

QUANTITIES				
ITEM	UNIT	ESTIMATE	AS-BUILT	SUPPLIER
8" SEWER	L.F.	260		
STD 4" MANHOLE	EA.	1		
4" S.H.C.	L.F.	25		

RESTORATION SCHEDULE		
LOCATION	DISTANCE	TYPE
EX. MH 230 TO S-1	34 L.F.	S.H.A. PAVING
S-1	230 L.F.	SEED & MULCH
S.H.C. TO HSE #2640	25 L.F.	SEED & MULCH
DRIVEWAY AT LOT 1	12 L.F.	MAC. PAVING

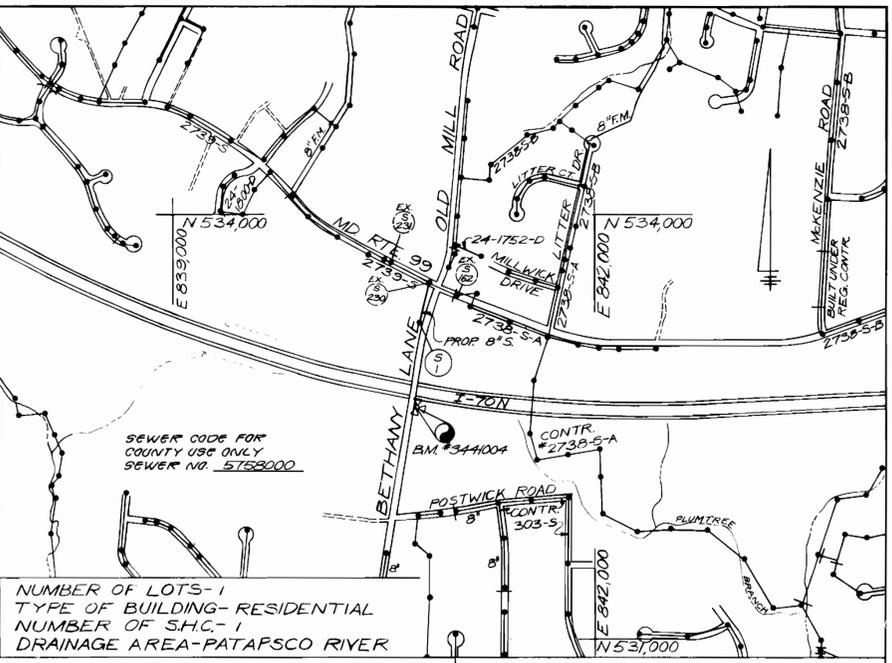
MANHOLE STAKEOUT TABLE		
MANHOLE	DISTANCE	OFFSET
S-1	171#4 TO 171#1 STA. 2+60	47' RT.

TRAVERSE DATA	
HEC. TRAV. PI. #4	N 533,533.11 E 840,890.05 EL. 478.82
S 18°08'32"W 394.72'	N 533,675.2 E 840,770.28 EL. 485.09
HEC. TRAV. PI. #101 (P.O.L.)	N 533,94.29 E 840,672.56 EL. 482.53

SEWER HOUSE CONNECTION (INVERT ELEV. @ 1" R.O.P. LINE)		
STATION	LOT	ELEV.
BETHANY LN. @ MH L.I.	HSE # 2040	474.90

**BENCH MARKS**  
 1. HOWARD COUNTY NO. 3441004  
 COORDINATES: N 532,658.086  
 E 840,720.726  
 ELEV. 479.097  
 (SEE VICINITY MAP)  
 2. HEC. BENCH MARK SET IN T. POLE BG #E. 363171,  
 C#P #2 ELEV. 481.94

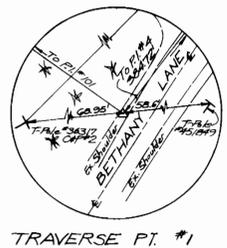
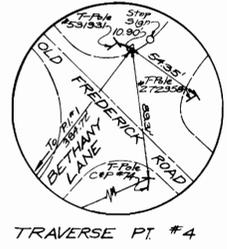
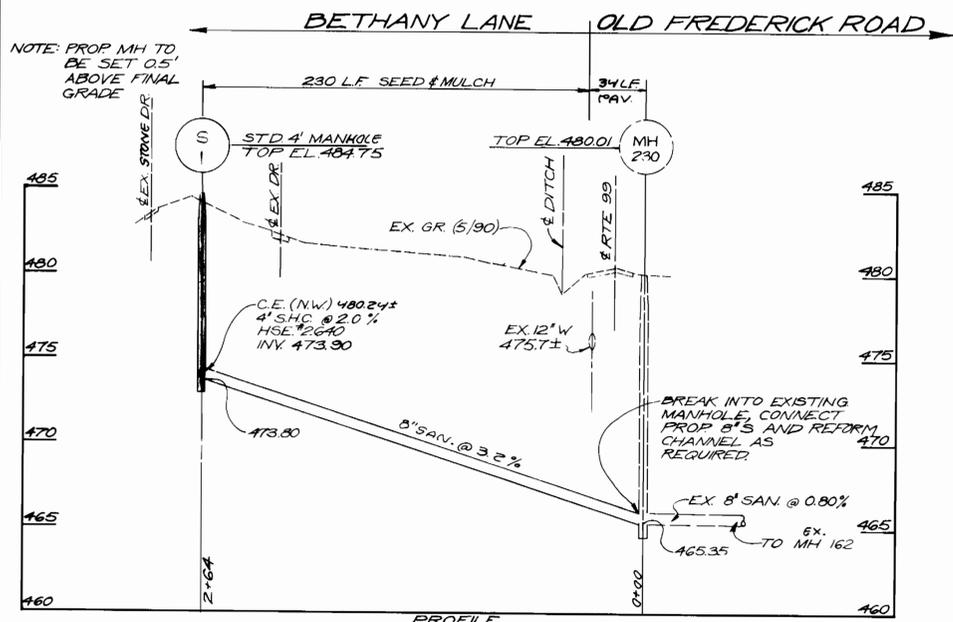
- SEQUENCE OF CONSTRUCTION**
- OBTAIN CONSTRUCTION PERMIT. CONTACT HOWARD COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS (301) 992-2437.
  - INSTALL EROSION AND SEDIMENT CONTROL DEVICES AS PER SECTION 219.
  - EXCAVATE AND INSTALL PROPOSED SEWER MAIN.
  - RESTORE PAVING AND EARTH TRENCHES TO THEIR ORIGINAL CONDITION AS PER HOWARD COUNTY AND S.H.A. STANDARDS.
  - FINE GRADE ALL DISTURBED AREAS AND STABILIZE WITH PERMANENT SEEDING.
  - REMOVE EROSION AND SEDIMENT CONTROL DEVICES AFTER ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.



**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 shown 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.
- For details not shown on the Drawings, and for materials and construction methods, use Howard County Design Manual, Volume IV, Standard Specification and Details for Construction, and Standard Specifications for construction and materials - Maryland Department of Transportation - State Highway Administration - Latest Addition.
- Where test pits have been made on existing utilities, they are noted by the symbol  $\boxtimes$  at location of 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 tests have not been dug shall be located by the Contractor two weeks in advance of Construction Operations at the Contractor's expense.
- The Contractor shall notify the following utility companies or agencies at least five working days prior to starting work shown on this plan:
 

C&P Telephone Company	507-8989
State Highway Administration	531-5533
Baltimore Gas & Electric Co. Contractor Service	850-4620
Baltimore Gas & Electric Co. Underground Damage Control	859-9014
Baltimore Gas & Electric Co. Trouble Shooting	298-9001
MISS UTILITY	1-800-257-7777
Colonial Pipeline	795-1390
Bureau of Utilities, Howard County Dept. of Public Works	992-2366
- Trees and shrubs are to be protected from damage to the maximum extent. Trees and shrubs 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. Payment for such removal shall be included in the unit price for construction of the main and service connections.
- All manholes shall be 4'-0" inside diameter unless otherwise noted.
- All sewer mains shall be C.S.P.X., R.C.S.P., V.C.P.X., or P.V.C. Unless otherwise noted.
- Trench repair to be in accordance with Howard County Std. Details.
- All work will be in accordance with Howard County Standards and Specifications for Soil Erosion and Sediment Control Section 219.
- The contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole wall except for PVC sewers.
- Length of open trench will be limited to that which can be filled and stabilized within one working day.



REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS  
 U.S. SOIL CONSERVATION SERVICE DATE: \_\_\_\_\_ HOWARD S.C.D. DATE: \_\_\_\_\_  
 This Construction Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.  
 APPROVED: \_\_\_\_\_

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Director of Public Works: \_\_\_\_\_ DATE: 8/21/90  
 Chief, Bureau of Engineering: \_\_\_\_\_ DATE: 8-14-90  
 Chief, Bureau of Utilities: \_\_\_\_\_ DATE: \_\_\_\_\_

HICKS ENGINEERING CO., INC.  
 ENGINEERS · SURVEYORS · PLANNERS  
 200 E. JOPPA ROAD · SUITE 402  
 TOWSON MARYLAND 21204

DES: F.A.S.  
 DRN: C.E.S.  
 CHK: J.S.L.G.  
 DATE: 8/3/90  
 BY: NO. \_\_\_\_\_ REVISION: \_\_\_\_\_ DATE: \_\_\_\_\_

CONTRACT NO. 10-3063  
 600' SCALE MAP NO. 5-17 BLOCK NO. \_\_\_\_\_

BETHANY LANE SEWER EXTENSION  
 SECOND ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 CAPITAL PROJECT S-6690  
 ELECTION DISTRICT NO. 1  
 SCALE AS SHOWN  
 SHEET 1 OF 1