

GENERAL NOTES

PART 1

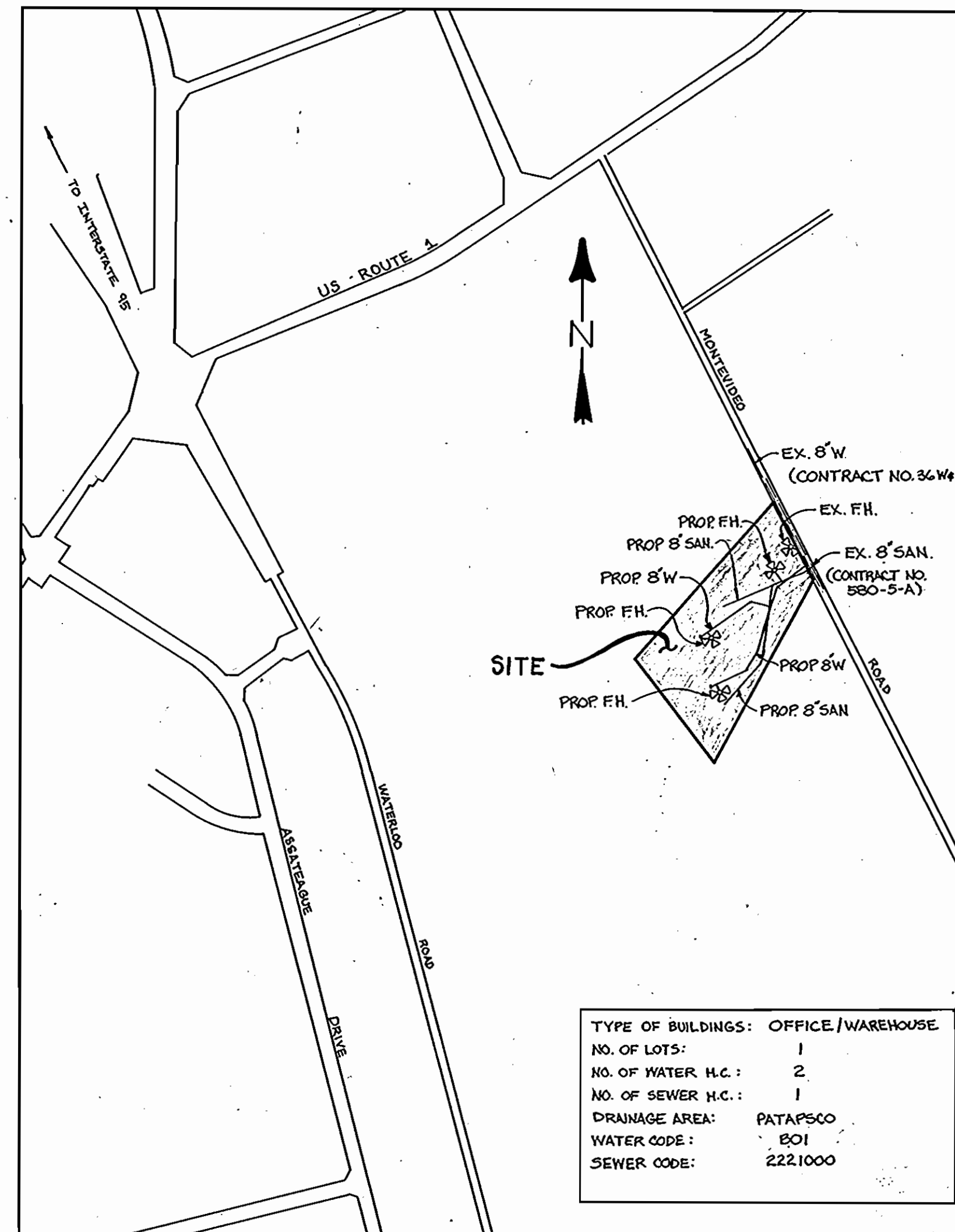
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICE AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL 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 850-4620, BALTO. GAS & ELECTRIC COMPANY - UNDERGROUND DAMAGE CONTROL 859-9004, BALTO. GAS & ELECTRIC COMPANY - TROUBLE SHOOTING 296-9001, MISS UTILITY 1-(301) 559-0100, COLONIAL PIPELINE 795-1390 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 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 1005 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 WATER HOUSE CONNECTIONS SHALL COMPLY WITH HOWARD CO. STD. W 3.2.4
- 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 AWWA 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., A.C.P. CLASS 2400 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 WATERTIGHT FRAME AND COVERS, STANDARD DETAIL GS.52. WHERE WATERTIGHT 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.



LOCATION MAP
SCALE: 1"=600'

BENCH MARKS

- #1 - AMB: DISC IN CONC. MON. N 486087.13
E 864033.68, ELEV. 170.78
- #2 - CONC. MON. X CUT N 486458.00
E 864214.06, ELEV. 175.09

ITEM	QUANTITIES		
	ESTIMATED	AS-BUILT	MATERIAL / SUPPLIER
8"x8" TAPPING SLEEVE	1		
8"x8" TEE	4		
8"x6" TEE	3		
8" VALVE	5		
6" VALVE	3		
8" CAP	3		
1/2" HORZ. BEND	1		
1/4" HORZ. BEND	3		
1/8" HORZ. BEND	2		
FIRE HYDRANT	3		
8" D.I.P.	1,297 LF.		
6" D.I.P.	75 LF.		
8" SAN. SEWER	54 LF.		
STD. SAN. M.H.	1		
DROP M.H. TYPE "A"	1		

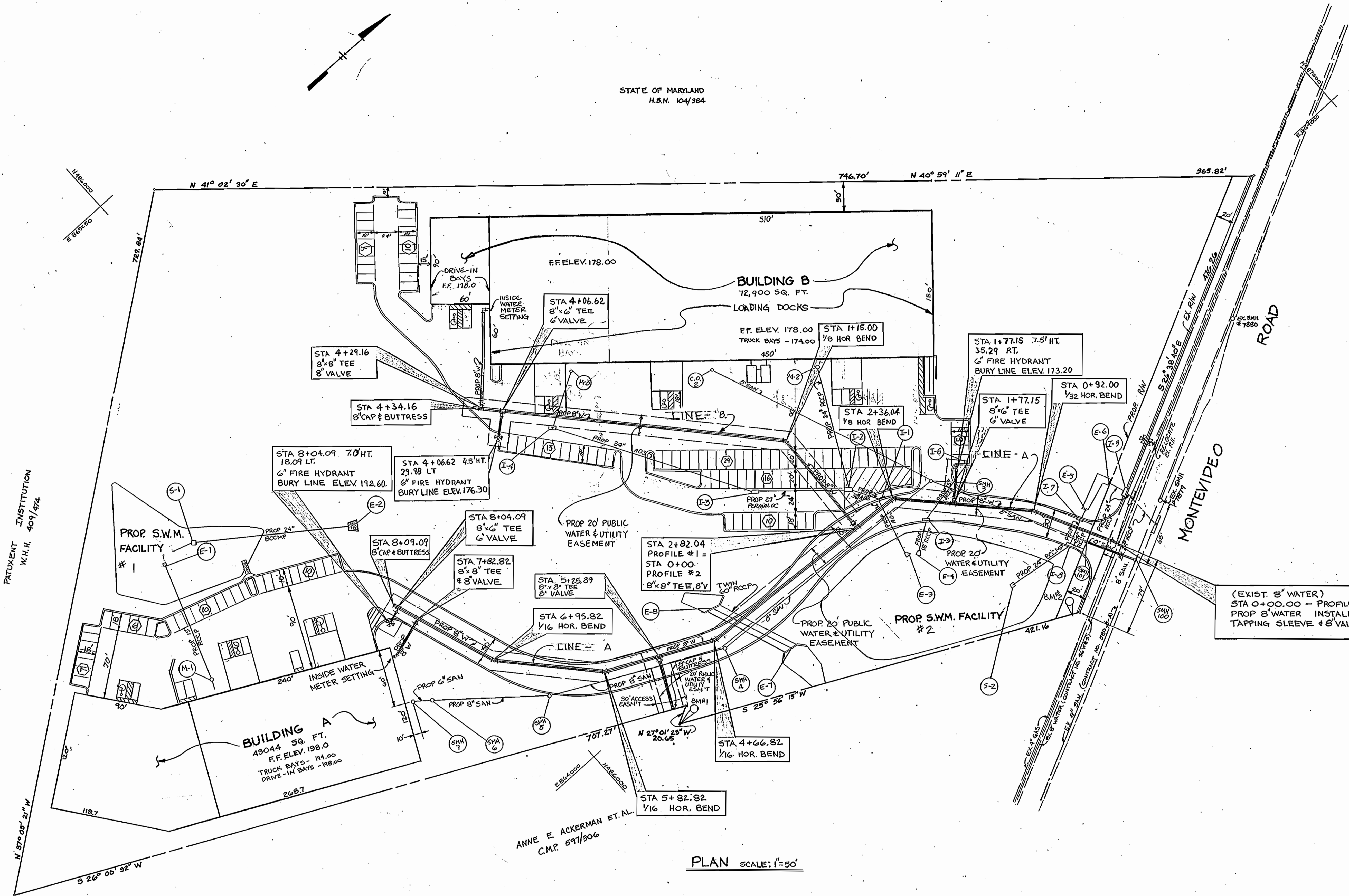
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 APPROVED: *James M. Nelson* 10/29/92
 HOWARD SOIL CONSERVATION DISTRICT DATE

THE DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: *John R. Hester* 10/29/92
 HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS AND SDP 90-110

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS DATE: 10-21-92 CHIEF BUREAU OF UTILITIES DATE: 10/29/92 CHIEF BUREAU OF ENGINEERING DATE: 10/29/92 CHIEF LAND DEVELOPMENT DIVISION DATE: 10/29/92	ENGINEER GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC. 658 KENILWORTH DRIVE SUITE 100 TOWSON, MARYLAND 21204 (301) 825-8120	DESIGNED: <i>K.J.</i> DRAWN: <i>K.J.</i> CHECKED: <i>K.J.</i>	STATE OF MARYLAND PROFESSIONAL ENGINEER LICENSE NO. 121189 EXPIRES 12/31/99	BY NO REVISION DATE	TITLE SHEET GENERAL NOTES FOR PROPOSED WATER MAIN CONTRACT NO. 14-3049-D 600' SCALE MAP NO. 43 BLK. NO. 10 & 16	PROPOSED OFFICE / WAREHOUSE COBB BUSINESS PARK HOWARD COUNTY, MARYLAND DECEMBER 21, 1989	SHEET 1 OF 3
		ELECT. DISTRICT 1					

STATE OF MARYLAND
H.B.N. 104/384



PLAN SCALE: 1"=50'

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
 THE DEVELOPMENT PLAN IS APPROVED FOR SOIL AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS AND SDP. 40-110

APPROVED: *James M. Helms* 10/29/92
 ENGINEER
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: *John R. Robertson* 10/29/92
 HOWARD SOIL CONSERVATION DISTRICT

DESIGNED: K.J.
 DRAFTED: T.L.
 CHECKED: K.J.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

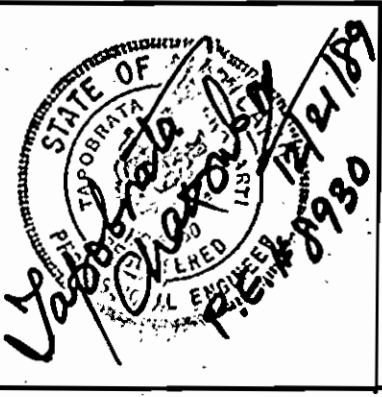
Ramon S. Ryan 10/30/92
 DIRECTOR OF PUBLIC WORKS

Robert B. Benin 10-21-92
 CHIEF BUREAU OF UTILITIES

William S. Ryan 10/30/92
 CHIEF BUREAU OF ENGINEERING

John D. ... 10/30/92
 CHIEF LAND DEVELOPMENT DIVISION

ENGINEER
GEORGE W. STEPHENS, JR.
 AND ASSOCIATES, INC.
 658 KENILWORTH DRIVE * SUITE 100 TOWSON, MARYLAND 21204
 PHONE: (301) 825-8120



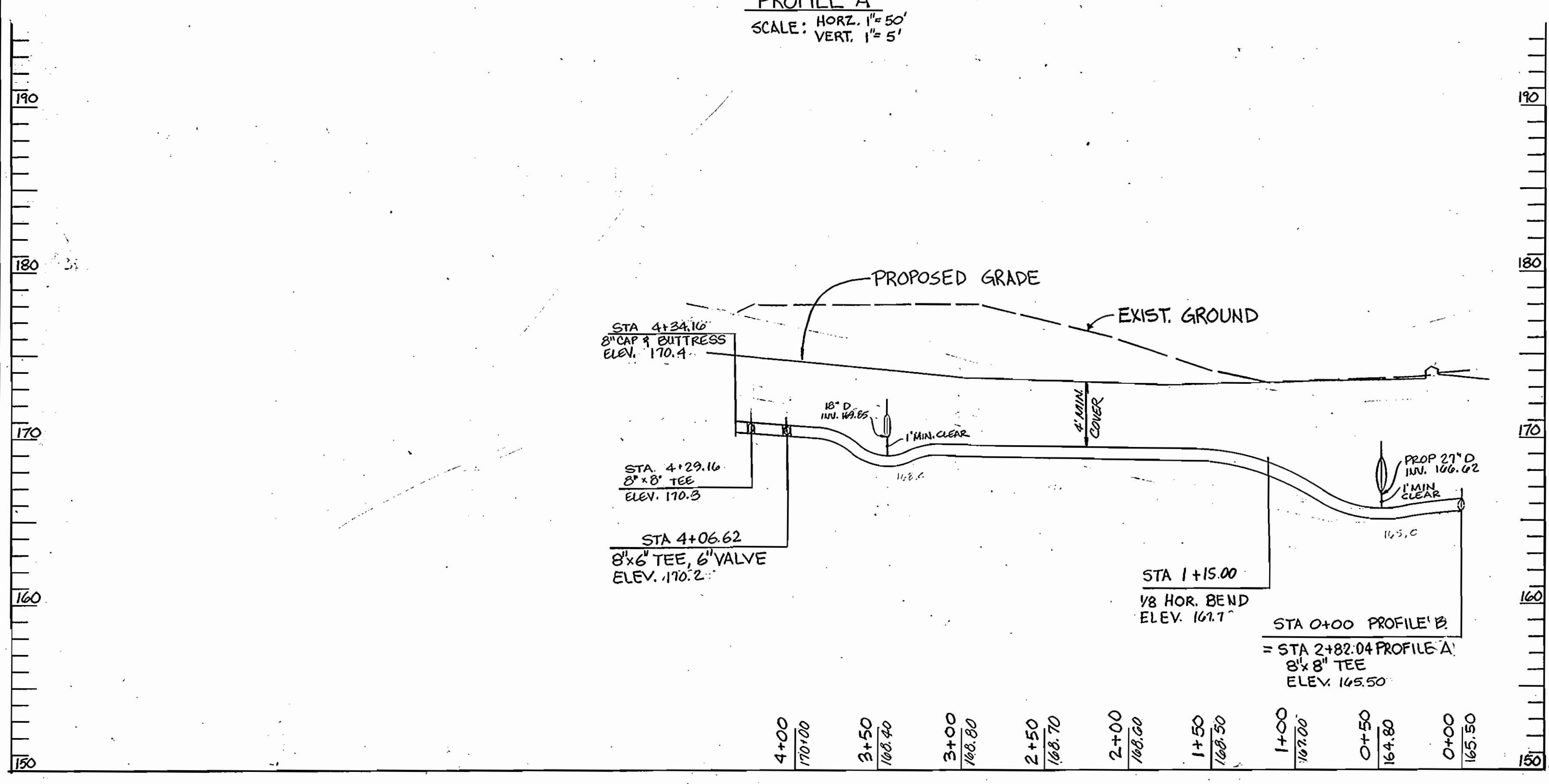
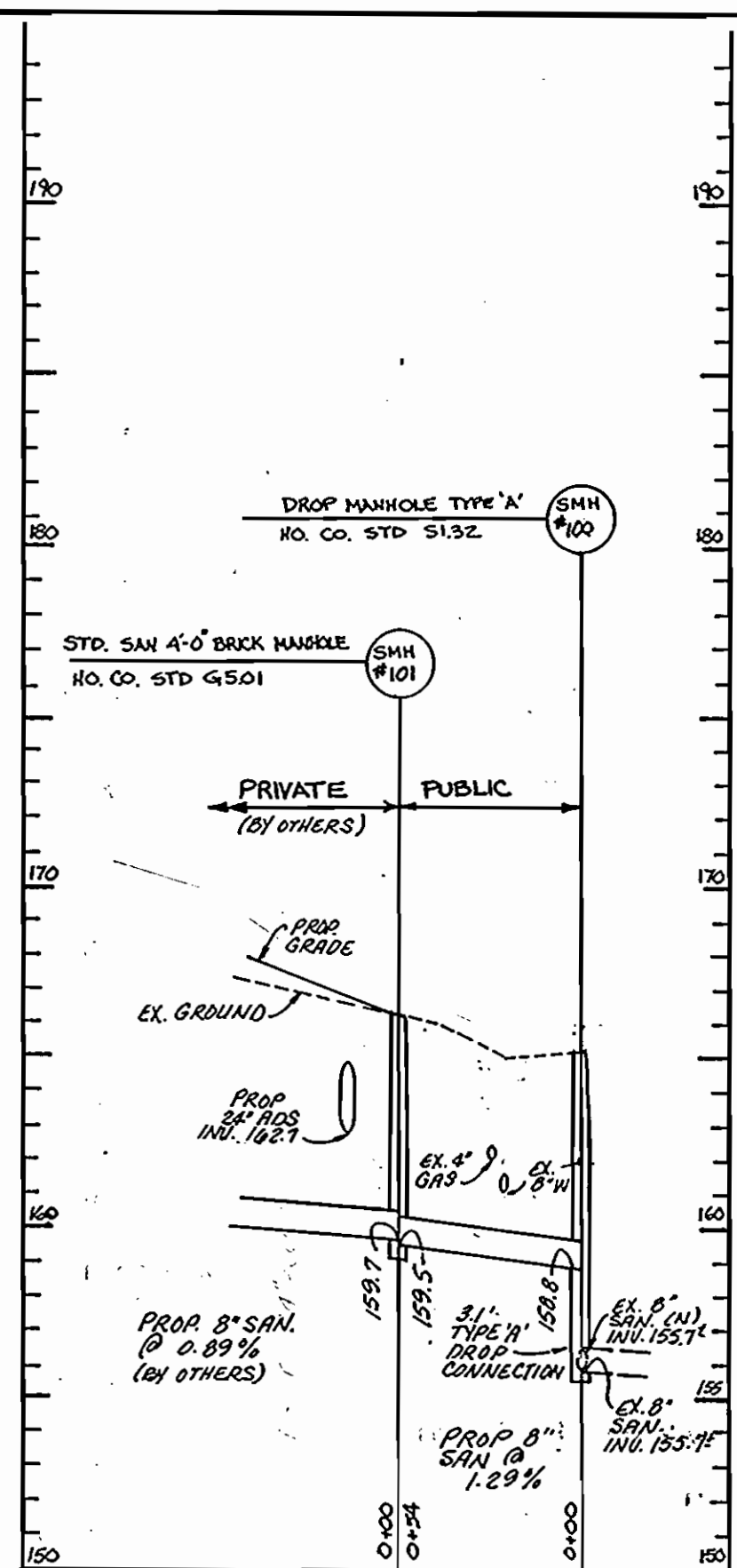
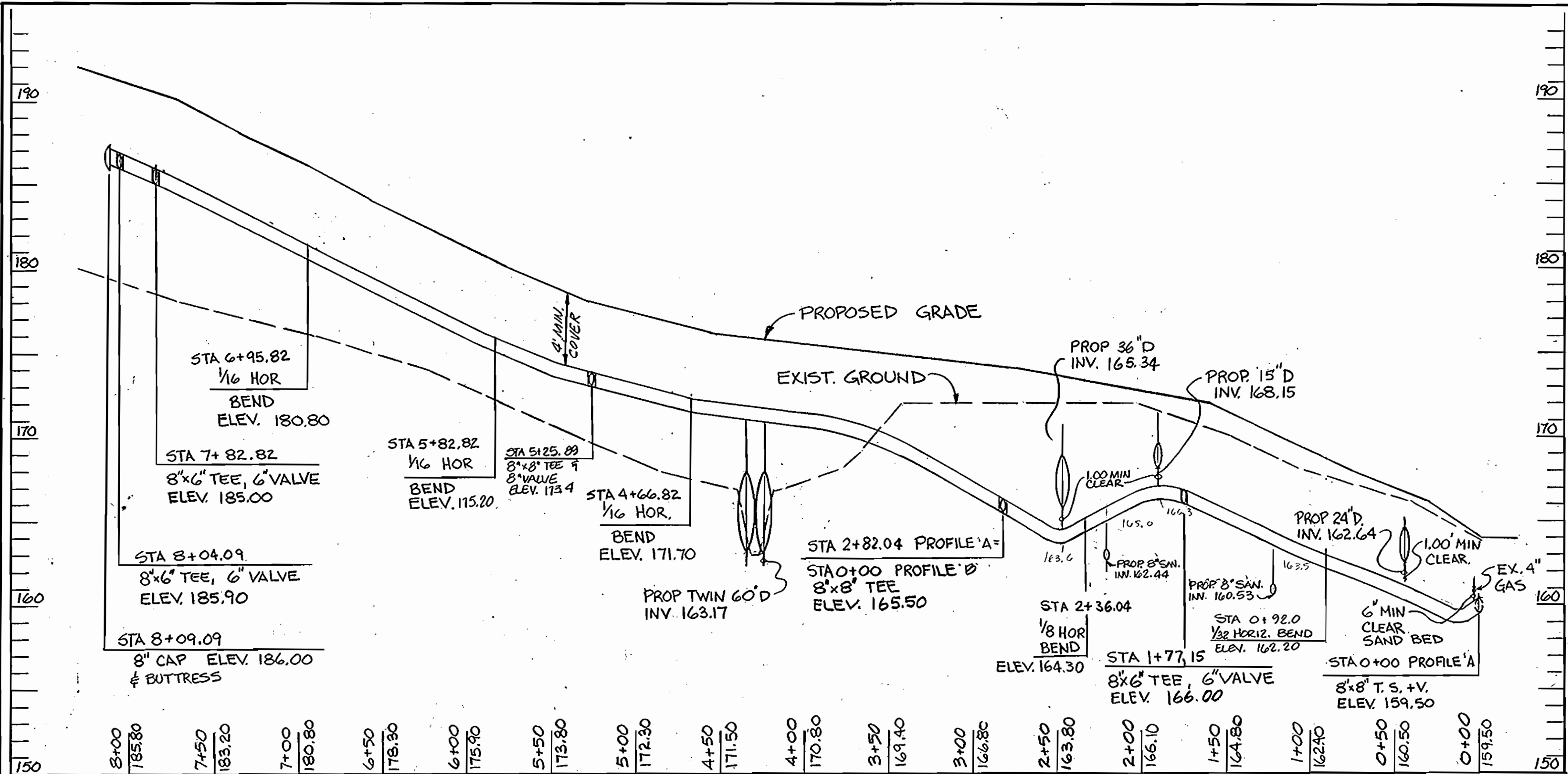
BY	NO.	REVISION	DATE

PLAN
 FOR
PROPOSED WATER MAIN

CONTRACT NO. 14-3049-D
 600' SCALE MAP NO. 43

PROPOSED OFFICE/WAREHOUSE
COBB BUSINESS CENTER
 HOWARD COUNTY, MARYLAND
 DECEMBER 21, 1989

SHEET NO. 2 OF 3
 ELECTION DIST. #1



REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
 APPROVED: *James M. Nelson* 10/29/92
 U.S. SOIL CONSERVATION SERVICE DATE

THE DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: *John R. Robertson* 10/29/92
 HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS AND SDP 90-110

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James M. Nelson 10-21-92
 DIRECTOR OF PUBLIC WORKS DATE
Robert M. Reardon
 CHIEF BUREAU OF UTILITIES DATE
John R. Robertson
 CHIEF BUREAU OF ENGINEERING DATE
John R. Robertson
 CHIEF LAND DEVELOPMENT DIVISION DATE

ENGINEER
GEORGE W. STEPHENS, JR.
 AND ASSOCIATES, INC.
 658 KENILWORTH DRIVE SUITE 100 TOWSON, MARYLAND 21204
 (301) 825-8120



DESIGNED: K.J. DRAWN: T.L. CHECKED: K.J.	BY NO.	REVISION	DATE

PROFILES FOR
 PROPOSED WATER MAIN
 CONTRACT NO. 14-3049-D
 600' SCALE MAP NO. 43 BLK NO. 10 & 16

PROPOSED OFFICE/WAREHOUSE
COBB BUSINESS PARK
 HOWARD COUNTY, MARYLAND
 DECEMBER 21, 1989

SHEET 3 OF 3
 ELECT. DIST. #1