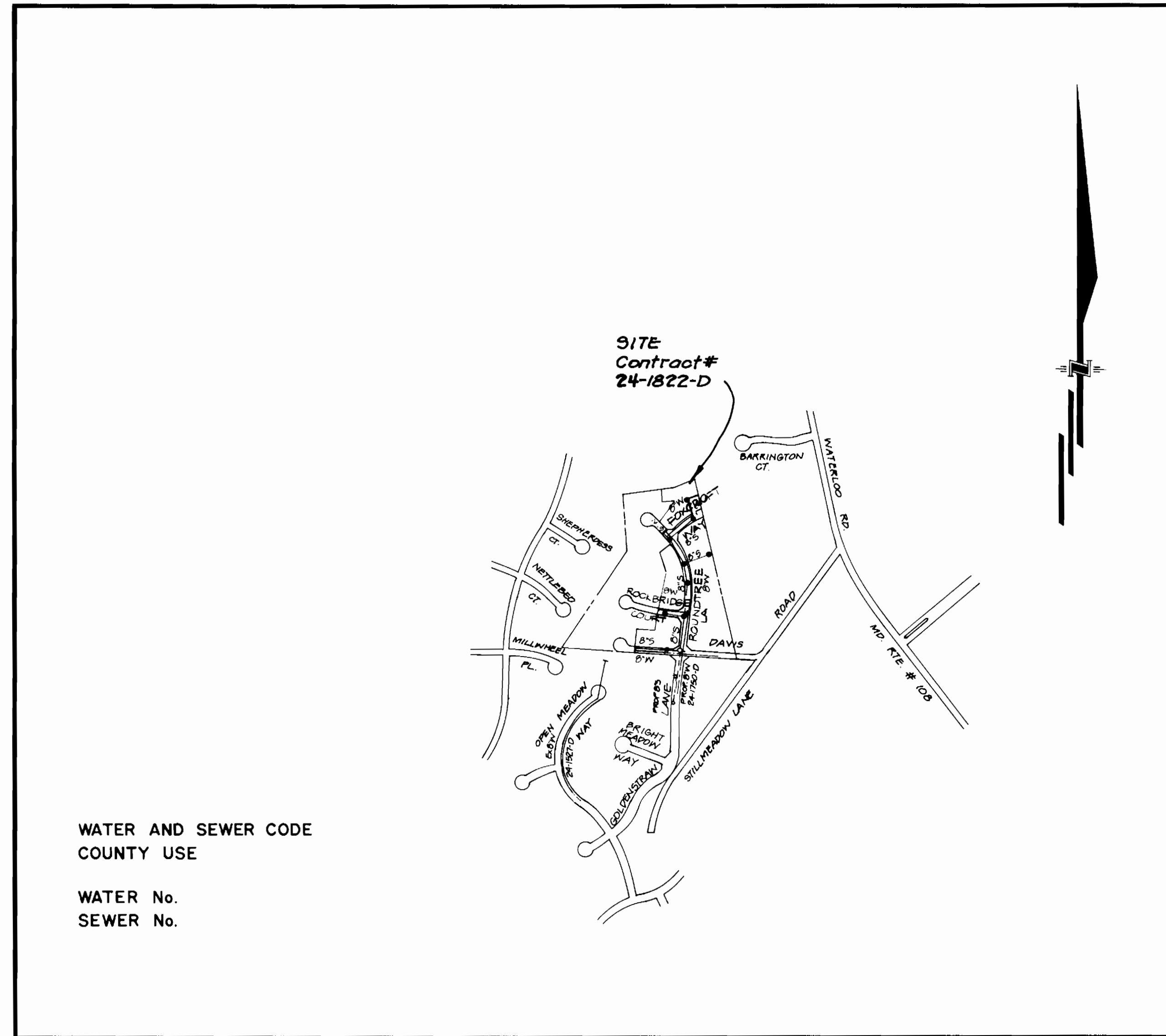


TYPE OF BUILDING	SINGLE FAMILY DETACHED
NUMBER OF UNITS	30
NUMBER OF SHC'S	30
NUMBER OF WHC'S	30
DRAINAGE AREA	LITTLE PATUXENT

GENERAL NOTES

- Approximate locations 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.
- All vertical controls are based on U.S.G.S. Datum.
- All pipe elevations shown are invert elevations.
- Clear all utilities by a minimum of 6". Clear all poles by 2'-0" minimum or tunnel as required. Any cost incurred by the contractor for tunnelling or bracing at poles shall be included in unit prices bid for construction of the main.
- For details not shown on the drawings, use Howard County Standard Details.
- For materials and construction methods, use Howard County Standard Specifications & Howard County Design Manual, Volume IV. The Contractor shall have a copy of Volume IV on the job.
- Contractor shall locate existing utilities a minimum of two (2) weeks in advance of construction operations in the vicinity of proposed utilities, at his own expense.
- Contractor shall notify the following utilities or agencies at least five (5) working days before starting work shown on these plans.

State Highway Administration	531-5533	Baltimore Gas & Electric Company	
"Miss Utility"	1-559-0100	Contractor Services	561-2585
Chesapeake & Potomac (CBP)		Underground Damage Control	234-5621
Telephone Company	725-9976	Trouble-shooting	298-9013
Colonial Pipeline Company	795-1390	Bureau of Utilities, Howard County	992-2366
- 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.
- 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 construction of the main.
- 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., class 52 only.
- 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 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 Sections 10.00 and 10.05 of the Standard Specifications.
- 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 CSPX, VCPX, RCSP, PVC or ACP 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 be 4'-0" inside diameter, unless otherwise noted.
- 12" and 16" manhole wall thicknesses shown on profiles pertain to brick manholes only.
- Manholes designated W.T. in plan and profile shall have watertight frames and covers. (See Standard Detail G 5 52) Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade. (See Standard Detail G 5 41)
- House(s) with the symbol "CNS" indicates that cellar cannot be served.
- Water main and water house connection lines must have a minimum of one foot separation from either sanitary sewer or sewer house connections as they cross. Except at crossings, water and sewer lines shall have a minimum horizontal separation of 10'.
- All D.I.P. fittings shall be in accordance with A.W.W.A. specification C-153 ductile iron compact fittings, 3-inch through 12-inch for water and other liquids.



WATER AND SEWER CODE
COUNTY USE

WATER No.
SEWER No.

VICINITY MAP
SCALE: 1" = 600'

CONTRACT NO. 24-1822-D

LONGRIDGE KNOLLS SECTION I AREA I

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

ITEM	QUANTITIES			MATERIAL / SUPPLIER
	ESTIMATED	AS-BUILT		
B/S	1560 L.F.	1551 L.F.		CHARLOTTE
B/W	1421 L.F.	1415 L.F.		ATLANTIC STATES
6" W	62 L.F.	64 L.F.		" " "
4 D.A.M.	8 EA.	7 EA.		" " "
FH	2 EA.	2 EA.		KENNEDY/ M&H
B.V.	3 EA.	3 EA.		" " "
GV (EXCL. F.H.)	1 EA.	1 EA.		" " "
4" SHC	800 L.F.	719 L.F.		CHARLOTTE
1" WHC	279 L.F.	299 L.F.		CAMBRIDGE F LEE
3/4" WHC	382 L.F.	413 L.F.		" " "
8" D.I.P. Sewer	258 L.F.			
52" CMP	35 L.F.	35 L.F.		

Sediment Control Measures will be implemented in accordance with Section 210 of the Specifications & with Road Construction Plan F-1-1-1, Drawings 47 of B Sediment & Erosion Control.

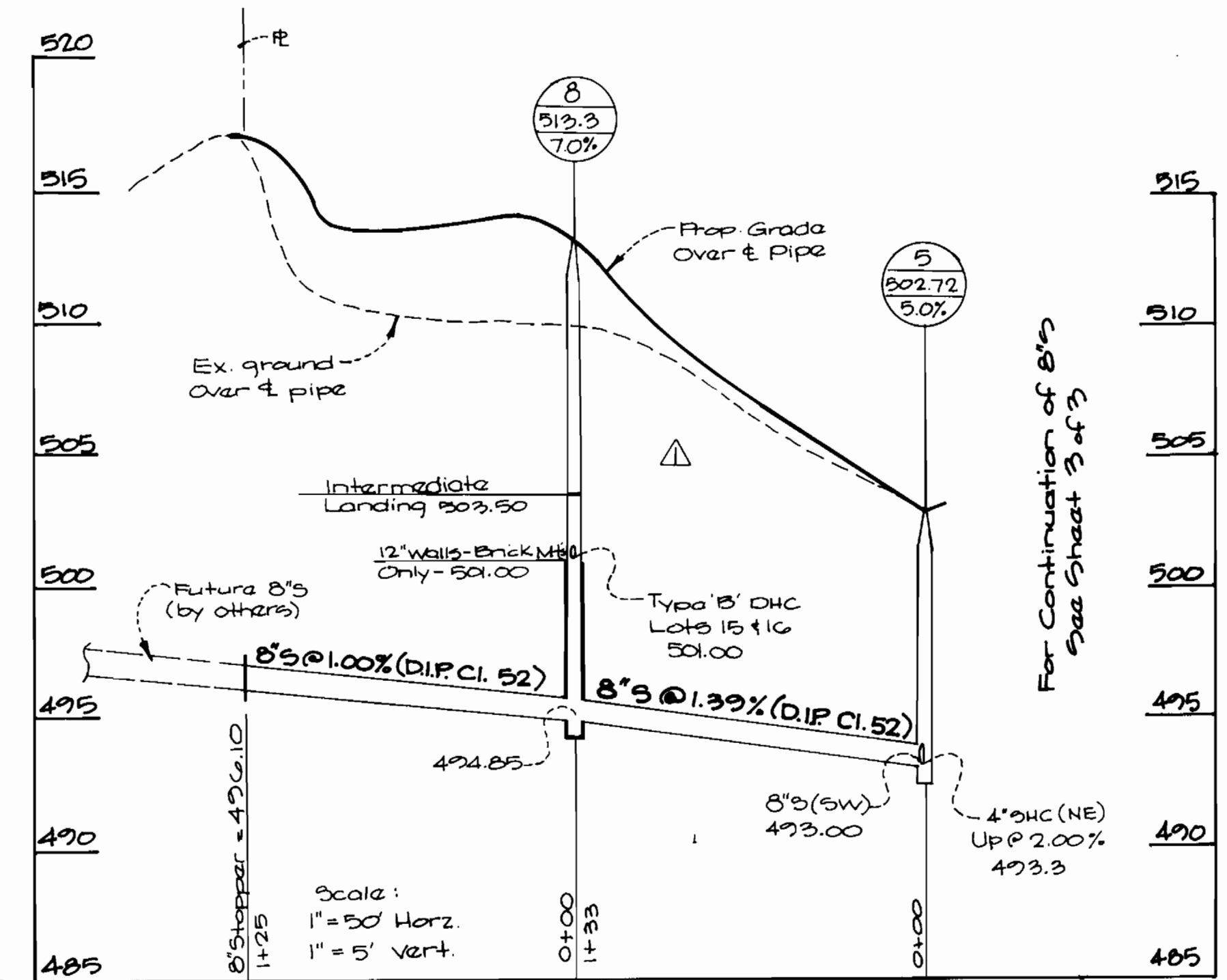
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.
[Signature] 8/27/90
SIGNATURE DATE

U.S. SOIL CONSERVATION SERVICE
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED
[Signature] 8/27/90
HOWARD S.C.D. DATE

COMPLETED 11-6-91

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>[Signature]</i> 8/27/90 DIRECTOR OF PUBLIC WORKS DATE <i>[Signature]</i> 8/23/90 CHIEF, BUREAU OF UTILITIES DATE	GW GUTSCHICK LITTLE & WEBER, P.A. ENGINEERS, PLANNERS, SURVEYORS 3909 NATIONAL DRIVE SUITE 250 BURTONTSVILLE OFFICE PARK BURTONTSVILLE, MD. 20886 (301) 421-4024		DES: GPM DRN: GPM CHK: CKG DATE: AUG 1990 BY: NO.	G.A.H. 8/22/91 REVISION	TITLE SHEET 600' SCALE MAP NO. 30 F 206 BLOCK NO. 24 F 6	LONGRIDGE KNOLLS SECTION I AREA I Lots 1-31 6TH ELECTION DISTRICT CONTRACT NO. 24-1822-D	SCALE AS SHOWN SHEET 1 OF 3
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For Continuation of 8\"/>

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

* SEWER HOUSE CONNECTIONS FOR LOTS 15 & 16 DELETED UNTIL FURTHER NOTICE.

PLAN SCALE 1" = 50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Lester H. Fisher 8/29/90
DIRECTOR OF PUBLIC WORKS DATE

Robert Beamer 8-23-90
CHIEF, BUREAU OF UTILITIES DATE

William E. Ryan 8-23-90
CHIEF, BUREAU OF ENGINEERING DATE

John A. ... 8/21/90
CHIEF, LAND DEVELOPMENT DIV. DATE

GW GUTSCHICK LITTLE & WEBER, P.A.
ENGINEERS, PLANNERS, SURVEYORS

3908 NATIONAL DRIVE SUITE 250 BURTONSVILLE OFFICE PARK
BURTONSVILLE, MD. 20866
(301) 421-4024



DES: GFM					
DRN: GFM					
CHK: CKG					
DATE: Aug. 1990	GALL	BY	NO.	REVISION	DATE
	ADD	8\"/>			

WATER & SEWER MAINS PLAN

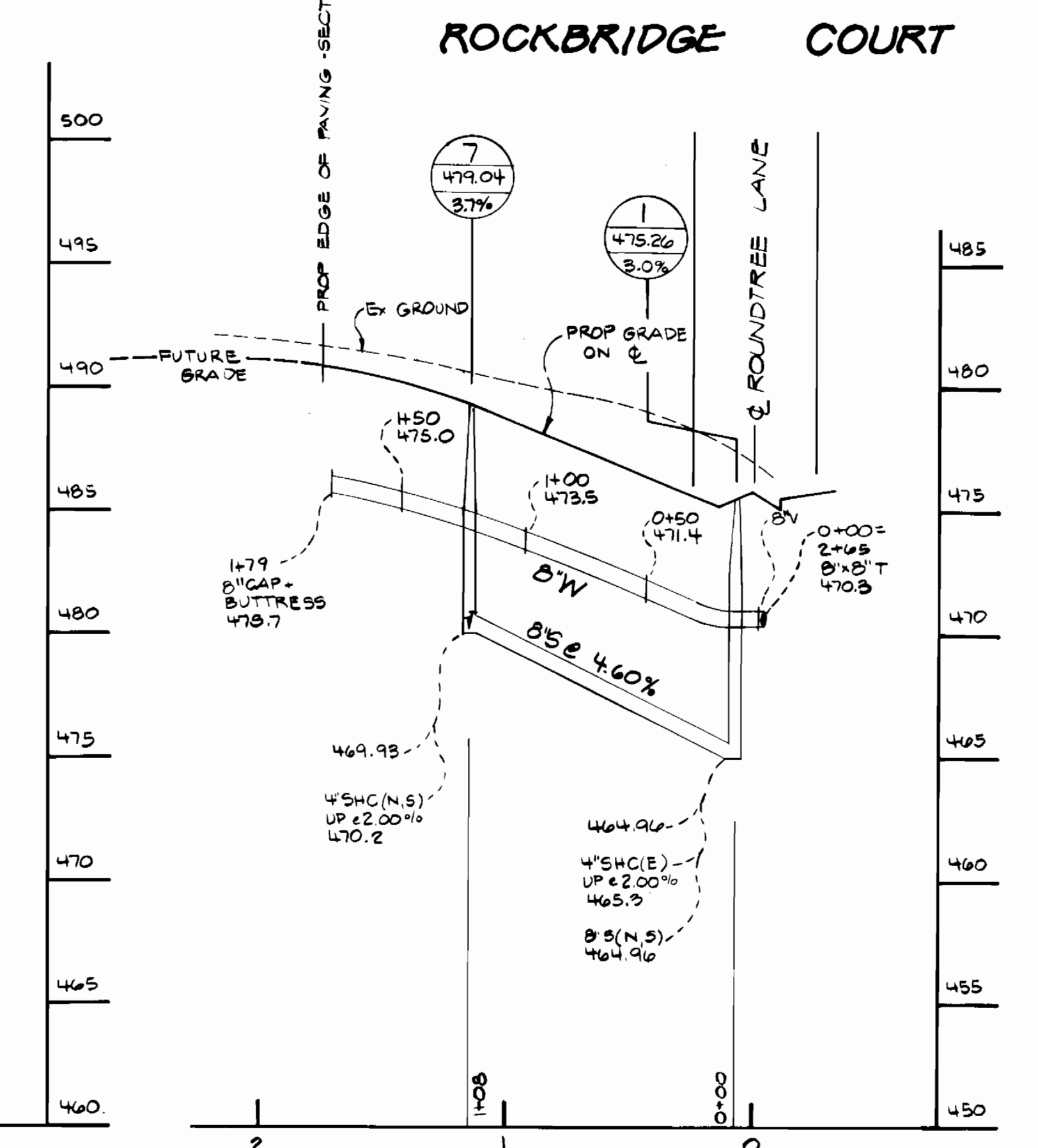
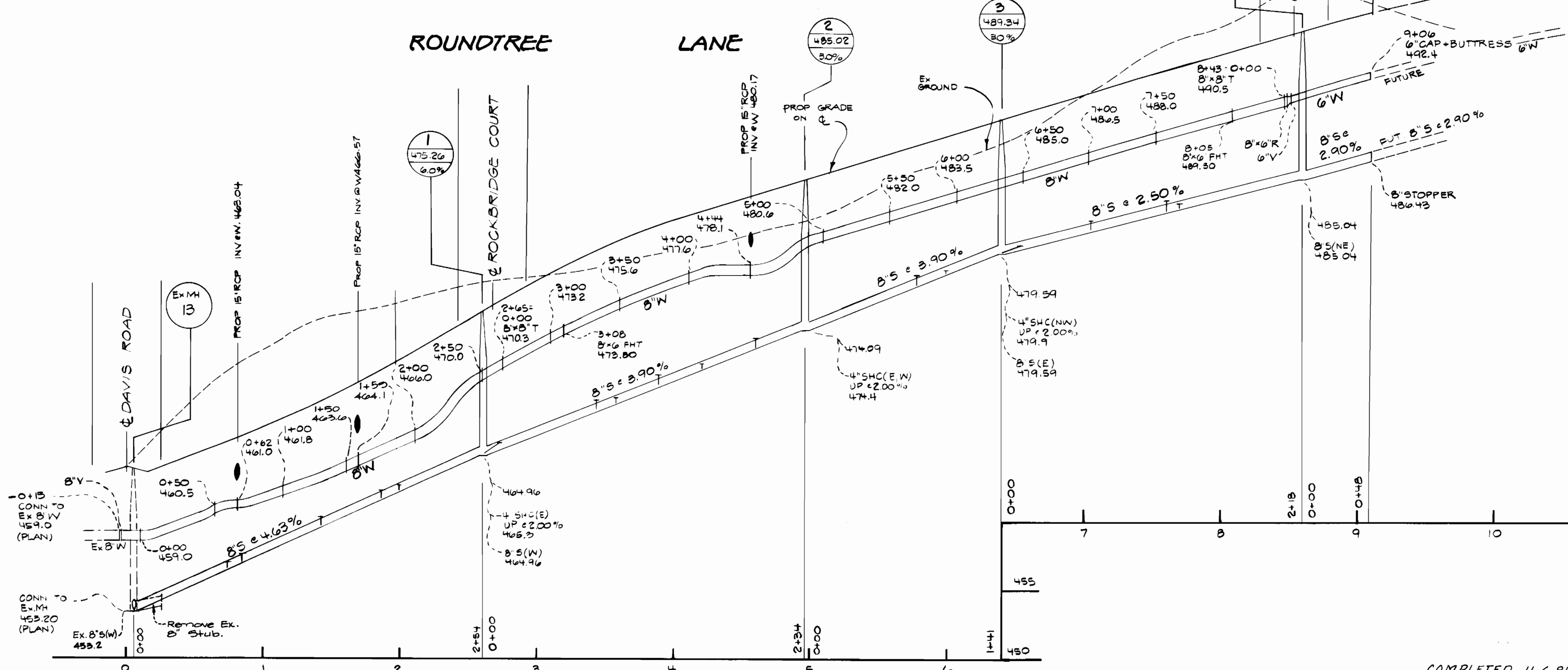
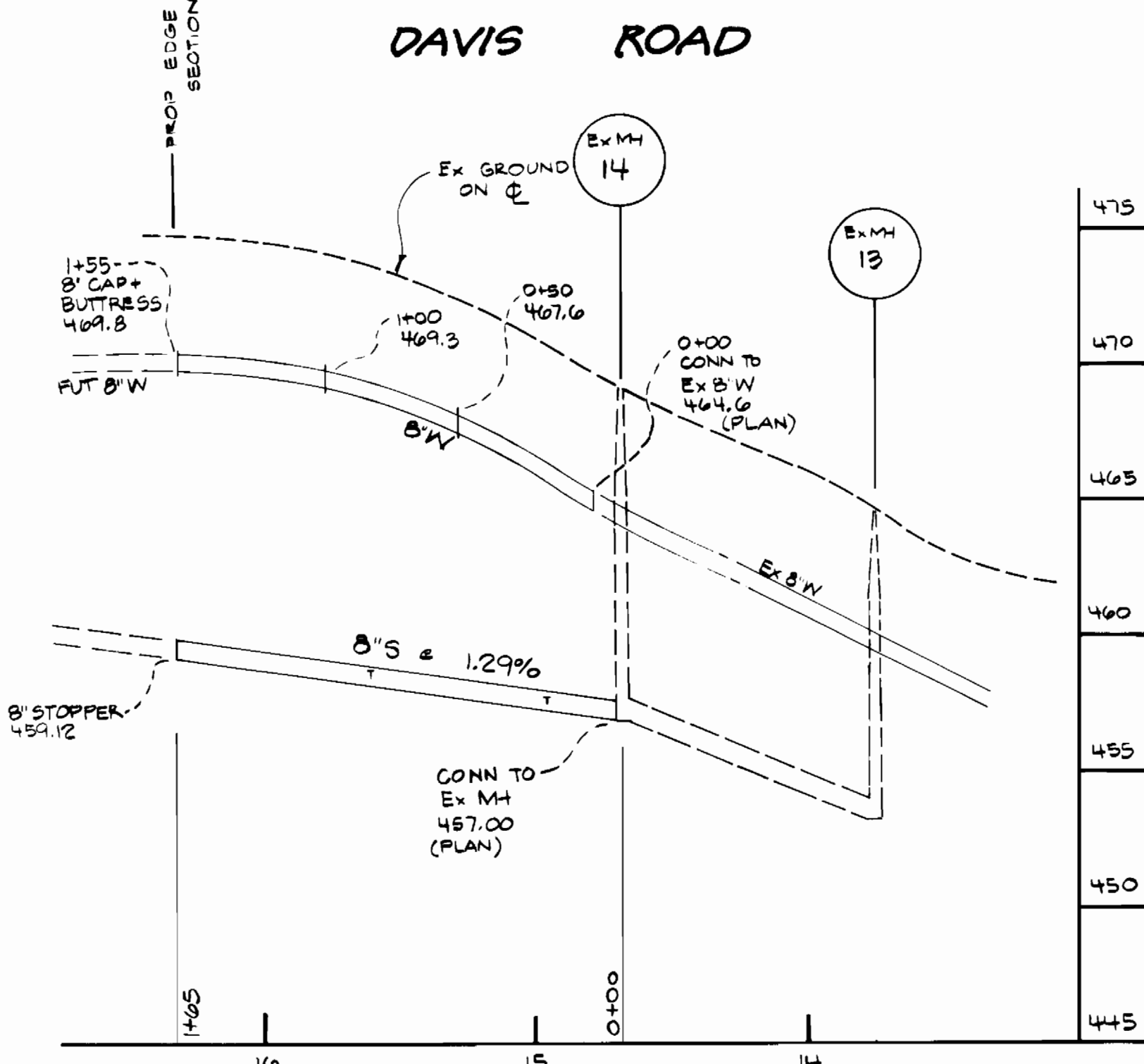
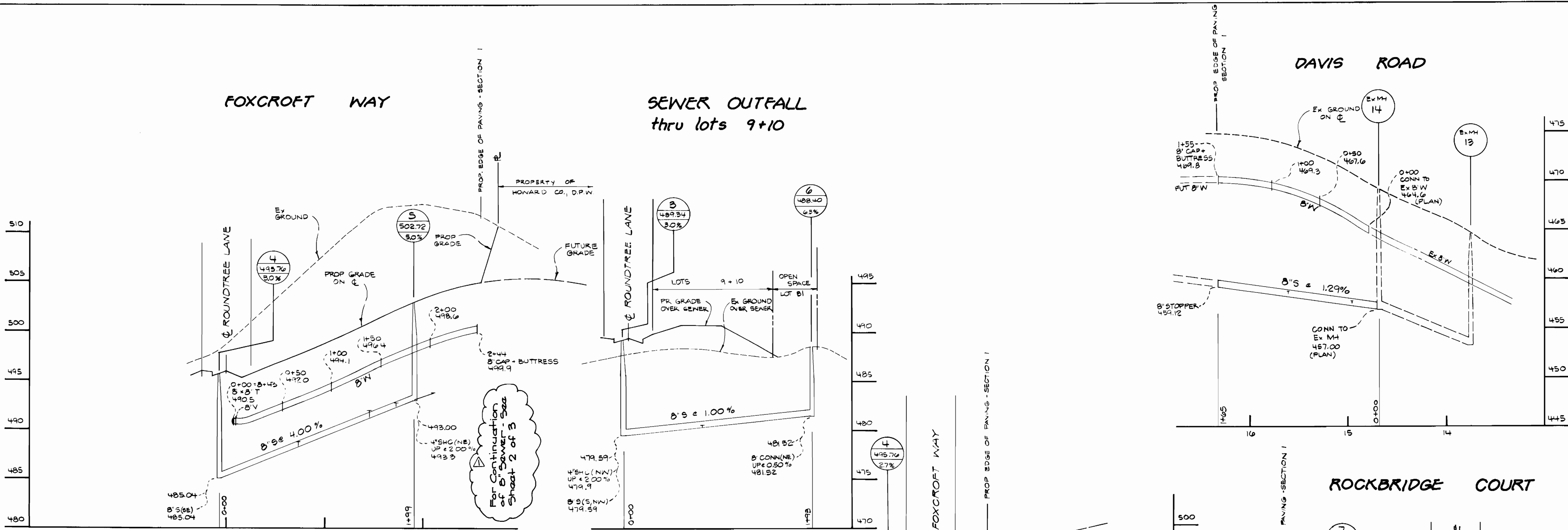
COMPLETED 11-6-91

600' SCALE MAP NO. 20136 BLOCK NO. 2446

LONGRIDGE KNOLLS
SECTION 1 AREA 1
Lots 1-31
6TH ELECTION DISTRICT
CONTRACT NO 24-1822-D

SCALE AS SHOWN

SHEET 2 OF 3



COMPLETED 11-6-91

PROFILE SCALE
Hor. 1" = 50'
Vert. 1" = 5'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>James J. ...</i> DATE: 8-23-90 Chief, Bureau of Engineering: <i>...</i> DATE: 8-23-90 Chief, Bureau of Utilities: <i>...</i> DATE: 8-23-90 Chief, Land Development Div.: <i>...</i> DATE: 8-23-90		GW GUTSCHICK LITTLE & WEBER, P.A. ENGINEERS, PLANNERS, SURVEYORS 3909 NATIONAL DRIVE SUITE 250 BURTONTVILLE OFFICE PARK BURTONTVILLE, MD. 20886 (301) 421-4024		STATE OF MARYLAND PROFESSIONAL ENGINEER License No. 12973		DES: G.P.M. DRN: G.P.M. CHK: C.K.G. DATE: Aug 1990 BY: NO. Add Note REVISION:		WATER & SEWER MAINS PROFILES 600' SCALE MAP NO. 20236 BLOCK NO. 2446		LONGRIDGE KNOLLS SECTION 1 AREA 1 Lots 1-31 6TH ELECTION DISTRICT CONTRACT NO 24-1822-D		SCALE AS SHOWN SHEET 2 OF 3
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