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3	Profile of a Water and Sewer Main
4	Profile of a Water and Sewer Main

SEDIMENT CONTROL CONSTRUCTION NOTES

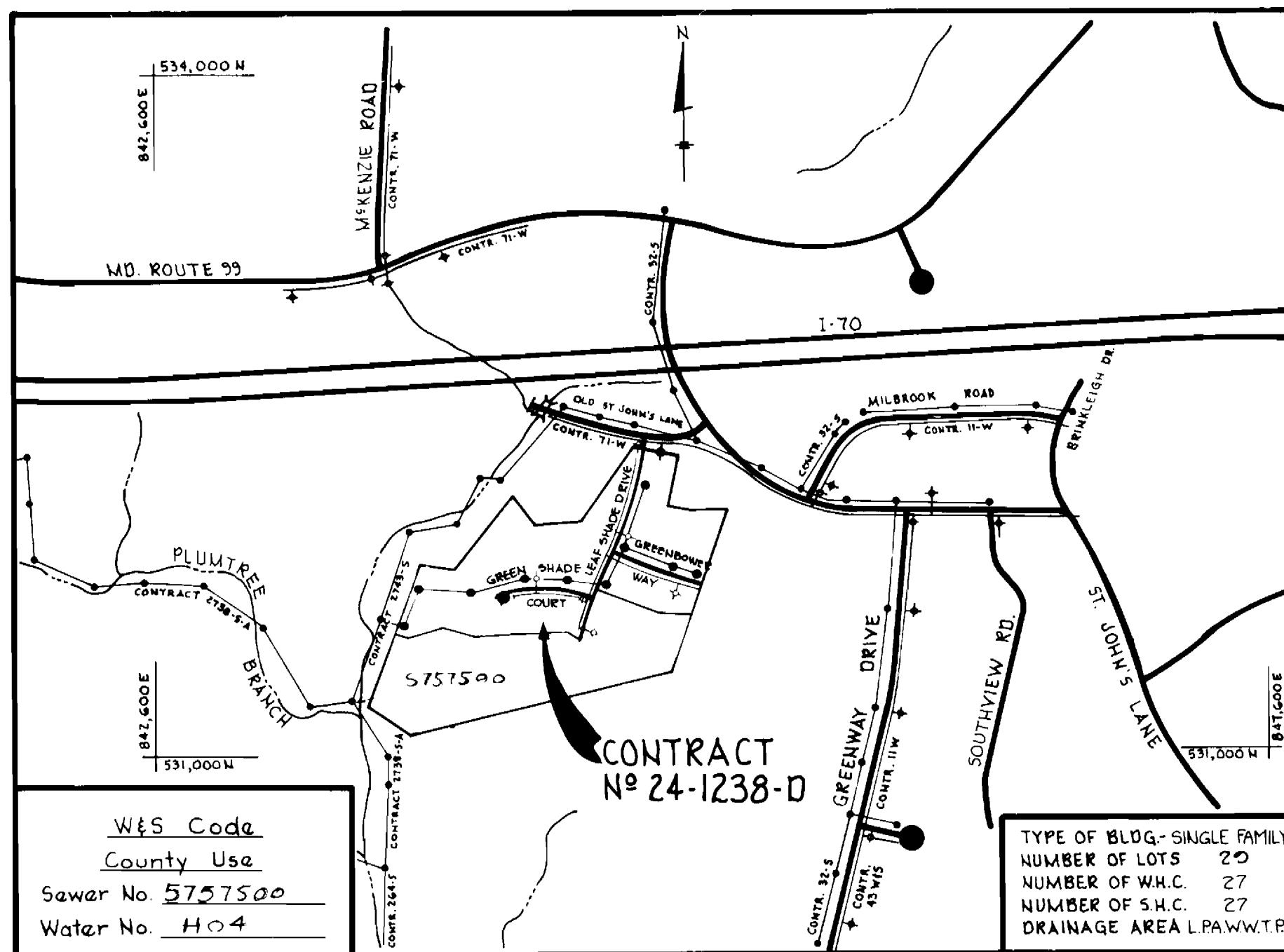
- Excavated topsoil shall be kept separate from the subsoil and shall be replaced in their natural order.
- References called for on the Sediment Control Construction plan and details are made to "The Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas."
- Straw bale 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 dressed 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 the 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 Condition 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 400 lbs. per acre harrow or disc lime and 0-20-20 fertilizer into the soil to a minimum depth of 3" lawn or maintenance area will be dragged and leveled with a yolk rake. At the time of seeding apply 400 lbs. of 38-0-0 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, Pennlawn or Jamastown @ 20 lbs. per acre.
 - Seed all slopes with a mixture of certified Kentucky 31 tall fescue @ 50 lbs. per acre and inoculated Koran Lespedeza @ 15 lbs. per acre.
 - Mulch with unweathered small grain straw at the rate of 1 1/2 to 2 tons per acre and anchor with a cutback asphalt or emulsified asphalt at the rate of 5 gal. per 1000 sq. ft.
 - Sodded swales shall be Kentucky 31 tall fescue.

SEQUENCE OF CONSTRUCTION

- Install sediment and erosion control devices according to plan.
- Clear and grub right-of-way for the construction of Sewer Plan.
- Install silt fence daily along the low side of the limits of construction. This silt fence shall be removed as construction proceeds upstream when the disturbed area has been stabilized and with approval of the Sediment Control Inspector.
- Complete construction of sanitary sewer main.
- Restabilize all disturbed areas in accordance with permanent seeding notes.
- Upon approval of Sediment Control Service inspector, remove all sediment control devices.



VICINITY MAP
SCALE: 1" = 600'

GENERAL NOTES

- Approximate location of existing mains are shown. The contractor shall take all the 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 (P) 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 company 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 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
 - 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
- Trees are to be protected from damage to maximum extent. Trees located within the construction strips 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 drawing. 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 & Sewer.
- All water house connections shall be for an inside meter setting.
- 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 4'-0" inside diameter, unless otherwise noted.
- Manholes shown with 12" and 16" wall are brick manholes only.
- Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail G552 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.5" indicates the cellar cannot 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 pipes shall be laid until lines of excavation have been brought to subgrade.

ST. JOHN'S GREEN SECTION I

CONTRACT NO. 24-1238-D

ELECTION DISTRICT NO. 2

HOWARD COUNTY, MARYLAND

ITEM	QUANTITIES		MATERIAL/SUPPLIER
	ESTIMATED	AS BUILT	
8" W	862 LF	1037	D&P W&S Supplies
6" W	976 LF	951	" " " "
6" V5 (excl. FH V5)	2	2	" " " "
8" TS & V	1	1	D&P W&S Supplies
Fire hydrants	4	4	" " " "
8" S	1984 LF	1929	" " " "
Manholes	103 V.F.	10	Atlantic Precast con.
7/8" W.H.C.	911 LF	336	" " " "
1" W.H.C.	160 LF	192	" " " "
8" V	1	1	D&P W&S Supplies
6" D.I.P.	147 LF	677	" " " "
6" PVC			

Sediment Control measures for this contract will be implemented in accordance with article 15 of the specifications.

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

[Signature] Date: 7-25-84
US Soil Conservation Service Date
This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.
[Signature] Date: 7-25-84
Howard Soil Conservation District Date

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature]
CHIEF, BUREAU OF UTILITIES
8-22-84
DATE

[Signature]
CHIEF, LAND DEVELOPMENT DIVISION
DATE

THE RIEMER GROUP, INC.
8659 BALTIMORE NATIONAL PIKE
ELLIOTT CITY, MARYLAND 21043

[Signature]
ARTHUR E. MUEGGE

DESIGNED BY: DAM
DRAWN BY: WCW
CHECKED BY: []
DATE: 6-13-84

REVISION: []
DATE: []

DATE: []

TITLE SHEET

SCALE MAP NO. 17 BLOCK NO.

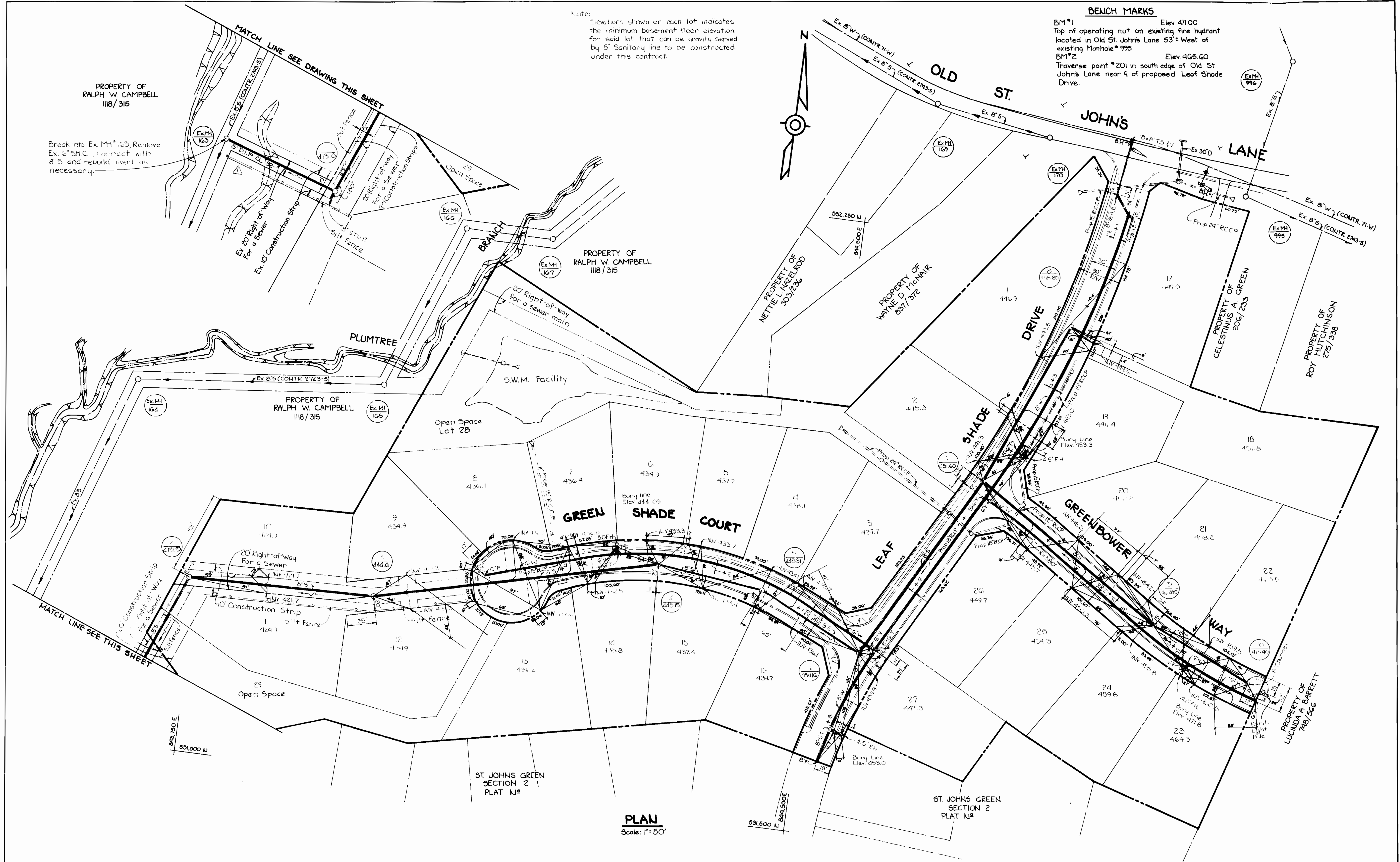
ST JOHN'S GREEN
SECTION ONE
ELECTION DISTRICT NO. 2
CONTRACT NO. 24-1238-D

SCALE AS SHOWN
SHEET 1 OF 4

BENCH MARKS

BM #1 Elev. 471.00
Top of operating nut on existing fire hydrant located in Old St. Johns Lane 53' West of existing Manhole # 995
BM #2 Elev. 465.60
Traverse point # 201 in south edge of Old St. Johns Lane near E of proposed Leaf Shade Drive.

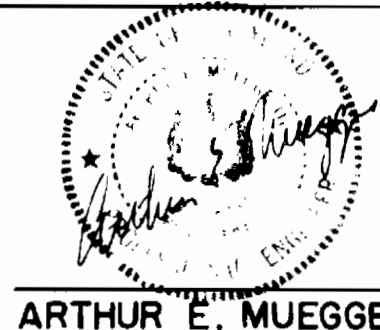
Note:
Elevations shown on each lot indicates the minimum basement floor elevation for said lot that can be gravity served by 8" Sanitary line to be constructed under this contract.



PLAN
Scale: 1" = 50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

THE RIEMER GROUP INC.
8659 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043



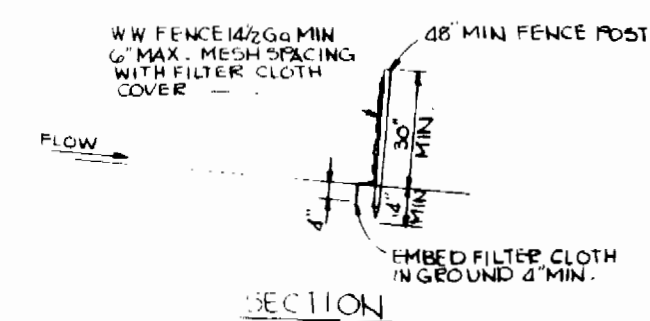
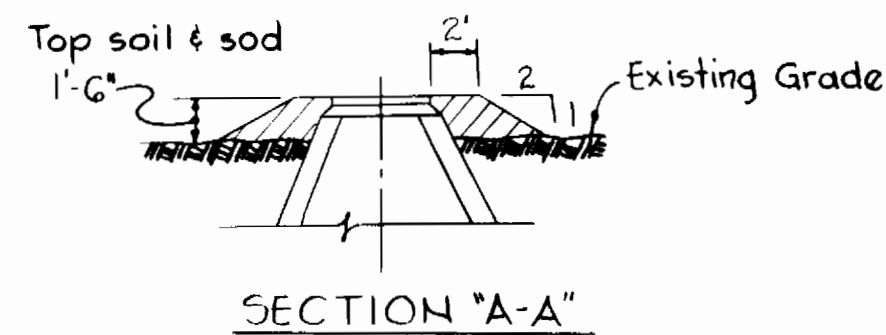
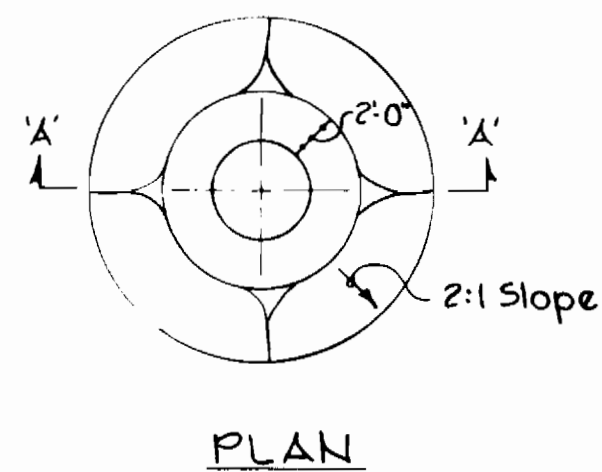
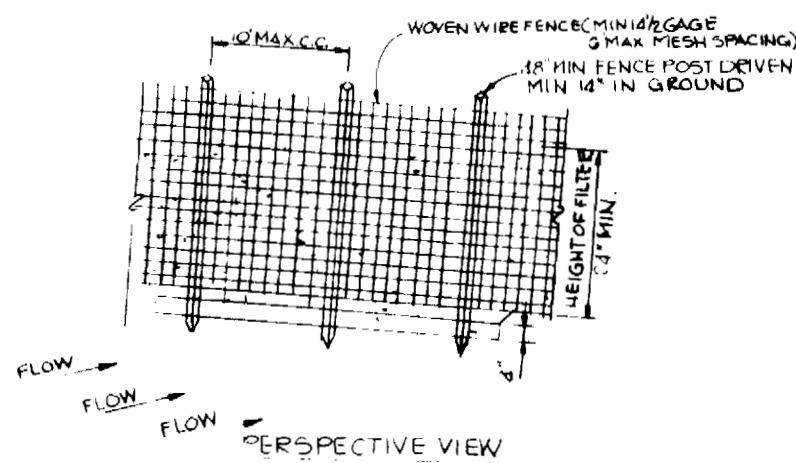
DES:	DAM
DRN:	TJM
CHK:	W.D.S. & J.C.V.
DATE:	6-13-84
BY:	NO.
REVISION:	
DATE:	

**PLAN OF A
WATER AND SEWER MAIN**

ST. JOHN'S GREEN
SECTION ONE
ELECTION DISTRICT NO. 2
CONTRACT NO. 24-1238-D

SCALE AS SHOWN
SHEET 2 OF 4

AS-BUILT April 8, 1985

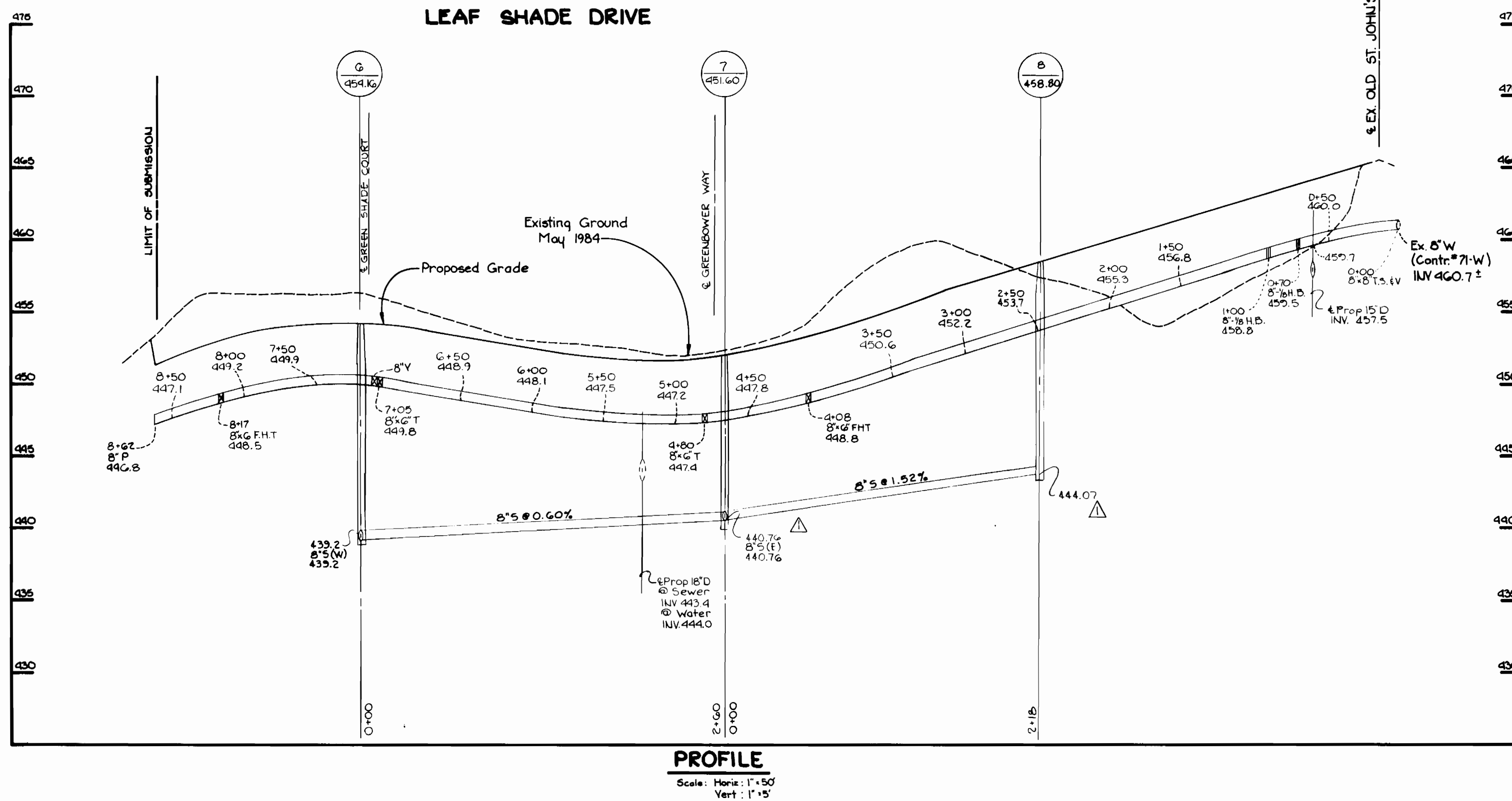
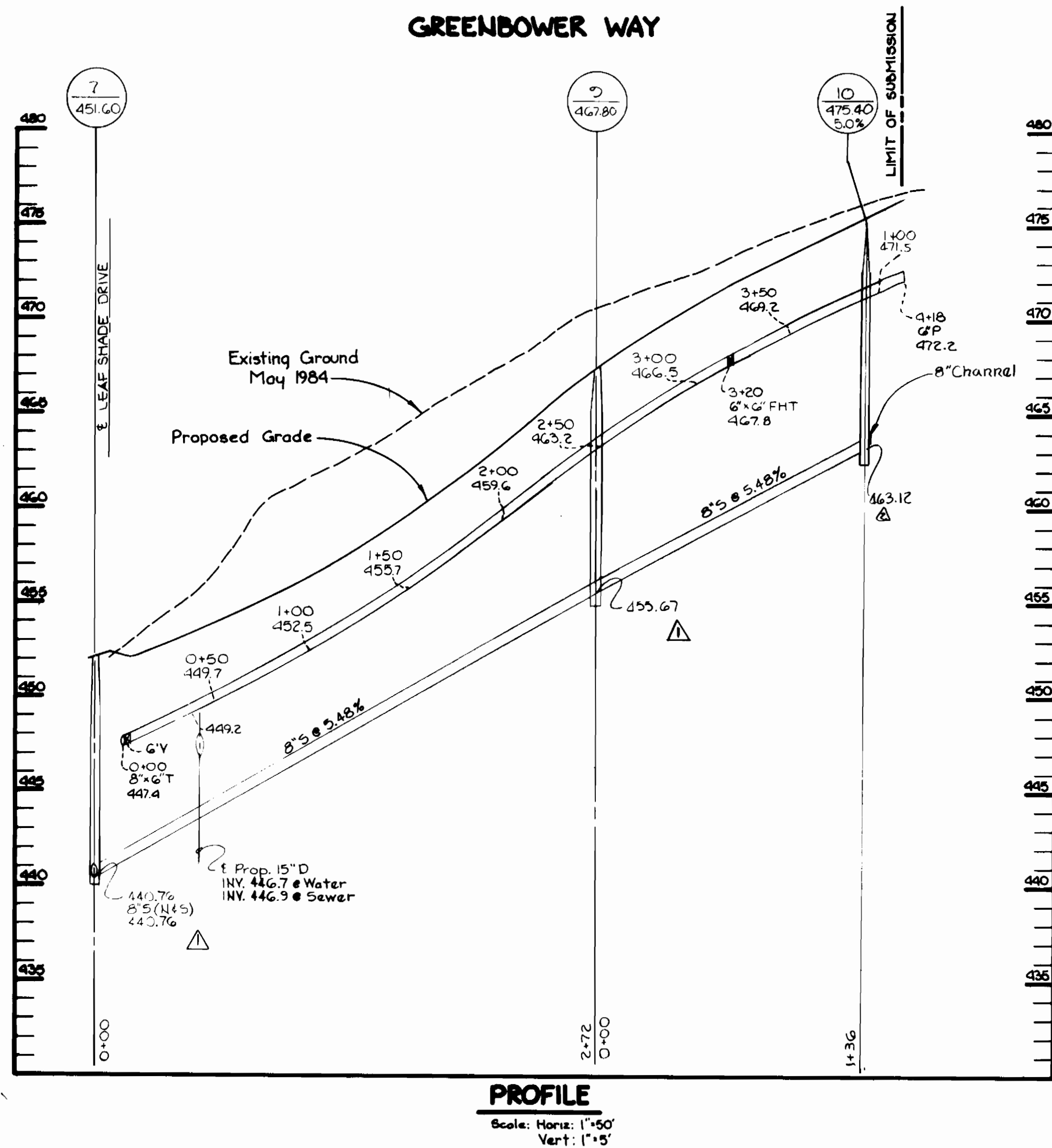


CONSTRUCTION NOTES:
 1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POST WITH WIRE TIES OR STAPLES.
 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH WIRE TIES SPACED EVERY 24" AT TOP AND MID SECTIONS.
 POST: STEEL EITHER T OR U TYPE OR HARDWOOD.
 FENCE: WOVEN WIRE 14/20 MAX. 6" MESH SPACING.
 FILTER CLOTH: FILTER X, MESH 100K, LAUREL EROSION CONTROL CLOTH, BIDIM, POLY FILTER X OR EQUAL.
 STANDARD SYMBOL 5-5-5-5-5

SILT FENCE DETAIL
 NO SCALE

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'-6" shall be set as noted on the Profile and in accordance with this Detail.

FILL AROUND MH 1
 NO SCALE



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Robert M. Deinger, 8-22-84, CHIEF BUREAU OF UTILITIES
 [Signature], DATE

THE RIEMER GROUP INC.
 8659 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21043

Arthur E. Muegge, PROFESSIONAL ENGINEER

DATE: 8/13/84

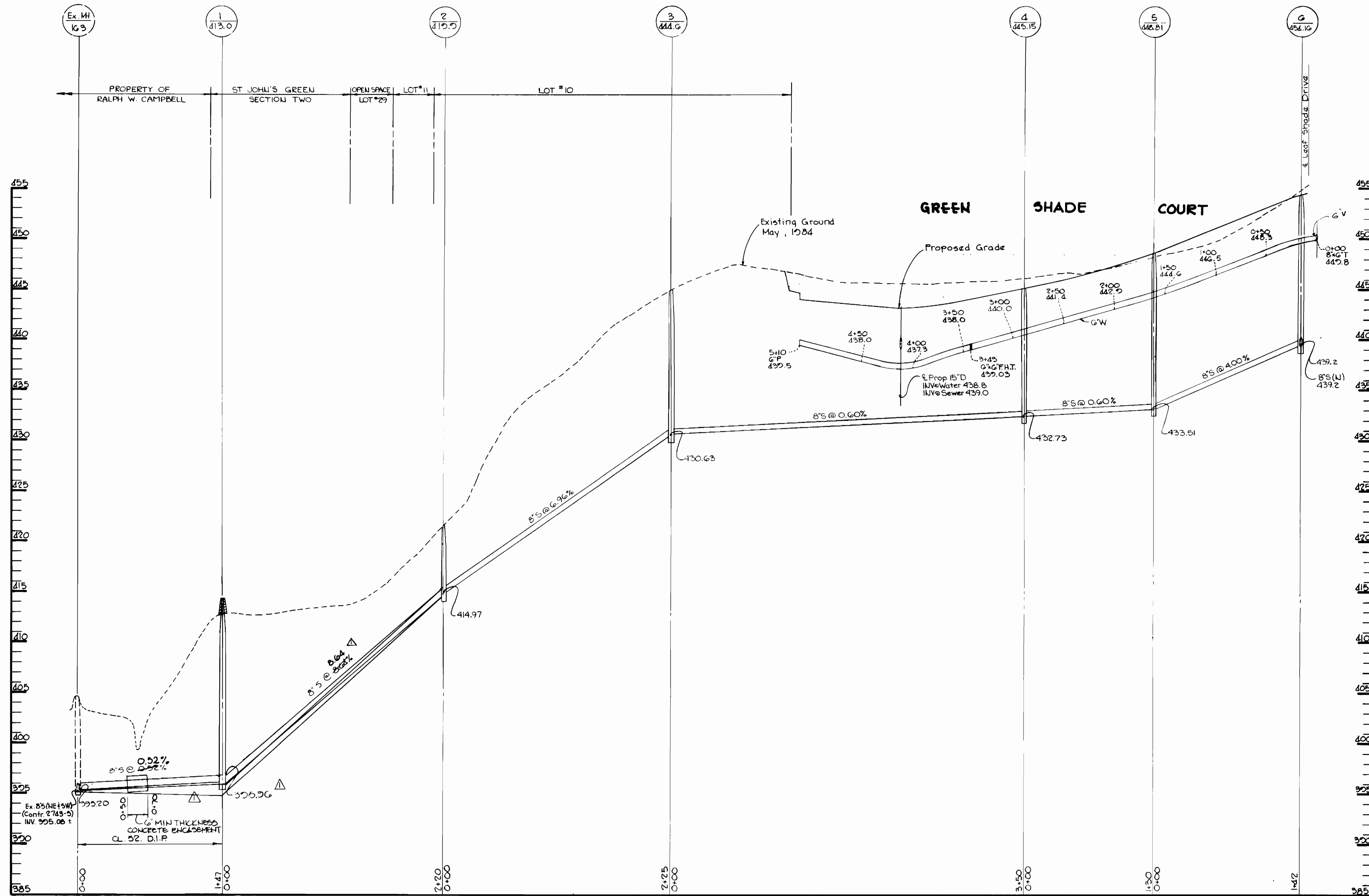
DES: DAM		
DRN: TJM		
CHK:	W.R.S.	CHANGED LOCATION MANHOLE 10 2-4-85
	J.C.J.	CHANGED INVERTS OF MANHOUS 7, 9, & 10 10-23-84
DATE: 8/13/84	BY: NO.	REVISION

PROFILES OF A
 WATER AND SEWER MAIN

DATE: 600' SCALE MAP NO. 17 BLOCK NO.

ST. JOHN'S GREEN
 SECTION ONE
 ELECTION DISTRICT NO. 2
 CONTRACT NO. 24-1238-D

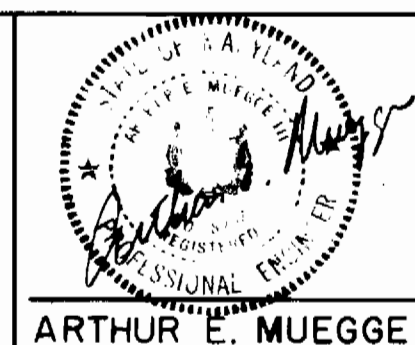
SCALE AS SHOWN
 SHEET 3 OF 4



PROFILE
 Horiz: 1"=50'
 Scale: Vert: 1"=5'

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *W. F. Neuman* 8-22-84
 Chief Bureau of Utilities: *Robert A. Reinger* 8-22-84

THE RIEMER GROUP INC.
 8669 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21043
 Chief, Bureau of Engineering: *W. S. ...*
 Chief, Land Development Division: *...*



DES: DAM			
DRN: TJM			
CHK:			
DATE: 6-13-84	J.C.J.	BY NO.	NO. 107584
	REVISION		CHANGED PIPE MATERIAL FROM EX MANHOLE TO 12\"/>

PROFILE OF A
 WATER AND SEWER MAIN

ST. JOHN'S GREEN
 SECTION ONE
 ELECTION DISTRICT NO. 2
 CONTRACT NO. 24-1238-D

SCALE AS SHOWN
 SHEET 4 OF 4