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# FINAL WATER AND SEWER EXTENSIONS

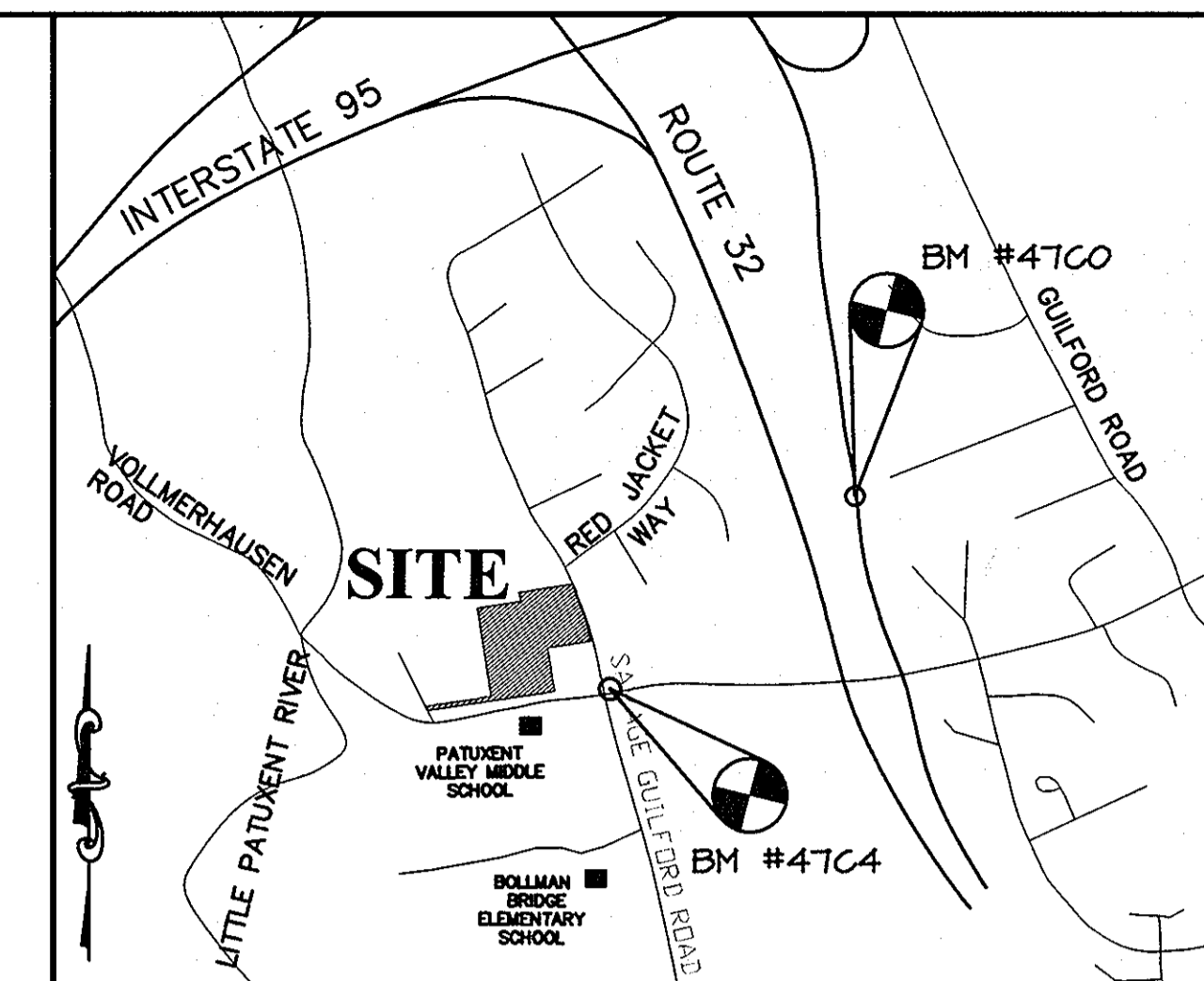
# NICOTRA PROPERTY

## LOTS 15-21

### 6th ELECTION DISTRICT

### HOWARD COUNTY, MARYLAND

## CONTRACT NO. 24-4429-D



#### BENCH MARKS

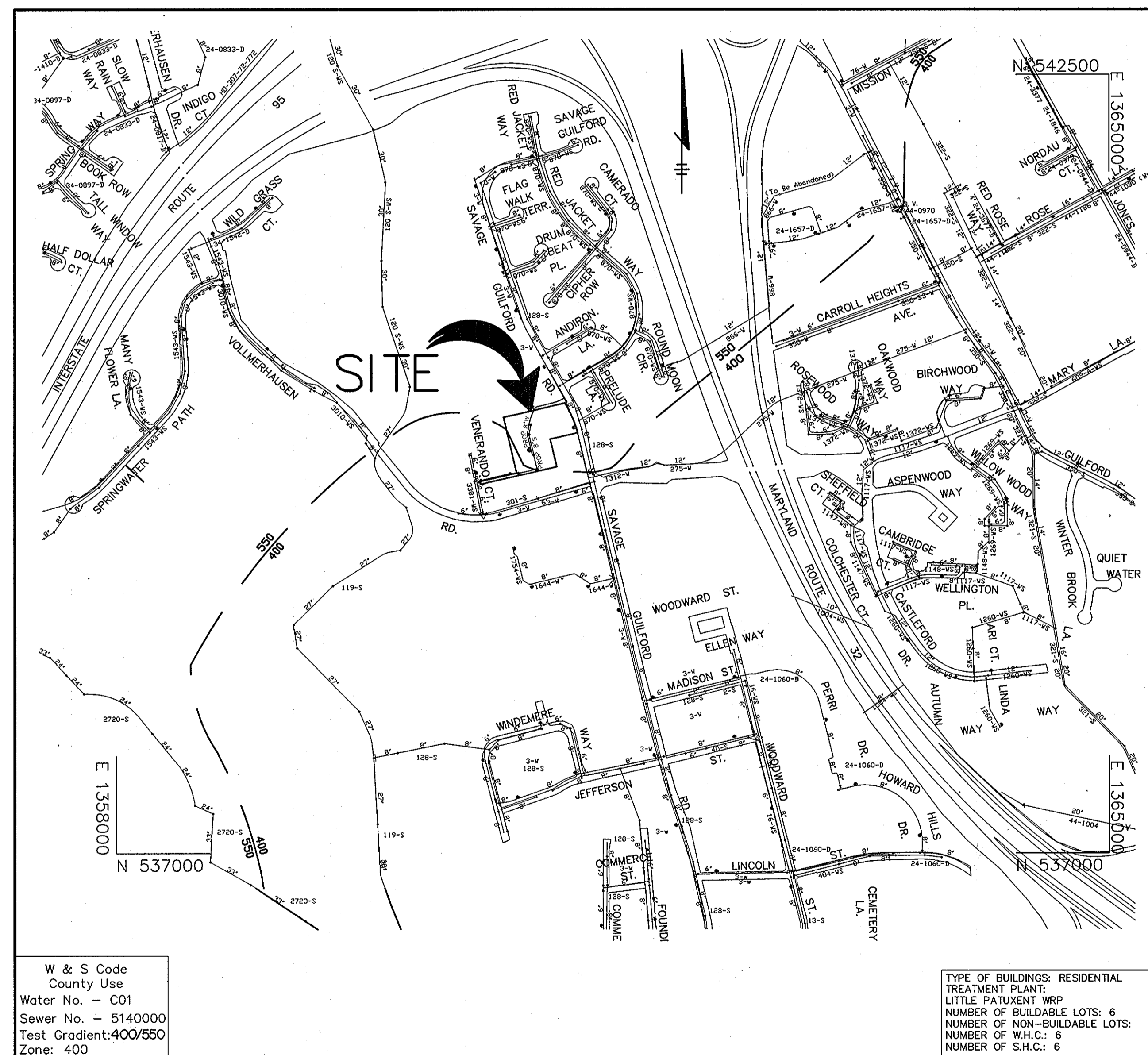
HOWARD COUNTY MONUMENT 47C0  
 N 540,529.712 E 1,362,460.513 ELEV.286.462  
 STANDARD STAMPED BRASS OR ALUMINUM DISC ON  
 CONCRETE MONUMENT; 0.3' BELOW SURFACE LOCATED  
 ON NORTH-EAST CORNER OF VOLLMERHAUSEN  
 RD. AND SAVAGE-GUILFORD RD. INTERSECTION.  
 70.63' SOUTH OF B&E POLE 309354.

HOWARD COUNTY MONUMENT 47C4  
 N 539,645.665 E 1,361,379.426 ELEV.288.807  
 STANDARD STAMPED BRASS OR ALUMINUM DISC ON  
 CONCRETE MONUMENT; 0.3' BELOW SURFACE  
 LOCATED ON WESTERN SIDE OF RT 32 WBL  
 ACROSS FROM CARROLL HEIGHTS AVE. DEAD END  
 16' WEST OF 3 REBARS SET 4' OFF RT. 32

#### VICINITY MAP

SCALE: 1"=1000'  
 HOWARD COUNTY ADC MAP 20 B 5  
 COPYRIGHT ADC THE MAP PEOPLE  
 PERMITTED USE NO. 20894285

NOTE:  
 THE PRELIMINARY PLAN FOR THIS  
 SUBDIVISION IS P-07-003.



**LOCATION MAP**  
 SCALE: 1"=600'

#### GENERAL NOTES

- Approximate location of existing mains are shown. The contractor shall take all necessary precautions to protect existing mains and services which may be interrupted. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer at the Contractor's expense.
- Topographic field surveys were performed on JUNE 2006, by PATTON HARRIS RUST & ASSOCIATES.
- 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. 47C4 and No. 47C1.
- All horizontal controls are based on NAVD 88. Horizontal controls provided on the drawings are ELEVATION 288.156 AND ELEVATION 280.860. All vertical controls are based on Ho. Co. monuments.
- 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 (Emergency) 410-685-1400  
 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 DPW requirements per Section 18.114(a) of the Howard County Code.
- Contractor shall take necessary precautions and safety measures to guard against overhead lines that will interfere with excavating equipment during construction.

#### WATER NOTES

- All water mains shall be DIP 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 C5.52. 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	559 LF	562 LF.	CL 54	GRIFFIN
6" WATER	15 LF	9 LF.		
8" TS&V	1 EA.	1 EA.		
6" VALVE	2 EA.	2 EA.		MUELLER
8"x6" TEE	2 EA.	2 EA.	D.I.P.	SIGMA
8" 1/8HB	2 EA.	2 EA.	D.I.P.	SIGMA
8" 1/16HB	4 EA.	4 EA.	D.I.P.	SIGMA
FIRE HYDRANTS	2 EA.	2 EA.	5/4	MUELLER
8" PLUG & BUTTRESS	1 EA.	1 EA.	D.I.P.	SIGMA
1" WHC	114 LF			
8" SEWER	720 LF		SDR 35	EVERGREEN
SEWER MANHOLES	7 EA.	7 EA.	48"	FREDERICK PRECAST
TYPE B DROP CONNECTION	1 EA.			
4" SHC	128 LF		SDR 35	EVERGREEN

NAME OF UTILITY CONTRACTOR : STAMBAUGH

CHECKBOX	
AS-BUILT DATE	
SURVEY AND DRAFTING DIVISION	

Review for Howard Soil Conservation District and meets technical requirements.

*Jim Mays* 9-24-07  
 NATURAL RESOURCES CONSERVATION SERVICE DATE

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

*John P. Platten* 9-24-07  
 HOWARD SOIL CONSERVATION DISTRICT DATE

OWNER / DEVELOPER  
 AL AND ANITA NICOTRA  
 8708 SAVAGE GUILFORD ROAD  
 JESSUP, MARYLAND 20794  
 AL NICOTRA 301-498-0159

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND

*Michael A. Accorinillo* 9-18-07  
 CHIEF, BUREAU OF UTILITIES DATE

*[Signature]* 9/15/07  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Patton Harris Rust & Associates, pc  
 Engineers, Surveyors, Planners, Landscape Architects,  
 8818 Centre Park Drive  
 Columbia, MD 21045  
 T 410.997.8900  
 F 410.997.9282

*[Signature]* 9/7/07  
 DOMENICO W. COLANGELO #27200

DES: NS					
DRN:					
FILE:					
DATE: 9/10/07	BY	NO.	REVISION	DATE	
			600' SCALE MAP NO. 47	BLOCK NO. 5	

AS-BUILT 24-11

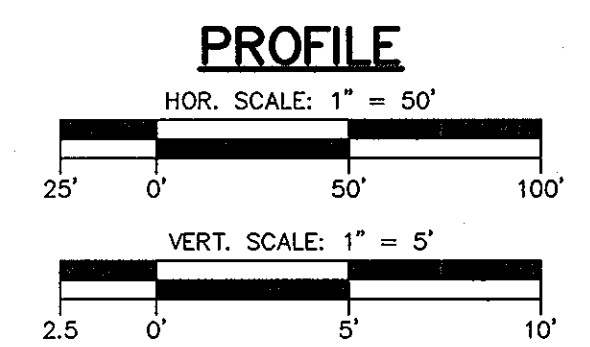
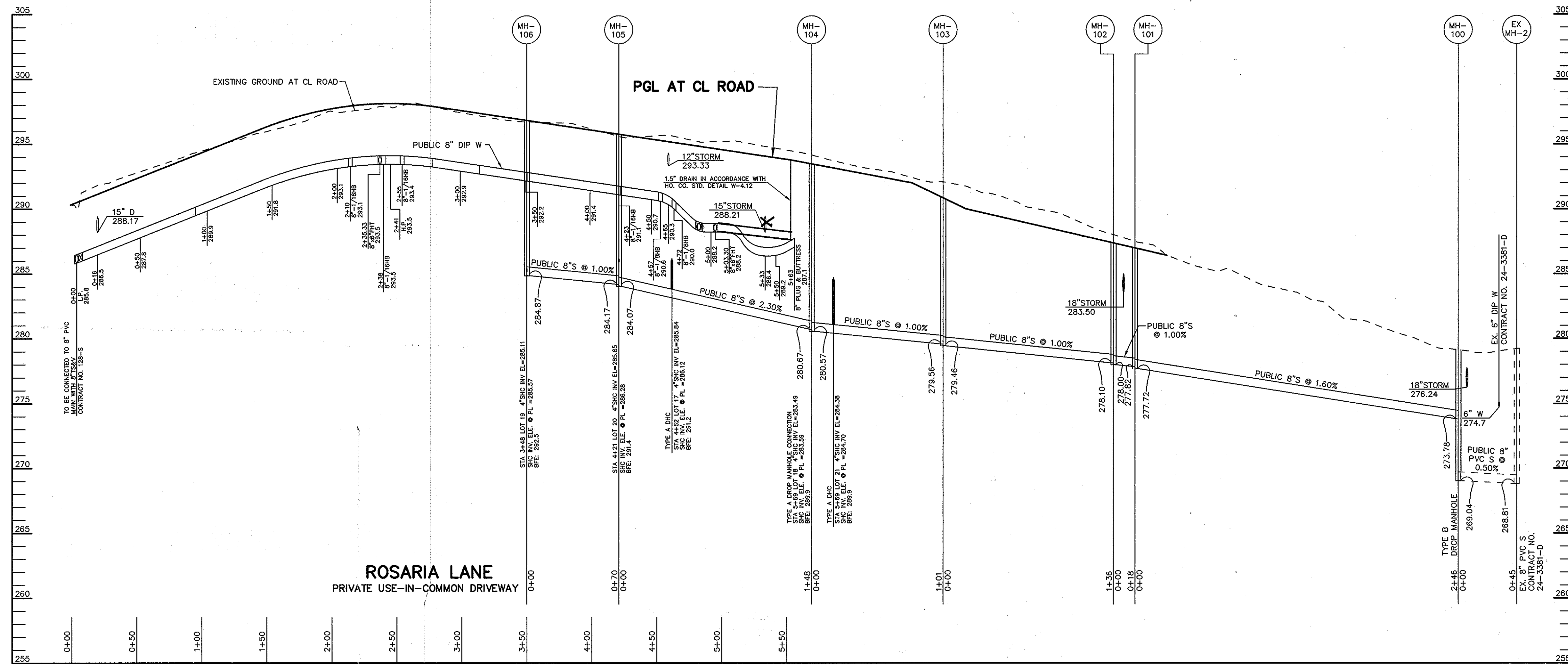
**NICOTRA PROPERTY**  
 LOTS 15 - 21  
 6th ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 CONTRACT NO. 24-4429-D

SCALE AS SHOWN

SHEET 1 OF 3



STRUCTURE SCHEDULE				
STRUCTURE	TYPE	LOCATION	TOP	REMARKS
SMH 106	4' DIA MANHOLE	N 540026 E 1360922	296.72	HOCO. STD. DETAIL G 5.12
SMH 105	4' DIA MANHOLE	N 539957 E 1360909	295.67	HOCO. STD. DETAIL G 5.12
SMH 104	TYPE A DROP MH	N 539813 E 1360943	293.83	HOCO. STD. DETAIL § 1.32
SMH 103	4' DIA MANHOLE	N 539715 E 1360967	291.06	HOCO. STD. DETAIL G 5.12
SMH 102	4' DIA MANHOLE	N 539684 E 1360834	287.36	HOCO. STD. DETAIL G 5.12
SMH 101	4' DIA MANHOLE	N 539692 E 1360817	286.97	HOCO. STD. DETAIL G 5.12
SMH 100	4' DIA MANHOLE	N 539638 E 1360577	279.98	HOCO. STD. DETAIL G 5.12



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE: 9-18-07 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND DATE: 9/18/07 CHIEF, DEVELOPMENT ENGINEERING DIVISION	Patton Harris Rust & Associates, pc Engineers, Surveyors, Planners, Landscape Architects. PHRA 8818 Centre Park Drive Columbia, MD 21045 T 410.997.8900 F 410.997.9282	9/7/07 DOMENICK W. COLANGELO #27200 PROFESSIONAL ENGINEER	DES: NS				PROFILE OF WATER AND SEWER MAINS 600' SCALE MAP NO. 47 BLOCK NO. 5	NICOTRA PROPERTY LOTS 15 - 21 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO. 24-4429-D	SCALE AS SHOWN
				DRN:						FILE:

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