



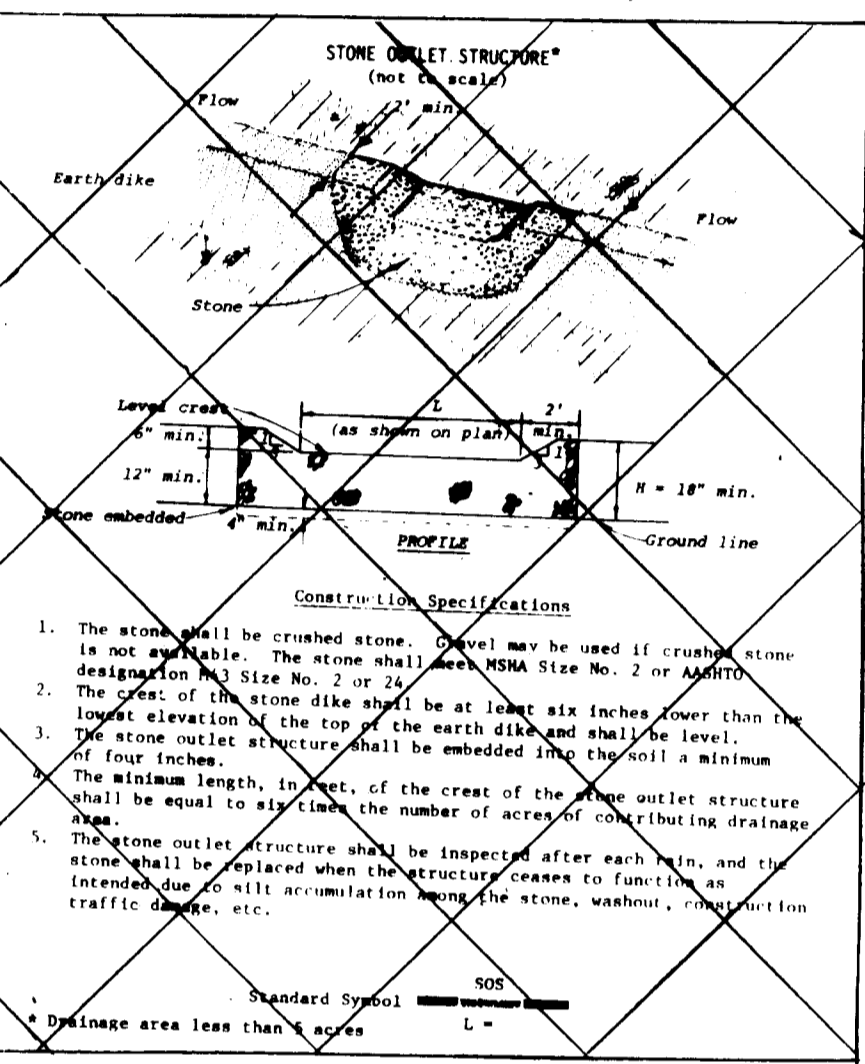


**PERMANENT SEEDING NOTES**

Seed means shall be stabilized as follows:  
 Seeded Preparation: Loosen upper 3 inches of soil by tilling, slicing or other acceptable means before seeding.  
 Soil Amendments: Apply 1 ton per acre dolomitic limestone (92 lbs./1,000 sq. ft.) and 100 lbs. per acre super phosphate (14 lbs./1,000 sq. ft.).  
 Seeding: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 20 lbs. per acre (1.0 lbs./1,000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 40 lbs./1,000 sq. ft. of Kentucky 31 Tall Fescue per acre and 40 lbs./1,000 sq. ft. of creeping lovegrass. During the period of October 16 thru February 28, practice alternate seeding: (1) 1 ton per acre of well anchored stream mulch and seed as shown on plan; (2) 1 ton per acre of urea and Option (3) - seed with 60 lbs./1,000 sq. ft. of Kentucky 31 Tall Fescue and mulch with 1 ton/acre well anchored stream.  
 Mulching: Apply 1/2 to 1 ton per acre (75 to 150 lbs./1,000 sq. ft.) of unweeded small grain straw immediately after seeding. Anchor mulch immediately after application using 200 gallons per acre (15 gal/min./1,000 sq. ft.) of emulsified asphalt on flat areas. On slopes 1 foot or higher, use 300 gallons per acre (15 gal/min./1,000 sq. ft.) for anchoring.  
 Maintenance - Inspect all seeded areas and make needed repairs, replacements, and reseedings.

**TEMPORARY SEEDING NOTES**

Seeded Preparation - Loosen upper 3 inches by tilling, slicing, or other acceptable means.  
 Soil Amendments - Apply 400 lbs. per acre (1.0 lbs./1,000 sq. ft.) of 10-20-20 fertilizer.  
 Seeding - For periods March 1 thru April 30, and from August 15 thru November 15, seed with 20 lbs. per acre (1.0 lbs./1,000 sq. ft.) of annual ryegrass. For the period May 1 thru August 14 seed with 3 lbs./1,000 sq. ft. (0.07 lbs./1,000 sq. ft.) of creeping lovegrass.  
 Mulching - Apply 1/2 to 1 ton per acre (75 to 150 lbs./1,000 sq. ft.) of unweeded small grain straw immediately after seeding. Anchor mulch immediately after application using 200 gallons per acre (15 gal/min./1,000 sq. ft.) of emulsified asphalt on flat areas. On slopes 1 foot or higher, use 300 gallons per acre (15 gal/min./1,000 sq. ft.) for anchoring.



**GENERAL NOTES**

1. Refer to U.S.D.A. Soil Conservation Service "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas" for standard details and detailed specifications of each practice specified hereon.
2. With the approval of the sediment control inspector, minor field adjustments can and will be made to insure the control of any sediment. Changes in sediment control practices require prior approval of the sediment control inspector and the Howard County Soil Conservation District.
3. At the end of each working day, all sediment control practices will be inspected and left in operational condition.
5. Any change to the grading proposed on this plan requires re-submission to Howard Co. Soil Conservation Dist. for approval.
6. Dust control will be provided for all disturbed areas. Refer to U.S.D.A. Soil Conservation Service "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas", pp. G2.01 and G2.02 for acceptable methods and specifications for dust control.
7. Any variation from the sequence of operations stated on this plan requires the approval of the sediment control inspector and the Howard County Soil Conservation District prior to the initiation of the change.

**CERTIFICATION BY THE DEVELOPER**

"I/we certify that all development and construction will be done according to this plan of Development and Plan for Erosion and Sediment Control and that all responsible personnel involved in the construction project will have a certificate of attendance at a Department of Natural Resources approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic on site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."  
*Samuel J. Ryan* 1/25/84 Date

**CERTIFICATION BY THE ENGINEER**

"I certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."  
*Kenneth A. McCord* 1/25/84 Date

STATE OF MARYLAND  
 PROFESSIONAL ENGINEER & LAND SURVEYOR  
 1974

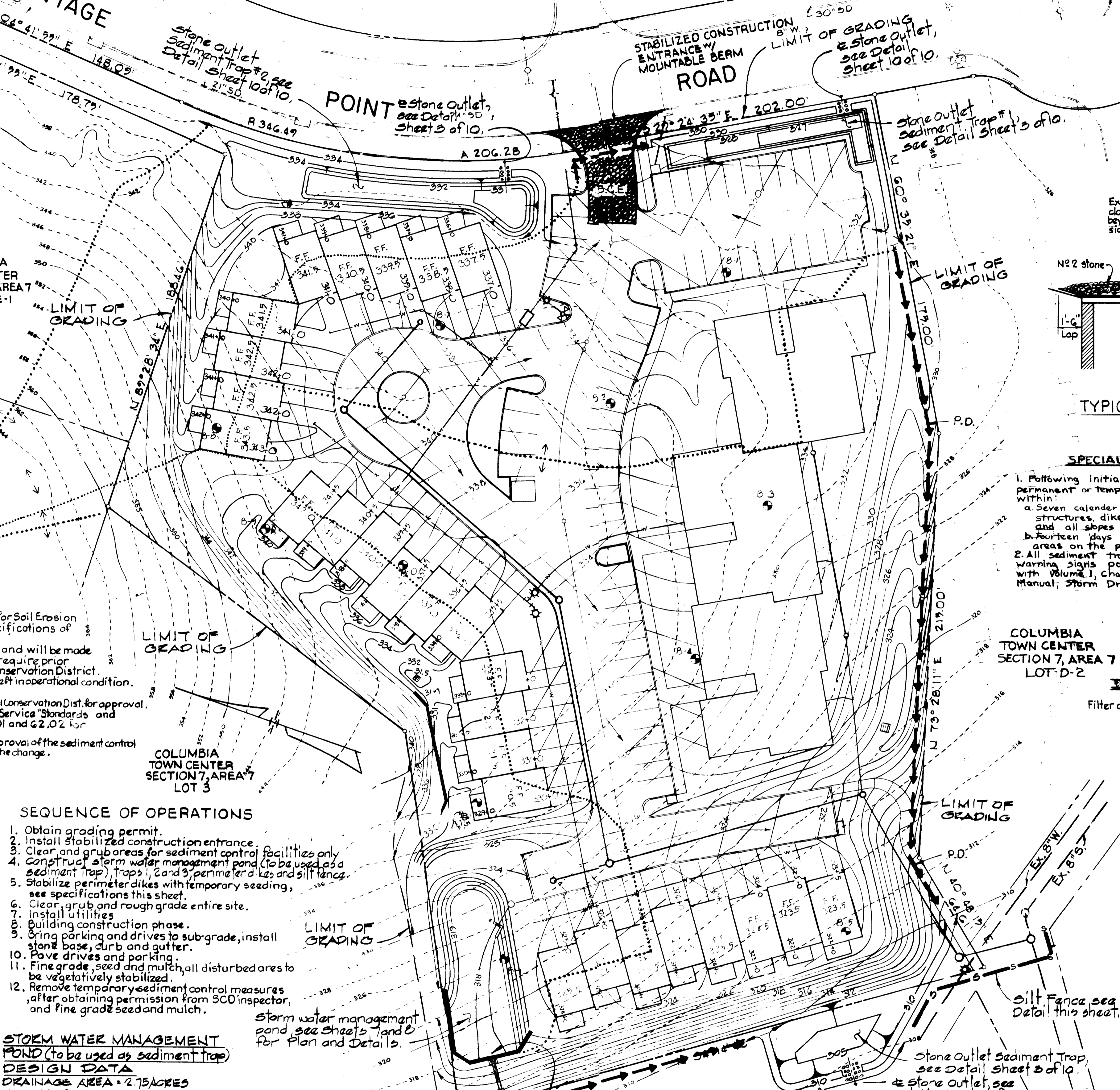
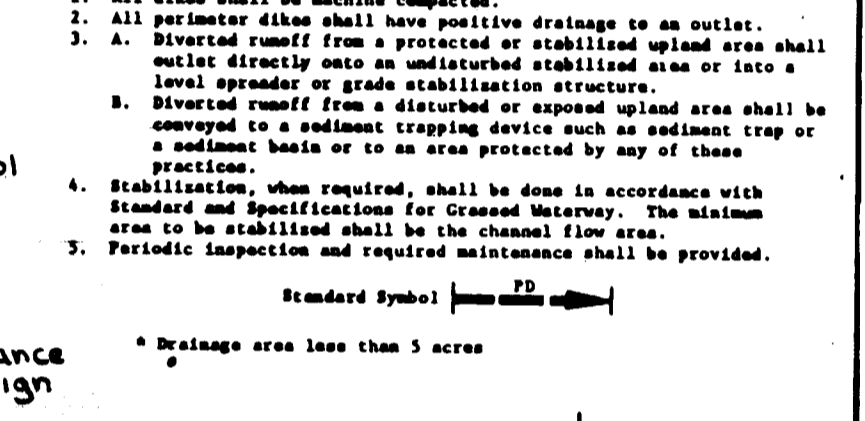
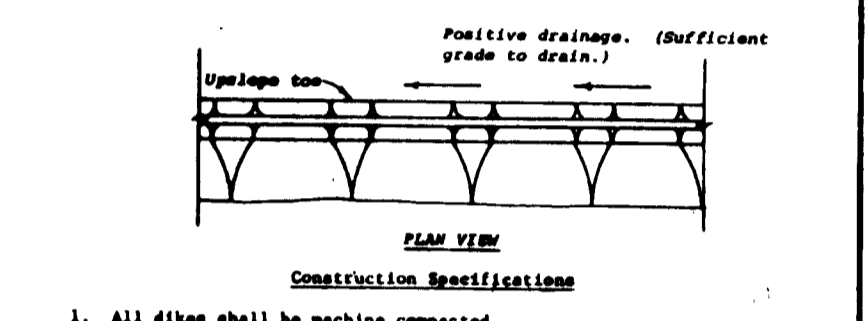
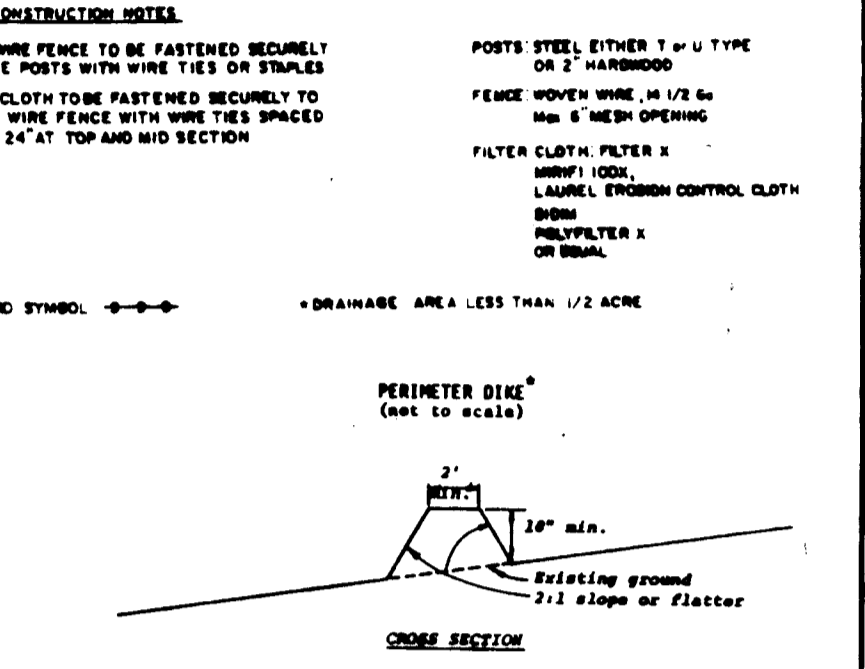
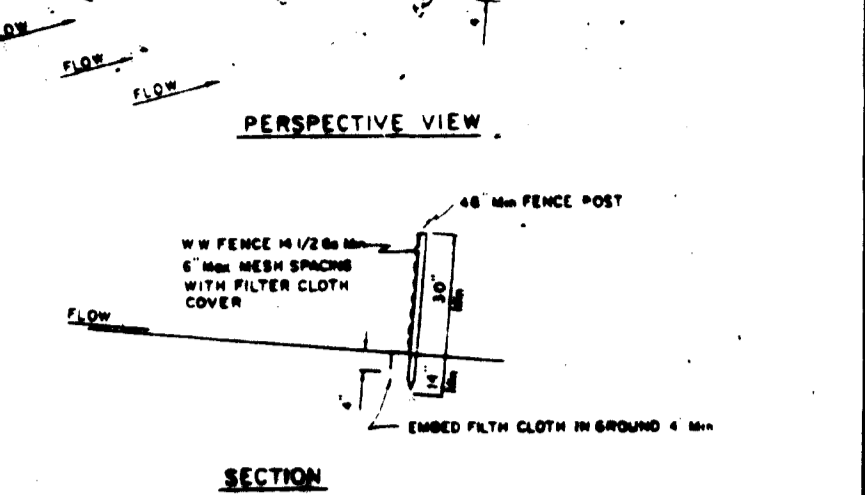
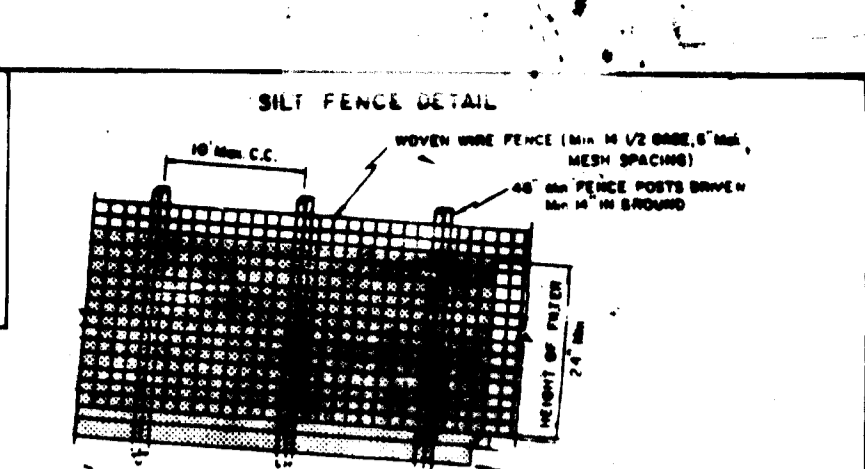
WHITMAN, REQUARDT AND ASSOCIATES  
 ENGINEERS  
 2315 SAINT PAUL STREET  
 BALTIMORE, MARYLAND 21218

7/25/84 DATE  
*Kenneth A. McCord*  
 KENNETH A. MCCORD, PE. & ELS. #1974

**SEDIMENT TRAP #2  
 DESIGN DATA**  
 DRAINAGE AREA = 1.5 ACRES  
 VOLUME REQUIRED = 17,071.81 CY  
 VOLUME AVAILABLE = 85 CY  
 TOP BERM ELEV. = 331.0  
 DESIGN CAPACITY ELEV. = 335.0  
 BOTTOM TRAP ELEV. = 331.0  
 STONE OUTLET WIDTH = 6'

**SEDIMENT TRAP #1  
 DESIGN DATA**  
 DRAINAGE AREA = 0.8 ACRES  
 VOLUME REQUIRED = 0.6 x 67 = 59.9 CY  
 VOLUME AVAILABLE = 55 CY  
 TOP BERM ELEV. = 330.0  
 DESIGN CAPACITY ELEV. = 329.0  
 BOTTOM TRAP ELEV. = 327.0  
 STONE OUTLET WIDTH = 5'

VANTAGE POINT TOWN CENTER LIMITED PARTNERSHIP II  
 CO. GENERAL AMERICAN REAL ESTATE  
 OWNER  
 9050 RED BRANCH ROAD  
 COLUMBIA, MARYLAND 21044



**SEQUENCE OF OPERATIONS**

1. Obtain grading permit.
2. Install stabilized construction entrance.
3. Clear and grub areas for sediment control facilities only.
4. Construct storm water management ponds to be used as a sediment trap, traps 1, 2 and 3, perimeter dikes and silt fence.
5. Stabilize perimeter dikes with temporary seeding, see specifications this sheet.
6. Clear, grub and rough grade entire site.
7. Install utilities.
8. Building construction phase.
9. Bring parking and drives to subgrade, install stone base, curb and gutter.
10. Pave drives and parking.
11. Fine grade, seed and mulch all disturbed areas to be vegetatively stabilized.
12. Remove temporary sediment control measures after obtaining permission from SCD inspector, and fine grade seed and mulch.

**STORM WATER MANAGEMENT POND (to be used as sediment trap)**  
**DESIGN DATA**  
 DRAINAGE AREA = 2.75 ACRES  
 VOLUME REQUIRED = 2,75 x 67 = 184.375 CY  
 VOLUME AVAILABLE = 185 CY  
 TOP WALL ELEV. = 322.5  
 DESIGN CAPACITY ELEV. = 320.2  
 BOTTOM ELEV. (INLET) = 317.0  
 CLEANOUT ELEV. = 319.1

**SITE ANALYSIS**  
 Impervious Area = 1.8 acres  
 Area to be Vegetated = 3.6 acres  
 Undisturbed Area = 0.3 acres

**SEDIMENT TRAP #3  
 DESIGN DATA**  
 DRAINAGE AREA = 1.0 ACRES  
 VOLUME REQUIRED = 1.0 x 67 = 67.0 CY  
 VOLUME AVAILABLE = 100 CY  
 TOP BERM ELEV. = 310.0  
 DESIGN CAPACITY ELEV. = 309.0  
 BOTTOM TRAP ELEV. = 305.0  
 STONE OUTLET WIDTH = 8'

**APPROVED**  
 PLANNING BOARD  
 OF HOWARD COUNTY  
 DATE 9-5-84

**PLAN AND DETAILS  
 SEDIMENT CONTROL PLAN**

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAIN SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
 DIRECTOR: *[Signature]* DATE: 11-16-84

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
 COUNTY HEALTH OFFICER: *[Signature]* DATE: 11-16-84

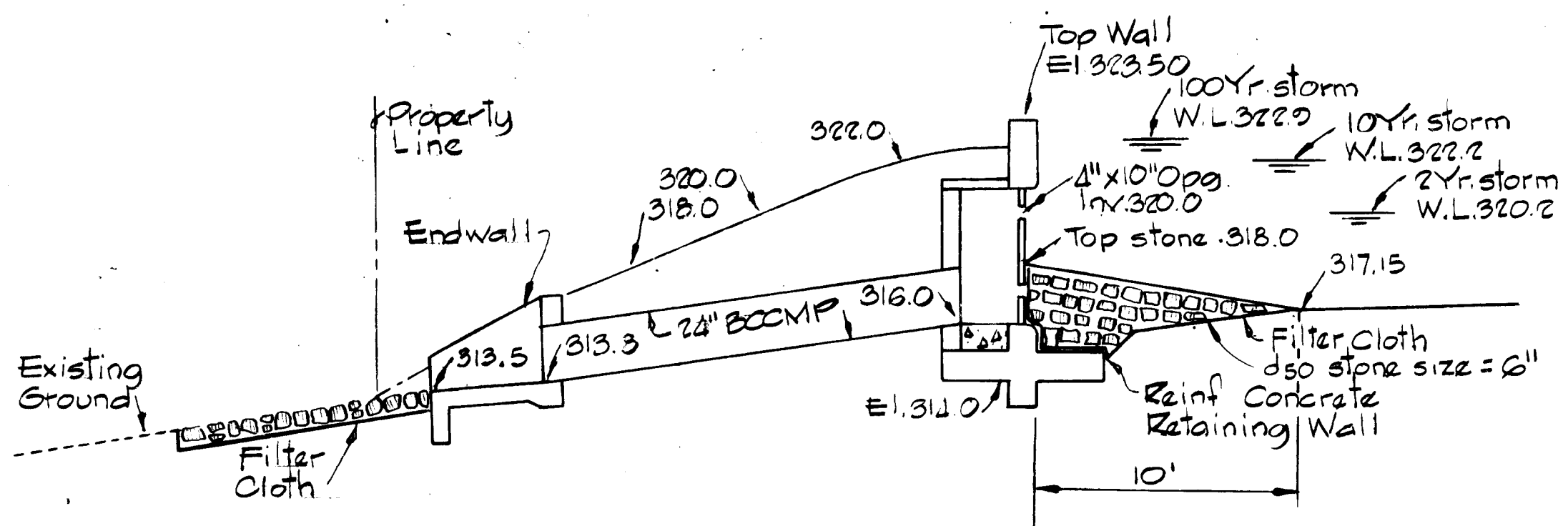
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.  
 PLANNING DIRECTOR: *[Signature]* DATE: 11-16-84  
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION: *[Signature]* DATE: 11-16-84

Reviewed for Howard S.C.D. and meets Technical Requirements  
*[Signature]* 11-8-84 Date  
 U.S. Soil Conservation Service

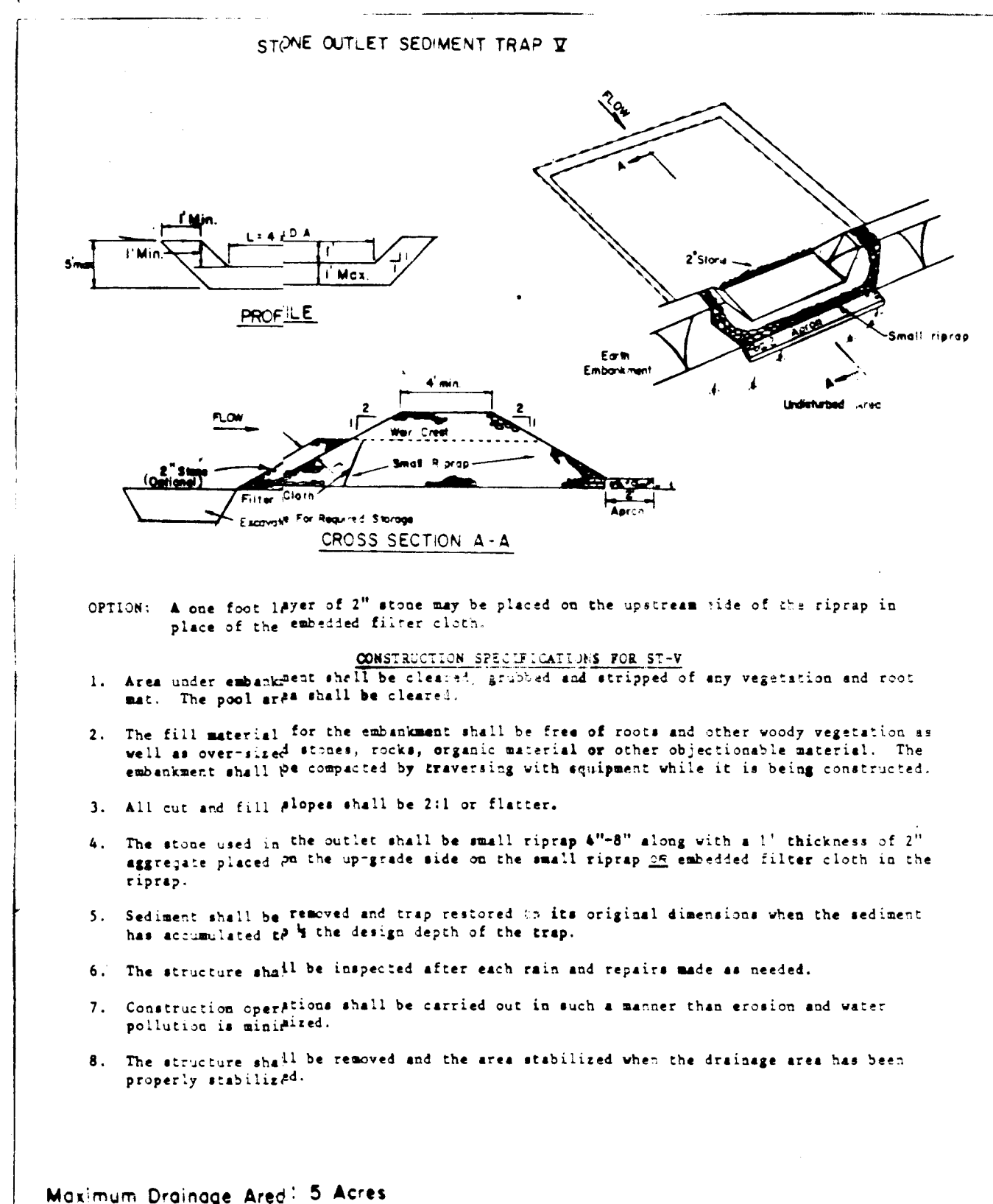
This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.  
 Approved: *[Signature]* 11-8-84  
 Howard S.C.D. District

**COLUMBIA**  
 Town Center - Section 7, Area Parcel D-3  
 Election District No. 5  
 Plat Book 29-Folio 48  
 Scale: As Noted  
 DATE MAY 29, 1984  
 SHEET 2 OF 11





**PRINCIPAL SPILLWAY INLET  
SEDIMENT CONTROL**  
No Scale



**STONE OUTLET SEDIMENT TRAP**  
No Scale

- OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth.
- CONSTRUCTION SPECIFICATIONS FOR ST-W**
1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
  2. The fill material for the embankment shall be free of roots and other woody vegetation as well as oversized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
  3. All cut and fill slopes shall be 2:1 or flatter.
  4. The stone used in the outlet shall be small riprap 4"-8" along with a 1" thickness of 2" aggregate placed on the upgrade side on the small riprap on embedded filter cloth in the riprap.
  5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap.
  6. The structure shall 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.
  8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

Maximum Drainage Area: 5 Acres

**CERTIFICATION BY THE DEVELOPER**

"I/we certify that all development and construction will be done according to this plan of Development and plan for Erosion and Sediment Control and that all responsible persons involved in the construction project will have a certificate of attendance at a Department of Natural Resources approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic on site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."

*Donald J. Ryan*  
Date

01/24/84  
Date

**CERTIFICATION BY THE ENGINEER**

"I certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

*Kenneth A. McCord*  
Kenneth A. McCord  
Date

01/29/84  
Date

**APPROVED**  
PLANNING BOARD  
OF HOWARD COUNTY  
DATE 9-15-84

*M. J. Ryan*

Reviewed for Howard S.C.D. and meets Technical Requirements  
*James M. John* 11-8-84  
U.S. Soil Conservation Service Date

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.  
Approved *Robert Zick* 11-8-84  
Howard S.C.D. District

VANTAGE POINT TOWN CENTER LIMITED PARTNERSHIP II  
co. GENERAL AMERICAN REAL ESTATE  
OWNER  
9050 RED BRANCH ROAD  
COLUMBIA, MARYLAND 21044

**COLUMBIA**  
Town Center - Section 7, Area 7, Parcel D-3  
Election District No 5 Tax Map No 30  
Plat Book 29-Folio 48 Howard County  
Scale: As Noted

0-21-84 This Sheet Added  
7-23-84 Revised as per Howard Co. Zoning comments  
DATE REVISIONS

WHITMAN, REINHART AND ASSOCIATES  
2310 SAINT PAUL STREET  
BALTIMORE, MARYLAND 21218

0-24-84  
DATE  
*Kenneth A. McCord*  
KENNETH A. MCCORD & ASSOCIATES

APPROVED: *James M. John* 11-16-84  
U.S. SOIL CONSERVATION SERVICE

APPROVED: *Robert Zick* 11-16-84  
HOWARD SOIL CONSERVATION DISTRICT

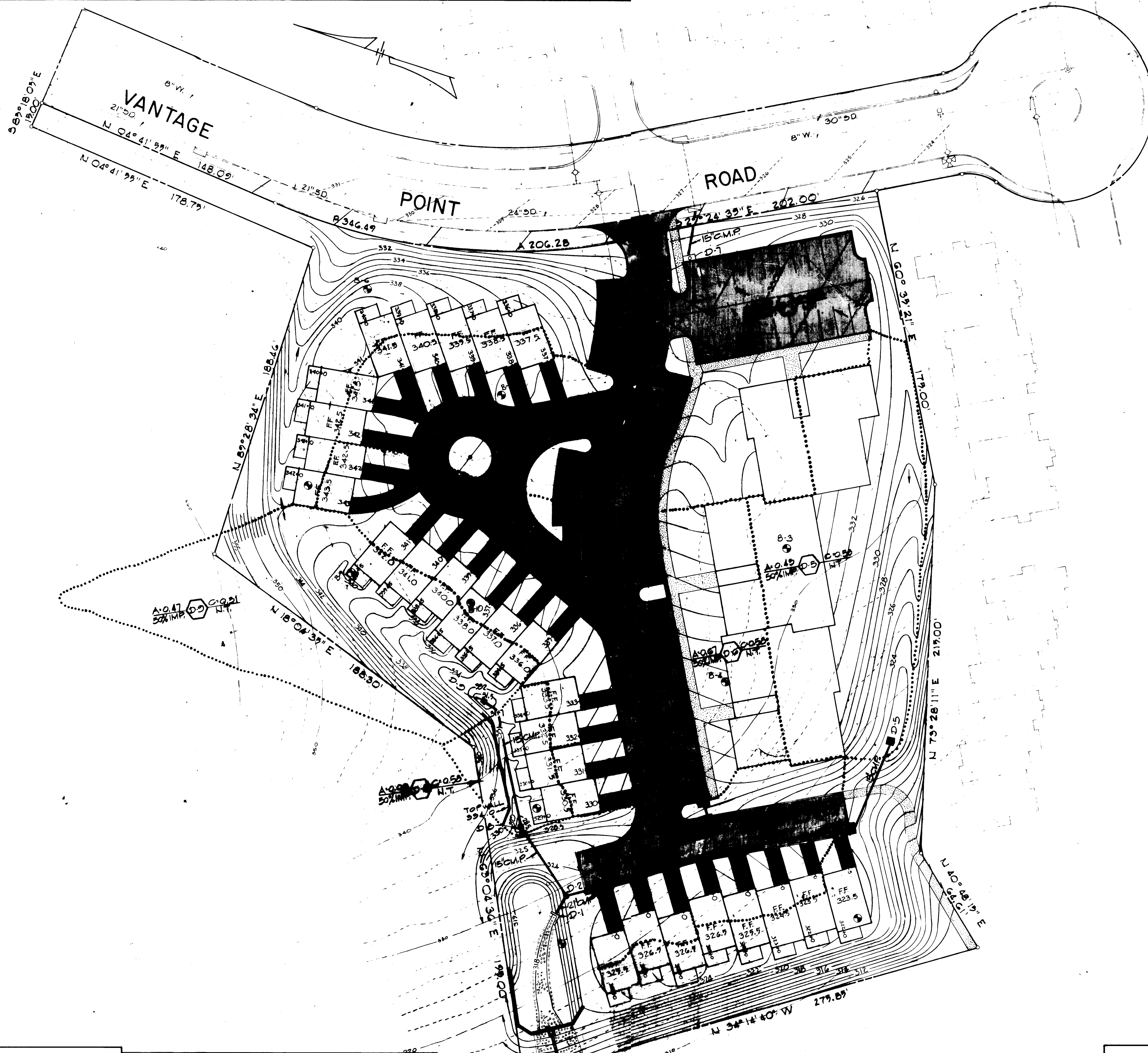
APPROVED: *James M. John* 11-19-84  
U.S. SOIL CONSERVATION SERVICE

**DETAILS  
SEDIMENT CONTROL PLAN**

MAY 29, 1984

3 of 11

SDP-84-290c



APPROVED  
 PLANNING BOARD  
 OF HOWARD COUNTY  
 DATE 9-5-84  
*[Signature]*

8-30-84 Revised as per Howard Co. Zoning comments  
 7-25-84 Revised as per Howard Co. Zoning comments  
 DATE - REVISIONS -  
 WHITMAN, REQUARDT AND ASSOCIATES  
 ENGINEERS  
 2315 SAINT PAUL STREET, BALTIMORE, MARYLAND 21218  
 7/15/84 *[Signature]*  
 DATE KENNETH A. MCCORD, PE. & ELS. #1974

VANTAGE POINT TOWN CENTER LIMITED PARTNERSHIP #1  
 CO. GENERAL AMERICAN REAL ESTATE  
 OWNER  
 9050 RED BRANCH ROAD  
 COLUMBIA, MARYLAND 21044

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAIN  
 SYSTEMS AND ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
 DIRECTOR *[Signature]* DATE *[Signature]*  
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT  
 COUNTY HEALTH OFFICER *[Signature]* DATE *[Signature]*

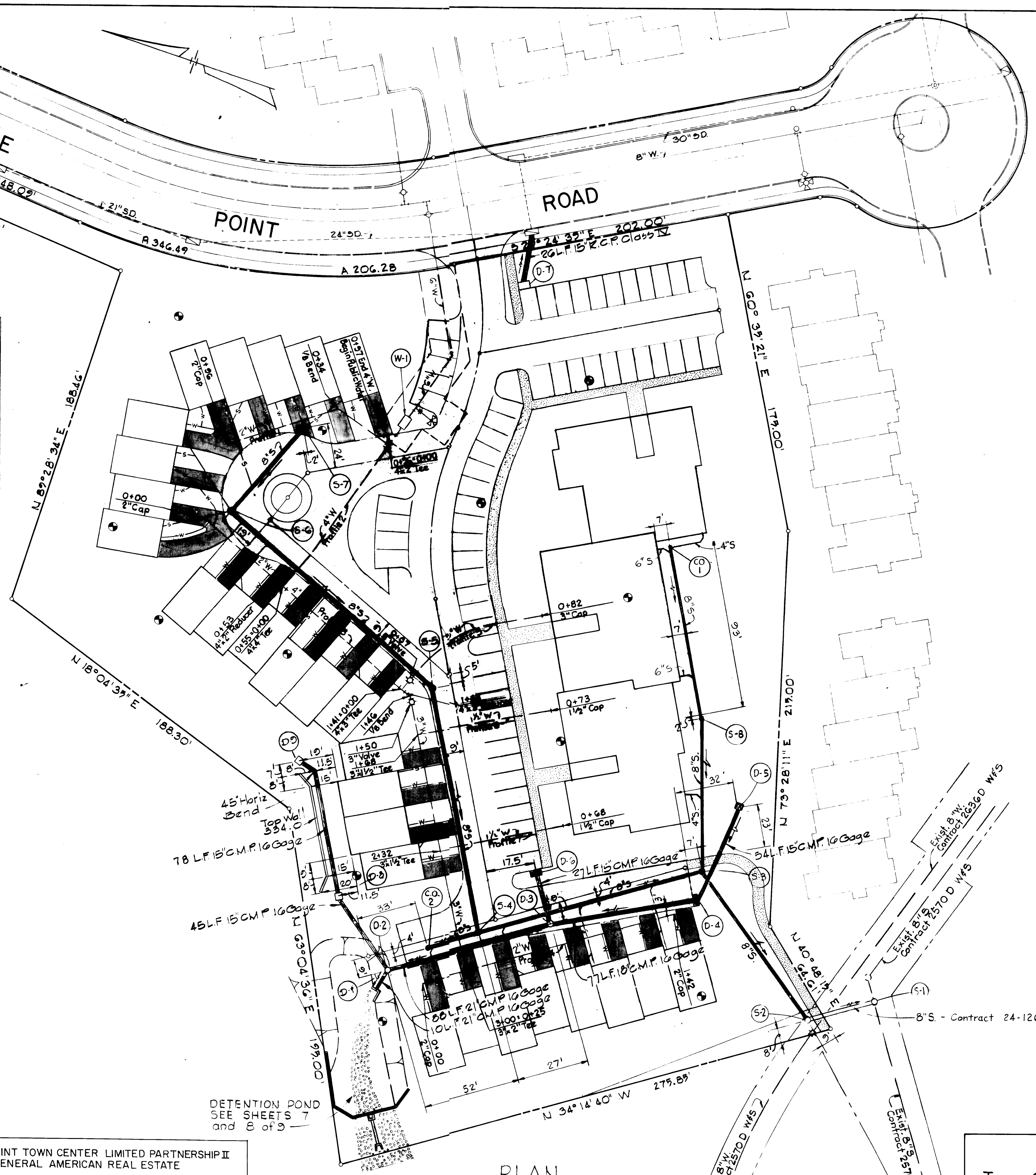
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
 PLANNING DIRECTOR *[Signature]* DATE *[Signature]*  
 DIVISION OF LAND DEVELOPMENT AND ZONING  
 ADMINISTRATOR *[Signature]* DATE *[Signature]*

**DRAINAGE AREA MAP &  
 GRADING PLAN**

COLUMBIA  
 Town Center - Section 7, Area 7, Parcel D-3  
 Election District No. 9 Tax Map No. 30  
 Plat Book 29 - Folio 48 Howard County  
 Scale: 1"=30'  
 DATE: MAY 29, 1984 SHEET 4 OF 11



STRUCTURE SCHEDULE					
NO.	TYPE	TOP EL.	INV. IN	INV. OUT	LOCATION
<b>STORM DRAINS</b>					
D-2	Shallow Precast Manhole G 5.12	323.50	317.35	317.35	See Plan
D-3	Std. Precast Manhole G 5.12	324.60	317.92	317.67	See Plan
D-4	A-5 Inlet	S.D. 4.01	318.46	318.21	See Plan
D-5	Yard Inlet	S.D. 4.14	322.31	318.66	See Plan
D-6	A-5 Inlet	S.D. 4.01	326.60	323.16	See Plan
D-7	A-5 Inlet	S.D. 4.01	328.50	325.00	See Plan
D-1	Type "E" Endwall	S.D. 5.31	317.34	317.34	See Plan
D-8	Yard Inlet	S.D. 4.14	328.00	322.05	See Plan
D-9	Yard Inlet	S.D. 4.14	331.20	327.54	See Plan
<b>SANITARY SEWERS</b>					
S-3	Std. Precast Manhole G 5.12	322.25	319.00	312.78	See Plan
S-4	Std. Precast Manhole G 5.12	325.30	316.37	314.34	See Plan
S-5	Std. Precast Manhole G 5.12	333.70	327.46	327.22	See Plan
S-6	Std. Precast Manhole G 5.12	341.20	332.25	332.13	See Plan
S-7	Std. Precast Manhole G 5.12	338.50	---	332.85	See Plan
S-8	Shallow Precast Manhole G 5.12	330.00	325.00	325.00	See Plan
C.O.1	Std. S 2.22	323.80	---	328.99	See Plan
C.O.2	Std. S 2.22	323.90	---	316.63	See Plan
<b>WATER MAINS</b>					
W-1	4" Meter Vault	W 3.36	---	---	---



4-10-85 Rev. as per Health Dept. Comments  
 4-1-85 Rev. D-2, D-5, C.O.1, 223, Stationed Water Mains, Relocated Portions of Parking & Mid-rise building.  
 8-30-84 Revised as per Howard Co. Zoning comments.  
 7-25-84 Revised as per Howard Co. Zoning comments.

DATE: 7/25/84

REVISIONS -  
 WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS  
 2315 SAINT PAUL STREET, BALTIMORE, MARYLAND 21218

Kenneth A. McCord  
 KENNETH A. MCCORD P.E. & ELS #1974

VANTAGE POINT TOWN CENTER LIMITED PARTNERSHIP II  
 co GENERAL AMERICAN REAL ESTATE  
 OWNER  
 9050 RED BRANCH ROAD  
 COLUMBIA, MARYLAND 21044

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAIN SYSTEMS BY HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 DIRECTOR: [Signature]  
 DATE: 11-17-84

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS BY HOWARD COUNTY HEALTH DEPARTMENT.  
 HEALTH OFFICER: [Signature]  
 DATE: 11-23-84

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING.  
 PLANNING DIRECTOR: [Signature]  
 DATE: 11-23-84  
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED  
 PLANNING BOARD  
 OF HOWARD COUNTY  
 DATE: 9-5-84  
 [Signature]

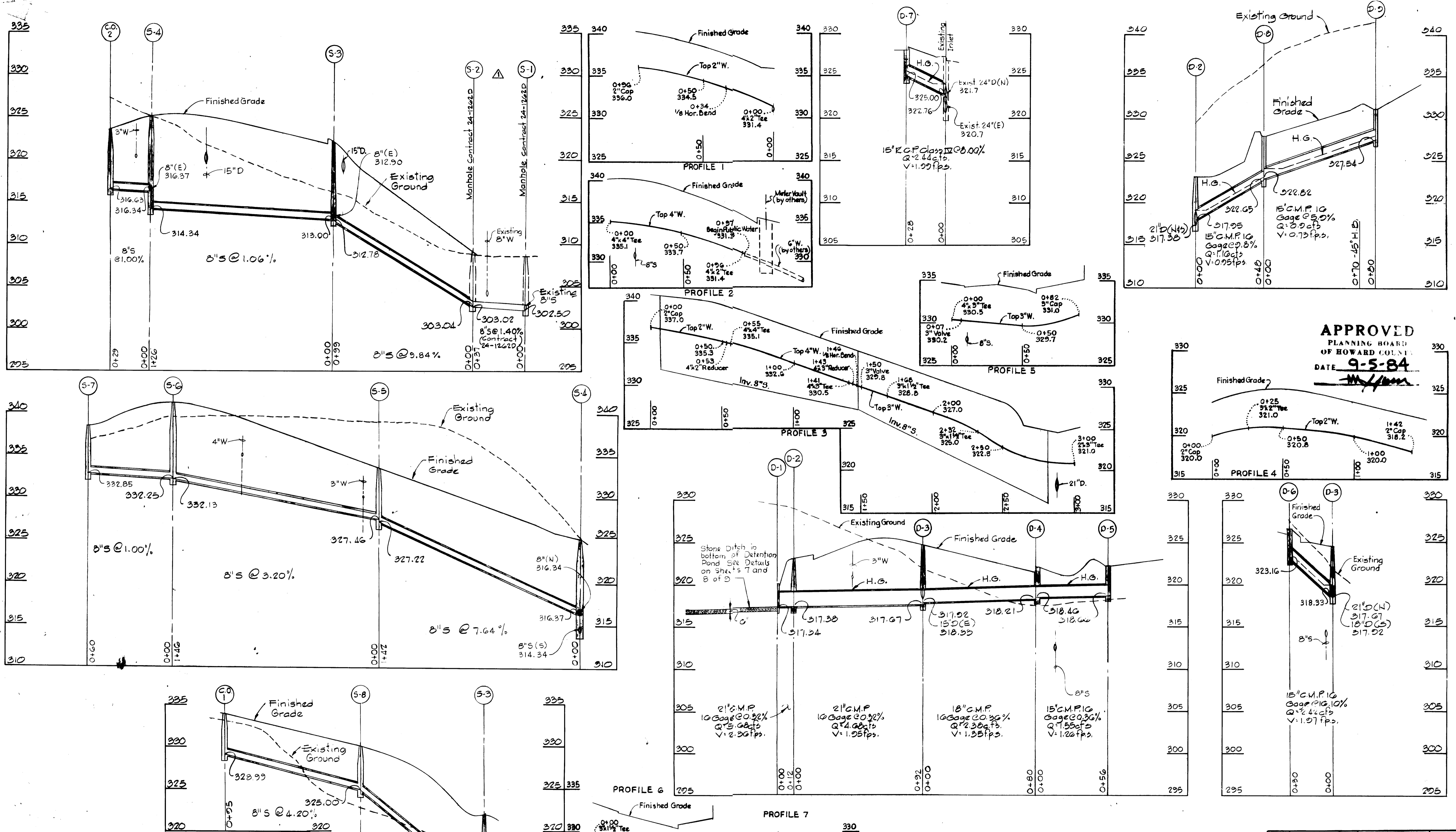
COLUMBIA  
 Town Center - Section 7, Area 7, Parcel D-3  
 Election District No. 5  
 Plat Book 29-Folio 4B  
 Scale: 1"=30'  
 DATE: MAY 23, 1984

Tax Map No. 30  
 Howard County

SHEET 5 OF 11

UTILITY PLAN

SDP-84-290.



**APPROVED**  
 PLANNING BOARD  
 OF HOWARD COUNTY  
 DATE 9-5-84

DATE	REVISIONS
4-10-85	Rev. as per Health Dept. Comments
4-1-85	Rev. 15' D between 3+34.5 & 4; Rev. C.O. 1, 2 & 3; Profile lengths at D-9; added water main profiles 1 thru 7
8-30-84	Revised as per Howard Co. Zoning comments.
7-25-84	Revised as per Howard Co. Zoning comments.

WHITMAN, REQUARDT AND ASSOCIATES  
 ENGINEERS  
 2315 SAINT PAUL STREET, BALTIMORE, MARYLAND, 21218

7/25/84  
 Kenneth A. McCord  
 KENNETH A. MCCORD, P.E. & ELS. 1974

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAIN SYSTEMS AND SANITATION  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 DIRECTOR: [Signature]  
 DATE: 11-16-84

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT  
 DIRECTOR: [Signature]  
 DATE: 11-16-84

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
 PLANNING DIRECTOR: [Signature]  
 DATE: 11-17-84

VANTAGE POINT TOWN CENTER LIMITED PARTNERSHIP II  
 co. GENERAL AMERICAN REAL ESTATE  
 OWNER  
 9050 RED BRANCH ROAD  
 COLUMBIA, MARYLAND 21044

**UTILITY PROFILES**

**COLUMBIA**  
 Town Center - Section 7, Area 7, Parcel D-3  
 Election District No. 9 Tax Map No. 30  
 Plat Book 29-Folio 4B Howard County

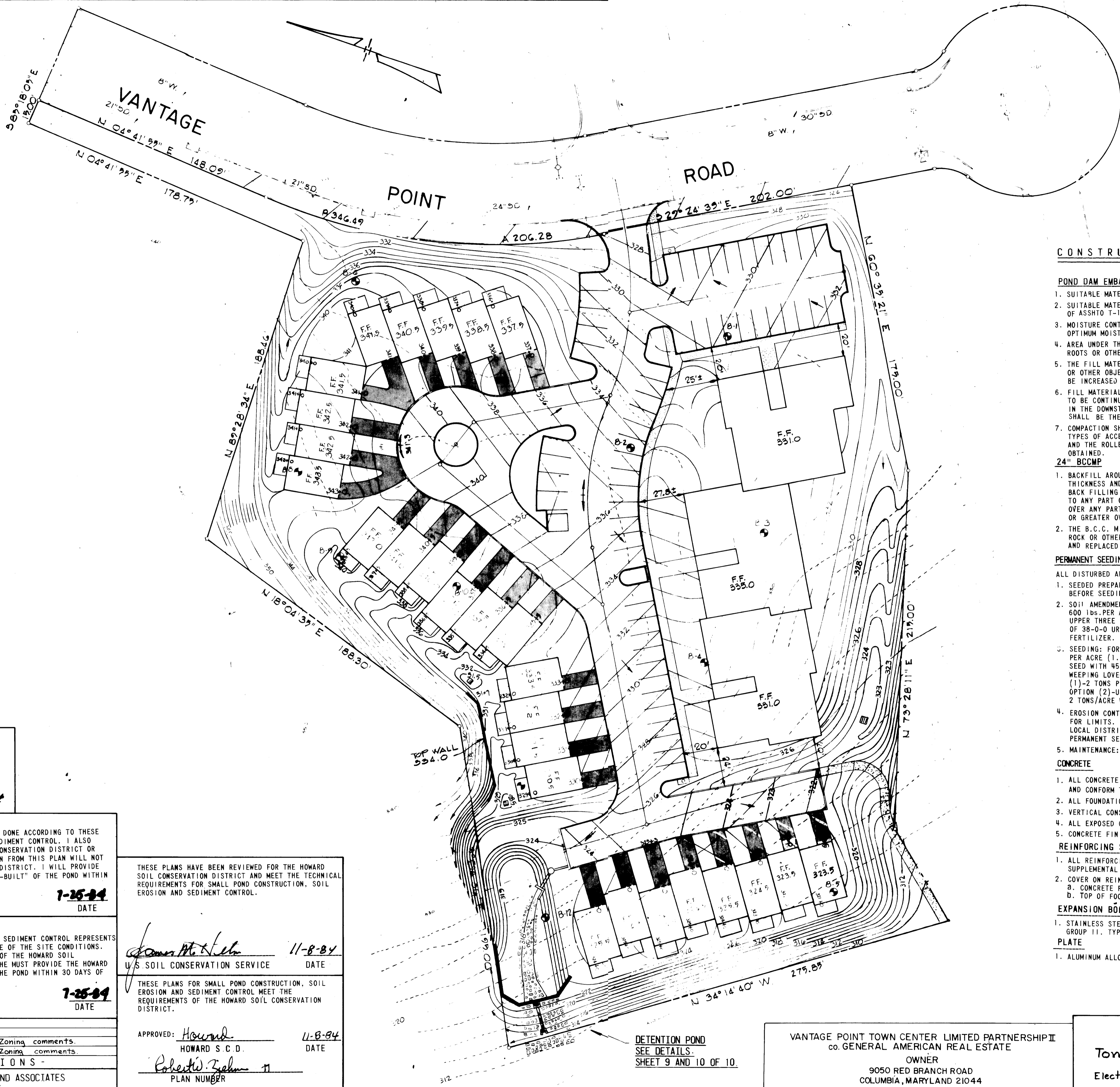
Scale: Hor. 1" = 30'  
 Ver. 1" = 5'

DATE: MAY 23, 1984

SHEET 6 OF 11  
 SDP-84-290.







**APPROVED**  
**PLANNING BOARD**  
**OF HOWARD COUNTY**  
 DATE 9-5-84  
*M. H. [Signature]*

**CONSTRUCTION SPECIFICATIONS**

- POND DAM EMBANKMENT**
- SUITABLE MATERIAL FROM THE POND EXCAVATION MAY BE USED FOR THE EMBANKMENT.
  - SUITABLE MATERIAL SHALL BE PLACED IN 8" LOOSE LAYERS AND COMPACTED TO 90% OF ASSHTO T-180.
  - MOISTURE CONTENT OF THE SUITABLE MATERIAL SHALL BE WITHIN THE RANGE OF 3% BELOW OPTIMUM MOISTURE TO 3" ABOVE OPTIMUM MOISTURE.
  - AREA UNDER THE EMBANKMENT SHALL BE CLEARED AND GRUBBED TO REMOVE ALL TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL AND TOPSOIL STRIPPED.
  - THE FILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS, WOOD, RUBBISH, OVERSIZE STONES, FROZEN EARTH OR OTHER OBJECTIONABLE MATERIALS. THE FILL HEIGHT ALL ALONG THE LENGTH OF THE EMBANKMENT SHALL BE INCREASED BY 10%.
  - FILL MATERIALS SHALL BE PLACED IN 8" MAXIMUM THICKNESS (BEFORE COMPACTION) LAYERS WHICH ARE TO BE CONTINUOUS OVER THE ENTIRE LENGTH OF THE FILL. THE MOST POROUS MATERIAL SHALL BE PLACED IN THE DOWNSTREAM PORTIONS OF THE EMBANKMENT. BACKFILL FOR THE CUTOFF TRENCH SHALL BE THE MOST IMPERVIOUS MATERIAL AVAILABLE.
  - COMPACTION SHALL BE BY MULTIPLE WHEEL PNEUMATION TIERED ROLLER, VIBRATORY ROLLER OR OTHER TYPES OF ACCEPTABLE ROLLERS. ROLLING OF EACH LAYER SHALL BE CONTINUOUS OVER ITS ENTIRE AREA AND THE ROLLER SHALL MAKE SUFFICIENT COVERAGES TO INSURE THAT THE REQUIRED DENSITY HAS BEEN OBTAINED.

- 24" BCCMP**
- BACKFILL AROUND B.C.C.M.P. PIPE SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED 4 INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR OTHER COMPACTION EQUIPMENT. AT NO TIME DURING THE BACK FILLING OPERATION, SHALL CONSTRUCTION EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN 4 FEET TO ANY PART OF THE B.C.C.M.P. PIPE, UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR DRIVE EQUIPMENT OVER ANY PART OF THE B.C.C.M.P. PIPE UNLESS THERE IS A COMPACTED FILL TO A DEPTH OF 24 INCHES OR GREATER OVER THE B.C.C.M.P. PIPE.
  - THE B.C.C.M.P. PIPE SHALL BE FIRMLY AND UNIFORMLY BEDDED THROUGHOUT ITS ENTIRE LENGTH, WHERE ROCK OR OTHER UNSUITABLE SOIL IS ENCOUNTERED UNDER THE PIPE, ALL SUCH MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE EARTH COMPACTED TO PROVIDE ADEQUATE SUPPORT.

- PERMANENT SEEDING**
- ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:
- SEED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.
  - SOIL AMENDMENTS: APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 lbs./1,000 sq.ft.) AND 600 lbs. PER ACRE 0-20 FERTILIZER (14 lbs./1,000 sq.ft.) HARROW OR DISC LIME AND FERTILIZER INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 lbs. PER ACRE (9.2 lbs./1,000 sq.ft.) OF 38-0-0 UREAFORM FERTILIZER AND 500 lbs. PER ACRE (11.5 lbs./1,000 sq.ft.) OF 10-20-20 FERTILIZER.
  - SEEDING: FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 45 lbs. PER ACRE (1.4 lbs./1,000 sq.ft.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 45 lbs. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 lbs. per acre (.05 lbs./1,000 sq.ft.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1)-2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2)-USE SOD. OPTION (3)-SEED WITH 60 lbs./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.
  - EROSION CONTROL MATERIAL: MIRAFI "MIRAMAT" SHALL BE PLACED IN THE DETENTION POND. SEE DETAILS FOR LIMITS. A MIRAFI REPRESENTATIVE WILL SUPERVISE THE "MIRAMAT" INSTALLATION. LOCAL DISTRIBUTOR FOR MIRAFI: WOLBERT AND MASTER, INC. 11350 PULASKI HWY. (301) 335-9300. PERMANENT SEEDING APPLICATION MAY BE DONE BEFORE OR AFTER MIRAMAT INSTALLATION.
  - MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS, AND RESEEDINGS.

- CONCRETE**
- ALL CONCRETE SHALL BE AIR-ENTRAINED WITH A 28 DAY STRENGTH OF 4000 LB. PER SQ. FT. AND CONFORM TO ACI 301.
  - ALL FOUNDATIONS OF WALL SHALL BE CAPABLE OF SUPPORTING 3000 LB. PER SQ. FT.
  - VERTICAL CONSTRUCTION JOINTS SHALL BE PLACED AT 20 FEET ON CENTER.
  - ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 3/4".
  - CONCRETE FINISH SHALL BE FREE OF HONEY COMBED AREAS, VOIDS AND RIDGES ETC.

- REINFORCING STEEL**
- ALL REINFORCING STEEL SHALL CONFORM TO A.S.T.M. A-615 GRADE 60 AND SUPPLEMENTAL REQUIREMENT S-1.
  - COVER ON REINFORCING STEEL:
    - CONCRETE POURED ON EARTH - 3"
    - TOP OF FOOTING AND WALLS - 2"

- EXPANSION BOLTS**
- STAINLESS STEEL CONFORMING TO FEDERAL SPECIFICATION FF-S-325, AMENDMENT 3 GROUP 11, TYPE 4, CLASS 1. DRILL HOLES WITH BIT CONFORMING TO ANSI B94.12-77.
- PLATE**
- ALUMINUM ALLOY - 6061-T6.

**RESPONSIBLE PERSONNEL CERTIFICATION**

"I HEREBY CERTIFY THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

*[Signature]* *[Signature]*  
 DATE

**CERTIFICATION BY THE 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.

*[Signature]* *[Signature]*  
 DATE 7-25-84

**CERTIFICATION BY THE 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]* *[Signature]*  
 DATE 7-25-84

KENNETH A. MCCORD, P.E. NO. 1974

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.

*[Signature]* *[Signature]* 11-8-84  
 U.S. SOIL CONSERVATION SERVICE DATE

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

APPROVED: *[Signature]* 11-8-84  
 HOWARD S.C.D. DATE  
*[Signature]* 11  
 PLAN NUMBER

8-30-84 Revised as per Howard Co. Zoning comments  
 7-25-84 Revised as per Howard Co. Zoning comments

DATE - REVISIONS -

WHITMAN, REQUARDT AND ASSOCIATES  
 ENGINEERS  
 2315 SAINT PAUL STREET, BALTIMORE, MARYLAND 21218

*[Signature]*  
 KENNETH A. MCCORD, PE. & ELS. NO. 1974



APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAIN SYSTEMS AND ROADS: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 11-11-84  
 DIRECTOR DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS: HOWARD COUNTY HEALTH DEPARTMENT  
*[Signature]* 11-11-84  
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*[Signature]* 11-19-84  
 PLANNING DIRECTOR DATE  
*[Signature]* 11-19-84  
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

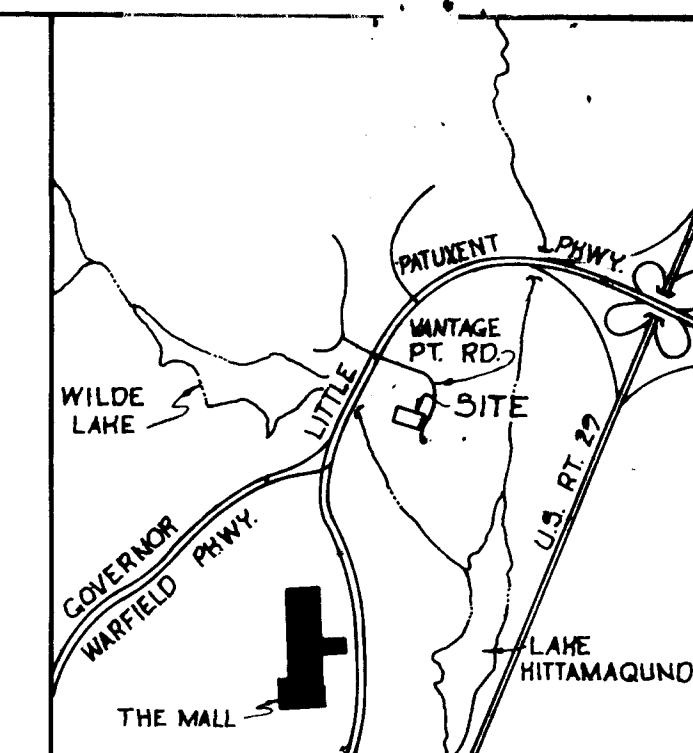
DETENTION POND  
 SEE DETAILS  
 SHEET 9 AND 10 OF 10

VANTAGE POINT TOWN CENTER LIMITED PARTNERSHIP II  
 co. GENERAL AMERICAN REAL ESTATE  
 OWNER  
 9050 RED BRANCH ROAD  
 COLUMBIA, MARYLAND 21044

**COLUMBIA**  
 Town Center - Section 7, Area 7, Parcel D-3  
 Election District No. 9 Tax Map No. 30  
 Plat Book 29 - Folio 48 Howard County  
 Scale: 1"=30'  
 DATE MAY 23, 1984 SHEET 7 OF 11

**STORM WATER MANAGEMENT**

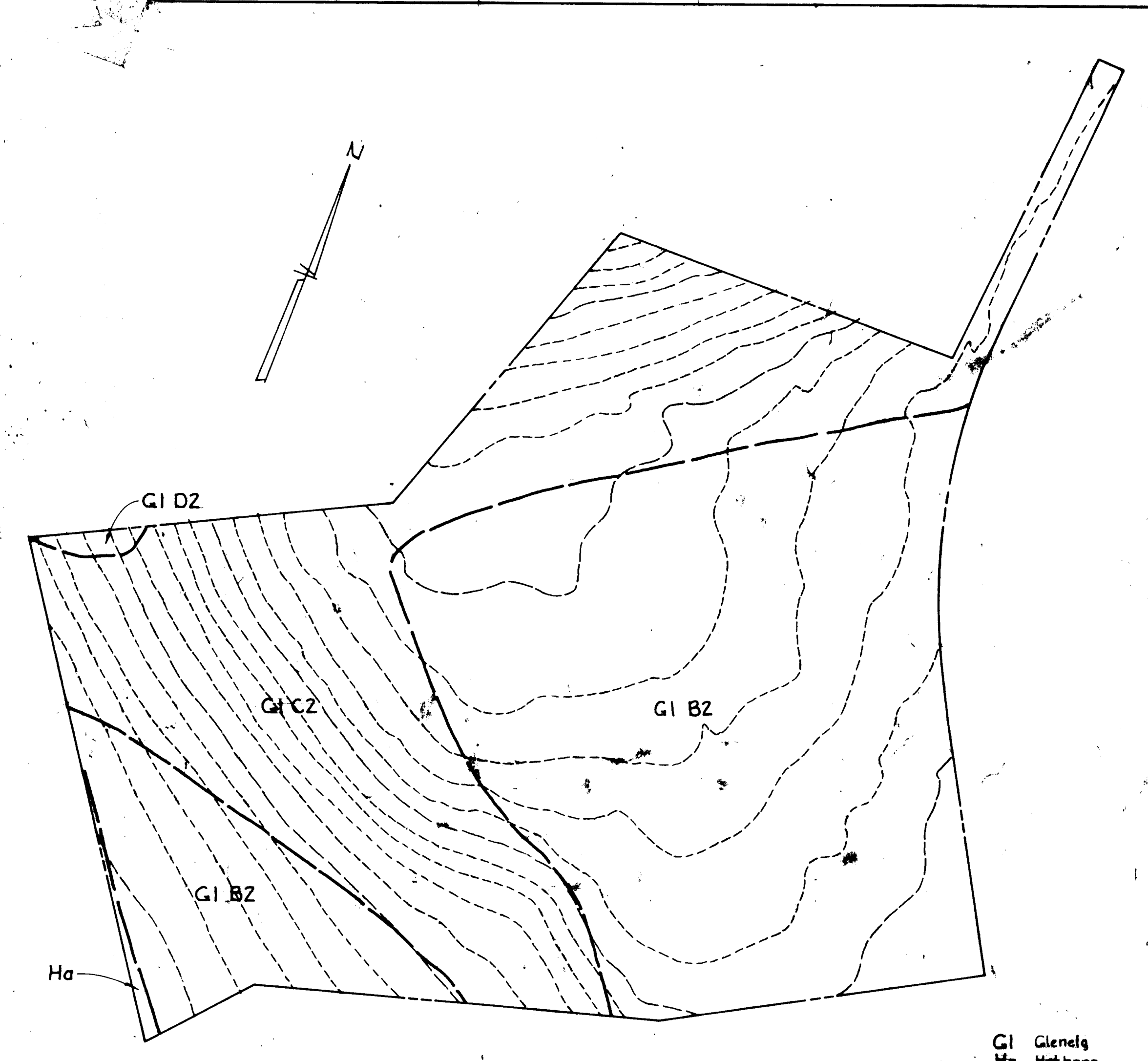




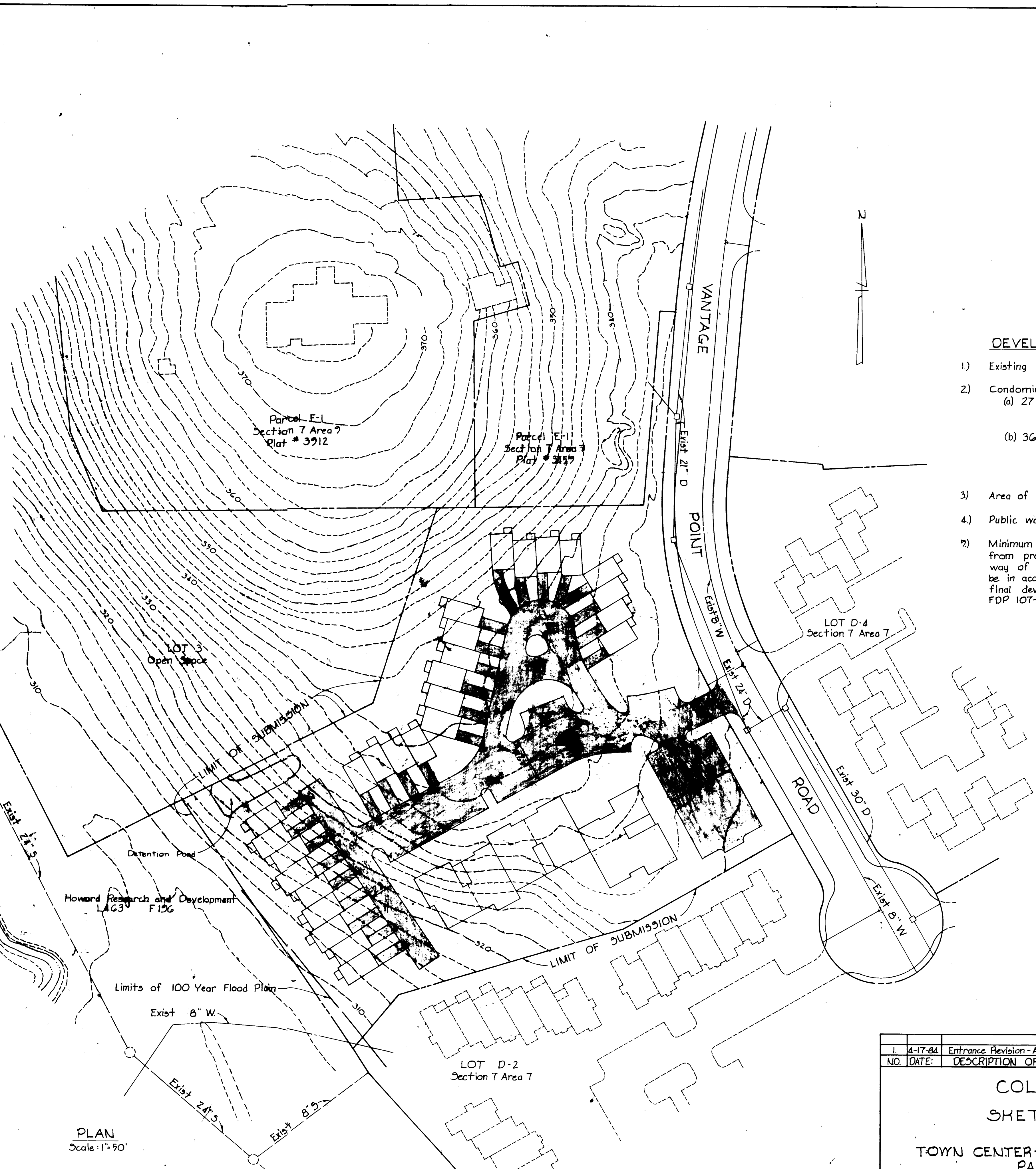
VICINITY MAP  
Scale: 1" = 2,000'

**DEVELOPMENT DATA**

- 1) Existing Zoning is New Town (Apartments)
- 2) Condominium Development Proposed
  - (a) 27 Townhouse Units  
27 Garages  
27 Parking Pads
  - (b) 36 Garden Units  
27 - 2 bedroom  
9 - 1 bedroom  
78 - Parking Spaces
- 3) Area of Parcel = 3.92 Acres
- 4) Public water and sewer to be utilized
- 5) Minimum building setback restrictions from property lines and the right-of-way of any public road or street to be in accordance with the recorded final development plan criteria for FDP 107-A-III.



SOILS MAP  
Scale: 1" = 90'



PLAN  
Scale: 1" = 50'

**APPROVED**  
PLANNING BOARD  
OF HOWARD COUNTY  
DATE: 9-5-84  
*[Signature]*

NO.	DATE	DESCRIPTION OF REVISION
1	4-17-84	Entrance Revision - Added notes - Revised TITLE

**COLUMBIA  
SKETCH PLAN**

TOWN CENTER - SECTION 7 AREA 7  
PARCEL D-3

PLAT BOOK 20 - FOLIO 46 TAX MAP NO. 90

ELECTION DISTRICT NO. 7 HOWARD COUNTY, MD.

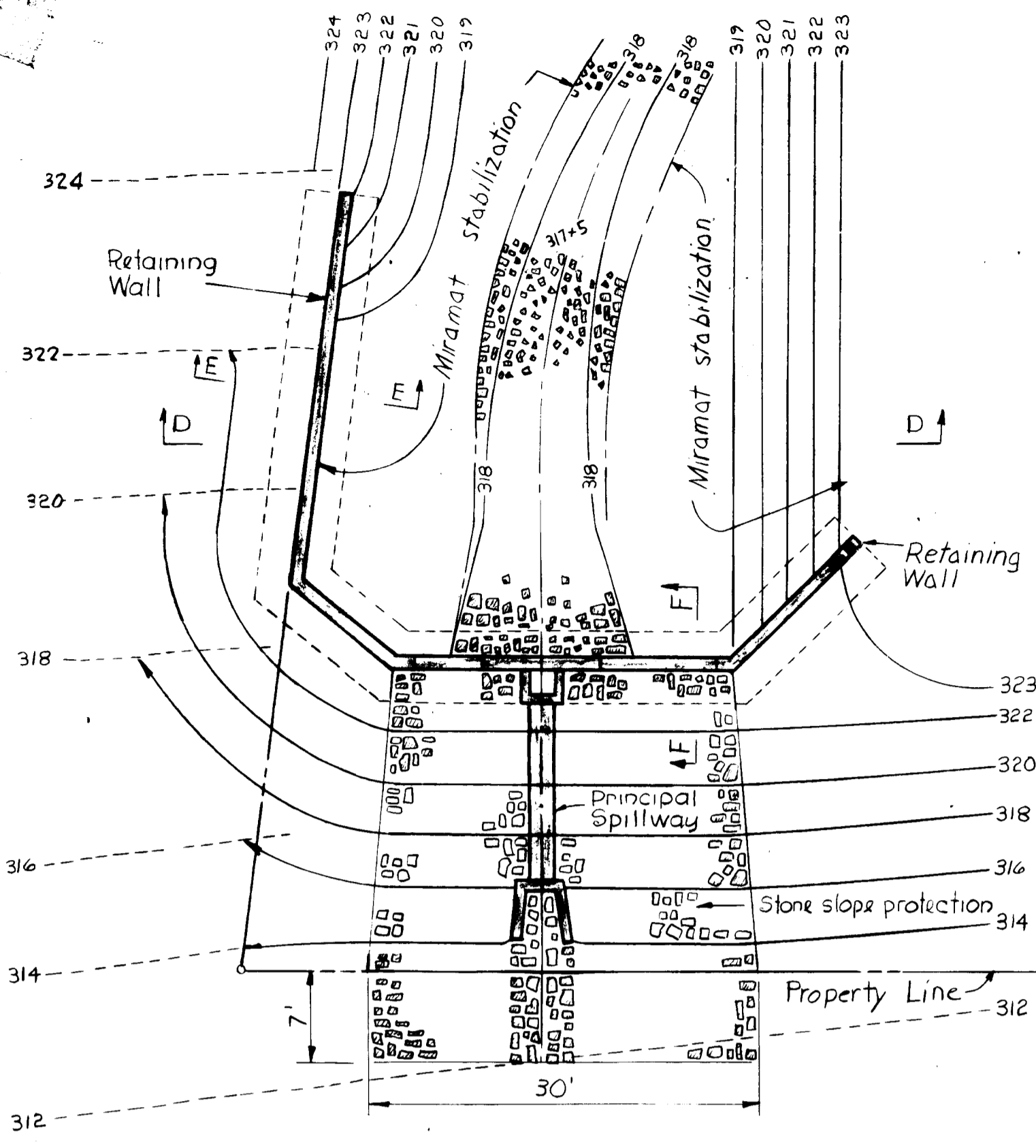
DATE: MARCH 2, 1984 SCALE: AS SHOWN

VANTAGE POINT TOWN CENTER LIMITED PARTNERSHIP II  
CO. GENERAL AMERICAN REAL ESTATE  
OWNER  
3030 RED BRANCH ROAD  
COLUMBIA, MARYLAND 21044

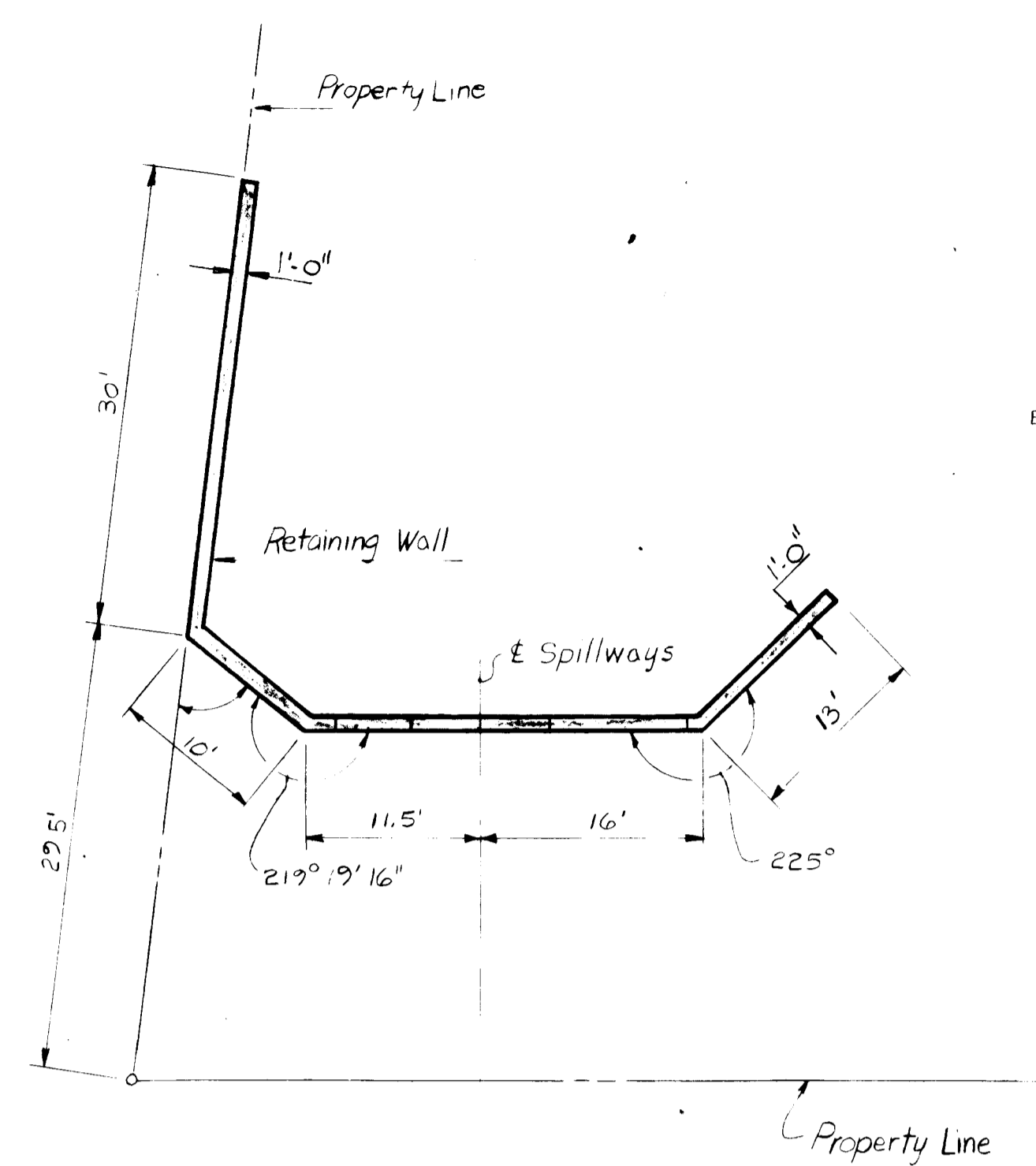
WHITMAN, REQUARDT AND ASSOCIATES  
ENGINEERS  
2315 SAINT PAUL STREET  
BALTIMORE, MARYLAND 21202  
*[Signature]*  
KENNETH A. McCORD PE-NO 1974



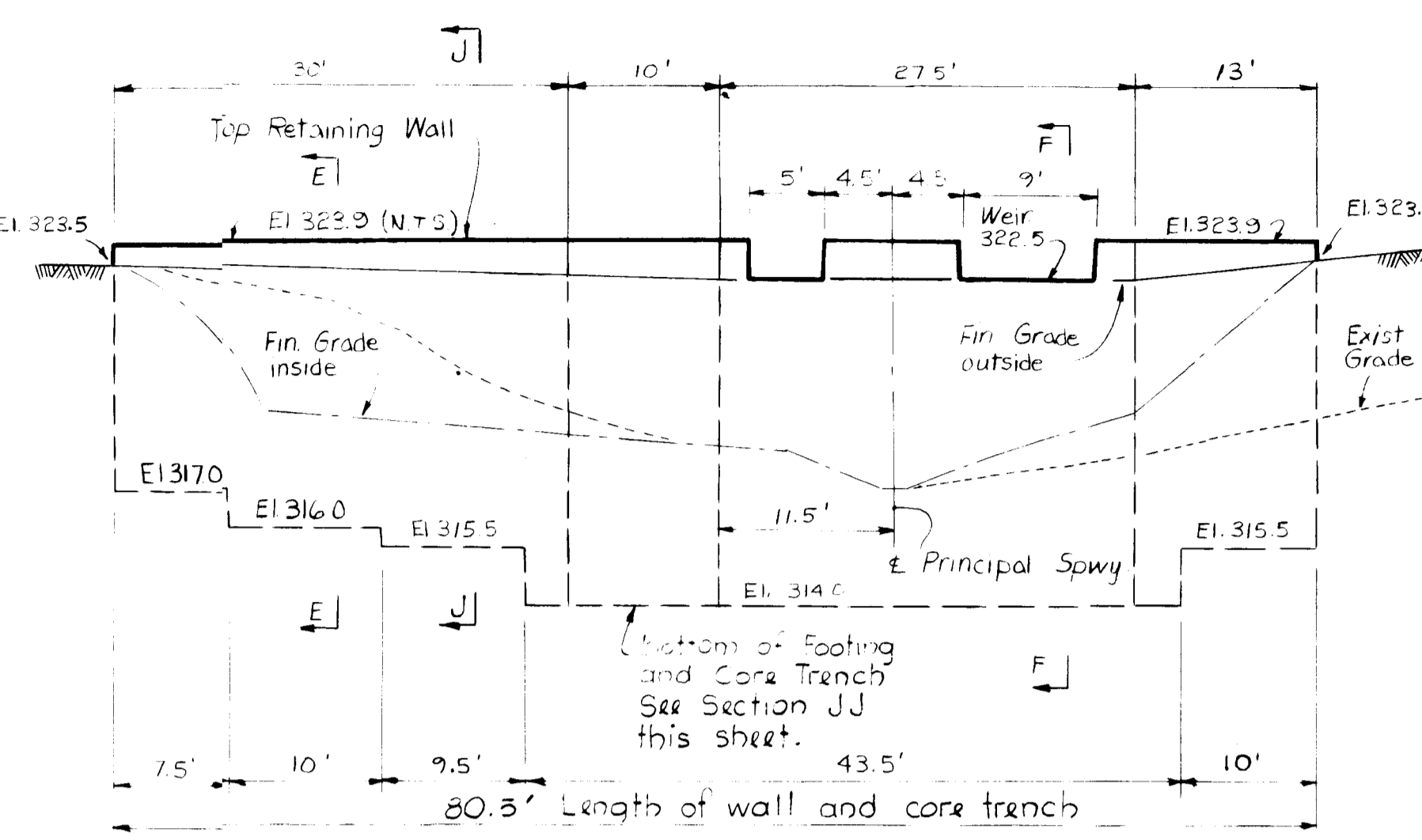




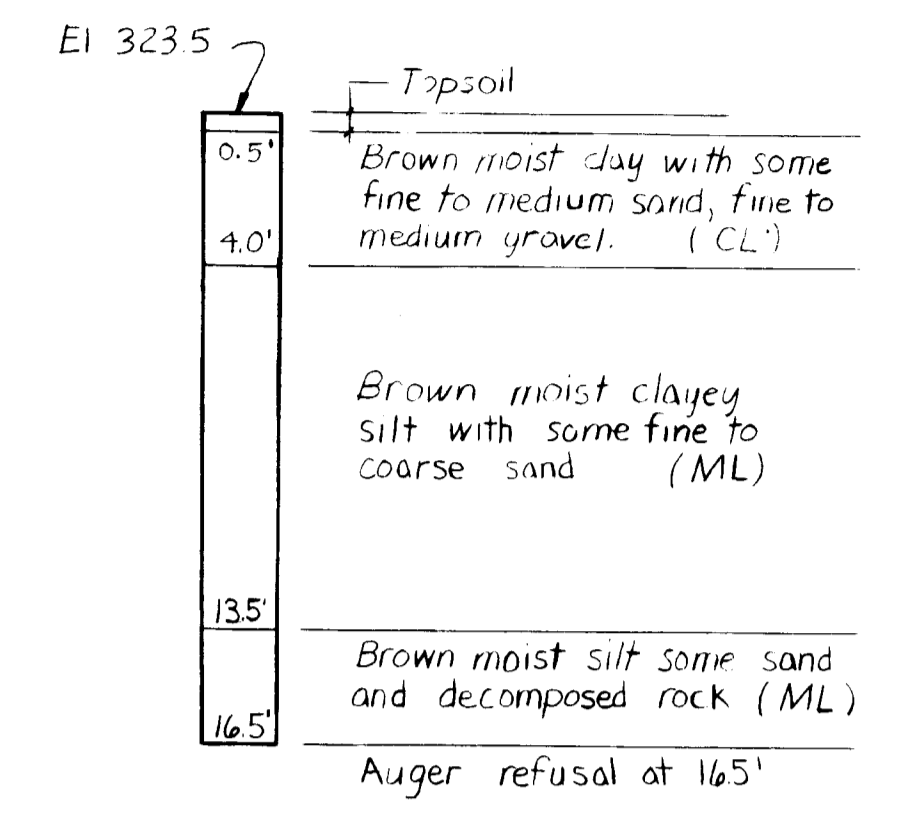
**POND SITE PLAN**  
Scale: 1" = 10'



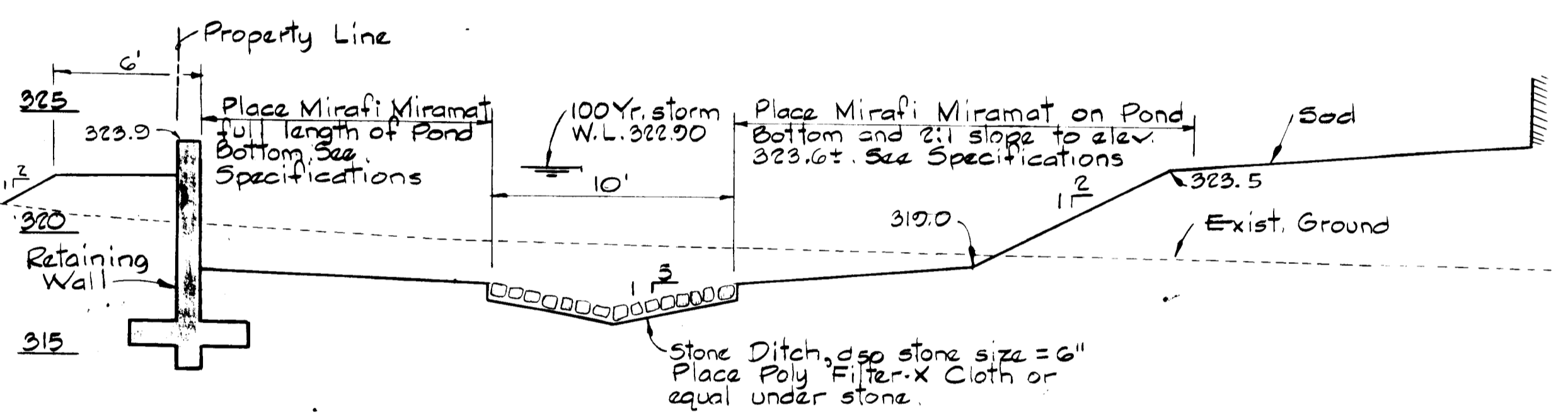
**RETAINING WALL GEOMETRY**  
Scale: 1" = 10'



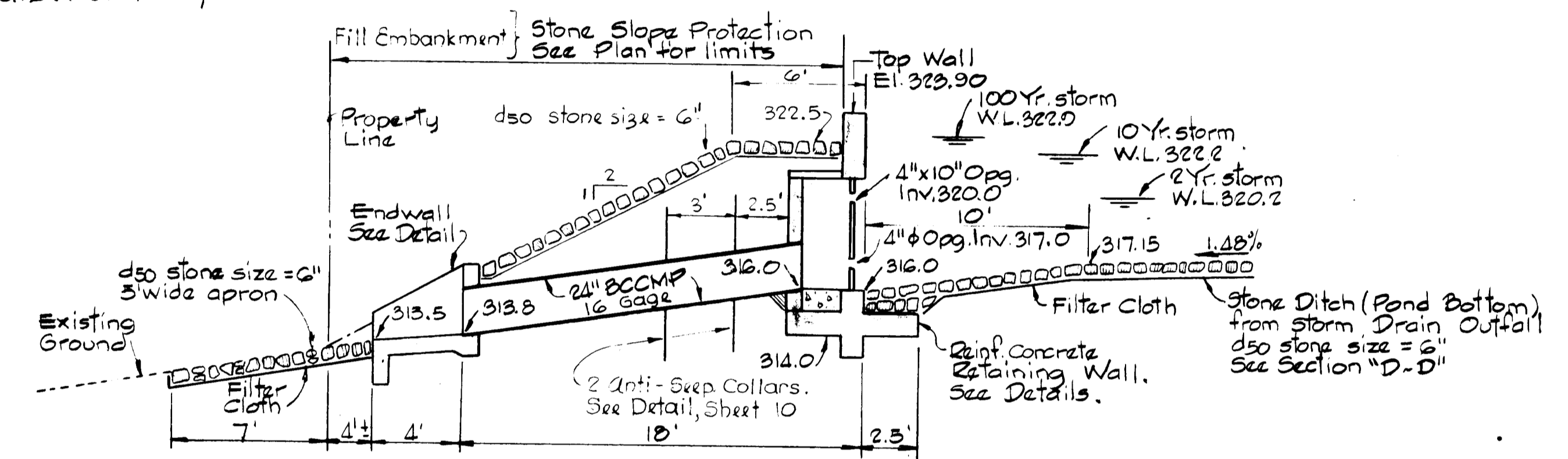
**REINFORCE CONCRETE RETAINING WALL**  
Scale: Hor: 1" = 10', Vert: 1" = 4'



**BORING NO. 12**



**SECTION "D-D"**  
Scale: 1" = 5'



**PROFILE - PRINCIPAL SPILLWAY**  
Scale: 1" = 5'

**RESPONSIBLE PERSONNEL CERTIFICATION**  
I HEREBY CERTIFY THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.  
*Signature* 11/1/84 DATE

**CERTIFICATION BY THE DEVELOPER**  
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT, POND CONSTRUCTION, 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.  
*Signature* 7-25-84 DATE

**CERTIFICATION BY THE 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* 1-25-84 DATE

VANTAGE POINT TOWN CENTER LIMITED PARTNERSHIP II  
co. GENERAL AMERICAN REAL ESTATE  
OWNER  
9050 RED BRANCH ROAD  
COLUMBIA, MARYLAND 21044

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.

*Signature* 11-8-84 DATE  
U.S. SOIL CONSERVATION SERVICE

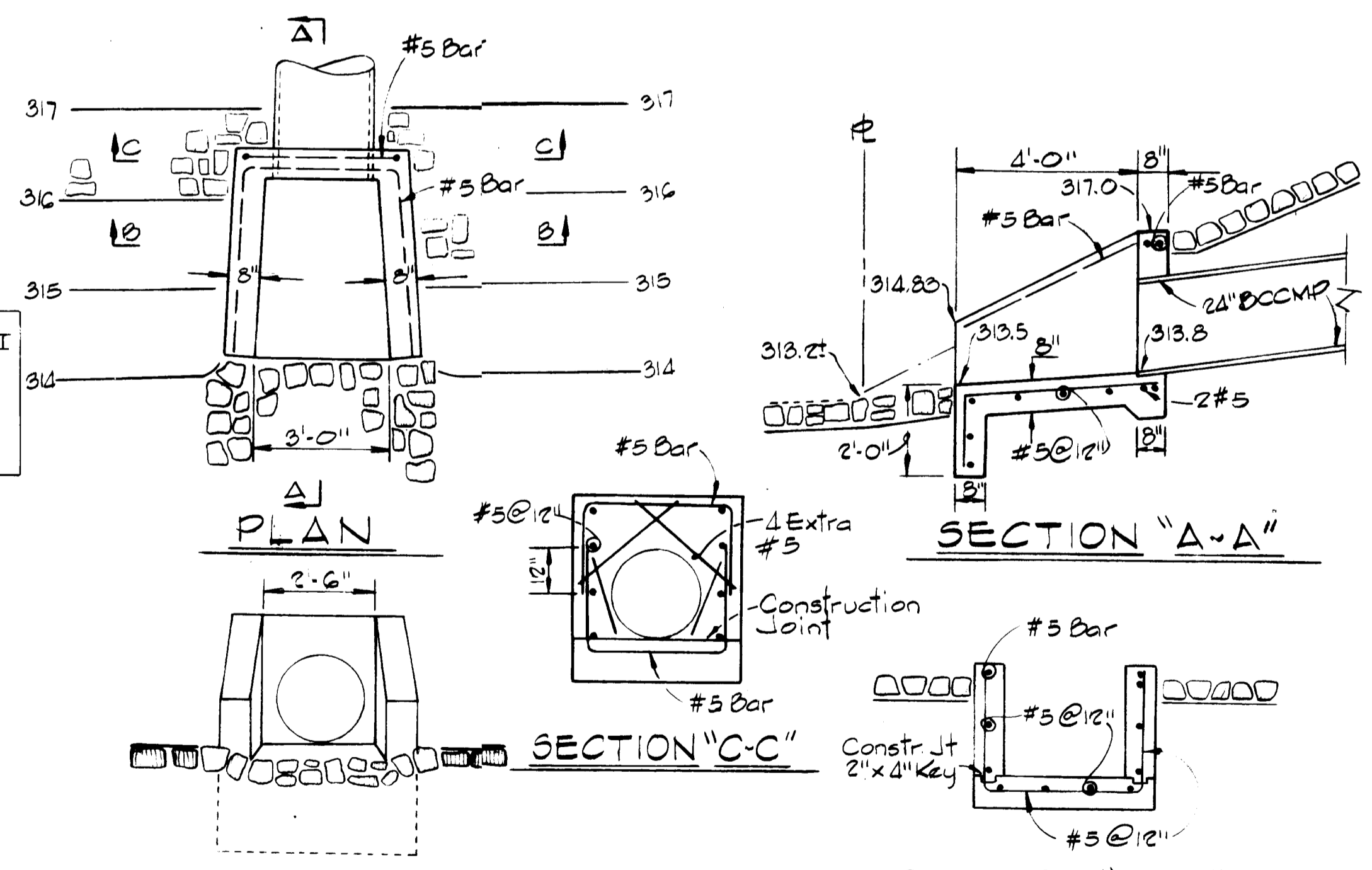
THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: *Signature* 11-8-84 DATE  
HOWARD S.C.D.  
*Signature*  
PLAN NUMBER

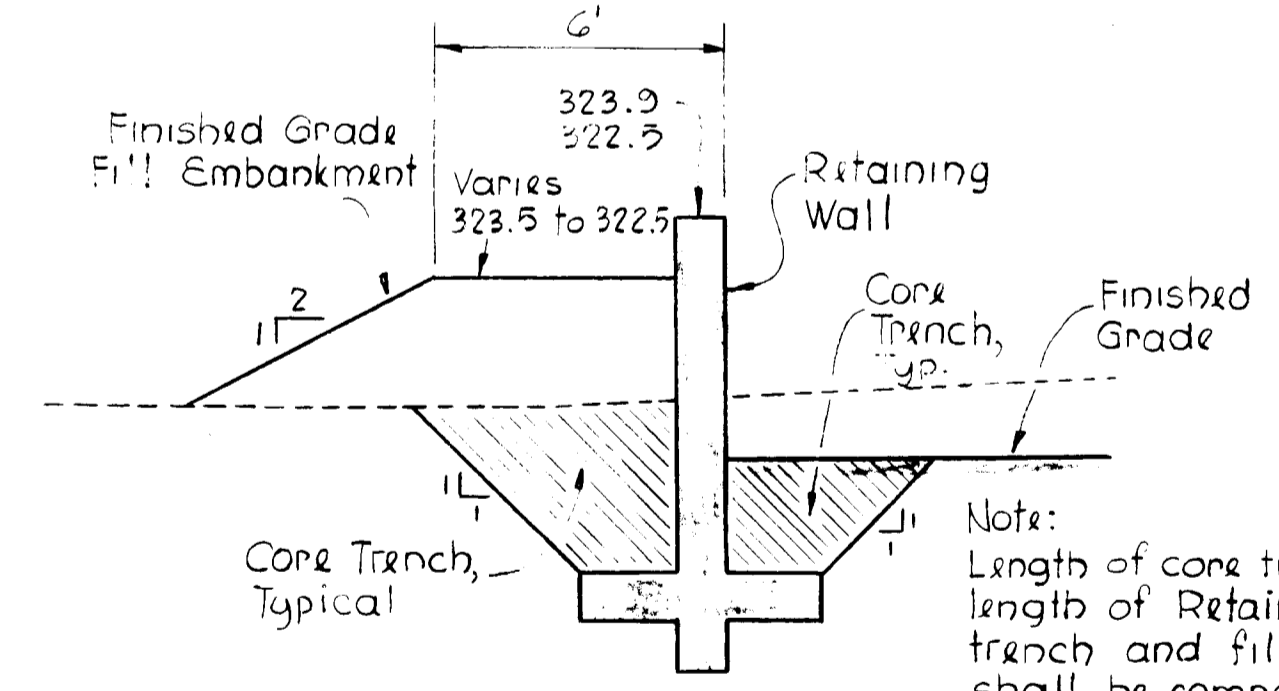
APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAIN SYSTEMS AND ROAD: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
11-8-84 DATE  
*Signature*  
DIRECTOR

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS: HOWARD COUNTY HEALTH DEPARTMENT  
*Signature*  
HEALTH OFFICER

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Signature* 11-19-84 DATE  
PLANNING DIRECTOR  
*Signature*  
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING



**DETAIL - SPILLWAY ENDWALL**  
Scale: 3/8" = 1'-0"



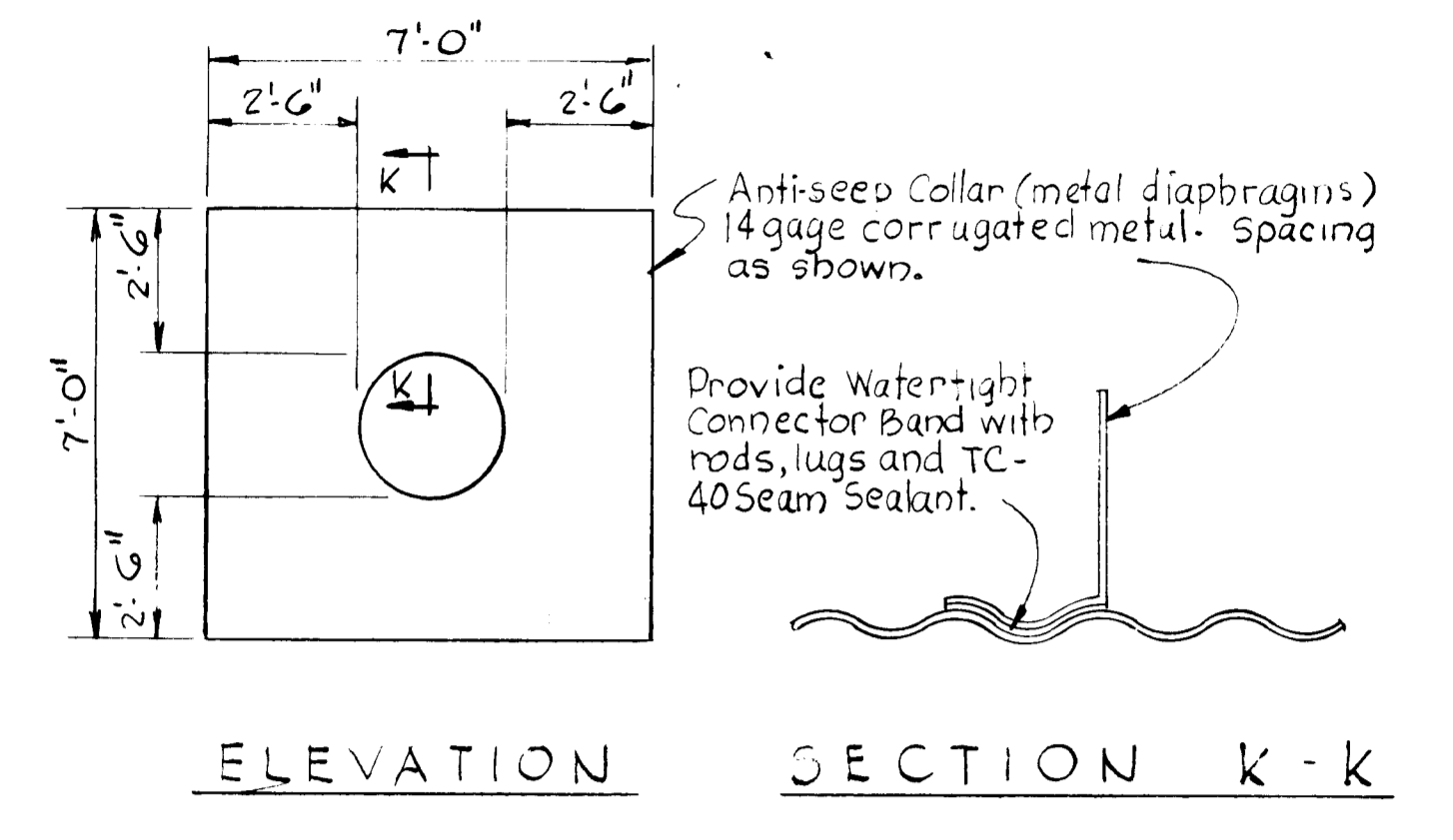
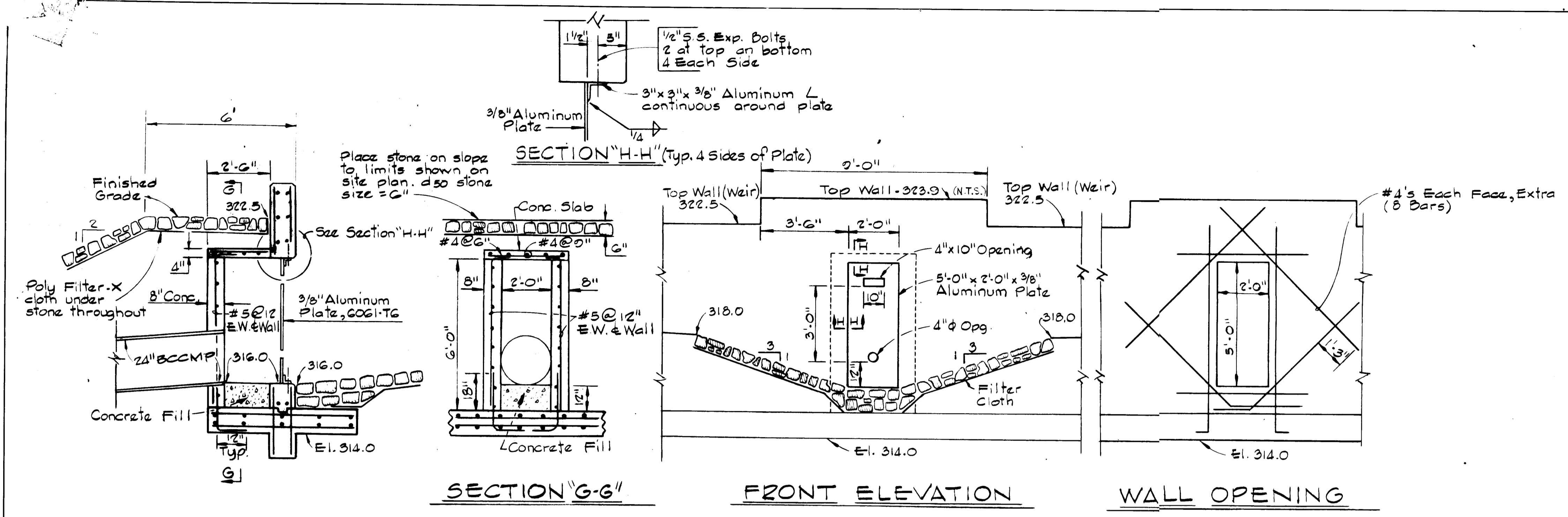
**SECTION JJ**  
Scale: 1" = 4'

**APPROVED**  
PLANNING DIRECTOR  
OF HOWARD COUNTY  
DATE: 9-5-84  
*Signature*

**COLUMBIA**  
Town Center - Section 7, Area 7, Parcel D.3  
Election District No. 5 Tax Map No. 30  
Plat Book 29-Folio 48 Howard County, Md.  
Scale: As Shown  
Date: August 13, 1984

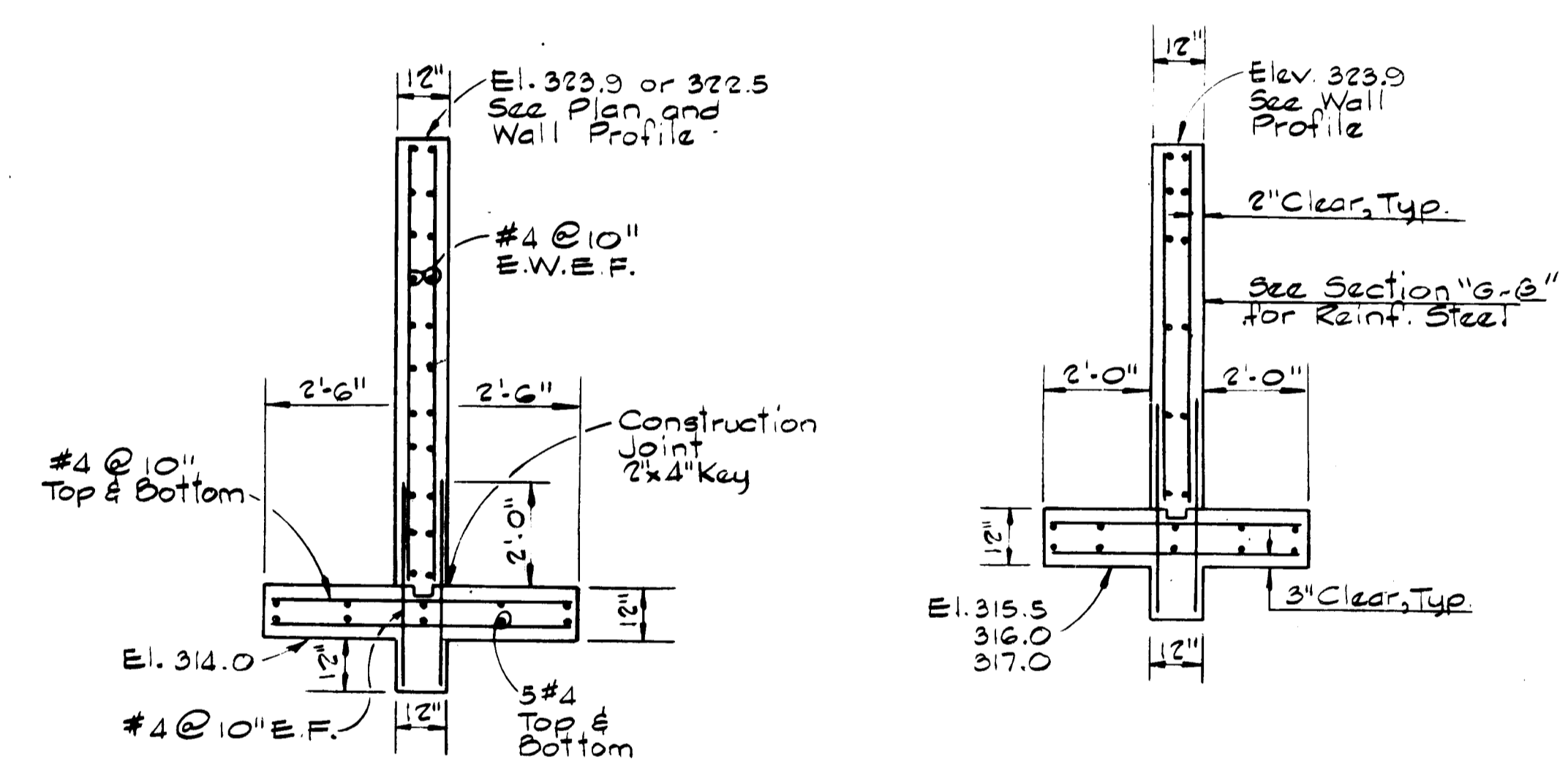
STORM WATER MANAGEMENT





**RETAINING WALL - SPILLWAY INLET**  
Scale: 3/8"=1'-0"

**ANTI SEEP COLLAR DETAILS**  
Not to Scale



**RETAINING WALL**  
Scale: 3/8"=1'-0"

**RESPONSIBLE PERSONNEL CERTIFICATION**  
"I HEREBY CERTIFY THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."  
*Signature* *Date*

**CERTIFICATION BY THE DEVELOPER**  
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*Signature* *7-26-84*  
DATE

**CERTIFICATION BY THE 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* *7-25-84*  
DATE  
KENNETH A. MCCORD, P.E. NO. 1974

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.  
*Signature* *11-8-84*  
N.S. SOIL CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
APPROVED: *Signature* *11-8-84*  
HOWARD S.C.D. DATE  
*Signature*  
PLAN NUMBER

7-26-84 Revised as per Howard Co. Zoning comments.  
DATE - REVISIONS -  
WHITMAN, REQUARDT AND ASSOCIATES  
ENGINEERS  
2315 SAINT PAUL STREET, BALTIMORE, MARYLAND 21218  
*Signature*  
DATE  
KENNETH A. MCCORD, PE. & ELS. #1974

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAIN SYSTEMS AND SOLIDS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Signature* *11-8-84*  
DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT  
*Signature* *11-8-84*  
DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Signature* *11-19-84*  
DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

VANTAGE POINT TOWN CENTER LIMITED PARTNERSHIP II  
co. GENERAL AMERICAN REAL ESTATE  
OWNER  
9050 RED BRANCH ROAD  
COLUMBIA, MARYLAND 21044

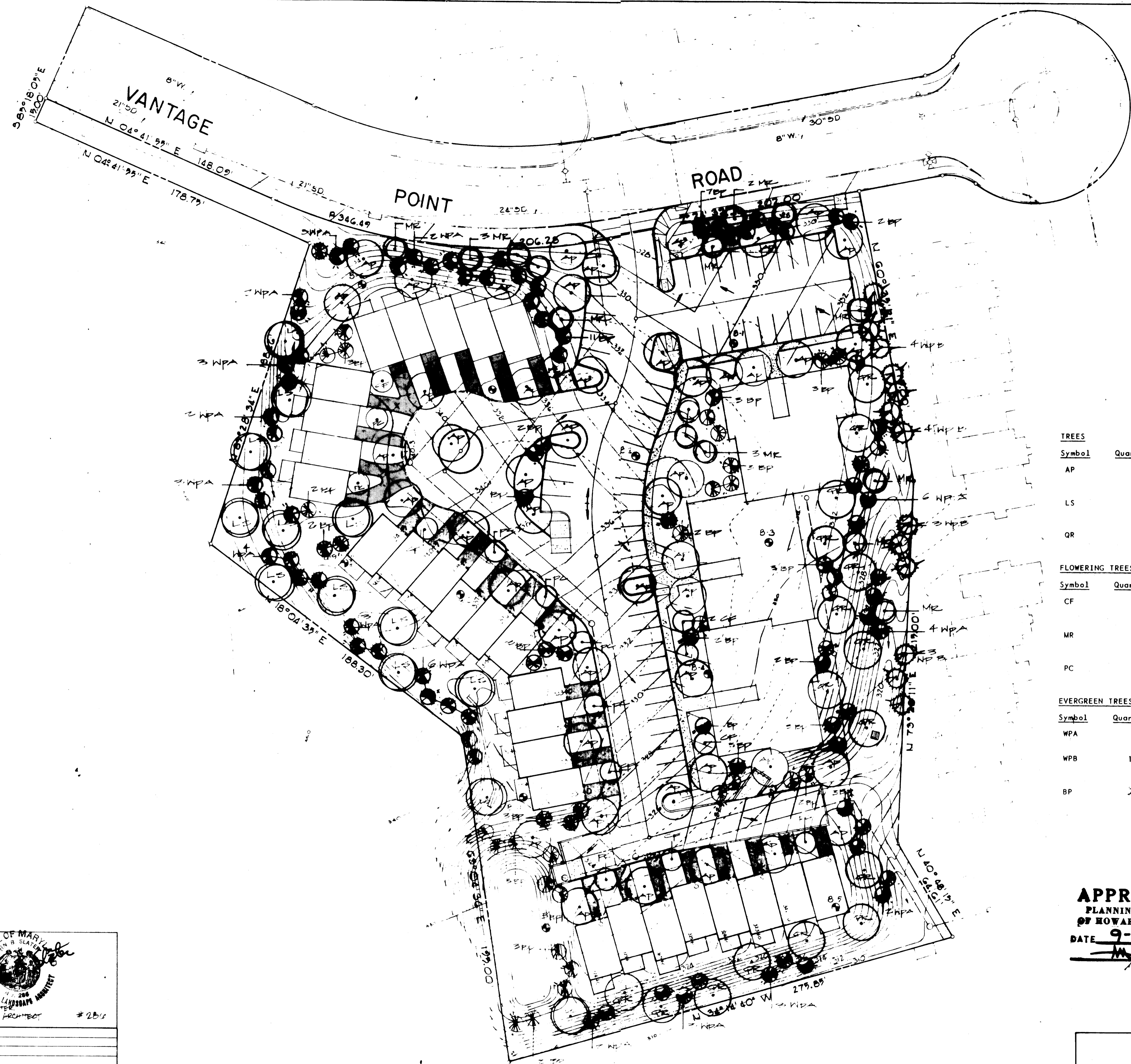
**COLUMBIA**  
Town Center - Section 7, Area 7, Parcel D-3  
Election District No. 5 Tax Map No. 30  
Plat Book 29-Folio 4B Howard County, Md.  
Scale: As Shown  
Date: August 13, 1984  
Sheet 10 of 11

**APPROVED**  
PLANNING  
OF HOWARD COUNTY  
DATE *9-5-84*  
*Signature*

**STORM WATER MANAGEMENT**

SDP-84-290





PLANT LIST-VANTAGE II

TREES			
Symbol	Quantity	Name	Remarks
AP	48	Acer platanoides Norway Maple	2 1/2"-3" cal. B&B, Full Head 12'-14' H.
LS	13	Liquidambar styraciflua Sweet Gum	2 1/2"-3" cal. B&B, Full Head 12'-14' H.
QR	16	Quercus rubra Red Oak	2 1/2"-3" cal. B&B, Full Head 12'-14' H.
FLOWERING TREES			
Symbol	Quantity	Name	Remarks
CF	7	Cornus florida Flowering Dogwood	2"-2 1/2" cal. B&B, Full Head 8'-10' H.
MR	15	Malus 'Radiant' Red Flowering Crab	2"-2 1/2" cal. B&B, Full Head 8'-10' H.
PC	9	Pyrus calleryana 'Bradford' Bradford Pear	2"-2 1/2" cal. B&B, Full Head 8'-10' H.
EVERGREEN TREES			
Symbol	Quantity	Name	Remarks
WPA	48	Pinus strobus White Pine	6'-8' H. B&B, Unsheared
WPB	14	Pinus strobus White Pine	2"-2 1/2" cal. 12'-14' H. B&B, Unsheared
BP	77	Pinus thunbergia Japanese Black Pine	2"-2 1/2" cal. 6'-8' H. B&B, Unsheared.

**APPROVED**  
 PLANNING BOARD  
 OF HOWARD COUNTY  
 DATE 9-5-84  
*M. J. JUM*

**SLATER ASSOCIATES**  
 SUITE 206 WILDE LAKE VILLAGE GREEN  
 COLUMBIA, MARYLAND 21044

LAND PLANNING  
 SITE PLANNING  
 LANDSCAPE ARCHITECTURE

982-0001

STATE OF MARYLAND  
 JOHN D. SLATER  
 LANDSCAPE ARCHITECT  
 #2516

DATE	REVISIONS
	WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS 100 WILDE VILLAGE LN.

APPROVED FOR PLANNING BOARD AND PUBLIC SERVICE SYSTEM  
 HOWARD COUNTY HEALTH DEPARTMENT  
*[Signature]* 11-16-84

APPROVED FOR PLANNING BOARD AND ZONING  
 HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*[Signature]* 11-19-84

planting plan

**COLUMBIA**  
 Town Center - Section 7, Area 7, Parcel D-3  
 Election District No. 9 Tax Map No. 30  
 Plat Book 29 - Folio 48 Howard County  
 Scale: 1"=30'  
 DATE MAY 1984