


SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN OF WATER AND SEWER MAINS
3	WATER AND SEWER PROFILES

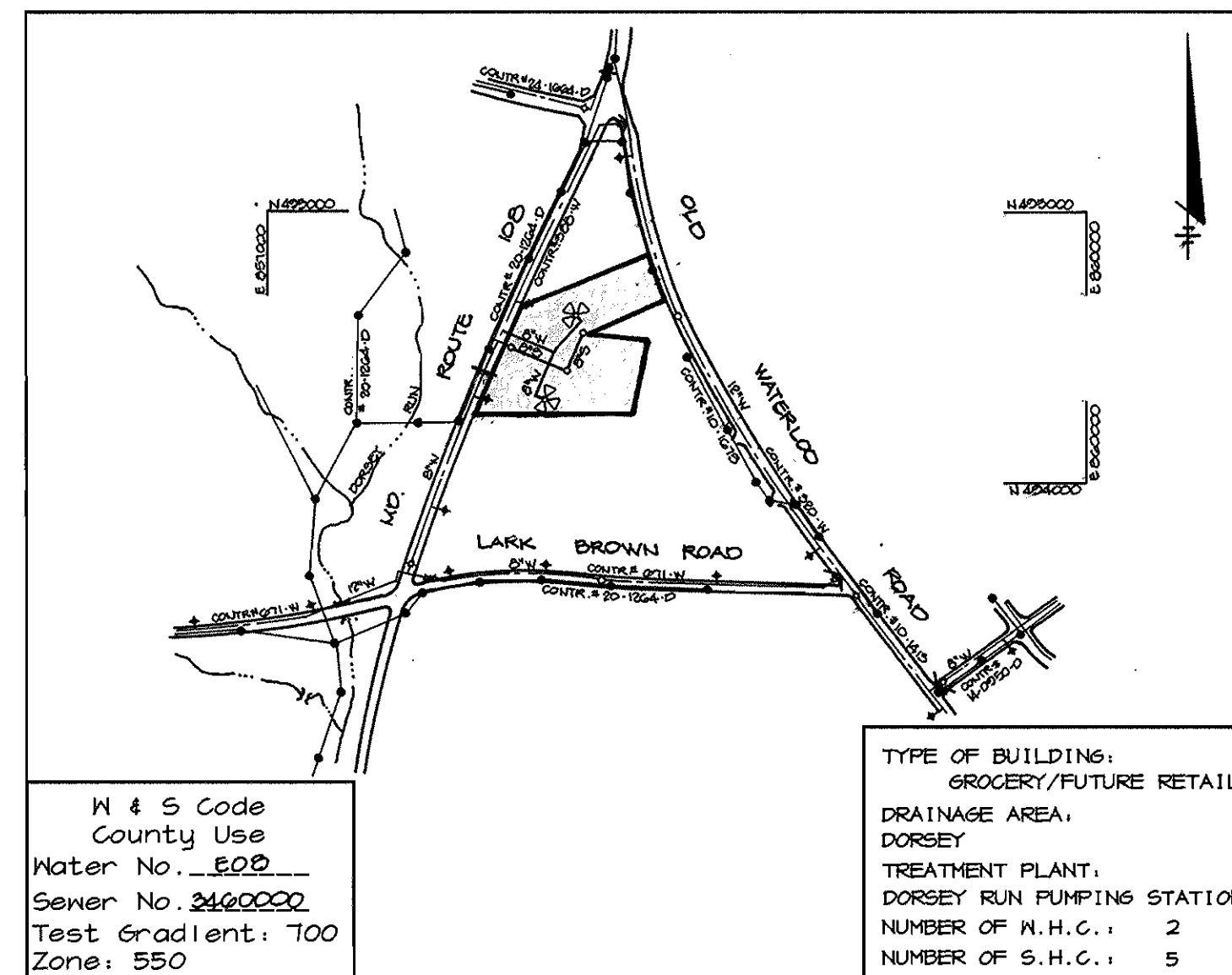
WATER AND SEWER EXTENSIONS FOOD LION

6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 24-3629-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 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  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	850-4620
Baltimore Gas & Electric Co. Underground Damage Control	787-4068
High Utility	1-800-281-7777
Colonial Pipeline Co.	795-1340
Bureau of Utilities, Howard County Department of Public Works	313-4400
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 M.T. in plan and profile shall have watertight frame and covers, Standard Detail 65.52. 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 N.1.11.
27. Fire hydrants will be located 3' FROM BACK OF CURB unless otherwise noted.
28. For sprinkler systems, 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) 313-7450 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 DPM requirements per Section 18.114(a) of the Howard County Code.



VICINITY MAP
SCALE: 1"=600'

BENCH MARKS

BM #1
HO. CO. MONUMENT 27GC
ELEV. 231.23
N 255, 250.75 E 1,370, 246.50

BM #2
HO. CO. MONUMENT 27HC
ELEV. 231.70
N 252, 254.21 E 1,372, 629.50

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	484 LF			
6" WATER	45 LF			
8" SEWER	283 LF			
6" SEWER	17 LF			
4" SEWER	47 LF			
SEWER MANHOLES	4 EA.			
8" X 8" T	1 EA.			
8" X 6" T	3 EA.			
8" VALVES	2 EA.			
6" VALVES	4 EA.			
FIRE HYDRANTS	2 EA.			
8" X 8" TS4V	1 EA.			
8" 1/8 HB	1 EA.			
SEWER MANHOLE 6' DEEP	2 VF.			
6" - 1/2" HD	2 EA.			
RELOCATE FIRE HYDRANT	1 EA.			

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 SDP-97-106

CHECKBOX
AS-BUILT DATE _____
SURVEY AND DRAFTING DIVISION

Review for Howard Soil Conservation District and meets technical requirements.

Luigi Simmaro 10/6/97
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John R. Robertson 10/6/97
HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282
97119.VSI.DWG



DES: RPP				
DRN: RPP				
CHK: CJR				
DATE: 0-25-97	BY NO.	REVISION	DATE	

TITLE SHEET

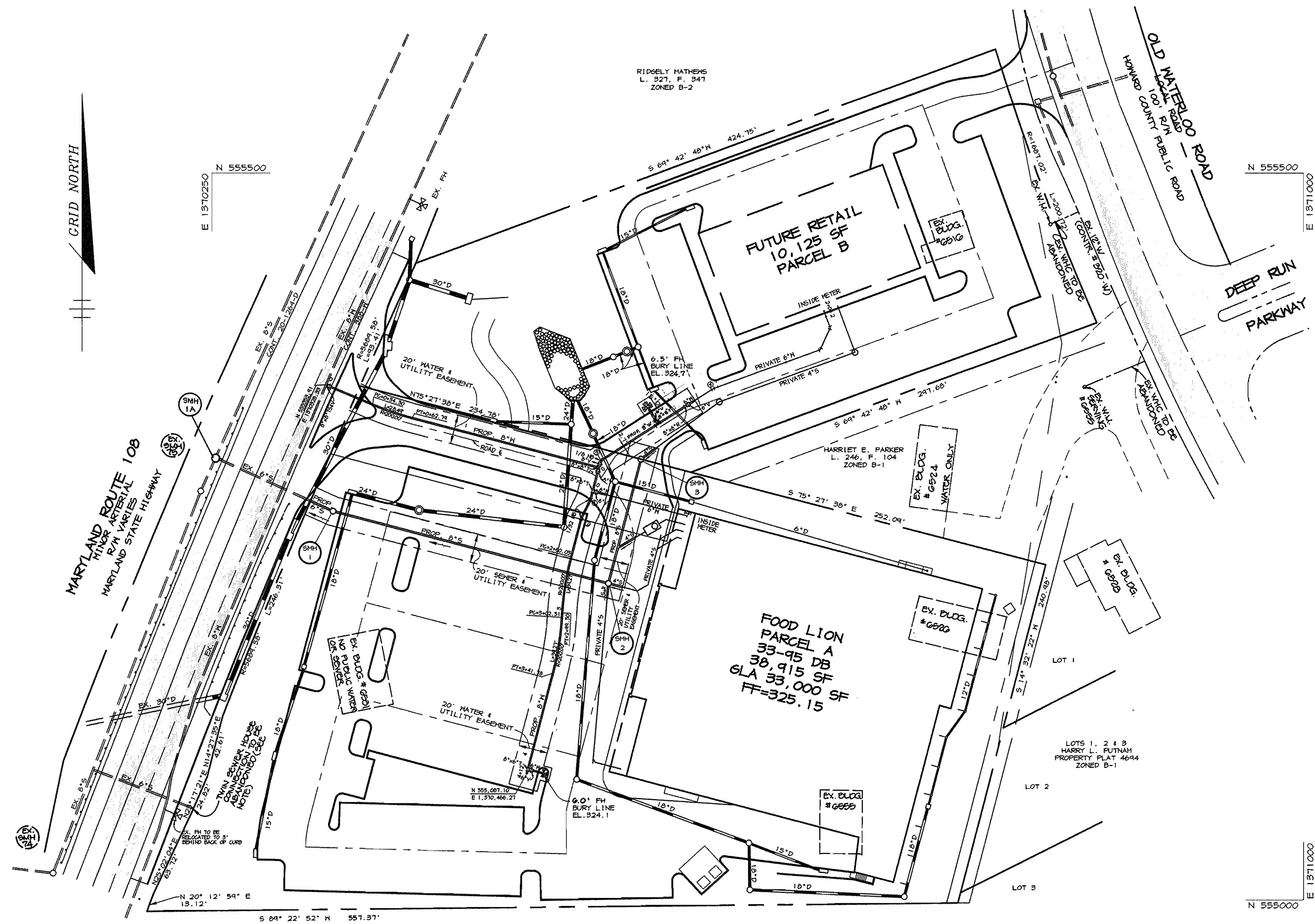
600' SCALE MAP NO. 37 BLOCK NO. 20

FOOD LION - MD. ROUTE 108

FOOD LION
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 24-3629-D

SCALE AS SHOWN

SHEET 1 OF 3



HORIZONTAL BEND COORDINATES

- ① N 555,275.57
E 1,310,510.20
- ② N 555,262.50
E 1,310,509.83
- ③ N 555,302.02
E 1,310,517.31
- ④ N 555,351.31
E 1,310,544.38

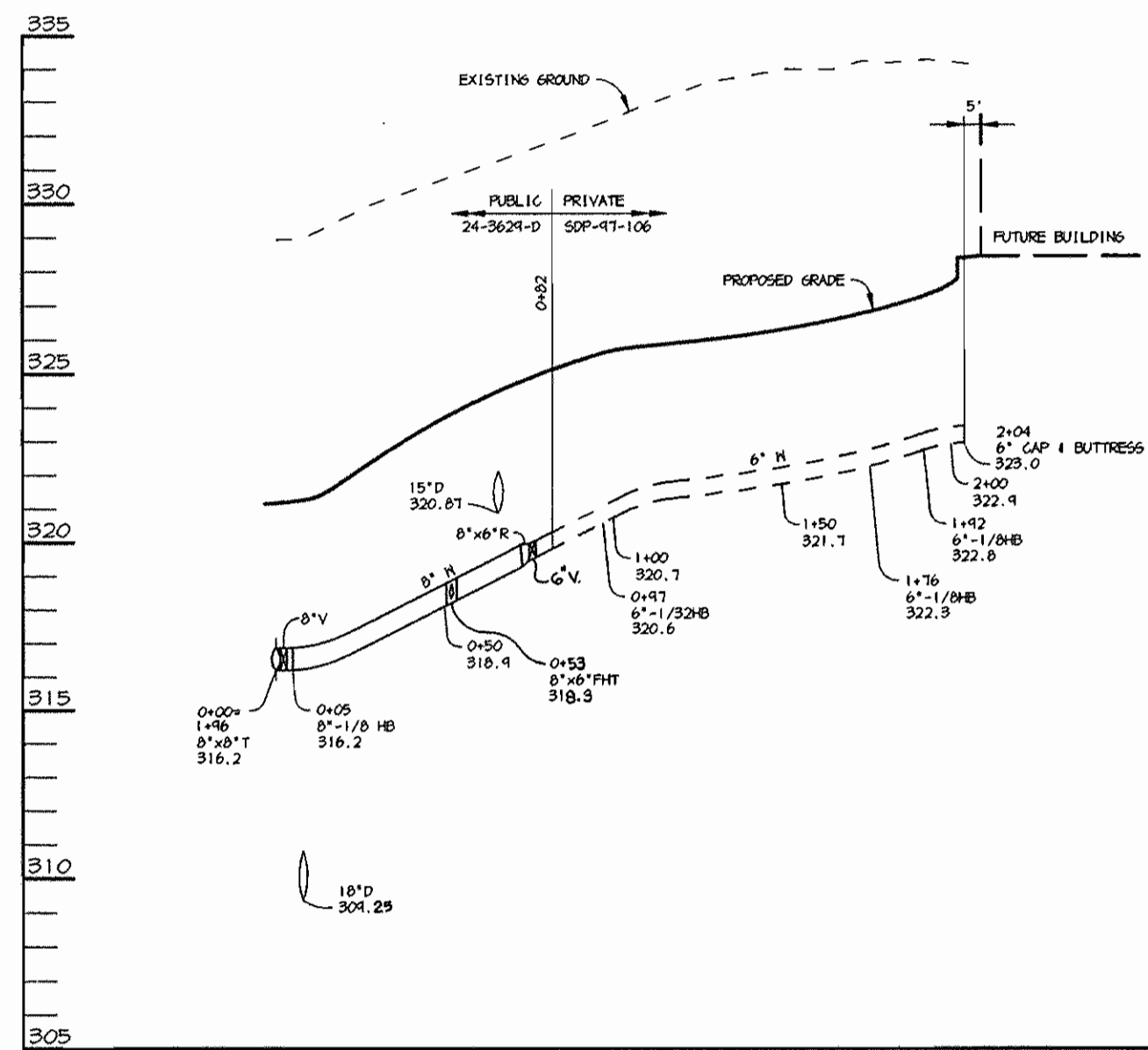
SHC ABANDONMENT FOR #G585

1. CONTACT BUREAU OF UTILITIES.
2. DISCONNECT TWIN SHC AT MAIN AND PLUG AT MAIN.

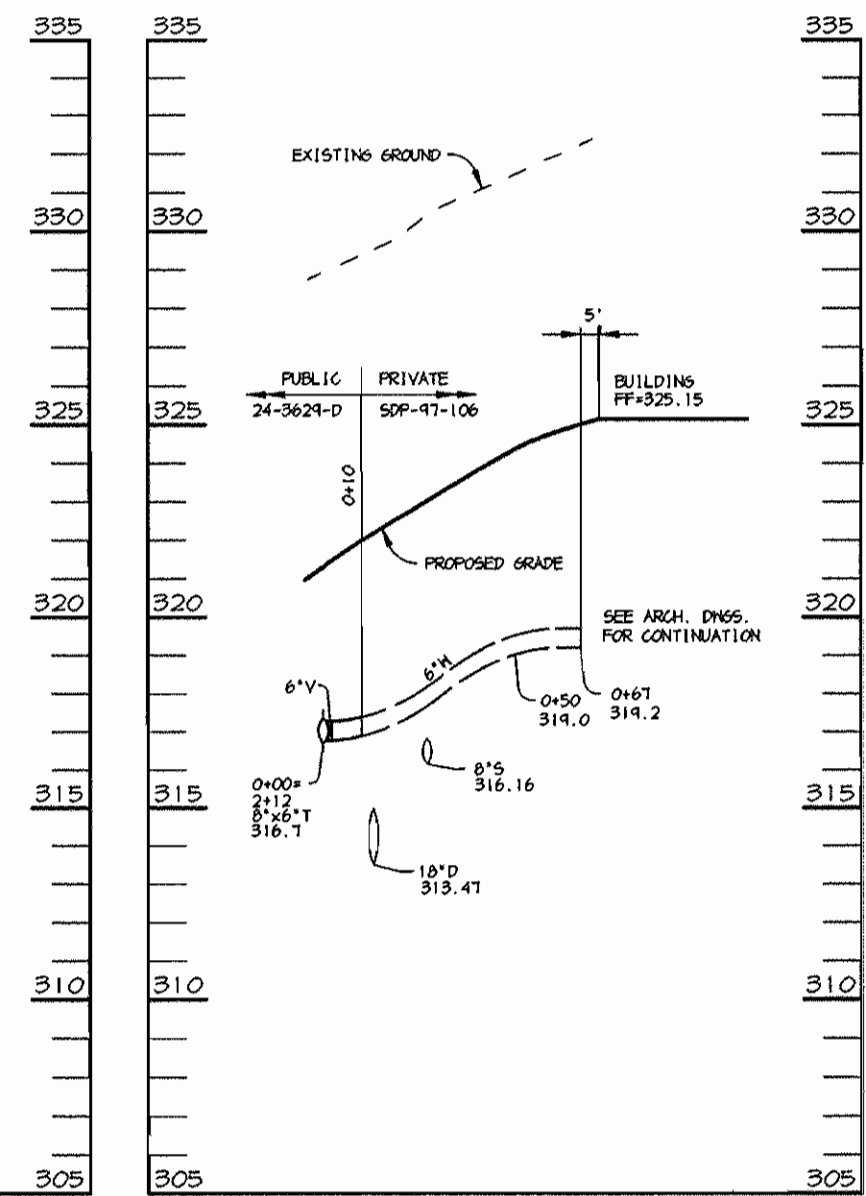
WHC ABANDONMENT FOR #G516 AND #G555

1. CONTACT BUREAU OF UTILITIES.
2. BEVER AT CORPORATION COCK AND ENCASE IN CONCRETE AT MAIN FOR #G516.
3. FOR #G555, DETERMINE HOW METER SERVES SIX HOUSES #G524 AND #G525 PRIOR TO DISCONNECTION.

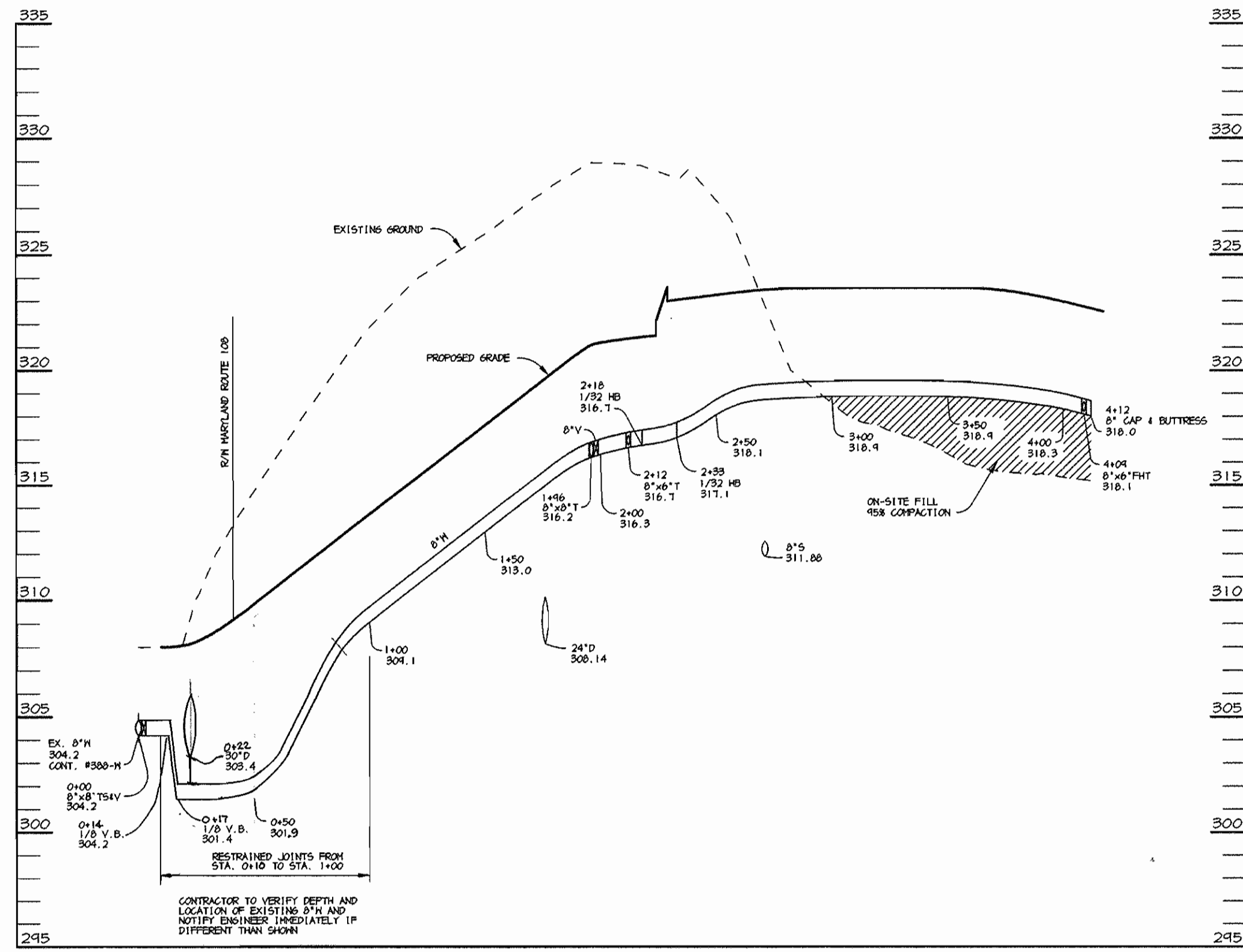
FOOD LION - MD. ROUTE 108



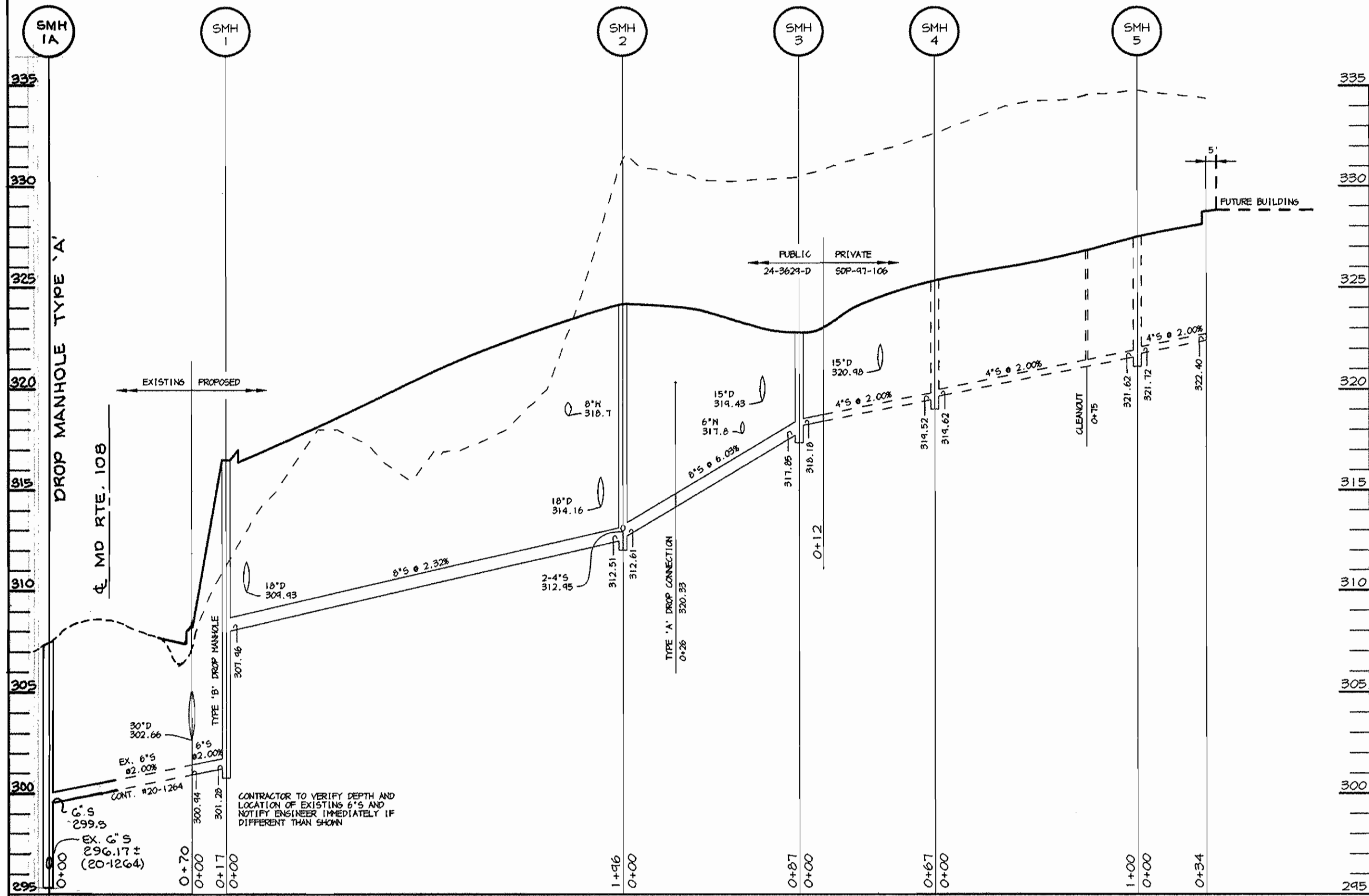
WATER PROFILE
SCALE
HOR. - 1" = 50'
VERT. - 1" = 5'



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



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



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

STRUCTURE SCHEDULE

STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP	REMARKS
SMH-1	4' MH	N 555,267.60 E 1,370,333.21	307.96	301.28	310.5	HOCO STD. DETAIL 6 5.12
SMH-2	4' MH	N 555,217.89 E 1,370,522.46	312.95(2-4') 312.61(8")	312.51	324.2	HOCO STD. DETAIL 6 5.12
SMH-3	4' MH	N 555,303.12 E 1,370,544.80	318.18	317.85	322.8	HOCO STD. DETAIL 6 5.12
SMH-1A	4' MH	N 555,304 E 1,370,613	299.50	296.17	307.2	" "

FOOD LION - MD. ROUTE 100

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. ...
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

...
CHIEF, DEVELOPMENT ENGINEERING DIVISION

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282
971101.WS3.DWG

STATE OF MARYLAND
JAYKAM D. PAREKH # 19148
PROFESSIONAL ENGINEER

DES: RPP					
DRN: RPP					
CHK: CJR					
DATE: 9-29-97	BY	NO.	REVISION	DATE	

PROFILES

600' SCALE MAP NO. 37 BLOCK NO. 20

FOOD LION
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT 24-3629-D

SCALE AS SHOWN
SHEET 3 OF 3