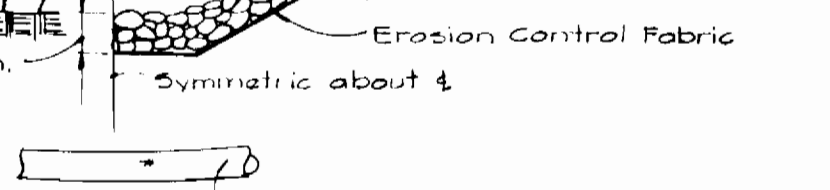
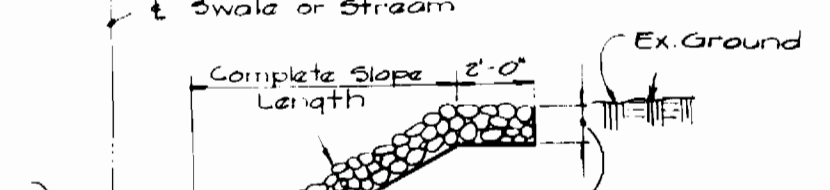
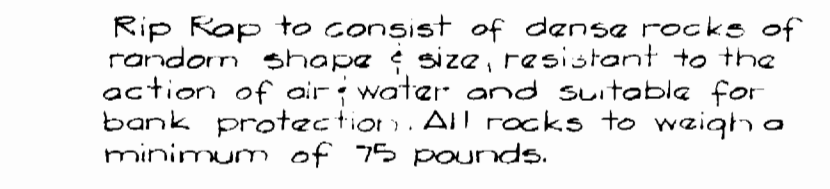
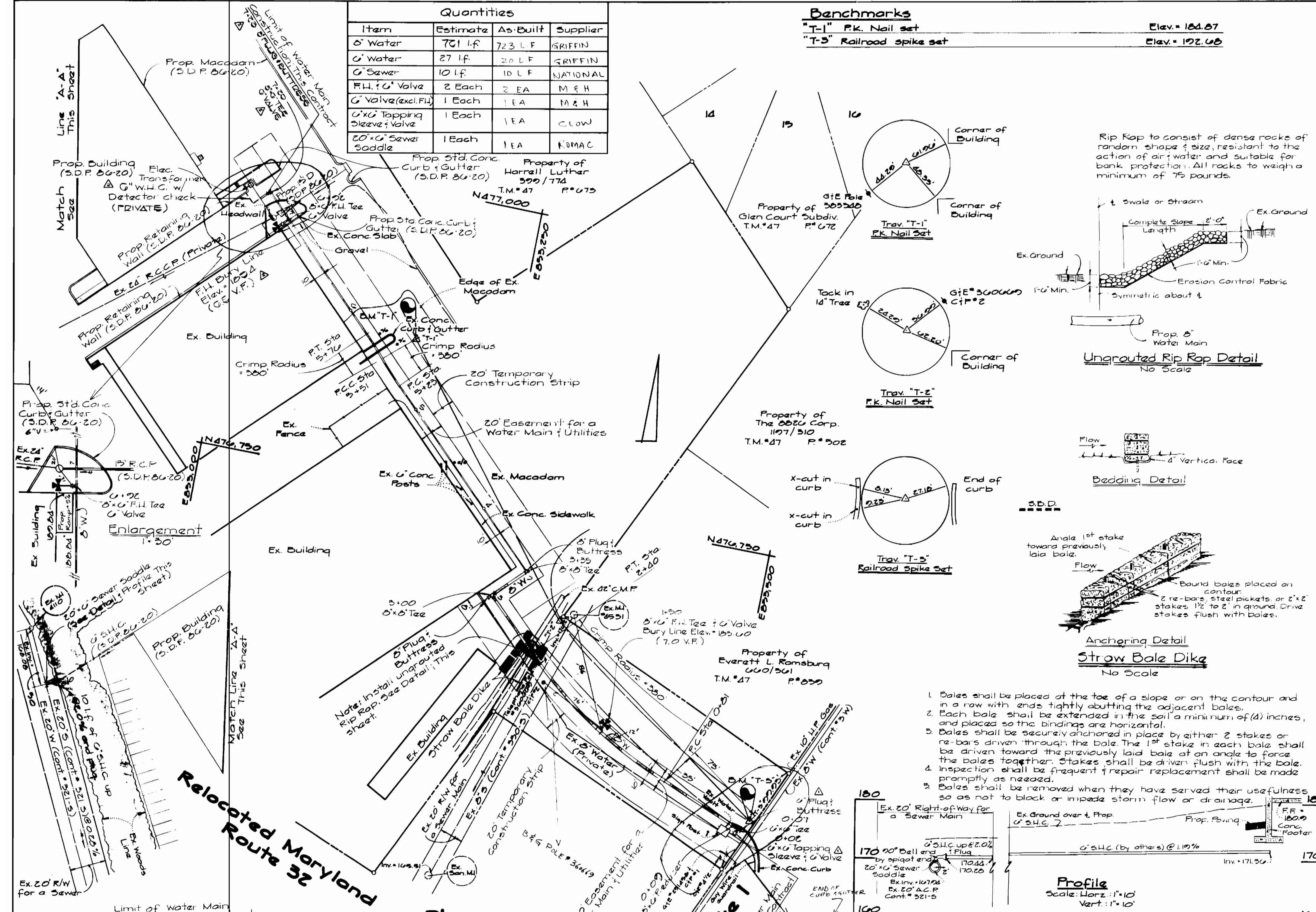
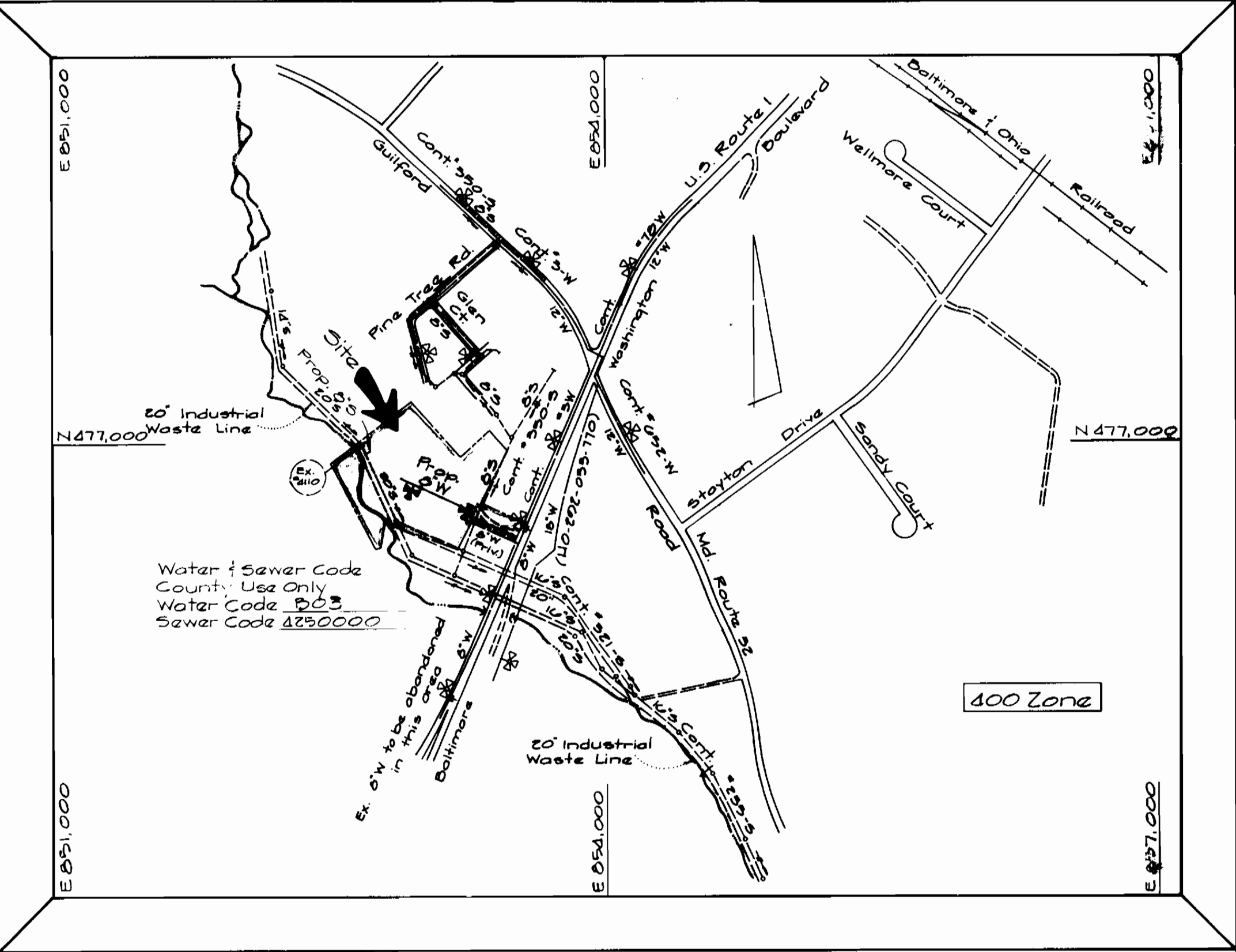
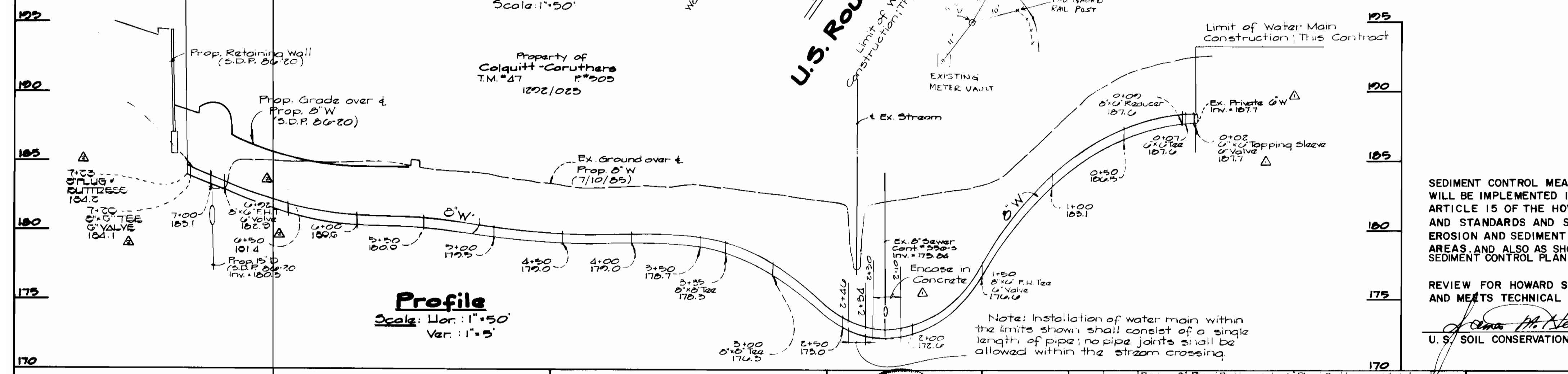
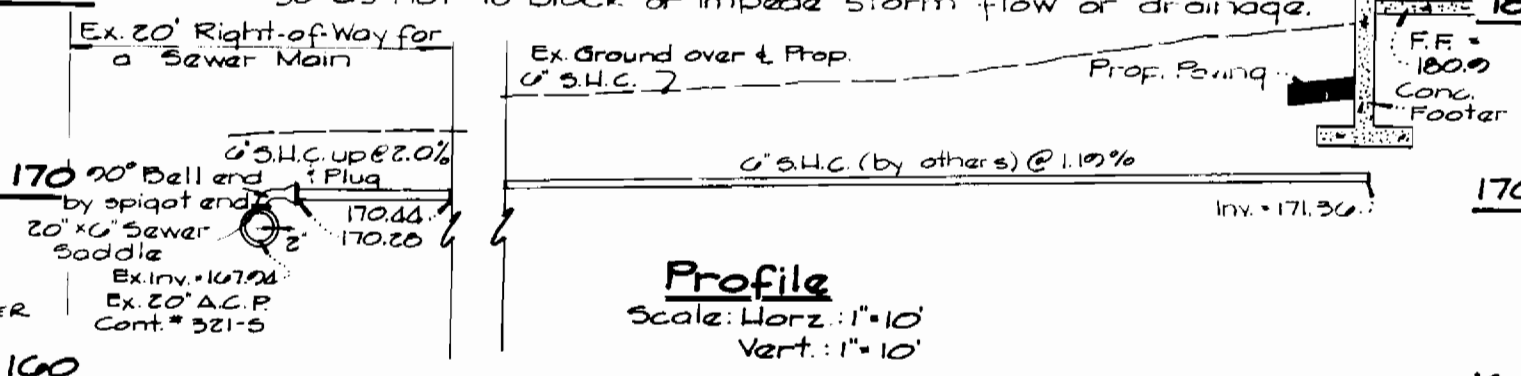


Quantities			
Item	Estimate	As-Built	Supplier
6" Water	701 LF	723 LF	GREEN
6" Water	27 LF	20 LF	GREEN
6" Sewer	10 LF	10 LF	NATIONAL
FL. 1/2" Valve	2 Each	2 EA	M & H
6" Valve (excl. FL)	1 Each	1 EA	M & H
6" X 6" Tapping Sleeve Valve	1 Each	1 EA	C. Low
20" X 6" Sewer Saddle	1 Each	1 EA	KOMAC

Benchmarks	
"T-1" P.K. Nail set	Elev. = 164.67
"T-5" Railroad spike set	Elev. = 192.66



- Bales shall be placed at the toe of a slope or on the contour and in a row with ends tightly abutting the adjacent bales.
- Each bale shall be extended in the soil a minimum of (4) inches, and placed so the bindings are horizontal.
- Bales shall be securely anchored in place by either 2 stakes or re-bars driven through the bale. The 1st stake in each bale shall be driven toward the previously laid bale of an angle to force the bales together. Stakes shall be driven flush with the bale.
- Inspection shall be frequent & repair replacement shall be made promptly as needed.
- Bales shall be removed when they have served their usefulness, so as not to block or impede storm flow or drainage.



VICINITY MAP	
TYPE OF BUILDINGS	Warehouse/Office
NUMBER OF LOTS	1
NO. OF WATER HOUSE CONNECTIONS	1
NO. OF SEWER HOUSE CONNECTIONS	1
DRAINAGE AREA	Little Potomac

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 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 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 THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - BALTIMORE GAS & ELECTRIC COMPANY - CONTRACTOR SERVICES: 561-2585
 - BALTIMORE GAS & ELECTRIC COMPANY - UNDER GROUND DAMAGE CONTROL: 234-5621
 - BALTIMORE GAS & ELECTRIC COMPANY - TROUBLE SHOOTING: 298-9013
 - MISS UTILITY: 1-559-0100
 - CHESAPEAKE & POTOMAC TELEPHONE COMPANY: 725-9976
 - BUREAU OF UTILITIES - HOWARD COUNTY: 992-2366
- TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES 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 AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- PLACE REGULATION "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 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.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR 1/2" INSIDE METER SETTINGS UNLESS OTHERWISE SHOWN.
- 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 ELEVATION SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1003 & 1008 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- FOR ALL COPPER WATER HOUSE CONNECTIONS, UTILIZE FLARED TYPE FITTINGS ONLY.
- 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 LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- 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.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH ARTICLE 15 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS, AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN S.D.P. 86-20.

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

Stephen L. Fisher 11/6/85
HOWARD SOIL CONSERVATION DISTRICT DATE

REVIEW FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
John M. Helm 11-6-85
U.S. SOIL CONSERVATION DISTRICT DATE

CROSS ROADS INDUSTRIAL BUILDING
CONTRACT NO. 24-1409-D
WATER & SEWER MAIN EXTENSION
HOWARD COUNTY, MARYLAND

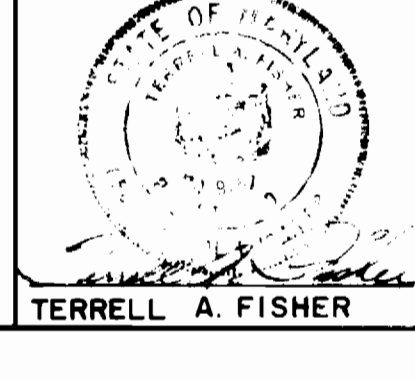
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Beiner 11-18-85
CHIEF, BUREAU OF UTILITIES DATE

William E. ... 11-18-85
DATE

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043

Terrell A. Fisher 11-18-85
DATE



DES.	D.E.V.	CHK.	DATE	BY	NO.	REVISION	DATE
D.E.V.			11/18/85				
D.E.V.			11/18/85				
T.A.F.			11/18/85				

**WATER AND SEWER MAINS
PLAN AND PROFILE**

600' SCALE MAP NO. 47 BLOCK NO. 12

**CROSS ROADS INDUSTRIAL BUILDING
WATER & SEWER MAIN EXTENSIONS**

CONTRACT NO. 24-1409-D
6 TH. ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 1

AS-BUILT
REV: 8/26/85 and 11/18/85