

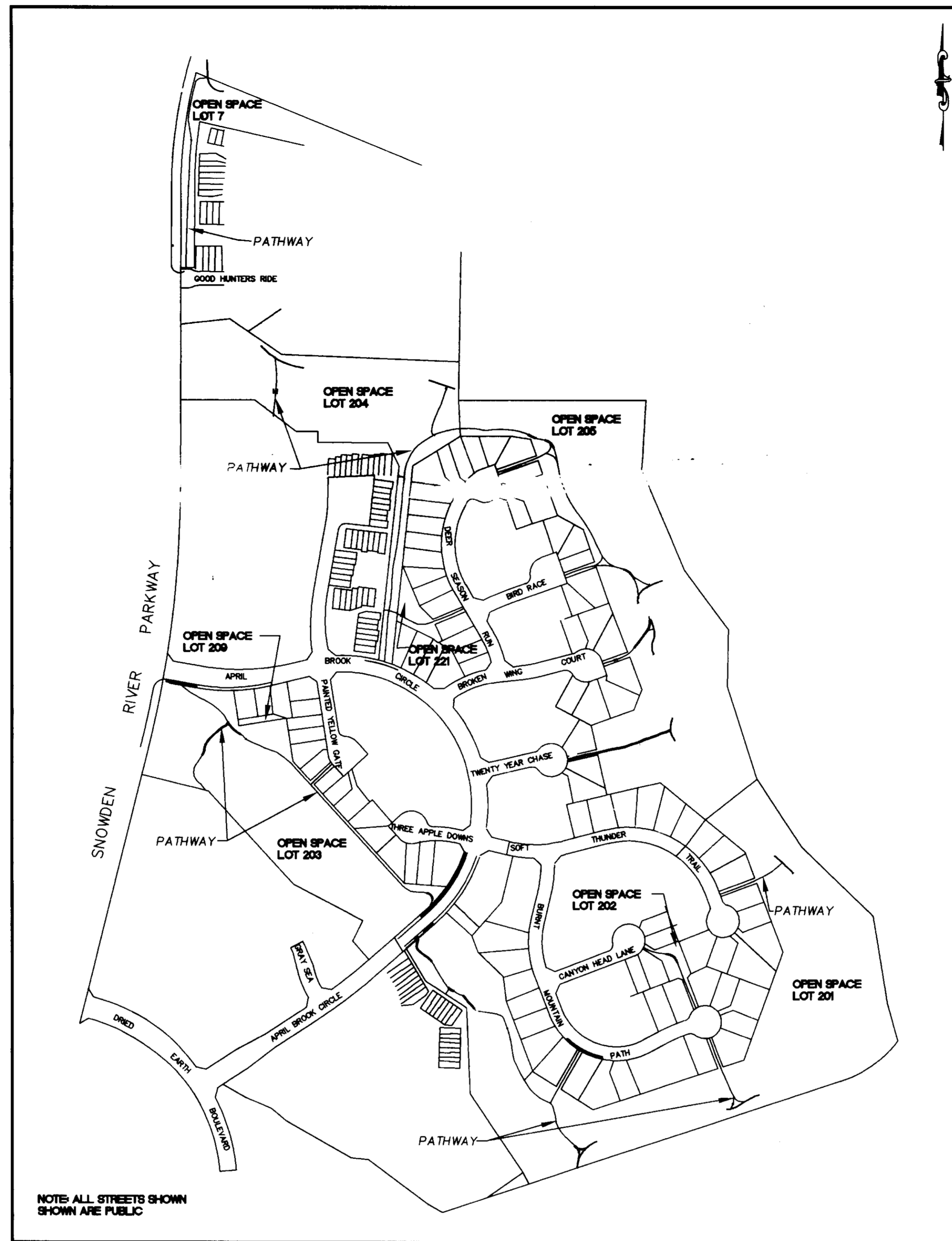
GENERAL NOTES

- TOPOGRAPHY ON THESE DRAWINGS ARE BASED ON FIELD RUN SURVEY BY THE RBA GROUP, INC. IN JULY 1995. THE INFORMATION SHOWN OR NOT SHOWN HEREON DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROPER COMPLETION OF GRADING.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.
- THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S ACTIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF CONSTRUCTION AND MAINTAIN MINIMUM COVER IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL.
MIN. COVER OVER WATER MAINS: 3.5'
MIN. COVER OVER SANITARY LINES: 2.5' ABOVE INVERT
MIN. COVER OVER STORM DRAIN: 18"
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AT LEAST 5 DAYS BEFORE THE START OF WORK SHOWN ON THESE PLANS:
"MISS UTILITY" 1-800-257-7777
BALTIMORE GAS & ELECTRIC CO. (410) 954-6260
C & P TELEPHONE CO. (410) 393-3648
- FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM SUCH WORK.
- THE CONTRACTOR SHALL OBTAIN THE NECESSARY PERMITS FOR CONSTRUCTION.
- A WAIVER HAS BEEN SUBMITTED FOR STORM WATER MANAGEMENT QUANTITY AND QUALITY CONTROL. A FEE IN LIEU OF STORMWATER MANAGEMENT HAS BEEN REQUESTED.
- THE CONTRACTOR SHALL CONTACT THE DEPARTMENT OF PUBLIC WORKS, DIVISION OF CONSTRUCTION & INSPECTION AT (410) 313-1860 48 HOURS IN ADVANCE OF THE COMMENCEMENT OF WORK.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL STAKE OUT ALL CONSTRUCTION AND VERIFY ALL OFFSETS, SETBACKS, EXISTING UTILITY LOCATIONS (HORIZONTAL AND VERTICAL), AND DIMENSIONS.
- SCALING OF THESE PLANS IS DISCOURAGED UNLESS DIRECTED BY THE ENGINEER.
- ALL FILL SHALL BE ROLLED TO A MINIMUM DEGREE OF COMPACTION TO 95% OF WEIGHT AS DETERMINED BY ASTM-D-698.
- ALL TREES 12" IN DIAMETER OR GREATER SHALL REMAIN PROTECTED AND UNDAMAGED AT ALL TIMES. AN ATTEMPT WILL BE MADE TO PROTECT ALL OTHER TREES THROUGH FIELD ADJUSTMENTS TO THE PATHWAY LAYOUT. THE EXISTING TREES ARE, AS BEST AS CAN BE DETERMINED, THE TREES TO REMAIN.
- THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS, OR RIGHTS-OF-WAYS THAT MAY BE REQUIRED TO COMPLETE THE WORK SHOWN HEREON.
- 100 YR FLOOD PLAIN AND WETLANDS SHOWN ARE BASED ON PLATS LISTED IN THE LOT SUMMARY (THIS SHEET).
- THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN SEDIMENT AND EROSION CONTROL MEASURES AND NOTIFY THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410) 313-1855. SEE SHEET 5 FOR ADDITIONAL NOTES.
- ALL PROPOSED IMPROVEMENTS WILL BE MAINTAINED BY THE OWNER.
- PREVIOUS COUNTY FILE NUMBERS: F-95-25, SDP-92-40, FDP-PHASE 216.
- ADJUSTMENTS TO THE SEQUENCE OF CONSTRUCTION MUST BE APPROVED BY THE HOWARD COUNTY CONSTRUCTION & INSPECTION DIVISION PRIOR TO SUCH ADJUSTMENTS.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- THIS DEVELOPMENT IS SUBJECT TO ALL REQUIREMENTS OF MD WRA PERMIT# 95-NI-0949-199069493 FOR WORK IN NON-TIDAL WETLANDS, FLOODPLAINS AND WETLAND BUFFERS.

SITE ANALYSIS

TOTAL AREA OF SITE: 58.26 ACRES
PRESENT ZONING: NEW TOWN
TOTAL LENGTH OF PROPOSED PATHWAY: 7,800 L.F.
LIMITS OF DISTURBANCE: 1.79 ACRES

LOT SUMMARY		
OPEN SPACE LOT NO.	PLAT NO.	TOTAL S.F.
7	8576	409,004
201	11599	758,401
202	11599	14,727
203	11596	371,819
204	11597	338,126
205	11598	622,152
209	11677	3,333
221	11678	20,181
TOTAL ACRES:		58.26

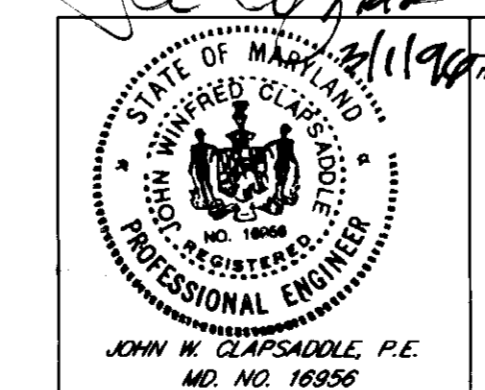


AREA MAP
SCALE: 1"=300'

VILLAGE OF LONG REACH KENDALL RIDGE PHASE III PATHWAYS

SHEET INDEX

SHEET NO.	TITLE
1	TITLE SHEET
2	LAYOUT PLAN
3	LAYOUT PLAN
4	LAYOUT PLAN
5	DETAILS



prepared by:
RBA ENGINEERS • ARCHITECTS • PLANNERS
7164 COLUMBIA CATEWAY DRIVE, SUITE 200
COLUMBIA, MARYLAND 21046
410/312-0866

TITLE SHEET		SCALE AS SHOWN	
KENDALL RIDGE PHASE III PATHWAYS	HOWARD COUNTY	DRAWN MEG	CHECKED JAC
1	5	PROJ. NO. 11317	DATE 10/26/95
SHEET	OF		

AGREEMENT
between
COLUMBIA ASSOCIATION (CA)
and
THE HOWARD SOIL CONSERVATION DISTRICT (HSCD)

Specific Terms

- All work performed under this agreement shall comply fully with the requirements of the 1983 Maryland Standard and Specifications for Soil Erosion and sediment control and/or specific requirements which may be issued by HSCD.
- No work performed under this agreement shall be started until written approval (as defined herein) has been received from HSCD.
- CA shall be responsible for arranging for immediate repair or replacement of existing erosion or sediment control measures which are removed, damaged, or rendered ineffective by work covered under this agreement.
- This agreement applies to earth disturbing activities necessary for the construction of recreational pathways which may be surfaced with bituminous paving, concrete, stone or mulch.
- The following grading limitations are imposed:
 - Earth work is limited to grubbing, cutting and filling (except as noted herein) necessary to construct pathways.
 - Fill must be properly compacted, fill height not to exceed three (3) feet, and be not steeper than 3:1.
 - Cut slopes may not exceed 2:1, 50 percent.
 - Grading may not impair surface drainage, create an erosion hazard or discharge sediment into any adjacent waterway.
 - Grading or filling within the 100-year flood plain is not permitted.
- Sediment and erosion control measures will be performed as follows:
 - Sediment control measures shall be placed as clearing and grubbing progresses on a day to day basis.
 - Equipment entrances must be stabilized with stone to prevent tire tracking of sediment onto public streets. If tracking occurs, immediate cleanup is required.
 - Silt fence or straw bale dikes shall be used around graded areas to contain sediment.
 - Following initial soil disturbances or re-disturbance, permanent or temporary stabilization shall be complete within: a) seven days for the surface of all perimeter controls and all perimeter slopes; b) fourteen calendar days for all other disturbed or graded areas. Areas where active construction is in progress are exempt.
 - Upon completion of final grading all disturbed areas shall be stabilized with concrete, blacktop, stone, or vegetable cover. Areas to be vegetatively stabilized (seeded) shall be stabilized during the first seeding period (March 1 thru April 30, or August 1 thru October 15) following grading. Extension Service Bulletin No. 171 may be used as a guide for seeding.
 - All off-site fill or borrow areas must have an approved sediment control plan and permit prior to grading.
 - The applicant shall notify the Howard County Sediment Control Division at least 48 hours prior to commencing clearing or grading.
- Compliance with the provisions of the agreement shall not relieve CA of taking additional measures when necessary to prevent erosion and sedimentation. Additional requirements may be imposed by the Howard County Sediment Control Inspector assigned to the job, when deemed necessary to prevent erosion and sedimentation.

VICINITY MAP
SCALE: 1"=2000'

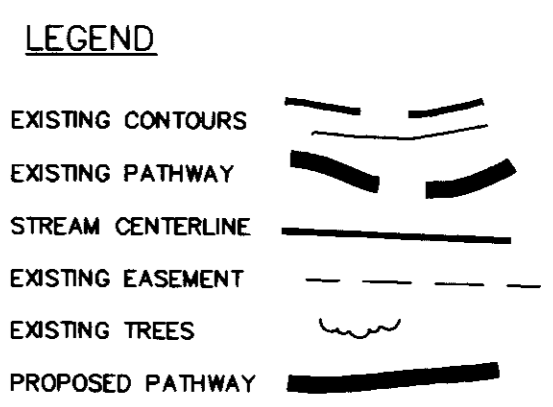
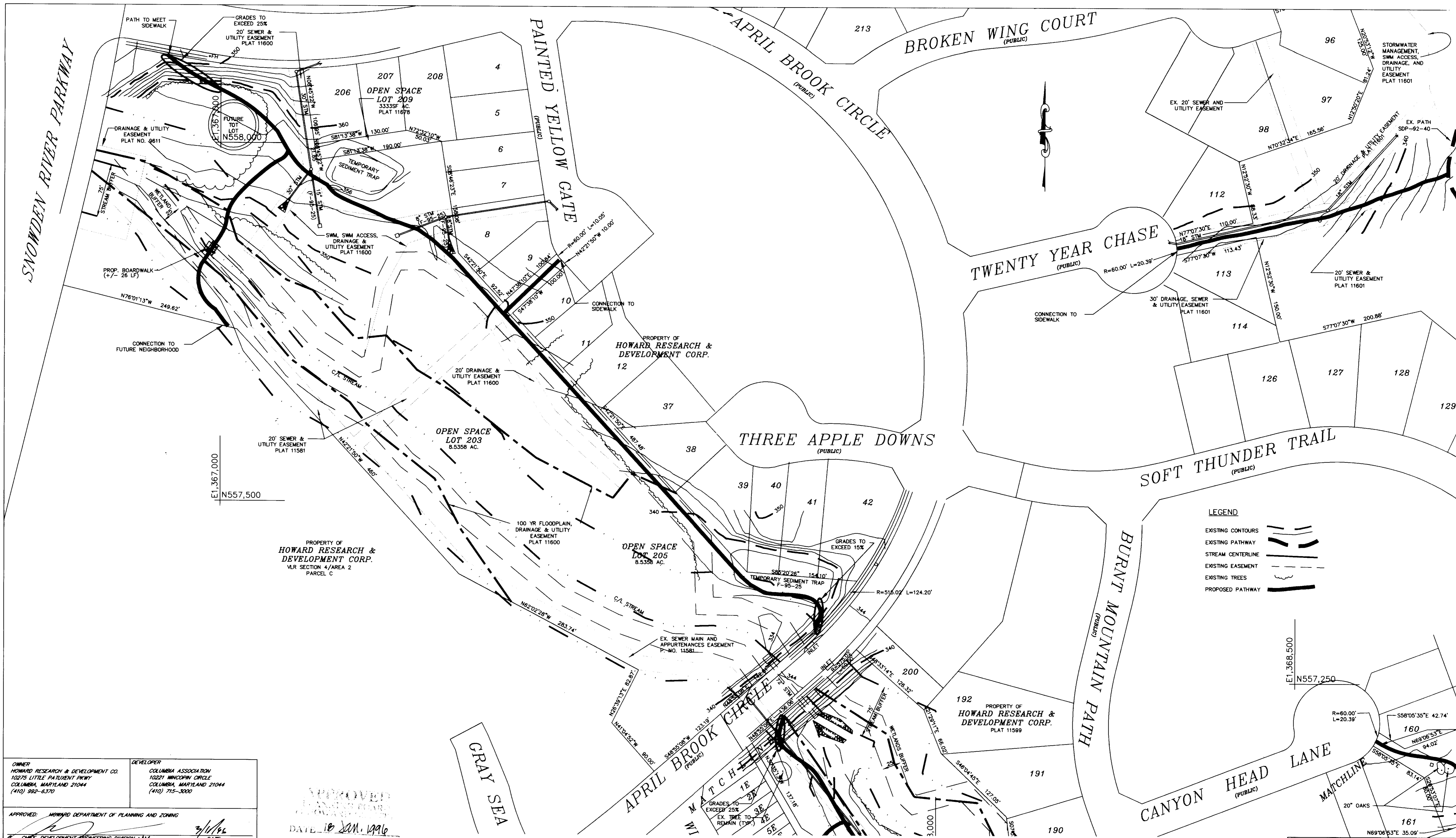
APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING
DATE: 5/17/96
DATE: 5/19/96
DATE: 5/21/96

OWNER: HOWARD RESEARCH & DEVELOPMENT CO.
10275 LITTLE PATRIBUTT FERRY
COLUMBIA, MARYLAND 21044
(410) 892-8370

DEVELOPER: COLUMBIA ASSOCIATION
10275 WINCOPIN CIRCLE
COLUMBIA, MARYLAND 21044
(410) 715-3500

APPROVED
DATE: 10-21-1996

53 F-96-23



OWNER: HOWARD RESEARCH & DEVELOPMENT CO.
10275 LITTLE PATENT PKWY.
COLUMBIA, MARYLAND 21044
(410) 992-6370

DEVELOPER: COLUMBIA ASSOCIATION
10221 MINOCOPIN CIRCLE
COLUMBIA, MARYLAND 21044
(410) 715-3000

APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING

[Signature] 3/1/96
DATE

[Signature] 5/2/96
DATE

[Signature] 5/2/96
DATE

APPROVED

DATE 10 JAN. 1996

RESPONSIBLE PERSONNEL CERTIFICATION

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

[Signature] 3/5/96
SIGNATURE OF DEVELOPER DATE

[Signature] 3/1/96
SIGNATURE OF ENGINEER 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."

[Signature] 3/1/96
SIGNATURE OF ENGINEER DATE

CERTIFICATION BY THE DEVELOPER

"I CERTIFY THAT ALL DEVELOPMENT AND OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS DEEMED NECESSARY."

[Signature] 3/5/96
SIGNATURE OF DEVELOPER DATE

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

APPROVED *[Signature]* 3/1/96
DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

APPROVED *[Signature]* 3/1/96
DATE

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
JOHN W. CLAPSADLE, P.E.
NO. 18898

prepared by:

RBA ENGINEERS • ARCHITECTS • PLANNERS

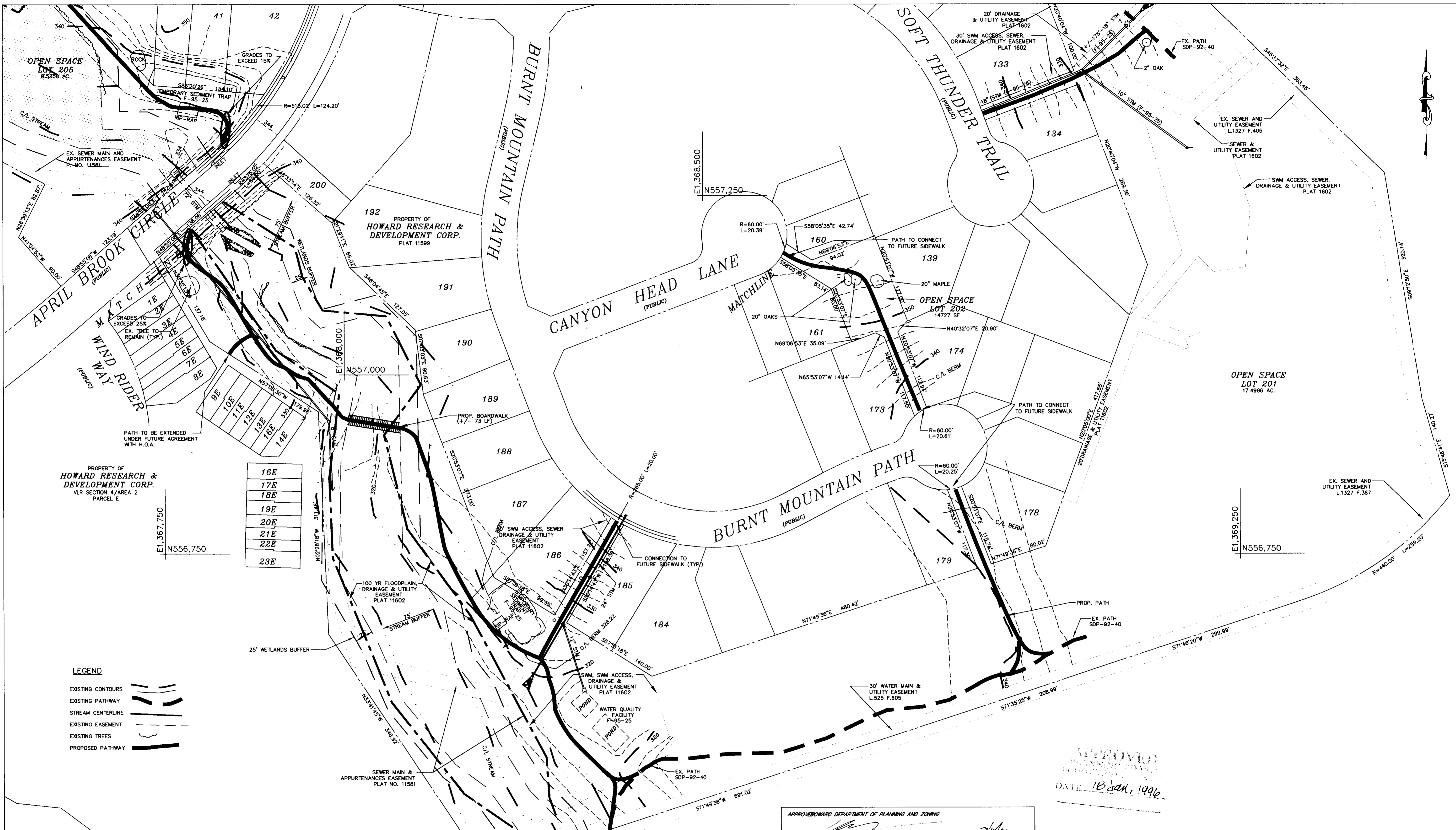
7164 COLUMBIA GATEWAY DRIVE SUITE 200
COLUMBIA, MARYLAND 21046
410/312-0868

Layout Plan

**KENDALL RIDGE
PHASE III PATHWAYS**

HOWARD COUNTY MARYLAND

SCALE	1" = 60'
DRAWN	MEG
CHECKED	JAC
PROJ. NO.	J1317
DATE	10/27/95
SHEET	3 OF 5



APPROVED 18 Jan, 1996	
APPROVED BY HOWARD DEPARTMENT OF PLANNING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION M.K. DATE 7/14/96	
APPROVED BY HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS. JOHN R. ROBERTSON 3/11/96 DATE	
APPROVED BY S. NATURAL RESOURCES CONSERVATION SERVICE J. A. WARDEN 3/11/96 DATE	
APPROVED BY STATE PROFESSIONAL ENGINEER JOHN W. CLAPSADLE, P.E. NO. 16256	
OWNER: HOWARD RESEARCH & DEVELOPMENT CO. 10225 LITTLE PATRICK PKWY COLUMBIA, MARYLAND 21044 (410) 892-6370	DEVELOPER: COLUMBIA ASSOCIATION 10221 WINDCOPIN CIRCLE COLUMBIA, MARYLAND 21044 (410) 715-3000
SUBMISSION NAME: VILLAGE OF LONG REACH SECTION/AREA: 4/2 LOT/PARCEL: 201, 202, 203	PLATS/BLOCK: NONE ZONE/TAX ZONE: 37 MAP/ELEC. DIST. GENCUS TR: 6 6056
WATER CODE: NOT APPLICABLE	SEWER CODE: NOT APPLICABLE
RESPONSIBLE PERSONNEL CERTIFICATION "I HEREBY CERTIFY THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE FROM A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT." DENNIS A. BLISS 3/11/96 SIGNATURE OF DEVELOPER (PRINT NAME BELOW) 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." JOHN W. CLAPSADLE 3/11/96 SIGNATURE OF ENGINEER (PRINT NAME BELOW) DATE
CERTIFICATION BY THE DEVELOPER "I CERTIFY THAT ALL DEVELOPMENT AND OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS DEEMED NECESSARY." DENNIS A. BLISS 3/11/96 SIGNATURE OF DEVELOPER DATE	THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. APPROVED: JOHN R. ROBERTSON 3/11/96 DISTRICT REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS. APPROVED: J. A. WARDEN 3/11/96 S. NATURAL RESOURCES CONSERVATION SERVICE DATE
prepared by: RBA ENGINEERS • ARCHITECTS • PLANNERS 7164 COLUMBIA GATEWAY DRIVE SUITE 200 COLUMBIA, MARYLAND 21046 410/312-0966	SCALE: 1" = 60' DRAWN: WEG CHECKED: JAC PROJ. NO: J1317 DATE: 7/25/95 Layout Plan - SOUTH KENDALL RIDGE PHASE III PATHWAYS HOWARD COUNTY MARYLAND SHEET 4 OF 5

SEDIMENT AND EROSION CONTROL NOTES

- ALL DISTURBED AREAS SHALL BE STABILIZED WITH PERMANENT SEED AND MULCH IN ACCORDANCE WITH PLANS APPROVED BY HSCD. APPROVAL OF FINAL STABILIZATION OF ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES BEFORE REMOVAL OF CONTROLS.
- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DIV. OF INSPECTION, LICENSES AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (313-2455)
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS TO THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- FOLLOWING THE INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETE WITHIN: A) SEVEN (7) CALENDAR DAYS AS TO THE SURFACE OF THE PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND B) FOURTEEN (14) DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- THE DEVELOPER SHALL IMPLEMENT AND ADEQUATELY MAINTAIN SEDIMENT AND EROSION CONTROL MEASURES INCLUDING LIMITING THE AREA OF DISTURBANCE TO EXISTING VEGETATION AND STEEP SLOPES FOR AREAS ADJACENT TO WETLANDS.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL PER PERMANENT SEEDINGS (SEC. 51), SOO (SEC. 54), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52) TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED IF DEEMED NECESSARY BY THE HOWARD COUNTY DEPT. OF PUBLIC WORKS SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES, DISTURBED AREAS IN EXCESS OF 2 ACRES APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- REFER TO "1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR THE STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN.
- 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 THE SEDIMENT CONTROL PRACTICES REQUIRE PRIOR APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
- ANY CHANGE TO THE GRADING PROPOSED ON THIS PLAN REQUIRES SUBMISSION TO HOWARD COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL.
- DUST CONTROL WILL BE PROVIDED FOR ALL DISTURBED AREAS. REFER TO 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL PP 62.01 OR 62.02 FOR ACCEPTABLE METHODS AND SPECIFICATIONS FOR DUST CONTROL.
- 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.
- ANY DISTURBED EARTH LEFT IDLE FOR PERIODS EXCEEDING 14 DAYS SHALL BE STABILIZED ACCORDING TO TEMPORARY STABILIZATION SPECIFICATIONS.
- AT THE END OF EACH WORK DAY ALL SEDIMENT CONTROL PRACTICE WILL BE INSPECTED AND LEFT IN THE OPERATIONAL CONDITION.
- ALL SEDIMENT AND EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE AGREEMENT MADE BETWEEN COLUMBIA ASSOCIATION AND HSCD AND AS AMENDED 8/1/90.
- THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS, AND/OR RIGHTS-OF-WAYS THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORMWATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORMWATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAYS THAT MAY BE REQUIRED FOR GRADING AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
- THE SEDIMENT CONTROL APPROVALS ON THIS PLAN EXTEND ONLY TO AREAS AND PRACTICES IDENTIFIED AS PROPOSED WORK AND SHALL APPLY AS IF SHOWN ON ALL PLANS.
- THE APPROVAL OF THE PLAN FOR SEDIMENT AND EROSION CONTROL DOES NOT RELIEVE THE DEVELOPER/CONSULTANT FROM COMPLYING WITH ANY FEDERAL/STATE/COUNTY REQUIREMENTS PERTAINING TO ENVIRONMENTAL ISSUES.

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DIGGING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSESED.

SOIL AMENDMENTS: LIEU OF SOIL TESTS RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 800 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL AT THE TIME OF SEEDING. APPLY 400 LB. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ. FT.)
- ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 80 LBS. PER ACRE (1.4 LBS/1000 SQ. FT.) OF KENTUCKY31 TALL FESCUE, FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 80 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (.05 LBS/1000 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 500. OPTION (3) SEED WITH 80 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 GRAN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DIGGING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSESED.

SOIL AMENDMENTS: APPLY 80 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.)

SEEDING: FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 15 THRU NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/100 SQ. FT.) FOR THE PERIOD OF MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ. FT.) FOR THE PERIOD OF NOVEMBER 16 THRU FEBRUARY 28. PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OR USE SOO.

MULCHING - APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED SMALL GRAN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

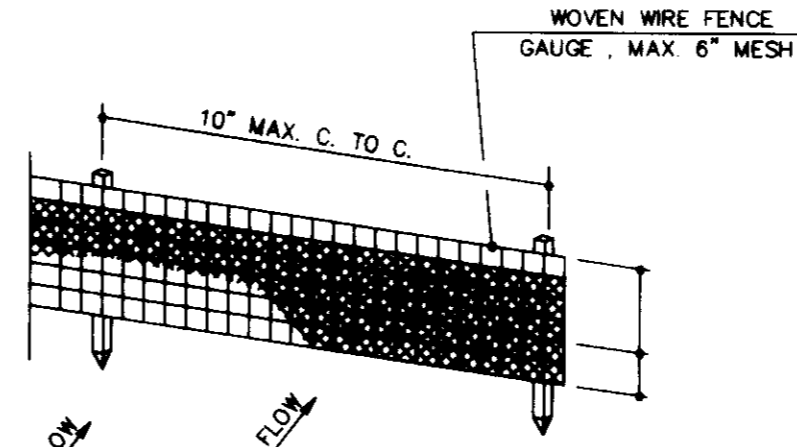
REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SEQUENCE OF CONSTRUCTION

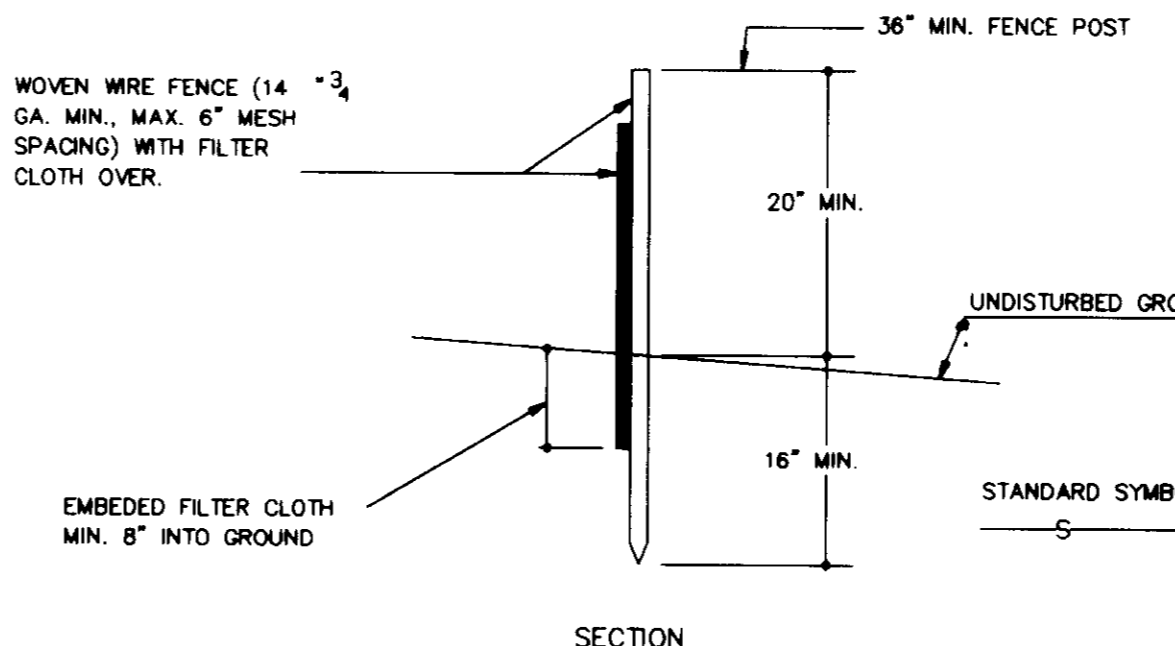
- OBTAIN GRADING PERMIT AND ALL OTHER NECESSARY PERMITS 1 WEEK
- NOTIFY THE DIVISION OF INSPECTIONS AND CONSTRUCTION 48 HOURS PRIOR TO COMMENCEMENT OF WORK
- INSTALL SILT FENCE ALONG THE PATHWAY SECTION TO BE CONSTRUCTED 1 WEEK
- INSTALL TREE PROTECTION FENCE 1 WEEK
- COMPACT SUBGRADE AND INSTALL PATHWAY 3 WEEKS
- UPON APPROVAL OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROLS AND STABILIZE IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES 1 WEEK

NOTE:

- THE BOARDWALK DETAILS SHOWN ON THIS PLAN ARE THE MINIMUM STANDARDS AND WERE SUPPLIED BY COLUMBIA ASSOCIATION. THEY ARE NOT SITE SPECIFIC AND SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES.
- D.P.W. REVIEWS BOARDWALK DRAWINGS FOR LINE GRADE AND FLOODPLAIN IMPACTS ONLY. THE DEPARTMENT OF LICENSES AND PERMITS PERFORMS STRUCTURAL REVIEW.



PERSPECTIVE VIEW

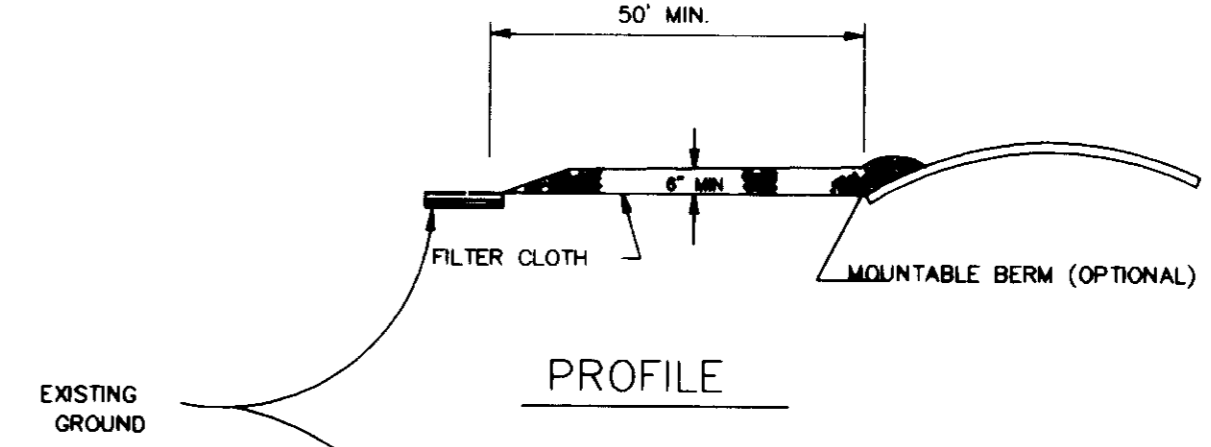


SECTION

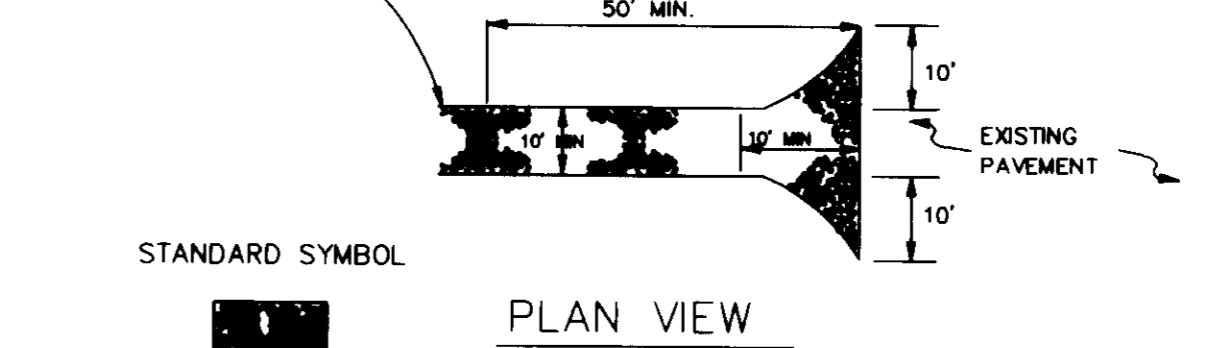
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

2 SILT FENCE
N.T.S.



PROFILE



PLAN VIEW

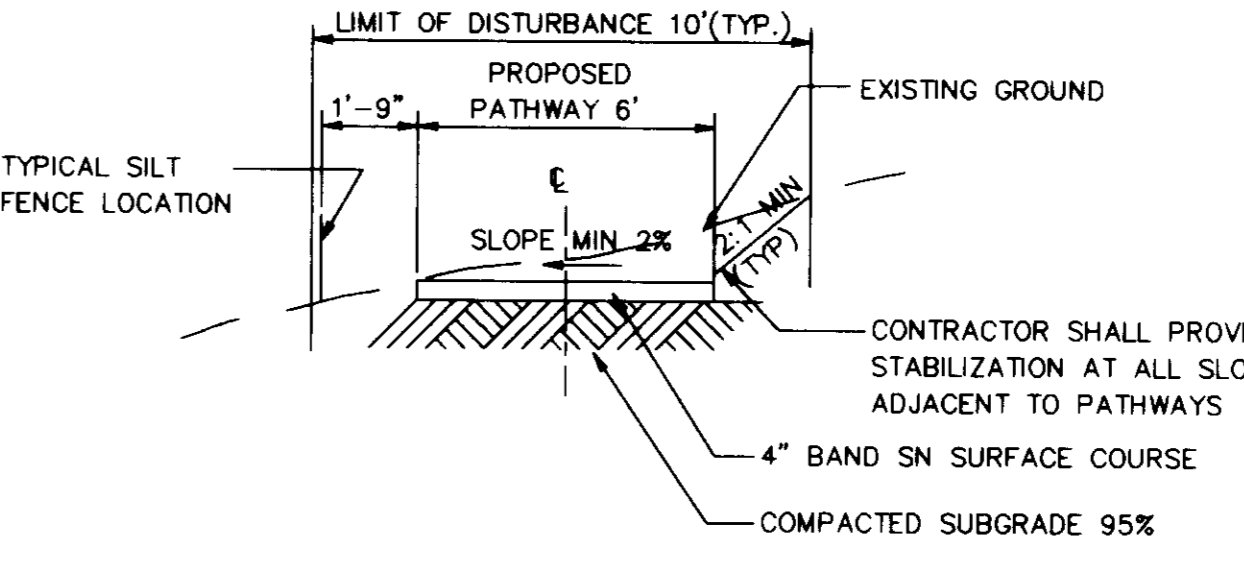
STANDARD SYMBOL

SCE

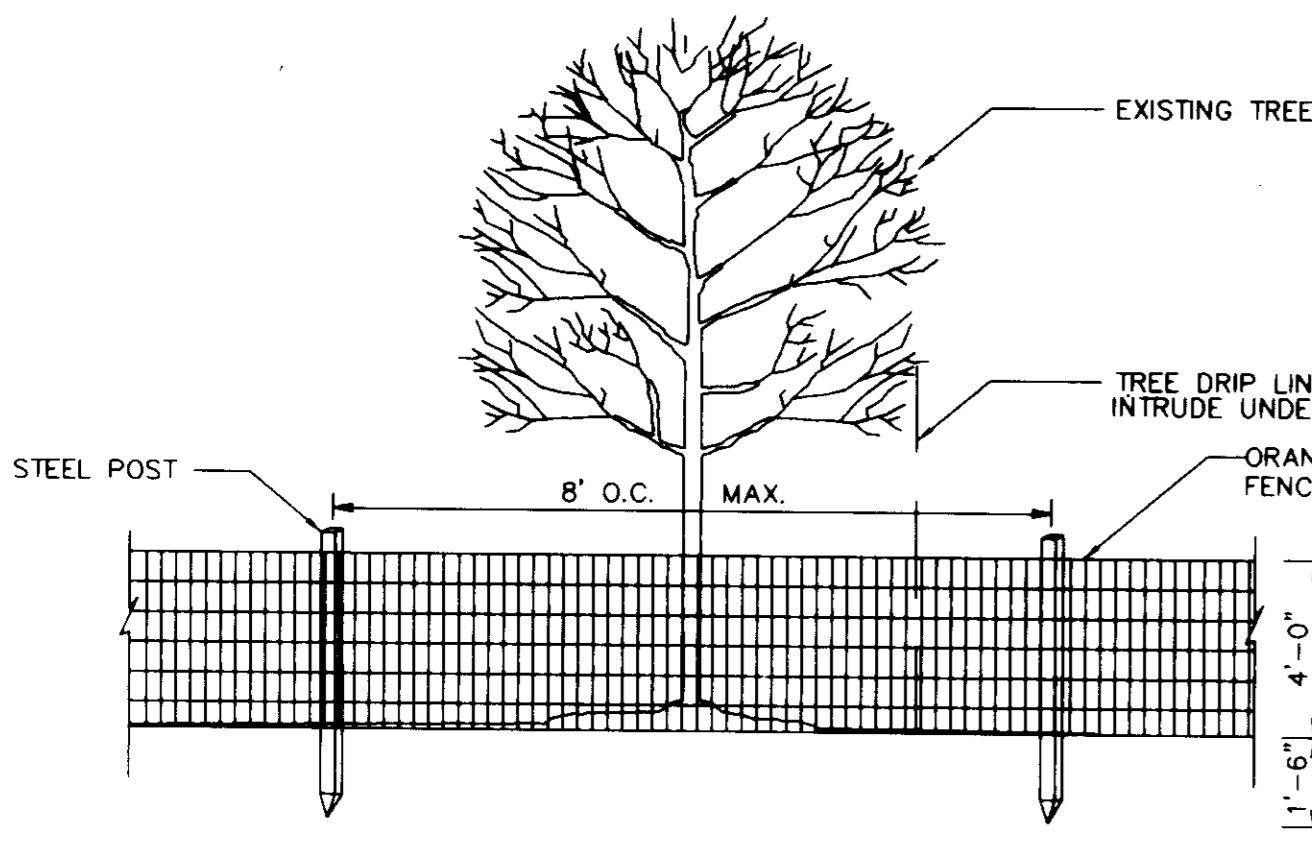
CONSTRUCTION SPECIFICATIONS

- STONE SIZE - USE 2" STONE OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET, (EXCEPT ON A RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - TEN (10) FOOT MINIMUM BUT NOT LESS THAN FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL A MOUNTABLE BERM WITH 3:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED IT SHALL BE DONE IN AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RUN.

3 STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



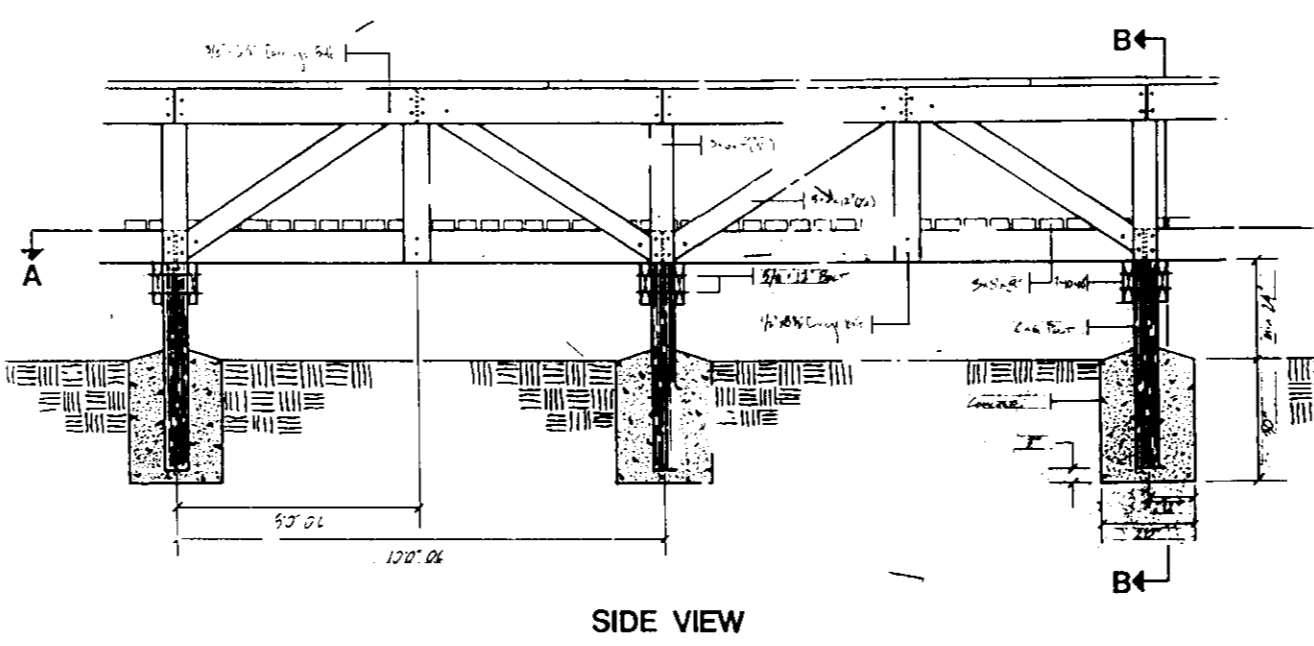
4 TYPICAL PATHWAY CROSS SECTION
N.T.S.



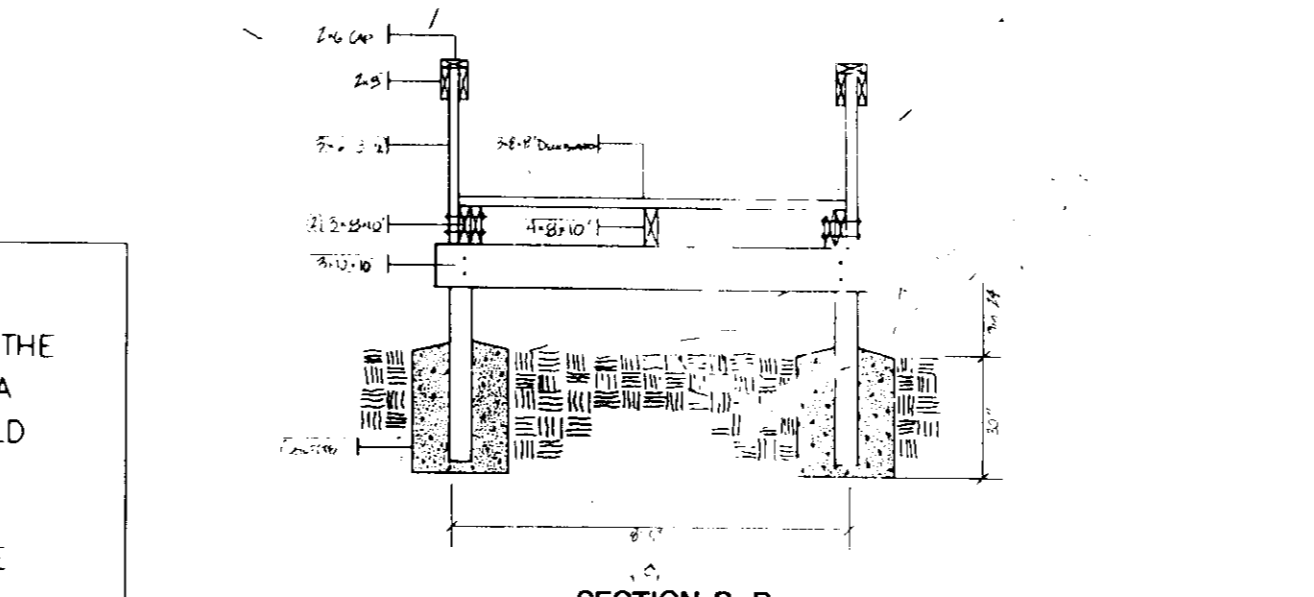
1 TREE PROTECTION FENCE
N.T.S.

TREE PROTECTION PROCEDURES

- TREE PROTECTION FENCE SHALL BE INSTALLED AT THE DRIP LINE OF THE TREES TO BE PROTECTED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.
- THE GENERAL CONTRACTOR SHALL HAVE THE RESPONSIBILITY FOR TREE PROTECTION. HE SHALL TAKE CARE TO PROTECT TREE ROOT SYSTEMS FROM DAMAGE INCLUDING SMOKING, FLOODING, AND SPILLAGE.
- REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA WILL BE PROHIBITED.
- FOOT AND VEHICULAR TRAFFIC SHALL BE KEPT TO A MINIMUM IN THE TREE PROTECTION AREA. THE FOLLOWING CONSTRUCTION ACTIVITIES ARE PROHIBITED: PLACING BACKFILL IN THE PROTECTED AREA; BURNING IN OR IN CLOSE PROXIMITY TO PROTECTED AREAS; FELLING TREES IN THE PROTECTED AREA; STORING SUPPLIES IN THE PROTECTED AREA; OR CONDUCTING TRENCHING OPERATIONS IN THE PROTECTED AREA.
- ALL TREES TO BE REMOVED WITHIN 50 FEET OF THE TREE PROTECTION AREA ARE TO BE REMOVED IN A MANNER THAT WILL NOT DAMAGE THE TREES OR ROOTS OF THE TREES IN THE TREE PROTECTION AREA.



SIDE VIEW



SECTION B-B

6 TYPICAL BOARDWALK
1/4" = 1'-0"

RESPONSIBLE PERSONNEL CERTIFICATION

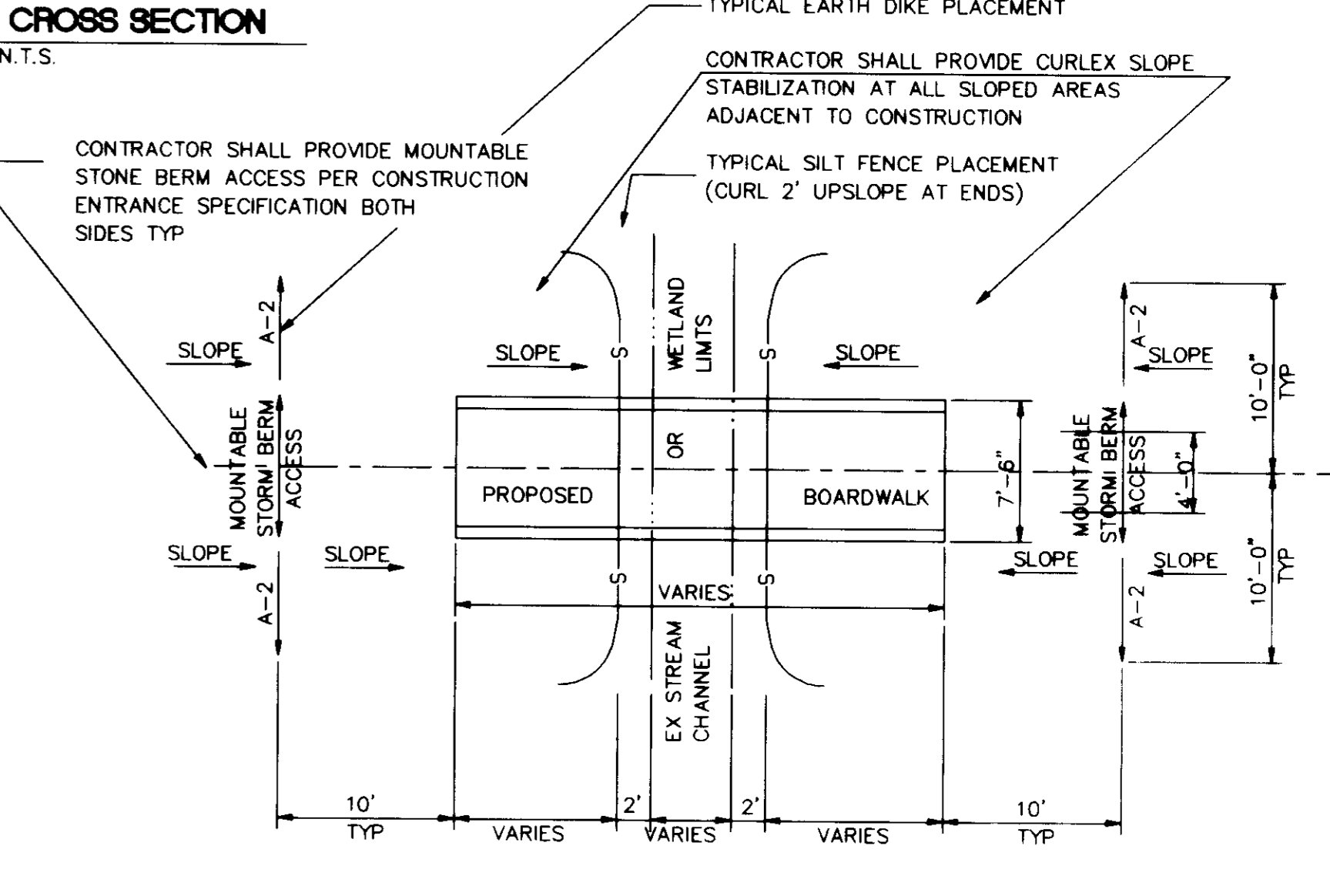
"I HEREBY CERTIFY THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE FROM A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."

Signature of Developer: Denis A. Ellis, Date: 3/15/96

Signature of Engineer: John W. Clapsdale, Date: 3/15/96

Signature of Developer: Denis A. Ellis, Date: 3/15/96

Professional Engineer Seal for John W. Clapsdale, P.E., No. 16836.



5 BOARDWALK INSTALLATION PLAN
N.T.S.

APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING

DEVELOPMENT ENGINEERING DIVISION M.K. DATE: 3/15/96

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE: 5/2/96

DIRECTOR DATE: 5/2/96

OWNER: HOWARD RESEARCH & DEVELOPMENT CO. 10275 LITTLE PATIENT PARK COLUMBIA, MARYLAND 21044 (410) 982-6370

DEVELOPER: COLUMBIA ASSOCIATION 10271 WHODOWN CIRCLE COLUMBIA, MARYLAND 21044 (410) 715-3000

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

APPROVED: John P. Rohatka, DATE: 3/11/96

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

APPROVED: J. A. Wanfield, DATE: 3/11/96

U.S. NATURAL RESOURCES CONSERVATION SERVICE

HOWARD COUNTY

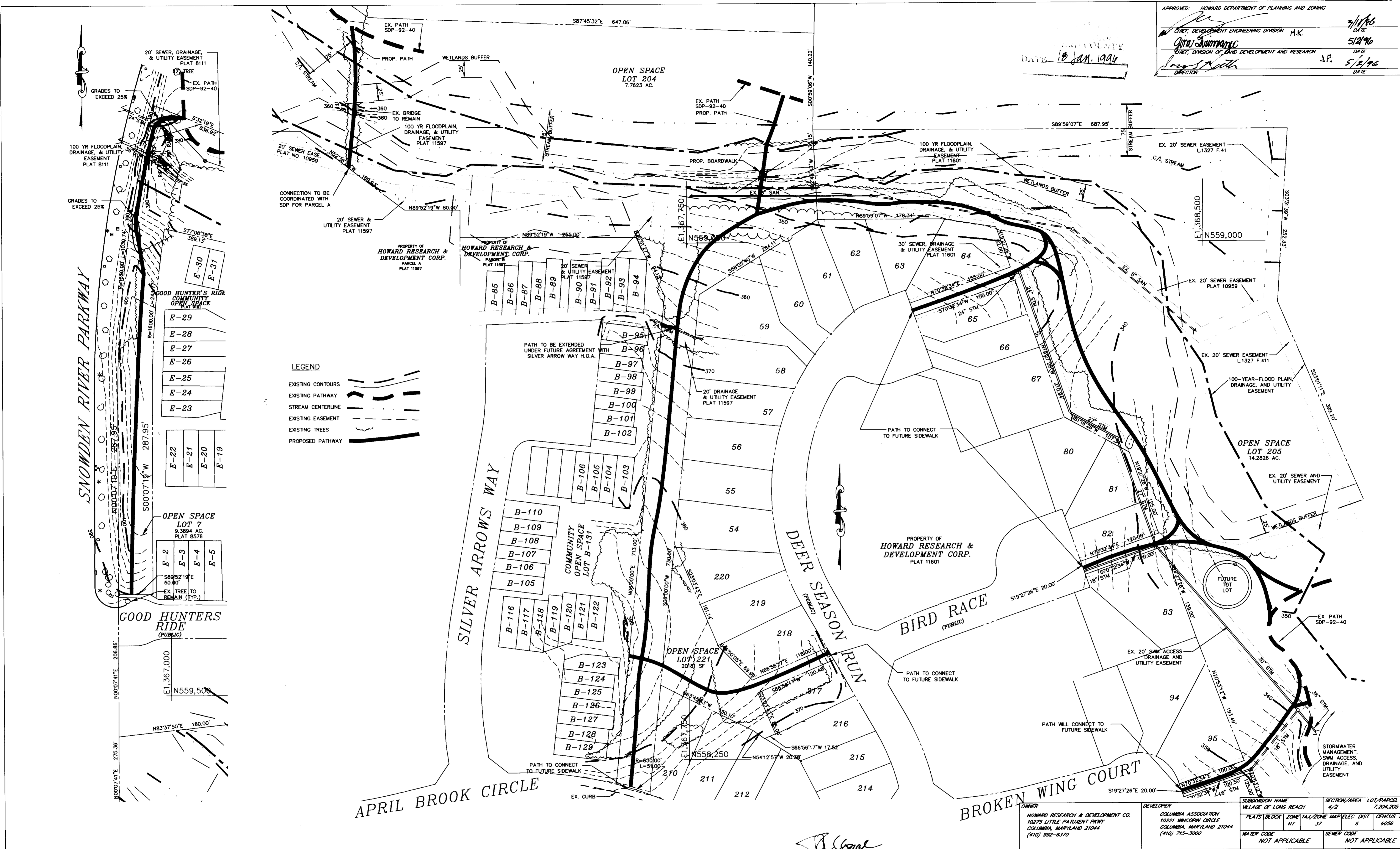
DATE: 18 JUN 1996

SUBDIVISION NAME VILLAGE OF LONG REACH	SECTION/AREA 4/2	LOT/PARCEL
PLATS/BLOCK NT	ZONE/TAX/ZONE MAP/ELEC. DIST. 37	CENSUS TR. 8056
WATER CODE NOT APPLICABLE	SEWER CODE NOT APPLICABLE	
DETAILS		
SCALE AS SHOWN		
DRAWN MEG	CHECKED JAC	
PROJ. NO. J317	DATE 10/26/95	
5	5	
SHEET OF		

RBA ENGINEERS - ARCHITECTS - PLANNERS

7164 COLUMBIA GATEWAY DRIVE SUITE 200 COLUMBIA, MARYLAND 21046 410/312-0886

APPROVED: HOWARD DEPARTMENT OF PLANNING AND ZONING
 DATE: 10 JAN. 1996
 CHIEF, DEVELOPMENT ENGINEERING DIVISION M.K.
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH J.P.
 DIRECTOR



LEGEND

- EXISTING CONTOURS
- EXISTING PATHWAY
- STREAM CENTERLINE
- EXISTING EASEMENT
- EXISTING TREES
- PROPOSED PATHWAY

RESPONSIBLE PERSONNEL CERTIFICATION
 I HEREBY CERTIFY THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE FROM A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.
 Signature: [Signature] DATE: 3/5/96
 DENIS A. ELLIS

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.
 Signature: [Signature] DATE: 3/1/96
 JOHN W. CLAPSADLE

CERTIFICATION BY THE DEVELOPER
 I CERTIFY THAT ALL DEVELOPMENT AND OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS DEEMED NECESSARY.
 Signature: [Signature] DATE: 3/5/96
 DENIS A. ELLIS

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
 APPROVED: [Signature] DATE: 3/1/96
 REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
 APPROVED: [Signature] DATE: 3/1/96
 JOHN W. CLAPSADLE, P.E. MD. NO. 16856

revisions	description	date

prepared by:
RBA ENGINEERS - ARCHITECTS - PLANNERS
 7164 COLUMBIA GATEWAY DRIVE SUITE 200
 COLUMBIA, MARYLAND 21046
 410.312-0866

Layout Plan - NORTH		SCALE: 1" = 60'
KENDALL RIDGE PHASE III PATHWAYS		DRAWN: MEG CHECKED: JAC
HOWARD COUNTY MARYLAND		PROJ. NO. J1317 DATE: 10/26/95
2	5	SHEET OF

319-96-33