

SEWER & WATER CODE FOR COUNTY USE  
 WATER NO.  
 SEWER NO.

NO. OF LOTS: 2  
 TYPE OF BUILDING: SINGLE FAMILY RESIDENCE  
 NUMBER OF WATER HOUSE CONNECTIONS: 2  
 NUMBER OF SEWER HOUSE CONNECTIONS: 2  
 DRAINAGE AREA: LITTLE PATUXENT

**QUANTITIES**

ITEM	EST.	AS-BUILT	MATERIAL/SUPPLIER
8" SEWER MAIN	230 L.F.	140 L.F.	D.I.P. CL. 82 GREEN PIPE
4" S.H.C.	15 L.F.	14 L.F.	CL. 82 AMERICAN PIPE
MANHOLE	2 EA.	2 EA.	ATLANTIC CEMENT PRODUCTS
1" W.H.C.	100 L.F.	100 L.F.	WATER METALS
8" SEWER	91 L.F.	91 L.F.	CL. 82 AMERICAN PIPE

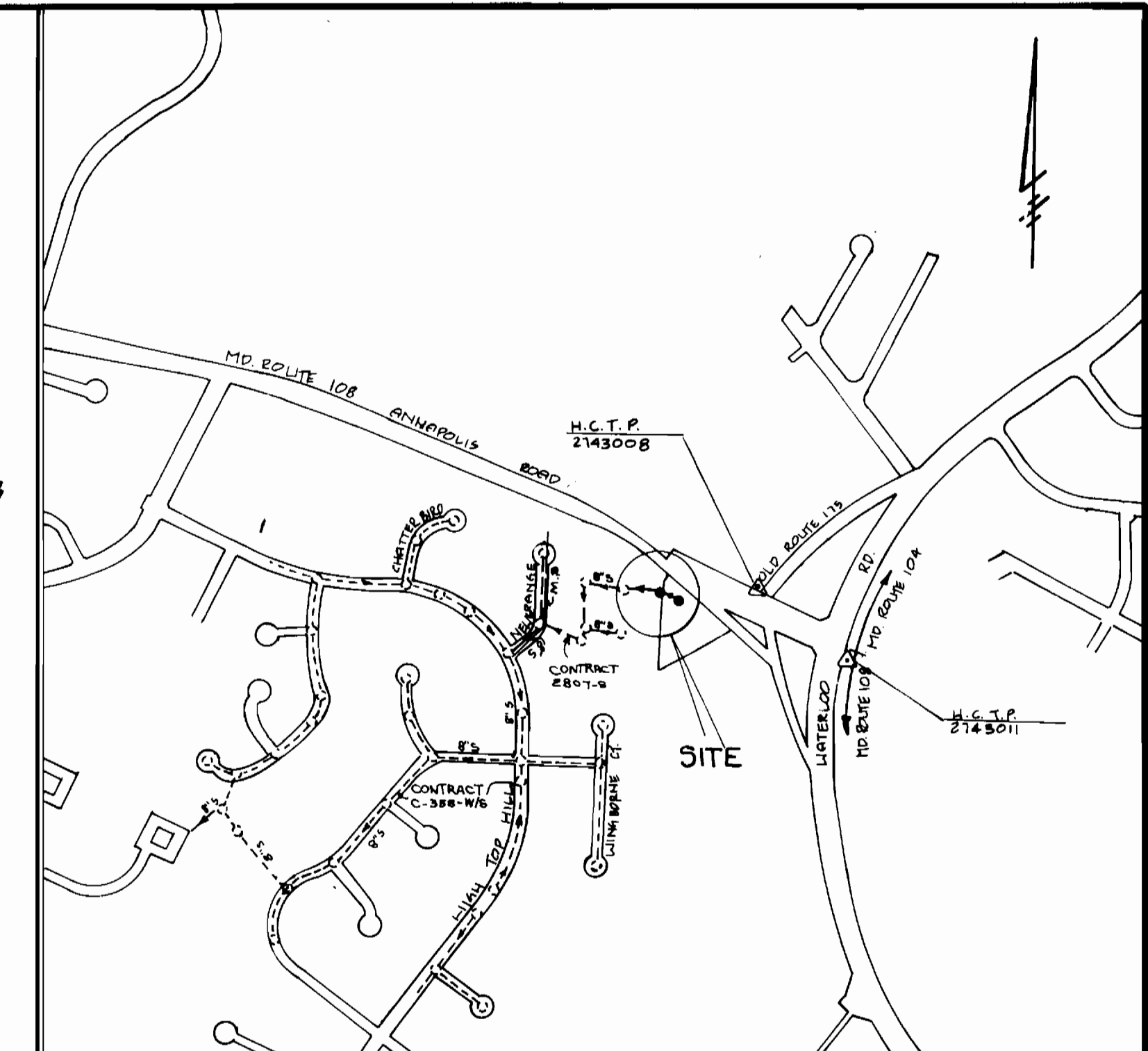
SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS.

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

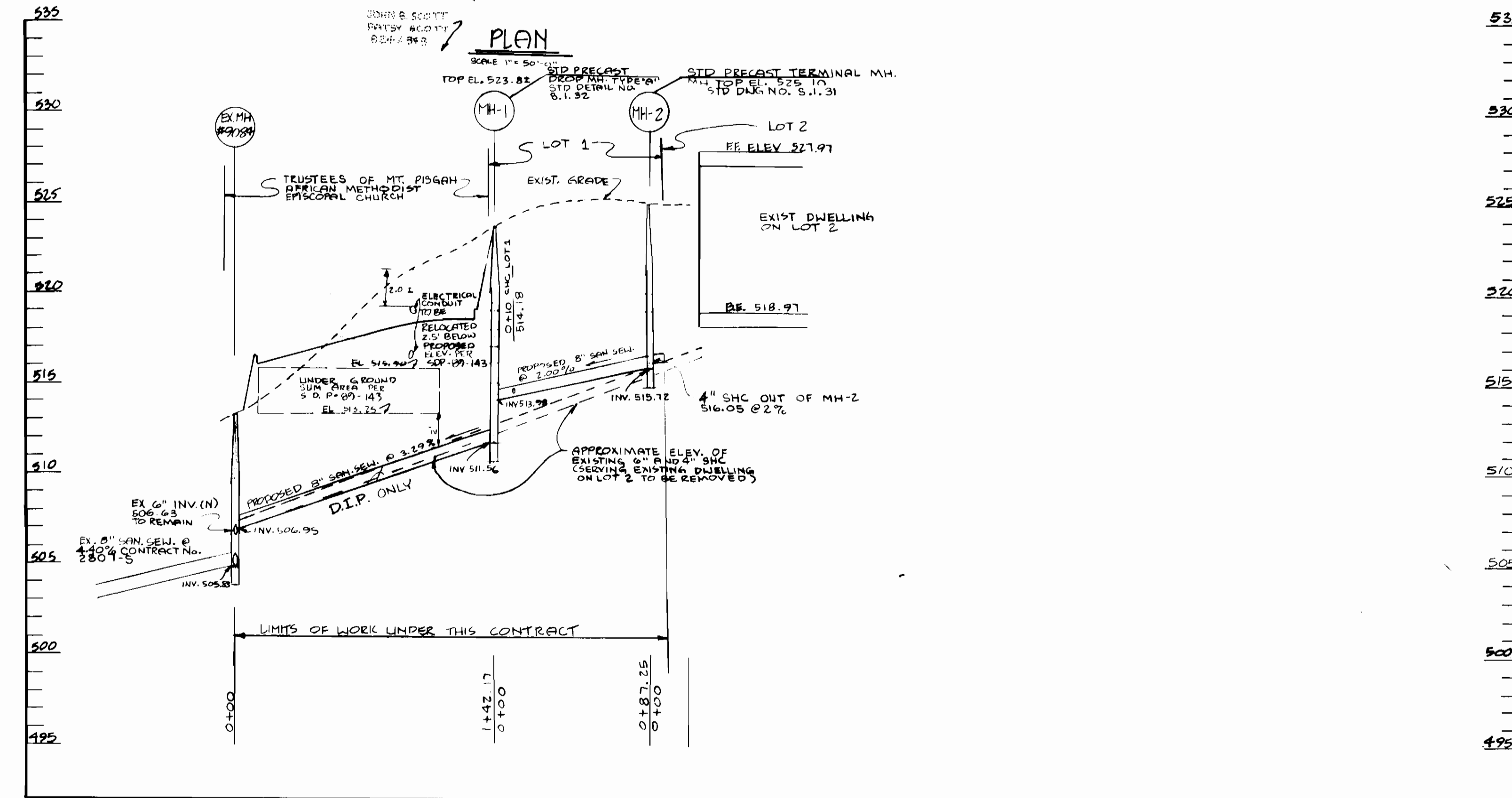
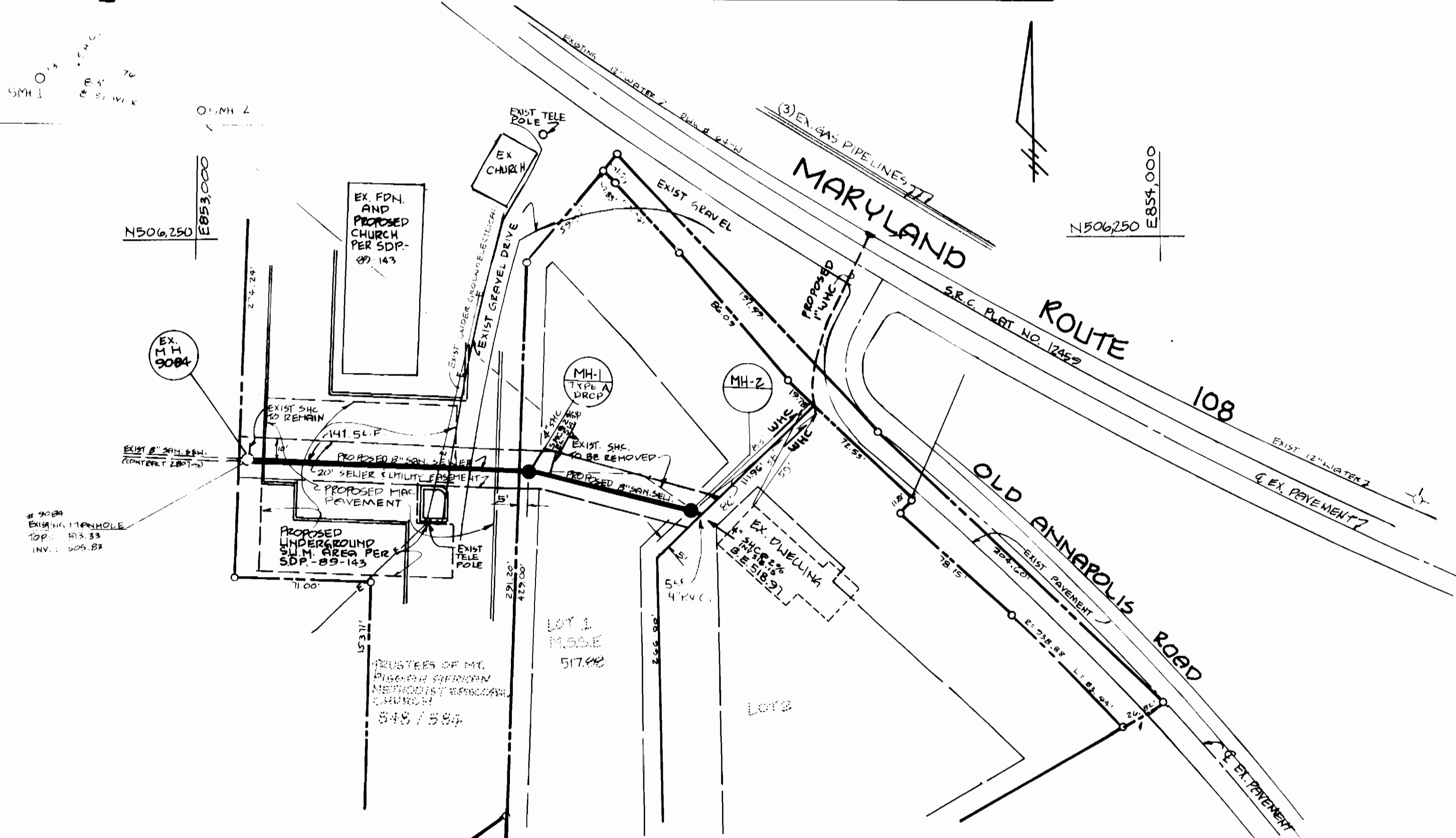
*James McT. Vela* 11-2-89  
 U.S. SOIL CONSERVATION SERVICE DATE

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

APPROVED:  
*John L. Robertson* 11/2/89  
 HOWARD COUNTY SOIL CONSERVATION DISTRICT DATE



WATER CODE: VICINITY MAP SEWER CODE:  
 SCALE = 1" = 600'

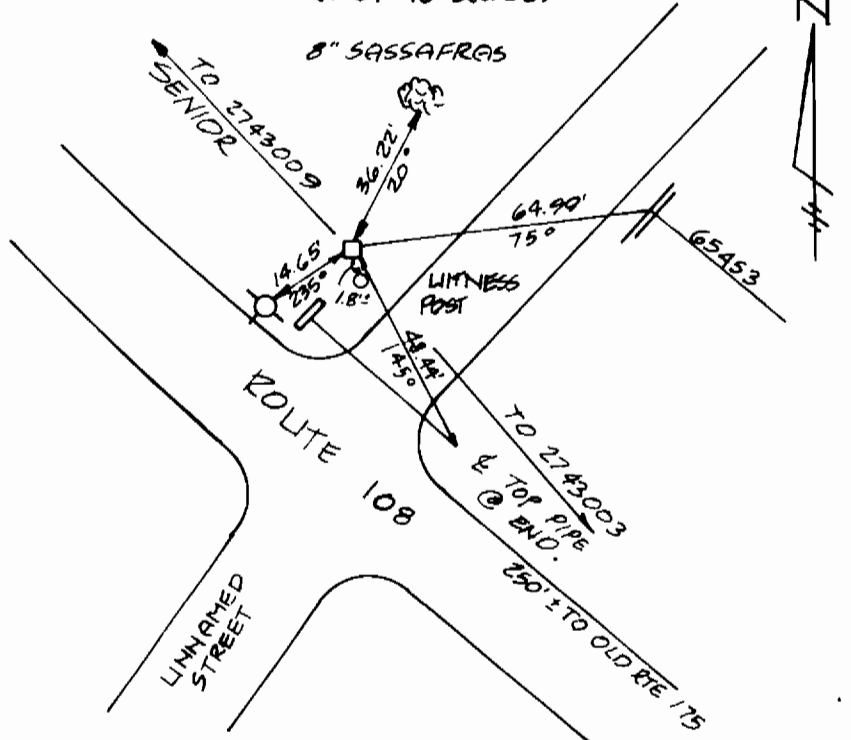


PROFILE  
 SCALE: HORIZ. 1" = 50'  
 VERT. 1" = 5'

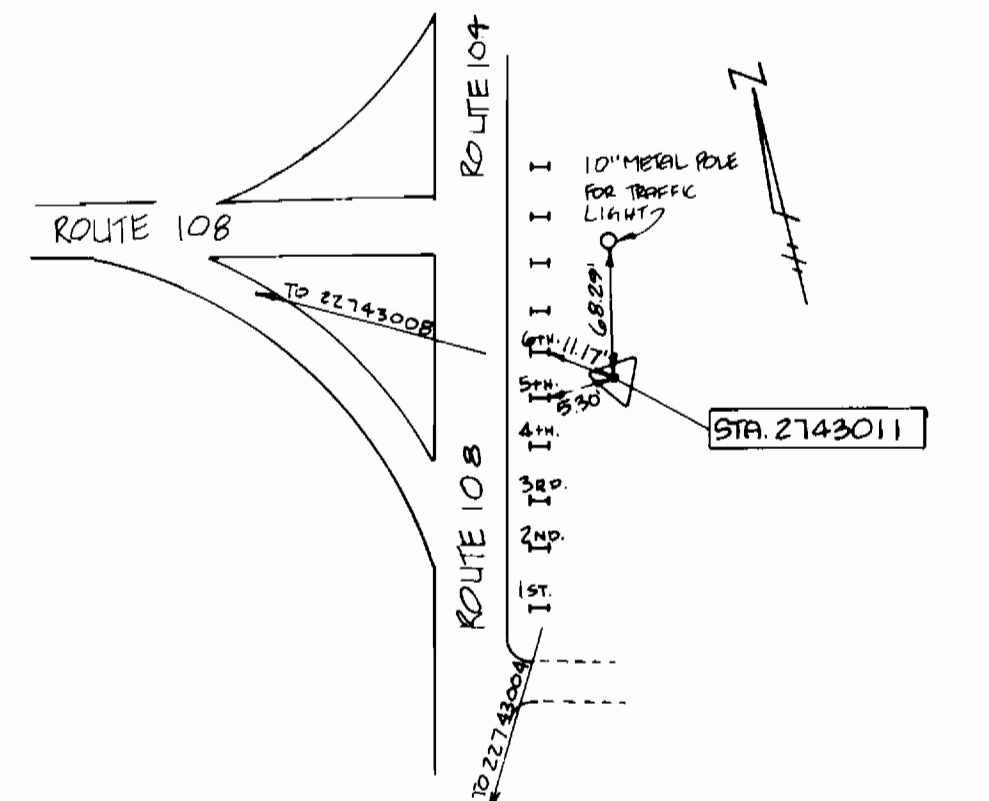
**BENCHMARKS**

274300B CONCRETE MONUMENT	EL. 519.851	0.1' ABOVE SURFACE
2743011 CONCRETE MONUMENT	EL. 508.760	2' BELOW SURFACE

TRAVERSE REFERENCE DIAGRAM (NOT TO SCALE)



TRAVERSE REFERENCE DIAGRAM (NOT TO SCALE)



**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 PIPES BY 24" 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 SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1989 AMENDMENT. 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 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 MADE SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK. NOTIFY ON THESE PLANS:  
 STATE HIGHWAY ADMINISTRATION - 531-5533  
 BALTIMORE GAS & ELECTRIC COMPANY - CONTRACTOR SERVICES - 850-9420  
 BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND DAMAGE CONTROL - 859-9004  
 BALTIMORE GAS & ELECTRIC COMPANY - TROUBLE SHOOTING - 798-9001  
 MISS UTILITY - 1-800-237-TITT  
 COLONIAL PIPE COMPANY - 795-1390  
 BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 992-2366
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO 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.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
- ALL MANHOLES SHOWN WITH 12" & 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- ALL S.H.C.'S TO BE 4"
- M.S.S.E. DESIGNATES "MINIMUM SEWER SERVICE ELEVATION".
- S --- S DENOTES Silt FENCE.
- MIN. 3 EDGE BEARING STRENGTH OF PIPE TO BE 365 LB/FT.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATIONS C-153 DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12 INCH, FOR WATER AND OTHER LIQUIDS.
- ALL SEWER MAINS SHALL BE C.S.P.X., D.I.P., V.C.P.X. OR P.V.C. UNLESS OTHERWISE NOTED.

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

*James McT. Vela* 11-2-89  
 U.S. SOIL CONSERVATION SERVICE DATE

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

APPROVED:  
*John L. Robertson* 11/2/89  
 HOWARD COUNTY SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS, AND F-82-04.

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

*Michael A. Berman* R.M.S. 11-2-89  
 CHIEF, BUREAU OF UTILITIES DATE

*Paul H. Larson* 11/3/89  
 CHIEF, LAND DEVELOPMENT DIVISION DATE

*James McT. Vela* 11/3/89  
 DIRECTOR OF PUBLIC WORKS DATE

*John L. Robertson* 11/3/89  
 CHIEF, BUREAU OF ENGINEERING DATE

SHANABERGER & LANE  
 8726 TOWN & COUNTRY BLVD.  
 SUITE 106 & 107  
 ELLICOTT CITY, MARYLAND 21043  
 (301) 461-9563



DESIGNED	DRAWN	CHECKED	DATE	BY	NO.	REVISION	DATE
G.S.S.	E.C.F.	S.A.S.	5/25/89				

WILLIAMS SUBDIVISION  
 LOTS 1 & 2  
 PLAN & PROFILES OF SEWER MAINS  
 AND WATER HOUSE CONNECTION

CONTRACT NO. 24-3001-D

SCALE: 1" = 50'  
 SHEET 1  
 OF 1