

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

# WATER AND SEWER EXTENSIONS

# PATAPSCO VALLEY

# BUSINESS CENTER


## PARCEL D-1

### 1st ELECTION DISTRICT

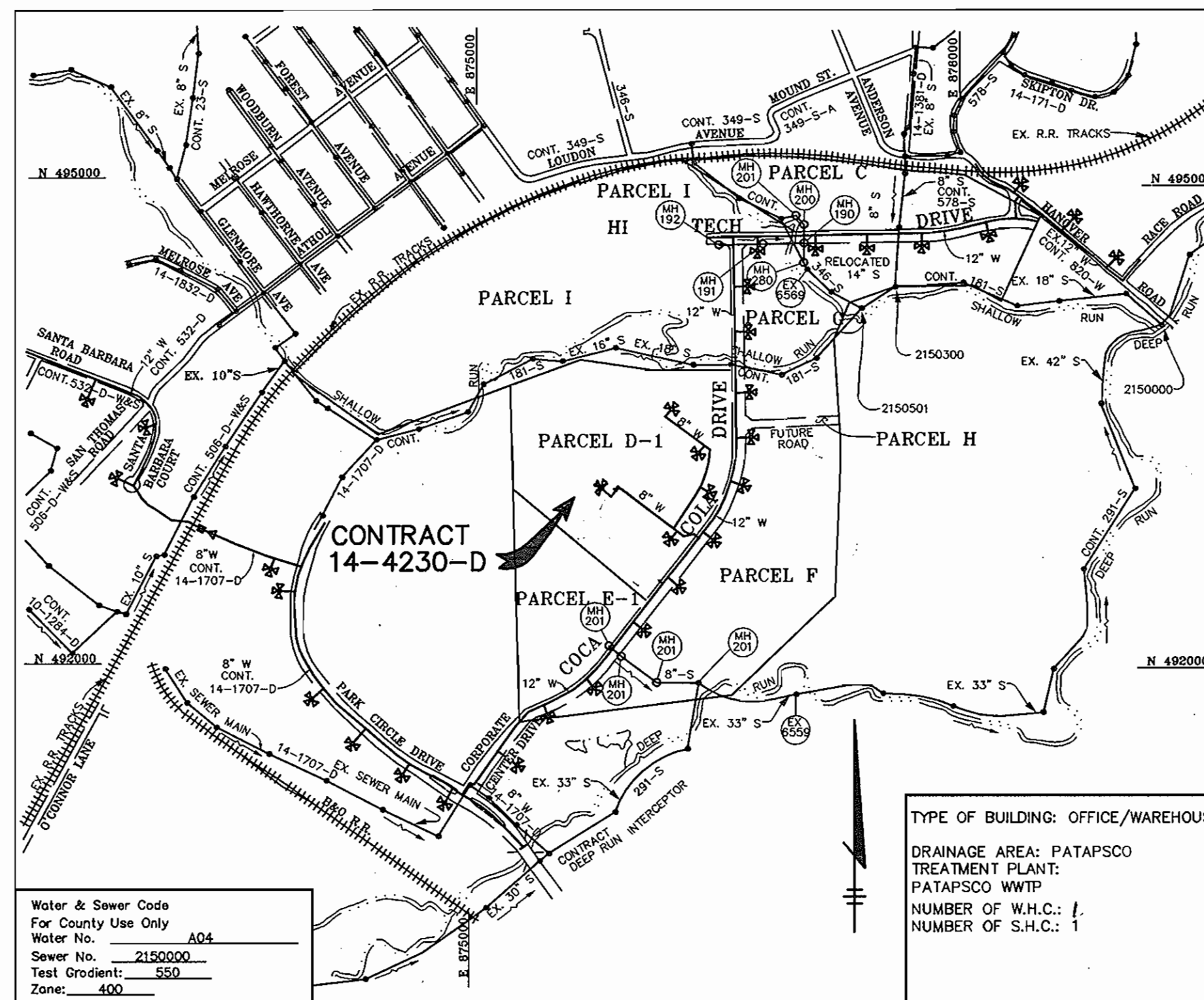
### HOWARD COUNTY, MARYLAND

## CONTRACT NO. 14-4230-D

#### GENERAL NOTES

- Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted service. 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, NAD 83/91.
- All vertical controls are based on NAVD 88.
- All pipe elevations shown are invert elevations unless otherwise noted on the plans.
- Clear all utilities by a minimum of 12 inches. Clear all poles by 5'-0" minimum or tunnel as required unless otherwise noted. 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 the bracing of additional poles or damages shall be deducted from monies owed 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 Detail 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  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.
- The contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:

AT&T	1-800-252-1133
BGE (Contractor Services)	410-850-4620
BGE (Underground Damage Control)	410-787-9088
Bureau of Utilities	410-313-4900
Colonial Pipeline Co.	410-795-1390
Miss Utility	1-800-257-7777
State Highway Administration	410-531-5533
Verizon	1-800-743-0033 / 410-224-9210
- Trees and shrubs are to be protected from damage to the maximum extent. Trees and shrubs located within the construction strip are not to be removed or damaged by the contractor.
- The contractor shall remove trees, stumps and roots along the line of excavation. Payment for such removal shall be included in the unit price bid for construction of the main.
- The contractor shall notify the Bureau of Highways, Howard County, at 410-313-7450 at least five working days before open cutting or boring/jacking of any County road 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.



#### BENCH MARK

HOWARD COUNTY CONTROL  
STATION 38D5  
N 422.813  
E 1,386.524  
ELEV. 193.73

HOWARD COUNTY CONTROL  
STATION 38D6  
N 422.147  
E 1,384.992  
ELEV. 175.23

#### WATER NOTES

- All water mains shall be D.I.P. Class 52 unless otherwise noted.
- Tops of all water mains shall have a minimum of 3'-6" of cover unless otherwise noted.
- Valves adjacent to tees shall be strapped to 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 installed in accordance with Standard Details. The 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.

#### SEWER NOTES

- All sewer mains shall be D.I.P. and P.V.C. unless otherwise noted.
- All manholes shall be 4'-0" inside diameter unless otherwise noted.
- Force mains shall be D.I.P. only.
- Manholes shown with 12" and 16" walls are for brick manholes only.
- Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail GS.52. Where watertight manhole frames and covers is used, set top of frame 1'-6" above finished grade unless otherwise noted on the drawings.
- House(s) with the symbol "C.N.S." indicates that cellar cannot be served.

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
8" WATER	1265 LF	1265 L.F.	CL 52 DIP	U.S. PIPE
6" WATER	116 LF	116 L.F.	CL 52 DIP	U.S. PIPE
4" WATER	0 LF			
12"x8" T,S&V	0 EA.			
4" VALVES	0 EA.			
6" VALVES	5 EA.	5EA.	RE SEATED <sup>CNTB</sup> V.V.	U.S. PIPE
8" VALVES	4 EA.	4EA.		U.S. PIPE
FIRE HYDRANTS	5 EA.	5EA.		U.S. PIPE
8" SEWER	10 LF	10 L.F.	PVC SDR 35	J.M. MANUFACTG.
4' DIA. MANHOLES	1 EA.	1 EA.	PRECAST	AMERICAST
4' DIA. MANHOLES	26 VF	26 VF	"	"

NAME OF UTILITY CONTRACTOR: W.F. WILSON

Sediment control measures for this contract will be implemented in accordance with Section 219 of the Specifications and as shown on SDP-05-003	CHECKBOX
	AS-BUILT DATE
	SURVEY AND DRAFTING DIVISION

Review for Howard Soil Conservation District and meets technical requirements.

*Jim Meyer* 10/25/04  
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

*John R. Roberts* 10/25/04  
HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND
<i>R. H. ...</i> CHIEF, BUREAU OF UTILITIES	<i>W. D. ...</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION

Patton Harris Rust & Associates, PC  
Engineers, Surveyors, Planners, Landscape Architects.  
8818 Centre Park Drive  
Columbia, MD 21045  
T 410.997.8900  
F 410.997.8282

**PHR+A**

CHRISTOPHER J. REID #19949

DES: C.J.R.			
DRN: D.A.M.	K01	ASBUILT DATA ADDED TO PLAN	11/09/04
CHK: C.J.R.	ACR	MODIFIED QUANTITIES	10/18/04
	ACR	MOVED FIRE HYDRANT LOCATION	02/26/05
	ACR	MODIFIED QUANTITIES & VICINITY MAP	02/26/05
DATE: 10/22/04	BY NO.	REVISION	DATE

600' SCALE MAP NO. 38 BLOCK NO. 20

TITLE SHEET

PATAPSCO VALLEY BUSINESS CENTER  
PARCEL D-1  
1st ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT 14-4230-D

SCALE AS SHOWN  
SHEET 1 OF 4

MATCHLINE SEE SHEET 3

PATAPSCO VALLEY BUSINESS CENTER  
PARCEL I  
PLAT NO. 15497  
ZONED M-2  
TAX MAP 38

PATAPSCO VALLEY BUSINESS CENTER  
PARCEL F  
PLAT NO. 14625  
ZONED M-2  
TAX MAP 38

BUILDING 200  
139,424 S.F.  
F.F. ELEV. 152.25

PARKWAY CENTER  
SECTION 1  
PARCEL K  
PLAT NO. 7583 & 7586  
ZONED M-2  
TAX MAP 38

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HOWARD COUNTY, MARYLAND

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CHK: C.J.R.

DATE: 10/22/04

BY	NO.	REVISION	DATE
XCI	1	ASBUJCT DATA ADDED TO PLAN	11/9/03
ACR	2	REMOVED 2-8" VALVES & 12"x8" REDUCER	10-18-03
ACR	3	REVISED FIRE HYDRANT LOCATIONS & REV PRIV. W.S	9-26-03
ACR	4	REMOVED BLDG & WATER #345; MODIFIED FH	9-23-03

PLAN OF WATER  
AND SEWER MAINS

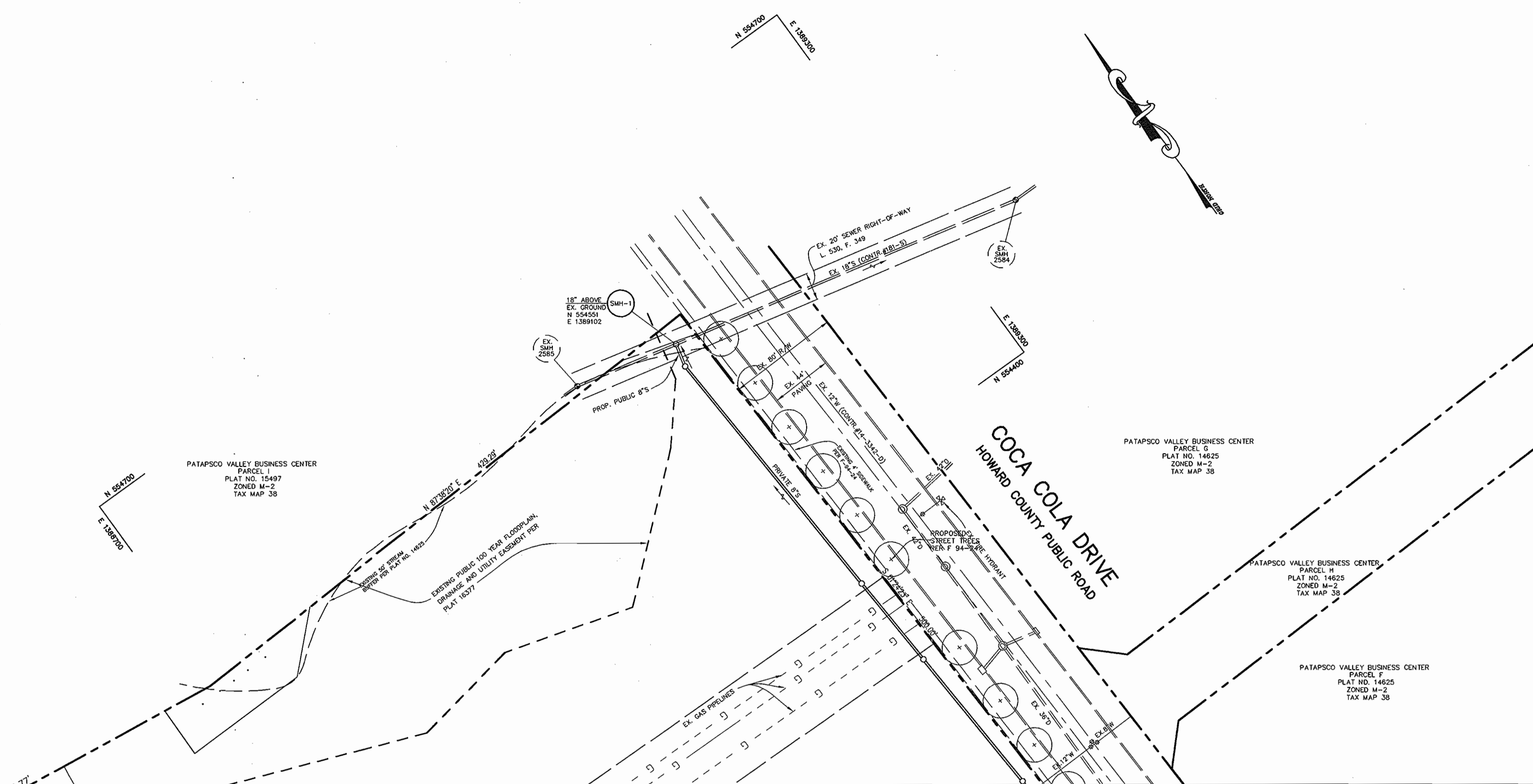
600' SCALE MAP NO. 38 BLOCK NO. 20

PATAPSCO VALLEY BUSINESS CENTER  
PARCEL D-1  
1st ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT 14-4230-D

SCALE  
1"=50'

SHEET  
2 OF 4

P:\project\128451-0\Plans\WS2.DWG, 10/21/2004 05:17:26 PM, HP750C(08).pc3, 1:1



MATCHLINE SEE SHEET 2

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

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CHK: C.J.R.

DATE: 10/22/04

BY	NO.	REVISION	DATE

PLAN OF WATER  
AND SEWER MAINS

600' SCALE MAP NO. 38 BLOCK NO. 20

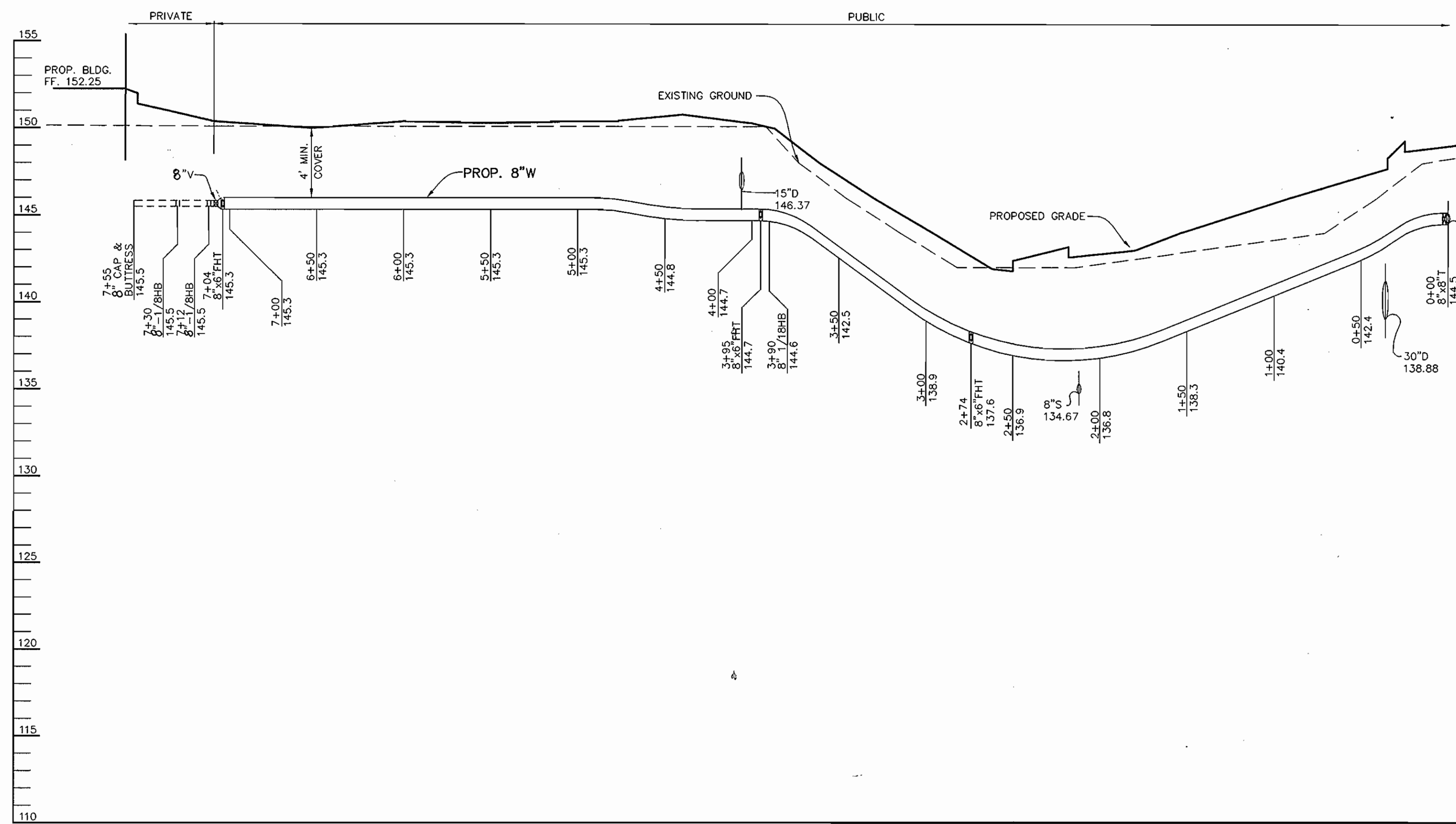
PATAPSCO VALLEY BUSINESS CENTER  
PARCEL D-1  
1st ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT 14-4230-D

SCALE  
1"=50'

SHEET  
3 OF 4

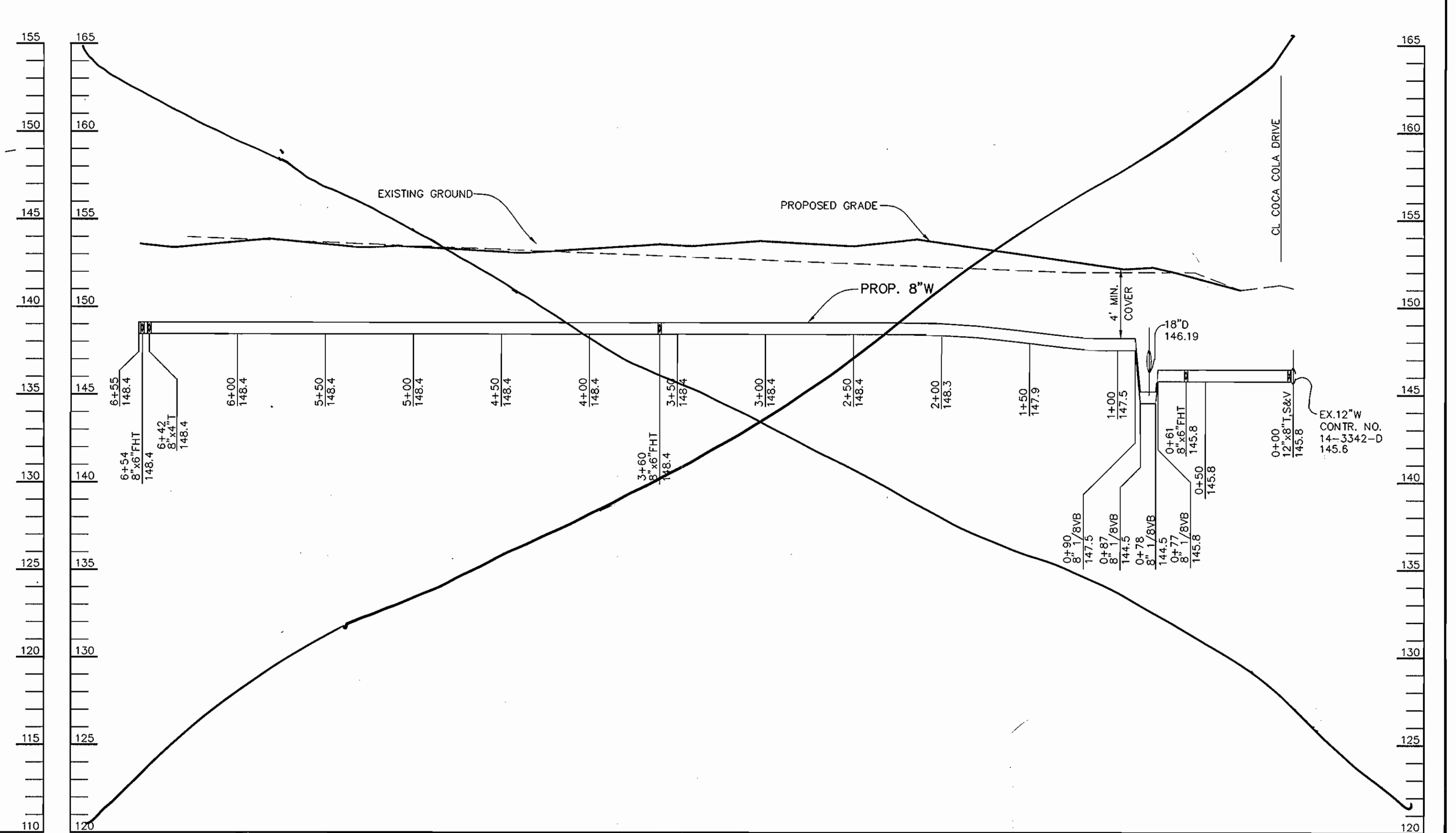
*R. L. H. B. 10-25-04*  
CHIEF, BUREAU OF UTILITIES DATE

*Christopher J. Reid* 10/26/04  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



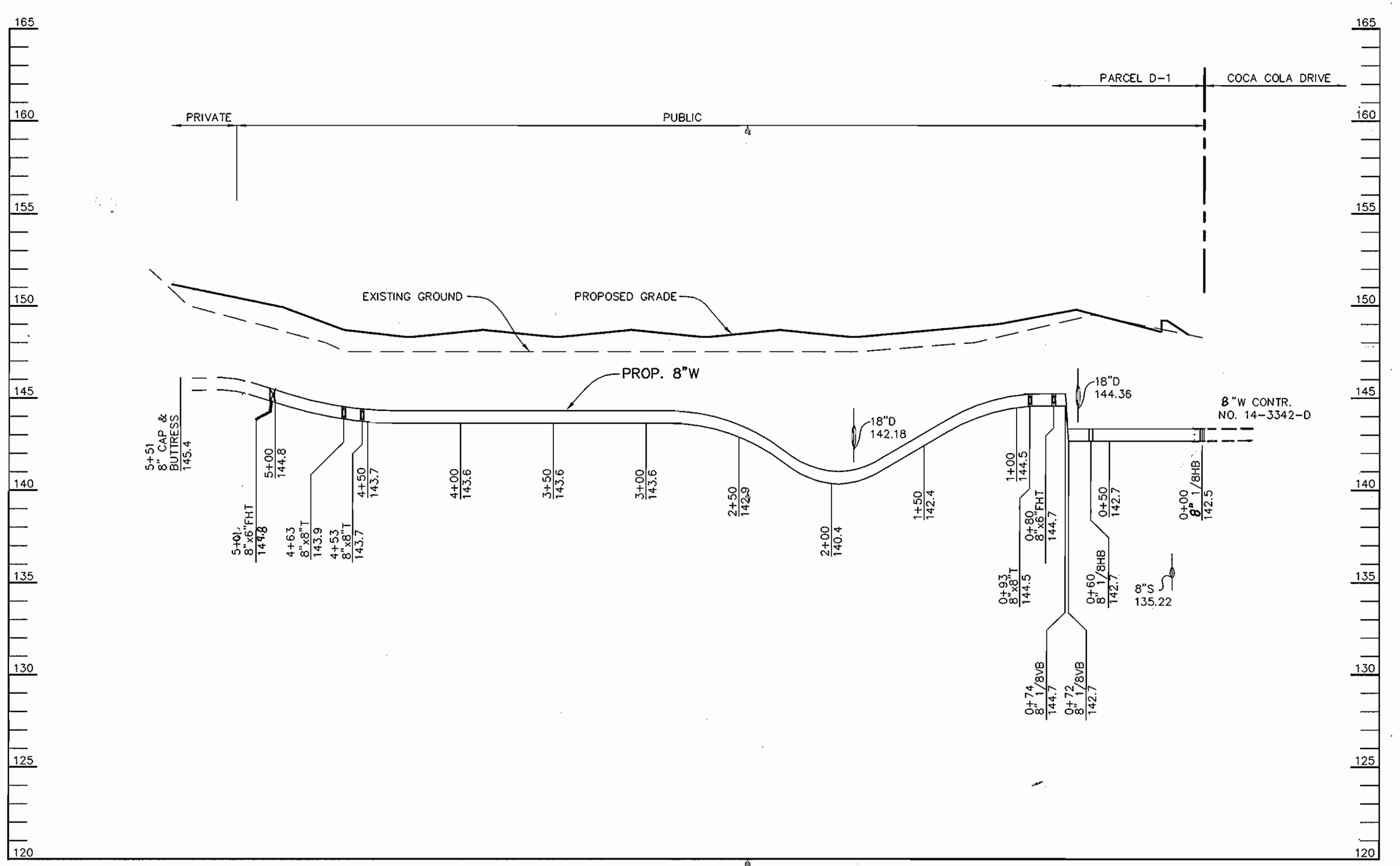
**WATER #1 PROFILE**

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



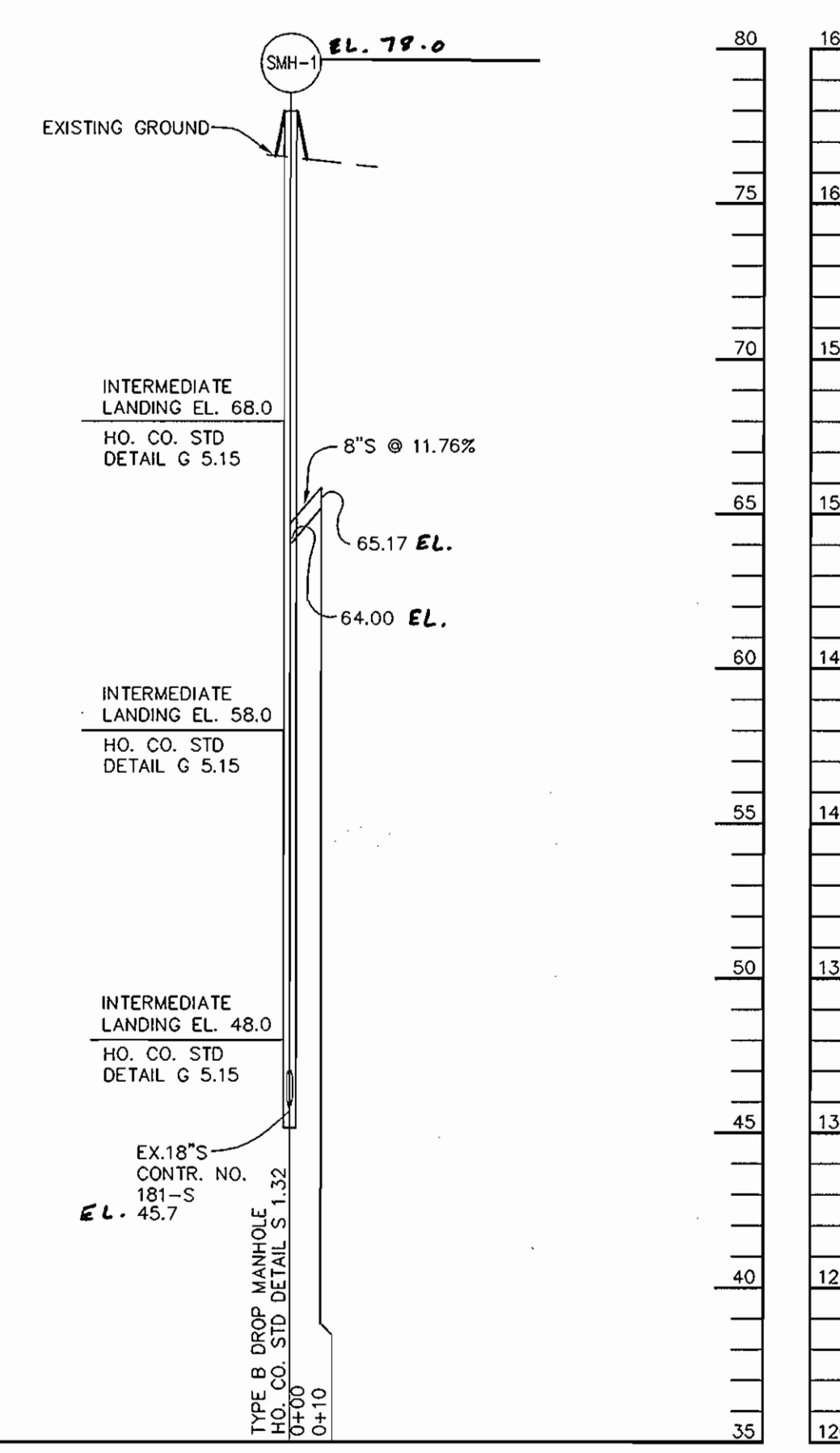
**WATER #3 PROFILE**

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



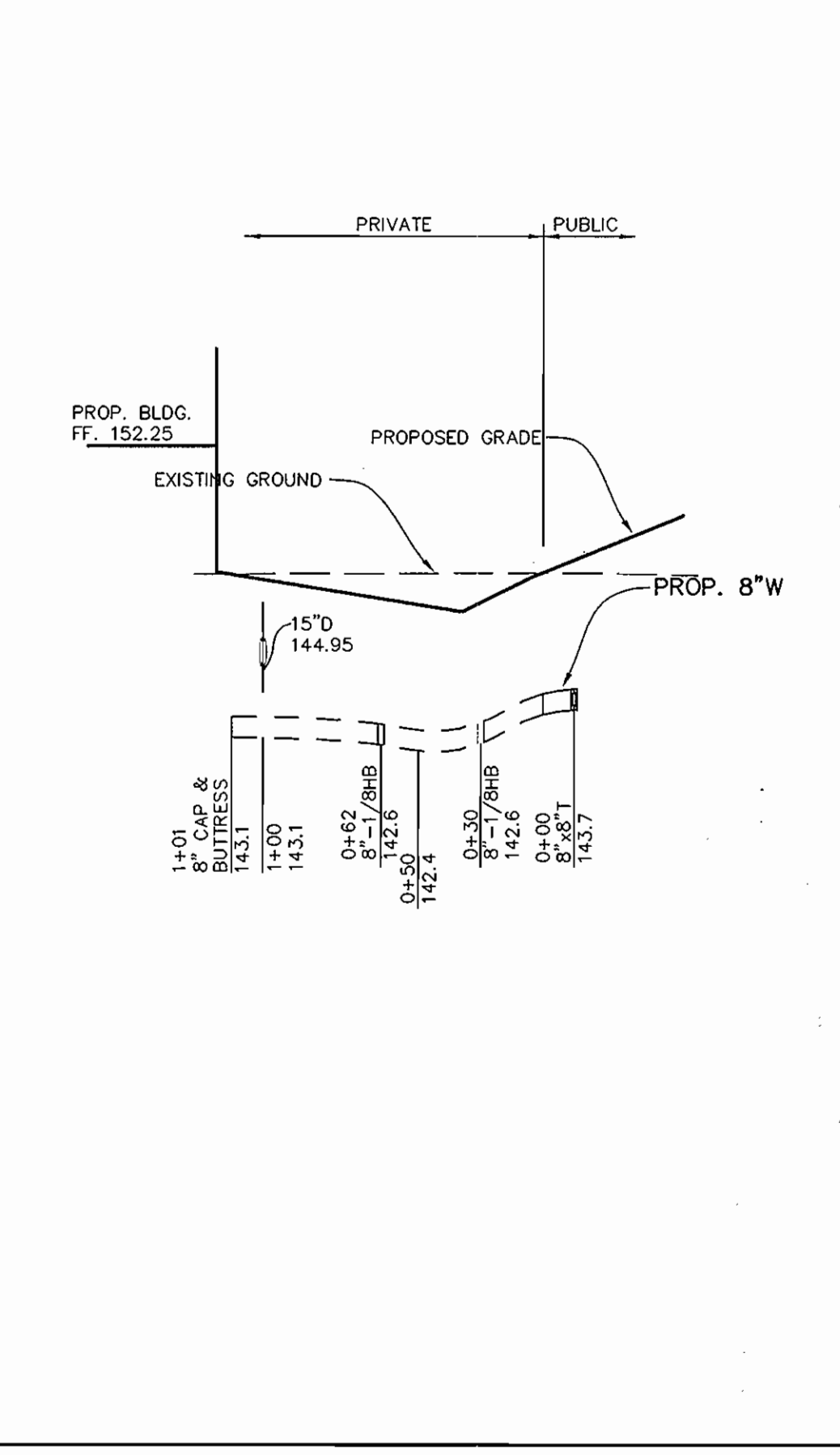
**WATER #2 PROFILE**

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



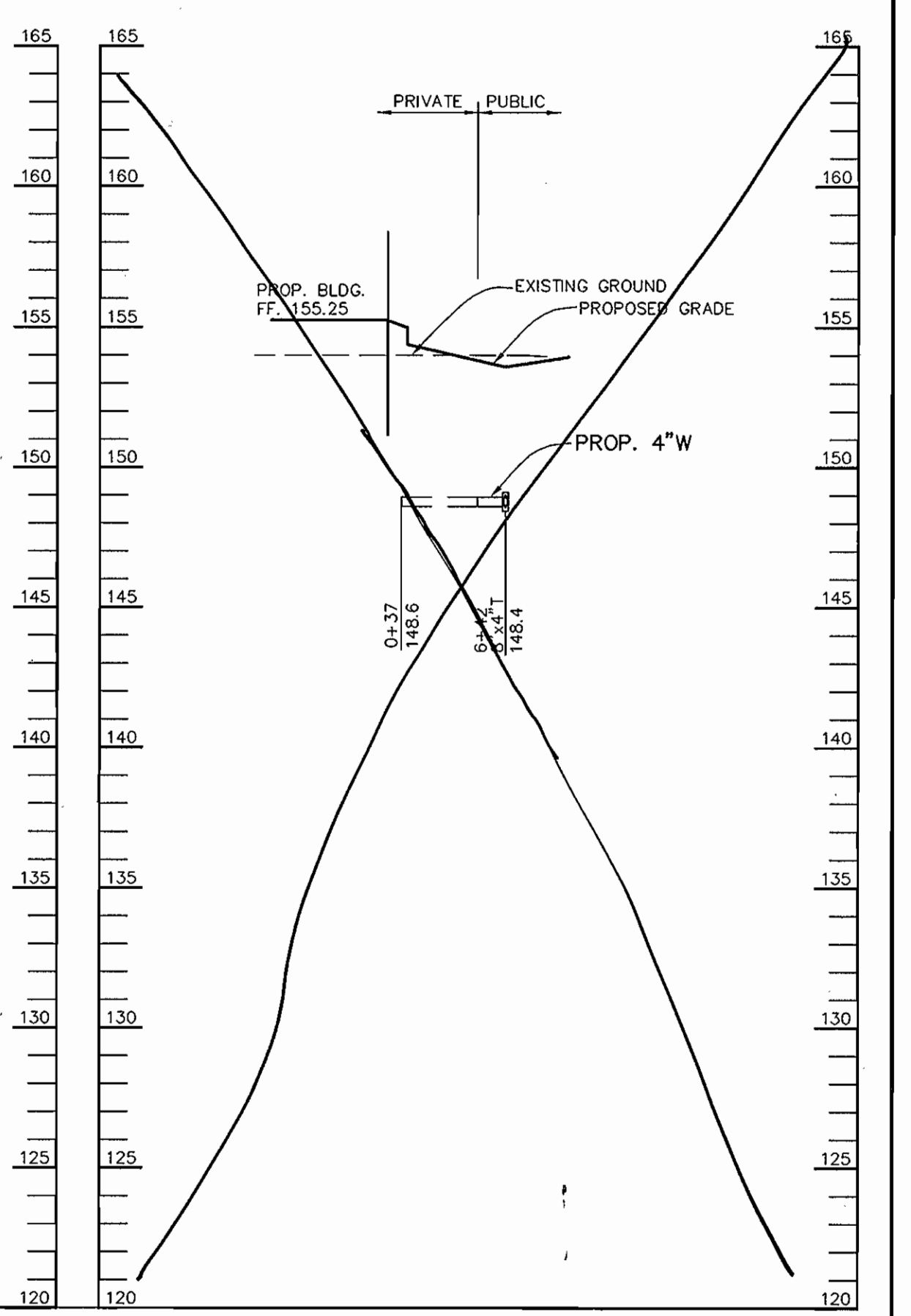
**SEWER PROFILE**

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



**WATER #4 PROFILE**

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



**WATER #5 PROFILE**

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

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CHRISTOPHER J. REID #19949

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DRN: D.A.M.  
CHK: C.J.R.  
DATE: 10/22/04

BY	NO.	REVISION	DATE
ACR	Δ	REMOVED 2-8" VALVES AND A 12" X 8" REDUCER	10-19-05
ACR	Δ	MODIFIED PROFILES 1 & 2 AND VOIDES 3 & 5	9-23-05

**PROFILES OF WATER  
AND SEWER MAINS**

600' SCALE MAP NO. 38 BLOCK NO. 20

**PATAPSCO VALLEY BUSINESS CENTER  
PARCEL D-1  
1st ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
CONTRACT 14-4230-D**

SCALE  
AS  
SHOWN

SHEET  
4 OF 4

*Ruth B...* 10-25-04  
CHIEF, BUREAU OF UTILITIES DATE

*Christopher J. Reid*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE