

**GENERAL NOTES**

**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.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON HOWARD COUNTY TOPOGRAPHY AND FIELD RUN TOPOGRAPHY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED AUGUST 2004.
- HORIZONTAL AND VERTICAL SURVEY CONTROLS:**  
THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD 83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 388A AND 388B.  
ALL VERTICAL CONTROLS ARE BASED ON (NAVD 88). VERTICAL CONTROLS PROVIDED ON DRAWINGS ARE:  
GEODETIC SURVEY CONTROL 388A (N 562553.353' E 1,390967.866') BRASS DISC SET ON TOP OF A CONCRETE MONUMENT, LOCATED AT EAST SIDE OF ROUTE 1, 0.3 MILES NORTH OF MONTGOMERY ROAD 81.7' NORTH OF FH & 78.8' SOUTH OF STORMDRAIN INLET.  
GEODETIC SURVEY CONTROL 388B (N 564007.678' E 1,393649.835') BRASS DISC SET ON TOP OF A CONCRETE MONUMENT, LOCATED EAST SIDE OF ROUTE 1, NORTH OF OLD WASHINGTON BLVD, 9.96' AWAY FROM CURB, AND 9.34' AWAY OF GUARDRAIL.  
4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.  
5. 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 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 MONIES 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 DRAWING, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS 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 LOCATIONS OF THE TEST PITS. A NOTE OR NOTES CONTAINING THE RESULTS OF 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. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN THESE PLANS:  
AT&T \_\_\_\_\_ 1-800-252-1133  
BGE (CONSTRUCTION SERVICES) \_\_\_\_\_ 410-637-8713  
BGE (EMERGENCY) \_\_\_\_\_ 410-685-0123  
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  
9. 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  
10. 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 THE CONSTRUCTION OF THE MAIN.  
11. 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 DPM REQUIREMENTS PER SECTION 18.114(G) OF THE HOWARD COUNTY CODE.

**PART II - WATER**

- ALL WATER MAINS SHALL BE 8" PVC 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 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.
- FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF THE ANWA STANDARD C900 FOR PVC PRESSURE PIPE SHALL BE SUBMITTED WITH THE PIPE MATERIAL CERTIFICATIONS OR SHOP DRAWINGS PRIOR TO APPROVAL OF THE MATERIAL FOR USE. THE TEST RECORDS SHALL BE FOR THE PIPE TO BE INSTALLED UNDER THIS CONTRACT. ALL PVC PIPE SHALL CONTAIN MARKINGS TO ALLOW CROSS REFERENCING OF THE PIPE SUPPLIED TO THE TEST RECORDS RECEIVED.
- UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS, SEVENTEEN (17) POUND SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL VALVES AND METALLIC FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSSES. ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC MAINS. ALL "TEES" USED WITH PVC MAINS SHALL BE DUCTILE IRON.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH FINAL PLAN F-10-032.

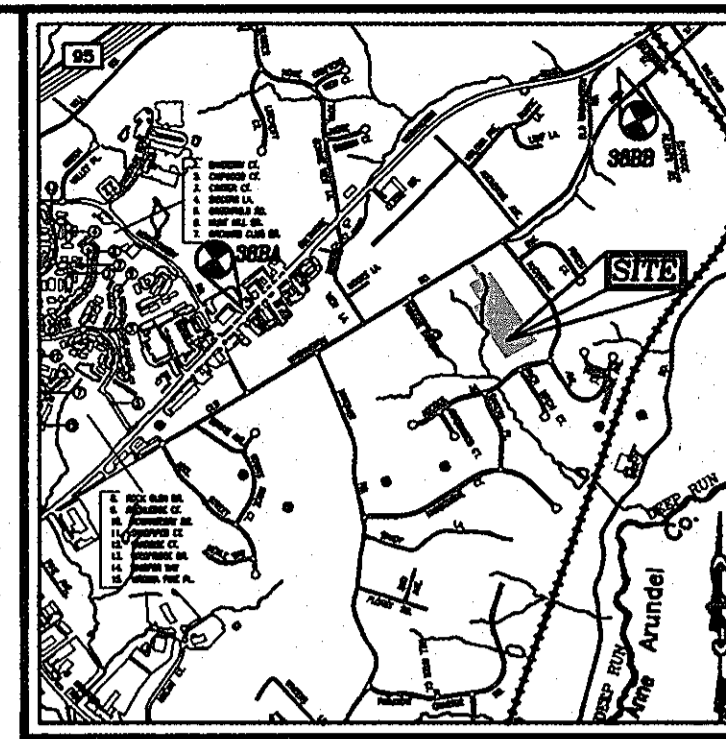
THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

*John R. [Signature]*  
SOIL CONSERVATION DISTRICT  
11/2/10  
DATE

# FINAL WATER & SEWER PLAN

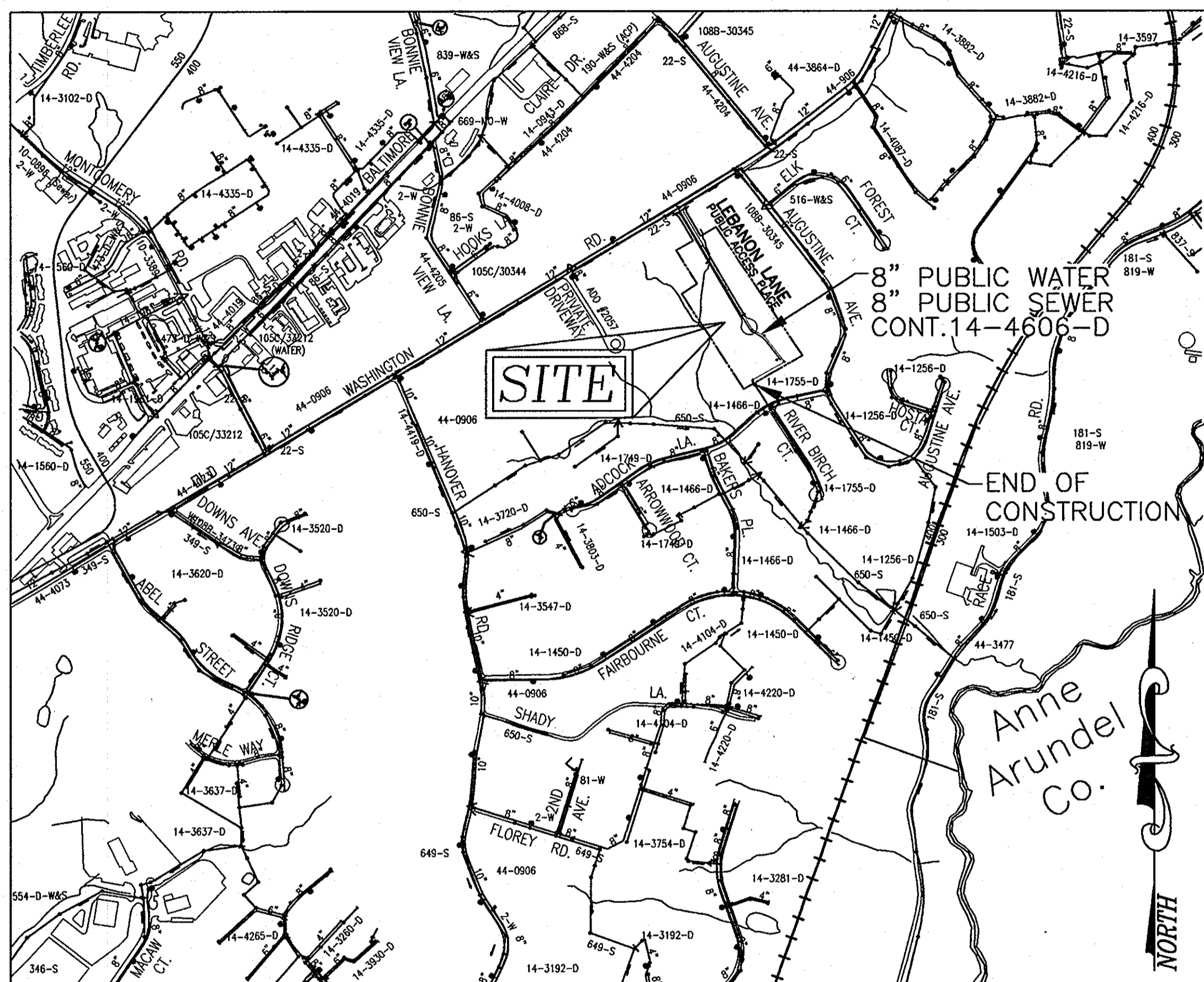
## PECORARO PROPERTY

CONTACT NO. 14-4606-D



**BENCHMARKS**  
COORDINATES BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 388A, 388B  
388A N 562553.353' E 1,390967.866' ELEV. 166.124'  
388B N 564007.678' E 1,393649.835' ELEV. 63.607'

**VICINITY MAP**  
SCALE: 1"=2000'  
ADC MAP COORDINATE= 17 J7



WATER CODE: 400  
TEST GRADIENT: 550

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

Type of Building :	SINGLE FAMILY DETACHED
No. of Lots/Parcels :	21
No. of single Water House Connections :	20
No. of twin Water House Connections :	-
No. of Sewer House Connections :	20
No. of twin Sewer House Connections :	-
Drainage Area :	PATAPSCO RIVER

**PART III - SEWER**

- ALL SEWER MAINS SHALL BE D.I.P. OR 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 COVER, STANDARD DETAIL C5.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE 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.

**LEGEND**

- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- FIRE HYDRANT
- PROPOSED VALVE
- PROPOSED TEE
- PROPOSED STORM DRAIN
- EXISTING STORM DRAIN
- PROPOSED SEWER
- EXISTING SEWER
- SEWER MANHOLE
- WATER HOUSE CONNECTION
- SEWER HOUSE CONNECTION
- PROPOSED SIGN
- PROPOSED LIGHT
- PROPOSED GUARDRAIL

**QUANTITIES**

ITEMS	QUANTITIES ESTIMATED	AS-BUILT	
		QUANTITIES	MANUFACTURER/SUPPLIER
NAME OF UTILITY CONTRACTOR :			
SURVEY AND DRAFTING DIVISION AS-BUILT DATE :			
WATER			
0" WATER C-900 PVC	1,008 LF	1080 O.L.F.	C-900 DR-18 J.M. EAGLE
1 1/2" WHC	548 LF	K	MUELLER
12" X 8" TAPPING SLEEVE	1 EA	1.0	FAST XXX4 FORD METEOR Box Co.
8" X 6" TEE	3 EA	3.0	D.I.P. C153 SIGMA CORP.
8" VALVE	2EA	2.0	KS-EX GATE KENNELLY VALVE
6" VALVE	3 EA	3.0	KS-FW GATE "
FIRE HYDRANT	3 EA	3.0	GUARDANK 812 "
8" HORIZ. COUPLING	1 EA	1.0	DIP C152 SIGMA CORP.
8" - 1/16 HORIZ. BEND	1 EA	1.0	" " "
8" - 1/32 HORIZ. BEND	1 EA	1.0	" " "
8" COP AND BUTTRESS	1 EA	1.0	" " "
8" VERTICAL COUPLING	1EA	3.0	C-900 NORTH AMERICAN
8" - 1/32 VERTICAL COUPLING	7EA	2.0	C-900 "
8" - 1/32 VERT. BEND	72 LF	1.0	SIGMA CORP.
SEWER			
8" SEWER	1,082 LF	1050	SOR-35 NORTH AMERICAN PIPE CORP.
MANHOLES	7 EA	7.0 EACH	PRE CAST FRED RICK PRECAST CONC. T.N.C.
4" SIC	497 LF	400	SOR-35 NORTH AMERICAN PIPE CORP.

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

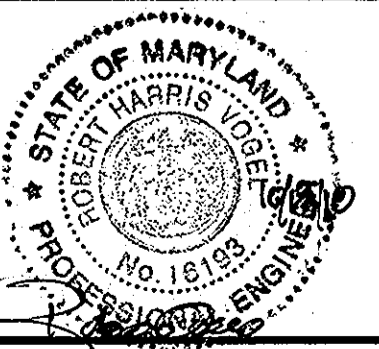
*[Signature]*  
10/22/10  
DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

*[Signature]*  
11/10  
DATE

**ROBERT H. VOGEL ENGINEERING, INC.**  
ENGINEERS • SURVEYORS • PLANNERS

8407 MAIN STREET  
ELLCOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.8961



PROFESSIONAL CERTIFICATE  
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, LICENSE NO. 10113, EXPIRATION DATE: 09-27-2012

DRN: KG DES: RHV  
CHK: RHV  
DATE: OCTOBER 2010

2	AS BUILT	10/1/13
1	REVISE PLAN DUE TO NEW SITE LAYOUT AND GRADING	1/29/11
NO.	REVISION	DATE

**FINAL WATER & SEWER PLAN**  
**COVER SHEET**  
**CONTRACT 14-4606-D**

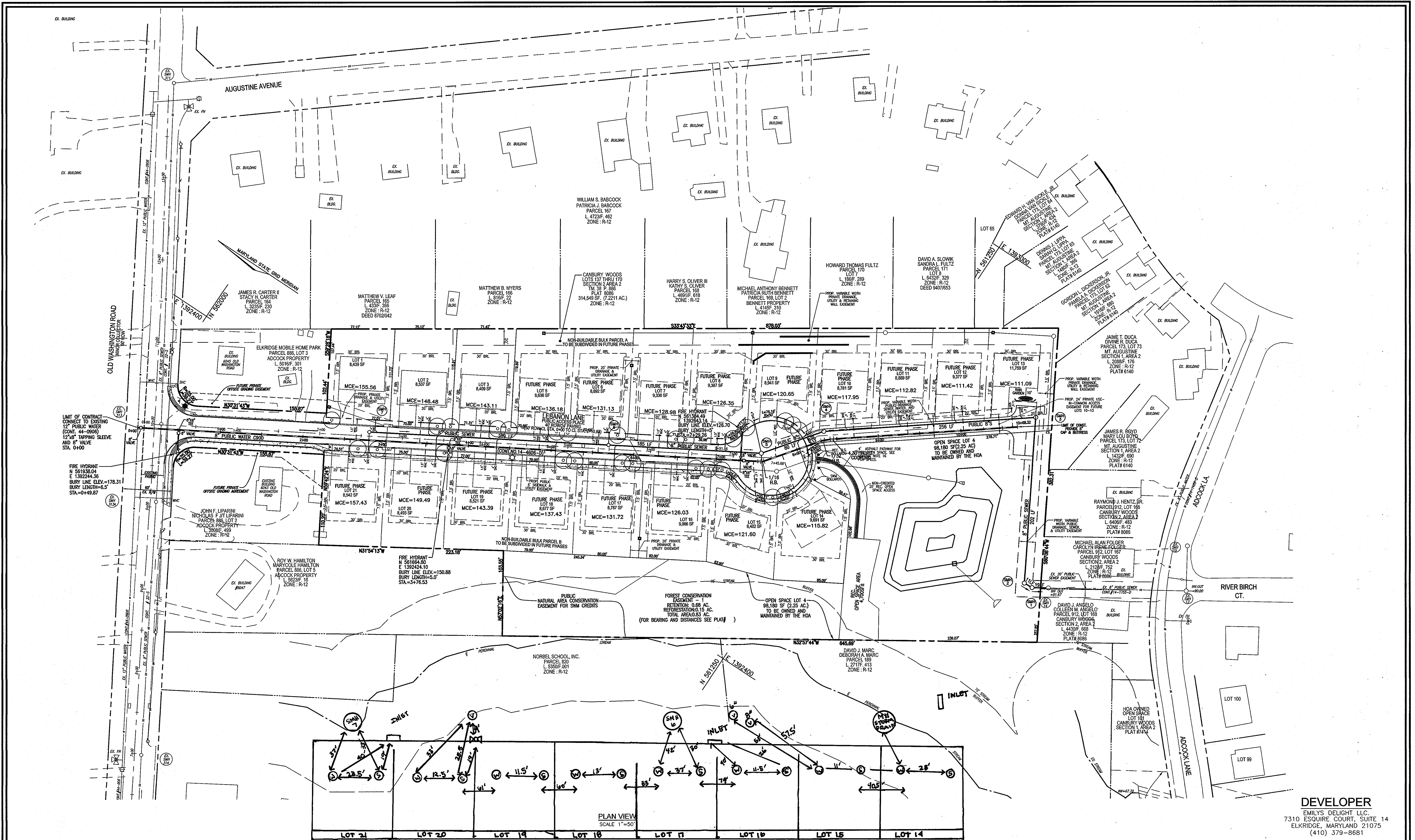
600' SCALE MAP NO. 38 BLOCK NO. 9

**DEVELOPER**  
EMILYS DELIGHT LLC.  
7310 ESQUIRE COURT, SUITE 14  
ELKRIDGE, MARYLAND 21075  
(410) 379-2661

TAX MAP 38 GRID 9  
1ST ELECTION DISTRICT

PARCEL P/O 886  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 1 OF 4



**DEVELOPER**  
 EMILYS DELIGHT LLC,  
 7310 ESQUIRE COURT, SUITE 14  
 ELKRIDGE, MARYLAND 21075  
 (410) 379-8681

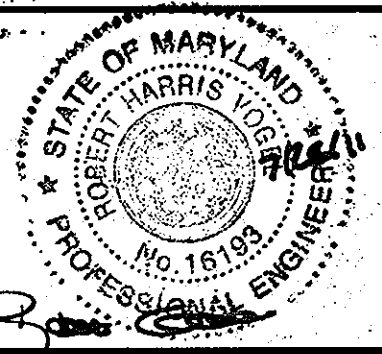
DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

*Signature*  
 CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND

*Signature*  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

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DRN: JMR	DES: RHV/JCO	
CHK: RHV		
DATE: OCTOBER 2010		
NO.	REVISION	DATE
2	AS BUILT	10/1/13
1	REVISE WATER AND SEWER DUE TO NEW SITE LAYOUT AND GRADING.	02/15/11

**FINAL WATER & SEWER PLAN**  
**LAYOUT VIEW**  
**CONTRACT 14-4606-D**

600' SCALE MAP NO. 38 BLOCK NO. 9

**PECORARO PROPERTY**

TAX MAP 38 GRID 9  
 1ST ELECTION DISTRICT

PARCEL P/O 886  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

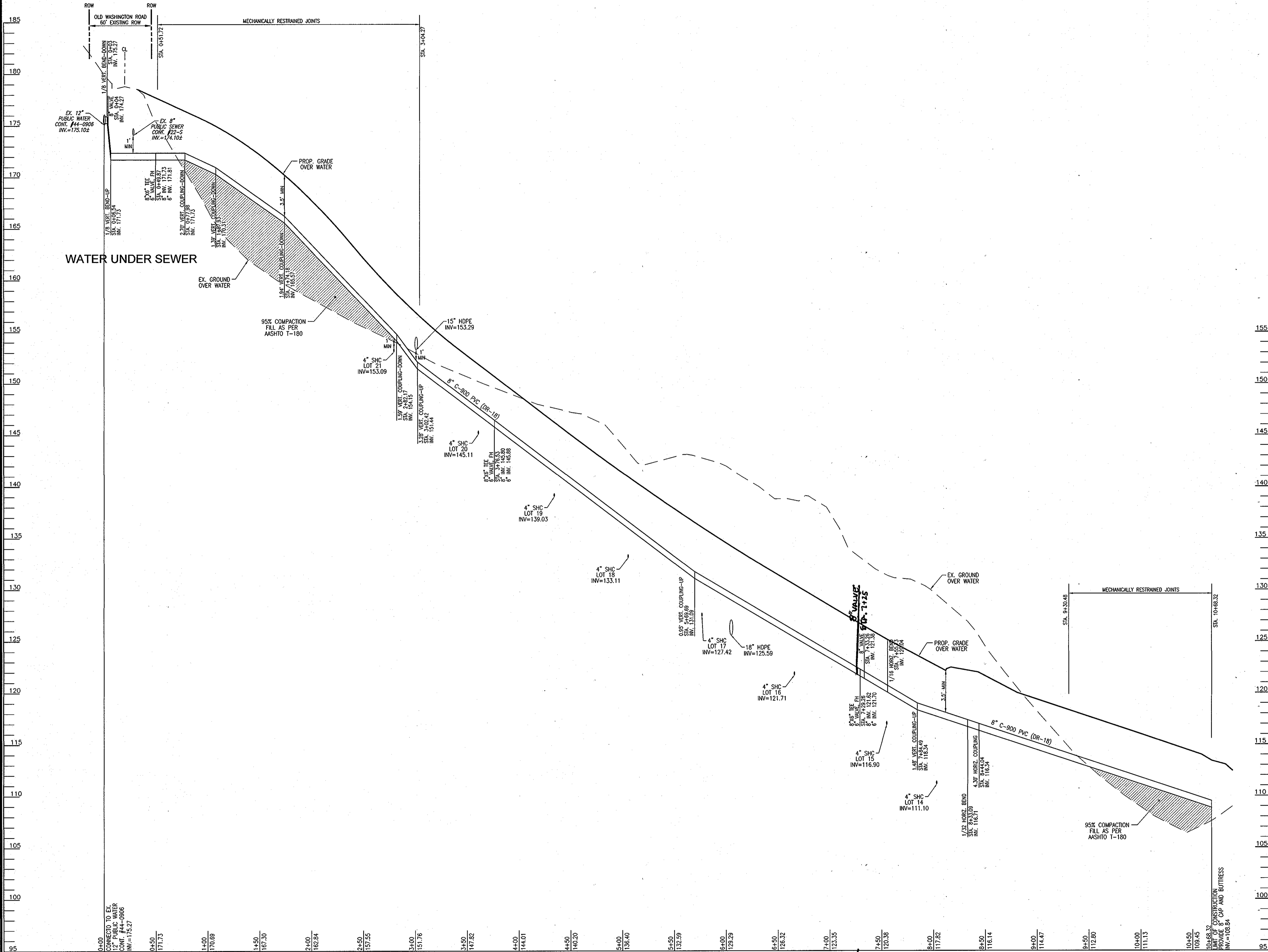
SHEET 2 OF 4

**WATER HOUSE CONNECTION AS-BUILT LOCATION TABLE**

LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
1	LEBANON LANE	LOT 1 SHC 23.0 FT	SMH #1 21.0 FT
2	LEBANON LANE	LOT 2 SHC 10.0 FT	F.H.V 48.0 FT
3	LEBANON LANE	LOT 3 SHC 10.0 FT	LOT 2 SHC 71.0 FT
5	LEBANON LANE	LOT 5 SHC 61.0 FT	LOT 5 SHC 10.0 FT
6	LEBANON LANE	LOT 6 SHC 62.0 FT	LOT 6 SHC 11.0 FT
7	LEBANON LANE	LOT 7 SHC 62.0 FT	LOT 7 SHC 10.0 FT
8	LEBANON LANE	LOT 8 SHC 60.0 FT	LOT 8 SHC 9.0 FT
9	LEBANON LANE	LOT 9 SHC 20.0 FT	LOT 10 SHC 81.0 FT
10	LEBANON LANE	LOT 10 SHC 10.0 FT	LOT 11 SHC 55.0 FT
11	LEBANON LANE	LOT 11 SHC 10.0 FT	LOT 12 SHC 57.0 FT
12	LEBANON LANE	LOT 12 SHC 11.0	LOT 13 WHC 57.0 FT
13	LEBANON LANE	LOT 12 WHC 57.0 FT	SMH #2 22.0 FT
14	LEBANON LANE	LOT 14 SHC 23.0 FT	LOT 15 SHC 10.5 FT
15	LEBANON LANE	LOT 15 SHC 11.0 FT	B.V. VALVE 7425 57.5 FT
16	LEBANON LANE	LOT 16 SHC 11.5 FT	LOT 17 SHC 79.0 FT
17	LEBANON LANE	LOT 17 SHC 37.0 FT	SMH #3 47.0 FT
18	LEBANON LANE	LOT 18 SHC 13.0 FT	LOT 19 SHC 69.0 FT
19	LEBANON LANE	LOT 19 SHC 11.5 FT	LOT 20 SHC 61.0 FT
20	LEBANON LANE	LOT 20 SHC 12.5 FT	FRV #716 25.5 FT
21	LEBANON LANE	LOT 21 SHC 23.5 FT	SMH #7 37.0 FT

**PUBLIC WATER MAIN**

STA.	FITTING
0+00.00	12"x8" TAPPING SLEEVE
0+03.00	8" 1/8" VERTICAL BEND-DOWN
0+04.00	8" VALVE
0+06.54	8" 1/8" VERTICAL BEND-UP
0+49.87	8"x6" TEE, 6" VALVE, 6" FH.
0+77.98	8" VERTICAL COUPLING - 2.70' DOWN
1+07.93	8" VERTICAL COUPLING - 1.39' DOWN
1+74.18	8" VERTICAL COUPLING - 1.94' DOWN
2+82.17	8" VERTICAL COUPLING - 1.59' DOWN
3+02.42	8" VERTICAL COUPLING - 3.28' UP
3+76.53	8"x6" TEE, 6" VALVE, 6" FH.
5+69.69	8" VERTICAL COUPLING - 0.95' UP
7+29.26	8"x6" TEE, 6" VALVE, 6" FH.
7+33.26	8" VALVE
7+55.73	8" 1/16" HORIZONTAL BEND
7+84.49	8" VERTICAL COUPLING - 1.45' UP
8+33.09	8" 1/32" HORIZONTAL BEND
8+44.04	8" HORIZONTAL COUPLING - 4.30'
10+68.32	8" CAP AND BUTTRISS



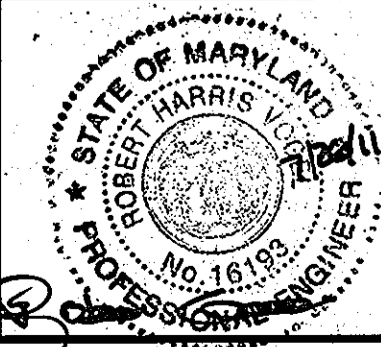
**8" C-900 PVC PUBLIC WATER PROFILE**  
 SCALE: HORIZONTAL - 1"=50'  
 VERTICAL - 1"=5'

**DEVELOPER**  
 EMILYS DELIGHT LLC.  
 7310 ESQUIRE COURT, SUITE 14  
 ELKRIDGE, MARYLAND 21075  
 (410) 379-8681

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 HOWARD COUNTY, MARYLAND  
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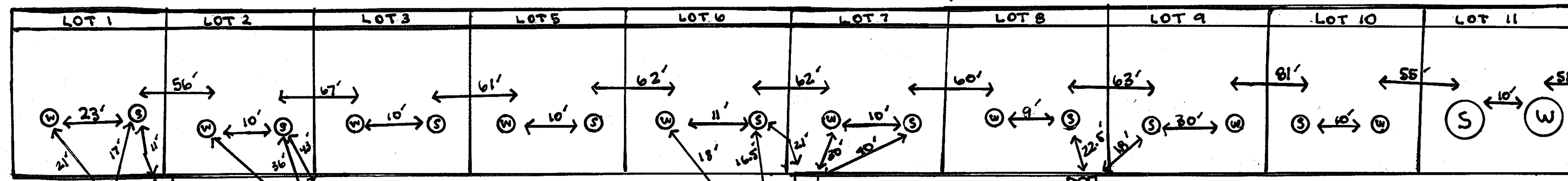
NO.	REVISION	DATE
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1	REVISE WATER AND SEWER DUE TO NEW SITE LAYOUT AND GRADING.	02/15/11

**FINAL WATER & SEWER PLAN**  
**WATER PROFILE**  
**CONTRACT 14-4606-D**

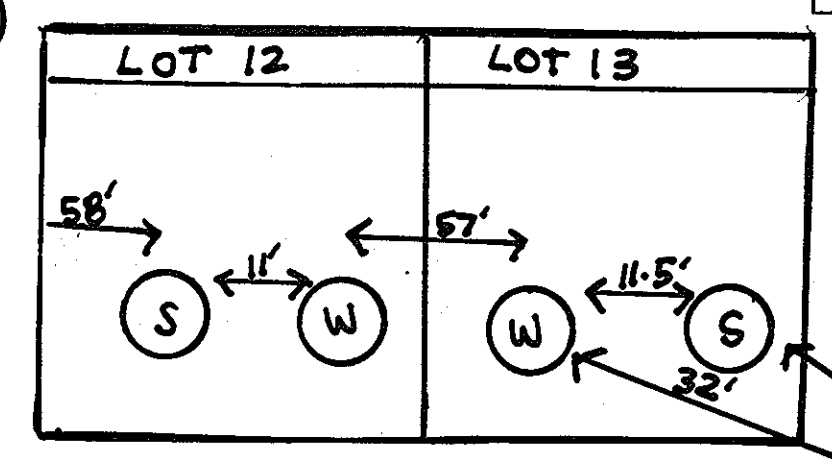
**PECORARO PROPERTY**

SCALE AS SHOWN  
 SHEET 3 OF 4

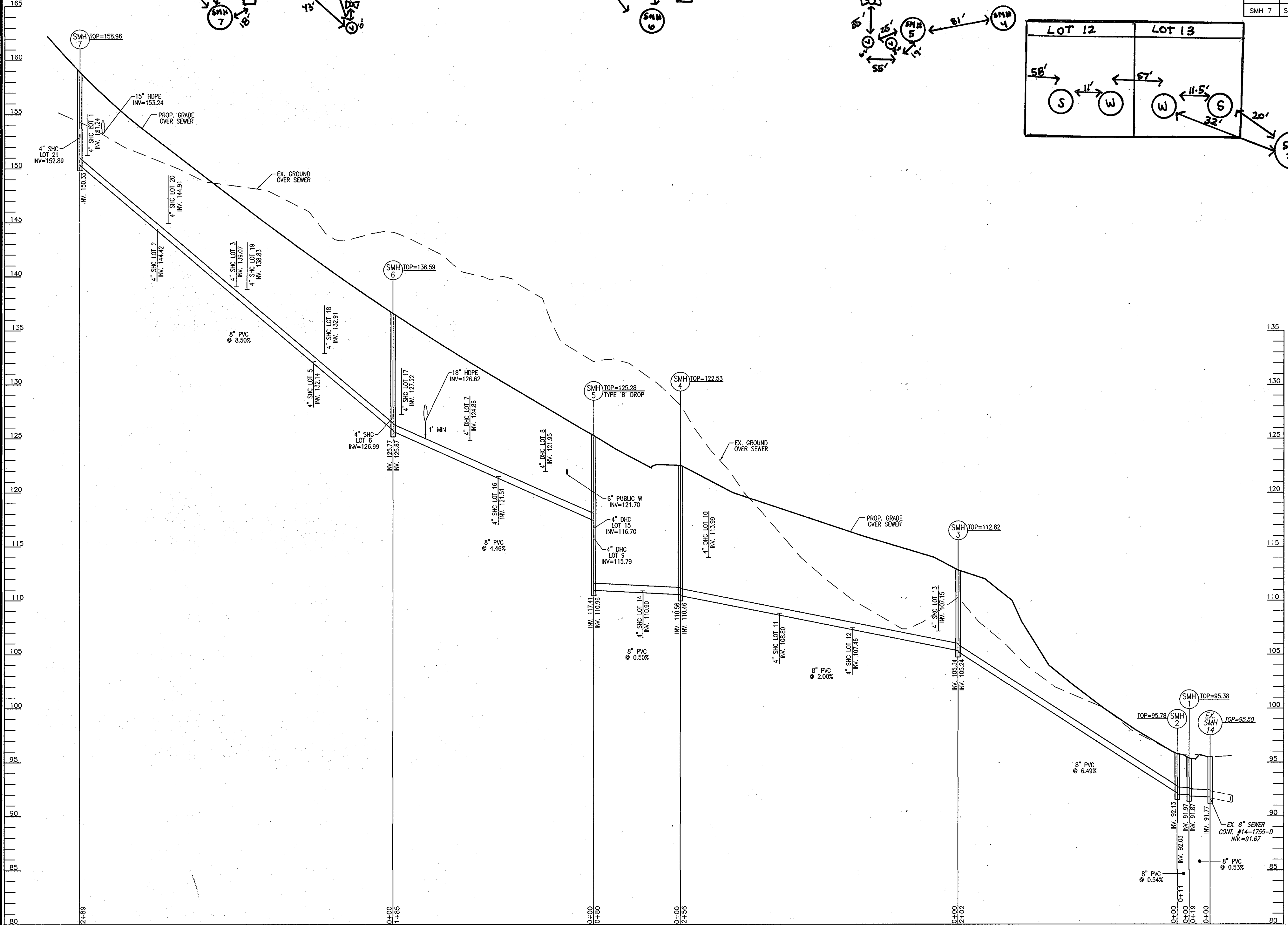
TAX MAP 38 GRID 9  
 1ST ELECTION DISTRICT  
 PARCEL P/O 886  
 HOWARD COUNTY, MARYLAND



SEWER MANHOLE SCHEDULE						
NO.	TYPE	LOCATION		TOP ELEV.	INV. IN	INV. OUT
SMH 1	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 560987.47	E 1392678.42	95.38	91.97	91.87
SMH 2	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 560998.25	E 1392677.78	95.78	92.13	92.03
SMH 3	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 561098.70	E 1392852.73	112.82	105.34	105.24
SMH 4	STD. PRECAST MH HO. CO. STD. DET. G5.12	N 561302.01	E 1392696.83	122.53	110.56	110.46
SMH 5	TYPE 'B' DROP MH HO. CO. STD. DET. S1.32	LRP STA. 2+59.98 LEBANON LANE, 32.48 LT.		125.28	117.41	110.96
SMH 6	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL ROAD STA. 5+48.89 LEBANON LANE, 5.00' LT.		136.59	125.77	125.67
SMH 7	STD. PRECAST MH HO. CO. STD. DET. G5.12	CL ROAD STA. 2+59.57 LEBANON LANE, 5.00' LT.		158.96	-	150.33



SEWER HOUSE CONNECTION AS-BUILT LOCATION TABLE					
LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2	SMH 1	SMH 2
1	LEBANON LANE	LOT 1 WHC 23 FT	LOT 2 WHC 10 FT	21 FT	10 FT
2	LEBANON LANE	LOT 2 WHC 48 FT	LOT 3 WHC 10 FT	10 FT	61.0 FT
3	LEBANON LANE	LOT 3 WHC 10 FT	LOT 4 WHC 10 FT	10 FT	10 FT
4	LEBANON LANE	LOT 4 WHC 62.0 FT	LOT 5 WHC 10 FT	10 FT	60.0 FT
5	LEBANON LANE	SMH 6 16.5 FT	LOT 6 WHC 10 FT	10 FT	68.0 FT
6	LEBANON LANE	LOT 7 WHC 10.0 FT	LOT 8 WHC 10.0 FT	10.0 FT	68.0 FT
7	LEBANON LANE	SMH 3 18.5 FT	LOT 9 WHC 30 FT	30 FT	30 FT
8	LEBANON LANE	LOT 10 WHC 10 FT	LOT 11 WHC 81 FT	81 FT	81 FT
9	LEBANON LANE	SMH 4 18 FT	LOT 12 WHC 11.5 FT	11.5 FT	11.5 FT
10	LEBANON LANE	LOT 10 WHC 10 FT	LOT 13 WHC 11.5 FT	11.5 FT	11.5 FT
11	LEBANON LANE	LOT 10 WHC 58 FT	LOT 14 WHC 40.5 FT	40.5 FT	40.5 FT
12	LEBANON LANE	SMH 5 20 FT	INLET 26.0 FT	26.0 FT	26.0 FT
13	LEBANON LANE	LOT 10 WHC 22.0 FT	LOT 17 WHC 37.0 FT	37.0 FT	37.0 FT
14	LEBANON LANE	LOT 10 WHC 11.0 FT	LOT 17 WHC 33.0 FT	33.0 FT	33.0 FT
15	LEBANON LANE	LOT 10 WHC 11.5 FT	LOT 18 WHC 60.0 FT	60.0 FT	60.0 FT
16	LEBANON LANE	SMH 6 30 FT	LOT 20 WHC 12.5 FT	12.5 FT	12.5 FT
17	LEBANON LANE	LOT 10 WHC 13 FT	LOT 21 WHC 22.5 FT	22.5 FT	22.5 FT
18	LEBANON LANE	LOT 10 WHC 11.5 FT			
19	LEBANON LANE	SMH 7 19.0 FT			
20	LEBANON LANE	SMH 7 32.0 FT			
21	LEBANON LANE	SMH 7 32.0 FT			



8" PUBLIC SEWER PROFILE  
SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=5'

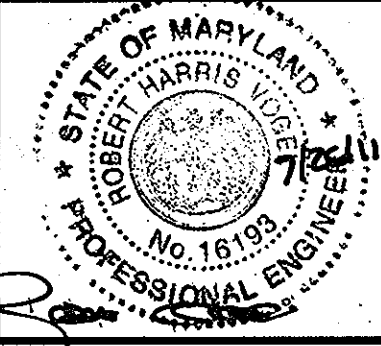
SEWER CONNECTION TABULATION						
LOT NO	TYPE	ELEV. @ MAIN	ELEV. @ DHC	ELEV. @ R/W OR EASEMENT	ELEV. @ UNIT	M.C.E.
1	4" SHC, 02.0%	151.24	-	(15') 151.54 (76')	153.06	155.56
2	4" SHC, 02.0%	144.42	-	(15') 144.72 (63')	145.98	148.48
3	4" SHC, 02.0%	139.07	-	(15') 139.37 (62')	140.61	143.11
5	4" SHC, 02.0%	132.14	-	(15') 132.44 (62')	133.68	136.18
6	4" SHC, 02.0%	126.99	-	(15') 127.29 (67')	128.63	131.13
7	4" DHC, 02.0%	-	124.86	(15') 125.16 (66')	126.48	128.98
8	4" DHC, 02.0%	-	121.95	(15') 122.25 (80')	123.85	126.35
9	4" DHC, 02.0%	-	115.79	(41') 116.61 (77')	118.15	120.65
10	4" DHC, 02.0%	-	113.99	(13') 114.25 (60')	115.45	117.95
11	4" SHC, 02.0%	109.80	-	(15') 109.96 (63')	110.32	112.82
12	4" SHC, 02.0%	107.46	-	(15') 107.72 (60')	108.92	111.42
13	4" SHC, 02.0%	107.15	-	(13') 107.41 (59')	108.59	111.09
14	4" SHC, 02.0%	110.90	-	(52') 111.94 (69')	113.32	115.82
15	4" DHC, 02.0%	-	116.70	(61') 117.92 (59')	119.10	121.60
16	4" SHC, 02.0%	121.51	-	(31') 122.13 (70')	123.53	126.03
17	4" SHC, 02.0%	127.22	-	(31') 127.84 (69')	129.22	131.72
18	4" SHC, 02.0%	132.91	-	(31') 133.53 (70')	134.93	137.43
19	4" SHC, 02.0%	138.83	-	(31') 139.45 (72')	140.89	143.39
20	4" SHC, 02.0%	144.91	-	(31') 145.53 (73')	146.99	149.49
21	4" SHC, 02.0%	152.89	-	(31') 153.51 (71')	154.93	157.43

DEVELOPER  
EMILYS DELIGHT LLC.  
7310 ESQUIRE COURT, SUITE 14  
ELKRIDGE, MARYLAND 21075  
(410) 379-8681

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
S. H. CLAWSON  
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
M. J. DANNEBERG  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

**ROBERT H. VOGEL ENGINEERING, INC.**  
ENGINEERS • SURVEYORS • PLANNERS  
8407 MAIN STREET TEL: 410.461.7666  
ELLCOTT CITY, MD 21043 FAX: 410.461.8981



PROFESSIONAL CERTIFICATE  
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, LICENSE NO. 16193, EXPIRATION DATE: 09-27-2012.  
DRN: JMR DES: RHW/JCO  
CHK: RHW  
DATE: OCTOBER 2010

NO.	REVISION	DATE
2	AS BUILT	10/01/10
1	REVISE WATER AND SEWER DUE TO NEW SITE LAYOUT AND GRADING.	02/15/11

FINAL WATER & SEWER PLAN  
SEWER PROFILE  
CONTRACT 14-4606-D

PECORARO PROPERTY

TAX MAP 38 GRID 9  
1ST ELECTION DISTRICT

PARCEL P/O 886  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 4 OF 4