

PUBLIC WATER AND SEWER

ATHOL WOODS

LOTS 1-12 AND OPEN SPACE LOTS 13-15

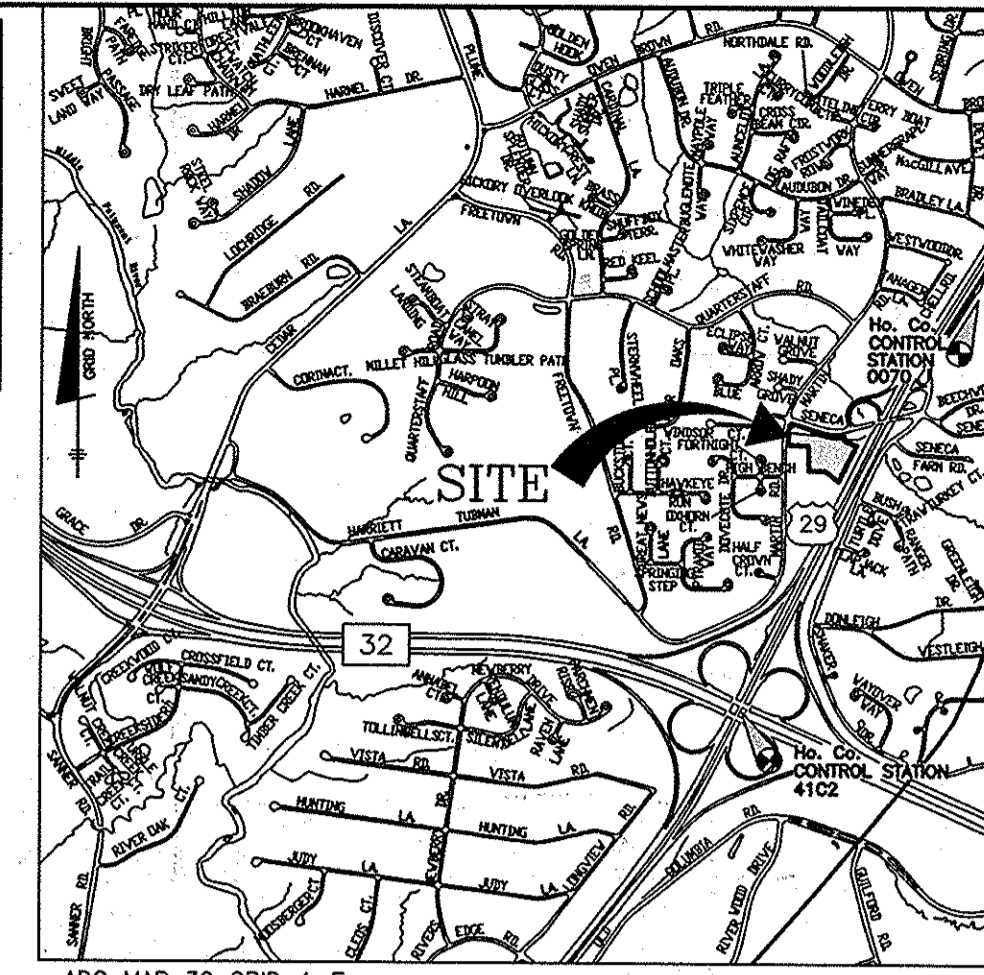
TAX MAP 36; PARCELS 4, 108 & 495 ; GRID 19

5TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

CONTRACT NO.: 24-4898-D

BENCH MARKS NAD '83	
HO. CO. #0070 (NAD '83)	ELEV. 406.357
STANDARD DISC ON CONCRETE MONUMENT	
E OF RTE 29, NORTH OF SENECA DRIVE BRIDGE	E 1350374.642
N 556041.785	E 1350374.642
HO. CO. #41C2 (NAD '83)	ELEV. 395.193
STANDARD DISC ON CONCRETE MONUMENT	
ISLE RTE 32 100' EAST OF RTE 29 NBL	E 1348104.192
N 551616.419	E 1348104.192



VICINITY MAP
SCALE: 1"=2000'

ITEMS	ESTIMATED QUANTITIES	AS-BUILT		
		QUANTITIES	TYPE	MANUF./SUPPLIER
8" WATER (PVC C900 DR18)	726 L.F.			
1.5" WHC	262 L.F.			
FIRE HYDRANT	3 EACH			
FH TEE & VALVE	3 EACH			
12"x8" TS&V	1 EACH			
8" SEWER (PVC)	924 L.F.			
MH (G-5.12)	7 EACH			
MH (G-5.14)	1 EACH			
4" SHC	201 L.F.			

NAME OF UTILITY CONTRACTOR:
SURVEY AND DRAFTING DIVISION AS-BUILT DATE:

THE EXISTING ONSITE WELL AND SEPTIC SYSTEM FOR LOT 12 (6645 ATHOL WOODS LANE) MUST BE PROPERLY ABANDONED WITH DOCUMENTATION SUBMITTED TO THE HEALTH DEPARTMENT PRIOR TO HEALTH DEPARTMENT APPROVAL. NO METERS WILL BE ALLOWED TO BE INSTALLED TO PROVIDING DOCUMENTATION FROM THE HEALTH DEPARTMENT THAT THE WELL AND SEPTIC SYSTEM HAS BEEN ABANDONED.

GENERAL NOTES

- PART 1 - GENERAL**
- 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 CONTRACTOR'S EXPENSE.
 - A TOPOGRAPHIC FIELD SURVEY WAS PERFORMED ON DECEMBER 2012 BY BENCHMARK ENGINEERING, INC.
 - THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM, NAD 83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 0070 AND 41C2. ALL VERTICAL CONTROLS ARE BASED ON MVD 88. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE HO.CO. GEODETIC CONTROL STA. 0070 & 41C2.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON PLANS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 12" CLEAR ALL POLES BY 6" 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 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 DETAILS 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 \square AT THE LOCATIONS OF THE TEST PITS. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR TEST 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 FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

AT&T	1-800-252-1133
BGE (CONSTRUCTION SERVICES)	410-637-8713
BGE (EMERGENCY)	410-685-0123
HO. CO. DPW - BUREAU OF UTILITIES	410-313-4800
COLONIAL PIPELINE CO.	410-785-1390
MISS UTILITY	1-800-257-7777
STATE HIGHWAY ADMINISTRATION	410-531-5533
VERIZON	1-800-743-0033
 - 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.
 - 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.
 - 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(c) OF THE HOWARD COUNTY CODE.

PART 2 - WATER

- ALL WATER MAINS TO BE PVC C900 DR18 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 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.
- TRACE WIRE AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL D.I.P. AND P.V.C. WATER MAINS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL.
- FOR PVC WATER MAINS, ALL RECORDS FOR THE QUANTITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF ANWA STANDARD C900 FOR PVC PRESSURE PIPE SHALL BE SUBMITTED WITH THE PIPE MATERIAL CERTIFICATIONS OR SHOP DRAWINGS PRIOR TO APPROVAL OF MATERIAL FOR USE. 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 RECORD RECEIVED.
- UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS, SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL VALVES AND METAL FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. SEVENTEEN (17) POUND MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSSES. TWELVE (12) POUND 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.
- PROPER ASSEMBLY OF GASKETED P.V.C. PIPE JOINTS: THE MANUFACTURER'S INSERTION LINE OF GASKETED PVC PIPE JOINTS INDICATES THE MAXIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL. AFTER ASSEMBLY OF THE JOINT, THE INSERTION LINE SHALL REMAIN VISIBLE. DUAL INSERTION LINES ON GASKETED P.V.C. PIPE INDICATE THE MAXIMUM AND MINIMUM DEPTH OF INSERTION INTO THE SPIGOT BELL. THE CONTRACTOR SHALL NOT OVER INSERT OVER HOME THE SPIGOT INTO THE BELL. THE CONTRACTOR SHALL NOT OVER INSERT OR OVER HOME THE SPIGOT INTO THE BELL OF THE P.V.C. PIPE.
- ALL CHANGES IN HORIZONTAL AND VERTICAL DIRECTION OF P.V.C. WATER PIPE SHALL BE MADE WITH STANDARD BENDS, 5-DEGREE SWEEPS, OR HIGH-DEFLECTION (HD) COUPLINGS. NO BENDING OF THE PIPE OR DEFLECTING OF P.V.C. PIPE JOINTS IS PERMITTED. WHERE HIGH-DEFLECTION (HD) COUPLINGS OR 5-DEGREE SWEEPS ARE PERMITTED, THE CONTRACTOR SHALL PROVIDE ONE FULL PIPE LENGTH (20-FOOT LONG) ON EITHER SIDE OF THE HIGH-DEFLECTION (HD) COUPLINGS OR 5-DEGREE SWEEP. THE CONTRACTOR SHALL USE A VIBRATORY PLATE COMPACTOR OR OTHER APPROVED MEANS TO THOROUGHLY COMPACT THE #57 STONE ON BOTH SIDES OF THE HIGH-DEFLECTION (HD) COUPLING OR 5-DEGREE SWEEP, TAKING CARE NOT TO USE COMPACTION EQUIPMENT DIRECTLY OVER THE FITTING.

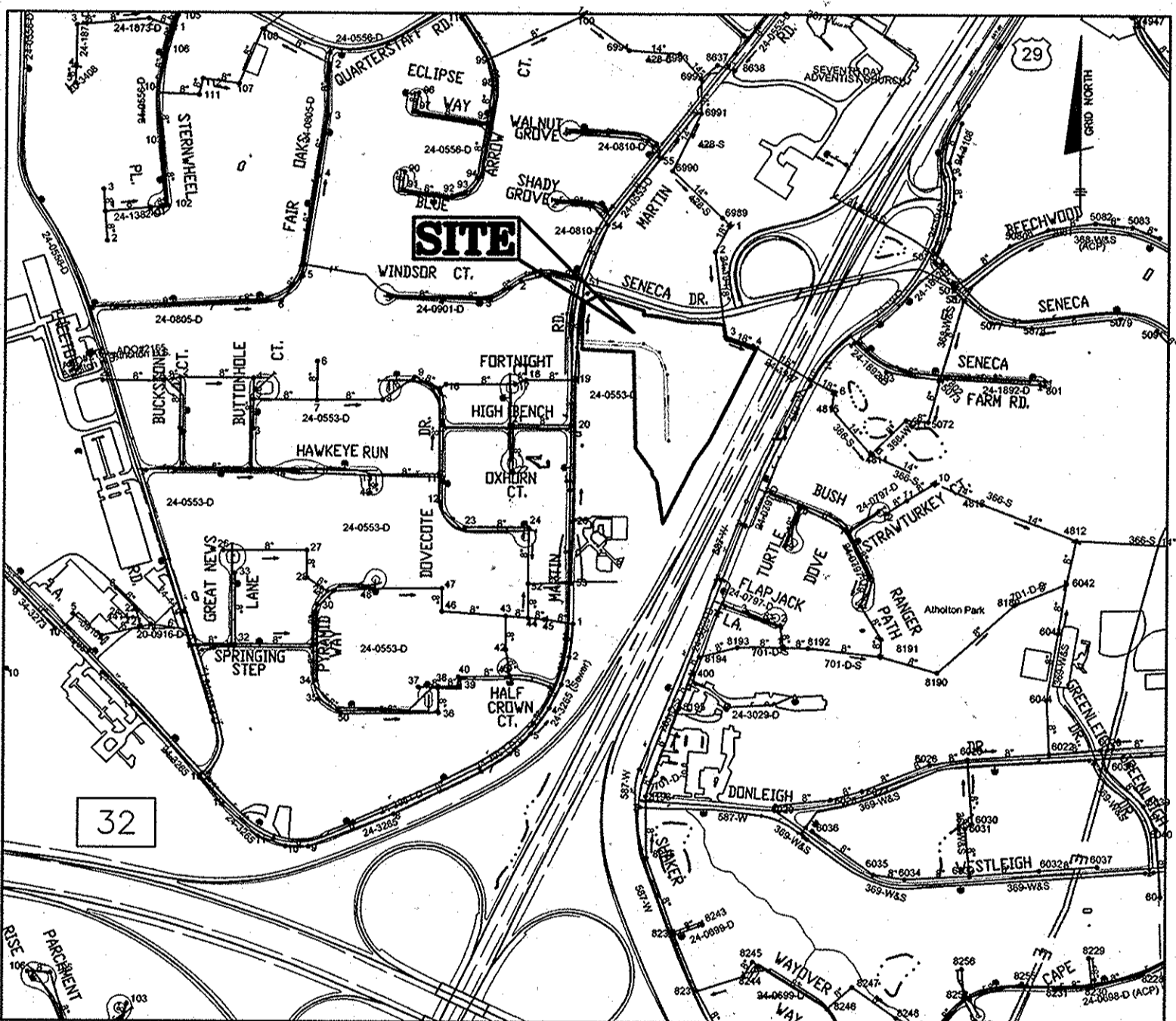
P.V.C. HIGH-DEFLECTION (HD) COUPLINGS SHALL BE LIMITED TO A TOTAL DEFLECTION OF 3-DEGREES (1-1/2 DEGREES ON EITHER END OF THE COUPLING). SHALL BE RATED FOR A MINIMUM OF 200-PSI MEETING THE REQUIREMENTS OF ANWA-C900. SHALL HAVE A MINIMUM LAY LENGTH OF 8-INCHES AND SHALL HAVE CENTER STOPS. P.V.C. HIGH-DEFLECTION (HD) COUPLINGS SHALL BE CERTAIN-TEED P.V.C. HIGH-DEFLECTION (HD) COUPLINGS OR EQUAL.

5-DEGREE SWEEPS SHALL BE BELL BY SPIGOT, RATED FOR A MINIMUM 225-PSI, DR-18 MEETING THE REQUIREMENTS OF ANWA-C900, AND SHALL BE MULTI-FITTING (PEX) BLUE BRUTE DR-18 OR EQUAL.

- WHEN P.V.C. HIGH-DEFLECTION (HD) COUPLINGS OR P.V.C. 5-DEGREE SWEEPS ARE USED TO FACILITATE CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENT OF 4-INCH OR 6-INCH P.V.C. PIPELINES, THE CONTRACTOR SHALL INSTALL DEVICES FOR THE PREVENTION OF OVER-INSERTION OF THE P.V.C. SPIGOTS OR PLAIN ENDS INTO THE PUSH ON BELL JOINT ON BOTH SIDES OF THE HIGH DEFLECTION (HD) COUPLINGS AND 5-DEGREE SWEEPS. BELL STOPS SHALL BE PLACED AT THE PROPER INSERTION LINE FOR THE FITTING. THE BELL STOP SHALL BE MANUFACTURED OF DUCTILE IRON AND INCORPORATE AN EXPANSION RETENTION SPRING TO ALLOW FOR PIPE EXPANSION AND CONTRACTION. THE BELL STOPS SHALL BE SERIES 5000 MEGA-STOP, AS MANUFACTURED BY EBAA IRON, INC. OR EQUAL.
- FIRE SPRINKLER SYSTEMS FOR ALL SINGLE FAMILY DWELLINGS SHALL HAVE A MINIMUM OF A 1-1/2" CONNECTION WITH A 1" OUTSIDE METER SETTING.

PART 3 - 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 WATERIGHT FRAME AND COVER, STANDARD DETAIL C-5.5.2. WHERE WATERIGHT 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.



TYPE OF BUILDING:	SFD
NO. OF BUILDABLE LOTS:	12
NUMBER OF SHC'S:	12
NUMBER OF WHC'S:	12
DRAINAGE AREA:	MIDDLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WWP
WATER ZONE:	550
TEST GRADIENT:	700

LOCATION PLAN

SCALE: 1" = 600'

OWNER
LISA MARIE SMITH
6128 EDWARD HILL ROAD
ELLICOTT CITY, MD 21043

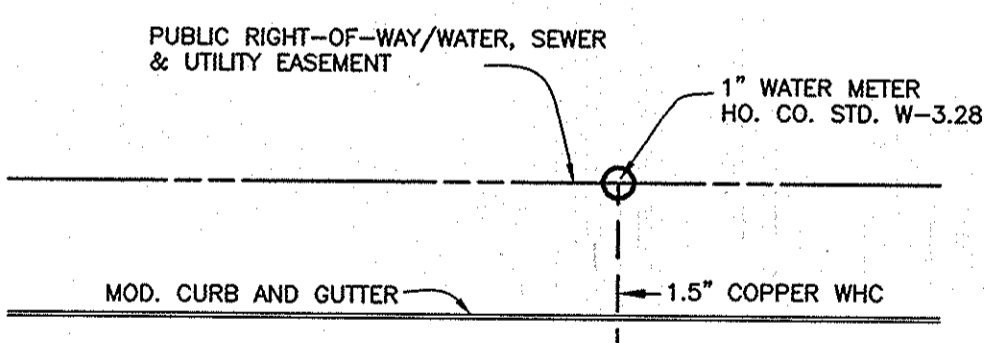
MICHELLE LYNN ARMSTRONG
6680 MARTIN ROAD
COLUMBIA, MD 21044

DEVELOPER
LEGACY INVESTMENTS, LLC
C/O HOGAN DEVELOPMENT, LLC
2661 RIVA ROAD, SUIT 300
ANNAPOLIS, MD 21401
410-266-5100

NOTE: OVERHEAD LINES ALONG MD RTE. 29 TO BE PLACED UNDERGROUND BY BGE.

NOTE: ALL JOINTS AND CONNECTIONS LOCATED WITHIN STRUCTURAL FILL AREAS SHALL BE MECHANICALLY RESTRAINED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION)

NOTE: HOUSE CONNECTIONS TO BE SIZED ACCORDINGLY:
SINGLE WHC = 1-1/2"
TWIN WHC = 1-1/2"
SINGLE SHC = 4"



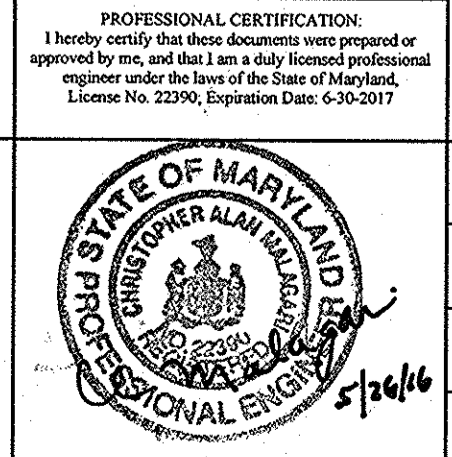
TYPICAL WATER HOUSE CONNECTION
NOT TO SCALE

NOTE:
ALL WATER HOUSE CONNECTIONS ARE TO BE 1.5" WITH A 1" METER (OUTSIDE SETTING).

SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET PUBLIC WATER & SEWER MAINS
2	PLAN VIEW PUBLIC WATER & SEWER MAINS
3	PROFILE VIEWS PUBLIC WATER & SEWER MAINS

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

Joh R. Hunter 4/23/16
HOWARD SOIL CONSERVATION DISTRICT
EROSION CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER APPROVED DEVELOPMENT PLANS F-16-007



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John C. Chen 6/14/16
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Ed Edmondson 7/6/16
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
INC.

8480 BALTIMORE NATIONAL PIKE & SUITE 315 • ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BE-ENGINEERING.COM

DES:	JCO	DATE:	MAY 2016
DRN:	JCO	BY:	NO.
CHK:	CAM	REVISIONS:	
DATE:	MAY 2016	DATE:	600 SCALE MAPS: 35
			BLOCKS: 2

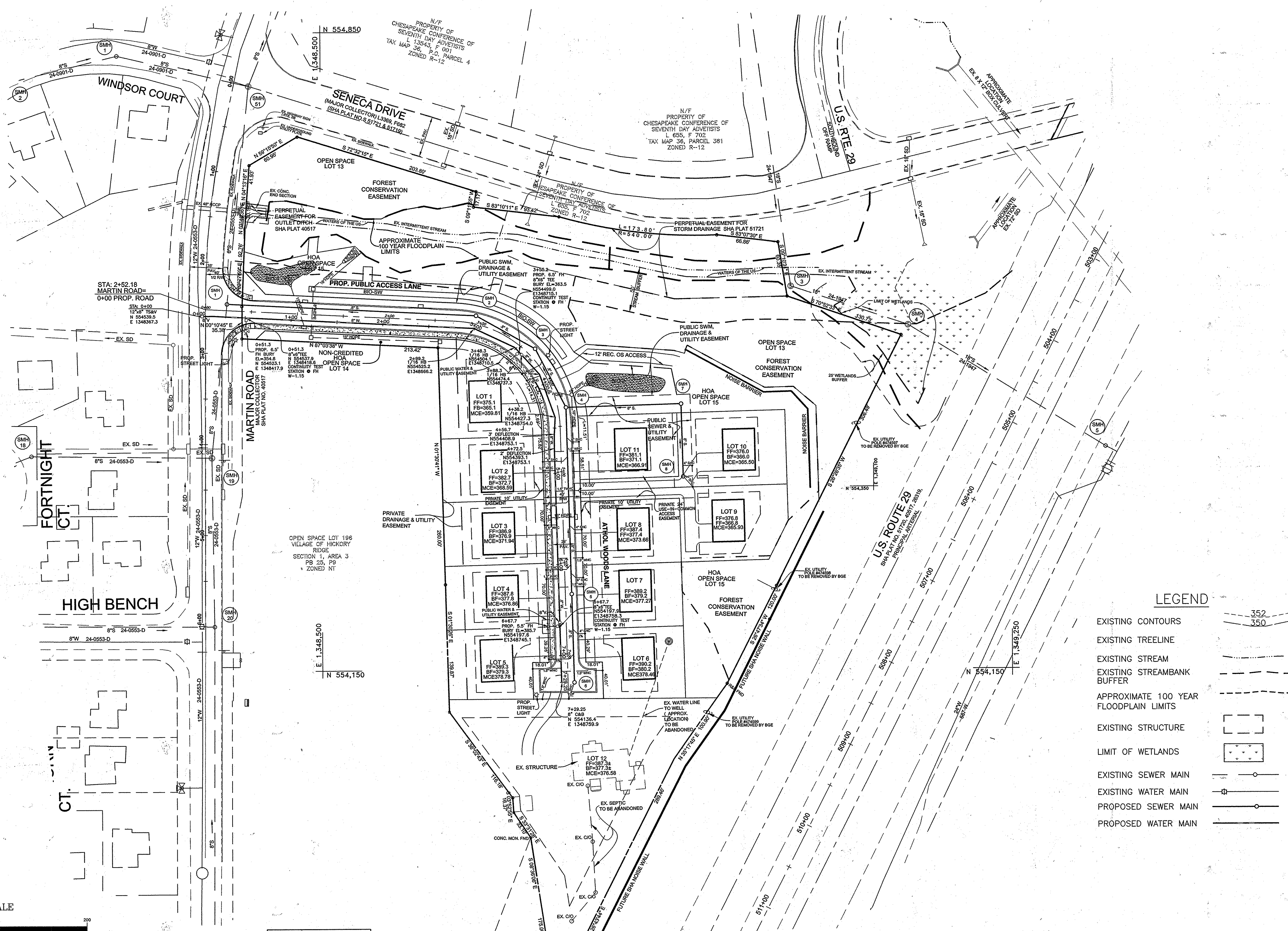
PUBLIC WATER AND SEWER TITLE SHEET

ATHOL WOODS
LOTS 1 THRU 12 AND OPEN SPACE LOTS 13-15

TAX MAP 36; PARCELS 4, 108 & 495; GRID 19
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

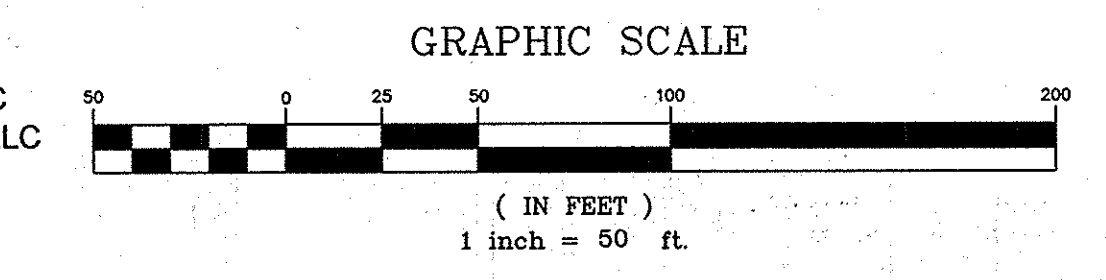
CONTRACT No. 24-4898-D

SCALE: AS SHOWN
SHEET NO. 1 OF 3



LEGEND

- EXISTING CONTOURS
- EXISTING TREELINE
- EXISTING STREAM
- EXISTING STREAMBANK BUFFER
- APPROXIMATE 100 YEAR FLOODPLAIN LIMITS
- EXISTING STRUCTURE
- LIMIT OF WETLANDS
- EXISTING SEWER MAIN
- EXISTING WATER MAIN
- PROPOSED SEWER MAIN
- PROPOSED WATER MAIN



OWNER
LISA MARIE SMITH
6128 EDWARD HILL ROAD
ELLCOTT CITY, MD 21043

MICHELLE LYNN ARMSTRONG
6680 MARTIN ROAD
COLUMBIA, MD 21044

DEVELOPER
LEGACY INVESTMENTS, LLC
C/O HOGAN DEVELOPMENT, LLC
2661 RIVA ROAD, SUIT 300
ANNAPOLIS, MD 21401
410-266-5100

PROFESSIONAL CERTIFICATION:
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. 22590; Expiration Date: 6-30-2017



BENCHMARK
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ENGINEERING, INC.
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(P) 410-485-6105 (F) 410-485-8644
WWW.BE-CNL-ENGINEERING.COM

DES:	JCO				
DRN:	JCO				
CHK:	CAM				
DATE:	MAY 2016	BY	NO.	REVISIONS	DATE

**PUBLIC WATER AND SEWER
PLAN VIEW**

600 SCALE MAPS: 35

ATHOL WOODS
LOTS 1 THRU 12 AND OPEN SPACE LOTS 13 — 15
TAX MAP 36; PARCELS 4, 108 & 495; GRID 19
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT No. 24-4898-D

SCALE:
1"=50'
SHEET NO.
2 OF 3

NOTE: OVERHEAD WIRES ALONG MD ROUTE 29 TO BE REMOVED BY BGE.

LOT	CONNECTION STA.	INV. AT MAIN	SLOPE	TYPE	INVERT AT R/W	MCE	BASEMENT ELEVATION
1	0+15	355.52	2%	SHC	356.03	359.81	365.1
2	0+54	364.23	2%	SHC	368.77	368.59	372.7
3	1+02	367.56	2%	SHC	368.10	371.94	376.9
4	1+73	372.48	2%	SHC	373.02	376.86	377.8
5	0+66	375.29	1%	SHC	375.56	378.78	379.3
6	0+39	375.05	1%	SHC	375.18	378.46	380.2
7	1+82	373.11	2%	SHC	373.37	377.27	379.2
8	1+30	369.50	2%	DHC	369.76	373.66	377.4
9	SMH 8	361.93	2%	SHC	362.15	365.93	366.8
10	0+68	361.50	2%	SHC	361.70	365.50	366.0
11	0+33	362.75	2%	SHC	363.01	366.91	371.1
12	SMH 7	375.70	1%	SHC	375.87	376.58	377.3

LOT	ADDRESS	LOCATION DIMENSION #1	LOCATION DIMENSION #2
1	6626 ATHOL WOODS LANE		
2	6630 ATHOL WOODS LANE		
3	6634 ATHOL WOODS LANE		
4	6638 ATHOL WOODS LANE		
5	6642 ATHOL WOODS LANE		
6	6646 ATHOL WOODS LANE		
7	6650 ATHOL WOODS LANE		
8	6654 ATHOL WOODS LANE		
9	6658 ATHOL WOODS LANE		
10	6662 ATHOL WOODS LANE		
11	6666 ATHOL WOODS LANE		
12	6670 ATHOL WOODS LANE		

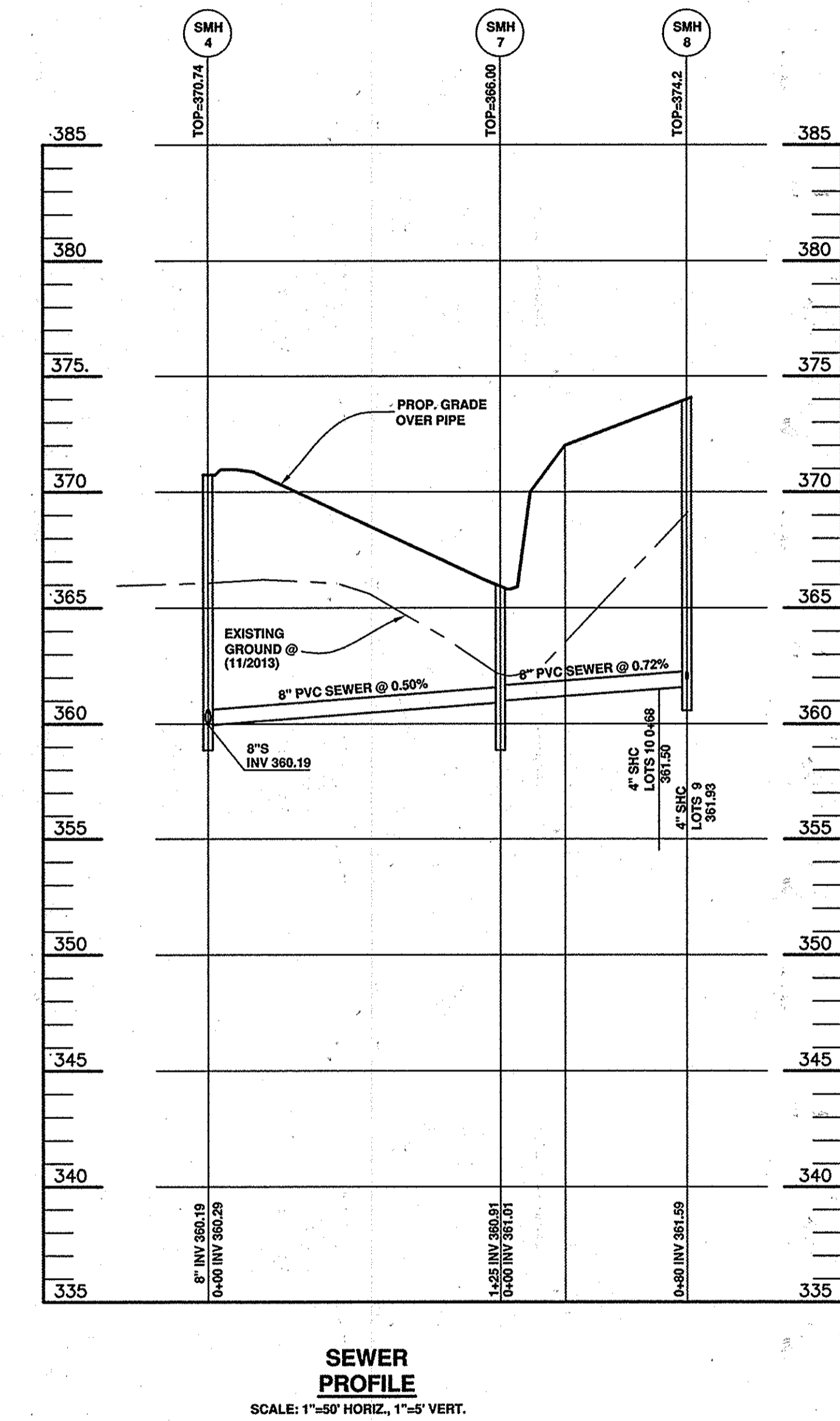
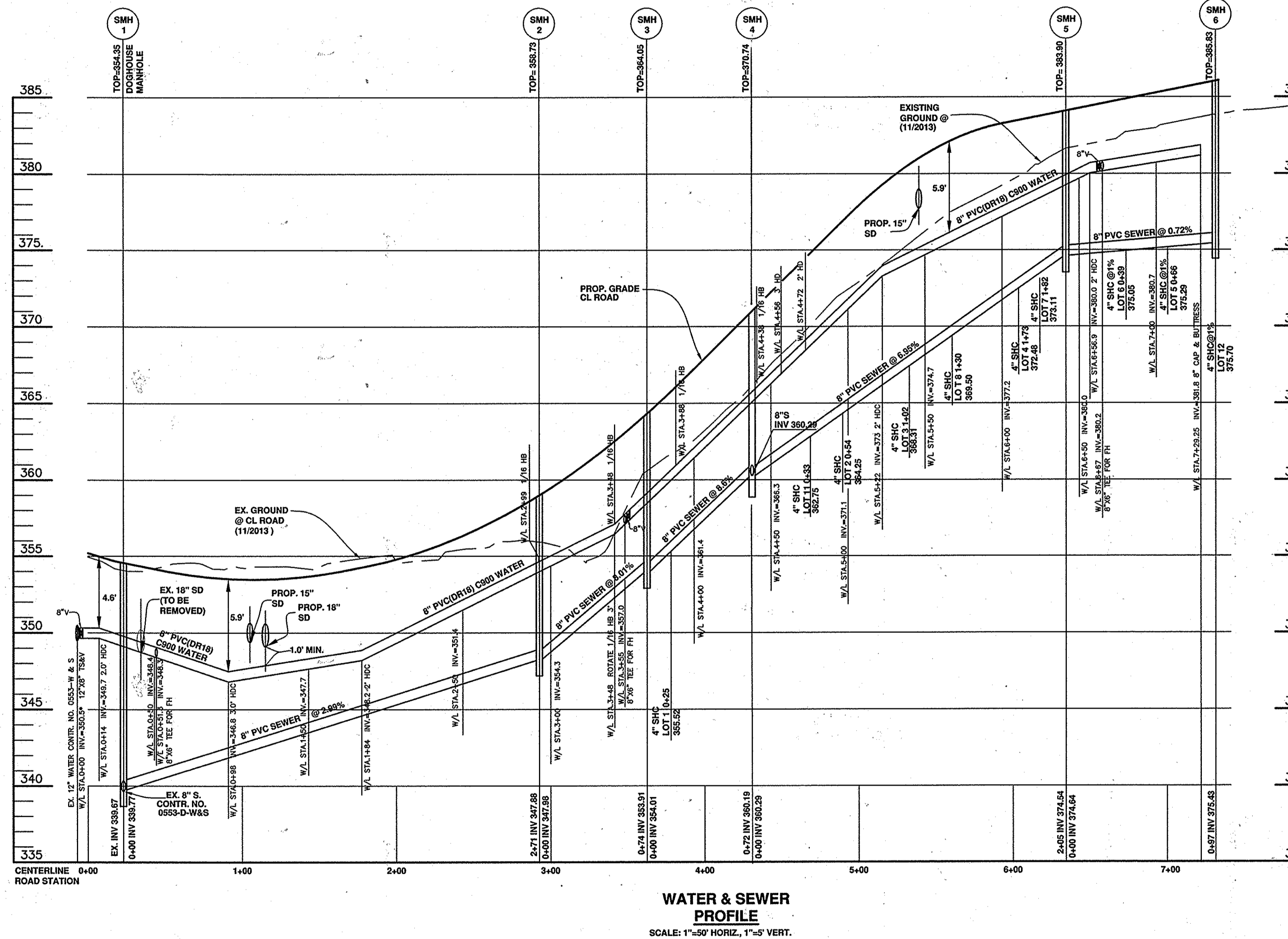
LOT	ADDRESS	LOCATION DIMENSION #1	LOCATION DIMENSION #2
1	6626 ATHOL WOODS LANE		
2	6630 ATHOL WOODS LANE		
3	6634 ATHOL WOODS LANE		
4	6638 ATHOL WOODS LANE		
5	6642 ATHOL WOODS LANE		
6	6646 ATHOL WOODS LANE		
7	6650 ATHOL WOODS LANE		
8	6654 ATHOL WOODS LANE		
9	6658 ATHOL WOODS LANE		
10	6662 ATHOL WOODS LANE		
11	6666 ATHOL WOODS LANE		
12	6670 ATHOL WOODS LANE		

APPURTENANCE	WATERLINE STATION	LOCATION	COMMENT
12"x8" TS&V	0+00	N 554539.5 E 1348367.3	
8"x6" TEE FOR FH	0+51.3	N 554537.9 E 1348418.6	
1/16" HB	2+99.2	N 554525.2 E 1348666.2	
1/16" HB	3+48.3	N 554504.1 E 1348710.5	
1/16" HB	3+88.3	N 554474.4 E 1348737.3	
1/16" HB	4+38.2	N 554427.3 E 1348754.0	
3" DEFLECTION	4+56.7	N 554408.9 E 1348753.1	
2" DEFLECTION	4+72.5	N 554393.1 E 1348753.1	
8"x6" TEE FOR FH	6+67.7	N 554197.9 E 1348758.3	
8" C&B	7+29.25	N 554136.4 E 1348759.9	

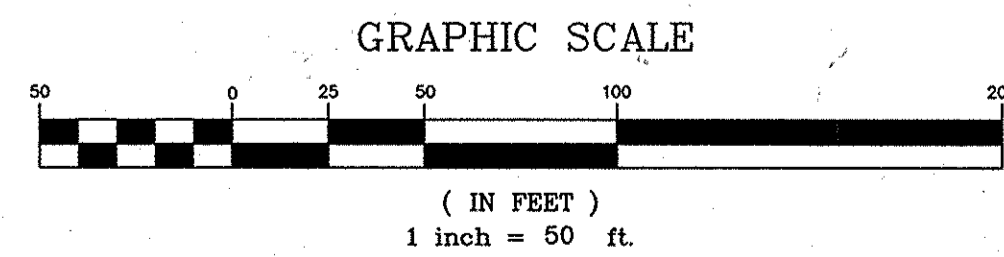
NO.	TYPE	LOCATION	INVERT IN	SHC INV.	INVERT OUT	TOP ELEV.	HO.CO. STD.	REMARKS
SMH-1	DOGHOUSE	STA. 0+23.0, 7' LT.	339.77	-	EX. 339.67	354.35	0-5.14	
SMH-2	STD. 4.0" PRE-CAST	STA. 2+92.7, 9' LT.	347.98	-	347.88	358.73	0-5.12	
SMH-3	STD. 4.0" PRE-CAST	STA. 3+62.4, 8.9' LT.	354.01	-	353.91	364.05	0-5.12	
SMH-4	STD. 4.0" PRE-CAST	STA. 4+30.8, 8.8' LT.	360.29	-	360.19	370.74	0-5.12	
SMH-5	STD. 4.0" PRE-CAST	STA. 6+34.4, 7' LT.	374.74	-	374.64	383.90	0-5.12	
SMH-6	STD. 4.0" PRE-CAST	STA. 7+31.4, 7' LT.	-	372.84	375.43	385.83	0-5.12	
SMH-7	STD. 4.0" PRE-CAST	N. 554441.55 E. 1348891.09	361.01	-	360.91	368.00	0-5.12	
SMH-8	STD. 4.0" PRE-CAST	N. 554361.58 E. 1348893.20	-	361.93	361.59	368.00	0-5.12	

NOTES:
1. STRUCTURE LOCATION FOR MANHOLES IS AT THE CENTER OF THE STRUCTURE.

WATER LINE STA.	FITTING	LOCATION
0+00	12"x8" TS&V	N554539.5 E1348367.3
0+51.3	FIRE HYDRANT	N554523.1 E1348417.9
0+51.3	8"x6" TEE	N554537.9 E1348418.6
2+99.2	1/16" HB	N554525.2 E1348666.2
3+48.3	1/16" HB	N554503.9 E1348710.5
3+55.2	FIRE HYDRANT	N554489.3 E1348704.5
3+55.2	8"x6" TEE	N554499.0 E1348715.1
3+88.3	1/16" HB	N554474.4 E1348737.3
4+32.5	1/16" HB	N554432.7 E1348751.9
6+67.2	FIRE HYDRANT	N554197.6 E1348745.1
6+67.2	8"x6" TEE	N554197.9 E1348758.3
7+28.9	8" CAP & BUTTRESS	N554136.4 E1348759.9



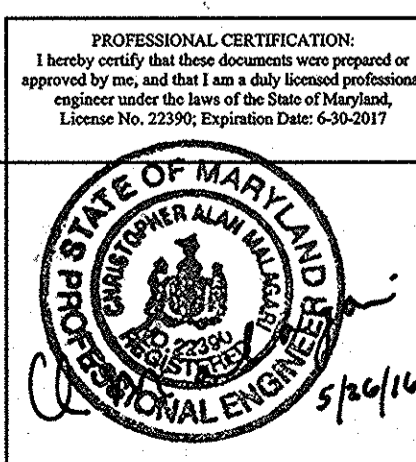
OWNER
LISA MARIE SMITH
6128 EDWARD HILL ROAD
ELLCOTT CITY, MD 21043
MICHELLE LYNN ARMSTRONG
6680 MARTIN ROAD
COLUMBIA, MD 21044
DEVELOPER
LEGACY INVESTMENTS, LLC
C/O HOGAN DEVELOPMENT, LLC
2661 RIVA ROAD, SUIT 300
ANNAPOLIS, MD 21401
410-266-5100



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Steve C. Coen
CHIEF, BUREAU OF UTILITIES
DATE: 6/14/16

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
Phil Phelan
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 7.6.16

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE SUITE 315 & ELLCOTT CITY, MARYLAND 21043
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WWW.BD-CIVILENGINEERING.COM



DES:	JCO
DRN:	JCO
CHK:	CAM
DATE:	MAY 2016
BY:	NO.
NO.	
REVISIONS	
DATE:	600 SCALE MAPS: 35

PUBLIC WATER AND SEWER PROFILES

ATHOL WOODS
LOTS 1 THRU 12 AND OPEN SPACE LOTS 13 — 15
TAX MAP 36, PARCELS 4, 108 & 495; GRID 19
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT No. 24-4898-D

SCALE:
AS SHOWN
SHEET NO.
3 OF 3