

PART 1

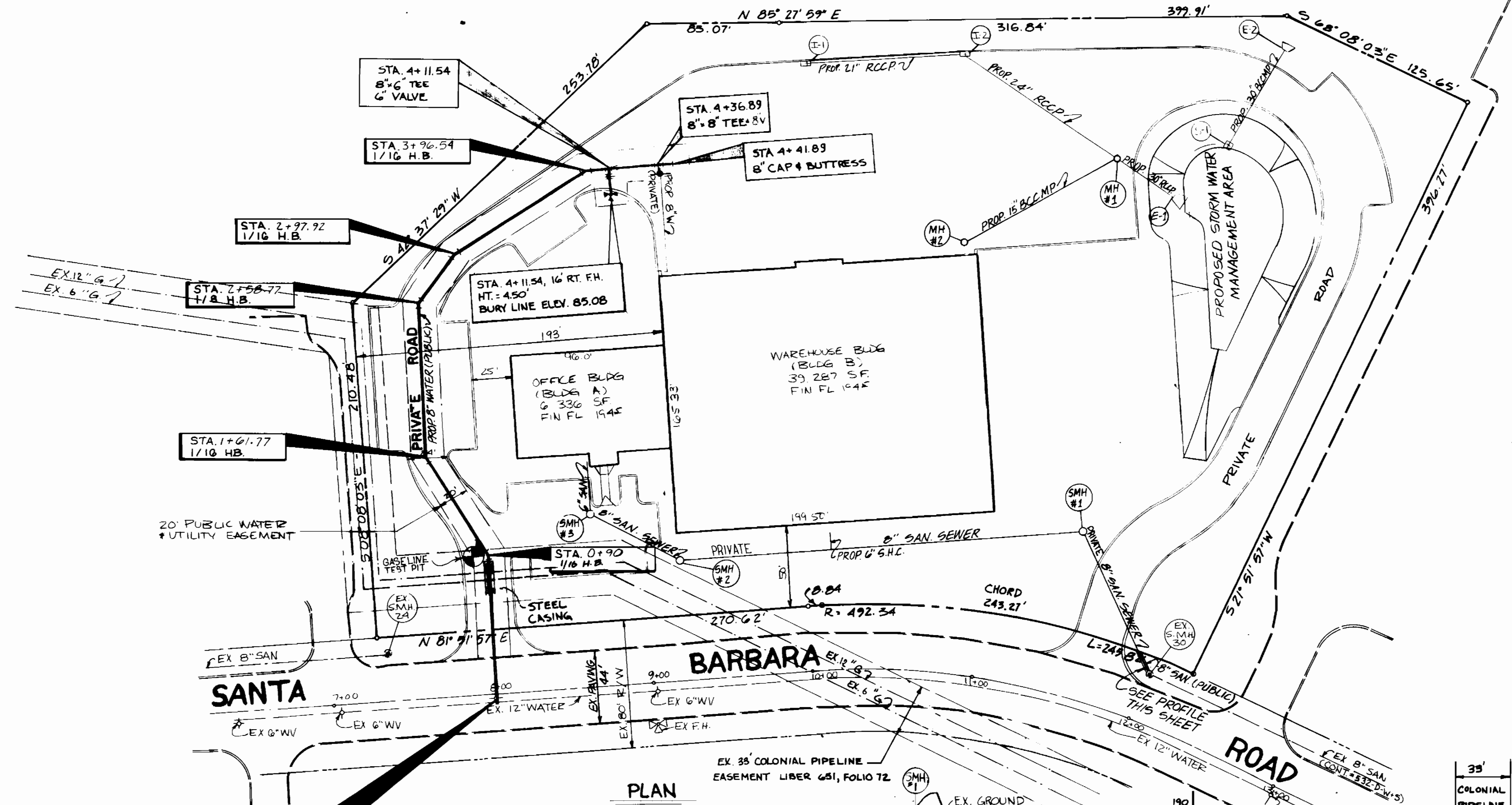
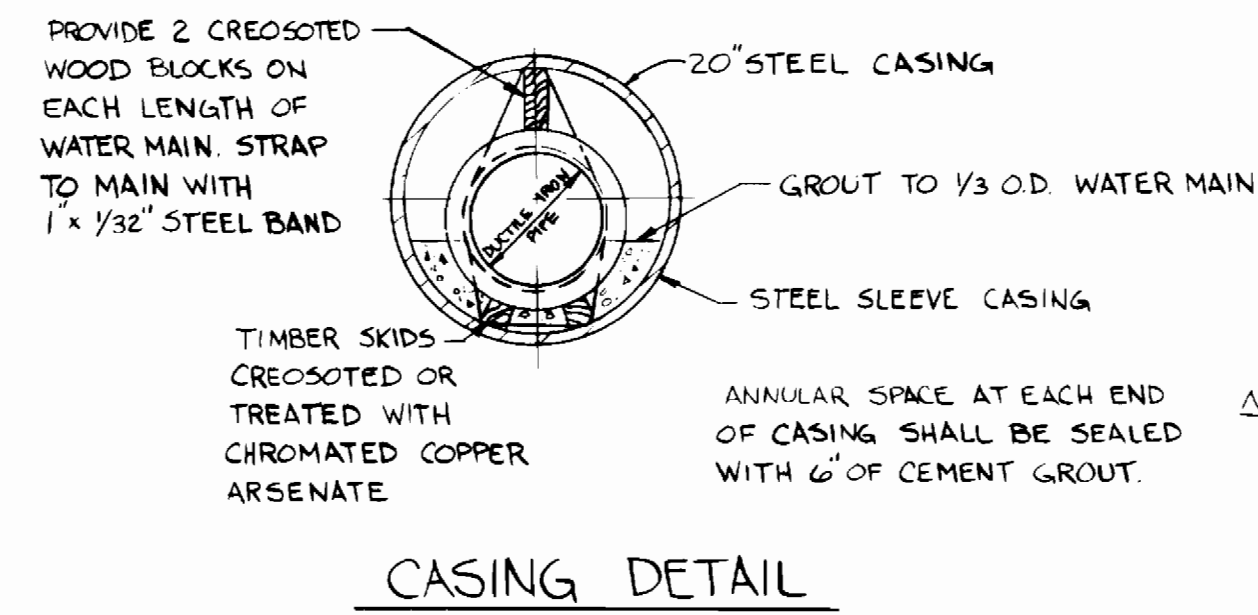
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICE AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
- ALL PIPE ELEVATIONS 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 DAMAGE SHALL BE DEDUCTED FROM THE MONEY OWED TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOL. IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION THE CONTRACTOR SHALL HAVE A COPY OF VOL. 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 RESULTS OF THE TEST 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 UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS: STATE HIGHWAY ADMINISTRATION 531-5533, BALTO. GAS & ELECTRIC COMPANY - CONTRACTOR SERVICES 850-4820, BALTO. GAS & ELECTRIC COMPANY - UNDERGROUND DAMAGE CONTROL 859-9004, BALTO. GAS & ELECTRIC COMPANY - TROUBLE SHOOTING 298-9001, MISS UTILITY 1-(301) 559-0100, COLONIAL PIPELINE 785-1380 BUREAU OF UTILITIES, HOWARD COUNTY DEPT. OF PUBLIC WORKS 992-2366, C & P TELEPHONE 1-(800) 257-7777.
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE DAMAGED OR REMOVED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS, AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OR THE MAIN.
- PLACE REGULATION "MEN WORKING" WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATIONS MANUAL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.

PART 2

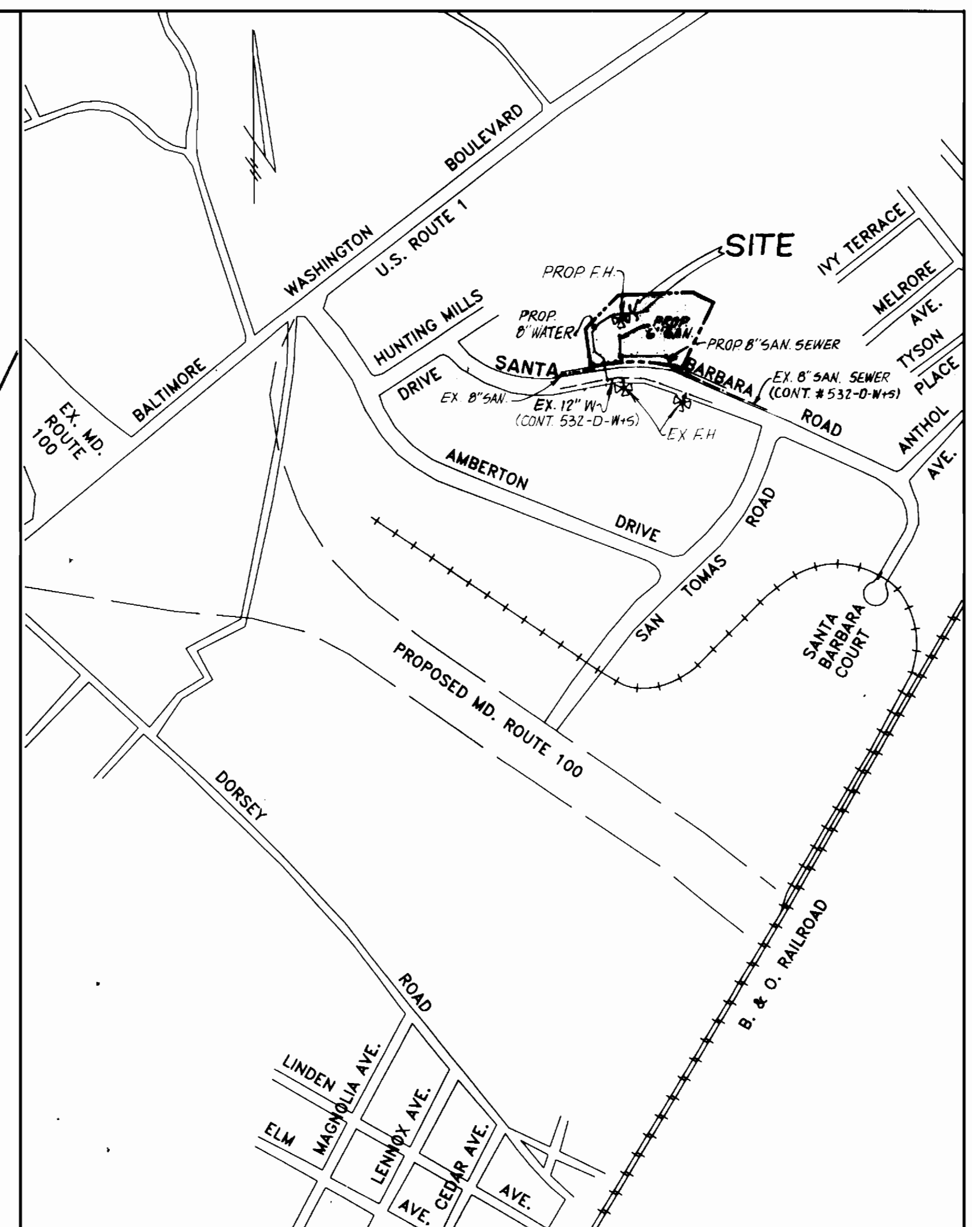
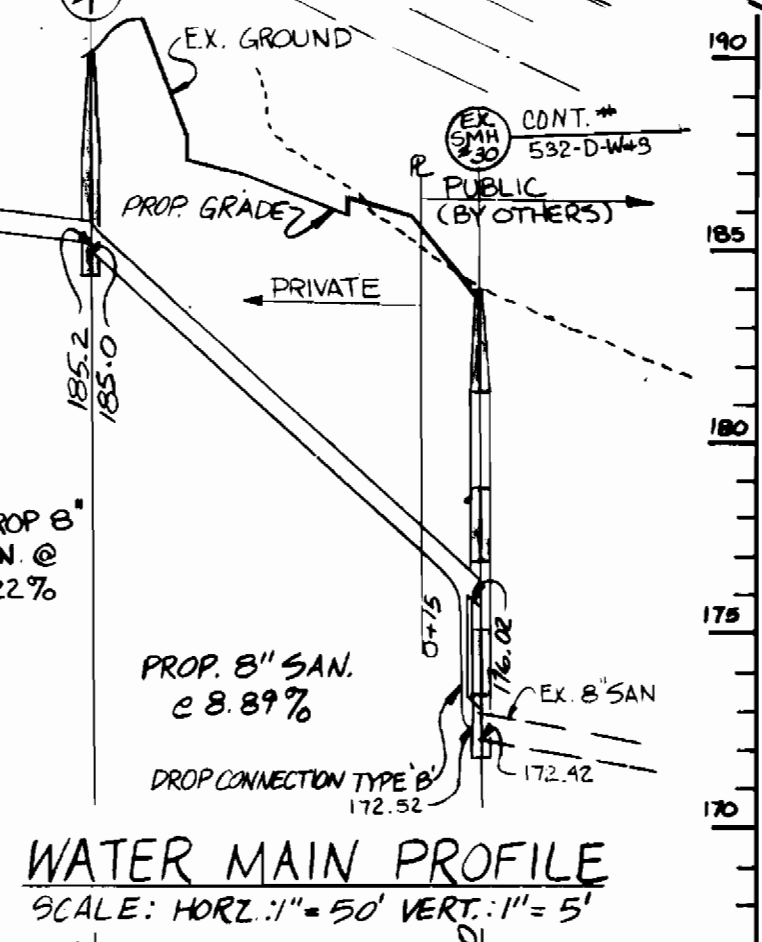
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3.5 COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED 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 THE STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1003 AND 1008 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL WATER HOUSE CONNECTIONS SHALL BE INSIDE METER SETTINGS UNLESS OTHERWISE NOTED.
- ALL FIRE HYDRANTS TO BE SET THREE FEET BEHIND FACE OF CURB UNLESS NOTED OTHERWISE.
- ALL WATER HOUSE CONNECTIONS SHALL COMPLY WITH HOWARD CO. STD. W 3.24
- MINIMUM CRIMP RADIUS WILL BE SPECIFIED BY PIPE MANUFACTURER.
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- SERVICE CLAMPS ARE TO HAVE STAINLESS STRAPS.
- ALL D.I.P. FITTINGS SHALL BE ACCORDANCE WITH ANWWA SPECIFICATION C-153 DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.

PART 3

- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., OR P.V.C. 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.
- MANHOLES SHOWN WITH 12" WALLS ARE BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED WITHIN THE PLAN AND PROFILE SHALL HAVE WATER TIGHT FRAME AND COVERS, STANDARD DETAIL GS.52, WHERE WATER TIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS NOTED ON DRAWINGS.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL GS.51.
- THE CONTRACTOR SHALL ARRANGE TO HAVE THE EXISTING UNDERGROUND CABLE FIELD-LOCATED PRIOR TO ANY EXCAVATION FOR THE SEWER MAIN.



QUANTITIES		
ITEM	ESTIMATED AS BUILT	MATERIAL / SUPPLIER
12" x 8" TAPPING SLEEVE	1	
8" x 8" TEE	1	
8" x 6" TEE	1	
8" VALVE	1	
6" VALVE	1	
8" 1/16" HORIZ. BEND	4	
8" 1/8" HORIZ. BEND	1	
8" CAP	1	
FIRE HYDRANT	1	
8" D.I.P. WATER	442 LF	
6" D.I.P. WATER	16 LF	
8" SAN. SEWER	15 LF	
STEEL CASING	20 LF	
DROP CONNECTION TYPE 'B'	1	



LOCATION MAP
SCALE: 1" = 600'

TYPE OF BUILDING: OFFICE/WAREHOUSE
NO. OF LOTS: 1
NO. OF WATER H.C.: 1
NO. OF SEWER H.C.: 1
DRAINAGE AREA: DEEP RUN
SEWER CODE: A04
SEWER CODE: 2151500

BENCH MARK
VERTICAL CONTROL: USC & GS BM 121 ELEV. 102.426 AND SHA. B.M. 6-A ELEV. 198.65.
INTERSECTION OF DORSEY ROAD AND B & O RAILROAD.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS SDP 90-79
James M. Helms 4/24/90
U.S. SOIL CONSERVATION DISTRICT

THE DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. SDP 90-79
John L. Platten 4/24/90
HOWARD SOIL CONSERVATION DISTRICT

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS AND SDP 90-79

WATER MAIN PROFILE
SCALE: HORIZ. 1" = 50' VERT. 1" = 5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

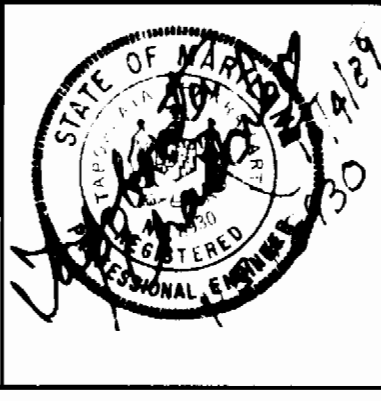
James M. Helms 4/24/90
DIRECTOR OF PUBLIC WORKS

Robert W. Burrows 4-19-90
CHIEF BUREAU OF UTILITIES

Stephen R. Kelly 4-23-90
CHIEF BUREAU OF ENGINEERING

George Wm. Stephens, Jr. 4/23/90
CHIEF, LAND DEVELOPMENT DIVISION

ENGINEER
GEORGE WM. STEPHENS, JR. AND ASSOCIATES, INC.
303 ALLEGHENY AVENUE, TOWSON, MD. 21204
(301) 825-8120



DESIGNED: K. J.
DRAWN: A. D.
CHECKED: T. C.

BY	NO	REVISION	DATE

PLAN & PROFILES
FOR
PROPOSED WATER MAIN

CONTRACT NO. 14-30 28-D
GCC SCALE MAP NO. 37 BLOCK NO. 24

PLAN FOR OFFICE / WAREHOUSE
ROUTE ONE HUNDRED BUSINESS PARK
BLOCK 'D' PARCEL B-1
HOWARD COUNTY, MARYLAND
CONTRACT 14-3028-D

SCALE: AS SHOWN

SHEET NO. 1 OF 1

AUGUST 5, 1989