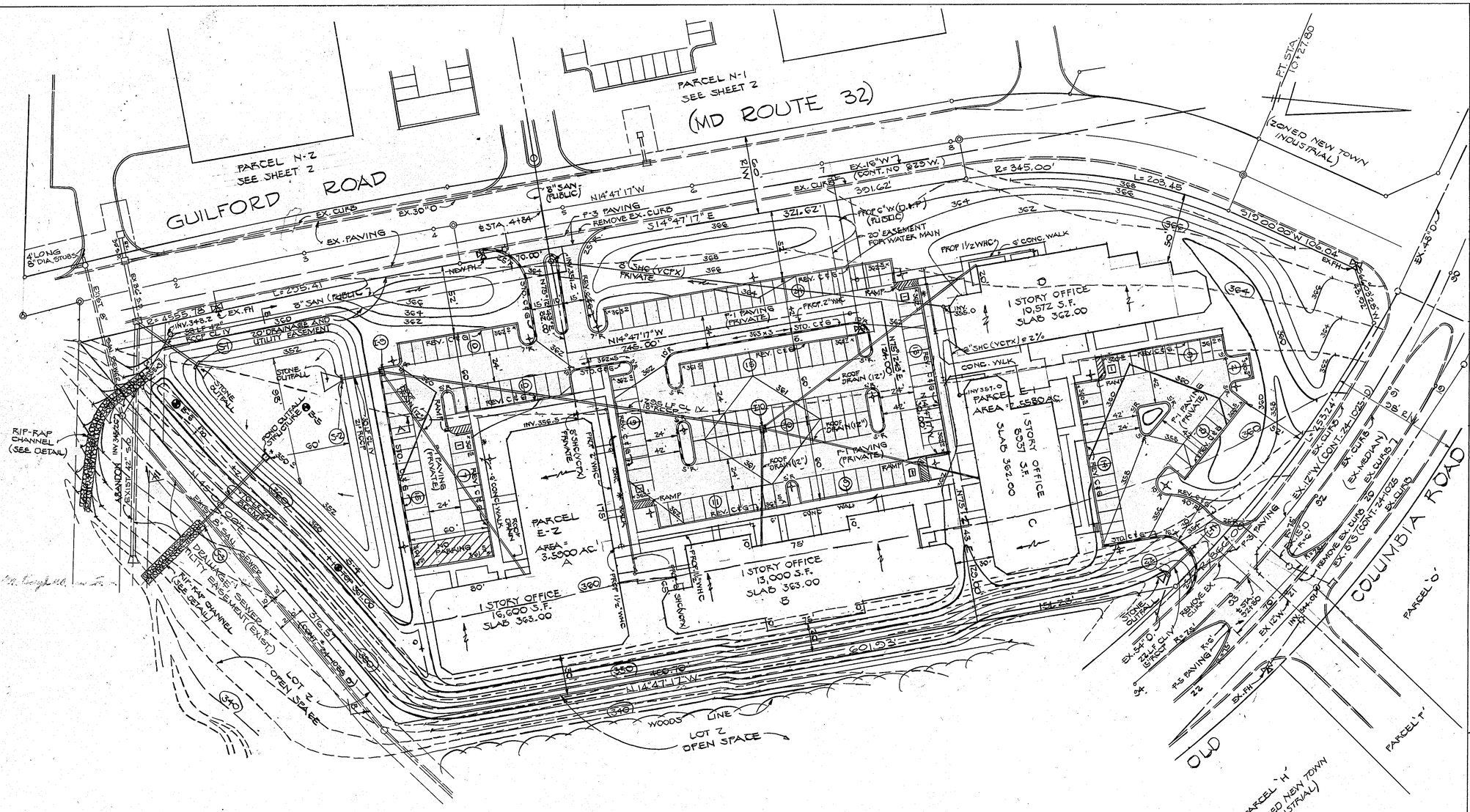


APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 5-18-83

NOTES:
1. ZONING - NEW TOWN F.D.P. PHASE 184
2. THIS SITE IS NOT AFFECTED BY A 100 YR. FLOOD PLAIN.
3. ANY DAMAGE TO THE COUNTY RIGHT OF WAY WILL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
4. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD CO. ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
5. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION/SURVEY DIVISION AT 992-2417 OR 992-2418, 24 HRS. BEFORE STARTING WORK.

Howard H Hume 4/11/83

WATER CODE: E-16
SEWER CODE: 5290000

SITE ANALYSIS

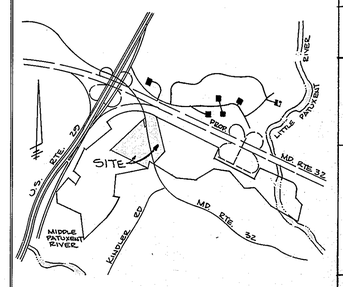
PARCEL	AREA	BLDG. AREA	BLDG. COVERAGE	OFFICE SPACE ⚠	WAREHOUSE SPACE ⚠	DAYCARE & SCHOOL SPACE	PARKING REQ.	PARKING PROVIDED	GREEN SPACE
N-1	9.3982	76,700 SF	18.7%	13,862 SF	41,588 SF 33 EMPL.	21,250 SF ⚠	13,862/500 = 27 83/2 = 42 } 112 ⚠ 21,250/500 = 43	152 ⚠	4.78 AC. 50 % ⚠
N-2	3.4801	33,650 SF	26.0%	9,900 SF	23,750 SF 60 EMPL.	-	-	9,900/500 + 20 } 50 60/2 = 30	106	0.95 AC. 28%
E-1	2.5580	19,400 SF	17.4%	19,400 SF	-	-	19,400/500 = 39	72	1.40 AC. 55%
E-2	3.5800	31,225 SF	20.0%	31,225 SF	-	-	31,225/500 = 63	120	1.74 AC. 48%
TOTAL	19.0353 AC	156,375 SF	20.0%	79,725 SF	81,250 SF 176 EMPL.	-	248	525	8.37 AC. 44%

⚠ REVISIONS BY G. W. STEPHENS & ASSOCIATES, INC. - 9/3/93

REVISED PER PLANNING BOARD APPROVAL OF JULY 8, 1993 FOR WP-93-116

STATE OF MARYLAND — TIMOTHY CHATAMBO — NO. 9330 — REGISTERED — PROFESSIONAL ENGINEER

Vasubrata Chatambo PE#9330 9-3-93
ENGINEER DATE
G.W. STEPHEN JR. & ASSOC. INC.



HUDKINS ASSOCIATES, INC.
101 SHELL BUILDING
200 E. JOPPA ROAD
TOWSON MD. 21204

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPT.
Joyce M. Boyd M.D.M.P.H. — 7/20/83
COUNTY HEALTH DEPT. OFFICER — DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
Robert W. Zellhum — 7-15-83
HOWARD S.C.D. — DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
James McAtee — 7-15-83
U.S. SOIL CONSERVATION SERVICE — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Thomas H. Harris — 7-22-83
PLANNING DIRECTOR — DATE
John Wiesemann — 7-22-83
CHIEF: DIVISION LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE & STORM DRAINAGE SYSTEMS, PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Charles F. Newmeyer — 7-19-83
DIRECTOR — DATE
[illegible] — 7-18-83
CHIEF, BUREAU OF ENGINEERING — DATE

DEVELOPER
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT, POND CONSTRUCTION AND EROSION AND SEDIMENT CONTROL. 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED LINED AS BUILT OF THE POND WITHIN 30 DAYS OF COMPLETION. RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT.
[illegible] — 4-11-83
SIGNATURE — DATE

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 MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED LINED AS BUILT OF THE POND WITHIN 30 DAYS OF COMPLETION
Howard H Hume Professional Engr. — 4/11/83
SIGNATURE — DATE

OWNER
HOWARD RESEARCH & DEVELOPMENT CORPORATION
ROUSE COMPANY BUILDING
COLUMBIA, MD. 21044

DEVELOPER
M.O.R. XX ASSOCIATES & M.O.R. XXIII ASSOCIATES
SUITE 2100 CHARLES CENTER SOUTH 36 S. CHARLES ST.
BALTO., MD 21201

ARCHITECT
NICHOLS/GOULD ARCHITECTS
1111 N. HUNTER STREET
BALTIMORE, MARYLAND 21202

PARCELS N-1, N-2, E-1 AND E-2
SECTION 1 AREA 1
RIVERS CORPORATE PARK
PLAT NO 5473
ELECT. DIST. 6 HOWARD CO., MARYLAND.

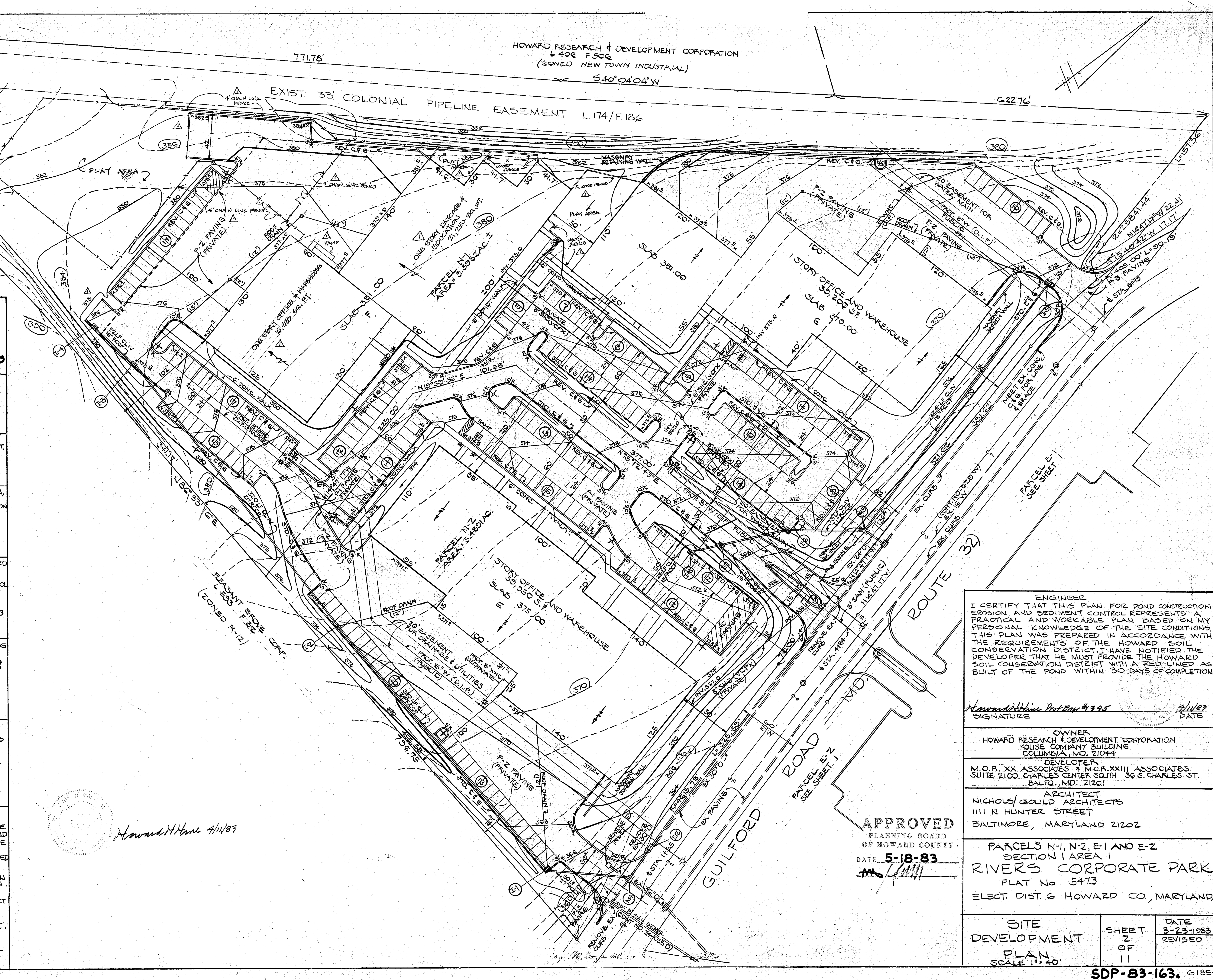
SITE DEVELOPMENT PLAN
SCALE 1"=40'

SHEET 1 OF 11

DATE 3-23-1983
REVISED 5-23-83

SDP-83-163c

G185-C



Howard H Hime 4/11/83

REVISIONS BY G.W. STEPHENS & ASSOCIATES, INC. — 9/3/93

REVISED PER PLANNING BOARD APPROVAL OF JULY 8, 1993 FOR WP-93-118

Tapobrata Chakrabarti 9/3/93
ENGINEER — G.W. STEPHENS JR & ASSOC. INC. — DATE

ENGINEER
HUDKINS ASSOCIATES, INC.
101 SHELL BUILDING
200 E. JOPPA ROAD
TOWSON, MD. 21204

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPT.

Joyce M. Boyd MD per F. S. — 7/20/83
COUNTY HEALTH DEPT. OFFICER — DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Ziehm — 7-15-83
HOWARD S.C.D. — DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL

James McHelm — 7-15-83
U.S. SOIL CONSERVATION SERVICE — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Thomas G. Harris Jr. — 7-22-83
PLANNING DIRECTOR — DATE

John W. Musselman — 7-22-83
CHIEF: DIVISION LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

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

Gary F. Neimy — 7-19-83
DIRECTOR — DATE

William E. Riley — 7-18-83
CHIEF, BUREAU OF ENGINEERING — DATE — 7-18-83

DEVELOPER

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Paul LB Alter — 4-11-83
SIGNATURE — DATE

ENGINEER

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Howard H Hime Prof Engr #7345 — 4/11/83
SIGNATURE — DATE

OWNER
HOWARD RESEARCH & DEVELOPMENT CORPORATION
ROUSE COMPANY BUILDING
COLUMBIA, MD. 21044

DEVELOPER
M.O.R. XX ASSOCIATES & M.O.R. XXIII ASSOCIATES
SUITE 2100 CHARLES CENTER SOUTH 36 S. CHARLES ST.
BALTO., MD. 21201

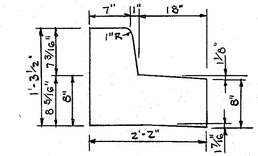
ARCHITECT
NICHOLS/GOULD ARCHITECTS
1111 N. HUNTER STREET
BALTIMORE, MARYLAND 21202

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 5-18-83

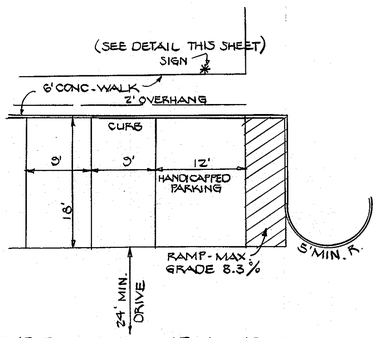
PARCELS N-1, N-2, E-1 AND E-2
SECTION 1 AREA 1
RIVERS CORPORATE PARK
PLAT No 5473
ELECT. DIST. 6 HOWARD CO., MARYLAND

SITE DEVELOPMENT PLAN SCALE 1" = 40'	SHEET 2 OF 11	DATE 3-23-1983 REVISED

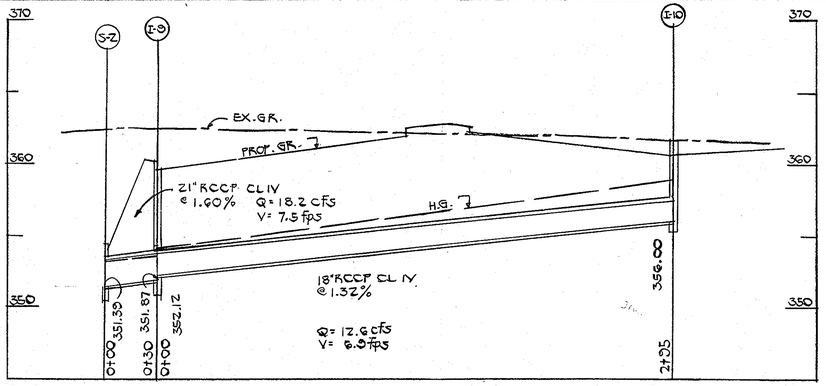
SDP-83-163. 6185-C

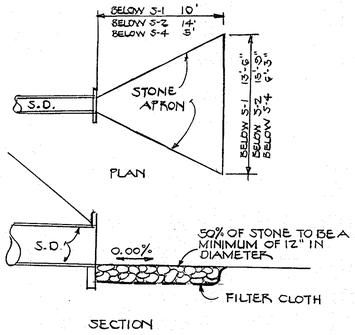


DETAIL - REVERSE CONC. CURB & GUTTER



TYPICAL PARKING LAYOUT



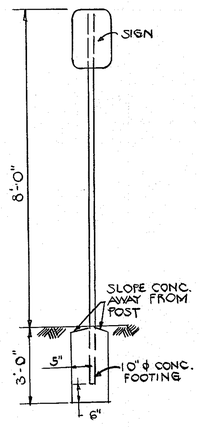


SECTION

STONE OUTFALL

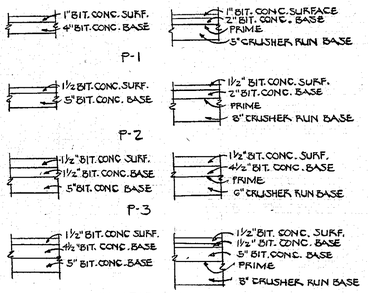
NO SCALE

STRUCTURE SCHEDULE					
NO	TYPE	INV. IN	INV. OUT	TOP	REMARKS
I-1	'S COMB'	360.01	359.76	366.50	SD-4.32
I-2	'S COMB'	365.31	365.06	370.70	SD-4.32
I-3	'S COMB'	371.73	371.23	376.00	SD-4.32
I-4	S' CURB DEPRESSED	–	372.25	376.40	SD-4.32
I-5	'S COMB' DEPRESSED	–	368.00	372.30	SD-4.33
I-6	'S COMB	363.75	363.50	371.60	SD-4.32
I-7	S' CURB DEPRESSED	365.95	365.70	369.80	SD-4.32
I-8	'S COMB'	–	366.70	371.60	SD-4.32
I-9	'S COMB'	352.07	351.87	360.20	SD 4.32
I-10	'S'	–	356.00	360.50	SD-4.22
I-11	'S COMB'	–	349.75	353.80	SD4.32
I-12	A-5	356.09	356.09	363.60	SD-4.01
M-4	STD MH	359.26	352.76	362.70	G5.02
M-5	STD. MH	362.29	360.04	368.00	G5.01
S-1	C ENDWALL	–	350.50	364.50	SD5.21
S-2	C ENDWALL	–	351.30	353.80	SD5.21
S-3	C ENDWALL	–	348.30	351.05	SD5.21
S-4	C ENDWALL	–	349.31	351.31	SD5.21

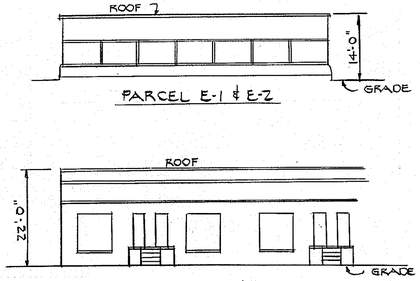


HANDICAPPED PARKING SIGN DETAIL

SHOWN THUS ON PLAN *

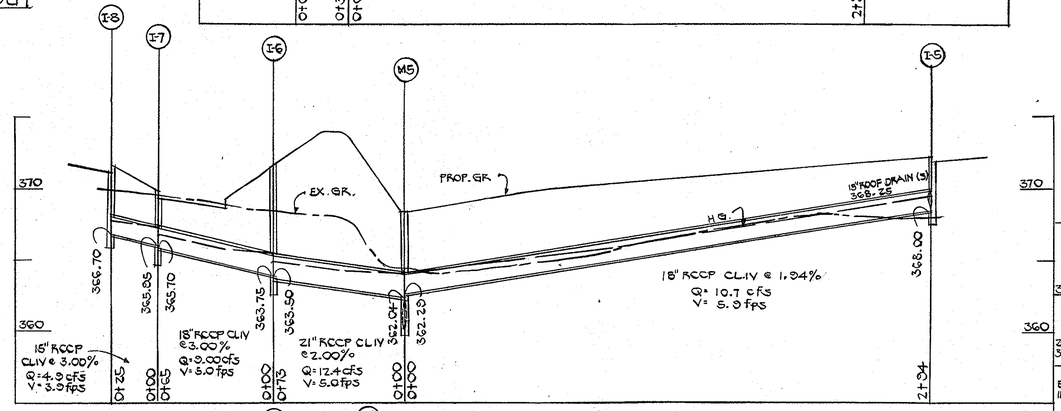


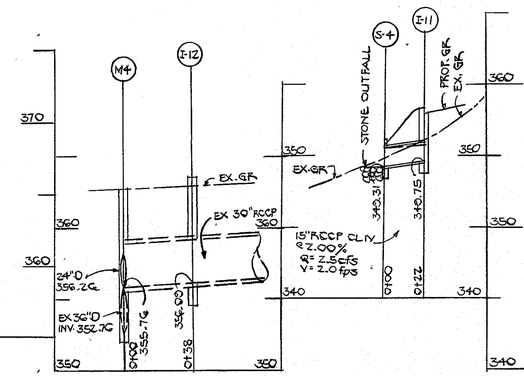
PAVING SECTIONS

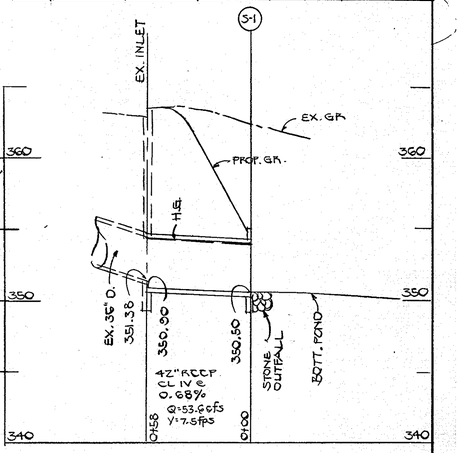


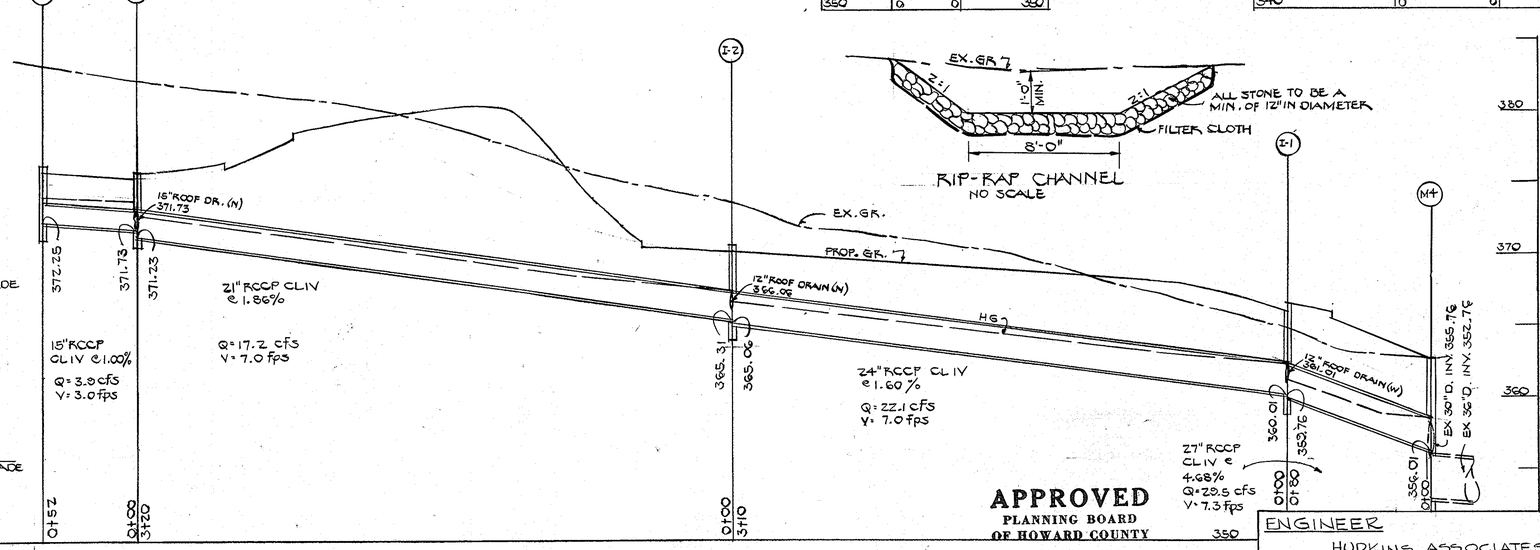
BUILDING ELEVATIONS

NO SCALE









RIP-RAP CHANNEL

NO SCALE

STORM DRAIN PROFILES

SCALE HORZ: 1" = 40'
VERT.: 1" = 5'

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 5-18-83

DEVELOPER

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT, POND CONSTRUCTION AND EROSION AND SEDIMENT CONTROL. 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED LINED AS BUILT OF THE POND WITHIN 30 DAYS OF COMPLETION. RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT.

Ronald Lee Allen — 4-11-83
SIGNATURE — DATE

ENGINEER

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Howard H. Hume, ProfEngr #7943 — 4/11/83
SIGNATURE — DATE

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Robert W. Zeihm — 7-15-83
HOWARD S.C.D. — DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

James M. Hilton — 7-15-83
U.S. SOIL CONSERVATION SERVICE — DATE

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE & STORM DRAINAGE SYSTEMS & PUBLIC ROADS.
HOWARD COUNTY DEPT. OF PUBLIC WORKS.

Glenn F. Nemeyer — 7-19-83
DIRECTOR — DATE

Erwin S. Rinn — 7-18-83
CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPT.

7/20/83
COUNTY HEALTH DEPT. OFFICER — DATE

OWNER
HOWARD RESEARCH & DEVELOPMENT CORPORATION
ROUSE COMPANY BUILDING
COLUMBIA, MARYLAND 21044

DEVELOPER
M.O.R. XX ASSOCIATES & M.O.R XXIII ASSOCIATES
SUITE 2100 CHARLES CENTER SOUTH
36 S. CHARLES ST.
BALTO. MD. 21201

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Thomas H. Hamilton — 7-22-83
PLANNING DIRECTOR — DATE

William Hanneman — 7-22-83
CHIEF: DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

ENGINEER
HUDKINS ASSOCIATES INC.
200 EAST JOPPA ROAD
TOWSON, MARYLAND 21204

ARCHITECT
NICHOLS/GOULD ARCHITECTS
1111 N. HUNTER STREET
BALTIMORE, MARYLAND 21202

PARCELS N-1, N-2, E-1 AND E-2
SECTION 1 AREA 1
RIVERS CORPORATE PARK
PLAT No 5473
ELECT. DIST. 6 HOWARD CO., MARYLAND

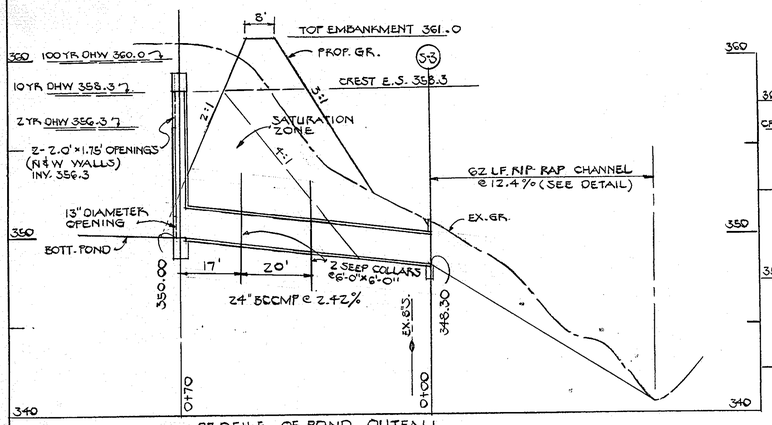
SITE DEVELOPMENT PLAN

SHEET 3 OF 11

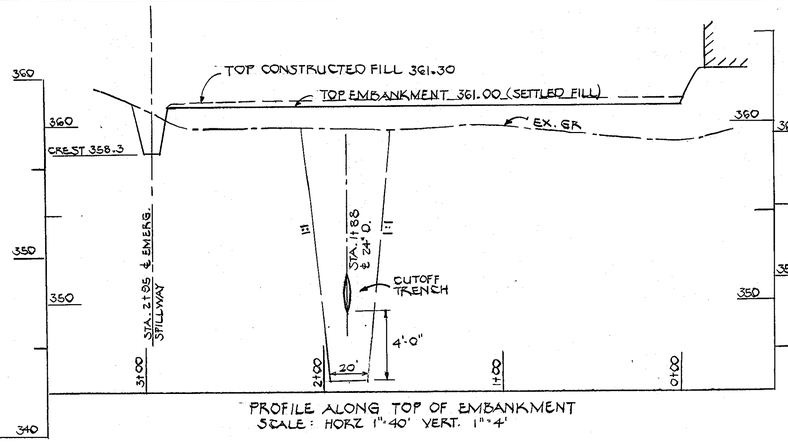
DATE 3-23-1983 REVISED

SDP-83-163c

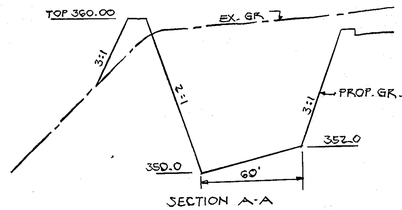
6185-C



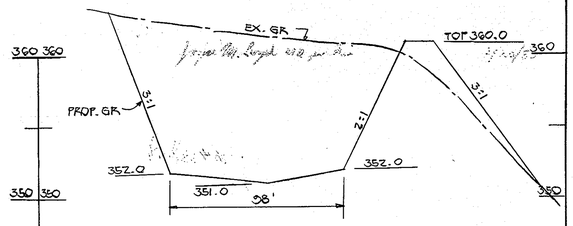
PROFILE OF POND OUTFALL
SCALE HORZ: 1"= 20' VERT. 1"= 4'



PROFILE ALONG TOP OF EMBANKMENT
SCALE: HORZ 1"=40' VERT. 1"=4'

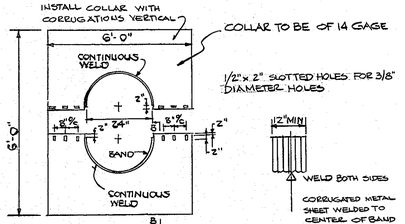


SECTION A-A



SECTION B-B

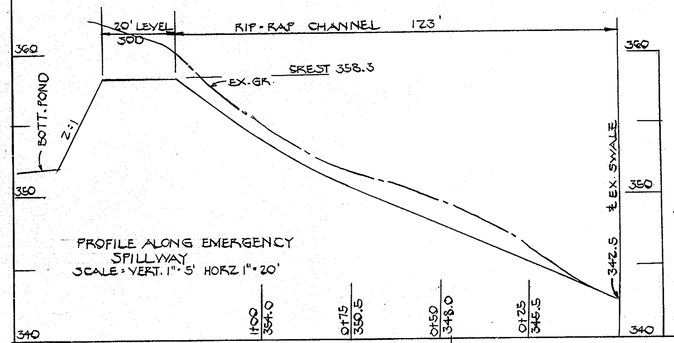
POND SECTIONS SCALE: HORZ. 1"= 40' VERT. 1"= 5'



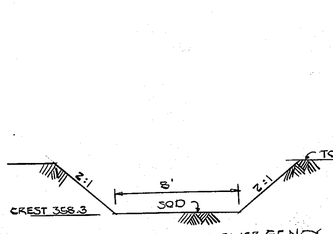
ELEVATION OF UNASSEMBLED COLLAR SECTION B-B

NOTES FOR COLLARS
1. ALL MATERIALS TO BE IN ACCORDANCE WITH CONSTRUCTION AND CONSTRUCTION MATERIAL SPECIFICATIONS.
2. WHEN SPECIFIED ON THE PLANS, COATING OF COLLARS SHALL BE IN ACCORDANCE WITH CONSTRUCTION AND CONSTRUCTION MATERIAL SPECIFICATIONS.
3. UNASSEMBLED COLLARS SHALL BE MARKED BY PAINTING OR TAGGING TO IDENTIFY MATCHING PAIRS.
4. THE LAP BETWEEN THE TWO HALF SECTIONS & BETWEEN THE PIPE & CONNECTING BAND SHALL BE CAULKED WITH ASPHALT MASTIC AT TIME OF INSTALLATION.
5. EACH COLLAR SHALL BE FURNISHED WITH TWO 1/2" DIAMETER RODS WITH STANDARD TANK LUGS FOR CONNECTING COLLARS TO PIPE.

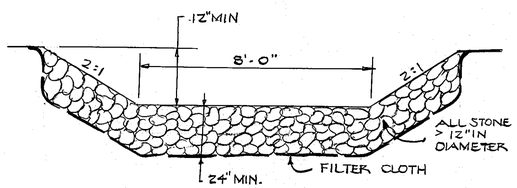
DETAILS OF CORRUGATED METAL ANTI-SEEP COLLAR



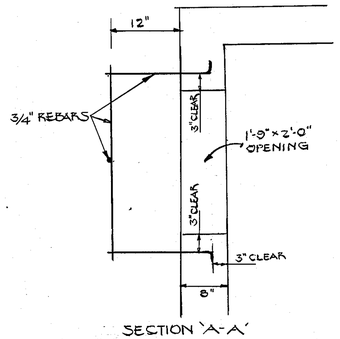
PROFILE ALONG EMERGENCY SPILLWAY
SCALE: VERT. 1"=5' HORZ 1"=20'



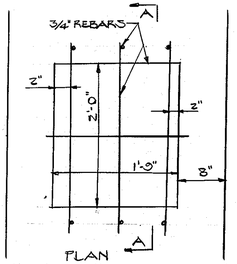
SECTION THROUGH EMERGENCY SPILLWAY
NO SCALE



SECTION THROUGH RIP-RAP EMERGENCY SPILLWAY

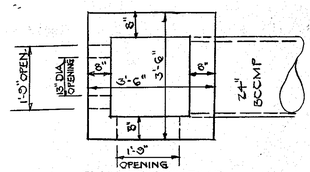


SECTION 'A-A'

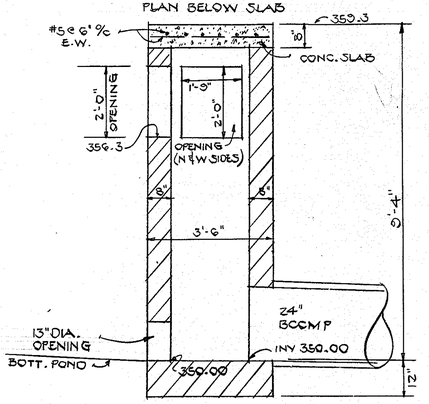


PLAN

DETAIL OF TRASH RACK FOR 1'-9" x 2'-0" OPENINGS



PLAN BELOW SLAB



SECTION

POND OUTFALL STRUCTURE
SCALE 1"=2'-0"

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 5-18-83

DEVELOPER

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT, POND CONSTRUCTION AND EROSION AND SEDIMENT CONTROL. 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED LINED AS BUILT OF THE POND WITHIN 30 DAYS OF COMPLETION. RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT

SIGNATURE _____ DATE 4-11-83

ENGINEER

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION EROSION AND SEDIMENT CONTROL REPRESENTS A FRACTICAL 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 MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED LINED AS BUILT OF THE POND WITHIN 30 DAYS OF COMPLETION.

SIGNATURE Howard H. Haines Prof Engr 7995 DATE 4/11/83

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Zichm 7-15-83
HOWARD S.C.D. DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIRMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL

James M. Hetler 7-15-83
U.S. SOIL CONSERVATION SERVICE DATE

ENGINEER
HUDKINS ASSOCIATES, INC.
101 SHELL BUILDING
200 E. JOPPA ROAD
TOWSON, MD. 21204

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

Joyce M. Boyd MD for F.S. 7/20/83
COUNTY HEALTH DEPT. OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Howard A. Haines Jr. 7-22-83
PLANNING DIRECTOR DATE

7-27-83
CHIEF: DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

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

Charles F. Nemmers 7-13-83
DIRECTOR DATE

7-18-83
CHIEF, BUREAU OF ENGINEERING DATE

OWNER
HOWARD RESEARCH & DEVELOPMENT CORPORATION
ROUSE COMPANY BUILDING
COLUMBIA, MD 21044

DEVELOPER
M.O.R. XX ASSOCIATES & M.O.R. XXIII ASSOCIATES
SUITE 2100 CHARLES CENTER SOUTH 36 S. CHARLES ST.
BALTO., MD 21201

PARCELS N-1, N-2, E-1 AND E-2
SECTION 1 AREA 1
RIVERS CORPORATE PARK
PLAT NO 5473
ELECT. DIST. 6 HOWARD CO, MARYLAND

SITE DEVELOPMENT PLAN

SHEET 4 OF 11

DATE 3-23-83
REVISED

SDP-83-163

SOIL CONSERVATION SERVICE
MARYLAND
CONSTRUCTION SPECIFICATIONS
FOR
PONDS

These specifications are appropriate to ponds within the scope of the Standard for practice 378.

I. SITE PREPARATION

Areas under the borrow areas, embankment, and structural works shall be cleared, grubbed and the topsoil stripped to remove all trees, vegetation, roots or other objectionable material. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Areas covered by the pond or 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.

All cleared and grubbed material shall be disposed of outside 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.

II. EARTH FILL

Material

The fill material shall be taken from approved designated borrow area or areas. It shall be free of roots, stumps, wood, rubbish, oversize stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased above the design elevation (including freeboard) as shown on the plans.

Placement

Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most perous borrow material shall be placed in the downstream portions of 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 can be obtained with the equipment used.

Cutoff Trench

Where specified, a cutoff trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability.

III. STRUCTURAL BACKFILL

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

IV. PIPE CONDUITS

A. Corrugated Metal Pipe

1. Materials - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands. Coupling bands, anti-seep collars, end sections, etc. must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be less than 9 and greater than 4.

Helically corrugated pipe in addition to the requirements above shall have either continuously welded seams or have lock seams which are caulked, during fabrication, with a neoprene bead.

2. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Watertight coupling bands shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight.

3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

4. Laying pipe - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.

5. Backfilling shall conform to structural backfill as shown above.

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

B. Reinforced Concrete Pipe

1. Materials - Reinforced concrete pipe shall have a rubber gasket joint and shall equal or exceed ASTM Specification C-361. Approved equivalents are AWWA Specification C-300, 301, and 302.

2. Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its diameter with a minimum thickness of 3", as shown on the drawings.

3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe.

4. Backfilling shall conform to structural backfill as shown above.

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

C. For pipes of other materials, specific specifications shall be shown on the drawings.

CONCRETE

1. Materials

a. Cement - Normal Portland cement shall conform to the latest ASTM Specification C-150.

b. Water - The water used in concrete shall be clean, free from oil, acid, alkali, scales, organic matter or other objectionable substances.

c. Sand - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a one-quarter inch sieve. Limestone sand shall not be used.

d. Coarse Aggregate - The coarse aggregate shall be clean, hard, strong and durable, and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1-1/2) inches.

e. Reinforcing Steel - The reinforcing steel shall be deformed bars of intermediate grade billet steel or rail steel conforming to ASTM Specification A-615.

2. Design Mix - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 5-1/2 to 6 U. S. gallons of water per 94 pound bag of cement. The proportion of materials for the trial mix shall be 1:2:3-1/2. The combination of aggregates may be adjusted to produce a plastic and workable mix that will not produce harshness in placing or honeycombing in the structure.

3. Mixing - The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and of uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicted on proper control of the speed of rotation of the mixer and of the introduction of the materials, including water, into the mixer. Water shall be added prior to, during, and following the mixer-charging operations. Excessive overmixing requiring the addition of water to preserve the required concrete consistency shall not be permitted. Truck mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given here.

4. Forms - The forms shall have sufficient strength and rigidity to hold the concrete and to withstand the necessary pressure, tamping, and vibration without deflection from the prescribed lines. They shall be mortar-tight and constructed so that they can be removed without hammering or prying against the concrete.

The inside of forms shall be oiled with a non-staining mineral oil or thoroughly wetted before concrete is placed.

Forms may be removed 24 hours after the placement of concrete. All wire ties and other devices used shall be recessed from the surface of the concrete.

5. Reinforcing Steel - All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coatings. The steel shall be accurately placed and securely tied and blocked into position so that no movement of the steel will occur during placement of concrete.

6. Consolidating - Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be supplemented by spading and hand tamping as necessary to insure smooth and dense concrete along form surfaces, in corners, and around embedded items.

7. Finishing - Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water on the finished structure, shall be repaired immediately after the removal of forms. All voids shall be reamed and completely filled with dry-patching mortar.

8. Protection and Curing - Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least the first three (3) days. All concrete shall be kept continuously moist for at least ten (10) days after being placed. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may also be used.

9. Placing Temperature - Concrete may not be placed at temperatures below 37° F with the temperature falling, or 34° with the temperature rising.

VI. 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, fertilizing and mulching (if required) in accordance with the vegetative treatment specifications shown on or accompanying the drawings.

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 5-18-83

STATE OF MARYLAND
HOWARD H. HINE
NO. 7345
REGISTERED
PROFESSIONAL ENGINEER

Howard H Hine 4/11/83

HUDKINS ASSOCIATES, INC.
101 SHELL BLDG.
200 E. JOPPA ROAD
TOWSON, MARYLAND 21204

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPT.

COUNTY HEALTH DEPT. OFFICER — 7/20/83 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT

HOWARD S.C.D. — 7-15-83 DATE

PLAN No.

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 — 7-15-83 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

PLANNING DIRECTOR — 7-22-83 DATE

CHIEF: DIVISION LAND DEVELOPMENT AND ZONING ADMINISTRATION — 7-22-83 DATE

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

DIRECTOR — 7-19-83 DATE

CHIEF, BUREAU OF ENGINEERING — 7-18-83 DATE

DEVELOPER

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT, POND CONSTRUCTION AND EROSION AND SEDIMENT CONTROL. 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION. ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT.

SIGNATURE — 4-11-83 DATE

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 MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION"

STATE OF MARYLAND
HOWARD H. HINE
NO. 7345
REGISTERED
PROFESSIONAL ENGINEER

Howard H Hine Prof Engr #7345 — 4/11/83 DATE

SIGNATURE

DEVELOPER
M.O.R. XX ASSOCIATES & M.O.R. XXIII ASSOCIATES
SUITE 2100 CHARLES CENTER SOUTH
36 S. CHARLES ST.
BALTO. MD. 21201

ARCHITECT
NICHOLS/GOULD ARCHITECTS
1111 N. HUNTER STREET
BALTO., MD 21202

OWNER
HOWARD RESEARCH & DEVELOPMENT CORPORATION
ROUSE COMPANY BUILDING
COLUMBIA, MARYLAND 21044

PARCELS N-1, N-2, E-1 AND E-2
SECTION 1, AREA 1
RIVERS CORPORATE PARK
PLAT NO. 5473
ELECT. DIST. 6 HOWARD CO., MD.

SITE DEVELOPMENT PLAN	SHEET No. 5 OF 11	DATE 3-23-83 REVISED

SDP-83-163 & 185-C

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 5-18-83

ENGINEER
HUDKINS ASSOCIATES, INC.
101 SHELL BUILDING
200 E. JOPPA ROAD
TOWSON, MD. 21204

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPT.

Joyce M. Boyd MD 7/20/83
COUNTY HEALTH DEPT. OFFICER — DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Zeihm 7-15-83
HOWARD S.C.D. — DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL

James McHelm 7-15-83
U.S. SOIL CONSERVATION SERVICE — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Thomas G. Harris Jr. 7-22-83
PLANNING DIRECTOR — DATE

7-22-83
CHIEF: DIVISION LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

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

George F. Neumen 7-19-83
DIRECTOR — DATE

7-18-83
CHIEF, BUREAU OF ENGINEERING 7-18-83 — DATE

DEVELOPER
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT, POND CONSTRUCTION AND EROSION AND SEDIMENT CONTROL. 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED LINED AS BUILT OF THE POND WITHIN 30 DAYS OF COMPLETION. RESPONSIBLE PERSONNELL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT.

4-11-83
SIGNATURE — DATE

ENGINEER
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SIGNATURE — DATE

OWNER
HOWARD RESEARCH & DEVELOPMENT CORPORATION
ROUSE COMPANY BUILDING
COLUMBIA, MD. 21044

DEVELOPER
M.O.R. XX ASSOCIATES & M.O.R. XXIII ASSOCIATES
SUITE 2100 CHARLES CENTER SOUTH 36 S. CHARLES ST.
BALTO., MD. 21201

ARCHITECT
NICHOLS/GOULD ARCHITECTS
1111 N. HUNTER STREET
BALTIMORE, MARYLAND 21202

PARCELS N-1, N-2, E-1 AND E-2
SECTION 1 AREA 1
RIVERS CORPORATE PARK
PLAT No. 5473
ELECT. DIST. 6 HOWARD CO., MARYLAND

DRAINAGE AREA MAP	SHEET 6 OF 11	DATE 3-23-1983 REVISED

SDP-83-163c 6185-C

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 5-18-83

NOTES:
1. ZONING - NEW TOWN F.D.P. PHASE 184
2. THIS SITE IS NOT AFFECTED BY A 100YR FLOOD PLAIN.
3. ANY DAMAGE TO THE COUNTY RIGHT OF WAY WILL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
4. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD CO. ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
5. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION/SURVEY DIVISION AT 992-2417 OR 992-2418, 24 HRS. BEFORE STARTING WORK.

STATE OF MARYLAND — HOWARD H. HINE — No. 7945 — PROFESSIONAL ENGINEER

Howard H Hine 4/11/83

SITE ANALYSIS

PARCEL	AREA	BLDG. AREA	BLDG. COVERAGE	OFFICE SPACE	WAREH'SE SPACE	PARKING REQ.	PARKING PROVIDED	GREEN SPACE
N-1	9.3982	76,700 SF	18.7%	19,200 SF	57,500 SF 115 EMPL.	19,200/500 = 38, 115/2 = 58 } 96	227	4.24 AC. 45%
N-2	3.4891	39,650 SF	26.0%	9,900 SF	29,750 S.F. 60 EMPL.	9,900/500 = 20, 60/2 = 30 } 50	106	0.99 AC. 28%
E-1		19,400 SF		19,400 SF	—	19,400/500 = 39	72	
E-2		29,600 SF		29,600 SF	—	29,600/500 = 59	120	
TOTAL	19.0353 AC	165,350 SF	19.9%			244	525	

HUDKINS ASSOCIATES, INC.
101 SHELL BUILDING
200 E. JOPPA ROAD
TOWSON MD. 21204

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPT.

Joyce M. Boyd — 7/26/83
COUNTY HEALTH DEPT. OFFICER — DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Ziehm — 7-15-83
HOWARD S.C.D. — DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

James M. Stahm — 7-15-83
U.S. SOIL CONSERVATION SERVICE — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Thomas G. Harris Jr. — 7-22-83
PLANNING DIRECTOR — DATE

7-22-83
CHIEF: DIVISION LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

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

George F. Nemeyer — 7-19-83
DIRECTOR — DATE

7-18-83
CHIEF, BUREAU OF ENGINEERING — DATE

DEVELOPER
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT, POND CONSTRUCTION AND EROSION AND SEDIMENT CONTROL. 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED LINED AS BUILT OF THE POND WITHIN 30 DAYS OF COMPLETION. RESPONSIBLE PERSONNELL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT.

4-11-83
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Howard H Hine Prof Engr #7945 — 4/11/83
SIGNATURE — DATE

LOCATION MAP
SCALE: 1" = 2000'
TAX MAP 41 & 42

OWNER
HOWARD RESEARCH & DEVELOPMENT CORPORATION
ROUSE COMPANY BUILDING
COLUMBIA, MD. 21044

DEVELOPER
M.O.R. XX ASSOCIATES & M.O.R. XXIII ASSOCIATES
SUITE 2100 CHARLES CENTER SOUTH 36 S. CHARLES ST.
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ARCHITECT
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PARCELS N-1, N-2, E-1 AND E-2
SECTION 1 AREA 1
RIVERS CORPORATE PARK
PLAT No 5473
ELECT. DIST. 6 HOWARD CO., MARYLAND.

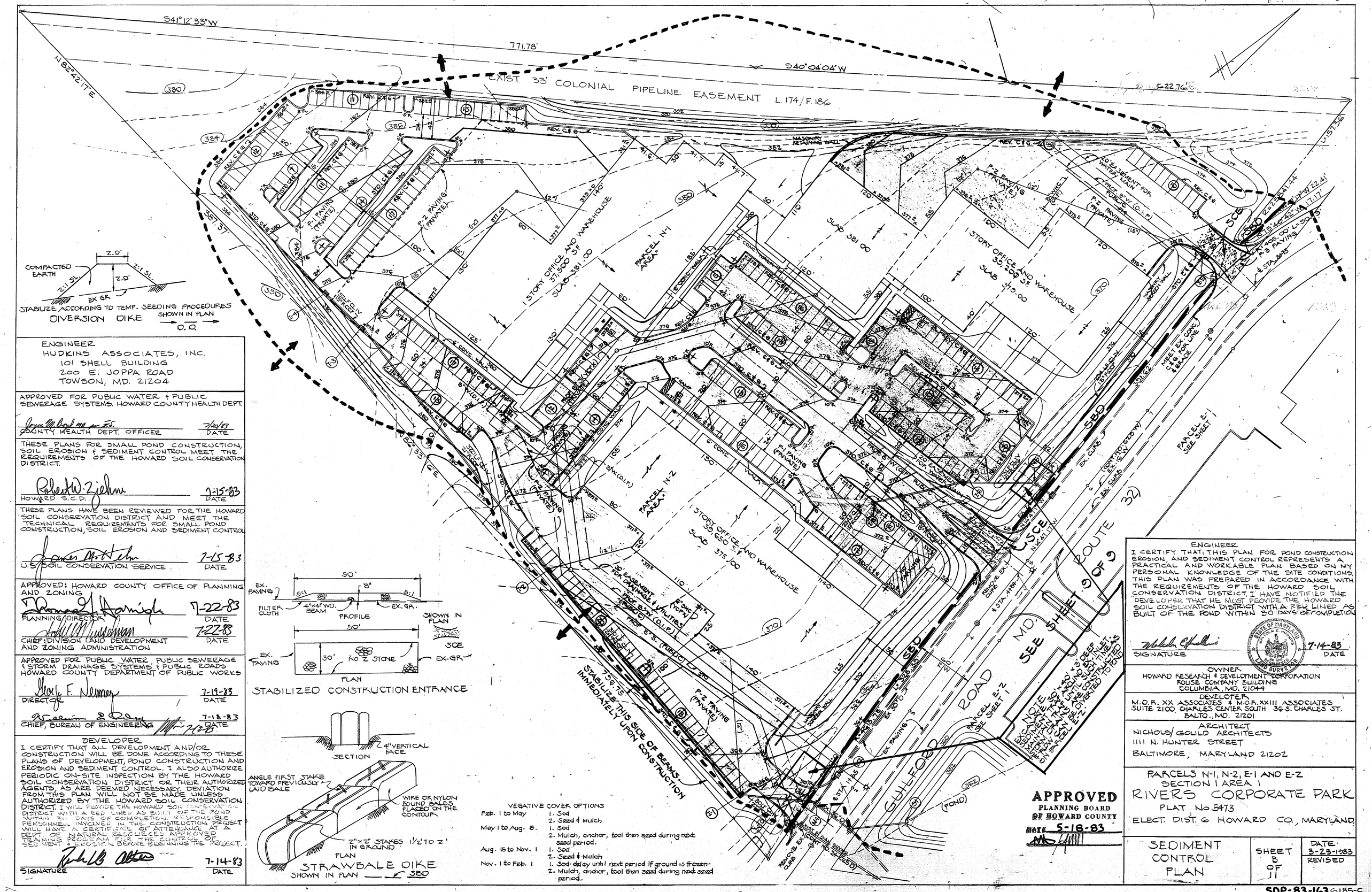
DRAINAGE AREA MAP

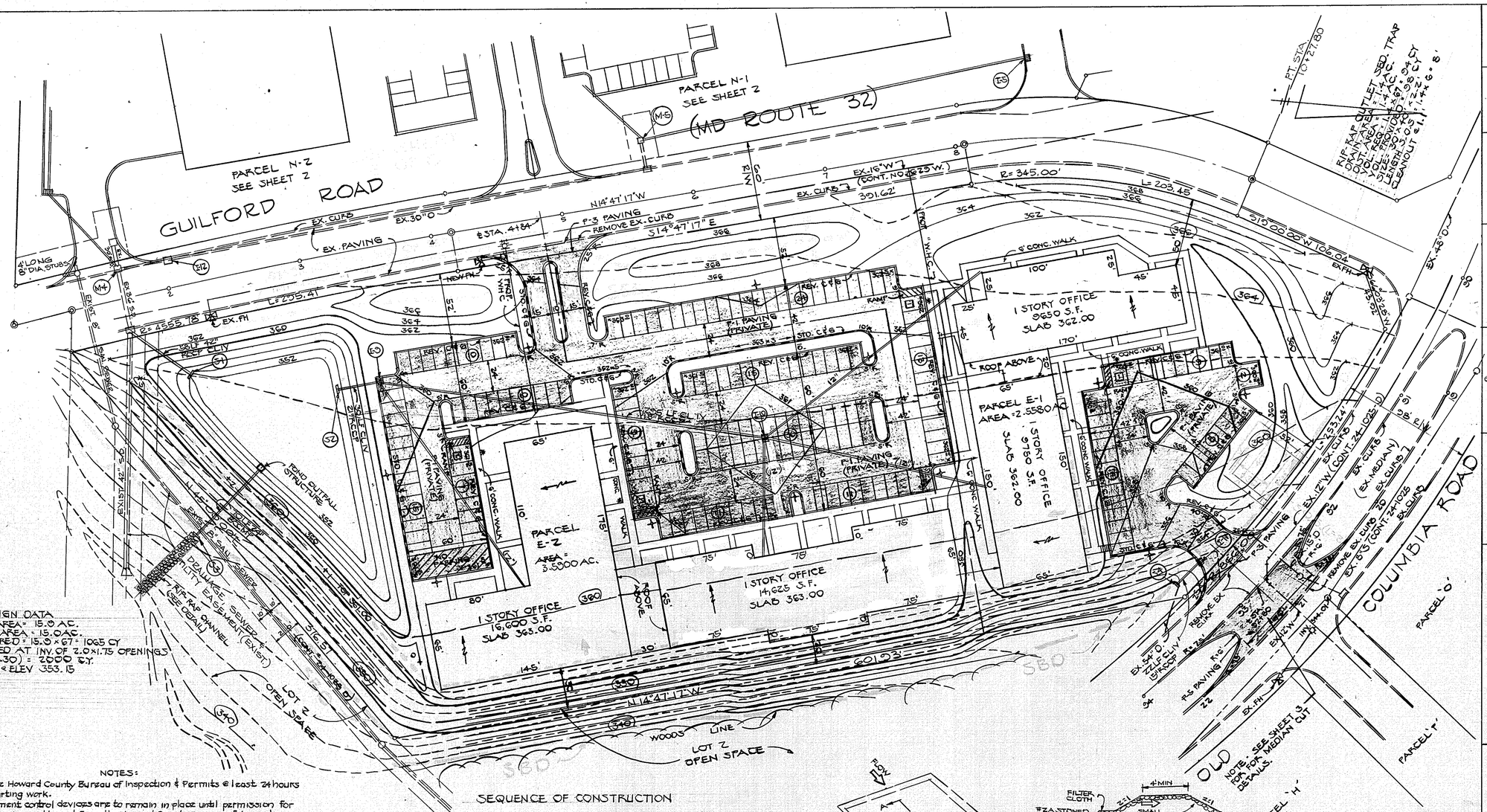
SHEET 7 OF 11

DATE 3-23-1983
REVISED

SDP-83-163c

6185-C


S41°12'33"W
771.78'
S40°04'04"W
N82°42'17"E
EXIST. 33' COLONIAL PIPELINE EASEMENT L.174/F.186
C=22.76'
MASONRY RETAINING WALL
REV. C & G
2-1 PAVING (PRIVATE)
P-2 PAVING (PRIVATE)
PARCEL N-1 AREA=
1 STORY OFFICE AND WAREHOUSE 37,500 S.F. SLAB 381.00
SLAB 381.00
1 STORY OFFICE AND WAREHOUSE 39,200 S.F. SLAB 379.00
PARCEL N-2 AREA=
1 STORY OFFICE AND WAREHOUSE 30,650 S.F. SLAB 375.00
20' E. EASEMENT FOR WATER MAIN
PROP. 8"W. (Q1.P)
P-2 PAVING (PRIVATE)
PROP. 8"S. (PUBLIC)
20' EASEMENT FOR DRAINAGE & UTILITIES
PROP. 15"RCP (Q1.P)
PROP. 8"W. (Q1.P)
PROP. 6"W. (Q1.P)
PROP. 8"W. (Q1.P)
PROP. 8"S. (PUBLIC



POND DESIGN DATA
DRAINAGE AREA = 15.0 AC.
DISTURBED AREA = 15.0 AC.
VOL. REQUIRED = 15.0 x 67 = 1065 CY
VOL. PROVIDED AT INV. OF 2.0 x 1.75 OPENINGS (ELEV. 356.30) = 2000 CY.
CLEANOUT @ ELEV 353.15

NOTES:

1. Notify the Howard County Bureau of Inspection & Permits @ least 24 hours before starting work.
2. All sediment control devices are to remain in place until permission for removal has been obtained from the Howard County Bureau of Inspection and permits.
3. Structural Measures such as berms, dikes, traps, basins, etc. will be installed & stabilized according to the plan prior to any disturbance of the existing surface of the site.
4. On site inspection and maintenance of all sediment control measures including cleanout of traps and berms & proper establishment of all planned vegetive measures will be the responsibility of the developer or his representative on the site on a continuing day to day basis.
5. All construction will be done in accordance with the standards and specifications for soil erosion & sediment control in developing areas.

PERMANENT SEEDING PROCEDURES

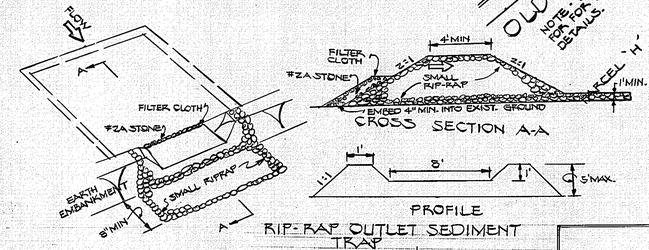
1. Apply 90 lbs./1000 S.F. of limestone
2. Apply fertilizer @ rate of 25 lbs. of 10-10-10 per 1000 S.F. depending on soil tests.
3. Harrow or disc fertilizer & limestone into soil to a depth of 3 inches.
4. Seed with KY 31 tall fescue at rate of 5 lbs./1000 S.F. or other SCS approved plan.
5. Mulch with small grain straw 1.5 to 2.0 tons per acre (70#-90#)/1000 S.F.
6. Anchor mulch with sprayed asphalt @ rate of 1 gal./S.Y.
7. No slope shall exceed 2:1

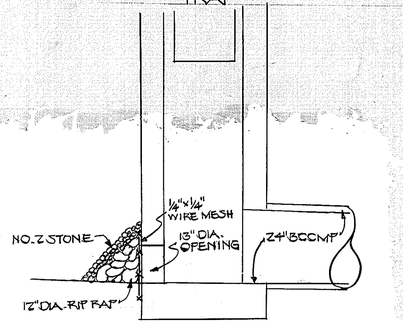
TEMPORARY SEEDING NOTES

1. Seed immediately upon construction with 1lb. rye grass per 1000 S.F.
2. Apply 46 lbs./1000 S.F. of pulverized dolomitic limestone and 115 lbs. to 18.4 lbs./1000 S.F. of 10-10-10 or equivalent fertilizer.
3. Harrow or disc lime and fertilizer into the soil to a depth of at least 3 inch continue tillage until a reasonably uniform fine firm seedbed has been prepared. On sloping land the final harrowing or discing should be on the contour.
4. Mulch with straw @ 75 lbs./1000 S.F.
5. Anchor mulch with sprayed asphalt @ rate of 0.1 gal./S.Y.

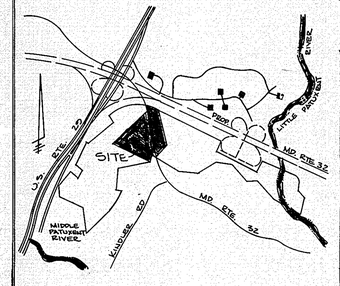
SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT.
2. NOTIFY HOWARD CO. DEPT. OF PERMITS AND LICENCES.
3. INSTALL STABILIZED CONSTRUCTION ENTRANCE AT STA. 5+00 RT.
4. INSTALL STRAW BALE DIKE ALONG BOTTOM OF SLOPE SOUTH OF POND.
5. CONSTRUCT POND, POND OUTFALL STRUCTURE, PIPE OUTFALL AND RIP-RAP CHANNEL PER SHT. 4 OF 9. PROVIDE STONE BLOCKING.
6. CONSTRUCT S-1 AND 42" RCCP TO EXISTING INLET.
7. CONSTRUCT REMAINING SEDIMENT CONTROL DEVICES.
8. ROUGH GRADE SITE.
9. INSTALL STORM DRAINS.
10. BEGIN BUILDING CONSTRUCTION AND INSTALL REMAINING UTILITIES.
11. PLACE SUB-BASE MATERIALS IN AREAS TO BE PAVED.
12. PAVE PARKING AREAS AND STABILIZE REMAINING AREAS PER PERMANENT SEEDING PROCEDURES.
13. FLUSH STORM DRAINS
14. PUMP STANDING WATER IN POND THROUGH OUTFALL STRUCTURE
15. REMOVE MUCK, SPREAD AND STABILIZE IMMEDIATELY.
16. RESTORE POND TO DESIGN DIMENSIONS & STABILIZE
17. INSTALL STONE OUTFALLS.
18. REMOVE REMAINING SEDIMENT CONTROL MEASURES AND STABILIZE THOSE AREAS.





APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 5-18-83



HUDKINS ASSOCIATES, INC.
101 SHELL BUILDING
200 E. JOPPA ROAD
TOWSON MD. 21204

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPT.

COUNTY HEALTH DEPT. OFFICER — DATE 7/20/83

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Zohn
HOWARD S.C.D. — DATE 7-15-83

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 — DATE 7-15-83

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

PLANNING DIRECTOR — DATE 7-22-83

CHIEF, DIVISION LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 7-22-83

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

DIRECTOR — DATE 7-19-83

CHIEF, BUREAU OF ENGINEERING — DATE 7-18-83

DEVELOPER

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT, POND CONSTRUCTION AND EROSION AND SEDIMENT CONTROL. 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED LINED AS BUILT OF THE POND WITHIN 30 DAYS OF COMPLETION. RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT.

SIGNATURE — DATE 4-11-83

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 MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED LINED AS BUILT OF THE POND WITHIN 30 DAYS OF COMPLETION

SIGNATURE — DATE 4/7/83

OWNER
HOWARD RESEARCH & DEVELOPMENT CORPORATION
ROUSE COMPANY BUILDING
COLUMBIA, MD. 21044

DEVELOPER
M.O.R. XX ASSOCIATES & M.O.R. XXIII ASSOCIATES
SUITE 2100 CHARLES CENTER SOUTH, 36 S. CHARLES ST.
BALTO., MD 21201

ARCHITECT
NICHOLS/GOULD ARCHITECTS
1111 N. HUNTER STREET
BALTIMORE, MARYLAND 21202

PARCELS N-1, N-2, E-1 AND E-2
SECTION 1 AREA 1
RIVERS CORPORATE PARK
PLAT NO 5473
ELECT. DIST. 6 HOWARD CO., MARYLAND.

SEDIMENT CONTROL PLAN

SHEET 5 OF 11

DATE 3-23-1983
REVISED

SDP-83-163c

G185-C

NEU VALLEY NURSERY

ELKRIDGE, MD. 21227 796-4195

PLANT LIST

KEY	NO.	PLANT NAME		SIZE	REMARKS
		MAJOR TREES:			
	83	ACER RUBRUM	RED MAPLE	2½-3" CAL. 12-14' HT.	B&B HEAVY HEADS
	58	ZELKOVA SERRATA	ZELKOVA	2½-3" CAL. 12-14' HT.	" "
	40	QUERCUS PALUSTRIS	PIN OAK	2½-3" CAL. 12-14' HT.	" "
	17	FRAXINUS P. LANCEOLATA	GREEN ASH	2½-3" CAL. 12-14' HT.	" "
	27	QUERCUS RUBRA	RED OAK	2½-3" CAL. 12-14' HT.	" "
	13	ACER SACCARUM GREEN MNT.	GREEN MNT. SUGAR MAP.	2½-3" CAL. 12-14' HT.	" "
	6	GLEDITSIA TRIACANTHOS INERM.	THORNLESS H. LOCUST	2½-3" CAL. 12-14' HT.	" "
		INTERMEDIATE TREES:			
	13	PYRUS CALLERIANA	BRADFORD PEAR	8-10' HT.	B&B HEAVY HEADS
	41	PRUNUS SERRULATA KWANZAN	KWANZAN CHERRY	8-10' HT.	" "
	31	MALUS RADIANT	RADIANT CRABAPPLE	8-10' HT.	" "
	16	PRUNUS CERASIFERA THUNDCLD	PURPLE LEAF PLUM	8-10' HT.	" "
	60	PINUS THUNBERGI	JAP. BLACK PINE	6-8' HT.	" "
	135	PINUS STROBUS	WHITE PINE	6-8' HT.	" "

NOTE: ALL PLANTING TO BE IN COMPLIANCE WITH STANDARD HRD COLUMBIA PLANTING SPECIFICATIONS. CONTRACTOR TO VERIFY LOCATION OF UTILITIES BEFORE DIGGING

STATE OF MARYLAND · VIGAND H. THEIMER · NO. 434 · REGISTERED · LANDSCAPE ARCHITECT

Wigand H. Theimer
6-23-83

SITE ANALYSIS

PARCEL	AREA	BLDG. AREA	BLDG. COVERAGE	OFFICE SPACE	WAREH'SE SPACE	PARKING REQ.	PARKING PROVIDED	GREEN SPACE
N-1	9.3982	76,700 SF	18.7%	19,200 SF	57,500 SF 115 EMPL.	19,200/500 = 38; 115/2 = 58 } 96	227	4.24 AC. 45%
N-2	3.4891	39,650 SF	26.0%	9,900 SF	29,750 S.F. 60 EMPL.	9,900/500 = 20; 60/2 = 30 } 50	106	0.99 AC. 28%
E-1	2.5580	19,400 SF	17.4%	19,400 SF	—	19,400/500 = 39	72	1.40 AC. 55%
E-2	3.5900	31,225 SF	20.0%	31,225 SF	—	31,225/500 = 63	120	1.74 AC. 48%
TOTAL	19.0353 AC	166,975 SF	20.0%	79,725 SF	87,250 SF 175 EMPL.	248	525	8.37 AC. 44%

HUDKINS ASSOCIATES, INC.
101 SHELL BUILDING
200 E. JOPPA ROAD
TOWSON MD. 21204

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPT.

Joyce M. Boyd MD for F.S. — COUNTY HEALTH DEPT. OFFICER — 7/20/83 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Ziehm — HOWARD S.C.D. — 7-15-83 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL

James M. Helm — U.S. SOIL CONSERVATION SERVICE — 7-15-83 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Thomas G. Harris Jr. — PLANNING DIRECTOR — 7-22-83 DATE

John W. Musselman — CHIEF: DIVISION LAND DEVELOPMENT AND ZONING ADMINISTRATION — 7-22-83 DATE

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

George F. Neimeyer — DIRECTOR — 7-19-83 DATE

[illegible] E. Riley — CHIEF, BUREAU OF ENGINEERING — 7-18-83 DATE

DEVELOPER

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Paul L.B. Alter — SIGNATURE — 4-11-83 DATE

ENGINEER

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Howard H. Hume Prof. Eng. #1395 — SIGNATURE — 4/11/83 DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 5-18-83

LOCATION MAP
SCALE: 1"=2000'
TAX MAP 41 & 42

OWNER
HOWARD RESEARCH & DEVELOPMENT CORPORATION
ROUSE COMPANY BUILDING
COLUMBIA, MD. 21044

DEVELOPER
M.O.R. XX ASSOCIATES & M.O.R. XXIII ASSOCIATES
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BALTO., MD 21201

ARCHITECT
NICHOLS/GOULD ARCHITECTS
1111 N. HUNTER STREET
BALTIMORE, MARYLAND 21202

PARCELS N-1, N-2, E-1 AND E-2
SECTION 1 AREA 1
RIVERS CORPORATE PARK
PLAT No 5473
ELECT. DIST. 6 HOWARD CO., MARYLAND

LANDSCAPE PLANTING PLAN
SCALE: 1" = 40'-0"

SHEET 10 OF 11

DATE 5-17-1983
REVISED 5-31-83

SDP-83-163. 6185-C

ENGINEER
HUDKINS ASSOCIATES, INC.
101 SHELL BUILDING
200 E. JOPPA ROAD
TOWSON, MD. 21204

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPT.

Joyce M. Boyd M.D. per F.L. — 7/20/83
COUNTY HEALTH DEPT. OFFICER — DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Ziehm — 7-15-83
HOWARD S.C.D. — DATE

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James M. Hele — 7-15-83
U.S. SOIL CONSERVATION SERVICE — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Thomas G. Harris Jr. — 7-22-83
PLANNING DIRECTOR — DATE

7-22-83
CHIEF: DIVISION LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

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

Geo. F. Nemey — 7-19-83
DIRECTOR — DATE

William E. Riley — 7-18-83
CHIEF, BUREAU OF ENGINEERING — DATE

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Kent L.B. Alter — 4-11-83
SIGNATURE — DATE

Howard H Hine 4/11/83

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 5-18-83

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Howard H Hine Prof Engr #7345 — 4/11/83
SIGNATURE — DATE

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ROUSE COMPANY BUILDING
COLUMBIA, MD. 21044

DEVELOPER
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BALTO., MD. 21201

ARCHITECT
NICHOLS/GOULD ARCHITECTS
1111 N. HUNTER STREET
BALTIMORE, MARYLAND 21202

STATE OF MARYLAND — WIGAND H. THEILER — NO. 434 — REGISTERED LANDSCAPE ARCHITECT
Wigand H. Theiler 6-23-83

PARCELS N-1, N-2, E-1 AND E-2
SECTION 1 AREA 1
RIVERS CORPORATE PARK
PLAT No 5473
ELECT. DIST. 6 HOWARD CO., MARYLAND

NEU VALLEY NURSERY
ELKRIDGE, MD. 21227 796-4195

LANDSCAPE PLANTING PLAN SCALE: 1" = 40'-0"	SHEET 11 OF 11	DATE 5-17-1983 REVISED 5-31-83

SDP-83-163c 6185-C