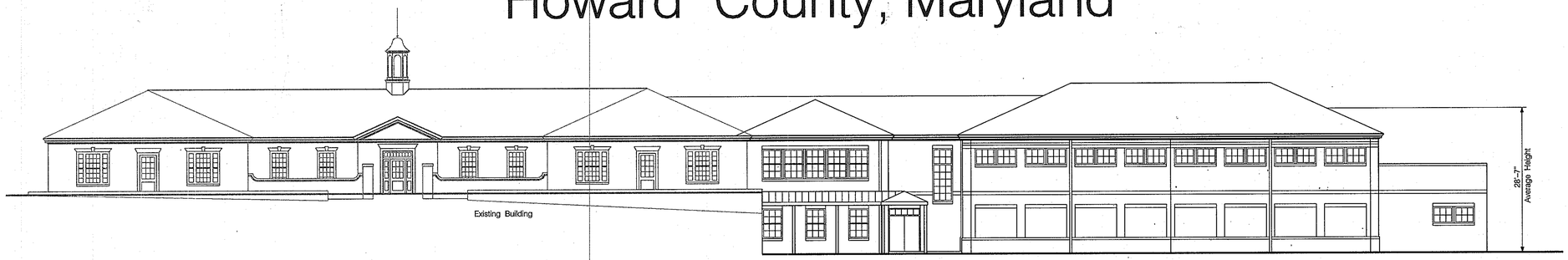
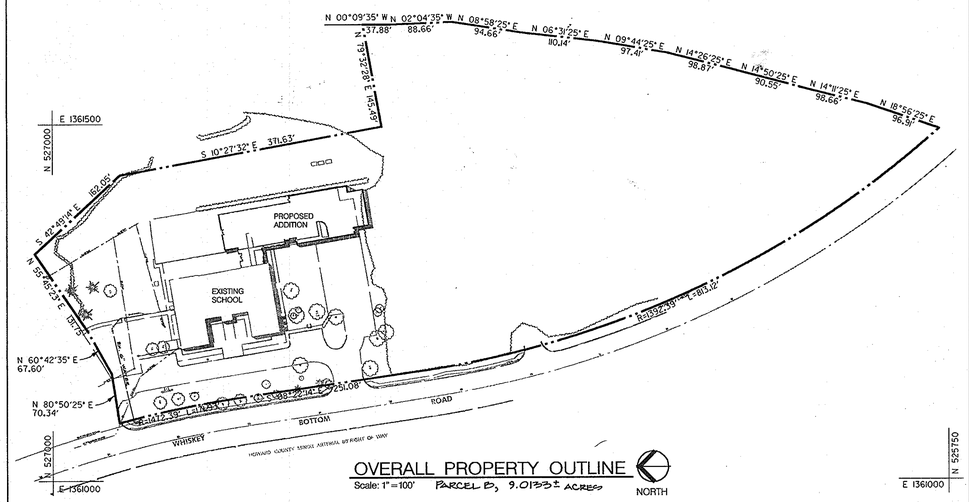
Sheet Index

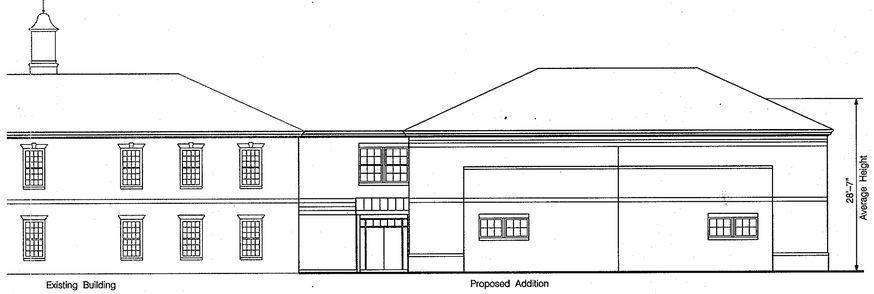
Site Development Plan for School for Contemporary Education Building Addition Howard County, Maryland



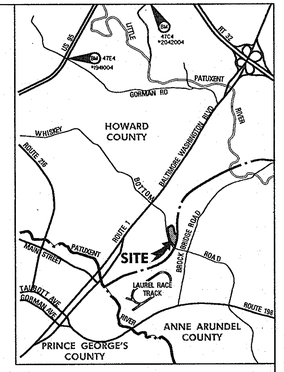
West Elevation
Not to Scale



OVERALL PROPERTY OUTLINE
Scale: 1" = 100' PARCEL B, 9.0133± ACRES NORTH



South Elevation
Not to Scale



NORTH

LOCATION MAP
SCALE: 1" = 4000'

BENCHMARK

HORIZONTAL (NAD 83) AND VERTICAL (NVD 29) CONTROL BASED UPON HOWARD COUNTY TRAVERSE POINTS 47E4 & 47C4

N 163326.2341, E 413136.2634
CONTROL STATION 47E4 (1941004)
ELEVATION = 338.320
CONCRETE MONUMENT AT NORTHEAST CORNER OF ROUTE 95 AND GORMAN ROAD, ONE FOOT NORTH OF NORTH EDGE OF CONCRETE WALK, 21' EAST OF NORTHEAST CORNER OF BRIDGE, 0.2 ' BELOW SURFACE.

N 164484.3288, E 414949.2600
CONTROL STATION 47C4 (2042004)
ELEVATION = 288.156
STAMPED CONCRETE MONUMENT AT NORTHEAST CORNER OF VOLLMERHAUSEN ROAD AND SAVAGE-GUILFORD ROAD. 2.16' EAST OF CROSS CUT IN TOP OF CURB OF NORTHEAST CORNER OF SAVAGE-GUILFORD ROAD, 70.63' SOUTH OF G. & E. POLE No. 305354.

Site Analysis Data Chart

1. General Site Data
   a. Present Zoning: M-2
   b. Applicable DPZ File References: SDP 78-93, WP-97-81, WP-90-60, S-89-94, F 91-94, AA-96-32
   c. Proposed Use of Site or Structure(s): School Expansion (Elementary & Middle)
   d. Proposed Water and Sewer Systems: x Public – ~~Private~~
   e. Water and Sewer contract number 24-3146D

2. Area Tabulation
   a. Total Project Area: 9.0133 Acres (Indicate by Section and Area As Shown on Final Plat or As Shown on Deed)
   b. Net Area of Site: 9.0133 Acres (Indicate by Section and Area As Shown on Final Plat)
   c. Area of This Plan Submission: ± 4.5 Acres
   d. Limit of Disturbed Area: 2.1 Acres
   e. Building Coverage of Site: 0.57 Acres and 0.6 % of Gross Area (Proposed)

4. Open Space Data: N /A

5. Parking Space Data
   a. Floor Space on Each Level per Building(s) per Use: N/A First Floor, N/A Second Floor
   b. Number of Parking Spaces Required by Zoning Regulations: ~~1 per 6 students-120 students = 20 spaces~~
   c. Total Number of Parking Spaces Provided On-Site: 72
   d. Number of Handicapped Parking Spaces Provided: 3

CHURCH ASSEMBLY USE - 5525 SF X 10 SPACES PER 1000 SF = 56 SPACES
THE APPROVED USE OF THE CHURCH IS ONLY ALLOWED WHEN SCHOOL IS NOT IN SESSION.

General Notes

1. 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.
2. Approximate location of existing utilities are shown from best available information. The contractor shall take all necessary precautions to protect the existing utilities and maintain uninterrupted service. Any damage incurred due to contractors operation shall be repaired immediately at the contractor's expense.
3. The contractor shall test pit existing utilities at least five (5) days 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.
4. 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) 313-1880 at least five (5) working days prior to the start of work.
5. Traffic control devices, markings, and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All street and regulatory signs be in place prior to the placement of any asphalt.
6. Any damage caused by the Contractor to existing public right-of-way, existing paving, existing curb and gutter, existing utilities, etc. shall be at the Contactors expense.
7. The existing topography was based on field run survey by DMW, Inc. on November 6, 1996, and supplemented by topography taken from SDP 78-93.
8. All hydraulic data is for the 10-year storm unless otherwise noted.
9. The subsurface exploration and geotechnical engineering analysis for this project was completed by Hillis Carnes Engineering Associates, Inc. in August 1996.
10. All fill areas shall be compacted to a minimum of 95% of the maximum dry density as determined and verified in accordance with AASHTO T-180.
11. All plan dimensions are to face of curb unless otherwise noted.
12. The coordinates shown hereon are based upon the Howard County geodetic control which is based upon the Maryland State plane coordination system. Howard County monument nos. 47C4 and 47E4 were used for this project.
13. Storm water management quantity control provided in part by dry facility and balance by payment of fee-in-lieu. Water quality provided by Stormceptor. Facilities are private and will be maintained by the owner.
14. Public water to be utilized. (Contract 24-3146-D, main Patuxent Drainage Area)
15. Public sewer to be utilized. (Contract 24-3146-D, main Patuxent Drainge Area)
16. All existing utilities are based solely on available records.
17. There is no floodplain on this site.
18. The wetlands delineation shown on this plan are as they are represented on plat 10207
19. No traffic study is required for this project.
20. The following waivers have been granted:
    Design Manual, Volume One, Sections 4.1.1.D.2, 4.1.1.D.8, 5.2.5.J., 5.2.6.F., 5.2.7.F.1 and 5.2.7.F.3. Approved on February 20, 1997.

    Howard County Subdivision and Land Development Regulations Section 16.119 (f)(2) WP-97-81, School For Contemporary Education. Approved February 26, 1997 subject to: Access point shall be only for buses and trash trucks entering the site; All vehicles shall exit from either of two existing driveways.
21. Fee-In-Lieu of providing stormwater management as per 5.2.3.A.3 of the Design Manual, Volume One, granted February 20, 1997.
22. PLAN IS SUBJECT TO BA CASE 99-01N WHICH WAS APPROVED MARCH 11, 1999 WITH FOLLOWING CONDITIONS:
    1. THE VARIANCE SHALL APPLY ONLY TO THE PARKING BEING REQUESTED AND NOT TO ANY OTHER USE OR STRUCTURE ON THE PROPERTY.
    2. THE PETITIONER SHALL ERECT SIGNS TO REGULATE THE ONE WAY TRAFFIC ON THE DRIVEWAY.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/10/97
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/12/97
DIRECTOR — DATE 6/13/97

Date	No.	Revision Description
6-10-99		ADDED NOTE TO GEN. NOTES
12-3-13		ADDED TO NOTE 5b SITE ANALYSIS DATA CHART

4-10-97
Date

Professional Engineer Number: 10557

"AS BUILT"

School for Contemporary Education Building Addition

Howard County, Maryland

OWNER /DEVELOPER
School For Contemporary Education
8920 Whiskey Bottom Road
Laurel, Maryland 20723

DMW
Daft-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME	SECTION /AREA	LOT /PARCEL #
SOUTHLAND CORPORATION PROPERTIES	N /A	Parcel 433, Par 'B'

PLAT# OR L/F	BLOCK#	ZONE	TAX MAP	ELECT. DISTRICT	CENSUS TRACT
10207	5	M-2	50	6TH	6069.03

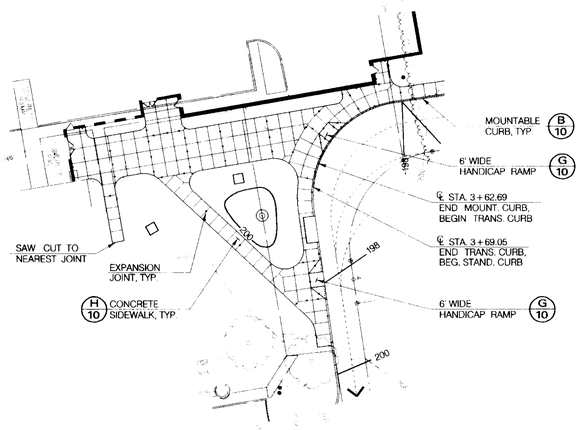
WATER CODE — SEWER CODE

TITLE
COVER SHEET

Des. By	MM	Scale	As Shown	Proj. No. 96065
Drn By	TPC, MSS	Date	1-10-97	1 of 16
Chk By	MK	Approved		

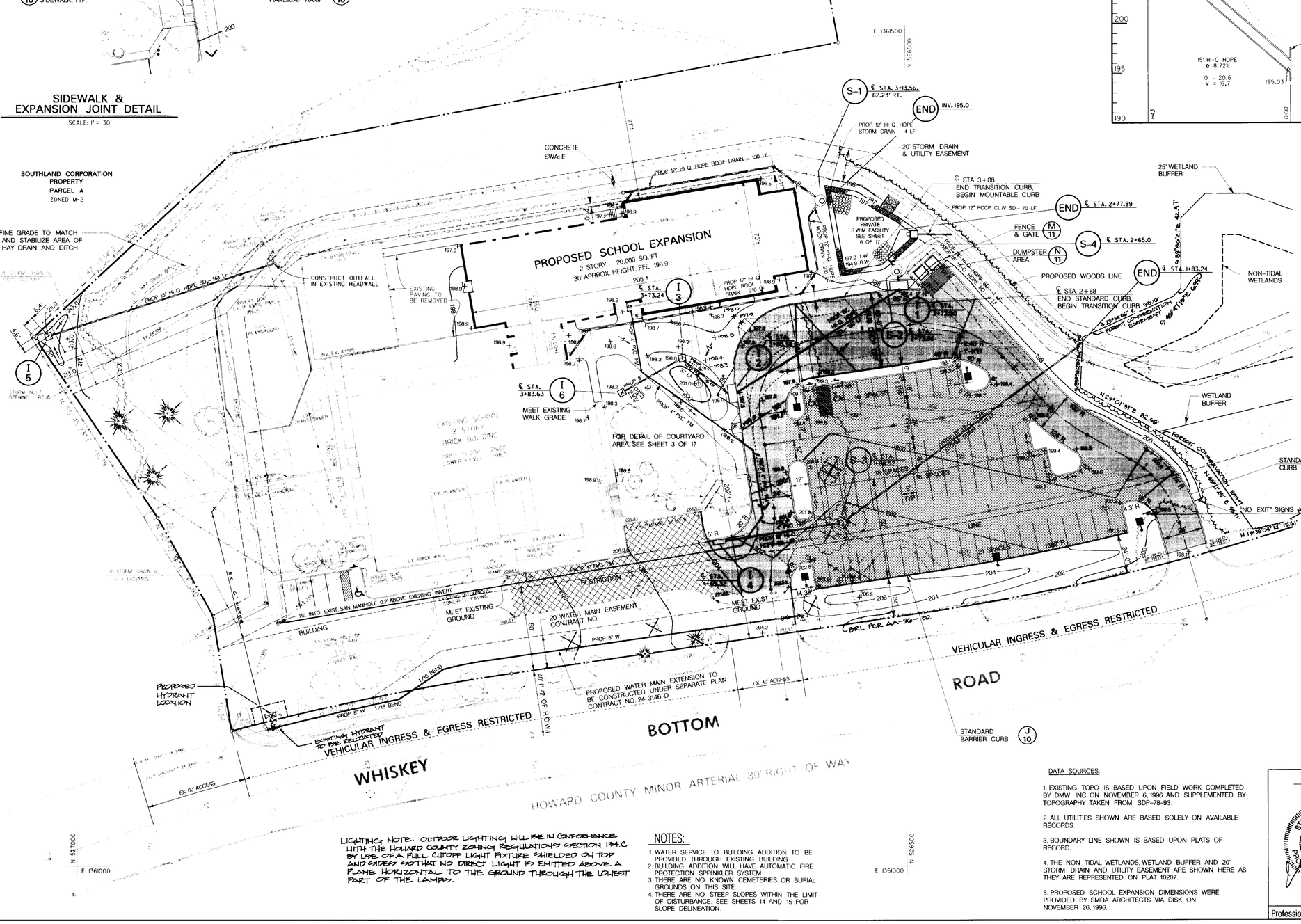
Tue Apr 8 10:42:31 1997 I:\96065\96065.tsl

SDP-97-80



SIDEWALK & EXPANSION JOINT DETAIL

SCALE: 1" = 30'



LEGEND

- 588 — EXISTING CONTOURS
- 590 — PROPOSED CONTOURS
- PROPOSED STORM DRAIN
- PROPOSED SANITARY SEWER
- PROPOSED WATER MAIN
- PROPOSED VALVE & REDUCER
- PROPOSED FIRE HYDRANT
- PROPOSED TRANSITION CURB
- PROPOSED MOUNTABLE CURB
- PROPOSED CURB & GUTTER
- PROPOSED STANDARD BARRIER CURB
- WEDGE COURSE PAVING
- LIGHT DUTY PAVING (COUNTY PAVING SECTION P-2)
- HEAVY DUTY PAVING (MODIFIED COUNTY PAVING SECTION P-3 PER GEOTECHNICAL REPORT)
- EXISTING TREE TO BE REMOVED
- V. I. & E. R. — VEHICULAR INGRESS & EGRESS RESTRICTED
- PROPOSED LIGHT POLE
- +199.7 — EXISTING SPOT ELEVATIONS (TO MATCH EXISTING CURB OR PAVEMENT, TYPICAL)
- +199.7 — PROPOSED SPOT ELEVATIONS

LIGHTING NOTE: OUTDOOR LIGHTING WILL BE IN CONFORMANCE WITH THE HOWARD COUNTY ZONING REGULATIONS SECTION 134.C BY USE OF A FULL CUTOFF LIGHT FIXTURE SHIELDED ON TOP AND SIDES SO THAT NO DIRECT LIGHT IS EMITTED ABOVE A PLANE HORIZONTAL TO THE GROUND THROUGH THE LOWEST PART OF THE LAMPS.

NOTES:

1. WATER SERVICE TO BUILDING ADDITION TO BE PROVIDED THROUGH EXISTING BUILDING.
2. BUILDING ADDITION WILL HAVE AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM.
3. THERE ARE NO KNOWN CEMETERIES OR BURIAL GROUNDS ON THIS SITE.
4. THERE ARE NO STEEP SLOPES WITHIN THE LIMIT OF DISTURBANCE. SEE SHEETS 14 AND 15 FOR SLOPE DELINEATION.

DATA SOURCES:

1. EXISTING TOPO IS BASED UPON FIELD WORK COMPLETED BY DMW, INC. ON NOVEMBER 6, 1996 AND SUPPLEMENTED BY TOPOGRAPHY TAKEN FROM SDP-78-93.
2. ALL UTILITIES SHOWN ARE BASED SOLELY ON AVAILABLE RECORDS.
3. BOUNDARY LINE SHOWN IS BASED UPON PLATS OF RECORD.
4. THE NON TIDAL WETLANDS, WETLAND BUFFER AND 20' STORM DRAIN AND UTILITY EASEMENT ARE SHOWN HERE AS THEY ARE REPRESENTED ON PLAT 10207.
5. PROPOSED SCHOOL EXPANSION DIMENSIONS WERE PROVIDED BY SMDA ARCHITECTS VIA DISK ON NOVEMBER 26, 1996.

NORTH

4-10-97
Date

STATE OF MARYLAND — JOHN W. RANOCCHIO — No. 10561 — REGISTERED PROFESSIONAL ENGINEER

Professional Engineer Number: 10561

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/10/97

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/12/97

DIRECTOR — DATE 6/13/97

Date	No.	Revision Description
11/19/97	2.	WALK & LANDSCAPE REVISION

School for Contemporary Education Building Addition

Howard County, Maryland

OWNER /DEVELOPER
School For Contemporary Education
8920 Whiskey Bottom Road
Laurel, Maryland 20723

DMW
Daft-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME: SOUTHLAND CORPORATION PROPERTIES		SECTION / AREA: N / A	LOT / PARCEL #: Parcel 433, Par 'B'
PLAT # OR L.F.: 10207	BLOCK #: 5	ZONE: M-2	TAX MAP: 50
ELEC. DISTRICT: 6TH	CENSUS TRACT: 6069.03		
WATER CODE:	STORM CODE:		

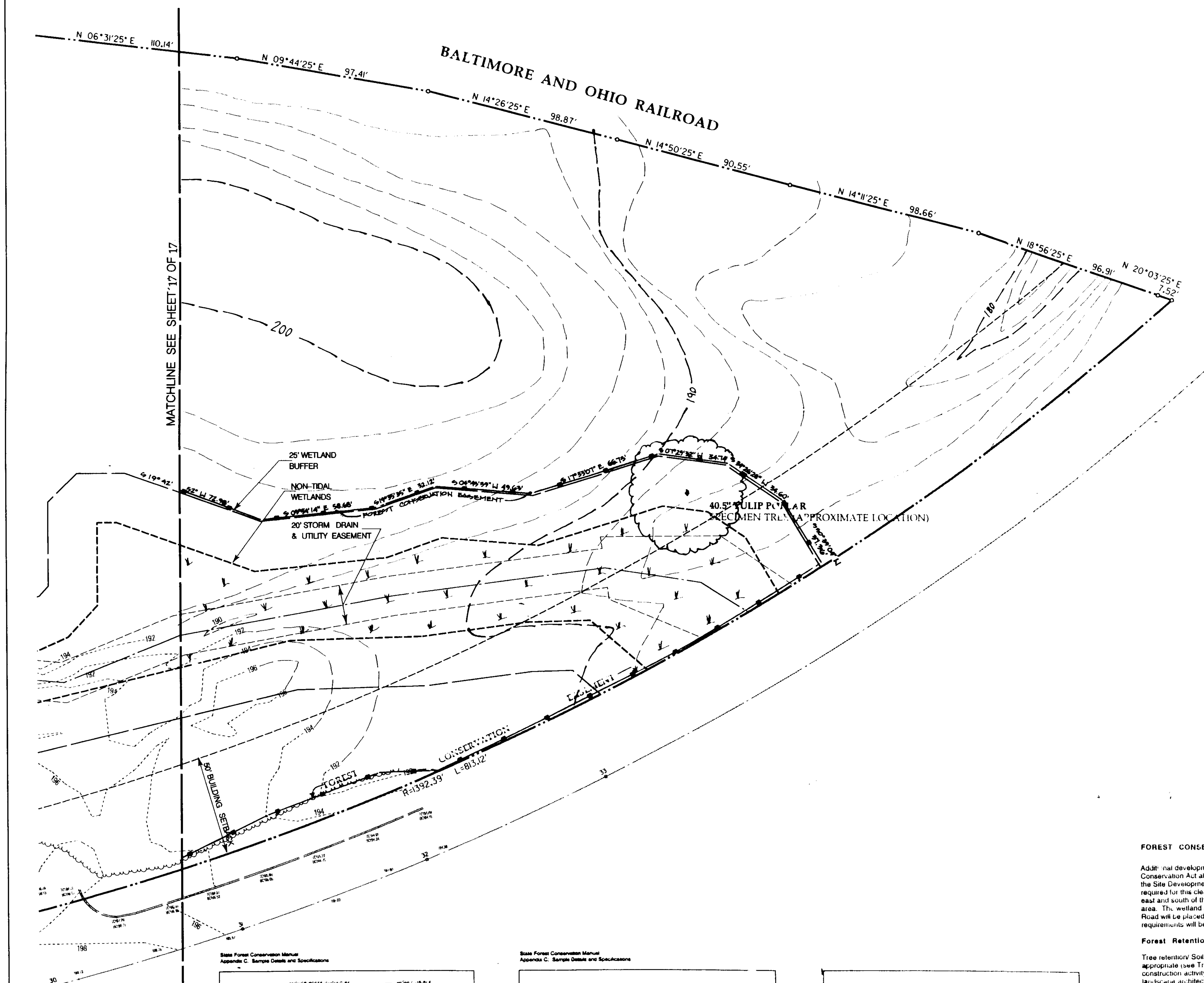
TITLE

SITE DEVELOPMENT PLAN

Des By	MM	Scale	1" = 30'	Proj. No. 96065
Drn By	TPC, MSS	Date	1-10-97	2 of 16
Chk By	MK	Approved		

Tue Apr 8 10:32:36 1997 I:\96065\96065.dgn

SDP-97-80



DATA SOURCES:

1. EXISTING TOPO FIELD WORK WAS COMPLETED BY DMW INC ON 11-6-96. TOPO SOUTH & EAST OF DRAINAGE & UTILITY EASEMENT WAS OBTAINED FROM SDP 78-93.

2. ALL UTILITIES SHOWN ARE BASED SOLELY ON FIELD LOCATION.

3. BOUNDARY LINE SHOWN IS BASED UPON DEEDS AND PLATS OF RECORD AND DO NOT REPRESENT AN ACCURATE FIELD RUN SURVEY.

4. THE NON TIDAL WETLANDS, WETLAND BUFFER AND 20' STORM DRAIN AND UTILITY EASEMENT ARE SHOWN HERE AS THEY ARE REPRESENTED ON PLAT 10207.

5. PROPOSED SCHOOL EXPANSION FOOTPRINT WAS OBTAINED FROM SMDA ARCHITECTS ON 11-26-96 VIA FLOPPY DISK.

HOWARD COUNTY FOREST CONSERVATION WORKSHEET

		ACRES (1/10 acre)
I.	**BASIC SITE DATA**	
	GROSS SITE AREA	9.0
	AREA WITHIN 100 YEAR FLOODPLAIN	0.0
	AREA WITHIN AGRICULTURAL USE OR PRESERVATION PARCEL (IF APPLICABLE)	0.0
	NET TRACT AREA	9.0
	LAND USE CATEGORY (R-RLD, R-RMD, R-S, C, I/O, I)	C/I/O
II.	**INFORMATION FOR CALCULATIONS**	
	A NET TRACT AREA	9.0
	B REFORESTATION THRESHOLD (15) % x A)	1.4
	C AFFORESTATION THRESHOLD (15) % x A)	1.4
	D EXISTING FOREST ON NET TRACT AREA	5.7
	E FOREST AREAS TO BE CLEARED	4.3
	F FOREST AREAS TO BE RETAINED	1.4

III DETERMINING REQUIREMENTS: AFFORESTATION OR REFORESTATION

1. Reforestation

If existing forest areas equal or exceed the afforestation minimum (if D equals or is more than C), and clearing of forest areas is proposed, reforestation requirements may apply.

GO TO SECTION IV

IV	**REFORESTATION CALCULATIONS**	
	A NET TRACT AREA	9.0
	B REFORESTATION THRESHOLD (15 % x A)	1.4
	D EXISTING FOREST ON NET TRACT AREA	5.7
	E FOREST AREAS TO BE CLEARED	4.3
	F FOREST AREA TO BE RETAINED	1.4
	G FOREST AREAS CLEARED **ABOVE** REFORESTATION THRESHOLD (D-F, if F equals or is greater than B, Alternate 1) (D-B, if F is less than B, Alternate 2)	1.0
	H FOREST AREAS CLEARED **BELOW** REFORESTATION THRESHOLD (B-F, if applicable)	
	I FOREST AREAS RETAINED **ABOVE** REFORESTATION THRESHOLD (F-B, Retention Credit, if applicable	0.25

Select the alternative that applies.

1 Clearing above the threshold only

If forest areas to be retained equal or are greater than the reforestation threshold (if F equals or is greater than B), the following calculations apply:

REFORESTATION FOR CLEARING ABOVE THRESHOLD G x 1/4	1.0
CREDIT FOR FOREST AREAS RETAINED ABOVE THRESHOLD I - Retention Credit	0.25
TOTAL REFORESTATION REQUIRED (G x 1/4) - I	0.0

If the total reforestation requirement is equal to or less than 0, no reforestation is required

FOREST CONSERVATION NARRATIVE

Additional development at the School for Contemporary Education under the current Forest Conservation Act allows the clearing of 3 5 acres of forest with no mitigation requirement. Based on the Site Development Plan, approximately 1.0 acres of forest clearing is anticipated. No mitigation is required for this clearing. At this time, there are no plans for development or subdivision of the area east and south of the 20' storm drain and utility easement at the edge of the proposed development area. The wetland and buffer and a small pocket of forest between the buffer and Whiskey Bottom Road will be placed within a Forest Conservation Easement (1 4 acres). Future Forest Conservation requirements will be determined when future development or subdivision is proposed.

Forest Retention

Tree retention/ Soil Protection areas will be delineated with fencing and/or temporary signage as appropriate (see Tree Protection Fence and Temporary Signage Details) prior to the beginning of any construction activity. Fencing shall not be considered installed correctly until reviewed by a landscape architect, or qualified natural resource professional familiar with the plan. Attachment of signs to trees is prohibited

Preconstruction Meeting/ Construction Period Practices

After tree retention areas have been fenced and before construction begins, a preconstruction meeting shall be held. The principle contractors, engineer, Howard County Inspectors and a qualified forest professional familiar with the plan shall be present. All items pertaining to forest retention, tree preservation, and construction period practices shall be discussed.

Any changes to the plan due to on-site conditions must be approved by Howard County Planning and Zoning

No grading, excavation, utility placement, sediment and erosion control activities, or vehicular traffic will occur within forest retention areas.

Storage of equipment and materials shall not be permitted in the forest retention areas

There will be no burial or disposal of discarded material on site within the retention area.

There will be no open burning within 100 feet of woodlands.

Temporary structures including, but not limited to construction trailers, sanitary facilities, etc shall not be placed within the forest retention areas

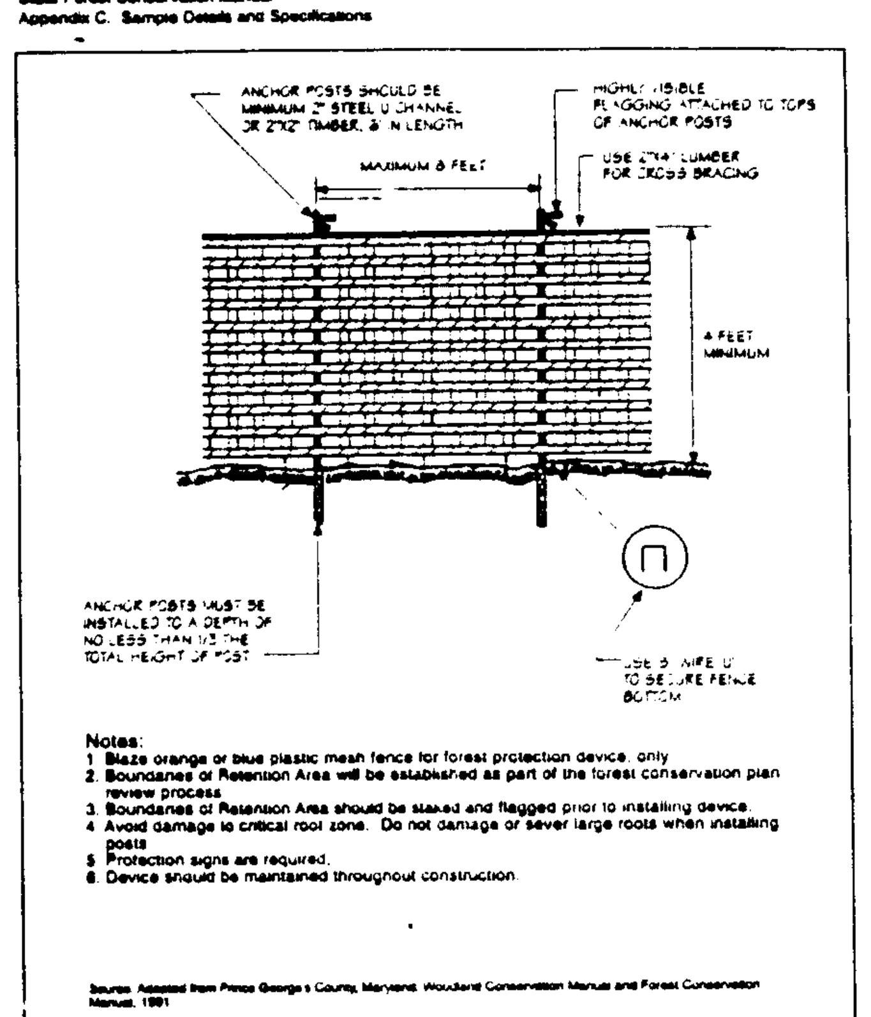
Employee parking shall not be permitted in the forest retention areas

LONG TERM FOREST PROTECTION

An easement will be created for the forest conservation area. The easement will require that the removal of any trees (except those which pose a safety hazard) must be approved by Howard County Planning and Zoning. Permanent forest protection signage will be placed along the perimeter of the forest conservation easement.

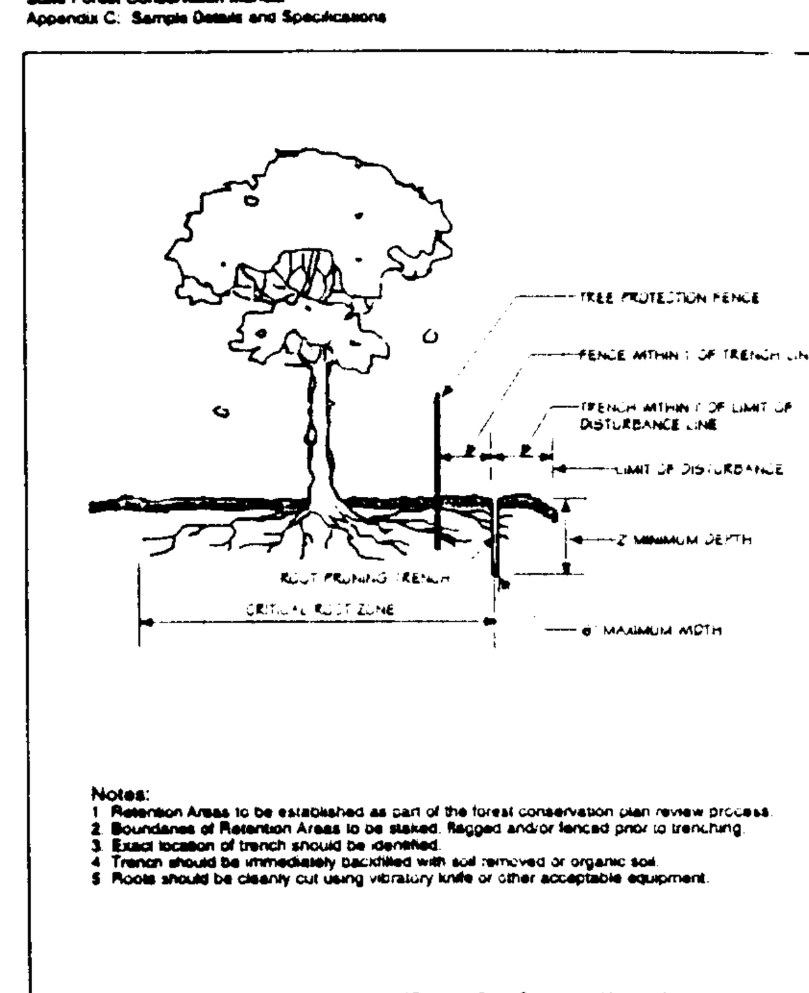
DEGRADATION OR DESTRUCTION OF THE FOREST CONSERVATION AREA MAY RESULT IN MONETARY PENALTIES AND/OR MITIGATION TO RESTORE THE AREA A QUALITY ACCEPTABLE TO THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

State Forest Conservation Manual
Appendix C. Sample Details and Specifications

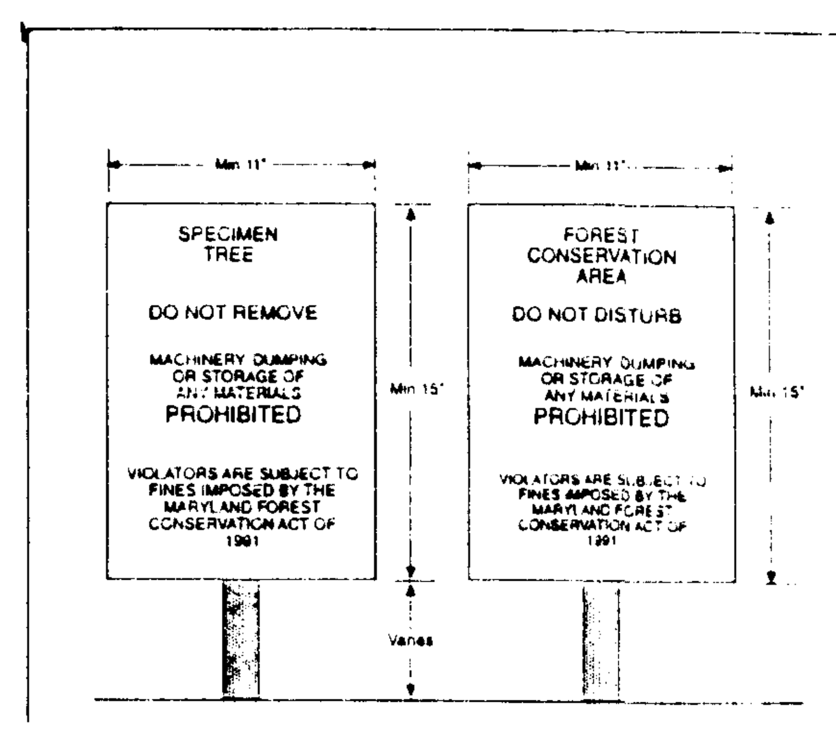


Plastic Mesh Tree Protection Fence — Figure C-5

State Forest Conservation Manual
Appendix C. Sample Details and Specifications



Root Pruning — Figure C-1



Notes
1. Bottom of signs to be higher than top of tree protection fence
2. Permanent and temporary signs to be placed approximately 50 feet apart
3. Attachment of signs to trees is prohibited

TEMPORARY AND PERMANENT FOREST PROTECTION SIGNAGE

4/10/97
Date

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	6/10/97 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	6/12/97 DATE
DIRECTOR	6/13/97 DATE

Date	No.	Revision Description

School for Contemporary Education Building Addition

Howard County, Maryland

OWNER /DEVELOPER

School for Contemporary Education
8920 Whiskey Bottom Road
Laurel, Maryland 20723

DMW

Daft·McCune·Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME SOUTHLAND CORPORATION PROPERTIES			SECTION/AREA N/A		LOT/PARCEL # Parcel 433, Par 'B'
PLAT# OR L/F 10207	BLOCK# 5	ZONE M-2	TAX MAP 50	ELECT. DISTRICT 6TH	CENSUS TRACT 6069.03
WATER CODE			SEWER CODE		

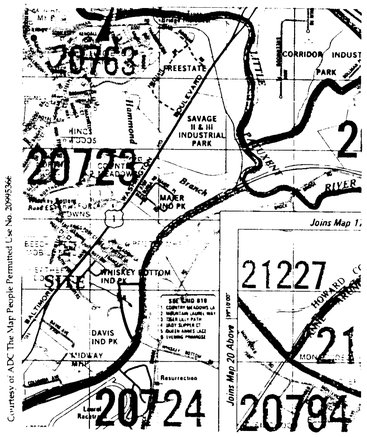
TITLE

FOREST CONSERVATION PLAN

Des By	Scale 1" = 30'	Proj. No. 96065
Drn By	Date 1-24-97	15 of 16
Chk By	Approved	

Fri Jan 10 16:24:44 1997 f:\96065\96065fb2

SDP-97-80



SITE VICINITY MAP Scale 1" = 2000'

NORTH

FOREST CONSERVATION CHART

EXISTING FOREST ON SITE (5.7 ± ACRES)
FOREST TO BE RETAINED (4.7 ± ACRES)
FOREST TO BE RETAINED IN EASEMENT (1.4 ± ACRES)
FOREST TO BE CLEARED (1.0 ± ACRES)

LEGEND:

- FOREST CONSERVATION EASEMENT
- NONTIDAL WETLAND LIMIT
- 25' WETLAND BUFFER
- EXISTING FOREST EDGE
- PROPOSED FOREST EDGE
- ROOT PRUNE LIMIT
- TEMPORARY/ PERMANENT FOREST PROTECTION SIGNS
- LIMIT OF DISTURBANCE ADJACENT TO RETENTION AREA/ TEMPORARY FOREST PROTECTION FENCING
- LIMIT OF DISTURBANCE
- SPECIMEN TREE
- SPECIMEN TREE TO BE REMOVED

DATA SOURCES:

1. EXISTING TOPO FIELD WORK WAS COMPLETED BY DMW INC ON 11-6-96. TOPO SOUTH & EAST OF DRAINAGE & UTILITY EASEMENT WAS OBTAINED FROM SDP 78-93.
2. ALL UTILITIES SHOWN ARE BASED SOLELY ON FIELD LOCATION.
3. BOUNDARY LINE SHOWN IS BASED UPON DEEDS AND PLATS OF RECORD AND DO NOT REPRESENT AN ACCURATE FIELD RUN SURVEY.
4. THE NON TIDAL WETLANDS, WETLAND BUFFER AND 20' STORM DRAIN AND UTILITY EASEMENT ARE SHOWN HERE AS THEY ARE REPRESENTED ON PLAT 10207.
5. PROPOSED SCHOOL EXPANSION FOOTPRINT WAS OBTAINED FROM SMDA ARCHITECTS ON 11-26-96 VIA FLOPPY DISK.

SOUTHLAND CORPORATION PROPERTY
PARCEL A
ZONED M-2

PROPOSED SCHOOL EXPANSION
2 STORY - 20,000 SQ. FT.
30' APPROX. HEIGHT, FFE 198.9

EXISTING SCHOOL
2 STORY
BRICK BUILDING
FIRST FLOOR = 211.02
LOWER LEVEL = 198.9

4.7 ± ACRES TO BE RETAINED

1.0 ± ACRES TO BE CLEARED

33.5" TULIP POPLAR SPECIMEN TREE (APPROXIMATE LOCATION)

30" WHITE OAK SPECIMEN TREE (APPROXIMATE LOCATION)

34" SCARLET OAK SPECIMEN TREE (APPROXIMATE LOCATION)

35" WILLOW OAK SPECIMEN TREE (APPROXIMATE LOCATION)

WHISKEY BOTTOM ROAD

HOWARD COUNTY MINOR ARTERIAL 80' RIGHT OF WAY

MATCHLINE SEE SHEET No. 01 OF 17

NORTH

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/10/97

~~CHIEF~~, DIVISION OF LAND DEVELOPMENT — DATE 6/12/97

DIRECTOR — DATE 6/13/97

Date	No.	Revision Description

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A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME SOUTHLAND CORPORATION PROPERTIES		SECTION/AREA N/A	LOT/PARCEL # Parcel 433, Par 'B'
PLAT # OR L/F 10207	BLOCK # 5	ZONE M-2	TAX MAP 50
ELECT. DISTRICT 6TH	CENSUS TRACT 6069.03		
WATER CODE	SEWER CODE		

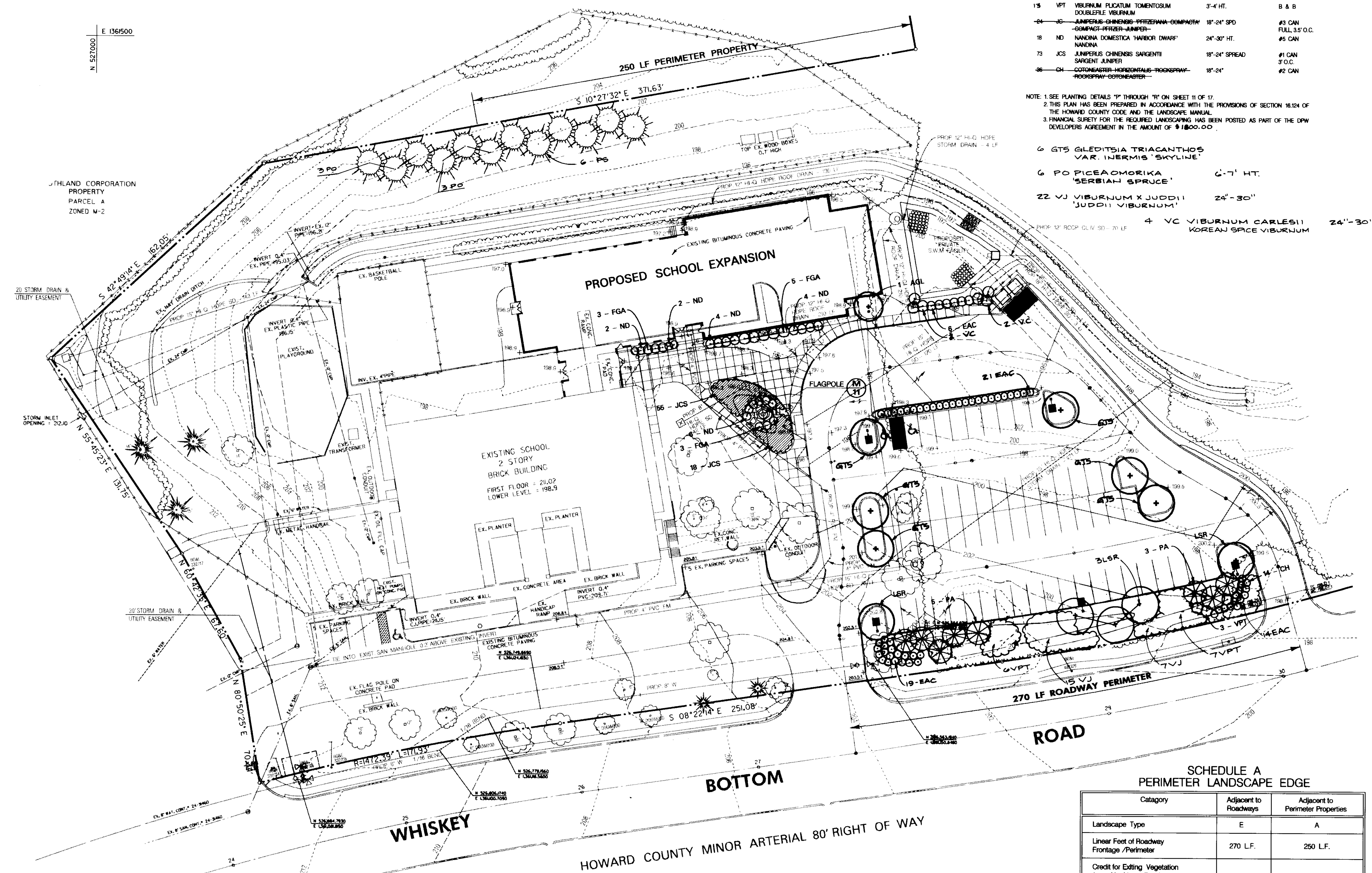
TITLE

FOREST CONSERVATION PLAN

Des By	MM	Scale	1" = 30'	Proj. No.	96065
Drn By	TPC	Date	1-24-97	14 of 16	
Chk By		Approved			

Wed Jan 15 14:43:26 1997 d:\96065\96065dp1

SDP 97-80



PLANT LIST

QTY	SYM	BOTANICAL NAME/COMMON NAME	SIZE	REMARKS
TREES				
5	LSR	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA ROUND LEAF SWEET - GUM	2 1/2" - 3" CAL.	B & B FULL HEAD
6	PS	PINUS STROBUS WHITE PINE	6'-8' HT.	B & B NATURAL
8	PA	PICEA ABIES NORWAY SPRUCE	6'-8' HT.	B & B
1	AGL	AMELANCHIER X GRANDIFLORA 'LAMARKII' SERVICE BERRY	8'-10' HT.	B & B HEAVY /MULTI-STEM
SHRUBS				
60	EAC	EUONYMUS ALATUS 'COMPACTUS' DWARF WINGED EUONYMUS	24"-30" HT.	#3 CAN
11	FGA	FOTHERGILLA GARDENI DWARF FOTHERGILLA	18"-24" HT.	#3 CAN HEAVY
13	VPT	VIBURNUM PLICATUM TOMENTOSUM DOUBLEFILE VIBURNUM	3'-4' HT.	B & B
~~24~~	~~JC~~	~~JUNIPERUS CHINENSIS 'PFITZERANA COMPACTA'~~ ~~COMPACT PFITZER JUNIPER~~	18"-24" SPD	#3 CAN FULL, 3.5' O.C.
18	ND	NANDINA DOMESTICA 'HARBOR DWARF' NANDINA	24"-30" HT.	#5 CAN
73	JCS	JUNIPERUS CHINENSIS SARGENTII SARGENT JUNIPER	18"-24" SPREAD	#1 CAN 3' O.C.
~~36~~	~~CH~~	~~COTONEASTER HORIZONTALIS 'ROCKSPRAY'~~ ~~ROCKSPRAY COTONEASTER~~	18"-24"	#2 CAN

NOTE: 1. SEE PLANTING DETAILS "P" THROUGH "R" ON SHEET 11 OF 17.
2. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
3. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF $1800.00.

6 GTS GLEDITSIA TRIACANTHOS VAR. INERMIS 'SKYLINE'
6 PO PICEA OMORIKA 'SERBIAN SPRUCE' 6'-7' HT.
22 VJ VIBURNUM X JUDDII 'JUDDII VIBURNUM' 24"-30"
4 VC VIBURNUM CARLESII KOREAN SPICE VIBURNUM 24"-30"

GENERAL NOTES

1. Plant material substitutions subject to approval of the landscape architect.
2. Plant material shall be tagged at the source by the landscape architect unless this requirement is specifically waived.
3. Locations of all plant material shall be staked for approval by landscape architect.
4. All shrubs and groundcover areas shall be planted in continuousprepared planting beds mulched with composted hardwood mulch as detailed and specified except where noted on plans.
5. Maintain positive drainage at planting beds (minimum 2% slope).
6. Contractor shall verify accuracy of base information and existing conditions in field. Bid shall be based on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications.
7. All areas within contract limits disturbed during or prior to constructionnot designated to receive plantings and mulch shall be fine graded and seeded in accordance with planting plan and specifications.
8. ~~The~~ contractor shall notify Miss Utility a minimum of three working days prior to planting and construction.
9. Damage to existing conditions and utilities shall be repaired at the expense of the contractor.
10. All plant material shall be nursery grown and shall conform to American Nurseryman Association standards.

DATA SOURCES:

1. EXISTING TOPO IS BASED UPON FIELD WORK COMPLETED BY DMW INC. ON NOVEMBER 6, 1996 AND SUPPLEMENTED BY TOPOGRAPHY TAKEN FROM SDP-78-93.
2. ALL UTILITIES SHOWN ARE BASED SOLELY ON AVAILABLE RECORDS.
3. BOUNDARY LINE SHOWN IS BASED UPON PLATS OF RECORD.
4. THE NON TIDAL WETLANDS, WETLAND BUFFER AND 20' STORM DRAIN AND UTILITY EASEMENT ARE SHOWN HERE AS THEY ARE REPRESENTED ON PLAT 10207.
5. PROPOSED SCHOOL EXPANSION DIMENSIONS WERE PROVIDED BY SMDA ARCHITECTS VIA DISK ON NOVEMBER 26, 1996.

SCHEDULE A
PERIMETER LANDSCAPE EDGE

Catagory	Adjacent to Roadways	Adjacent to Perimeter Properties
Landscape Type	E	A
Linear Feet of Roadway Frontage /Perimeter	270 L.F.	250 L.F.
Credit for Exting Vegetation (yes, No, Linear Feet) (Described below if needed)	NO	NO
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) Describe below if nedded)	NO	NO
Number of Plants Required Shade Trees Evergreen Trees Shrubs	 1:40' = 8 0 1:4' = 68	 1:60' = 4 0 0
Number of Plants Provided Shade Trees Evergreen Trees Other Trees (2:1 substitution) Shrubs (10:1 Substitution) (Describe plant substitution credits Below if needed)	 5 6* 68	 0 12** 0 0

Comments * Used (6) Evergreeen Trees as substitution for 3 Shade Trees.
** Special consideration for use of (12) Evergreen Trees in substitution for (4) Shade Trees for the purpose of screening adjacent uses.

SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING

Number of Parking Spaces	62
Number of Trees REquired	1:20 L.F. = 3
Number of Trees Provided Shade Trees Other Trees (2:1 substitution)	6
Number of Islands Required	3
Number of Islands Provided	8

NORTH

4/10/97
Date

STATE OF MARYLAND THOMAS H. [illegible] NO. [illegible] REGISTERED LANDSCAPE ARCHITECT

Professional Engineer Number:

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[signature] CHIEF, DEVELOPMENT ENGINEERING DIVISION	6/10/97 DATE
[signature] ~~CHIEF~~, DIVISION OF LAND DEVELOPMENT JA	6/12/97 DATE
[signature] DIRECTOR	6/18/97 DATE

Date	No.	Revision Description
11/19/97	2	REVISE LANDSCAPE & COURTYARD WALK

School for Contemporary Education Building Addition

Howard County, Maryland

OWNER /DEVELOPER
School For Contemporary Education
8920 Whiskey Bottom Road
Laurel, Maryland 20723

DMW
Daft-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME	SECTION /AREA	LOT /PARCEL #
SOUTHLAND CORPORATION PROPERTIES	N /A	Parcel 433, Par 'B'

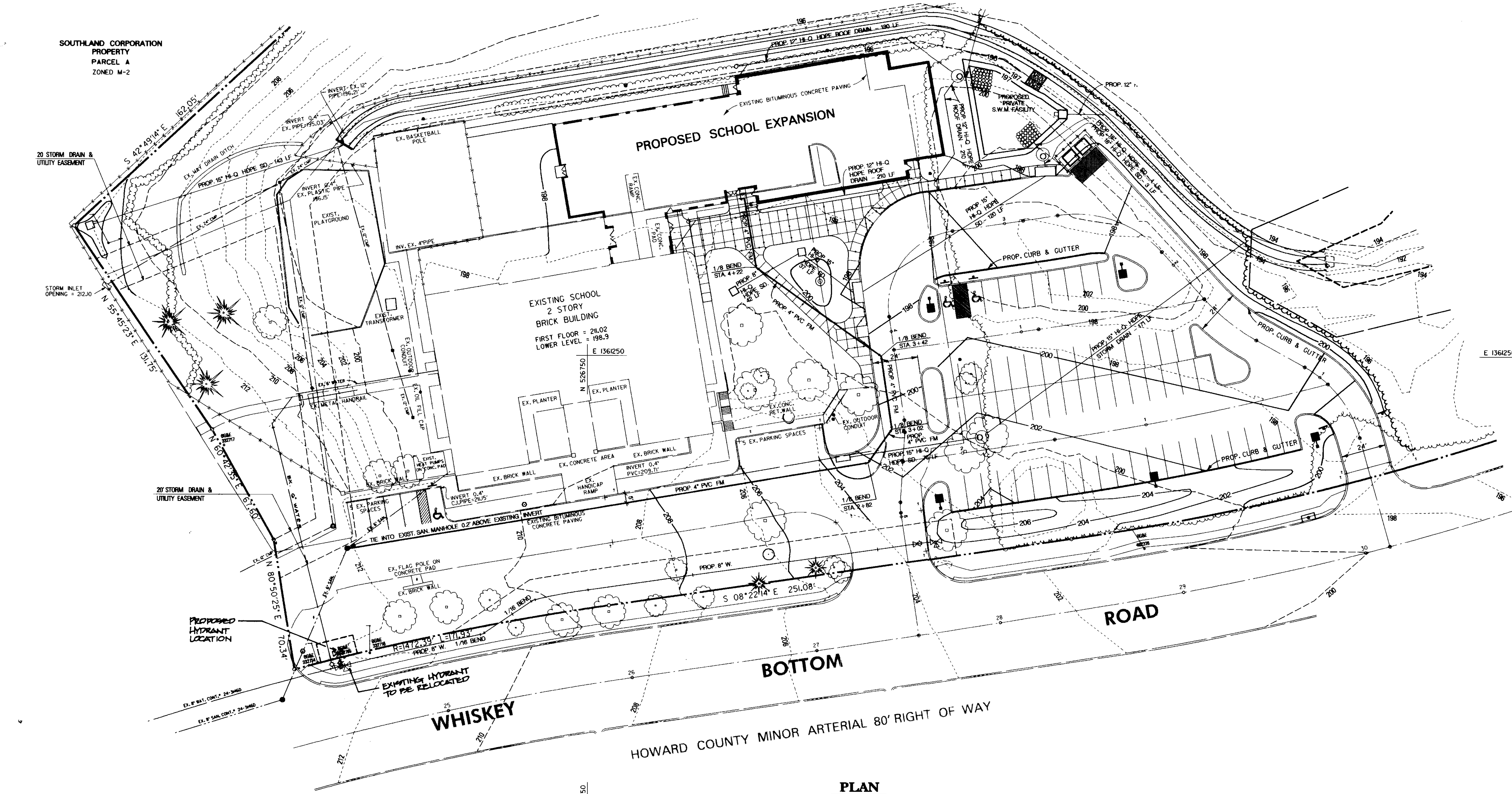
PLAT# OR L/F	BLOCK#	ZONE	TAX MAP	ELECT. DISTRICT	CENSUS TRACT
10207	5	M-2	50	6TH	6069.03

WATER CODE | SEWER CODE

TITLE
LANDSCAPE PLAN

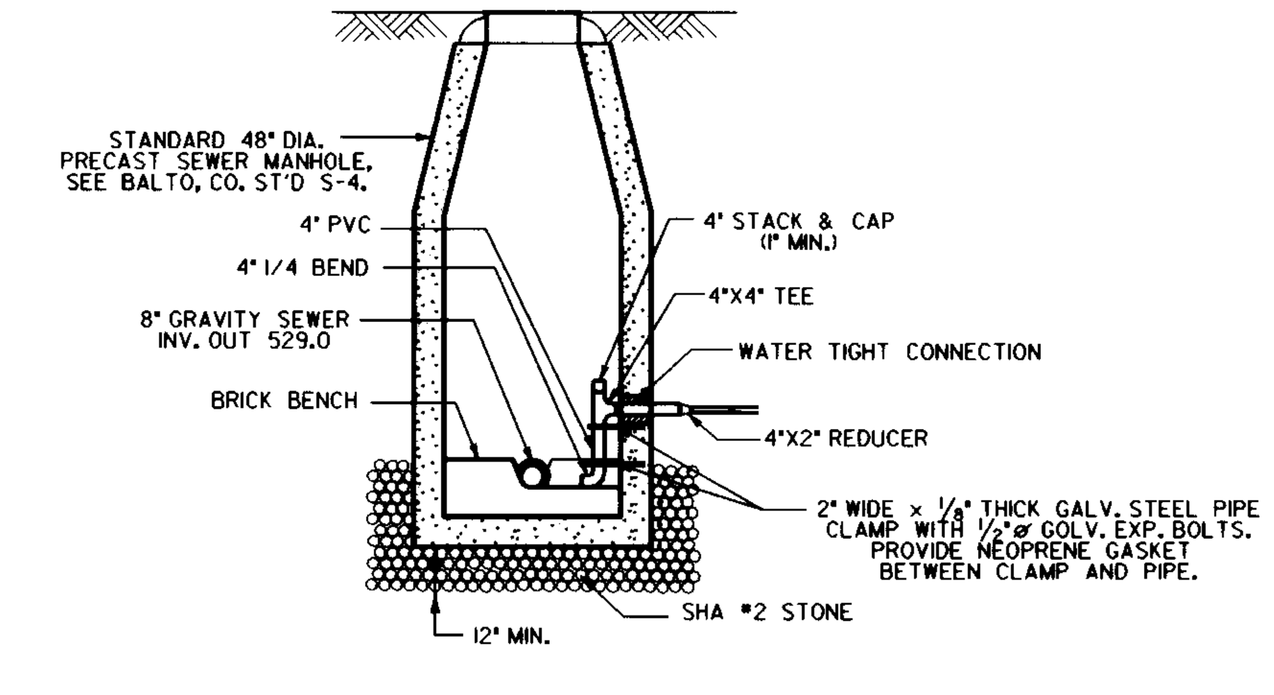
Des By	MM	Scale	1" = 30'	Proj. No. 96065
Dm By	MSS	Date	1-10-97	13 of 16
Chk By		Approved		

Sun Apr 6 15:26:44 1997 d:\96065\96065.lal
SDP.97.80



PLAN

SCALE: 1" = 30'



CONNECTION TO GRAVITY SEWER

NOT TO SCALE

DATA SOURCES:

1. EXISTING TOPO IS BASED UPON FIELD WORK COMPLETED BY DMW INC. ON NOVEMBER 6, 1996 AND SUPPLEMENTED BY TOPOGRAPHY TAKEN FROM SDP-78-93.

2. ALL UTILITIES SHOWN ARE BASED SOLELY ON AVAILABLE RECORDS.

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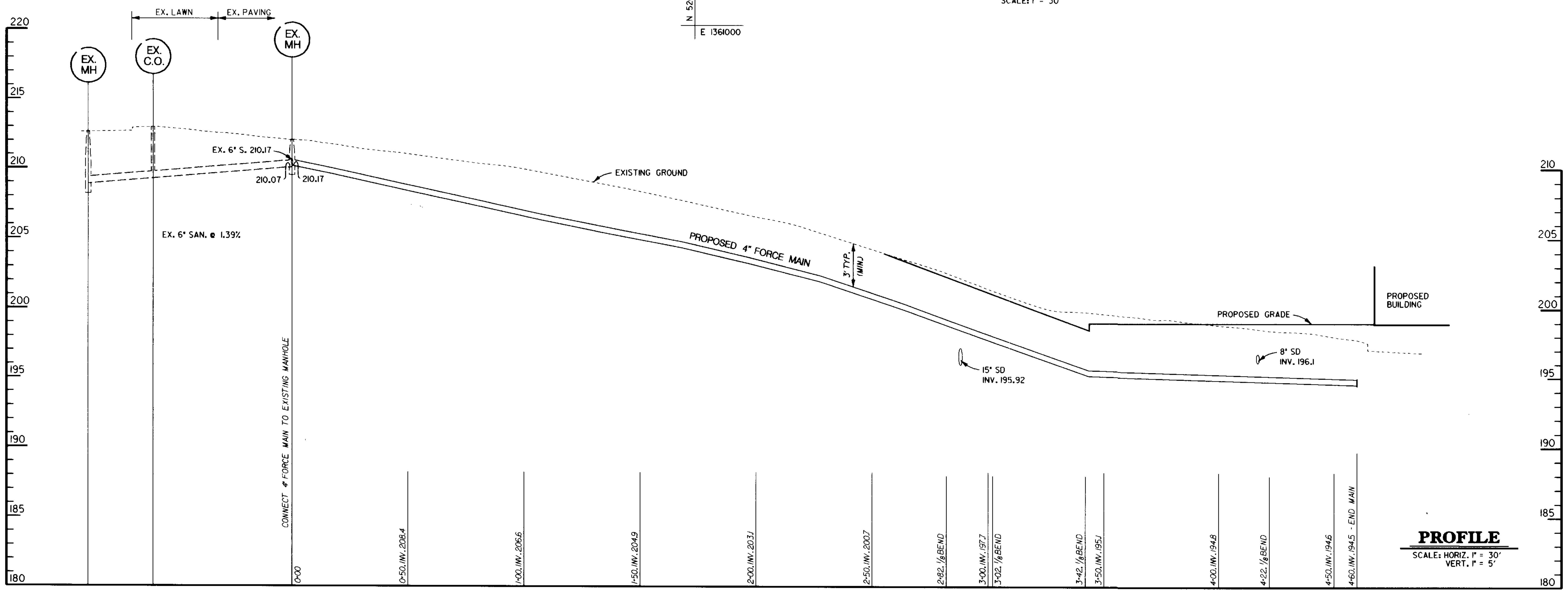
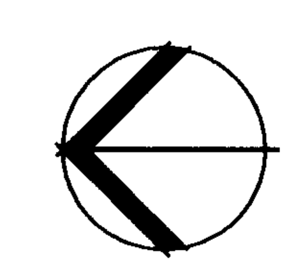
4. THE NON TIDAL WETLANDS, WETLAND BUFFER AND 20' STORM DRAIN AND UTILITY EASEMENT ARE SHOWN HERE AS THEY ARE REPRESENTED ON PLAT 10207.

5. PROPOSED SCHOOL EXPANSION DIMENSIONS WERE PROVIDED BY SMDA ARCHITECTS VIA DISK ON NOVEMBER 26, 1996.



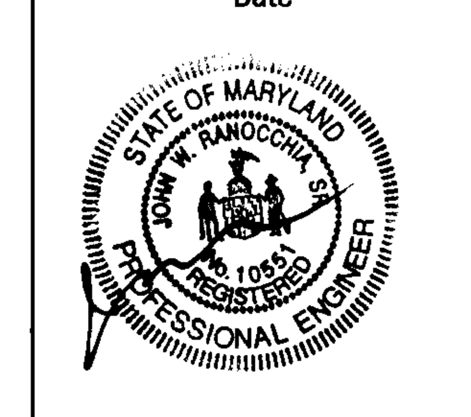
PROFILE

SCALE: HORIZ. 1" = 30'
VERT. 1" = 5'



NORTH

4/10/97
Date



Professional Engineer Number: 10551

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	6/10/97 DATE
~~CHIEF,~~ DIVISION OF LAND DEVELOPMENT	6/12/97 DATE
DIRECTOR	6/13/97 DATE

Date	No.	Revision Description

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DMW

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(410) 296-3333
Fax 296-4706

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SUBDIVISION NAME	SECTION /AREA	LOT /PARCEL #
SOUTHLAND CORPORATION PROPERTIES	N /A	Parcel 433, Par 'B'

PLAT# OR L/F	BLOCK#	ZONE	TAX MAP	ELECT. DISTRICT	CENSUS TRACT
10207	5	M-2	50	6TH	6069.03

WATER CODE	SEWER CODE

TITLE

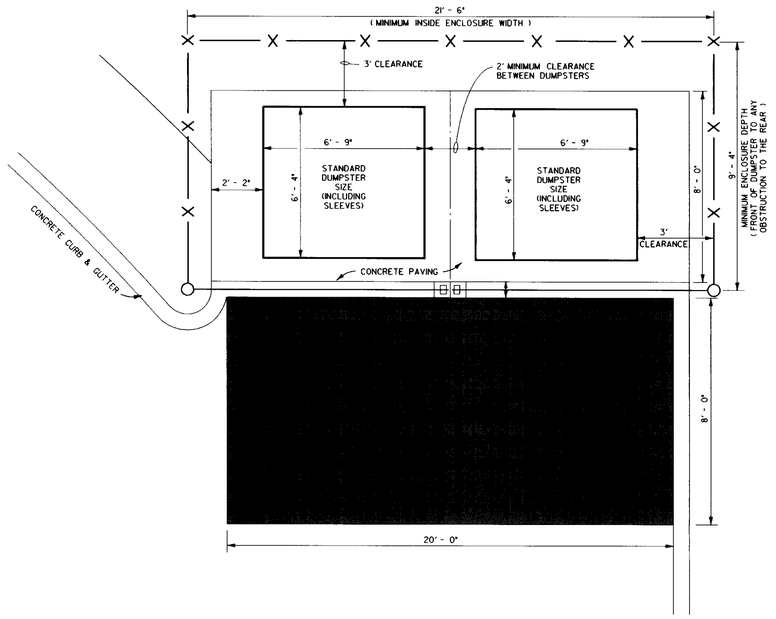
SANITARY SEWER

PLAN AND PROFILE

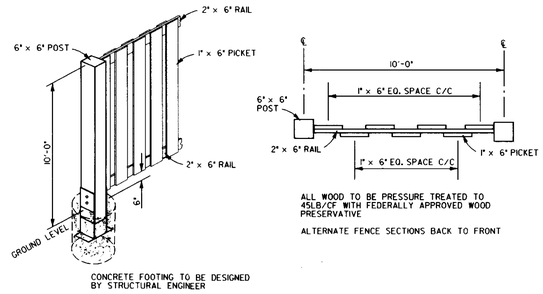
Des By	MM	Scale	As Shown	Proj. No. 96065
Dm By	MSS	Date	1-10-97	12 of 16
Chk By	MK	Approved		

Sun Apr 6 15:08:05 1997 d:\96065\96065.san

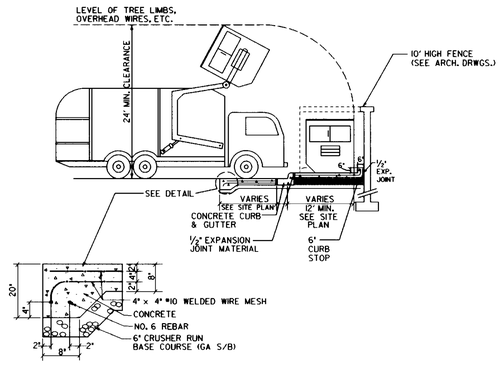
SDP-97-80



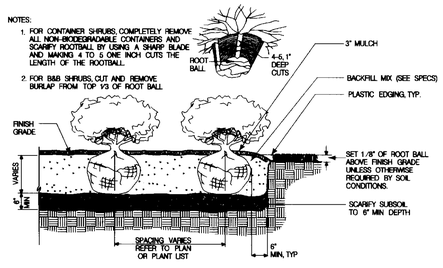
(L) Solid Waste Container Enclosure and Service Pad
Not To Scale



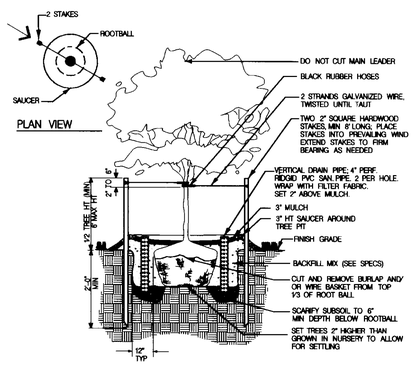
(M) Board on Board Fence
Not To Scale



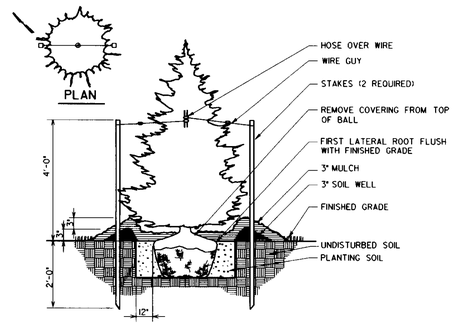
(N) Dumpster Area
Not To Scale



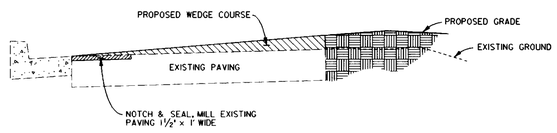
(P) Shrub Bed Planting
Not To Scale



(Q) Tree Planting (Less than 3" Caliper)
Not To Scale



(R) Evergreen Tree Planting
Not To Scale



(S) Wedge Course Paving
Not To Scale

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/10/97

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/12/97

DIRECTOR — DATE 6/12/97

Date	No.	Revision Description

School for Contemporary Education Building Addition

Howard County, Maryland

OWNER /DEVELOPER

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8920 Whiskey Bottom Road
Laurel, Maryland 20723

DMW
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200 East Pennsylvania Avenue
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Fax 296-4706

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SUBDIVISION NAME		SECTION / AREA		LOT / PARCEL #
SOUTHLAND CORPORATION PROPERTIES		N / A		Parcel 433, Par 'B'
PLAT # OR L / F	BLOCK #	ZONE	TAX MAP	ELECT. DISTRICT	CENSUS TRACT
10207	5	M-2	50	6TH	6069.03
WATER CODE		SEWER CODE		

TITLE

SITE DETAILS

Des By	MM	Scale	As Shown	Proj. No. 96065
Drn By	MSS	Date	1-10-97	11 of 16
Chk By	MK	Approved		

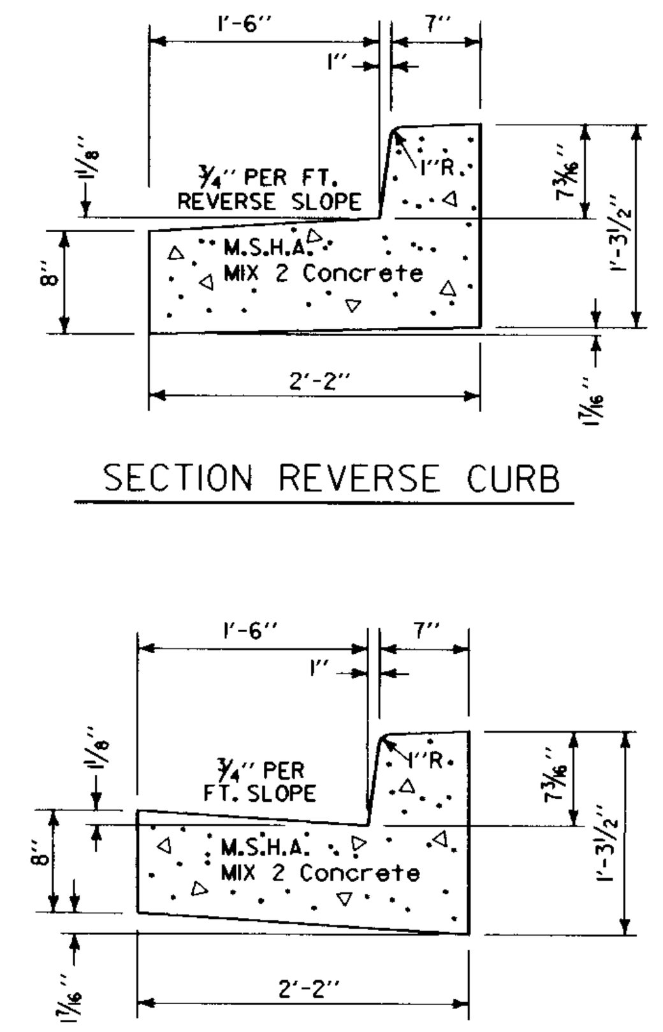
4/10/97
Date

STATE OF MARYLAND — JOHN W. RANOCCHIA — No. 10551 — REGISTERED PROFESSIONAL ENGINEER

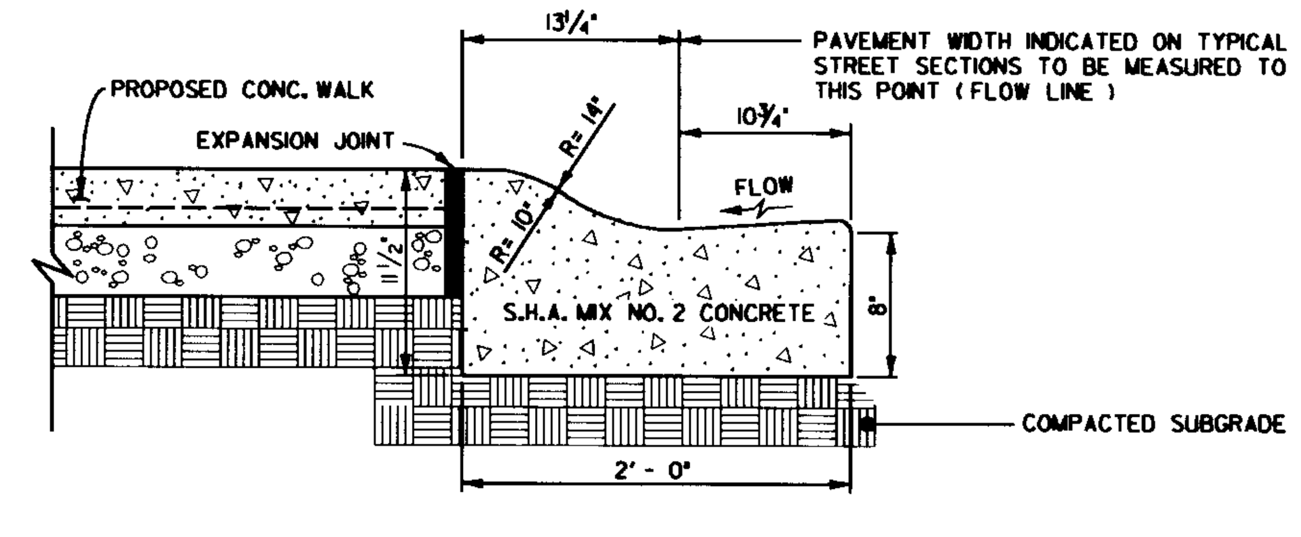
Professional Engineer Number: 10551

Sun Apr 6 14:48:22 1997 d:\96065\96065.dt2

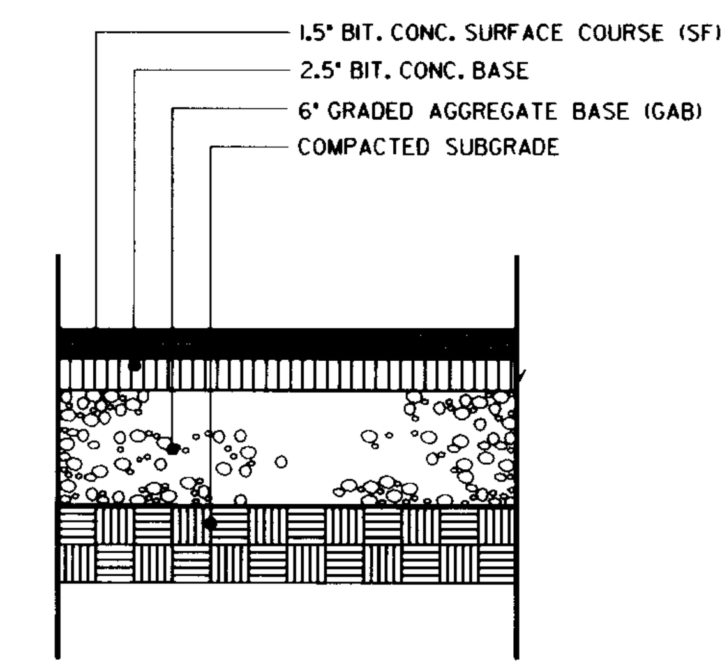
SDP-97-80



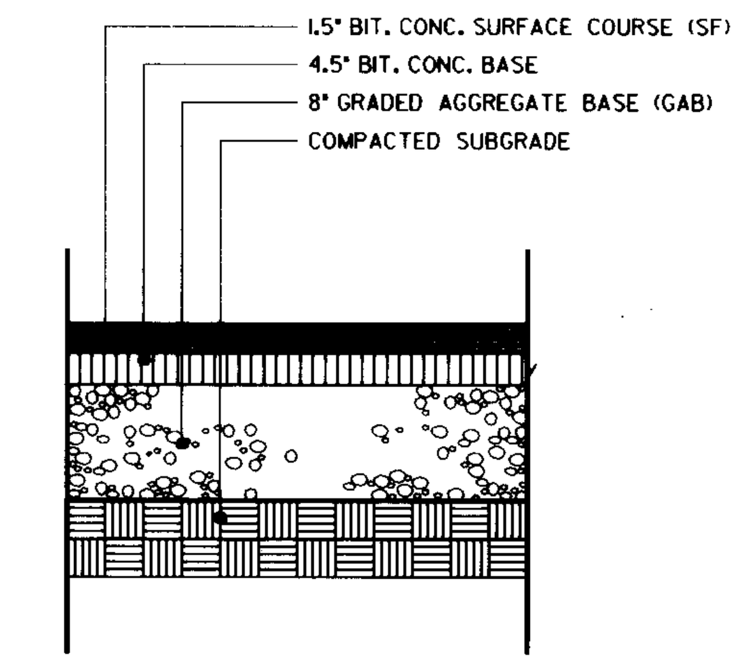
Ⓐ **Concrete Curb, Typical**
Not To Scale



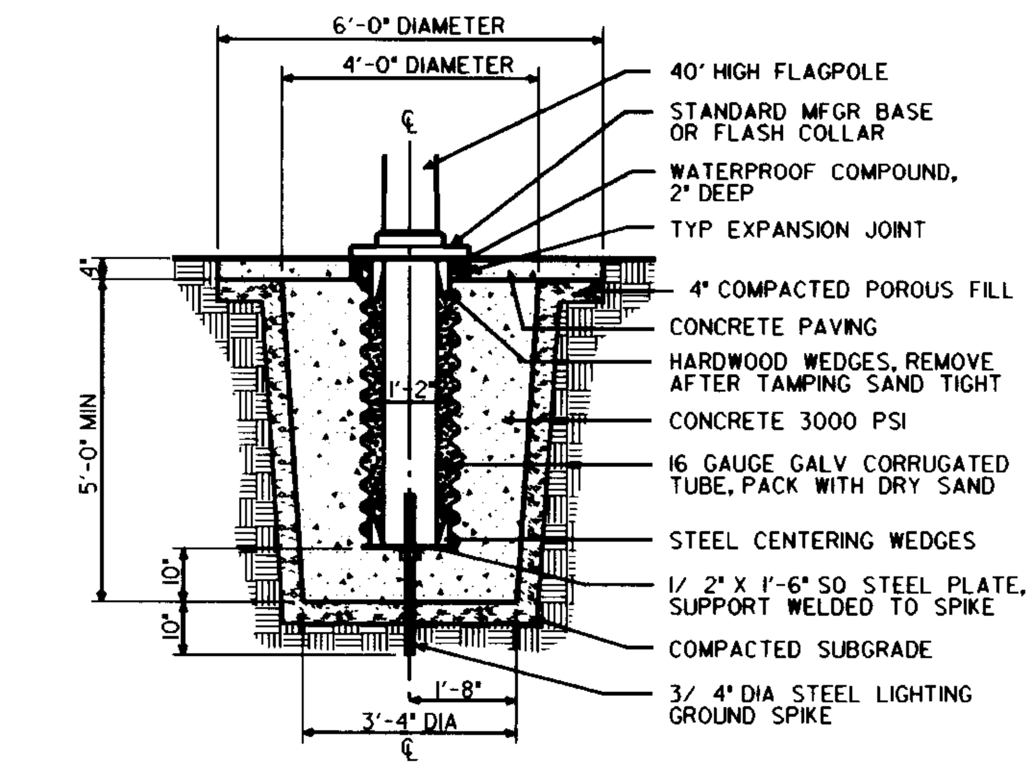
Ⓑ **Modified Combination Curb & Gutter**
Not To Scale



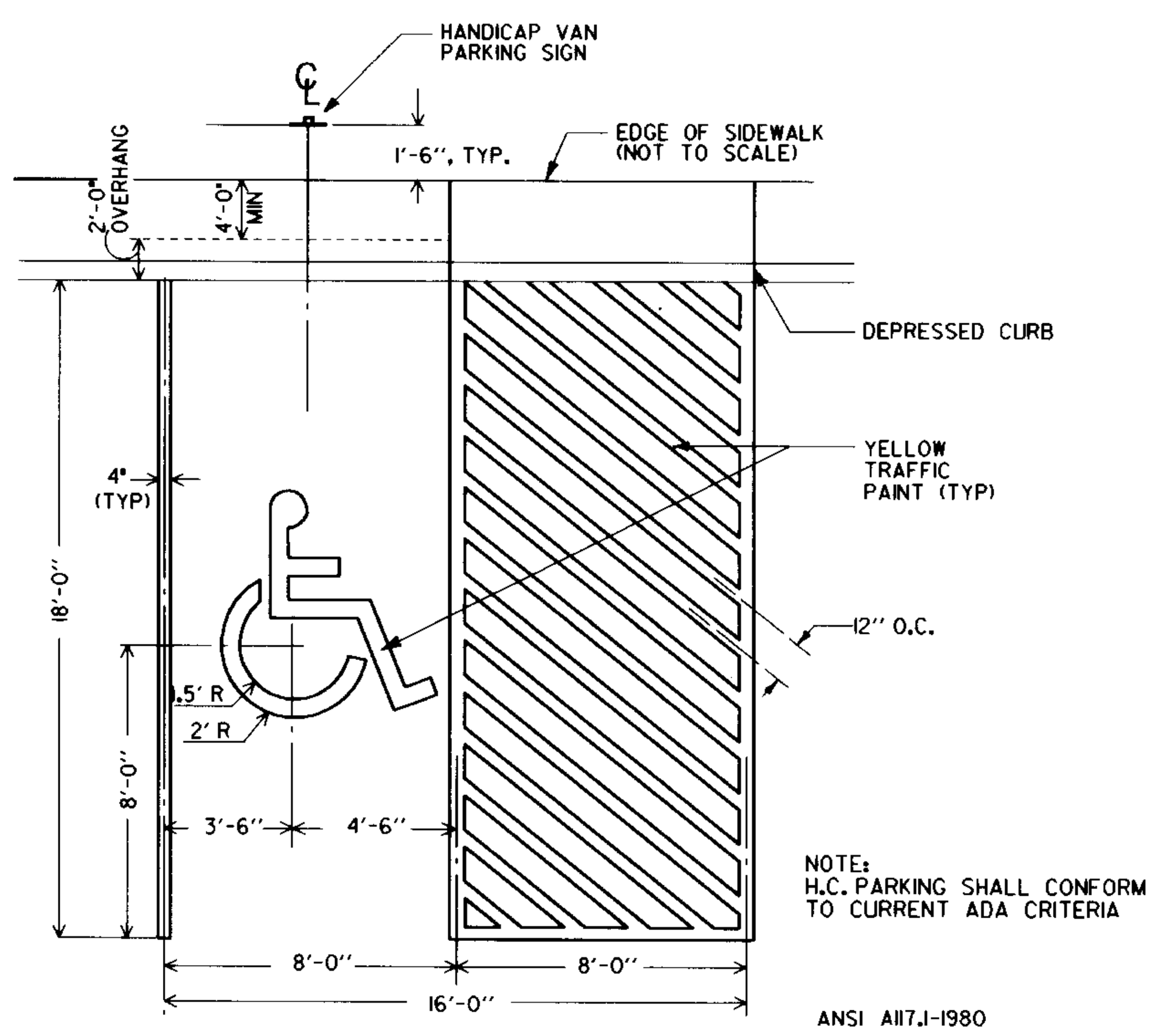
Ⓒ **Light Duty Paving**
Not To Scale



Ⓓ **Heavy Duty Paving**
Not To Scale

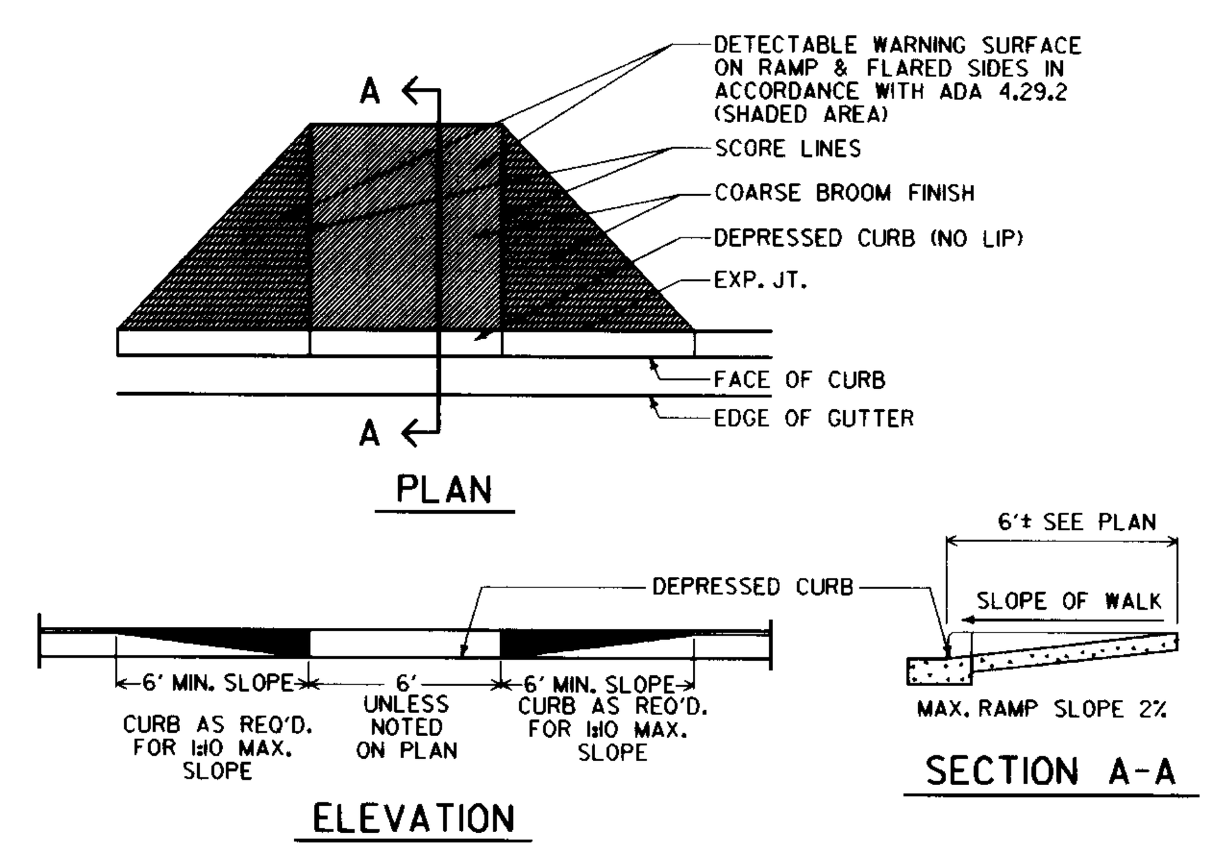


Ⓔ **Flagpole Mounting**
Scale: 1/2" = 1'-0"

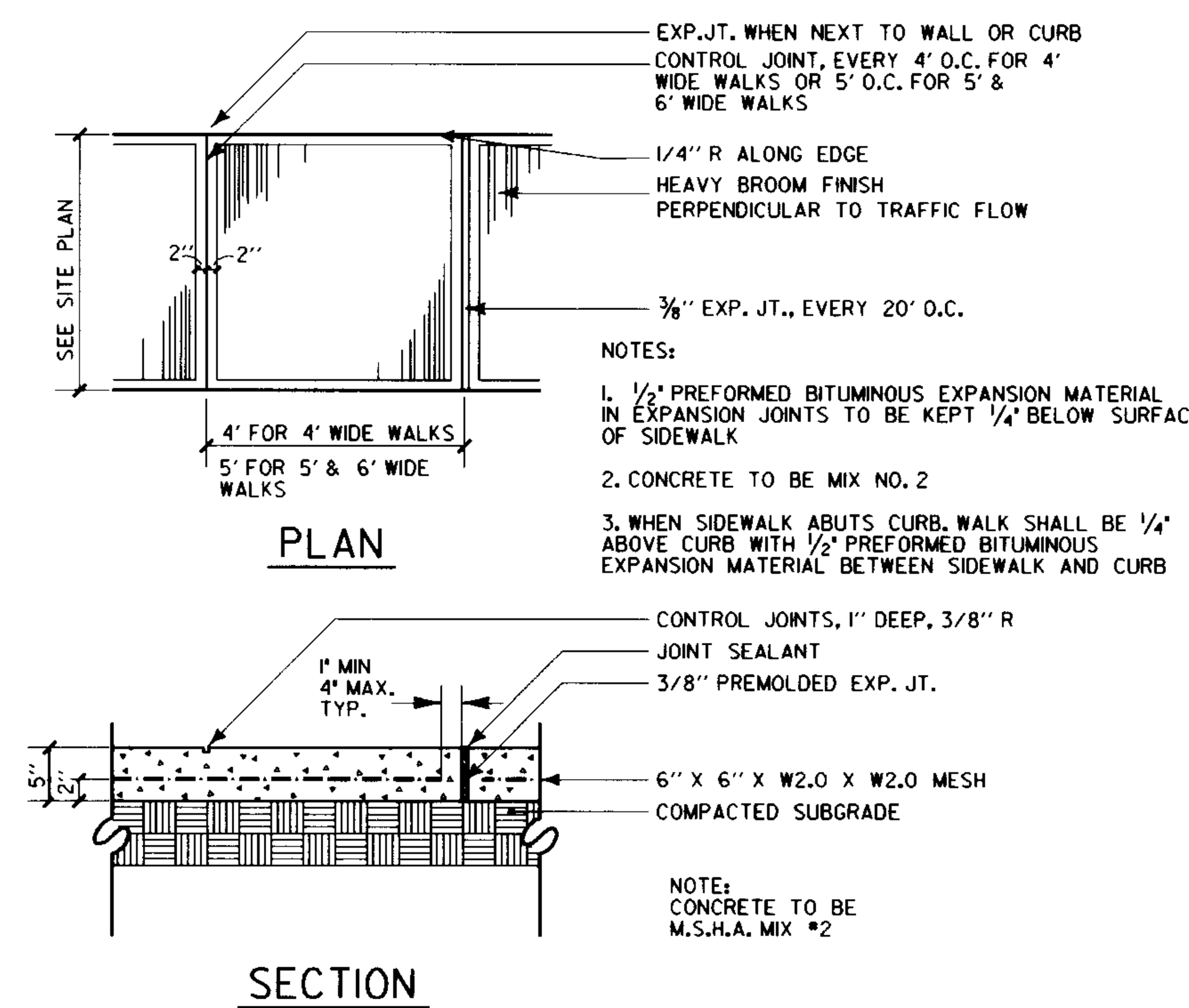


Ⓕ **Handicap Van Parking**
Not To Scale

NOTE:
HC RAMPS SHALL CONFORM TO CURRENT ADA CRITERIA



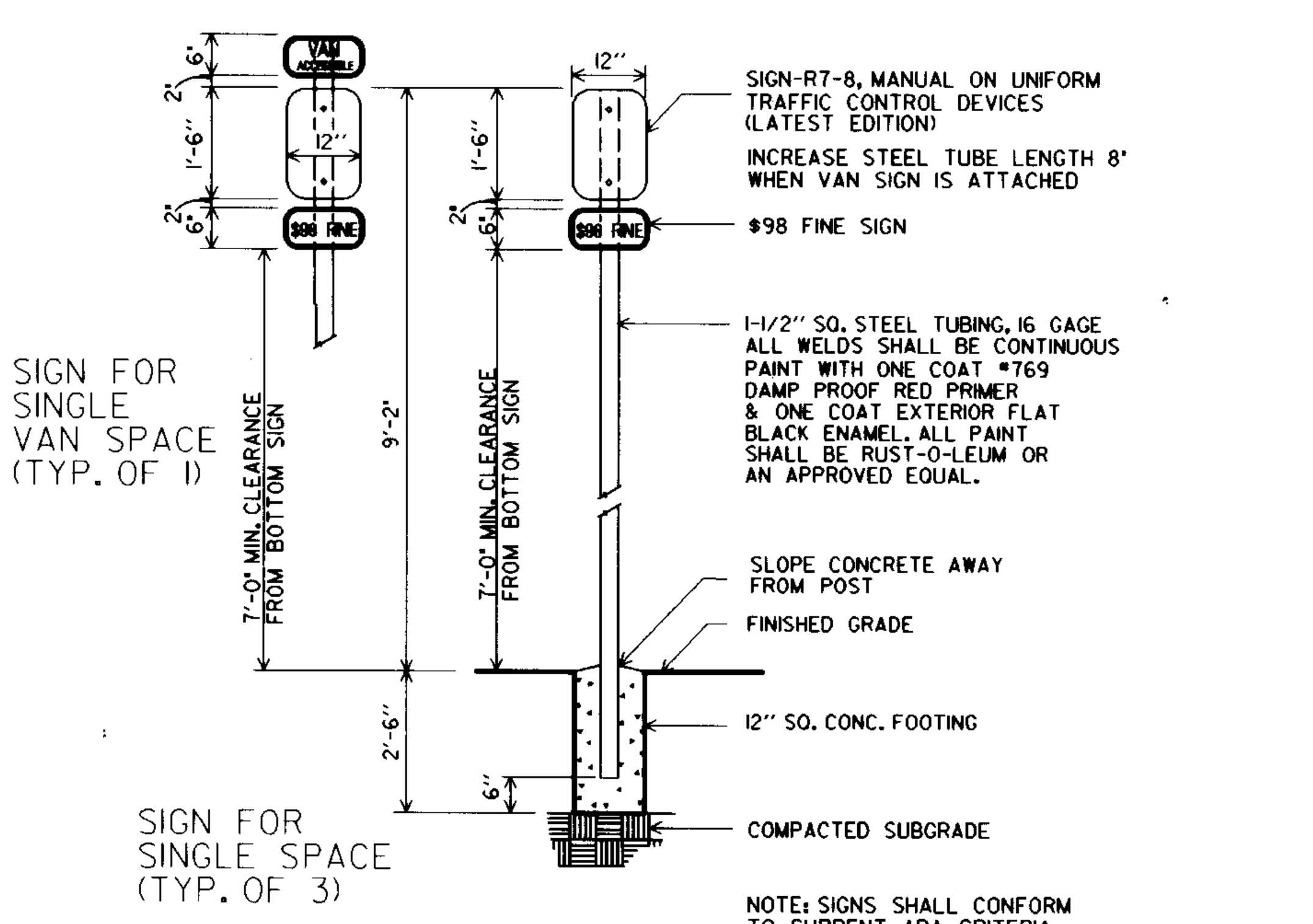
Ⓖ **Handicapped Ramp Type I**
Not To Scale



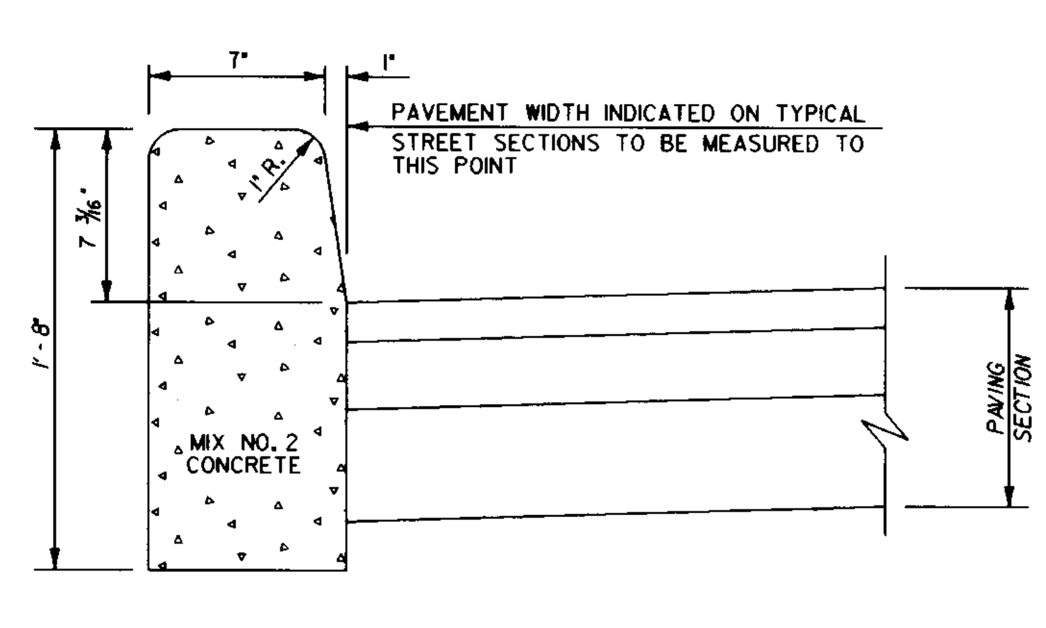
Ⓗ **Concrete Walk**
Not To Scale

NOTES
1. DISTANCE FROM GROUND TO BOTTOM OF SIGN SHALL BE 7'
2. SEE HANDICAPPED PARKING SPACE DETAIL THIS SHEET FOR LOCATION OF HANDICAPPED SIGN.
3. SPACE MARKED 'V' SHALL INCLUDE 'VAN SIGN' AS REQUIRED

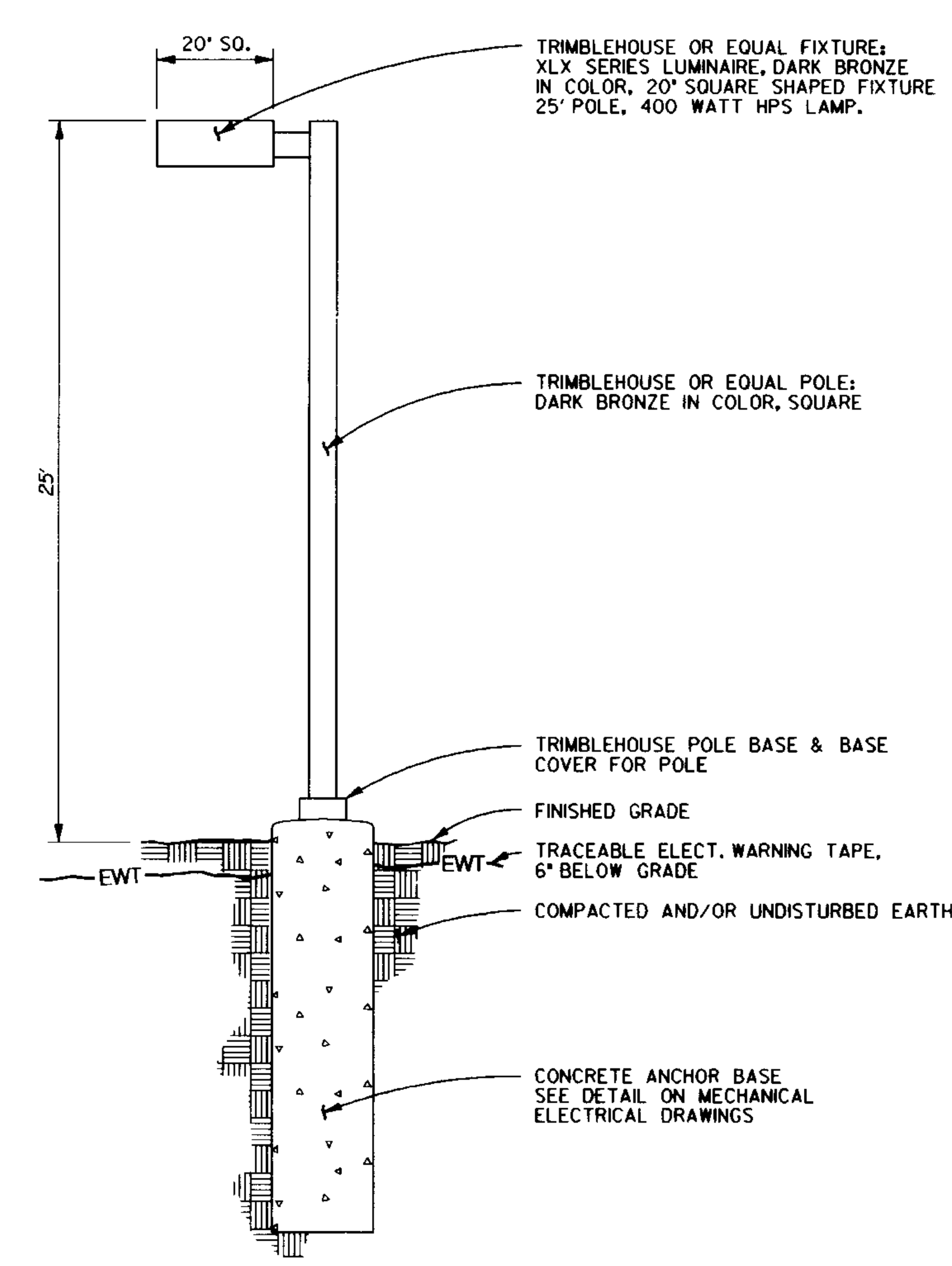
SIGN COLORS
LETTERS AND BORDER - GREEN
WHITE H.C. SYMBOLS ON BLUE BACKGROUND
BACKGROUND - WHITE



Ⓘ **Handicap Parking Sign**
Not To Scale



Ⓙ **Standard Barrier Curb**
Not To Scale



Ⓚ **Sharp Cutoff Area Light**
Not To Scale

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 6/10/97
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 6/12/97
DIRECTOR	DATE 6/13/97

Date	No.	Revision Description

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Howard County, Maryland

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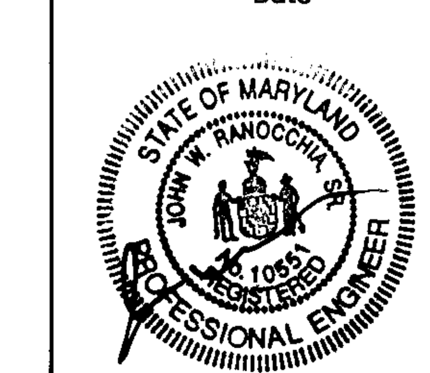
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
SOUTHLAND CORPORATION PROPERTIES	N/A	Parcel 433, Par 'B'

PLAT # OR L/F	BLOCK #	ZONE	TAX MAP	ELECT. DISTRICT	CENSUS TRACT
10207	5	M-2	50	6TH	6069.03

WATER CODE | SEWER CODE

TITLE
SITE DETAILS



4/10/97
Date

Professional Engineer Number: 18551

Des By	MM	Scale	As Shown	Proj. No. 96065
Drn By	MSS	Date	1-10-97	10 of 16
Chk By	MK	Approved		

Sun Apr 6 14:00:02 1997 d:\96065\96065.dri
SDP-97-80

DUST CONTROL
SPECIFICATIONS

Temporary Methods:

1. Mulches - See Standards for vegetative stabilization with mulches only. Mulch should be crimped or tacked to prevent blowing.
2. Vegetative Cover - See standards for temporary vegetative cover.
3. Tillage - To roughen surface and bring clods to the surface. This is an emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.
4. Irrigation - This is generally done as an emergency treatment. Site is sprinkled with water until the surface is moist. Repeat as needed. At no time should the site be irrigated to the point the runoff begins to flow.
5. Barriers - Solid board fences, snow fences, burlap fences, straw bales, and similar material can be used to control air curents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 10 times their height are effective in controlling soil blowing.
6. Calcium Chloride - Apply at a rate that will keep surface moist. May need retreatment.

Permanent Methods:

1. Permanent Vegetation - See standards for permanent vegetative cover, and permanent stabilization with sod. Existing trees or large shrubs may afford valuable protection if left in place.
2. Topsoiling - Covering with less erosive soil materials. See standards for topsoiling.
3. Stone - Cover surface with crushed stone or coarse gravel.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

H - 30 - 1

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

Dust Control Specifications

UTILITY CONSTRUCTION OUTSIDE SEDIMENT CONTROL PRACTICES

1. EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON UPSTREAM SIDE OF TRENCH.
2. IMMEDIATELY FOLLOWING PIPE INSTALLATION, THE TRENCH SHALL BE BACKFILLED, COMPACTED AND IMMEDIATELY STABILIZED (MULCHED, SEEDED, AND/OR SODDED MECHANICAL STABILIZATION) AT THE END OF EACH WORK DAY.
3. SILT FENCE SHALL BE PLACED IMMEDIATELY DOWN STREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED LONGER THAN ONE (1) WORKING DAY. (SILT FENCE AS PER SCS STANDARD DRAWING - E-15-3)
4. THE CONTRACTOR SHALL DISTURB AND OPEN TRENCH THE MINIMUM PRACTICAL AREA REQUIRED TO ACCOMPLISH THE WORK DESIGNATED FOR EACH DAY.
5. ALL SEDIMENT AND EROSION CONTROL PRACTICES AND VEGETATIVE STABILIZATION SHALL BE IN ACCORDANCE WITH THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS."

ANY EROSION AND SEDIMENT CONTROL PRACTICES DAMAGED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

Utility Construction Outside Sediment Control

HOWARD SOIL CONSERVATION DISTRICT

Developer and Engineer Certificates

By the Developer:

"I/We certify that all development and/or construction will be done according to these plans, 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 shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.~~ I also authorize periodic on-site inspections by the Howard Soil Conservation District."

Sally A. Sibley — 4-18-97
Signature of Developer — Date
Print name below signature
SALLY A. SIBLEY

By the Engineer:

"I certify that this plan for ~~pond construction~~, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. ~~I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.~~"

[signature] — 4/10/97
Signature of Engineer John W. Ranocchia, Sr. — Date
Print name below signature

Reviewed for Howard Soil Conservation District and meets Technical Requirements.

[signature] — 6/6/97
Natural Resources Conservation Service — Date

This Development Plan is Approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District

[signature] — 6/6/97
Howard Soil Conservation District — Date

Certifications

1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (992-2437).
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 SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL."
3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
   - A. SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1
   - B. FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE
4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. I, CHAPTER 12, OF THE "HOWARD COUNTY DESIGN MANUAL," STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR PERMANENT SEEDINGS, SOD, TEMPORARY SEEDING, AND MULCHING (SECTION G). 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	9.01 ACRES
AREA DISTURBED	2.10 ACRES
AREA TO BE ROOFED OR PAVED	1.50 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.60 ACRES
TOTAL CUT	2778 CUBIC YARDS
TOTAL FILL	2821 CUBIC YARDS
OFF-SITE WASTE/BORROW AREA LOCATION WASTE = NA	

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 CONTROLS 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 MADE.

Sediment Control General Notes

PERMANENT SEEDING NOTES

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

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:
1. PREFERRED - APPLY 2 TONS PER ACRES DOLOMITIC LIMESTONE (92 LBS/1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS./1000 SQ.FT.)
2. ACCEPTABLE - APPLY 2 TOMS PER ACRES DOLOMITIC LIMESTONE (92 LBS/1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK 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 OF 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 STRAW.

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 APPLICATIONS 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 SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDING.

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 BE RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS - APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.FT.)

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 15 OCTOBER 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 WEED FREE SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL. PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHLAT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE 348 GAL. PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

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

Permanent Seeding Notes

Table 28 Stone Size

	SIZE RANGE	D_{50}	D_{100}	AASHTO	WEIGHT
NUMBER 57*	3/8" - 1 1/2"	1/2"	1 1/2"	M-43	N/A
NUMBER 1	2" - 3"	2 1/2"	3"	M-43	N/A
RIP-RAP**	4" - 7"	5 1/2"	7"	N/A	N/A
CLASS I	N/A	9.5"	15"	N/A	150lb max.
CLASS II	N/A	16"	24"	N/A	700lb max.
CLASS III	N/A	23"	34"	N/A	2000lb max.

* This classification is to be used on the inside face of stone outlets and check dams.
** This classification is to be used when ever small rip-rap is required. The State Highway Administration designation for this stome is Stone For Gabions (905.01.04)

Stone For Gabion Baskets

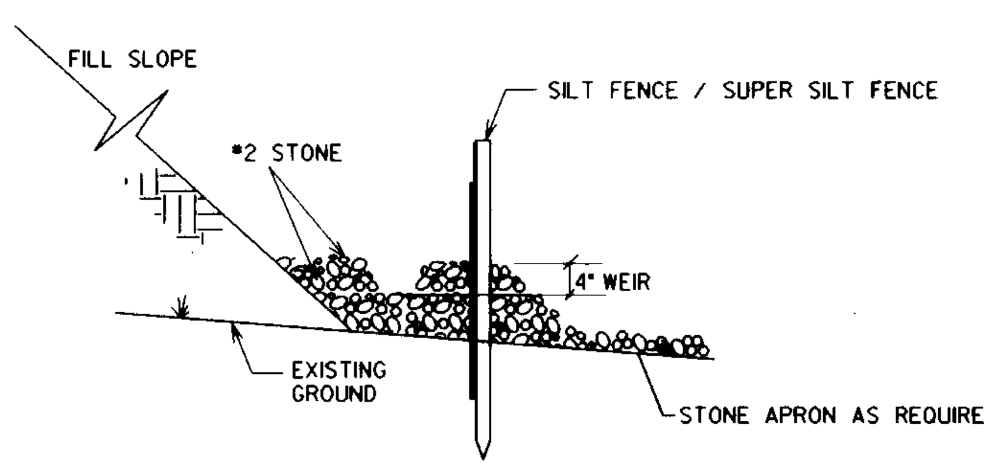
BASKET THICKNESS		SIZE OF INDIVIDUAL STONES	
INCHES	MM	INCHES	MM
6	150	3 - 5	75 - 125
9	225	4 - 7	100 - 175
12	300	4 - 7	100 - 175
18	460	4 - 7	100 - 175
36	910	4 - 12	100 - 300

NOTE: Recycled concrete equivalent may be substituted for all stone classifications. Recycled concrete equivalent shall be concrete broken into the sizes meeting the appropriate classification, shall contain no steel reinforcement, and shall have a density of 150 pounds per cubic foot.

Materials Specifications

STD. SILT FENCE	SUPER SILT FENCE
#2 STONE	#2 STONE
12" HIGH	24" HIGH
24" WIDE	36" WIDE
50'-100' O.C.	50'-100' O.C.

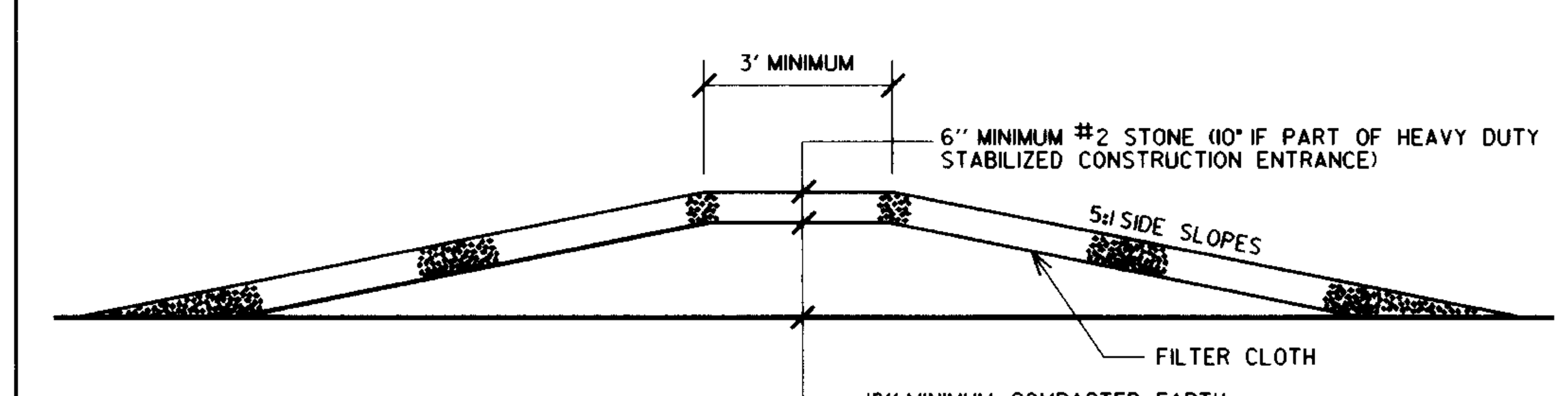
OR 4' MAX. VERTICAL CHANGE IN ELEV.



SECTION

LIMITED USE WHERE SILT FENCE DOESN'T FOLLOW CONTOURS

(G) Number 2 Stone Check Dam



IF MOUNTABLE BERM IS PART OF A "B" CLASS DIKE, COMPACTED EARTH MUST BE 30" MINIMUM.

(H) Mountable Berm Detail

NOT TO SCALE

Table 27 Geotextile Fabrics

CLASS	APPARENT OPENING SIZE MM. MAX.	GRAB TENSILE STRENGTH LB. MIN.	BURST STRENGTH PSI. MIN.
A	0.30	250	500
B	0.60	200	320
C	0.30	200	320
D	0.60	90	145
E	0.30	90	145
F (SILT FENCE)	0.40-0.80*	90	190

* US Std. Sieve CW-02215

The properties shall be determined in accordance with the following procedures:
- Apparent opening size MSMT 323
- Grab tensile strength ASTMD 1682: 4x8" specimen, 1x2" clamps, 12"/min. strain rate in both principal directions of geotextile fabric.
- Burst strength ASTMD D 3786

The fabric shall be inert to commonly encountered chemicals and hydrocarbons, and will be rot and mildew resistant. It shall be manufactured from fibers consisting of long chain synthetic polymers, and composed of a minimum of 85% by weight of polyolephins, polyesters, or polyamides. The geotectile fabric shall resist deterioration from ultraviolet exposure.

In addition, Classes A through E shall have a 0.01 cm./sec. minimum permeability when tested in accordance with the grab tensile strength requirements listed above.

Silt Fence
Class F geotextile fabrics for silt fence shall have a 50 lb./in. minimum tensile strength and a 20 lb./in. minimum tensile modules when tested in accordance with MSMT 509. The material shall also have a 0.3 gal./ft.²/min. flow rate and seventy-five percent (75%) minimum filtering efficiency when tested in accordance with MSMT 322. Geotextile fabrics used in the construction of silt fence shall resist deterioration from ultraviolet exposure. The fabric shall contain sufficient amounts fo ultraviolet ray inhibitors and stabilizers to provide a minimum of 12 months of expected usable construction life at a temperature range of 0 to 120 degrees F.

Materials Specifications

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[signature] — 6/10/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE

[signature] — 6/12/97
~~CHIEF~~, DIVISION OF LAND DEVELOPMENT — DATE

[signature] — 6/13/97
DIRECTOR — DATE

Date	No.	Revision Description

School for Contemporary Education Building Addition

Howard County, Maryland

OWNER /DEVELOPER
School For Contemporary Education
8920 Whiskey Bottom Road
Laurel, Maryland 20723

DMW
Daft-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

4/10/97
Date

STATE OF MARYLAND — JOHN W. RANOCCHIA, SR. — REGISTERED PROFESSIONAL ENGINEER

Professional Engineer Number: 10551

SUBDIVISION NAME	SECTION /AREA	LOT /PARCEL #
SOUTHLAND CORPORATION PROPERTIES	N /A	Parcel 433, Par 'B'

PLAT # OR L/F	BLOCK #	ZONE	TAX MAP	ELECT. DISTRICT	CENSUS TRACT
10207	5	M-2	50	6TH	6069.03

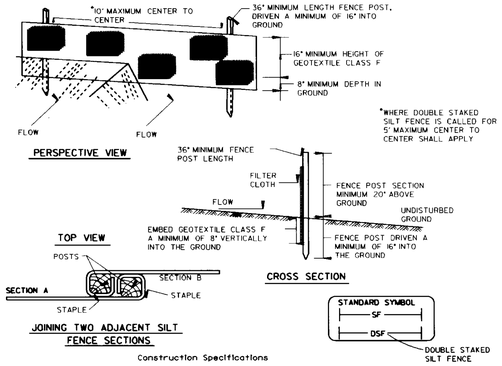
WATER CODE	SEWER CODE

TITLE
EROSION & SEDIMENT CONTROL DETAILS

Des By	MM	Scale	As Shown	Proj. No. 96065
Drn By	MSS	Date	1-10-97	9 of 16
Chk By	MK	Approved		

Sun Apr 6 14:56:31 1997 d:\96065\96065sec.dt2

SDP-97-80



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1½" x 1½" square (minimum) cut, or 1¾" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft/minute (max.)	Test: MSTM 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

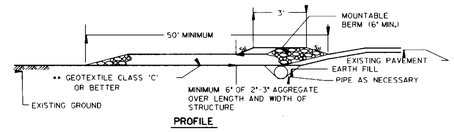
4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

E - 15 - 3

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

(A) Silt Fence NOT TO SCALE



Construction Specification

1. Length - minimum of 50' (*30' for single residence lot).

2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.

3. Geotextile fabric Class C (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.

4. Stone - crushed aggregate (2" to 3½" or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.

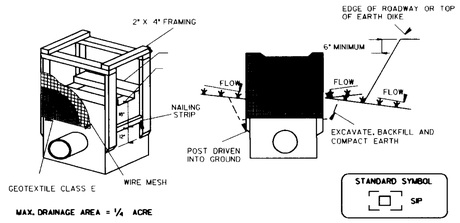
6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

F - 17 - 3

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

(D) Stabilized Construction Entrance NOT TO SCALE



MAX. DRAINAGE AREA = ¼ ACRE

Construction Specifications

1. Excavate completely around the inlet to a depth of 18" below the notch elevation.

2. Drive the 2" x 4" construction grade lumber posts 1' into the ground at each corner of the inlet. Place nail strips between the posts on the ends of the inlet. Assemble the top portion of the 2" x 4" frame using the overlap joint shown on Detail. The top of the frame (weir) must be 6" below adjacent roadways where flooding and safety issues may arise.

3. Stretch the 1/2" x 1/2" wire mesh tightly around the frame and fasten securely. The ends must meet and overlap at a post.

4. Stretch the Geotextile Class E tightly over the wire mesh with the geotixtile extending from the top of the frame to 18" below the inlet notch elevation. Fasten the geotextile firmly to the frame. The ends of the geotextile must meet at a post, be overlapped and folded, then fastened down.

5. Backfill around the inlet in compacted 6" layers until the layer of earth is level with the notch elevation on the ends and top elevation on the sides.

6. If the inlet is not in a sump, construct a compacted earth dike across the ditch line directly below it. The top of the earth dike should be at least 6" higher than the top of the frame.

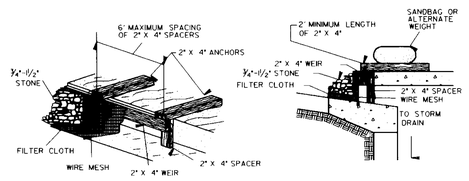
7. The structure must be inspected periodically and after each rain and the geotextile replaced when it becomes clogged.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

E - 16 - 5

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

(B) Standard Inlet Protection NOT TO SCALE



MAX. DRAINAGE AREA = ¼ ACRE

Construction Specifications

1. Attach a continuous piece of 1/2" x 1/2" wire mesh (30" minimum width by throat length plus 4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard drawing.

2. Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir.

3. Securely nail the 2" X 4" weir to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4' apart).

4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.

5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.

6. Form the ½" x ½" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean ¾" x ½" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.

7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.

8. Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

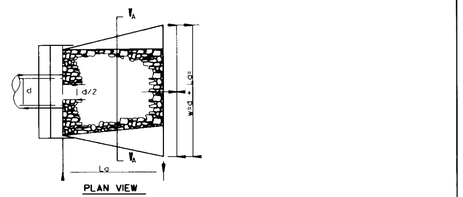
U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

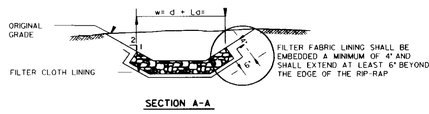
E - 16 - 6B

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

NOT TO SCALE

(E) Curb Inlet Protection (COG or COS Inlets)





NOTE: FILTER CLOTH SHALL BE GEOTEXTILE CLASS C

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

F - 18 - 10

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

(C) Rock Outlet Protection III NOT TO SCALE

Construction Specifications

1. The subgrade for the filter, rip-rap, or gabion shall be prepared to the required lines and grades. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.

2. The rock or gravel shall conform to the specified grading limits when installed respectively in the rip-rap or filter.

3. Geotextile class C shall be protected from punching, cutting, or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of geotextile over the damaged part or by completely replacing the geotextile. All overlaps whether for repairs or for joining two pieces of geotextile shall be a minimum of one foot.

4. Stone for the rip-rap or gabion outlets may be placed by equipment. They shall be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. The stone for rip-rap or gabion outlets shall be delivered and placed in a manner that will ensure that it is reasonably homogeneous with the smaller stones and spalls filling the voids between the larger stones. Rip-rap shall be placed in a manner to prevent damage to the filter blanket or geotextile. Hand placement will be required to the extent necessary to prevent damage to the permanent works.

5. The stone shall be placed so that it blends in with the existing ground. If the stone is placed too high then the flow will be forced out of the channel and scour adjacent to the stone will occur.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

F - 18 - 8A, 8A, 20A

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

Rock Outlet Protection Specifications

HOWARD SOIL CONSERVATION DISTRICT

Developer and Engineer Certificates

By the Developer:

"I/We certify that all development and/or construction will be done according to these plans, 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 shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with as-built plan of the pond within 30 days of completion.~~ I also authorize periodic on-site inspections by the Howard Soil Conservation District."

Sally A. Sibley — 4-18-97
Signature of Developer — Date
Print name below signature
SALLY A. SIBLEY

By the Engineer:

"I certify that this plan for ~~pond construction~~, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. ~~I have notified the developer that he/she must employ a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with as-built plan of the pond within 30 days of completion.~~"

Signature of Engineer John W. Ranuschio, Jr. — 4/10/97 Date
Print name below signature

Reviewed for Howard Soil Conservation District and meets Technical Requirements.

Natural Resources Conservation Service — 6/6/97 Date

This Development Plan is Approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

Howard Soil Conservation District — 6/6/97 Date

4/10/97
Date

Professional Engineer Number: 9537

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 6/6/97 DATE

~~CHIEF~~, DIVISION OF LAND DEVELOPMENT — 6/6/97 DATE

DIRECTOR — 6/12/97 DATE

Date	No.	Revision Description

School for Contemporary Education Building Addition

Howard County, Maryland

OWNER /DEVELOPER
School For Contemporary Education
8920 Whiskey Bottom Road
Laurel, Maryland 20723

DMW
Daft-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME: SOUTHLAND CORPORATION PROPERTIES			SECTION /AREA: N /A		LOT /PARCEL #: Parcel 432, Par 'B'
PLAT# OR L/F: 10207	BLOCK#: 5	ZONE: M-2	TAX MAP: 50	ELEC. DISTRICT: 6TH	CENSUS TRACT: 6069.03
WATER CODE:		SEWER CODE:			

TITLE
EROSION & SEDIMENT CONTROL DETAILS

Des By: MM	Scale: As Shown		Proj. No. 96065
Drn By: MSS	Date: 1-10-97		8 of 16
Chk By: MK	Approved		

Sun Apr 13 08:44:43 1997 I:\96065\96065sed.dtl

SDP-97-80

SEQUENCE OF CONSTRUCTION

1. Obtain a grading permit. (7 days)
2. Notify the Howard County Office of Inspection and Permits (313-1855) a minimum of 48 hours prior to the start of any construction. (2 days)
3. Clear and grub for and install sediment and erosion control measures or devices. (5 days)
4. Stabilize all nonactive graded surfaces with temporary seeding. (1 day)
5. Mass grade site and begin building construction. (9 months)
6. Install S.W.M. Facility. Provide inlet protection for riser and brick or cap 8" PVC lowflow pipe.
7. Install utilities, provide inlets with inlet protection. (2 months)
8. Fine grade all paved areas. Install curb and gutters. Apply road or walkway sub-base, pave areas. (1 month)
9. Fine grade site. Stabilize all disturbed areas with permanent seeding. (1 month)
10. With the prior permission of the Sediment Control Inspector and the Howard County Sediment Control Division remove sediment controls. Fine grade and stabilize these areas. (1 week)

HOWARD SOIL CONSERVATION DISTRICT

Developer and Engineer Certificates

By the Developer:

"I/We certify that all development and/or construction will be done according to these plans, 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 shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as built" plan of the pond within 30 days of completion.~~ I also authorize periodic on-site inspections by the Howard Soil Conservation District."

Sally A. Sibley 4-18-97

Signature of Developer — Date

Print name below signature

SALLY A. SIBLEY

By the Engineer:

"I certify that this plan for ~~pond construction,~~ erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. ~~I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as built" plan of the pond within 30 days of completion.~~"

[signature] 4/10/97

Signature of Engineer John W. Ranocchia, Sr. — Date

Print name below signature

Reviewed for Howard Soil Conservation District and meets Technical Requirements.

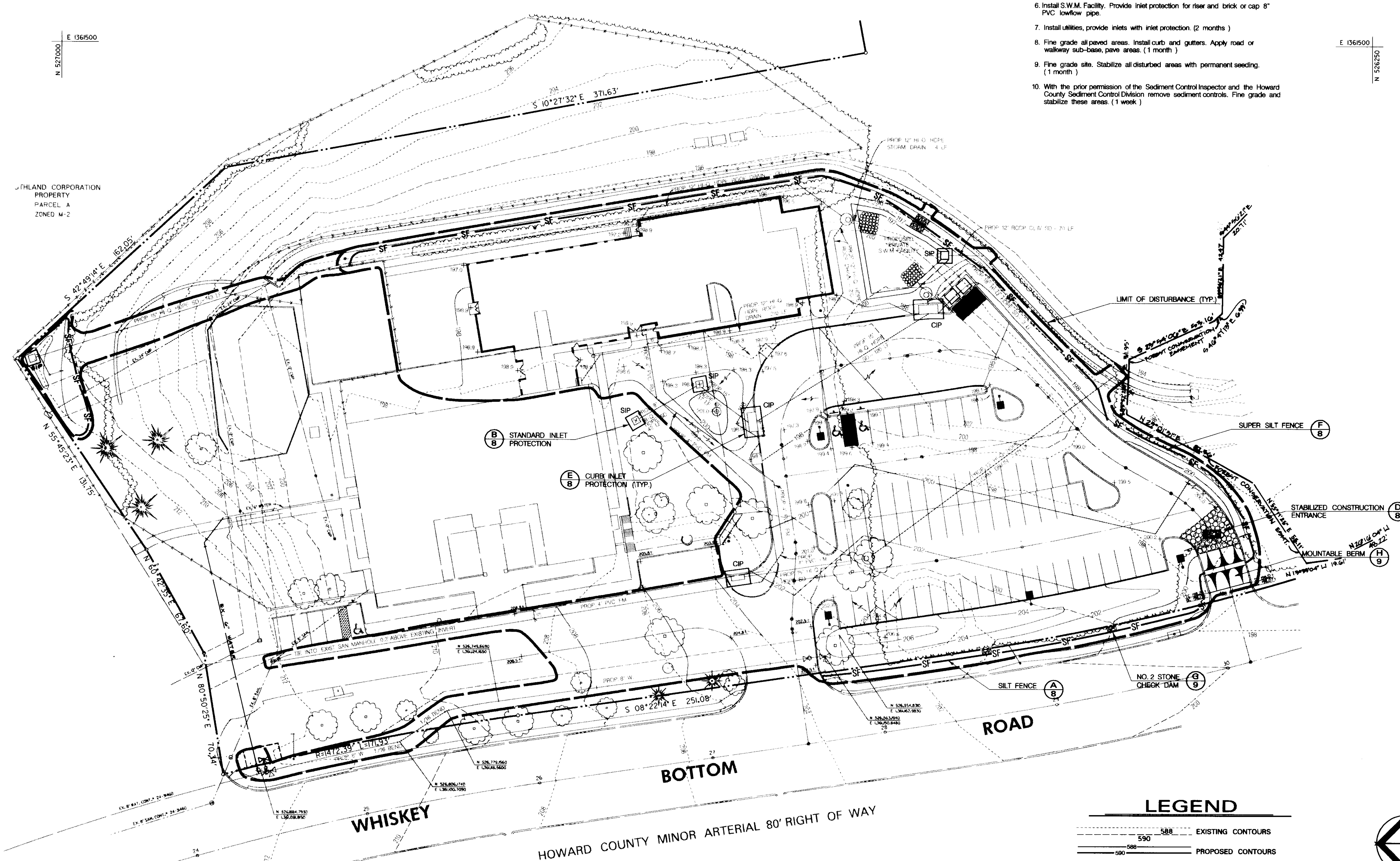
Cheryl Simmons 6/6/97

Natural Resources Conservation Service — Date

This Development Plan is Approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

John R. [signature] 6/6/97

Howard Soil Conservation District — Date



LEGEND

588	EXISTING CONTOURS
590	PROPOSED CONTOURS
─ ─ ─	LIMIT OF DISTURBANCE (LOD)
—SF—SF—SF—	PROPOSED SILT FENCE
	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
	PROPOSED No.2 STONE CHECK DAM
	PROPOSED INLET PROTECTION
	PROPOSED MOUNTABLE BERM

AREA OF DISTURBANCE:
91564 S.F. – 2.10 ACRES

NORTH

4/10/97
Date

STATE OF MARYLAND — JOHN W. RANOCCHIA — No. 10551 — REGISTERED PROFESSIONAL ENGINEER

Professional Engineer Number: 10551

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 6/10/97
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 6/12/97
DIRECTOR	DATE 6/13/97

Date	No.	Revision Description

School for Contemporary Education Building Addition

Howard County, Maryland

OWNER /DEVELOPER

School For Contemporary Education
8920 Whiskey Bottom Road
Laurel, Maryland 20723

DMW

Daft-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME	SECTION /AREA	LOT /PARCEL #
SOUTHLAND CORPORATION PROPERTIES	N /A	Parcel 433, Par 'B'

PLAT# OR L/F	BLOCK#	ZONE	TAX MAP	ELECT. DISTRICT	CENSUS TRACT
10207	5	M-2	50	6TH	6069.03

WATER CODE	SEWER CODE

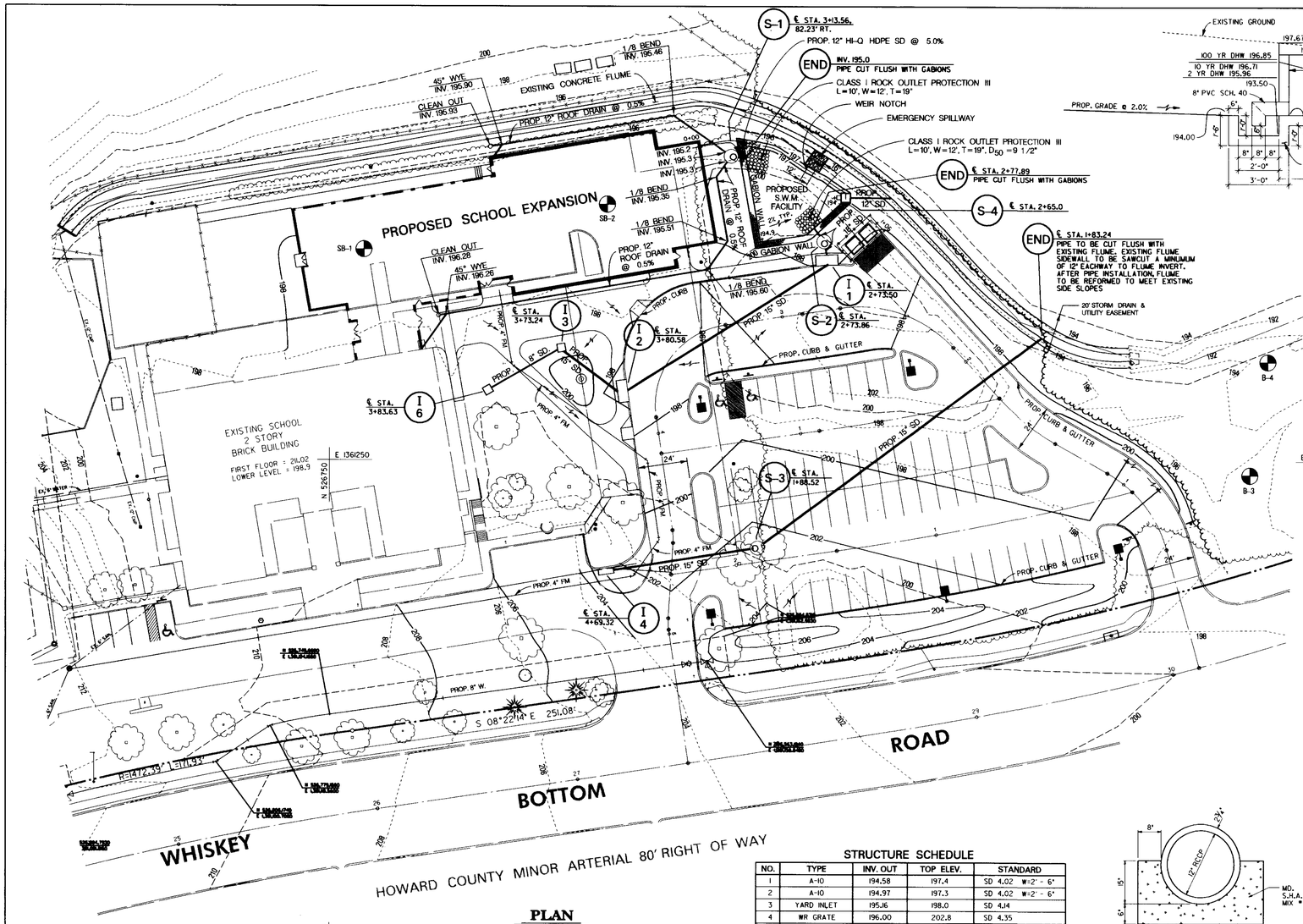
TITLE

EROSION AND SEDIMENT CONTROL

Des By	MM	Scale 1" = 30'	Proj. No. 96065
Drn By	MSS	Date 1-10-97	7 of 16
Chk By	MK	Approved	

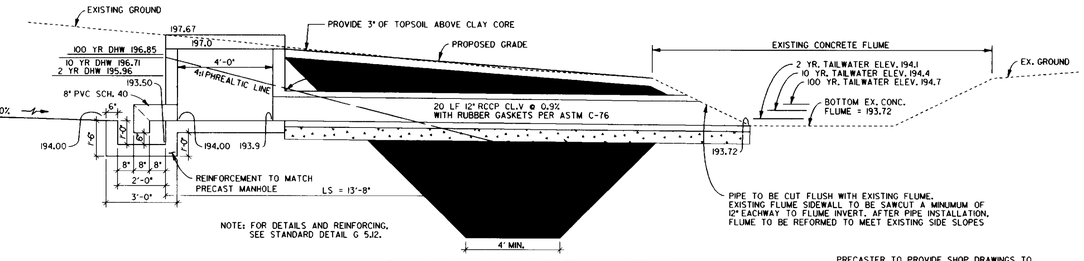
Sun Apr 13 08:24:27 1997 f:\96065\96065.esc

SDP 97-80



PLAN

SCALE: 1" = 30'

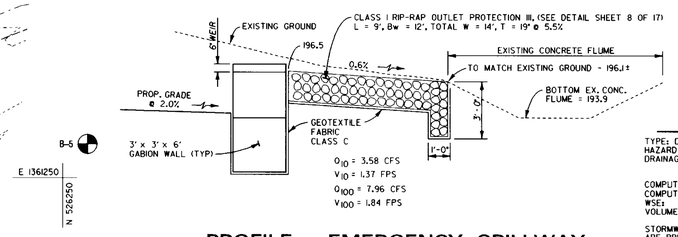


NOTE: FOR DETAILS AND REINFORCING, SEE STANDARD DETAIL G 5.12.

STANDARD "B" SHALLOW PRECAST MANHOLE AND OUTFALL

SCALE: 1" = 3'

PRECASTER TO PROVIDE SHOP DRAWINGS TO THE ENGINEER PRIOR TO AND CONSTRUCTION OR POURING OF RISER STRUCTURE.



PROFILE – EMERGENCY SPILLWAY

SCALE: 1" = 3'

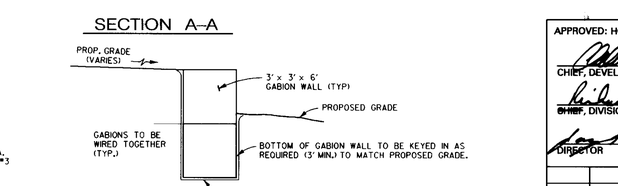
SWM FACILITY SUMMARY TABLE

TYPE: DRY FACILITY
HAZARD CLASSIFICATION: A
DRAINAGE AREA: 1.66 ACRES

	2 YEAR	10 YEAR	100 YEAR
COMPUTED INFLOW:	3.7 CFS	7.4 CFS	11.6 CFS
COMPUTED DISCHARGE:	1.8 CFS	7.4 CFS	8.4 CFS
WSE:	195.96	196.71	196.85
VOLUME PROVIDED:	1940 CF	2960 CF	3150 CF

STORMWATER MANAGEMENT FACILITIES SHOWN ON THIS PLAN ARE PRIVATE AND ARE TO BE MAINTAINED BY THE OWNER.

ELEVATION



SECTION A–A

TYPICAL DETAILS OF GABION WALL

SCALE: 1" = 3'

STRUCTURE SCHEDULE

NO.	TYPE	INV. OUT	TOP ELEV.	STANDARD
1	A-10	194.58	197.4	SD 4.02 W=2' - 6"
2	A-10	194.97	197.3	SD 4.02 W=2' - 6"
3	YARD INLET	195.16	198.0	SD 4.14
4	WR GRATE	196.00	202.8	SD 4.35
5	TYPE 'D' INLET	207.49	211.83	SD 4.11
6	YARD INLET	196.8	198.2	SD 4.14
S-1	STORMCEPTOR	195.20	197.5	SEE DETAIL 5 OF 17
S-2	STORMCEPTOR	194.44	197.3	SEE DETAIL 5 OF 17
S-3	STORMCEPTOR	195.40	202.6	SEE DETAIL 5 OF 17
S-4	SEE DETAIL	193.9	197.67	G 5.12 (MODIFIED)

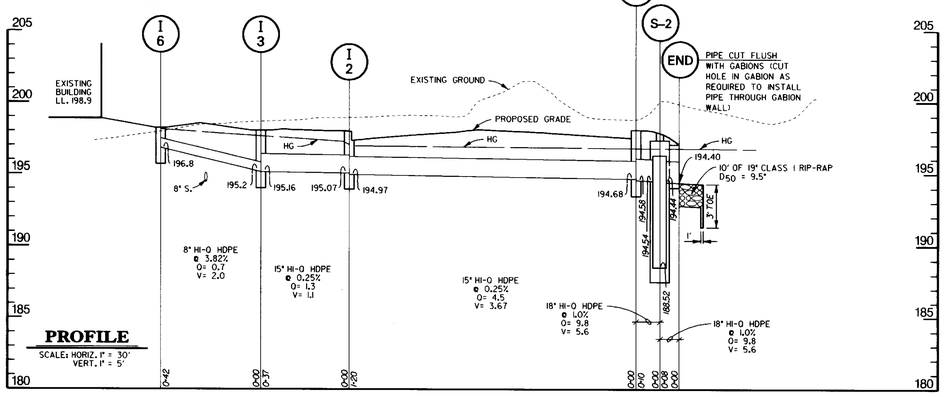
SCS TR-46 A-2

CONCRETE CRADLE

NO SCALE

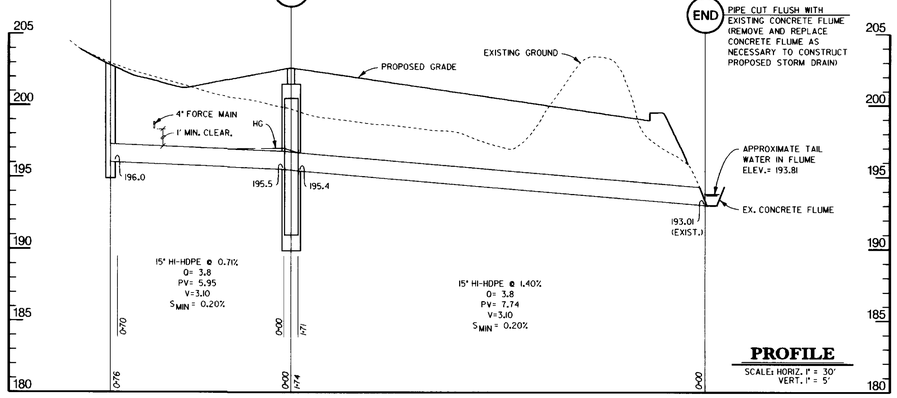
DRY FACILITY MAINTENANCE SCHEDULE

1. DRY FACILITY TO BE INSPECTED AFTER EACH MAJOR STORM EVENT OR ANNUALLY, WHICHEVER IS SHORTER.
2. ALL ACCUMULATED PAPER, TRASH AND DEBRIS IS TO BE REMOVED ON AS NEEDED BASIS BY THE OWNER.
3. SILT IS TO BE REMOVED WHEN ACCUMULATIONS EXCEED SIX (6) INCHES WITHIN THE FACILITY.
4. MOW A MINIMUM OF TWICE EACH GROWING SEASON OR WHEN VEGETATION GROWNING ON THE EMBANKMENT OR WITHIN THE FACILITY REACHES 18 INCHES IN HEIGHT AT ANY TIME.
5. VISIBLE SIGNS OF EROSION IN THE FACILITY AS WELL AS RIP-RAP OUTLET AREAS SHALL BE REPAIRED AS SOON AS IT IS NOTICED.



PROFILE

SCALE: HORIZ. 1" = 30' VERT. 1" = 5'



PROFILE

SCALE: HORIZ. 1" = 30' VERT. 1" = 5'

NORTH

4/10/97
Date

Professional Engineer Number: 10551

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/6/97

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/2/97

DIRECTOR — DATE 6/3/97

Date	No.	Revision Description

School for Contemporary Education Building Addition

Howard County, Maryland

OWNER /DEVELOPER
School For Contemporary Education
8920 Whiskey Bottom Road
Laurel, Maryland 20723

DMW
Daft-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4706

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME: SOUTHLAND CORPORATION PROPERTIES		SECTION / AREA: N/A	LOT / PARCEL #: Parcel 433, Par 'B'
PLAT # OR L/F: 10207	BLOCK #: 5	ZONE: M-2	TAX MAP: 50
ELECT. DISTRICT: 6TH	CENSUS TRACT: 6069.03		
WATER CODE:	SEWER CODE:		

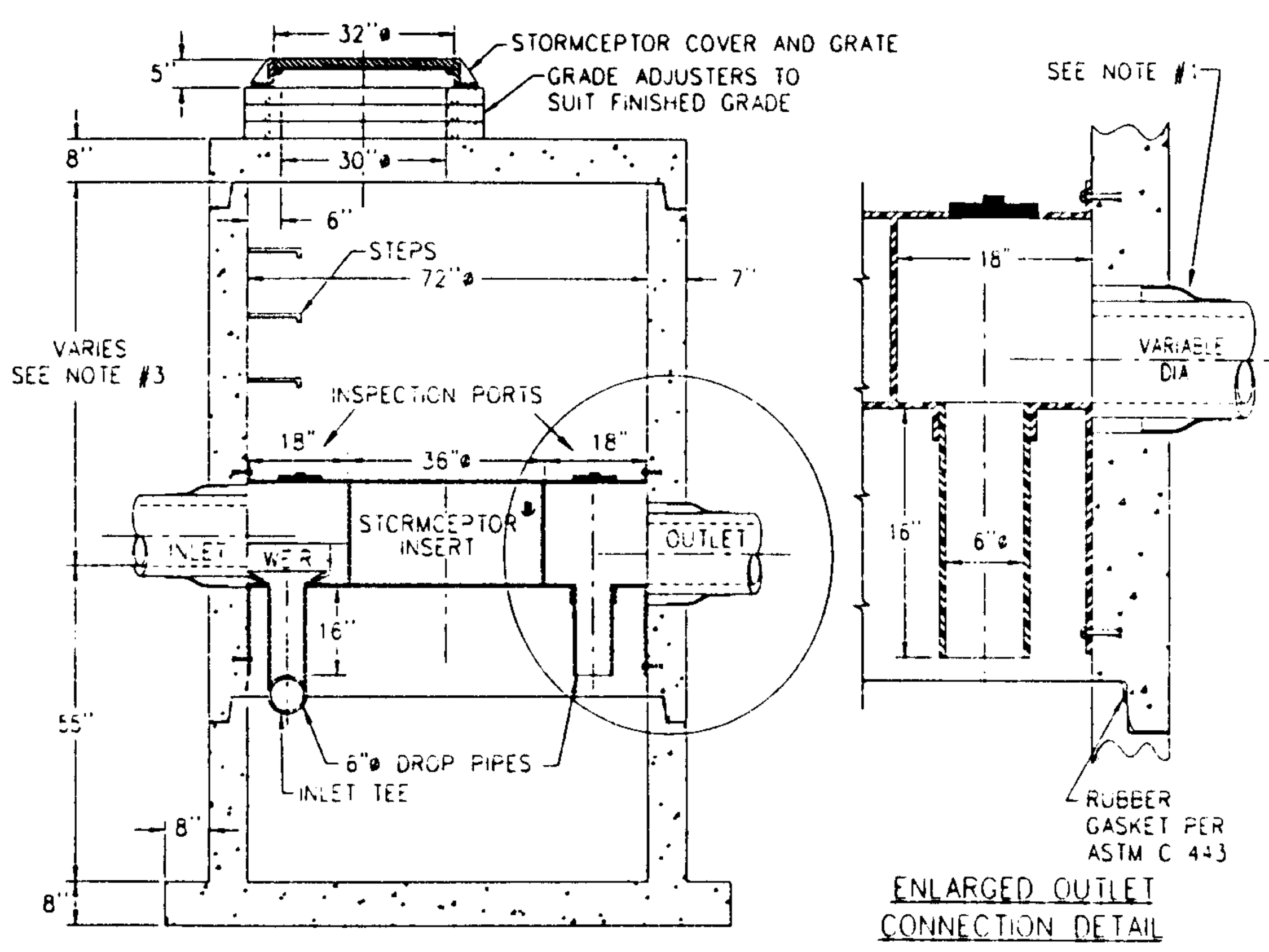
TITLE
S.W.M. & STORM DRAINS
PLAN – PROFILES – DETAILS

Des By: MM	Scale: As Shown	Proj. No. 96065	
Drn By: MSS	Date: 1-10-97	6 of 16	
Chk By: MK	Approved		

Sun Apr 6 13:22:54 1997 d:\96065\96065.sdl

SDP 97-80

STC 900 Precast Concrete Stormceptor®
(900 US Gallon Capacity)



ENLARGED OUTLET CONNECTION DETAIL

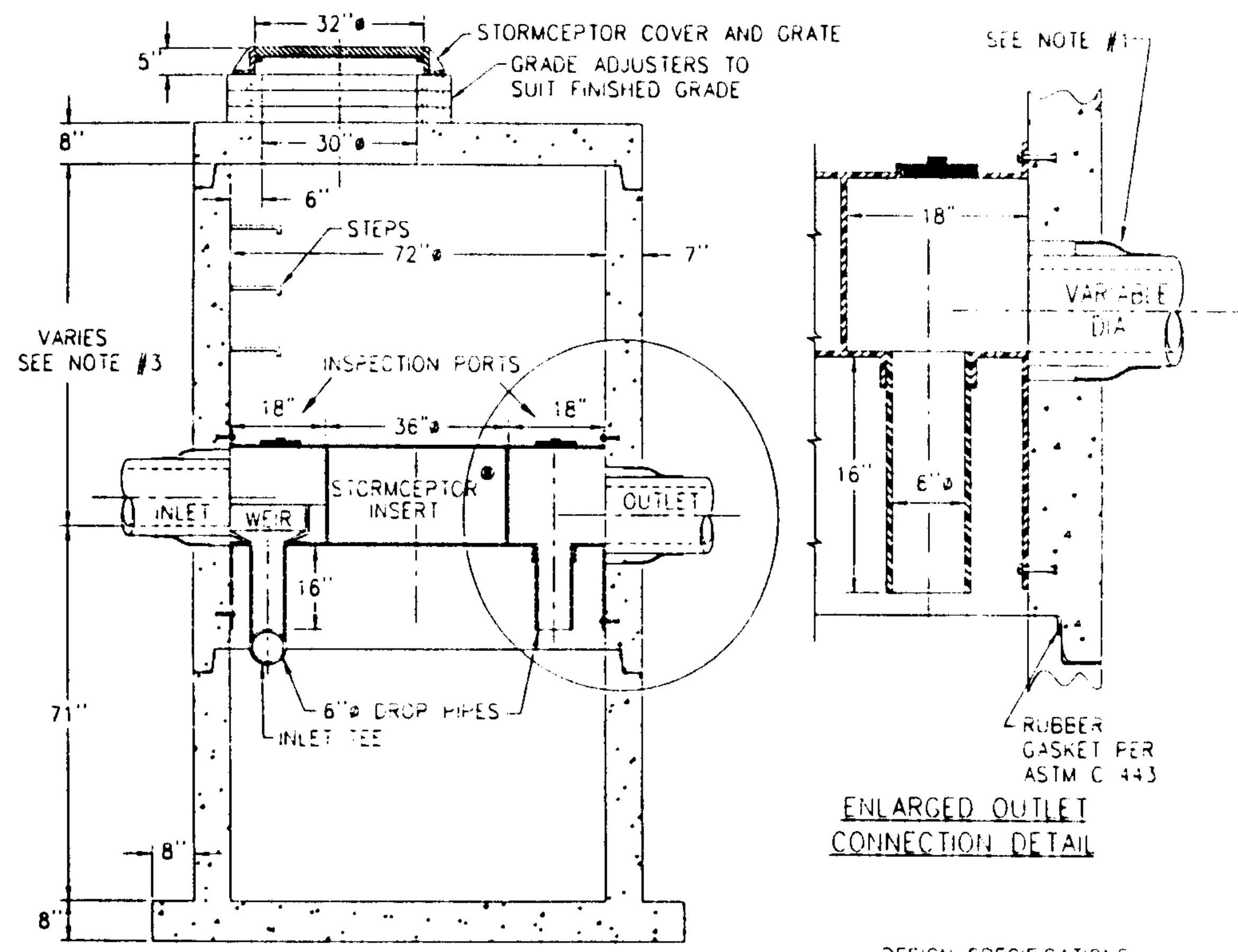
SECTION THRU CHAMBER

DESIGN SPECIFICATIONS
1. ASTM C 478
2. BASE WEIGHT = 6.46 TONS

NOTE:
1. CSR RECOMMENDS THE USE OF FLEXIBLE CONNECTIONS AT THE INLET AND OUTLET WHERE APPLICABLE.
2. COVER TO BE POSITIONED OVER INLET INSPECTION PORT.
3. THIS IS A GENERAL ARRANGEMENT DRAWING. CONSULT LOCAL REPRESENTATIVE FOR SPECIAL CONDITIONS.

STC-900
REVISED 5/96

STC 1200 Precast Concrete Stormceptor®
(1200 US Gallon Capacity)



ENLARGED OUTLET CONNECTION DETAIL

SECTION THRU CHAMBER

DESIGN SPECIFICATIONS
1. ASTM C 478
2. BASE WEIGHT = 7.60 TONS

NOTE:
1. CSR RECOMMENDS THE USE OF FLEXIBLE CONNECTIONS AT THE INLET AND OUTLET WHERE APPLICABLE.
2. COVER TO BE POSITIONED OVER INLET INSPECTION PORT.
3. THIS IS A GENERAL ARRANGEMENT DRAWING. CONSULT LOCAL REPRESENTATIVE FOR SPECIAL CONDITIONS.

STC-1200
REVISED 5/96

OPERATION AND MAINTENANCE SCHEDULE FOR STORMCEPTOR WATER QUALITY DEVICE

1. The Stormceptor water quality structure shall be periodically inspected and cleaned to maintain operation and function. The owner shall inspect the Stormceptor unit yearly at a minimum, utilizing the Stormceptor Inspection/Monitoring Form. Inspections shall be done by using a clear Plexiglass tube ("sludge judge") to extract a water column sample. When the sediment depths exceed the level specified in Table 6 of the Stormceptor Technical Manual, the unit must be cleaned.

2. The Stormceptor water quality structure shall be checked and cleaned immediately after petroleum spills. The owner shall contact the appropriate regulatory agencies.

3. The maintenance of the Stormceptor unit shall be done using a vacuum truck which will remove the water, sediment, debris, floating hydrocarbons and other materials in the unit. Proper cleaning and disposal of the removed materials and liquid must be followed by the owner.

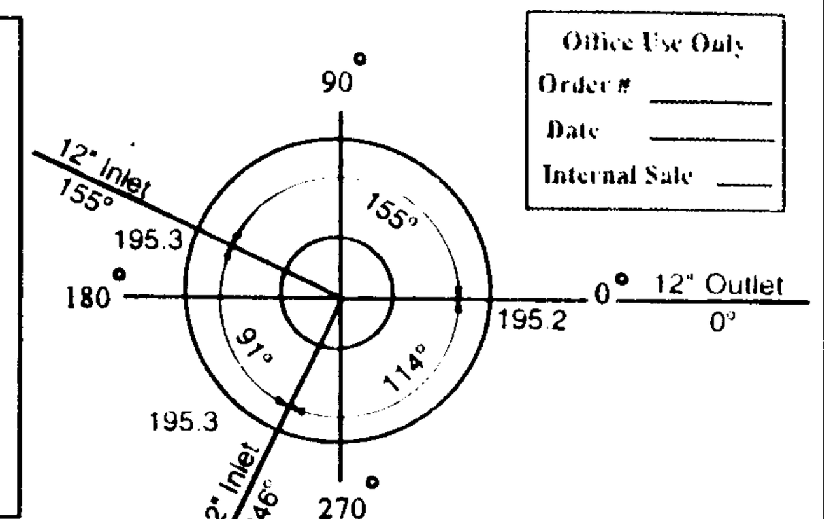
4. The inlet and outlet pipes shall be checked for any obstructions at least once every six months. If obstructions are found the owner shall have them removed. Structural parts of the Stormceptor unit shall be repaired as needed.

5. The owner shall retain and make the Stormceptor Inspection/Monitoring Forms available the Howard County officials upon their request.

Concrete Stormceptor® Order Request Form *

Contractor Information
Name: To be determined
Address:
City:
State:
Zip Code:
Contact:
Phone:
Fax:

Office Use Only
Order #
Date
Internal Sale



Please draw orientation of inlet and outlet pipes on diagram along with pipe inside diameter (in.) and invert elevation (ft). Clearly mark inlet pipes with an I and outlet pipes with an O and provide the inlet/outlet pipe angle in degrees

Owner Information
Name: School for Contemporary Education
Phone: c/o Crispin Etherington
Fax: (410) 266-7990
(410) 266-6554

Stormceptor® Model: 900 ■ 3600 ☐ 1200 ☐ 4800 ☐ 1800 ☐ 6000 ☐ 2400 ☐ 7200 ☐

Insert Size: 22" ■ 32" ☐ 44" ☐ Custom ___

Manhole Number	S-1
Top Elevation (ft)	197.5
Inlet Pipe Invert (ft)	195.3
Outlet Pipe Invert (ft)	195.2
Pipe Type:	HDPE HI-Q
Pipe Inside Diameter (in) [ID]	12"
Pipe Outside Diameter (in) [OD]	14.2"

Project Name: School for Contemporary Education
Approximate time frame until required delivery ~~(weeks)~~: Mid to end of June
Delivery Address: Street: 8920 Whiskey Bottom Road
City: Laurel State: Maryland Zip Code: 20723
Designer Company: Daft-McCune-Walker, Inc.
Designer Contact: Charles Wilson Jr. Phone: (410) 296-3333 Fax: (410) 296-4705

Please fax this order to Stormceptor at (301) 762-4190
For Technical Assistance Please Call Stormceptor Corporation at (301) 762-8361 or toll free at 1 (800) 762-4703

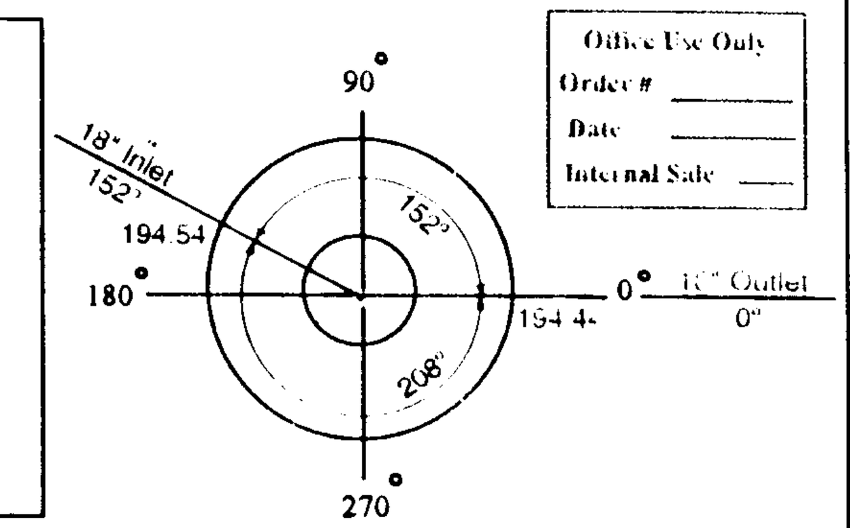
ALL LIFTING APPARATUS TO BE PROVIDED BY THE INSTALLATION CONTRACTOR

* TO BE INCLUDED ON SWM PLAN BY DESIGNER 7/1/96

Concrete Stormceptor® Order Request Form *

Contractor Information
Name: To be determined
Address:
City:
State:
Zip Code:
Contact:
Phone:
Fax:

Office Use Only
Order #
Date
Internal Sale



Please draw orientation of inlet and outlet pipes on diagram along with pipe inside diameter (in.) and invert elevation (ft). Clearly mark inlet pipes with an I and outlet pipes with an O and provide the inlet/outlet pipe angle in degrees

Owner Information
Name: School for Contemporary Education
Phone: c/o Crispin Etherington
Fax: (410) 266-7990
(410) 266-6554

Stormceptor® Model: 900 ☐ 3600 ☐ 1200 ■ 4800 ☐ 1800 ☐ 6000 ☐ 2400 ☐ 7200 ☐

Insert Size: 22" ■ 32" ☐ 44" ☐ Custom ___

Manhole Number	S-2
Top Elevation (ft)	197.3
Inlet Pipe Invert (ft)	194.54
Outlet Pipe Invert (ft)	194.44
Pipe Type:	HDPE HI-Q
Pipe Inside Diameter (in) [ID]	18"
Pipe Outside Diameter (in) [OD]	21.5"

Project Name: School for Contemporary Education
Approximate time frame until required delivery ~~(weeks)~~: Mid to end of June
Delivery Address: Street: 8920 Whiskey Bottom Road
City: Laurel State: Maryland Zip Code: 20723
Designer Company: Daft-McCune-Walker, Inc.
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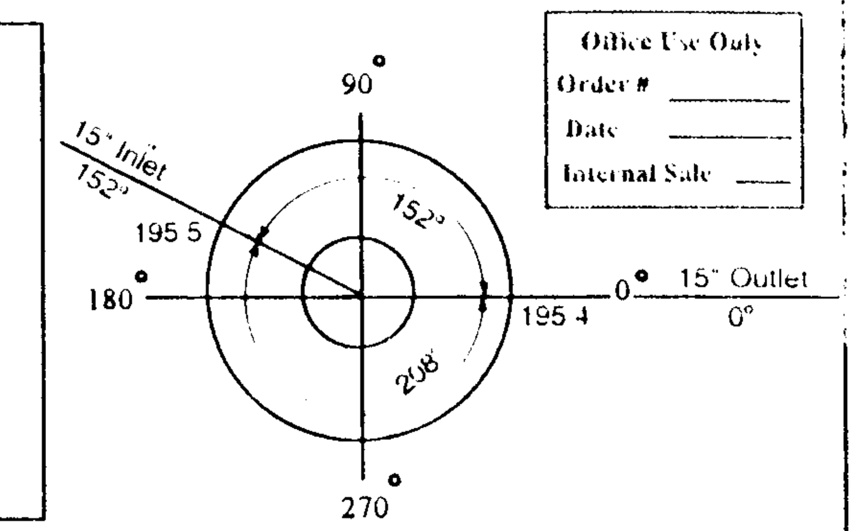
* TO BE INCLUDED ON SWM PLAN BY DESIGNER 7/1/96

Concrete Stormceptor® Order Request Form *

Contractor Information
Name: To be determined
Address:
City:
State:
Zip Code:
Contact:
Phone:
Fax:

Office Use Only
Order #
Date
Internal Sale



Please draw orientation of inlet and outlet pipes on diagram along with pipe inside diameter (in.) and invert elevation (ft). Clearly mark inlet pipes with an I and outlet pipes with an O and provide the inlet/outlet pipe angle in degrees

Owner Information
Name: School for Contemporary Education
Phone: c/o Crispin Etherington
Fax: (410) 266-7990
(410) 266-6554

Stormceptor® Model: 900 ■ 3600 ☐ 1200 ☐ 4800 ☐ 1800 ☐ 6000 ☐ 2400 ☐ 7200 ☐

Insert Size: 22" ■ 32" ☐ 44" ☐ Custom ___

Manhole Number	S-3
Top Elevation (ft)	202.6
Inlet Pipe Invert (ft)	195.5
Outlet Pipe Invert (ft)	195.4
Pipe Type:	HDPE HI-Q
Pipe Inside Diameter (in) [ID]	15"
Pipe Outside Diameter (in) [OD]	17.7"

Project Name: School for Contemporary Education
Approximate time frame until required delivery ~~(weeks)~~: Mid to end of June
Delivery Address: Street: 8920 Whiskey Bottom Road
City: Laurel State: Maryland Zip Code: 20723
Designer Company: Daft-McCune-Walker, Inc.
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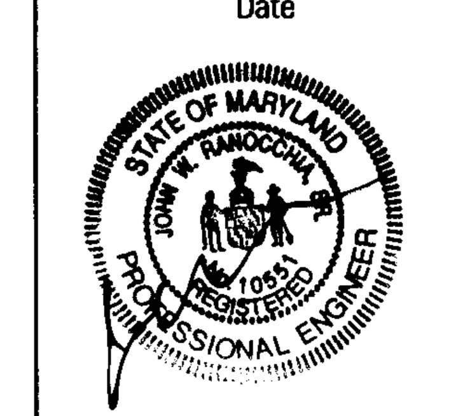
ALL LIFTING APPARATUS TO BE PROVIDED BY THE INSTALLATION CONTRACTOR

* TO BE INCLUDED ON SWM PLAN BY DESIGNER 7/1/96

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/10/97
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/12/97
DIRECTOR — DATE 6/13/97

Date	No.	Revision Description



4-10-97
Date

Professional Engineer Number: 10551

School for Contemporary Education Building Addition

Howard County, Maryland

OWNER /DEVELOPER
School For Contemporary Education
8920 Whiskey Bottom Road
Laurel, Maryland 20723

DMW
Daft-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4706

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME	SECTION / AREA	LOT / PARCEL #
SOUTHLAND CORPORATION PROPERTIES	N/A	Parcel 433, Par 'B'

PLAT # OR L/F	BLOCK #	ZONE	TAX MAP	ELECT. DISTRICT	CENSUS TRACT
10207	5	M-2	50	6TH	6069.03

WATER CODE | SEWER CODE

TITLE
STORMCEPTOR DETAILS

Des By	MM	Scale	As Shown	Proj. No. 96065
Drn By	TPC	Date	1-10-97	5 of 16
Chk By		Approved		

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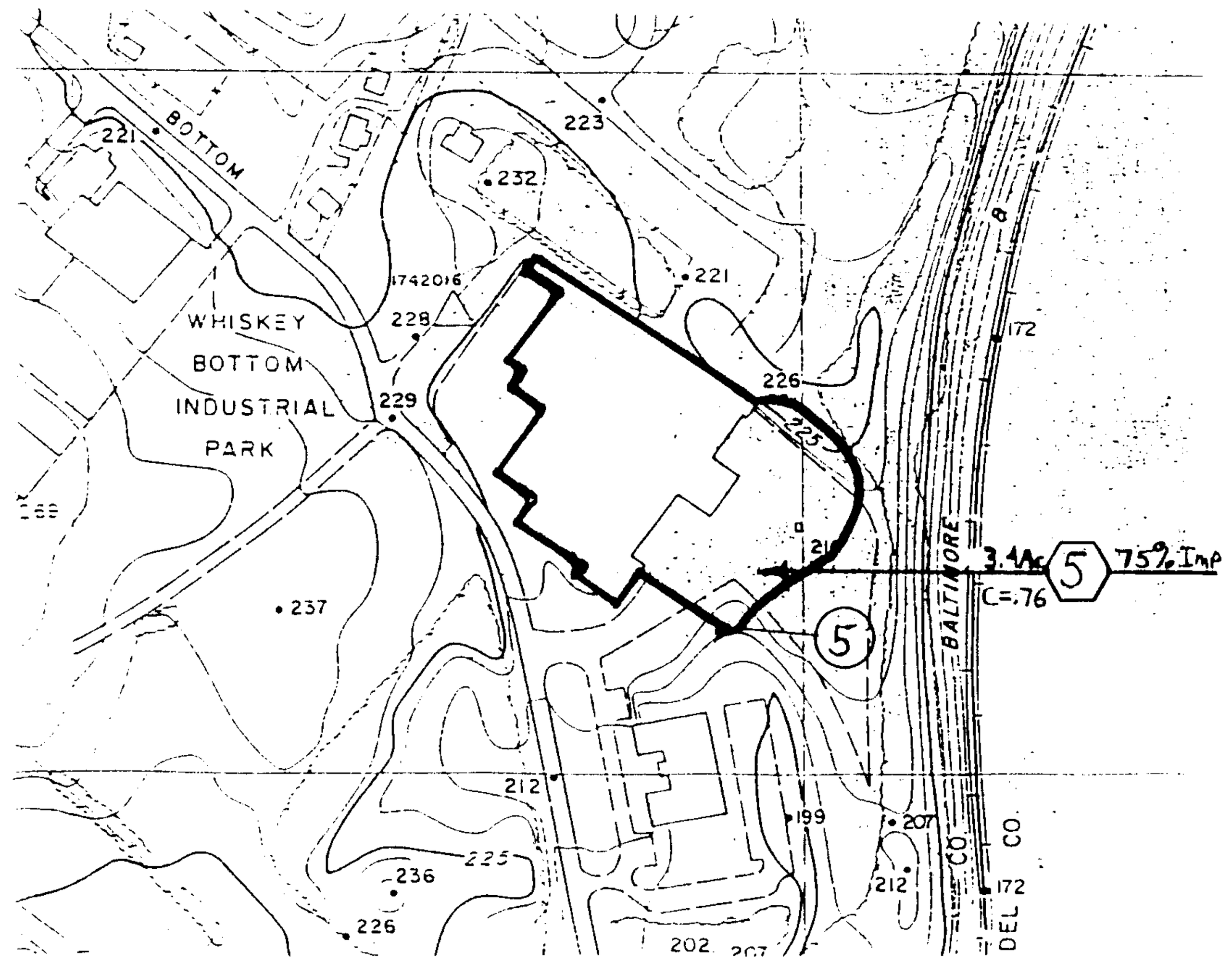
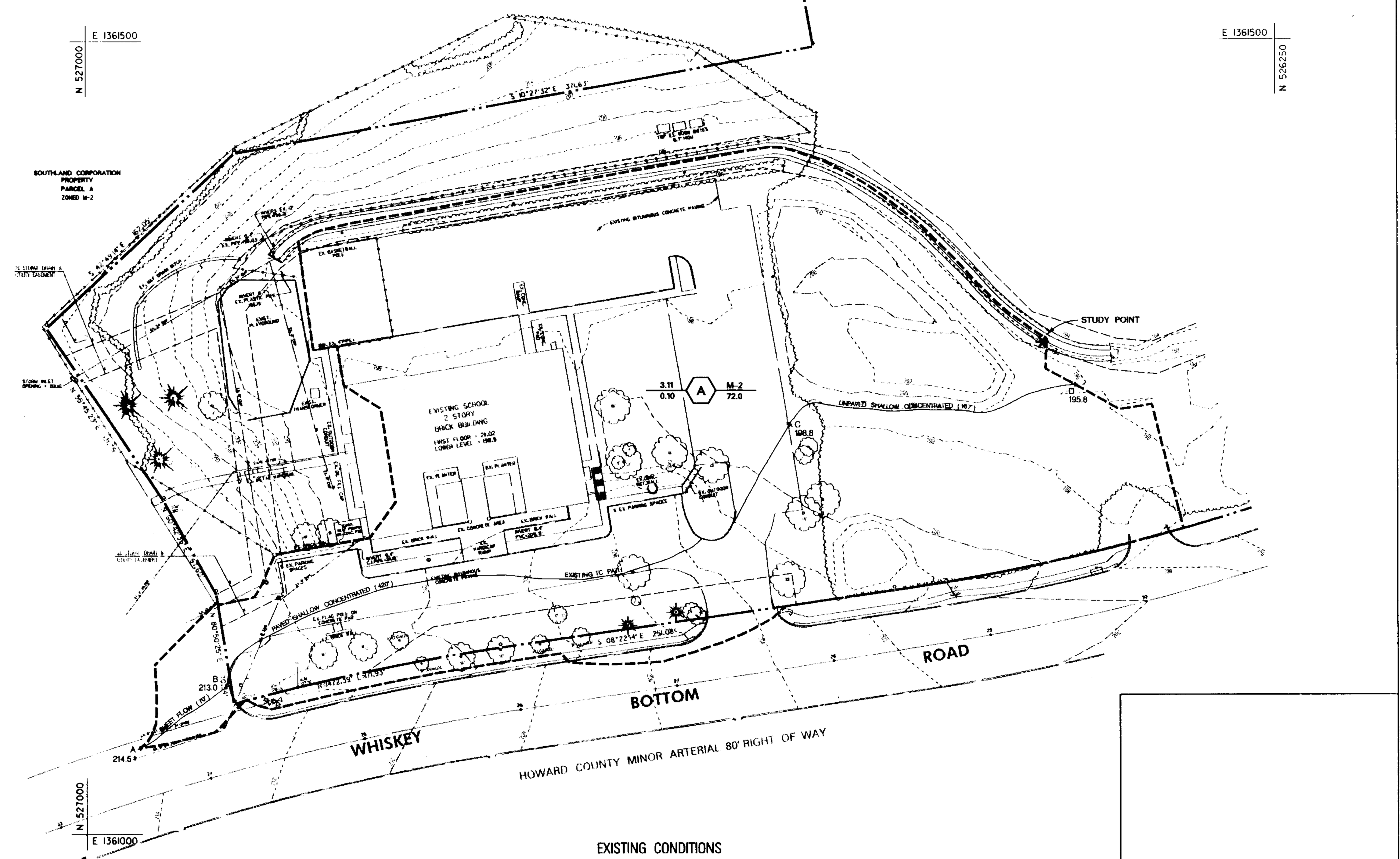
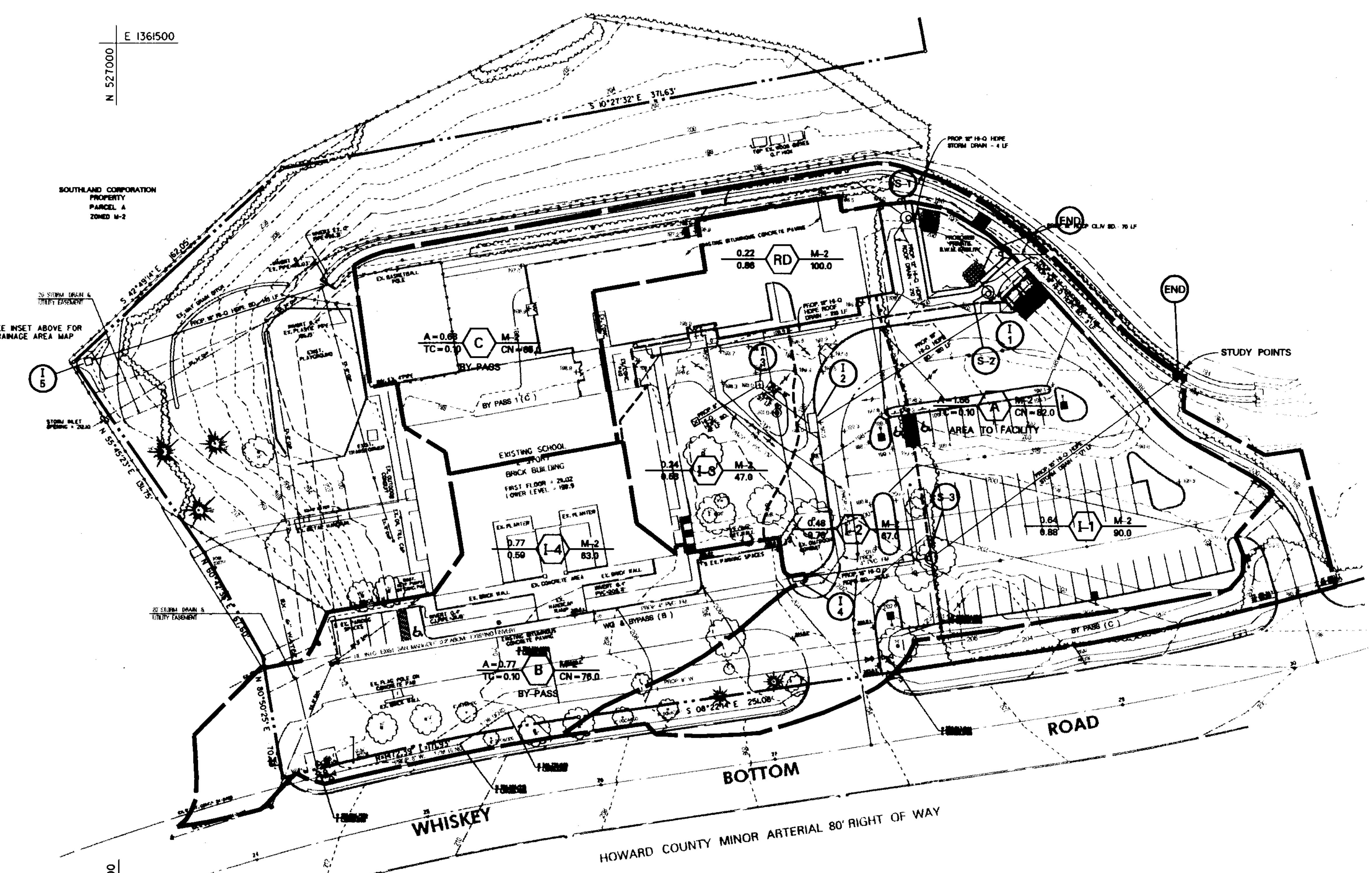
SDP-97-80



INSET STORM DRAIN
DRAINAGE AREA MAP
SCALE: 1" = 200'



EXISTING CONDITIONS
DRAINAGE AREA MAP
SCALE: 1" = 50'



STORM DRAIN & STORM WATER MANAGEMENT
DRAINAGE AREA MAP
SCALE: 1" = 50'

LEGEND

- STORM WATER DRAINAGE AREAS
- STORM DRAIN DRAINAGE AREAS
- A=1.66 / TC=0.10 (A) M-2 / CN=82.0 STORM WATER DRAINAGE AREA
- 0.48 / 0.70 (I-2) M-2 / 67.0 STORM DRAIN DRAINAGE AREA

NOTE: ALL SOILS WITHIN THE DRAINAGE AREAS ARE SOILS TYPE GD; HYDROLOGIC SOILS GROUP A.

NORTH

4/10/97
Date

STATE OF MARYLAND — JOHN W. RANOCCHIA — REGISTERED — PROFESSIONAL ENGINEER

Professional Engineer Number: 14351

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	6/10/97 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	6/12/97 DATE
DIRECTOR	6/13/97 DATE

Date	No.	Revision Description

School for Contemporary Education Building Addition
Howard County, Maryland

OWNER /DEVELOPER
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8920 Whiskey Bottom Road
Laurel, Maryland 20723

DMW
Daft-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705

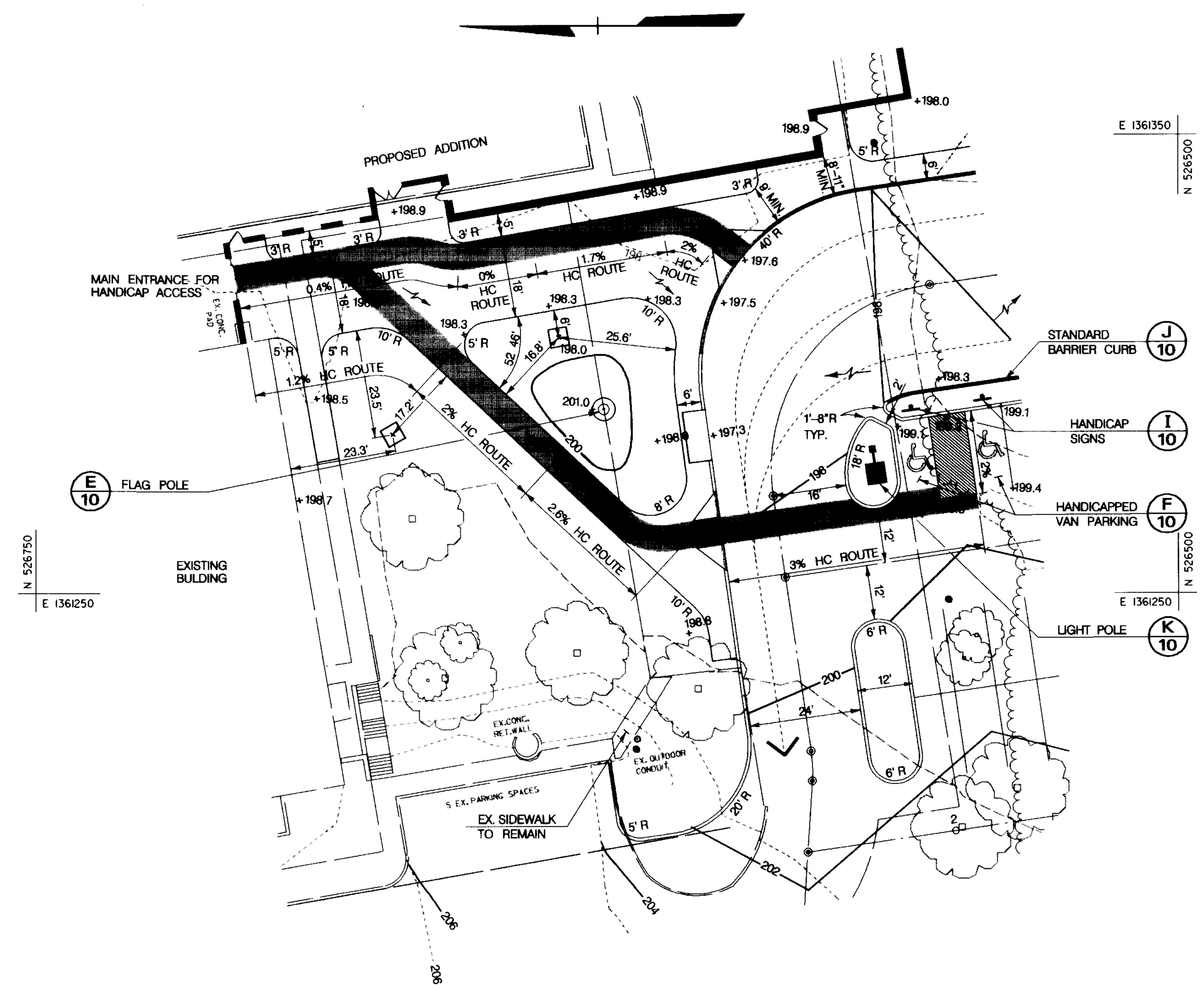
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME			SECTION /AREA		LOT/PARCEL #
SOUTHLAND CORPORATION PROPERTIES			N /A		Parcel 433, Par 'B'
PLAT# OR L/F	BLOCK #	ZONE	TAX MAP	ELECT DISTRICT	CENSUS TRACT
10207	5	M-2	50	6TH	6069.03
WATER CODE			SEWER CODE		

TITLE
DRAINAGE AREA MAPS

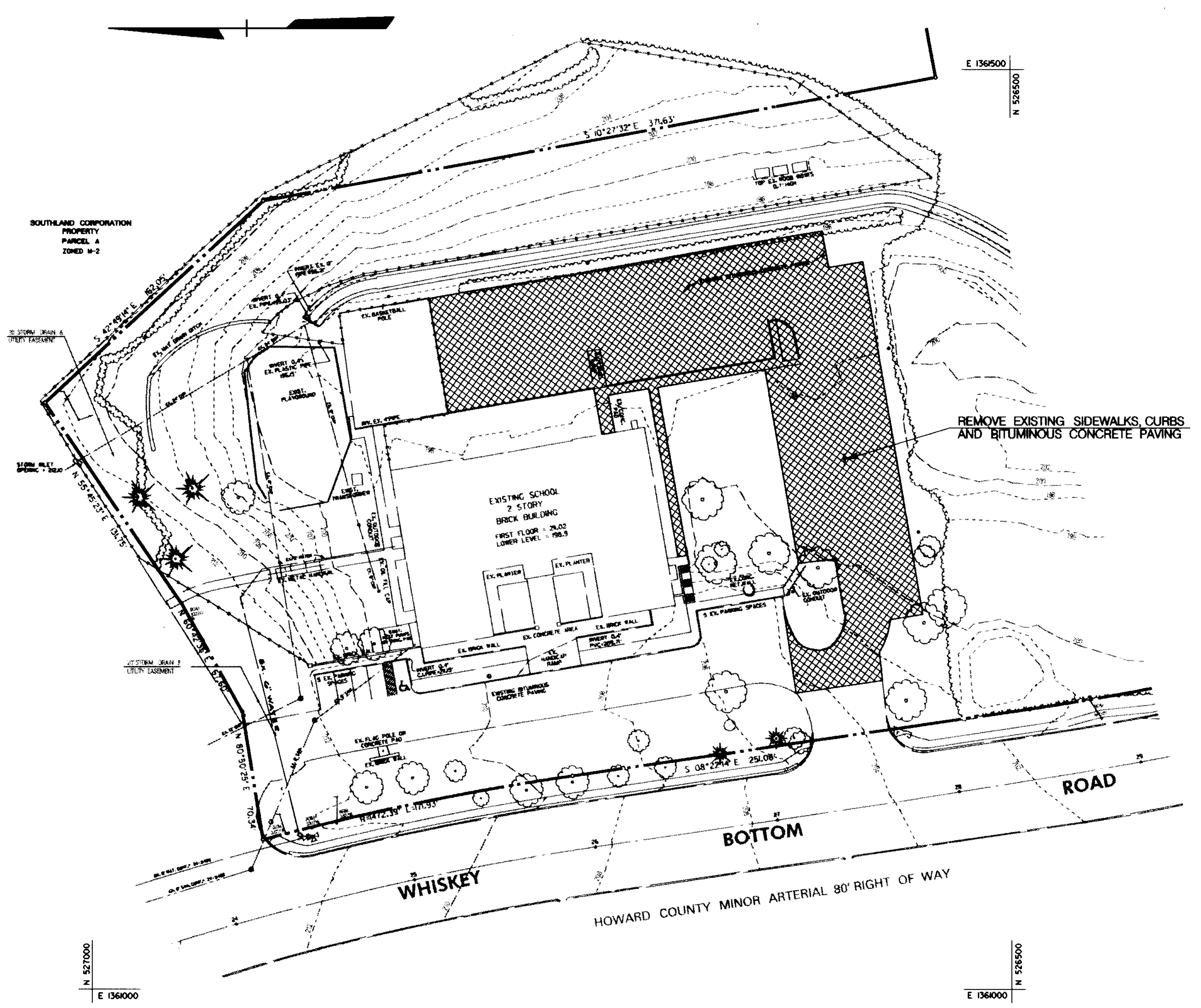
Des By	MM	Scale	As Shown	Proj. No. 96065
Drn By	MSS	Date	1-10-97	4 of 16
Chk By	MK	Approved		

SDP-97-80



COURTYARD DETAIL

SCALE: 1" = 20'



DEMOLITION PLAN

SCALE: 1" = 50'

NORTH

4-10-97
Date

STATE OF MARYLAND
JOHN W. RANOCCHIA
PROFESSIONAL ENGINEER

Professional Engineer Number: 14551

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 6/10/97
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 6/12/97
DIRECTOR	DATE 6/13/97

Date	No.	Revision Description

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A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME	SECTION / AREA	LOT / PARCEL #
SOUTHLAND CORPORATION PROPERTIES	N /A	Parcel 433, Par "B"

PLAT # OR L/F	BLOCK #	ZONE	TAX MAP	ELECT. DISTRICT	CENSUS TRACT
10207	5	M-2	50	6TH	6069.03

WATER CODE · SEWER CODE

TITLE:

DEMOLITION PLAN & COURTYARD DETAIL

Des By	MM	Scale	As Shown	Proj. No. 96065
Drn By	MSS	Date	1-10-97	3 of 16
Chk By	MK	Approved		

Mon Apr 7 08:32:23 1997 d:\96065\96065.dwn

SDP-97-80

STORMWATER MANAGEMENT POND

GENERAL CONSTRUCTION SPECIFICATIONS

1. GENERAL
All stormwater management facilities shall be constructed in accordance with Howard County's "Design Manual, Volume I - Storm Drainage (1995)" and the N.R.C.S. Maryland "Standard and Specifications for Ponds" (MD-378, 1992)

These specifications are appropriate to all ponds within the scope of the Standard practice MD-378. All references to ASTM and AASHTO specifications apply to the most recent version.

2. SITE PREPARATION
Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fences rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 50 foot radius around the inlet structure shall be cleared.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

3. EARTH FILL

MATERIAL. The fill material shall be taken from approved designated borrow area. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Fill material for the center of the embankment and cut off trench shall conform to Unified Soil Classification GC, SC, CH or CL Consideration may be given to the use of other materials in the embankment if design and construction are supervised by a geotechnical engineer.

PLACEMENT. Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8 inch thick (before compaction) layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment. The principal spillway must be installed concurrently with fill placement and not excavated into the embankment.

COMPACTION. The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble yet not be so wet that water can be squeezed out.

All compaction is to be not less than 95 percent of the maximum dry density as determined by AASHTO Specification T-99 (Standard Proctor) with a moisture content within ± 2 percent of optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction.

CUTOFF TRENCH. The cutoff trench shall be excavated into impervious material along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least 4 feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability.

4. STRUCTURAL BACKFILL
Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed 4 inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than 4 feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 24 inches or greater over the structure or pipe.

5. REMOVAL AND REPLACEMENT OF DEFECTIVE FILL
Fill placed at densities lower than specified minimum density or at moisture contents outside the specified acceptable range of moisture content or otherwise not conforming to the requirements of the specifications shall be reworked to meet the requirements or removed and replaced by acceptable fill. The bottoms of such excavations shall be finished flat or gently curving and at the sides of such excavations the adjacent sound fill shall be trimmed to a slope not steeper than 3 feet horizontally to 1 foot vertically extending from the bottom of the excavation to the fill surface.

6. PIPE CONDUITS
All pipes shall be circular in cross section. All perforated pipe shall have a minimum of 3.31 square inches of opening per square foot of pipe surface (e.. 30 3/8 inch holes per square foot). Perforations are to be uniformly spaced around the full periphery of the pipe. Any holes blocked or partially blocked by bituminous coating shall be opened prior to installation.

REINFORCED CONCRETE PIPE. All of the following criteria shall apply for reinforced concrete pipe:

1. Materials - Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM Designation C-76.
2. Cradle - All reinforced concrete pipe conduits shall be laid in a concrete cradle for their entire length. This cradle shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10 percent of its outside diameter with a minimum thickness of 3 inches, or as shown on the drawings.
3. Laying Pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the cradle shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be located within 2 feet from the riser.
4. Backfilling shall conform to "Structural Backfill".
5. Connections - All connections (to anti-seep collars, riser, etc.) shall be watertight.
6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Polyvinyl Chloride (PVC) Pipe - All of the following criteria shall apply for polyvinyl chloride (PVC) pipe:

1. Materials - PVC pipe shall be PVC-1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241.
2. Joints and connections to anti-seep collars shall be completely watertight.
3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
4. Backfilling shall conform to "Structural Backfill".
5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

7. CONCRETE
Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Sections 414 and 902, Mix No. 3.

Contractor shall add color mix at plant in accordance with manufacturers recommendation "C-12 Messa Beige" as manufactured by L. M. Scofield Company (213) 723-5285.

Supply mixture for approval prior to application. Contractor shall supply load and mix tickets for each truckload. No partial field mixes shall be allowed.

8. ROCK RIP-RAP
Rock rip-rap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 901.02.

The rip-rap shall be placed to the required thickness in one operation. The rock shall be delivered and placed in a manner that will insure the rip-rap in place shall be reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks filling the voids between the larger rocks. Filter cloth shall be placed under all rip-rap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 921.09.

9. CARE OF WATER DURING CONSTRUCTION
All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from the various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom of required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require draining the water to sumps from which the water shall be pumped.

10. STABILIZATION
All borrow areas shall be graded to provide proper drainage and left in a sightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Maryland Soil Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

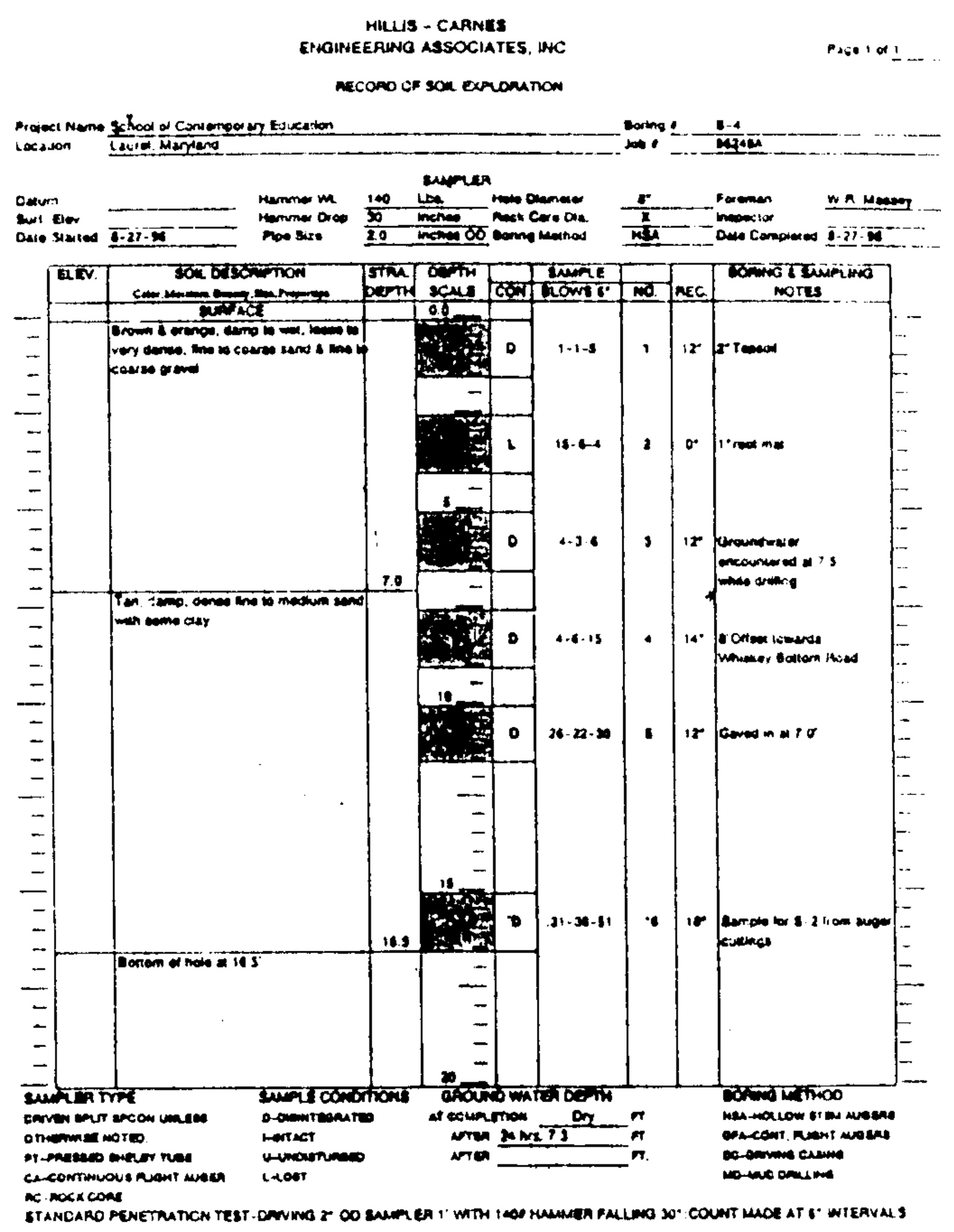
11. EROSION AND SEDIMENT CONTROL
Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.

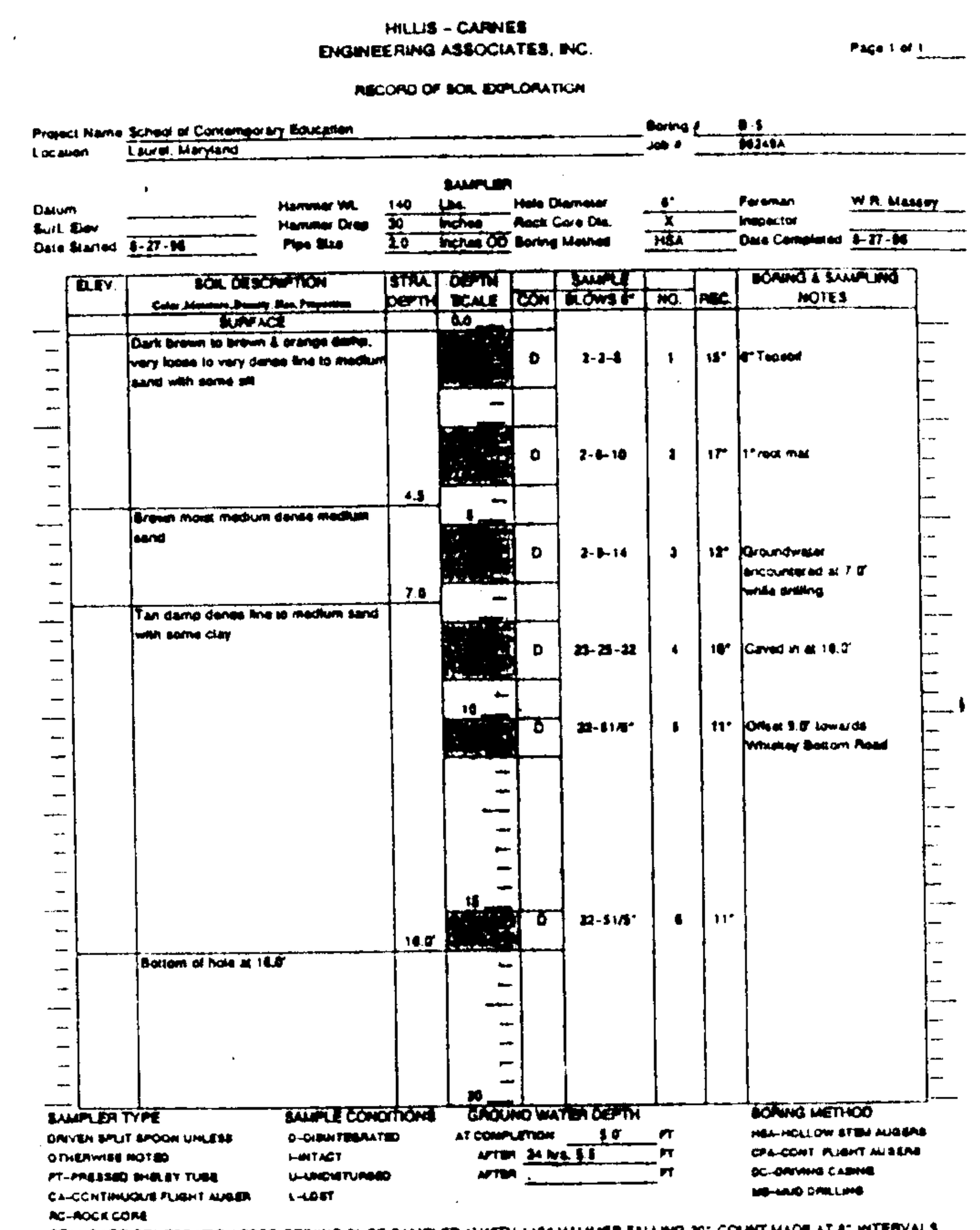
All disturbed areas shall be controlled by an Erosion and Sediment Control Plan which has been approved by the Howard Soil Conservation District (H.S.C.D.).

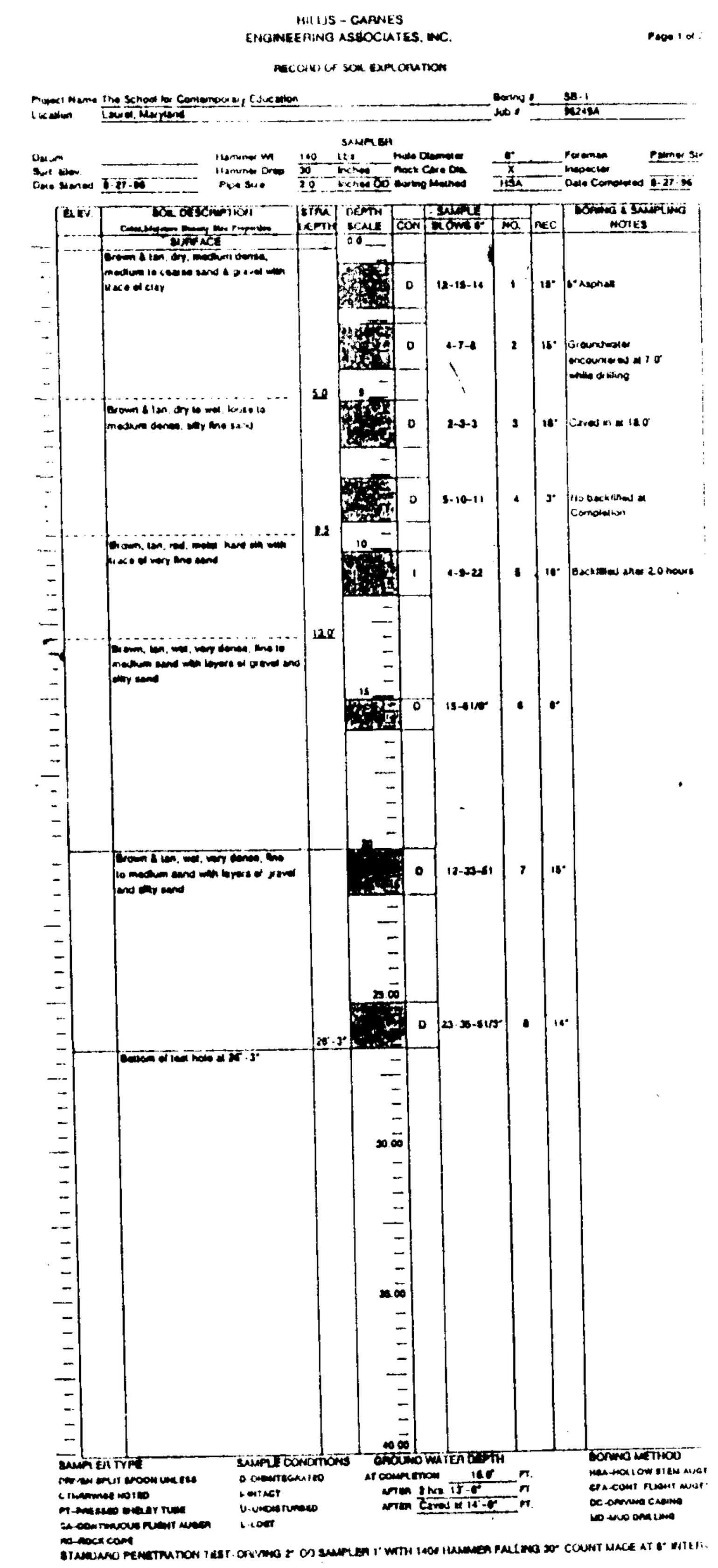
12. FILTER CLOTH
All filter cloth shall conform to Minfi 140N, Dupont Typar 3341 or 3401, Supac 5P or approved equal.

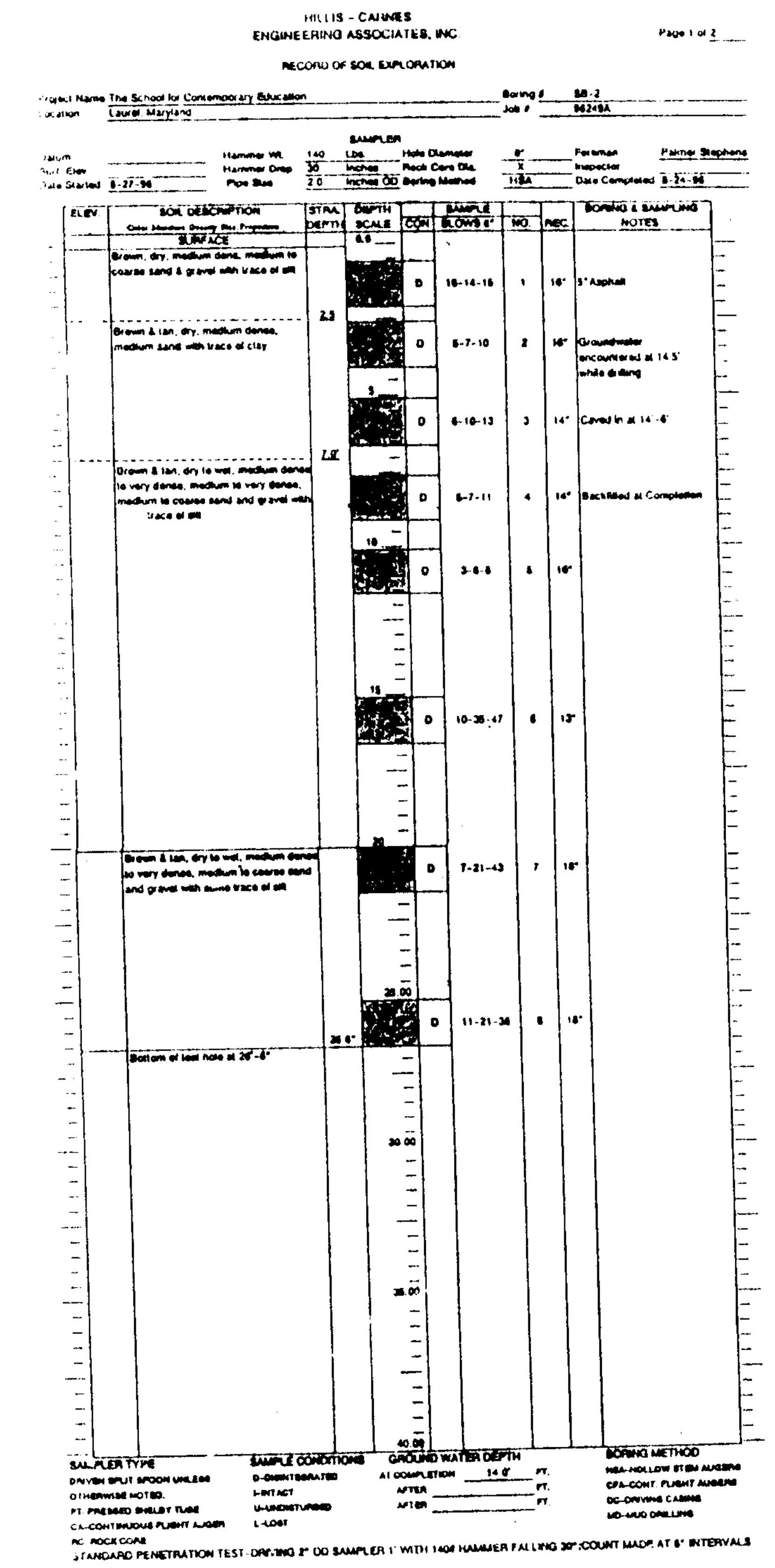
13. GABIONS
All gabions shall be P.V.C. coated wire baskets. Stone size shall be 4 inches to 7 inches.

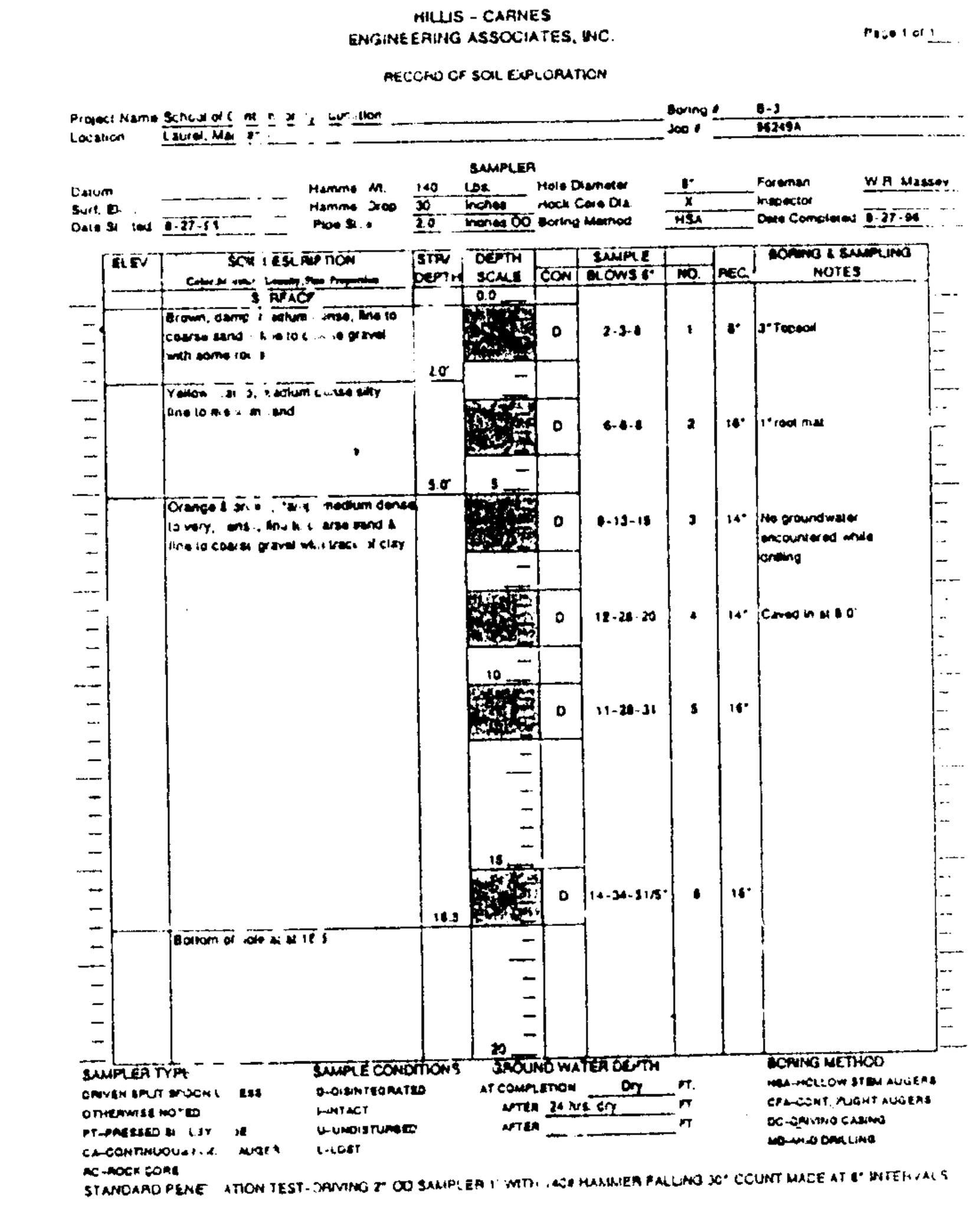
14. CONSTRUCTION INSPECTION BY DESIGNATED ENGINEERS
The construction of the pond and embankment, and certification that the pond and embankment have been built in accordance with the plans shall be under the supervision of a Registered Professional Engineer. The Engineer shall be notified sufficiently in advance of construction in order that arrangements can be made for (1) inspection of pipe trench and bedding, (2) inspection of riser and anti-seep collars and (3) supervision of embankment construction and compaction testing. The Engineer shall direct the handling of water during construction, minor changes not affecting the integrity of the dam in order to compensate for unusual soil conditions, and the removal and replacement of defective fill.

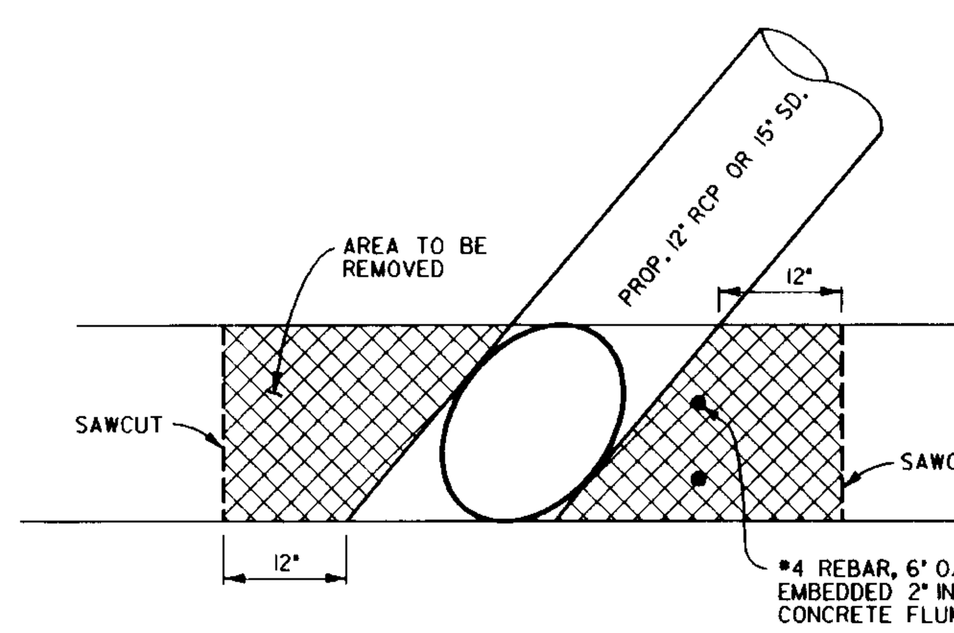






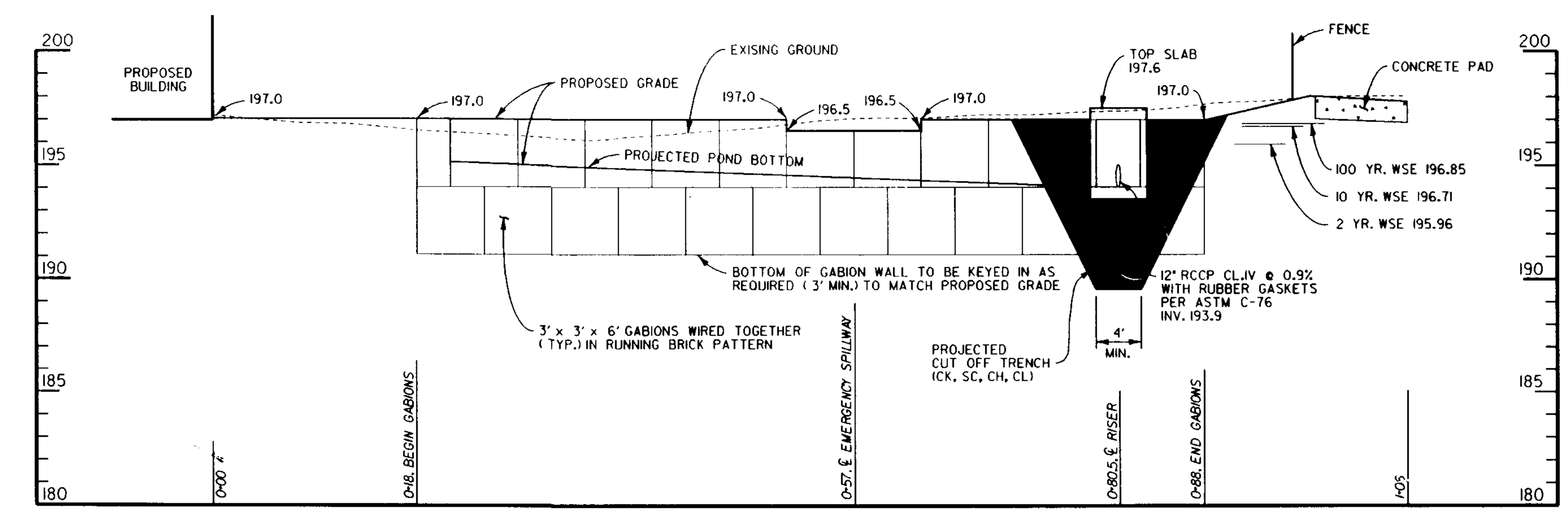






CONCRETE FLUME SAWCUT DETAIL

NO SCALE



FOR TYPICAL DETAILS OF GABION WALL, SEE SHEET 6 OF 18

PROFILE ALONG CENTERLINE OF DAM

SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/10/97

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/12/97

DIRECTOR — DATE 6/13/97

Date	No.	Revision Description

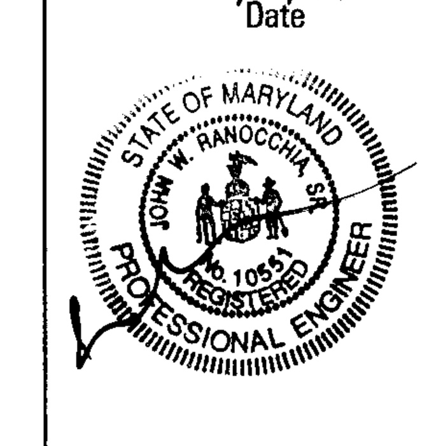
School for Contemporary Education Building Addition

Howard County, Maryland

OWNER /DEVELOPER

School For Contemporary Education
8920 Whiskey Bottom Road
Laurel, Maryland 20723

4/10/97
Date



Professional Engineer Number: 1055

DMW
Daft·McCune·Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME	SECTION /AREA	LOT /PARCEL #
SOUTHLAND CORPORATION PROPERTIES	N /A	Parcel 433, Par 'B'

PLAT# OR L/F	BLOCK#	ZONE	TAX MAP	ELECT. DISTRICT	CENSUS TRACT
10207	5	M-2	50	6TH	6069.03

WATER CODE	SEWER CODE

TITLE

S.W.M. DETAILS & SPECIFICATIONS

Des By	CRW	Scale	As Shown	Proj. No. 96065
Drn By	MSS	Date	1-10-97	16 of 16
Chk By	MK	Approved		

Sun Apr 6 15:44:38 1997 d:\96065\96065.sd2

SDP-97-80