

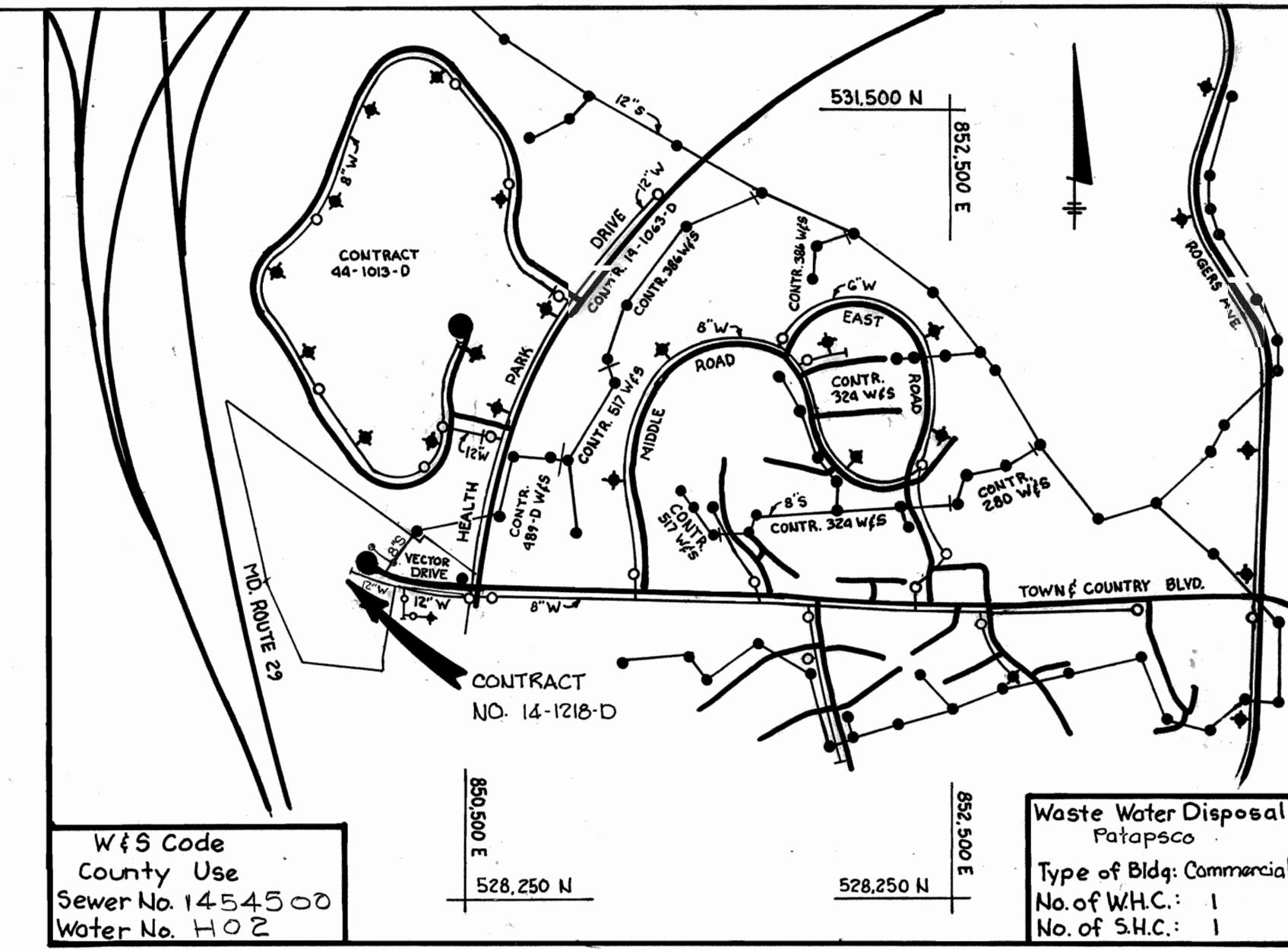
Sediment Control measures for this contract will be implemented in accordance with article 15 of the specifications F-84-164

Howard Soil Conservation District:  
Reviewed for Howard Soil Conservation District and meets technical requirements.

*James H. Water* 7-27-84  
U.S. Soil Conservation Service Date  
This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.  
*Robert Zischer* 7-27-84  
Howard Soil Conservation District Date

Bon Secours  
Howard County Health Park  
Parcel 5  
Plot No. 4379

**BENCH MARKS**  
B.M. #1 Elev. 425.97  
Top of ex. F.H. on Southeast side of Town and Country Blvd. & Sta 3+00.0  
B.M. #2 Elev. 411.68  
Existing manhole #7177 top of rim

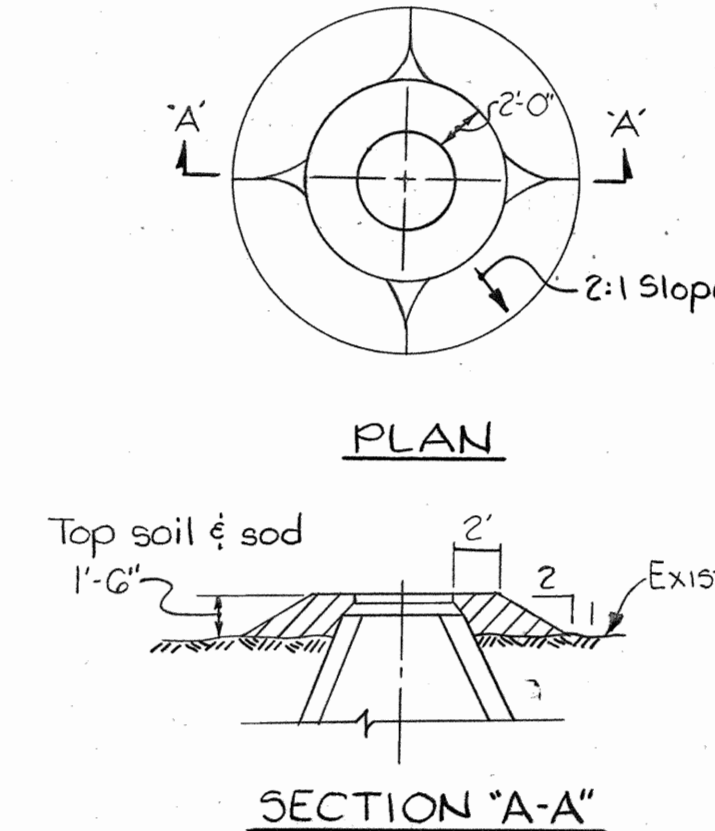


WFS Code  
County Use  
Sewer No. 14-545-00  
Water No. H02

Waste Water Disposal:  
Patapsco  
Type of Bldg: Commercial  
No. of W.H.C.: 1  
No. of S.H.C.: 1

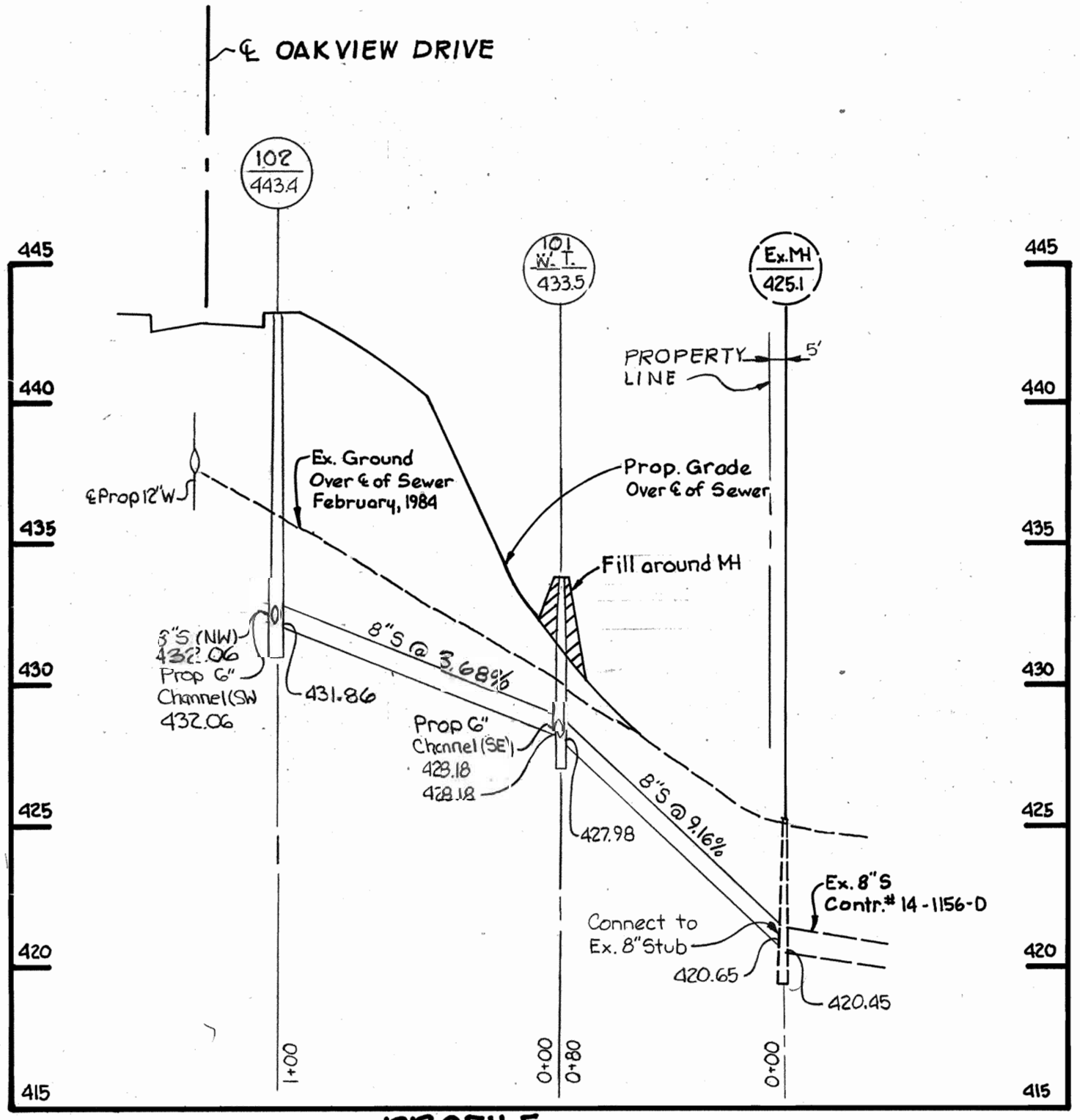
**VICINITY MAP**  
Scale: 1"=600'  
**GENERAL NOTES**

- 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. data.
- 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 utilities 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 coordinate with the utility companies to schedule the bracing of the poles.
- 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  $\square$  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.
- Contractor shall notify the following utilities or agencies at least five (5) working days before starting work shown on these plans.
  - a. State Highway Administration 531-5533
  - b. Baltimore Gas & Electric Company - Underground Electric Distribution Customer Service 685-0123
  - c. Baltimore Gas & Electric Company - Underground Gas Distribution Customer Service 685-0123
  - d. Engineering - "Damage Control" 234-5621
  - e. "Miss Utility" 1-559-0100
  - f. Chesapeake & Potomac (C&P) Telephone Company 725-9978
  - g. American Telephone & Telegraph - Cable Location Division 393-3553
  - h. Colonial Pipeline Company 781-4641
  - i. 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 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 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 1003 & 1008 of the General Requirements for Water and Sewer.
- All water house connections shall be for inside meter setting.
- The contractor shall not operate any water main valves on the existing system.
- For all copper water house connection utilize flared type fittings only.
- All sewer mains shall be C.S.P.X., V.C.P.X., P.V.C. 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.
- 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 G5.52 Volume IV. Where watertight manhole frame and cover is used set top of frame 1'-6" above finished grade.
- House(s) with the symbol "C.N.S." indicates the cellar can not be served.
- All water house connections shall have a minimum vertical clearance of 12" above all sanitary sewer crossings.
- All sanitary sewer house connections shall have a minimum vertical clearance of 12" below all water main crossings.
- Profile stations shall be adjusted as necessary to conform to plan dimensions.
- No pipe shall be laid until lines of excavation have been brought to subgrade.

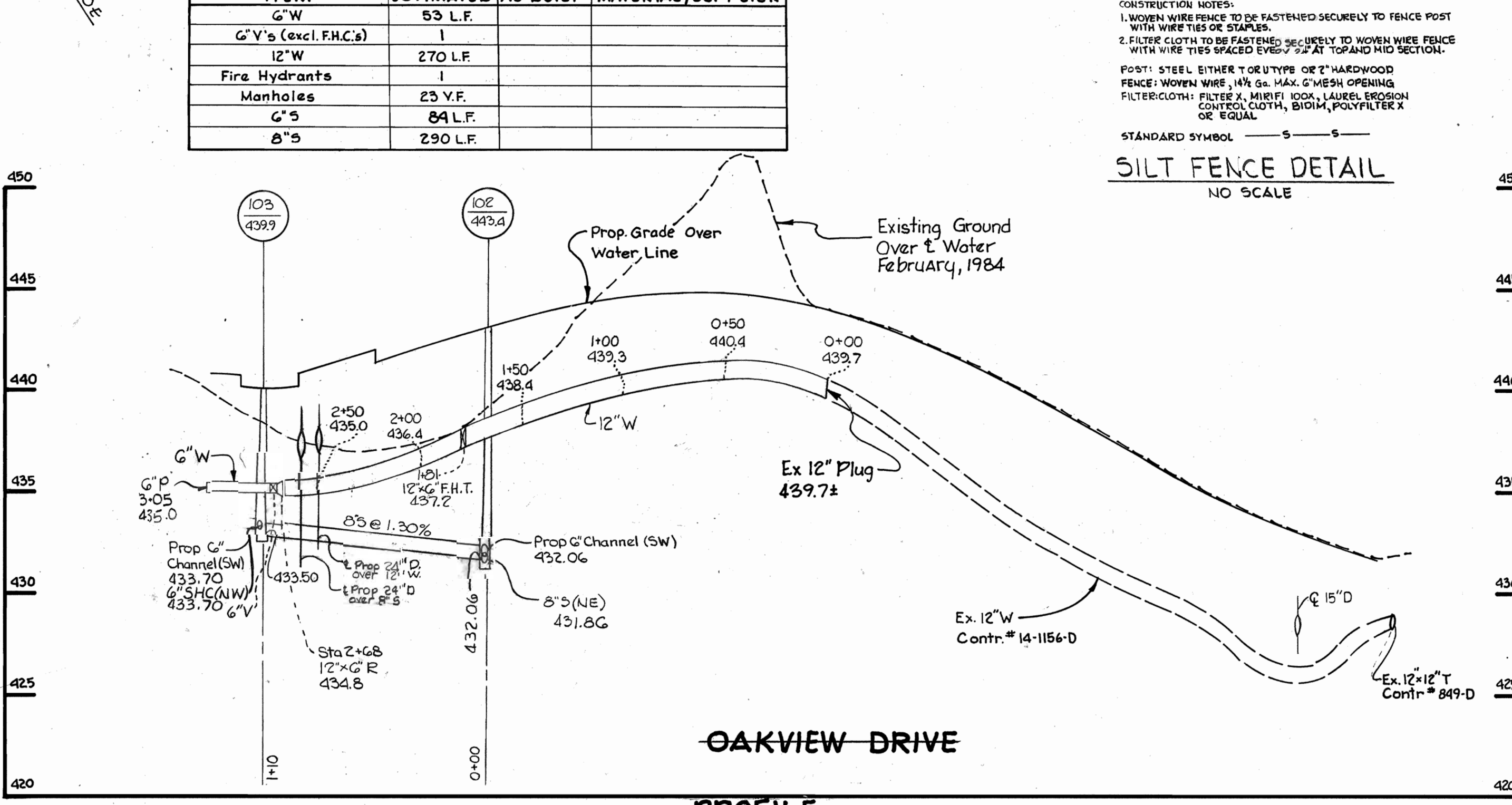


- Notes:**
- All manhole frame and covers shall be flush with grade except when shown on Profile to be set higher than grade.
  - Manhole frame and covers to be set higher than grade shall be set in accordance with this detail.
  - Manhole frames and covers to be set higher than 1'-6" shall be set as noted on the Profile and in accordance with this Detail.

**FILL AROUND MH #1**  
No Scale

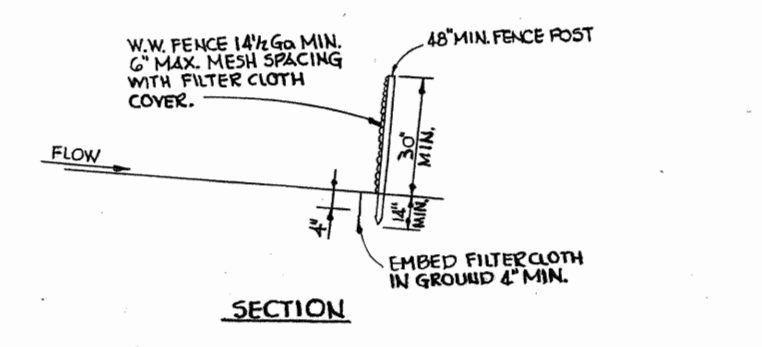
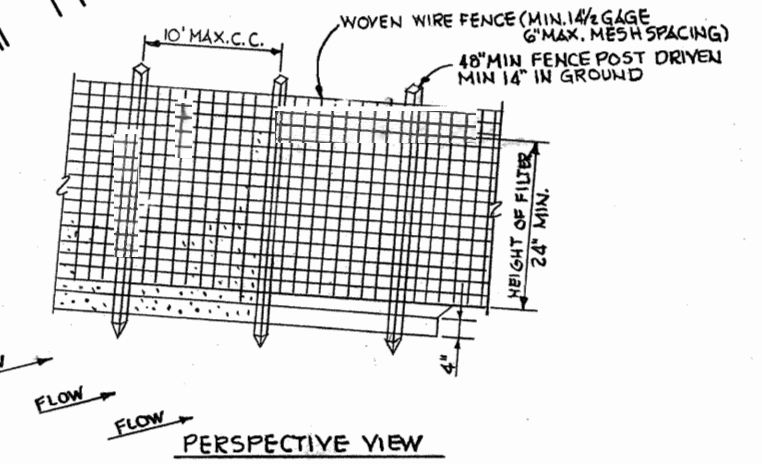


**PROFILE**  
SCALE: HORIZ. 1"=50'  
VERT. 1"=5'



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

QUANTITIES		
ITEM	ESTIMATED AS BUILT	MATERIAL/SUPPLIER
6" W	53 L.F.	
6" V's (excl. F.H.C.s)	1	
12" W	270 L.F.	
Fire Hydrants	1	
Manholes	23 V.F.	
6" S	84 L.F.	
8" S	290 L.F.	



**CONSTRUCTION NOTES:**  
1. WOMEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POST WITH WIRE TIES OR STAPLES.  
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOMEN WIRE FENCE WITH WIRE TIES SPACED EVERY 7'-2" AT TOP AND MID SECTION.  
POST: STEEL EITHER 4" O.D. TYPE OR 2" HARDWOOD  
FENCE: WOMEN WIRE 1/4" GA. MAX. MESH OPENING  
FILTER CLOTH: FILTER #1, MURPHY 100A, LAUREL EROSION CONTROL CLOTH, BIDIM, POLYFILTER X OR EQUAL

STANDARD SYMBOL  $\square$

**SILT FENCE DETAIL**  
NO SCALE

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*James F. Neimey* 7-31-84  
DIRECTOR OF PUBLIC WORKS DATE  
*Robert Zischer* 7-30-84  
CHIEF BUREAU OF UTILITIES DATE

THE RIEMER GROUP INC.  
8659 BALTIMORE NATIONAL PIKE  
ELLCOTT CITY, MARYLAND 21043  
*Arthur E. Muegge*  
ARTHUR E. MUEGGE

DES: DLW	
DRN: TJM	
CHK:	
DATE: 4/11/83	

PLAN AND PROFILES  
OF A WATER AND SEWER MAIN

HOWARD COUNTY MEDICAL RESEARCH PARK  
PARCEL C-1  
ELECTION DISTRICT NO. 2  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 14-1218-D

SCALE AS SHOWN  
SHEET 1 OF 1