
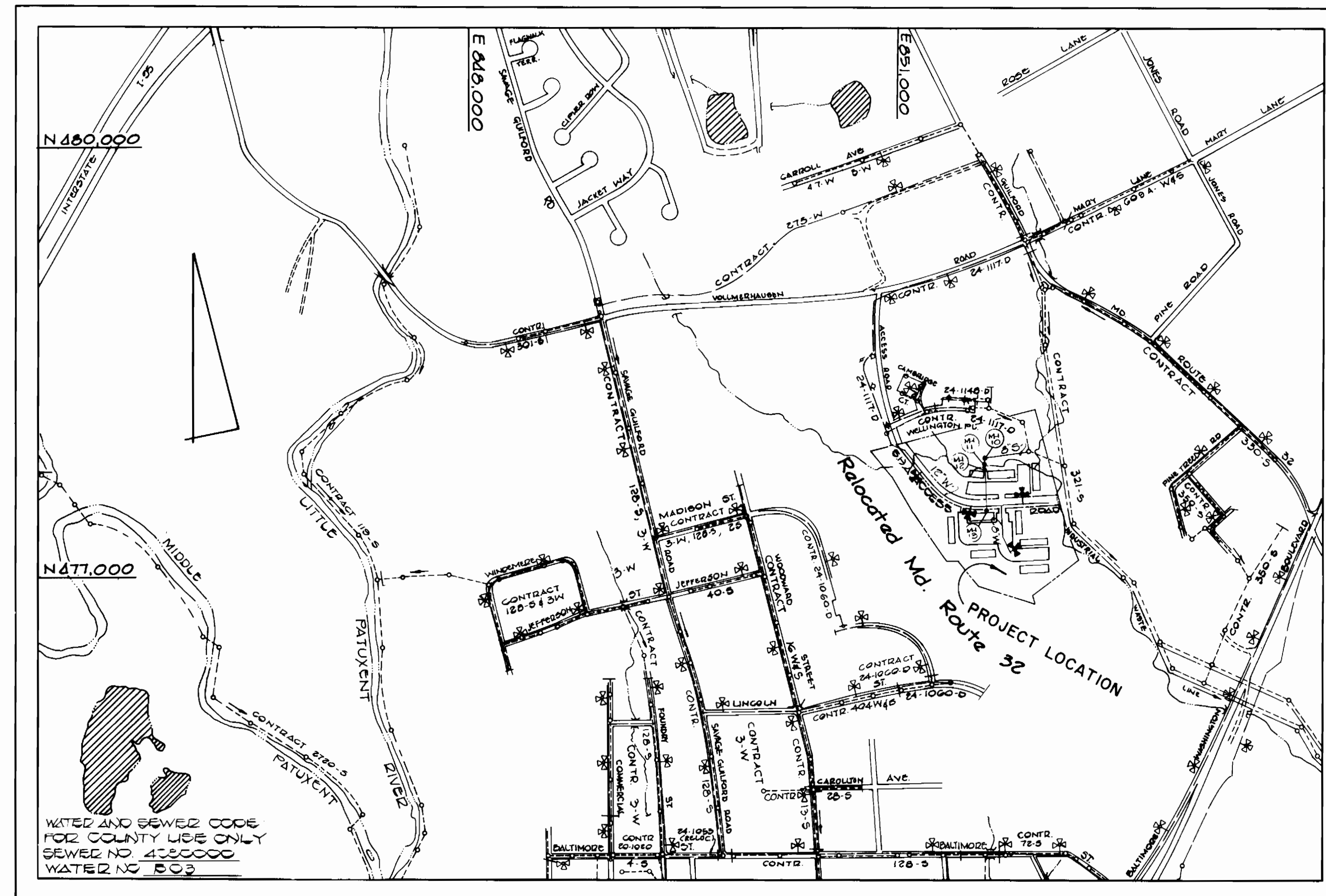


GENERAL NOTES

- 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. DATA.
- 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. THE OWNER HAS CONTACTED THE UTILITIES COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - BALTIMORE GAS & ELECTRIC COMPANY-CONTRACTOR SERVICES-561-2585
 - BALTIMORE GAS & ELECTRIC COMPANY-UNDER GROUND DAMAGE CONTROL-234-5621
 - BALTIMORE GAS & ELECTRIC COMPANY-TROUBLE SHOOTING-298-9013
 - "MISS UTILITY" - 1-559-0100
 - CHESAPEAKE & POTOMAC TELEPHONE COMPANY - 725-9976
 - BUREAU OF UTILITIES-HOWARD COUNTY - 992-2366
- 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 UNLESS OTHERWISE NOTED. C.S.P.X., R.C.S.P., P.V.C. OR A.C.P. CLASS 2400
- 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.
- ALL WATER MAINS TO BE 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.
- 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 SECTION 1003 AND 1008 OF THE STANDARD SPECIFICATIONS.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN OUTSIDE 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 THEY PASS ABOUT IT.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL G5 51
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL G5 52. WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- FOR ALL COPPER WATER HOUSE CONNECTIONS, UTILIZE FLARED TYPED FITTINGS ONLY.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL  AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- INSTALLATION OF 2" W.P.C. SHALL BE IN ACCORDANCE WITH SECTION 200.13.03 AND DETAIL W.D. 24 ATTACHED TO SPECIAL PROVISIONS.

QUANTITIES			
ITEM	EST'D	AS BUILT	SUPPLIER
12" WATER	1227 L.F.	1227 L.F.	GRIFFIN
8" WATER	365 L.F.	362 L.F.	GRIFFIN
6" WATER	60 L.F.	61 L.F.	GRIFFIN
2" W.H.C.	240 L.F.	240 L.F.	CAMBRIDGE LEE
METER VAULTS	10 EA.	10 EA.	ATLANTIC
FIRE HYDRANTS	4 EA.	4 EA.	M&H
8" SEWER	760 L.F.	743 L.F.	NAT'L P.V.C.
6" SEWER	30 L.F.	17 L.F.	NAT'L P.V.C.
MANHOLES	4 EA.	4 EA.	ATLANTIC
12" VALVES	1 EA.	1 EA.	M&H
8" VALVES	1 EA.	1 EA.	M&H
6" VALVES	4 EA.	4 EA.	M&H

CONTRACTOR SHALL VERIFY QUANTITIES TO THEIR OWN SATISFACTION PRIOR TO BIDDING.



TYPE OF BUILDING	Apartments
NUMBER OF LOTS	3
NO. OF WATER HOUSE CONNECTIONS	10
NO. OF SEWER HOUSE CONNECTIONS	4
DRAINAGE AREA	Little Patuxent

SCALE: 1" = 600'

CONTRACT NO.24-1260-D

AUTUMN WOODS

WATER AND SEWER MAIN EXTENSIONS

HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH ARTICLE 15 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F 85-13

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

APPROVED: *Stephen L. Fisher* 9/7/84
HOWARD SOIL CONSERVATION DISTRICT

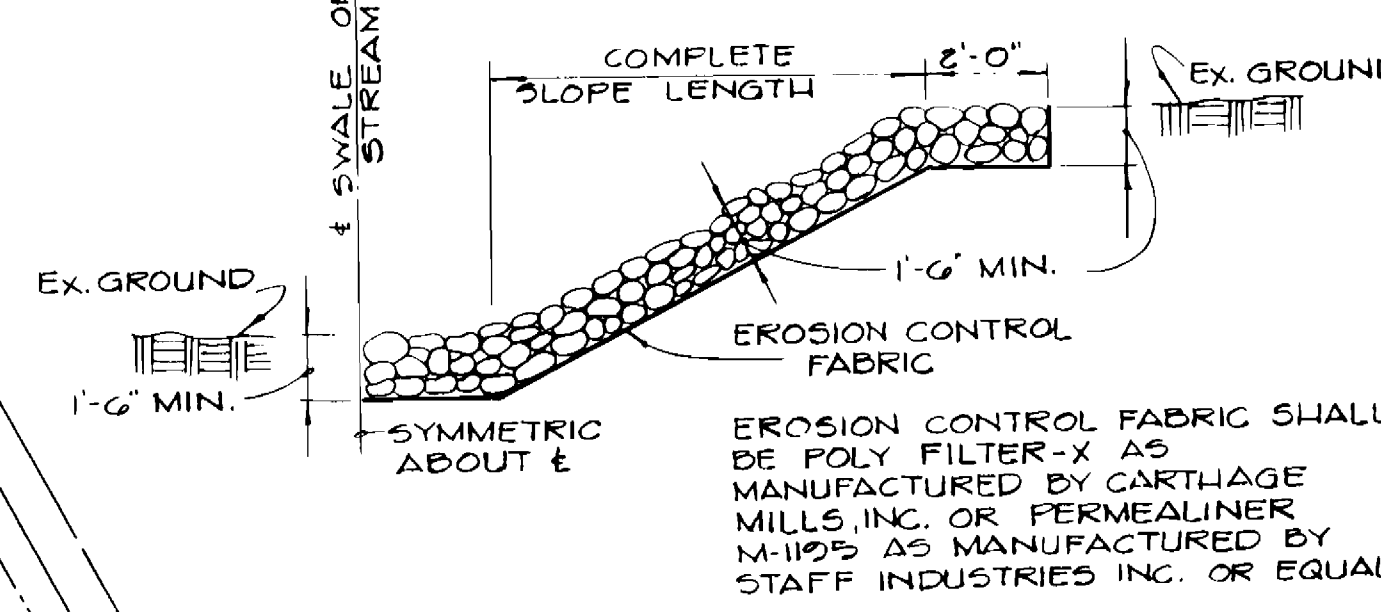
REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
U.S. SOIL CONSERVATION SERVICE 9-7-84 DATE

CONTRACT NO.24-1260-D
AUTUMN WOODS
WATER AND SEWER EXTENSION
HOWARD COUNTY, MARYLAND

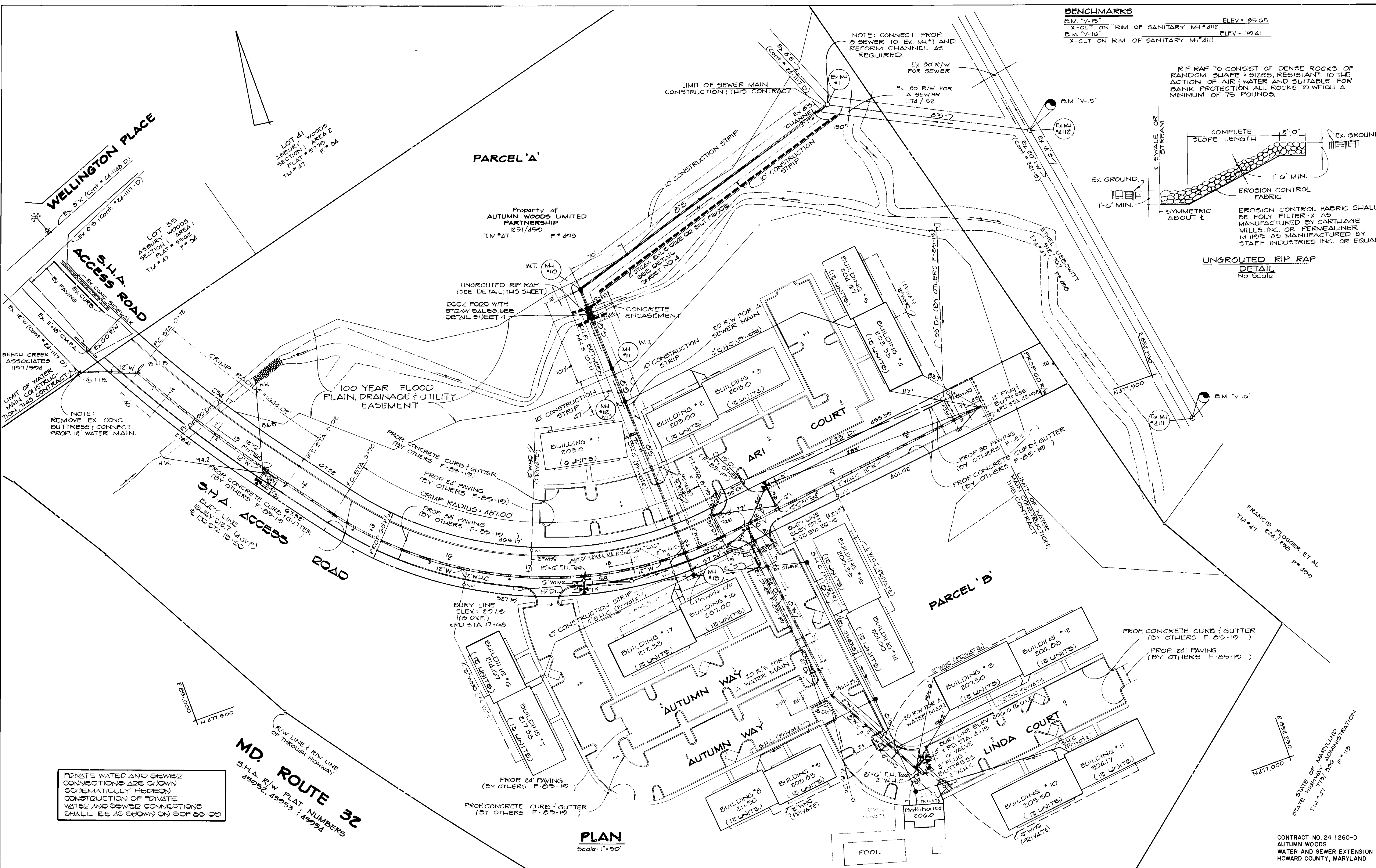
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director: <i>John F. Nimmer</i> 9-11-84 Chief, Bureau of Engineering: <i>William E. Kelly</i> 9/11/84 Chief, Bureau of Utilities: <i>Robert M. Berger</i> 9-11-84 Chief, Land Development Division: <i>William E. Kelly</i> 9-11-84	FISHER, COLLINS, AND CARTER, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043	DES. DEV./D.S. DRN. D.E.V. CHK. T.A.F. DATE: 7/13/84	TITLE SHEET
AUTUMN WOODS CONTRACT NO.24-1260-D SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND			SCALE AS SHOWN SHEET 1 OF 4

BENCHMARKS
 B.M. "V-15" ELEV. 105.05
 X-CUT ON RIM OF SANITARY M#4112 ELEV. 110.41
 B.M. "V-16" ELEV. 110.41
 X-CUT ON RIM OF SANITARY M#4111

RIP RAP TO CONSIST OF DENSE ROCKS OF RANDOM SHAPE, SIZE, RESISTANT TO THE ACTION OF AIR, WATER, AND SUITABLE FOR BANK PROTECTION. ALL ROCKS TO WEIGH A MINIMUM OF 75 POUNDS.



UNGROUTED RIP RAP
 DETAIL
 No Scale



PLAN
 Scale: 1"=50'

PRIVATE WATER AND SEWER CONNECTIONS ARE SHOWN SCHEMATICALLY HEREON. CONSTRUCTION OF PRIVATE WATER AND SEWER CONNECTIONS SHALL BE AS SHOWN ON S.O.P. 05-00

MD. ROUTE 32
 S.H.A. E/W PLAT NUMBERS
 4552, 4553, 4554, 4555, 4556, 4557, 4558, 4559, 4560, 4561, 4562, 4563, 4564, 4565, 4566, 4567, 4568, 4569, 4570, 4571, 4572, 4573, 4574, 4575, 4576, 4577, 4578, 4579, 4580, 4581, 4582, 4583, 4584, 4585, 4586, 4587, 4588, 4589, 4590, 4591, 4592, 4593, 4594, 4595, 4596, 4597, 4598, 4599, 4600

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *Robert M. Beemer*
 Chief, Bureau of Utilities: *Robert M. Beemer*
 DATE: 7-11-84

FISHER, COLLINS AND CARTER, INC.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043
 461-2855



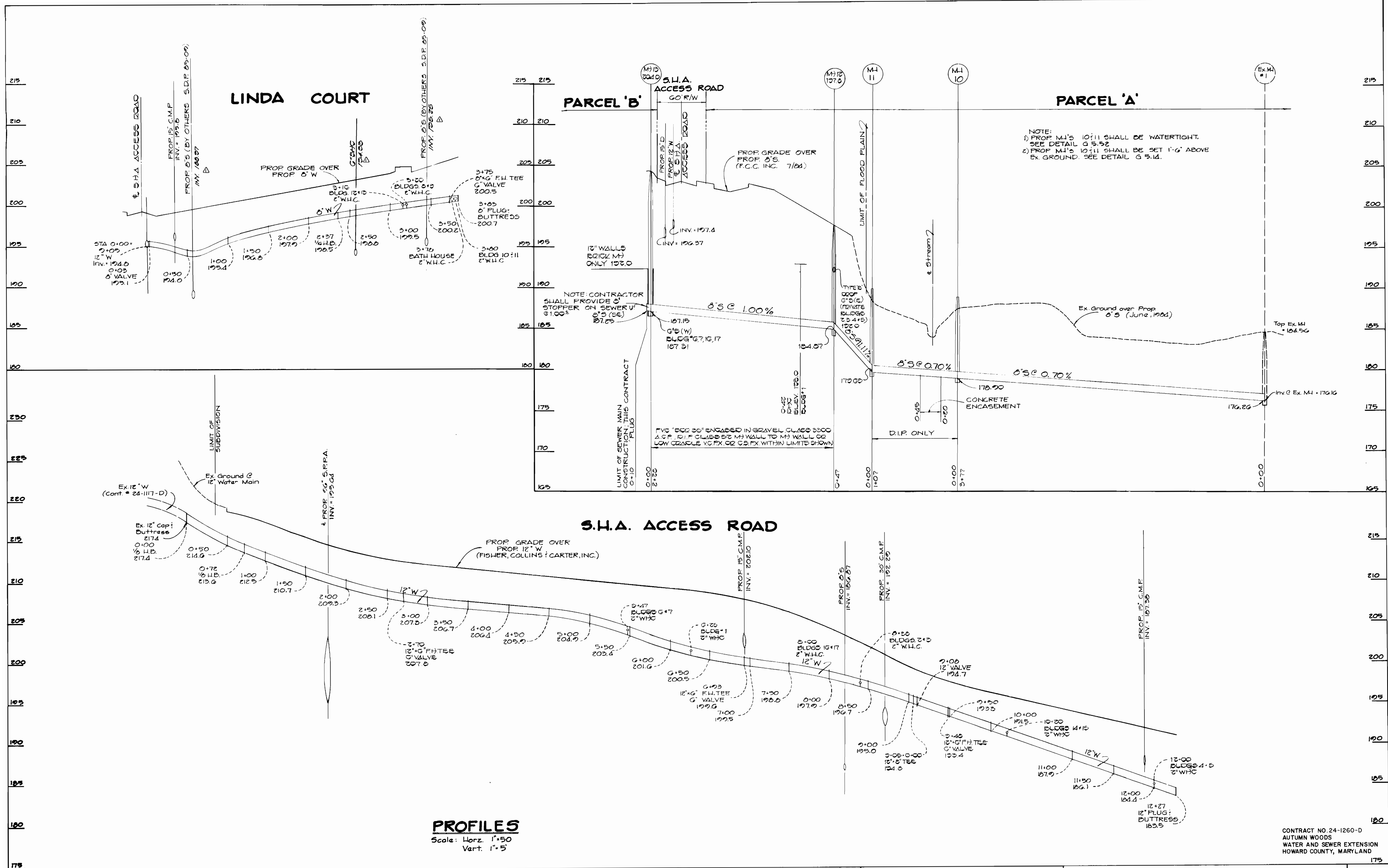
DES: DEV/DBS	BY: NO	DATE: 7/10/84
DRN: DEV	REVISION	DATE
CHK: T.A.F.		

PLAN
 WATER AND SEWER MAINS

AUTUMN WOODS
 CONTRACT NO. 24-1260-D
 SIXTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 2 OF 4

CONTRACT NO. 24-1260-D
 AUTUMN WOODS
 WATER AND SEWER EXTENSION
 HOWARD COUNTY, MARYLAND



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS
David M. Beatty
DATE 9/11/84

CHEF, BUREAU OF UTILITIES

CHIEF, BUREAU OF ENGINEERING
William E. Carter
DATE 9/11/84

CHIEF, LAND DEVELOPMENT DIVISION

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS

8388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043
461-2855

STATE OF MARYLAND
Professional Engineer Seal
William E. Carter

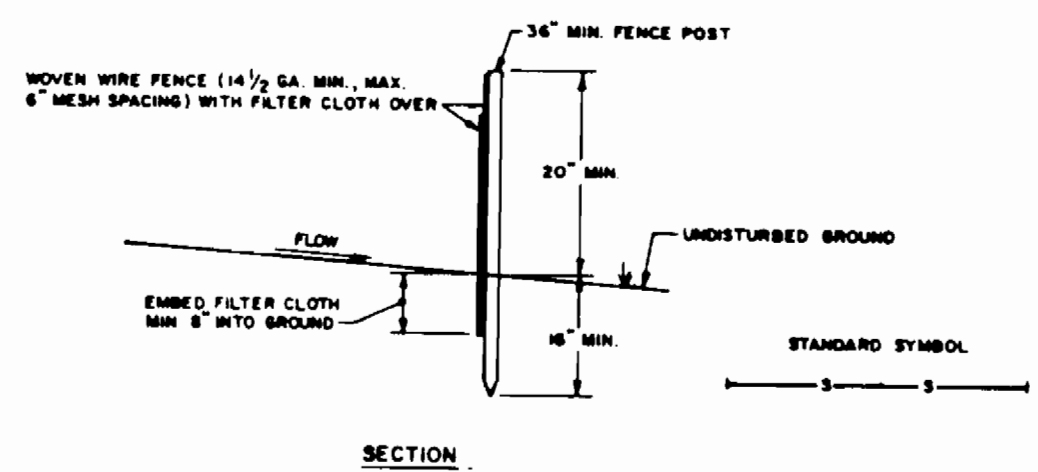
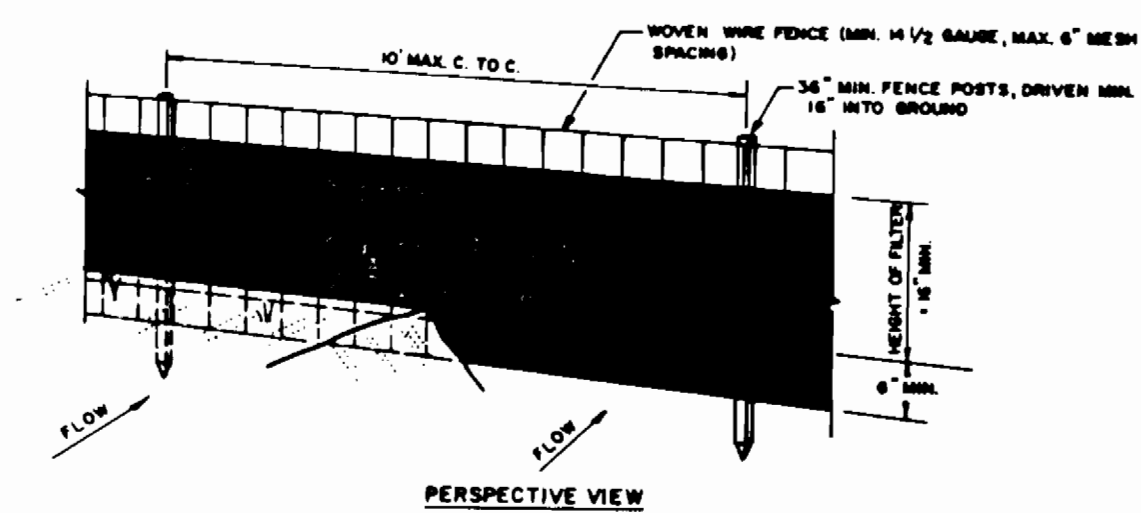
DES: DEV/DBS	DATE: 7/13/84
DRN: D.E.V.	BY: DBS
CHK: T.A.F.	NO:
REVISION	
DATE	600' SCALE MAP NO. 47 BLOCK NO.

PROFILE
WATER AND SEWER MAINS

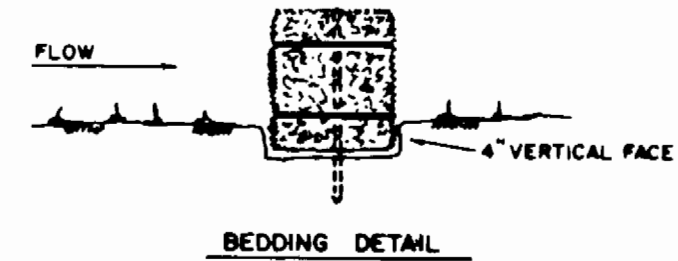
SCALE AS SHOWN

AUTUMN WOODS
CONTRACT NO. 24-1260-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

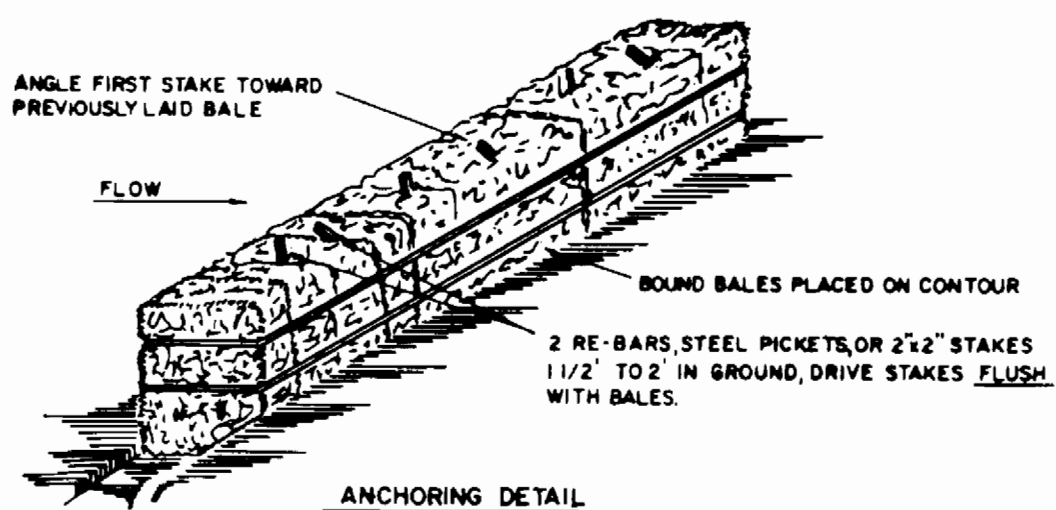
SHEET 3 OF 4



SILT FENCE
NO SCALE

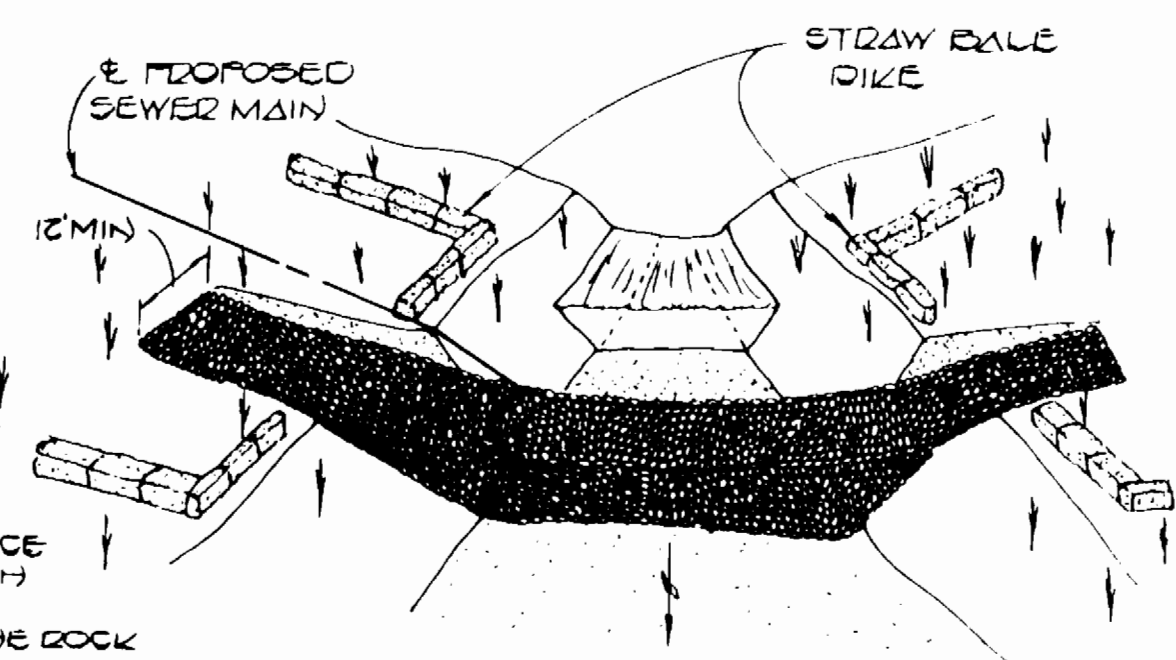


STANDARD SYMBOL



STRAW BALE DIKE
NO SCALE

1. ROCK FORD TO BE PLACED PRIOR TO CROSSING STREAM.
2. THERE WILL BE WATER 4" TO 6" MINIMUM DEEP RUNNING OVER THE FORD AT NORMAL WATER LEVEL.
3. FORD TO BE CONSTRUCTED OF 150 TO 300 LB. ROCK WITH SMALLER ROCK ON THE TOP FOR THE RUNNING SURFACE.
4. THE BANK SHALL BE CUT BACK AT 3:1 SLOPE AT THE FORD.
5. THE CONTRACTOR SHALL NOT OPEN THE TRENCH ACROSS THE STREAM UNTIL THE PIPE IS ON SITE AND READY TO BE INSTALLED.
6. THE ROCK FORD SHALL REMAIN IN PLACE DURING INSTALLATION OF PIPE THROUGH STREAM.
7. UPON COMPLETION AND BACKFILLING THE ROCK FORD SHALL BE REMOVED AND THE STONES PLACED ON THE DISTURBED STREAM BANK AS SHOWN ON THIS SHEET.



ROCK FORD WITH STRAW BALES
NO SCALE

CONTRACT NO. 24-1260-D
AUTUMN WOODS
WATER AND SEWER EXTENSION
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
9-11-84
9-11-84

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLCOTT CITY, MARYLAND
461-2855

DES: D.B.S.	
DRN: D.B.S.	
CHK: T.A.F.	
DATE: 8/31/84	

SEDIMENT CONTROL
DETAILS
WATER AND SEWER MAINS

AUTUMN WOODS
CONTRACT NO. 24-1260-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 4 OF 4