

GENERAL NOTES

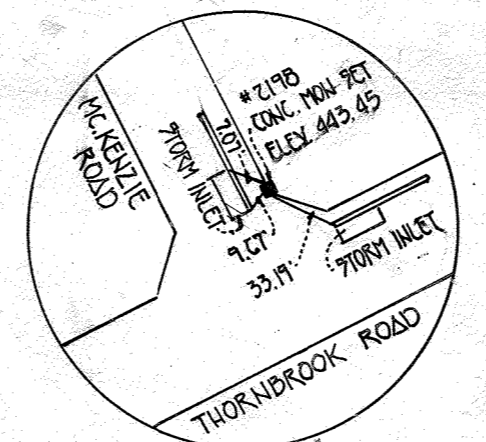
- 1) All Work Shall be done in Accordance With Howard County Specifications And Details For Construction.
- 2) All Utility Companies Must Be Notified 24 hrs. in Advance of Any Construction.
- 3) Storm Drainage Trenches Within Road Right-of-Ways Shall be Backfilled And Compacted in Accordance with Howard County Road Code.
- 4) Any damage to Public Right-of-Ways, Paving or Existing Utilities will be Contacted At the Contractors Expense.
- 5) Contractor to Notify the Howard County Inspection and Survey Division at least 5 days Before Starting Work shown on These Drawings, telephone (301) 792-7272.
- 6) Approximate Location of Existing Utilities Are Shown For the Contractors Information. Contractor shall Locate Existing Utilities Well in Advance of Construction Activities And Take All Necessary Precautions to Protect the Existing Utilities And to Maintain Uninterrupted service.
- 7) All Traffic Control Devices shall be installed With the Manual of Uniform Traffic Control Current Revised Edition.
- 8) Storm Water Management And Water Quality is Provided For in Mt. Hebron Sec. 20 F70-77

STREET LIGHTS

- 150-Watt "Modern" Sodium Vapor Lamp Post Top Fixtures On A 14' Gray Fiberglass Pole Located 2'-10" From Back Of Curb At The Following Locations.
1. Southwest Intersection of McKenzie Road And Thornbrook Road.
 2. McKenzie Road @ Sta. 13+70 On The East Side.
 3. Thornbrook Road @ Sta. 3+75 On The West Side.

BENCH MARKS

- BM. 1000 Elev. 407.81
 Rebar Set 27' Southeast Of Linear Profile Sta. 1+55 Glenwood Court On Lot 45.
 BM. 2000 Elev. 423.62
 Rebar Set 91' North Of & Sta. 2+00
 Dunleer Road On Lot 36
 *For Locations, See Sheet 3 of Mt. Hebron Section 20 - F70-77

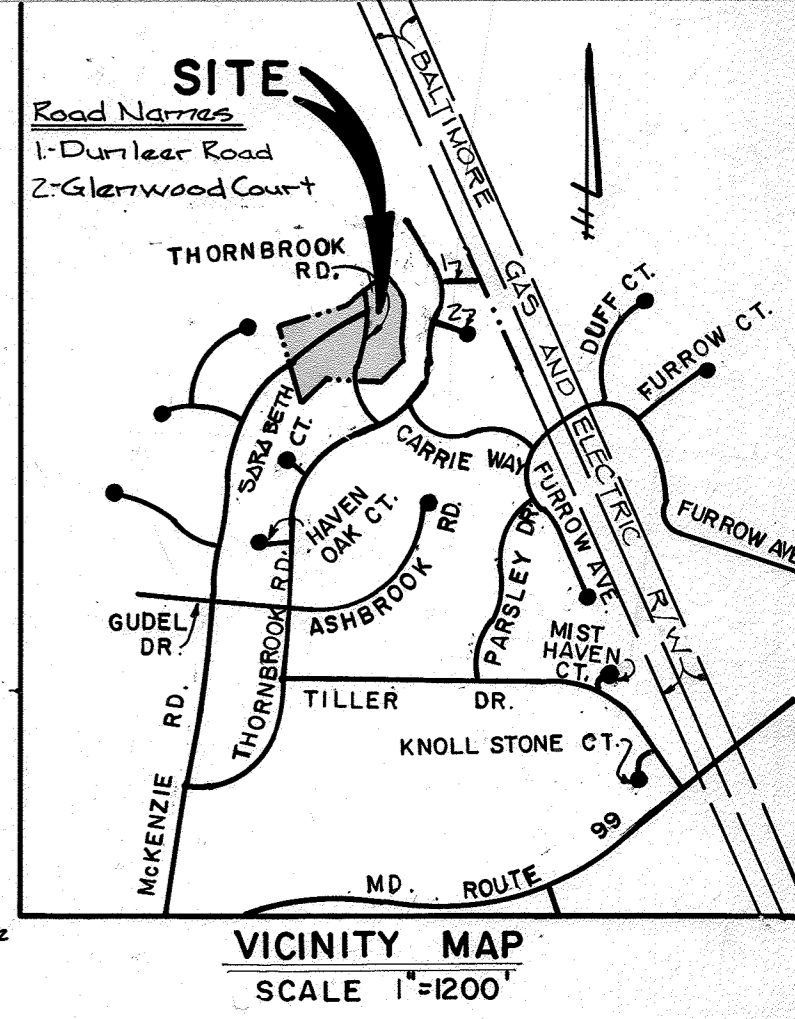


THORNBROOK ROAD & CURVE DATA

STA. 5+87.40 TO STA. 7+42.66
 R=440.00'
 L=159.26'
 Δ=20°13'06"
 T=78.45'
 CHD. N05°23'27"W 154.46'

THORNBROOK ROAD & CURVE DATA

STA. 5+87.40 TO STA. 8+69.81
 R=440.00'
 L=282.41'
 Δ=36°46'30"
 T=146.26'
 CHD. N13°20'09"W, 277.59'



DATE	BY

DATE	BY

APPROVED DEPARTMENT OF PUBLIC WORKS

Chris Dammus 8/20/91
 CHIEF, LAND DEVELOPMENT DIVISION

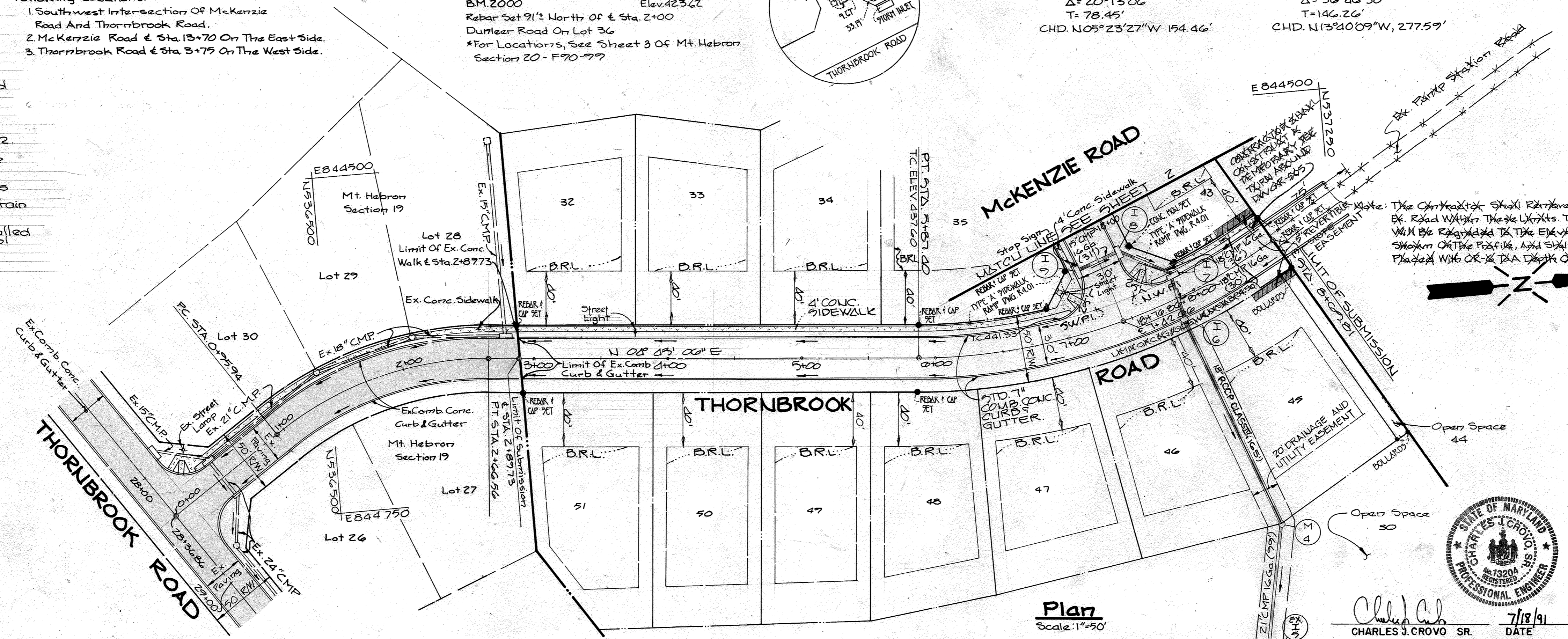
Brigitte W. Welland 8/2/91
 CHIEF, BUREAU OF HIGHWAYS

APPROVED DEPARTMENT OF PUBLIC WORKS

John J. Kelly 9/13/91
 CHIEF, BUREAU OF ENGINEERING

APPROVED DEPT. OF PLANNING AND ZONING

Emma Habermath 9/6/91
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT



MT. HEBRON SECTION 20 PHASE II LOTS 32-51

2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

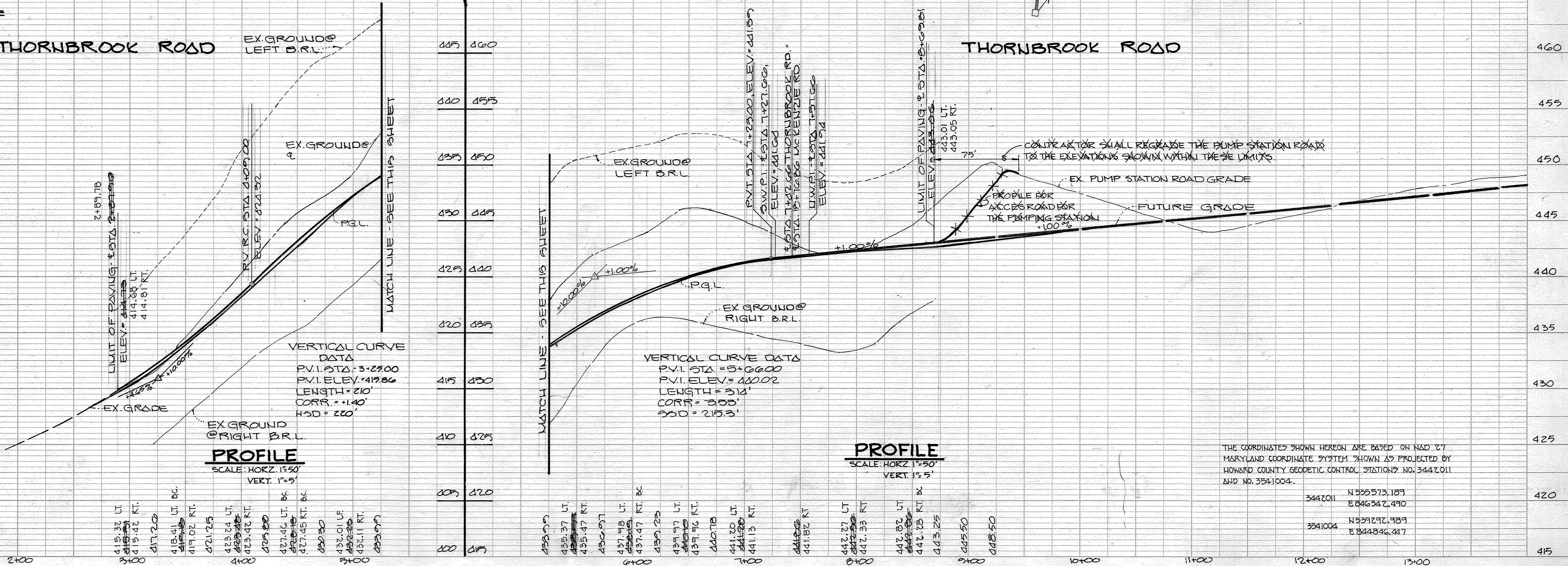
THORNBROOK ROAD PLAN & PROFILE

OWNER AND DEVELOPER
 MT. HEBRON INC.
 2106 MT. HEBRON DRIVE
 ELLICOTT CITY, MARYLAND 21043

SCALE As Shown DATE JULY 18, 1991 DWG. NO. 1 OF 5
 DES. R. Isaac DRN. M. Young CHK. C. Crovo

FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELICOTT CITY, MARYLAND 21043
 (301) 461-2855

PLAN REVISION NOTE: ON OR AROUND 11/1/2022 CAPITAL PROJECT D-1116, ENTITLED ASHBROOK DRIVE STREAM RESTORATION PROJECT, WAS CREATED TO SIMULATE APPROXIMATELY 123 LINEAR FEET ALONG AN UNNAMED TRIBUTARY TO THE PATTERED RIVER. REPLACE AN EXISTING BENCH MARK AND REPAIR AN EXISTING POND EMERGENCY SALLWAY ILLUSTRATED WITHIN THE LIMITS OF THIS SITE PLAN. AN ALTERNATE COMPLIANCE WAS PROCESSED THROUGH THE DEPARTMENT OF PLANNING AND ZONING UNDER WP-22-112 APPROVED ON 8/9/2022 TO WAIVER SECTIONS 16.11(a)(2), 16.12(1)(v), 16.12(5)(a)(1), AND 16.15F(a)(1) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SUBJECT TO THE APPROVAL CONDITIONS, FOR THE DETAILED CONDITIONS OF APPROVAL AND THE CURRENT SITE CONDITIONS WITHIN THE DISTURBED AREA PLEASE SEE THE CAPITAL PROJECT PLANS.



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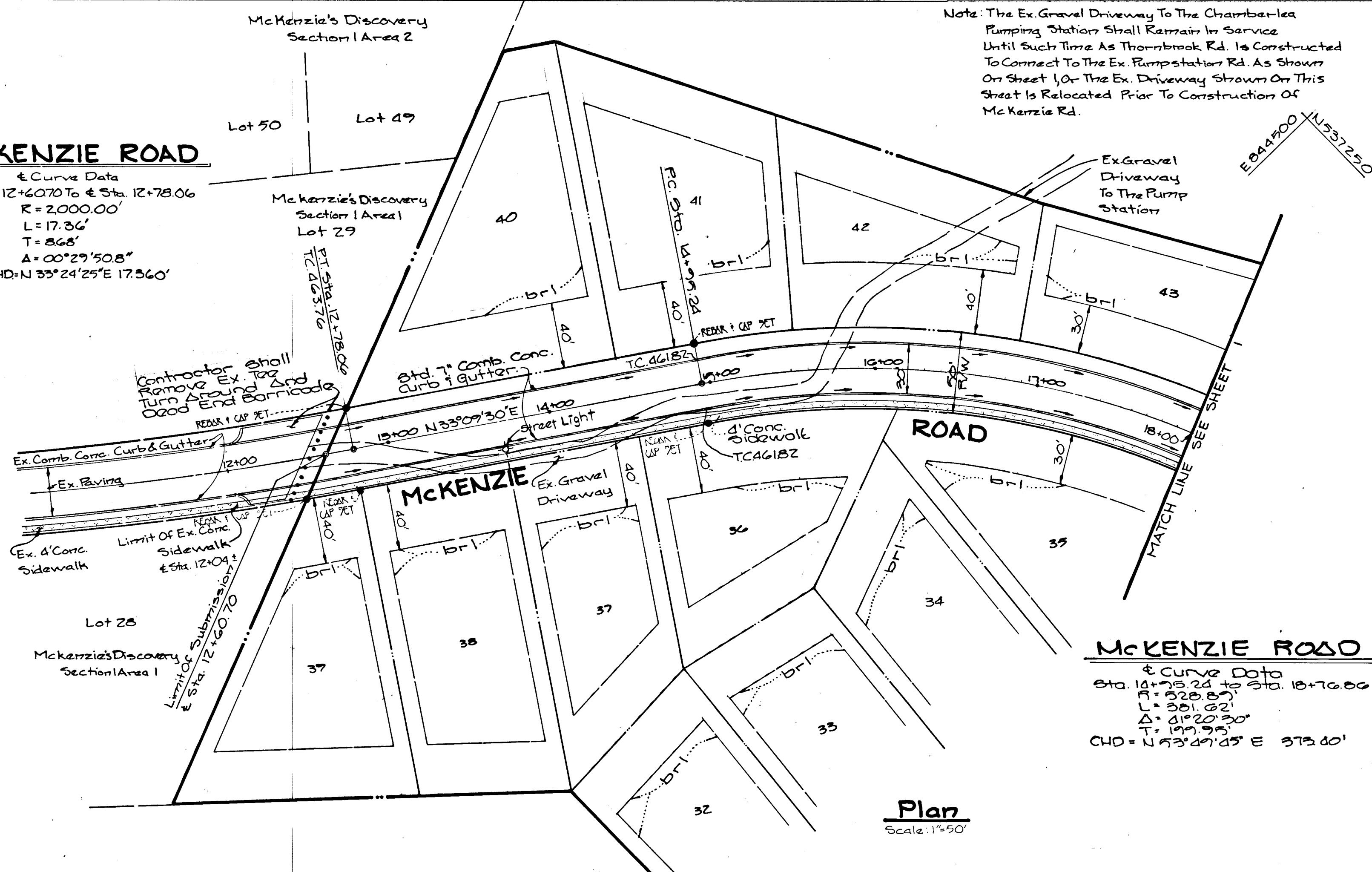
BY _____ DATE _____
 SURVEYED _____
 PLOTTED _____
 CHECKED _____
 NOTE BOOK NO. _____

BY _____ DATE _____
 SURVEYED _____
 PLOTTED _____
 CHECKED _____
 NOTE BOOK NO. _____

McKENZIE ROAD

± Curve Data
 ± Sta. 12+60.70 To ± Sta. 12+78.06
 R = 2,000.00'
 L = 17.36'
 T = 8.68'
 Δ = 00°29'50.8"
 CHD = N 33°24'25"E 17.560'

Note: The Ex. Gravel Driveway To The Chamberlea Pumping Station Shall Remain In Service Until Such Time As Thornbrook Rd. Is Constructed To Connect To The Ex. Pumpstation Rd. As Shown On Sheet 1.0. The Ex. Driveway Shown On This Sheet Is Relocated Prior To Construction Of McKenzie Rd.



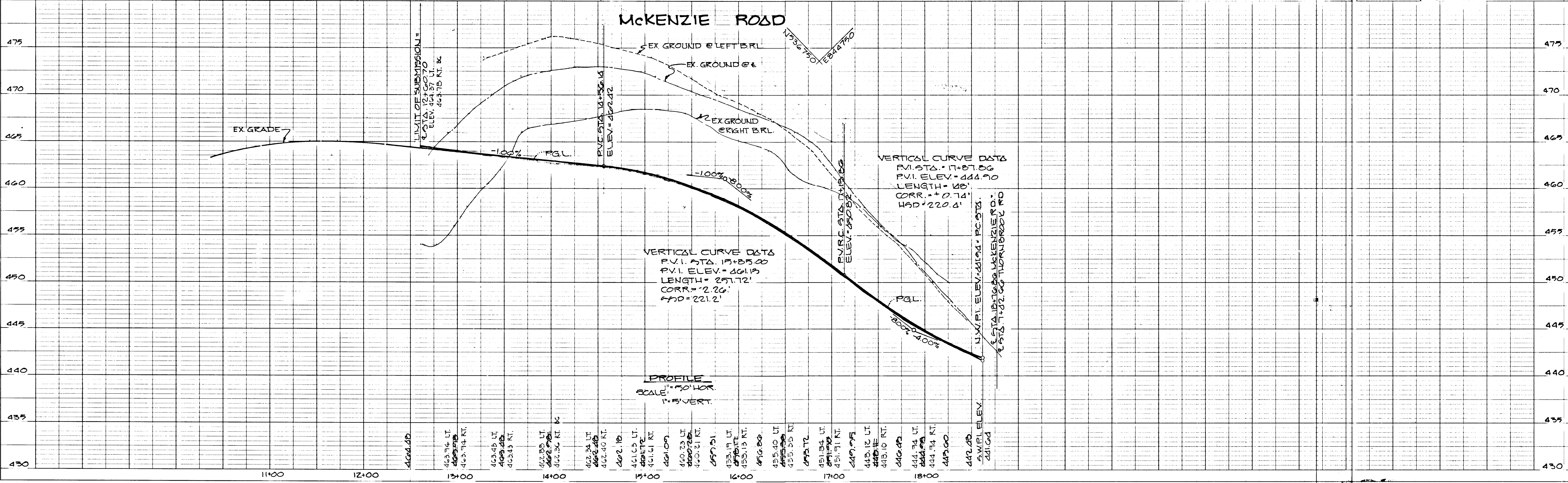
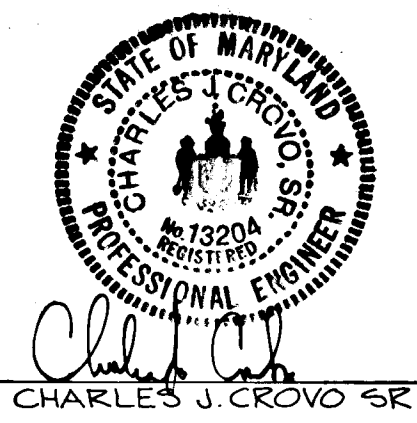
McKENZIE ROAD

± Curve Data
 Sta. 12+78.06 To Sta. 18+76.89
 R = 2,000.00'
 L = 59.83'
 T = 29.91'
 Δ = 01°20'30.0"
 CHD = N 33°24'25"E 37.540'

Plan
 Scale: 1"=50'

APPROVED
 DEPARTMENT OF PUBLIC WORKS
[Signature] 8/20/91
 DEVELOPMENT DIVISION
 APPROVED
 DEPARTMENT OF PUBLIC WORKS
[Signature] 8/2/91
 CHIEF, BUREAU OF ENGINEERING
 APPROVED
 DEPT. OF PLANNING AND ZONING
[Signature] 9/6/91
 DIVISION OF PLANNING AND LAND DEVELOPMENT

Mt. Hebron
 SECTION 20 PHASE II
 Lots 32-51
 2ND Election District
 Howard County, Md.
McKENZIE ROAD
PLAN & PROFILE
 OWNER AND DEVELOPER
 Mt. Hebron Inc.
 2106 Mt Hebron Drive
 Ellicott City, Maryland 21043
 SCALE As Shown DATE JULY 18, 1991 DWG. NO. 2 OF 5
 DES R. Isaacs DRN M. Young CHK C. Crovo
FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELICOTT CITY, MARYLAND 21043
 (301) 461-2855

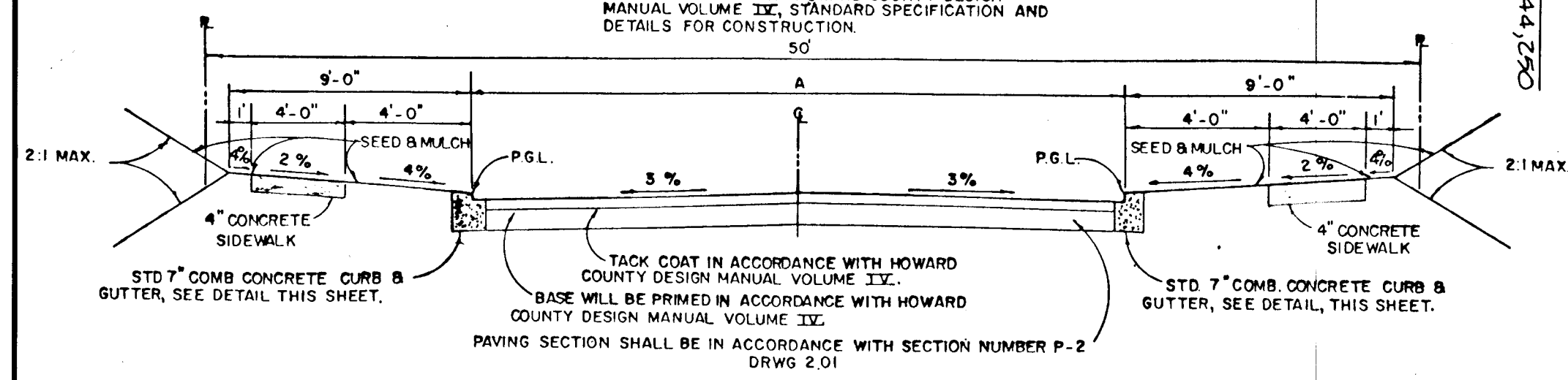


PROFILE
 SCALE: 1"=50' HORIZ
 1"=5' VERT.

STRUCTURE	TOP ELRV.	INV. IN.	INV. OUT.	ROAD	ROAD STATION	TYPE	REMARKS
I-6	442.20 440.44	435.88 434.12	435.63 433.87	THORNBROOK RD. 15' RT.	7+84.15 6.0	A-5	S.D.-4.01
I-7	442.24 440.11	437.17 435.04	436.92 434.79	THORNBROOK RD. 15' LT.	7+88.50 7+81.00	A-10/W DEFLECTORS	S.D.-4.02 & S.D.-4.83
I-8	443.30 440.07	438.85 436.72	438.60 436.47	MCKENZIE RD. 15' LT.	18+31.00 18+23.50	A-10/W DEFLECTORS	S.D.-4.02 & S.D.-4.83
I-9	443.30 440.07	438.85 436.72	438.60 436.47	MCKENZIE RD. 15' RT.	18+31.00 18+23.50	A-10/W DEFLECTORS	S.D.-4.02 & S.D.-4.83
M-4	418.20 418.05	407.50 407.35	407.33 407.18			STD. 4" MANHOLE	G-501

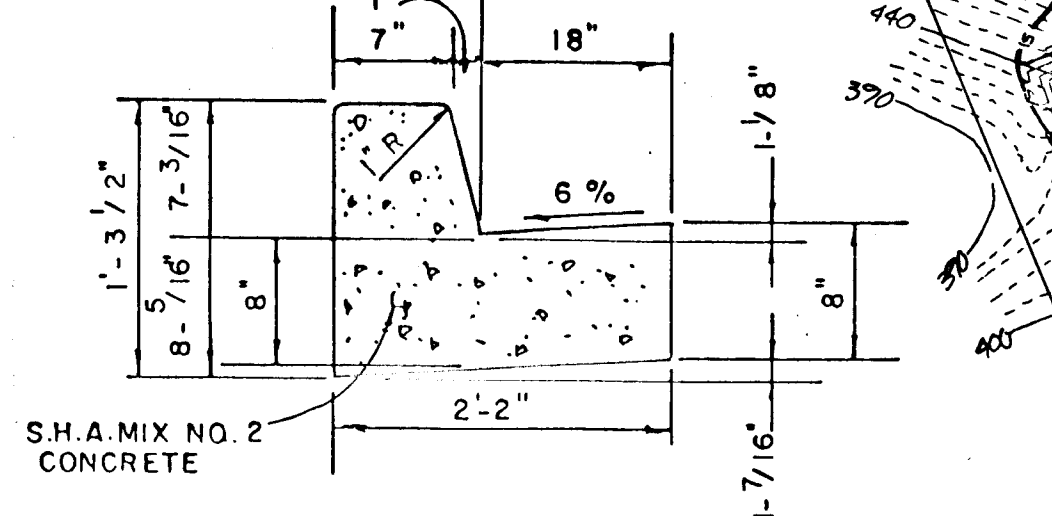
TYPICAL ROADWAY SECTION
NO SCALE

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

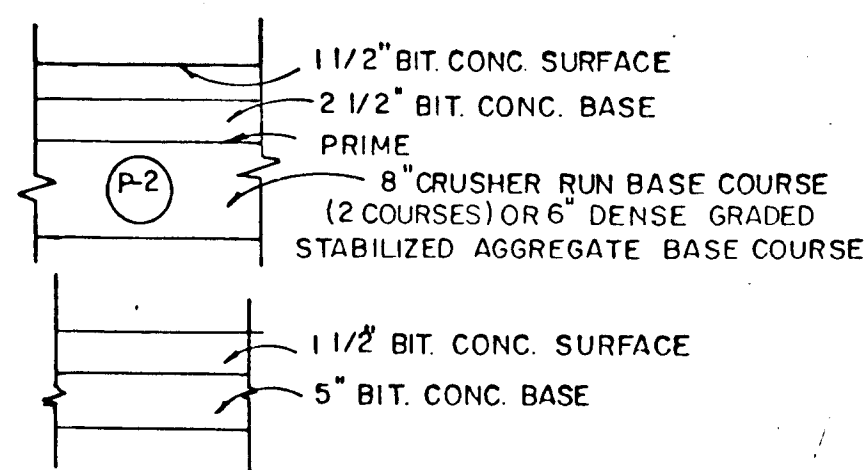


ROAD NAME	CLASSIFICATION	DESIGN SPEED	ZONING	STA. LIMITS	A
MCKENZIE ROAD	LOCAL ROAD	30 MPH	R-20	12+60 TO 18+60	30'
THORNBROOK ROAD	LOCAL ROAD	30 MPH	R-20	2+89 TO 8+69	30'

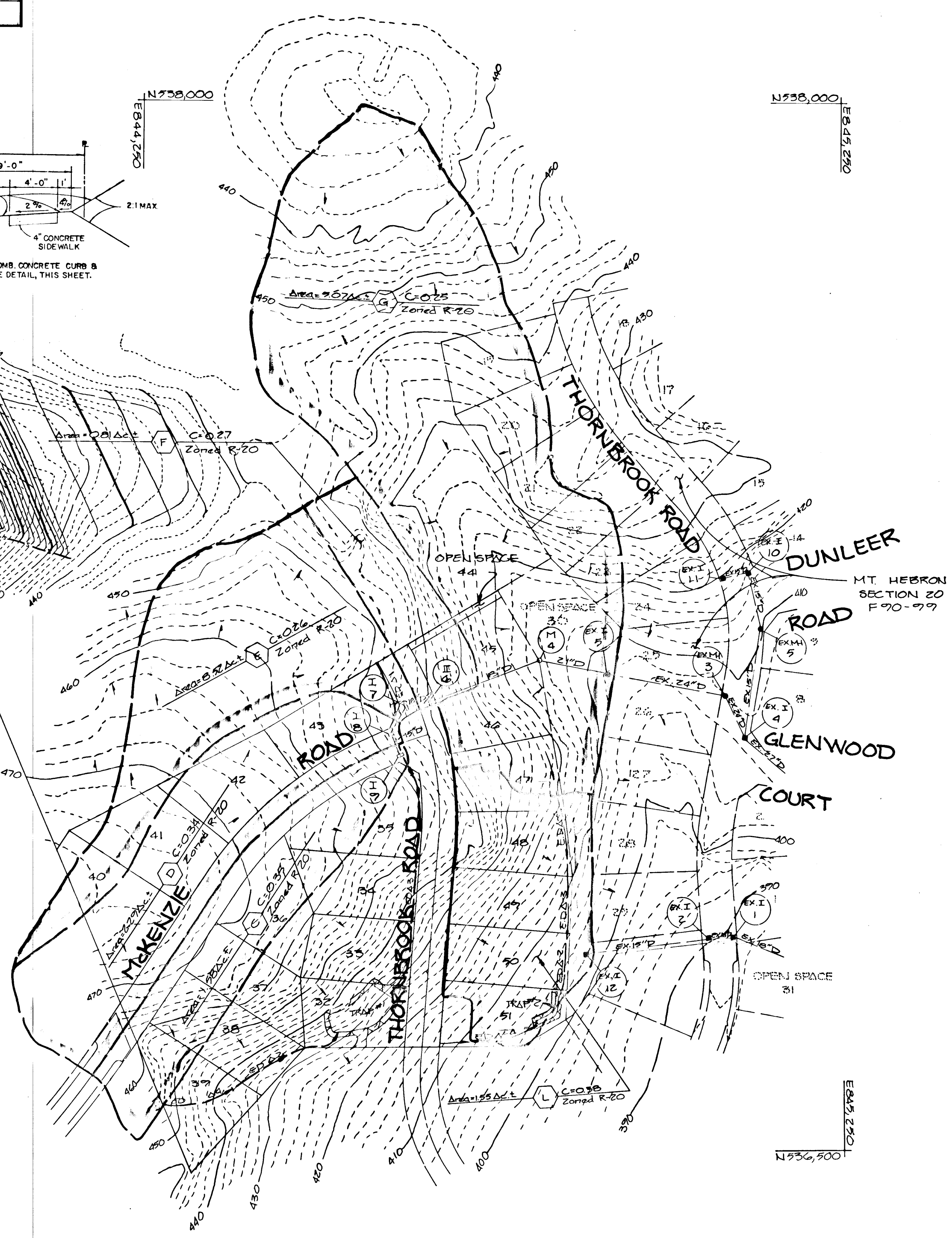
PAVEMENT WIDTH INDICATED ON TYPICAL STREET SECTION TO BE MEASURED TO THIS POINT.



STANDARD 7" COMB. CONC. CURB & GUTTER
NO SCALE

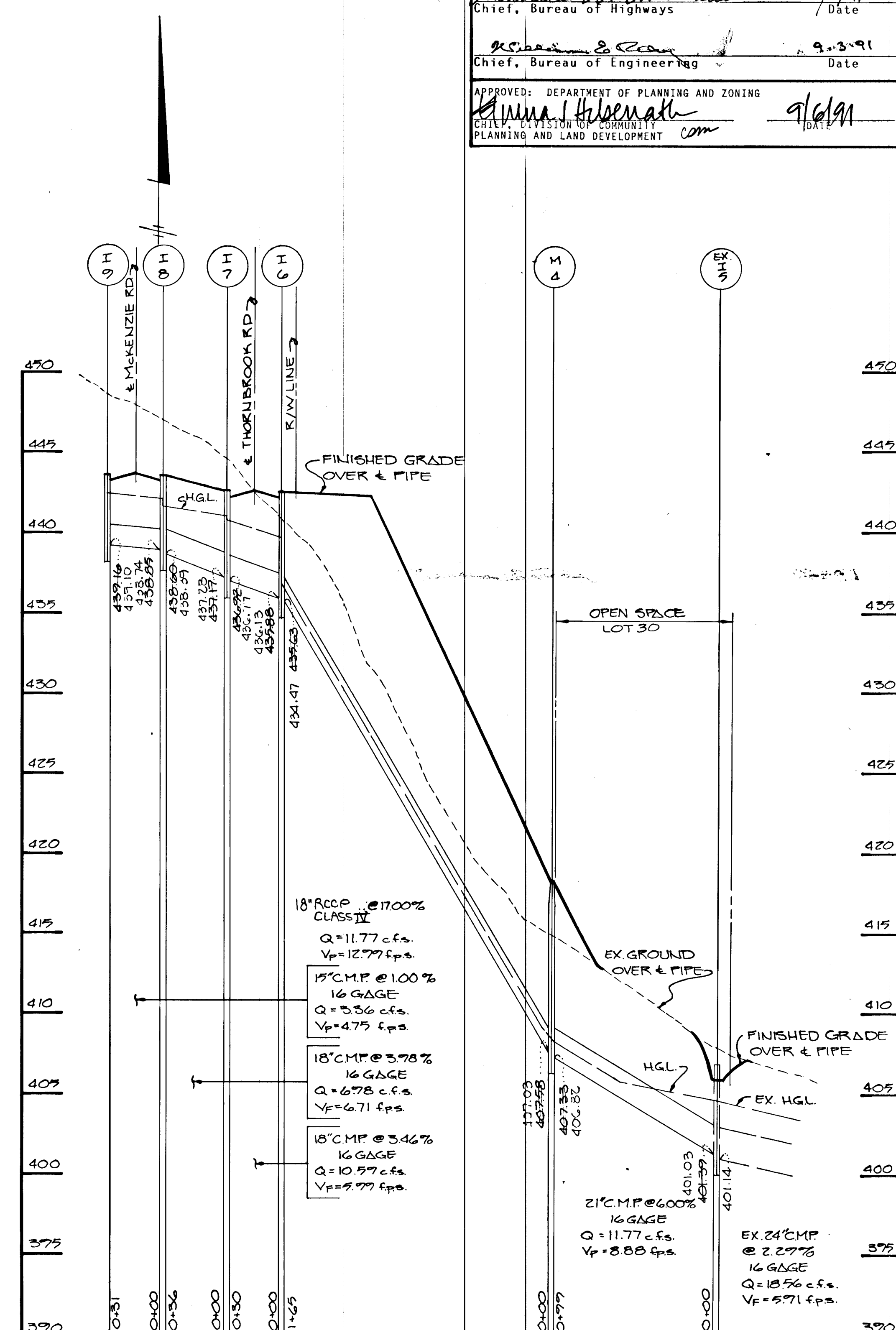


PAVING SECTION P-2
NO SCALE



NOTE: ED Δ11 - EARTH DIKE & TREATMENT TYPE

PLAN
SCALE: 1"=100'



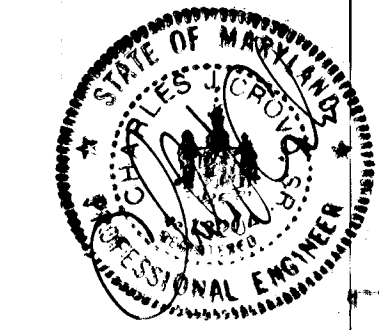
STORM DRAIN PROFILE

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

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Land Development Division
 Chief, Bureau of Highways
 Chief, Bureau of Engineering
 APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Community Planning and Land Development

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 SUITE 100, 9171 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21043
 (301) 461-2855

OWNER AND DEVELOPER
 MT. HEBRON INC.
 2106 MT. HEBRON DRIVE
 ELLICOTT CITY, MARYLAND 21043



Drainage Area Map
Mt. Hebron
 SECTION 20, PHASE II
 Lots 32-51
 2nd Election District Scale 1"=100'
 Howard County, Md. July 18, 1979
 Sheet 5 of 5

CONSTRUCTION SEQUENCE

1. OBTAIN GRADING PERMIT.
2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE, SEDIMENT TRAP, EARTH DIKE, AND STORMWATER MANAGEMENT FACILITIES.
3. CLEAR AND GRUB SITE TO LIMITS OF DISTURBANCE.
4. GRADE ROADS TO SUBGRADE.
5. CONSTRUCT STORM DRAINS.
6. 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.
7. SEDIMENT SHALL BE REMOVED FROM TRAP WHEN CLEANOUT ELEVATION HAS BEEN REACHED TRAP SHALL BE DEWATERED BY PUMPING SEDIMENT SHALL BE PLACED UP HILL FROM SITE.
8. REMOVE SEDIMENT FROM EX-ROADWAYS AND DRESS STONE CONSTRUCTION ENTRANCE AS REQUIRED.
9. CONSTRUCT ALL UTILITIES.
10. INSTALL CURB AND GUTTER AND SUB-BASE ON ROADS.
11. REMOVE STONE CONSTRUCTION ENTRANCE, CLEAN BASE COURSE, APPLY TACK COAT AND LAY SURFACE COURSES.
12. ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED BY PERMANENT SEEDING.
13. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN a) 7 CALENDAR DAYS FOR PERIMETER SEDIMENT CONTROL STRUCTURES, SLOPES GREATER THAN 3:1; b) 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
14. COMPLETE STABILIZATION OF ALL DISTURBED AREAS SHALL BE DONE PRIOR TO REMOVAL OF ALL SEDIMENT CONTROLS.
15. NOTIFY HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS FOR FINAL INSPECTION AT DURATION OF PROJECT (301) 792-7272.

SEDIMENT TRAP DATA NO. 3

1. TYPE = RIP-RAP OUTLET SEDIMENT TRAP
2. DRAINAGE AREA = 5.30 AC.±
3. VOLUME REQUIRED = 353 CU.YD.
4. VOLUME PROVIDED = 357 CU.YD.
5. TOP DIM. = 100' X 36'
6. BOTTOM DIM. = 94' X 30'
7. WEIR CREST ELEVATION = 393.25
8. BOTTOM ELEVATION = 389.25
9. CLEANOUT ELEVATION = 390.75
10. DEPTH = 3.0'
11. SIDE SLOPES = 1:1
12. 'L' = 14.0'

SEDIMENT TRAP DATA NO. 2

1. TYPE = STONE OUTLET SEDIMENT TRAP
2. DRAINAGE AREA = 2.36 AC.±
3. VOLUME REQUIRED = 158 CU.YD.
4. VOLUME PROVIDED = 165 CU.YD.
5. TOP DIM. = 90' X 20'
6. BOTTOM DIM. = 84' X 14'
7. WEIR CREST ELEVATION = 403.00
8. BOTTOM ELEVATION = 399.0
9. CLEANOUT ELEVATION = 400.50
10. DEPTH = 3.0'
11. SIDE SLOPES = 1:1
12. 'L' = 10.0'

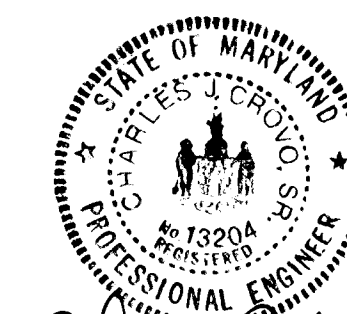
SEDIMENT TRAP DATA NO. 1

1. TYPE = STONE OUTLET SEDIMENT TRAP
2. DRAINAGE AREA = 4.97 AC.±
3. VOLUME REQUIRED = 331 CU.YD.
4. VOLUME PROVIDED = 377 CU.YD.
5. TOP DIM. = 75' X 50'
6. BOTTOM DIM. = 69' X 44'
7. WEIR CREST ELEVATION = 424.00
8. BOTTOM ELEVATION = 420.00
9. CLEANOUT ELEVATION = 421.50
10. DEPTH = 3.0'
11. SIDE SLOPES = 1:1
12. L = 20.0'

NOTE: CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITIES PRIOR TO DIGGING. FINAL LOCATIONS OF TREES MAY BE ADJUSTED SLIGHTLY TO ACCOMMODATE FIELD CONDITIONS. PLANTING PROCEDURES SHALL COMPLY WITH "LANDSCAPE SPECIFICATIONS FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS". SUBSTITUTIONS TO THE ABOVE SPECIES MAY BE PERMITTED, PROVIDED THAT THE PLANTING IS IN ACCORDANCE WITH THE STREET TREE AND LANDSCAPE REQUIREMENTS AS SPECIFIED IN SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS.

FISHER, COLLINS & CARTER
CONSULTING ENGINEERS AND LAND SURVEYORS
SUITE 100, BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043
TELEPHONE: (301) 411-2855

OWNER AND DEVELOPER
MT. HEBRON INC.
2106 MT. HEBRON DRIVE
ELLICOTT CITY, MARYLAND 21043



CHARLES J. CROVO SR. 7/18/91
DATE

STREET TREE, GRADING AND
SEDIMENT CONTROL PLAN
MT. HEBRON
SECTION 20 PHASE II
LOTS 32-51
2ND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
JULY 18, 1971 SHEET 4 OF 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 of Engineer: *Charles J. Crovo* 7/18/91
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."

Signature of Developer: *James M. Helm* 7/18/91
DATE

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

Signature: *James M. Helm* 7/31/91
DATE

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

Signature: *John R. Roberts* 7/31/91
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Signature: *Emma J. Hileman* 9/6/91
DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

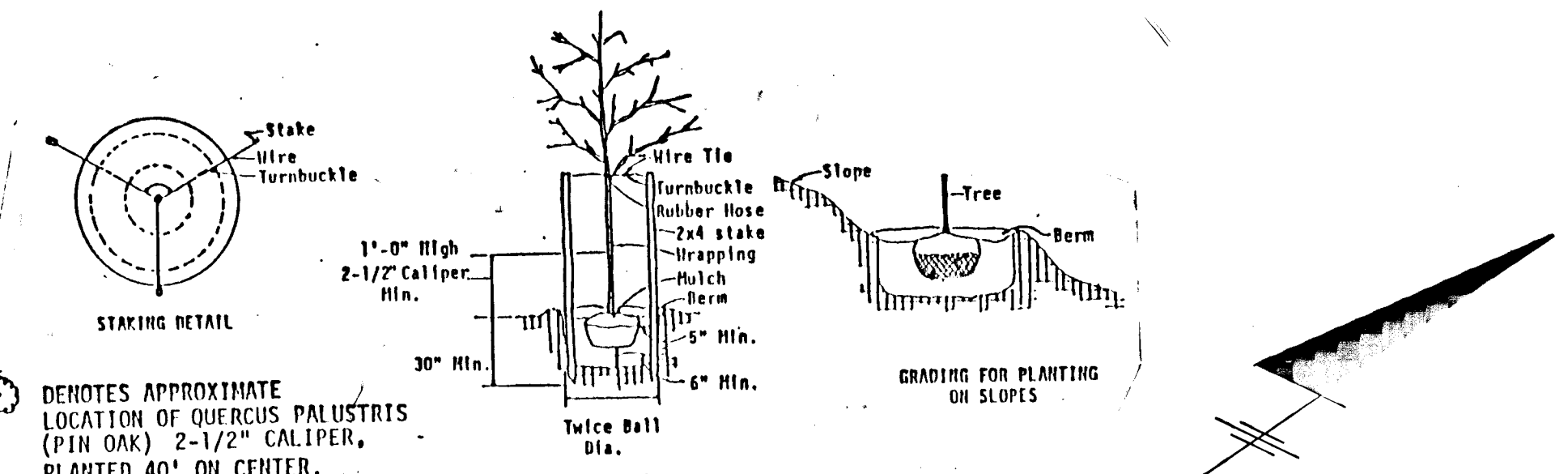
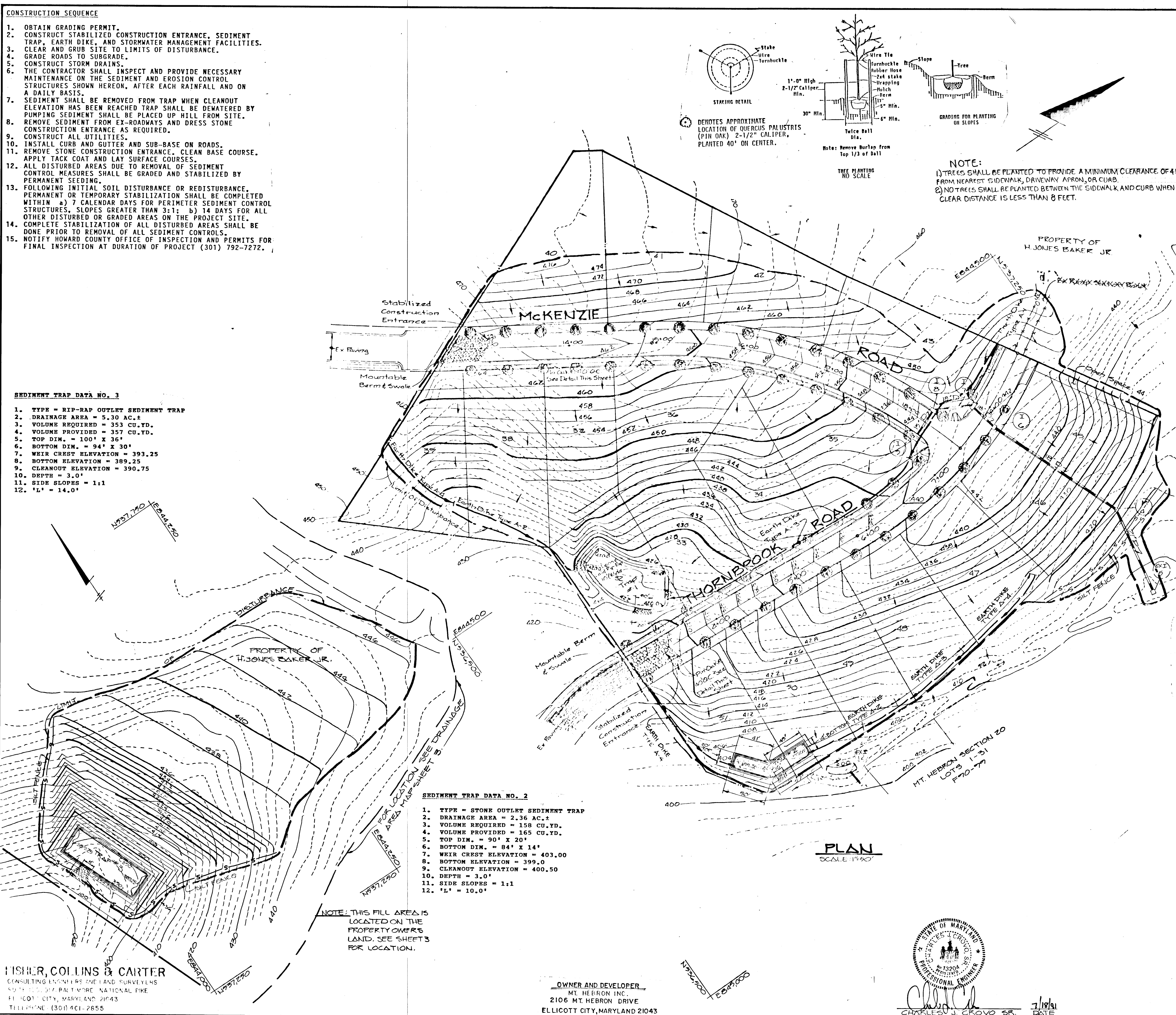
Signature: *William J. Reed* 9/2/91
DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

Signature: *Francis W. Cleland* 8/2/91
DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

Signature: *Charles J. Crovo* 8/30/91
DATE



NOTE:
1) TREES SHALL BE PLANTED TO PROVIDE A MINIMUM CLEARANCE OF 4 FEET FROM NEAREST SIDEWALK, DRIVEWAY APRON, OR CURB.
2) NO TREES SHALL BE PLANTED BETWEEN THE SIDEWALK AND CURB WHEN CLEAR DISTANCE IS LESS THAN 8 FEET.

PLAN
SCALE 1/4" = 1'-0"

16

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 ACRE 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.) OR 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.

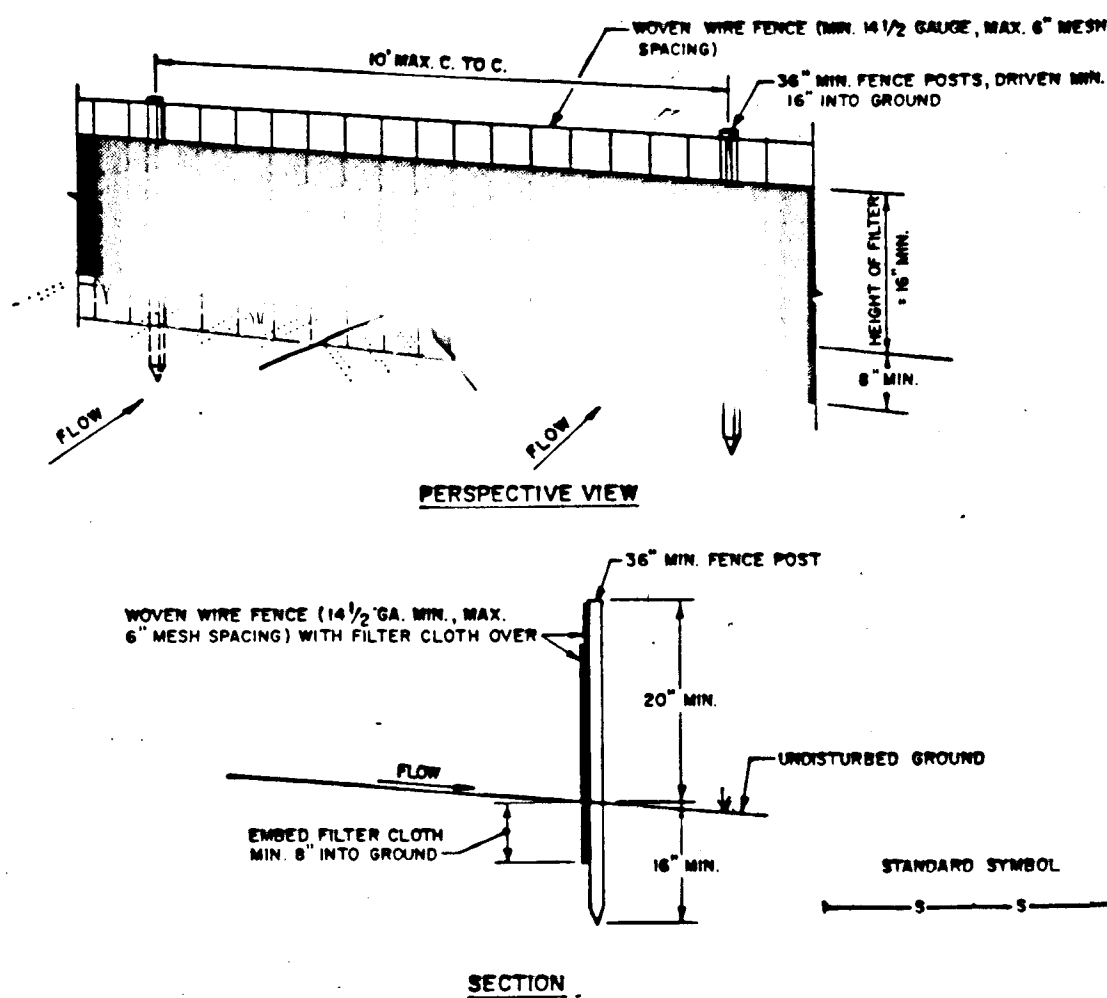
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REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

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.
- 4) 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.
- 5) 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.
- 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:

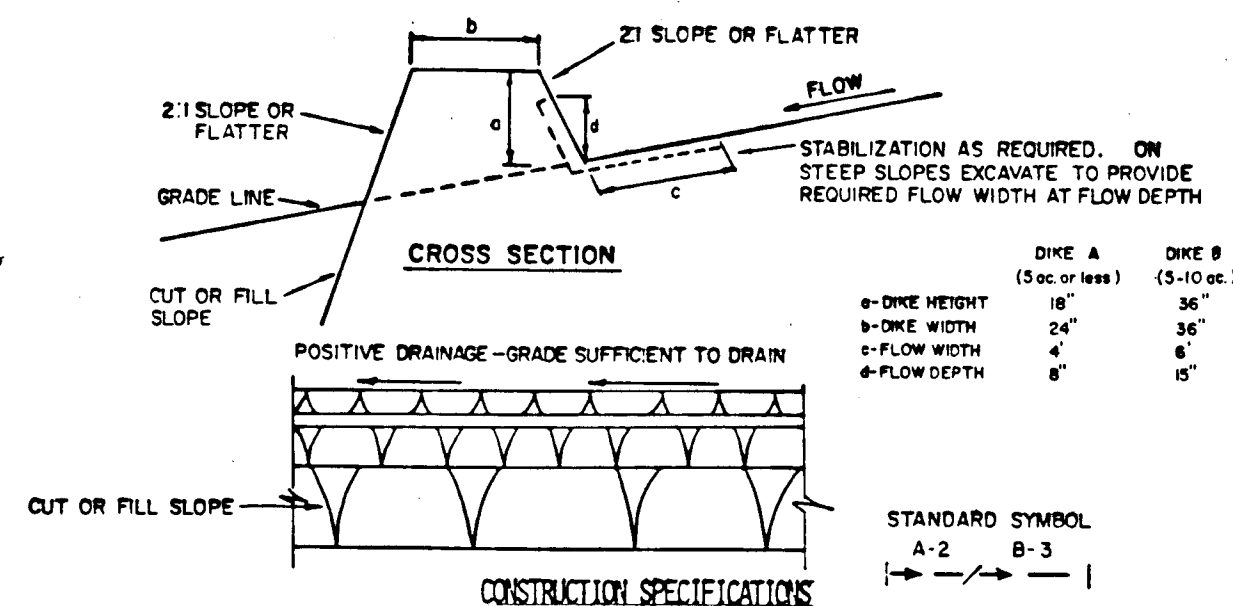
TOTAL AREA OF SITE	5127 ACRES
AREA DISTURBED	9739 ACRES
AREA TO BE ROOFED OR PAVED	0882 ACRES
AREA TO BE VEGETATIVELY STABILIZED	3097 ACRES
TOTAL CUT	8000 CU. YDS.
TOTAL FILL	8000 CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION	23270 CU. YDS.
- 8) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING 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 DPM SEDIMENT CONTROL INSPECTOR.
- 10) 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 FABRICATING 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 24" 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, MUFAL, LUNA, STAB-LINKA LUNA OR APPROVED EQUAL
 PREFABRICATED UNIT: GEOPAB, ENVIROFLEX, OR APPROVED EQUAL

SILT FENCE
 NOT TO SCALE



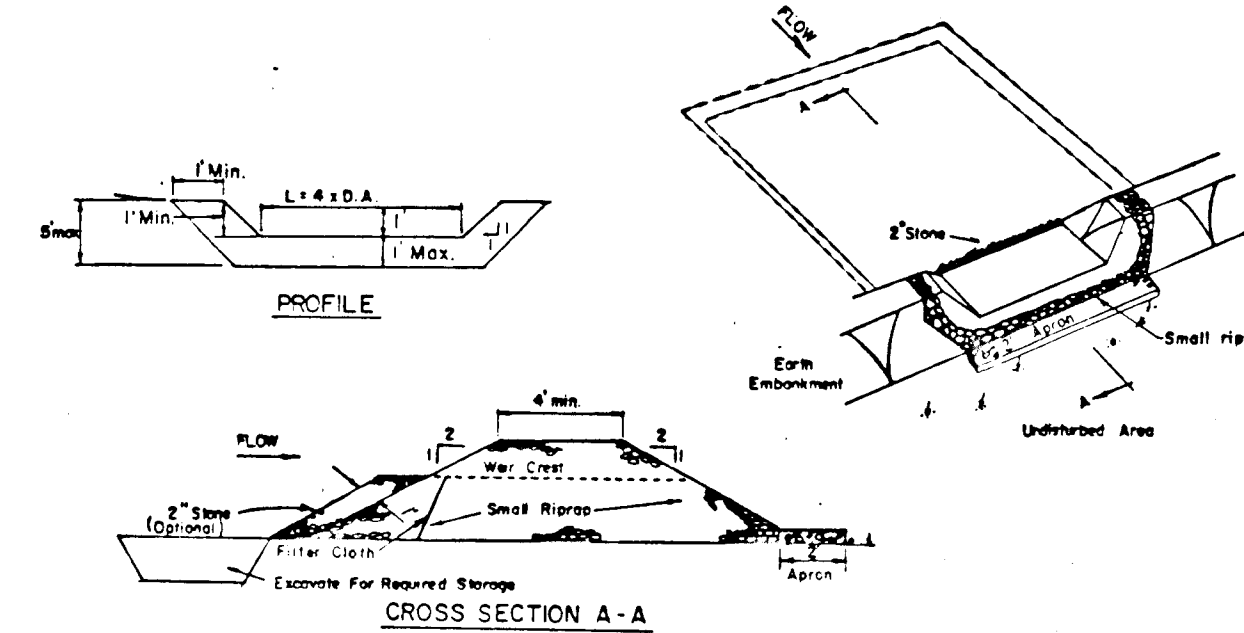
1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED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

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 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

- STONE TO BE 2 INCH STONE, OR RECLAIMED 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.
- PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

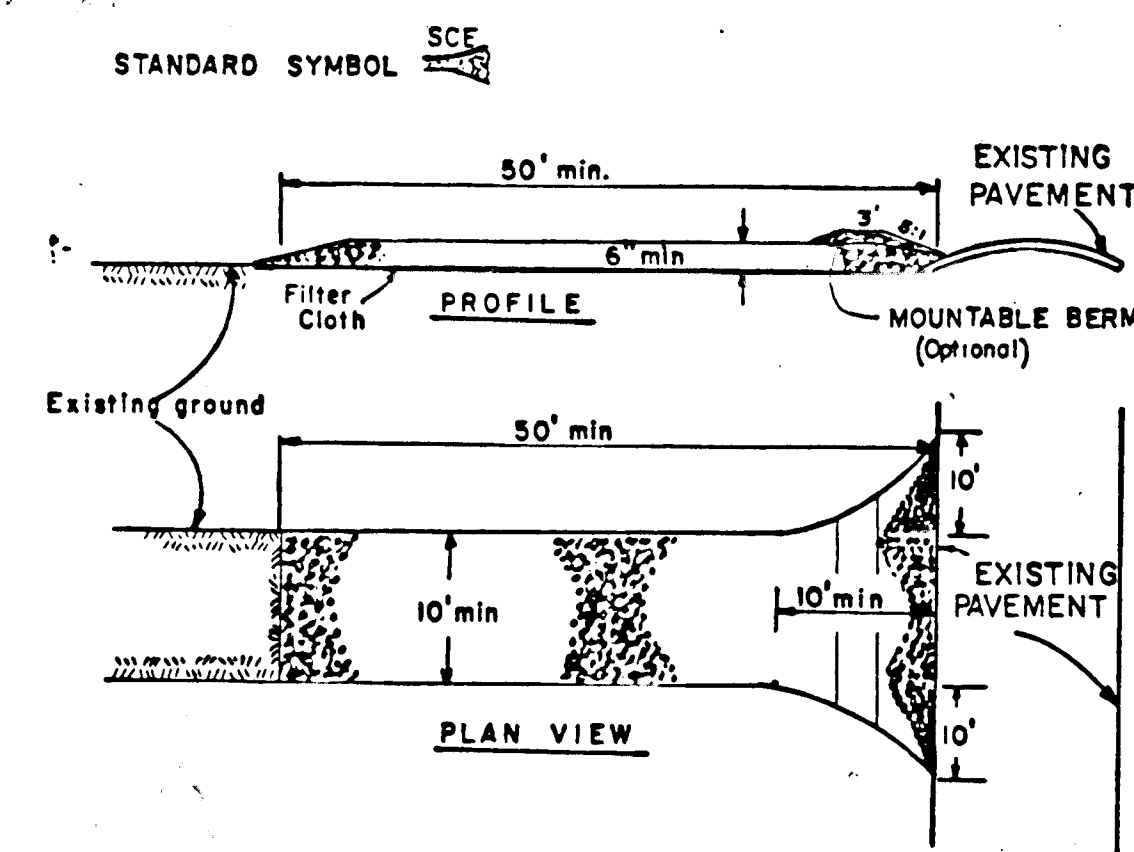
EARTH DIKE
 NOT TO SCALE



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-T**
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 on embedded filter cloth in the riprap.
 5. 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.
 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: 7/18/91

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 of Developer: *[Signature]* DATE: 7/18/91

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

Signature of District: *[Signature]* DATE: 7/31/91

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

Signature of District: *[Signature]* DATE: 7/31/91

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Signature: *[Signature]* DATE: 9/6/91

APPROVED: DEPARTMENT OF PUBLIC WORKS

Signature: *[Signature]* DATE: 9-3-91

APPROVED: DEPARTMENT OF PUBLIC WORKS

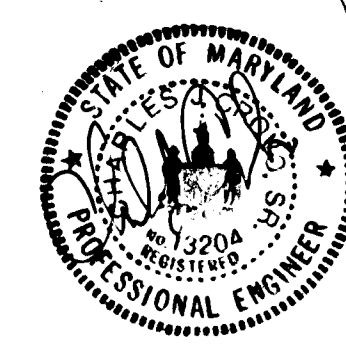
Signature: *[Signature]* DATE: 8/2/91

APPROVED: DEPARTMENT OF PUBLIC WORKS

Signature: *[Signature]* DATE: 8/26/91

SEDIMENT CONTROL NOTES AND DETAILS

MT. HEBRON
 SECTION 20 PHASE II
 LOTS 32-51
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 JULY 18, 1971 SCALE AS SHOWN
 SHEET 50 OF 59



OWNER AND DEVELOPER
 MT. HEBRON INC.
 2106 MT. HEBRON DRIVE
 ELLICOTT CITY, MARYLAND 21043

FISHER, COLLINS & CARTER, INC.
 LAND SURVEYORS
 SUITE 100, 9171 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21043
 (301) 461-2855

AS-BUILT
 7-20-95