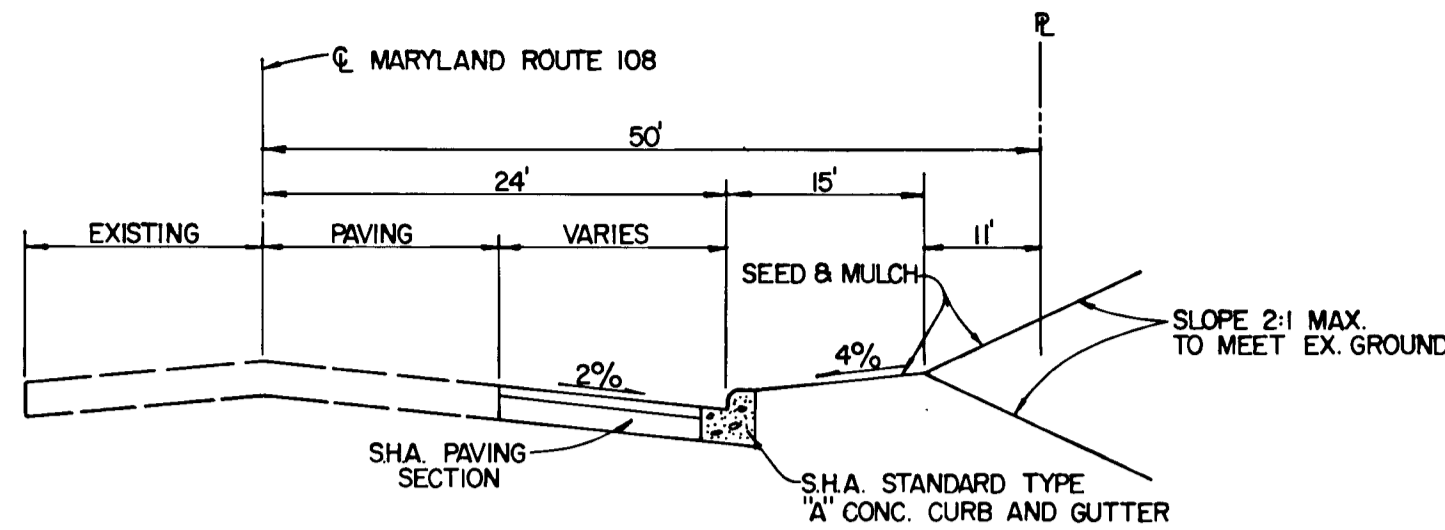


STORM WATER MANAGEMENT PROFILE

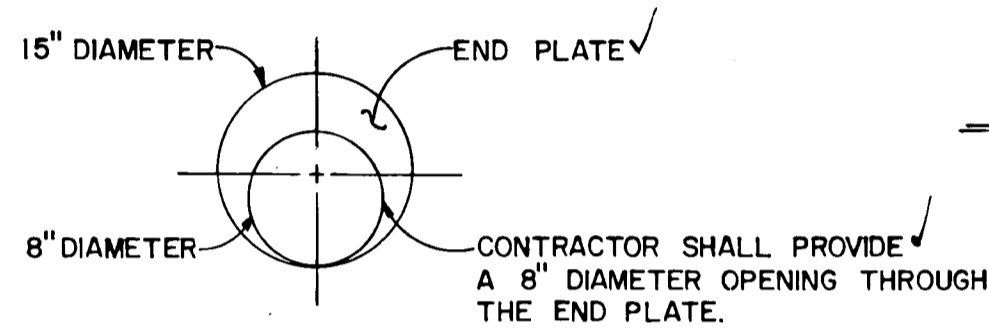
SCALE: 1" = 20' HOR.
1" = 2' VERT.

STRUCTURE SCHEDULE						
NO.	TYPE	INV. IN	INV. OUT	STATION	ELEVATION	REMARKS
I-1	A (S)-5		513.93 514.21	1+25.45 LINEAR PROFILE BARRINGTON COURT	518.78 518.66	DRWG. SD. 4.01
M-1	STANDARD MANHOLE	510.58 510.53	510.33 510.35		518.65	DRWG. G. 5.01
S-1	STANDARD METAL END SECTION		509.04 509.05		510.20	DRWG. SD. 5.61
I-2	DOUBLE 'S' COMB. INLET WITH RECTANGULAR GRATES		512.02 511.77		516.76 516.75	DRWGS MD-37904 & MD-37908



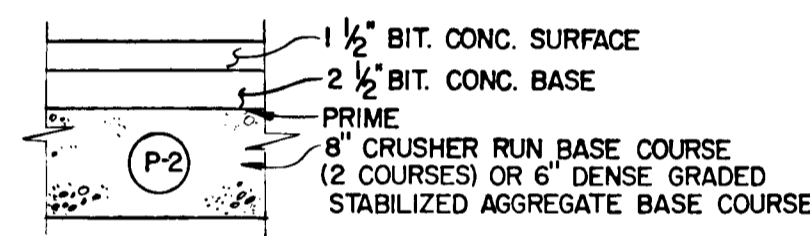
TYPICAL WIDENING SECTION ALONG MARYLAND ROUTE 108

NO SCALE



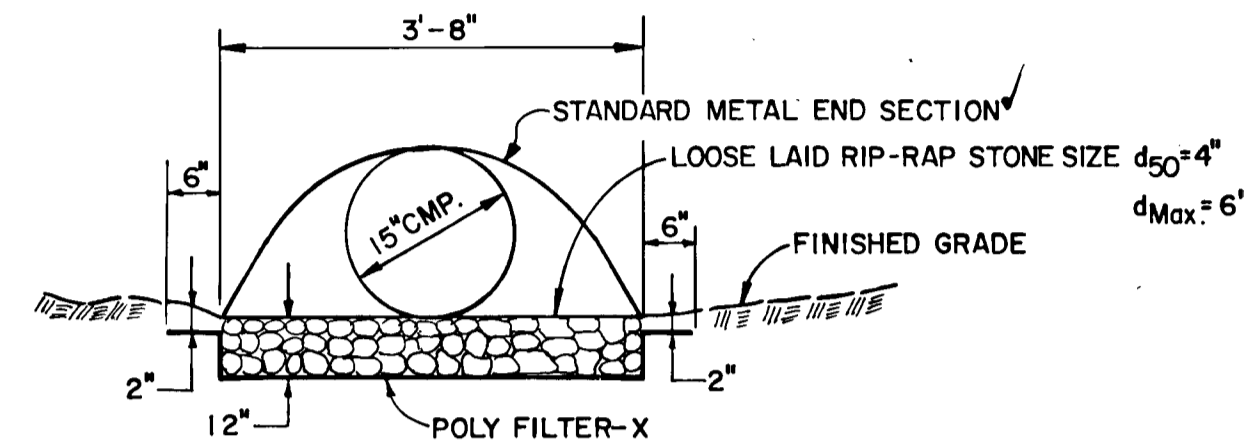
ORIFICE DETAIL

NO SCALE



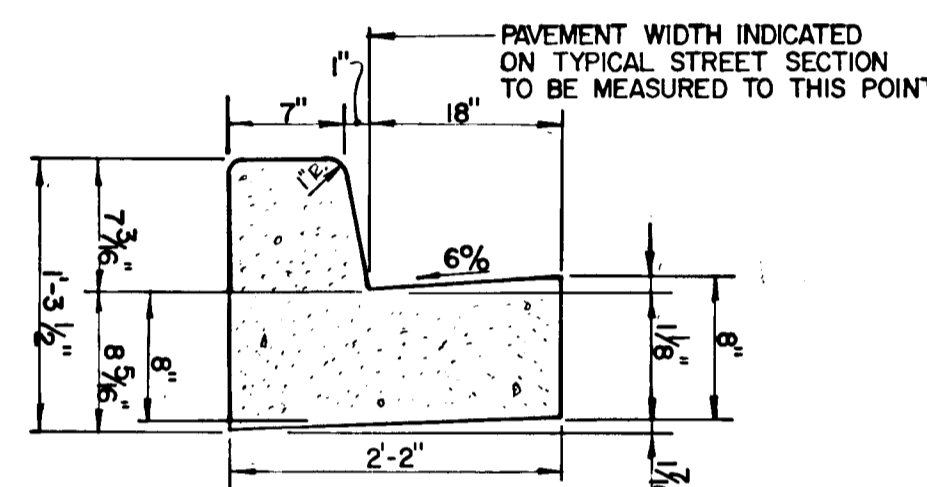
PAVING SECTION P-2

NO SCALE



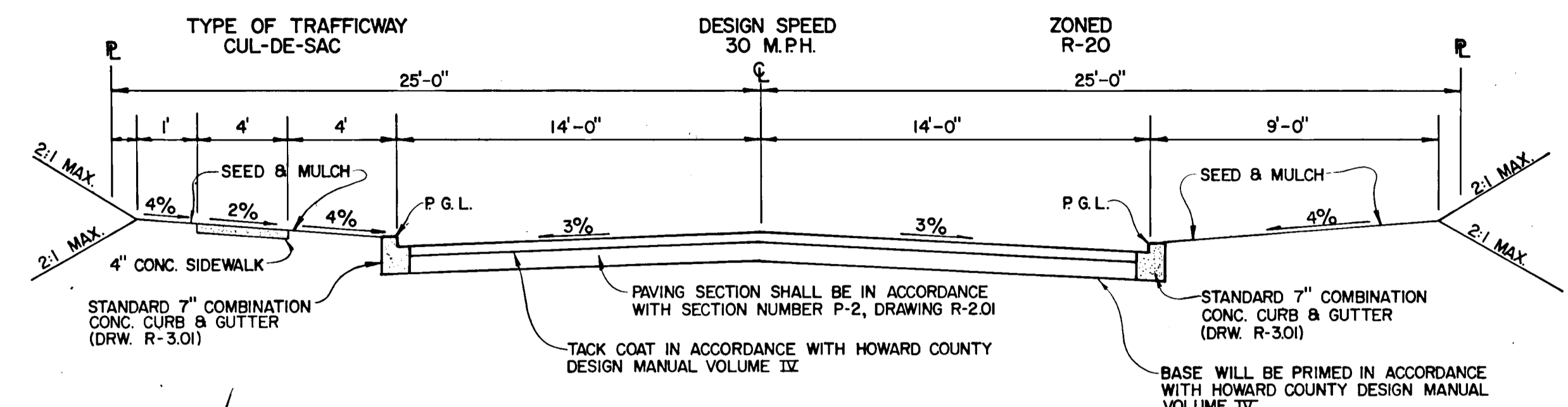
RIP RAP APRON DETAIL @ S-1

NO SCALE



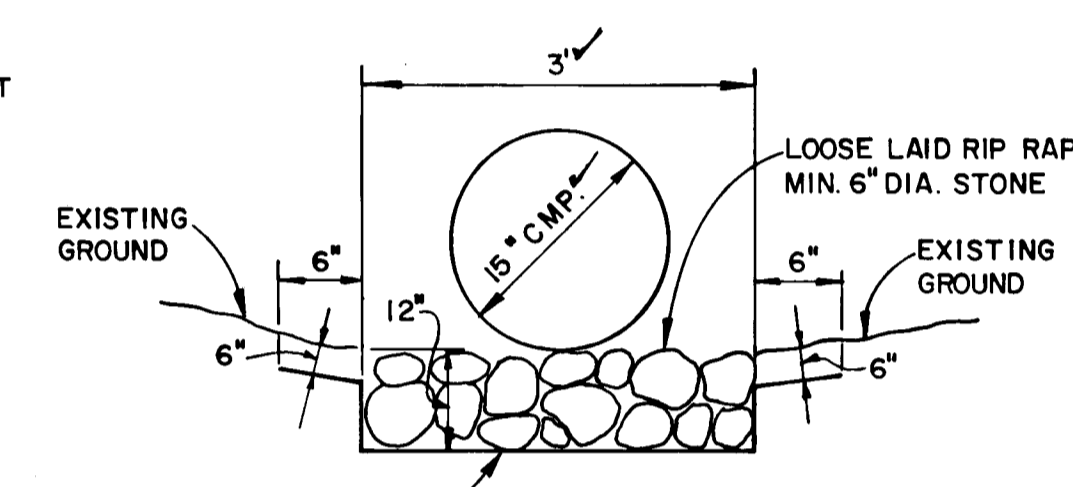
STANDARD SLOPE 7" COMB. CONC. CURB & GUTTER

NO SCALE



TYPICAL ROADWAY SECTION

NO SCALE



RIP-RAP APRON DETAIL @ S.W.M. POND OUTFALL

NO SCALE

APPROVED DEPARTMENT OF PUBLIC WORKS
William E. Reed 10-15-84
 CHIEF, BUREAU OF ENGINEERING

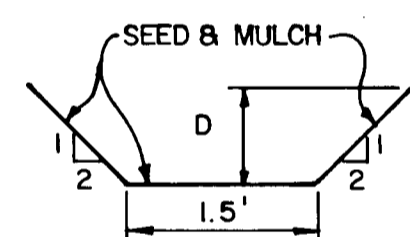
APPROVED OFFICE OF PLANNING AND ZONING
John W. ... 10-11-84
 CHIEF, DIVISION OF LAND ACQUISITION AND ZONING ADMINISTRATION

CHARLES J. CROVO, SR.
 PROFESSIONAL ENGINEER
 9/30/84
 AS BUILT CERTIFICATION 7/14/86

BARRINGTON WOODS
 LOTS 1-14
 SIXTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

ROAD SECTION, DETAILS,
 STORM DRAIN & STORM WATER
 MANAGEMENT PROFILES
 OWNER AND DEVELOPER
 BARRINGTON WOODS LIMITED PARTNERSHIP
 SUITE 114 GORMAN PLAZA BUILDING
 COLUMBIA, MARYLAND 21045

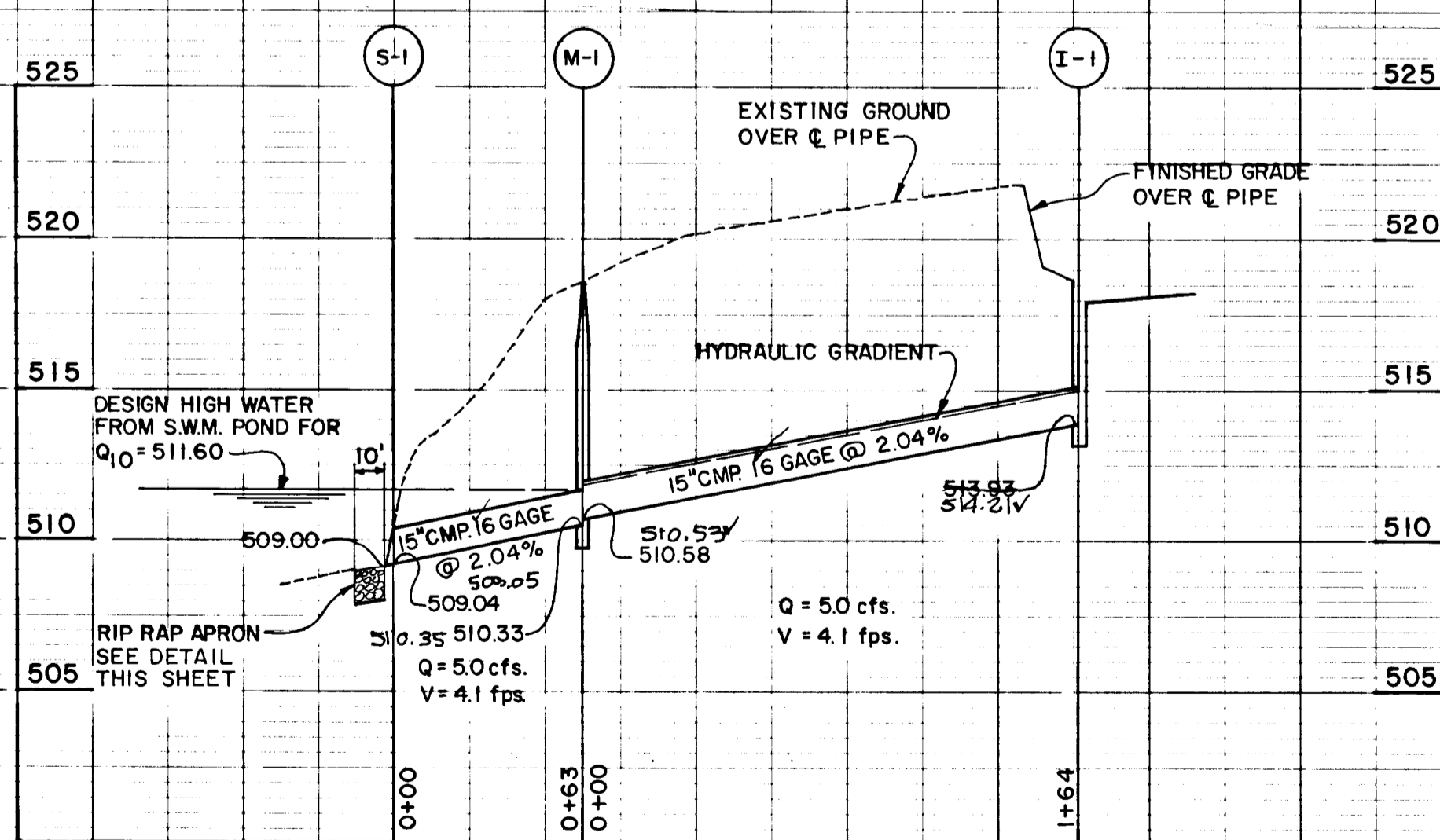
SCALE AS SHOWN DATE AUGUST 17, 1984 DWG. NO. 2 OF 3
 DES. C. GROVO DRN. A. BOGDAN CHK. R. CARTER
FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043



CHANNEL DETAIL ALONG REAR OF LOTS 9-13

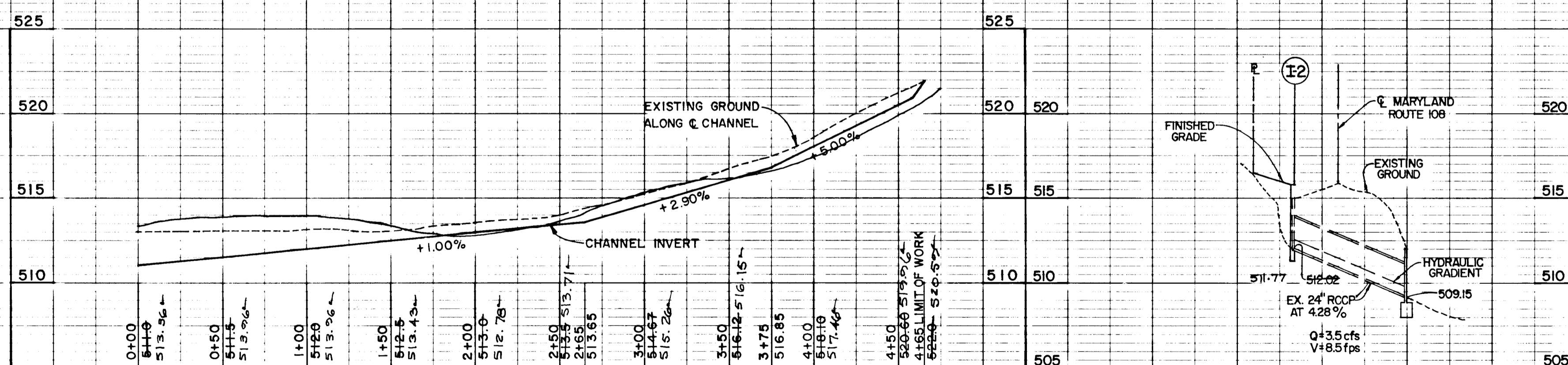
NO SCALE

CHANNEL DESIGN DATA									
CHANNEL SLOPE	A	P	R	R ^{2/3}	S ^{1/2}	n	D	Q _D	V _D
1.00%	0.92'	3.28'	0.2805	0.4285	0.1000	0.03	0.40'	2.0 cfs.	2.12 fps.
2.90%	0.65'	2.86'	0.2273	0.3724	0.1703	0.03	0.31'	2.0 cfs.	3.14 fps.
5.00%	0.53'	2.66'	0.1992	0.3411	0.2236	0.03	0.26'	2.0 cfs.	3.78 fps.



STORM DRAIN PROFILE

SCALE: 1" = 50' HOR.
1" = 5' VERT.



CHANNEL PROFILE ALONG REAR OF LOTS 9-13

SCALE: 1" = 50' HOR.
1" = 5' VERT.

PLAN
 SURVEYED, SCOTTED, ALIGNED, CHECKED, RT. OF WAY CHECKED.
 NOTE BOOK NO.

PROFILE
 SURVEYED, GRADES CHECKED, B.M.'S NOTED, STRUCTURE ROTARY'S CHECKED.
 NOTE BOOK NO.

1100

2/20/88

AS-BUILT

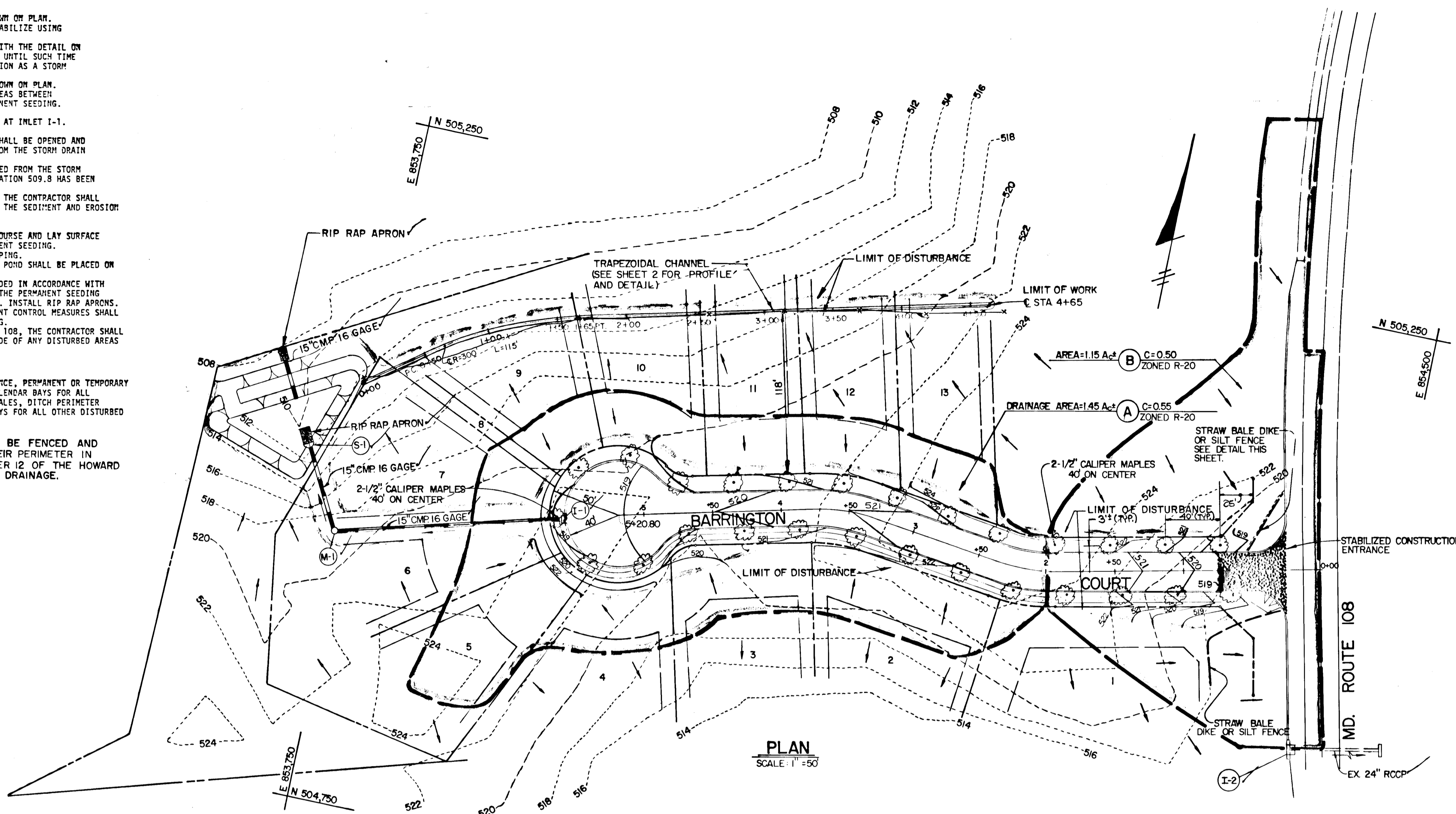
F85-42

CONSTRUCTION SEQUENCE:

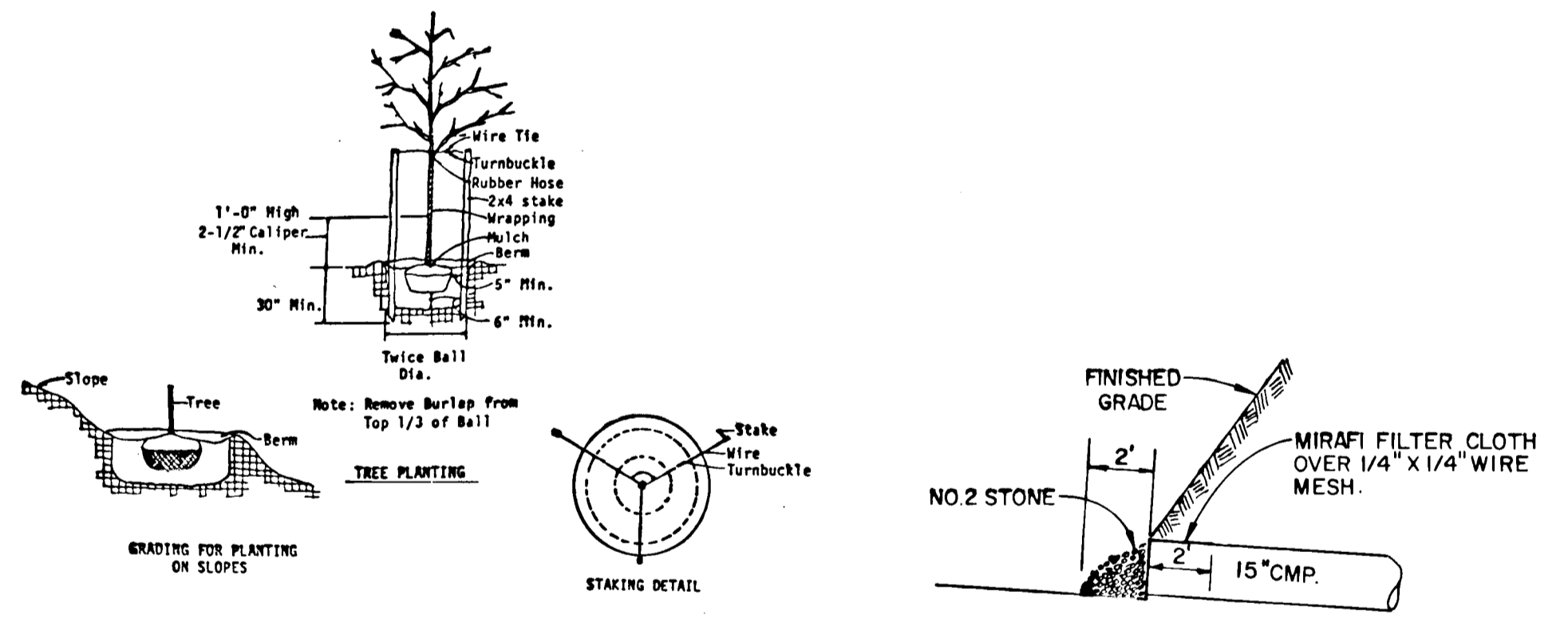
1. OBTAIN GRADING PERMIT.
2. CONSTRUCT STONE CONSTRUCTION ENTRANCE AS SHOWN ON PLAN.
3. CONSTRUCT STORM WATER MANAGEMENT POND AND STABILIZING TEMPORARY SEEDING.
4. THE 15" CMP SHALL BE BLOCKED IN ACCORDANCE WITH THE DETAIL ON THIS SHEET. THE 15" CMP SHALL REMAIN BLOCKED UNTIL SUCH TIME WHEN THE SEDIMENT BASIN TRANSITIONS TO FUNCTION AS A STORM WATER MANAGEMENT POND.
5. INSTALL STRAW BALE DIKES OR SILT FENCE AS SHOWN ON PLAN.
6. GRADE ROADS TO SUBGRADE STABILIZING SLOPE AREAS BETWEEN EXISTING GROUND AND BACK OF CURB USING PERMANENT SEEDING.
7. CONSTRUCT STORM DRAIN SYSTEM.
8. INSTALL STONE FILTER INLET PROTECTION DEVICE AT INLET 1-1.
9. CONSTRUCT CONCRETE CURB AND LAY BASE COURSE.
10. UPON STABILIZATION OF GRADED AREAS, INLETS SHALL BE OPENED AND ALL ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE STORM DRAIN SYSTEM.
11. DURING CONSTRUCTION, SEDIMENT SHALL BE REMOVED FROM THE STORM WATER MANAGEMENT POND WHEN THE CLEANOUT ELEVATION 509.8 HAS BEEN REACHED.
12. DURING CONSTRUCTION AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON.
13. REMOVE STONE CONSTRUCTION ENTRANCE.
14. CLEAN BASE COURSE, APPLY TACK COAT TO BASE COURSE AND LAY SURFACE COURSE, STABILIZE ALL SHOULDERS USING PERMANENT SEEDING.
15. THE SEDIMENT BASIN SHALL BE DEWATERED BY PUMPING.
16. THE SEDIMENT FROM THE STORM WATER MANAGEMENT POND SHALL BE PLACED ON LOT 8 AND STABILIZED WITH PERMANENT SEEDING.
17. THE STORM WATER MANAGEMENT POND SHALL BE GRADED IN ACCORDANCE WITH SHEET ONE AND STABILIZED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS IN THE SEDIMENT CONTROL NOTES. INSTALL RIP RAP APRONS.
18. ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED BY PERMANENT SEEDING.
19. DURING THE CONSTRUCTION ALONG MARYLAND ROUTE 108, THE CONTRACTOR SHALL PLACE STRAW BALE DIKES OR SILT FENCE DOWNGRADE OF ANY DISTURBED AREAS AT THE END OF EACH WORKING DAY.

FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, SHALES, DITCH PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; b) 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

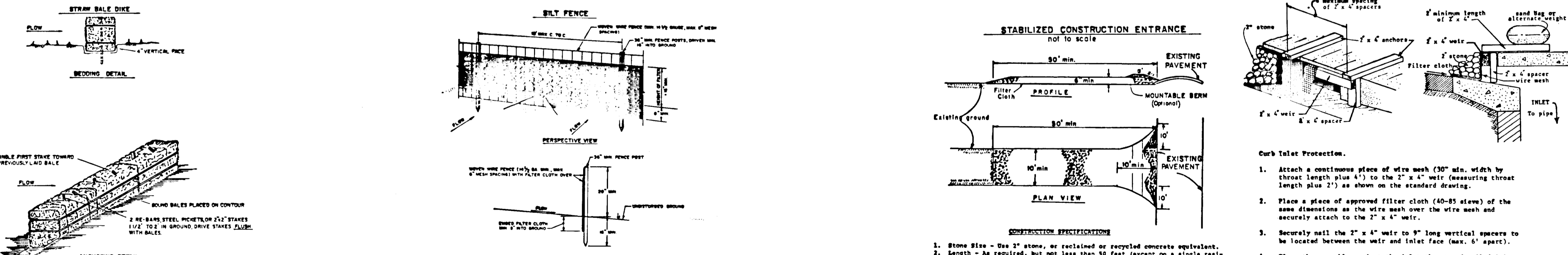
NOTE: ALL SEDIMENT TRAPS MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOLUME 1 CHAPTER 12 OF THE HOWARD COUNTY DESIGN MANUAL FOR STORM DRAINAGE.



PLAN
SCALE: 1" = 50'



BLOCKING DETAIL FOR 15" CMP
AT STORM WATER MANAGEMENT POND
NO SCALE



- CONSTRUCTION SPECIFICATIONS**
1. Stone Size - Use 1" stone, or recycled concrete equivalent.
 2. Length - As required, but not less than 30 feet (except on a single residence lot where a 30 foot minimum length would apply).
 3. Thickness - Not less than six (6) inches.
 4. Width - Two (2) foot minimum, but not less than the full width at points where ingress or egress occurs.
 5. 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.
 6. Surface Water - All surface water flowing in directed toward construction entrances shall be piped across the entrance. If piping is impractical, a mounded berm with 5:1 slopes will 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 elements of any measures used to keep sediment. All sediment, spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
 7. Washing - Washes 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.
 8. Periodic inspection and needed maintenance shall be provided after each rain.

- SEDIMENT CONTROL NOTES**
1. SPECIFICATIONS FOR THE SEDIMENT CONTROL DETAILS INCLUDED IN THE U.S.D.A. SOIL CONSERVATION SERVICE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS."
 2. THE DEVELOPER SHALL NOTIFY THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS AT LEAST 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION PRIOR TO ANY ON-SITE GRADING OR DISTURBANCE TO ANY EXISTING SURFACE MATERIAL, AND ARE TO BE STABILIZED AS SOON AS CONSTRUCTED.
 3. ALL SEDIMENT CONTROL STRUCTURES TO REMAIN IN PLACE OBTAINED FROM THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS (992-2433).
 4. ALL GRADED AREAS NOT TO BE SODED SHALL BE STABILIZED BY SEEDING AND MULCHING IN ACCORDANCE WITH THE FOLLOWING:
 1. SITE PREPARATION
 - A. HARROW OR DISC IN AREAS PROPOSED TO BE SEED THE FOLLOWING MATERIALS
 - 1) PULVERIZED LIMESTONE AT 2 TONS/ACRE.
 - 2) COMMERCIAL FERTILIZER 10-10-10 AT 3/4 TONS/ACRE.
 - 3) SUPER PHOSPHATE AT 600 LBS./ACRE.
 2. SEEDING
 - A. SOW THE FOLLOWING SEED MIXTURE AT THE RATE OF 200 LBS./ACRE WITH A MECHANICAL SPREADER.
 - 1) TEMPORARY: ITALIAN OR PERENNIAL RYE GRASS.
 - 2) PERMANENT: 40% MARIOT BLUE GRASS, 40% DAKOTA BLUE GRASS AND 20% PENN LAWN CREEPING FESCUE.
 - B. THE SEED AREA SHALL THEN BE RAKED WITH A YORK RAKE (A MINIMUM OF 2 PASSES) COVERED AND COMPACTED WITH CULTIPACKER OR OTHER APPROVED METHOD.
 3. MULCHING
 - A. SEED AREAS SHALL BE UNIFORMLY MULCHED IMMEDIATELY AFTER SEEDING WITH UNWEATHERED SMALL GRAIN STRAW AT THE RATE OF 1 1/2-2 TONS/ACRE.
 - B. TIE MULCH DOWN WITH LIQUID ASPHALT AT 0.1 GAL./S.Y. OR EMULSIFIED ASPHALT AT 0.04 GAL./S.Y. OR MULCH NETTING.
 5. A GRADING PLAN MUST BE DEVELOPED BY THE BUILDER AND APPROVED BEFORE BEGINNING CONSTRUCTION OF DWELLINGS.

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 CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Charles J. Crovo 8/30/84
SIGNATURE OF ENGINEER DATE

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."

F. Chandrasekhar 8/28/84
SIGNATURE OF DEVELOPER DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

M.M. Smith 10-10-84
U.S. SOIL CONSERVATION SERVICE DATE

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

Stephen J. Fisher 10-10-84
DISTRICT HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS.

William S. P. King 10-15-84
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING AND ZONING

John M. Muehlen 10-11-84
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE



SITE ANALYSIS

TOTAL AREA OF SUBDIVISION	5.7 Ac. ±
IMPERVIOUS AREA	0.5 Ac. ±
AREA TO BE VEGETATED	0.3 Ac. ±
UNDISTURBED AREA	4.9 Ac. ±

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8386 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043

OWNER AND DEVELOPER
BARRINGTON WOODS LIMITED PARTNERSHIP
SUITE 114 GORMAN PLAZA BUILDING
COLUMBIA, MARYLAND 21045

STREET TREE
GRADING AND SEDIMENT CONTROL PLAN
BARRINGTON WOODS
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: 1" = 50' AUGUST 17, 1984
SHEET 3 OF 3

1100

2/26/88