

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLD 1514A STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF CONSTRUCTION INSPECTION AT (301) 792-7272 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-237-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
4. 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.
5. LIGHT POLES AND FIXTURES FOR STREET LIGHTS SHALL BE IN ACCORDANCE WITH THE LATEST HOWARD COUNTY DESIGN MANUAL, VOLUME III, ROADS AND BRIDGES.
6. PUBLIC WATER AND POWER WILL BE UTILIZED FOR THIS PROJECT.
7. THIS PROJECT TO UTILIZE ALL EXISTING SWM POND LOCATED IN MT. HEBRON SECTION 20 ON OPEN SPACE LOT 47 (P 90-99).
8. VERTICAL DATUM IS BASED ON THE FOLLOWING BENCH MARKS:
 BM 1000 ELEVATION 407.81
 REBAR SET 27" SOUTHEAST OF LINEAR PROFILE STATION 1+55 GLENWOOD COURT ON LOT 45 ELEVATION 423.62
 BM 2000
 REBAR SET 91" NORTH OF & STATION 2+00 DUNLEAK ROAD ON LOT 36.

- SEE SHEET 3 OF ROAD DWGS FOR MT. HEBRON SECTION 20 P 90-99
9. HORIZONTAL DATUM IS BASED ON THE MARYLAND STATE GRID SYSTEM AND DERIVED FROM THE FOLLOWING HOWARD COUNTY CONTROL STATIONS:
 3442011 N 535573.189 E 846324.490
 3541004 N 539274.789 E 844246.447
 10. ANY DAMAGE TO PUBLIC RIGHT OF WAY, FINING OR UTILITIES WILL BE CORRECTED AT CONTRACTOR'S EXPENSE.
 11. TOPOGRAPHY PREPARED BY:
 PHOTO SCIENCE INC.
 7040 AIRPARK ROAD
 GAITHERSBURG, MARYLAND 20878
 DATED: JANUARY 27, 1990
 12. PREVIOUS HOWARD COUNTY FILE NO'S:
 90-27-55
 72-08

STREET LIGHTS

150 WATT 115V POST TOP FIXTURES ON 25' FOOT GALVANIZED STEEL POLE. POLE LOCATED AT THE FOLLOWING LOCATIONS:
 1. INTERSECTION OF BAKERS ACRES AND THORNBROOK ROAD.

✧ DENOTES STREET LIGHT

NOTE: ANY UNMANAGED RUNOFF FROM THIS SECTION WILL BE COMPENSATED IN A SWM POND WHICH WILL BE CONSTRUCTED IN FUTURE 1,2.

FOREST BROOK COURT

CURVE DATA
 STA. 1+37 TO 2+06.01
 R=109.02'
 L=109.01'
 Δ=36°04'12"
 T=35.691'
 CHD = 9°57'49" S 55° W 67.85'

THORNBROOK ROAD

RECURVE DATA
 STA. 47+13.16 TO STA. 47+93.16
 R=440.00'
 L=400.00'
 Δ=208°12'31"
 T=200.00'
 CHD = 111°31'40" W 577.77'

THORNBROOK ROAD

RECURVE DATA
 STA. 47+13.50 TO STA. 47+46+13.50
 R=300.00'
 L=100.00'
 Δ=15°04'33"
 T=100.00'
 CHD = N 15°27'42" W 100.20'
 15' REVERSIBLE SLOPE EASEMENT
 STA. 47+68.26

THORNBROOK ROAD

RECURVE DATA
 STA. 47+13.50 TO STA. 47+68.26
 R=375.00'
 L=375.00'
 Δ=107°55'53"
 T=27.38'
 CHD = N 15°02'03" W 54.64'

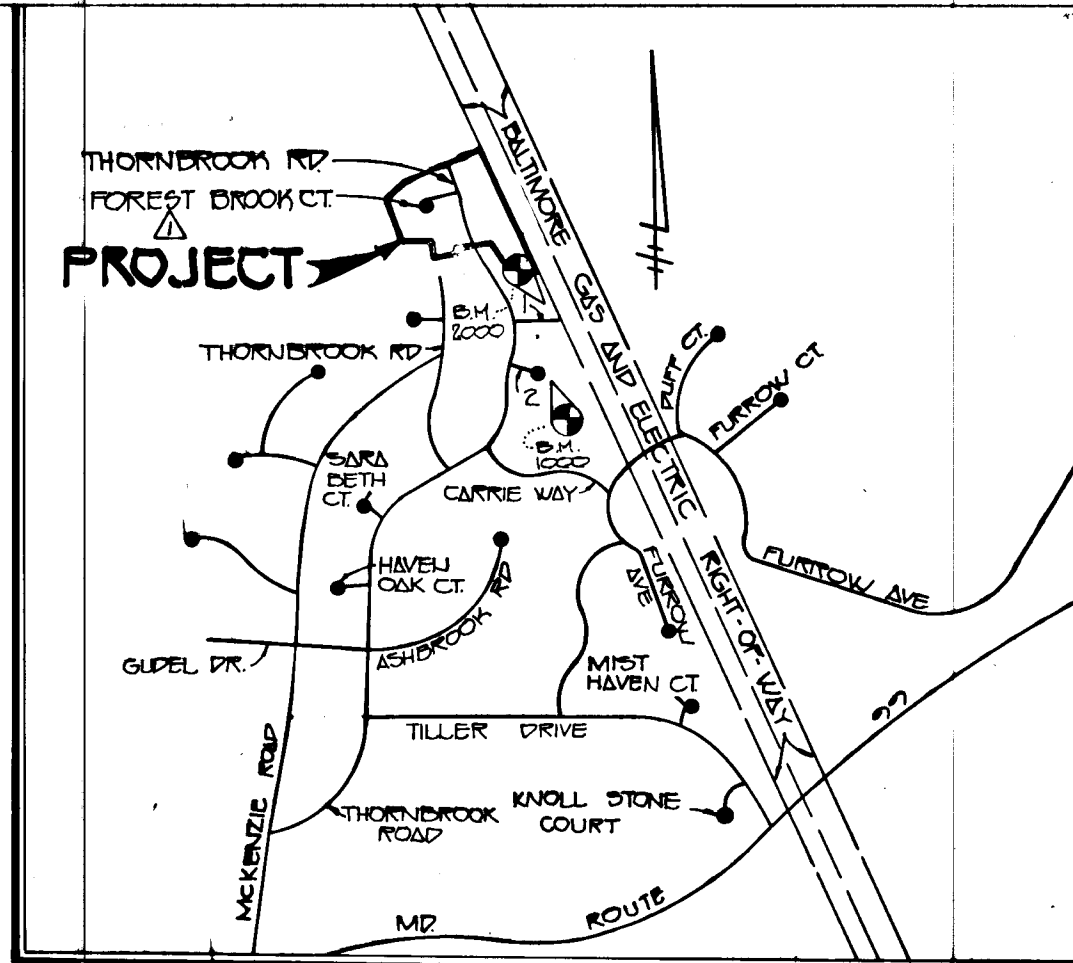
HORIZONTAL & VERTICAL CONTROL IS BASED ON THE FOLLOWING HOWARD COUNTY CONTROL STA.
 STA. 3442011 N 535573.189 E 846324.490
 STA. 3541004 N 539274.789 E 844246.447

PLAN

SCALE 1"=50'

BENCH MARKS

BM 1000 - REBAR SET 27" SOUTHEAST OF LINEAR PROFILE STA. 1+55 GLENWOOD CT. ON LOT 45 ELEV. 407.81
 BM 2000 - REBAR SET 91" NORTH OF & STA. 2+00 DUNLEAK RD ON LOT 36 ELEV. 423.62



VICINITY MAP

SCALE 1"=1200'

MT. HEBRON

SECTION 21
 LOTS 1-17
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

THORNBROOK ROAD

PLAN & PROFILE

OWNER AND DEVELOPER
 MR. H. JONES BAKER JR.
 2108 MT. HEBRON DRIVE
 ELLICOTT CITY, MARYLAND 21042

SCALE AS SHOWN DATE MAY 26, 1992 DWG. NO. 1 OF 3
 DES. K. FRALIC DRN. J. SMITH CHK. C. CROW
 FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 9171 BALTIMORE NATIONAL PIKE, SUITE 100
 ELLICOTT CITY, MD 21042

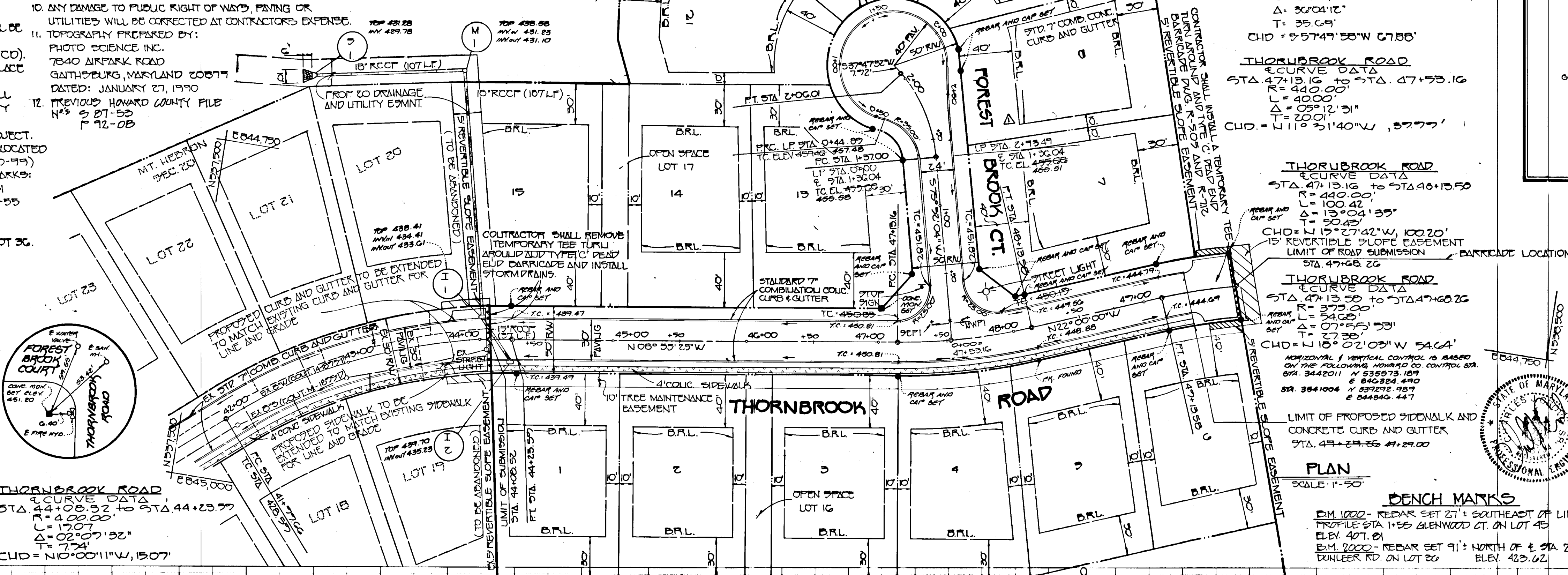
DATE	BY
11/23/92	CHIEF, LAND DEVELOPMENT DIVISION
11/13/92	CHIEF, BUREAU OF HIGHWAYS
11-23-92	CHIEF, BUREAU OF ENGINEERING
12/1/92	CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED DEPARTMENT OF PUBLIC WORKS
 [Signature] 11/23/92
 CHIEF, LAND DEVELOPMENT DIVISION

APPROVED DEPARTMENT OF PUBLIC WORKS
 [Signature] 11/13/92
 CHIEF, BUREAU OF HIGHWAYS

APPROVED DEPARTMENT OF PUBLIC WORKS
 [Signature] 11-23-92
 CHIEF, BUREAU OF ENGINEERING

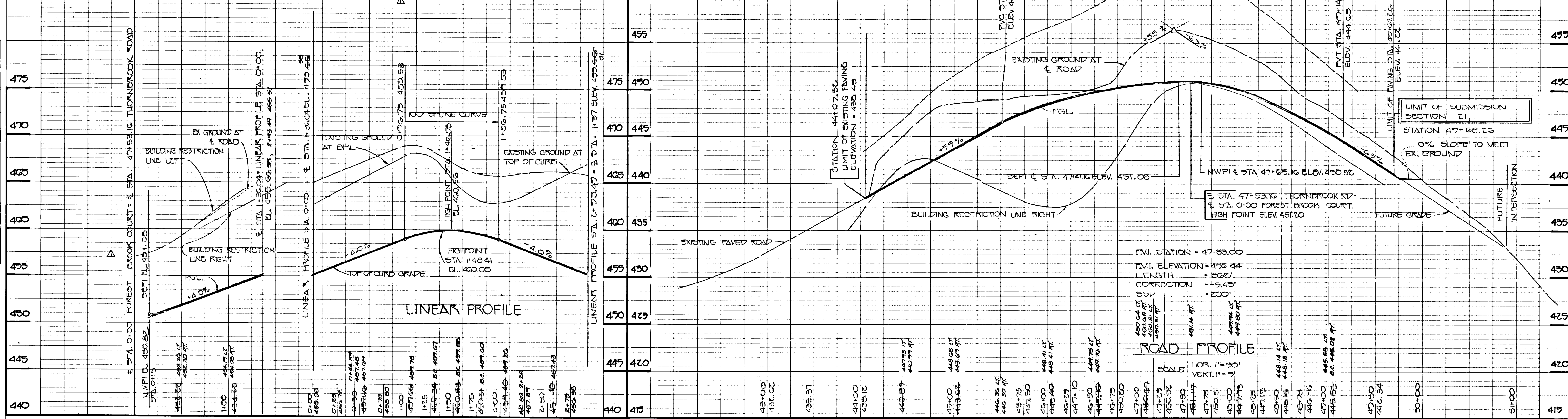
APPROVED DEPARTMENT OF PLANNING AND ZONING
 [Signature] 12/1/92
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT



FOREST BROOK COURT

THORNBROOK ROAD

ROAD



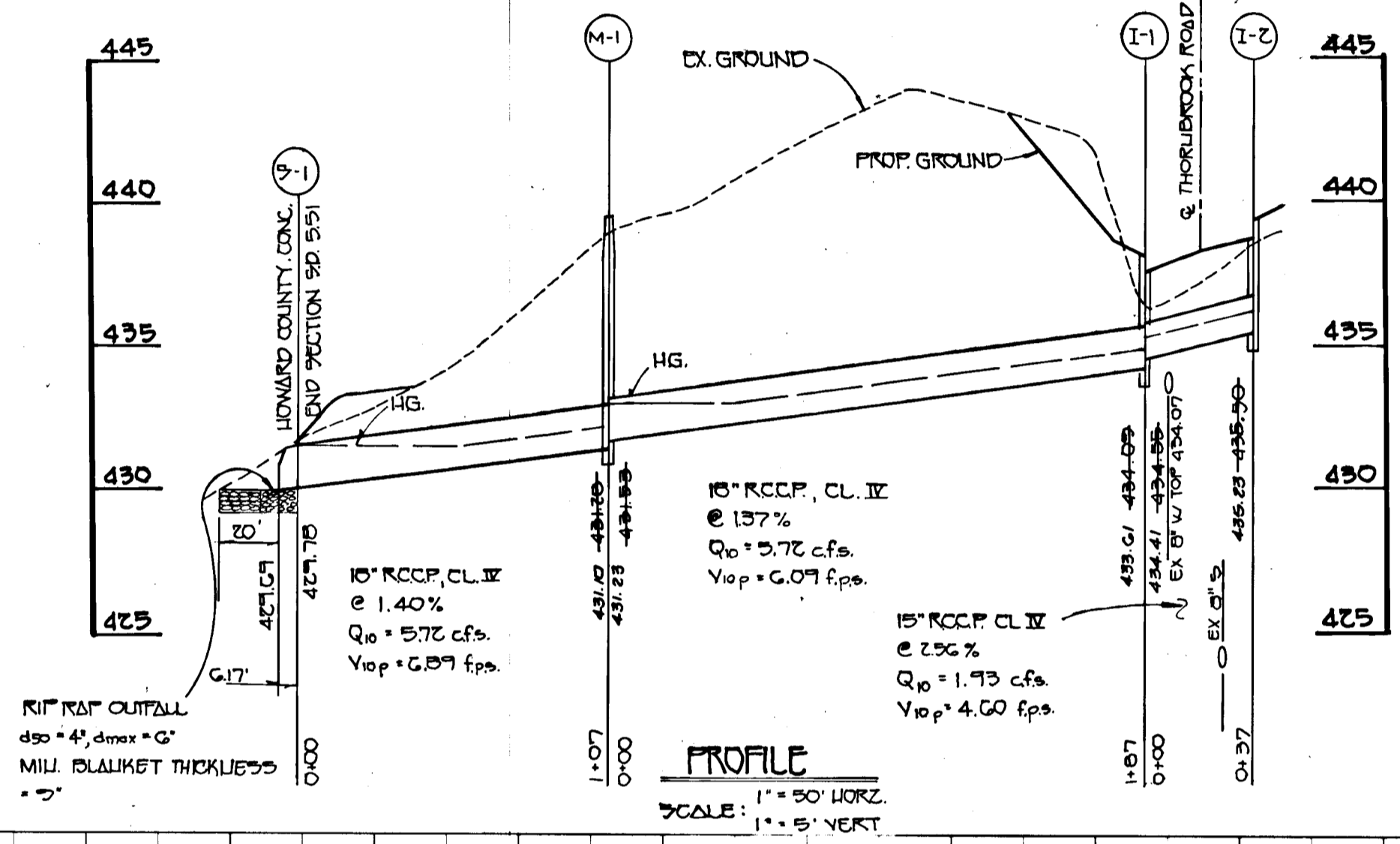
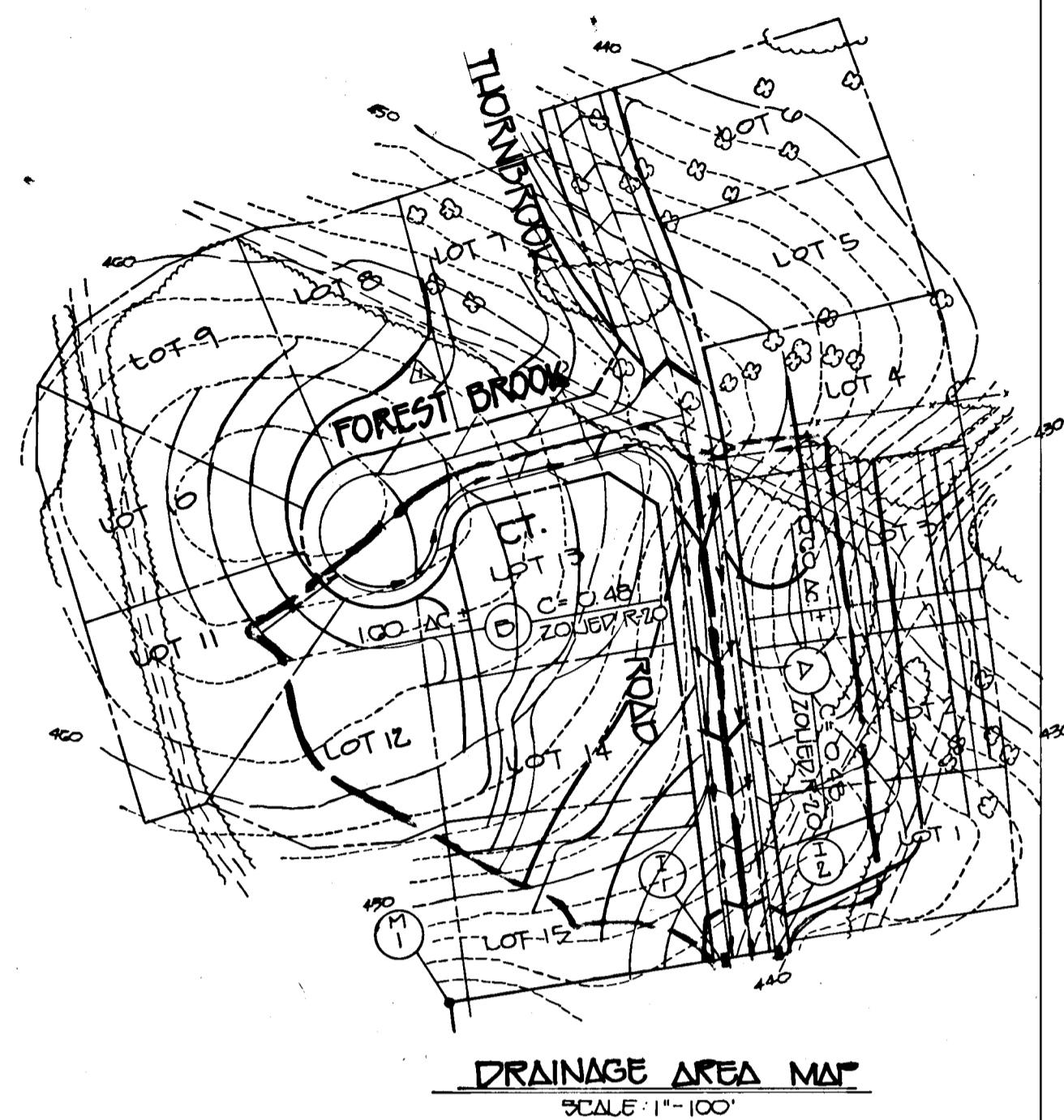
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DATE	
BY	
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
NOTE BOOK NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
GRADES CHECKED	
NOTE BOOK NO.	
STRUCTURE NOTATIONS CHKD	

STRUCTURE SCHEDULE						
STRUCTURE	TYPE	INV. IN	INV. OUT	TOP ELEV.	CENTERLINE ROAD STATION	REMARKS
I-1	A-10 W/DEFLECTORS	434.47	438.25	438.25	44+01.51	INLET 9.0 4.41 DEFLECTORS 9.0 4.41
I-2	A-10 W/DEFLECTORS	434.55	437.70	437.70	44+23.00	INLET 9.0 4.41 DEFLECTORS 9.0 4.41
M-1	STANDARD 4' MANHOLE CONC.	437.23	437.23	437.23	SEE PLAN	G 5.12
S-1	END SECT.	427.70	427.07	431.50	SEE PLAN	S.D. 5.51

* DENOTES T.C. ELEVATION



APPROVED DEPARTMENT OF PUBLIC WORKS
Chad D... 11/23/92
 CHIEF, LAND DEVELOPMENT DIVISION

APPROVED DEPARTMENT OF PUBLIC WORKS
John M. T... 11/13/92
 CHIEF, BUREAU OF HIGHWAYS

APPROVED DEPARTMENT OF PUBLIC WORKS
... 11-23-92
 CHIEF, BUREAU OF ENGINEERING

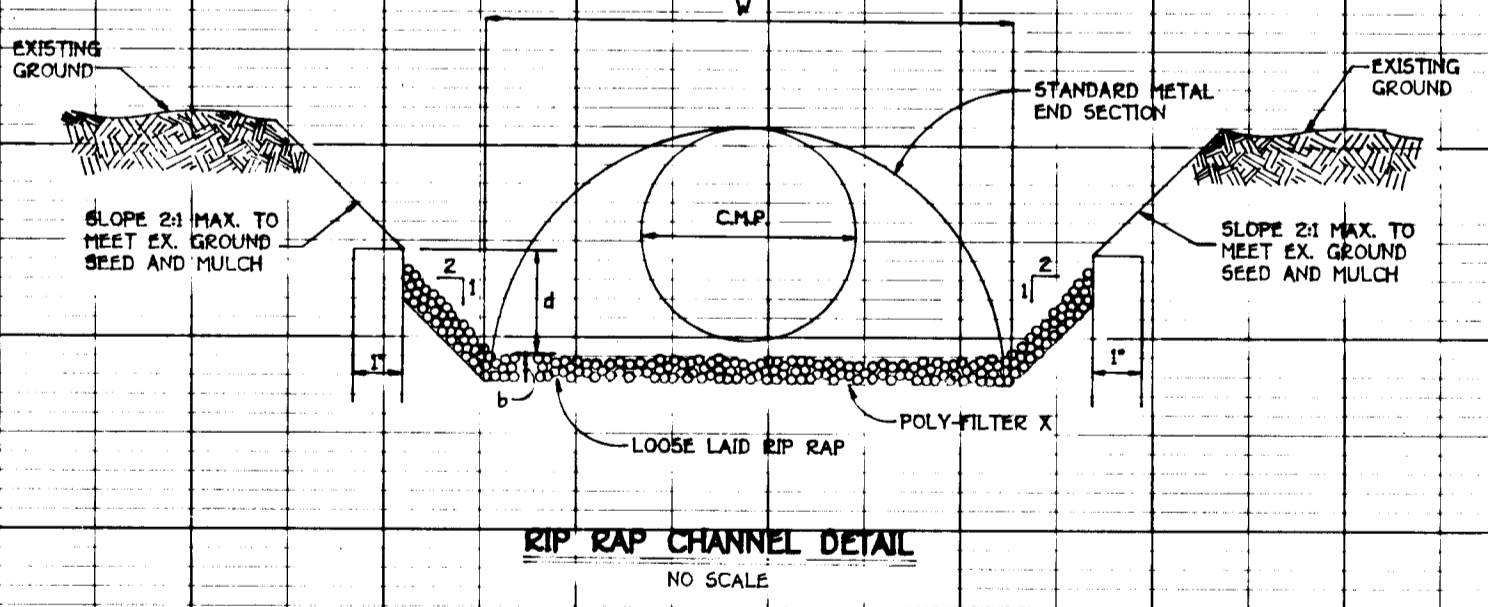
APPROVED DEPARTMENT OF PLANNING AND ZONING
Mina Holom... 12/1/92
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

MT. HEBRON
 SECTION 21
 LOTS 1-16
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
 MT. HEBRON LLC
 2106 MT. HEBRON DRIVE
 ELLICOTT CITY, MARYLAND 21042

SCALE AS SHOWN DATE MAY 26, 1992 DWG. NO. 2 OF 5
 DES. M. Taylor DRN. J. Smith CHK. C. Crow

FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 9171 BALTIMORE NATIONAL PIKE, SUITE 100
 ELLICOTT CITY, MD 21042



CONSTRUCTION SPECIFICATIONS FOR RIP-RAP OUTFALLS

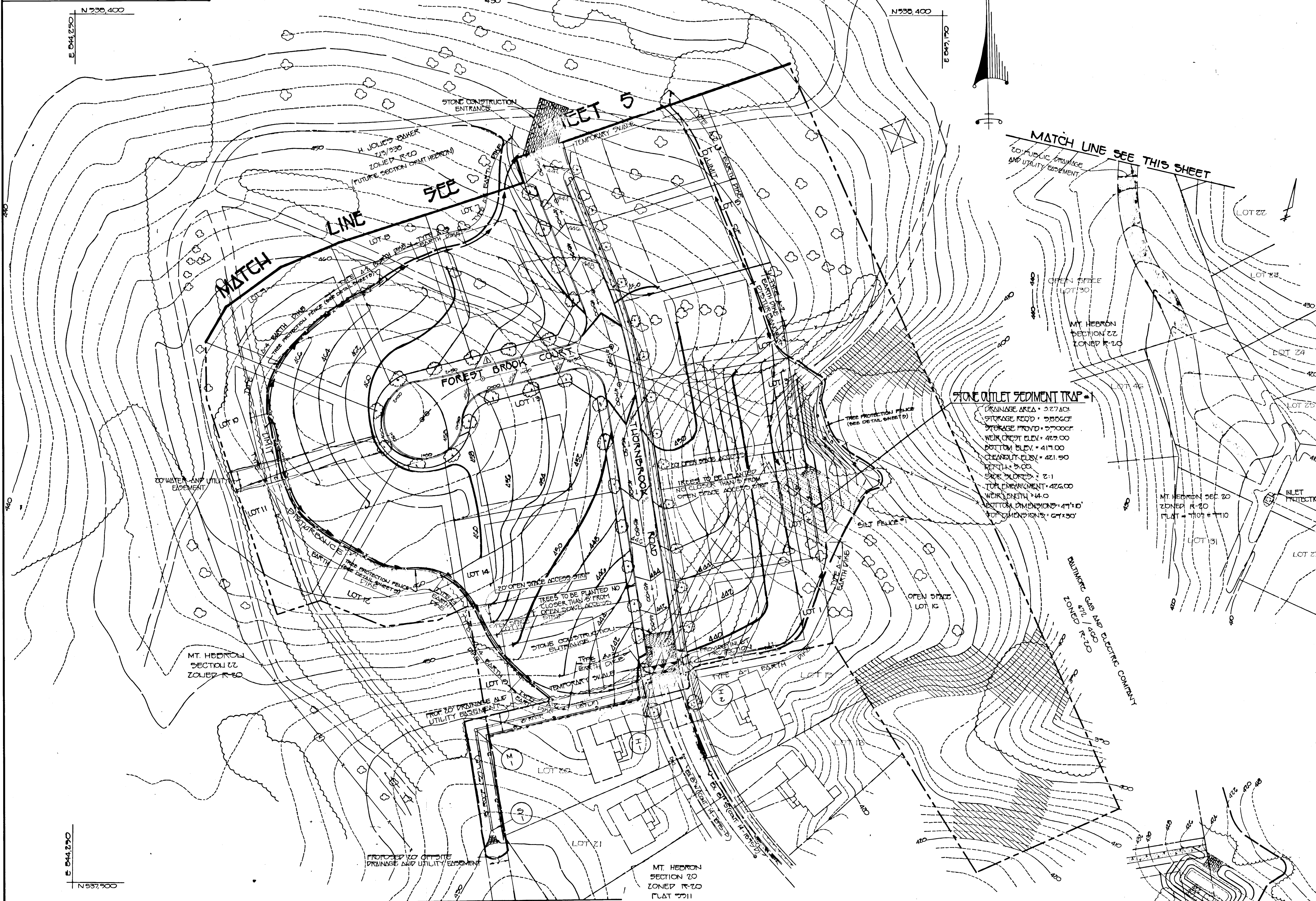
- The subgrade for the filter, riprap or gabion shall be prepared to the required line and grades. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.
- The rock or gravel shall conform to the specified grading limits when installed respectively in the riprap or filter.
- Filter cloth shall be protected from bunching, cuffing or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of cloth over the damaged part or by completely replacing the cloth. All overlaps whether for repairs or for joining two pieces of cloth shall be a minimum of one foot.
- Stone for the riprap or gabion outlets may be placed by equipment. Both shall each be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. The stone for riprap or gabion outlets shall be delivered and placed in a manner that will insure that it is reasonably homogeneous with the smaller stones and spalls filling the voids between the larger stones. Riprap shall be placed in a manner to prevent damage to the filter blanket or filter cloth. Hand placement will be required to the extent necessary to prevent damage to the permanent works.

RIP-RAP CHANNEL DESIGN DATA											
STRUCTURE	AREA sq. ft.	WETTED PERIMETER	R	R ^{2/3}	S	S ^{1/2}	W	d	N	V	Q
S-1	3.45	6.91'	0.499	0.629	0.035	0.071	4'	0.65	0.035	1.90	6.56

REVISIONS	DATE	No.
CHANGED BAKERS ACRES CT. TO FOREST BROOK	8-31-92	1

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REVISION	DATE	No.
CHANGE BAKERS ACRES CT. TO FOREST BROOK CT.	6-3-94	1



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: 10/1/92

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 MARYLAND 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 OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."
 Signature of Developer: *[Signature]* Date: 10/1/92

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 U.S. SOIL CONSERVATION DISTRICT
 Signature: *[Signature]* Date: 11/5/92

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED:
 Signature: *[Signature]* Date: 11/5/92
 DISTRICT HOWARD SOIL CONSERVATION DIST.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Signature: *[Signature]* Date: 10/1/92
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: DEPARTMENT OF PUBLIC WORKS
 Signature: *[Signature]* Date: 11-23-92
 CHIEF, BUREAU OF ENGINEERING

APPROVED: DEPARTMENT OF PUBLIC WORKS
 Signature: *[Signature]* Date: 11/13/92
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PUBLIC WORKS
 Signature: *[Signature]* Date: 11/23/92
 CHIEF, LAND DEVELOPMENT DIVISION

STONE OUTLET SEDIMENT TRAP #1
 DRAINAGE AREA = 0.27 AC
 STORAGE REQ'D = 2800 CF
 STORAGE PROVIDED = 27000 CF
 WALK CREST ELEV. = 419.00
 BOTTOM ELEV. = 417.00
 CLEANOUT ELEV. = 421.50
 WIDTH = 5.00
 SLOPE SLOPED = 2:1
 TOTAL LENGTH = 426.00
 WALK LENGTH = 14.0
 BOTTOM DIMENSIONS = 41' x 10'
 TOP DIMENSIONS = 61' x 50'

NOTE: THE APPROVED MODIFICATIONS TO THE EXISTING POND LOCATED ON OPEN SPACE LOT 31 MT. HEBRON SEC. 20 (P-50-55) SHALL PROCEED ON OR CONCURRENT WITH THE CONSTRUCTION OF THIS SECTION.

- SEQUENCE OF CONSTRUCTION**
- OBTAIN GRADING PERMIT.
 - NOTIFY HOWARD COUNTY OFFICE OF PERMITS AND INSPECTION (303-1050) 24 HOURS BEFORE STARTING WORK.
 - INSTALL SEDIMENT CONTROL MEASURES, STONE CONSTRUCTION ENTRANCE, EARTH DIKES, SILT FENCE, STONE OUTLET SEDIMENT TRAP, TEMPORARY SWALES, INLET PROTECTION, TREE PROTECTION FENCE, TEMPORARY SEDIMENT BASIN.
 - CLEAR AND GRUB SITE.
 - FINE GRADE SITE AND STABILIZE, GRADE ROADS AND PARKING AREAS TO SUBGRADE, AND INSTALL STORM DRAINS.
 - THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON AFTER EACH RAINFALL AND ON A DAILY BASIS. SEDIMENT SHALL BE REMOVED FROM THE STONE OUTLET SEDIMENT TRAP AND TEMP. SEDIMENT BASIN WHEN THE CLEANOUT ELEVATIONS HAVE BEEN REACHED. SEDIMENT MUST BE PLACED UP HILL FROM THE TRAPS.
 - INSTALL CURB AND GUTTER AND SUB-BASE ON ROADS.
 - APPLY TACK COAT TO SUB-BASE AND LAY SURFACE COURSE.
 - REMOVE ALL SEDIMENT CONTROL MEASURES, UPON SEDIMENT CONTROL INSPECTORS APPROVAL EXCEPT STONE CONSTRUCTION ENTRANCE AT NORTH SIDE OF THORNBROOK ROAD AND CONSTRUCT SEDIMENT BENCH ACCORDING TO TEMPORARY SWM PLAN PROFILE.
 - UPON REMOVAL OF STONE OUTLET SEDIMENT TRAP #1 CONTRACTOR SHALL GRADE PROPERTY AND SHOW OIL GRADING PLAN APPLY PERMANENT SEDIMENT (SILT FENCE #1). ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED & STABILIZED BY PERMANENT SEEDING.
 - NOTIFY HOWARD COUNTY OFFICE OF INSPECTION & PERMITS FOR FINAL INSPECTION AT DURATION OF PROJECT (410) 515-1050.

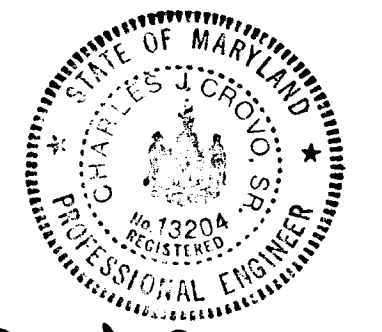
PERMITS SLOPES OF 25% OR GREATER.

STONE OUTLET SEDIMENT TRAP #1
 SCALE 1"=50'

OWNER AND DEVELOPER
 MT. HEBRON INC.
 2106 MT. HEBRON DRIVE
 ELLICOTT CITY, MARYLAND 21042

STREET TREE, GRADING AND SEDIMENT CONTROL PLAN
MT. HEBRON
 SECTION 21
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 DATE: MAY 26, 1992
 SHEET 3 OF 5

PLAN
 SCALE 1"=50'



Signature: *[Signature]* Date: 10/1/92
 CHARLES J. KRONE, P.E.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 11711 BALTIMORE NATIONAL PIKE, SUITE 100
 ELLICOTT CITY, MARYLAND 21042
 TELEPHONE: (410) 461-0777
 FAX: (410) 750-7784

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PERMANENT SEEDING NOTES:
 APPLY TO GRADED OR CLEARED AREA 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, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.
SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULE.

- 1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ.FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.FT.) BEFORE SEEDING.
 HARROW OR DISC INTO UPPER THREE-INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ.FT.)
- 2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC 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 (.05 LBS/1000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WILL ANCHORED STRAW.
MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.
MAINTENANCE: INSPECT ALL SEEDING 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, DISCING 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 PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ.FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/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/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/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT. OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

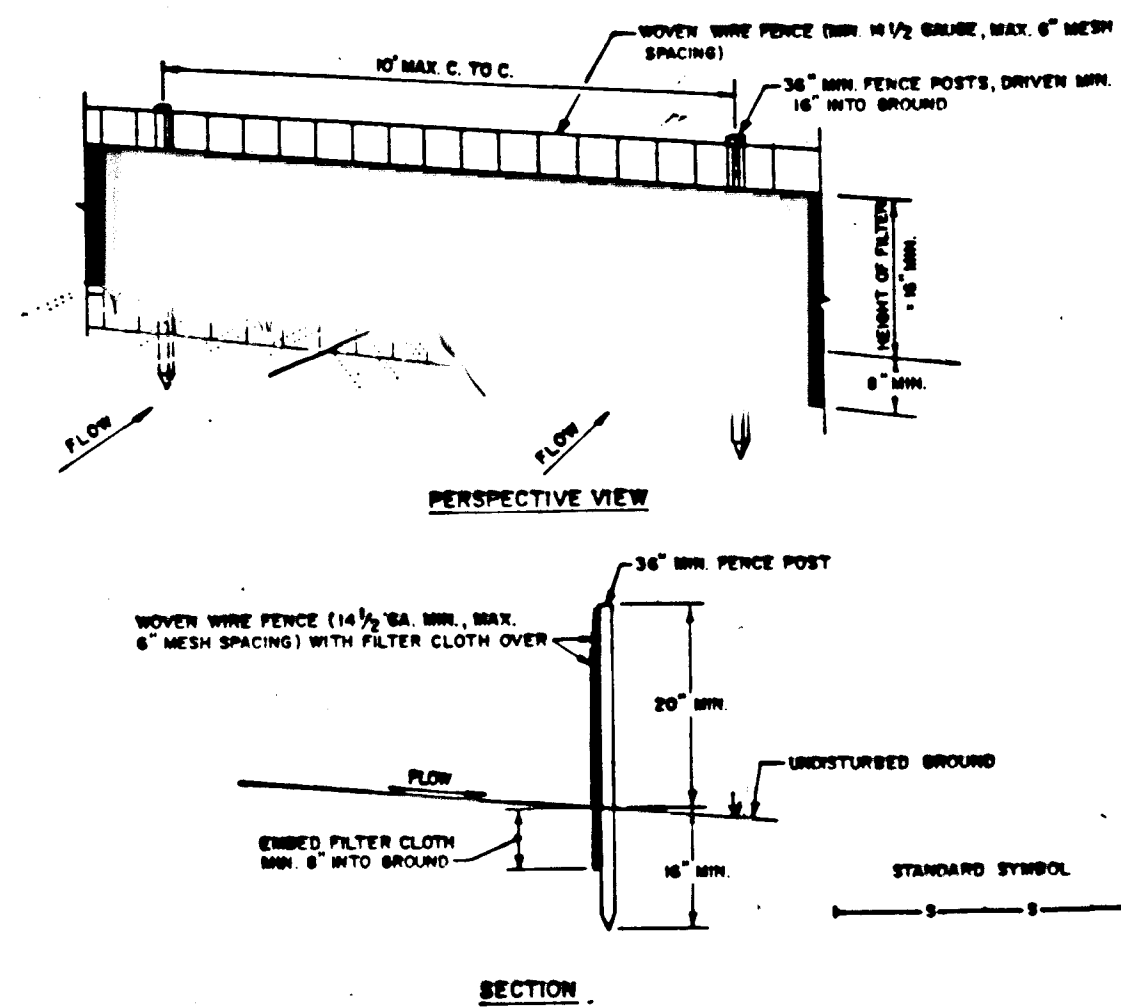
REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

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 EROSION AND SEDIMENT CONTROL.
- 3) 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, 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 OF GRASSES.
- 4) 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.
- 5) SITE ANALYSIS:

TOTAL AREA OF SITE	170 ACRES
AREA DISTURBED	534 ACRES
AREA TO BE ROOFED OR PAVED	069 ACRES
AREA TO BE VEGETATIVELY STABILIZED	527 ACRES
TOTAL CUT	25,420 CU. YDS.
TOTAL FILL	56,770 CU. YDS.
OFFSITE FILL AREA LOCATION	SEE SHEETS FOR STOCKPILE AREA

- 6) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- 7) ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW 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.

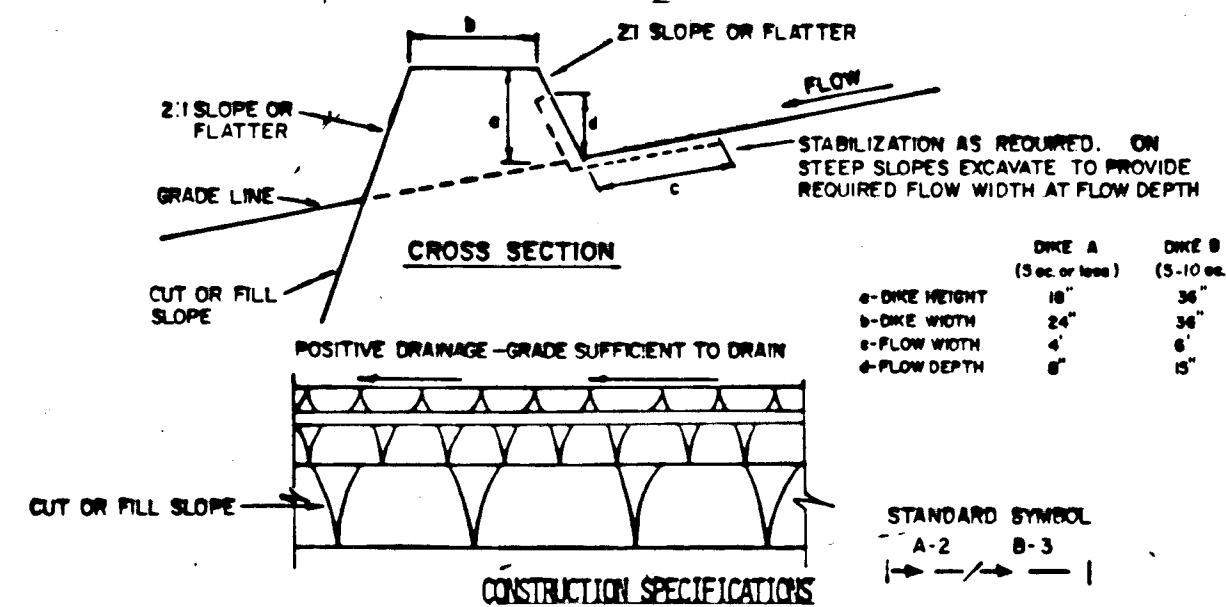


CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 1' AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES 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, 1/4" GA. 6" MAX. MESH OPENING
 FILTER CLOTH: FILTER X, MIRAFL 1000, STABIL-LINNA 1100N OR APPROVED EQUAL
 PREFABRICATED UNIT: GEOPAL, DOW/ROFFENSE, OR APPROVED EQUAL

SILT FENCE
 NOT TO SCALE

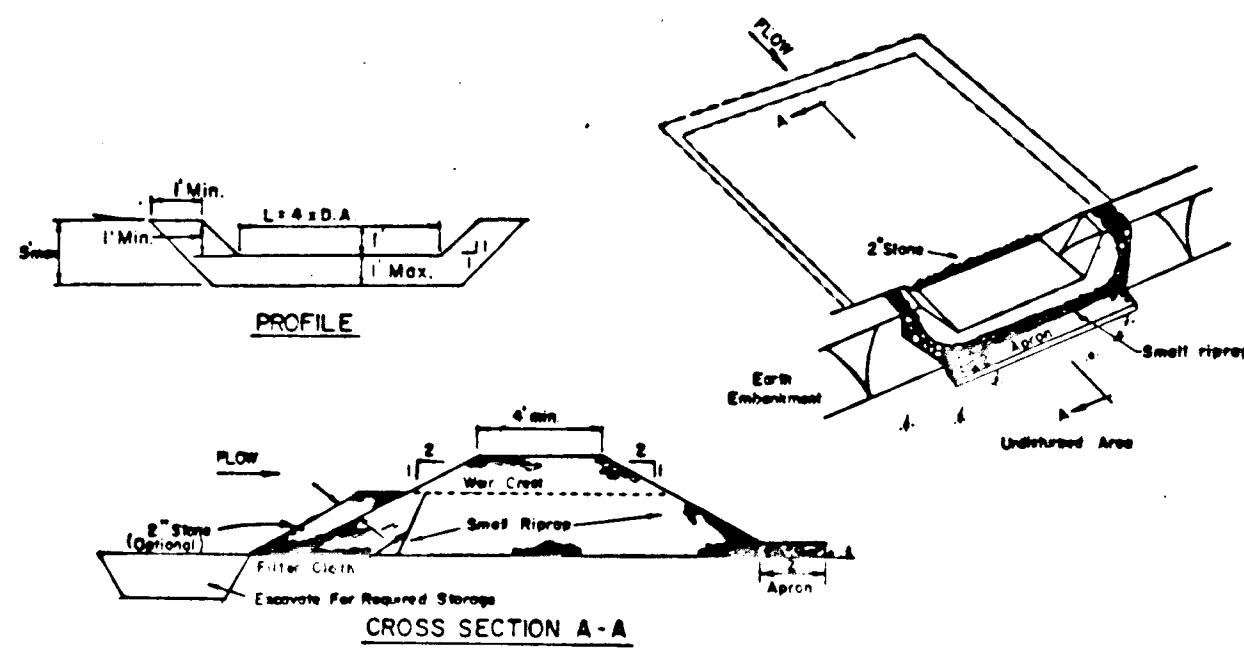


1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF 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.
6. 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.

TYPE OF TREATMENT	FLOW CHANNEL STABILIZATION		
	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 EXCELSTOR; SOD; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

A. 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.
 B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
 C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
 7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

EARTH DIKE
 NOT TO SCALE

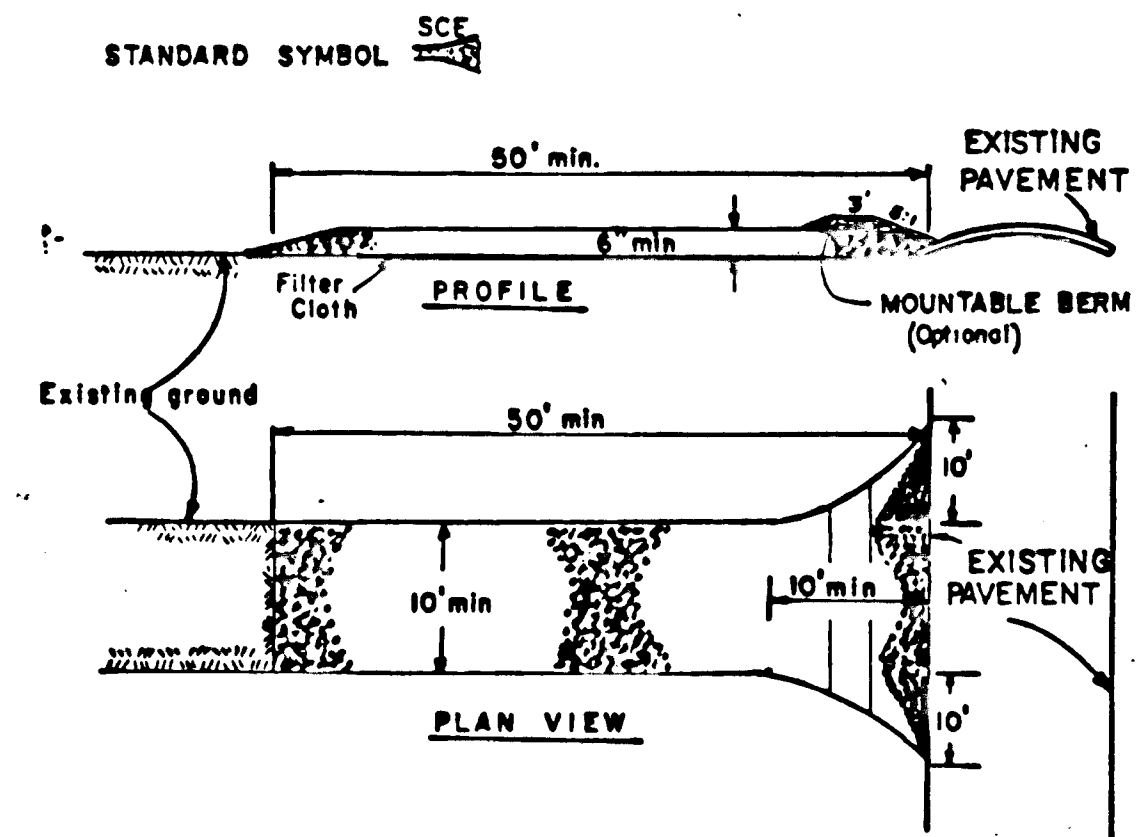


OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth.

- CONSTRUCTION SPECIFICATIONS FOR ST-1**
1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
 2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
 3. All cut and fill slopes shall be 2:1 or flatter.
 4. The stone used in the outlet shall be small riprap 4"-8" along with a 1' thickness of 2" aggregate placed on the upgrade side on the small riprap or embedded filter cloth in the riprap.
 5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to the design depth of the trap.
 6. The structure shall be inspected after each rain and repairs made as needed.
 7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
 8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

Maximum Drainage Area: 5 Acres

STONE-OUTLET SEDIMENT TRAP
 NOT TO SCALE



- CONSTRUCTION SPECIFICATIONS**
1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
 2. Length - As required, but not less than 50 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 - Ten (10) 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 or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
 7. 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.
 8. 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.
 9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE
 NOT TO SCALE

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: 10/1/92

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 MARYLAND DEPARTMENT OF THE ENVIRONMENT IMPROVED 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 OF DEVELOPER: *[Signature]* DATE: 10/1/92

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 U.S. SOIL CONSERVATION DISTRICT DATE: 11/5/92

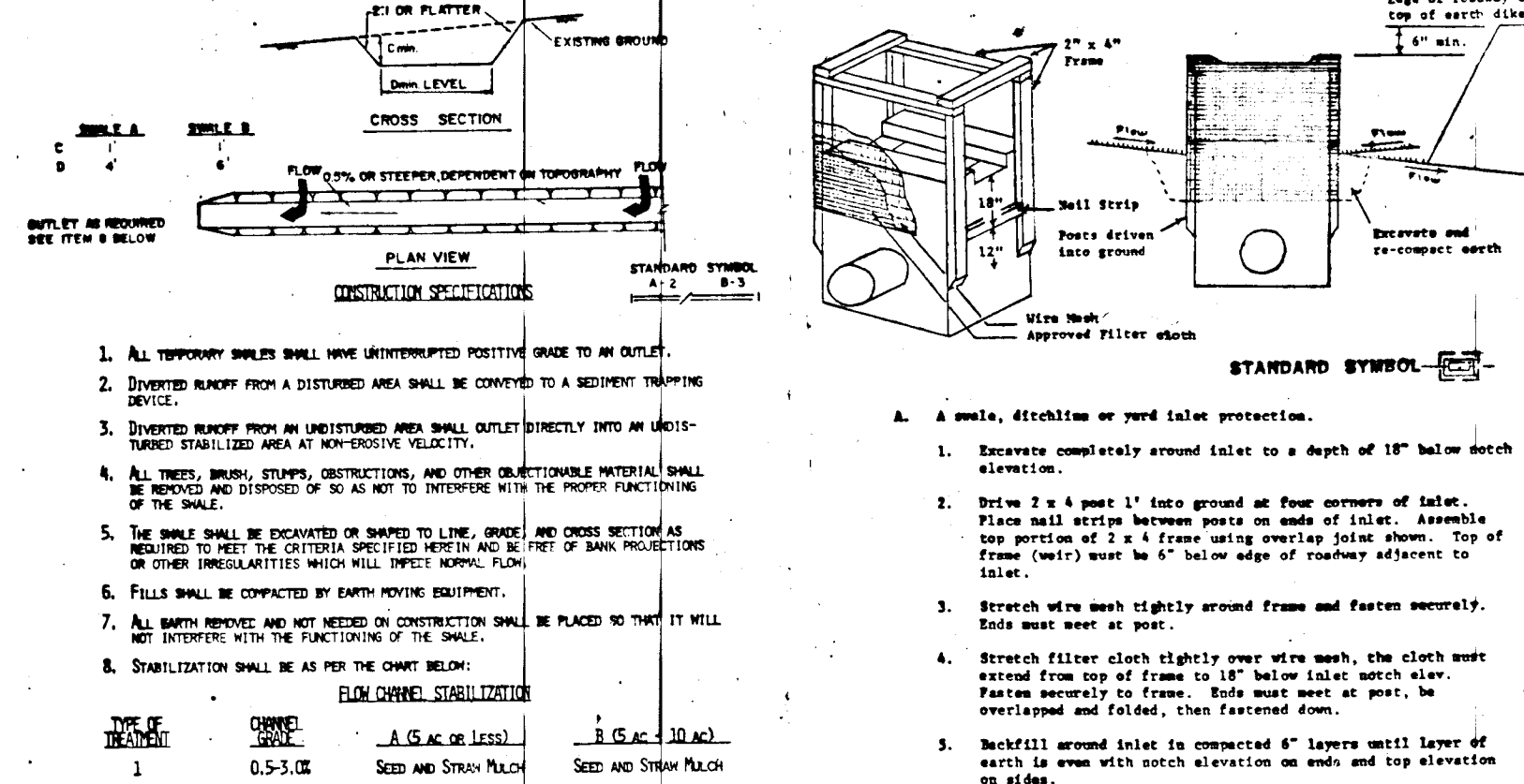
THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 DISTRICT HOWARD SOIL CONSERVATION DIST. DATE: 11/5/92

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE: 10/1/92

APPROVED: DEPARTMENT OF PUBLIC WORKS
 CHIEF, BUREAU OF ENGINEERING DATE: 11/23/92

APPROVED: DEPARTMENT OF PUBLIC WORKS
 CHIEF, BUREAU OF HIGHWAYS DATE: 11/19/92

APPROVED: DEPARTMENT OF PUBLIC WORKS
 CHIEF, LAND DEVELOPMENT DIVISION DATE: 11/23/92



- CONSTRUCTION SPECIFICATIONS**
1. ALL TEMPORARY SWALES SHALL HAVE UNIMPROVED POSITIVE GRADE TO AN OUTLET.
 2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
 3. DIVERTED RUNOFF FROM AN UNIMPROVED AREA SHALL BE CONVEYED TO AN UNIMPROVED STABILIZED AREA AT NON-EROSIVE VELOCITY.
 4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF OR AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
 5. THE SWALE SHALL BE DISPOSED OF OR AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
 6. FILLS SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
 7. ALL SWALE REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE PLACED TO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
 8. STABILIZATION SHALL BE AS PER THE CHART BELOW.
- | TYPE OF TREATMENT | CHANNEL GRADE | DIKE A | DIKE B |
|-------------------|---------------|----------------------------------|----------------------------------------------|
| 1 | 0.5-3.0% | SEED AND STRAW MULCH | SEED AND STRAW MULCH |
| 2 | 3.1-5.0% | SEED AND STRAW MULCH | SEED USING JUTE, OR EXCELSTOR; SOD; 2" STONE |
| 3 | 5.1-8.0% | SEED WITH JUTE, OR SOD; 2" STONE | LINED RIP-RAP 4-8" |
| 4 | 8.1-20% | LINED RIP-RAP 4-8" | ENGINEERING DESIGN |
1. 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.
 2. Rip-rap to be 4-8 inches in a layer at least 8 inches thickness and pressed into the soil.
 3. Approved equivalents can be substituted for any of the above materials.
 7. Periodic inspection and required maintenance must be provided after each rain event.

TEMPORARY SWALE
 NOT TO SCALE

SWALE INLET PROTECTION
 NOT TO SCALE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 971 BALTIMORE NATIONAL PKWY, SUITE 100
 ELLICOTT CITY, MARYLAND 21042
 (301) 481-2955



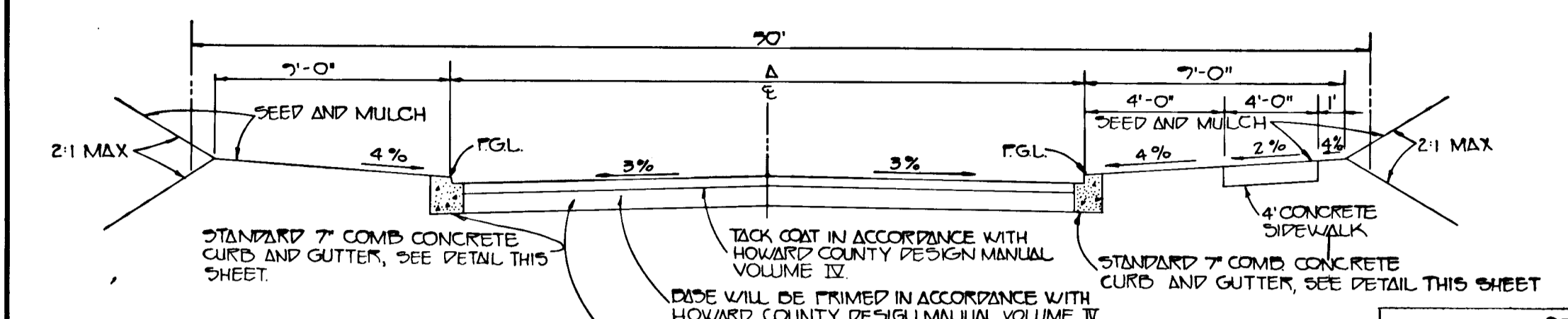
OWNER AND DEVELOPER
 MT. HEBRON LLC
 200 MT. HEBRON DRIVE
 ELLICOTT CITY, MARYLAND 21042

MT. HEBRON
 SECTION 2.1
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN
 MAY 26, 1972 SHEET 4 OF 5

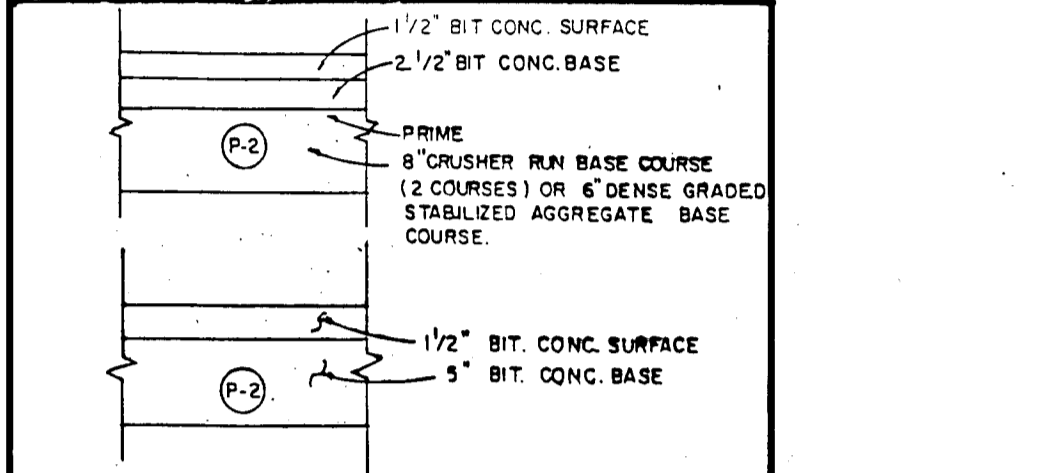
REVISION	DATE	NO.
CHANGE BAKERS ACRES CT TO FOREST BROOK CT	0-31-04	1

ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME II, STANDARD SPECIFICATION AND DETAILS FOR CONSTRUCTION.

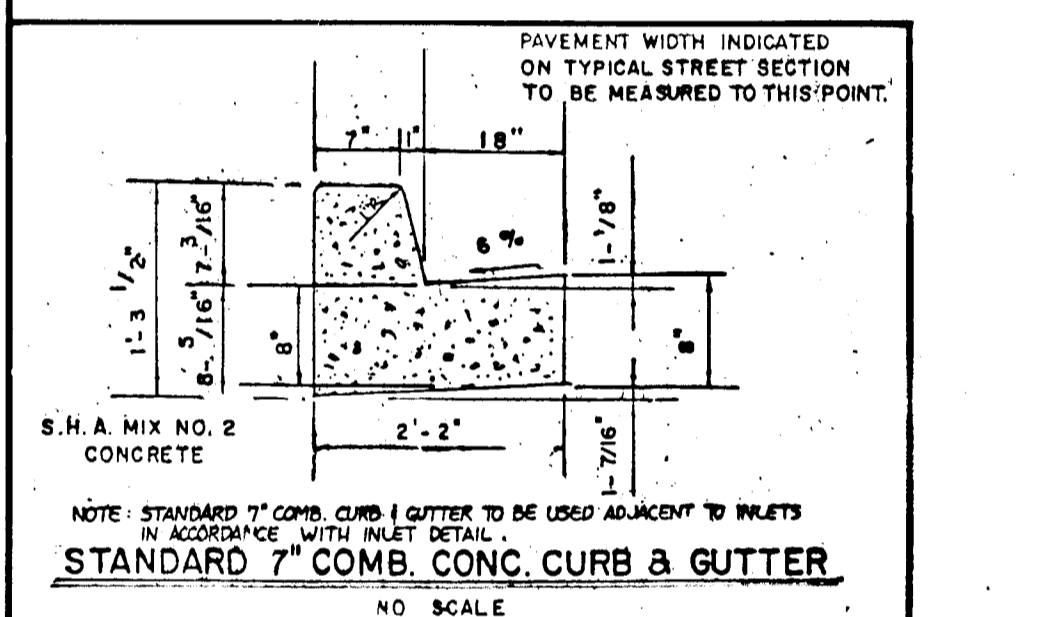
TYPICAL ROADWAY SECTION
NO SCALE



ROAD NAME	CLASSIFICATION	DESIGN SPEED	ZONING	% STA. LIMITS	A
FOREST BROOK COURT	CULPERSIC	75 M.P.H.	R-20	0+00 TO 1+360.4	24'
THORNBROOK ROAD	LOCAL ROAD	30 M.P.H.	R-20	44+00.52 TO 49+67.22	30'



PAVING SECTION P-2
NO SCALE



STANDARD 7" COMB. CURB & GUTTER
NO SCALE



VIEW ONLY EXHIBIT REGARDING SWM POND CONSTRUCTION SPECIFICATIONS

Site Preparation
Areas under the embankment shall be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots or other objectionable material. In order to facilitate clearing and reconstruction, the pool area (measured at the top of the pipe spillway) will be cleared of all brush, trees, and other objectionable materials.

Cut-off Trench
A cut-off trench shall be constructed along the centerline of earth fill embankments. The minimum depth shall be two feet. The cut-off trench shall extend up both abutments to the riser crest elevation. The minimum bottom width shall be four feet, but wide enough to permit operation of excavation and connection equipment. The side slopes shall be no steeper than 1:1. Connection requirements shall be the same as those for embankment. The trench shall be dewatered during the backfilling-connection operations.

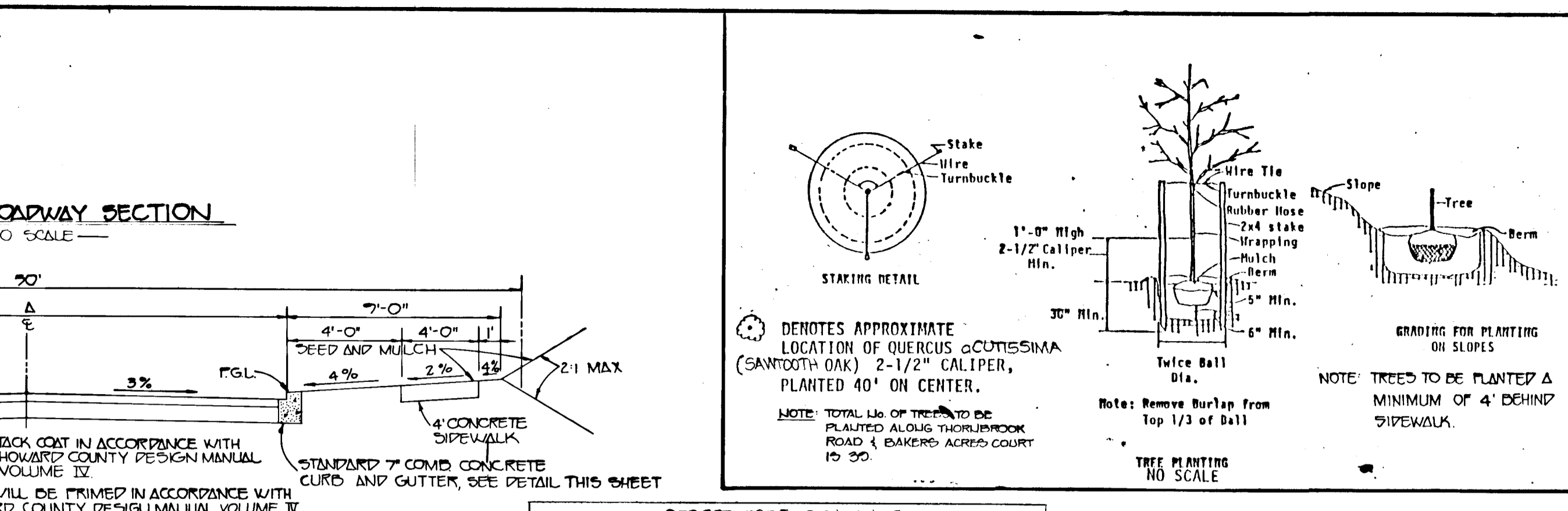
Embankment
The fill material shall be taken from approved areas shown on the plans. It shall be clean natural soil free of roots, woody vegetation, oversized stones, rocks, or other objectionable material. Relatively pervious materials such as sand or gravel (Unified Soil Classes 60, 65, 70 & 75) shall not be placed in the embankment. Areas on which fill is to be placed shall be marked prior to placement of fill. The fill material shall contain sufficient moisture so that it can be formed by hand into a ball without crumbling. If water can be squeezed out of the ball, it is too wet for proper compaction. Fill material shall be placed six-inch to eight-inch thick continuous layers over the entire length of the fill. Compaction shall be obtained by tamping and leveling the construction equipment over the fill so that the entire surface of each layer of the fill is covered by at least one wheel or tread track of the equipment or by the use of a compactor. The embankment shall be constructed to an elevation 10 percent higher than the design height to allow for settlement.

Pipe Spillways
The riser shall be securely attached to the barrel or barrel stub by welding the full circumference making a watertight structural connection. The barrel stub must be attached to the riser at the same percent (angle) of grade as the riser barrel. The connection between the riser and the barrel shall be watertight. All connections between barrel sections must be achieved by approved watertight hand assemblies. (See page 18.22 for details.) The barrel and riser shall be placed on a firm, smooth foundation of impervious soil. Pervious materials such as sand, gravel, or crushed stone shall not be used as backfill around the pipe or around the riser. The fill material around the pipe spillway shall be placed in four inch layers and compacted under and around the pipe to at least the same density as the adjacent embankment.

A minimum depth of two feet of hand compacted backfill shall be placed over the pipe spillway before crossing it with construction equipment. Steel bare plates on risers shall have at least 2 1/2 feet of compacted earth, stone or gravel placed over it to prevent flotation.

Emergency Spillway
The emergency spillway shall be installed in undisturbed ground. The achievement of planned elevations, grades, design width, structure and exit channel slopes are critical to the successful operation of the emergency spillway and must be constructed within a tolerance of ± 0.2 feet.

Protective Treatment
Stabilize the embankment and emergency spillway in accordance with the appropriate protective Standard and Specifications immediately following construction. In no case shall the embankment remain unstabilized for more than seven (7) days.

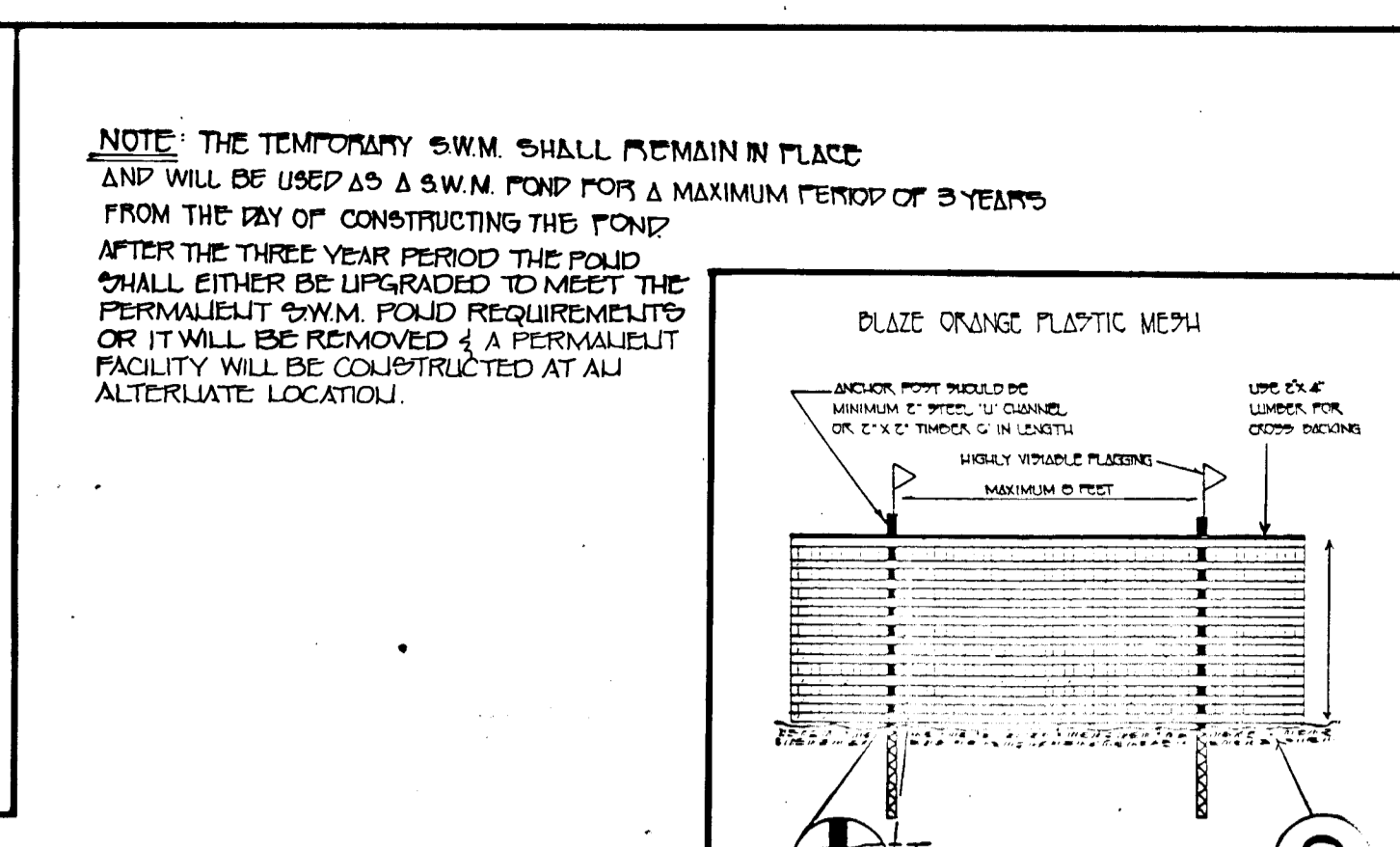


STREET TREE SCHEDULE

SYMBOL	BOTANICAL AND COMMON NAME	SIZE @ ROOT	COMMENTS
(Symbol)	QUERCUS QUTISSIMA SMOOTH OAK	MIN. 2 1/2" DBH	40' APART

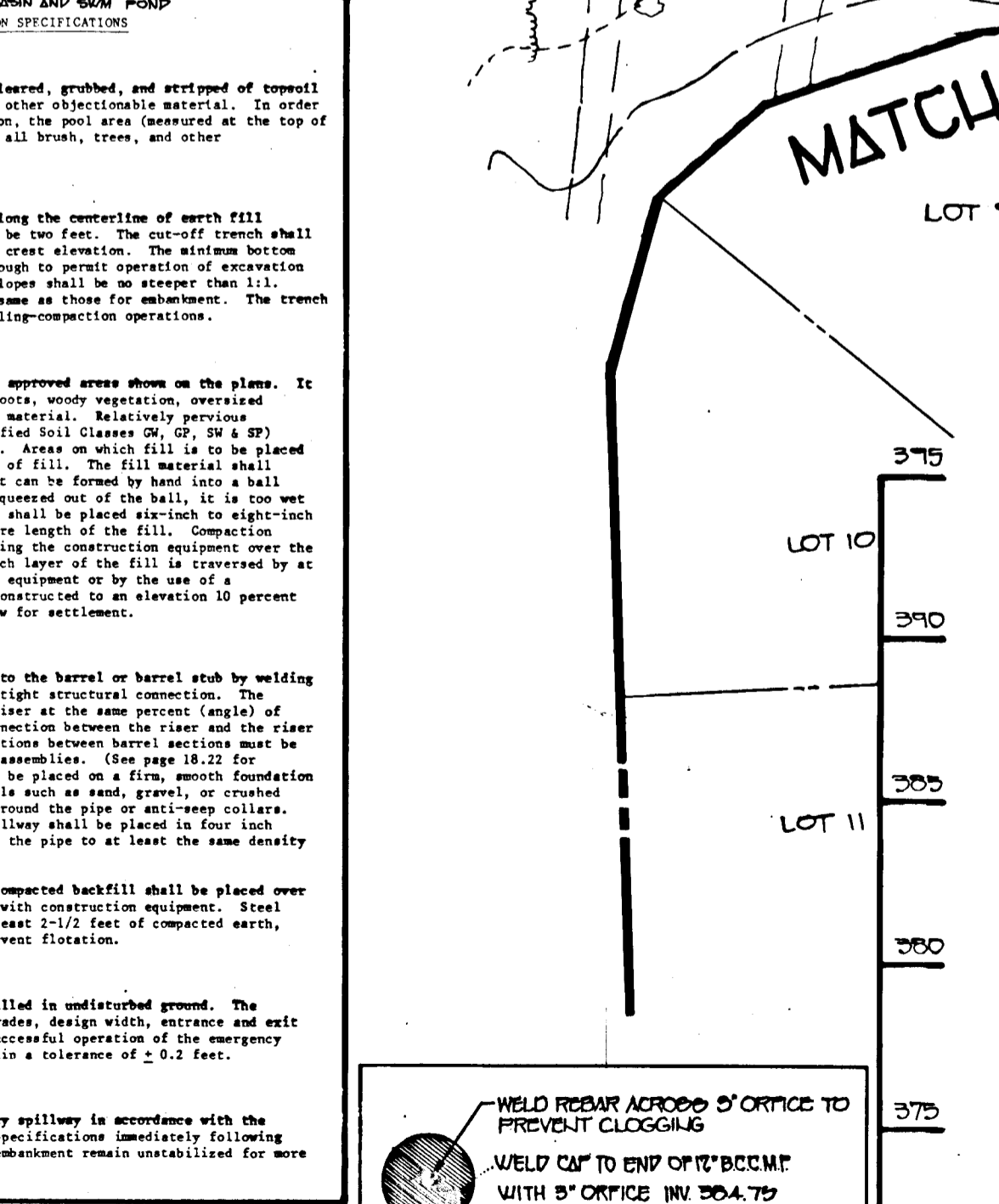
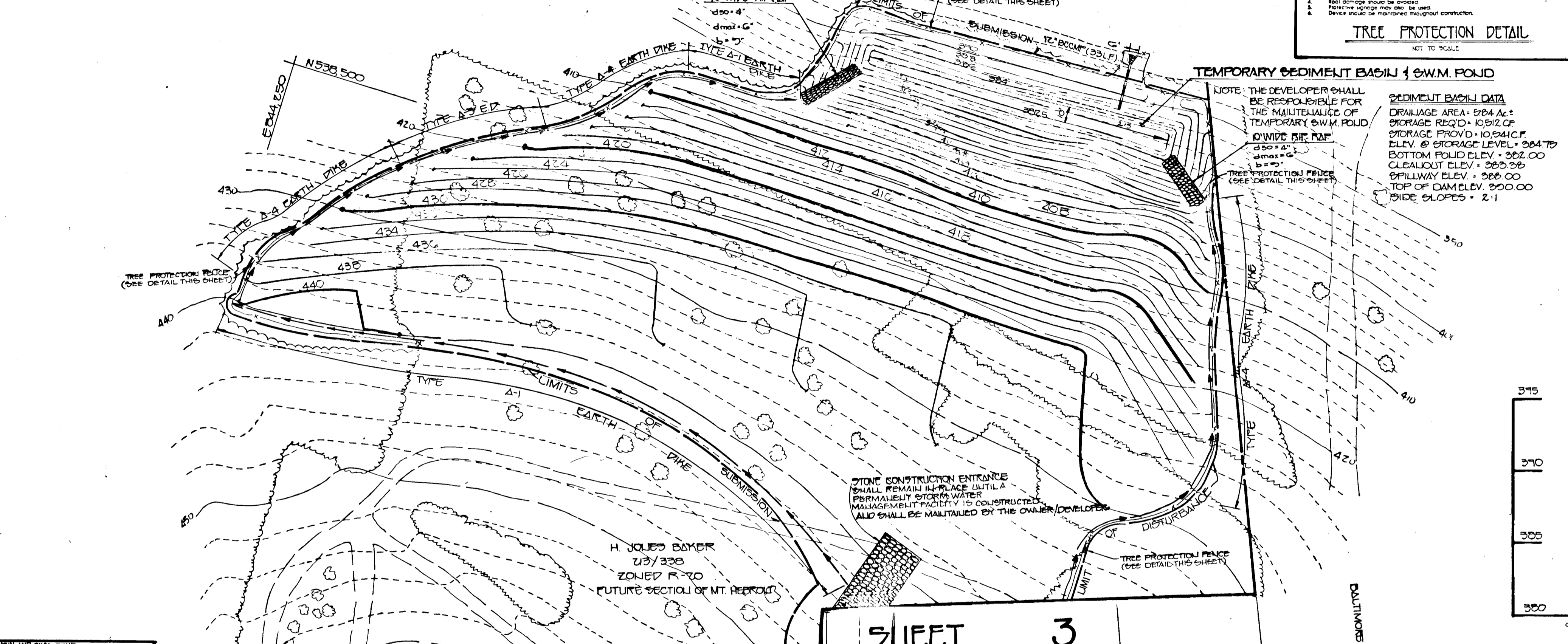
NOTE: TOTAL LBS OF TREES TO BE PLANTED ALONG THORNBROOK ROAD & BAKERS ACRES COURT IS 30.

NOTE: TREES TO BE PLANTED A MINIMUM OF 4' BEHIND DRIVEWALK.

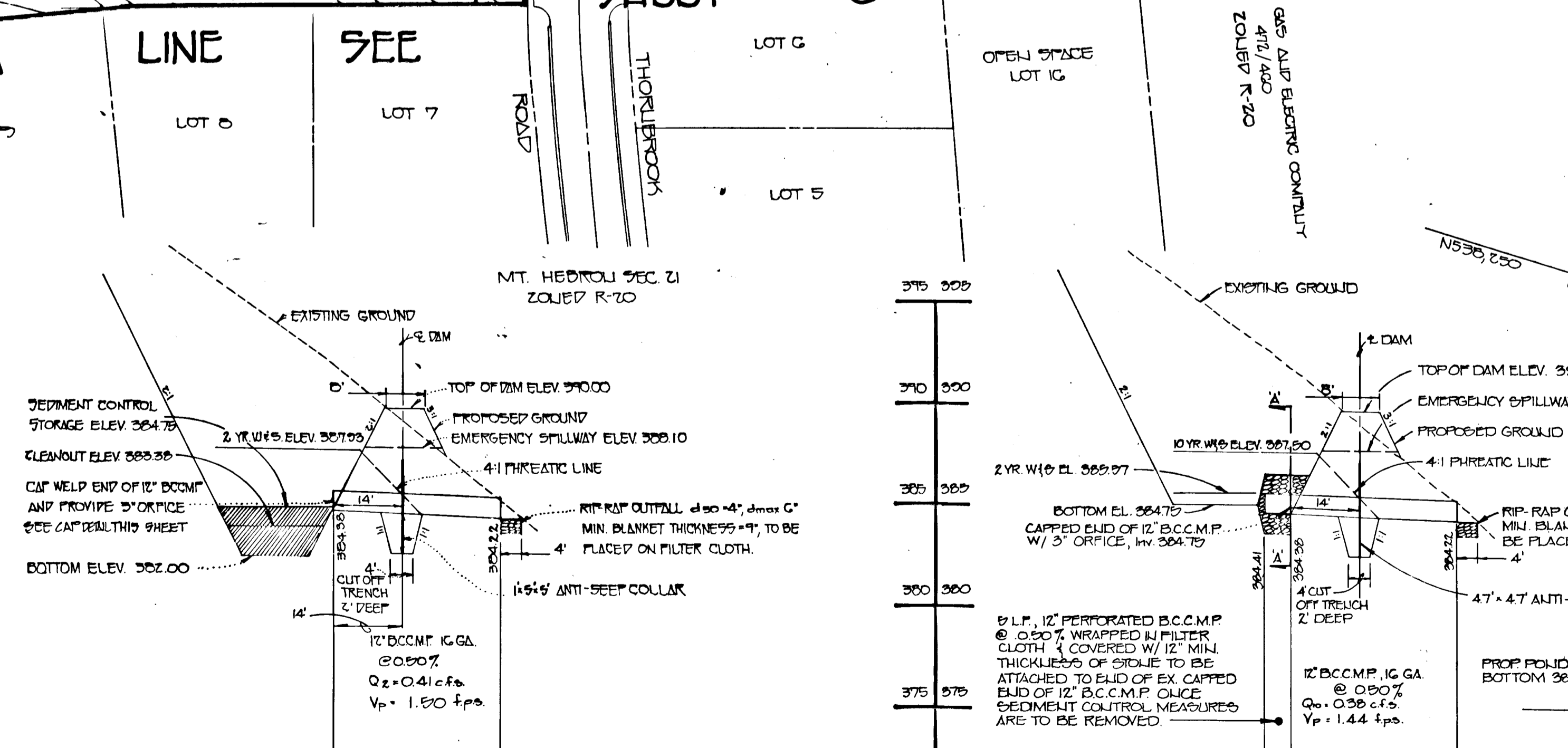


SEDIMENT BASIN DATA

DRAINAGE AREA	5294 AC
STORAGE REQ'D - 10% OF STORAGE PROVIDED	102541 CF
ELEV. @ STORAGE LEVEL	364.75
BOTTOM POND ELEV.	362.00
CLEAROUT ELEV.	363.55
SPILLWAY ELEV.	365.00
TOP OF DAM ELEV.	366.00
SIDE SLOPES	2:1



PRINCIPLE SPILLWAY PROFILE OF TEMPORARY SEDIMENT BASIN
SCALE: HORIZ. 1"=20', VERT. 1"=5'



PRINCIPLE SPILLWAY PROFILE OF TEMPORARY SWM POND
SCALE: HORIZ. 1"=20', VERT. 1"=5'

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: [Signature]
DATE: 10/19/92

DEVELOPER'S CERTIFICATE
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Signature: [Signature]
DATE: 10/19/92

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

Signature: [Signature]
DATE: 11/5/92

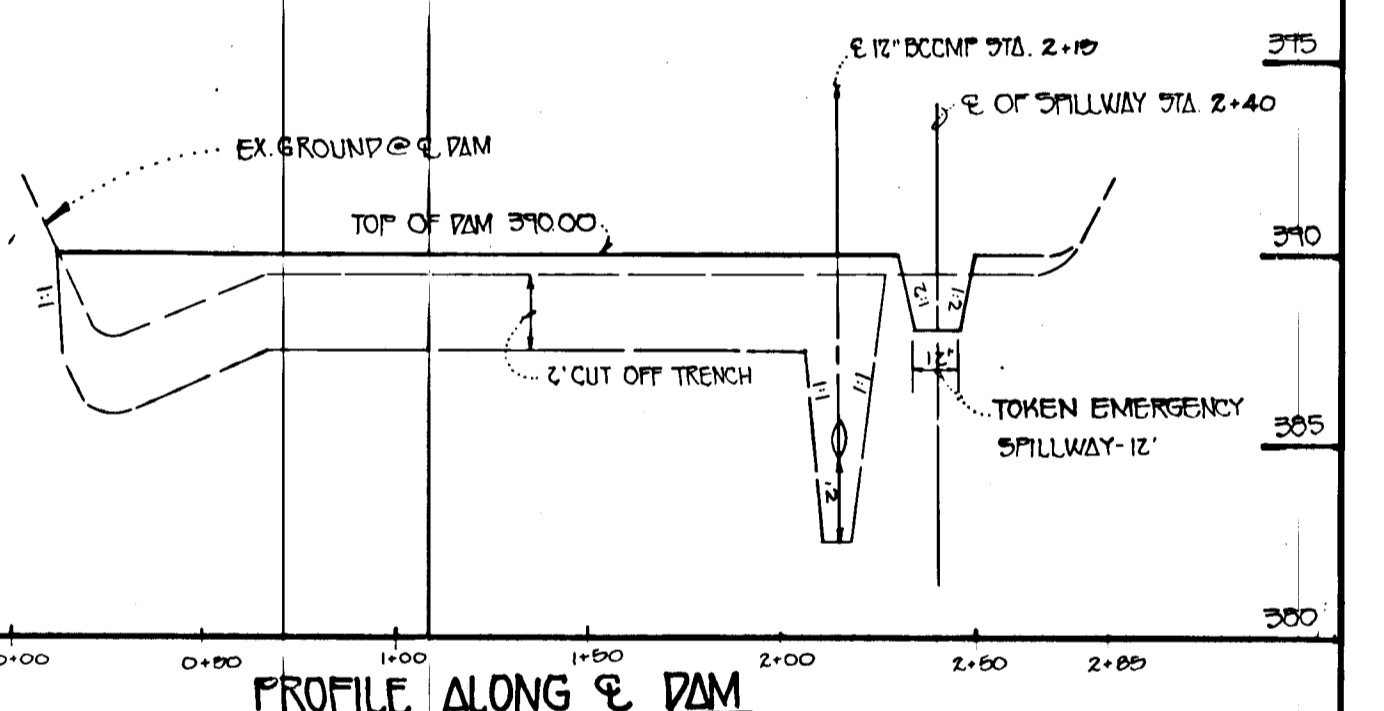
APPROVED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

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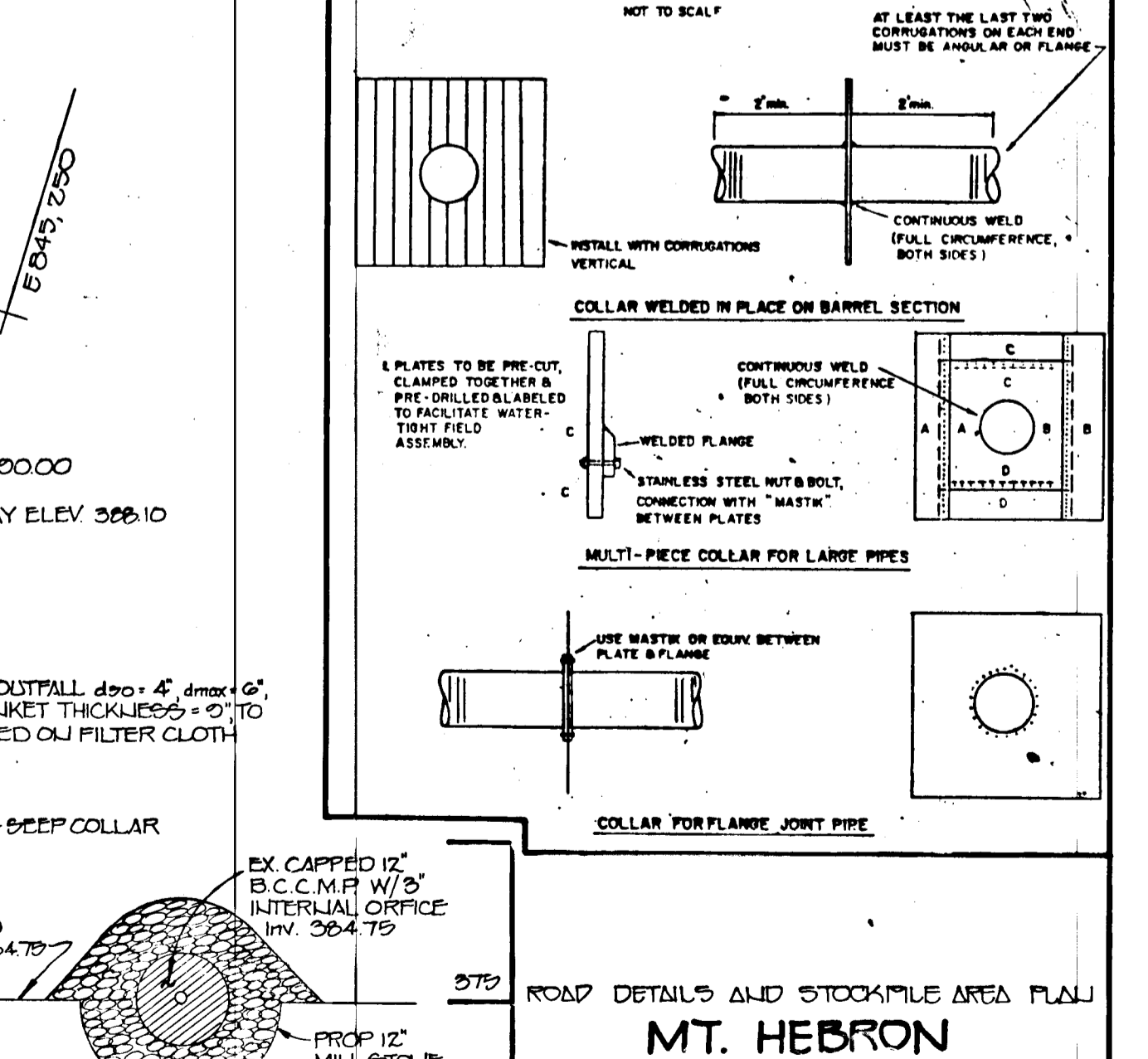
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Signature: [Signature]
DATE: 11/11/92

APPROVED: DEPARTMENT OF PUBLIC WORKS
Signature: [Signature]
DATE: 11/23/92

APPROVED: DEPARTMENT OF PUBLIC WORKS
Signature: [Signature]
DATE: 11/23/92



PROFILE ALONG E. DAM
SCALE: HORIZ. 1"=50', VERT. 1"=5'



ROAD DETAILS AND STOCKPILE AREA PLAN
SECTION 21
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN
DATE: MAY 26, 1972
SHEET 5 OF 5

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
1711 BALTIMORE NATIONAL PIKE, SUITE 100
ELLSWORTH CITY, MARYLAND 21042
TELEPHONE: (410) 451-1255
FAX: (410) 750-3764