GENERAL NOTES

- 1. 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 NOVEMBER 2016 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.
- 5. 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
- 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 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: BG&E (CONTSTRUCTION SERVICES) BG&E (EMERGENCY). . 410-313-4900 HO. CO. DPW - BUREAU OF UTILITIES COLONIAL PIPELINE CO .. STATE HIGHWAY ADMINISTRATION
- 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.
- 10. 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(a) OF THE HOWARD COUNTY CODE.

- 1. ALL WATER MAINS TO BE PVC C900 DR14 UNLESS OTHERWISE NOTED.
- 2. TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" COVER UNLESS OTHERWISE NOTED.
- 3. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- 4. 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 N ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- 6. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- 7. 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 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 METALIC 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 HARNESSES. 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
- PROPER ASSEMBLY OF GASKETED P.V.C. PIPE JOINTS: THE MANUFACTURER'S INSERTION LINE OF GAKETED 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 THI SPIGOT INTO THE BELL. THE CONTRACTOR SHALL NOT OVER INSERT OR OVER HOME THE SPIGOT INTO THE BELL OF THE
- 11. 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 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 DEFLETION 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 LÉNGTH 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 (IPEX) 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 RETENTION SPRING TO ALLOW FOR PIPE XPANSION AND CONTRACTION. THE BELL STOPS SHALL BE SERIES 5000 MEGA-STOP, AS MANUFACTURED BY EBAA IRON, INC. OR EQUAL.
- 13. 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

- 1. ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- 2. ALL MANHOLES SHALL BE 4' 0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.

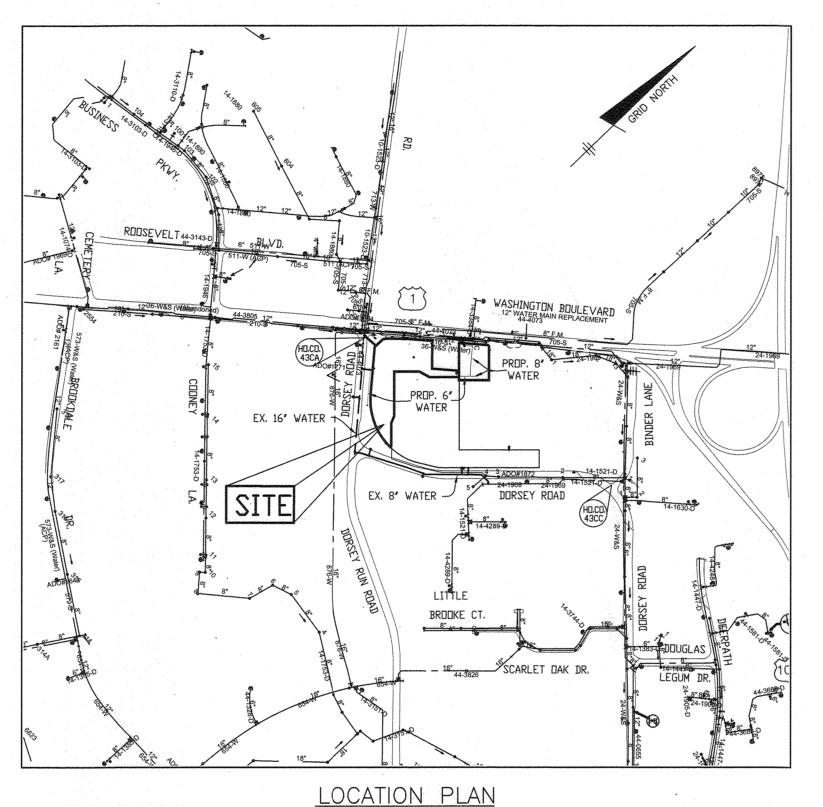
GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.

- 3. FORCE MAINS SHALL BE D.I.P. ONLY. 4. 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 G-5.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED
- 6. HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

PUBLIC WATER

CORRIDOR SQUARE PARCEL B

1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT NO.: 14-5188-D



SCALE: 1" = 600'

(IN FEET) 1 inch = 600 ft

NO. OF BUILDABLE PARCELS:	DMMERCIAL/(20)RESIDENT
NUMBER OF SHC'S:	
NUMBER OF WHC'S:	(20 UNITS)10 TW
DRAINAGE AREA	
TREATMENT PLANT:	PATAPSCO WW
•	
WATER ZONE:	4
TEST GRADIENT:	6
TEST PRESSURE:	2

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,

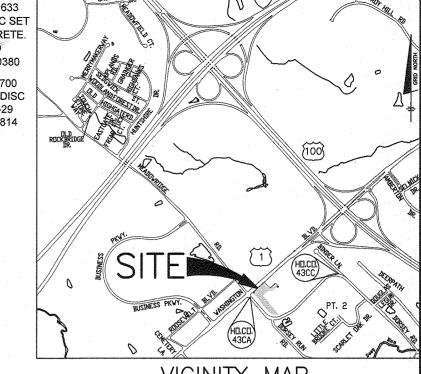
CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELKRIDGE, MD 21075 410.579.2442 **DEVELOPER:** CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELKRIDGE, MD 21075 410.579.2442

OWNER:

TRAVERSE CHART NO. DESCRIPTION COORDINATE ELEVATION N. 552373.9839 E. 1380259.2000 174.73 N. 552089.3228 E. 1379901.6930 N. 552395.0730 E. 1379503.5100

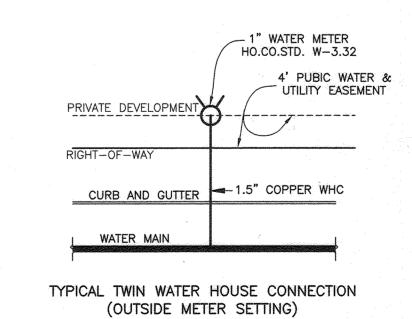
BENCH MARKS (NAD'83) HO.CO. No.43CA ELEV.191.633 STAMPED (BRASS OR ALUMINUM) DISC SET TOP OF A 3' DEEP COLUMN OF CONCRETE. AT CORNER US-1 AND DORSEY ROAD N 5526860129

HO.CO. No.43CC ELEV.163.700 CONCRETE MONUMENT WITH BRASS DISC AT RT-103(DORSEY ROAD)1/3 MI.E.US-29 N 553201.462 E 1381152.814

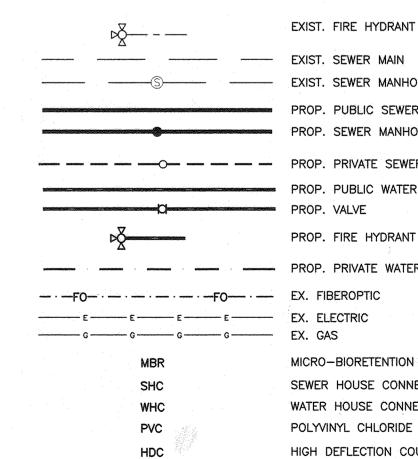


QU	JANTITIES	**	
ESTIMATED	AS-BUJLT		
QUANTITIES	QUANTITIES	TYPE	MANUF./SUPPLIER
468 L.F.	470 LF	C-900	JM MANUFACTURING
295 L.F.	300 LF	C-900	JM MANUFACTURING
40 L.F.	40 LF	C-900	JM MANUFACTURING
2 EACH	2 EA	C-502	MUELLER, INC.
4 EACH	4 EA	C-153	STAR PIPE
2 EACH	2EA	C-153	STAR PIPE
1 EACH	1EA	C-153	STAR PIPE
1 EACH	1EA		JCM INDUSTRIES
2 EACH	2 EA	C-515	MUELLER, INC.
4 EACH	4EA	C-515	MUELLER, INC.
2 EACH	2EA	C-515	MUELLER, INC.
3 EACH	3EA	C-153	STAR PIPE
1 EACH	I EA	C-153	STAR PIPE
10 EACH	IO EA		ROMAC INDUSTRIES
	2 EA	C-153	STAR PIPE
OR: BOSLEY	CONSTRUCTIO	N,INC.	
SION AS-BUILT	DATE:		
	ESTIMATED QUANTITIES 468 L.F. 295 L.F. 40 L.F. 2 EACH 4 EACH 2 EACH 1 EACH 2 EACH 4 EACH 2 EACH 1 EACH 1 EACH 2 EACH 1 EACH 2 EACH 3 EACH 1 EACH	QUANTITIES QUANTITIES 468 L.F. 470 LF 295 L.F. 300 LF 40 L.F. 40 LF 2 EACH 2 EA 4 EACH 2 EA 1 EACH 1 EA 2 EACH 2 EA 4 EACH 4 EA 2 EACH 2 EA 3 EACH 3 EA 1 EACH 1 EA 10 EACH 10 EA 2 EA 2 EA	ESTIMATED QUANTITIES TYPE 468 L.F. 470 LF C-900 295 L.F. 300 LF C-900 40 L.F. 40 LF C-900 2 EACH 2EA C-502 4 EACH 2EA C-153 1 EACH 1EA C-153 1 EACH 1EA C-515 4 EACH 2EA C-515 2 EACH 2EA C-515 3 EACH 1EA C-515 1 EACH 1EA C-515 2 EACH 1EA C-515 2 EACH 2EA C-515 2 EACH 1EA C-153 1 EACH 1EA C-153

SHEET INDEX						
NO.	DESCRIPTION					
1	WATER AND SEWER TITLE SHEET					
2	WATER AND SEWER PLAN AND PROFILES					



NOT TO SCALE



EXIST. WATER MAIN

	EXIST. SEWER MAIN
<u> </u>	EXIST. SEWER MANHOLE
	PROP. PUBLIC SEWER MAIN
	PROP. SEWER MANHOLE
<u> </u>	PROP. PRIVATE SEWER
	PROP. PUBLIC WATER MAIN
	PROP. VALVE
	PROP. FIRE HYDRANT
(somewhates : single-motion : somewhates	PROP. PRIVATE WATER
FO	EX. FIBEROPTIC
ΕΕΕ	EX. ELECTRIC
G G	EX. GAS
MBR	MICRO-BIORETENTION FACILITY
SHC	SEWER HOUSE CONNECTION
WHC	WATER HOUSE CONNECTION
	001144114 0111 00105 0105

POLYVINYL CHLORIDE PIPE HIGH DEFLECTION COUPLING VERTICAL HIGH DEFLECTION COUPLING HORIZONTAL BEND VERTICAL BEND TAPPING SLEEVE & VALVE

CORRIDOR SQUARE PARCEL B

FIRST ELECTION DISTRICT CONTRACT NO. 14-5188-D

SCALE: AS SHOWN SHEET NO.

1 OF 2

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS PER SDP-21-051.

DEPARTMENT OF PUBLIC WORKS

HOWARD COUNTY, MARYLAND

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT

DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND

BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS ENGINEERING, INC 3300 NORTH RIDGE ROAD A SUITE 140 A ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644



Expiration Date: 6-30-2023.

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RAFT: JCO					_
ES: JCO		And the second s		 	

TITLE SHEET

WWW.BEI-CIVILENGINEERING.COM

BLOCK23 & 05 600 SCALE MAP #37 & 43

WATER PLAN

J:\2695 Gunter Properties\dwg\PARCEL B\6009.dwg, 9/2/2022 10:36:49 AM

