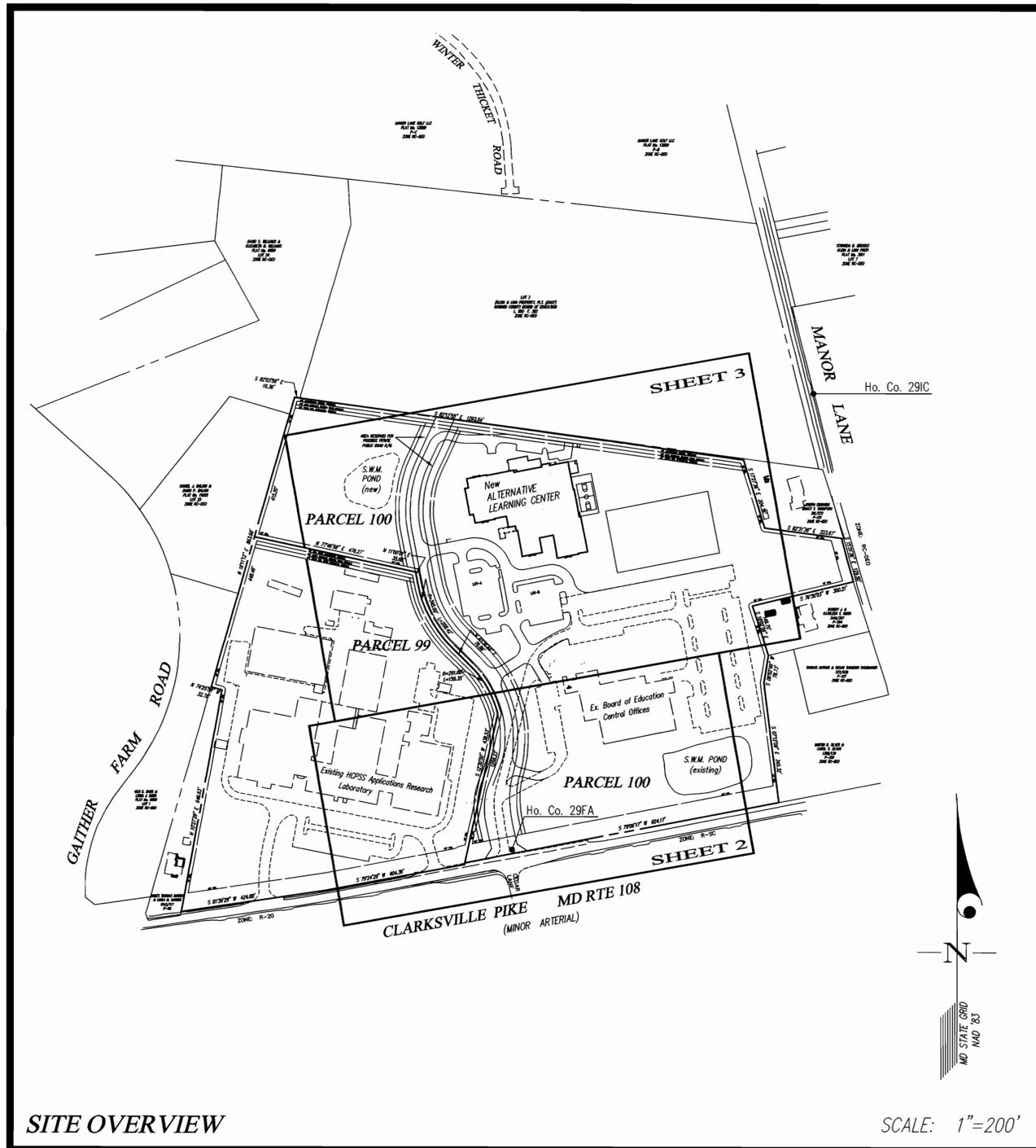
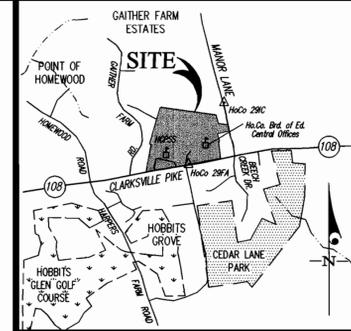


ALTERNATIVE LEARNING CENTER

THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

GENERAL NOTES

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
- The contractor shall notify the Bureau of Engineering/Construction Inspection Division at (410) 313-1800 at least five (5) working days prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48-hours prior to any excavation work.
- Project Background:
 - Location: Tax Map 29, across from Cedar Ln. & Rte. 108
 - Zoning: R-20 (Parcels 99 & 100)
 - Election District: 3rd Election District
 - Section/Area: N/A
 - Site Area: 44,664 AC (Gross)
- Approved Name and DPZ Ref. File Nos.:
 - HCPSS Administrative Building (SDP-79-30)
 - HCPSS Applications & Research Lab. (SDP-85-01 & SDP-87-137)
 - WP-01-53, approved on 1-16-00 to waive Sect. 16.156.L(2) and extend submission of revised plan to address SRC comments transmitted with DPZ letter of 10-5-00.
 - GP-01-142 and Adj. Order Deed recorded as L5473 F.119 that adjusted the common property line between Parcels 99 & 100.
 - WP-01-124, which allowed the submission of a Grading Plan (GP) for the stockpile of spoil material on adjacent Lot 3. Lot 3 is not part of this SDP submission.
- 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 shall be in place prior to the placement of any asphalt.
- All plan dimensions are to the face of curb or face of building unless otherwise noted. Dimensions are measured perpendicular or radially between items unless otherwise noted.
- Existing topography and features were derived from survey by Gutschick, Little & Weber, P.A. done in May & June of 2000 and from survey by Air Survey Corporation of Sterling, Va., dated April, 2000. SDP drawing reflects "GP" grading. Forest conservation plans show existing topography & tree line prior to "GP" grading.
- Coordinates are based on NAD '83 (91) Maryland Coordinate System as projected by as projected by Howard County Geodetic Control Station Numbers 29-1A, 29-FA, 29-1C and 29-CA. Vertical Datum is in NAVD '29.
- Public water and sewer is to be utilized. Contract Nos 2831-W&S and 44-3013-D, which are in the Little Patuxent Drainage Area.
- Stormwater Management is provided by an on-site private retention facility that is to be privately maintained.
- All on-site storm drains proposed under this SDP are private.
- The existing utilities shown herein were derived from available public records. The contractor must dig test pits, by hand, at all utility crossings and connections points to verify exact location.
- All proposed ramps shall be in accordance with current A.D.A. Standards. Maximum sidewalk cross slope shall be (2%) to percent. Provide a (5'x5') five foot by five foot level (2% max.) landing area at the top and bottom of all ramps and building entrances and exits.
- All driveways and parking to be owned and maintained by Howard County Public School System.
- Any damage to County & State owned right-of-way to be corrected at the contractor's expense.
- Trench bedding for storm drainage structures shall be in accordance with Howard County Standard G2.01. Class "C" Bedding, unless otherwise noted.
- Gutter pan of curbs shall be pitched to conform to the adjacent drainage patterns of the adjoining paving for vehicular use. See detail 7/A.
- All curb filets are 5' radius unless noted otherwise. Spot elevations along curb line are at the flow line, unless noted otherwise.
- For details of building profile, parking, paving sections, handicap ramps, and curb/gutter see sheet Nos. 4 & 5.
- There are no known grave sites or cemeteries on this site.
- Other topics related to this site:
 - Traffic Study prepared by The Traffic Group dated June 26, 2000.
 - Subsurface Exploration and Geotechnical Evaluation by Penman & Brown, Inc. dated June 30, 2000.
- There are no wetlands or Waters of the U.S. at the site as indicated in the report by M.A. Dirks & Co., Inc. dated June 8, 2000.
- The largest drainage area on the site is less than 24 acres; therefore, the site is not encumbered by a 100 year floodplain.
- All outside lighting shall comply with Zoning Regulation Section 134 which requires lights to be installed to direct/reflect light downwards and inwards on site away from all adjoining public streets and residential areas. See drawing sheet E-1 to be submitted with the Building Permit Submission package.
- The water meter is located inside the building. The building shall be equipped with an automatic Fire Prevention Sprinkler System.
- The Forest Conservation Easements on this plan have been established to fulfill the requirements of Section 16.1200 of the Howard County Code, Forest Conservation Act. No clearing, grading or construction is permitted within the Forest Conservation Easements; however, the initial grading to develop the Alternative Learning Center per this SDP and the forest management practices as defined in the Deed of Forest Conservation Easement are allowed. See Plot of Forest Conservation Easement for this site filed under this SDP number and recorded as Plat No. 14B22 on JUNE 01, 2001.
- Parcel 100 complies with the requirements of Section 16.1200 of the Howard County Code for Forest Conservation with an obligation of 5.58 acres of Forest Conservation which is met by recording a total of 6.30 acres of Forest Conservation Easement that comprises of:
 - 0.77 acres of on-site forest retention
 - 5.53 acres of forest planting
- The adjacent Parcel 99 is exempt from the requirements of Section 16.1200 of the Howard County Code for Forest Conservation because:
 - The proposed work shown on Parcel 99 per this SDP is within the limits of disturbance from previous development work affecting Parcel 99 under SDP-85-01 and SDP-79-30.
 - Parcel 99 is not subject to any previously approved forest conservation restriction/easement and the grading and development activity proposed on Parcel 99 under this SDP does not clear any forest.
- There may be an old abandoned septic field in the vicinity of the S.W.M. facility for the ALC. Any septic pipes or related items that are discovered when the site is graded must be inspected by the Howard County Health Department prior to removal and disposal off-site. Any tanks or items containing liquid sewage must be pumped by a Scavenger and inspected by the Health Department prior to removal and disposal off-site.
- Where new curb & gutter abuts existing paving, hold new gutter pan 2" higher than existing paving to accommodate the resurfacing of the existing paving.
- No landscape surety and no forest conservation surety is required for this plan because it is a Howard County Public School System project.
- There is an gap in the title between Parcel 100 and the adjacent Lot #3 to the north. The southern most property line of the two lines is the northern property line of Parcel 100.



SHEET INDEX

No.	TITLE
1	COVER SHEET
2	SITE DEVELOPMENT PLAN
3	SITE DEVELOPMENT PLAN
4	SITE DETAILS
5	SITE DETAILS
6	SEDIMENT CONTROL PLAN (ENTRANCE)
7	SEDIMENT CONTROL PLAN
8	SEDIMENT CONTROL NOTES AND DETAILS
9	ROAD GEOMETRY AND BITUMINOUS PAVING DELINEATION PLAN
10	STORM DRAIN PROFILES AND DETAILS
11	UTILITY PROFILES AND DETAILS
12	STORMWATER MANAGEMENT DETAILS
13	DRAINAGE AREA MAP
14	STORMWATER MANAGEMENT SPECIFICATIONS & BORING LOGS
15	LANDSCAPE EDGE ANALYSIS AND FOREST CONSERVATION OVERVIEW
16	LANDSCAPE & FOREST CONSERVATION PLANTING PLAN
17	LANDSCAPE & FOREST CONSERVATION PLANTING PLAN
18	FOREST STAND DELINEATION & EXISTING CONDITION
19	PLANTING NOTES, SCHEDULES & DETAILS
20	FOREST CONSERVATION NOTES, SCHEDULES & DETAILS

SITE ANALYSIS DATA CHART

- General Site Data
 - Present Zoning: R-20 (Parcels 99 & 100)
 - Proposed Use of Site or Structures: Institutional (Public School System)
 - Public Water and Sewer System to be utilized.
- Area Tabulation
 - Total Project Area: 15.93 ± acres (gross for Parcel 99)
28.68 ± acres (gross for Parcel 100)
44.61 ± acres (total gross project/site area)
 - Area of this plan submission: 14.2 ± ac. is the limit of submission and grading disturbance for the construction of the Alternative Learning Center (ALC) and associated road improvements. The adjacent Parcel 99 is included with this submission in order to tie in the grading and common features between the two parcels plus contiguous forest conservation areas on Parcel 99 to fulfill the forest conservation obligation for the development of the ALC on Parcel 100 (see general note Nos. 26 & 27 on this sheet regarding forest conservation).
 - Limit of Disturbed Area by this SDP: 14.2 ± acres
 - Building Coverage of Site:

HCPSS Administration Building	= 1.0 ± acres
HCPSS Applications Research Lab	= 4.3 ± acres
Alternative Learning Center	= 1.4 ± acres
Total	= 6.7 acres or 15.0 % of Gross Site Area
 - Alternative Learning Center building area: 61,421 s.f.
 - Total paved surfaces (parking, driveways, play courts, etc.) on site (Drainage to the ALC S.W.M. pond): 2.8 ± Ac. or 9.7%.
- Open Space Data
 - Open Space Required on Site: N/A
 - Open Space Proposed: N/A
- Parking Space Data
 - Number of Parking Spaces Required by Zoning Regulations: N/A
 - Parking Spaces Provided for the ALC: 120 spaces
 - Number of Accessible Parking Spaces Provided: 5 (including 1 Van Space)

SITE OVERVIEW

SCALE: 1"=200'

32. The As built required for the existing pond between the Board of Education Central Offices building and Md Route 108 shall be provided concurrent with the As built required for the new pond on this plan.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *[Signature]* Date: 6/7/01

Chief, Division of Land Development: *[Signature]* Date: 6/7/01

Chief, Development Engineering Division: *[Signature]* Date: 5/28/01



WATER CODE:		SEWER CODE:		ADDRESS CHART	
J06	5583000	BUILDING	STREET ADDRESS		
		Alternative Learning Ctr.	10014 CLARKSVILLE PIKE		
PROJECT NAME: ALTERNATIVE LEARNING CENTER		SECTION/AREA	PARCEL		
		N/A	P99 and P100		
DEED L465/F377 L750/F528	ZONE R-20	TAX MAP 29	BLOCK	ELEC. DIST. J	CENSUS TRACT 8020

GLW GUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS

3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK

BURTONSVILLE, MARYLAND 20886

TEL: 301-421-4024 FAX: 301-421-4186

CADD\DRAWINGS\00066\DESIGN\00066CS.dwg

DES.	DRN.	CHK.	DATE	REVISION	BY	APP'R.

ARCHITECT: THOMAS CLARK ASSOC.'S ARCHITECTS
2861 RIVA ROAD, SUITE 120
ANNAPOLIS, MD 21401
TEL: 301-261-6700

OWNER: HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 ROUTE 108
ELLIOTT CITY, MD 21043
ATTN: CATHEEN YOUNG
TEL: 410-313-6704

COVER SHEET

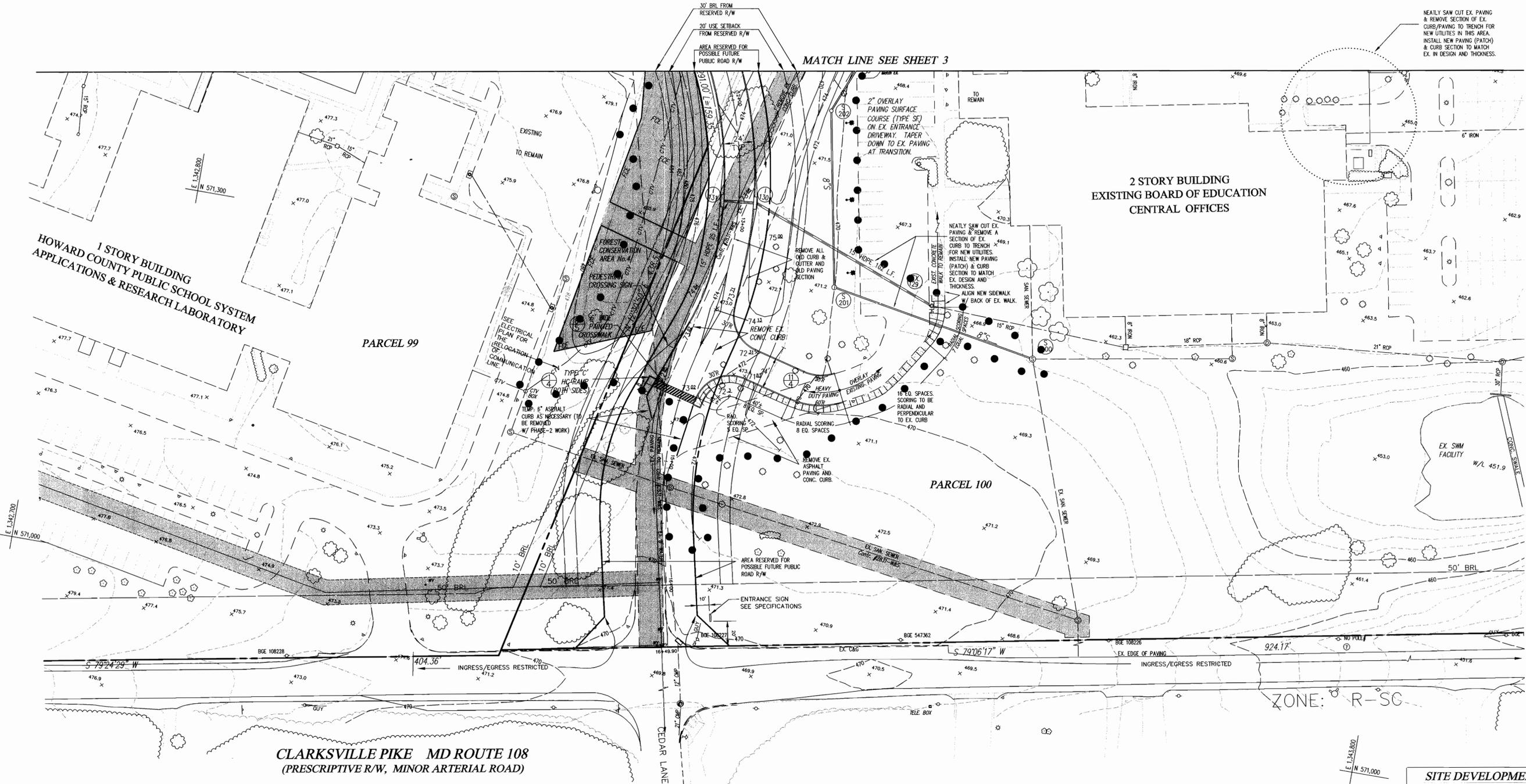
ALTERNATIVE LEARNING CENTER
HOWARD COUNTY PUBLIC SCHOOL SYSTEM

L. 465 @ F. 577 (PARCEL 99), L. 750 @ F. 528 (PARCEL 100)

WEST FRIENDSHIP ELECTION DISTRICT No. 3

HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	R-20	00066
DATE	TAX MAP - GRID	SHEET
18/MAY/01	29 - 11	1 OF 20



NEATLY SAW CUT EX. PAVING & REMOVE SECTION OF EX. CURB PAVING TO TRENCH FOR NEW UTILITIES IN THIS AREA. INSTALL NEW PAVING (PATCH) & CURB SECTION TO MATCH EX. IN DESIGN AND THICKNESS.

MATCH LINE SEE SHEET 3

2 STORY BUILDING EXISTING BOARD OF EDUCATION CENTRAL OFFICES

1 STORY BUILDING HOWARD COUNTY PUBLIC SCHOOL SYSTEM APPLICATIONS & RESEARCH LABORATORY

PARCEL 99

PARCEL 100

CLARKSVILLE PIKE MD ROUTE 108 (PRESCRIPTIVE R/W, MINOR ARTERIAL ROAD)

ZONE: R-SC

NO IMPROVEMENTS ARE SHOWN AT THIS TIME FOR ROUTE 108 OR THE MODIFIED ENTRANCE INTO THE COMPLEX. ONCE THE CONFIGURATION HAS BEEN FINALIZED, BETWEEN HCPSS AND MSHA, THOSE IMPROVEMENTS WILL BE SHOWN ON A REVISED SHEET 2 OF 20 AND PROCESSED AS A SUBSTITUTE SHEET, ALONG WITH ANY DETAILS NECESSARY ON OTHER SHEETS. ONCE APPROVED BY HC & MSHA, THOSE IMPROVEMENTS WILL REQUIRE A SHA ENTRANCE PERMIT. AND WILL HAVE TO BE CONSTRUCTED, PRIOR TO THE ISSUANCE OF A "USE & OCCUPANCY" PERMIT FOR THE ALTERNATIVE LEARNING CENTER.

SITE DEVELOPMENT PLAN LEGEND

- EXISTING CONTOUR..... ---322---
- PROPOSED CONTOUR..... ---320---
- EXISTING CURB LINE.....
- PROPOSED CURB LINE & FLOW LINE ELEV.....
- EXISTING WATER LINE.....
- PROPOSED WATER LINE (PUBLIC).....
- PROPOSED WATER LINE (PRIVATE).....
- PROPOSED FIRE HYDRANT.....
- EXISTING SEWER LINE.....
- PROPOSED SEWER LINE.....
- EXISTING STORM DRAIN LINE.....
- PROPOSED STORM DRAIN LINE.....
- PROPOSED WALKWAY.....
- PROPOSED TREELINE.....
- EXISTING TREE & TREE LINE.....
- EXISTING STREET LIGHT.....
- NEW STREET LIGHT (6-6' DBE LT. (6'-0" W)).....
- PROPOSED PARKING LOT LIGHTS (TYP.).....
- EX-UTILITY POLE.....
- NUMBER OF PARKING SPACES.....
- FENCE LINE (EXISTING).....
- FENCE LINE (PROPOSED).....
- LIMIT OF GRADING DISTURBANCE (L.O.D.).....
- PROPOSED FOREST CONSERVATION ESMT.....
- TEL-COMMUNICATION LINE.....

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

[Signature] 6/7/01
 Director Date

[Signature] 6/7/01
 Chief, Division of Land Development Date

[Signature] 5/21/01
 Chief, Development Engineering Division Date



GLW GUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT. 410-880-1820 DC/VA. 301-989-2524 FAX: 301-421-4186

DES. DRN. CHK. DATE REVISION BY APPR.

PREPARED FOR: ARCHITECT THOMAS CLARK ASSOC.'S ARCHITECTS
2661 RIVA ROAD, SUITE 120 ANNAPOLIS, MD 21401
TEL: 301-261-8700

OWNER HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 ROUTE 108 ELLICOTT CITY, MD 21043
ATTN: CATHLEEN YOUNG
TEL: 410-313-6704

SITE DEVELOPMENT PLAN
 ALTERNATIVE LEARNING CENTER
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 L. 465 @ F. 577 (PARCEL 99), L. 750 @ F. 528 (PARCEL 100)

SCALE	ZONING	G. L. W. FILE No.
1"=40'	R-20	00066
DATE	TAX MAP - GRID	SHEET
18/MAY/01	29 - 11	2 of 20

BID & CONSTRUCTION 01 FEBRUARY, 2001

WEST FRIENDSHIP ELECTION DISTRICT No. 3

HOWARD COUNTY, MARYLAND

SITE DEVELOPMENT PLAN LEGEND

- EXISTING CONTOUR.....-322---
- PROPOSED CONTOUR.....-320---
- EXISTING CURB LINE.....-120---
- PROPOSED CURB LINE & FLOW LINE ELEV.....
- EXISTING WATER LINE.....14---
- PROPOSED WATER LINE (PUBLIC).....14---
- PROPOSED WATER LINE (PRIVATE).....14---
- PROPOSED FIRE HYDRANT.....FH---
- EXISTING SEWER LINE.....0---
- PROPOSED SEWER LINE.....0---
- EXISTING STORM DRAIN LINE.....SD---
- PROPOSED STORM DRAIN LINE.....SD---
- PROPOSED WALKWAY.....WALK---
- PROPOSED TREENE.....TREENE---
- EXISTING TREE & TREE LINE.....TREE---
- EXISTING STREET LIGHT.....STREET---
- NEW STREET LIGHT (40' OR LESS TO R/W).....STREET---
- PROPOSED PARKING LOT LIGHTS (TRIP).....PARK---
- EX-UTILITY POLE.....UTILITY---
- NUMBER OF PARKING SPACES.....PARK---
- FENCE LINE (EXISTING).....FENCE---
- FENCE LINE (PROPOSED).....FENCE---
- LIMIT OF GRADING DISTURBANCE (L.O.D.).....L.O.D.---
- PROPOSED FOREST CONSERVATION ESM.....FC---
- TELE-COMMUNICATION LINE.....CTV---

ENGINEER'S CERTIFICATE
 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.
 C. K. Young
 Engineer's Signature
 5/18/01
 Date



NOTES
 1. SEE SHEET #9 FOR BITUMINOUS PAVING DELINEATION AND ROAD GEOMETRY FOR THE MAIN ROAD WITHIN THE AREA RESERVED FOR THE POSSIBLE FUTURE R/W.
 2. THE EXISTING CONTOUR AND TREENE SHOWN ON THIS PLAN REFLECTS THE WORK DONE ON 06-01-142. SEE SHEET 10 (FSD) & EXISTING CONDITION AND SHEETS 15-17 (FOREST CONSERVATION INFORMATION) FOR EXISTING TOPOGRAPHY AND TREENES PRIOR TO ANY "AS-BUILT" WORK FOR THE ALTERNATIVE LEARNING CENTER.

ALTERNATIVE LEARNING CENTER
 F.F.E. = 478.50

NOTES
 1. BUILDING INGRESS/EGRESS POINTS ARE DENOTED BY THE SYMBOL ▽. THE FINISHED GRADE AT THESE LOCATIONS IS 478.50. THE (S) FEET FROM THESE POINTS, THE OUTSIDE FINISHED GRADE IS 478.40.
 2. SEE ARCHITECTURAL DRAWINGS FOR SCREENING WALLS, FLAGPOLE, ART PATIO, PAVED PLAY AREA, SIDEWALK DIMENSION & SCORING NOT SHOWN ON THIS SITE DEVELOPMENT PLAN.

STORMWATER MANAGEMENT POND SUMMARY

ITEM	EX-Q (cfs)	Q ₁₀ (cfs)	Q ₁₀₀ (cfs)	WSEL	STOR. REQ. (AC-FT)	STOR. PROV. (AC-FT)
QUALITY					462.50	0.31
2-YEAR	2.1	16.0	1.9	464.06	0.50	0.42
10-YEAR	9.6	32.6	7.8	465.08	0.77	0.86
100 YR	N/A	51.7	31.4	466.35	N/A	1.47

NOTE: THE PROPOSED POND IS A 2/10 YEAR MANAGEMENT RETENTION POND WITH A 4' DEEP PERMANENT POOL FOR QUALITY CONTROL. IT IS A CLASS 5 FACILITY THAT IS SUBJECT TO MD-378. IT SHALL BE PRIVATELY MAINTAINED BY THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM AND THE DRAINAGE AREA IS 7.95 AC.

DEVELOPER'S/BUILDER'S CERTIFICATE
 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 Maryland 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.
 Cathleen Conley Young
 Signature of Developer/Builder
 5/18/01
 Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.
 Jim Rye/CS
 Natural Resources Conservation Service
 5/29/01
 Date

These Plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.
 [Signature]
 5/29/01
 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 [Signature]
 6/7/01
 Date

Chief, Division of Land Development
 [Signature]
 6/7/01
 Date

Chief, Development Engineering Division
 [Signature]
 5/31/01
 Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

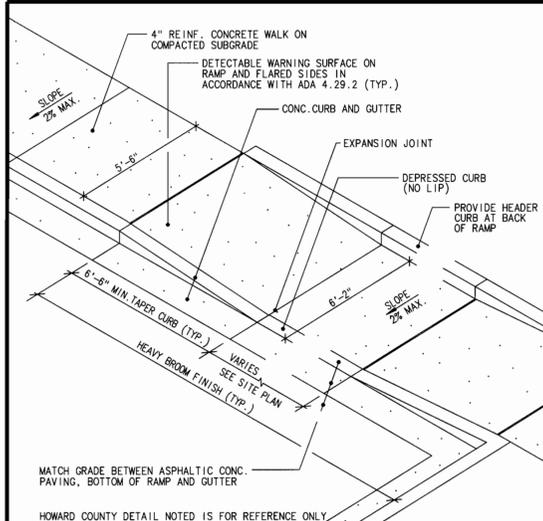
DATE	REVISION	BY	APPR.

ARCHITECT
 THOMAS CLARK ASSOC.'S ARCHITECTS
 2661 RIVA ROAD, SUITE 120
 ANNAPOLIS, MD 21401
 TEL: 301-261-8700

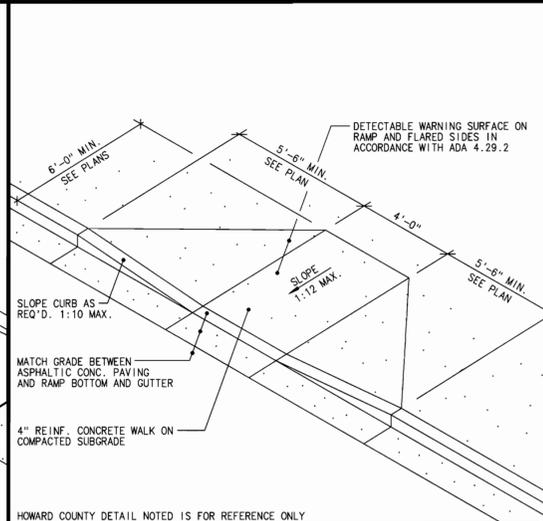
OWNER
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 ROUTE 108
 ELLICOTT CITY, MD 21043
 ATTN: CATHEEN YOUNG
 TEL: 410-313-6704

SITE DEVELOPMENT PLAN
ALTERNATIVE LEARNING CENTER
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 L. 465 @ F. 577 (PARCEL 99), L. 750 @ F. 528 (PARCEL 100)
 WEST FRIENDSHIP ELECTION DISTRICT No. 3
 HOWARD COUNTY, MARYLAND

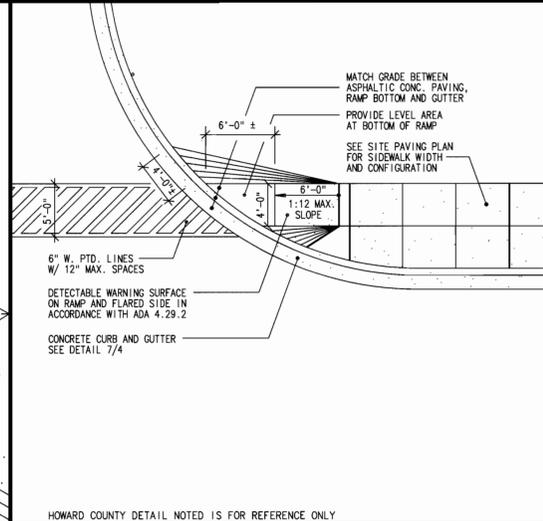
SCALE	ZONING	G. L. W. FILE No.
1"=40'	R-20	00066
DATE	TAX MAP - GRID	SHEET
18/MAY/01	29 - 11	3 of 20



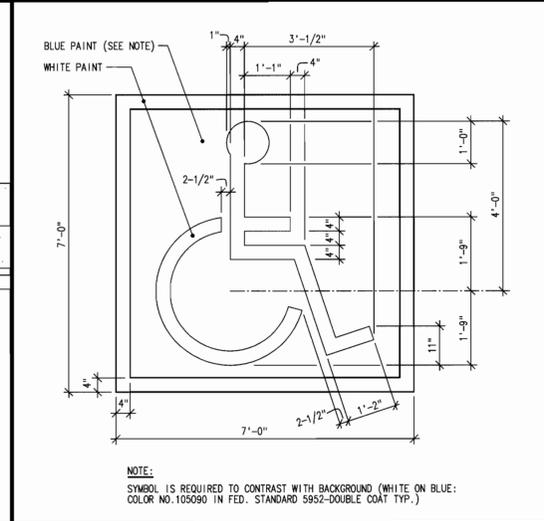
1
4 TYPE C CURB RAMP DETAIL HO. CO. DETAIL R4.03 NO SCALE



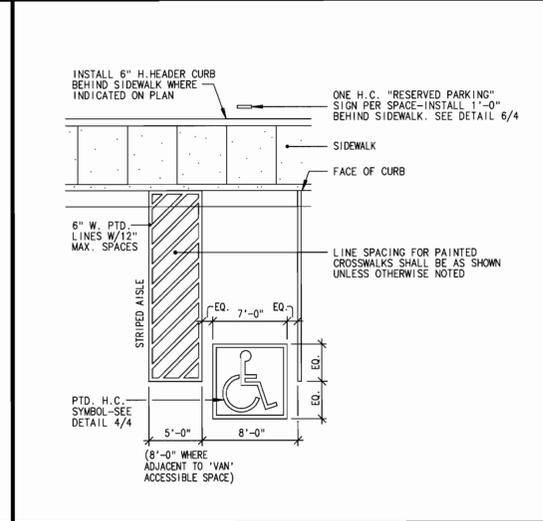
2
4 TYPE A CURB RAMP DETAIL FOR USE WHERE RAMP IS PERPENDICULAR TO CURB HO. CO. DETAIL R4.01 NO SCALE



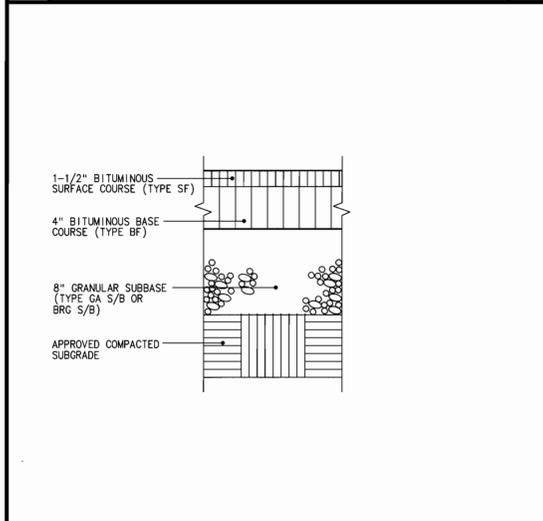
3
4 TYPE A CURB RAMP DETAIL FOR USE AT RADIUS CURB HO. CO. DETAIL R4.01 1 1/8



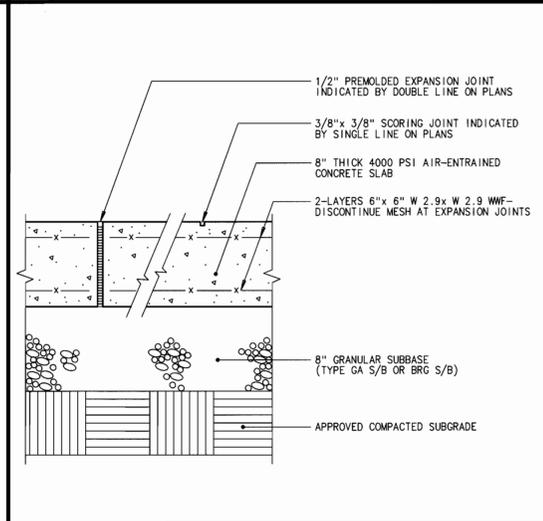
4
2 ACCESSIBLE SPACE STENCIL LAYOUT 1 1/2



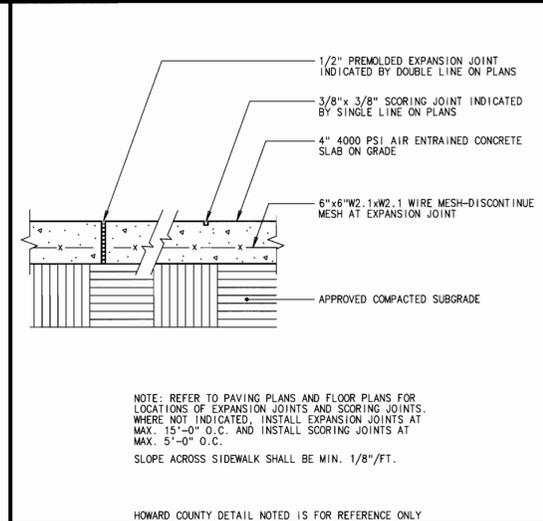
5
4 ACCESSIBLE SPACE LAYOUT 1 1/8



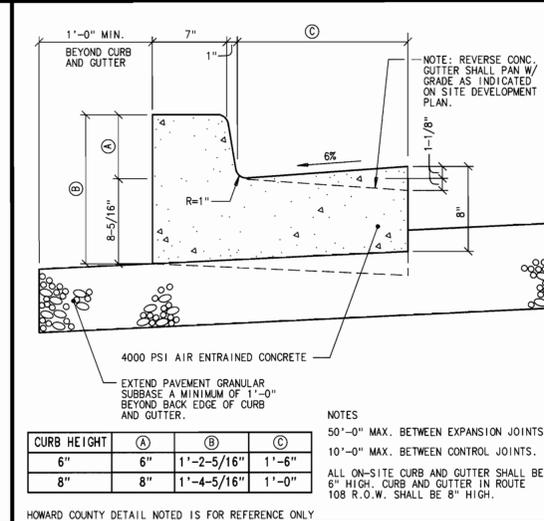
10
4 LIGHT DUTY PAVEMENT DETAIL 1 1/2



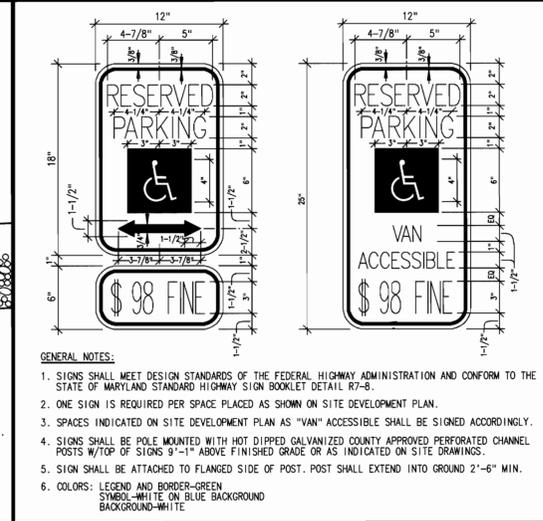
9
4 SERVICE AREA CONCRETE PAVING 1 1/2



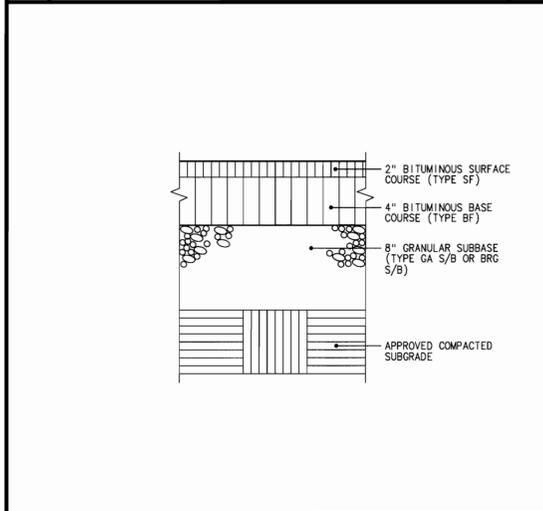
8
4 CONCRETE WALK DETAIL HO. CO. DETAIL R3.05 1 1/2



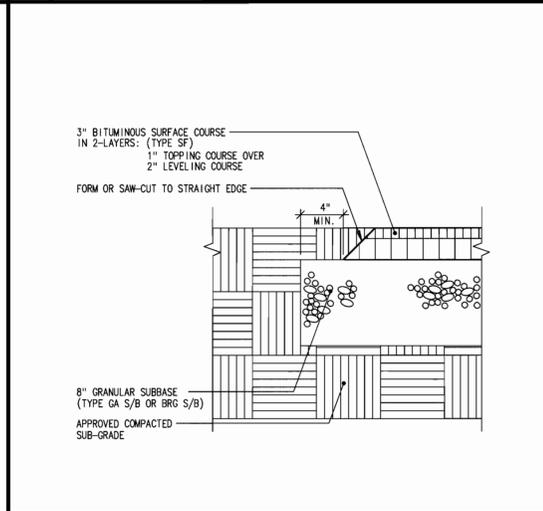
7
4 CONCRETE CURB AND GUTTER HO. CO. DETAIL R3.01/R3.07 1 1/2



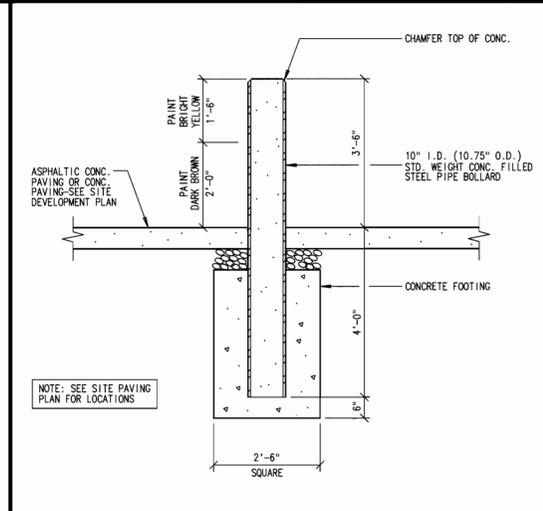
6
4 HANDICAP PARKING SIGNS DETAIL NO SCALE



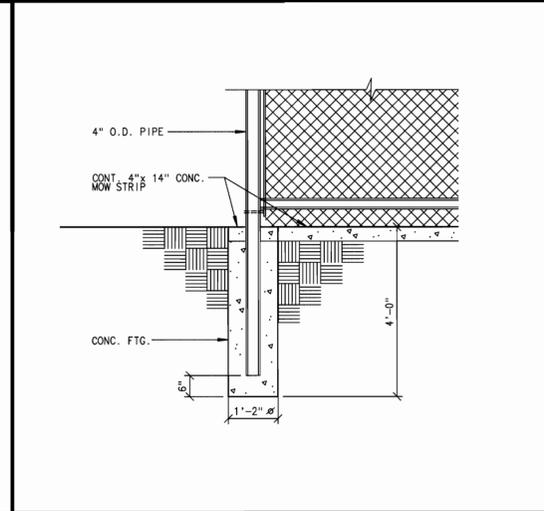
11
4 HEAVY DUTY PAVEMENT DETAIL 1 1/2



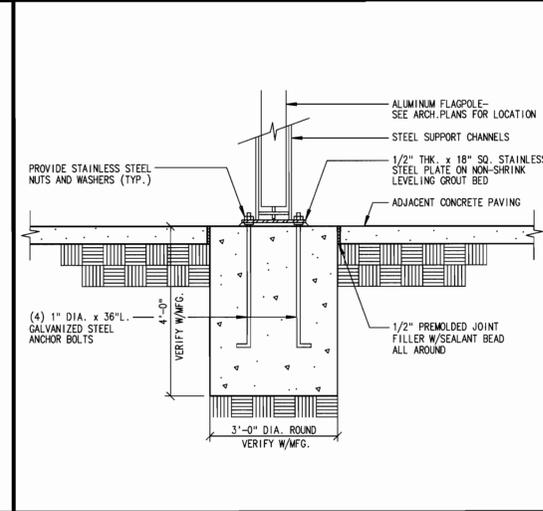
12
4 PAVED PLAY AREA PAVEMENT DETAIL 1 1/2



13
4 PIPE BOLLARD DETAIL 1 1/2



14
4 BACKSTOP FOOTING DETAIL 1 1/2

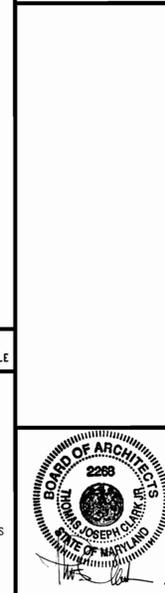


15
4 TILT FLAGPOLE DETAIL 1 1/2

APPROVED: DEPARTMENT OF PLANNING AND ZONING

<p style="text-align: center;">TCA ARCHITECTS 2661 RIVA ROAD SUITE 120 ANNAPOLIS, MARYLAND 21401 410-841-6205</p> <p style="text-align: center;">OWNER HOWARD COUNTY PUBLIC SCHOOL SYSTEM 10910 ROUTE 108 ELLICOTT CITY, MARYLAND 21043</p>	<p style="text-align: center;"><i>David Smith</i> DIRECTOR DATE: 6/7/01</p> <p style="text-align: center;"><i>Cindy Hamilton</i> CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 6/7/01</p> <p style="text-align: center;"><i>Michael...</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 5/31/01</p>	<p style="text-align: center;">SITE DETAILS</p> <p style="text-align: center;">ALTERNATIVE LEARNING CENTER</p> <p style="text-align: center;">TAX MAP NO. 29 LIBER 465 FOLIO 577, LIBER 750 FOLIO 528 & LIBER 850 FOLIO 382 3RD ELECTION DISTRICT: HOWARD COUNTY, MARYLAND SCALE: AS SHOWN</p>
---	--	--

ALTERNATIVE LEARNING CENTER
Howard County, Maryland
Howard County Public School System

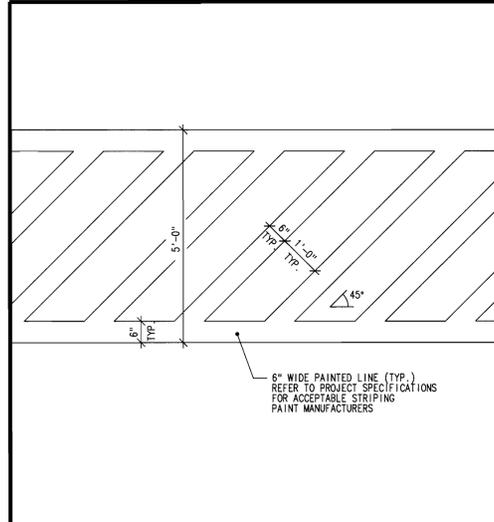


tca
Thomas Clark Associates Architects
Annapolis, Maryland

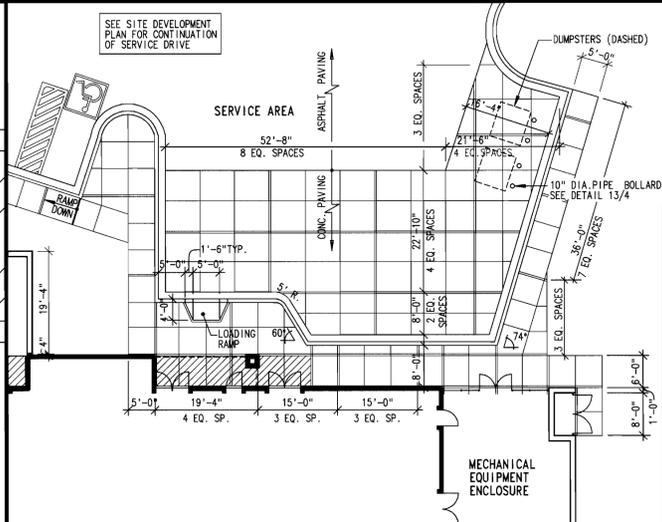
SDP PERMIT
18 AUGUST 00

4 of 20

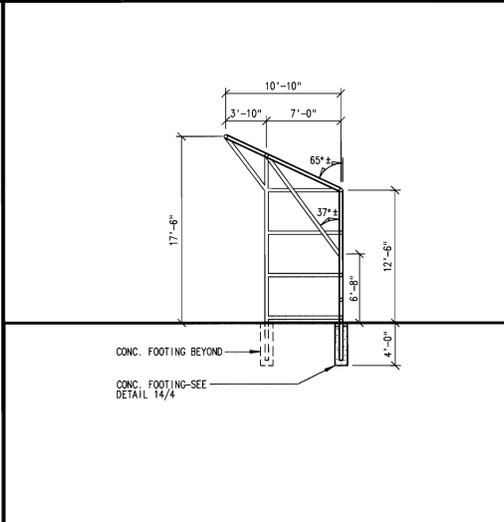
project no. 9901



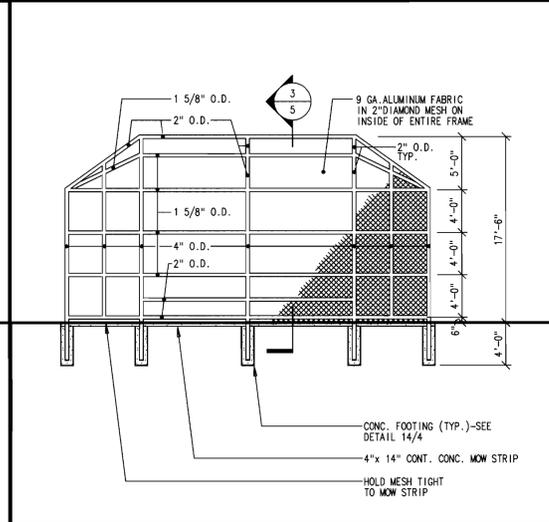
8
5 PAINTED CROSSWALK DETAIL 1/2" 4/5



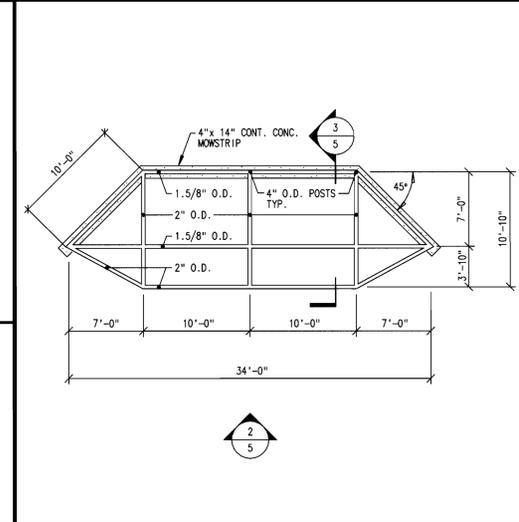
11
16 SERVICE AREA DETAIL 3/5



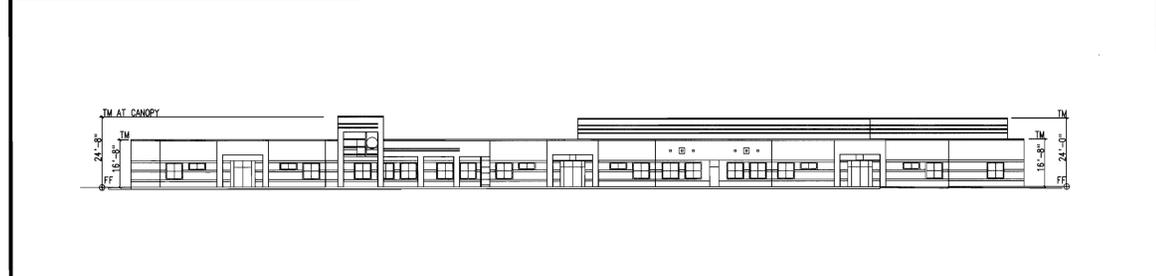
11
8 SOFTBALL BACKSTOP SECTION 1/8" 2/5



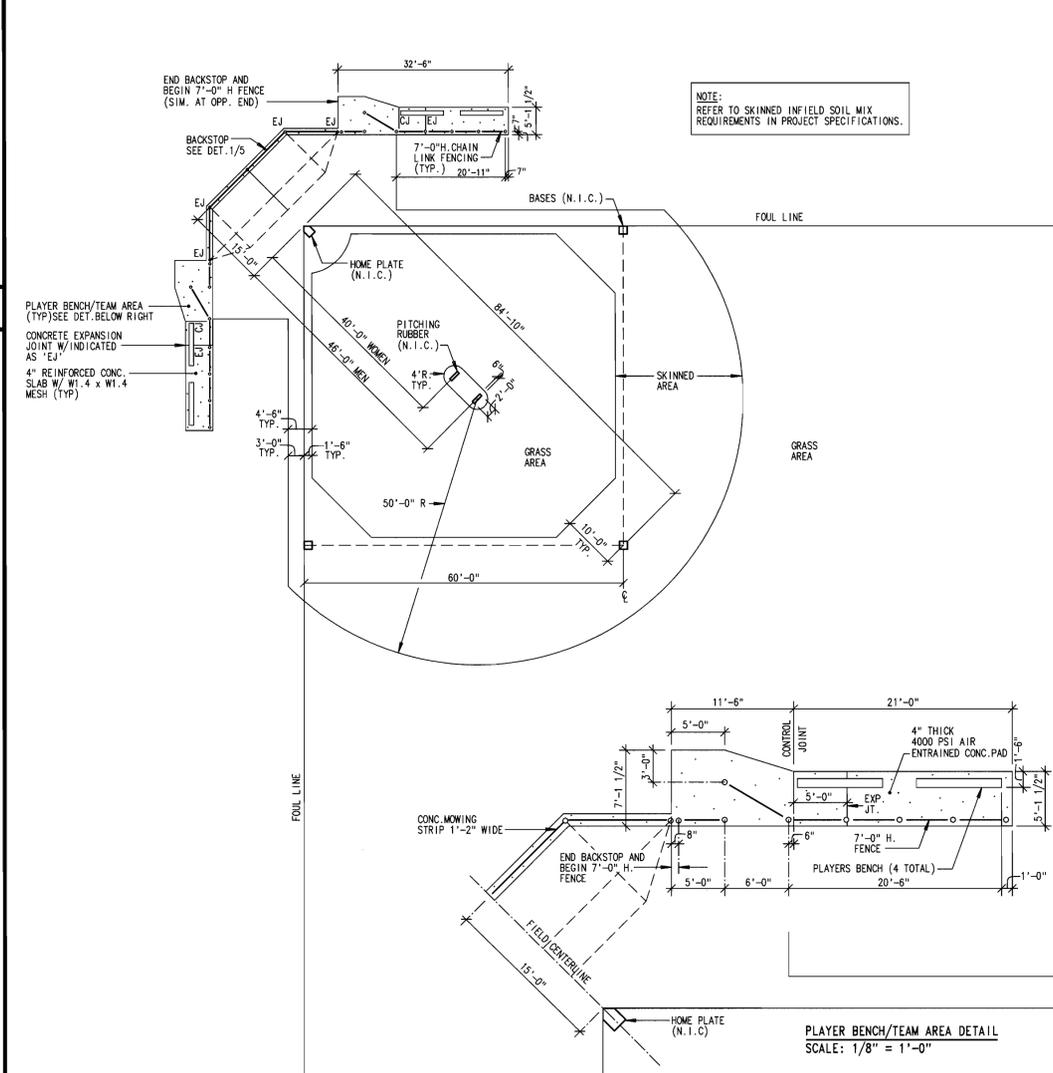
11
8 SOFTBALL BACKSTOP ELEVATION 1/8" 1/5



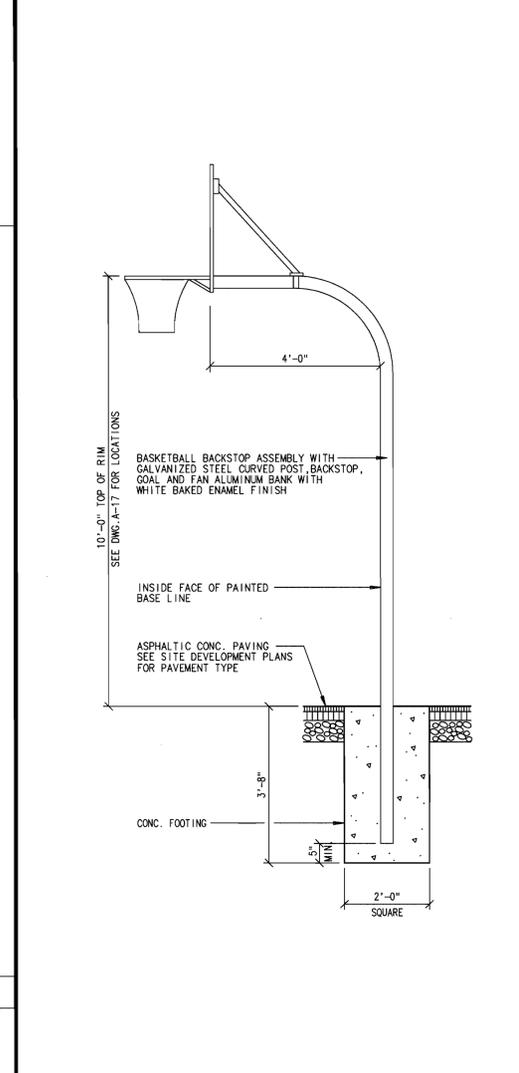
11
8 SOFTBALL BACKSTOP PLAN 1/8" 1/5



7
5 FRONT ELEVATION 1/30



6
5 SOFTBALL FIELD 1/16" 5/5



11
2 BACKBOARD DETAIL 1/2"

TCA ARCHITECTS
2661 RIVA ROAD SUITE 120
ANNAPOLIS, MARYLAND 21401
410-841-6205

OWNER
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 ROUTE 108
ELLCOTT CITY, MARYLAND 21043

APPROVED: DEPARTMENT OF PLANNING AND ZONING

PROJECTOR: *Robert Raithe* DATE: 6/16/01
CHIEF, DIVISION OF LAND DEVELOPMENT

CHIEF, DIVISION OF LAND DEVELOPMENT: *Cindy Thonta* DATE: 6/7/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION: *John P. ...* DATE: 5/21/01

SITE DETAILS

ALTERNATIVE LEARNING CENTER

TAX MAP NO. 29
LIBER 465 FOLIO 577, LIBER 750 FOLIO 528
& LIBER 850 FOLIO 382
3RD ELECTION DISTRICT: HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN

ALTERNATIVE LEARNING CENTER
Howard County, Maryland
Howard County Public School System

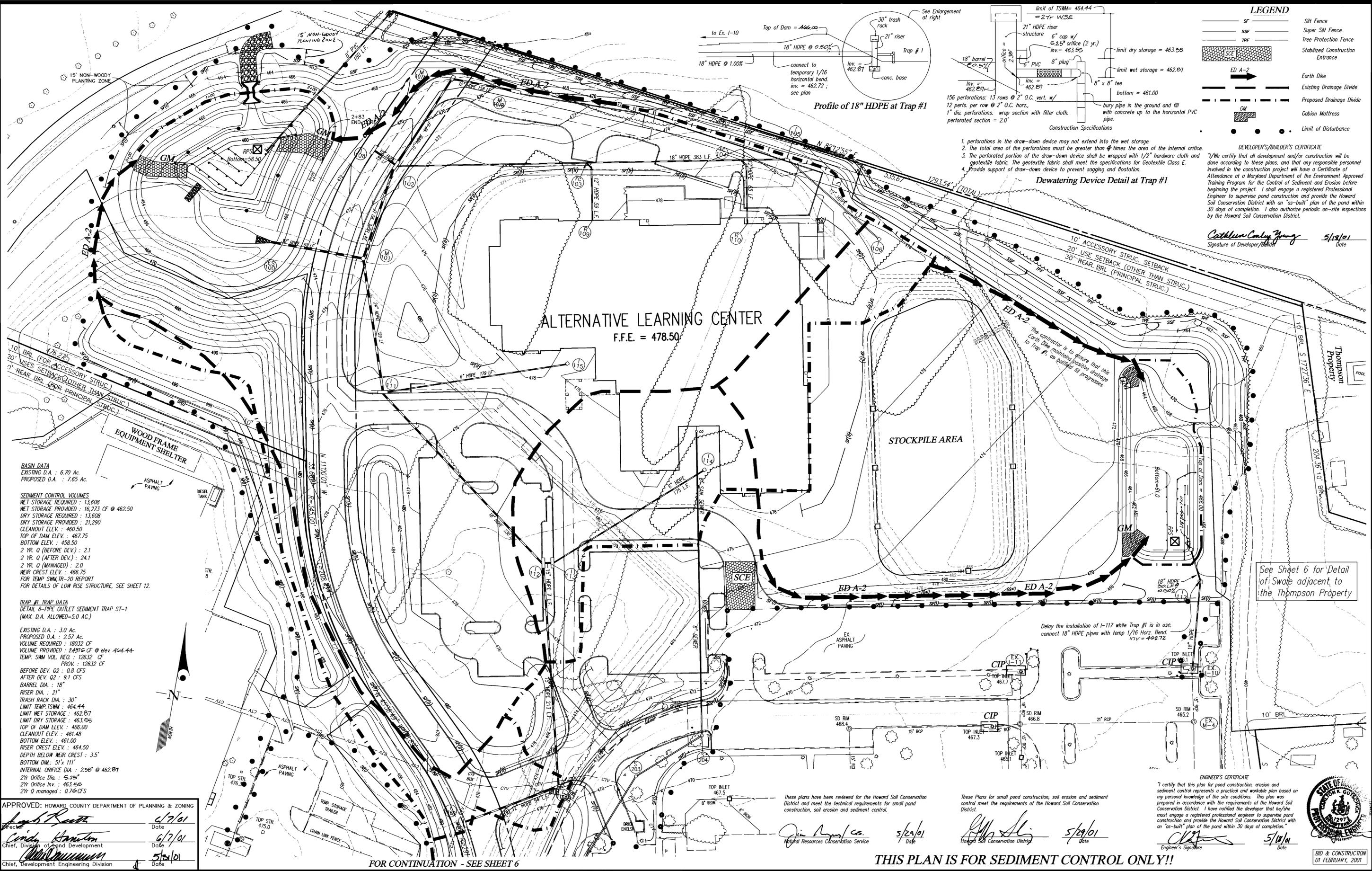
BOARD OF ARCHITECTS
2268
THOMAS CLARK ASSOCIATES ARCHITECTS
STATE OF MARYLAND

tca
Thomas Clark Associates Architects
Annapolis, Maryland

SDP FILING
18 AUGUST 00

5 of 20

project no. 9901



LEGEND

	Silt Fence
	Super Silt Fence
	Tree Protection Fence
	Stabilized Construction Entrance
	Earth Dike
	Existing Drainage Divide
	Proposed Drainage Divide
	Gabion Mattress
	Limit of Disturbance

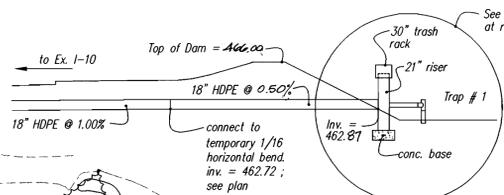
DEVELOPER'S/BUILDER'S CERTIFICATE
 I/We certify that all development and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Maryland Department of the Environment Approved Training Program 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.

Cathleen Conly Young 5/18/01
 Signature of Developer/Builder Date

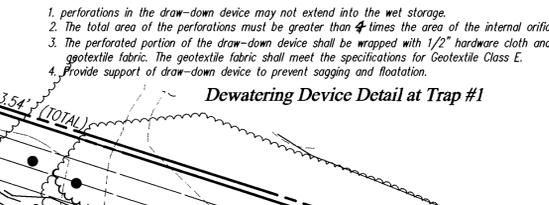
ENGINEER'S CERTIFICATE
 I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have 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] 5/18/01
 Engineer's Signature Date

Profile of 18" HDPE at Trap #1



Dewatering Device Detail at Trap #1



ALTERNATIVE LEARNING CENTER
 F.F.E. = 478.50

BASIN DATA
 EXISTING D.A. : 6.70 Ac.
 PROPOSED D.A. : 7.65 Ac.

SEDIMENT CONTROL VOLUMES
 NET STORAGE REQUIRED : 13,608
 NET STORAGE PROVIDED : 16,273 CF @ 462.50
 DRY STORAGE REQUIRED : 13,608
 DRY STORAGE PROVIDED : 21,290
 CLEANOUT ELEV. : 460.50
 TOP OF DAM ELEV. : 467.75
 BOTTOM ELEV. : 458.50
 2 YR. Q (BEFORE DEV.) : 2.1
 2 YR. Q (AFTER DEV.) : 24.1
 2 YR. Q (MANAGED) : 2.0
 WEIR CREST ELEV. : 466.75
 FOR TEMP SIMULTR-20 REPORT
 FOR DETAILS OF LOW RISE STRUCTURE, SEE SHEET 12.

TRAP #1 TRAP DATA
 DETAIL 8-PIPE OUTLET SEDIMENT TRAP ST-1
 (MAX. D.A. ALLOWED=5.0 AC.)

EXISTING D.A. : 3.0 Ac.
 PROPOSED D.A. : 2.57 Ac.
 VOLUME REQUIRED : 1,803.2 CF
 VOLUME PROVIDED : 2,497.6 CF @ elev. 464.44
 TEMP. SIM VOL. REQ. : 126.32 CF
 PROV. : 126.32 CF

BEFORE DEV. Q2 : 0.8 CFS
 AFTER DEV. Q2 : 9.1 CFS
 BARREL DIA. : 18"
 RISER DIA. : 21"
 TRASH RACK DIA. : 30"
 LIMIT TEMP. TSMW : 464.44
 LIMIT NET STORAGE : 462.87
 LIMIT DRY STORAGE : 463.95
 TOP OF DAM ELEV. : 466.00
 CLEANOUT ELEV. : 461.49
 BOTTOM ELEV. : 461.00
 RISER CREST ELEV. : 464.50
 DEPTH BELOW WEIR CREST : 3.5'
 BOTTOM DIM. : 51' x 111'
 INTERNAL ORIFICE DIA. : 2.50" @ 462.87
 2Yr Orifice Dia. : 5.25"
 2Yr Orifice Inv. : 463.55
 2Yr Q managed : 0.76 CFS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

[Signature] 6/9/01
 Date

[Signature] 6/7/01
 Date

[Signature] 5/18/01
 Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

[Signature] 5/29/01
 Date

These Plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

[Signature] 5/29/01
 Date

ENGINEER'S CERTIFICATE
 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] 5/18/01
 Date



THIS PLAN IS FOR SEDIMENT CONTROL ONLY!!

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BIRTONVILLE OFFICE PARK
 BIRTONVILLE, MARYLAND 20865
 TEL: 301-421-4024 BALT: 410-880-1220 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY
2/28/01	Add dewatering device detail for trap #1	MCJ

ARCHITECT
 THOMAS CLARK ASSOC.'S ARCHITECTS
 2661 RIVA ROAD, SUITE 120
 ANNAPOLIS, MD 21401
 TEL: 301-261-8700

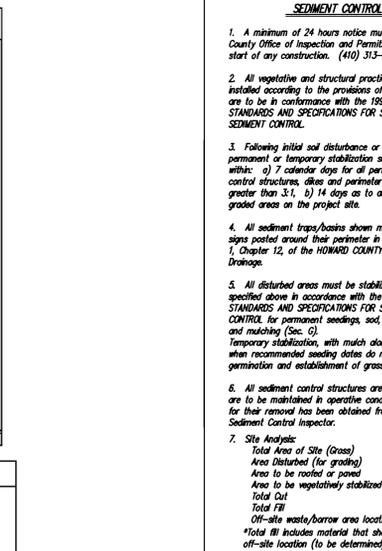
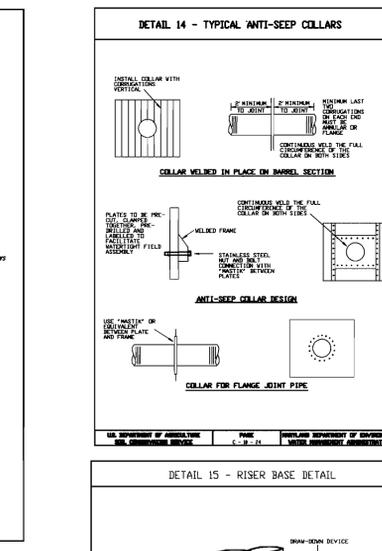
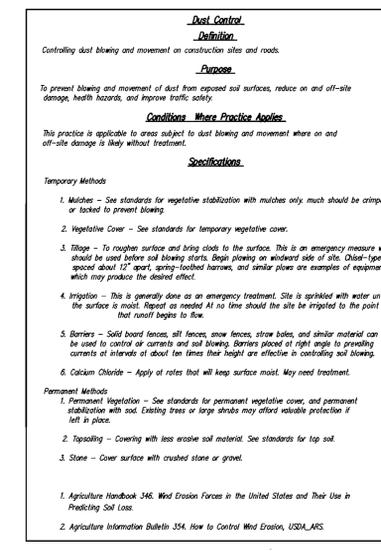
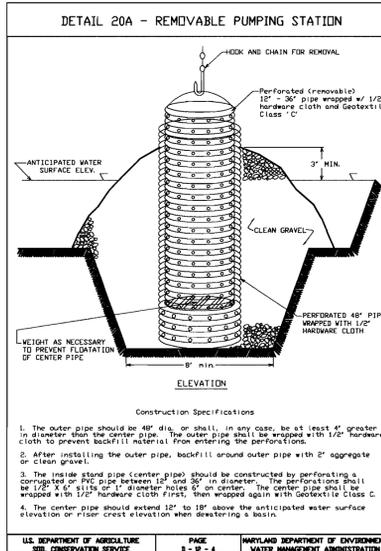
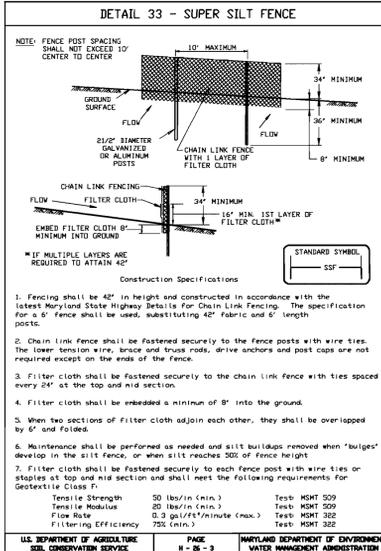
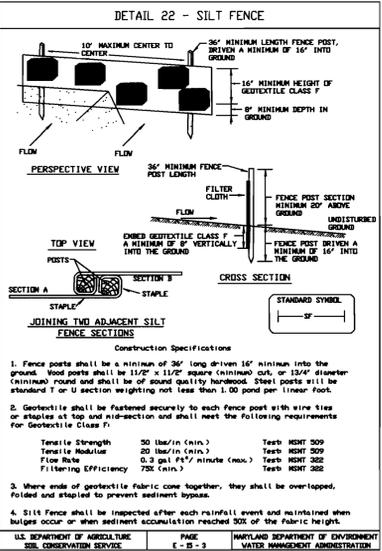
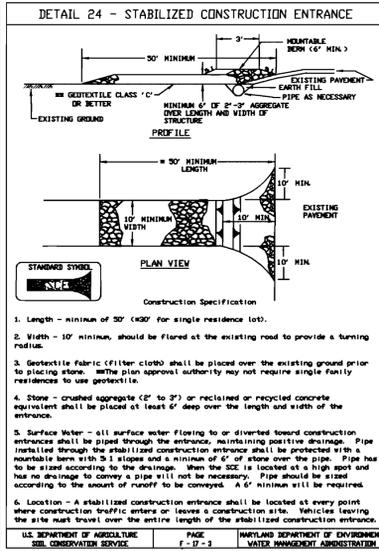
OWNER
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 ROUTE 108
 ELLICOTT CITY, MD 21043
 ATTN: CATHEEN YOUNG
 TEL: 410-313-6704

SEDIMENT CONTROL PLAN
ALTERNATIVE LEARNING CENTER
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 L. 465 @ F. 577, L. 750 @ F. 528 & L. 850 @ F. 382

SCALE: 1"=40'
 ZONING: R-20
 DATE: 18/MAY/01
 TAX MAP - GRID: 29 - 11
 SHEET: 7 of 20

HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=40'	R-20	00066
DATE	TAX MAP - GRID	SHEET
18/MAY/01	29 - 11	7 of 20

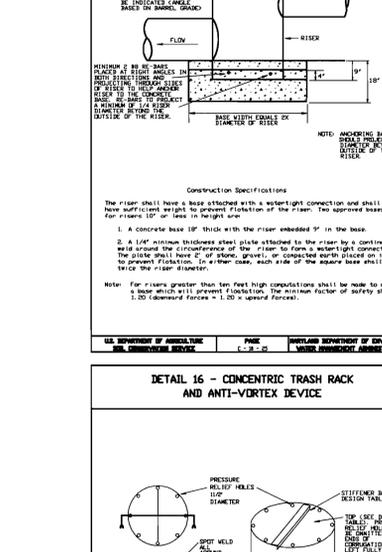
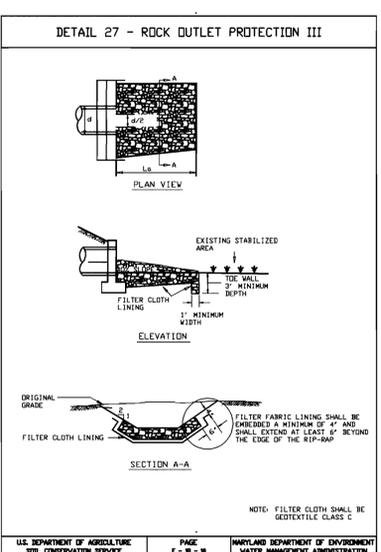
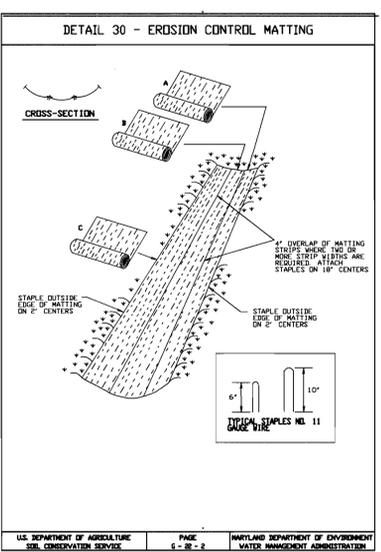
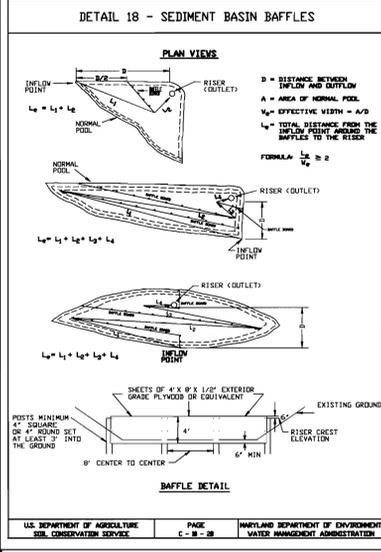
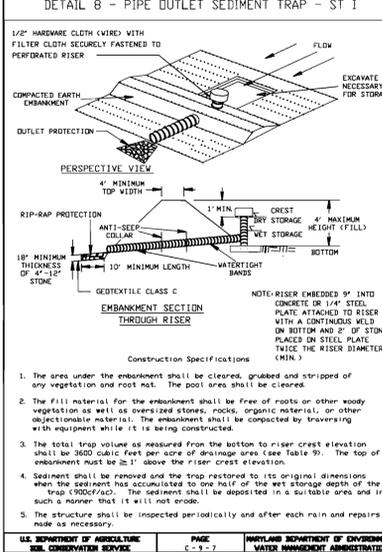
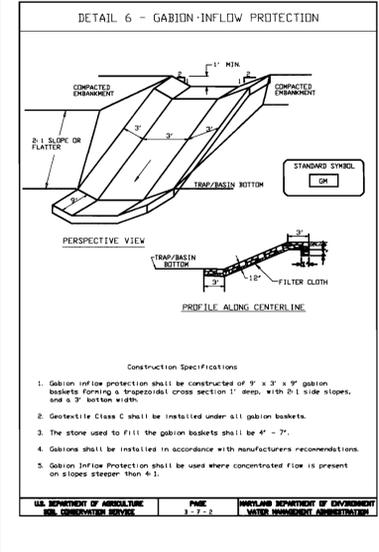


SEDIMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (410) 313-1855.
- 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.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within:
 - 7 calendar days for all perimeter sediment control structures, ditches, perimeter slopes and all slopes greater than 3:1.
 - 14 days for all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- 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, soil, temporary seeding and mulching (Sec. G). Temporary stabilization, with mulch alone, can only be done when recommended seedings do not allow for proper germination and establishment of grasses.
- 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.
- Site Analysis:

Total Area of Site (Gross)	: 64.82 AC
Area Disturbed by Construction	: 14.2 AC
Area to be vegetated or paved	: 3.62 AC
Area to be regraded/stabilized	: 10.45 AC
Total	: 31.90 AC
Off-site water/borrow area location:	N/A

 *Total # of inches material that shall be taken to an approved off-site location (to be determined) shall be under an approved sediment control plan and an active grading permit.
- Any sediment control practice which is disturbed by grading activities for placement of material must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.
- On all sites with disturbed areas in excess of 2 acres, completion of installation of perimeter erosion and sediment control, before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until the initial approval by the inspection agency is made.
- Tranches for the construction of utilities is limited to 3 pipe lengths or that which shall be backfilled and stabilized within one working day, whichever is shorter.



PERMANENT SEEDING NOTES

Apply to graded or cleared area not subject to immediate further disturbance where a permanent long-lived vegetative cover is desirable.

Soil Amendments: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding (unless previously loosened).

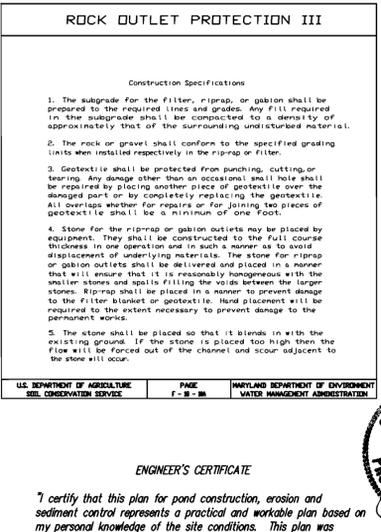
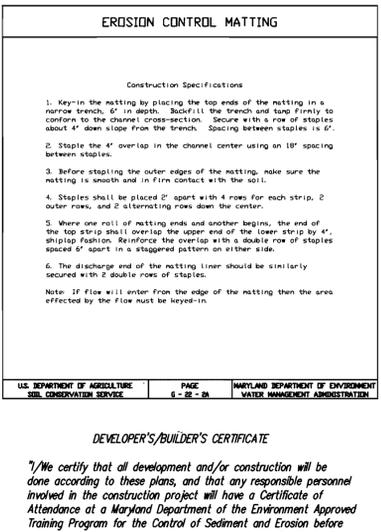
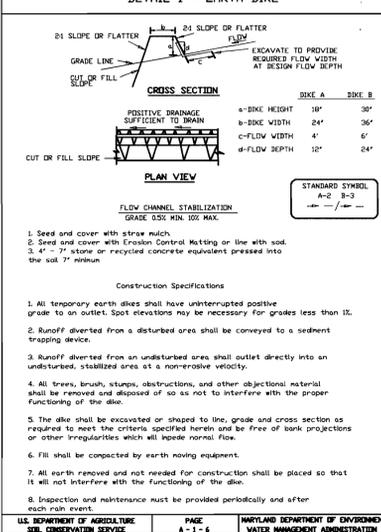
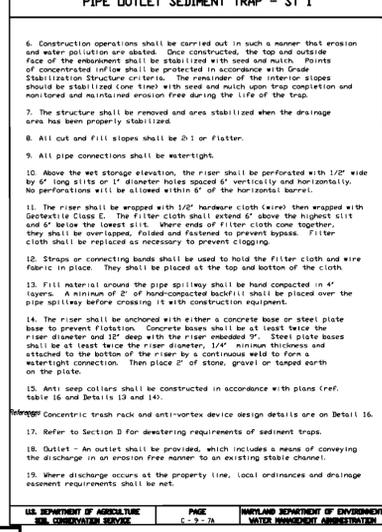
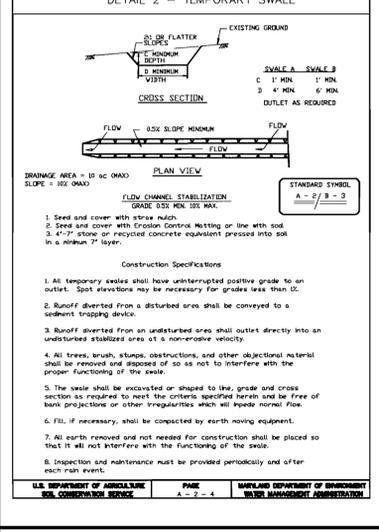
Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:

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

Seeding: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 50 lbs per acre (14 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 (0.5 lbs/1000 sq ft) of waning 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 seed. Option (3) seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

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

Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseeding.



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *[Signature]* Date: 6/7/01

Chief, Division of Land Development: *[Signature]* Date: 6/2/01

Chief, Development Engineering Division: *[Signature]* Date: 5/21/01

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

[Signature] Date: 5/29/01
 Natural Resources Conservation Service

These Plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

[Signature] Date: 5/29/01
 Howard Soil Conservation District

DEVELOPER'S/BUILDER'S CERTIFICATE

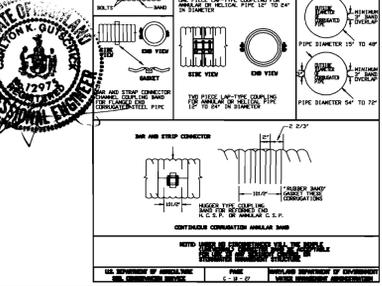
"I/We certify that all development and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Maryland Department of the Environment Approved Training Program for the Control of Sediment 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."

[Signature] Date: 5/18/01
 Signature of Developer/Builder

ENGINEER'S CERTIFICATE

"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] Date: 5/18/01
 Date



GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3609 NATIONAL DRIVE, SUITE 250 - BURTNSVILLE OFFICE PARK
 BURTNSVILLE, MARYLAND 20866
 TEL: 301-421-4024 FAX: 301-999-2524

SCALE: AS SHOWN
 ZONING: R-20
 DATE: 18/MAY/01
 TAX MAP - GRID: 29 - 11
 SHEET: 8 of 20

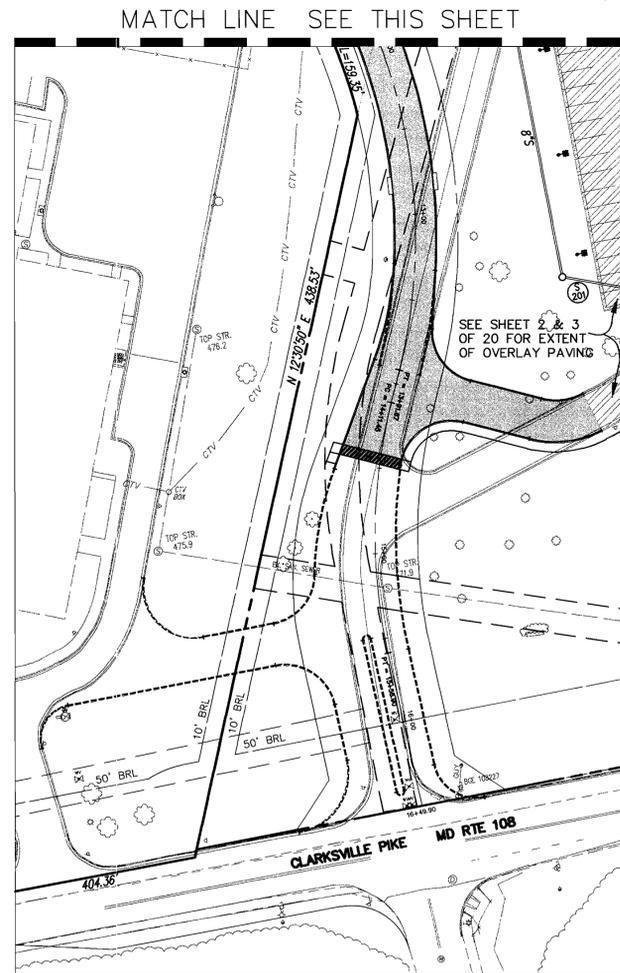
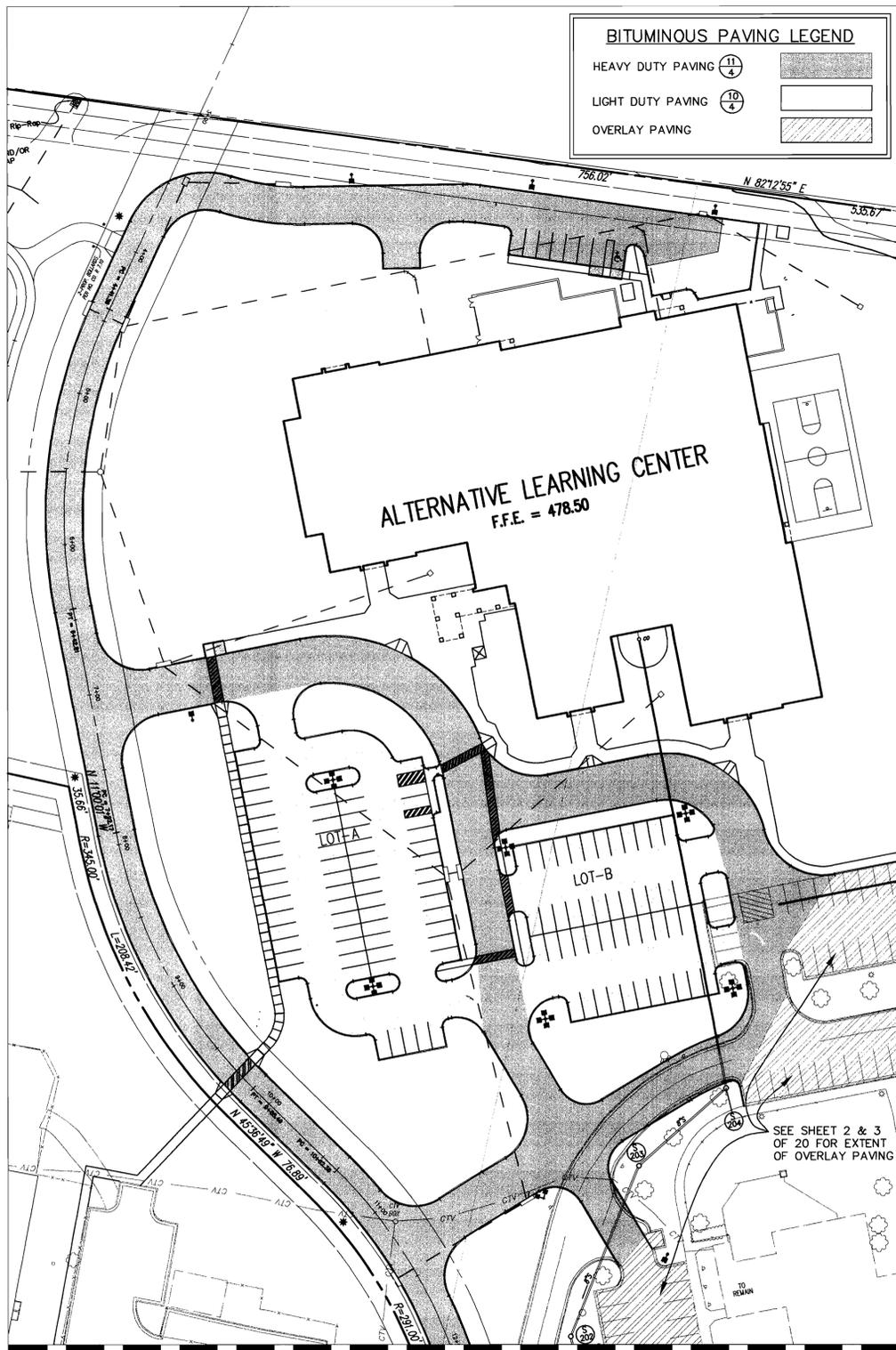
REVISION: BY APPR.

PREPARED FOR: OWNER
 THOMAS CLARK ASSOC.'S ARCHITECTS
 2661 RIVA ROAD, SUITE 120
 ANNAPOLIS, MD 21401
 TEL: 301-261-8700

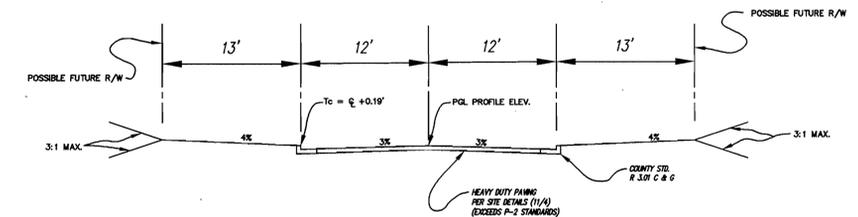
SEDIMENT CONTROL NOTES & DETAILS
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 ALTERNATIVE LEARNING CENTER
 L. 465 @ F. 577 (PARCEL 99), L. 750 @ F. 528 (PARCEL 100)

SCALE: AS SHOWN
 ZONING: R-20
 DATE: 18/MAY/01
 TAX MAP - GRID: 29 - 11
 SHEET: 8 of 20

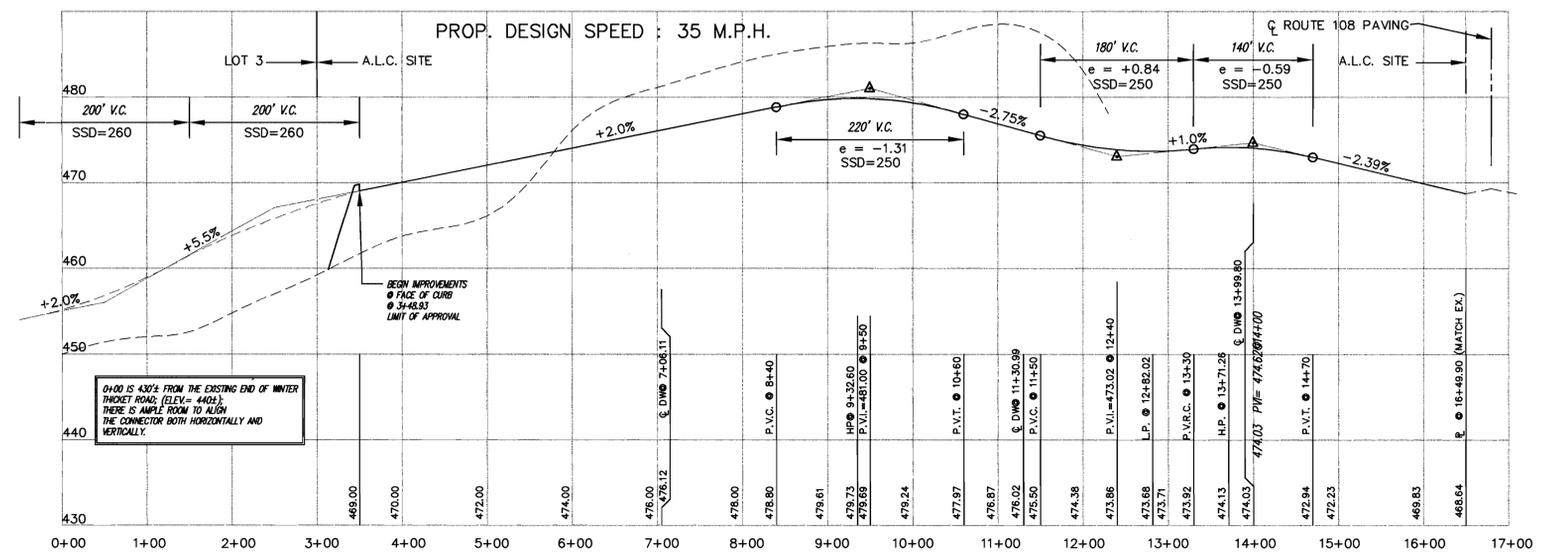
G. L. W. FILE NO.: 00066
 HOWARD COUNTY, MARYLAND
 SDP-01-28



CURVE DATA CHART					
P.C. STA	P.T. STA.	RADIUS	ARC	CHORD	DELTA
4+41.36	6+42.81	320.00'	201.45'	198.14'	36°04'09"
7+92.17	9+85.49	320.00'	193.32	190.39'	34°36'48"
10+62.38	13+91.87	316.00'	329.49	314.77'	59°44'30"
14+11.45	15+58.90	316.00'	147.46	146.12'	26°44'11"



TYPICAL SECTION-SITE ACCESS ROADWAY
N.T.S.



ROAD GEOMETRY
SCALE: 1" = 50'-0"



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

[Signature] 6/7/01
Director Date

[Signature] 6/7/01
Chief, Division of Land Development Date

[Signature] 5/11/01
Chief, Development Engineering Division Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK
BURTNSVILLE, MARYLAND 20886
TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

ARCHITECT
THOMAS CLARK ASSOC.'S
ARCHITECTS
2661 RIVA ROAD, SUITE 120
ANNAPOLIS, MD 21401
TEL: 301-261-8700

OWNER
HOWARD COUNTY
PUBLIC SCHOOL SYSTEM
10910 ROUTE 108
ELICOTT CITY, MD 21043
ATTN: CAITHEEN YOUNG
TEL: 410-313-6704

ROAD GEOMETRY AND BITUMINOUS PAVING DELINEATION PLAN

ALTERNATIVE LEARNING CENTER
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
L. 465 @ F. 577 (PARCEL 99), L. 750 @ F. 528 (PARCEL 100)

SCALE: AS SHOWN
ZONING: R-20
DATE: 18/MAY/01
TAX MAP - GRID: 29 - 11
G. L. W. FILE No.: 00066
SHEET: 9 of 20

DES. DRN. CHK. DATE REVISION BY APP'R.

WEST FRIENDSHIP ELECTION DISTRICT No. 3

HOWARD COUNTY, MARYLAND

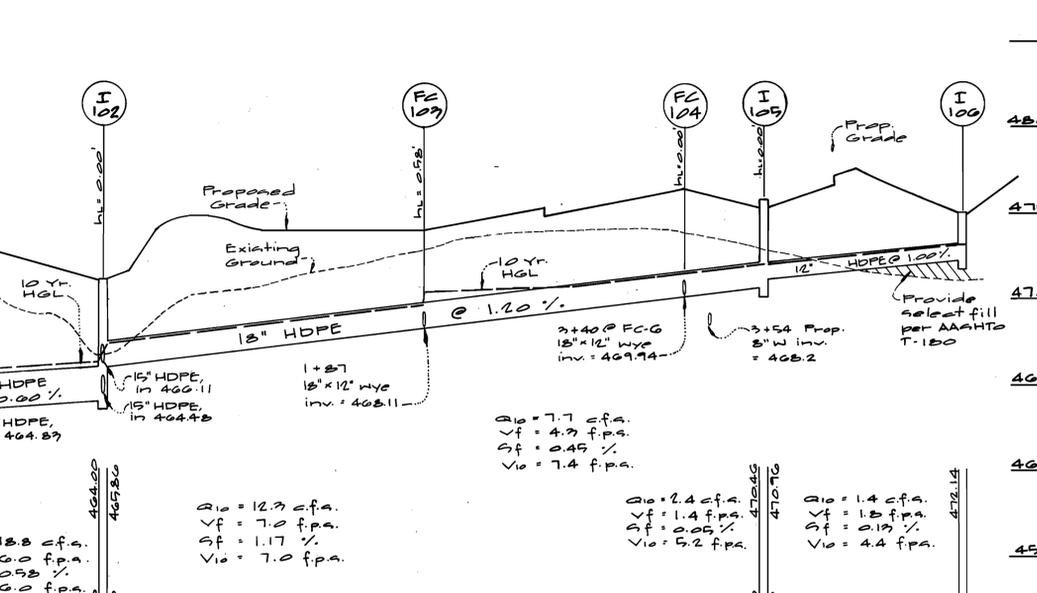
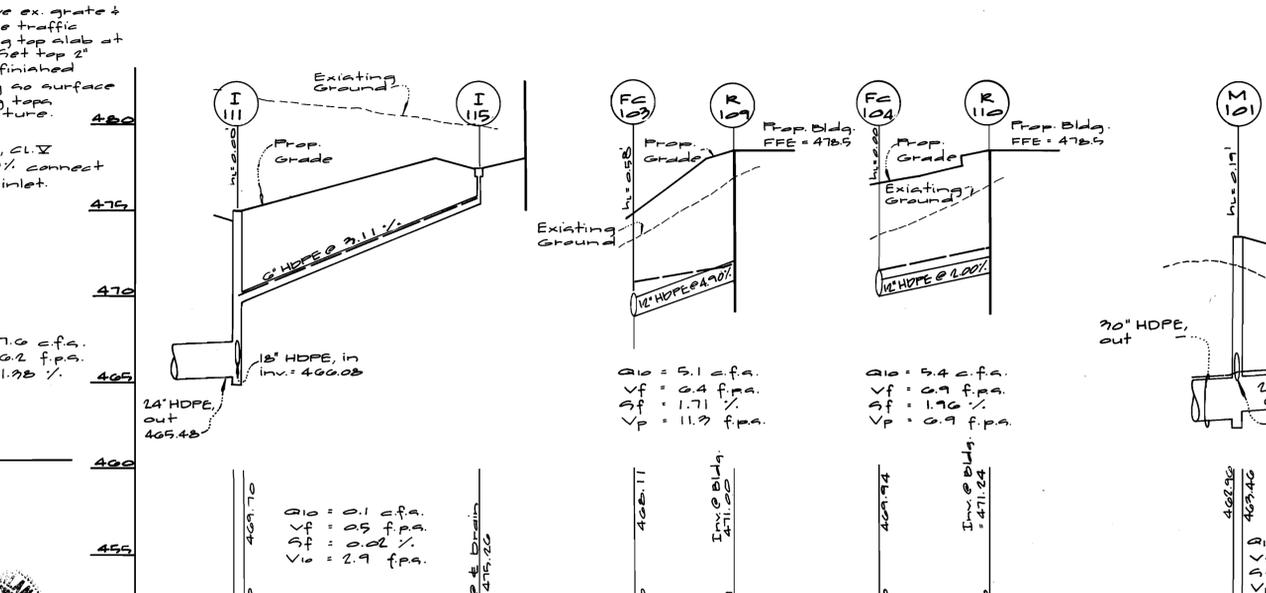
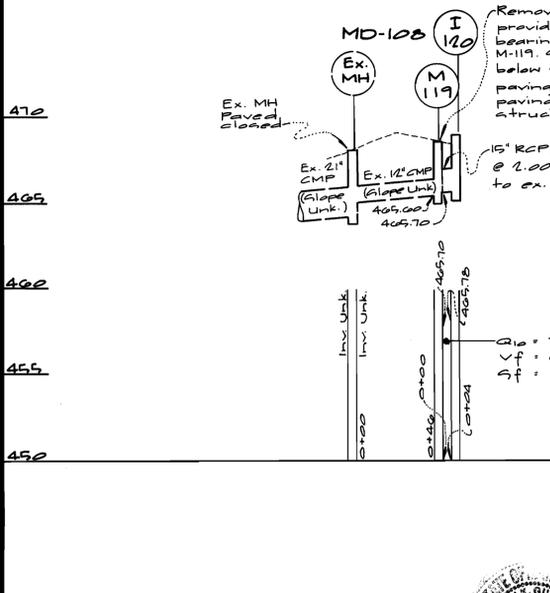
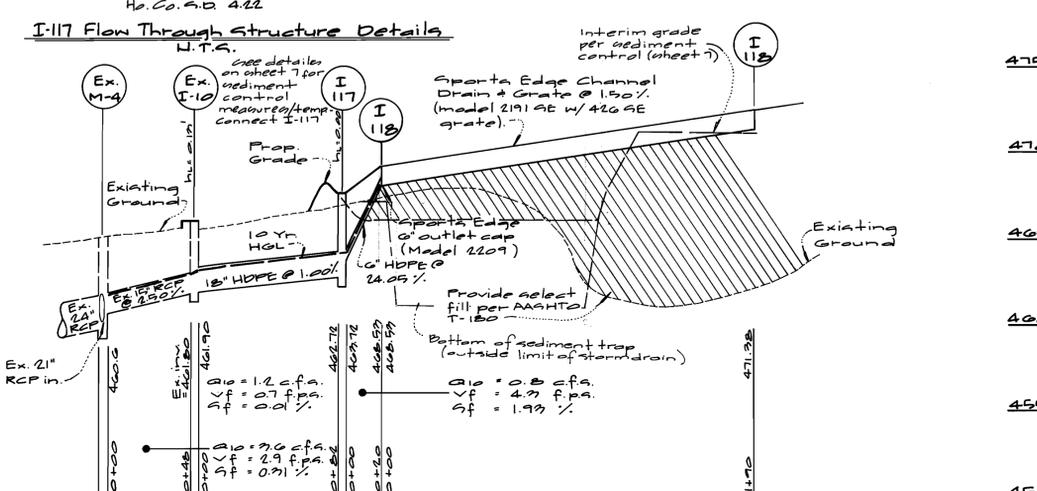
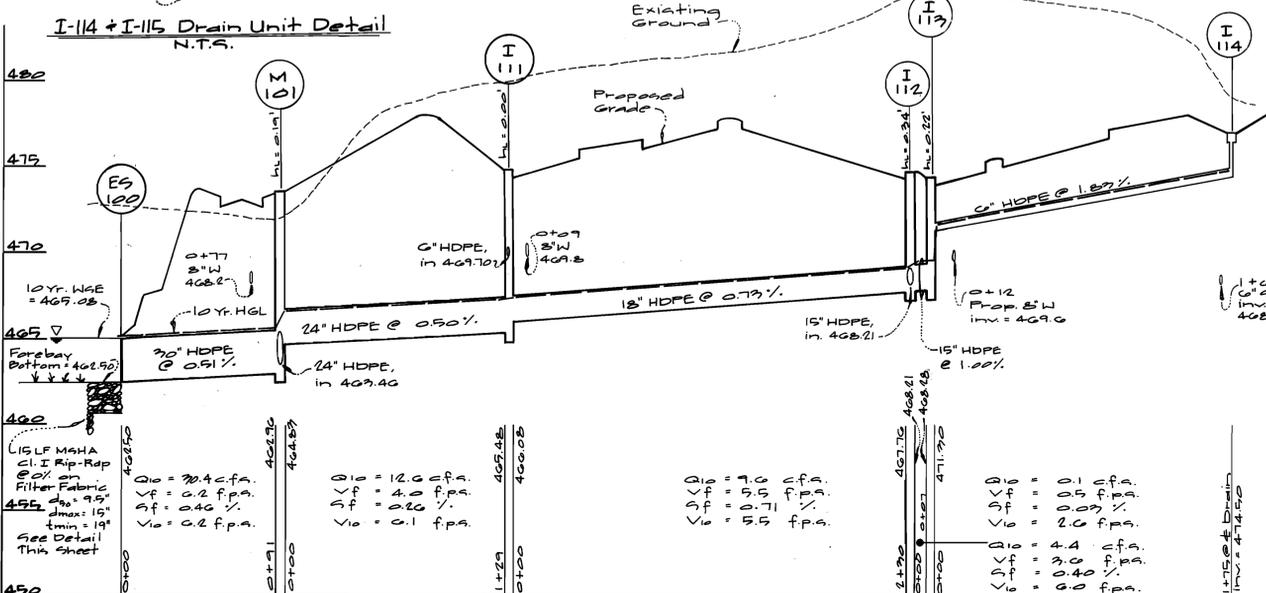
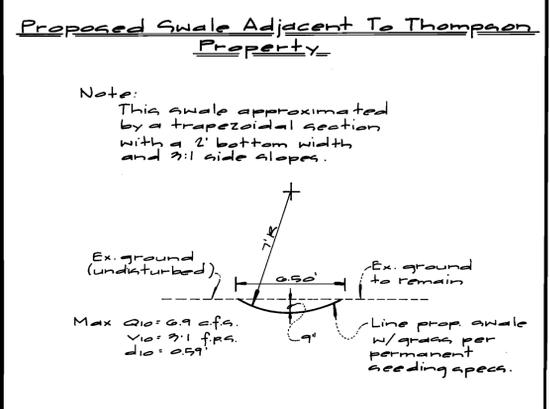
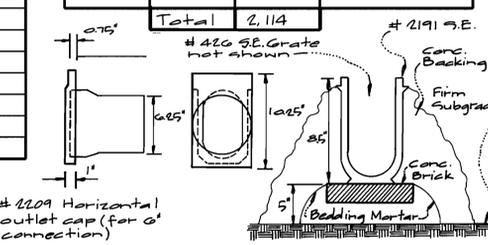
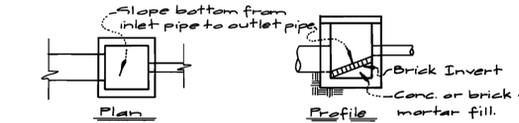
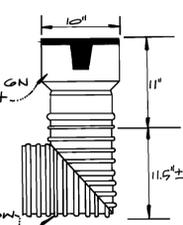
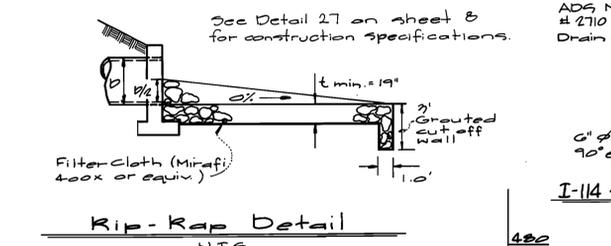
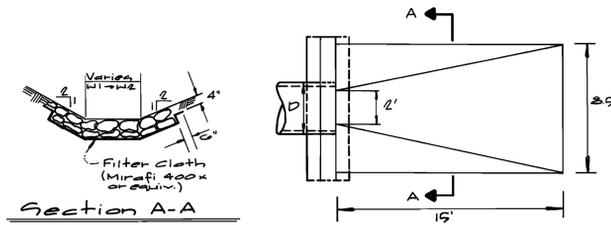
BID & CONSTRUCTION
01 FEBRUARY, 2001

Notes:

1. Pre-cast alternatives to field constructed standard details referenced above are acceptable.
2. Provide reticular grates for all S inlets per Ho.Co. SD 4.99.
3. Manhole top elevations are surface elevations at the center of the base unit.
4. A-inlet top elevations are top of slab at the face of curb at the inside face of the side walls.
5. Yard type inlet top elevations are grate elevations.
6. Provide 10" diameter drains and 6" diameter downspouts at area drains.
7. Field drain from Sports Edge (888-975-EDOE). Provide no. 426 Grate.

Structure Schedule									
No.	Type	Width (inside)	Top Elevation		Invert Elevation		St'd Detail	Locations	Remarks
			Upper	Lower	Upper	Lower			
ES 100	End Section	7'-0"	465.35		462.50		Per Manuf.	20M Pond	
M 101	Manhole	5'-0"	473.61		464.87	462.70	Ho.Co. SD 4.13	5+50 Roadway, 22.5' L.	
I 102	A-12 Inlet	2'-0"	471.22	471.02	466.11	464.20	Ho.Co. SD 4.41	4+42.71 Roadway, 12' L.	
I 103	A-5 Inlet	2'-0"	475.78	475.78	470.90	470.46	Ho.Co. SD 4.40	Behind School - East	
I 104	S-Inlet	2'-7"	475.00		472.14		Ho.Co. SD 4.42	Behind School - East	
I 105	Case-12 Inlet	4'-0"	474.99	474.99	466.08	465.48	MD-274.03	West Side Drive Aisle	
I 106	A-12 Inlet	2'-0"	474.70	474.70	468.21	467.70	Ho.Co. SD 4.41	Front Parking Area Center	
I 107	A-12 Inlet	2'-0"	474.40	474.40	471.30	468.28	Ho.Co. SD 4.41	Front Parking Area Center	
I 108	Area Drain	Note 6	477.00		474.50		AD-11-12	Building Front - East	
I 109	Area Drain	Note 6	477.50		475.20		AD-11-12	Building Front - West	
I 110	Modified S-Inlet	2'-7"	467.60		463.72		Ho.Co. SD 4.22	Eastern Ball Fields	
I 111	Field Drain	4"	472.50	469.30	471.83	468.93	Edge No. 2191	Eastern Ball Fields	

Pipe Schedule			
size	type	quantity (l.f.)	Remarks
6"	HDPE, ADA #12 or Equal	274	
12"	"	274	
15"	"	227	
18"	"	695	
24"	"	219	
30"	HDPE, ADA #12 or Equal	91	
15"	REPC 1.52	4	
Total		2,114	

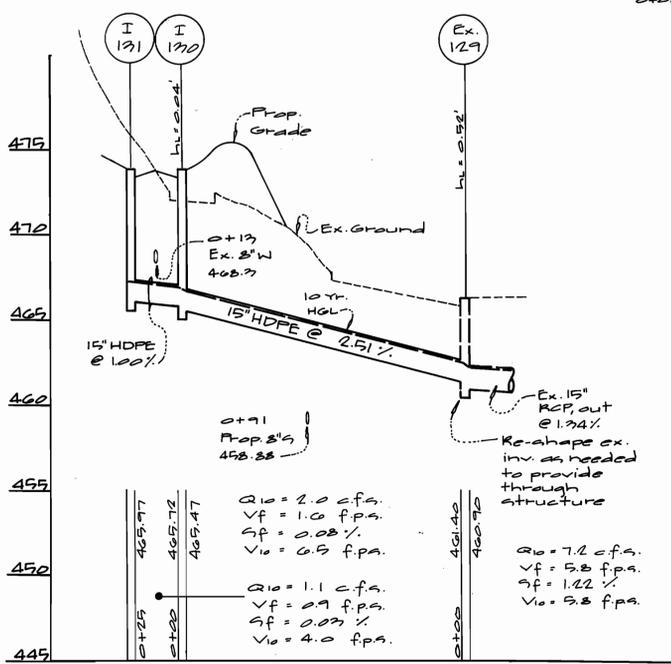
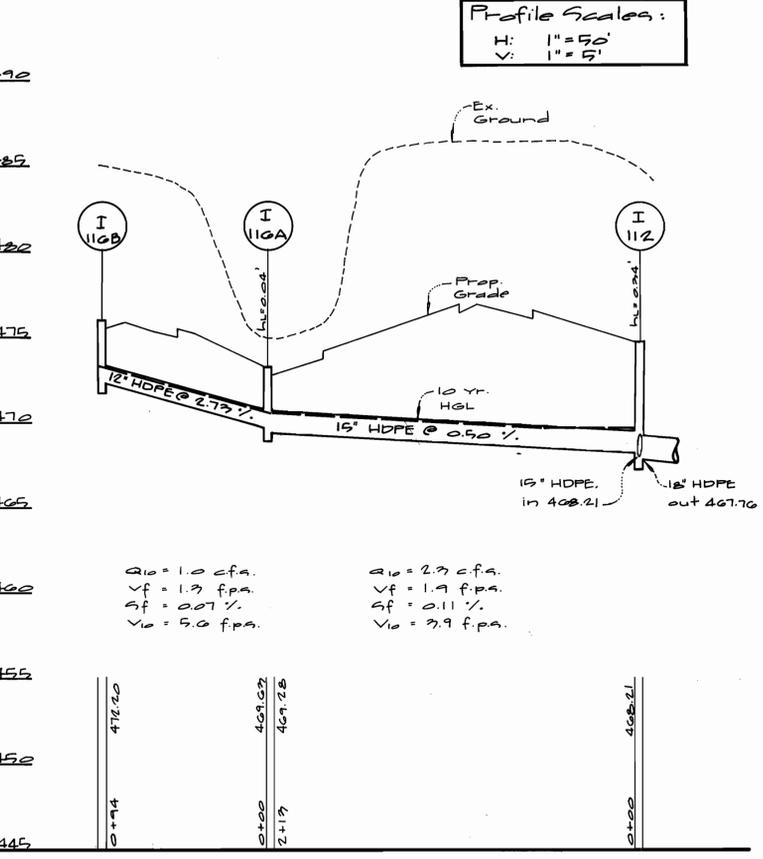
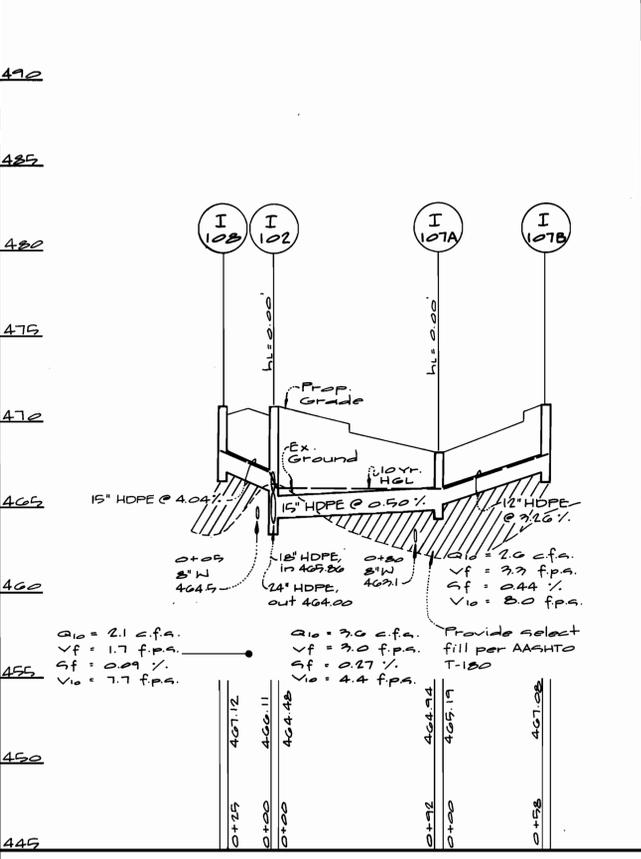
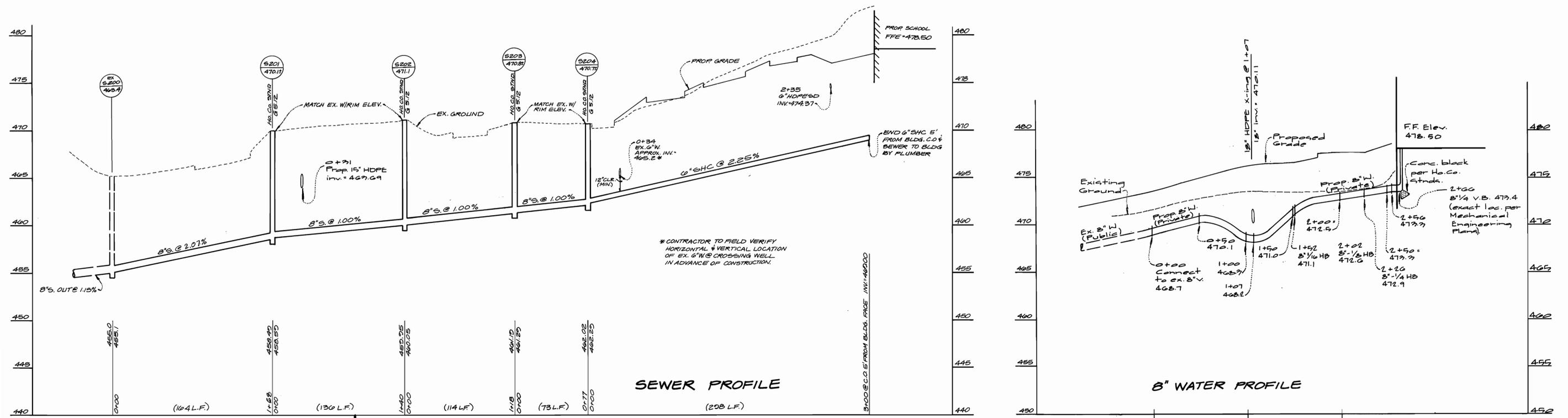


APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Chief, Development Engineering Division
 Date: 5/31/01



BID & CONSTRUCTION
 01 FEBRUARY, 2001

GLW GUTSCHICK LITTLE & WEBER, P.A. CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS 3809 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MARYLAND 20866 TEL: 301-421-4024 BALT. 410-580-1820 DC/VA: 301-388-2524 FAX: 301-421-4186	PREPARED FOR: ARCHITECT THOMAS CLARK ASSOC.'S ARCHITECTS 2861 RIVA ROAD, SUITE 120 ANNAPOLIS, MD. 21401 TEL: 301-261-8700	OWNER HOWARD COUNTY PUBLIC SCHOOL SYSTEM 10910 ROUTE 108 ELLICOTT CITY, MD. 21043 ATTN: CATHEEN YOUNG TEL: 410-313-6704	STORM DRAIN PROFILES & DETAILS ALTERNATIVE LEARNING CENTER HOWARD COUNTY PUBLIC SCHOOL SYSTEM L. 465 E F. 571 (Parcel 79), L. 730 E F. 528 (Parcel 100)		SCALE Horiz: 1"=50' Vert: 1"=5' DATE 18/MAY/01	ZONING R-20 TAX MAP - GRID 29-11	G. L. W. FILE No. 00066 SHEET 10 OF 20
			DATE REVISION BY APPR.	WEST FRIENDSHIP ELECTION DISTRICT No. 3 HOWARD COUNTY, MARYLAND GDF-21-78			



Structure Schedule							
No.	Type	Width (Inside)	Elevation		Std Detail	Locations	Remarks
			Upper	Lower			
I 107A	WR Inlet	2'-5 1/2"	468.58	468.47	465.19	464.74	Ho.Co. SD 4.25 7+44.02 Roadway, 10' R
I 107B	A-12 Inlet	2'-0"	470.77	470.75		467.02	Ho.Co. SD 4.41 Behind School, West
I 108	A-12 Inlet	2'-0"	471.22	471.22		467.12	Ho.Co. SD 4.41 4+46.71 Roadway, 12' R
I 106A	A-12 Inlet	2'-0"	473.40	473.00	469.09	469.20	Ho.Co. SD 4.41 Driveway opposite I-106B
I 109A	A-12 Inlet	2'-0"	475.74			472.20	Ho.Co. SD 4.41 11+44.78 Roadway, 12' R
I 109B	A-12 Inlet	2'-0"	473.87	473.87	465.72	465.47	Ho.Co. SD 4.41 12+82.02 Roadway, 12' L
I 131	A-12 Inlet	2'-0"	473.87	473.87		465.97	Ho.Co. SD 4.41 12+82.02 Roadway, 12' R

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *[Signature]* Date: 6/7/01
 Chief, Division of Land Development: *[Signature]* Date: 6/7/01
 Chief, Development Engineering Division: *[Signature]* Date: 5/21/01



GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK
 BURTNSVILLE, MARYLAND 20888
 TEL: 301-421-4024 FAX: 301-989-2524

DATE	REVISION	BY	APP'R.

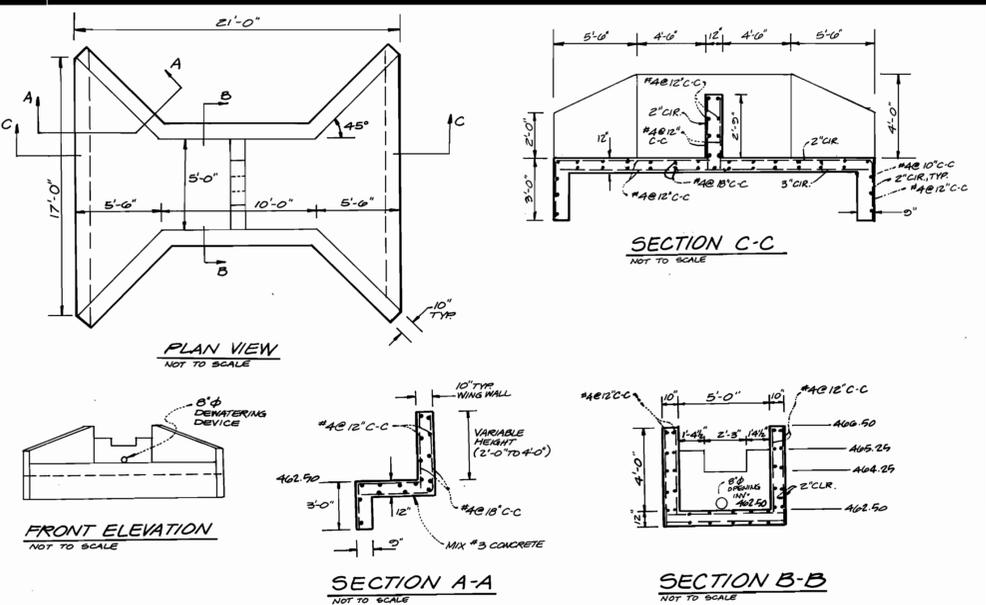
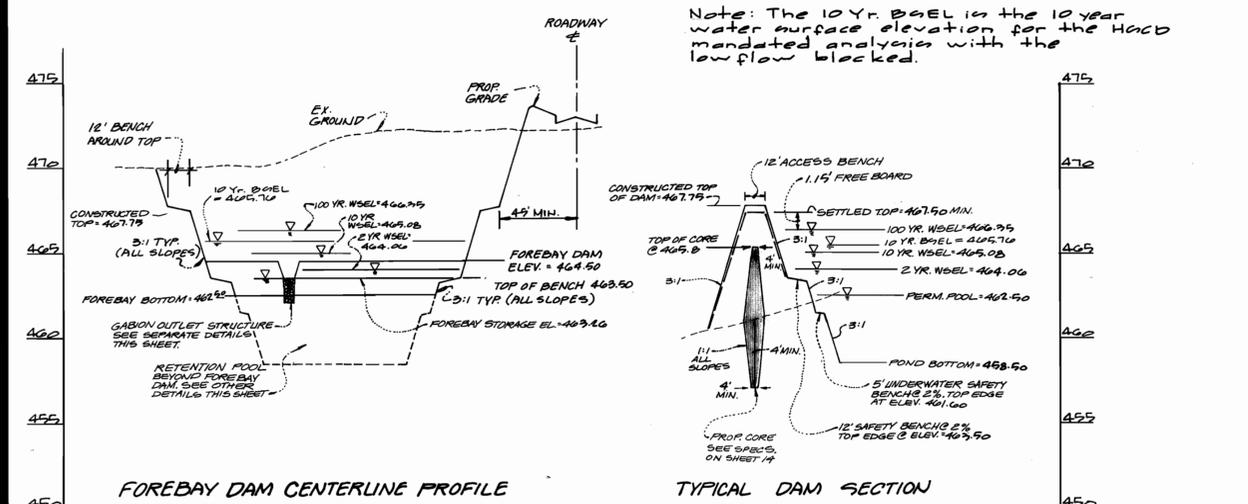
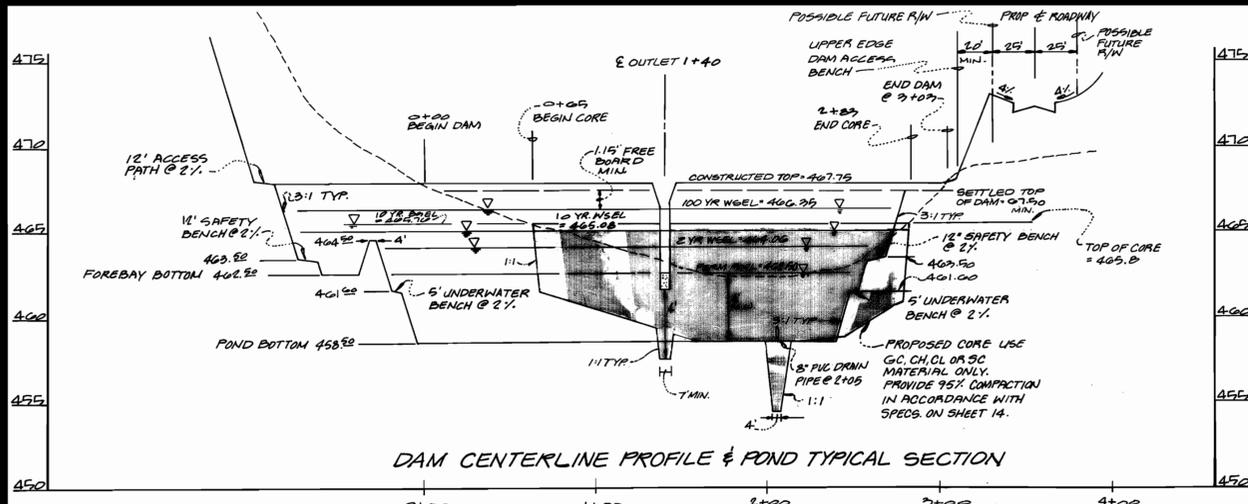
ARCHITECT: THOMAS CLARK ASSOC.'S ARCHITECTS
 2661 RIVA ROAD, SUITE 120 ANNAPOLIS, MD 21401
 TEL: 301-261-8700

OWNER: HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 ROUTE 108 ELLICOTT CITY, MD 21043
 ATTN: CATHELINE YOUNG
 TEL: 410-313-6704

UTILITY PROFILES AND DETAILS
ALTERNATIVE LEARNING CENTER
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 L. 465 @ F. 577 (Parcel 79), L. 750 @ F. 525 (Parcel 102)
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	R-20	00066
DATE	TAX MAP - GRID	SHEET
18/MAY/01	29 - 11	11 OF 20

SDP-01-23



OUTLET STRUCTURE GENERAL NOTES

A. REFERENCE STANDARDS

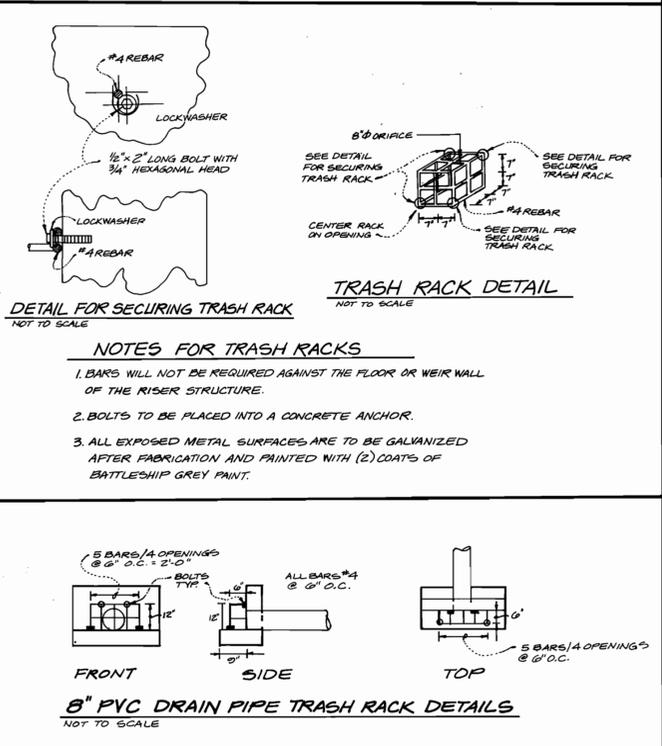
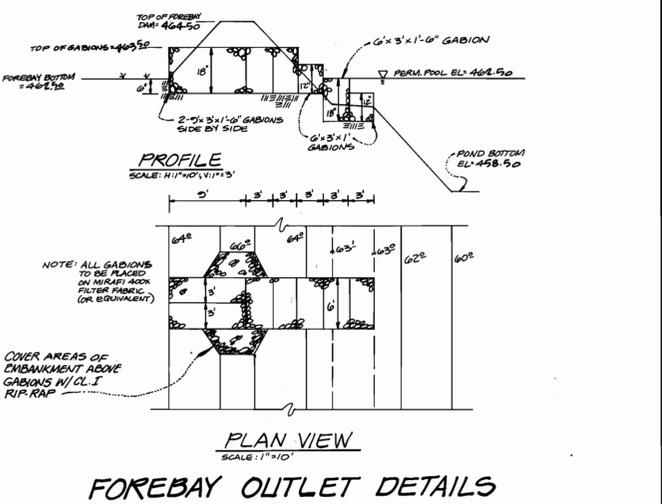
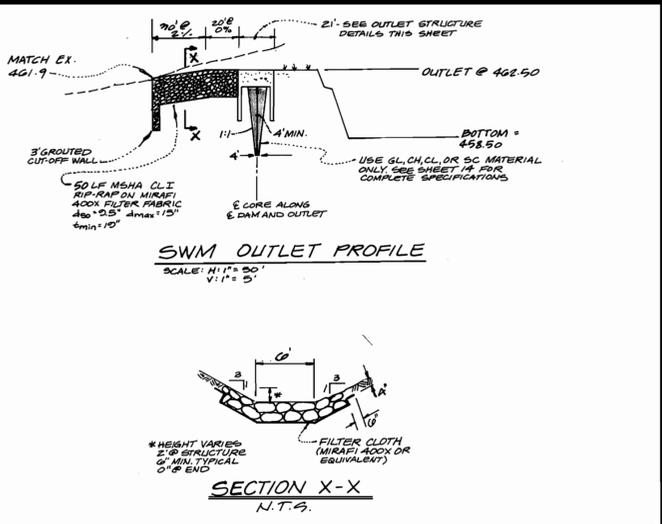
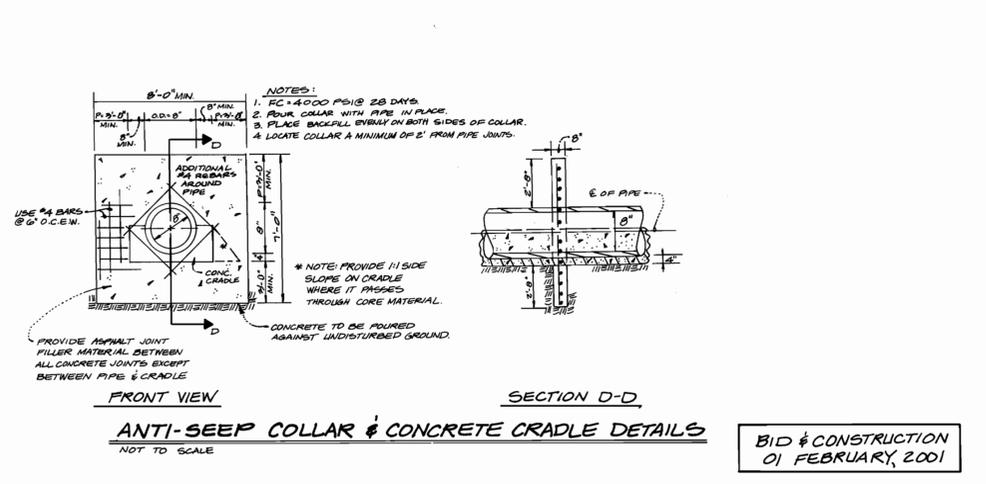
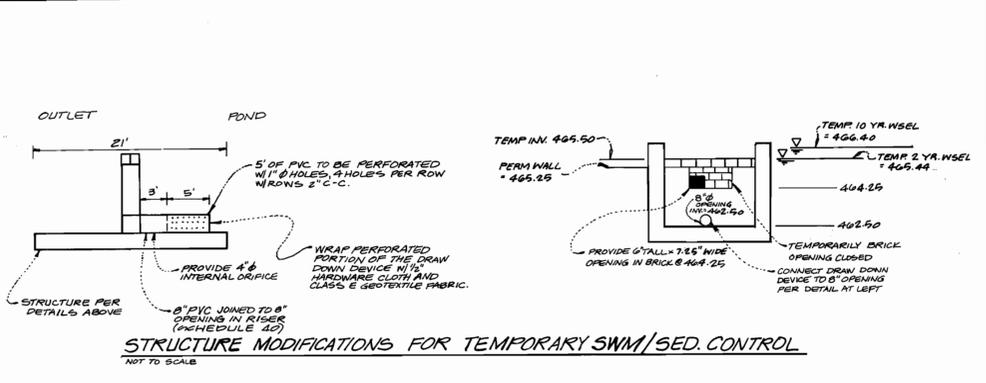
- BOCA NATIONAL BUILDING CODE
- BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI-318.

B. MATERIALS

- CONCRETE TO BE NORMAL WEIGHT (150 PCF) WITH A COMPRESSIVE STRENGTH OF 4000 PSI MINIMUM AT 28 DAYS. ALL CONCRETE TO BE AIR ENTRAINED (MNSHA MIX NO. 3)
- DEFORMED REINFORCING BARS TO CONFORM TO ASTM A615, GRADE 60.

C. CONSTRUCTION

- ALL FOUNDATIONS TO BE PLACED ON UNDISTURBED SOIL OR COMPACTED STRUCTURAL FILL.
- ASSUMED MINIMUM BEARING CAPACITY - 2,000 PSF. ACTUAL CAPACITY TO BE VERIFIED PRIOR TO PLACING CONCRETE.
- PLACE BACKFILL AGAINST WALLS IN MAXIMUM LIFTS OF EIGHT (8) INCHES.
- PROVIDE 3/4" x 3/4" CHAMFER ALONG ALL EXPOSED EDGES.



Note: The 10 Yr. WSEL is the 10 year water surface elevation for the HMOB mandated analysis with the low flow blocked.

PROFILE/SECTION SCALE
HORIZ: 1" = 50'
VERT: 1" = 5'

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

John Hays / as 5/29/01
Natural Resources Consultant Date

These Plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

[Signature] 5/29/01
Howard Soil Conservation District Date

DEVELOPER'S/BUILDER'S CERTIFICATE

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 Maryland 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.

Cathleen Conley Young 5/18/01
Signature of Developer/Builder Date

ENGINEER'S CERTIFICATE

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] 5/18/01
Engineer's Signature Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

[Signature] 6/7/01
Director Date

[Signature] 6/7/01
Chief, Division of Land Development Date

[Signature] 5/21/01
Chief, Development Engineering Division Date



GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALE: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.

ARCHITECT
THOMAS CLARK ASSOC.'S
ARCHITECTS
2681 RIVA ROAD, SUITE 120
ANNAPOLIS, MD 21401
TEL: 301-261-8700

OWNER
HOWARD COUNTY
PUBLIC SCHOOL SYSTEM
10910 ROUTE 108
ELICOTT CITY, MD 21043
ATTN: CATHEEN YOUNG
TEL: 410-313-6704

STORMWATER MANAGEMENT DETAILS

ALTERNATIVE LEARNING CENTER
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
L. 405 E F. 577 (Parcel 177), L. 750 E F. 528 (Parcel 100)

SCALE: AS SHOWN
ZONING: R-20
DATE: 18/MAY/01
TAX MAP - GRID: 29 - 11
SHEET: 12 OF 20

HOWARD COUNTY, MARYLAND

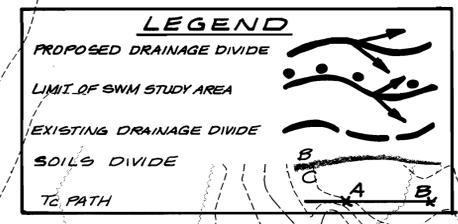
G. L. W. FILE NO. 00066
SHEET 12 OF 20
SDP-01-2B

NOTES

- FOR DRAINAGE DIVIDES TO STRUCTURES 130 & 131 AND THE ROUTE 108 IMPROVEMENTS REFER TO THE STORM DRAIN COMPUTATIONS.
- ALL SD & SWM COMPS. INCLUDE PUBLIC SIDEWALKS ON BOTH SIDES OF THE "ROAD" ALTHOUGH THESE ARE NOT CURRENTLY PROPOSED.
- ALL SWM COMPS. ARE FOR THE CURRENTLY PROPOSED DRAINAGE AREAS AND COVER CHARACTERISTICS WITH THE EXCEPTION OF THE SIDEWALKS IN NOTE 2, ANY NEW IMPERVIOUS AREA MAY REQUIRE A RE-EVALUATION/RE-ANALYSIS OF THE SWM FACILITY AT THE COUNTY'S DISCRETION.

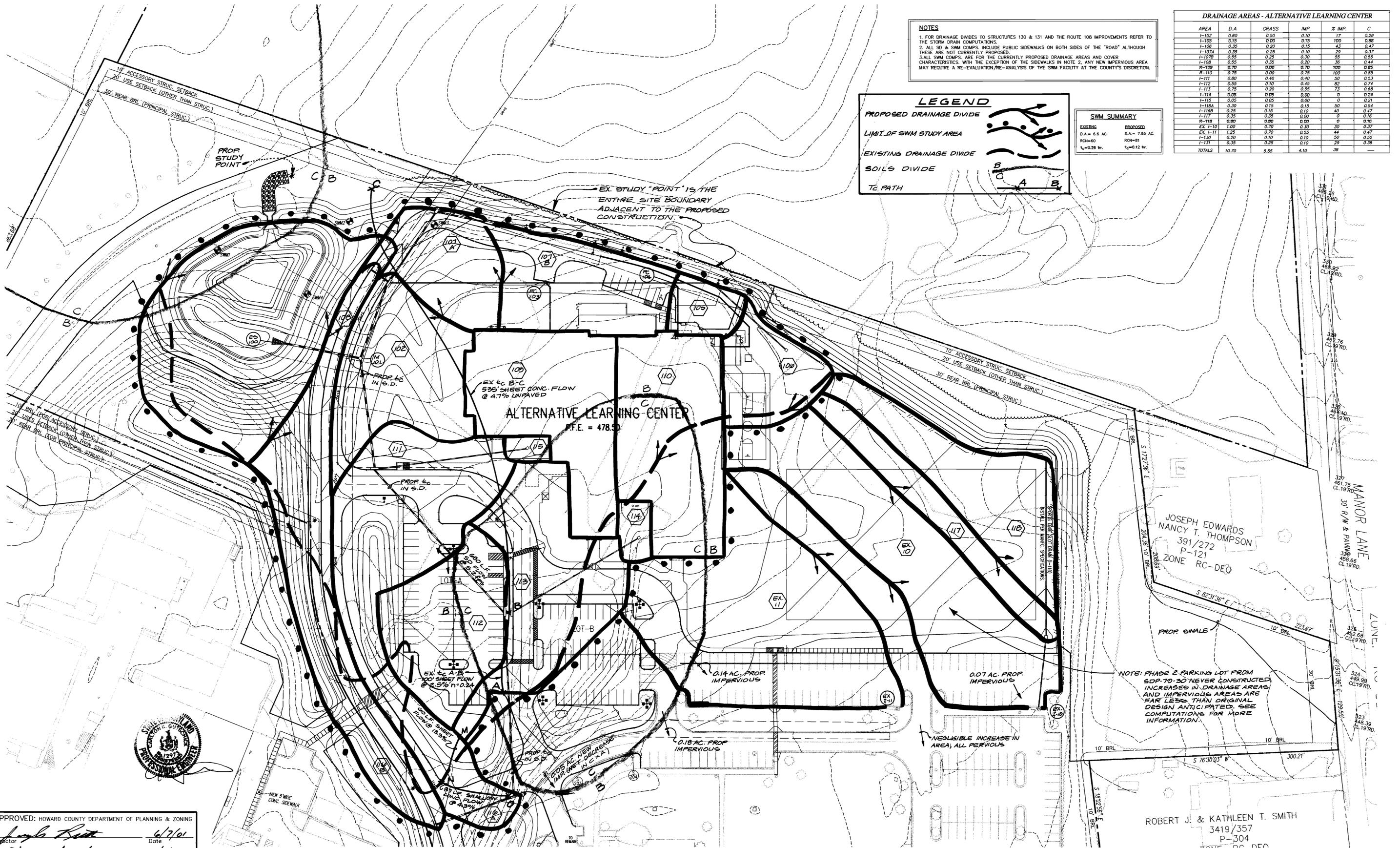
DRAINAGE AREAS - ALTERNATIVE LEARNING CENTER

AREA	D.A.	GRASS	IMP.	% IMP.	C
I-102	0.60	0.50	0.10	17	0.29
I-105	0.15	0.00	0.15	100	0.86
I-106	0.35	0.20	0.15	43	0.47
I-107A	0.35	0.25	0.10	29	0.37
I-107B	0.55	0.25	0.30	55	0.55
I-108	0.55	0.35	0.20	36	0.44
R-109	0.70	0.60	0.10	100	0.85
R-110	0.75	0.00	0.75	100	0.85
I-111	0.80	0.40	0.40	50	0.53
I-112	0.55	0.10	0.45	82	0.74
I-113	0.75	0.20	0.55	73	0.68
I-114	0.05	0.05	0.00	0	0.24
I-115	0.05	0.05	0.00	0	0.21
I-116A	0.30	0.15	0.15	50	0.54
I-116B	0.25	0.15	0.10	40	0.47
I-117	0.35	0.35	0.00	0	0.16
R-118	0.80	0.80	0.00	0	0.16
EX. I-110	1.00	0.70	0.30	30	0.37
EX. I-111	1.25	0.70	0.55	44	0.47
I-130	0.20	0.10	0.10	50	0.52
I-131	0.35	0.25	0.10	29	0.38
TOTALS	10.70	5.55	4.10	38	—



SWM SUMMARY

EXISTING	PROPOSED
D.A. = 6.6 AC.	D.A. = 7.95 AC.
RCN=60	RCN=81
$t_c=0.26$ hr.	$t_c=0.12$ hr.



JOSEPH EDWARDS
NANCY T. THOMPSON
391/272
P-121
ZONE RC-DE0

ROBERT J. & KATHLEEN T. SMITH
3419/357
P-304

NOTE: PHASE 2 PARKING LOT FROM SDP-70-30 NEVER CONSTRUCTED INCREASES IN DRAINAGE AREAS AND IMPERVIOUS AREAS ARE FAR LESS THAN ORIGINAL DESIGN ANTICIPATED. SEE COMPUTATIONS FOR MORE INFORMATION.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *[Signature]* Date: 6/7/01

Chief, Division of Land Development: *[Signature]* Date: 6/2/01

Chief, Development Engineering Division: *[Signature]* Date: 5/31/01

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.

PREPARED FOR: OWNER
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 ROUTE 108
ELLCOTT CITY, MD 21043
ATTN: KATHLEEN YOUNG
TEL: 410-313-8704

ARCHITECT
THOMAS CLARK ASSOC.'S ARCHITECTS
2661 RIVA ROAD, SUITE 120
ANNAPOLIS, MD 21401
TEL: 301-261-8700

DRAINAGE AREA MAP
ALTERNATIVE LEARNING CENTER
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
L. 465 @ P. 577 (PARCEL 99), L. 750 @ P. 528 (PARCEL 100)

SCALE: 1"=50'
ZONING: R-20
DATE: 10/MAY/01
TAX MAP - GRID: 29 - 11
SHEET: 13 of 20

HOWARD COUNTY, MARYLAND

BID # CONSTRUCTION
01 FEBRUARY, 2001

HOWARD COUNTY, MARYLAND

DAM-BASE.DWG 2-14-01 5:12:24 pm EST

CONSTRUCTION SPECIFICATIONS

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

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. All trees shall be cleared and grubbed within 15 feet of the toe of the embankment.

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. For dry stormwater management ponds, a minimum of a 25-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.

Earth Fill

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6" across 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 and must have at least 30% passing the #200 sieve. Consideration may be given to the use of other materials in the embankment if designed by a geotechnical engineer. Such special designs must have construction supervised by a geotechnical engineer.

Materials used in the outer shell of the embankment must have the capability to support vegetation of the quality required to prevent erosion of the embankment.

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 heavy 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.

When required by the reviewing agency the minimum required density shall not be less than 95% of maximum dry density with a moisture content within ±2% of the 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. All compaction is to be determined by AASHTO Method T-99 (Standard Proctor).

Cut Off Trench - The cutoff trench shall be excavated into imperious 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 four 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.

Embankment Core - The core shall be parallel to the centerline of the embankment as shown on the plans. The top width of the core shall be a minimum of four feet. The height shall extend up to at least the 10-year water elevation or as shown on the plans. The side slopes shall be 1 to 1 or flatter. The core shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability. In addition, the core shall be placed concurrently with the outer shell of the embankment.

Structure 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 four 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 four 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" or greater over the structure or pipe.

Structure backfill may be flowable fill meeting the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 313 as modified. The mixture shall have a 100-200 psi, 28 day unconfined compressive strength. The flowable fill shall have a minimum pH of 4.0 and a minimum resistivity of 2,000 ohm-cm. Material shall be placed such that a minimum of 6" (measured perpendicular to the outside of the pipe) of flowable fill shall be under (bedding), over and, on the sides of the pipe. It only needs to extend up to the spring line for rigid conduits. Average slump of the fill shall be 7" to assure flowability of the material. Adequate measures shall be taken (sand bags, etc.) to prevent floating the pipe. When using flowable fill, all metal pipe shall be bituminous coated. Any adjoining soil fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material shall completely fill all voids adjacent to the flowable fill zone. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a structure or pipe unless there is a compacted fill of 24" or greater over the structure or pipe. Backfill material outside the structural backfill (flowable fill) zone shall be of the type and quality conforming to that specified for the core of the embankment or other embankment materials.

Pipe Conduits

All pipes shall be circular in cross section.

Corrugated Metal Pipe - All of the following criteria shall apply for corrugated metal pipe:

1. Materials - (Polymer Coated steel pipe) - Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. This pipe and its appurtenances shall conform to the requirements of AASHTO Specifications M-245 & M-246 with watertight coupling bands or flanges.

Materials - (Aluminum Coated Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274 with watertight coupling bands or flanges. Aluminum Coated Steel Pipe, when used with flowable fill or when soil and/or water conditions warrant the need for increased durability, shall be fully bituminous coated per requirements of AASHTO Specification M-190 Type A. Any aluminum coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer or two coats of asphalt.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands or flanges. Aluminum Pipe, when used with flowable fill or when soil and/or water conditions warrant for increased durability, shall be fully bituminous coated per requirements of AASHTO Specification M-190 Type A. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer or two coats of asphalt. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be between 4 and 9.

2. Coupling bands, anti-seep collars, end sections, etc., must be composed of the same material and coatings as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness.

3. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered to be watertight.

All connections shall use a rubber or neoprene gasket when joining pipe sections. The end of each pipe shall be re-rolled an adequate number of corrugations to accommodate the bandwidth. The following type connections are acceptable for pipes less than 24 inches in diameter: flanges on both ends of the pipe with a circular 3/8 inch closed cell neoprene gasket preattached to the flange bolt circle, sandwiched between adjacent flanges; a 12-inch wide standard lap type band with 12-inch wide by 3/8-inch thick closed cell circular neoprene gasket; and a 12-inch wide hugger type band with o-ring gaskets having a minimum diameter of 1/2 inch greater than the corrugation depth. Pipes 24 inches in diameter and larger shall be connected by a 24 inch long annular corrugated band using a minimum of 4 (four) rods and lugs, 2 on each connecting pipe end. A 24-inch wide by 3/8-inch thick closed cell circular neoprene gasket will be installed with 12 inches on the end of each pipe. Flanged joints with 3/8 inch closed cell gaskets the full width of the flange is also acceptable.

Helically corrugated pipe shall have either continuously welded seams or have lock seams with internal caulking or a neoprene bead.

4. 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.

5. Backfilling shall conform to "Structure Backfill".

6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

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 C-361.

2. Bedding - Reinforced concrete pipe conduits shall be laid in a concrete bedding / cradle for their entire length. This bedding / cradle shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 50% of its outside diameter with a minimum thickness of 6 inches. Where a concrete cradle is not needed for structural reasons, flowable fill may be used as described in the "Structure Backfill" section of this standard. Gravel bedding is not permitted.

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 bedding shall be placed under the pipe and the pipe shall be 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 4 feet from the riser.

4. Backfilling shall conform to "Structure Backfill".

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Plastic Pipe - The following criteria shall apply for plastic pipe:

1. Materials - PVC pipe shall be PVC-1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241. Corrugated High Density Polyethylene (HDPE) pipe, couplings and fittings shall conform to the following: 4" - 10" inch pipe shall meet the requirements of AASHTO M252 Type S, and 12" through 24" inch shall meet the requirements of AASHTO M294 Type S.

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 "Structure Backfill".

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Drainage Diaphragms - When a drainage diaphragm is used, a registered professional engineer will supervise the design and construction inspection.

Concrete

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

Rock Riprap

Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 311.

Geotextile shall be placed under all riprap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 921.09, Class C.

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 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 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 sumps from which the water shall be pumped.

Stabilization

All borrow areas shall be graded to provide proper drainage and left in a suitable 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 Natural Resource Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

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.

OPERATION AND MAINTENANCE

An operation and maintenance plan in accordance with Local or State Regulations will be prepared for all ponds. As a minimum, the dam inspection checklist located in Appendix A shall be included as part of the operation and maintenance plan and performed at least annually. Written records of maintenance and major repairs needs to be retained in a file. The issuance of a Maintenance and Repair Permit for any repairs or maintenance that involves the modification of the dam or spillway from its original design and specifications is required. A permit is also required for any repairs or reconstruction that involve a substantial portion of the structure. All indicated repairs are to be made as soon as practical.

STORMWATER MANAGEMENT FACILITY OPERATIONS AND MAINTENANCE GUIDELINES

Operations:

- Owner shall keep accurate records of inspections and maintenance type repairs. These records should also include a copy of the "as-built" plans and small pond summary sheet.
- Owner shall make a visual inspection of the facility at least twice a year. Once in the summer after the facility has been mowed and during the winter when the vegetation is inactive. Additional inspections shall be made during and after extreme rainfalls.
- During the extreme weather or rainfall events, the owner shall check for overtopping, seepage, or dam failure. In order to avoid overtopping, either place sandbags on top of the embankment or lower the water elevation by using a dewatering device.
- If a severe problem develops, the owner shall contact a Professional Engineer to assess the problem and make a suggestion to remedy the situation. The Howard Soil Conservation District or Maryland Dam Safety Division shall be contacted before major repairs are made.

Maintenance

During the semi-annual visual inspections, the following items must be checked and documented by the owner:

- Spillways and Outlet Device
 - Pipes - check for sagging, misalignment, gaps at joints, cracks, leaks, and wear along inside surface of pipes. Also remove any blockages.
 - Trash Racks - inspect and replace if necessary. Actual time for removal of trash racks should be limited. Trash racks shall be pointed once a year.
 - Concrete Surfaces - check for cracks or any other signs of failure.
 - Forebay and Spillway - check for stone & wire mesh deterioration or loss and spillway failure.
 - Rip Rap Outlet - check for stone deterioration or stone loss.
 - Dewatering Device - remove blockages.
- Embankments
 - Vegetation - proper vegetative cover is required on all embankments. The owner shall follow proper seeding specifications for reseeding.
 - Trees and Brush - trees and brush shall be removed from the embankment. Stumps can be removed using silvicide.
 - Mowing - mowing is necessary to control the establishment of woody growth and to maintain the vegetative cover. The embankment, a 25-foot wide (except in wetland/stream buffers) strip adjacent to the toe, upstream and downstream of the embankment, and the area within 50 feet of the control structures need to be mowed. Mowing shall be done at least once a year (mid to late summer) but may be done more often.
 - Seepage - the following warning signs should be looked for when inspecting for seepage problems: cracks (longitudinal and vertical), soft spots or boggy areas on downstream embankment, seepage along downstream toe of embankment.
 - Stability - large cracks, slides, sloughing and excessive settlement are signs of embankment instability and a need for repair. Repairs must be approved by Howard Soil Conservation District.
 - Rodents - check for burrows, which can lead to seepage, and remove rodents when encountered.

PENNINGMAN & BROWNE, INC.		BORING LOG	
CLIENT: Howard County Public Schools		DATE: 6-28-00	
PROJECT: Alternative Learning Center		LOCATION: See Plans	
BORING NO.: SWM-1		TOTAL DEPTH: 20 feet	ELEVATION: 467
TYPE OF BORING: HSA	STARTED: 6-19-00	COMPLETED: 6-19-00	DRILLER: EBA
DEPTH	DESCRIPTION OF MATERIAL	SAMPLE BLOW	SAMPLE DEPTH
4	4 - Inches Topsoil		
5	Reddish brown, moist, fine sandy SILT, (SM)	4-5.5	2.5
462	USDA Texture - Loam	10-7.7	5.0
		9-14-16	7.5
457	Brown, moist, micaceous silty SAND, medium dense (SM)	9-8.9	10.0
452	USDA Texture - Sandy Loam	6-8-10	15.0
447	Bottom of hole @ 20 feet Cured to 12.5% @ completion Water at 11" @ 24 hrs.	2-5-10	20.0
25			
30			

PENNINGMAN & BROWNE, INC.		BORING LOG	
CLIENT: Howard County Public Schools		DATE: 6-28-00	
PROJECT: Alternative Learning Center		LOCATION: See Plans	
BORING NO.: SWM-2		TOTAL DEPTH: 20 feet	ELEVATION: 463
TYPE OF BORING: HSA	STARTED: 6-19-00	COMPLETED: 6-19-00	DRILLER: EBA
DEPTH	DESCRIPTION OF MATERIAL	SAMPLE BLOW	SAMPLE DEPTH
4	4 - Inches Topsoil		
458	Dark brown, dry, silty SAND, with organic, (SO) - possible fill	8-10-8	2.5
	USDA Texture - Loam	3-4-10	5.0
	Brown, moist, micaceous silty SAND, medium dense to loose (SM)	3-4-5	7.5
453	USDA Texture - Silty Loam	1-2-3	10.0
	Brown, moist, micaceous silty SAND, medium dense (SM)	5-8-11	15.0
448	USDA Texture - Sandy Loam	5-4-4	20.0
443	Bottom of hole @ 20 feet Cured to 12.5% @ completion Water at 11" @ 24 hrs.		
25			
30			

PENNINGMAN & BROWNE, INC.		BORING LOG	
CLIENT: Howard County Public Schools		DATE: 6-28-00	
PROJECT: Alternative Learning Center		LOCATION: See Plans	
BORING NO.: SWM-3		TOTAL DEPTH: 20 feet	ELEVATION: 465
TYPE OF BORING: HSA	STARTED: 6-19-00	COMPLETED: 6-19-00	DRILLER: EBA
DEPTH	DESCRIPTION OF MATERIAL	SAMPLE BLOW	SAMPLE DEPTH
12	12 - Inches Topsoil		
460	Dark brown, moist, silty SAND, medium dense (SM)	5-7-8	2.5
	USDA Texture - Loam	6-10-9	5.0
	Brown, moist, micaceous silty SAND, medium dense (SM)	4-6-7	7.5
455	Light brown, moist, fine to coarse, silty SAND, loose to medium dense (SM)	8-8-9	10.0
450	USDA Texture - Sandy Loam	2-5-5	15.0
445	Bottom of hole @ 20 feet Cured to 12.5% @ completion Water at 11" @ 24 hrs.	4-5-5	20.0
25			
30			

PENNINGMAN & BROWNE, INC.		BORING LOG	
CLIENT: Howard County Public Schools		DATE: 6-28-00	
PROJECT: Alternative Learning Center		LOCATION: See Plans	
BORING NO.: SWM-4		TOTAL DEPTH: 20 feet	ELEVATION: 470
TYPE OF BORING: HSA	STARTED: 6-19-00	COMPLETED: 6-19-00	DRILLER: EBA
DEPTH	DESCRIPTION OF MATERIAL	SAMPLE BLOW	SAMPLE DEPTH
4	4 - Inches Topsoil		
465	Reddish brown, moist, micaceous silty SAND, very loose (SL)	2-1-2	2.5
	USDA Texture - Sandy Loam	1-2-1	5.0
	Brown to reddish brown, saturated, silty SAND, very loose (SL)	5-3-3	7.5
460	USDA Texture - Clay Loam	3-3-3	10.0
455	Light brown, saturated, clayey SAND, with silt, medium dense (SC)	3-4-5	15.0
450	USDA Texture - Sandy Clay Loam	6-4-7	20.0
25			
30			

NOTE: POND CONSTRUCTION SPECS. REFER TO SWM POND FOR THE ALTERNATIVE LEARNING CENTER POND/BASIN ONLY; REFER TO PROJECT SPECIFICATIONS FOR GRADING AND CONCRETE SPECIFICATIONS FOR THE REST OF THE SITE. ANY TREES, BRUSH, STUMPS AND GRUBBED MATERIAL CLEARED FOR THE SWM POND SHALL BE REMOVED FROM THIS SITE TO A LEGAL DUMP SITE.

These Plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

[Signature] 5/29/01
Howard Soil Conservation District Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

[Signature] 5/29/01
Natural Resources Conservation Service Date

DEVELOPER'S/BUILDER'S CERTIFICATE

"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 Maryland 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 a copy of the "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

[Signature] 5/18/01
Signature of Developer/Builder Date

ENGINEER'S CERTIFICATE

"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] 5/18/01
Date



NOTE: In addition to the Howard County Standard Specifications, and those on this sheet, the construction of the Stormwater Management facility shall be in accordance with the recommendations contained in the Subsurface Exploration and Geotechnical Evaluation report by Penningman & Browne, Inc., dated 6-30-00. If a provision of the report conflict with Howard County's specifications or those on this sheet in any way, the more stringent requirement shall apply. The private geotechnical engineer hired by the Howard County Board of Education shall be on the site to observe all Stormwater management construction and to provide testing and approvals where needed for proper implementation of the plans and specifications and to provide information for future as-builts.

BID & CONSTRUCTION 01 FEBRUARY, 2001

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
[Signature] 6/7/01
 Director Date
[Signature] 6/7/01
 Chief, Division of Land-Development Date
[Signature] 5/29/01
 Chief, Development Engineering Division Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 FAX: 410-880-1820 DC/VA: 301-588-2524 FAX: 301-421-4186
 CADD/DRAWINGS/00066/DESIGN/SWM/00066wb.dwg DES. DRN. CHK. DATE REVISION BY APPR.

DATE	REVISION	BY	APPR.

ARCHITECT THOMAS CLARK ASSOC.'S ARCHITECTS 2661 RIVA ROAD, SUITE 120 ANNAPOLIS, MD 21401 TEL: 301-261-8700
 OWNER HOWARD COUNTY PUBLIC SCHOOL SYSTEM 18910 ROUTE 108 ELICOTT CITY, MD 21043 ATTN: MS. CATHEEN YOUNG TEL: 410-313-6704

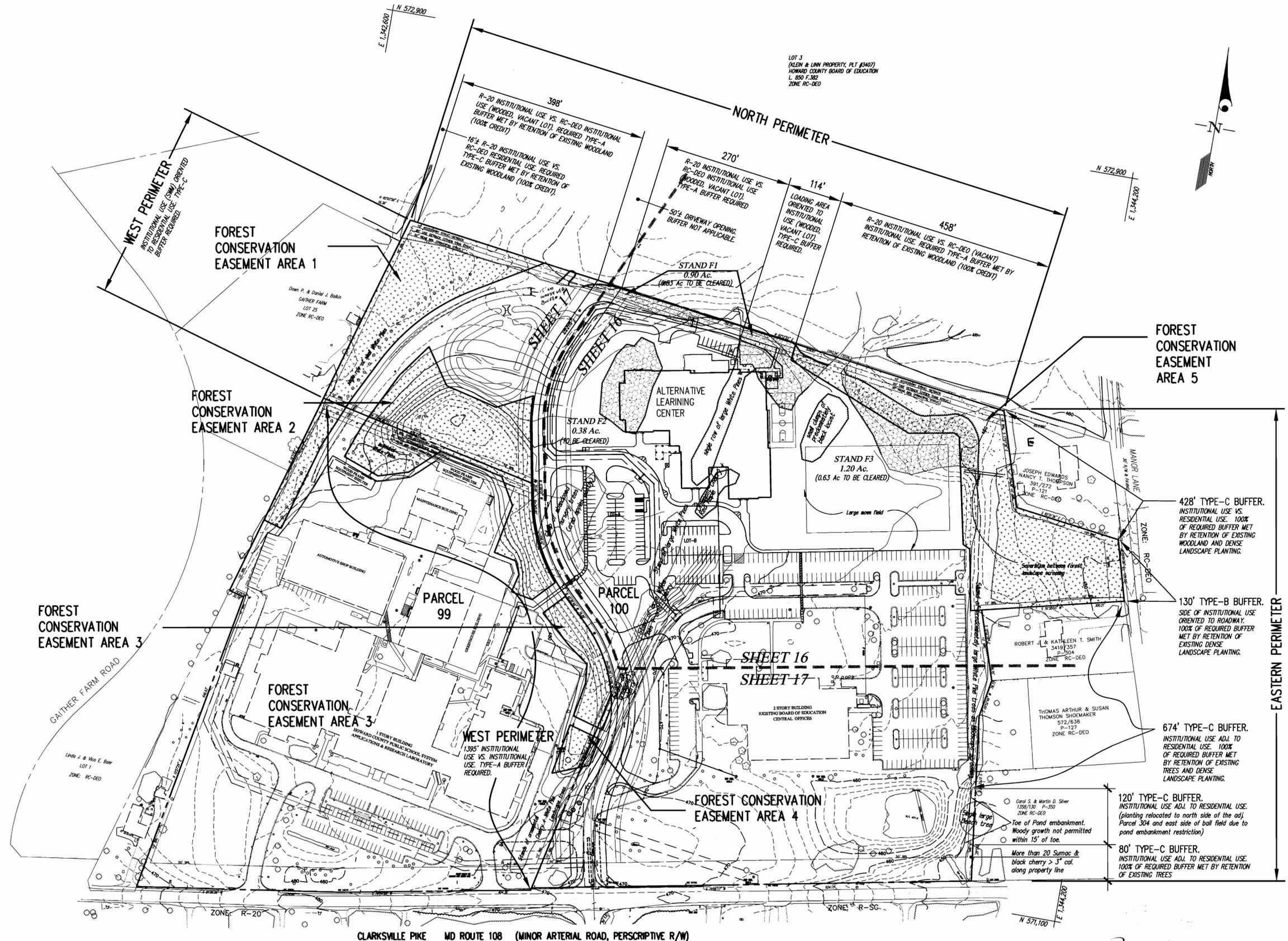
STORMWATER MANAGEMENT SPECIFICATIONS & BORING LOGS
 ALTERNATIVE LEARNING CENTER
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 L. 465 @ F. 577 (PARCEL 99), L. 750 @ F. 528 (PARCEL 100)
 WEST FRIENDSHIP ELECTION DISTRICT No. 3
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	R-20	00066
DATE	TAX MAP - GRID	SHEET
18/MAY/01	29 - 11	14 of 20

FOREST CONSERVATION LEGEND

- EXISTING TREE LINE
- PROPOSED TREE LINE
- LIMIT OF DISTURBANCE (LOD)
- FOREST PLANTING
- FOREST RETENTION AREA
- TREE PROTECTION FENCE (along LOD)
- FOREST CLEARING AREA
- FOREST CONSERVATION ESMT AREA
- FOREST CONSERVATION SIGNAGE
- REFORESTATION AREA

NOTE:
NO DEVELOPMENT EXPANSION OF THE EXISTING BUILDING, LOADING AREA OR PARKING LOT ON PARCEL 99 IS PROPOSED BY THIS SDP. THEREFORE, LANDSCAPING OF THE EXISTING FACILITY ON PARCEL 100 IS NOT APPLICABLE (CHAPTER II, HOWARD COUNTY LANDSCAPE MANUAL); HOWEVER, VOLUNTARY LANDSCAPE PLANTING IS PROMOTED.



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *[Signature]* Date: 6/7/01

Chief, Division of Land Development: *[Signature]* Date: 6/7/01

Chief, Development Engineering Division: *[Signature]* Date: 5/31/01

CLARKSVILLE PIKE MD ROUTE 108 (MINOR ARTERIAL ROAD, PERSCRIPTIVE R/W)

[Signature]

BID & CONSTRUCTION 01 FEBRUARY, 2001

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3900 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BAL: 410-880-1820 DC/Vac: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.

PREPARED FOR:

HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 MARYLAND ROUTE 108
ELICOTT CITY, MARYLAND 21042
ATTN: CATHLEEN YOUNG

THOMAS CLARK ASSOC.
2661 RIVA ROAD, SUITE 120
ANNAPOLIS, MD 21401
301-261-8700

LANDSCAPE EDGE ANALYSIS & FOREST CONSERVATION OVERVIEW

HOWARD COUNTY SCHOOL SYSTEM
ALTERNATIVE LEARNING CENTER
L. 465 @ F. 577 (PARCEL 99), L. 750 @ F. 528 (PARCEL 100)

WEST FRIENDSHIP ELECTION DISTRICT No.3

HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=100'	R-20	00066
DATE	TAX MAP - GRID	SHEET
18/MAY/01	29-11	15 of 20

THIS PLAN IS FOR PLANTING PURPOSES ONLY!!

LEGEND

- EXISTING TREE LINE
- PROPOSED TREE LINE
- FOREST CONSERVATION ESMT AREA
- FOREST PLANTING
- FOREST RETENTION AREA
- EX. FOREST TO BE CLEARED
- LIMIT OF DISTURBANCE (LOD)
- TREE PROTECTION FENCE (along LOD)
- FOREST CONSERVATION SIGNAGE

FOREST CONSERVATION EASEMENT AREA #5
 2.53 ACRES
 0.57 AC. OF RETENTION
 1.96 AC. OF PLANTING

JOSEPH EDWARDS
 NANCY T. THOMPSON
 391/272
 P-121
 ZONE RC-DEO

ROBERT J. & KATHLEEN T. SMITH
 3419/357
 P-304
 ZONE RC-DEO

SEE SHEET 17 FOR CONTINUATION OF PARCEL 100 ON THE WEST SIDE OF ROAD CENTER LINE.

SEE SHEET 17 FOR CONTINUATION ON THE SOUTH SIDE OF THIS LINE.

NOTE:
 THE EXISTING TOPO AND TREELINE CONDITION SHOWN ON THIS PLAN ARE PRIOR TO ANY "GP-PLAN" GRADING WORK.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

[Signature] Director Date 6/7/01
[Signature] Chief, Division of Land Development Date 6/2/01
[Signature] Chief, Development Engineering Division Date 5/31/01

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK
 BURTNSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BAL: 410-980-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

ARCHITECT
THOMAS CLARK ASSOC.
 2661 RIVA ROAD, SUITE 120
 ANNAPOLIS, MD 21401
 301-261-8700

OWNER
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 MARYLAND ROUTE 108
 ELLICOTT CITY, MARYLAND 21042
 ATTN: CATHEEN YOUNG
 410-313-6704

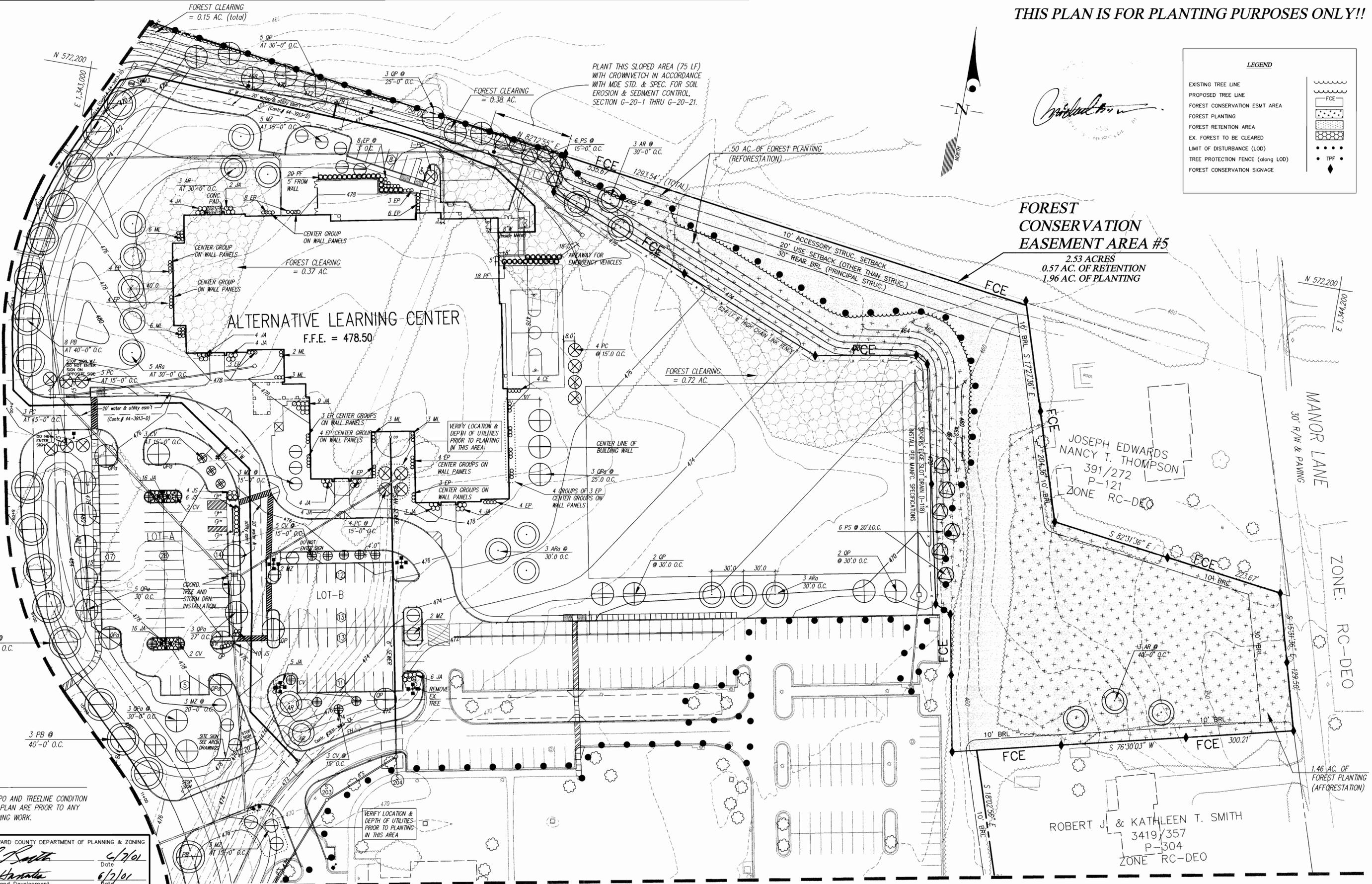
LANDSCAPE & FOREST CONSERVATION PLANTING PLAN

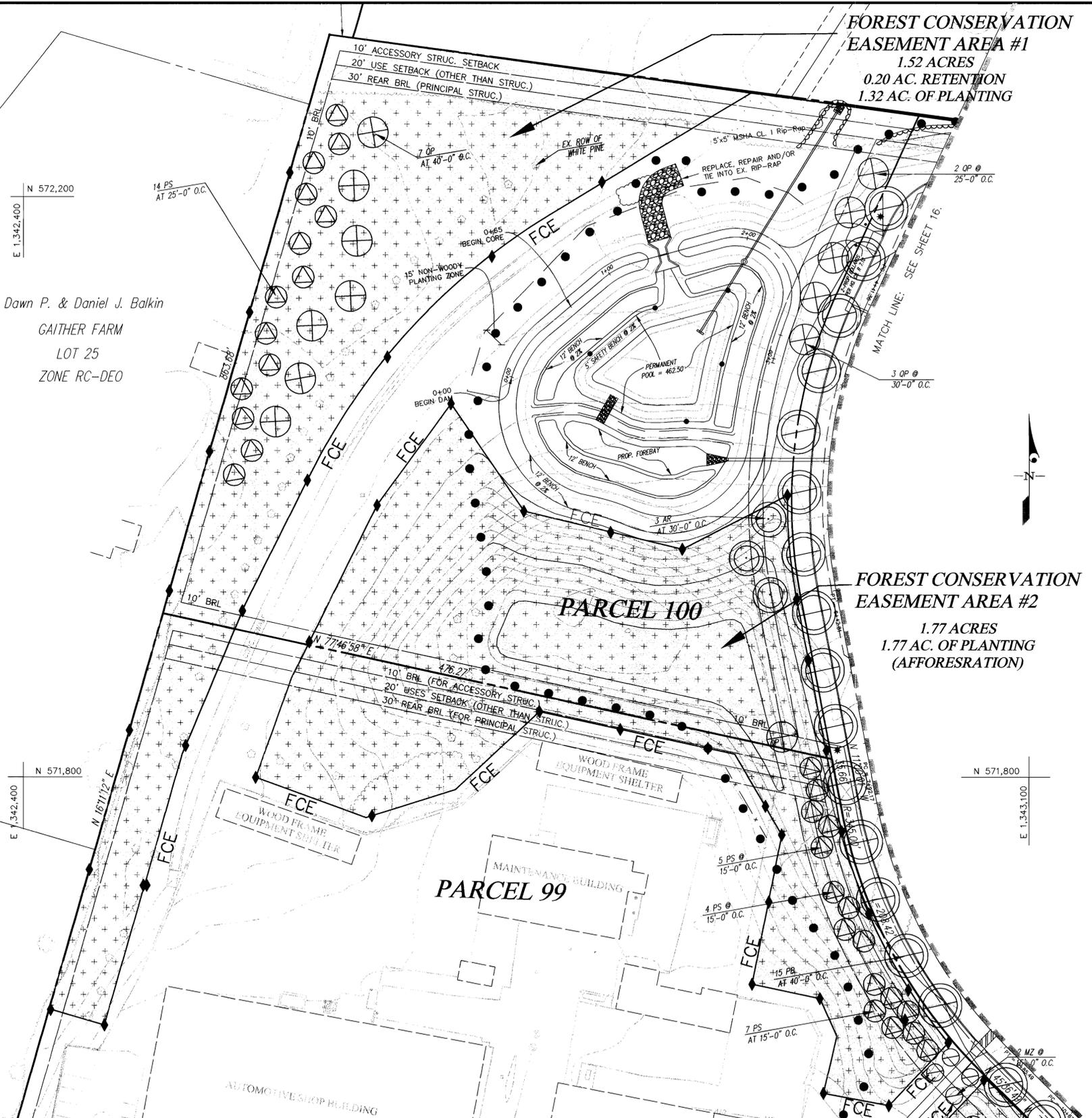
HOWARD COUNTY SCHOOL SYSTEM
ALTERNATIVE LEARNING CENTER
 L. 465 @ F. 577 (PARCEL 99), L. 750 @ F. 528 (PARCEL 100)

SCALE	ZONING	G. L. W. FILE NO.
1" = 40'	R-20	00066
DATE	TAX MAP - GRID	SHEET
18/MAY/01	29-11	16 of 20

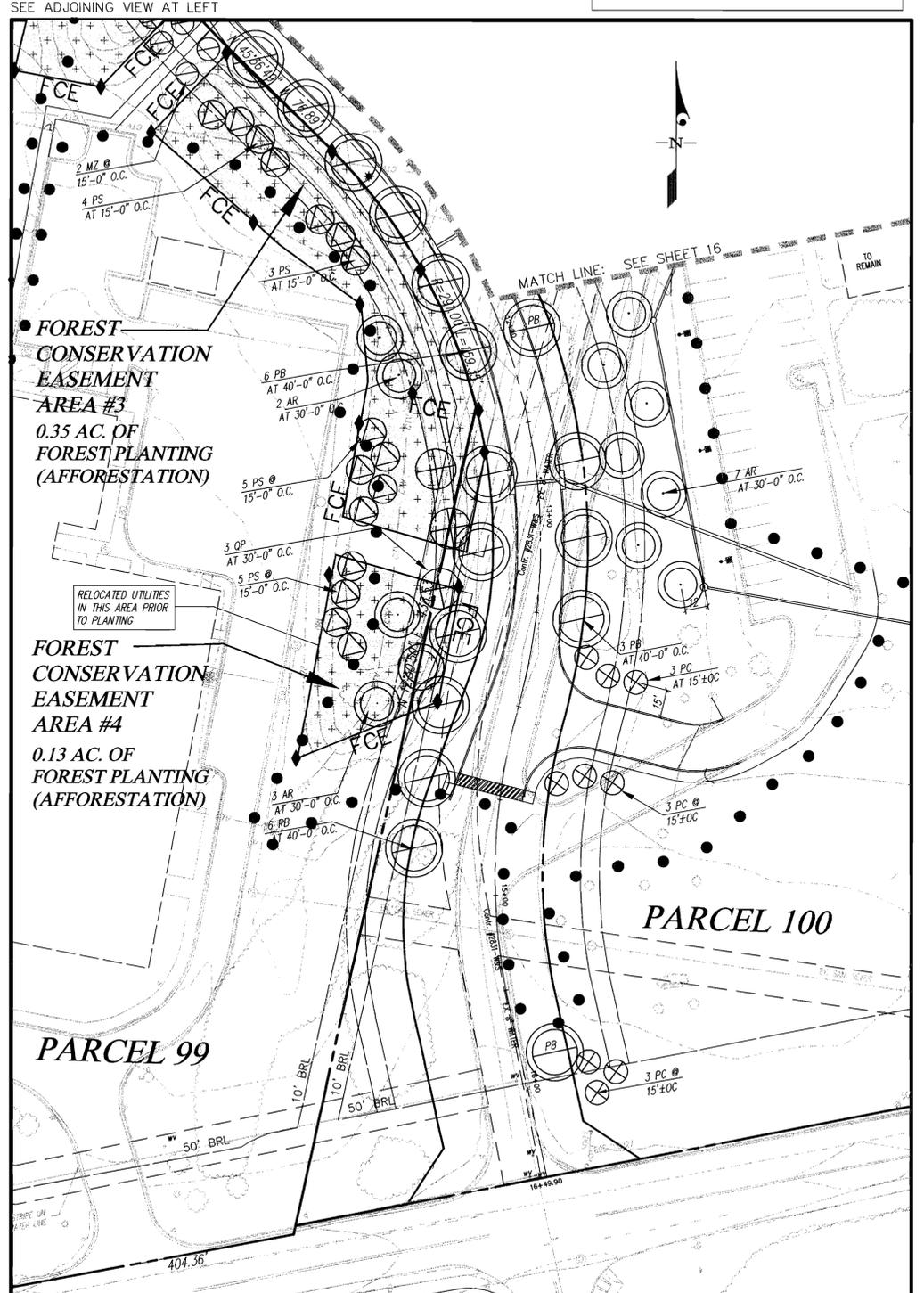
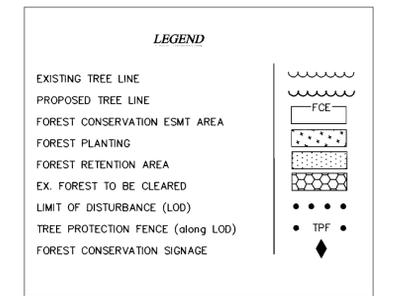
00066FC1.dwg 5-18-01 3:38:05 pm EST

DES.	DRN.	CHK.	DATE	REVISION	BY	APP.
			4-12-01	ADDED 5-QP's and 6-PS's along north boundary		





THIS PLAN IS FOR PLANTING PURPOSES ONLY!!



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Director: *[Signature]* Date: 6/7/01
 Chief, Division of Land Development: *[Signature]* Date: 6/7/01
 Chief, Development Engineering Division: *[Signature]* Date: 5/31/01

WEST SIDE OF PARCELS 99 & 100 SEE ADJOINING VIEW AT RIGHT

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

NO.	DATE	REVISION	BY	APP'R.

ARCHITECT: THOMAS CLARK ASSOC. 2681 RIVA ROAD, SUITE 120 ANNAPOLIS, MD 21401 301-261-8700
 OWNER: HOWARD COUNTY PUBLIC SCHOOL SYSTEM 10910 MARYLAND ROUTE 108 ELLICOTT CITY, MARYLAND 21042 ATTN: CATHEEN YOUNG 410-313-8704

LANDSCAPE & FOREST CONSERVATION PLANTING PLAN
 HOWARD COUNTY SCHOOL SYSTEM
 ALTERNATIVE LEARNING CENTER
 L. 465 @ F. 557 (PARCEL 99), L. 750 @ F. 528 (PARCEL 100)
 WEST FRIENDSHIP ELECTION DISTRICT No. 3 HOWARD COUNTY, MARYLAND

SCALE: 1"=40'	ZONING: R-20	G. L. W. FILE No.: 00066
DATE: 18/MAY/01	TAX MAP - GRID: 29 - 11	SHEET: 17 OF 20

PLAN LEGEND

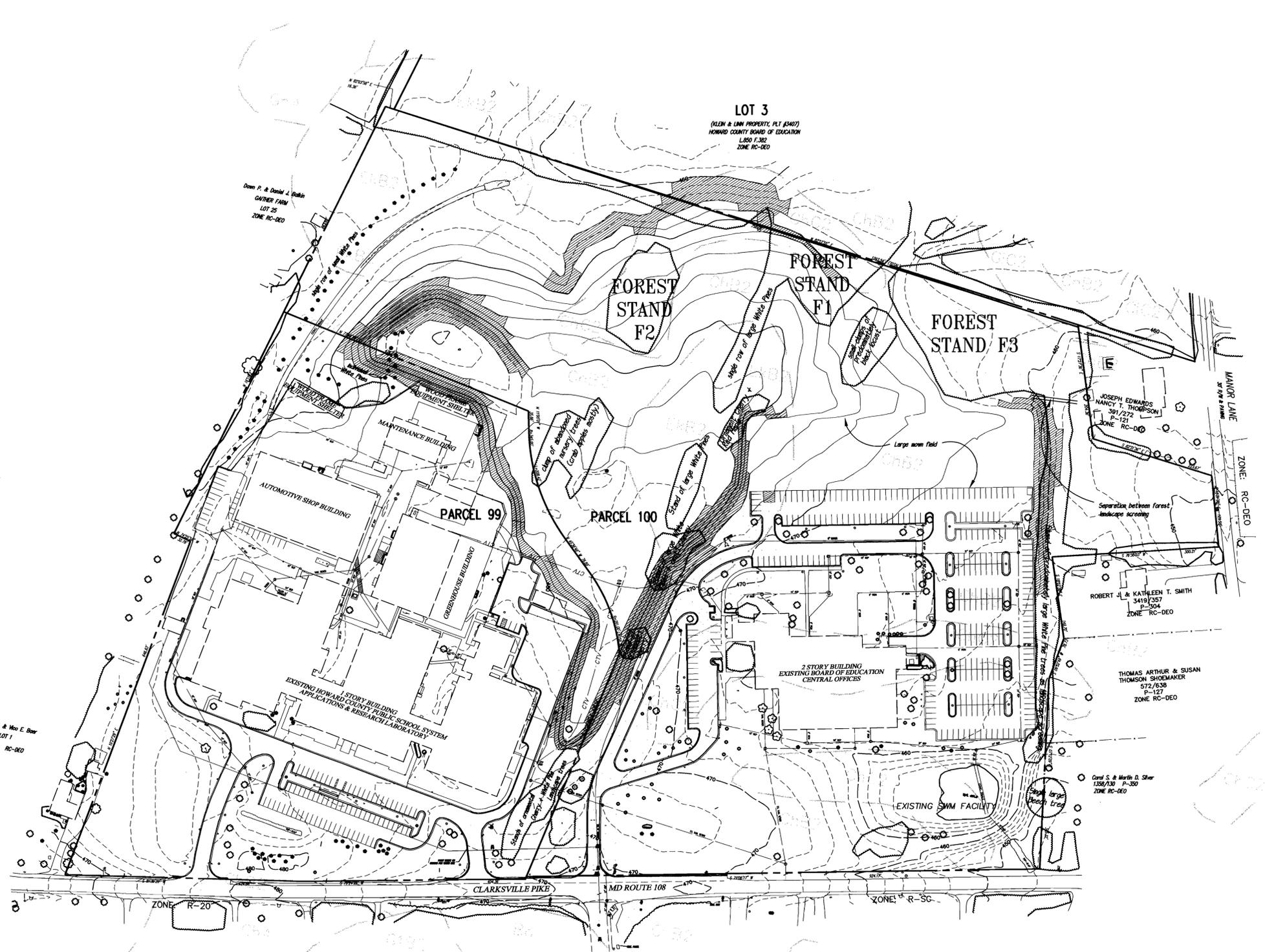
- EXISTING CONTOUR..... ---322---
- EXISTING CURB LINE..... ————
- EXISTING WATER LINE..... ————
- EXISTING SEWER LINE..... ————
- EXISTING STORM DRAIN LINE..... ————
- EXISTING TREE & TREE LINE..... ————
- EX-UTILITY POLE..... ————
- FENCE LINE..... ————
- SLOPES 15%-25%..... ————
- SLOPES 25% OR GREATER..... ————
- SOIL SYMBOL..... ————
- SOIL DELINEATION..... ————
- EXISTING FOREST..... ————
- EXISTING LANDSCAPING OR TREE STAND (NOT FOREST)..... ————

SOIL LEGEND

- ChB2 CHESTER SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED.
- ChC2 CHESTER SILT LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED.
- GIB2 GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED.

FOREST STAND DESCRIPTION

- F1: YOUNG, UPLAND FOREST. INTERIOR TREES ARE PREDOMINATELY BLACK LOCUST & CHERRY. THE PERIMETER IS PREDOMINATELY SUMAC, MULBERRY AND MULTIFLORA ROSE. AVERAGE 4-6" DBH. AREA: 0.86± ac.
- F2: AREA: 0.37 ac. MIXED UPLAND STAND OF OAKS, TULIP POPLAR, SWEETGUM AND CHERRY. AVERAGE 5-6" DBH.
- F3: AREA: 1.19 ac. YOUNG UPLAND FOREST CONSISTING OF SMALL TULIP POPLAR, SILVER MAPLE, AND CHERRY. AVERAGE 4-6" DBH.



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *[Signature]* Date: 4/7/01

Chief, Division of Land Development: *[Signature]* Date: 6/7/01

Chief, Development Engineering Division: *[Signature]* Date: 5/31/01

STATE OF MARYLAND
[Signature]

BID & CONSTRUCTION
 01 FEBRUARY, 2001

GLW GUTSCHICK LITTLE & WEBER, P.A. CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MARYLAND 20886 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-988-2524 FAX: 301-421-4186		ARCHITECT		OWNER		FOREST STAND DELINEATION & EXISTING CONDITIONS ALTERNATIVE LEARNING CENTER HOWARD COUNTY PUBLIC SCHOOL SYSTEM L. 465 @ F. 577 (PARCEL 99), L. 750 @ F. 528 (PARCEL 100)			SCALE	ZONING	G. L. W. FILE No.
		THOMAS CLARK ASSOC.'S ARCHITECTS 2661 RIVA ROAD, SUITE 120 ANNAPOLIS, MD 21401 TEL: 301-261-8700		HOWARD COUNTY PUBLIC SCHOOL SYSTEM 10910 ROUTE 108 ELLICOTT CITY, MD 21043 ATTN: MS. CATHLEEN YOUNG TEL: 410-313-6704					1"=100'	R-20	00066
DRAWINGS\00066\DESIGN\FSD\0066FSD.DWG		DES.	DRN.LMM	CHK.	DATE	REVISION	BY	APP'R.	DATE	TAX MAP - GRID	SHEET
									18/MAY/01	29-11	18 OF 20

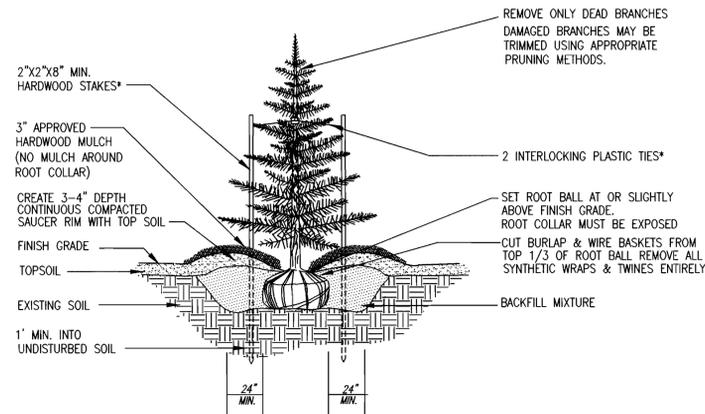
SCHEDULE-A: PERIMETER LANDSCAPE EDGE							
PERIMETER	WEST*	NORTH			EAST		
USE SITUATION	instln': instln'	instln': instln'	instln': residential	loading: instln'	instln': residential	instln': roadway	
LANDSCAPE BUFFER TYPE	Type-A	Type-A	Type-C	Type-C	Type-C	Type-B	
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	1395 L.F.	1126 L.F.	16 L.F.	114 L.F.	1302 L.F.	130 L.F.	
CREDIT FOR EXISTING VEGETATION	Yes, 6 trees	Yes, 856' of existing woodland retention	Yes, 100% for existing woodland retention	n/a	Yes, 1180' of retention of ex. woodland & landscape planting	Yes, 100% for existing landscape planting	
CREDIT FOR WALL, FENCE OR BERM	n/a	n/a	n/a	n/a	n/a	n/a	
NUMBER OF PLANTS REQUIRED							
SHADE TREES	17 (23 less 6 credit)	5 (for 270' @ 1:60)	n/a	3	(for 120 L.F.)	n/a	
EVERGREEN TREES	n/a	n/a	n/a	6	3		
SHRUBS	n/a	n/a	n/a	n/a	6		
NUMBER OF PLANTS PROVIDED							
SHADE TREES	over 17 shade trees plus additional (voluntary) planting on parcel 100	5 shade trees	n/a	3 shade trees	(relocated**) 3 shade trees	n/a	
EVERGREEN TREES		n/a	n/a	6 evergreen trees	6 evergreen trees		
OTHER TREES (@ 2:1 substitution)		n/a	n/a	n/a	n/a		
SHRUBS (@ 10:1 substitution)		n/a	n/a	n/a	n/a		

*SEE SCHEDULE-D FOR SWM PERIMETER ADJ. TO RESIDENTIAL.

** These plantings are relocated along the east perimeter due to the existing pond embankment restriction (see sheet #15)

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
NUMBER OF PARKING SPACES	92 CAR SPACES
NUMBER OF TREES REQUIRED @ 1:20	5
NUMBER OF TREES PROVIDED	
SHADE TREES	MORE THAN 5
OTHER TREES (2:1 SUBSTITUTION)	

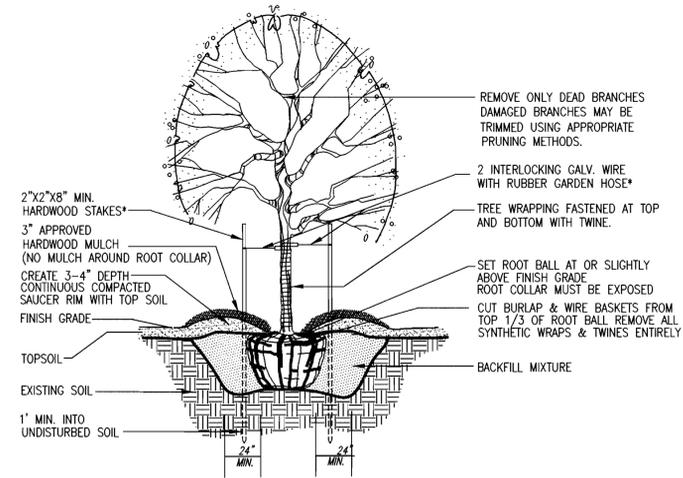
SCHEDULE-D STORMWATER MANAGEMENT AREA LANDSCAPING	
LINEAR FEET OF PERIMETER	415'
LANDSCAPE BUFFER TYPE	TYPE-C
CREDIT FOR EXISTING VEGETATION	YES, 20 trees (W. Pines)
NUMBER OF PLANTS REQUIRED	
SHADE TREES	10 shade trees
EVERGREEN TREES	21 evergreen trees
NUMBER OF PLANTS PROVIDED	
SHADE TREES	7 shade trees
EVERGREEN TREES	34 evergreen trees (20 existing + 14 new excess to be credited toward 3 shade trees)



* TO BE REMOVED BY OWNER AFTER 2 GROWING SEASONS.

EVERGREEN TREE PLANTING DETAIL

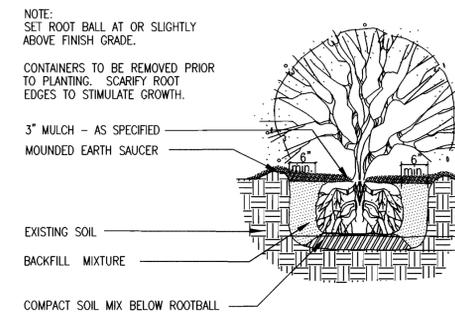
NTS



* TO BE REMOVED BY OWNER AFTER 2 GROWING SEASONS.

DECIDUOUS TREE PLANTING DETAIL

NTS



SHRUB PLANTING DETAIL

NTS

PLANT LIST						
KEY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE & CONDITION	REMARKS	QUANTITY
ARa	⊙	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY MAPLE	3"-3 1/2" CAL. B&B	30' O.C. U.O.N.	8
AR	⊙	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY MAPLE	2 1/2"-3" CAL. B&B	30' O.C. U.O.N.	29
QPa	⊕	QUERCUS PALUSTRIS	PIN OAK	3"-3 1/2" CAL. B&B	MIN. 25' O.C.	19
QP	⊕	QUERCUS PALUSTRIS	PIN OAK	2 1/2"-3" CAL. B&B	MIN. 25' O.C.	30
PB	⊖	PLATANUS ACERIFOLIA 'BLOODGOOD'	LONDON PLANE TREE	2 1/2"-3" CAL. B&B	MIN. 40' O.C.	49
PS	⊖	PINUS STROBUS	WHITE PINE	10-12" HT. B&B	MIN. 20' O.C.	58
CV	⊕	CRATAEGUS VIRIDUS 'WINTER KING'	WINTER KING HAWTHORN	1"-1 1/2" CAL. B&B	MATCHED IN GROUPS	16
MZ	⊖	MALUS ZUMI 'CALOCARPA'	ZUMI CRABAPPLE	1"-1 1/2" CAL. B&B	MATCHED IN GROUPS	22
PC	⊕	PRUNUS CERASIFERA 'THUNDERCLOUD'	PURPLELEAF FLOWERING PLUM	1"-1 1/2" CAL. B&B	MATCHED IN GROUPS	24
PF	⊙	PHOTINIA FRASERI	FRASER'S PHOTINIA	36"-42" CONT.	AT 5'-0" O.C. & 5'-0" FROM WALL	38
CE	⊙	ALATUS COMPACTUS	DWARF-WINGED EUONYMUS	30"-36" CONT.	AT 3'-0" O.C. & 3'-6" FROM WALL	4
EP	⊙	EUONYMUS PATENS PAULI	PAULI EUONYMUS	30"-36" CONT.	AT 3'-0" O.C. & 3'-0" FROM WALL	70
JA	⊙	JUNIPERUS ANDORRA	ANDORRA JUNIPER	18"-24" CONT.	AT 4'-6" O.C.	81
JS	⊙	JUNIPERUS CHINENSIS 'SARGENTI'	SARGENT'S JUNIPER	18"-24" CONT.	AT 4'-6" O.C.	20
ML	⊙	PRUNUS LAUROCERASUS	OTTO LUTKEN LAUREL	30"-36" CONT.	AT 3'-0" O.C.	23

U.O.N. = UNLESS OTHERWISE NOTED.

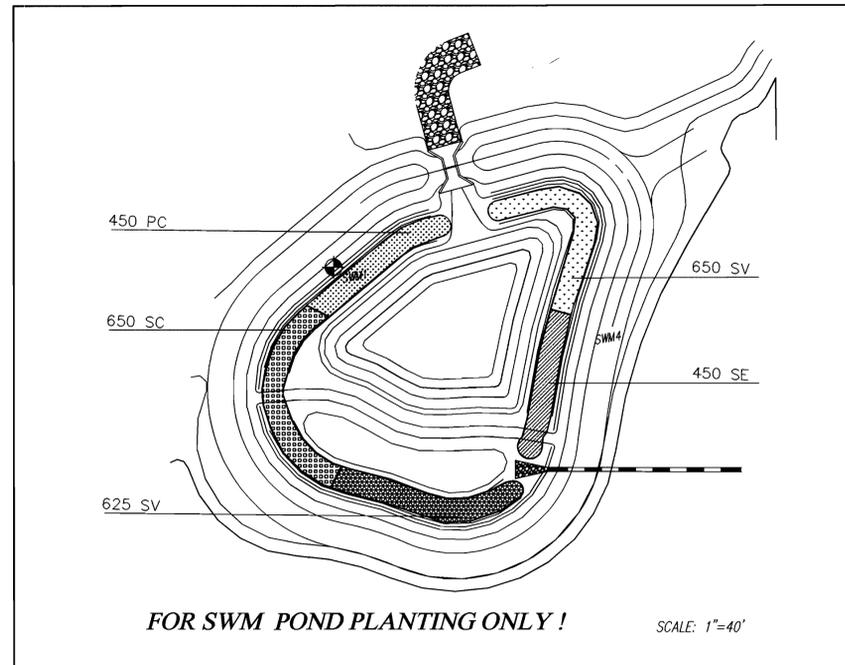
* INDICATES LOCATIONS WHERE CONTRACTOR MUST HAND DIG FOR NEW TREES AND SHRUBS AFTER VERIFYING LOCATIONS OF UTILITIES.

NOTES: 1. This plant list covers only the individual "landscape" plants shown on sheets 16 and 17. Also see the "FOREST CONSERVATION PLANT LIST" on sheet #20 for forestation planting.
2. ALL EXISTING TREES WITHIN THE L.O.D. ARE TO BE REMOVED. ALL TREES OUTSIDE THE L.O.D. ARE TO REMAIN.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *[Signature]* Date: 6/7/01
Chief, Division of Land Development: *[Signature]* Date: 6/5/01
Chief, Development Engineering Division: *[Signature]* Date: 5/31/01

NO LANDSCAPE SURETY IS REQUIRED FOR THIS PLAN BECAUSE IT IS A HOWARD COUNTY PUBLIC SCHOOL SYSTEM PROJECT.



LANDSCAPING NOTES

- This plan has been prepared in accordance with Section 16.124 of the Howard County Code and Chapter VI of the Howard County Landscape Manual.
- Contractor shall notify all utilities at least (5) five days before starting work. All General Notes, especially those regarding utilities, on Sheet 1 shall apply.
- Field verify underground utility locations and existing conditions before starting planting work. Contact construction manager if any relocations are required.
- Plant quantities shown on Plant List are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on the plan and those shown on the plant list, the quantities on the plan shall take precedence.
- All plant material shall be full, heavy, well formed, and symmetrical, and conform to the A.A.N. Specifications, and be installed in accordance with project specifications.
- No substitution shall be made without written consent of the owner or his representative.
- All areas disturbed by construction activities but not otherwise planted, paved, or mulched shall be seeded in accordance with project specifications.
- The contractor shall notify the owner in writing if he/she encounters soil drainage conditions which may be detrimental to the growth of the plants.
- All exposed earth within limits of planting beds shall be mulched with shredded hardwood mulch per Planting Details.

SWM POND PLANTING NOTES

- Upon conversion of sediment control pond to stormwater management pond, the contractor shall remove any stones, debris, or construction material larger than two inches (2") in any dimension. The ponds shall be flooded and left undisturbed for a period of 10 days prior to planting.
- One ounce of 18-6-25 slow release fertilizer shall be incorporated into the soil for each plant at the time of planting.
- Soil shall be saturated with water during and after planting, or the planting area may be completely flooded at this time (wet planting). Planting soil shall be firmly pressed around each to prevent flotation.
- The source of all aquatic and emergent plants shall be approved by the owner or landscape architect prior to ordering. These plants shall be grown in pots (container specified) or nursery growing beds (bare root specified) for a minimum of 12 months prior to installation and shall have been wet cultivated during the entire period.
- All plant material shall be guaranteed for a period of one year after substantial completion. Plants which have greater than 33% dieback or have not grown so as to emerge from the water surface shall be replaced at the next planting season.
- Remove litter and debris as required during the first growing season and at the beginning of the second growing season.

SWM POND PLANT LIST

KEY	QTY	NAME (COMMON/BOTANICAL)	REMARKS
PC	450	Pickereel Weed/ Pondederia cordata	Bare Root @ 18" O.C.±
SC	650	Lizards Tail/ Saururus cernuus	Bare Root @ 18" O.C.±
SE	450	Giant Bur-reed/ Sparganium eurycarpum	Bare Root @ 18" O.C.±
SV	1275	Soft Stem Bullrush/ Scirpus validus	Bare Root @ 18" O.C.±

BID & CONSTRUCTION
01 FEBRUARY, 2001

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BIRTONVILLE OFFICE PARK
BIRTONVILLE, MARYLAND 20856
TEL: 301-421-4024 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.
5-18-01	REV. SCHEDULE-A & PLANT LIST (added 3 'ARs', total of 29)		
4-12-01	REV. SCHEDULES & PLANT LIST		

ARCHITECT: THOMAS CLARK ASSOC.'S ARCHITECTS
2661 RIVA ROAD, SUITE 120 ANNAPOLIS, MD 21401
TEL: 301-261-8700

OWNER: HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 ROUTE 108 ELICOTT CITY, MD 21043
ATTN: CATHEEN YOUNG
TEL: 410-313-8704

PLANTING NOTES, SCHEDULES & DETAILS
ALTERNATIVE LEARNING CENTER
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
L. 465 @ F. 577 (PARCEL 99), L. 750 @ F. 528 (PARCEL 100)

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	R-20	00066
DATE	TAX MAP - GRID	SHEET
18/MAY/01	29 - 11	19 of 20

GENERAL NOTES

- This reforestation plan is provided in accordance with the requirements of Subtitle 12 "Forest Conservation" of the Howard County Code.
- Implementation of this plan must be performed by a contractor that is knowledgeable and experienced in afforestation/reforestation techniques and practices.
- The owner is responsible for a 2-year (min.) post-construction maintenance period which involves activities necessary to ensure survival and growth of the conservation area.

Two inspection per year by a qualified professional at beginning and end of the growing season, are recommended in order to take remedial steps as necessary. If, after one year, the possibility exists that the original planting will not meet survival rate standards, the applicant may choose to establish reinforcement plantings.
- The survival rate for any forest planting areas shall be a minimum of 100 trees per acre or at least 75% of the total number of trees planted per acre (whichever is greater).
- At the end of the post-construction management and protection period, certification by a qualified consultant will be required before to the owner can be released from his/her forest conservation obligation to the administrator of the Howard County Forest Conservation Program.
- To minimize soil erosion, all reforestation planting areas shall be in a stabilized condition (see Sediment Control Plan).
- The contractor is responsible for the location of any existing utilities. The repair of any utilities damaged by the contractor shall be at the contractor's expense.

CONSTRUCTION PERIOD PROTECTION PROGRAM

- The limit of forest retention and forest planting shall be staked and flagged.
- A pre-construction meeting at the site should be held to confirm the limits of clearing specified. The meeting should include the owner or the owner's representative, the on-site foreman in charge of land disturbance, the environmental consultant and the appropriate Howard County inspectors.
- Forest protection devices and signs (see details) shall be installed prior to any clearing or grading. The protection devices and signs shall be maintained during the entire construction period. None of the devices shall be anchored or attached in any way to the trees to be saved.
- Equipment, vehicles and building materials shall not be within the protected area. Activities strictly to implement any reforestation planting and maintenance (i.e. watering, fertilizing, thinning, pruning, removal of dead and diseased trees where necessary, etc.) of the conservation area are permitted. Clearing for the purpose of sodding or planting grass is not permitted within the forest conservation area once it's established.
- At the end of the construction period, the designated qualified professional shall convey to the administrator of the Howard County Forest Conservation Program certification that all forest retention areas have been preserved, all reforestation and/or afforestation plantings have been installed as required by the forest conservation plan, and that all protection measures required for the post-construction period have been installed.

Upon review of the final certification document for completeness and accuracy, the program coordinator will notify the owner of release from the construction period obligations. The 2-year (min.) post-construction management and protection period then commences.

FOREST CONSERVATION PROGRAM SEQUENCE

- OBTAIN ALL NECESSARY PERMITS.
- STAKEOUT LIMITS OF DISTURBANCE AND THE FOREST PLANTING AREAS.
- FIELD MEETING TO REVIEW AND VERIFY LIMIT OF DISTURBANCE FOR THE SCHOOL SITE GRADING AND CONSTRUCTION.
- INSTALL FOREST CONSERVATION SIGNS AND FOREST PROTECTION DEVICES (FENCES) ALONG THE PORTION OF THE LIMIT OF DISTURBANCE (THAT INVOLVES CLEARING AND/OR RETENTION OF TREES) PER THE "SEDIMENT CONTROL PLAN."
- PLANT FOREST CONSERVATION AREA #1 AND GRADE AREA FOR SCHOOL CONSTRUCTION AND COMMENCE SITE CONSTRUCTION.
- INSTALL FOREST PLANTING AND INSTALLED THE REMAINDER OF THE CONSERVATION SIGNS ALONG THE EDGE OF THE CONSERVATION EASEMENT. MOVE CONSERVATION SIGNS INSTANT IN #4 (ABOVE) TO THE EDGE OF THE CONSERVATION EASEMENT.
- INSPECTION AND CERTIFICATION FOR THE RELEASE OF THE CONSTRUCTION PERIOD OBLIGATIONS; START OF POST-CONSTRUCTION MANAGEMENT PERIOD.
- POST-CONSTRUCTION MANAGEMENT FOR A PERIOD OF 2 YEARS (MIN.).
- FINAL INSPECTION AND CERTIFICATION FOR THE RELEASE OF THE OWNER'S FOREST CONSERVATION OBLIGATION.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *[Signature]* Date: 6/2/01
 Chief, Division of Land Development: *[Signature]* Date: 6/2/01
 Chief, Development Engineering Division: *[Signature]* Date: 5/31/01

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK
 BURTNSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

5-18-01	Rev. Tabulation, Schedule & Plant List	DATE	REVISION	BY	APP'R
---------	--	------	----------	----	-------

ARCHITECT: THOMAS CLARK ASSOC.'S ARCHITECTS
 2661 RIVA ROAD, SUITE 120 ANNAPOLIS, MD 21401
 TEL: 301-261-8700

OWNER: HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 ROUTE 108 ELLICOTT CITY, MD 21043
 ATTN: CATHEEN YOUNG
 TEL: 410-313-6704

FOREST CONSERVATION NOTES, SCHEDULES & DETAILS

**HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 ALTERNATIVE LEARNING CENTER**
 L. 465 @ F. 577 (PARCEL 99), L. 750 @ F. 528 (PARCEL 100)

HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN	ZONING: R-20	G. L. W. FILE No.: 00066
DATE: 13/APR/01	TAX MAP - GRID: 29 - 11	SHEET: 20 of 20

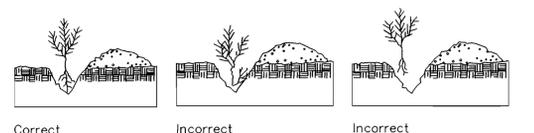
FOREST CONSERVATION WORKSHEET

	ACRES (1/10 acres)
I. BASIC SITE DATA	
GROSS SITE AREA (PARCEL 100)**	28.68
AREA WITHIN 100 YEAR FLOODPLAIN	0.00
AREA OF THE RESERVE R/W FROM RT 108 TO NORTHERN BOUNDARY OF PARCEL 100.	1.68
NET TRACT AREA	27.00
LAND USE CATEGORY:	INSTITUTIONAL
II. INFORMATION FOR CALCULATIONS	
A. NET TRACT AREA	27.00
B. REFORESTATION THRESHOLD (20% X A)	5.40
C. AFFORESTATION MINIMUM (15% X A)	4.05
D. EXISTING FOREST ON NET TRACT AREA	2.39
E. FOREST AREAS TO BE CLEARED	1.62
F. FOREST AREAS TO BE RETAINED	0.77
III. AFFORESTATION CALCULATIONS	
A. NET TRACT AREA	27.00
B. AFFORESTATION MINIMUM (15% X A)	4.05
C. EXISTING FOREST ON NET TRACT AREA	2.39
D. FOREST AREA ON NET TRACT TO BE CLEARED	1.62
E. FOREST AREA TO BE RETAINED	0.77
IV. REQUIRED FOREST PLANTING	
A. AFFORESTATION TO MEET 15% MINIMUM THRESHOLD (III B - III C)	1.66
B. REFORESTATION FOR CLEARING BELOW THRESHOLD (III D X 2)	3.24
C. TOTAL FOREST PLANTING REQUIRED	4.90
D. TOTAL CONSERVATION AREA REQUIRED (III E + IVC)	5.67
V. PROPOSED METHOD OF SATISFYING FOREST CONSERVATION OBLIGATIONS	
RETENTION OF EXISTING FOREST ON NET TRACT	0.77
FOREST PLANTING ON PARCEL 100 AND ON ADJACENT PARCEL 99.	5.53

****NOTE:**
 The adjacent Parcel 99 is exempt from the requirements of Section 16.1200 of the Howard Code for Forest Conservation because:
 1. The proposed work shown on Parcel 99 per this SDP is within the limits of disturbance from previous development work affecting Parcel 99 under SDP 85-01 and SDP-79-30.
 2. Parcel 99 is not subject to any previously approved forest conservation restriction/easement and the grading and development activity proposed on Parcel 100 under this SDP does not clear any forest.

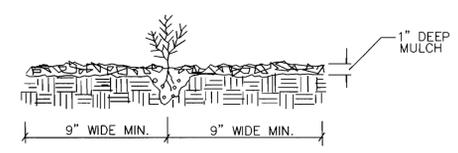
HANDLING AND PLANTING OF SEEDLING(4)

C. CORRECT AND INCORRECT PLANTING DEPTH



Correct: AT SAME DEPTH OR 1/2 DEEPER THAN SEEDLING GREW IN NURSERY
 Incorrect: TOO DEEP AND ROOT BENT
 Incorrect: TOO SHALLOW AND ROOTS EXPOSED

SEEDLING AND WHIP PLANTING SPECIFICATION



NOTE:
 Mulching newly planted seedlings helps the soil retain moisture and it protects the seedling from compaction and stem injuries.

SOURCE: adapted from the Maryland State FOREST CONSERVATION MANUAL

TREE PLANTING AND MAINTENANCE CALENDAR

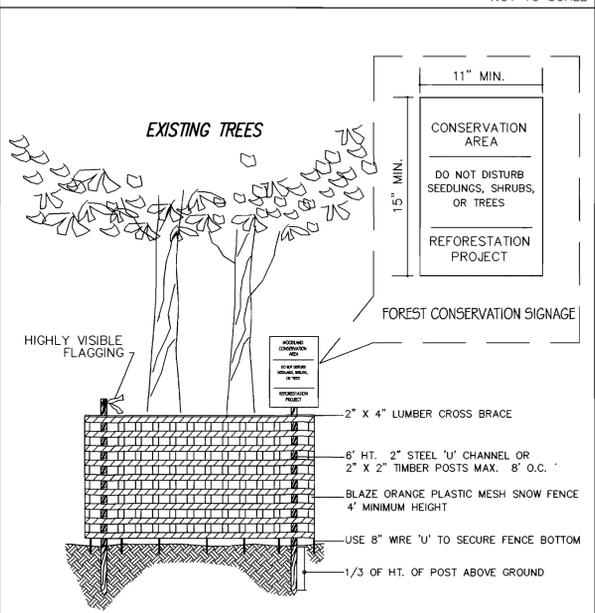
TASKS	MONTHS											
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
TRANSPLANT OF 2" DBH OR GREATER	[RECOMMENDED]											
PLANTING SEEDLINGS, WHIPS	[RECOMMENDED]											
MINIMUM MONITORING		*			*					*		
FERTILIZER + (IF NEEDED)	[RECOMMENDED]											
WATER ++	[RECOMMENDED]											
PRUNING												

KEY
 * ACTIVITIES DURING THESE MONTHS ARE DEPENDANT UPON GROUND CONDITIONS
 [RECOMMENDED] GREATLY RECOMMENDED
 [RECOMMENDED WITH ADDITIONAL CARE] RECOMMENDED WITH ADDITIONAL CARE
 [RECOMMENDED] RECOMMENDED
 + DEPENDANT UPON SITE CONDITIONS
 ++ DEPENDANT UPON SITE CONDITIONS; WEEKLY WATERING IS GREATLY RECOMMENDED FROM MAY THROUGH OCTOBER UNLESS WEEKLY RAINFALL EQUALS 1"

NOTE:
 The planting and care of trees is most successful when coordinated with the local climatic conditions. This calendar summarizes some of the recommended time frames for basic reforestation and stress reduction activities.

SOURCE: adapted from the Maryland State FOREST CONSERVATION MANUAL

TREE PROTECTION FENCE



NOTE:
 1. Forest protection device only.
 2. Avoid root damage
 3. Device must be maintained throughout construction.

SOURCE: Prince George's County, Maryland: WOODLAND CONSERVATION MANUAL adapted from the Maryland State FOREST CONSERVATION MANUAL

FOREST CONSERVATION EASEMENT AREA TABULATION

CONSERVATION EASEMENT AREA NUMBER	1	2	3	4	5	
FOREST RETENTION AREA (IN AC.)	0.20	0.00	0.00	0.00	0.57	.77 AC. TOTAL RETENTION AREA
FORESTATION PLANTING AREA (IN AC.)	1.32	1.77	0.35	0.13	1.96	5.53 AC. TOTAL FORESTATION PLANTING
TOTAL AREA IN CONSERVATION EASEMENT (IN AC.)	1.52	1.77	0.35	0.13	2.53	

FOREST CONSERVATION PLANTING QUANTITY SCHEDULE

FOREST CONSERVATION LOCATION NO.	1	2	3	4	5
AREA TO BE PLANTED (IN AC.)	1.32	1.77	0.35	0.13	1.96
BASE QUANTITY OF 2" CAL. TREES REQUIRED (AT 100 TREES/AC.)	132	177	35	13	196
CREDIT FOR EXISTING AND PROPOSED LANDSCAPE TREES	54	38	16	8	45
REQUIRED QUANTITY OF 2" CAL. TREES TO BE PLANTED*	78	139	19	5	151

* FOR PLANTING WITH SMALLER TREES, THE REQUIRED QUANTITY TO BE PLANTED SHALL BE INCREASED BY A FACTOR OF:
 A. 2x FOR PLANTING WITH 1" CAL. TREES
 B. 7x FOR PLANTING WITH SEEDLINGS
 FIFTY PERCENT (50%) OF THE TREES TO BE PLANTED IN EACH AREA SHALL BE 2" CAL.

FOREST CONSERVATION PLANT LIST

PLANT NAME (BOTANICAL/COMMON)	CONSERVATION AREA				
	1	2	3	4	5
ACER RUBRUM/RED MAPLE	11	19	4	5	19
CARYA GLABRA / PIGNUT HICKORY	11	19	5	0	22
FAGUS GRANDIFOLIA/ AMERICAN BEECH	11	19	5	0	22
FRAXINUS PENNSYLVANICA/GREEN ASH	11	19	0	0	22
LIRIODENDRON TULIPIFERA/TULIP TREE	11	19	0	0	22
QUERCUS PALUSTRIS/PIN OAK	11	19	0	0	22
QUERCUS RUBRUM/RED OAK	12	25	5	0	22
TOTAL	78	139	19	5	151

NO FOREST CONSERVATION SURETY IS REQUIRED FOR THIS PLAN BECAUSE IT IS A HOWARD COUNTY PUBLIC SCHOOL SYSTEM PROJECT.

- NOTES:**
- THE TREE PROTECTION FENCING SHOWN ON THESE PLANS IS TEMPORARY AND SHALL REMAIN IN PLACE DURING CONSTRUCTION ACTIVITY, BUT THE FOREST CONSERVATION SIGNAGE IS PERMANENT AND SHALL REMAIN IN PLACE AROUND THE FOREST CONSERVATION EASEMENTS AFTER THE REMOVAL OF THE TREE PROTECTION FENCING.
 - FOREST CONSERVATION SIGNAGE SHALL BE INSTALLED ALONG THE PERIMETER OF THE CONSERVATION EASEMENT AT 50' TO 100' APART AND AT ALL CORNERS WHERE THE EASEMENT CHANGES DIRECTION.
 - ATTACHMENT OF SIGNS TO TREES IS PROHIBITED.

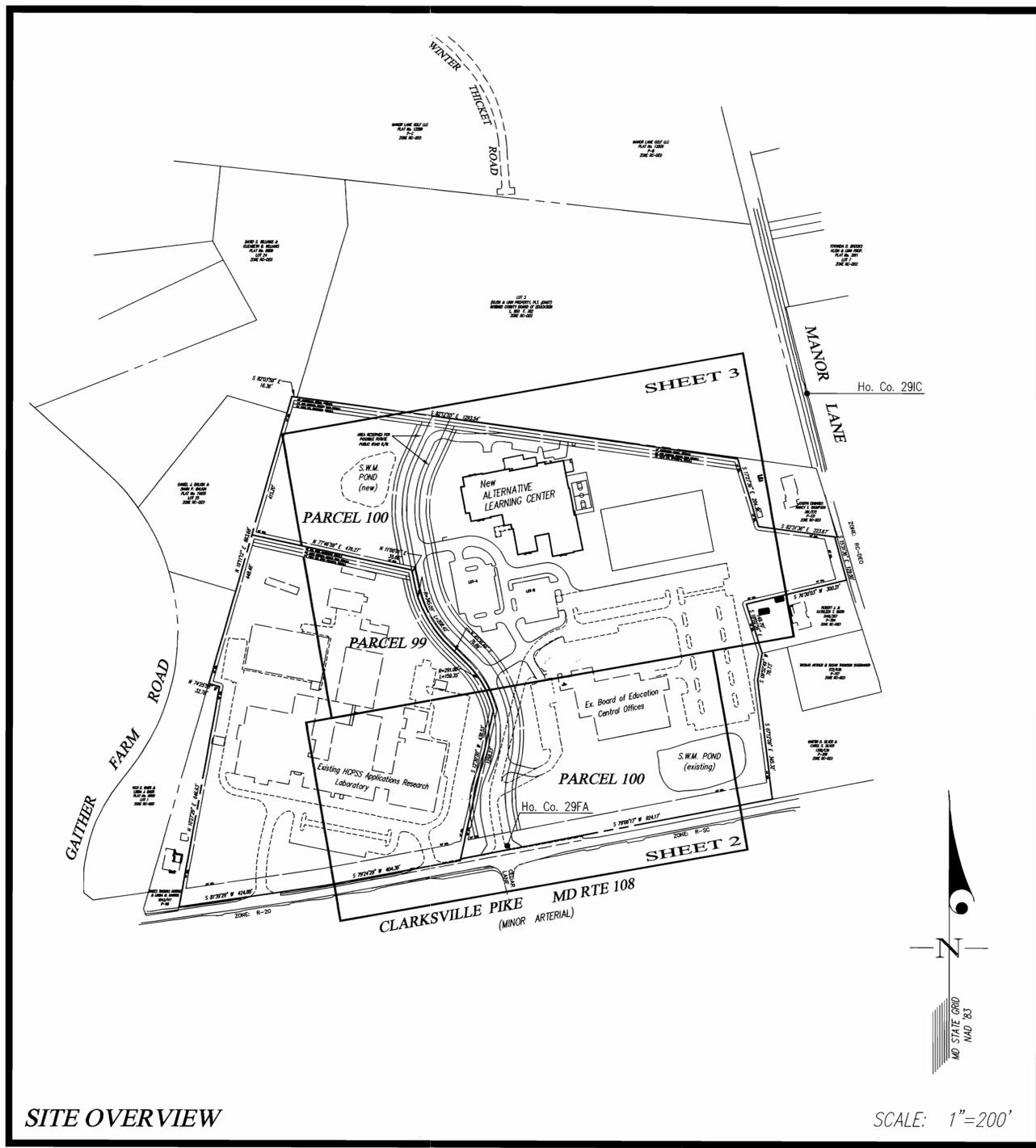
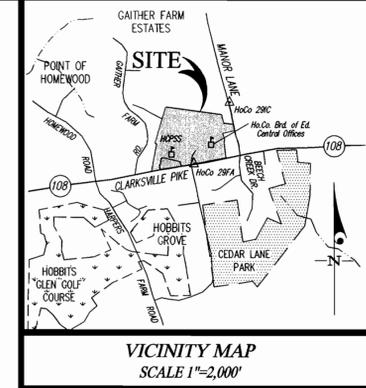
BID & CONSTRUCTION 01 FEBRUARY, 2001

ALTERNATIVE LEARNING CENTER

THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

GENERAL NOTES

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
- The contractor shall notify the Bureau of Engineering/Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48-hours prior to any excavation work.
- Project Background:
 - Location: Tax Map 29, across from Cedar Ln. & Rte. 108
 - Zoning: R-20 (Parcels 99 & 100)
 - Election District: 3rd Election District
 - Section/Area: N/A
 - Site Area: 44.66± AC (Gross)
- Approved Name and DPZ Ref. File Nos.:
 - HCPSS Administrative Building (SDP-79-30)
 - HCPSS Applications & Research Lab. (SDP-85-01 & SDP-87-137)
 - MP-01-53, approved on 1-16-00 to waive Sect. 16.156.1(2) and extend submission of revised plan to address SRC comments transmitted with DPZ letter of 10-5-00.
 - GP-01-142 and Adj. prior Deed recorded as L5473 F.119 that adjusted the common property line between Parcels 99 & 100.
 - MP-01-124, which allowed the submission of a Grading Plan (GP) for the stockpile of spoil material on adjacent Lot 3. Lot 3 is not part of this SDP submission.
- 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 shall be in place prior to the placement of any asphalt.
- All plan dimensions are to the face of curb or face of building unless otherwise noted. Dimensions are measured perpendicular or radially between items unless otherwise noted.
- Existing topography and features were derived from survey by Ouschick, Little & Weber, P.A. done in May & June of 2000 and from survey by Air Survey Corporation of Sterling, Va., dated April, 2000. SDP drawing reflects "GP" grading. Forest conservation plans show existing topography & tree line prior to "GP" grading.
- Coordinates are based on NAD '83 (91) Maryland Coordinate System as projected by as projected by Howard County Geodetic Control Station Numbers 29-1A, 29-1A, 29-1C and 29-1C. Vertical Datum is in NGVD '29.
- Public water and sewer is to be utilized. Contract Nos. 2831-W&S and 44-3913-D, which are in the Little Patuxent Drainage Area.
- Stormwater Management is provided by an on-site private retention facility that is to be privately maintained.
- All on-site storm drains proposed under this SDP are private.
- The existing utilities shown herein were derived from available public records. The contractor must dig test pits, by hand, at all utility crossings and connections points to verify exact location.
- All proposed ramps shall be in accordance with current A.D.A. Standards. Maximum sidewalk cross slope shall be (2%) to percent. Provide a (5'x5') five foot by five foot level (2% max.) landing area at the top and bottom of all ramps and building entrances and exits.
- All driveways and parking to be owned and maintained by Howard County Public School System.
- Any damage to County & State owned right-of-way to be corrected at the contractor's expense.
- Trench bedding for storm drainage structures shall be in accordance with Howard County Standard G2.01. Class "C" Bedding, unless otherwise noted.
- Gutter pan of curbs shall be pitched to conform to the adjacent drainage patterns of the adjoining paving for vehicular use. See detail 7/4.
- All curb fillets are 5' radius unless noted otherwise. Spot elevations along curb line are at the flow line, unless noted otherwise.
- For details of building profile, parking, paving sections, handicap ramps, and curb/gutter see sheet Nos. 4 & 5.
- There are no known grave sites or cemeteries on this site.
- Other topics related to this site:
 - Traffic Study prepared by The Traffic Group dated June 26, 2000.
 - Subsurface Exploration and Geotechnical Evaluation by Pennington & Brown, Inc. dated June 30, 2000.
- There are no wetlands or Waters of the U.S. at the site as indicated in the report by M.A. Deeks & Co., Inc. dated June 6, 2000.
- The largest drainage area on the site is less than 24 acres; therefore, the site is not encumbered by a 100 year floodplain.
- All outside lighting shall comply with Zoning Regulation Section 134 which requires lights to be installed to direct/reflect light downwards and inwards on site away from all adjoining public streets and residential areas. See drawing sheet E-1 to be submitted with the Building Permit Submission package.
- The water meter is located inside the building. The building shall be equipped with an automatic Fire Prevention Sprinkler System.
- The Forest Conservation Easements on this plan have been established to fulfill the requirements of Section 16.1200 of the Howard County Code, Forest Conservation Act. No clearing, grading or construction is permitted within the Forest Conservation Easements; however, the initial grading to develop the Alternative Learning Center per this SDP and the forest management practices as defined in the Deed of Forest Conservation Easement are allowed. See Plat of Forest Conservation Easement for this site filed under this SDP number and recorded as Plat No. 143.B.2.2 on JUNE 01, 2001.
- Parcel 100 complies with the requirements of Section 16.1200 of the Howard County Code for Forest Conservation with an obligation of 5.58 acres of Forest Conservation which is met by recording a total of 6.30 acres of Forest Conservation Easement that comprises of:
 - 0.77 acres of on-site forest retention
 - 5.53 acres of forest planting
- The adjacent Parcel 99 is exempt from the requirements of Section 16.1200 of the Howard County Code for Forest Conservation because:
 - The proposed work shown on Parcel 99 per this SDP is within the limits of disturbance from previous development work affecting Parcel 99 under SDP-85-01 and SDP-79-30.
 - Parcel 99 is not subject to any previously approved forest conservation restriction/easement and the grading and development activity proposed on Parcel 99 under this SDP does not clear any forest.
- There may be an old abandoned septic field in the vicinity of the S.W.M. facility for the ALC. Any septic pipes or related items that are discovered when the site is graded must be inspected by the Howard County Health Department prior to removal and disposal off-site. Any tanks or items containing liquid sewage must be pumped by a Scavenger and inspected by the Health Department prior to removal and disposal off-site.
- Where new curb & gutter abuts existing paving, hold new gutter pan 2" higher than existing paving to accommodate the resurfacing of the existing paving.
- No landscape surety and no forest conservation surety is required for this plan because it is a Howard County Public School System project.
- There is an gap in the title between Parcel 100 and the adjacent Lot #3 to the north. The southern most property line of the two lines is the northern property line of Parcel 100.



SHEET INDEX

No.	TITLE
1	COVER SHEET
2	SITE DEVELOPMENT PLAN
*3	SITE DEVELOPMENT PLAN
4	SITE DETAILS
5	SITE DETAILS
6	SEDIMENT CONTROL PLAN (ENTRANCE)
7	SEDIMENT CONTROL PLAN
8	SEDIMENT CONTROL NOTES AND DETAILS
9	ROAD GEOMETRY AND BITUMINOUS PAVING DELINEATION PLAN.
10	STORM DRAIN PROFILES AND DETAILS
11	UTILITY PROFILES AND DETAILS
12	STORMWATER MANAGEMENT DETAILS
13	DRAINAGE AREA MAP
14	STORMWATER MANAGEMENT SPECIFICATIONS & BORING LOGS
15	LANDSCAPE EDGE ANALYSIS AND FOREST CONSERVATION OVERVIEW
16	LANDSCAPE & FOREST CONSERVATION PLANTING PLAN
17	LANDSCAPE & FOREST CONSERVATION PLANTING PLAN
18	FOREST STAND DELINEATION & EXISTING CONDITION
19	PLANTING NOTES, SCHEDULES & DETAILS
20	FOREST CONSERVATION NOTES, SCHEDULES & DETAILS
*2A	PAVEMENT MARKING PLAN & STORM DRAIN PROFILES

SITE ANALYSIS DATA CHART

- General Site Data
 - Present Zoning: R-20 (Parcels 99 & 100)
 - Proposed Use of Site or Structures: Institutional (Public School System)
 - Public Water and Sewer System to be utilized.
- Area Tabulation
 - Total Project Area: 15.93 ± acres (gross for Parcel 99)
28.68 ± acres (gross for Parcel 100)
44.61 ± acres (total gross project/site area)
 - Area of this plan submission: 14.2 ± ac. is the limit of submission and grading disturbance for the construction of the Alternative Learning Center (ALC) and associated road improvements. The adjacent Parcel 99 is included with this submission in order to tie in the grading and common features between the two parcels plus contiguous forest conservation areas on Parcel 99 to fulfill the forest conservation obligation for the development of the ALC on Parcel 100 (see general note Nos. 26 & 27 on this sheet regarding forest conservation).
 - Limit of Disturbed Area by this SDP: 14.2 ± acres
 - Building Coverage of Site:

HCPSS Administration Building	= 1.0 ± acres
HCPSS Applications Research Lab	= 4.3 ± acres
Alternative Learning Center	= 1.4 ± acres
Total	= 6.7 acres or 15.0 % of Gross Site Area
 - Alternative Learning Center building area: 61,421 s.f.
 - Total paved surfaces (parking, driveways, play courts, etc.) on site (Drainage to the A.L.C. SWM pond): 2.8± Ac. or 9.7%.
- Open Space Data
 - Open Space Required on Site: N/A
 - Open Space Proposed: N/A
- Parking Space Data
 - Number of Parking Spaces Required by Zoning Regulations: N/A
 - Parking Spaces Provided for the ALC: 120 spaces
 - Number of Accessible Parking Spaces Provided: 5 (including 1 Van Space)

32. The As-built required for the existing pond between the Board of Education Central Offices building and Md Route 108 shall be provided concurrent with the As-built required for the new pond on this plan.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Director: *[Signature]* Date: 6/7/01
 Chief, Division of Land Development: *[Signature]* Date: 6/7/01
 Chief, Development Engineering Division: *[Signature]* Date: 5/21/01



GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.
9-19-01	Revised Plan to include Route 108 Improvements. Added sheet 2A. Replaced sheets 2 & 9.	J.A.U.	

ARCHITECT: THOMAS CLARK ASSOC.'S ARCHITECTS
 2681 RIVA ROAD, SUITE 120
 ANNAPOLIS, MD 21401
 TEL: 301-261-6700

OWNER: HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 ROUTE 108
 ELLICOTT CITY, MD 21043
 ATTN: CATHLEEN YOUNG
 TEL: 410-313-6704

ADDRESS CHART				G. L. W. FILE No.			
WATER CODE:	SEWER CODE:	BUILDING:	STREET ADDRESS:	SCALE:	ZONING:	G. L. W. FILE No.	
JOB:	5583000	Alternative Learning Ctr.	10914 CLARKSVILLE PIKE	AS SHOWN	R-20	00066	
PROJECT NAME:	ALTERNATIVE LEARNING CENTER	SECTION/AREA:	N/A	DATE:	TAX MAP - GRID:	SHEET	
DEED L465/F577 L750/F528	ZONE R-20	TAX MAP 29	BLOCK	18/MAY/01	29 - 11	1 OF 20	
						HOWARD COUNTY, MARYLAND	

BID & CONSTRUCTION 01 FEBRUARY, 2001

Notes:

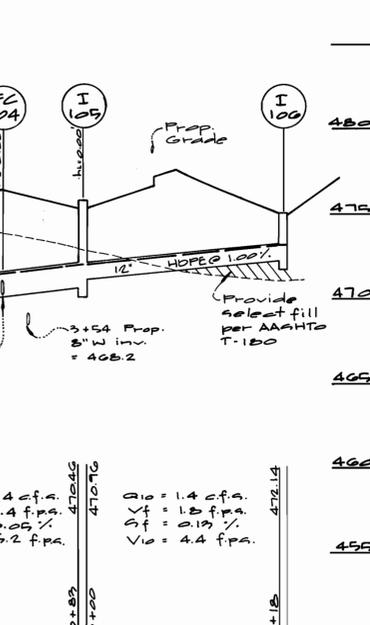
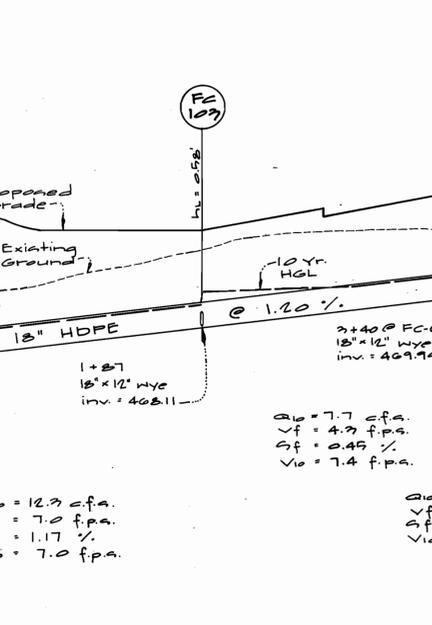
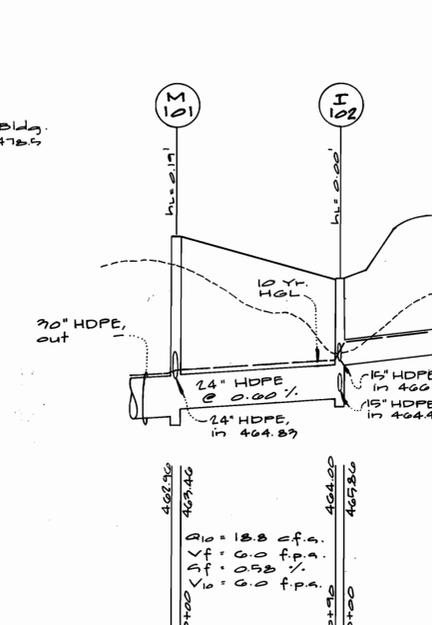
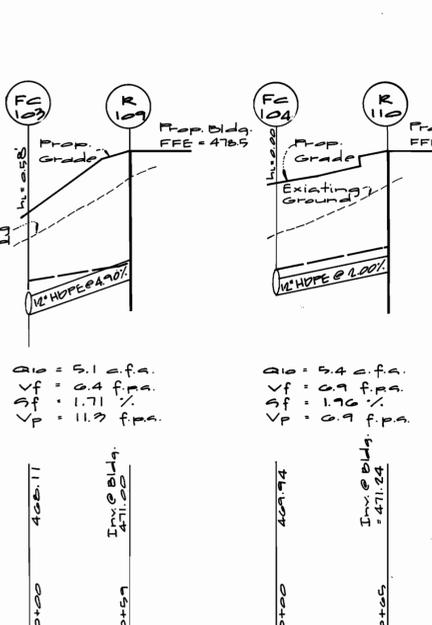
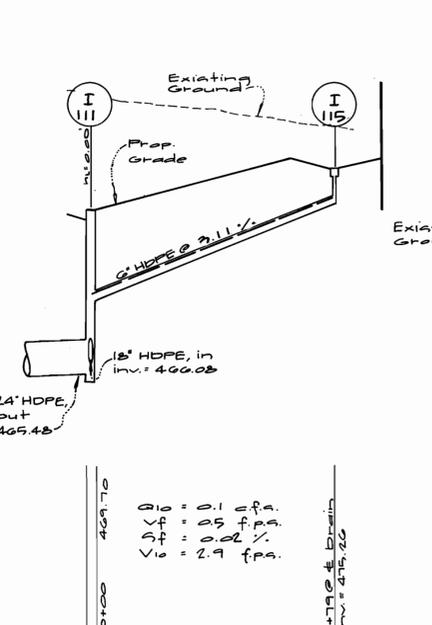
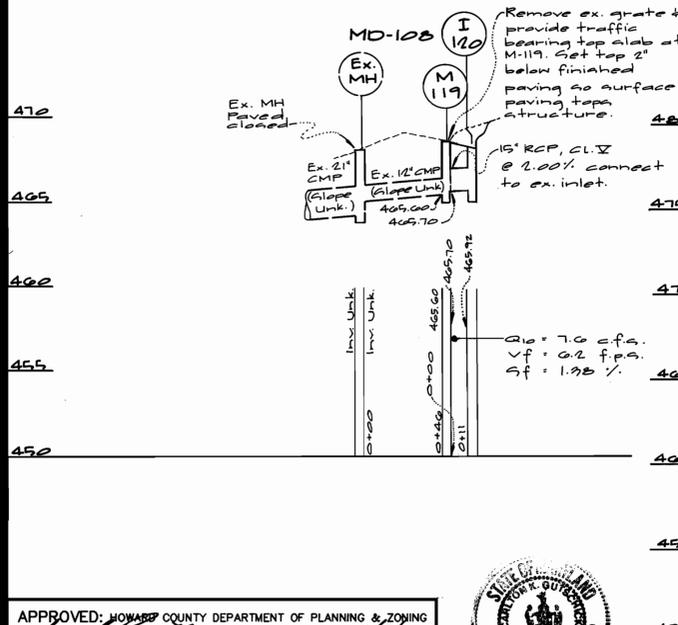
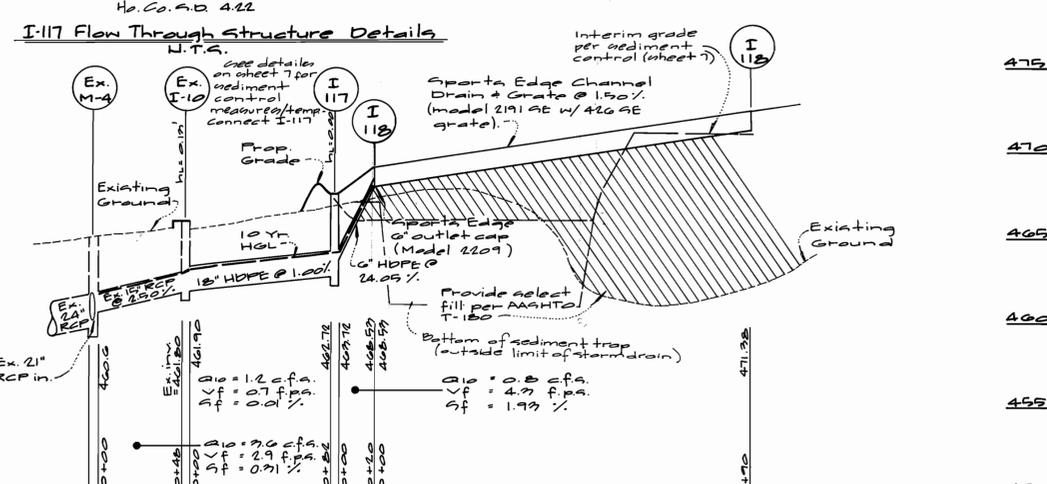
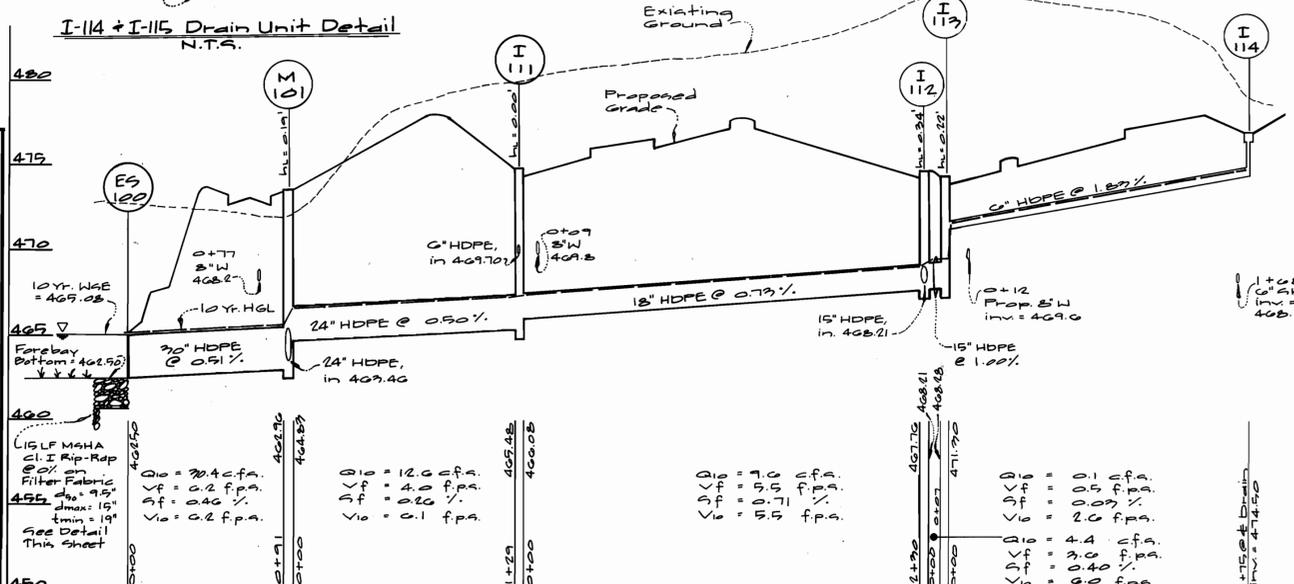
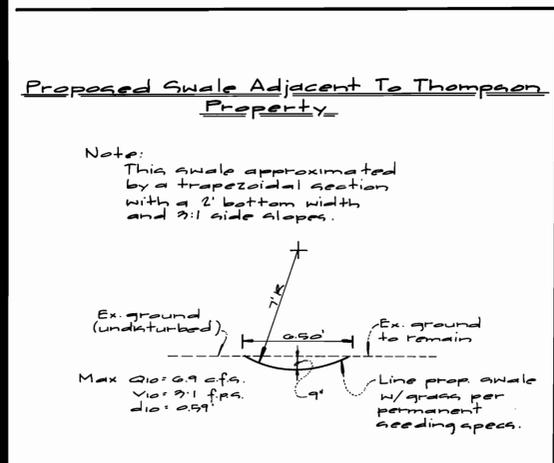
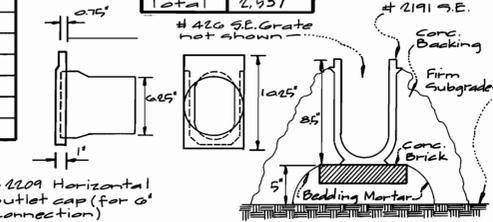
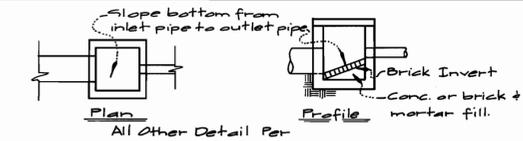
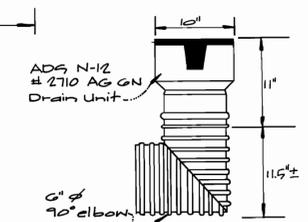
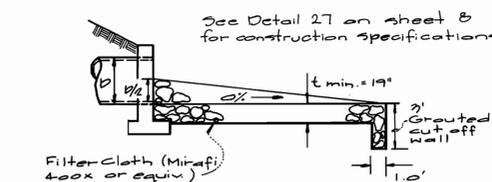
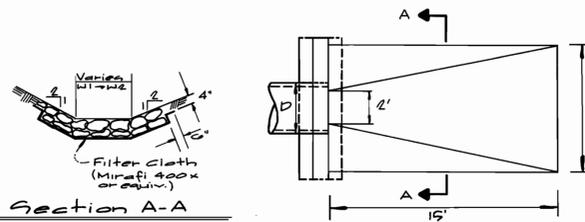
1. Pre-cast alternatives to field constructed standard details referenced above are acceptable.
2. Provide reticular grates for all S inlets per Ho.Co. SD 4.99.
3. Manhole top elevations are surface elevations at the center of the base unit.
4. A-inlet top elevations are top of slab at the face of curb at the inside face of the side walls.
5. Yard type inlet top elevations are grate elevations.
6. Provide 10" diameter drains and 6" diameter downspouts at area drains.
7. Field drain from Sports Edge (888-975-ED0E). Provide no. 426 Grate.

Structure Schedule

No.	Type	Width (inside)		Top Elevation		Invert Elevation		St'd Detail	Locations	Remarks
		Upper	Lower	Upper	Lower	Upper	Lower			
100	End Section	7'-0"	465.25		462.50			Per Manuf.	211M Pond	
101	Manhole	5'-0"	479.01		468.80	462.90		Ho.Co. SD 4.17	5+52 Roadway, 22.5' L.	
102	A-12 Inlet	2'-6"	471.22	471.02	468.11	468.00		Ho.Co. SD 4.41	4+46.71 Roadway, 12' L.	
103	A-5 Inlet	2'-6"	475.78	475.78	472.90	472.90		Ho.Co. SD 4.40	Behind School - East	
104	S-Inlet	2'-7"	475.00		472.14	472.14		Ho.Co. SD 4.42	Behind School - East	
105	Con-10 Inlet	4'-0"	474.77	474.77	469.08	469.42		MD-274.03	Front Side Drive Aisle	
106	A-12 Inlet	2'-6"	474.70	474.70	468.21	467.70		Ho.Co. SD 4.41	Front Parking Area Center	
107	A-12 Inlet	2'-6"	474.40	474.40	471.70	468.28		Ho.Co. SD 4.41	Front Parking Area Center	
108	Area Drain	Note 2	477.00		474.50	474.50		ADS, I-12	Building Front - East	
109	Area Drain	Note 2	475.50		475.20	475.20		ADS, I-12	Building Front - West	
110	Modified S-Inlet	2'-7"	467.00		467.72	467.72		Ho.Co. SD 4.42	Eastern Ball Fields	
111	Field Drain	4"	472.50	469.20	471.80	468.50		Edge No. 2191	Eastern Ball Fields	
112	WR-Inlet	3'-3"	468.26	468.26	468.92	468.92		MSHA MD 374.21	Entrance Road (Left) at 108	

Pipe Schedule

size	type	quantity (l.f.)	Remarks
6"	HDPE, ADS #12 or Equal	374	
12"	"	374	
15"	"	773	Includes pipes on sheet 2A Profiles.
18"	"	695	
24"	"	219	
30"	HDPE, ADS #12 or Equal	91	
15"	21P Cl. 50	11	
Total		2,957	



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Chief, Development Engineering Division
 Date: 5/31/01



GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3609 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 FAX: 301-421-4188

7-13-01 Revison to include Route 108 Improvements. Added sheet 2A. Replaced sheets 2.C and 9.
 DATE: 5/31/01 REVISION: JAL

PREPARED FOR:
 ARCHITECT: THOMAS CLARK ASSOC.'S ARCHITECTS
 2861 RIVA ROAD, SUITE 120 ANNAPOLIS, MD 21401 TEL: 301-261-8700
 OWNER: HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 ROUTE 108 ELICOTT CITY, MD 21043 ATTN: CATHEEN YOUNG TEL: 410-313-6704

STORM DRAIN PROFILES & DETAILS
ALTERNATIVE LEARNING CENTER
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 L. 405 @ F. 577 (Parcel 77), L. 750 @ F. 528 (Parcel 100)
 WEST FRIENDSHIP ELECTION DISTRICT No. 3
 SCALE: Horz: 1"=50' Vert: 1"=5'
 DATE: 18/MAY/01 TAX MAP - GRID: 29-11 SHEET: 10 OF 20

BID & CONSTRUCTION
 01 FEBRUARY, 2001