

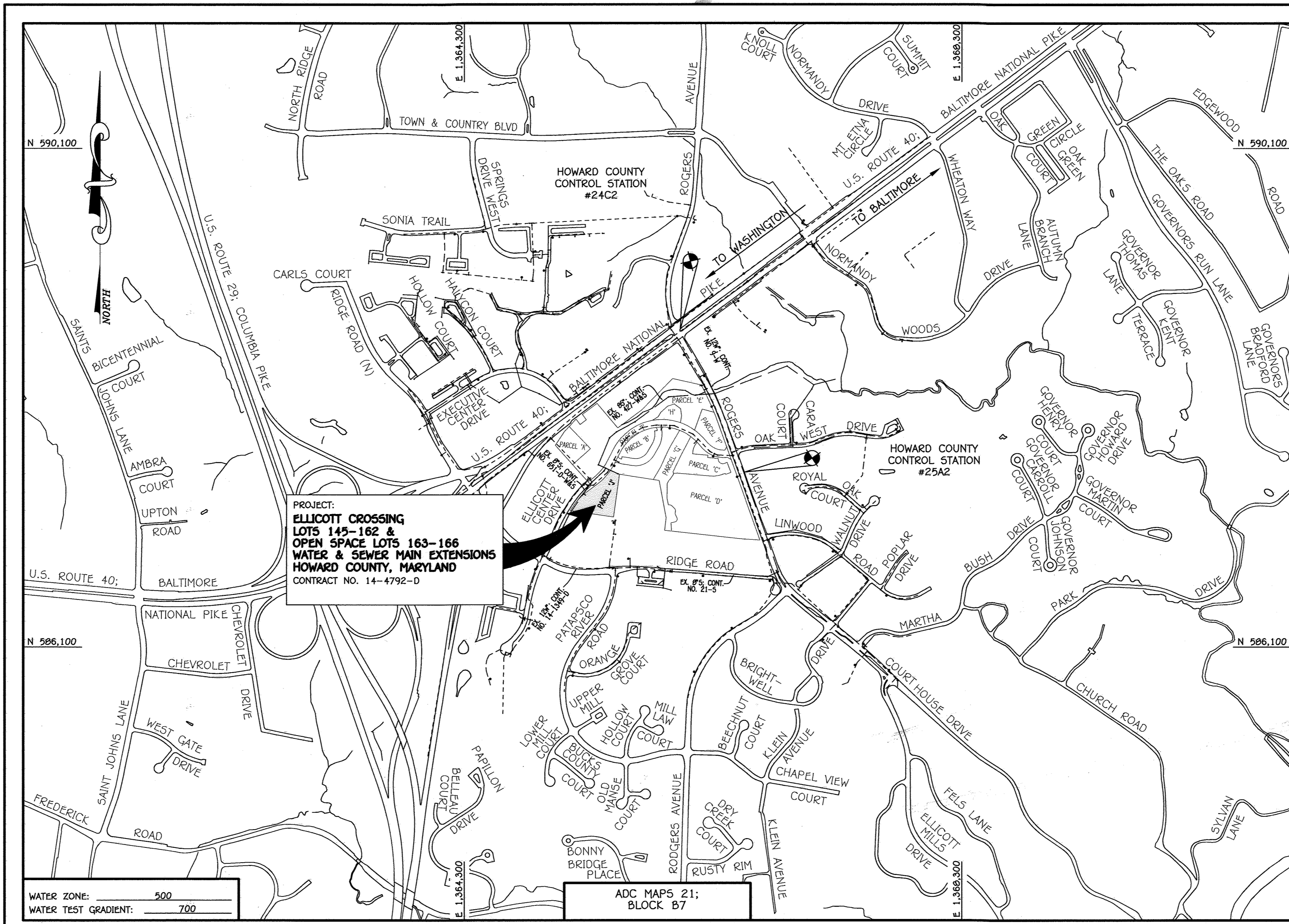
QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		SUPPLIER
		QUANTITIES	TYPE	
8" SDR-35 PVC	388 L.F.	388 L.F.	PVC SDR-35	J.M. EAGLES
4" S	380 L.F.	380 L.F.	PVC SDR-35	J.M. EAGLES
MANHOLE	5 EACH	5 EA.	PRECAST CONCRETE	ATLANTIC CONCRETE
8" W, C900 DR-18 PVC	310 L.F.	310 L.F.	PVC C-900	J.M. EAGLES
6" W	25 L.F.	25 L.F.	PVC C-900	J.M. EAGLES
1-1/2" WHC	238 L.F.	231 L.F.	V-COPPER	CAMBRIDGE LEE
1/8" H.B.	2 EACH	2 EA.	PVC #32.6	HARCO
1/16" H.B.	1 EACH	1 EA.	PVC #32.6	HARCO
1/32" H.B.	1 EACH	1 EA.	PVC #32.6	HARCO
8" X 6" TEE	1 EACH	1 EA.	8" X 6" M.J. D.I.P.	STAR PIPE
8" VALVE	1 EACH	1 EA.	GATE VALVE	MUELLER CO.
6" VALVE	1 EACH	1 EA.	GATE VALVE	MUELLER CO.
FIRE HYDRANT	1 EACH	1 EA.	5" G" MUELLER	MUELLER CO.
CONTINUITY TEST STATION	1 EACH	1 EA.	18" X 30" VAULT	HORNE CONC.
1" TWIN OUTSIDE METER SETTING	9 EACH	9 EA.	1/4" HOWARD CO. TWIN SETTING	A.Y. McDONALD

NAME OF UTILITY CONTRACTOR: CONSOLIDATED CONSTRUCTION
SURVEY & DRAFTING DIVISION AS-BUILT DATE: 7-22-13

BENCHMARK INFORMATION

B.M.#1 - HOWARD COUNTY CONTROL STATION #242C - HORIZONTAL - NAD '83
(LOCATED IN THE MIDDLE OF MD ROUTE 40; BALTIMORE NATIONAL PIKE, IN THE NORTHEAST SIDE OF THE MEDIAN, AT THE INTERSECTION ON ROGERS AVENUE AND MD ROUTE 40)
N 586,648.3703
E 1,356,503.81389
ELEVATION = 354.017 - VERTICAL - (NAVD '86)

B.M.#2 - HOWARD COUNTY CONTROL STATION #25A2 - HORIZONTAL - (NAD '83)
(LOCATED ALONG ROGERS AVENUE, SOUTH OF OAK WEST DRIVE, APPROX. 6.2' SW OF SANITARY MANHOLE, ALONG THE EAST SIDE OF ROAD, APPROX. 67.8' NORTH OF HOUSE NO. 3329)
N 587,502.7292
E 1,356,556.3776
ELEVATION = 348.145 - VERTICAL - (NAVD '86)

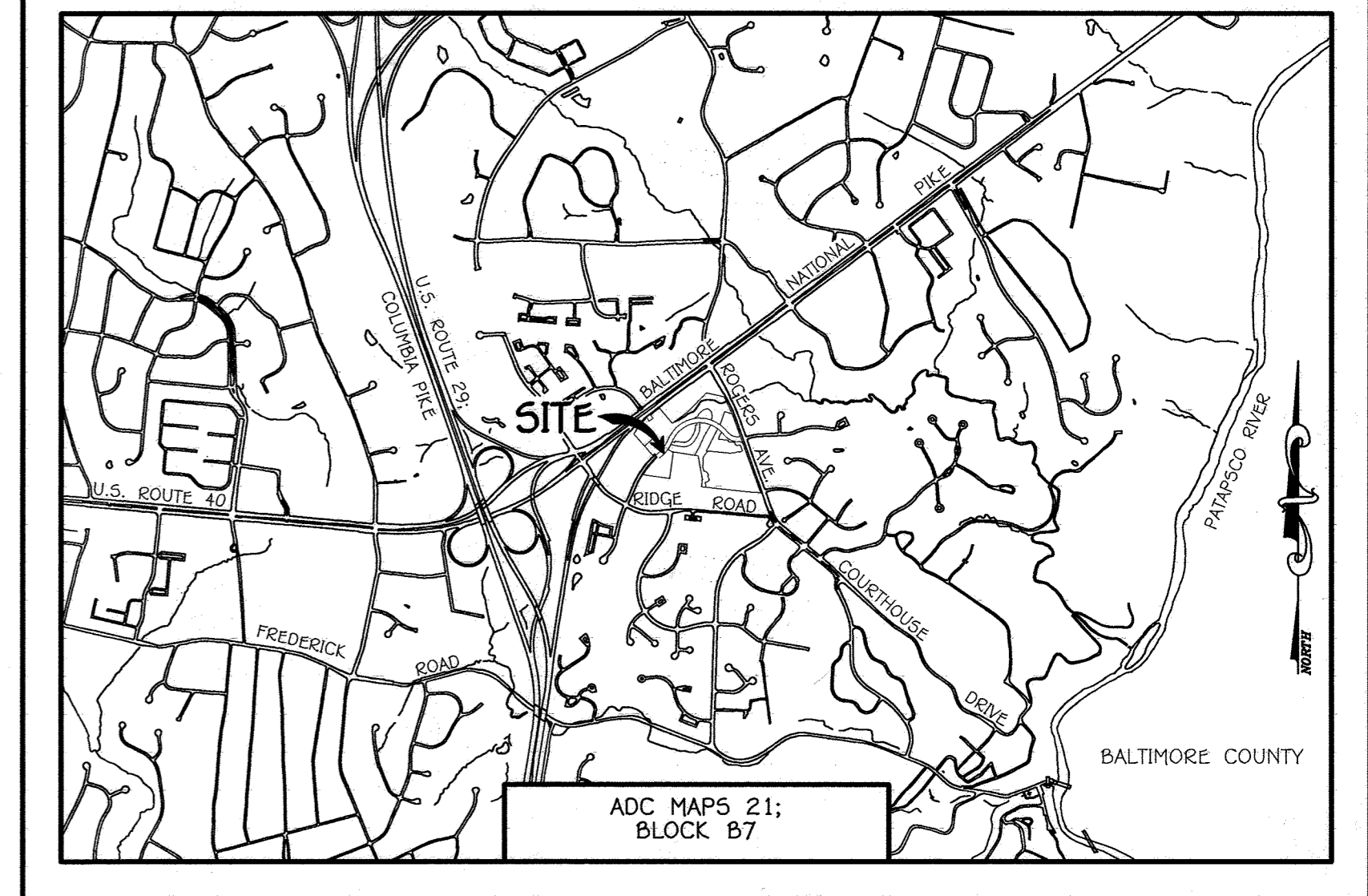
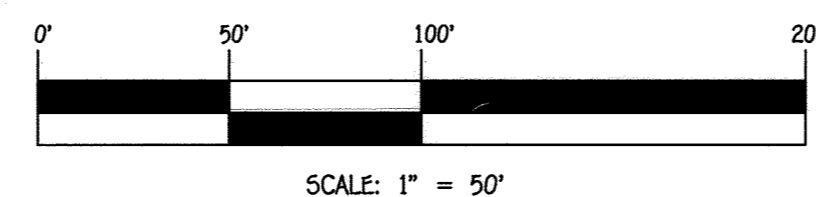


TYPE OF BUILDING:	TOWNHOUSE
NUMBER OF LOTS:	22 TOTAL: 18 BUILDABLE & 4 OPEN SPACE
NO. OF WATER HOUSE CONNECTIONS:	9
NO. OF SEWER HOUSE CONNECTIONS:	18
SEWER SHED:	PATAPSCO
TREATMENT PLANT:	PATAPSCO WASTEWATER TREATMENT PLANT CITY OF BALTIMORE

LOCATION MAP
SCALE: 1" = 600'

PLAN REFERENCE NUMBERS:
SDP-11-057 F-13 (RECORDED PLAT)

CONTRACT NO. 14-4792-D ELLICOTT CROSSING LOTS 145 - 162 & OPEN SPACE LOTS 163-166 WATER & SEWER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1" = 2000'

GENERAL NOTES

- PART A
- APPROXIMATE LOCATIONS 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.
 - TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON OR ABOUT MARCH, 2011 BY FISHER, COLLINS & CARTER, INC.
 - 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 NO. 242C & NO. 25A2.
 - ALL VERTICAL CONTROLS ARE BASED ON NAVD '86. 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 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 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 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.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
AT&T 1-800-252-1133
BGE (CONTRACTOR SERVICES) 410-637-8713
BGE (EMERGENCY) 410-689-0123
BUREAU OF UTILITIES 410-313-4900
COLONIAL PIPELINE CO 410-795-1390
MISS UTILITY 1-800-257-7777
STATE HIGHWAY ADMINISTRATION 410-531-9533
VERIZON 1-800-743-0033 / 410-224-9210
 - 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.
 - 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.
 - 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 18.11.4(a) OF THE HOWARD COUNTY CODE.

- PART B: WATER MAIN GENERAL NOTES
- ALL WATER MAINS SHALL BE AWWA C900 PVC; DR-18.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
 - 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.
 - 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 SECTION 1009 OF THE STANDARD SPECIFICATIONS.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
 - 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 AWWA 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 HARNESSES. 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.
 - TO ACCOMMODATE A SPRINKLER SYSTEM, ALL DWELLING UNITS SHALL HAVE A 1-1/2" CONNECTION WITH A 1" OUTSIDE METER SETTING, STD. DET. W-3.28 OR W-3.32.

- 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 16" WALLS ARE FOR BRICK MANHOLES ONLY.
 - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL G5.52. 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.

AS BUILTS
BY: DFI DATE: 8/19/13

OWNER	DEVELOPER
HOWARD COUNTY, MD 3430 COURTHOUSE DRIVE ELLICOTT CITY, MD 21042 410-313-4400	3330 ROGERS AVENUE, LLC SUITE 102 5300 DORSEY HALL DRIVE ELLICOTT CITY, MD 21042 443-367-0422
	M & T DEVELOPERS, LLC 4515 MANOR LANE ELLICOTT CITY, MARYLAND 21042 443-367-0422

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John L. Robertson 6/11/13
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

Paul W. Kriebel 6.12.13
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. 12043 EXPIRATION DATE IS 7/16/14.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461-2992

#12043

Paul W. Kriebel
PAUL W. KRIEBEL

DESIGNED BY:	B.C.R.				
DRAWN BY:	B.C.R.				
CHECKED BY:	P.W.K.				
DATE:	JUNE, 2013	BY NO.		REVISION	

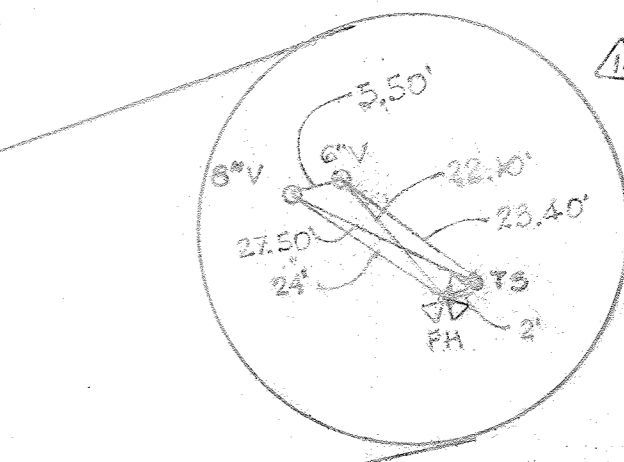
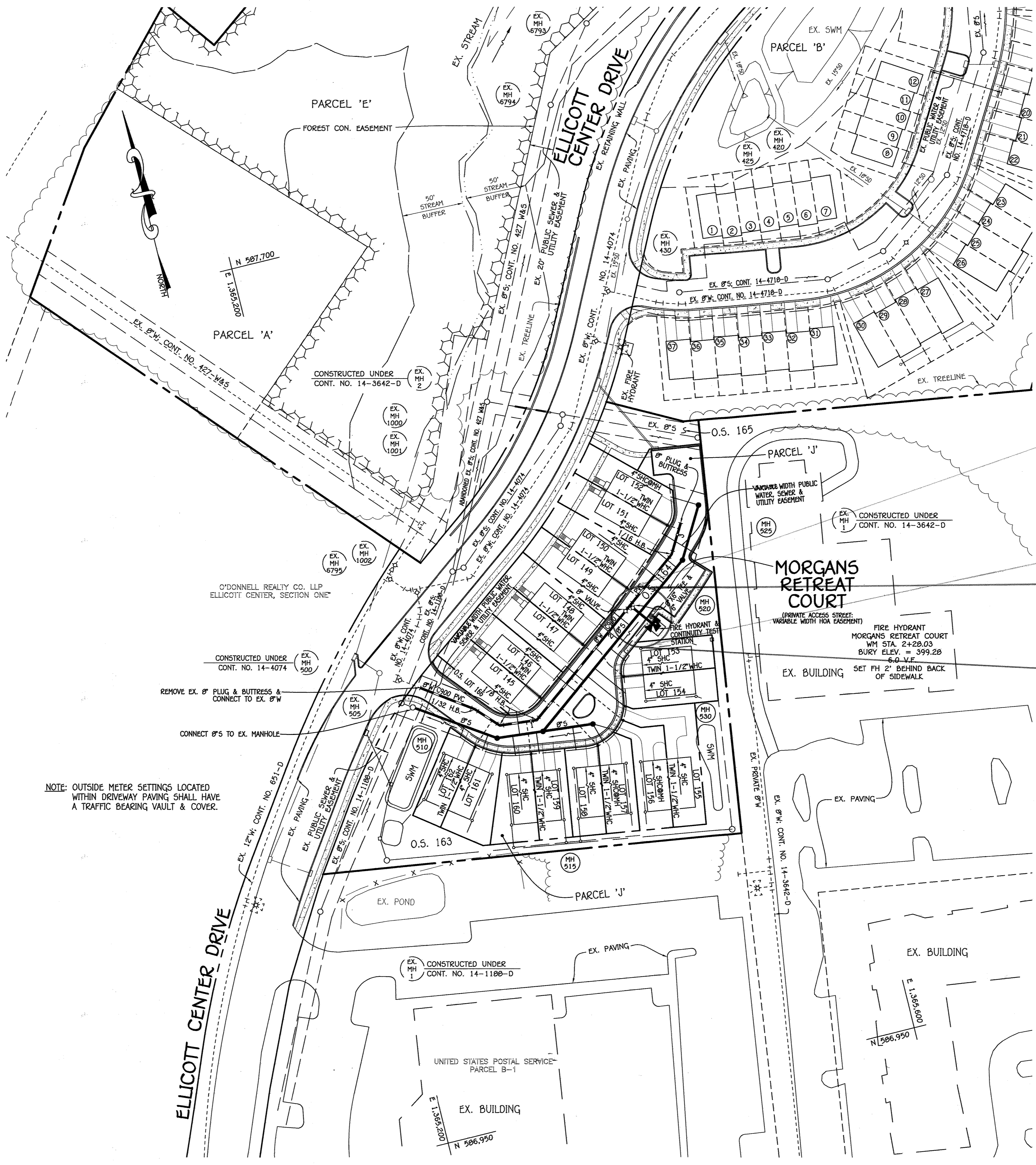
WATER & SEWER MAIN EXTENSIONS
TITLE SHEET

600' SCALE MAP NO. 24/25 BLOCK NO. 6/1
F.C.C. WORK ORDER NO. 10040

FILE NAME: WATER & SEWER MAIN EXTENSION PLAN

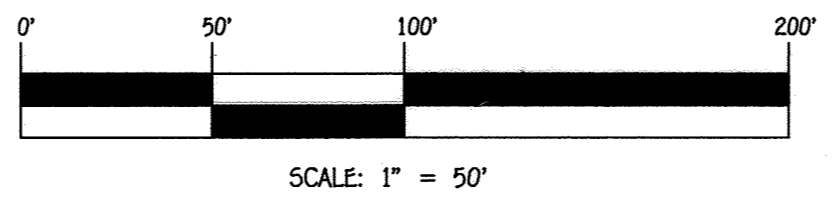
ELLICOTT CROSSING
LOTS 145-162 & OPEN SPACE
LOTS 163-166
WATER & SEWER MAIN EXTENSIONS
CONTRACT NO. 14-4792-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 3



F.H. ASBUILT UTILITY LOCATION CHART		
FROM	TO	DISTANCE
F.H.	6\"/>	
F.H.	6\"/>	
6\"/>		
6\"/>		
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NOTE: OUTSIDE METER SETTINGS LOCATED WITHIN DRIVEWAY PAVING SHALL HAVE A TRAFFIC BEARING VAULT & COVER.



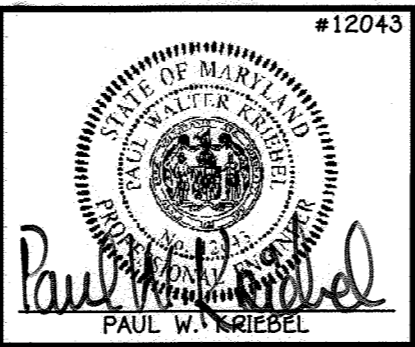
AS BUILTS
BY: DFI DATE: 8/19/13

CONTRACT NO. 14-4792-D
ELICOTT CROSSING
LOTS 145-162 &
OPEN SPACE LOTS 163-166
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Steve C. Lee
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
Paul W. Weisdel
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 6-12-13

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. 12243 EXPIRATION DATE 8/7/16/14.
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTONAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 461-3999



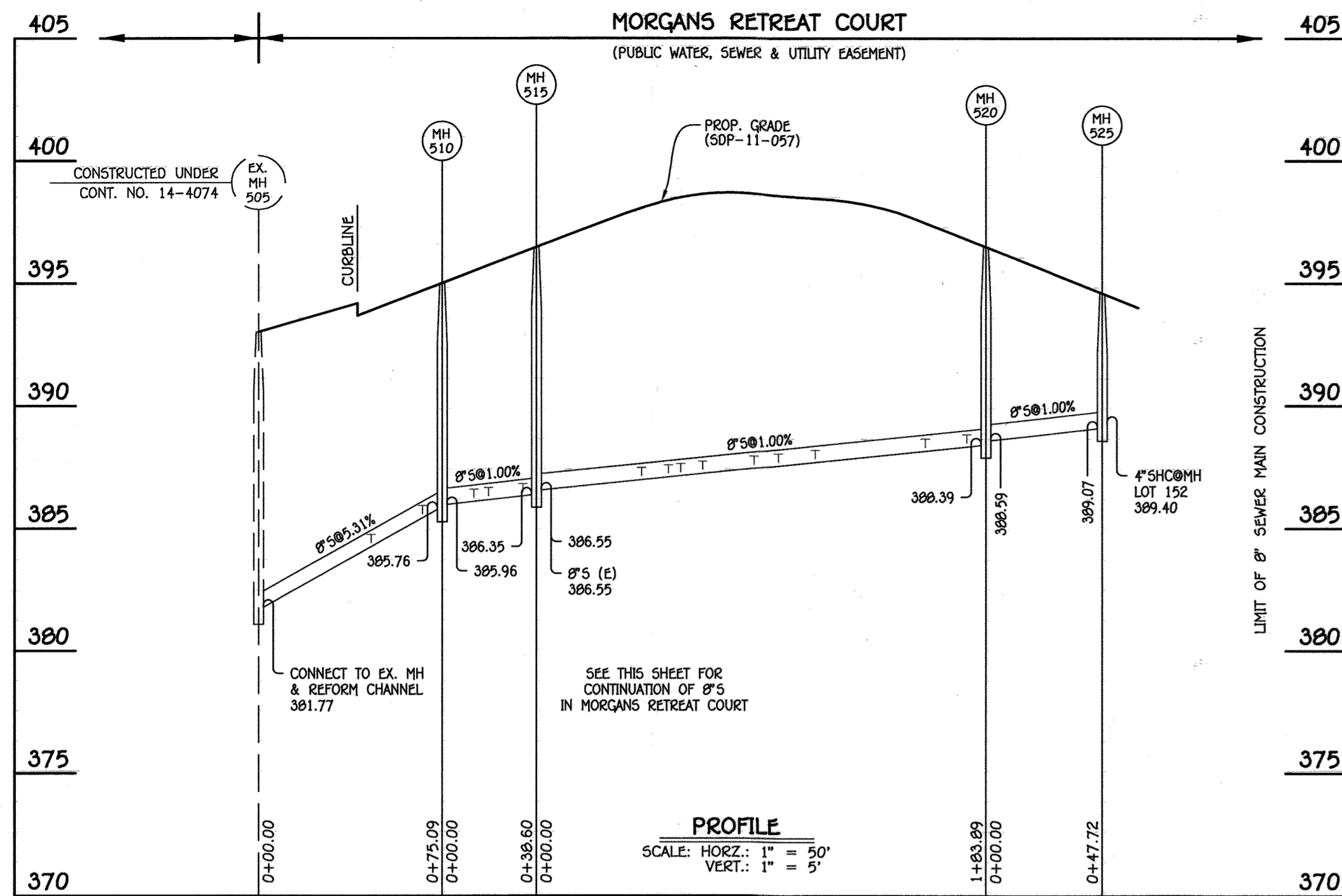
DESIGNED BY: B.C.R.
DRAWN BY: B.C.R.
CHECKED BY: P.W.K.
DATE: JUNE, 2013
BY NO. REVISION

WATER & SEWER MAIN EXTENSIONS PLAN
600' SCALE MAP NO. 24/25 BLOCK NO. 6/1
F.C.C. WORK ORDER NO. 10040
DATE: 8/19/13
FILE NAME: WATER & SEWER MAIN EXTENSION PLAN

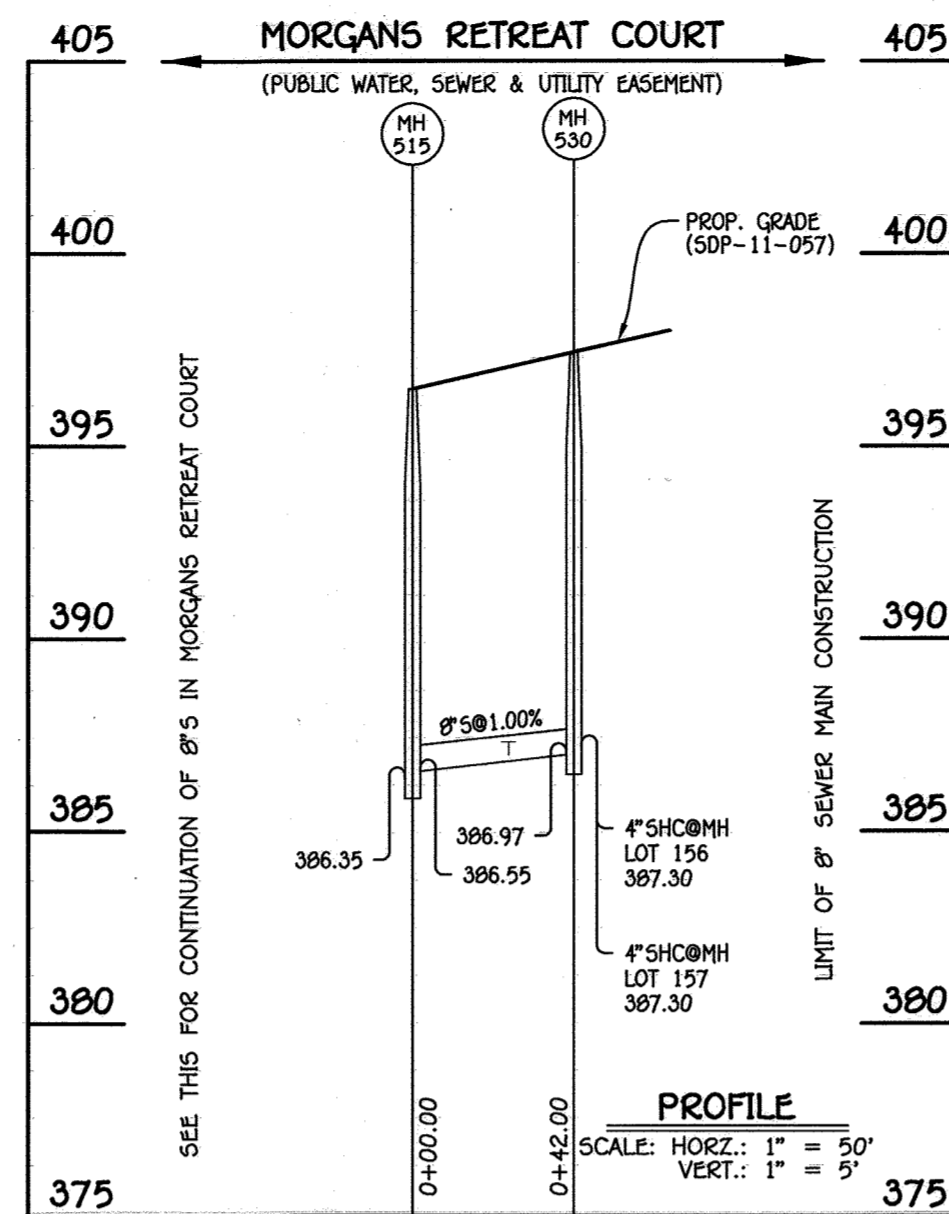
ELICOTT CROSSING
LOTS 145-162 & OPEN SPACE
LOTS 163-166
WATER & SEWER MAIN EXTENSIONS
CONTRACT NO. 14-4792-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 3

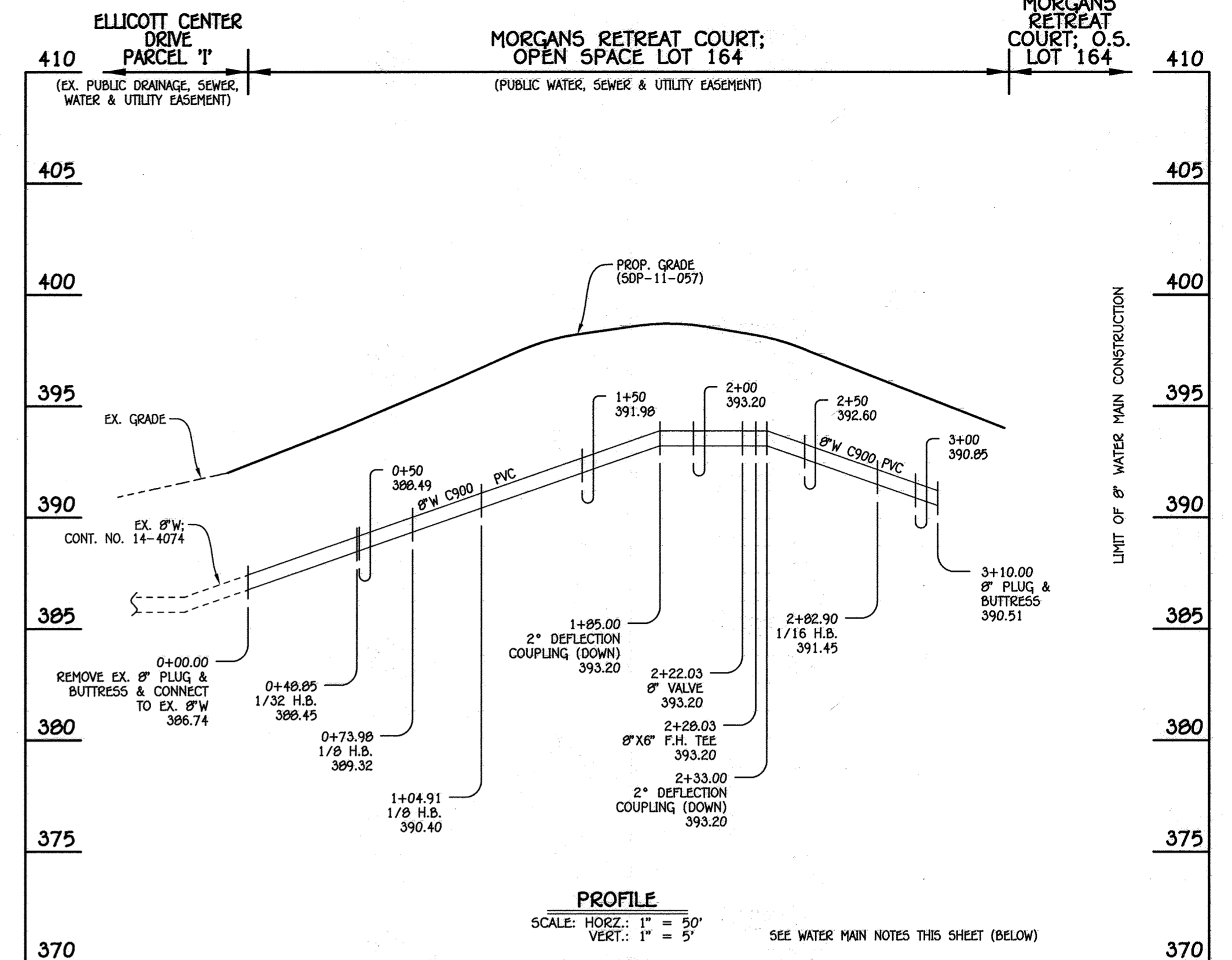
I:\2010\10040\DWG\Water & Sewer\Contract\14-4792\DWG\Water and Sewer\Contract Plan Conf. No. 14-4792.dwg, Plan Sheet 2, 5/31/2013 10:08:24 AM



8" SEWER MAIN: EX. MH 505 TO MH 525



8" SEWER MAIN: MH 515 TO MH 530



8" WATER MAIN: MORGANS RETREAT COURT

NO.	NORTHING	EASTING	RIM ELEVATION
510	587267.44	1365320.69	395.00
515	587263.74	1365359.11	396.48
520	587374.20	1365506.13	396.48
525	587392.35	1365516.69	395.65
530	587415.45	1365530.11	394.59

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.

LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
145	MORGANS RETREAT COURT	TO MH 510 - 31'	TO MH 515 - 3.0'
146	MORGANS RETREAT COURT	TO MH 530 - 51.7'	TO MH 515 - 44.5'
147	MORGANS RETREAT COURT	TO MH 515 - 48.7'	TO MH 530 - 51.6'
148	MORGANS RETREAT COURT	TO 8" VALVE - 26.5'	TO F.H. - 47.0'
149	MORGANS RETREAT COURT	TO 8" VALVE - 16.0'	TO 6" F.H. VALVE - 20.5'
150	MORGANS RETREAT COURT	TO MH 520 - 32.0'	TO 6" F.H. VALVE - 34.5'
151	MORGANS RETREAT COURT	TO MH 520 - 20.0'	TO MH 525 - 51.5'
152	MORGANS RETREAT COURT	TO MH 520 - 26.7'	TO WMC LOT 151/152 - 21.3'
153	MORGANS RETREAT COURT	TO F.H. - 38.0'	TO MH 530 - 56.4'
154	MORGANS RETREAT COURT	TO MH 530 - 35.1'	TO 8" VALVE - 64.3'
155	MORGANS RETREAT COURT	TO MH 530 - 31.0'	TO WMC LOT 155/156 - 9.2'
156	MORGANS RETREAT COURT	TO MH 530 - 22.1'	TO WMC LOT 155/156 - 7.6'
157	MORGANS RETREAT COURT	TO MH 530 - 20.5'	TO MH 515 - 51.5'
158	MORGANS RETREAT COURT	TO MH 530 - 29.0'	TO MH 515 - 32.0'
159	MORGANS RETREAT COURT	TO MH 515 - 19.0'	TO MH 510 - 36.2'
160	MORGANS RETREAT COURT	TO MH 510 - 20.2'	TO MH 515 - 29.5'
161	MORGANS RETREAT COURT	TO MH 510 - 16.5'	TO MH 505 - 67.5'
162	MORGANS RETREAT COURT	TO MH 510 - 31.8'	TO MH 505 - 46.7'

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: MORGANS RETREAT COURT			
0+00.00	EX. 8" PLUG & BUTTRESS	587323.56	1365268.34
0+48.05	1/32 H.B.	587295.40	1365308.25
0+73.98	1/8 H.B.	587277.03	1365325.42
1+04.91	1/8 H.B.	587274.07	1365356.21
2+22.03	8" VALVE	587344.41	1365449.84
2+28.03	8"X6" F.H. TEE	587348.02	1365454.64
2+82.90	1/16 H.B.	587380.97	1365498.51
3+10.00	8" PLUG & BUTTRESS	587404.40	1365512.12

AS BUILTS
BY: DJE DATE: 8/19/13

STATION	LOT	ELEVATION AT MAIN	ELEVATION AT R/W	M.C.E.
EX. MH 505 MH 510				
0+46 RT.	162	384.38	384.58	388.58
0+67 RT.	161	385.50	385.77	389.77
MH 510 MH 515				
0+13 RT.	160	386.26	386.60	390.60
0+19 LT.	145	386.32	386.70	390.70
0+33 RT.	159	386.46	386.82	390.82
MH 515 TO MH 520				
0+43 LT.	146	387.15	387.55	391.55
0+54 LT.	147	387.26	387.66	391.66
0+59 RT.	155	387.31	388.15	392.15
0+68 RT.	154	387.40	388.16	392.06
0+89 RT.	153	387.61	387.95	391.95
0+99 LT.	148	387.71	388.11	392.11
1+14 LT.	149	387.86	388.26	392.26
1+59 LT.	150	388.31	388.77	392.77
1+76 LT.	151	388.48	388.98	392.98
MH 520 TO MH 525				
0+MH 525 LT.	152	389.40	389.90	393.80
MH 515 TO MH 530				
0+25 RT.	158	386.97	387.37	391.37
0+MH 530 RT.	157	387.30	387.68	391.68
0+MH 530 RT.	156	387.30	387.74	391.74

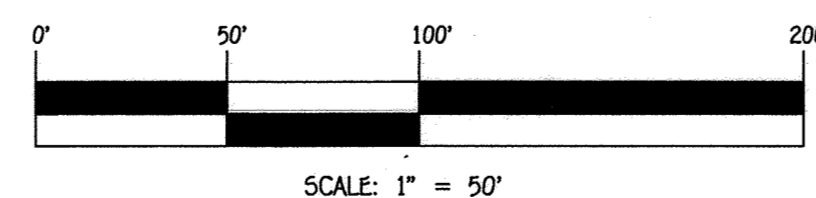
*NOTE: ALL WATER METER VAULTS ARE TWIN WATER VAULTS.

LOT NUMBER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
145	MORGANS RETREAT COURT	TO MH 510 - 48.3'	TO MH 515 - 48.4'
146	MORGANS RETREAT COURT	TO MH 510 - 48.3'	TO MH 515 - 48.4'
147	MORGANS RETREAT COURT	TO 8" VALVE - 44.5'	TO MH 515 - 65.3'
148	MORGANS RETREAT COURT	TO 8" VALVE - 44.5'	TO MH 515 - 65.3'
149	MORGANS RETREAT COURT	TO 8" VALVE - 19.2'	TO MH 520 - 50.0'
150	MORGANS RETREAT COURT	TO 8" VALVE - 19.2'	TO MH 520 - 50.0'
151	MORGANS RETREAT COURT	TO MH 520 - 30.3'	TO MH 525 - 31.5'
152	MORGANS RETREAT COURT	TO MH 520 - 30.3'	TO MH 525 - 31.5'
153	MORGANS RETREAT COURT	TO 8" VALVE - 52.6'	TO MH 530 - 47.6'
154	MORGANS RETREAT COURT	TO 8" VALVE - 52.6'	TO MH 530 - 47.6'
155	MORGANS RETREAT COURT	TO F.H. - 83.5'	TO MH 530 - 23.6'
156	MORGANS RETREAT COURT	TO F.H. - 83.5'	TO MH 530 - 23.6'
157	MORGANS RETREAT COURT	TO MH 515 - 47.0'	TO MH 530 - 19.8'
158	MORGANS RETREAT COURT	TO MH 515 - 47.0'	TO MH 530 - 19.8'
159	MORGANS RETREAT COURT	TO MH 515 - 20.2'	TO MH 510 - 30.6'
160	MORGANS RETREAT COURT	TO MH 515 - 20.2'	TO MH 510 - 30.6'
161	MORGANS RETREAT COURT	TO MH 510 - 20.0'	TO MH 505 - 60.0'
162	MORGANS RETREAT COURT	TO MH 510 - 20.0'	TO MH 505 - 60.0'

WATER MAIN NOTES:

- ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE, DR-18.
- 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.
- DEFLECTION COUPLINGS SHALL BE CERTAIN-TEED HIGH DEFLECTION COUPLINGS.
- ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

CONTRACT NO. 14-4792-D
ELLCOTT CROSSING
LOTS 145-162 &
OPEN SPACE LOTS 163-166
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
S. C. CLEGG
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
Chris Edwards
CHIEF, DEVELOPMENT ENGINEERING DIVISION
6-12-13
DATE: M.G.

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 6/7/16/14.
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTONAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PARK
ELLCOTT CITY, MARYLAND 21042
(410) 461-2995

#12043
DESIGNED BY: B.C.R.
DRAWN BY: B.C.R.
CHECKED BY: P.W.K.
DATE: JUNE, 2013
BY NO. REVISION DATE

WATER & SEWER MAIN EXTENSIONS
PROFILES, CHARTS & TABLES
600' SCALE MAP NO. 24/25 BLOCK NO. 6/1
F.C.C. WORK ORDER NO. 10040
FILE NAME: WATER & SEWER MAIN EXTENSION PLAN

ELLCOTT CROSSING
LOTS 145-162 & OPEN SPACE
LOTS 163-166
WATER & SEWER MAIN EXTENSIONS
CONTRACT NO. 14-4792-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
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