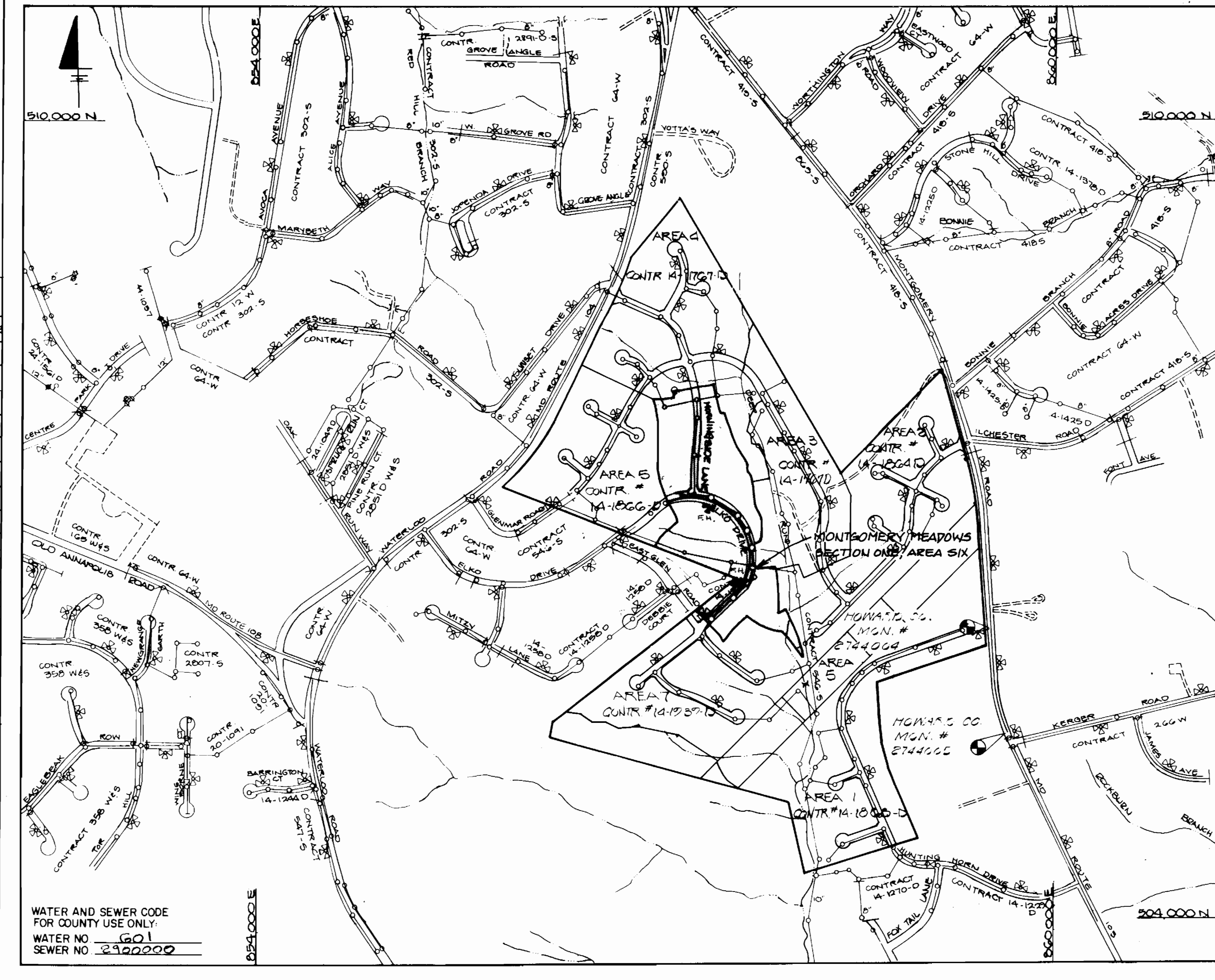


QUANTITIES			
ITEM	EST'D	AS BUILT	SUPPLIER
8" WATER	2117'	2,096 LF	SEAM RO 2441
6" WATER	FILE HYDRANT	3+ LF	SEAM RO 2441
3/4" W.H.C.	686'	551 LF	BEAM RO 2441
1" W.H.C.	245'	287 LF	BEAM RO 2441
FIRE HYDRANTS	4	4 EA	BEAM RO 2441
8" SEWER	1875'	1871 LF	BEAM RO 2441
8" SEWER (D.I.P.)	116'	118 LF	BEAM RO 2441
MANHOLES	12	12 EA	BEAM RO 2441
4" S.H.C.	767'	1,137 LF	BEAM RO 2441
8" VALVES	4	4 EA	BEAM RO 2441
6" SEWER			BEAM RO 2441
6" F.H. VALVES	4	4 EA	BEAM RO 2441
8"x8" TEE	1	1 EA	BEAM RO 2441
8" CAP	1	1 EA	BEAM RO 2441
9"x6" F.H. TEE	4	4 EA	BEAM RO 2441
1 1/2" DRAIN	1	1 EA	BEAM RO 2441



- ### 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 POLES SHALL BE INCLUDED IN UNIT PRICES BID FOR CONSTRUCTION OF THE MAIN.
 - FOR DETAILS NOT SHOWN ON THE DRAWINGS USE HOWARD COUNTY STANDARD DETAILS.
 - FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY STANDARD SPECIFICATIONS.
 - CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO (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 SHOWN ON THESE PLANS.
 - STATE HIGHWAY ADMINISTRATION 531-5533
 - BALTIMORE GAS AND ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE 685-0123
 - BALTIMORE GAS AND ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE 685-0123
 - ENGINEERING - "DAMAGE CONTROL" 234-5611
 - "MISS UTILITY" 1-559-0100
 - CHESAPEAKE & POTOMAC (C&P) TELEPHONE COMPANY 725-9976
 - AMERICAN TELEPHONE AND TELEGRAPH - CABLE LOCATION DIVISION 383-3533
 - COLONIAL PIPELINE COMPANY 795-1390
 - BUREAU OF UTILITIES HOWARD COUNTY 313-4200
 - 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.
 - ALL WATER MAINS TO BE D.I.P. CLASS 52 ONLY.
 - TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-1/2' COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
 - BLOCK ALL FITTINGS WITH CONCRETE.
 - BURY LINE ELEVATIONS ON ALL 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 10.05 OF THE STANDARD SPECIFICATIONS.
 - ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
 - HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CAN NOT BE SERVED.
 - ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X. OR PVC UNLESS OTHERWISE NOTED.
 - THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
 - ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER, UNLESS OTHERWISE NOTED.
 - FORCE MAINS SHALL BE D.I.P. ONLY.
 - 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 5.52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE, STANDARD DETAIL G 5.41.
 - ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATION C-153. DUCTILE IRON CONTACT FITTINGS, 3-INCH THROUGH 12-INCH WATER AND OTHER LIQUIDS.

BENCH MARKS

HOWARD CO. # 2744004 ELEV. 415.307
 3/4" ROUND O.G. BELLY SURFACE, 7 1/2' (W)
 EDGE OF ROUTE 103 & 1400' (C) OF INTER. WITH
 WOODBURN ROAD.

HOWARD CO. # 277040 ELEV. 413.025
 3/4" ROUND O.G. BELLY SURFACE, 10 1/2' (W)
 EDGE OF ROUTE 103 & 1201' (N) OF E, KEMBLE
 ROAD.

WATER AND SEWER CODE
 FOR COUNTY USE ONLY:
 WATER NO. 601
 SEWER NO. 2322200

TYPE OF BUILDING SINGLE FAMILY - RESID.
 NUMBER OF LOTS 45
 NO. OF WATER HOUSE CONNECTIONS 82
 NO. OF SEWER HOUSE CONNECTIONS 82
 DRAINAGE AREA 1.33 ACRES

LOCATION MAP
 SCALE: 1" = 600'

CONTRACT NO. 14-1938-D

MONTGOMERY MEADOWS

SECTION ONE AREA SIX

WATER AND SEWER MAIN EXTENSIONS

HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 27 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-89-178.

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

REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
 [Signature] DATE 5-8-90
 SOIL CONSERVATION SERVICE

APPROVED:
 [Signature] DATE (F89-178)
 HOWARD SOIL CONSERVATION DISTRICT

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

[Signature] DATE 5-4-90
 DIRECTOR OF PUBLIC WORKS

[Signature] DATE 4-27-90
 CHIEF, BUREAU OF UTILITIES

[Signature] DATE 5/3/90
 CHIEF, LAND DEVELOPMENT DIVISION

DEWBERRY & DAVIS
 ARCHITECTS ENGINEERS PLANNERS SURVEYORS

3300 N. RIDGE ROAD
 SUITE 100
 ELLICOTT CITY, MD 21043
 (301) 461-7478

[Signature] DATE 4/11/90

DES: MLH					
DRN: SSB					
CHK: RMT					
DATE: 5-8	WED	REVISION AS PER EC LINE COMMENTS	7/12/90	1/13/90	
BY NO.		REVISION			

TITLE SHEET

600' SCALE MAP NO. 221 BLOCK NO. 14

CONTRACT NO. 14-1938-D
 MONTGOMERY MEADOWS
 SECTION ONE, AREA SIX
 1ST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

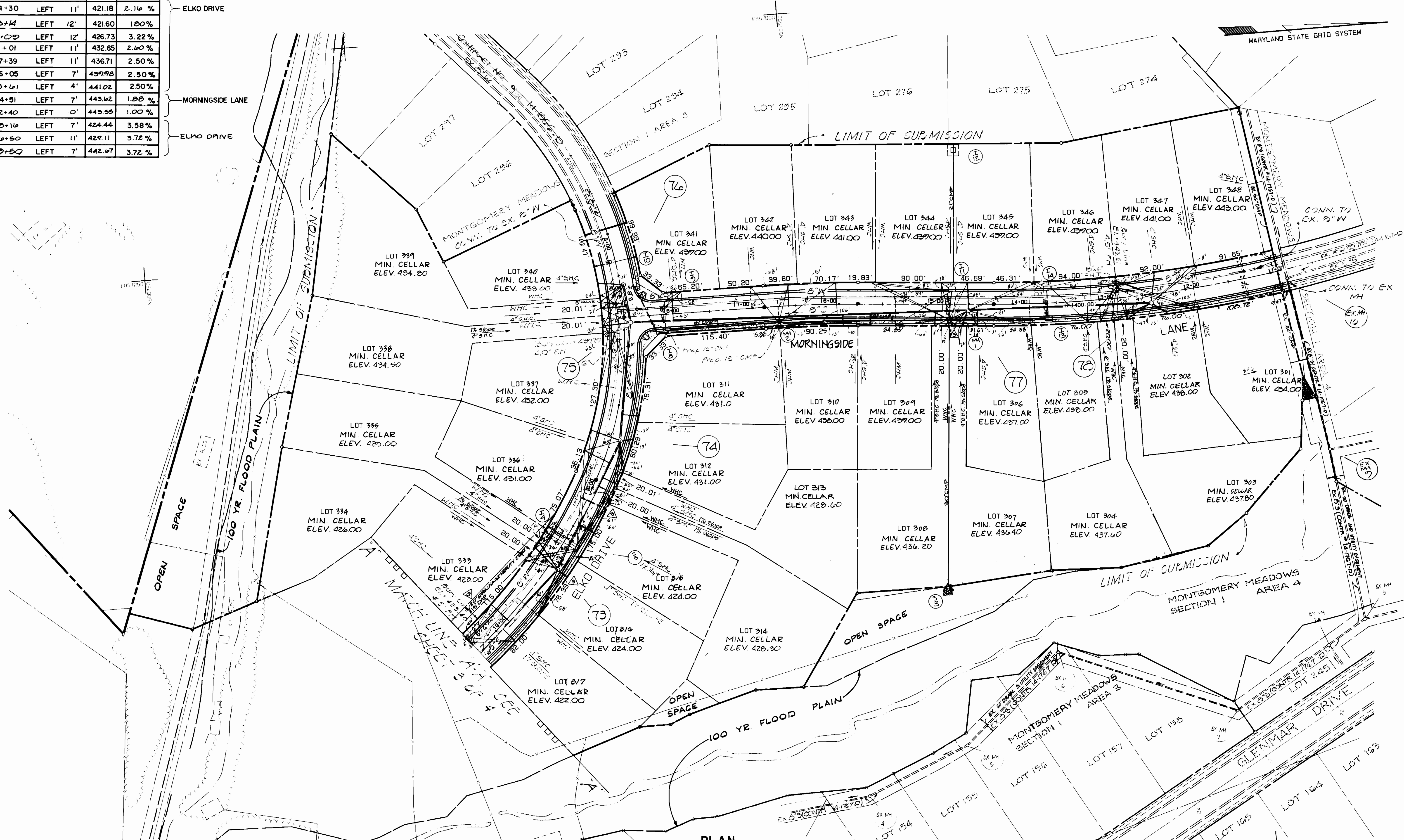
SEWER & WATER AS-BUILTS

SCALE AS SHOWN

SHEET 1 OF 4

MANHOLE TABULATION				
NO.	LOCATION	RIM	SLOPE	
70	14+30 LEFT	11'	421.18	2.16 %
71	13+14 LEFT	12'	421.60	1.00 %
72	11+09 LEFT	12'	426.73	3.22 %
73	9+01 LEFT	11'	432.65	2.60 %
74	7+39 LEFT	11'	436.71	2.50 %
75	6+05 LEFT	7'	439.98	2.50 %
76	5+61 LEFT	4'	441.02	2.50 %
77	14+51 LEFT	7'	443.62	1.80 %
78	12+40 LEFT	0'	443.59	1.00 %
79	15+16 LEFT	7'	424.44	3.58 %
80	16+50 LEFT	11'	429.11	3.72 %
81	19+50 LEFT	7'	442.67	3.72 %

ELKO DRIVE
MORNINGSIDE LANE
ELKO DRIVE



PLAN SCALE 1" = 50'

CONTRACT NO. 14-1938-D
MONTGOMERY MEADOWS
SECTION ONE, AREA SIX
WATER & SEWER MAIN EXTENSION

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Beatty
DIRECTOR OF PUBLIC WORKS
DATE: 4-27-90

Robert M. Beatty
CHIEF, BUREAU OF UTILITIES
DATE: 5/3/90

DEWBERRY & DAVIS
ARCHITECTS ENGINEERS PLANNERS SURVEYORS

3300 N. RIDGE ROAD
SUITE 100
ELLICOTT CITY, MARYLAND 21043

Robert M. Beatty
DATE: 5-00

DES: MLH			
DRN: 558			
CHK: RMT			
DATE: 5-00			
BY: NO	REVISION	DATE	
	REVISED S.D. EBMT & WATER/SEWER SERVICES	4/11/91	
	REVISED S.D. FOR RED-LINE CHANGES	5/17/90	
	REVISED S.D. FOR RED-LINE CHANGES	7/10/90	

PLAN
WATER AND SEWER MAIN

600' SCALE MAP NO. 31 BLOCK NO. 14

MONTGOMERY MEADOWS
SECTION ONE, AREA SIX
CONTRACT NO. 14-1938-D
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 4

