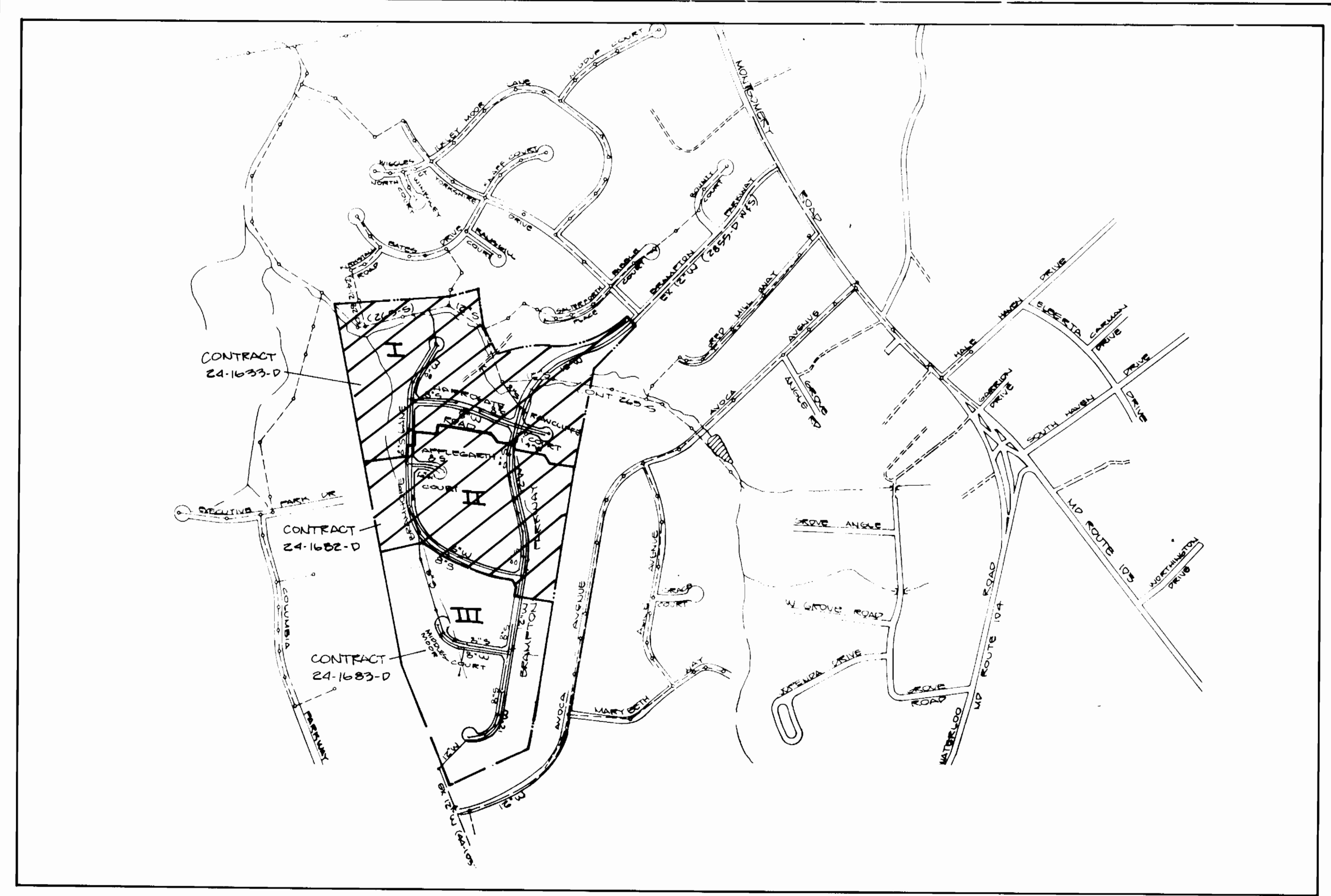


ITEM	ESTIMATED	AS BUILT	ITEM	ESTIMATED	AS BUILT
12" WATER MAIN	1425 L.F.	1392	12" x 6" TEE	1	1
8" WATER MAIN	266 L.F.	371	1/2" HB x 4"	1	1
6" WATER MAIN	152 L.F.	186	1/2" HB x 12"	1	1
3/4" W.H.C.	239 L.F.	492	1/2" HB x 12"	3	3
1" W.H.C.	528 L.F.	379	1/2" HB x 8"	1	1
12" VALVE	3	3	AIR RELEASE VALVE MANHOLE	1	1
8" VALVE	1	1	BLOW OFF	1	1
6" VALVE	1	1	4" VALVE	1	1
FIRE HYDRANT	3	3	4" WATER MAIN	1	1
12" x 6" TEE W/CV	2	2	4" x 8" REDUCER	1	1
8" x 6" REDUCER	1	1	TIE-IN PRELOCATION 2" WATER	?	?
8" SAN SEWER	2424 L.F.	2371	WORK INCLUDES RELOCATING "TEE"		
SHC	85 L.F.	838	WATER MAIN & REMOVING EXISTING		
MAN HOLES	15	5	CONCRETE BUTTRESS		

STATION	LOT	INVERT @ R.C.
MH 21	167	477.85
MH 22/1+75	169	475.85
MH 22/1+75	170	475.85
MH 22/0+16	171	470.85
MH 22/0+16	172	470.85
MH 22/1+42	174	474.85
MH 22/3+06	175	470.85
MH 22/3+06	176	470.85
MH 22/0+55	178	483.85
MH 22/0+55	179	483.85
MH 21	180	484.85
MH 21	181	484.85
MH 22	182	485.85
MH 22	183	485.85
MH 22	184	485.85
MH 22	185	485.85
MH 22/0+50	186	485.85
MH 22/0+50	187	485.85
MH 22	188	485.85
MH 22/0+51	189	485.85
MH 22/0+51	190	485.85
MH 22/0+51	191	485.85
MH 22/0+51	192	485.85
MH 22/0+51	193	485.85
MH 22/0+51	194	485.85
MH 22/0+51	195	485.85
MH 22/0+51	196	485.85
MH 22/0+51	197	485.85
MH 22/0+51	198	485.85
MH 22/0+51	199	485.85
MH 22	200	485.85
MH 22	201	485.85
MH 22	202	485.85
MH 22A	203	485.85
MH 22	204	485.85
MH 22	205	485.85
MH 22A	206	485.85
MH 22/0+92	207	485.85
MH 22/0+92	208	485.85
MH 22/1+25	209	485.85
MH 22/1+25	210	485.85
MH 22/2+47	211	485.85
MH 22	212	485.85
MH 7/2+45	213	485.85
MH 20	214	485.85
MH 19/0+80	215	485.85
MH 21	216	485.85

ITEM	SUPPLIER/MANUF.
12" WATER	BELAIR PD SUPPLY/GRAFFIN
8" WATER	" " " " " " " "
6" "	" " " " " " " "
3/4" W.H.C.	" " " " " " " "
1" W.H.C.	" " " " " " " "
12" VALVE	" " " " " " " "
8" VALVE	" " " " " " " "
6" VALVE	" " " " " " " "
F. H.	" " " " " " " "
12" x 6" TEE	" " " " " " " "
8" x 6" REDUCER	" " " " " " " "
8" SEWER	" " " " " " " "
6" SHC	" " " " " " " "
MANHOLES	ATLANTIC, CONC.
12" x 8" TEE	BELAIR PD SUPPLY/GRAFFIN
1/2" HB x 4"	" " " " " " " "
1/2" HB x 12"	" " " " " " " "
1/2" HB x 8"	" " " " " " " "
1/2" HB x 12"	" " " " " " " "
AIR RELEASE VALVE	" " " " " " " "
VALVE - M.H.	" " " " " " " "
BLOW OFF	" " " " " " " "
4" VALVE	" " " " " " " "
4" WATER	" " " " " " " "
4" x 8" REDUCER	" " " " " " " "
(F.V.C.T.)	" " " " " " " "
(D.P.)	" " " " " " " "



TYPE OF BLDG. - SINGLE FAMILY HOME
 NO. OF LOTS 50
 NO. OF WATER HOUSE CONN. 44
 NO. OF SEWER HOUSE CONN. 44
 DRAINAGE AREA 5.24 AC @ 1.0% SLOPE

SCALE: 1" = 600'

WATER AND SEWER CODE:
 FOR COUNTY USE ONLY
 WATER NO. 602
 SEWER NO. 5750652

AS BUILT
CONTRACT NO. 24-1683D
BRAMPTON HILLS
SECTION 4 AREA 3
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

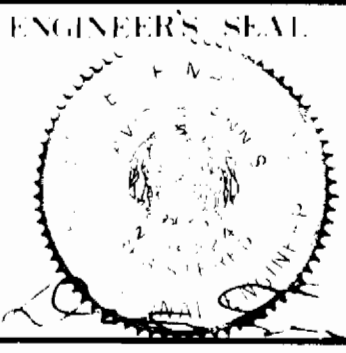
- GENERAL NOTES
- Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer at the Contractor's expense.
 - 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 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 the contractor. The contractor shall coordinate with the utility companies to schedule the bracing of the poles.
 - 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 by the symbol \odot at the location of the test pits. 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 construction 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.
 - Contractor shall notify the following utilities or agencies at least five working days before starting work shown on those plans:
 State Highway Administration - 531-5533
 Baltimore Gas & Electric Co. - Contractor Services - 561-2585
 Baltimore Gas & Electric Co. - Underground Damage Control - 234-5621
 Miss Utility - 1-800-257-7777
 Colonial Pipeline Co. - 795-1390
 Bureau of Utilities, Howard County Department of Public Works - 992-2366
 - Trees are to be protected from damages 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 excavation and backfill.
 - 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 water mains to be D.I.P. unless otherwise noted.
 - Top of all water mains to have 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 elevation on fire hydrants shall be set to the elevations shown on the drawings. All fire hydrants shall be strapped and buttressed with concrete on accordance with standard details. Soil around the fire hydrant to be compacted in accordance with Section 1003 & 1008 of the General Requirements for Water & Sewer.
 - All water house connections shall be for an inside meter setting.
 - The contractor shall not operate any water main valves on the existing system.
 - All sewer mains shall be C.S.P.X., V.C.P.X., P.V.C. or A.C.P. Class 2400 unless otherwise noted.
 - The contractor shall provide a joint in all sewer mains with 2'-0" of exterior manhole wall.
 - 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 water tight frame and covers, Standard Detail G5 52 volume IV. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade.
 - House (s) with the symbol "CMB" indicates cellar can not be served.
 - All water house connections shall have a minimum vertical clearance of 12" above all sanitary sewer crossings.
 - All sanitary sewer house connections shall have a minimum vertical clearance of 12" below all water main crossings.
 - Profile stations shall be adjusted as necessary to conform to plan dimensions.
 - No pipe shall be laid until lines of excavations have been brought to subgrade.
 - Lot grading to be shown on a separate S.D.P. to be done at a later date.

*SHC UP @ 1.0%
 SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSIONS AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F88-91

REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
James M. Selman 8-10-87
 SOIL CONSERVATION SERVICE DATE
 THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 APPROVED:
James M. Selman 8/10/87
 HOWARD COUNTY SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DIRECTOR OF PUBLIC WORKS DATE 8-10-87
 CHIEF, BUREAU OF ENGINEERING DATE
 CHIEF, BUREAU OF UTILITIES DATE

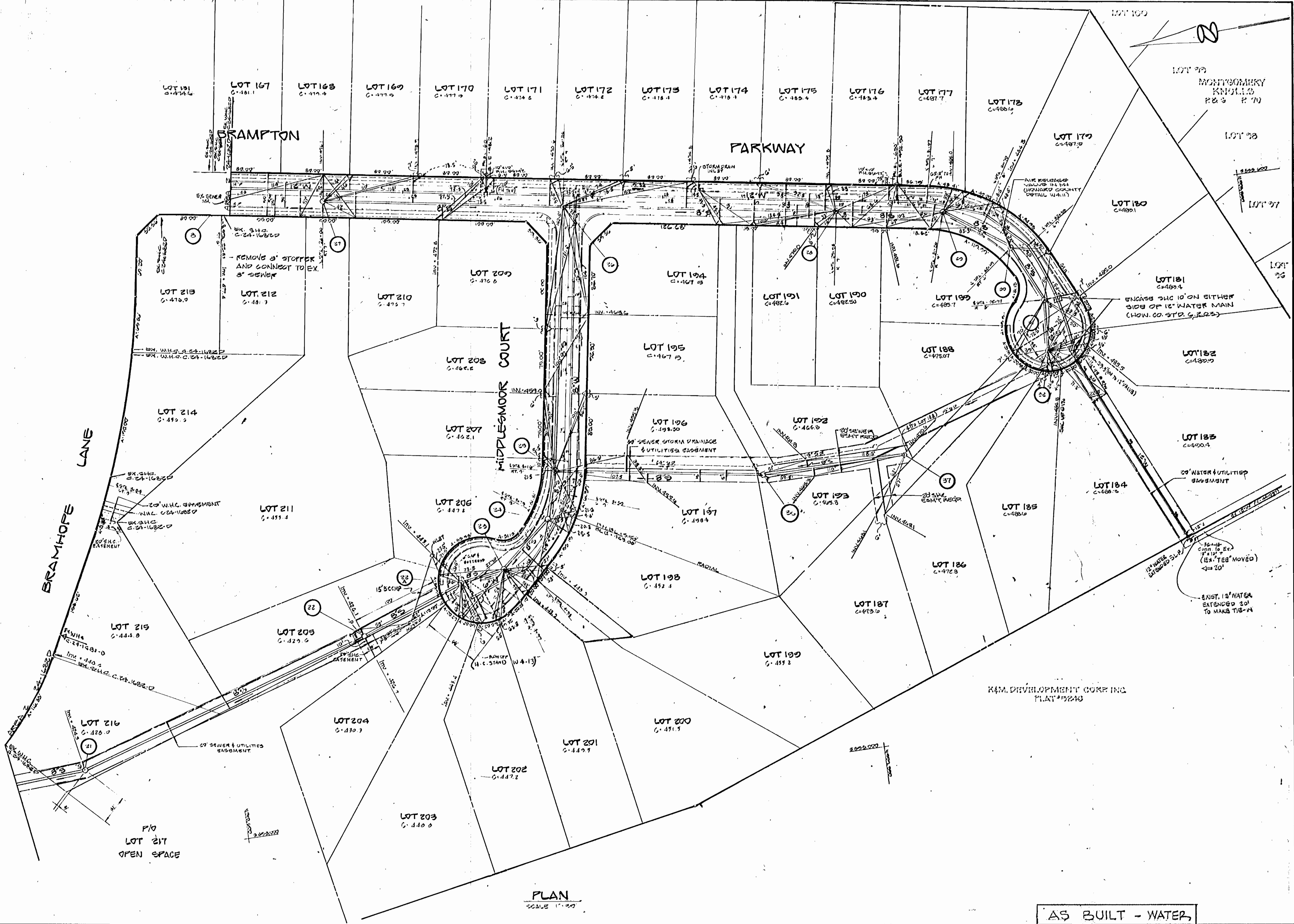
DEVELOPMENT CONSULTANTS
 GROUP, INC.
 17904 GEORGIA AVE.
 OLNEY, MD. 20832
 301-924-4570



DES.	DATE	NO.	REVISION
Dave S.	8-10-87	5	REALIGNMENT WATER LINE AT MIDDLESMOOR CT
M.A.H.	8-10-87	4	REVISED PER PERKINS ENGINEERING DEPT. COMMENTS
M.A.H.	8-10-87	3	REVISED SEWER MT 20 TO MT 22, ADD MT 24 + M.A.H.
M.A.H.	8-10-87	2	REVISED LOTS 18A THRU 19B
M.A.H.	8-10-87	1	REVISED AS PER STATE HEALTH DEPT. COMMENTS
M.A.H.	8-10-87	0	LOT NO. CHANGES

TITLE SHEET
 600 SCALE MAP NO. 30431 BLOCK NO.

BRAMPTON HILLS
 SECTION 4 AREA 3
 CONTRACT NO. 24-1683-D
 ELLICOTT CITY (2nd) ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 1 of 3



AS BUILT - WATER

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 8-13-87
DIRECTOR OF PUBLIC WORKS DATE

[Signature] 8-13-87
CHIEF, BUREAU OF ENGINEERING DATE

[Signature] 8-13-87
CHIEF, BUREAU OF UTILITIES DATE

[Signature] 8-13-87
CHIEF, LAND DEVELOPMENT DIV. DATE

 DEVELOPMENT CONSULTANTS
GROUP, INC.

17904 GEORGIA AVE.
OLNEY, MD. 20832
301-921-1570



DATE	BY	NO.	REVISION
NOV 1987	MAM	1	LOT NO. CHANGES
		2	REVISED AS PER STATE HEALTH DEPT. COMMENTS
		3	REVISED SEWER MAIN TO 12" ACCORDING TO ST. HEALTH DEPT. COMMENTS
		4	REVISED FOR PER ENGINEERING DEPT. COMMENTS
		5	PERMS BURY LINE OF FRESHWATER

PLAN OF
WATER & SEWER MAINS

600 SCALE MAP NO. 30 & 31 BLOCK NO.

BRAMPTON HILLS

SECTION 4 AREA 3

CONTRACT NO. 24 16830

ELLCOTT CITY (2nd) ELECTION DISTRICT

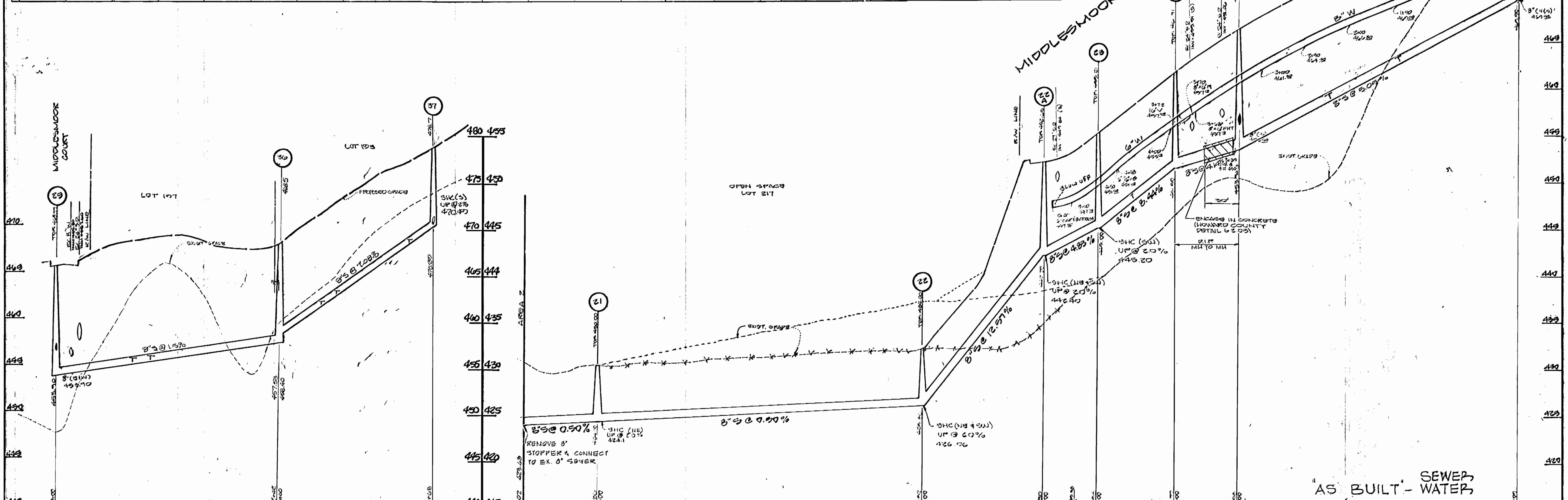
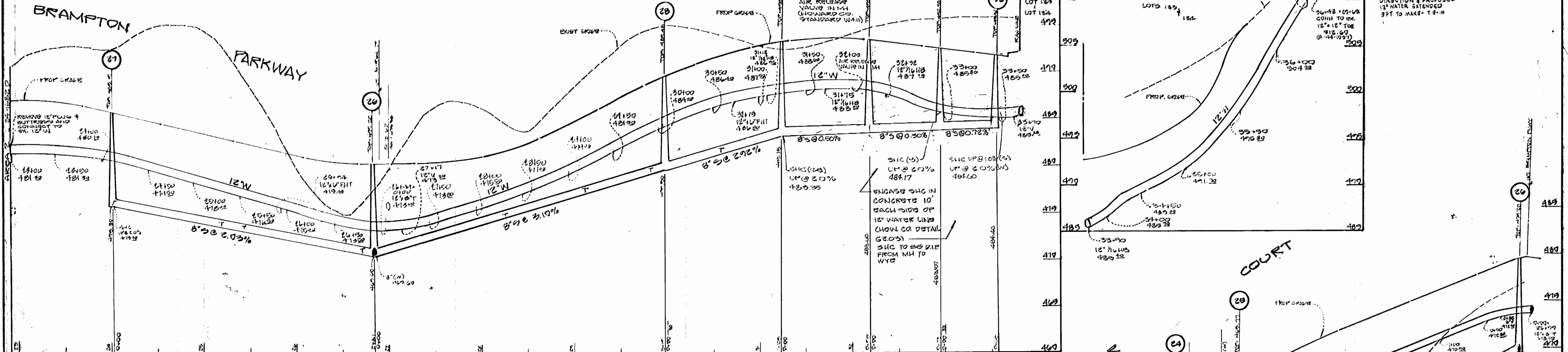
HOWARD COUNTY, MARYLAND

SCALE
1"=30'

SHEET
2
of 3

AS-BUILT AUGUST 30, 1987

BRAMPTON PARKWAY



"AS BUILT" - SEWER WATER

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

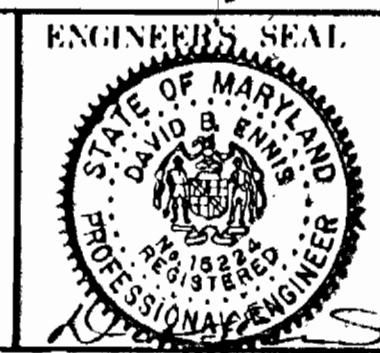
Director of Public Works: *James H. Lewis* 3/12/87
Date: 3/12/87

Chief, Bureau of Engineering: *Richard B. Benner* 3/12/87
Date: 3/12/87

Chief, Land Development Div.: *Richard B. Benner* 3/12/87
Date: 3/12/87

DEVELOPMENT CONSULTANTS GROUP, INC.

17904 GEORGIA AVE.
OLNEY, MD. 20832
301-924-1570



DES.	DATE	BY	NO.	REVISION
DRN	12-23-86	MAM	4	REVISED WATER LINE LAYOUT ON MIDDLESMOOR COURT FOR DEPARTMENT OF PUBLIC WORKS COMMENTS REVISED WITH HIGH THRU UPS.
CHK	2-17-87	MAM	2	REVISED AS PER STATE HEALTH DEPT. COMMENTS
DATE	11-17-87	MAM	1	LOT NO. CHANGES
AUG. 2007				

PROFILES OF WATER + SEWER MAINS

600 SCALE MAP NO. 30 & 31 - BLOCK NO.

BRAMPTON HILLS

SECTION 4 AREA 3

CONTRACT NO. 24-12830

ELICOTT CITY (2nd) ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

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

SHEET 3 of 3