

WATER AND SEWER EXTENSION

CLARKS GLEN

SECTION 2 AREA 2

5th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

CONTRACT NO. 34-3522 -D

GENERAL NOTES

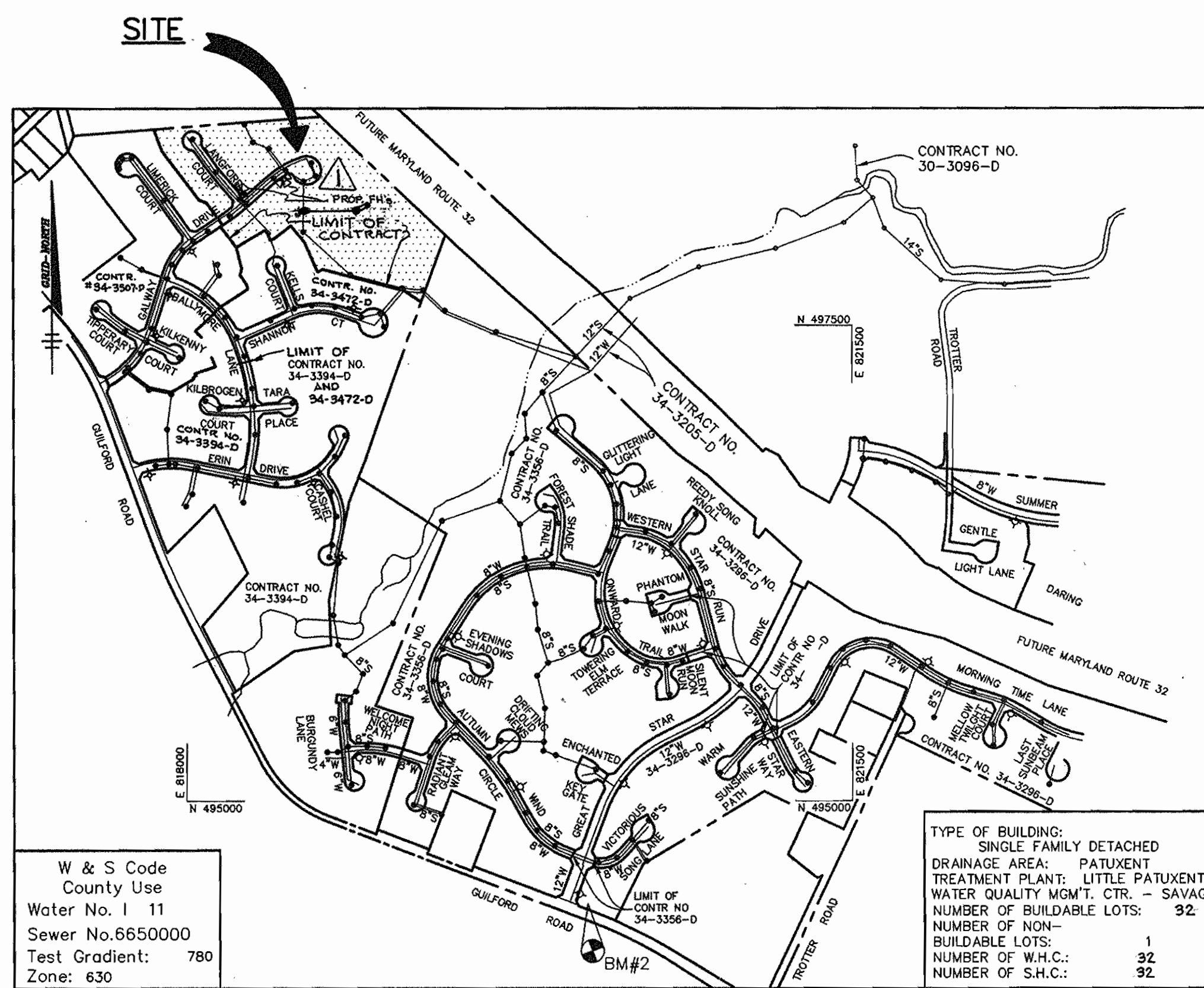
1. Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer at the Contractor's expense.
2. All 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 \ominus 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 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 Detail for Construction. (Latest Edition). 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 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	850-4520
Baltimore Gas & Electric Co. Underground Damage Control	787-9068
Miss Utility	1-800-257-7777
Colonial Pipeline Co.	795-1390
Bureau of Utilities, Howard County Department of Public Works	313-4900
9. 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.
10. 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.
11. All water mains to be D.I.P. Class 52 unless otherwise noted.
12. Tops of all water mains to have a minimum of 3-1/2' cover unless otherwise noted.
13. Valves adjacent to tees shall be strapped to tees.
14. All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
15. 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 Standard Details. Soil around the fire hydrant shall be compacted in accordance with Section 1000 and 1005 of the Standard Specifications.
16. The contractor shall not operate any water main valves on the existing water system.
17. All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
18. All sewer mains shall be D.I.P. and P.V.C. unless otherwise noted.
19. All manholes shall be 4'-0" inside diameter unless otherwise noted.
20. Force mains shall be D.I.P. only.
21. Manholes shown with 12" and 16" walls are for brick manholes only.
22. Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail 95.52. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade unless otherwise noted on the drawings.
23. House(s) with the symbol "C.N.S." indicates that cellar cannot be served.
24. Manholes can be either brick or precast concrete structures.
25. Contractor is solely responsible for construction means, methods, techniques, sequences, procedures, and safety precautions and programs.
26. The fire hydrant shall be installed as per standard detail W.1.11.
27. Fire hydrants will be located 3' FROM BACK OF CURB unless otherwise noted.
28. For sprinkler system for all townhomes or multi-family dwelling units should have a minimum of 1" connection with a 3/4" meter.
29. The 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 DPW requirements per Section 18.114(a) of the Howard County Code.

SMH	LOCATION	
71	N 558515.34	E 1331284.12
72	N 558742.27	E 1331037.73
73	GALWAY LP STA 3+53.75	5.04'
74	GALWAY STA 15+77.76	3.00' RT
75	GALWAY STA 15.02	26.6.26' RT
76	GALWAY STA 13+03.03	6.07' RT
77	LANGFORD STA 0+31.08	7.00' RT
78	LANGFORD STA 2+20.12	5.98' RT
79	N 559233.44	E 1330455.88
80	GALWAY LP STA 2+71.38	7.40'
81	N 558,853	E 1,331,310
82	N 558,888	E 1,331,377
83	GALWAY LP STA 1+74.38	17.75'
84	N 559183.41	E 1330858.56
85	N 559217.47	E 1330774.18
86	N 559312.17	E 1330729.46
87	GALWAY STA 11+96.32	7.00' RT
81A	N 558,847	E 1,331,039

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" C & B	1 EA.			
4" C & B	1 EA.			
6" C & B	1 EA.			
4"X3" R	2 EA.			
8"X6" R	1 EA.			
6"X4" T	1 EA.			
8"X6" T	2 EA.			
8"X4" T	1 EA.			
8"X8" C	1 EA.			
8" 1/8 HB	2 EA.			
8" 1/16 HB	2 EA.			
8" 1/32 HB	2 EA.			
4" 1/32 HB	1 EA.			
4" 1/16 HB	1 EA.			
6" 1/8 HB	4 EA.			
6" VALVES	4 EA.			
4" VALVES	3 EA.			
8" VALVES	4 EA.			
8" WATER	1145 LF			
6" WATER	470 LF			
4" WATER	210 LF			
3/4" WHC	700 LF			
4" SHC	610 LF			
8" SEWER	1623 LF			
8" DIP CL52	1019 LF			
FIRE HYDRANTS	2 EA.			
SEWER MANHOLES	18 EA.			
V.F. SEWER MANHOLES	293 V.F.			
3" BLOWOFF	2 EA.			



BENCHMARKS

BM1
HOWARD COUNTY MONUMENT NO. 2637003
ELEV. 481.25
CONCRETE MONUMENT

BM2
HOWARD COUNTY MONUMENT NO. 2437003
ELEV. 472.12
CONCRETE MONUMENT

VICINITY MAP

SCALE: 1"=600'

NAME OF UTILITY CONTRACTOR: _____

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on F-20-40

Review for Howard Soil Conservation District and meets technical requirements.

J. A. Work 6-12-96
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John R. Roberts 6-12-96
HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>R. J. ...</i> 6-12-96 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>...</i> 6-12-96 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
--	--

RIEMER MUEGGE & ASSOCIATES, INC.
Planners • Engineers • Surveyors
8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
410-997-8900 FAX: 410-997-9282
hoco/00000 00.dwg

J. ...
JAYKANT D. PAREKH # 19148

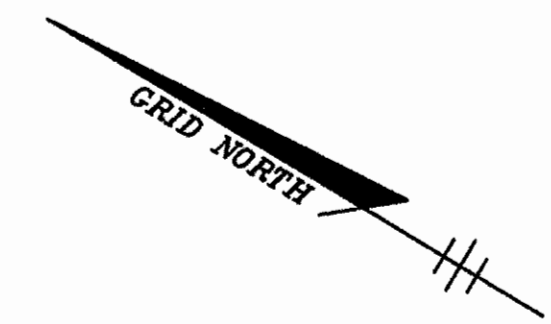
DES: BLW	
DRN: BLW	
CHK: JTO	
DATE: 5-20-96	
E.L.R. Δ REVISED MANHOLE QUANTITY, MODIFIED VICINITY MAP	1/23/99
BY NO. REVISION	DATE

TITLE SHEET

600' SCALE MAP NO. 35 BLOCK NO. 13

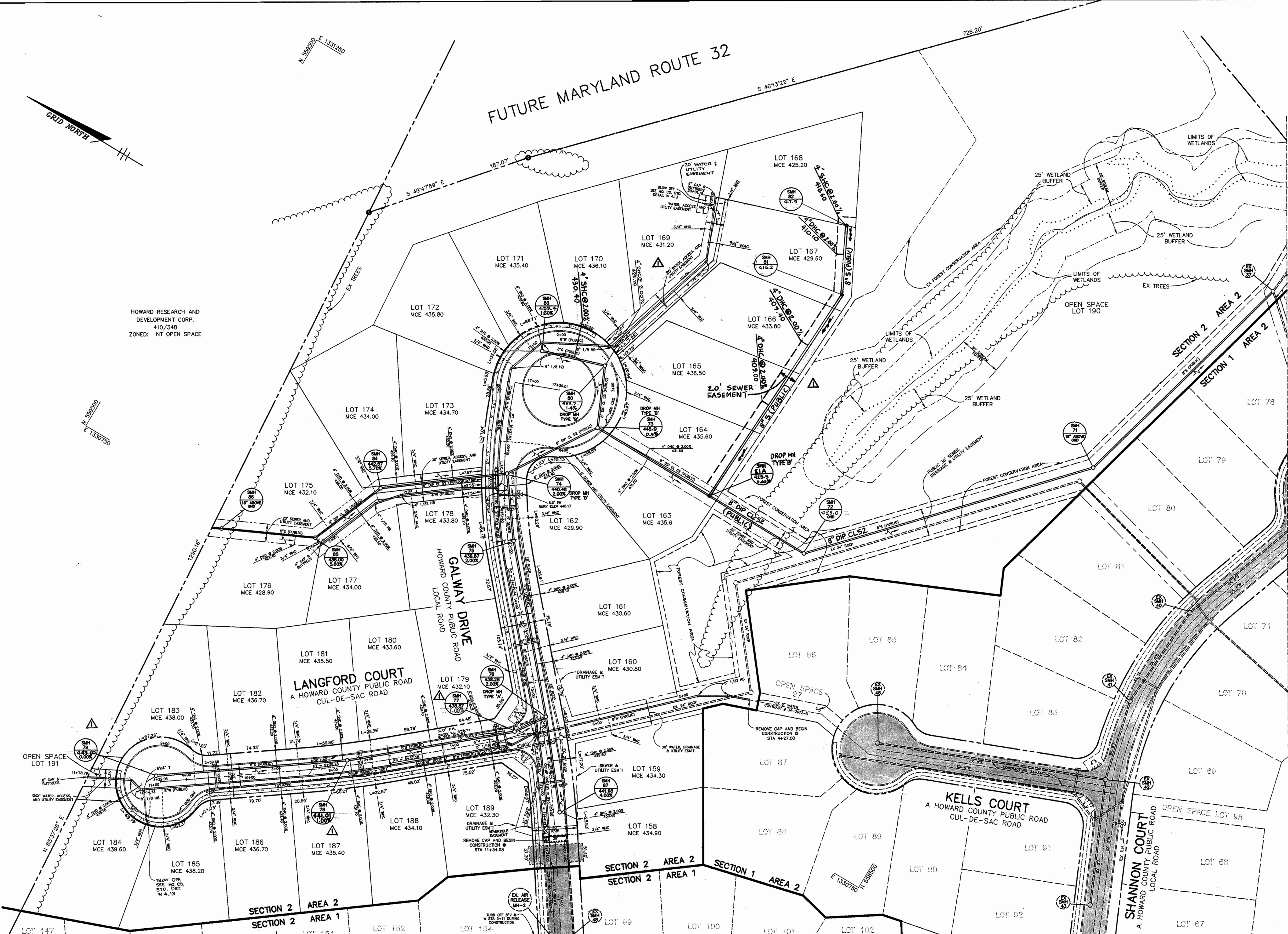
CLARKS GLEN
SECTION 2 AREA 2
LOTS 158 THRU 191
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 34-3522 -D

SCALE AS SHOWN
SHEET 1 OF 4



FUTURE MARYLAND ROUTE 32

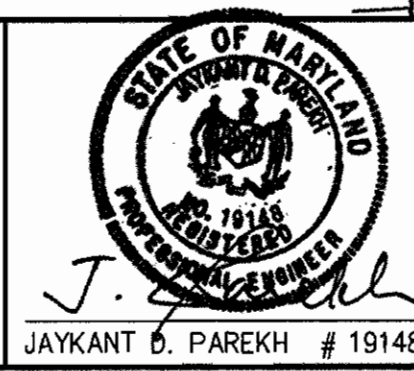
HOWARD RESEARCH AND DEVELOPMENT CORP.
410/348
ZONED: NT OPEN SPACE



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert W. Bannan 6-12-96
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
John W. Bannan 6/19/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

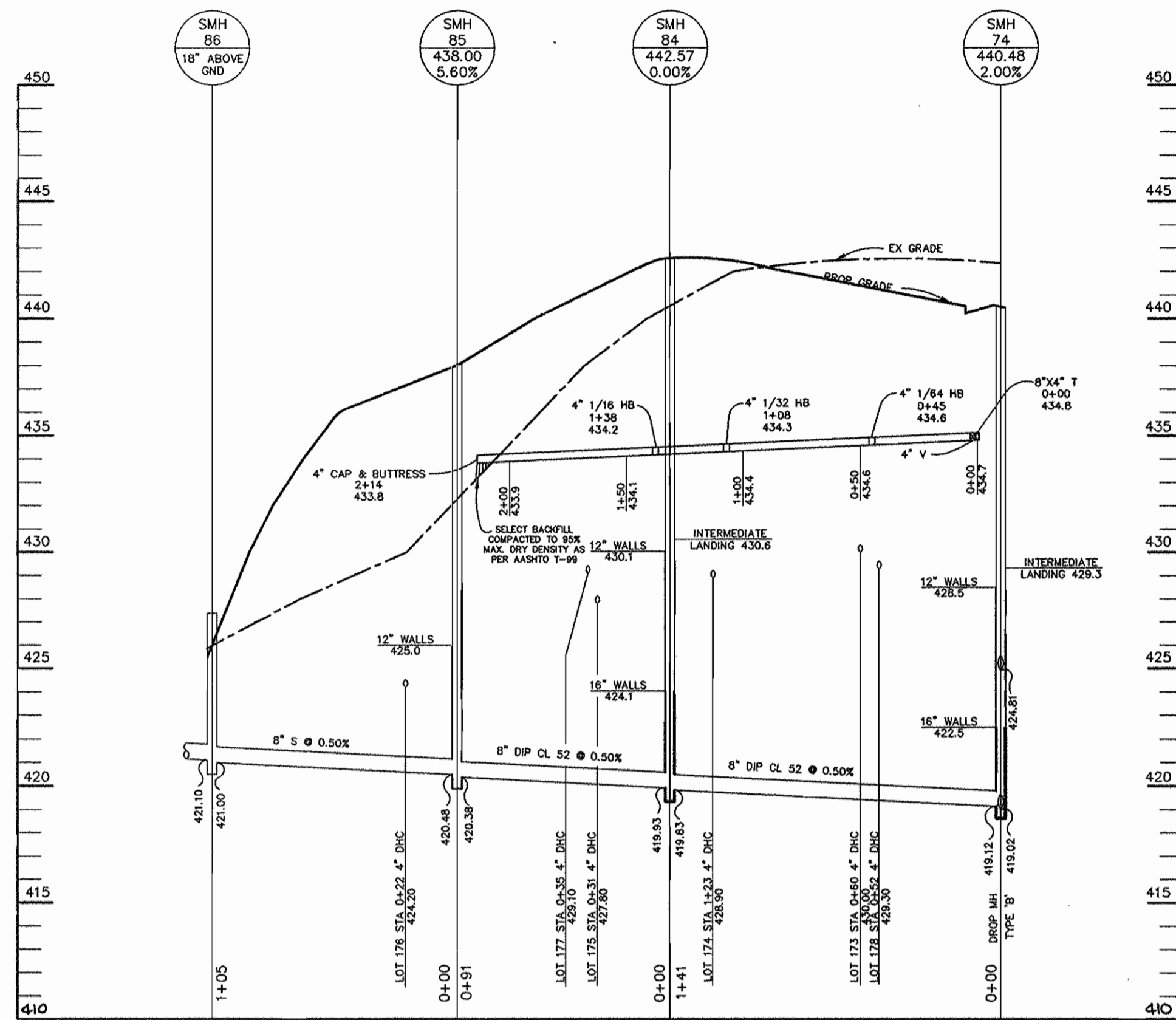
RIEMER MUEGGE & ASSOCIATES, INC.
Planners • Engineers • Surveyors
8818 Centre Park Drive • Suite 200 Columbia, MD 21045
410-997-8900 FAX: 410-997-9282
REC/00000 00.000



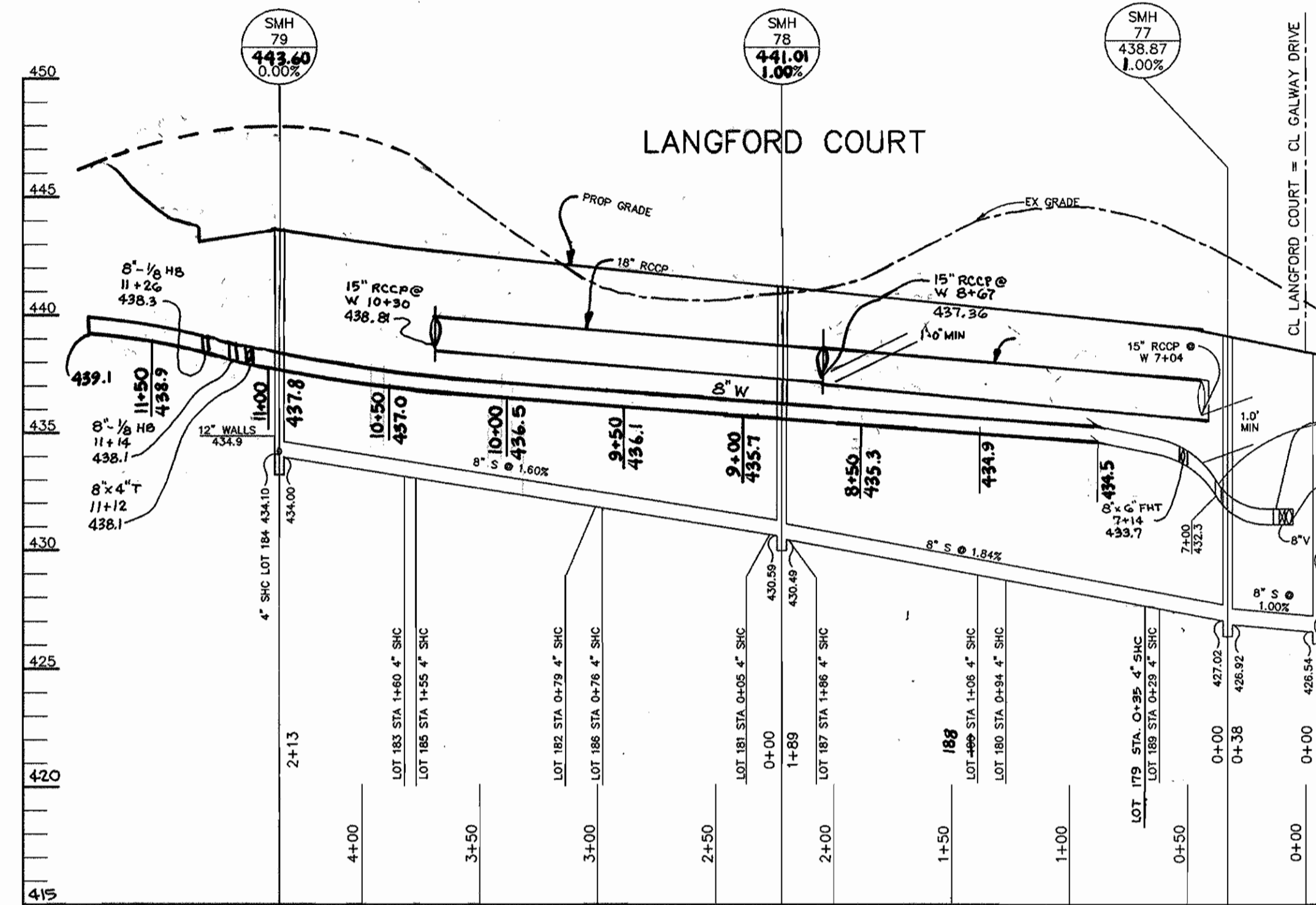
DES:	BLW				
DRN:	BLW				
CHK:	JTO				
DATE:	5-20-96				
E.L.R.:	I	REVISED MANHOLE RIM ELEV'S, CHANGED SEWER LINE LOCATION	1-29-99		
BY:	NO.	REVISION	DATE		

WATER AND SEWER PLAN
600' SCALE MAP NO. 35 BLOCK NO. 13

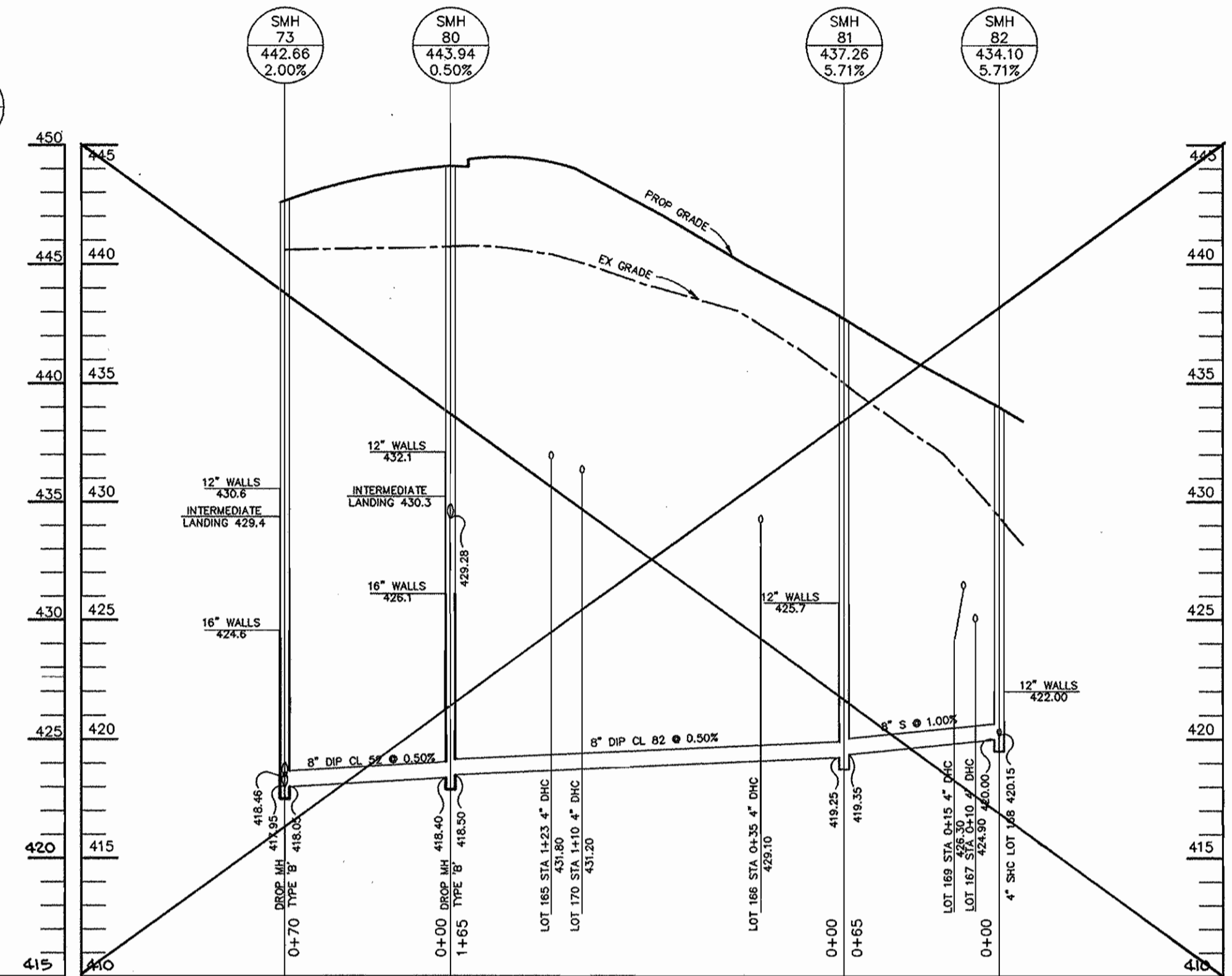
CLARKS GLEN
SECTION 2 AREA 2
LOTS 158 THRU 191
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 34-3522-D
SCALE AS SHOWN
SHEET 2 OF 4



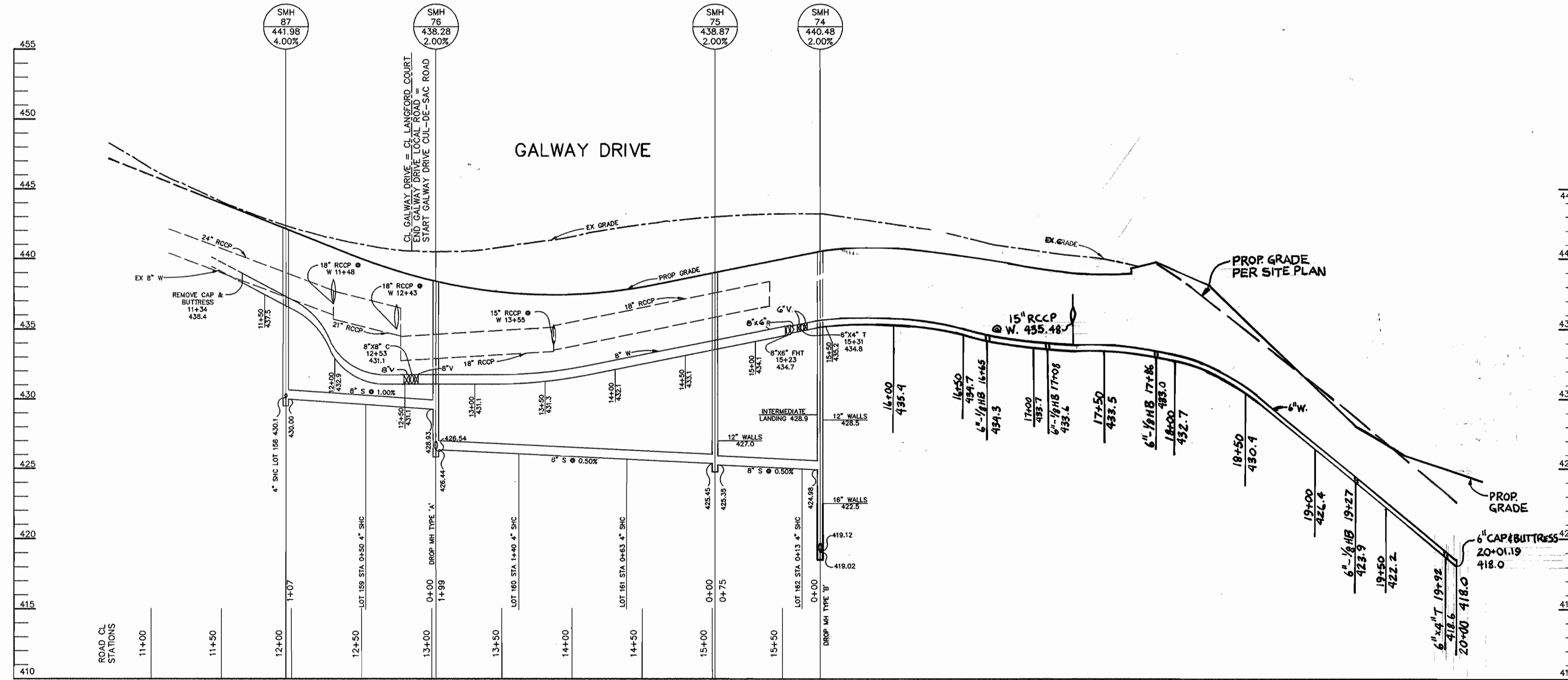
PROFILE
SCALE:
HOR.-1"=50'
VERT.-1"=5'



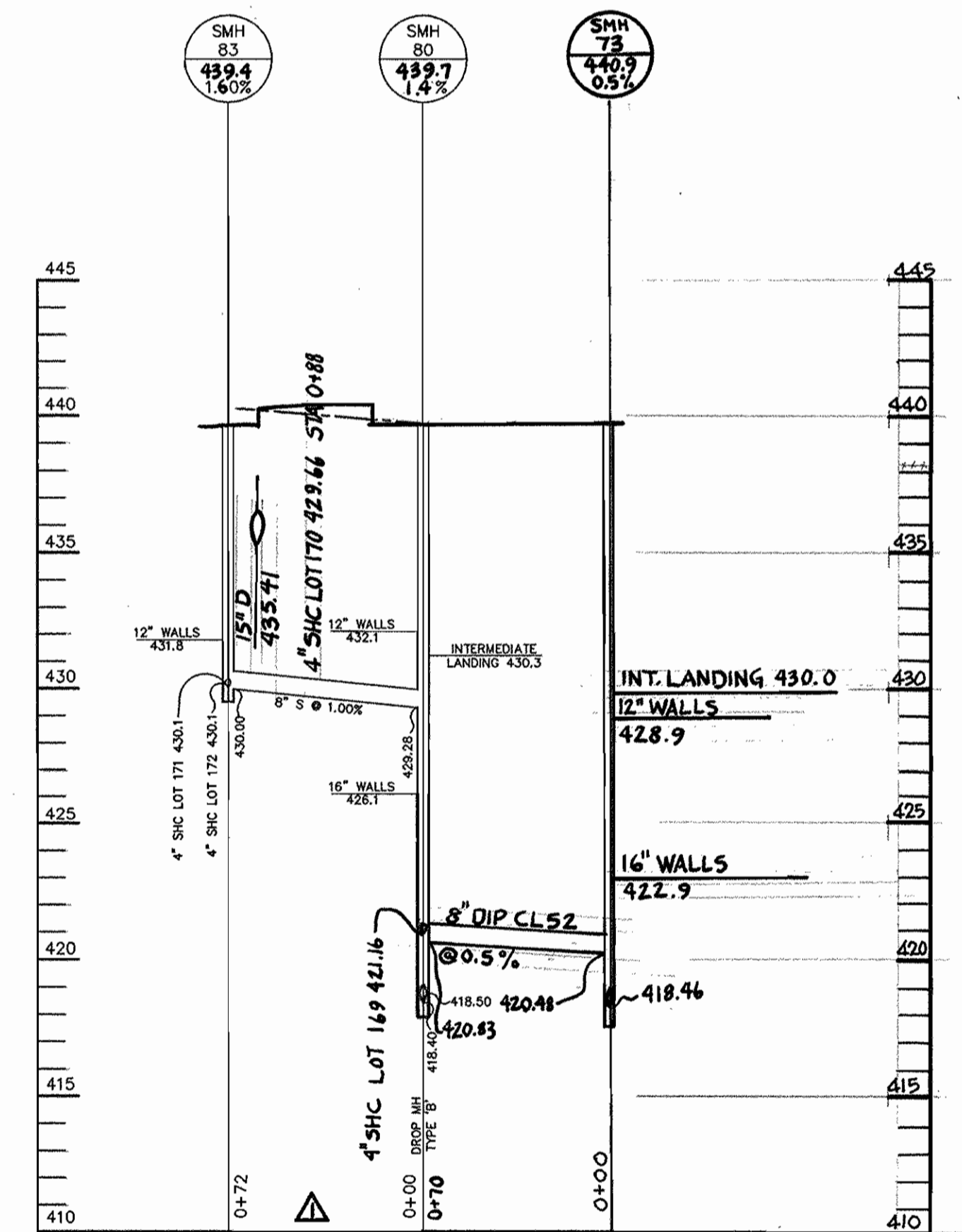
PROFILE
SCALE:
HOR.-1"=50'
VERT.-1"=5'



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



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



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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

RIEMER MUEGGE & ASSOCIATES, INC.
Planners • Engineers • Surveyors
8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
410-997-8900 FAX: 410-997-8282
RMC0/00000 00.DWG



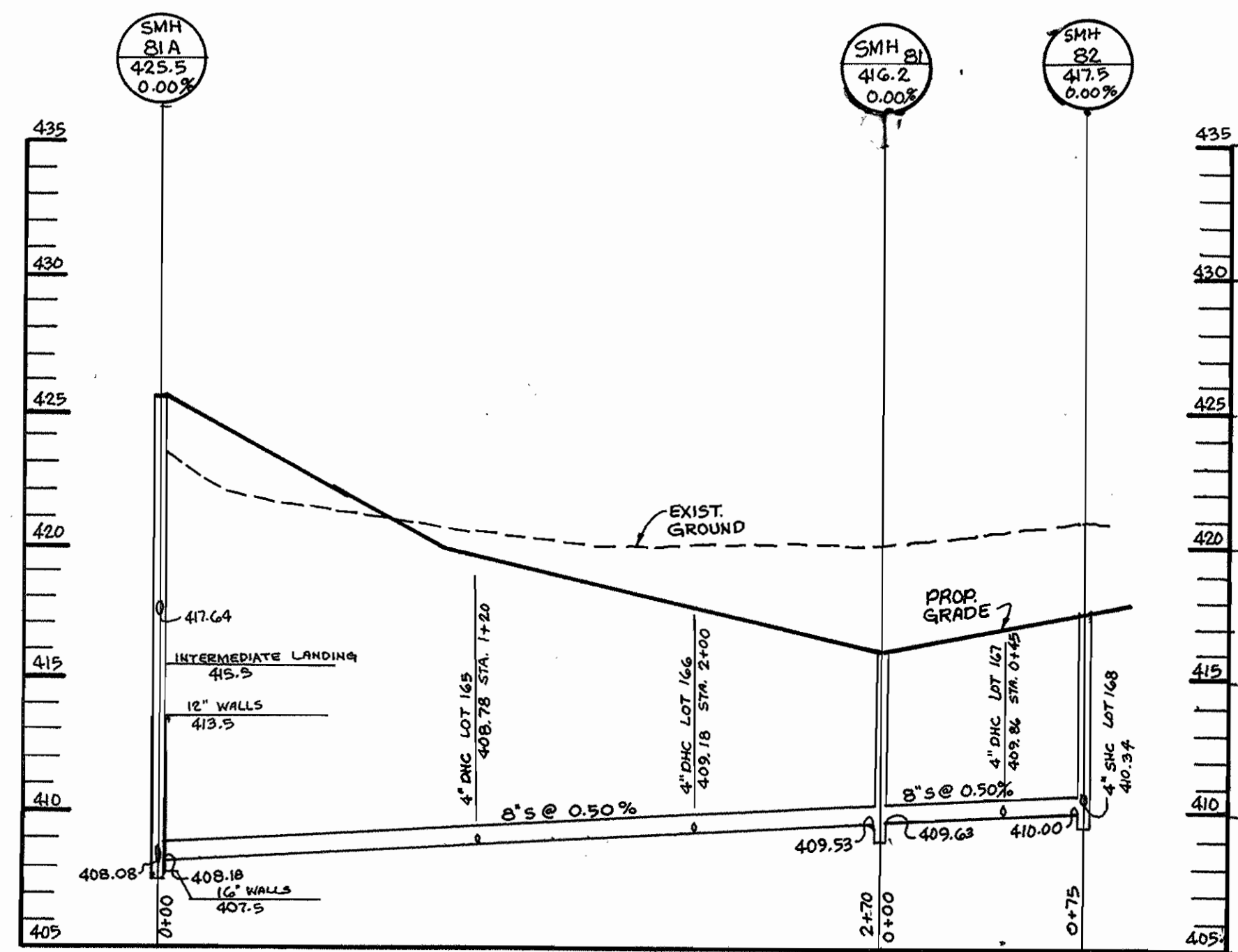
DES: BLW					
DRN: BLW					
CHK: JTD					
E.L.R. BY NO.					
DATE: 5-20-96					
REVISION: REVISED WATER & SEWER IN LANGFORD CRT. & GALWAY DRIVE. DATE: 1-29-99					

WATER AND SEWER PROFILES

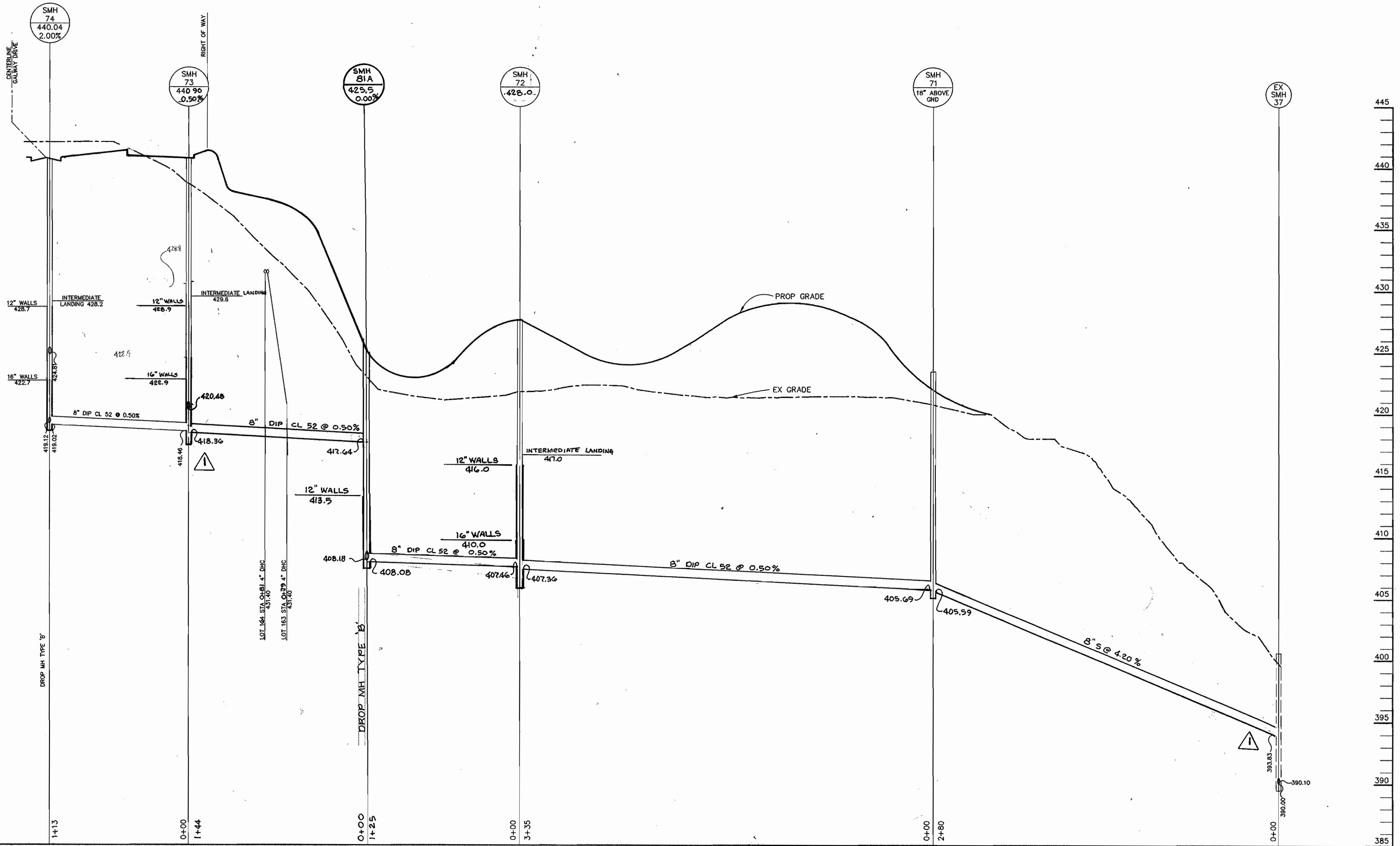
CLARKS GLEN
SECTION 2 AREA 2
LOTS 158 THRU 191
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 34-3522-D

SCALE AS SHOWN

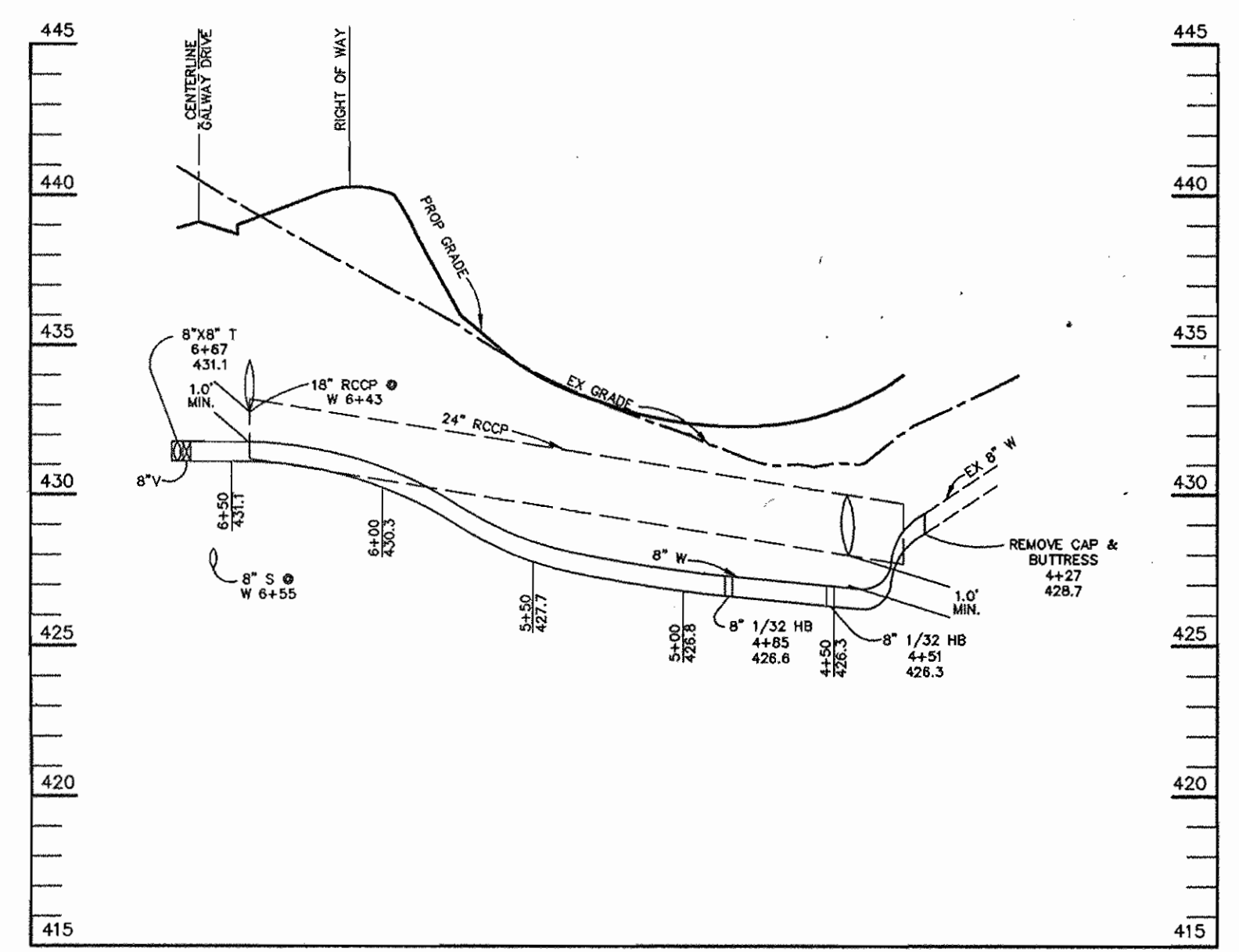
SHEET 3 OF 4



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



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



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

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Robert J. ...
 CHIEF, BUREAU OF UTILITIES
 DATE: 6-12-96

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND
 ...
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 6/19/96

RIEMER MUEGGE & ASSOCIATES, INC.
 Planners • Engineers • Surveyors
 8818 Centre Park Drive • Suite 200 • Columbia, MD 21046
 410-997-8900 FAX: 410-997-9282
 HOCO/00000 00.00%

STATE OF MARYLAND
 J. ...
 JAYKANT D. PAREKH # 19148

DES: BLW			
DRN: BLW			
CHK: JTD			
DATE: 5-20-96			
R.J.C.	ADDED ONE, REVISED ONE, SEWER PROFILES	1-25-98	
BY NO.	REVISION	DATE	

WATER AND SEWER PROFILES
 600' SCALE MAP NO. 35 BLOCK NO. 13

CLARKS GLEN
 SECTION 2 AREA 2
 LOTS 158 THRU 189
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 CONTRACT 34-3522-D

SCALE AS SHOWN
 SHEET 4 OF 4