
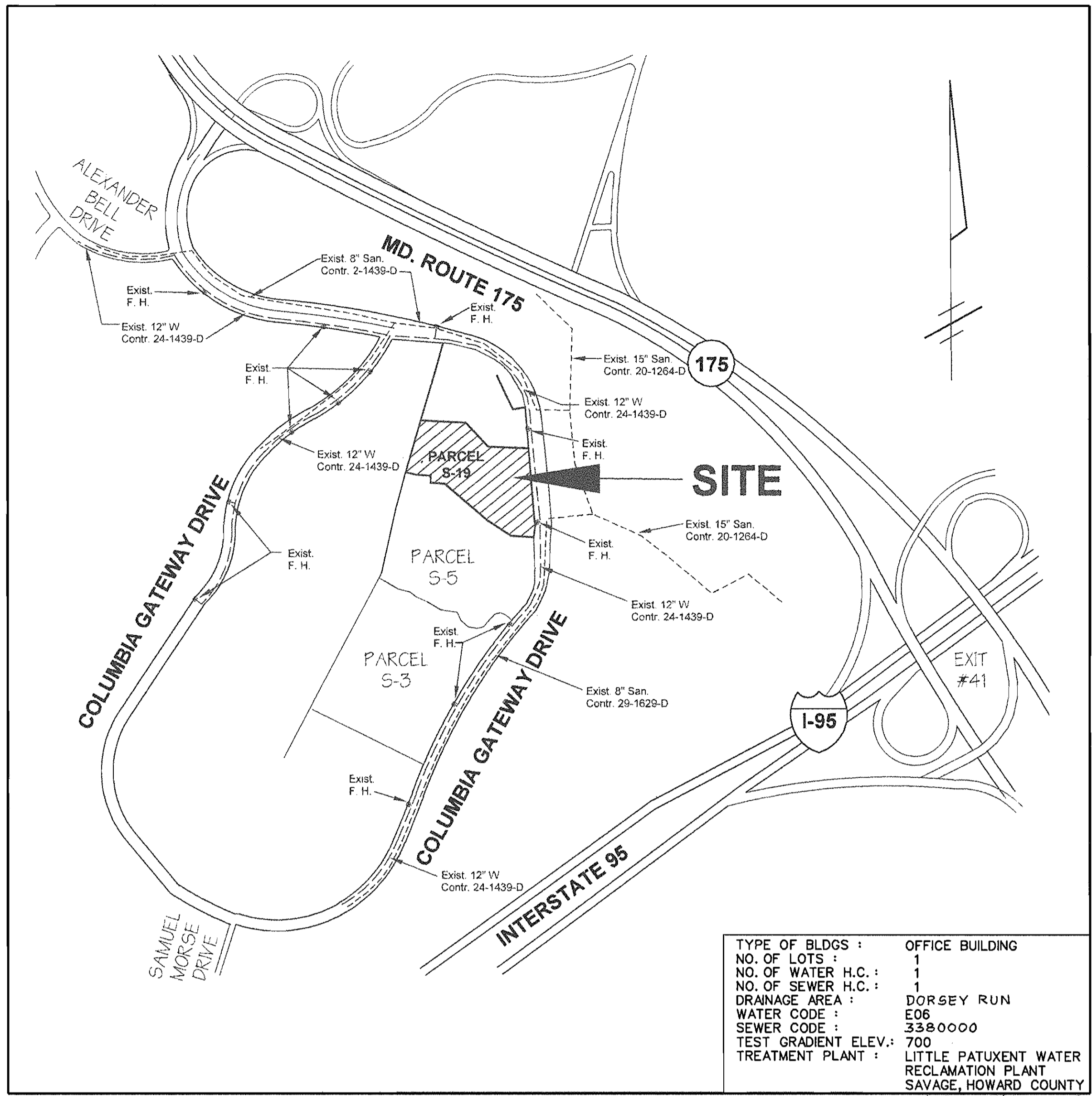


GENERAL NOTES

- 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 tunnels 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 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
Baltimore Gas & Electric Co. Contractor Services	850-4620
Baltimore Gas & Electric Co. Underground Damage Control	787-9068
Miss Utility	1-800-257-7777
Colonial Pipeline Co.	795-1390
Bureau of Utilities, Howard County Department of Public Works	313-4900
- 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.
- All fill areas within future roadway and under structures to be compacted to a minimum of 95% compaction as determined by AASHTO T-180.
- Valves adjacent to tees shall be strapped to tees.
- All water mains 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.
- 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 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/jacking 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.
- 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.
- All water mains shall be D.I.P. and P.V.C. unless otherwise noted.
- All manholes shall be 4'-0" inside diameter unless otherwise noted.
- Manholes must be precast concrete structure.
- Manholes shown with 12" and 16" area are for brick manholes only.



LOCATION MAP

SCALE: 1" = 600'

WATER & SEWER CONSTRUCTION PLANS COLUMBIA GATEWAY

PARCEL S-19

6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

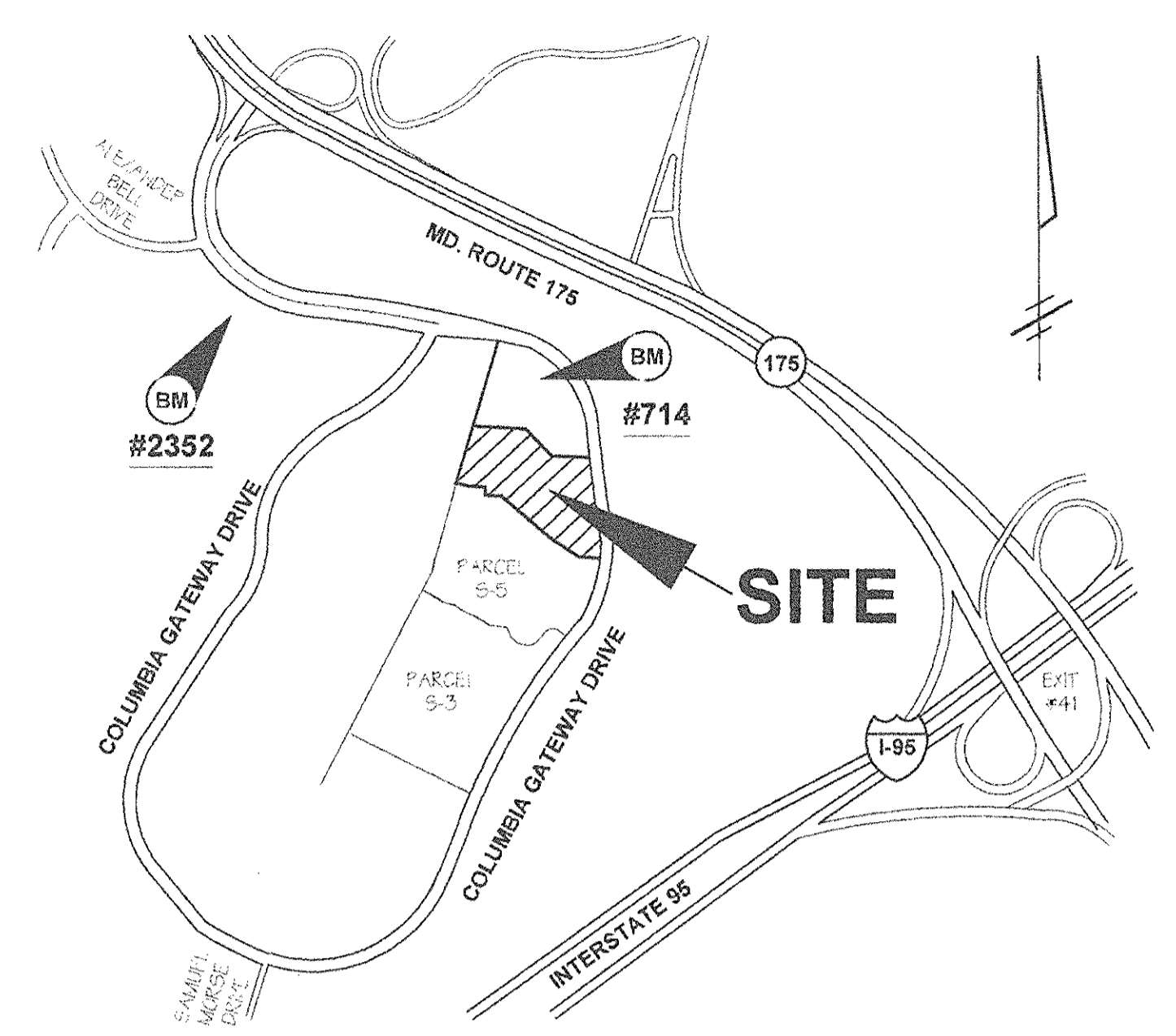
CONTRACT NO. 24-3634-D

INDEX OF SHEETS

SHEET NO.	TITLES
1	COVER SHEET, GENERAL NOTES & LOCATION MAP
2	PLAN VIEW & PROFILES

VICINITY MAP

SCALE: 1" = 500'



BENCHMARKS :

- WR & A BM #2352 ELEVATION : 338.29' IRON PIPE 240 FEET RIGHT OF CENTERLINE STA. 15+00 COLUMBIA GATEWAY DRIVE .
- WR & A BM #714 ELEVATION : 315.29' 230 FEET RIGHT OF CENTERLINE STA. 34+30 COLUMBIA GATEWAY DRIVE.

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/ SUPPLIER
8" DIP Water Main	770 L.F.	773 L.F.	CL. 52 DIP.	Atlantic States/US Filter
6" D.I.P. Water Main	21 L.F.	19 L.F.	CL. 52 DIP.	Atlantic States/US Filter
Fire Hydrants	2 Each	2 Ea.		
Sanitary Manholes (G 5.01)	1 Each	1 Ea.	Pre-Cast	Mueller / US Filter

NAME OF UTILITY CONTRACTOR : T.C. Simons
SURVEY AND DRAFTING DIVISION AS-BUILT DATE 11-20-97

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS, SDP 97-151 AND FDP-87-125

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

APPROVED : *John L. Robertson* 7/31/97
HOWARD SOIL CONSERVATION DISTRICT DATE

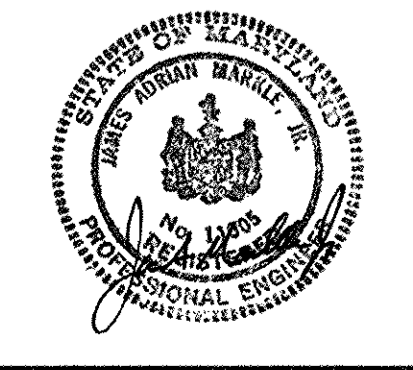
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Cheryl Simmons 7/31/97
U.S. SOIL CONSERVATION SERVICE DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Ruth Bunin 7-21-97
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
8/16/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

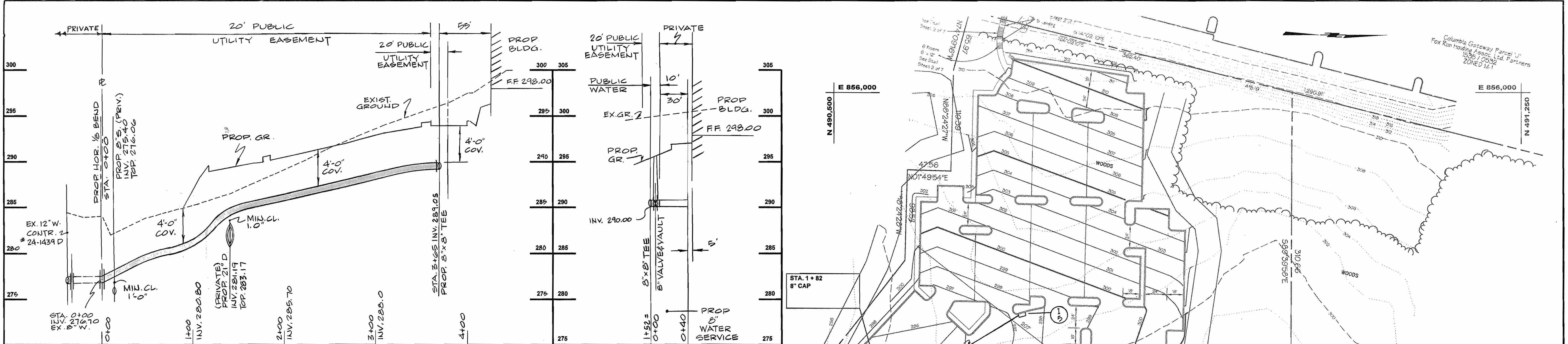
GWS
GEORGE W. STEPHENS, JR.
AND ASSOCIATES, INC.
Civil Engineers and Land Surveyors
658 Kenilworth Drive, Suite 100
Towson Maryland 21204
(410) 825-8120



DESIGNED : PRC
DRAFTED : KE
CHECKED : PRC

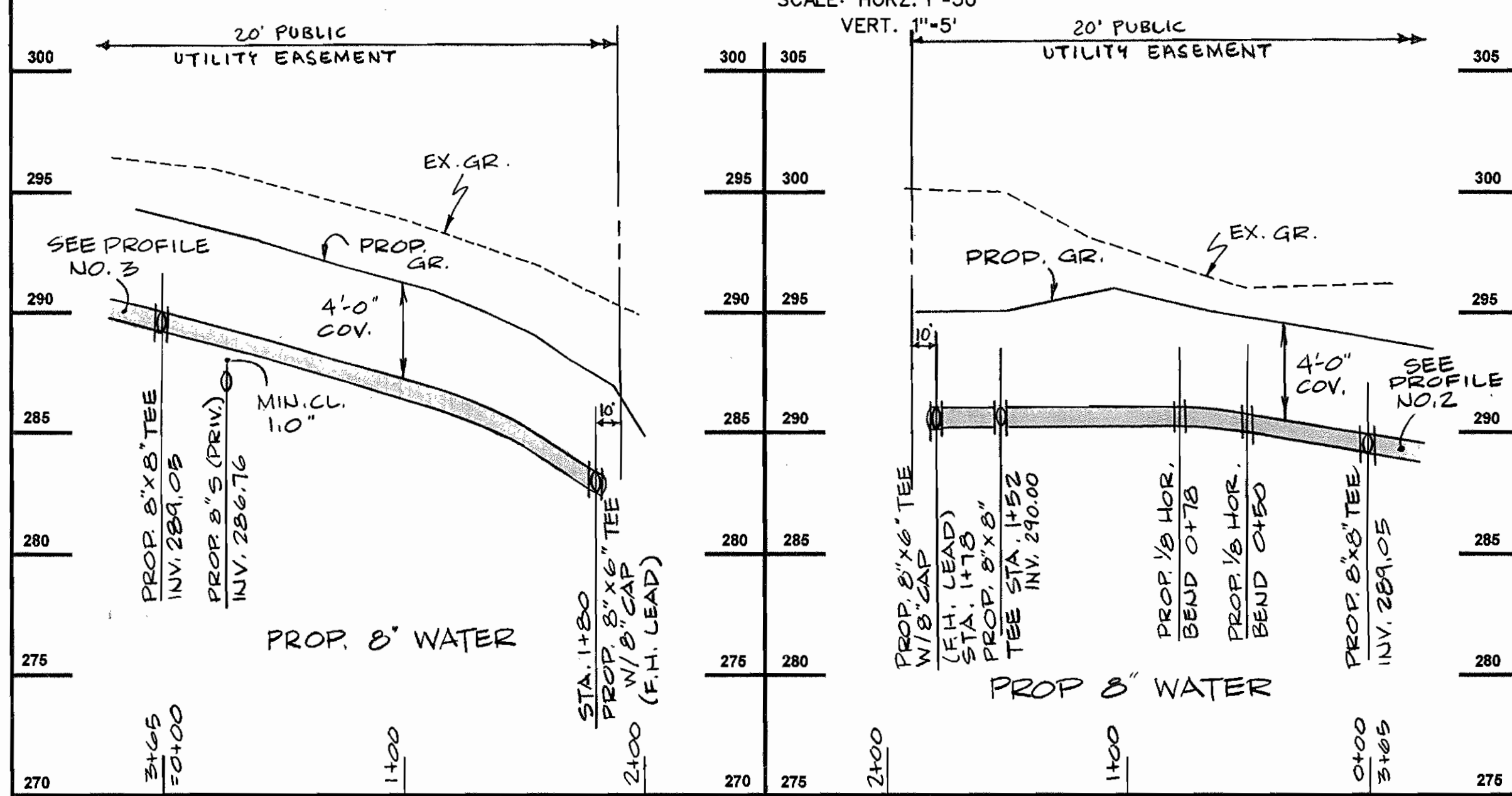
**COVER SHEET,
GENERAL NOTES & LOCATION MAP**
CONTRACT NO. 24-3634-D
600 SCALE MAP NO. 43 BLOCK NO. 1

**PUBLIC WATER & SEWER MAIN
COLUMBIA GATEWAY
PARCEL S-19
GREEN SPRING**
HOWARD COUNTY, MARYLAND
ELECTION DISTRICT #06
JULY 14, 1997
SHEET 1 OF 2



PROP. 8" PUBLIC WATER MAIN PROFILE NO. 1

WATER MAIN PROFILE NO. 4



PUBLIC WATER MAIN PROFILE NO. 2 PUBLIC WATER MAIN PROFILE NO. 3

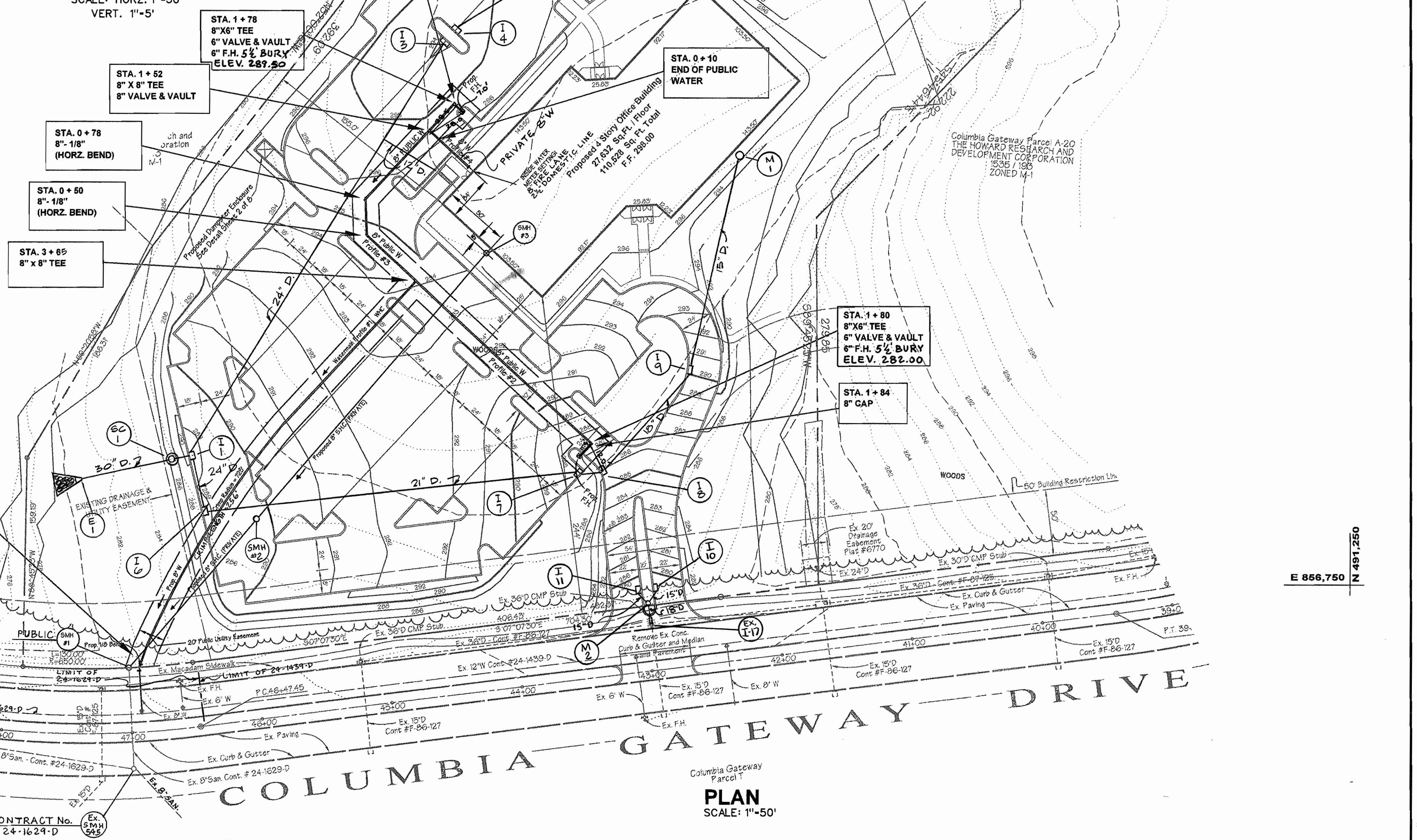
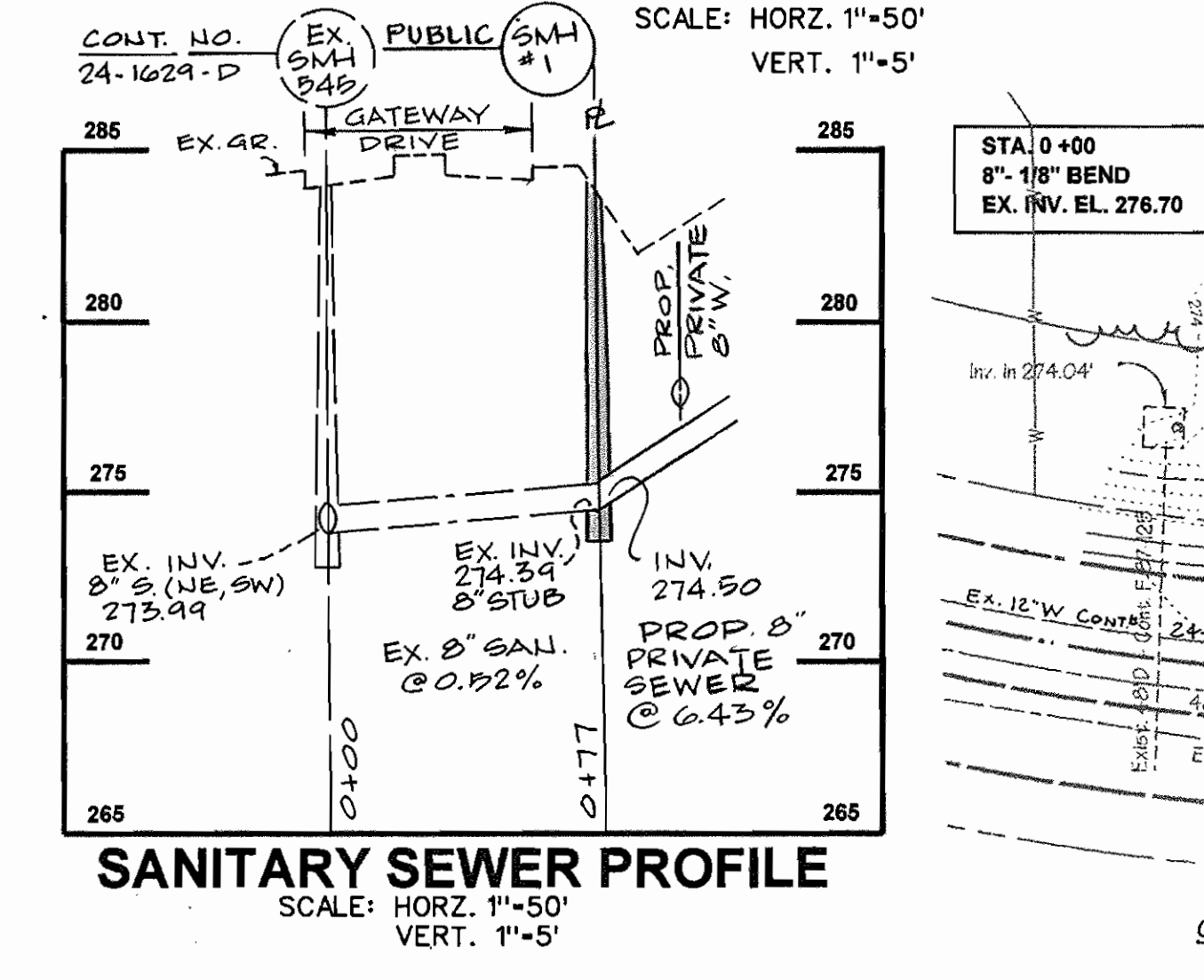
SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS, SDP 97-151 AND FDP-87-125

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

APPROVED: *[Signature]* 7/31/97
HOWARD SOIL CONSERVATION DISTRICT DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

[Signature] 7/31/97
U.S. SOIL CONSERVATION SERVICE DATE



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 7-29-97
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

[Signature] 8/1/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
Civil Engineers and Land Surveyors
658 Kenilworth Drive, Suite 100
Towson Maryland 21204
(410) 825-8120

DESIGNED : PRC
DRAFTED : KE
CHECKED : PRC

PLAN & PROFILES

CONTRACT NO. 24-3634-D
SCALE MAP NO. 43
BLOCK NO. 1

PUBLIC WATER & SEWER MAIN COLUMBIA GATEWAY PARCEL S-19 GREEN SPRING

HOWARD COUNTY, MARYLAND ELECTION DISTRICT #06

JULY 14, 1997
SHEET 2 OF 2

P/N 8413- waterplan1.s01