

ITEM	ESTIMATED	AS-BUILT	MATERIAL/SUPPLIER
8" VALVE	NO. 1	1	1/2" H
FIRE HYDRANT	NO. 1	1	L.F.A.
8" WATER	350 L.S.	350	A.H.
8" VALVE	NO. 1	1	L.F.A.
6" VALVE	NO. 1	1	L.F.A.
6" W.H.C. (THREAT)	NO. 1	1	L.F.A.
4" VALVE	NO. 1	1	L.F.A.
4" W.H.C.	4 L.F.	4	L.F.A.

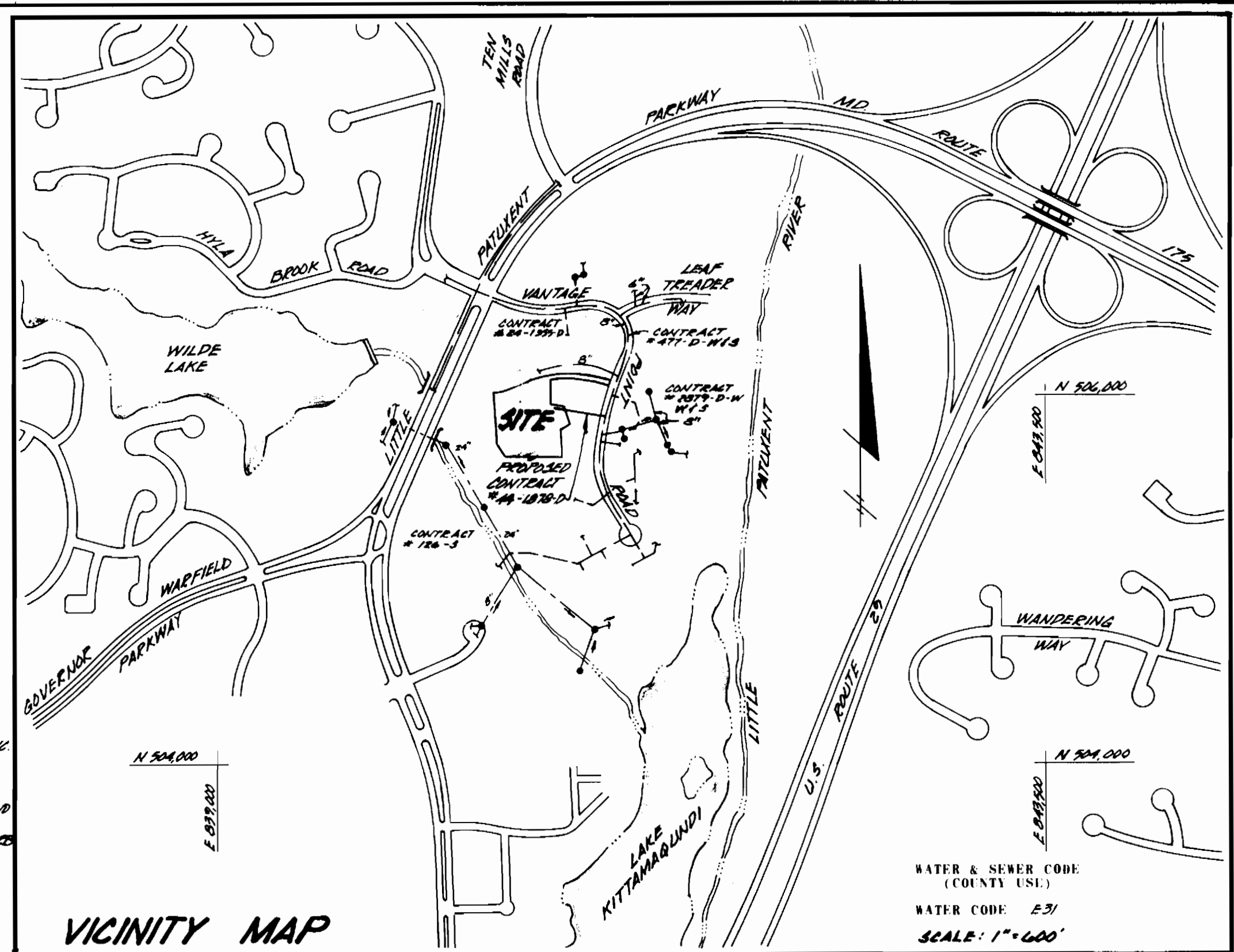
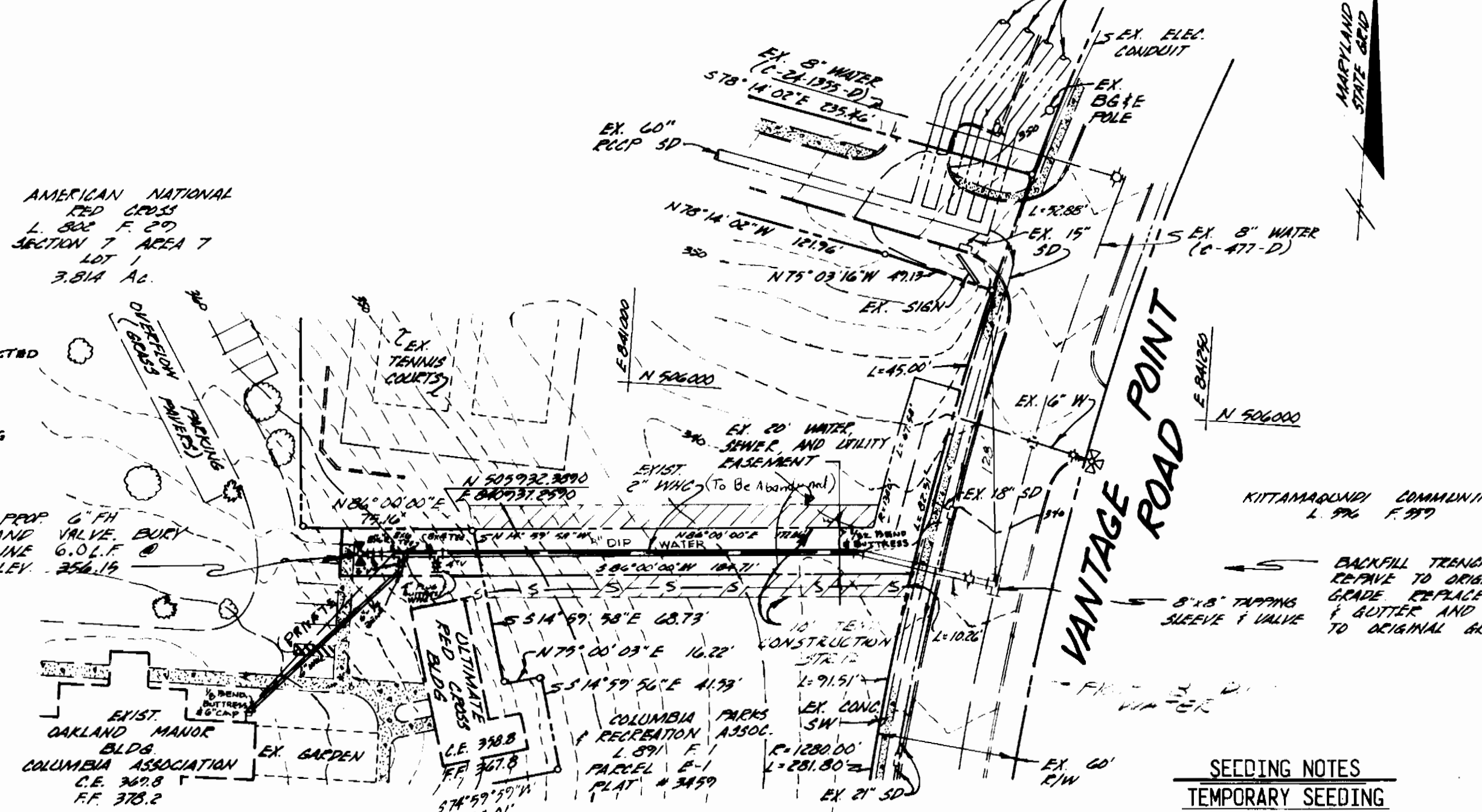
**PROCEDURE FOR CONSTRUCTION**

1. STAKE OUT LIMITS OF CONSTRUCTION AND WATER LINE.
2. TEST PIT ALL UNDERGROUND UTILITIES TO VERIFY ELEVATIONS.
3. RECONNECT 2" W.H.C. FROM 8" MAIN AND PLUS MAIN.
4. REMOVE 2" W.H.C. AND DISCONNECT FROM BUILDINGS OF BATHROOM FACILITIES AND DRINKING WATER USAGE BY PATRONS OF OAKLAND MANOR.
5. INSTALL 8" TAPPING SLEEVE AND VALVE.
6. EXCAVATE AND LAY 8" PIPE TO GRADE AS SHOWN. BACKFILL AND STABILIZE PER APPLICABLE SEEDING NOTES.

NOTE: DURING THE PERIOD OF THE DISCONNECTED WATER SERVICE TO OAKLAND MANOR BUILDING THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A TEMPORARY TRAILER ON SITE FOR THE PURPOSE OF BATHROOM FACILITIES AND DRINKING WATER USAGE BY PATRONS OF OAKLAND MANOR.

**PLAN**

SCALE: 1" = 50'



WATER & SEWER CODE (COUNTY USE)  
 WATER CODE: E-31  
 SCALE: 1" = 600'  
 WASTEWATER DISPOSAL: TYPE OF BUILDINGS: OFFICES, 2 NO. OF W.H.C.'S: 2 NO. OF TOTS: 1

**SEEDING NOTES**

**TEMPORARY SEEDING**  
 APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.  
 SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.  
 SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS. 1000 SQ. FT.).  
 SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS. 1000 SQ. FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WHEAT LOVEGRASS (.07 LBS. 1000 SQ. FT.). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OR USE SOU.  
 MULCHING: APPLY 1 TO 2 TONS PER ACRE (70 TO 90 LBS. 1000 SQ. FT.) OF UNROTATED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL. PER ACRE (5 GAL. 1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE 348 GAL. PER ACRE (8 GAL. 1000 SQ. FT.) FOR ANCHORING.  
 REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

**PERMANENT SEEDING**

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.  
 SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.  
 SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:  
 1. PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS. 1000 SQUARE FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS. 1000 SQ. FT.) BEFORE SEEDING. BARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 38-0-0 UREA-FORM FERTILIZER (9 LBS. 1000 SQ. FT.).  
 2. ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS. 1000 SQ. FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS. 1000 SQ. FT.) BEFORE SEEDING. BARROW OR DISC INTO UPPER THREE INCHES OF SOIL.  
 SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 15 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. 1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (.05 LB. 1000 SQ. FT.) OF WHEAT LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOU. OPTION (3) SEED WITH 60 LBS. ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS ACRE WELL ANCHORED STRAW.

**PERMANENT SEEDING (CONTINUED)**

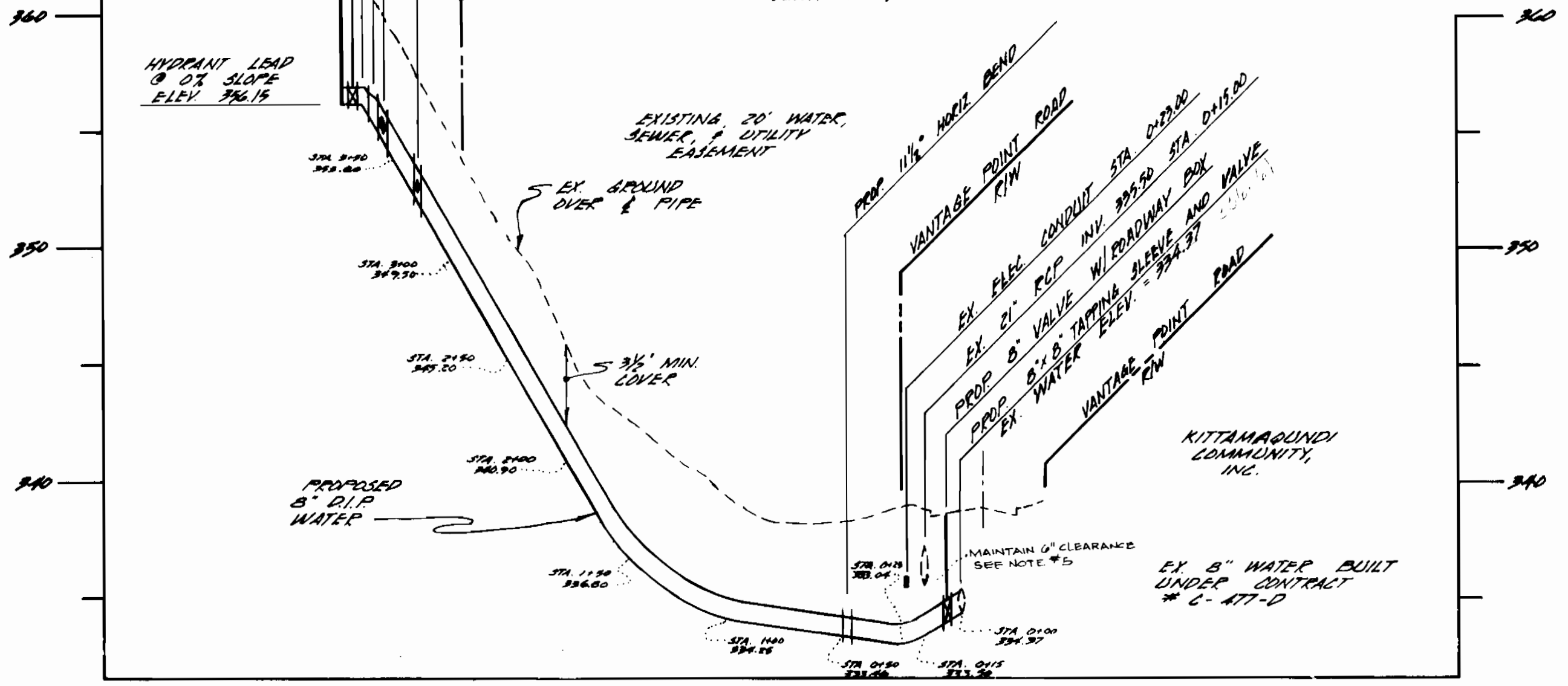
MULCHING - APPLY 1 TO 2 TONS PER ACRE (70 TO 90 LBS. 1000 SQ. FT.) OF UNROTATED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL. 1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE 348 GALS. PER ACRE (8 GAL. 1000 SQ. FT.) FOR ANCHORING.  
 MAINTENANCE - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

**GENERAL NOTES**

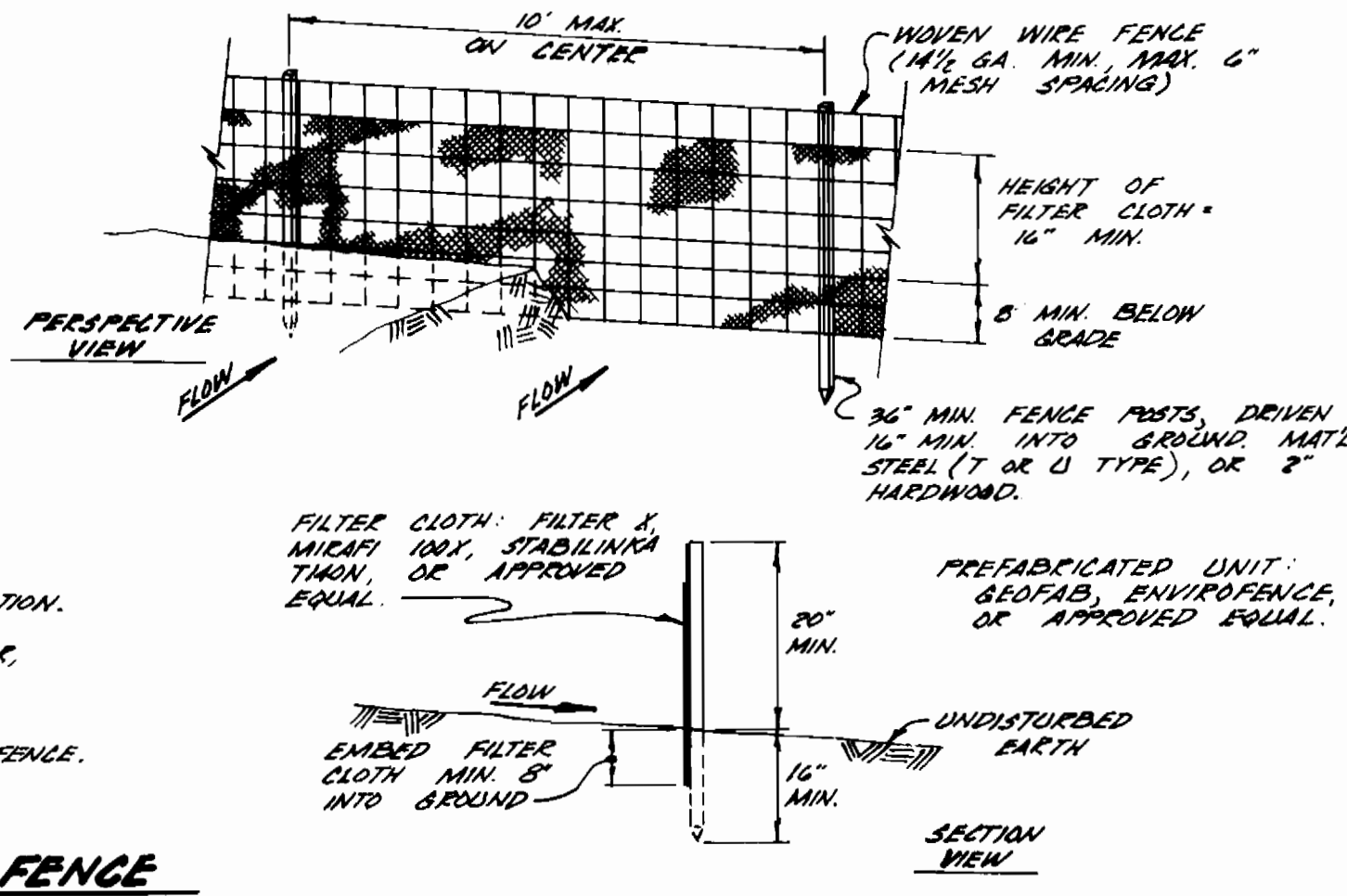
1. APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
2. ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
3. ALL VERTICAL CONTROLS ARE BASED ON U.S.C.S. DATUM.
4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
5. CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED.
6. 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.
7. 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.
8. 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  
 BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES - 561-2585  
 BALTIMORE GAS & ELECTRIC CO. - UNDER GROUND DAMAGE CONTROL - 234-5621  
 BALTIMORE GAS & ELECTRIC CO. TROUBLE SHOOTING - 298-9013  
 MISS UTILITY - 1-559-0100  
 COLONIAL PIPELINE CO. - 795-1390  
 BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - 992-2366
9. TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIPS ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
10. CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION.
11. STRAW BALE DIKE AND SILT FENCE ARE INTERCHANGEABLE.
12. ALL WATER HOUSE CONNECTIONS SHALL BE FOR AN INSIDE METER SETTING.

**PROFILE**

SCALE: HORIZ. 1" = 50' VERT. 1" = 2'



NOTE: 1. ALL FITTINGS TO BE INSTALLED WITH APPROPRIATE JOINTS. SEE STANDARD DETAILS. 2. WATER HOUSE CONNECTIONS PER U.S. STANDARD DETAIL W.3-24.



**CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**

1. WOVEN WIRE FENCE TO BE SECURELY FASTENED TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE SECURELY FASTENED TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MIDSECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BOULGES" DEVELOP IN THE SILT FENCE.
5. STANDARD SYMBOL:

**SILT FENCE**

NO SCALE

DATE	NO.	DESCRIPTION
10-25-90	1	RELOCATE WATER LINE AS PER FW.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH ARTICLE 15 OF THE STANDARD SPECIFICATIONS

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT  
 SIGNATURE: *[Signature]* DATE: 12/19/88  
 U.S. SOIL CONSERVATION SERVICE

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

APPROVED  
 HOWARD S.C.D. *[Signature]* DATE: 12/16/88

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

*[Signature]* 12/16/88  
 DIRECTOR OF PUBLIC WORKS - DATE  
*[Signature]* 12/16/88  
 CHIEF - BUREAU OF UTILITIES - DATE

CENTURY ENGINEERING, INC.  
 CONSULTING ENGINEERS - PLANNERS  
 TOWSON, MARYLAND 21204

CONTRACT NO. 44-1878-D

PLAN & PROFILE  
 8" WATER MAIN

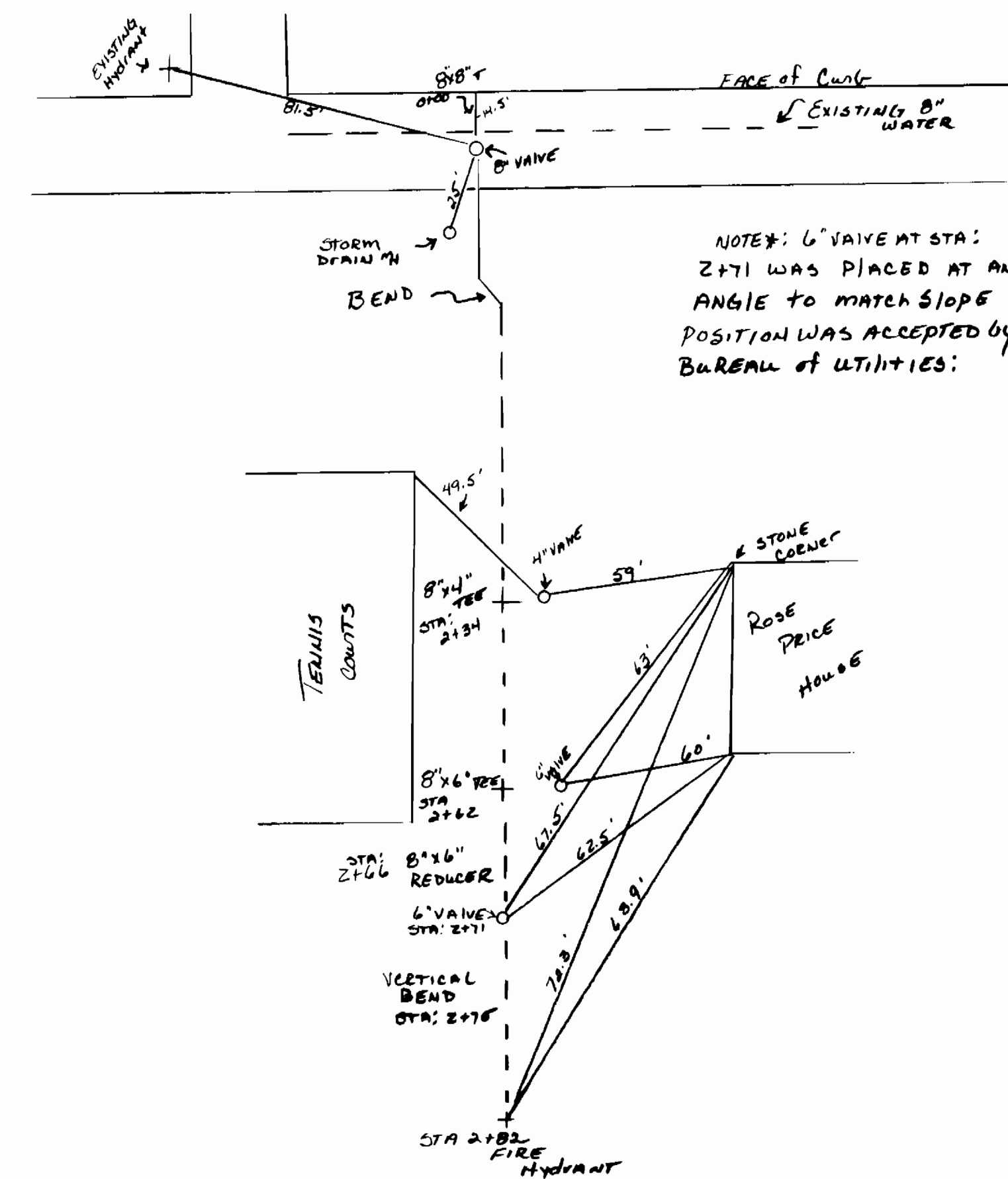
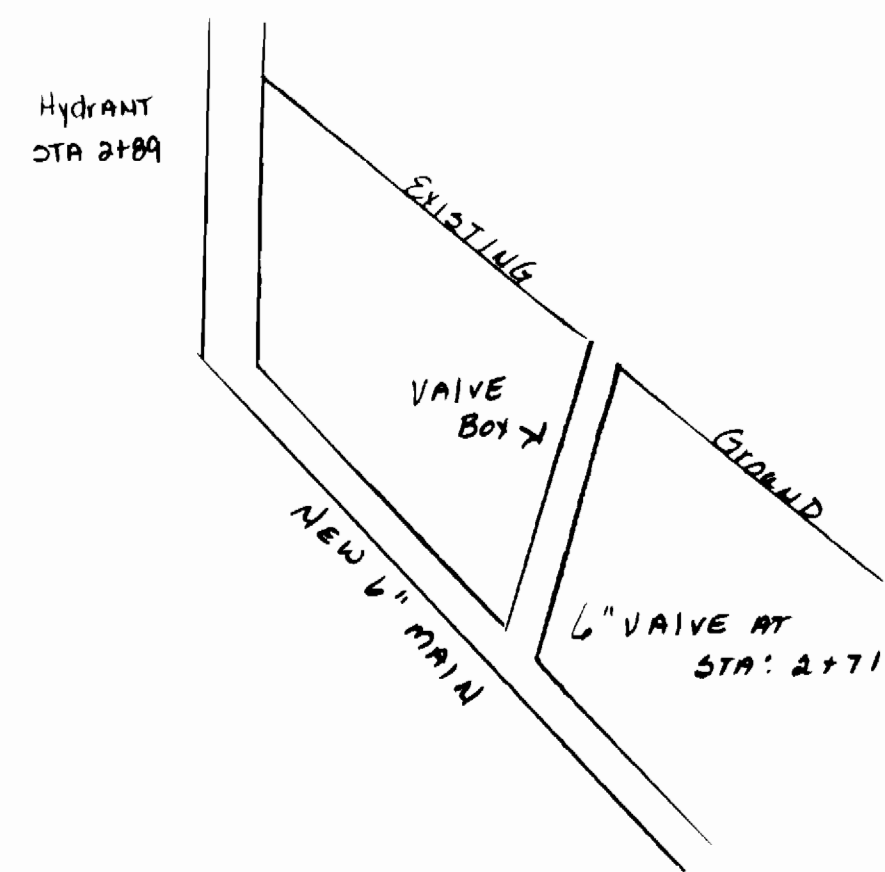
COLUMBIA TOWN CENTER  
 5TH ELECTION DISTRICT

OAKLAND MANOR  
 SECTION 7 AREA 9 & 7 LOT-3 & PARCEL E-1  
 HOWARD COUNTY, MD.

DRAWING NO. 1 OF 1A  
 SCALE AS SHOWN

JOHN R. HEINRICHS  
 PROFESSIONAL ENGINEER NO. 14920

AS-BUILTS



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE CHIEF, BUREAU OF ENGINEERING DATE

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

8" WATER MAIN AS-BUILTS

600' SCALE MAP NO. BLOCK NO.

OAKLAND MANOR - SECTION 7 AREA 9+7 LOT 2 & Parcel E-1

CONTRACT NUMBER 44-1870-D

SCALE AS SHOWN

SHEET 1A OF 1A

KATHY WILLIAMS

AS-BUILT 7-3-89