GENERAL NOTES

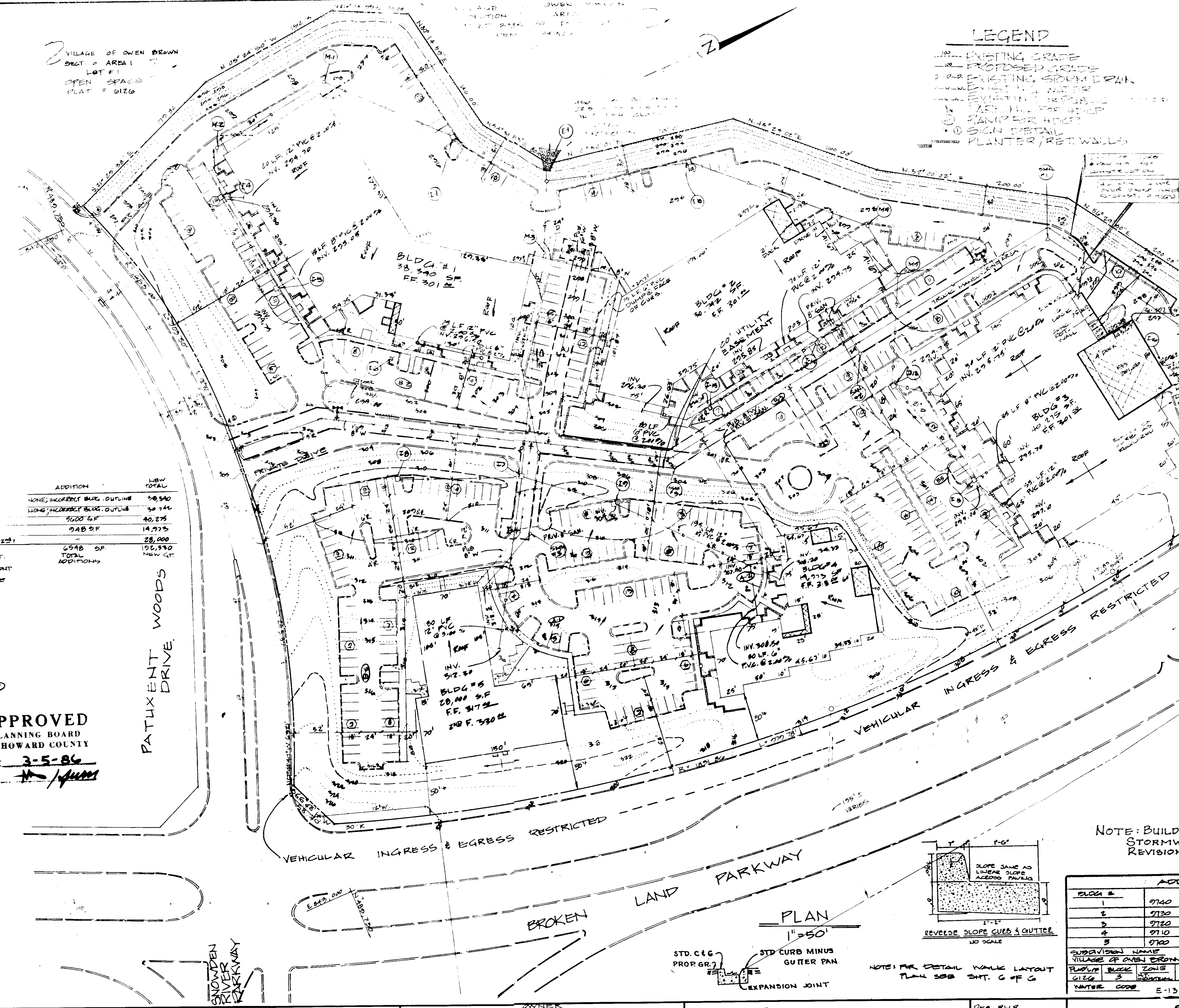
1. Maximum building height = 50'.
2. All areas not being paved or receiving building coverage shall be stabilized in accordance with the plans approved by the Howard Soil Conservation District.
3. Any damage to public rights-of-way and/or adjacent properties shall be repaired immediately at the contractor's expense.
4. The contractor shall maintain at least a 2' level bench behind all curb and gutter in fill areas.
5. The contractor shall verify all existing utilities to his own satisfaction before starting construction.
6. All slopes shall be 2:1 or flatter.
7. All work shall be done in accordance with Howard County Standard Specifications and Details for Construction, or as shown on these plans.
8. The contractor shall notify the C & P Telephone Co. and the Gas and Electric Company five days prior to starting work shown on these plans by calling "Miss Utility". Call collect 1-559-0100.
9. For details of ramps and signs for the handicapped see the Maryland Building Code for the Handicapped and Aged and as shown hereon.
10. The contractor shall maintain a minimum of 3.5' cover over all proposed water lines.
11. All rip-rap shall be placed on filter cloth.
12. The contractor or developer shall contact the Construction Inspection/Survey Division, 24 hours in advance of commencement of work at 992-2417 or 792-7272.
13. The contractor shall remove all existing paving, curb and gutter, etc. that may interfere with proposed construction.
14. All utilities installed shall receive full trench compaction.
15. All water main tees, bends, caps, etc. shall be buttressed in accordance with Howard County Design requirements.

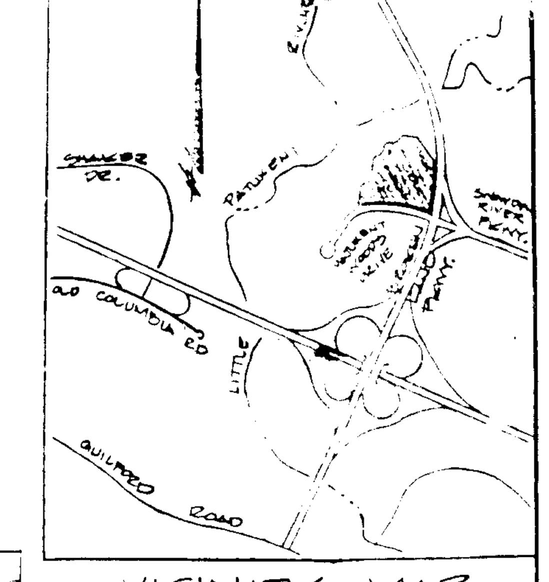
SITE DATA

- TOTAL SITE AREA = 14.62 AC±
- TOTAL FLOOR AREA = 145,782 SF = 22.89% OF SITE

		ADDITION	NEW TOTAL
BLDG #1	38,340 SF.	NONE; INCORRECT BLDG. OUTLINE	38,340
BLDG #2	30,742 SF.	NONE; INCORRECT BLDG. OUTLINE	30,742
BLDG #3	34,675 SF.	5600 SF	40,275
BLDG #4	14,025 SF.	948 SF	14,973
BLDG #5	28,000 SF. (14,000 SF 1st F; 14,000 SF 2nd F)	–	28,000
TOTAL	145,782 SF.	6548 SF. TOTAL ADDITIONS	152,330 NEW GT.

- EXISTING USE = OFFICE FOR RESEARCH & DEVELOPMENT.
- PROPOSED USE = OFFICE FOR RESEARCH & DEVELOPMENT
- PARKING REQ'D: OFFICE 2 P.S./1000 SF. NET LEASEABLE OFFICE AREA = 305 P.S. (8 HDCP)
- PARKING PROV'D. = 460 P.S. (8 HDCP)
  - 439 @ 9'x18' W/ 2' OVERHANG
  - 8 @ 9'x20'
  - 13 @ 12'x18' W/2' OVERHANG
- FLOOR AREA RATIO = 3.35/14.62 = 22.89%
- PROPERTY REFERENCE
  PLAT ENTITLED: "VILLAGE OF OWEN BROWN SECT. 6 AREA 1 PARCEL 'B' PLAT #6126
- EXISTING ZONING: N.T. - INDUSTRIAL
- OPEN SPACE = 230,352 SF; 5.29/14.62 = 36.17% (AREA TO BE VEGETATIVELY STABILIZED)





STD. C & G
PROP. GR.
STD CURB MINUS GUTTER PAN
EXPANSION JOINT

REVERSE SLOPE CURB & GUTTER
NO SCALE

NOTE: FOR DETAIL WALK LAYOUT PLAN SEE SHT. 6 OF 6

BUILDING #	PERMIT #
1	65,433
2	65,434
3	66,337
4	66,338
5	67,034

NOTE: BUILDING LOCATIONS AND STORMWATER MANAGEMENT REVISIONS TO SDP-85-102

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 3-5-86

HOWARD SOIL CONSERVATION DISTRICT
THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: Robert W. Ziehm DATE: 4-16-86
HOWARD SOIL CONSERVATION DISTRICT

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
SIGNATURE: [signature] DATE: 4-16-86
THE UNITED STATED SOIL CONSERVATION SERVICE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
[signature] 4-17-86
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
[signature] 4-17-86
PLANNING DIRECTOR DATE
[signature] 4-17-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[signature] 4-17-86
DIRECTOR DATE
[signature] 4-17-86
CHIEF BUREAU OF ENGINEERING DATE

ADDRESS CHART

BLDG #	STREET ADDRESS		
1	9740	PATUXENT WOODS	DRIVE
2	9730	PATUXENT WOODS	DRIVE
3	9720	PATUXENT WOODS	DRIVE
4	9710	PATUXENT WOODS	DRIVE
5	9700	PATUXENT WOODS	DRIVE

SUBDIVISION NAME		SECT./AREA	LOT/PARCEL #
VILLAGE OF OWEN BROWN		6/1	'B'

PLAT/L.F.	BLOCK	ZONE	TAX/ZONE MAP	ELECT. DIST.	CENSUS TRACT
6126	3	N.T. INDUSTRIAL	42	6	6061.03

WATER CODE	E-13	SEWER CODE	5290000

WILLIAM R. SUDECK & ASSOCIATES, INC.
Consulting Engineers & Land Surveyors
112 South Main Street • Bel Air, Maryland 21014
301-879-4353 301-838-5833

ENGINEER
[signature] 4874 1/15/86
WILLIAM R. SUDECK REG. No. DATE

OWNER
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND, 21044
992-6033

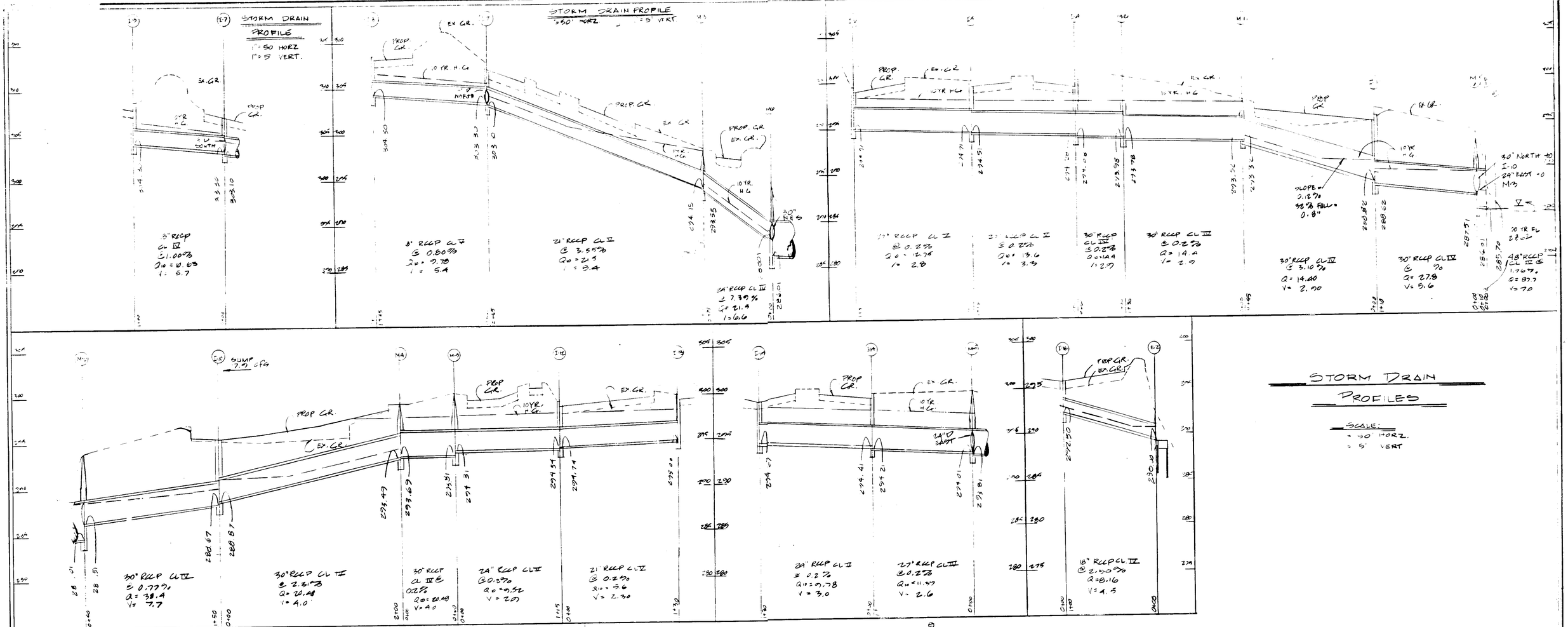
DEVELOPER / CONTRACT PURCHASER
MANEKIN CORPORATION
8325 GUILFORD ROAD
COLUMBIA, MD 21046
995-1670

DEVELOPER
[signature] DEVELOPER 3/1/88 1-15-86
DONALD MANEKIN TITLE DATE

DES. RWR
DWG. K.M.G.
CHK: R.W.R.

SITE PLAN
FOR
PROPOSED OFFICES FOR RESEARCH & DEVELOPMENT
VILLAGE OF OWEN BROWN
SECTION 6 AREA 1 PARCEL 'B'
COLUMBIA
HOWARD CO., MD. ELECT. DIST. # 6
SCALE: AS SHOWN DATE: DEC. 1, 1984
SHT. 1 OF 6

SDP-86-152c

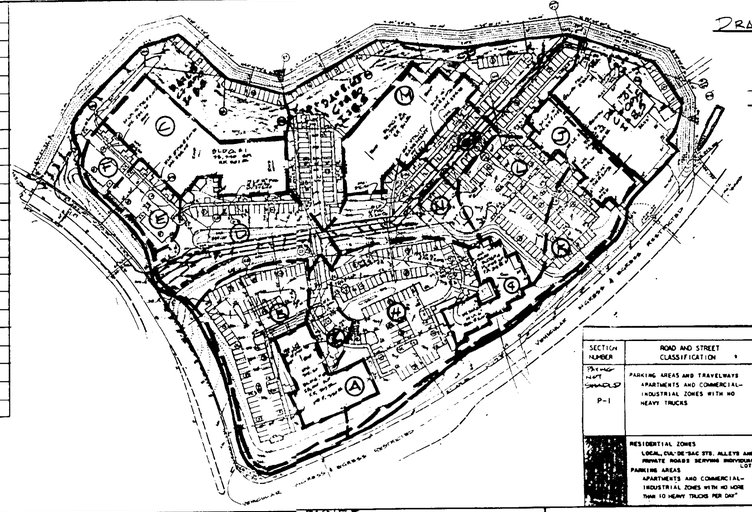


STORM DRAIN PROFILES

SCALE:
1" = 50' HORZ.
1" = 5' VERT

STRUCTURE SCHEDULE					
No.	TYPE	INV. IN	INV. OUT	TOP ELEV.	REMARKS
I-1	DBL 'S' COMB.	288.82	288.62	295.30*	H.O.CO. STD. SD. 4.34
I-4	DBL'S COMB.	294.28	294.08	299.60*	S.D. 4.34
I-5	DBL'S COMB.	294.71	294.51	299.60*	S.D. 4.34
I-6	DBL'S COMB.	—	294.97	299.00*	S.D. 4.34
I-7	DBL'S COMB.	303.30	303.10	307.00*	S.D. 4.34
I-8	DBL'S COMB.	—	304.30	308.00*	S.D. 4.34
I-9	DBL'S COMB.	—	304.30	308.00*	S.D. 4.34
I-10	DBL'S COMB.	388.87	388.67	295.50*	S.D. 4.34
I-12	DBL'S COMB.	294.74	294.54	299.00*	S.D. 4.34
I-13	DBL'S COMB.	—	295.00	299.60*	S.D. 4.34
I-14	DBL'S COMB.	294.41	294.21	299.60*	S.D. 4.34
I-15	DBL'S COMB.	—	294.67	299.40*	S.D. 4.34
I-16	SGL'S GRATE	—	292.50	296.00*	SD. 4.22
E-1	TYPE 'A' HDWL	285.70	285.70	292.50	S.D. 5.11
E-2	TYPE 'A' HDWL	290.00	290.00	293.00	S.D. 5.11
M-1	SHALLOW MH	293.32	293.32	298.00	H.O.CO. STD. G. 505
M-2	SHALLOW MH	293.98	294.78	299.60	G. 505
M-3	SHALLOW MH	294.75	294.55	298.20	G. 5.05
M-4	SHALLOW MH	293.69	293.49	299.00	G. 5.05
M-5	SHALLOW MH	294.31	293.81	300.60	G. 5.05
M-6	6' BACK MH	387.51	286.01	294.00	G. 5.02

* - TOP OF GRATE
** - WIER ELEVATION



DRAINAGE AREA MAP
PAVING PLAN
1" = 100'

---- INDICATES SUB DA.
——— INDICATES TOTAL DA.

D.A. TABULATION

AREA	ACS	'C'
A	0.32	0.95
B	1.19	0.70
C	0.88	0.95
D	0.10	0.60
E	6.28	0.70
F	0.21	0.70
G	0.32	0.95
H	1.34	0.70
I	0.22	0.70
J	0.20	0.95
K	0.52	0.60
L	0.75	0.70
M	0.69	0.95
N	0.27	0.80

SECTION NUMBER	ROAD AND STREET CLASSIFICATION	PAVEMENT MATERIALS: FULL DEPTH BIT. CONC. ALTERNATE	PAVEMENT MATERIALS: GRANULAR BASE ALTERNATES
P-1	PARKING AREAS AND TRAVELWAYS APARTMENTS AND COMMERCIAL-INDUSTRIAL ZONES WITH NO HEAVY TRUCKS	1" BIT. CONC. SURFACE 4" BIT. CONC. BASE	1" BIT. CONC. SURFACE 2" BIT. CONC. BASE PRIME 8" CRUSHER RUN BASE COURSE OR 6" DENSE GRADED STABILIZED AGGREGATE BASE COURSE
	RESIDENTIAL ZONES LOCAL, COLLECTOR STS. ALLEYS AND PRIVATE ROADS SERVING INDIVIDUAL LOTS PARKING AREAS APARTMENTS AND COMMERCIAL-INDUSTRIAL ZONES WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY	1 1/2" BIT. CONC. SURFACE 5" BIT. CONC. BASE	1 1/2" BIT. CONC. SURFACE 3 1/2" BIT. CONC. BASE PRIME 8" CRUSHER RUN BASE COURSE 2 COURSES OR 6" DENSE GRADED STABILIZED AGGREGATE BASE COURSE

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

COUNTY HEALTH OFFICER: _____ DATE: 4-17-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

PLANNING DIRECTOR: _____ DATE: 4-17-86

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

_____ DATE: 4/17/86

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

DIRECTOR: _____ DATE: 4-17-86

CHIEF, BUREAU OF ENGINEERING: _____ DATE: 4-17-86

HOWARD SOIL CONSERVATION DISTRICT

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

APPROVED: _____ DATE: 4/16/86
HOWARD SOIL CONSERVATION DISTRICT

REVIEWED FOR THE HOWARD SOIL CONSEPVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

SIGNATURE: _____ DATE: 4/16/86
THE UNITED STATES SOIL CONSERVATION SERVICE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 3-5-86

NOTE: BUILDING LOCATIONS AND STORMWATER MANAGEMENT REVISIONS TO SDP-85-102

WRS
WILLIAM R. SUDECK & ASSOCIATES, INC.
Consulting Engineers & Land Surveyors
112 South Main Street • Bel Air, Maryland 21014
301-879-4353 301-838-5833

STATE OF MARYLAND — WILLIAM R. SUDECK — REGISTERED PROFESSIONAL ENGINEER

ENGINEER

_____ 6874 1/15/86
WILLIAM R. SUDECK REG. NO. DATE

OWNER

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND, 21044
992-6033

DEVELOPER / CONTRACT PURCHASER

MANEKIN CORPORATION
RIVERS CENTER
8270 OLD COLUMBIA RD
COLUMBIA, MD. 21046
992-670

DEVELOPER

_____ PRES. DEVELOPER 3/1/86
DONALD MANEKIN TITLE DATE

DES: R.W.R.
DWG: K.M.C.
CHK: R.W.R.

REV. SD PROFILES TO ELIMINATE SWM
DELETE SWM NFO.

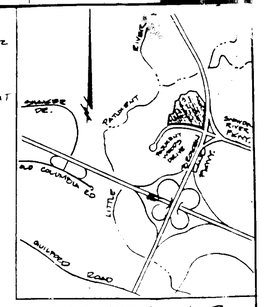
PROFILES & DETAILS
FOR
PROPOSED OFFICES FOR RESEARCH & DEVELOPMENT
VILLAGE OF OWEN BROWN
SECTION 6 AREA 1 PARCEL D
COLUMBIA
HOWARD CO., MD
SCALE AS SHOWN
ELECT DIST # 6
DATE DEC 1984
SHT 2 OF 6
REV. 3-5-86

SDP-86-152

SEQUENCE OF OPERATION

NOTE THIS SITE HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE SEQUENCE OF OPERATIONS FOR SDP 85-102 THRU OPERATION #8.

9 COMPLETE BUILDING CONSTRUCTION
10 COMPLETE VEGETATIVE STABILIZATION
11 COMPLETE PAVING
12 AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR REMOVE ALL REMAINING SEDIMENT CONTROL DEVICES



VICINITY MAP
1" = 2000

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 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.

All sediment traps/basins shown must be fenced and warning signs erected 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 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 50) and sodding (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	4.02	Acres ±
Area Disturbed	3.48	Acres
Area to be roofed or paved	2.55	Acres
Area to be vegetatively stabilized	0.93	Acres
Total Cut	———	cu. yds. SEADING COMPLETE
Total Fill	———	cu. yds.
Offsite waste/borrow area location	N.A.	

Any sediment control practice which is disturbed by grading activity for placement of utilities must be restored on the same day of disturbance.

Additional sediment controls must be provided, if necessary by the Howard County DPW sediment control inspector.

On all sites with disturbed areas in excess of 2 acres, approval by the inspection agency shall be requested upon completion of the perimeter erosion and sediment controls, but before stabilization of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other proceeding with any other earth disturbance or grading. Other grading and grading inspection approvals may not be authorized until the initial approval by the inspection agency is made.

PERMANENT SEEDING NOTES

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

Method 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 square 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 10-20-20 urea-form fertilizer (9 lbs/1000 sq ft).

Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 600 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 (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 40 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.5 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by applying 2 tons per acre of unchopped straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 40 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1½ 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 - Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

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

Method 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 from August 15 thru November 15, seed with 2½ 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 unchopped straw mulch and anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching - Apply 1½ 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.

For the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

HOWARD SOIL CONSERVATION DISTRICT

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

APPROVED: Robert W. Zieham DATE: 4-16-86
HOWARD SOIL CONSERVATION DISTRICT

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

SIGNATURE: [illegible] DATE: 4/16/86
THE UNITED SOIL CONSERVATION SERVICE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
[illegible] 4-17-86
COUNTY HEALTH OFFICER DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
[illegible] 4-17-86
PLANNING DIRECTOR DATE
[illegible] 4-17-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[illegible] 4-17-86
DIRECTOR DATE
[illegible] 4-17-86
CHIEF BUREAU OF ENGINEERING DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 3-5-86

NOTE: BUILDING LOCATIONS AND STORMWATER MANAGEMENT REVISIONS TO SDP-85-102

- ⊠ INDICATES PROPOSED BLDG ADDITION / REVISION
- S—S—S INDICATES EXISTING SILT FENCE
- ——— INDICATES EXISTING LIMITS OF DISTURBANCE
- □ INDICATES EXISTING INLET PROTECTION

TOTAL AREA OF SITE = 14.62 AC. ±
TOTAL DISTURBANCE = 12.66 AC. ± 551,470 S.F.
AREA TO BE VEGETATIVELY STABILIZED = 5.29 AC. ± 230,552 S.F.

WILLIAM R. SUDECK & ASSOCIATES, INC.
Consulting Engineers & Land Surveyors
112 South Main Street • Bel Air, Maryland 21014
301-879-4353 301-838-5833

ENGINEER'S CERTIFICATE

"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. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District.

[illegible] 4876 1/15/86
Signature of Engineer Reg. No. Date

OWNER

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND, 21044
992-6055

DEVELOPER / CONTRACT PURCHASER
MANEKIN CORPORATION
RIVERS CENTER
10270 OLD COLUMBIA ROAD
COLUMBIA, MD 21046
995-1670

DEVELOPER'S CERTIFICATE

"I 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 Natural Resources" 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 or their authorized agents as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

[illegible] DEVELOPER 3/1/86
Signature of Developer Date

DES: R.W.R.
DWG: K.M.G.
CHK: R.W.R.

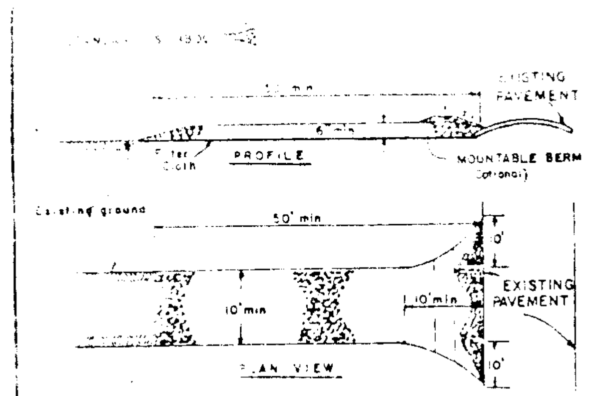
SITE IS LOWER TO BALANCE EARTH.

EXISTING E.C. MEASURES SHOWN

GRADING, EROSION & SEDIMENT CONTROL PLAN
FOR
PROPOSED OFFICES FOR RESEARCH & DEVELOPMENT
VILLAGE OF OWEN BROWN
SECTION 6 AREA 1 PARCEL 'B'
COLUMBIA
HOWARD CO., MD.
SCALE: AS SHOWN
ELECT DIST. # 6
DATE DEC. 1 1984
SHT 3 OF 6 REV.

SDP-86-152c

STABILIZED CONSTRUCTION ENTRANCE



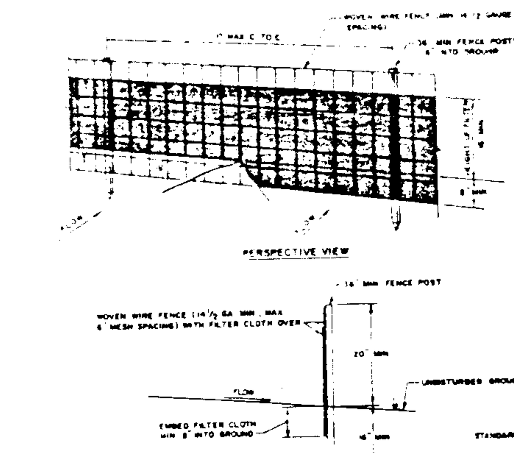
CONSTRUCTION SPECIFICATIONS

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.

U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, College Park, Md. | STABILIZED CONSTRUCTION ENTRANCE | Standard Drawing SCE-1

NOTE: AT THE END OF EACH WORKING DAY DURING LAYOUT & CONSTRUCTION OF STORM DRAINS, THE UPPER END OF THE INCOMPLETE SYSTEM SHALL BE PLUGGED TO PREVENT SEDIMENTATION OF PIPE SYSTEM.

SILT FENCE



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. 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 over-lapped 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 2" hardwood

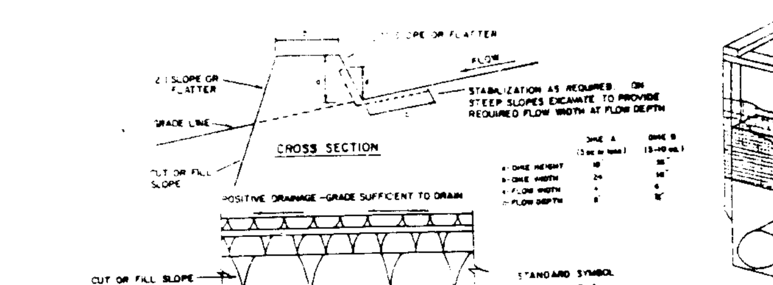
FENCE: Woven wire, 14 1/2 Ga. 6" Max. Mesh Opening

FILTER CLOTH: Filter X, Mirafi 100X, Stabilinka T140N or approved equal.

PREFABRICATED UNIT: Geofab, Envirofence, or approved equal.

U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, COLLEGE PARK, MARYLAND | SILT FENCE | STANDARD DRAWING SF-1

EARTH DIKE



CONSTRUCTION SPECIFICATIONS

1. All dikes shall be compacted by earth-moving equipment.
2. All dikes shall have positive drainage to an outlet.
3. Top width may be wider and side slopes may be flatter if desired to facilitate crossing by construction traffic.
4. Field location should be adjusted as needed to utilize a stabilized safe outlet.
5. 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 where either the dike channel or the drainage area above the dike are not adequately stabilized.
6. 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.

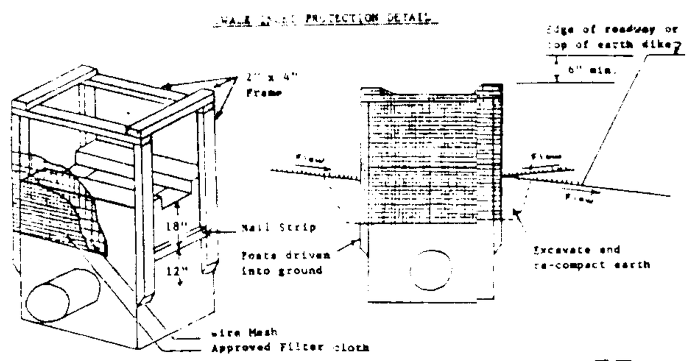
FLOW CHANNEL STABILIZATION

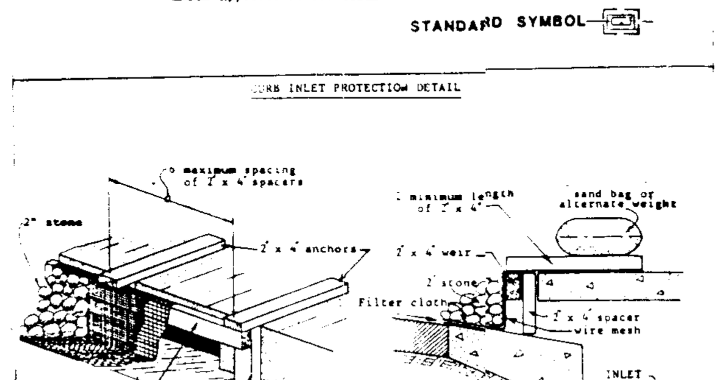
TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	.5-3.0%	Seed and Straw Mulch	Seed and Straw Mulch
2	3.1-5.0%	Seed and Straw Mulch	Seed using Jute, or Excelsior; Sod; 2" Stone
3	5.1-8.0%	Seed with Jute, or Sod; 2" Stone	Lined Rip-Rap 4-8"
4	8.1-20%	Lined Rip-Rap 4-8"	Engineering Design

A. 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.
B. Rip-Rap to be 4-8 inches in a layer at least 8 inches thickness and pressed into the soil.
C. Approved equivalents can be substituted for any of the above materials.
7. Periodic inspection and required maintenance must be provided after each rain event.

U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, COLLEGE PARK, MARYLAND | EARTH DIKE | STANDARD DRAWING ED-1

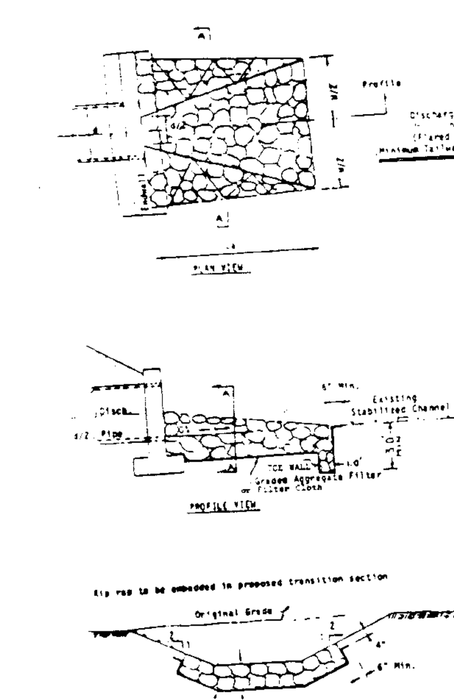
INLET PROTECTION





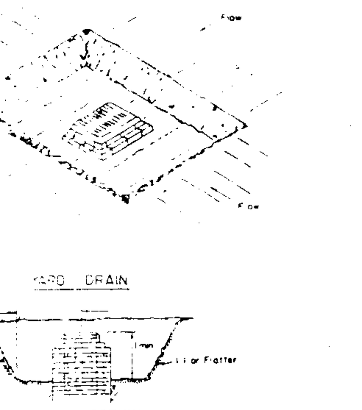
U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, COLLEGE PARK, MARYLAND | INLET PROTECTION DETAIL | STANDARD DRAWING IPD-1

RIPRAP OUTLET PROTECTION



U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, COLLEGE PARK, MARYLAND | RIPRAP OUTLET PROTECTION-I | STANDARD DRAWING ROP-I

STORM INLET SEDIMENT TRAP ST-III

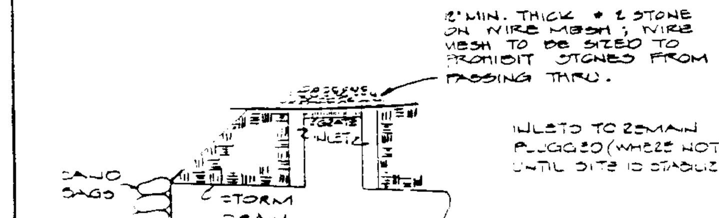


CONSTRUCTION SPECIFICATION FOR ST-III

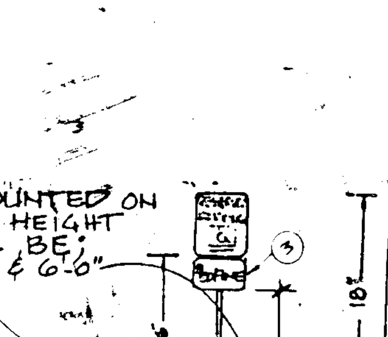
1. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
2. The volume of sediment storage shall be 1800 cubic feet per acre of contributory drainage.
3. The structure shall be inspected after each rain and repairs made as needed.
4. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
5. The sediment trap shall be removed and the area stabilized when the constructed drainage area has been properly stabilized.
6. All cut slopes shall be 1:1 or flatter.

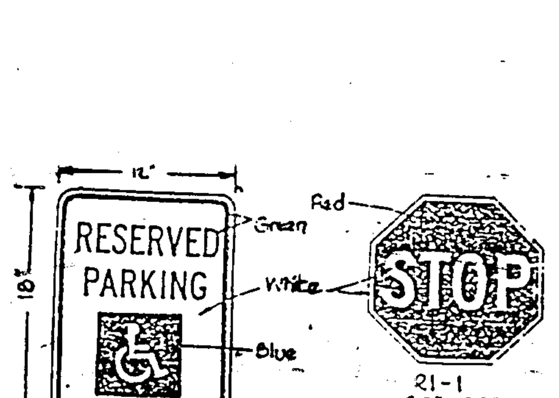
Maximum Drainage Area: 3 Acres

U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, COLLEGE PARK, MARYLAND | STORM INLET SEDIMENT TRAP | STANDARD DRAWING ST-III



INTERIM STORM DRAIN PLUGGING DETAIL
NO SCALE





Handicapped Parking Space Violation Fine Notation

Pursuant to Howard County Council Bill 58-84 which established a Fifty-Dollar ($50.00) fine for violating provisions for Handicapped Parking and provided for posting notifications of that fine, this specification describes the sign authorized for posting and the associated mounting detail.

I. Sign (1/2 size)

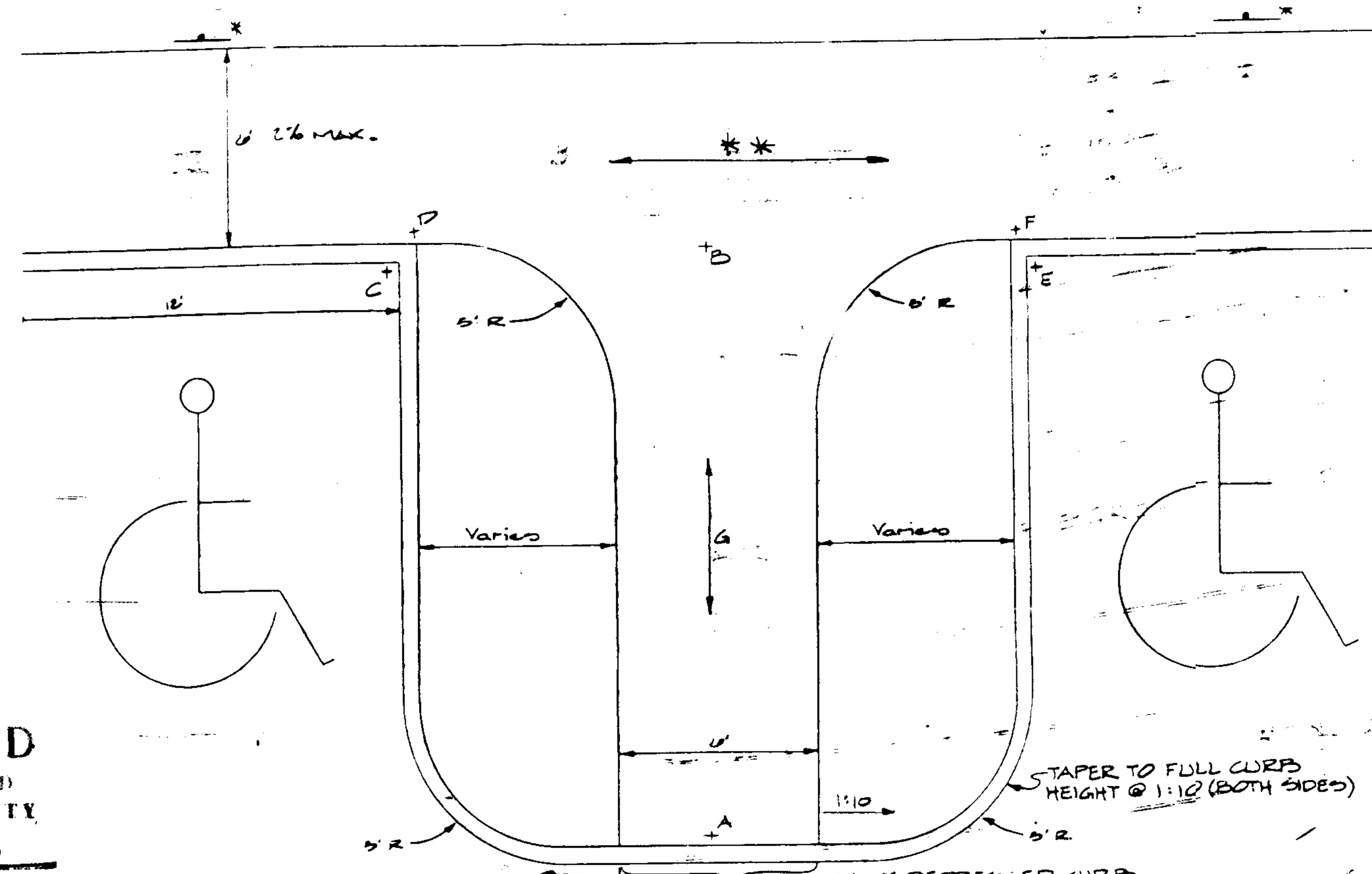
Sign to utilize an aluminum blank 6" x 12" x 0.080 inch thick with two (2) single post mounting holes.

The text and border shall be standard green to match that on R7-8 and the background shall be reflective white. Text shall be in 3" characters.

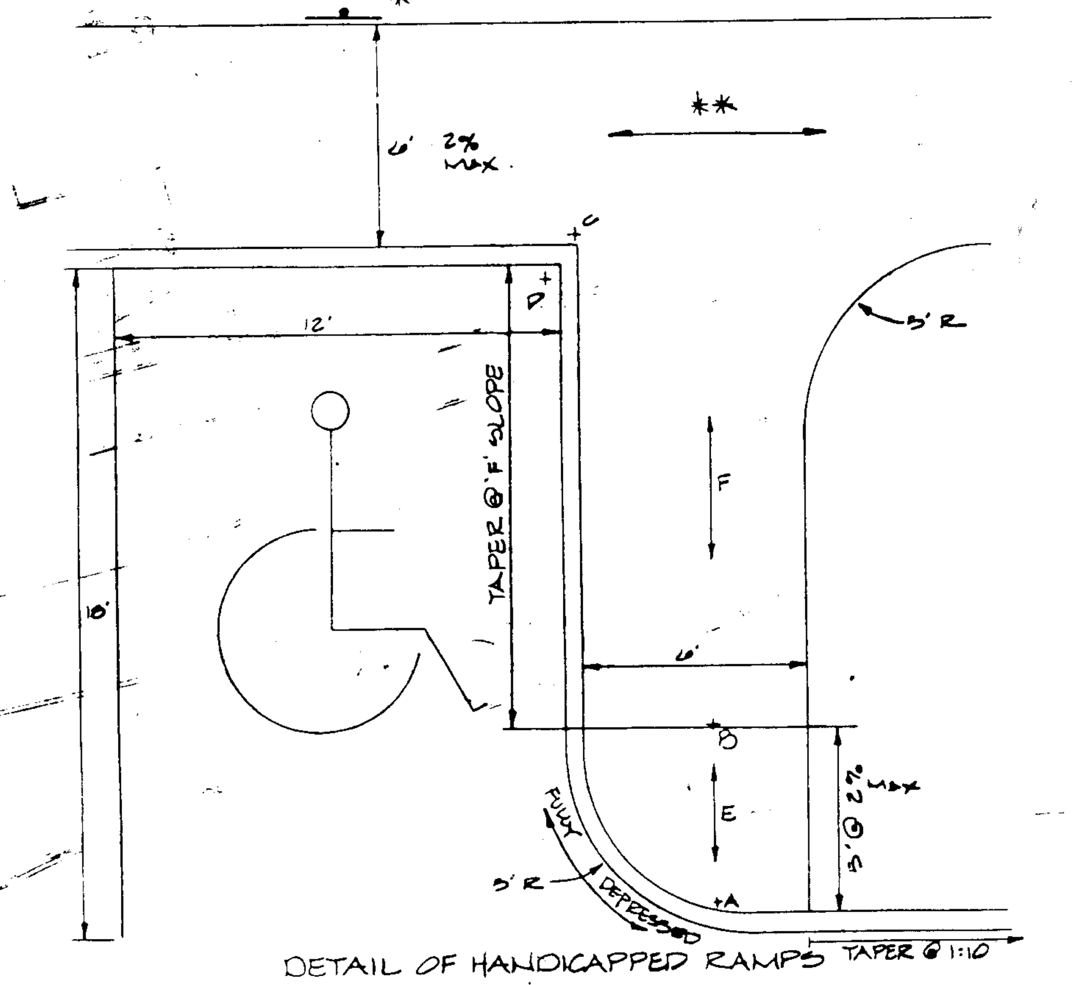
* ONE SIGN CENTERED ON EACH SPACE
** SEE SITE PLAN FOR CONTINUED GRADES

HANDICAP RAMP SLOPES AND ELEVATIONS

	A	B	C	D	E	F	G
A-1	315.0	315.1	316.8	315.2	2%	5.38%	—
A-2	312.0	312.1	312.6	312.0	2%	3.85%	—
B-1	300.3	300.6	300.0	300.6	300.0	300.6	1.677%
B-2	299.7	300.6	300.0	300.6	300.0	300.6	5.00%
B-3	300.1	300.6	300.0	300.6	300.0	300.6	2.78%
B-4	300.1	300.6	300.0	300.6	300.0	300.6	2.78%
B-5	300.0	300.6	300.0	300.6	299.6	300.2	3.33%
B-6	315.8	316.5	315.8	316.4	316.1	316.7	3.89%



DETAIL OF HANDICAPPED RAMPS B-1 - B6
SCALE: 1"=4'



DETAIL OF HANDICAPPED RAMPS A-1 & A-2
SCALE: 1"=4'

NOTE: BUILDING LOCATIONS AND STORMWATER MANAGEMENT REVISIONS TO SDP-85-102

HOWARD SOIL CONSERVATION DISTRICT
THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: Robert W. Zielinski [signature] DATE: 4-16-86
HOWARD SOIL CONSERVATION DISTRICT

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
SIGNATURE: [signature] DATE: 4-16-86
THE UNITED STATES SOIL CONSERVATION SERVICE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
[signature] 4-17-86
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Thomas G. Harris [signature] 4-17-86
PLANNING DIRECTOR DATE
John W. Muncheck [signature] 4-17-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[signature] 4-17-86
DIRECTOR DATE
[signature] 4-17-86
CHIEF BUREAU OF ENGINEERING DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 3-5-86
[signature]

WRS
WILLIAM R. SUDECK & ASSOCIATES, INC.
Consulting Engineers & Land Surveyors
112 South Main Street • Bel Air, Maryland 21014
301-879-4353 301-838-5833

ENGINEER
[signature] 4874 1/15/86
BY: WILLIAM R. SUDECK REG. NO. DATE

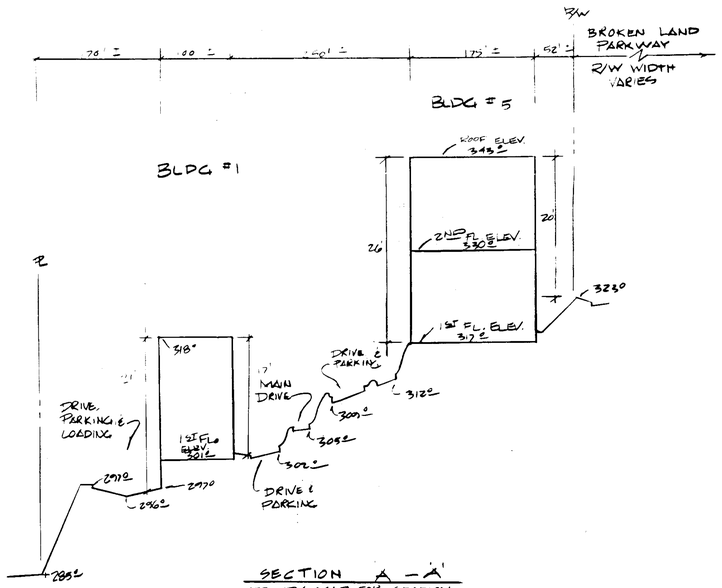
OWNER
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND, 21044
992-6033

DEVELOPER / CONTRACT PURCHASER
MANEKIN CORPORATION
RIVERS CENTER
10270 OLD COLUMBIA ROAD
COLUMBIA, MD. 21046
995-1670

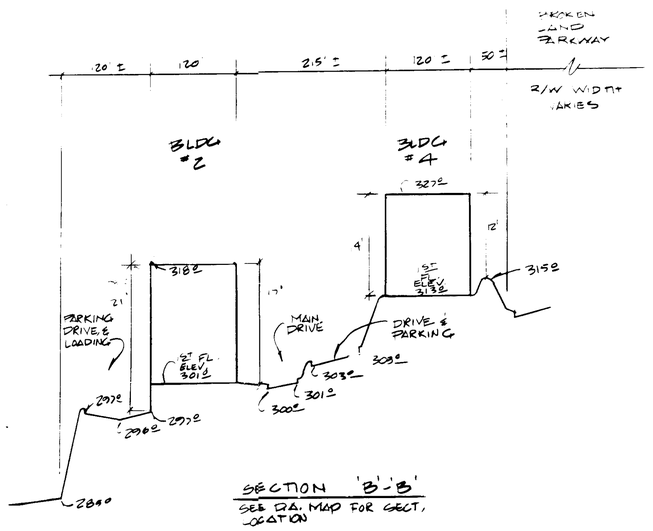
DEVELOPER
[signature] DEVELOPER 3/1/86 1-15-86
BY: DONALD MANEKIN DATE

DES BY: R.W.R.
DWG BY: K.M.G.
CHK BY: WRS, SR
REVISIONS
⚠ DELETE SLOT DRAIN & S-1 DETAILS

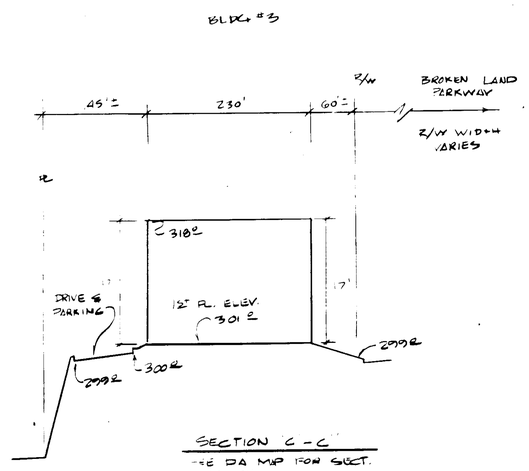
SITE PLAN
PROFILES & DETAILS FOR
PROPOSED OFFICES FOR RESEARCH & DEVELOPMENT
VILLAGE OF OWEN BROWN
SECTION 6 AREA 1 PARCEL 'B'
COLUMBIA
HOWARD CO., MD. ELECT DIST. # 6
SCALE: AS SHOWN DATE: DEC. 1984
SHT 4 OF 6
SDP-86-152



SECTION A-A'
SEE DA. MAP FOR SECTION LOCATION



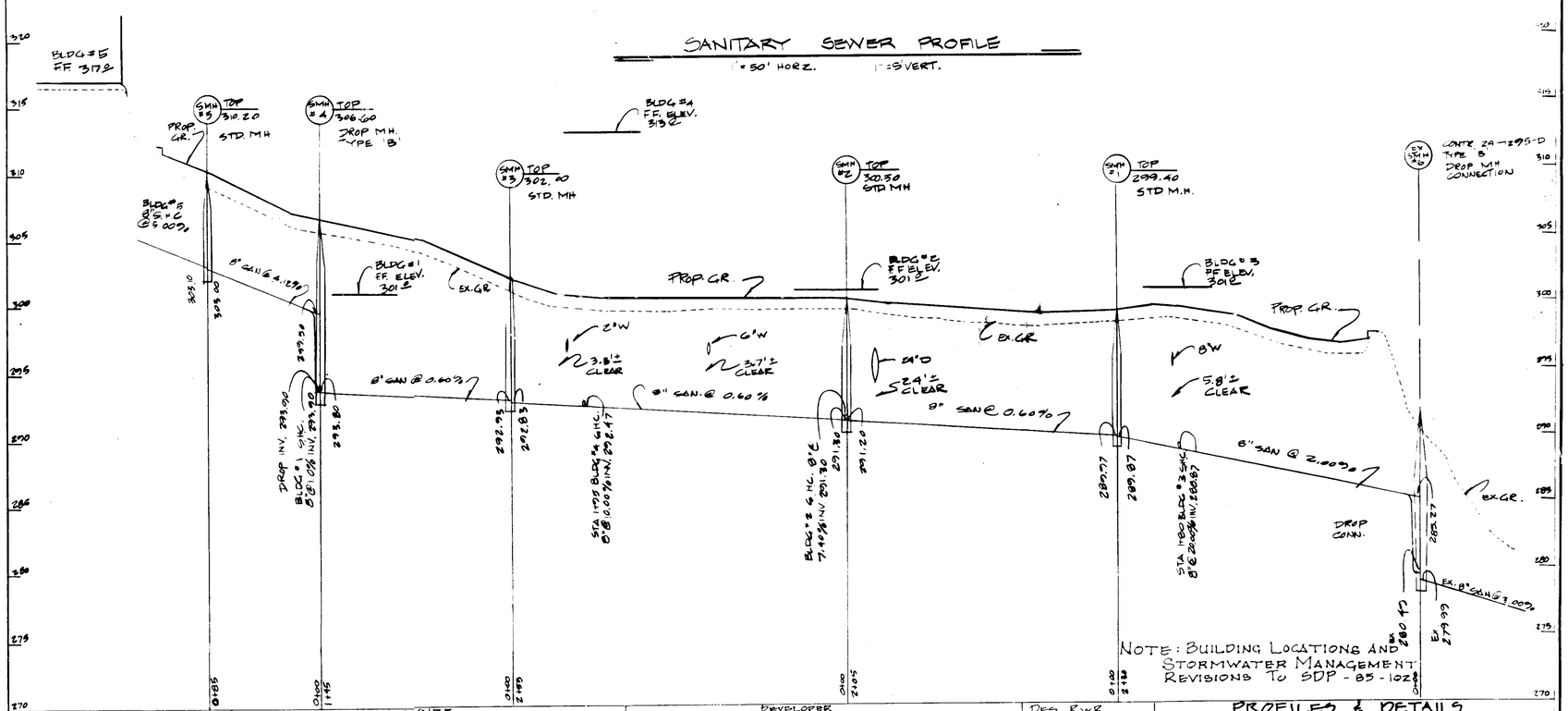
SECTION 'B'-'B'
SEE DA. MAP FOR SECT. LOCATION



SECTION C-C
SEE DA MAP FOR SECT. LOCATION

SANITARY SEWER PROFILE

1" = 50' HORZ. 1" = 5' VERT.



NOTE: BUILDING LOCATIONS AND STORMWATER MANAGEMENT REVISIONS TO SDP-85-102.

HOWARD SOIL CONSERVATION DISTRICT

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

APPROVED: Robert W. Nelson — DATE: 4-16-86
HOWARD SOIL CONSERVATION DISTRICT

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

SIGNATURE: James M. Nelson — DATE: 4-16-86
THE UNITED STATES SOIL CONSERVATION SERVICE

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

Virginia Bodine — 4-17-86
COUNTY HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

Thomas H. Hanson — 4-17-86
PLANNING DIRECTOR — DATE

John W. Moore — 4-17-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

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

Charles E. Nelson — 4-17-86
DIRECTOR — DATE

Frederick R. Rehrig — 4-17-86
CHIEF BUREAU OF ENGINEERING — DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 3-5-86

WRS
WILLIAM R. SUDECK & ASSOCIATES, INC.
Consulting Engineers & Land Surveyors
112 South Main Street • Bel Air, Maryland 21014
301-879-4353 301-838-5833

STATE OF MARYLAND — WILLIAM R. SUDECK — 4874 — REGISTERED PROFESSIONAL ENGINEER

William R. Sudeck — 4874 — 5/86
WILLIAM R. SUDECK — REG. NO. — DATE

OWNER
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND, 21044
992-6033

DEVELOPER / CONTRACT PURCHASER
MANEKIN CORPORATION
ROSS CENTER
10270 OLD COLUMBIA ROAD
COLUMBIA, MD. 21046

Donald Manekin — DEVELOPER — 3/14/86
DONALD MANEKIN — TITLE — DATE

DES. RWR
DWG. KMG
CHK. RWR

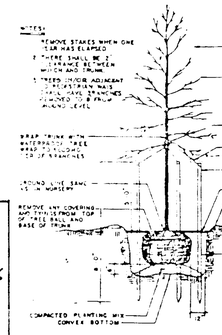
PROFILES & DETAILS
FOR
PROPOSED OFFICES FOR RESEARCH & DEVELOPMENT
VILLAGE OF OWEN BROWN
SECTION 6 AREA 1 PARCEL 'B'
COLUMBIA
HOWARD CO., MD. — ELECT DIST # 6
SCALE AS SHOWN — DATE

SDP-86-152.

Plant List

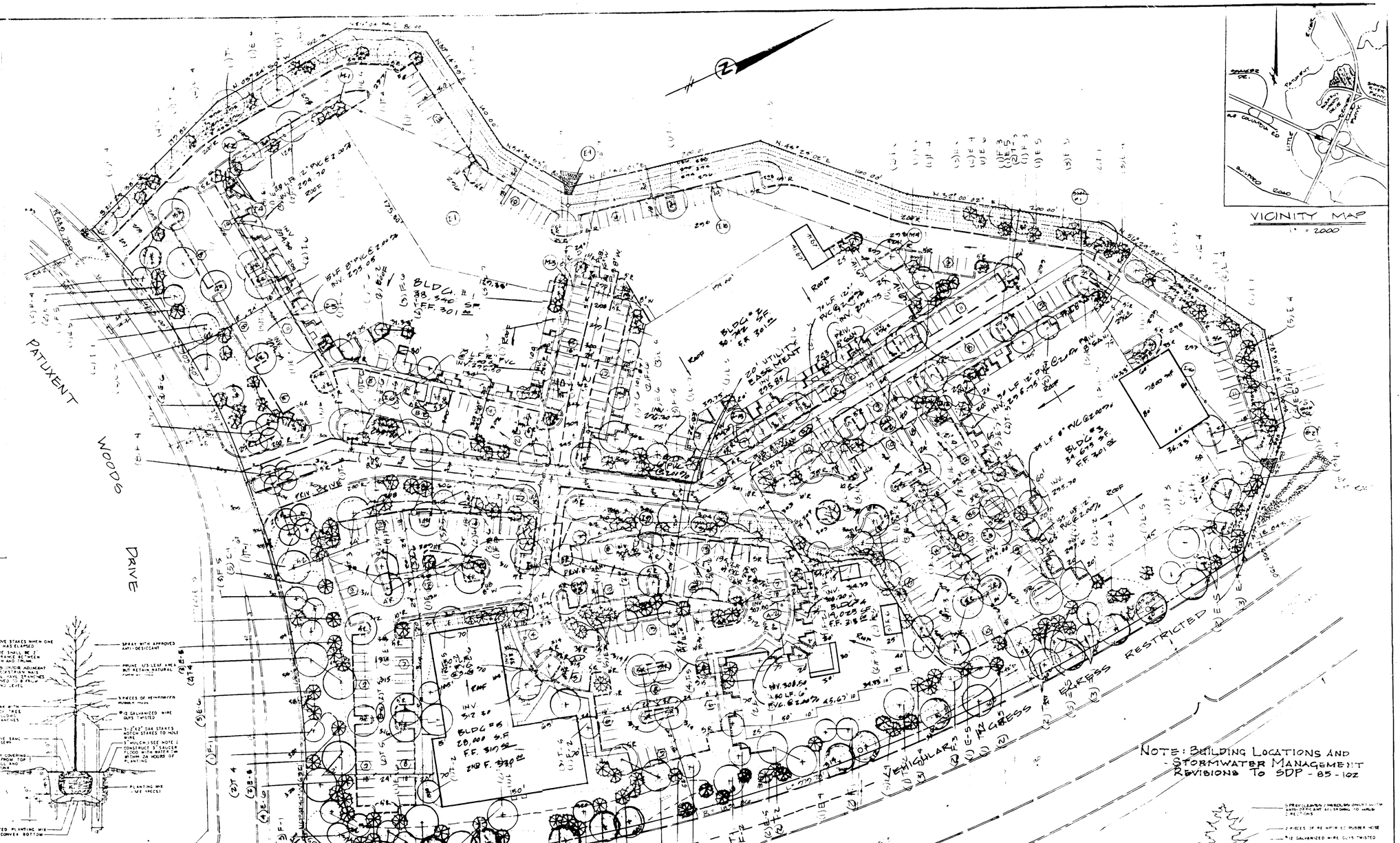
KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
		SHADE TREES			
ZP	7	ZELKOVA PARVIFOLIA	JAPANESE ZELKOVA	2½" CAL.	B&B
PA	12	PLATANUS ACERIFOLIA	LONDON PLANETREE	2½" CAL.	B&B
QA	12	QUERCUS ALBA	WHITE OAK	2½" CAL.	B&B
QP	26	QUERCUS PALUSTRIS	PIN OAK	2½" CAL.	B&B
QR	14	QUERCUS RUBRA	RED OAK	2½" CAL.	B&B
ZS	16	ZELKOVA SERRATA	JAPANESE ZELKOVA	2½" CAL.	B&B
		EVERGREEN TREES			
TC	4	TAXODIUM DISTICHUM	BALD CYPRESS	6'-8'	B&B
CJ	4	CRYPTOMERIA JAPONICA	JAPANESE CRYPTOMERIA	6'-8'	B&B
CL	4	CHAMAECYPARIS LAWSONIANA	LAWSON FALSE CYPRESS	6'-8'	B&B
JV	22	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	6'-8'	B&B
PS	14	PINUS STROBUS	WHITE PINE	6'-8'	B&B
PT	3	PINUS TAEDA	LOBLOLLY PINE	6'-8'	B&B
TC	4	TSUGA CANADENSIS	CANADIAN HEMLOCK	6'-8'	B&B
		DECIDUOUS TREES			
AS	5	AMELANCHIER CANADENSIS	SHADBLOW SERVICEBERRY	6'-8'	B&B
CF	3	CORNUS FLORIDA	FLOWERING DOGWOOD	6'-8'	B&B
CK	3	CORNUS KOUSA	KOUSA DOGWOOD	6'-8'	B&B
KP	3	KOELREUTERIA PANICULATA	GOLDENRAIN TREE	6'-8'	B&B
MV	22	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	6'-8'	B&B
NS	14	NYSSA SYLVATICA	BLACK GUM	6'-8'	B&B
OA	5	OXYDENDRUM ARBOREUM	SOURWOOD	6'-8'	B&B
PS	4	PRUNUS SUBHIRTELLA PENDULA	WEEPING JAPANESE CHERRY	6'-8'	B&B
PY	4	PRUNUS YEDOENSIS	YOSHINO CHERRY	6'-8'	B&B
		EVERGREEN SHRUBS			
JC	5	JUNIPERUS CHINENSIS	ATLAS CEDAR	6'-8'	B&B
JF	5	JUNIPERUS VIRGINIANA FASTIGIATA	HICKS FALSE CYPRESS	6'-8'	B&B
CP	3	CHAMAECYPARIS PISIFERA SQUARROSA	ARCHER CHAMAECYPARIS	3'-4'	B&B
EA	3	EUONYMUS JAPONICA	JAPANESE EUONYMUS	3'-4'	B&B
PA	3	PICEA ABIES	NORWAY SPRUCE	6'-8'	B&B
PG	3	PINUS STROBUS	WHITE PINE	6'-8'	B&B
TM	3	TAXUS MEDIA HICKSII	HICKS YEW	3'-4'	B&B
TC	4	THUJA OCCIDENTALIS COMPACTA	COMPACT AMERICAN ARBORVITAE	3'-4'	B&B
IO	5	ILEX OPACA	AMERICAN HOLLY	6'-8'	B&B

EXISTING TREE



PLANTING DETAIL FOR TREES 1¼"-4" CAL

NOT TO SCALE



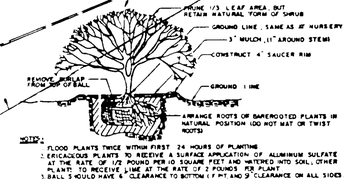
PLAN

1" = 50'

VICINITY MAP

1" = 2000'

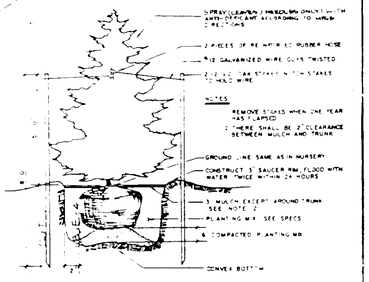
NOTE: BUILDING LOCATIONS AND STORMWATER MANAGEMENT REVISIONS TO SDP-85-102



NOTE:
1. FLOOD PLANTS TWICE WITHIN FIRST 24 HOURS OF PLANTING
2. ERICACEOUS PLANTS TO RECEIVE A SURFACE APPLICATION OF ALUMINUM SULFATE AT THE RATE OF 1/2 POUND PER 10 SQUARE FEET AND WATERED INTO SOIL; OTHER PLANTS TO RECEIVE LIME AT THE RATE OF 5 POUNDS PER PLANT
3. BALL SHOULD HAVE 3 CLEARANCE TO BOTTOM (FIRST AND 3" CLEARANCE ON ALL SIDES

PLANTING DETAIL FOR EVERGREENS AND DECIDUOUS SHRUES

NOT TO SCALE



PLANTING DETAIL
EVERGREEN TREES 3'-8' TALL

NOT TO SCALE

HOWARD SOIL CONSERVATION DISTRICT

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

APPROVED Robert W. Zieher DATE 4-16-86
HOWARD SOIL CONSERVATION DISTRICT

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

SIGNATURE [illegible] DATE 4-16-86
THE UNITED STATES SOIL CONSERVATION SERVICE

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

[illegible] 4-17-86
COUNTY HEALTH OFFICER DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING

Thomas H. Ramsey, Jr. 4-17-86
PLANNING DIRECTOR DATE

John W. Mueseler 4-17-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

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

Kenneth F. Newman 4-17-86
DIRECTOR DATE

[illegible] 4-17-86
CHIEF BUREAU OF ENGINEERING DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 3-5-86

WRS
WILLIAM R. SUDECK & ASSOCIATES, INC.
Consulting Engineers & Land Surveyors
112 South Main Street • Bel Air, Maryland 21014
301-879-4353 301-838-5830

STATE OF MARYLAND — WILLIAM R. SUDECK — PROFESSIONAL ENGINEER

ENGINEER

William R. Sudeck 4874 1/15/86
WILLIAM R. SUDECK REG. NO. DATE

OWNER

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND, 21044
992-6033

DEVELOPER / CONTRACT PURCHASER

MANEKIN CORPORATION
ATTN: [illegible]
3310 Old Columbia Road
Columbia, MD. 21045
995-1670

DEVELOPER

[illegible] 2/1/86
SIGNATURE DATE

DES. K.W.R.
DWG. K.M.G.
CHK. R.W.R.

LANDSCAPE PLAN
FOR
PROPOSED OFFICES FOR RESEARCH & DEVELOPMENT
VILLAGE OF OWEN BROWN
SECTION 6 AREA 1 PARCEL 'F'
COLUMBIA
HOWARD CO., MD
SCALE: AS SHOWN
ELECT DIST # 6
DATE: DEC 1 1985
SHT 1 OF 6

SDP-86-152c