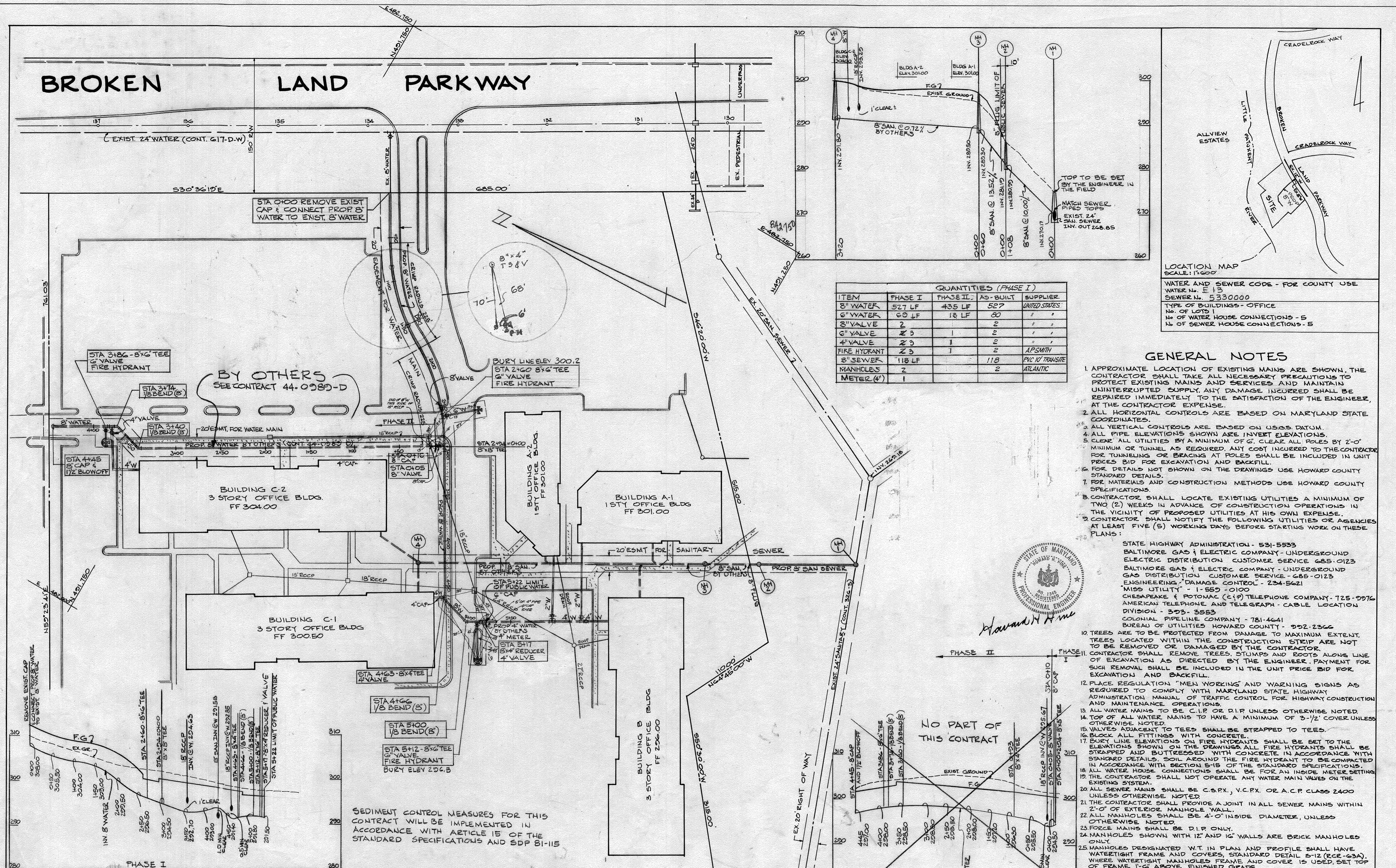


988/1 WS



ITEM	QUANTITIES (PHASE I)			SUPPLIER
	PHASE I	PHASE II	AS-BUILT	
8" WATER	527 LF	435 LF	527	UNITED STATES
6" WATER	60 LF	18 LF	80	"
8" VALVE	2		2	"
6" VALVE	2		2	"
4" VALVE	2		2	"
FIRE HYDRANT	2	1	2	APSMITH
8" SEWER	118 LF		118	PVC 10' TRANSITE
MANHOLES	2		2	ATLANTIC
METER (4")	1			"

LOCATION MAP  
SCALE: 1"=60'

WATER AND SEWER CODE - FOR COUNTY USE  
WATER No. E 13  
SEWER No. 5330000  
TYPE OF BUILDINGS - OFFICE  
No. OF LOTS 1  
No. OF WATER HOUSE CONNECTIONS - 5  
No. OF SEWER HOUSE CONNECTIONS - 5

- ### 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 EXPENSE.
  - ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
  - ALL VERTICAL CONTROLS ARE BASED ON U.S.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. ANY COST INCURRED TO THE CONTRACTOR FOR TUNNELING OR BRACING AT POLES SHALL BE INCLUDED IN UNIT PRICES BID FOR EXCAVATION AND BACKFILL.
  - FOR DETAILS NOT SHOWN ON THE DRAWINGS USE HOWARD COUNTY STANDARD DETAILS.
  - FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY STANDARD DETAILS.
  - 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 ON THESE PLANS:
    - STATE HIGHWAY ADMINISTRATION - 531-5533
    - BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION CUSTOMER SERVICE 685-0123
    - BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION CUSTOMER SERVICE - 685-0123
    - ENGINEERING DAMAGE CONTROL - 234-5621
    - M&S UTILITY - 1-550-0100
    - CHESAPEAKE & POTOMAC (C&P) TELEPHONE COMPANY, 725-0976
    - AMERICAN TELEPHONE AND TELEGRAPH - CABLE LOCATION DIVISION - 303-3553
    - COLONIAL PIPELINE COMPANY - 781-4641
    - BUREAU OF UTILITIES HOWARD COUNTY - 502-2366
  - 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 EXCAVATION AND BACKFILL.
  - 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 C.I.P. OR D.I.P. UNLESS OTHERWISE NOTED.
  - TOP 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.
  - BLOCK ALL FITTINGS WITH CONCRETE.
  - 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 STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT TO BE COMPACTED IN ACCORDANCE WITH SECTION 5-15 OF THE STANDARD SPECIFICATIONS.
  - ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING SYSTEM.
  - ALL SEWER MAINS SHALL BE C.S.P.X., V.C.P.X. OR A.C.P. CLASS 2400 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.
  - FORCE MAINS SHALL BE D.I.P. ONLY.
  - MANHOLES SHOWN WITH 12" AND 16" WALLS ARE BRICK MANHOLES ONLY.
  - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 5-12 (SEE 6-5A), WHERE WATERTIGHT MANHOLES FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE.
  - HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CAN NOT BE SERVED.
  - WATER HOUSE CONNECTIONS MUST HAVE 1.0' MIN. VERTICAL CLEARANCE ABOVE SEWER MAINS AT CROSSINGS.



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*William F. Newman* 6-3-81  
DIRECTOR OF PUBLIC WORKS DATE CHIEF - BUREAU OF ENGINEERING - DATE

*Robert M. Bennett* 5/28/81  
CHIEF - BUREAU OF UTILITIES DATE CHIEF - LAND DEVELOPMENT DIVISION - DATE

HUDKINS ASSOCIATES INC.  
ENGINEERS & LAND SURVEYORS  
101 SHELL BUILDING  
200 E. JOPPA RD TOWSON, MD 21204

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

*Janey J. Barkum* 5.26.81  
SIGNATURE DATE  
U.S. SOIL CONSERVATION SERVICE

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

*William V. Rose* 5.26.81  
SIGNATURE DATE  
HOWARD S.C.D.

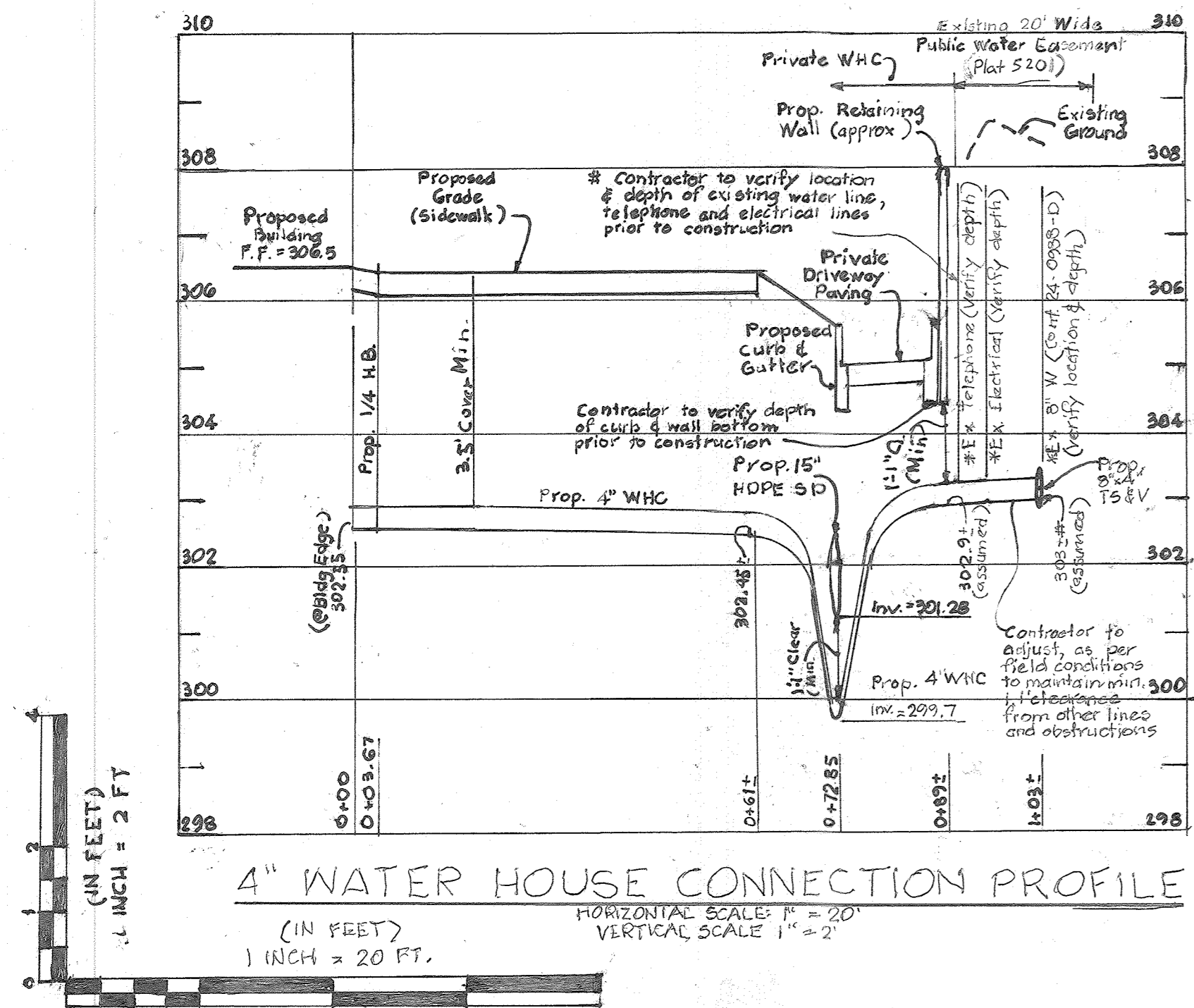
CONTRACT No. 24-0988-D

PLAN AND PROFILE OF  
WATER MAIN AND  
SANITARY SEWER

PARCEL A-2 VILLAGE OF OWEN BROWN  
SECTION 3 AREA 1 - PHASE I  
ELECTION DISTRICT G  
HOWARD COUNTY, MARYLAND

CONTACT 24-0988-0  
VILLAGE OF OWEN BROWN  
SECTION 3 AREA 1

SCALE: PLAN: 1"=50'  
PROFILE: 1"=10'  
JOB: No. 1 of X 2  
DATE: MARCH 5, 1981



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND.

DIRECTOR OF PUBLIC WORKS DATE CHIEF, BUREAU OF ENGINEERING DATE  
 CHIEF, BUREAU OF UTILITIES DATE CHIEF, UTILITY DESIGN DIVISION DATE

PREPARED BY :



**Whitman, Requardt & Associates, LLP**  
 801 South Caroline Street, Baltimore, Maryland 21231

DES:			
DRN:			
CHK:			
DATE:			
BY	NO.	REVISION	DATE

PLAN AND PROFILE  
 WATER MAIN AND  
 SANITARY SEWER

PARCEL A-2 VILLAGE OF OWEN BROWN  
 SECT 3 AREA 1 - PHASE I  
 ELECTION DISTRICT 6  
 HOWARD COUNTY, MARYLAND

SCALE:  
 SHEET  
 2 OF 2

Professional Certification  
 I hereby certify that these documents were prepared or approved  
 by me, and that I am a duly licensed Professional Engineer under  
 the laws of the State of Maryland.  
 License Number: Expiration Date