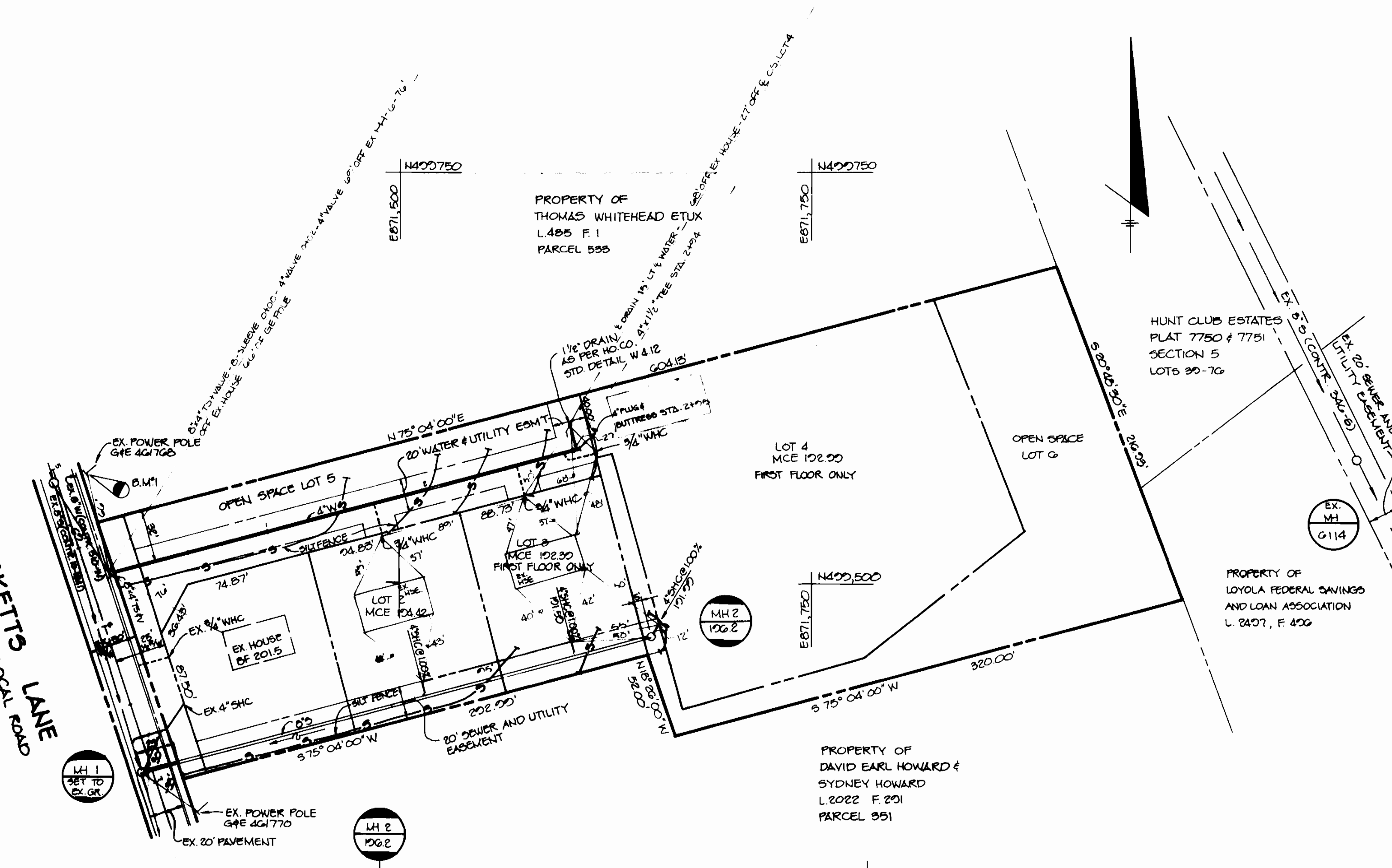
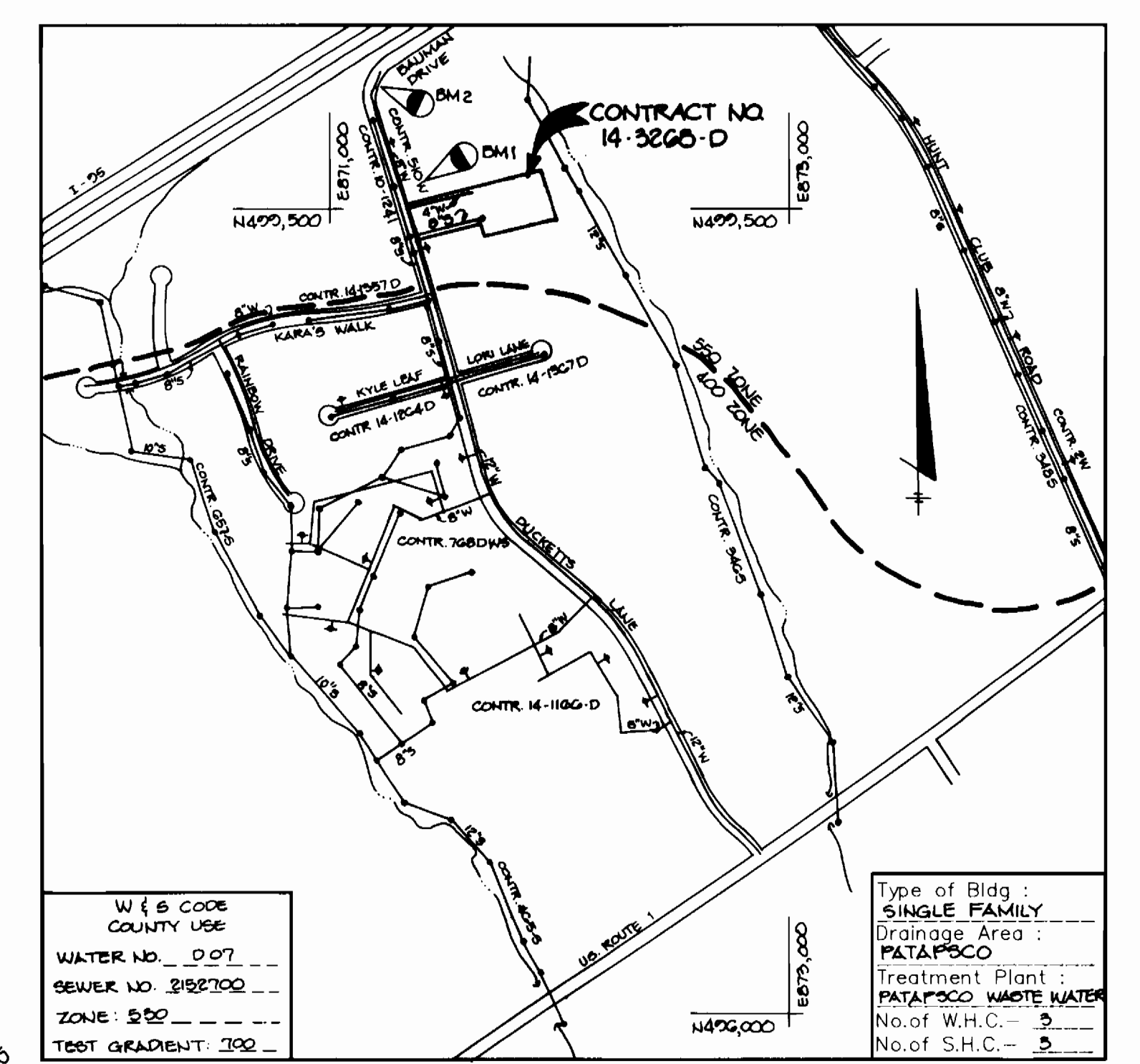


AB.  
 GREEN'S PROPERTY  
 WS/1  
 3268

# WATER AND SEWER EXTENSIONS GREEN'S PROPERTY

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
4" WATER	310 LF	297 LF	D.I.P.	GRIFFIN PIPE
1 1/2" DRAIN	1 EA	1 EA	"K" COPPER	HOWELL METAL
8" SEWER	302 LF	316 LF	PVC	JM-MANUFACTURING
MANHOLES	2EA, 105 VF	2 EA	PRECAST CONC.	ATLANTIC CONC.
3/4" W/C	50 LF	64 LF	"K" COPPER	HOWELL METAL
4" W/C	20 LF	52 LF	PVC	JM-MANUFACTURING
8" x 4" TS + VALVE	—	1 EA	CASTIRON-DIP	MUELLER CO
NAME OF UTILITY CONTRACTOR: UTILITIES UNLIMITED, INC				
CHECKBOX				
AS-BUILT DATE				
SURVEY AND DRAFTING DIVISION				

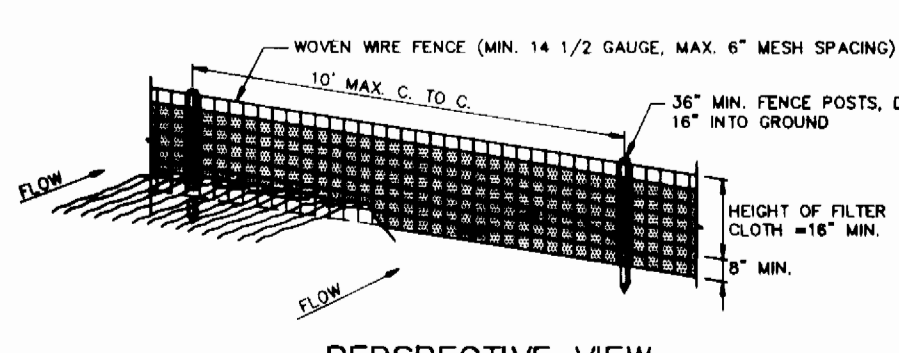


- ### GENERAL NOTES
- Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer or the Contractor's 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 4'. Clear all poles by 2'-0" minimum or higher 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 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 Detail for Construction, (Latest Edition). 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 utility companies 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: 850-4620
    - Baltimore Gas & Electric Co. Underground Damage Control: 787-8068
    - Mesa Utility: 1-800-257-7777
    - Colonial Pipeline Co.: 798-1390
    - Bureau of Utilities, Howard County Department of Public Works: 313-4900
  - Trees and shrubs are to be protected from damage to maximum extent. Trees and shrubs 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. Payment for such removal shall be included in the unit price bid for construction of the main.
  - All water mains to be D.I.P. Class 52 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.
  - All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
  - Fire hydrants shall be set to the bury line 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 shall be compacted in accordance with Section 1000 and 1005 of the Standard Specifications.
  - The contractor shall not operate any water main valves on the existing water system.
  - All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
  - All sewer mains shall be D.I.P., RCP, VCP, CSPX, RCP and P.V.C. 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.
  - Force mains shall be D.I.P. only.
  - Manholes shown with 12" and 18" walls are for brick manholes only.
  - Manholes designated W.T. in plan and profile shall have watertight frame and covers. Standard Detail 55.52. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade unless otherwise noted on the drawings.
  - House(s) with the symbol "C.N.S." indicates that cellar cannot be served.

### BENCH MARKS

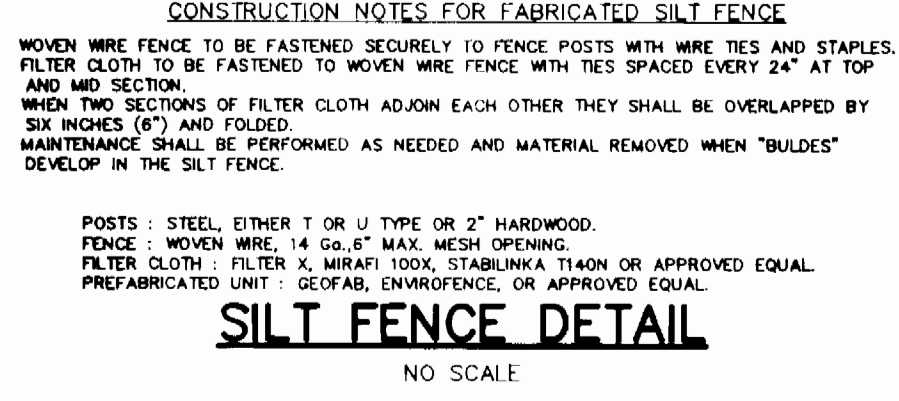
BM#1 ELEV. 210.00  
 R.R. SPIKE SET IN G&E POLE 461768, APPROXIMATELY 520' SOUTH OF BAUMAN DRIVE DUCKETTS LANE INTERSECTION.

BM#2 ELEV. 207.10  
 R.R. SPIKE SET IN G&E POLE 457026 LOCATED AT THE INTERSECTION OF BAUMAN DRIVE AND DUCKETTS LAKE.



### CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES AND STAPLES.
- FILTER CLOTH TO BE FASTENED TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES (6") AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.



Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications

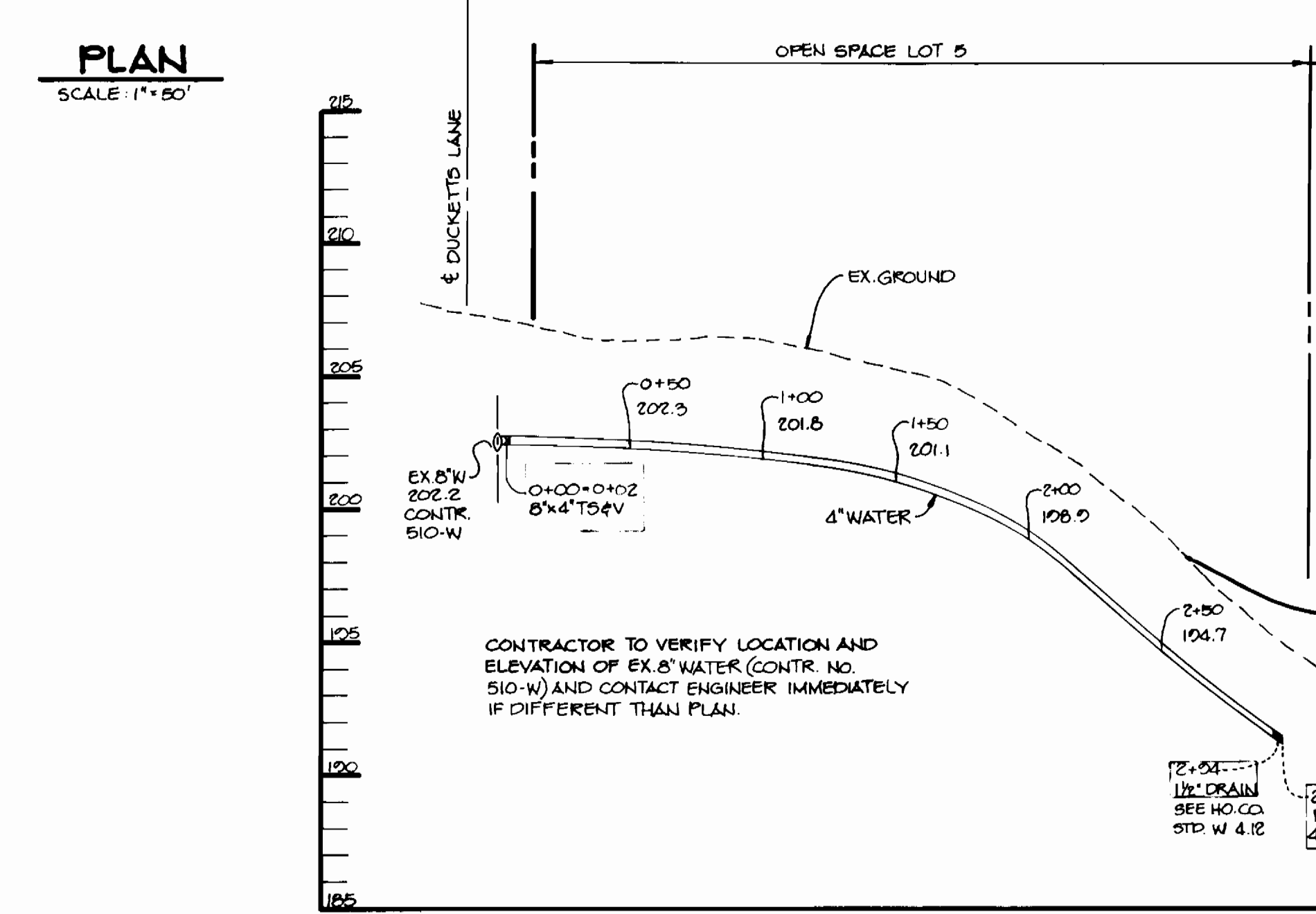
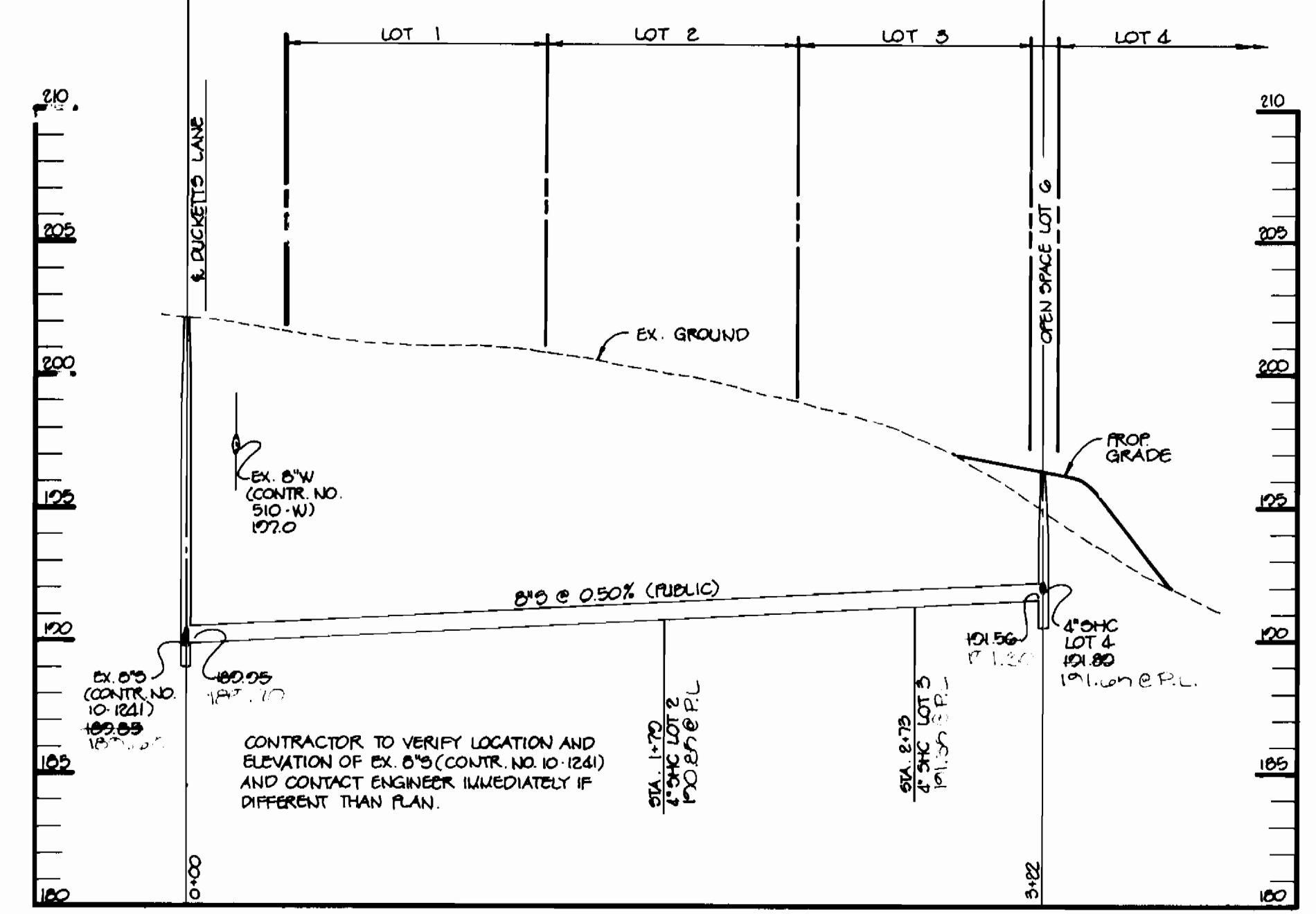
HOWARD SOIL CONSERVATION DISTRICT

Review for Howard Soil Conservation District and meet technical requirements.

*John M. Miller* 5/7/93  
SOIL CONSERVATION SERVICE DATE

This plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

*John R. Robertson* 5/7/93  
HOWARD SOIL CONSERVATION DISTRICT DATE



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*James J. Lewis* 5/14/93 DIRECTOR OF PUBLIC WORKS DATE

*John R. Robertson* 5/14/93 CHIEF, BUREAU OF ENGINEERING DATE

*Robert J. Bennett* 5/14/93 CHIEF, BUREAU OF UTILITIES DATE

RIEMER MUEGGE & ASSOCIATES, INC.  
A Land Planning, Engineering and Consulting Firm  
8818 Centre Park Drive • Suite 200 • Columbia, Md 21045  
410-997-8900 FAX: 410-997-9282

*J. Farrell*  
JAYKANT D. PAREKH # 10140

DES: C.J.R.	
DRN: DAM	
CHK:	
DATE: 4-27-93	
BY NO.	REVISION
DATE	

**PLAN AND PROFILE OF  
WATER AND SEWER MAINS**

600' SCALE MAP NO. 37 BLOCK NO. 12

**GREEN'S PROPERTY  
1st ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT NO. 14-3268-D**

SCALE AS SHOWN  
SHEET 1 OF 1