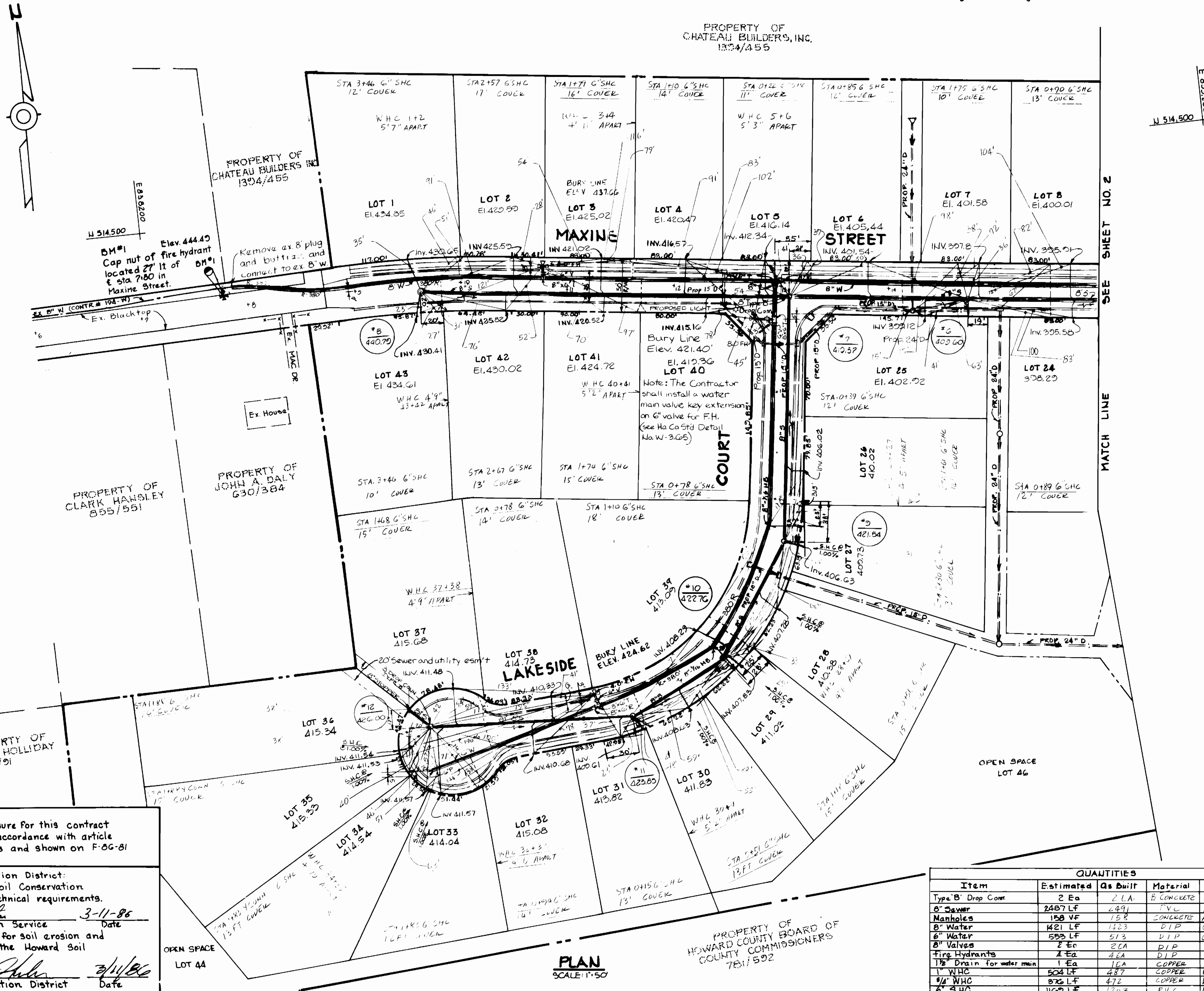
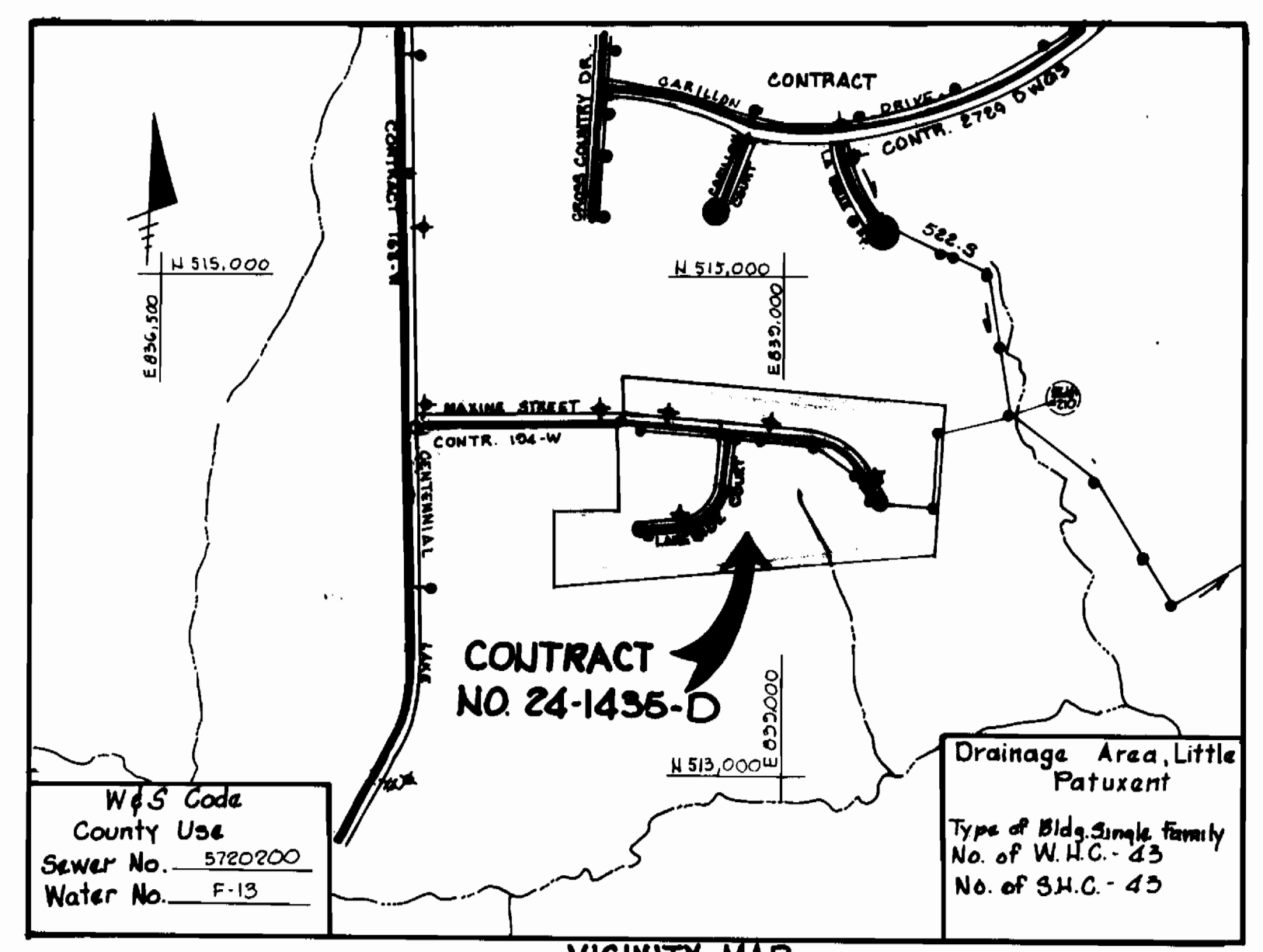


Note:  
Elevations shown on each lot indicates the minimum basement floor elevation for said lot that can be gravity served by 8" sanitary line to be constructed under this contract.

**Bench Marks**  
 BM #1  
 Cap nut of fire hydrant located 27' left of Sta. 7+80 Maxine Street  
 Elev. 444.49  
 BM #2  
 R.R. spike in base of 60' poplar 17' right of Sta. 1+42 between PI 908 & 909-A  
 Elev. 586.96

**General Notes Continued**  
 26. House(s) with the symbol "C.N.S." indicates the cellar can not be served.  
 27. All water house connections shall have a minimum vertical clearance of 18" above all sanitary sewer crossings.  
 28. All sanitary sewer house connections shall have a minimum vertical clearance of 12" below all water main crossings.  
 29. Profile stations shall be adjusted as necessary to conform to plan dimensions.  
 30. No pipe shall be laid until lines of excavation have been brought to subgrade.



- 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 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 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.
  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  $\square$  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.
  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 - 254-5421  
 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 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.
  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' 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 elevation 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 & 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., P.V.C. 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" and 16" walls are brick manholes only.
  24. Manholes designated WJ in plan and profile shall have watertight frame and covers, standard Detail G.5.52 Volume IV. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade.

Sediment Control measure for this contract will be implemented in accordance with article 15 of the specifications and shown on F-06-81

Howard Soil Conservation District:  
 Reviewed for Howard Soil Conservation District and meets technical requirements.  
 Date: 3-11-85  
 Date: 3/1/86

Howard Soil Conservation District  
 Date: 3/1/86

QUANTITIES				
Item	Estimated	Qs Buil	Material	Supplier
Type 'B' Drop Conn	2 Ea	2 EA	B CONCRETE	GENSTAR
6" Sewer	2487 LF	2,491	P.V.C.	BEAIRD
Manholes	158 VF	158	CONCRETE	ATLANTIC TRENK
6" Water	421 LF	423	D.I.P.	GRIFIN PIPE
6" Water	558 LF	563	D.I.P.	GRIFIN PIPE
6" Valves	2 Ea	2 EA	D.I.P.	BEAIRD
Fire Hydrants	2 Ea	2 EA	D.I.P.	BEAIRD
1 1/2" Drain for water main	1 Ea	1 EA	COPPER	BEAIRD
1" W.H.C.	504 LF	487	COPPER	BEAIRD
1/2" W.H.C.	876 LF	472	COPPER	BEAIRD
6" S.H.C.	1169 LF	1203	P.V.C.	BEAIRD

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

Director of Public Works: 3-10-86  
 Chief, Bureau of Engineering: 3-20-86  
 Chief, Bureau of Utilities: 3-19-86  
 Chief, Land Development Division: 3-20-86

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

Professional Engineer  
 Arthur E. Muegge #8707

DES: D.A.M.  
 DRN: JEM  
 CHK: L.J.D.  
 DATE: 11-8-85

REVISIONS:  
 1. REVISED PROPOSED SEWER AND PROFILE 5/15/86

PLAN OF WATER AND SEWER MAINS

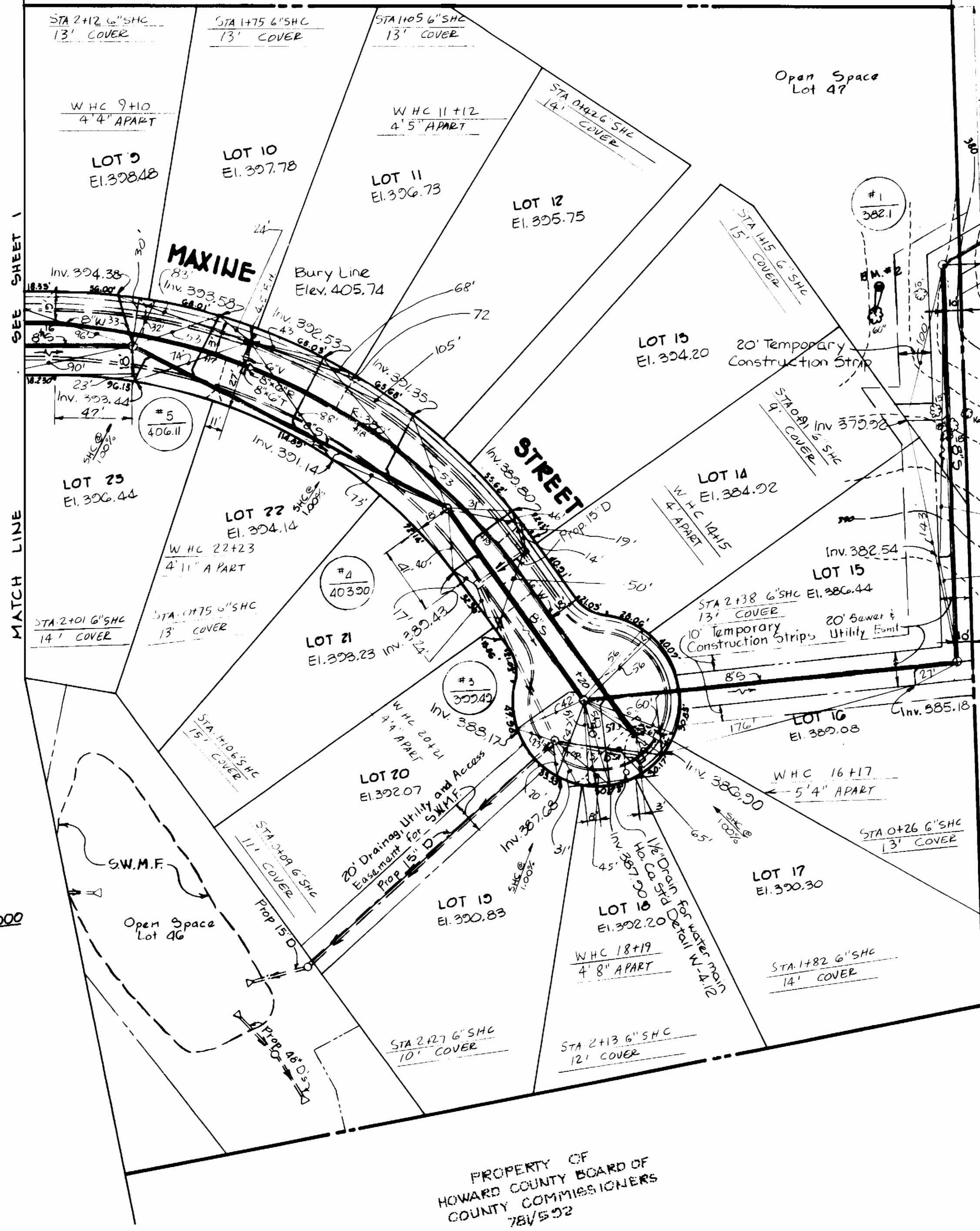
600' SCALE MAP NO. 30 BLOCK NO.

CENTENNIAL LAKE SECTION ONE  
 ELECTION DISTRICT NO. 2  
 CONTRACT NO. 24-1435-D

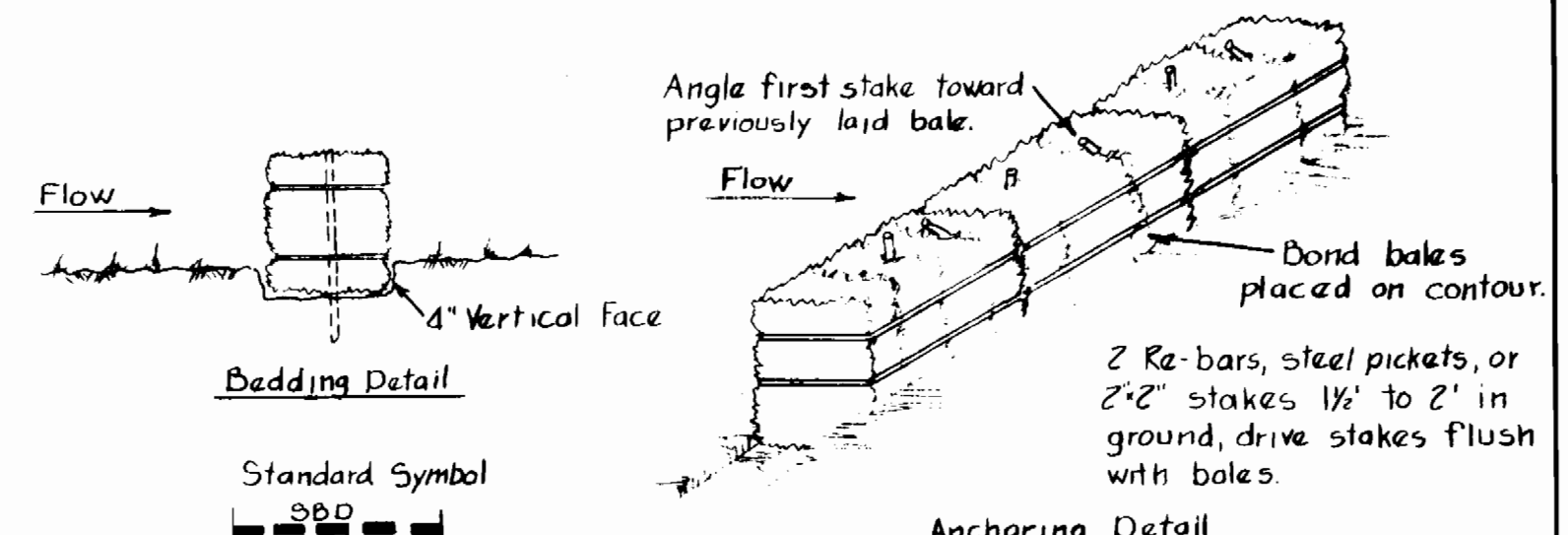
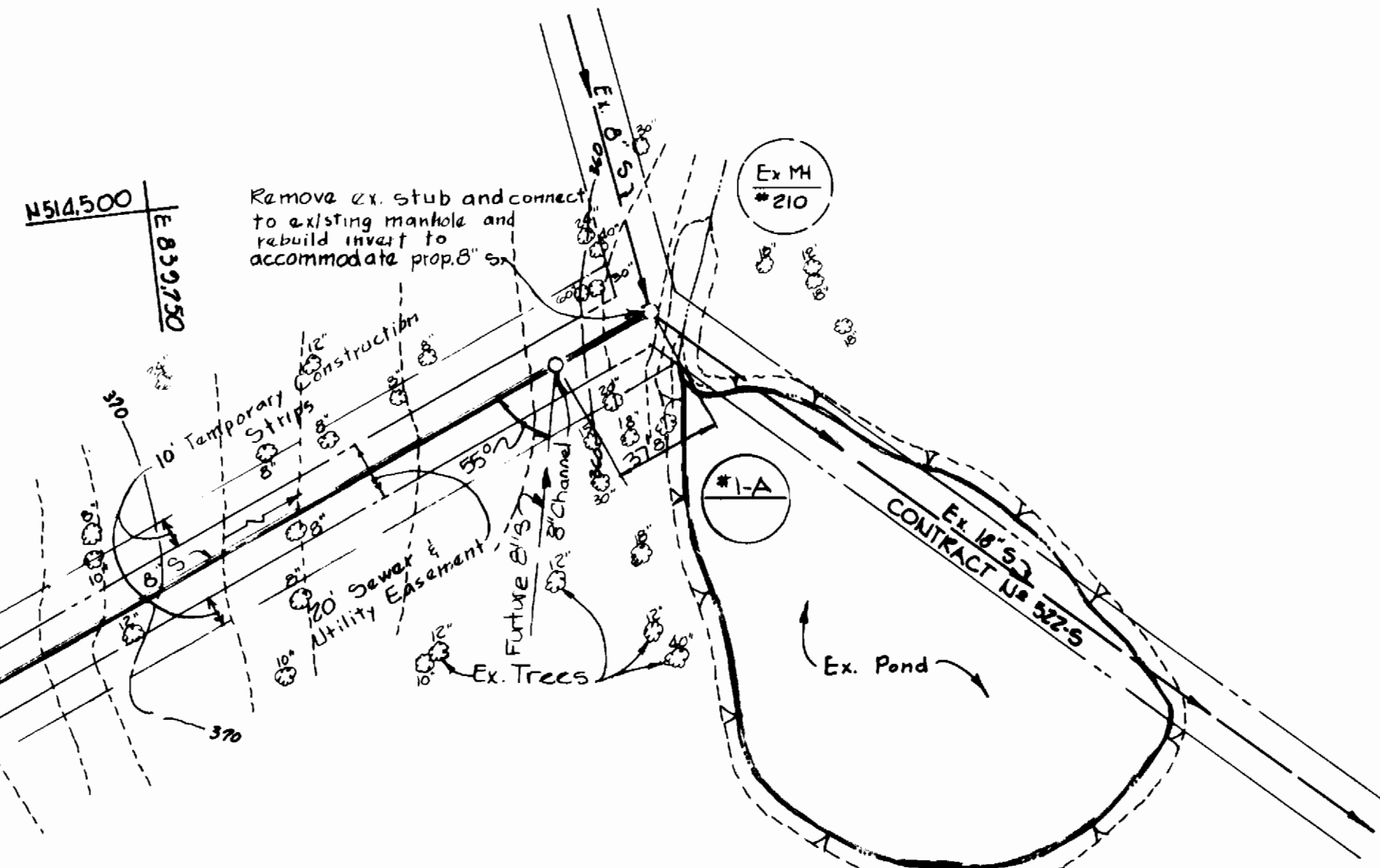
SCALE AS SHOWN  
 SHEET 1 OF 3



PROPERTY OF CHATEAU BUILDERS INC 1304/455

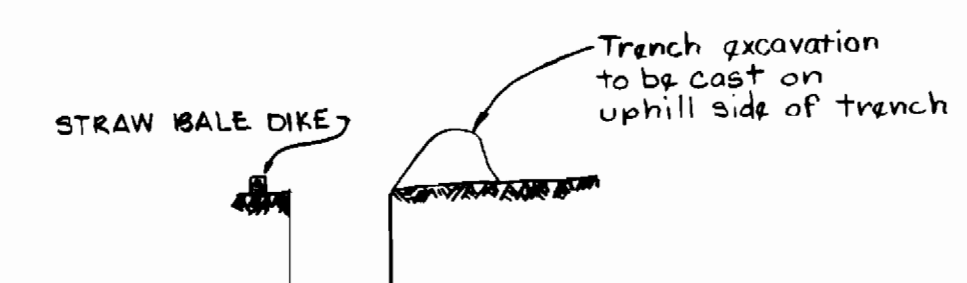


PLAN SCALE: 1"=50'



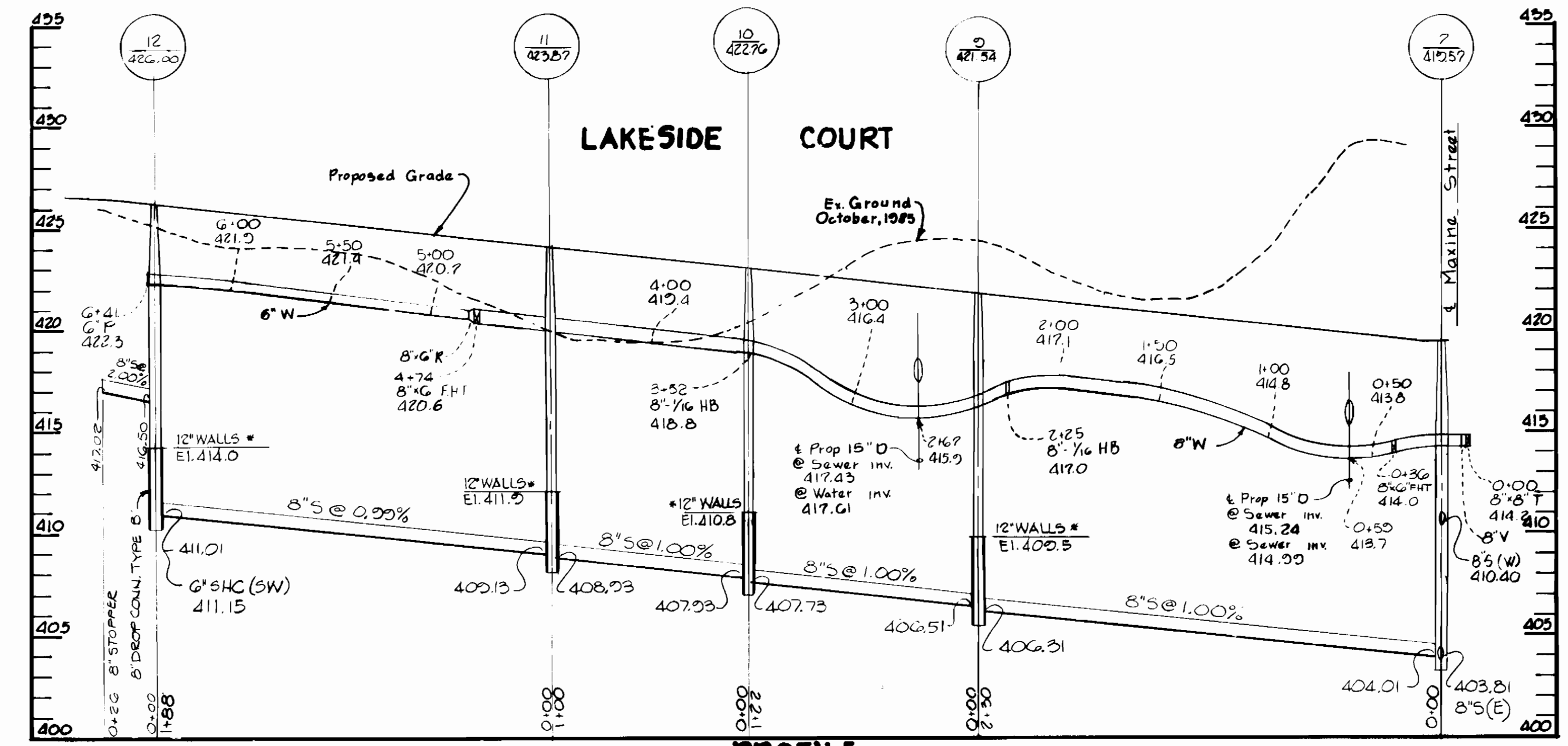
- CONSTRUCTION SPECIFICATIONS**
1. Bales shall be placed at toe of the slope or on the contour and in a row with ends tightly abutting the adjacent bales.
  2. Each bale shall be embedded in the soil a minimum of (4) inches, and placed so the bindings are horizontal.
  3. Bales shall be securely anchored in place by either two stakes or re-bars driven through the bale. The first stake in each bale shall be driven toward the previously laid bale at an angle to force the bales together. Stakes shall be driven flush with the bale.
  4. Inspection shall be frequent and repair replacement shall be made promptly as needed.
  5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

STRAW BALE DIKE NO SCALE



Note: Trench is to be backfilled fine graded and stabilized at the end of each day.

**TRENCH EXCAVATION DETAIL FROM M-3 TO EX MH 210 NO SCALE**



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

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

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



DES: D.A.M.			
DRN: F.D.M.			
CHK: L.J.D.			
DATE: 11-6-85	BY: NO.	REVISION	DATE
		REVISED PROPOSED SEWER AND WATER MAINS	11/15/85

PLAN AND PROFILE OF WATER AND SEWER MAINS

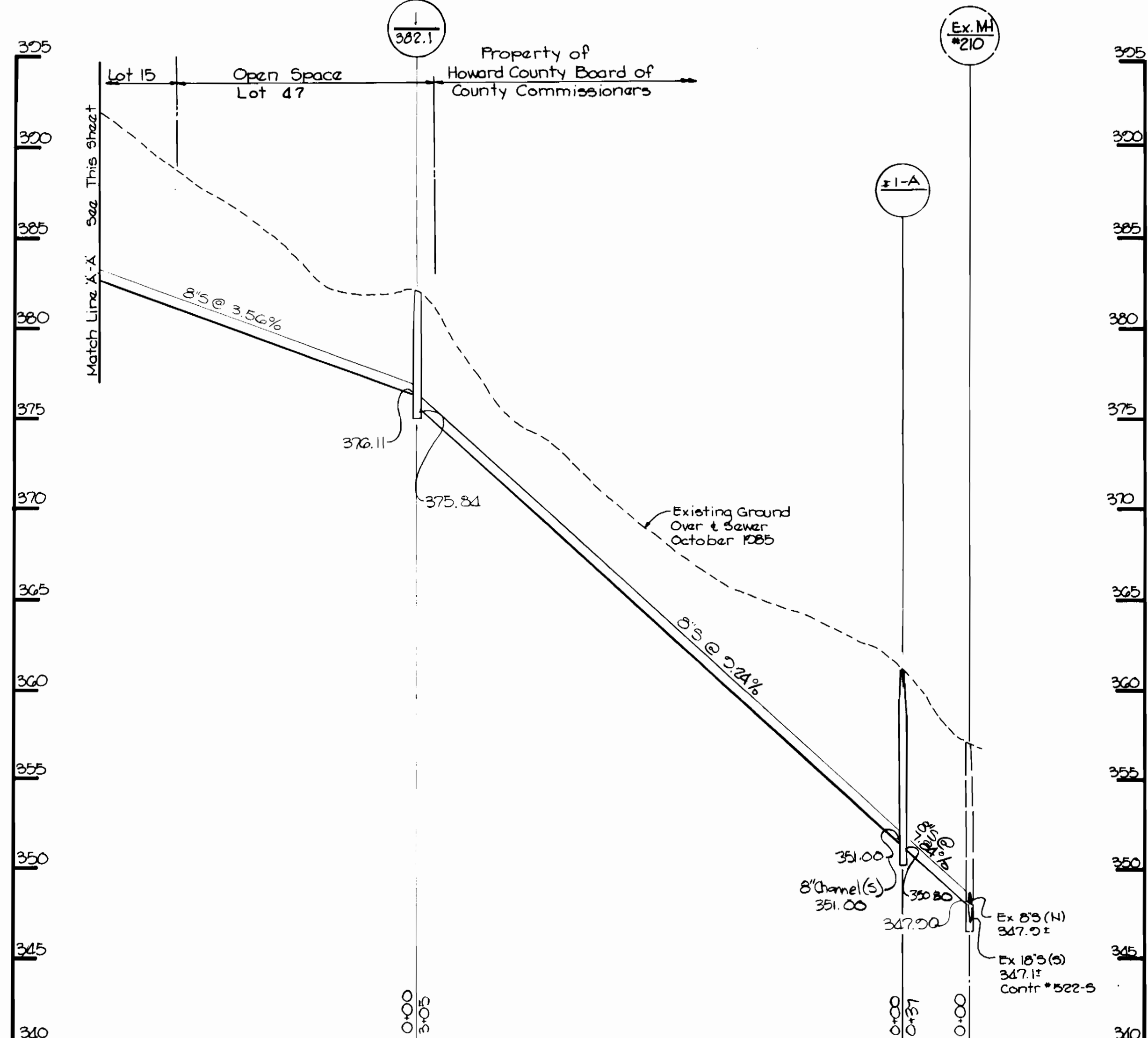
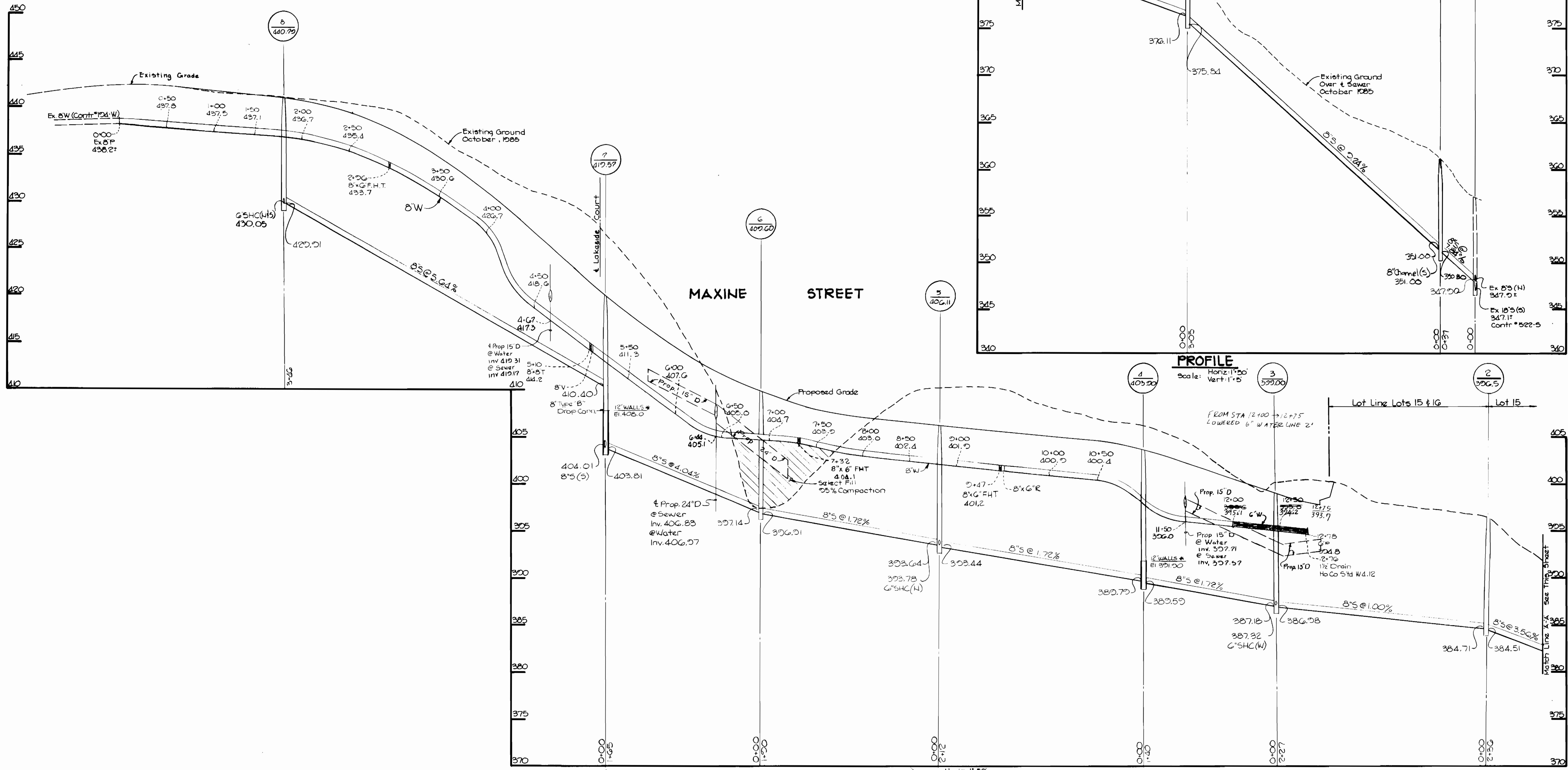
CENTENNIAL LAKE SECTION ONE ELECTION DISTRICT NO. 2 CONTRACT NO. 24-1435 D

SCALE AS SHOWN

SHEET 2 OF 3

AS-BUILT 9 OCT 1986

JANUARY 21, 1986



\* -12" Walls are for brick manholes only.

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

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Robert M. Rainey*  
DIRECTOR OF PUBLIC WORKS  
DATE: 3-19-86

*William B. Rainey*  
CHIEF, BUREAU OF ENGINEERING  
DATE: 3-20-86

*Walter L. Rainey*  
CHIEF, LAND DEVELOPMENT DIVISION  
DATE: 3-20-86

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



DES: DAM			
DRN: DAM			
CHK:			
DATE: 11-6-85	BY: NO.	REVISION	DATE
		REVISED PROPOSED SEWER AND PROFILE	3/19/86

PROFILE OF  
WATER AND SEWER MAINS

CENTENNIAL LAKE  
SECTION ONE  
ELECTION DISTRICT NO. 2  
CONTRACT NO. 24-1435-D

SCALE AS SHOWN  
SHEET 3 OF 3