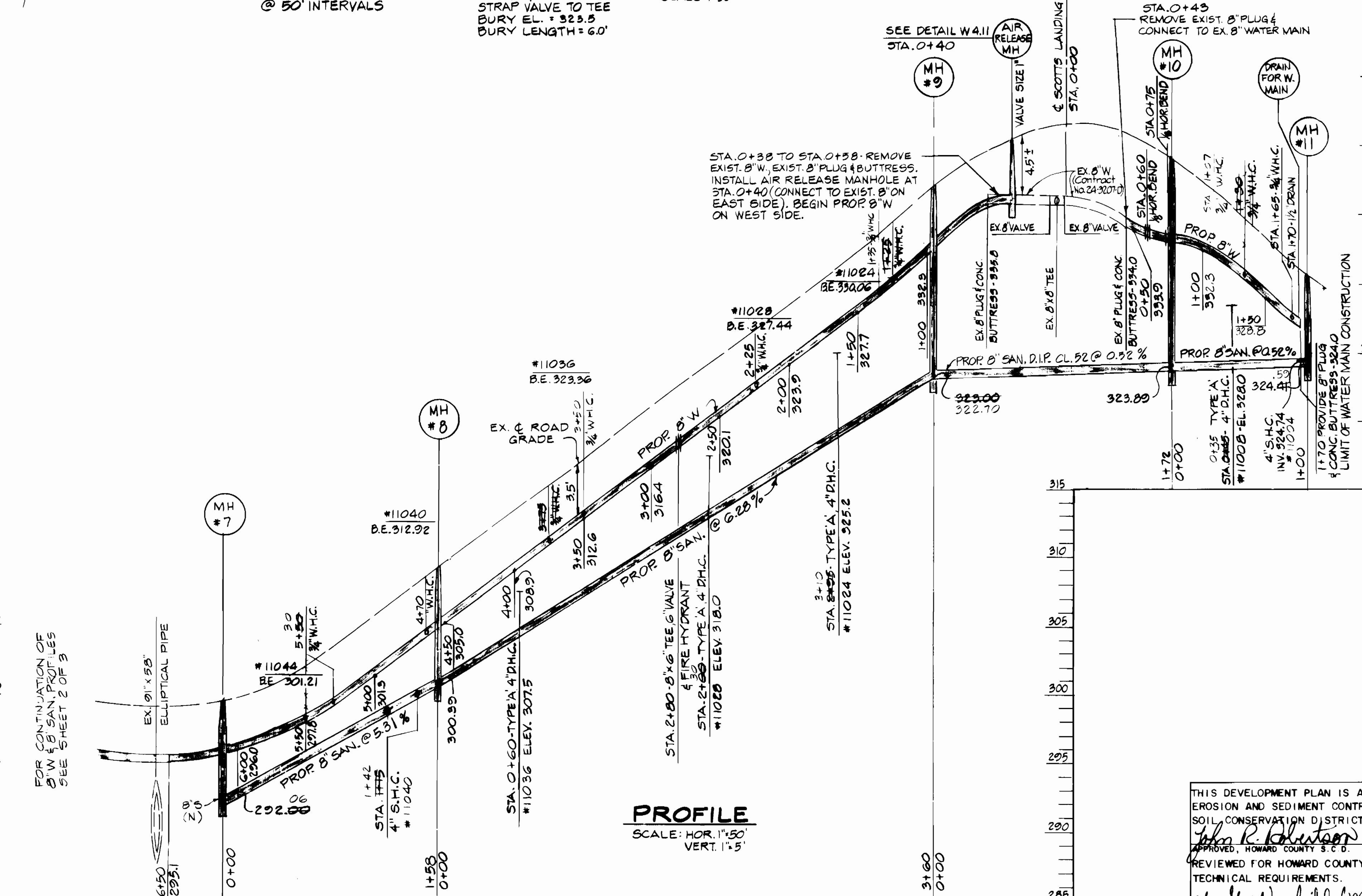
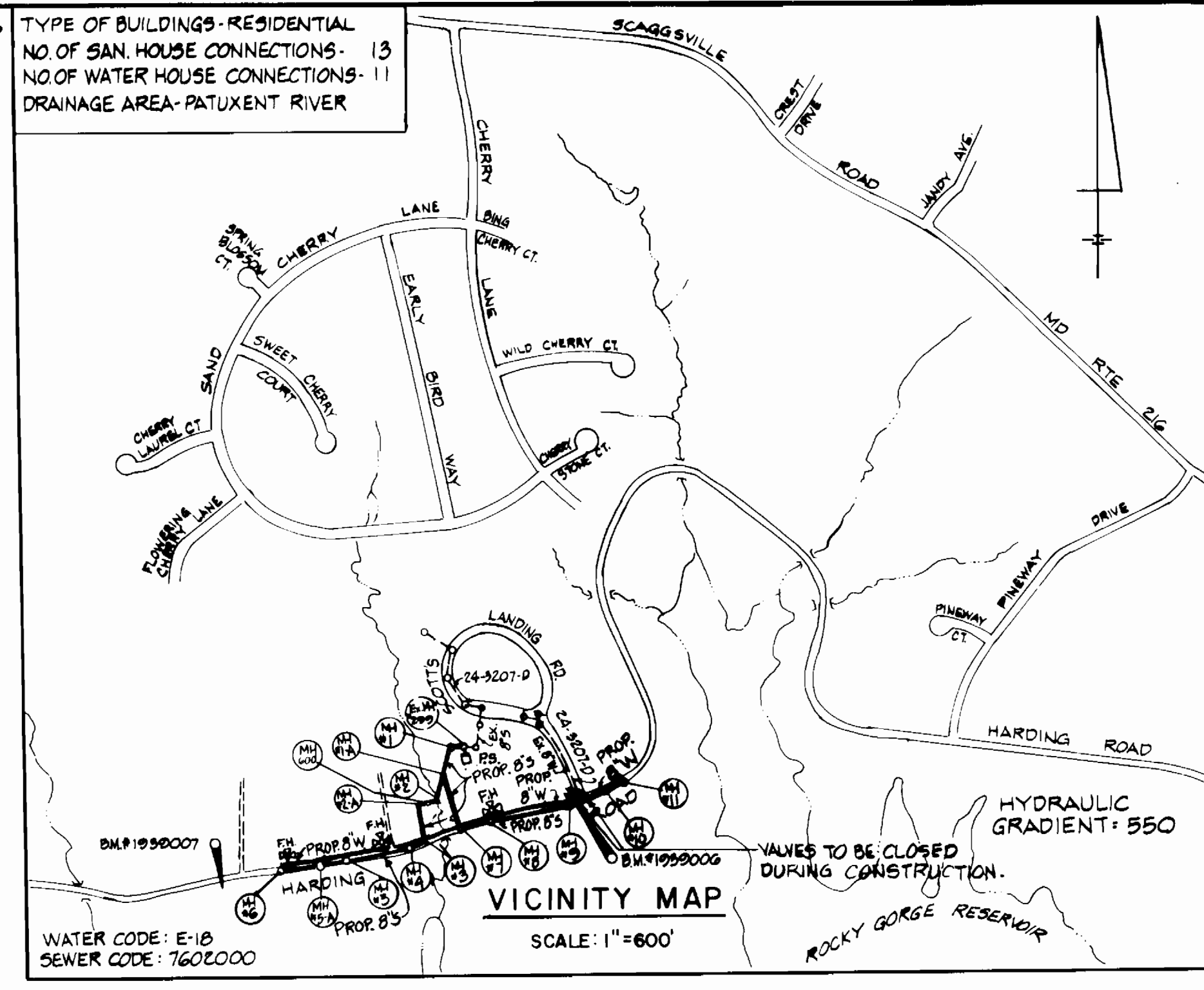
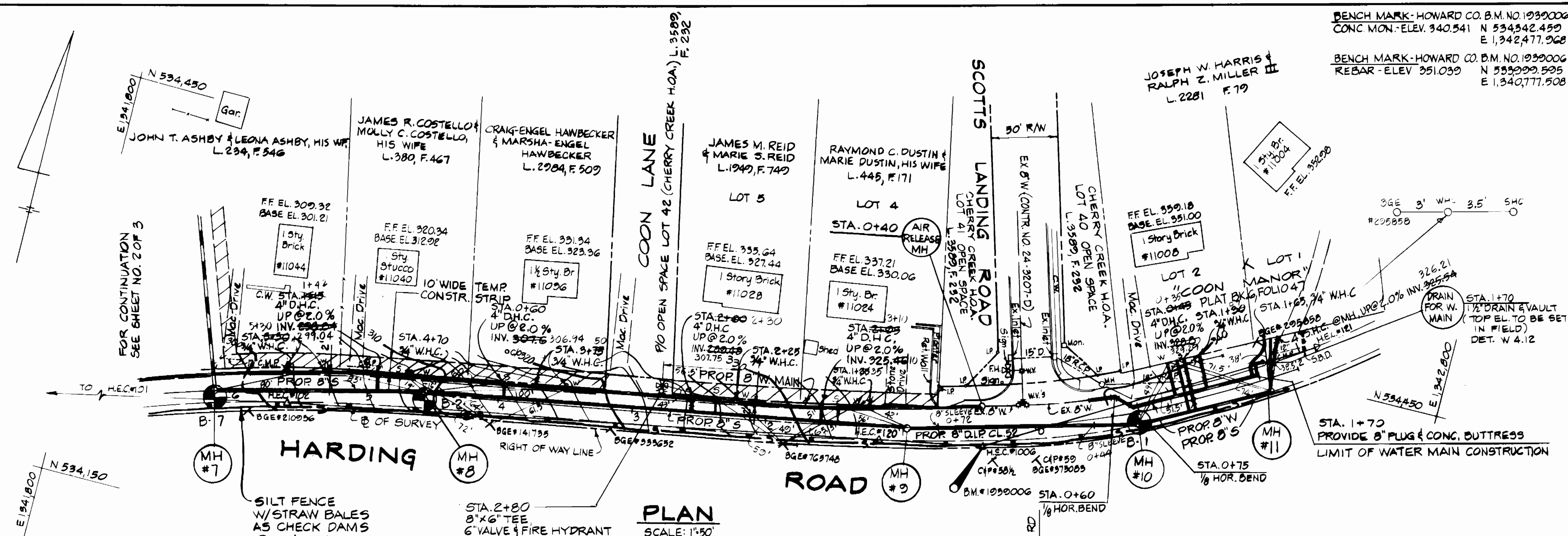


AS-BUILT 10/16/97

3540 WS/1 HARDING RD.



QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" D.I.P. CL. 52	700 L.F.	677 L.F.	D.I.P.	U.S. PIPE/BEALAIR RD. SUPPLY
8" SEWER MAIN	1520 L.F.	1221 L.F.	K TYPE	PEAK RD. SUPPLY
4" SAN. HSE. CONN.	263 L.F.	226 L.F.	P.V.C.	"
4" SAN. STANDPIPE	40 L.F.	73 L.F.	"	"
4" TYPE 'A' D.H.C.	6 EA.	6 EA.	"	"
4" DIA. MH	14 EA.	15 EA.	PRE-CAST	ATLANTIC CON. PRODUCTS
4" DIA. MH OVER 6' DEPTH	00 V.F.	21.5 V.F.	"	"
4" TYPE 'B' DROP CONN.	1 EA.	1 EA.	PRE-CAST	ATLANTIC CON. PRODUCTS
8" WATER MAIN	1537 L.F.	1533 L.F.	D.I.P.	U.S. PIPE/BEALAIR RD. SUPPLY
34" W.H.C.	133 L.F.	134 L.F.	K TYPE	PEAK RD. SUPPLY
FIRE HYDRANT	3 EA.	2 EA.	MUELLEK	FITTED/BEALAIR RD. SUPPLY
6" VALVE	3 EA.	2 EA.	MUELLEK	"
8" VALVE	1 EA.	1 EA.	MUELLEK	"
1" AIR RELEASE MH	1 EA.	1 EA.	PRE-CAST	ATLANTIC CON. PRODUCTS
1 1/2" DRAIN MH	2 EA.	2 EA.	PRE-CAST	"
4" VALVE	1 EA.	1 EA.	MUELLEK	"
4" WATER MAIN	10 L.F.	7.5 L.F.	D.I.P.	U.S. PIPE/BEALAIR RD. SUPPLY

- 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.C.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 3'-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:
    - ATA - 865-3803
    - RC&E - Contractor Services - 850-4620
    - RC&E - Underground Damage Control - 787-9068
    - Bureau of Utilities (BU) - 313-4900
    - Bell Atlantic-MD, Inc. - 327-5193
    - Colonial Pipeline Co. - 795-1390
    - Water Utility Administration - 1-800-337-7777
    - 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 18.11(a) of the Howard County Code.
  - M.D.E. WETLAND/PERMIT TRACKING NO. 199664122

- PART III SEWER
- 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 05.52. Where watertight manhole frame 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 that cellar cannot be served.

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

*John R. Dustin* 8/6/96 DATE  
APPROVED, HOWARD COUNTY S.C.D.

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

*J. H. W. [Signature]* 8/6/96 DATE  
DIRECTOR OF ENGINEERING  
DEPARTMENT OF PUBLIC WORKS

DEVELOPER'S CERTIFICATION:

"I 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]* 7/25/96 DATE  
DIRECTOR OF ENGINEERING  
DEPARTMENT OF PUBLIC WORKS

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 CONSERVATION DISTRICT."

*[Signature]* 8/9/96 DATE  
HICKS ENGINEERING COMPANY, INC.  
ENGINEERS-SURVEYORS-PLANNERS  
200 EAST JOPPA ROAD, SUITE 402  
TOWSON, MARYLAND 21286 TEL (410) 494-0001

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*[Signature]* 7/26/96 DATE  
DIRECTOR OF PUBLIC WORKS

*[Signature]* 7/25/96 DATE  
CHIEF, BUREAU OF ENGINEERING

*[Signature]* 7-26-96 DATE  
CHIEF, BUREAU OF UTILITIES

*[Signature]* 7-29-96 DATE  
CHIEF, WATER & SEWER DESIGN DIVISION

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



DES: K.W.	K.W.	1	REVISED SEWER ALIGN., MH-2 TO MH-5	1/97
DRN: F.W.	F.W.	3	ADD MH #5	2/97
CHK: D.E.H.				
DATE: 7/1/96	BY: NO.		REVISION	DATE

WATER & SEWER MAINS  
PLAN & PROFILES

600' SCALE MAP NO. W-46-3-46 BLOCK NO. 10, 11, 12, 17

HARDING ROAD WATER & SEWER MAINS  
6 TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CAPITAL PROJECT S-6192  
CONTRACT NO. 24-3540

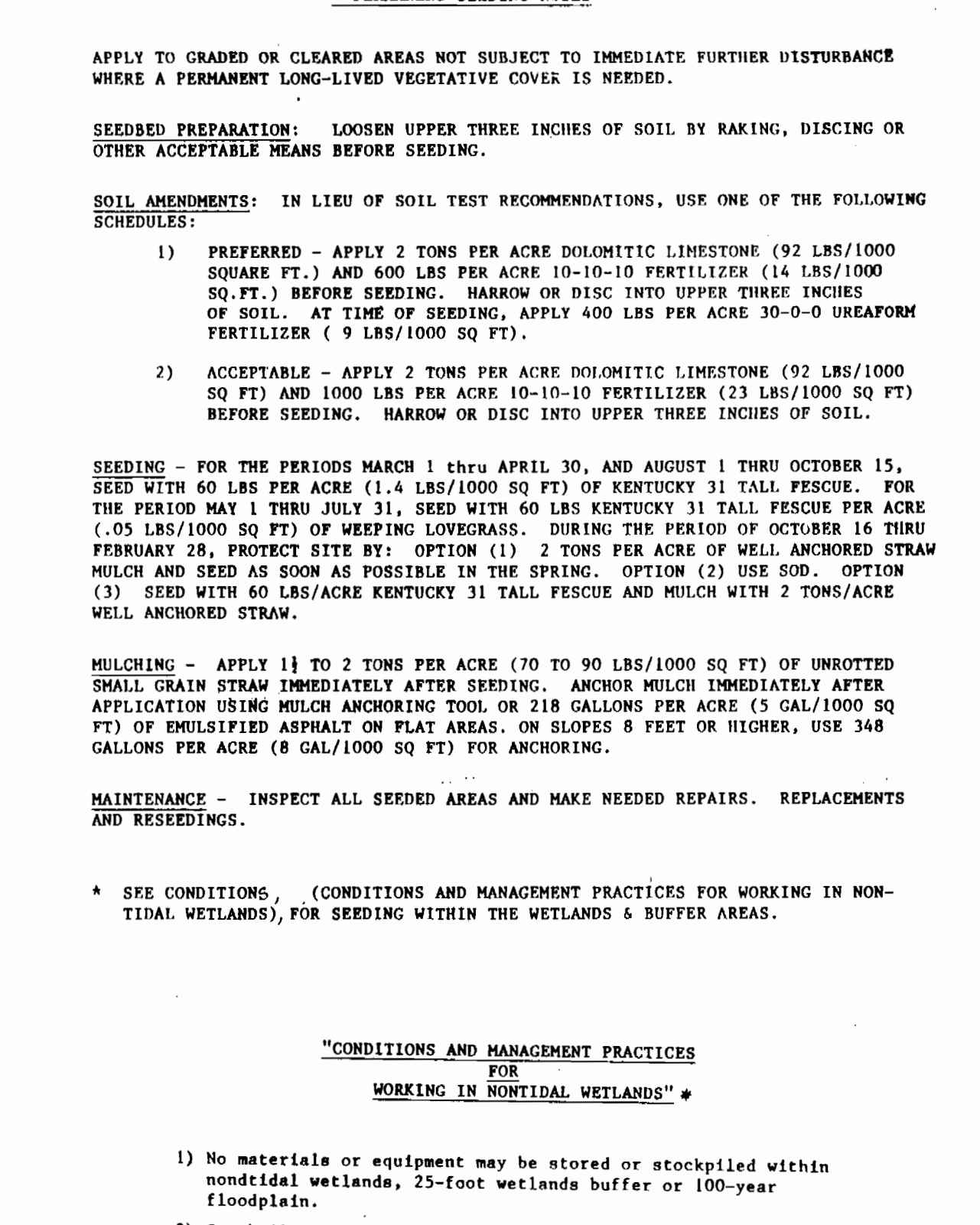
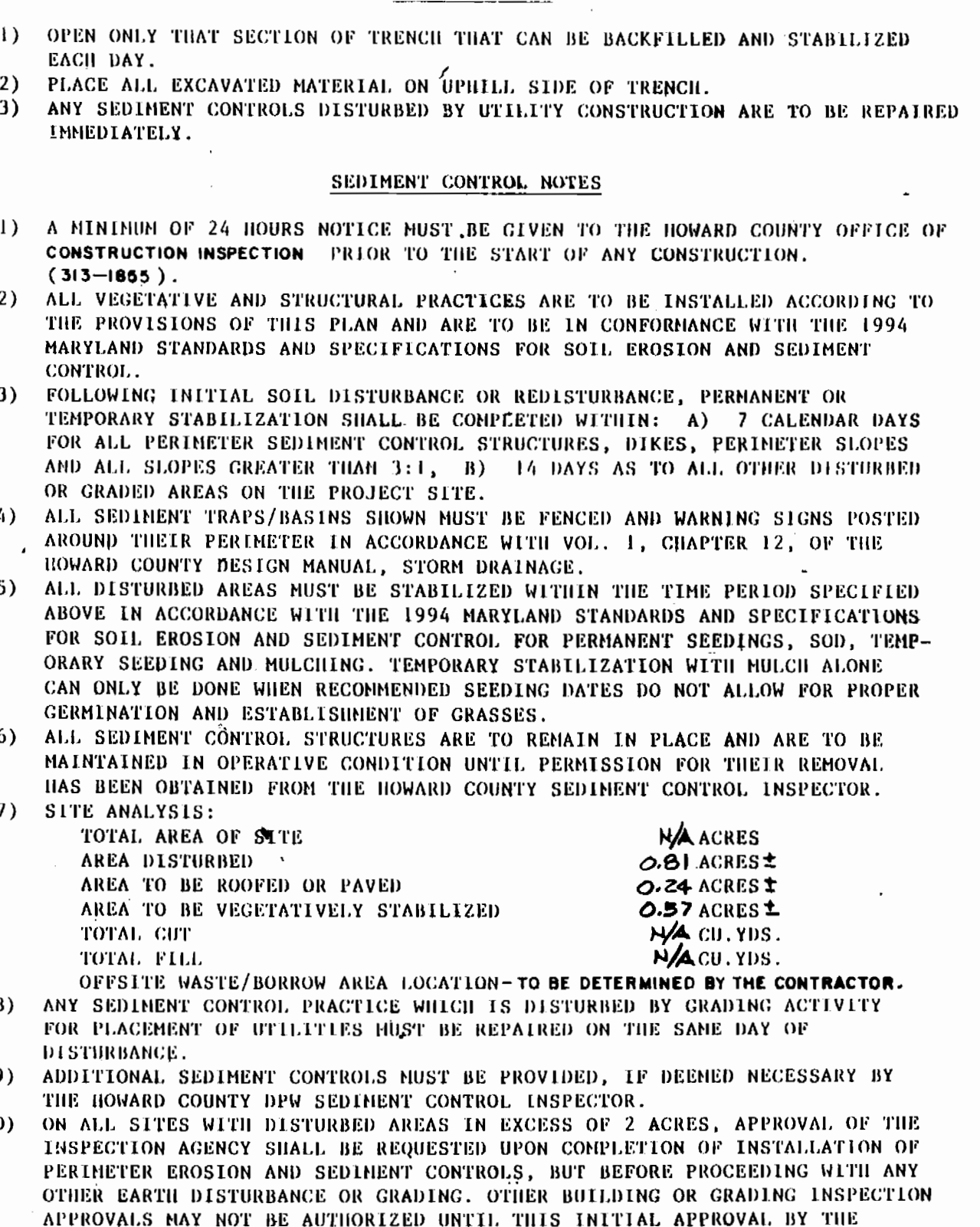
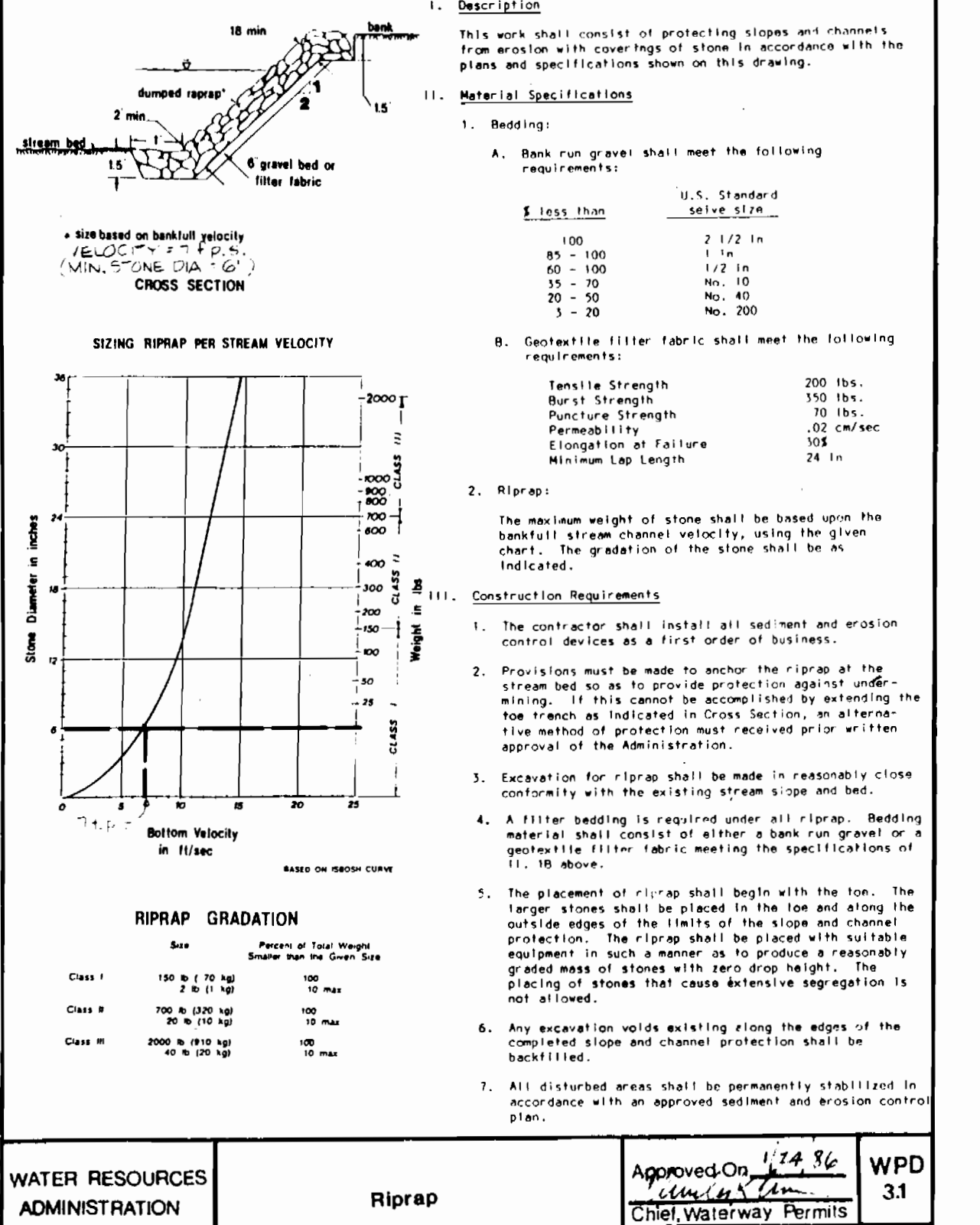
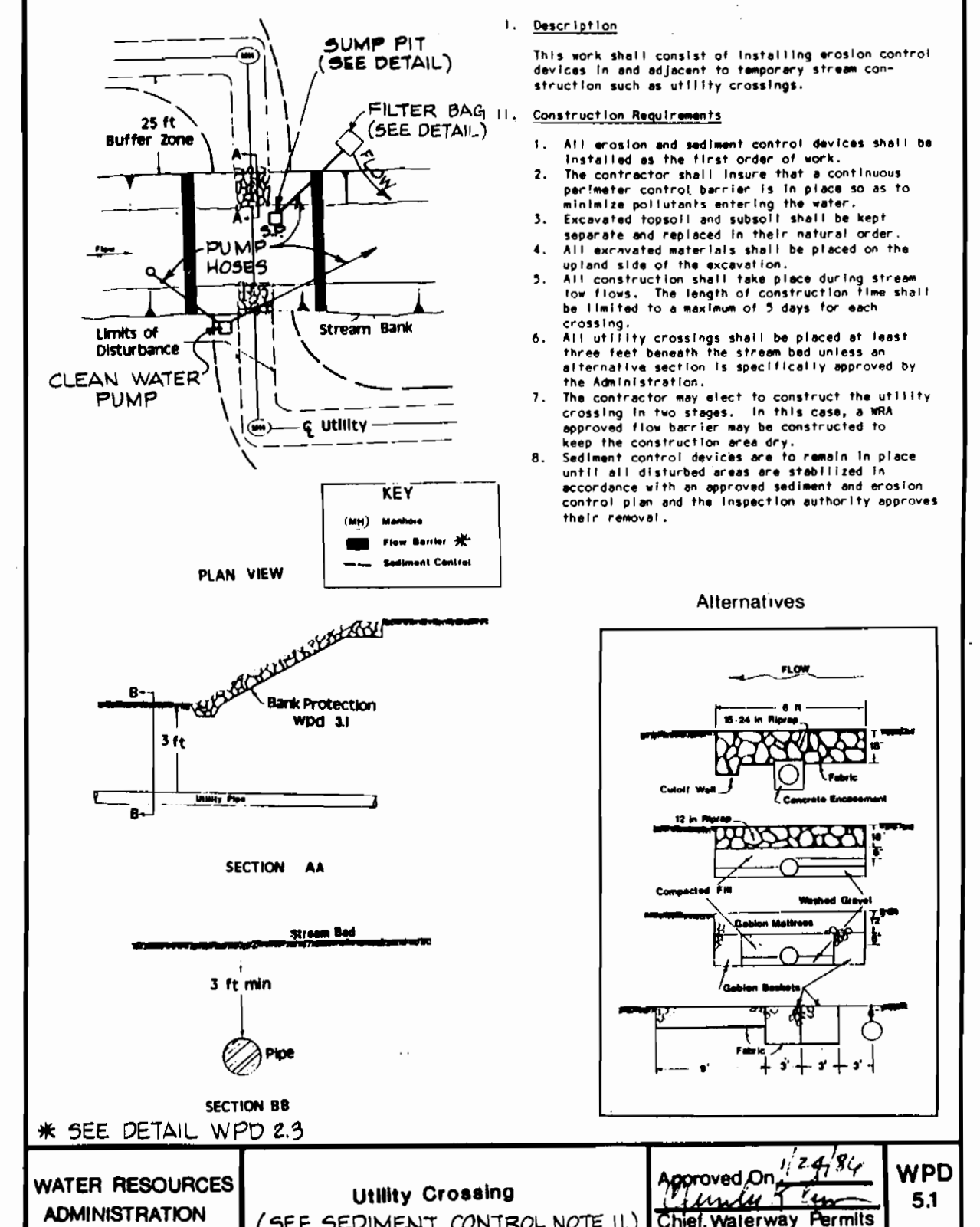
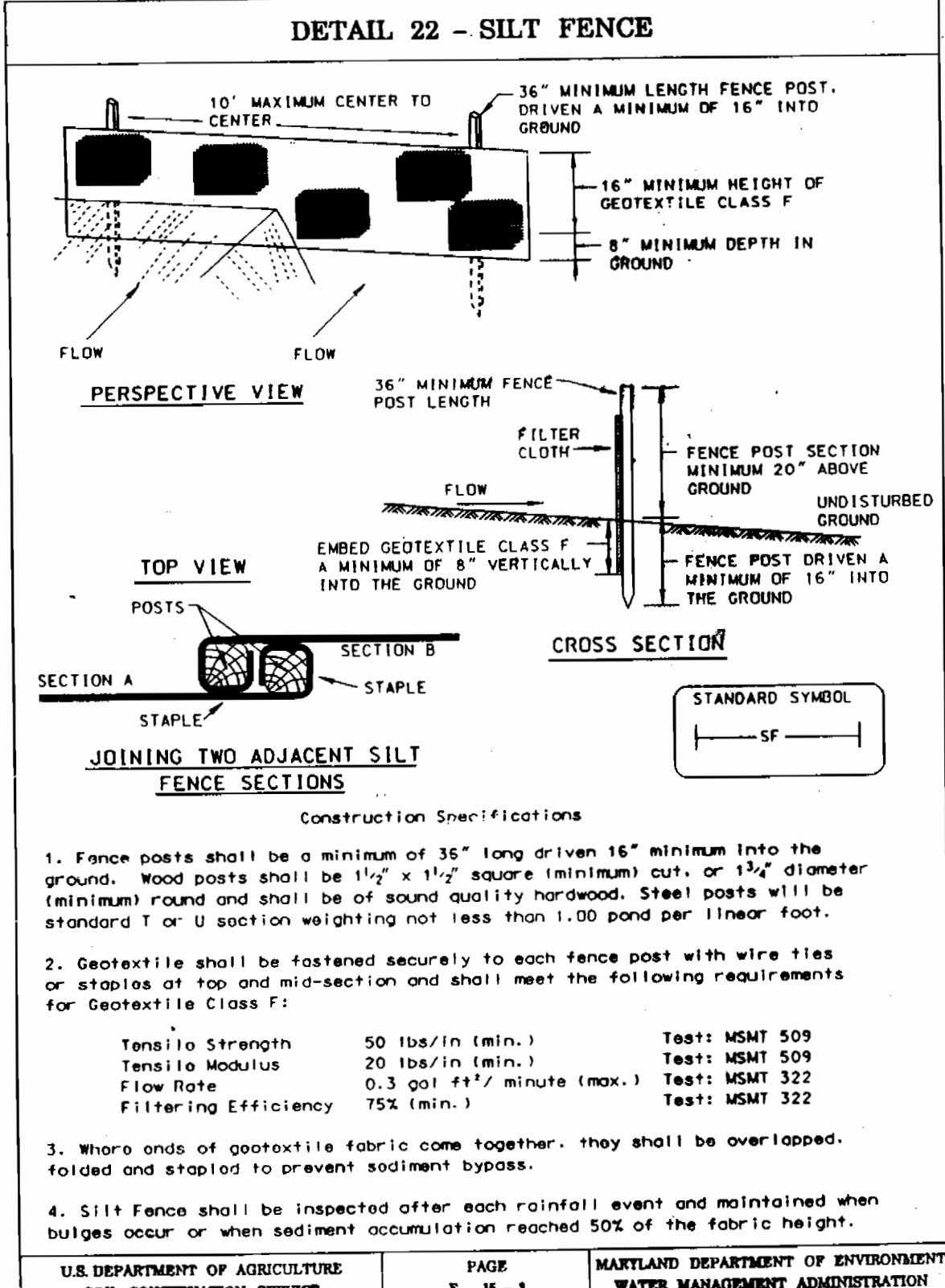
SCALE AS SHOWN  
SHEET 1 OF 3

AS-BUILT 10/16/97

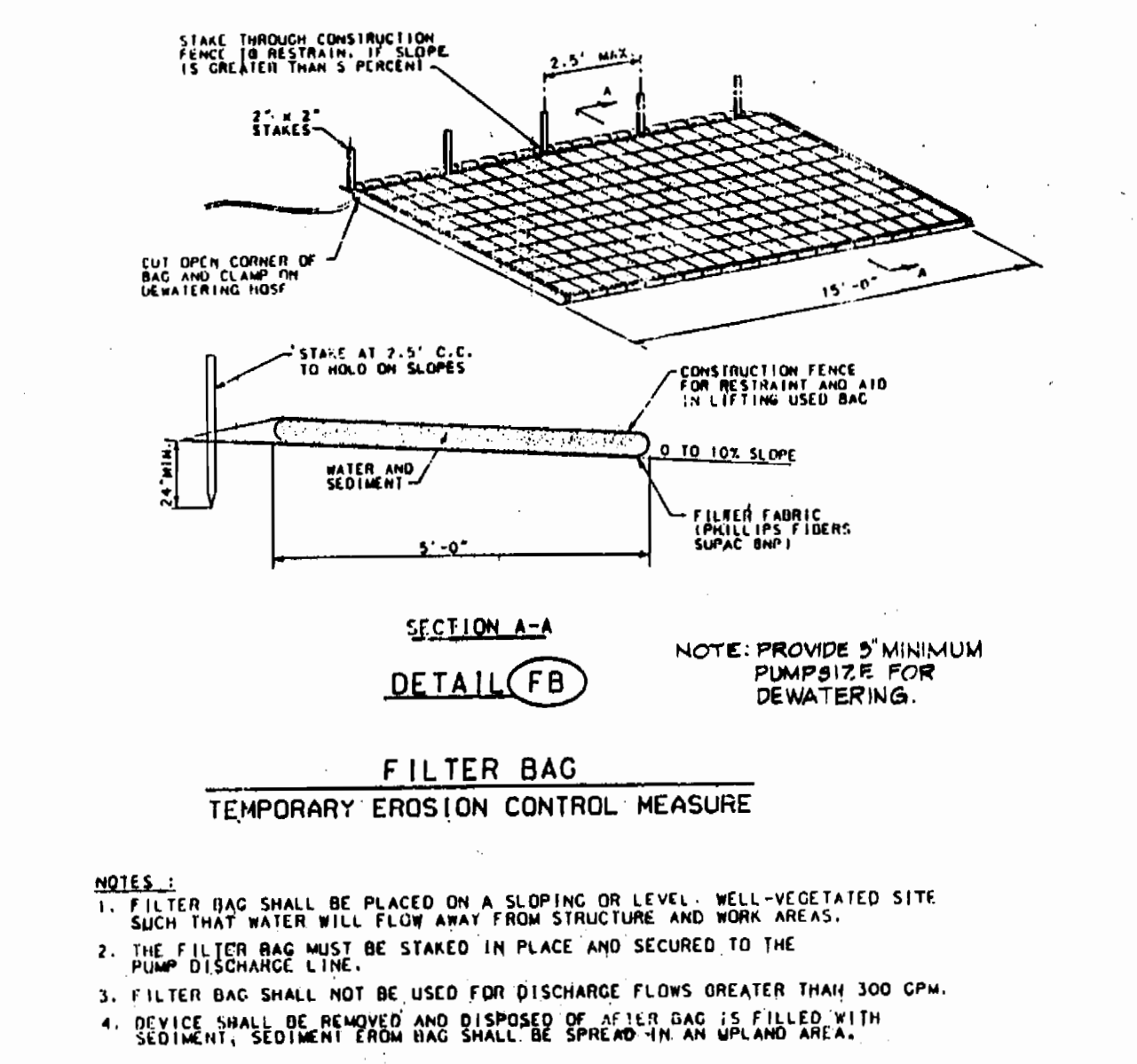
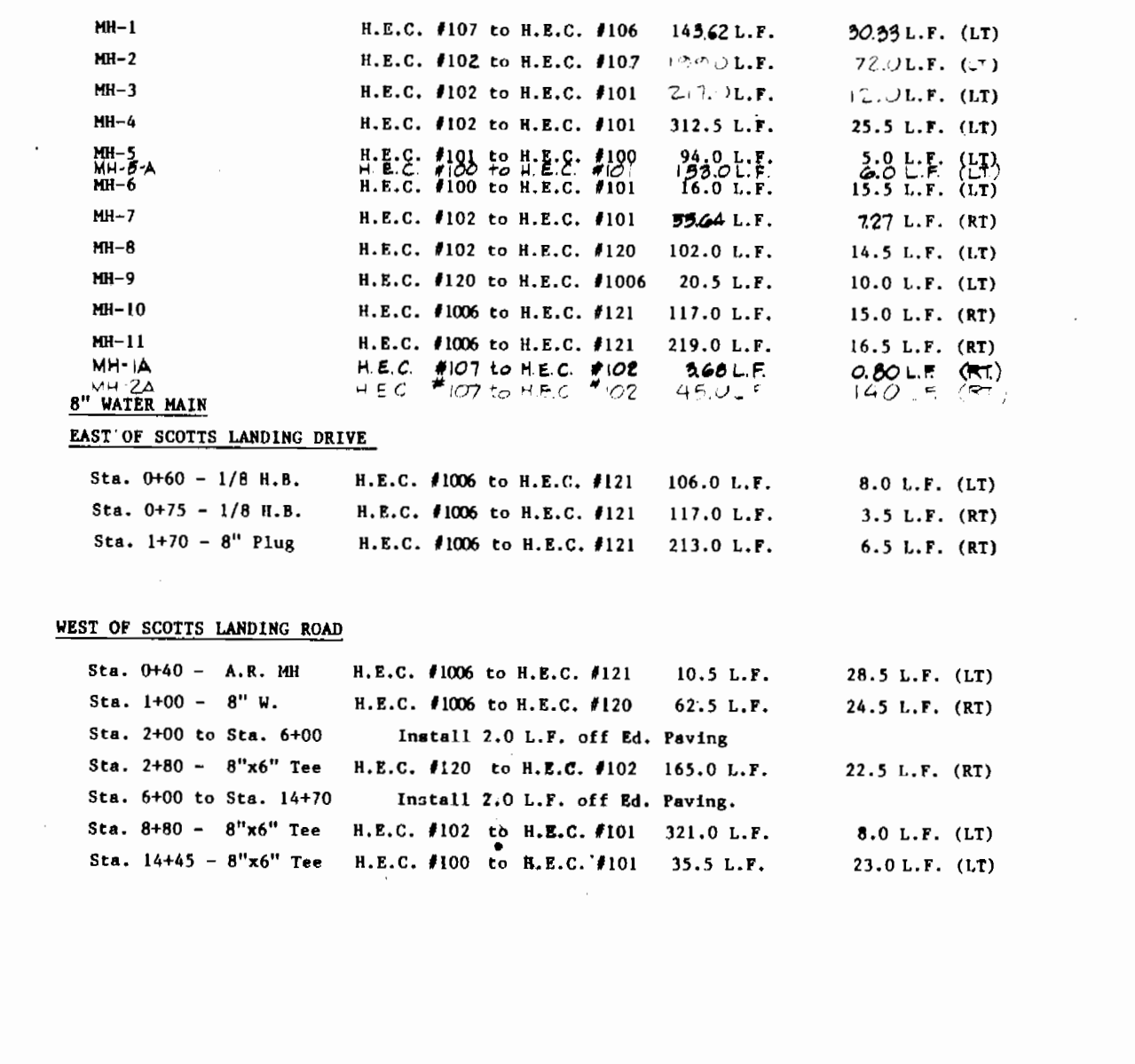
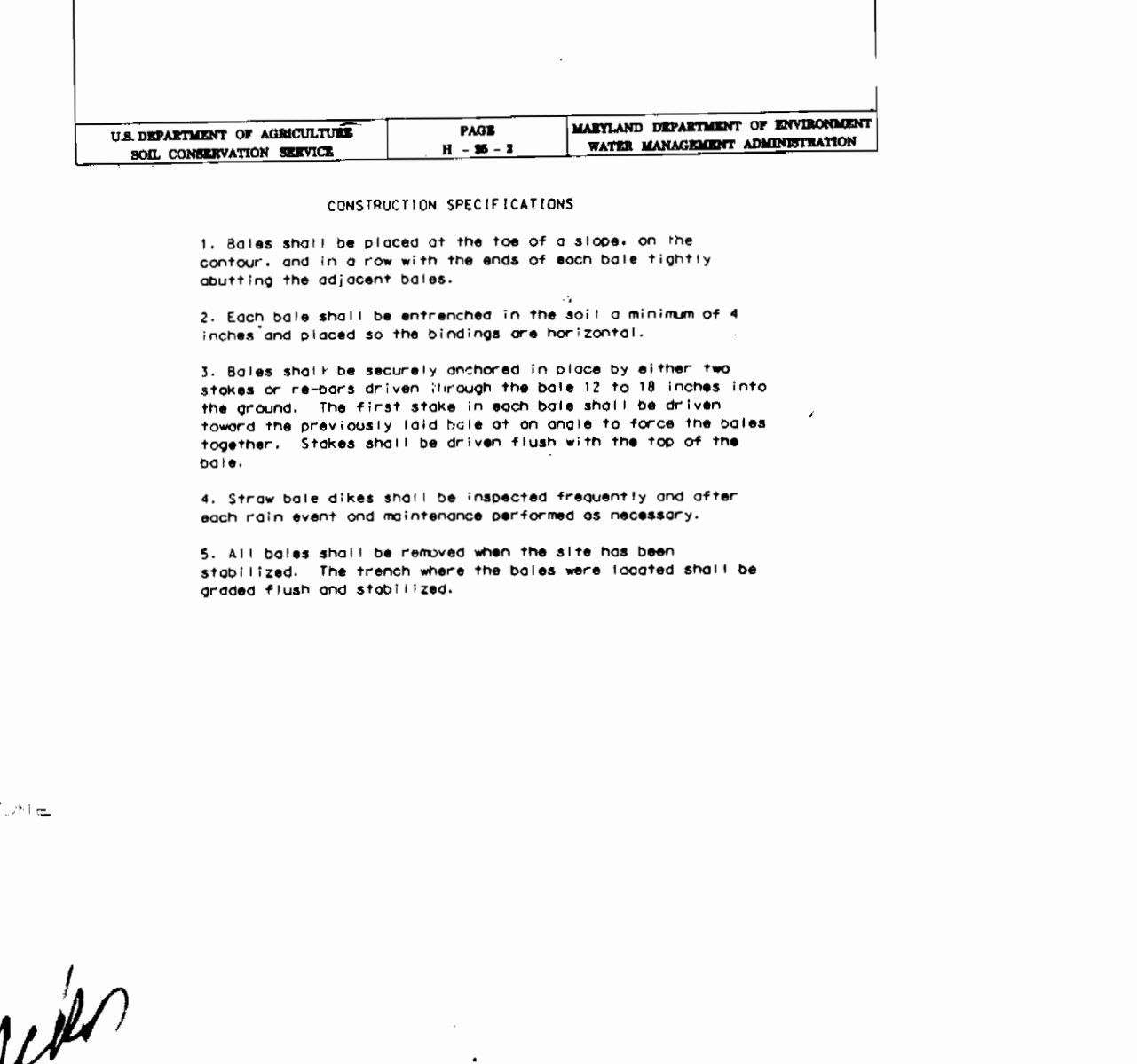
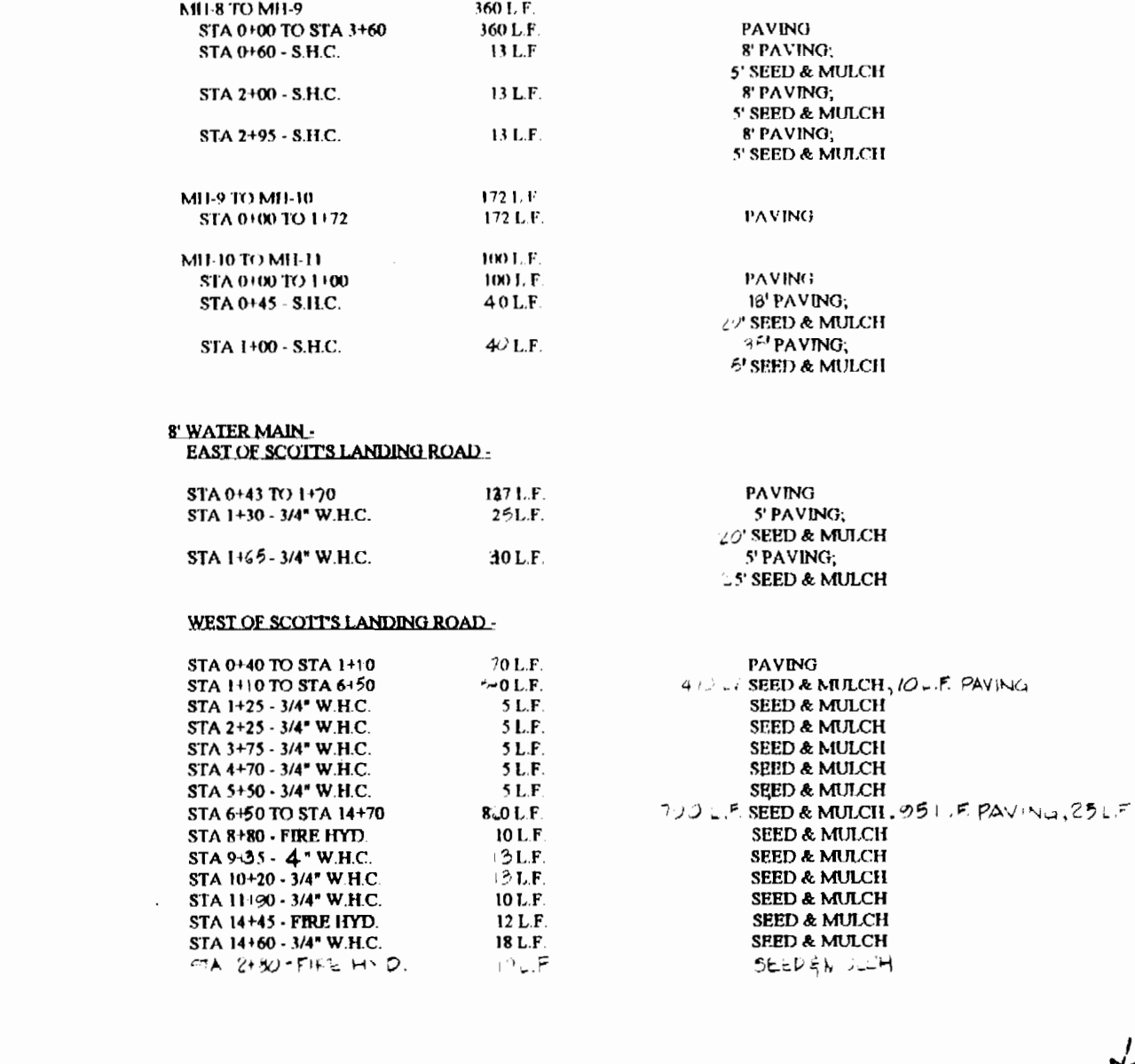
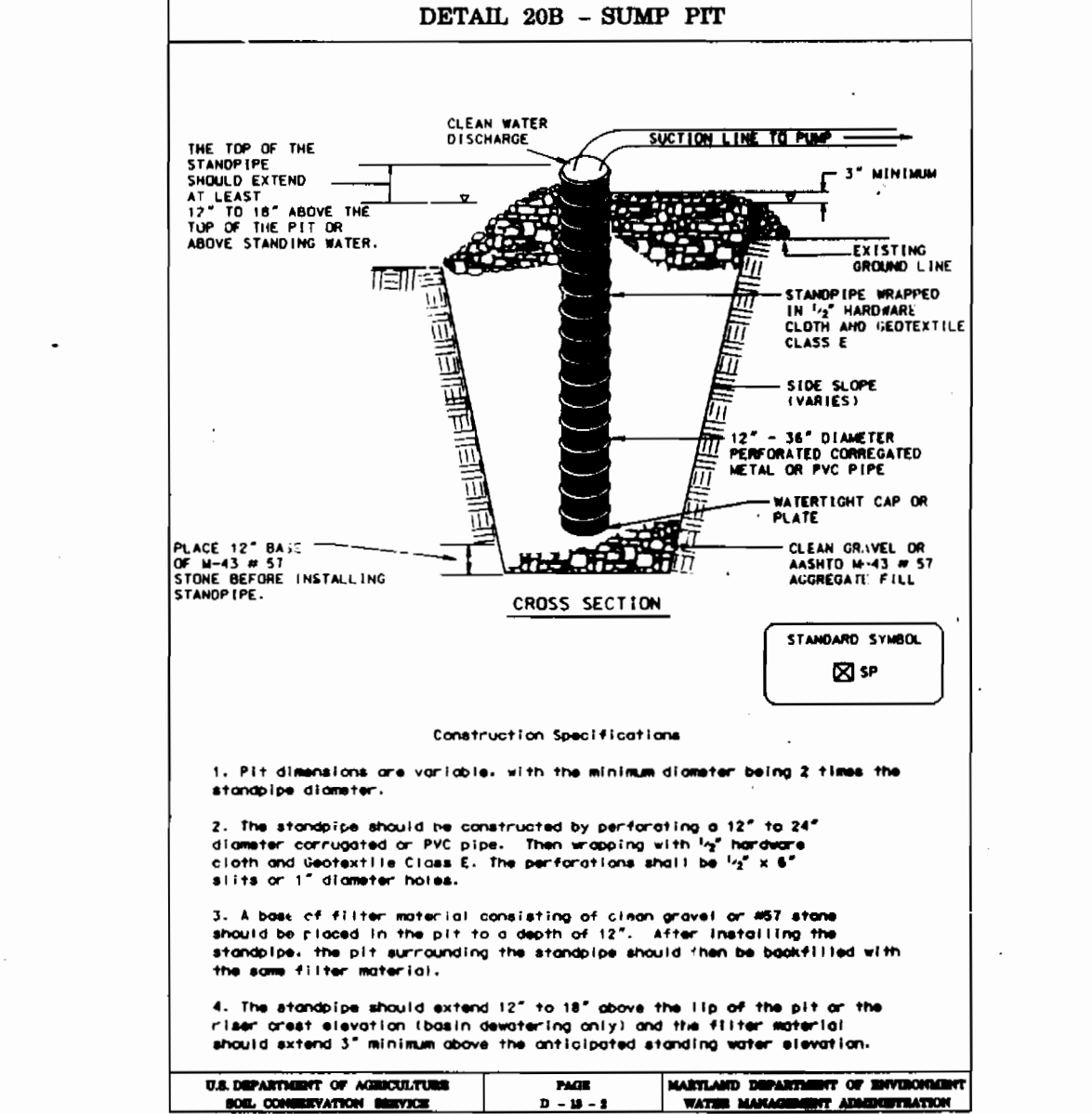
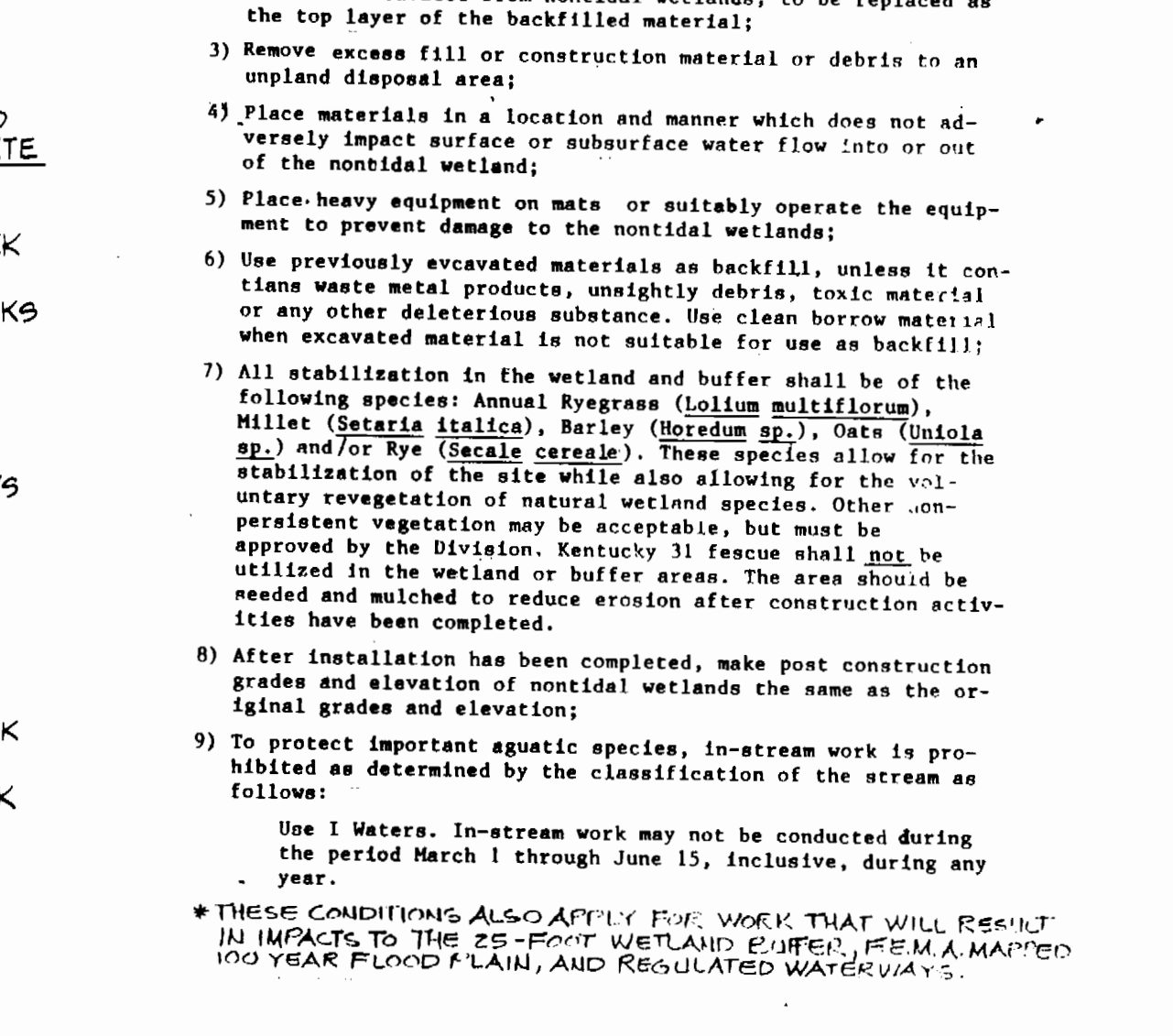
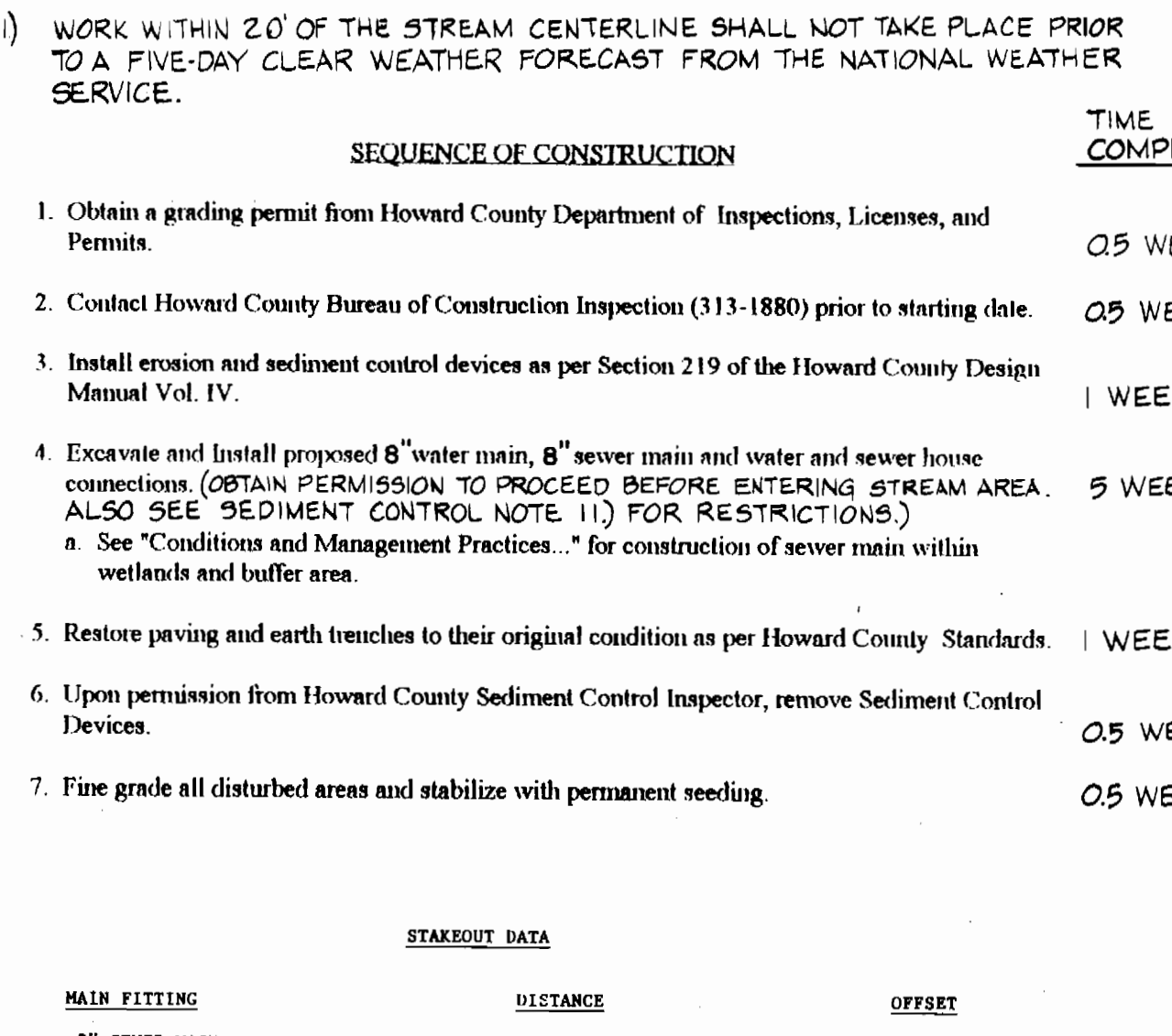
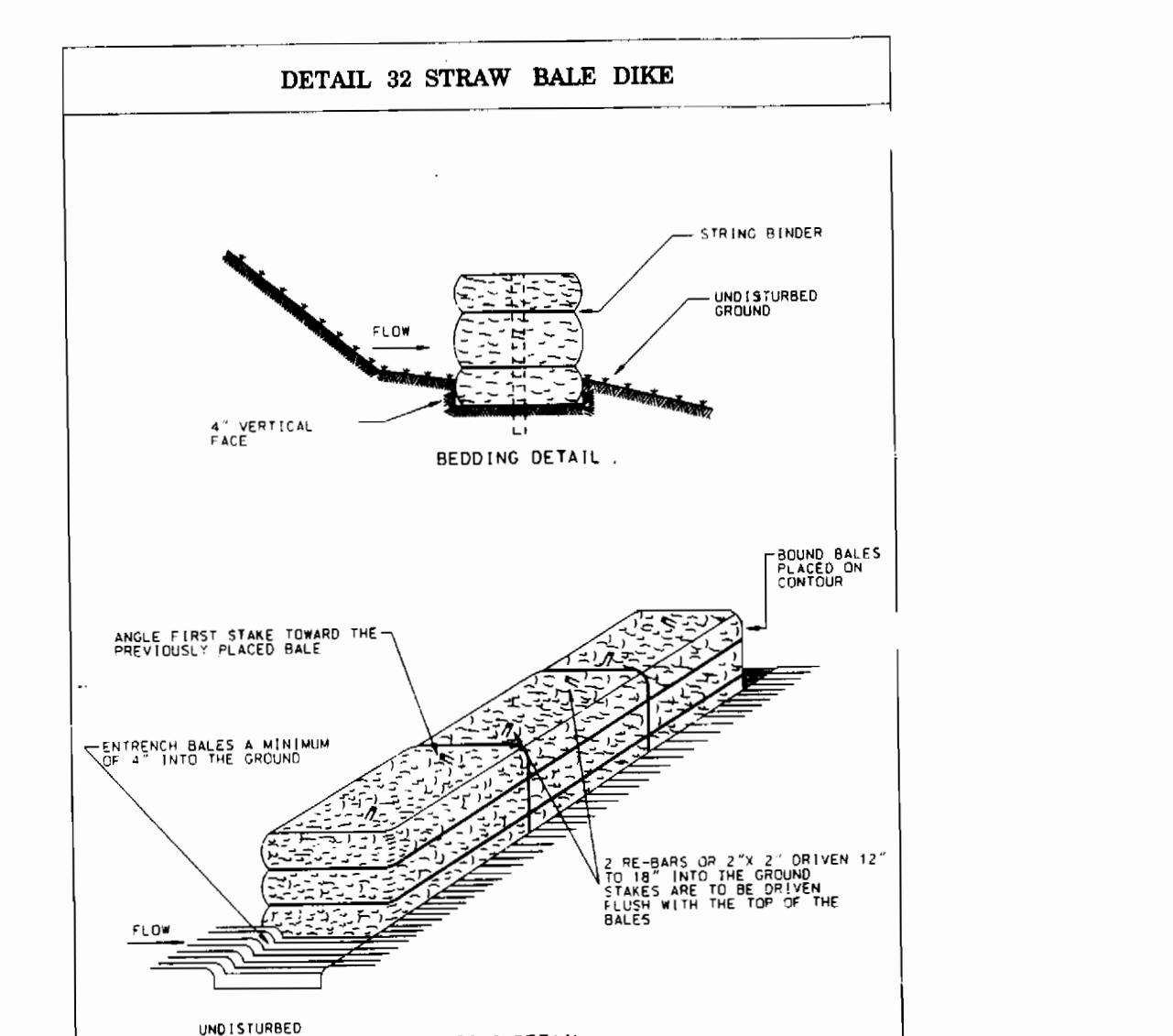
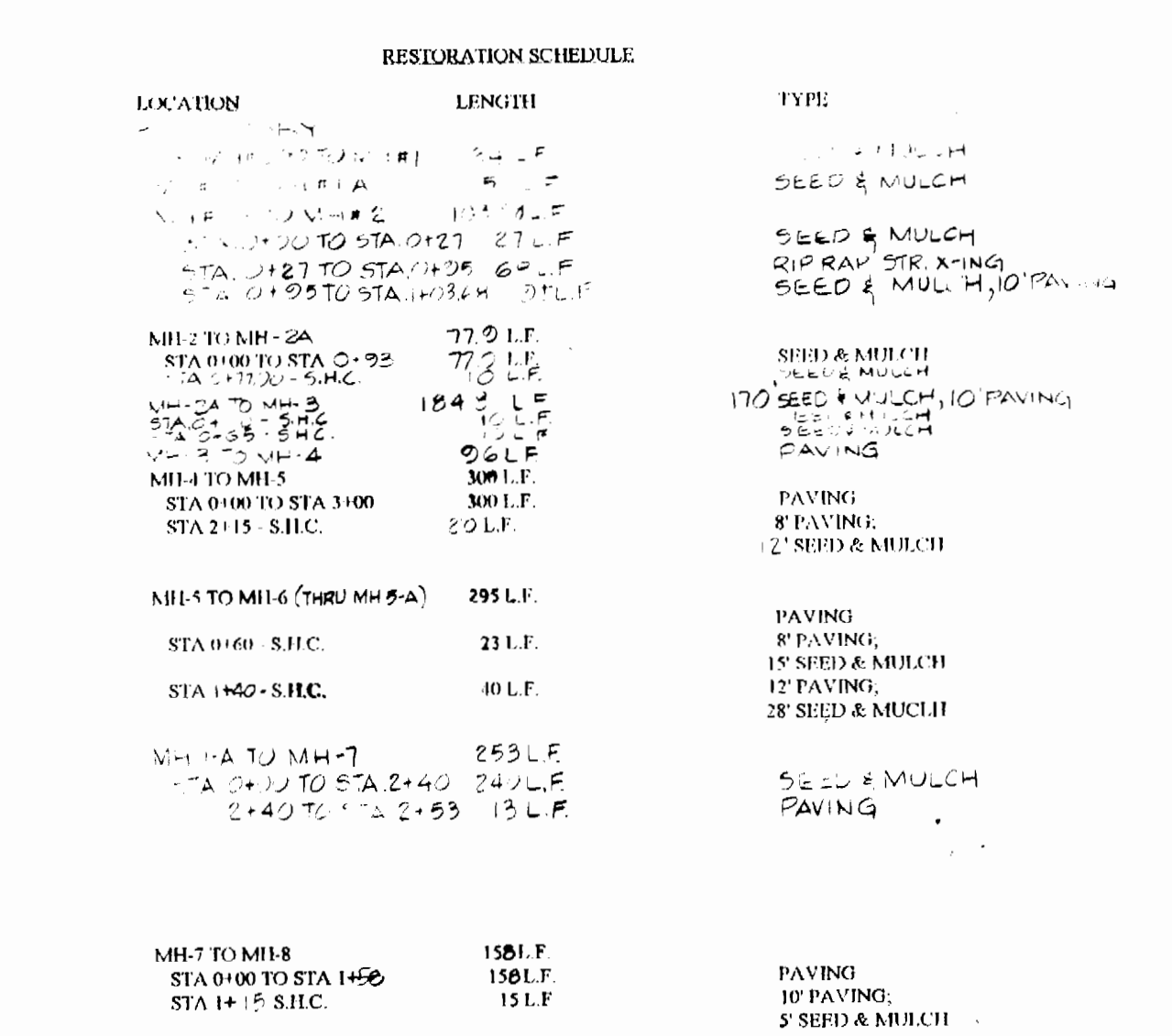
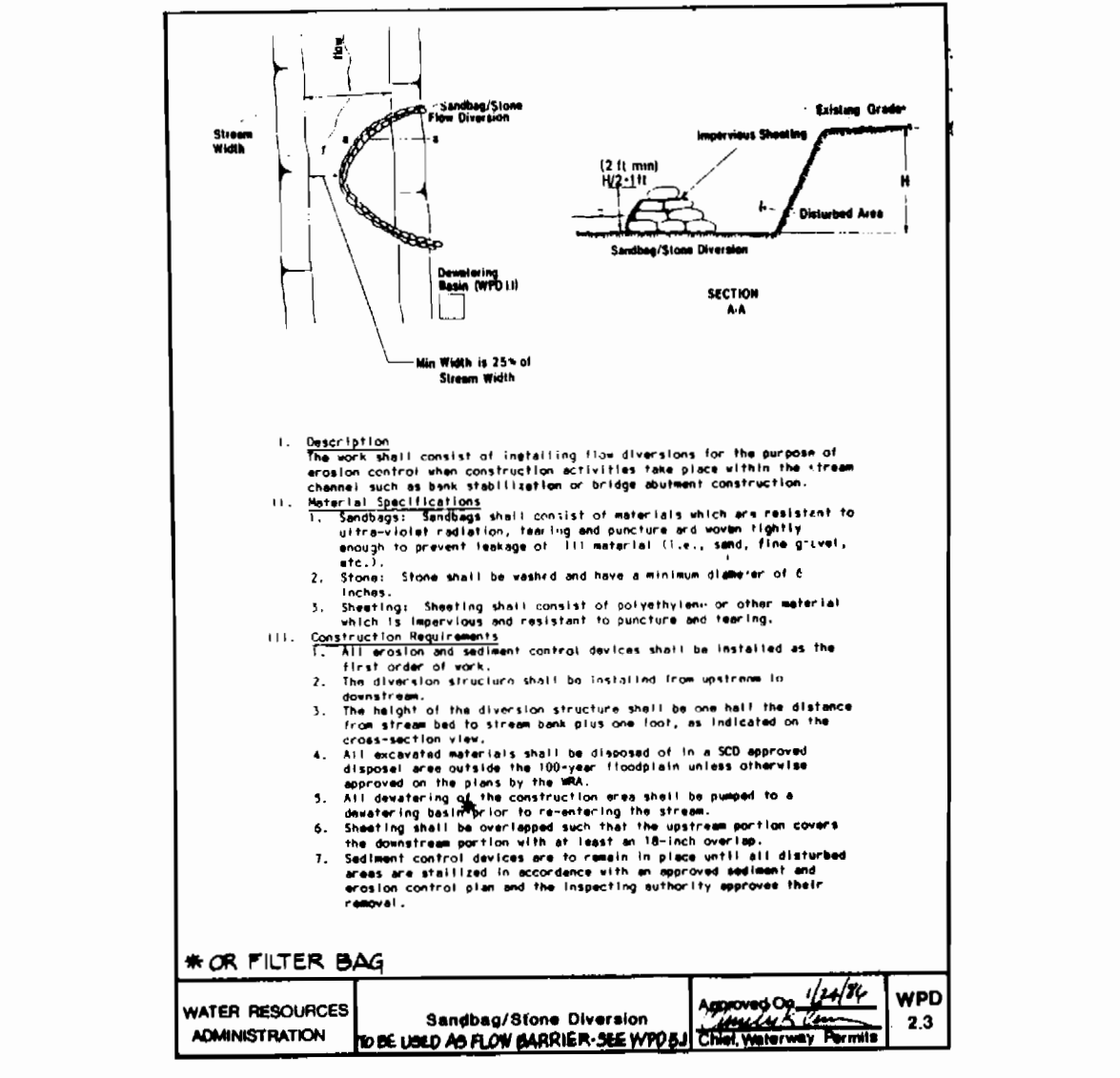








3540 WS/3 HARDING RD



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*James J. Lane* 7/30/96  
DIRECTOR OF PUBLIC WORKS DATE

*Michael Breunlich* 7/20/96  
CHIEF BUREAU OF UTILITIES DATE

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

*Paul J. Hicks* 7/25/96  
CHIEF, WATER & SEWER DESIGN DIVISION DATE

*Paul J. Hicks* 7/24/96  
CHIEF, WATER & SEWER DESIGN DIVISION DATE

DES: K.W. 1 REVISED SEWER PLAN 1/4" TO MI-3 1/97

DRN: F.W. 2 ADD MI-5-A 2/97

CHK: D.E.H.

DATE: 7/1/96 BY NO. REVISION

WATER QUALITY CERTIFICATION  
(88GWCO-001R)  
NATIONWIDE PERMIT #12  
UTILITY LINE BACKFILL AND BEDDING

DATE: 600 SCALE MAP NO. W46-546 BLOCK NO. 10, 11, 12, 17

HARDING ROAD WATER & SEWER MAINS  
6 TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CAPITAL PROJECT S-6192  
CONTRACT NO. 24-3540

SCALE AS SHOWN  
3 OF 3