

VICINITY MAP
SCALE: 1" = 2000'

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

COUNTY HEALTH OFFICER _____ DATE _____

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

James J. [Signature] 8/22/90
DIRECTOR DATE

William J. [Signature] 8/22/90
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

William J. [Signature] 8/28/90
PLANNING DIRECTOR DATE

Mark J. [Signature] 8/28/90
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

ADDRESS CHART

PARCEL	STREET ADDRESS
A	10550 LITTLE PATUXENT PKWY

APPROVED
PLANNING BOARD
OF HOWARD COUNTY

7-17-90
[Signature]

**SEDIMENT TRAP #1
DESIGN DATA**

OUTLET - EXISTING INLET
DRAINAGE AREA - 9.3 ACRES
VOLUME REQUIRED - 623 C.Y.
VOLUME PROVIDED - 645 C.Y.
BOTTOM ELEVATION - 355.0
CLEANOUT ELEV. - 356.0
STORAGE ELEV. - 357.0
WEIR CREST ELEV. - 357.0
TOP BERM ELEV. - 358.5
AREA @ ELEV.355.0 - 0.15 AC
AREA @ ELEV.357.0 - 0.25 AC

OWNER AND DEVELOPER
THE HOWARD RESEARCH AND
DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21043

WHITMAN, REQUART AND ASSOCIATES
ENGINEERS
2315 SAINT PAUL STREET
BALTIMORE, MARYLAND 21218
Thomas J. [Signature]
THOMAS J. SHAFER P.E. NO. 8457

NOTE: See previous D.P.Z. File Nos. S-90-31, P8-264, FDP-211.

LEGEND

- 400 EXISTING CONTOUR
- 398 PROPOSED CONTOUR
- PROPOSED DRAINAGE DIVIDE
- S---S--- PROPOSED SILT FENCE
- ←←←←← PROPOSED EARTH DIKE
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- LIMIT OF DISTURBANCE
- ===== EXISTING PATHWAY
- RIGHT OF WAY

SITE ANALYSIS (SHEET 1)

TOTAL AREA OF SITE 9.3 ACRES
AREA DISTURBED 9.3 ACRES
AREA TO BE ROOFED OR PAVED 0 ACRES
AREA TO BE VEGETATIVELY STABILIZED 9.3 ACRES
TOTAL CUT 47,000 CU. YDS.
TOTAL FILL 11,000 CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION 36,000 CU. YDS. (TO SPOIL AREA)

SUBDIVISION NAME			SECTION/AREA		PARCEL
TOWN CENTER			2/6		A & B
PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
-	1	NT E.C. COMM.	36	5	6052-02
WATER CODE			SEWER CODE		
E-31			5321000		

NO. DATE DESCRIPTION OF REVISION

COLUMBIA
SITE DEVELOPMENT PLAN
TOWN CENTER
SECTION 2 AREA 6
PARCELS "A" AND "B"
(OFFICE BUILDING AND PARKING DECK)
**GRADING AND
SEDIMENT CONTROL PLAN**

SHEET 1 OF 3

ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND
DATE: AUGUST 6, 1990

PARCEL
TAX MAP NO. 36
SCALE: 1" = 50'

REVIEWED FOR HOWARD S.C.D. AND MEETS THE
TECHNICAL REQUIREMENTS.

[Signature] 8/22/90
U.S. SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL
EROSION AND SEDIMENT CONTROL BY THE HOWARD
SOIL CONSERVATION DISTRICT.

HOWARD S.C.D. DATE

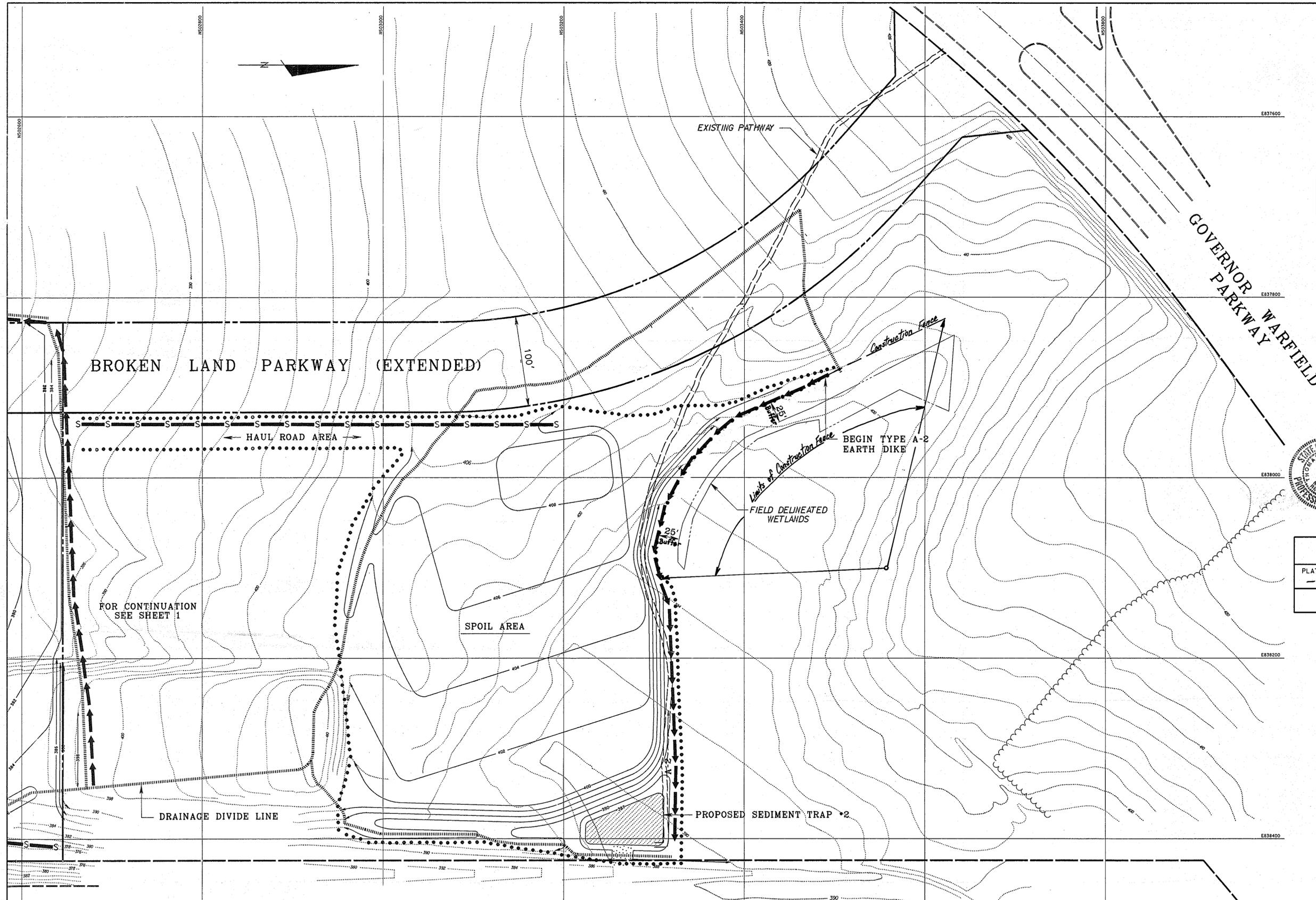
BY THE DEVELOPER:
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE
DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE
PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A
CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT
APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT
AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE
PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL
CONSERVATION DISTRICT".

[Signature] 8/22/90
GREGORY R. KLAR DATE

NOTE #1
Modify existing inlet to
Type "D" inlet using
existing top slab (open
4 sides) Top Slab Elev. 357.83
Throat Opening Elev. 357.10

BY THE ENGINEER:
"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".

Thomas J. [Signature] 8/22/90
THOMAS J. SHAFER P.E. NO. 8457 DATE



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

COUNTY HEALTH OFFICER _____ DATE _____

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

James J. Schum 8/22/90
DIRECTOR DATE

Gregory R. Klar 8/22/90
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

James J. Schum 8/22/90
PLANNING DIRECTOR DATE

Frank S. Dangle 8/22/90
CHIEF, DIVISION OF COMMUNITY
PLANNING AND LAND DEVELOPMENT DATE

APPROVED
PLANNING BOARD
HOWARD COUNTY

DATE 7-17-90

OWNER AND DEVELOPER
THE HOWARD RESEARCH AND
DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21043

WHITMAN, REQUARDT AND ASSOCIATES
ENGINEERS
2315 SAINT PAUL STREET
BALTIMORE, MARYLAND 21218

Thomas J. Shafer
THOMAS J. SHAFER P.E. NO. 8457



SUBDIVISION NAME TOWN CENTER			SECTION/AREA 2/6	PARCEL A & B
PLAT -	BLOCK 1	ZONE NT E.C. COM.	TAX/ZONE MAP 36	ELEC. DIST. 5
WATER CODE E-31			SEWER CODE 5321000	
CENSUS TR. 6052-02				

REVIEWED FOR HOWARD S.C.D. AND MEETS THE
TECHNICAL REQUIREMENTS.

Gregory R. Klar 8/18/90
HOWARD S.C.D. DATE

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EROSION AND SEDIMENT CONTROL BY THE HOWARD
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BY THE DEVELOPER:
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE
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PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL
CONSERVATION DISTRICT".

Gregory R. Klar 8/7/90
GREGORY R. KLAR DATE

BY THE ENGINEER:
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL
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PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE
HOWARD SOIL CONSERVATION DISTRICT".

Thomas J. Shafer 8/7/90
THOMAS J. SHAFER P.E. NO. 8457 DATE

**SEDIMENT TRAP #2
DESIGN DATA**

STONE OUTLET TRAP
DRAINAGE AREA - 5.0 ACRES
VOLUME REQUIRED - 335 C.Y.
VOLUME AVAILABLE - 348 C.Y.
BOTTOM ELEVATION - 386.8
CLEANOUT ELEV. - 387.9
STORAGE ELEV. - 389.0
WEIR CREST ELEV. - 390.0
TOP BERM ELEV. - 391.0
LENGTH OF WEIR - 20'

SITE ANALYSIS (SHEET 2)

TOTAL AREA OF SITE 5.0 ACRES
AREA DISTURBED 4.1 ACRES
AREA TO BE ROOFED OR PAVED 0 ACRES
AREA TO BE VEGETATIVELY STABILIZED 4.1 ACRES
TOTAL CUT 0 CU. YDS.
TOTAL FILL 36,000 CU. YDS.

NO.	DATE	DESCRIPTION OF REVISION

COLUMBIA
SITE DEVELOPMENT PLAN
TOWN CENTER
SECTION 2 AREA 6
PARCELS "A" AND "B"
(OFFICE BUILDING AND PARKING DECK)

**GRADING AND
SEDIMENT CONTROL PLAN**

SHEET 2 OF 3

ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND
DATE: AUGUST 6, 1990

PARCEL
TAX MAP NO. 36
SCALE: 1" = 50'

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, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENED.

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

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15. SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ FT). FOR THE PERIOD MAY 1 THRU AUGUST 14. SEE 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 ACHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OR USE SOD.

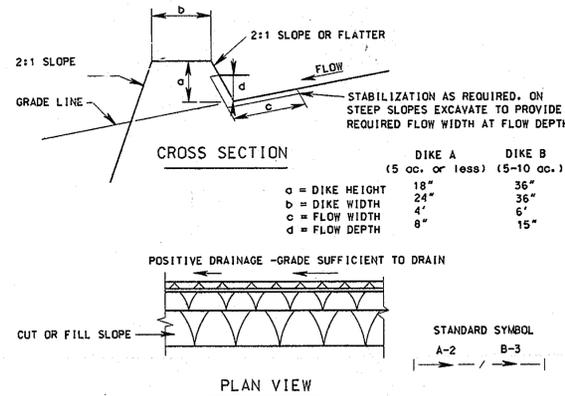
MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/100 SQ FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT OR HIGHER, USE 348 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 RATE AND METHODS NOT COVERED.

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT.
- ARRANGE AN ON-SITE PRE-CONSTRUCTION MEETING WITH A SEDIMENT CONTROL INSPECTOR.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- INSTALL SILT FENCE ALONG LITTLE PATUXENT PARKWAY.
- CLEAR AND GRUB ONLY THE AREA NECESSARY TO CONSTRUCT SEDIMENT TRAP #1, SEDIMENT TRAP #2 AND EARTH DIKES. RAISE EXISTING INLET TO DESIGN ELEVATION.
- CONSTRUCT AND STABILIZE SEDIMENT TRAP #1, SEDIMENT TRAP #2 AND PERIMETER DIKES.
- CLEAR, GRUB AND ROUGH GRADE REMAINDER OF SITE ACCORDING TO PLANS, SHEETS 1 AND 2.
- STABILIZE ALL CONTRIBUTING AREAS IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS.
- ALL SEDIMENT CONTROL DEVICES TO REMAIN IN PLACE FOR FUTURE SITE DEVELOPMENT.

EARTH DIKE



CONSTRUCTION SPECIFICATIONS

- ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
- ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
- TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
- FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
- EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN. EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
- STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON. (B) FLOW CHANNEL AS PER THE CHART BELOW.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	-5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSIOR, SOD, 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD, 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

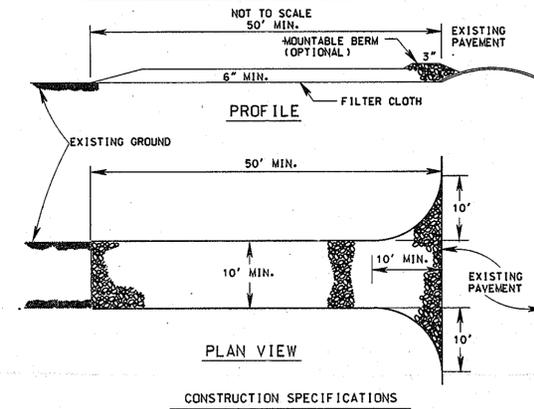
- STONE TO BE 2 INCH STONE OR RECYCLED CONCRETE EQUIVALENT. IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
 - RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
 - APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

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. (1992-2437)
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 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 GREATER THAN 3:1, (b) 14 DAYS AS TO 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 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51) SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 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:

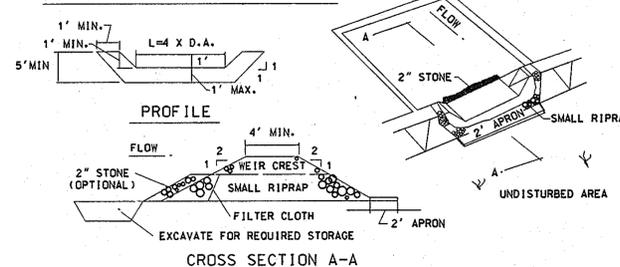
TOTAL AREA OF SITE	14.3 ACRES
AREA DISTURBED	13.4 ACRES
AREA TO BE ROOFED OR PAVED	0 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.9 ACRES
TOTAL CUT	47,000 CU. YDS.
TOTAL FILL	11,800 CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION	36,000 CU. YDS. (TO SPOIL AREA)
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
- 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 KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD-SOIL CONSERVATION DISTRICT.

STABILIZED CONSTRUCTION ENTRANCE



- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- 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.
- 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.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-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.
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO A APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STONE OUTLET SEDIMENT TRAP V



- OPTION: A ONE FOOT LAYER OF 2" STONE MAY BE PLACED ON THE UPSTREAM SIDE OF THE RIPRAP IN A PLACE OF THE EMBEDDED FILTER CLOTH.
- CONSTRUCTION SPECIFICATIONS FOR ST-V**
- AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
 - THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
 - ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
 - THE STONE USED IN THE OUTLET SHALL BE RIPRAP 4"-8" ALONG WITH A 1" THICKNESS OF 2" AGGREGATE PLACED ON THE UP-GRADE SIDE OF THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN RIPRAP.
 - SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP.
 - THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
 - CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
 - THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

PERMANENT SEEDING NOTES

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

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY 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 SQ FT) 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 UREAFORM FERTILIZER (9 LBS/1000 SQ FT).
- ACCEPTABLE - APPLY 2 TONS PER ACRE 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 DISC 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 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 ACHORED 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 APPLICATION 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 - INSPECTION ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

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

COUNTY HEALTH OFFICER _____ DATE _____

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

James J. L... 8/22/90
DIRECTOR DATE

William S. ... 8/22/90
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Thomas J. Shafer 8/22/90
PLANNING DIRECTOR DATE

David V. ... 8/22/90
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY

DATE: 7-17-90

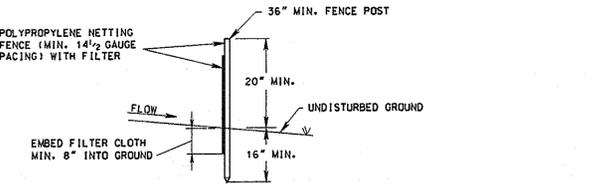
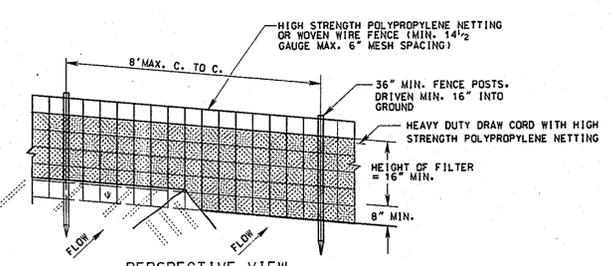
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OWNER AND DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
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COLUMBIA, MARYLAND 21043

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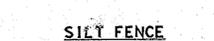
Thomas J. Shafer
THOMAS J. SHAFER P.E. NO. 8457



CONSTRUCTION SPECIFICATIONS

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

STANDARD SYMBOL



SILT FENCE

REVIEWED FOR HOWARD S.C.D. AND MEETS THE TECHNICAL REQUIREMENTS.

James J. L... 8/18/90
DATE

BY THE DEVELOPER:
"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 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."

Gregory B. Klar 8/7/90
DATE

HOWARD S.C.D. DATE

BY THE ENGINEER:
"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."

Thomas J. Shafer 8/7/90
DATE

THOMAS J. SHAFER P.E. NO. 8457

SUBDIVISION NAME		SECTION/AREA	PARCEL
TOWN CENTER		2/6	A & B
PLAT	BLOCK	ZONE	TAX/ZONE MAP
-	1	NT E.C. COMM.	36
WATER CODE		ELEC. DIST.	CENSUS TR.
E-31		5	6052-02
SEWER CODE			
5321000			

NO. DATE DESCRIPTION OF REVISION

COLUMBIA
SITE DEVELOPMENT PLAN
TOWN CENTER
SECTION 2 AREA 6
PARCELS "A" AND "B"
(OFFICE BUILDING AND PARKING DECK)
SEDIMENT CONTROL
DETAILS

SHEET 3 OF 3

ELECTION DISTRICT NO.5
HOWARD COUNTY, MARYLAND
DATE: AUGUST 6, 1990

PARCEL
TAX MAP NO. 36
SCALE: AS SHOWN