

AREA OF SITE: 5.3441 AC
 EXISTING ZONING: M1
 PROPERTY REFERENCE: PLAT #5678
 EXISTING USE: VACANT
 PROPOSED USE: OFFICE (FLOORS 1,2,3)
 TOTAL FLOOR AREA: 62,296 SQ. FT. = 1.43 AC
 1 ST FLOOR: 21,157 SQ. FT.
 2 ND FLOOR: 19,681 SQ. FT.
 3 RD FLOOR: 21,458 SQ. FT.
 PARKING PROVIDED: 219 SPACES
 FLOOR AREA RATIO: 1.43 AC / 5.3441 AC = 26.61
 OPEN SPACE: 2.56 AC / 5.3441 AC = 47.91
 BUILDING COVERAGE WITH PAVING: 2.78 AC / 5.3441 AC = 52.11
 AREA TO BE DISTURBED: 4.56 AC
 AREA TO BE PERMANENTLY STABILIZED: 1.90 AC
 BUILDING COVERAGE: 9.712
 TOTAL AREA OF PARKING LOT: 1.90 AC
 TOTAL AREA OF LANDSCAPED ISLANDS: 0.16 AC
 LANDSCAPED ISLANDS AND PARKING: 8.402

PARKING TABULATION
 PARKING REQUIRED: OFFICE 42,296 SQ. FT. 312MP #7SPACES=116MP #11SPACES
 PARKING PROVIDED: 219 SPACES (INCLUDING 7 HANDICAP SPACES)

STATE HIGHWAY ADMINISTRATION
 LIBER 520 FOLIO 577
 SHA PLATS 577 57 AND 58
 VEHICULAR INGRESS AND EGRESS IS RESTRICTED

BENCH MARKS:
 No. 2240001 CONG. MONUMENT 16' SOUTH OF SOUTH EDGE OF ROAD, N48°19'30" E 89°01'30" W ELEVATION: 929.697
 No. 2340002-R R.D. 1.5' WEST OF WEST EDGE OF ROAD 7' BELOW SURFACE, N48°09'17" E 89°02'09" W ELEVATION: 962.011

LEGEND

- EX. CONTOURS
- PROP. GRADE
- EX. CURB & GUTTER
- PROP. CURB & GUTTER
- PROPERTY LINE
- BUILDING RESTRICTION LINE
- BASEMENT
- EX. WATER
- PROPOSED WATER
- EX. STORM DRAIN
- PROP. STORM DRAIN
- EX. SAN SEWER
- PROP. SAN SEWER
- PROP. HANDICAPPED PARKING
- NO. OF PROP. PARKING SPACES
- SOIL BORING LOCATION
- 30 POLE - SINGLE FIXTURE
- 30 POLE - DUAL FIXTURES

APPROVED For public water and public sewerage storm drainage systems and public roads Howard County Department of Public Works.

James L. ... Director Date *3/29/88*

Chief Bureau of Engineering E Date
 These plans have been reviewed for the Howard Soil Conservation District meet the technical requirements for small pond construction, soil erosion and sediment control.

James M. ... U.S. Soil Conservation Service Date *3/29/88*

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

Approved: *Stephen L. ...* Howard Soil Conservation District Date *3/24/88*

Plan Number
 APPROVED For public water and public sewerage systems Howard County Health Department.

Joseph ... Health Officer Date *6-29-89*

Approved: *Walt ...* Director Date *7.17.89*

David ... Chief Division of COMMUNITY PLANNING AND LAND DEVELOPMENT Date *7/1/89*

ADDRESS CHART
 BUILDING # STREET ADDRESS
 1000 Old COLUMBIA ROAD

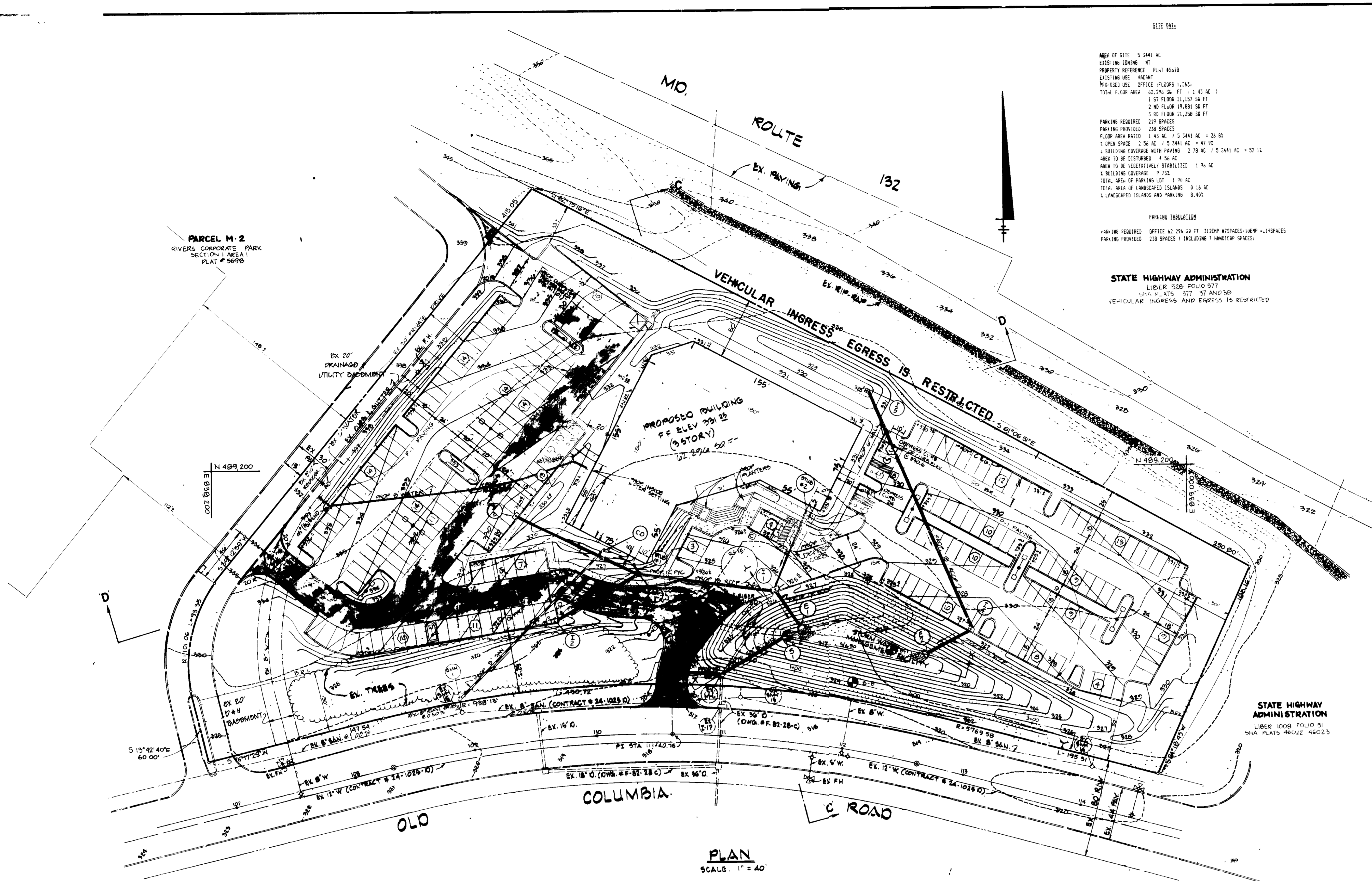
SUBDIVISION NAME: RIVERS CORPORATE PARK
 PLAT # OR L/F: 5628
 BLOCK # ZONE: NT A2
 ELCTR. DIST: 6
 CENSUS TRACT: 6061 02
 WATER CODE: E 16
 SEWER CODE:

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR S.W.N. FACILITY CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENT A PRACTICE 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 S.W.N. FACILITY WITHIN 90 DAYS OF COMPLETION.
 ENGINEER: *George William Stephens, Jr.* DATE: *4/13/88*

OWNER / DEVELOPER
 RIVERS 19 PARTNERSHIP
 C/O MANXIN CORPORATION
 10270 OLD COLUMBIA RD
 COLUMBIA, MARYLAND 21046
 (301) 945-1670

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 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 AND WHEN 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 S.W.N. FACILITY WITHIN 90 DAYS OF COMPLETION.
 DEVELOPER: *J. ...* DATE: *2/3/88*

DESIGNED BY: K.B.
 DRAWN BY: J.W./K.B.
 CHECKED BY: T.G.
 REVISIONS:
 3/29/89 REVISE PERM. ENTRANCE, ADD ACCESS EAVAP
 PARCEL M-2 SEC. 1 AREA
 RIVERS CORPORATE PARK
 HOWARD COUNTY, MD.
 SCALE 1" = 40'
 TAX MAP 42
 ELEC. DIST. # 6
 SHEET 1 OF 8
 FEBRUARY 15, 1988



PLAN
 SCALE: 1" = 40'

NOTE: ALL CURB RADII ARE 5' UNLESS OTHERWISE NOTED.

APPROVED
 DATE: 4-13-88

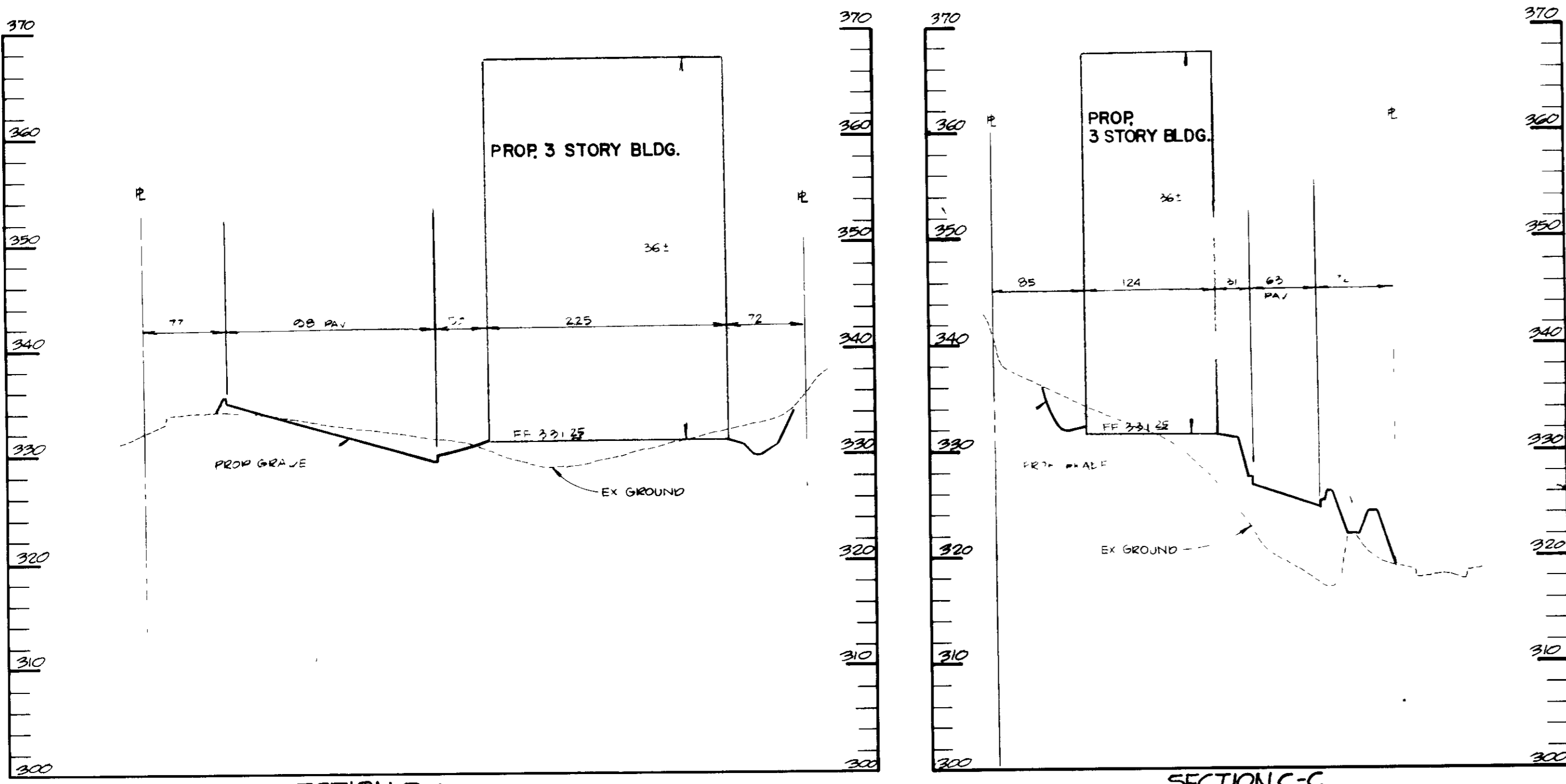
GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 303 ALLEGHENY AVENUE
 TOWSON, MARYLAND 21204
 (301) 825-8120

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 ENGINEER: *George William Stephens, Jr.* DATE: *4/13/88*

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 DEVELOPER: *J. ...* DATE: *2/3/88*

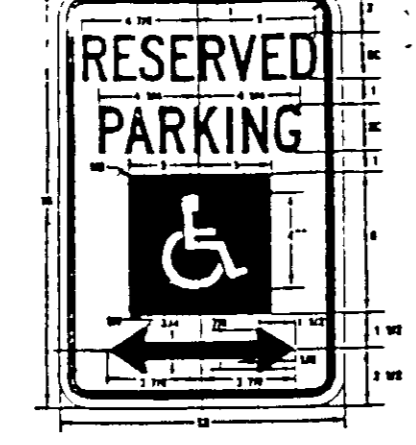
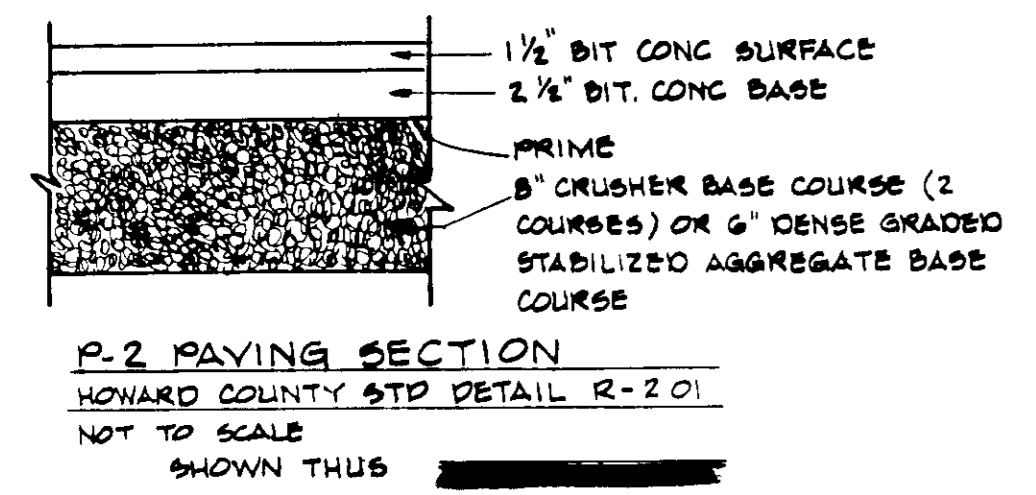
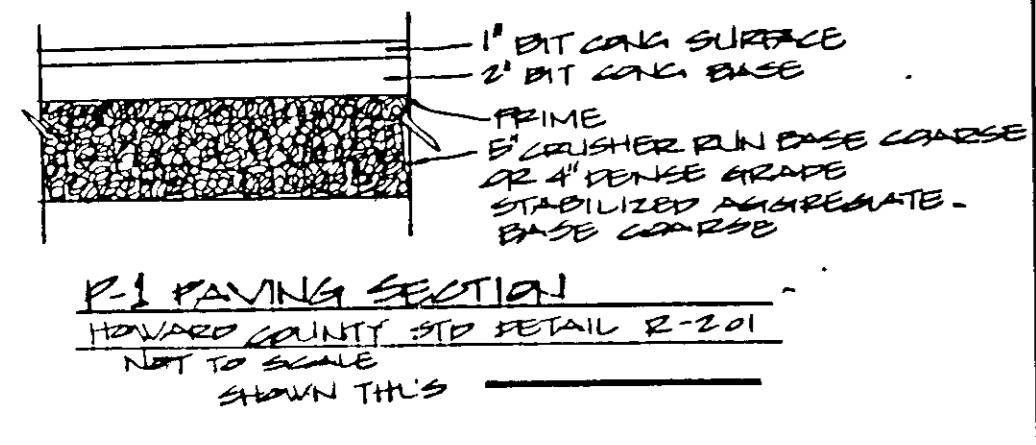
DESIGNED BY: K.B.
 DRAWN BY: J.W./K.B.
 CHECKED BY: T.G.
 REVISIONS:
 3/29/89 REVISE PERM. ENTRANCE, ADD ACCESS EAVAP
 PARCEL M-2 SEC. 1 AREA
 RIVERS CORPORATE PARK
 HOWARD COUNTY, MD.
 SCALE 1" = 40'
 TAX MAP 42
 ELEC. DIST. # 6
 SHEET 1 OF 8
 FEBRUARY 15, 1988



- 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 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 CAP 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 as shown hereon. See Sheet of
 10. The contractor shall maintain a minimum of 4' cover over all proposed water lines.
 11. All pipe-rap shall be placed on filter cloth.
 12. The contractor of developer shall contact the Construction Inspection/Survey Division, 24 hours in advance of commencement of work at 992-7417 or 792-7771.
 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 caps, bands, caps, etc shall be decreased in accordance with Howard County Design requirements.
 16. All sidewalks shall be 6' wide (see architectural plans for details).
 17. The owner shall provide a separate and independent sewer connection for each tenant or occupant of any building, shown on this site development plan, who will discharge non-domestic waste to the public sewerage system if this waste is regulated under Section 18.122A of the Howard County Code. Each separate and independent sewer connection shall include a standard macerator and pump waste pretreatment device as required and approved by Howard County. Waste lines on the interior of the building shall be designed, constructed or modified such that non-domestic waste will be discharged to the separate and independent sewer connection. NO tenant or occupant of any building shown on this site development plan shall discharge regulated non-domestic waste to the public sewerage system prior to installation of the separate and independent sewer connection and related interior waste lines. The above requirements shall apply to all initial and future occupants of buildings.

SECTION D-D
Scale Horiz 1"=100'
Vert 1"=10'

SECTION C-C
Scale Horiz 1"=100'
Vert 1"=10'



RESERVED PARKING SIGN
Sign to utilize an aluminum blank 6" x 12" x 0.080 inch thick with two single post mounting holes.
The text and border shall be standard green to match that on R-7-4 and the background shall be reflective white. Text shall be in 3" characters.
Sign shall be mounted directly below the standard R-7-4 Reserved Parking for Handicapped sign. Its bottom edge shall be no less than 7 feet above ground. If the capped sign is placed against a building, structure, or other location where vehicle or pedestrian traffic is not obstructed the bottom edge of sign shall be at least 6 feet but not more than 10 feet above ground.

LOG OF BORING BORING #8

Job No. 429-75153
Client: Bridge & Assoc.
Project: CR Expansion
Location of Boring: Other Detour, Columbia, MD
Water Level: 45.0'
Time: 11-24-87
Date: 11-24-87

DEPTH IN FEET	DESCRIPTION
0-1.0'	6" Topsoil
1.0'-2.5'	Moist, med. dense sandy silt with little clay (SM)
2.5'-5.0'	Moist, med. dense sandy silt with trace clay (SM)
5.0'-10.0'	Moist, very dense silty sand with trace clay (SM)
10.0'-13.0'	Moist, very dense silty sand with trace clay (SM)
13.0'-15.0'	Moist, very dense silty sand with trace clay (SM)

LOG OF BORING BORING #7

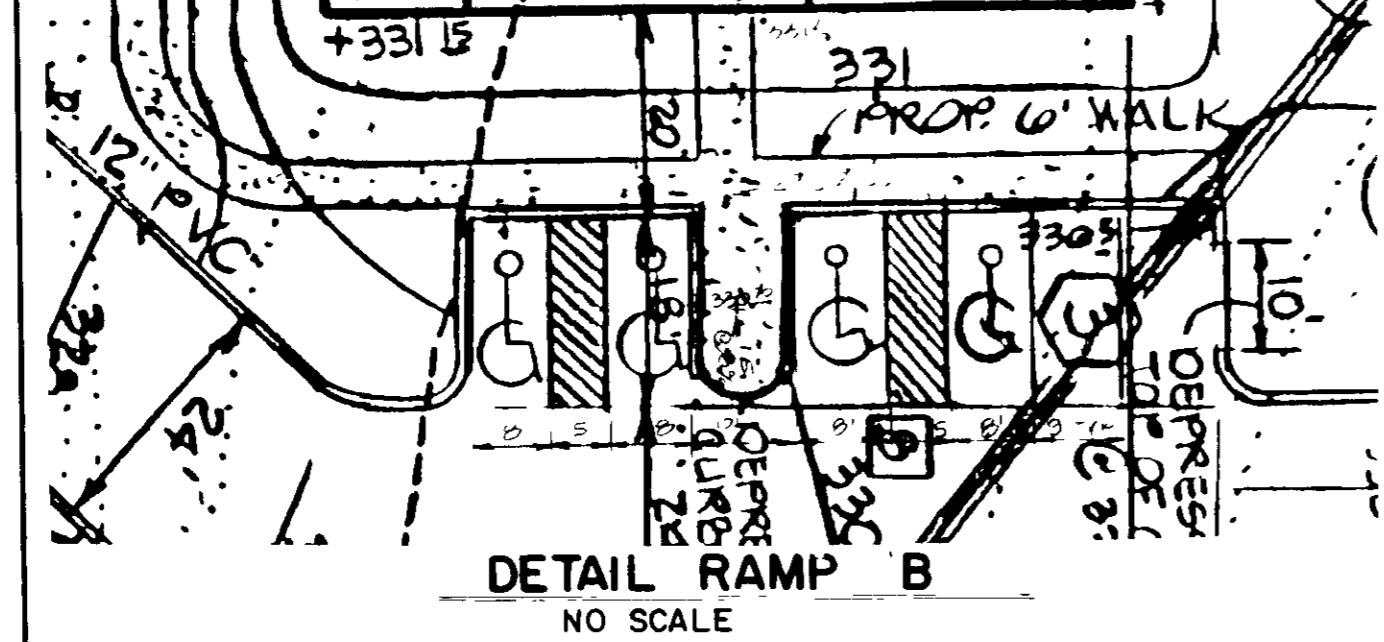
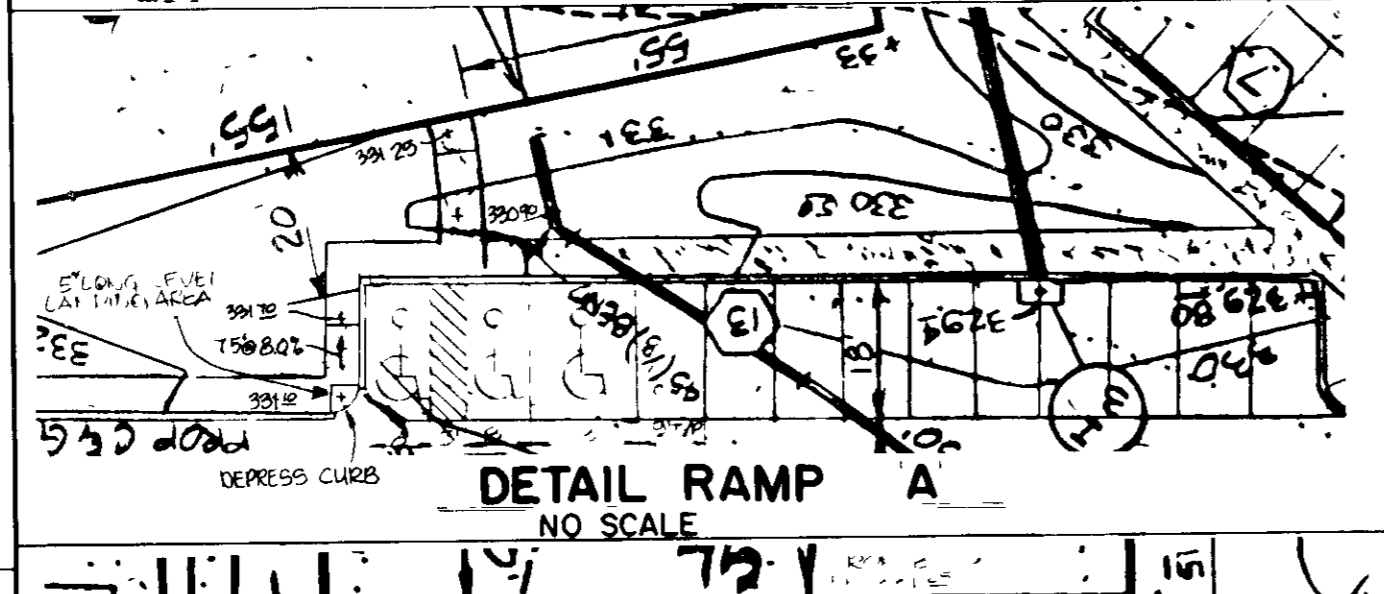
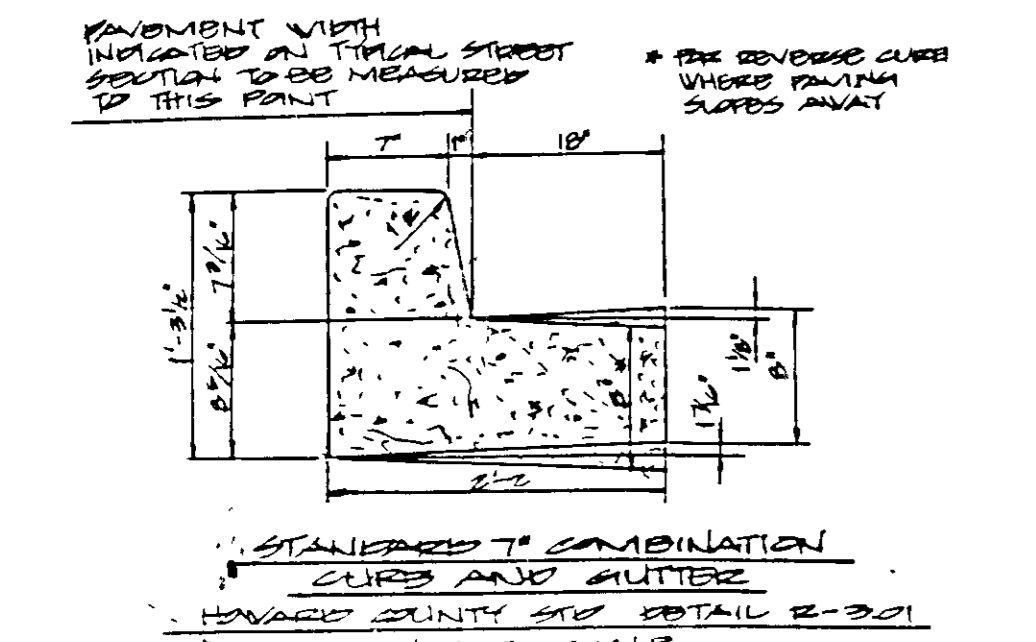
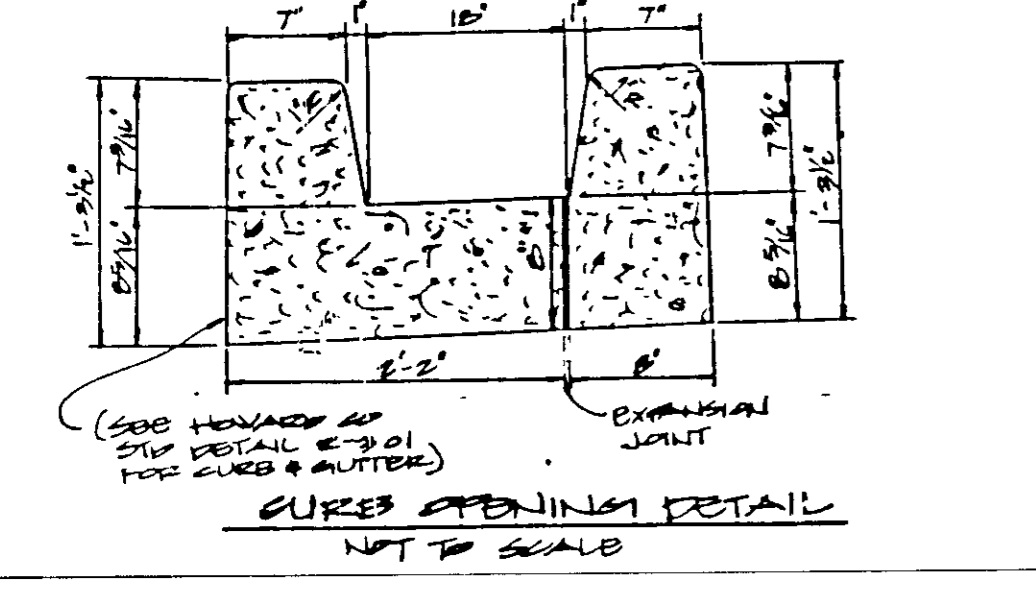
Job No. 429-75153
Client: Bridge & Assoc.
Project: CR Expansion
Location of Boring: Other Detour, Columbia, MD
Water Level: 45.0'
Time: 11-24-87
Date: 11-24-87

DEPTH IN FEET	DESCRIPTION
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2.5'-5.0'	Moist, med. dense sandy silt with little clay (SM)
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10.0'-13.0'	Moist, med. dense silty sand with trace clay (SM)
13.0'-15.0'	Moist, med. dense silty sand with trace clay (SM)

LOG OF BORING BORING #6

Job No. 429-75153
Client: Bridge & Assoc.
Project: CR Expansion
Location of Boring: Other Detour, Columbia, MD
Water Level: 45.0'
Time: 11-24-87
Date: 11-24-87

DEPTH IN FEET	DESCRIPTION
0-1.0'	6" Topsoil
1.0'-2.5'	Moist, med. dense sandy silt with little clay (SM)
2.5'-5.0'	Moist, med. dense sandy silt with little clay (SM)
5.0'-10.0'	Moist, med. dense silty sand with trace clay (SM)
10.0'-13.0'	Moist, med. dense silty sand with trace clay (SM)
13.0'-15.0'	Moist, med. dense silty sand with trace clay (SM)



APPROVED
DATE 4-13-88

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

Approved: *Stephen L. Fisher* 3/28/87
Howard Soil Conservation District

Approved: *James P. Gorman* 6-29-87
County Health Officer

Approved: *James P. Gorman* 7-17-89
Director

Approved: *James P. Gorman* 7/1/89
Chief Division of COMMUNITY PLANNING AND LAND DEVELOPMENT

Approved: *James P. Gorman*
Director

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301)825-8120

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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.

ENGINEER: *TAKAKATA CHANAKA* REG. NO. DATE

OWNER / DEVELOPER
RIVERS 19 PARTNERSHIP
C/O MANCKIN CORPORATION
10270 OLD COLUMBIA RD
COLUMBIA, MARYLAND 21046
(301) 945-1670

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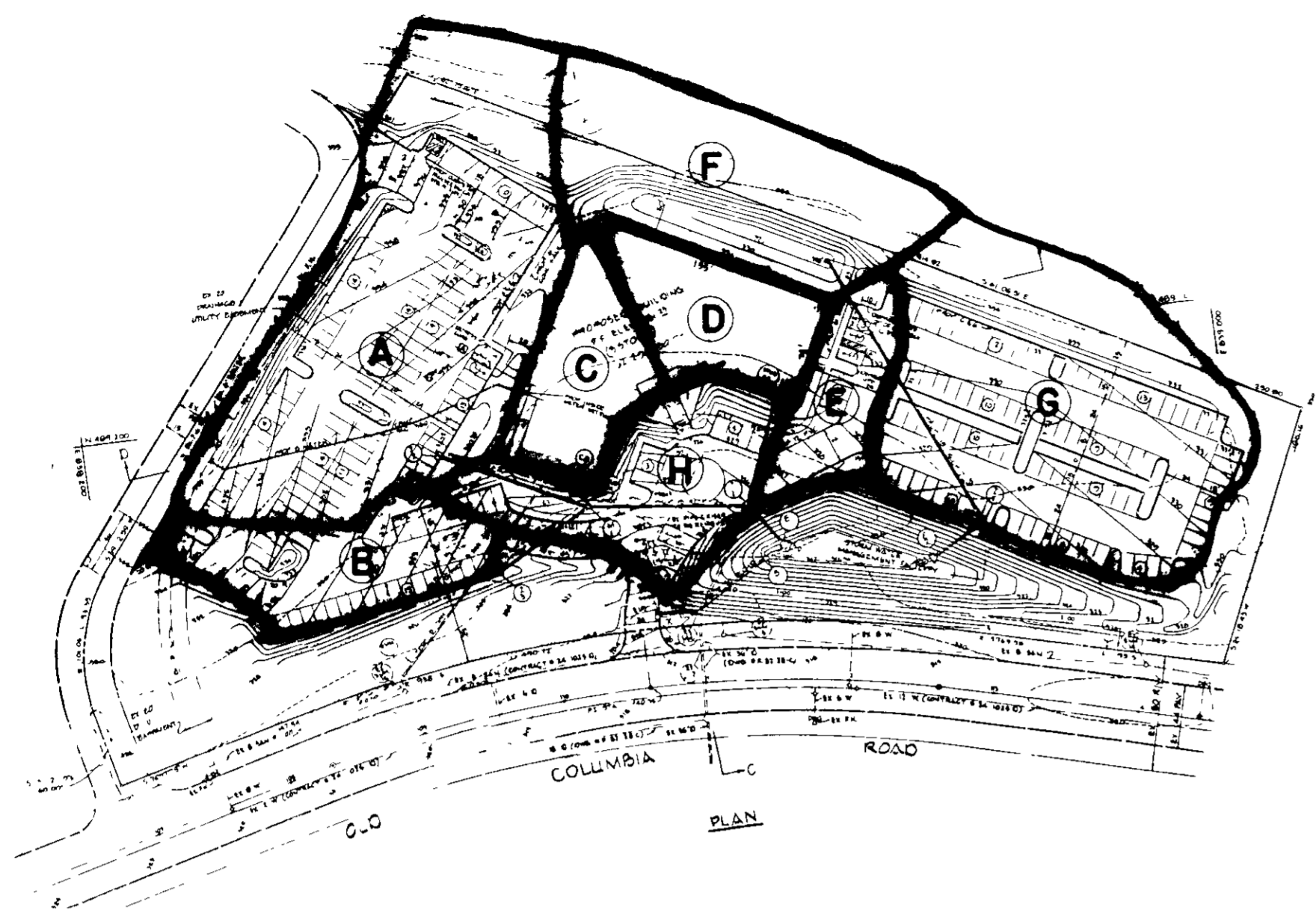
DEVELOPER: *[Signature]* DATE 2/3/88

DESIGNED BY KB/NB
DRAWN BY JW
CHECKED BY NB
REVISIONS

PROFILES AND DETAILS -FOR-
RIVERS 19 PARTNERSHIP
RIVERS CORPORATE PARK
PARCEL M-3, SEC 1, AREA 1
BOWLE AS SHOWN
HOWARD COUNTY, MD.

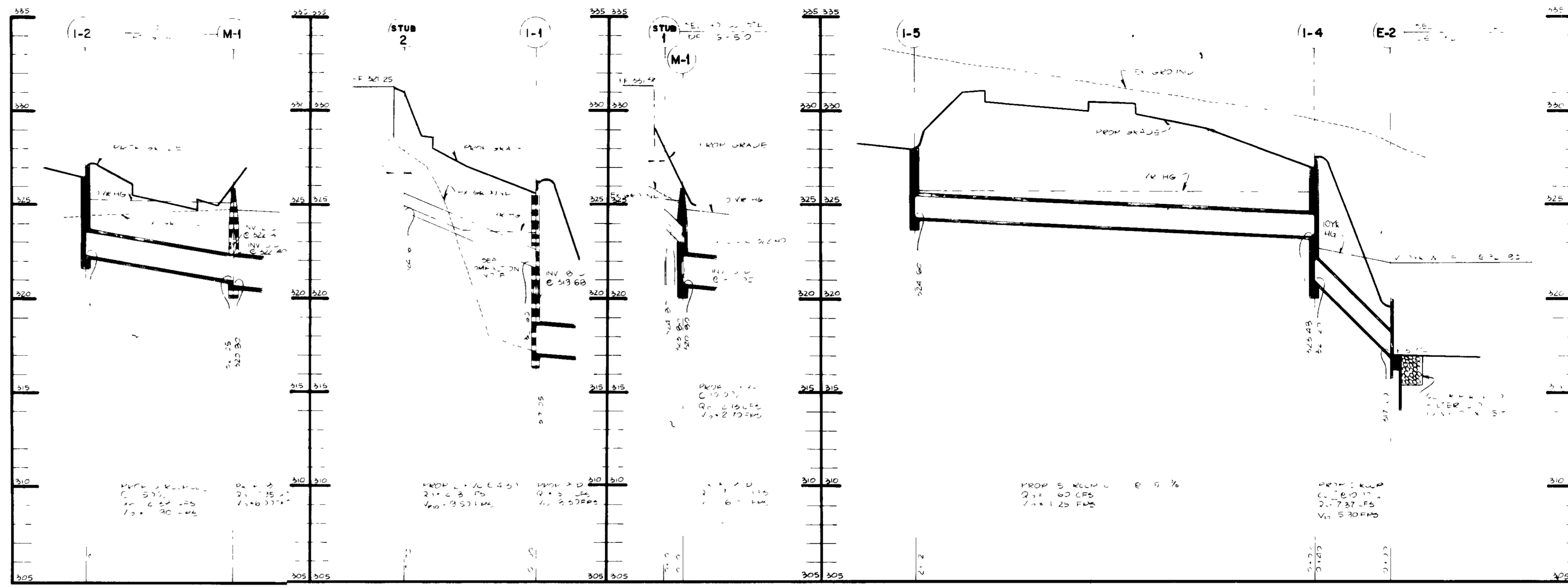
TAX MAP 42
ELEC DIST 06
SHEET 2 OF 6
FEBRUARY 5, 1988

SDP-88-142



PROP. DRAINAGE AREA MAP
SCALE: 1" = 100'

AREA	ACRES	C FACTOR
A	1.29	0.72
B	0.51	0.90
C	0.26	0.95
D	0.26	0.95
E	0.19	0.82
F	0.60	0.95
G	1.04	0.73
H	0.43	0.80

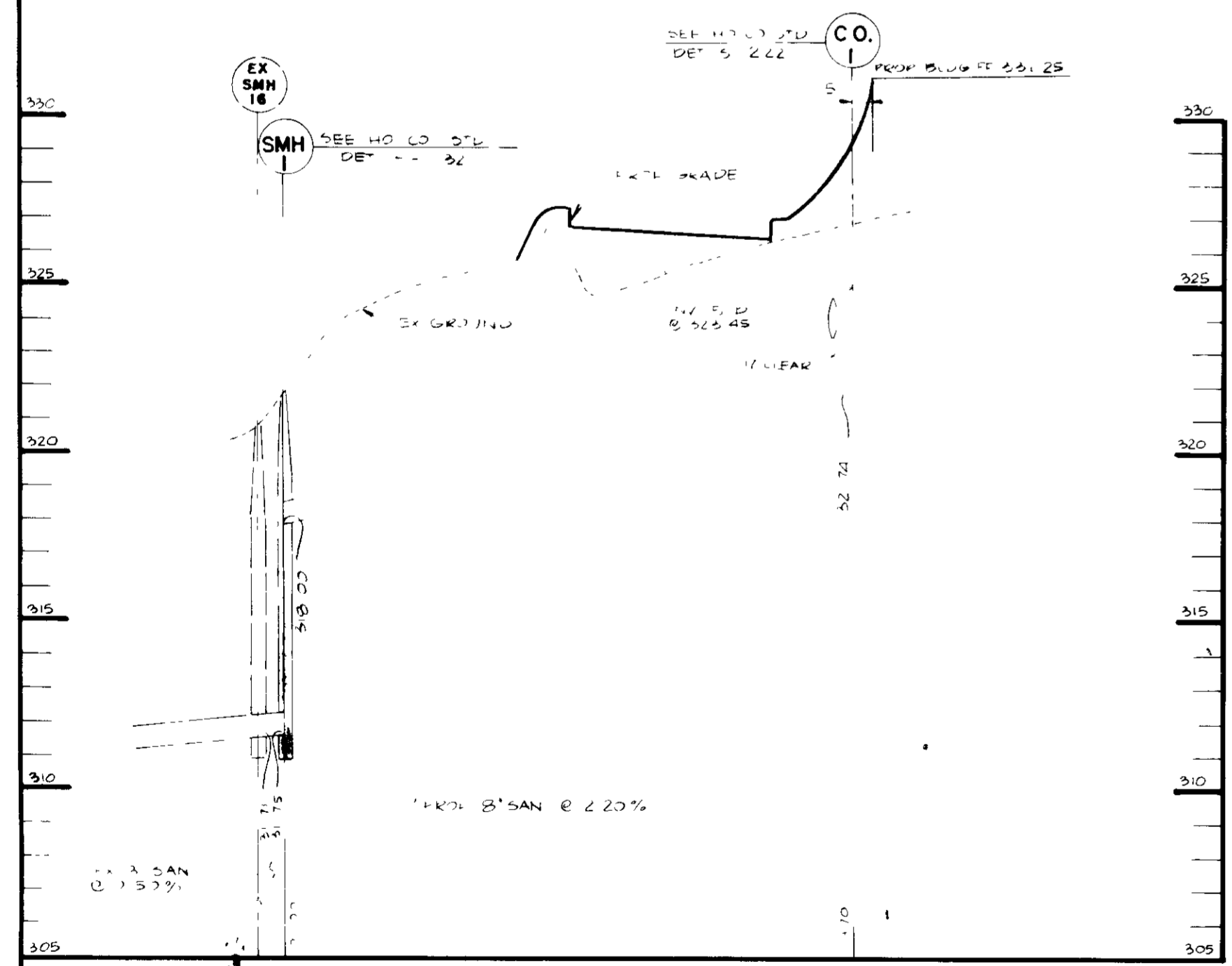


PROP. STORM DRAIN PROFILE
SCALE: HORIZ. 1" = 40' VERT. 1" = 4'

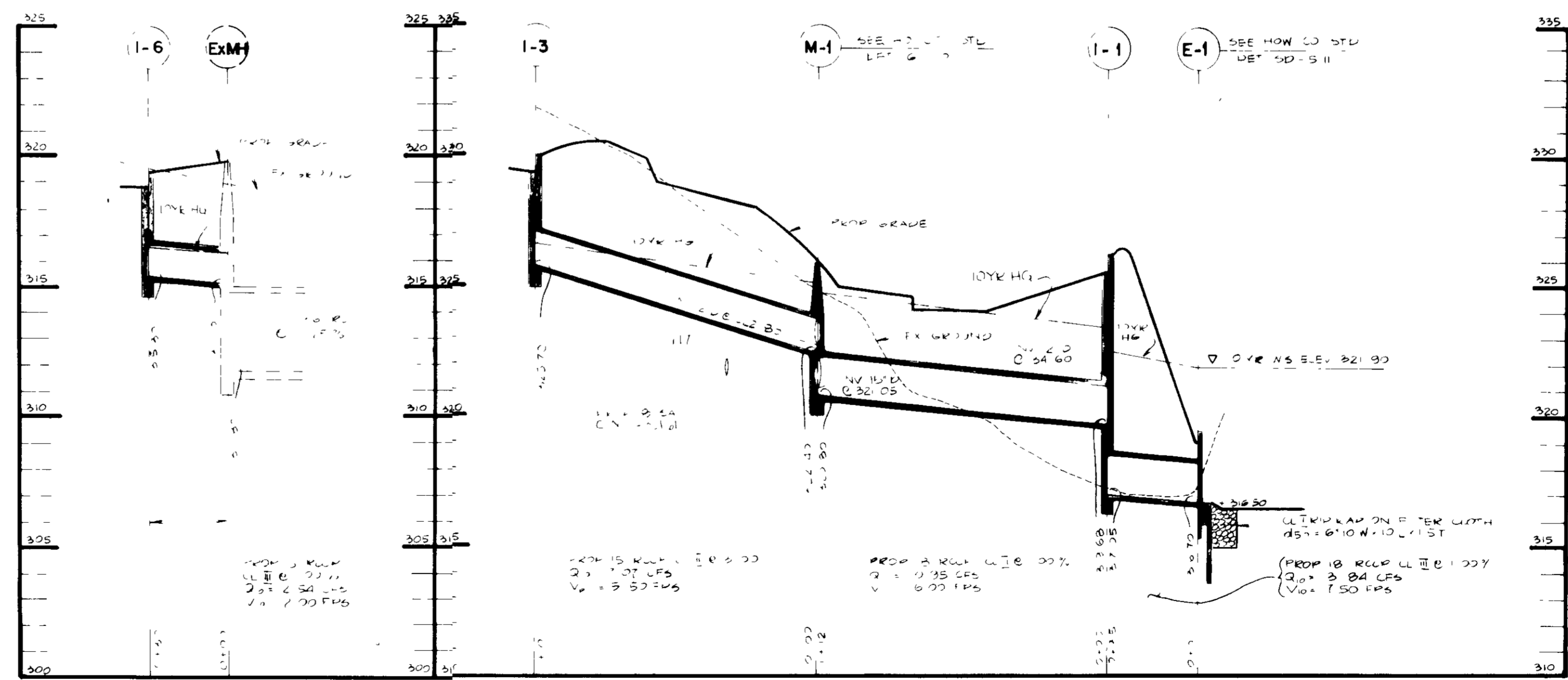
No.	TYPE	ELEVATION		REMARKS
		TOP *	INV. IN	
1-1	5' COMBINATION	326.20	319.68	SEE HOWARD CO STD DET 4-32
1-2	5' COMBINATION	327.0	322.24	SEE HOWARD CO STD DET 4-34
1-3	PBL 5' COMBINATION	330.00	325.80	SEE HOWARD CO STD DET 4-34
1-4	DBL 5' COMBINATION	327.60	323.48	SEE HOWARD CO STD DET 4-34
1-5	TYPE 'S' INLET	328.00	324.60	SEE HOWARD CO STD DET 4-22
1-6	5' COMBINATION	318.80	315.30	SEE HOWARD CO STD DET 4-32

* TOP OF CURB ELEVATION
** TOP OF GRATE ELEVATION

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE: 4-13-88
J.A.



PROP. SANITARY SEWER PROFILE
SCALE: HORIZ. 1" = 40' VERT. 1" = 4'



PROP. STORM DRAIN PROFILE
SCALE: HORIZ. 1" = 40' VERT. 1" = 4'

These plans have been reviewed for the Howard Soil Conservation District to meet the technical requirements for small pond construction, soil erosion and sediment control.

James M. Klatka 3/28/89
U.S. Soil Conservation Service Date

Approved: *Stephen R. Fales* 3/28/89
Howard Soil Conservation District Date

Plan Number: _____

APPROVED For public water and public sewerage systems
Howard County Health Department

Joyce Boykin 6-29-89
County Health Officer Date

APPROVED Howard County Office of Planning & Zoning

John 2/17/89
Director Date

Wanda J. Langley 2/1/89
Chief Division of Community Planning
Land Development Date

APPROVED For public water and public sewerage storm drainage
systems and public roads Howard County Department of
Public Works.

James 4/6/89
Director Date

Chief Bureau of Engineering *E* Date

GWS
GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21284
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ENGINEER: *JWS* REG NO. 774423 DATE

OWNER/DEVELOPER
RIVERS 19 PARTNERSHIP
c/o Manekin Corporation
10270 Old Columbia Rd
Columbia, Maryland 21046
(301) 945-1070

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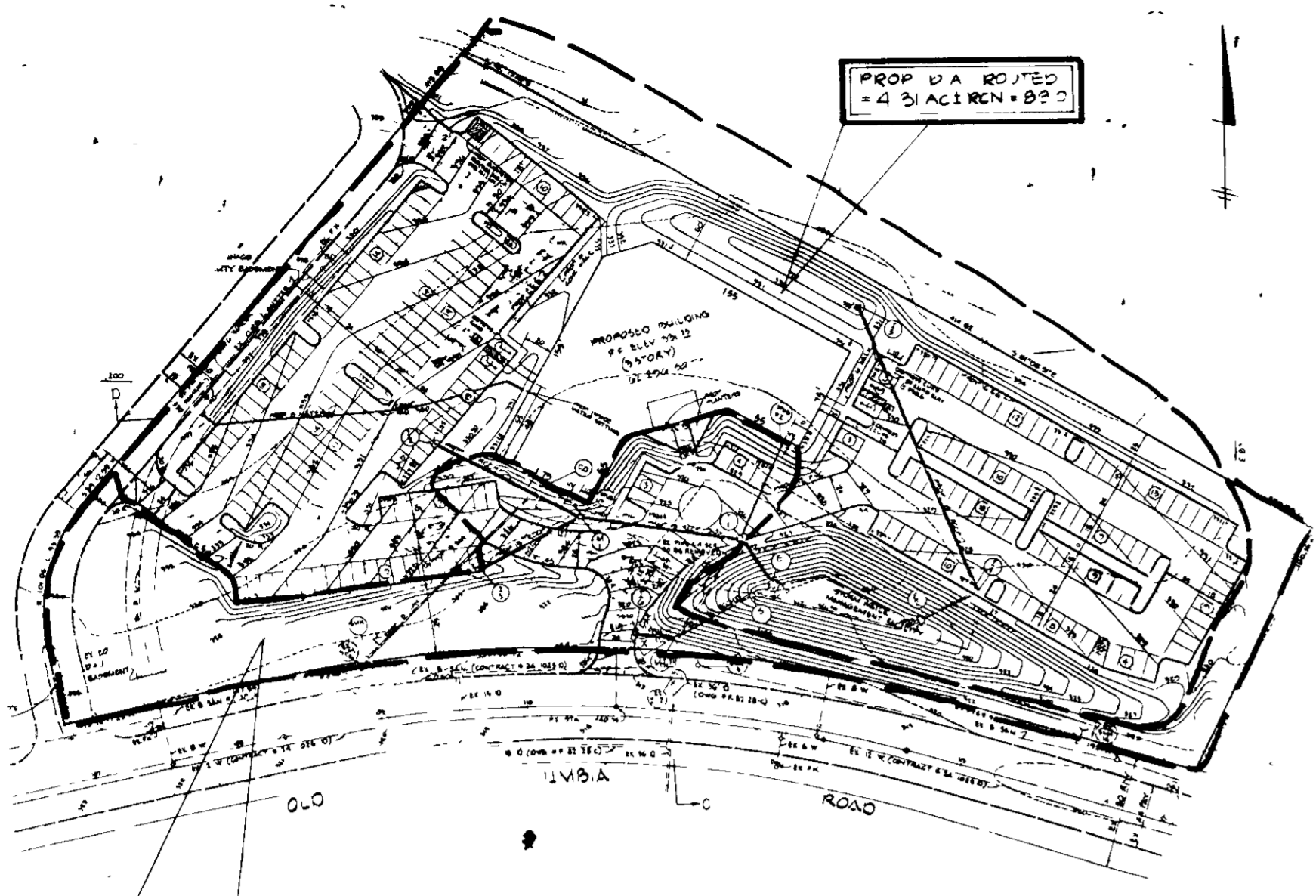
DEVELOPER: *JWS* DATE 2/13/88

DESIGNED: N.B.
DRAWN: J.W.
CHECKED: N.B.

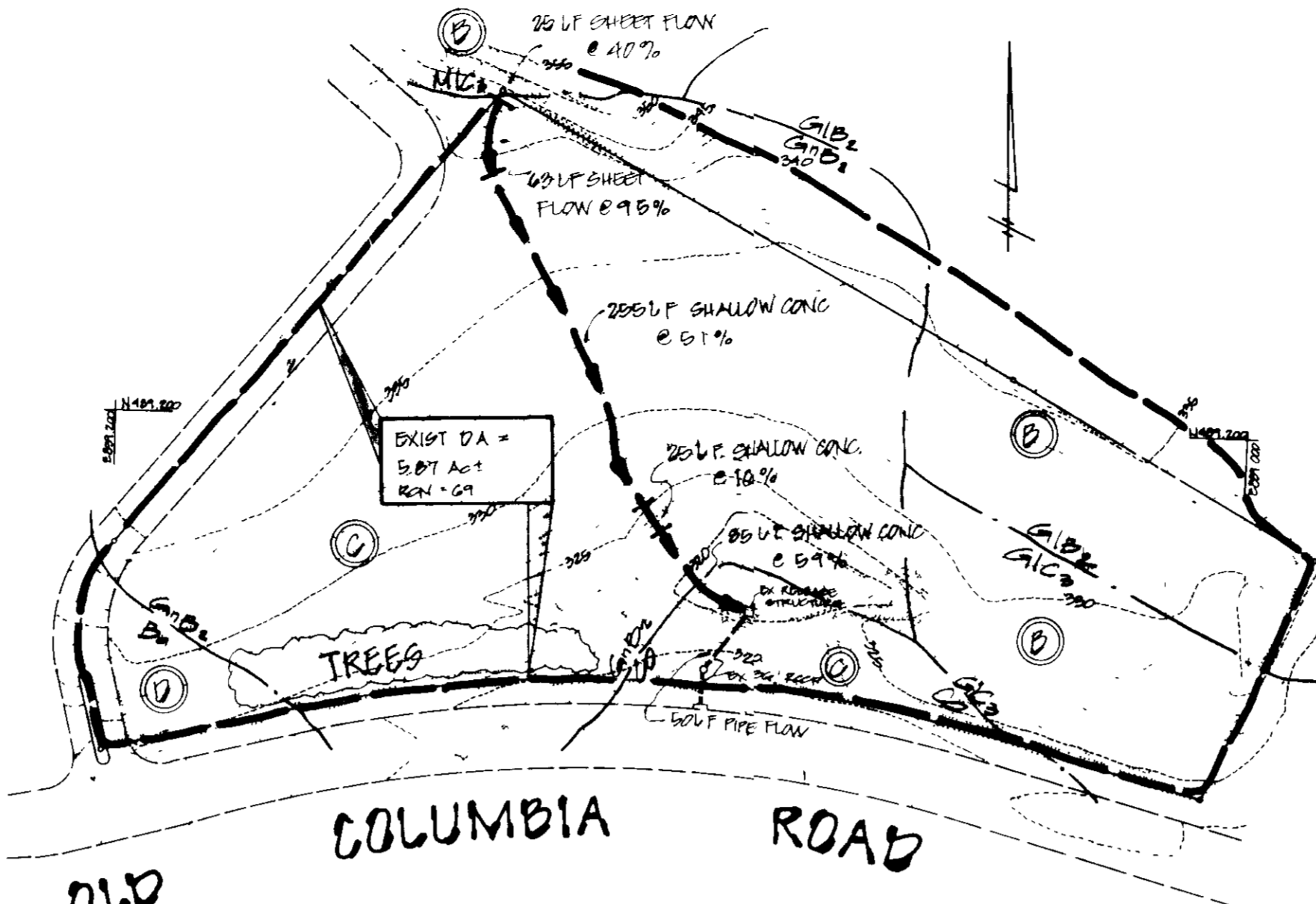
STORM DRAIN PROFILES
RIVERS 19 PARTNERSHIP
RIVERS CORPORATE PARK

PARCEL M 3 SEC 1 AREA 1
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN

TAX MAP # 42
ELEC. DIST # 6
FEBRUARY 5, 1988
SHEET 3 OF 8



DRAINAGE AREA MAP #1
PROP. CONDITIONS
SCALE: 1" = 100'

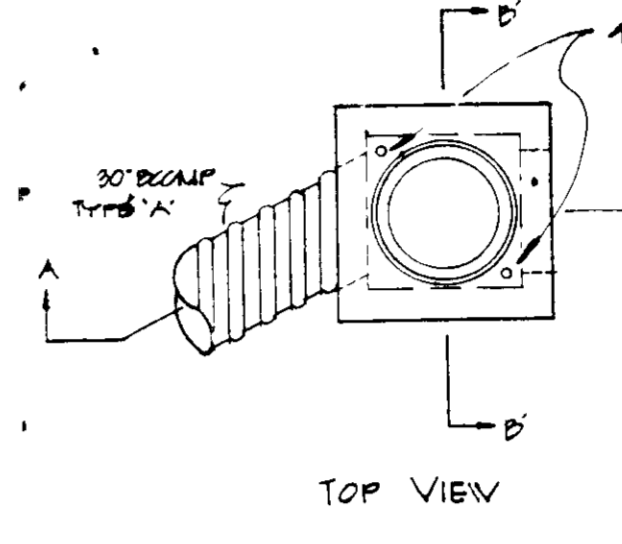


DRAINAGE AREA MAP #2
EXISTING CONDITIONS
SCALE: 1" = 100'

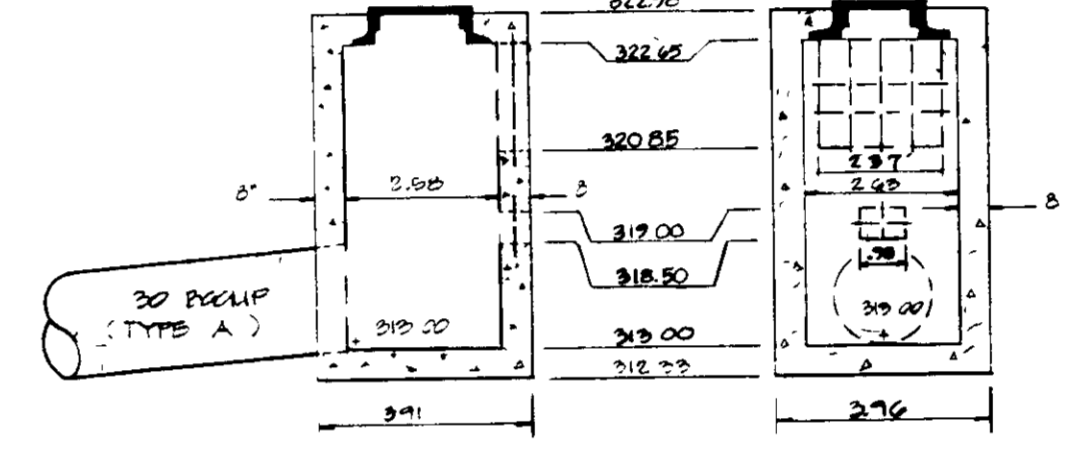
MAINTENANCE SCHEDULE

Maintenance Item	1	2	3	4	5	6
Maintenance Frequency	D	A	D	A	D	A
Repair Duration #	0	0	0	0	0	0

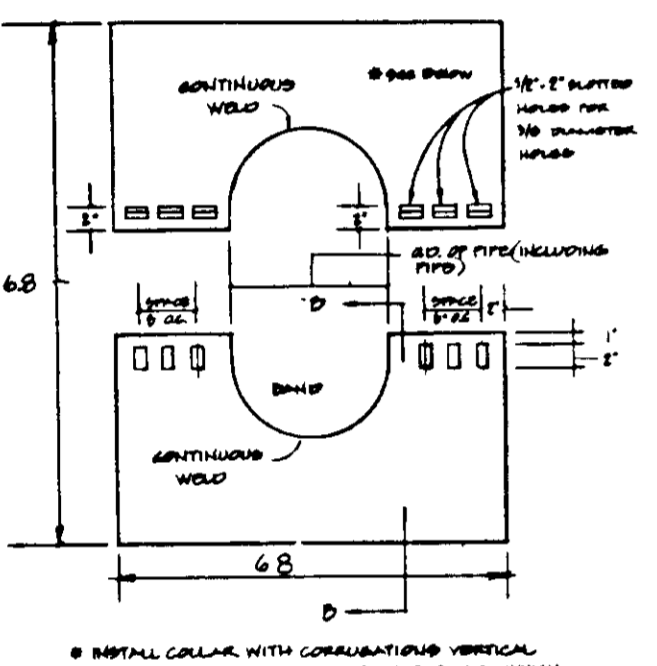
- CLEAN OUT PILT
 - CLEAN OUT TRAMP
 - CHECK VIBR. CLOGGING
 - CHECK PLOT STABILIZATION
 - CUT GRASS
 - CHECK STRUCTURAL INTEGRITY
- A EVERY TWO WEEKS
D EVERY THREE MONTHS
C ONE WEEK MAXIMUM
D TWO DAYS
- * ALL MAINTENANCE, INSPECTIONS AND REPAIRS SHALL BE THE RESPONSIBILITY OF THE OWNER.
* INSPECT ALL ABOVE ITEMS AFTER EACH MAJOR RAINFALL AND REPAIR IF REQUIRED.



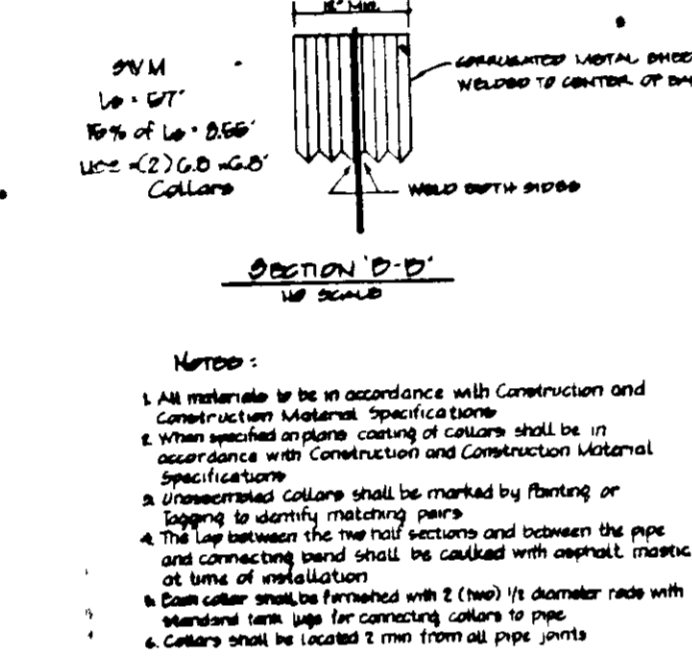
- NOTES:**
- Reinforcement of structure shall be per Howard Co. detail 90-4-01
 - The structure shall be built of reinforced concrete.
 - Trash rack shall be #6 rebar @ 6" o.c. or as shown.
 - Provide typical manhole steps per Howard Co. detail 9-9-21
 - Top slab thickness to be a minimum of 4" bottom slab thickness to be a minimum of 6"



RELEASE STRUCTURE 9-1 DETAIL (HOWARD CO. DETAIL 90-4-22)
- MODIFIED TYPE 'B' INLET -
NOT TO SCALE

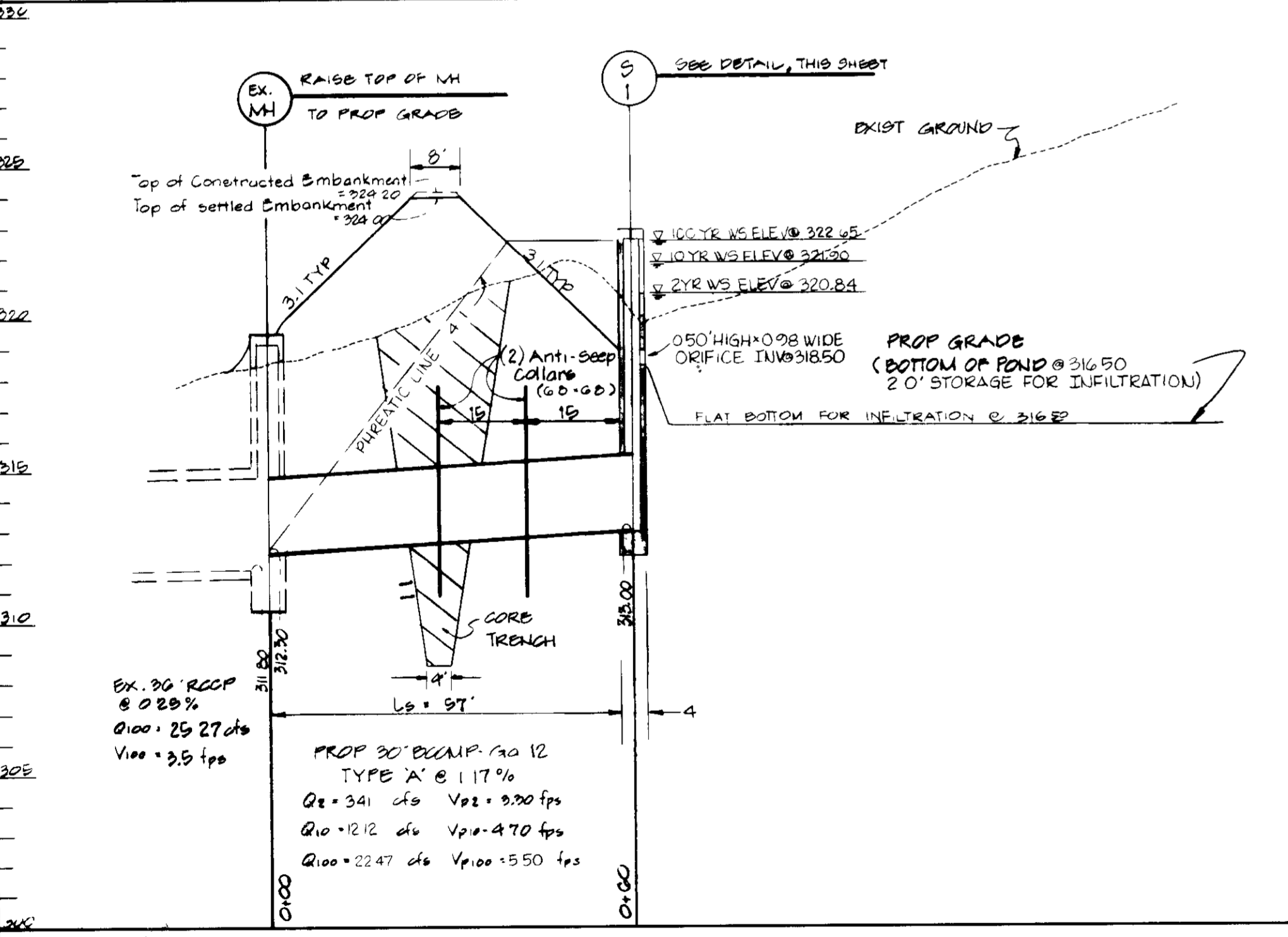


ANTI-SWEEP COLLAR DETAIL
NOT TO SCALE

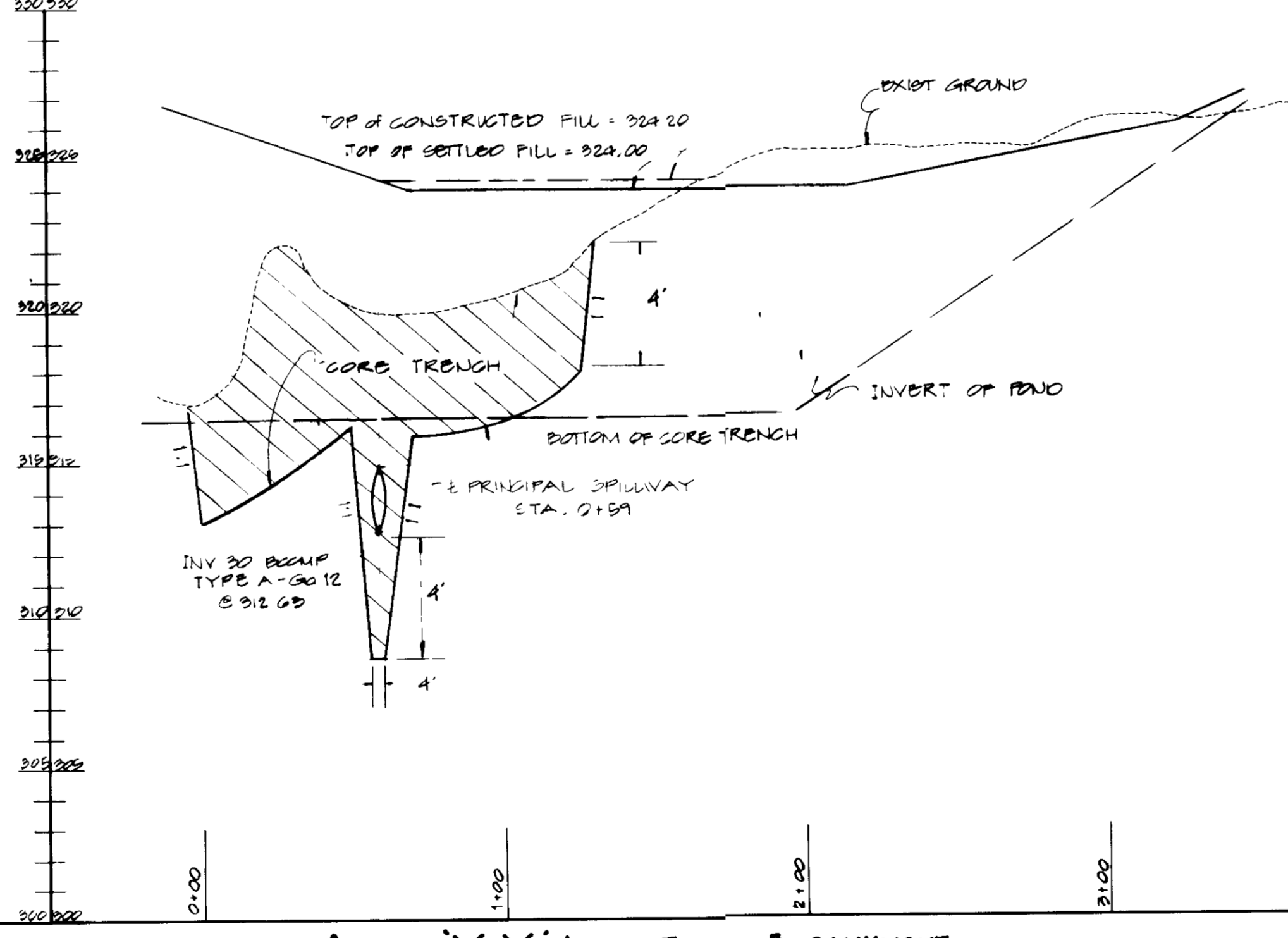


- NOTES:**
- NO RUST SHALL BE PERMITTED ON WELDING SURFACES TO BE WELDED
 - BITUMINOUS COATING SHALL BE APPLIED TO BARS UPON COMPLETION OF WELDING

WELDING DETAIL
NO SCALE



SECTION X-X THROUGH PRINCIPAL SPILLWAY
SCALE: HORIZ. 1" = 20', VERT. 1" = 4'



SECTION Y-Y ALONG TOP OF EMBANKMENT
SCALE: HORIZ. 1" = 40', VERT. 1" = 4'

STORM WATER MANAGEMENT DATA

SOIL GROUP: M.C.D.	
EXISTING CONDITION	
D.A. = 5.87 Ac.	RCW = 82
2 Yr. Flow = 6.57 cfs	10 Yr. Flow = 17.48 cfs
100 Yr. Flow = 31.22 cfs	
PROPOSED CONDITION	
A) Not Routed	D.A. = 1.56 Ac.
	RCW = 82
	2 Yr. Flow = 3.49 cfs
	10 Yr. Flow = 6.96 cfs
	100 Yr. Flow = 10.88 cfs
B) Routed	
S.W.M. Facility - Pond	
D.A. = 4.31 Ac.	
RCW = 89	
BEFORE MANAGEMENT	
2 Yr. Flow = 12.52 cfs	10 Yr. Flow = 22.31 cfs
100 Yr. Flow = 33.03 cfs	
AFTER MANAGEMENT (ROUTING)	
2 Yr. Flow = 6.57 cfs	10 Yr. Flow = 17.48 cfs
100 Yr. Flow = 31.22 cfs	
ALLOWABLE RELEASES:	
For 2 Yr. Storm = 6.57 cfs	2 Yr. Flow = 6.57 cfs
For 10 Yr. Storm = 17.48 cfs	10 Yr. Flow = 17.48 cfs
For 100 Yr. Storm = 31.22 cfs	100 Yr. Flow = 31.22 cfs
HYDROLOGIC CRITERIA	
Required = 2, 10	Provided = 2, 10 and 100 yr.
Structure Classification - A	
Maximum Depth of Water - 6'15"	
STORAGE REQUIREMENT	
For 2 Yr. Storm = 11,000 c.f.	For 10 Yr. Storm = 18,500 c.f.
For 100 Yr. Storm = 24,500 c.f.	
Storage height Product - 4.09 Ac.-ft.	

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: 4-13-88

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

Approved: *[Signature]* 3/28/89
S. Soil Conservation Service Date

Approved: *[Signature]* 3/28/89
Howard Soil Conservation District Date

Plan Number: _____
APPROVED: For public water and public sewerage systems
Howard County Health Department

Approved: *[Signature]* 6-29-89
County Health Officer Date

Approved: *[Signature]* 7-17-89
Director Date

Approved: *[Signature]* 7/1/89
Chief Division of COMMUNITY PLANNING AND LAND DEVELOPMENT Date

APPROVED: For public water and public sewerage storm drainage systems and public roads Howard County Department of Public Works.

Approved: *[Signature]*
Director Date

Chief Bureau of Engineering L Date

STORMWATER MANAGEMENT PROBLEMS & OPTIONS FOR

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-9120

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR 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 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.

ENGINEER: *[Signature]* TAPORRATA CHARRABART
REG. NO. _____ DATE _____

OWNER/DEVELOPER
RIVERS 19 PARTNERSHIP
c/o Manekin Corporation
10270 Old Columbia Rd
Columbia, Maryland 21046
(301) 416-1070

DATE: 2/3/88

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 THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. 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 OTHER 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.

DEVELOPER: *[Signature]* DATE: 2/3/88

REVISIONS

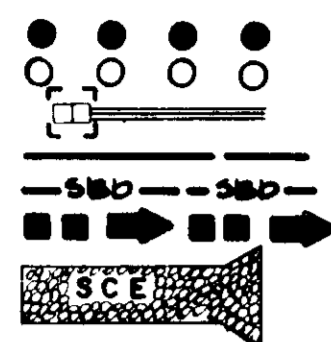
RIVERS 19 PARTNERSHIP
RIVERS CORPORATE PARK
PARCEL M 3 SEC 1 AREA 1
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN

TAX MAP # 32
ELEC. DIST. # 42
FEBRUARY 6, 1988
SHEET A OF 2

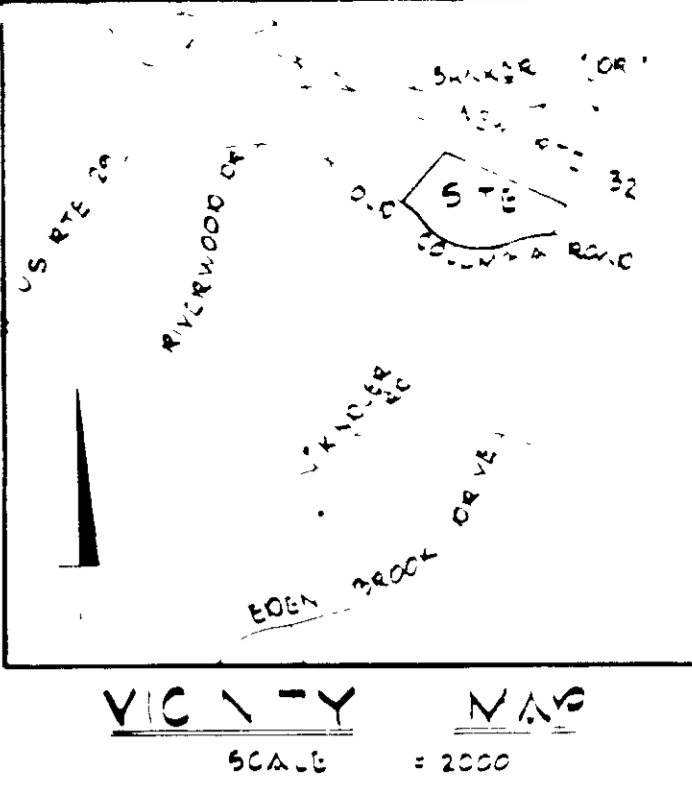
SDP-88-142

LEGEND

- PROP DRAINAGE AREA
- EX DRAINAGE AREA
- INLET PROTECTION
- LIMIT OF DISTURBANCE
- STRAW BALE DIKE
- EARTH DIKE
- STABILIZED CONSTR ENTRANCE



PARCEL M 2
RIVERS CORPORATE PARK
DEVELOPMENT AREA
PLAT # 5409B

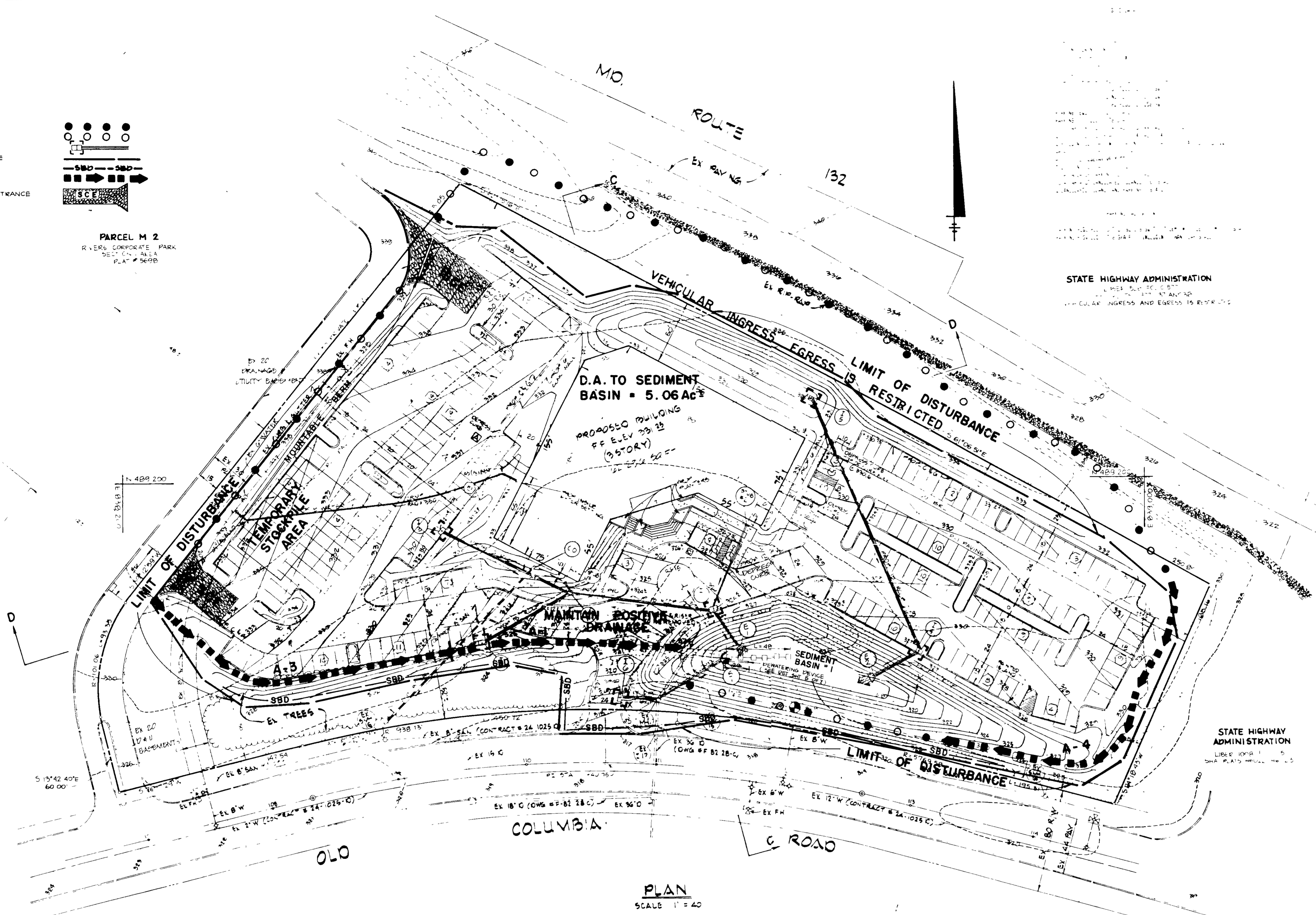


BENCH MARKS:

- NO 2240001 CONC MONUMENT 16' SOUTHWEST OF SOUTHWEST CORNER OF ROAD, N48° 09' 30" E 83' 5" S ELEVATION 329.697
- NO 2340002 R.R.B. 16' WEST OF WEST EDGE OF ROAD 7' BELOW SURFACE N48° 09' 30" E 83' 5" S ELEVATION 302.011

LEGEND

- EX CONTOUR
- PROP GRADE
- EX CURB & GUTTER
- PROP CURB & GUTTER
- PROPERTY LINE
- BUILDING RESTRICTION LINE
- EA TANK
- EX W/ABOR
- PROPOSED WATER
- EX STORM DRAIN
- PROP STORM DRAIN
- EX SAN SEWER
- PROP SAN SEWER
- PROP HANDICAPPED PARKING
- NO OF PROP PARKING SPACES
- SOIL BORING LOCATION



James J. ...

3/28/89

Approved: *Stephen L. ...* 4/28/89

6-29-89

7.12.89

2/1/89

APPROVED PLANNING BOARD OF HOWARD COUNTY DATE 4-13-88

JA.

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGANY AVENUE
TOWSON, MARYLAND 21284
410-281-8100

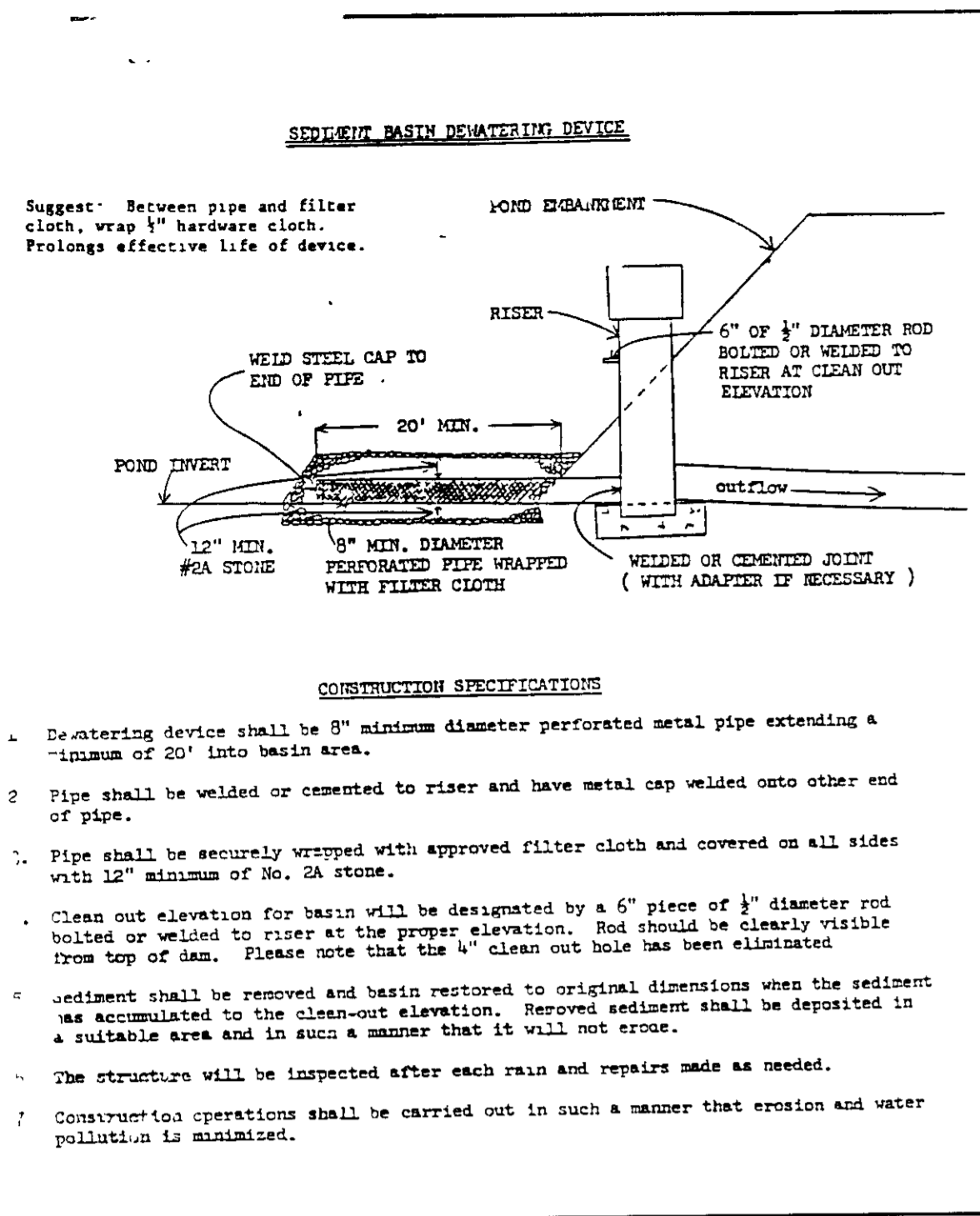
ENGINEER: *[Signature]*
REG. NO. 2332

OWNER / DEVELOPER
RIVERS 19 PARTNERSHIP
C O WANKIN CORPORATION
10070 OLD COLUMBIA RD
COLUMBIA, MARYLAND 21046
(410) 945-1470

DESIGNED BY: *[Signature]*
DRAWN BY: J.W.A.B.
CHECKED BY: T.C.
REVISIONS:
3/29/89 REVISE PERMIT
ENTRANCE, ADD ACCESS
RAMP

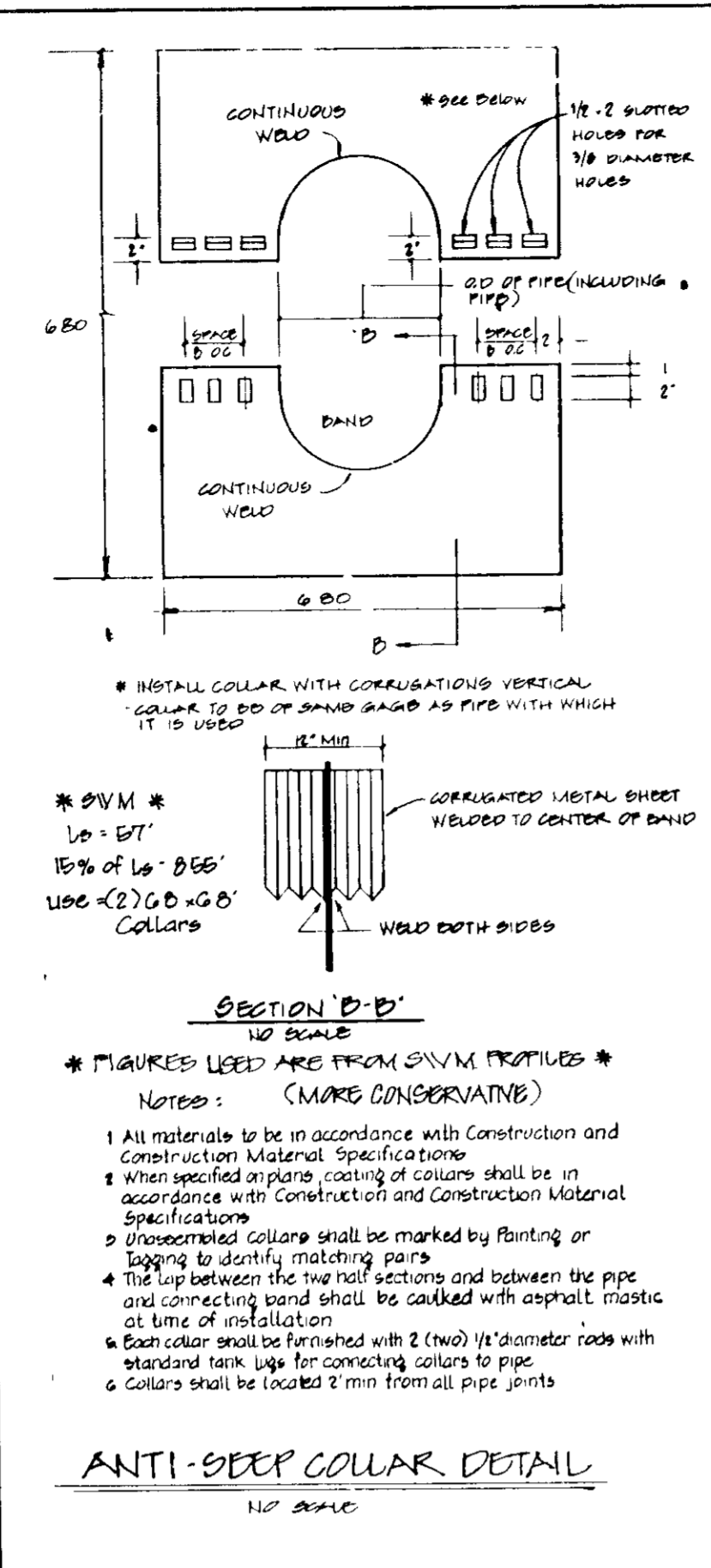
SEDIMENT & EROSION CONTROL PLAN FOR RIVERS 19 PARTNERSHIP
RIVERS CORPORATE PARK
HOWARD COUNTY, MD
SCALE 1" = 40'
DATE: FEBRUARY 1988

SDP-88-142



CONSTRUCTION SPECIFICATIONS

- De-watering device shall be 8" minimum diameter perforated metal pipe extending a minimum of 20' into basin area.
- Pipe shall be welded or cemented to riser and have metal cap welded onto other end of pipe.
- Pipe shall be securely wrapped with approved filter cloth and covered on all sides with 1/2" minimum of No. 24 stone.
- Clean out elevation for basin will be designated by a 6" piece of 1/2" diameter rod bolted or welded to riser at the proper elevation. Rod should be clearly visible from top of dam. Please note that the 1/2" clean out hole has been eliminated.
- Sediment shall be removed and basin restored to original dimensions when the sediment has accumulated to the clean-out elevation. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
- The structure will be inspected after each rain and repairs made as needed.
- Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.



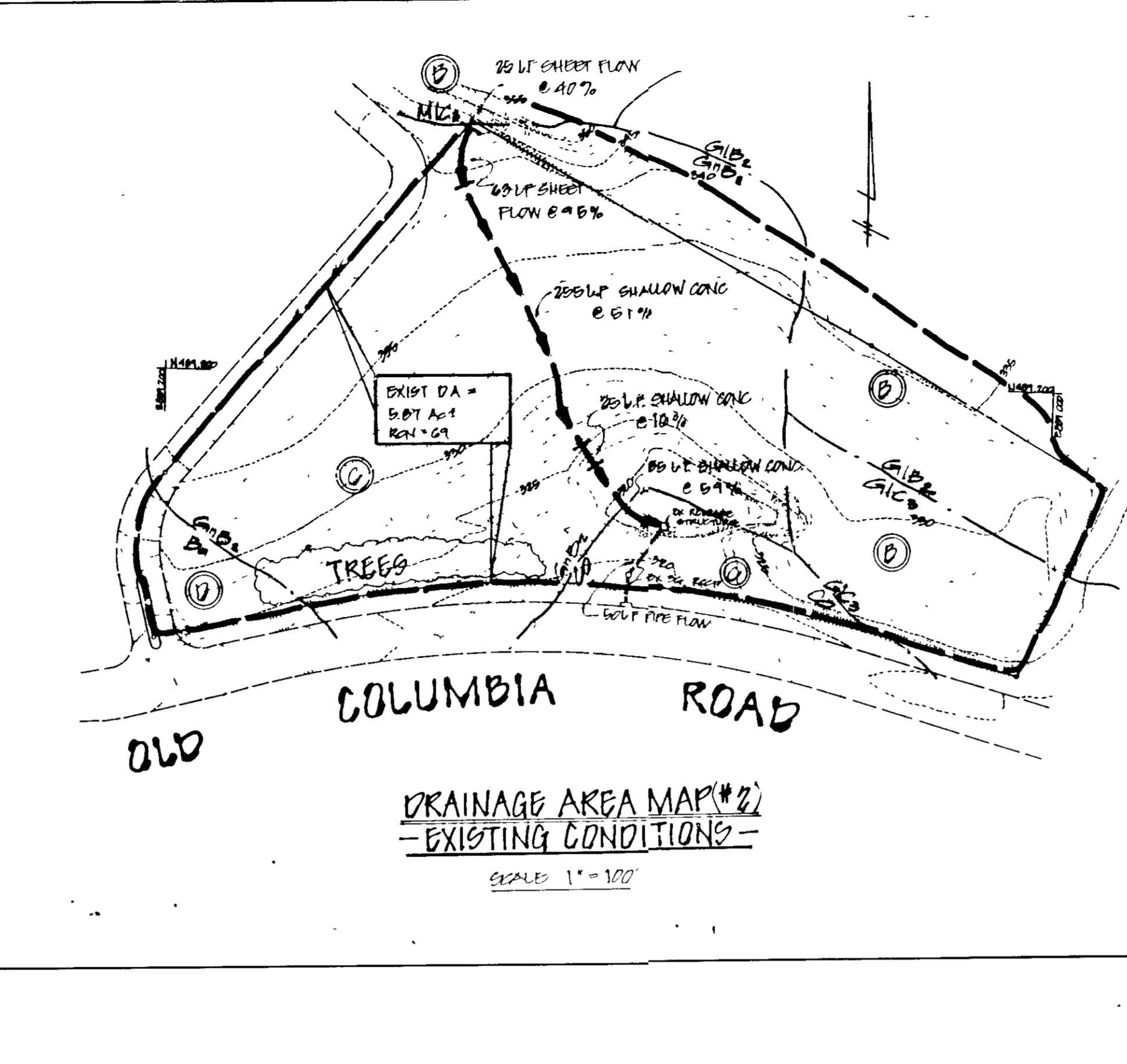
ANTI-DEEP COLLAR DETAIL
NO SCALE

* INSTALL COLLAR WITH CORRU-GATED METAL SHEET
COLLAR TO BE OF SAME GAGE AS PIPE WITH WHICH IT IS USED

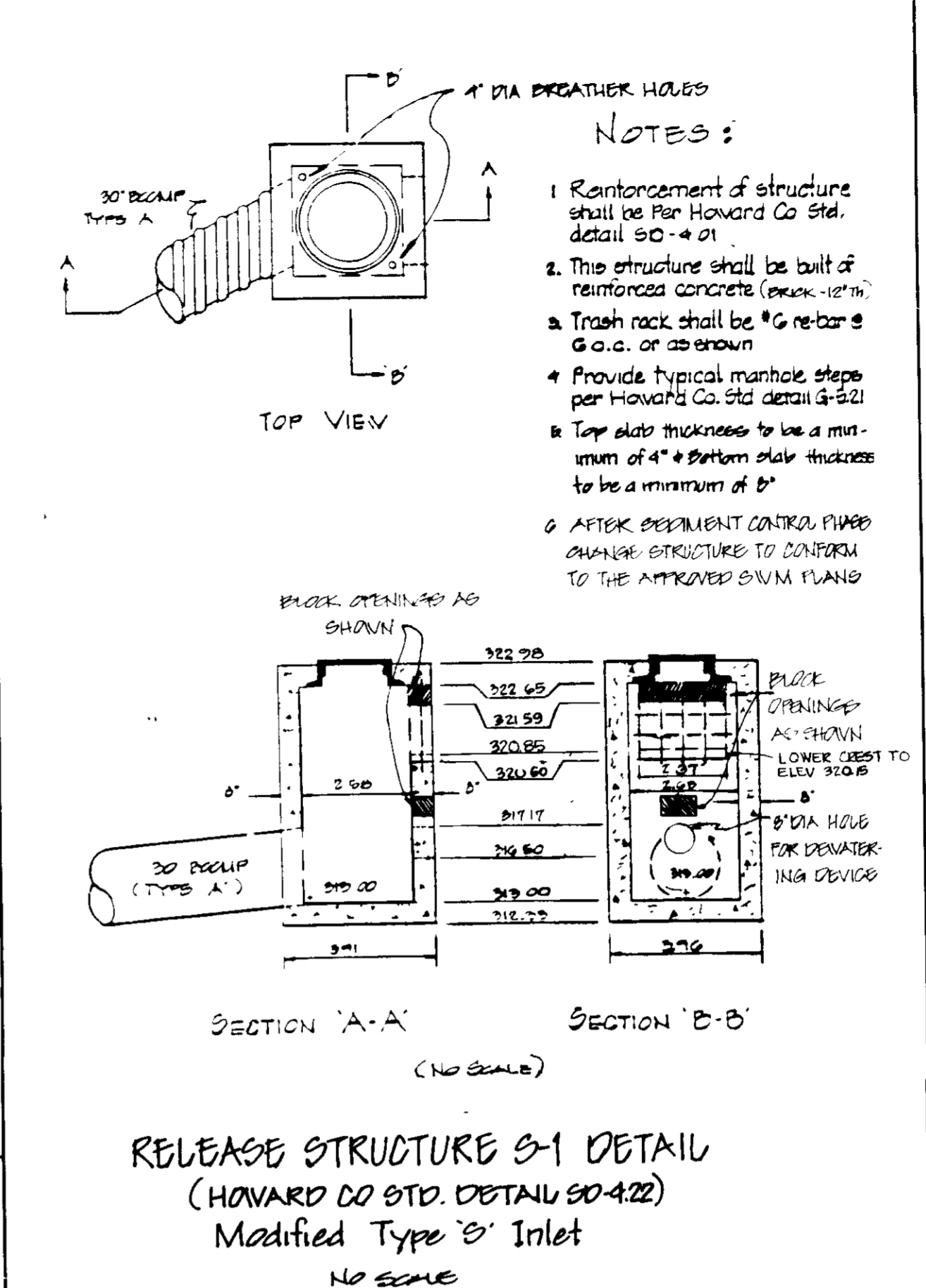
* DIM *
L = 5'7"
10% OF L = 6" SEE
100% (2) 6" G.G. COLLARS

* COLLARS USED ARE FROM S.W.M. PRODUCTS *
(MORE CONSERVATIVE)

Notes:
1. All materials to be in accordance with Construction and Construction Material Specifications.
2. When specified surface coating of collars shall be in accordance with Construction and Construction Material Specifications.
3. Dimensioned collars shall be marked by painting or tagging to identify matching parts.
4. The lap between the two half sections and between the pipe and connecting band shall be coated with asphalt mastic at time of installation.
5. Collar shall be furnished with 2 (two) 1/2" diameter rods with standard lock lugs for connecting collars to pipe.
6. Collars shall be located 2' min from all pipe joints.

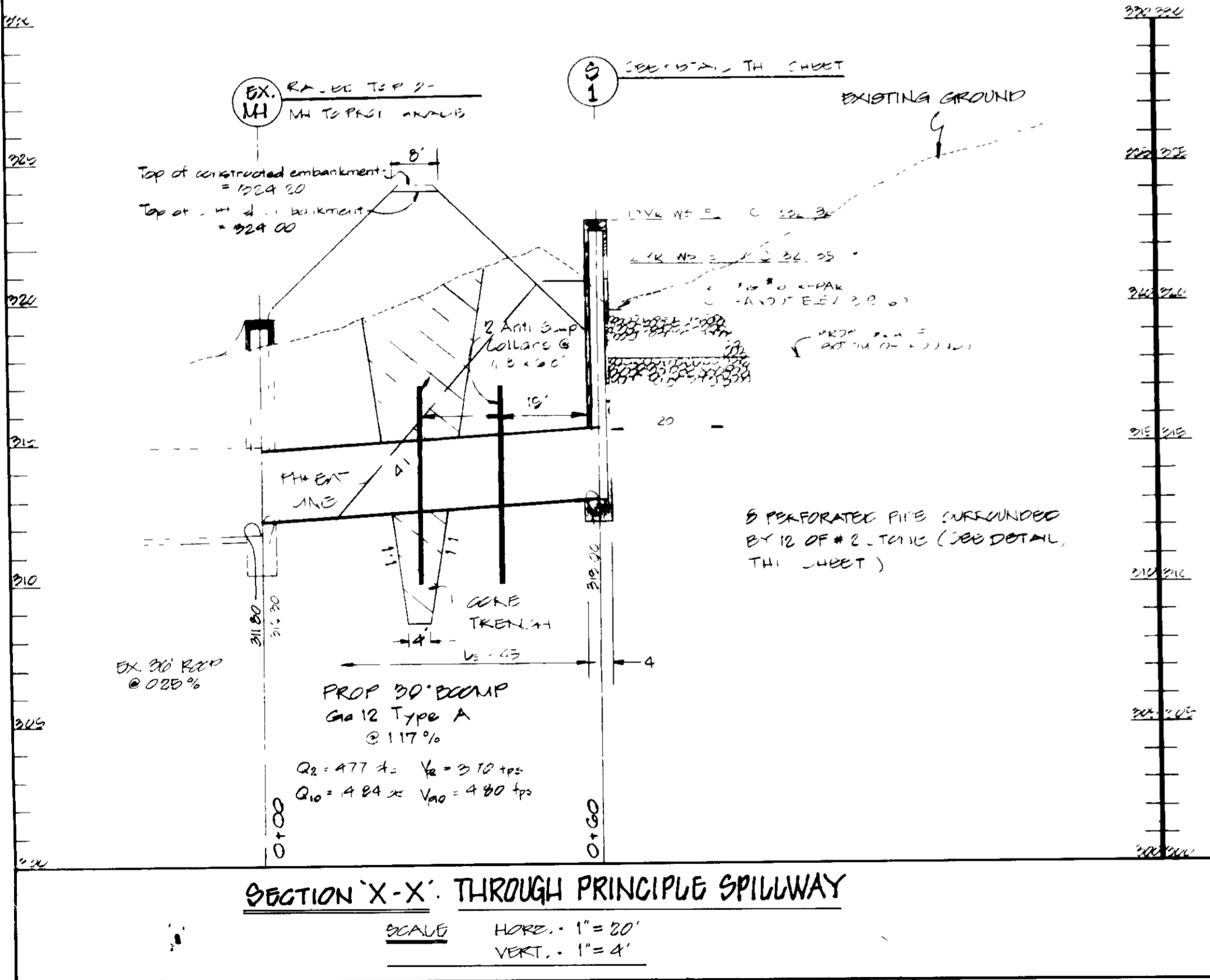


DRAINAGE AREA MAP #2 - EXISTING CONDITIONS -
SCALE 1" = 100'



RELEASE STRUCTURE S-1 DETAIL
(HOWARD CO STD. DETAIL 50-422)
Modified Type 'B' Inlet
NO SCALE

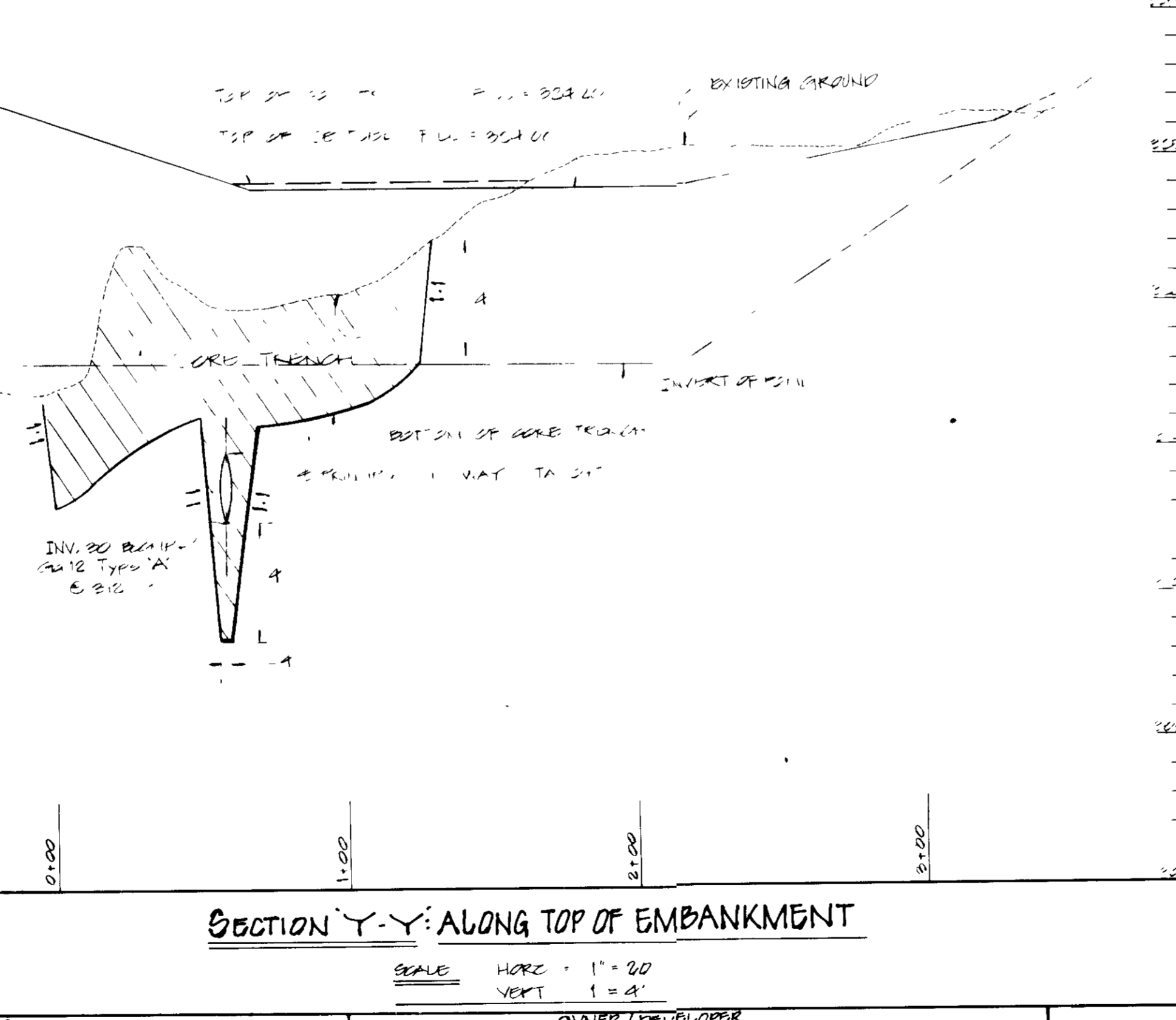
NOTES:
1. Reinforcement of structure shall be per Howard Co Std. detail 50-421.
2. This structure shall be built of reinforced concrete (min. 12" thick).
3. Trash rack shall be #6 rebar @ 6" o.c. or as shown.
4. Provide typical manhole steps per Howard Co. Std. detail 5-521.
5. Top plate thickness to be a minimum of 4" & bottom plate thickness to be a minimum of 2".
6. AFTER SEDIMENT CONTROL PIPES CHANGE STRUCTURE TO CONFORM TO THE APPROVED S.W.M. PLANS.



SECTION X-X THROUGH PRINCIPLE SPILLWAY
SCALE HORIZ. 1" = 20' VERT. 1" = 4'

PROP 30" DIAM PIPE
Gao 12 Type A
@ 117%

Q₁₀ = 477 cfs
Q₁₀₀ = 484 cfs
V₁₀ = 3.12 fps
V₁₀₀ = 4.80 fps



SECTION Y-Y ALONG TOP OF EMBANKMENT
SCALE HORIZ. 1" = 20' VERT. 1" = 4'

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE 1-13-88

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

John M. Adams 3/28/89
Soil Conservation Service Date

Approved *Stephen L. Smith* 3/28/89
Howard Soil Conservation District Date

Plan Number
APPROVED For public water and public sewerage systems
Howard County Health Department

Joyce Boylan 6-29-89
County Health Officer Date

W. H. Smith 7-17-89
Director Date

Mark J. D. Taylor 7/17/89
Chief Division of PLANNING Date

APPROVED For public water and public sewerage storm drainage systems and public roads Howard County Department of Public Works.

James J. Adams 4/28/89
Director Date

James J. Adams 4/28/89
Chief Bureau of Engineering Date

SEDIMENT & EROSION CONTROL PROFILES & DETAILS
FOR

RIVERS 19 PARTNERSHIP
RIVERS CORPORATE PK.
PARCEL M-3 SEC 1 AREA 1
HOWARD CO. MARYLAND
SCALE 1" = AS SHOWN

ELEC. DIST. # 6
DATE FEBRUARY 15, 1988
SHEET 6 OF 8

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR 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 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.

Arpana Chakrabarti
ENGINEER ARPARNA CHAKRABARTI REG. NO. DATE

OWNER / DEVELOPER
RIVERS 19 PARTNERSHIP
Old Manekin Corporation
10270 Old Columbia Road
COLUMBIA, MARYLAND 21046
(301) 216-1072

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 THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. 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.

John M. Adams
DEVELOPER DATE 2/3/88

DRAWN BY RDM
CHECKED BY NLD
REVISIONS

SDP-88-142

PLAN LIST REQUIRED:

53 A x 50 TREES/AC = 159 TREES REQUIRED

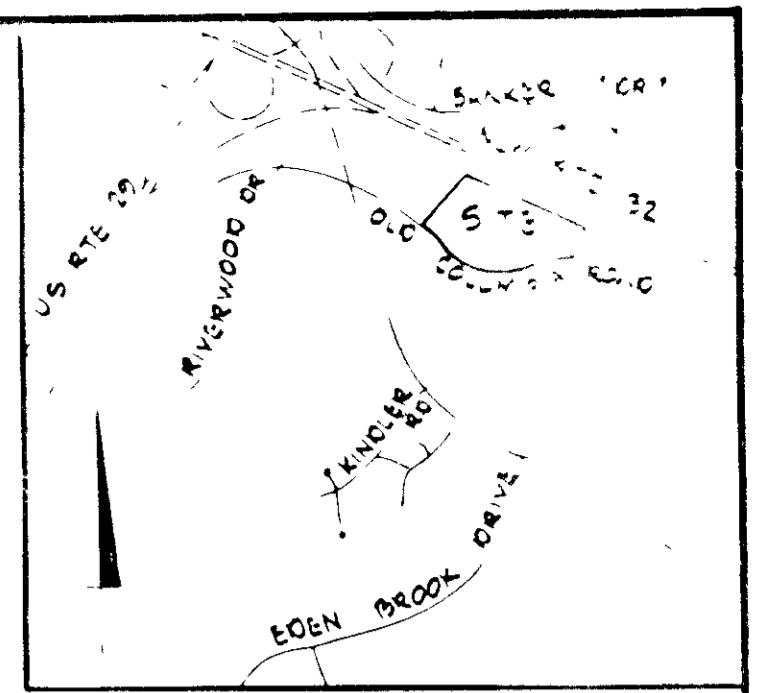
PLANTING PROVIDED:

FLORIDIAN TREES = 94
 BLOWING TREES 37-2 = 18.5
 EVERGREEN TREES 11-2 = 5.5
 EXISTING TREES = 5

159 TREES PROVIDED

PLANT LIST

KEY	QTY	BOTANICAL NAME COMMON NAME	SIZE	CONDITION
⊕	26	ACER RUBRUM RED MAPLE	22-3' CAL 12-14' HT.	B & B HEAVY
⊕	22	PLATANUS ACERIFOLIA LONDON PLANE		
⊕	29	QUERCUS PALUSTRIS PIN OAK		
⊕	10	QUERCUS RUBRA RED OAK		
⊕	1	ZELKOVA SERRATA JAPANESE ZELKOVA		
⊕	3	CEDRUS DEODARA CEDAR	10-12' HT.	B & B HEAVY SPECIMEN
⊕	6	ACER PALMATUM ATROPURPUREUM JAPANESE RED MAPLE	8-12' CAL 5-6' HT.	B & B HEAVY
⊕	22	PRUNUS YEDOENSIS YOSHINO CHERRY	8-10' HT.	
⊕	9	PRUNUS SERRULATA KWANZAN KWANZAN CHERRY	8-10' HT.	
⊕	23	PINUS THUNBERGI JAPANESE BLACK PINE	6-8' HT.	
⊕	49	PINUS STROBUS EASTERN WHITE PINE	6-8' HT.	



VICINITY MAP
SCALE 1" = 2000'

BENCH MARKS:

NO 2240001 CONG MONUMENT 16" SOUTHWEST CORNER OF 50' x 50' LOT
 EDGE OF ROAD, N 489 199 349 E 83° 58' 30"
 ELEVATION 929.697

NO 2340002 R.R. 15' WEST OF WEST EDGE OF ROAD
 7' BELOW SURFACE, N 488 835 77 E 89° 52' 22"
 ELEVATION 962.611

LEGEND

- EX CONTOURS
- PROJ GRADE
- EX CURB & GUTTER
- PROJ CURB & GUTTER
- PROPERTY LINE
- BUILDING RESTRICTION LINE
- EASEMENT
- EX WADP
- PROPOSED WATER
- EX STORM DRAIN
- PROJ STORM DRAIN
- EX SAN SEWER
- PROJ SAN SEWER
- PROJ HANDICAPPED PARKING
- NO OF PROJ PARKING SPACES

NOTES: 1. ALL PLANTING TO BE IN COMPLIANCE WITH STANDARD HRI
 COLUMBIA PLANTING SPECIFICATIONS.

2. ALL UTILITY COMPANIES ARE TO BE NOTIFIED & ALL
 UTILITIES TO BE LOCATED BEFORE PLANTING.

3. THE LANDSCAPE ARCHITECT IS TO BE
 NOTIFIED 48 HRS. BEFORE PLANTING BEGINS.

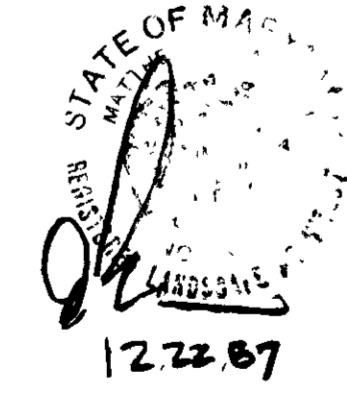
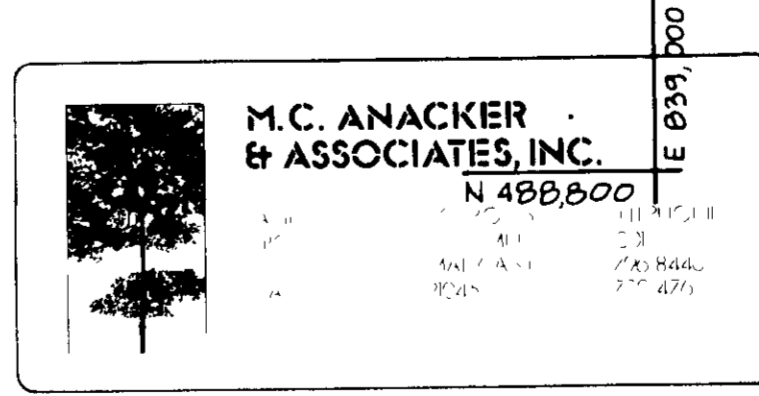


PLAN
SCALE 1" = 40'

EXISTING TREES
 2 ZELKOVA
 2 RED OAK
 1 PLUM
 1 REDSPICE PEAR

STATE HIGHWAY
 ADMINISTRATION
 LIBER 100B FOLIO 51
 SHA PLAT 0622 4023

APPROVED
 DATE 4-13-88
 J.R.



Howard Soil Conservation District

Approved: *James M. Helm* 3/28/89
 Director

Approved: *James Boylan* 6-29-89
 Director

Approved: *Uphill* 7.17.89
 Director

Approved: *Jack J. Conley* 7/1/88
 Chief Division of COMMUNITY PLANNING

STATE OF MARYLAND
 REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT
 12-22-87

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 303 ALLEGHENY AVENUE
 TOWSON, MARYLAND 21284
 (301) 825-8120

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR S.W. FACILITY 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 STATE OF MARYLAND. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTICED THE DEVELOPER THAT HE MUST REGISTER THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE S.W. FACILITY WITHIN 30 DAYS OF COMPLETION.

ENGINEER _____ DATE _____
 REG NO _____

OWNER / DEVELOPER
RIVERS 19 PARTNERSHIP
 C/O MANEKIN CORPORATION
 10270 OLD COLUMBIA RD
 COLUMBIA MARYLAND 21046
 (301) 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 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE S.W. FACILITY WITHIN 30 DAYS OF COMPLETION.

DEVELOPER *[Signature]* DATE 2/3/88

DESIGNED BY
DRAWN BY
CHECKED BY
REVISIONS
 4-8-88 AS PER
 HRI COMMENTS

RIVERS 19 PARTNERSHIP
 RIVERS CORPORATE PARK
 HOWARD COUNTY, MD
 SCALE 1" = 40'

FOR: _____
 SHEET B-1 B