

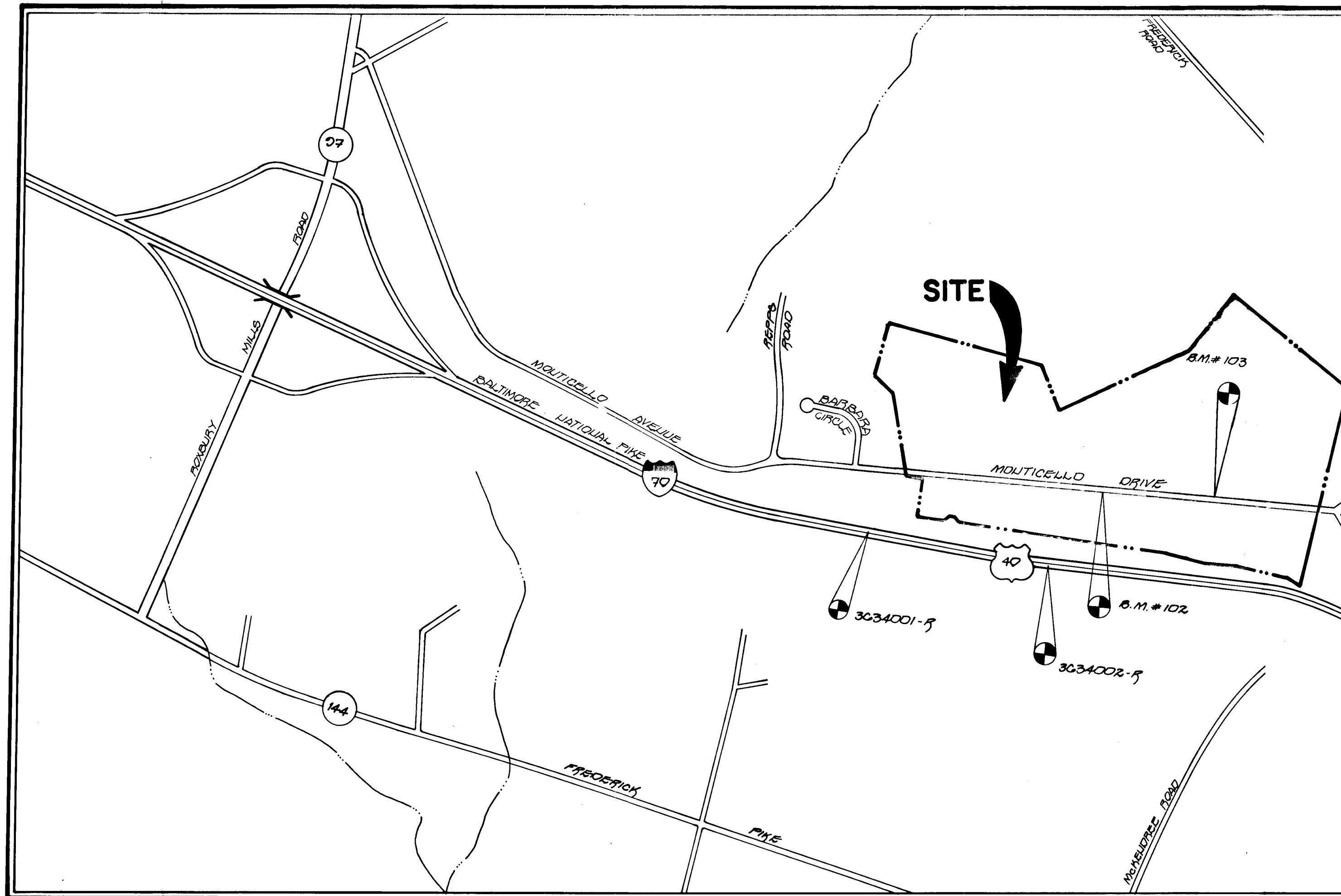
# HARLESS MANOR PHASE 1 LOTS 1-20 PRESERVATION PARCEL "A" AND BULK PARCEL "B" FOURTH ELECTION DISTRICT HOWARD COUNTY MARYLAND

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*John Deane* 5/20/95  
 CHIEF, LAND DEVELOPMENT DIVISION DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*Andrew M. Decker* 5-16-95  
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*Elizabeth Anderson Calver* 5/26/95  
 CHIEF, BUREAU OF ENGINEERING AND CONSTRUCTION DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*Richard Blood* 5/31/95  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE



### VICINITY MAP

SCALE: 1"=600'

#### GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS M.S.H.A. STANDARDS AND SPECIFICATIONS IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1070 AT LEAST FIVE (5) DAYS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
4. PROJECT BACKGROUND:
  - LOCATION: TAX MAP 9, PARCEL 324 AND PART OF PARCEL 9
  - ZONING: RC-DEO
  - ELECTION DISTRICT: FOURTH
  - TOTAL TRACT AREA: 55.949 AC. (90.148 AC. FOR BOTH PHASES)
  - NUMBER OF PROPOSED BUILDABLE LOTS: 20 INCLUDING THE PRESERVATION PARCEL.
5. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
6. FIELD RUN SURVEY PERFORMED ON OR ABOUT JULY 15, 1992 BY FISHER, COLLINS AND CARTER, INC.
7. COORDINATES BASED ON NAD '83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATION No. 3634001-R AND 3634002-R.

3634001-R N 602,816.9922  
 E 1,311,778.966

3634002-R N 602,678.5270  
 E 1,313,084.196

8. PRIVATE WATER AND PRIVATE SEWER SYSTEMS ARE TO BE UTILIZED FOR THIS SITE.
9. ANY DAMAGE TO ANY PUBLIC RIGHTS-OF-WAY, PAVING OR UTILITIES WILL BE CORRECTED AT CONTRACTOR'S EXPENSE.
10. A FEE-IN-LIEU OF PROVIDING STORM WATER MANAGEMENT FOR THE ROADWAYS WAS APPROVED ON MAY 9, 1994.
11. SKETCH PLAN FILE REFERENCE 694-19 WAS APPROVED ON DECEMBER 10, 1993.
12. PRELIMINARY PLAN FILE REFERENCE P94-20 WAS APPROVED ON AUGUST 3, 1994.
13. THE WETLANDS DELINEATION STUDY WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. ON OCTOBER 25, 1993 AND APPROVED BY HOWARD COUNTY ON DECEMBER 10, 1993.
14. THE TRAFFIC STUDY WAS PREPARED BY STREET TRAFFIC STUDIES, LTD. ON NOVEMBER 8, 1993 AND APPROVED BY HOWARD COUNTY ON DECEMBER 10, 1993.
15. THIS PROJECT IS IN CONFORMANCE WITH A.D.A. CRITERIA.
16. WETLANDS ARE SHOWN WITH WETLAND SYMBOLS.
17. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE WETLAND OR STREAM BUFFERS UNLESS APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING.

#### BENCH MARKS

**BM 102** ELEV. 509.06  
 REBAR AND CAP SET FLUSH WITH GROUND  
 @ STA. 13+36 MONTICELLO DRIVE 16' RIGHT OF C

**BM 103** ELEV. 508.42  
 REBAR AND CAP SET FLUSH WITH GROUND  
 @ STA. 21+02 MONTICELLO DRIVE 36' LEFT OF C

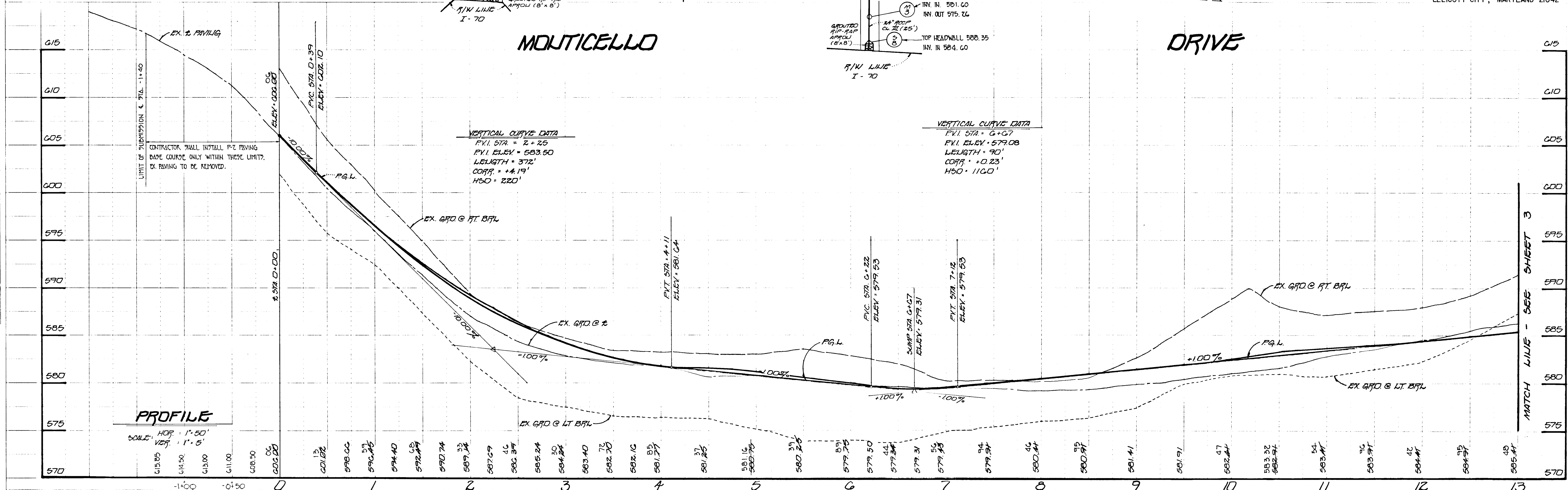
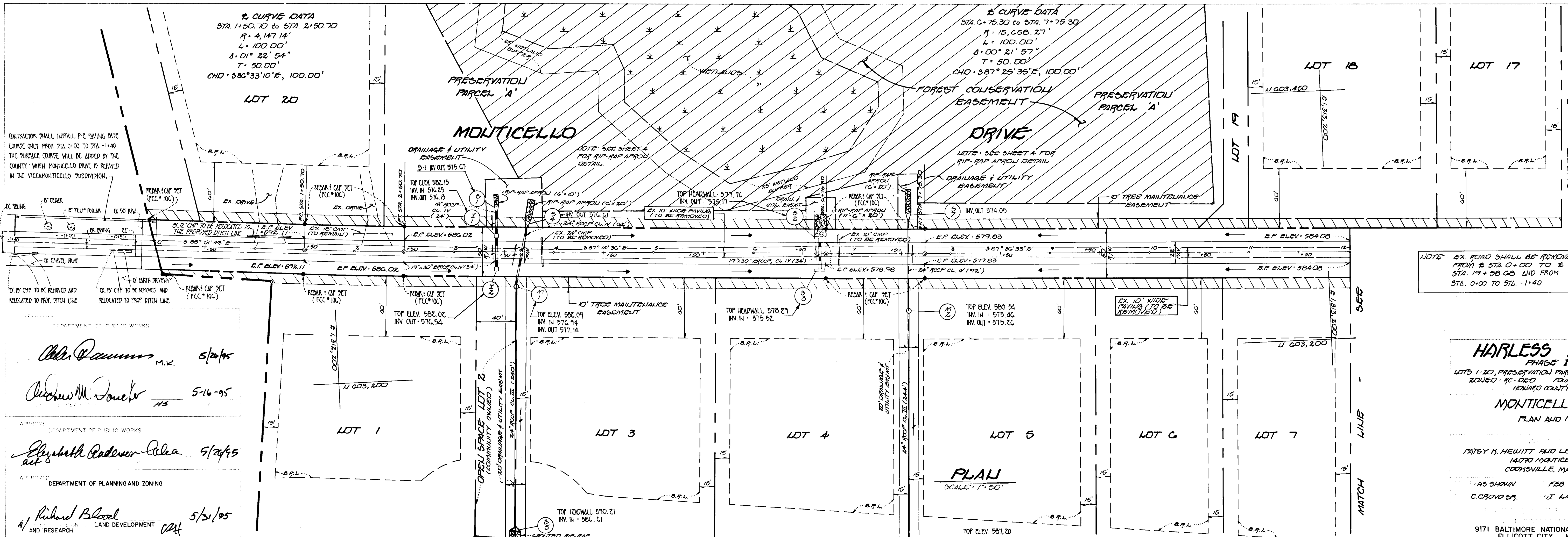
SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	MONTICELLO DRIVE PLAN AND PROFILE
3	MONTICELLO DRIVE PLAN AND PROFILE
4	DRAINAGE AREA MAP AND STORM DRAIN PROFILES
5	STREET TREE, GRADING AND SEDIMENT CONTROL PLAN
6	LANDSCAPING PLAN
7	TYPICAL ROADWAY SECTION, SEDIMENT CONTROL NOTES AND DETAILS



**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING, SURVEYING & LAND SURVEYORS  
 907 BALTIMORE NATIONAL PIKE, SUITE 300  
 ELLICOTT CITY, MARYLAND 21114  
 (410) 461-2855

**OWNER AND DEVELOPER**  
 PATSY K. HEWITT AND LEROY H. HEWITT SR.  
 14070 MONTICELLO DRIVE  
 COOKSVILLE, MARYLAND 21723

1733



NOTE: EX. ROAD SHALL BE REMOVED FROM STA. 0+00 TO STA. 19+58.00 AND FROM STA. 0+00 TO STA. 1+40



**HARLESS MAJOR**  
PHASE 1  
LOTS 1-30, PRESERVATION PARCEL 'A' AND BULKY PARCEL 'B'  
ZONED 'R-0' GEO. PLANNING DISTRICT  
HOWARD COUNTY, MD

**MONTICELLO DRIVE**  
PLAN AND PROFILE

PATSY H. HEWITT AND LEROY H. HEWITT SR.  
14070 MONTICELLO DRIVE  
COOKSVILLE, MARYLAND 21723

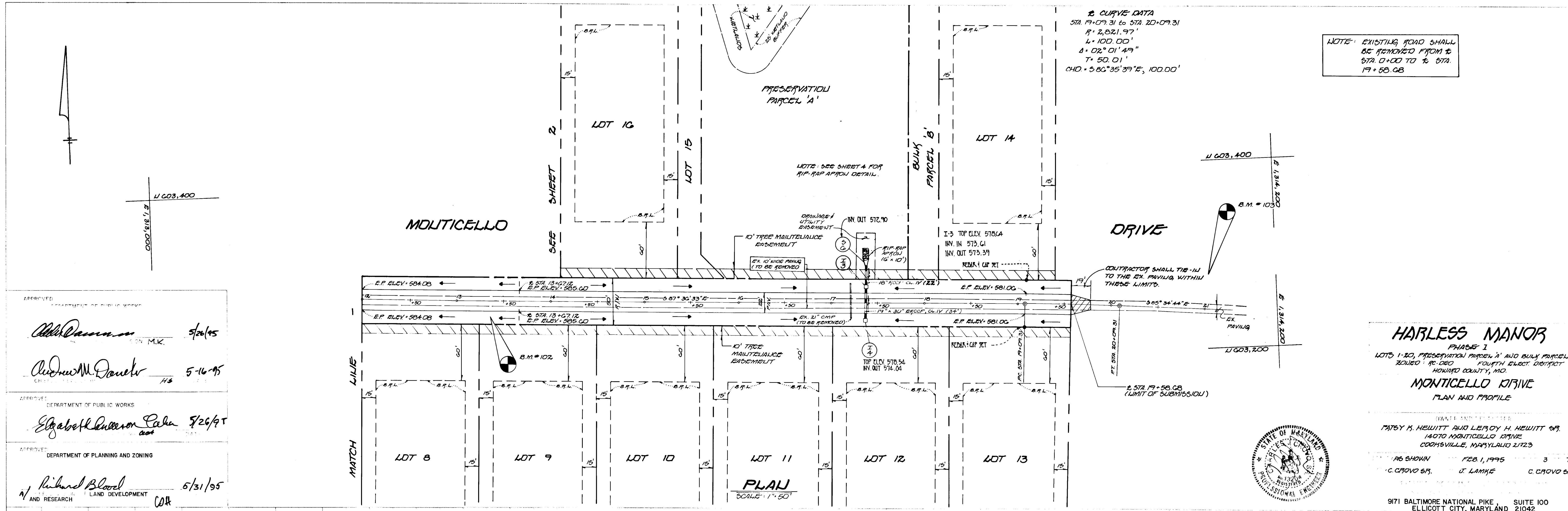
AS SHOWN FEB. 1, 1995 2 7  
C. CROVO SR. J. LAMKE C. CROVO SR.

9171 BALTIMORE NATIONAL PIKE, SUITE 100  
ELLICOTT CITY, MARYLAND 21042

1733

NOTE: EXISTING ROAD SHALL BE REMOVED FROM ST. 0+00 TO ST. 19+58.08

**2. CURVE DATA**  
 STA 19+09.31 to STA 20+09.31  
 R = 2,821.97'  
 L = 100.00'  
 Δ = 02° 01' 49"  
 T = 50.01'  
 CHD = 582° 35' 39" E, 100.00'



**HARLESS MANOR**  
 PHASE I  
 LOTS 1-20, PRESERVATION PARCEL 'A' AND BULKY PARCEL 'B'  
 ZONED: RC-060 FOURTH ELECT. DISTRICT  
 HOWARD COUNTY, MD.  
**MONTICELLO DRIVE**  
 PLAN AND PROFILE

DATE: FEB 1, 1995  
 PATTY K. HEWITT AND LEROY H. HEWITT ES.  
 14070 MONTICELLO DRIVE  
 COOKSVILLE, MARYLAND 21223  
 AS SHOWN FEB 1, 1995 3 7  
 C. CROVO ES. J. LAMKE C. CROVO ES.  
 9171 BALTIMORE NATIONAL PIKE SUITE 100  
 ELLICOTT CITY, MARYLAND 21042

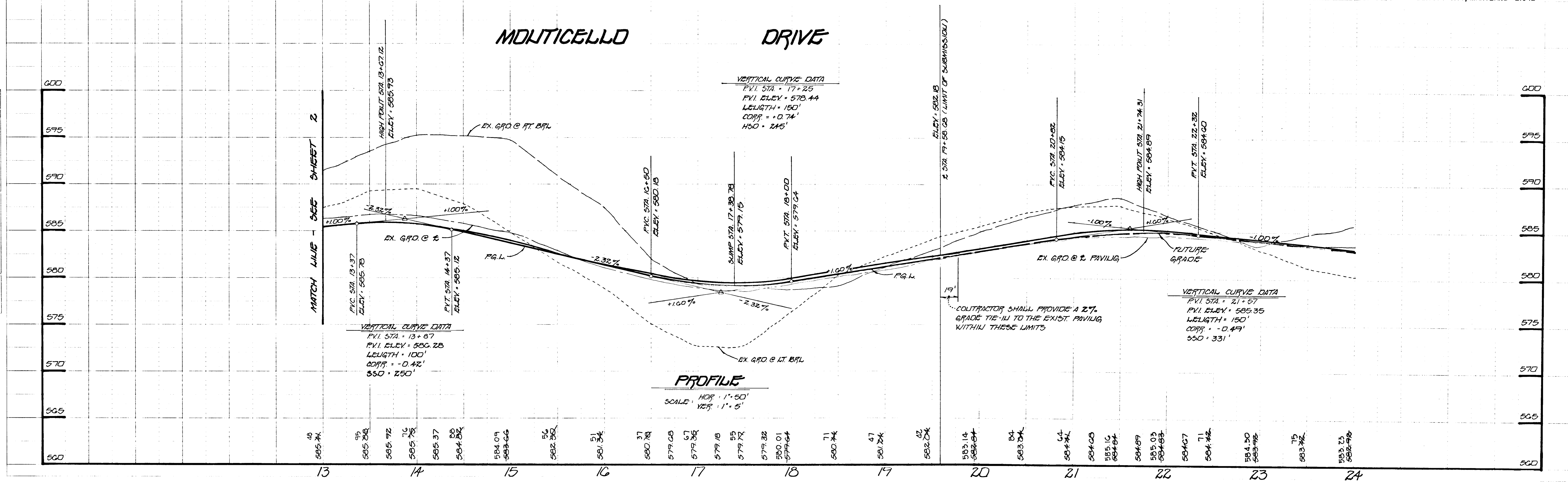


APPROVED: *Abdul Qasim* 5/26/95  
 M.K.

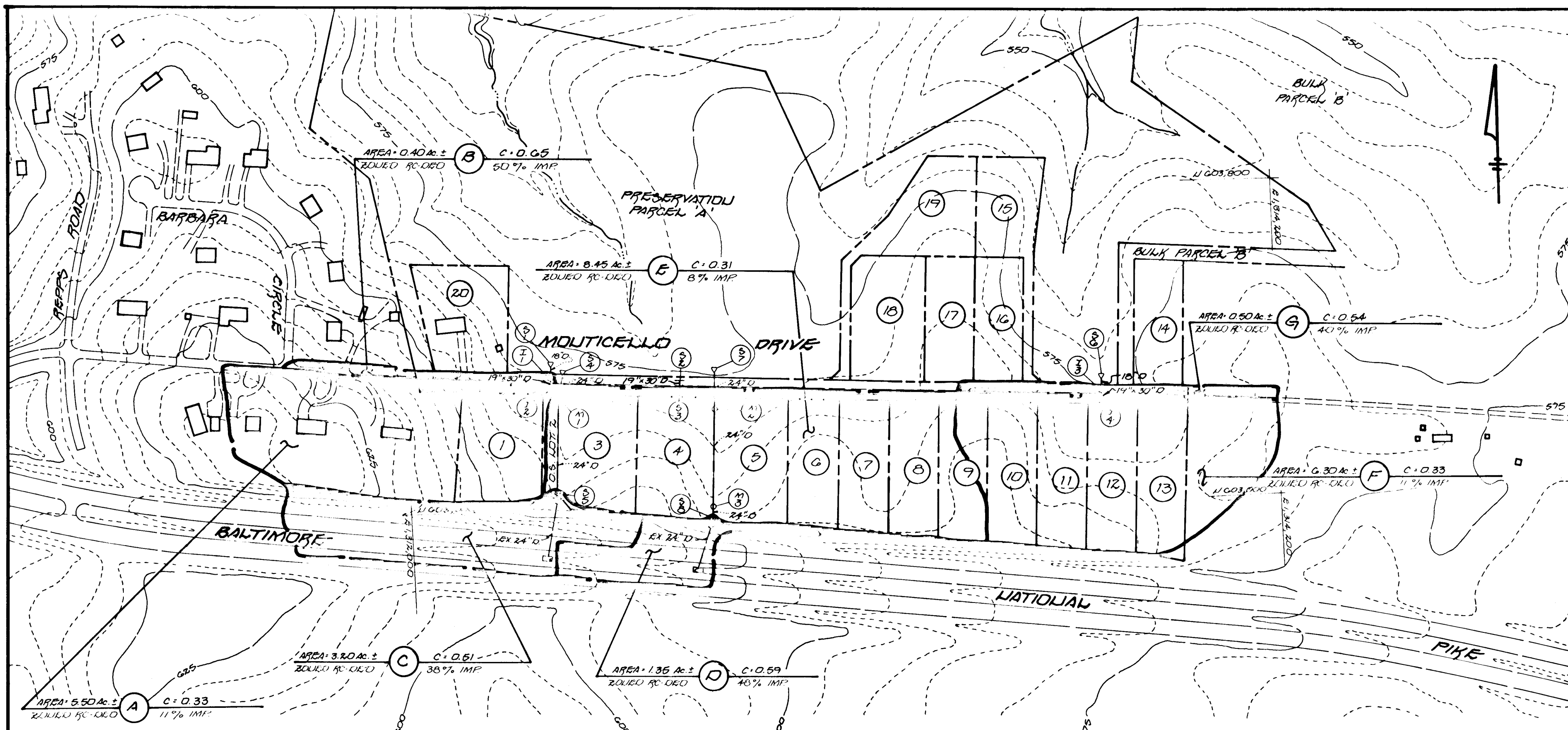
APPROVED: *Richard M. Davel* 5-16-95  
 H.S.

APPROVED: *Elizabeth Anderson* 5/26/95  
 C.A.

APPROVED: *Richard Blood* 5/31/95  
 AND RESEARCH LAND DEVELOPMENT C.A.

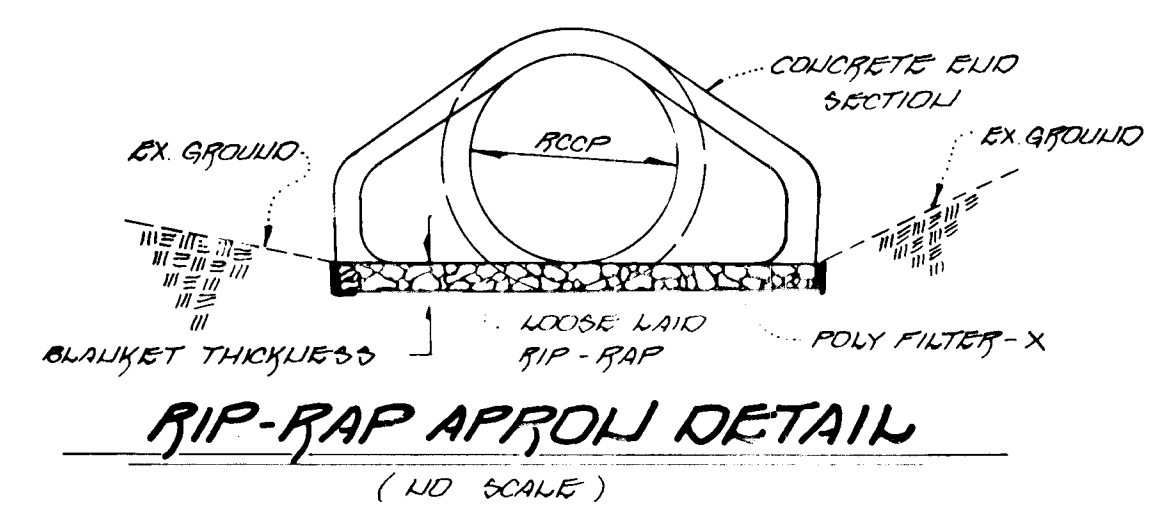


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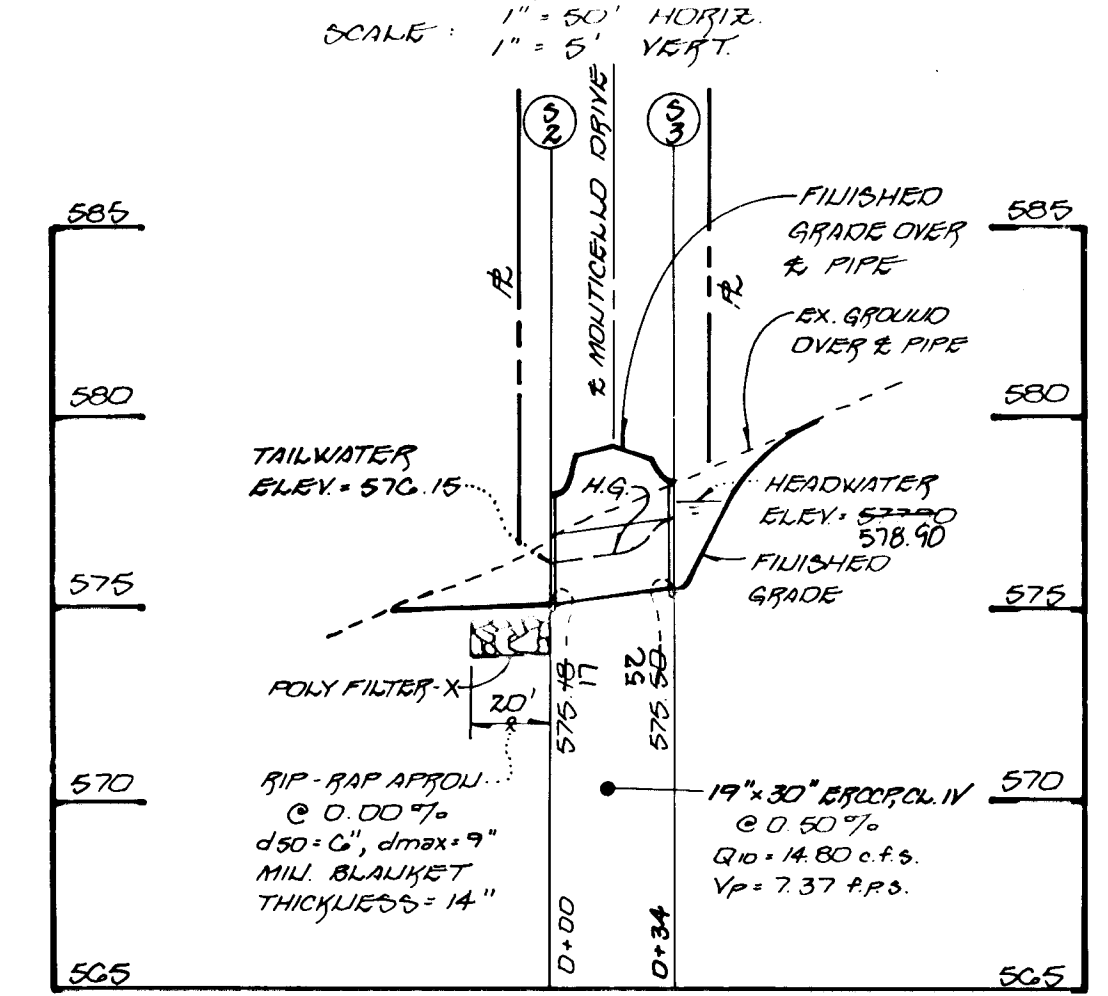
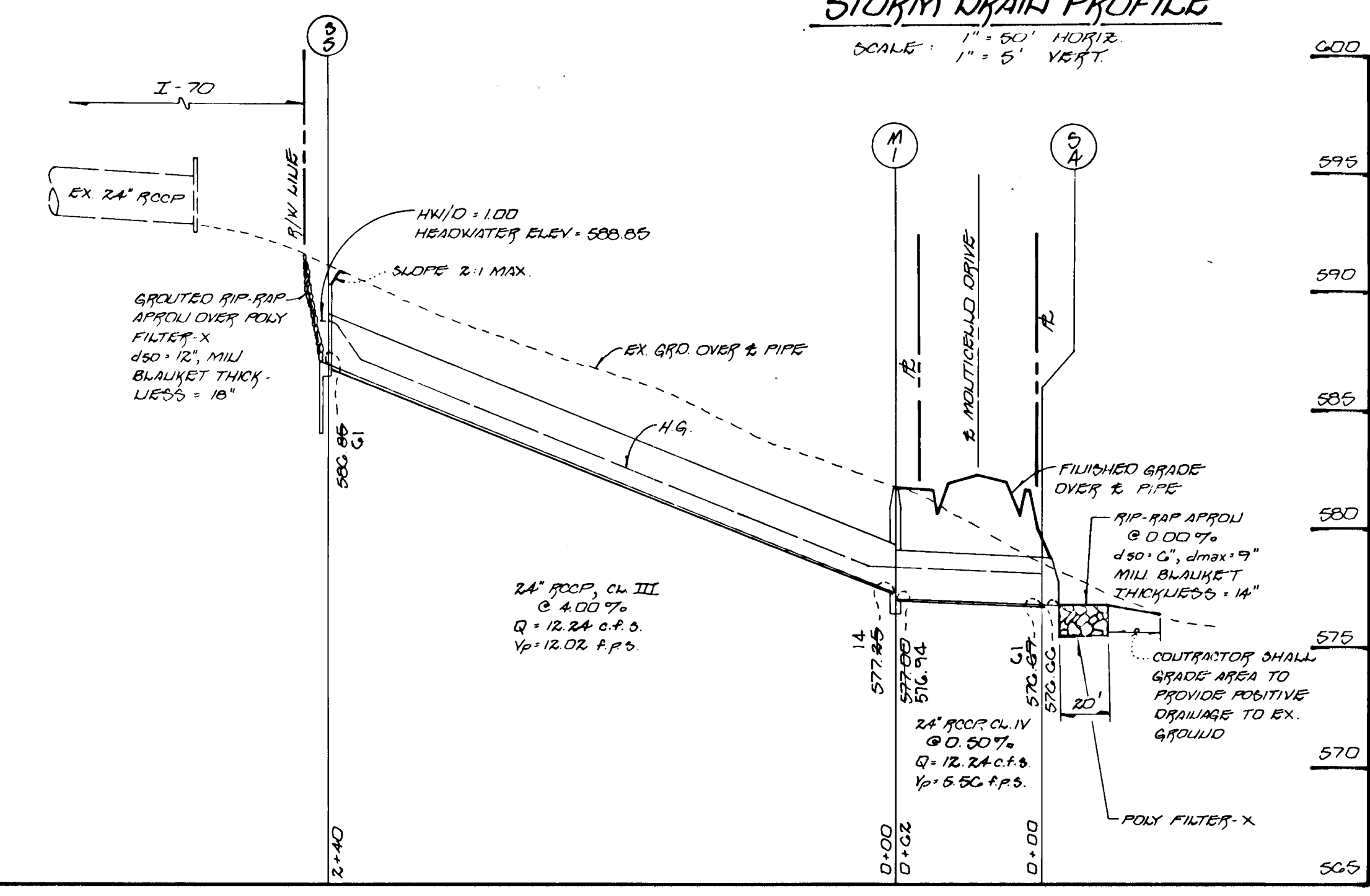
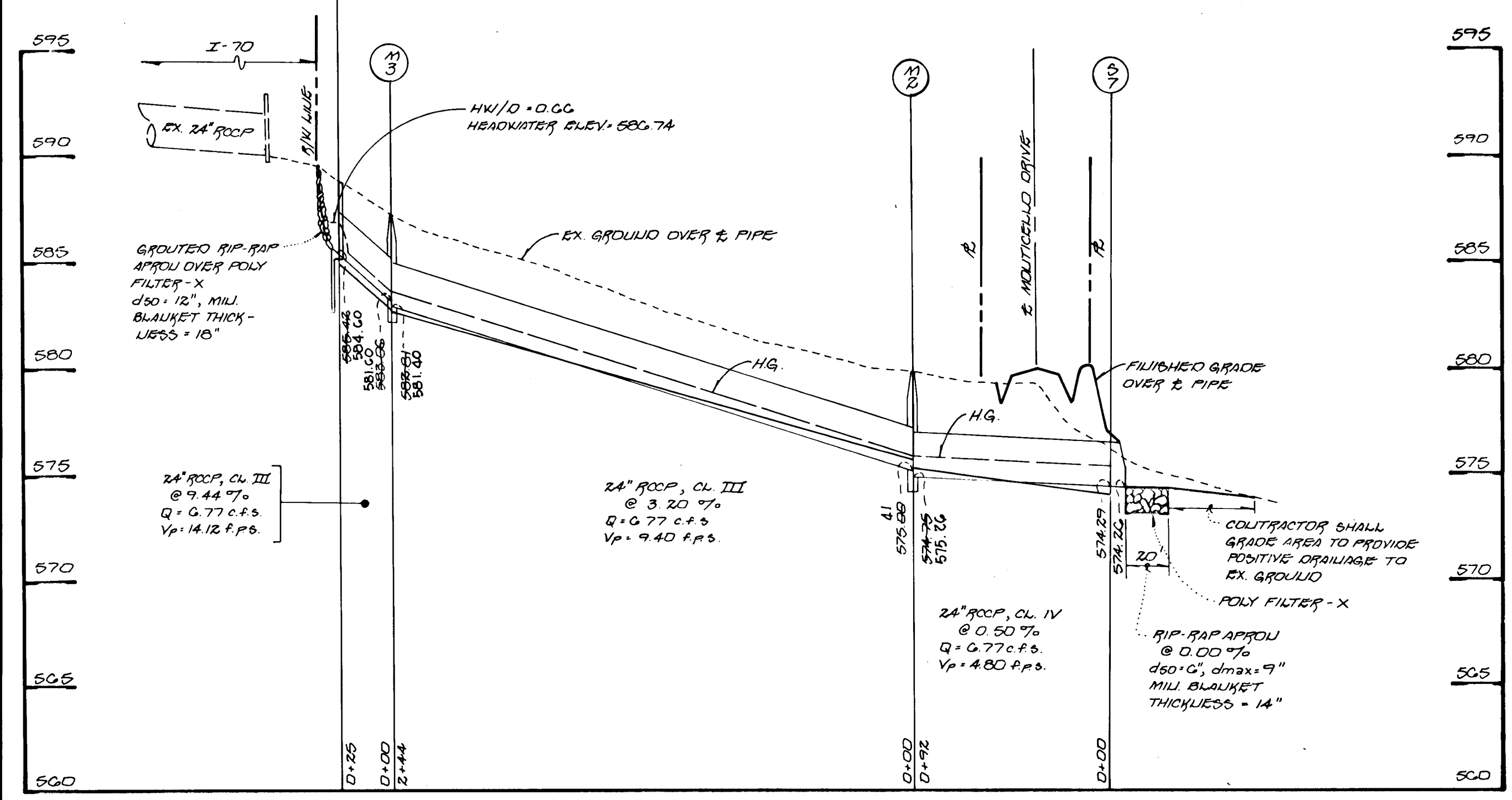
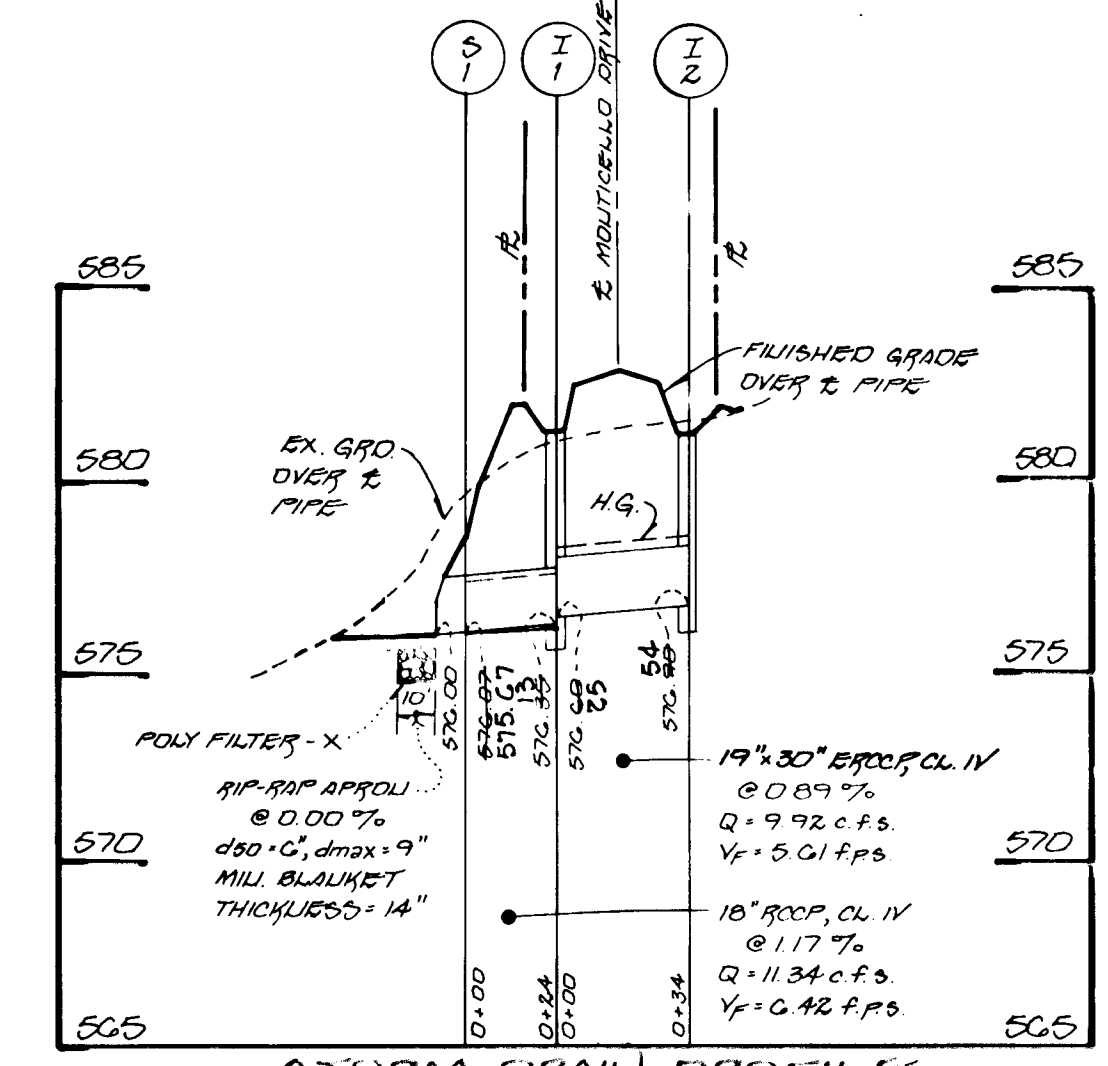
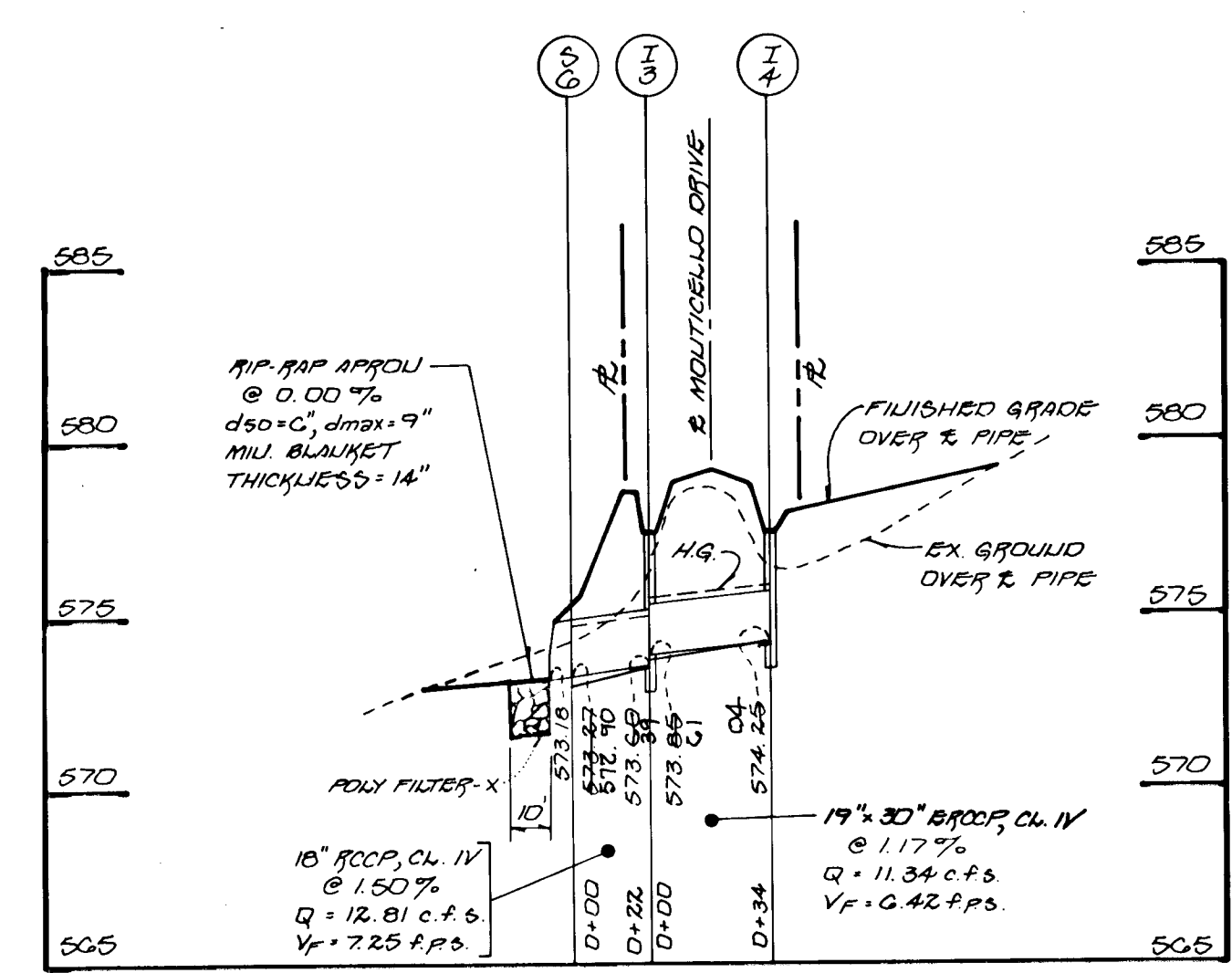
**DRAINAGE AREA MAP**  
SCALE: 1" = 20'

- NOTES:
1. STORM DRAIN BEDDING SHALL BE CLASS C.
  2.  $V_p$  DENOTES PARTIAL FLOW VELOCITY.
  3.  $V_f$  DENOTES FULL FLOW VELOCITY.
  4. H.G. DENOTES HYDRAULIC GRADIENT FOR 10 YEAR STORM.



STRUCTURE SCHEDULE										
STRUCT. I.D.	TOP ELEV.	INLET I/L	INLET O/V	ROAD NAME	ROAD STA.	OFFSET	TYPE	REMARKS		
I-1	581.18*	576.85	576.85	MOUTICELLO DRIVE	3+42.85	17' LT	"K"	S.D. 4.13		
I-2	581.18*	---	576.85	"	3+42.85	17' RT	"K"	S.D. 4.13		
I-3	578.24*	573.91	573.91	"	17+38.78	17' LT	"K"	S.D. 4.13		
I-4	578.24*	---	574.82	"	17+38.78	17' RT	"K"	S.D. 4.13		
M-1	582.89	577.85	577.85	"	3+02.88	35' RT	STD. M.H.	G. 5.12		
M-2	586.34	575.97	575.97	"	7+50.38	58' RT	STD. M.H.	G. 5.12		
M-3	587.25	581.08	581.08	"	7+50.38	302' RT	STD. M.H.	G. 5.12		
S-1	577.57	575.07	575.07	"	3+42.85	41' LT	CONC. ELD SECTION	S.D. 5.51		
S-2	577.57	---	---	"	6+67.89	17' LT	TYPE "C" ELD WALL	S.D. 5.21		
S-3	578.85	575.58	---	"	---	---	TYPE "C" ELD WALL	S.D. 5.21		
S-4	578.85	576.87	576.87	"	3+72	20' LT	CONC. ELD SECTION	S.D. 5.51		
S-5	590.35	586.01	586.01	"	3+02.88	275' RT	TYPE "A" HEADWALL	S.D. 5.11		
S-6	574.24	572.90	572.90	"	17+38.78	39' LT	CONC. ELD SECTION	S.D. 5.51		
S-7	576.88	574.82	574.82	"	7+50.38	34' LT	CONC. ELD SECTION	S.D. 5.51		
S-8	588.35	584.00	584.00	"	7+50.38	327' RT	TYPE "A" HEADWALL	S.D. 5.11		

\* DENOTES THROAT ELEV., TOP OF GRATE IS 1.25' ABOVE THROAT ELEVATION.



DRAINAGE AREA MAP AND STORM DRAIN PROFILES  
**HARLESS MANOR**  
PHASE I LOTS 1-20  
PRESERVATION PARCEL "A" AND BULK PARCEL "B"  
ZONED RC-DEO FOURTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN  
FEBRUARY 1, 1995  
SHEET 4 OF 7



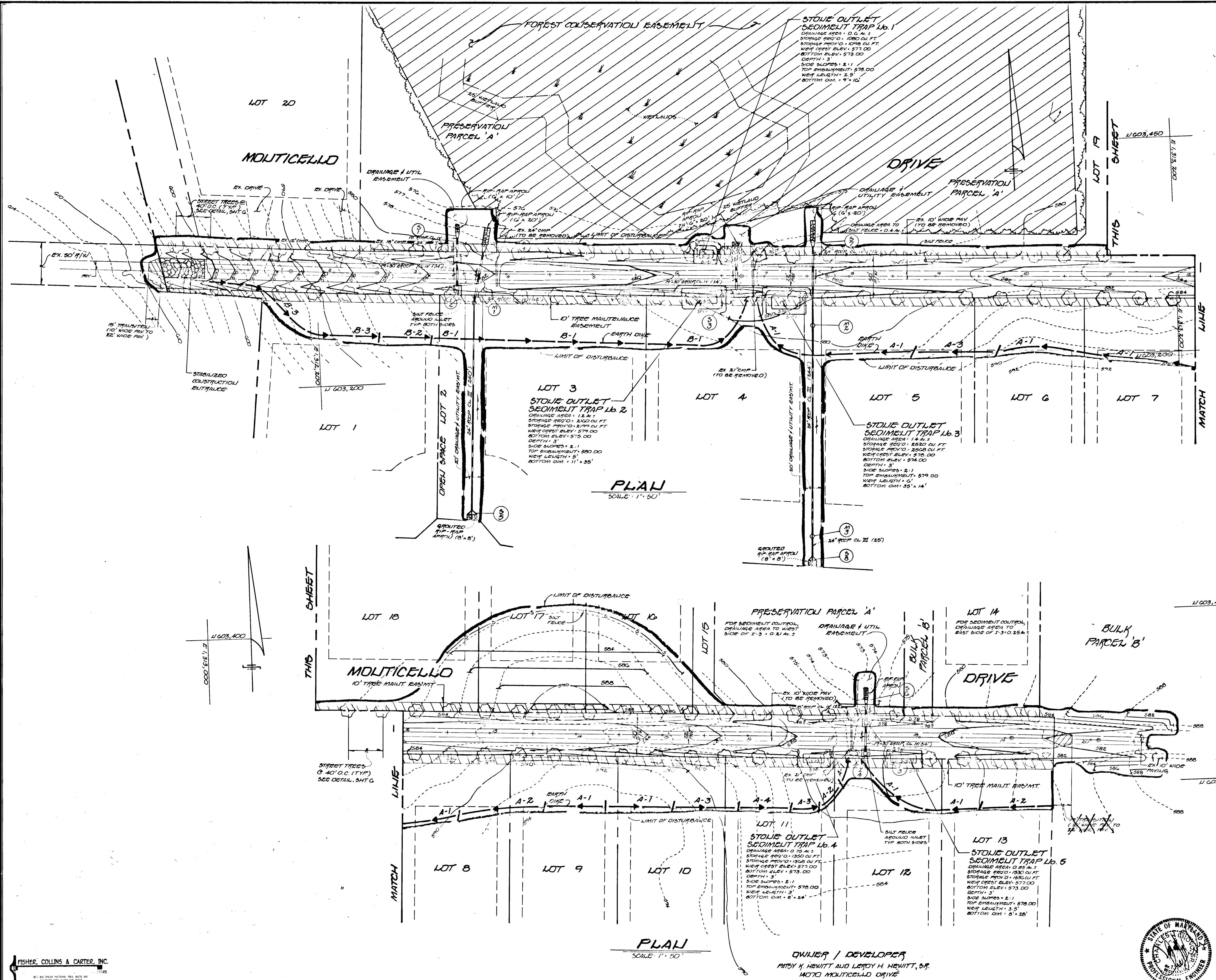
OWNER / DEVELOPER  
PATSY H. HEWITT AND LEROY H. HEWITT, SR.  
MOTO MOUTICELLO DRIVE  
COOKSVILLE, MARYLAND 21723

AS BUILT 1-28-97

F95-10A

1733

FISHER, COLLINS & CARTER, INC.



**ENGINEER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
 SIGNATURE: *Clayce* DATE: 2/9/95

**DEVELOPER'S CERTIFICATE**  
 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.  
 SIGNATURE: *DeRoy H. Hewitt* DATE: 2-9-95

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
 SIGNATURE: *Patricia Engler* DATE: 4/24/95

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 APPROVED: *John R. Blanton* DATE: 4/24/95

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 CHIEF: *Kenneth Blount* DATE: 5/31/95

APPROVED: DEPARTMENT OF PUBLIC WORKS  
 CHIEF: *Elizabeth Anderson* DATE: 5/26/95

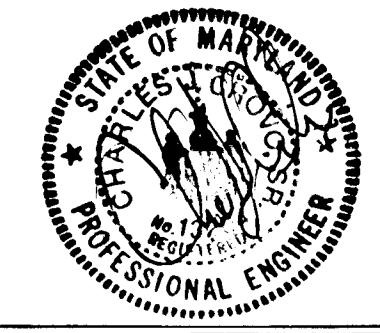
APPROVED: DEPARTMENT OF PUBLIC WORKS  
 CHIEF: *Andrew M. Damer* DATE: 5-16-95

APPROVED: DEPARTMENT OF PUBLIC WORKS  
 CHIEF: *Robert Williams* DATE: 5/26/95

**LEGEND**

- LIMIT OF DISTURBANCE
- A-1 | B-1 → EARTH DIKE
- SILT FELCE
- STREET TREE, SEE DETAIL, SHEET G.

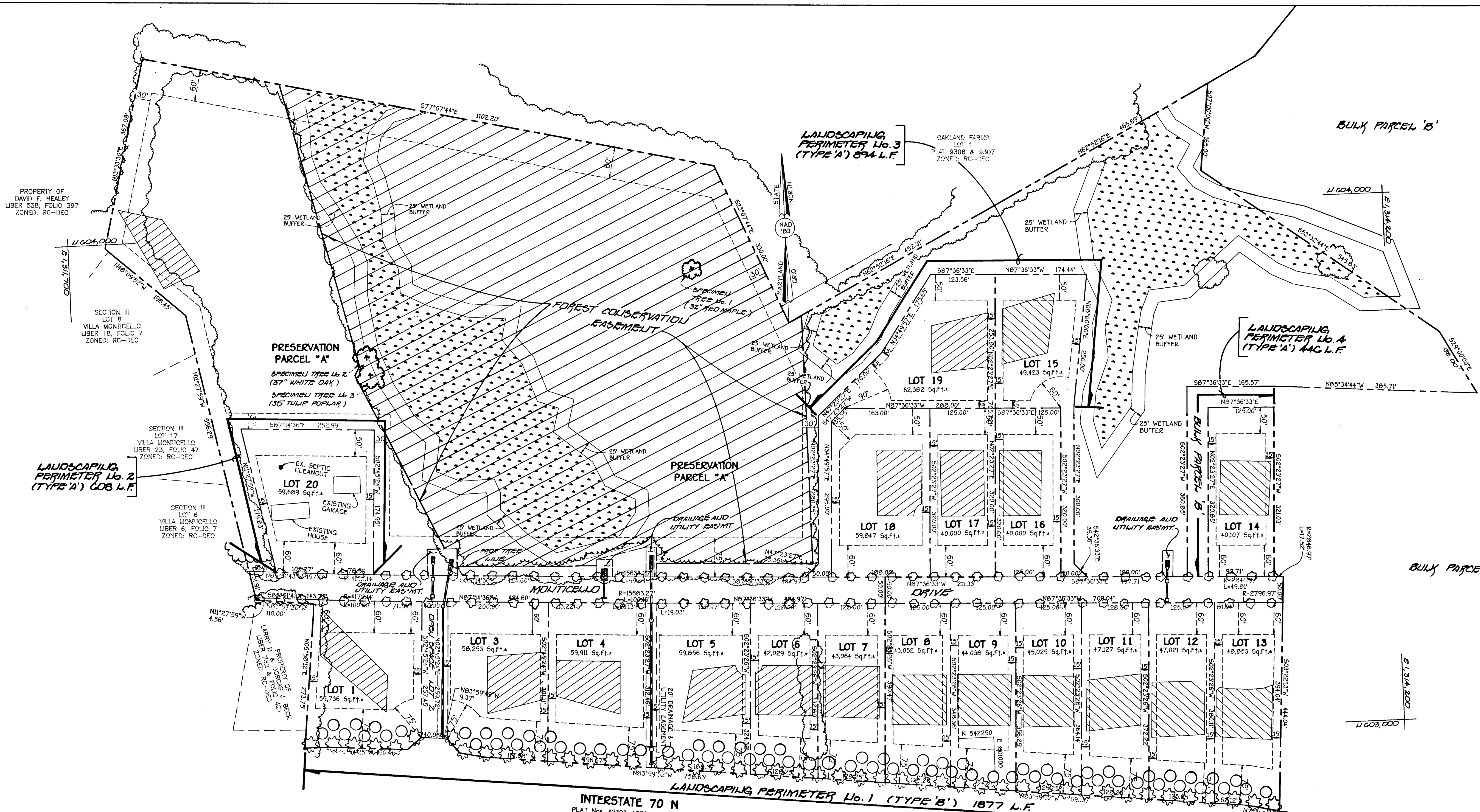
**STREET TREE, GRADING AND SEDIMENT CONTROL PLAN**  
**HARLESS MANOR**  
 PHASE I LOTS 1-20  
 PRESERVATION PARCEL "A"  
 AND BULK PARCEL "B"  
 ZONED RC-DEO FOURTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 SCALE: AS SHOWN  
 FEBRUARY 1, 1995  
 SHEET 5 OF 7



FISHER, COLLINS & CARTER, INC.  
 11003  
 17333

OWNER / DEVELOPER  
 PATSY K. HEWITT AND LEROY H. HEWITT, SR.  
 14070 MOUTICELLO DRIVE  
 COOKSVILLE, MARYLAND 21723

APPROVED: DEPARTMENT OF PUBLIC WORKS  
 CHIEF, LAND DEVELOPMENT DIVISION *John D. ...* 5/26/95  
 APPROVED: DEPARTMENT OF PUBLIC WORKS  
 CHIEF, BUREAU OF HIGHWAYS *Andrew W. ...* 5-16-95  
 APPROVED: DEPARTMENT OF PUBLIC WORKS  
 CHIEF, BUREAU OF ENGINEERING *Elizabeth ...* 5/26/95  
 APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 CHIEF, DIVISION OF LAND DEVELOPMENT *Nicholas ...* 5/31/95  
 AND RESEARCH

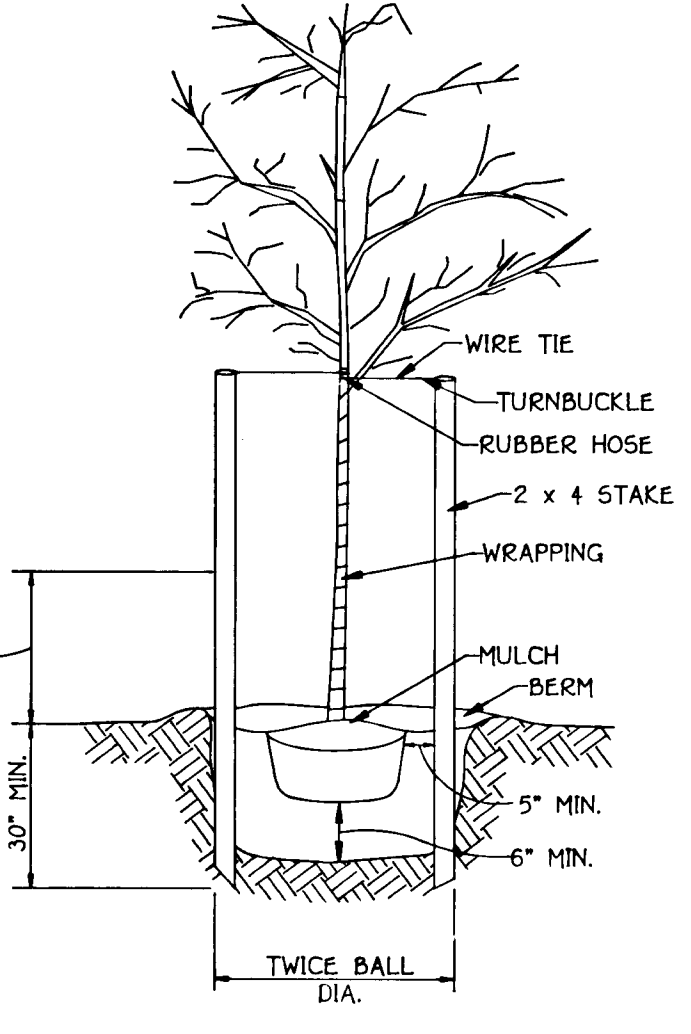


INTERSTATE 70 N  
 PLAT Nos. 42393, 42503 & 42504  
 PLAN  
 SCALE: 1"=100'

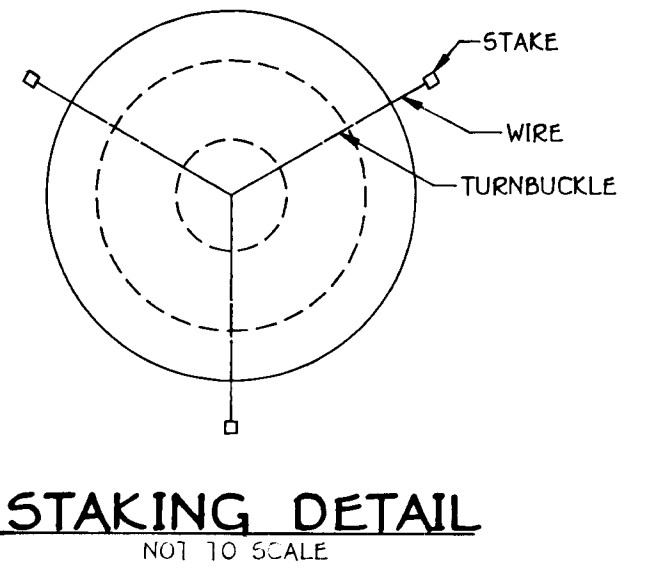
SCHEDULE A PERIMETER LANDSCAPE EDGE				
CATEGORY	Adjacent to Roadways		Adjacent to Perimeter Properties	
	B	A	B	A
LANDSCAPE TYPE	PERIMETER No. 1 1877		PERIMETER No. 2 608	
LINEAR FEET OF PERIMETER	1877		608	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	N/A		N/A	
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE IF NEEDED)	N/A		N/A	
NUMBER OF PLANTS REQUIRED	1877/50 = 35		1940/60 = 33	
SHADE TREES	1877/40 = 47			
EVERGREEN TREES			33 SHADE TREES	
SHRUBS			47 EVERGREEN TREES	
NUMBER OF PLANTS PROVIDED	35 SHADE TREES		33 SHADE TREES	
SHADE TREES	47 EVERGREEN TREES			
EVERGREEN TREES				
OTHER TREES (2:1 SUBSTITUTION)				
SHRUBS (10:1 SUBSTITUTION)				
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)				

THE LANDSCAPING REQUIREMENTS FOR PERIMETERS 2, 3 AND 4 WILL BE PLACED ALONG PERIMETER No. 1 IN ADDITION TO THEIR OWN OBLIGATIONS.

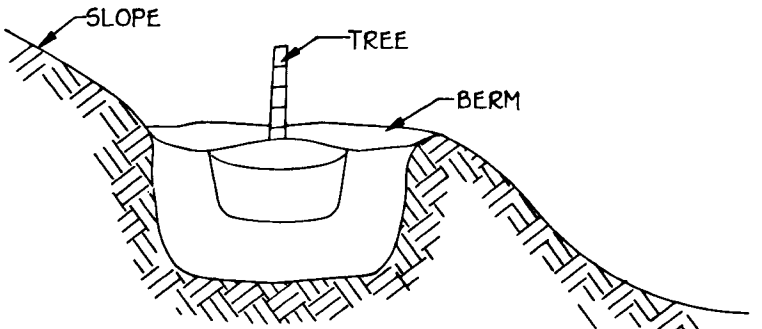
○ DENOTES SHADE TREES (71 TOTAL)  
 ● DENOTES EVERGREENS (47 TOTAL)  
 ○ DENOTES STREET TREE (98 TOTAL)



NOTE: REMOVE BURLAP FROM TOP 1/3 OF BALL  
**TREE PLANTING**  
 NOT TO SCALE



**STAKING DETAIL**  
 NOT TO SCALE



**GRADING FOR PLANTING ON SLOPES**  
 NOT TO SCALE

STREET TREE SCHEDULE			
SYMBOL	BOTANICAL AND COMMON NAME	SIZE AND ROOT	COMMENTS
○	QUERCUS COCCINEAS SCARLET OAK	MIN. 2 1/2" CALIPER B AND B	40' APART ON PUBLIC R/W

\* NOTE: STREET TREE IS ONLY A RECOMMENDATION, THIS MAY BE REVISED TO A COUNTY ACCEPTABLE EQUIVALENT.

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE LANDSCAPING HAS BEEN POSTED AS PART OF THE D.P.W. DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$11,000.00 (118 TREES).

LANDSCAPING PLAN  
**HARLESS MANOR**  
 PHASE 1 LOTS 1-20  
 PRESERVATION PARCEL "A"  
 AND BULK PARCEL "B"  
 ZONED RC-DEO FOURTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 SCALE: AS SHOWN  
 FEBRUARY 1, 1995  
 SHEET 6 OF 7

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 9171 BALTIMORE NATIONAL PIKE, SUITE 100  
 ELLICOTT CITY, MARYLAND 21042  
 (410) 461-2855



17331

**ENGINEER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER: *[Signature]* DATE: 2/19/95

**DEVELOPER'S CERTIFICATE**  
 I HAVE CERTIFIED THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL. 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 EROSION AND SEDIMENT 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.

SIGNATURE OF DEVELOPER: *[Signature]* DATE: 2-9-95

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
*[Signature]* DATE: 4/24/95  
 U.S. SOIL CONSERVATION DISTRICT

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*[Signature]* DATE: 4/24/95  
 DISTRICT HOWARD SOIL CONSERVATION DIST.

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* DATE: 5/24/95

APPROVED: DIVISION OF LAND DEVELOPMENT AND RESEARCH  
*[Signature]* DATE: 5/24/95

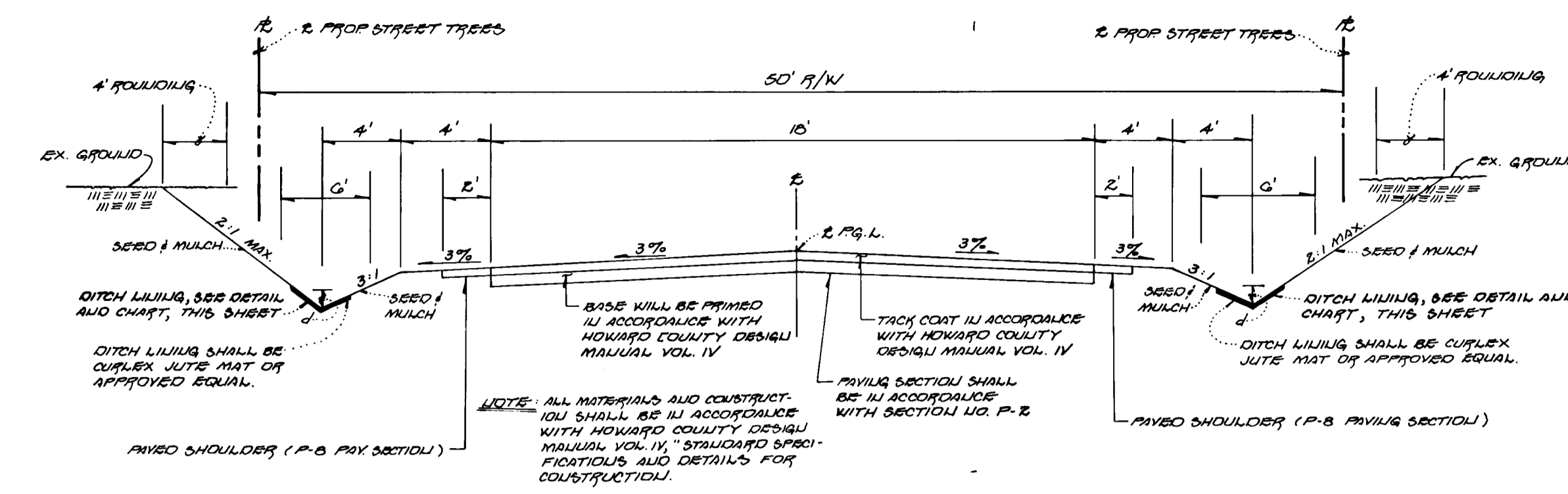
APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* DATE: 5/26/95

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*[Signature]* DATE: 5/26/95

CHIEF, BUREAU OF HIGHWAYS  
*[Signature]* DATE: 5-16-95

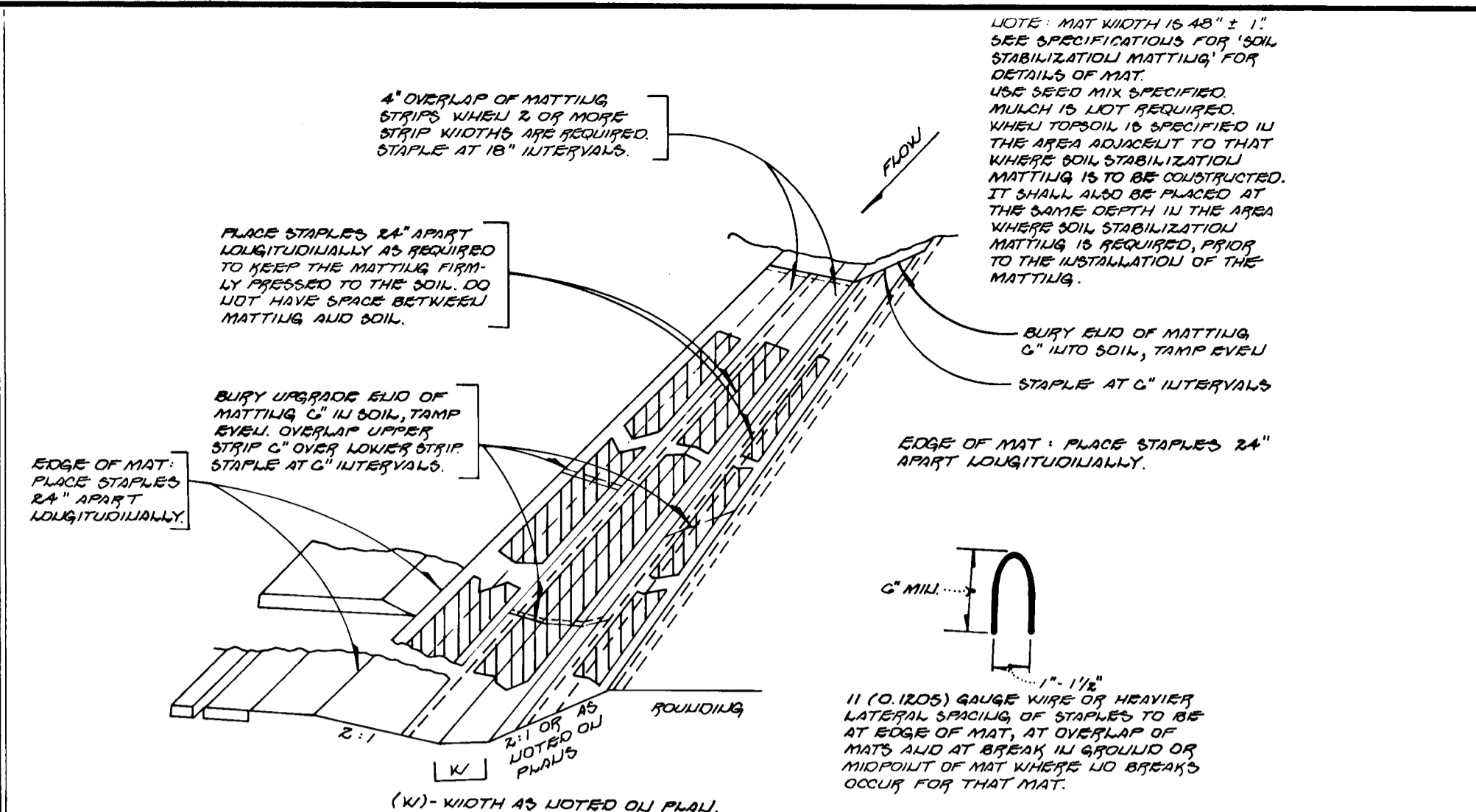
**DITCH LINING CHART**

ROAD	FROM	TO	LOCATION	DEPTH
MONTICELLO DRIVE	D+00	3+42	RIGHT OF E	1'
MONTICELLO DRIVE	D+00	3+42	LEFT OF E	0.0'
MONTICELLO DRIVE	G+07	1+50.08	RIGHT OF E	1'

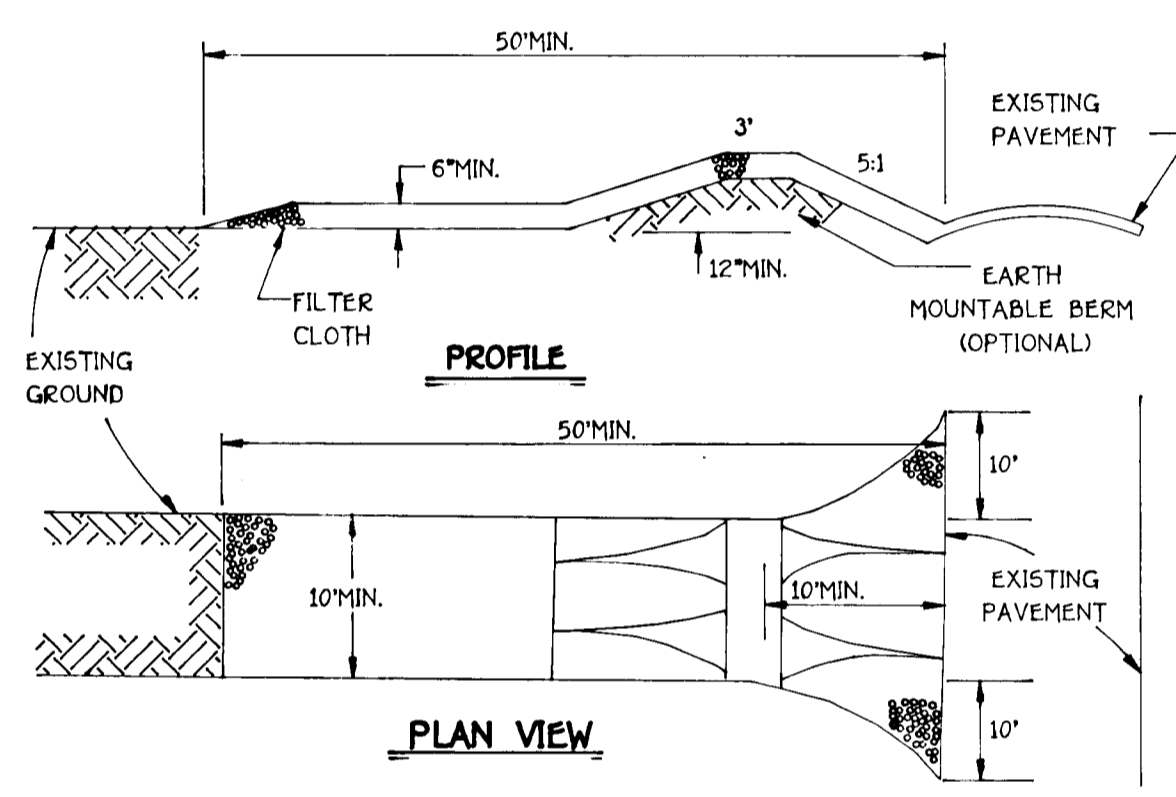


**TYPICAL ROADWAY SECTION**  
(1/2\"/>

ROAD NAME	CLASSIFICATION	DESIGN SPEED	SDUR	R. STA. LIMITS
MONTICELLO DRIVE	LOCAL ROAD	30 M.P.H.	RC-DEO	STA 0+00 TO STA 14+50.08



**DITCH LINING PLACEMENT**  
(1/2\"/>



**CONSTRUCTION SPECIFICATIONS**

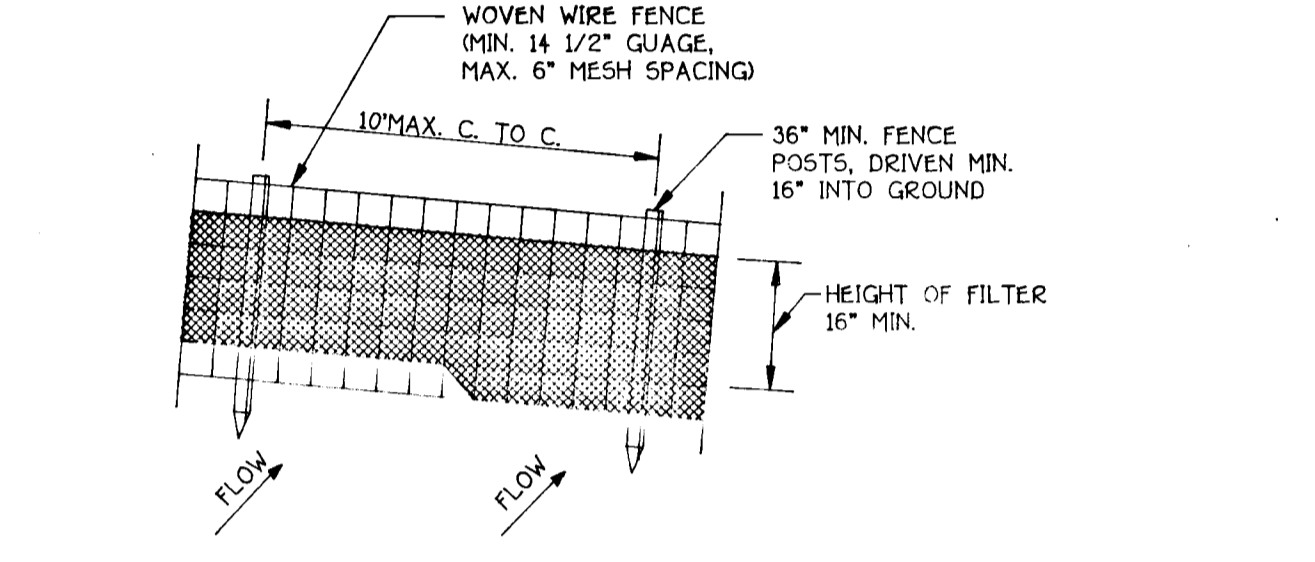
- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE 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 A 5:1 SLOPE 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 TOP 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 ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

**STABILIZED CONSTRUCTION ENTRANCE**  
NOT TO SCALE

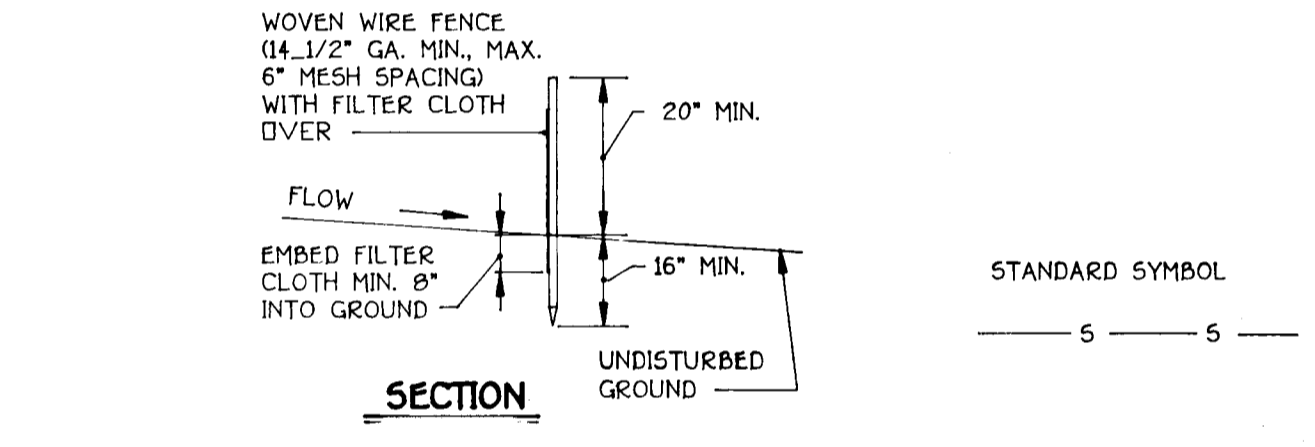
**STONE OUTLET SEDIMENT TRAP ST-VI**  
NOT TO SCALE

- 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.
- THE AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
  - THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVELING.
  - ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
  - THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4"-8" ALONG WITH A 1" THICKNESS OF 2" AGGREGATE PLACED ON THE UP-GRADE SIDE ON THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.
  - 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.
  - THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRED AS NEEDED.
  - CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
  - THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

**FISHER, COLLINS & CARTER, INC.**  
 SOIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 971 BALTIMORE NATIONAL BLDG. SUITE 100  
 ELLETTT CITY, MARYLAND 21112  
 410-461-1000



**PERSPECTIVE VIEW**

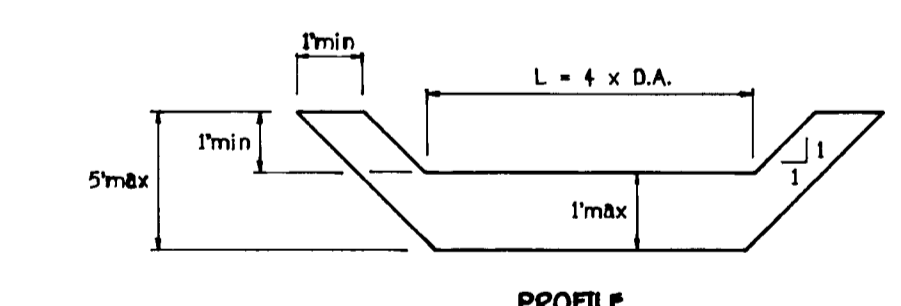


**SECTION**

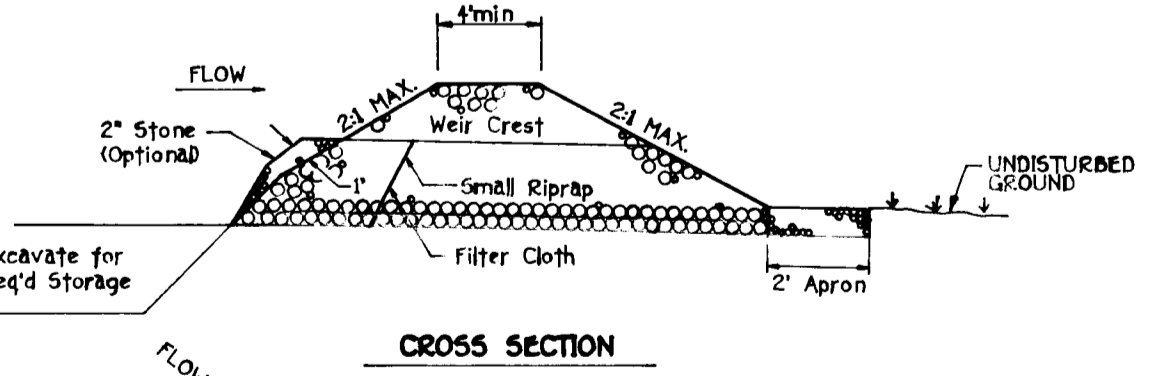
**CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OF 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.

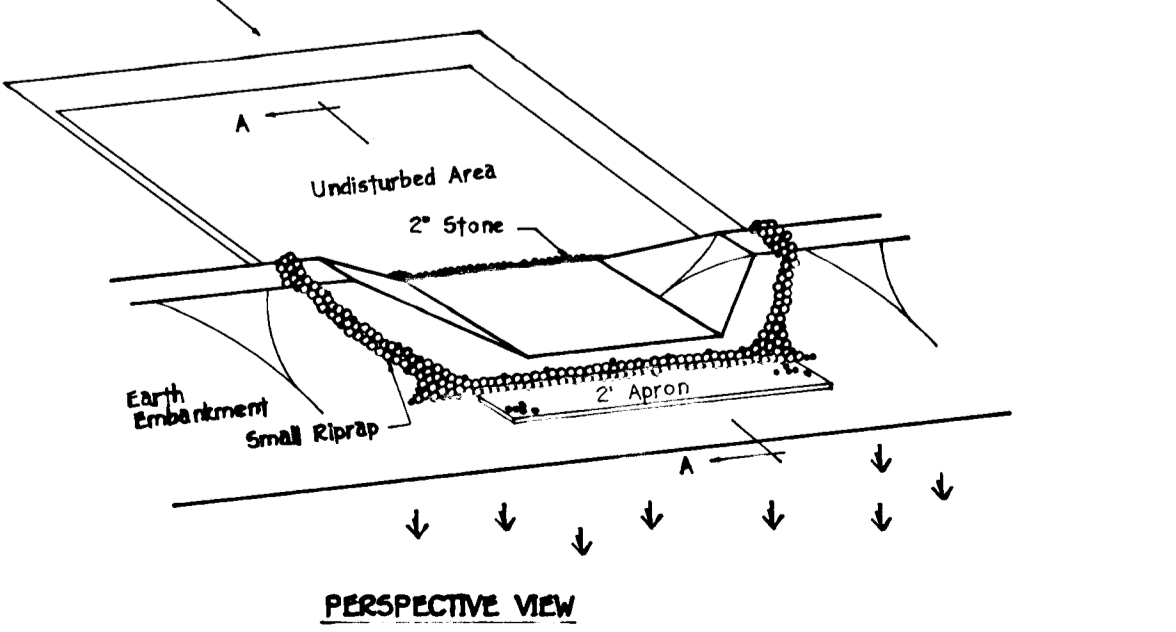
**SILT FENCE**  
NOT TO SCALE



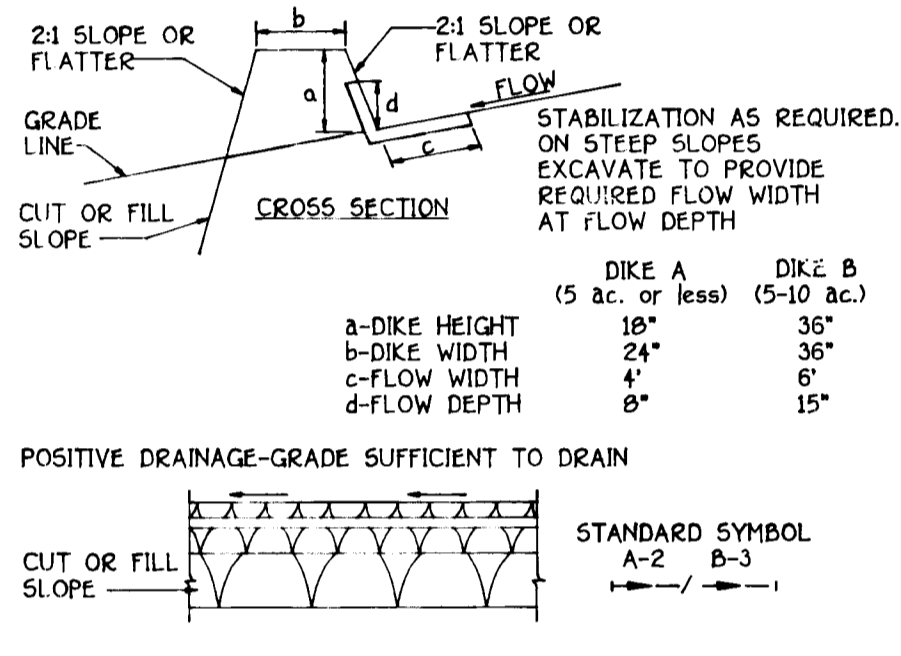
**PROFILE**



**CROSS SECTION**



**PERSPECTIVE VIEW**



**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 CROSSING 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 RUNOFF SHALL BE CONVEYED TO A 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.

**FLOW CHANNEL STABILIZATION**

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELGRO; 500; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR 500; 2" STONE	LINED RIP-RAP 4"-8"
4	8.1-20%	LINED RIP-RAP 4"-8"	ENGINEERING DESIGN

- STONE TO BE 2" INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
- RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
- APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.

**EARTH DIKE**  
NOT TO SCALE

**SEQUENCE OF CONSTRUCTION**

- OBTAIN GRADING PERMIT. (1 DAY)
- NOTIFY "MISS UTILITY" 48 HOURS BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION DIVISION AT (410) 313-1880. 24 HOURS BEFORE STARTING ANY WORK. (1 DAY)
- CONSTRUCT STORM DRAIN PIPE FROM 5-4 TO 5-5 AND 5-7 TO 5-8 TO CONVEY OFFSITE RUNOFF FROM EXISTING CULVERTS AT 1-70. (5 DAYS)
- INSTALL STONE CONSTRUCTION ENTRANCE. (1 DAY)
- CONSTRUCT EARTH DIKE ACROSS LOTS 1 THRU 13 TO DIVERT STORM WATER RUNOFF FROM THESE LOTS TO THE EXISTING CULVERTS WHICH ARE AT E STA 6+84.5. MONTICELLO DRIVE AND STA. 17+20 MONTICELLO DRIVE. THESE CULVERTS WILL REMAIN UNTIL SUCH TIME AS THE STORM DRAIN SYSTEM AND ROAD HAVE BEEN CONSTRUCTED. STABILIZE EARTH DIKE WITH TEMPORARY SEEDING. (4 DAYS)
- CONSTRUCT STONE OUTLET SEDIMENT TRAPS AND STABILIZE TRAPS WITH TEMPORARY SEEDING. (3 DAYS)
- GRADE SITE TO SUBGRADE AND INSTALL REMAINING STORM DRAIN SYSTEM. INSTALL INLET PROTECTION AROUND INLETS. (3 WEEKS)
- SEDIMENT SHALL BE REMOVED FROM STONE OUTLET SEDIMENT TRAPS ONCE THE CLEANOUT ELEVATIONS HAVE BEEN REACHED. (1 DAY)
- INSTALL ROAD BASE COURSE. (2 DAYS)
- REMOVE SEDIMENT FROM ROADWAY AND DRESS STONE CONSTRUCTION ENTRANCE AS REQUIRED AND STABILIZE ALL DISTURBED AREAS. (1 DAY)
- REMOVE INLET PROTECTION AND FLUSH STORM DRAIN SYSTEM TO REMOVE ANY TRAPPED SEDIMENT. (1 DAY)
- APPLY TACK COAT TO SUBGRADE AND LAY SURFACE COURSE. (2 DAYS)
- REMOVE ALL SEDIMENT CONTROL MEASURES UPON SEDIMENT CONTROL INSPECTORS APPROVAL. (2 DAYS)
- ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED BY PERMANENT SEEDING.

**OWNER AND DEVELOPER**

PATSY K. HEWITT AND LEROY H. HEWITT SR.  
 14070 MONTICELLO DRIVE  
 COCKSVILLE, MARYLAND 21273

**SEDIMENT CONTROL NOTES**

- 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).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURE DIKES, PERIMETER SLOPES AND ALL GREATER THAN 3:1 b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON 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 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51) SOD (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 GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND / TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDI CONTROL INSPECTOR.
- SITE ANALYSIS:
 

TOTAL AREA OF SITE	55.85 ACRES
AREA DISTURBED	0.22 ACRES
AREA TO BE ROOFED OR PAVED	1.00 ACRES
AREA TO BE VEGETATIVELY STABILIZED	5.22 ACRES
TOTAL CUT	10,000 CU.YDS.
TOTAL FILL	10,000 CU.YDS.
- ANY SEDIMENT CONTROL PRACTICES 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. SEDIMENT CONTROL INSPECTOR ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES. APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

**PERMANENT SEEDING NOTES**

- ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:
- SEEDING PREPARATION:**  
 LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

**SOIL AMENDMENTS:**

- APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1,000 SQ.FT.) AND 500 LBS. PER ACRE 0-20-20 FERTILIZER (14 LBS./1,000 SQ.FT.) BEFORE SEEDING HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 38-0-0 UREAFORM FERTILIZER (9 LBS./1,000 SQ.FT.) AND 500 LBS. PER ACRE (11.5 LBS./1,000 SQ.FT.) OF 10-20-20 FERTILIZER.

**SEEDING:**

- FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 31 SEED WITH 100 LBS. PER ACRE (2.3 LBS./1,000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE, FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS./ACRE (1.4 LBS./1,000 SQ.FT.) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.05 LBS./1,000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, PROJECT SITE BY: OPTION (1) - TWO 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 100 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD BE HYDROSEDED.

**MULCHING:**

- APPLY 1 1/2 TO 2 TONS PER ACRE (10 TO 90 LBS./1,000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (5 GAL./1,000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FEET OR HIGHER USE 348 GALLONS PER ACRE (19 GAL./1,000 SQ.FT.) FOR ANCHORING.

**MAINTENANCE:**

- INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.
- \* FOR PUBLIC PONDS SUBSTITUTE CHEMUNG CROWN VETCH AT 15 LBS./ACRE AND KENTUCKY 31 TALL FESCUE AT 40 LBS./ACRE AS THE SEEDING REQUIREMENT. OPTIMUM SEEDING DATE FOR THIS MIXTURE IS MARCH 1 TO APRIL 30.

**TYPICAL ROADWAY SECTION**  
**SEDIMENT CONTROL NOTES AND DETAILS**

**HARLESS MANOR**  
 PHASE 1 LOTS 1-20  
 PRESERVATION PARCEL "A"  
 AND BULK PARCEL "B"  
 ZONED RC-DEO FOURTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 SCALE: AS SHOWN  
 FEBRUARY 1, 1995  
 SHEET 7 OF 7



1733