

Contract No. 24-4027-D

COLUMBIA GATEWAY

PARCEL S-30

WATER & SEWER CONSTRUCTION PLANS

Howard County, Maryland Department of Public Works

ITEM	QUANTITIES		AS-BUILT	
	ESTIMATED	QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" WATER	697'			
6" WATER	39'			
6" VALVES	3			
8" x 6" TEE	3			
8" CAP	2			
8" WBEND	4			
FIRE HYDRANT	2			
8" SLEEVE & SPACER	1			
8" VALVE	3			
6" CAP	1			
8" x 8" TEE	1			
8" SEWER	95'			
SEWER MANHOLE	1			
8" PLUG	1			

NAME OF UTILITY CONTRACTOR _____
SURVEY AND DRAFTING DIVISION AS-BUILT DATE _____

BENCHMARK

DESCRIPTION

NO. 2244002 - HOWARD COUNTY MONUMENT

CONCRETE MONUMENT SET FLUSH WITH THE GROUND, 0.5 MILES SOUTH OF U.S. ROUTE 1, 26.89' SOUTHWEST OF A NAIL IN A 4" OAK TREE, 36.39' SOUTHWEST OF A NAIL IN A 27" OAK TREE AND 72.54' NORTH OF A NAIL IN A 8" PINE TREE.

NORTH	EAST	ELEVATION
485,383.660	861,905.275	253.074

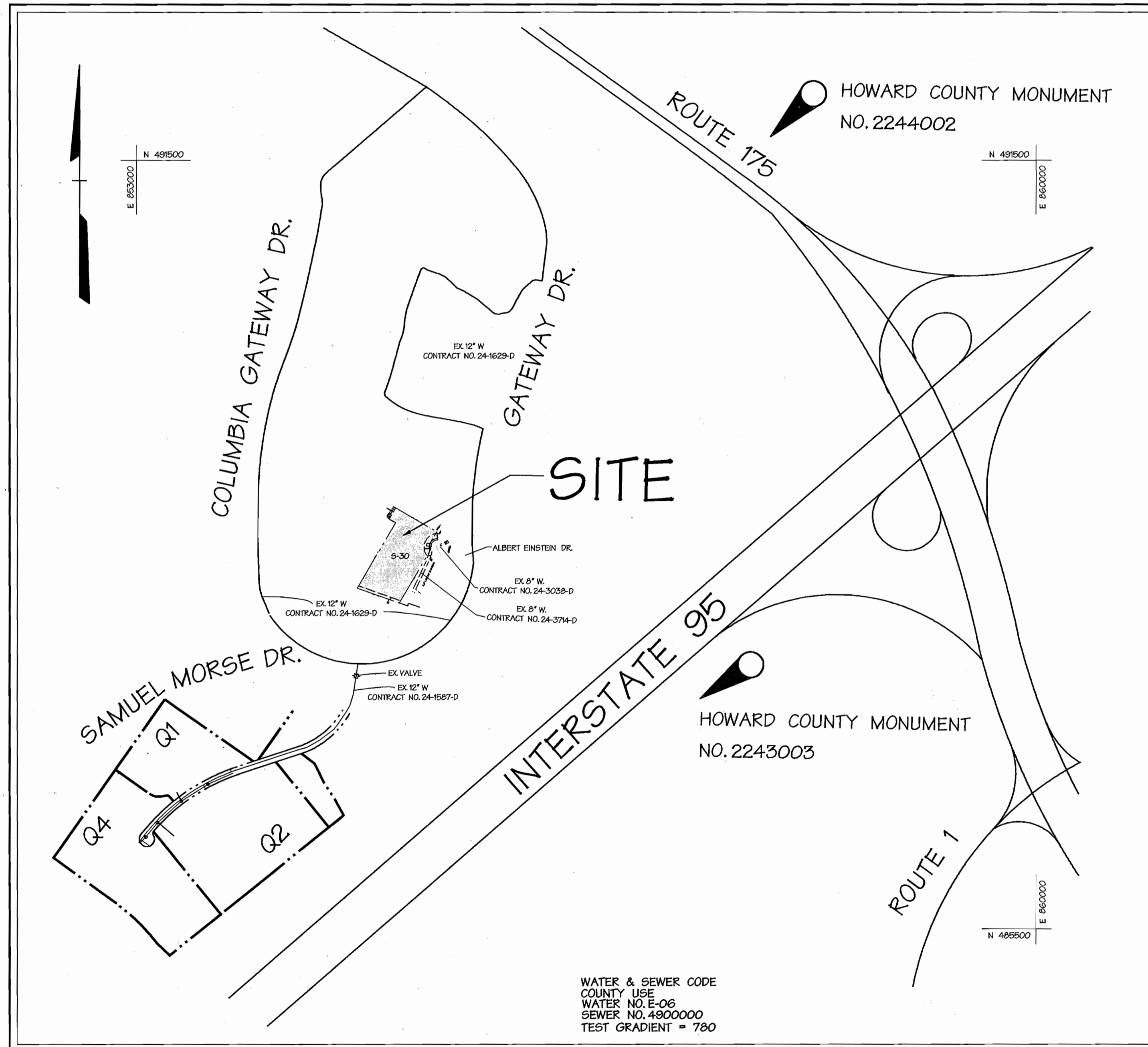
NO. 2243003 - HOWARD COUNTY MONUMENT

CONCRETE MONUMENT WITH A BRONZE DISK SET FLUSH WITH THE GROUND, 25'± EAST OF EAST EDGE MAC OF THE NORTHBOUND LANE OF I-95, 70'± SOUTH OF EXIT SIGN TO MD ROUTE 175.

NORTH	EAST	ELEVATION
487,448.365	856,755.255	301.486

TYPE OF BUILDINGS:	OFFICE
NO. OF LOTS / PARCELS	1
NO. OF WATER CONNECTIONS:	2
NO. OF SEWER CONNECTIONS:	1
DRAINAGE AREA:	LITTLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WATER RECLAMATION PLANT, SAVAGE, HOWARD COUNTY

SHEET INDEX	
SHEET No.	DESCRIPTION
1	TITLE SHEET
2	WATER & SEWER PLAN
3	WATER & SEWER PROFILES



VICINITY MAP
SCALE: 1" = 600'
CONTRACT NO. 24-4027-D

GENERAL NOTES

PART I

- 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, [North American Datum of 1927 (NAD 27)].
- 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 contracted 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 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 Detail for Construction (latest edition). 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.
- Contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:

State Highway Administration	531-5533
BC&E CO. Contractor Services	850-4620
BC&E CO. Under Ground Damage Control	787-9068
Miss Utility	1-800-257-7777
Colonial Pipeline CO.	795-1390
Howard County Department of Public Works	410-313-2420

- Trees and shrubs are to be protected from damage to maximum extent. Trees and shrubs 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. Payment for such removal shall be included in the unit price bid for construction of the main.
- The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-2450 at least five working days before any open cut of any county road or boring/lacking operation in county roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DPW requirements per section 18.114(A) of the Howard County code.

PART II - WATER

- All water main to be D.I.P. Class 52 unless otherwise noted.
- Tops 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.
- All fittings shall be buttressed or anchored with concrete in accordance with the standard details unless otherwise provided for on the drawings.
- Fire hydrants shall be set to the bury line elevations shown on the drawings. All fire hydrants shall be restrained and buttressed with concrete in accordance with standard details. Soil around the fire hydrant shall be compacted in accordance with section 1000 and 1005 of the standard specifications.
- The contractor shall not operate any water main valves on the existing water system.
- All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.

PART III - SEWER

- All sewer mains shall be D.I.P. or P.V.C. unless otherwise noted.
- All manholes shall be 4'-0" inside diameter unless otherwise noted.
- Manholes shown with 12" and 16" walls are for brick manholes only.
- 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.
- House(s) with the symbol "C.N.S." indicates that cellar cannot be served.

REVIEWED FOR NATURAL RESOURCES CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

Jim Myer 5/2/02
SIGNATURE DATE

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

APPROVED
John Robertson 5/2/02
HOWARD S.C.D. DATE

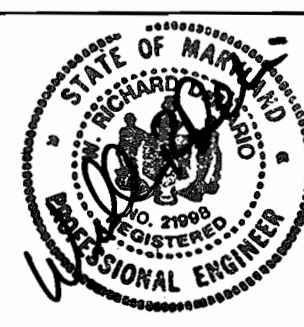
SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH CONSTRUCTION PLANS SDP-02-63.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

DMW
Daft-McCune-Walker, Inc.

A Team of Land Planners, Landscape Architects, Golf Course Architects, Engineers, Surveyors & Environmental Professionals



DESIGN BY:	DFM		
DRAWN BY:	ADL		
CHECKED BY:			
DATE:	DMW 1 7/16/03		
BY	NO.	REVISION	DATE
		REVISED 8" WATER QUANTITIES	7/16/03

TITLE SHEET

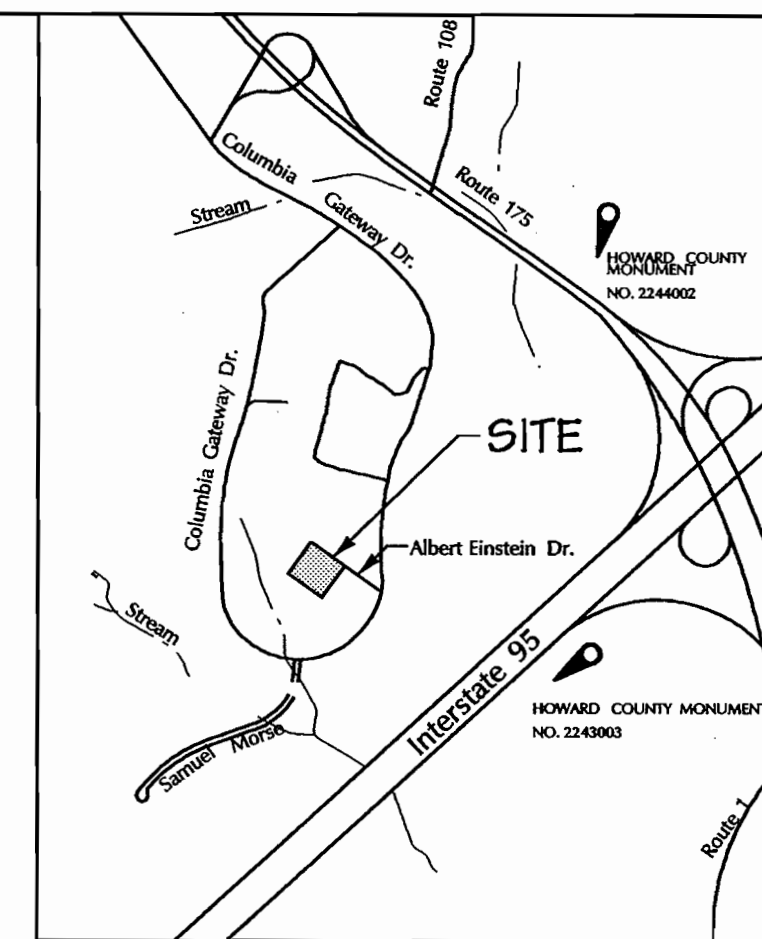
Columbia Gateway
Parcel S-30
6th Election District
Howard County, Maryland

OWNER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
5850 WATERLOO ROAD
SUITE 230
COLUMBIA, MD 21044

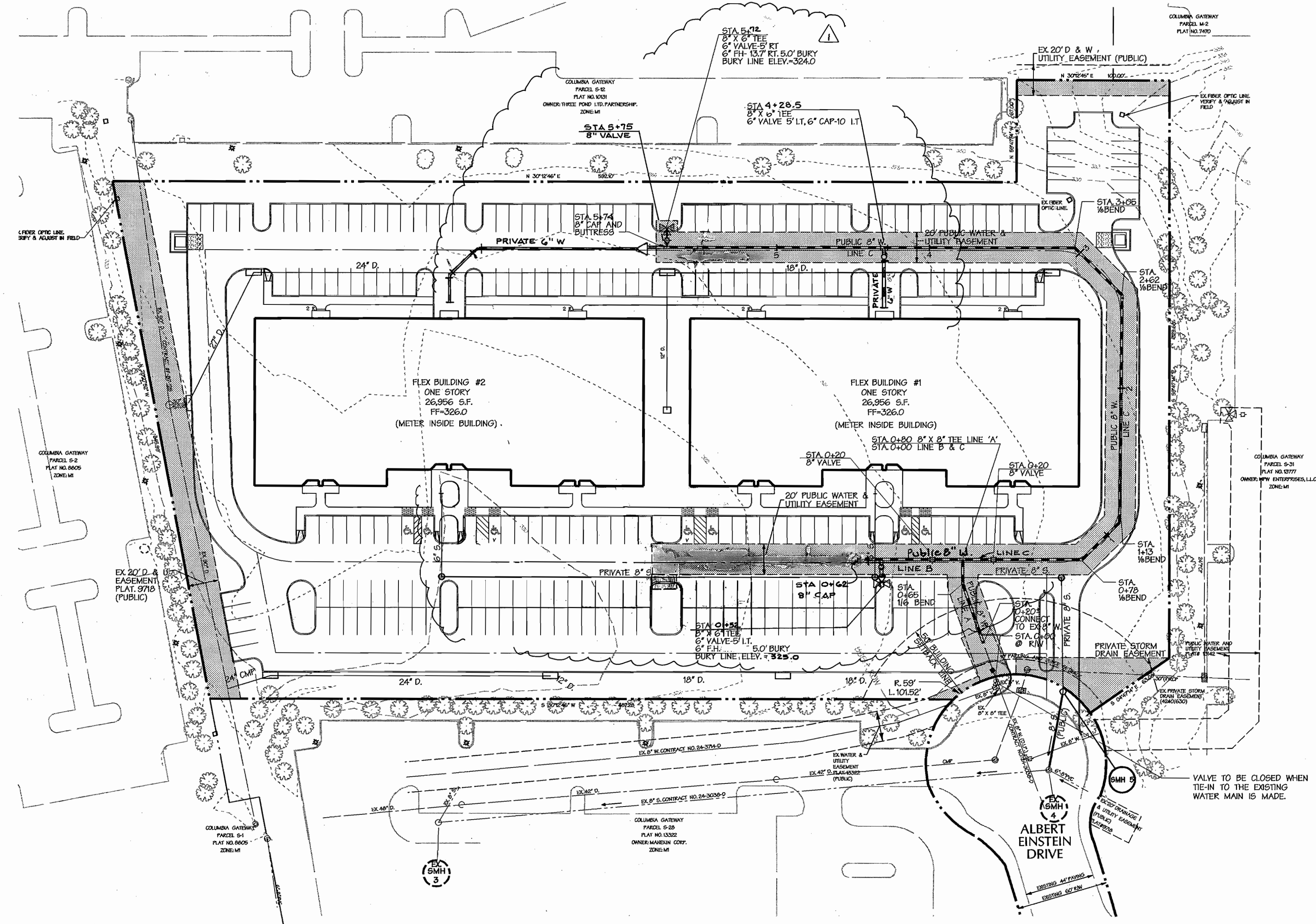
DEVELOPER: ABRAMS DEVELOPMENT GROUP
5850 WATERLOO ROAD
SUITE 230
COLUMBIA, MD 21045

SCALE:
AS SHOWN

SHEET
1 of 3



LOCATION MAP
SCALE: 1" = 2000'



PLAN
1"=50'

ITEMS	COORDINATES		STATION
	NORTH	EAST	
LINE A			
8" SLEEVE & SPACER			STA. 0+20.1
8" BEND			STA. 0+65
8" X 8" TEE			STA. 0+80
LINE B			
8" X 8" TEE			STA. 0+00
8" VALVE			STA. 0+20
8" X 6" TEE			STA. 0+52
6" VALVE			STA. 0+52.5' LT.
6" F.H.			STA. 0+52.1' LT.
8" VALVE			STA. 1+99
8" CAP			STA. 0+62
LINE C			
8" X 8" TEE			STA. 0+00
8" VALVE			STA. 0+20
8" BEND			STA. 0+79
8" BEND			STA. 1+13
8" BEND			STA. 2+62
8" BEND			STA. 3+05
8" X 6" TEE			STA. 4+28.5
6" VALVE			STA. 4+28.5 5' LT.
6" CAP			STA. 4+28.5 10' LT.
8" X 6" TEE			STA. 5+72
6" VALVE			STA. 5+72.9' LT.
6" F.H.			STA. 5+72.3' LT.
8" VALVE			STA. 5+75
8" CAP			STA. 5+79

NOTE: ALL FIRE HYDRANTS TO BE PLACED 3'-0" BEHIND THE BACK OF CURB

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DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Robert Berman</i> CHIEF - BUREAU OF UTILITIES - DATE 4-23-02	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>[Signature]</i> CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE	DMW Daft-McCune-Walker, Inc. <small>200 East Pennsylvania Avenue Towson, Maryland 21286 (410) 296-3333 Fax 296-4705</small> <i>A Team of Land Planners, Landscape Architects, Golf Course Architects, Engineers, Surveyors & Environmental Professionals</i>	DESIGN BY: DFM DRAWN BY: ADL CHECKED BY: DATE:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>DMW</td> <td>I</td> <td>REVISED WATER LINE B & C</td> <td>DATE</td> <td>600 SCALE MAP NO. 43</td> <td>BLOCK NO. 7</td> </tr> <tr> <td>BY</td> <td>NO.</td> <td>REVISION</td> <td>DATE</td> <td></td> <td></td> </tr> </table>	DMW	I	REVISED WATER LINE B & C	DATE	600 SCALE MAP NO. 43	BLOCK NO. 7	BY	NO.	REVISION	DATE			<h2 style="margin: 0;">WATER & SEWER PLAN</h2>	<h2 style="margin: 0;">COLUMBIA GATEWAY</h2> PARCEL S-30 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 24-4027-D	SCALE: 1"=50' SHEET 2 of 3
DMW	I	REVISED WATER LINE B & C	DATE	600 SCALE MAP NO. 43	BLOCK NO. 7														
BY	NO.	REVISION	DATE																

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