

QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	AS-BUILT	SUPPLIER
8" PVC, SDR-35	572 L.F.	572 L.F.	SDR35 PVC	NATIONAL
4" PVC, SDR-35	758 L.F.	758 L.F.	SDR35 PVC	NATIONAL
MANHOLES	6 EACH	6	CONCRETE	PRISM PRECAST
CLEAN-OUTS	45 EACH	45	CONCRETE	—
8" W. CS90 PVC, DR-14	694 L.F.	674 L.F.	DR-14 PVC	NATIONAL
8" W. CS90 PVC, DR-14	25 L.F.	20 L.F.	DR-14 PVC	NATIONAL
1-1/2" W.H.C.	346 L.F.	346 L.F.	TYPE K	CAMBRIDGE LEE
REMOVAL OF EXISTING WATER & SEWER MAINS	LUMP SUM	COMPLETE		
8" X 8" TEE	3 EACH	3	EPOXY DI	STAR PIPE
8" X 6" F.H. TEE	2 EACH	2	—	—
8" VALVE	3 EACH	3	—	AMERICAN FLOW CONTROL
6" VALVE	2 EACH	2	—	—
1/8" H.B.	3 EACH	3	—	STAR PIPE
1/16" H.B.	3 EACH	3	—	—
1/32" H.B.	1 EACH	1	—	—
8" PLUG & BUTTRESS	3 EACH	3	—	—
FIRE HYDRANT	2 EACH	2	884B	AMERICAN DARLING
CONTINUITY TEST STATION	2 EACH	2	CONCRETE	PRISM PRECAST
8" X 8" TAPPING SLEEVE	1 EACH	0	N/A	—
SINGLE METER SETTING	4 EACH	4	—	A Y MC DONALD
TWIN METER SETTING	16 EACH	16	—	—

NAME OF UTILITY CONTRACTOR: **UTILITIES UNLIMITED**
 SURVEY & DRAFTING DIVISION AS-BUILT DATE:

PROPERTIES IMPACTED BY TEMPORARY INTERRUPTION OF WATER SERVICE					
ADDRESS	STREET NAME	ADDRESS	STREET NAME	ADDRESS	STREET NAME
#7285	Elkridge Crossing Way	#7102	Daniel John Drive	#7128	Daniel John Drive
#7287	Elkridge Crossing Way	#7104	Daniel John Drive	#7130	Daniel John Drive
#7289	Elkridge Crossing Way	#7106	Daniel John Drive	#7132	Daniel John Drive
#7291	Elkridge Crossing Way	#7108	Daniel John Drive	#7134	Daniel John Drive
#7293	Elkridge Crossing Way	#7110	Daniel John Drive	#7136	Daniel John Drive
#7295	Elkridge Crossing Way	#7112	Daniel John Drive	#7138	Daniel John Drive
#7297	Elkridge Crossing Way	#7114	Daniel John Drive	#7140	Daniel John Drive
#7299	Elkridge Crossing Way	#7116	Daniel John Drive	#7142	Daniel John Drive
#7301	Elkridge Crossing Way	#7118	Daniel John Drive	#7144	Daniel John Drive
#7303	Elkridge Crossing Way	#7120	Daniel John Drive	#7146	Daniel John Drive
#7305	Elkridge Crossing Way	#7122	Daniel John Drive	#7148	Daniel John Drive
#7307	Elkridge Crossing Way	#7124	Daniel John Drive	#7150	Daniel John Drive

BENCHMARK INFORMATION
 B.M.#1 - HOWARD COUNTY CONTROL STATION #38A - HORIZONTAL - (NAD83)
 (LOCATED ALONG WASHINGTON BLVD. EAST OF THE INTERSECTION OF MONTGOMERY ROAD AND WASHINGTON BLVD. ON THE SOUTH EAST SIDE, WITHIN THE ISLAND NET TO POWER POLE # 334790)
 N 561,150.815
 E 1,389,726.426
 ELEVATION = 220.036 - VERTICAL - (NAVD 88)

B.M.#2 - HOWARD COUNTY CONTROL STATION #38A - HORIZONTAL - (NAD 83)
 (LOCATED ALONG THE NORTH SIDE OF WASHINGTON BLVD. APPROX. 01.7' EAST OF AN EX. FIRE HYDRANT AND 78.0' SOUTH OF EX. STORM DRAIN INLET)
 N 562,553.314
 E 1,393,879.956
 ELEVATION = 166.174 - VERTICAL - (NAVD 88)

DEVELOPER'S CERTIFICATION
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Paul W. Kriebel, FOR:
ELKRIDGE DEVELOPERS, LLC 06-24-20
 SIGNATURE OF DEVELOPER DATE

ENGINEER'S CERTIFICATION
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Paul W. Kriebel, FOR:
ELKRIDGE DEVELOPERS, LLC 06-24-20
 SIGNATURE OF DEVELOPER DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 30B OF THE HOWARD COUNTY DESIGN MANUAL - VOLUME IV: STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AND AS SHOWN ON THE SITE DEVELOPMENT PLAN, SDP-20-007.

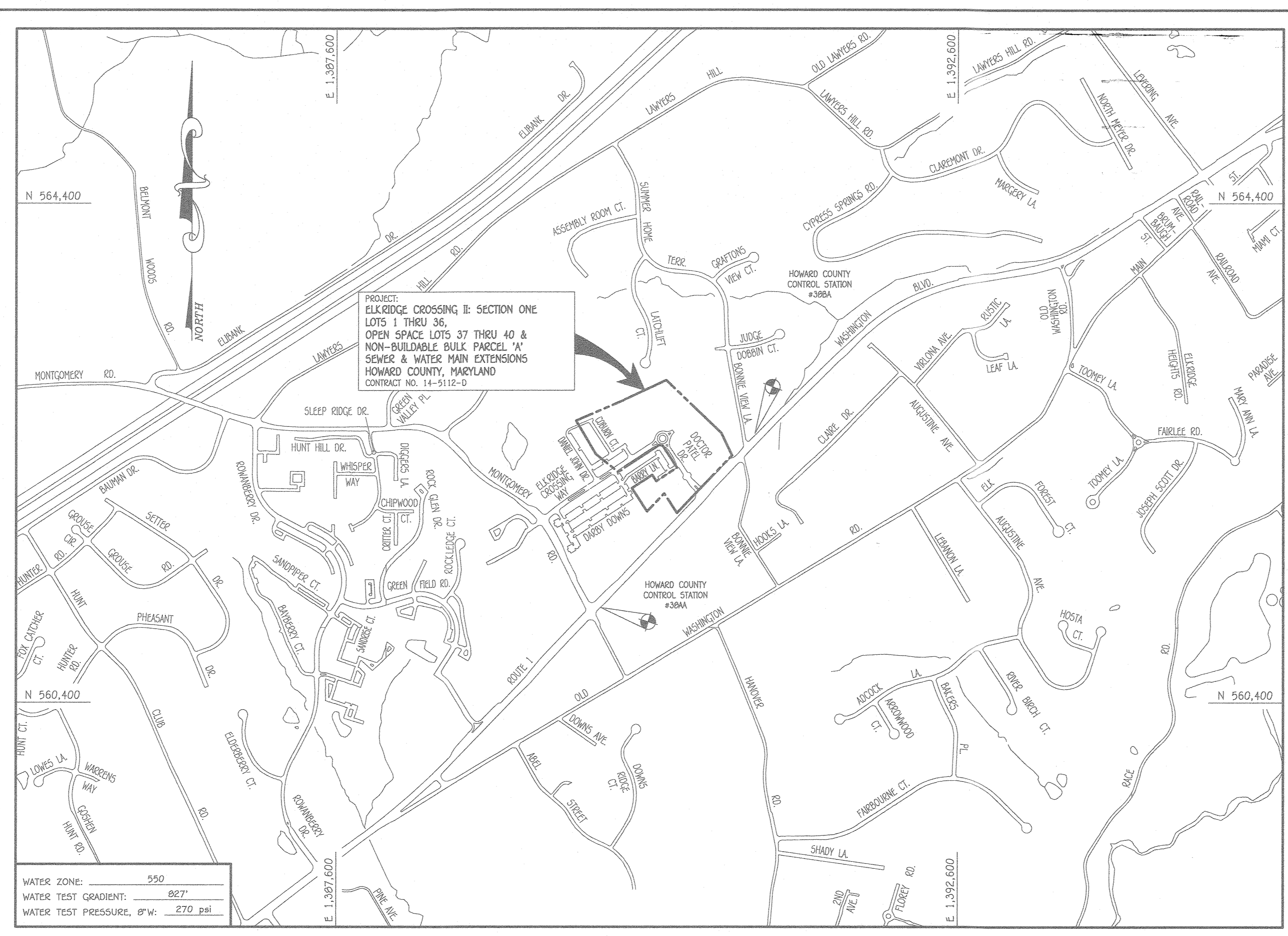
Paul W. Kriebel, FOR:
ELKRIDGE DEVELOPERS, LLC 06-24-20
 SIGNATURE OF DEVELOPER DATE

50P-20-007

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

APPROVED:
John A. Calabrese 7/15/20
 HOWARD SOIL CONSERVATION DISTRICT DATE

LEGEND	
SYMBOL	DESCRIPTION
---	EX. WATER MAIN
---	EX. SEWER MAIN
○	EX. SEWER MANHOLE
○	EX. SEWER, WATER & UTILITY EASEMENT
○	EX. FIRE HYDRANT
○	EX. VALVE
---	PROP. WATER MAIN
---	PROP. SEWER MAIN
○	PROP. SEWER MANHOLE
---	PROP. SEWER, WATER & UTILITY EASEMENT
---	PROP. W.H.C.
---	PROP. S.H.C.
○	PROP. FIRE HYDRANT
○	PROP. VALVE



TYPE OF BUILDING:		RESIDENTIAL: TOWNHOUSES
NUMBER OF LOTS:		36 (BUILDABLE); 4 (OPEN SPACE)
NO. OF WATER HOUSE CONNECTIONS:		36
NO. OF SEWER HOUSE CONNECTIONS:		45
SEWER SHED:		PATAPSCO
TREATMENT PLANT:		PATAPSCO WASTEWATER TREATMENT PLANT BALTIMORE, MARYLAND

LOCATION MAP
 SCALE: 1" = 600'

PLAN REFERENCE NUMBERS:
 F-20-025 (RECORDED PLAT)
 SDP-20-007
 ECP-19-032
 S-19-005
VMV2-21-013

CONTRACT NO. 14-5112-D

ELKRIDGE CROSSING II

SECTION ONE

LOTS 1 THRU 36,

OPEN SPACE LOTS 37 THRU 40 &

NON-BUILDABLE BULK PARCEL 'A'

SEWER AND WATER MAIN EXTENSIONS

HOWARD COUNTY, MARYLAND

Owner
 CHETAN B. MEHTA, BENEFICIARY OF
 THE CHETAN MEHTA IRREVOCABLE TRUST
 5192 TALBOTS LANDING
 ELLICOTT CITY, MARYLAND 21046
 443-285-9563

Developer
 ELKRIDGE DEVELOPERS, LLC
 5192 TALBOTS LANDING
 ELLICOTT CITY, MD 21046
 443-285-9563

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

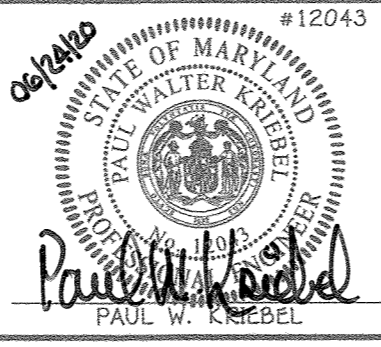
John A. Calabrese 7-9-2020
 CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

Al Edmund 7.27.20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

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. 12843 EXPIRATION DATE IS 7/16/20.

Paul W. Kriebel
 PAUL W. KRIEBEL



DESIGNED BY:	J.C.L.	
DRAWN BY:	J.C.L.	
CHECKED BY:	P.W.K.	
DATE:	JUNE, 2020	
BY	NO.	REVISION
WRA	1	ADDED QUANTITIES
PKC	2	ADDED TAPPING NOTE
	8/26/21	
	4/19/21	

SEWER & WATER MAIN EXTENSIONS
 TITLE SHEET

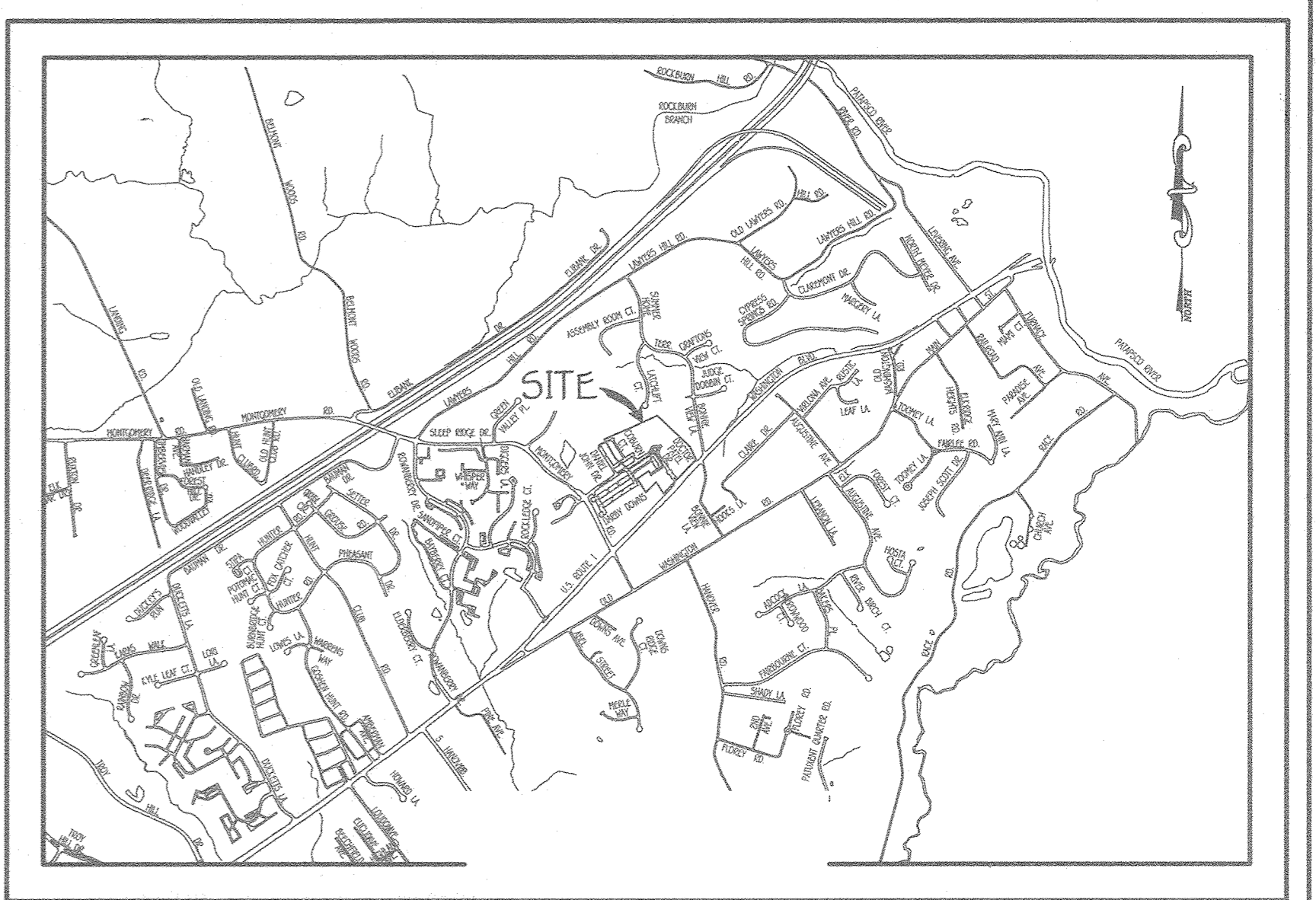
600' SCALE MAP NO. 38 BLOCK NO. 2 & 3
 F.C.C. WORK ORDER NO. 18017

FILE NAME: SEWER & WATER MAIN CONTRACT PLANS

ELKRIDGE CROSSING II
 SECTION ONE
 LOTS 1 THRU 36, OPEN SPACE LOTS 37 THRU 40
 & NON-BUILDABLE BULK PARCEL 'A'
 SEWER AND WATER MAIN EXTENSIONS
 CONTRACT NO. 14-5112-D
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 1 OF 6



GENERAL NOTES
 SCALE: 1" = 2000'

- PART A**
- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL MAKE ALL NECESSARY PRODUCTIONS 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.
 - TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON OR ABOUT MAY, 2010 BY FISHER, COLLINS & CARTER, INC.
 - HORIZONTAL AND VERTICAL SURVEY CONTROLS ARE SHOWN ON THE DRAWINGS. THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD 83/91 AS PRODUCED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 38A & NO. 43B. ALL VERTICAL CONTROLS ARE BASED ON NAVD 88 VERTICAL CONTROLS PROVIDED ON THE DRAWINGS.
 - 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 1'-0" MINIMUM OR TOWER 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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE 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 SITE.
 - WHERE TEST FITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL @ AT THE LOCATIONS @ THE TEST FITS. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST FIT OR FITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST FITS HAVE NOT BEEN MADE 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:

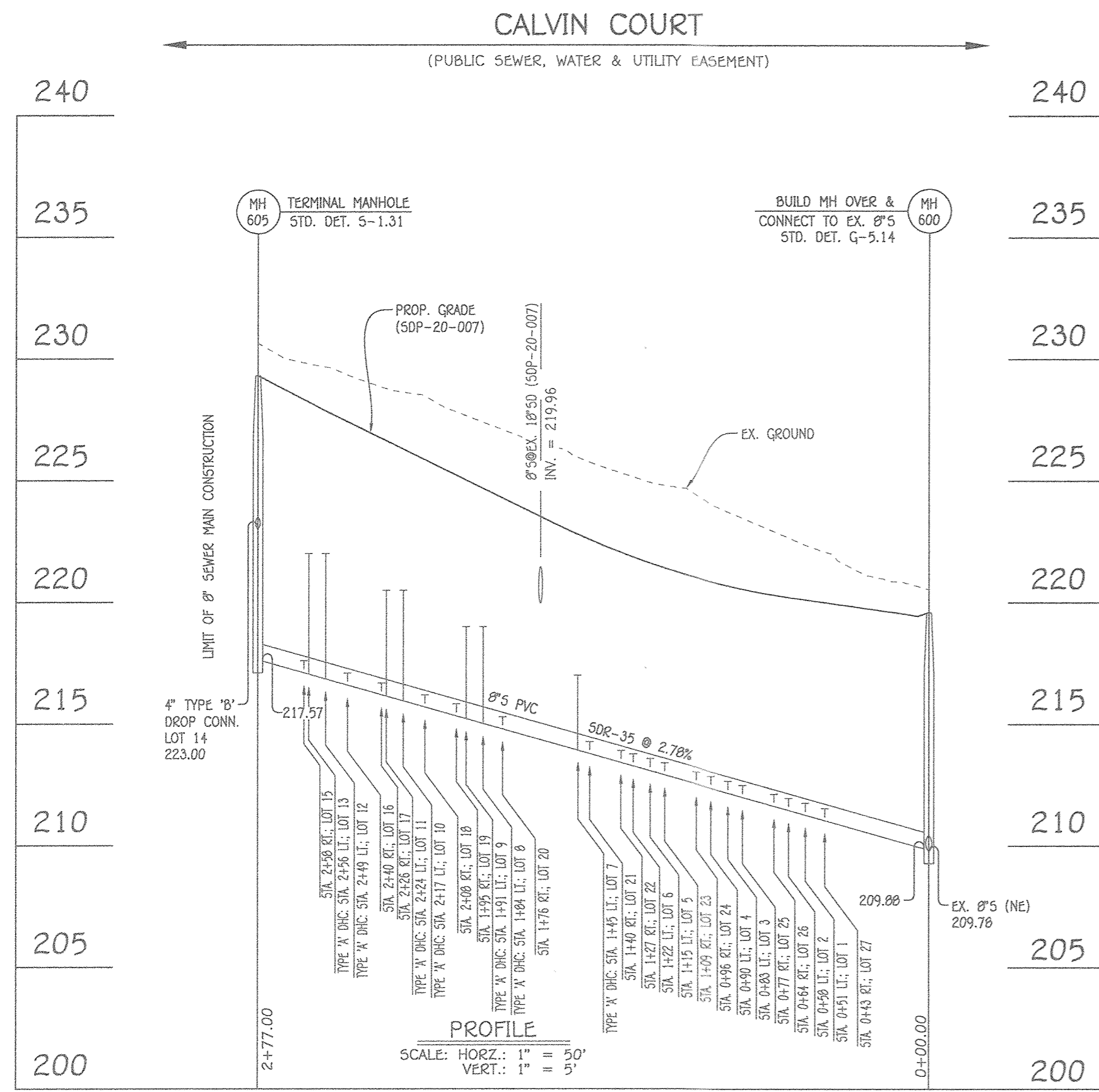
AT&T	1-800-292-1133
BGE (CONTRACTOR SERVICES)	410-637-8713
BGE (EMERGENCY)	410-699-0123
BUREAU OF UTILITIES	410-315-1800
COLONIAL PIPELINE CO.	410-799-1990
MESA UTILITY	1-800-291-7777
STATE HIGHWAY ADMINISTRATION	410-531-5553
VERIZON	1-800-743-0033 / 410-224-9120
 - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STREIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
 - CONTRACTOR SHALL REMOVE STUMPS AND ROOTS ALONG THE LINE OF EASEMENT. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CONSTRUCTION OF THE MAIN.
 - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)-315-7400 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BEFORE CONSTRUCTION OPERATIONS BEGINNING. THE CONTRACTOR SHALL OBTAIN THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.11(A) OF THE HOWARD COUNTY CODE.

- PART B: WATER MAIN GENERAL NOTES**
- ALL WATER MAINS SHALL BE ANNA CS90 PVC, DR-14.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TIES SHALL BE SETTING WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
 - 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 SURF 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 SECTION 1005 OF THE STANDARD SPECIFICATIONS.
 - FIRE HYDRANTS SHALL BE SET TO THE SURF LINE ELEVATIONS SHOWN ON THE DRAWINGS.
 - TRACER WIRE AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL D.I.P. AND PVC WATER MAINS IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL.
 - FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF THE ANNA STANDARD CS90 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 GALVANNEAL 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 METALLIC FITTINGS INCLUDING RESTRAINTS AND HANGERS. ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC MAINS. ALL "TIES" USED WITH PVC MAINS SHALL BE DUCTILE IRON.
 - PROPER ASSEMBLY OF GASKETED PVC 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 PVC PIPE INDICATE THE MAXIMUM AND MINIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL. THE CONTRACTOR SHALL NOT OVER INSERT OR OVER HOME THE SPIGOT INTO THE BELL OF PVC PIPE.
 - ALL CHANGES IN HORIZONTAL OR VERTICAL DIRECTION OF PVC WATER PIPE SHALL BE MADE WITH STANDARD BENDS, 5-DEGREE SWEEPS OR HIGH DEFLECTION COUPLINGS. NO BENDING OF THE PIPE OR DEFLECTING OF PVC PIPE JOINTS IS PERMITTED, WHERE HIGH DEFLECTION 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 COUPLING OR 5-DEGREE SWEEP, TAKING CARE NOT TO USE COMPACTOR EQUIPMENT DIRECTLY OVER THE FITTING.
 - PVC HIGH DEFLECTION COUPLINGS SHALL BE LIMITED TO A TOTAL OF 3-DEGREES (1) 3-DEGREE ON EITHER END OF THE COUPLING. SHALL BE GATED FOR A MINIMUM 200 PSI MEETING THE REQUIREMENTS OF ANNA CS90. SHALL HAVE A MINIMUM LAY LENGTH OF 9-INCHES AND SHALL HAVE CENTER STOPS. PVC HIGH DEFLECTION COUPLINGS SHALL BE CERTIFICATED PVC HIGH DEFLECTION (HD) STOP COUPLINGS OR EQUAL.
 - FIVE DEGREE SWEEPS SHALL BE BELL BY SPIGOT, RATED FOR A MINIMUM 225 PSI, DR-18 MEETING THE REQUIREMENTS OF ANNA CS90 AND SHALL BE FULL FITTINGS (FIFX) BLUE BRUTE DR-18 OR EQUAL.
 - WHEN PVC HIGH DEFLECTION COUPLINGS OR PVC 5-DEGREE SWEEPS ARE USED TO FACILITATE CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENTS OF ANNA CS90 PVC PIPELINES, THE CONTRACTOR SHALL INSERT DEVICES FOR THE PREVENTION OF OVER-INSERTION OF THE PVC PIPE. SPIGOTS OR PLAIN ENDS INTO THE BELL ON BELL JOINT ON BOTH SIDES OF THE HIGH DEFLECTION 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 SPIGOT TO ALLOW FOR PIPE EXPANSION AND CONTRACTION. THE BELL STOPS SHALL BE SERIES 5000 MECA-STOP, AS MANUFACTURED BY EBAN IRON, INC. OR APPROVED EQUAL.

PART C: SEWER MAIN GENERAL NOTES

- 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 G5.32. WHERE WATERIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-0" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSES) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

CONTRACT NO. 14-5112-D
 ELKRIDGE CROSSING II
 SECTION ONE
 LOTS 1 THRU 36,
 OPEN SPACE LOTS 37 THRU 40 &
 NON-BUILDABLE BULK PARCEL 'A'
 SEWER AND WATER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

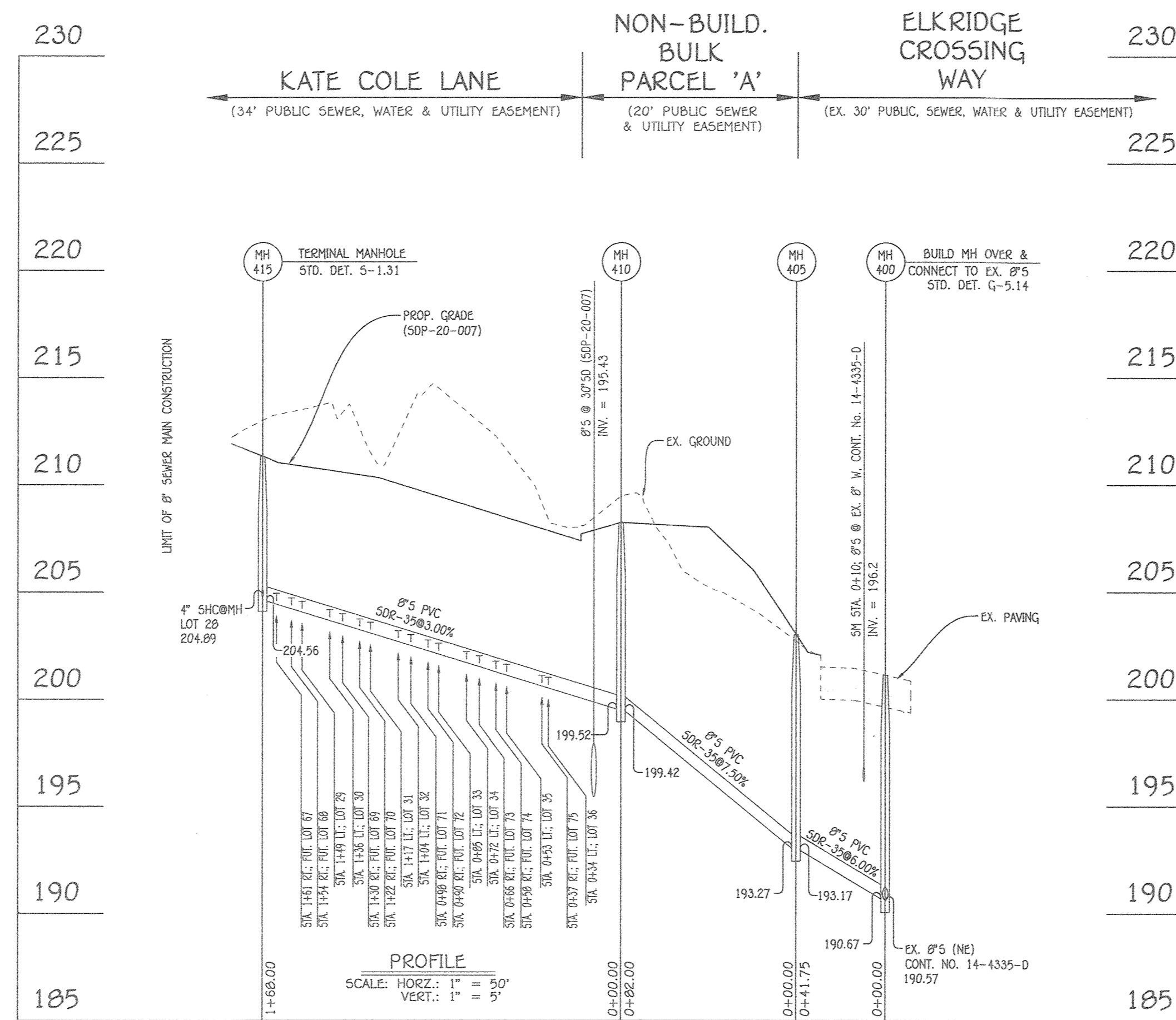


8" SEWER MAIN: CALVIN COURT; MH 600 TO MH 605

NO.	NORTHING	EASTING	RIM ELEVATION
600	562392.60	1389808.34	219.59
605	562624.35	1389656.61	229.30

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.

STATION	LOT	ELEVATION AT MAIN	ELEVATION AT EDGE OF EASEMENT	M.C.E.	SLAB ELEV.
MH 600 TO MH 605: CALVIN COURT					
0+43 RT.	27	211.25	211.73	215.73	221.74
0+51 LT.	1	211.47	211.67	215.67	221.82
0+58 LT.	2	211.66	211.86	215.86	221.82
0+64 RT.	26	211.83	212.31	216.31	221.74
0+77 RT.	25	212.19	212.67	216.67	222.41
0+83 LT.	3	212.36	212.56	216.56	222.49
0+90 LT.	4	212.55	212.75	216.75	222.49
0+96 RT.	24	212.72	213.20	217.20	222.41
1+09 RT.	23	213.08	213.56	217.56	223.08
1+15 LT.	5	213.25	213.45	217.45	223.16
1+22 LT.	6	213.44	213.64	217.64	223.83
1+27 RT.	22	213.58	214.06	218.06	223.75
1+40 RT.	21	213.94	214.42	218.42	224.42
1+45 LT.	7(DHC:2.92')	217.00	217.20	221.20	224.50
1+76 RT.	20	214.94	215.42	219.42	226.32
1+84 LT.	8(DHC:3.83')	219.00	219.20	223.20	226.60
1+91 LT.	9(DHC:3.64')	219.00	219.20	223.20	227.27
1+95 RT.	19	215.47	215.95	219.95	226.99
2+08 RT.	18	215.83	216.31	220.31	227.66
2+17 LT.	10(DHC:4.42')	220.50	220.70	224.70	227.94
2+24 LT.	11(DHC:4.20')	220.50	220.68	224.68	228.61
2+26 RT.	17	216.33	216.81	220.81	228.33
2+40 RT.	16	216.72	217.20	221.20	229.00
2+49 LT.	12(DHC:5.03')	222.00	222.20	226.20	229.26
2+56 LT.	13(DHC:4.83')	222.00	222.20	226.20	229.95
2+58 RT.	15	217.22	217.70	221.70	229.67
⊙ MH 605 LT.	14(DROP CONN.)	223.00	223.20	227.20	230.62

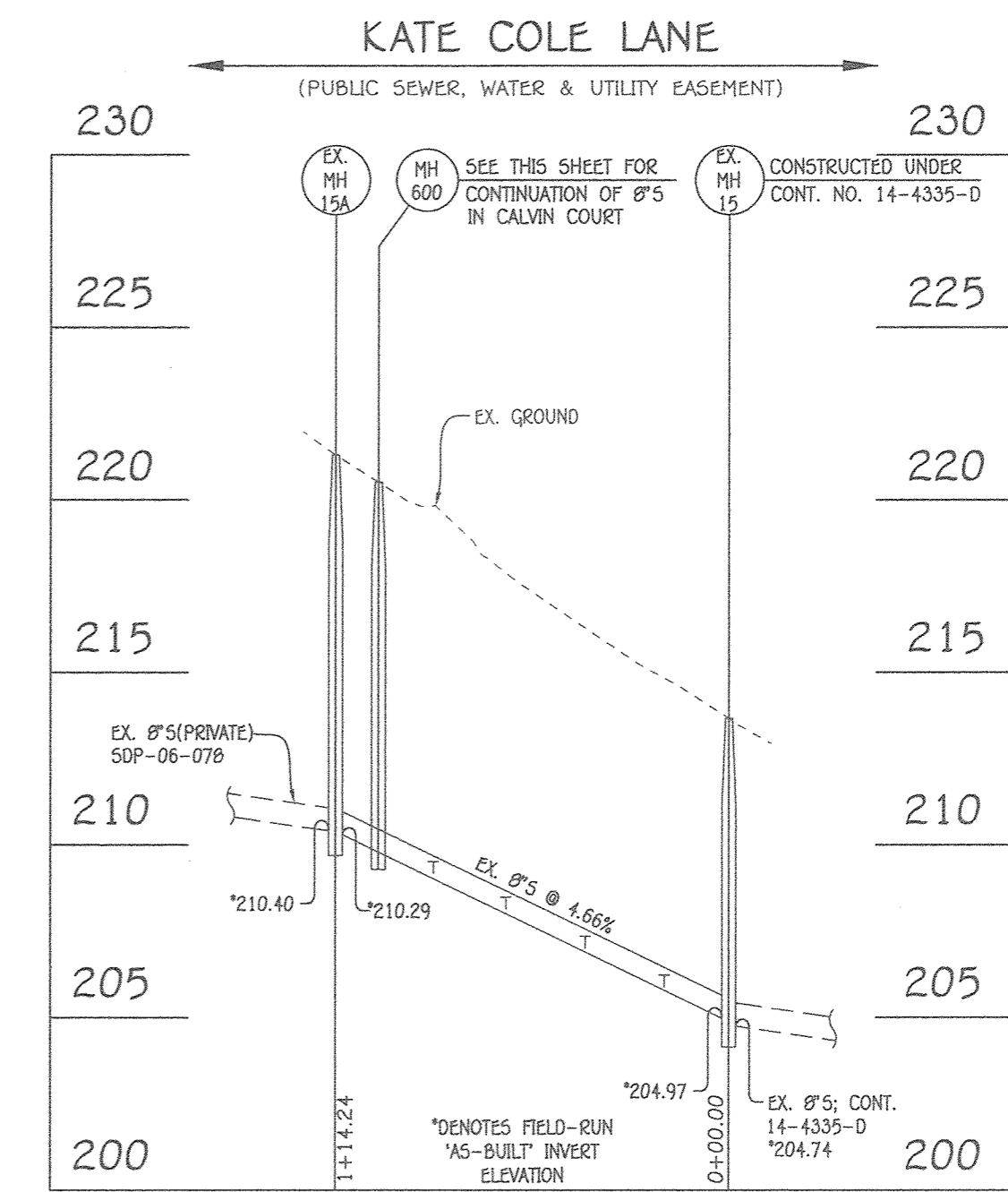


8" SEWER MAIN: KATE COLE LANE; MH 400 TO MH 415

NO.	NORTHING	EASTING	RIM ELEVATION
400	562474.88	1390171.63	201.10
405	562491.98	1390133.54	203.00
410	562560.99	1390088.62	208.25
415	562468.81	1389948.43	211.30

NOTE: SET MH RIMS FLUSH W/EXISTING OR PROPOSED GRADE, AS APPLICABLE.

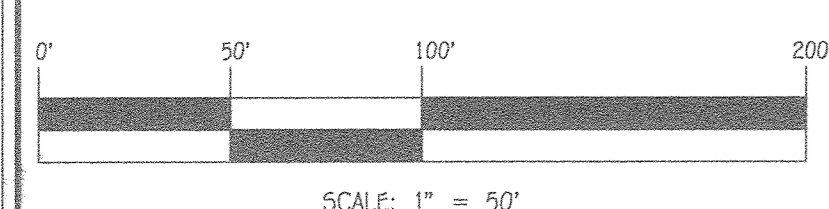
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT EDGE OF EASEMENT	M.C.E.	SLAB ELEV.
MH 410 TO MH 415: KATE COLE LANE					
0+34 LT.	36	200.71	201.15	205.15	208.93
0+37 RT.	FUTURE LOT 75	200.80	201.04	205.04	210.61
0+53 LT.	35	201.28	201.72	205.72	209.60
0+58 RT.	FUTURE LOT 74	201.43	201.67	205.67	211.28
0+66 RT.	FUTURE LOT 73	201.67	201.91	205.91	211.28
0+72 LT.	34	201.85	202.29	206.29	210.27
0+85 LT.	33	202.24	202.68	206.68	210.94
0+90 RT.	FUTURE LOT 72	202.39	202.63	206.63	211.28
0+98 RT.	FUTURE LOT 71	202.63	202.87	206.87	211.95
1+04 LT.	32	202.81	203.25	207.25	210.94
1+17 LT.	31	203.20	203.64	207.64	211.61
1+22 RT.	FUTURE LOT 70	203.35	203.59	207.59	211.95
1+30 RT.	FUTURE LOT 69	203.59	203.83	207.83	212.62
1+36 LT.	30	203.77	204.21	208.21	211.61
1+49 LT.	29	204.16	204.60	208.60	212.28
1+54 RT.	FUTURE LOT 68	204.31	204.55	208.55	212.62
1+61 RT.	FUTURE LOT 67	204.52	204.76	208.76	213.29
⊙ MH 415 LT.	28	204.89	205.33	209.33	212.95



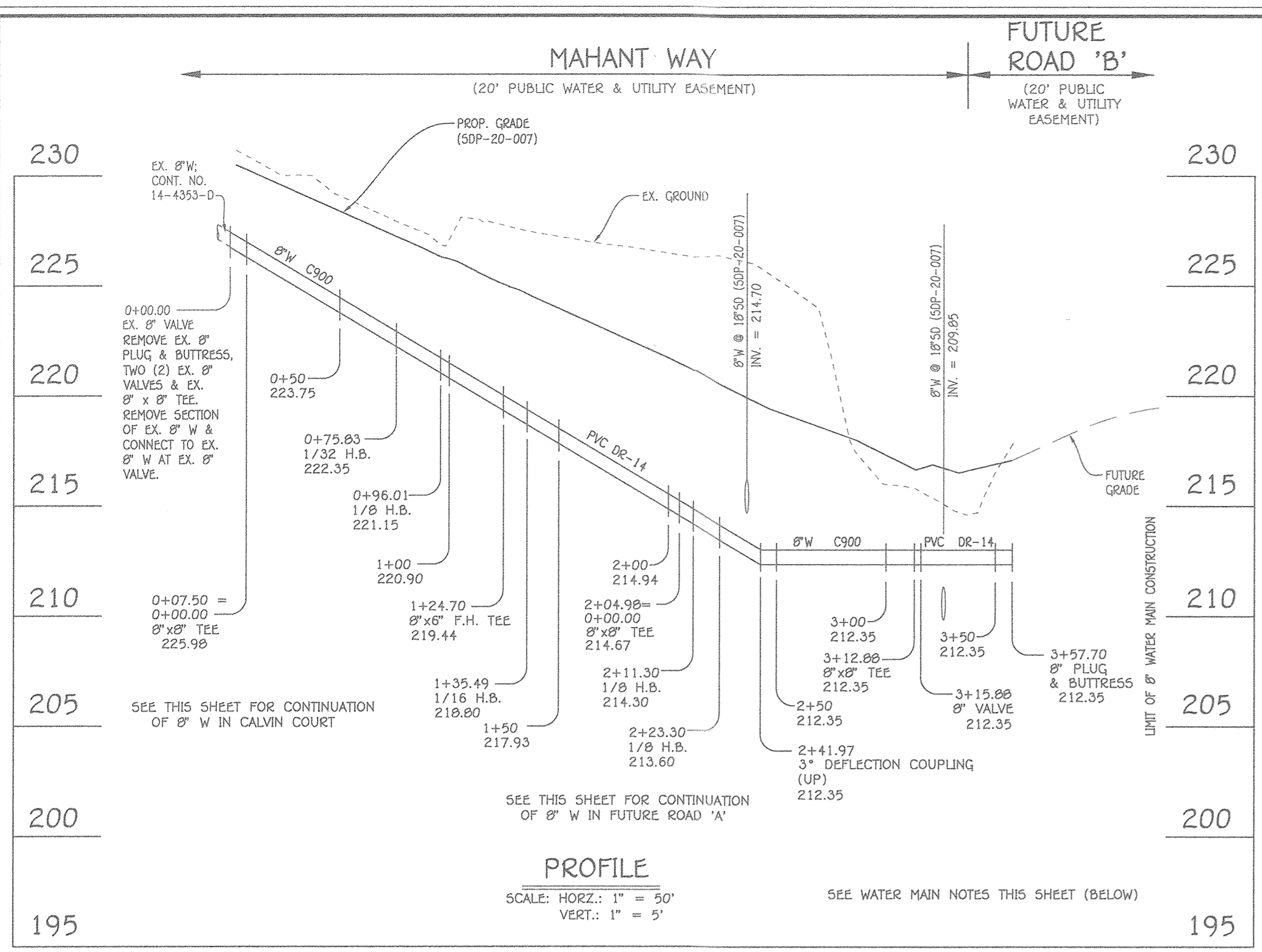
EX. 8" SEWER MAIN: KATE COLE LANE; EX. MH 15 TO EX. MH 15A

LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
1	CALVIN COURT	FH #1 39'	FH #1 VALVE 31'
2	---	---	---
3	---	---	---
4	---	---	---
5	---	---	---
6	---	FH #1 97'	FH #1 VALVE 34'
7	---	SD INLET 1 16'	SD INLET 2 35'
8	---	SMH 605 75'	SD INLET 1 26'
9	---	SMH 605 88'	SD INLET 1 32'
10	---	8" VALVE #1 72'	SMH 605 63'
11	---	---	---
12	---	---	---
13	---	---	---
14	---	---	---
15	---	---	---
16	---	---	---
17	---	---	---
18	---	---	---
19	---	8" VALVE #1 97'	SD INLET 2 49'
20	---	SMH 605 71'	---
21	---	SMH 605 84'	---
22	---	SMH 605 102'	---
23	---	SD INLET 1 38'	SD INLET 2 21'
24	---	FH #1 76'	FH #1 VALVE 79'
25	---	---	---
26	---	---	---
27	CALVIN COURT	FH #1 13'	FH #1 VALVE 17'
28	ELKRIDGE CROSSING WAY	SDMH #1 51'	SMH 415 25'
29	---	---	---
30	---	---	---
31	---	---	---
32	---	---	---
33	---	SDMH #1 101'	SMH 415 60'
34	---	SDMH #2 75'	SMH 410 78'
35	---	---	---
36	ELKRIDGE CROSSING WAY	SDMH #2 43'	---
FUTURE LOT 67	KATE COLE LANE	SDMH #1 26'	---
FUTURE LOT 68	---	---	---
FUTURE LOT 69	---	---	---
FUTURE LOT 70	---	---	---
FUTURE LOT 71	---	---	---
FUTURE LOT 72	---	SDMH #1 103'	SMH 410 100'
FUTURE LOT 73	---	SDMH #2 80'	SMH 415 41'
FUTURE LOT 74	---	---	---
FUTURE LOT 75	KATE COLE LANE	SDMH #2 42'	SMH 415 16'

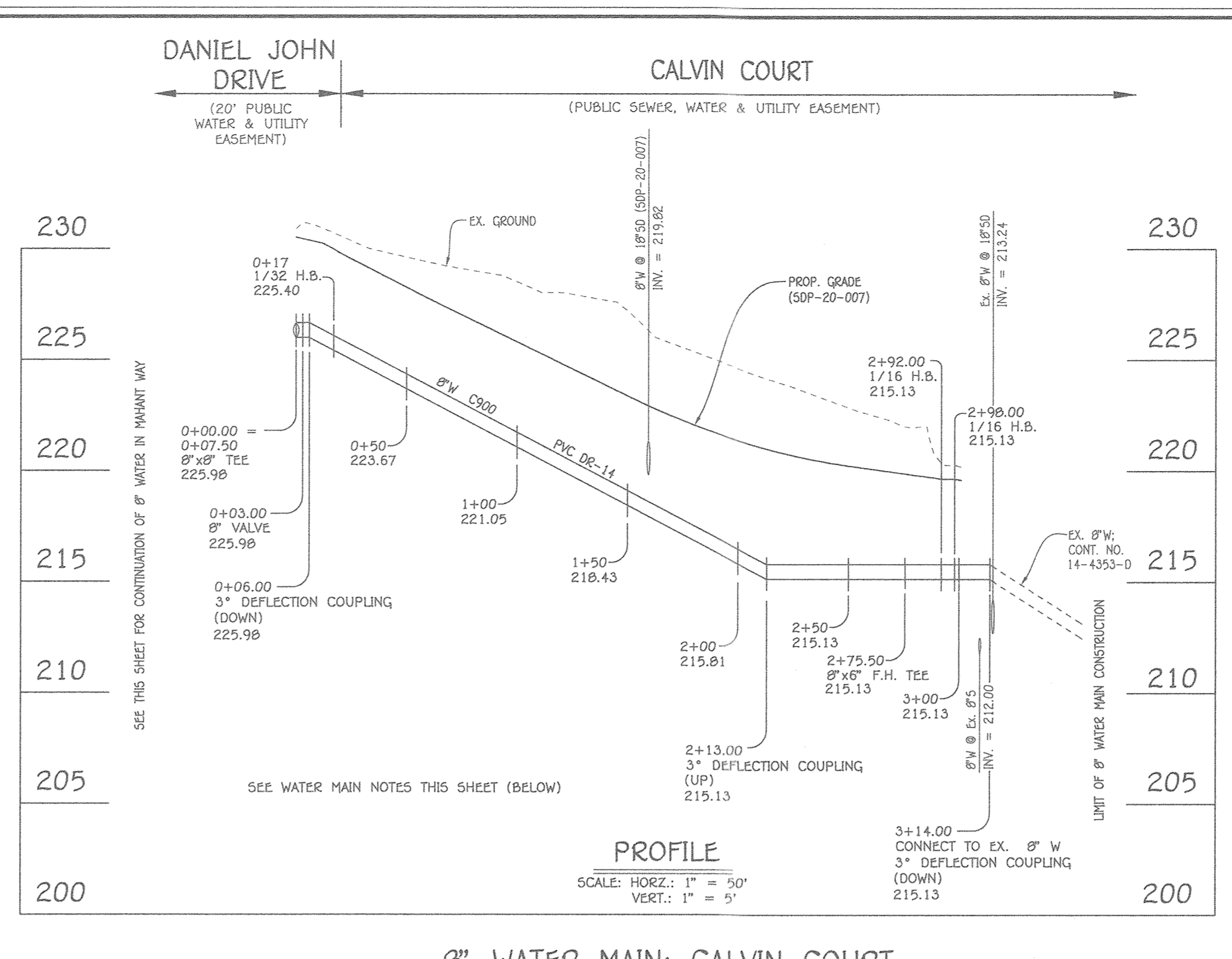
CONTRACT NO. 14-5112-D
ELKRIDGE CROSSING II
SECTION ONE
LOTS 1 THRU 36,
OPEN SPACE LOTS 37 THRU 40 &
NON-BUILDABLE BULK PARCEL 'A'
SEWER AND WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 2-8-2020 CHIEF, BUREAU OF UTILITY	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND 7.27.20 CHIEF, DEVELOPMENT ENGINEERING DIVISION	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. 12043 EXPIRATION DATE 5/7/16/20. DESIGNED BY: J.C.L. DRAWN BY: J.C.L. CHECKED BY: P.W.K. DATE: JUNE, 2020 BY NO. WRA REVISION	SEWER MAIN EXTENSIONS PROFILES, CHARTS & TABLE 600' SCALE MAP NO. 38 BLOCK NO. 2 & 3 F.C.C. WORK ORDER NO. 18017 FILE NAME: SEWER & WATER MAIN CONTRACT PLANS	ELKRIDGE CROSSING II SECTION ONE LOTS 1 THRU 36, OPEN SPACE LOTS 37 THRU 40 & NON-BUILDABLE BULK PARCEL 'A' SEWER AND WATER MAIN EXTENSIONS CONTRACT NO. 14-5112-D FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 4 OF 6
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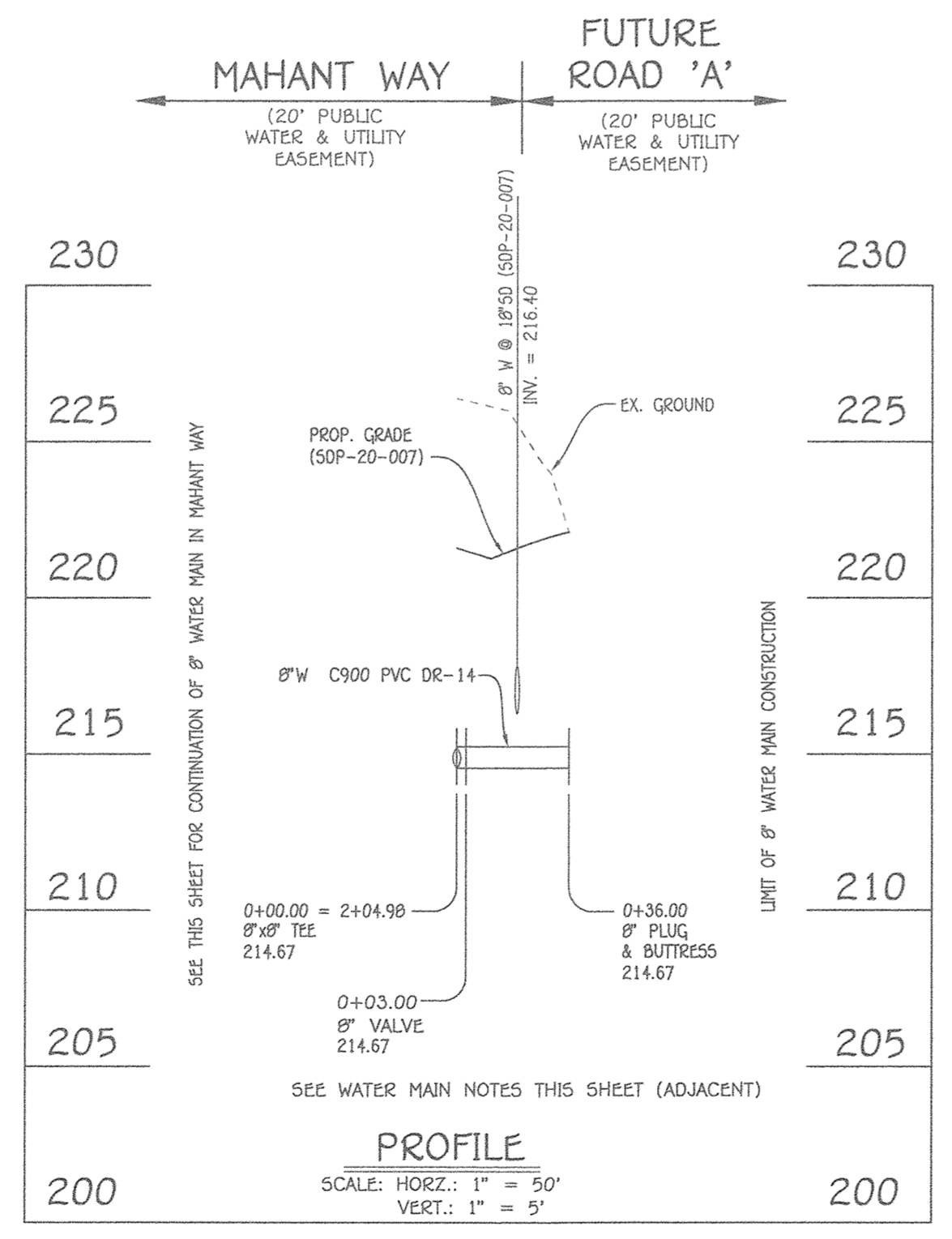


8" WATER MAIN: MAHANT WAY



8" WATER MAIN: CALVIN COURT

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: MAHANT WAY			
0+00.00	EX. 8" VALVE	562,656.78	1,389,648.72
0+07.50 = 0+00.00	8" x 8" TEE, CONNECT TO EX. 8" W	562,659.41	1,389,655.67
0+75.83	1/32 H.B.	562,689.03	1,389,719.08
0+96.01	1/8 H.B.	562,688.50	1,389,738.96
1+24.70	8" x 8" F.H. TEE	562,672.06	1,389,762.37
1+35.49	1/16 H.B.	562,665.90	1,389,771.33
2+04.98 = 0+00.00	8" x 8" TEE	562,607.49	1,389,809.57
2+11.30	1/8 H.B.	562,602.47	1,389,812.85
2+23.30	1/8 H.B.	562,590.66	1,389,810.43
2+41.97	3" DEFLECTION COUPLING (UP)	562,575.04	1,389,820.50
3+12.88	8" x 8" TEE	562,515.76	1,389,899.47
3+15.88	8" VALVE	562,517.41	1,389,861.98
3+57.70	8" PLUG & BUTTRESS	562,540.14	1,389,896.70

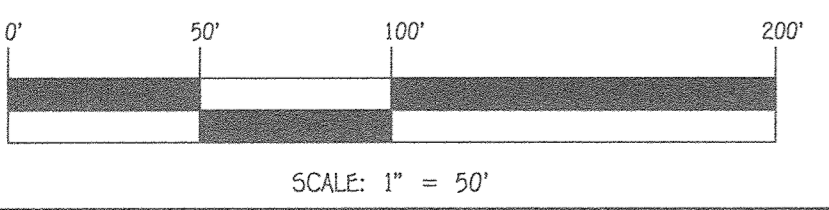


8" WATER MAIN: FUTURE ROAD 'A'

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: CALVIN COURT			
0+00.00	8" x 8" TEE	562,661.85	1,389,661.21
0+03.00	8" VALVE	562,659.07	1,389,662.32
0+06.00	3" DEFLECTION COUPLING (VERT. DOWN)	562,656.31	1,389,663.42
0+17.00	1/32 H.B.	562,643.36	1,389,662.10
2+13.00	3" DEFLECTION COUPLING (VERT. UP)	562,505.89	1,389,749.76
2+75.50	8" x 8" F.H. TEE	562,425.75	1,389,800.87
2+92.00	1/16 H.B.	562,411.94	1,389,809.56
2+98.00	1/16 H.B.	562,405.98	1,389,810.68
3+14.00	3" DEFLECTION COUPLING (VERT. DOWN) CONNECT TO EX. 8" W	562,392.81	1,389,819.81

LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
1	CALVIN COURT	FH #1 VALVE	FH #1
2			
3			
4			
5			
6		FH #1 VALVE	FH #1
7		SD INLET #2 40'	SD INLET #1 26'
8		30'	12'
9		30'	12'
10		52'	45'
11		SD INLET #2 52'	45'
12		SMH 605	76'
13		45'	SD INLET #1 76'
14		16'	8" VALVE #1 45'
15		16'	45'
16		34'	57'
17		34'	8" VALVE #1 57'
18		63'	SD INLET #2 58'
19		SMH 605 63'	58'
20		SD INLET #1 39'	37'
21		31'	9'
22		SD INLET #1 31'	SD INLET #2 9'
23		FH #1 85'	FH #1 VALVE 85'
24		85'	85'
25		52'	53'
26		52'	58'
27	CALVIN COURT	FH #1 21'	FH #1 VALVE 24'
28	ELKRIDGE CROSSING WAY	SMH 405 173'	EX. SMH #1 40'
29		143'	70'
30		143'	70'
31		110'	100'
32		110'	EX. SMH #1 100'
33		78'	EX. SMH #2 47'
34		78'	47'
35		46'	37'
36	ELKRIDGE CROSSING WAY	SMH 405 46'	EX. SMH #2 37'

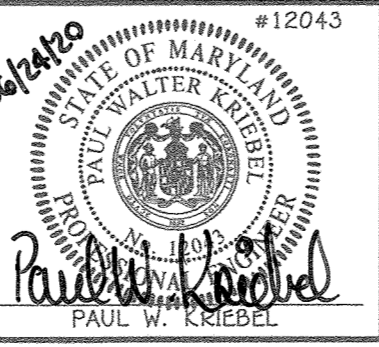
WATER MAIN NOTES:
 1. ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE; DR-14.
 2. ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV - WATER AND SEWER STANDARDS FOR AWWA C900 PVC WATER PIPE INSTALLATION.
 3. DEFLECTION COUPLINGS SHALL BE CERTAIN-TEED PVC HIGH DEFLECTION COUPLINGS.
 4. ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Chief, Bureau of Utilities
 Date: 7-8-2020

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
 Chief, Development Engineering Division
 Date: 7.27.20

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. 12043 EXPIRATION DATE IS 7/18/22.
FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALDWIN NATIONAL PIKE
 CLUETT CITY, MARYLAND 21042
 (410) 461-2895



DESIGNED BY: J.C.L.
 DRAWN BY: J.C.L.
 CHECKED BY: P.W.K.
 DATE: JUNE, 2020
 WRA ADDED WATER HOUSE CONNECTION AS BUILT LOCATION TABLE
 REVISION: _____ DATE: _____

WATER MAIN EXTENSIONS
 PROFILES, CHARTS, TABLE & NOTES
 600' SCALE MAP NO. 38 BLOCK NO. 2 & 3
 F.C.C. WORK ORDER NO. 18017
 FILE NAME: SEWER & WATER MAIN CONTRACT PLANS

ELKRIDGE CROSSING II
 SECTION ONE
 LOTS 1 THRU 36, OPEN SPACE LOTS 37 THRU 40 & NON-BUILDABLE BULK PARCEL 'A'
 SEWER AND WATER MAIN EXTENSIONS
 CONTRACT NO. 14-5112-D
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 5 OF 6

CONTRACT NO. 14-5112-D
 ELKRIDGE CROSSING II
 SECTION ONE
 LOTS 1 THRU 36,
 OPEN SPACE LOTS 37 THRU 40 &
 NON-BUILDABLE BULK PARCEL 'A'
 SEWER AND WATER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND



RESIDENTIAL SDP's
 SECTION ONE - 36 LOTS
 SECTION TWO - 35 LOTS
 SECTION THREE - 31 LOTS
 SECTION FOUR - 56 LOTS

COMMERCIAL SDP ONE

COMMERCIAL SDP TWO

PLAN
 SCALE: 1" = 50'

CONTRACT NO. 14-5112-D
 ELKRIDGE CROSSING II
 SECTION ONE
 LOTS 1 THRU 36,
 OPEN SPACE LOTS 37 THRU 40 &
 NON-BUILDABLE BULK PARCEL 'A'
 SEWER AND WATER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

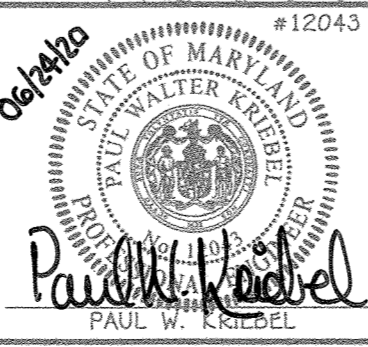
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

 DATE: 7-8-2020

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

 DATE: 7-27-20

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. 12043 EXPIRATION DATE IS 7/16/20.
FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTONAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461 - 2995



DESIGNED BY: J.C.L.	DATE: JUNE, 2020
DRAWN BY: J.C.L.	BY NO.
CHECKED BY: P.W.K.	REVISION

SEWER & WATER MAIN EXTENSIONS PROJECT OVERVIEW	
600' SCALE MAP NO. 30	BLOCK NO. 2 & 3
F.C.C. WORK ORDER NO. 18017	
FILE NAME: SEWER & WATER MAIN CONTRACT PLANS	

ELKRIDGE CROSSING II
 SECTION ONE
 LOTS 1 THRU 36, OPEN SPACE LOTS 37 THRU 40 & NON-BUILDABLE BULK PARCEL 'A'
 SEWER AND WATER MAIN EXTENSIONS
 CONTRACT NO. 14-5112-D
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 6 OF 6

I:\2018\18017\Engineering\Drawings\18017-3001 Sewer & Water Contract\Phase 1 W.S. Cont. No. 24 - D\Final\SDP-1 RESIDENTIAL\18017 Water and Sewer Contract plans sheet 6.dwg, Plan Sheet 6, 1 of 1