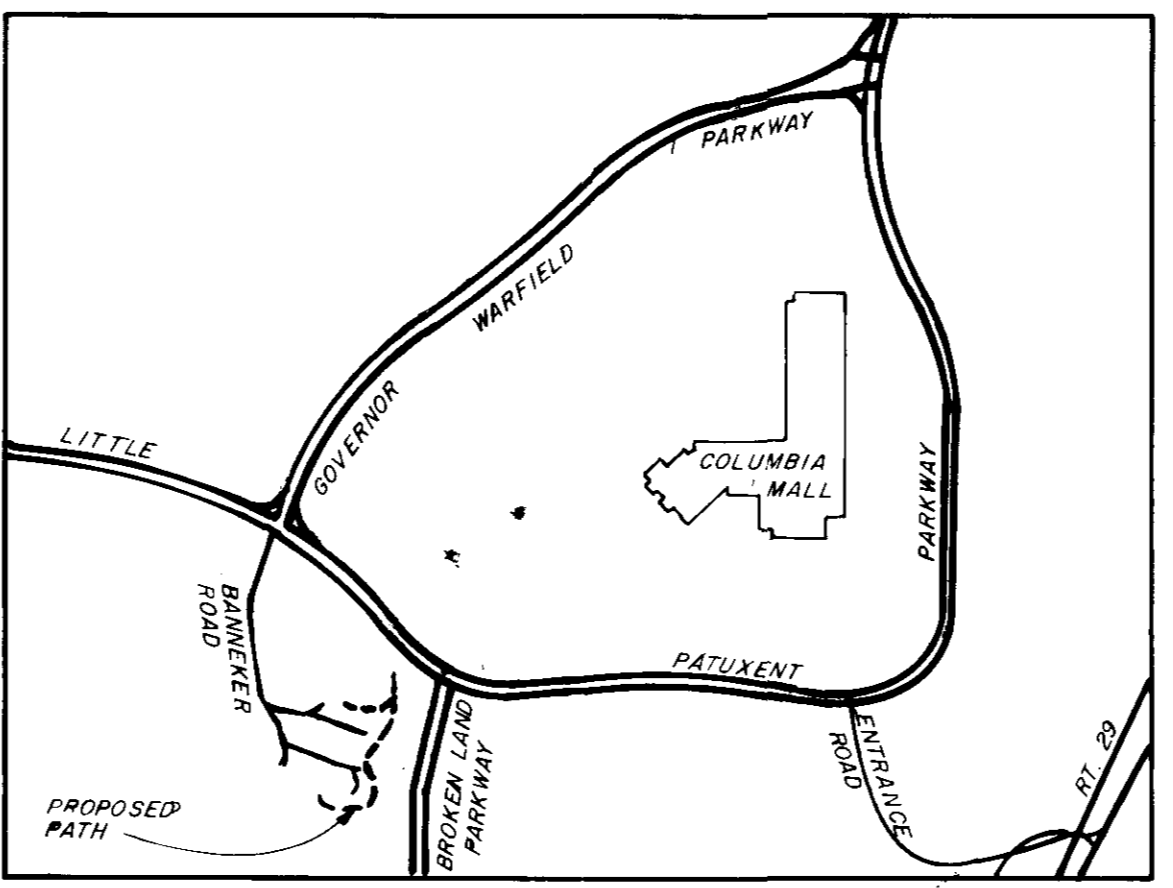
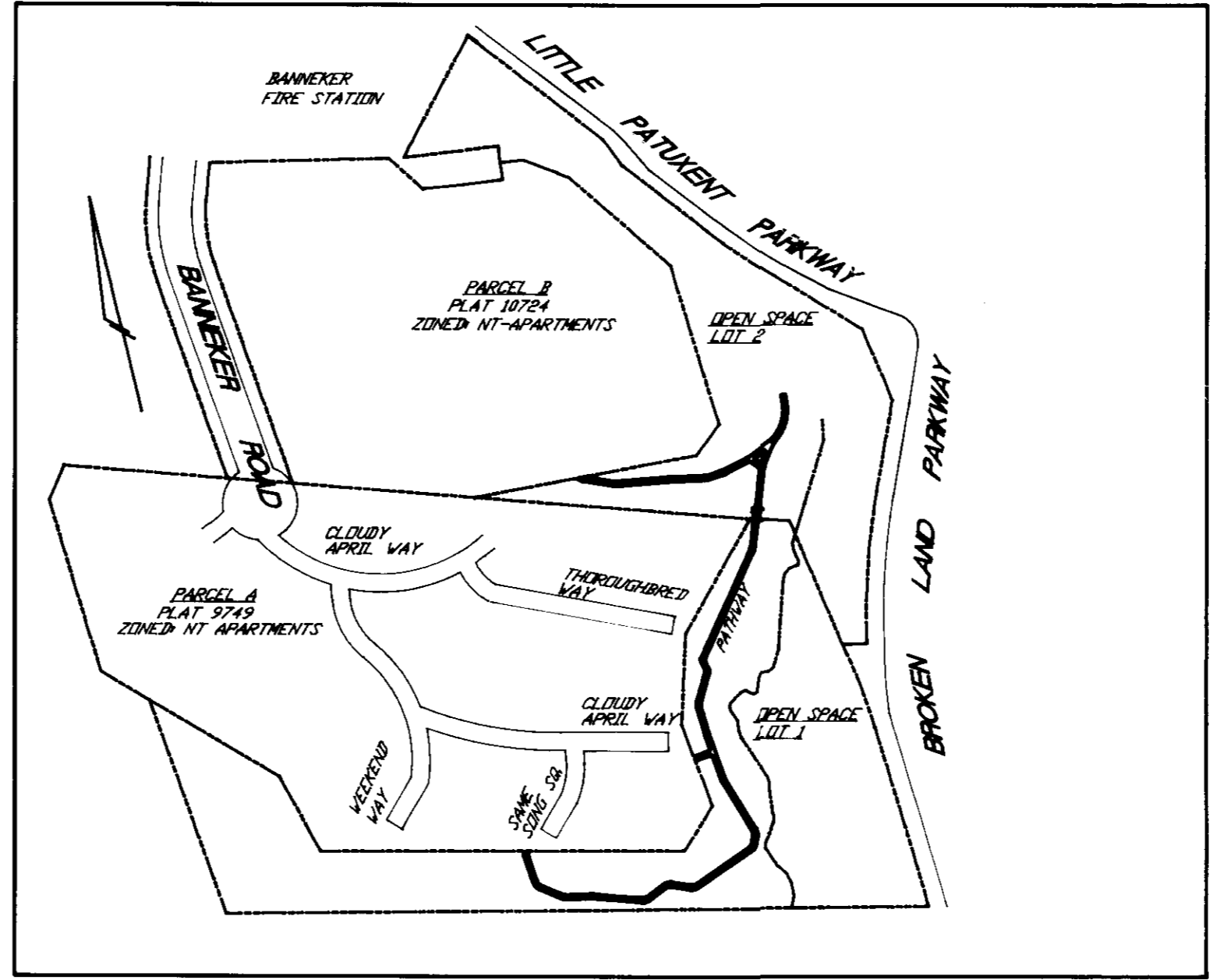


### GENERAL NOTES

- TOPOGRAPHY ON THIS DRAWING HAS BEEN TRACED FROM AVAILABLE PUBLIC RECORDS. THE OWNER OR ARCHITECT DO NOT GUARANTEE THE INFORMATION HEREIN, NOR DOES INFORMATION SHOWN OR NOT SHOWN 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 CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE AND MINIMUM COVER. 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.
- 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 NOT 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/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1800 48 HOURS DAYS 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.
- THE DEVELOPER SHALL REQUEST THAT THE DEPARTMENT OF INSPECTIONS, PERMITS AND LICENSES APPROVE WORK COMPLETED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN AND THE GRADING OR BUILDING PERMIT.
- 100 YR FLOOD PLAIN AND WETLANDS SHOWN ARE BASED ON PLATS 9749 AND 10724.
- 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 3 FOR ADDITIONAL NOTES.
- ALL PROPOSED IMPROVEMENTS WILL BE MAINTAINED BY THE OWNER.
- IN ACCORDANCE WITH FDP NO.61-A-II FOR OPEN SPACE LAND USE, NO STRUCTURE SHALL BE LOCATED WITHIN 10 FEET OF A PUBLIC STREET, ROAD OR HIGHWAY RIGHT-OF-WAY OR WITHIN 25 FEET OF ANY PROPERTY LINE, EXCEPT IF SHOWN ON A SDP BY THE HOWARD COUNTY PLANNING BOARD.
- ADJUSTMENTS TO THE SEQUENCE OF CONSTRUCTION MUST BE APPROVED BY THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, PERMITS AND LICENSES PRIOR TO SUCH ADJUSTMENTS.
- LOT 2 IS SUBJECT TO WP-93-37 (APPROVED 11/2/92) WHICH REQUESTED A WAIVER OF SECTION 116(C)(4) TO ALLOW GRADING OF SLOPES 25% OR GREATER WHEN ADJACENT TO FLOODPLAIN OR WETLANDS OR WHEN THE SLOPE AREA IS OVER 20,000 CONTIGUOUS SQUARE FEET. NO GRADING, CLEARING OR DISTURBANCE IS ALLOWED WITHIN THE 25 FOOT WETLANDS BUFFER OR 75 FOOT STREAM BUFFER.
- WAIVERS WERE GRANTED (WP-94-92) ON 5/26/94 FROM THE FOLLOWING PORTIONS OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS: 16.115(b)(1), 116(a)(1) AND (2) AND 116(b)(1) TO ALLOW GRADING/CONSTRUCTION IN THE FLOODPLAIN WITHIN THE WETLANDS BUFFER AND STREAM BUFFER, AND ON SLOPES GREATER THAN 25%. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
  - COMPLIANCE WITH COMMENTS FROM SRC FOR SDP-94-114.
  - GRADING AND REMOVAL OF VEGETATION SHALL ONLY BE TO THE EXTENT NECESSARY FOR THE PROPOSED PATHWAY.
  - CORRECT THE WAIVER EXHIBIT TO INCLUDE STREAM BUFFER AND FLOODPLAIN DISTURBANCE IN THE LEGEND.



VICINITY MAP  
SCALE: 1"=1000'



AREA MAP  
SCALE: 1"=200'

# BANNEKER ROAD PATHWAY CONNECTION COLUMBIA TOWN CENTER

### SITE ANALYSIS

- AREA OF LOTS: LOT 1- 4,3354 AC. LOT 2- 3,165 AC. = 7,50 TOTAL AC.
- ZONING: NEW TOWN FDP NO: 61-A-II
- PROPOSED DEVELOPMENT: PEDESTRIAN PATHWAY
- PROPOSED BITUMINOUS PATHWAY: 1,354 LF TOTAL 8,124 SQ. FT.
- DISTURBED WETLANDS: 294 SQ. FT. DISTURBED WETLANDS BUFFER: 4,382 SQ. FT., 0.10 AC.
- DISTURBED STREAM BUFFER: 7,261 SQ. FT. 0.17 AC.
- TOTAL LIMITS OF DISTURBANCE: 14,902 SQ. FT. 0.34 AC.

### SHEET INDEX

SHEET NO.	TITLE
1	TITLE SHEET
2	LAYOUT, GRADING AND SEDIMENT CONTROL PLAN
3	SEDIMENT AND EROSION CONTROL DETAILS

### SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT FROM HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS. 1 DAY
- NOTIFY MD. DEPARTMENT OF ENVIRONMENT TEN (10) DAYS PRIOR TO COMMENCING WORK.
- NOTIFY INSPECTIONS, LICENSES AND PERMITS AT LEAST 48 HOURS BEFORE ANY WORK BEGINS. 2 DAYS
- CLEAR AND GRUB FOR SEDIMENT AND EROSION CONTROL MEASURES ONLY 2 DAYS
- INSTALL STABILIZED CONSTRUCTION ENTRANCES. LOCATE ENTRANCES AS PER AGREEMENT BETWEEN PROPERTY OWNERS AND COLUMBIA ASSOCIATION. 1 DAY
- INSTALL TREE PROTECTION FENCE 1 DAY
- INSTALL SEDIMENT AND EROSION CONTROL MEASURES ASSOCIATED WITH BRIDGE AND BOARDWALK CROSSING AREAS. OBTAIN BUILDING PERMIT FOR CONSTRUCTION OF BRIDGES. INSTALL BRIDGES AND BOARDWALKS TO AVOID DISTURBANCE TO EXISTING STREAM CHANNELS. 5 DAYS
- INSTALL SILT FENCE ALONG THE PATH SECTION TO BE CONSTRUCTED. LIMIT LENGTH OF DISTURBANCE SECTION TO 100 FEET AT ANY ONE TIME OR THAT WHICH WILL BE STABILIZED IN ONE WORK DAY. PLACE ON THE DOWNHILL SIDE OF THE PROPOSED PATH IN ACCORDANCE WITH THE HOWARD COUNTY SOIL CONSERVATION DISTRICT DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AND 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. 2 DAYS
- NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS. SEDIMENT CONTROL DIVISION UPON COMPLETION OF SAID INSTALLATION. 2 DAYS
- ALL PROPOSED PATHWAY LOCATIONS SHALL BE FIELD STAKED AND APPROVED BY THE PROJECT ENGINEER. PATHWAYS SHALL BE LAID OUT 30' FROM EXISTING STREAM CHANNELS WHERE OPEN SPACE PROPERTY LIMITS PERMIT. 2 DAYS
- WITH THE APPROVAL OF THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AND THE SEDIMENT CONTROL INSPECTOR, CLEAR AND GRUB AREAS FOR PATHWAY CONSTRUCTION. 3 DAYS
- GRADE AREAS FOR PATHWAY CONSTRUCTION AS CLOSE TO EXISTING GRADES AS POSSIBLE. CROSS SLOPES SHALL REFLECT EXISTING TOPOGRAPHIC CONDITIONS. 3 DAYS
- MAINTAIN POSITIVE DRAINAGE TO SEDIMENT CONTROL STRUCTURES. NO SLOPES SHALL EXCEED 3% SLOPE. STABILIZE ROUGH GRADED AREAS PER SPECIFICATIONS LISTED. 3 DAYS
- STABILIZE ALL DISTURBED AREAS IMMEDIATELY FOLLOWING INITIAL SOIL DISTURBANCE AND WITHIN 14 DAYS.
- INSTALL BASE COURSE AND BITUMINOUS ASPHALT AS REQUIRED TO MAINTAIN POSITIVE DRAINAGE FLOW. PERMANENTLY STABILIZE ALL DISTURBED AREAS ON EITHER SIDE OF PATHWAYS. 10 DAYS
- AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL EROSION CONTROL DEVICES AND STABILIZE THOSE AREAS. 1 DAY

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

*James J. [Signature]* 11/12/94  
DIRECTOR DATE

*James J. [Signature]* 11/2/94  
CHIEF, BUREAU OF ENGINEERING M.K. ODUM DATE

APPROVED HOWARD DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 11/18/94  
DIRECTOR DATE

*James J. [Signature]* 11/18/94  
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH JR

OWNER  
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY  
1825 LITTLE PATUXENT PKWY  
COLUMBIA, MARYLAND 21044  
(410) 992-6370

DEVELOPER  
COLUMBIA ASSOCIATION  
1821 WINDOPIN CIRCLE  
COLUMBIA, MARYLAND 21044  
(410) 715-3000

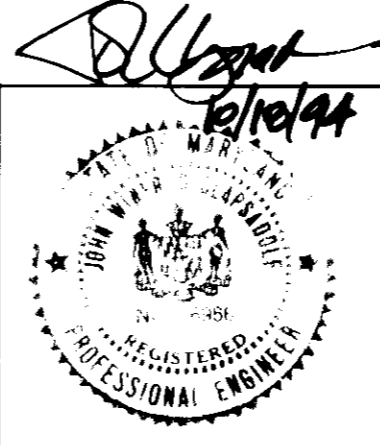
ADDRESS CHART

BUILDING: NA  
STREET ADDRESS: NA

SUBDIVISION NAME: COLUMBIA TOWN CENTER  
SECTION/AREA: 3/2  
LOT/PARCEL: 2

PLAT'S/BLOCK: 9749, 10724  
ZONE/TAX ZONE: NT, 36  
MAP/REG. DIST: 5, 6056

SEWER CODE: NA



no.	description	date	prepared by:

**RBA** ENGINEERS • ARCHITECTS • PLANNERS

3360 STERRETT PLACE SUITE 300  
COLUMBIA, MARYLAND 21044  
410/730-7950

TITLE SHEET

**BANNEKER ROAD  
PATHWAY CONNECTION**

HOWARD COUNTY MARYLAND

SCALE: 1"=200'

DRAWN: JAC  
PROJ. NO: J07986  
DATE: 9/94

CHECKED: JMC  
DATE: 9/94

1 3  
SHEET OF

BHW-SP-DWG

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

*James J. Law* 11/9/94  
DIRECTOR DATE

*Robert J. Gannon* 11/9/94  
CHIEF, BUREAU OF ENGINEERING M.K. (01/16/94) DATE

APPROVED HOWARD DEPARTMENT OF PLANNING AND ZONING

*Mark V. DeAngelis* 11/12/94  
DIRECTOR DATE

*Jim Jammann* 11/10/94  
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH J.R.

OWNER  
HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY  
10275 LITTLE PATUMENT PKWY  
COLUMBIA MARYLAND 21044  
(410) 992-6370

DEVELOPER  
COLUMBIA ASSOCIATION  
10221 WINDCOPIN CIRCLE  
COLUMBIA MARYLAND 21044  
(410) 715-3000

CERTIFICATION BY THE DEVELOPER  
"I HAVE HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT 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."  
*Donis A. Buis* 10/18/94  
SIGNATURE OF DEVELOPER DATE  
PRINT NAME BELOW SIGNATURE

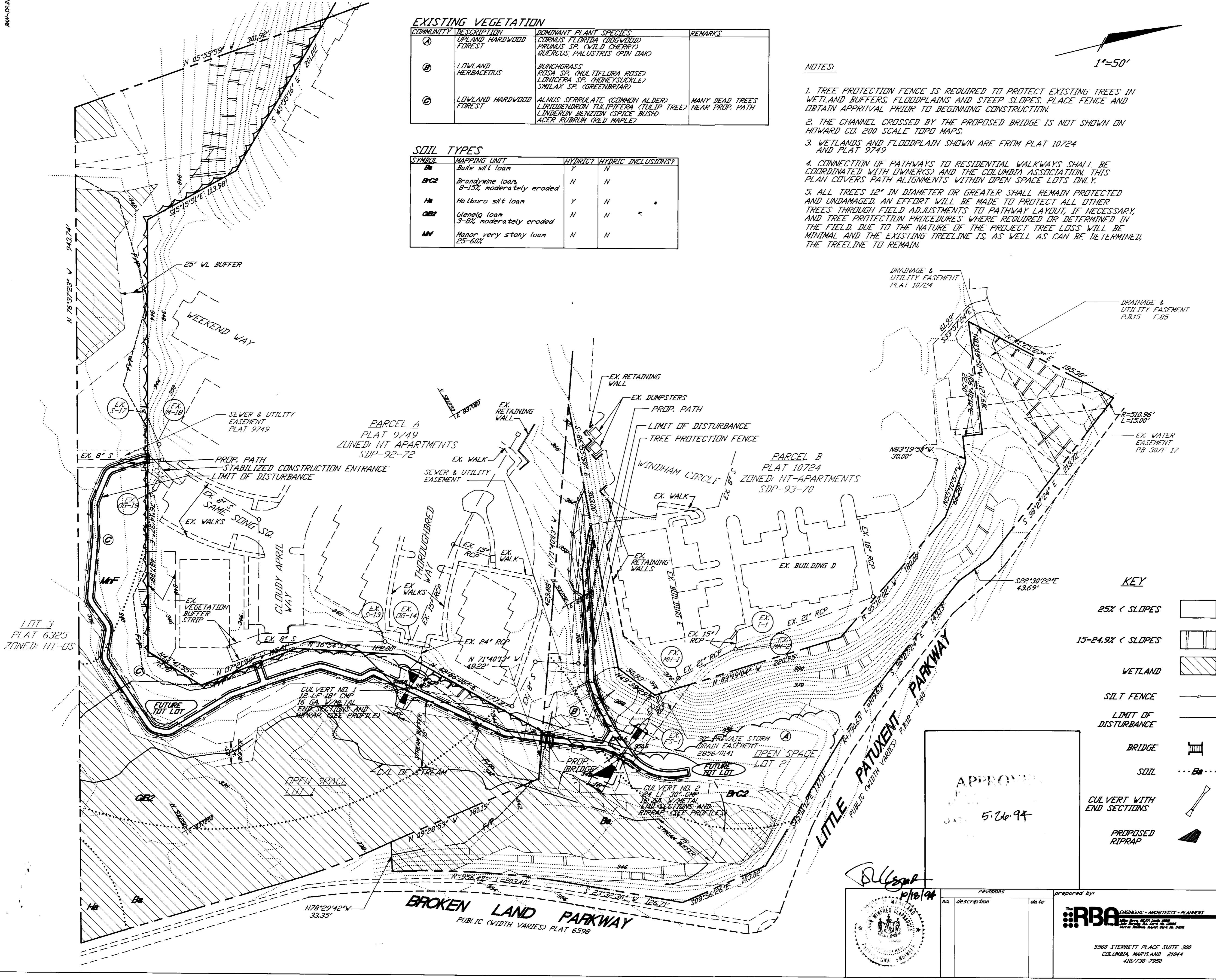
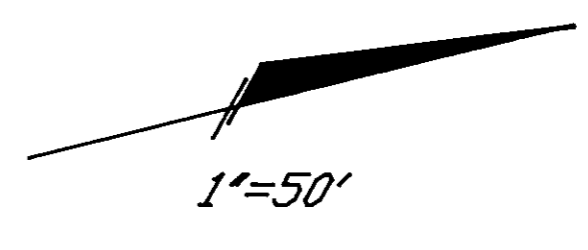
CERTIFICATION BY THE ENGINEER  
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."  
*John W. Clapsaddle* 10/18/94  
SIGNATURE OF ENGINEER DATE  
PRINT NAME BELOW SIGNATURE

APPROVED FOR HOWARD S.C.B. AND MEETS TECHNICAL REQUIREMENTS  
*Patricia E. ...* 10/26/94  
U.S. SOIL CONSERVATION SERVICE DATE  
\*... per Standard Agreement with C.A.

EXISTING VEGETATION		
COMMUNITY DESCRIPTION	DOMINANT PLANT SPECIES	REMARKS
① UPLAND HARDWOOD FOREST	QUERCUS FLORIDA (OAKWOOD) PRUNUS SP. (WILD CHERRY) QUERCUS PALUSTRIS (PIN OAK)	
② LOWLAND HERBACEOUS	BUNCHGRASS RIZIA SP. (MULTIFLORA ROSE) LINDIGERA SP. (HONEY SUCKLE) SMILAX SP. (GREENBRIAR)	
③ LOWLAND HARDWOOD FOREST	ALNUS SERRULATA (COMMON ALDER) LIRIODENDRON TULIPIFERA (TULIP TREE) LINDERON BENZON (SPICE BUSH) ACER RUBRUM (RED MAPLE)	MANY DEAD TREES NEAR PROP. PATH

SOIL TYPES			
SYMBOL	MAPPING UNIT	HYDRIC?	HYDRIC INCLUSIONS?
Ba	Baile silt loam	Y	N
BC2	Brandywine loam 8-15% moderately eroded	N	N
Hs	Hatboro silt loam	Y	N
GB2	Glenelg loam 3-8% moderately eroded	N	N
MV	Manor very stony loam 25-60%	N	N

- NOTES:
- TREE PROTECTION FENCE IS REQUIRED TO PROTECT EXISTING TREES IN WETLAND BUFFERS, FLOODPLAINS AND STEEP SLOPES. PLACE FENCE AND OBTAIN APPROVAL PRIOR TO BEGINNING CONSTRUCTION.
  - THE CHANNEL CROSSED BY THE PROPOSED BRIDGE IS NOT SHOWN ON HOWARD CO. 200 SCALE TOPO MAPS.
  - WETLANDS AND FLOODPLAIN SHOWN ARE FROM PLAT 10724 AND PLAT 9749.
  - CONNECTION OF PATHWAYS TO RESIDENTIAL WALKWAYS SHALL BE COORDINATED WITH OWNER(S) AND THE COLUMBIA ASSOCIATION. THIS PLAN COVERS PATH ALIGNMENTS WITHIN OPEN SPACE LOTS ONLY.
  - ALL TREES 12" IN DIAMETER OR GREATER SHALL REMAIN PROTECTED AND UNDAUNAGED. AN EFFORT WILL BE MADE TO PROTECT ALL OTHER TREES THROUGH FIELD ADJUSTMENTS TO PATHWAY LAYOUT. IF NECESSARY, AND TREE PROTECTION PROCEDURES WERE REQUIRED OR DETERMINED IN THE FIELD, DUE TO THE NATURE OF THE PROJECT TREE LOSS WILL BE MINIMAL AND THE EXISTING TREELINE IS, AS WELL AS CAN BE DETERMINED, THE TREELINE TO REMAIN.



**KEY**

25% < SLOPES	[Symbol]	EX. CONTOUR	[Symbol]
15-24.9% < SLOPES	[Symbol]	PROP. CONTOUR	[Symbol]
WETLAND	[Symbol]	EX. TREES & VEGETATION	[Symbol]
SILT FENCE	[Symbol]	TREE PROTECTION FENCE	[Symbol]
LIMIT OF DISTURBANCE	[Symbol]	FLOODPLAIN	[Symbol]
BRIDGE	[Symbol]		
SOIL	[Symbol]		
CULVERT WITH END SECTIONS	[Symbol]		
PROPOSED RIPRAP	[Symbol]		

ADDRESS CHART

BUILDING	STREET ADDRESS

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
COLUMBIA TOWN CENTER	3/2	1
PLATS/BLOCK	ZONE	SEWER DIST.
9749	NT 36	5 6056
10724		
WATER CODE		SEWER CODE

APPROVED 5/26/94

*Donis A. Buis* 10/18/94

revisions

no.	description	date

prepared by

**RBA** ENGINEERS - ARCHITECTS - PLANNERS  
3560 STERRETT PLACE SUITE 300  
COLUMBIA MARYLAND 21044  
410-730-7920

**SITE PLAN**

**BANNEKER ROAD PATHWAY CONNECTION**

SCALE 1"=50'

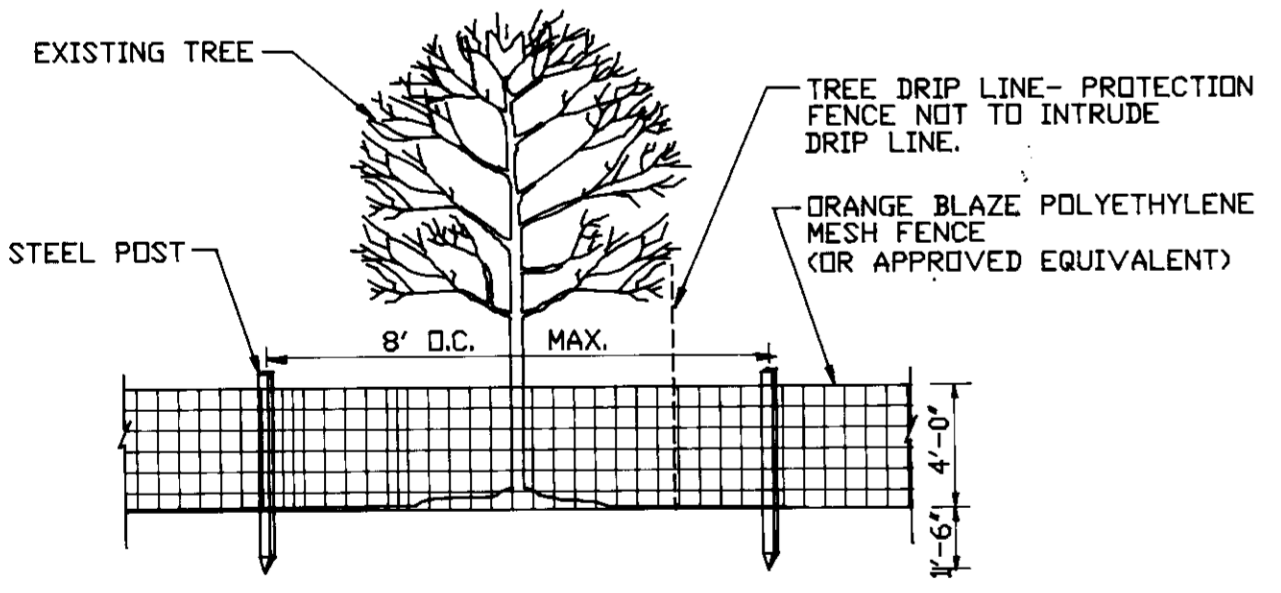
DRAWN	CHECKED
JAC	JAC
PROJ. NO.	DATE
JZ9906	9/94
SHEET	OF
2	3

HOWARD COUNTY MARYLAND

**SEDIMENT AND EROSION CONTROL NOTES**

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN ACCORDANCE WITH THE MOST CURRENT MD STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS HERETO.
- FOLLOWING THE INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETE WITHIN A SEVEN (7) CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, BY 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS IN THE PROJECT SITE.
- 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.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 5), SDD (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 PERMISSON FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
 

TOTAL AREA OF THE SITE:	7.50 ACRES
AREA DISTURBED:	0.34 ACRES
AREA TO BE REEDED OR PAVED:	0.19 ACRES
AREA TO BE VEGETATIVELY STABILIZED:	0.15 ACRES
TOTAL CUT:	80 CU. YDS.
TOTAL FILL:	50 CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION:	COUNTY LANDFILL
- 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 SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- 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 IN THIS PLAN REQUIRES RE-SUBMISSION TO HOWARD COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL.
- 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.
- AT THE END OF EACH WORK DAY ALL SEDIMENT CONTROL PRACTICES 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 RIGHT S-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.



**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 TREEMING 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.

**CERTIFICATION BY THE DEVELOPER**  
I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT 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.

**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.

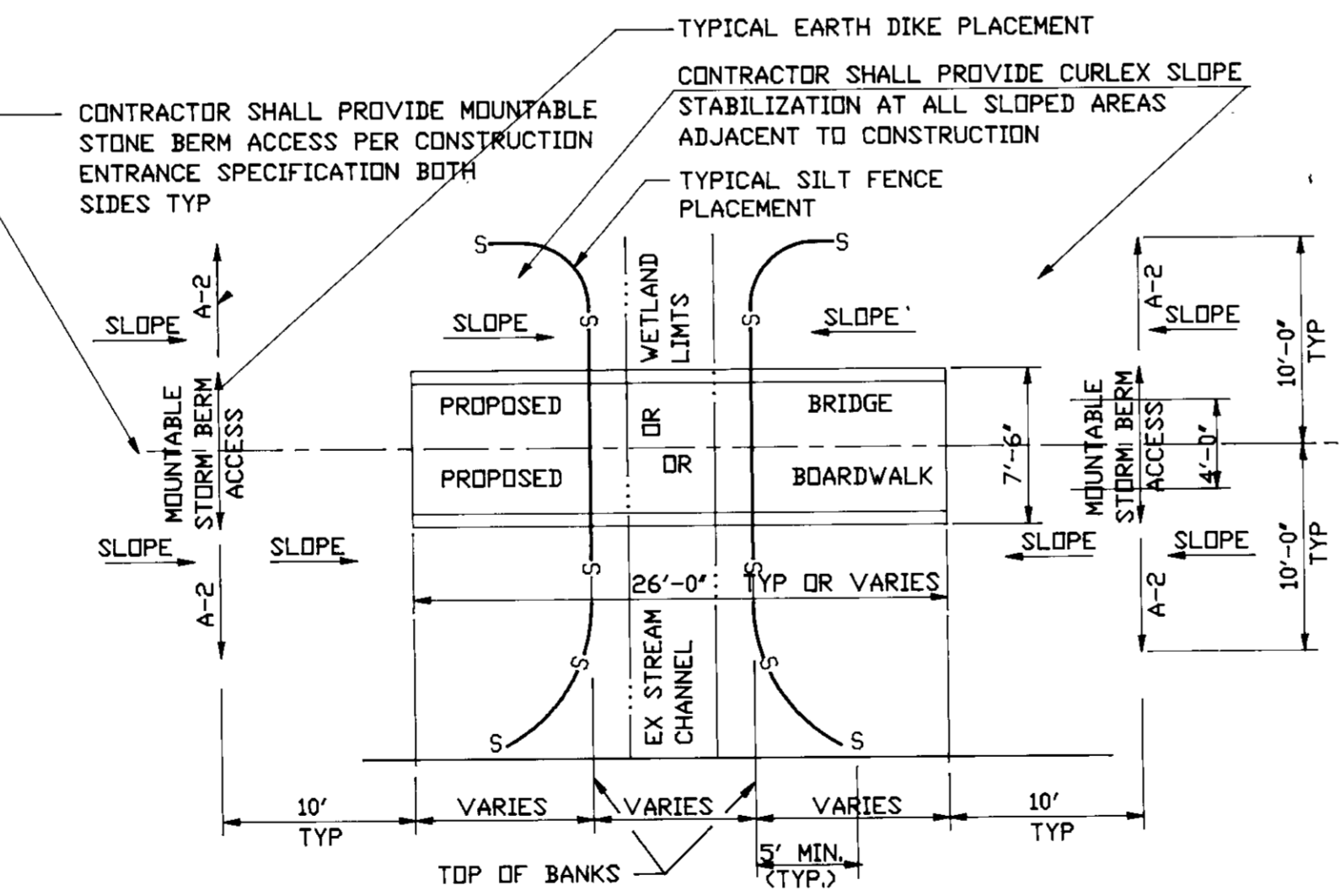
APPROVED: *John W. Saddle* 10/10/94  
SIGNATURE OF DEVELOPER (PRINT NAME ALSO) DATE  
SIGNATURE OF ENGINEER (PRINT NAME ALSO) DATE

**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, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING IF NOT PREVIOUSLY LOOSENED.
- SOIL AMENDMENTS: IN LIEU OF SOIL TESTS RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:
- PREFERRED - APPLY 2 TONS PER ACRE DOLIMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 600 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 DOLIMITIC 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 60 LBS. PER ACRE (1.4 LBS/1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (0.5 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 SDD. 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 GRAN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOL. 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, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING IF NOT PREVIOUSLY LOOSENED.
- SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.)
- SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (92 LBS/1000 SQ. FT.) FOR THE PERIOD OF MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (0.7 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 SDD.
- 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 TOL. 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.

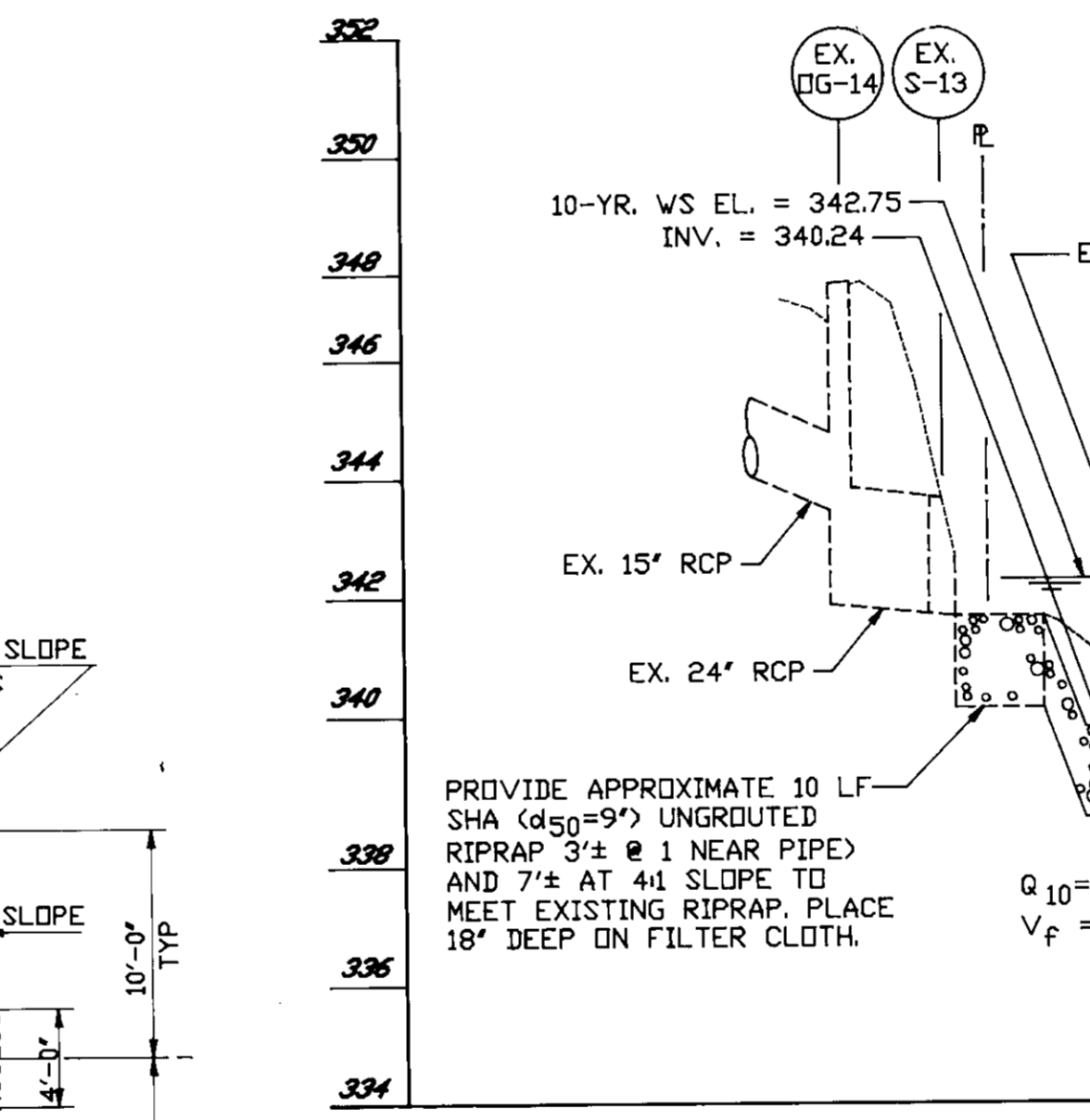


**5 BRIDGE AND BOARDWALK INSTALLATION PLAN**  
N.T.S.

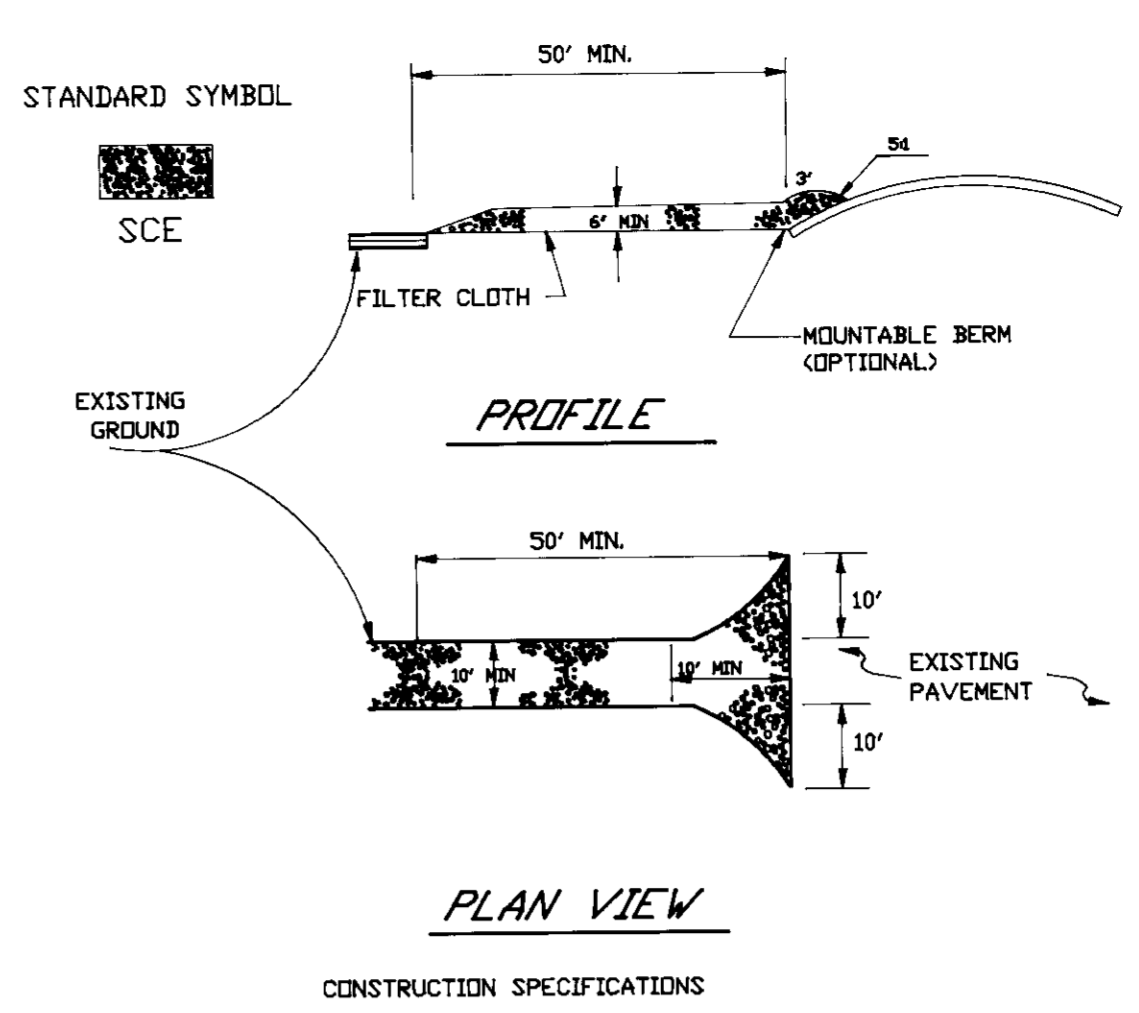
**CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**

- 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.
- POSTS: STEEL EITHER 1 DR U TYPE OR 2" HARDWOOD  
FENCE: WOVEN WIRE, 14 GA, 6" MAX. MESH OPENING  
FILTER CLOTH: FILTER X MIRAFL 100X, STABI-LINKA TIAON OR APPROVED EQUAL  
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

**2 SILT FENCE**  
N.T.S.



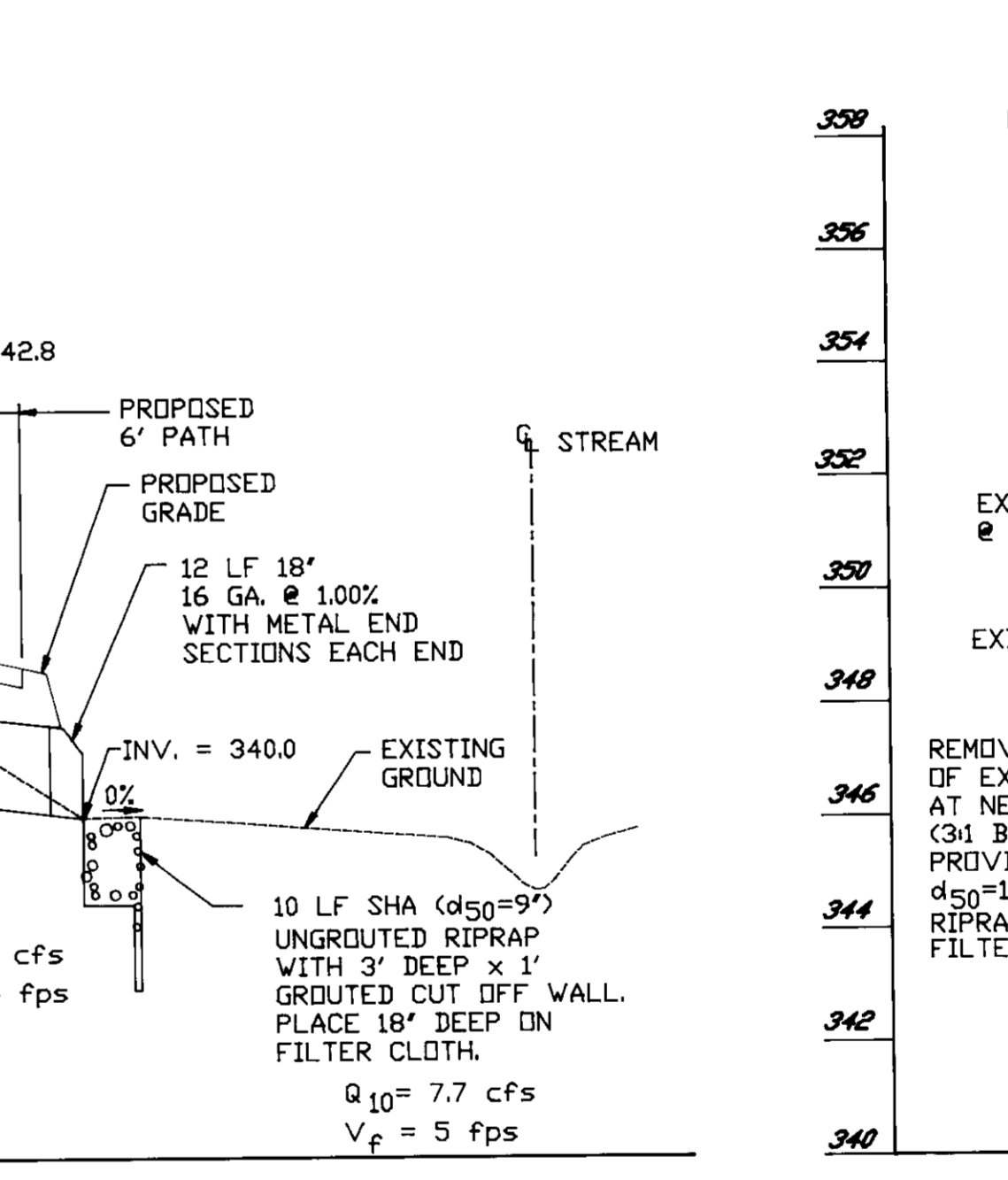
**PROFILE CULVERT NO. 1**  
HORIZ. 1"=30'  
VERT. 1"=3'



**STANDARD SYMBOL**  
**CONSTRUCTION SPECIFICATIONS**

- STONE SIZE - USE 2" STONE OR RECLAIMED DR 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 INTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEM AND 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.



**PROFILE CULVERT NO. 2**  
HORIZ. 1"=30'  
VERT. 1"=3'

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

*James J. Spon* 11/9/94  
DIRECTOR DATE

*John W. Saddle* 11/9/94  
CHIEF, BUREAU OF ENGINEERING DATE

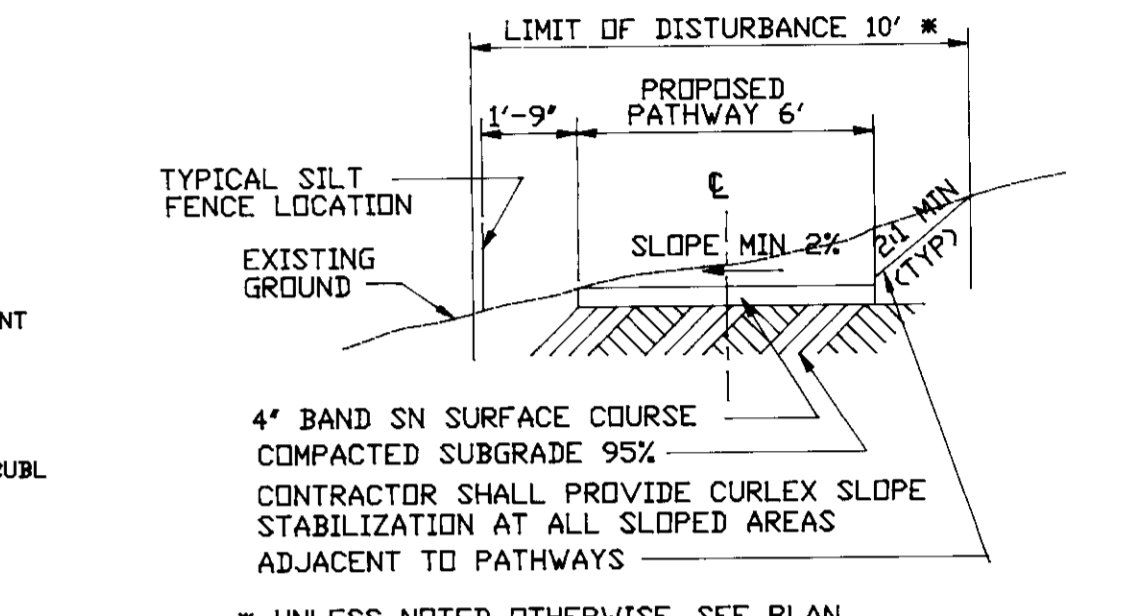
APPROVED HOWARD DEPARTMENT OF PLANNING AND ZONING

*John W. Saddle* 11/10/94  
DIRECTOR DATE

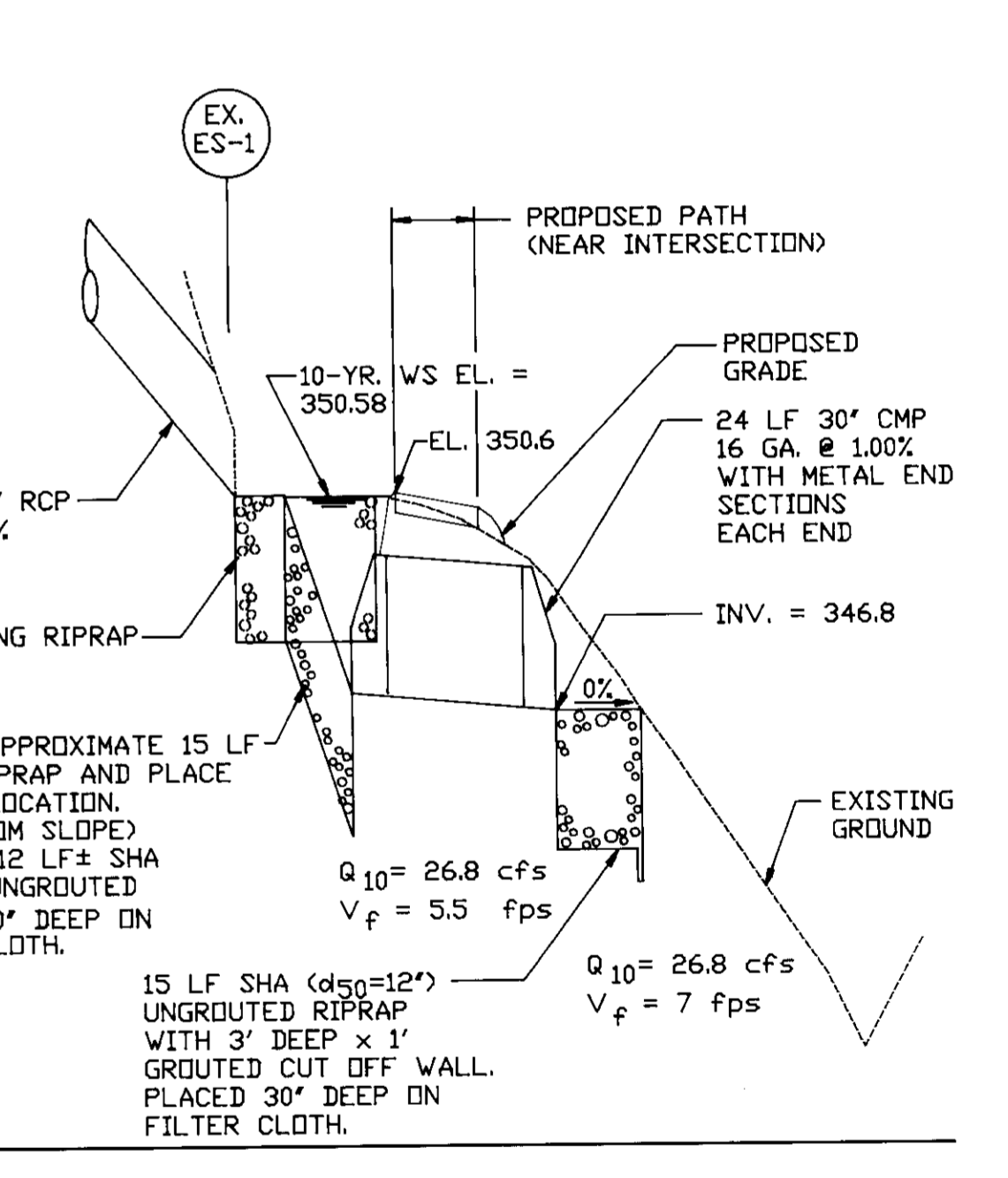
*John W. Saddle* 11/10/94  
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

OWNER: HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY  
10275 LITTLE PATENT PKWY  
COLUMBIA, MARYLAND 21044  
(410) 592-6370

DEVELOPER: COLUMBIA ASSOCIATION  
10201 WINSTON CIRCLE  
COLUMBIA, MARYLAND 21044  
(410) 755-3000



**4 TYPICAL PATHWAY CROSS SECTION**  
N.T.S.



**PROFILE CULVERT NO. 2**  
HORIZ. 1"=30'  
VERT. 1"=3'

ADDRESS CHART	
BUILDING	STREET ADDRESS

SUBDIVISION NAME		SECTION/AREA	LOT/PARCEL
COLUMBIA TOWN CENTER		3/2	1
PLATS/BLOCK		ZONE/TAX ZONE	MAP/ELEC. DIST./GENUS TR.
10724		NT 36	5 6096
WATER CODE		SEWER CODE	

**DETAILS AND PROFILES**

SCALE: DRAWN JAC CHECKED JMC  
PROJ. NO. DATE 9/94  
3 3

**BANNER ROAD PATHWAY CONNECTION**

HOWARD COUNTY MARYLAND SHEET OF

DATE: 5-26-94

APPROVED: *Patricia Engle* 10/26/94  
U.S. SOIL CONSERVATION SERVICE DATE

PREPARED BY: *RBA* ENGINEERS - ARCHITECTS - PLANNERS  
5360 STERRETT PLACE SUITE 300  
COLUMBIA, MARYLAND 21044  
(410) 730-7950