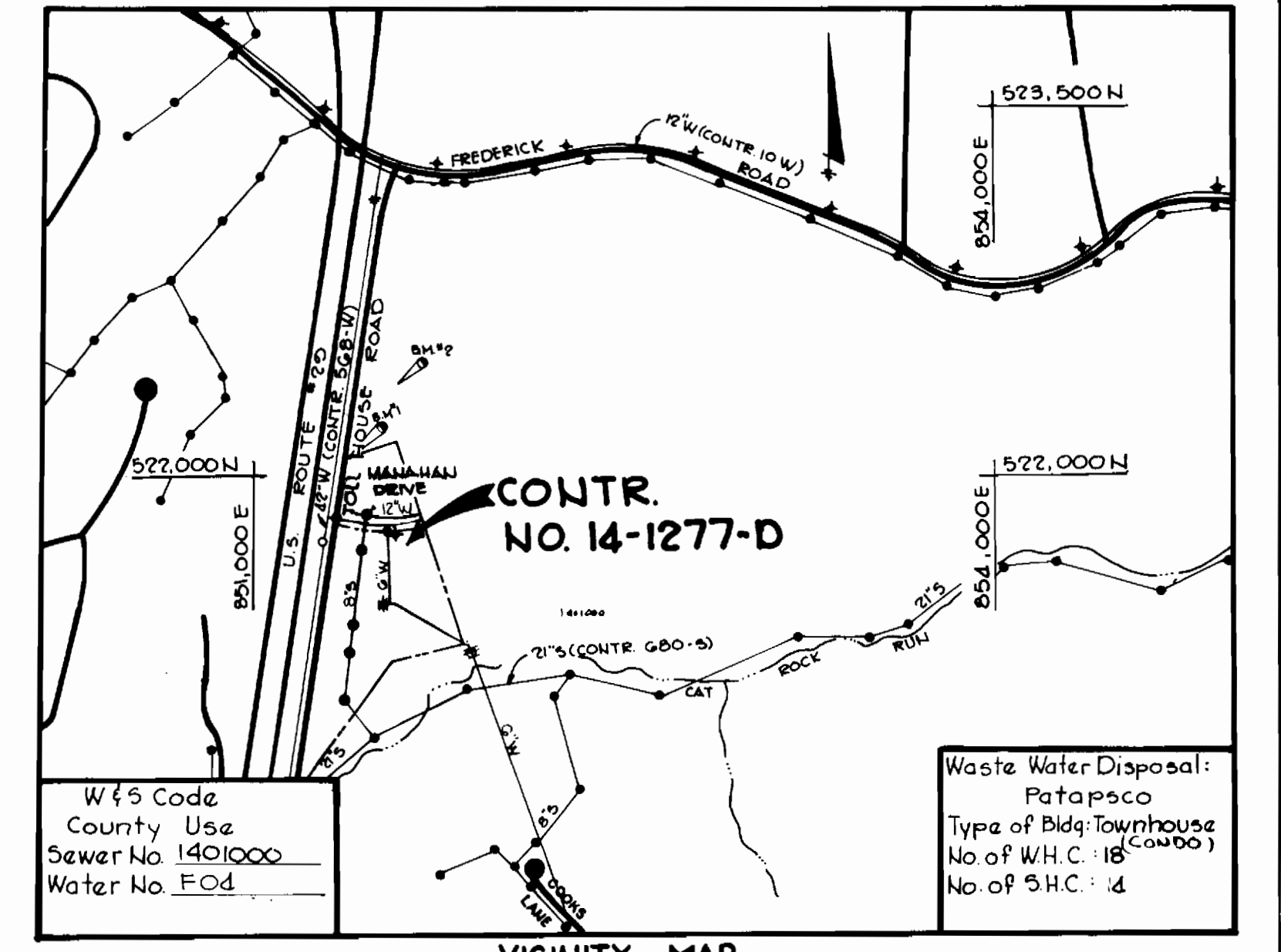
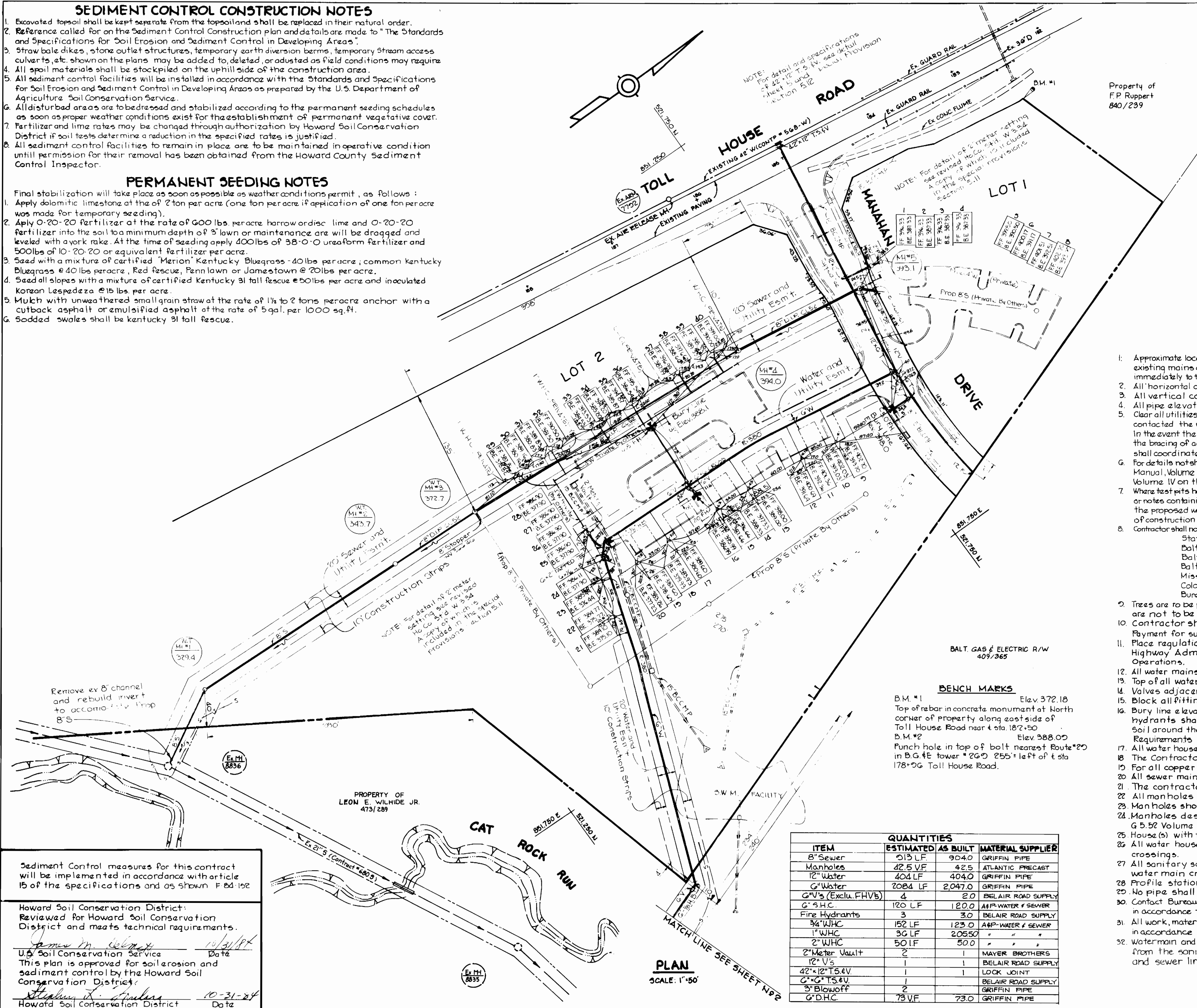


**SEDIMENT CONTROL CONSTRUCTION NOTES**

- Excavated topsoil shall be kept separate from the topsoil and shall be replaced in their natural order.
- Reference called for on the Sediment Control Construction plan and details are made to "The Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas".
- Straw bale dikes, stone outlet structures, temporary earth diversion berms, temporary stream access culverts, etc. shown on the plans may be added to, deleted, or adjusted as field conditions may require.
- All spoil materials shall be stockpiled on the uphill side of the construction area.
- All sediment control facilities will be installed in accordance with the Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas as prepared by the U.S. Department of Agriculture Soil Conservation Service.
- All disturbed areas are to be reseeded and stabilized according to the permanent seeding schedules as soon as proper weather conditions exist for the establishment of permanent vegetative cover.
- Fertilizer and lime rates may be changed through authorization by Howard Soil Conservation District if soil tests determine a reduction in the specified rates is justified.
- All sediment control facilities to remain in place are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

**PERMANENT SEEDING NOTES**

- Final stabilization will take place as soon as possible as weather conditions permit, as follows:
- Apply dolomitic limestone at the rate of 2 ton per acre (one ton per acre if application of one ton per acre was made for temporary seeding).
  - Apply 0-20-20 fertilizer at the rate of 600 lbs per acre harrow or disc lime and 0-20-20 fertilizer into the soil to a minimum depth of 3" lawn or maintenance are will be dragged and leveled with a work rake. At the time of seeding apply 400 lbs of 3B-0-0 ureaform fertilizer and 500 lbs of 10-20-20 or equivalent fertilizer per acre.
  - Seed with a mixture of certified "Merion" Kentucky Bluegrass - 40 lbs per acre, common Kentucky Bluegrass @ 40 lbs per acre, Red fescue, Penn lawn or Jamestown @ 20 lbs per acre.
  - Seed all slopes with a mixture of certified Kentucky 31 fall fescue @ 50 lbs per acre and inoculated Korzan Lespedeza @ 15 lbs per acre.
  - Mulch with unweathered small grain straw at the rate of 1 1/2 to 2 tons per acre anchor with a cutback asphalt or emulsified asphalt at the rate of 5 gal. per 1000 sq. ft.
  - Sodded swales shall be kentucky 31 fall fescue.



Property of  
F.P. Ruppert  
840/239

- 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 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 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 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 working days before starting work shown on these plans:
 

State Highway Administration	591-5533
Baltimore Gas & Electric Co. - Contractor Services	561-2585
Baltimore Gas & Electric Co. - Under Ground Damage Control	234-5621
Baltimore Gas & Electric Co. - Trouble Shooting	298-2013
Miss Utility	1-555-0100
Colonial Pipeline Co.	705-1300
Bureau of Utilities, Howard County Department of Public Works	202-2966
  - 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 trees shall be strapped to trees.
  - 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 1005 & 1008 of the General Requirements for Water and Sewer.
  - All water house connections shall be for an inside meter setting unless otherwise shown.
  - The Contractor shall not operate any water main valves on the existing system.
  - For all copper water house connections 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 2'-0" inside diameter, unless otherwise noted.
  - Manholes shown with 12" and 18" walls are brick manholes only.
  - Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail G.5.2 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.
  - Contact Bureau of Utilities 72 hours prior to making connection of prop 12" W. to ex. 42" W. in Toll House Road in accordance to section 5.07 of the special provisions.
  - All work, materials and fittings for the connection of the prop 12" W. to the ex. 42" W. in Toll House Road shall be in accordance with section 5.11 of the special provision and as shown on these plans.
  - Watermain and water house connection line must have a minimum of one foot separation from the sanitary sewer and sewer house connections as they cross. Except at crossings, water and sewer lines shall have a minimum horizontal separation of 10'.

**BENCH MARKS**

B.M. #1 Elev. 372.18  
Top of rebar in concrete monument at North corner of property along east side of Toll House Road near to sta. 187+50

B.M. #2 Elev. 388.05  
Punch hole in top of bolt nearest Route #20 in B.G. & E. tower #26 @ 255' left of to sta 178+06 Toll House Road.

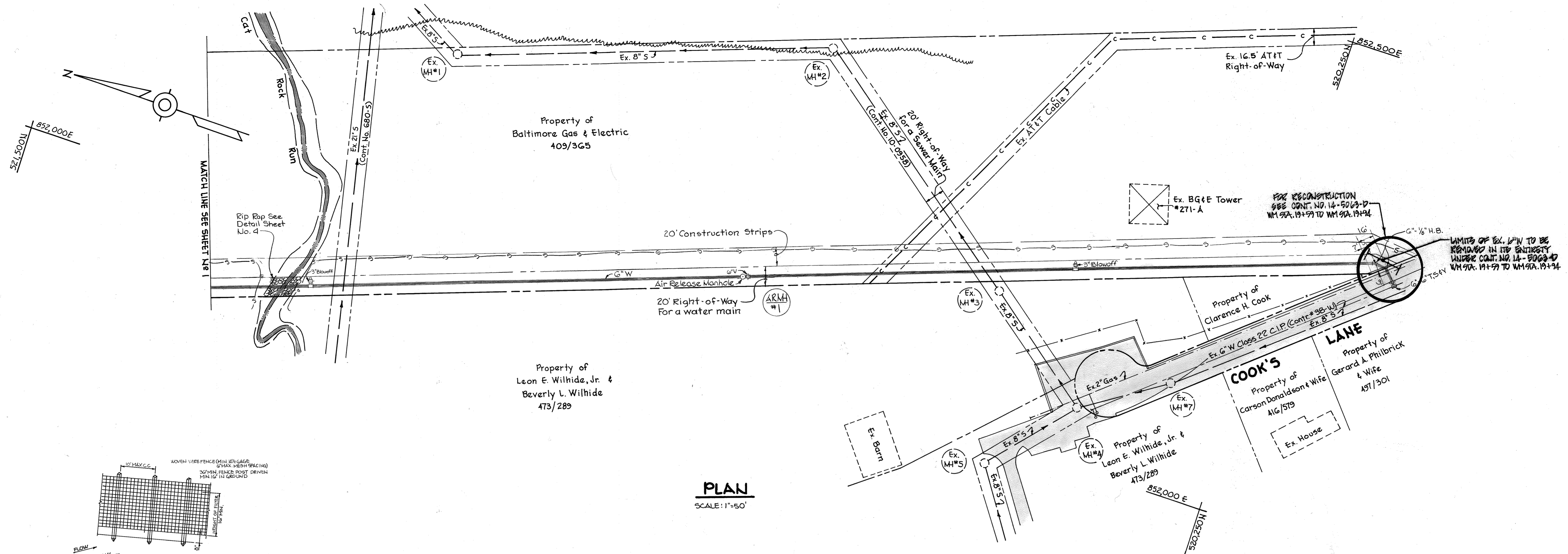
ITEM	ESTIMATED	AS BUILT	MATERIAL SUPPLIER
8" Sewer	213 LF	2040	GRIFFIN PIPE
Manholes	42.5 VF	425	ATLANTIC PRECAST
12" Water	404 LF	4040	GRIFFIN PIPE
6" Water	2084 LF	20470	GRIFFIN PIPE
G.W.'s (Exclu. F.H.V's)	4	20	BELAIR ROAD SUPPLY
G.S.H.C.	120 LF	1200	A.P. WATER & SEWER
Fire Hydrants	3	30	BELAIR ROAD SUPPLY
3/4" W.H.C.	152 LF	1230	A.P. WATER & SEWER
1" W.H.C.	36 LF	20550	" " "
2" W.H.C.	50 LF	500	" " "
2" Meter Vault	2	1	MAYER BROTHERS
12" V's	1	1	BELAIR ROAD SUPPLY
42" x 12" T.S.E.V.	1	1	LOCK JOINT
G.C.T.S.E.V.	1	1	BELAIR ROAD SUPPLY
3" Blowoff	2	2	GRIFFIN PIPE
G.D.H.C.	73 VF	730	GRIFFIN PIPE

Sediment Control measures for this contract will be implemented in accordance with article 15 of the specifications and as shown Fed 152

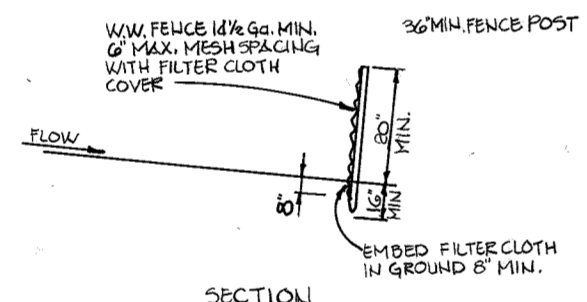
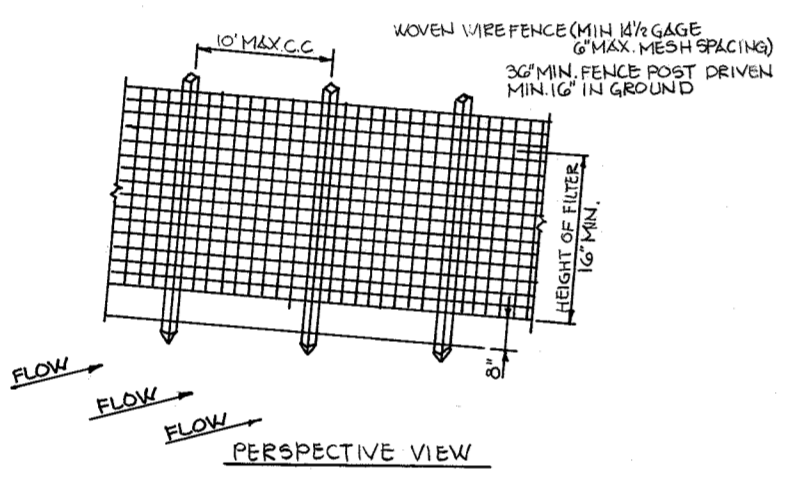
Howard Soil Conservation District:  
Reviewed for Howard Soil Conservation District and meets technical requirements.  
*James M. Selman* Date 11/21/84  
U.S. Soil Conservation Service  
This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.  
*Stephen D. Spillers* Date 10-31-84  
Howard Soil Conservation District

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>John F. Newman</i> Chief, Land Development Div.: <i>John F. Newman</i> Chief, Bureau of Engineering: <i>Arthur E. Muegge</i> Chief, Bureau of Utilities: <i>Arthur E. Muegge</i>	THE RIEMER GROUP INC. 3105 HEALTH PARK DRIVE ELLICOTT CITY, MARYLAND 21043 Arthur E. Muegge	DES: J.K.B.	DRN: T.J.M.	CHK:	DATE: 8-1-84	BY: NO.	REVISION	DATE: 600' SCALE MAP NO. 24	BLOCK NO.
		PLAN OF A WATER AND SEWER MAIN		TOLL HOUSE SECTION I LOT 1 & 2 ELECTION DISTRICT NO. 2 HOWARD COUNTY MARYLAND CONTRACT NO. 14-1277-D		SCALE AS SHOWN SHEET 1 OF 5			





**PLAN**  
SCALE: 1"=50'



**CONSTRUCTION NOTES:**  
 1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POST WITH WIRE TIES OR STAPLES.  
 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH WIRE TIES SPACED EVERY 24" @ TOP AND MID SECTION.  
 POST: STEEL EITHER T OR U TYPE OR 2" HARDWOOD  
 FENCE: WOVEN WIRE, 1/2" GA. MAX. MESH OPENING  
 FILTER CLOTH: FILTER # 20, MESH 100X, LAUREN RESEARCH CONTROL CLOTH, BIDIM, POLYFIBREX OR EQUAL

**STANDARD SYMBOL**  
**SILT FENCE DETAIL**  
 NO SCALE

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

Director of Public Works  
 DATE: 11-2-89  
 Chief, Land Development Div.

Chief, Bureau of Engineering  
 DATE: 11-2-89  
 Chief, Bureau of Utilities

THE RIEMER GROUP INC.  
 3105 HEALTH PARK DRIVE  
 ELLICOTT CITY, MARYLAND 21043



DES: J.K.B.					
DRN: T.J.M.					
CHK:					
DATE: 8/11/84	BY:	NO.	REVISION	DATE	

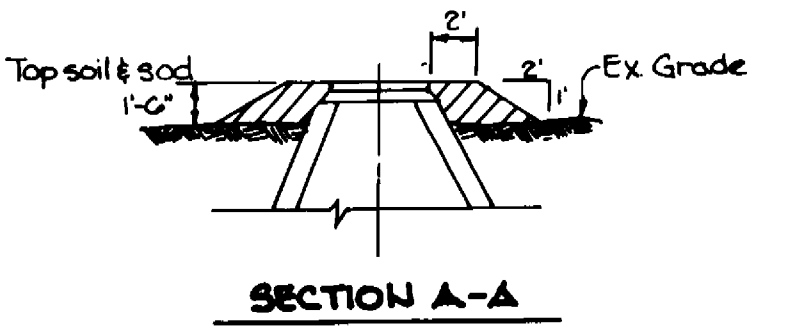
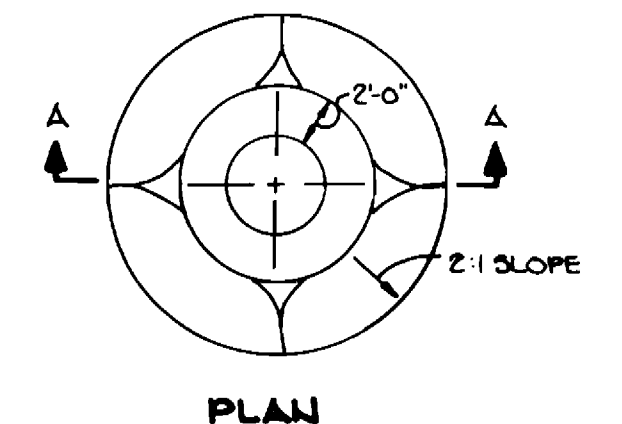
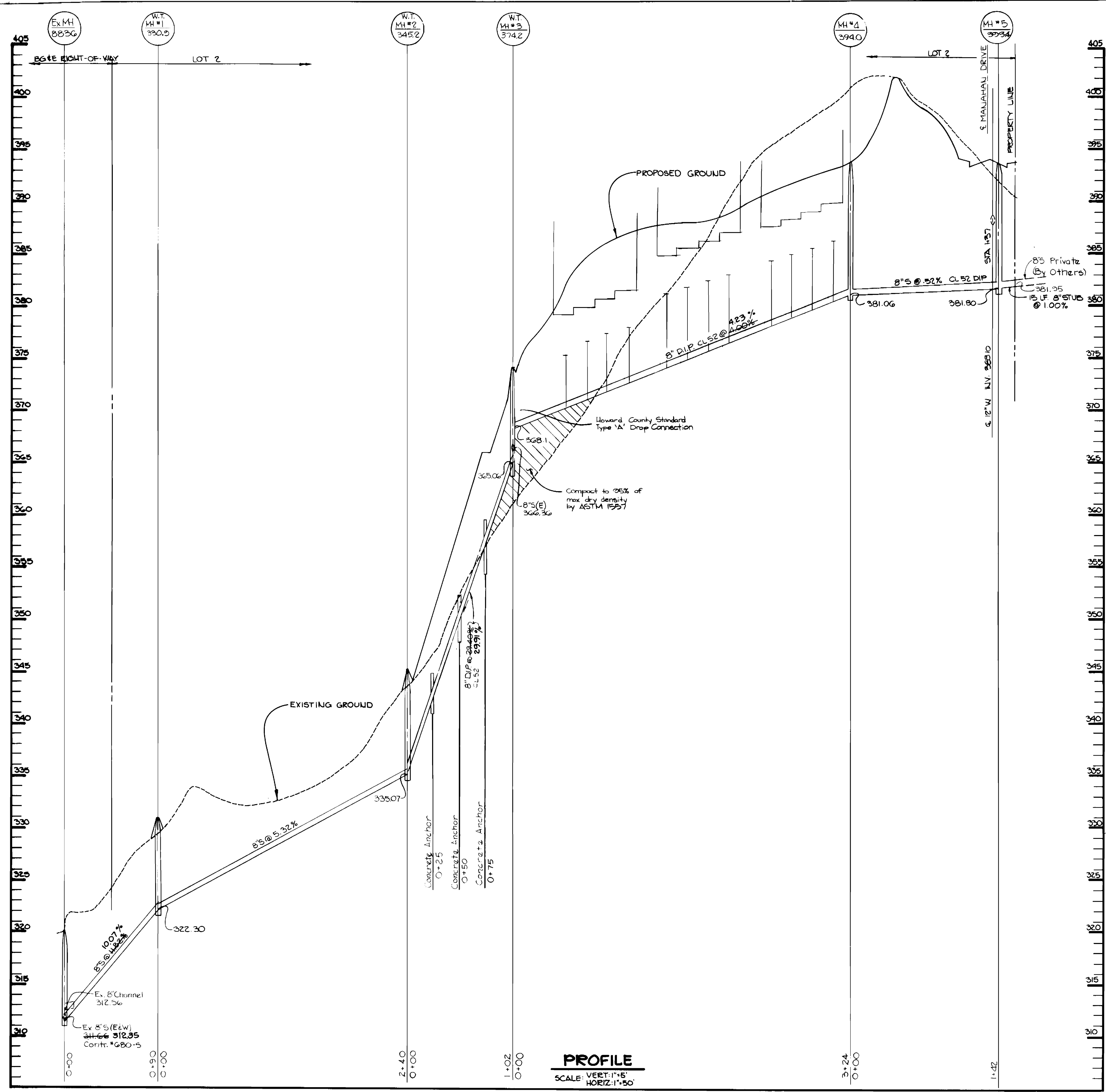
PLAN OF A  
 WATER AND SEWER MAIN

600' SCALE MAP NO. 24 BLOCK NO.

TOLL HOUSE SECTION I LOTS 1&2  
 ELECTION DISTRICT NO. 2  
 HOWARD COUNTY, MARYLAND  
 CONTRACT NO. 14-1277-D

SCALE AS SHOWN  
 SHEET 2 OF 5

AS-BUILT 8-9-89



- Notes:
- 1) All manhole frame and covers shall be flush with grade except when shown on Profile to be set higher than grade.
  - 2) Manhole frame and covers to be set higher than grade shall be set in accordance with this detail.
  - 3) Manhole frames and covers to be set higher than 1'-0\"/>

**FILL AROUND MH'S 1, 2 & 3**  
NO SCALE

**PROFILE**  
SCALE: VERT. 1"=6'  
HORIZ. 1"=50'

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DATE: 11-24-84  
CHIEF, LAND DEVELOPMENT DIV.

DATE: 11-24-84  
CHIEF, BUREAU OF UTILITIES

THE RIEMER GROUP, INC.  
3105 HEALTH PARK DRIVE  
ELLICOTT CITY, MARYLAND 21043

ARTHUR E. MUEGGE

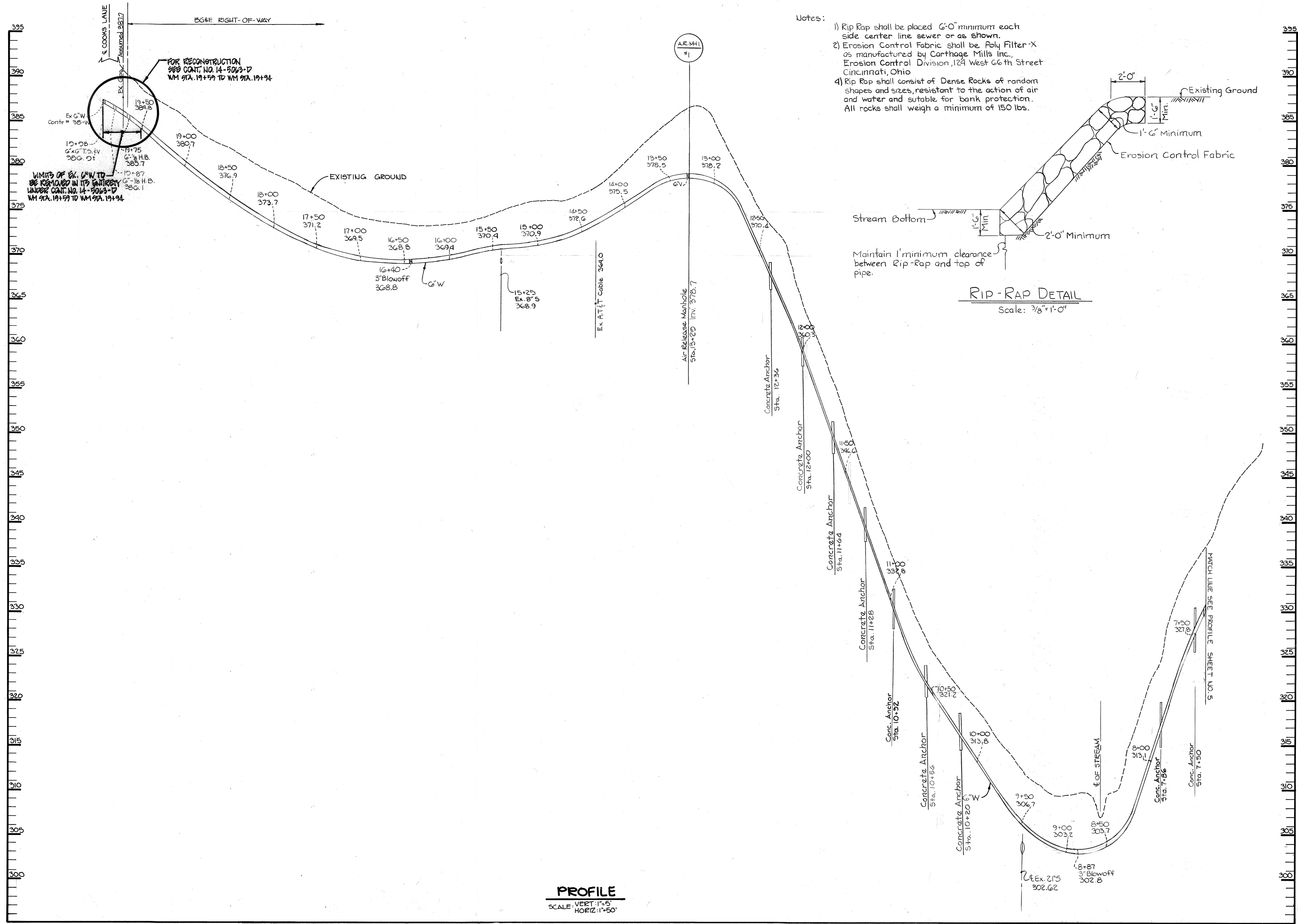
DES: J.D.P.					
DRN: T.J.M.					
CHK:					
DATE: 8/11/84	BY: W.D.S.	NO. 1	REVISION: REVISED SLOPE BETWEEN EX. MH & MH 1, PROVIDE ADDITIONAL ANCHORS	DATE: 2/4/85	

PROFILE OF A SEWER MAIN

600' SCALE MAP NO. 24 BLOCK NO. \_\_\_\_\_

TOLL HOUSE SECTION 1 LOTS 1&2  
ELECTION DISTRICT NO. 2  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 14-1277-D

SHEET 3 OF 5



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

Director of Public Works: *Mark A. [Signature]* DATE: 11-2-84  
Chief, Land Development Div. DATE: 11-2-84

Chief, Bureau of Engineering: *William E. Muegge* DATE: 11-2-84  
Chief, Bureau of Utilities: *Richard W. [Signature]* DATE: 11-2-84

THE RIEMER GROUP, INC.  
3105 HEALTH PARK DRIVE  
ELLCOTT CITY, MARYLAND 21043



DES:	JDP				
DRN:	TJM				
CHK:					
DATE:	8/1/84	W.D.S.:	1	Provide Additional Concrete Anchors	
BY:		NO.		REVISION	
		DATE:			

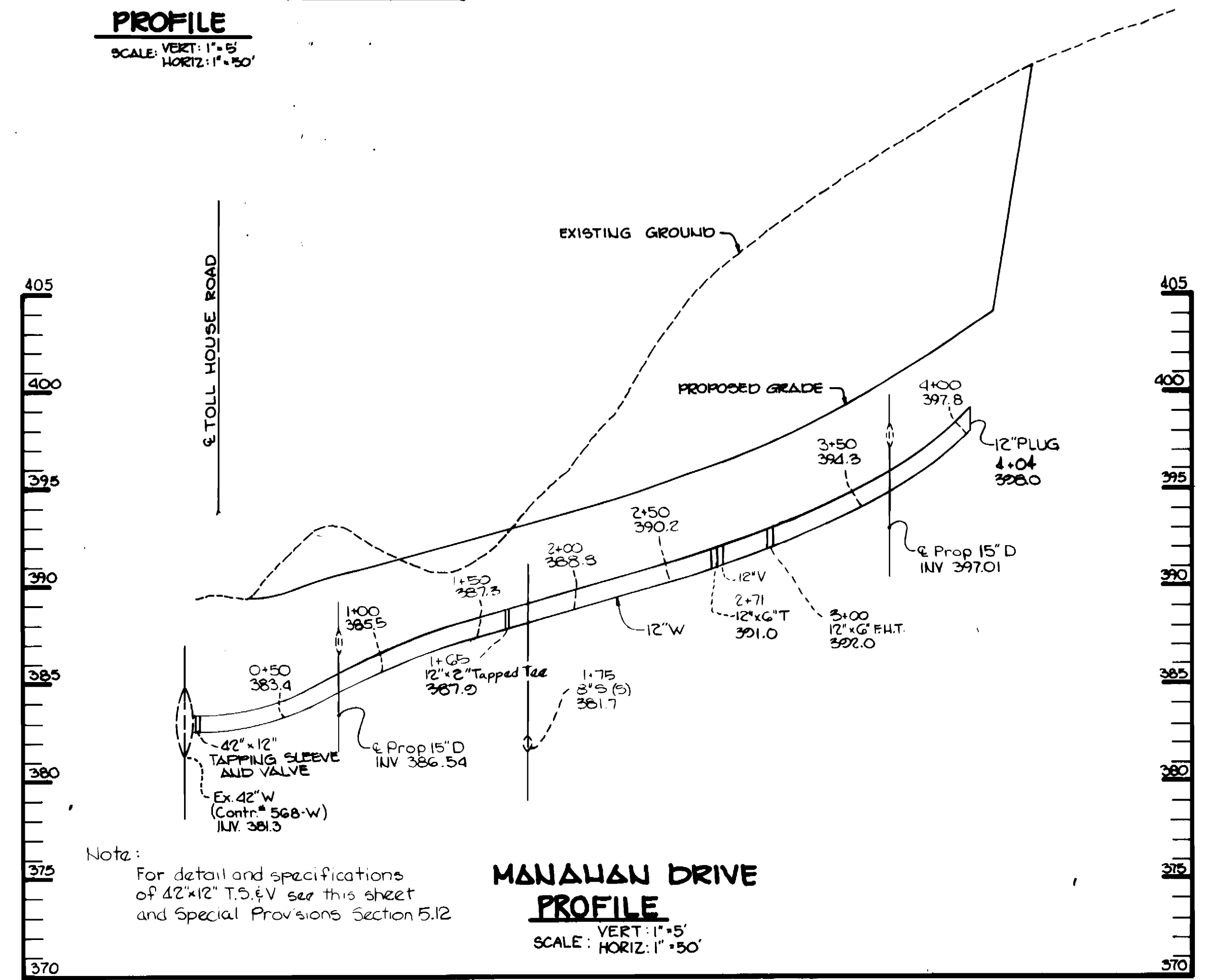
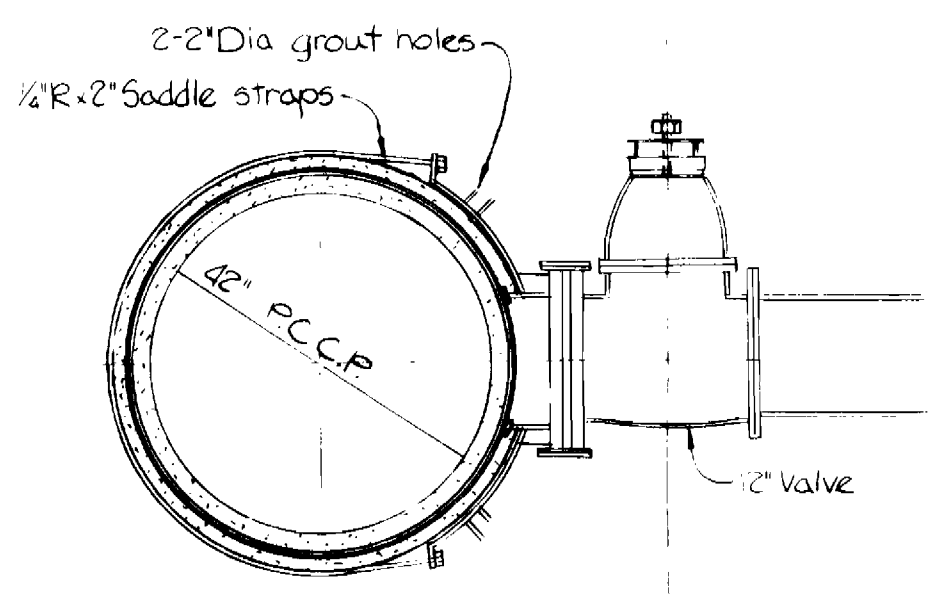
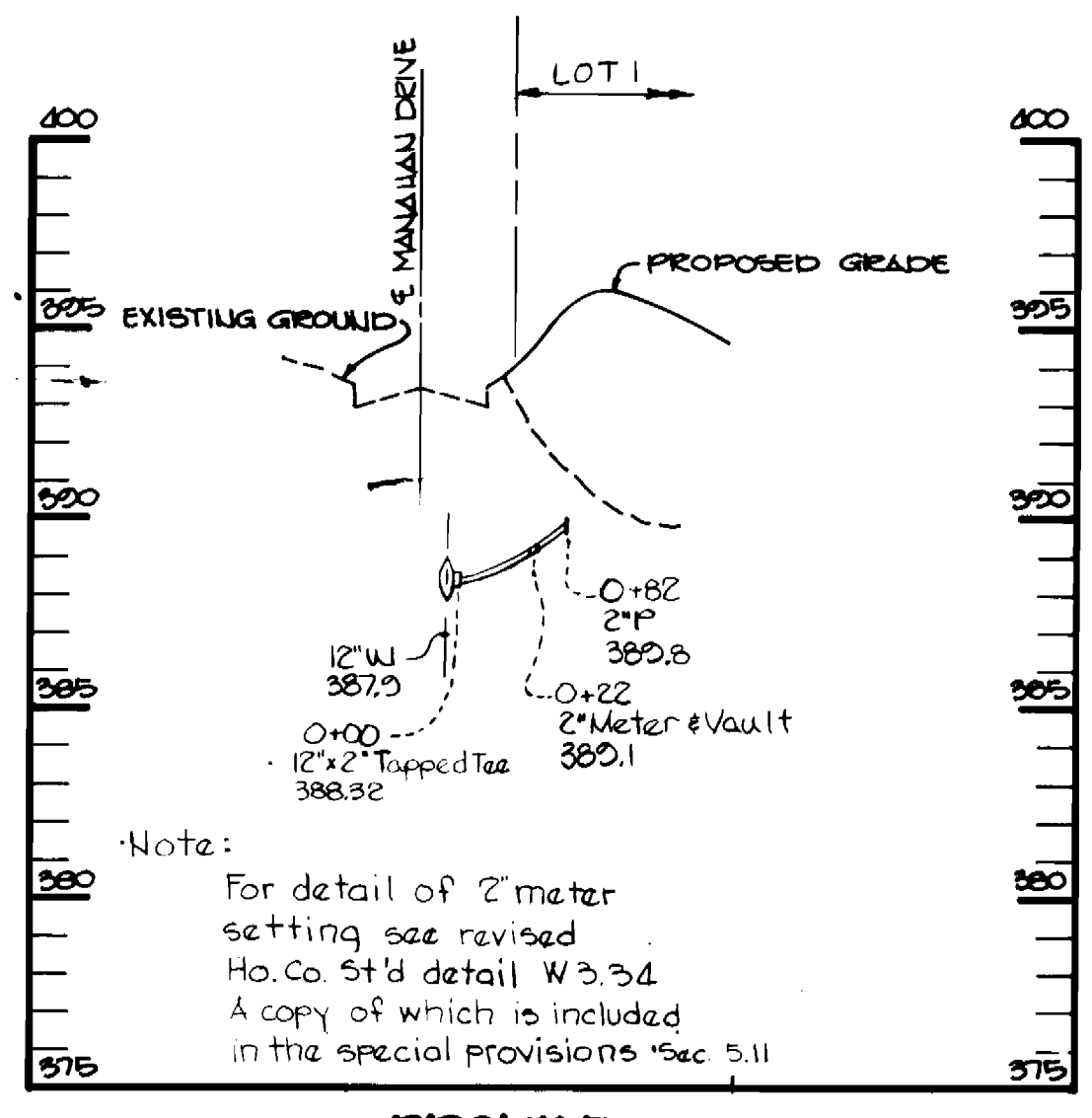
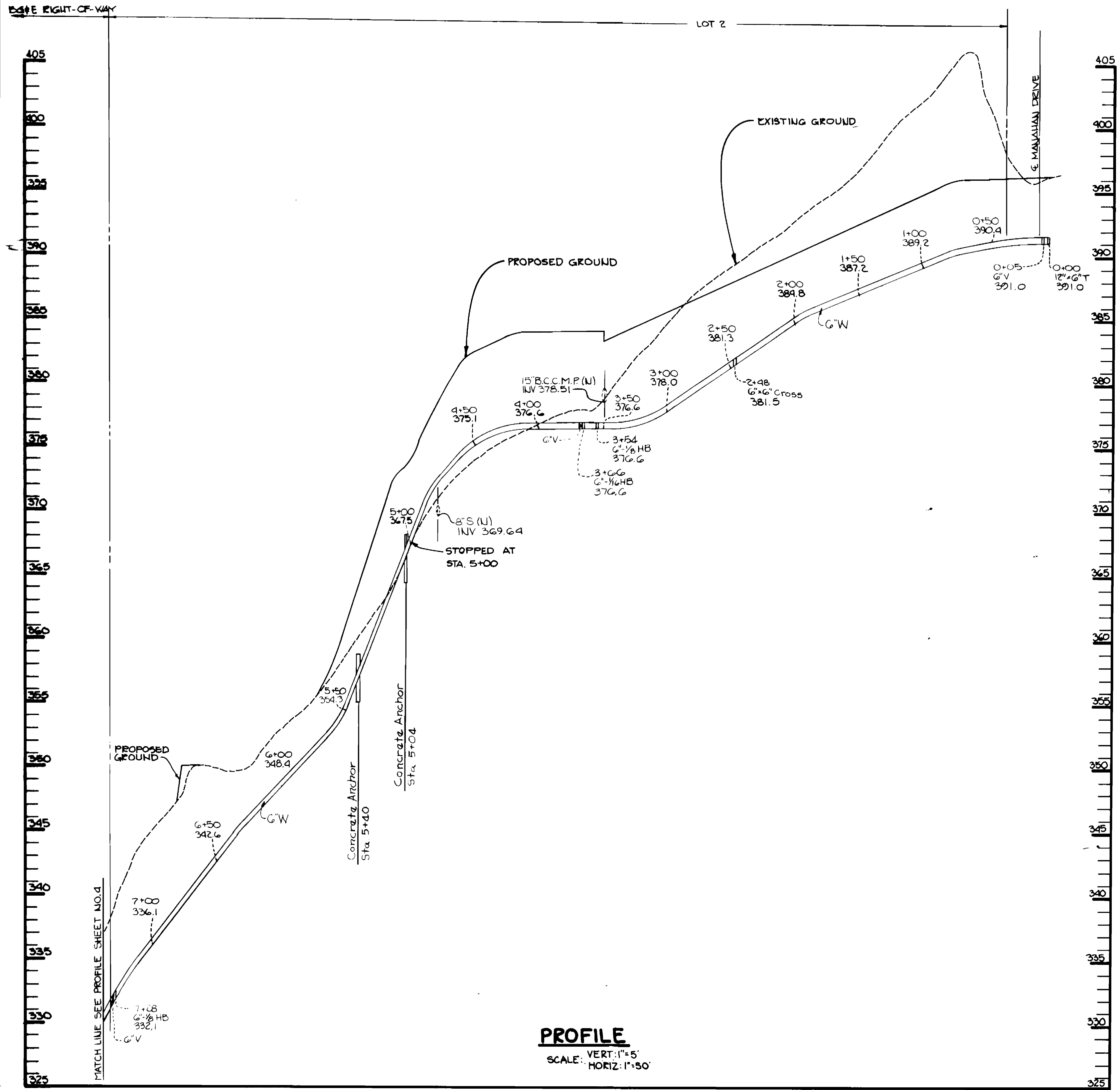
PROFILE OF A WATER MAIN

600' SCALE MAP NO. 24 BLOCK NO.

TOLL HOUSE SECTION I LOTS 18 & 2  
ELECTION DISTRICT NO. 2  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 14-1277-D

SCALE AS SHOWN  
SHEET 4 OF 5





DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*William F. Neumeier* 11-2-89  
DIRECTOR OF PUBLIC WORKS DATE

*Robert M. Brimmer* 11-2-89  
CHIEF, BUREAU OF UTILITIES DATE

THE RIEMER GROUP, INC.  
3105 HEALTH PARK DRIVE  
ELLCOTT CITY, MARYLAND 21043

*Arthur E. Muegge*  
ARTHUR E. MUEGGE

DES: J.D.P.			
DRN: T.J.M.			
CHK:			
DATE: 8/1/84	W.D.S. 1	Provide Additional Concrete Anchors	24/85
	BY NO.	REVISION	DATE

**PROFILES OF A WATER MAIN**

600' SCALE MAP NO. 25 BLOCK NO.

TOLL HOUSE SECTION 1 LOTS 1 & 2  
ELECTION DISTRICT NO. 2  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 14-1277-D

SHEET 5 OF 5