
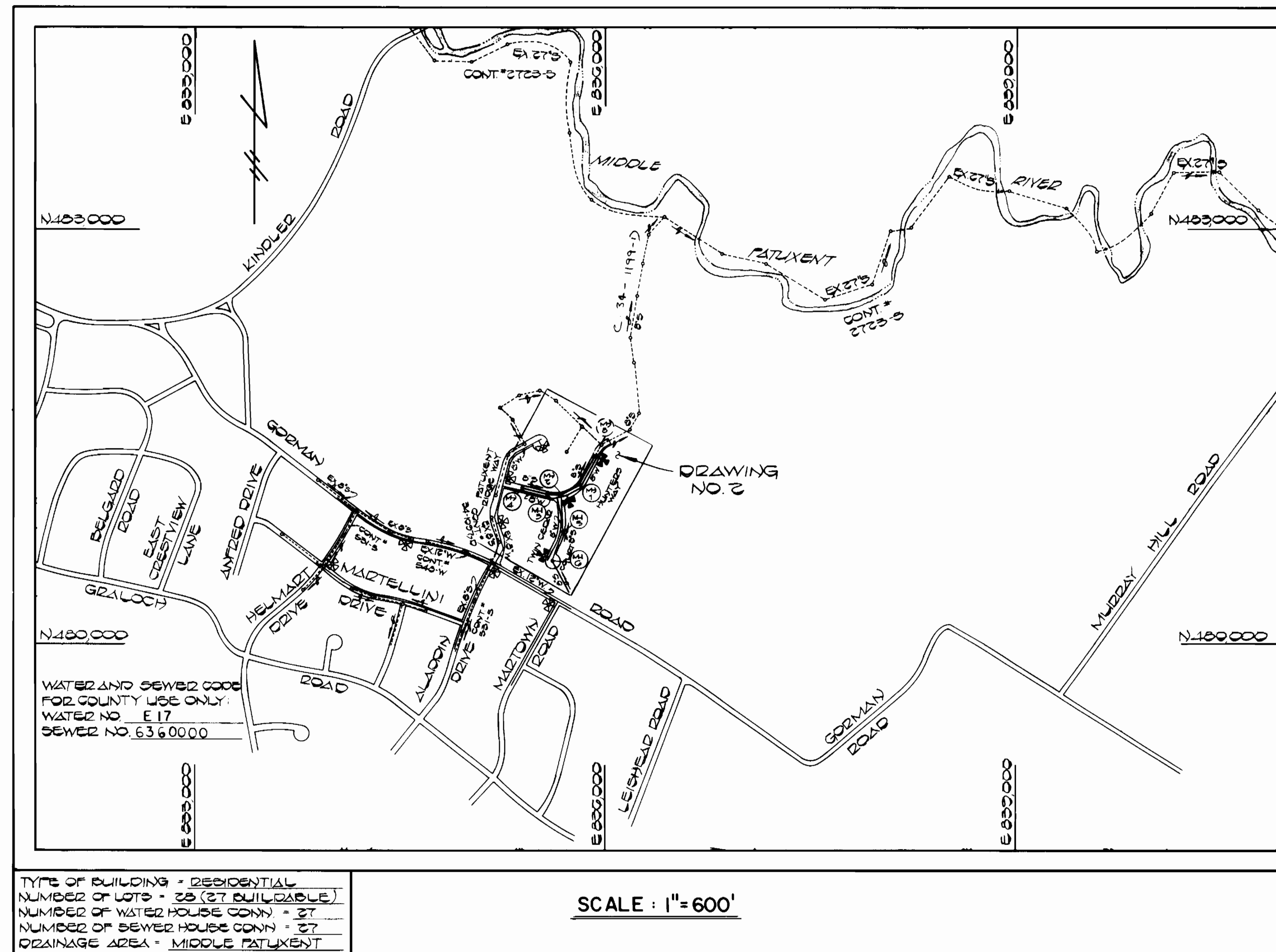


GENERAL NOTES

- 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 TUNNELS AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITY 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 TO 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 CO. - CONTRACTOR SERVICES - 561-2585
 - BALTIMORE GAS & ELECTRIC CO. UNDER GROUND DAMAGE CONTROL - 234-5621
 - BALTIMORE GAS & ELECTRIC CO. TROUBLE SHOOTING - 298-9013
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - 992-2366
 - "MISS UTILITY" - 1-559-0100
 - CHESAPEAKE & POTOMAC TELEPHONE COMPANY - 725-9976
- 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 C.S.P.X., 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.
- 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 & 1008 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 THEY PASS ABOUT IT.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL 65-51.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 65-92, 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.

QUANTITIES			
ITEM	EST'D	AS BUILT	SUPPLIER
6" WATER	1,324 L.F.	1,324 L.F.	GRIFFIN
6" WATER	131 L.F.	131 L.F.	
1" WHC	225 L.F.	225 L.F.	BELAIR RD SUPPLY
3/4" WHC	310 L.F.	310 L.F.	
FIRE HYD.	3 EA.	3 EA.	
6" SEWER	1376 L.F.	1376 L.F.	J.M. PVC PRODUCTS
6" SEWER	665 L.F.	665 L.F.	
MANHOLES	7 EA.	7 EA.	BELAIR RD SUPPLY
8" SADDLES	1 EA.	1 EA.	BELAIR RD SUPPLY
6" VALVES	2 EA.	2 EA.	US
6" VALVES	3 EA.	3 EA.	US
BLOWOFF	1 EA.	1 EA.	



CONTRACT NO. 34-1202-D
WARFIELD'S RANGE
SECTION TWO AREA TWO
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

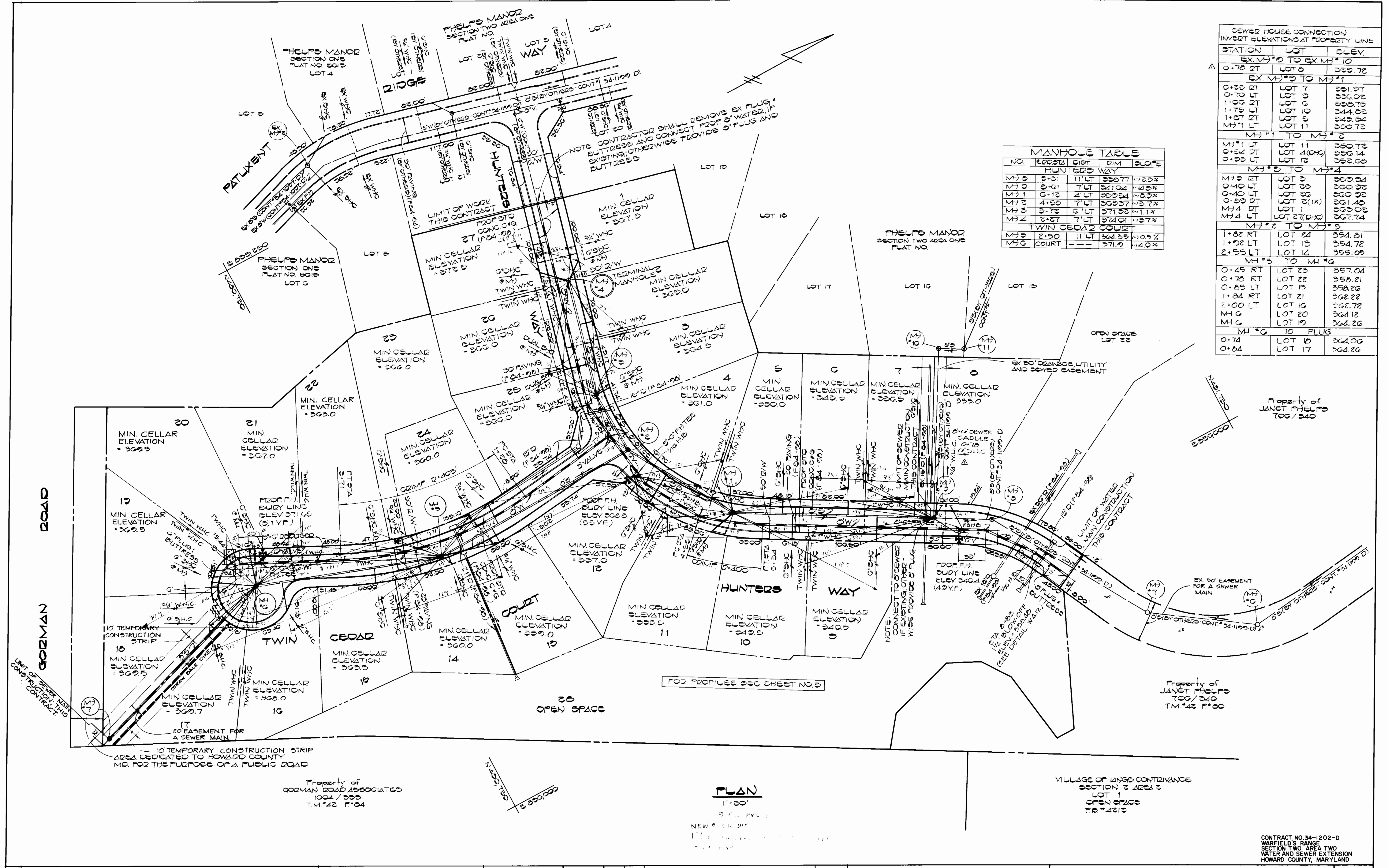
ALL SEDIMENT CONTROL OPERATIONS ARE TO BE DONE IN ACCORDANCE WITH ARTICLE 15 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F-84-98

REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
 Approved: *James M. Vella* 1-30-85
 U.S. SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT
 APPROVED: *Stephen K. Huber* 1/30/85
 HOWARD SOIL CONSERVATION DISTRICT DATE

CONTRACT NO. 34-1202-D
 WARFIELD'S RANGE
 SECTION TWO AREA TWO
 WATER AND SEWER EXTENSION
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director: <i>Robert M. Baunier</i> 2-8-85 CHIEF, BUREAU OF UTILITIES DATE	FISHER, COLLINS, AND CARTER, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043 Chief: <i>Terrell A. Fisher</i> 2/8/85 CHIEF, LAND DEVELOPMENT DIVISION DATE	STATE OF MARYLAND TERRELL A. FISHER DATE	DES. D.B.S. DRN. D.B.S. CHK. T.A.F. DATE: 12-22-85	TITLE SHEET	WARFIELD'S RANGE SECTION TWO AREA TWO CONTRACT NO. 34-1202-D SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 1 OF 3
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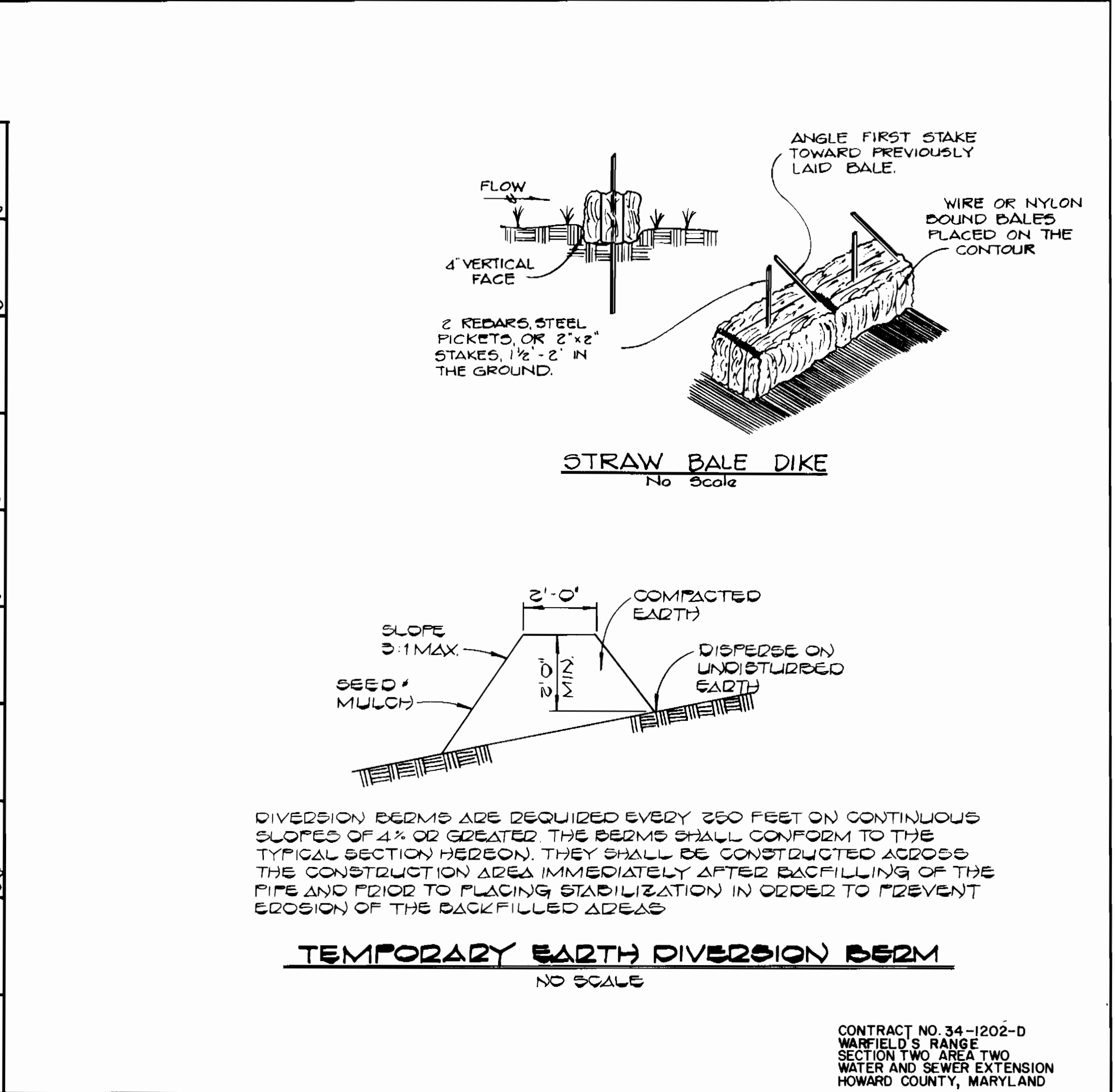
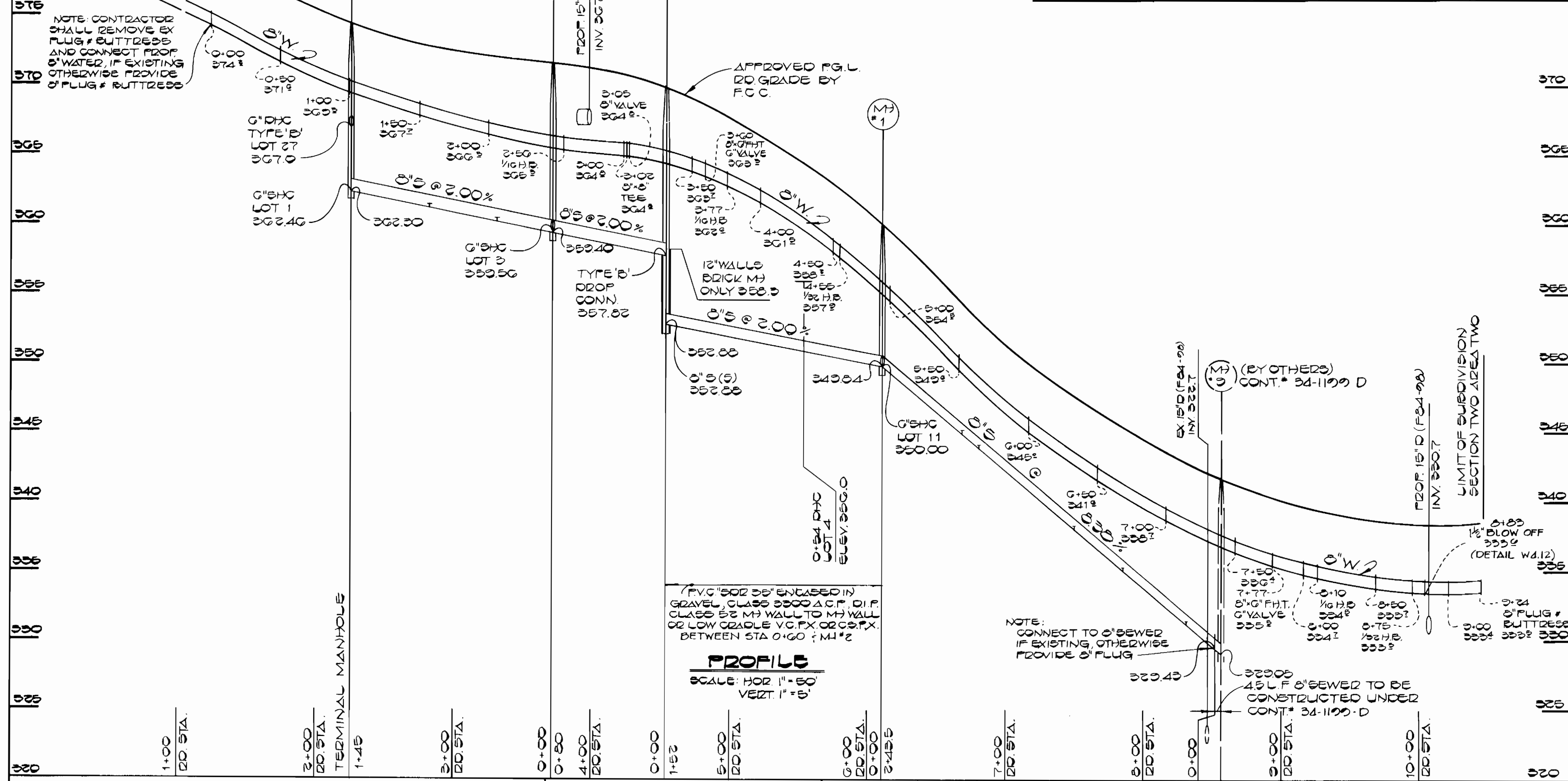
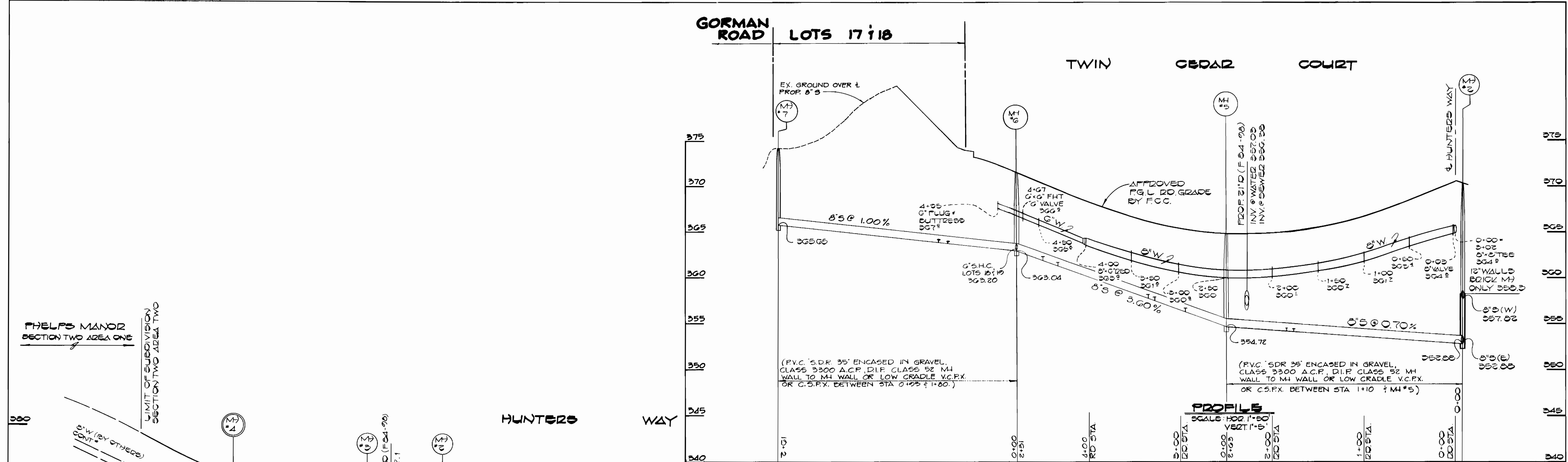
MANHOLE TABLE

NO.	ELEVATION	DIST.	DIM.	SLOPE
HUNTERS WAY				
MH 0	3+01	11' LT	338.77	0.25%
MH 1	0+12	7' LT	341.04	0.43%
MH 2	4+55	7' LT	339.57	0.37%
MH 3	3+72	6' LT	371.52	1.1%
MH 4	3+27	7' LT	374.01	0.7%
TWIN CEDAR COURT				
MH 5	2+50	11' LT	364.35	0.05%
MH 6	COURT	---	371.9	1.0%

SEWER HOUSE CONNECTION INVERT ELEVATIONS AT PROPERTY LINE

STATION	LOT	ELEV.
EX. MH #0 TO EX. MH #10		
0+78 RT	LOT 9	333.72
EX. MH #3 TO MH #1		
0+25 RT	LOT 7	331.97
0+70 LT	LOT 9	330.02
1+00 LT	LOT 9	330.75
1+75 LT	LOT 10	344.02
1+87 RT	LOT 9	345.54
MH #1 LT	LOT 11	350.72
MH #1 TO MH #2		
MH #1 LT	LOT 11	350.72
0+54 RT	LOT 4(DX)	352.14
0+35 LT	LOT 12	352.60
MH #3 TO MH #4		
MH 3 RT	LOT 9	350.34
0+40 LT	LOT 25	350.32
0+40 RT	LOT 25	350.32
0+59 RT	LOT 2(1X)	351.40
MH 4 RT	LOT 1	350.02
MH 4 LT	LOT 2(DX)	357.74
MH #2 TO MH #5		
1+82 RT	LOT 24	354.31
1+92 LT	LOT 13	354.72
2+55 LT	LOT 14	355.09
MH #5 TO MH #6		
0+45 RT	LOT 23	357.04
0+78 RT	LOT 22	358.21
0+85 LT	LOT 15	358.26
1+84 RT	LOT 21	358.22
2+00 LT	LOT 16	358.72
MH 6	LOT 20	364.12
MH 6	LOT 19	364.26
MH #6 TO PLUG		
0+74	LOT 18	364.09
0+84	LOT 17	364.26

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works Chief, Bureau of Utilities	FISHER, COLLINS, AND CARTER, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043 461-2855	DES. D.B.S.				PLAN WATER AND SEWER MAINS 600' SCALE MAP NO. 42 BLOCK NO.	WARFIELD'S RANGE SECTION TWO AREA TWO CONTRACT NO. 34-1202-D SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN
		DRN. D.B.S.						SHEET 2 OF 3
DATE: 2/1/85 DATE: 2/3/85	DATE: 2/3/85 DATE: 2/3/85	DATE: 2/3/85 DATE: 2/3/85	DATE: 2/3/85 DATE: 2/3/85	DATE: 2/3/85 DATE: 2/3/85	DATE: 2/3/85 DATE: 2/3/85	WATER & SEWER AS-... 7-1-86 January 28, 1985		



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John F. Neuman
DIRECTOR OF PUBLIC WORKS
DATE 2-11-85

Robert M. Berger
CHIEF, BUREAU OF UTILITIES
DATE 2-8-85

William J. ...
CHIEF, BUREAU OF ENGINEERING
DATE 2/11/85

William J. ...
CHIEF, LAND DEVELOPMENT DIVISION
DATE

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

Terrell A. Fisher
TERRELL A. FISHER

DES: D.B.S.			
DRN: D.B.S.			
CHK: T.A.F.			
DATE: 2/11/85	BY: NO.	REVISION	DATE

PROFILES AND DETAILS
WATER AND SEWER MAINS

600' SCALE MAP NO. 42 BLOCK NO.

WARFIELD'S RANGE
SECTION TWO AREA TWO
CONTRACT NO. 34-1202-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 3

January 28, 1985