

Waste Water Disposal - Re. 108
Pumping Station & Potapoco
Type of Buildings - Single Family
No. of SHC 42 No. of Lots 42
No. of WHC 42

WATER & SEWER CODE
County Use
Sewer No. 5880000, 5870000
Water No. F-12

BENCH MARKS
TOP. FH 18' LT. OF STA 304.24
GRASSVENOR DR. EL. 383.43
P.K. NAIL @ STA 351.42-34
GRASSVENOR DR. EL. 390.53

GENERAL NOTES

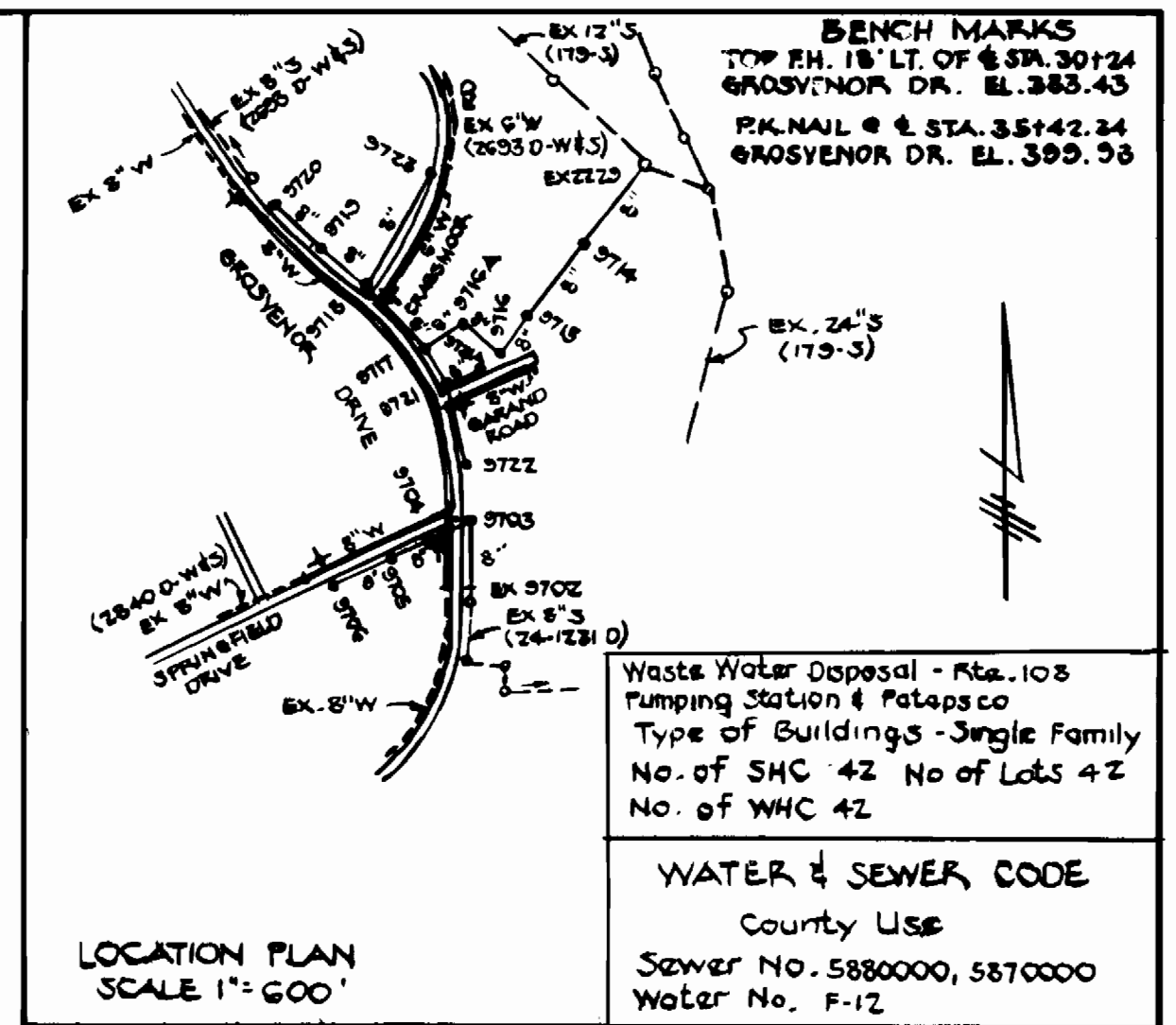
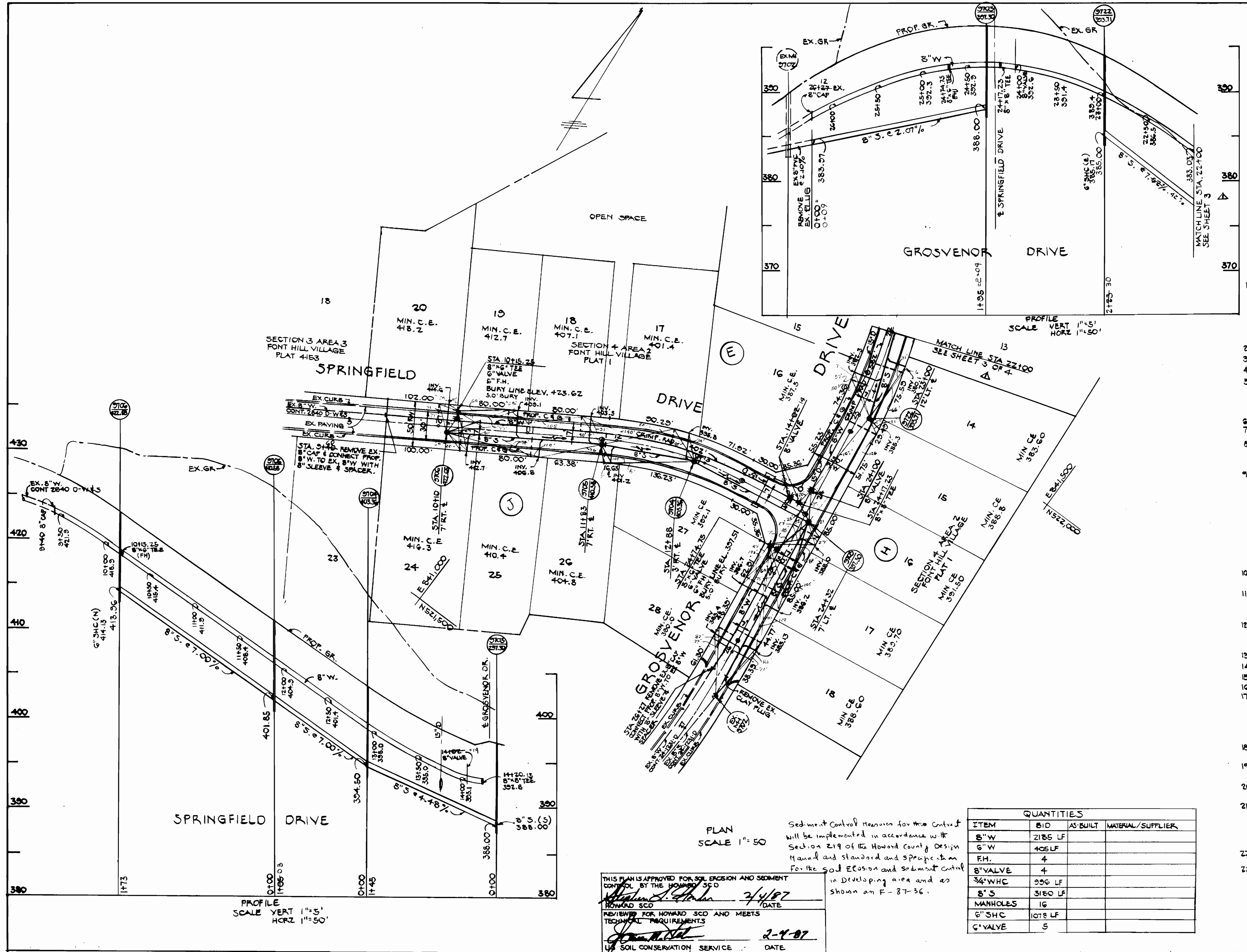
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTORS EXPENSE.
- ALL HORIZONTAL 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" MIN. OR TUNNEL AS REQUIRED. ANY COST INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT POLES SHALL BE INCLUDED IN UNIT PRICES BID FOR EXCAVATION AND BACKFILL.
- ALL SANITARY SEWER SHALL BE C.S.P.V. OR A.C.P.C.L. 2400 TYPE FITTINGS ONLY.
- 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 531-5553	MISSISSIPPI 559-0100
BALTIMORE GAS & ELECTRIC CO. (UNDERGROUND ELECTRIC DISTRIBUTION)	CHEBAPEAKE AND POTOMAC (C&P) TELEPHONE CO. 725-9976
CUSTOMER SERVICE 685-0123	AT&T CABLE LOCATION
BALTIMORE GAS & ELECTRIC CO. (UNDERGROUND GAS DISTRIBUTION)	DIVISION 393-3553
CUSTOMER SERVICE 685-0123	COLONIAL PIPELINE CO. 781-4641
ENGINEERING DAMAGE CONTROL 234-5621	BUREAU OF UTILITY HOWARD COUNTY 992-2366
- TREES ARE TO BE PROTECTED FROM DAMAGE TO MAX. EXTENT. TREES LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGE BY 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 EXCAVATION AND BACKFILL.
- PLACE REGULATIONS' 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 TO BE C.I.P. OR D.I.P. UNLESS OTHERWISE NOTED.
- TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 3.5 FT. COVER UNLESS OTHERWISE NOTED.
- ALL VALVES SHALL BE STRAPPED TO TEES. SEE STANDARD SPECS.
- BLOCK ALL FITTINGS WITH CONCRETE. SEE STD'S BOUND IN SPECS.
- 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 STD. DETAILS. SOIL AROUND THE FIRE HYDRANT TO BE COMPACTED IN ACCORDANCE WITH SECTION 1003.1008 OF THE STD SPECIFICATIONS.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING. UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
- ALL PVC PIPE IS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S AND HOWARD COUNTY SPECIFICATIONS.
- WATERMAIN AND WATERHOUSE CONNECTIONS MUST HAVE AT LEAST ONE FOOT SEPARATION FROM THE SEWER MAIN AND SEWER HOUSE CONNECTION AS THEY PASS ABOVE IT. EXCEPT AT CROSSINGS, WATER & SEWER LINES HAVE A MINIMUM HORIZONTAL SEPARATION OF 10'
- 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.

ITEM	QUANTITIES		MATERIAL/SUPPLIER
	BID	AS-BUILT	
8" W	2185 LF	2164 LF	GRIFFIN PIPE CO.
6" W	425 LF	414 LF	GRIFFIN PIPE CO.
F.H.	4	4	KENNEDY
8" VALVE	4	4	M.B.H. VALVE CO.
3/4" WHC	896 LF	1236 LF	RELAIR RD. SUPPLY
8" S	3160 LF	3140 LF	J.M. MANUFACTURING CO.
MANHOLES	16	16	ATLANTIC FRECAST
6" SHC	1076 LF	1118 LF	J.M. MANUFACTURING CO.
6" VALVE	5	5	M.B.H. VALVE CO.

LOTS 4 THRU 20 BLOCK E (17 LOTS)
 LOTS 4 THRU 8 BLOCK F (5 LOTS)
 LOTS 4 THRU 12 BLOCK H (15 LOTS)
 LOTS 24 THRU 28 BLOCK J (5 LOTS)

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS: <i>Robert M. Beckman</i> 3-26-87 CHIEF, BUREAU OF UTILITIES: <i>Robert M. Beckman</i> 3-18-87	HUDKINS ASSOCIATES, INC. 200 E. JOPPA RD. SUITE 101 SHELL BUILDING TOWSON, MD. 21204 828-9060	DES: DWB DRN: LBS CHK: VJM DATE:	WATER & SEWER PLAN & PROFILE	SECTION 4 AREA 2 FONT HILL VILLAGE SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT 24-1476 D	SCALE AS SHOWN
					SHEET 1 OF 4



- GENERAL NOTES**
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE THE 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.
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 - 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" MIN. OR TUNNEL AS REQUIRED. ANY COST INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT POLES SHALL BE INCLUDED IN UNIT PRICES BID FOR EXCAVATION AND BACKFILL.
 - ALL SANITARY SEWER SHALL BE C.S.P.X., V.C.P.X., PVC OR ACP EL. 2400
 - FOR ALL COPPER WATER HOUSE CONNECTIONS, UTILIZE FLARED TYPE FITTINGS ONLY.
 - 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 581-5533 MISS UTILITY 589-0100
 BALTIMORE GAS & ELECTRIC CO. CHEESAPEAKE AND POTOMAC (C&P)
 (UNDERGROUND ELECTRIC DISTRIBUTION) TELEPHONE CO. 725-9976
 CUSTOMER SERVICE 685-0123 AT&T CABLE LOCATION
 BALTIMORE GAS & ELECTRIC CO. DIVISION 873-8553
 (UNDERGROUND GAS DISTRIBUTION) COLONIAL PIPELINE CO. 781-4241
 CUSTOMER SERVICE 685-0123 BUREAU OF UTILITY HOWARD
 ENGINEERING DAMAGE CONTROL 234-5621, COUNTY 992-7366
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 - 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 EXCAVATION AND BACKFILL.
 - PLACE REGULATIONS "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 TO BE CIP OR PIP UNLESS OTHERWISE NOTED.
 - TOP OF ALL WATER MAINS TO HAVE A MINIMUM OF 8.5 FT. OVER UNLESS OTHERWISE NOTED.
 - ALL VALVES SHALL BE STRAPPED TO TEES. SEE STANDARD SPECS.
 - BLOCK ALL FITTINGS WITH CONCRETE. SEE STD'S BOUND IN SPECS.
 - 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 STD. DETAILS. SOIL AROUND THE FIRE HYDRANT TO BE COMPACTED IN ACCORDANCE WITH SECTION 31008 OF THE STD SPECIFICATIONS.
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 - ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER.

QUANTITIES			
ITEM	BID	AS-BUILT	MATERIAL/SUPPLIER
8" W	2185 LF		
6" W	405 LF		
F.H.	4		
8" VALVE	4		
3/4" W/C	956 LF		
8" S	3180 LF		
MANHOLES	16		
6" SHC	1078 LF		
6" VALVE	5		

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SCD
Howard SCD 3/4/87 DATE
 REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS
Howard SCD 2-9-87 DATE
 U.S. SOIL CONSERVATION SERVICE DATE

PLAN SCALE 1"=50'
 Sediment Control Measures for this contract will be implemented in accordance with the Section 219 of the Howard County Design Manual and standard and specifications for the soil erosion and sediment control in developing area and as shown on F-87-36.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 3-16-87 DATE
 3-18-87 DATE

HUOKINS ASSOCIATES, INC
 200 E. JOPPA RD.
 SUITE 101 SHELL BUILDING
 TOWSON, MD. 21204
 828-0060

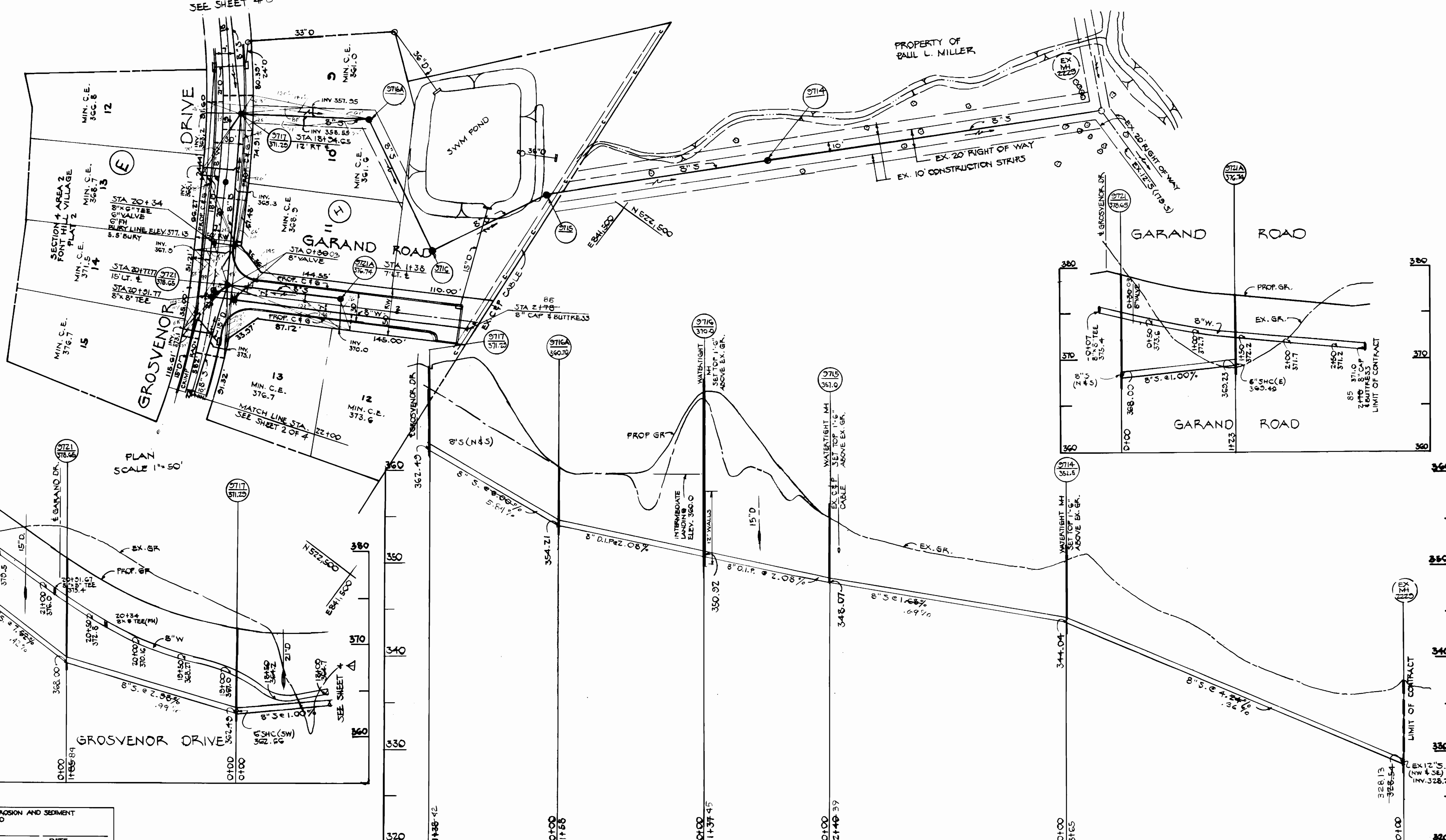
DES. DWG					
DRW. DWG					
CHK. VLM					
DATE:	DB	BY	NO	SHEET NOS	6-21-87
				REVISION	DATE

WATER & SEWER PLAN & PROFILE

SECTION 4 AREA 2
 FONT HILL VILLAGE
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 CONTRACT 24-1476-D
 SCALE AS SHOWN
 SHEET 2 OF 4

AS-BUILT

SEE SHEET 4 OF 4



PLAN SCALE 1" = 50'

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

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

HOWARD SCD _____ DATE _____
 REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

US SOIL CONSERVATION SERVICE _____ DATE _____

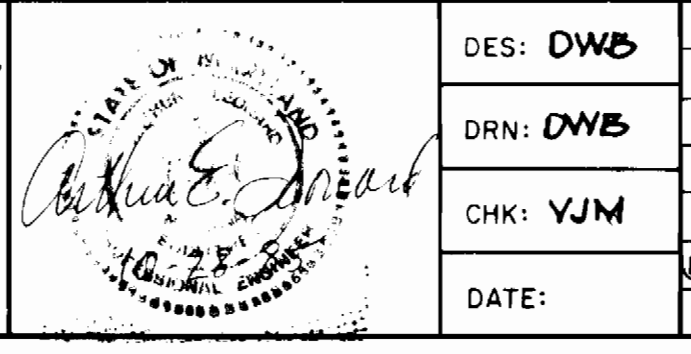
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

John J. Nemy
 DIRECTOR OF PUBLIC WORKS
 DATE 3-18-87

William H. ...
 CHIEF, BUREAU OF ENGINEERING
 DATE 3-28-87

William H. ...
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
 DATE 3-28-87

HUJKINS ASSOCIATES, INC.
 200 E. JOPPA RD.
 SUITE 101 SHELL BUILDING
 TOWSON, MD 21204
 828-8060



DES: DWB	
DRN: DWB	
CHK: YJM	
DATE: _____	
BY: _____	
NO. _____	
REVISION _____	
DATE: _____	

WATER & SEWER
 PLAN & PROFILE

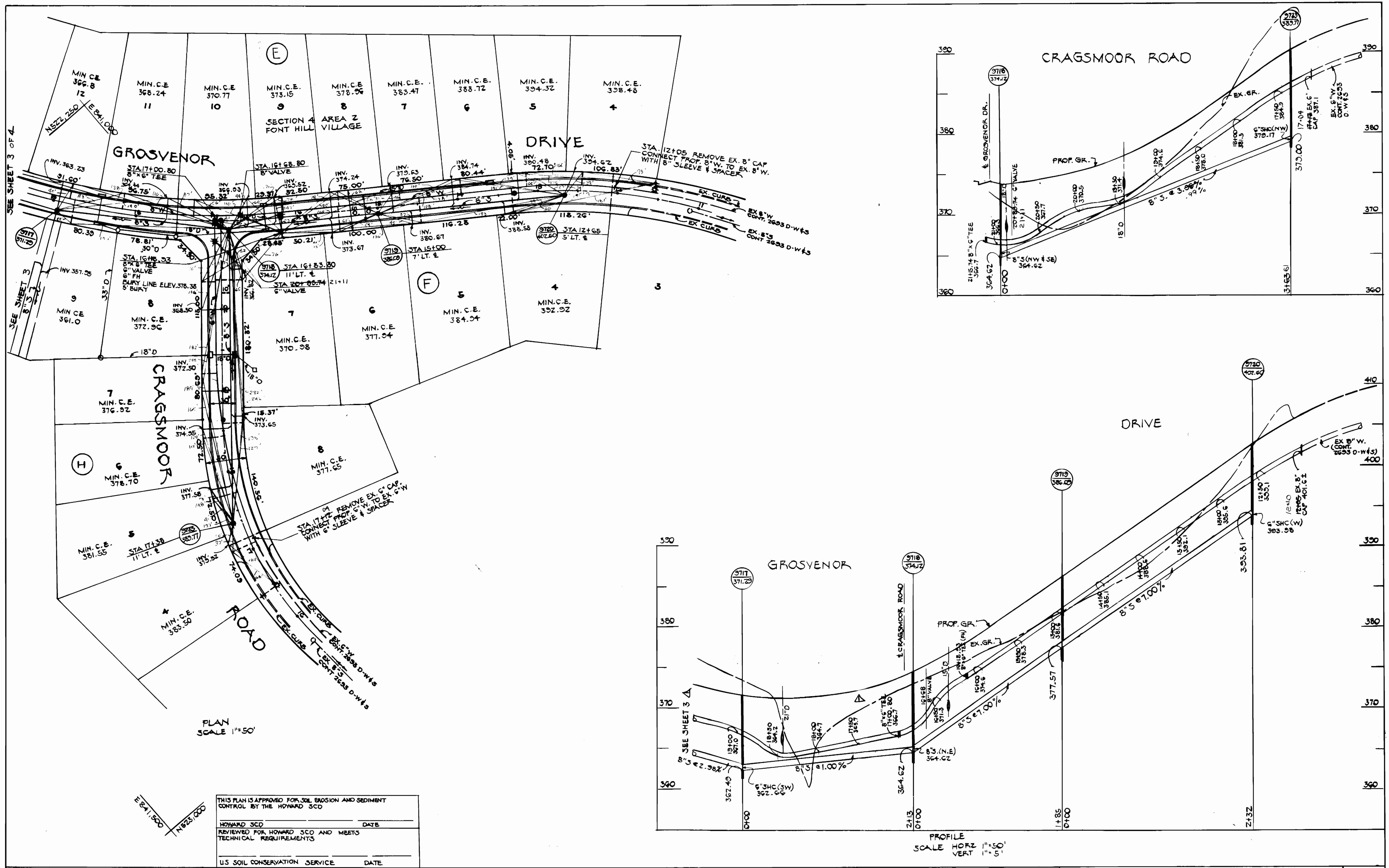
600' SCALE MAP NO. _____ BLOCK NO. _____

SECTION 4 AREA 2
 FONT HILL VILLAGE
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

CONTRACT 24-1476-D

SCALE AS SHOWN

SHEET 3 OF 4



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

HOWARD SCD	DATE
REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS	
U.S. SOIL CONSERVATION SERVICE	DATE

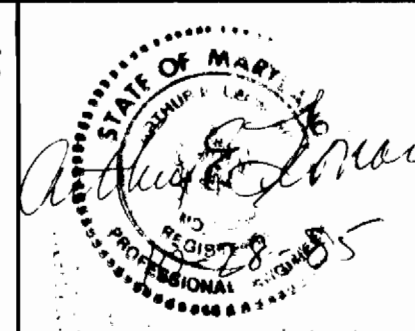
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert W. Deinger
DIRECTOR OF PUBLIC WORKS
DATE: 3-26-87

Michael J. ...
CHIEF, BUREAU OF ENGINEERING
DATE: 3-25-87

...
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
DATE: 3-18-87

HUDKINS ASSOCIATES, INC
200 E. JOPPA RD
SUITE 101 SHELL BUILDING
TOWSON, MD. 21204
828-9060



DES: DWB	
DRN: DWB	
CHK: VJM	
DATE:	
BY NO.	
SHEET NOS. - REMOVE CROSSING	
REVISION	5-21-85

**WATER & SEWER
PLAN & PROFILE**

600' SCALE MAP NO. _____ BLOCK NO. _____

SECTION 4 AREA 2
FONT HILL VILLAGE
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 24-1476-D

SCALE AS SHOWN
SHEET 4 OF 4