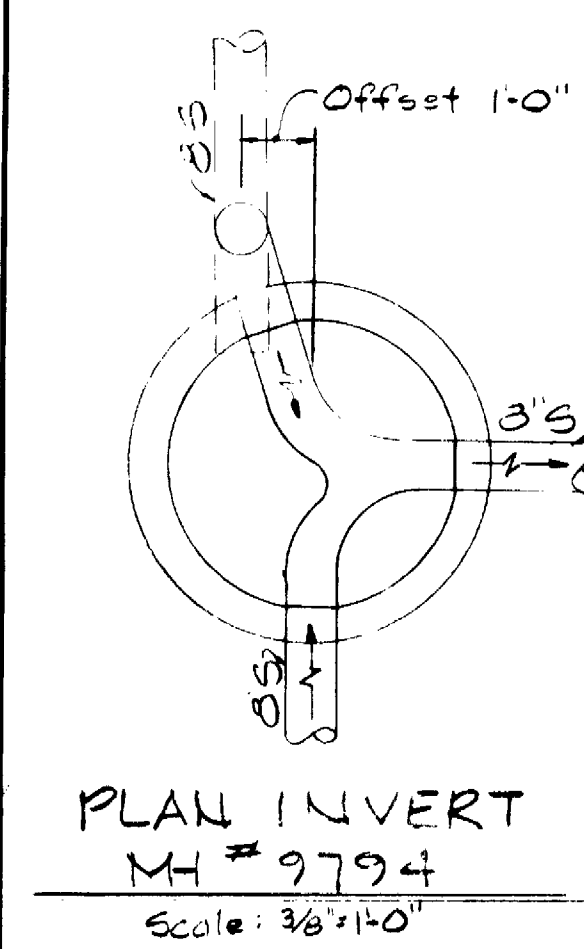


See Plan Invert for MH #9794 This Sheet.

BENCH MARKS
 W.R. & A. B.M. #1 Elev. 301.02
 R.R. spike at side 18' Poplar, 50' right of Vollmerhausen Rd. Sta. 6+00.
 W.R. & A. B.M. #2 Elev. 334.54
 R.R. spike at side 18' Twin Poplar, 40' right of Vollmerhausen Rd. Sta. 15+35.



REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT
 James M. Helmforfer 4-1-81
 SIGNATURE DATE
 U.S. SOIL CONSERVATION SERVICE

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard County Conservation District

APPROVED: William J. Rowe 4-1-81
 HOWARD SCD DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Frank F. Newman 4/18/81
 DIRECTOR OF PUBLIC WORKS DATE
 Robert M. Bunniger 4-6-81
 CHIEF - BUREAU OF UTILITIES - DATE
 William J. Rowe 4-8-81
 CHIEF - LAND DEVELOPMENT DIVISION - DATE

Sediment Control Measures for this Contract will be implemented in accordance with Article 15 of the Standard Specifications and SDP 81-111

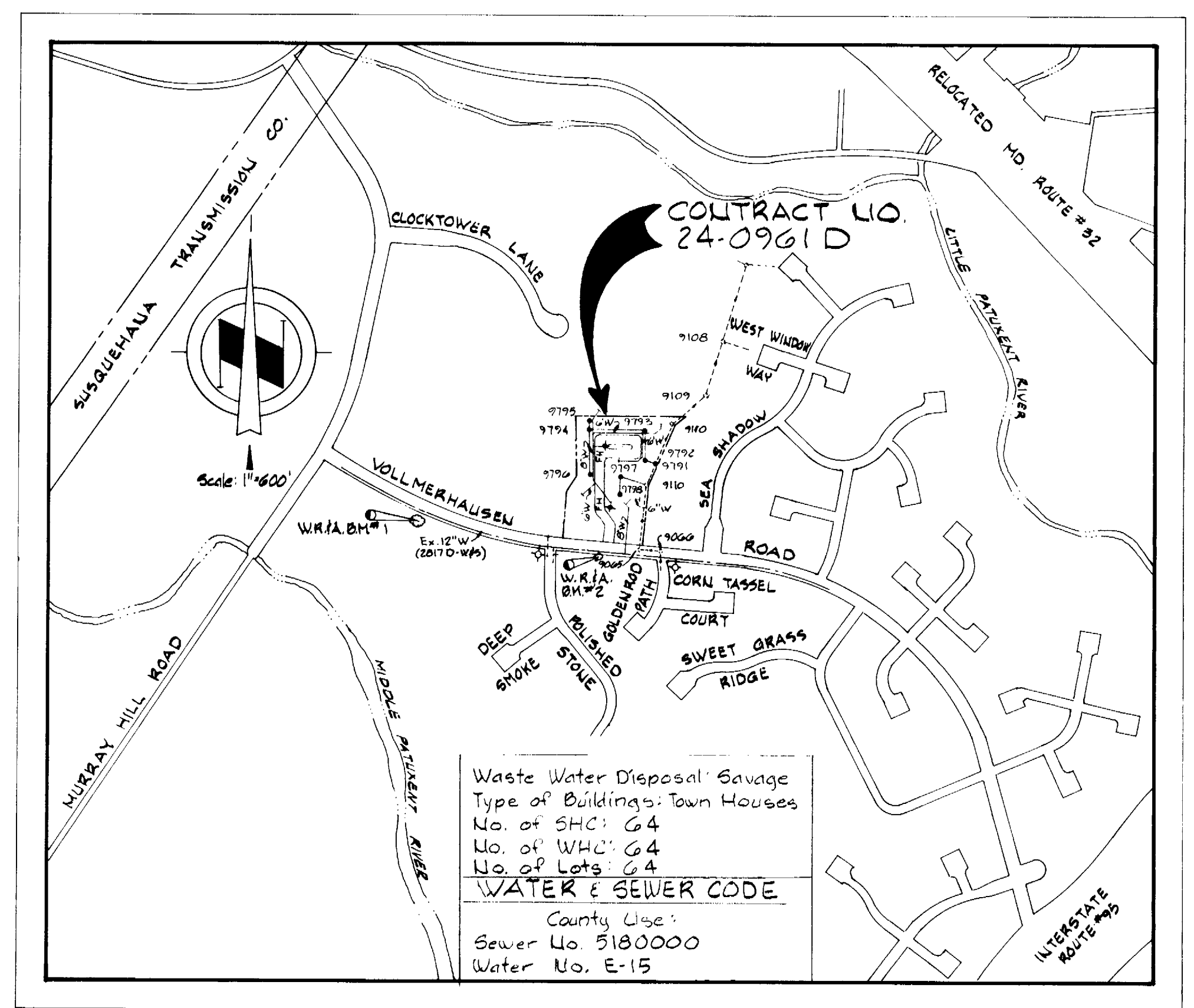
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
 2315 ST. PAUL ST.
 BALTIMORE, MARYLAND

CONTRACT NO. 24-0961D

PLAN OF WATER & SEWER MAINS

COLUMBIA VILLAGE OF KINGS CONTRIVANCE ELECTION DISTRICT GUILFORD NO. 6

DRAWING NO. 1 OF 2 SCALE AS SHOWN



VICINITY MAP Scale: 1" = 600'

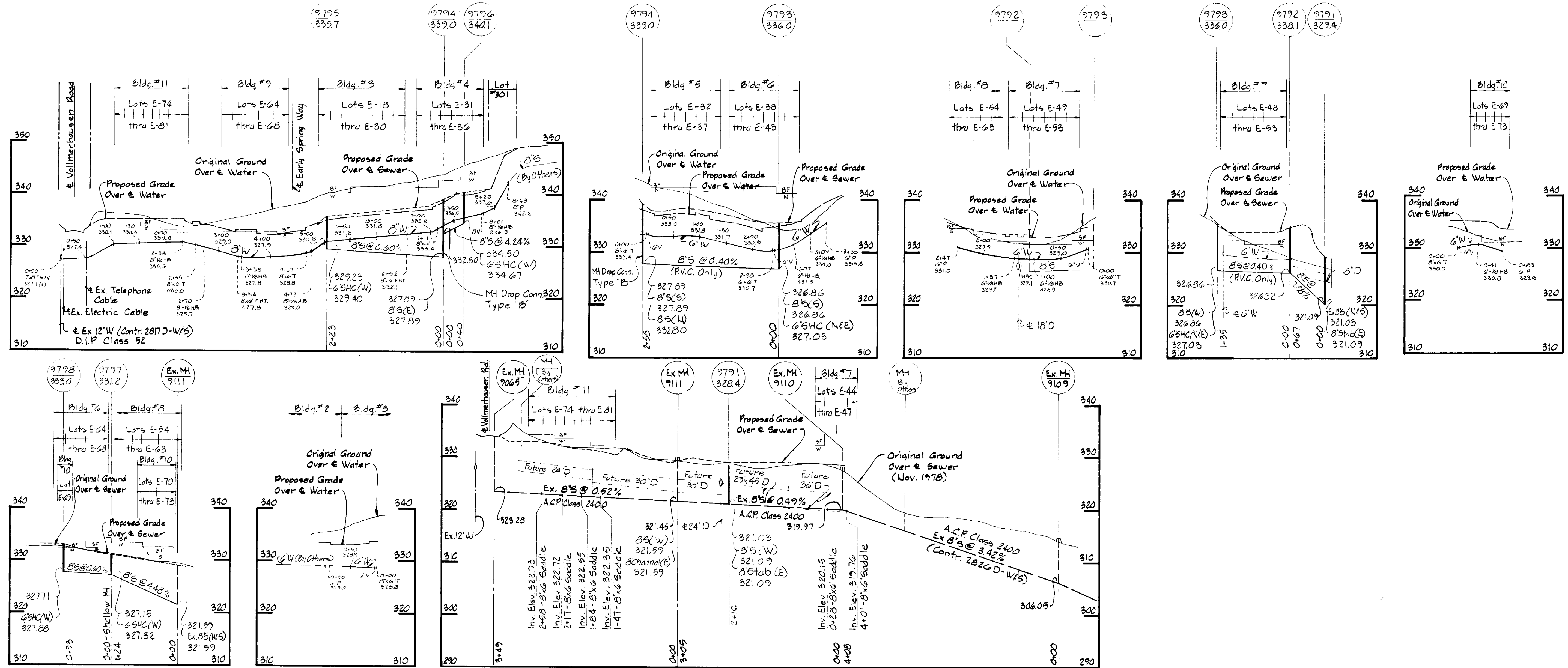
GENERAL NOTES

- 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 PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN THE VICINITY OF UTILITIES AT HIS EXPENSE.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, USE HOWARD COUNTY STANDARD DETAILS.
- FOR MATERIALS AND CONSTRUCTION REQUIREMENTS, USE HOWARD COUNTY STANDARD SPECIFICATIONS.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON USGS DATUM.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. THE COST FOR TUNNELING OR BRACING POLES SHALL BE INCLUDED IN APPROPRIATE UNIT PRICES BID.
- 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
 UNDERGROUND ELECTRIC AND GAS DISTRIBUTION-CUSTOMER SERVICE - 685-0123
 DAMAGE CONTROL - 234-5621
 "MISS UTILITY" - 1 - 559-0100
 CHESAPEAKE & POTOMAC TELEPHONE COMPANY - 725-9976
 AMERICAN TELEPHONE AND TELEGRAPH - CABLE LOCATION DIVISION - 393-3553
 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 APPROPRIATE UNIT PRICES BID.
- 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 C.I.P. OR D.I.P. UNLESS OTHERWISE NOTED.
- TOP OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3 1/2 FEET OF COVER UNLESS OTHERWISE NOTED.
- VALVES SHALL BE STRAPPED WHERE APPLICABLE.
- 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 THE STANDARD SPECIFICATIONS.
- WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
- ALL SEWER MAINS SHALL BE C.S.P.X., V.C.P.X., A.C.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER, UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
- MANHOLES SHOWN WITH 12" WALLS ARE FOR BRICK MANHOLES ONLY.

ITEM	BID	AS-BUILT	MATERIAL/SUPPLIER
8" Sewer - L.F.	950	226	CLAY PIPE (LOGAN INC. PVC PIPE (J.M. TOC)
Manholes - Ea.	8	8	ATLANTIC MANHOLES
8" Water - L.F.	845	812	D.I.P. GRIFFIN INC.
6" Water - L.F.	820	813	D.I.P. GRIFFIN INC.
8" Valves - Ea.	1	1	M&H INC.
6" V (Excluding FHV)	5	5	M&H INC.
Fire Hydrants - Ea.	2	2	U.S.P. INC.
12" x 8" T.S. F.V.	1	1	U.S.P. INC.
8" x 6" Saddle	6	6	A & P INC.

NOTE:
 All W.H.C.'s shall be 34" diameter unless otherwise noted.

Village of Kings Contrivance Section 3 Area 1 Parcel "E" Part 1 Contract No. 24-0961D



NOTE
 Original Ground over Water & Sewer was taken from Aerial Photography prepared by Maps and Inc., and verified by field survey in March, 1981.



Kenneth J. Pollock

Village of Kings Contrivance
 Section 3, Area 1
 Parcel "E"
 Part 1
 Contract No. 24-0961-D

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director: *Frank F. Nelmis*
 Chief - Bureau of Engineering: *Richard M. Bringer* 4-6-81
 Chief - Bureau of Utilities: *Richard M. Bringer* 4-6-81
 Chief - Bureau of Engineering: *Richard M. Bringer* 4-6-81
 Chief - Land Development Division: *Richard M. Bringer* 4-6-81

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 2315 ST. PAUL ST.
 BALTIMORE, MARYLAND

CONTRACT NO. 24-0961D

PROFILES OF
 WATER & SEWER MAINS

COLUMBIA
 VILLAGE OF KINGS CONTRIVANCE
 ELECTION DISTRICT GUILFORD NO. 6

DRAWING NO. 2 OF 2
 SCALE H: 1"=100' V: 1"=10'