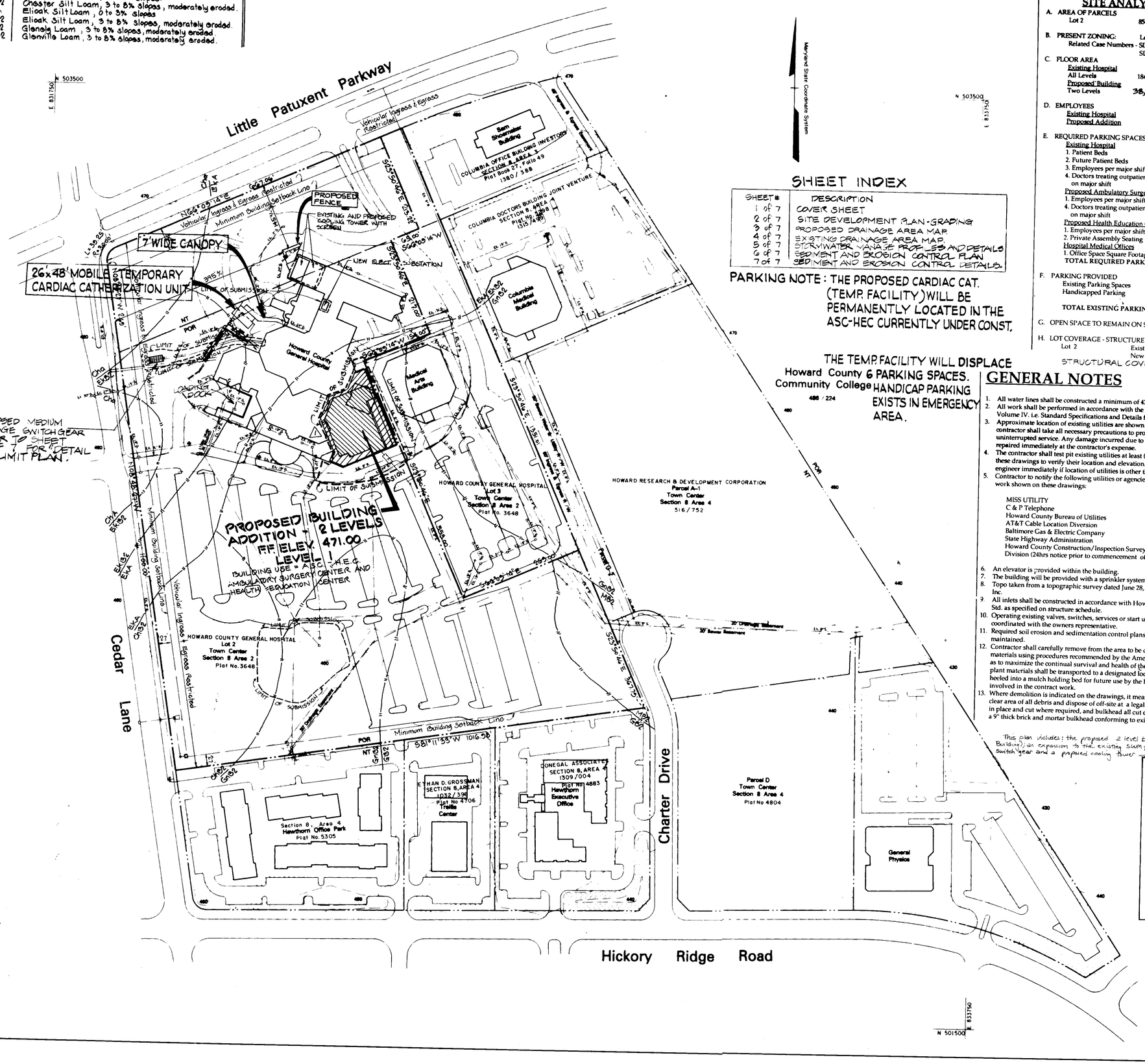
SOILS CLASSIFICATION

ChA	Chester Silt Loam, 0 to 3% slopes.
ChB2	Chester Silt Loam, 3 to 8% slopes, moderately eroded.
EkA	Elioak Silt Loam, 0 to 3% slopes
EkB2	Elioak Silt Loam, 3 to 8% slopes, moderately eroded.
GlB2	Glenelg Loam, 3 to 8% slopes, moderately eroded.
GnB2	Glenville Loam, 3 to 8% slopes, moderately eroded.



SHEET INDEX

PARKING NOTE: THE PROPOSED CARDIAC CAT. (TEMP. FACILITY) WILL BE PERMANENTLY LOCATED IN THE ASC-HEC CURRENTLY UNDER CONST.

SITE ANALYSIS

A. AREA OF PARCELS
Lot 2 — 854,037 S.F. — 19.606 Acres

B. PRESENT ZONING: Lot 2 (NT/POR)
Related Case Numbers - SDP-86-207, FDP-83, SDP-85-17, F-76-101, SDP-86-269, S-90-32, PB 266

C. FLOOR AREA
Existing Hospital
All Levels — 184,225 S.F.
Proposed Building
Two Levels — 38,600 S.F. ⚠

D. EMPLOYEES

Existing Hospital	350
Proposed Addition	55

E. REQUIRED PARKING SPACES

Existing Hospital		
1. Patient Beds	204 (1 per 2 beds)	102
2. Future Patient Beds	36 (1 per 2 beds)	18
3. Employees per major shift	350 (1 per employee)	350
4. Doctors treating outpatients on major shift	4 (4 per Doctor)	16
Proposed Ambulatory Surgery Center		
1. Employees per major shift	49 (1 per employee)	49
4. Doctors treating outpatients on major shift	4 (4 per Doctor)	16
Proposed Health Education Center		
1. Employees per major shift	2 (1 per employee)	2
2. Private Assembly Seating	225 (1 per 6 seats)	40
Hospital Medical Offices ⚠		
1. Office Space Square Footage	5,000 (5 per 1000 Sq. Ft.)	25
TOTAL REQUIRED PARKING SPACES		648 ⚠

F. PARKING PROVIDED

Existing Parking Spaces	671
Handicapped Parking	41
TOTAL EXISTING PARKING SPACES	712

G. OPEN SPACE TO REMAIN ON SITE: Lot 2 — 10,375 Ac. /52% of site

H. LOT COVERAGE - STRUCTURE
Lot 2 — Existing Hospital 62,485 S.F.; New Building 13,350 S.F.
STRUCTURAL COVERAGE = 8.9 % ⚠

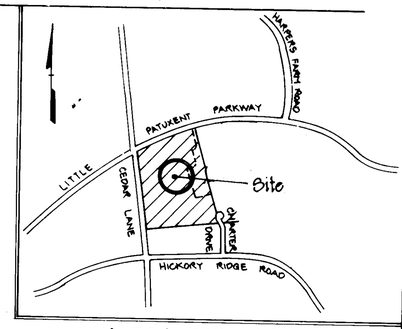
GENERAL NOTES

1. All water lines shall be constructed a minimum of 42" cover below finished grade.
2. All work shall be performed in accordance with the Howard County Design Manual, Volume IV. i.e. Standard Specifications and Details for Construction, 1990 Amendments.
3. Approximate location of existing utilities are shown from best available information. The contractor shall take all necessary precautions to protect the existing utilities and maintain uninterrupted service. Any damage incurred due to contractor's operation shall be repaired immediately at the contractor's expense.
4. The contractor shall test pit existing utilities at least (5) days before starting work shown on these drawings to verify their location and elevation. The contractor shall notify the engineer immediately if location of utilities is other than shown.
5. Contractor to notify the following utilities or agencies at least five days before starting work shown on these drawings:

MISS UTILITY	1-800-257-7777
C & P Telephone	725-9976
Howard County Bureau of Utilities	313-4900
AT&T Cable Location Diversion	393-3553
Baltimore Gas & Electric Company	685-0123
State Highway Administration	531-5533
Howard County Construction/Inspection Survey Division (24hrs notice prior to commencement of work)	792-7272

6. An elevator is provided within the building.
7. The building will be provided with a sprinkler system.
8. Topo taken from a topographic survey dated June 28, 1986 by Fisher, Collins and Carter, Inc.
9. All inlets shall be constructed in accordance with Howard County Standards or MSHA Std. as specified on structure schedule.
10. Operating existing valves, switches, services or start up of new services shall be coordinated with the owners representative.
11. Required soil erosion and sedimentation control plans shall be provided, installed and maintained.
12. Contractor shall carefully remove from the area to be disturbed all trees, shrubs and plant materials using procedures recommended by the American Nurseryman's Association so as to maximize the continual survival and health of the materials. These trees, shrubs and plant materials shall be transported to a designated location on the hospital property and heeled into a mulch holding bed for future use by the hospital in locations other than those involved in the contract work.
13. Where demolition is indicated on the drawings, it means to completely demolish feature, clear area of all debris and dispose of off-site at a legal dumpsite. Abandon means to leave in place and cut where required, and bulkhead all cut ends with a plug or cap or construct a 9" thick brick and mortar bulkhead conforming to existing utility materials.

This plan includes: the proposed 2 level building addition (west of the Medical Arts Building), an expansion to the existing SWM pond, the addition of a medium voltage switchgear and a proposed cooling tower with screening.



LOCATION MAP

Scale : 1" = 1000'

ELEVATIONS HEREON ARE BASED ON THE GRID MERIDIAN OF THE MARYLAND COORDINATE SYSTEM AND DERIVED FROM THE FOLLOWING HOWARD COUNTY CONTROL SYSTEM:
2639003 3/4" IRON BAR ELEV. = 479.559

SUBDIVISION NAME			SEC./AREA	LOT/PARCEL
HOWARD COUNTY GENERAL HOSPITAL, INC.			8/2	2/276
PLAT OR L/F	BLOCK #	ZONE	TAX MAP	ELEC DIST.	CENSUS TRACT
3648	5	POR/NT	35	5	6053.02
WATER CODE 106			SEWER CODE 5522500		

ADDRESS CHART
LOT 2 — 5755 CEDAR LANE — COLUMBIA, MD. 21044

BM #1 Grid point No. B-3: A PK Nail in the Bituminous Concrete Paving Driveway Entrance. ELEV. 474.73. 1929 U.S.C.G.S. General Datum

BM #2 Grid point No. F-3: A PK Nail in the Bituminous Concrete Paving Doctors' Parking Lot West of the Main Building. ELEV. 470.44. 1929 U.S.C.G.S. General Datum.

BM #3 Square cut in top of Southeast Corner of Concrete Pedestal Light Base Main Parking Lot Southeast Section. ELEV. 463.79. 1929 U.S.C.G.S. General Datum.

REFERENCE: S90-32, AA-90-09, WP-90-106, BA-90-36V, SDP-86-269, SDP-86-207, SDP-85-17, FDP-83, F-76-101, F-91-65, SDP-90-190

Date	No.	Revision Description
9-1-95	⚠	ADD PSYCH. UNIT PATIO FENCE
5-1-95	⚠	TO ADD TEMP. CARDIAC CAT. UNIT
8-3-94	⚠	TO REUSE BUILDING FOOTPRINT AND ADJUST SITE ANALYSIS

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 1/4/94

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 1/30/95
CHIEF, BUREAU OF ENGINEERING ACTING — DATE 12/30/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DIRECTOR — DATE 1/10/95
CHIEF, DIVISION OF COMMUNITY PLANNING & RESEARCH — DATE

ASC - HEC

OWNER / DEVELOPER

HOWARD COUNTY GENERAL HOSPITAL, INC.
5755 Cedar Lane Columbia, MD. 21044

11/23/93
Date

Professional Engr. No.

DMW
Daft · McCune · Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue, Towson, Maryland 21286
410 296 3333
Fax 296 4705

HOWARD COUNTY GENERAL HOSPITAL, INC.
TOWN CENTER SECTION 8, AREA 2
TAX MAP 35 LOT 2 / PARCEL 276
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE
COVER SHEET
SITE DEVELOPMENT PLAN

Des By T.P.D.	Scale 1" = 100'	Proj. No. 85015.K1	
Drn By T.P.D.	Date 6/23/93	1 OF 7	
Chk By M.W.F./T.H.R.	Approved		

SDP 94-04

DETECTABLE WARNING SURFACE ON RAMP & FLARED SIDES IN ACCORDANCE WITH ADA 4.29.2
SCORE LINES
COARSE BROOM FINISH
DEPRESSED CURB
EXP. JOINT
FACE OF CURB
EDGE OF GUTTER
PLAN
DEPRESSED CURB
6" MIN. SLOPE CURB AS REQUIRED FOR 1:10 MAX. SLOPE
WALK SLOPE
MAX RAMP SLOPE 15 1:12
ELEVATION
SECTION A-A
NOTE: HC RAMPS SHALL CONFORM TO CURRENT ADA CRITERIA
HANDICAPPED RAMP TYPE I
NOT TO SCALE
LOT 3
4.233 Acres
Plat No.3648
20' Sewer Easement to Lot 2 Plat No 3648
MAIN GENERATOR
COOLING TOWER
MEDICAL ARTS BUILDING
EXISTING BRIDGE TO BE DEMOLISHED AND RECONSTRUCTED TO TIE INTO NEW BUILDING ADDITION
APPROX. INV. OF EX. 8" SANITARY @ BLDG. = 447.30 AS SHOWN ON 1-28-86 TOPO SURVEY BY FISHER, COLLINS & CARTER, INC.
4 - EX. 3.5 x 3.5 AIR CONDITIONING UNITS AND EX. GENERATOR TO BE MOVED APPROXIMATELY 10' IN THE NW DIRECTION
HOWARD COUNTY GENERAL HOSPITAL
EX. EDUCATION CENTER ALONG WITH CONC. STAIRS AND CONC. PORCH TO BE DEMOLISHED AND CLEARED.
NEW BUILDING ADDITION
F.F. ELEV. 471.00
LEVEL ONE
EX. CONC. WALLS AND CONC. WALKS TO BE DEMOLISHED AND CLEARED.
WATER & UTILITY EASEMENT PLAT #4-1558-D-W
LOT 2
19.606 Acres
Plat No. 3648
PROPOSED 30'x12' MEDIUM VOLTAGE SWITCHGEAR - SEE SHEET 1 OF 7 FOR CAMPUS LOCATION
UNDERGROUND ELECTRICAL CONDUIT
MAIN HOSPITAL BUILDING
LOADING DOCK
DETAIL OF LIMIT PLAN
1"=40'
EXTEND EXIST. WALK TO CONNECT TO NEW CONSTRUCTION
EX. PAINTED CROSSWALK
STRIPE NEW PAVING FOR LOADING ZONE
EX. MEDIAN RAMP
CONVERT COMBINATION INLET TO GRATE TOP
NEW CONCRETE WALKS
REWORK EXIST. BUS SHELTER RAMP TO MEET NEW WALKS. USE HO. CO. STD. R.G.12
EX. PAINTED CROSSWALK
INSTALL SIDEWALK RAMP TYPE C (HO. CO.)
INSTALL NEW PAINTED CROSSWALK
EXISTING ROADWAY EASEMENT PLAT 3648
RELOCATED UTILITY EASEMENT
HANDICAP RAMP TYPE I (SEE DETAIL THIS SHEET)
ALL RAMPS EXCEEDING 5% SLOPE TO HAVE HANDRAILS (SEE DETAIL THIS SHEET)
CONSTRUCT NEW COMBINATION CURB TO RELOCATED ALIGNMENT
REALIGN AND ENLARGE NEW PAINTED CROSSWALK TO MATCH RAMPS
NOTE: ROOF DRAIN TO DIVERT NEW BUILDING ADDITION TO EXISTING STORM DRAIN SYSTEM
INSTALL SIDEWALK RAMP TYPE C (HO. CO.)
EXIST. BUS SHELTER
REMOVE EXIST. BIT. CURB IN FRONT OF HANDICAP SPACES. INSTALL NEW BIT. WALK AT SAME ELEVATION OF PARKING SURFACE. CONNECT WALK TO NEW SIDEWALK AND RAMP CONSTRUCTION AT BUS SHELTER
LEGEND
Existing Contours
Proposed Spot Elevations
Existing Sanitary Sewer Lines
Existing Water Lines
Existing Storm Drain Lines
Proposed Building Envelope
DEMO Existing Features to be Demolished and Cleared
(ABAND) Existing Utility to be Abandoned
EDGE OF RAMP
EDGE OF RAMP
1 1/2" Ø STEEL PIPE RAIL
SLEEVE
EMBED POST IN SLEEVE WITH NON-SHRINK GROUT APPLY SEALANT AT SURFACE
8" WIDE CONC. BAND
TYPICAL ELEVATION OF HANDICAP RAMP
NOT TO SCALE
CONC. WALK
HANDRAIL
EXP. JOINT FILLER AND SEALANT
CONC. CURB
SLEEVE
TYPICAL SECTION AT HANDICAP RAMP
NOT TO SCALE
EX. HOSPITAL
ROOF
SECOND FLOOR LEVEL
FIRST FLOOR LEVEL
BASEMENT LEVEL
GRD. LINE
BUILDING ADDITION SCHEMATIC
NOT TO SCALE

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

COUNTY HEALTH OFFICER — DATE 1/4/94

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 6/30/93

CHIEF BUREAU OF ENGINEERING ACTING — DATE 12/30/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE

CHIEF, DIVISION OF COMMUNITY PLANNING & RESEARCH — DATE

Date	No.	Revision Description
8.4.94	1	REVISE BUILDING FOOTPRINT, REVISE GRADING, ADD WALKS, RAMPS AND DETAILS

ASC - HEC

OWNER / DEVELOPER

HOWARD COUNTY GENERAL HOSPITAL, INC.
5755 Cedar Lane Columbia, MD. 21044

Daft · McCune · Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue Towson, Maryland 21286
410 296 3333
Fax 296 4705

11/23/93
Date

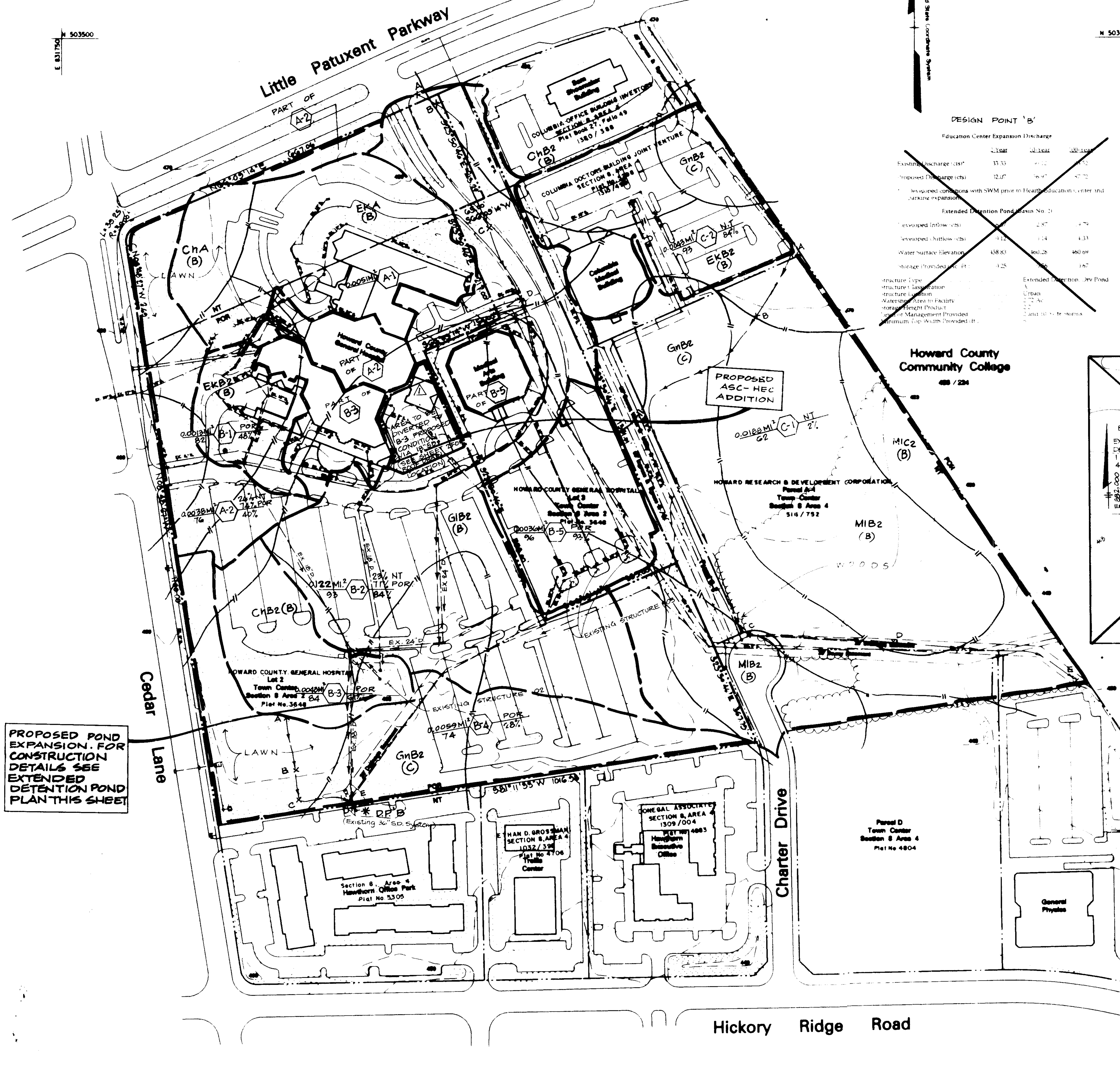
Professional Engr. No. 10551

HOWARD COUNTY GENERAL HOSPITAL, INC.
TOWN CENTER SECTION 6, AREA 2
TAX MAP 36 LOT 2 / PARCEL 239
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE SITE DEVELOPMENT PLAN
GRADING

Des By T.P.O.	Scale 1"=60'	Proj. No.		
Drn By T.P.O.	Date 6/25/93			
Chk By M.W.F./THR	Approved	2 OF 7		

SDP 94-04



PROPOSED POND EXPANSION. FOR CONSTRUCTION DETAILS SEE EXTENDED DETENTION POND PLAN THIS SHEET

LOCATION AND DRAINAGE AREA MAP

SCALE : 1" = 100'

Maryland State Coordinate System

N 503500
E 833750

DESIGN POINT 'B'

Education Center Expansion Discharge

	2-Year	10-Year	100-Year
Existing Discharge (cfs)*	33.33	[illegible]	[illegible]
Proposed Discharge (cfs)	32.07	[illegible]	[illegible]

* Developed conditions with SWM prior to Health Education Center and parking expansion.

Extended Detention Pond (Basin No. 2)

Developed Inflow (cfs)	[illegible]	2.87	[illegible]
Developed Outflow (cfs)	0.12	[illegible]	4.33
Water Surface Elevation	458.83	460.28	460.69
Storage Provided (Ac. Ft.)	0.25	[illegible]	[illegible]

Structure Type	Extended Detention, Dry Pond
Structure Classification	A
Structure Location	Urban
Watershed Area to Facility	2.72 Ac
Storage Height Product	[illegible]
Level of Management Provided	2 and 10 Yr. storms
Minimum Top Width Provided (ft.)	[illegible]

Sequence of Construction

1. Obtain a grading permit.
2. Notify Howard County Office of Inspection and Permits (992-2437) a minimum of 24 hours prior to the start of any construction.
3. After installation of sediment controls and approval of Sediment Control Inspector, replace orifice plate in existing inlet with extended detention device (1 day).
4. Excavate the pond and fill in the existing emergency spillway (1 day).
5. Conduct an initial as built survey of the stormwater management grading (1 week).
6. Fine grade and stabilize the stormwater management area (1 day).
7. Upon completion of construction, with prior approval of the Sediment Control Inspector, remove silt fence. Stabilize all remaining disturbed areas (1 day).
8. Prepare and submit final as built (30 days).

△2

Notes:

1. This site lies within the Little Patuxent River watershed.
2. This facility is private and shall be maintained by the property owner.
3. Stormwater management is required and provided for the 2 and 10-year storms.
4. Call "Miss Utility" at 1-800-257-7777, 48 hours prior to the start of work. The excavator must notify all public utility companies with underground facilities in the area of proposed excavation and have those facilities located by the utility companies prior to commencing excavation.
5. This facility is Hazard Class 'A'

AS-BUILT CERTIFICATION

I hereby certify that the facility shown on this plan was constructed as shown on the "as-built" plans and meets the approved plans and specifications.

Signature
PE No. ________
Date ________

Certify means to state or declare a professional opinion based upon onsite inspections and material tests which are conducted during construction. The onsite inspections and material tests are those inspections and tests deemed sufficient and appropriate by commonly accepted engineering standards. Certify does not mean or imply a guarantee by the engineer nor does an engineer's certification relieve any other party from meeting requirements imposed by contract, employment, or other means, including meeting commonly accepted industry practices.

OPERATION, MAINTENANCE AND INSPECTION

Inspection of the pond(s) shown hereon shall be performed at least annually in accordance with the checklist and requirements contained within USDA, SCS "Standards and Specifications for Ponds" (MD 378). The pond owner(s) and any heirs, successors, or assigns shall be responsible for the safety of the pond and the continued operation, surveillance, inspection, and maintenance thereof. The pond owner(s) shall promptly notify the Soil Conservation District of any unusual observations that may be indications of distress such as excessive seepage, turbid seepage, sliding or slumping.

The embankment, a twenty five foot wide buffer strip adjacent to the toe upstream and downstream of the embankment, and the area within fifty feet of the control structures shall be mowed at least annually (mid to late summer) but may be done more often as desired.

By the Engineer:

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

Signature of Engineer — 11/23/93 — Date
Print name below signature
JOHN W. RANOCCHIA PE 10551

By The Developer:

"I/We certify that all development and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

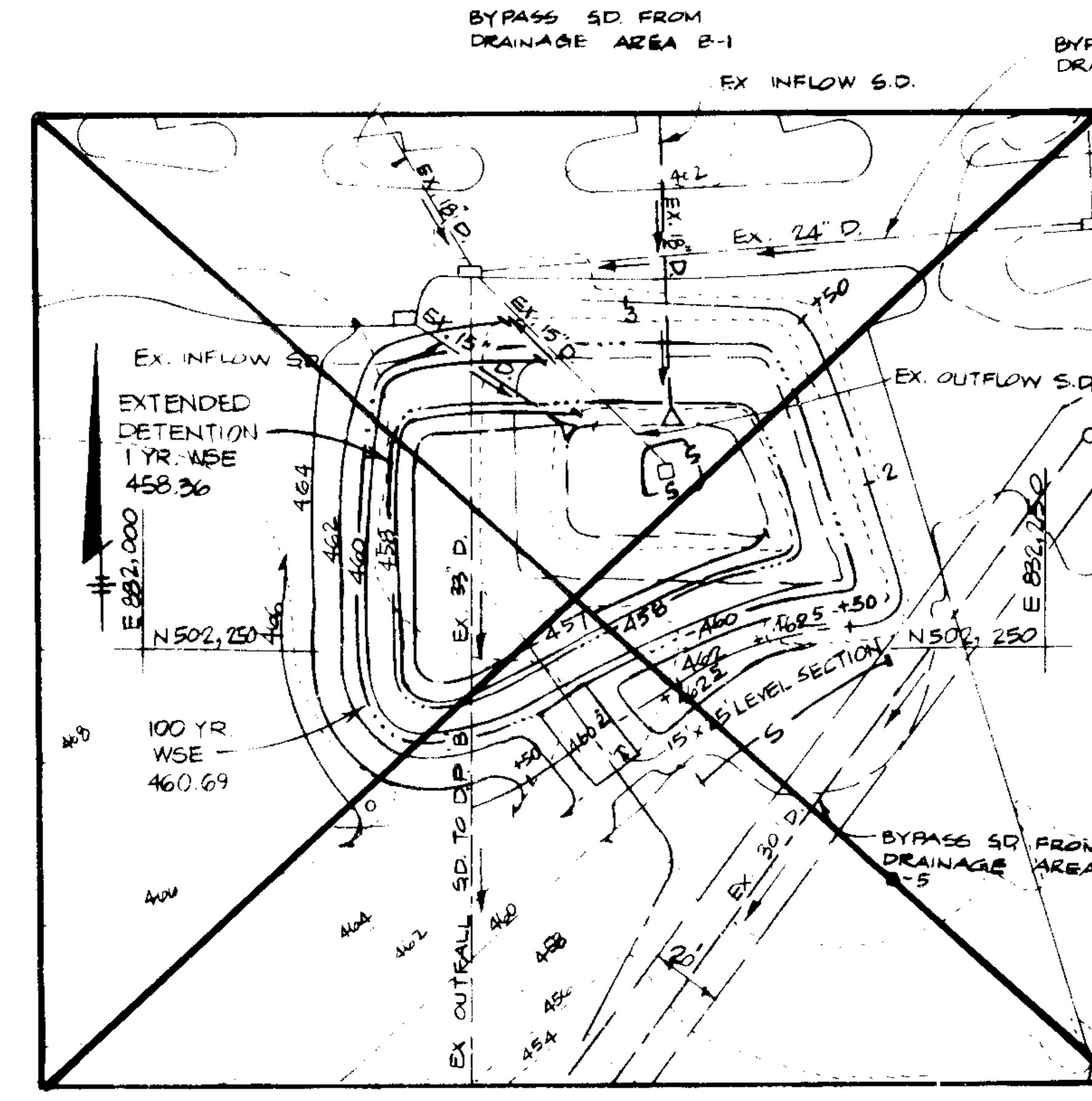
Signature of Developer — (MF) 11/23/92 — Date
Print name below signature
GEORGE BARKER - SR. VICE PRES. HOWARD CO. GEN. HOSP.

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.

U.S. Soil Conservation Service — 12/2/93 — Date

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

Howard Soil Conservation District — 12/2/93 — Date



EXTENDED DETENTION POND PLAN

STRUCTURE 02

SCALE: 1" = 50'

LEGEND

DRAINAGE AREA BOUNDARY

DRAINAGE AREA IN SQ. MI. / RCN — DA — ZONING / % IMPERVIOUS

SILT FENCE —S—S—

SOILS DATA GnB2 (C)

TIME OF CONCENTRATION PATH x A → x B

△2 THE STORMWATER MANAGEMENT FACILITY SHOWN ON THIS SHEET HAS BEEN SUPERCEDED BY SDP 95-114. CONSTRUCTION OF THE EXTENDED DETENTION POND STRUCTURE 02 SHOULD BE COMPLETED PER SDP 95-114.

11/23/93
Date

Professional Engr. No. 16580

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

COUNTY HEALTH OFFICER — 1/4/94 — DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — 12.30.93 — DATE

CHIEF BUREAU OF ENGINEERING — 12/30/93 — DATE

APPROVED: HOWARD COUNTY DEPT OF PLANNING AND ZONING

DIRECTOR — 1/12/94 — DATE

CHIEF, DIVISION OF COMMUNITY PLANNING AND RESEARCH — 1/10/94 — DATE

Date	No.	Revision Description
02-06-96	△2	REMOVE SWM POND 02 FROM CONTRACT
8.3.94	△1	REVISE BUILDING FOOTPRINT

ASC - HEC

OWNER / DEVELOPER

HOWARD COUNTY GENERAL HOSPITAL, INC.
5755 Cedar Lane Columbia, MD 21044

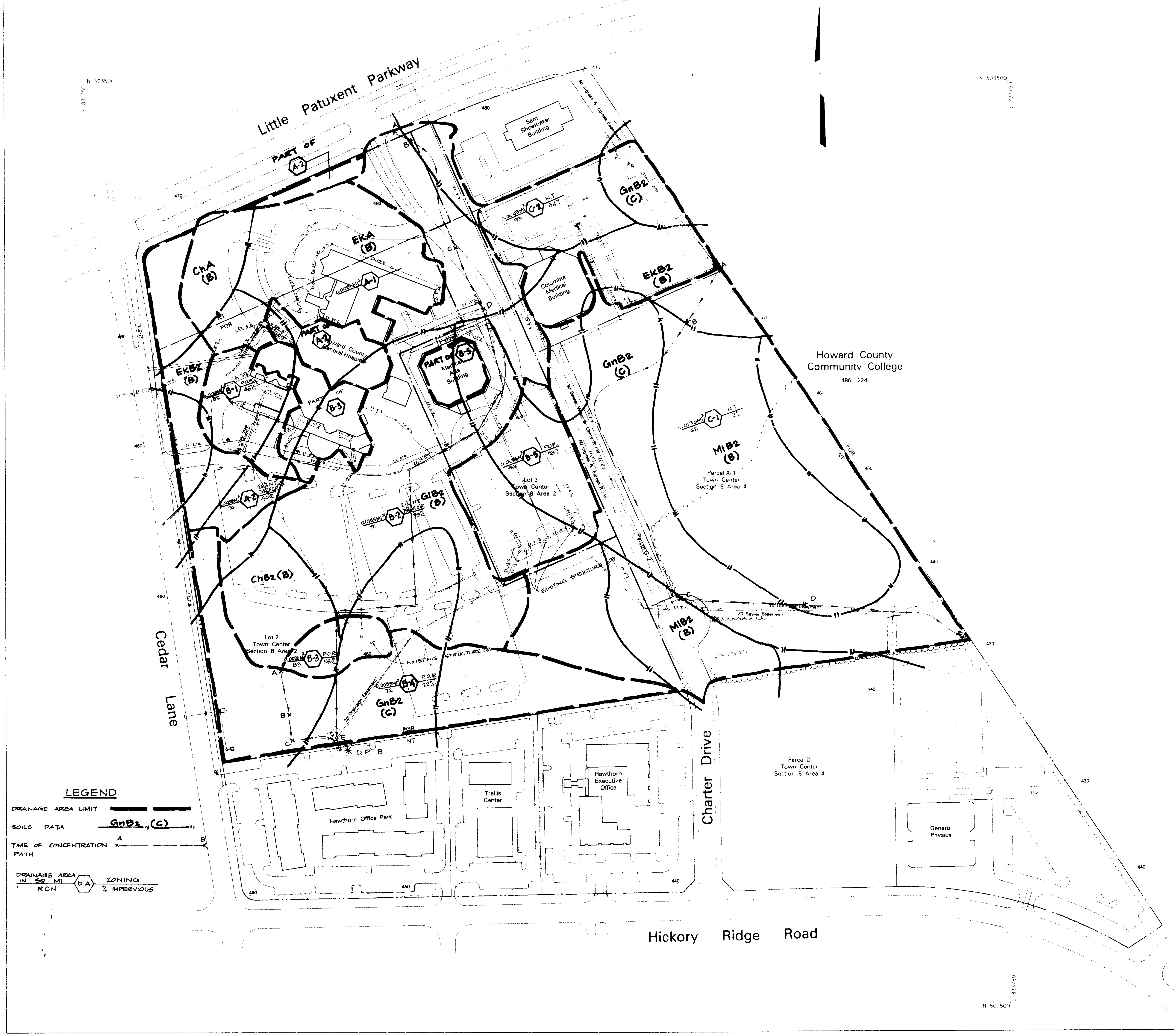
Daft · McCune · Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue Towson, Maryland 21286
410 296 3333
Fax 296 4705

AREA HOWARD COUNTY GENERAL HOSPITAL, INC.
TOWN CENTER SECTION 8, AREA 2
TAX MAP 35 LOT 2 / PARCEL 276
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE DRAINAGE AREA MAP PROPOSED CONDITION STORMWATER MANAGEMENT PLAN

Des By JMG	Scale As Shown	Proj. No. 89015.K1
Drn By DBS	Date	3 OF 7
Chk By EIS	Approved	

SDP-94-04



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

COUNTY HEALTH OFFICER — DATE 1/4/94

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 12.30.93

CHIEF BUREAU OF ENGINEERING — DATE 12/30/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 1/12/94

CHIEF, DIVISION OF COMMUNITY PLANNING AND RESEARCH — DATE 1/10/94

Date	No.	Revision Description

ASC–HEC

OWNER / DEVELOPER

HOWARD COUNTY GENERAL HOSPITAL, INC.
5755 CEDAR LANE
COLUMBIA, MARYLAND 21044

Daft · McCune · Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

HOWARD COUNTY GENERAL HOSPITAL, INC.
TOWN CENTER SECTION 8, AREA 2
TAX MAP 35 LOT 2 /PARCEL 276
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

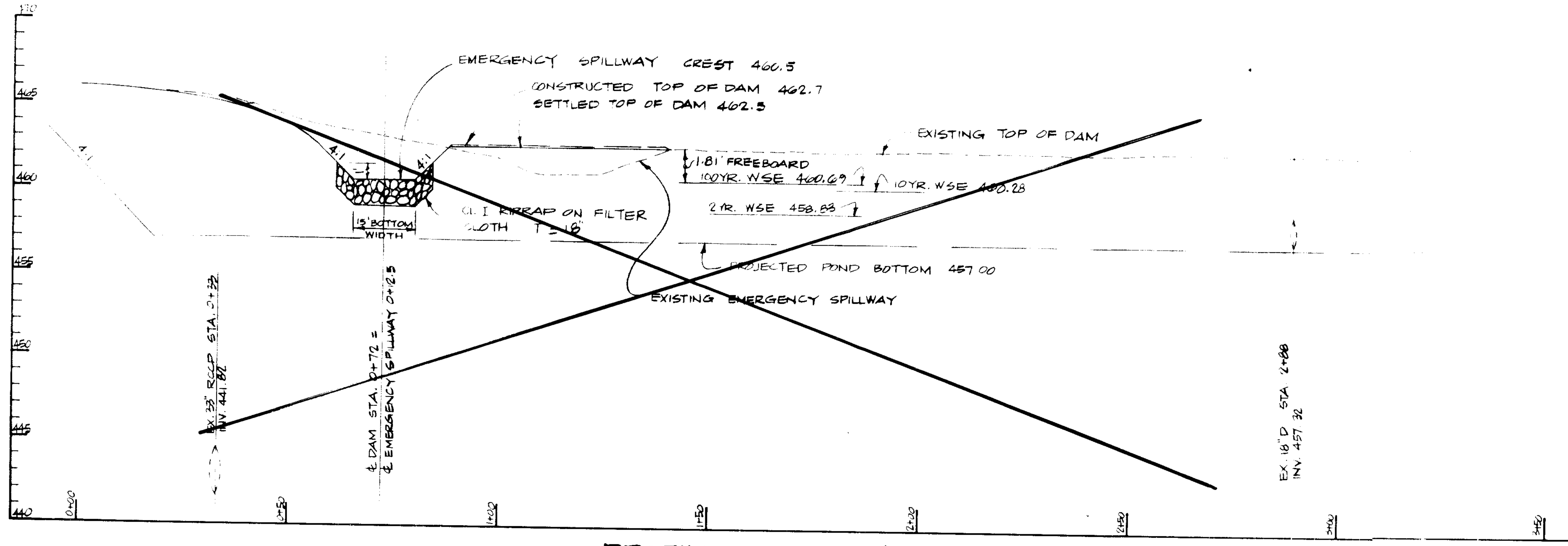
TITLE **DRAINAGE AREA MAP EXISTING CONDITION STORMWATER MANAGEMENT PLAN**

11/23/93 Date

Professional Engr. No. 16580

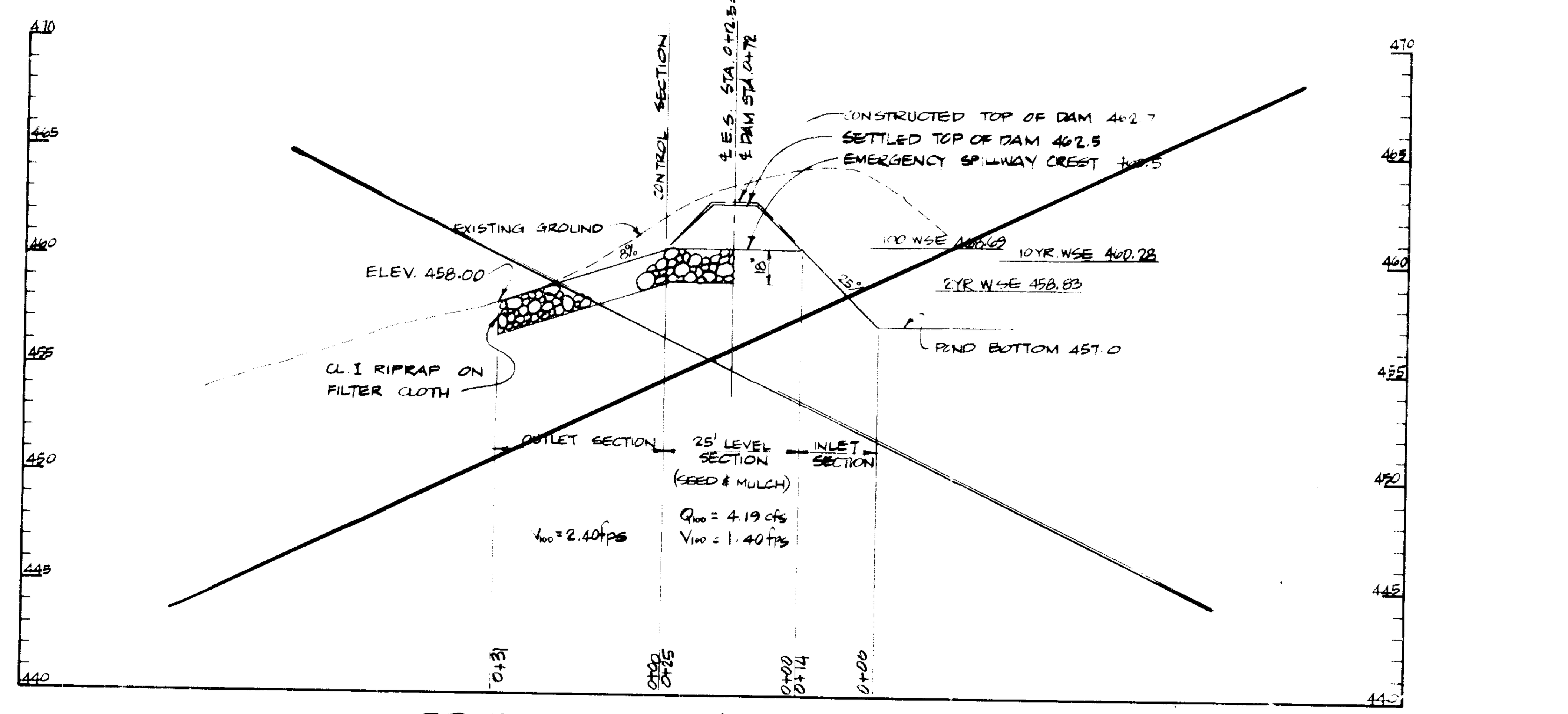
Des By JMG	Scale 1" = 100'	Proj. No. 89015 K1
Drn By DBS	Date	4 OF 7
Chk By EIS	Approved	

SDP-94-04



PROFILE ALONG ℄ DAM

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'



PROFILE ALONG ℄ EMERGENCY SPILLWAY

SCALE: HORIZ. 1" = 20'
VERT. 1" = 5'

CONSTRUCTION SPECIFICATIONS

1. **GENERAL**
All stormwater management facilities shall be constructed in accordance with Howard County's "Design Manual, Volume I - Storm Drainage (1990)" and the S.C.S. Maryland "Standard and Specifications for Ponds" (MD-378, 1992)

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

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

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

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

3. **EARTH FILL**

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

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

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

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

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

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

6. **ROCK RIP-RAP**
Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 905.

The rip-rap shall be placed to the required thickness in one operation. The rock shall be delivered and placed in a manner that will insure the rip-rap in place shall be reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks filling the voids between the larger rocks. Filter cloth shall be placed under all rip-rap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 919.12.

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

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

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

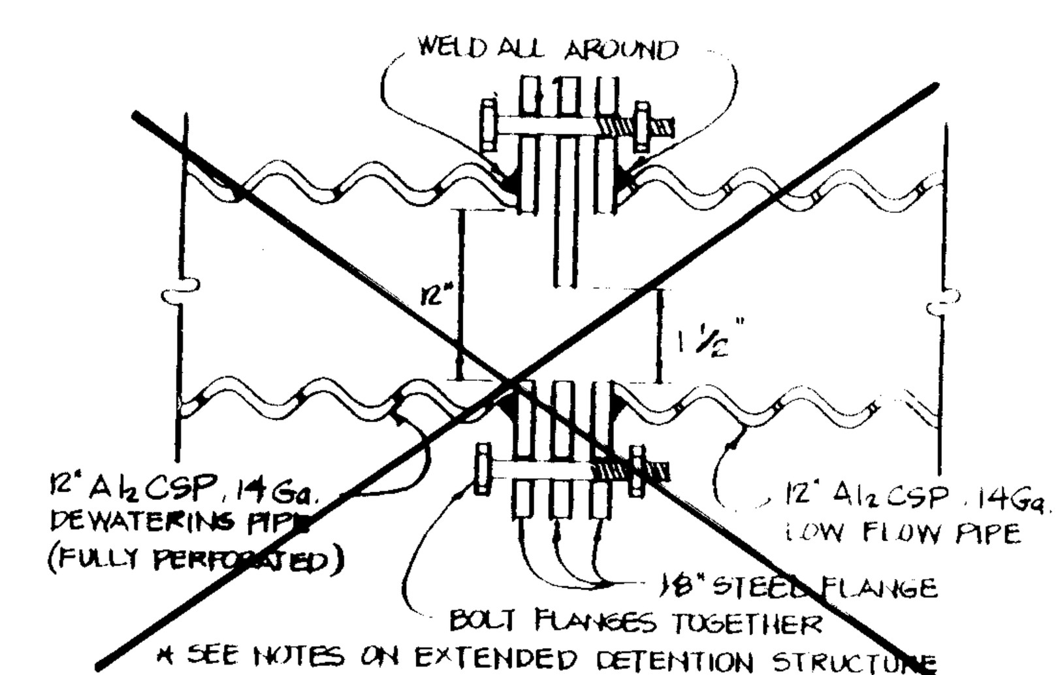
All disturbed areas shall be controlled by an Erosion and Sediment Control Plan which has been approved by the Howard County Soil Conservation District (HCS.C.D.).

10. **SEEDING**
Seeding, fertilizing and mulching shall be as follows:

Seed Mix:	90% Forager Tall Fescue 10% Kenblue Applied at a rate of 300 lbs. per acre.
Lime:	2 tons/acre Dolomitic Limestone.
Fertilizer:	600 lbs./acre 10-10-10 fertilizer before seeding, 400 lbs./acre 30-0-0 ureaform fertilizer at time of seeding.
Mulch:	Straw at 4,000 lbs. per acre.
Anchoring:	Mulching tool or emulsified asphalt binder at a rate of 8 gal. per 1,000 square feet.

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

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

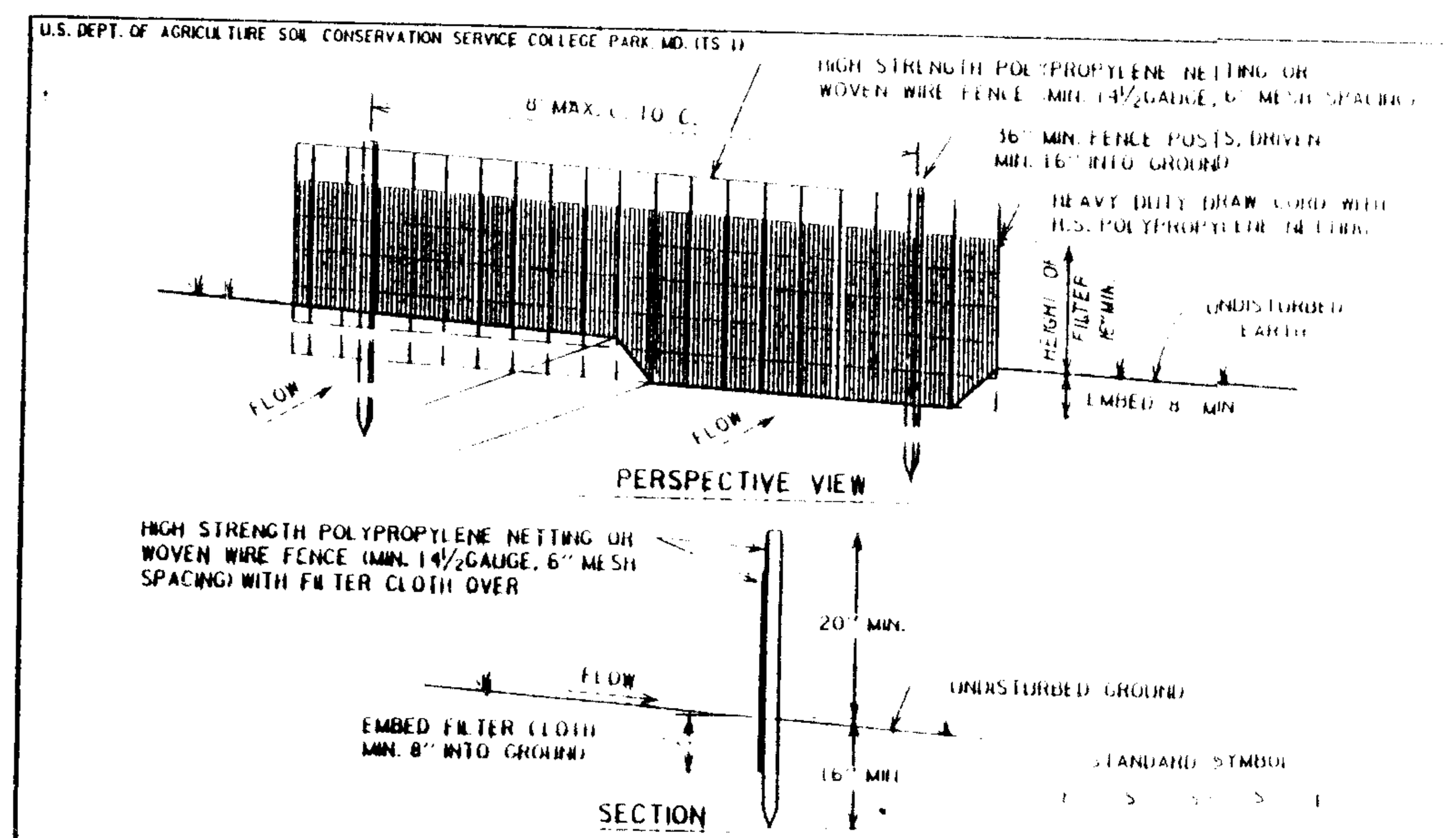


WELDING DETAIL

NO SCALE

THE STORMWATER MANAGEMENT FACILITY SHOWN ON THIS SHEET HAS BEEN SUPERCEDED BY SDP 95-114. CONSTRUCTION OF THE EXTENDED DETENTION POND STRUCTURE 02 SHOULD BE COMPLETED PER SDP 95-114.

U.S. DEPT. OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK MD.

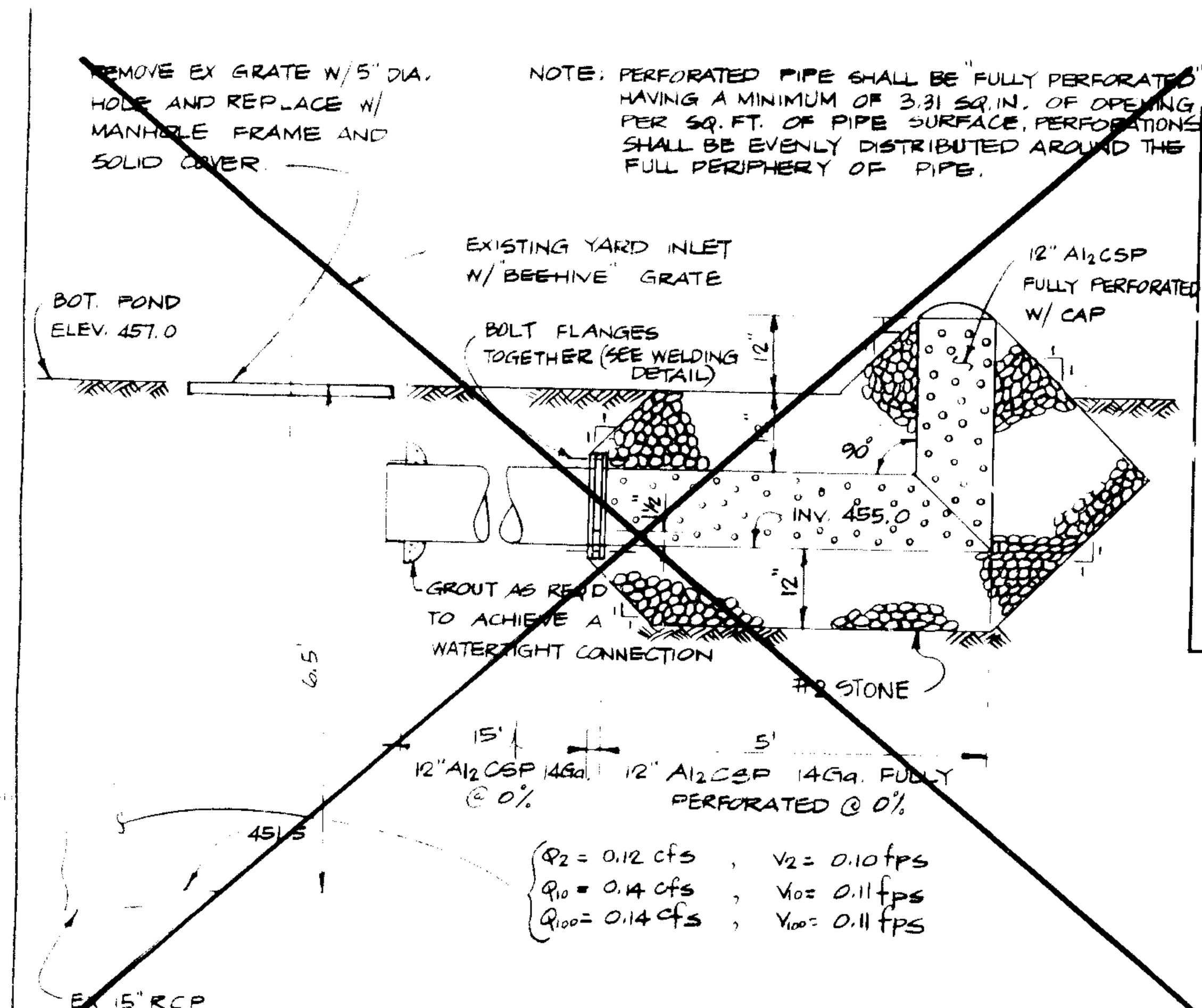


CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. HIGH STRENGTH POLYPROPYLENE NETTING OR WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE

POSTS: STEEL EITHER T OR U TYPE OR [illegible] HARDWOOD
FENCE: WOVEN WIRE, 14 GAUGE 6" MAX. MESH OPENING OR HIGH STRENGTH POLYPROPYLENE NETTING
FILTER CLOTH: FILTER X, MIRAFI [illegible], STABILINKA [illegible] OR APPROVED EQUAL
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

SILT FENCE



EXTENDED DETENTION DEWATERING DEVICE

SCALE: 1/2" = 1'-0"

11/23/93
Date

Professional Engr. No. 16580

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 1/4/94

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 12/30/93
CHIEF BUREAU OF ENGINEERING — DATE 12/30/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DATE 1/12/94
CHIEF, DIVISION OF COMMUNITY PLANNING & RESEARCH — DATE 1/10/94

Date	No.	Revision Description
02-06-96	2	REMOVE SWM POND 02 FROM CONTRACT

ASC - HEC

OWNER / DEVELOPER

HOWARD COUNTY GENERAL HOSPITAL INC.
5755 Cedar Lane Columbia MD. 21044

DMW
Daft · McCune · Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue Towson, Maryland 21286 410 296 3333 Fax 296 4705

AREA: HOWARD COUNTY GENERAL HOSPITAL INC.
TOWN CENTER SECTION 8 AERA 2
TAX MAP 35 LOT 2/ PARCEL 276
5TH ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

TITLE: STORMWATER MANAGEMENT PROFILES & DETAILS

Des By J.M.G.	Scale AS SHOWN	Proj. No. 89015 KI
Drn By D.B.S.	Date	
Chk By E I S	Approved	5 OF 7

SDP-94-04

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

Seedbed preparation - Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

Soil Amendments - Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq.ft.)

Seeding - For the periods March 1 thru April 30, and August 15 thru October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq.ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching - Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq.ft.) of unrotted weed free small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 ft. or higher, use 348 gal per acre (8 gal/1000 sq.ft.) for anchoring.

Refer to the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control for additional rates and methods not covered.

PERMANENT SEEDING NOTES

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

Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

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

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

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

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

Maintenance - Inspect all seeding area and make needed repairs, replacements and reseeding.

SEDIMENT CONTROL LEGEND

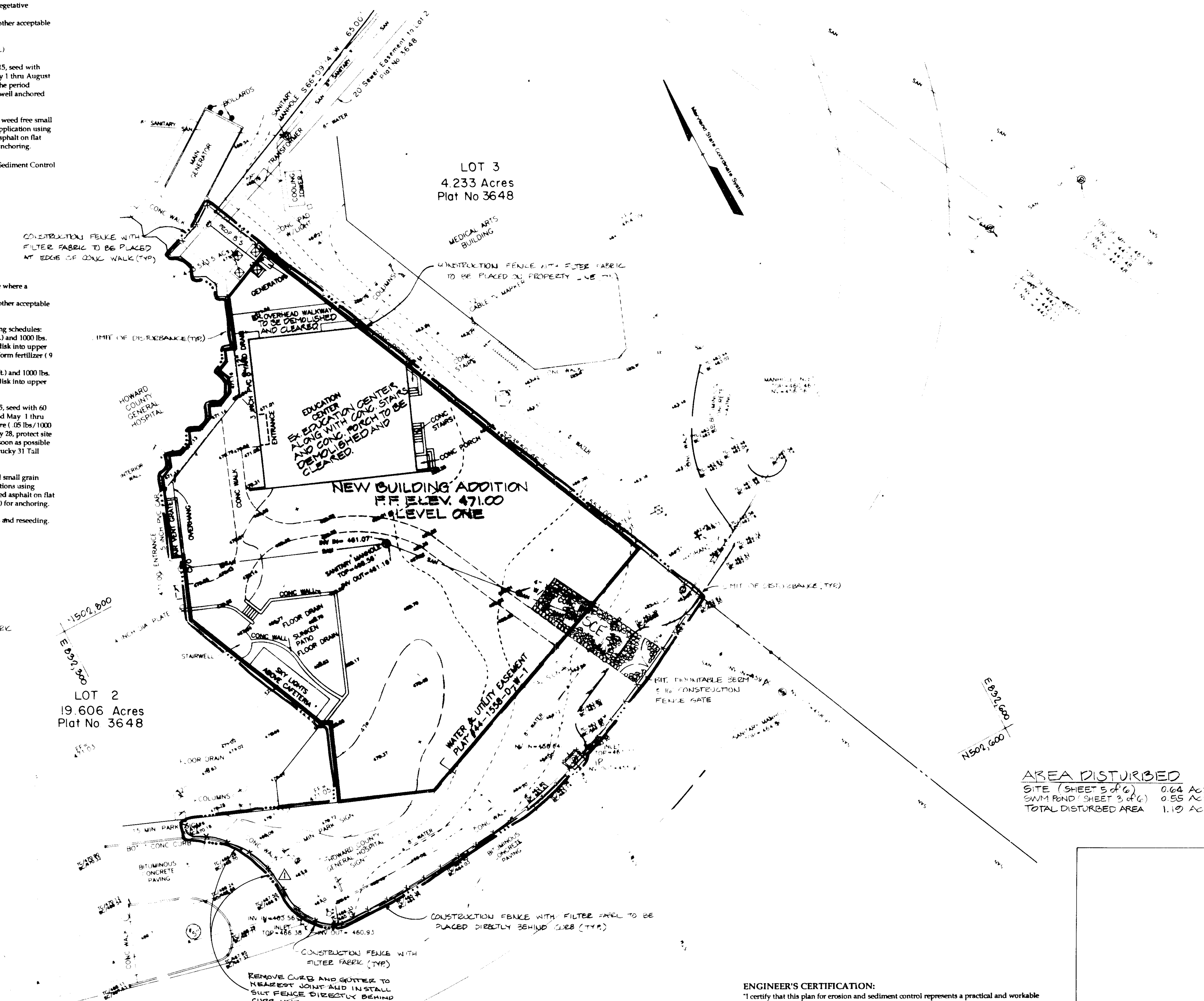
EXISTING CONTOURS

LIMIT OF DISTURBANCE

CONSTRUCTION FENCE WITH FILTER FABRIC

STABILIZED CONSTRUCTION ENTRANCE

INLET PROTECTION



AREA DISTURBED

SITE (SHEET 5 of 6)	0.64 Ac±
SWM POND (SHEET 3 of 6)	0.55 Ac±
TOTAL DISTURBED AREA	1.19 Ac±

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

Howard S.C.D. — Date 12/2/93

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

J. G. Crawfield / c.s. — 12/2/93

U.S. Soil Conservation Service — Date

ENGINEER'S CERTIFICATION:

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

John W. Ranocchia, Sr. PE 10551 — 11/23/93 Date

DEVELOPER'S CERTIFICATION:

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

George Barker — 11/23/93 Date

Sr. V.P. - Howard Co. Gen. Hosp.

STANDARD SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction, (313 - 1850).
2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", and revisions thereto.
3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a.) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b.) 14 days as to all other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. 51), sod (Sec. 54), temporary seeding (Sec. 50), and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7. SITE ANALYSIS:

Total Area of Site	19.61 Acres +/-
Area Disturbed	0.64 Acres +/-
Area to be roofed or paved	0.47 Acres +/-
Area to be vegetatively stabilized	0.17 Acres +/-
Total Cut	12,725 Cu. Yds. +/-
Total Fill	0 Cu. Yds. +/-
Offsite waste/borrow area location	EXCESS CUT TO BE TAKEN TO A SITE WITH AN APPROVED SEDIMENT AND EROSION CONTROL PLAN

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
11. Trenches for the construction of utilities is limited to three pipe lengths or that which can be back filled and stabilized within one working day, whichever is shorter.

Sequence of Construction

1. Obtain a grading permit.
2. Notify the Howard County Office of Inspection and Permits (992-2437) a minimum of 48 hours prior to the start of any construction
3. Clear and grub for and install sediment and erosion control measures or devices. (1 week)
4. Clear, grub, and complete demolition of existing structures (1 month)
5. Stabilize all nonactive graded surfaces with temporary seeding (1 day)
6. Begin building addition construction. Install utilities. (1 year)
7. With the prior permission of the Sediment Control Inspector and the Howard County Sediment Control Division, remove sediment controls. Fine grade and stabilize these areas. (3 days)

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

COUNTY HEALTH OFFICER — DATE 1/4/94

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 12.30.93

CHIEF BUREAU OF ENGINEERING — DATE 12.30.93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 1/12/94

CHIEF, DIVISION OF COMMUNITY PLANNING & RESEARCH — DATE 1/10/94

Date	No.	Revision Description
8.3.94	1	REVISE L.O.D. AND SILT FENCE LOCATION

ASC - HEC

OWNER / DEVELOPER

HOWARD COUNTY GENERAL HOSPITAL, INC.
5755 Cedar Lane Columbia, MD. 21044

Daft · McCune · Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue, Towson, Maryland 21286
410 296 3333
Fax 296 4705

HOWARD COUNTY GENERAL HOSPITAL, INC.
TOWN CENTER SECTION 8, AREA 2
TAX MAP 35 LOT 2 / PARCEL 278
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

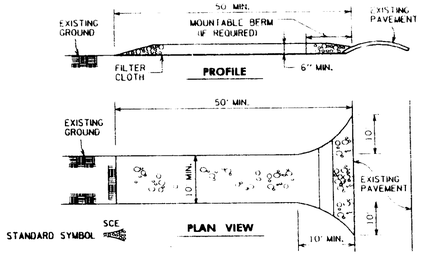
TITLE SITE DEVELOPMENT PLAN
SEDIMENT & EROSION CONTROL PLAN

11/23/93 Date

Professional Engr. No. 16580

Des By CRW	Scale 1" = 30'	Proj. No. [illegible]
Drn By CRW	Date 6/25/93	6 OF 7
Chk By EIS	Approved	

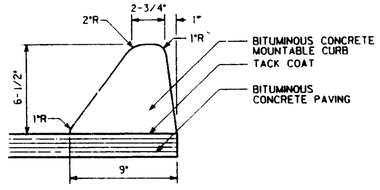
SDP-94-64



CONSTRUCTION SPECIFICATIONS:

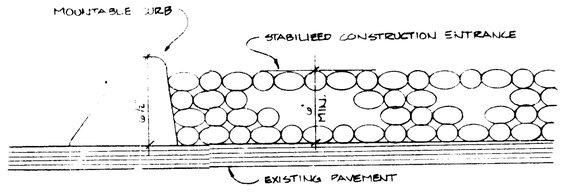
1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE, IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE



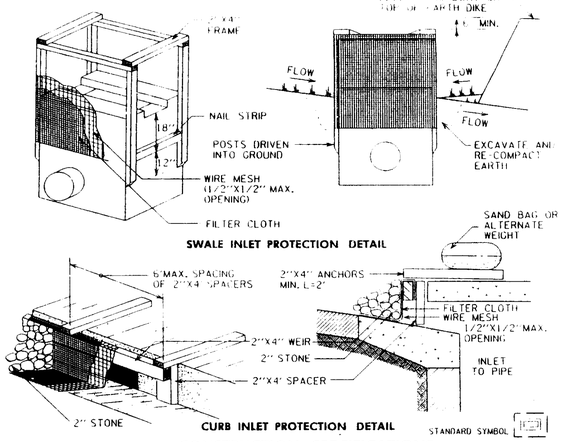
BIT. CONC. MOUNTABLE CURB

SCALE : 2"=1'-0"



BIT. CONC. MOUNTABLE CURB & STABILIZED CONSTRUCTION ENTRANCE JUNCTURE

2"=1'-0"



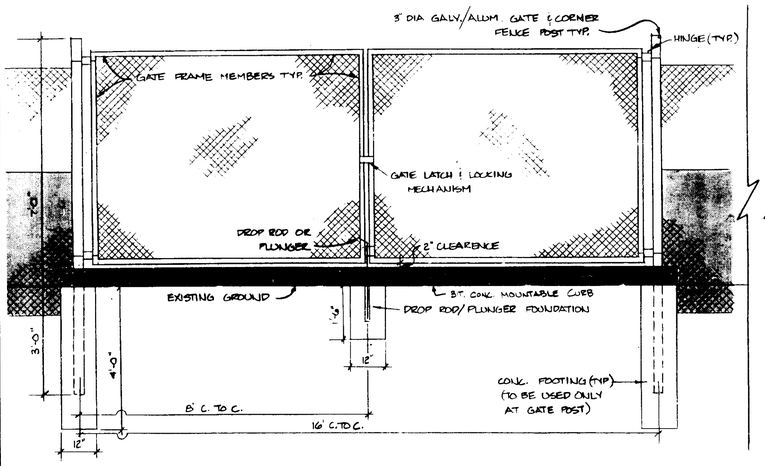
SWALE INLET PROTECTION DETAIL

CONSTRUCTION SPECIFICATIONS

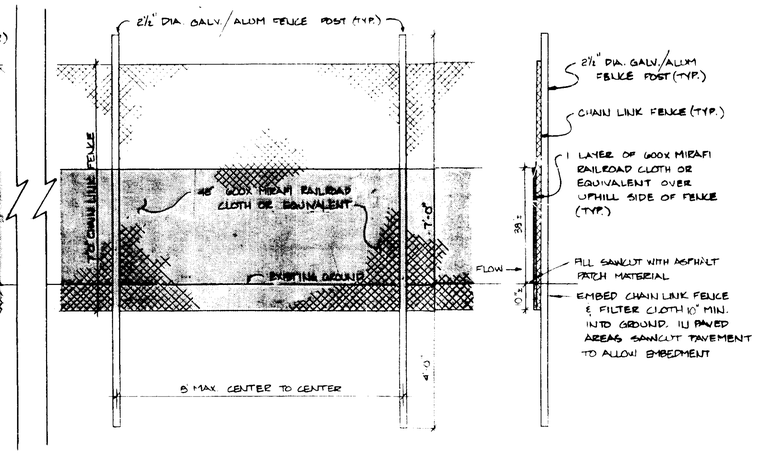
I. MATERIALS
- A. WOODEN FRAME IS TO BE CONSTRUCTED OF 2" X 4" CONSTRUCTION GRADE LUMBER.
- B. WIRE MESH MUST BE OF SUFFICIENT STRENGTH TO SUPPORT FILTER FABRIC, AND STONE FOR CURB INLETS, WITH WATER FULLY IMPOUNDED AGAINST IT.
- C. FILTER CLOTH MUST BE OF A TYPE APPROVED FOR THIS PURPOSE; RESISTANT TO SUNLIGHT WITH SIEVE SIZE, EOS, 40-85, TO ALLOW SUFFICIENT PASSAGE OF WATER AND REMOVAL OF SEDIMENT.
- D. STONE IS TO BE 2" IN SIZE AND CLEAN, SINCE FINES WOULD CLOG THE CLOTH.

II. PROCEDURE
- A. A SWALE, DITCHLINE, OR YARD INLET PROTECTION.
  1. EXCAVATE COMPLETELY AROUND INLET TO A DEPTH OF 18" BELOW NOTCH ELEVATION.
  2. DRIVE 2" X 4" POST 1' INTO GROUND AT FOUR CORNERS OF INLET. PLACE NAIL STRIPS BETWEEN POSTS ON ENDS OF INLET. ASSEMBLE TOP PORTION OF 2" X 4" FRAME USING OVERLAP JOINT SHOWN. TOP OF FRAME (WEIR) MUST BE 6" BELOW EDGE OF ROADWAY ADJACENT TO INLET.
  3. STRETCH WIRE MESH TIGHTLY AROUND FRAME AND FASTEN SECURELY. ENDS MUST MEET AT POST.
  4. STRETCH FILTER CLOTH TIGHTLY OVER WIRE MESH. THE CLOTH MUST EXTEND FROM TOP OF FRAME TO 18" BELOW INLET NOTCH ELEVATION. FASTEN SECURELY TO FRAME. ENDS MUST MEET AT POST, BE OVERLAPPED, AND FOLDED, THEN FASTENED DOWN.
  5. BACKFILL AROUND INLET IN COMPACTED 6" LAYERS UNTIL LAYER OF EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
  6. IF INLET IS NOT IN A LOW POINT, CONSTRUCT A COMPACTED EARTH DIKE IN THE DITCHLINE BELOW IT. THE TOP OF THIS DIKE IS TO BE AT LEAST 6" HIGHER THAN THE TOP OF THE FRAME (WEIR).
  7. THIS STRUCTURE MUST BE INSPECTED FREQUENTLY AND THE FILTER FABRIC REPLACED WHEN CLOGGED.
- B. CURB INLET PROTECTION.
  1. ATTACH A CONTINUOUS PIECE OF WIRE MESH (30" MINIMUM WIDTH BY THROAT LENGTH PLUS 4') TO THE 2" X 4" WEIR (MEASURING THROAT LENGTH PLUS 2') AS SHOWN ON THE STANDARD DRAWING.
  2. PLACE A PIECE OF APPROVED FILTER CLOTH (40-85 SIEVE) OF THE SAME DIMENSIONS AS THE WIRE MESH OVER THE WIRE MESH AND SECURELY ATTACH TO THE 2" X 4" WEIR.
  3. SECURELY NAIL THE 2" X 4" WEIR TO 2" LONG VERTICAL SPACERS TO BE LOCATED BETWEEN THE WEIR AND INLET FACE (MAXIMUM 6' APART).
  4. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL ANCHORS (MINIMUM 2' LENGTHS OF 2" X 4") TO THE TOP OF THE WEIR AT SPACER LOCATIONS. THESE 2" X 4" ANCHORS SHALL EXTEND ACROSS THE INLET TOP AND BE HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHT.
  5. THE ASSEMBLY SHALL BE PLACED SO THAT THE END SPACERS ARE A MINIMUM 1' BEYOND BOTH ENDS OF THE THROAT OPENING.
  6. FORM THE WIRE MESH AND FILTER CLOTH TO THE CONCRETE GUTTER AGAINST THE FACE OF CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN 2" STONE OVER THE WIRE MESH AND FILTER FABRIC IN SUCH MANNER TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE FILTER CLOTH.
  7. THIS TYPE OF PROTECTION MUST BE INSPECTED FREQUENTLY AND THE FILTER CLOTH AND STONE REPLACED WHEN CLOGGED WITH SEDIMENT.
  8. ASSURE THAT STORM FLOW DOES NOT BYPASS INLET BY INSTALLING TEMPORARY EARTH OR ASPHALT DIKES DIRECTING FLOW INTO INLET.

INLET PROTECTION DETAIL



CONSTRUCTION FENCE GATE



WITH SUPER SILT FENCE

Notes

1. Refer to specifications for material sized, types and construction requirements.
2. Refer to the specifications for footing sizes and depths.
3. Submit shop drawings for approval prior to construction.
4. Provide keeper at gates.
5. Fencing and Super Silt Fence

   Fencing shall be chain link fence, height as noted in detail, constructed in accordance with the latest Maryland State Highway Administration Standard Detail 890.01 and 890.02. The specifications for a 6'-0" fence shall be used substitute 6' or 7' fabric as shown on detail and 132" posts. Posts shall be placed without concrete embedment, EXCEPT AS SHOWN IN DETAIL.

   a. Chain link fence to be fastened securely to fence posts with ties or staples.

   b. Filter cloth to be fastened securely to chain link fence with ties spaced every 24" at top of mid section.

   c. When two sections of filter cloth adjoin each other they shall be overlapped by 6" and folded.

   d. Maintenance shall be performed as needed and material removed when bulges develop in the silt fence.

CONSTRUCTION FENCE

1"=2'

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

Howard S.C.D. — 12/2/93 Date

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

U.S. Soil Conservation Service — 12/2/93 Date

ENGINEER'S CERTIFICATION:

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

John W. Runacchia, Jr. PE10551 — 11/23/93 Date

DEVELOPER'S CERTIFICATION:

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Date

11/23/93 Date

Professional Engr. No. 16580

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
Joyce M Boyd — COUNTY HEALTH OFFICER — 12/2/93 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE
CHIEF BUREAU OF ENGINEERING — 12/2/93 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
Joint Summary — CHIEF, DIVISION OF COMMUNITY PLANNING & RESEARCH — 12/2/93 DATE

Date	No.	Revision Description

ASC - HEC

OWNER / DEVELOPER

HOWARD COUNTY GENERAL HOSPITAL, INC.
5755 Cedar Lane Columbia, MD. 21044

DMW
Daft · McCune · Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue, Towson, Maryland 21286, (410) 296-3333, Fax (410) 296-4705

HOWARD COUNTY GENERAL HOSPITAL, INC.
TOWN CENTER SECTION 6, AREA 2
TAX MAP 35 LOT 2 / PARCEL 276
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE SITE DEVELOPMENT PLAN
SEDIMENT & EROSION CONTROL DETAILS

Des By C.R.W.	Scale AS NOTED	Proj. No. 89015K1
Drn By C.R.W.	Date 6/25/93	7 OF 7
Chk By E.S.	Approved	

SDP 94-04