# BENCH MARKS

HORIZONTAL (NAD 83) AND (NVD 29) CONTROL BASED UPON HOWARD COUNTY TRAVERSE POINTS 47E4, 42EA, AND 1941005

# SITE DEVELOPMENT PLAN FOR

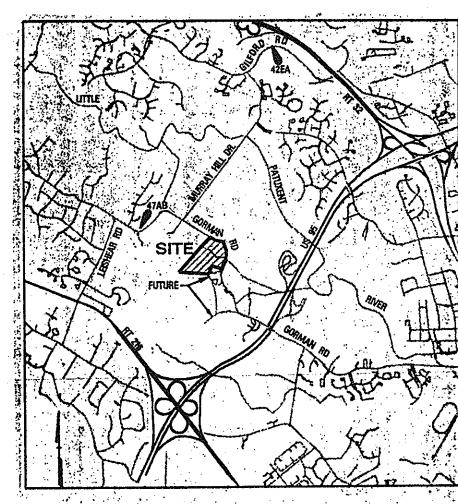
# SOUTHEASTERN ELEMENTARY SCHOOL NO.3

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

## SHEET INDEX

DESCRIPTION TITLE SHEET SITE DEVELOPMENT PLAN SITE DEVELOPMENT PLAN LANDSCAPE PLAN SITE DEVELOPMENT PLAN, LANDSCAPE PLAN AND DRAINAGE AREA MAP DETAIL SHEET SEDIMENT & EROSION CONTROL PLAN SEDIMENT & EROSION CONTROL PLAN SEDIMENT & EROSION CONTROL NOTES AND DETAILS DETAIL SHEET C-1

> DETAIL SHEET C-2 UTILITIES PROFILES, NOTES & DETAILS DRAINAGE AREA MAP



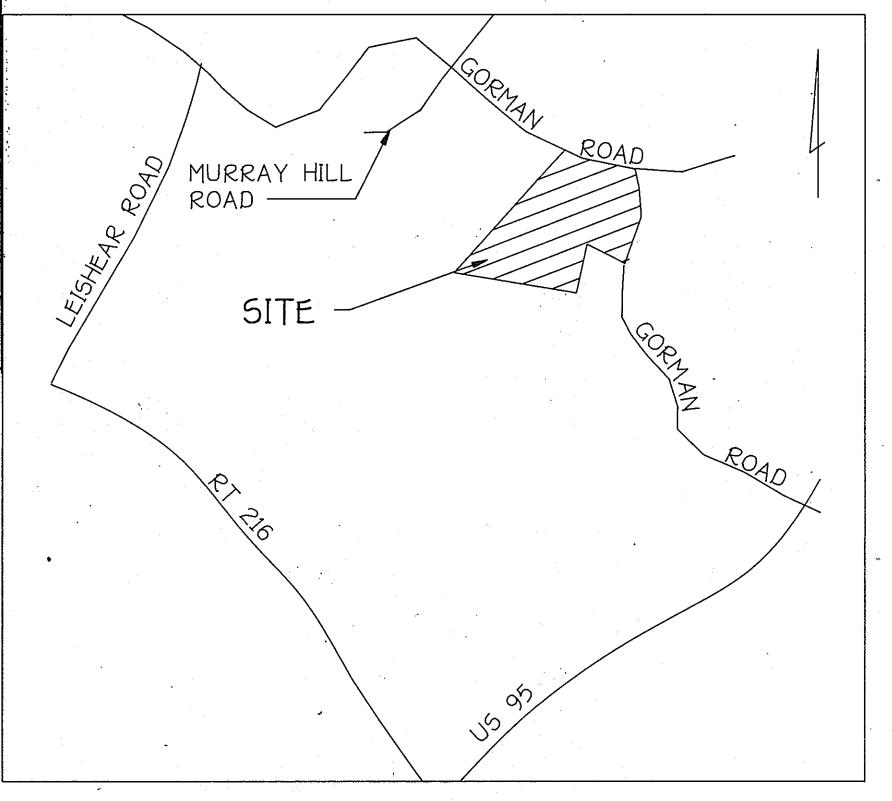
LOCATION MAP

	SITE ANALYSIS	DATA CHART
1. GENERAL SITE DATA	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
a. Present Zoning:		R-ED & PEC
b: Applicable DPZ File Refer	ences:	5-96-02, RESOLUTION 120-95,PB 306, 50P 96-42
c. Proposed Use of Site or	Structure(s):	SCHOOL, PARKING & PLAYFIELDS
d. Proposed Water and Sew	er Systems:	YE5
e. Any Other information W	hich May be Relevant:	PUBLIC WATER & SEWER SYSTEMS TO BE PROVIDED UNDER CAPITAL PROJECT NO. 5-6204 :FUTURE PUBLIC ROAD TO BE PROVIDED UNDER E-093
2. GENERAL SITE DAT	<b>A</b>	
a. Total Project Area:	(indicated by Sectio	39.11 Acres on and Area As Shown on Final Plat or As Shown on Deed)
b. Net Area of Site:	(indica†e	38.10 Acres by Section and Area As Shown on Final Plat)
c. Area of This Plan Submis	sion:	17.85 Acres
d. Limit of Disturbed Area:		17.85 Acres
e. Building Coverage of Site	•	1.54 Acres and Gross Area (proposed)
3. OPEN SPACE DATA		
a. Open Space Required on	Si†e:	4.5 Acres (25 % of Gross Area) (9.8 Acres of Total Site)
b. Open Space Proposed 🗽	ont 'A	1.6 + Acres (Total)
. PARKING SPACE DA	TA'	
a. Floor Space on Each Lev	el per Buildings per Use:	67,052 sf
b. Number of Parking Space	s Required by Zoning Regulation	ons and / or FDP Criteria: NA
c. Total Number of Parking	Spaces Provided On-Site:	98
d. Number of Handicapped P	arking Spaces Provided:	4

FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21042

(410) 461 - 2855

PLANNING BOARD



NOTE: THIS PLAN IS SUBJECT TO WAIVER PETITION WPII-142.
THE PLANNING DIRECTOR ON MARCH 24, 2011 GRANTED APPROVAL TO WAIVE SECTION 1G,15G(0)(1)(11) AND SECTION 1G,15G(0)(2) WHICH REQUIRES THE DEVELOPER TO APPLY FOR BUILDING PERMITS FOR ALL CONSTRUCTION AUTHORIZED BY THE APPROVED SITE DEVELOPMENT PLAN WITHIN EYEARS OF SIGNATURE APPROVAL, OTHERWISE THE SITE DEVELOPMENT RAN STALL EXPRE AND A NEW SITE DEVELOPMENT PLAN SUBMISSION WILL BE REQUIRED. APPROVAL OF THE WAIVER 16 SUBJECT TO THE FOLLOWING: THE DEVELOPER SHALL APPLY TO THE DEPARTMENT OF INSPECTIONS. LICENSES AND FERMITS FOR BUILDING PERMITS FOR ALL CONSTRUCTION AUTHORIZED BY THE APPROVED RED-LINE REVISION TO THE SITE DEVELOPMENT PLAN WITHIN 2 YEARS FROM THE DATE OF THIS WAIVER

THE WAIVER PETITION APPROVAL IS FOR REVISION & PREVIOUSLY APPROVED ON 2/17/2004,

OWNER / DEVELOPER

10910 ROUTE 108

KEVISION

CHANGED SHEET INDEX

ELLICOTT CITY, MARYLAND 21043

HOWARD COUNTY PUBLIC SCHOOL SYSTEM

PETITION APPROVAL (ON OR BEFORE MARCH 24, 2013),

# 254.90' . 918° 58' 36"E, 436.75' HO. CO. PUBLIC SCHOOL SYSTEM - 504°11' 58"W 3573/491 -546°41'58"W " 5 24" 54" 07 "W, 127.32" 5 18° 44' 50" W, 76.92' 5 22° 10° 32" W, 112.49' N 630 48'06" W, 59.99' 5 35° 24' 42"W, 88.90 TRACT BOUNDARY

SCALE: 1": 400'

STREET ADORESS LOT/PARCEL # P/O P. 3 9999 WINTER SUN ROAD SECTION/AREA LOT NO. SUBDIVISION SOUTHEASTERN EVEM. SCHOOL N/A Plo Parcel 3 BLOCK ZONE TAX/ZONE ELEC. DIST CENSUS TR. PLAT HO 47 2 6 WATER CODE SENER CODE 12/15/08 巨15

# GENERAL NOTES

ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY, PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE OR AS SPECIFIED. APPROXIMATE LOCATIONS OF EXISTING UTILITIES ARE SHOWN FROM BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTER-SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.

BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TO VERIFY THEIR LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF LOCATION OF UTILITIES IS OTHER THAN SHOWN. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY: AT 1-800-257-7777 AT LEAST

48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE, AND SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410)313-1000 AT LEAST FIVE (5) WORKING DAYS PRIOR THE EXISTING TOPOGRAPHY IS TAKEN FROM A FIELD RUN SURVEY WITH TWO (2) FOOT CONTOUR INTERVALS PREPARED BY SCHMIDT, PFETLZ AND MCDONALD,

ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS OR MSHA STANDARDS AS SPECIFIED ON STRUCTURE SCHEDULE. OPERATING EXISTING VALVES, SWITCHES, SERVICES OR START UP OF NEW SERVICES SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.

REQUIRED SOIL EROSION AND SEDIMENTATION CONTROL PLANS SHALL BE PROVIDED, INSTALLED AND MAINTAINED. PLETELY DEMOLISH FEATURE, CLEAR AREA OF ALL DEBRIS, AND DISPOSE OF OFF-SITE AT A LEGAL DUMPSITE. ABANDON MEANS TO LEAVE IN PLACE AND CUT WHERE REQUIRED, AND BULKHEAD ALL CUT ENDS WITH A PLUG OR CAP, OR CONSTRUCT A 9" THICK BRICK AND MORTAR BULKHEAD CONFORMING TO

EXISTING UTILITY MATERIALS. PUBLIC WATER AND SEWER PER CAPITAL PROJECT NO. 5-6204. THERE ARE NO KNOWN GRAVE SITES OR CEMETERIES ON THIS SITE. GORMAN ROAD IS A SCENIC ROAD ON THE HOWARD COUNTY SCENIC ROAD

THE WETLAND DELINEATION STUDY FOR THIS PROJECT WAS PREPARED BY M.A. DIRCKS & COMPANY, INC. DATED MAY, 1995 AND WAS APPROVED IN THE SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING ANALYSIS FOR THIS PROJECT WAS PREPARED BY ESC, LTD. DATED AUGUST, 1995.

ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLAN COORDINATION SYSTEM. HOWARD COUNTY MONUMENT NOS. 4784 AND 478A WERE USED FOR THIS PROJECT.

17. EXTENDED DETENTION STORMWATER MANAGEMENT IS USED ON THIS PROJECT AND WILL BE OWNED AND MAINTAINED BY THE BOARD OF EDUCATION. THE FLOOD PLAIN STUDY FOR THIS PROJECT WAS PREPARED BY DAFT-MCCUNE-

WALKER, INC. DATED AUGUST, 1995 AND WAS APPROVED IN SEPTEMBER, 1995. THIS APPROVED STUPY IS BEING MODIFIED BY THIS PROJECT. NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT. FOR THE TEMPORARY STREAM CROSSING AND UTILITY PLACEMENT THE JOINT PERMIT TRACKING IS 199660231.

SITE LIGHTING, LANDSCAPING, OFF-SITE ROADS AND POND "2 OUTFALL ARE TO BE BID AS ALTERNATES. NOTE: RESOLUTION NUMBER 120. 1995 GRANTED A YARIANCE FROM THE REQUIRED 75 FOOT PEC SETBACK, ALLOWING ZERO FOOT SETBACK FOR THE CONSTRUCTION OF AN ELEMENTARY SCHOOL AND PARKING

AND ALLOWING A VARIANCE FROM THE R-ED TO FOOT SETBACK FOR ATHLETIC FACILITIES ALONG GORMAN ROAD. NOTE: PLANTING FOR FOREST CONSERVATION AS APPROVED UNDER 9.D.P. - 96.42 WILL BE COMPLETED BY OCTOBER 1997.

# SEQUENCE OF OPERATIONS

OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION.
NOTIFY HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS (410)313-1855 A MINIMUM OF 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION (2 DAYS).

NOTIFY THE ENGINEER IN CHARGE OF THE AS-BUILT INSPECTION AT (410)296-3333 (1 DAY).

CLEAR, GRUB AND INSTALL ALL SEDIMENT AND EROSION CONTROL MEASURES AS SHOWN ON THIS PLAN. INSTALL TEMPORARY SEEDING (2 DAYS);

WITH THE APPROVAL OF ESC INSPECTOR, CLEAR, GRUB THE REMAINDER OF THE SITE (2 WEEKS).

MASS GRADE SITE AND PROVIDE DUST CONTROL AS NEEDED (5 WEEKS). BEGIN BUILDING CONSTRUCTION, INSTALL ALL UTILITIES. STABILIZE ALL NON-ACTIVE GRADED SURFACES WITH TEMPORARY SEEDING (Ø WEEKS). FINE GRADE ALL PAVED SURFACES. INSTALL CURB AND GUTTER. APPLY

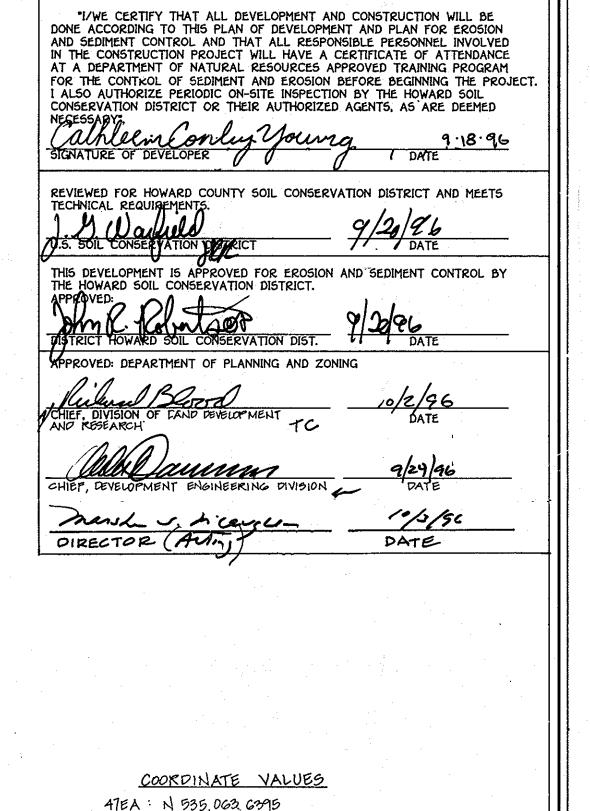
ROAD SUB-BASE (3 WEEKS). FINE GRADE ALL LAWN AREA AND STABILIZE WITH PERMANENT SEEDING (2 WEEKS). COMPLETE BUILDING CONSTRUCTION (1 YEAR).

PAVE ROADWAYS (2 WEEKS). WITH THE PRIOR PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR AND THE HOWARD COUNTY SEDIMENT CONTROL DIVISION, REMOVE SEDIMENT CONTROLS. FINE GRADE AND STABILIZE THESE AREAS (3 WEEKS).

INSTALL LANDSCAPING.

SHEET 1 OF 13

5. D.P. 97-05



E 1,357, 284. 011

E 1,355,431.224

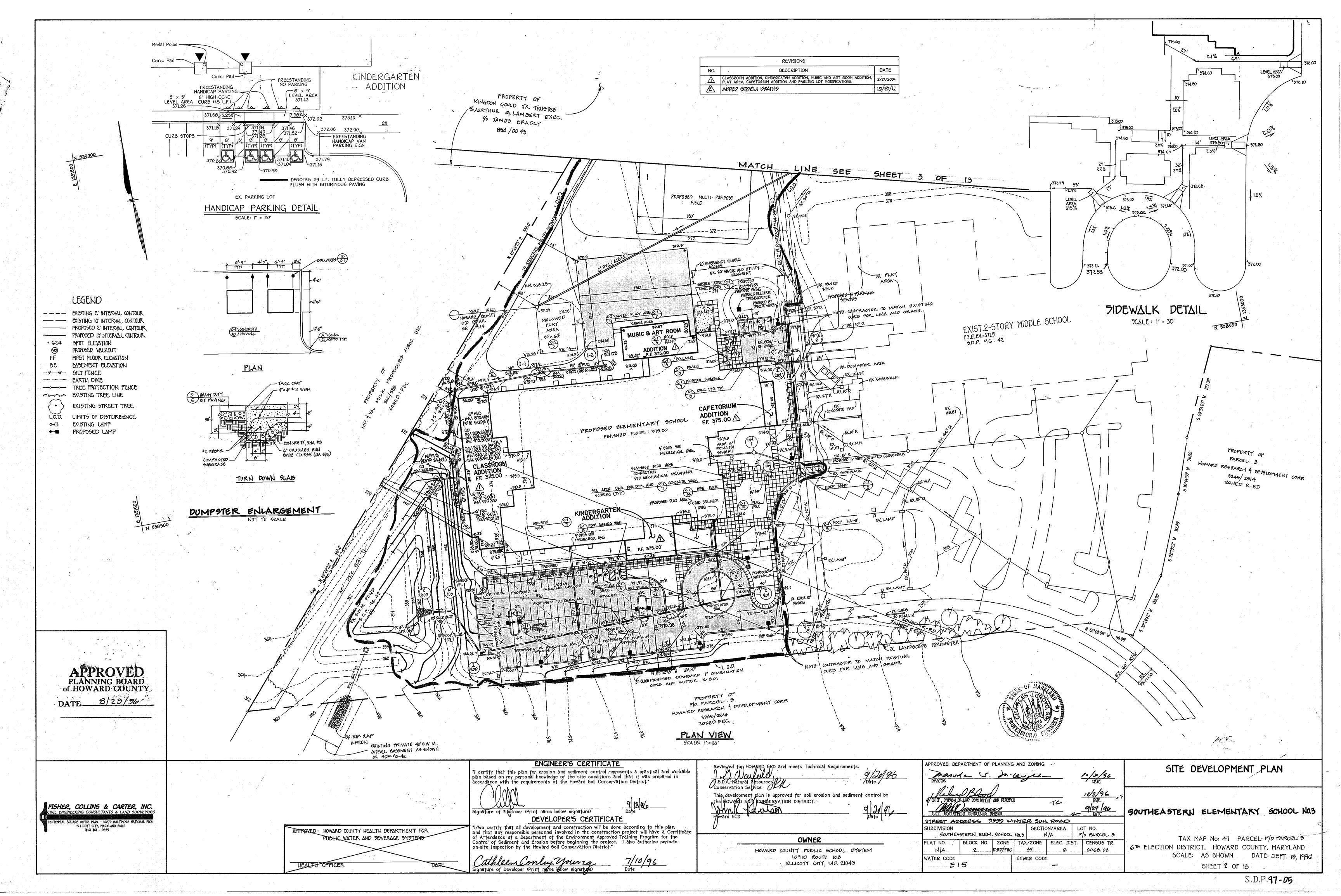
41E4: N 535, 846, 153

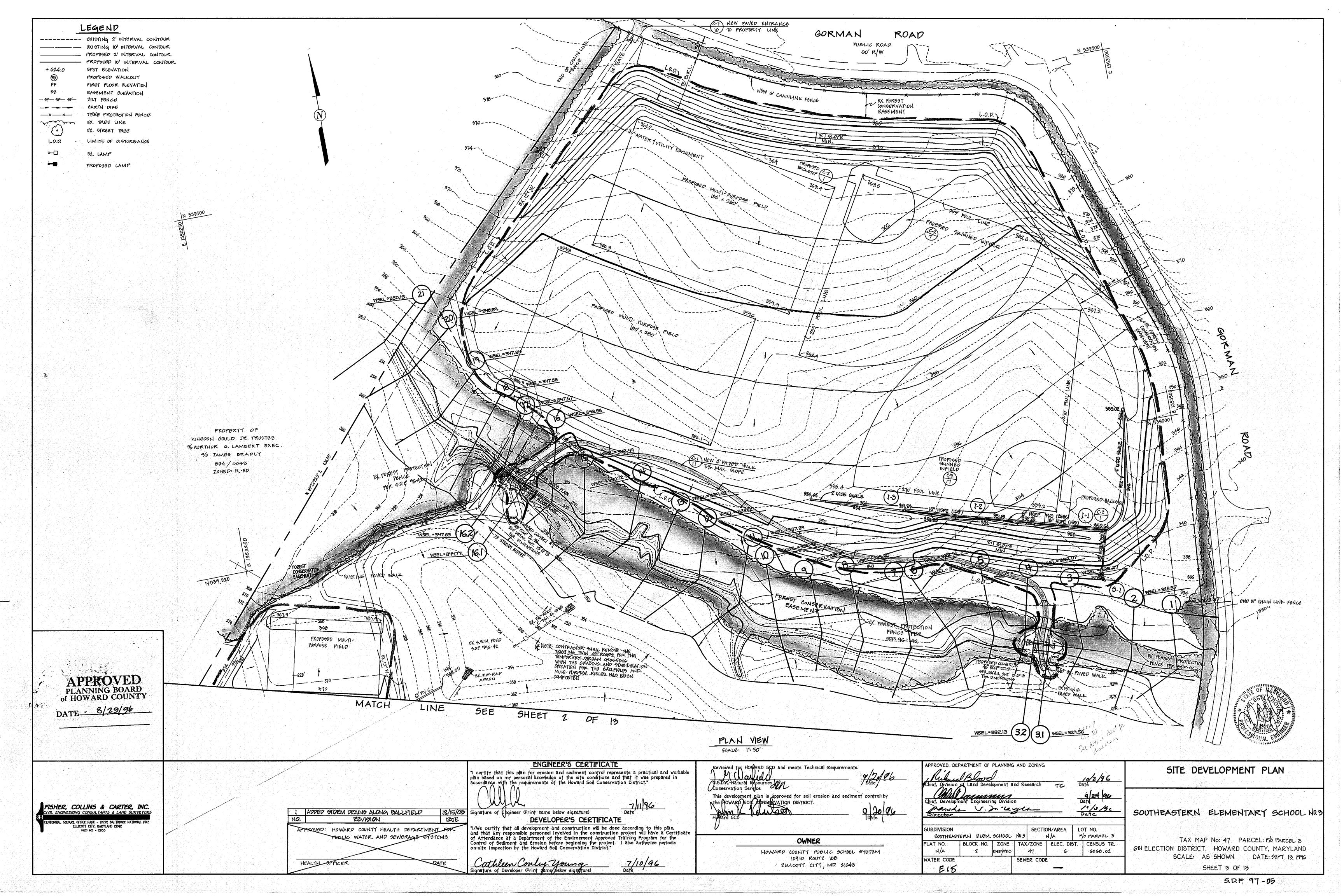
ENGINEER'S CERTIFICATE

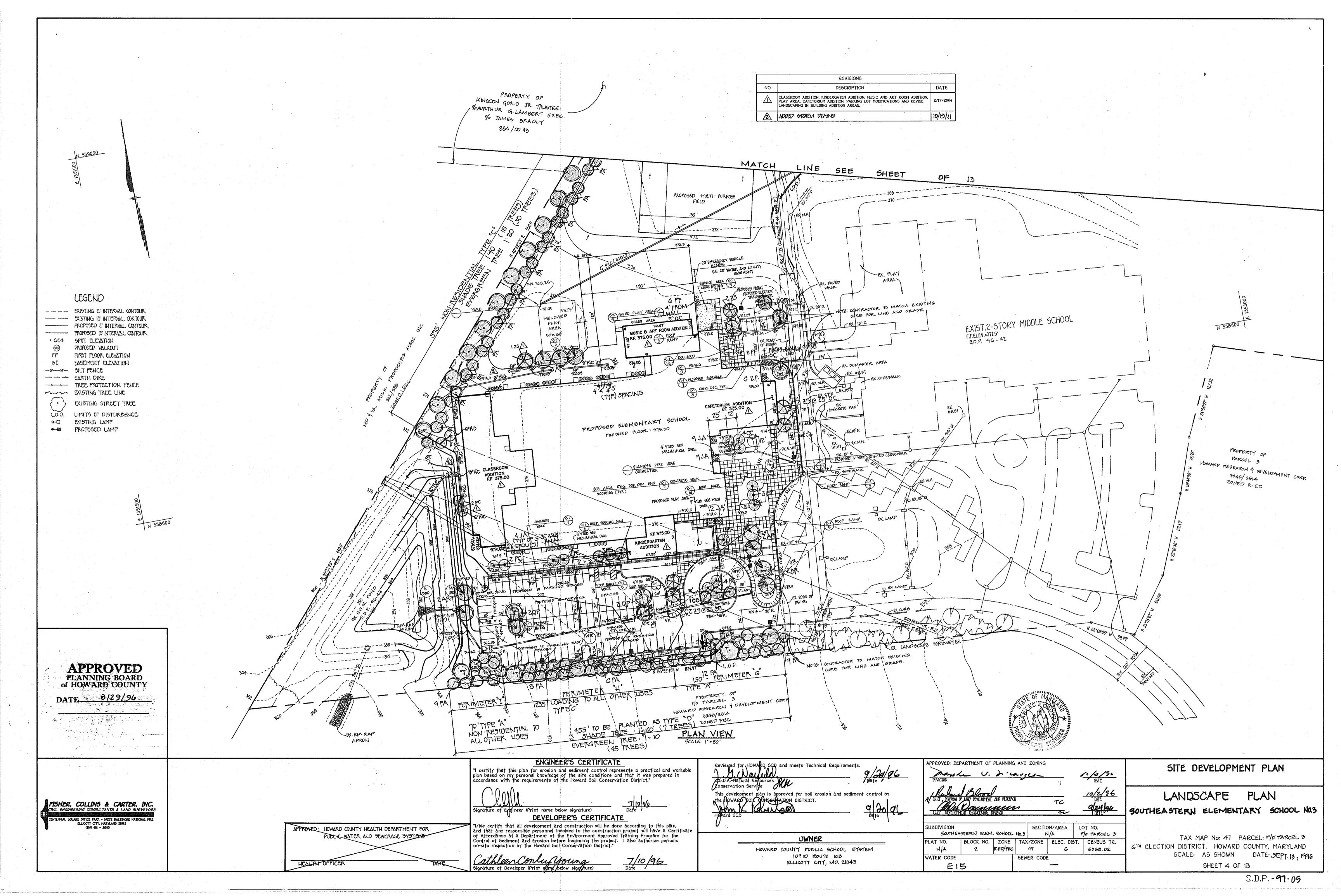
DEVELOPER'S CERTIFICATE

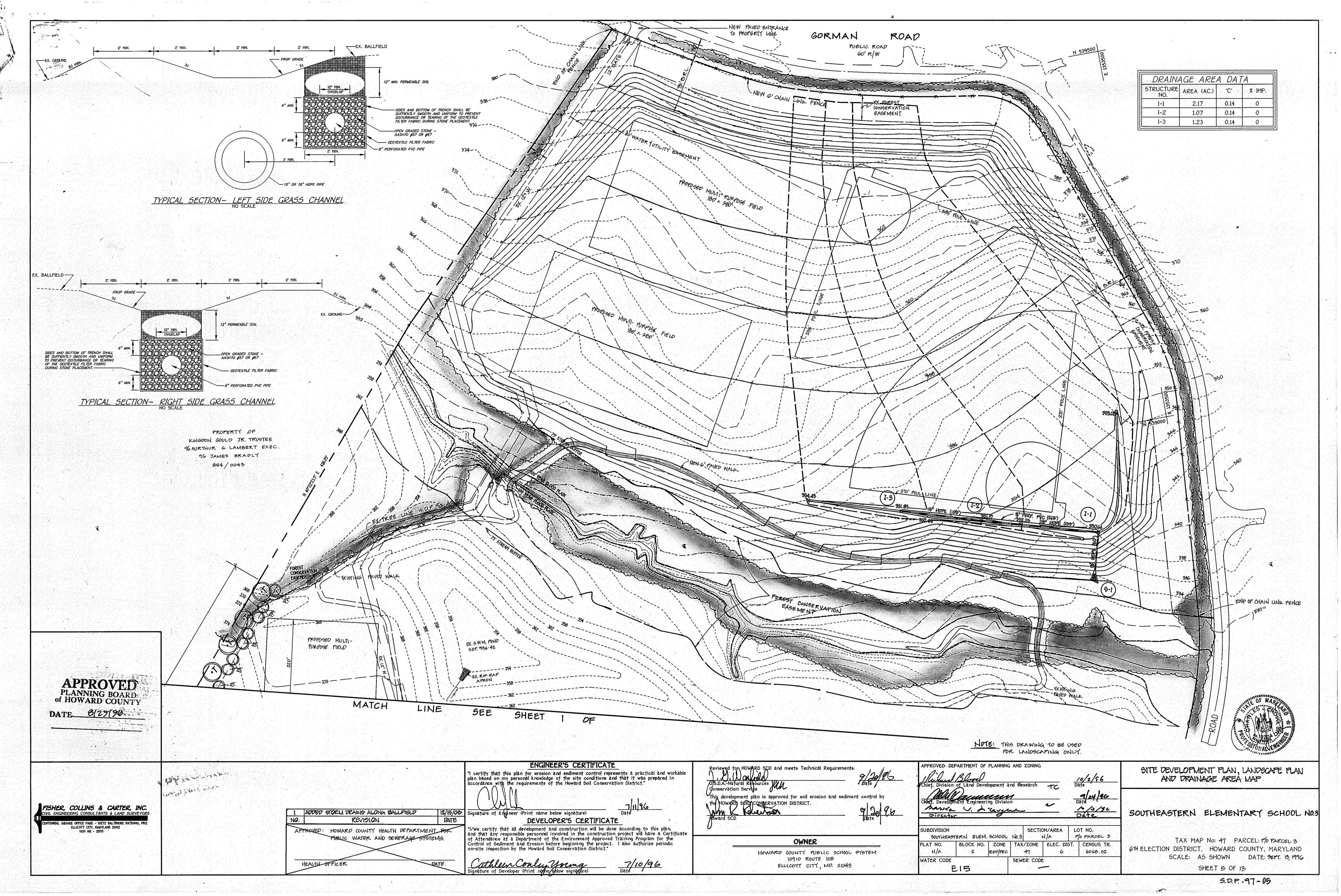
KNOWLEDGE OF THE SITE CONDITION AND THAT IT WAS PREPARED IN

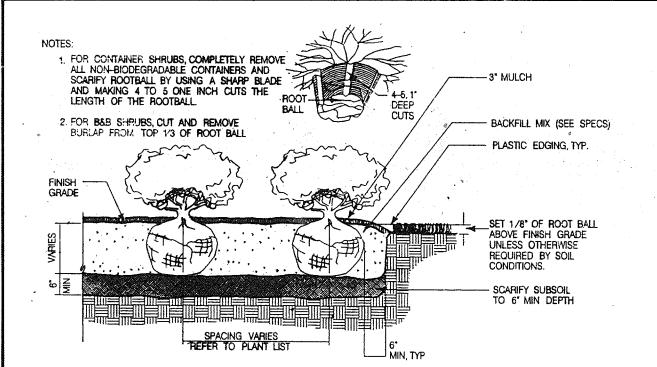
I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL



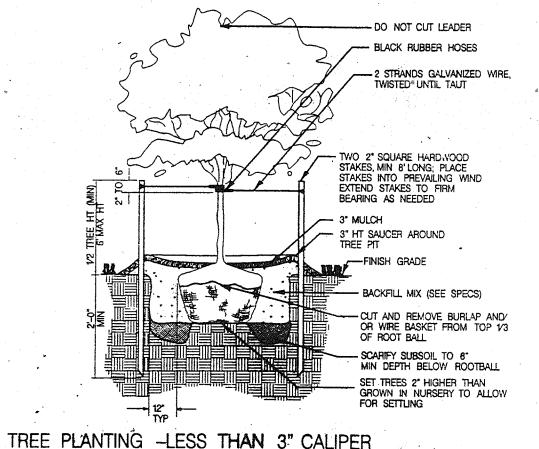


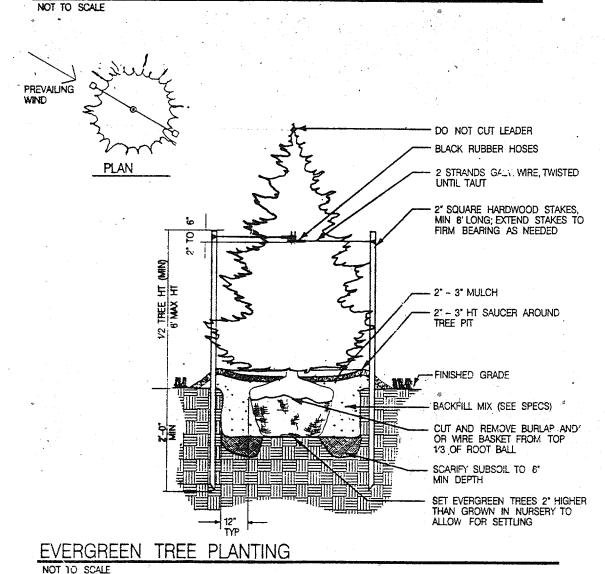






NOT TO SCALE





### SCHEDULE A

LANDSCAPE REQUIREMENTS:

	ADJACENT TO ROADWAYS		ADJACENT TO PERIMETER PROPERTIES		
CATEGORY	LANDSCAPE TYPE 'E'		LANDSCAPE TYPE 'C'		
· LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	LF	LF	LF 595	LF 455	
• CREDIT FOR EXISTING VEGETATION		ŕ	No	No	
• CREDIT FOR WALL, FENCE OR BERM	٠, ٠, ٣		· N0	NO	
NUMBER OF PLANTS REQUIRED SHADE TREES EVERGREEN TREES SHRUBS			15 30 -	7 45 —	
NUMBER OF PLANTS PROVIDED SHADE TREES EVERGREEN TREES OTHER TREES (2:1 SUB.) SHRUBS (10:1 SUB.)			15 30 —	7 45 -	

#### SCHEDULE B

PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	94
NUMBER OF TREES REQUIRED  @ 1/20 SPACES	5
NUMBER OF TREES PROVIDED SHADE TREES OTHER TREES (2:1 SUB.)	5
PARKING ISLANDS REQUIRED @ 1/20 SPACES	5
PARKING ISLANDS PROVIDED	5
	· · · · · · · · · · · · · · · · · · ·

#### PI ANT LIST

KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION .	REMARKS
*						
OQP		QUERCUS PALLSTRIS	PIN OAK	12'-14' 21/2"-3"cal.	B+B	internal plante
<u>O</u> AR		ACEK KUBKUM "OCTOBER GLORT"	OCTOBER GLORT RED MAPLE		B+B	irratta plante
Ø 15				121-14, 22-3" cal.	B+B .	<del>                                     </del>
<u>⊙pc</u>			purple leaf flowering pun		B+B	18
$\odot cc$		CARPINUS CAROLINIANA	IKONWOOD	6'-7'Multistem		
059		JUNIPERUS, CHINESIS "SARGENTI"	SARGENTS JUNIPER	18"-24" container		11
OEP		EUONYMOUS PATENS " PAULI"	PAULI EUONYMOUS	24"-30"	B+B	-
OPF	14	PHOTINIA FRASEN	RED TIPPED PHOTINIA	2'-3'	B+B	5' 0.c. "
OJA	. 74	JUNIPERUS HORIZONTALLS "PLUMOSA"	ANDORRA JUNIPER	18"-24" container		11
					•	<u> </u>
-	9.1					*:*
0	22	TILLA CORDATA GREENSPIRE /AREENSPIRE	LITTLE LEAF LINDEN	21/2-3" cal.		PERILATER DI 1.17
OPA	74	PICEA ABIES	NORWAY SPRUCE	6'-8' ht.		PERIMETER PLANT
					· · · · · · · · · · · · · · · · · · ·	

#### LANDSCAPE NOTES

projected drainage patterns.

- The contractor shall review architectural/engineering plans to become thoroughly familiar with grading and surface utilities.
- All equipment and tools shall be placed so as not to interfere or hinder the pedestrian and vehicular traffic flow.
- 3. The contractor shall coordinate with lighting and irrigation contractors regarding timing of installation of plant material.
- 4. The contractor shall insure that his work does not interrupt established or
- 5. During planting operations, excess waste materials shall be promptly and
- frequently removed from the site.
- 6. Call Miss Utility a minimum of three days prior to any excavation. The contractor is advised of the existence of underground utilities on the site. Their exact location shall be verified in the field with the owner or general contractor prior to the commencement of any digging operations. In the event they are uncovered, the contractor shall be held responsible for all damage to utilities and such damage shall not result in any additional expenses to the owner. Any damage of unreported lines shall not be the responsibility of the contractor.
- 7. If utility lines are encountered in excavation of tree pits, other locations for trees shall be made by the contractor without additional compensation. No changes of location shall be made without approval by the landscape architect.
- 8. Maintain positive drainage out of planting beds at a minimum 2% slope. All grades, dimensions, and existing conditions shall be verified by the contractor on site before construction begins. Any discrepancies shall be brought to the attention of the landscape architect or owner.
- Every possible safeguard shall be taken to protect building surfaces, equipment, and furnishing, The contractor shall be responsible for any damage or injury to person or property which may occur as a result of his negligence in the execution of the work.
- 10. In the event of variation between quantities shown on the plant list and the plans, the plans shall control. The contractor is responsible for verifying all plant quantities prior to the commencement of work, Seed quantity take-offs are the responsibility of the contractor, All discrepancies shall be reported to the landscape architect for clarification prior to bidding. The contractor shall furnish plant material in sizes as specified in plant list.
- 11. Plants shall be located as shown on the drawings or as designated in the field. The contractor shall stake all material located on the site for review and/or adjustment by the landscape architect prior to planting. All locations are to be approved by the landscape architect before excavation.
- 12. Plants shall conform to current "American Standards for Nursery Stock" by American Association, of Nurserymen (AAN), particularly with regard to size, growth, size of ball, and density of branch structure. Plant material shall be tagged at the source by the landscape architect unless this requirement is specifically waived.
- 13. All plants (B&B or container) shall be properly identified by weather-proof labels securely attached thereto before delivery to project site. Labels shall identify plants by name, species, and size. Labels shall not be removed until the final inspection by the landscape architect or agent in charge.
- 14. Any material and/or work may be rejected by the landscape architect if it does not meet the requirements of the specifications. All rejected materials shall be removed from the site by the contractor.
- 15. No substitutions shall be made without written consent of the owner or landscape architect.
- 16. The landscape architect or owner shall have the right, at any stage of the operations, to reject any and all work and material which, in his opinion, does not meet the requirements of these plans and specifications.
- 17. The contractor shall be wholly responsible for stability, and conditions of all trees and shrubs and shall be legally liable for any damage caused by instability of any plant materials. Staking of all trees shall be done utilizing a method agreed upon by the landscape architect, as indicated on the documents.
- 18. All proposed trees to be installed either entirely on or entirely out of planting beds. Planting bed lines are not to be obstructed. All shrubs and ground cover areas shall be planted in continuous prepared bed and top dressed with 3-inch shredded hardwood mulch. Mulch shall have been shredded within the last six months.
- 19. Spade edge all planting beds.
- 20. Maintenance shall begin after each plant has been installed and shall continue until 90 days after final acceptance by the architect or owner representative. Maintenance includes watering, pruning, weeding, fertilizing, mulching, replacement of sick or dead plants, and any other care necessary for the proper growth of the plant material. The contractor must be able to provide continued maintenance if requested by the owner.
- 21. Upon completion of all landscaping, an acceptance of work shall be held. The contractor shall notify the landscape architect or owner for scheduling the inspection at least seven (7) days prior to the anticipated inspection date.
- 22. All trees shall be guaranteed for 12 months from the date of acceptance. All shrubs and ground covers shall be guaranteed for 12 months from the date of acceptance. Replacement plants used shall be guaranteed for an additional 90 days.
- 23. The contractor is responsible for testing project soils. The contractor is to provide a certified soils report to the owner. The contractor shall verify that the soils on site are acceptable for the proper growth of the proposed plant material. Should the contractor find poor soil conditions, the contractor shall be required to provide soil amendments as necessary. These amendments shall include, but not be limited to, fertilizers, lime, and topsoil. Proper planting soils must be verified prior to planting of materials.
- 24. The contractor shall dispose of stumps and major roots of all plants to be removed. Any depressions caused by removal operations shall be refilled with fertile, friable soil placed and compacted so as to reestablish proper grade for new planting and/or lawn areas.
- 25. The contractor shall insure adequate vertical drainage in all plant beds.
- 26. All disturbed areas of the site not planted with shrubs or ground cover shall be fine graded and seeded. See Sediment & Erosion Centrol Plans for details.



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042

(410) 461 - 2055

PLANNING BOARD of HOWARD COUNTY

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

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Signature of Engineer (Print name below signature)

DEVELOPER'S CERTIFICATE

"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 the Environment Approved Training Program for the Control of Sediment and Engine before beginning the project. I also authorize periodic

and that any responsible personnel involved in the construction project will have a Certiful 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."

Cathlela Canlus Vigura 9-18-96

Reviewed for HOWARD OCD and meets Technical Requirements.

Disp.D.A.-Natural Resources
Conservation Service

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

Howard SCD

Date

OWNER

HOWARD COUNTY PUBLIC SCHOOL SYSTEM

10910 ROUTE 108

EULICOTT CITY, MD. 21043

R.ED/PEC

SOUTHEASTERN ELEM. SCHOOL NO. 3

丘15

A/N

WATER CODE

P/O PARCEL 3

6068.02

N/A

6

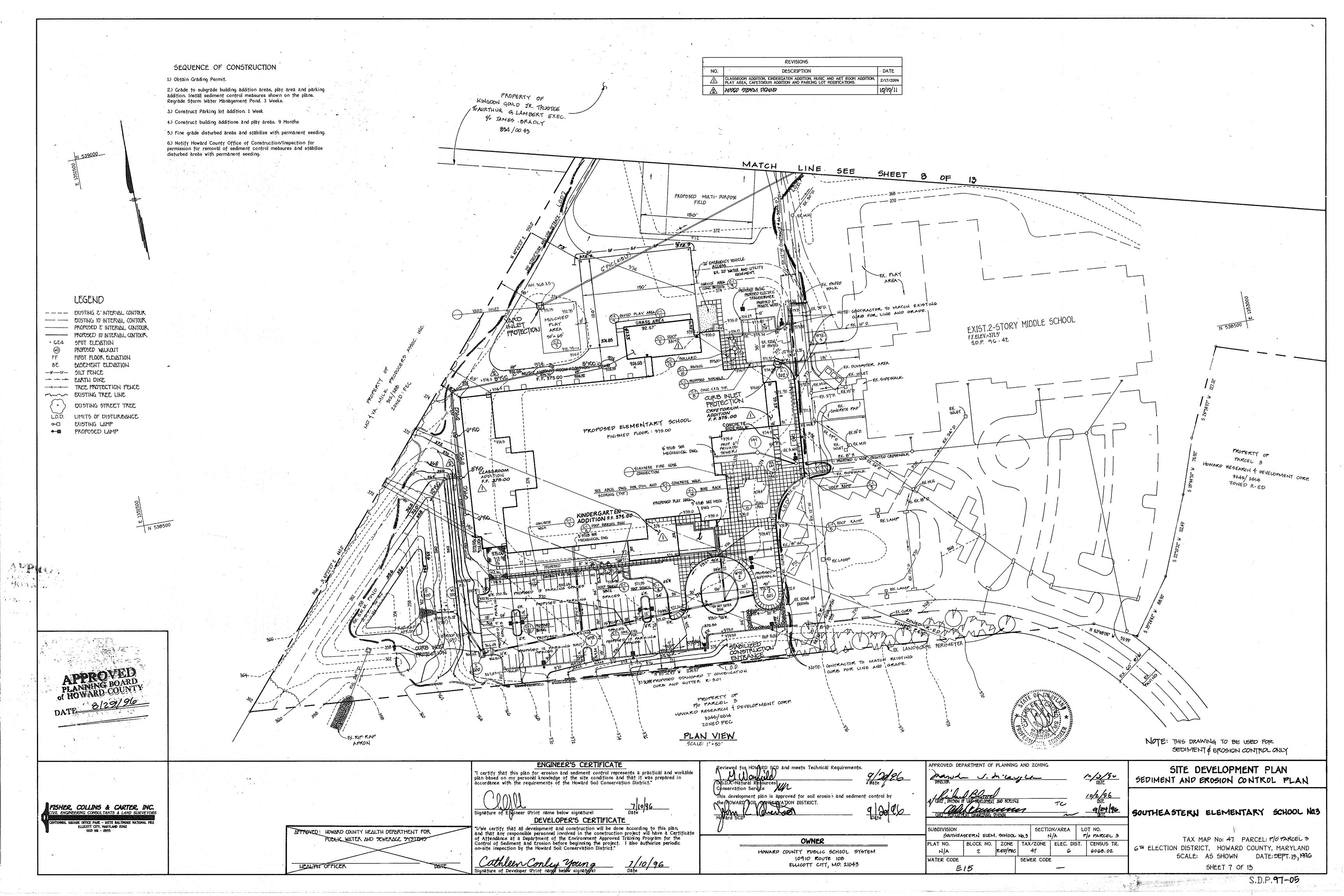
BLOCK NO. | ZONE | TAX/ZONE | ELEC. DIST. | CENSUS TR.

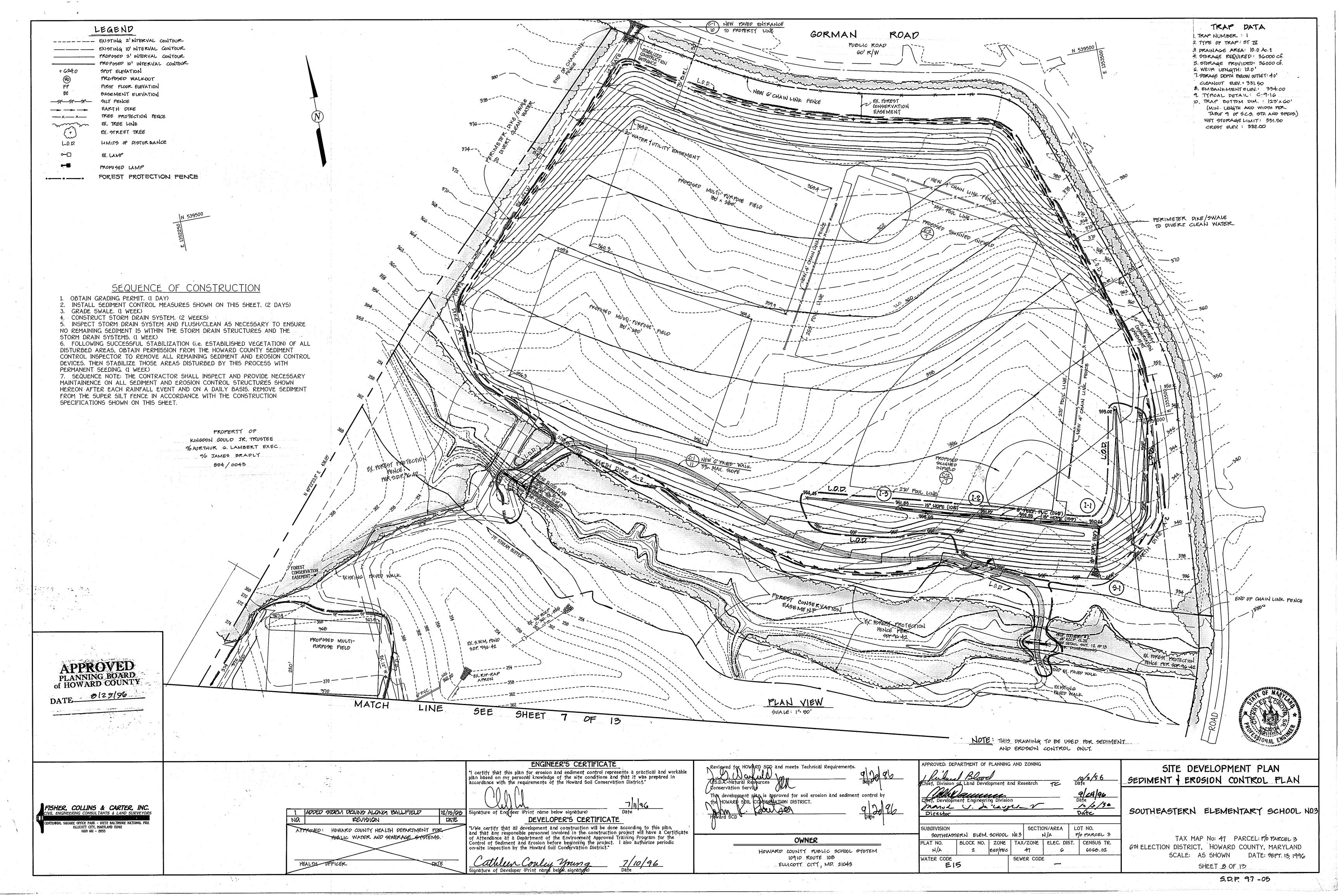
SEWER CODE

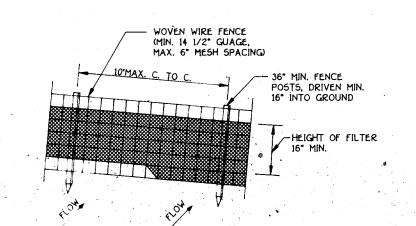
SITE DEVELOPMENT PLAN
LANDSCAPE DETAIL PLAN
4/96

SOUTHEASTERN ELEMENTARY SCHOOL NO.3

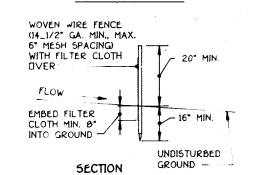
TAX MAP No: 47 PARCEL; P/O PARCEL 3
6THELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: 5EPT. 13, 1996
SHEET 6 OF 13







#### PERSPECTIVE VIEW



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OF STAPLES. 2. FILTER CLOTH TO BE FASTENED SECURELY TO

WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY

SIX INCHES AND FOLDED.

4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U

STANDARD SYMBOL

\_\_\_\_\_ 5 \_\_\_\_\_ 5 \_\_\_\_

EXISTING GROUN

STABILIZATION

PD/S-1 SEED AND MULCH (DRAINING ± 1 ACRE)
PD/S-2 SEED AND COVER WITH SOIL

COMPACTED EARTH -

-----

1. All perimeter dike/swales shall have an uninterrupted positive

grade to an outlet. Spot elevations may be necessary for grades

2. Runoff diverted from a disturbed area shall be conveyed to a

undisturbed stabilized area at a non-erosive velocity.

5. Fill shall be compacted by earth moving equipment.

4. The swale shall be excavated or shaped to line, grade, and

6. Stabilization with seed and mulch or as specified of the area

Note: The maximum drainage area for this practice is 2 acres-

disturbed by the dike and swale shall be completed within  $\overline{t}$  days upon .

7. Inspection and required maintenance shall be provided after each

PERIMETER DIKE/SWALE

NOT TO SCALE

3. Runoff diverted from an undisturbed area shall outlet into an

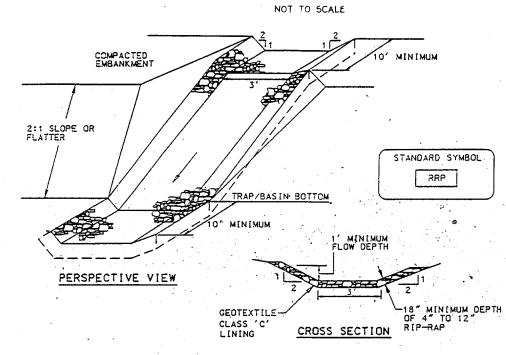
FENCE: WOVEN WIRE, 14. GA. 6" MAX. MESH OPENING FILTER CLOTH FILTER X, MIRAFI

PREFABRICATED UNIT: GEOFAB. ENVIROFENCE, OR APPROVED EQUAL.

100X: STABILINKA T14 ON

OR APPROVED EQUAL

#### SILT FENCE



#### Construction Specifications

1. Rip-rcp lined inflow channels shall be 1' in depth, have a trapezoidal cross section with 2:1 or flatter side slopes and 3' (min.) bottom width. The channel shall be lined with 4" to 12" rip-rap to a depth of 18". 2. Filter cloth shall be installed under all rip-rap. Filter cloth shall

3. Entrance and exit sections shall be installed as shown on the detail

4. Rip-rap used for the lining may be recycled for permanent outlet protection if the basin is to be converted to a stormwater management

5. Gabion Inflow Protection may be used in lieu of Rip-rap Inflow

Protection for slopes 25% or greater. 6. Rip-rap should blend into existing ground.

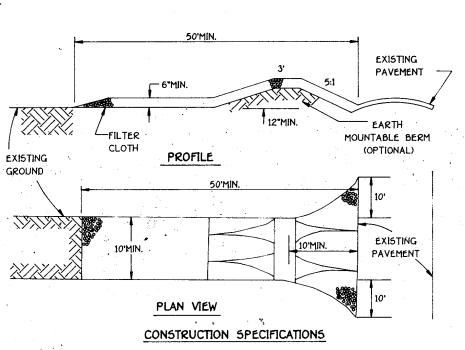
7. Rip-rap Inflow Protection shall be used where the slope is between 4:1 and 10:1. for slopes flatter than 10:1 use Earth Dike or Temporary Swale lining criteria.

RIP-RAP INFLOW PROTECTION

NOT TO SCALE

### APPROVED PLANNING BOARD of HOWARD-COUNTY





1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT. 2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY). 3. THICKNESS - NOT LESS THE SIX (6) INCHES.

4. WIDTH - TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT. 6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION

ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED. 7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND /OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY

MUST BE REMOVED IMMEDIATELY. 9. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING

NOT TO SCALE

#### STABILIZED CONSTRUCTION ENTRANCE

TCP OF EMBANKMENT

WE IR LENGTH EXISTING BILLING GROUND

SECTION B-8 CROSS SECTION PROVIDE POSITIVE DRAINAGE  $\Rightarrow$  PD/S-1 $\Rightarrow$ LINE WITH SOO (DRAINING BETWEEN 1 AND 2 ACRES)

> PERSPECTIVE VIEW 1' THICKNESS) 4' MIN. WIDTH 1 - WEIR CREST 2 ELEVATION FLOW --OUTLET ELEVATION -SMALL RIP-RAP 4" TO T

> > Constuction Specifications

1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared. 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 empankment 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

6. Geotextile Class C shall be placed over the bottom and sides of the outlet channelprior 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 ! rip-rap shall be used to construct the outlet channel 8. Dutlet - 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.

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 a manner that it will not erode.

9. Outlet channel must have positive drainage from the trap.

11. The structure shall be inspected periodically after each rain and repaired

12. Construction of traps shall be carried out in such a manner that sediment pollution is abated. Once constructed, the top and outside face of the embankment shall be stabilized 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 monitored and maintained erosion free during the life of the trop.

13. The structure shall be dewatered by approved methods, removed and the rarea stabilized when the drainage area has been properly stabilized.

STONE/RIP-RAP OUTLET SEDIMENT TRAP

9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN. 7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EARTH DIKE

ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS: SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING

OR OTHER ACCEPTABLE MEANS BEFORE SEEDING SOIL AMENDMENTS:
APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/ 1,000 SQ.FT.) AND 600 LBS. PER ACRE 0-20-20 FERTILIZER A LRS /1 000 SOFT) REFORE SEFTING HAPPOW OF DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS./1.000 SQ.FT.) AND 500 LBS. PER ACRE (11.5 LBS./ 1,000 SQ.FT.) OF 10-20-20 FERTILIZER.

SEEDING:
FOR THE PRERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST THROUGH OCTOBER 15, SEED WITH 100 LBS. PER ACRE (2.3 LBS./1,000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE, FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS/ACRE 1.4 LBS./1,000 SQ.FT.) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.05 LBS./1.000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 20. PROJECT SITE BY: OPTION (1) - TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS 500N AS SEED WITH 100 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD

MULCHING:
APPLY 1 TO 2 TON5 PER ACRE (10 TO 90 LB5./1,000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (5 GAL./1,000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT ACRES. ON SLOPES Ø FEET OR HIGHER USE 340 GALLONS PER ACRE (Ø GAL./1,000 SQ.FT.) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

FOR PUBLIC PONDS SUBSTITUTE CHEMUNG CROWNVETCH AT 15 LBS./ACRE AND KENTUCKY 31 TALL FESCUE AT 40 LBS/ACRE AS THE SEEDING REQUIRMENT. OPTIMUM SEEDING DATE FOR THIS MIXTURE IS MARCH 1 TO APRIL 30.

PERMANENT 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, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY

APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./

FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 17 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./ACRE OF WEEPING LOVEGRASS (.07 LBS./ 1,000 SQ.FT. FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 20, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WEL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OR USE SOD.

MULCHING: APPLY 17 TO 2 TONS PER ACRE (70 TO 90 LB5./1,000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING ANCHORING TOOL OR 210 GALLONS PER ACRE (5 GAL.1,000 50.FT. OF EMULSIFIED ASPHALT ON FLAT ACRES ON SLOPES 0 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL./1,000 SQ.FT.) FOR

REFER TO THE 1988 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT

TEMPORARY SEEDING NOTES

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

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 inis practice snall be used on denuted areas as specified on the plans and may be used on highly evolute or critically evoling areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration O(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 lawns, dams, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc. EFFECTS ON WATER QUALITY AND QUANTITY

Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff. infiltration evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth. egetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone. Sediment control devices must remain in place during grading, seedbed 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 Install erosion and sediment control structures (either temporary of permanent) such as diversions, 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

having disturbed area over 5 acres. Soil Amendments (Fertilizer and Lime Specifications) Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses. 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

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 mesh sieve. . Incorporate lime and fertilizer into the top 3-5° of soil by disking or other suitable means. Seedbed Preparation
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 plows o 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 plans.

c. In corporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.

i. Permanent Seeding

a. Minimum soil conditions required for permanent vegetative establishment:

1. Soil pH shall be between 6.0 and 7.0.

Soluble salts shall be less than 500 parts per million (ppr The soil shall comtain 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 lovegrass serecia lespedezas is to be planted, then a sandy soil (<30% silt plus clay) would be acceptable.

Soil shall contain 1.5% minimum organic matter by weight. Soil must contain sufficient pore space to permit adequate root penetration. If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3-5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil o the surface area and to create horizontal erosion check slots to prevent topsoil from

sliding down a slope.

Apply soil amendments as per soil test or as included on the plans.

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, and 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 slope. The top 1-3" of soil should be loose and friable. Seedbed loosening may not be necessary on D. Seed Specifications 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 specifically for the species. Inoculants shall not be used later than the date indicated on the comtainer. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75°-80° f. can weaken bacteria and make the inoculant less effective

Methods of Seeding
i. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeded, or a cultipacker seeder. or drop 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 bs. per acre total of soluble nitrogen; P205 (phosphorous); 200 lbs/ac; K20 (potassium); 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 interruntion.

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.

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.

Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

Mulch Specifications (In order of preference) Straw shall consist of thoroughly threshed wheat, ree or oat 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.

Wood Cellulose Fiber Mulch (WCFM)

a. WCFM shall consist of specially prepared wood cellulose processed into a uniform

fibrous physical state.

Tiprous physical state.

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 siurry. WCFM, including dye, shall contain no germination or growth inhibiting factors.

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 seedlings. WCFM material shall contain no elements or compounds at concentration levels that will be phyto-toxic.

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. 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.

Securing Straw 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:

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 safety. It used on sloping land, this practice should be used on the contour if possible.

Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture shall be may be used for anchoring straw.

the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water. 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 be appear uniform after binder
application. Synthetic binders - such as Acrylic DLR (Agro-Tack), DCA-70 Petroset, Terra Ta

Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long.

# STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

"NOTE: NOTES ONLY APPLY TO WORK RELATING TO SEDIMENT CONTROL REFER TO PROJECT SPECIFICATIONS FOR SEEDING REPUIREMENTS FOR OTHER AREAS OF SITE.

NOT TO SCALE

ENGINEER'S CERTIFICATE certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District." signature of (fringineer (Print name below signature)

DEVELOPER'S CERTIFICATE 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 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."

OWNER HOWARD COUNTY PUBLIC SCHOOL SYSTEM 10910 ROUTE 108 ELLICOTT CITY, MD. 21043

march U. d. regre TU HEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH MM Vaumm SECTION/AREA LOT NO. SUBDIVISION SOUTHEASTERN ELEM. SCHOOL NO. 3 P/O PARCEL 3 BLOCK NO. | ZONE | TAX/ZONE ELEC. DIST. CENSUS TR. N/A RED/PEC 47 6 G068.02 ATER CODE SEWER CODE

SITE DEVELOPMENT PLAN SEDIMENT CONTROL NOTES AND DETAILS

SOUTHEASTERN ELEMENTARY SCHOOL NO. 3

TAX MAP No: 47 PARCEL: P/O PARCEL 3 6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: SEPT. 13, 1996

FISHER, COLLINS & CARTER, INC. IL ENGINEERING CONSULTANTS & LAND SURVEYORS ELLICOTT CITY, MARYLAND 21042

HOWARD COUNTY HEALTH DEPARTMENT FOR SUBLIC WATER AND SEWERAGE STSTEMS. HEALTH OFFICER

Cathleen Conly Young bignature of Developer (Print name below signature)

Conservation Settlice

STABILIZATION AS REQUIRED

(5 ac. or less) (5-10 ac.

STANDARD SYMBOL

A-2 B-3

SEED AND STRAW MULCH SEED AND STRAW MULCH

SEED AND STRAW MULCH SEED USING JUTE, OR EXCELSIOR: 50D: 2° STONE

SEED WITH JUTE, OR SOD; LINED RIP-RAP 4"-0"

LINED RIP-RAP 4"-8" ENGINEERING DESIGN

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER

C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.

AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH

B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST & INCHES THICKNESS AND

NOT TO SCALE

1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY

ALL VECETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED

ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN

FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.

3) FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT

5) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD

GERMINATION AND ESTABLISHMENT OF GRASSES.

AREA TO BE ROOFED OR PAVED

AREA TO BE VEGETATIVELY STABILIZED

OFFSITE WASTE/BORROW AREA LOCATION

8) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING

9) ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED

10) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES,

ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE

NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR

APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON

COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMEN 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

11) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGHTS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN

SEDIMENT CONTROL NOTES

7) SITE ANALYSIS: TOTAL AREA OF SITE

SAME DAY OF DISTURBANCE

BY THE INSPECTION AGENCY IS MADE.

ONE WORKING DAY, WHICHEVER IS SHORTER.

OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7

CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES,

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.

SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS

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

39.11 ACRES

17.85 ACRES

14.53 ACRES

48629 CU.YDS

332 ACRES

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 ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER

DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1. b) 14 DAYS

TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE

DEPARTMENT OF INSPECTIONS, LISCENSES AND PERMITS, SEDIMENT CONTROL

CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS

ON STEEP SLOPES EXCAVATE TO PROVIDE REQUIRED FLOW WIDTH AT FLOW DEPTH

CUT OR FILL

TREATMENT

3.1-5.0%

CROSS SECTION

POSITIVE DRAINAGE-GRADE SUFFICIENT TO DRAIN 

d-FLOW DEPTH

1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.

4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE

STABILIZED SAFE OUTLET.

5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A

5. EARTH DIRES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.

6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD

SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF

FLOW CHANNEL STABILIZATION

NOT IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART

CONSTRUCTION SPECIFICATIONS

HOWARD FOIL CONSERVATION DISTRICT.

NOTE: EXCESS CUBIC YARDAGE WILL

BE PLACED ON THE MIDDLE SCHOOL SITE

HOWARD SCD and meets Technical Requirements

s development plan is approved for soil erosion and sediment control by

\_\_\_\_

APPROVED: DEPARTMENT OF PLANNING AND ZÖNING

5HEET 9 OF 13

S.D.P.97-05

