

QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	SUPPLIER
12" WATER	939 L.F.		DR-18 C-900	NATIONAL PIPE
8" WATER	1,525 L.F.		DR-18 C-900	NATIONAL PIPE
6" WATER	95 L.F.		DR-18 C-900	NATIONAL PIPE
1-1/2" WHC	1,476 L.F.			
12"x12" TEE	1 EACH		MJ TEE EPOXY	STAR PIPE
12"x8" TEE	1 EACH		MJ TEE EPOXY	STAR PIPE
12"x6" TEE	1 EACH		MJ TEE EPOXY	STAR PIPE
8"x6" TEE	3 EACH		MJ TEE EPOXY	STAR PIPE
12"x8" REDUCER	1 EACH		MJ RED.	STAR PIPE
12" VALVE	3 EACH		M3 GATE VALVE	MUELLER CO.
8" VALVE	3 EACH		M3 GATE VALVE	MUELLER CO.
6" VALVE	4 EACH		M3 GATE VALVE	MUELLER CO.
1/8 H.B.	3 EACH		M3 45 EPOXY COAT.	STAR PIPE
1/16 H.B.	12 EACH		M3 2 1/2 EPOXY	STAR PIPE
1/32 H.B.	7 EACH		M3 1 1/4 EPOXY	STAR PIPE
FIRE HYDRANT	4 EACH		MUELLER IN.	MUELLER CO.
12" PLUG & BUTTRESS	1 EACH			
8" PLUG & BUTTRESS	1 EACH			
CONTINUITY TEST STATION	5 EACH			
SINGLE OUTSIDE METER SETTING	45 EACH			
TWIN OUTSIDE METER SETTING	17 EACH			
NAME OF UTILITY CONTRACTOR:				
SURVEY & DRAFTING DIVISION AS-BUILT DATE:				

BENCHMARK INFORMATION	
B.M.#1 - HOWARD COUNTY CONTROL STATION #0012 LOCATED ALONG THE WEST SIDE OF MARIOTTVILLE ROAD, JUST NORTH OF INTERSTATE 70 N 596,502.7604 - HORIZONTAL = (NAD '83) E 1,340,054.3654 - HORIZONTAL = (NAD '83) ELEVATION = 486.993 - VERTICAL = (NGVD '29)	
B.M.#2 - HOWARD COUNTY CONTROL STATION #101A LOCATED ALONG THE WEST SIDE OF MARIOTTVILLE ROAD, JUST NORTH OF OLD FREDERICK ROAD, APPROX. 21 WEST OF THE CENTERLINE OF ROAD N 601,206.59 - HORIZONTAL = (NAD '83) E 1,340,912.325 - HORIZONTAL = (NAD '83) ELEVATION = 483.888 - VERTICAL = (NGVD '29)	

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. Keibel, FOR:
WAVERLY WOODS DEVELOPMENT CORP. 05-29-13
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.

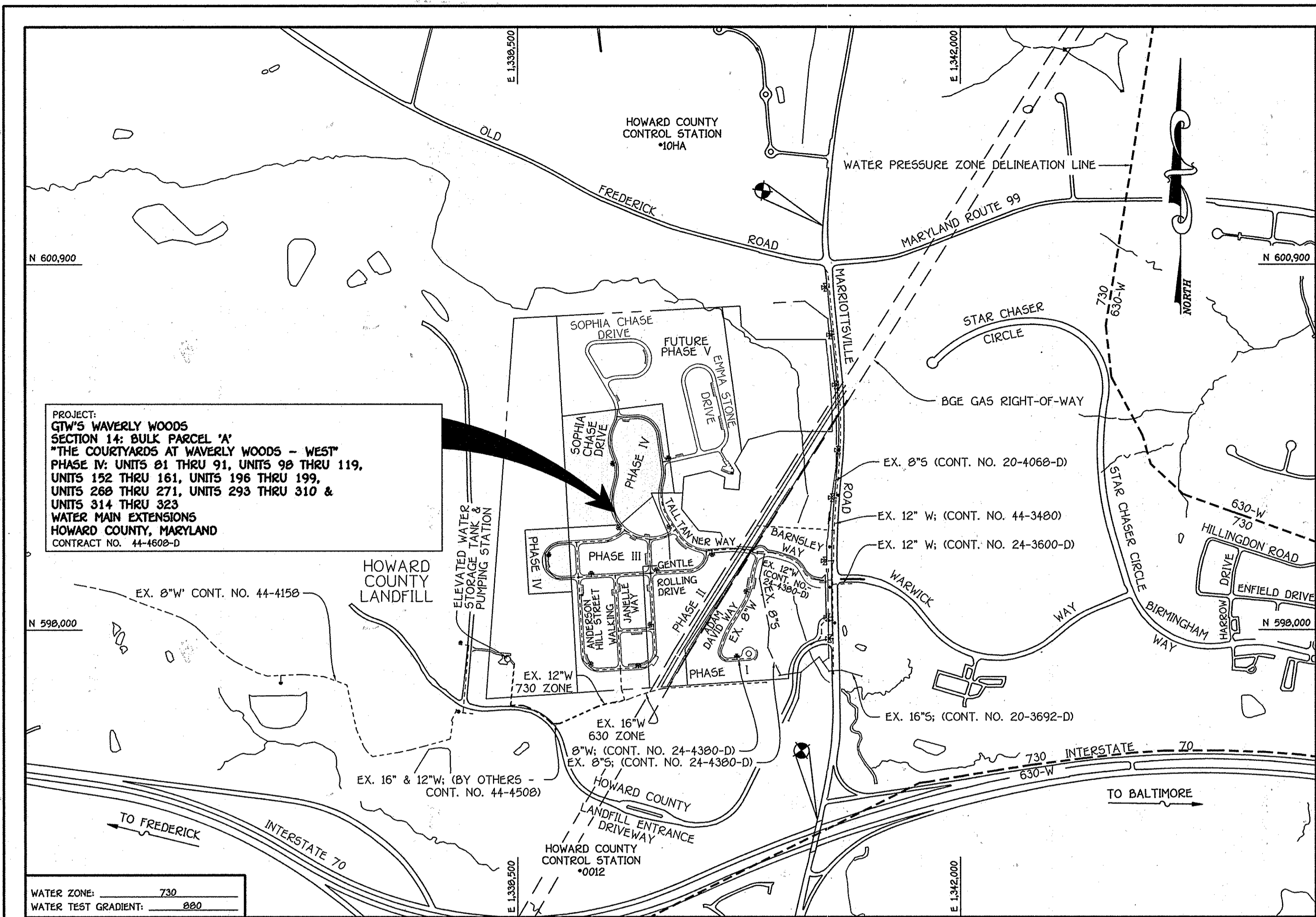
Paul W. Keibel, FOR:
WAVERLY WOODS DEVELOPMENT CORP. 05-29-13
SIGNATURE OF DEVELOPER DATE

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 1 OF 6 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING, ON JANUARY 13, 2010.

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

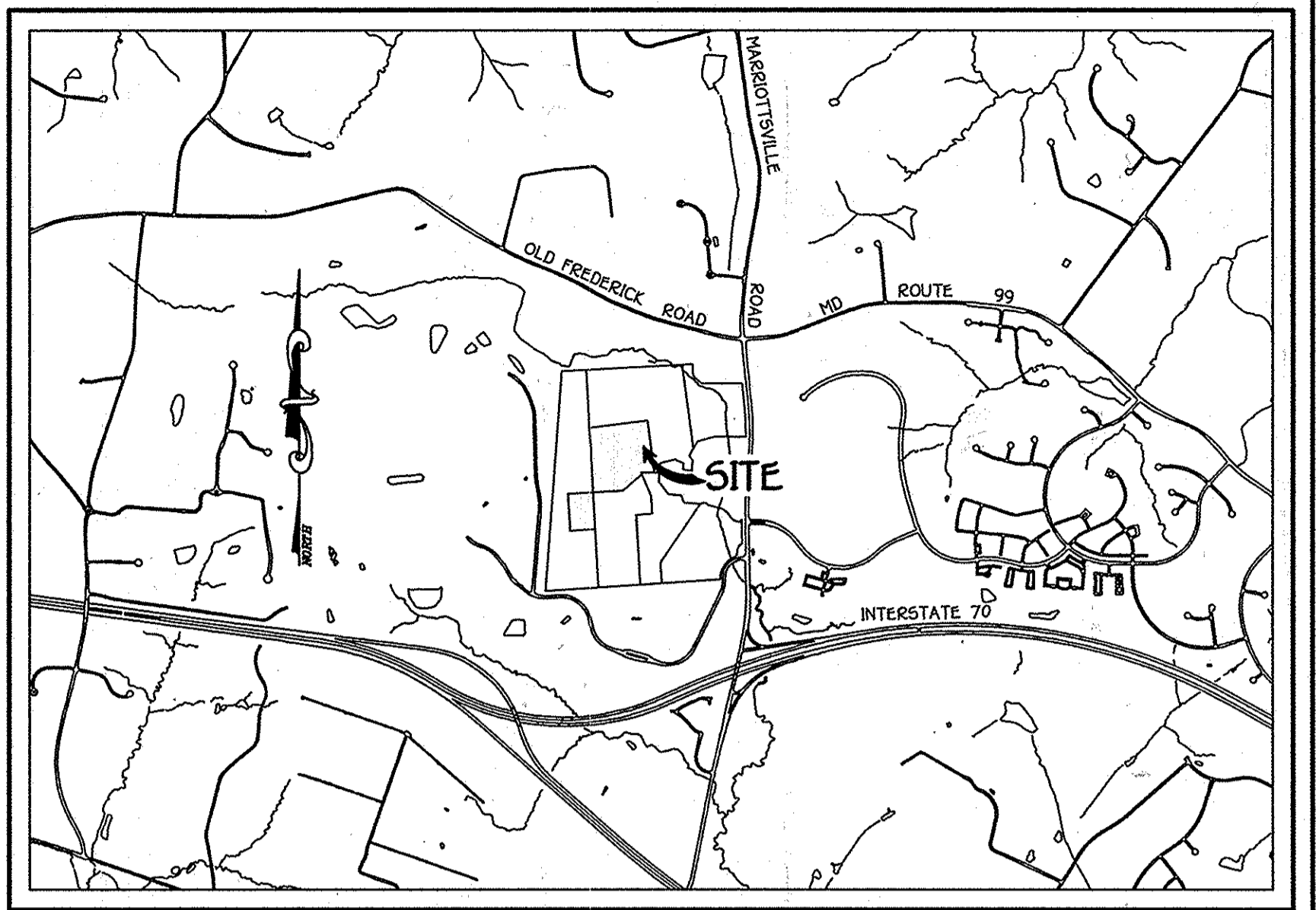
APPROVED:
John R. Robertson 10/29/13
HOWARD SOIL CONSERVATION DISTRICT DATE

CONTRACT NO. 44-4608-D
GTW'S WAVERLY WOODS
SECTION 14: BULK PARCEL 'A'
"THE COURTYARDS AT WAVERLY WOODS-WEST"
PHASE IV: UNITS 81 THRU 91, UNITS 98 THRU 119,
UNITS 152 THRU 161, UNITS 196 THRU 199,
UNITS 268 THRU 271, UNITS 293 THRU 310 & UNITS 314 THRU 323
WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND



TYPE OF BUILDING: RESIDENTIAL - SINGLE FAMILY DETACHED & TOWNHOUSE/CONDOMINIUMS	
NUMBER OF UNITS:	79
NO. OF WATER HOUSE CONNECTIONS:	79
NO. OF SEWER HOUSE CONNECTIONS:	0
SEWER SHED:	LITTLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WATER RECLAMATION PLANT, SAVAGE, MARYLAND

VICINITY MAP
SCALE: 1" = 600'



LOCATION 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 JULY, 2005 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. 101A & NO. 0012. ALL VERTICAL CONTROLS ARE BASED AS INDICATED IN THE BENCH MARK INFORMATION. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE 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.
 - 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 (S) 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)	410-637-0713
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 MANUAL VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION OR WITHIN THE VICINITY OF THE PROPOSED WORK SHALL BE REMOVED 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 ANY 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 10.11(K) OF THE HOWARD COUNTY CODE.

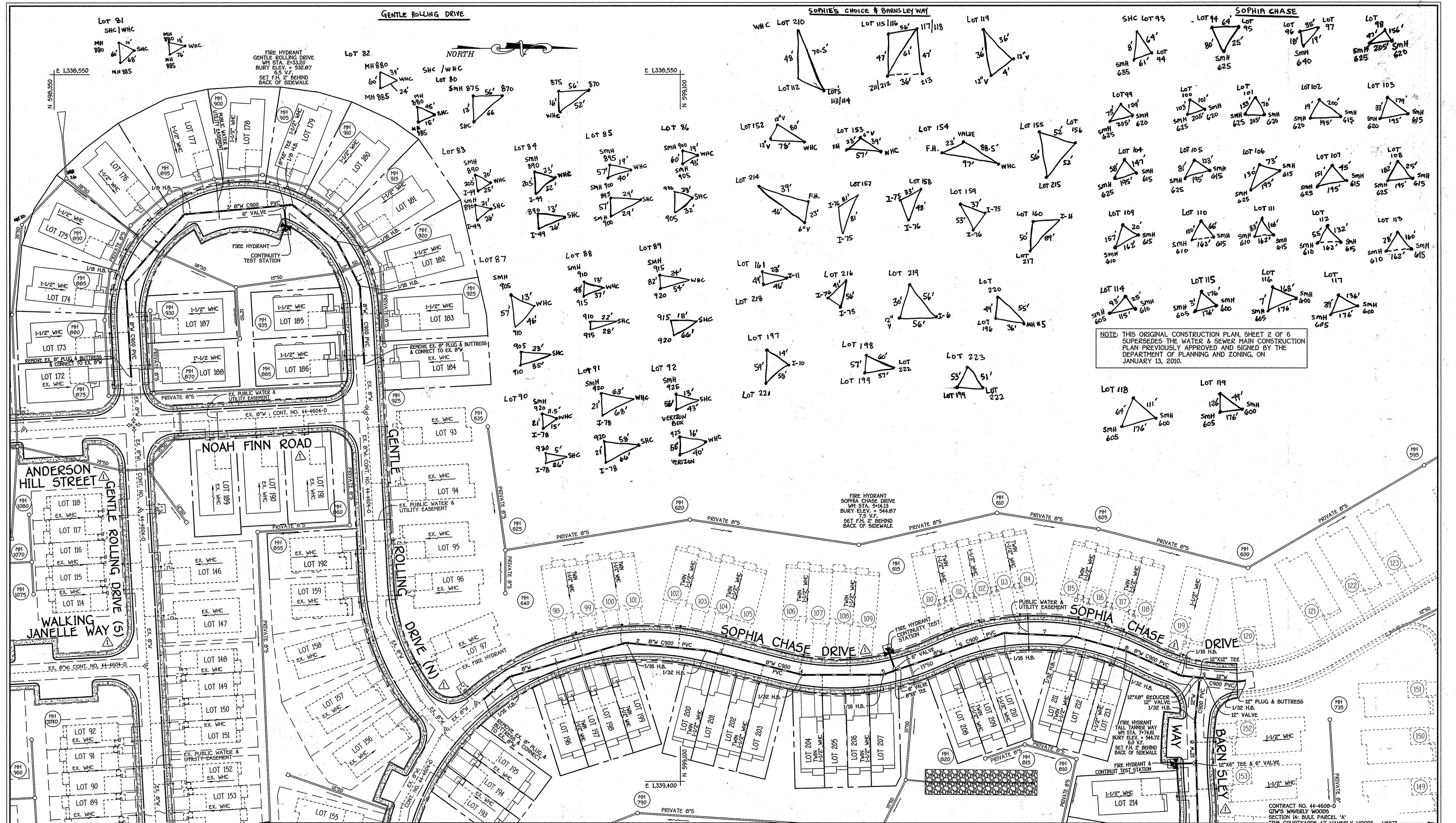
- PART B: WATER MAIN GENERAL NOTES
- ALL WATER MAINS SHALL BE AWWA C900 PVC, DR-18.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
 - ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE 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 51 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-328.

- 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 "M.T." IN PLAN AND PROFILE SHALL HAVE WATER-TIGHT FRAME AND COVER, STANDARD DETAIL C5.52. WHERE WATER-TIGHT 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.

CONTRACT NO. 44-4608-D
GTW'S WAVERLY WOODS
SECTION 14: BULK PARCEL 'A'
"THE COURTYARDS AT WAVERLY WOODS - WEST"
PHASE IV: UNITS 81 THRU 91, UNITS 98 THRU 119, UNITS 152 THRU 161, UNITS 196 THRU 199, UNITS 268 THRU 271, UNITS 293 THRU 310 & UNITS 314 THRU 323
WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEVELOPER
WAVERLY WOODS DEVELOPMENT CORPORATION
5300 DORSEY HALL DRIVE
SUITE 102
ELLCOTT CITY, MARYLAND 21042
PHONE: 443-367-0422

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Chief, Bureau of Utilities Date: 10/29/13	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND Chief, Development Engineering Division Date: 10-31-13	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. 12043 EXPIRATION DATE IS 7/28/14. FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PKWY ELLCOTT CITY, MARYLAND 21042 410-461-2252 Paul W. Keibel Professional Engineer	DESIGNED BY: B.C.R. DRAWN BY: B.C.R. CHECKED BY: KCF 2 AS-BUILT REVISIONS DATE: 10/1/13 BY NO. REVISION DATE	WATER MAIN EXTENSIONS TITLE SHEET 600' SCALE MAP NO. 16 BLOCK NO. 3 & 4 F.C.C. WORK ORDER NO. 30770 FILE NAME: WATER MAIN EXTENSION TITLE SHEET	SCALE AS SHOWN SHEET 1 OF 6
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NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 2 OF 6 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING, ON JANUARY 13, 2010.

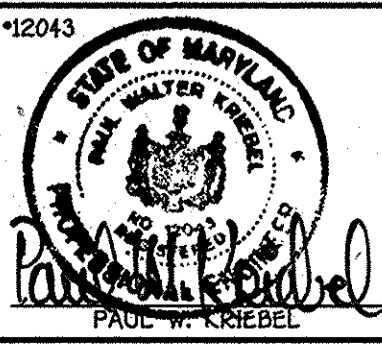
MATCHLINE: SEE SHEET 3
 PLAN
 SCALE: 1" = 50'

CONTRACT NO. 44-4608-D
 GTW'S WAVERLY WOODS
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 WATER MAIN EXTENSIONS
 CONTRACT NO. 44-4608-D
 THIRD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DATE: 10-31-13

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
 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. 12243 EXPIRATION DATE IS 7/31/16.
FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 2072 BALTIMORE NATIONAL PIKE
 ELKOTT CITY, MARYLAND 21042
 410-461-2255



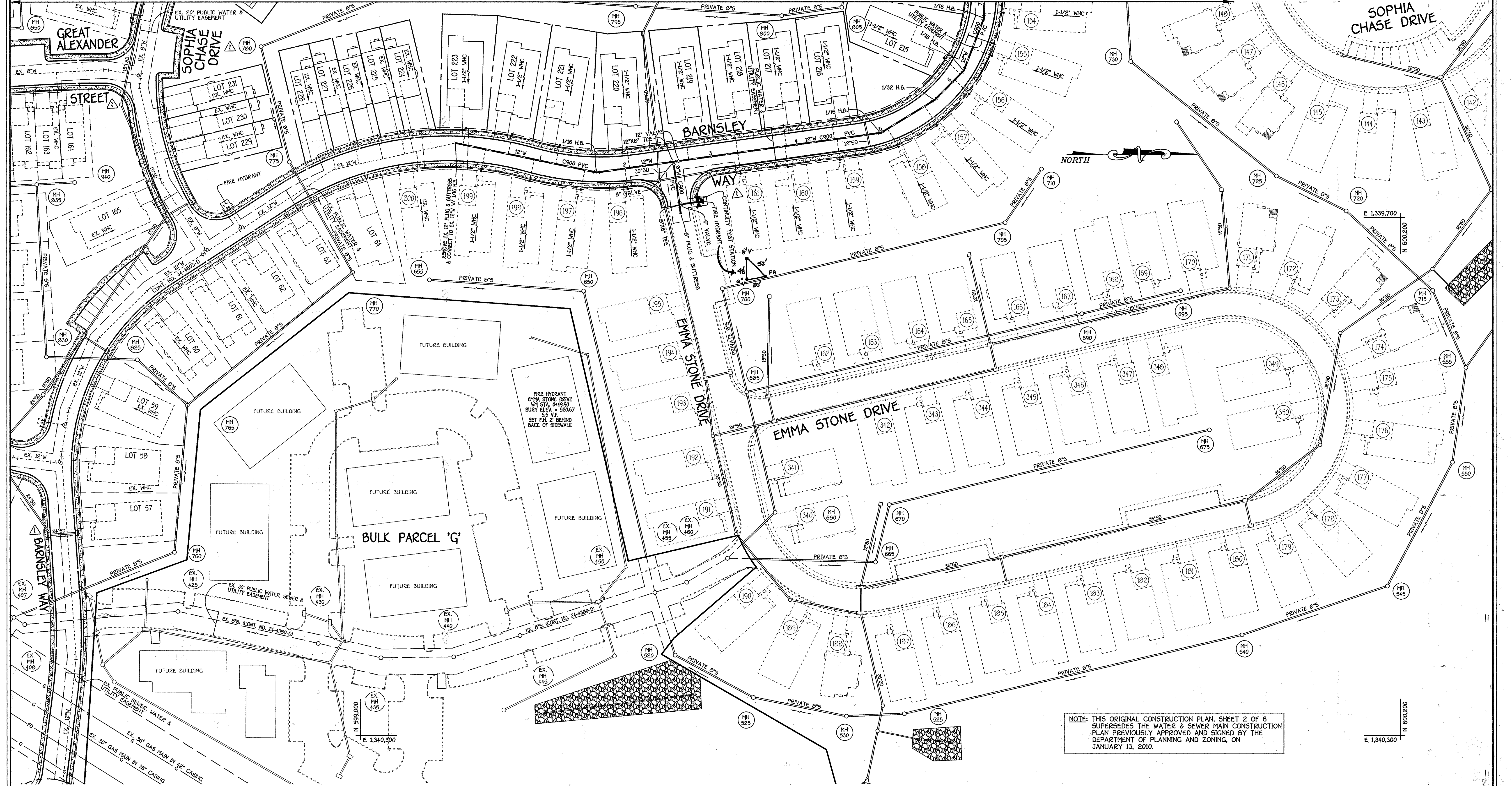
DESIGNED BY:	B.C.R.	DATE:	11/19/13
DRAWN BY:	B.C.R.	DATE:	11/19/13
CHECKED BY:	K.C. 2	DATE:	11/19/13
DATE:	11/19/13	BY:	NO.
INDICATE ALL REVISIONS RESULTING FROM CONVERSION TO PDS SAMPLE LOTS			

WATER MAIN EXTENSIONS PLAN	
600' SCALE MAP NO. 16	BLOCK NO. 3 & 4
F.C.C. WORK ORDER NO. 30770	
FILE NAME: WATER MAIN EXTENSION PLAN	

SCALE AS SHOWN
 SHEET 2 OF 6

K:\SIS\PROJ\00770 GTW WAVERLY\Construction Documents\Construction Document - 30770 Water Main Plan - Phase 4 (Redline).dwg (NEW REDLINE 1) PLAN SHEET 2, 5/29/2013 10:47:41 AM, 11

MATCHLINE: SEE SHEET 2



NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 2 OF 6 SUPERSEDES THE WATER & SEWER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING, ON JANUARY 13, 2010.

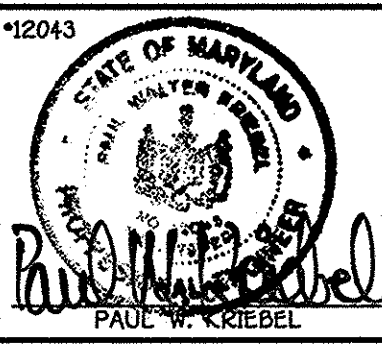
PLAN
SCALE: 1" = 50'

CONTRACT NO. 44-4608-D
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UNITS 314 THRU 323
WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
S. J. Green
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
Paul W. Kriebel
CHIEF, DEVELOPMENT ENGINEERING DIVISION
10-31-12
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. 12943 EXPIRATION DATE IS 7/26/14.
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
4101 461 - 2255
PAUL W. KRIEBEL



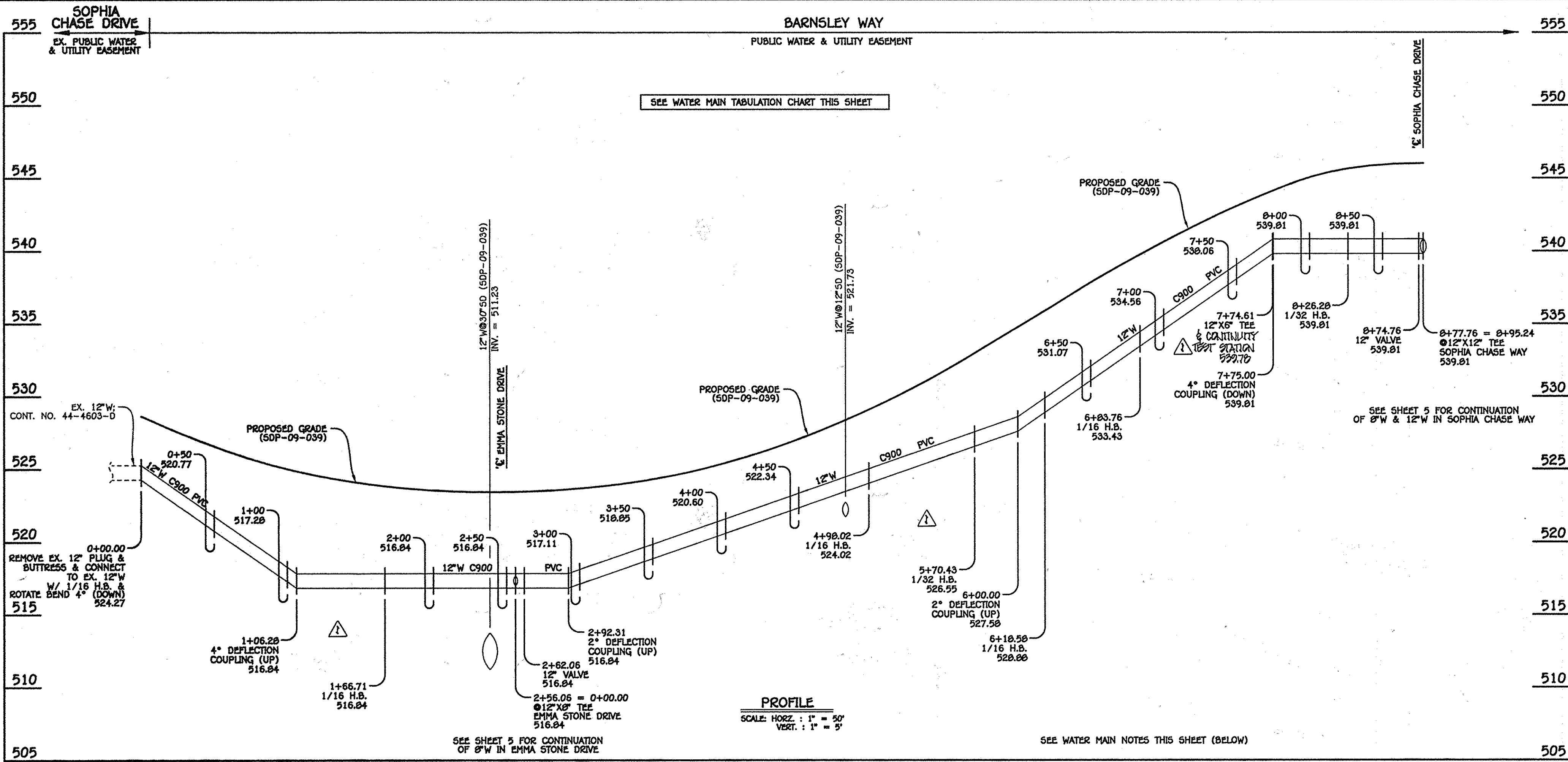
DESIGNED BY:	B.C.E.	
DRAWN BY:	B.C.E.	
CHECKED BY:	MC	2
DATE:	11/1/13	
BY NO.	REVISION	DATE

WATER MAIN EXTENSIONS PLAN	
60' SCALE MAP NO. 16	BLOCK NO. 3 & 4
F.C.C. WORK ORDER NO. 30770	
FILE NAME: WATER MAIN EXTENSION PLAN	

GTW'S WAVERLY WOODS
SECTION 14: BULK PARCEL 'A'
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WATER MAIN EXTENSIONS
CONTRACT NO. 44-4608-D
THIRD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 6

K:\SIS\PROJ\30770 GTW WAVERLY\Construction Documents\30770 Water Main Plan - Phase 4 (Redline).dwg (NEW REDLINE 1) PLAN SHEET 3_5/23/2013 10:48:07 AM.11

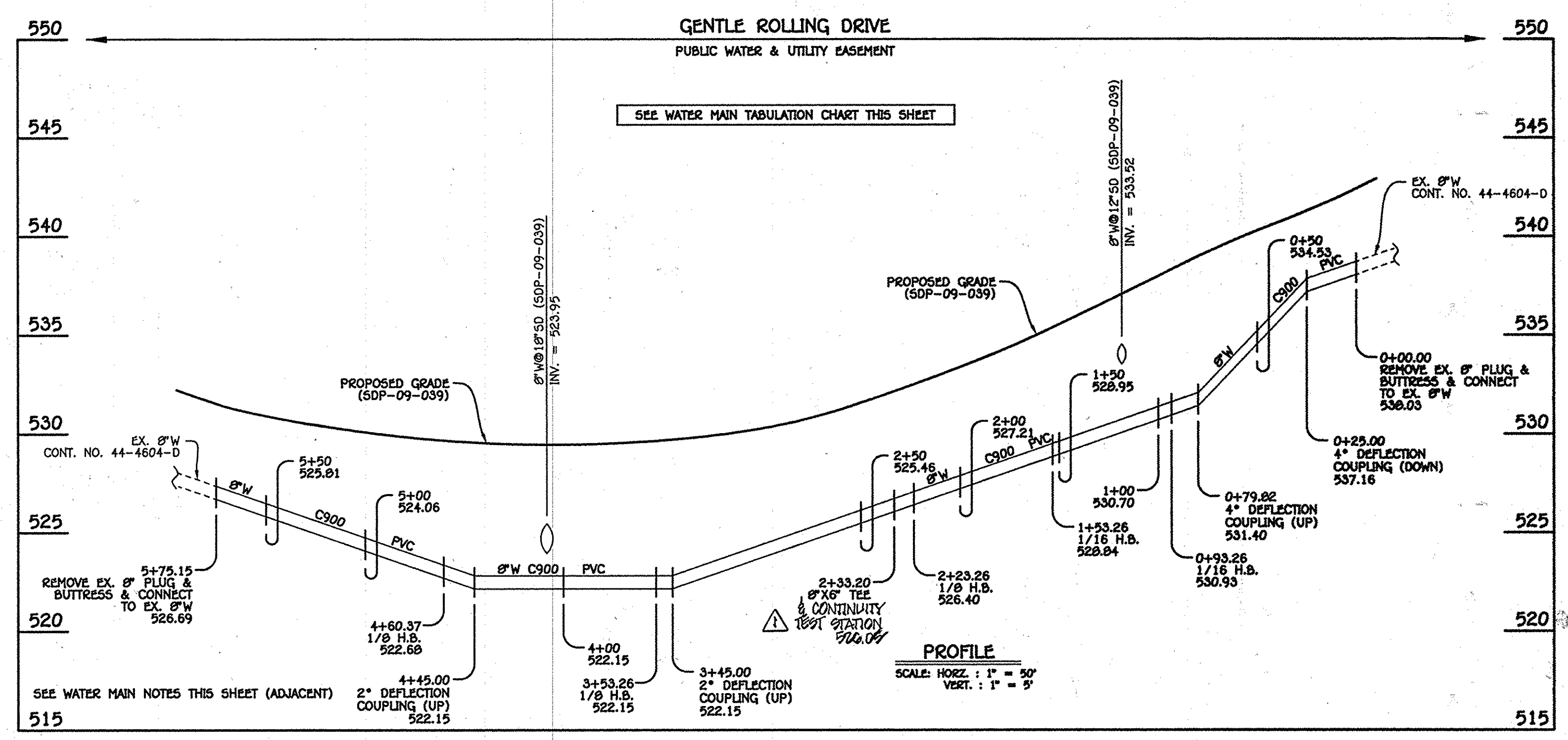


WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
12" WATER MAIN: BARNESLEY WAY			
0+00.00	CONNECT TO EX. 12" W/ 1/16 H.B.	999109.97	1339613.63
1+66.71	1/16 H.B.	999273.16	1339647.60
2+56.06	12" X6" TEE	999361.66	1339635.36
2+62.06	12" VALVE	999367.60	1339634.53
4+98.03	1/16 H.B.	999601.31	1339601.99
5+70.43	1/32 H.B.	999662.92	1339563.95
6+18.98	1/16 H.B.	999896.82	1339529.77
6+83.76	1/16 H.B.	999720.19	1339468.92
7+74.61	12" X6" TEE	999717.79	1339378.10
8+26.28	1/32 H.B.	999716.42	1339326.44
8+74.76	12" VALVE	999721.65	1339278.25
8+77.76	12" X12" TEE	999721.98	1339275.27

12" WATER MAIN: BARNESLEY WAY

- WATER MAIN NOTES:**
1. ALL WATER MAINS SHALL BE AMWA C900 PVC PIPE.
 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-TEED PVC HIGH DEFLECTION COUPLINGS.
 4. ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

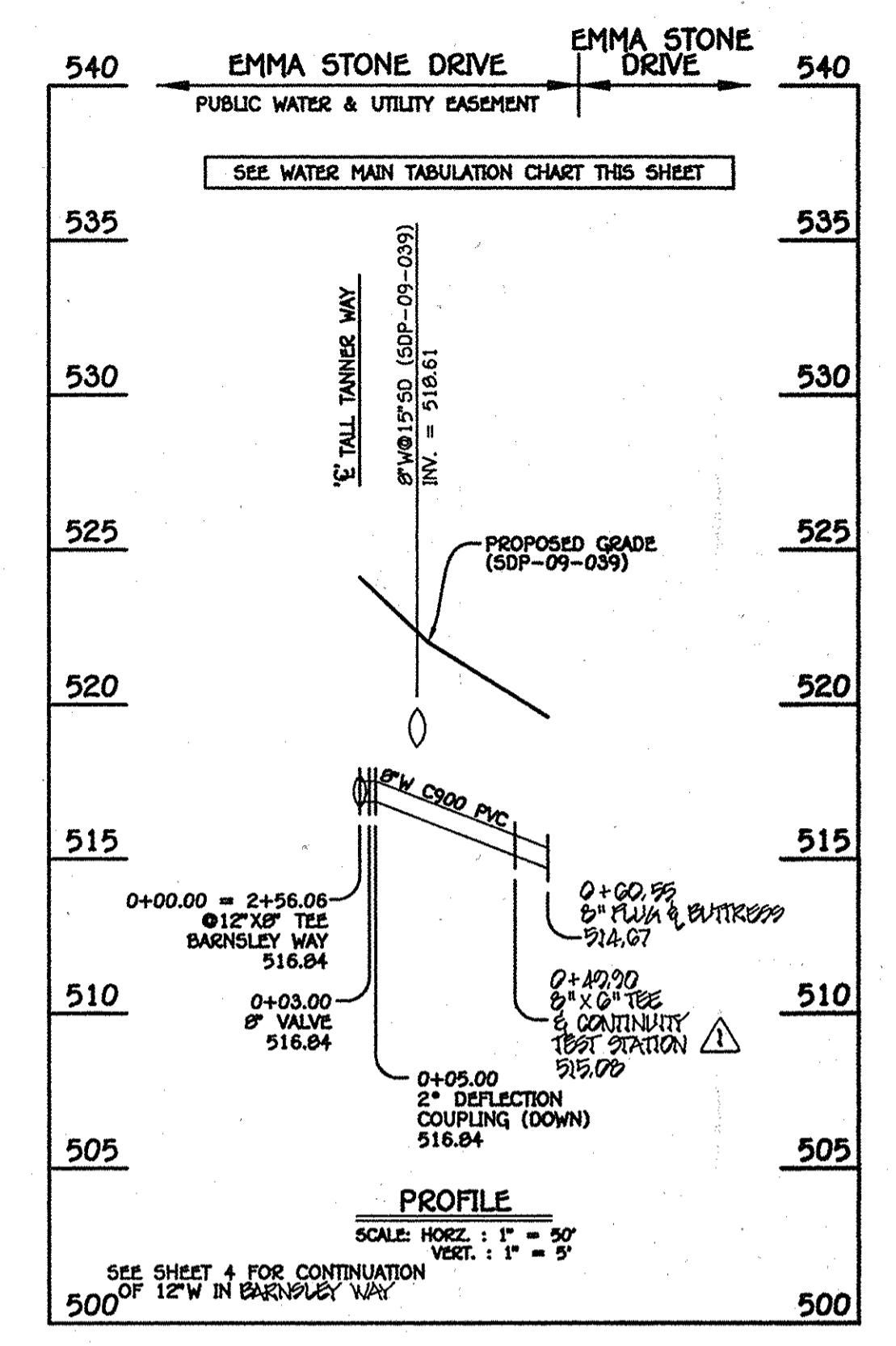
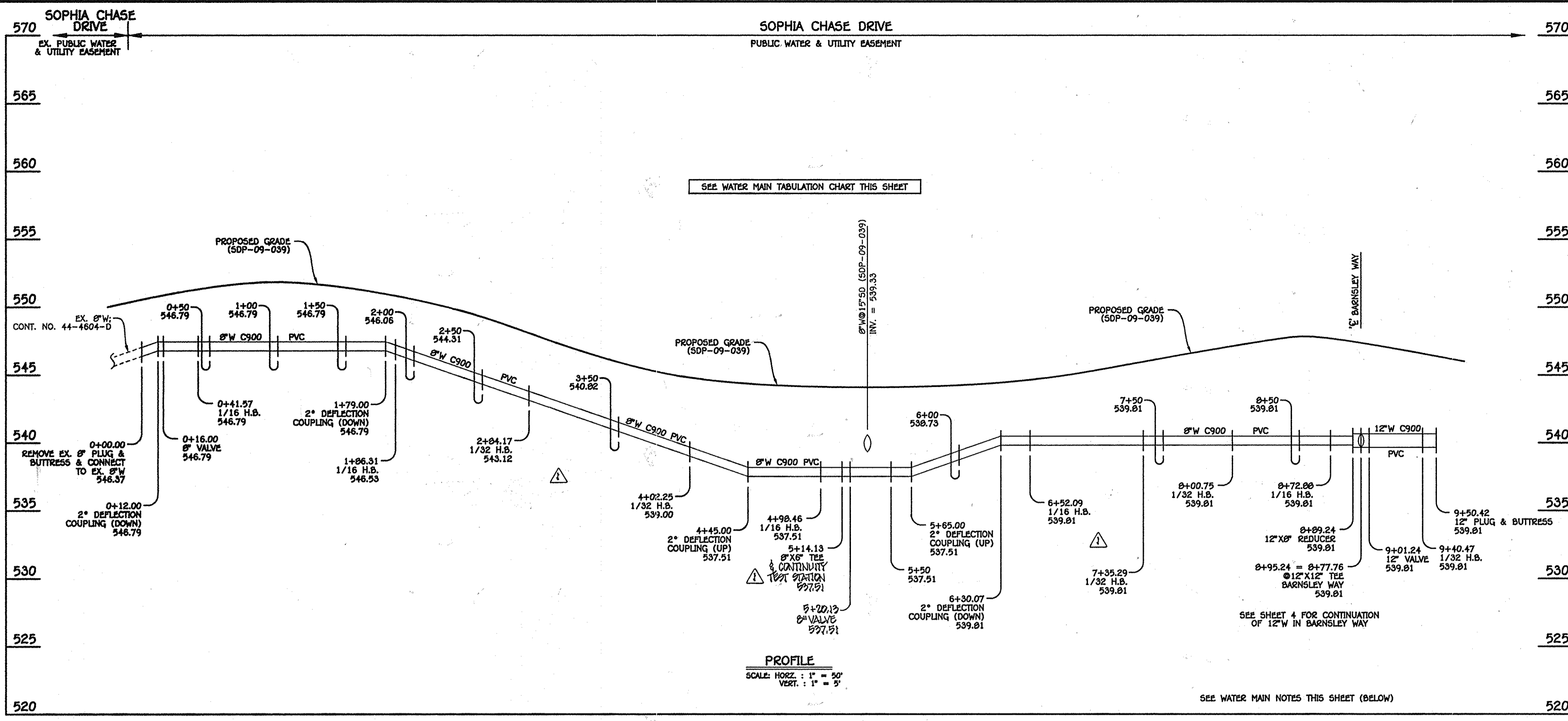
WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: GENTLE ROLLING DRIVE			
0+00.00	EX. 8" PLUG & BUTTRESS	998721.38	1338898.21
0+93.26	1/16 H.B.	998716.23	1338805.09
1+53.26	1/16 H.B.	998689.18	1338751.53
2+23.26	1/8 H.B.	998635.44	1338706.67
2+33.20	8" X6" TEE	998625.54	1338707.54
3+53.26	1/8 H.B.	998505.94	1338718.02
4+60.37	1/8 H.B.	998435.88	1338799.05
5+75.15	EX. 8" PLUG & BUTTRESS	998442.22	1338913.65



8" WATER MAIN: GENTLE ROLLING DRIVE

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 WATER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Chief, Bureau of Utilities 12/22/09 DATE	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND Chief, Development Engineering Division 12/10 DATE	FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CONTINENTAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELLSWORTH CITY, MARYLAND 21046 (410) 461-2892 Paul W. Kriebel PAUL W. KRIEBEL PROFESSIONAL ENGINEER	DESIGNED BY : B.C.R. DRAWN BY : B.C.R. CHECKED BY : P.M.K. DATE : 12/22/09	WATER MAIN EXTENSIONS PROFILES & CHARTS 600' SCALE MAP NO. 16 BLOCK NO. 3 & 4 F.C.C. WORK ORDER NO. 30770 DATE: 12/22/09 FILE NAME: WATER MAIN EXTENSION PROFILE	GTW'S WAVERLY WOODS SECTION 14: BULK PARCEL 'A' "THE COURTYARDS AT WAVERLY WOODS - WEST" UNITS 152 THRU 199, UNITS 268 THRU 271, UNITS 293 THRU 310 & UNITS 314 THRU 323 WATER MAIN EXTENSIONS CONTRACT NO. 44-4608-D THIRD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 4 OF 6
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8" & 12" WATER MAIN: SOPHIA CHASE DRIVE

8" WATER MAIN: EMMA STONE DRIVE

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" & 12" WATER MAIN: SOPHIA CHASE DRIVE			
0+00.00	EX. 8" PLUG & BUTTRESS	598864.36	1339301.63
0+16.00	8" VALVE	598876.44	1339291.14
0+41.57	1/16 H.B.	598895.76	1339274.38
1+06.31	1/16 H.B.	599034.64	1339233.60
2+04.17	1/32 H.B.	599132.04	1339243.12
4+02.25	1/32 H.B.	599246.45	1339272.19
4+98.46	1/16 H.B.	599342.67	1339271.88
5+14.13	8" X 6" TEE	599357.48	1339266.75
5+20.13	8" VALVE	599363.15	1339264.78
6+52.09	1/16 H.B.	599487.83	1339221.56
7+35.29	1/32 H.B.	599570.92	1339225.62
8+00.75	1/32 H.B.	599633.95	1339243.31
8+72.88	1/16 H.B.	599699.75	1339272.86
8+89.24	12" X 8" REDUCER	599716.01	1339274.62
8+95.24	12" X 12" TEE	599721.97	1339275.27
9+01.24	12" VALVE	599727.94	1339275.92
9+40.47	1/32 H.B.	599766.94	1339280.15
9+50.42	12" PLUG & BUTTRESS	599776.81	1339278.83

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN: EMMA STONE DRIVE			
0+00.00	12" X 8" TEE	599361.66	1339635.36
0+03.00	8" VALVE	599362.07	1339638.35
0+49.90	8" X 6" TEE	599368.54	1339684.78
0+60.55	8" PLUG & BUTTRESS	599370.01	1339695.33

- WATER MAIN NOTES:**
1. ALL WATER MAINS SHALL BE AWMA C900 PVC PIPE.
 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 AWMA 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. 44-4608-D
 GTW'S WAVERLY WOODS
 SECTION 14: BULK PARCEL 'A'
 "THE COURTYARDS AT WAVERLY WOODS - WEST"
 PHASE IV: UNITS 81 THRU 91, UNITS 98 THRU 119,
 UNITS 152 THRU 161, UNITS 198 THRU 199,
 UNITS 268 THRU 271, UNITS 293 THRU 310 &
 UNITS 314 THRU 323
 WATER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

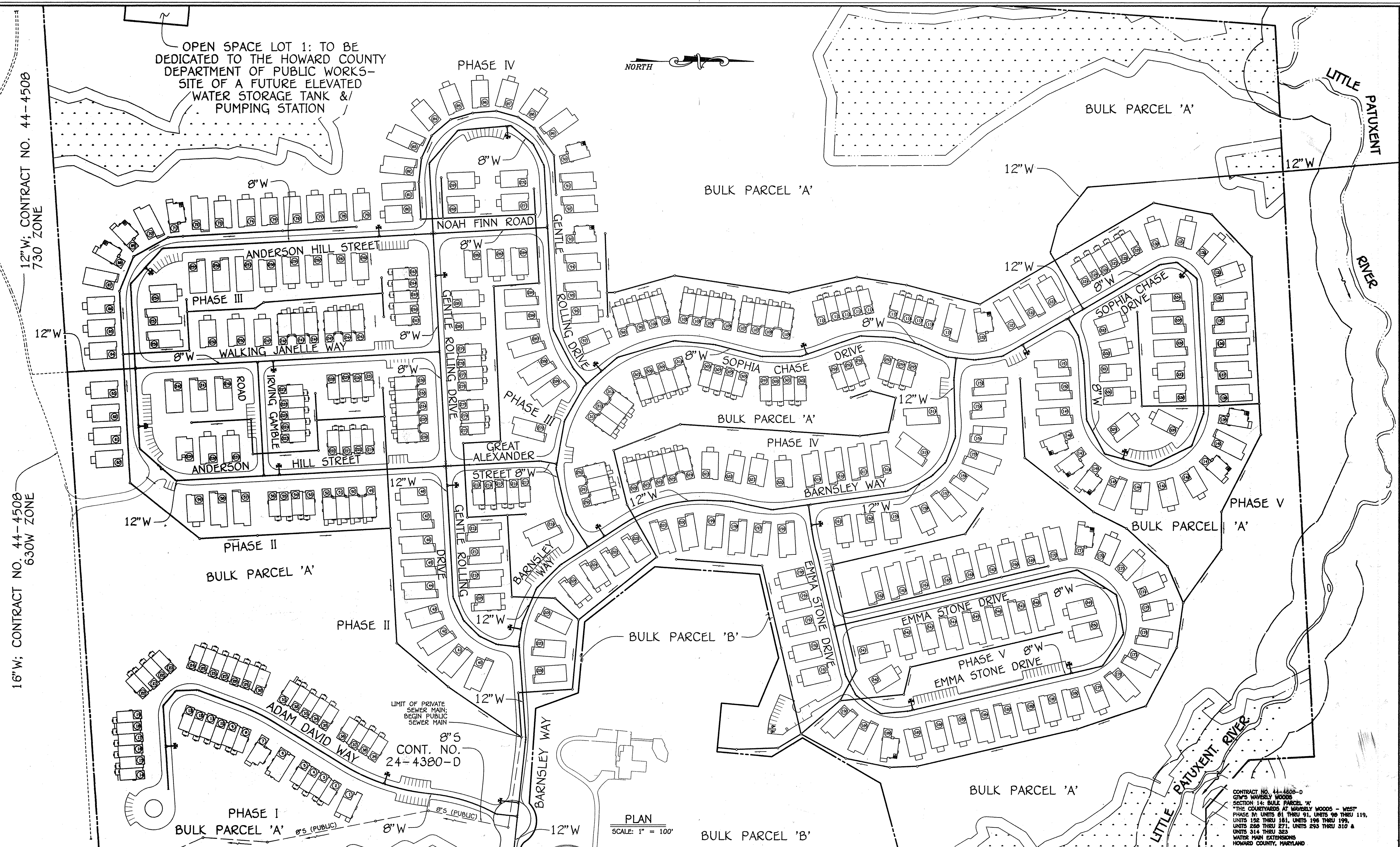
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Chief, Bureau of Utilities 12/22/09	DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND Chief, Development Engineering Division 12/10	FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTRAL SQUARE OFFICE BUILDING - 10272 BALTIMORE NATIONAL PIKE ELLETTT CITY, MARYLAND 21042 (410) 461-2095 Paul W. Kriebel	DESIGNED BY: B.C.R. DRAWN BY: B.C.R. CHECKED BY: P.W.K. DATE: DEC 2009 BY NO.	WATER MAIN EXTENSIONS PROFILES & CHARTS 600' SCALE MAP NO. 16 BLOCK NO. 3 & 4 F.C.C. WORK ORDER NO. 30770 FILE NAME: WATER MAIN EXTENSION PROFILE	GTW'S WAVERLY WOODS SECTION 14: BULK PARCEL 'A' "THE COURTYARDS AT WAVERLY WOODS - WEST" PHASE IV: UNITS 81 THRU 91, UNITS 98 THRU 119, UNITS 152 THRU 161, UNITS 198 THRU 199, UNITS 268 THRU 271, UNITS 293 THRU 310 & UNITS 314 THRU 323 WATER MAIN EXTENSIONS CONTRACT NO. 44-4608-D THIRD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 5 OF 6
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OPEN SPACE LOT 1: TO BE DEDICATED TO THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - SITE OF A FUTURE ELEVATED WATER STORAGE TANK & PUMPING STATION



12" W; CONTRACT NO. 44-4508
730 ZONE

16" W; CONTRACT NO. 44-4508
630W ZONE



LIMIT OF PRIVATE SEWER MAIN: BEGIN PUBLIC SEWER MAIN
CONT. NO. 24-4380-D

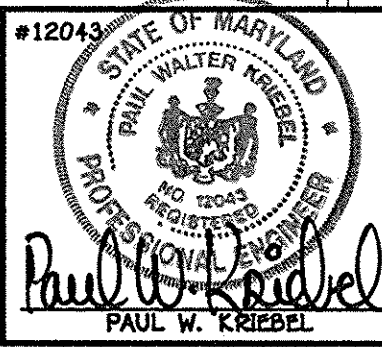
PLAN
SCALE: 1" = 100'

CONTRACT NO. 44-4508-D
GTW'S WAVERLY WOODS
SECTION 14: BULK PARCEL 'A'
THE COURTYARDS AT WAVERLY WOODS - WEST
PHASE IV: UNITS 81 THRU 91, UNITS 98 THRU 119,
UNITS 152 THRU 181, UNITS 196 THRU 199,
UNITS 260 THRU 271, UNITS 293 THRU 310 &
UNITS 314 THRU 323
WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
John C. Lee
DATE: 12/22/09
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
Paul W. Krieger
DATE: 12/22/09
CHIEF, DEVELOPMENT ENGINEERING DIVISION

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CONTINENTAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2999



DESIGNED BY:	B.C.R.
DRAWN BY:	B.C.R.
CHECKED BY:	P.W.K.
DATE:	DECEMBER, 2009
BY NO.	
REVISION	
DATE	

WATER MAIN EXTENSIONS
OVERVIEW
600' SCALE MAP NO. 16 BLOCK NO. 3 & 4
F.C.C. WORK ORDER NO. 30770
FILE NAME: WATER MAIN EXTENSION PHASING

GTW'S WAVERLY WOODS
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WATER MAIN EXTENSIONS
CONTRACT NO. 44-4508-D
THIRD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 6 OF 6