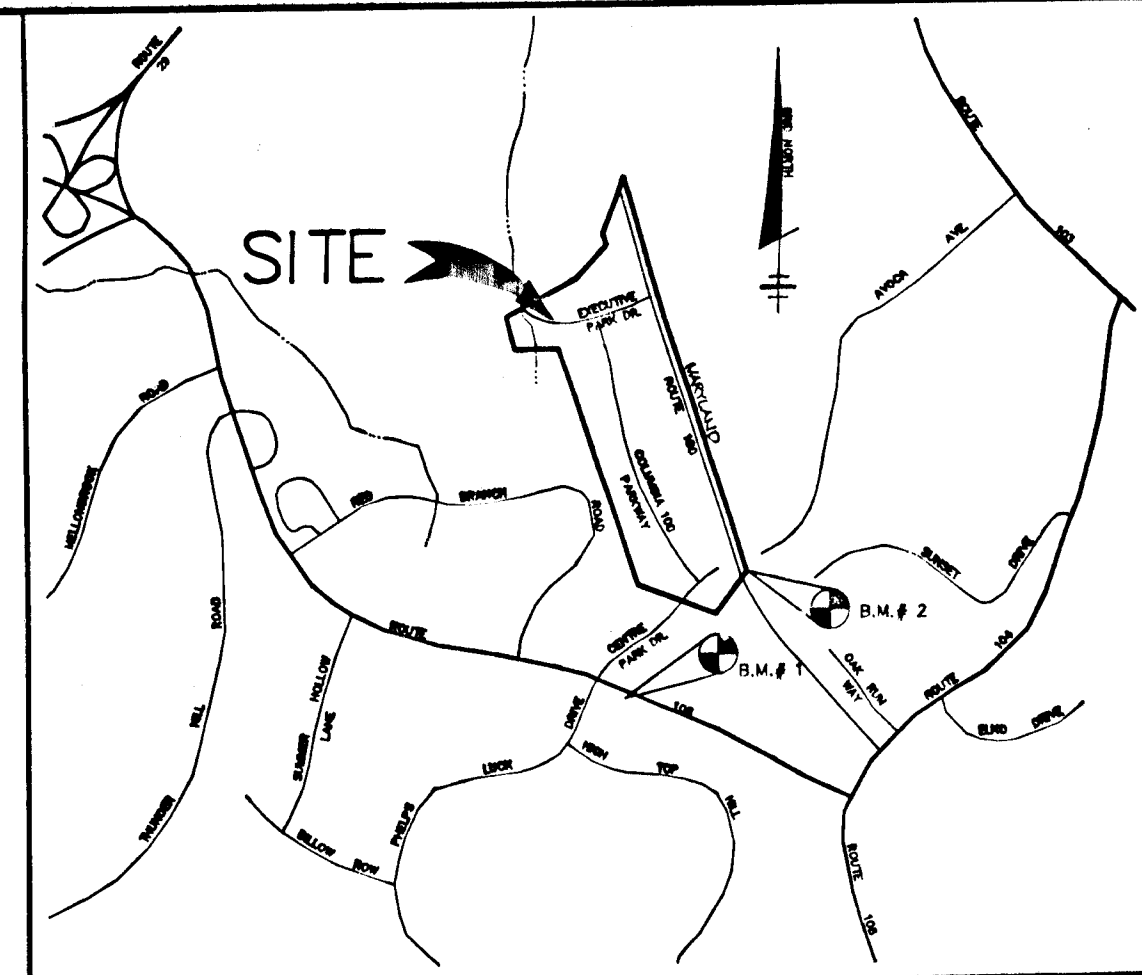


SHEET INDEX

1. TITLE SHEET
2. ROAD PLAN AND PROFILE OF EXECUTIVE PARK DRIVE
3. GRADING AND SEDIMENT CONTROL PLAN & NOTES AND DETAILS

COLUMBIA 100 OFFICE RESEARCH PARK EXECUTIVE PARK DRIVE ROAD EXTENSION



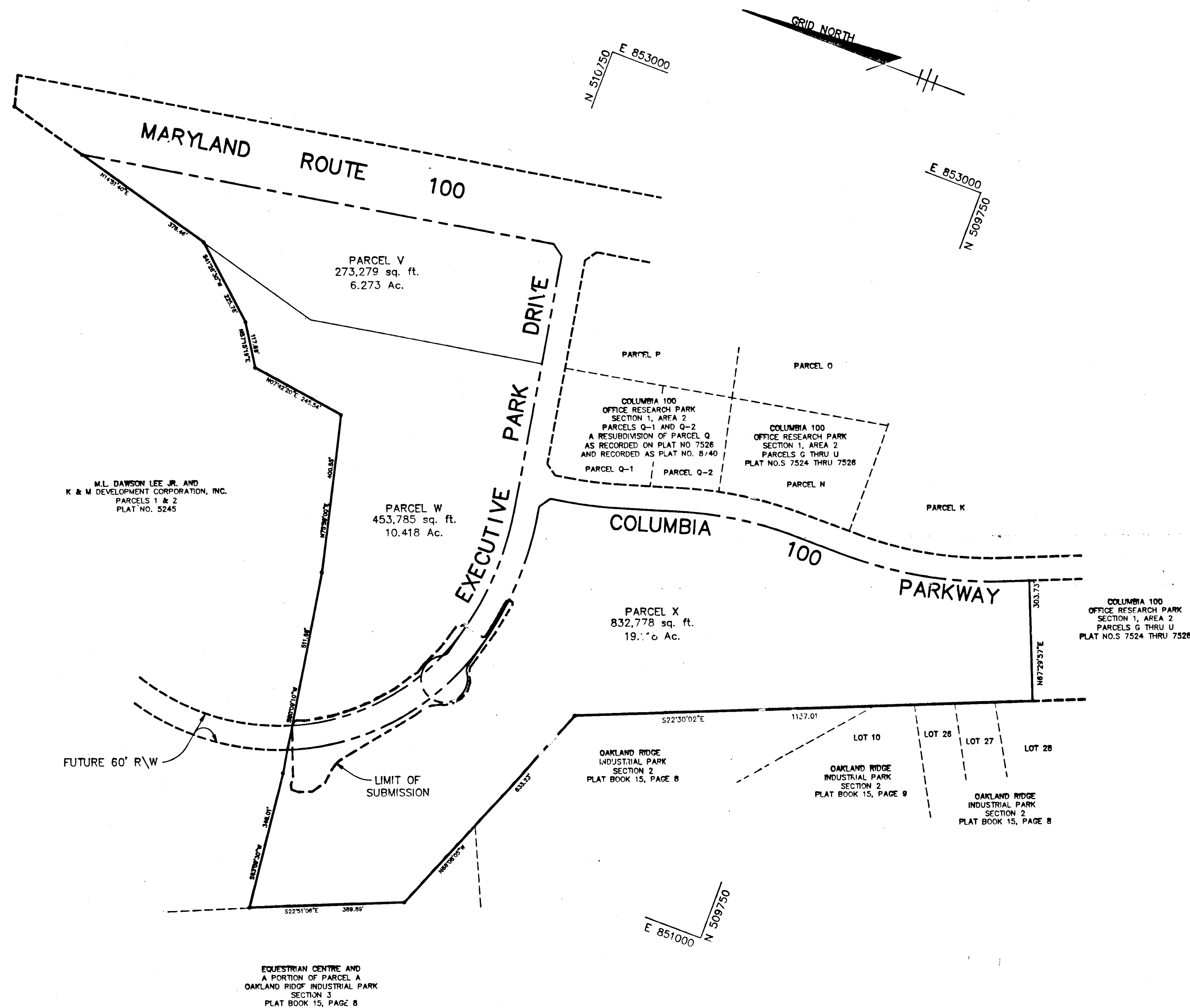
VICINITY MAP
SCALE: 1" = 2000'

GENERAL NOTES:

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST EDITION.
2. APPROXIMATE LOCATION EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
3. THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
4. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK ON THESE DRAWINGS:

MISS UTILITY	1-800-257-7777
BELL TELEPHONE SYSTEM	393-3649
LONG DISTANCE CABLE DIVISION	393-3553 or 3554
BALTIMORE GAS AND ELECTRIC CO.	539-3000
HOWARD COUNTY BUREAU OF UTILITIES	992-2366
HOWARD COUNTY BUREAU OF CONSTRUCTION INSPECTION	792-7272
COLONIAL PIPELINE	795-1390
5. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
6. ALL STREET CURB RETURNS SHALL HAVE 25' RADII UNLESS OTHERWISE NOTED.
7. FORM DRAIN TRENCHES WITHIN ROAD RIGHT-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1989 AMENDMENTS.
8. INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
9. PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
10. DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS:

ALL 60' RIGHT-OF-WAYS	35 MPH
-----------------------	--------
11. ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEAL LEVEL DATUM, 1929.
12. ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION.
13. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
14. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
15. SUBJECT PROPERTY ZONED R-A-15 PER ZB 930M DATED 1-6-93.
16. TOPO TAKEN FROM FIELD RUN SURVEY DATED FEBRUARY 1993 BY RIEMER MUEGGE & ASSOCIATES, INC.
17. NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAS BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
18. ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS "C" AS SHOWN IN FIG. 11.4, VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
19. SEE OFFICE OF PLANNING AND ZONING FILE NO'S. F-87-82, P. 06-51, VP. 06-54, P. 06-44, VP. 06-54A.1, VP. 06-02A.1, GP. 06-07, F. 07-1D & GP. 07-1D.
20. LIGHT POLES AND FIXTURES FOR STREET LIGHTS SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME III - ROAD AND BRIDGES, PAGE 4A-26.
21. THE STORMWATER MANAGEMENT IS PROVIDED UNDER F-87-82.
22. WATER & SEWER LINES TO BE PULVED UP TO PROPOSED RIGHT-OF-WAY.
23. FLOODPLAIN LIMITS FROM PLAT 0650 BY REUBER-TRACY ASSOCIATES, INC. DATED JULY 21, 1988. WETLAND DELINEATION PREPARED BY MCCARTHY & ASSOCIATES, INC. TITLED "WETLAND DELINEATION FOR ORCHARD CROCODING, HOWARD COUNTY, MARYLAND" DATED MAY, 1993. TRAFFIC STUDY WAS PERFORMED BY TRAFFIC GROUP, INC. APRIL, 1992.



PLAN
SCALE: 1" = 200'

BENCHMARKS

- | | |
|---|--------------|
| BM # 1 | ELEV. 482.29 |
| HO. CO. 2743010-R | |
| 3/4" REBAR 0.4' BELOW SURFACE, 34.7' SOUTH OF CURB ON | |
| MARYLAND ROUTE 108 175' + EAST OF CL PHELPS LUCK DRIVE. | |
| BM # 2 | ELEV. 525.51 |
| NAIL IN STONE AT PROPERTY CORNER COLUMBIA 100 - OFFICE RESEARCH PARK. | |

AS BUILT CERTIFICATE	
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	DATE
<i>Gina Jummamy</i>	10/7/93
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH	DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
CHIEF, LAND DEVELOPMENT DIVISION	DATE
<i>Richard M. ...</i>	9/30/93
CHIEF, BUREAU OF HIGHWAYS	DATE
<i>Richard M. ...</i>	9-21-93
CHIEF, BUREAU OF ENGINEERING	DATE
<i>Richard M. ...</i>	9/30/93

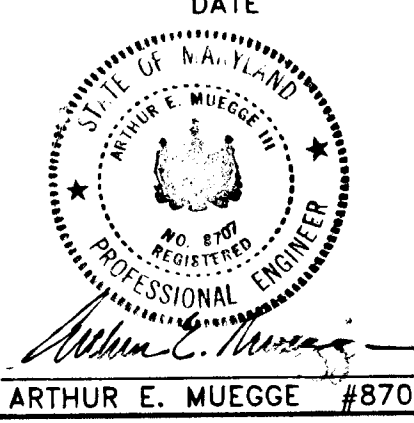
DATE NO.	REVISION
OWNER / DEVELOPER	
MUF LIMITED PARTNERSHIP C/O PATRICK MCCUHAN THE K & M BUILDING 5550 STERRETT PLACE SUITE 312 COLUMBIA, MARYLAND 21044	

PROJECT	COLUMBIA 100 OFFICE RESEARCH PARK SECTION 1, AREA 2 PARCELS V THRU Y
AREA	TAX MAP 30 PARCEL 406 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

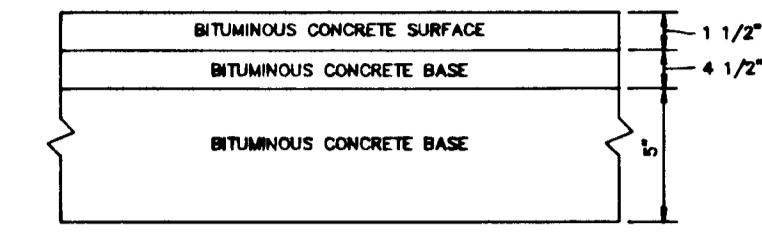
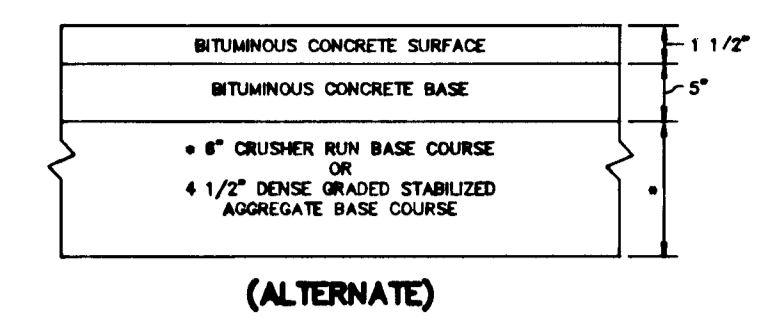
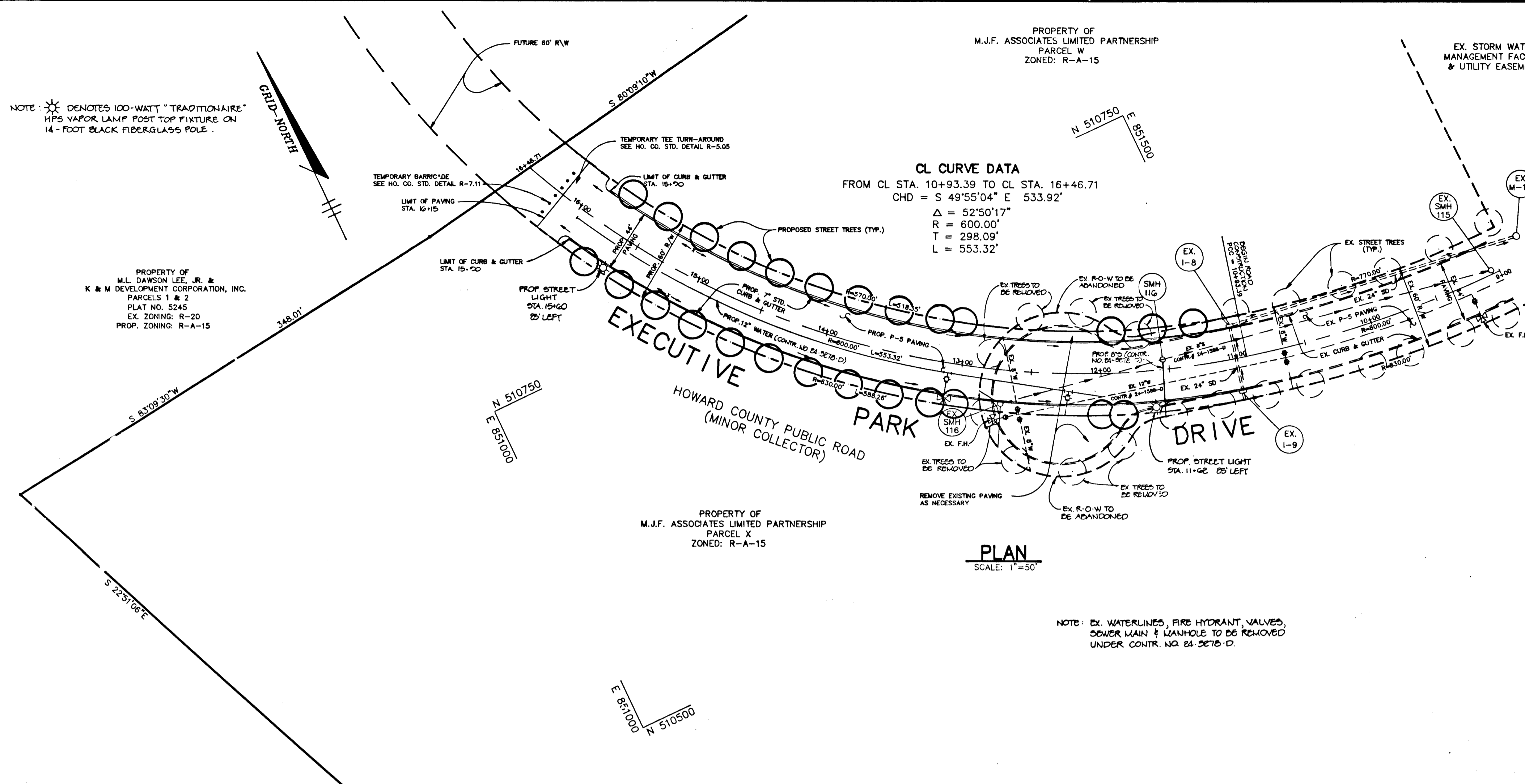
TITLE	TITLE SHEET
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RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
8818 Centre Park Drive • Suite 200 • Columbia, Md 21045
410-997-8900 FAX: 410-997-8282

DATE	F-87-82, ZB 930M
9-1-93	DESIGNED BY: DBS
DATE	DRAWN BY: DBS
SEPTEMBER 1, 1993	PROJECT NO: 82504
SCALE: AS SHOWN	DATE: SEPTEMBER 1, 1993
DR. WING NO. 1 OF 3	SCALE: AS SHOWN

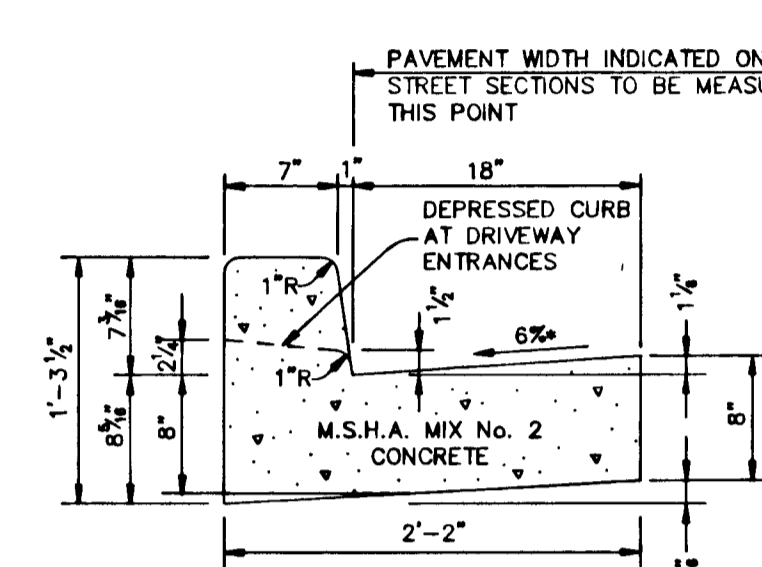


1231



HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.02)

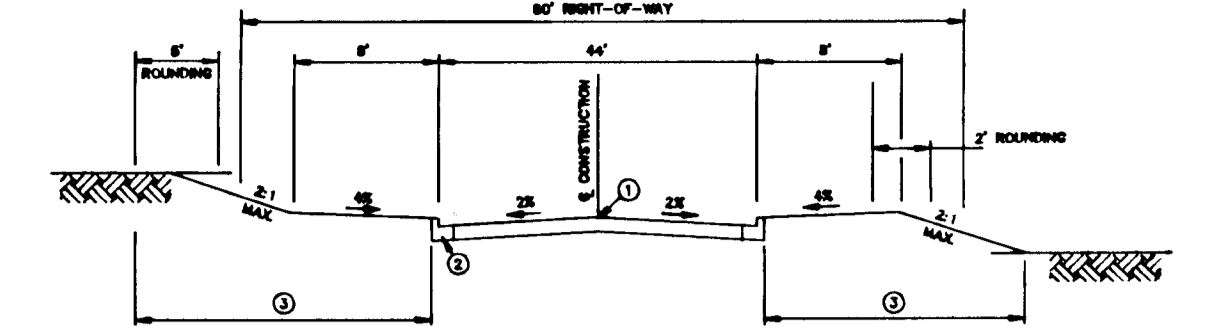
P-5 PAVING
NO SCALE



HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-3.01)

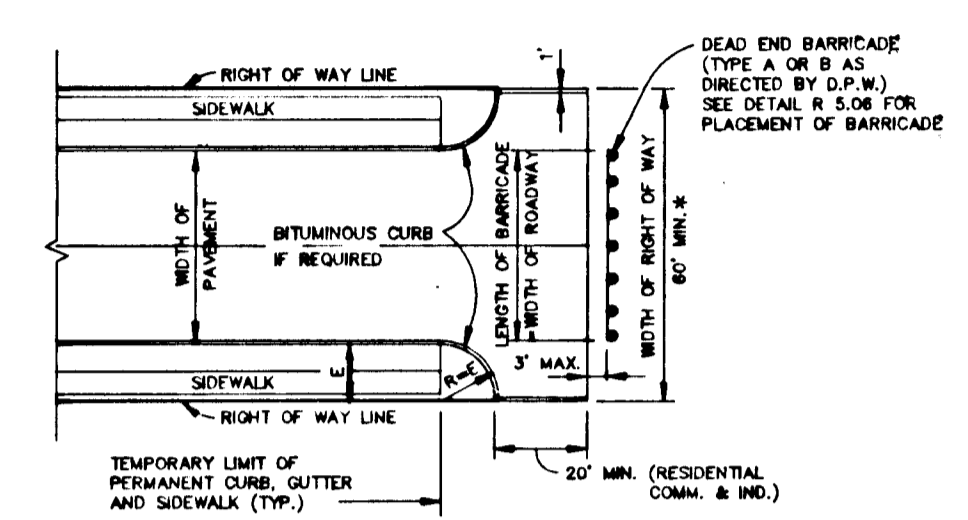
GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

STANDARD 7" COMBINATION CURB AND GUTTER
NO SCALE



- 1. PROFILE GRADE LINE (P.G.L.)
- 2. TYPE OF CURB - STANDARD 7" COMBINATION CURB & GUTTER
- 3. INDICATES 2" ROPES, SEED AND MELCH
- 4. DITCH CROSS SECTION SLOPE MAY BE FLATTENED TO PROVIDE A SHADE AT TOP OF CURB. THE QUANTITY OF MATERIAL SHALL BE APPROVED BY CITY.

TYPICAL SECTION MINOR COLLECTOR EXECUTIVE PARK DRIVE
NO SCALE



- NOTES:
1. A TREE TURN-AROUND SHALL BE USED IN LIEU OF A CUL-DE-SAC ONLY IF THE STREET IS TO BE EXTENDED IN THE FUTURE.
 2. BITUMINOUS CURB SHALL EXTEND AROUND THE TREE TURN-AROUND IF AND AS REQUIRED TO CONTROL CURB DRAINAGE FROM THE ROADWAY SECTION.
 3. REFER TO STANDARD R-5.06 FOR TYPICAL ROADWAY PROFILE OF TEMPORARY LIMIT OF PAVING.
 4. FOR LOCAL ROADS, PROVIDE 5' REVERSIBLE EASEMENT EACH END OF THE TREE.
 5. PROVIDE EASEMENTS AS REQUIRED FOR PLACEMENT OF BARRICADE AND ANY NECESSARY GRADING (SEE DETAIL R-5.06)

TEMPORARY TREE TURN-AROUND
NO SCALE

AS BUILT CERTIFICATE

DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Gina Swamy 10/7/93
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Andrew M. Staveland 9-21-93
CHIEF, BUREAU OF HIGHWAYS

Robert J. Brown 9/30/93
CHIEF, BUREAU OF ENGINEERING

DATE	NO.	REVISION

OWNER / DEVELOPER
M.J.F. LIMITED PARTNERSHIP
C/O PATRICK MCGUIN
THE K & M BUILDING
5550 STEPHEN PLACE
SUITE 312
COLUMBIA, MARYLAND 21044

PROJECT
COLUMBIA 100 OFFICE RESEARCH PARK
SECTION 1, AREA 2, PARCELS 'Y' THRU 'Y'

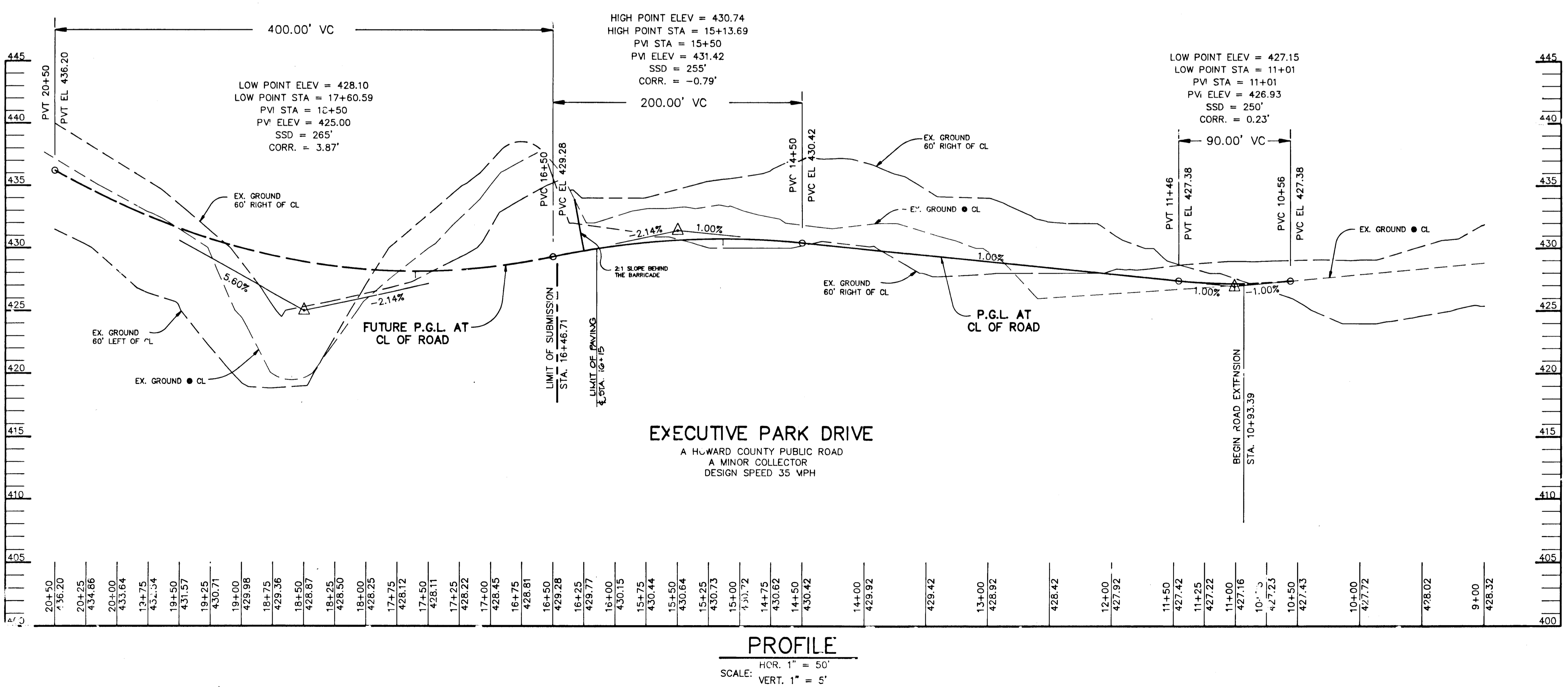
AREA
TAX MAP 30 PARCEL 406
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
PLAN AND PROFILE EXECUTIVE PARK DRIVE FROM STA. 10+93.39 TO STA. 16+46.71

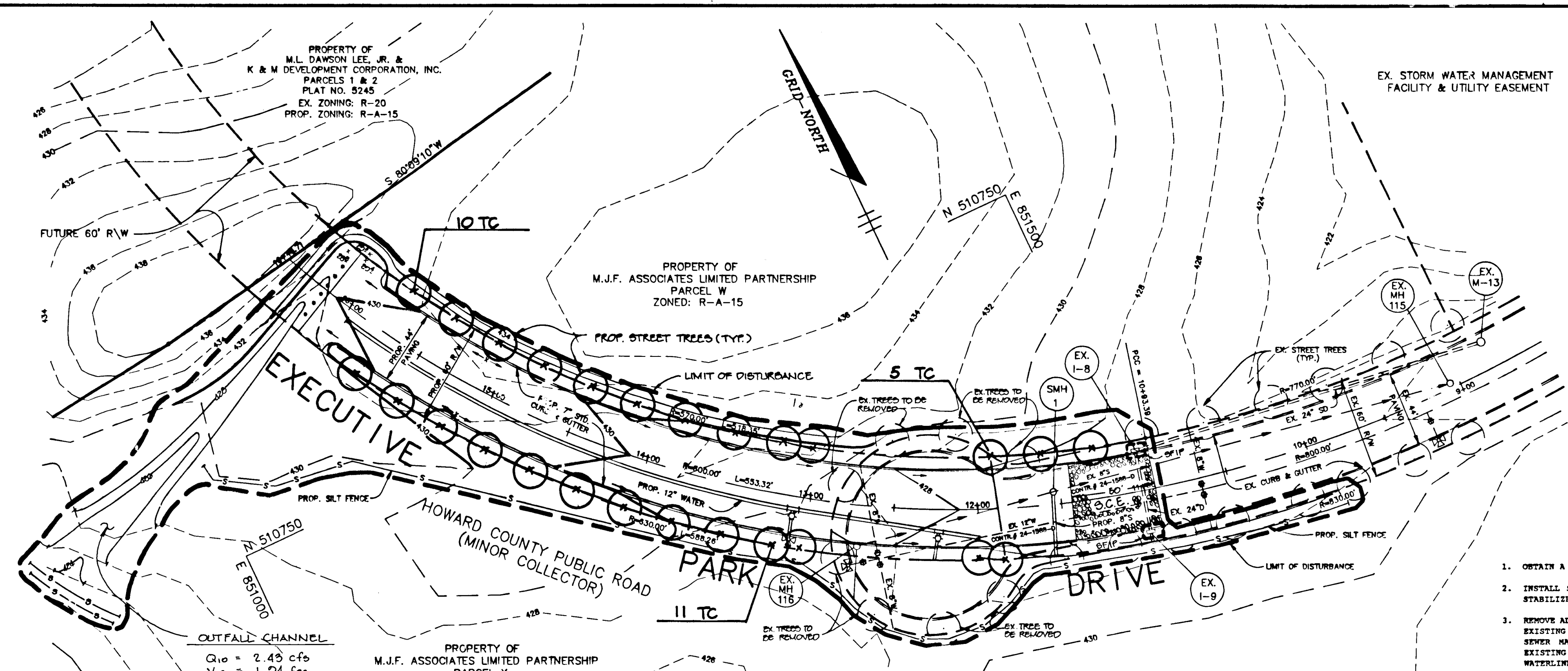
RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
8818 Centre Park Drive • Suite 200 • Columbia, Md 21045
410-997-8900 FAX: 410-997-9282

DATE: 9-1-93
DESIGNED BY: DBS
DRAWN BY: DBS
PROJECT NO: 82504
DATE: SEPTEMBER 1, 1993
SCALE: AS SHOWN
DRAWING NO. 2 OF 3

ARTHUR E. MUEGGE #8707



1231



LEGEND

- - - 420 - - - EXISTING CONTOUR
- - - 420 - - - PROPOSED CONTOUR
- - - - - LIMIT OF DISTURBANCE
- EXISTING STREET TREE
- PROPOSED STREET TREE
- S - S - SILT FENCE
- SPF STONE FILTER INLET PROTECTION
- DIRECTION OF DRAINAGE FLOW
- STABILIZED CONSTRUCTION ENTRANCE

SEQUENCE OF CONSTRUCTION

1. OBTAIN A GRADING PERMIT.
2. INSTALL SILT FENCE AND REMOVE EXISTING PAVEMENT AS NECESSARY TO INSTALL STABILIZED CONSTRUCTION ENTRANCE.
3. REMOVE ALL EXISTING PAVEMENT FROM STA 10+83.39 TO END OF CURB OR SDC. REMOVE EXISTING SEWER MANHOLE 116. REMOVE EXISTING FIRE HYDRANT FOR RELOCATION AND EXISTING 12" WATERLINE TO THE POINT WHERE IT TIES INTO PROPOSED 12" WATERLINE.
4. INSTALL SEWER MANHOLE 116. BEGIN GRADING. INSTALL PROPOSED WATERLINE EXTENSION AS SHOWN IN 18 REVISION.
5. INSTALL CURB AND GUTTER. PERFORM PAVING.
6. PLANT STREET TREES.
7. STABILIZE REMAINING DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES.
8. UPON APPROVAL OF HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROLS AND STABILIZE AS NEEDED AS PER THE PERMANENT SEEDING NOTES.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.

Seeded 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. per 1000 sq.ft.).

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2-1/2 bushels per acre of annual rye (3.2 lbs. per 1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.07 lbs. per 1000 sq.ft.). For the period 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 sod.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 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.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seeded 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 test recommendations, use one of the following schedules:

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs. per 1000 sq.ft.).
- 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

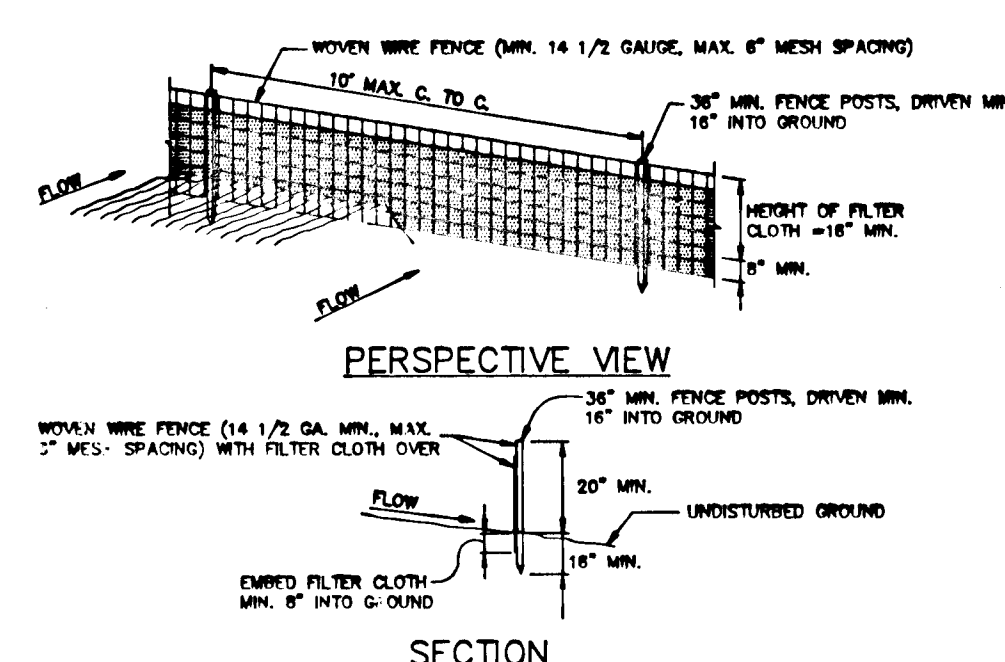
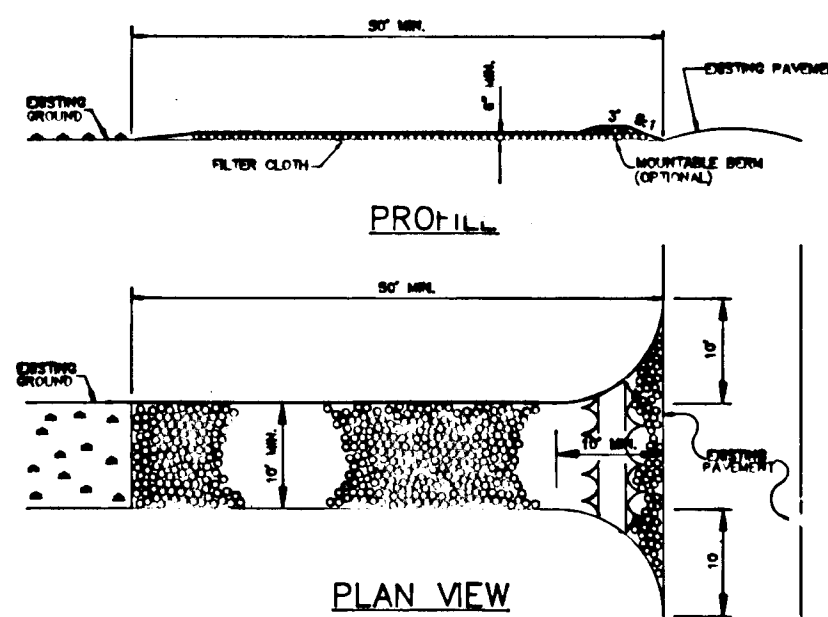
Seeding: For the period March 1 thru April 30 and from August 1 thru October 15, seed with 60 lbs. per acre (1.1 lbs. per 1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.05 lbs. per 1000 sq.ft.) of weeping lovegrass. During the period October 16 thru February 28, protect site by one of the following options:

- 1) 2 tons per acre of well-anchored mulch straw and seed as soon as possible in the spring.
- 2) Use sod.
- 3) Seed with 80 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per acre well anchored straw.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.

Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseedings.

PLAN SCALE: 1" = 50'



CONSTRUCTION SPECIFICATIONS

1. STONE FILL - USE 2" STONE OR EQUIVALENT OR BROOD CONCRETE COARSEMENT.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 30 FEET (EXCEPT ON A TIE IN).
3. BELIEVED TO BE MORE THAN 10 FEET MINIMUM (SEE NOTE 1).
4. WIDTH - 10 FT. (10 FEET MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT THE POINT OF ENTRANCE AND EXISTING CURB).
5. FILTER CLOTH - WILL BE PLACED OVER THE EXISTING AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REMOVED ON A TYPICAL WEATHER EVENT.
6. SURFACE WATER - ALL SURFACE WATER FLOWING IN DIRECTION THROUGH CONSTRUCTION ENTRANCE SHALL BE FILTERED BY THE ENTRANCE. IF FLOWING IS UNDESIRABLE, THIS MAY BE ACHIEVED BY PLACING A 2" x 4" WOODEN BOARD OR SIMILAR MATERIAL OVER THE ENTRANCE. THIS SHALL BE REMOVED PRIOR TO THE END OF THE CONSTRUCTION PERIOD. ALL PUBLIC RIGHTS OF WAY MUST BE MAINTAINED AT ALL TIMES.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED AS A CONDITION WHICH WILL PREVENT THE ENTRANCE FROM BEING CLOGGED WITH DEBRIS. THE ENTRANCE SHALL BE MAINTAINED AS A CONDITION WHICH WILL PREVENT THE ENTRANCE FROM BEING CLOGGED WITH DEBRIS. THE ENTRANCE SHALL BE MAINTAINED AS A CONDITION WHICH WILL PREVENT THE ENTRANCE FROM BEING CLOGGED WITH DEBRIS.
8. INSPECTION - THE ENTRANCE SHALL BE INSPECTED FREQUENTLY AND THE FILTER CLOTH AND STONE REPLACED WHEN CLOGGED WITH SEDIMENT.
9. PREPARE INSPECTION AND MAINTENANCE RECORDS TO BE PROVIDED AFTER EACH RAIN.

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED TO FENCE POSTS WITH WIRE TIES AND STAPLES.
2. FILTER CLOTH TO BE FASTENED TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES (6") AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD.
FENCE: WOVEN WIRE, 4 GA. MAX. MESH OPENING.
FILTER CLOTH: FILTER CLOTH, STABILIZED THICK OR APPROVED EQUAL.
PREFABRICATED UNIT: GEOTAF, ENVIRONMENT, OR APPROVED EQUAL.

SEDIMENT CONTROL NOTES

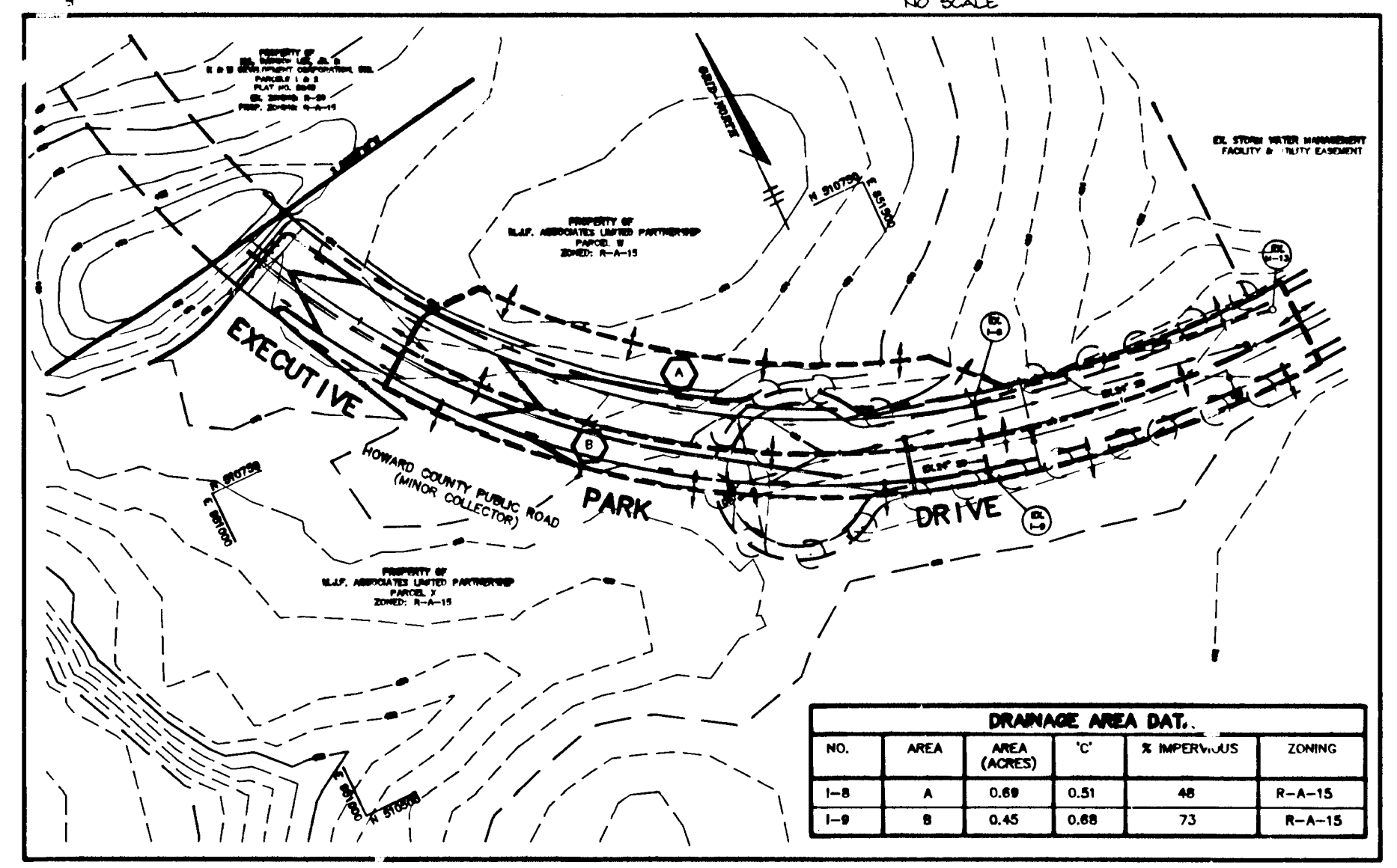
1. A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction (992-2437).
2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL.
3. Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted around the perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL for permanent seedings (Sec. 51), and (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.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7. Site Analysis:
 - Total Area of Site: 36.312 acres
 - Area Disturbed: 1.34 acres
 - Area to be roofed or paved: 0.53 acres
 - Area to be vegetatively stabilized: 0.81 acres
 - Total Cut: 621 cu.yds.
 - Total Fill: 291 cu.yds.
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment controls must be provided, if deemed necessary by the Howard County Department of Public Works Sediment Control Inspector.
10. Site grading will begin only after all perimeter sediment control measures have been installed and are in a functioning condition.
11. Sediment will be removed from traps when its depth reaches clean out elevation shown on the plans.
12. Cut and fill quantities provided under site analysis do not represent bid quantities. These quantities do not distinguish between topsoil, structural fill or embankment material, nor do they reflect consideration of undercutting or removal of unsuitable material. The contractor shall familiarize himself with site conditions which may affect the work.

PLANT LIST

QTY	KEY	NAME	SIZE	REMARKS
26	TC	TILIA CRADATA GREENSPIRE	1 1/2" CAL.	6 ft D
		GREENSPIRE LITTLE LEAF LINDEN	12-14 HT.	

THREE PLANTING DETAIL N.T.S.

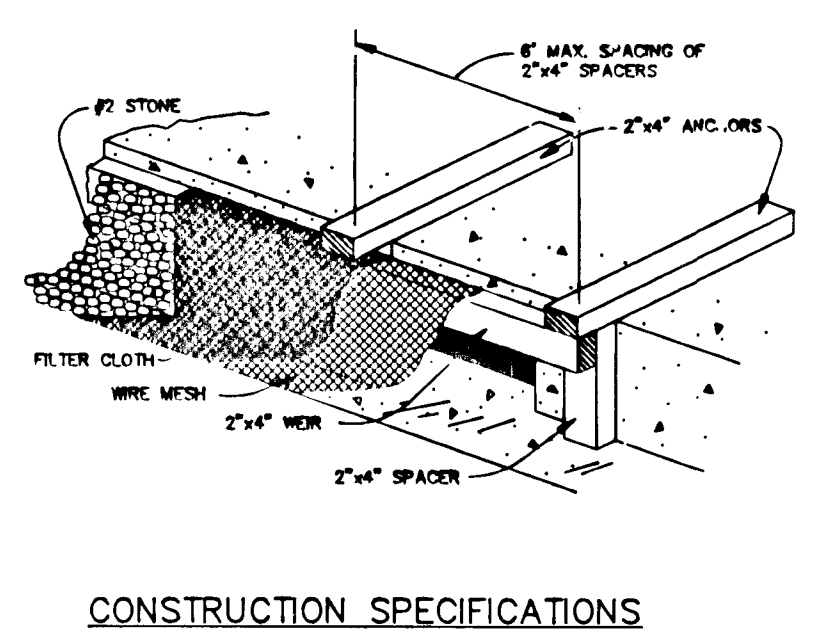
TREE LOCATION DETAIL NO SCALE



DRAINAGE AREA DAT.

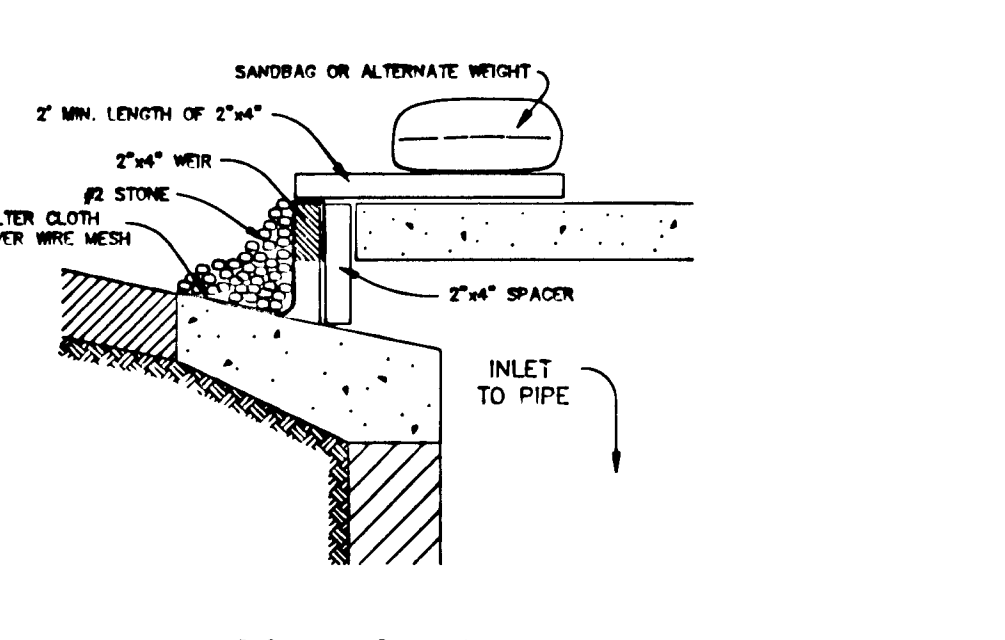
NO.	AREA	AREA (ACRES)	% IMPERVIOUS	ZONING
1-B	A	0.89	0.51	R-A-15
1-B	B	0.45	0.88	R-A-15

DRAINAGE AREA MAP SCALE: 1" = 100'



CONSTRUCTION SPECIFICATIONS

1. MATERIALS
 - A. WOODEN FRAME IS TO BE CONSTRUCTED OF 2" x 4" CONSTRUCTION GRADE LUMBER.
 - B. WIRE MESH MUST BE OF SUFFICIENT STRENGTH TO SUPPORT FILTER FABRIC AND STONE WITH WATER FULLY IMPONDED AGAINST IT.
 - C. FILTER CLOTH MUST BE OF A TYPE APPROVED FOR THIS PURPOSE, RESISTANT TO SUNLIGHT WITH A SEWE SIZE, EGS 40-60 TO ALLOW SUFFICIENT PASSAGE OF WATER AND REMOVAL OF SEDIMENT.
2. STONE IS TO BE 2" IN SIZE AND CLEAN, SINCE FINES WOULD CLOG THE CLOTH.
3. PROCEDURE FOR CURB INLET PROTECTION
 - A. ATTACH A CONTINUOUS PIECE OF WIRE MESH (30" MIN. WIDTH BY THROAT LENGTH PLUS 4") TO THE 2" x 4" WOOD FRAME (MEASURING THROAT LENGTH PLUS 4") AS SHOWN ON THE STANDARD DRAWING.
 - B. PLACE A PIECE OF APPROVED FILTER CLOTH (40-60 SEWE) OF THE SAME DIMENSIONS AS THE WIRE MESH OVER THE WIRE MESH AND SECURELY ATTACH TO THE 2" x 4" WOOD.



STONE FILTER INLET PROTECTION NO SCALE

- C. SECURELY NAIL THE 2" x 4" WOOD TO 8" LONG VERTICAL SPACERS TO BE LOCATED BETWEEN THE WIRE AND INLET FACE (MAX. 6" APART).
- D. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL (MINIMUM 2" LENGTH) TO THE TOP OF THE WIRE AT SPACER LOCATIONS. THESE 2" x 4" ANCHORS SHALL EXTEND ACROSS THE INLET TOP AND BE HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHT.
- E. THE ASSEMBLY SHALL BE PLACED SO THAT THE END SPACERS ARE A MINIMUM 1" BEYOND BOTH ENDS OF THE THROAT OPENING.
- F. FROM THE WIRE MESH AND FILTER CLOTH TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET, PLACE CLEAN 2" STONE OVER THE WIRE MESH AND FILTER FABRIC IN SUCH A MANNER AS TO PREVENT WATER FROM EXTENDING 1/2" INLET UNDER OR AROUND THE FILTER CLOTH.
- G. THIS TYPE OF PROTECTION MUST BE INSPECTED FREQUENTLY AND THE FILTER CLOTH AND STONE REPLACED WHEN CLOGGED WITH SEDIMENT.
- H. ASSURE THAT STORM FLOW DOES NOT BYPASS INLET BY HIS' ALONG TEMPORARY EARTH OR ASPHALT Dikes DIRECTING FLOW INTO INLET.

STONE FILTER INLET PROTECTION NO SCALE

ARTHUR E. MUEGGE #8707 DATE

BY THE DEVELOPER:

I/WE 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Asmra 9/9/95
DEVELOPER DATE

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.

Arthur E. Muegge 7-1-93
ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

Howard Hill 9/15/93
S.O. SOIL CONSERVATION SERVICE DATE

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

John L. Polutan 9/15/93
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Gina Summary 10/7/93
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Arthur E. Muegge 9/30/93
CHIEF, LAND DEVELOPMENT DIVISION DATE

Richard M. Smith 9-21-93
CHIEF, BUREAU OF HIGHWAYS DATE

William J. Spam 9/30/93
CHIEF, BUREAU OF ENGINEERING DATE

DATE NO.	REVISION

OWNER / DEVELOPER
M.J.F. LIMITED PARTNERSHIP
C/O PATRICK MCCUAN
THE K & M BUILDING
5550 STERRETT PLACE
SUITE 312
COLUMBIA, MARYLAND 21014

PROJECT
COLUMBIA 100
OFFICE RESEARCH PARK
SECTION 1, AREA 2 PARCELS Y THRU Y

AREA
TAX MAP 21 PARCEL 406
2nd ELECT. DISTRICT
HOWARD COU. Y, MARYLAND

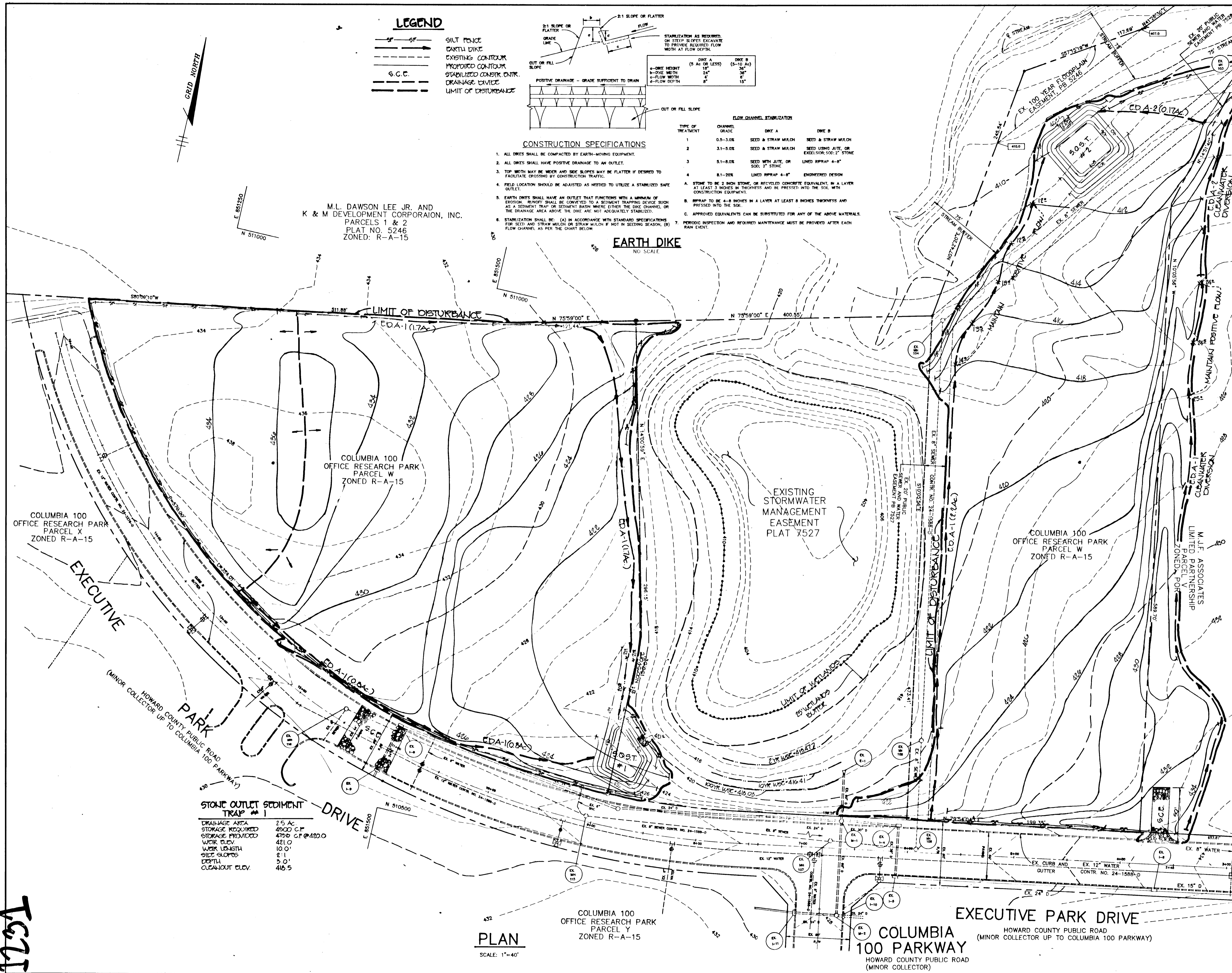
TITLE
GRADING AND SEDIMENT CONTROL PLAN & NOTES AND DETAILS

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
8818 Centre Park Drive • Suite 200 • Columbia, Md 21045
410-997-8900 FAX: 410-997-282

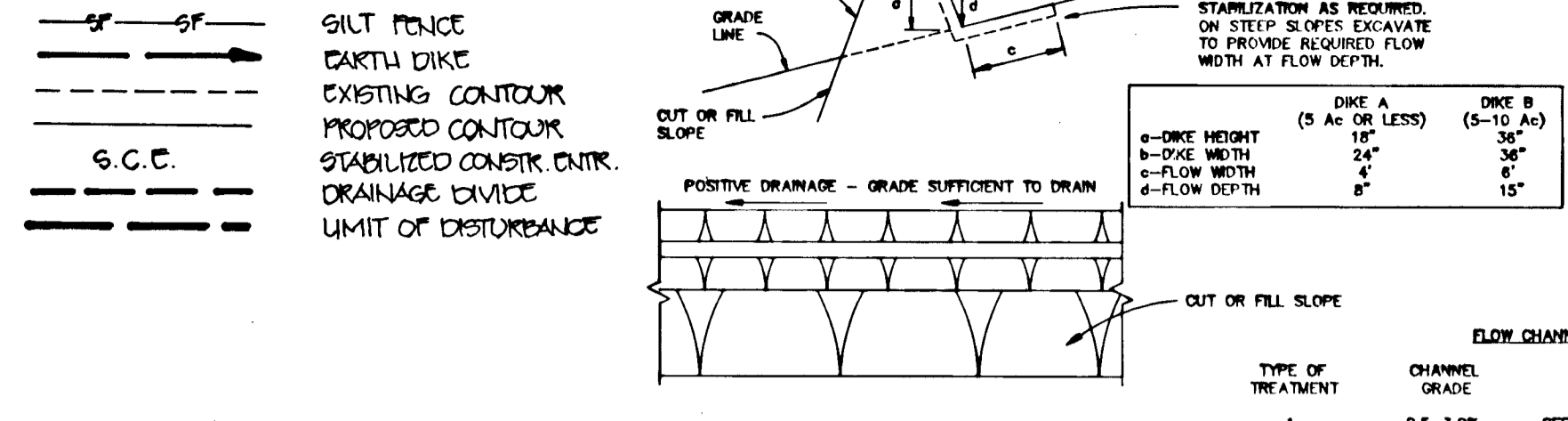
9-1-93 DATE
F-87-82, ZB 930M
DESIGNED BY: DBS
DRAWN BY: DBS
PROJECT NO: 82504
DATE: SEPTEMBER 1, 1993
SCALE: AS SHOWN
DRAWING NO. 3 OF 3

ARTHUR E. MUEGGE #8707

1231



LEGEND



CONSTRUCTION SPECIFICATIONS

- ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
- ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
- TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE GROWING BY CONSTRUCTION TRAFFIC.
- FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
- EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RINOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
- STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON; (B) FLOW CHANNEL AS PER THE CHART BELOW.
- PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

STONE OUTLET SEDIMENT TRAP # 2

DRAINAGE AREA	2.7 AC
STORAGE REQUIRED	4850 C.F.
STORAGE PROVIDED	4892 C.F. @ 400.0
WORK ELEV.	402.0
WORK LENGTH	11.0'
SIDE SLOPES	2:1
DEPTH	3.0'
CLEANOUT ELEV.	406.5

M.L. DAWSON LEE JR. AND
K & M DEVELOPMENT CORPORATION, INC.
PARCELS 1 & 2
PLAT NO. 5246
ZONED: R-A-15

EARTH DIKE
NO SCALE

BY THE DEVELOPER:
I/WE 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 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Patrick McQuan 4/26/94
DEVELOPER DATE

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.

J. Faull 4.26.94
ENGINEER JAYKANT D. PAREKH DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

Patricia Engle 5/28/94
U.S. SOIL CONSERVATION SERVICE DATE

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

John R. Platon 5/28/94
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Gina Swirnamy 6/15/94
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Charles D. ... 6/3/94
CHIEF, DIVISION OF PUBLIC WORKS DATE

Andrew M. ... 6-8-94
CHIEF, BUREAU OF HIGHWAYS DATE

James ... 6/2/94
CHIEF, BUREAU OF ENGINEERING DATE

DATE	NO.	REVISION

OWNER / DEVELOPER
M/J LIMITED PARTNERSHIP
c/o PATRICK MCQUAN
THE K & M BUILDING
SUITE 312
5550 STERRETT PLACE
COLUMBIA, MARYLAND 21044

PROJECT
COLUMBIA 100 OFFICE RESEARCH PARK
SECTION 1, AREA 2 PARCELS 'V' THRU 'Y'

AREA
TAX MAP 30 PARCEL 406
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
GRADING AND SEDIMENT CONTROL PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
Planners • Engineers • Surveyors
8818 Centre Park Drive • Suite 200 • Columbia, Md 21045
410-997-8900 FAX: 410-997-9282

DATE
4.26.94

DESIGNED BY: D.R.F.
DRAWN BY: J.C.O.
PROJECT NO: 82504
DATE: 4.26.94
SCALE: AS SHOWN
DRAWING NO. 2A OF 2

J. Faull
JAYKANT/D. PAREKH # 19148

1231