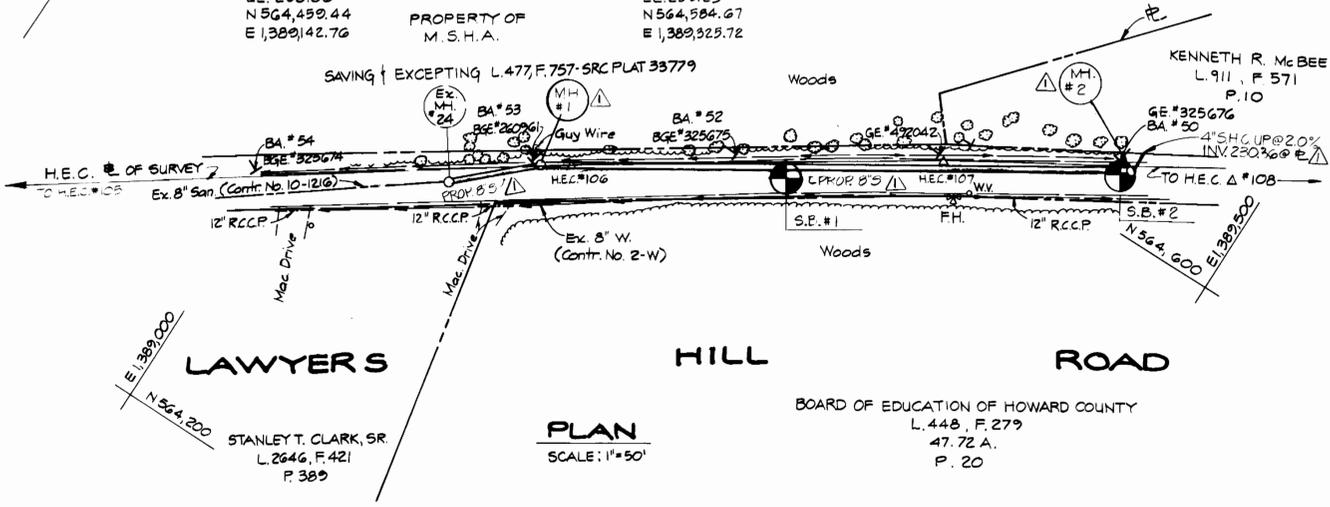


**TRAVERSE POINT**  
 H.E.C. #106  
 EL. 238.06  
 N 56° 4' 45.00  
 E 1,389,142.76

**TRAVERSE POINT**  
 H.E.C. #107  
 EL. 239.23  
 N 56° 4' 58.47  
 E 1,389,929.72

**BENCH MARK - HOWARD CO. BM NO. 0021**  
 STANDARD HO. CO. SURVEY DISC. SET ON  
 CONCRETE MONUMENT, FLUSH W/GROUND.  
 ELEV. 227.06  
 N 56° 2' 45.77  
 E 1,386,542.08

**BENCH MARK - HOWARD CO. BM NO. 3844**  
 STANDARD HO. CO. SURVEY DISC. SET ON  
 CONCRETE MONUMENT.  
 ELEV. 224.24  
 N 56° 2' 45.77  
 E 1,386,288.08



ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" SEWER MAIN	392 L.F.	407 L.F.	PVC SDR35	J-M MANUFACTURING
4'-0" DIA. MH.	2 EA.	2 EA.	PRE-CAST	ATLANTIC PRE-CASTING
4" SHC @ 20%	19 L.F.	20 L.F.	PVC SDR35	J-M MANUFACTURING

CONTRACTOR: W.F. WILSON & SONS, INC.

**RESTORATION SCHEDULE**

LOCATION	LENGTH	TYPE
8" SEWER MAIN	56 L.F.	PAVING
EX. MH #24 TO MH #1	35' L.F.	PAVING

**STAKEOUT DATA**

MAIN FITTING	DISTANCE	OFFSET
8" SEWER MAIN	H.E.C. #106 TO H.E.C. #105 - 32 L.F.	2 L.F. (LT.)
EX. MH #1	H.E.C. #107 TO H.E.C. #105 - 106 L.F.	3 L.F. (RT.)

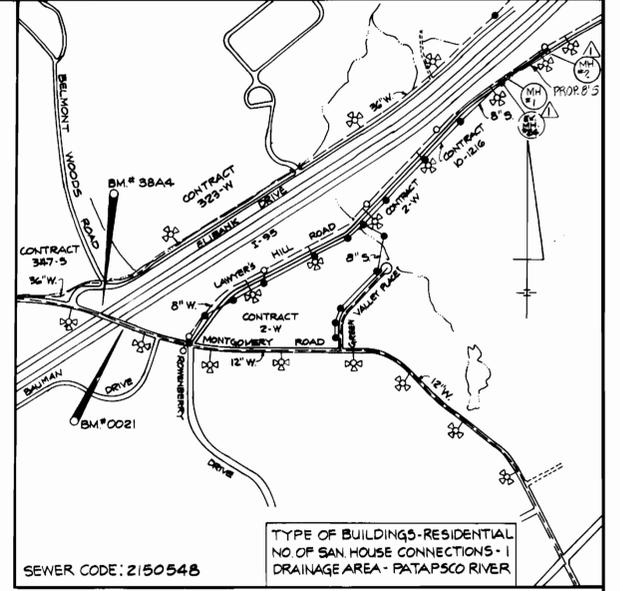
**TIME TO COMPLETE**

- 0.5 WEEK 1. OBTAIN A GRADING PERMIT FROM HOWARD COUNTY DEPARTMENT OF INSPECTIONS LICENSES AND PERMITS.
- 0.5 WEEK 2. CONTACT HOWARD COUNTY BUREAU OF CONSTRUCTION INSPECTION (313-1880) PRIOR TO STARTING DATE.
- 1.0 WEEK 3. EXCAVATE AND INSTALL PROPOSED 8" SEWER MAIN.
- 0.5 WEEK 4. RESTORE PAVING TRENCHES TO THEIR ORIGINAL CONDITION AS PER HOWARD COUNTY STANDARDS.

**SEQUENCE OF CONSTRUCTION**

**UTILITY NOTES**

- 1. OPEN ONLY THAT SECTION OF TRENCH THAT CAN BE BACKFILLED AND STABILIZED EACH DAY.
- 2. PLACE ALL EXCAVATED MATERIAL ON UPHILL SIDE OF TRENCH.
- 3. ANY SEDIMENT CONTROLS DISTURBED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.



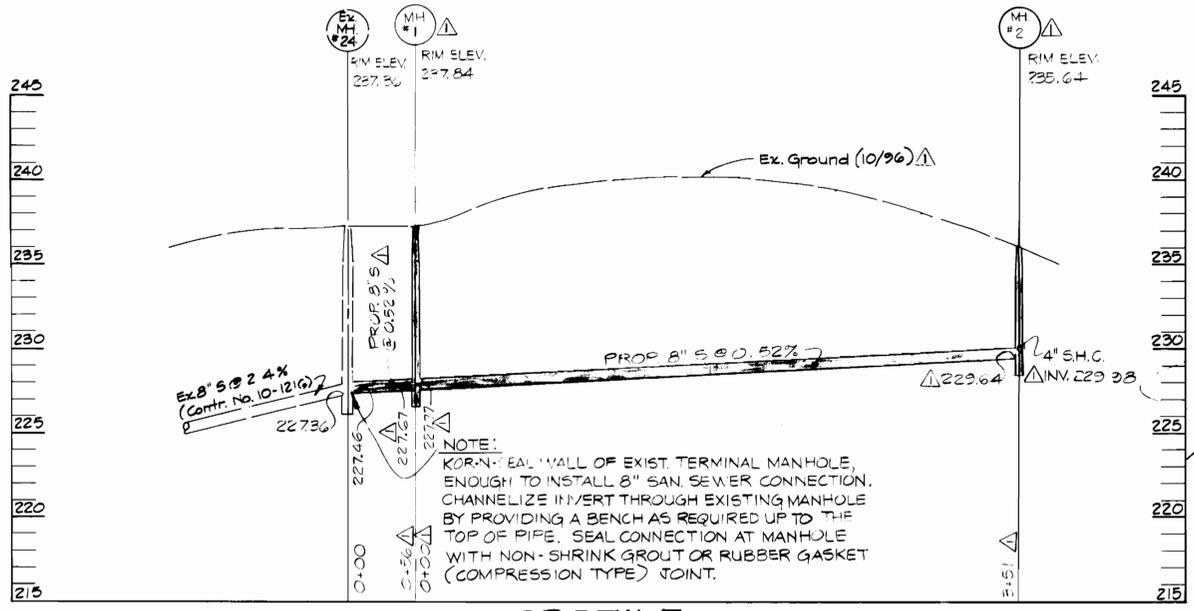
**VICINITY MAP**  
SCALE: 1" = 600'

**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 service. 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. data.
- All pipe elevations shown are invert elevations unless otherwise noted on the plans.
- Clear all utilities by a minimum of 6'. Clear all poles by 5'-0" minimum or tunnel as required. The owner has contacted the utility companies and has made arrangements for bracing of poles as shown on the drawings. In the event the Contractor's work requires the bracing of additional poles, any cost incurred by the owner for the bracing of additional poles or damages shall be deducted from money owed the Contractor. The Contractor shall coordinate with the utility companies to schedule the bracing of the poles.
- For details not shown on the drawings, and for materials and construction methods, use Howard County Design Manual, Volume IV, Standard Specifications and Details for Construction (Latest Edition). The Contractor shall have a copy of Volume IV on the job.
- Where test pits have been made on existing utilities, they are noted by the symbol [X] at the location of the 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 test pits have not been dug shall be located by the Contractor two weeks in advance of construction operations at his own expense.
- Contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:  
 AT&T ..... 865-3803  
 BGE - Contractor Services ..... 850-4620  
 BGE - Underground Damage Control ..... 787-9068  
 Bureau of Utilities (DPW) ..... 313-4900  
 Bell Atlantic - MD, Inc. .... 597-8585  
 Colonial Pipeline Co. .... 795-1390  
 Miss Utility ..... 1-800-257-7777  
 State Highway Administration ..... 531-5533
- 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 bid for construction of the main.
- The Contractor shall notify the Bureau of Highways, Howard County, at (410) 313-2450 at least five working days before any open cut or any County road or trenchless installation operation in county roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DPW requirements per Section 18.114(a) of the Howard County Code.

**SEWER NOTES**

- All sewer mains shall be D.I.P. or P.V.C. unless otherwise noted.
- All manholes shall be 4'-0" inside diameter unless otherwise noted.
- Force mains shall be D.I.P. only.
- Manholes shown with 12" and 16" walls are for brick manholes only.
- Manholes designated W.T. in plan and profile shall have watertight frame and cover, Standard Detail G5.52. Where watertight manhole frames and covers are used, set top of frame 1'-6" above finished grade unless otherwise noted on the drawings.
- House(s) with the symbol 'C.N.S.' indicates cellar cannot be served.



**PROFILE**  
SCALE: HOR. 1" = 50'  
VERT. 1" = 5'

**ENGINEER'S CERTIFICATION:**  
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."  
 [Signature] 10/19/96  
 HICKS ENGINEERING COMPANY, INC.  
 ENGINEERS SURVEYORS PLANNERS  
 200 EAST JOPPA ROAD, SUITE 402  
 TOWSON, MARYLAND 21286 TEL: (410) 494-0001

THIS DEVELOPMENT PLAN IS APPROVED FOR THE SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
 [Signature] 10/23/96  
 APPROVED, HOWARD COUNTY S.C.D.  
 REVIEWED FOR HOWARD COUNTY S.C.D. AND MEETS TECHNICAL REQUIREMENTS  
 [Signature] 10/23/96  
 U.S. NATURAL RESOURCES CONSERVATION SERVICE

**DEVELOPER'S CERTIFICATION:**  
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATION OF ATTENDANCE AT A MARYLAND DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."  
 [Signature] 10/23/96  
 BUREAU OF ENGINEERING  
 DEPARTMENT OF PUBLIC WORKS.

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 [Signature] 10/23/96  
 DIRECTOR OF PUBLIC WORKS  
 [Signature] 10-23-96  
 CHIEF, BUREAU OF UTILITIES

HICKS ENGINEERING CO., INC.  
 ENGINEERS • SURVEYORS • PLANNERS  
 200 E. JOPPA ROAD, SUITE 402  
 TOWSON, MARYLAND 21286



DES:	FW:	REVISE	DATE
K.W.		8" SANITARY SEWER MAIN ALIGNMENT	7/97
R.W.			
D.E.H.			
DATE: 10/23/96	BY: ND.	REVISION	DATE

PLAN & PROFILE  
 8" SANITARY SEWER MAIN  
 SCALE MAP NO. 338 BLOCK NO. 12/20

LAWYERS HILL ROAD SEWER MAIN EXTENSION  
 1ST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 CAPITAL PROJECT S-6194  
 CONTRACT NO. 10-3575

SCALE AS SHOWN  
 SHEET 1 OF 1