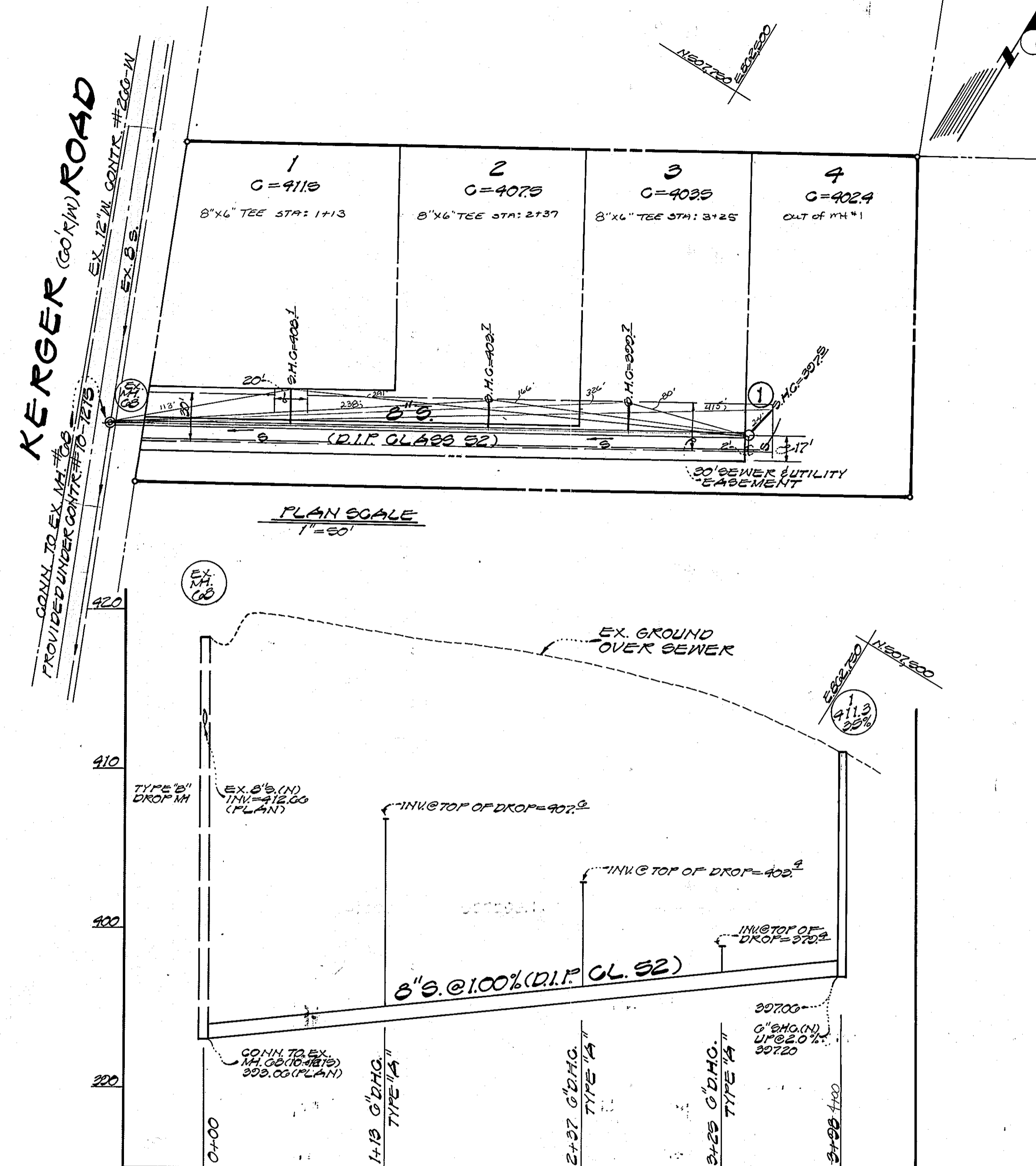
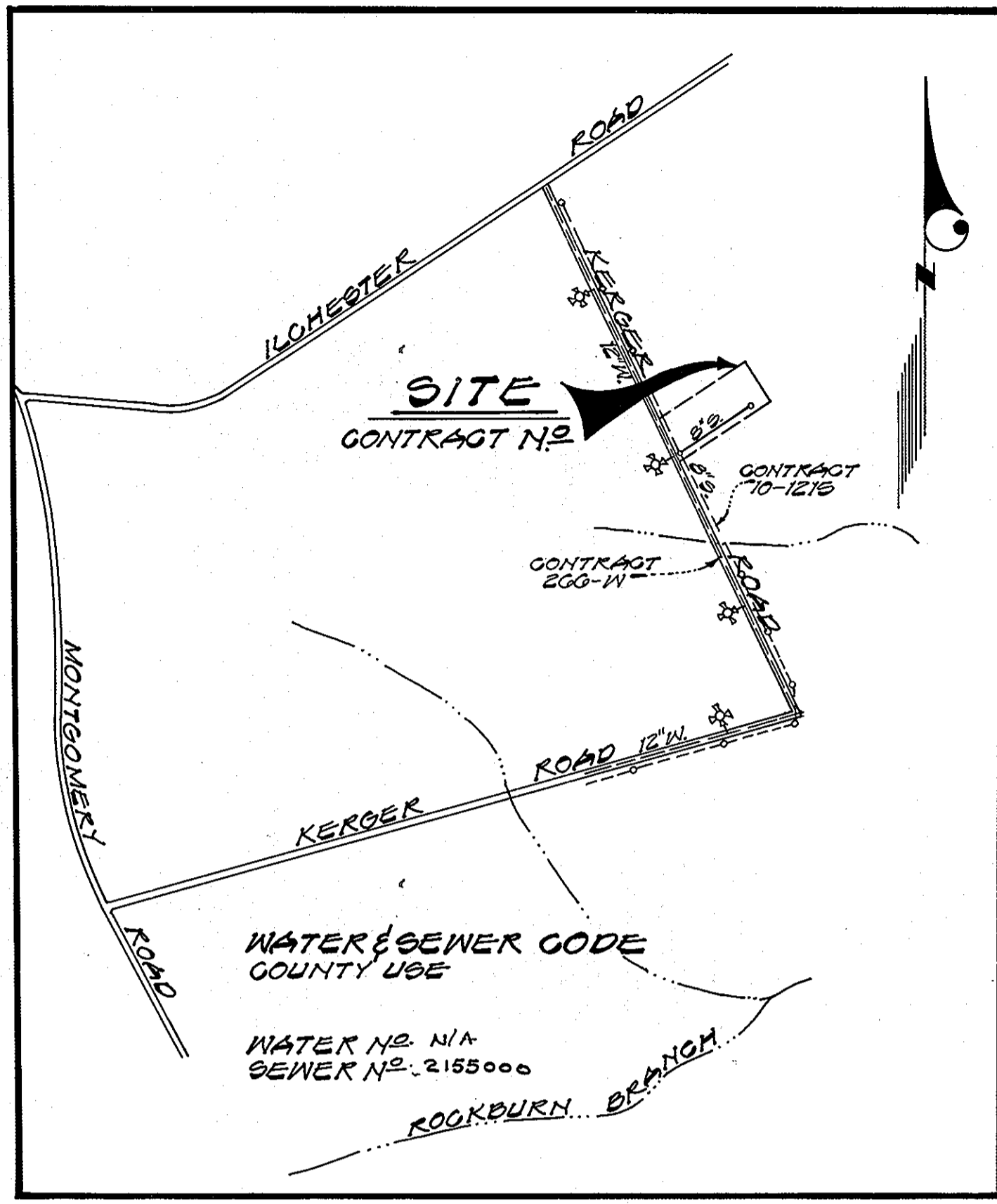


TYPE OF BUILDING	SINGLE FAMILY DETACHED
NUMBER OF UNITS	4
NUMBER OF SHC's	4
NUMBER OF WHC's	0
DRAINAGE AREA	1241200

GENERAL NOTES

- Approximate locations 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 6". Clear all poles by 2'-0" minimum or tunnel as required. Any cost incurred by the contractor for tunneling or bracing at poles shall be included in unit prices bid for construction of the main.
- For details not shown on the drawings, use Howard County Standard Details.
- For materials and construction methods, use Howard County Standard Specifications & Howard County Design Manual, Volume IX. The Contractor shall have a copy of Volume IX on the job.
- 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.

State Highway Administration	531-5533	Baltimore Gas & Electric Company	
"Miss Utility"	1-559-0100	Contractor Services	561-2585
Chesapeake & Potomac (CBP)		Underground Damage Control	234-5621
Telephone Company	725-9976	Trouble-shooting	298-9013
Colonial Pipeline Company	795-1390	Bureau of Utilities, Howard County	992-2366
- 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 construction of the main.
- 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 Sections 10.03 and 10.08 of the Standard Specifications.
- All water house connections shall be for an inside meter setting.
- The contractor shall not operate any water main valves on the existing system.
- For all Copper Water House Connections, utilize flared type fittings only.
- All sewer mains shall be D.I.P. GLASS 52 ONLY.
- 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.
- 12" and 16" manhole wall thicknesses shown on profiles pertain to brick manholes only.
- Manholes designated W.T. in plan and profile shall have watertight frames and covers. (See Standard Detail G.5.52). Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade. (See Standard Detail G.5.41).
- House(s) with the symbol "C.N.S." indicates that cellar cannot be served.
- Water main and water house connection lines must have a minimum of one foot separation from either sanitary sewer or sewer house connections as they cross. Except at crossings, water and sewer lines shall have a minimum horizontal separation of 10'.



LEGEND

..... SILT FENCE
(TO BE INSTALLED PER U.S.D.A.-O.G.S. 2712 DIS. 5P. 1 PRIOR TO ANY LAND DISTURBING ACTIVITY.)

Sediment Control Measures will be implemented in accordance with Article No. 15 of the Specifications & with THIS PLAN.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

J. Heber 3/3/89
SIGNATURE DATE

U.S. SOIL CONSERVATION SERVICE

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

APPROVED:
Stephen L. Anker 3/3/89
HOWARD S.C.D. DATE

CONTRACT NO. 10-1221-D

O'NEILL PROPERTY
LOTS 1 THRU 4

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

QUANTITIES			
ITEM	ESTIMATED	AS-BUILT	MATERIAL / SUPPLIER
4" DIA. M.	1 EA.	1 EA.	ATLANTIC PRECAST
8" D.I.P. SEWER	400 L.F.	398 L.F.	GRIFFIN PIPE CO.
6" G.H.C. DEP.	70 L.F.	98 L.F.	" " "

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. ... 3/3/89
DIRECTOR OF PUBLIC WORKS DATE

Robert M. ... 3-3-89
CHIEF, BUREAU OF UTILITIES DATE

James M. ... 3/3/89
CHIEF, LAND DEVELOPMENT DIV. DATE

GW GUTSCHICK LITTLE & WEBER, P.A.
ENGINEERS, PLANNERS, SURVEYORS

3909 NATIONAL DRIVE - SUITE 250 - BURTONTOWNE OFFICE PARK
BURTONTOWNE, MD. 20866
(301) 421-4024



DES: TOG			
DRN: WBJ			
CHK: GKG			
DATE: FEB 1989	BY NO.	REVISION	DATE

TITLE SHEET
SEWER MAIN
AND PROFILE

600' SCALE MAP NO. 31 BLOCK NO. 12

O'NEILL PROPERTY
LOTS 1 THRU 4
102 ELECTION DISTRICT
CONTRACT # 10-1221-D

SCALE AS SHOWN
SHEET 1 OF 1