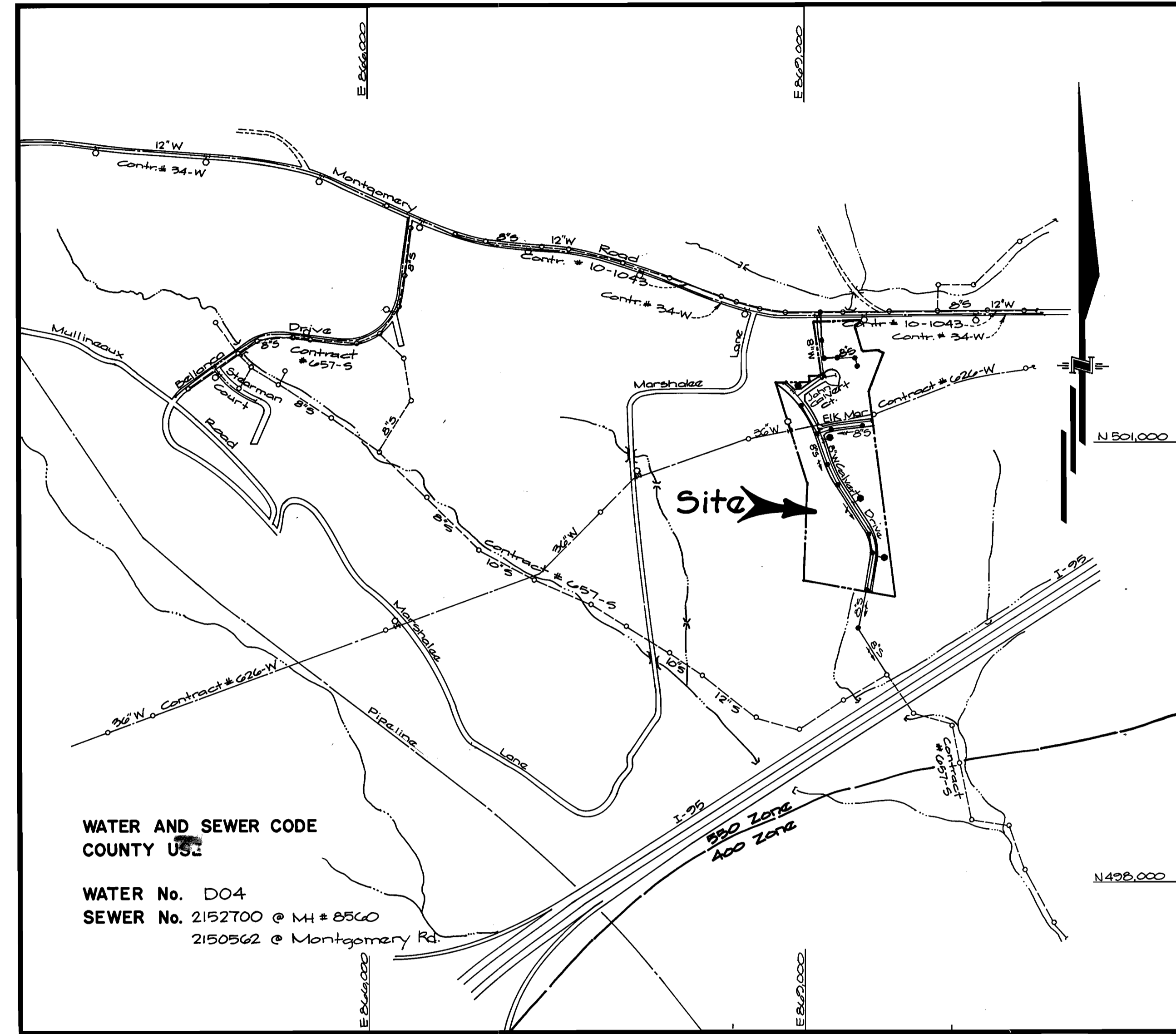


TYPE OF BUILDING	Single Family
NUMBER OF UNITS	33 (2 existing-21 proposed)
NUMBER OF SHC's	33
NUMBER OF WHC's	32 prop (1 existing)
DRAINAGE AREA	Patapsco

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 of 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 IX. The Contractor shall have a copy of Volume IX 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"	1-800 257-7777	Contractor Services	850-4620
Chesapeake & Potomac (C&P)		Underground Damage Control	787-2068
Telephone Company	725-9976	Trouble-shooting	288-9013
Colonial Pipeline Company	795-1390	Bureau of Utilities, Howard County	313-4000
- 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 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.
- Block all fittings with concrete. Anchor in accordance with standard details.
- 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 1000 and 1005 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 C.S.P.X., V.C.P.X., R.C.S.P., P.V.C. or A.C.P. 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 "C.N.S." 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'.~~



WATER AND SEWER CODE
COUNTY USE

WATER No. D04
SEWER No. 2152700 @ MH # 8560
2150562 @ Montgomery Rd

VICINITY MAP
SCALE: 1" = 600'

CONTRACT NO. 14-3120-D

CALVERT RIDGE

LOTS 3, 6-26, 29-31, 33, 34 and 36-41

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

Sediment Control Measures will be implemented in accordance with Section 219 of the Specifications & with Road Construction Plan F-21-117 ; Drawings 4, 5 & 7, Sediment & Erosion Control.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

James M. Helms / *JMH* 8/28/92
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:
John R. Dunton 8/28/92
HOWARD S.C.D. DATE

QUANTITIES				
ITEM	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MATERIAL / SUPPLIER
8" Water	2706 L.F.	2595 L.F.	52 D.I.P.	ATLANTIC / WATERPRO
6" Water	110 L.F.	107 L.F.	" "	" "
4" WATER	18 L.F.	25 L.F.	" "	" "
1" WHC	200 L.F.	208 L.F.	" "	CAMBRIDGE-LEE / WATERPRO
3/4" WHC	360 L.F.	450 L.F.	" "	" "
F.H. & Valve	5 ea.	5 EA.	" "	MUELLER / WATERPRO
12"x8" T.S. & V.	1 ea.	1 EA.	MUELLER	" "
8" Valves	7 ea.	8 EA.	" "	" "
4" VALVES	1 ea.	" "	" "	" "
8" S (D.I.P.)	218 L.F.	218 L.F.	52 D.I.P.	ATLANTIC / WATERPRO
8" Sewer	2701 L.F.	2913 L.F.	SDR 35	J.M. MFGR / WATERPRO
4" Manholes	10 ea.	16 EA.	PRECAST	ATLANTIC PRECAST
4" SHC	820 L.F.	797 L.F.	SDR 35	J.M. MFGR / WATERPRO
20" Steel Sleeve	20 L.F.	20 L.F.	IRON	" "

NAME OF UTILITY CONTRACTOR: _____ SURVEY AND CHECKBOX: _____
DRAFTING DIV. AS-BUILT DATE: _____

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Helms 9/23/92
DIRECTOR OF PUBLIC WORKS DATE

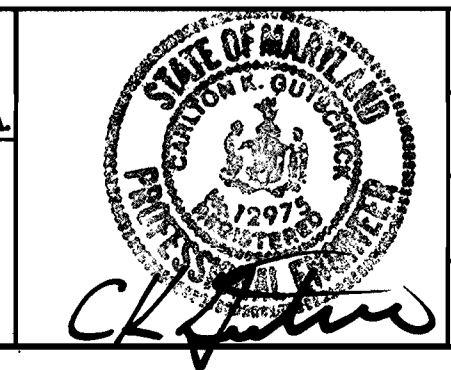
John R. Dunton 9/23/92
CHIEF, BUREAU OF ENGINEERING DATE

Jeffrey E. Wally 8/28/92
CHIEF, BUREAU OF UTILITIES DATE

Howard CHIEF, LAND DEVELOPMENT DIV. DATE

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

3909 NATIONAL DRIVE SUITE 250 BURTONSVILLE OFFICE PARK
BURTONSVILLE, MD. 20866
(301) 421-4024



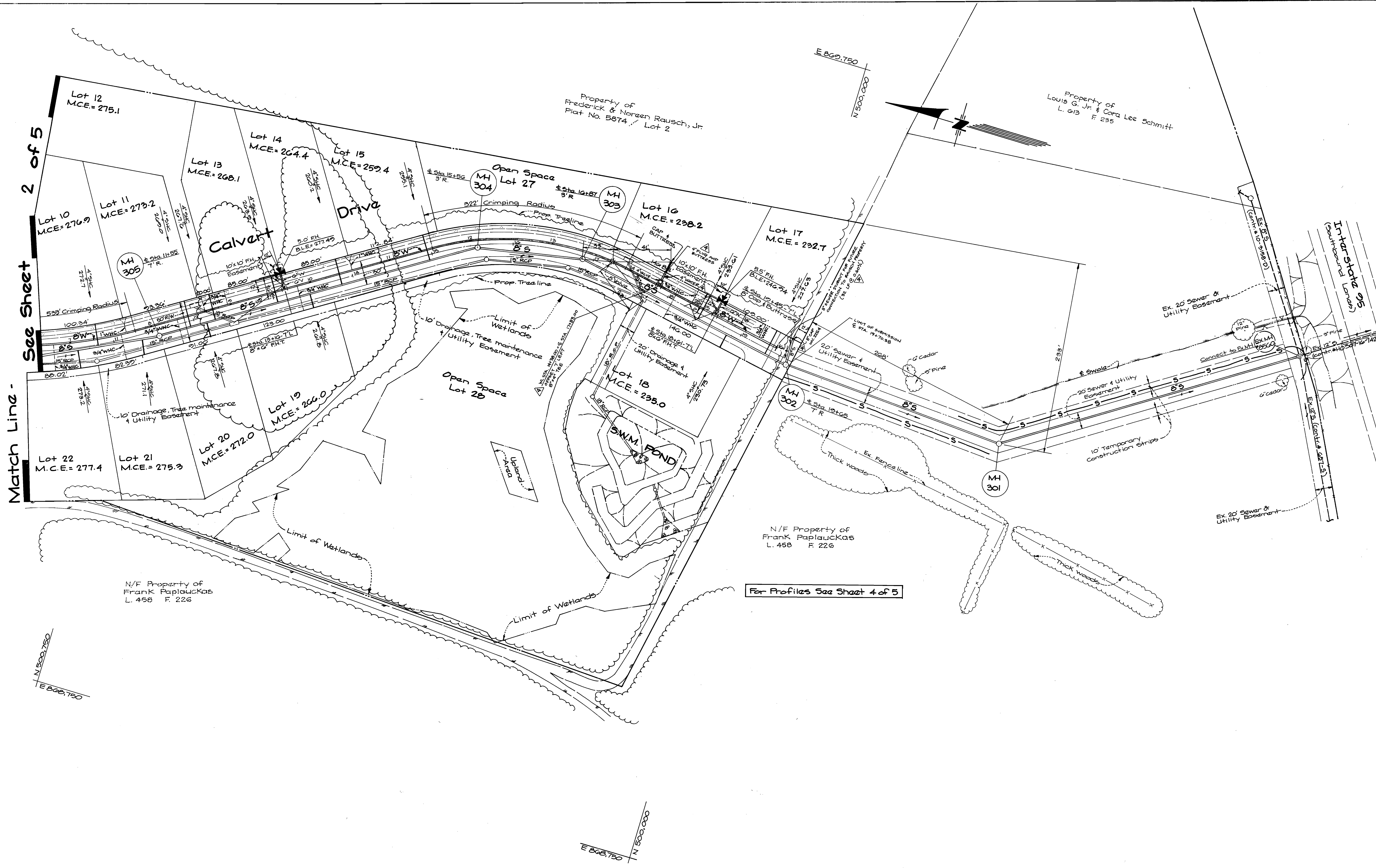
DES: G.A.H.	GAH	Rev. Quantities & Vicinity Map	10/9/92
DRN: G.A.H.	GAH	Rev. Quantities	12/29/92
CHK: C.K.G.	DBT	ADD WATER & SEWER CONNECTION FOR RAUSCH PROPERTY	3/12/93
	LRE	Revise Sewer Quantities	2/12/94
DATE: Aug. 1992	GAH	Revise Quantities Box	7/22/92
BY NO.		REVISION	

Title Sheet

600' SCALE MAP NO. 37 BLOCK NO. 5, 6, 12

Calvert Ridge
Lots 3, 6-26, 29-31, 33, 34 and 36-41
First Election District
Howard County, Maryland
Contract No: 14-3120-D

SCALE AS SHOWN
SHEET 1 OF 5

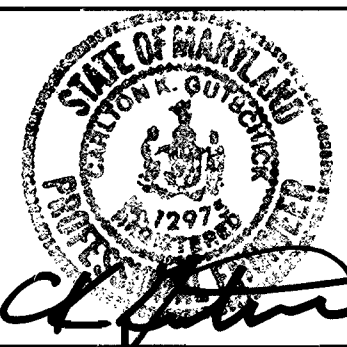


DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. ... 9/23/92
DIRECTOR OF PUBLIC WORKS DATE
John F. ... 9/23/92
CHIEF, BUREAU OF ENGINEERING DATE
John F. ... 9/23/92
CHIEF, LAND DEVELOPMENT DIV. DATE

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

3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MD. 20866
(301) 421-4024



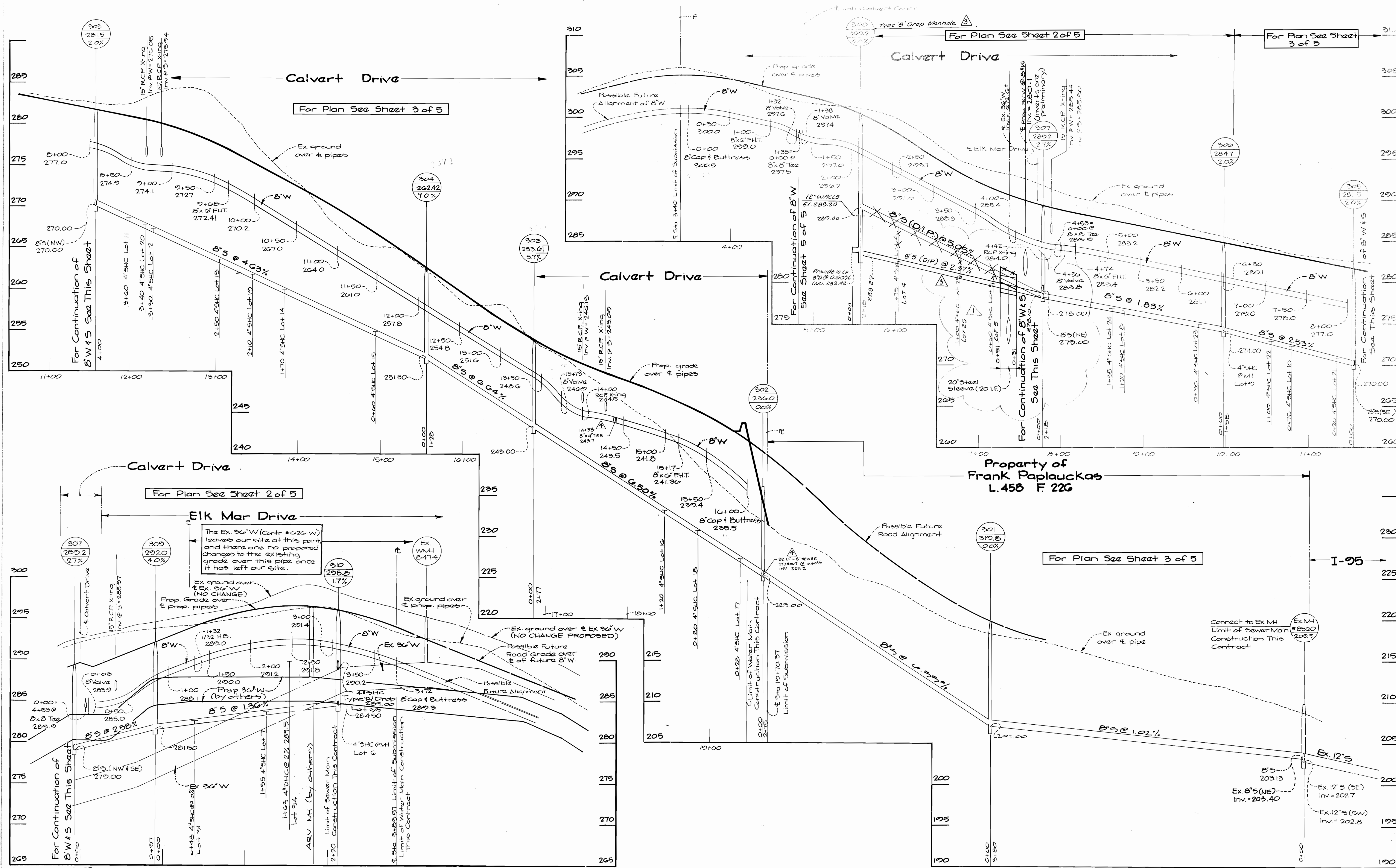
DES: G.A.H.					
DRN: G.A.H.					
CHK: C.K.G.	DEBT.	ADD WATER & SEWER CONNECTION FOR RAUSCH PROPERTY	9/12/92		
DATE: Aug. 1992	MCF	correct front footage on lots 4, 15, 16	10/1/92		
	BY	NO.	REVISION		

Water & Sewer Construction Plan
Scale: 1" = 50'
600' SCALE MAP NO. 37 BLOCK NO. 5, 6, 12

Calvert Ridge
Lots 3, 6-26, 29-31, 33, 34 and 36-41
First Election District
Howard County, Maryland
Contract No: 14-3120-D

SCALE AS SHOWN
SHEET 3 OF 5

AS BUILT



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

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

DES: G.A.H.

DRN: G.A.H.

CHK: C.K.G.

DATE: Aug 1992

NO.	REVISION	DATE
1	Add new connections & revise 302" W	12/29/91
2	ADD WATER AND SEWER CONNECTION FOR RAUSCH PROPERTY	3/12/92
3	Revise 8" S from MH 307 to MH 308	2/18/92
4	Revise 8" S from MH 302 to Ex. MH 8500	1/29/92
5	Revise 8" S (NE) to 279.00	10/29/92
6	Add Steel Sleeve - Change pipe to (D.I.P.)	

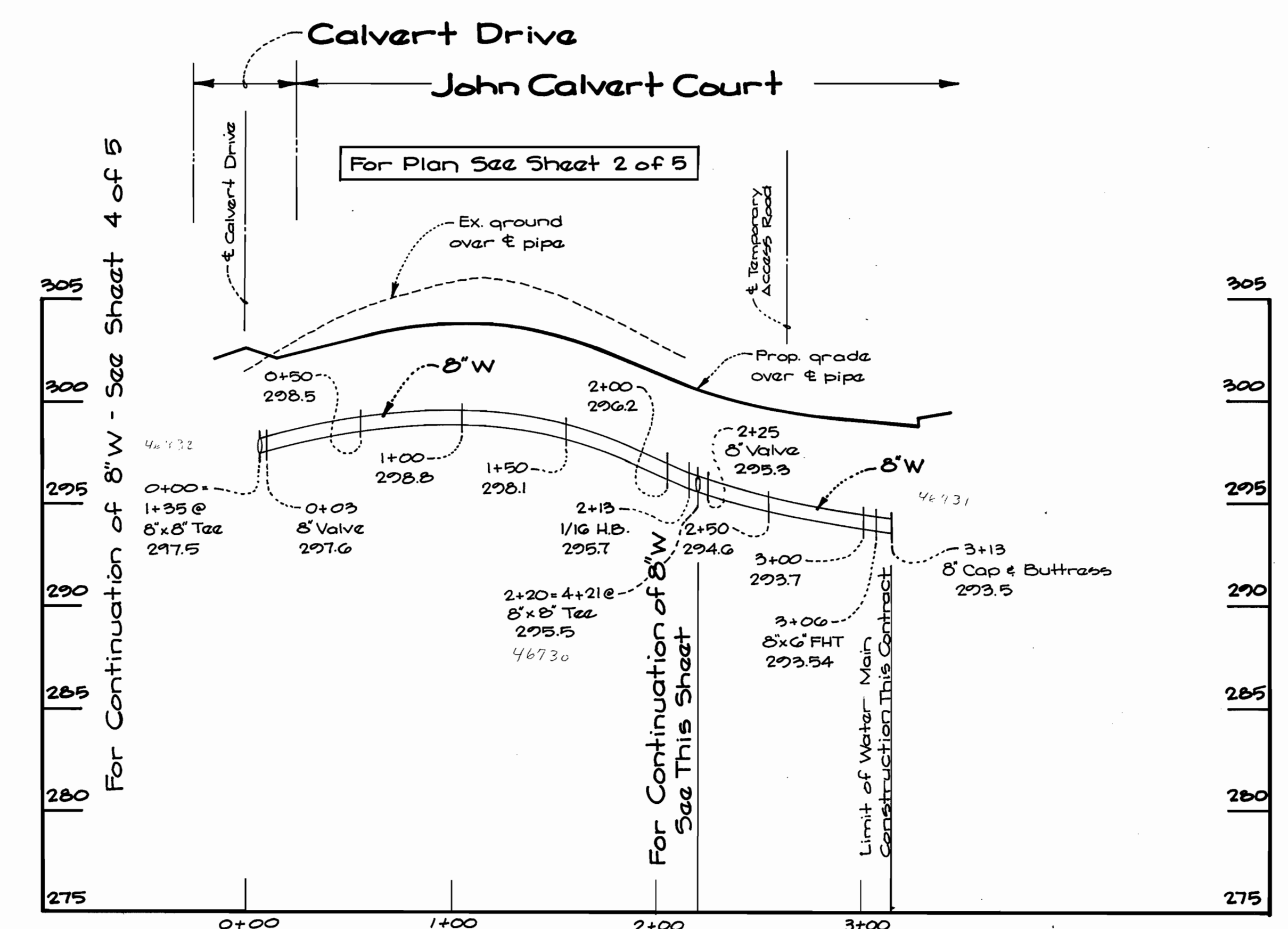
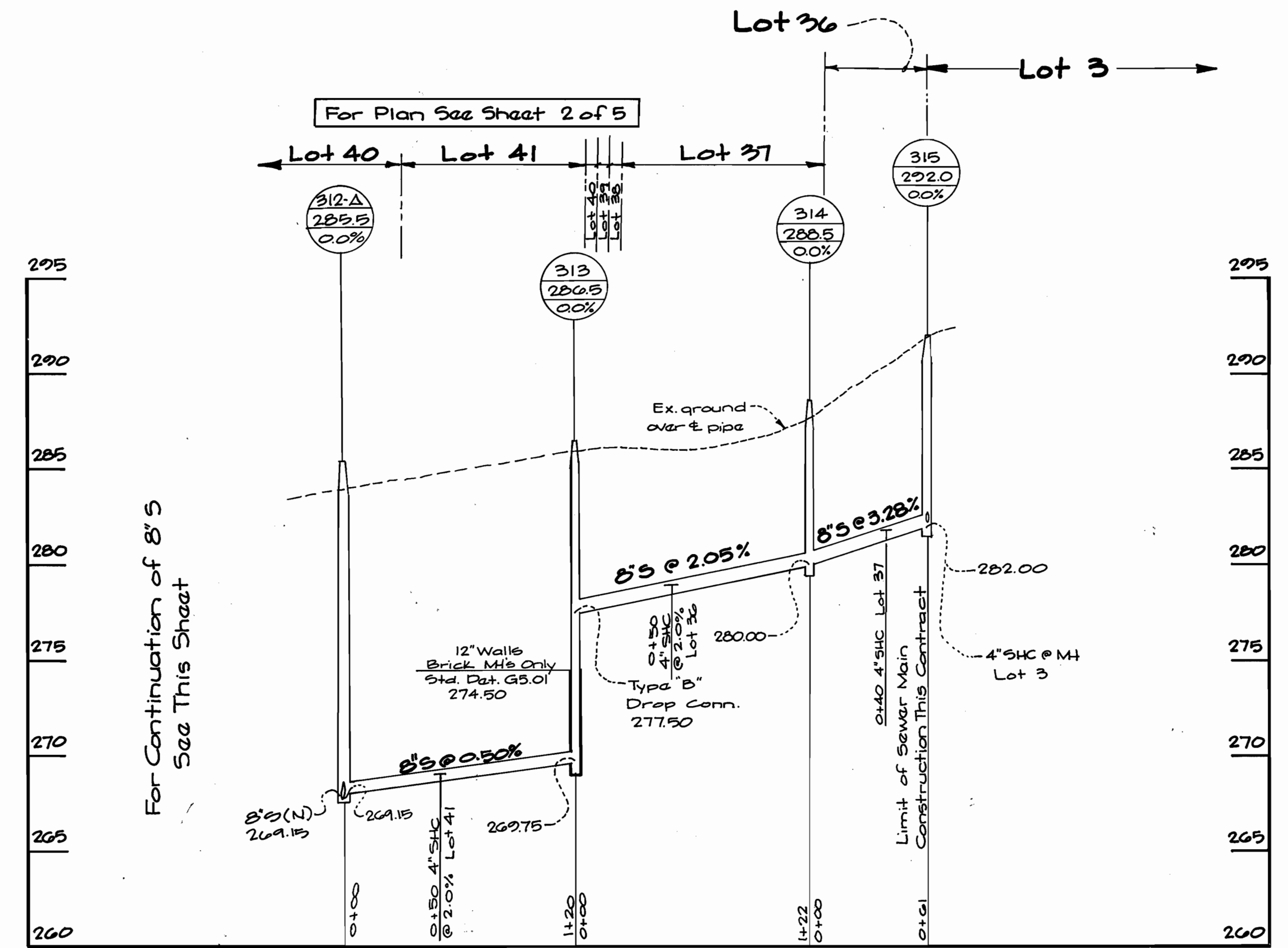
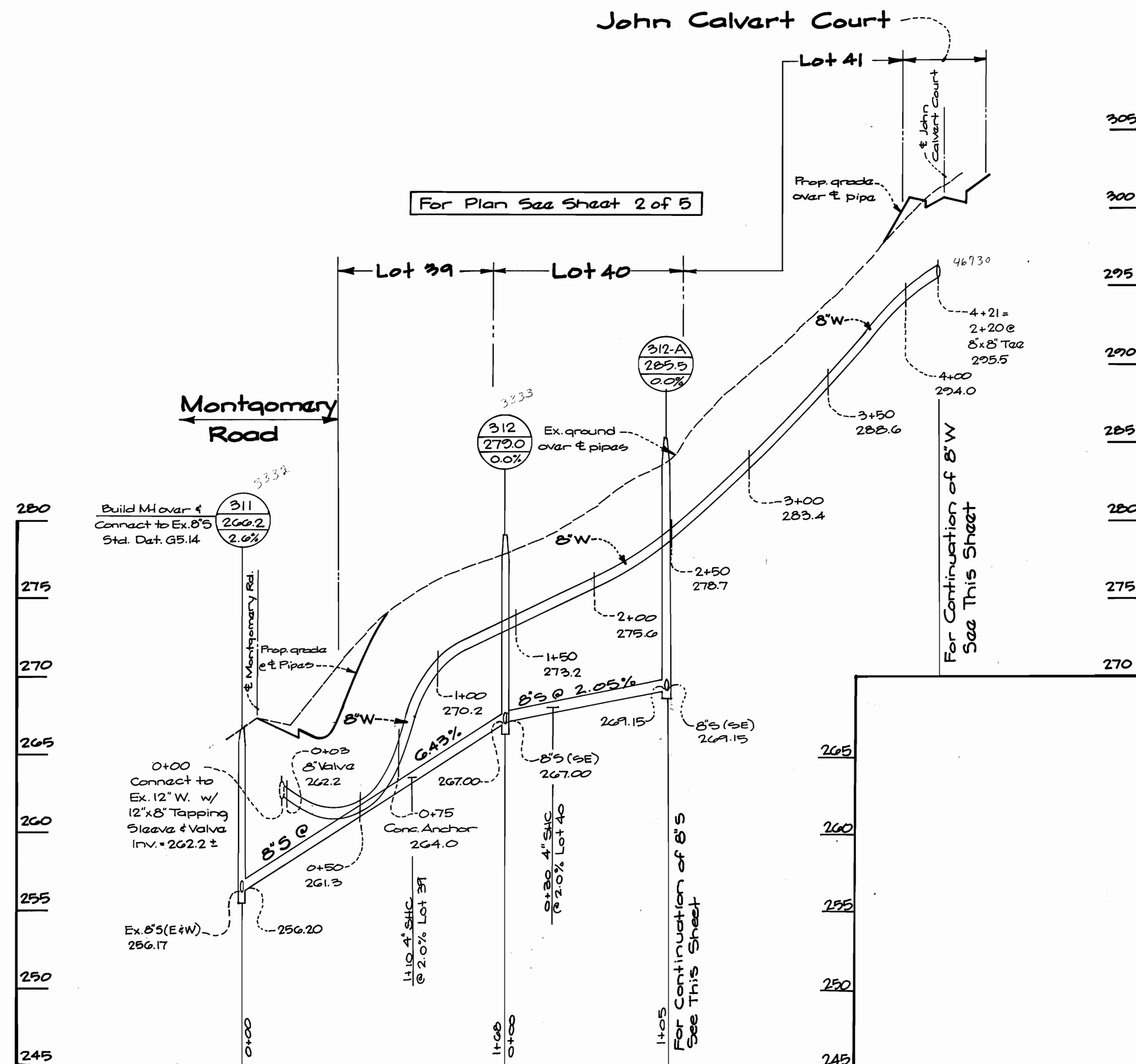
Profiles
Scale: 1" = 50' Horiz.
1" = 5' Vert.

Calvert Ridge
Lots 3, 6-26, 29-31, 33, 34 and 36-41
First Election District
Howard County, Maryland
Contract No: 14 3120-D

SCALE AS SHOWN
SHEET 4 OF 5

9/23/92
DATE
9/23/92
DATE
9/23/92
DATE

3909 NATIONAL DRIVE SUITE 250 BURTONTOWNE OFFICE PARK
BURTONTOWNE, MD 20866
13011 421-4024

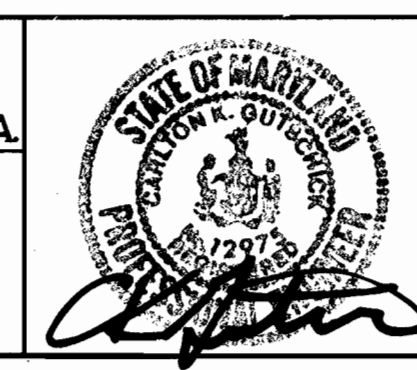


DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *[Signature]* DATE: 9/23/92
 Chief, Bureau of Engineering: *[Signature]* DATE: 2/22/92
 Chief, Land Development Div.: *[Signature]* DATE: *[Signature]*

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

3909 NATIONAL DRIVE SUITE 250 BURTNSVILLE OFFICE PARK
BURTNSVILLE, MD. 21086
(301) 421-4024



DES: G.A.H.
 DRN: G.A.H.
 CHK: C.K.G.
 DATE: Aug. 1992
 BY: G.A.H.
 NO. 1099
 REVISION: Revise Sewer Profile / Add MH 312-A

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

600' SCALE MAP NO. 37 BLOCK NO. 5, 6, 12

Calvert Ridge
 Lots 3, 6-20, 29-31, 33, 34 and 36-41
 First Election District
 Howard County, Maryland
 Contract No: 14-3120-D

SCALE AS SHOWN
 SHEET 5 OF 5