

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" WATER	525 LF			
6" WATER	20 LF			
FIRE HYDRANT	2 EA.			
8"x8" TAPPING SLEEVE 8" V.	1 EA.			
6" VALVE	2 EA.			
6" SANITARY SEWER	25 LF			
SANITARY MANHOLE	1 EA.			
8"x6" TAPPING TEE	1 EA.			
SHC	1 EA.			
NAME OF UTILITY CONTRACTOR:				
SURVEY AND DRAFTING DIV.		CHECKBOX: AS-BUILT DATE:		

TYPE OF BUILDING	COMMERCIAL-RECREATIONAL FOR SCHOOL AND CHURCH ACTIVITIES
NUMBER OF UNITS	N/A
NUMBER OF S.H.C.'s	1
NUMBER OF W.H.C.'s	1
DRAINAGE AREA	PATAPSCO
TREATMENT PLANT	

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
CONTRACT # 14-4069-D

NOTE: EXISTING F.H. TO BE REMOVED AND RETURNED TO HOWARD COUNTY BUREAU OF UTILITIES. F.H. LEAD TO BE REMOVED AND WATER MAIN PLUGGED AT TEE.

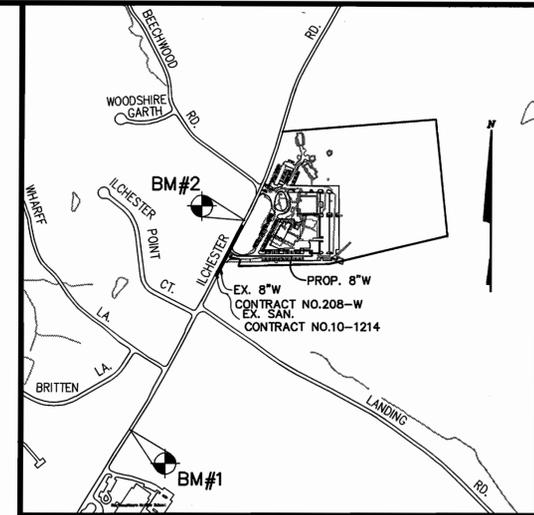
6" FIRE HYDRANT
ILCHESTER ROAD 80' SOUTH OF EX. HYDRANT. 18" FROM & 8"x8" TAPPING TEE, 6" VALVE
TOP VALVE EL. 470.5
BURY DEPTH 5.0'
BURY ELEV. 470.6

HOWARD COUNTY GRID
(NAD 83/91, NAVD29)

BENCHMARKS

BM #1
3168 - NAIL & FLASHER IN POWER POLE 2 TREES & FENCE POST
5' - S.W. OF EDGE OF ROAD & 500' - W. OF WHARF LANE
NAD83 N 57082.4
E 137750.7

BM #2
3167 - 9' S.E. OF EDGE OF ROAD AND 250' W OF BEACHWOOD ROAD
NAD83 N 57233.3
E 137753.9



VICINITY MAP
SCALE: 1"=600'

GENERAL NOTES

WATER AND SEWER CODE FOR COUNTY USE ONLY

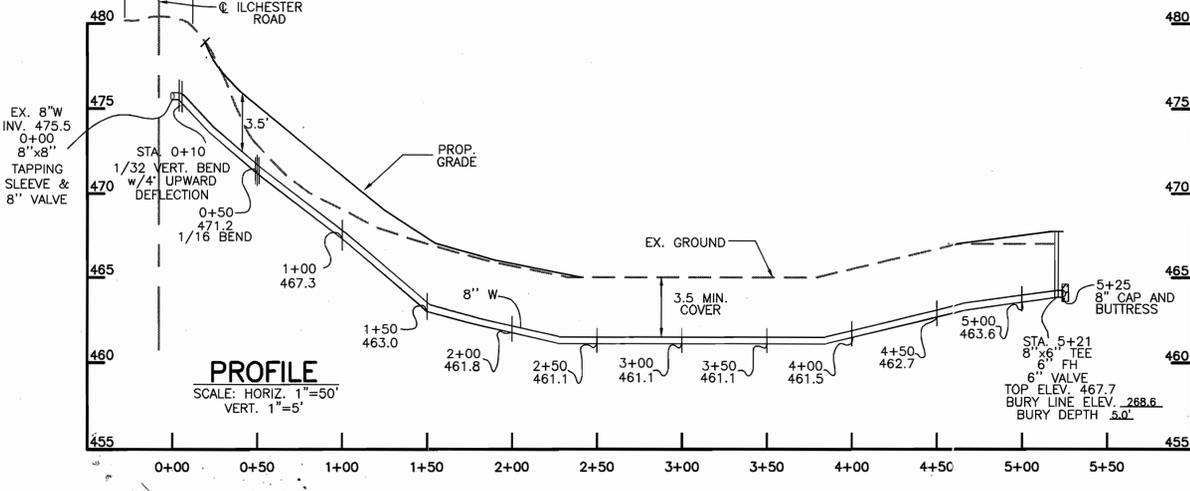
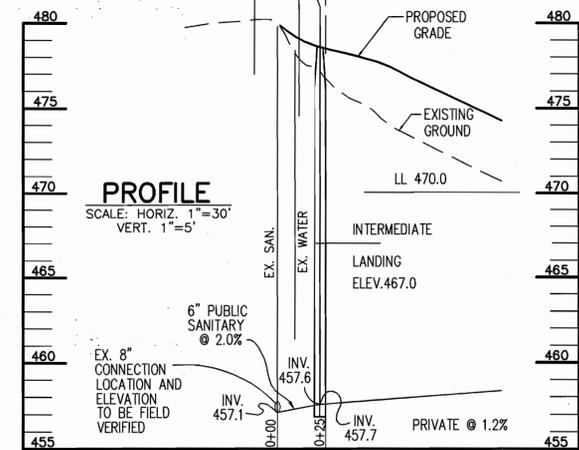
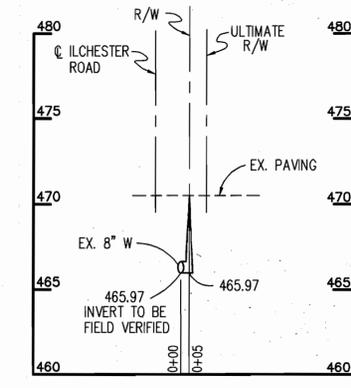
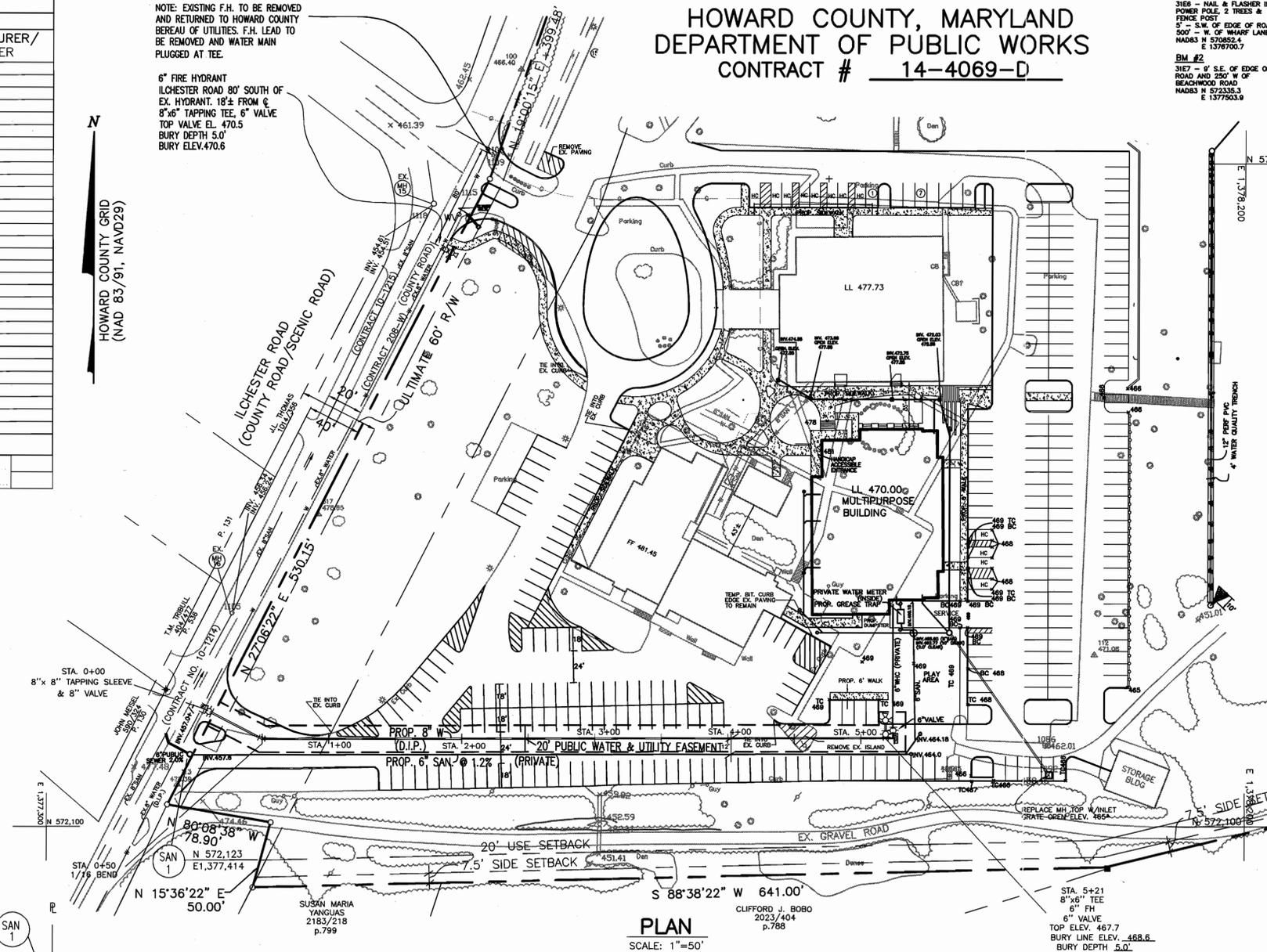
SEWER CODE 1252600
WATER CODE G-10
TEST GRADIENT 780

TREATMENT PLANT PATAPSCO WWTP

- PART I**
- 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 this plan.
 - Clear all utilities by a minimum of 12". 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 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.
 - 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 (S) 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. Contractor shall notify the following utility companies or agencies at least (5) working days before starting work shown on these plans:
 - State Highway Administration 410-531-5533
 - BGE Contractor Services 410-850-4620
 - BGE Under Ground Damage Control 410-787-9088
 - Miss Utility 1-800-257-7777
 - Colonial Pipeline Co. 410-795-1390
 - AT&T 410-252-1133
 - Bureau of utilities 410-313-4900
 - Verizon 1-800-743-0033/410-224-9210
 - 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. 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.
 - The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-7450 at least five (5) working days before open cutting or boring/jacking of any County roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DPW requirement per Section 18.11(a) of the Howard County Code.

- PART II - WATER**
- All water mains to be D.I.P. Class 52 unless otherwise noted.
 - Tops of all water mains to have a minimum of 3'-6" 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 restrained and buttressed with concrete in accordance with the Standard Details. 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.
 - All water house connections shall be for inside meter setting unless otherwise noted on plans or in specifications.
 - For sprinkler system for all townhomes or multi-family dwelling units should have a minimum of 1' connection with a 3/4" meter.

- PART III - SEWER**
- 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 18" walls are for brick manholes only.
 - Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail G5.52. Where watertight manhole frame and cover is used, set top of frame 1'-6" above finished grade unless otherwise noted on drawings.
 - House(s) with the symbol "C.N.S." indicates that cellar cannot be served.



SDP-02-097

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

John R. Roberts 1/16/03
SIGNATURE DATE

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE

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

APPROVED: *John R. Roberts* 1/16/03
HOWARD S.O.D. DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John R. Roberts 12/30/02
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

John R. Roberts 1/16/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS, PLANNERS, SURVEYORS
32 WEST ROAD
TOWSON, MARYLAND 21204
(410) 823-8070



DES:	
DRN:	
CHK:	
DATE:	
BY:	NO
REVISION:	
DATE:	

WATER AND SEWER EXTENSIONS

600' SCALE MAP NO. 31 BLOCK NO. 10

ELECTION DISTRICT
ELK RIDGE No.1
OUR LADY OF PERPETUAL HELP,
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT # 14-4069-D

SCALE AS SHOWN

SHEET 1 OF 1

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" WATER	525 LF	525 L.F.	TYTON	U.S. PIPE / B&T
6" WATER	20 LF	16 L.F.	TYTON	U.S. PIPE / B&T
FIRE HYDRANT	2 EA.	1 EA.	GUARDIAN K-81	KENNEDY/B&T
8"x8" TAPPING SLEEVE 8" V.	1 EA.	1 EA.	FORD/KENSEAL	BINSHAM & TAYLOR
6" VALVE	2 EA.	2 EA.	KENSEAL	" "
6" SANITARY SEWER	27 LF	27 L.F.		
C.O.	1 EA.			
8"x6" TAPPING TEE	1 EA.			

NAME OF UTILITY CONTRACTOR: BOBLEY, INC.

SURVEY AND DRAFTING DIV. CHECKBOX: AS-BUILT DATE:

TYPE OF BUILDING	COMMERCIAL-RECREATIONAL FOR SCHOOL AND CHURCH ACTIVITIES
NUMBER OF UNITS	N/A
NUMBER OF S.H.C.'s	1
NUMBER OF W.H.C.'s	1
DRAINAGE AREA	PATAPSCO
TREATMENT PLANT	

NOTE: EXISTING F.H. TO BE REMOVED AND RETURNED TO HOWARD COUNTY BUREAU OF UTILITIES. F.H. LEAD TO BE REMOVED AND WATER MAIN PLUGGED AT TEE.

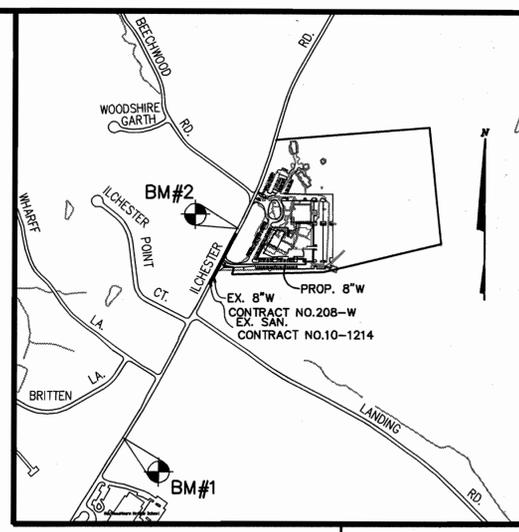
6" FIRE HYDRANT ILCHESTER ROAD 80' SOUTH OF EX. HYDRANT. 18" FROM 6" 8"x6" TAPPING TEE, 6" VALVE TOP VALVE EL. 470.5 BURY DEPTH 5.0' BURY ELEV. 470.6

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
CONTRACT # 14-4069-D

BENCHMARKS

BM #1
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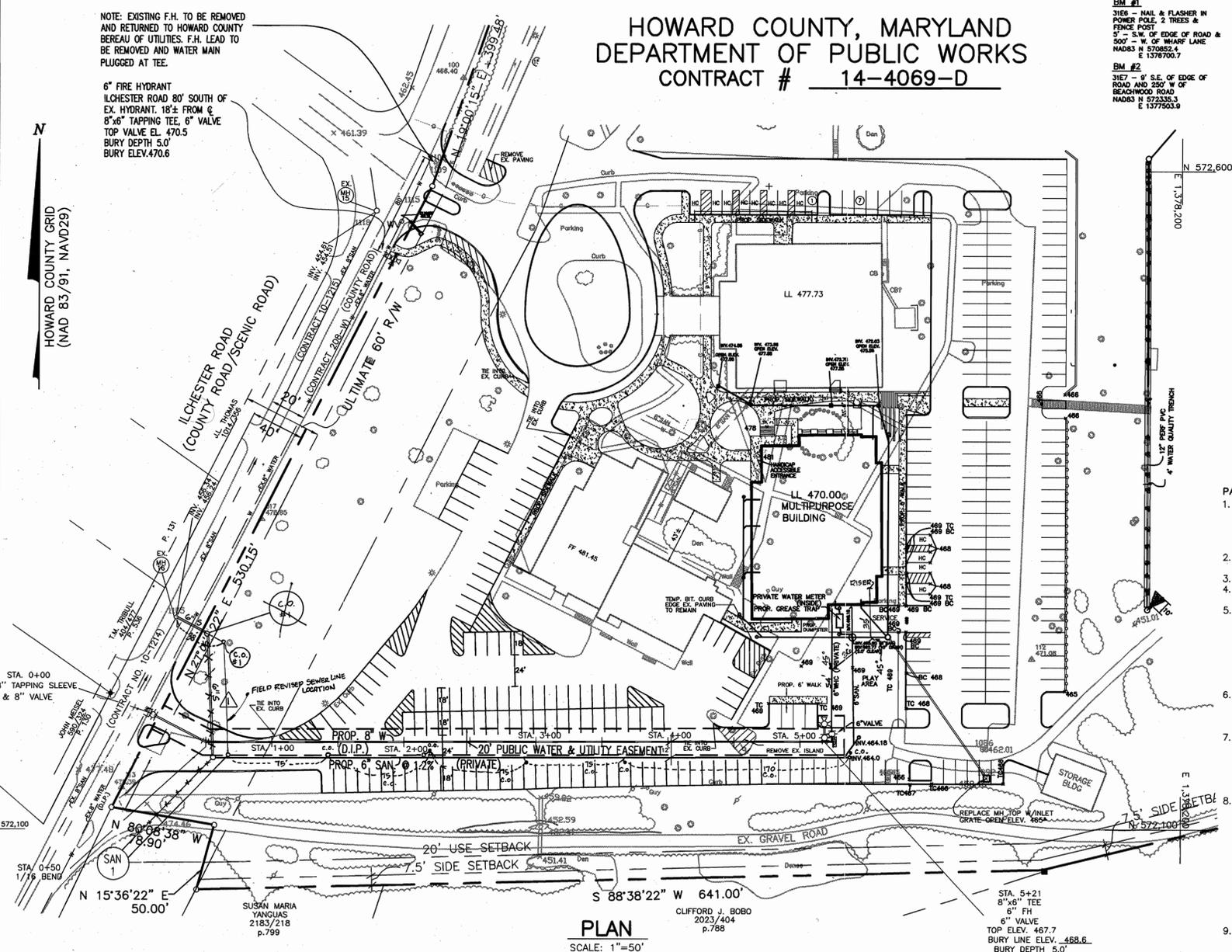
VICINITY MAP
SCALE: 1"=600'

GENERAL NOTES

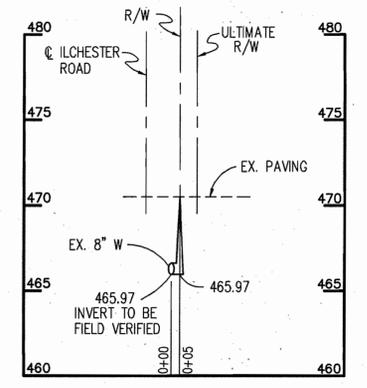
WATER AND SEWER CODE FOR COUNTY USE ONLY

SEWER CODE 1252600
WATER CODE G-10
TEST GRADIENT 780

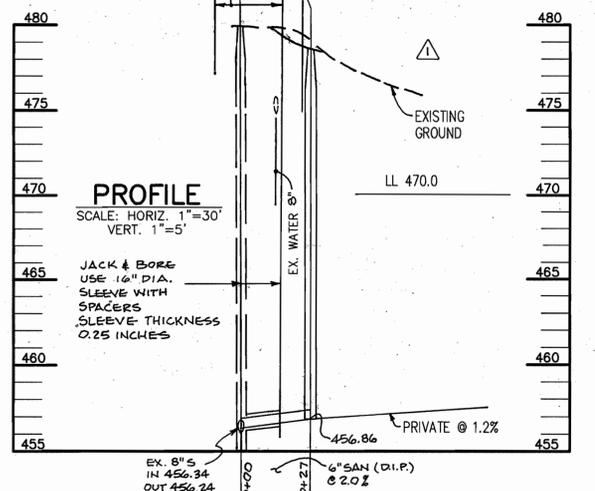
TREATMENT PLANT PATAPSCO WWTP



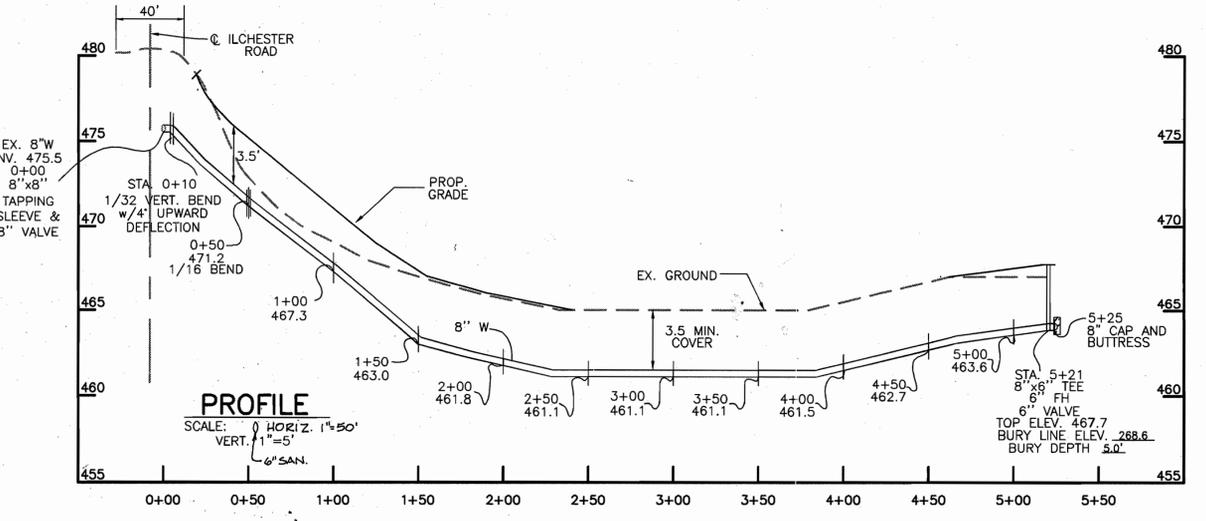
PLAN
SCALE: 1"=50'



RELOCATED F.H.
SCALE: HORIZ. 1"=50'
VERT. 1"=5'



PROFILE
SCALE: HORIZ. 1"=30'
VERT. 1"=5'



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

- PART I**
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SDP-02-097

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

John R. Roberts 1/6/03
SIGNATURE DATE

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE

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APPROVED: *John R. Roberts* 1/6/03
HOWARD S.O.D. DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John R. Roberts 12/30/02
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

John R. Roberts 2/5/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS, PLANNERS, SURVEYORS
32 WEST ROAD
TOWSON, MARYLAND 21204
(410) 823-8070



DES:	
DRN:	
CHK:	KCI 2 ABOLISHED DATA ADDED 09/26/04
DATE:	1/12/04
BY:	NO REVISION

WATER AND SEWER EXTENSIONS

600' SCALE MAP NO. 31 BLOCK NO. 10

ELECTION DISTRICT ELKRIDGE No.1
OUR LADY OF PERPETUAL HELP,
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT # 14-4069-D

SCALE AS SHOWN
SHEET 1 OF 1