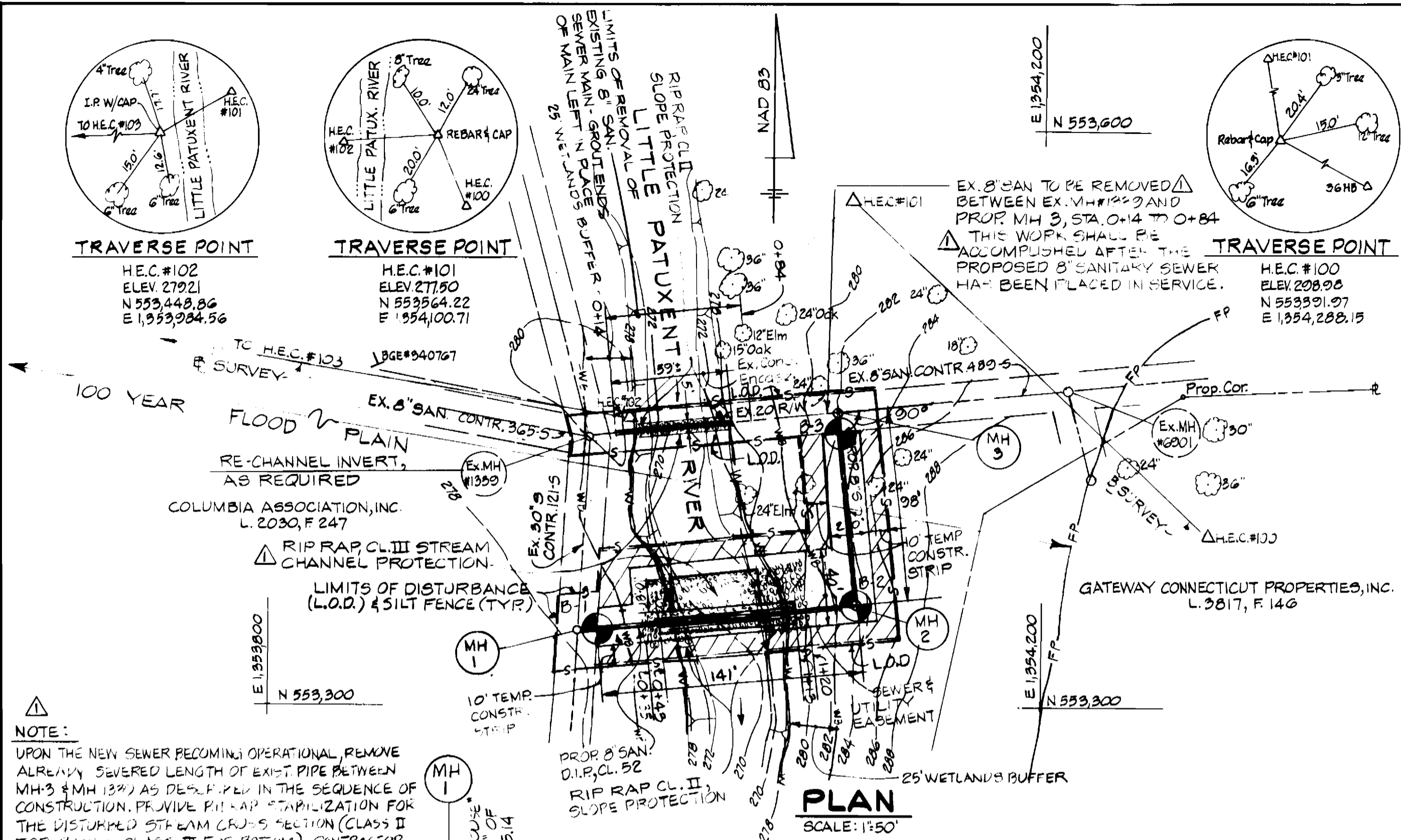
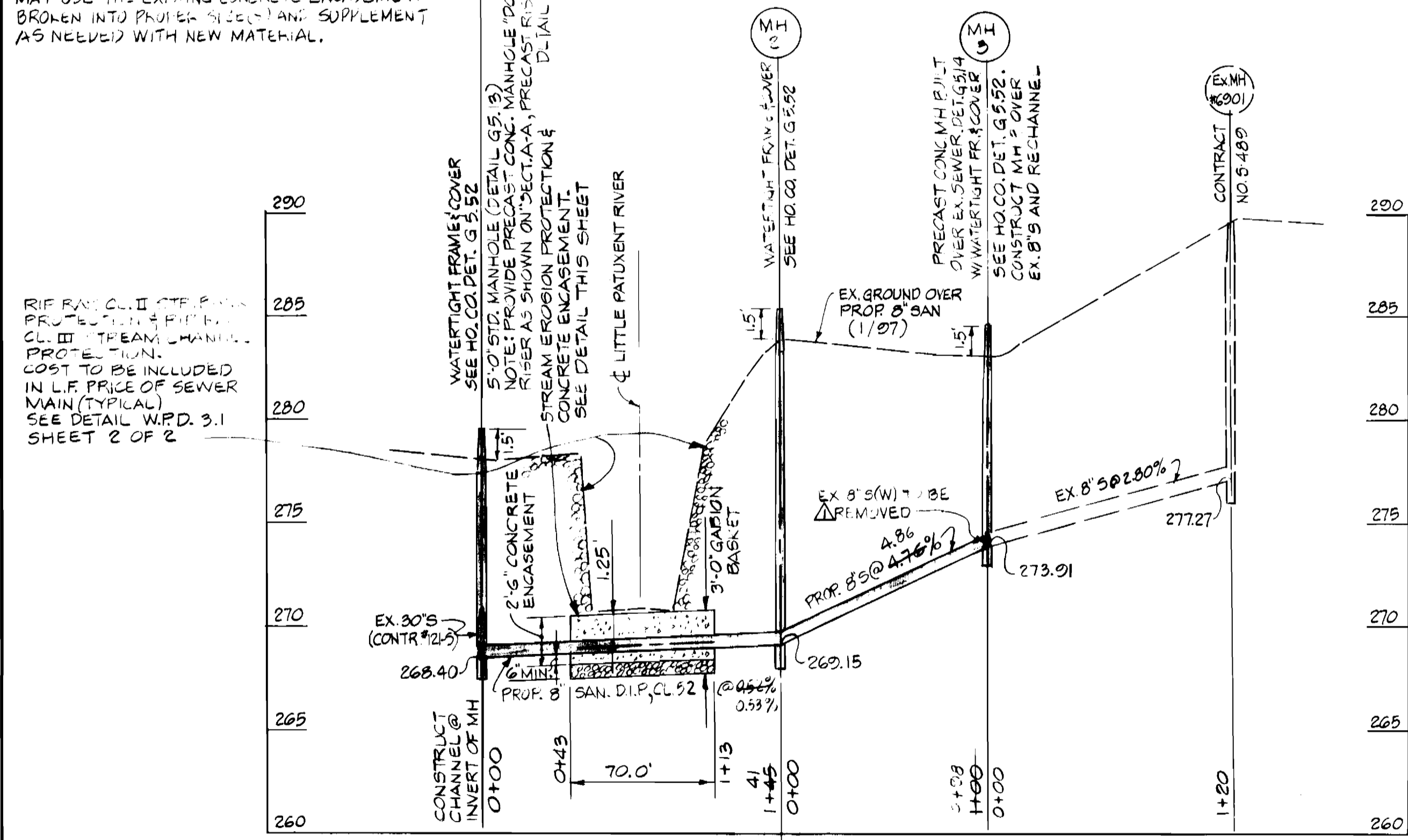


AS-BUILT-1/27/98



**NOTE:**  
UPON THE NEW SEWER BECOMING OPERATIONAL REMOVE ALREADY SEVERED LENGTH OF EXIST PIPE BETWEEN MH#3 & MH#2 AS DESCRIBED IN THE SEQUENCE OF CONSTRUCTION. PROVIDE FINAL STABILIZATION FOR THE DISTURBED STREAM CHANNEL SECTION (CLASS II FOR BANKS, CLASS III FOR BOTTOM). CONTRACTOR MAY USE THE EXISTING CONCRETE ENGAGEMENT BROKEN INTO PORTION SECTIONS AND SUPPLEMENT AS NEEDED WITH NEW MATERIAL.

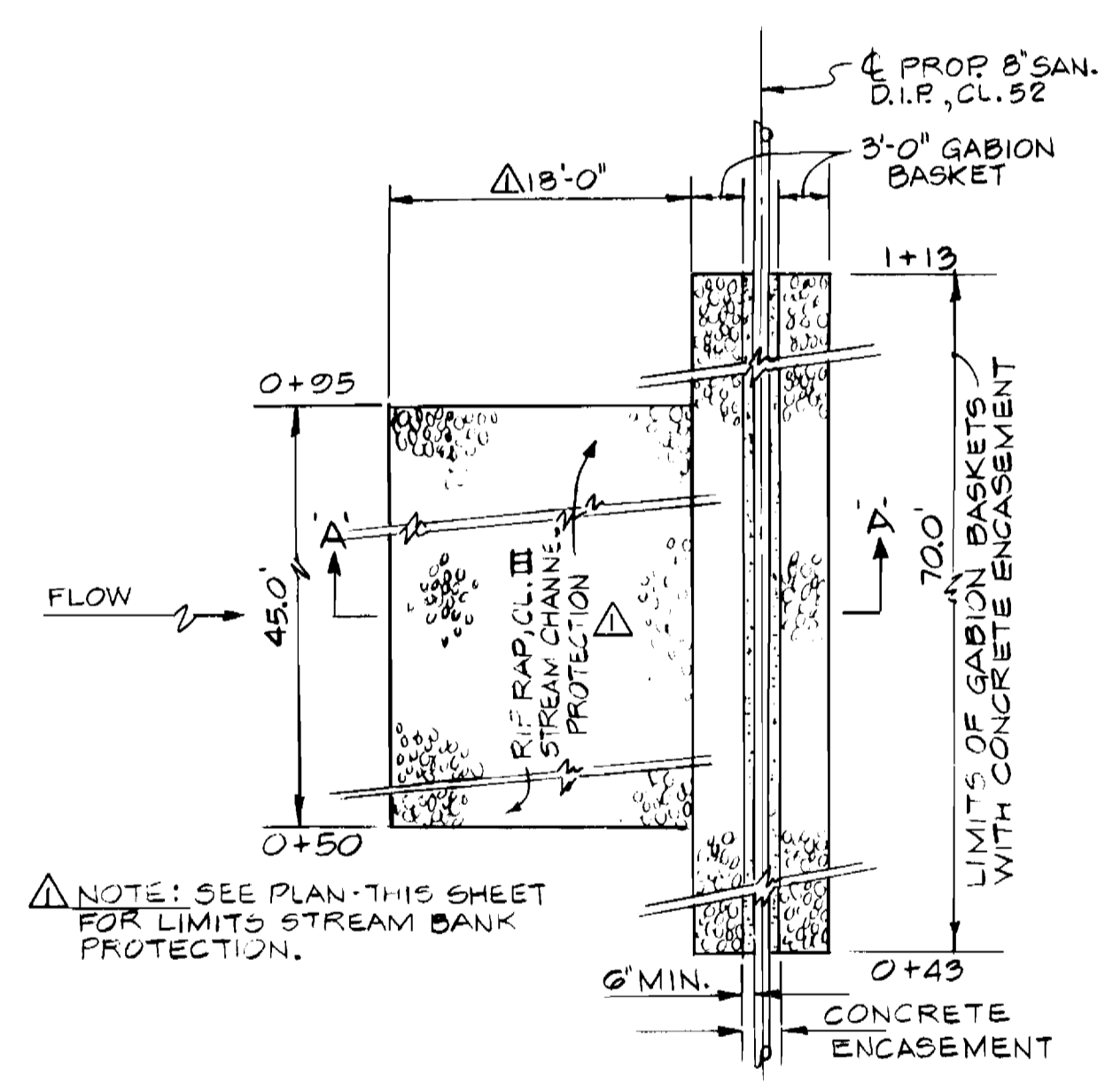


**PROFILE**  
SCALE: HOR. 1"=50'  
VERT. 1"=5'

ITEMS	QUANTITIES ESTIMATED	AS BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" SAN. SEWER MAIN	26 L.F.	98 L.F.		
8" SAN. D.I.P. CL. 52	14 L.F.	14 L.F.		
STD. 4" DIA. MH	1 EA.	1 EA.		
4" DIA. DOGHOUSE MH	1 EA.	1 EA.		
5" DIA. DOGHOUSE MH	1 EA.	1 EA.		
CONTRACTOR UTILITIES UNLIMITED				

MAIN FITTING	STAKEOUT DATA	
	DISTANCE	OFFSET
8" SEWER MAIN		
MH# 1	H.E.C.#102 TO H.E.C.#103 - 7'	115' LT.
MH# 2	H.E.C.#100 TO H.E.C.#101 - 108'	152' LT.
MH# 3	H.E.C.#101 TO H.E.C.#100 - 72'	85' RT.

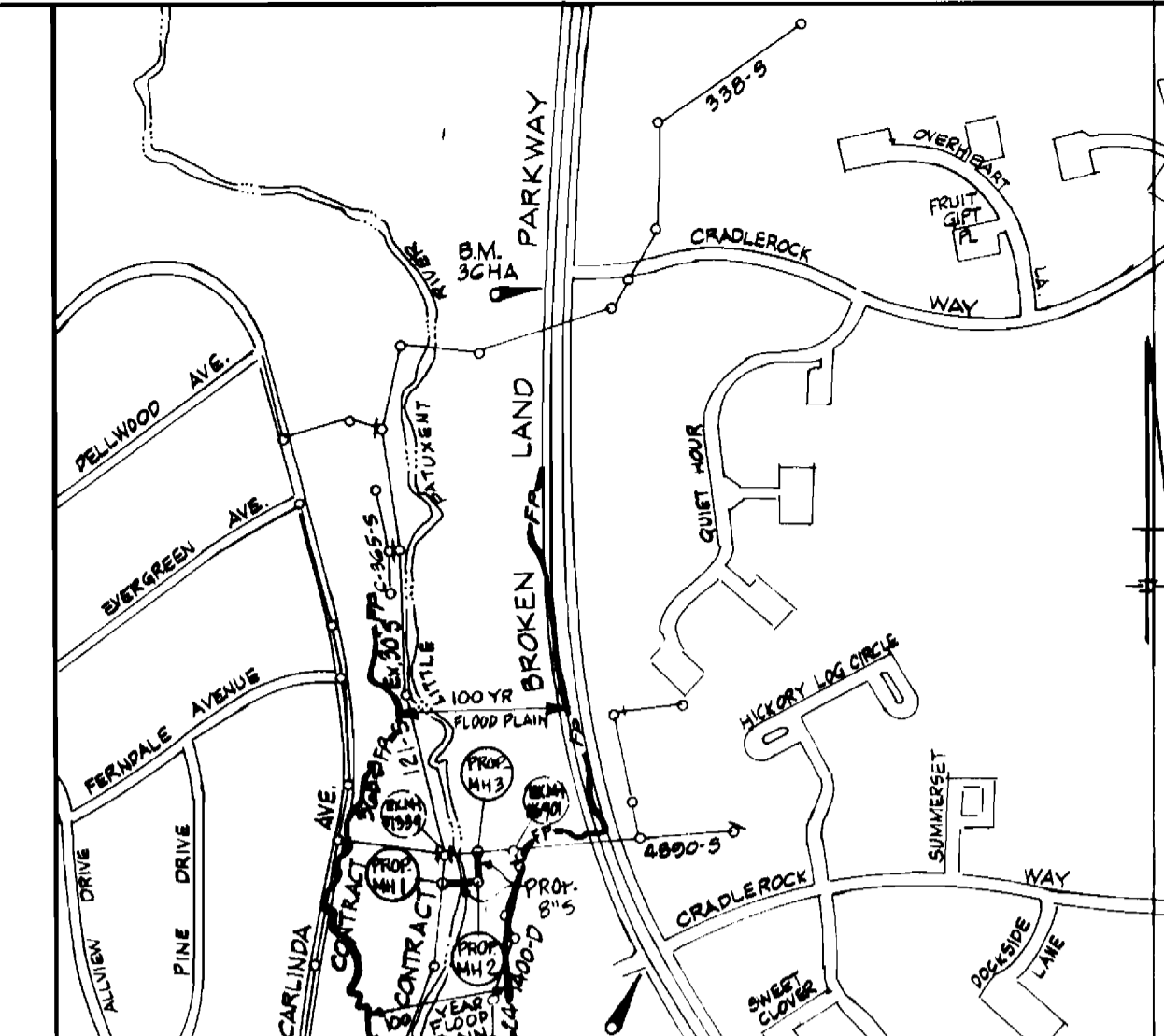
LOCATION	RESTORATION SCHEDULE - 8" SANITARY	
	LENGTH	TYPE
MH 1 TO MH 2	75 L.F.	SEED & MULCH
	70 L.F.	GABIONS
	30 L.F.	RIP RAP
MH 2 TO MH 3	100 L.F.	SEED & MULCH
MH 3 TO MH 13' 0"	70 L.F.	SEED & MULCH
	50 L.F.	RIP RAP



**SECTION 'A-A'**  
SCALE: 1"=10'-0"

BENCH MARK - HOWARD CO. B.M. NO. 36 HA  
STD. HO. CO. SURV. DISC N 555,116.60  
SET IN CONCRETE - ELEV. 293.01 E 1,354,981.90

BENCH MARK - HOWARD CO. B.M. NO. 36 HB  
STD. HO. CO. SURV. DISC N 552,970.31  
SET IN CONCRETE - ELEV. 314.22 E 1,354,677.80



TYPE OF BUILDINGS: RESIDENTIAL  
DRAINAGE AREA: LITTLE PATUXENT RIVER  
SEWER CODE: 5870-000

**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, NAD 83.
- 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 [ ] 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 of 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 18" 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.

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

APPROVED, HOWARD COUNTY S.C.D. DATE 5/3/97

REVIEWED FOR HOWARD COUNTY S.C.D. AND MEETS TECHNICAL REQUIREMENTS

CHIEF, BUREAU OF UTILITIES DATE 5/3/97

**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.

DATE 4/22/97

**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 COUNTY SOIL CONSERVATION DISTRICT.

DATE 3/17/97

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DATE 4/22/97

DATE 4-22-97

**HICKS ENGINEERING CO., INC.**  
ENGINEERS, SURVEYORS & PLANNERS  
200 EAST JOPPA ROAD, SUITE 402  
TOWSON, MARYLAND 21286-3160  
(410) 494-0001

DES. F.W.	F.W.	REVISED PER M.D.E. COMMENTS	DATE
			5/29/97
DRN. F.W.			
CHK. D.E.H.			
DATE: 3/97	BY NO.	REVISION	DATE

PLAN AND PROFILE  
8" SANITARY SEWER MAIN

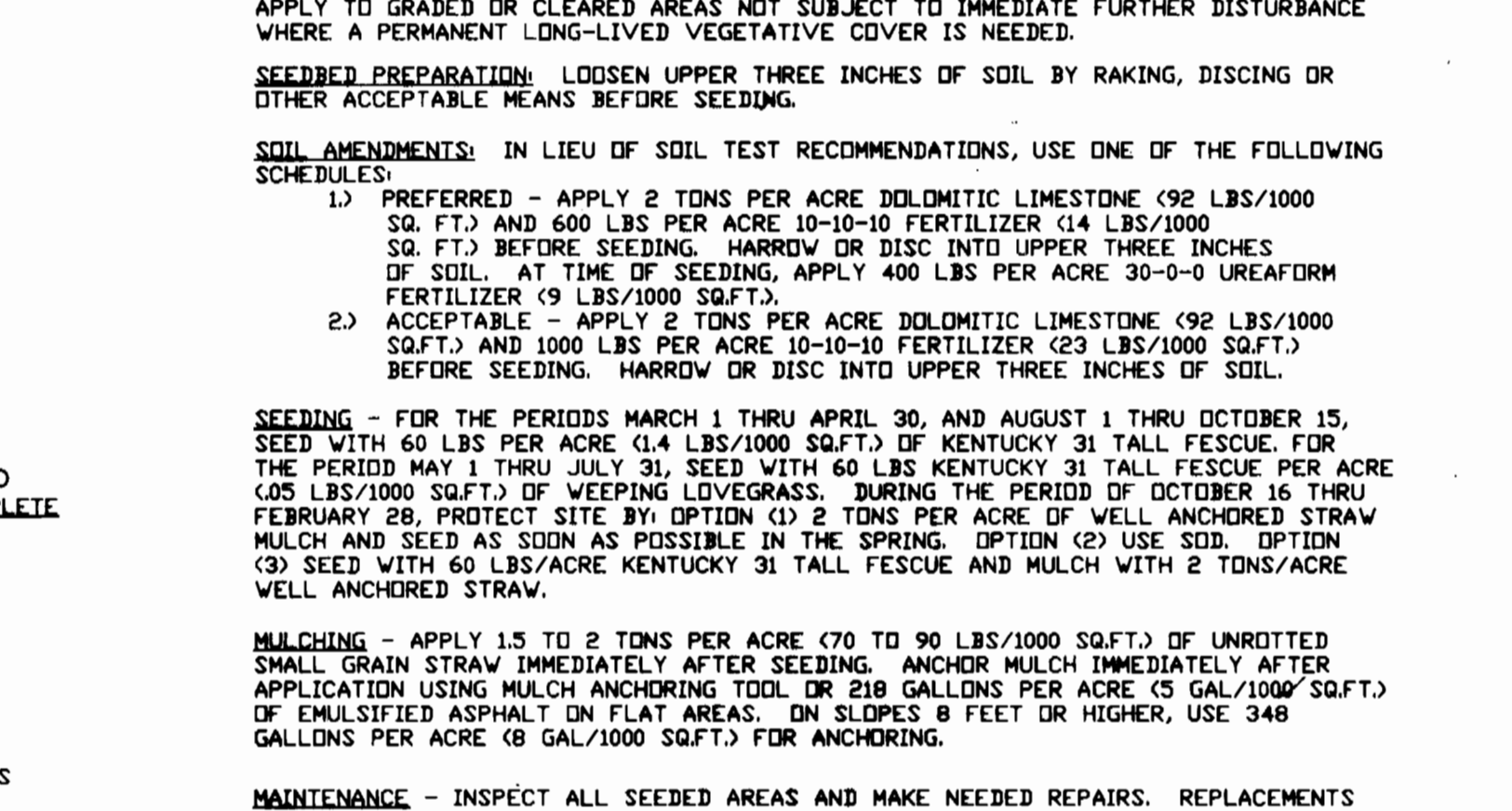
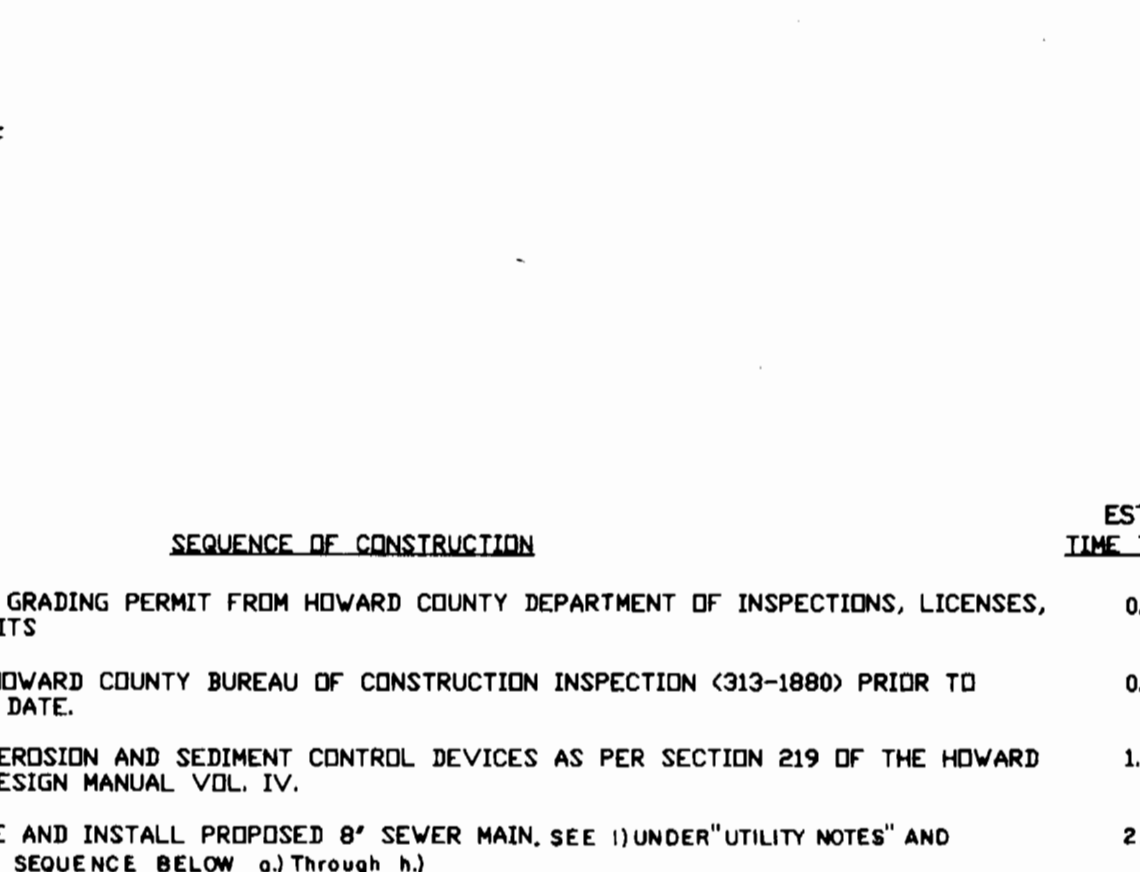
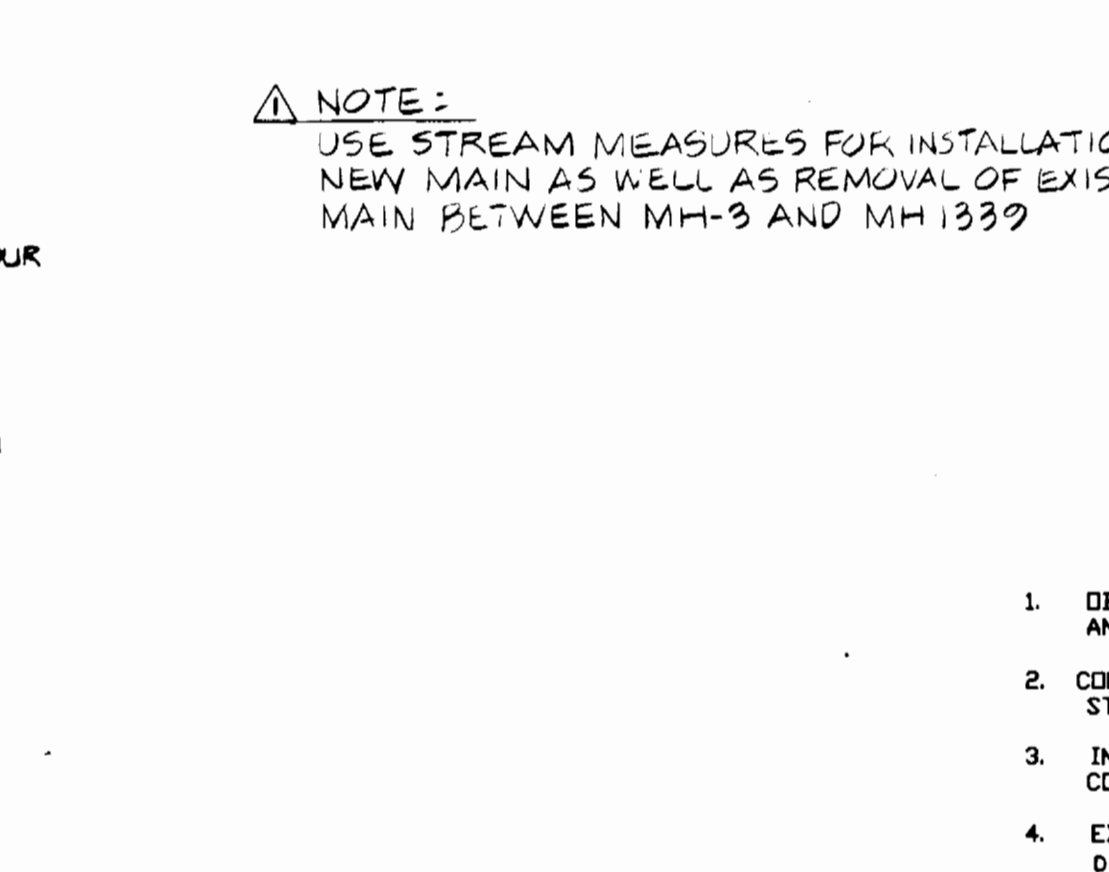
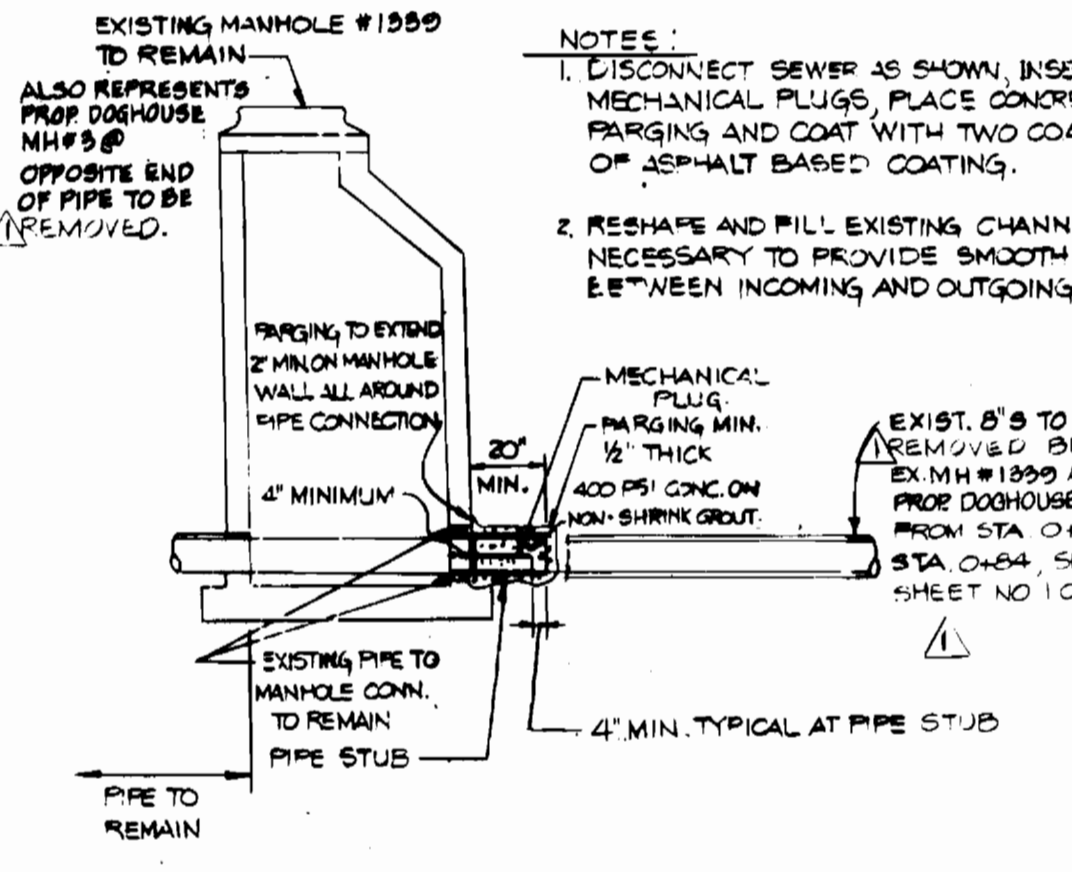
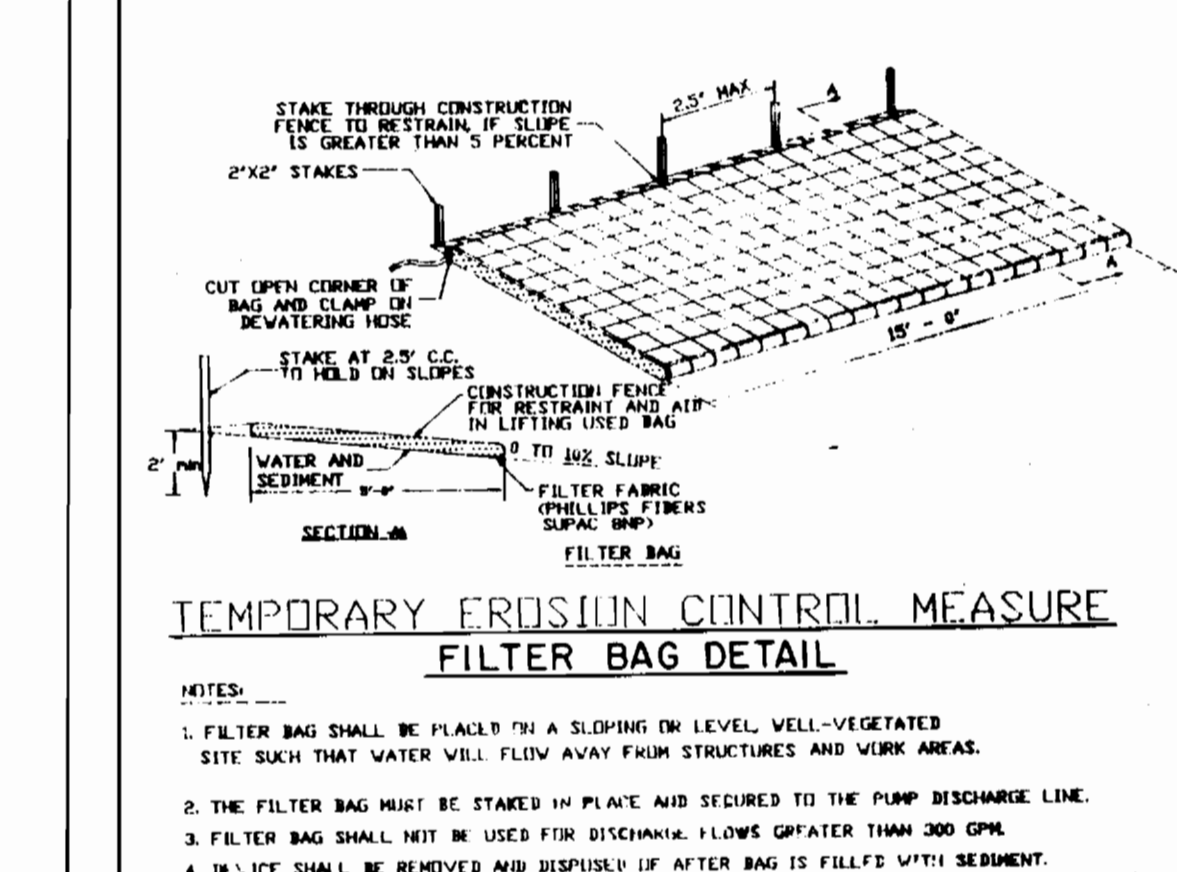
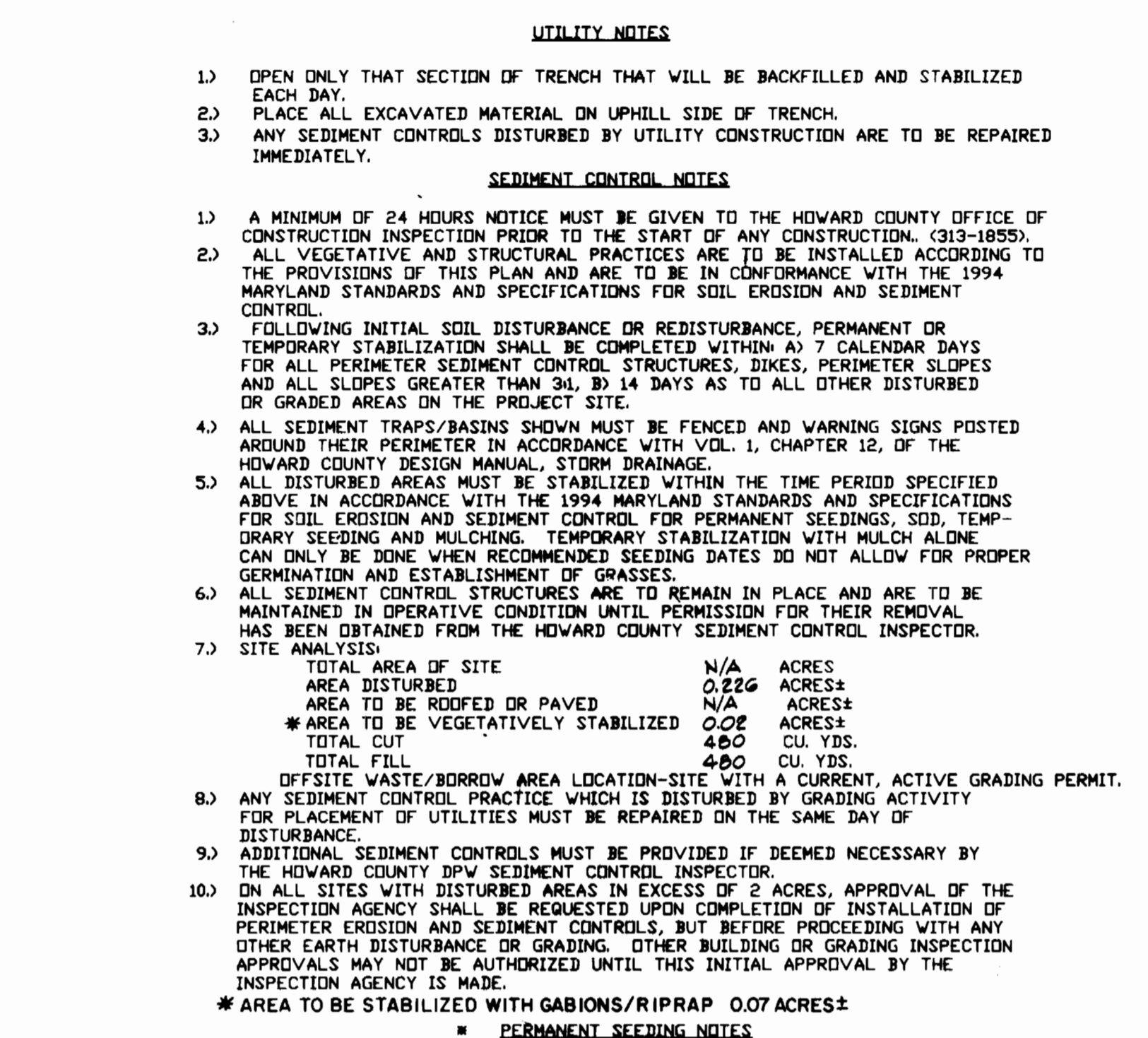
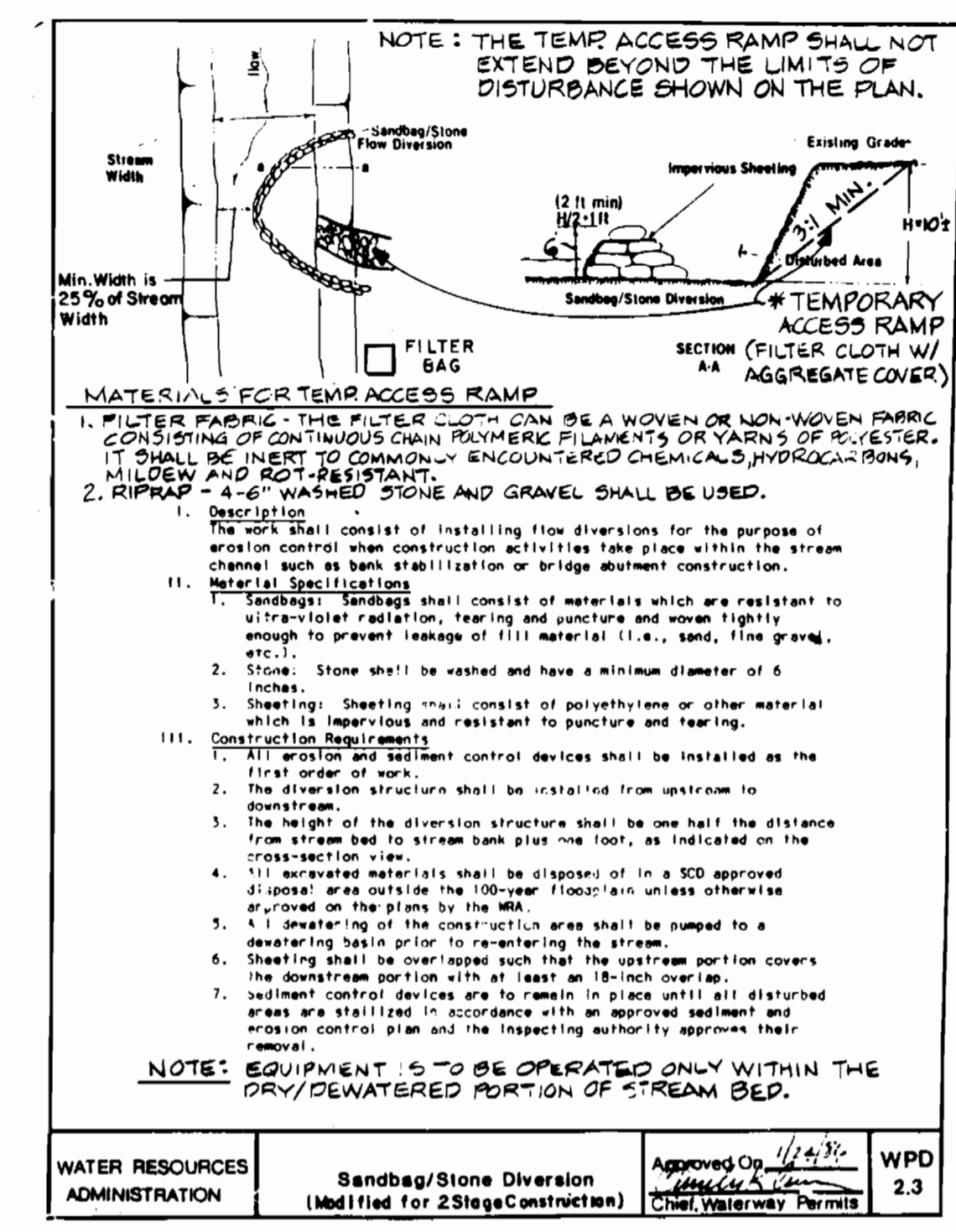
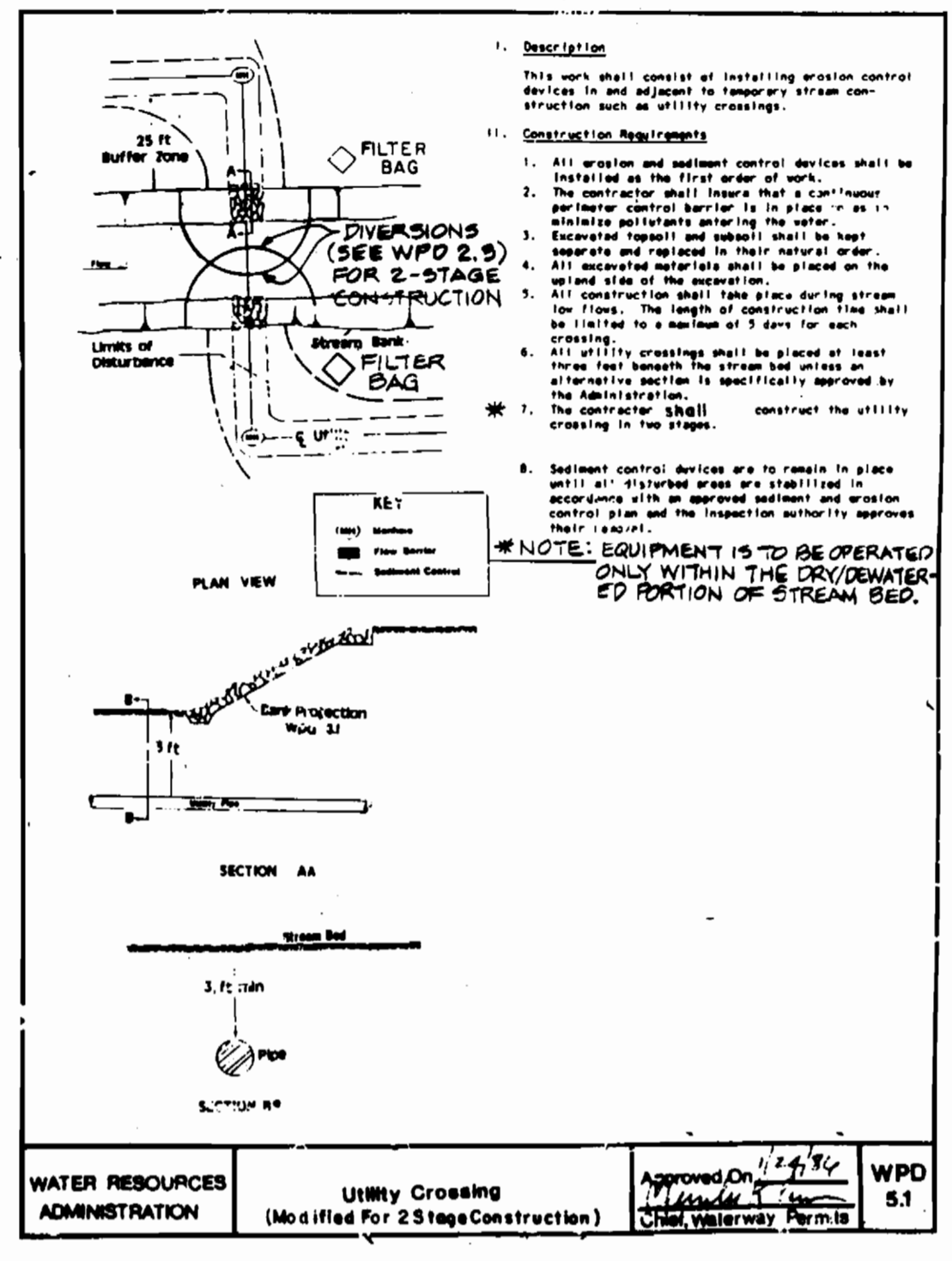
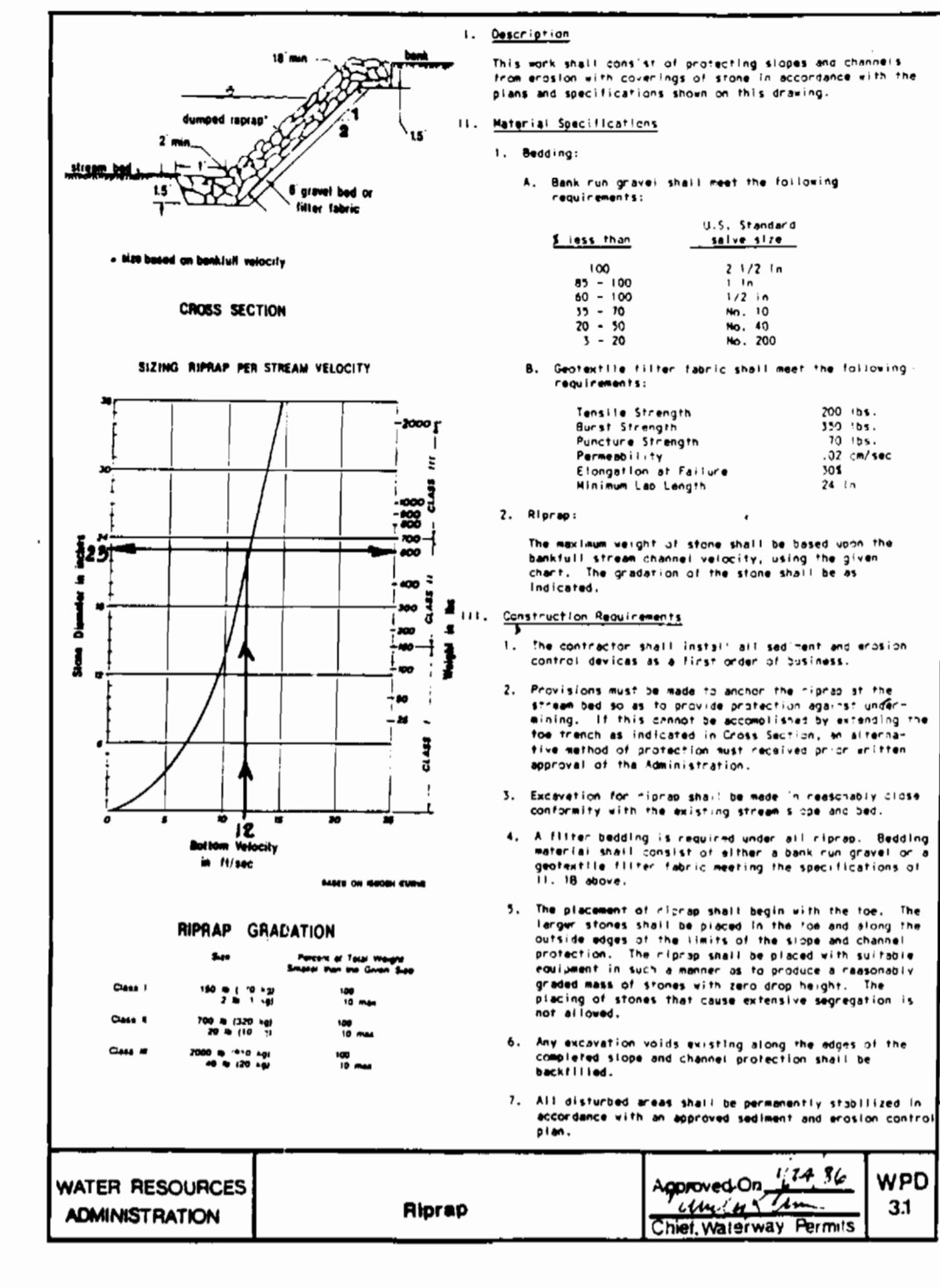
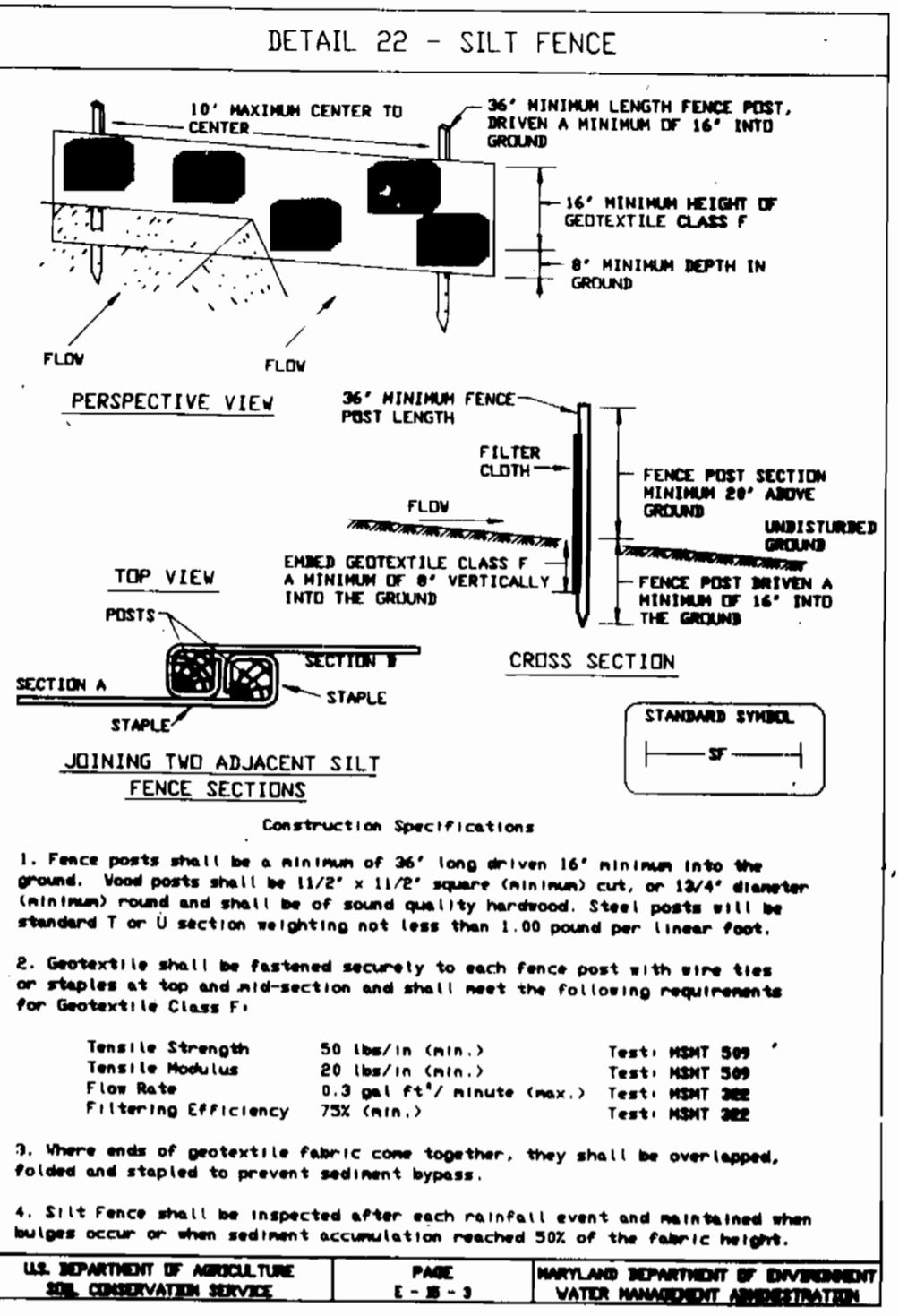
600' SCALE MAP NO. S-36/W-36 BLOCK NO. 20

CRADLEROCK OUTFALL SEWER MAIN REPLACEMENT  
6TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CAPITAL PROJECT S-6206  
CONTRACT NO. 20-3609

SCALE AS SHOWN

SHEET 1 OF 2

AS-BUILT 1/27/99



<b>DEPARTMENT OF PUBLIC WORKS</b> HOWARD COUNTY, MARYLAND Director of Public Works: [Signature] DATE: 4/22/97 Chief, Bureau of Engineering: [Signature] DATE: 4/22/97 Chief, Bureau of Utilities: [Signature] DATE: 4-22-97 Chief, Water & Sewer Design Div.: [Signature] DATE: 4-22-97			<b>HICKS ENGINEERING CO., INC.</b> ENGINEERS, SURVEYORS & PLANNERS 200 EAST JORD ROAD, SUITE 409 TOWSON, MARYLAND 21286-3166 (410) 494-0001 [Professional Seal]		DES: K.W. DRN: L.A.C. CHK: D.E.H. DATE: 3/97 BY: NO. REVISION: [Table with 2 columns: NO., DATE] DATE: 600' SCALE MAP NO. S-36/W-36, BLOCK NO. 20	<b>CRADLEROCK OUTFALL SEWER MAIN REPLACEMENT</b> 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND CAPITAL PROJECT S-6206 CONTRACT NO. 20-3609 SCALE AS SHOWN SHEET 2 OF 2
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AS-BUILT-1/27/99