

QUANTITIES			
ITEM	BID	AS-BUILT	MATERIAL/SUPPLIER
8" Sewer LF	2240	2249	V.C.P. A&P WATER/SEWER
Manholes Ea	13	13	ATLANTIC PRECAST CONC. CO.
8" Water LF	1030	997	D.I.P. GRIFFIN PIPE
8" Valves Ea	4	4	FLOW INDUSTRIES
6" Water LF	1060	1042	D.I.P. GRIFFIN PIPE
6" V (Excluding FMV)	4	4	FLOW INDUSTRIES
Fire Hydrants Ea	3	3	FLOW INDUSTRIES
6" SEWER		1108	V.C.P. A&P W/S
3/4" COPPER PIPE		868	FLOW INDUSTRIES
1" COPPER PIPE		270	FLOW INDUSTRIES

**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 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. ANY COST INCURRED TO 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.
- 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 - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE - 685-0123.  
 BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE - 685-0123.  
 ENGINEERING - "DAMAGE CONTROL" - 234-5621.  
 "MISS UTILITY" - 1-559-0100  
 CHESAPEAKE & POTOMAC (C&P) TELEPHONE COMPANY - 725-9976  
 AMERICAN TELEPHONE AND TELEGRAPH - CABLE LOCATION DIVISION - 393-3553  
 COLONIAL PIPELINE COMPANY - 781-4641  
 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 SHALL BE 6" OR D.I.P. UNLESS OTHERWISE NOTED.
- TOP OF ALL WATER MAINS SHALL 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 37.01 AND 37.05 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.
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., A.C.P. CLASS 2400 OR PVC 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 ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL S1.45.

**CONTRACT NO. 34-1093-D**  
**VILLAGE OF KINGS CONTRIVANCE**  
**HOWARD COUNTY, MARYLAND**  
**DEPARTMENT OF PUBLIC WORKS**

Sediment Control Measures for this Contract will be implemented in accordance with Article 15 of the Standard Specifications and F-83-80

**REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT**

*James M. Hill* 3-10-83  
 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: *Robert M. Quinn* 3-9-83  
 HOWARD S.C.D. DATE

Village of Kings Contrivance  
 Section 3 Area 2 (Lots B-1 Thru B-66)  
 Parcel B Phase 1  
 Contract No. 34-1093-D

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	
<i>Henry F. Neuman</i> 3-15-83 DIRECTOR OF PUBLIC WORKS - DATE	<i>Robert M. Quinn</i> 3-11-83 CHIEF - BUREAU OF UTILITIES - DATE
<i>William J. Kelly</i> 3-14-83 CHIEF - BUREAU OF ENGINEERING - DATE	<i>William J. Kelly</i> 3-14-83 CHIEF - LAND DEVELOPMENT DIVISION - DATE

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



VICINITY MAP  
 AND  
 GENERAL NOTES

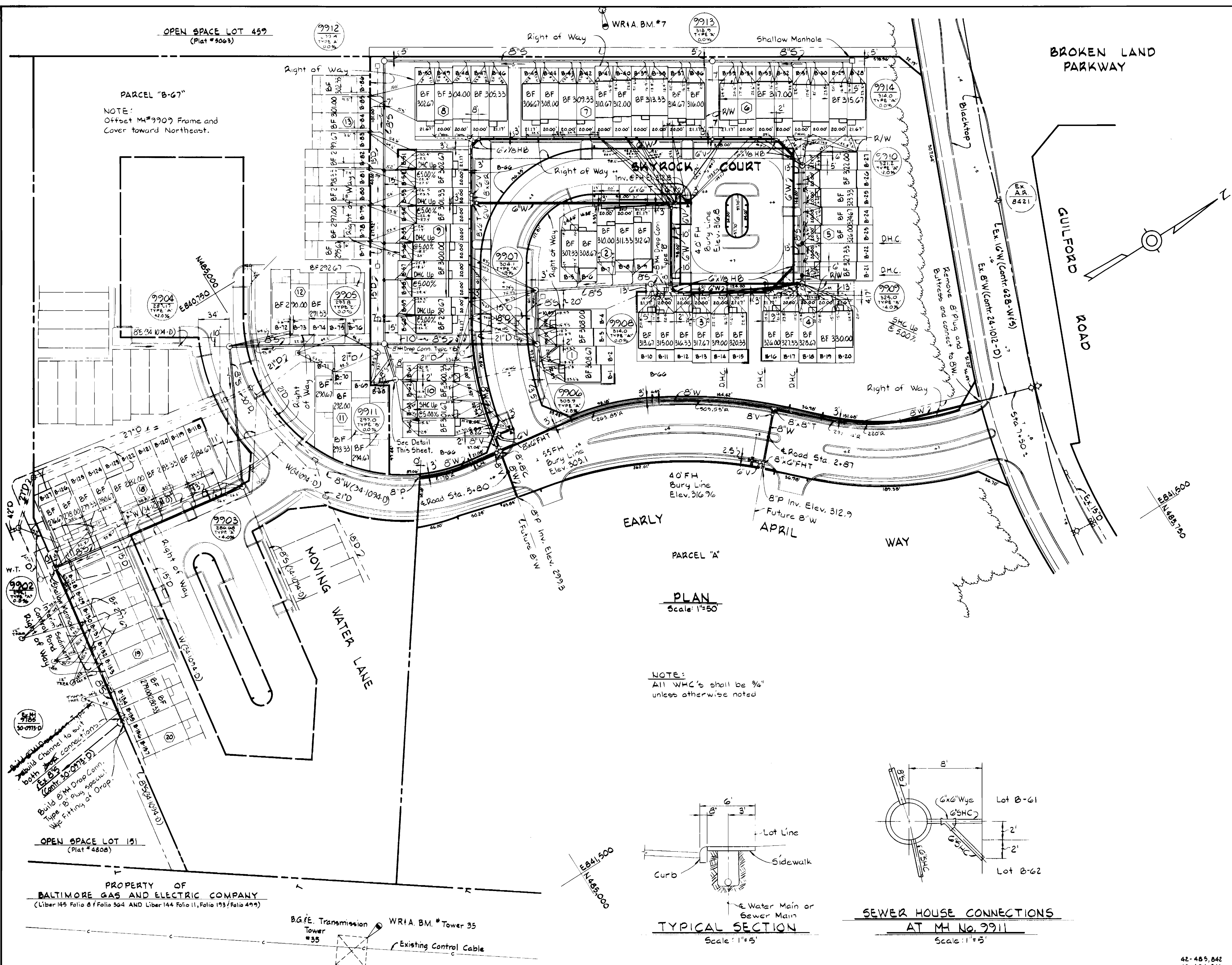
600 SCALE MAP NO. 42 BLOCK NO.

COLUMBIA  
 VILLAGE OF KINGS CONTRIVANCE  
 SECTION 3 AREA 2  
 ELECTION DISTRICT NO. 6  
 CONTRACT NO. 34-1093-D

SCALE  
 1"=600'  
 SHEET  
 1 OF 4

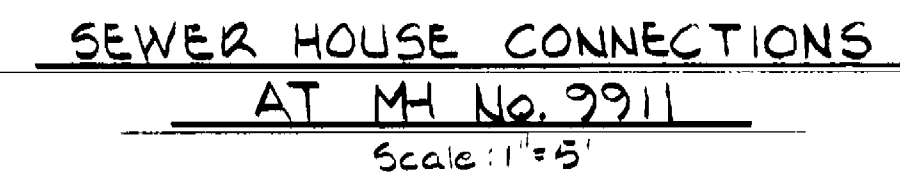
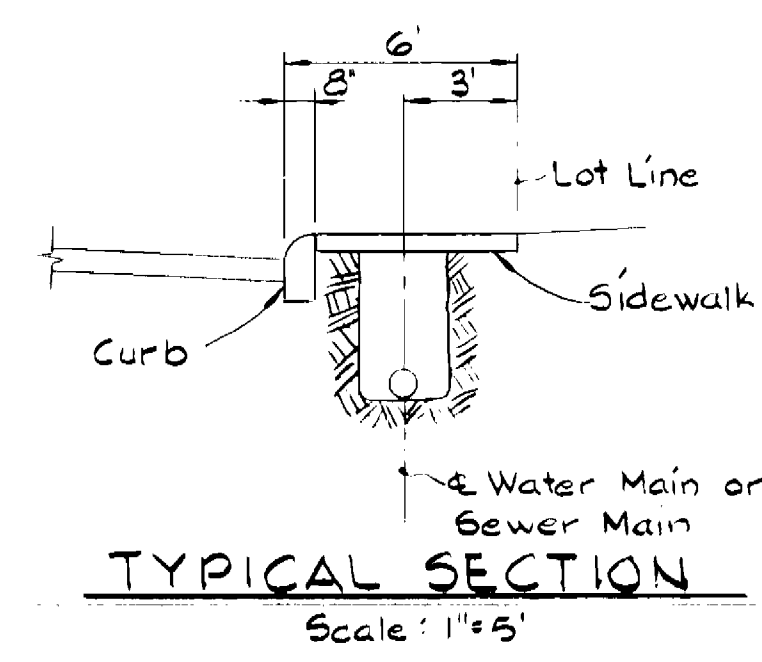
OPEN SPACE LOT 459  
(Plat # 9063)

PARCEL "B-67"  
NOTE:  
Offset MH #9909 Frame and  
Cover toward Northeast.



PLAN  
Scale: 1"=50'

NOTE:  
All WHC's shall be 3/4"  
unless otherwise noted



SEWER HOUSE CONNECTION  
INVERT ELEVATIONS AT PROPERTY LINE

STATION	LOT	INVERT	STATION	LOT	INVERT
<b>MH 9905 TO MH 9912</b>					
0+28 R	B-59	291.25	0+14 L	B-127	272.04
0+48 L	B-60	291.25	0+48 L	B-125	273.31
0+68 R	B-57	291.75	0+88 L	B-126	273.31
1+08 R	B-58	291.75	1+28 L	B-123	274.67
1+08 R	B-55	292.35	1+28 L	B-124	274.67
1+12 L	B-56	292.35	1+68 L	B-121	276.16
1+12 L	B-77	298.76	1+68 L	B-122	276.16
1+48 R	B-78	288.76	2+01 L	B-117	277.65
1+48 R	B-53	293.85	2+01 L	B-120	277.65
1+52 L	B-54	293.85		B-118	278.88
1+52 L	B-79	290.16	<b>MH 9904 TO MH 9905</b>		
1+88 R	B-80	290.16	0+65 L	B-72	282.43
1+88 R	B-51	295.05	0+65 L	B-73	282.43
1+92 L	B-52	295.05	0+92 L	B-74	283.22
1+92 L	B-81	291.40	1+15 R	B-70	284.27
2+32 L	B-82	291.40	1+25 L	B-71	284.27
2+32 L	B-83	292.56	1+25 L	B-75	284.20
2+72 L	B-84	292.56		B-76	284.20
2+72 L	B-85	293.76	<b>MH 9906 TO MH 9907</b>		
2+72 L	B-86	293.76	0+40 R	B-1	298.49
			0+08 R	B-2	298.49
			0+26 R	B-3	298.09
			0+26 R	B-4	298.09
			<b>MH 9907 TO MH 9908</b>		
			0+46 L	B-5	301.74
			0+46 L	B-6	301.74
			0+85 L	B-7	303.87
			1+07 L	B-8	305.05
			1+07 L	B-9	305.05
			<b>MH 9908 TO MH 9909</b>		
			0+07 R	B-10	310.76
			0+43 R	B-11	310.76
			0+43 R	B-12	311.66
			0+83 R	B-13	311.66
			0+83 R	B-14	316.06
			1+23 R	B-15	316.06
			1+60 R	B-16	318.16
			0+78 R	B-17	318.76
			0+78 R	B-18	318.76
			0+78 R	B-19	316.93
			0+78 R	B-20	316.93
			<b>MH 9909 TO MH 9910</b>		
			0+10 R	B-21	318.86
			0+44 R	B-22	317.56
			0+44 R	B-23	317.56
			0+80 R	B-24	314.40
			0+90 R	B-25	314.47
			1+15 R	B-26	314.65
			0+70 R	B-27	314.81
			<b>MH 9905 TO MH 9911</b>		
			0+17 R	B-68	288.38
			0+17 R	B-67	288.38
			0+17 R	B-61	292.12
			0+17 R	B-62	292.12
			0+17 R	B-63	293.96
			0+17 R	B-64	293.96

BENCH MARKS

- WR1A. BM #7 Elev. 311.17
- R.R. Spike in 24" Oak.
- WR1A. BM. # Tower 35 Elev. 286.55
- Bolt in concrete Base of N.W. leg of tower.

42-485,842  
42-484,842  
42-484,8405

Village of Kings Contrivance  
Section 3 Area 2 (Lots B-1 Thru B-66)  
Parcel B Phase 1  
Contract No. 34-1093-D

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Robert F. Newman* 3-15-83  
DIRECTOR OF PUBLIC WORKS—DATE

*Robert F. Newman* 3-15-83  
CHIEF—BUREAU OF UTILITIES—DATE

*William R. Lister*  
CHIEF—BUREAU OF ENGINEERING—DATE

*William R. Lister* 3-14-83  
CHIEF—LAND DEVELOPMENT DIVISION—DATE

WHITMAN, REQUARDT  
AND ASSOCIATES  
ENGINEERS

2315 ST. PAUL ST.  
BALTIMORE, MARYLAND

PLAN OF  
WATER & SEWER MAINS

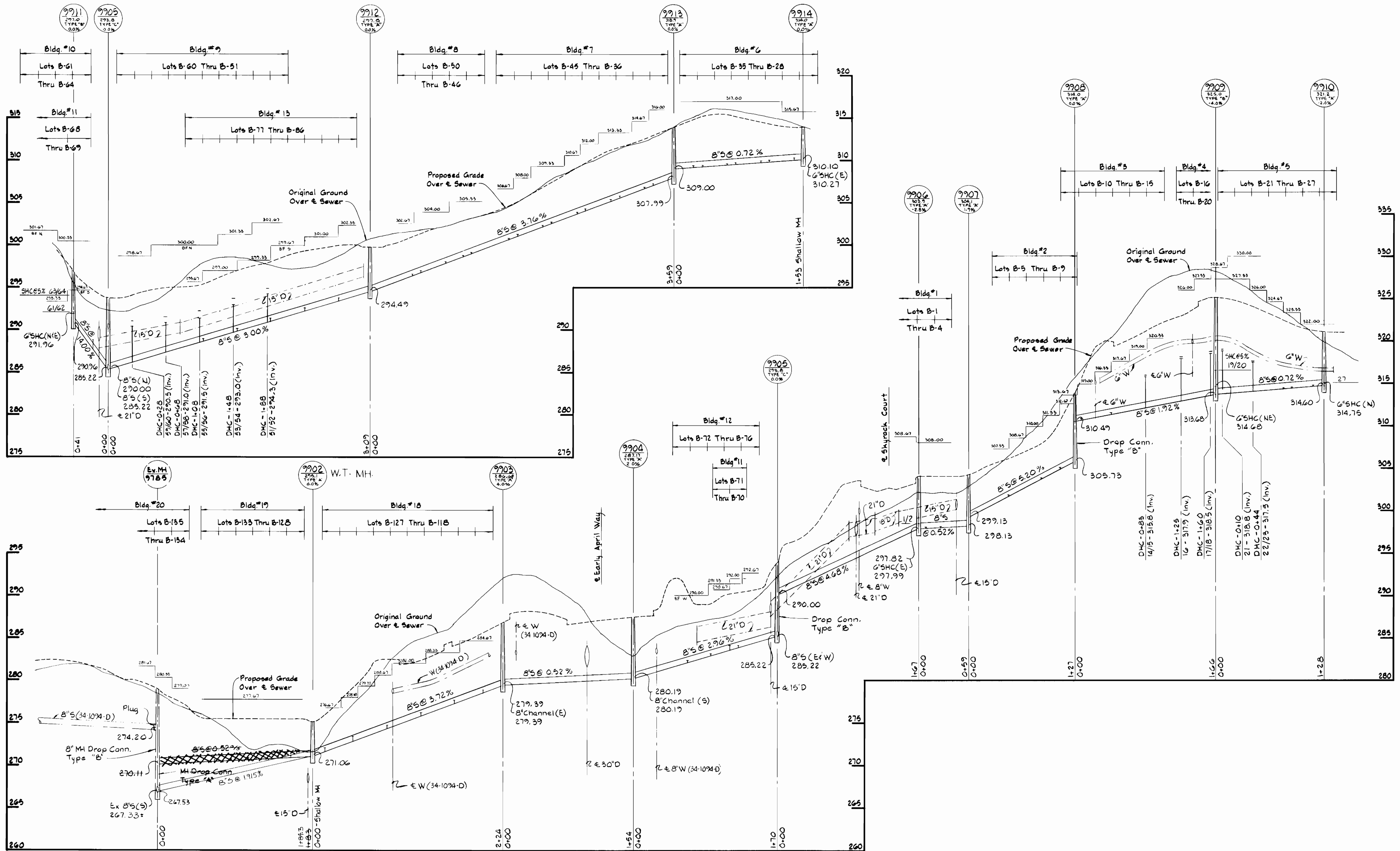
600 SCALE MAP NO. 42 BLOCK NO.

COLUMBIA  
VILLAGE OF KINGS CONTRIVANCE  
SECTION 3 AREA 2  
ELECTION DISTRICT NO. 6  
CONTRACT NO. 34-1093-D

SCALE  
AS  
SHOWN

SHEET  
2 OF 4

AS-BUILT JULY, 1983



Village of Kings Contrivance  
 Section 3 Area 2 (Lots B-1 Thru B-69)  
 Parcel B Phase 1  
 Contract No. 34-1093-D

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 3-15-83  
 3-11-83

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



PROFILES OF  
 SEWER MAINS  
 600 SCALE MAP NO. 42 BLOCK NO.

COLUMBIA  
 VILLAGE OF KINGS CONTRIVANCE  
 SECTION 3 AREA 2  
 ELECTION DISTRICT NO. 6  
 CONTRACT NO. 34-1093-D

SCALE  
 H:1"=50'  
 V:1"=5'  
 SHEET  
 3 OF 4

