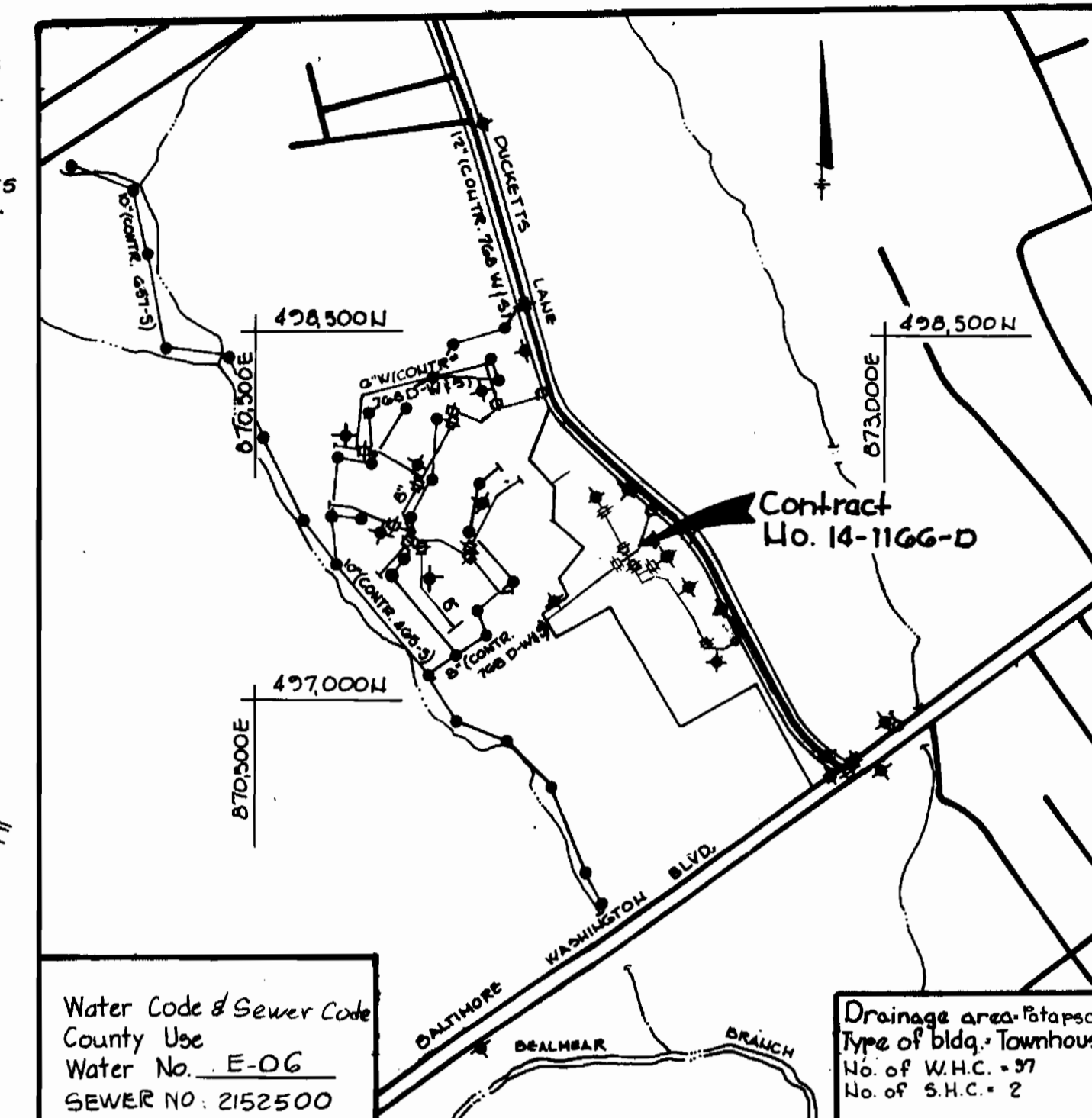


DUCKETT'S LAKE

**BENCH MARKS**

B.M. 1480 ELEV. 185.12  
CUT "14" top of curb along Duckett's Lane 20.73' West of P.T. Near bldg. #27  
B.M. 1481 ELEV. 178.61  
Cut "1" top of curb along Duckett's Lane 41.25' East of Ex. Inlet near bldg. #30

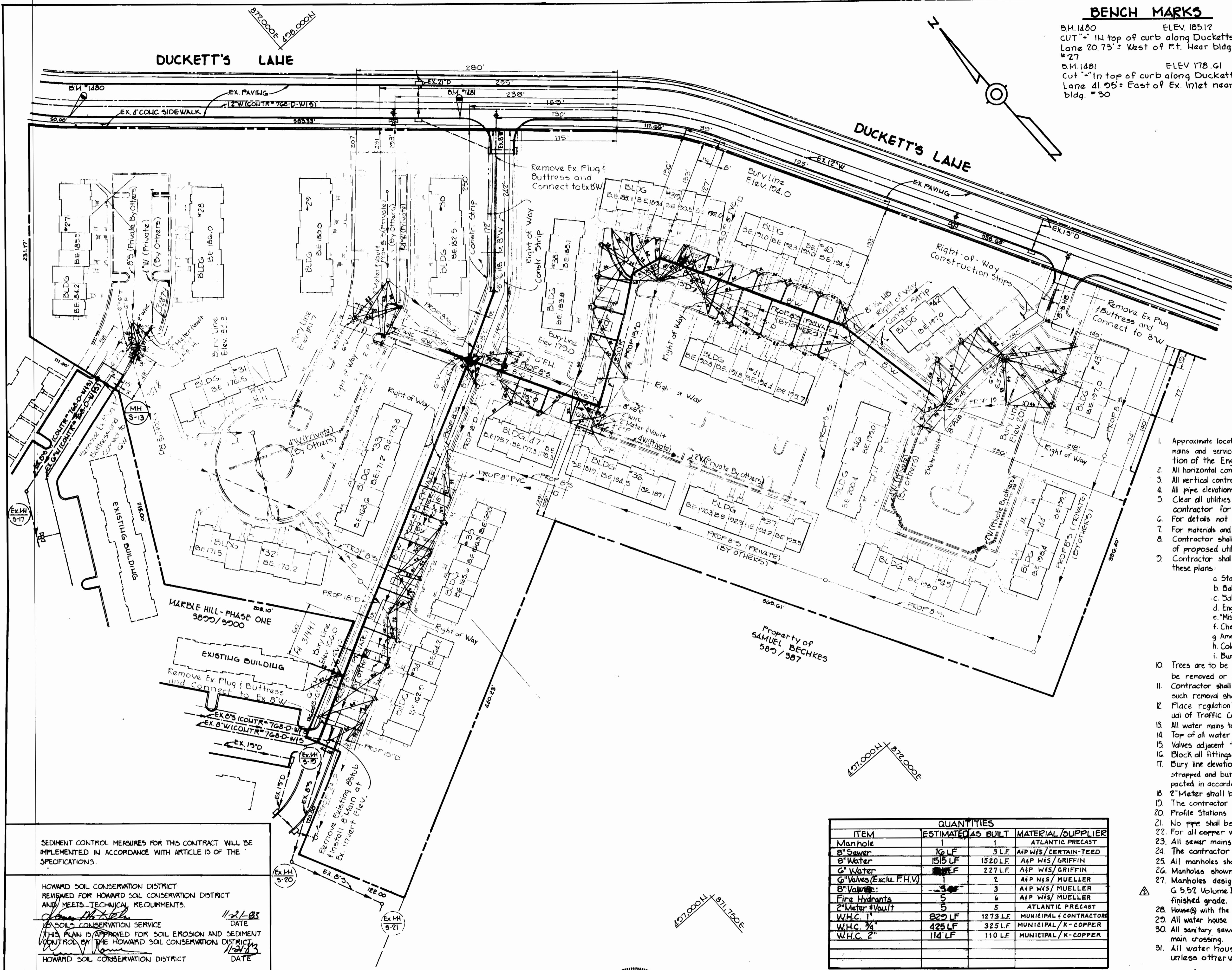


**VICINITY MAP**  
1" = 600'

**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 2'. Clear all poles by 2'-0" minimum or tunnel as required. Any cost incurred to the contractor for tunneling or bracing of poles shall be included in unit prices bid for excavation and backfill.
- 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:
 

a. State Highway Administration -	591-5533
b. Baltimore Gas and Electric Company - Underground Electric Distribution Customer Service -	685-0823
c. Baltimore Gas and Electric Company - Underground Gas Distribution Customer Service -	685-0823
d. Engineering - "Damage Control" -	234-5621
e. "Miss Utility" -	1-552-0100
f. Chesapeake and Potomac Telephone Company -	725-2576
g. American Telephone and Telegraph - Cable Location Division -	323-3533
h. Colonial Pipeline Company -	781-4641
i. Bureau of Utilities Howard County -	792-2566
- 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 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 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 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 37.01 & 37.05 of the Standard Specifications.
- 2" Meter shall be as shown in Howard County Standard W 3.34 & W 3.64 as shown in special provisions.
- The contractor shall not operate any water main valves on the existing system.
- Profile Stations shall be adjusted as necessary to conform to plan dimensions.
- No pipe shall be laid until lines of excavation have been brought to subgrade.
- For all copper water house connections utilize flared type fittings only.
- 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 within 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.
- Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail G 5.52 Volume II. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade.
- House(s) with the symbol "C.N.S." indicates the cellar can not be served.
- All water house connections shall have a minimum vertical clearance of 12" above all sanitary sewer crossing.
- All sanitary sewer house connections shall have a minimum vertical clearance of 12" below all water main crossing.
- All water house connections shall be for inside meter settings unless otherwise shown.



QUANTITIES		
ITEM	ESTIMATED AS BUILT	MATERIAL/SUPPLIER
Manhole	1	ATLANTIC PRECAST
8" Sewer	16 LF	3 LF AIP W/S / CERTAIN-TEED
8" Water	1515 LF	1520 LF AIP W/S / GRIFFIN
6" Water	227 LF	227 LF AIP W/S / GRIFFIN
6" Valves (Exclu. F.H.V.)	2	2 AIP W/S / MUELLER
8" Valves	3	3 AIP W/S / MUELLER
Fire Hydrants	5	5 AIP W/S / MUELLER
2" Meter Vault	5	5 ATLANTIC PRECAST
W.H.C. 1"	822 LF	1273 LF MUNICIPAL / K-COPPER
W.H.C. 3/4"	425 LF	325 LF MUNICIPAL / K-COPPER
W.H.C. 2"	114 LF	110 LF MUNICIPAL / K-COPPER

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH ARTICLE 13 OF THE SPECIFICATIONS.

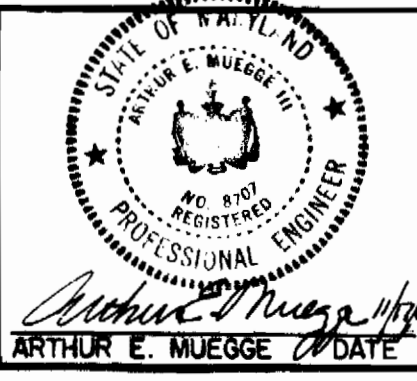
HOWARD SOIL CONSERVATION DISTRICT REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

DATE: 11/21/83  
DATE: 11/21/83

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

14-5-83  
12-1-83

THE RIEMER GROUP, INC.  
8659 BALTIMORE NATIONAL PIKE  
ELLCOTT CITY, MARYLAND 21043



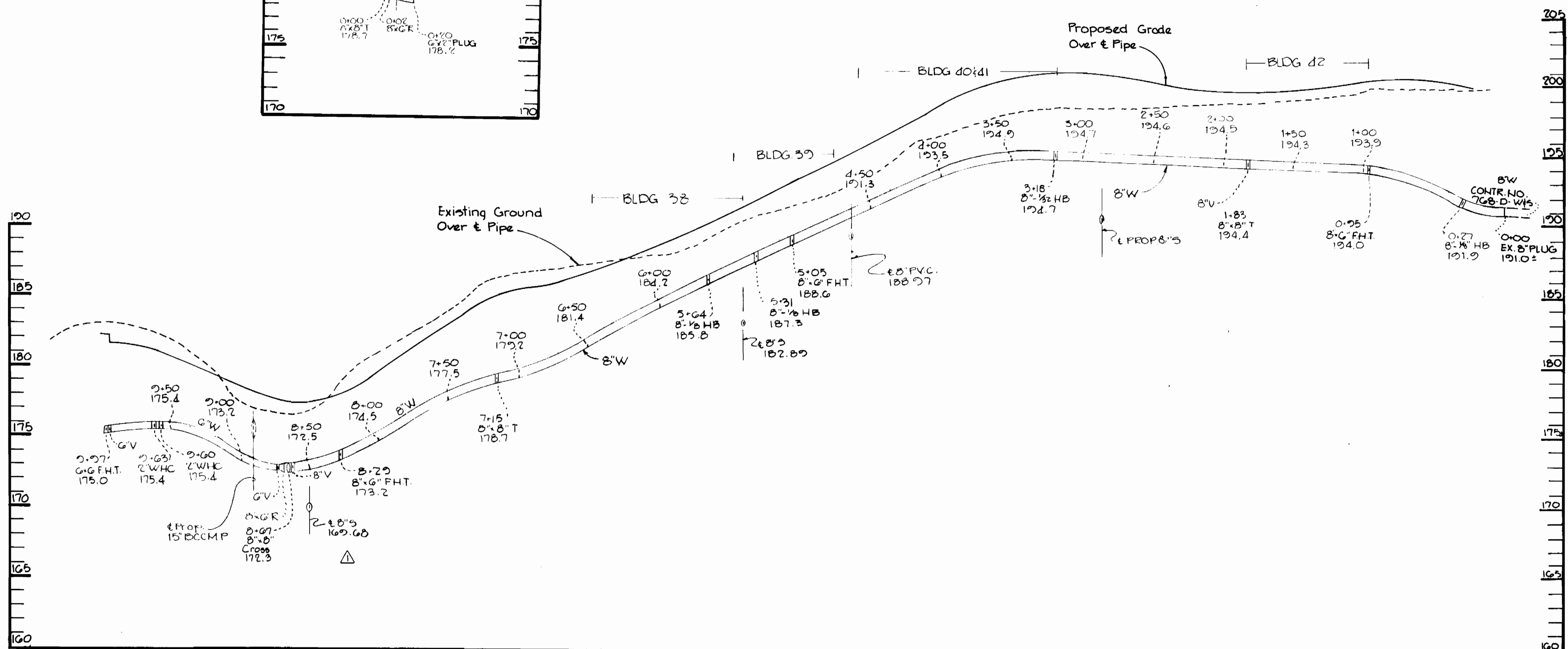
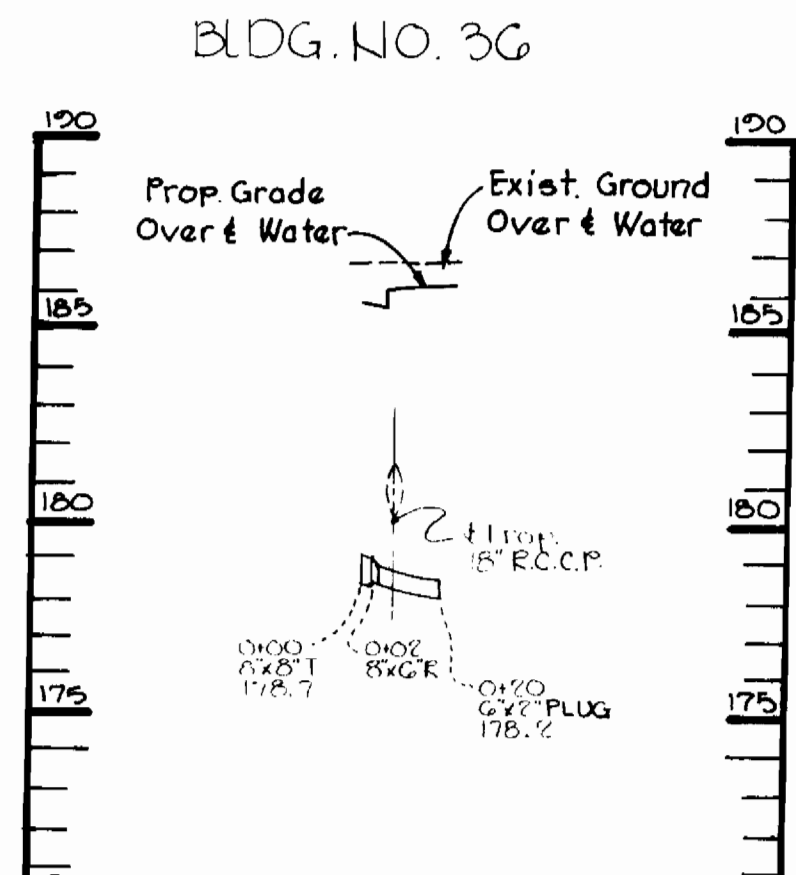
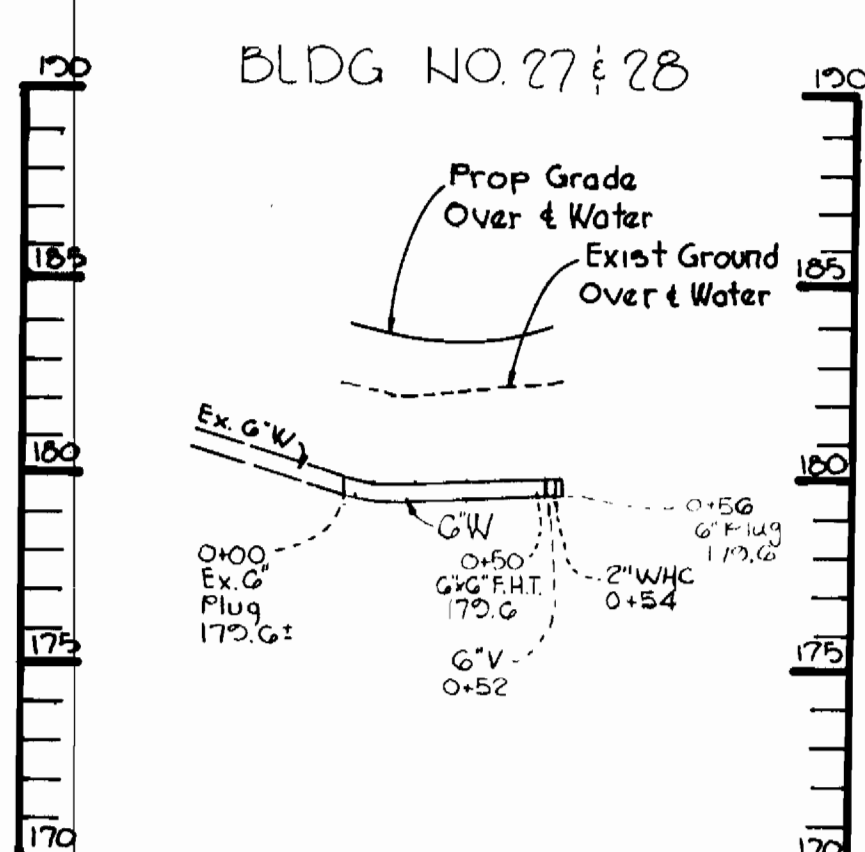
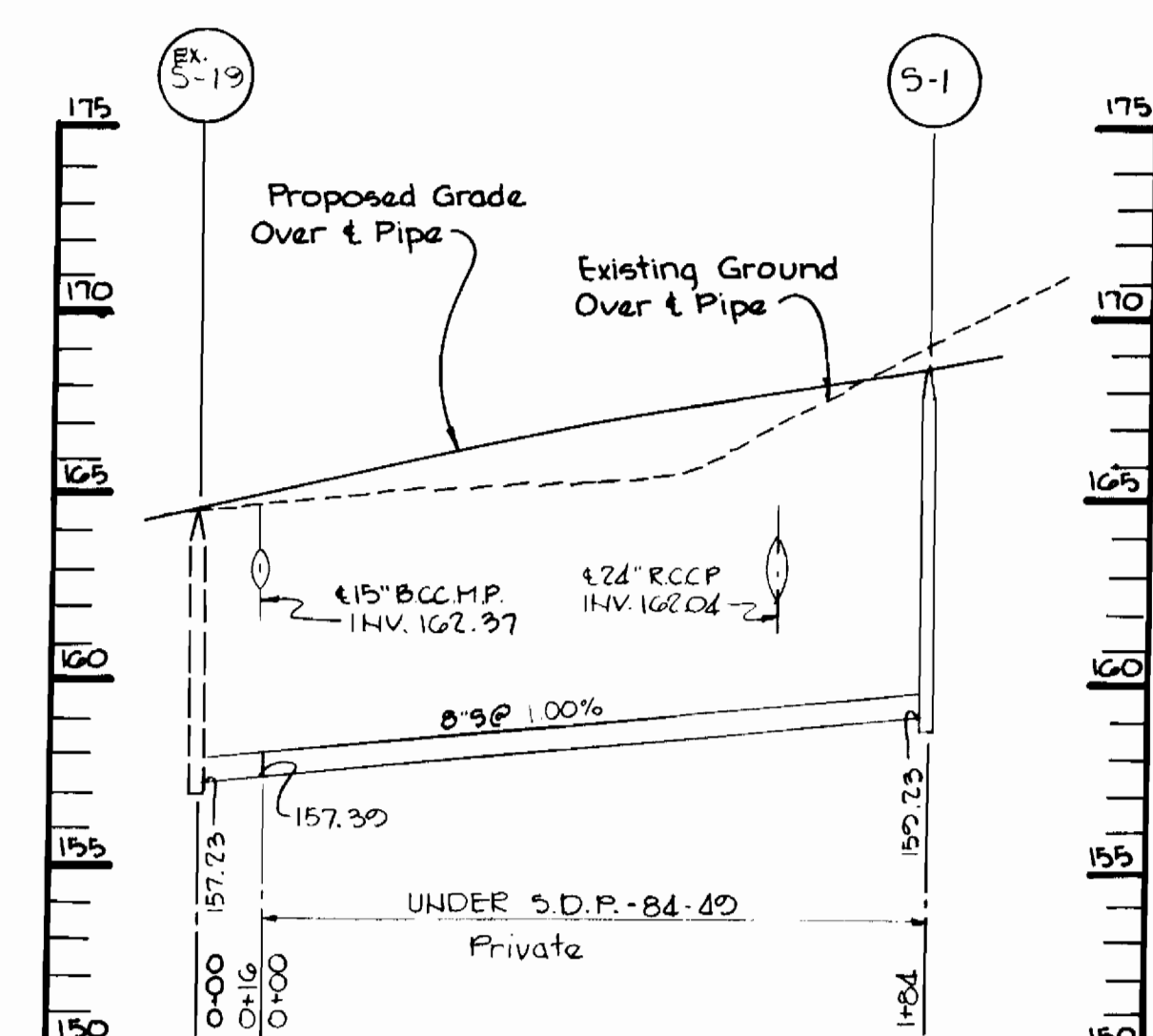
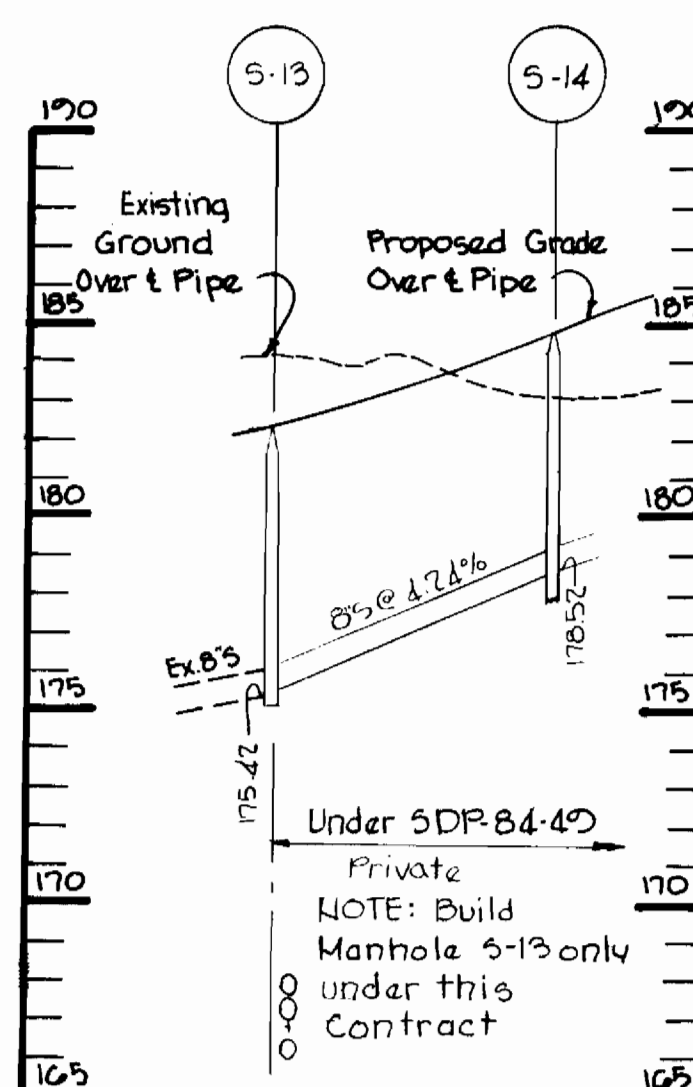
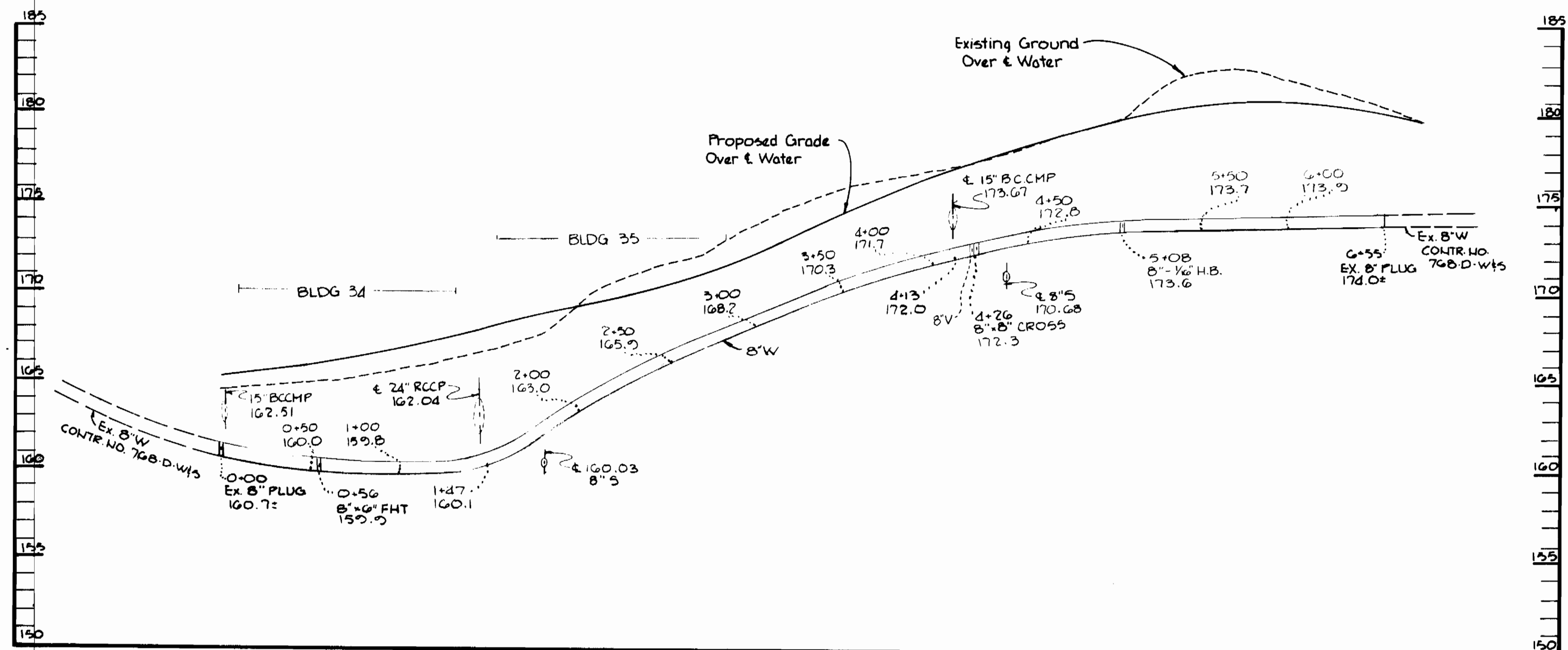
DES: VLS  
DRW: POA  
CHK: J.S.K. / D.A.H.  
DATE: 11/17/83

REVISED NOTE NO. 27  
ADDED BENCH MARKS

PROFILES OF WATER AND SEWER MAINS

MARBLE HILL PHASE TWO  
ELECTION DISTRICT NO. 1  
CONTRACT NO. 14-1166-D

SCALE 1" = 50'  
SHEET 1 OF 2



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*John F. Neuman* 12-5-83  
DIRECTOR OF PUBLIC WORKS DATE

*Richard M. Bainger* 12-1-83  
CHIEF BUREAU OF UTILITIES DATE

*William E. Ray* 12/5/83  
CHIEF BUREAU OF ENGINEERING DATE

*William E. Ray* 12/5/83  
CHIEF-LAND DEVELOPMENT DIVISION DATE

THE RIEMER GROUP, INC.  
8659 BALTIMORE NATIONAL PIKE  
ELLICOTT CITY, MARYLAND 21043

*Arthur E. Muegge* 11/7/83  
ARTHUR E. MUEGGE DATE

DES: VLS					
DRW: JSK					
CHK:					
DATE: 11/17/83	J.S.K.	△	ADDITION OF SEWER CROSSING	2-15-84	
BY: NO.			REVISIONS		

PROFILES OF  
WATER AND SEWER MAINS

80' SCALE MAP NO. 37.838 BLOCK NO.

MARBLE HILL PHASE TWO  
ELECTION DISTRICT NO. 1  
CONTRACT NO. 14-1166-D

AS-BUILT AUG. 3, 1984 NOVEMBER 30, 1983

SCALE  
HOR: 1" = 50'  
VERT: 1" = 5'

SHEET  
2 OF 2