

VICINITY MAP
SCALE: 1" = 2000'

BENCH MARKS:
 W.R. & A.B.M. #2: ELEV. 965.28
 R.R. SPIKE IN BASE OF 14" POPLAR, 10' S. RIGHT OF & ALEXANDER BELL DRIVE 1ST STA. 11+23.99
 W.R. & A.B.M. #3: ELEV. 929.26
 TOP BOLT @ TOP OLD LIGHT POST #FOOTER, 14' S. OF & COLUMBIA GATEWAY DRIVE STA. 11+50.

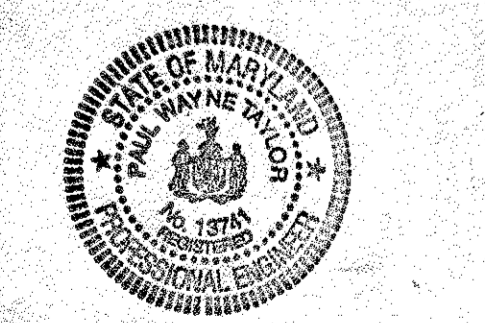
APPROVED
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE: 3-22-88

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: *John M. Selig* 4-22-88
 U.S. Soil Conservation Service Date
 These plans for small pond construction, soil erosion and sediment control meet the requirements of Howard Soil Conservation District.
 Approved: *Stephen L. Fisher* 4/22/88
 Howard Soil Conservation District Date

APPROVED: For public water and public sewerage systems
 Howard County Health Department.
 Approved: *John B. ...* 5-3-88
 County Health Officer Date
 Approved: *James Butler* 5/1/88
 Director Date
 Approved: *James Butler* 5/6/88
 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: *James Butler* 5/2/88
 Director Date
 Approved: *William S. Reidy* 4-22-88
 Chief Bureau of Engineering Date

| BUILDING # | STREET ADDRESS | BUILDING # | STREET ADDRESS |
|------------|---------------------------|------------|---------------------------|
| A | 6700 ALEXANDER BELL DRIVE | G | 6750 ALEXANDER BELL DRIVE |
| B | 6724 ALEXANDER BELL DRIVE | | |
| C | 6708 ALEXANDER BELL DRIVE | | |
| D | 6716 ALEXANDER BELL DRIVE | | |
| E | 6716 ALEXANDER BELL DRIVE | | |
| F | 6740 ALEXANDER BELL DRIVE | | |



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17141, EXPIRATION DATE: 12-08-19

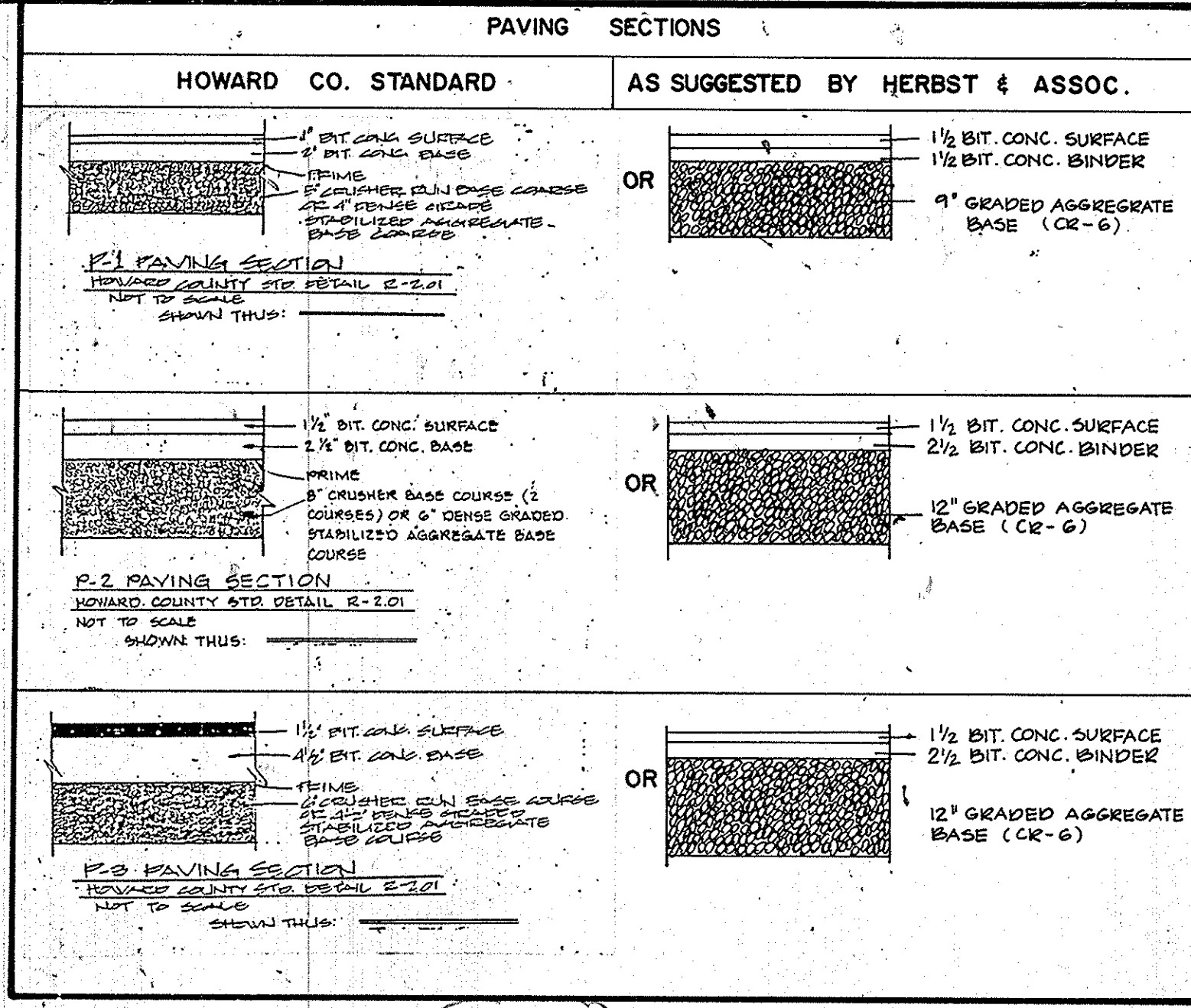
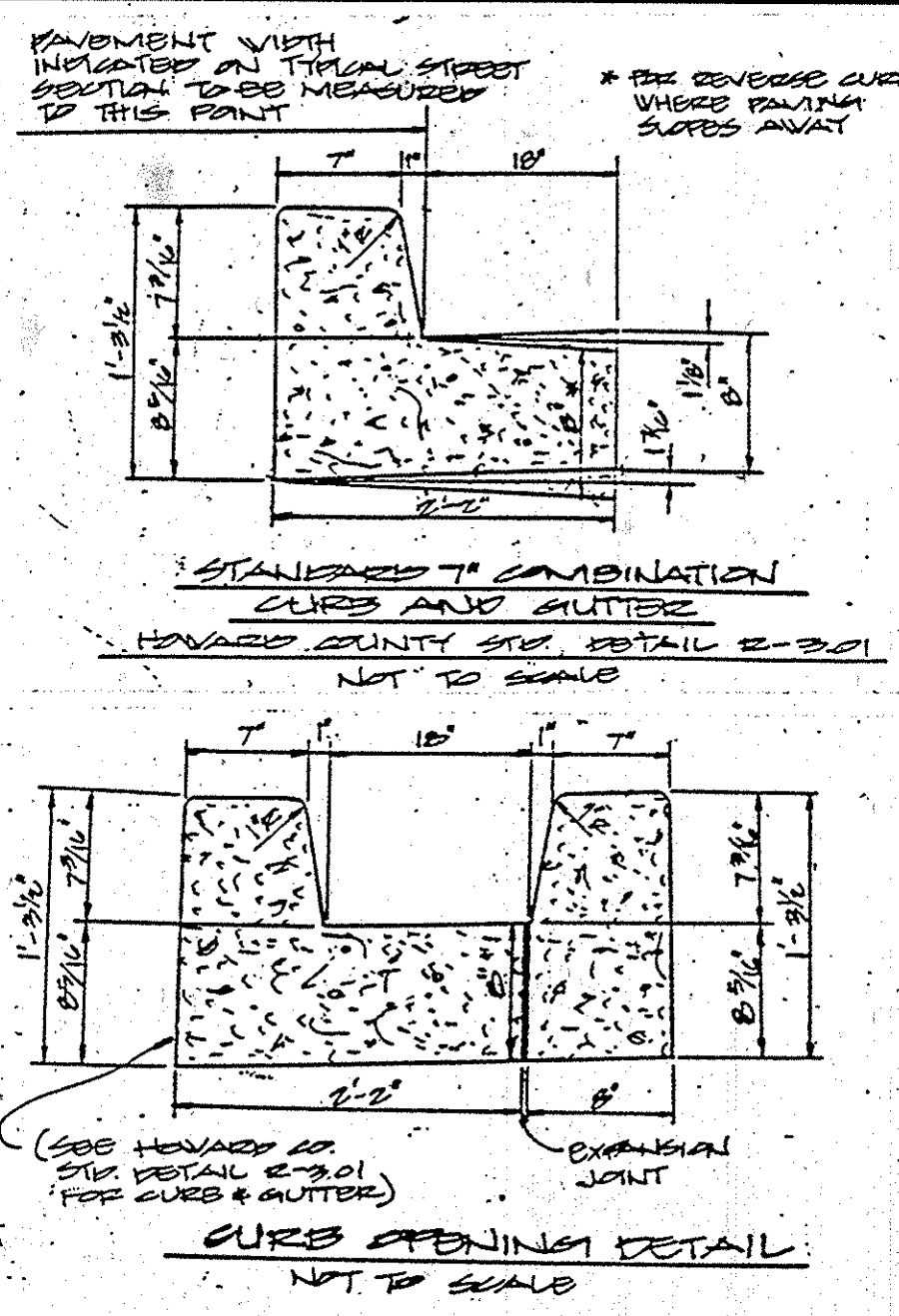
GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
 CIVIL ENGINEERS & LAND SURVEYORS
 303 ALLEGHENY AVENUE, TOWSON, MARYLAND 21284
 4282 MILLENNIUM DRIVE, BEL CAMP, MARYLAND 21017
 (410) 297-2340

ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN FOR S.W.M. 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 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.M. FACILITY WITHIN 30 DAYS OF COMPLETION.
 ENGINEER: *Vasanta Chandra*
 REG. NO.: 8930 DATE: 1/6/88

OWNER / DEVELOPER
GATEWAY 44 PARTNERSHIP
 410 MANKIN CORPORATION COPT GATE
 10270 OLD COLUMBIA ROAD #711 COLUMBIA GATEWAY DR. SUITE 2104G
 COLUMBIA, MARYLAND 21046
 (410) 995-6767 (443) 285-5400

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.M. FACILITY WITHIN 30 DAYS OF COMPLETION.
 DEVELOPER: *George W. Stephens, Jr.*
 DATE: 1/6/88

SITE AND STORM WATER MANAGEMENT PLAN
 -FOR-
PROPOSED OFFICE AND RESEARCH DEVELOPMENT PARK
COLUMBIA GATEWAY
 PARCEL 'A' & PART OF PARCEL 'C'
 TAX MAP #42 & #43
 HOWARD COUNTY, MD. ELECTION DISTRICT #6
 SCALE AS SHOWN DECEMBER 31, 1987
 P.N. 08806 SHEET 1 OF 10
 AS-BUILT 9/8/93 SDP-88-129



LEGEND

| | |
|-------------------------------|-------|
| PROPERTY LINE | --- |
| BLOG RESTRICTION LINE | ---- |
| EASEMENTS | ..... |
| EX. GROUND | ..... |
| PROP. GRADE | ..... |
| EX. CURBS & GUTTER | ..... |
| PROP. CURBS & GUTTER | ..... |
| EX. WATER | ..... |
| PROP. WATER | ..... |
| EX. SANITARY SEWER | ..... |
| PROP. SANITARY SEWER | ..... |
| EX. STORM DRAINS | ..... |
| PROP. STORM DRAINS | ..... |
| PROP. HANDICAPPED PARKING | ..... |
| HANDICAPPED RAMP DETAIL | ..... |
| NUMBER OF PARKING SPACES | ..... |
| PROP. SIDEWALKS | ..... |
| PAVING P-1 | ..... |
| PAVING P-2 | ..... |
| PAVING P-3 | ..... |
| SOIL BORING LOCATION | ..... |
| PROP. DOUBLE LIGHTING FIXTURE | ..... |
| PROP. SINGLE LIGHTING FIXTURE | ..... |

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. DeLoach 4-22-88
 U.S. Soil Conservation Service Date

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

Approved: *Stephen E. Smith* 4-22-88
 Howard Soil Conservation District Date

Plan Number

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

John Papp 5-3-88
 County Health Officer Date

APPROVED: *James Smith* 5/11/88
 Director Date

James Smith 5/16/88
 Director Date

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

James Smith 5/16/88
 Director Date

James Smith 4-22-88
 Chief Bureau of Engineering Date

PARCEL D

TOTAL AREA: 12.09 ac.
 EXISTING ZONING: M-1
 PROPERTY REFERENCE: PLAT# 6766 & 6767
 EXISTING USE: VACANT
 PROPOSED USE: RESEARCH AND DEVELOPMENT
 TOTAL FLOOR AREA: 165,543 S.F. (19.80 AC.)
 PARKING REQUIRED: 582 SPACES
 PARKING PROVIDED: 647 SPACES (INCLUDES 14 HANDICAP SPACES)
 # PARKING SPACES TO BE USED IN COMMON: 7
 AREA TO BE DISTURBED: 11.25 AC.
 AREA TO BE VEGETATIVELY STABILIZED: 3.11 AC.
 % BUILDING COVERAGE: 1.43 AC. / 12.09 AC. = 11.8 %
 TOTAL AREA OF PARKING LOT: 253,500 AC. (5.82 AC.)
 TOTAL AREA OF LANDSCAPED ISLANDS: 0.36 AC.
 % LANDSCAPED ISLANDS IN PARKING: 0.36 AC. / 5.82 AC. = 6.2 %
 % OPEN SPACE: 3.95 AC. / 12.09 AC. = 32.7 %
 % BUILDING COVERAGE WITH PAVING: 8.14 AC. / 12.09 AC. = 67.3 %

PARKING TABULATION

PARKING REQUIRED:

BUILDING E: OFFICE-40,529 S.F. 283 EMP. @ 7 P.S./10 EMP. = 143 SPACES
 BUILDING F: OFFICE-62,898 S.F. 395 EMP. @ 7 P.S./10 EMP. = 221 SPACES
 BUILDING G: OFFICE-62,125 S.F. 341 EMP. @ 7 P.S./10 EMP. = 218 SPACES
 TOTAL REQUIRED = 582 SPACES
 TOTAL PROVIDED = 647 SPACES

PARCEL C

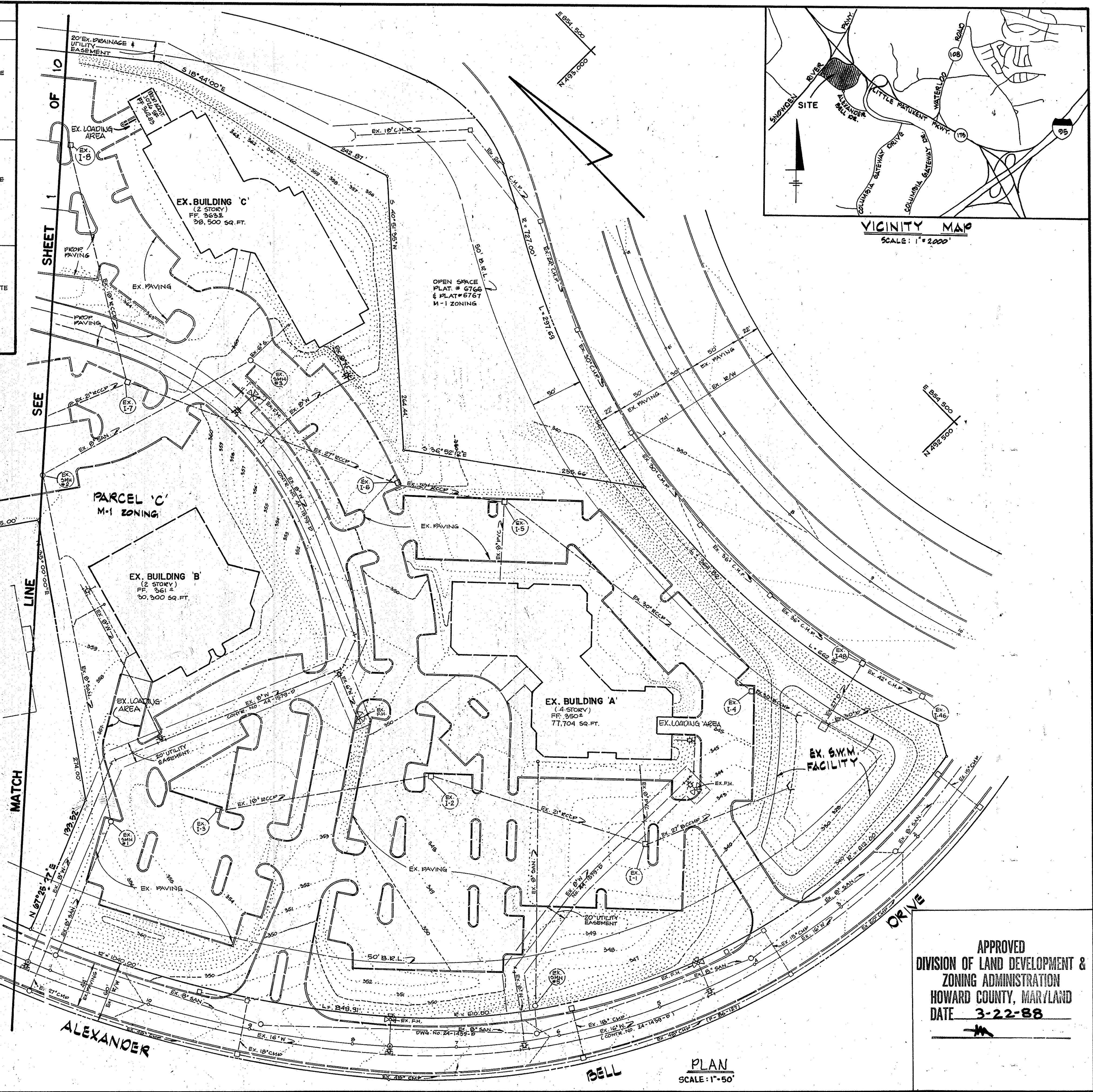
TOTAL AREA: 16.16 ac.
 EXISTING ZONING: M-1
 PROPERTY REFERENCE: PLAT# 6766 & 6767
 EXISTING USE: VACANT / RESEARCH AND DEVELOPMENT
 PROPOSED USE: RESEARCH AND DEVELOPMENT
 EXISTING FLOOR AREA: 147,530 S.F. (3.39 AC.)
 PROPOSED FLOOR AREA (BUILDING D): 53,830 S.F. (1.24 AC.)
 TOTAL FLOOR AREA: 201,360 S.F. (4.62 S.F.)
 TOTAL PARKING REQUIRED: 693 SPACES
 EXISTING PARKING PROVIDED: 433 SPACES
 PROPOSED ADDITIONAL SPACES: 301 SPACES
 TOTAL PARKING PROVIDED: 734 SPACES (INCLUDES 10 HANDICAP SPACES)
 # PARKING SPACES TO BE USED IN COMMON: 7
 AREA TO BE DISTURBED: 4.99 AC.
 AREA TO BE VEGETATIVELY STABILIZED: 1.35 AC.
 EXISTING % BUILDING COVERAGE: 1.25 AC. / 16.16 AC. = 7.74 %
 TOTAL % BUILDING COVERAGE: 1.87 AC. / 16.16 AC. = 11.57 %
 EXISTING AREA OF PARKING LOT: 183,800 S.F. (4.22 AC.)
 PROPOSED AREA OF PARKING LOT: 121,300 S.F. (2.79 AC.)
 TOTAL AREA OF PARKING LOT: 305,100 S.F. (7.01 AC.)
 EXISTING AREA OF LANDSCAPED ISLANDS: 0.29 AC.
 PROPOSED AREA OF LANDSCAPED ISLANDS: 0.25 AC.
 TOTAL AREA OF LANDSCAPED ISLANDS: 0.54 AC.
 EXISTING AREA OF LANDSCAPED ISLANDS IN PARKING: 0.29 AC. / 4.22 AC. = 6.90 %
 PROPOSED AREA OF LANDSCAPED ISLANDS IN PARKING: 0.25 AC. / 2.79 AC. = 9.00 %
 TOTAL AREA OF LANDSCAPED ISLANDS IN PARKING: 0.54 AC. / 7.01 AC. = 7.70 %
 EXISTING % OPEN SPACE: 4.47 AC. / 16.16 AC. = 27.6 %
 PROPOSED % OPEN SPACE: 1.35 AC. / 16.16 AC. = 8.35 %
 TOTAL % OPEN SPACE: 5.82 AC. / 16.16 AC. = 36.0 %
 EXISTING % BUILDING COVERAGE WITH PAVING: 6.70 AC. / 16.16 AC. = 41.5 %
 PROPOSED % BUILDING COVERAGE WITH PAVING: 3.64 AC. / 16.16 AC. = 22.5 %
 TOTAL % BUILDING COVERAGE WITH PAVING: 10.34 AC. / 16.16 AC. = 64.0 %

PARKING TABULATION

PARKING REQUIRED:

BUILDING A: OFFICE-77,704 S.F. 389 EMP. @ 7 P.S./10 EMP. = 273 SPACES
 BUILDING B: OFFICE-30,300 S.F. 152 EMP. @ 7 P.S./10 EMP. = 107 SPACES
 BUILDING C: OFFICE-38,500 S.F. 193 EMP. @ 7 P.S./10 EMP. = 136 SPACES
 WAREHOUSE-1026 S.F. 1 P.S./500 S.F. = 3 SPACES
 BUILDING D: OFFICE-43,030 S.F. 216 EMP. @ 7 P.S./10 EMP. = 152 SPACES
 WAREHOUSE-10800 S.F. 1 P.S./500 S.F. = 22 SPACES
 TOTAL REQUIRED = 573 SPACES
 TOTAL PROVIDED = 734 SPACES

TOTAL PARKING REQUIRED FOR PARCEL A AND PARCEL C: 1275 SPACES
 TOTAL PARKING PROVIDED (EXISTING AND PROPOSED) FOR PARCEL A, AND PARCEL C: 1401 SPACES
 (7 SPACES ARE USED IN COMMON (10% HANDICAP SPACES))

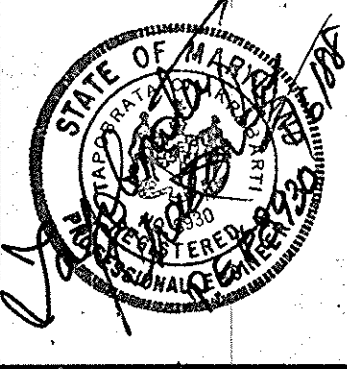


APPROVED
 DIVISION OF LAND DEVELOPMENT &
 ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE 3-22-88

DESIGNED: N.B.
 DRAWN: K.B./J.W.
 CHECKED: N.B.
 DATE: 4/6/88

SITE AND STORM WATER MANAGEMENT PLAN
 FOR
 PROPOSED OFFICE AND RESEARCH DEVELOPMENT PARK
COLUMBIA GATEWAY
 PARCEL 'A' PART OF PARCEL 'C'
 HOWARD COUNTY, MD.
 SCALE AS SHOWN
 RN. 05806

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

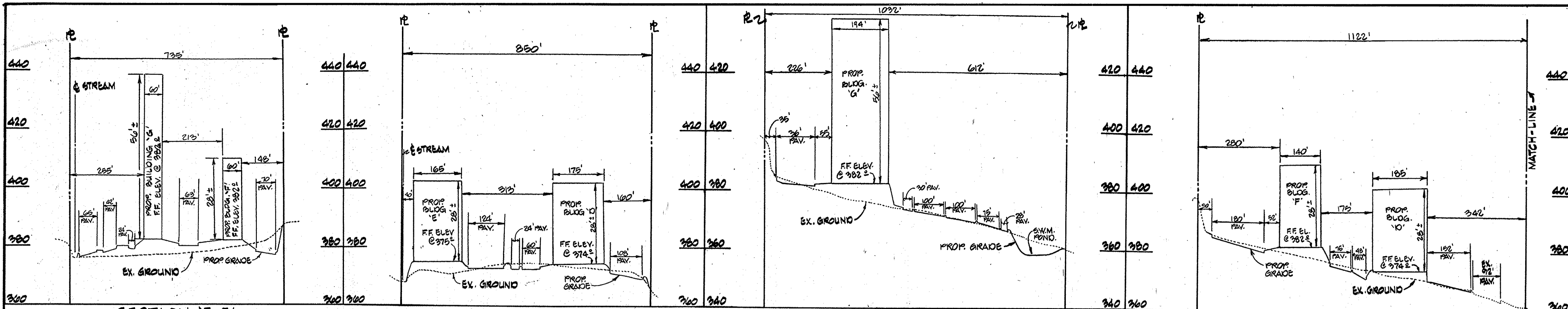


ENGINEER'S CERTIFICATE
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 ENGINEER: *George William Stephens, Jr.*
 REG. NO.: 2930 DATE: 1/6/88

OWNER / DEVELOPER
M.O.R. 44 PARTNERSHIP
 CIO MANEJIN CORPORATION
 10270 OLD COLUMBIA ROAD
 COLUMBIA, MARYLAND
 21046
 (301) 925-6767

DEVELOPER'S CERTIFICATE
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 DEVELOPER: *Daniel Manekin*
 DATE: 4/6/88

FOR
 ELECTION DISTRICT #6
 DECEMBER 31, 1987
 SHEET 2 OF 10-11



SECTION 'E-E'
SCALE: 1" = 200' HORIZ.
1" = 20' VERT.

SECTION 'F-F'
SCALE: 1" = 200' HORIZ.
1" = 20' VERT.

SECTION 'G-G'
SCALE: 1" = 200' HORIZ.
1" = 20' VERT.

SECTION 'H-H'
SCALE: 1" = 200' HORIZ.
1" = 20' VERT.



STANDARD KIT-D RESERVE PARKING SIGN

COLORS
GREEN - LEGEND AND BORDER
WHITE SYMBOL ON BLUE BACKGROUND
WHITE - BACKGROUND



350 FILE 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 R7-8 and the background shall be reflective white. Text shall be in 3" characters.
Sign shall be mounted directly below the standard R7-8 Reserved Parking for Handicapped sign. Its bottom edge shall be no less than 7 feet above ground. If the 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.

GENERAL NOTES:

- 1 ALL WORK SHALL BE DONE IN ACCORDANCE WITH HOWARD COUNTY ESTABLISHED SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, AS SHOWN ON THESE PLANS.
- 2 ALL AREAS NOT BOUND BY THE REVENUE 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 BELCH BEHIND ALL CURBS AND GUTTER AND THE EDGES OF ALL GRADE AREAS.
- 5 THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES TO HIS OWN SATISFACTION BEFORE STARTING CONSTRUCTION.
- 6 ALL GRADES SHALL BE 2:1 OR FLATTER.
- 7 THE CONTRACTOR SHALL NOTIFY THE GAS TELEPHONE CO AND THE GAS AND ELECTRIC COMPANY FIVE DAYS PRIOR TO STARTING WORK SHOWN ON THESE PLANS BY CALLING "MISS UTILITY" CALL COLLECT 1-800-210-2100.
- 8 THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4" COVER OVER ALL PROPOSED WATER LINES.
- 9 THE CONTRACTOR OR DEVELOPER SHALL CONTACT THE CONSTRUCTION/INSPECTION/SUBDIVISION DIVISION, 24 HOURS IN ADVANCE OF COMMENCEMENT OF WORK AT THE-2411 OR 142-7422.
- 10 THE CONTRACTOR SHALL REMOVE ALL EXISTING PAVING, CURBS AND GUTTER, ETC. THAT MAY INTERFERE WITH PROPOSED CONSTRUCTION.
- 11 ALL UTILITIES INSTALLED UNDER PAVING SHALL RECEIVE FULL TRENCH COMPLETION.
- 12 ALL WATER MAINS, BELLS, CAPS, ETC. SHALL BE BUTTERESSED IN ACCORDANCE WITH HOWARD COUNTY SPECIFICATIONS.
- 13 ALL WATER MAINS SHALL HAVE A MIN. 24" COVER UNLESS NOTED OTHERWISE ON THE PLAN.
- 14 CONTRACTOR TO PROVIDE "AS-BUILT" LOCATION AT WATER MAIN IF THERE IS ANY DEVIATION FROM THE PLAN LOCATION.

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 manhole and other waste pretreatment devices 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 or tenants.

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. Helm 4-22-88
U/S Soil Conservation Service Date

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

Approved: *Stephen L. Fisher* 4-22-88
Howard Soil Conservation District Date

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

John B... 5-3-88
County Health Officer Date

APPROVED: *James R...* 5/11/88
Director Date

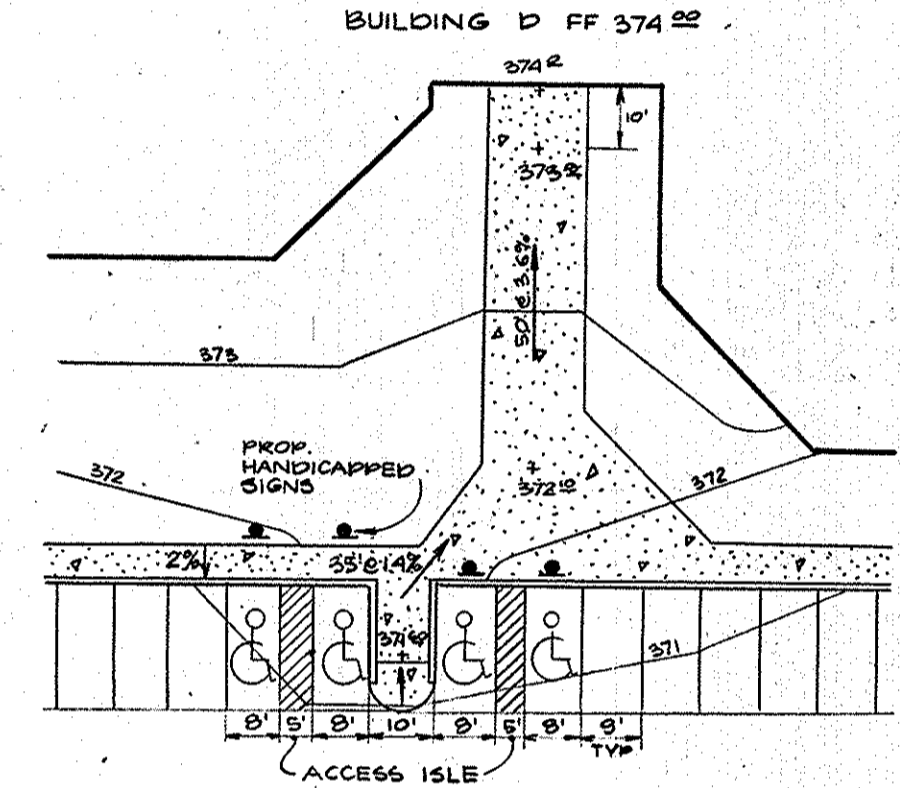
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Chief Division of Community Planning and Land Development Date

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

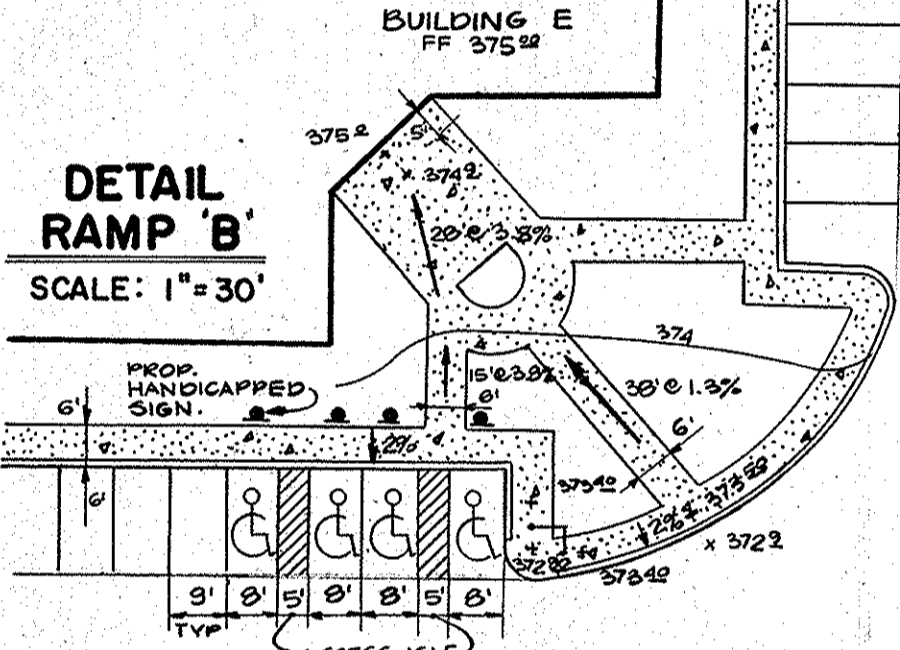
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Chief Bureau of Engineering Date

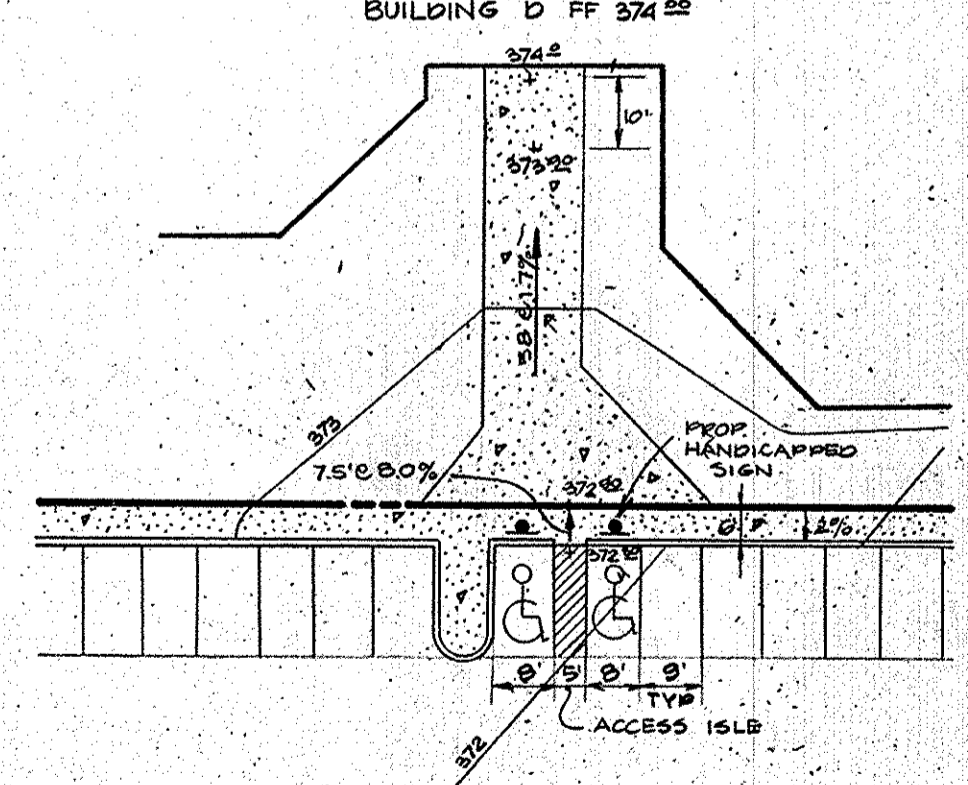
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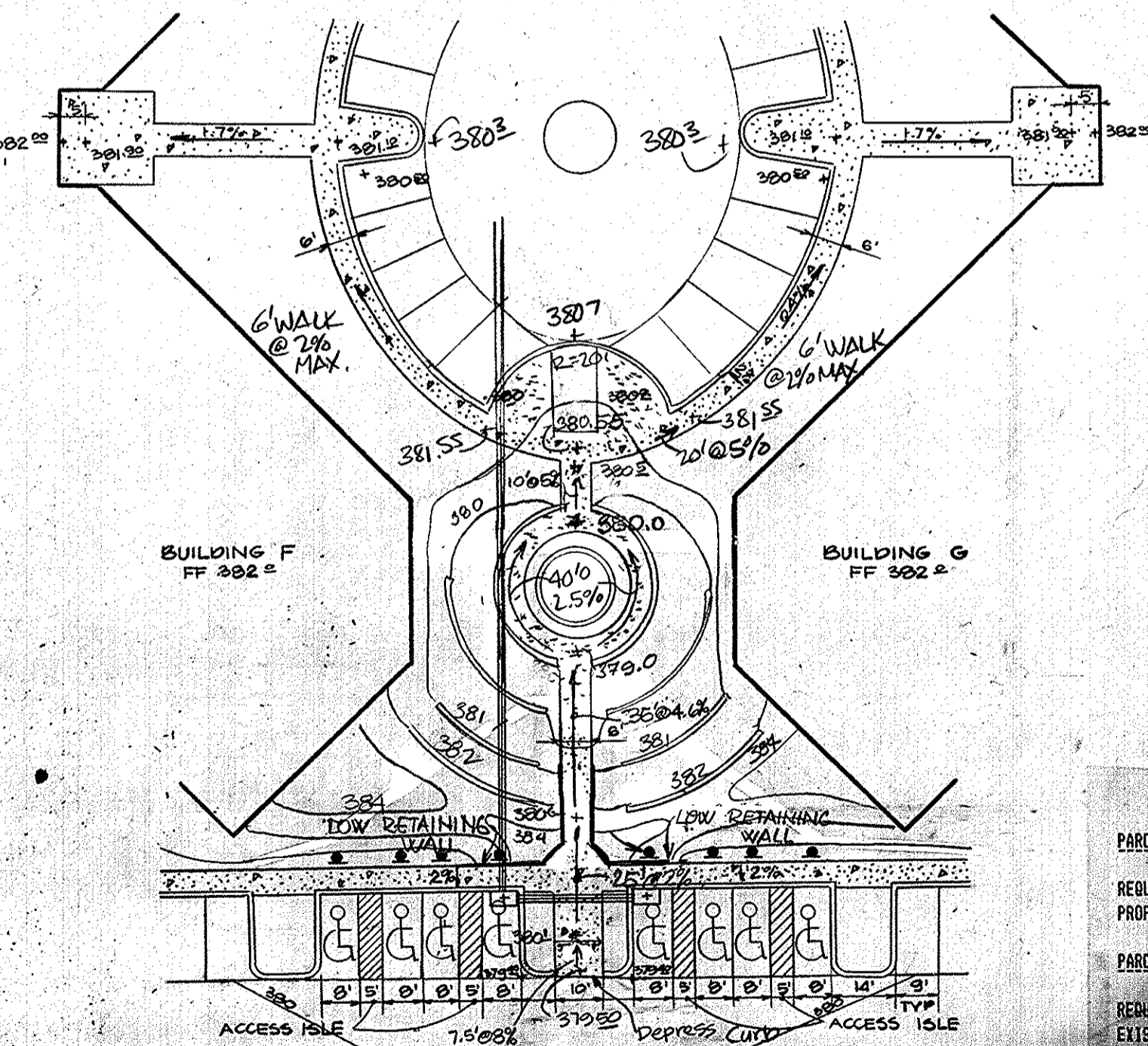
DETAIL RAMP 'A'
SCALE: 1" = 30'



DETAIL RAMP 'B'
SCALE: 1" = 30'



DETAIL RAMP 'C'
SCALE: 1" = 30'



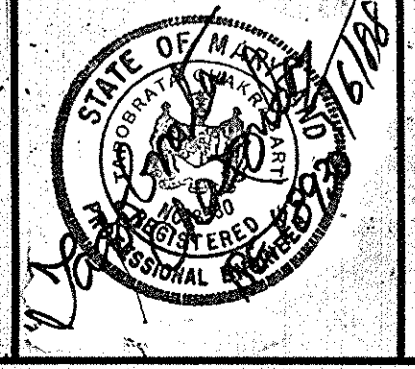
DETAIL RAMP 'D'
SCALE: 1" = 30'

HANDICAP PARKING TABULATION

| | |
|----------|------------------------------|
| PARCEL A | REQUIRED HANDICAP SPACES: 13 |
| | PROPOSED HANDICAP SPACES: 14 |
| PARCEL C | REQUIRED HANDICAP SPACES: 15 |
| | EXISTING HANDICAP SPACES: 14 |
| | PROPOSED HANDICAP SPACES: 4 |
| | TOTAL HANDICAP SPACES: 18 |

NOTE: ALL AREAS WHERE SIDEWALK CHANGES DIRECTIONS SHOULD BE LEVEL (2% GRADE OR LESS)

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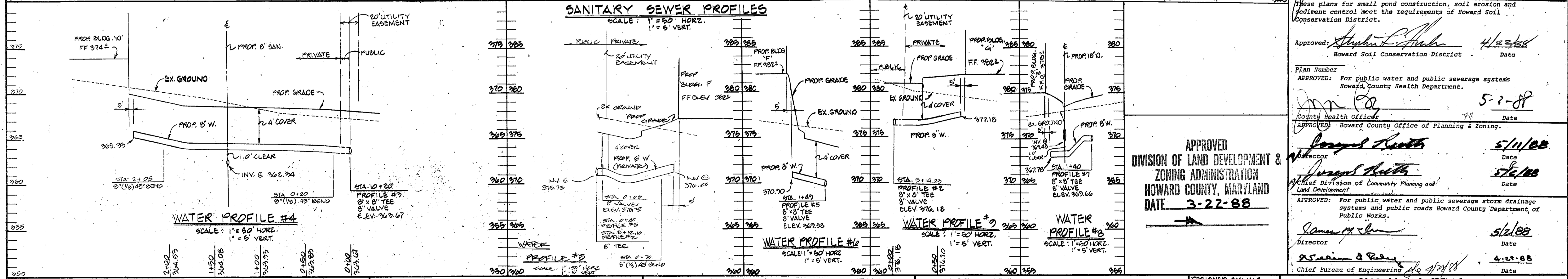
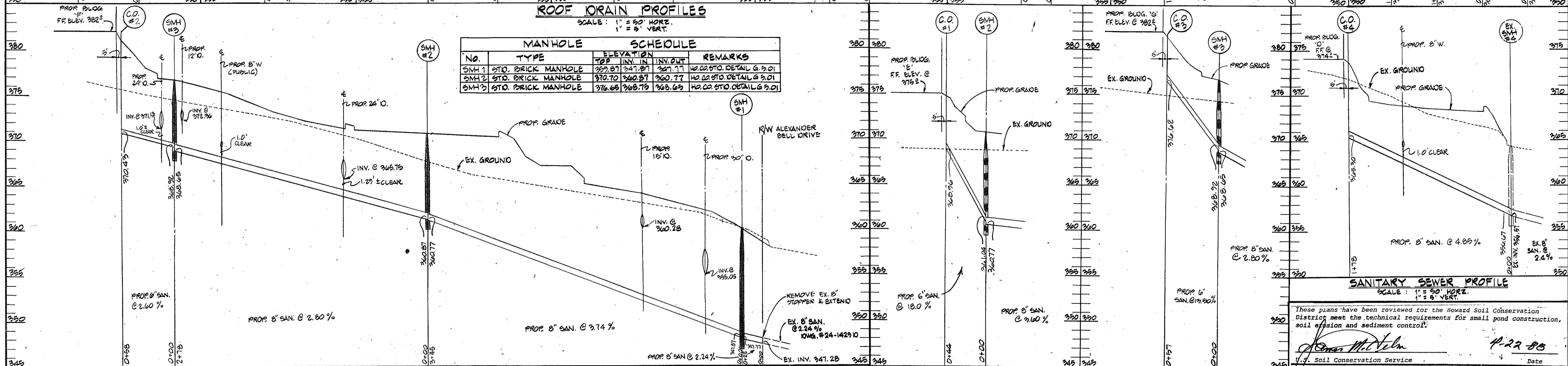
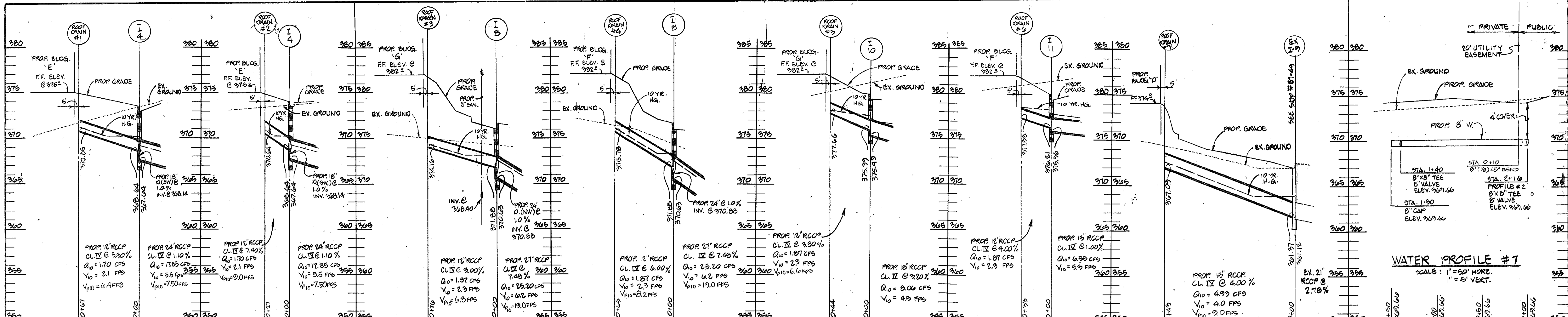
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Kapobrata Chakrabarti 8930 4/6/88
ENGINEER REG. NO. 17406040

OWNER / DEVELOPER
GATEWAY 44 PARTNERSHIP
C/O MANEKIN CORPORATION
10270 OLD COLUMBIA ROAD
COLUMBIA, MARYLAND 21046
(301) 995-6767

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DEVELOPER: *Donald Manekin* DATE: 4/6/88

DESIGNED: N.B.
DRAWN: J.W./K.B.
CHECKED: N.B.
1-3-89
HANDICAP RAMP 'D' CHANGED

PROPOSED OFFICE AND RESEARCH DEVELOPMENT PARK
COLUMBIA GATEWAY
PARCEL 'A' AND PART OF PARCEL 'C'
HOWARD COUNTY, MD. TAX MAP #42 & 43
SCALE AS SHOWN
ELECTION DISTRICT #6
DECEMBER 31, 1987
SHEET 3 OF 1011
SDP-88-129



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George William Stephens, Jr. 8/30
ENGINEER 77408777, REG. NO. 1/6/88

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C/O MANEKIN CORPORATION
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(301) 975-6767

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.

George William Stephens, Jr.
DEVELOPER: 77408777, REG. NO. 1/6/88

DESIGNED BY: KLB.
DRAWN BY: KLB.
CHECKED BY: T.C.
REVISIONS
#1 EIT CHANGED MADE FOR STATE HEALTH PERMIT.
#2 CHANGED BUILDING CONNECTION

PROFILES AND DETAILS FOR - PROPOSED OFFICE AND RESEARCH DEVELOPMENT PARK COLUMBIA GATEWAY
PARCEL 'A' PART OF PARCEL 'C'
TAX MAP #42 & #43
HOWARD COUNTY, MD. SCALE AS SHOWN. MN. 08806
ELECTION DISTRICT #6
DECEMBER 31, 1987
SHEET 5 OF 10
AS-R1111
SDP-88-124

APPROVED: *Stephen L. Ancker* 4/23/88
Howard Soil Conservation District Date

Plan Number APPROVED: For public water and public sewerage systems Howard County Health Department. 5-1-88
County Health Officer Date

APPROVED: Howard County Office of Planning & Zoning. 5/11/88
Director Date

APPROVED: For public water and public sewerage storm drainage systems and public roads Howard County Department of Public Works. 5/2/88
Director Date

APPROVED: For public water and public sewerage storm drainage systems and public roads Howard County Department of Public Works. 4-29-88
Chief Bureau of Engineering Date

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 3-22-88

PERMANENT SEEDING NOTES

Seeded Preparation: Loosen upper 3 inches of soil by raking, disking or other acceptable means before seeding, IF NOT PREVIOUSLY LOOSENEED.

Soil Amendments: Use one of the following schedules:

- 1.) Preferred - Apply 2 tons per acre dolomitic limestone (97 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 30-0-0 urethane fertilizer (9 lbs./1000 sq. ft.).
- 2.) Acceptable - Apply 2 tons per acre dolomitic limestone (97 lbs./1000 sq. ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper three inches of soil.

Seeding - For the periods March 1 thru April 30, and August 15 thru October 15, seed with 40 lbs. per acre (1.4 lbs./1000 sq. ft.) of Kentucky 31 tall fescue per acre and 2 lbs. per acre (.05 lbs./1000 sq. ft.) of sweeping leavergrass. During the period of October 15 thru February 25, protect site by Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use seed, Option (3) Seed with 60 lbs./acre Kentucky 31 tall fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 2 1/2 gallons per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 6 feet or higher, use 248 gal. per acre (5 gal./1000 sq. ft.) for anchoring.

Maintenance - Inspect all seeded areas and make needed repairs, replacements and adjustments.

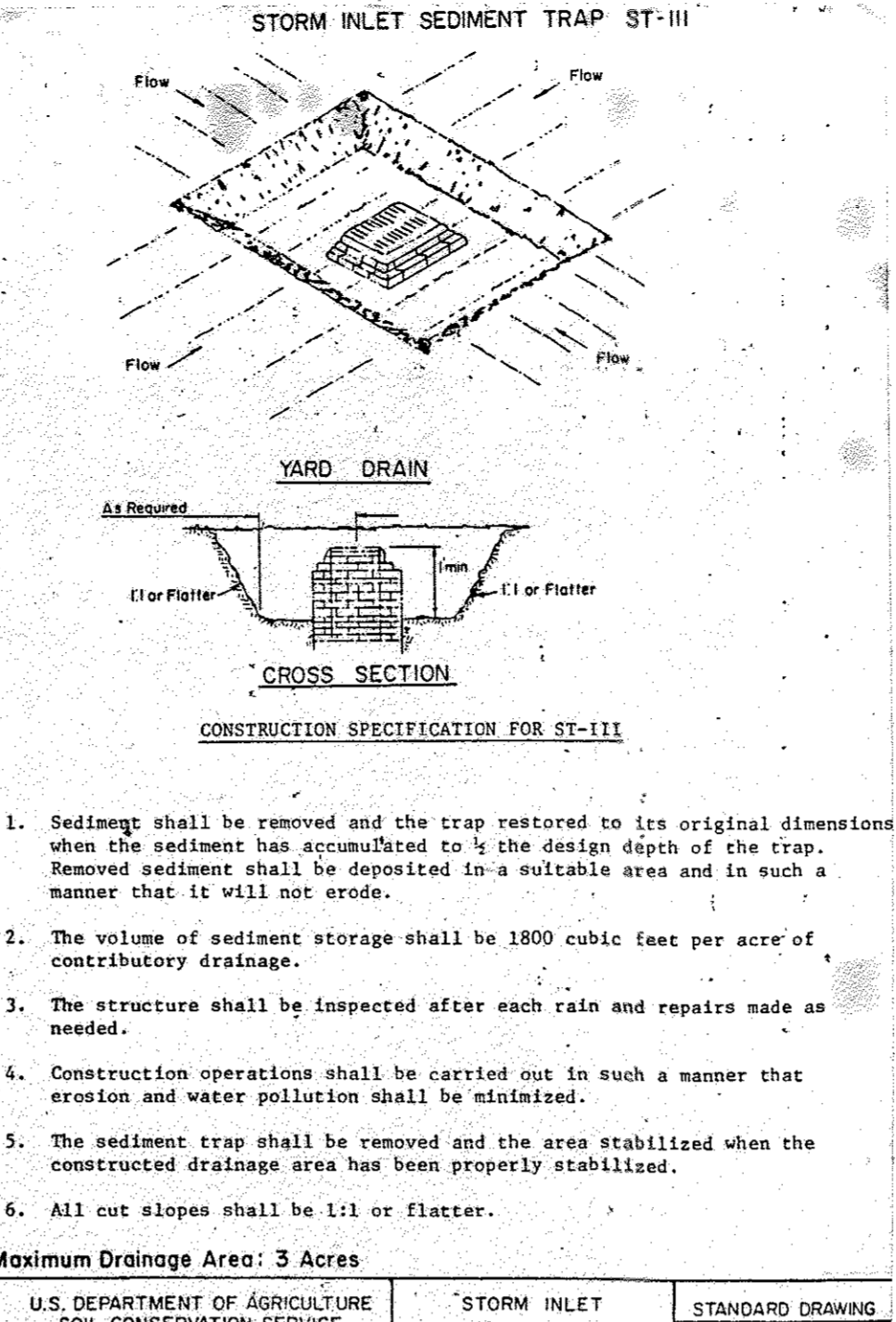
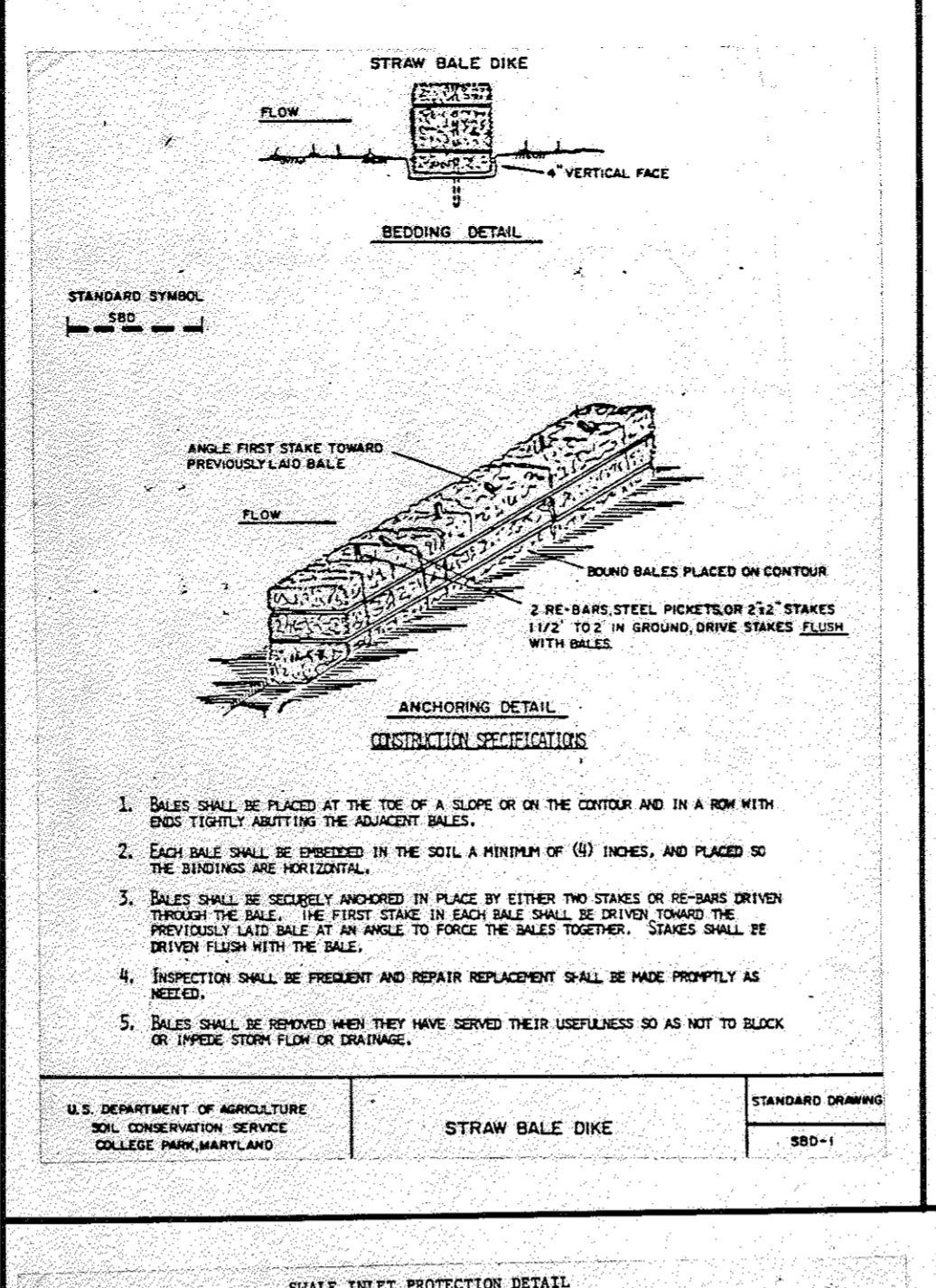
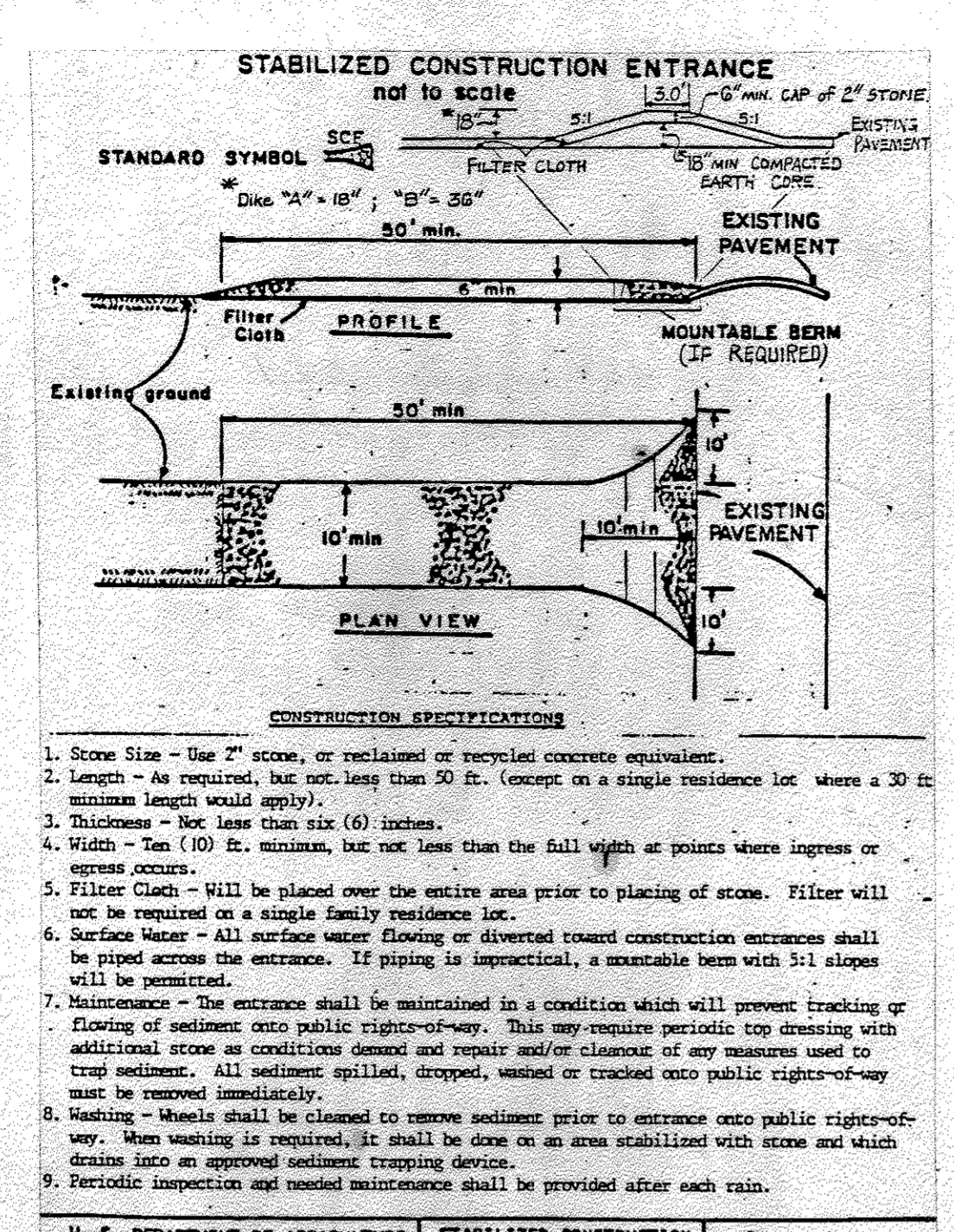
TEMPORARY SEEDING NOTES

Seeded Preparation: Loosen upper 3 inches of soil by raking, disking or other acceptable means before seeding, IF NOT PREVIOUSLY LOOSENEED.

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 25 lbs. 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 sweeping leavergrass (1.07 lbs./1000 sq. ft.). For the period November 15 thru February 25, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use seed.

Mulching - Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 2 1/2 gal. per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 6 ft. or higher, use 248 gal. per acre (5 gal./1000 sq. ft.) for anchoring.



CONSTRUCTION SPECIFICATIONS OWN & SED. CONTROL

1. **SIZE PREPARATION** - The fill area and borrow area shall be cleared and grubbed to remove all trees, vegetation, roots and other objectionable material. The topsoil from the embankment area and borrow area shall be removed and stockpiled. The topsoil shall be spread on the completed fill area.

2. **FILL** - FILL MATERIAL shall be obtained from on-site under the supervision of a soils engineer. It shall be free from rocks, stumps, wood rubbish, oversized stones, frozen or other objectionable material. Fill areas shall be constructed to the elevation shown on the plan to allow for anticipated settlement. Placement shall be done on water fill which shall be subjected to rolled water compaction. The movement of the hauling and spreading equipment over the fill shall be controlled so that the surface of the fill shall be compacted to the specified density. FILL MATERIAL shall contain sufficient moisture so that the required degree of compaction can be obtained with the equipment used.

3. **STRUCTURAL BARRIERS** - Barriers shall be of the type and quality specified for the defining fill material. The fill shall be placed in horizontal layers 4" thick maximum and compacted by hand tamping or manually directed power compactors or plate vibrators. At no time during backfilling operations shall drive equipment be allowed to operate any 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 2' or greater over the structure or pipe. Materials shall fill completely all spaces under and adjacent to newly installed pipe.

4. **CONCRETE** - Concrete shall meet the minimum requirements set forth in the Maryland State Highway Administration "Specifications for Construction and Materials" January 1982. Maximum depth of maximum aggregate shall be 1 1/2" for concrete placed in a thickness of 4" or greater. Concrete shall be placed in a thickness of 4" or greater. Concrete shall be placed in a thickness of 4" or greater.

5. **PIPE** - All pipe shall be of the type and quality specified for the defining fill material. The pipe shall be placed in horizontal layers 4" thick maximum and compacted by hand tamping or manually directed power compactors or plate vibrators. At no time during backfilling operations shall drive equipment be allowed to operate any 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 2' or greater over the structure or pipe. Materials shall fill completely all spaces under and adjacent to newly installed pipe.

6. **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 or flanges shall be used at all joints. Anti-siphon collars shall be connected to the pipe in such a manner as to be completely watertight. Flange bands are not considered to be watertight.

7. **HOLES** - 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 compaction to provide adequate support.

8. **LAYING PIPE** - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.

9. **BACKFILLING** shall conform to structural standards as shown above.

10. **OTHER DETAILS** (anti-siphon collars, valves, etc.) shall be as shown on the drawings.

11. **FILTER CLOTH** - Filter cloth or equivalent shall be used.

12. **SEDIMENT CONTROL** - Construction shall be in accordance with 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control. In release structure install detouring device by installing 25 L.P. of 12" perforated underdrain to the low flow minimum. The 12" underdrain shall be wrapped in filter cloth and covered with minimum 12" thick #2 stone.

NOTE: (SPECIFIED DENSITY) SUITABLE MATERIAL SHALL BE USED FOR THE EMBANKMENT AND ROLLER TO A MINIMUM DEGREE OF COMPACTION OF 95% OF THE DRY UNIT WEIGHT AS DETERMINED BY A.S.T.M. A 999. CONSTRUCTION OF SAK FLOW SHALL BE PERFORMED UNDER STRICT SUPERVISION OF A SOILS ENGINEER.

STORM WATER MANAGEMENT DATA

SOIL GROUP: C & D

EXISTING CONDITION:

D.A. = 12.2 Ac.
RCV = 69
2 Yr. Flow = 7.66 cfs
10 Yr. Flow = 22.22 cfs
100 Yr. Flow = 41.04 cfs

PROPOSED CONDITION:

A) Not Routed
D.A. = 1.48 Ac.
RCV = 79
2 Yr. Flow = 2.89 cfs 3.0
10 Yr. Flow = 8.17 cfs 6.8
100 Yr. Flow = 14.87 cfs 10.7

B) Routed
S.W.M. Facility - Detention Pond
D.A. = 11.16 Ac.
RCV = 91

BEFORE MANAGEMENT

2 Yr. Flow = 14.70 cfs 33.6
10 Yr. Flow = 39.73 cfs 58.8
100 Yr. Flow = 73.87 cfs 88.7

AFTER MANAGEMENT (ROUTING)

2 Yr. Storm = 1.85 cfs 8.8
10 Yr. Storm = 5.17 cfs 21.2
100 Yr. Storm = 10.77 cfs 54.1

REQUIRED - 2 and 10 yr. management
Provided - 2 & 10-yr. management

STRUCTURE CLASSIFICATION - A
Maximum Depth of Maximum Aggregate = 1.5"
FREEBOARD PROVIDED: 1.00
FREEBOARD REQUIREMENT: 1.00

STORAGE REQUIREMENT: 42000 0.957
65000 1.513
For 2 Yr. Storm = 37000 c.f. (0.444 Ac.-ft.)
For 10 Yr. Storm = 79000 c.f. (0.464 Ac.-ft.)
For 100 Yr. Storm = 154000 c.f. (0.494 Ac.-ft.)
65000 1.588
Storage Height Produce = 7.33 Ac.-ft.
Top Width of Embankment = 8.0' 15.71'

SEQUENCE OF CONSTRUCTION

1. NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, PERMIT INSPECTOR 48 HOURS PRIOR TO BEGINNING WORK. 2 DAYS
2. CLEAR AND GRUB FOR SEDIMENT CONTROL MEASURES ONLY. 2 DAYS
3. INSTALL STABILIZED CONSTRUCTION ENTRANCES. 1 DAY
4. CONSTRUCT SEDIMENT BASIN. (SEDIMENT BASIN SHALL BE CONSTRUCTED PER THE CONSTRUCTION SPECIFICATIONS OF STORM WATER MANAGEMENT POND - SEE SHEET #10). INSTALL STORM INLET SEDIMENT TRAPS. THE TOP OF EXISTING 12" PIPES SHALL BE TEMPORARILY CONSTRUCTED TO ELEVATION 36.0 DURING THE SEDIMENT AND EROSION CONTROL PHASE. 4 DAYS
5. INSTALL ALL EARTH Dikes AND STRAW BALE DIKES MAINTAINING POSITIVE DRAINAGE TO THE SEDIMENT TRAPPING DEVICES AT ALL TIMES. 3 DAYS
6. BEGIN MAJOR GRADING AND ADJUST DIVERSION DIKES AS WORK PROGRESSES MAINTAINING POSITIVE DRAINAGE AT ALL TIMES. 12 DAYS
7. INSTALL STORM DRAINS AND OTHER UTILITIES. PROVIDE ADEQUATE PROTECTION FOR ALL INLETS. 20 DAYS
8. STABILIZE AREAS NOT RECEIVING PAVING. 2 DAYS
9. FINE GRADE AND INSTALL SUBBASE MATERIAL IN PARKING AND BUILDING AREAS. 14 DAYS
10. FINE GRADE ANY REMAINING AREAS AND STABILIZE. 7 DAYS
11. AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, CLEAR OUT THE SEDIMENT TRAPS AND SEDIMENT TRAPS. CONVERT THE SEDIMENT BASIN TO STORM WATER MANAGEMENT FACILITY. MAKE THE NECESSARY CHANGES TO THE RELEASE STRUCTURE ACCORDING TO THE APPROVED STORM WATER MANAGEMENT PLANS. 7 DAYS
12. AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE THE REMAINING SEDIMENT CONTROL DEVICES AND STABILIZE. 3 DAYS

SEDIMENT CONTROL NOTES

1) 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)

2) 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.

3) Following initial soil disturbance or re-disturbance, 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.

4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.

5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent stabilization (Sec. 51) and (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with which alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.

6) 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.

7) **Site Analysis:**

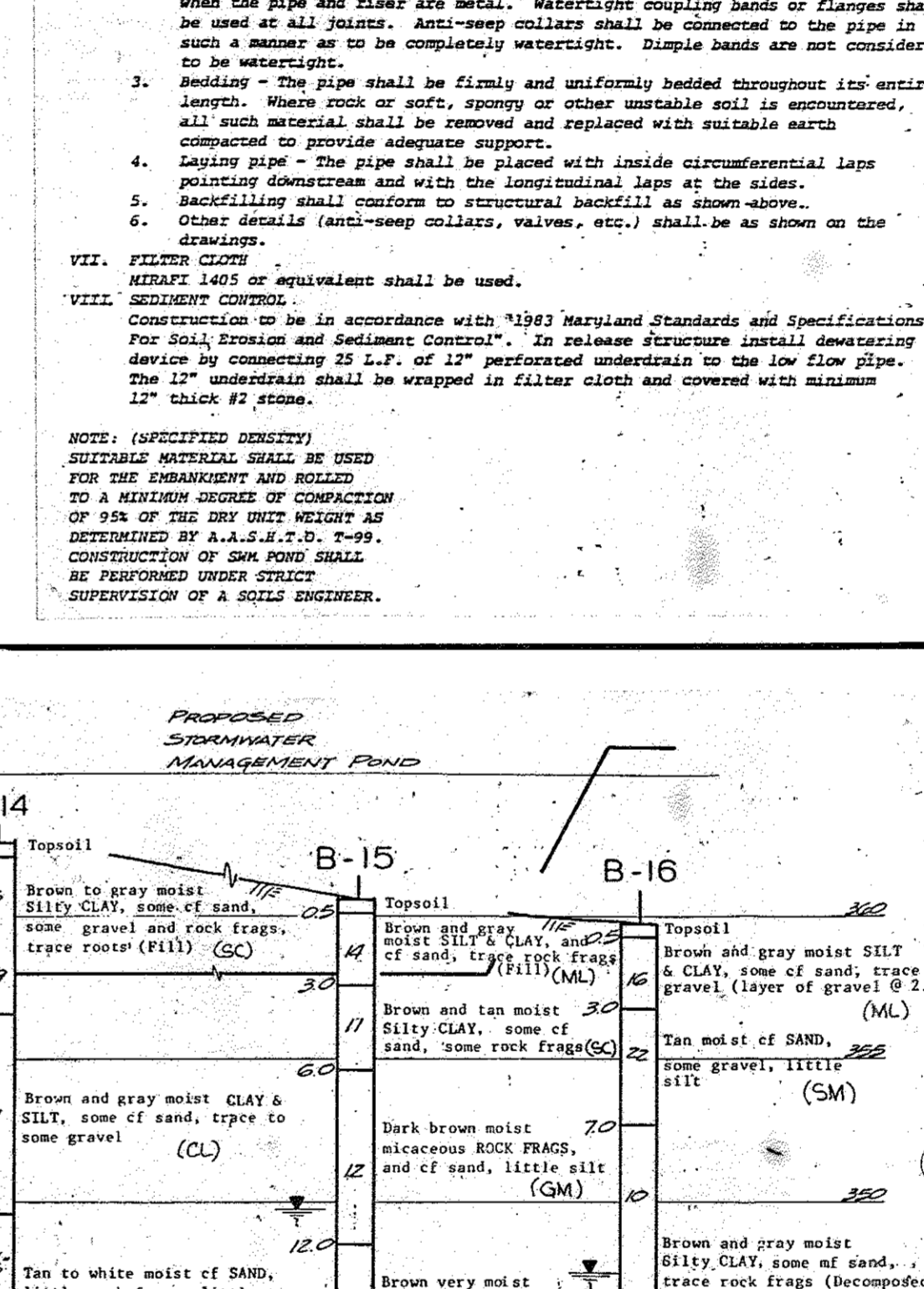
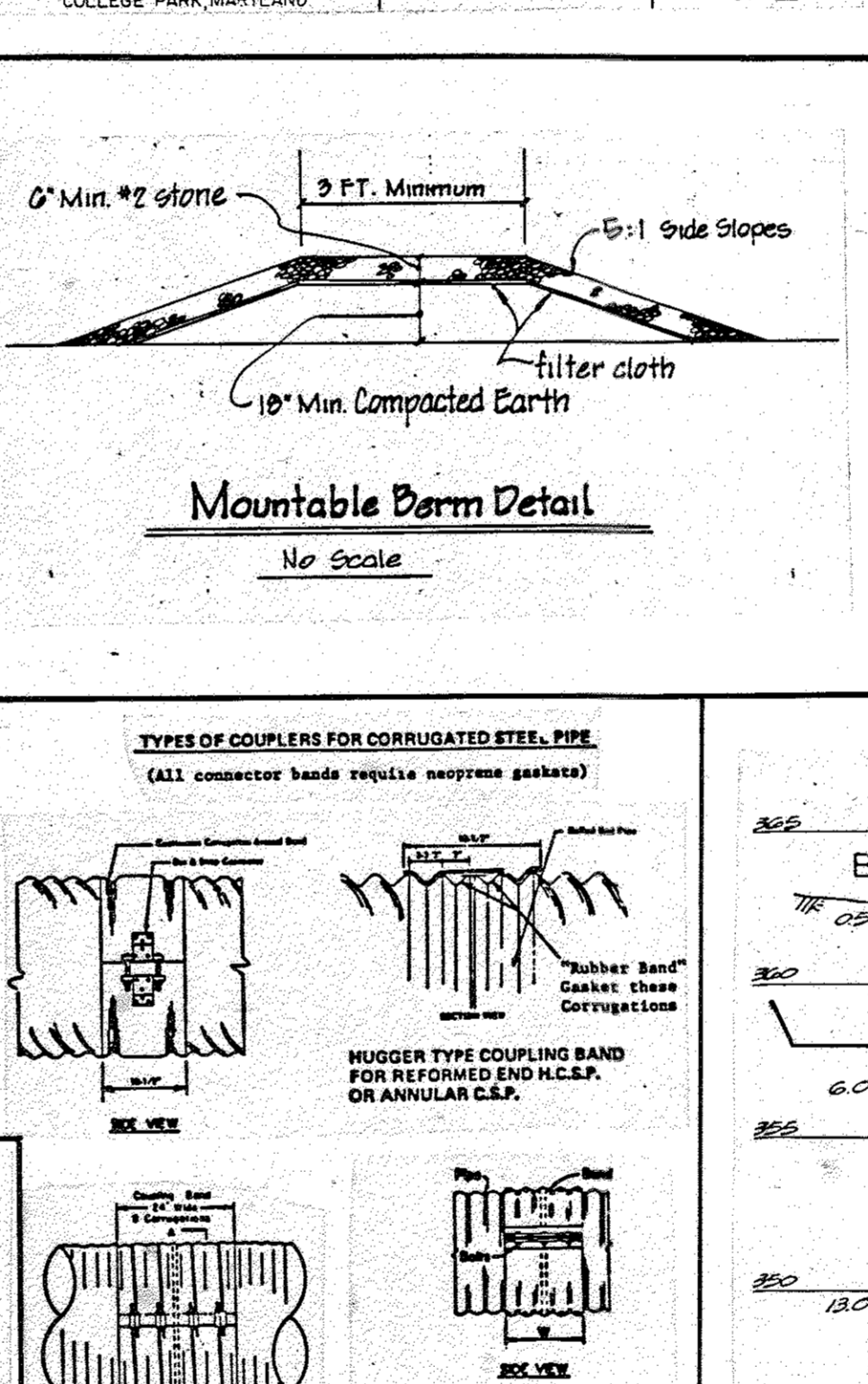
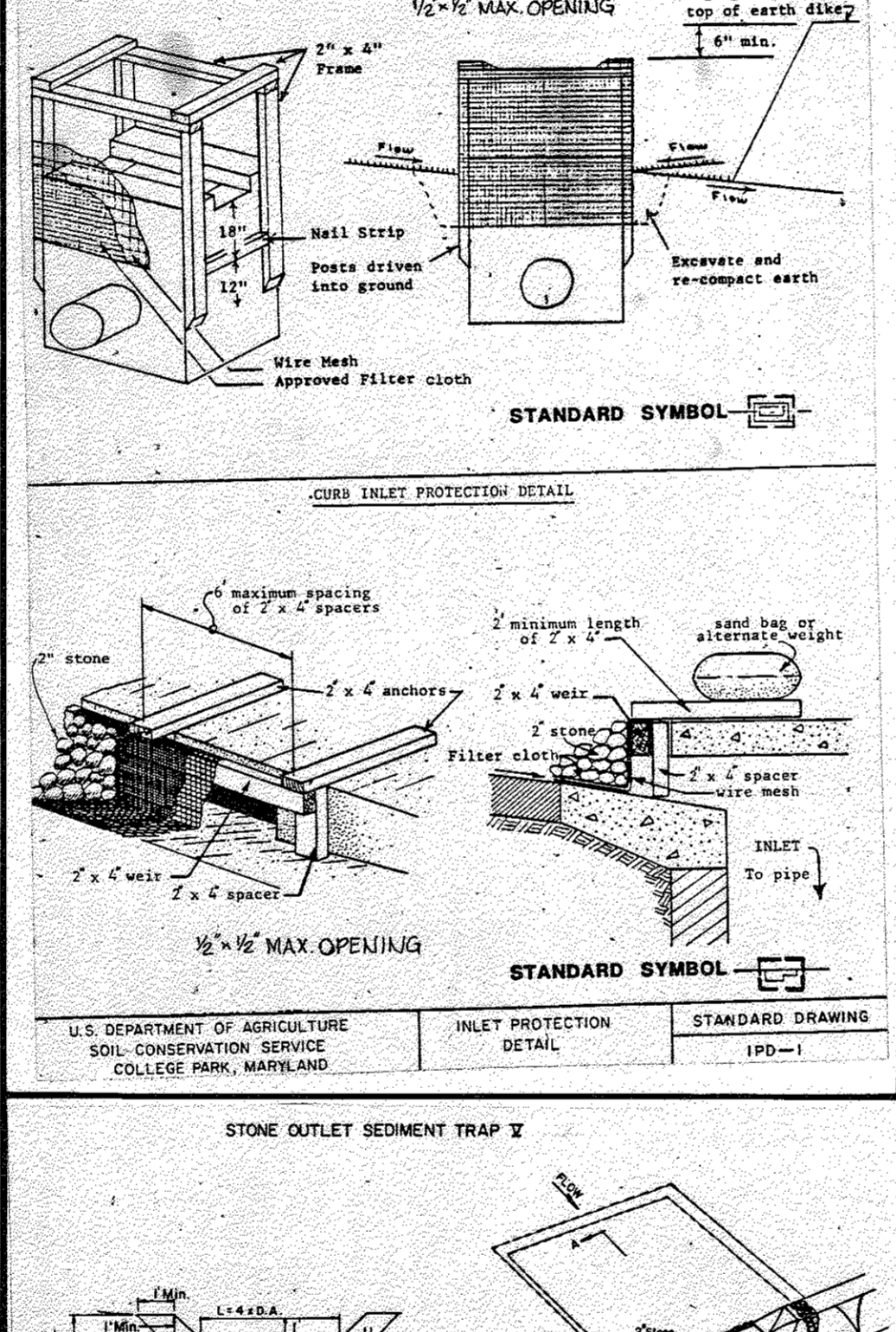
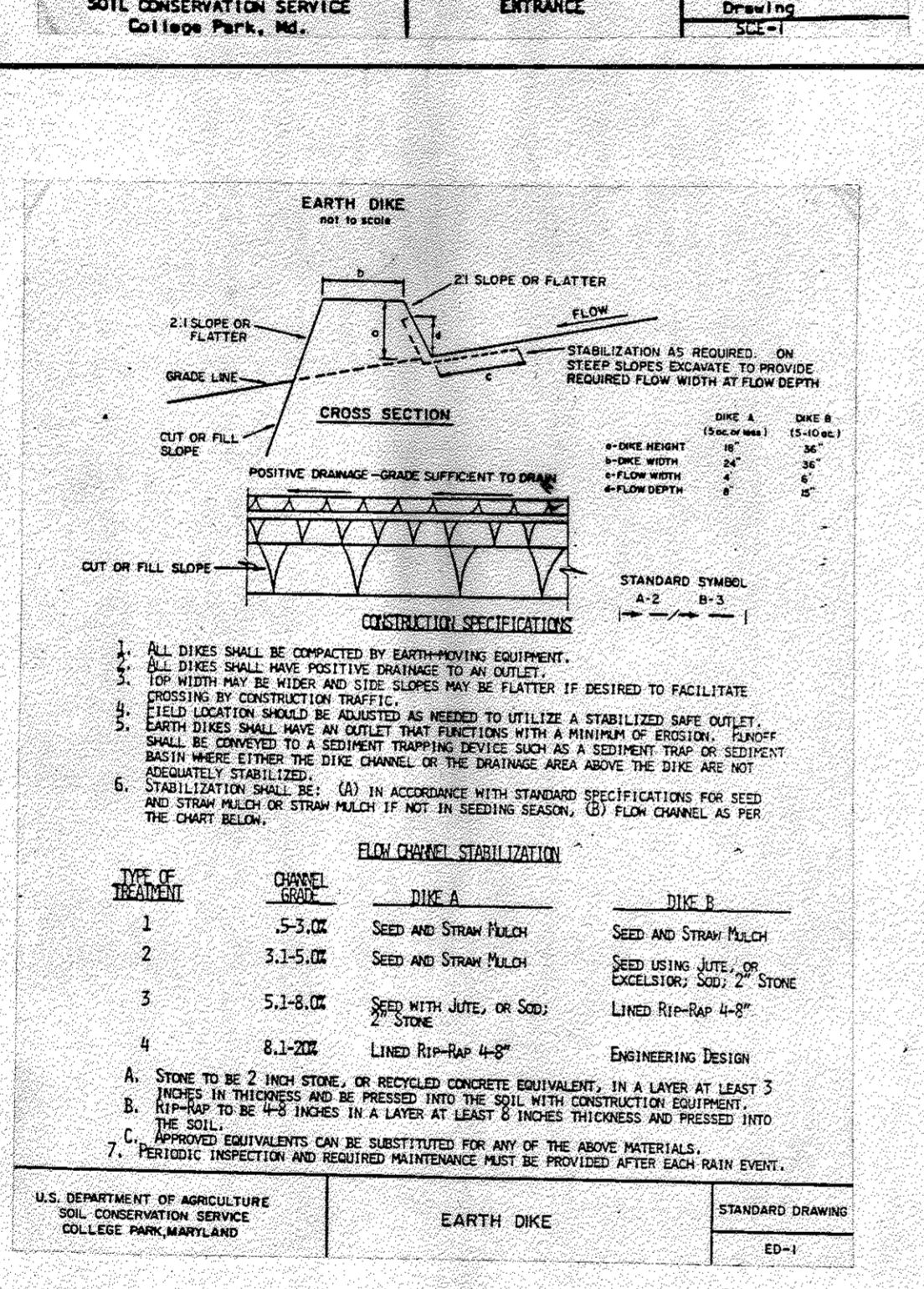
| | |
|------------------------------------|----------------|
| Total Area of SUBMITTAL | 17.06 Acres |
| Area to be roofed or paved | 10.92 Acres |
| Area to be vegetatively stabilized | 6.14 Acres |
| Total Cut | 32,236 Cu. Yds |
| Total Fill | 31,877 Cu. Yds |
| Office waste/borrow area location | N/A |

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

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

10) On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may be authorized until this initial approval by the inspection agency is made.

11) Material Will Be Obtained From A Site With An Approved Sediment Control Plan.



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: *James M. Helms* 4/22/88
U.S. Soil Conservation Service Date

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

Approved: *Stephen L. Fisher* 4/22/88
Howard Soil Conservation District Date

Plan Number

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

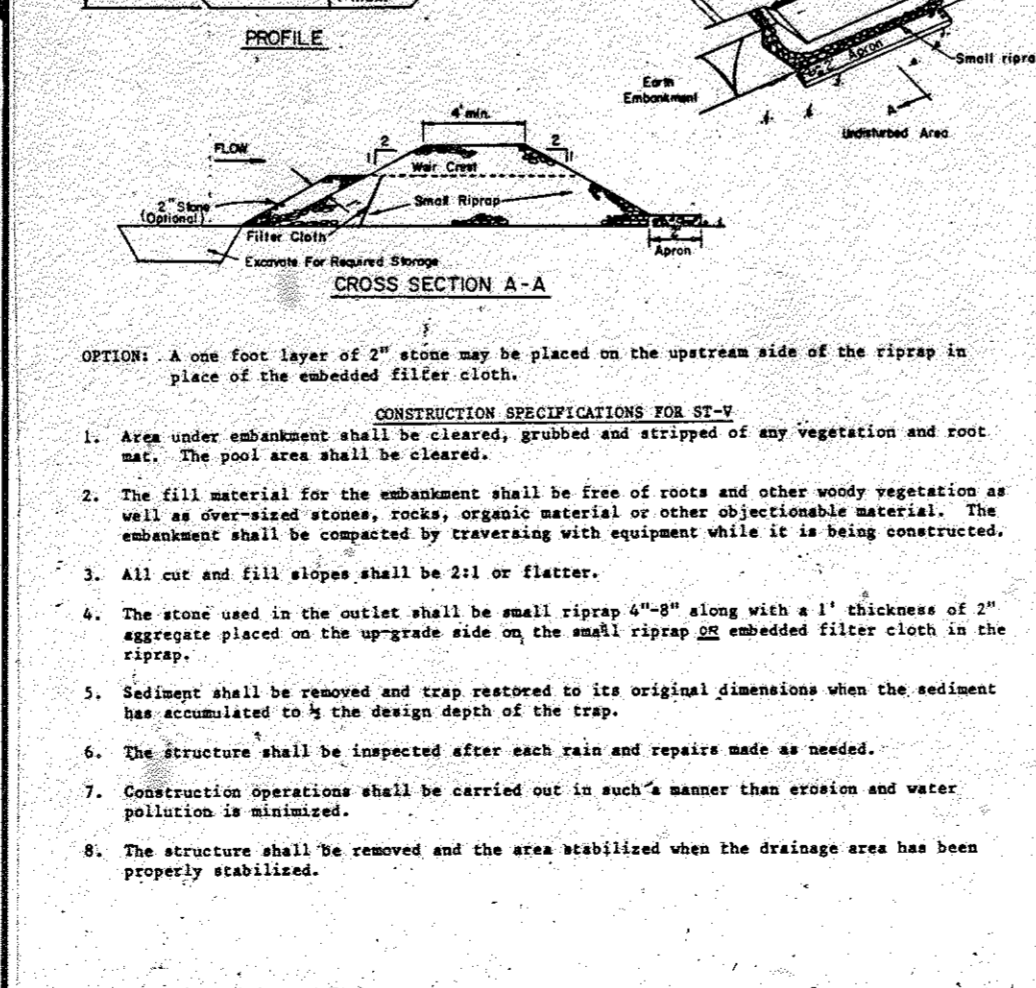
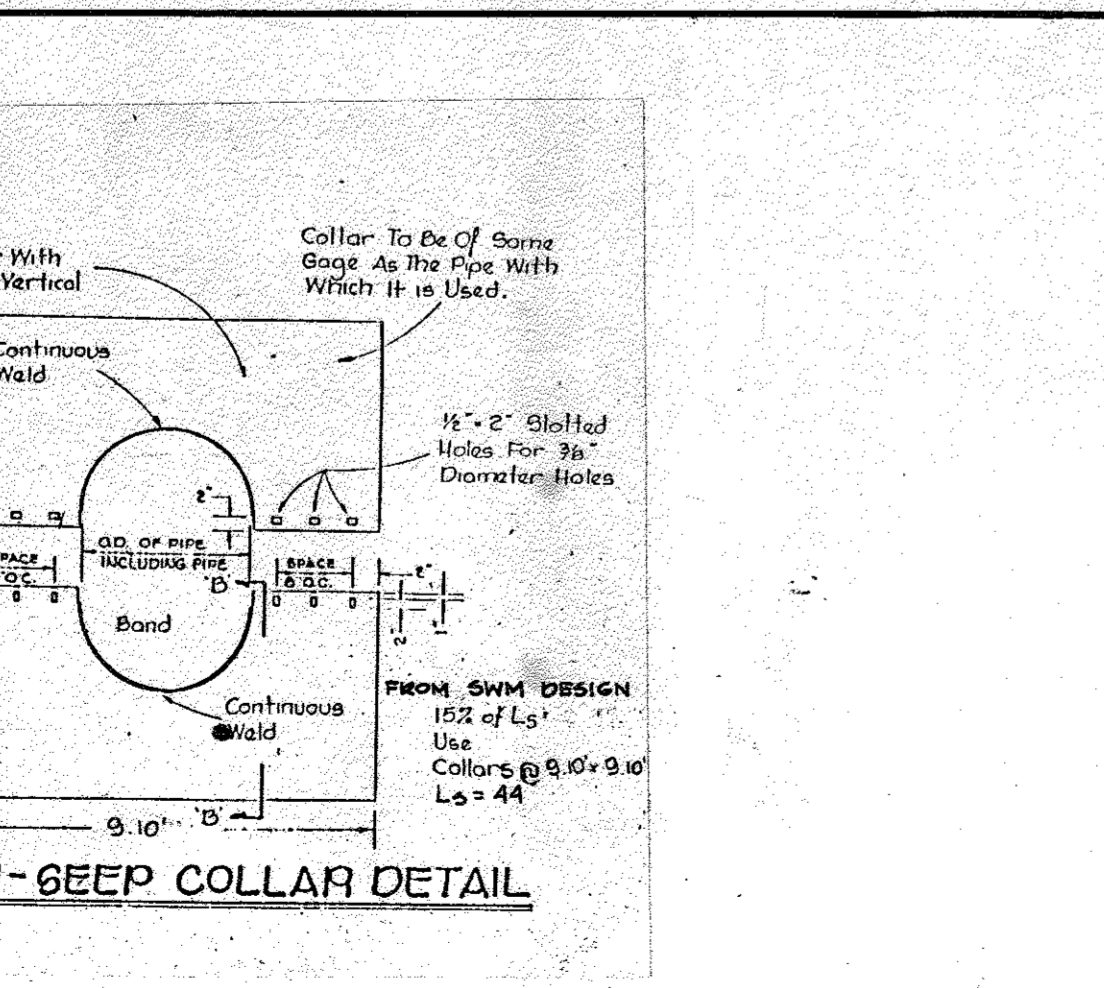
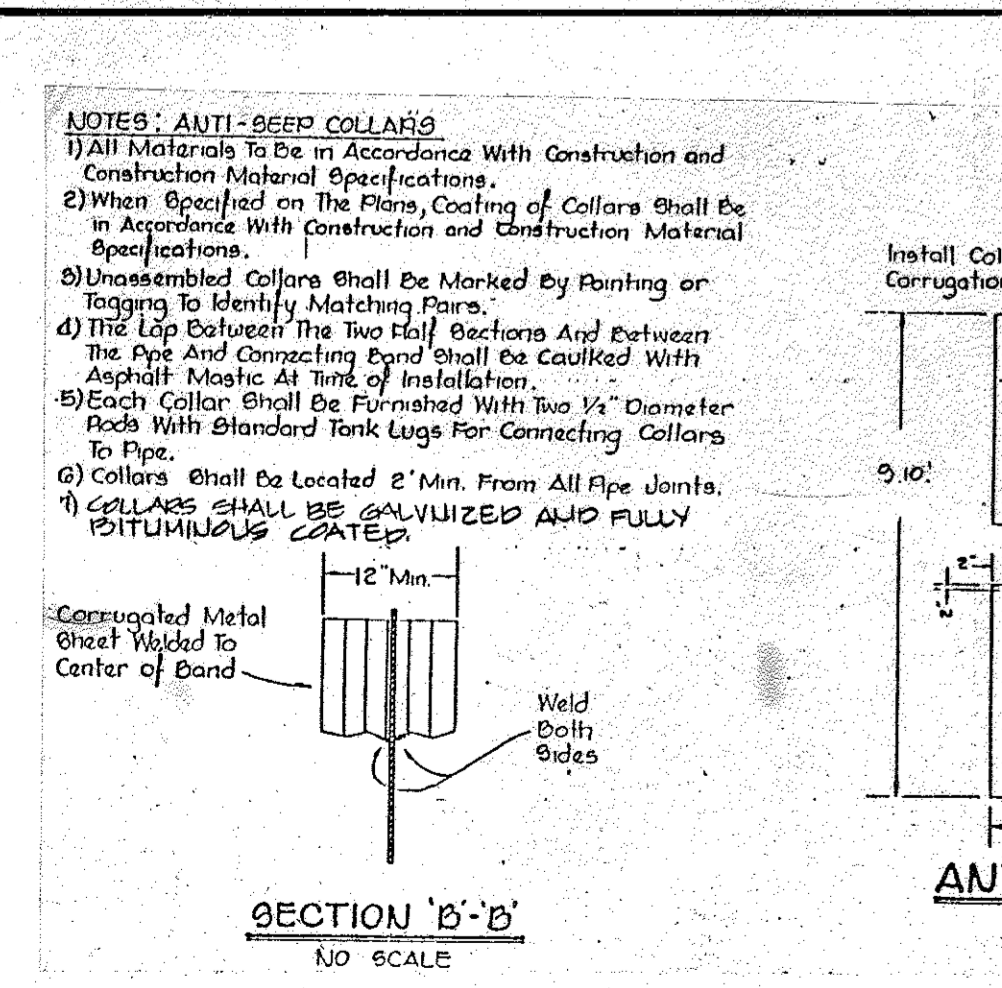
Approved: *John Fox* 5-3-88
County Health Office Date

Approved: *James M. Helms* 5/11/88
Director Date

Approved: *James M. Helms* 5/16/88
Chief Division of COMMUNITY PLANNING & LAND DEVELOPMENT Date

Approved: *James M. Helms* 6/1/88
Director Date

Approved: *James M. Helms* 4-29-88
Chief Bureau of Engineering Date



APPROVED DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION HOWARD COUNTY, MARYLAND DATE 3-22-88

Professional Certification: I hereby certify that the 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.

License No. 44288, Expiration Date 2/10/88

For Rev. Only
10-02-16 CUTFLAP BARREL SLIP-LINING IN LIEU OF A

OWNER / DEVELOPER
GATEWAY 44 PARTNERSHIP
C/O MANEKIN CORPORATION
10270 OLD COLUMBIA ROAD
COLUMBIA, MARYLAND
21046
(301) 995-6767

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

STORM WATER MANAGEMENT & SEDIMENT EROSION CONTROL NOTES & DETAILS
PROPOSED OFFICE AND RESEARCH DEVELOPMENT PARK
COLUMBIA GATEWAY
PARCEL A PART OF PARCEL C
TAX MAP #42 & 43
HOWARD COUNTY, MO. ELECTION DISTRICT #6
SCALE AS SHOWN DECEMBER 31, 1987
RN. 08806 SHEET #1 OF 11
AS BUILT
SDP-88-129

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 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.

George William Stephens, Jr. 4/6/88
ENGINEER TAPPOUNTA REG. NO. DATE

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George William Stephens, Jr. 4/6/88
DEVELOPER: DATE

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

OWNER / DEVELOPER
GATEWAY 44 PARTNERSHIP
C/O MANEKIN CORPORATION
10270 OLD COLUMBIA ROAD
COLUMBIA, MARYLAND
21046
(301) 995-6767

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

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PROPOSED OFFICE AND RESEARCH DEVELOPMENT PARK
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PARCEL A PART OF PARCEL C
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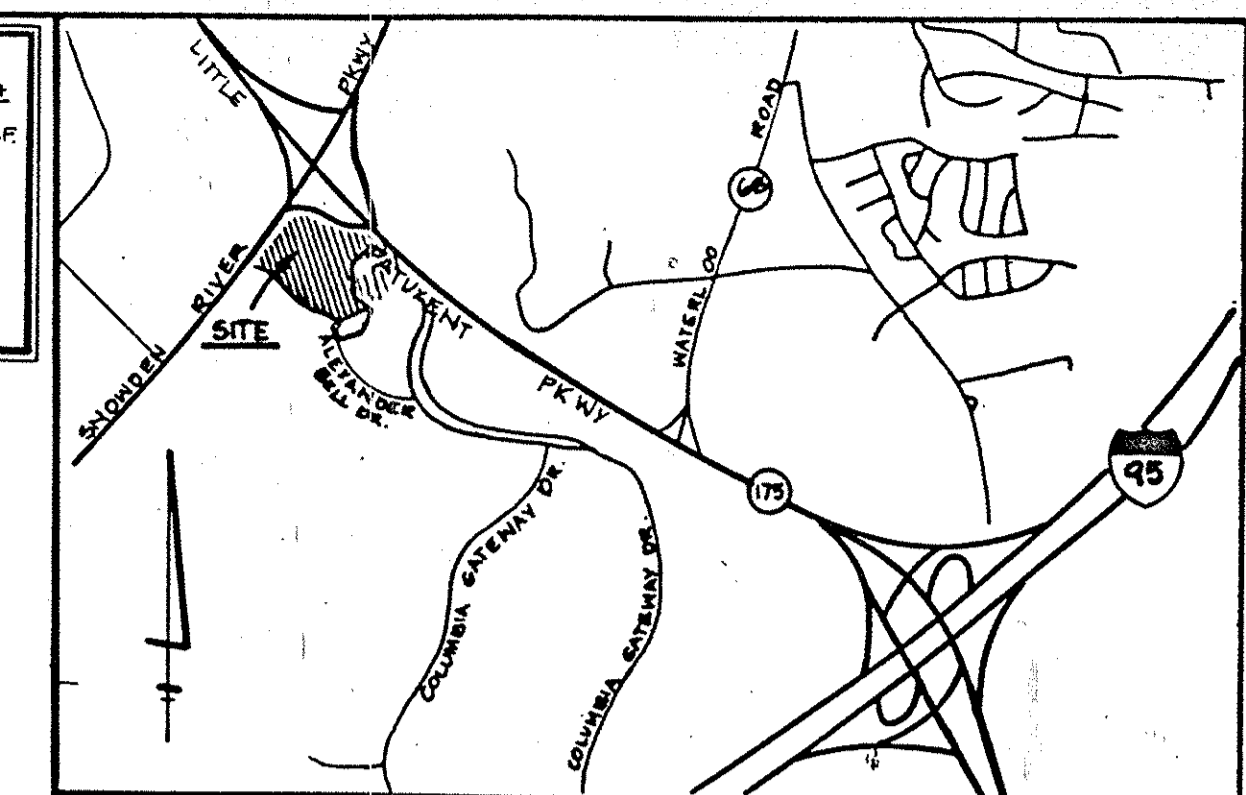
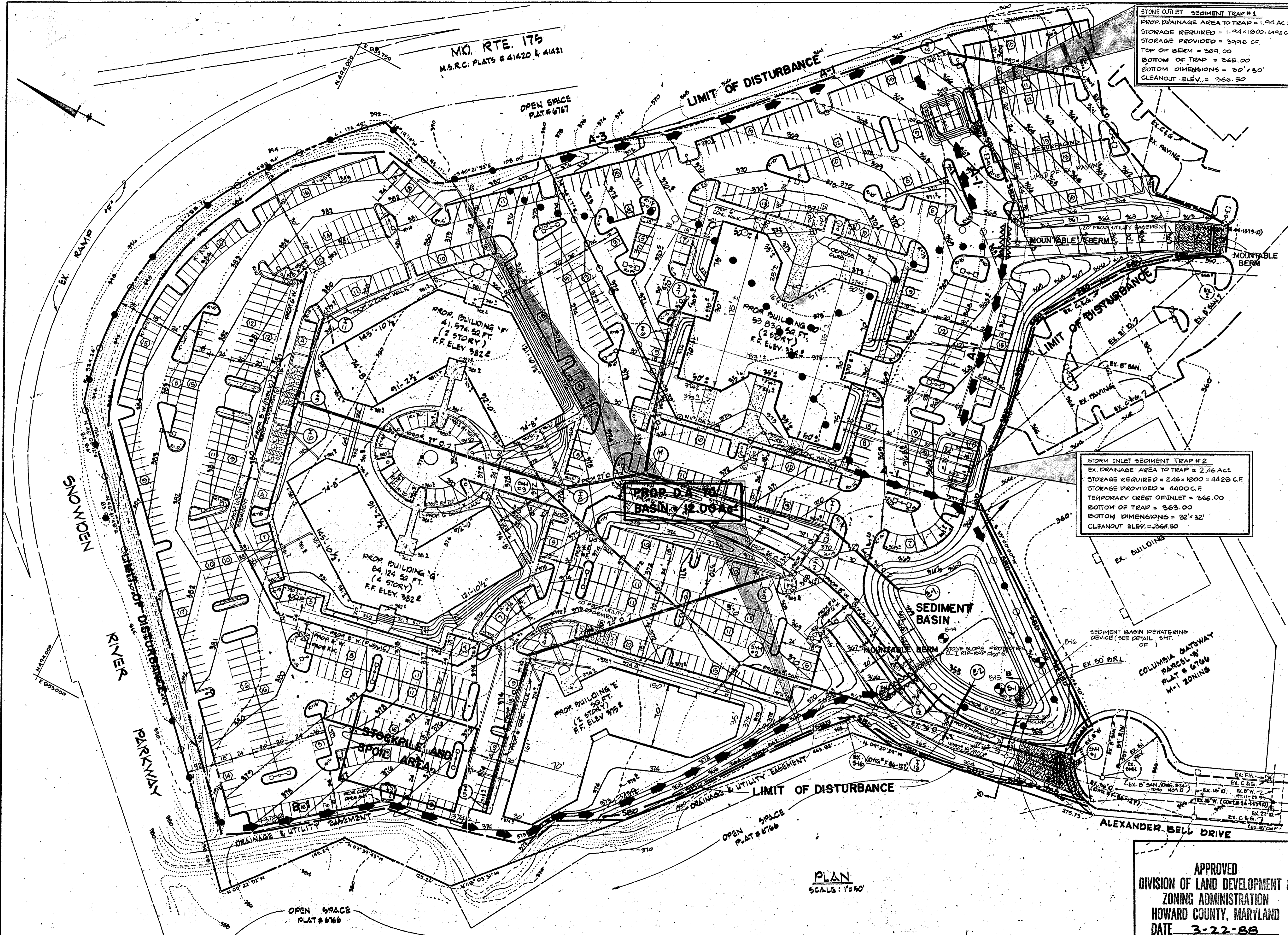
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George William Stephens, Jr. 4/6/88
DEVELOPER: DATE

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



VICINITY MAP
SCALE: 1" = 200'

BENCH MARKS:
 W.R. & A.B.M. #2: ELEV. 365.28
 R.R. SPIKE IN BASE OF 14" POPLAR, 10' ± RIGHT OF & ALEXANDER BELL DRIVE PT STA. 11+23.49.
 W.R. & A.B.M. #3: ELEV. 329.26
 TOP BOLT @ TOP OLD LIGHT POST FOOTER, 149' OF & COLUMBIA GATEWAY DRIVE STA. 11+50.

LEGEND

- EARTH DIKE
- STRAW BALE DIKE
- EXISTING DRAINAGE AREA
- PROP. DRAINAGE AREA
- MOUNTABLE BERM
- LIMIT OF DISTURBANCE
- STABILIZED CONSTR. ENTRANCE

NOTE: STORM WATER MANAGEMENT IS ALREADY PROVIDED FOR PARCEL 'C'. SEE SDP 87-49.

STONE OUTLET SEDIMENT TRAP #1
 PROP. DRAINAGE AREA TO TRAP = 1.94 AC ±
 STORAGE REQUIRED = 1.94 x 1000 = 3492 C.F.
 STORAGE PROVIDED = 3996 C.F.
 TOP OF BERM = 368.00
 BOTTOM OF TRAP = 365.00
 BOTTOM DIMENSIONS = 30' x 30'
 CLEANOUT ELEV. = 366.50

STORM INLET SEDIMENT TRAP #2
 EX. DRAINAGE AREA TO TRAP = 2.46 AC ±
 STORAGE REQUIRED = 2.46 x 1000 = 4428 C.F.
 STORAGE PROVIDED = 4400 C.F.
 TEMPORARY CREST OF INLET = 366.00
 BOTTOM OF TRAP = 365.00
 BOTTOM DIMENSIONS = 22' x 32'
 CLEANOUT ELEV. = 364.50

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. Tolson 4-22-88
 U.S. Soil Conservation Service Date

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

Approved: *Stephen L. Fuller* 4-22-88
 Howard Soil Conservation District Date

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

[Signature] 5-3-88
 County Health Officer Date
 Approved: Howard County Office of Planning & Zoning.

Joseph Smith 5/11/88
 Director Date

Joseph Smith 5/6/88
 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.

James M. Tolson 5/2/88
 Director Date

William S. [Signature] 4-28-88
 Chief Bureau of Engineering Date

APPROVED
 DIVISION OF LAND DEVELOPMENT &
 ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE 3-22-88

NOTE: THE TOP OF ANY EARTH DIKES LEADING TO THE SEDIMENT BASIN SHALL BE AT ELEVATION 366.0 OR ABOVE.

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



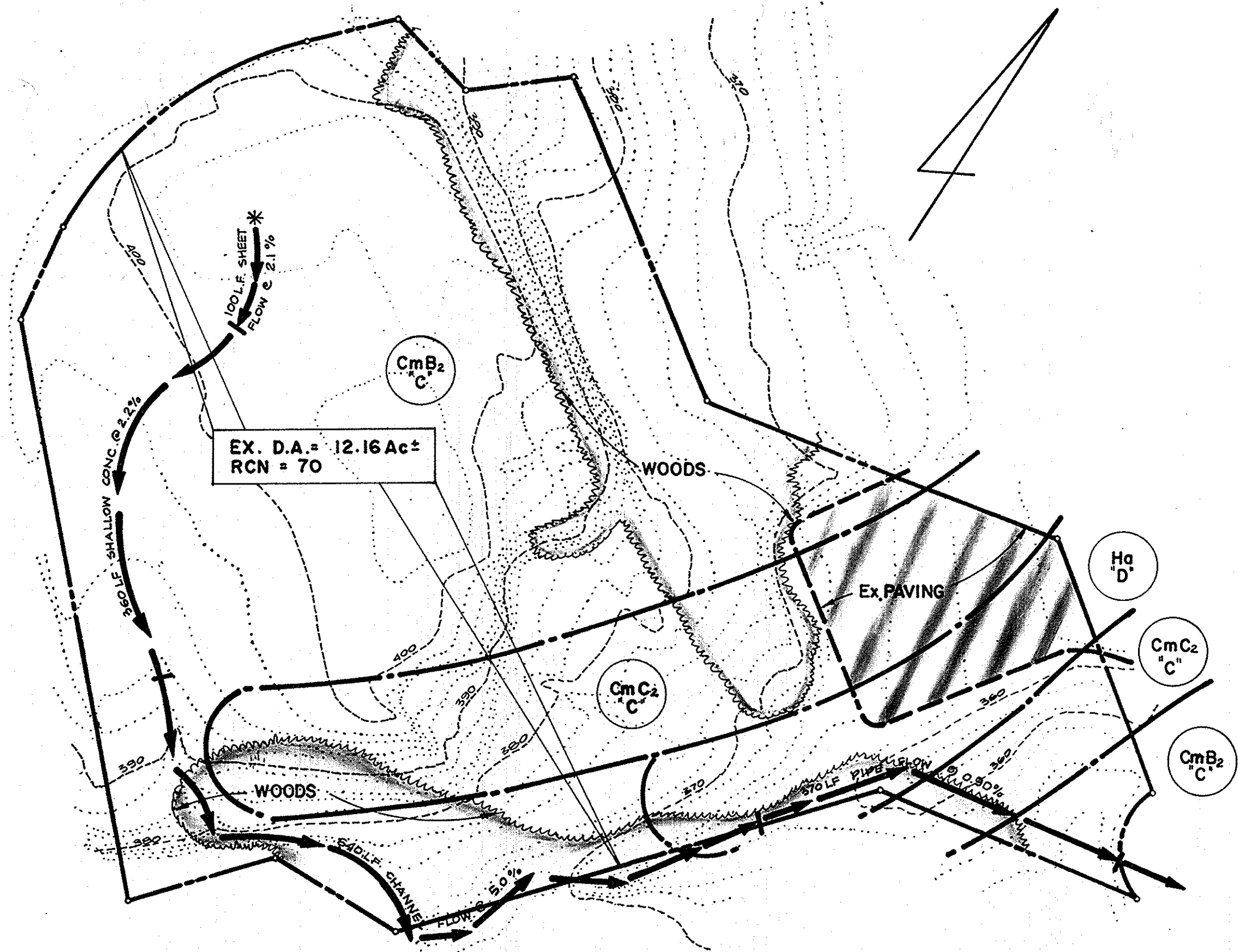
ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR S.M.N. FACILITY CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE S.M.N. FACILITY WITHIN 30 DAYS OF COMPLETION.
 ENGINEER: *George W. Stephens, Jr.*
 REC. NO.: 8920 DATE: 1/6/88

OWNER / DEVELOPER
GATEWAY 44 PARTNERSHIP
 GIO MANEKIN CORPORATION
 10270 OLD COLUMBIA ROAD
 COLUMBIA, MARYLAND
 21046
 (301) 999-6767

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.M.N. FACILITY WITHIN 30 DAYS OF COMPLETION.
 DEVELOPER: *Donald M. [Signature]*
 DATE: 1/6/88

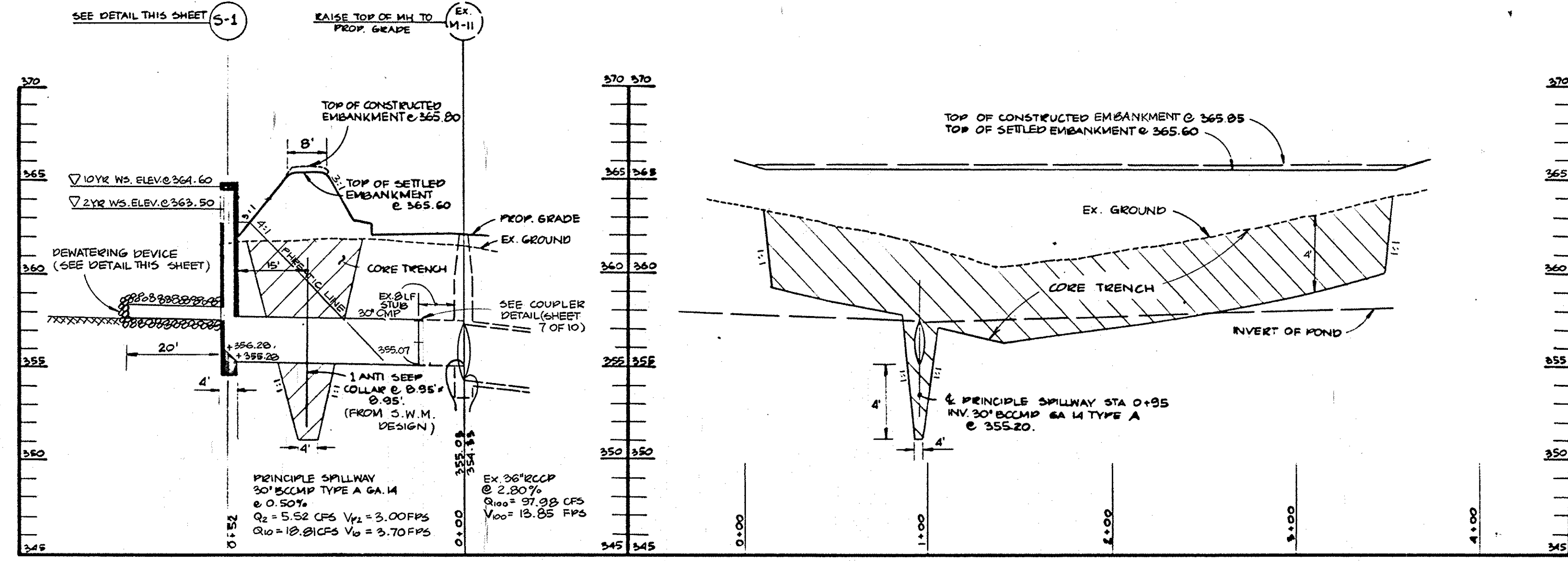
DESIGNED BY: N.B.
 DRAWN BY: J.W.
 CHECKED BY: N.B.
 REVISIONS

SEDIMENT EROSION CONTROL PLAN
 PROPOSED OFFICE AND RESEARCH DEVELOPMENT PARK
COLUMBIA GATEWAY
 PARCEL 'A' PART OF PARCEL 'C'
 TAX MAP # 42 & 43
 HOWARD COUNTY, MD. ELECTION DISTRICT #6
 SCALE AS SHOWN DECEMBER 31, 1987
 P.N. 05806 AS-BUILT SHEET 2 OF 11
 SDP-88-129



EXISTING DRAINAGE AREA MAP

SCALE: 1" = 100'



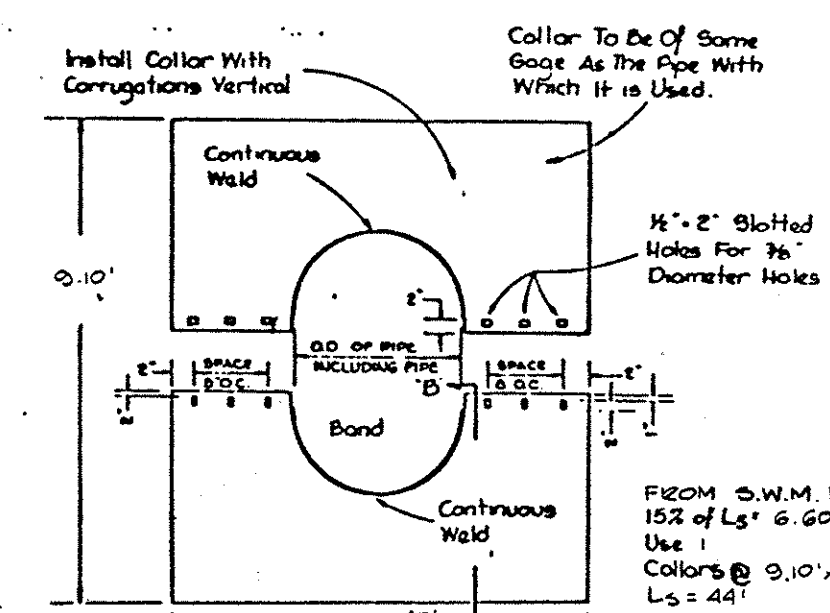
SECTION B-B TROUGH PRINCIPLE SPILLWAY

SCALE: HORZ. 1" = 20' VERT. 1" = 5'

SECTION A-A ALONG CENTERLINE OF THE EMBANKMENT

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

- NOTES: ANTI-SEEP COLLARS**
- 1) All Materials to be in accordance with Construction and Construction Material Specifications.
 - 2) When specified on the Plans, Coatings 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 Lip Between the Two Half Sections and Between the Pipe and Connecting Band shall be Caulked with Asphalt Mastic at Time of Installation.
 - 5) Each Collar shall be Furnished with Two 1/4" Diameter Rods with Standard Tank Lugs for Connecting Collars to Pipe.
 - 6) Collars shall be Located 2" Min. from All Pipe Joints.
 - 7) COLLARS SHALL BE GALVANIZED AND FULLY BITUMINOUS COATED.

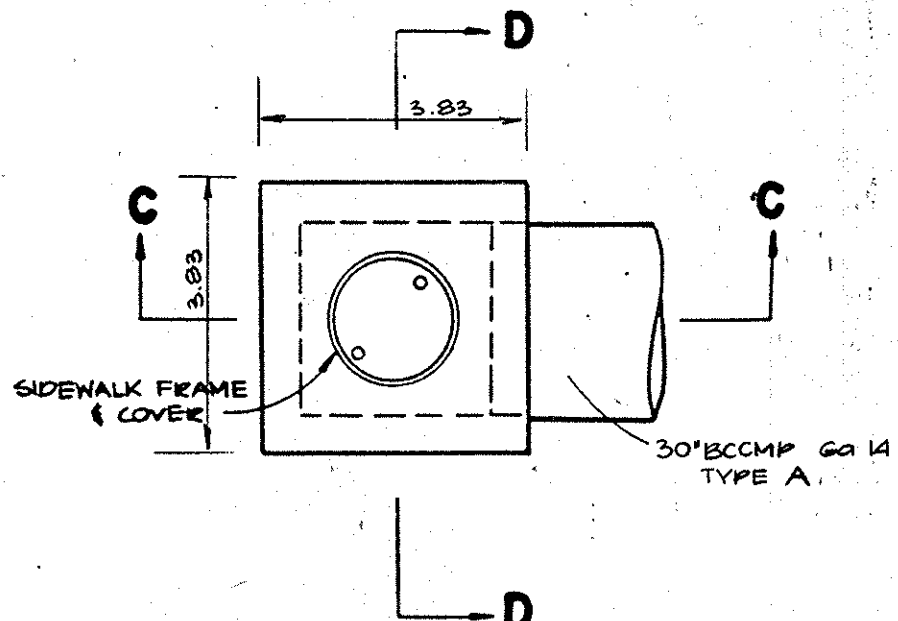


ANTI-SEEP COLLAR DETAIL

DETAIL S-1 (MODIFIED TYPE 'D' INLET)

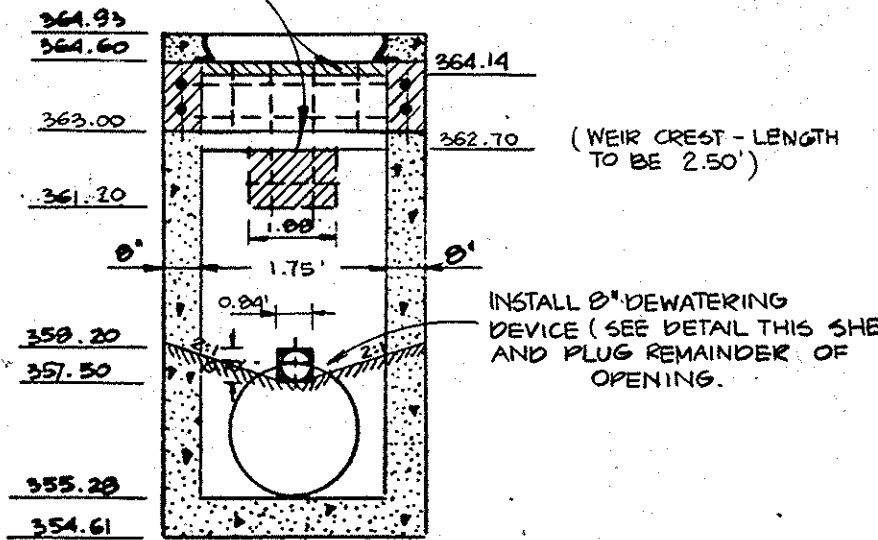
NOT TO SCALE

1. INLET CONSTRUCTION SHALL BE ACCORDING TO HOWARD CO. STD DETAIL 4.11 OR AS OTHER WISE NOTED ON THIS PLAN.
2. TRASH RACKS SHALL BE #6 REBARS @ 6" O.C. OR AS SHOWN ON PLAN.
3. MINIMUM SLAB THICKNESSES TO BE 4" FOR THE TOP SLABS AND 8" FOR THE BOTTOM SLABS.
4. INLET TO BE MADE OF REINFORCED CONCRETE, BRICK, OR CONCRETE BLOCK. ANY JOINTS TO BE FILLED WITH CONCRETE.
5. AFTER SEDIMENT AND EROSION CONTROL PHASE MAKE THE NECESSARY CHANGES TO THE STRUCTURE SO THAT IT CONFORMS TO THE APPROVED STORM WATER MANAGEMENT PLAN.

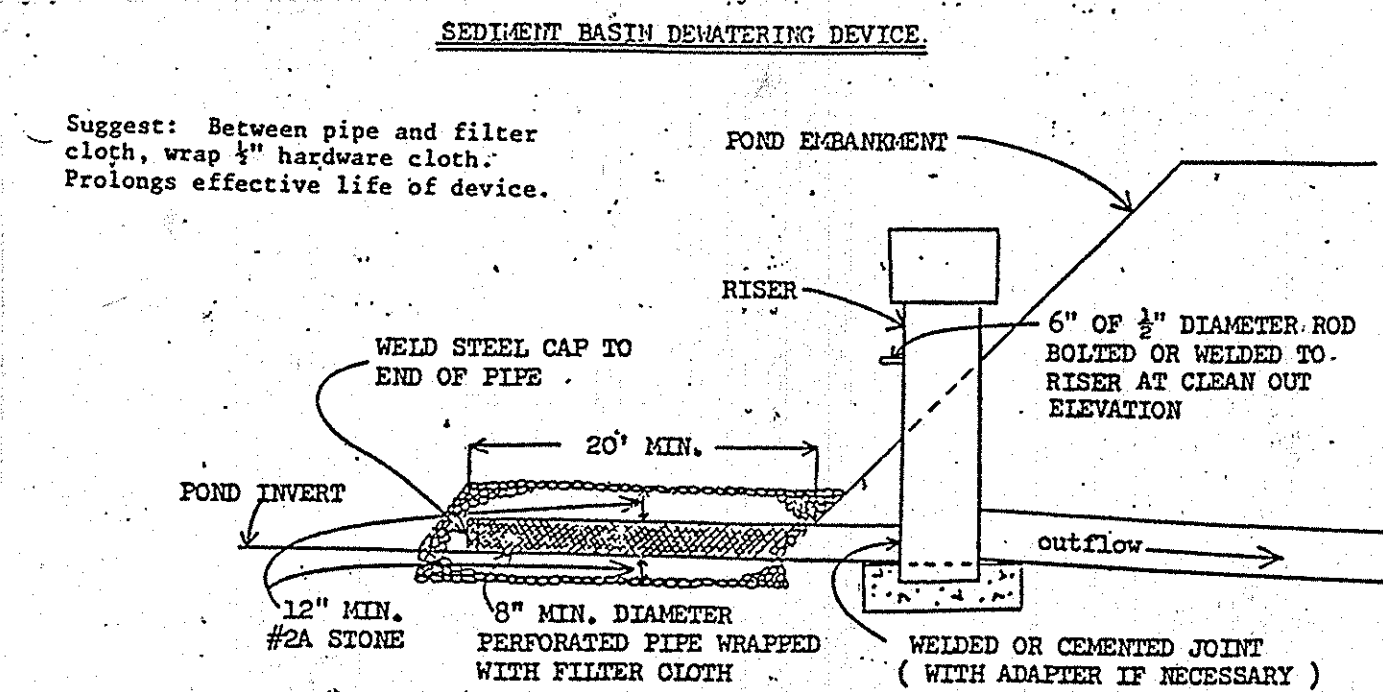


SECTION C-C

BRICK IN UPPER OPENINGS AS SHOWN.



SECTION D-D

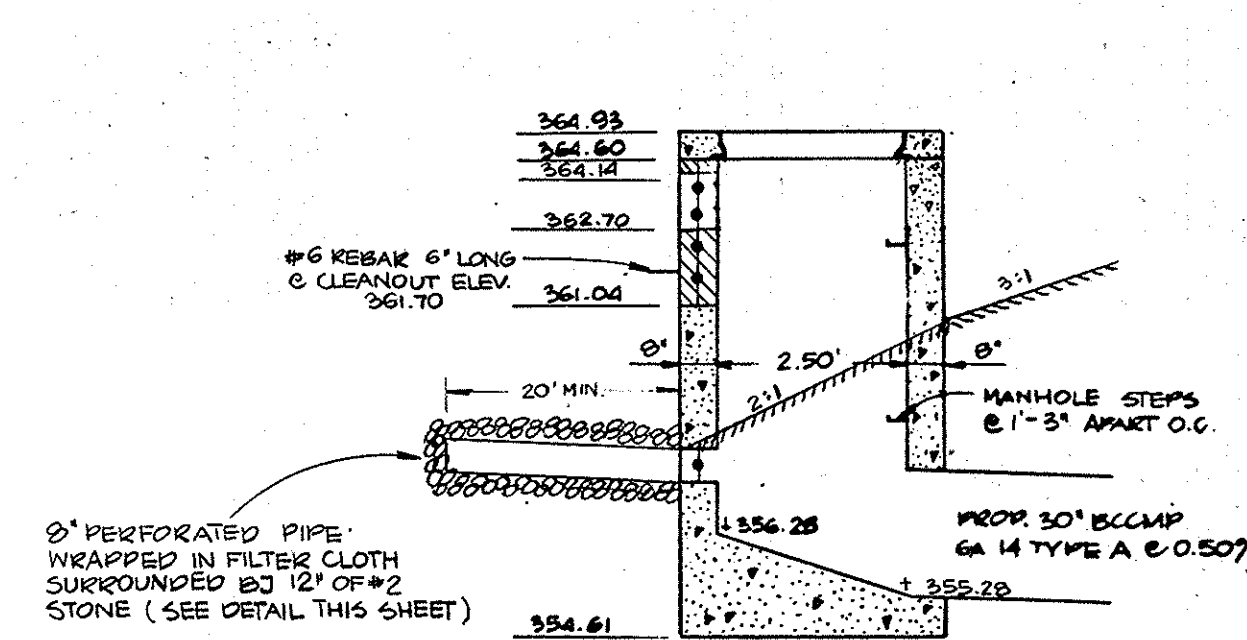


SEDIMENT BASIN DEWATERING DEVICE

Suggest: Between pipe and filter cloth, wrap 1/2" hardware cloth. Prolongs effective life of device.

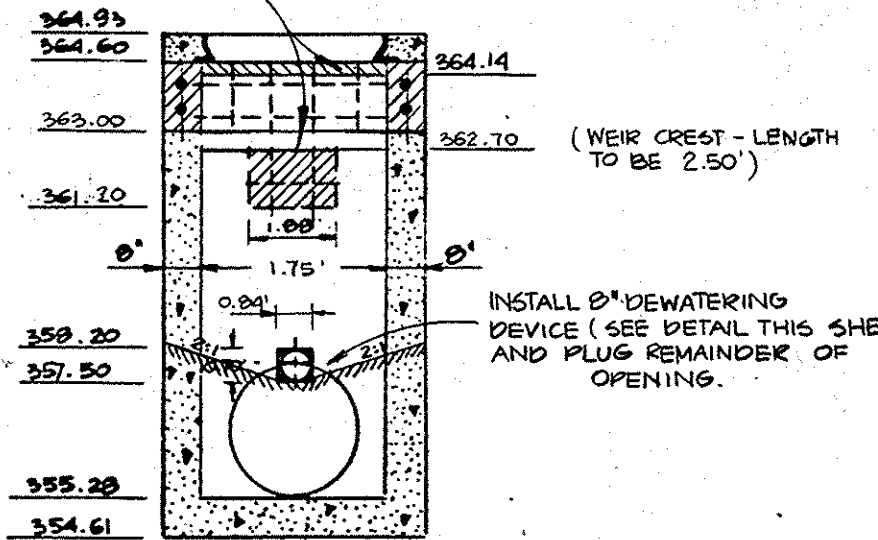
CONSTRUCTION SPECIFICATIONS

1. Dewatering device shall be 8" minimum diameter perforated metal pipe extending a minimum of 20' into basin area.
2. Pipe shall be welded or cemented to riser and have metal cap welded onto other end of pipe.
3. Pipe shall be securely wrapped with approved filter cloth and covered on all sides with 1/2" minimum of No. 24 stone.
4. 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.
5. 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.
6. The structure will be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.



SECTION C-C

BRICK IN UPPER OPENINGS AS SHOWN.



SECTION D-D

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 Mitchell 4-22-88
U.S. Soil Conservation Service Date

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

Approved: *Stephen L. Rubin* 4-23-88
Howard Soil Conservation District Date

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

John P. ... 5-3-88
County Health Officer Date

APPROVED: Howard County Office of Planning & Zoning.
James ... 5/11/88
Director Date

James ... 5/6/88
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.

James ... 5/6/88
Director Date

James ... 4-22-88
Chief Bureau of Engineering Date

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 3-22-88

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.
James ... 8930 1/6/88
ENGINEER TAPORATH CORPORATION REG. NO. DATE

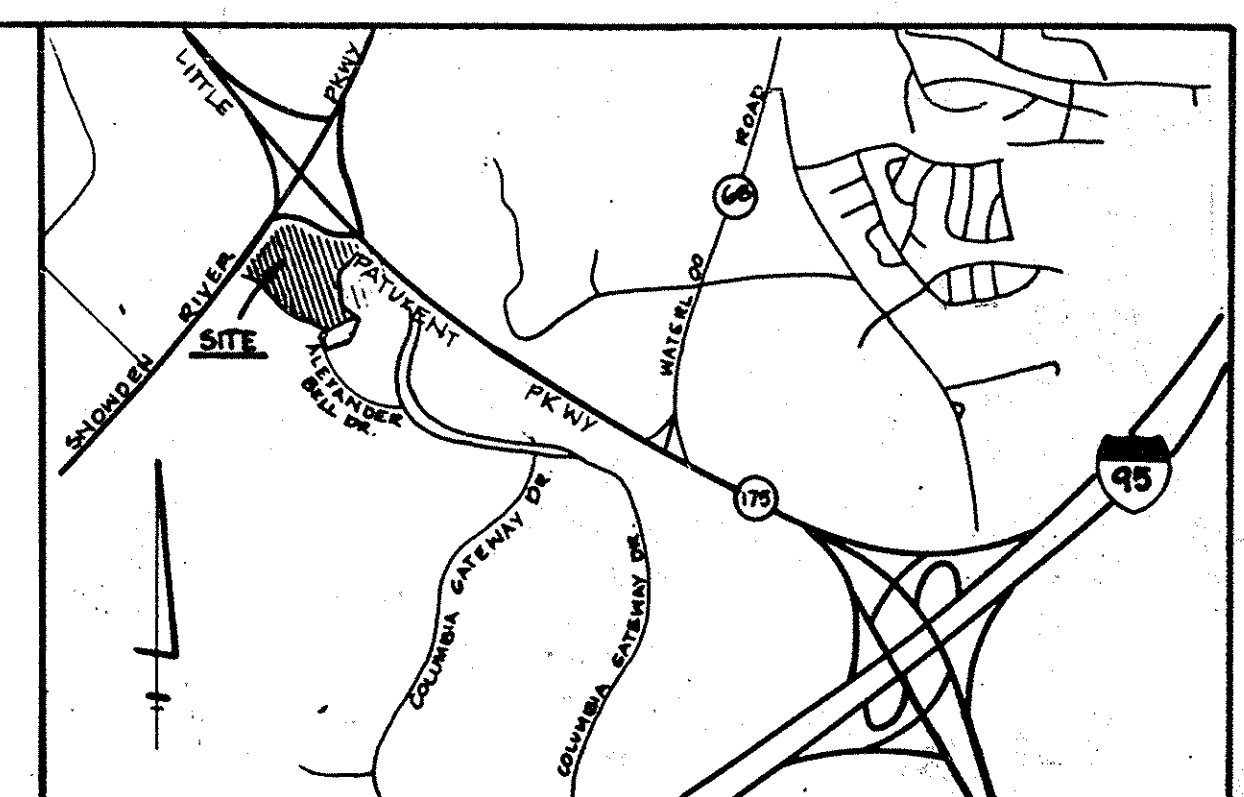
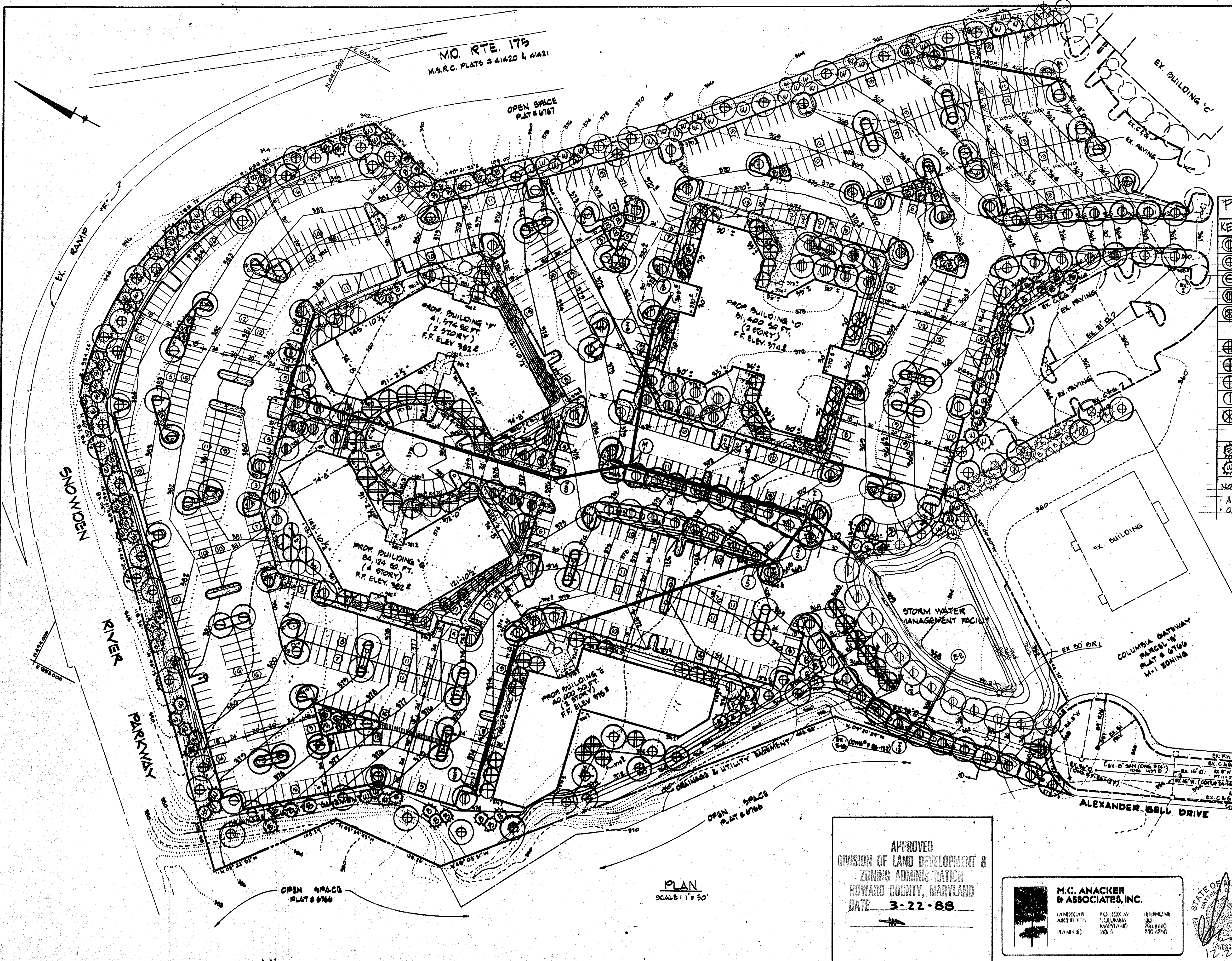
OWNER / DEVELOPER
GATEWAY 44 PARTNERSHIP
C/O MANEKIN CORPORATION
10270 OLD COLUMBIA ROAD
COLUMBIA, MARYLAND
21046
(301) 995-6767

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: *Donald Manekin* DATE: 1/6/88

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

SEDIMENT & EROSION CONTROL PROFILES & DETAILS
PROPOSED OFFICE AND RESEARCH DEVELOPMENT PARK
COLUMBIA GATEWAY
PARCEL 'A' & PART OF PARCEL 'C'
TAX MAP #42 & #43
HOWARD COUNTY, MD.
SCALE AS SHOWN
RN.05806 AS-BUILT

ELECTION DISTRICT #6
DECEMBER 31, 1987
SHEET 3 OF 11
SDP-88-129



| KEY | PLANT NAME | SIZE | QTY | REMARK |
|-----|---|------------------------------|-----|---------------|
| ⊕ | ZELKOVA 'VILLAGE GREEN' | 2 1/2 - 3' CAL 12-14' HT. | 103 | B 4B HEAVY |
| ⊕ | ACER RUBRUM 'RED SUNSET' | | 62 | |
| ⊕ | FRAXILUS PL. 'SUMMIT' | | 53 | |
| ⊕ | SOPHORA JAPONICA 'REGENT' | | 32 | |
| ⊕ | SALIX BABILONICA | | 5 | |
| ⊕ | PRUNUS S. 'KWANZAN' | 2 1/2 - 3' CAL 8-10' HT. | 11 | |
| ⊕ | PRUNUS SUBHIRTELLA 'AUTUMNALIS' | | 25 | |
| ⊕ | CORNUS KOLGA | | 24 | |
| ⊕ | AMELANCHIER CANADENSIS (3-5 STEM CLUMP) | | 14 | |
| ⊕ | CRATAEGUS PHAENOPYRUM | | 20 | |
| ⊕ | PINUS THUNBERGI | 6-8' HT. | 93 | |
| ⊕ | PINUS STROBUS | 6-8' HT. | 93 | |

NOTE
 ALL PLANTING TO BE IN ACCORD WITH HMD COLUMBIA SPECS.
 CALL MISS UTILITY BEFORE PIGGING.

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. Helm 4-22-88
 U.S. Soil Conservation Service Date

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

Approved: *Stephen L. Smith* 4-22-88
 Howard Soil Conservation District Date

Plan Number

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

John Boyer 5-2-81
 County Health Officer Date

APPROVED: Howard County Office of Planning & Zoning.

Joseph R. Butler 5/11/88
 Director Date

Joseph R. Butler 5/14/88
 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.

James M. Helm 5/16/88
 Director Date

William E. Rowe 4-22-88
 Chief Bureau of Engineering Date

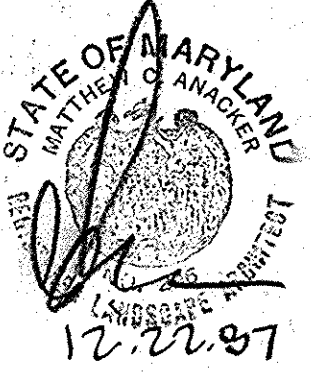
APPROVED
 DIVISION OF LAND DEVELOPMENT &
 ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE 3-22-88

M.C. ANACKER & ASSOCIATES, INC.

LANDSCAPE ARCHITECTS
 PLANNERS

PO BOX 57
 COLUMBIA, MARYLAND 21045

PHONE 410-730-4760



PLAN
 SCALE: 1" = 50'

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: _____ DATE: _____

OWNER / DEVELOPER
GATEWAY 44 PARTNERSHIP
 G10 MANKIN CORPORATION
 10270 OLD COLUMBIA ROAD
 COLUMBIA, MARYLAND 21046
 (301) 999-6767

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DEVELOPER: *Paul* DATE: 1/6/88

DESIGNED BY: _____
 DRAWN BY: _____
 REVISIONS: _____
 4-8-88 APPROVED TREES
 10% SLOPE

LANDSCAPE PLAN
 -FOR-
 PROPOSED OFFICE AND RESEARCH DEVELOPMENT PARK
COLUMBIA GATEWAY
 PARCEL 'A'

HOWARD COUNTY, MD. TAX MAP # 42 & 49
 SCALE AS SHOWN
 PN. 08806

ELECTION DISTRICT #6
 DECEMBER 22, 1987
 SHEET 1007 OF 11
 AS BUILT SDP 88-129

