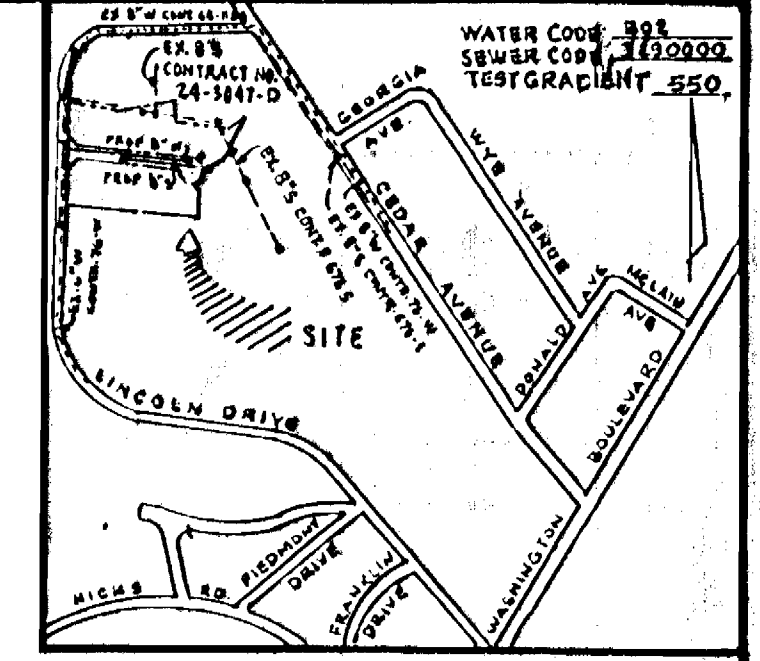


BENCH MARKS
 B.M. #1 ELEV. 272.51
 R.R. SPIKE SET IN C & P #15
 25' NORTHEAST OF P.I. # LD-2
 B.M. #2 ELEV. 252.39
 X-CUT ON ROAD FLANGE EX. P.H.
 160' SOUTHEAST OF P.I. # LD-1

ITEMS	QUANTITIES ESTIMATED	AS BUILT	
		QUANTITIES	TYPE
8" WATER	310 L.F.	310 L.F.	D.I.P.
6" WATER	83 L.F.	83 L.F.	D.I.P.
3/4" WHC	483 L.F.	483 L.F.	COPPER
8" VALVE	1	1	D.I.P.
6" VALVE	1	1	D.I.P.
FIRE HYDRANT	1	1	MUELLER
8" SEWER	395 L.F.	395 L.F.	P.V.C.
4" SHC	508 L.F.	508 L.F.	P.V.C.
SEWER MANHOLE	3	3	PRECAST
8" X 8" REDUCER	1	1	D.I.P.
6" X 8" INCREASER	1	1	D.I.P.

NAME OF UTILITY CONTRACTOR: DEVELOPMENT CONTROL SURVEY & DRAFTING DIV. AS BUILT DATA



VICINITY MAP
 SCALE 1"=600'
 HOWARD COUNTY W&S MAP #43, BLOCK 8

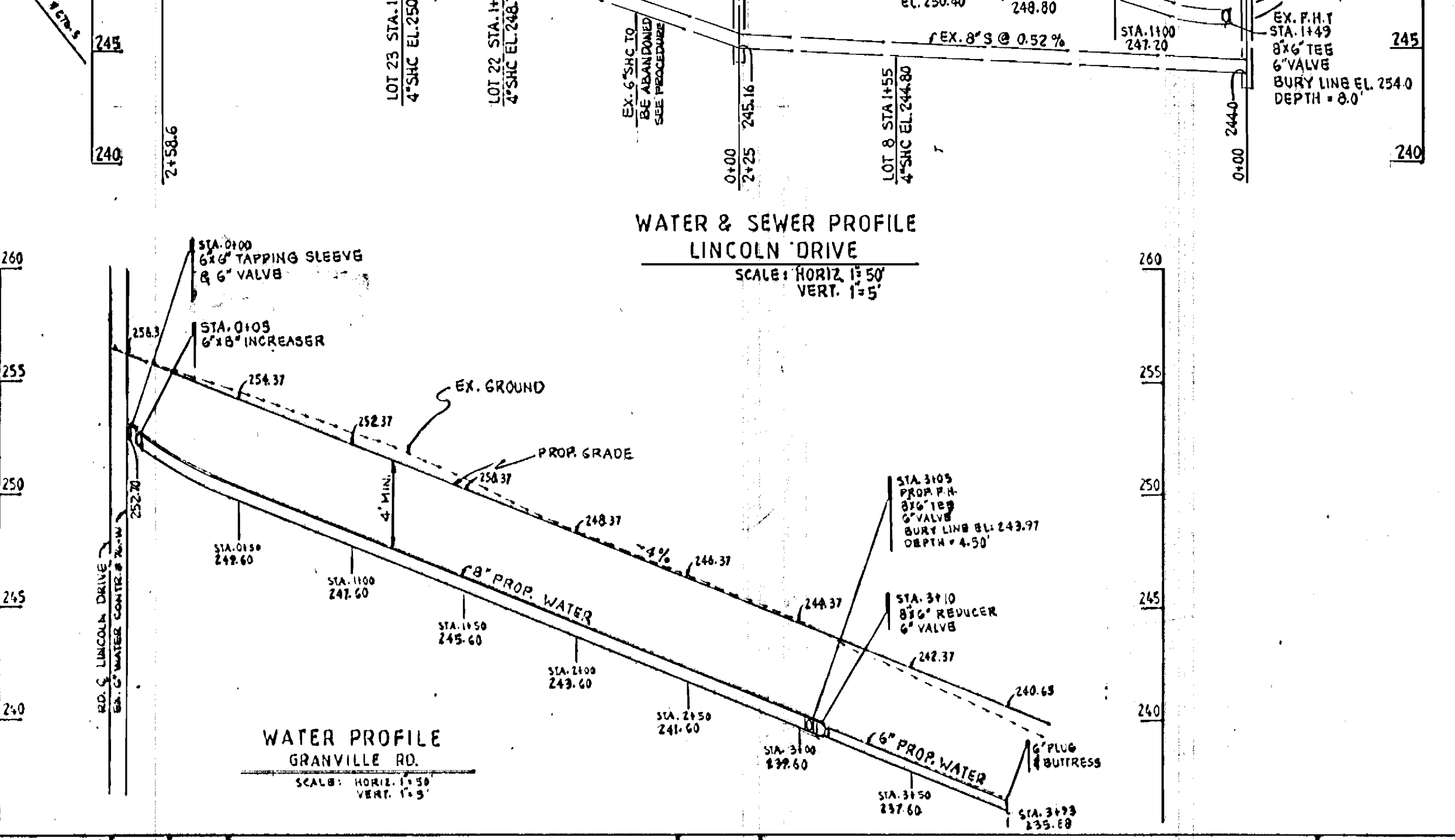
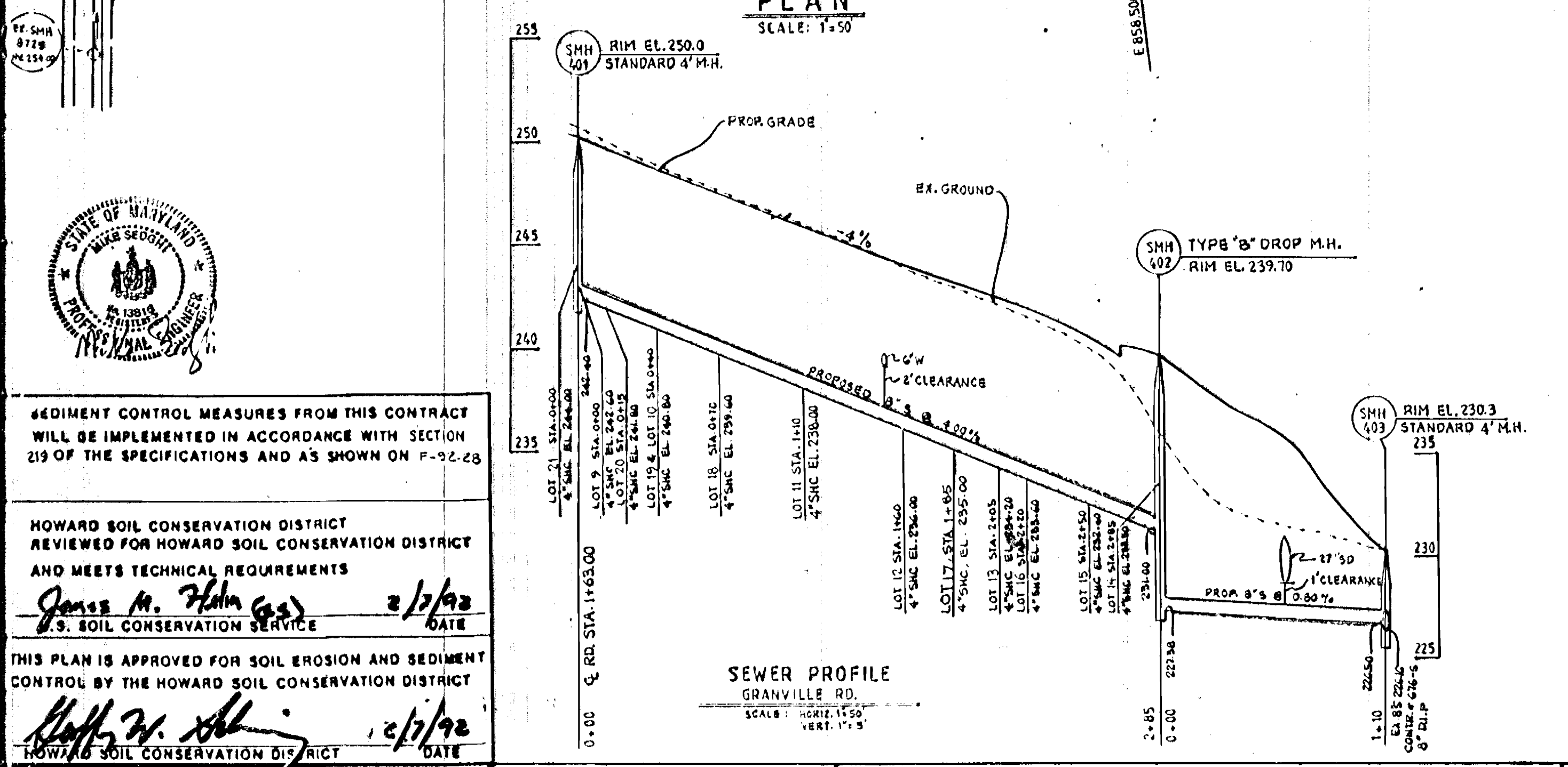
NUMBER OF LOTS 1G
 BUILDING TYPE RESIDENTIAL
 NUMBER OF WHC'S 1G
 NUMBER OF SHC'S 1G
 DRAINAGE AREA: LITTLE PATUXENT TREATMENT PLANT, LITTLE PATUXENT WATER QUALITY MANAGEMENT CENTER, SAVAGE

GENERAL NOTES

ABANDONMENT OF SEWER HOUSE CONNECTIONS:
 A. THE 6" INCHES SEWER HOUSE CONNECTION EXISTING SHALL BE ABANDONED AT THE WYE. THE CONTRACTOR SHALL CUT THE PIPE AND INSERT A PLUG AT THIS POINT.
 B. THIS WATER HOUSE CONNECTION IS EXISTING FOR ADDRESS 8250 LINCOLN DRIVE, NOW THE HOUSE IS NOT EXISTING, WATER METER IS ALREADY REMOVED.

- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-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 BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED BY THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
 - CAST IRON SADDLE TO BE USED TO CONNECT THE 4" SHC OF LOTS 8, 22, & 23 TO THE EXISTING 8" SEWER MAIN IN ACCORDANCE WITH SECTION 5.21 OF HOWARD COUNTY DESIGN MANUAL IX.
 - HOUSE(S) WITH THE SYMBOL 'C.N.S.' INDICATES THAT CELLAR CANNOT BE SERVED.
- ABANDONMENT OF WATER HOUSE CONNECTIONS:**
 A. EXISTING WATER HOUSE CONNECTION TO BE ABANDONED AT MAIN. THE CORPORATION STOP SHALL BE REMOVED, AND A PLUG IS INSERTED. THE CONTRACTOR SHALL CONTACT BUREAU OF UTILITIES 313-4900 TO ARRANGE THE RETURN OF MATERIALS.

- 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. DATA.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6".
- 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. 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 DUG 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 SHOWN ON THESE PLANS:
 STATE HIGHWAY ADMINISTRATION: 531-5533
 BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES: 850-4620
 BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL: 781-7058
 MISS UTILITY: 1 (800) 257-1777
 COLONIAL PIPELINE COMPANY: 795-1390
 BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS: 313-4900.
- 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. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-1/2' COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE RESTRAINING AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000.04 AND 1005.00 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- EXISTING WATER VALVE TO BE CLOSED WHEN CONNECTIONS TO THE SYSTEM IS MADE.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS. (STD. DETAIL W.3.21).
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER-TIGHT FRAME AND COVERS STANDARD DETAIL GS.52 WHERE WATER TIGHT MANHOLE FRAME AND COVER IS USED. SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL SEWER MAINS SHALL BE D.I.P., R.C.P., V.C.P.X., C.S.P.X., R.C.C.P., OR P.V.C. 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 FOR BRICK MANHOLES ONLY.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL GS.51.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATION C153 DUCTILE IRON COMPACT BELL END, 5" THROUGH 12" FOR WATER AND OTHER LIQUIDS.



SEDIMENT CONTROL MEASURES FROM THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND AS SHOWN ON F-92-23

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

James M. Helm (GS) 2/1/92 DATE
 S.O. SOIL CONSERVATION SERVICE

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

Hoff W. Helm 2/1/92 DATE
 HOWARD SOIL CONSERVATION DISTRICT

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James M. Helm 2/1/92 DATE
 DIRECTOR OF PUBLIC WORKS

2-3-92 DATE
 CHIEF BUREAU OF UTILITIES

James M. Helm 2/1/92 DATE
 CHIEF BUREAU OF ENGINEERING

2/1/92 DATE
 CHIEF LAND DEVELOPMENT DIVISION

SEDGHI & ASSOCIATES, LTD.
 Engineers • Site Planners • Surveyors

3217 Corporate Court
 Ellicott City, MD 21043
 (410) 750-0003

DESIGN BY	DATE	CHECKED BY	DATE	REVISION	DATE
V.S.		V.S.			
V.S.		M.S.			

WATER & SEWER PLAN & PROFILE
 CONTRACT NO. 24-3164-D

AS-BUILT 11-11-92

DEVELOPER
 THAMES INVESTMENT GROUP LTD.
 3701 COURT HOUSE DRIVE
 ELLICOTT CITY, MD. 21043

SCALE AS SHOWN
 SHEET 1 OF 1