

- CONSTRUCTION NOTES**
- All materials and construction to be in accordance with Howard County "Standard Specification and Details for Construction".
  - Any damage to county owned rights-of-way to be corrected at the developer's expense.
  - Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location by digging test pits, at all utility crossings, well in advance of construction.
  - Notify "Miss Utility" at 559-0100 before beginning construction.
  - Topography was taken from previous construction drawings.
  - Driveways and parking areas to be privately maintained.
  - Handicap Parking Details shall be in accordance with the "Maryland Building Code for the Handicapped," Sect. 5.01-7.05.
  - Sod all disturbed lawn areas.
  - The following paving standards apply:  
 Sidewalk per std. R-3.05.  
 St'd. Curb & Gutter per std. R-3.01.  
 Paving per P-2 std. R-2.01.  
 Handrails per std. G-7.02.
  - Other Standards may additionally apply as needed to complete the proposed construction.
  - Spill gutter at all locations where paving slopes away from the curb.

- SITE ANALYSIS**
- Land area = 9.973± Ac.
  - Land zoned: R-20
  - Proposed: addition to Elementary School. Elimination of 12 parking spaces & provision for bus drop off spaces.
  - Floor area of addition = 6,200 s.f.
  - Building height = one story, 12.6' average above grade
  - Building addition coverage = 1.43%
  - Parking required = 50
  - Parking provided:  
 Total existing spaces = 82  
 Spaces deleted = 12  
 Spaces remaining = 70  
 Std spaces = 67  
 H/C spaces = 3
  - Bus drop off area: 13 - 12' x 44' spaces provide, 5804 s.f. of new paving.
  - New paving coverage = 1.34%
  - Existing building area = 57,056 s.f.
  - Total building area = 63,256 s.f.
  - Total building coverage = 14.56%

- INDEX TO DRAWINGS**
- SITE PLAN
  - PLAN OF SEDIMENT CONTROL
  - SEDIMENT CONTROL DETAILS

NOTE:  
 ALL FACILITIES DAMAGED BY CONSTRUCTION SHALL BE RESTORED/REPAIRED AT THE CONTRACTOR'S EXPENSE.

OWNER - DEVELOPER  
 HOWARD COUNTY BD. OF EDUC.  
 10910 RT. 108  
 ELLICOTT CITY, MD 21043  
 992-0500

Subdivision Name St. John's La. Elem. School	Section / Area 115	Lot / Parcel # 115
Plot # L/R 250/11G	Block # 16/22	Zone R-20
Tax / Parc. Map 17	Elec. Dist. 2	Census Tract 6021
Water Code H 04	Sewer Code 1403700	

Address Chart

Parcel #	Street Address
115	2960 St. John's Lane

PENKIUNAS & ASSOCIATES  
 Engineers  
 8855 ANNAPOLIS RD.  
 LANHAM, MD. 20706  
 301-577-5053

DATE Aug 1987	DRAWING OF 3
SCALE 1" = 30'	
JOB NO. 8700	



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

*John Polue* 12-15-87  
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

*U.A.H.* 12.22.87  
 PLANNING DIRECTOR DATE

*Joseph R. ...* 12/16/87  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADM. DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC WORKS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*James M. ...* 12/16/87  
 DIRECTOR DATE

*...* 12-20-87  
 CHIEF, BUREAU OF ENGINEERING DATE

BY THE DEVELOPER:  
 "I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL, AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."  
*Henry ...* 12-11-87  
 DEVELOPER DATE

11-27-87  
*AA*

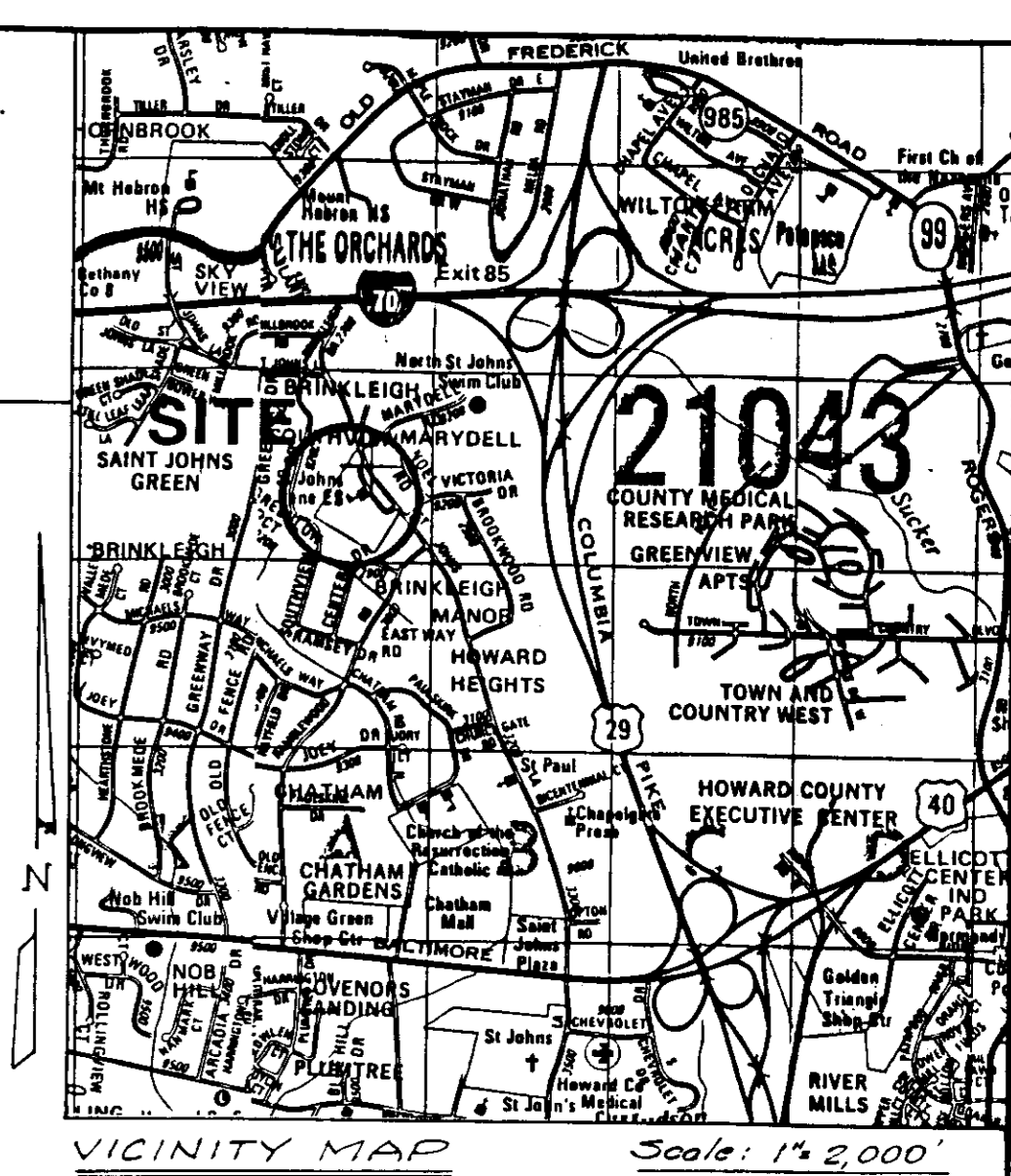
SITE PLAN  
 ADDITION TO  
 ST JOHN'S LANE  
 ELEMENTARY SCHOOL  
 PARCEL 115, BLOCK 16/22, 2ND ELEC. DIST.  
 HOWARD COUNTY, MARYLAND



LOT 33 Albert Kiersarsky N/E  
 LOT 31 Marguerite Garratt N/E  
 LOT 30

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
 APPROVED HOWARD S.C.D. DATE \_\_\_\_\_  
 PLAN NUMBER \_\_\_\_\_

REVIEWED FOR HOWARD S.C.D. NAME  
 AND MEETS TECHNICAL REQUIREMENTS  
James W. Penkiunas 12-8-87 SIGNATURE DATE  
 U.S. SOIL CONSERVATION SERVICE



NOTE:  
 ALL FACILITIES DAMAGED BY CONSTRUCTION SHALL BE RESTORED/ REPAIRED AT THE CONTRACTOR'S EXPENSE.

NOTE:  
 GRAVEL FILTERS WILL NOT BE NECESSARY WITH SILT FENCE PROTECTION.

**SEDIMENT CONTROL**

**Developer's Certification:**

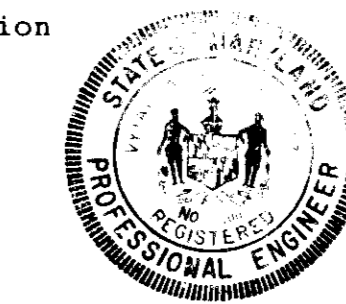
"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project."

Henry Hanning Date 12-14-87

**Engineer's Certification:**

"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."

V. J. Penkiunas, P.E. Date 12-8-87



**Sequence of Construction**

(Accumulative calendar days to start of:)

1. Obtain grading & building permits. 0 d.
2. Install "Gravel Filter" and all other sediment control measures at the "Building Addition". 3 d.
3. Remove tree and existing site improvements in conflict with proposed construction. 5 d.
4. Excavate for foundations. 8 d.
5. Construct foundation walls and place fill within. 28 d.
6. Construct building. 180 d.
7. When building is substantially completed, install sidewalk, fine grade and stabilize as required as required by plan. 225 d.
8. When school is recessed for summer, install "Gravel Filters" across driveway. 228 d.
9. Remove ex. curb as shown/required. 230 d.
10. Remove soil (cut) as required for curb and paving installation. 233 d.
11. Install new curb. 238 d.
12. Fine grade and sod disturbed area. 238 d.
13. Install paving. 238 d.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
J. J. ... 12-15-87  
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.  
... 12-22-87  
 PLANNING DIRECTOR DATE

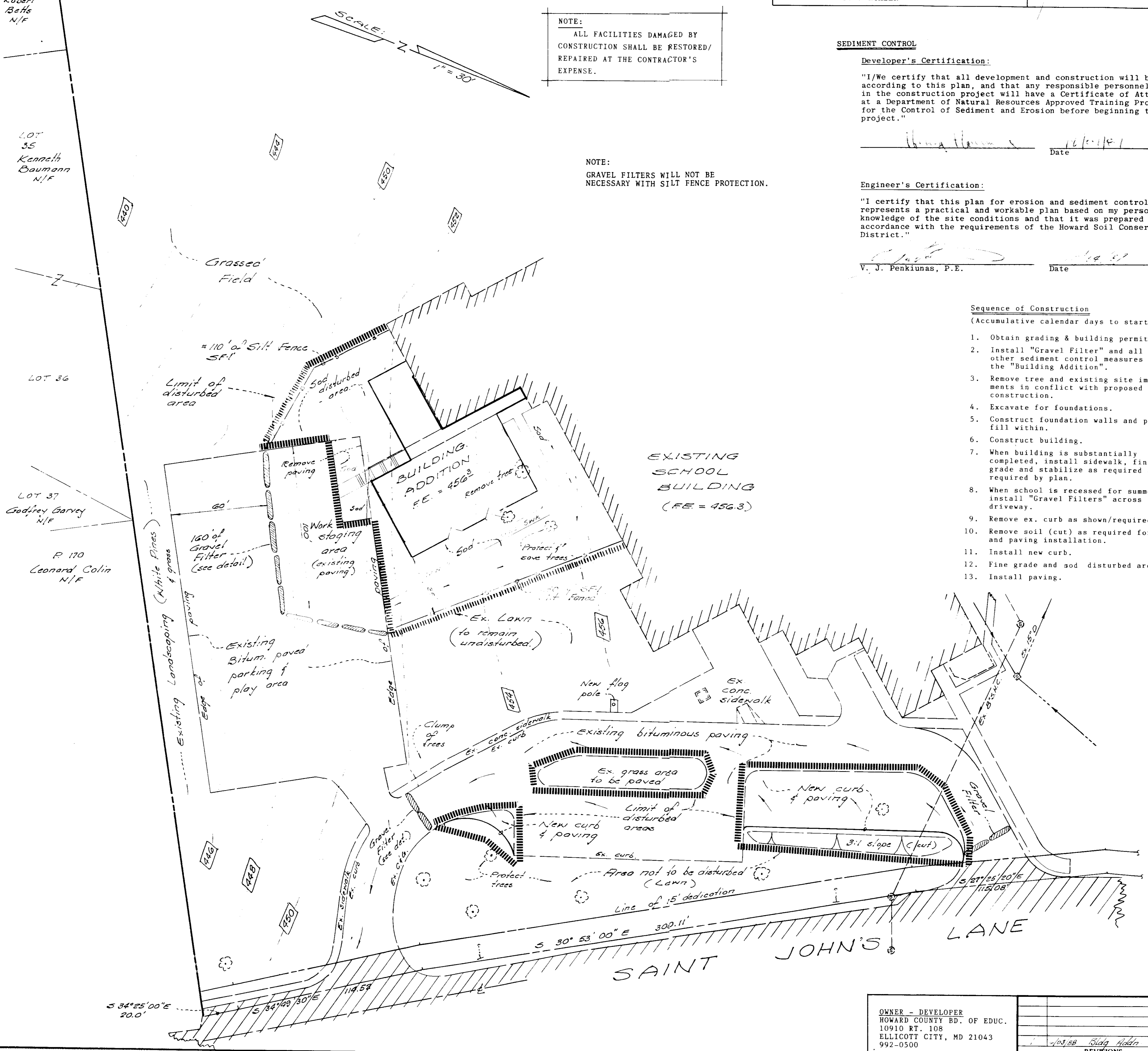
APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.  
... 12/16/87  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADM. DATE

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
... 12/16/87  
 DIRECTOR DATE

CHIEF, BUREAU OF ENGINEERING  
... 12/16/87  
 DATE

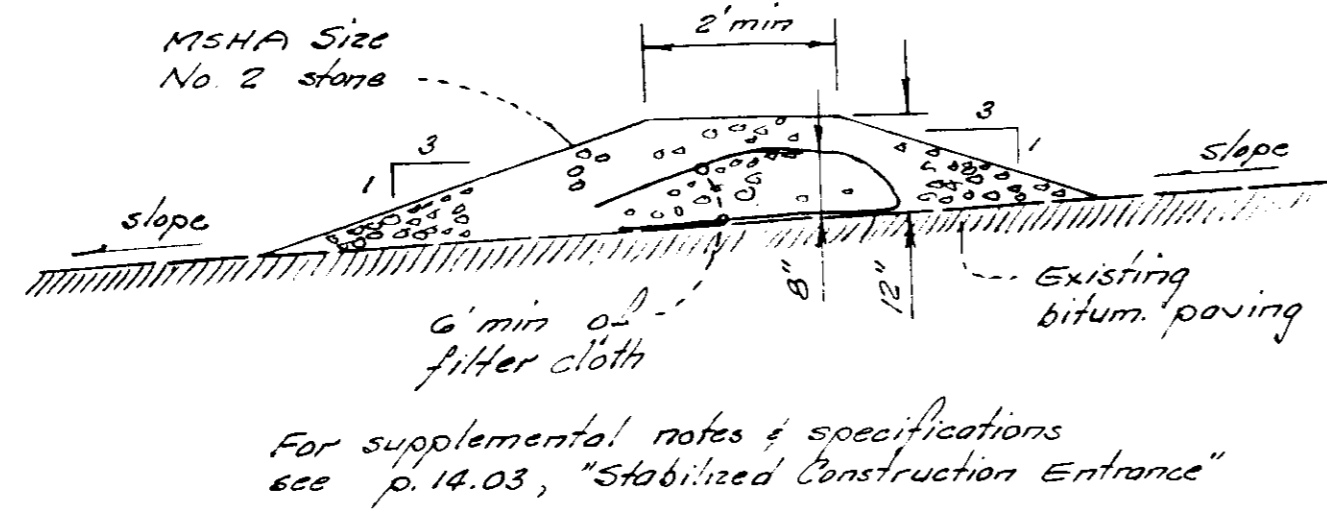
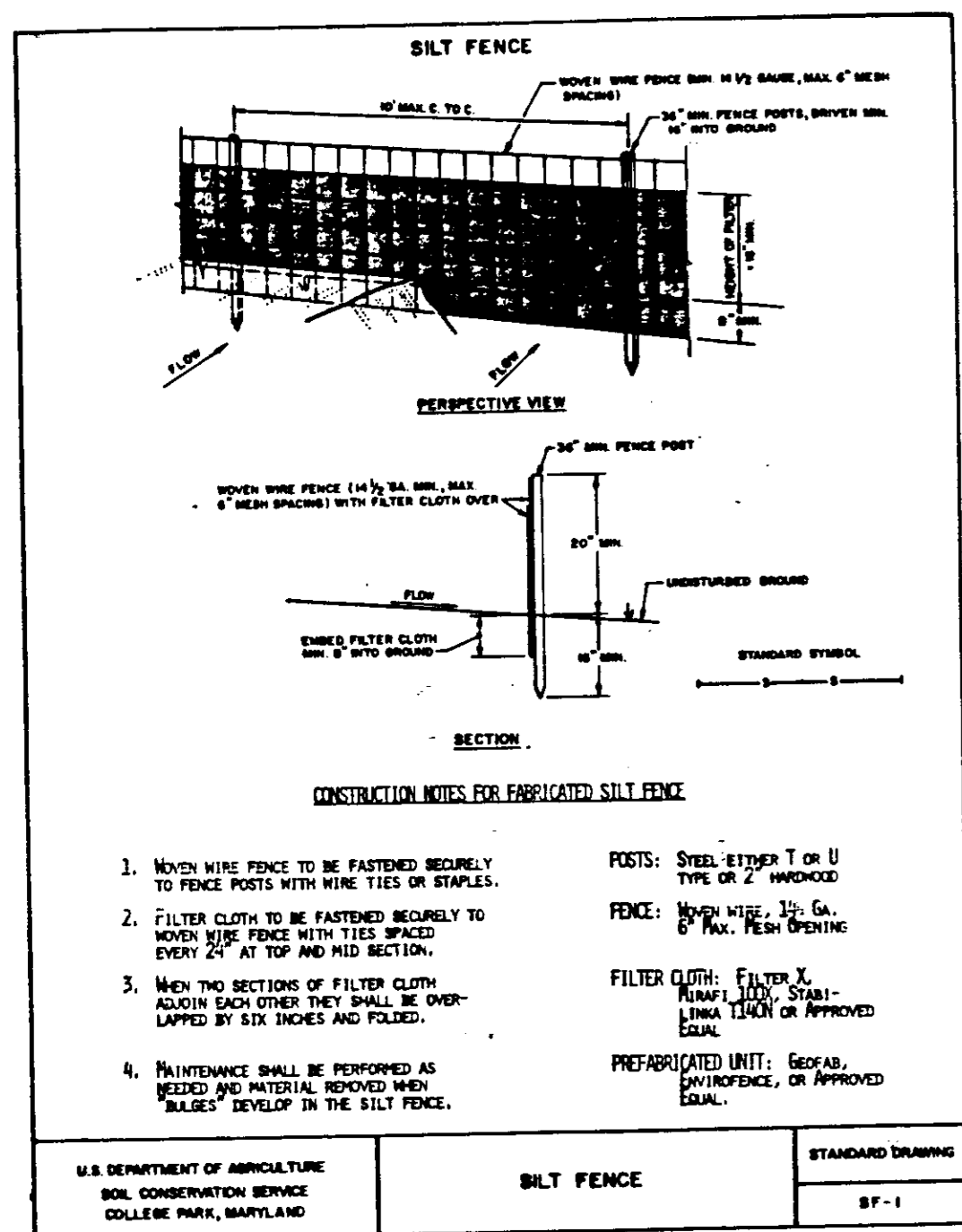
BY THE DEVELOPER:  
 "I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL, AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."  
Henry Hanning 12/16/87  
 DEVELOPER DATE

LOT 34 Robert Betts N/E  
 LOT 35 Kenneth Baumann N/E  
 LOT 36  
 LOT 37 Godfrey Garvey N/E  
 P 170 Leonard Colin N/E



PLAN OF  
 SEDIMENT CONTROL  
 ADDITION TO  
 ST. JOHN'S LANE  
 ELEMENTARY SCHOOL  
 PARCEL 115, BLOCK 16/22, 2ND ELEC. DIST.  
 HOWARD COUNTY, MARYLAND

OWNER - DEVELOPER HOWARD COUNTY BD. OF EDUC. 10910 RT. 108 ELLCOTT CITY, MD 21043 992-0500	REVISIONS 1/03/88 Blag Hoban	PENKIUNAS & ASSOCIATES Engineers 8855 ANNAPOLIS RD. LANHAM, MD. 20706 301-577-5053	DATE AUG. 1987 SCALE 1" = 30' JOB NO. 8709	DRAWING OF 3
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For supplemental notes & specifications see p. 14.03, "Stabilized Construction Entrance"

**GRAVEL FILTER**  
No Scale

**TEMPORARY SEEDING NOTES**  
Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.  
Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.  
Soil amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.)  
Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual 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 16 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 200 gals. per acre (5 gal/1000 sq. ft.) of emulsified asphalt as 6 ft. or higher, or 348 gal. per acre (6 gal/1000 sq. ft.) for anchoring.  
Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

**SODDING**  
Site Preparation  
Fertilizer and lime application rates shall be determined by soil tests. Under unusual circumstances where there is insufficient time for a complete soil test, fertilizer and lime materials may be applied in amounts shown below.  
Prior to sodding, the surface shall be cleared of all trash, debris, and of all roots, brush, wire, grade stakes and other objects.  
Where the soil is acid or composed of heavy clays, ground limestone shall be spread at the rate of 2 tons/acre or 100 pounds per square foot. In all soils 1,000 pounds per acre of 25 pounds per 1,000 square feet of 10-10-10 fertilizer or equivalent shall be uniformly applied and mixed into the top 3 inches of soil with the required lime.  
All areas receiving sod shall be uniformly fine graded. Hard-packed earth shall be scarified prior to placement of sod.  
Sod Installation  
During periods of excessively high temperature the soil shall be lightly irrigated immediately prior to laying the sod.  
The first row of sod shall be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other. Lateral joints shall be staggered to promote more uniform growth and strength. Insure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.  
On sloping areas where erosion may be a problem, sod shall be laid with the long edges parallel to the contour and with staggered joints. Secure the sod by tamping and pegging or other approved methods. As sodding is completed in any one section, the entire area shall be rolled or tamped and watered immediately.  
Sod Maintenance  
In the absence of adequate rainfall, watering shall be performed daily or as often as necessary to prevent wilting.  
First mowing should not be attempted until sod is firmly rooted. No more than 1/3 of the grass leaf shall be removed by the initial cutting or subsequent cuttings. Grass height shall be maintained between 2 and 3 inches unless otherwise specified.

**MULCHING**  
Materials and Amounts  
Straw - Straw shall be unrotted small grain applied at the rate of 1 1/2 to 2 tons per acre, or 70 to 90 pounds per 1,000 square feet. Mulch materials shall be relatively free of all kinds of weeds and shall be free of prohibited noxious weeds such as: thistles, Johnsongrass and quackgrass.  
Spread uniformly by hand or mechanically. For uniform distribution spread by hand or mechanically, divide area into approximately 1,000 square foot sections and place 70-90 pounds of mulch (two bales) in each section.  
Mulch mattresses such as jute or excelsior blanket shall be stapled to the surface in waterways and on steep slopes. Lighter materials of paper, plastic and cotton mulch mattresses may be used where erosion hazard is not severe. If area is to be mowed, do not use metal staples.  
Wood chips at the rate of approximately 6 tons per acre or 275 pounds per 1,000 square foot may be used when available and when feasible to use.  
Mulch anchoring shall be accomplished immediately after mulch placement to minimize loss by wind or water. This may be done by one of the following methods, (limited by preference) depending upon size of area, erosion hazard, and cost. On sloping land, practice No. 1 below, should be done on the contour wherever possible, except "tracking" should be done up and down the slope with 1 1/2 inch cleat marks running across the slope.  
1. Mulch Anchoring Tool and Tracking - A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the surface 2 inches of soil.  
2. Mulch Nettings - Staple lightweight biodegradable paper, plastic or cotton nettings.  
3. Liquid Mulch Binders - Application of liquid binders should be heavier at edges where wind catches mulch, in valleys, and at crests of banks; and shall be cutback asphalt, emulsified asphalt or synthetic binders.

**GENERAL SEDIMENT CONTROL NOTES**  
1. All work shall be in accordance with "1983 MD STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL".  
2. All site work to be per sequence of construction given herein.  
3. Stabilize the perimeter dikes by seeding and mulching.  
4. Only the area of immediate construction to be disturbed.  
5. Periodic inspection and maintenance of all sediment control structures must be provided to insure intended purpose is accomplished.  
6. At the end of each working day, check all sediment control measures for integrity and operation.  
7. All surface run-off to be directed into the silt traps, no sediment must be allowed to leave the site.  
8. Silt traps shall be cleaned out when sediment reaches pre-scribed elevation.  
9. A. The developer is responsible for the acquisition of all required easements, right, and/or right-of-way pursuant to the discharge from the sediment and erosion control practices, storm water management practices and the discharge of storm water onto or across and grading or other work to be performed on adjacent or downstream properties affected by this plan.  
B. Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a). Seven calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 2 horizontal to 1 vertical (3:1) and b). Fourteen days as to all other disturbed or graded areas on the project site. The in-place sediment control measures will be maintained on a continuing basis until the site is permanently stabilized and all permit requirements are met.  
C. 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 by the inspection agency is made; and  
D. Approval shall be requested upon final stabilization of all site with disturbance areas in excess of 2 acres before removal or controls.  
10. All borrow or spoil to be at a source with an approved sediment control plan  
11. Use mulch only during non-seeding periods.

**APPROVED:** FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
*[Signature]* 12-15-87  
COUNTY HEALTH OFFICER DATE  
**APPROVED:** HOWARD COUNTY OFFICE OF PLANNING AND ZONING.  
*[Signature]* 12-22-87  
PLANNING DIRECTOR DATE  
*[Signature]* 12/14/87  
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADM. DATE  
**APPROVED:** FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.  
*[Signature]* 12-2-87  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
DIRECTOR DATE  
*[Signature]* 12-2-87  
CHIEF, BUREAU OF ENGINEERING DATE  
BY THE DEVELOPER:  
"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL, AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."  
*[Signature]* 12/14/87  
DEVELOPER DATE

**SPECIAL SEDIMENT 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.  
2. 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 Drainage.  
3. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.  
4. 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.  
5. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.  
6. Additional sediment controls must be provided, if deemed necessary by the Howard County DPW sediment control inspector.  
7. Notify "Miss Utility" at 559-0100 before beginning the construction.  
8. Site Analysis:

Total Area of Site	9.975	Acres
Area Disturbed	0.582	Acres
Area to be roofed or paved	0.338	Acres
Area to be vegetatively stabilized	0.244	Acres
Total Cut	582	Cu. yds.
Total Fill	600	Cu. yds.
Offsite waste/borrow area location		Approved site

Should additional fill be required beyond the above quantities, contractor is to provide at no additional cost to the owner.

**THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.**  
**APPROVED:** *[Signature]*  
HOWARD S.C.D. DATE

PLAN NUMBER  
REVIEWED FOR **HOWARD** S.C.D. NAME  
AND MEETS TECHNICAL REQUIREMENTS  
*[Signature]* 12-8-87  
SIGNATURE DATE  
U.S. SOIL CONSERVATION SERVICE

DIVISION OF LAND DEVELOPMENT AND ZONING  
HOWARD COUNTY  
DATE 11-27-87

**SEDIMENT CONTROL DETAILS**  
ADDITION TO  
ST. JOHN'S LANE  
ELEMENTARY SCHOOL  
PARCEL 115, BLOCK # 16/22, 2ND ELEC. DIST.  
HOWARD COUNTY, MARYLAND



<b>OWNER - DEVELOPER</b> HOWARD COUNTY Bd. OF EDUC. 10910 RT. 108 ELLICOTT CITY, MD 21043 992-0500	<b>REVISIONS</b>	<b>PENKIUNAS &amp; ASSOCIATES</b> Engineers 8855 ANNAPOLIS RD. LANHAM, MD. 20706 301-577-5053	<b>DATE:</b> 2/18/1987 <b>SCALE:</b> As Shown <b>JOB NO.:</b> 8709	<b>DRAWING</b> 3 OF 3 SDP-88-31
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