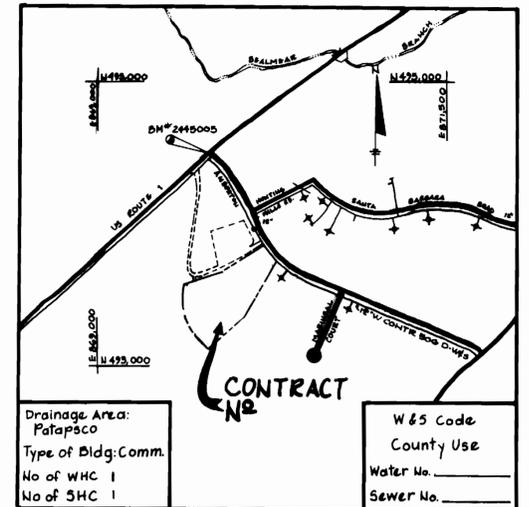


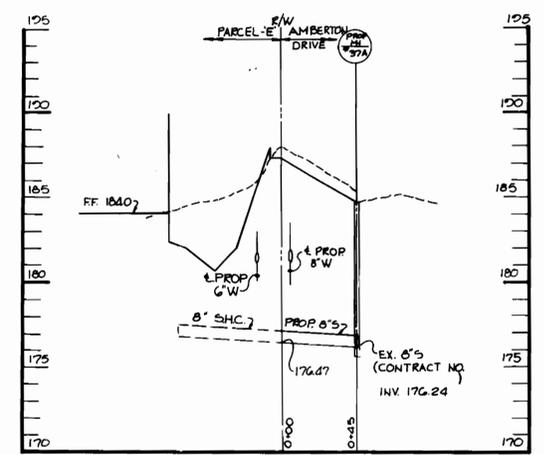
BENCH MARKS
 Ho. Co. BM NR 2546003 ELEV 175.81
 N 494.438.35 E 872.586.60
 RB 1' Below Macadam in shoulder of US Route 1
 Ho. Co. BM NA 2445005 ELEV 172.65
 N 494.517.78 E 867.750.21
 Rebar set 0.4' below surface
 4.76' West of US Route 1
 22.67' Northeast of BG&E Pole # 147615



VICINITY MAP
 SCALE: 1" = 600'
GENERAL NOTES

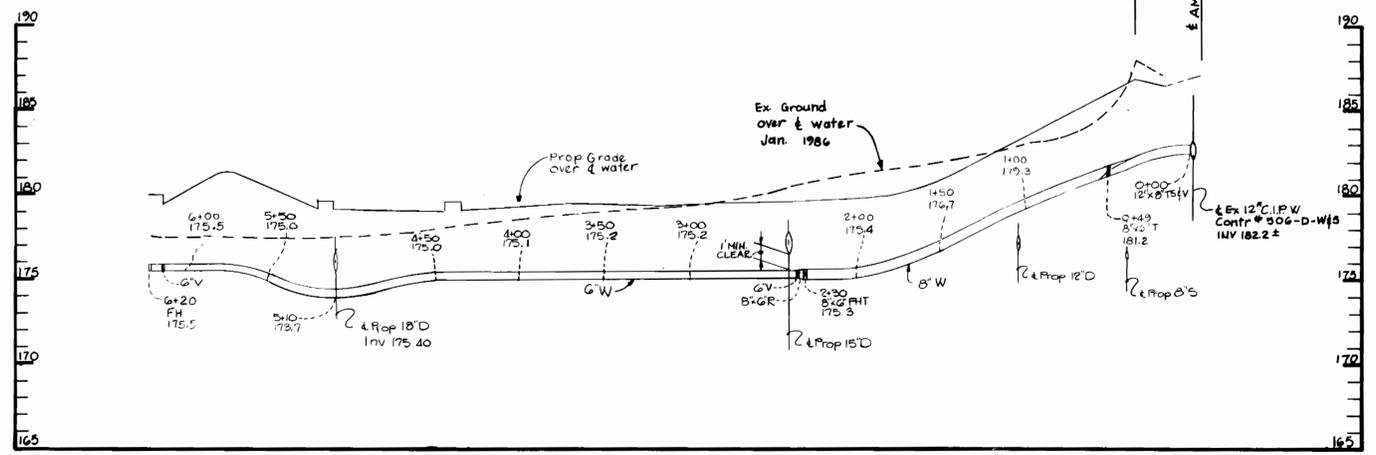
- 1) Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer at the Contractor's expense.
- 2) All horizontal controls are based on Maryland State Coordinates.
- 3) All vertical controls are based on U.S.G.S. data.
- 4) All pipe elevations shown are invert elevations.
- 5) 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.
- 6) 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.
- 7) 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.
- 8) Contractor shall notify the following utilities 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 - 561-2585
 Baltimore Gas & Electric Co. Under Ground Damage Control - 234-5621
 Baltimore Gas & Electric Co. Trouble Shooting - 238-9013
 Miss Utility - 1-800-257-7777
 Colonial Pipeline Co. - 795-1390
 Bureau of Utilities, Howard County Department of Public Works - 992-2364
- 9) 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.
- 10) 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.
- 11) 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.
- 12) All water mains to be D.I.P. Class 52 unless otherwise noted.
- 13) Top of all water mains to have a minimum of 3/8" cover unless otherwise noted.
- 14) Valves adjacent to trees shall be strapped to trees.
- 15) Block all fittings with concrete.
- 16) 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 general requirements for Water and Sewer.
- 17) All water house connections shall be for an inside meter setting.
- 18) The contractor shall not operate any water main valves on the existing system.
- 19) For all copper water house connections utilize flared type fittings only.
- 20) Profile stations shall be adjusted as necessary to conform to Plan dimensions.
- 21) No pipe shall be laid until lines of excavation have been brought to subgrade.
- 22) All sewer mains shall be C.G.P.X., V.C.P.X., P.V.C. or A.C.P. Class 2400 unless otherwise noted.
- 23) The contractor shall provide a joint in all sewer mains within 2' of exterior manhole wall.
- 24) All manholes shall be 4'0" inside diameter, unless otherwise noted.
- 25) Manholes shown with 12" and 16" walls are brick manholes.
- 26) Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail G-552 Volume IV. Where watertight frame and cover are used, set top of frame 1'-6" above finished grade.
- 27) House(s) with the symbol "C.N.S." indicates the cellar can not be served.
- 28) All water house connections shall have a minimum vertical clearance of 12" above all sanitary sewer crossings.
- 29) All sewer house connections shall have a minimum vertical clearance of 12" below all water main crossings.
- 30) Service Clamps are to have stainless steel straps.

PLAN
 SCALE: 1" = 50'



Item	Quantities		Material Supplier
	Estimated	As Built	
8" WATER	230 LF	214.0 LF	US PIPE - BELLEVILLE
6" WATER	300 LF	377.0 LF	"
12" TS 14"	1 EA	1 EA	"
6" (EXCL. FH'S)	2 EA	2 EA	"
FIRE HYDRANTS	2 EA	2 EA	"
MANHOLE	5 VF	5 VF	ATLANTIC PIPE CO.
8" S SEWER	45 LF	45 LF	U.S. MANUFACTURING

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



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

Sediment control measures for this contract will be implemented in accordance with article 15 of the Specifications and as shown on this plan and as shown on SDP- 86-230

Howard Soil Conservation District:
 Reviewed for Howard Soil Conservation District and meets technical requirements.
 Date: 6-25-86
 U.S. Soil Conservation Service

This Plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.
 Date: 6/25/86
 Howard Soil Conservation District

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director: J. F. Nemy Date: 7-2-86 Chief Bureau of Utilities: R. J. Reimer Date: 6-30-86	THE RIEMER GROUP, INC. 3105 NORTH RIDGE ROAD ELLICOTT CITY, MARYLAND 21043 Arthur E. Muegge, P.E. Date: 4-18-86	DES: D.A.M. DRN: K.J.B. CHK: J.K.B. DATE: 4-18-86	PLAN AND PROFILE OF A WATER MAIN AND SANITARY SEWER 600' SCALE MAP NO. 37 BLOCK NO.	ROUTE ONE HUNDRED BUSINESS PARK BLOCK B PARCEL E FEATHERMAN CONTRACT NO. 14-1509-D 1ST ELECTION DISTRICT HOWARD COUNTY MARYLAND	SCALE AS SHOWN SHEET 1 OF 1
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