

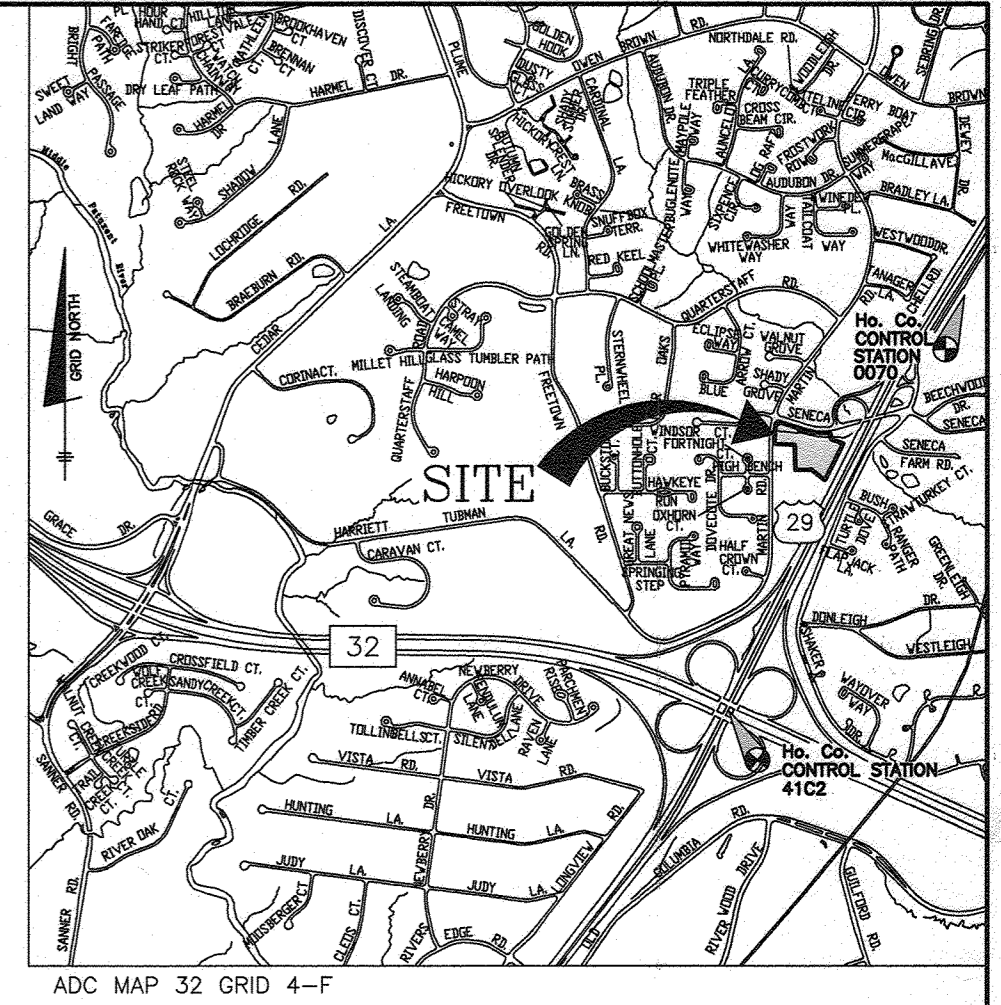
QUANTITIES				
ITEMS	ESTIMATED QUANTITIES	AS-BUILT		
		QUANTITIES	TYPE	MANUF./SUPPLIER
8" WATER (PVC C900 DR18)	728 L.F.	718		NATIONAL PIPE NORTH
8" WHC (DIP CLASS-52)	10 L.F.	169	PRIVATE	
FIRE HYDRANT	2 EACH	2		AMERICAN DARLING
FH TEE & VALVE	2 EACH	2		FORD METER BOX
12"x8" TS&V	1 EACH	1		FORD METER BOX
8"x8" TEE	1 EACH	1		STAR PIPE
4" SHC	43 L.F.	117		NORTH AMERICAN PIPE
6" SEWER MAIN	363 L.F.	361		NORTH AMERICAN PIPE
10" SEWER MAIN	35 L.F.	35		NORTH AMERICAN PIPE
DROP MANHOLE	1 EACH	2		CONTRACTORS PRECAST CORP.
DOGHOUSE MANHOLE	1 EACH	1		CONTRACTORS PRECAST CORP.
48" MANHOLE	2 EACH	1		CONTRACTORS PRECAST CORP.
10" C-900		51'	SMH-1 TO SMH-2	JM EAGLE

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

PUBLIC WATER AND SEWER BRIGHTVIEW COLUMBIA PARCELS A, B, AND OPEN SPACE LOT 1 TAX MAP 36; PARCELS 04, 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	
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	
N 551616.419	E 1348104.192



VICINITY MAP
SCALE: 1"=2000'

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 ENGINEER AT 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 NAVD 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 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 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 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 MADE 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&E (CONSTRUCTION SERVICES)	410-637-8711
BGE&E (EMERGENCY)	410-685-0123
HO. CO. DPW - BUREAU OF UTILITIES	410-313-4900
COLUMBIA PIPELINE CO.	410-795-1300
MISS UTILITY	1-800-257-7777
STATE HIGHWAY ADMINISTRATION	410-531-5533
VERIZON	410-543-9033
 - 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 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.
- TRACER 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 AWWA 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 METALLIC FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. 17 POUND MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSES. 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 OR 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) COUPLINGS 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 AWWA-C900. SHALL HAVE A MINIMUM LAY LENGTH OF 9-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 AWWA-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 ALIGNMENTS OF AWWA-C900 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 RESTRAINT 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.

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 18" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERIGHT FRAME AND COVER, STANDARD DETAIL G-5-52. 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.

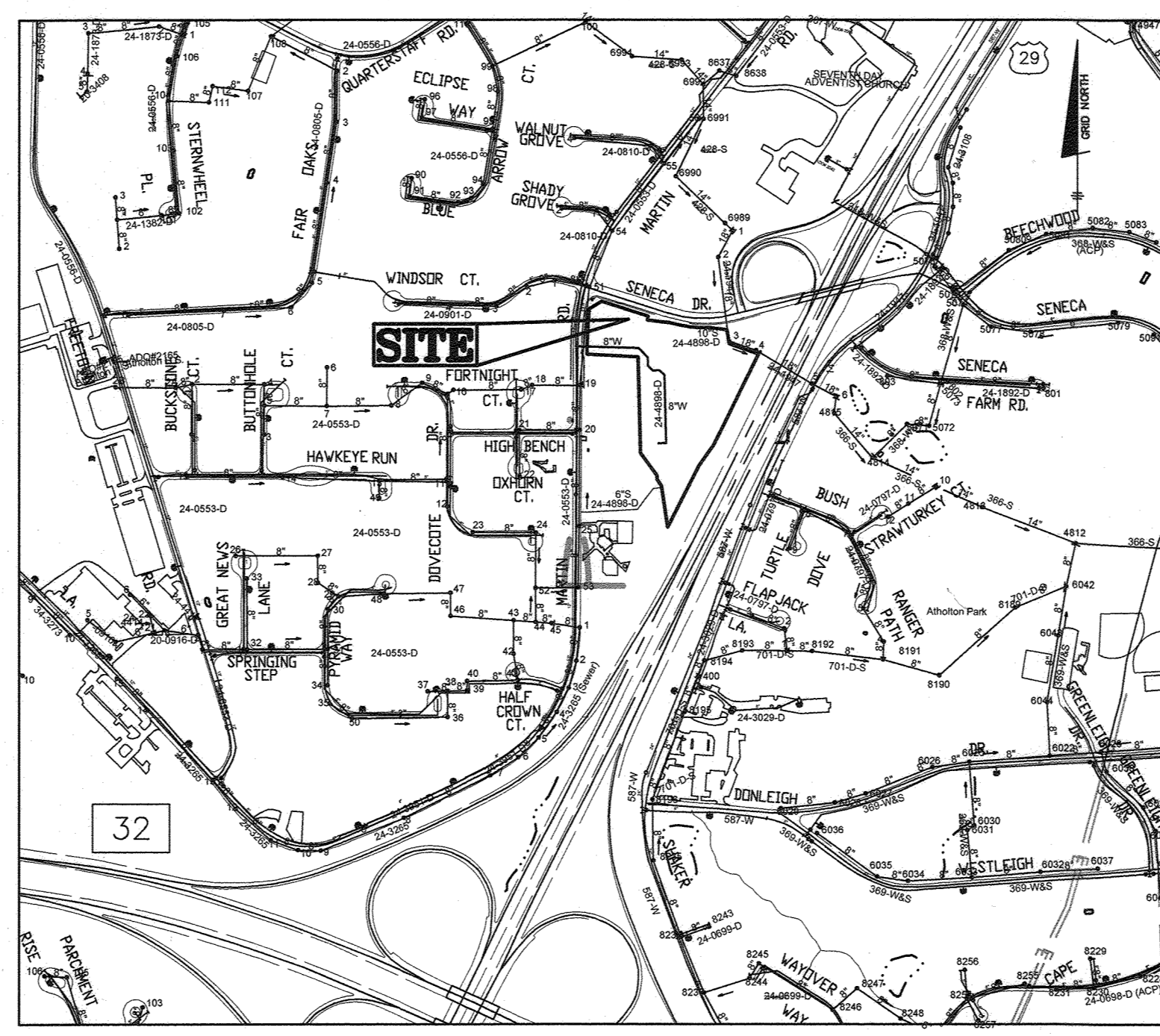
WELL AND SEPTIC CHART

ADDRESS	WELL STATUS	SEPTIC STATUS
6680 MARTIN ROAD (ATHOL MANOR)	*TO BE ABANDONED	*TO BE ABANDONED

*THE EXISTING ATHOL MANOR IS TO BE CONNECTED TO PUBLIC WATER AND SEWER PER THIS CONTRACT.

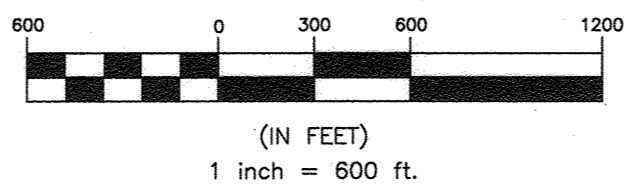
NOTE: THE EXISTING ONSITE WELL AND SEPTIC SYSTEM FOR THE EXISTING ATHOL MANOR HOUSE MUST BE PROPERLY ABANDONED WITH DOCUMENTATION SUBMITTED TO THE HEALTH DEPARTMENT PRIOR TO HEALTH DEPARTMENT APPROVAL. NO METERS WILL BE ALLOWED TO BE INSTALLED UNTIL DOCUMENTATION FROM THE HEALTH DEPARTMENT THAT THE WELL AND SEPTIC SYSTEM HAS BEEN ABANDONED.

LEGEND	
	EXIST. WATER MAIN
	EXIST. FIRE HYDRANT
	EXIST. SEWER MAIN
	EXIST. SEWER MANHOLE
	PROP. PUBLIC SEWER MAIN
	PROP. SEWER MANHOLE
	PROP. PRIVATE SEWER
	PROP. PUBLIC WATER MAIN
	PROP. VALVE
	PROP. FIRE HYDRANT
	PROP. PRIVATE WATER



LOCATION PLAN
SCALE: 1" = 600'

TYPE OF BUILDING:	SENIOR HOUSING APARTMENT
NO. OF UNITS:	170
NUMBER OF SHC'S:	2
NUMBER OF WHC'S:	2
DRAINAGE AREA:	MIDDLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WWP
WATER ZONE:	550
TEST GRADIENT:	827
TEST PRESSURE:	208



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)

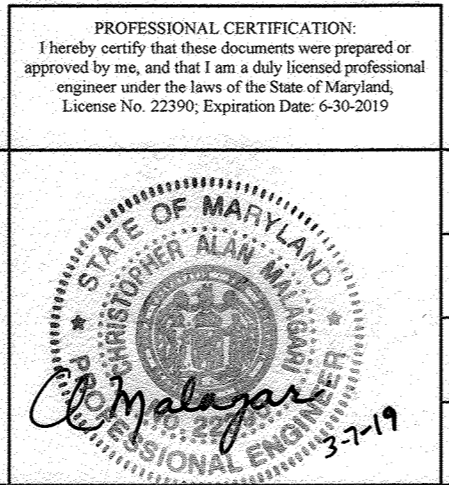
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE SOIL CONSERVATION DISTRICT.

John P. Robinson / 10 4/17/19
 HOWARD SOIL CONSERVATION DISTRICT
 SEDIMENT 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 SDP-19-032

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
John P. Robinson 3-22-19
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
John P. Robinson 5-1-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

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



OWNER:
 LEGACY INVESTMENTS, LLC
 2661 RIVA ROAD
 SUITE 330
 ANNAPOLIS, MARYLAND 21410
 410-266-5100

DEVELOPER:
 BRIGHTVIEW COLUMBIA, LLC
 218 NORTH CHARLES STREET
 SUITE 220
 BALTIMORE, MARYLAND 21201
 410-965-0595

DES:	JCO		
DRN:	MDP		
CHK:	CAM		
DATE:	MAR. 2019		
BY:	NO.	REVISIONS	DATE
		ADDED QUANTITIES	11/2020
		REDLINE REPLACEMENT SHEET	2/19

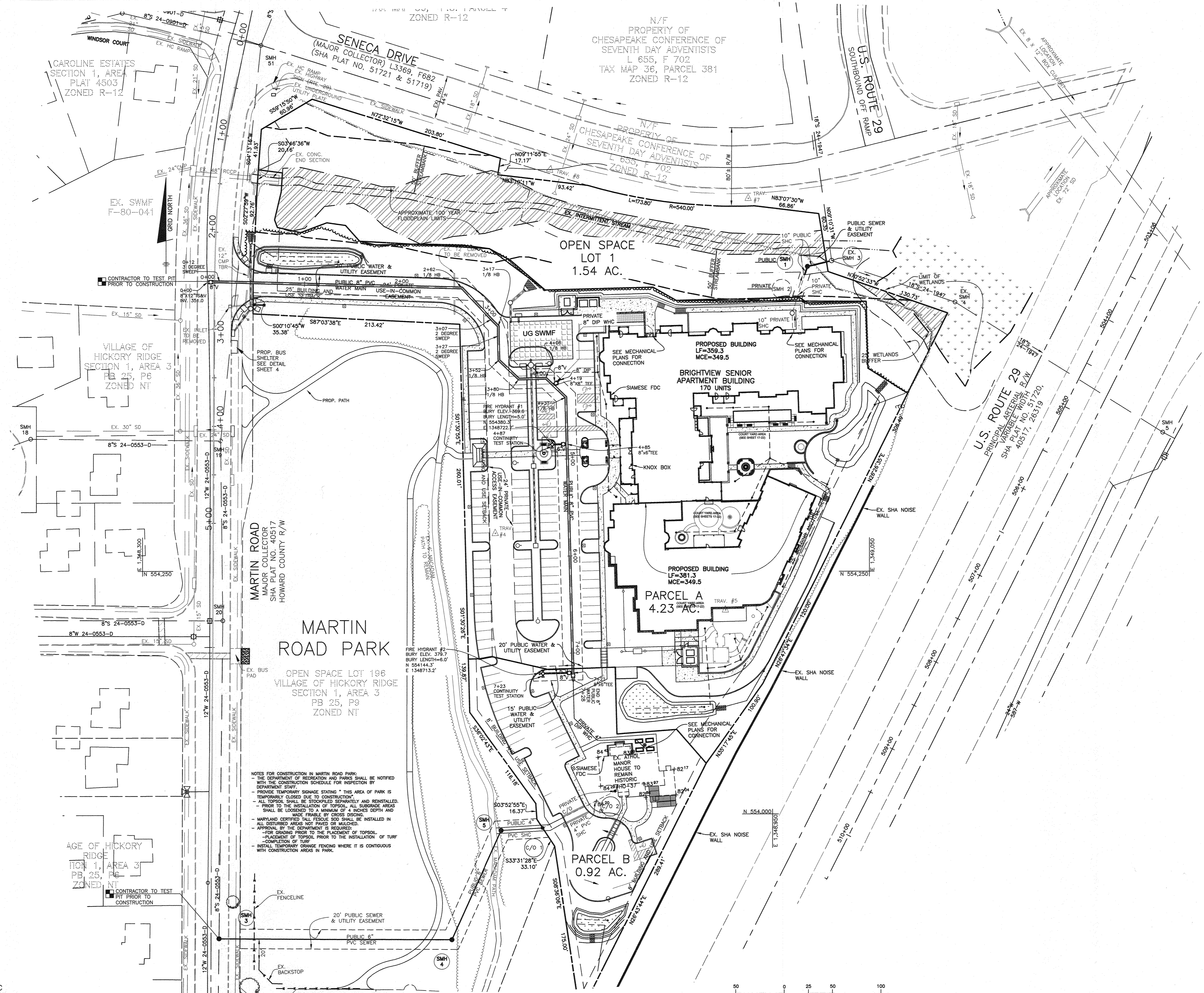
PUBLIC WATER AND SEWER TITLE SHEET

600 SCALE MAPS: 35 BLOCKS: 2

THIS SHEET REPLACES ORIGINAL SHEET 1 OF 3

BRIGHTVIEW COLUMBIA
 PARCELS A, B, AND OPEN SPACE LOT 1
 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 4



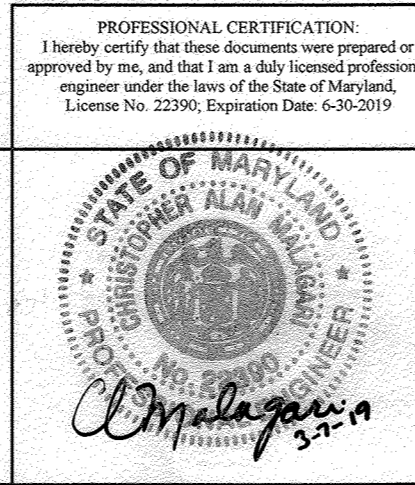
TRAVERSE/CONTROL COORDINATE TABLE		
NO.	NORTHING	EASTING
4	554,288.8124	1,348,664.1399
5	554,210.1401	1,348,901.4712
7	554,634.0058	1,348,824.7091
8	554,663.2200	1,348,720.5340

NOTES FOR CONSTRUCTION IN MARTIN ROAD PARK:
 - THE DEPARTMENT OF RECREATION AND PARKS SHALL BE NOTIFIED WITH THE CONSTRUCTION SCHEDULE FOR INSPECTION BY DEPARTMENT STAFF.
 - PROVIDE TEMPORARY SIGNAGE STATING "THIS AREA OF PARK IS TEMPORARILY CLOSED DUE TO CONSTRUCTION."
 - ALL TOPSOIL SHALL BE STOCKPILED SEPARATELY AND REINSTALLED. PRIOR TO THE INSTALLATION OF TOPSOIL, ALL SURFACE AREAS SHALL BE LOOSENEED TO A MINIMUM OF 4 INCHES DEPTH AND MADE FIRM BY CROSS BROADCASTING.
 - MARYLAND CERTIFIED "TALL FESCUE" SOU SHALL BE INSTALLED IN ALL DISTURBED AREAS NOT PAVED OR GRADED.
 - APPROVAL BY THE DEPARTMENT IS REQUIRED.
 - FOR GRADING PRIOR TO THE PLACEMENT OF TOPSOIL, PLACEMENT OF TOPSOIL PRIOR TO THE INSTALLATION OF TURF COMPLETION OF TURF.
 - INSTALL TEMPORARY ORANGE FENCING WHERE IT IS CONTIGUOUS WITH CONSTRUCTION AREAS IN PARK.

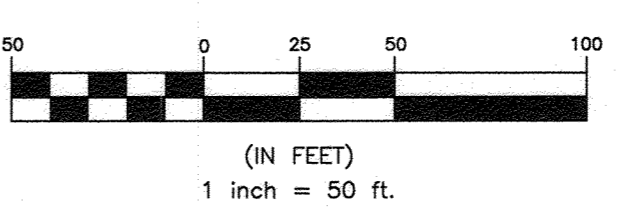
OWNER:
 LEGACY INVESTMENTS LLC
 2661 RIVA ROAD
 SUITE 330
 ANNAPOLIS, MARYLAND 21410
 410-266-5100

DEVELOPER:
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 WWW.BEI-CVLENGINEERING.COM



DES:	JCO			
DRN:	MDP			
CHK:	CAM			
DATE:	MAR. 2019			
BY:	NO.	REVISIONS	DATE	
		1 REDLINE REPLACEMENT SHEET	10/18	



THIS SHEET REPLACES ORIGINAL SHEET 2 OF 3

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DATE: 3-27-19

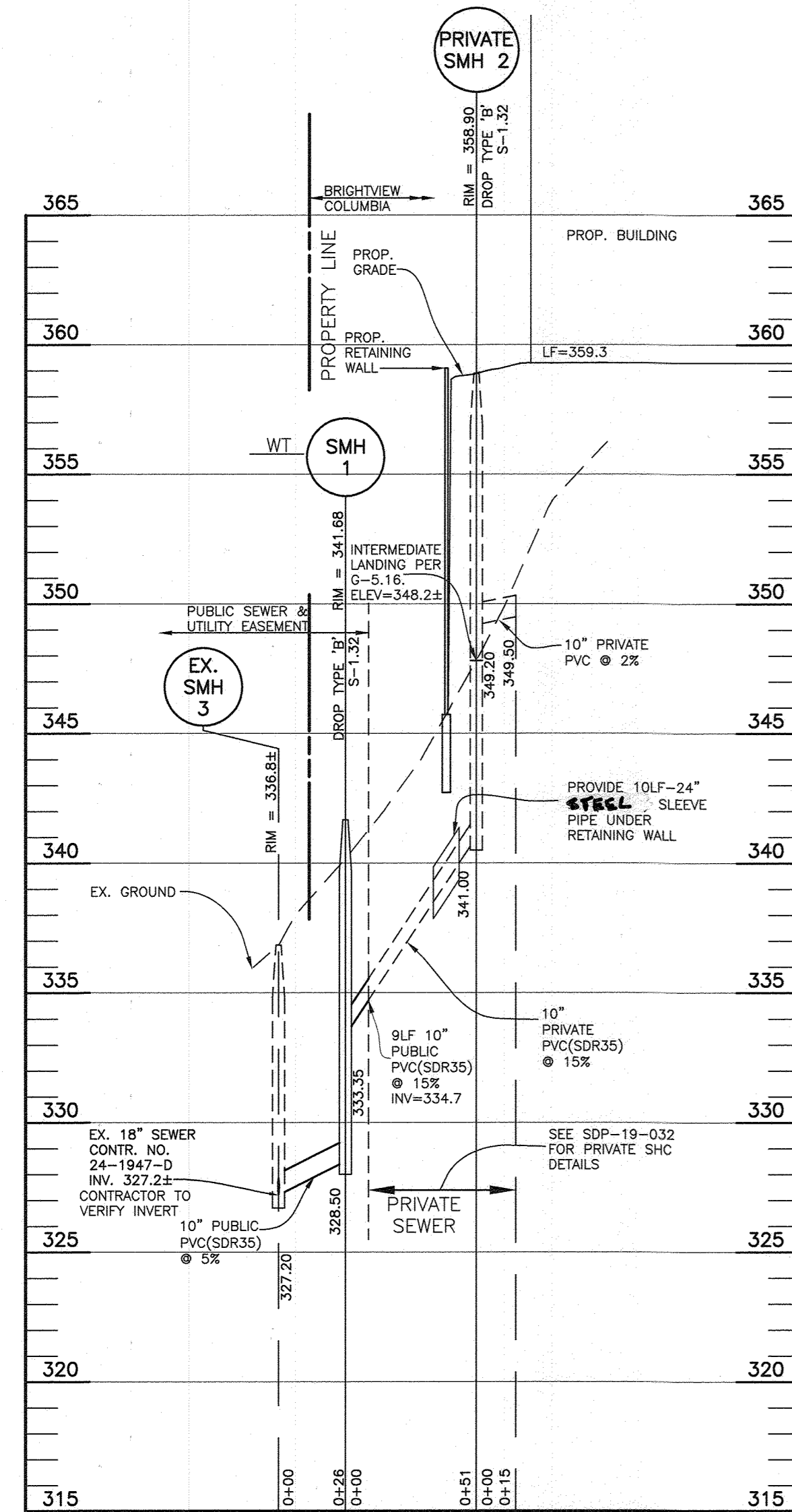
DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
 DATE: 5-1-19

PUBLIC WATER AND SEWER PLAN VIEW

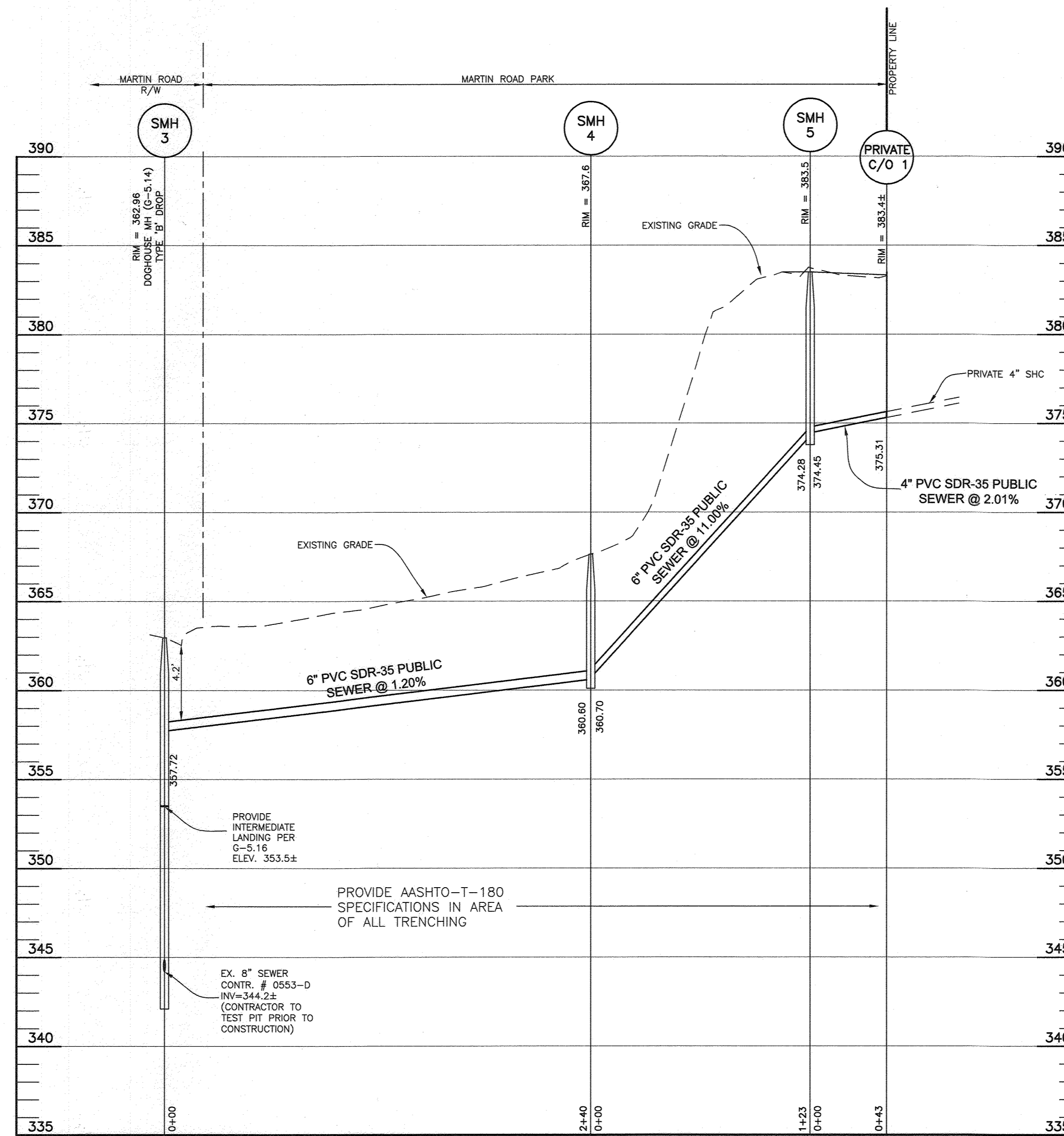
BRIGHTVIEW COLUMBIA
 PARCELS A, B, AND OPEN SPACE LOT 1
 TAX MAP 36; PARCELS 4, 108 & 495; GRID 19
 FIFTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 CONTRACT No. 24-4898-D

SCALE:
 1"=50'
 SHEET NO.
 2 OF 4

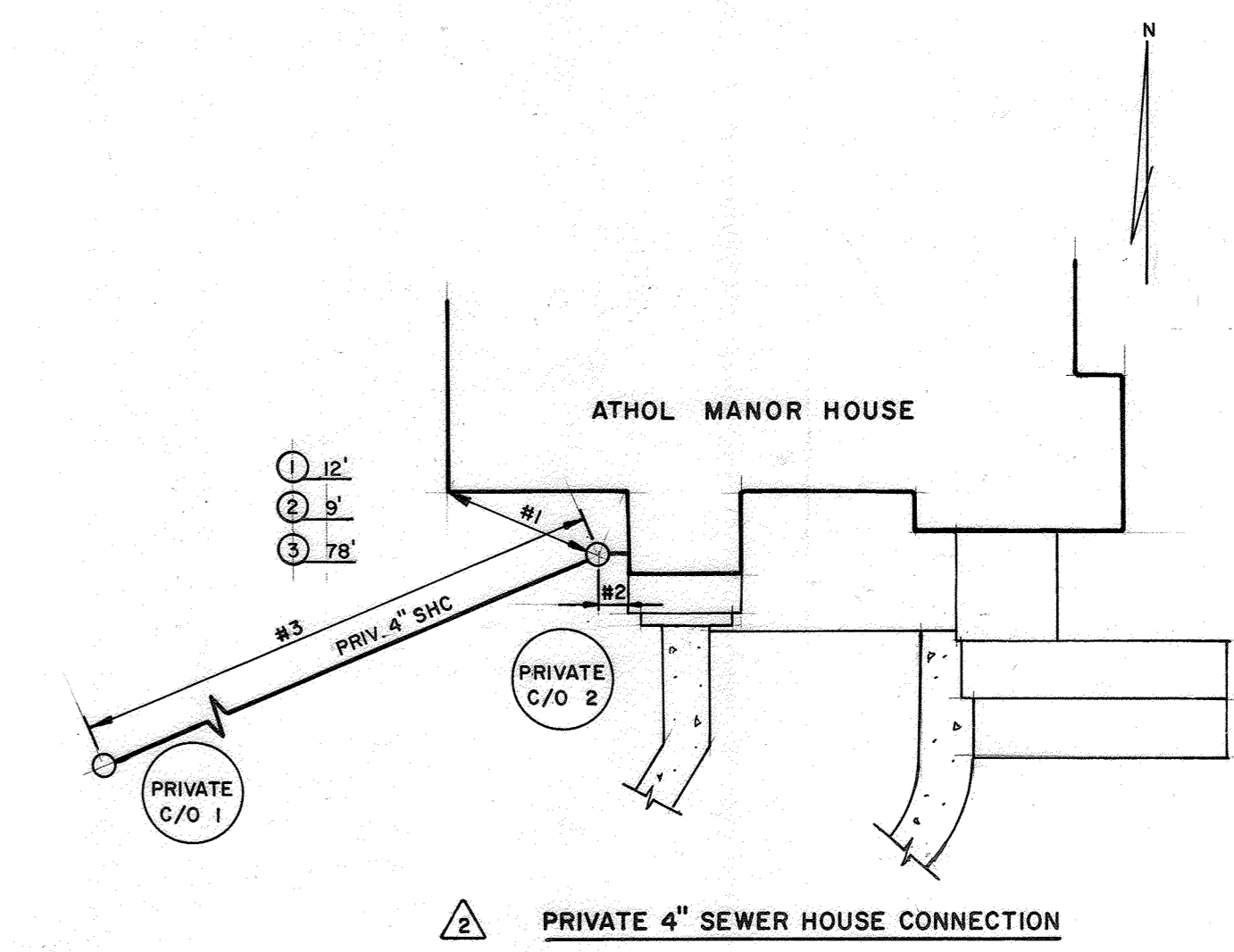
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PROPOSED BUILDING SHC
 SCALE:
 HORIZONTAL: 1" = 50'
 VERTICAL: 1" = 5'



REVISED PUBLIC SEWER ATHOL MANOR
 SCALE:
 HORIZONTAL: 1" = 50'
 VERTICAL: 1" = 5'

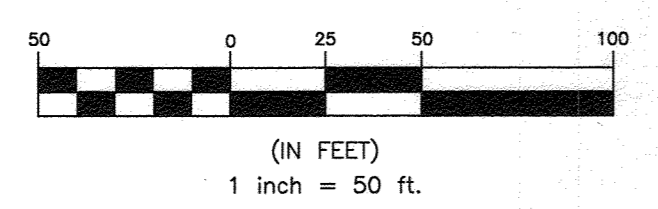


PRIVATE 4" SEWER HOUSE CONNECTION

STRUCTURE TABLE								
NUMBER	TYPE	LOCATION	INVERT IN	INVERT OUT	TOP ELEV.	STD. DETAIL	OWNER	REMARKS
SMH-1	48" MH	N. 554563.9, E. 1348985.8	333.35(10')	328.50(10')	341.68	S-1.32	PUBLIC	DROP MANHOLE TYPE 'B' (WT)
SMH-3	48" MH	N. 553871.4, E. 1348379.0	357.72(6')	344.24(8')	362.96	G-5.14	PUBLIC	DOGHOUSE MANHOLE W/ TYPE 'B' DROP
SMH-4	48" MH	N. 553870.2, E. 1348619.3	360.70(6')	360.60(6')	367.6	G-5.12	PUBLIC	
SMH-5	48" MH	N. 553982.8, E. 1348670.1	374.45(4')	374.28(6')	383.5	G-5.12	PUBLIC	

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DEVELOPER:
 BRIGHTVIEW COLUMBIA, LLC
 218 NORTH CHARLES STREET
 SUITE 220
 BALTIMORE, MARYLAND 21201
 410-965-0595



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. 22390; Expiration Date: 6-30-2019

BENCHMARK
 ENGINEERS & LAND SURVEYORS & PLANNERS
 ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLCOTT CITY, MARYLAND 21043
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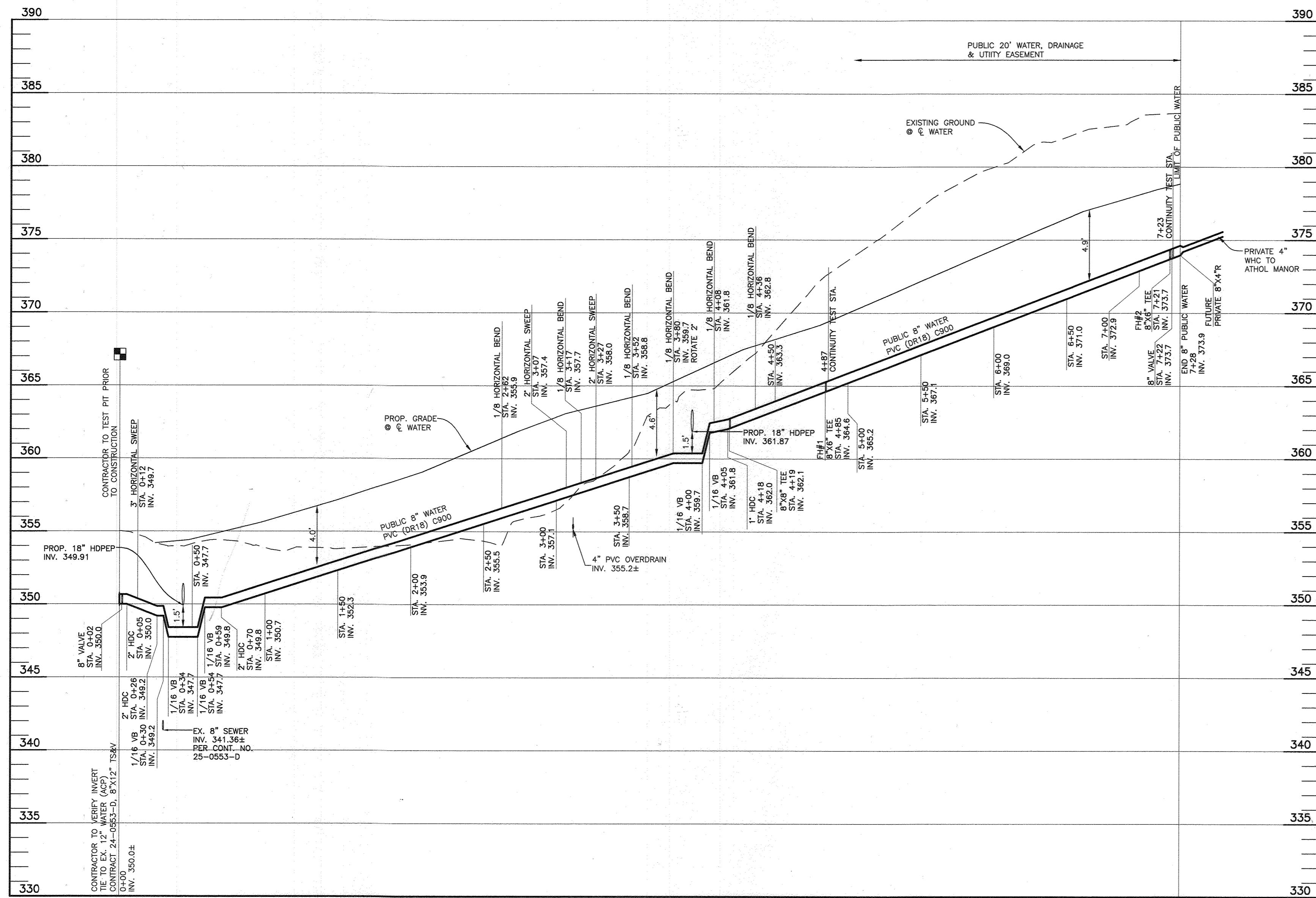
DES:	JCO			
DRN:	MDP			
CHK:	CAM	WRA	BEI	BY
DATE:	MAR. 2019			
		NO.	NO.	NO.

SEWER PROFILES

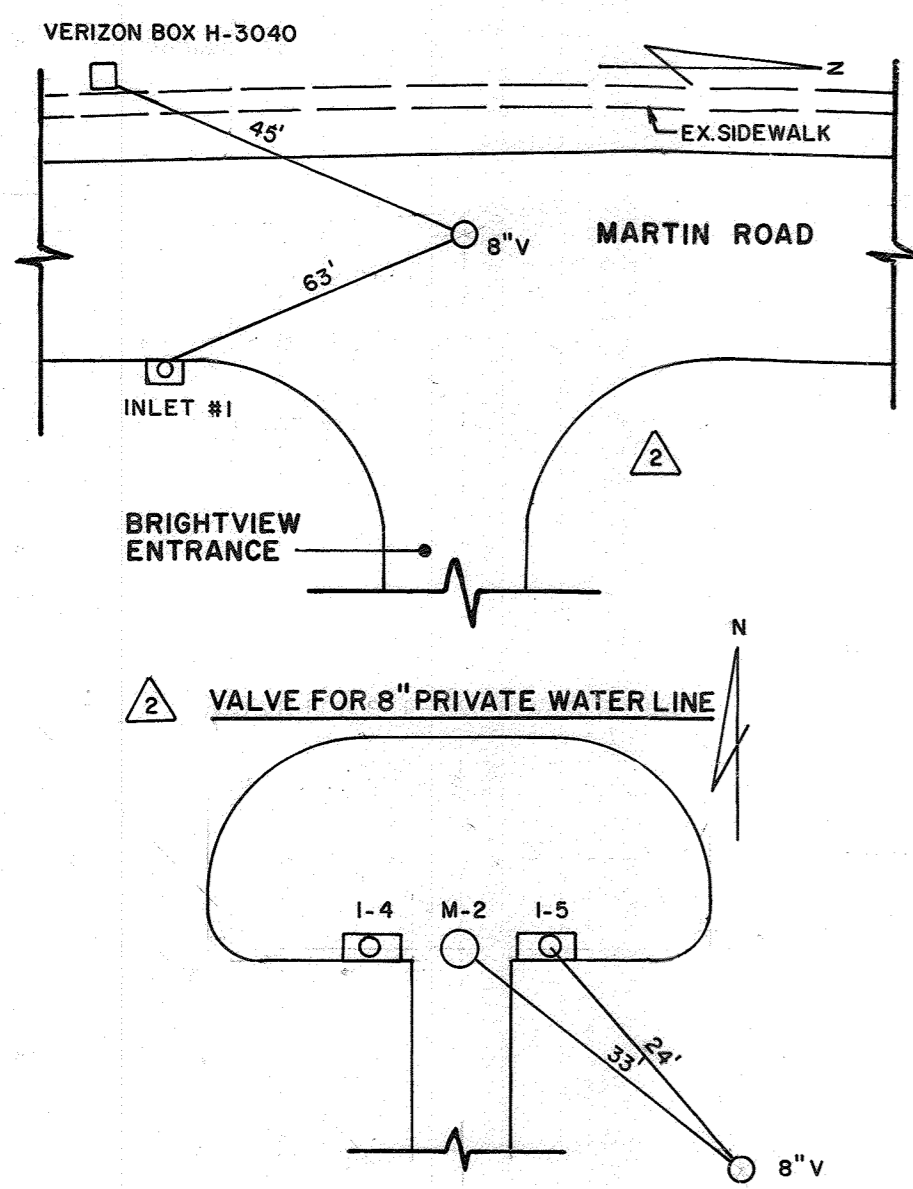
THIS SHEET REPLACES ORIGINAL SHEET 3 OF 3

BRIGHTVIEW COLUMBIA
 PARCELS A, B, AND OPEN SPACE LOT 1
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 FIFTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
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 SHEET NO.
 3 OF 4

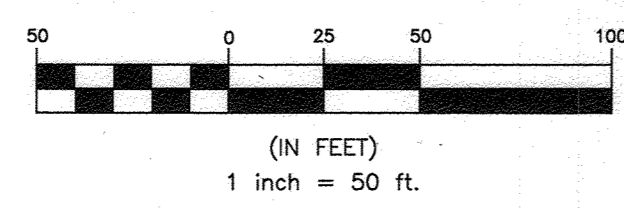
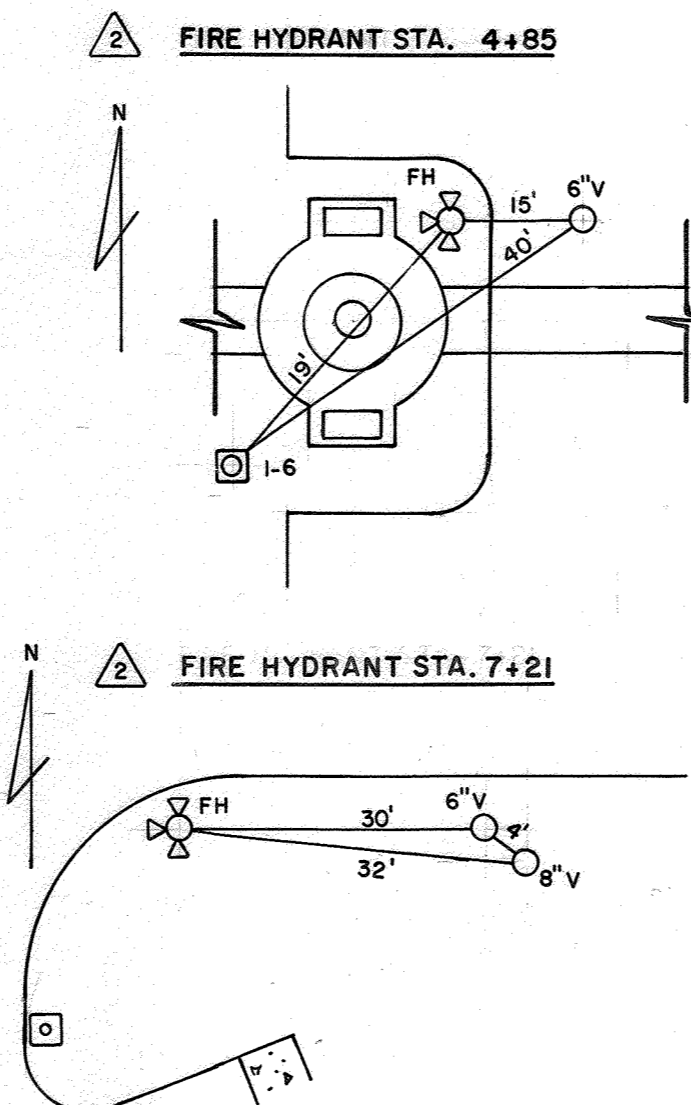


8" PUBLIC WATER APPURTENANCE SCHEDULE		
APPURTENANCE	WATER LINE STATION	LOCATION
8"X12" TS&V	WL STA. 0+00	N 554547.7', E 1348367.0'
8" VALVE	WL STA. 0+02	N 554547.8', E 1348370.2'
2" VHDC	WL STA. 0+05	N 554547.9', E 1348372.0'
3" HDC	WL STA. 0+12	N 554548.1', E 1348379.5'
2" VHDC	WL STA. 0+26	N 554547.7', E 1348393.0'
1/16 VB	WL STA. 0+30	N 554547.6', E 1348397.0'
1/16 VB	WL STA. 0+34	N 554547.5', E 1348401.0'
1/16 VB	WL STA. 0+54	N 554547.0', E 1348421.0'
1/16 VB	WL STA. 0+59	N 554546.8', E 1348426.0'
2" VHDC	WL STA. 0+70	N 554546.6', E 1348437.0'
1/8 HB	WL STA. 2+62	N 554541.5', E 1348629.2'
2" HDC	WL STA. 3+07	N 554509.2', E 1348659.8'
1/8 HB	WL STA. 3+17	N 554502.1', E 1348667.0'
2" HDC	WL STA. 3+27	N 554492.0', E 1348667.0'
1/8 HB	WL STA. 3+52	N 554467.2', E 1348667.6'
1/8 HB	WL STA. 3+80	N 554447.7', E 1348688.2'
1/16 VB	WL STA. 4+00	N 554448.2', E 1348708.0'
1/16 VB	WL STA. 4+05	N 554448.3', E 1348713.0'
1/8 HB	WL STA. 4+08	N 554448.4', E 1348716.0'
1" VHDC	WL STA. 4+18	N 554441.6', E 1348723.3'
8"X8" TEE	WL STA. 4+19	N 554440.8', E 1348724.2'
1/8 HB	WL STA. 4+36	N 554429.0', E 1348736.7'
8"X6" FH TEE	WL STA. 4+85	N 554380.7', E 1348738.0'
8"X6" FH TEE	WL STA. 7+21	N 554145.1', E 1348744.2'
8" VALVE	WL STA. 7+22	N 554142.6', E 1348744.2'



PUBLIC WATER MAIN

SCALE:
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



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. 22390; Expiration Date: 6-30-2019

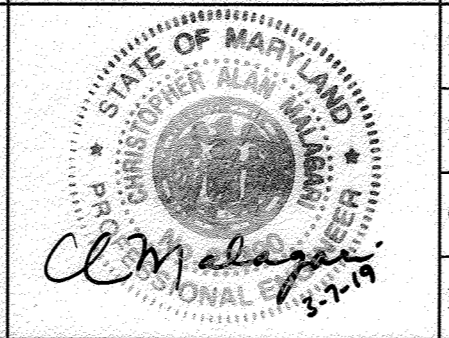
OWNER:
LEGACY INVESTMENTS, LLC
2661 RIVA ROAD
SUITE 330
ANNAPOLIS, MARYLAND 21410
410-266-5100

DEVELOPER:
BRIGHTVIEW COLUMBIA, LLC
218 NORTH CHARLES STREET
SUITE 220
BALTIMORE, MARYLAND 21201
410-965-0595

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BEI-CIVILENGINEERING.COM



DES:	JCO			
DRN:	MDP			
CHK:	CAM			
DATE:	MAR. 2019			
BY:	NO.	REVISIONS	DATE	
		WATER VALVE LOCATION DETAILS	11/2020	
		REDLINE REPLACEMENT SHEET		

WATER PROFILE

THIS SHEET IS TO BE ADDED TO THE SET AS SHEET 4 OF 4

BRIGHTVIEW COLUMBIA
PARCELS A, B, AND OPEN SPACE LOT 1
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.
4 OF 4