

INDEX SHEET	
NO.	DESCRIPTION
1	Title Sheet
2	Plan of water and sewer mains.
3	Plan and profiles of water and sewer mains.
4	Profiles of water and sewer mains.

GENERAL NOTES

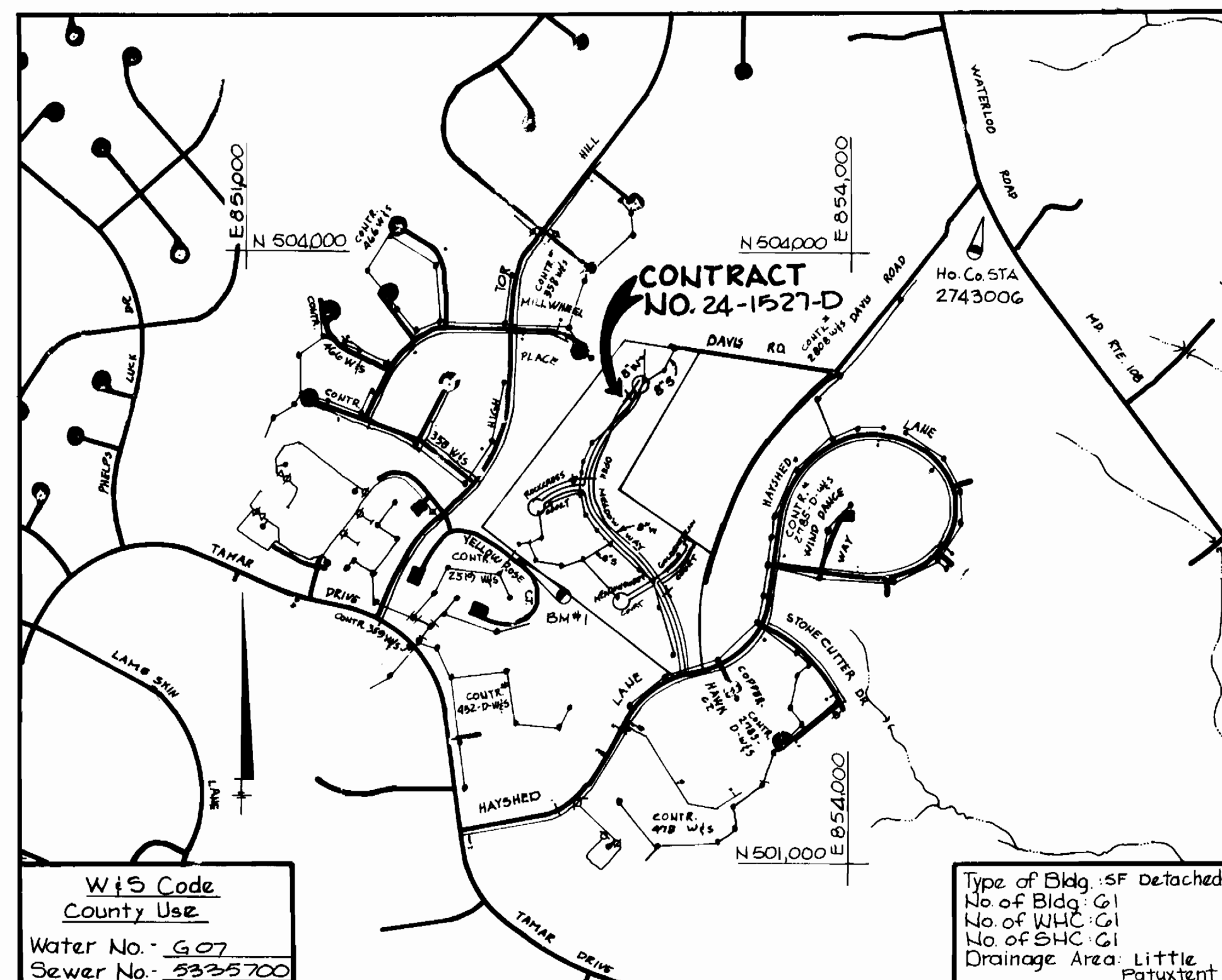
1. Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer at the Contractor's expense.
2. All horizontal controls are based on Maryland State Coordinates.
3. All vertical controls are based on U.S.G.S. data.
4. All pipe elevations shown are invert \ominus elevations.
5. 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 contractors 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.
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. Where test pits have been made on existing utilities, they are noted by the symbol \boxplus 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 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 - 298-2013
 - Miss Utility - 1-800-257-7777
 - Colonial Pipeline Co. - 725-1390
 - Bureau of Utilities, Howard County Department of Public Works - 292-2366
9. 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.
10. 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.
11. 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.
12. All water mains to be D.I.P. unless otherwise noted.
13. Top of all water mains to have a minimum of 3 1/2' cover unless otherwise noted.
14. Valves adjacent to trees shall be strapped to trees.
15. Block all fittings with concrete.
16. Bury line elevations on fire hydrants shall be set to the elevations shown on the drawings. All fire hydrants to be strapped and buttressed with concrete in accordance with standard details. Soil around the fire hydrants to be compacted in accordance with Section 1003 (1008) of the General Requirements for Water & Sewer.
17. All water house connections shall be for an inside meter setting.
18. The Contractor shall not operate any water main valves on the existing system.
19. For all copper water house connections utilize flared type fittings only.
20. All sewer mains shall be C.S.P.X., V.C.P.X., PVC or A.C.P. Class 2400 unless otherwise noted.
21. The contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole wall.
22. All manholes shall be 4'-0" inside diameter, unless otherwise noted.
23. Manholes shown with 12" or 16" walls are brick manholes only.
24. 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'-0" above finished grade.
25. House(s) with the symbol "C.N.S." indicates the cellar can not be served.
26. All water house connections shall have a minimum vertical clearance of 12' above all sanitary sewer crossings.
27. All sanitary sewer house connections shall have a minimum vertical clearance of 12' below all water main crossings.
28. Profile stations shall be adjusted as necessary to conform with plan dimensions.
29. No pipe shall be laid until lines of excavation have been brought to subgrade.

LONG MEADOW SECTION - 1 CONTRACT NO. 24-1527-D 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

BENCH MARKS

B.M. #1 ELEV. 411.04
 □ - CUT IN SOUTHEAST CORNER OF WINGWALL

HO. CO. STA. 274300G ELEV. 515.094
 CONCRETE MONUMENT 0.1' BELOW SURFACE AT TOP OF BANK WEST SIDE OF RT. 108, 100' ± SOUTH OF DAVIS ROAD.



W&S Code
County Use
Water No. - G.07
Sewer No. - 5325700

Type of Bldg. - SF Detached
No. of Bldg. - 1
No. of WHC - 1
No. of SHC - 1
Drainage Area - Little Patuxent

QUANTITIES			
ITEM	ESTIMATED	AS BUILT	MATERIAL/SUPPLIER
8" Water	522 LF	2163 LF	Coniffin Pipe Co.
6" Water	301 LF	676 LF	Coniffin Pipe Co.
6" Fire Hydrants	3 Ea.	3 Ea.	Municipal Contract Sales Zone
8" Sewer	2878 LF	2875.18 LF	Municipal Contract Sales Zone
8" Sewer (D.I.P.)	381 LF	374.83 LF	Gaydon Pipe Co.
6" Sewer	1762 LF	1736.0 LF	Municipal Contract Sales Zone
3/4" Copper	620 LF	314 LF	Municipal Contract Sales Zone
1" Copper	686 LF	591 LF	Municipal Contract Sales Zone
1/2" Drain for Water Main W-412	1 Ea.	1 Ea.	Municipal Contract Sales Zone
8" Drop Connection Type B	3 Ea.	3 Ea.	Municipal Contract Sales Zone
8" VALVES	5	5 Ea.	Municipal Contract Sales Zone
6" VALVES (OTHER THAN F.H. VALVES)	?	2 Ea.	Municipal Contract Sales Zone
Manhole	304 VF	297 VF	Atlantic Concrete

Sediment control measures for this contract will be implemented in accordance with section 219 of the specification and as shown on F-86-203

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

[Signature]
US Soil Conservation Service Date

This plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

[Signature] 9/19/86
Howard Soil Conservation District Date

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 9/19/86
DIRECTOR OF PUBLIC WORKS DATE

[Signature] 9/29/86
CHIEF, BUREAU OF ENGINEERING DATE

[Signature]
CHIEF, LAND DEVELOPMENT DIVISION

THE RIEMER GROUP, INC.
3105 NORTH RIDGE ROAD
ELLCOTT CITY, MARYLAND



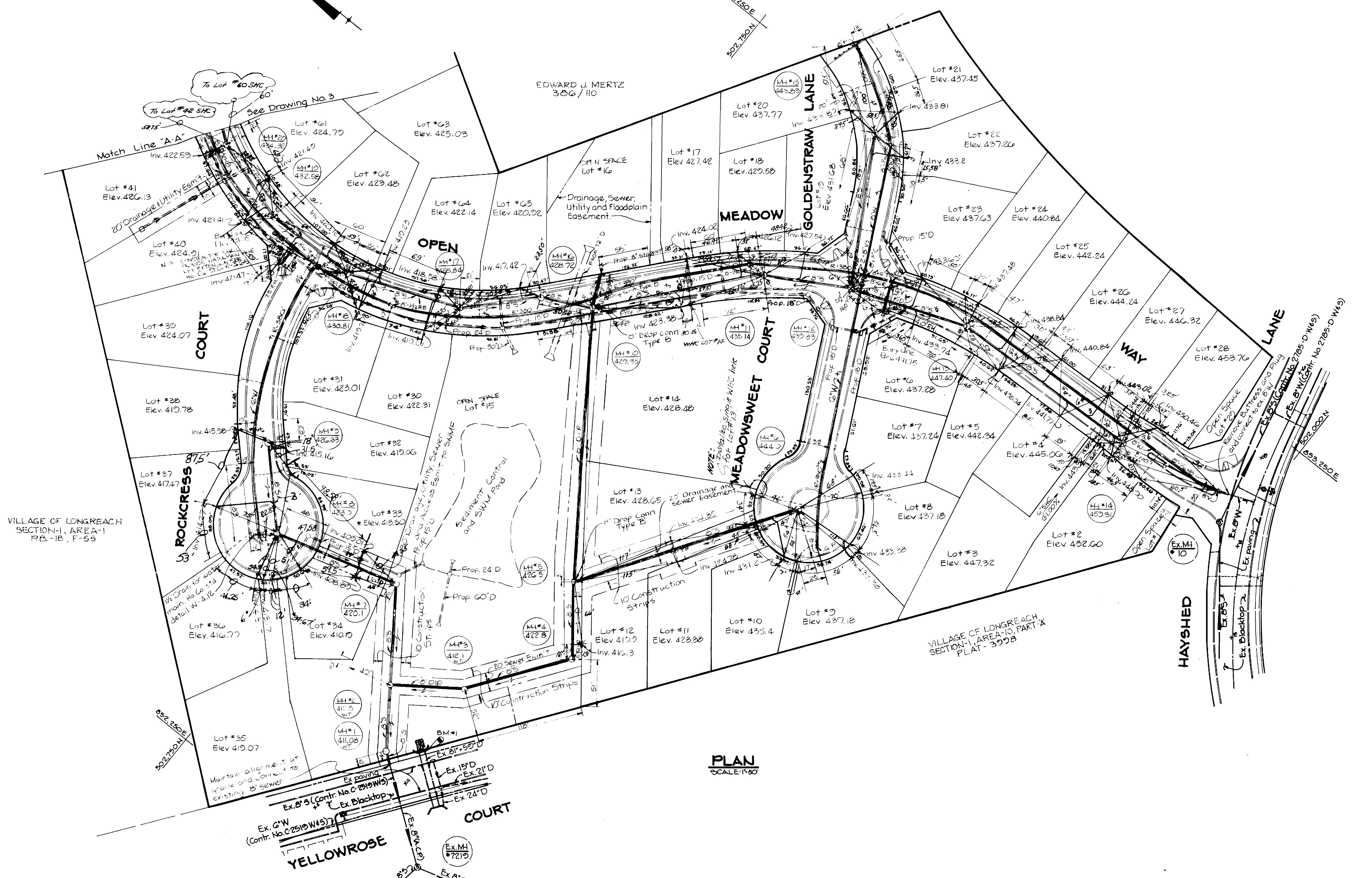
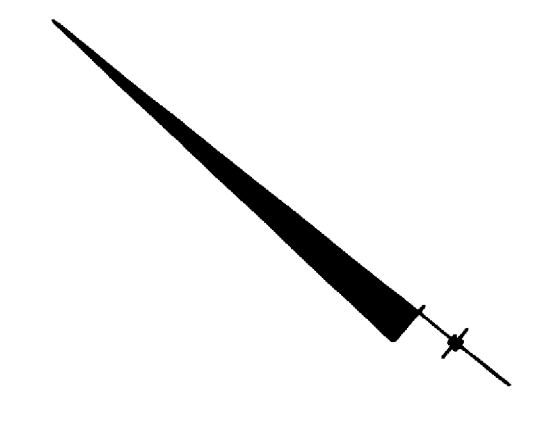
DES: L.J.D.			
DRN: F.D.M.			
CHK: L.J.D.			
DATE: 8-1-86	BY: NO.	REVISION	DATE

TITLE SHEET

600' SCALE MAP NO. 36 BLOCK NO.

LONG MEADOW
SECTION ONE
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. -24-1527-D

SCALE AS SHOWN
SHEET 1 OF 4



PLAN
SCALE 1"=50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

THE RIEMER GROUP, INC.
3105 NORTH RIDGE ROAD
ELLCOTT CITY, MARYLAND

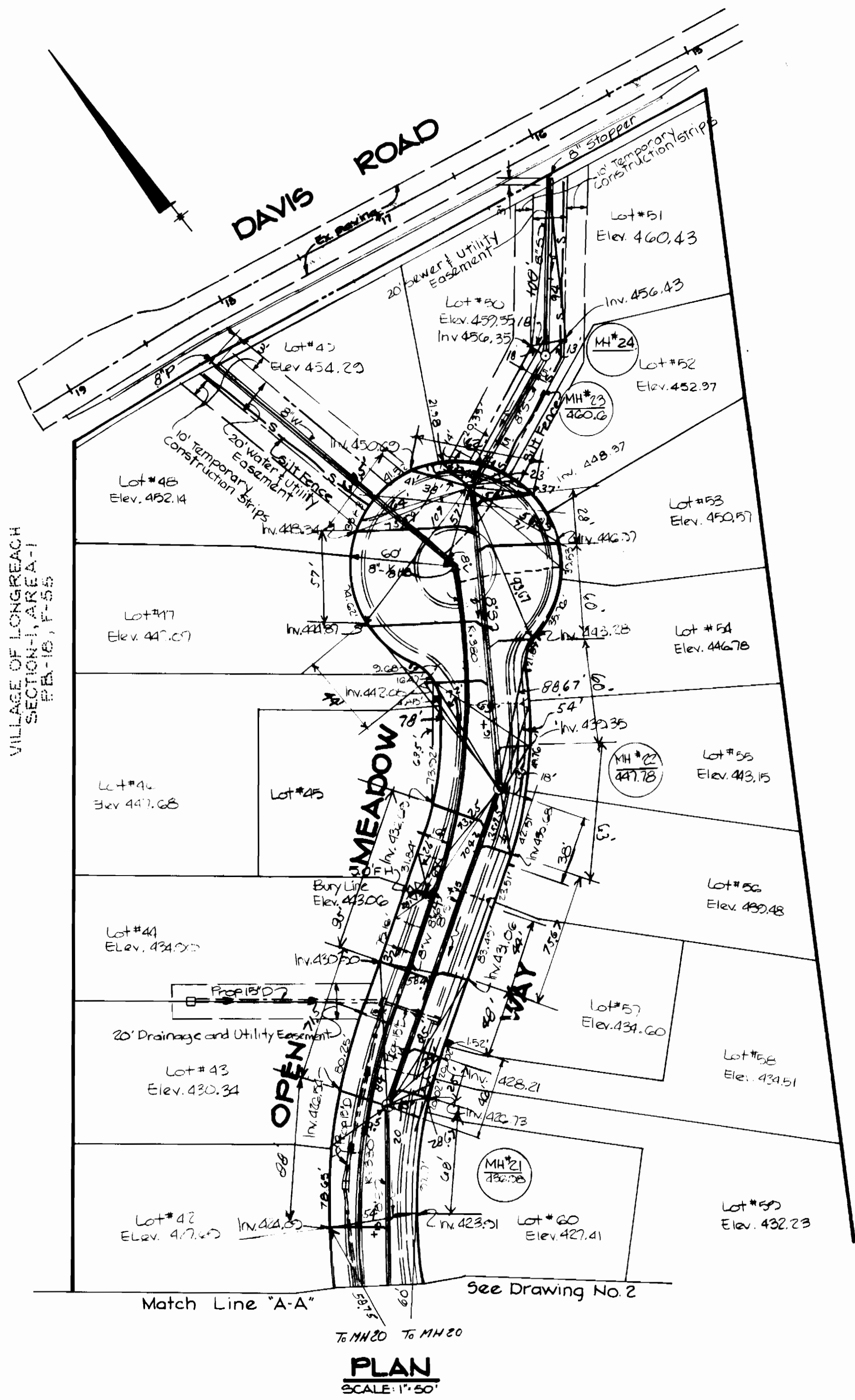


DES: L.J.D.				
DRN: F.D.M.				
CHK: L.J.D.				
DATE: 8-1-86	BY: N.C.	REVISION:	DATE:	60' SCALE MAP NO. 36 BLOCK NO.

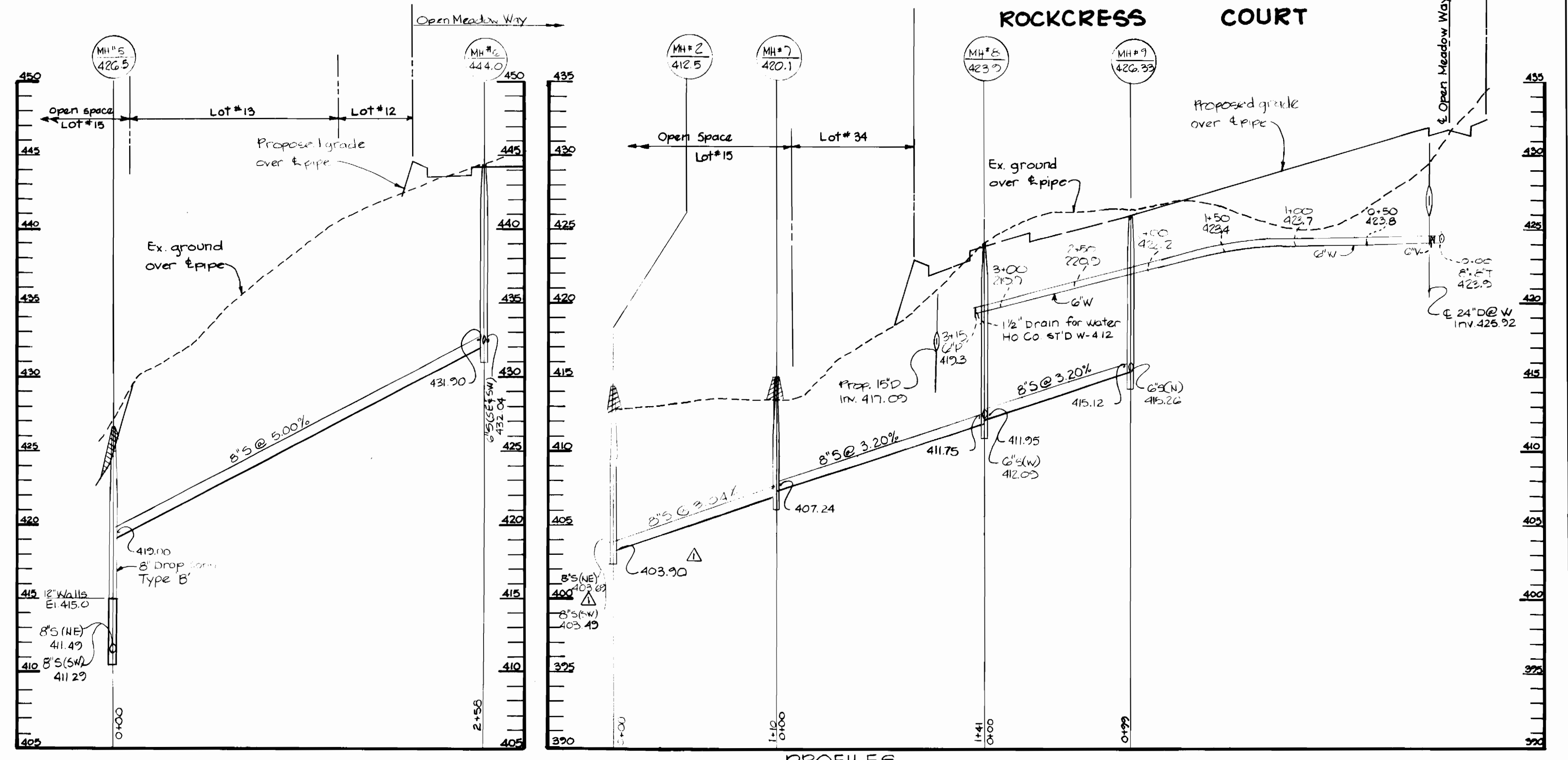
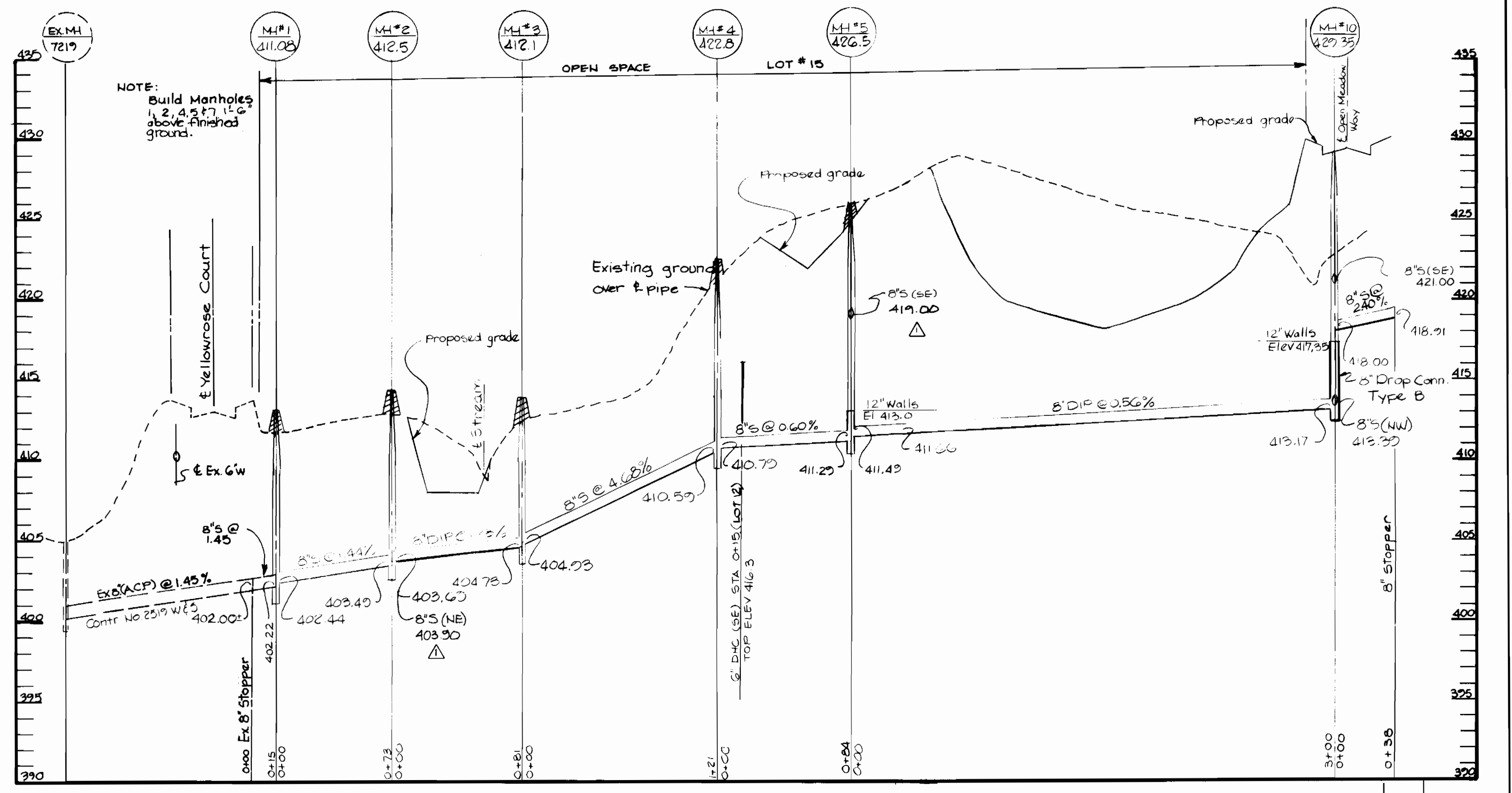
PLAN OF
WATER AND SEWER MAINS

LONG MEADOW
SECTION ONE
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. - 24-1527-D

SCALE
AS
SHOWN
SHEET
2 OF 4



EDWARD J. MERTZ
386/110



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Berman
DIRECTOR OF PUBLIC WORKS
DATE: 9-19-86
CHIEF, BUREAU OF UTILITIES

William B. Ray
CHIEF, BUREAU OF ENGINEERING
DATE: 9-19-86
CHIEF, LAND DEVELOPMENT DIVISION

THE RIEMER GROUP, INC.
3105 NORTH RIDGE ROAD
ELLCOTT CITY, MARYLAND



DES: L.J.D.	
DRN: F.D.M.	
CHK: L.J.D.	
DATE: 8-1-86	
BY: NO.	
REVISION	REVISED INVERTS ILLI. M.H.'S. No. 245

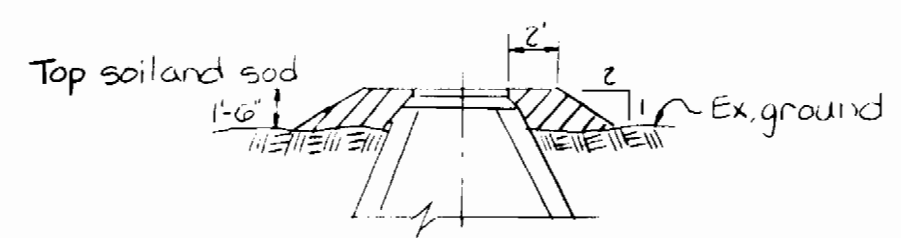
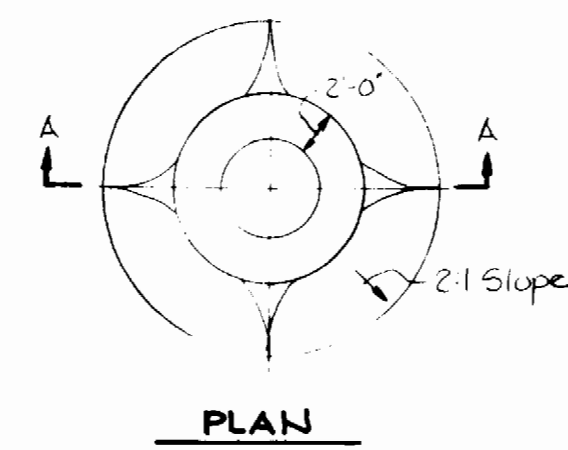
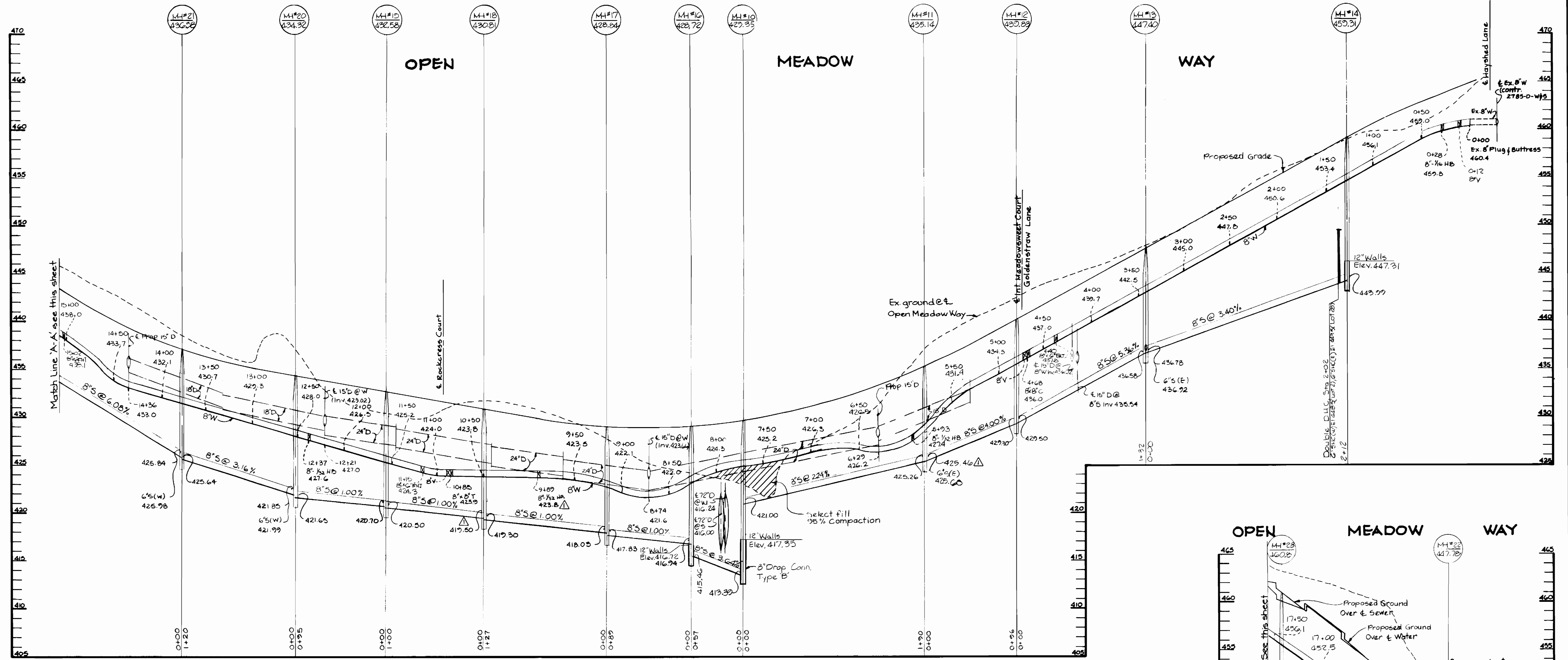
PLAN AND PROFILE
OF WATER AND SEWER MAINS

DATE: 11-26-86
600' SCALE MAP NO. 36 BLOCK NO.

LONG MEADOW
SECTION ONE
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. - 24-1527-D

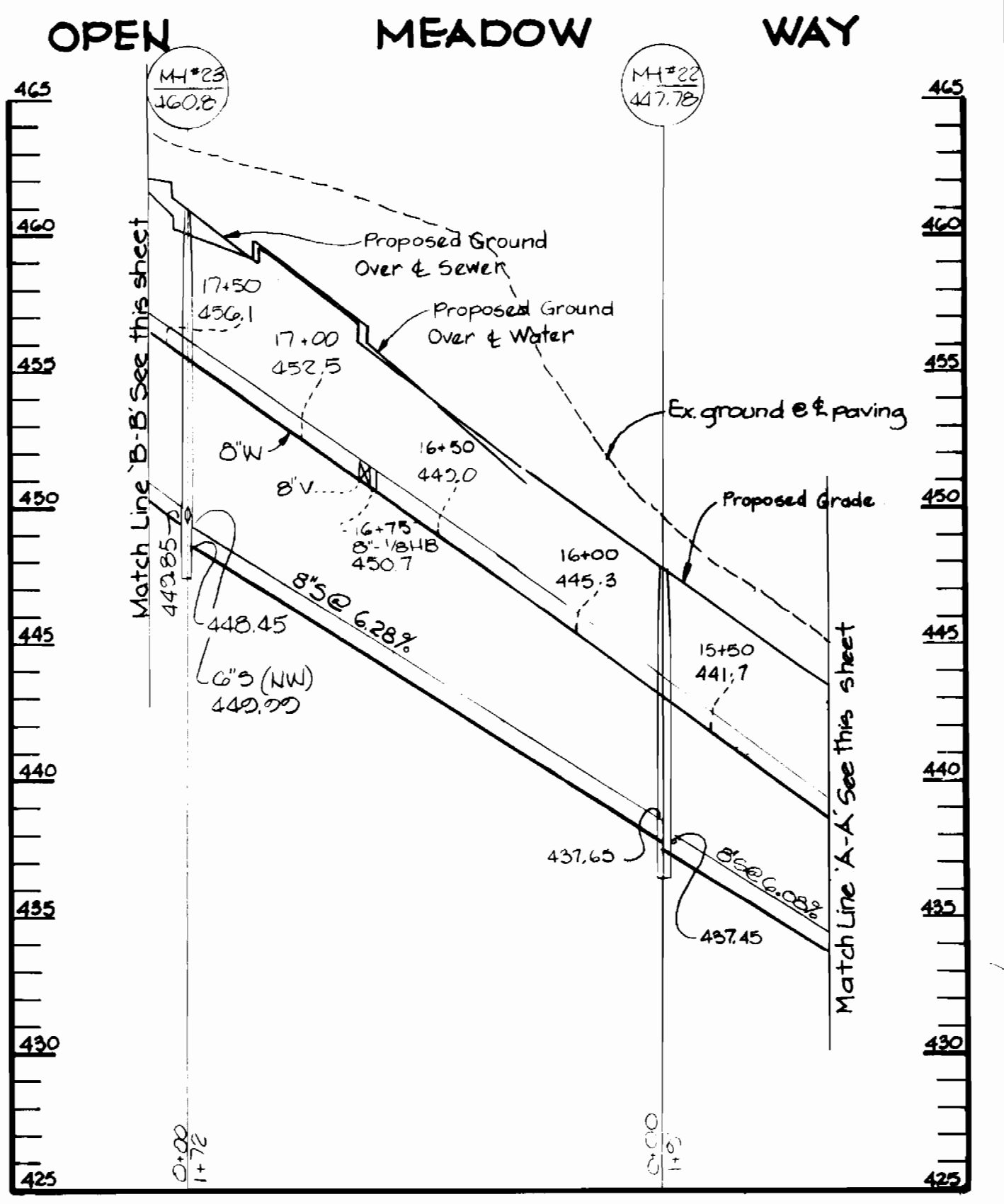
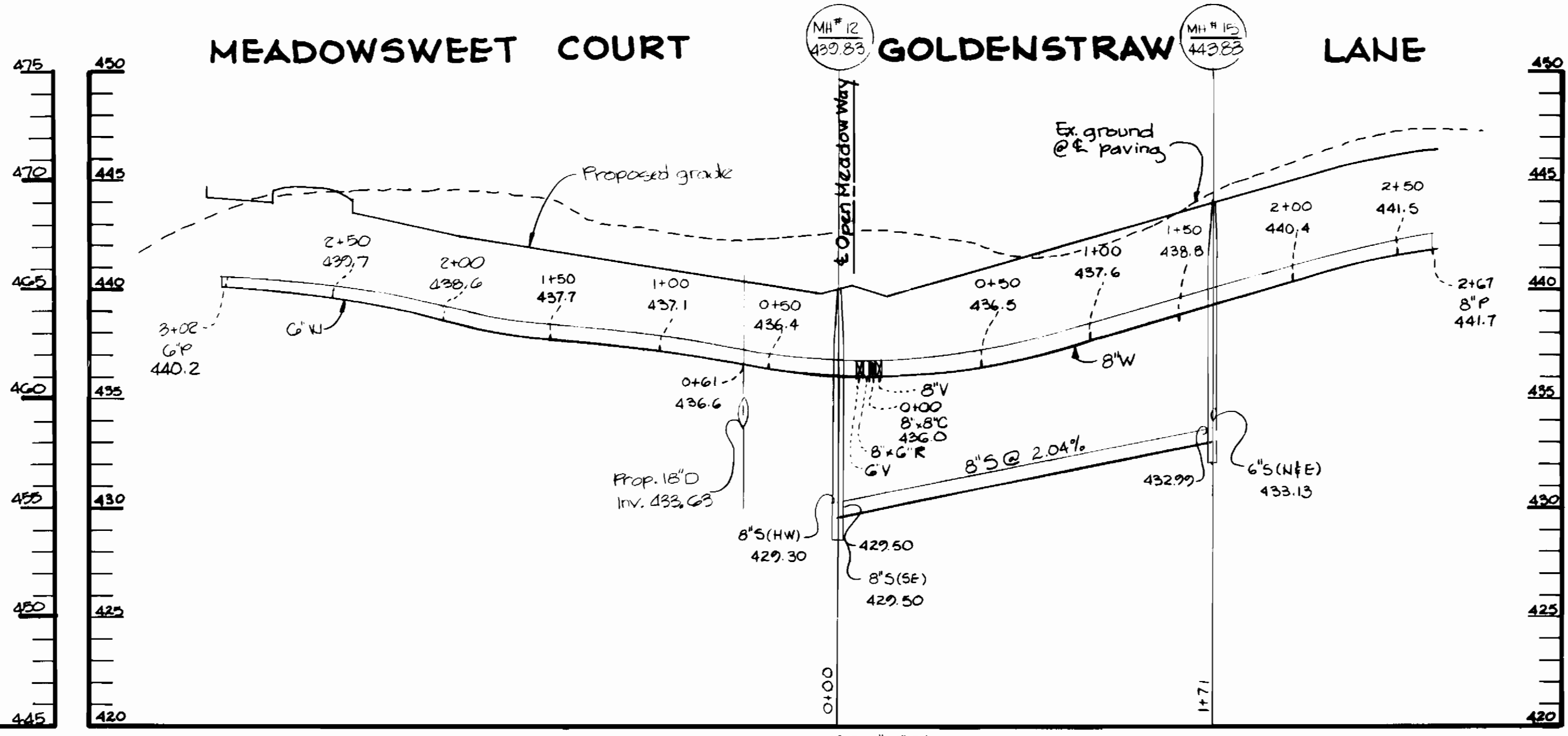
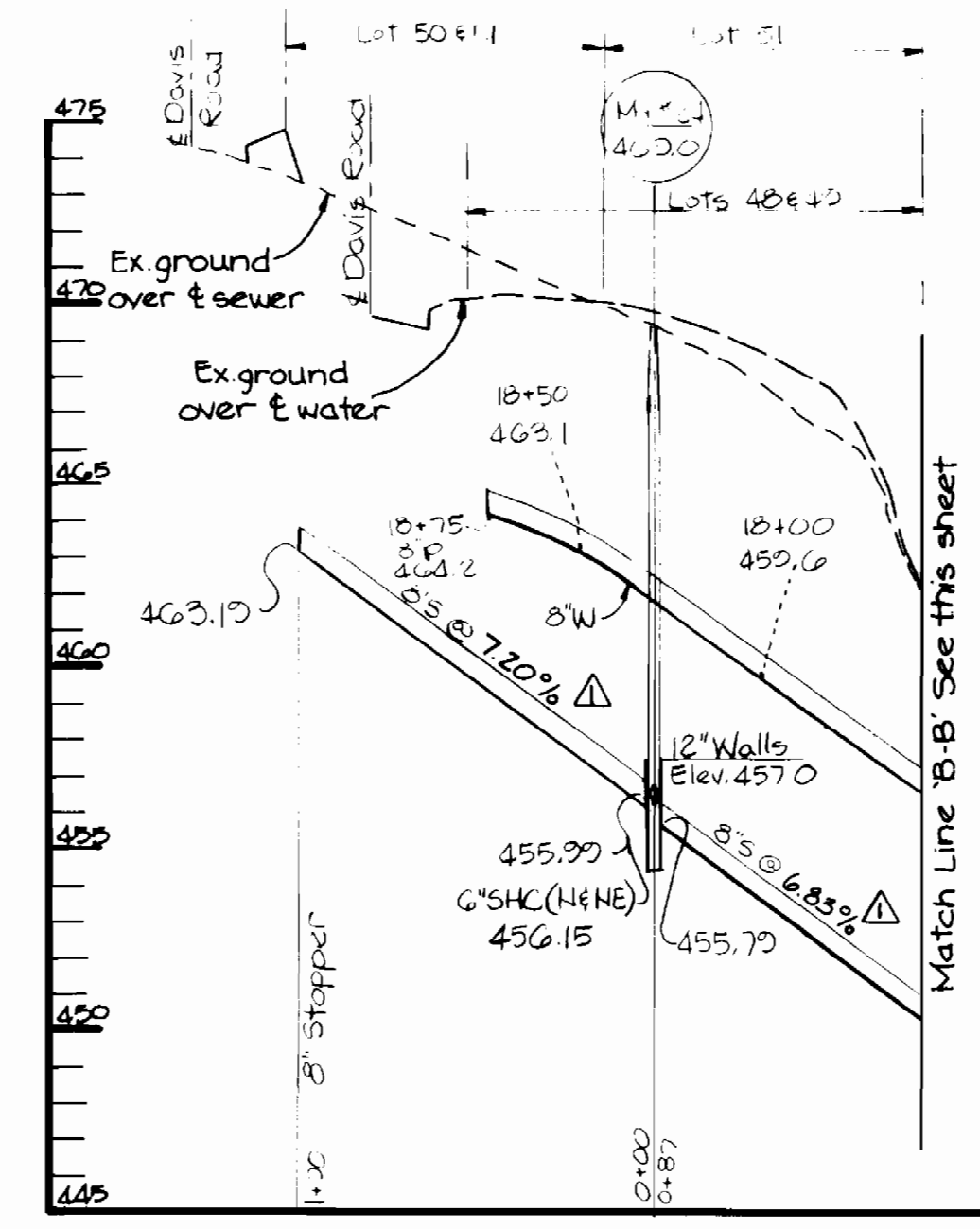
SCALE
AS
SHOWN

SHEET
3 OF 4



- 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 cover to be set higher than grade shall be set in accordance with this detail.
 - 3) Manhole frame and cover to be set higher than 1'-6\"/>

FILL AROUND MH's 1,2,&3
NO SCALE



PROFILES SCALE: HOR. 1"=50' VERT. 1"=5'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *Robert D. ...* DATE: 9-19-86
Chief, Bureau of Engineering: _____ DATE: _____
Chief, Bureau of Utilities: _____
Chief, Land Development Division: _____

THE RIEMER GROUP, INC.
3105 NORTH RIDGE ROAD
ELLCOTT CITY, MARYLAND



DES: L.J.D.					
DRN: K.J.B.					
CHK: L.J.D.					
DATE: 8-1-86	BY:	NO.:	REVISION:	DATE:	

PROFILES OF
WATER AND SEWER MAINS

600' SCALE MAP NO. 36 BLOCK NO. _____

LONG MEADOW
SECTION ONE
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 24-1527-D

SCALE AS SHOWN
SHEET 4 OF 4