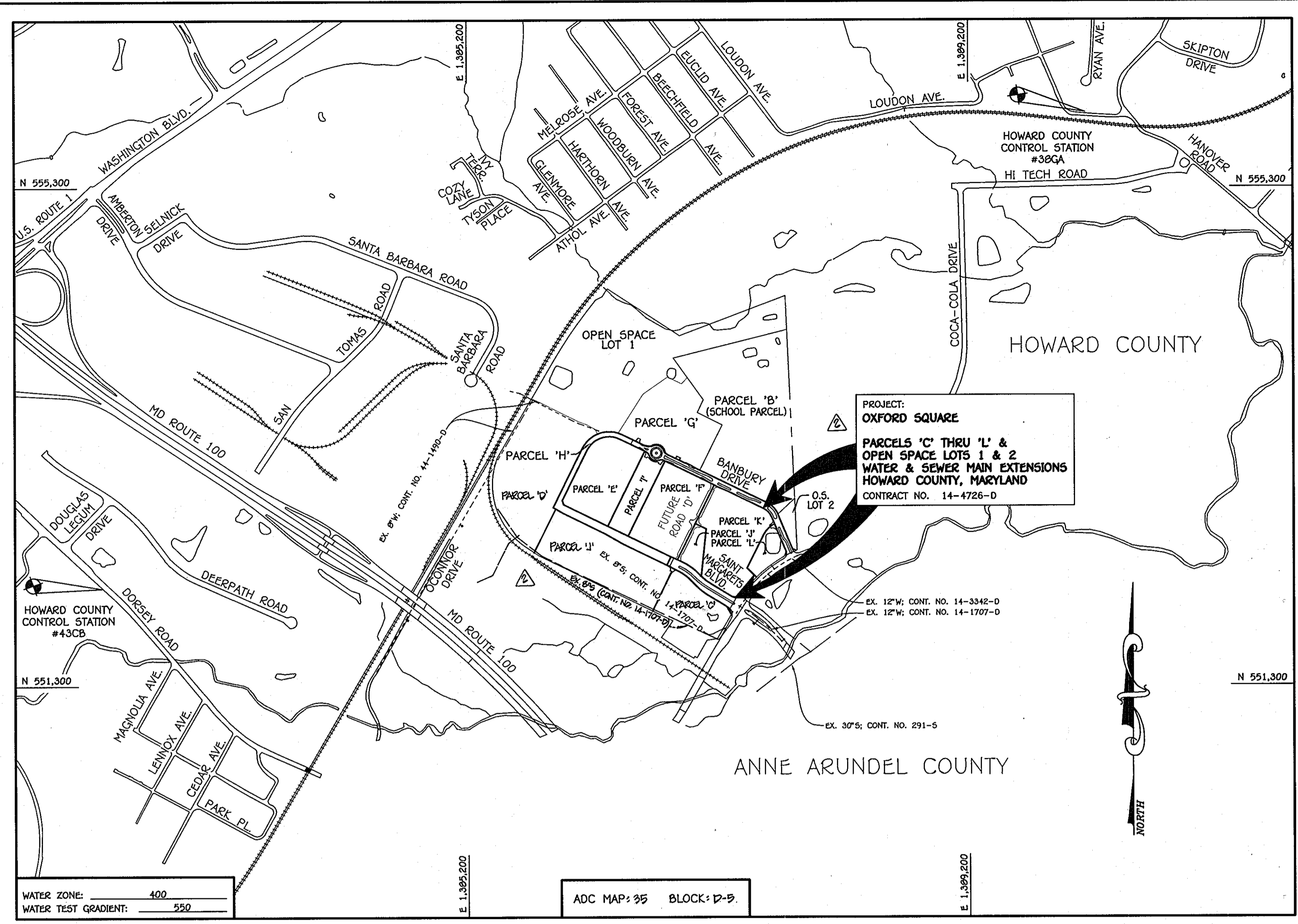


QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	SUPPLIER
APD	174 L.F.			
8" PVC	1,791 L.F.			
8" PLUG	7 EACH			
MANHOLES	15 EACH			
12" W	1,907 L.F.			
8" W	421 L.F.			
6" W	121 L.F.			
4" DEFLECTION COUPLING	2 EACH			
1/8" H.B.	4 EACH			
1/16" H.B.	3 EACH			
1/32" H.B.	6 EACH			
12"x12" TAPPING SLEEVE	1 EACH			
12" TAPPING VALVE	1 EACH			
12"x12" CROSS	1 EACH			
12"x8" TEE	6 EACH			
12"x6" TEE	4 EACH			
8"x6" TEE	2 EACH			
12" VALVE	7 EACH			
8" VALVE	7 EACH			
6" VALVE	6 EACH			
12" PLUG	2 EACH			
8" PLUG	7 EACH			
CONTINUITY TEST STATION	6 EACH			
FIRE HYDRANT	6 EACH			

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

BENCHMARK INFORMATION
 B.M.#1 - HOWARD COUNTY CONTROL STATION #38CA - HORIZONTAL - NAD '83)
 (LOCATED ALONG RAILROAD AVENUE, JUST SOUTH OF RYAN AVENUE, APPROX. 22.6' NORTH FROM
 THE CENTER LINE OF RAILROAD AVENUE.
 N 555,897.3373
 E 1,392,132.0933
 ELEVATION = 80.783 - VERTICAL - (NAVD '88)
 B.M.#2 - HOWARD COUNTY CONTROL STATION #43CB - HORIZONTAL - (NAD '83)
 (LOCATED ALONG THE SOUTHWEST CORNER OF DORSEY ROAD, APPROX. 2.2' OFF THE EDGE OF PAVING,
 APPROX. 46.7' EAST OF POWER POLE NO. 19)
 N 552,084.2468
 E 1,392,292.4190
 ELEVATION = 144.391 - VERTICAL - (NAVD '88)



TYPE OF BUILDING: COMMERCIAL & RESIDENTIAL	
NUMBER OF PARCELS:	11
NO. OF WATER HOUSE CONNECTIONS:	-0-
NO. OF SEWER HOUSE CONNECTIONS:	-0-
SEWER SHED:	PATAPSCO
TREATMENT PLANT:	PATAPSCO WASTEWATER TREATMENT PLANT CITY OF BALTIMORE

LOCATION MAP
SCALE: 1" = 600'

PLAN REFERENCE NUMBERS:
F-12-026

DEVELOPER'S CERTIFICATION
 I/WE 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. Keibel, FOR:
 PRESTON SCHEFFENACKER 05-11-12
 SIGNATURE OF DEVELOPER DATE

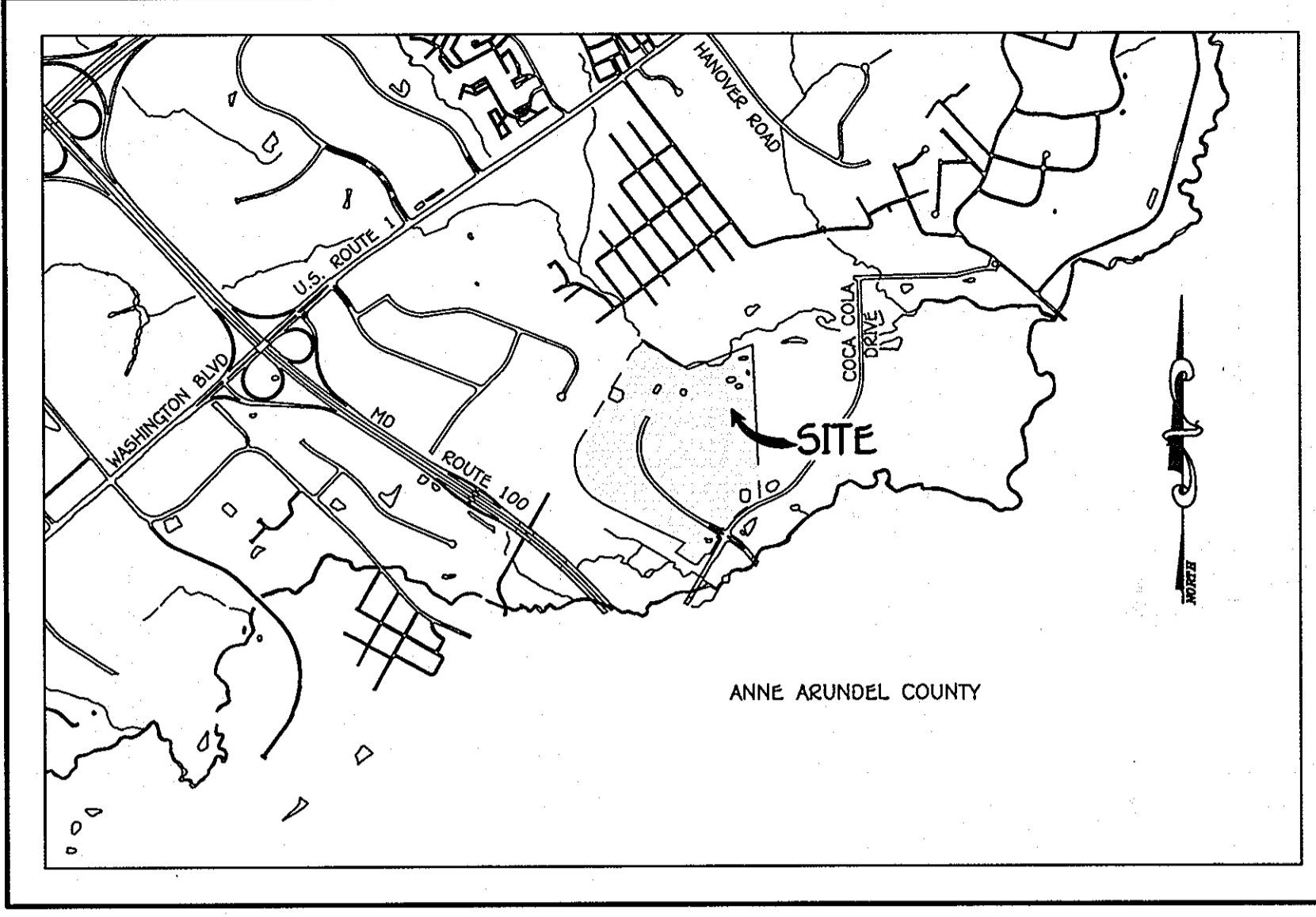
ENGINEER'S CERTIFICATION
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Paul W. Keibel 05/11/12
 SIGNATURE OF ENGINEER DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 3009 OF THE HOWARD COUNTY DESIGN MANUAL - VOLUME IV: STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AND AS SHOWN ON THE ROAD CONSTRUCTION PLANS, F-12-026.
 Paul W. Keibel, FOR:
 PRESTON SCHEFFENACKER PROPERTIES 05-11-12
 SIGNATURE OF DEVELOPER DATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED:
 John R. Kohnen 6/12/12
 HOWARD SOIL CONSERVATION DISTRICT DATE

CONTRACT NO. 14-4726-D OXFORD SQUARE

PARCELS 'C' THRU 'L' & OPEN SPACE LOTS 1 AND 2 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 MAY, 2010 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. 38CA & NO. 43CB.
 - 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 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 (circle with cross) AT THE LOCATIONS OF THE TEST PITS. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR FITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN OUG 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)	410-685-0123
BUREAU OF UTILITIES	410-313-4900
COLONIAL PIPELINE CO	410-795-1390
MISS UTILITY	1-800-257-7777
STATE HIGHWAY ADMINISTRATION	410-531-5533
VERIZON	1-800-743-0033 / 410-224-9210

- PART B: WATER MAIN GENERAL NOTES**
- ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE, DR-18.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF 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 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 1005 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 HARNESSSES. 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.

- 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 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.

OWNER
 KELLOGG-COR, LLC
 c/o DAVID P. SCHEFFENACKER, JR.
 MANAGING MEMBER
 2330 WEST JOPPA ROAD, SUITE 190
 LUTHERVILLE, MARYLAND 21093-4514
 PHONE - 410-296-3800

DEVELOPER
 PRESTON SCHEFFENACKER PROPERTIES
 2330 WEST JOPPA ROAD, SUITE 190
 LUTHERVILLE, MARYLAND 21093-4514
 PHONE - 410-296-3800

CONTRACT NO. 14-4726-D
OXFORD SQUARE
 PARCELS 'C' THRU 'L' &
OPEN SPACE LOTS 1 AND 2
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

APPROVED:
 John C. Coen 5/24/12
 CHIEF, BUREAU OF UTILITIES DATE

APPROVED:
 [Signature] 6/12/12
 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 5/31/14.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK 18275 BALTIMORE NATIONAL PIKE
 ELIZABETH CITY, MARYLAND 21042
 (410) 461-2892

PAUL W. KEIBEL
 PROFESSIONAL ENGINEER
 #12043

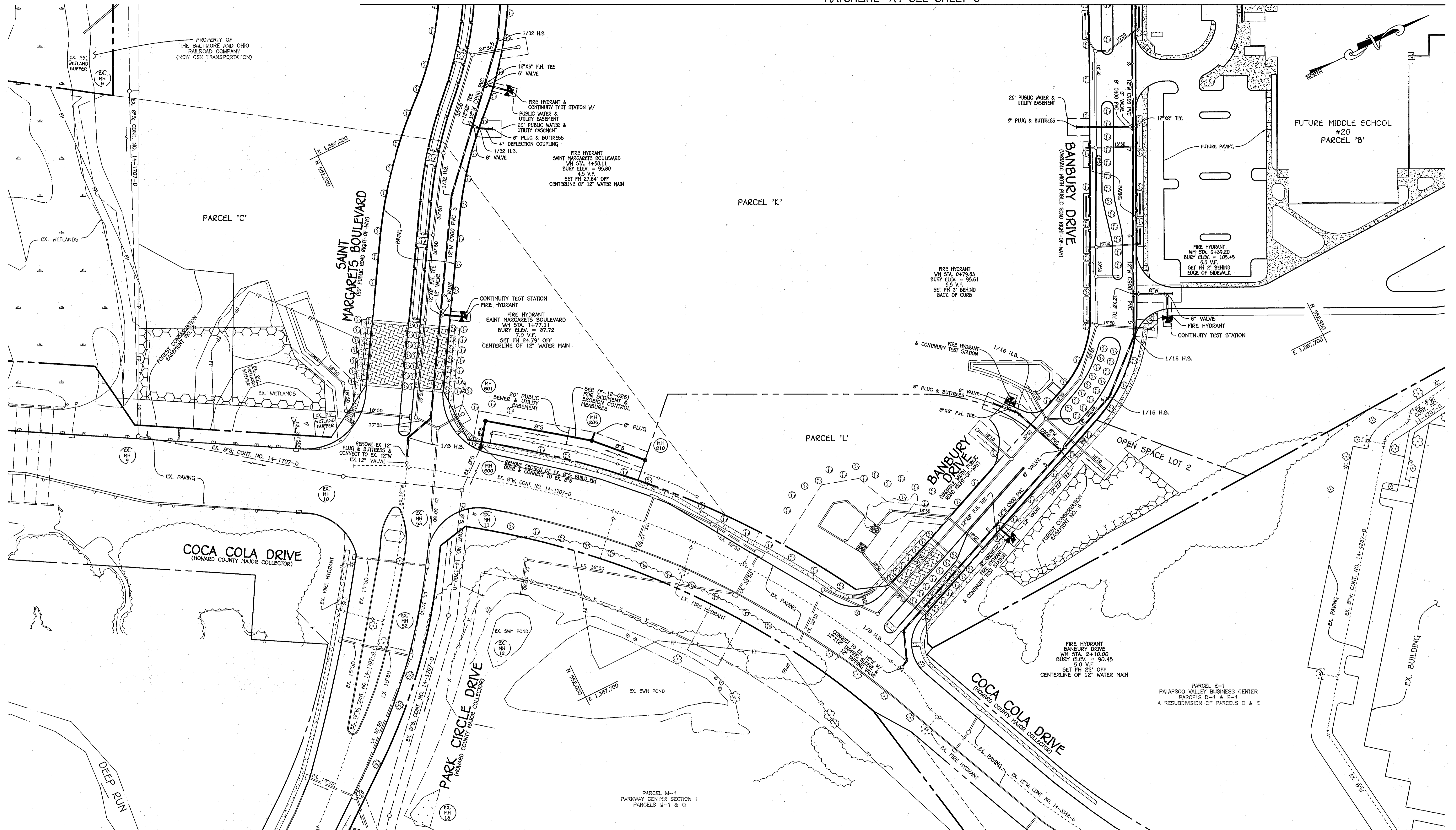
DESIGNED BY:	B.C.R.	
DRAWN BY:	B.C.R.	
CHECKED BY:	P.C.C.	RENAME SHEET NUMBER 7/02/13
	P.C.C.	RENAME LOCATION MAP TO UPDATE PARCEL LINES 7/02/13
	P.C.C.	RENAME QUANTITY AMOUNTS FOR SANITARY SEWER & MANHOLE 7/02/13
DATE:	MAY, 2012	
BY:	NO.	REVISION

WATER & SEWER MAIN EXTENSIONS
TITLE SHEET

600' SCALE MAP NO. 38 BLOCK NO. 19 & 20
 F.C.C. WORK ORDER NO. 09014
 FILE NAME: WATER & SEWER MAIN EXTENSION TITLE SHEET

OXFORD SQUARE
 PARCELS 'C' THRU 'L' & OPEN SPACE LOTS 1 & 2
 WATER & SEWER MAIN EXTENSIONS
 CONTRACT NO. 14-4726-D
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 1 OF 2



NOTE: SEE SHEET 9 FOR ABANDONMENT OF EX. 8\"/>

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 2 OF 8 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING, ON JUNE 15, 2012.

PLAN
SCALE: 1" = 50'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

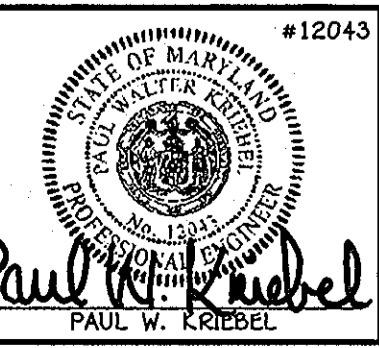
John C. Curran
7/13/13
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

John C. Curran
08/13
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 IS 7/16/14.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FREE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2895



DESIGNED BY:	S.C.R.
DRAWN BY:	S.C.R.
CHECKED BY:	P.W.K.
DATE:	JULY, 2013
BY NO.	
REVISION	
DATE	7/02/13

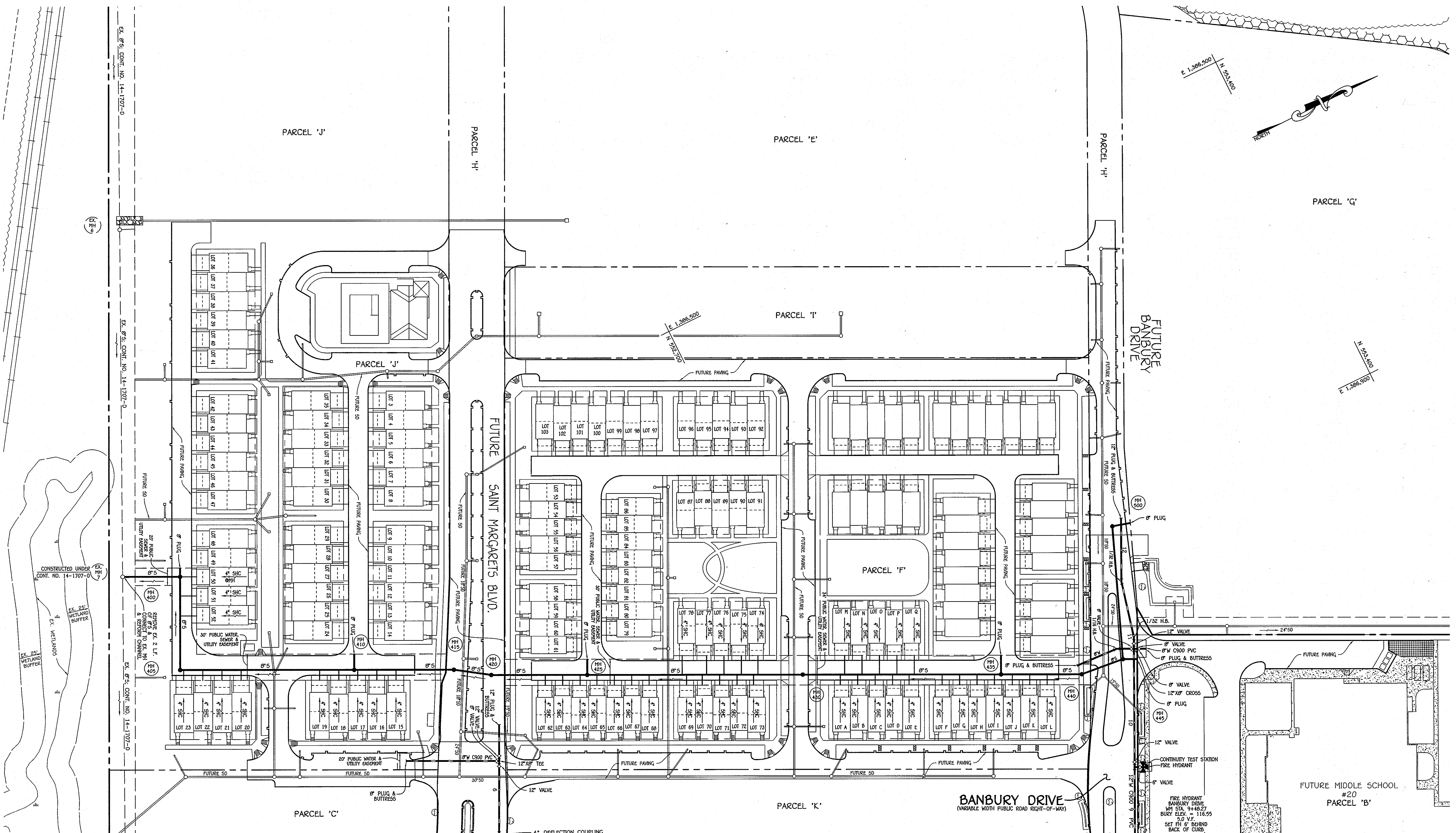
WATER & SEWER MAIN EXTENSIONS PLAN

600' SCALE MAP NO. 38 BLOCK NO. 19 & 20
F.C.C. WORK ORDER NO. 09014
FILE NAME: WATER & SEWER MAIN EXTENSION PLAN SHEET

OXFORD SQUARE
PARCELS 'C' THRU 'L' & OPEN SPACE LOTS 1 & 2
WATER & SEWER MAIN EXTENSIONS
CONTRACT NO. 14-4726-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 8

I:\2009\09014\Eng\Water & Sewer\Contract\3001 - Contract No. 14-4726-d (F-12-026)\09014-3001 Water & Sewer Base Plan - Phase 1 (Redline 1).dwg (New) Plan Sheet 2, 7/17/2013 10:05:52 AM



NOTE: SEE SHEET 9 FOR ABANDONMENT OF EX. 8" W & 8" S ON SITE.

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 3 OF 8 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING, ON JUNE 15, 2012.

MATCHLINE 'A': SEE SHEET 2

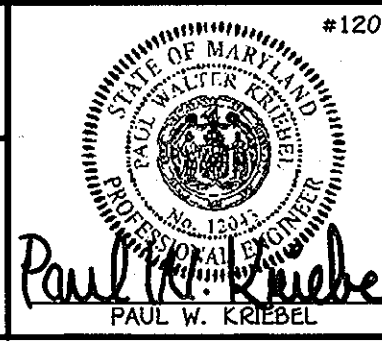
PLAN
SCALE: 1" = 50'

CONTRACT NO. 14-4726-D
OXFORD SQUARE
PARCELS 'C' THRU 'L' &
OPEN SPACE LOTS 1 AND 2
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

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.



DESIGNED BY: B.C.R.
DRAWN BY: B.C.R.
CHECKED BY: P.W.K.
DATE: JULY, 2013

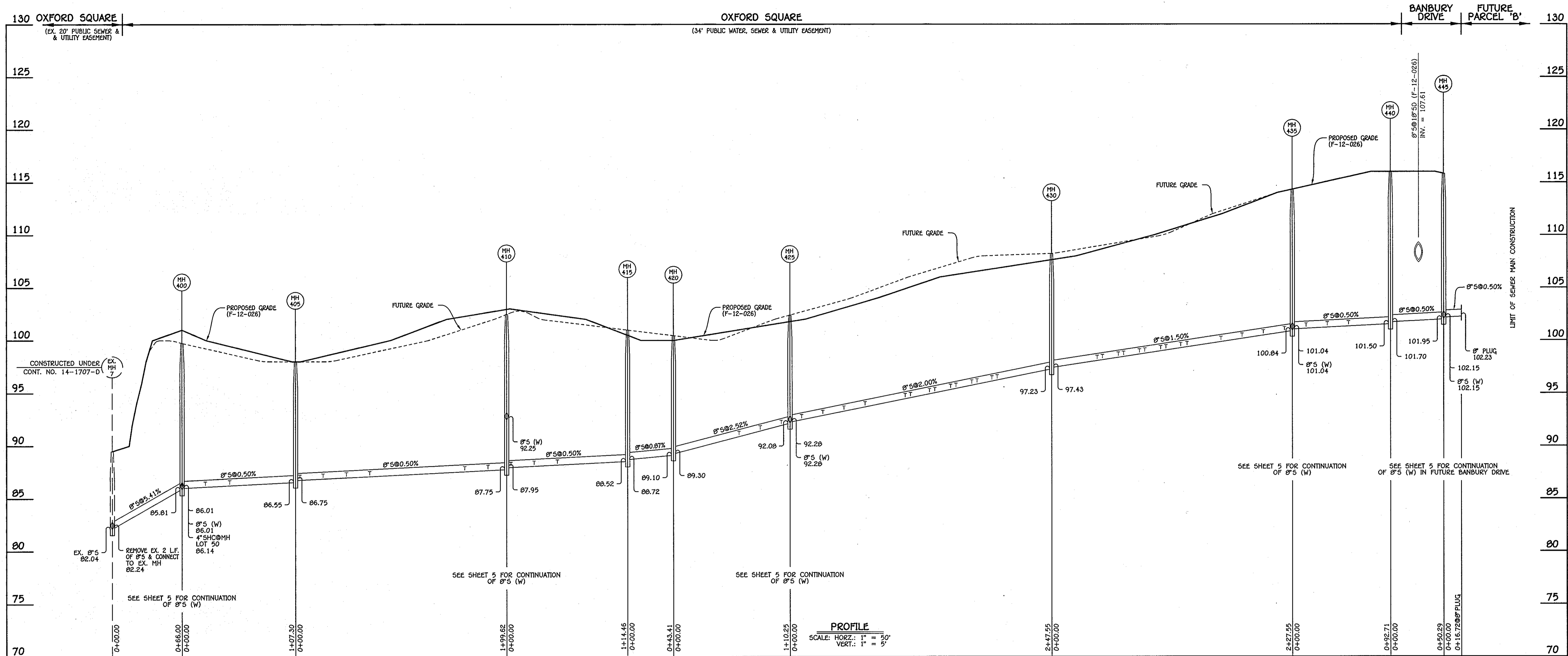
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WATER & SEWER MAIN EXTENSIONS PLAN
600' SCALE MAP NO. 38 BLOCK NO. 19 & 20
F.C.C. WORK ORDER NO. 09014
FILE NAME: WATER & SEWER MAIN EXTENSION PLAN SHEET

OXFORD SQUARE
PARCELS 'C' THRU 'L' & OPEN SPACE LOTS 1 & 2
WATER & SEWER MAIN EXTENSIONS
CONTRACT NO. 14-4726-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 8

I:\2009\09014\Wg\Water & Sewer\Contract\3001 - Contract No. 14-4726-d (F-12-026)\09014-3001 Water & Sewer Base Plan - Phase 1 (Redline) 1.Ang. (New) Plan Sheet 3, 7/17/2013 10:21:19 AM



8" SEWER MAIN: EX. MH 7 - MH 445

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
400	552071.51	1386504.63	99.75
405	552024.03	1386600.86	98.00
410	552203.05	1386689.19	102.48
415	552305.69	1386739.84	100.98
420	552341.54	1386764.32	100.45
425	552440.41	1386813.10	102.39
430	552682.41	1386922.64	108.16
435	552866.47	1387023.33	114.32
440	552949.61	1387064.35	116.00
445	552999.62	1387089.67	115.82
8" PLUG	553014.61	1387077.07	---

NOTE: SET MH RIMS FLUSH W/FUTURE GRADE; AS SHOWN

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 4 OF 8 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING, ON JUNE 15, 2012.

SEWER HOUSE CONNECTION CHART					
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT R/W	M.C.E.	SLAB
EX. MH 7 TO MH 400					
0+62 RT.	50	86.14	86.52	90.42	102.60
MH 400 TO MH 405					
0+22 LT.	51	86.29	86.67	90.57	101.94
0+45 LT.	52	86.41	86.79	90.69	101.27
MH 405 TO MH 410					
0+04 RT.	23	86.94	87.18	90.98	98.75
0+26 RT.	22	87.05	87.29	91.09	99.42
0+48 RT.	21	87.16	87.40	91.20	100.08
0+70 RT.	20	87.27	87.51	91.30	100.00
1+60 RT.	19	87.72	87.96	91.76	103.36
1+82 RT.	18	87.83	88.07	91.87	104.03
MH 410 TO MH 415					
0+04 RT.	17	88.14	88.38	92.18	104.03
0+26 RT.	16	88.25	88.49	92.29	104.03
0+48 RT.	15	88.36	88.60	92.40	103.36

SEWER HOUSE CONNECTION CHART					
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT R/W	M.C.E.	SLAB
MH 420 TO MH 425					
0+62 RT.	62	91.03	91.27	95.07	102.81
0+82 RT.	63	91.54	91.78	95.58	103.48
1+02 RT.	64	92.04	92.28	96.08	103.48
MH 425 TO MH 430					
0+11 RT.	65	92.67	92.91	96.71	104.15
0+31 RT.	66	93.07	93.31	97.11	104.81
0+51 RT.	67	93.47	93.71	97.51	105.48
0+71 RT.	68	93.87	94.11	97.91	106.15
1+09 LT.	78	94.63	95.07	98.97	108.33
1+14 LT.	69	94.73	94.97	98.77	107.33
1+32 RT.	70	95.09	95.33	99.13	108.00
1+37 LT.	77	95.19	95.63	99.53	109.00
1+52 RT.	71	95.49	95.73	99.53	108.67
1+57 LT.	76	95.59	96.03	99.93	109.66
1+72 RT.	72	95.89	96.13	99.93	109.33
1+77 LT.	75	95.99	96.43	100.33	110.33
1+91 RT.	73	96.27	96.51	100.31	110.00
1+96 LT.	74	96.37	96.81	100.71	111.00

SEWER HOUSE CONNECTION CHART					
STATION	LOT	ELEVATION AT MAIN	ELEVATION AT R/W	M.C.E.	SLAB
MH 430 TO MH 435					
0+43 RT.	A	98.25	98.49	102.29	
0+48 LT.	M	98.32	98.76	102.66	
0+63 RT.	B	98.55	98.79	102.59	
0+68 LT.	N	98.62	99.06	102.96	
0+83 RT.	C	98.85	99.09	102.89	
0+88 LT.	O	98.92	99.36	103.26	
1+03 RT.	D	99.15	99.39	103.19	
1+08 LT.	P	99.22	99.66	103.56	
1+22 RT.	E	99.43	99.67	103.47	
1+28 LT.	Q	99.52	99.96	103.86	
1+60 RT.	F	100.00	100.24	104.04	
1+80 RT.	G	100.30	100.54	104.34	
2+00 RT.	H	100.60	100.84	104.64	
2+20 RT.	I	100.90	101.14	104.94	
MH 435 TO MH 440					
0+13 RT.	J	101.28	101.52	105.32	
0+33 RT.	K	101.38	101.62	105.42	
0+53 RT.	L	101.48	101.72	105.52	

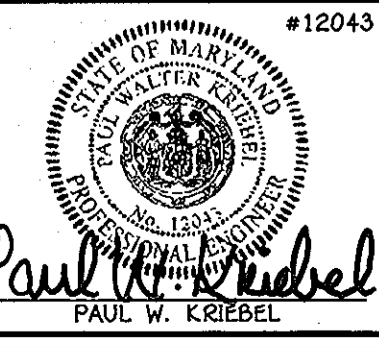
* MINIMUM SEWER SERVICE ELEVATION: NO GRAVITY SERVICE AVAILABLE

CONTRACT NO. 14-4726-D
OXFORD SQUARE
PARCELS 'C' THRU 'L' &
OPEN SPACE LOTS 1 AND 2
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Steve C. Green
7/23/13
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
Paul W. Kriebel
8/1/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION

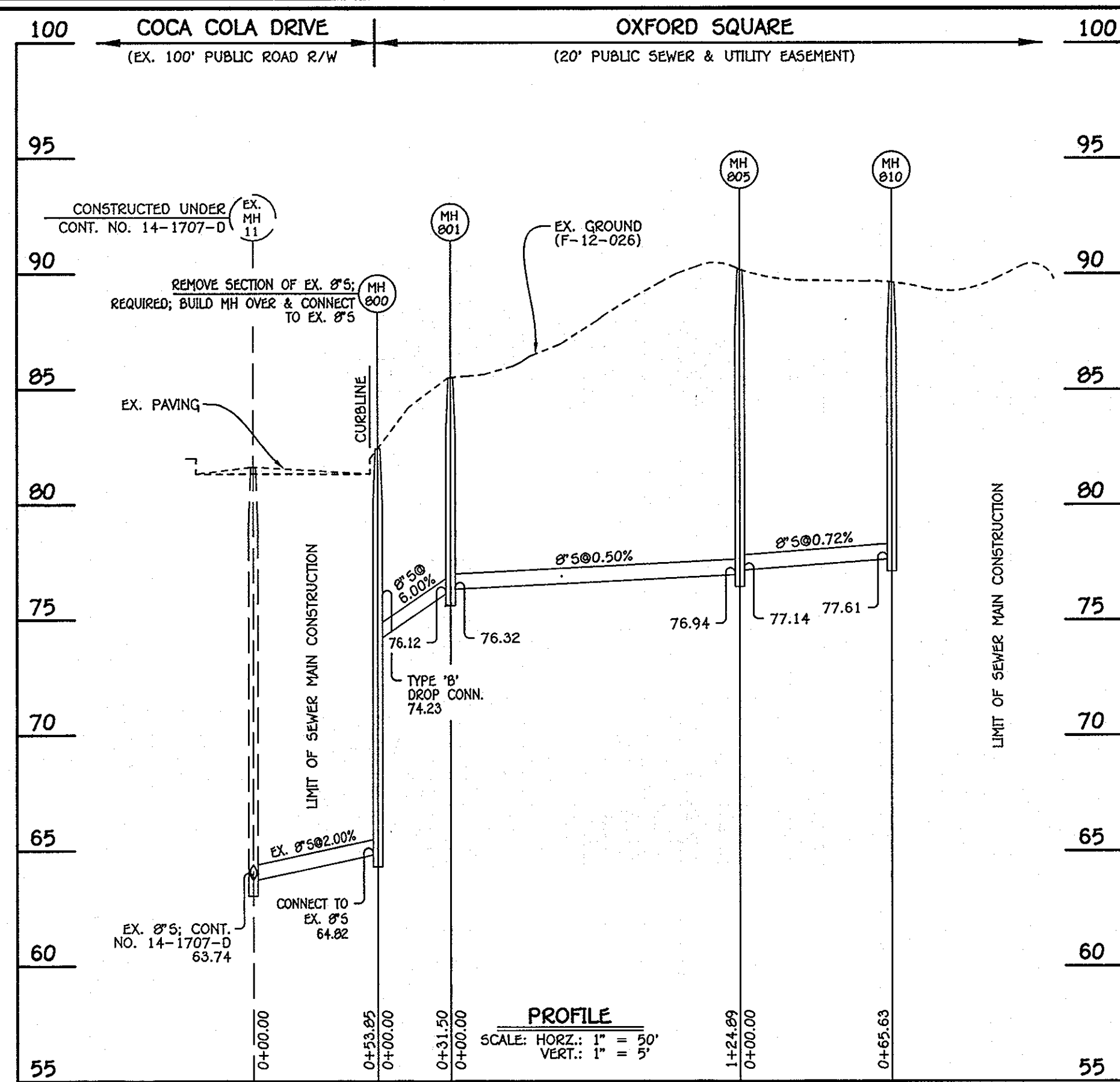
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 12043 EXPIRATION DATE IS 7/18/14.
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL Pk
ELLSWORTH CITY, MARYLAND 21116
(410) 461-2925



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

SEWER MAIN PROFILE & CHARTS
600' SCALE MAP NO. 38 BLOCK NO. 19 & 20
F.C.C. WORK ORDER NO. 09014
FILE NAME: WATER & SEWER MAIN EXTENSION PROFILE SHEET

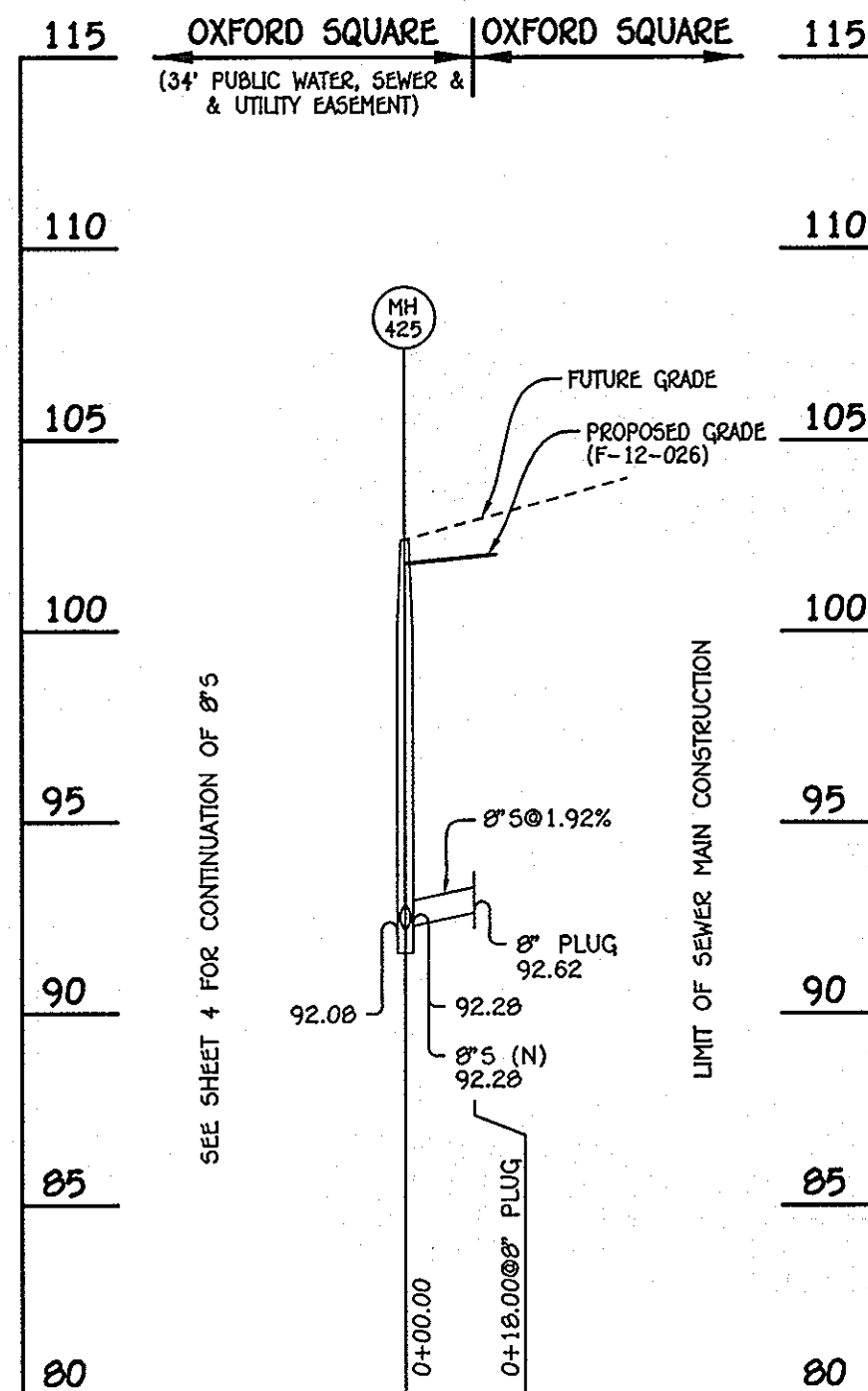
OXFORD SQUARE
PARCELS 'C' THRU 'L' & OPEN SPACE LOTS 1 & 2
WATER & SEWER MAIN EXTENSIONS
CONTRACT NO. 14-4726-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN
SHEET 4 OF 8



8" SEWER MAIN; PARCELS 'K' & 'L': EX. MH 11 - MH 810

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
800	552018.91	1387386.66	82.43
801	552037.77	1387361.43	85.50
805	552137.81	1387436.21	90.15
810	552183.11	1387483.70	89.62

NOTE: SET MH RIMS FLUSH W/EXISTING GROUND.



8" SEWER MAIN: MH 425 - 8" PLUG (W)

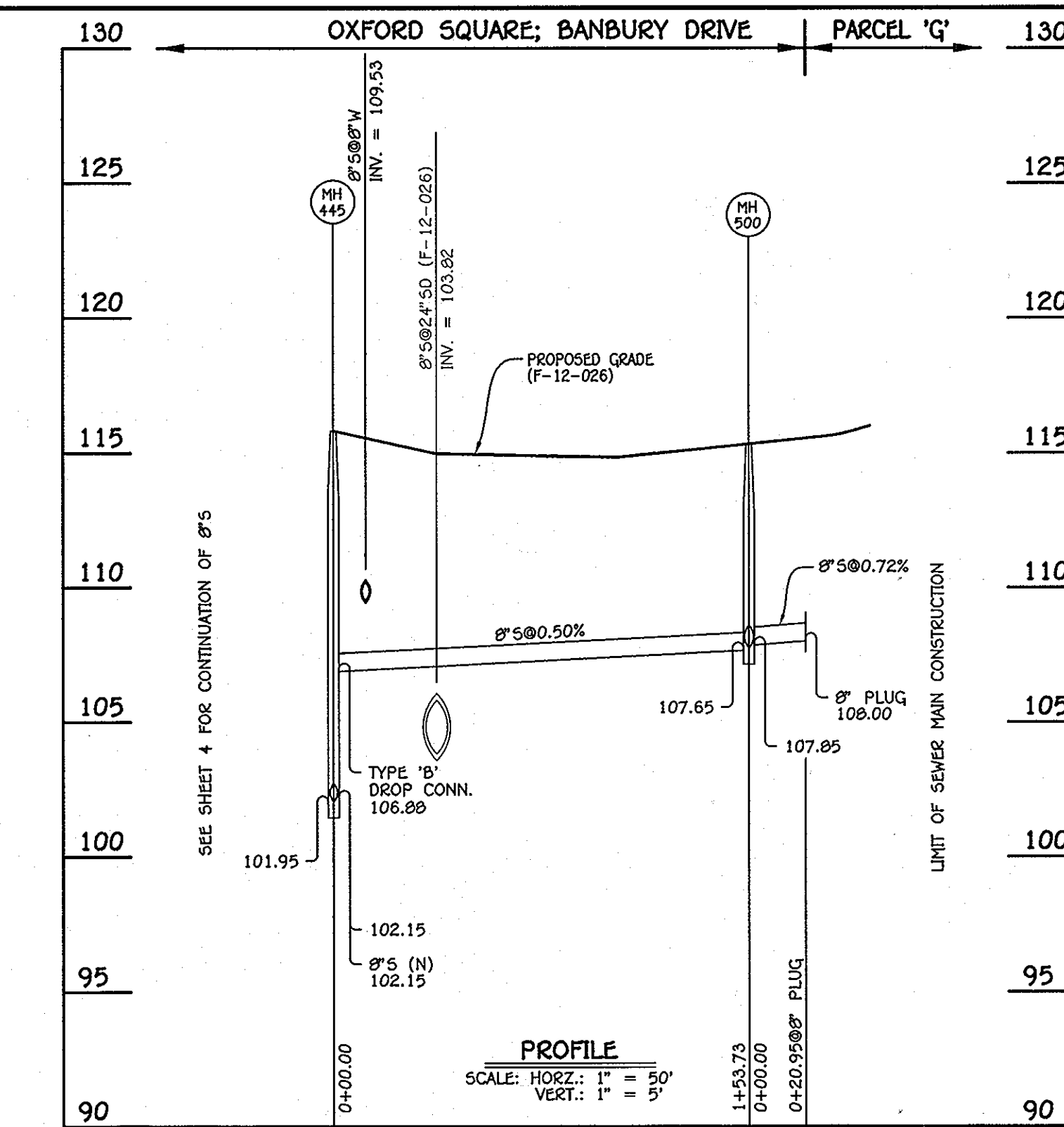
MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
425	552440.41	1386813.10	102.39
8" PLUG	552440.37	1386796.96	---

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
435	552866.47	1387023.33	114.32
8" PLUG	552876.21	1387003.60	---

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.

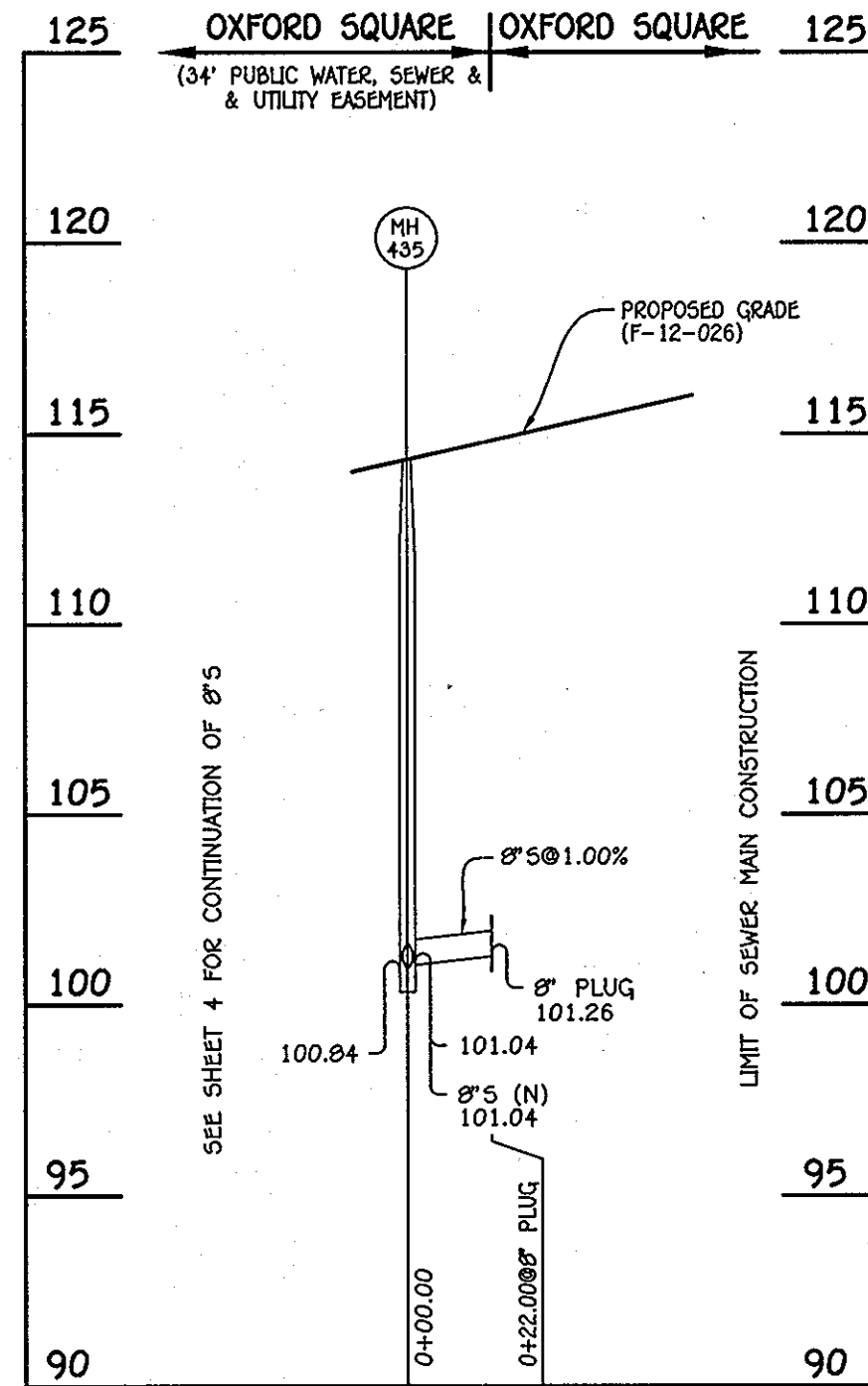
NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 5 OF 8 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING, ON JUNE 15, 2012.



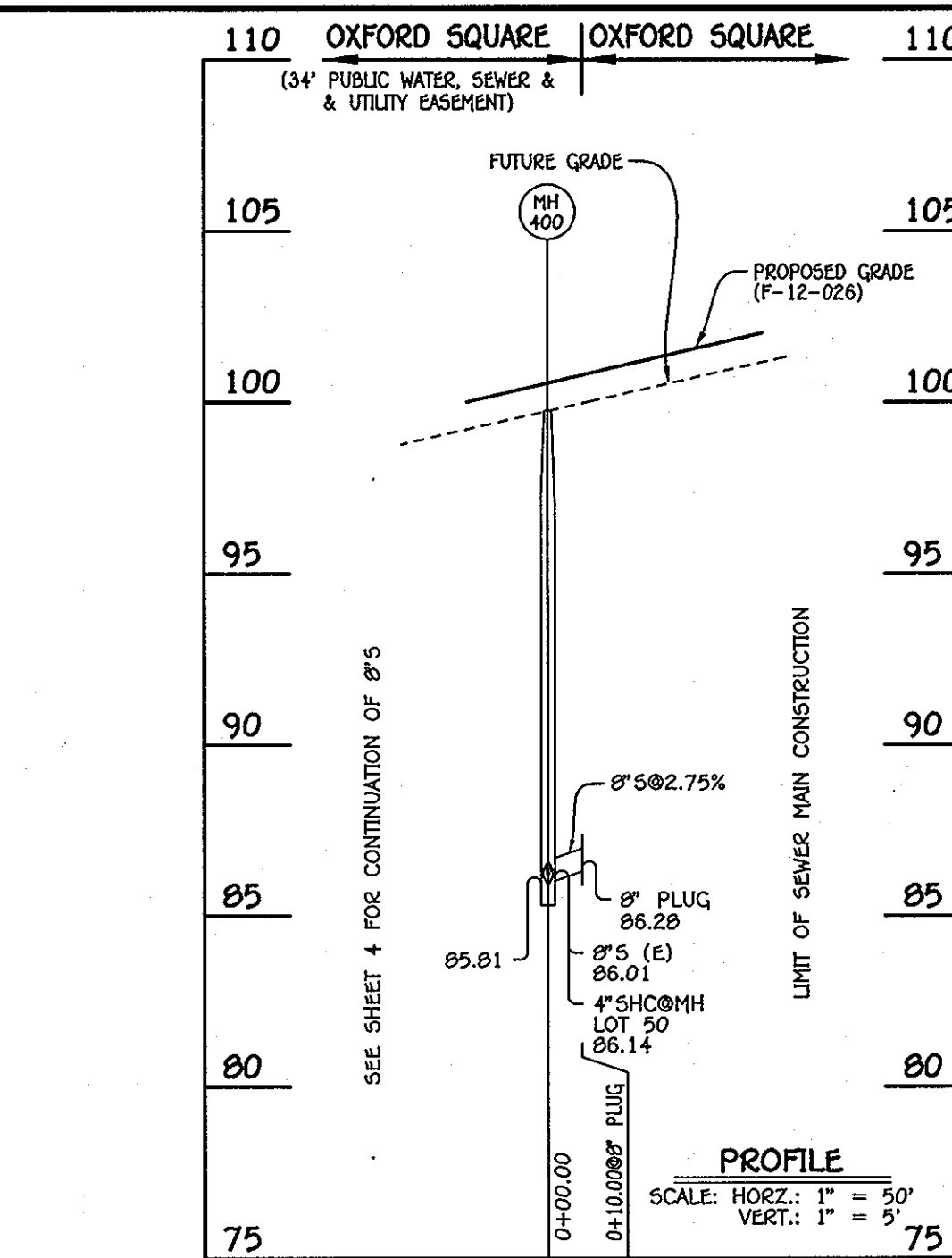
8" SEWER MAIN; BANBURY DRIVE: MH 445 - MH 500

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
445	552999.62	1387069.67	115.82
500	553056.67	1386926.92	115.33
8" PLUG	553076.81	1386932.67	---

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.



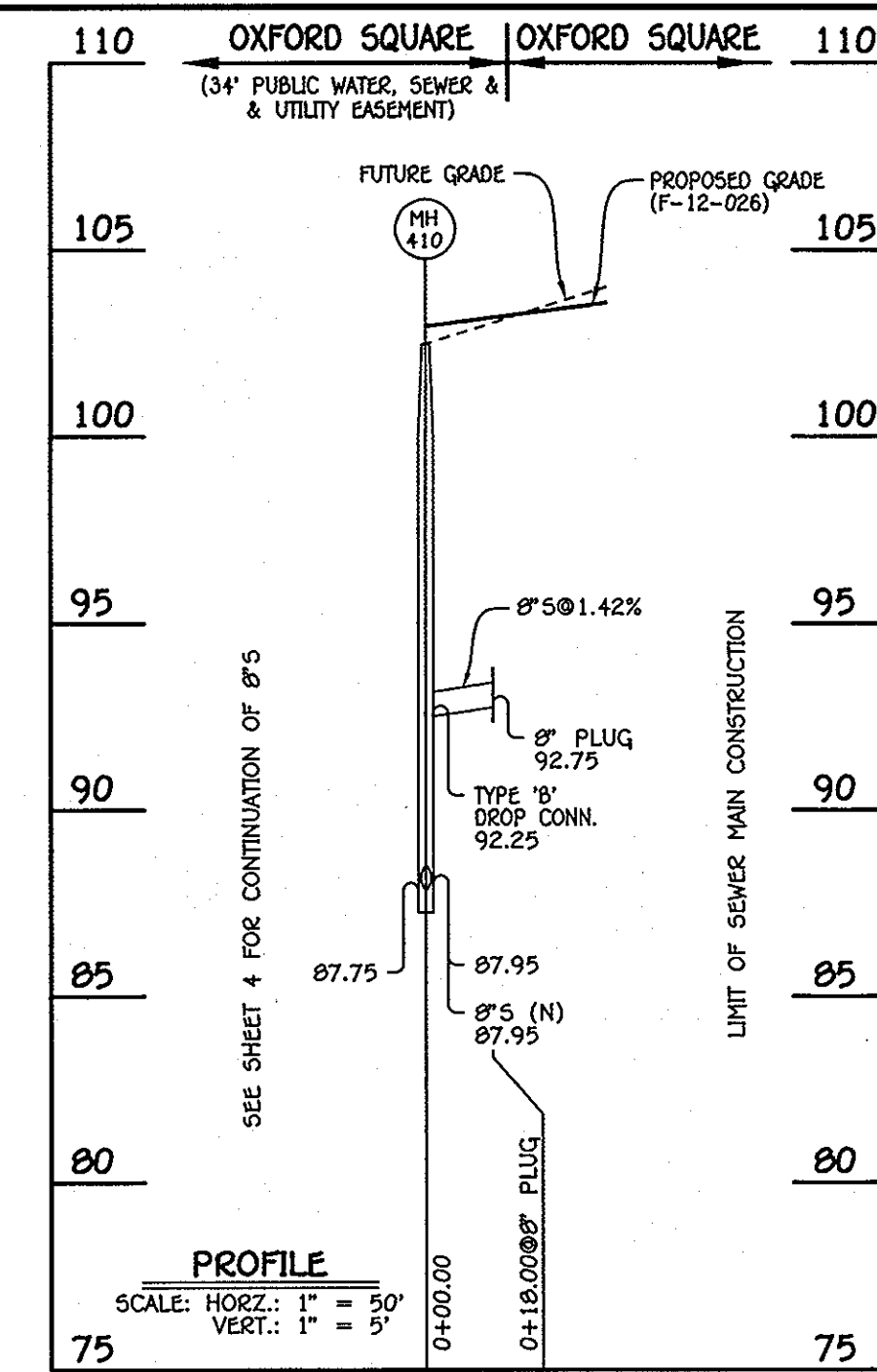
8" SEWER MAIN: MH 435 - 8" PLUG (W)



8" SEWER MAIN: MH 400 - 8" PLUG (W)

MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
400	552071.51	1386504.63	99.75
8" PLUG	552075.94	1386495.67	---

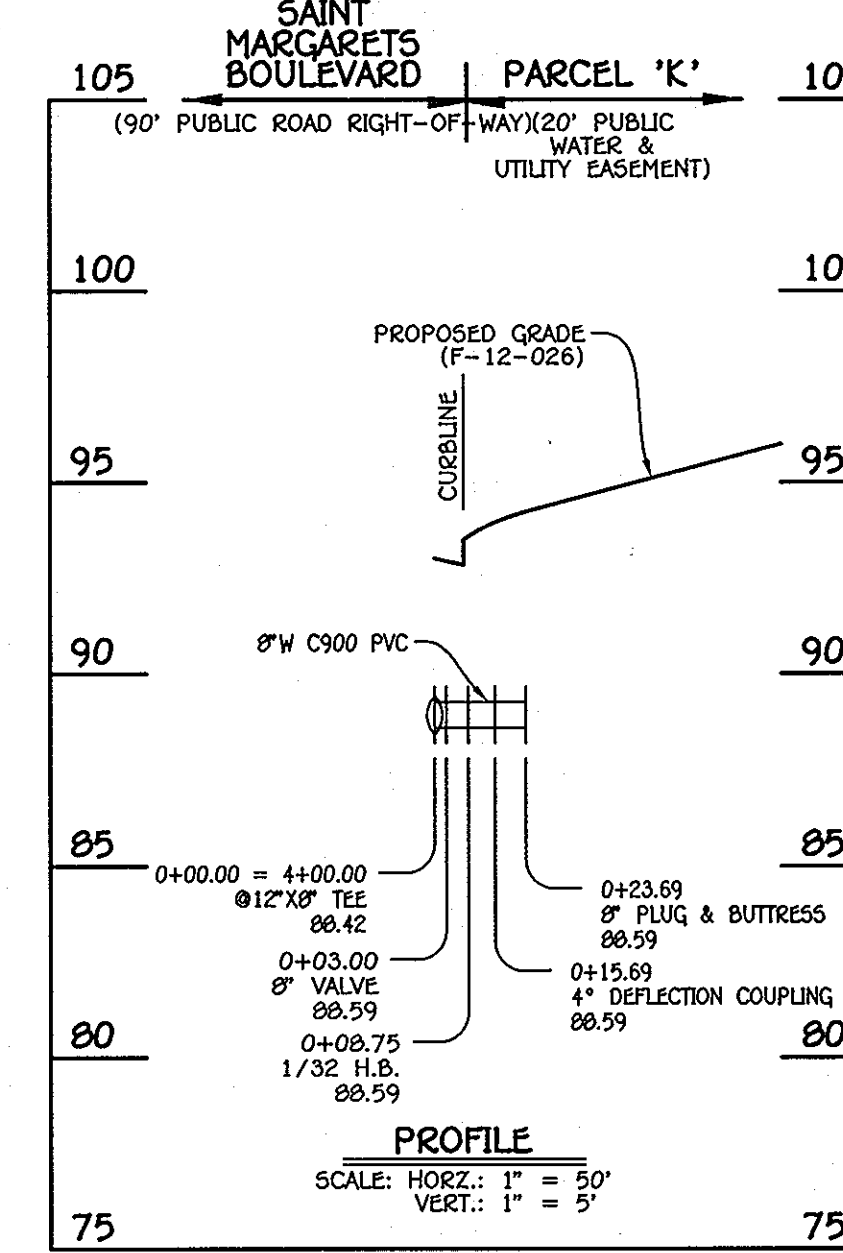
NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.



8" SEWER MAIN: MH 410 - 8" PLUG (W)

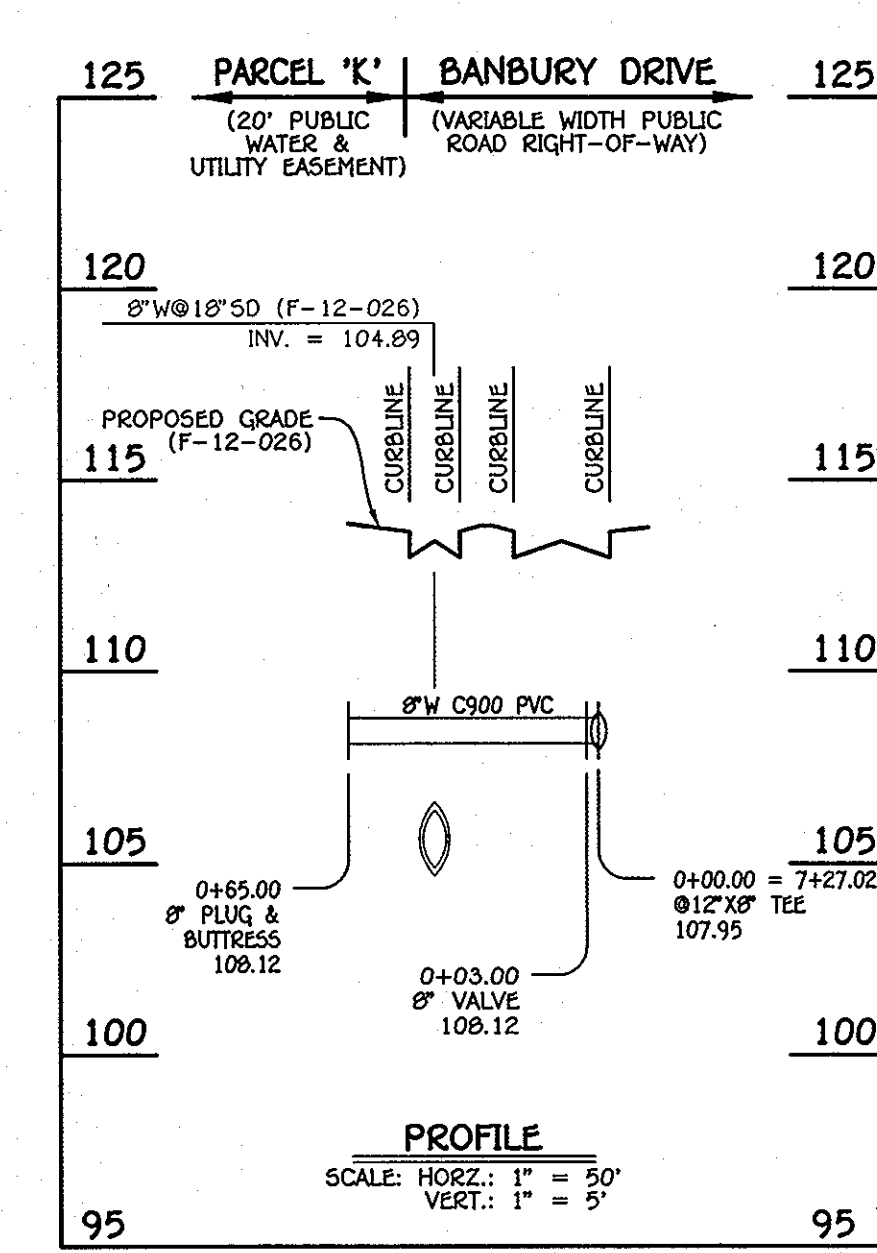
MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
410	552203.05	1386689.19	102.48
8" PLUG	552211.01	1386673.05	---

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.



8" WATER MAIN (WEST): PARCEL 'K'

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN (WEST): PARCEL 'K'			
0+00.00	12" X8" TEE	552175.38	1387047.95
0+03.00	8" VALVE	552177.59	1387049.99
0+08.75	1/32 H.B.	552181.81	1387053.89
0+15.69	4" DEFLECTION COUPLING	552187.76	1387057.46
0+23.69	8" PLUG & BUTTRESS	552194.93	1387061.00



8" WATER MAIN (EAST): PARCEL 'K'

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN (EAST): PARCEL 'K'			
0+00.00	12" X8" TEE	552859.45	1387386.18
0+03.00	8" VALVE	552856.75	1387384.87
0+65.00	8" PLUG & BUTTRESS	552801.02	1387357.70

CONTRACT NO. 14-4726-D
OXFORD SQUARE
PARCELS 'C' THRU 'L' &
OPEN SPACE LOTS 1 AND 2
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

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 BALDORP NATIONAL Pk
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2895



DESIGNED BY: B.C.R.
DRAWN BY: B.C.R.
CHECKED BY: P.W.K.
DATE: JULY, 2013

REMOVED SANITARY SEWER & WATER MAIN ALIGNMENT
DATE: 7/22/13

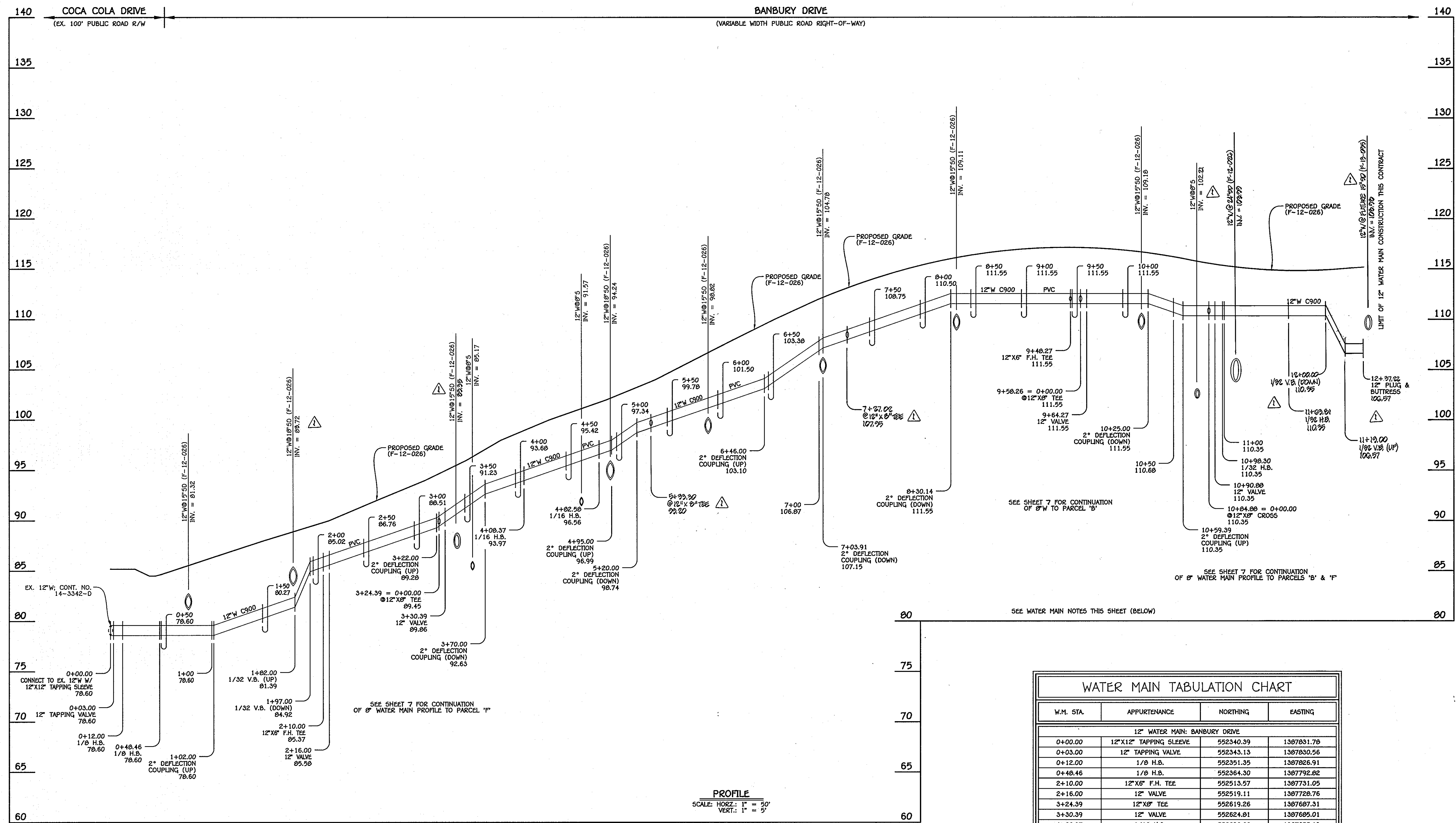
SEWER MAINS
PROFILES & CHARTS

600' SCALE MAP NO. 38 BLOCK NO. 19 & 20
F.C.C. WORK ORDER NO. 09014
FILE NAME: WATER & SEWER MAIN EXTENSION PROFILE SHEET

OXFORD SQUARE
PARCELS 'C' THRU 'L' & OPEN SPACE LOTS 1 & 2
WATER & SEWER MAIN EXTENSIONS
CONTRACT NO. 14-4726-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 5 OF 8



12" WATER MAIN: BANBURY DRIVE

PROFILE
SCALE: HORIZ.: 1" = 50'
VERT.: 1" = 5'

- WATER MAIN NOTES:**
1. ALL WATER MAINS SHALL BE AMWA C900 PVC PIPE, DR-18.
 2. ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME II - WATER AND SEWER STANDARDS FOR AMWA C900 PVC WATER PIPE INSTALLATION.
 3. DEFLECTION COUPLINGS SHALL BE CERTAIN-TIED PVC HIGH DEFLECTION COUPLINGS.
 4. ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

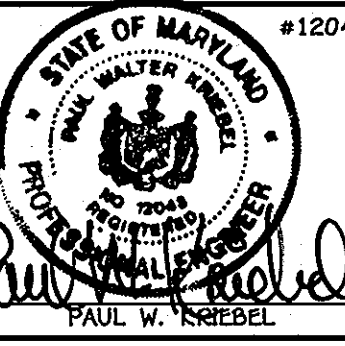
WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
12" WATER MAIN: BANBURY DRIVE			
0+00.00	12" X 12" TAPPING SLEEVE	552340.39	1387831.78
0+03.00	12" TAPPING VALVE	552343.13	1387830.56
0+12.00	1/8" H.B.	552351.35	1387826.91
0+48.46	1/8" H.B.	552364.30	1387792.82
2+10.00	12" X 6" F.H. TEE	552513.57	1387731.05
2+16.00	12" VALVE	552519.11	1387728.76
3+24.39	12" X 8" TEE	552619.26	1387687.31
3+30.39	12" VALVE	552624.91	1387685.01
4+08.37	1/16" H.B.	552696.86	1387655.19
4+82.58	1/16" H.B.	552752.32	1387605.90
5+22.00	12" X 8" TEE	552774.55	1387560.91
9+48.27	12" X 8" TEE	552906.42	1387187.31
9+58.26	12" X 8" TEE	552960.79	1387178.33
9+64.27	12" VALVE	552963.42	1387172.93
10+84.88	12" X 8" CROSS	553016.28	1387064.52
10+90.88	12" VALVE	553018.91	1387059.12
10+98.30	1/32" H.B.	553022.16	1387052.45
11+08.81	1/32" H.B.	553097.62	1386988.79
12+97.22	12" PLUG & BUTTRESS	553099.60	1386922.91
7+27.02	12" X 8" TEE	552892.45	1387586.18

CONTRACT NO. 14-4726-D
OXFORD SQUARE
PARCELS 'C' THRU 'L' & OPEN SPACE LOTS 1 AND 2
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
SILVER CLARK
CHIEF, BUREAU OF UTILITIES
5/24/12
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
M. G.
CHIEF, DEVELOPMENT ENGINEERING DIVISION
6/15/12
DATE

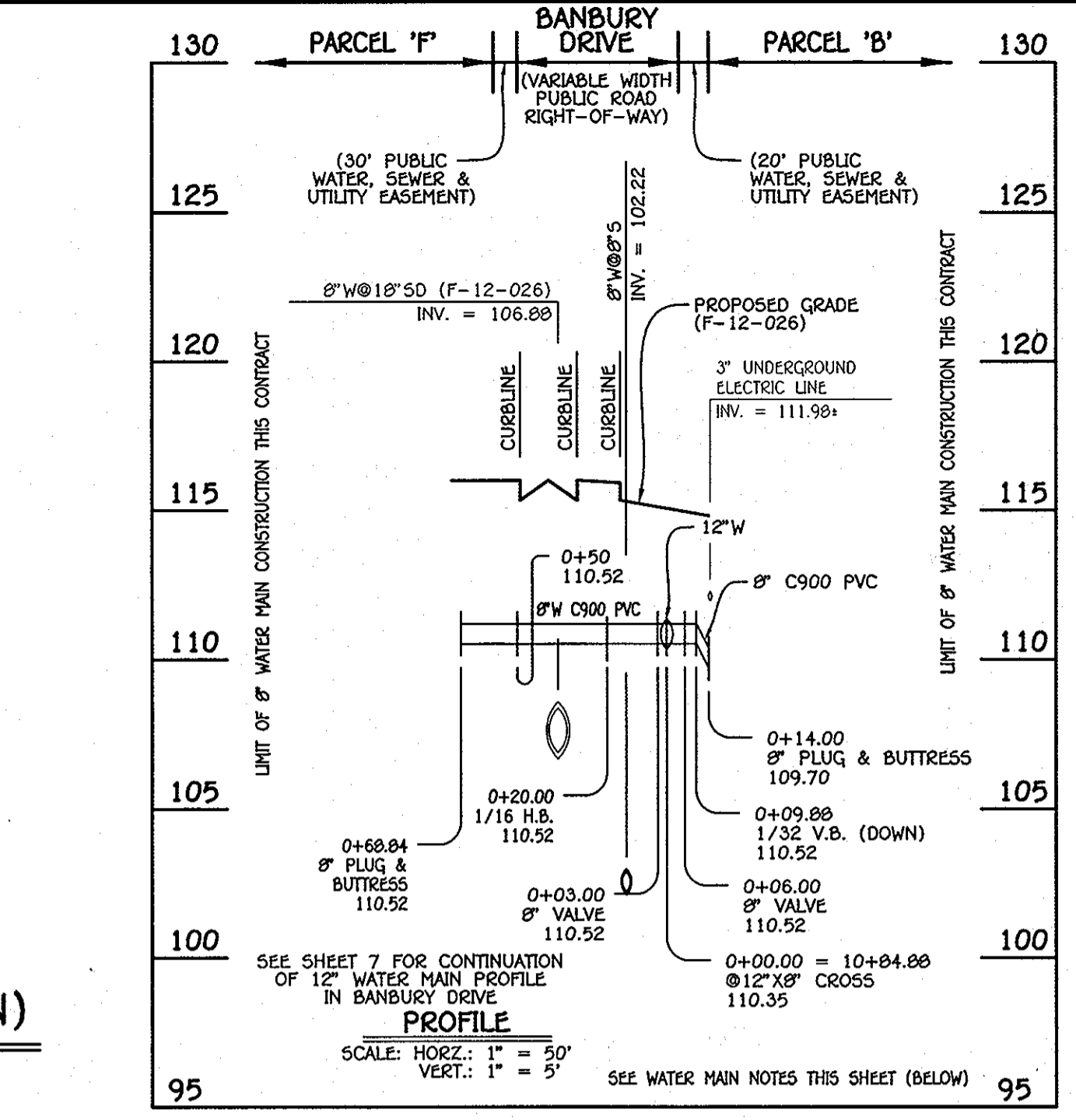
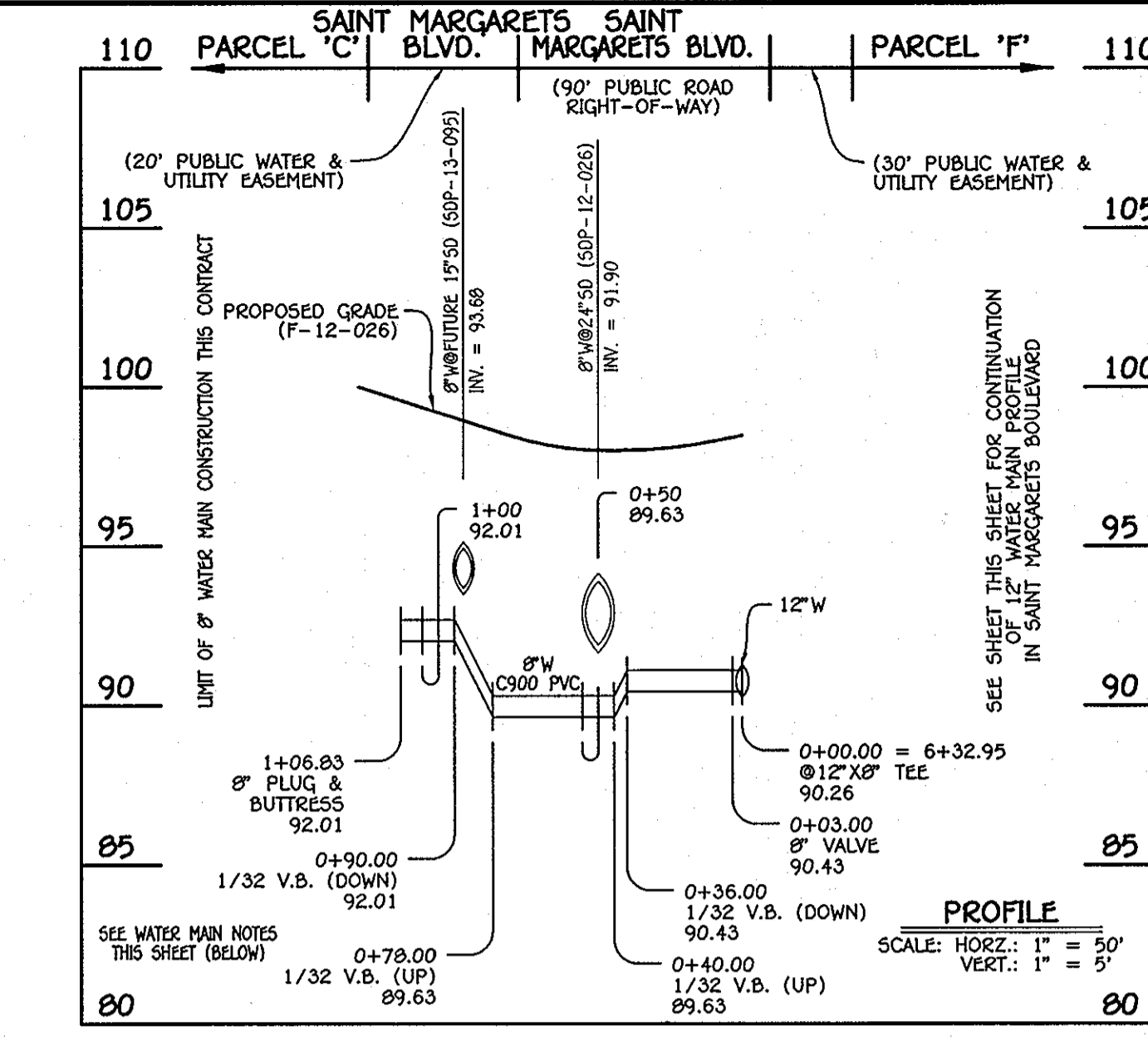
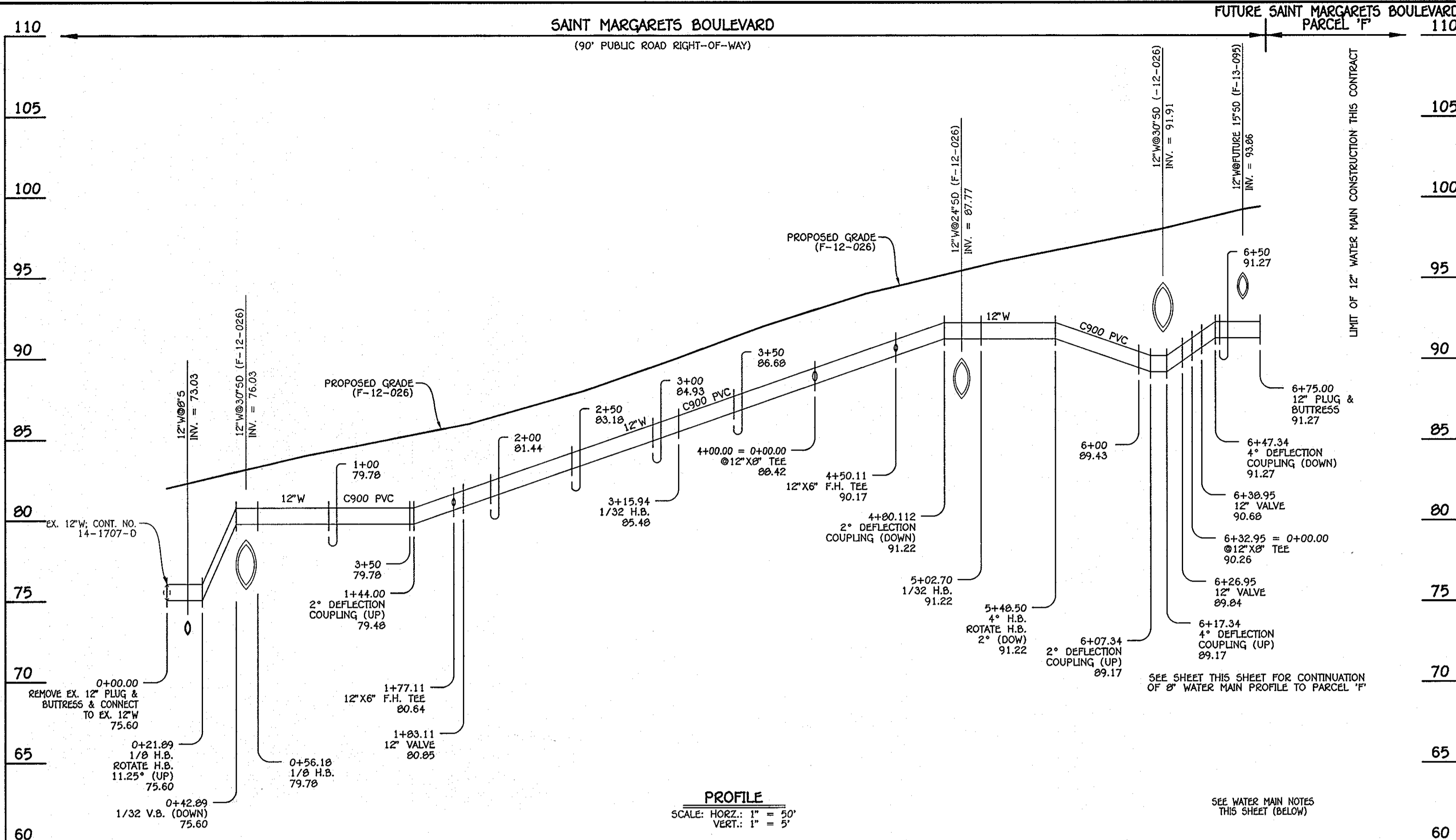
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 12043 EXPIRATION DATE 6/7/16/17.
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALDWIN NATIONAL FREE
DULLITT CITY, MARYLAND 21042
(410) 461-2895



DESIGNED BY: B.C.R.
DRAWN BY: B.C.R.
CHECKED BY: P.W.K.
DATE: MAY, 2012
BY: NO. REVISION
DATE: 7/22/12
FILE NAME: WATER & SEWER MAIN EXTENSION PROFILE SHEET

WATER MAIN
PROFILE & CHART
60' SCALE MAP NO. 38 BLOCK NO. 19 & 20
F.C.C. WORK ORDER NO. 09014

OXFORD SQUARE
PARCELS 'C' THRU 'L' & OPEN SPACE LOTS 1 & 2
WATER & SEWER MAIN EXTENSIONS
CONTRACT NO. 14-4726-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN
SHEET 6 OF 8



8" WATER MAIN: PARCEL 'C' (S) & PARCEL 'F' (N)

8" WATER MAINS: PARCEL 'F' (S) & PARCEL 'B' (N)

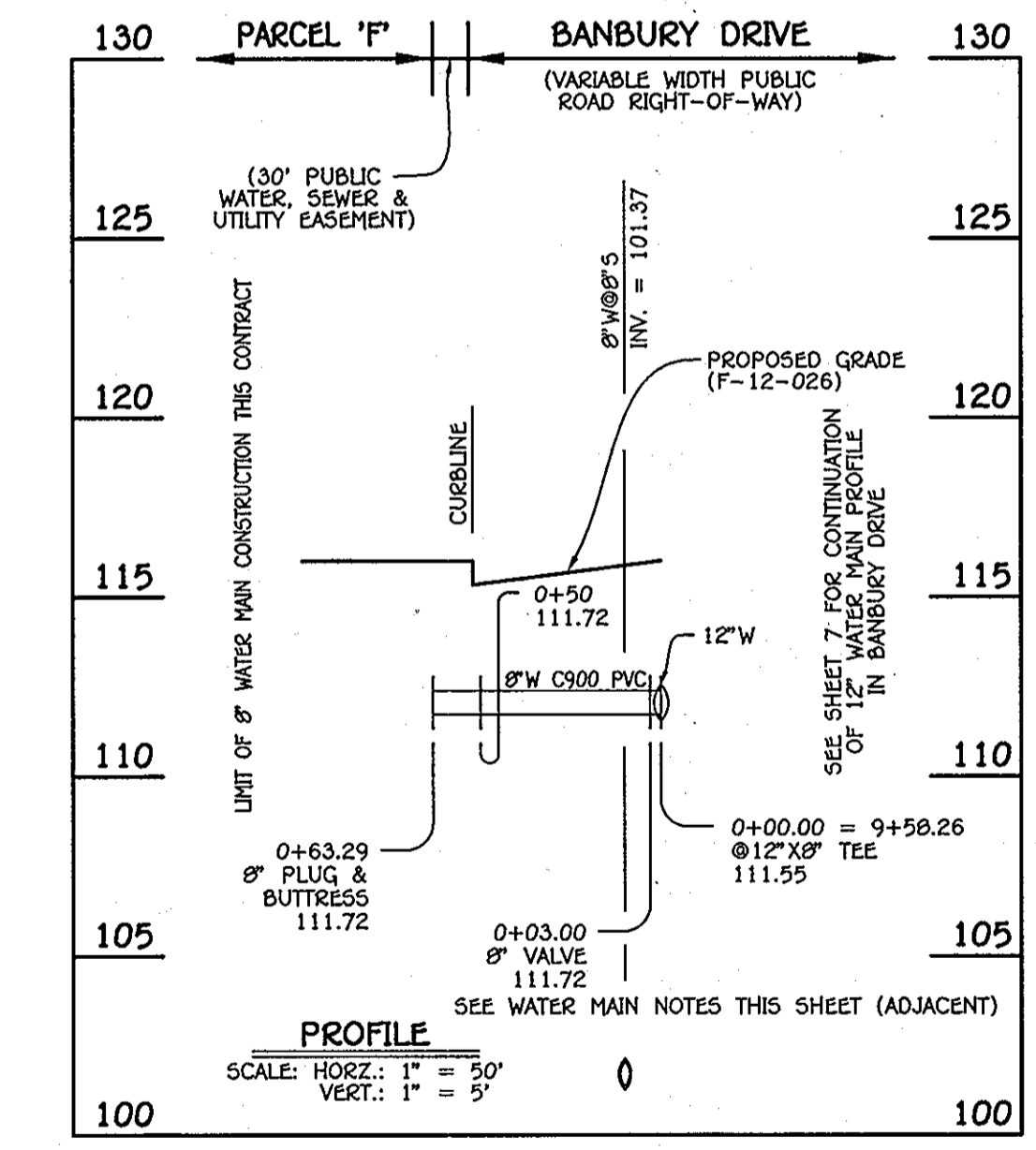
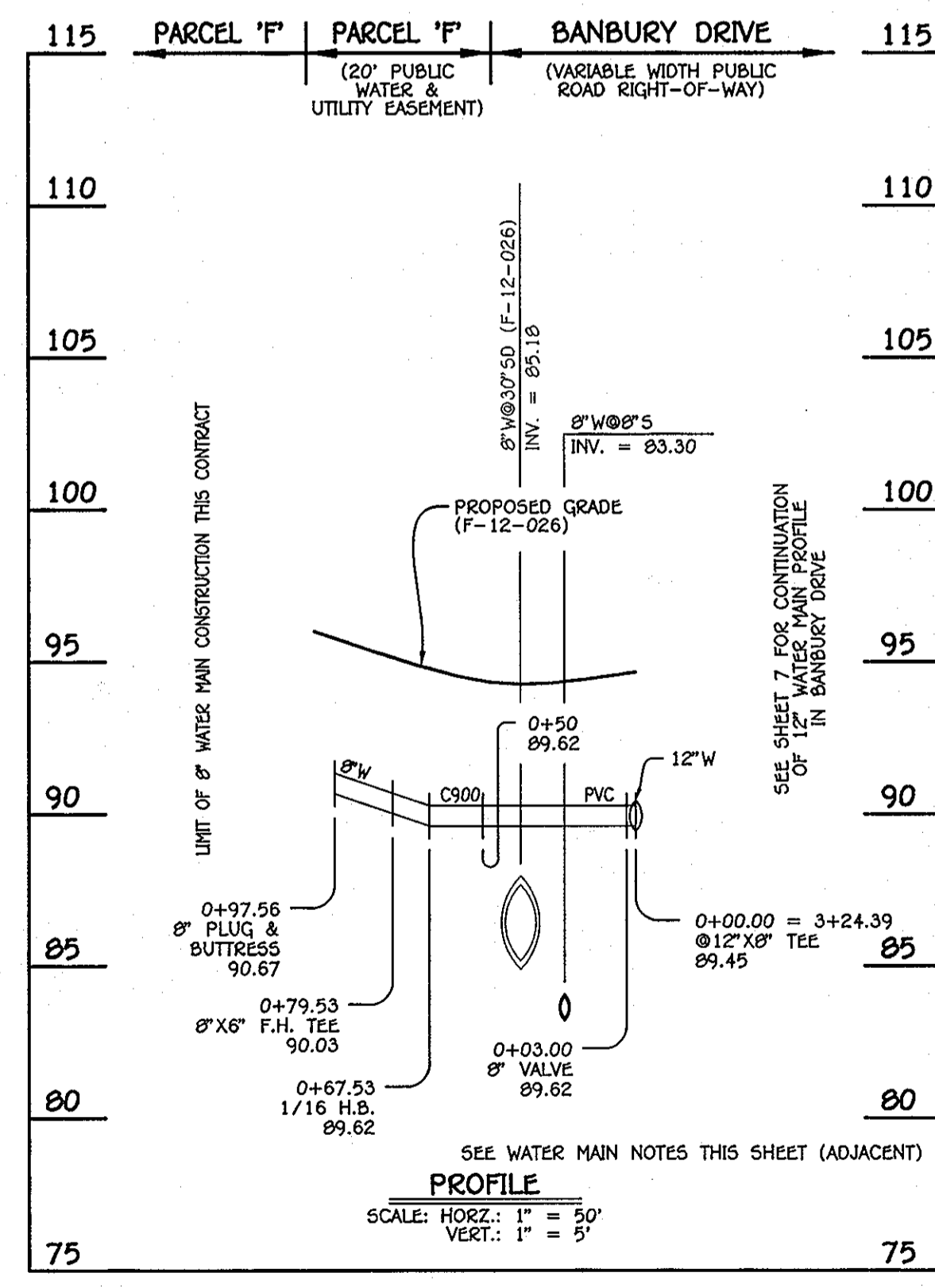
WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: PARCEL 'C' (S)			
0+00.00	12" X 6" TEE	552305.61	1386897.28
0+03.00	8" VALVE	552302.92	1386895.96
1+06.83	8" PLUG & BUTTRESS	552209.82	1386809.98

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: PARCEL 'F' (S)			
0+00.00	12" X 8" CROSS	553016.28	1387064.52
0+03.00	8" VALVE	553013.55	1387063.26
0+20.00	1/16 H.B.	552998.27	1387055.81
0+68.84	8" PLUG & BUTTRESS	552949.51	1387053.14
8" WATER MAIN: PARCEL 'B' (N)			
0+00.00	12" X 8" CROSS	553016.28	1387064.52
0+06.00	8" VALVE	553021.67	1387067.16
0+14.00	8" PLUG & BUTTRESS	553028.84	1387070.71

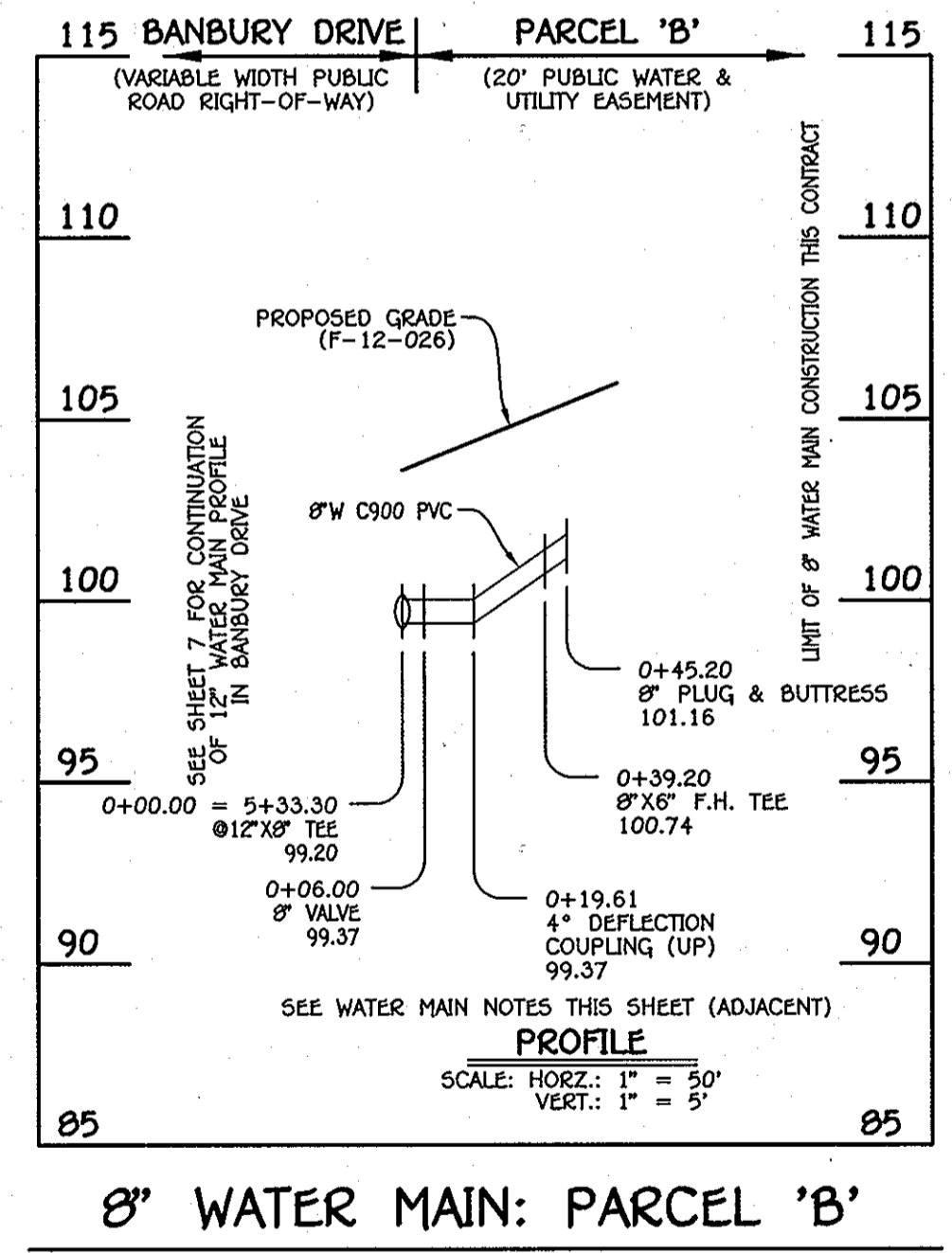
12" WATER MAIN: SAINT MARGARETS BOULEVARD

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
12" WATER MAIN: SAINT MARGARETS BOULEVARD			
0+00.00	CONNECT TO EX. 12" W	551938.24	1387358.29
0+21.89	1/8 H.B.	551949.03	1387339.24
0+56.18	1/8 H.B.	551982.30	1387330.97
1+77.11	12" X 6" F.H. TEE	552045.62	1377227.94
1+83.11	12" VALVE	552048.76	1377222.82
3+15.94	1/32 H.B.	552118.31	1387109.66
4+00.00	12" X 6" TEE	552175.38	1387047.95
4+50.11	12" X 6" F.H. TEE	552209.41	1387011.16
5+02.70	1/32 H.B.	552245.12	1386972.55
5+48.50	4" H.B.	552268.24	1386933.01
6+26.95	12" VALVE	552302.95	1386862.66
6+32.95	12" X 6" TEE	552305.60	1386857.28
6+38.95	12" VALVE	552308.26	1386851.90
6+75.00	12" PLUG & BUTTRESS	552324.22	1386819.57

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: PARCEL 'F'			
0+00.00	12" X 6" TEE	552340.39	1387831.78
0+03.00	8" VALVE	552343.13	1387830.56
0+67.53	1/16 H.B.	552351.35	1387826.91
0+79.53	8" X 6" F.H. TEE	552585.24	1387616.15
0+97.56	8" PLUG & BUTTRESS	552564.30	1387792.82



WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: PARCEL 'F'			
0+00.00	12" X 6" TEE	552960.79	1387178.33
0+03.00	8" VALVE	552958.11	1387176.99
0+63.29	8" PLUG & BUTTRESS	552904.03	137150.33



WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: PARCEL 'B'			
0+00.00	12" X 6" TEE	552774.55	1387560.31
0+06.00	8" VALVE	552779.94	1387562.95
0+35.20	8" X 6" F.H. TEE	552809.79	1387577.49
0+45.20	8" PLUG & BUTTRESS	552815.18	1387580.12

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 7 OF 8 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING, ON JUNE 15, 2012.

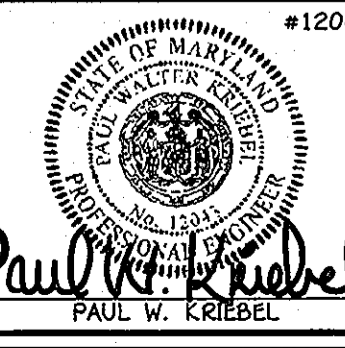
- WATER MAIN NOTES:
1. ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE, DR-18.
 2. ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME II - WATER AND SEWER STANDARDS FOR AWWA C900 PVC WATER PIPE INSTALLATION.
 3. DEFLECTION COUPLINGS SHALL BE CERTAIN-TEED PVC HIGH DEFLECTION COUPLINGS.
 4. ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

CONTRACT NO. 14-4726-D
OXFORD SQUARE
PARCELS 'C' THRU 'L' &
OPEN SPACE LOTS 1 AND 2
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
SILVER CLEMON
7/21/13
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
PAUL W. KRIEBEL
8/1/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION

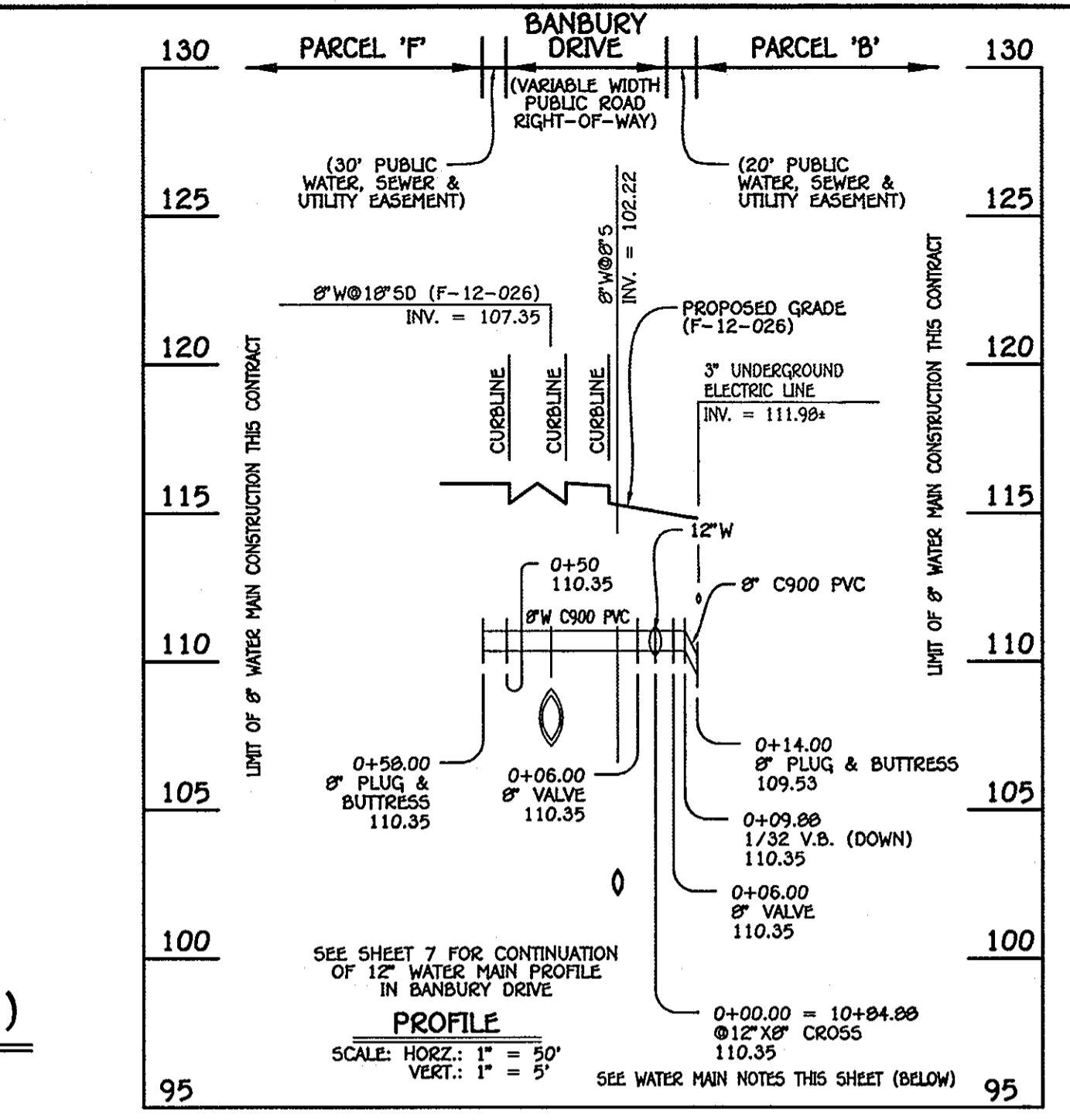
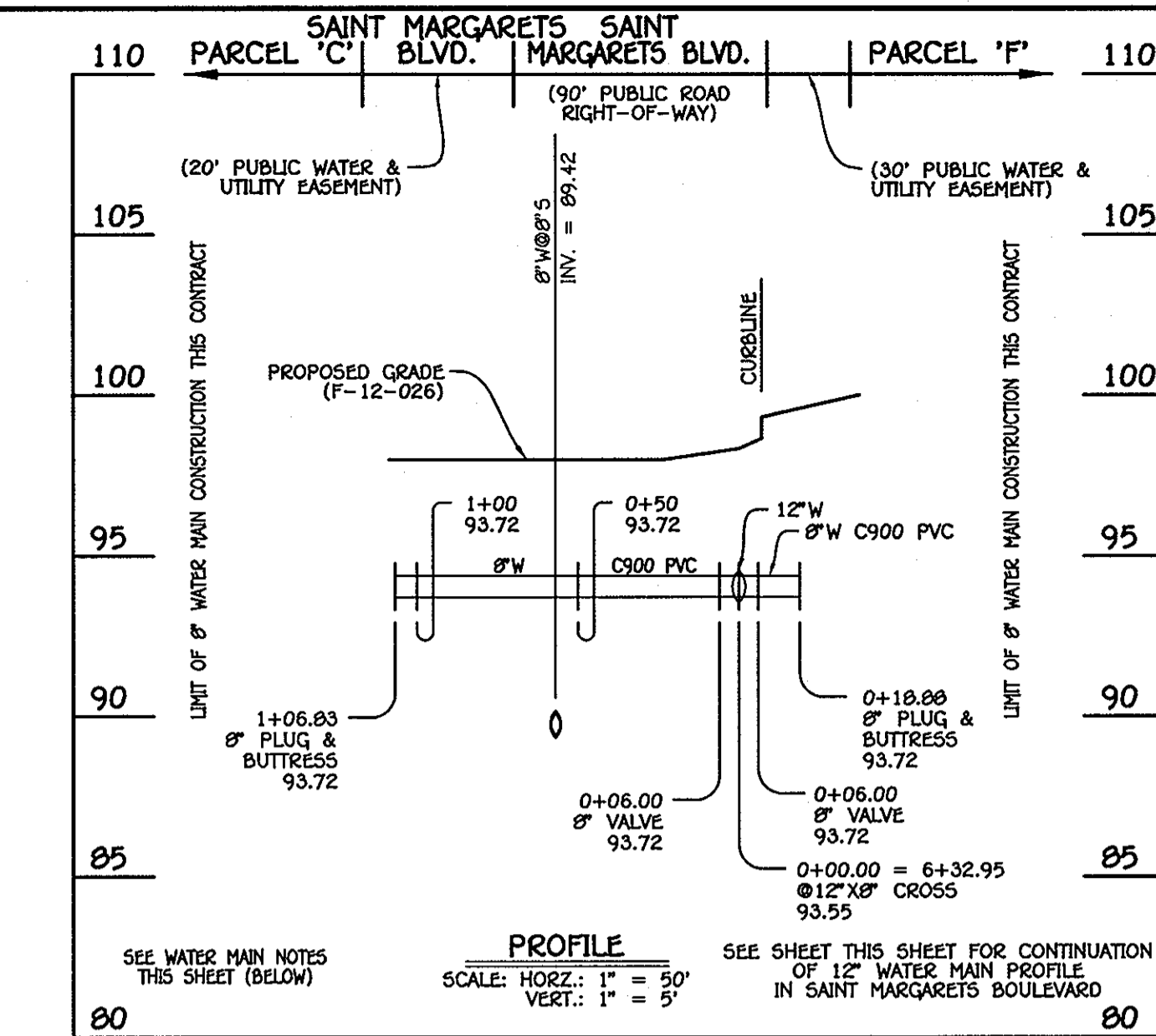
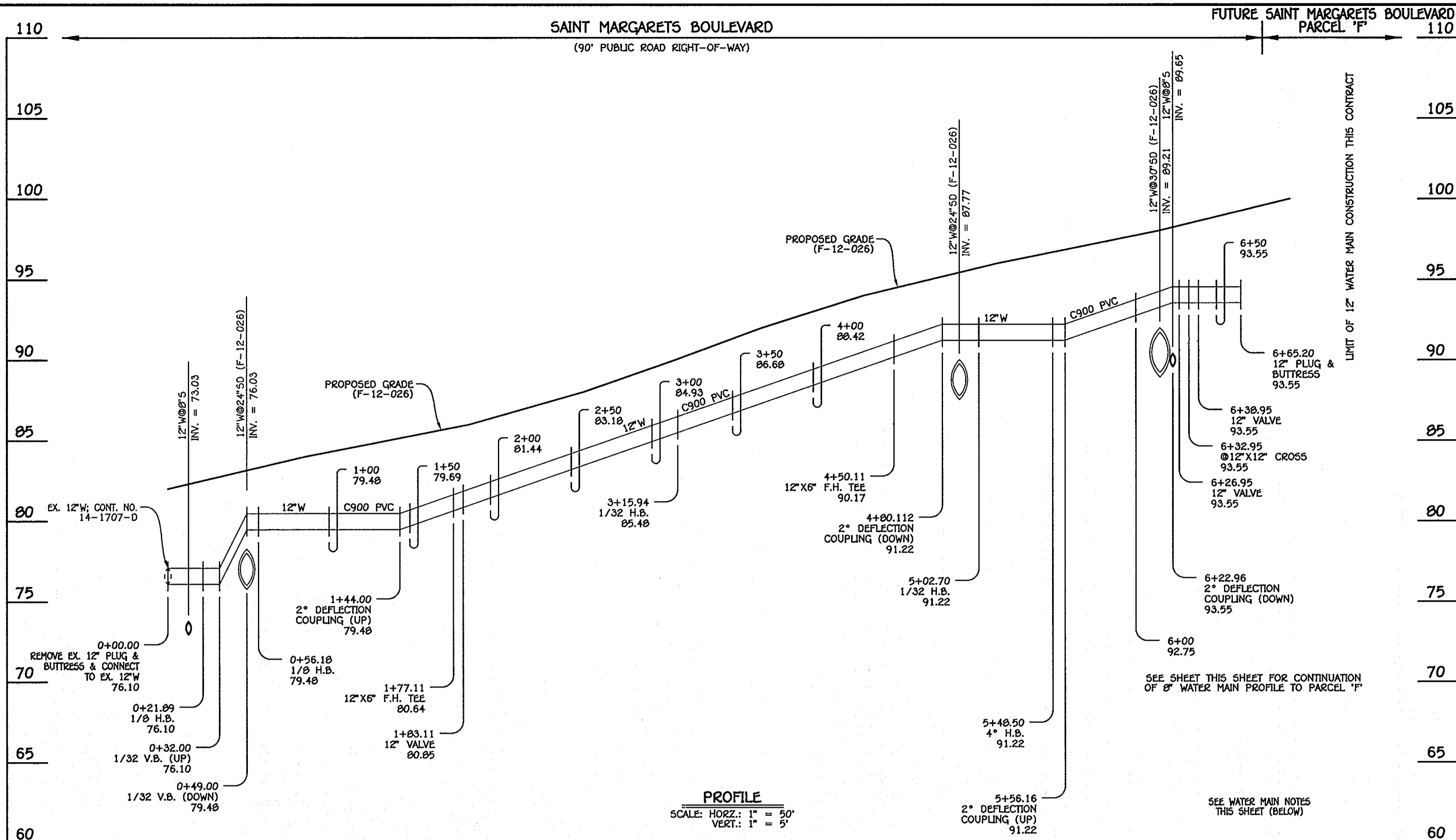
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 12043 EXPIRATION DATE 5/7/16/1E.
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALDWIN NATIONAL Pkwy
CLUETI CITY, MARYLAND 21046
(410) 461-2899



DESIGNED BY: B.C.R.
DRAWN BY: B.C.R.
CHECKED BY: P.W.K.
DATE: JULY, 2013
BY NO. 7/2/13
REVISION: REVERSE WATER MAIN ALIGNMENT PROFILES

WATER MAINS
PROFILES & CHARTS
600' SCALE MAP NO. 38 BLOCK NO. 19 & 20
F.C.C. WORK ORDER NO. 09014
FILE NAME: WATER & SEWER MAIN EXTENSION PROFILE

OXFORD SQUARE
PARCELS 'C' THRU 'L' & OPEN SPACE LOTS 1 & 2
WATER & SEWER MAIN EXTENSIONS
CONTRACT NO. 14-4726-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN
SHEET 7 OF 8



8" WATER MAIN: PARCEL 'C' (S) & PARCEL 'F' (N)

8" WATER MAINS: PARCEL 'F' (S) & PARCEL 'B' (N)

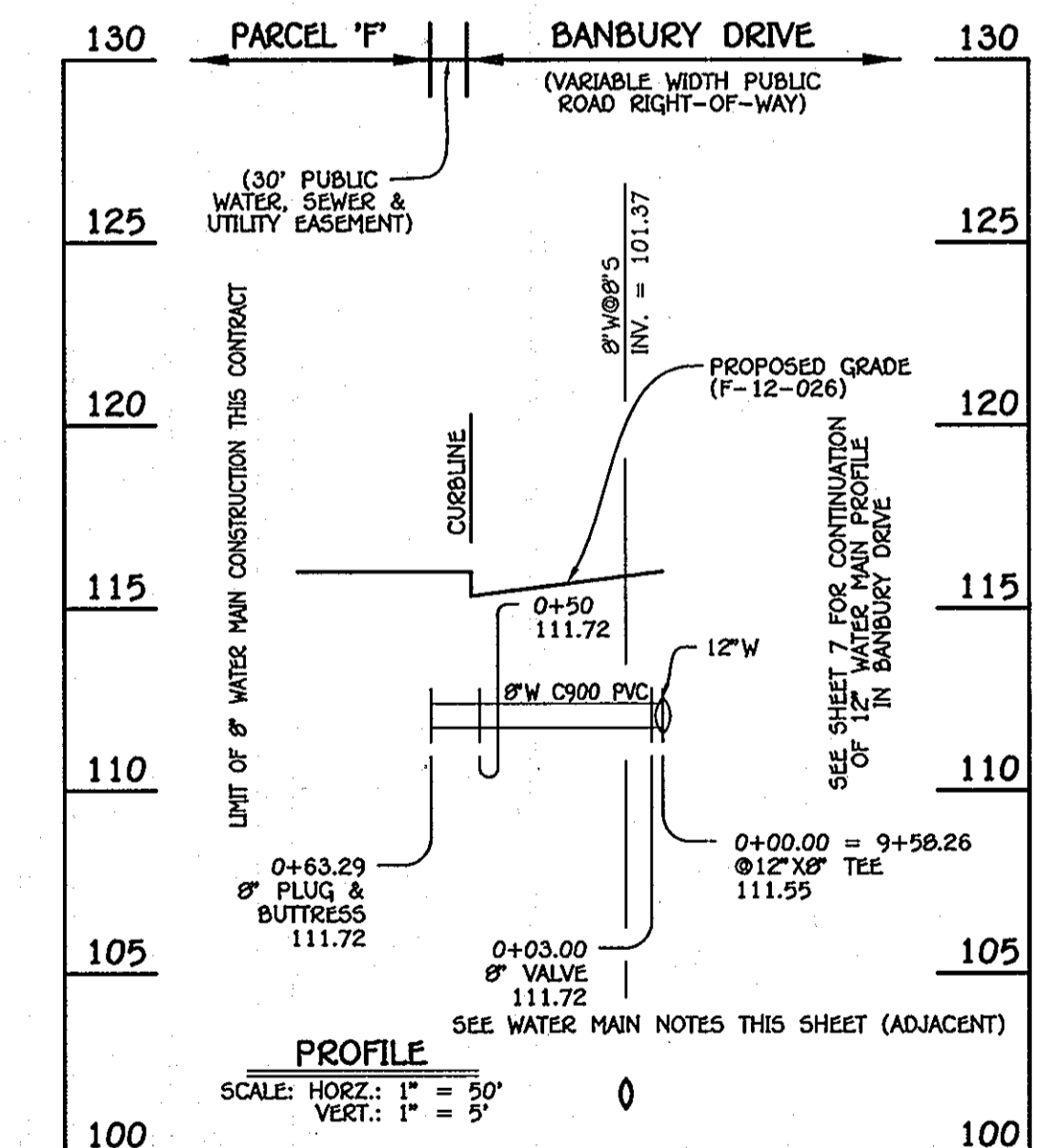
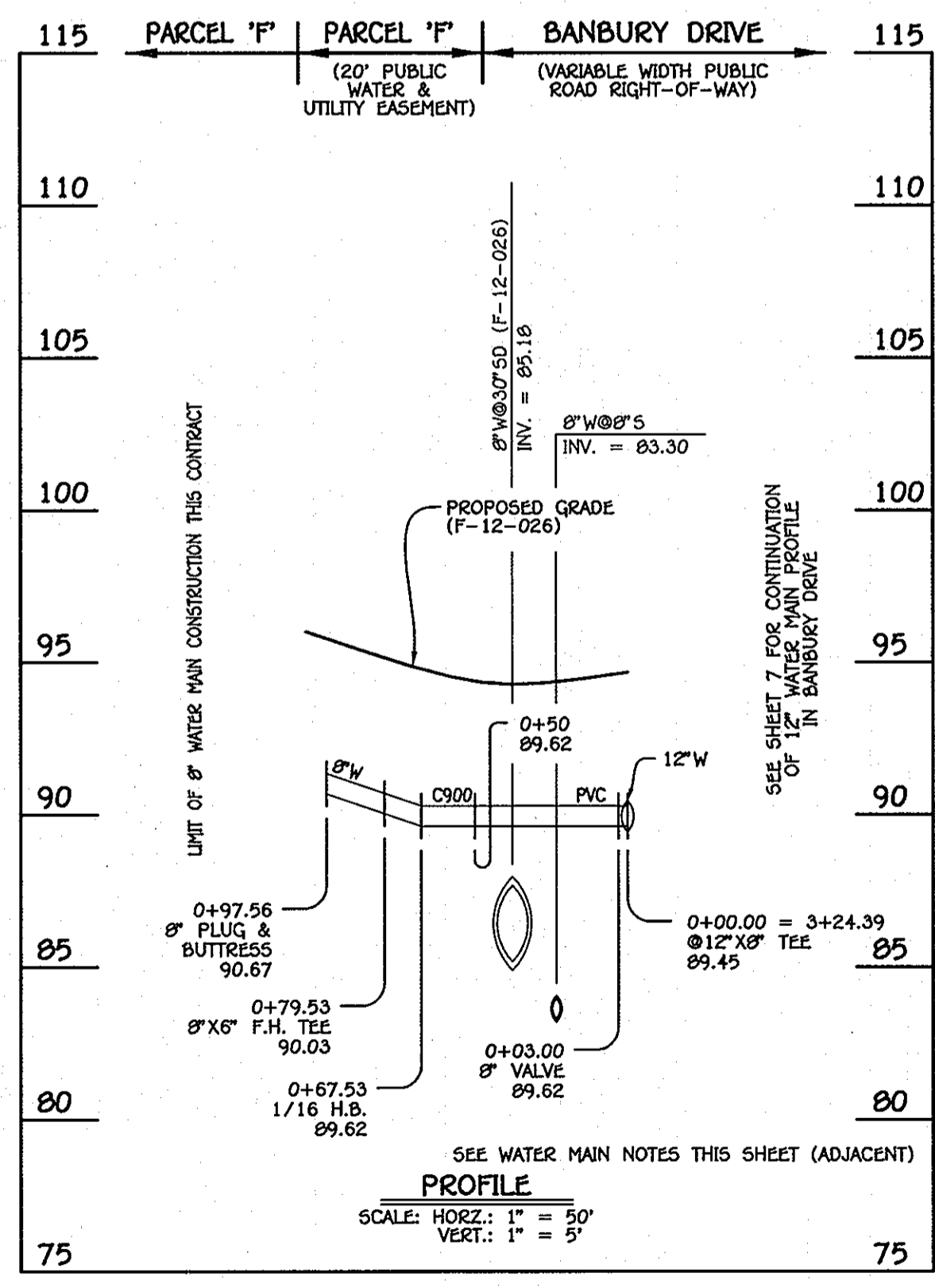
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: PARCEL 'C' (S)			
0+00.00	12" X 8" CROSS	552305.61	1386057.20
0+06.00	8" VALVE	552300.23	1386054.64
1+06.83	8" PLUG & BUTTRESS	552209.82	1386009.98
8" WATER MAIN: PARCEL 'F' (N)			
0+00.00	12" X 8" CROSS	552305.61	1386057.20
0+06.00	8" VALVE	552315.92	1386062.30
0+18.00	8" PLUG & BUTTRESS	552322.53	1386065.64

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: PARCEL 'F' (S)			
0+00.00	12" X 8" CROSS	553016.28	1387064.52
0+06.00	8" VALVE	553021.67	1387067.16
0+58.00	8" PLUG & BUTTRESS	552964.27	1387038.86
8" WATER MAIN: PARCEL 'B' (N)			
0+00.00	12" X 8" CROSS	553016.28	1387064.52
0+06.00	8" VALVE	553021.67	1387067.16
0+14.00	8" PLUG & BUTTRESS	553028.84	1387070.71

12" WATER MAIN: SAINT MARGARETS BOULEVARD

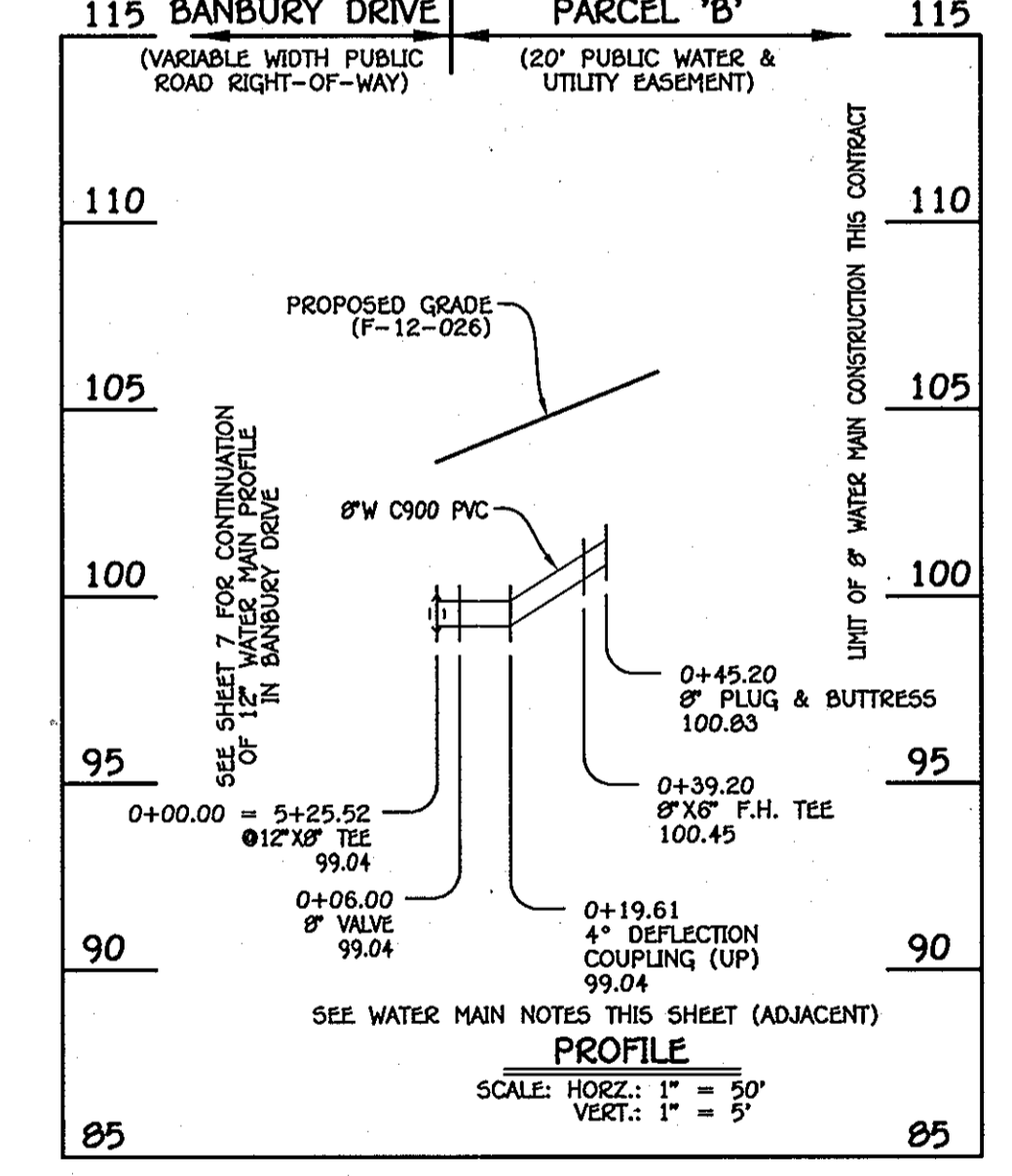
W.M. STA.	APPURTENANCE	NORTHING	EASTING
12" WATER MAIN: SAINT MARGARETS BOULEVARD			
0+00.00	CONNECT TO EX. 12" W	551938.24	1387358.29
0+21.09	1/8" H.B.	551949.03	1387339.24
0+56.18	1/8" H.B.	551982.30	1387330.97
1+77.11	12" X 6" F.H. TEE	552045.62	1377227.94
1+83.11	12" VALVE	552048.76	1377222.82
3+15.94	1/32" H.B.	552118.31	1387109.66
4+50.11	12" X 6" F.H. TEE	552209.41	1387011.16
5+02.70	1/32" H.B.	552245.12	1386972.55
5+48.50	4" H.B.	552268.24	1386933.01
6+26.95	12" VALVE	552302.95	1386862.66
6+32.95	12" X 8" CROSS	552305.61	1386857.20
6+38.95	12" X 8" CROSS	552308.26	1386851.90
6+65.20	12" VALVE	552319.88	1386828.36

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: PARCEL 'F'			
0+00.00	12" X 8" TEE	552340.39	1387831.78
0+03.00	8" VALVE	552343.13	1387830.56
0+67.53	1/16" H.B.	552351.35	1387826.91
0+79.53	8" X 6" F.H. TEE	552365.24	1387616.15
0+97.56	8" PLUG & BUTTRESS	552364.30	1387792.82



8" WATER MAIN: PARCEL 'F'

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: PARCEL 'F'			
0+00.00	12" X 8" TEE	552960.79	1387178.33
0+03.00	8" VALVE	552958.11	1387176.99
0+63.29	8" PLUG & BUTTRESS	552904.03	137150.33



8" WATER MAIN: PARCEL 'B'

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: PARCEL 'B'			
0+00.00	12" X 8" TEE	552772.46	1387564.60
0+06.00	8" VALVE	552777.85	1387567.24
0+35.20	8" X 6" F.H. TEE	552807.70	1387581.78
0+45.20	8" PLUG & BUTTRESS	552813.09	1387584.41

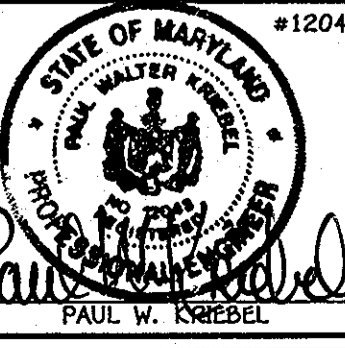
- WATER MAIN NOTES:**
1. ALL WATER MAINS SHALL BE AMWA C900 PVC PIPE, DR-18.
 2. ALL PIPE BEDDINGS, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME II - WATER AND SEWER STANDARDS FOR AMWA C900 PVC WATER PIPE INSTALLATION.
 3. DEFLECTION COUPLINGS SHALL BE CERTAIN-TYED PVC HIGH DEFLECTION COUPLINGS.
 4. ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

CONTRACT NO. 14-4726-D
OXFORD SQUARE
PHASE I
PARCELS 'C' THRU 'L' &
OPEN SPACE LOTS 1 AND 2
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
6/15/12
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
6/15/12
DATE

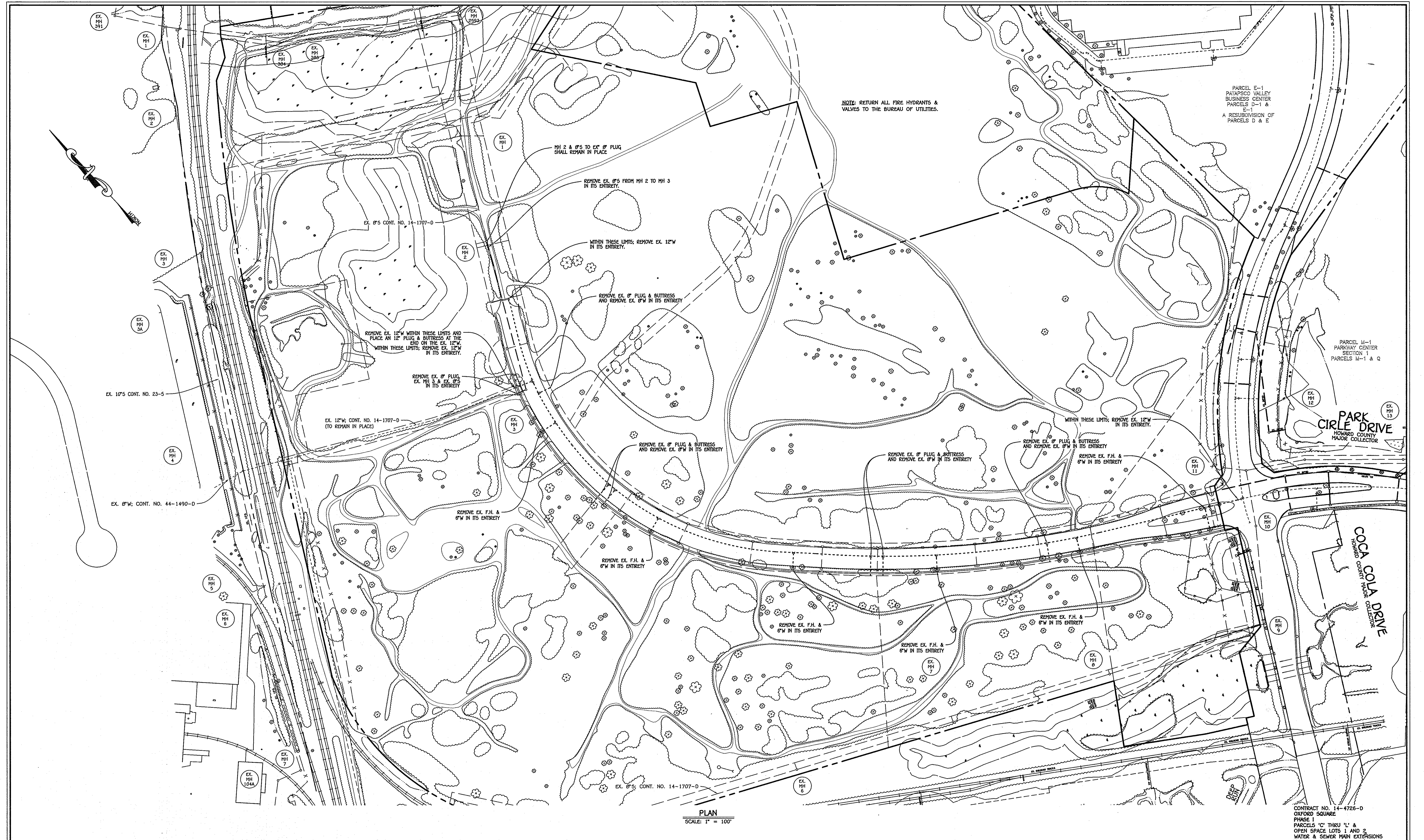
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 12043 EXPIRATION DATE 5/7/16/12.
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10276 BALTIMORE NATIONAL PARK
ELIZABETH CITY, MARYLAND 21042
(410) 461-2999



DESIGNED BY :
B.C.R.
DRAWN BY :
B.C.R.
CHECKED BY :
P.W.K.
DATE :
MAY, 2012
BY NO. REVISION

WATER MAINS
PROFILES & CHARTS
600' SCALE MAP NO. 38 BLOCK NO. 19 & 20
F.C.C. WORK ORDER NO. 09014
DATE FILE NAME : WATER & SEWER MAIN EXTENSION PROFILE

OXFORD SQUARE
PHASE I
PARCELS 'C' THRU 'L' &
OPEN SPACE LOTS 1 & 2
WATER & SEWER MAIN EXTENSIONS
CONTRACT NO. 14-4726-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN
SHEET 8 OF 9



NOTE: RETURN ALL FIRE HYDRANTS & VALVES TO THE BUREAU OF UTILITIES.

PARCEL E-1
PATAPSCO VALLEY
BUSINESS CENTER
PARCELS D-1 &
E-1
A RESUBDIVISION OF
PARCELS D & E

PARCEL M-1
PARKWAY CENTER
SECTION 1
PARCELS M-1 & Q

PARK CIRCLE DRIVE
HOWARD COUNTY
MAJOR COLLECTOR

COCA COLA DRIVE
HOWARD COUNTY MAJOR COLLECTOR

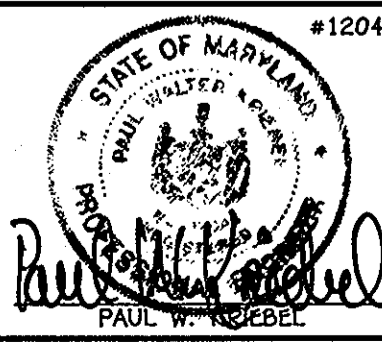
PLAN
SCALE: 1" = 100'

CONTRACT NO. 14-4726-D
OXFORD SQUARE
PHASE I
PARCELS 'C' THRU 'L' & OPEN SPACE LOTS 1 AND 2
WATER & SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

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 5/7/16/12.



DESIGNED BY:	B.C.R.
DRAWN BY:	B.C.R.
CHECKED BY:	P.W.K.
DATE:	MAY, 2012
BY NO.	
REVISION	

WATER & SEWER MAINS
ABANDONMENT PLAN

600' SCALE MAP NO. 38 BLOCK NO. 19 & 20
F.C.C. WORK ORDER NO. 09014
FILE NAME: WATER & SEWER MAIN EXTENSION PLAN SHEET

OXFORD SQUARE
PHASE I
PARCELS 'C' THRU 'L' & OPEN SPACE LOTS 1 & 2
WATER & SEWER MAIN EXTENSIONS
CONTRACT NO. 14-4726-D
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 9 OF 9

1/2009/030/Advng/ETMALS - PHASE ONE/09/014 Water & Sewer Base Plan - Phase 1/Adv. 5/11/2012 11:45:09 AM