GENERAL NOTES

A. STANDARD GENERAL NOTES

- a. 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
- b. Topographic field surveys were performed on September 2002 by DMW. The existing topography is taken from low level flight and aerial surevy with 2' contour intervals prepared by 3DI dated April 8, 2002.
- c. The coordinates shown on the drawings are based on Maryland State Reference System NAD'83/91 as projected by Howard County Geodetic Control Stations No.#31ea and No.#37CA.
- d. All vertical controls are based on NAVD '88. Vertical controls provided on the drawings are BM1, #31EA-Disc set in concrete, N569641.123, E1374815.935, Elev. 468.90, 2' south of sidewalk on Illchester Road ± 47.1' from gate in fence on the transmission line R.O.W. BM2-#37CA-Disc set in concrete, N569641.123, E1382742.880, Elev. =256.965, 20.6 south of centerline of Landing Road, 0.25 miles northwest on Landing Road from intersection of Landing Road and Montgomery Road.
- e. All pipe elevations shown are invert elevations unless otherwise noted.
- f. 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 regulres the bracing of additional poles, any cost incurred by the owner for bracing of additional poles or damages shall be deducted from monles owed the contractor. The contractor shall coordinate with the utility companies to schedule the
- g. 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
- h. Where test pits have been made on existing utilities, they are noted by the symbol at the locations of the test pits. 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.
- i. The contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:

BG&E (Construction Services) BG&E (Emergency) Bureau of Utilities 410-313-4900 Colonial Pipeline CO. 1-*800-257-7777* State Highway Administration 410-531-5533 1-800-742-0033/410-224-9210

- 1. 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
- k. The 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.
- I. The contractor shall notify the Bureau of Highways, Howard County, at (410) 313-7450 at least five working days before any open cut of any county road 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 requirements per section 18.114(a) of the Howard County code.

B. STANDARD WATER MAIN GENERAL NOTES

- a. All water mains to be D.I.P. Class 54 unless otherwise noted. b. Tops of all water mains to have a minimum of 3'-6" of cover unless otherwise noted.
- c. Valves adjacent to tees shall be strapped to tees.
- d. All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise
- provided for on the drawings. e. Fire hydrants shall be set to the bury line elevations shown on the drawings. All fire hydrants shall be installed and buttressed with concrete in accordance with Standard Details. The soil around the fire hydrant shall be compacted in accordance with section 1000 and 1005 of the Standard
- f. The contractor shall not operate any water main valves on the existing water system.
- g. All water house connections shall be for inside meter settings unless otherwise noted on plans or in specifications. h. For sprinkler system for all town homes or multi-family dwelling units should have a minimum of 1 connection with a 34 meter

C. STANDARD SEWER MAIN GENERAL NOTES

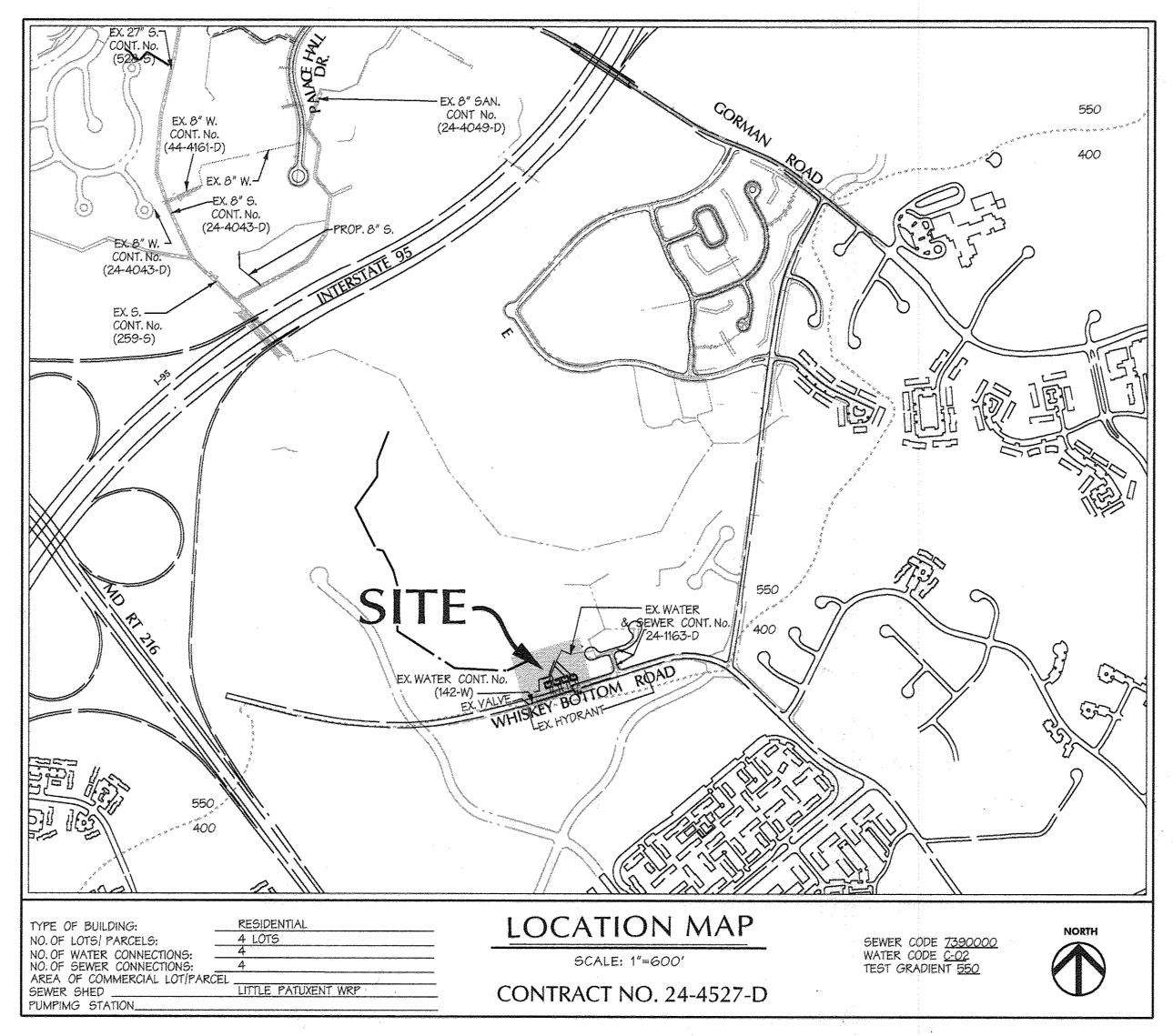
- a. All sewer mains shall be DIP or P.V.C. unless otherwise noted.
- b. All manholes shall be 4'-0" inside diameter unless otherwise noted. c. Force mains shall be D.I.P. only.
- d. Manholes shown with 12" and 16" walls are for brick manholes only.
 e. Manholes designated W.T. In plan and profile shall have watertight frame and covers, Standard Detail 65:52. Where watertight frame and cover is used, set top of frame 1-6" above finished grade unless otherwise noted on the drawings.

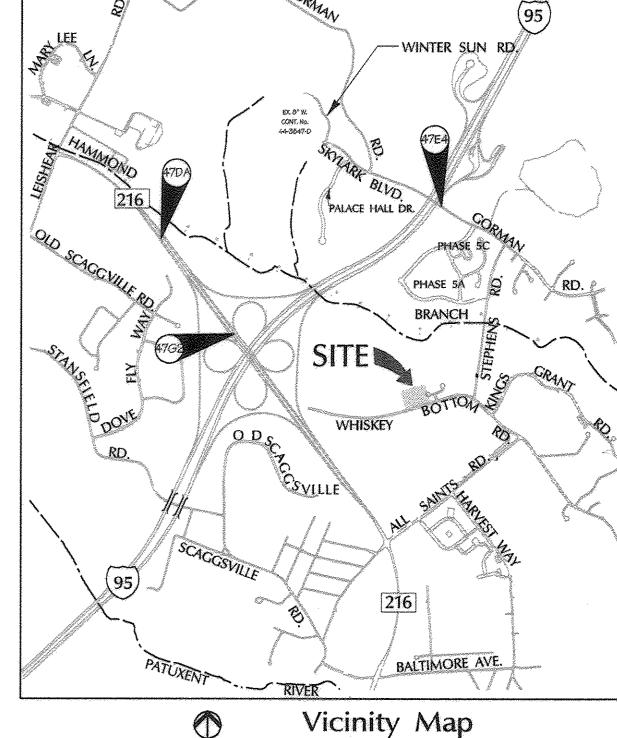
8"Sewer Main Extension Blough Property

Howard County, Maryland

Department of Public Works

Contract No. 24-4527-D





SCALE: 1"=2000"

BENCHMARK DESCRIPTION

ADC COORDINATES Map 19, J-9

License No. 26569 Expiration Date: 7-18-17

I hereby certify that these documents were

prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

PROFESSIONAL CERTIFICATION

COORDINATES IN MARYLAND NAD83(91) (HORIZONTAL)

47DA NORTHING: 163191,9104 FOR REVISION Nº I ONLY EASTING: 4112865759 ELEVATION: 315905 ft. 4-24-1 47E4 NORTHING: 163326.2295

EASTING: 413136.2550 ELEVATION: 338.909ft 47G2 NORTHING: 162440.1212 EASTING: 4118539279

DEVELOPER: THE HOWARD RESEARCH & DEVELOPMENT CORPORATION COLUMBIA, MARYLAND 21044

410-922-6149

Professional Engr. \$26560

QUANTITIES AS-BUILT QUANTITIES ESTIMATED | QUANTITIES MANUFACTURER | SUPPLIER 243 L.F. PVC,5DR-35 JMMFG./BELAIR ROAD SUPPLY 8" PVC SEWER 3 EA. PRECAST ATLANTIC CONC. PRODUCTS/BELAIR RD. SUPY STD. MANHOLES 4 EA. BALLCURBST MUELLER CO./BELAIR ROAD SUPPLY WHC-1 1/2" IEA. 5'G'MUELLERMUELLER CO./BELAIR ROAD SUPPLY FIRE HYDRANT 48L.F. DIP, CL.54 GRIFFIN PIPE/BELAIR ROAD SUPPLY 6" WATER NAME OF UTILITY CONTRACTOR: CONSOLIDATED CONSTRUCTION SERVICES SURVEY AND DRAFTING DIVISION AS-BUILT DATE: NOVEMBER 14,2008

Purpose Statment for Redline Rivision No. A

The purpose of this redline revision is to show new offsite 1.5" low pressure sewer and it's associated easement through lot 5 and connect to public SMH* 103, as well as, show revisions to the Forest Conservation Area per this impact.

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT. DEPARTMENT OF PUBLIC WORKS

HOWARD COUNTY, MARYLAND

CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND

CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

A Team of Land Planners, 200 East Pennsylvania Avenue Landscape Architects, Towson, Maryland 21286 Golf Course Architects, (410) 296-3333 Engineers, Surveyors & Fax 296-4705

SHEET

COVER SHEET



SHEET INDEX

PRELIMINARY WHC & 8"SANITARY SEWER PLAN

DESCRIPTION

**************************************	3/14/08	BY	NO.	REVISION	***************************************
ENG!	DATE:	DVM /I		Redline Revision No.1-Shown for Reference	
0 . 30 .					_
	CHECKED BY:				_
	KAW				4
TO ME	DRAWN BY:				┰
10°C 20	KAD		:		7
1420	DESIGN BY:				

Legend

EX. CURB & GUTTER

EX. MAJOR CONTOURS

EX. MINOR CONTOURS

EXISTING TREE LINE

PROP. STORM DRAIN

EXISTING WETLAND LIMIT

WATER LINE STATIONING

EX. STORM DRAIN

EX. SEWER

EX. WATER

Scorphonographical Medical Anticological Ant

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EX 8 ° S.

ricommonweation Solot Flanco Victoria con consis

15" RCCP CL. IV

PROP. SEWER

PROPERTY LINE

ROADWAY RIGHT-OF-WAY

PROPOSED CURB & GUTTER

PROPOSED LOT LINE

PROPOSED EASEMENT

PROPOSED SIDEWALK

PROPOSED RIP-RAP

PROPOSED HYDRANT

11-30-160

PROPOSED GUARD RAIL

TITLE SHEET 8"SEWER 6th ELECTION DISTRICT

DATE | 600 SCALE MAP NO. 47 BLOCK NO.7,8,9,13

6" F.H. Y EXO"W

WHC W/ BALL VALVE AND SERVICE BOX

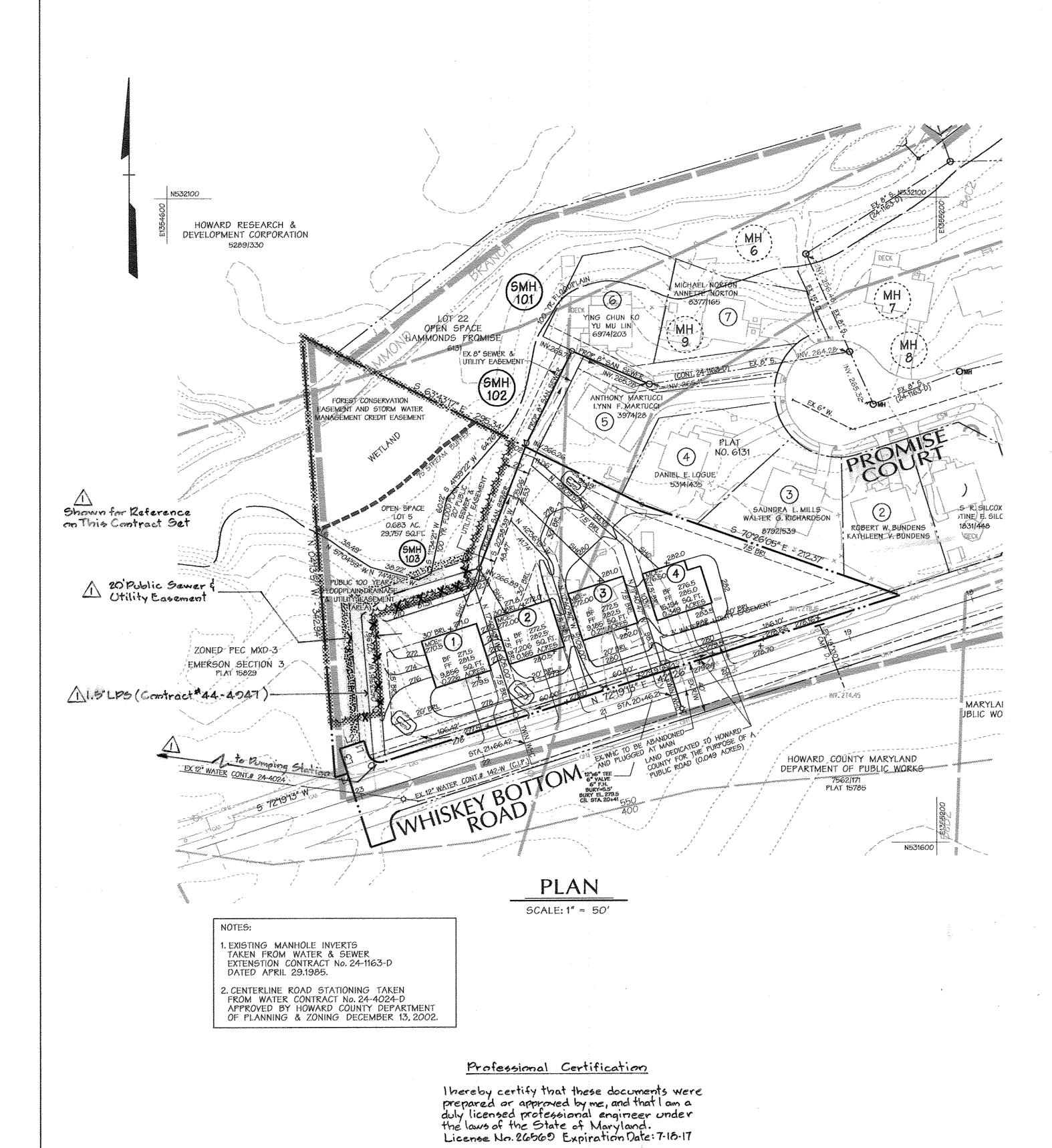
BLOUGH PROPERTY

DATE NOVEMBER 14,2008

SCALE: 1"=600" SHEET

CONTRACT NO. 24-4527-D

Thu Mar 13 13:27:6005050895054.D6\BLOUGH\95054D6W01



SEWER AND
UTILITY EASEMENT — EX. GROUND & PROP. GROUND BF=276.5 6MH TOP ELEV. 270.00 PROP. 7 GRADE BF=272.31 8" PVC AT 0.50% 4" PVC SHC-INV. 267.25 265.21 `266.65 265.11 LEX. SAN. PROFILE SCALE: HORIZ. 1"= 50' VERT. 1"= 5'

WHC AS BUILTS

:	77.10 71000	<u> </u>	
LOTI	LOT 2	LOT 3	LOT 4
TO LOT 2 WHC-4'	TO LOT I WHC-4	TO FIRE HYDRANT-9.5	TO FIRE HYDRANT - 6'
TO MH3 -116.41	TO MH3-116'	TO LOT 4 WHC -4.3'	TO LOT 3 WHC - 4.3
		TO FIRE HYDRANT V-41.4	TO FIRE HYDRANT V-40.5

FIRE HYDRANT TO VALVE -30.3

SHC AS BILLITS

	SHE AS BUILI		
LOT I	LOT 2	LOT 3	LOT 4
TO MH3-31'	T0 MH 3 - 13.1	TO LOT 2 SHC-68	TO MH3-94.8'
TO LOT 2 SHC-24.2	TO LOT 1 SHC - 24.2	TO MH 3 - 60'	TO MH 2-14.5'
	TO LOT 35HC - 68	TO MH 2 -44.7'	TO LOT 3 SHC-35.4
		TO LOT 4 SHC-35.4	

DATE NOVEMBER 14,2008

SIGNATURE

REVIEWED FOR NATURAL RESOURCES CONSERVATION SERVICE

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

Professional Engr. No. 26569

HOWARD S.C.D DATE

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

AND MEETS TECHNICAL REQUIREMENT

DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND

Daft·McCune·Walker, Inc.

4.24-17

A Team of Land Planners, Landscape Architects, Golf Course Architects, Engineers, Surveyors &



	3/14/08	BY	NO.	REVISION	DA
ľ	DATE:	MAKT		Redline revisionNo. 1-Shown for Reference	11.30
	CHECKED BY:				<u> </u>
	KAW		 		+
	DRAWN BY:				
	KAD				
	DESIGN BY:				,

FINAL WATER & SEWER PLAN 8"SEWER

6th ELECTION DISTRICT

BLOUGH PROPERTY

1"=50' SHEET

SCALE:

CONTRACT NO. 24-4527-D

Thu Mar 13 12:02:85952600005054.D6\BLOUGH\95054D6\W02

CHIEF - BUREAU OF UTILITIES - DATE

CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

Towson, Maryland 21286 (410) 296-3333

30.16 DATE 600 SCALE MAP NO. 47 BLOCK NO.7,8,9,13