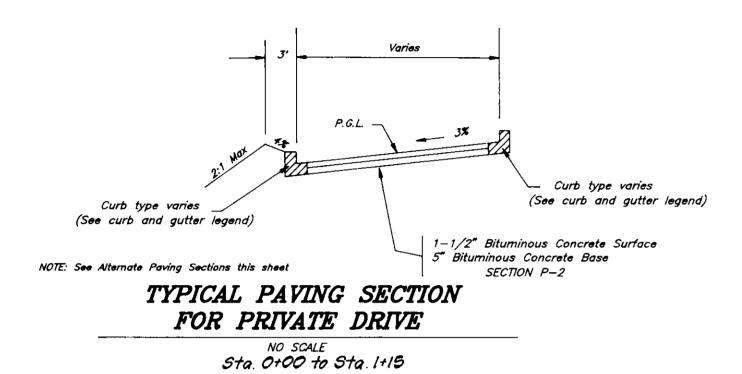
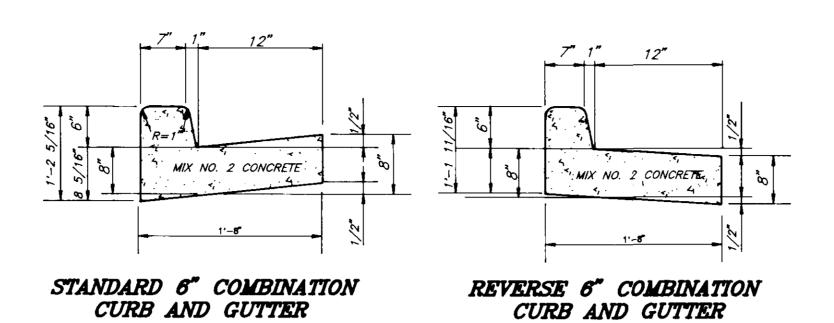


FOR PRIVATE DRIVE

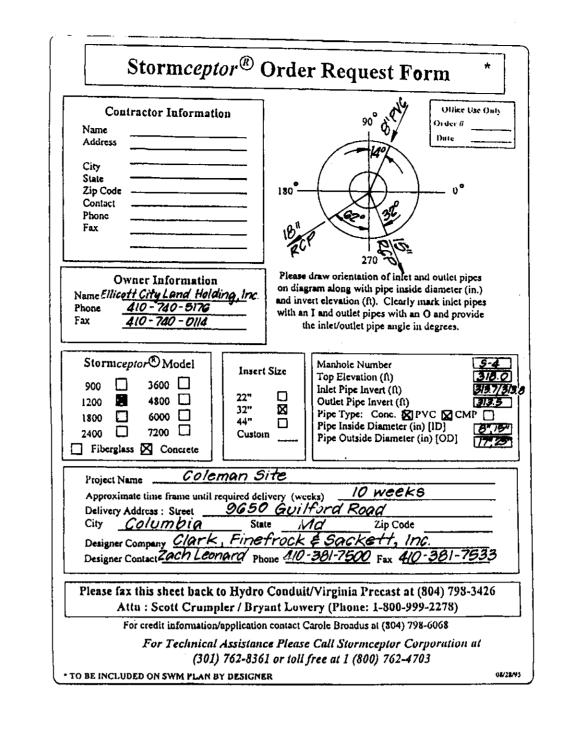
NO SCALE Sta. 1+15 to Sta. 3+79.84

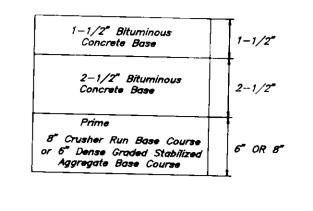


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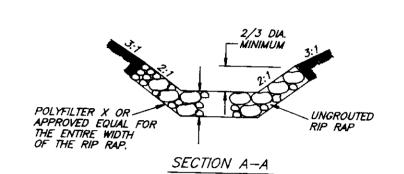
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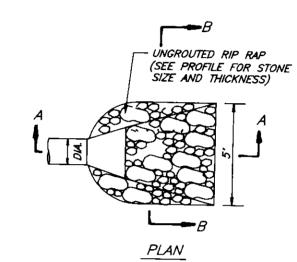


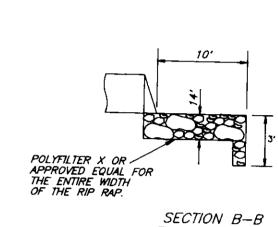


ALTERNATE PAVING SECTION FOR PRIVATE DRIVE

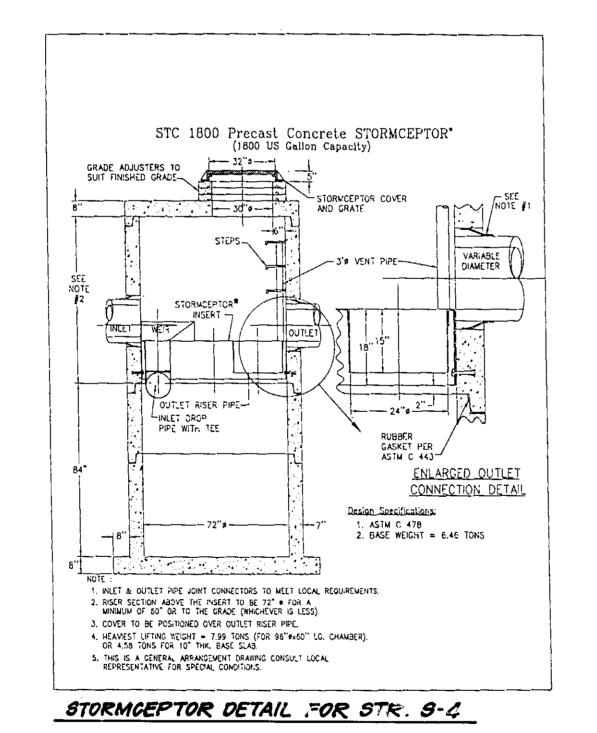
> NO SCALE (SECTION P-2)







UNGROUTED RIP RAP DETAIL FOR S-3



NO SCALE

STORMCEPTOR MAINTENANCE NOTES

1. WATER QUALITY STRUCTURES WILL REQUIRE PERIODIC CLEANING. OWNERS OF THESE FACILITIES WILL HAVE TO CLEAN THEM AS NEEDED, AT LEAST ANNUALLY.

2. MAINTENANCE OF THESE FACILITIES WILL CONSIST OF CLEANING OUT THE STORMCEPTOR AND DISPOSAL OF THE WASTE AND REPAIR OF THE FACILITY AS NEEDED. PERIODIC INSPECTIONS OF THESE FACILITIES WILL BE MADE BY THE OWNER EVERY MONTH OR AFTER MAJOR STORM EVENTS.

3. THE DISPOSAL OF THE LIQUID AND SOLID MATTER SHALL BE AS FOLLOWS:

A. ALL LIQUID MATERIAL IN THE STORMCEPTOR SHALL BE PIPED INTO A SUITABLE TANK AND DISPOSED OF AT AN APPROVED SANITARY DISTRICT DISCHARGE MANHOLE OR BE TAKEN TO AN APPROVED SEWAGE TREATMENT PLANT FOR

B. THE SOLID MATERIAL SHALL BE LANDFILLED IN AN APPROVED SANITARY LANDFILL.

4. THE INLET PIPES AND STRUCTURAL PARTS SHALL BE REPAIRED AS NEEDED.

5. STORMCEPTER INLET AND OUTLET ASSEMBLY SHALL BE PERIODICALLY INSPECTED. BLOCKAGES SHALL BE REMOVED AND DISPOSED OF AS REQUIRED IN 3B ABOVE.

STORMCEFTOR NOTES

I. FOR TECHNICAL ASSISTANCE PLEASE CALL STORMCEPTOR CORPORATION @ 1-800-762-4703.

APPROVED: DEPARTMENT OF PLANNING AND ZONING Marine

U.S. Natural Resources Conservation Service

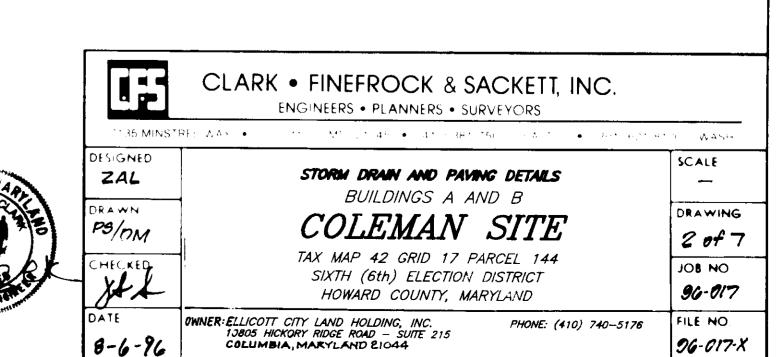
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

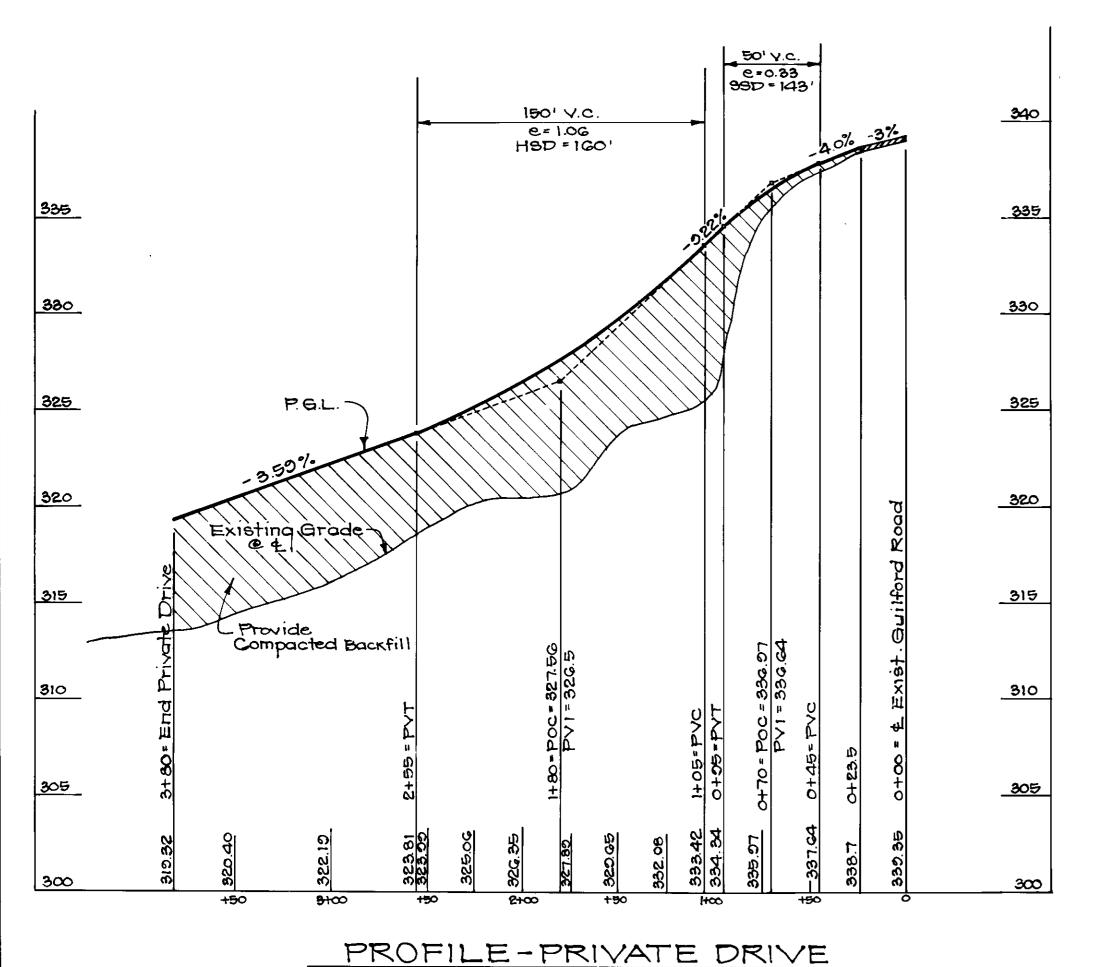
DEVELOPER'S/BUILDER'S CERTIFICATE

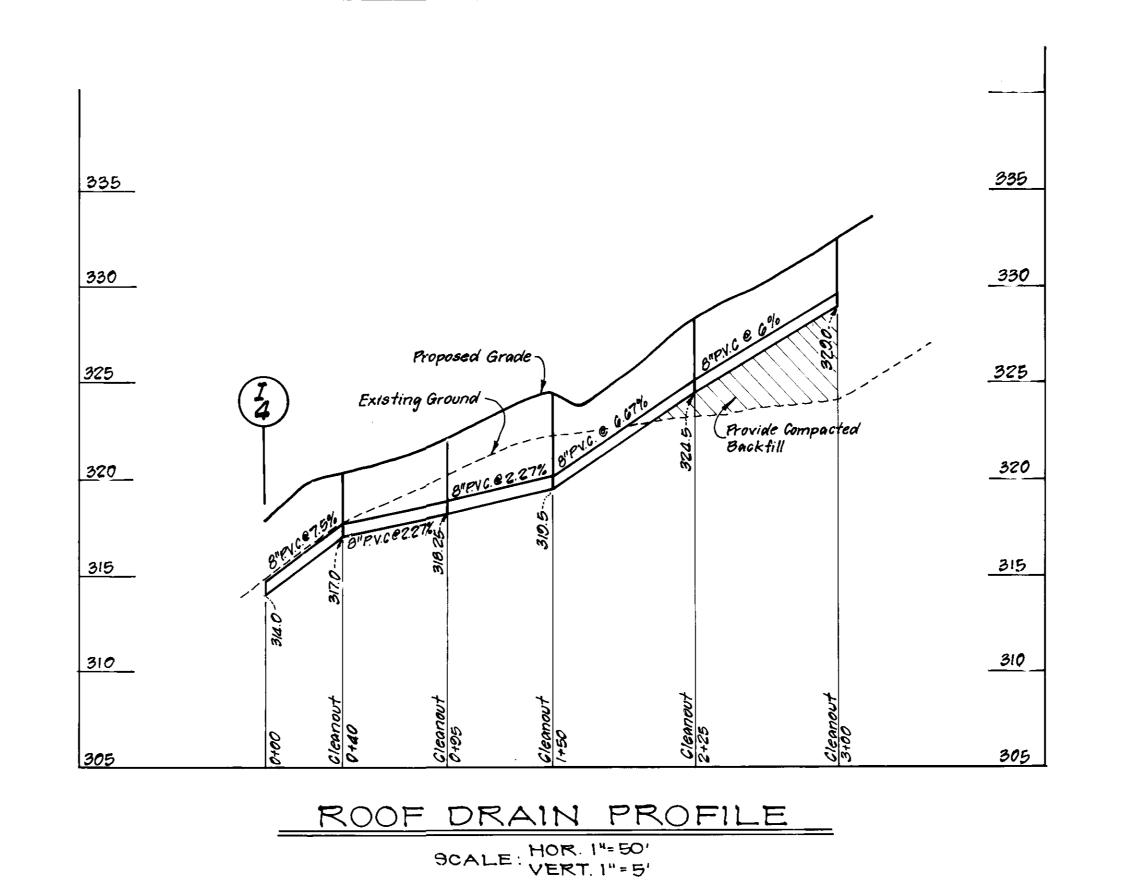
I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training 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 or their authorized agents, as are deemed

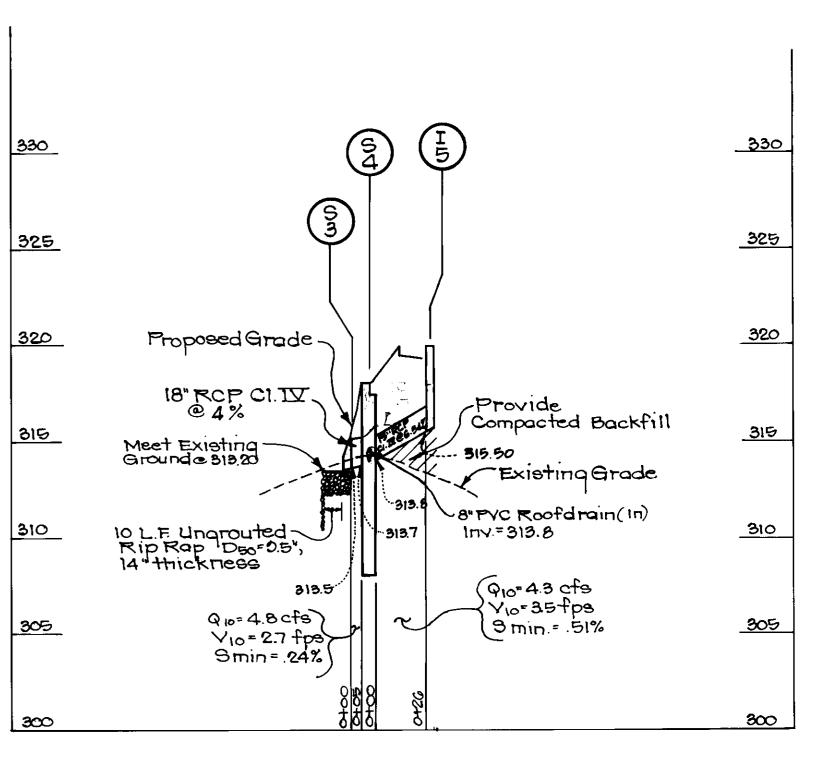
DATE

ENGINEER'S CERTIFICATE I hereby certify that this plan for Sediment and Erosion Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance



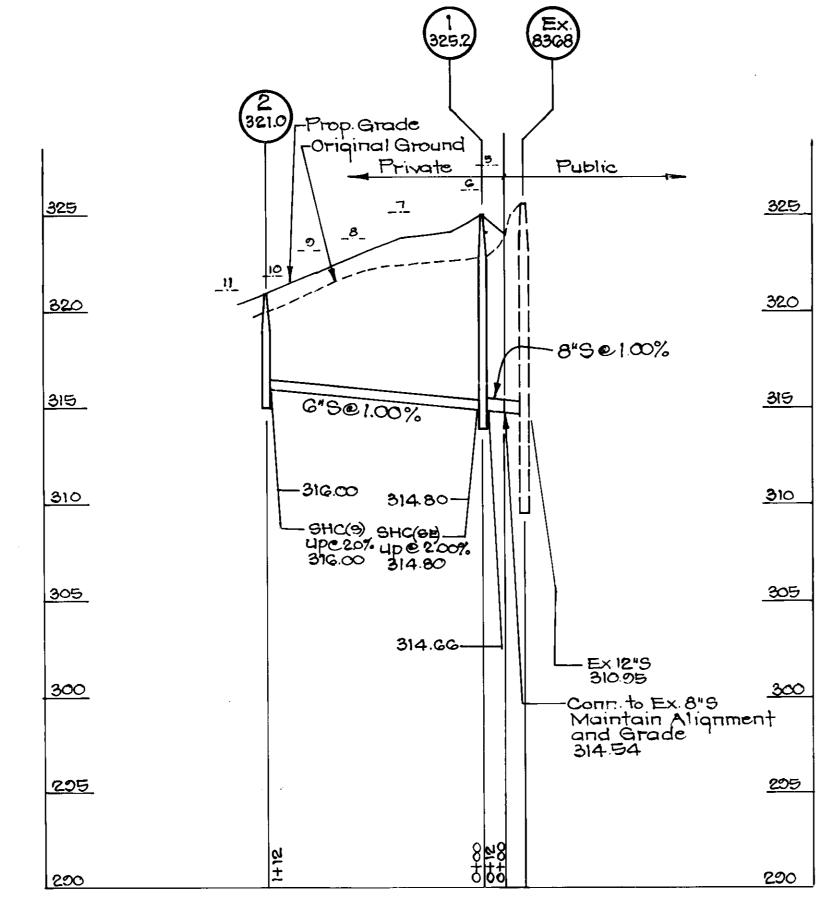






STORM DRAIN PROFILE SCALE: HOR. 1"=50" VERT 1"=5"

PROFILE-PRIVATE DRIVE SCALE: HOK. 1"= 50"



SEWER PROFILE

SCALE YERT. 1'=5'

A	\triangle STRUCTURE SCHEDULE \triangle									
1	Nö.	TYPE	INVERT		TOP ELEVATION		REMARKS	LOCATION		
1			IN	OUT	UPPER	LOWER				
F	I-5	A-10 Inlet		315.50	320.15	319.80	Ho.Co.914. Det 904.02	Sta. 3+75 12' Lt. 4_ Structure		
ţ	3-4	Stormcepter 1200 U.S.Gallon	ormcepter 1200 U.S.Gallon 313.8 313.7		318.0		STC 1200 Precast Conc.	See Plan		
ķ		Concrete End Section	313.50	_	315.0		Ho.Co. 3td. Det . SD-551	See Plan		
T	_ 1									
t										

* See detail sheet 2 of G \$\triangle All inverts to be fully developed.

PIPE SCHEDULE						
SIZE	TYPE	LENGTH				
15"	RCP CI. IV	26'				
18"	RCP CI.IV	5				
8"	PVC Schedule 40	300				

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all 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 or their authorized agents, as are deemed

ENGINEER'S CERTIFICATE I hereby certify that this plan for Sediment and Erosion 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



	CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS	
7135 MINSTR	EL WAY • COLUMBIA, MD. 21045 • (410) 381-7500 - BALTO. • (301) 62	1-8100 — WASH.
DESIGNED	PROFILES	SCALE
ZAL	BUILDINGS A AND B	As Shown
DRAWN PS/DM	COLEMAN SITE	DRAWING 3 OF 7
CHECKED J.J.S	SIXTH (6th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 96017
DATE 8-6-96	PWNER: ELLICOTT CITY LAND HOLDING, INC. PHONE: (410) 740-5176 10805 HICKORY RIDGE ROAD - SUITE 215 COLUMBIA, MARYLAND 21044	FILE NO. 96-017

APPROVED: DEPARTMENT OF PLANNING AND ZONING

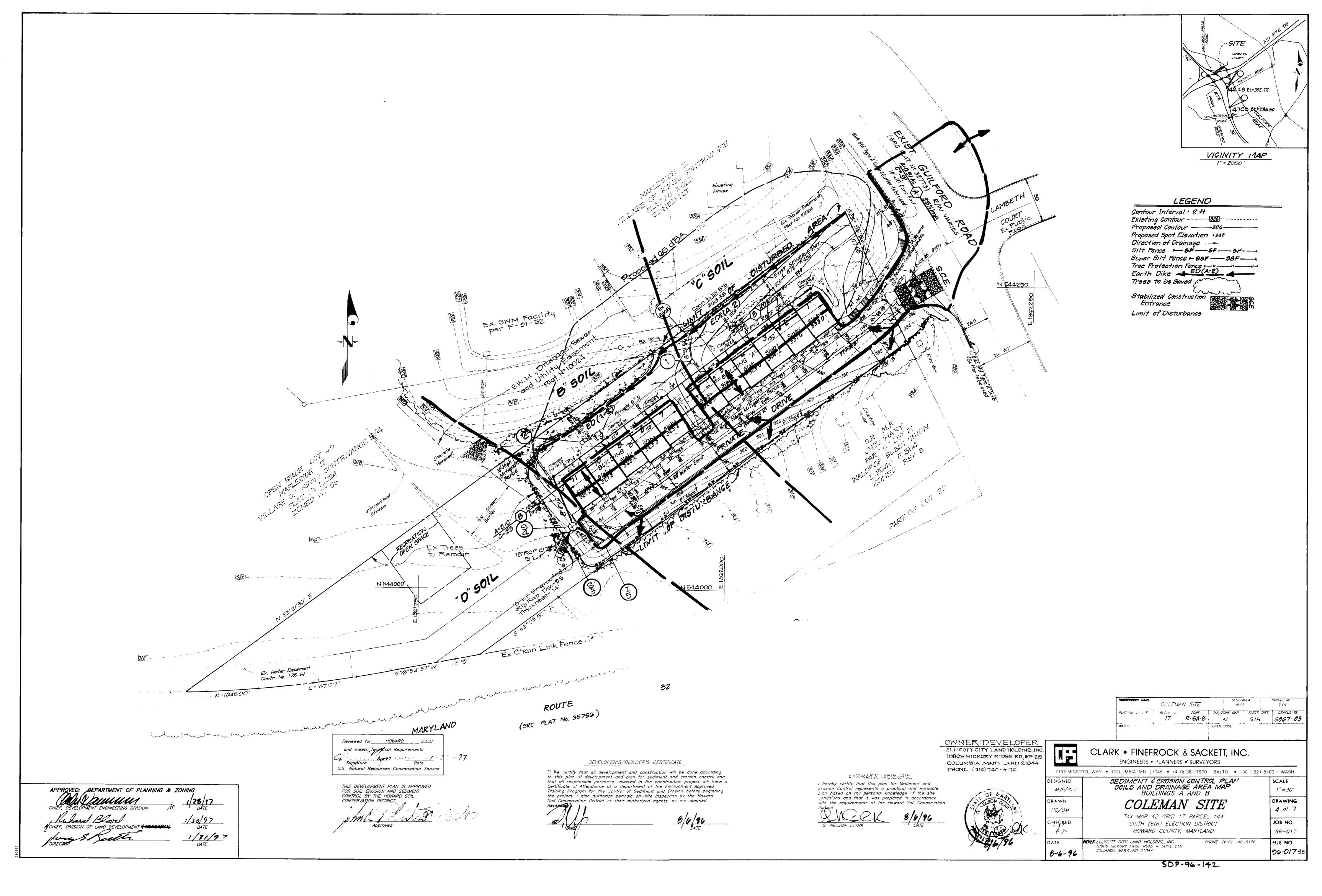
Reviewed for HOWARD S.C.D. and meets Technical Requirements

U.S. Natural Resources Conservation Service

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

CONSERVATION DISTRICT

5DP-96-142



SEDIMENT AND EROSION CONTROL NOTES

- 1. A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (313-1855).
- 2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL.
- 3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control stuctures, dikes, perimeter slopes and all slopes greater than 3:1 b) 14 days as to all other disturbed or graded areas on the
- 4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeters in accordance with Vol.1. Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm
- 5. All disturbed areas must be stabilized within the time period specified above, in accordance with the 1994 MARYLAND STAND-ARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings, soil, tamporary seedings and mulching (Sec. 6-20-1 Hery 6-23-3). Temporary stabilization with mulch alone can only be done 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: Area Disturbed: Area to be roofed or paved: Area to be vegetatively stabilized: Total Fill : Offsite Waste/Borrow Area Location
- 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 DPW 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 11. The total amount of silt fence = 325 L. F. The total amount of super silt fence = 150 L.F.
 - * It is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from the sediment control inspector of the site and it's grading permit number at the time of construction.

PERMANENT SEEDING NOTES

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

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously

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

- 1) Preferred-Apply 2 tons per acre dolomitic limestone (92 lbs/ 100 sq.ft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs./ 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq.ft.)
- 2) Acceptable-Apply 2 tons per acre dolomatic limestone (92 lbs/ 1000 sq.ft.) and apply 1000 lbs. per acre 10-10-10- fertilizer (23 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs/1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.05 lbs./1000 sq.ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq. ft.) of unrotted 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 slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

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

TEMPORARY SEEDING NOTES

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously

SOIL AMENDMENTS: Apply 600 lbs. per acre 10-10-10 fertilizer

SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.) For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs./1000 sq.ft.). For the period November 1 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq.ft.) of unrotted 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 slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

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

21.0 STANDARDS AND SPECIFICATIONS <u>FOR</u> **TOPSOIL**

Definition

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

<u>Purpose</u>

To provide a suitable soil medium for vegetable 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 areas having 2:1 or flatter a. The texture of the exposed subsoil/parent material

is not adequate to produce vegetative growth. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.

The original soil to be vegetated contains material toxic to plant growth.

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.

d. The soil is so acidic that treatment with

Construction and Material Specifications

Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.

II. Topsoil Specifications - Soil to be used as topsoil

Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or a soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger that 1 and 1/2" in

ii. Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutsedge, 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 greas and worked into the soil in conjunction with tillage operations as described in the following procedures.

II. 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.

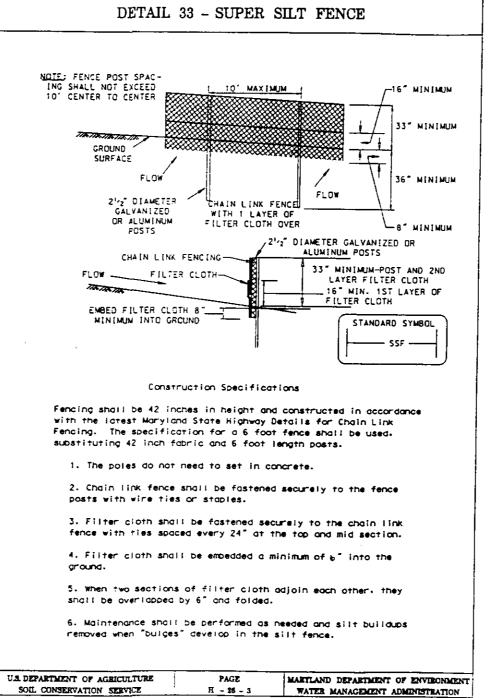
V. Topsoil Application

i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.

ii. Grades on the areas to be topsoiled, 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 seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.

iv. Topsoil shall not be place while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.



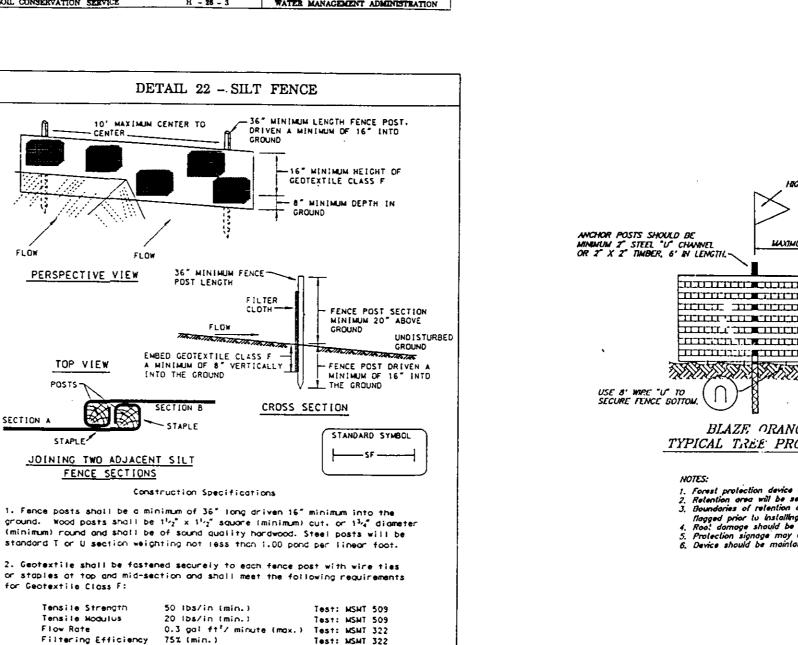
3. Where ends of geotextile fabric come together, they shall be overlapped

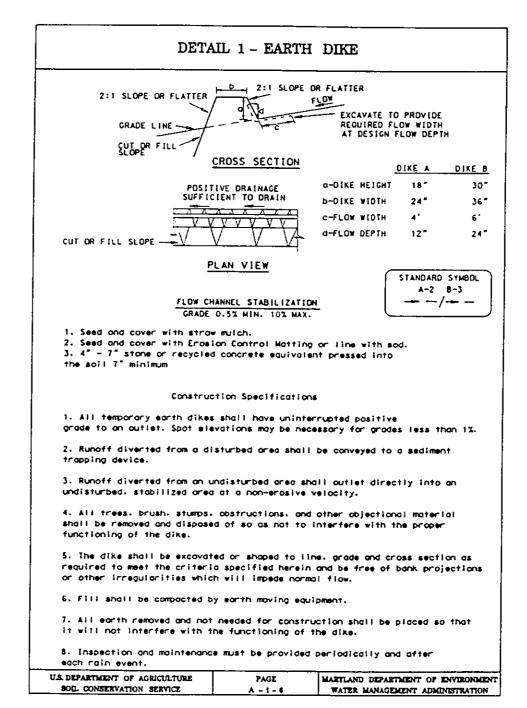
4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

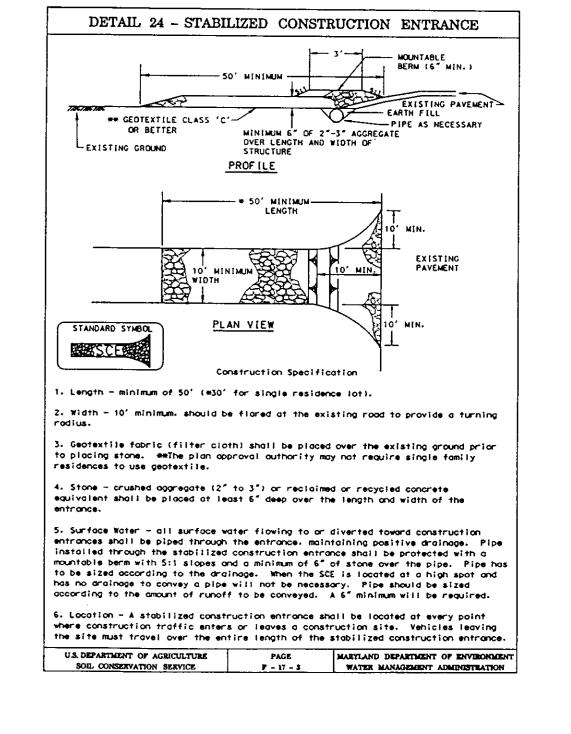
PAGE MARTLAND DEPARTMENT OF ENVIRONMENT
E - 15 - 3 WATER MANAGEMENT ADMINISTRATION

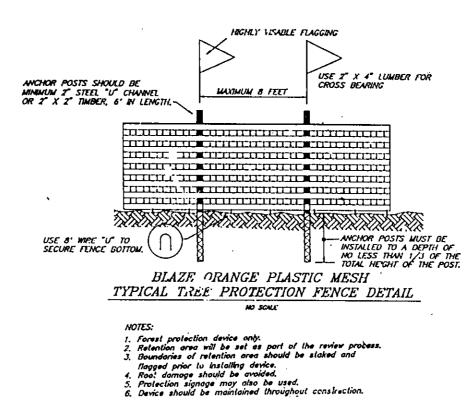
folded and stapled to prevent sediment bypass.

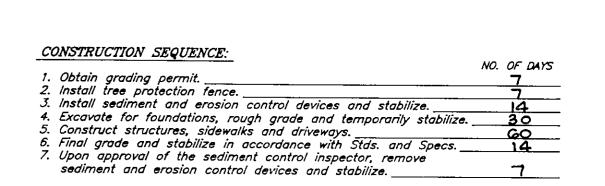
SOIL CONSERVATION SERVICE











Reviewed for HOWARD and meets Technical Requirements Signature Date
Natural Resources Conservation Service

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

APPROVED: DEPARTMENT OF PLANNING AND ZONING

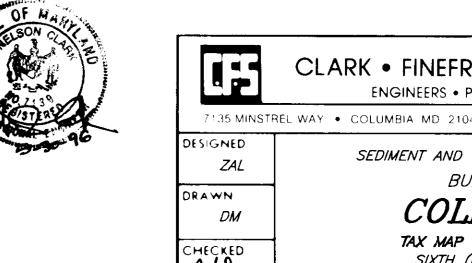
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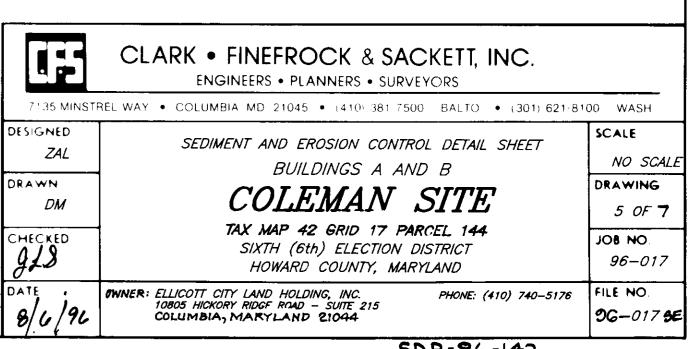
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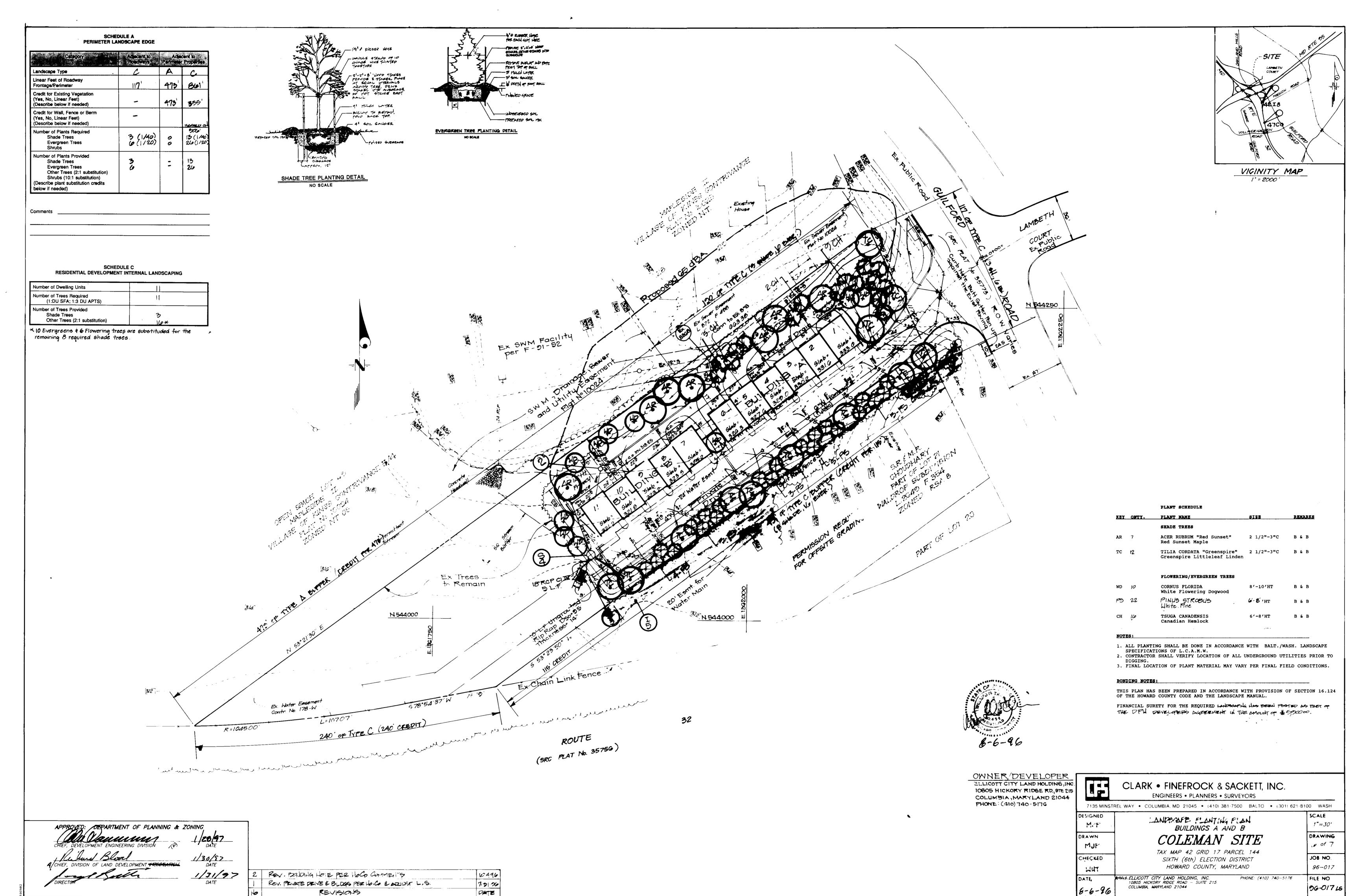
ENGINEER'S CERTIFICATE

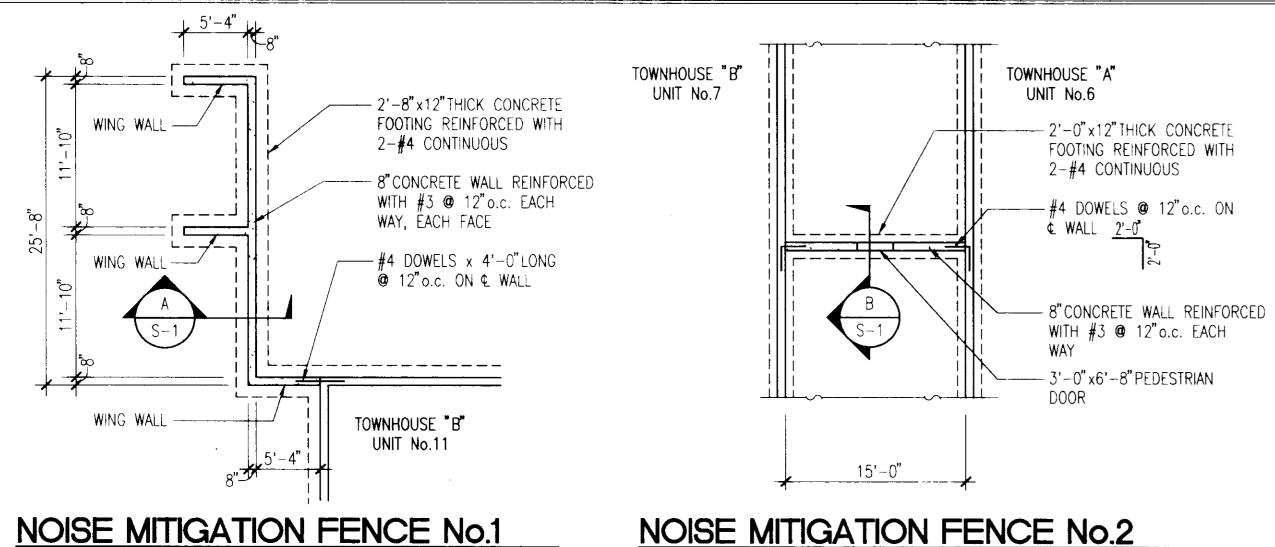
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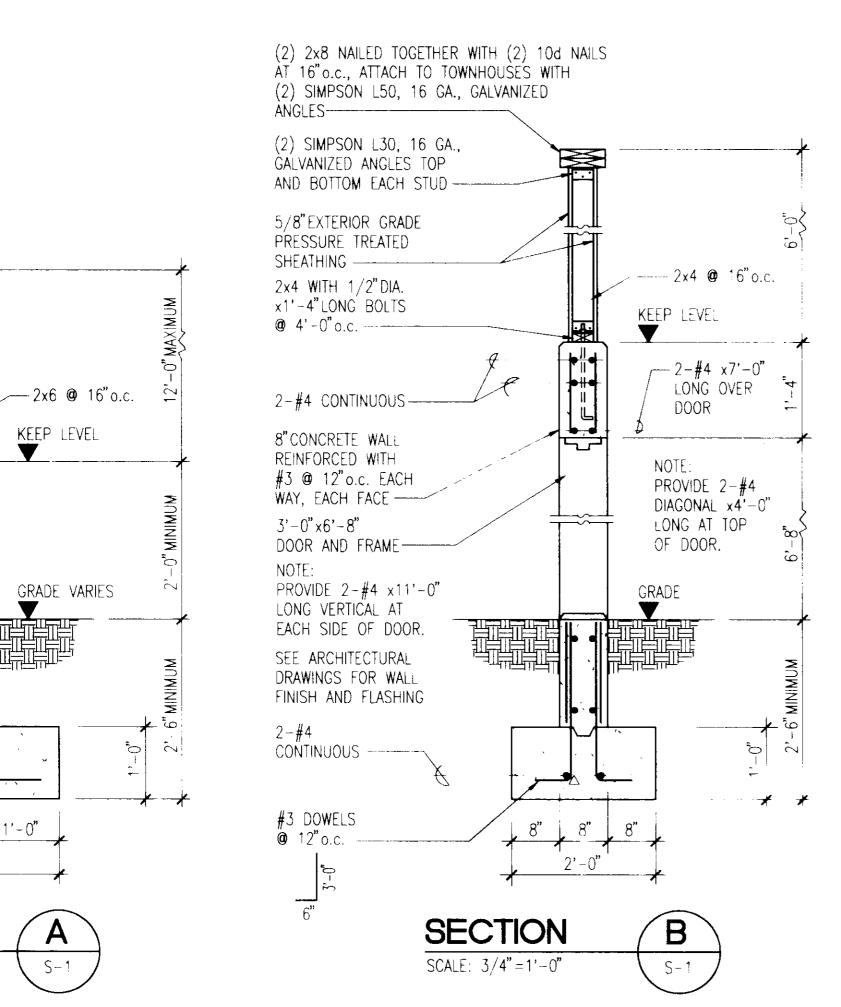








SCALE: 1/8" = 1' - 0"



GENERAL NOTES

FOUNDATION AND SLAB-ON-GRADE:

1.) FOOTINGS ARE DESIGNED FOR AN ASSUMED BEARING CAPACITY OF 2000 PSF. FOOTINGS SHALL BEAR ON NATURAL UNDISTURBED SOIL, 1'-0" BELOW ORIGINAL GRADE AND BOTTOM OF EXTERIOR FOOTINGS SHALL BE 2'-6" BELOW FINISHED GRADE, STEP FOOTINGS AS NECESSARY. CONTRACTOR SHALL VERIFY SOIL PRESSURE IN THE FIELD. IF FOUND TO BE LESS THAN 2000 PSF, THE FOOTINGS WILL HAVE TO BE REDESIGNED.

CONCRETE:

- 1.) ALL CONCRETE, EXCEPT AS NOTED, SHALL BE f'c=3000 psi NORMAL WEIGHT CONCRETE AT 28 DAYS, ALL CONCRETE EXPOSED TO THE WEATHER SHALL BE AIR ENTRAINED.
- 2.) ALL REINFORCING SHALL BE HIGH STRENGTH NEW BILLET STEEL CONFORMING TO ASTM DESIGNATION A615 (LATEAST LOCAL APPROVED EDITION), GRADE 60. ALL REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315, "MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES" (LATEST LOCAL APPROVED EDITION).
- 3.) UNLESS OTHERWISE NOTED ON STRUCTURAL DRAWINGS, PROVIDE CONCRETE PROTECTION FOR REINFORCING AS FOLLOWS: CAST AGAINST EARTH 3"

EXPOSED TO EARTH OR WEATHER: No. 6 AND LARGER BARS 2" No. 5 AND SMALLER BARS 1 1/2"

4.) ALL CONCRETE WORK SHALL CONFORM TO THE LATEST LOCAL APPROVED EDITIONS OF THE FOLLOWING ACI AND ASTM DOCUMENTS: ACI-301 SPECIFICATIONS FOR STRUCTURAL CONCRETE ACI-318 CODE

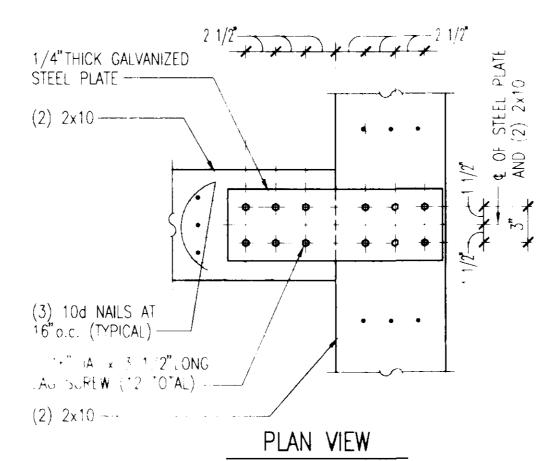
1.) STRUCTURAL WOOD MEMBERS SHALL BE SOUTHERN PINE NUMBER TWO OR EQUAL HAVING Fb=1200 psi MINIMUM. ALL FABRICATION, ERECTION, OTHER PROCEDURES AND MINIMUM UNIT STRESSES SHALL CONFORM TO THE CURRENT "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION". ALL LUMBER AND SHEATHING SHALL BE PRESSURE TREATED.

MISCELLANEOUS:

1.) SHOP DRAWINGS FOR ALL STRUCTURAL ITEMS MUST BE SUBMITTED BY THE GENERAL CONTRACTOR . IF A CONTRACTOR OR OWNER FAILS TO SUBMIT THE SHOP DRAWINGS, THE FIRM CEI ENGINEERING INC., WILL NOT BE RESPONSIBLE FOR THE STRUCTURAL CERTIFICATION AND/OR THE DESIGN OF THE PROJECT.

<u>LIVE LOADS:</u> 1) WIND LOAD

1.)	MINU	LUAU		
	1.	BASIC WIND SPEED	70 M	РН
	2.	IMPORTANCE FACTOR	1.0	
	3.	EXPOSURE ·····	C	
	4	DESIGN PF: SURE ON MAIN RESISTING		
		Faciment'S FROM IN TO 15 FEET	19.0	PSF
		15 TO 20 FEET	20.0	PSF
		20 TO 25 FEET	20.5	PSf
		25 TO 30 FEET	21.0	PSF
		30 TO 40 FEET	21.5	PSF
		40 TO 50 FEET	22.5	PSF



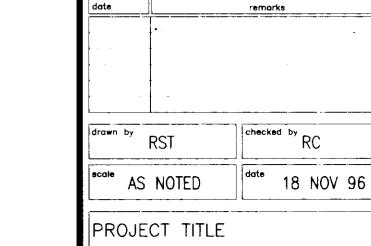
DETAIL SCALE: $1 \frac{1}{2} = 1' - 0''$ S-1



6470 DOBBIN ROAD COLUMBIA, MD 21045 Fax. 410.992.0627

> dw taylor associates inc **ARCHITECT**

5024 DORSEY HALL DRIVE SUITE 203 ELLICOTT CITY, MARYLAND 21042



NOISE MITIGATION FENCES No.1 AND No.2

CONTENT

CLARK • FINEFROCK & SACKETT, INC. **ENGINEERS • PLANNERS • SURVEYORS** 7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (410) 381-7500 - BALTO. • (301) 621-8100 - WASH. NOISE MITIGATION FENCE DETAILS BUILDINGS A AND B As Shown DRAWN DRAWING 7 OF 7 PS/DM

8-6-96

TAX MAP 42 GRID 17 PARCEL 144 SIXTH (6th) ELECTION DISTRICT JOB NO. HOWARD COUNTY, MARYLAND 96-017 OWNER: ELLICOTT CITY LAND HOLDING, INC. 10805 HICKORY RIDGE ROAD - SUITE 215 COLUMBIA, MARYLAND 21044 PHONE: (410) 740-5176 FILE NO. 96-017 .

PROJECT NUMBER DRAWING NUMBER **S**-1

CAD CEI\00396\S1

SDP-96-142,

PLANS, NOTES AND SECTIONS

APPROVED: DEPARTMENT OF PLANNING & ZONING 1/30/97 1/31/97

SCALE: 1/8" = 1' - 0"

WING WALL ----

SEE DETAIL C/S-1 FOR ATTACHMENT

OF (2) 2x10 TO (2) 2x10 OVER

(2) 2x10 NAILED TOGETHER WITH

(3) 10d NAILS AT 16"o.c.——

(2) SIMPSON L50, 16GA.,

GALVANIZED ANGLES TOP

AND BOTTOM EACH STUD -

5/8" EXTERIOR GRADE PRESSURE TREATED

SHEATHING -

2x6 WITH 1/2"DIA.

@ 4'-0"o.c. ---

x1'-4"LONG BOLTS

2-#4 CONTINUOUS-

8"CONCRETE WAL

REINFORCED WITH

WAY, EACH FACE-

#3 **@** 12"o.c. EACH

SEE ARCHITECTURAL DRAWINGS FOR WALL

FINISH AND FLASHING

SECTION

SCALE: 3/4" = 1' - 0"

CONTINUOUS -

KEEP LEVEL

GRADE VARIES

Α