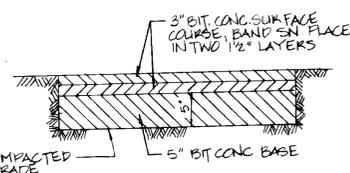
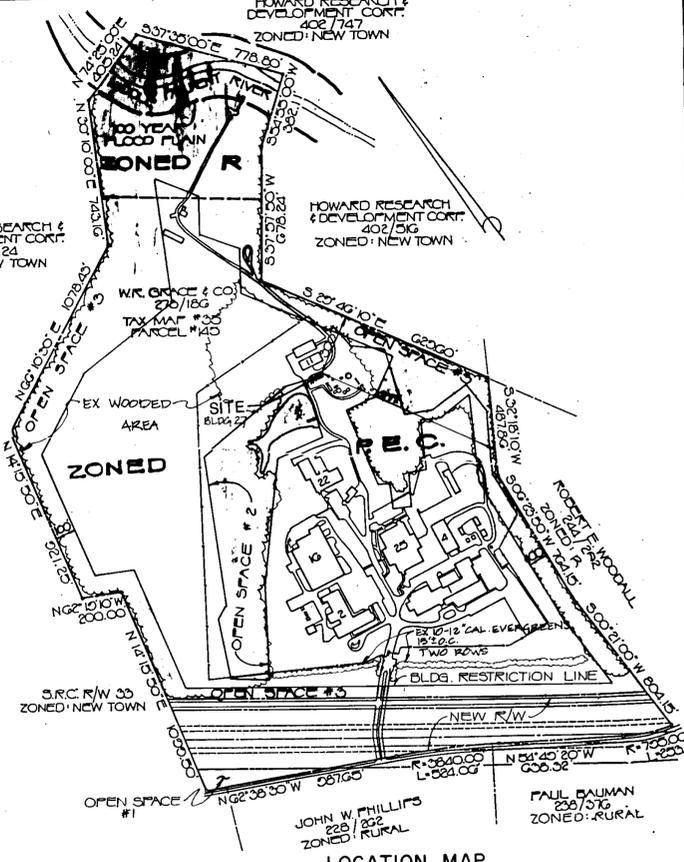


GENERAL NOTES

- A. PRIOR TO THE START OF ANY CONSTRUCTION, THE CONTRACTOR SHALL STAKE OUT ALL BASELINES, BUILDING LOCATION, AND CURBS; AND VERIFY OFFSETS AND SETBACKS.
- B. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT TELEPHONE NO. 1-800-257-7777 AT LEAST 72 HOURS PRIOR TO STARTING EXCAVATION TO VERIFY ALL LOCATIONS OF EXISTING UTILITIES.
- C. ALL CONSTRUCTION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH HOWARD COUNTY, DEPARTMENT OF PUBLIC WORK STANDARDS, SPECIFICATIONS AND REQUIREMENTS.
- D. THE INFORMATION SHOWN ON THESE PLANS IS FOR THE CONVENIENCE OF THOSE CONCERNED ONLY. THE CORRECTNESS OR COMPLETENESS OF THE INFORMATION SHOWN IS NOT WARRANTED OR GUARANTEED.
- E. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- F. ALL DISTURBED AREAS NOT STABILIZED WITH PAVING, BUILDING OR MULCH IN PLANTING AREAS SHALL BE SODED.
- G. TOPOGRAPHY TAKEN FROM SURVEY DONE BY PURDUM & JESCHKE, DATED JULY 27, 1987.
- H. ALL SITE WORK SHOWN HEREON SHALL BE COMPLETED UNDER PHASE I CONSTRUCTION.



BITUMINOUS CONCRETE PAVING DETAIL
NOT TO SCALE



LOCATION MAP
SCALE: 1"=400'

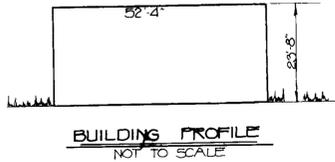
SITE ANALYSIS

- 1. LOCATION: FIFTH ELECTION DISTRICT, HOWARD CO.
 - 2. TAX MAP 35, PARCEL 145
 - 3. AREA OF PROPERTY = 147.42 ACRES
 - 4. LIMIT OF SUBMISSION AREA = 6120 SQ. FT.
 - 5. PRESENT ZONING: P.E.C., FDP, P.E.C.-1, PLAT 2054A-920 THRU 2054A-924 RECORDED 7/20/87
 - 6. EXISTING PARKING SPACES = 400 STD.; 2 H.C.
 - 7. PARKING SPACES PROPOSED = 0
 - 8. AREA OF OPEN AREAS = 40.66 ACRES & IS 30% OF TOTAL SITE
 - 9. PROPOSED USE: WATER FILTER BLDG.
 - 10. EXISTING BUILDING COVERAGE = 307,175 SQ. FT. (4.8% OF TOTAL SITE)
 - 11. PROPOSED BUILDING COVERAGE = 1400 SQ. FT. (2.3% OF SUBMISSION AREA)
 - 12. PROPOSED TOTAL BUILDING COVERAGE = 308,575 SQ. FT. TOTAL (4.8% OF TOTAL SITE)
 - 13. ADDITIONAL EMPLOYEES = 0
- PLANNING AND ZONING CASES RELATED TO W.R. GRACE & CO. ARE: CASE NO. 168C, CASE NO. VP-81-83, CASE NO. VP-82-31E, CASE NO. 82-92, CASE NO. 83-50E, CASE NO. 83-54E.

LEGEND

	EXISTING	PROPOSED	TO BE REMOVED
CONTOUR	--- 358 ---	— 358 —	
CURB & GUTTER	====		
PAVEMENT	▭	▭	
LABORATORY CONN.	○		
SANITARY SERVICE	○		
WATER SERVICE	○		
STORM DRAIN	○		
BUILDING	▭	▭	
TREE	☆		☆
SPOT ELEVATION		370.90	

PLAN
SCALE: 1"=10'



BUILDINGS PROFILE
NOT TO SCALE

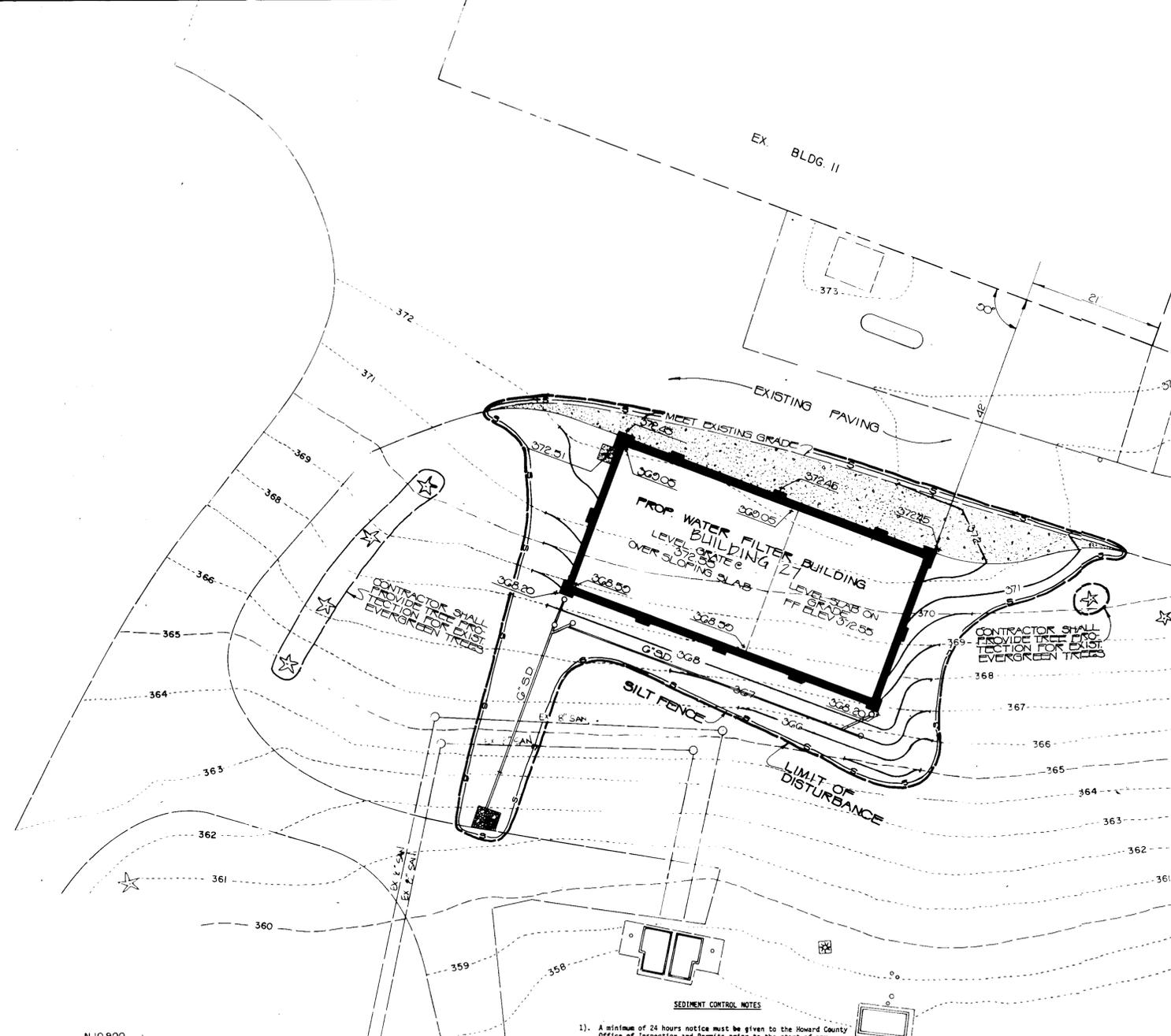
APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: 10-28-87

PARCEL/LOT NUMBER	STREET ADDRESS
145	7379 GUILFORD ROAD

SUBDIVISION NAME		SECT./AREA	LOT/PARCEL #
W.R. GRACE			145
PLAT #	BLOCK #	ZONE	TAX/ZONE MAP
273/186	22	P.E.C.	35
ELEC. DIST.	CENSUS TR.		
5TH	6053.01		
WATER CODE		SEWER CODE	
N/A		N/A	

APPROVED: FOR STORM DRAINAGE SYSTEMS AND PUBLIC ROADS	
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
DIRECTOR	11/16/87
DATE	
CHIEF, BUREAU OF ENGINEERING	11-13-87
DATE	
APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS	
HOWARD COUNTY HEALTH DEPARTMENT	
DATE	11-18-87
DATE	
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING	
PLANNING DIRECTOR	11-23-87
DATE	
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION	20 NOV 87
DATE	

DATE	NO.	REVISION
W.R. GRACE & CO.		
WASHINGTON RESEARCH CTR. COLUMBIA, MARYLAND		
BUILDING ADDITION TO SDP-87-237		
TITLE: WATER FILTER BUILDING LAYOUT, GRADING & PLANTING PLAN		
OWNER: W.R. GRACE & CO. 7379 GUILFORD ROAD COLUMBIA MD. 21044		
ENGINEERS: WHITNEY, BAILEY, COX & MAGNANI CONSULTING ENGINEERS 1850 YORK ROAD TIMONIUM, MARYLAND 21093 301-282-6060		
DATE: 11/4/87	DESIGNED: RZB	
	DRAWN: MEW	
	CHECKED: PD	
	PROJECT NO. 87161	
	DATE: AUG. 29, 1987	
	SCALE: 1"=10'	
	DRAWING NO. 1 OF 2	



LEGEND

	EXISTING	PROPOSED	TO BE REMOVED
CONTOUR	--- 358 ---	--- 358 ---	
CURB & GUTTER	=====	=====	
PAVEMENT	=====	=====	
LABORATORY CONN.	-----○-----		
SANITARY SERVICE	-----○-----		
WATER SERVICE	-----○-----		
STORM DRAIN	-----○-----		
BUILDING	=====	=====	
TREE	★	★	
SPOT ELEVATION		370.00	
LIMIT OF DISTURBANCE	-----	-----	
SILT FENCE	-----	-----	

- 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. (992-2437)
 - 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 redistribution, permanent or temporary stabilization shall be completed within:
 - 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1;
 - 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	147.4 Acres
Area Disturbed	0.08 Acres
Area to be roofed or paved	0.04 Acres
Area to be vegetatively stabilized	0.04 Acres
Total Cut	100 Cu. Yds.
Total Fill	100 Cu. Yds.
Office waste/borrow area location	N/A
 - 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 the 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 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.

- SEQUENCES OF OPERATIONS**
- OBTAIN GRADING PERMIT
 - NOTIFY HOWARD CO. OFFICE OF INSPECTION & PERMITS (999-2437) A MINIMUM OF 48 HOURS PRIOR TO THE START OF ANY WORK.
 - MINOR CLEARING & GRUBBING FOR INSTALLATION OF SEDIMENT CONTROL MEASURES
 - INSTALL SILT FENCE
 - CLEAR & GRUB REMAINDER OF SITE
 - CONSTRUCT BUILDING
 - REMAINING SITE WORK
 - SEED & MULCH ALL DISTURBED AREAS OUTSIDE OF BUILDING & PAVED AREAS
 - WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL MEASURES & STABILIZE REMAINING AREAS

- GENERAL NOTES**
- REFER TO "1983 STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN.
 - WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, MINOR FIELD ADJUSTMENTS CAN AND WILL BE MADE TO INSURE THE CONTROL OF ANY SEDIMENT. CHANGES IN SEDIMENT CONTROL PRACTICES REQUIRE PRIOR APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 - AT THE END OF EACH WORKING DAY, ALL SEDIMENT CONTROL PRACTICES WILL BE INSPECTED AND LEFT IN OPERATIONAL CONDITION.
 - FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTRIBUTION, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A.) SEVEN CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SHALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND B.) FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
 - ANY CHANGE TO THE GRADING PROPOSED ON THIS PLAN REQUIRES RE-SUBMISSION TO HOWARD COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL.
 - DUST CONTROL WILL BE PROVIDED FOR ALL DISTURBED AREAS. REFER TO USDA SOIL CONSERVATION SERVICE "1983 - STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PP 52.01 AND 52.02 FOR ACCEPTABLE METHODS AND SPECIFICATIONS FOR DUST CONTROL.
 - ANY VARIATION FROM THE SEQUENCE OF OPERATIONS STATED ON THIS PLAN REQUIRES THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE HOWARD COUNTY SOIL CONSERVATION DISTRICT PRIOR TO THE INITIATION OF THE CHANGE.

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, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

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 992 (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 ANCHORED STRAW.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNWEEDED 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: INSPECT ALL SEEDED AREAS, AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDING.

OWNERS/DEVELOPERS CERTIFICATION

I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATION OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

C. E. HODGSON
 SIGNATURE OF OWNER/DEVELOPER
 PRINT NAME: C. E. HODGSON
 ADDRESS: 7379 GUILFORD ROAD
 ADDRESS: COLUMBIA, MD. 21044
 PHONE: 531-4239

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE: 10-28-87

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL, WORKABLE PLAN BASED ON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENT OF THE HOWARD COUNTY EROSION AND SEDIMENT CONTROL SECTION.

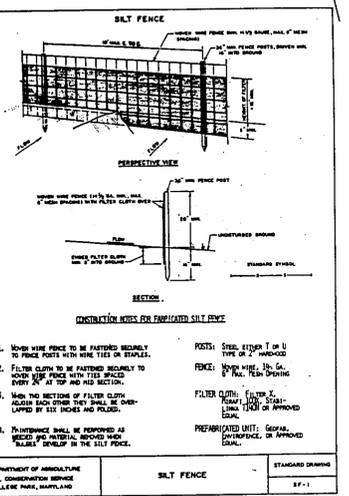
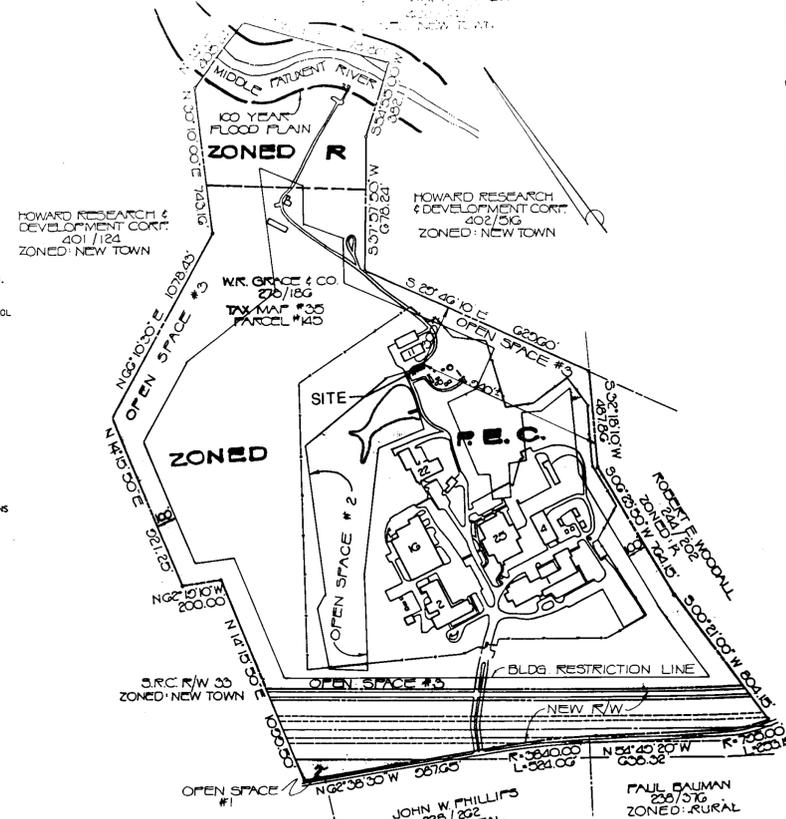
Philip DeGroot
 SIGNATURE DATE: 11/16/87
 ADDRESS: 1050 YORK RD TIMONIUM, MD 21073
 PHONE: 301-252-6660

REVIEWED FOR HOWARD COUNTY S.C.D., AND MEETS TECHNICAL REQUIREMENTS.
James M. Miller
 U.S. SOIL CONSERVATION SERVICE DATE: 11-6-87

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
Stephen L. Pugh DATE: 11/6/87
 HOWARD COUNTY S.C.D.

ADDRESS CHART

PARCEL/LOT NUMBER	STREET ADDRESS
145	7379 GUILFORD ROAD



APPROVED FOR STORM DRAINAGE SYSTEM AND PUBLIC ROADS

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
James J. Lewis DATE: 11/16/87
 DIRECTOR

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS

HOWARD COUNTY HEALTH DEPARTMENT
James J. Lewis DATE: 11-13-87
 COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Wm. P. Anis DATE: 11-23-87
 PLANNING DIRECTOR

PDF/dds DATE: 20 Nov 87
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

LOCATION MAP
 SCALE 1"=400'

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE DISTURBED 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.

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

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30, AND 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, SEED WITH 3 LBS 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) OR UNWEEDED 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.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

DATE	NO	REVISION

W.R. GRACE & CO.
 WASHINGTON RESEARCH CTR.
 COLUMBIA, MARYLAND

BUILDING ADDITION TO SDP-87-237

TITLE: WATER FILTER BUILDING
 SEDIMENT CONTROL PLAN

OWNER: W.R. GRACE & CO.
 7379 GUILFORD ROAD
 COLUMBIA MD. 21044

ENGINEERS: WHITNEY, BAILEY, COX & MAGNANI
 CONSULTING ENGINEERS
 1850 YORK ROAD
 TIMONIUM, MARYLAND 21093
 301-282-6000

DATE: 11/4/87

DESIGNED: RJB
 DRAWN: MEW
 CHECKED: PD
 PROJECT NO: 87161
 DATE: AUG 23, 1987
 SCALE: 1" = 10'
 DRAWING NO. 2 OF 2

PROFESSIONAL ENGR NO. 9972