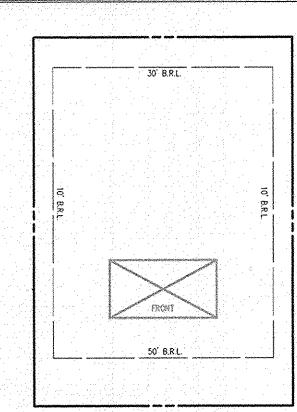
CO	ORDINATE	TABLE
POINT	NORTHING	EASTING
1	545308.8753	1329991.5554
2	545279.4889	1330045.6202
3	544999.0330	1330405.7120
4	544962.7420	1330403.8227
5	544843.8051	1330264.0457
6	544770.1467	1330196.1405
7	544761.7977	1330165.9381
8	544687.8249	1330193.8717
9	544813.3411	1330289.9676
10	544932.7955	1330430.3528
11	544928.7581	1330467.3325
12	544841.6806	1330533.5699
13	544790.2917	1330569.2997
14	544442.4010	1330419.2333
15	544392.8908	1330534.0102
16	544322.5327	1330503.6684
17	543669.1436	1330219,9658
18	544416.3075	1329562.1596
19	544850.2138	1329623.3845
20	544820.5102	1329840,4168
21	545113.4161	1329896.7653



BULK REGULATIONS: LOTS LESS THAN 3 ACRES A.) MINIMUM WIDTH AT

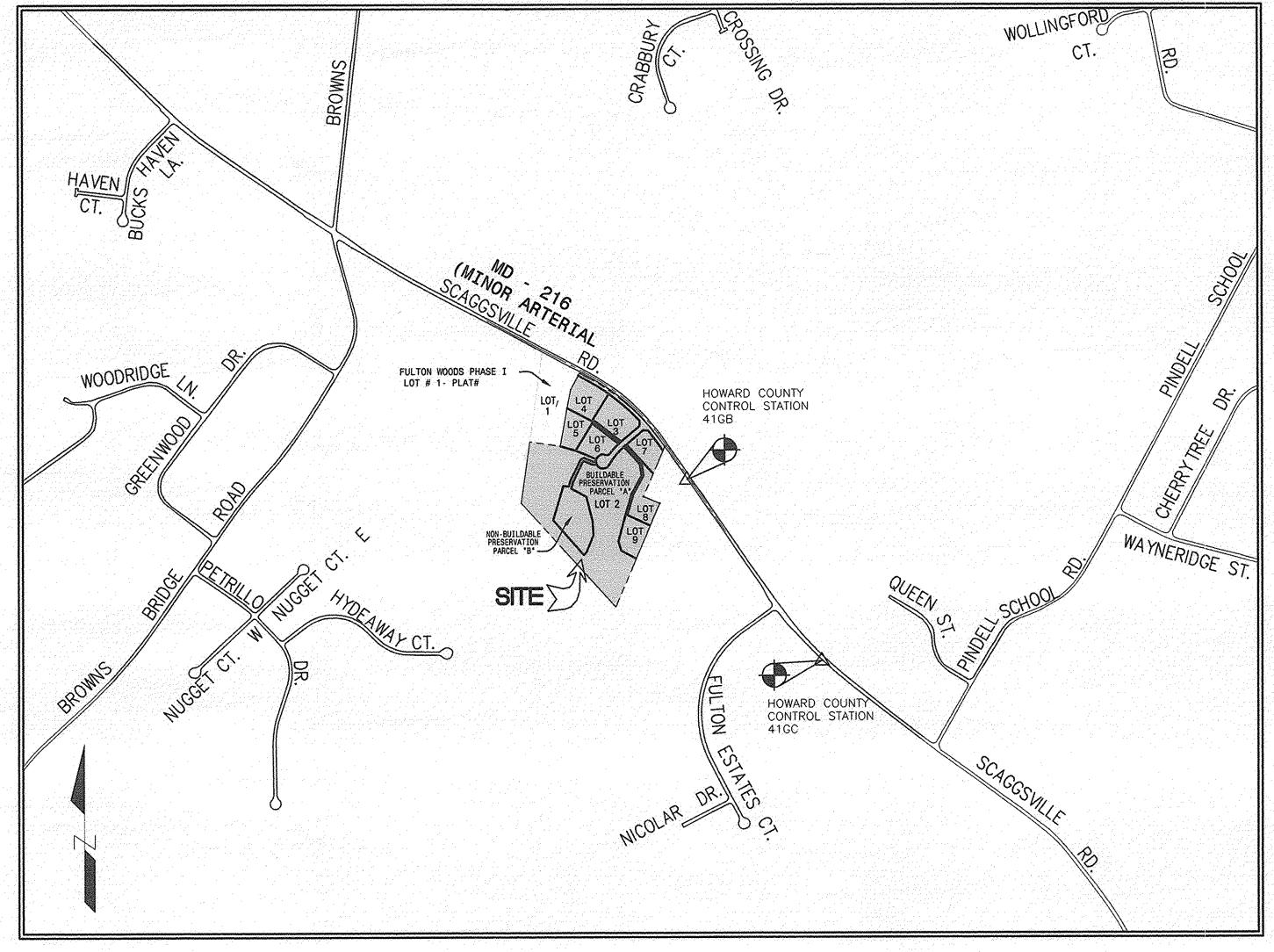
FRONT B.R.L. = 100 FT. B.) SETBACK: FRONT = 50 FT SIDE  $= 10 \, \text{FT}$ . REAR = 30 FT.

	MINIMUM L	OT SIZE CHART	
LOT No.	GROSS AREA	PIPESTEN AREA	MINIMUM LOT SIZE
LOT 4	45,441 S.F.	3,056 S.F.	42,385 S.F.
LOT 5	42,120 S.F.	2,885 S.F.	39,235 S.F.
LOT 8	44,070 S.F.	3,861 S.F.	40,209 S.F.
LOT 9	47,666 S.F.	6,898 S.F.	40,768 S.F.

ROAD CLASSIFICATION					
ROAD NAME	CLASSICIFICATION	RIGHT-OF-WAY	DESIGN SPEED		
COLEWOOD CT.	PUBLIC ACCESS PLACE	40 FEET	30 M.P.H.		

	TRAFF	IC CONT	TROL SIGNS	
ROAD NAME	CENTERLINE STA.	OFFSET	POSTED SIGN	SIGN CODE
COLEWOOD CT.	0+45	25' R	STOP SIGN	R1-1

12-26-07



# **LOCATION MAP**

# FINAL ROAD CONSTRUCTION PLAN RULTON WOODS PHASE II

LOTS 3 THRU 9, BUILDABLE PRESERVATION PARCEL'A' AND NON-BUILDABLE PRESERVATION PARCEL'B' RESUBDIVISION OF LOT #2, TAX MAP 40 & 41, GRID 13 & 18 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

> 42. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.

> 43. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION

45. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCETHE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE

46. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)." A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREETLIGHT AND ANY TREE.

47. ALL SIGN POST USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED SUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License NO.

NO.

DATE

13265, Expiration Date: 12-26-08.

# **DENSITY TABULATION** = (21.37 Ac./4.25 Ac.) 5 LOTS= 3 (8-5 = 3)

DESCRIPTION

REVISIONS

# **FULTON WOODS PHASE II** LOTS 3 THRU 9, BUILDABLE PARCEL 'A' AND

NON-BUILDABLE PRESERVATION PARCEL'B' RESUBDIVISION OF LOT #2, TAX MAP 40 & 41, GRID 13 & 18 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

# **COVER SHEET**

DALE THOMPSON BUILDERS 410-995-6736 301-596-7280 Fax 410-381-8747 6300 Woodside Court Columbia, MD 21046 IN HOUSE ENGINEERING DES. : JHE/AVG JOB :

DATE : DEC. 05, 2007

DEBORAH C. WILSON 12275 ROUTE 216 FULTON, MD. 20759 TEL. 443-542-9140 DEVELOPER : FULTON, LLC TEL. 410-996-6736 PROJ.

APPROVED: DEPARTMENT OF PUBLIC WORKS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

MEERING DIVISION

WP-06-076 SP-06-011 F-06-096

GENERAL NOTES

AND THE "COMP LITE" ZONING AMENDMENTS EFFECTIVE 7-28-06.

3. a. GROSS AREA OF TRACT = 21.37 Ac. b. AREA OF FLOODPLAIN = 0.20 Ac.

d. NET AREA OF TRACT = 21.17 Ac. 4. a. AREA OF PROPOSED ROAD R/W = 0.55 Ac.

6. NUMBER OF LOTS PROPOSED: a. BUILDABLE = 7

JULY, 1968 ISSUE.

CONTROL STATIONS:

c. AREA OF 25% OR GREATER SLOPES = 0.0 Ac.

5. a. AREA OF PROPOSED BUILDABLE LOTS = 7.34 Ac.

b. BUILDABLE PRESERVATION PARCEL "A" = 1

c. NON-BUILDABLE PRESERVATION PARCEL "B" = 1

2. THE SUBJECT PROPERTY ZONED RR-DEO PER 2/2/04 COMPREHENSIVE ZONING PLAN.

b. AREA OF PROPOSED BUILDABLE PRESERVATION PARCEL "A" = 11.34 Ac.

7. PRIOR CASE NUMBERS ARE AS FOLLOWS: SP-06-011, WP-06-076 & F-06-096 (PLAT # 19301).

9. SOILS INFORMATION TAKEN FROM SOIL MAP No. 13, SOIL SURVEY, HOWARD COUNTY, MARYLAND,

OF A MODIFIED SEWAGE EASEMENT SHALL NOT BE NECESSARY. APPROVAL OF THE NUMBER OF

17. THE TRAFFIC STUDY WAS PREPARED BY THE LEE CUNNINGHAM AND ASSOCIATES ON NOV. 15, 2005.

19. NO CEMETERIES AND HISTORIC SITES OR FEATURES EXIST WITHIN THIS SUBDIVISION. 20. HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETI

543290.641

24. PER SEC.16.121 OF THE SUBDIVISION REGULATION OPEN SPACE IS NOT REQUIRED

RELIEF FROM DRILLING THE REMAINING WELLS PRIOR TO PLAT RECORDATION

30. PERCOLATION TESTS AND PLAT WAS APPROVED ON JUNE 8, 2005

ASSOCIATION WITH HOWARD COUNTY HOLDING AN EASEMENT.

33. A COMMUNITY MEETING WAS HELD ON JULY 19, 2005 34. THE PURPOSES OF PRESERVATION PARCEL "A" ARE

FOREST CONSERVATION EASEMENT OR ITS BUFFER

35. THERE ARE NO STRUCTURES ON THE SITE.

25. ALL SHOWN HOUSE SITES COMPLY WITH MINIMUM BUILDING RESTRICTION REGULATIONS.

OF WHICH 8.32 ACRES IS CREDITED AND BONDED UNDER F-06-96

8. PRIVATE WATER AND PUBLIC SHARED SEPTIC SEWER SHALL BE UTILIZED WITHIN THIS DEVELOPMENT.

10. Lalas THIS AREA DESIGNATES A MINIMUM 80,000 SQ. FT. PRIVATE SEWAGE EASEMENT REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR SHARED SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THESE EASEMENTS SHALL BE

AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENT INTO THE PRIVATE SEWAGE EASEMENT. RECORDATION

11. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED TO THE

12. BOUNDARY OUTLINE BASED ON FIELD RUN SURVEY PERFORMED BY JACK C. MELLEMA INC., IN MARCH OF 2005. 13. TOPOGRAPHIC CONTOURS BASED FIELD RUN SURVEY PREPARED BY JACK C. MELLEMA INC. IN MARCH OF 2005.

18. FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND THE ROAD R/W LINE AND NOT THE PIPESTEM LOT DRIVEWAY TO INCLUDE LOTS 4, 5, 8, 9, AND THE ADJOINING LOT # 1 (SEE PLAT # 19301).

14. THERE ARE NO AREAS OF STEEP SLOPES LOCATED ON THIS PROPERTY AS DEFINED BY THE HOWARD COUNTY SUBDIVISION

15. FOREST STAND DELINEATION AND WETLAND DELINEATION WAS PREPARED BY ECOSCIENCE PROFESSIONALS IN MAY 25, 2006.

NORTHING (FT) EASTING (FT) ELEVATION (FT)

1331697.829 21. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING, AND NEW STRUCTURES SHALL BE PERMITTED WITHIN

NSERVATION MANUAL FOR THIS SUBDIVISION WILL BE FULFILLED BY RETENTION OF 8.52 ACRES OF FOREST

23. THE FLOODPLAIN STUDY WAS PREPARED BY ALDE INC. FOR F-06-096, AND APPROVED BY THE COUNTY ON 08-20-06.

26. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREAS AS REQUIRED BY THE

27. EXISTING WELLS AND/OR SEWERAGE EASEMENTS WITHIN 100 FEET OF THE PROPERTY HAVE BEEN SHOWN FROM THE

28. ALL WELLS SHALL BE DRILLED PRIOR TO FINAL PLAT RECORDATION. IT IS THE DEVELOPERS RESPONSIBILITY TO

29. A GROUND WATER APPROPRIATION PERMIT MUST BE ISSUED PRIOR TO SUBMITTAL OF RECORD PLAT FOR SIGNATURE

32. PRESERVATION PARCEL "A" IS TO BE PRIVATELY OWNED AND THE EASEMENT HOLDERS ARE HOWARD COUNTY

(1) RESIDENTIAL BUILDING: (2) FOREST CONSERVATION EASEMENT: (3) WETLAND PRESERVATION: THE PURPOSE FOR PRESERVATION PARCEL "B" IS FOR PUBLIC SHARED SEPTIC SYSTEM.

36. A NOISE STUDY WAS PERFORMED BY STIANO ENGINEERING INC. ON OCTOBER 20, 2005 AS SHOWN ON THE PLAT #

38. LANDSCAPING AND STREET TREES FOR THIS SUBDIVISION WILL BE PROVIDED ON THE FINAL PLANS IN ACCORDANCE

40. STATE HIGHWAY ADMINISTRATION WILL NOT RELEASE ANY ASSOCIATED BONDS UNTIL ALL ROAD DEDICATION DOCUMENTS HAN

42. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS

43. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION

44. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORLD

46. STREET LIGHT PLACEMENT AND THE TYPE OF ANY FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNT

47. ALL SIGN POST USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2° GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2° GALVANIZED STEEL,

48. STORMWATER MANAGEMENT WAS ACHIEVED BY CREDITS AND ENVIRONMENTAL EASEMENTS. NO MAINTENANCE AND RESPONSIBILITY

49. LANDSCAPING FOR LOTS 3-9 IS PROVIDED IN ACCORDANCE WITH A CERTIFIED LANDSCAPE PLAN ON FILE WITH ROAD

A DPW DEVELOPER'S AGREEMENT WITH SURETY IN THE AMOUNT OF \$13,050.00.

DRW. : AVG

ERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. A GÂLVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP O

CONSTRUCTION PLAN SET IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL WITH

41. THE PRELIMINARY EQUIVALENT SKETCH PLAN WAS APPROVED AUGUST 28, 2006 AND FOR THIS REASON THIS PROJECT IS

31. THE SPECIFICATIONS FOR THE DRAIN FIELDS WILL BE DESIGNED IN ACCORDANCE WITH HEALTH DEPARTMENT CRITERIA

AND THE HOME OWNERS ASSOCIATION. NON BUILDABLE PRESERVATION PARCEL "B" TO BE OWNED BY THE HOMEOWNERS

SCHEDULE THE WELL DRILLING PRIOR TO FINAL PLAT SUBMISSION. IT WILL NOT BE CONSIDERED "GOVERNMENT DELAY" IF THE WELL DRILLING HOLDS-UP THE HEALTH DEPARTMENT SIGNATURE OF THE RECORD PLAT. IF A WELL SUCCESS

RATE IS ACCOMPLISHED AT VARIOUS LOCATIONS WITHIN SITE. THE DEVELOPER SHALL HAVE THE OPTION TO REQUEST

THE LIMITS OF WETLANDS, STREAMS, OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENTS AREAS.

c. AREA OF NON-BUILDABLE PRESERVATION PARCELS \*B\* = 2.14 Ac.

LOTS/BEDROOMS IS SUBJECT TO PRELIMINARY PLAN APPROVAL.

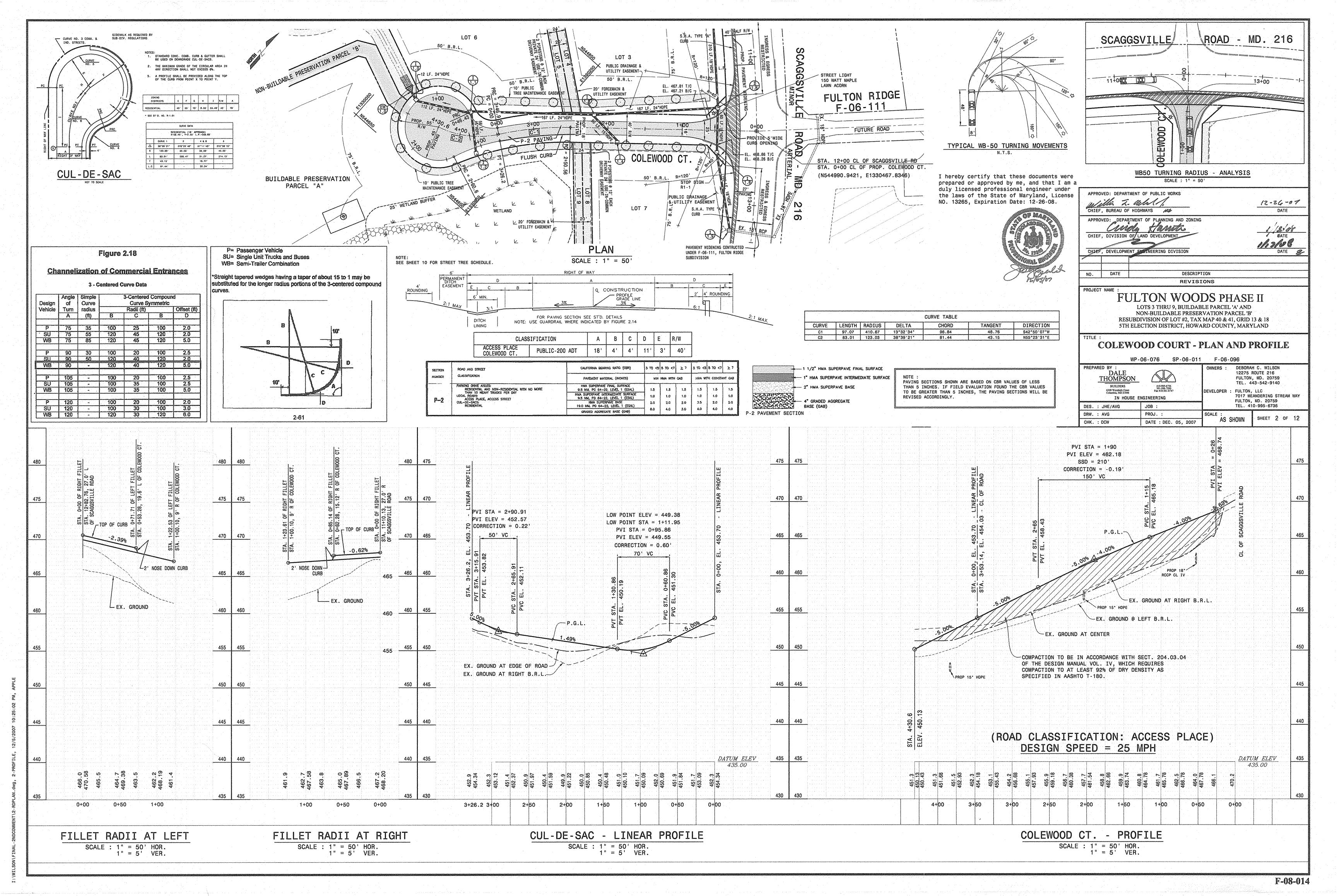
AND LAND DEVELOPMENT REGULATIONS, SECTION 16.116 b.

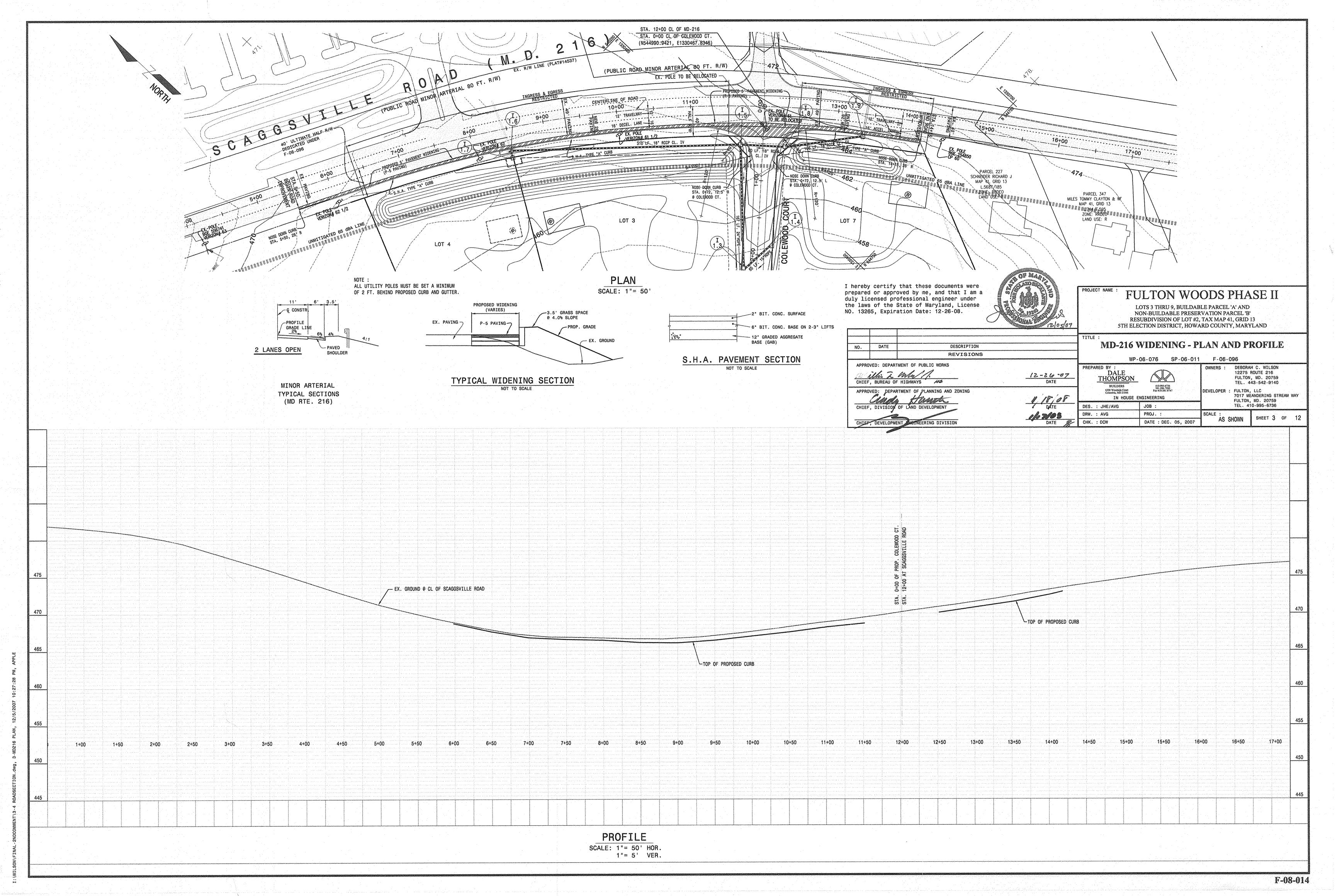
16. THIS PROPERTY IS LOCATED OUTSIDE OF THE METROPOLITAN DISTRICT.

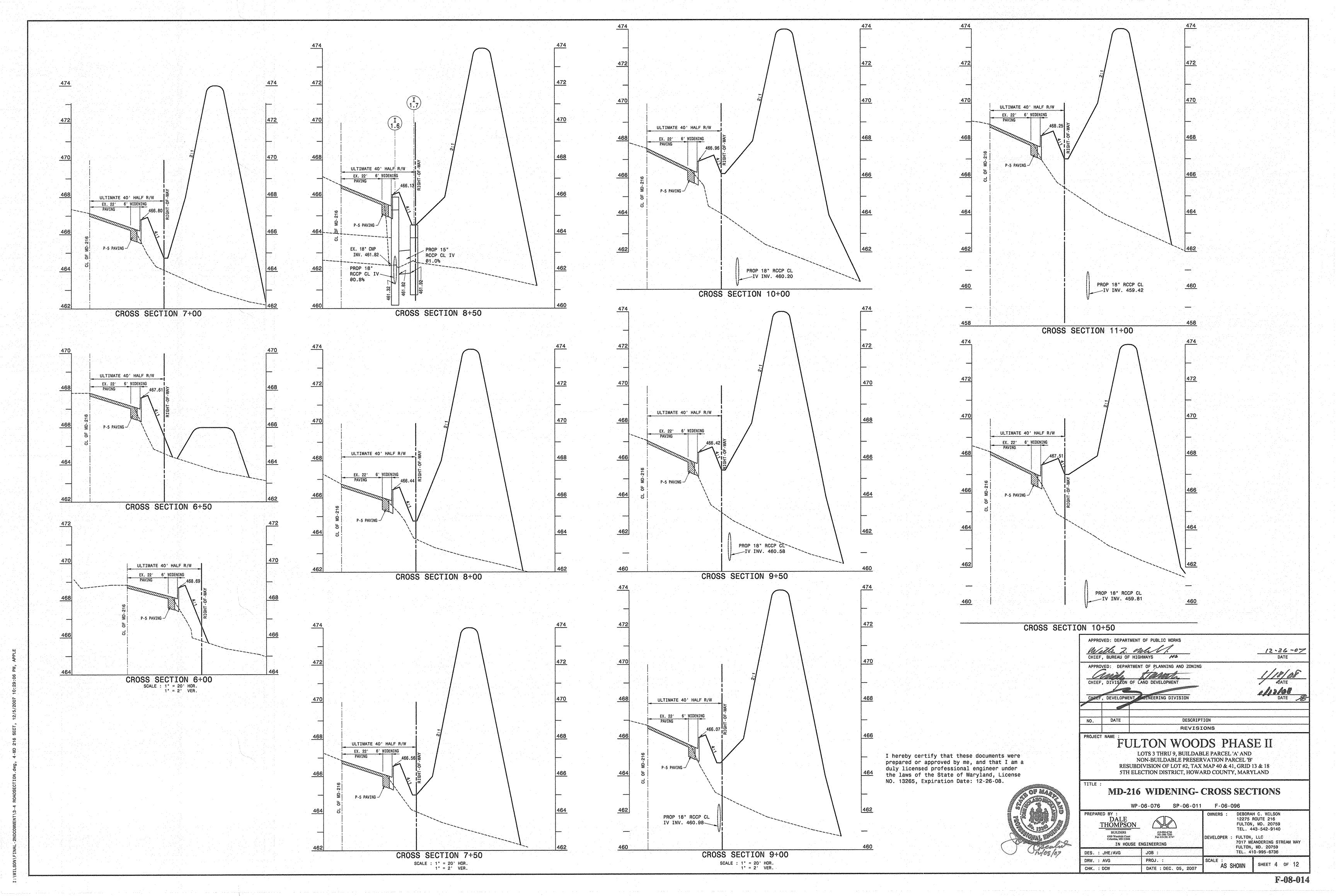
MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT

1. THIS PROJECT IS SUBJECT TO THE AMMENDED FIFTH EDITION OF THE SUBDIVISION REGULATIONS AND LAND DEVELOPMENT REGULATION PER COUNCIL BILL NO. 45-2003 AND THE 2004 ZONING

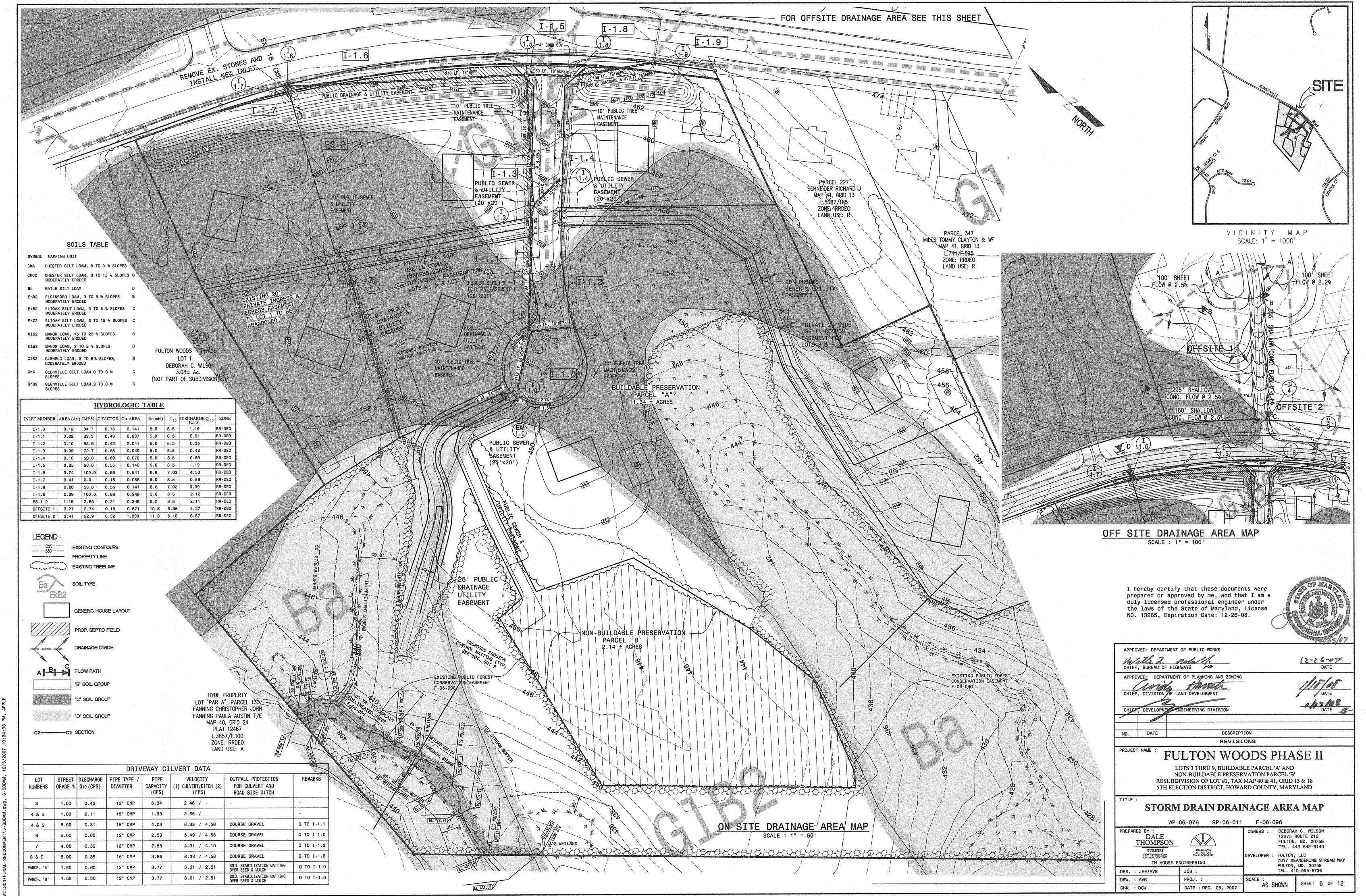
7017 MEANDERING STREAM WAY

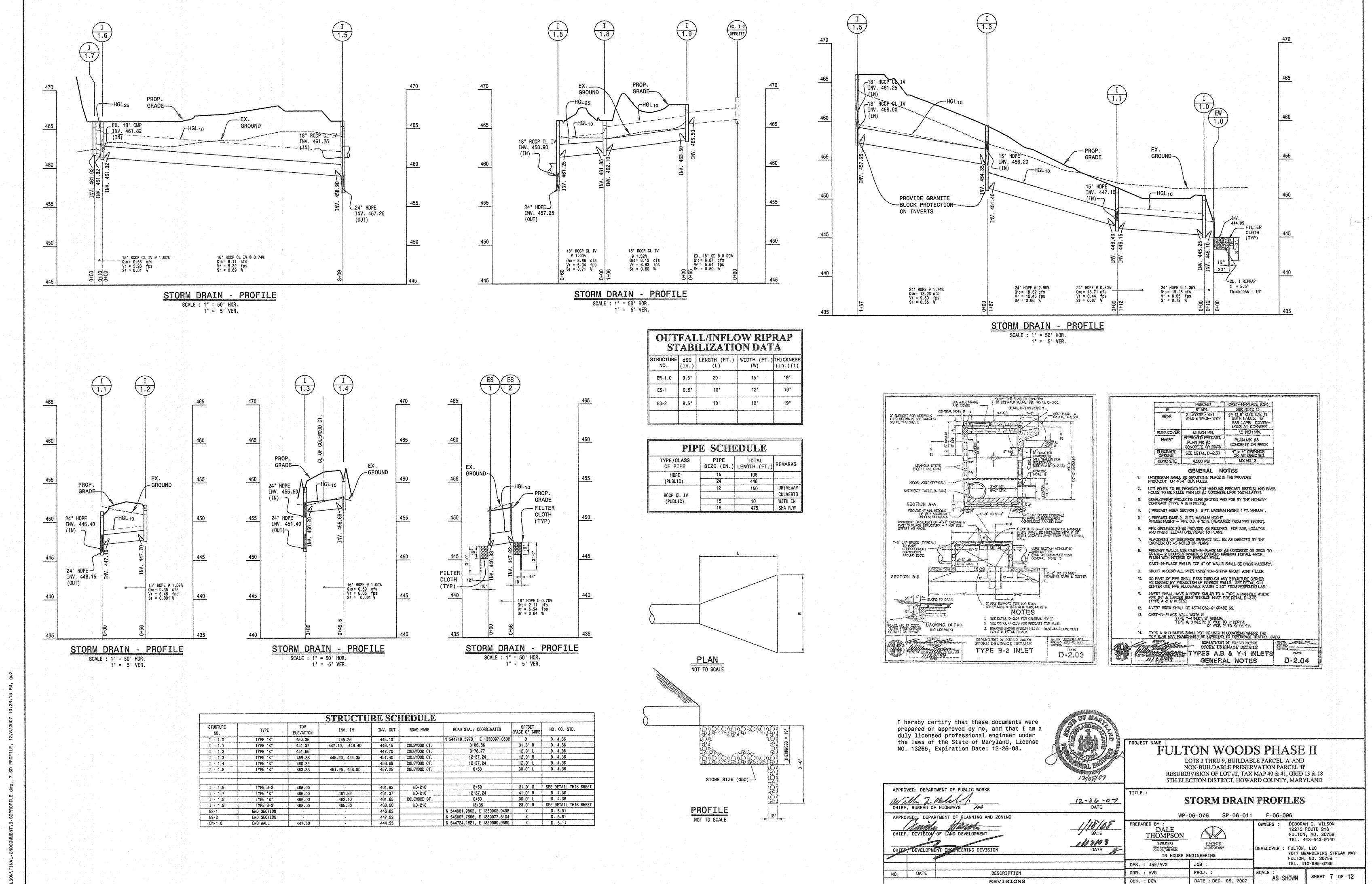


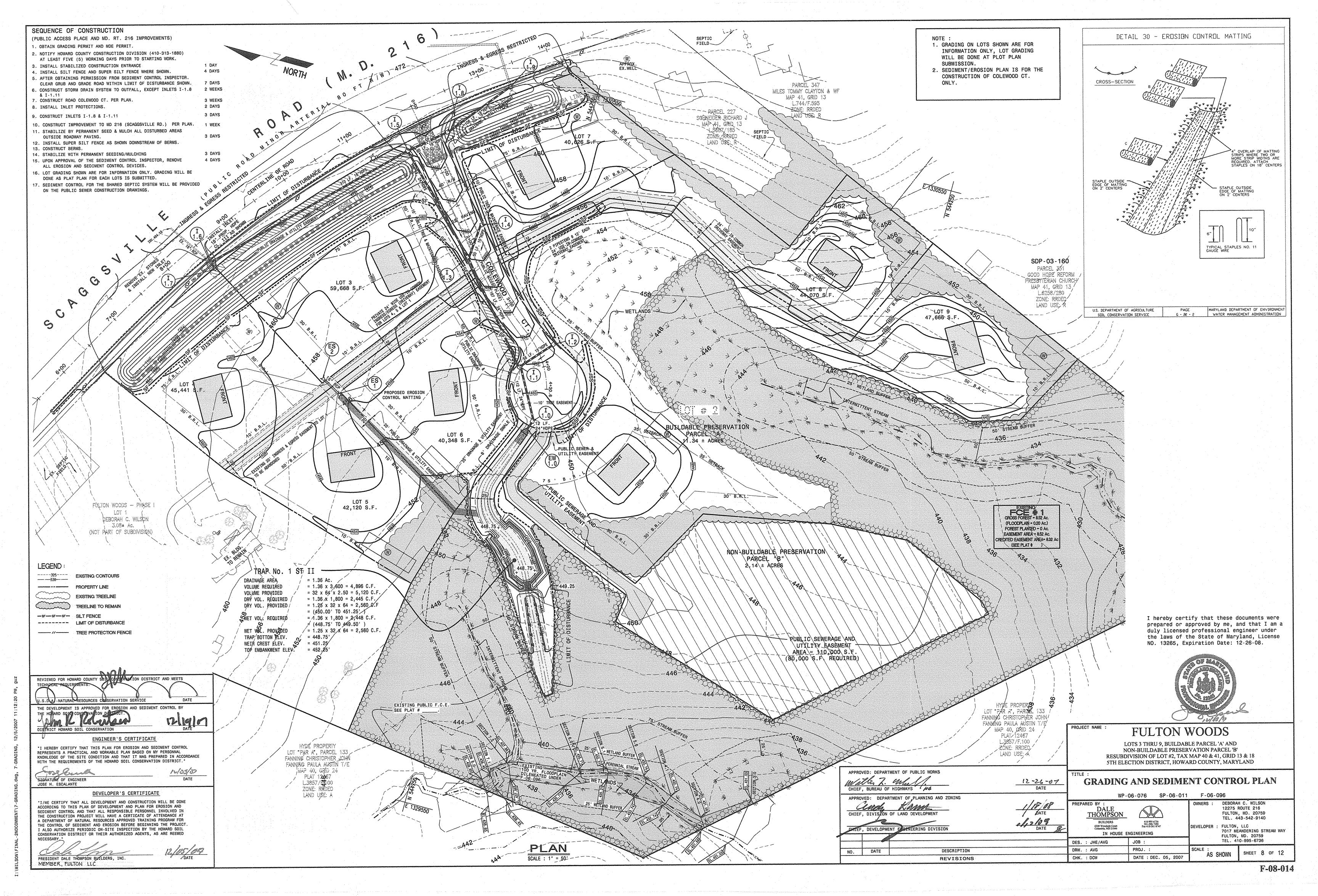




I:\WILSON\FINAL-2NDCOMMENT\3-4 ROADSECTION.dwg, 5-MD 216 SECT, 12/5/2007 10







3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.

4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1. Chapter 12 of the Howard County Design Manual, Storm

5. All disturbed greas must be fenced within the time period specified above in accordance with 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (sec. 51), sod (sec. 54), temporary seeding (sec. 50) and mulching (sec. 52). Temporary stabilization with mulch alone can be done only when recommended seeding dates do not allow for proper germination and establishment of grasses.

6. 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

#### 7. Site Analysis

· ·	
Total Area of Site	.21.37 Acres
Area Disturbed	C Ed ACIES
	6.51 Acres
Area to be roofed or paved	3.85 Acres
Area to be vegetatively stabilized	
	2.66 Acres
Total Cut	.2485 Cu. Y
Total Fill	
	.4490 cu. y
Offsite waste/borrow area location :	
	A 1/

..... Cu. Yds. 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 Sediment Control Inspector

10. 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.

11. Trenches for the construction of utilities is limited to three pipe length or that which should be back-filled and stabilized by the end of each work day, whichever is shorter.

#### PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived wegetative cover is needed.

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

Soil Amendments: In lieu of soil test rescommendations, use one of the following schedules

- 1. Preferred -- Apply 2 tons/acre dolomitic limestone (92 bls/1000 sq. ft.) and 600 ibs/acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil. At time of seeding, apply 400 lbs/acre 30-0-0 ureoform fertilizer (9 lbs/1000 sq. ft.)
- 2. Acceptable -- Apply 2 tons/acre dolomitic limestone (92 bls/1000 sq. ft.) and 600 lbs/acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil.

Seeding -- For the periods March 1 -- April 30, and August 1 -- October 15, seed with 60 lbs/care (1.4 lbs/sq. ft.) of Kentuky 31 Tall Fescue. For the perion May 1 -- July 31, seed with 60lbs Kentucky 31 tail Fescue per acre and 2 lbs/acre (.05 lbs/1000 sq. ft.) of weeping lovegrass. During the period of October 16 -- February 28, protect site by :

Option 1 -- Two tons per acre of well anchored straw mulch and seed as soon as possible in

Option 2 -- Use sod. Option 3 -- Seer: with 60 lbs/acre Kentucky 30 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching -- Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq. ft.) of rooted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slope 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq. ft.) for anchoring.

Maintenance -- Inspect all seeding areas and make needed repairs, replacements and reseedings.

### TEMPORARY SEEDING NOTES

straw mulch and seed as soon as possible in the spring, or use sod.

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is

Seedbed Preparation: -- Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, unless previously loosened.

Soil Amendments: -- Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 lbs/1000 sq ft).

Seeding: -- For periods March 1 -- April 30 and from August 15 -- October 15, seed with 2 1/2 bushel per ocre of annual rye (3.2 lbs/1000 sq. ft.) for the period May 1 -- August 14, seed with 3 lbs/acre of weeping lovegrass (.07ibs/1000 sq. ft.). For the period November 16 -- Ferbruary 28, protect site by applying 2 tons/acre of well anchored

Mulching: -- Apply 1-1/2 to 2 tons/acre (70 to 90 lbs/1000 sq. ft.) of unrotted weed free, small grain straw immediately after seeding, anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/ 1000 sq. ft.) of emulsified asphalt on flat areas. on slopes, 8 ft. or higher, use 348 gal per acre (8 gal/1000 sq. ft.) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for additional rate and methods not covered.

## 20.0 STANDARDS AND SPECIFICATIONS **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 more likely to allow infiltration of rainfall, thereby reducing sediment loads and run-off 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 divided into Temporary Seeding to quickly establish vegetative cover for short duration (up to one year), and 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 dikes, etc. and for Permanent Seeding are lowes dams cut and fill slones and other areas of final grade, former stockpile and staging areas, etc.

EFFECTS OF WATER QUALITY AND QUANTITY Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of run-off, infiltration, evaporation, transpiration, percolation, and aroundwater 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 run-off to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone. Sediment control devices must retain 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.

- i. Install erosion and sediment control structures (either temporary or permanent) such as diversion, grade stabilization structures, berms, waterways, or sediment control basins.
- ii. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding
- iii. Schedule required soil tests to determine soil amendment composition and application rates for sites naving disturbed area over 5 acres.
- B. Soil Amendments (Fertilizer and Lime Specifications)
- i. 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 maybe performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposed may also be used for chemical analyses.
- ii. Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warrantee
- iii, Lime materials shall be ground limestone (hydrated or burnt lime may be substituted) which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 98-100% will pass through a #20
- iv. Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.

#### C. Seedbed Preparation

of the producer.

- i. Temporary Seeding
- a. Seedbed preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plaws or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth, but left in the roughened condition. Sloped areas (greater than 3:1) should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
- b. Apply fertilizer and lime as prescribed on the plane.
- c. In corporate time and fertilizer into the top 3-5" of soil by disking or other suitable means.
- ii. Permanent Seeding a. Minimum soil conditions required for permanent vegetative establishment:
- 1. Soil pH shall be between 6.0 and 7.0.
- 2. Soluble salts shall be less than 500 parts per million (ppm). 3. The soil shall contain less than 40% clay, but enough fine grained

material (>30% silt plus clay) to provide the capacity to hold a

- moderate amount of moisture. An exception is if lovegross or serecia lespedezas is to be planted, then a sandy soil (<30% silt olus clay) would be acceptable
- 4. Soil shall contain 1.5% minimum organic matter by weight
- 5. Soil must contain sufficient pore space to permit adequate root penetration. 6. If these conditions cannot be met by soils on site adding topsoil is required
- in accordance with Section 21 Standard and Specification for Topsoil. b. 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 3-5" 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
- c. Apply soil amendments as per soil test or as included on the plans.
- d. Mix soil amendments into the top 3-5" of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, abd ready the area for seed and application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the sloppe. The top 1-3" of soil should be loose and friable. Seedbed loosening may not be necessary on

#### newly disturbed areas. D. Seed Specifications

- i, All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on this job. Note: Seed tags shall be made available to the inspector to verify type and rate of seed used.
- ii. Inoculant The inoculant for treating legume seed in the seed mixtures shall be a pure culture of nitrogen-fixing bacteria prepared specially for the species. Inoculants shall not be used later than the date indicated in the container. Add fresh inoculant as directed on pockage. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperature above 75°-80°F, can weaken bacteria amd make the inoculant less effective.
- i. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or dropo seeded, or a cultipacker seeder.
- a. 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: P205 (phosphorus); 200 lbs/ac; K20 (potossium); 200 lbs/ac.
- b. Lime use only ground agricultural limestone, (Up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
- c. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.
- ii. Dry Seeding: This includes use of conventional drop or broadcast spreaders. a. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the
- Temporary or Permanent Seeding Summaries or Tables 265 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed to soil contact. b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction
- iii. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil. a. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting.
- b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seed rate in each direction.
- F. Mulch Specifications (In order of preference)
- i. Straw shall consist of thoroughly threshed wheat, rye or out straw, reasonable bright in color, and shall not be musty, moldy, caked, decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.

#### ii. Wood Cellulose Fiber Mulch (WCFM)

- a. WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
- b. WCFM shall be dyed green or contain a green dye in the package that will provide
- an appropriate color to facilitate visual inspection of the uniformly spread slurry.
- c. WCFM, including dye, shall contain no germination or growth inhibiting factors.
- d. WCFM 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 The mulch material shall form a blotter-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 seedings.
- e. WCFM material shall contain no elements or compounds at concentration levels that will be phytol-toxic.
- f. WCFM must conform to the following physical requirements: fiber length to approximately 10 mm., diameter approximately 1 mm., pH range of 4.0 to 8.5, ash content of 1.6% maximum and water holding capacity of 90% minimum.
- Note: Only sterile straw mulch should be used in areas where one species of grass is desired, G. Mulching Seeded Areas - Mulch shall be applied to all seeded areas immediately after seeding.
- i. If grading is completed outside of the seeding season, mulch along shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications
- ii. 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 soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.
- iii, 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.
- H. Securing Strow Mulch (Mulch 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:
- i. 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 land, this practice should be used on the contour if possible
- net dry weight of 750 lbs./acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons iii. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys and crest of banks. The remainder of area should appear uniform after binder

ii. Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a

- application. Synthetic binders- such as Acrylic DLR (Agro-Tack), DCA-70 Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to anchor mulch. iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' wide and 300 to 3,000 feet long.
- Incremental Stabilization Cut Slope
- i. All cuts slopes shall be dressed, prepared, seeded and mulched as the work progresses. Slopes shall be excavated and stabilized in equal increments not to exceed 15'.
- ii. Construction sequence (Refer to Figure 3 below): a. Excavate and stabilize all temporary swales, side ditches, or berms that will be
- used to convey runoff from the excavation.
- b. Perform Phase 1 excavation, dress, and stabilize c. Perform Phase 2 excavation, dress, and stabilize. Overseed Phase 1 as
- d. Perform final phase excavation, dress, and stabilize. Overseed previously seeded 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 in the operation of completing out of the seeding

- season will necessitate the application of temporary stabilization.
- J. Incremental Stabilization of Embankments Fill Slopes i. Embankments shall be constructed in lifts as prescribed on the plans.
- ii. Slopes shall be stabilized immediately when the vertical height of the multiple lifts reaches 15", or when the grading operation ceases as prescribed in the plans. iii. At the end of each day, temporary berms and pipe slope drains should be constructed along the top edge of the embankment to invercept surface runoff
- and convey it down the slope in a non-erosive manner to a sediment trapping device. iv. Construction sequence: Refer to Figure 4 (below).
- a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to divert runoff around the fill. Construct slopr silt fence on low side of fill as shown in Figure 5, unless other methods shown on the plans address this area.
- b. Place Phase 1 embankment, dress, and stabilize.
- c. Place Phase 2 embankment, dress, and stabilize. d. Place final phase embankment, dress, and stabilize. Overseed previously seeded greas as necessary.
- Note: Once the placement of fill 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 in the operation or completing the operation out at the seeding season will necessitate the application of temporary

## CONSTRUCTION SPECIFICATIONS

- 1. The area under embankment shall be cleared, arubbed and stripped of any vegetation and root mot. The pool area shall be cleared.
- 2. The fill material for the embankment shall be free of roots or other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed. Maximum height of embonkment shall
- be 4', measured at centerline of embankment. 3. All cut and fill slopes shall be 2:1 or flatter.
- 4. Elevation of the top of any dike directing water into trap must equal or
- 5. Storage area provided shall be figured by computing the volume measured rom top of excavation. (For storage requirements see Table 9).
- 6. Geotextile Class C shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Section of fabric must overlap at least 1 with section nearest the entrance placed on top. Fabric shall be embedded at least 6" into existing ground at entrance of outlet channel.
- 7. 4"-7" stone shall be used to construct the weir and 4"-12" or Class I rip-rop shall be used to construct the outlet channel.
- 8. Outlet An outlet shall include a means of conveying the discharge in an erosion free manner to an existing stable channel. Protection against scour at the discharge point shall be provided as necessary.
- 9. Outlet channel must have positive drainage from the trap.
- 10. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 of the wet storage depth of the trap (900 cf/ac). Removed sediment shall be deposited in a suitable area and in such manner that it will not erode.
- 11. The structure shall be inspected periodically after each rain and repaired
- 12. Construction of trops shall be carried out in such manner that sediment pollution is abated. Once constructed, the top and outside face of the embankment shall be established with seed and mulch. Points of concentrated inflow shall be protected in accordance with Grade Stabilization Structure criteria. The remainder of the interior slopes should be stabilized (one time) with seed and mulch upon trap completion and manitored and maintained erosion free during the life of the trap.
- 13. The structure shall be dewatered by approved methods, removed and the area stabilized when the drainage area has been properly stabilized.

I hereby certify that these documents were

duly licensed professional engineer under

the laws of the State of Maryland, License

NO. 13265, Expiration Date: 12-26-08.

prepared or approved by me, and that I am a

STANDARDS AND SPECIFICATIONS FOR TOPSOIL

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

#### **CONDITIONS WHERE PRACTICE APPLIES**

- I. This practice is limited to oreas having 2:1 or flatter slopes where:
- a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative
- b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
- c. The original soil to be vegetated contains material toxic to plant growth.
- d. The soil is so acidic that treatment with limestone is not feasible. II. 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

I. 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-SCA in cooperation with Maryland Agricultural Experimental Station.

#### II. Topsoil Specifications - Soil to be used as topsoil must meet the following:

- i. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slags, coarse fragments, gravel, sticks, roots, trash, or other materials larger the 11/12" in diameter.
- ii. Topsoil must be free of plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified.
- iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following
- III. For sites having disturbed areas under 5 acres:
- i. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
- IV. For sites having disturbed areas over 5 acres. i. On soil meeting topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
- a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient time shall be prescribed to raise the pH to 6.5 or higher.
- b. Organic content of topsoil shall be not less than 1.5 percent by weight.
- d. No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials. Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate authority, may be used in lieu of natural topsoil. ii. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and

c. Topsoil having soluble salt content greater than 500 parts per million shall not be used.

proper grading and seedbed preparation.

- V. Topsoil Application i. When topsoilling, maintain needed erosion and sediment control practices such as diversions,
- Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins. ii. Grades on the areas to be top soiled, which have been previously established, shall be maintained, albeit 4"-8" higher in elevation.
- iii. Topsoil shall be uniformly distributed in a 4"-8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seed line can proceed with a minimum of additional soil preparation and tillage, Any irregularities in the surface resulting from top soiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets
- iv. Topsoil shall not be placed while the topsoil or subsoil is in a frozen of muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to
- VI. Alternative for Permanent Seeding Instead of applying the full amounts of time and commercial fertilizer, composted sludge and amendments may be applied as specified below:
- i. Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:

a. Composted sludge shall be supplied by, or originate from, a person or persons that

b. Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus,

and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these

are permitted (at the time of acquisition of the compost) by the Maryland Department of the

- Environment under COMAR 26.04.06.
- requirements, the appropriate constituents must be added to meet the requirements prior to c. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
- 1b/1,000 square feet, and 1/3 the normal lime application rate. References, Guideline Specifications, Soil Preparation and Sodding, MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1973.

ENGINEER'S CERTIFICATE

iv. Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4

#### I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONNAL KNOWLEDGE OF THE SITE CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER
JOSE H. ESCALANTE 12/08/07 DATE

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES 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

NECESSARY

MEMBER, FULTON LLC

CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE REEMED PRESIDENT DALE THOMPSON BUILDERS, INC. 12/08/09

NO.

DETAIL 22 - SILT FENCE PERSPECTIVE VIEW SF ----JOINING TWO ADJACENT SILT Construction Specifications 1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter mum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1,00 pond per linear foo or staples at top and mid-section and shall meet the following requirements for Geotextile Class F: Test: MSMT 500 Tensile Strength 50 lbs/in (min.) 20 lbs/in (min.) Tensile Modulus

3. Where ends of geotextile fabric come together, they shall be overlapped,

4. Silt Fence shall be inspected after each rainfall event and maintained when

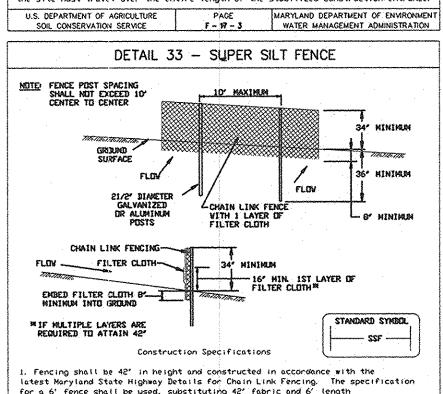
Filtering Efficiency 75% (min.)

U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE E-15-3 WATER MANAGEMENT ADMINISTRATION DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE EXISTING PAVENENT EARTH FILL
PIPE AS NECESSARY \*\* GEOTEXTILE CLASS 'C'-MINIMUM 6' OF 2'-3' AGGREGATE OVER LENGTH AND VIDTH OF STRUCTURE -EXISTING GROUND PROFILE PLAN VIEW STANDARD SYNEOL SCE

Length - minimum of 50' (\*30' for single residence lot) 2. Width - 10' minimum, should be flared at the existing road to provide a turning . Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. \*\*The plan approval authority may not require single family residences to use geotextile.

. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the 5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, naintaining positive drainage. Pipe mountable berm with 5:1 slopes and a minimum of 6' of stone over the pipe. Pipe has

to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized ccording to the amount of runoff to be conveyed. A 6' minimum will be required. 5. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance



for a 6' fence shall be used, substituting 42' fabric and 6' length

2. 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.

3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24' at the top and mid section. 4. Filter cloth shall be embedded a minimum of 8° into the ground. 5. When two sections of filter cloth adjoin each other, they shall be overlapped

develop in the silt fence, or when silt reaches 50% of fence height

SOIL CONSERVATION SERVICE

DEPARTMENT OF PLANNING AND ZONING

INEERING DIVISION

APPROVED: DEPARTMENT OF PUBLIC WORKS

CHIEF, DIVISION OF LAND DEVELOPMENT

CHIEF, BUREAU OF HIGHWAYS

DEVELOPMENT

DATE

7. Filter cloth shall be fastened securely to each fence post with wire ties or stagles at top and mid section and shall neet the following requirements for ectextile Class F 50 lbs/in (min.) Tensile Strength Tensile Hodulus 20 lbs/in (ein.) Test: MSMT 509 0.3 gal/ft\*/ninute (nax.) Filtering Efficiency 75% (min.) Test: MSMT 322 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION U.S. DEPARTMENT OF AGRICULTURE

H - 28 - 3

DESCRIPTION

REVISIONS

Maintenance shall be performed as needed and silt buildups removed when 'bulges'

12-26-07 DES. : JHE/AVG DRW. : AVG

COMPACTED EARTH TOP OF EMBANCHENT MIN VEIR S'LONGTH 11 4' MAX EXISTING SHIFTEHENEN EXISTING GROWN SECTION B-B 4' MIN. VIDTH PL COL SO TENET LE VEIR CREST PERSPECTIVE VIEW -GEOTEXTILE CLASS C -SMALL RIP-RAP 4' TO 7' - BOTTON CLEVATION CL. 448.0 Construction Specifications

DETAIL 9 - STONE OUTLET SEDIMENT TRAP - ST II

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared 2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic naterial or other objectionable naterial. The embankment shall be compacted by traversing with equipment while it is being

3. All cut and fill slopes shall be 2:1 or flatter 4. The stone used in the putlet shall be small rip-rap 4" to 7" in size with a 1' thick layer of 3/4' to 11/2' washed aggregate placed on the upstream face of the outlet. Stone facing shall be as necessary to prevent clogging. Geotextile Class C may be substituted for the stone facing by placing it on the inside face

5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to one half of the wet storage depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.

PAGE MARYLAND DEPARTMENT OF ENVIRONMENT
C-9-10 WATER MANAGEMENT ADMINISTRATION

STONE OUTLET SEDIMENT TRAP -ST II

 The structure shall be inspected periodically and after each rain and repairs made is needed. 7. Construction of traps shall be corried out in such a manner that sediment pollution is obsted. Once constructed, the top and autside face of the embankment shall be stabilized with seed and mulch. Points of concentration inflow shall be protected in accordance with Grade Stabilization Structure criteria. The remainder of the interior slopes should be stabilized (one time) with seed and mulch upon trap completion and monitored and maintained erosion free during the life of the trap.

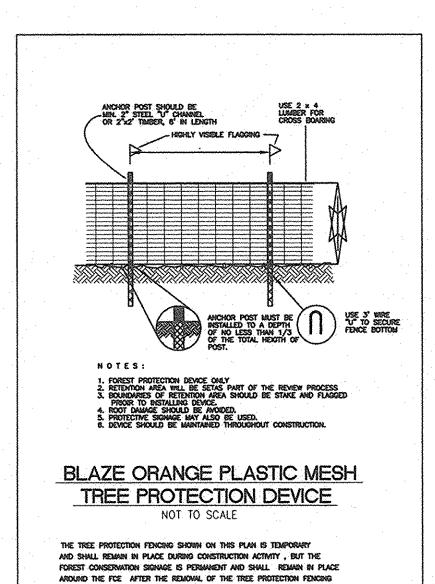
U.S. DEPARTMENT OF AGRICULTURE

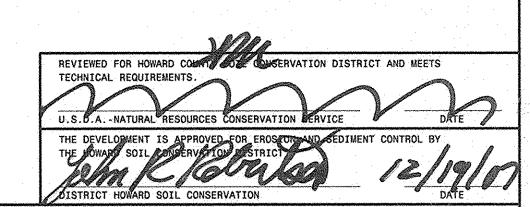
SOIL CONSERVATION SERVICE

8. The structure shall be dewatered by approved methods, removed and the area stabilized when the drainage area has been properly stabilized. 9. Refer to Section D for specifications concerning trop dewatering

10. Minimum trop depth shall be measured from the weir elevation 11. The elevation of the top of any dike directing water into the trop must equal or exceed the elevation of the trap embankment. 12. Geotextile Class C shall be placed over the bottom and sides of the outlet channel prior to the placement of stone. Sections of filter cloth must overlop at least 1" with the section nearest the entrance placed on top. The filter cloth shall be embedded at least 6" into existing ground at the entrance of the outlet channel

13. Outlet - An outlet shall be provided, including a means of conveying the discharge in an erosion free manner to an existing stable channel. U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE C - 94-104 WATER MANAGEMENT ADMINISTRATION





FULTON WOODS PHASE II NON-BUILDABLE PRESERVATION PARCEL 'B' RESUBDIVISION OF LOT #2, TAX MAP 41, GRID 13

5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SEDIMENT CONTROL NOTES AND DETAILS

WP-06-076 SP-06-011 F-06-096 REPARED BY DALE THOMPSON BUILDERS 410-995-6735 301-596-7280 Fax 410-381-874 6300 Woodside Court Columbia, MD 21046 IN HOUSE ENGINEERING

PROJ.

DATE : DEC. 05, 2007

CHK. : DCW

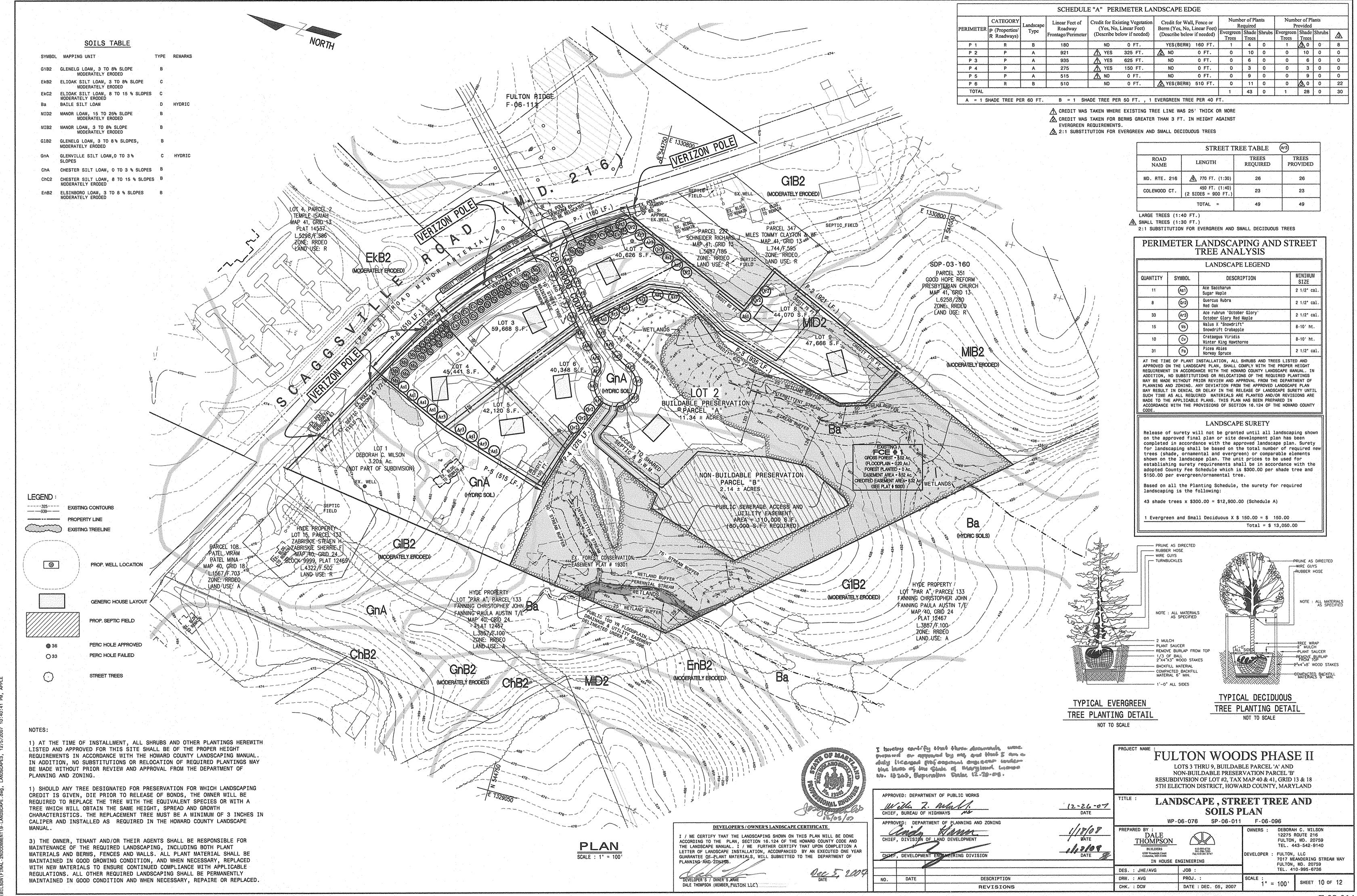
12275 ROUTE 216 FULTON, MD. 20759 TEL. 443-542-9140 DEVELOPER : FULTON, LLC 7017 MEANDERING STREAM WAY JOB :

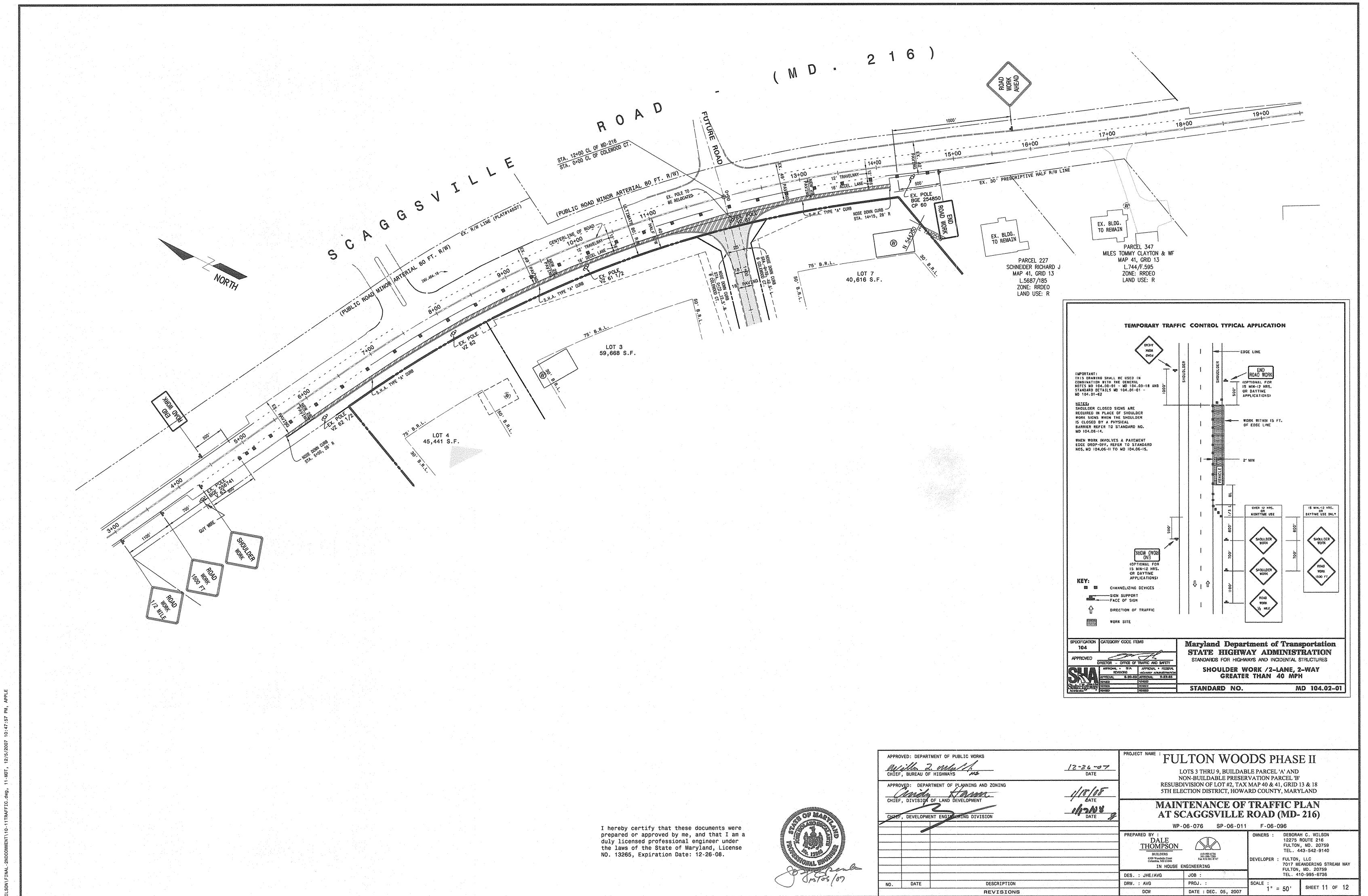
OWNERS

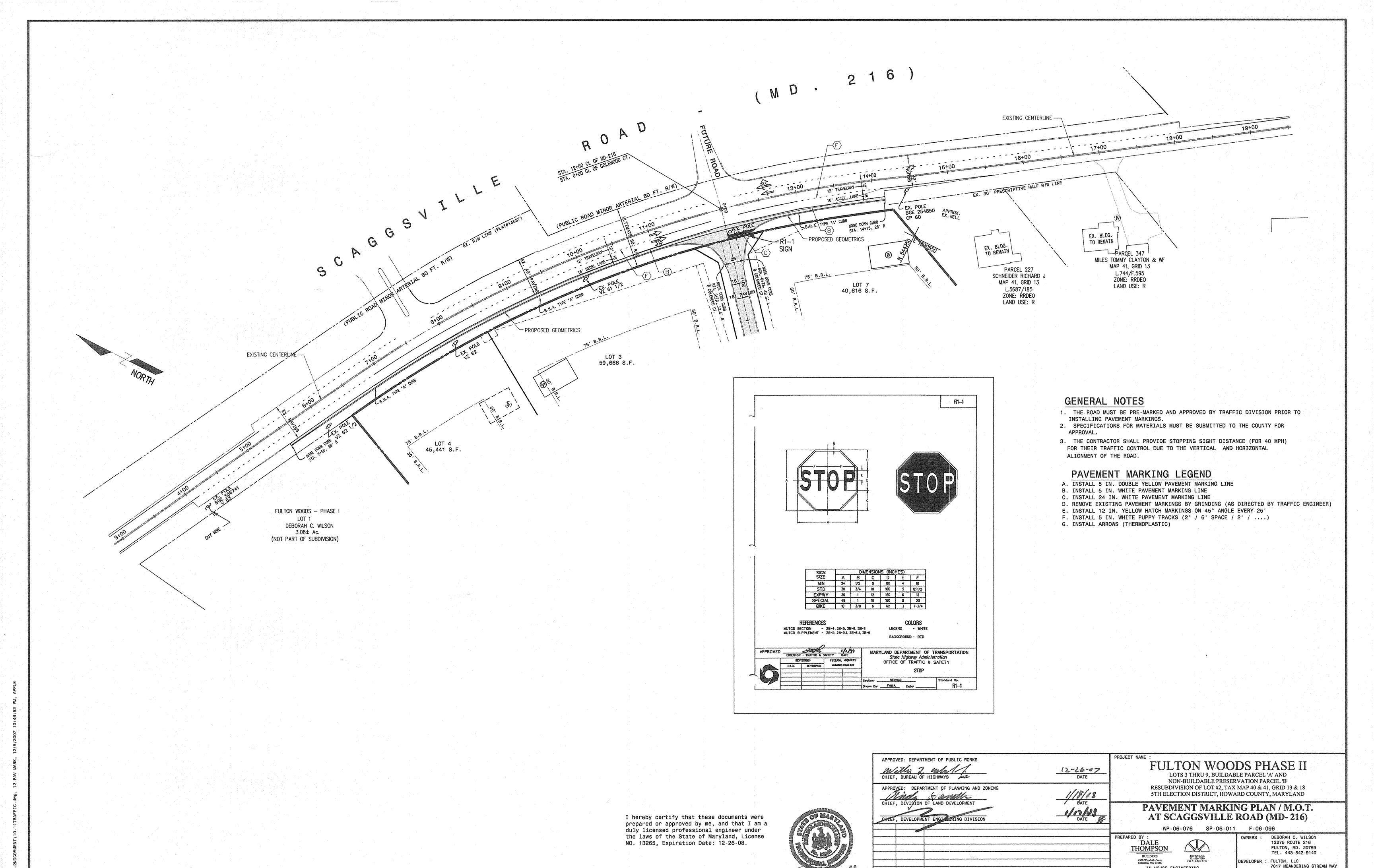
SCALE

FULTON, MD. 20759 TEL. 410-995-6736 SHEET 9 OF 12

DEBORAH C. WILSON







FULTON, MD. 20759 TEL. 410-995-6736

SHEET 12 OF 12

1" = 50'

IN HOUSE ENGINEERING

PROJ. :

DATE : DEC. 05, 2007

DES. : JHE/AVG DRW. : AVG

CHK : DCW

NO. DATE

DESCRIPTION

REVISIONS