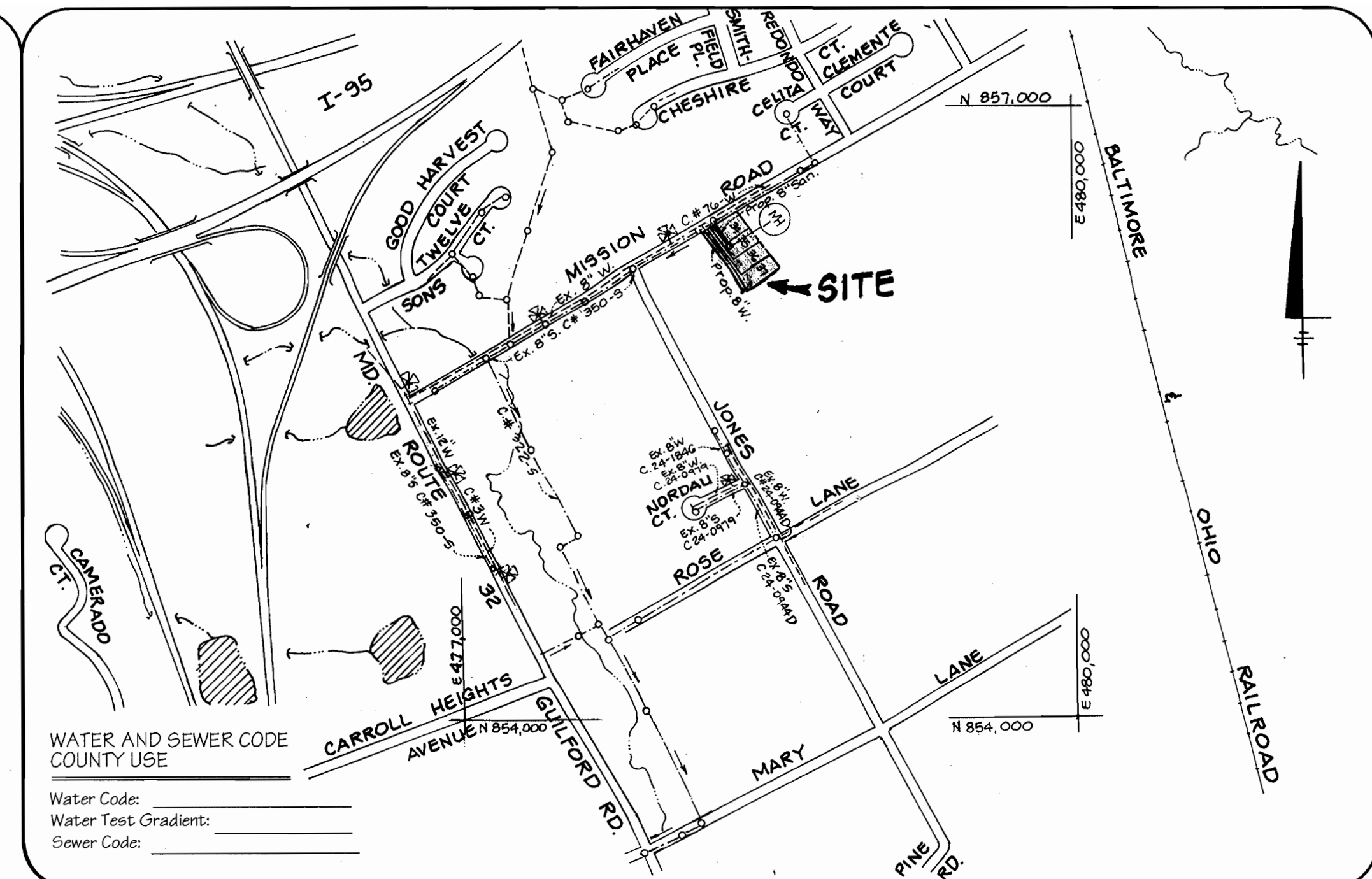
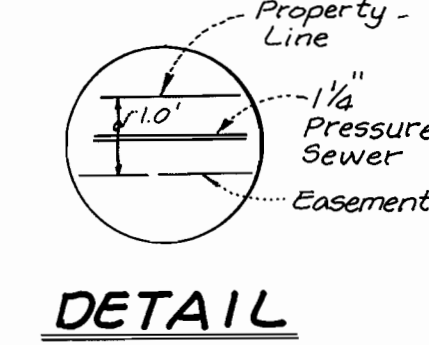
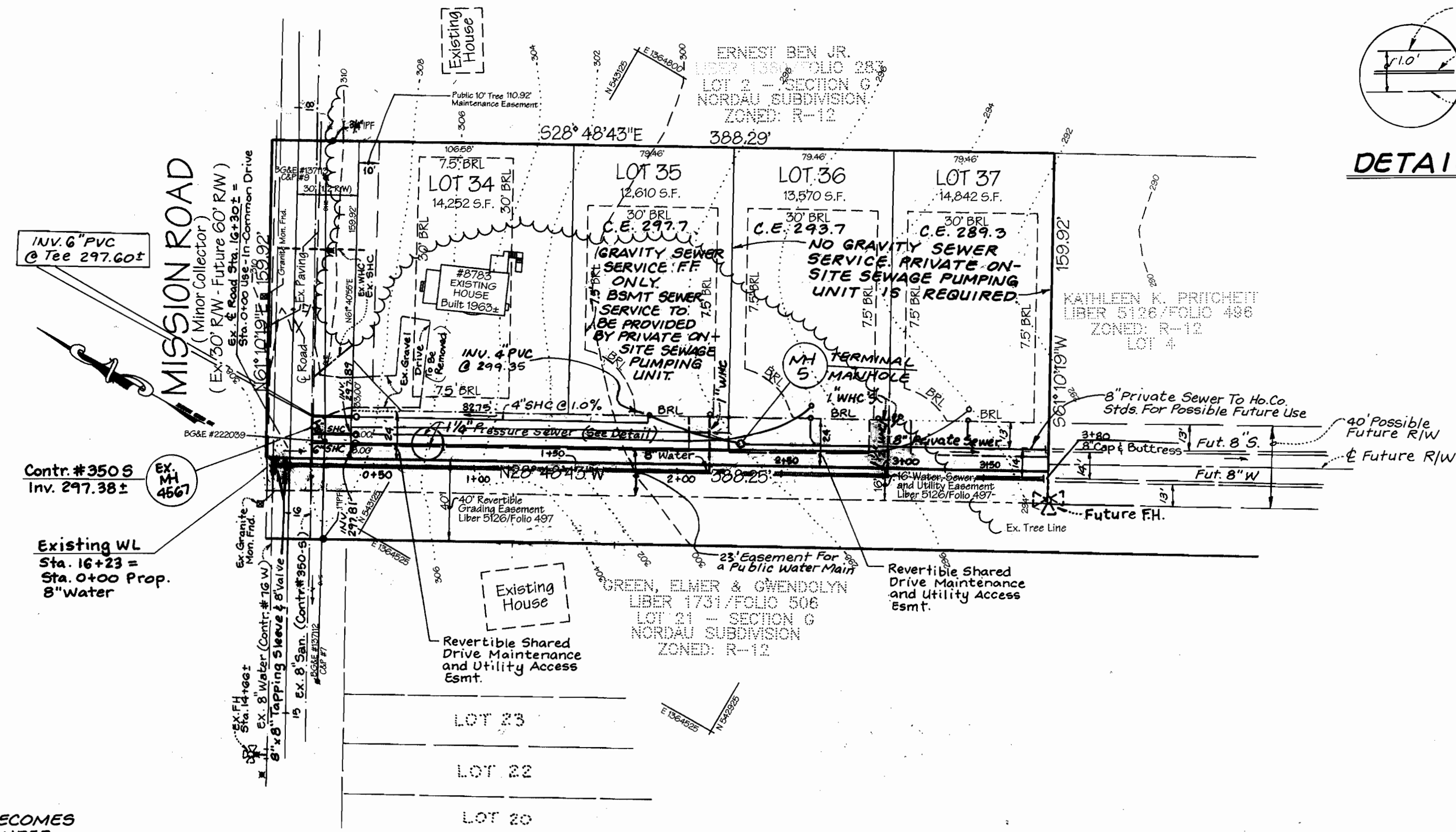


BENCH MARKS:

Ho. Co. Monument # 421 A
 Elev 312.653
 Standard stamped brass or aluminum disc on
 Concrete Monument; 0.3' Below Surface
 Located on west margin of Mission Road
 340' east of 8783 Mission Road
 74.3' north of BGE Pole # 297906.

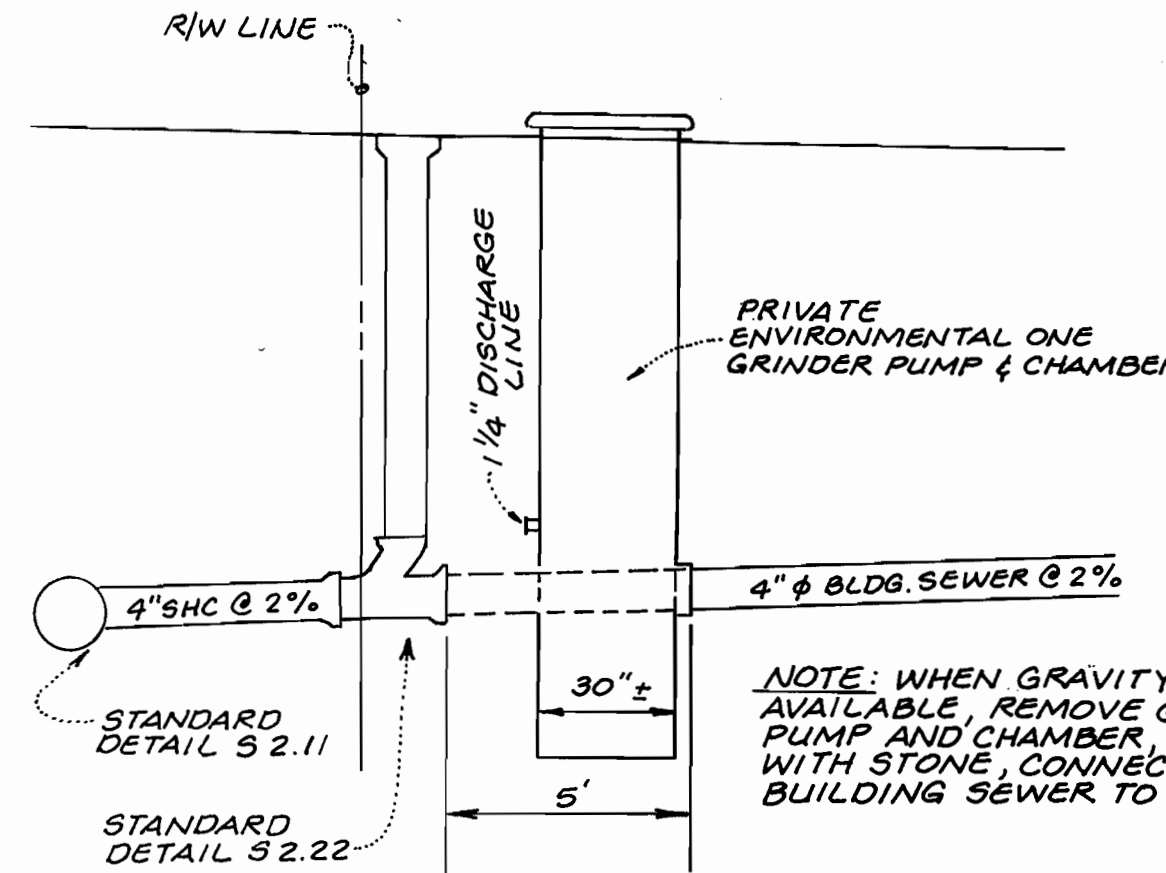
Ho. Co. Monument # 421 B
 Elev 283.105
 Standard stamped brass or aluminum disc on
 Concrete Monument; 0.3' Below Surface
 Located on southern margin of Guilford Road
 Across from Mission Road
 19.4' southeast of BGE Pole # 271362.

PLAN: 1" = 50'

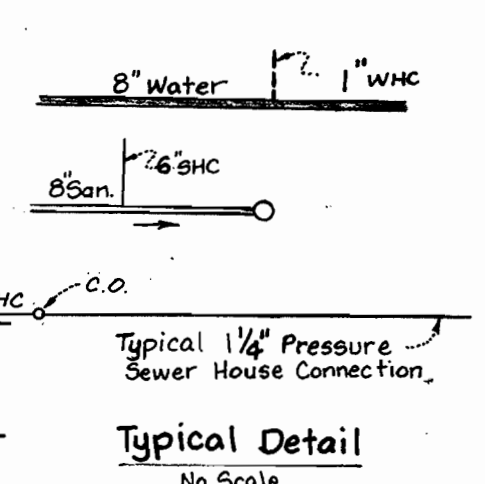


Type of Buildings:	Residential - SFD
Number of Lots/Parcels:	4
Number of W.H.C.'s:	3
Number of S.H.C.'s:	3
Drainage Area:	Little Patuxent
Treatment Plant:	

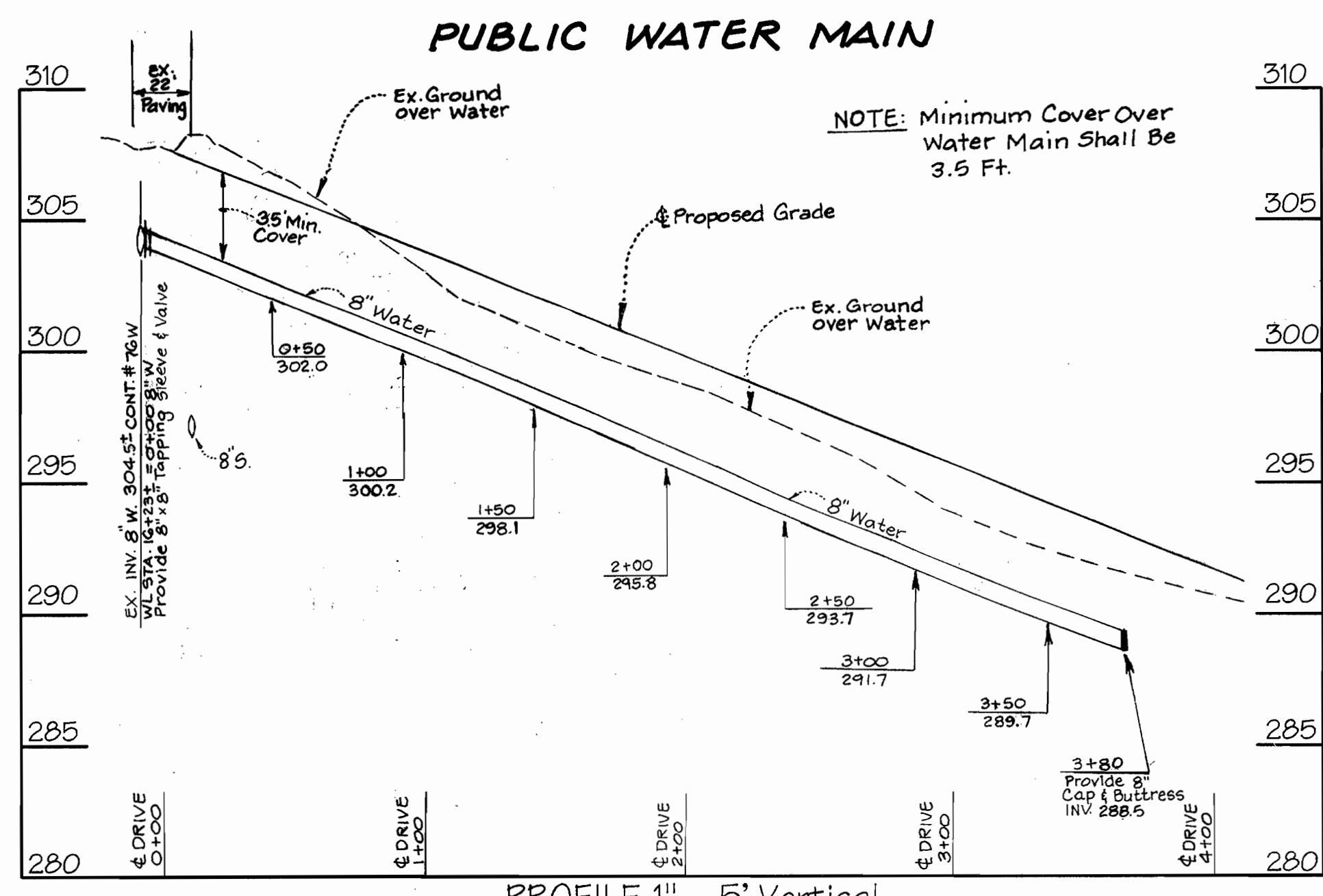
VICINITY MAP
 Scale: 1"=600'



WATER & SEWER HOUSE CONNECTION LEGEND



Typical Detail
 No Scale



PROFILE 1" = 5' Vertical
 1" = 50' Horizontal

QUANTITIES

ITEM	QUANTITIES ESTIMATED	AS BUILT	
		QUANTITIES	MANUFACTURER/SUPPLIER
8" D.I.P. WATER	380 LF		
8" x 8" TAPPING SLEEVE & VALVE	1 Ea.		
1" WATER HSE CONNECTION	32 LF		
1 1/2" WATER HSE CONNECTION	25 LF		
6" SEWER HSE. CONN.	60 LF		

General Notes

- PART I:
- 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, [North American Datum of 1983 (NAD'83)].
 - 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 20" 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 bracing of additional poles or damages shall be deducted from money owned 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 (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 \blacksquare 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 (5) working days before starting work shown on these plans:
 - a. SHA: (410) 531-5633
 - b. BGE (Contractor Services): (410) 850-4620
 - c. BGE (Underground damage control): (410) 787-9068
 - d. Miss Utility: 1-800-257-7777
 - e. Colonial Pipeline Company: (410) 795-1390
 - f. Howard County Dept. of Public Works, Bureau of Utilities: (410) 313-4900
 - g. Bell Atlantic: 1-800-446-5266
 - Trees and shrubs are to be protected from damage to maximum extent. Trees and shrubs 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.
 - Contractor shall notify the Bureau of Highways, Howard County, at (410) 313-2450 at least five (5) working days before any open cut of any County road or boring/jacking operation in County roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DFW requirements per Section 18.114(a) of the Howard County Code.

PART II: WATER

- All water mains to be D.I.P. Class 52 unless otherwise noted.
- Tops of all water mains to have a minimum of 3 1/2' cover unless otherwise noted.
- Valves adjacent to the tees shall be strapped to the 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 restrained and buttressed with concrete in accordance with the 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.

PART III: SEWER

- All sewer mains to be 8" P.V.C. unless otherwise noted.
- All proposed sewers shall be private.
- All manholes shall be 4'0" inside diameter unless otherwise noted.
- Force mains shall be SDR-21 only.

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 Jim Meyer 4/12/01

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 John R. Robertson 4/12/01

PROFILE: PUBLIC AND PRIVATE SEWER
 Scale: 1" = 5' Vert.
 1" = 50' Horiz.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL VOL IV OF THE STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, AND THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

DEPARTMENT OF PUBLIC WORKS
 Robert A. Beaman 3-30-01
 CHIEF-BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
 [Signature] 4/12/01
 CHIEF-DEVELOPMENT ENGINEERING DIVISION

LDE, INC.
 9250 RUMSEY ROAD, SUITE 106
 COLUMBIA, MARYLAND 21045
 (410) 715-1070 (301) 596-3424
 Fax (410) 715-9540



DESIGNED SWC				
DRAWN JLM/KBW				
CHECKED BDB				
DATE 2/2001	BY NO.	REVISION	DATE	

PLAN & PROFILE
 600 SCALE MAP NO. 42
 BLOCK 24

NORDAU SUBDIVISION
 SECTION "G"
 LOTS 34 - 37
 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 CONTRACT NO. 24-3962

SCALE
 AS SHOWN
 SHEET
 1 OF 2

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

- 1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction... 2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL"...

Table with 2 columns: Item, Quantity/Value. Includes Total Area of Site (1.30 Acres), Area to be roofed or paved (0.00 Acres), Area to be vegetatively stabilized (0.59 Acres), Total Cut (5.0 Cu. Yds.), Total Fill (3.00 Cu. Yds.).

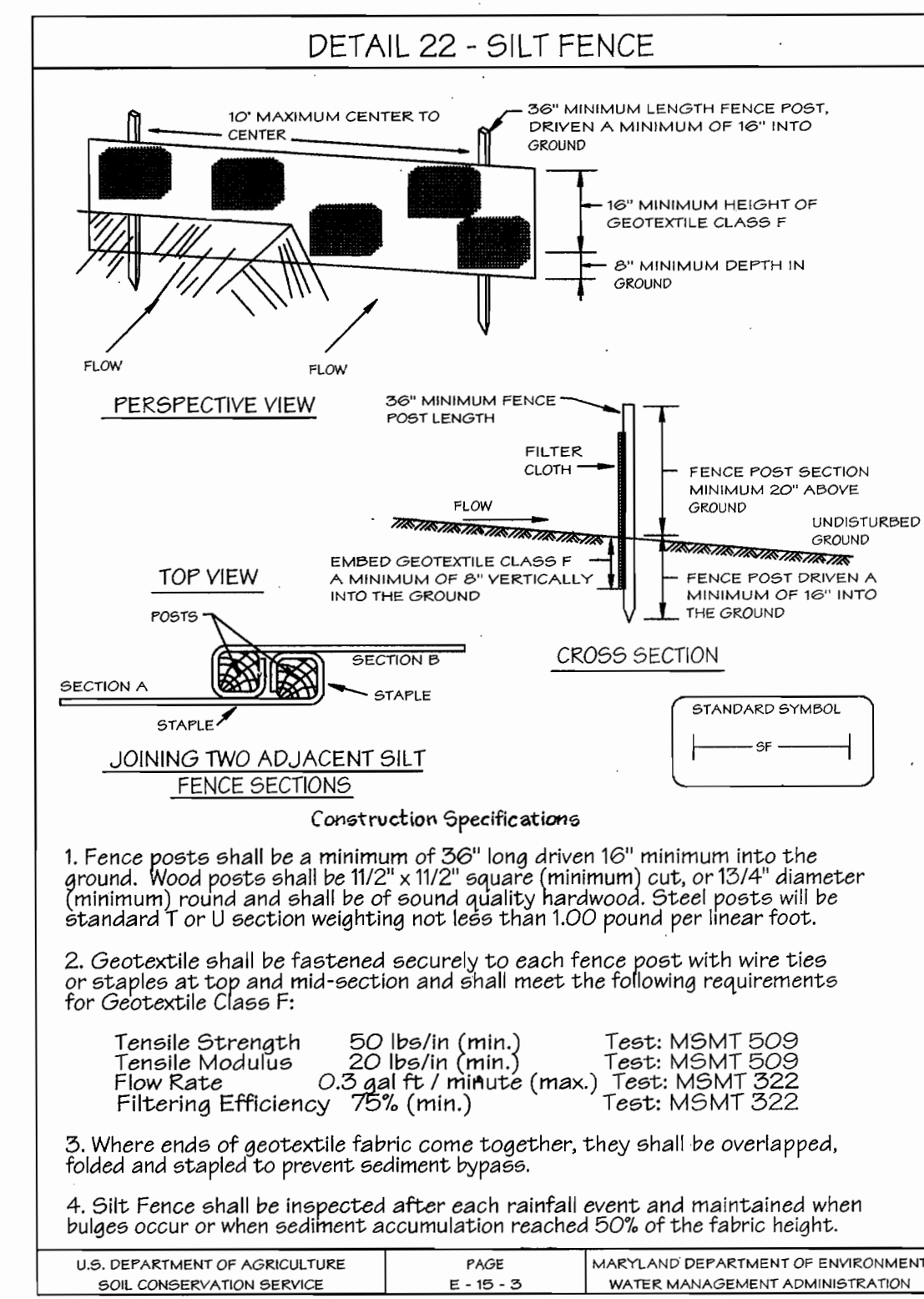
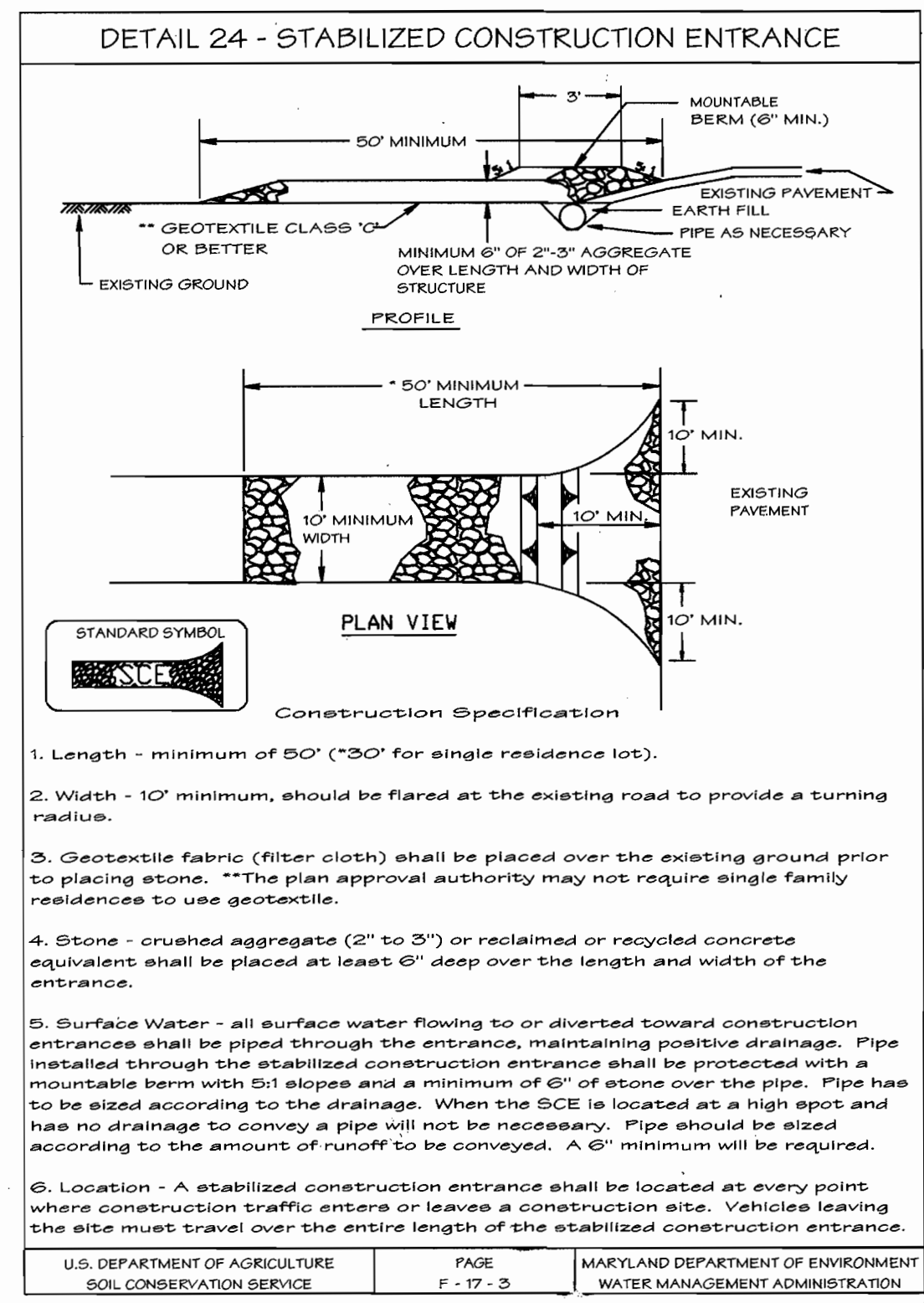
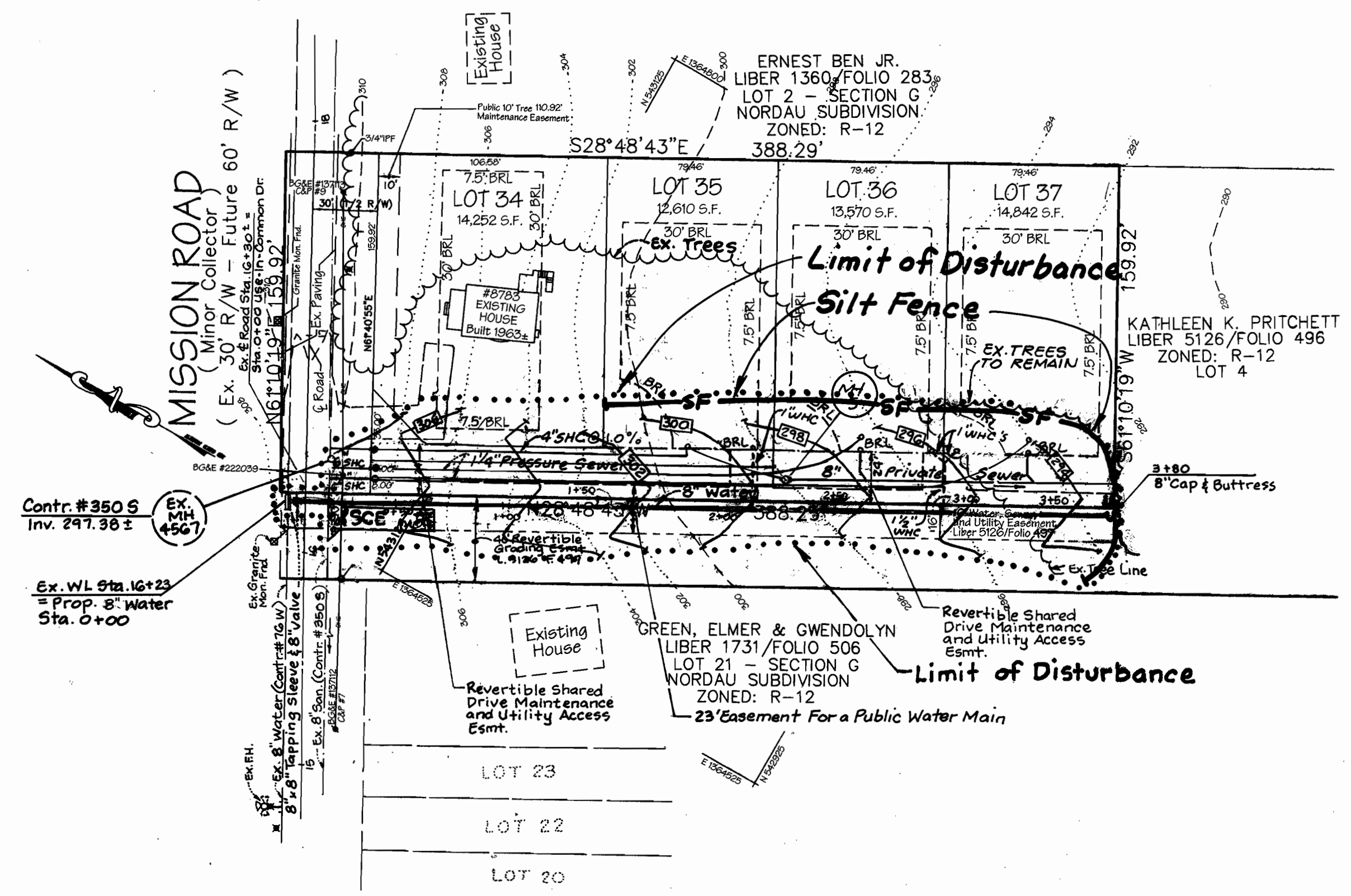
HOWARD SOIL CONSERVATION DISTRICT PERMANENT SEEDING NOTES

- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed. SEEDBED PREPARATION: Loosen upper three inches of soil by raking, disking, or other acceptable means before seeding... SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules: 1) PREFERRED -- Apply 2 tons per acre dolomitic limestone... 2) ACCEPTABLE -- Apply 2 tons per acre dolomitic limestone...

HOWARD SOIL CONSERVATION DISTRICT TEMPORARY SEEDING NOTES

- Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed. SEEDBED PREPARATION: -- Loosen upper three inches of soil by raking, disking, or other acceptable means before seeding... SOIL AMENDMENTS: -- Apply 600 lbs per acre 10-10-10 fertilizer... SEEDING -- For periods March 1 thru April 30, and from August 15 thru October 15 seed with 2-12 bushels per acre of annual rye... MULCHING -- Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000sq. ft.) of unrotted weed free small grain straw immediately after seeding...

PLAN: 1" = 50'



CONSTRUCTION SEQUENCE

- 1. Obtain Grading Permit. - 1 Day
2. Construct Stabilized Construction Entrance. - 1 Day
3. Install Silt Fence & Super Silt Fence where shown hereon. - 2 Days
4. Clear and Grub site for Utility Line Construction. - 3 Days
5. Install Proposed 8" Public Water and Private Sewer Systems as shown - 10 Days
6. Provide required cover over utility lines. - 5 Days
7. Contractor shall inspect and provide necessary maintenance on the sediment control devices shown on this plan after each rainfall and on a daily basis. - 1 Day
8. Remove sediment from Mission Road and dress stabilized construction entrance as required. - Daily
9. After permission has been given by the sediment control inspector, remove sediment control devices. Grade and stabilize all remaining disturbed areas - 2 Days

TOTAL TIME: 30 Days +/-

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS. Jim Myers 4/26/01

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT. John R. Pritchett 4/21/01

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL VOL IV OF THE STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, AND THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

DEPARTMENT OF PUBLIC WORKS DEPARTMENT OF PLANNING & ZONING Robert Deane 3-30-01 DATE

LDE, INC. 9250 RUMSEY ROAD, SUITE 106 COLUMBIA, MARYLAND 21045 (410) 715-1070 (301) 596-3424 Fax (410) 715-9540

Table with columns: DESIGNED (SWC, JLM/KBW), CHECKED (BDB), DATE (2/2001), BY, NO., REVISION, DATE.

GRADING & SOIL EROSION AND SEDIMENT CONTROL PLAN, DETAILS & NOTES 600 SCALE MAP NO. 42 BLOCK 24

NORDAU SUBDIVISION SECTION "G" LOTS 34 - 37 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 24 - 3962

SCALE AS SHOWN SHEET 2 OF 2