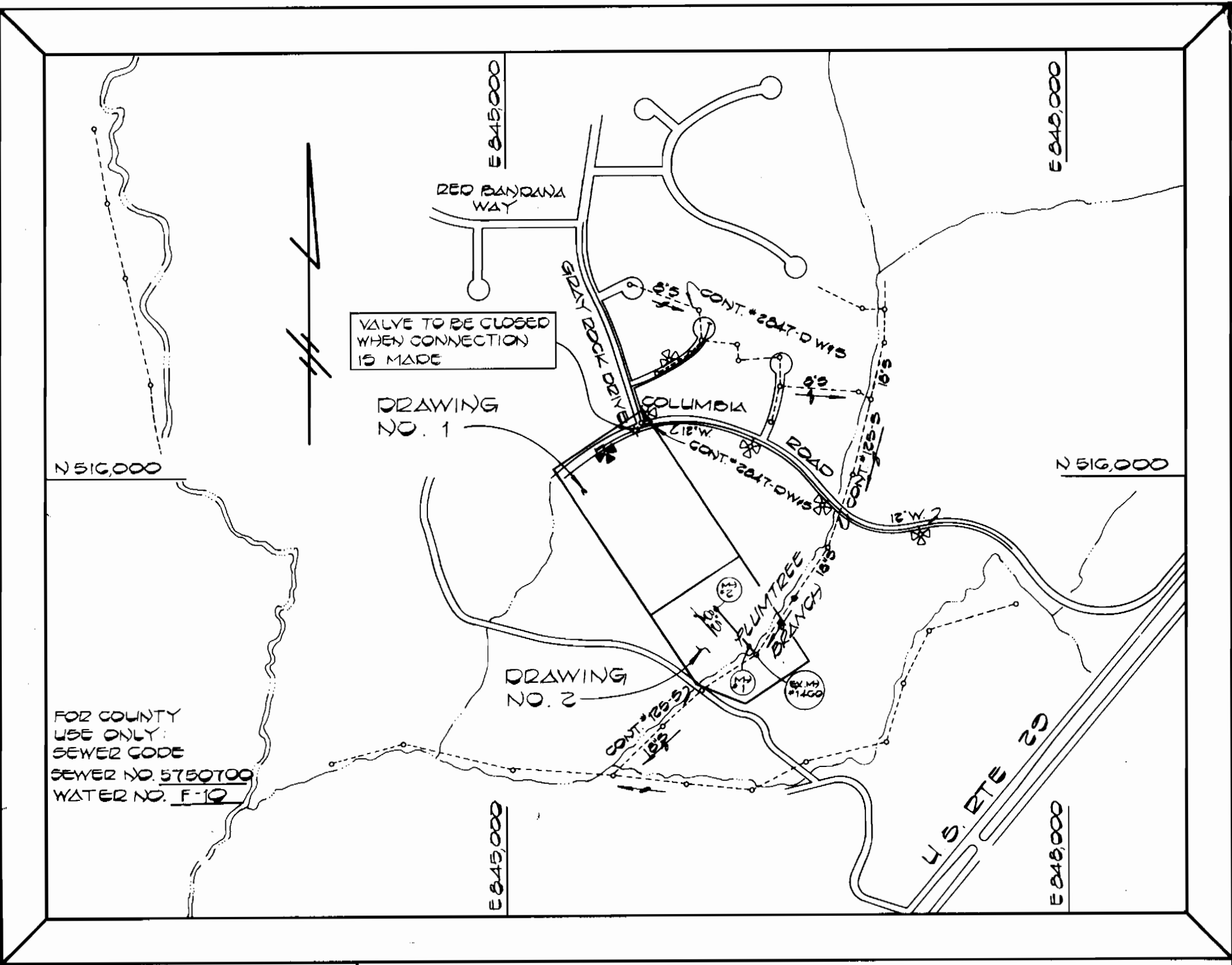
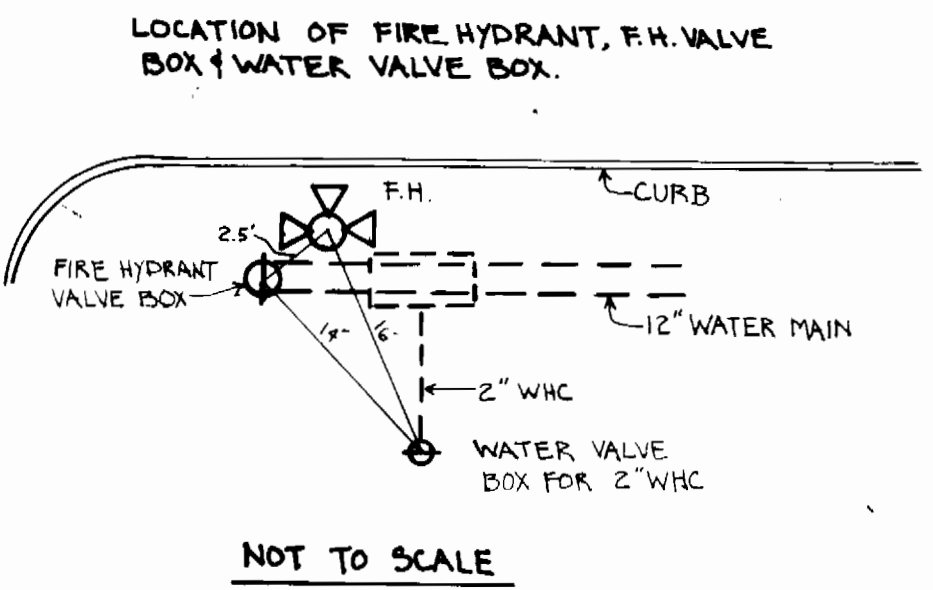


BENCH MARKS
 B.M.#1 ELEV. 325.77
 RIM OF EXISTING SEWER MANHOLE #1460
 ADJACENT TO PLUMTREE BRANCH.
 B.M.#2 ELEV. 382.91
 X-CUT ON CURB SOUTH SIDE OF COLUMBIA
 ROAD - OPPOSITE GRAY ROCK DRIVE



TYPE OF BUILDINGS: BATH HOUSE & POOL
 NUMBER OF PARCELS: ONE
 NUMBER OF SEWER HOUSE CONNS.: ONE
 DRAINAGE AREA: LITTLE PATHWEST

VICINITY MAP
 SCALE: 1" = 600'

GENERAL NOTES

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. ANY COST INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT THE POLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, USE HOWARD COUNTY STANDARD DETAILS.
- FOR MATERIAL AND CONSTRUCTION METHODS, USE HOWARD COUNTY STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF (2) WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF PROPOSED UTILITIES AT HIS OWN EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK ON THESE PLANS:
 BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE: 685-0123
 COLONIAL PIPELINE COMPANY: 781-4641
 BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE: 685-0123
 CHESAPEAKE AND POTOMAC TELEPHONE COMPANY: 725-9976
 BUREAU OF UTILITIES - HOWARD COUNTY: 992-2366
 "MISS UTILITY": 1-559-0100
- TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- PLACE REGULATION MEN WORKING AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
- ALL SEWER MAINS SHALL BE H.D.P.E., C.S.P.X., R.C.S.P., P.V.C., V.C.P.X. OR A.C.P. CLASS 2400 UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER, UNLESS OTHERWISE NOTED.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL G 552. WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP FRAME 1'-6" ABOVE FINISHED GRADE.
- ALL WATER MAINS TO BE C.I.P. OR D.I.P. UNLESS OTHERWISE NOTED.
- TOP OF WATER MAINS TO HAVE A MINIMUM OF 3'-6" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- BLOCK ALL FITTINGS WITH CONCRETE.
- BURY LINE ELEVATIONS ON FIRE HYDRANTS SHALL BE SET TO THE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT TO BE COMPACTED IN ACCORDANCE WITH SECTIONS 37.01 AND 37.05 OF THE STANDARD SPECIFICATIONS.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THE PASS ABOUT IT.
- TOPOGRAPHIC SURVEY PROVIDED BY HUDKINS ASSOCIATES, INC.
- ALL COPPER WATER HOUSE CONNECTIONS, UTILIZE FLARED TYPED FITTINGS ONLY.

QUANTITIES			
ITEM	EST'D	AS-BUILT	SUPPLIER
6" SEWER	406 L.F.	487 L.F. P.V.C.	NATIONAL PIPE CO.
6" SEWER	4.5 L.F.	2 L.F. P.V.C.	" "
MANHOLES	2 EA.	2 EA.	ATLANTIC PRECAST
12" WATER	3 L.F.	3 L.F. D.I.P. CL 52	GRIFFIN PIPE CO.
6" WATER	5 L.F.		
FIRE HYD.	1 EA.	1 EA.	DRESSER, METRO
6" FH VALVE	1 EA.	1 EA.	DRESSER
1 1/2" WHC	12 L.F.	11.5 L.F. COPPER	

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH THE PROVISIONS OF THESE SPECIFICATIONS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN. IT IS REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

James M. Delaney 5/3/83
 U.S. SOIL CONSERVATION SERVICE DATE

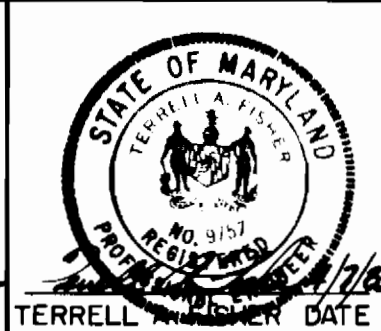
THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT APPROVED:

John J. Home 5-3-83
 HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
John F. Williams 5-6-83
 DIRECTOR OF PUBLIC WORKS DATE
Robert M. Beisinger 5-6-83
 CHIEF, BUREAU OF UTILITIES DATE

Richard E. Collins 5/6/83
 CHIEF, BUREAU OF ENGINEERING DATE
Melville L. Price 5-6-83
 CHIEF, LAND DEVELOPMENT DIVISION DATE

FISHER, COLLINS AND CARTER, INC.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043



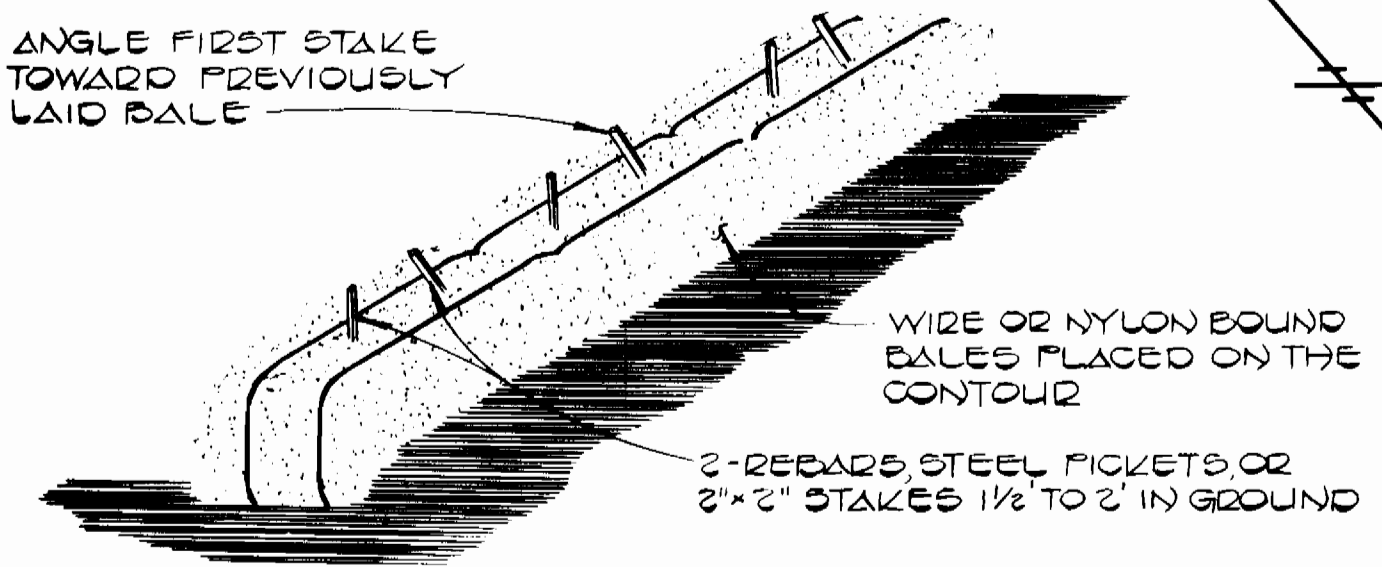
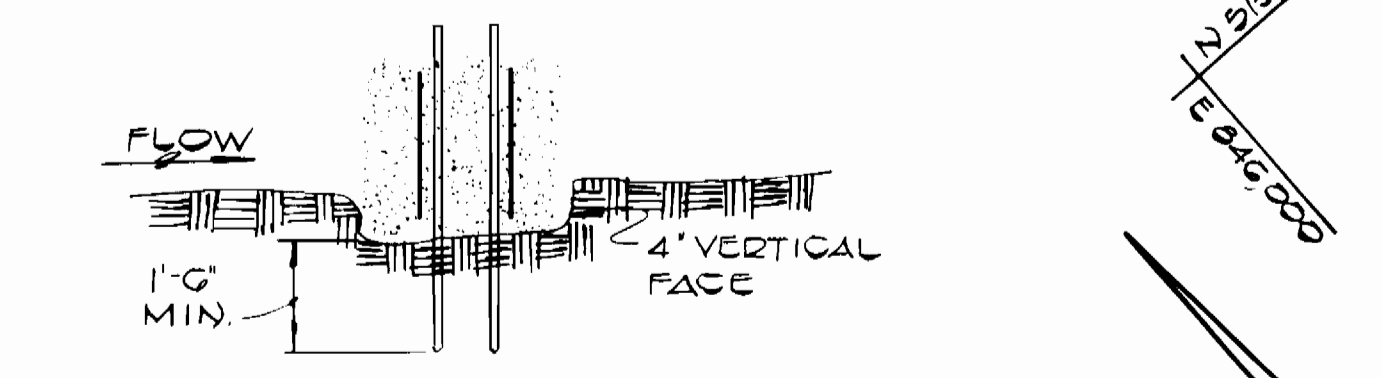
DES. D.B.S.			
DRN. D.B.S.			
CHK. T.A.F.			
DATE	BY	NO.	REVISION

PLAN
WATER AND SEWER MAINS

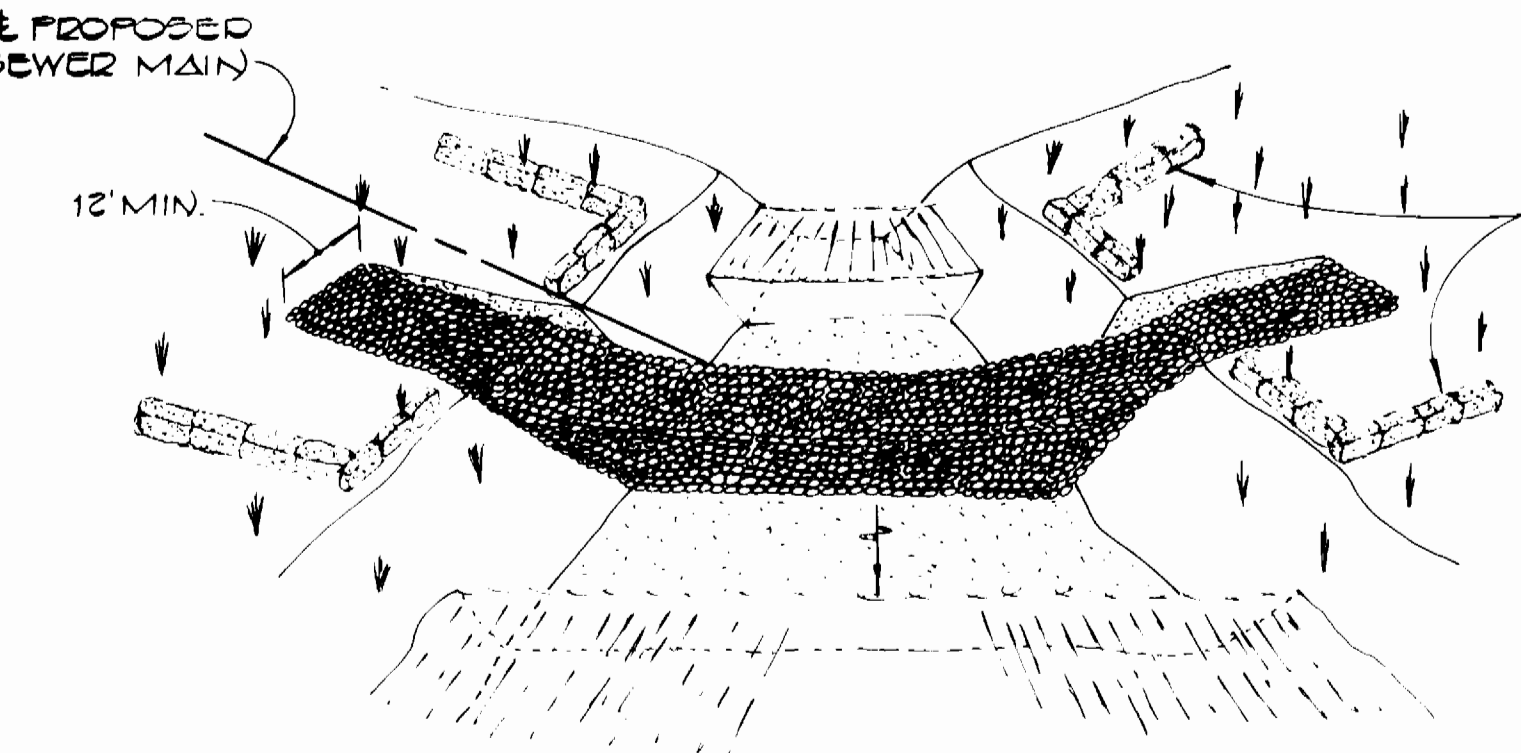
DORSEY HALL SECTION I AREA 3
LOT 146
COLUMBIA ASSOCIATION POOL FACILITY
CONTRACT NO. 24-1111-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN
 SHEET 1 OF 2

AS-BUILT JULY, 1983



STRAW BALE DIKE
NO SCALE

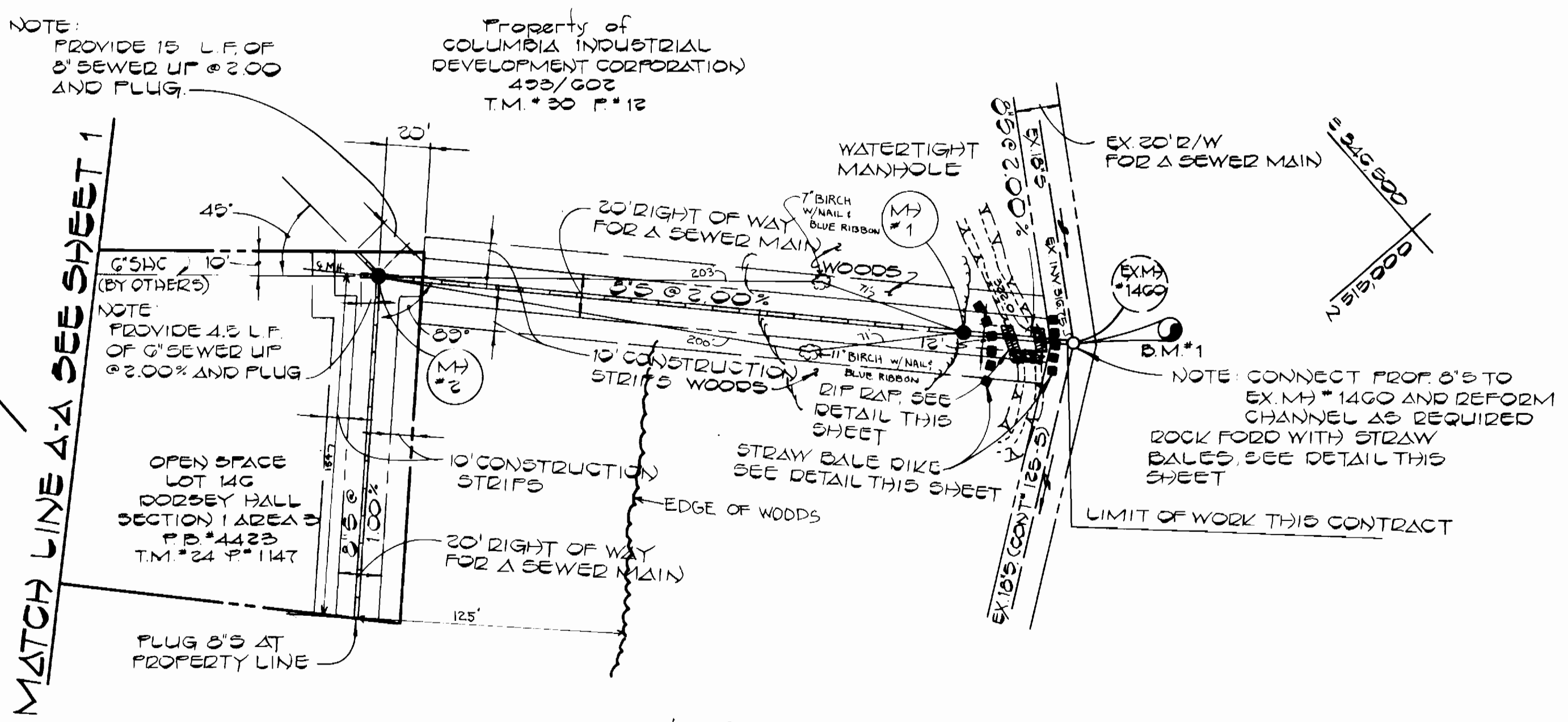


- ROCK FORD TO BE PLACED PRIOR TO CROSSING PLUMTREE BRANCH
- THERE WILL BE WATER 4" TO 6" MINIMUM DEEP RUNNING OVER THE FORD AT NORMAL WATER LEVEL
- FORD TO BE CONSTRUCTED OF 150 TO 300 LB ROCK WITH SMALLER ROCK ON THE TOP FOR THE RUNNING SURFACE
- THE BANK SHALL BE CUT BACK AT 5:1 SLOPE AT THE FORD
- THE CONTRACTOR SHALL NOT OPEN THE TRENCH ACROSS THE STREAM UNTIL THE PIPE IS ON SITE AND READY TO BE INSTALLED
- THE ROCK FORD SHALL REMAIN IN PLACE DURING INSTALLATION OF PIPE THROUGH STREAM
- UPON COMPLETION AND BACKFILLING, THE ROCK FORD SHALL BE REMOVED AND THE STONES PLACED ON THE DISTURBED STREAM BANK AS RIP RAP, SEE DETAIL THIS SHEET

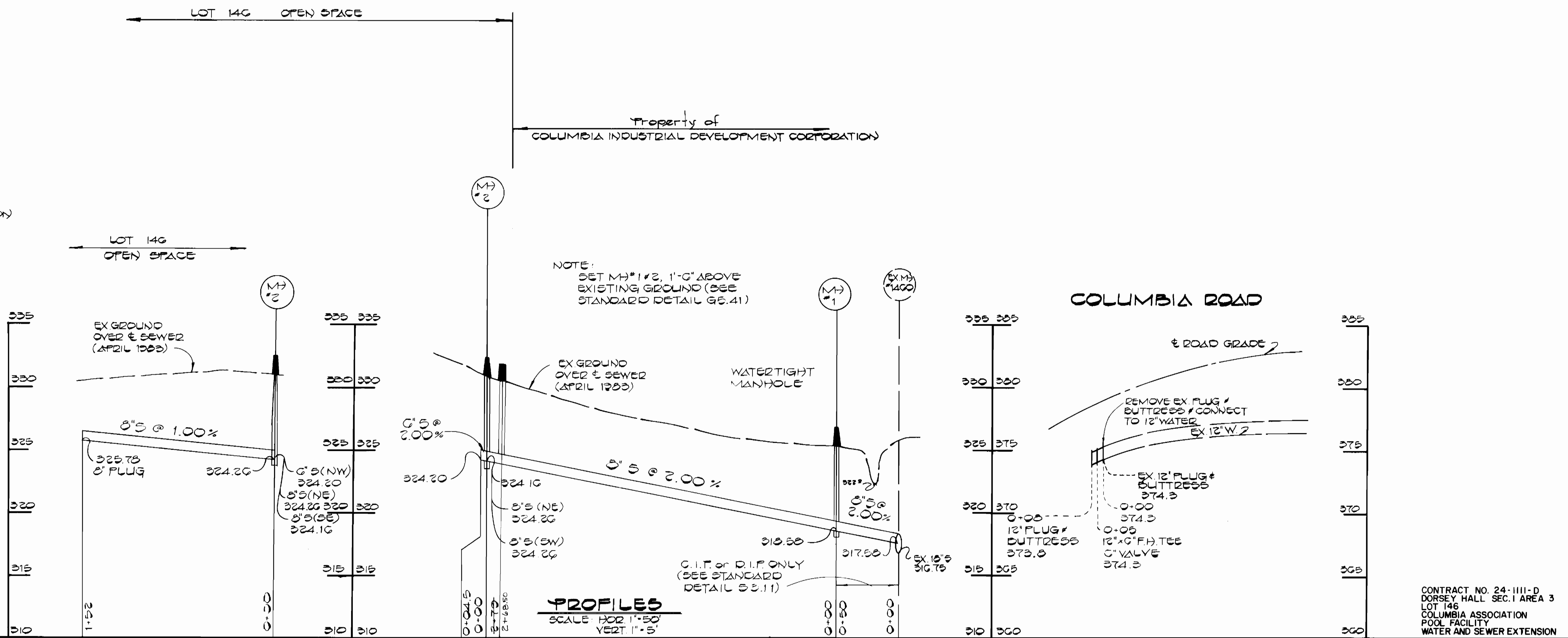
ROCK FORD WITH STRAW BALES
NO SCALE

CONSTRUCTION SEQUENCE

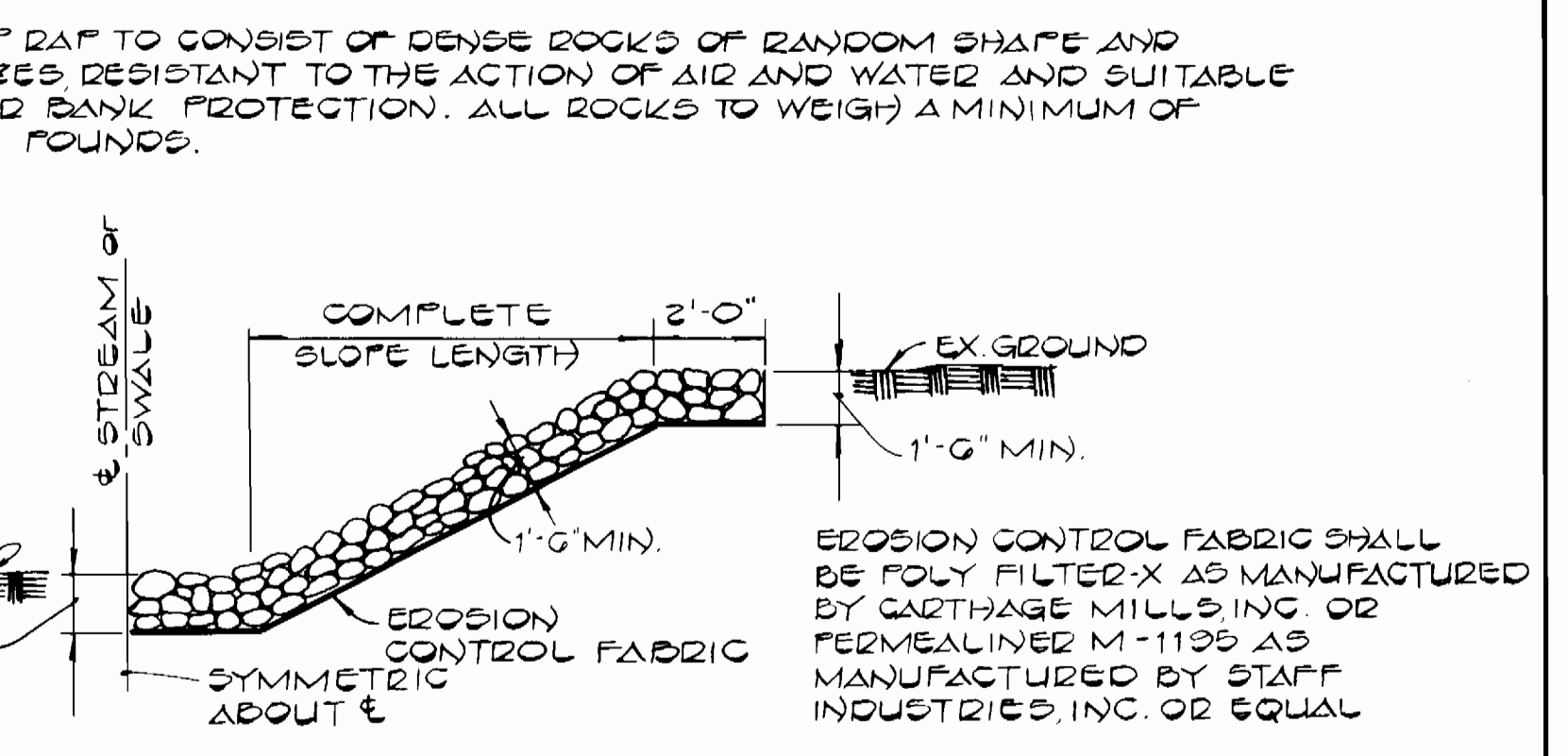
- OBTAIN NECESSARY CONSTRUCTION PERMITS
- INSTALL ROCK FORD AND STRAW BALE DIKES
- EXCAVATE, INSTALL AND BACKFILL 8" SEWER MAIN
- STABILIZE AREAS DISTURBED BY SEWER CONSTRUCTION
- REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE. ALL DISTURBED AREAS DUE TO THIS REMOVAL



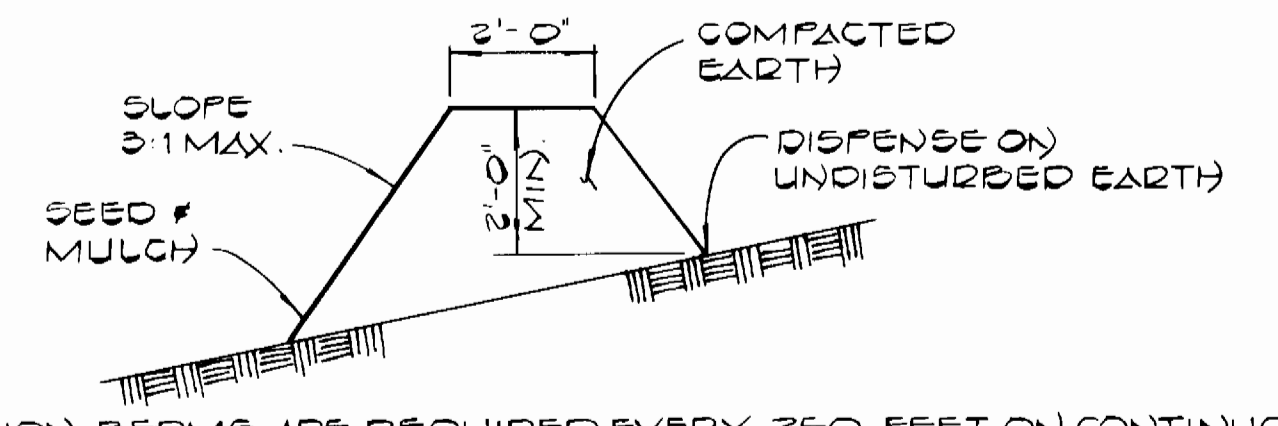
PLAN
SCALE 1"=50'



PROFILES
SCALE HOR 1"=50' VERT 1"=5'



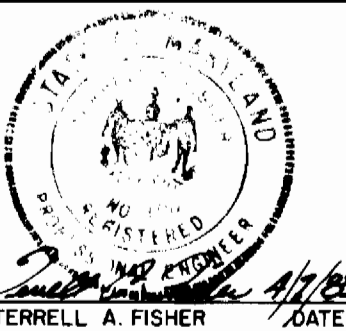
UNGRADED RIP RAP DETAIL
NO SCALE



TEMPORARY EARTH DIVERSION BERM
NO SCALE

DEPARTMENT OF PUBLIC WORKS
 Director of Public Works: *Robert M. ...* 5-6-83
 Chief, Bureau of Engineering: *...* 5/6/83
 Chief, Bureau of Utilities: *...* 5-6-83
 Chief, Land Development Division: *...*

FISHER, COLLINS AND CARTER, INC.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043
 Terrell A. Fisher



DES: D.B.S.			
DRN: D.B.S.			
CHK: T.A.F.			
DATE	BY	NO.	REVISION

PROFILES AND DETAILS
 WATER AND SEWER MAINS

DORSEY HALL SECTION I AREA 3
 LOT 146
 COLUMBIA ASSOCIATION POOL FACILITY
 CONTRACT NO. 24-1111-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 2 OF 2