


GENERAL NOTES

PART I

- 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.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON AN AERIAL SURVEY BY POTOMAC AERIAL SURVEYS, DATED MAY 15, 2009.
- HORIZONTAL AND VERTICAL SURVEY CONTROLS:**
THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM MAD 83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 43EC AND 43EA.
ALL VERTICAL CONTROLS ARE BASED ON (NAVD' 27). VERTICAL CONTROLS PROVIDED ON DRAWINGS ARE:
GEODETIC SURVEY CONTROL 43 EC (N 550,601.597 E 1,376,866.072)
BRASS DISC SET ON TOP OF A CONCRETE MONUMENT, LOCATED AT IN GORMAN ROAD, NORTH OF EDGE OF SIDEWALK, 2.21' EAST OF BRIDGE, AND 11.60' NORTH OF GUARDRAIL.
GEODETIC SURVEY CONTROL 43 EB (N 551,654.993 E 1,378,176.951)
BRASS DISC SET ON TOP OF A CONCRETE MONUMENT, LOCATED IN GORMAN ROAD, BETWEEN SKYLARK BLVD AND I-95 BRIDGE, 1.9' NORTH SIDE OF SIDEWALK, AND 48.3' AWAY FROM END OF GUARDRAIL.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED.
- 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 DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWING, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL  AT THE LOCATION OF THE TEST PIT. A NOTES 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 OPERATION AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN THESE PLANS:
AT&T 1-800-252-1133
BGE (CONTRACTOR SERVICE) 410-637-8713
BGE (EMERGENCY) 410-685-0123
BUREAU OF UTILITIES 410-313-4900
COLONIAL PIPELINE CO. 410-785-1300
MISS UTILITY 1-800-257-7777
STATE HIGHWAY ADMINISTRATION 410-531-5533
VERIZON 1-800-743-0033
- 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.
- THE 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 OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.

PART II - WATER

- ALL WATER MAINS TO BE PVC (C-900) UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-6" 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 THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 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 DIP AND PVC WATER MAINS IN ACCORDANCE WITH THE 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.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE SPECIFICATIONS AND WITH SITE DEVELOPMENT PLAN SDP-83-144

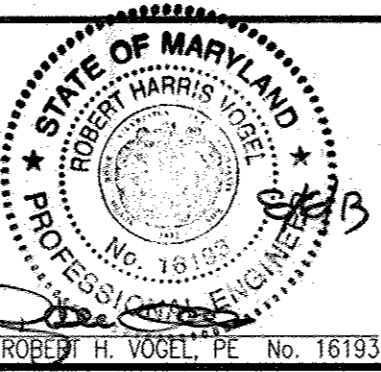
THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John R. Roberts 8/22/13
SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Steve Coen 8/23/13
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
Michael G. ... 8/23/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL: 410.461.7666
ELLCOTT CITY, MD 21043 FAX: 410.461.8961



PROFESSIONAL CERTIFICATE
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. 16193, EXPIRATION DATE: 09-27-2014.

DRN: JER	DES: DZE
CHK: RHV	
DATE: JULY 2013	BY NO. REVISION DATE

FINAL WATER CONSTRUCTION PLAN COVER SHEET

EASTGATE SHOPPING CENTER - IHOP
7361 ASSATEAGUE DRIVE, JESSUP, MD 20794
MD WHOLESALE FOOD CENTER
CONTRACT 24-4810-D

SCALE MAP NO. 43 BLOCK NO. B
TAX MAP: 43 BLOCK B 6TH ELECTION DISTRICT
PARCEL 659, LOT B1 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 2

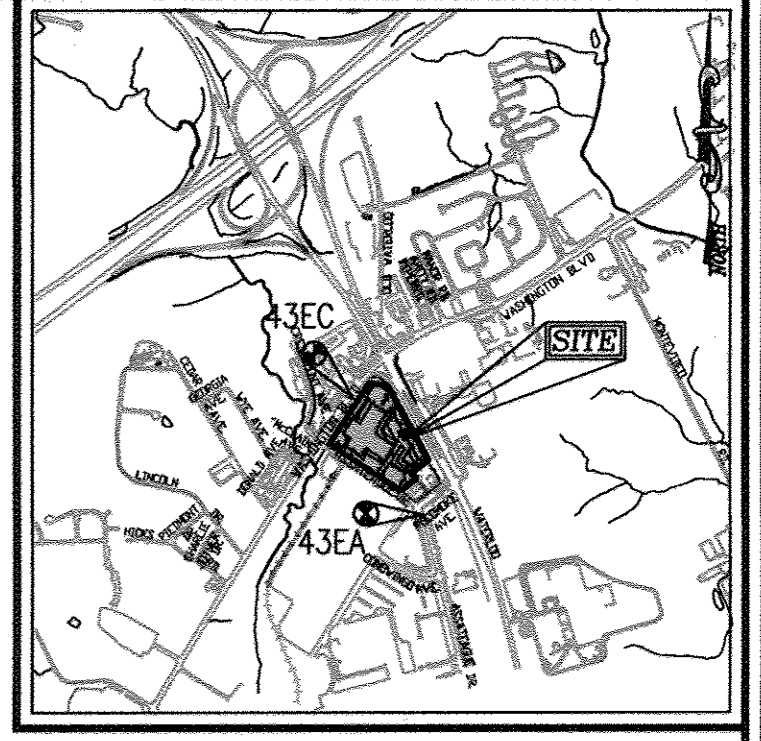
FINAL WATER PLAN

EASTGATE SHOPPING CENTER - IHOP
7361 ASSATEAGUE DRIVE, JESSUP, MD 20794
MD WHOLESALE FOOD CENTER
PARCEL 659, LOT B-1

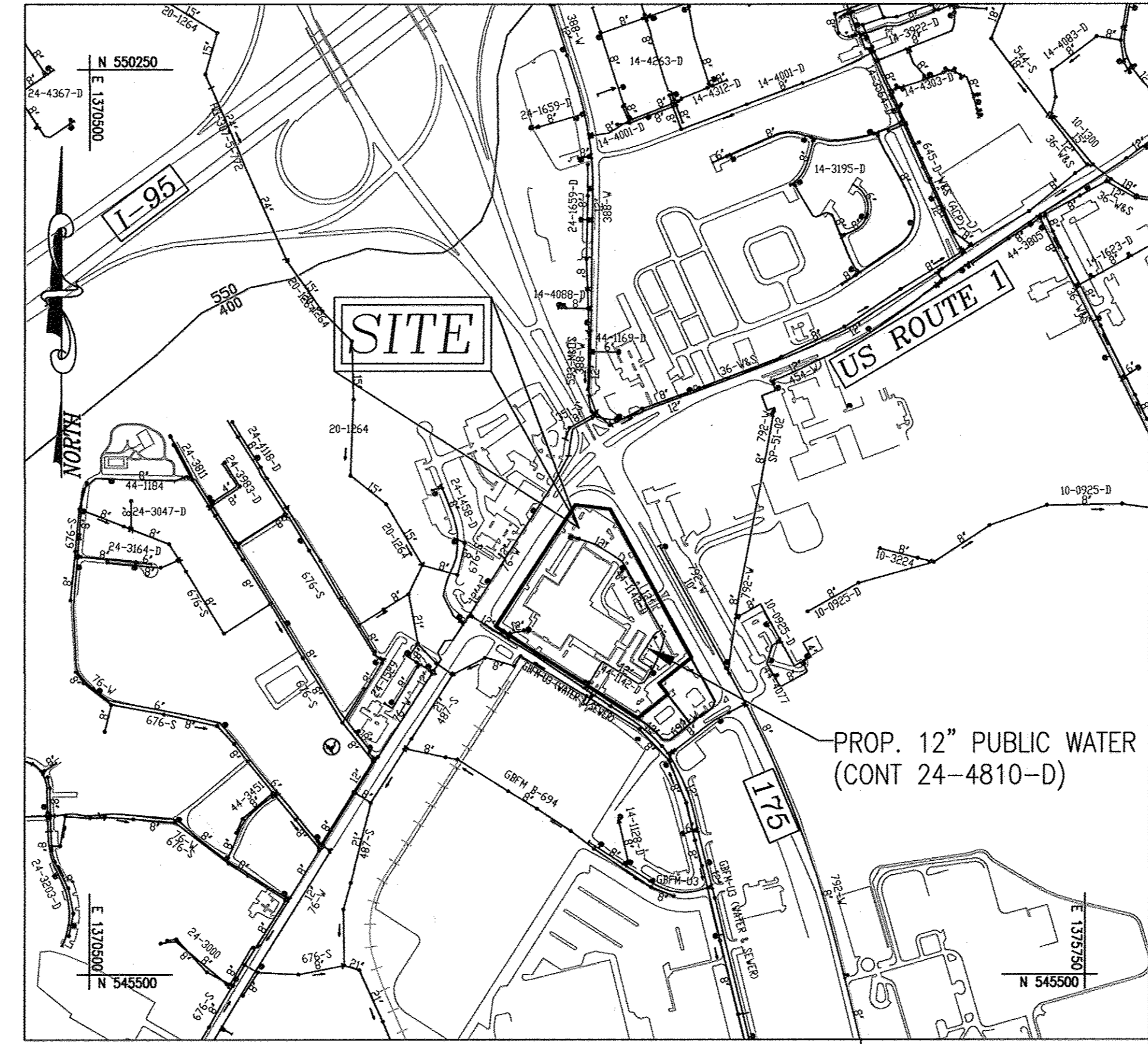
CONTRACT 24-4810-D
HOWARD COUNTY, MARYLAND

BENCHMARKS

HOWARD COUNTY BENCHMARK 43EA (CONC. MON)
N 546593.97, E 1373621.75 ELEV. 242.198
HOWARD COUNTY BENCHMARK 43EC (CONC. MON)
N 547821.27, E 1372882.45 ELEV. 219.706



VICINITY MAP
SCALE: 1"=2000'
ADC MAP COORDINATES: 5054/E3



LOCATION MAP
SCALE: 1"=600'

PROP. 12" PUBLIC WATER
(CONT 24-4810-D)

WATER CODE: 550
TEST GRADIENT: 700

TYPE OF BUILDING:	COMMERCIAL (RESTAURANT)
NO. OF LOTS/PARCELS:	1
NO. OF SINGLE WATER HOUSE CONNECTIONS:	1
NO. OF TWIN WATER HOUSE CONNECTIONS:	0
NO. OF SEWER HOUSE CONNECTIONS:	0
NO. OF TWIN SEWER HOUSE CONNECTIONS:	0
DRAINAGE AREA:	LITTLE PATUXENT RIVER
TREATMENT PLANT:	LITTLE PATUXENT WASTEWATER TREATMENT PLANT

LEGEND

- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- FIRE HYDRANT
- PROPOSED VALVE
- PROPOSED TEE
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- EXISTING SEWER
- EXISTING SEWER MANHOLE
- WATER HOUSE CONNECTION
- SEWER HOUSE CONNECTION
- PROPOSED LIGHT

QUANTITIES

NAME OF UTILITY CONTRACTOR :				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE :				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
WATER				
12" WATER (PVC C-900)	290 LF	290 LF	C-900	
6" WATER (PVC C-900)	12 LF	12 LF	C-900	
4" WATER (PVC C-900)	10 LF	10 LF	C-900	
6" VALVE	1 EA	1 EA	DUCTILE	
4" VALVE	1 EA	1 EA	DUCTILE	
12"x6" TEE	1 EA	1 EA	DUCTILE	
12"x4" TEE	1 EA	1 EA	DUCTILE	
6" FIRE HYDRANT	1 EA	1 EA	KENNEDY	
12" - 1/32 BEND	3 EA	3 EA	DUCTILE	
12" - 1/16 BEND	3 EA	3 EA	DUCTILE	
12" - 1/8 BEND	6 EA	6 EA	DUCTILE	
12" - 5' SWEEP	2 EA	2 EA	DUCTILE	
12" VALVE	1 EA	1 EA	DUCTILE	

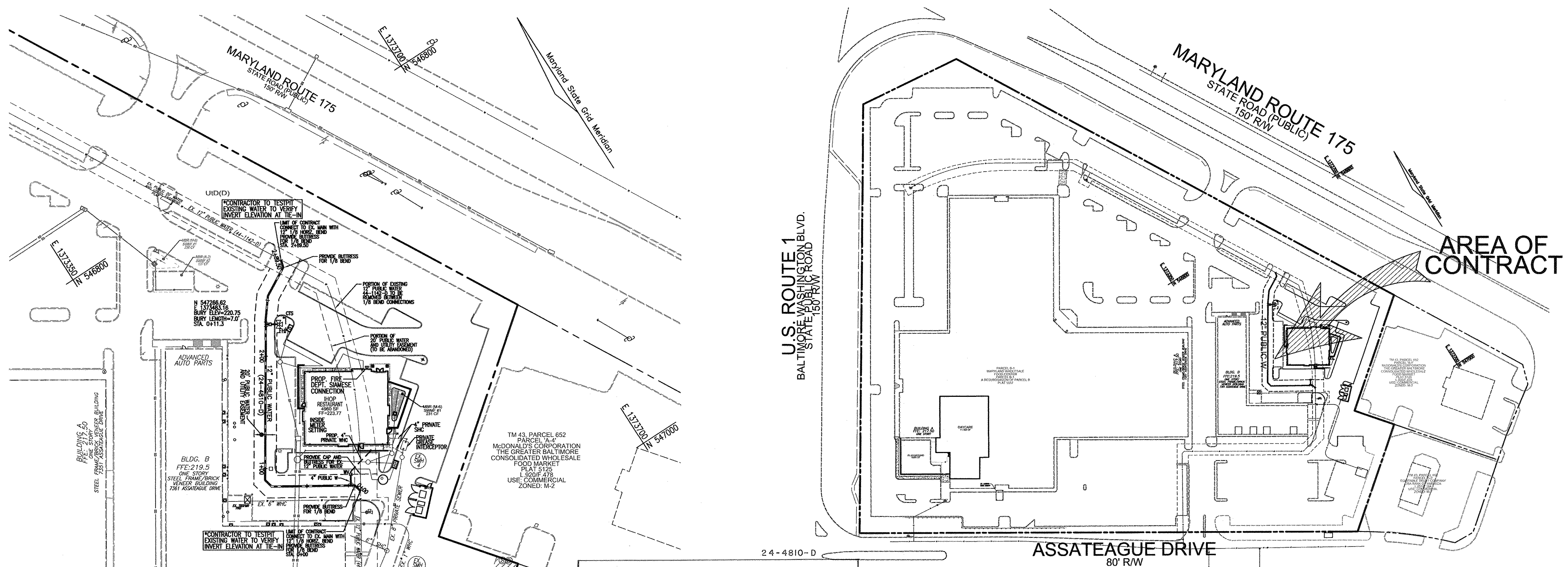
AS-BUILT

By *JER* Date 1/23/14

OWNER/DEVELOPER
EASTGATE LLC
8150 LEESBURG PIKE STE 1100
VIENNA, VA 22182

LEGEND:

	PROPERTY LINE
	RIGHT-OF-WAY LINE
	ADJACENT PROPERTY LINE
	EXISTING CURB AND GUTTER
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPOSED STORMDRAIN
	PROPOSED CURB
	PROPOSED LIGHT POLE
	PROPOSED WATER MAIN
	FIRE HYDRANT
	PROPOSED VALVE
	PROPOSED TEE
	WATER HOUSE CONNECTION
	SEWER HOUSE CONNECTION

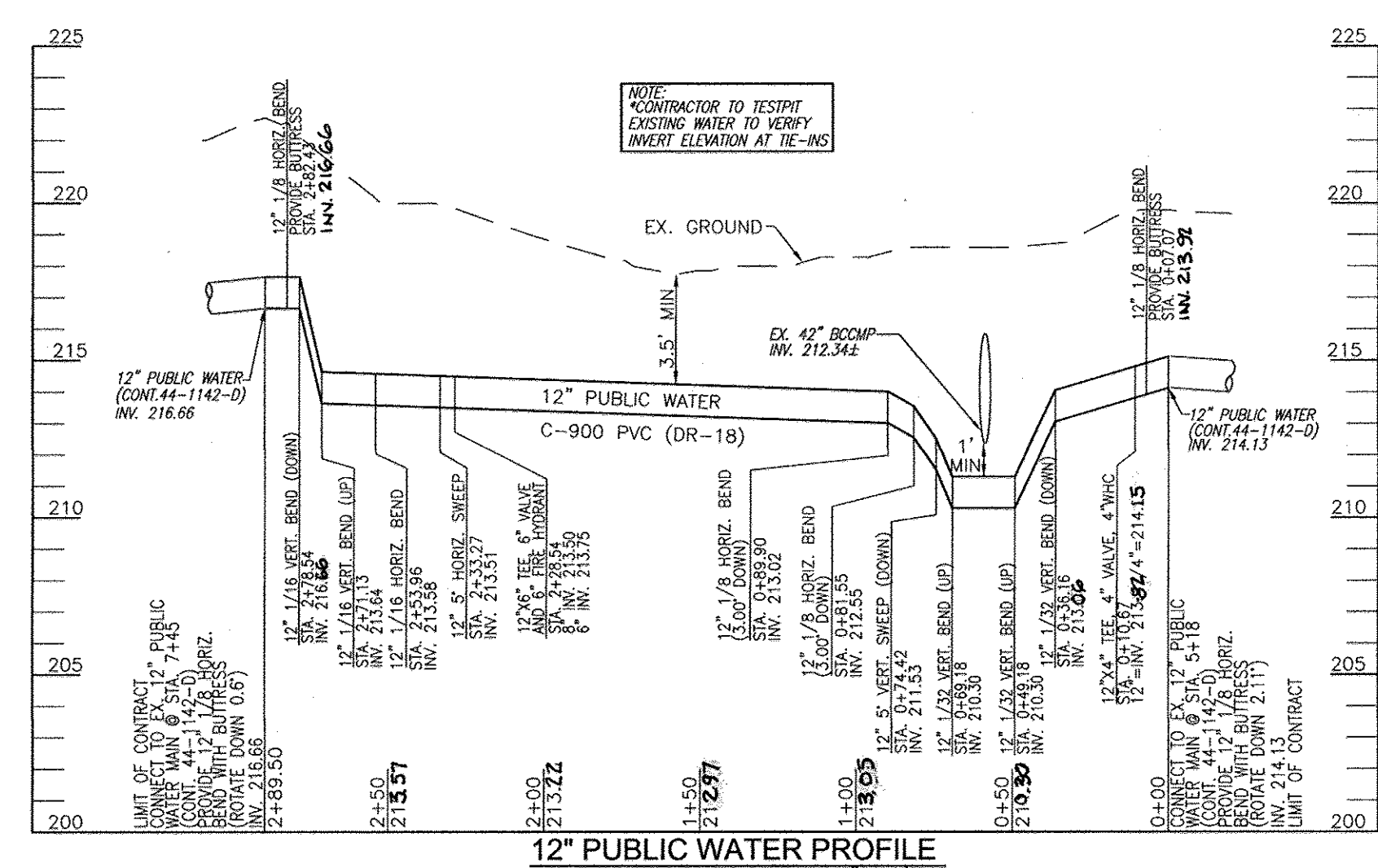


LAYOUT PLAN
SCALE: 1"=50'

SITE PLAN
SCALE: 1"=100'

EASTGATE SHOPPING CENTER - I H O P

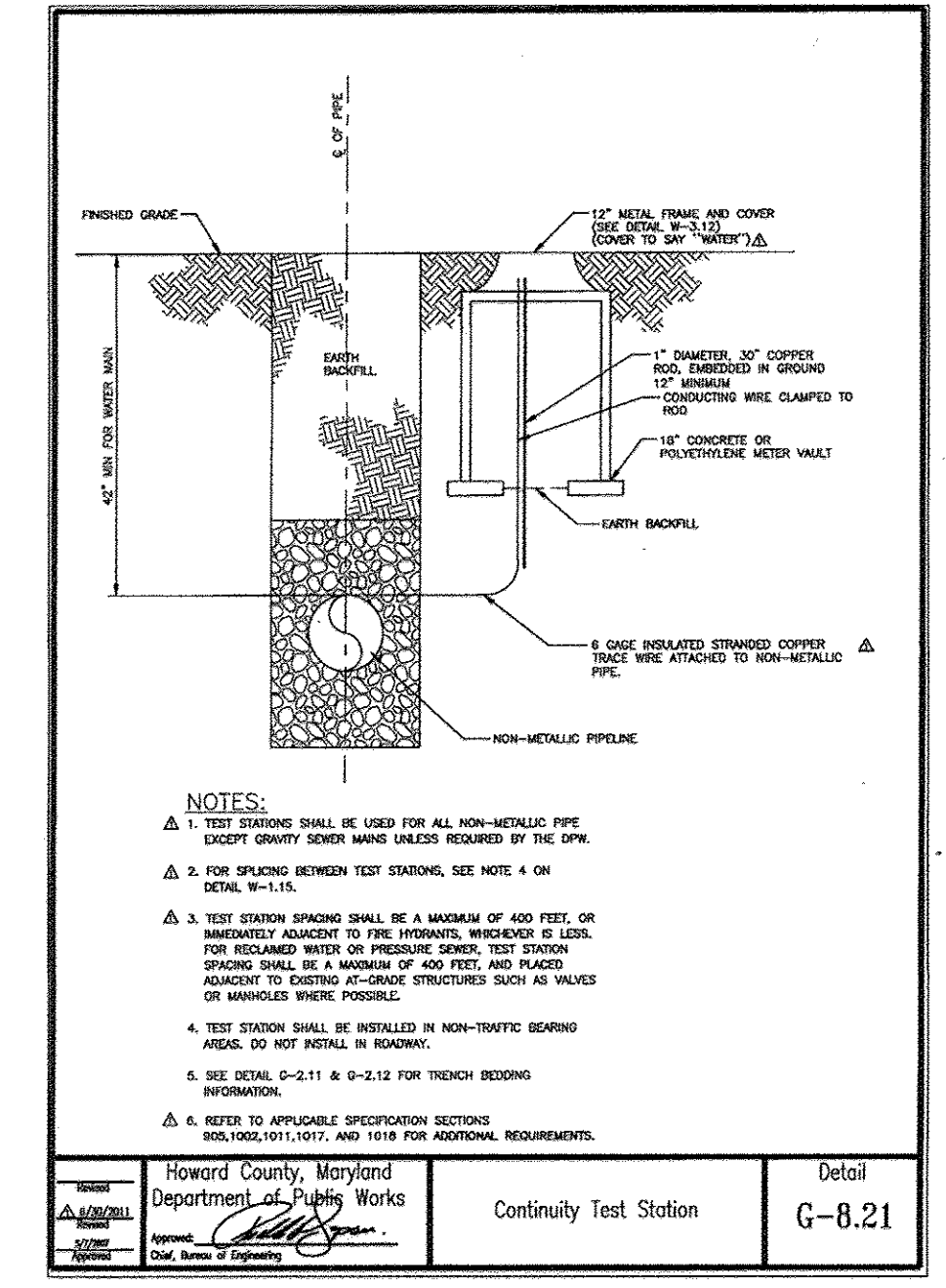
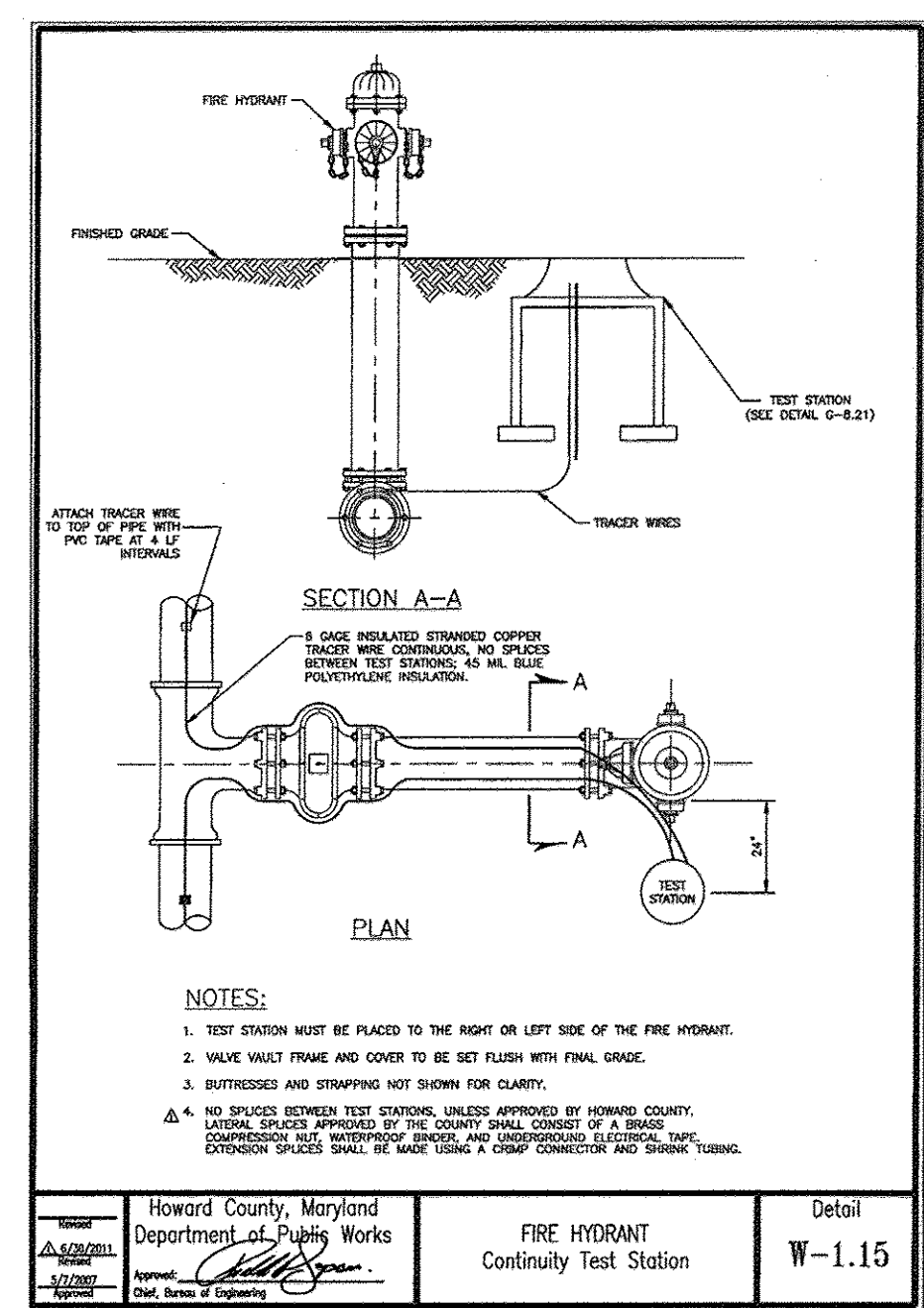
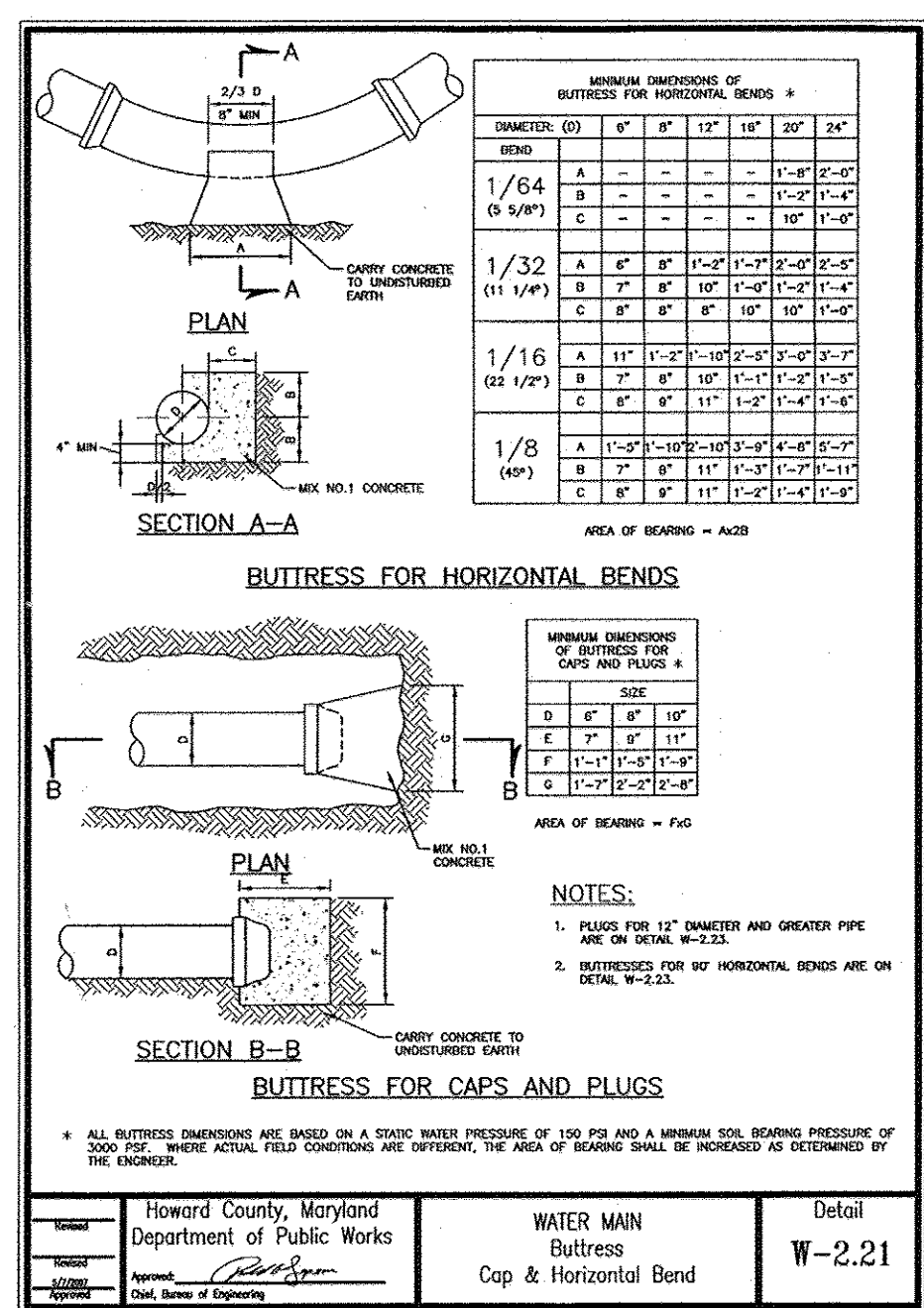
	FROM	TO	DISTANCE	REMARKS
STA 2+28	FH	6" VALVE	10'	
	I2" VALVE	6" VALVE	6'	
	FH	I2" VALVE	13'	
	INLET	6" VALVE	21'	
STA 0+10	FH	4" VALVE	37'	
	6" VALVE	4" VALVE	36'	
STA 2+28	SMH 4	4" VALVE	46.7'	
	TEST STATION	6" VALVE	7'	
	TEST STATION	I2" VALVE	11.6'	
	TEST STATION	FH	4'	



12" PUBLIC WATER PROFILE
SCALE: HORIZONTAL 1"=50' VERTICAL 1"=5'

WATER MAIN LOCATION CHART

WL STA.	APPURTENANCE
WL STA. 0+00.00	12" 1/8 HORIZ. BEND (2.11" DOWN)
WL STA. 0+07.07	12" 1/8 HORIZ. BEND
WL STA. 0+10.67	12"x4" TEE, 10 LF 4" DIP WATER, 4" VALVE
WL STA. 0+36.16	12" 1/32 VERT. BEND
WL STA. 0+49.18	12" 1/32 VERT. BEND
WL STA. 0+69.18	12" 1/32 VERT. BEND
WL STA. 0+74.42	12" 5" VERT. SWEEP
WL STA. 0+81.51	12" 1/8 HORIZ. BEND (3.0" DOWN)
WL STA. 0+89.80	12" 1/8 HORIZ. BEND (1.56" DOWN)
WL STA. 2+28.54	12"x8" TEE, 6" VALVE AND 6" FIRE HYDRANT
WL STA. 2+33.27	12" 5" HORIZ. SWEEP
WL STA. 2+53.96	12" 1/16 HORIZ. BEND
WL STA. 2+71.13	12" 1/16 VERT. BEND
WL STA. 2+78.54	12" 1/16 VERT. BEND
WL STA. 2+82.43	12" 1/8 HORIZ. BEND
WL STA. 2+89.50	12" 1/8 HORIZ. BEND (0.60" DOWN)



NOTE: CONTRACTOR TO NOTIFY ALL AFFECTED PARTIES AND HOWARD COUNTY BUREAU OF UTILITIES PRIOR TO CLOSING EXISTING 12" VALVE IN CONJUNCTION WITH PROPOSED WATER MAIN CONSTRUCTION

AS-BUILT

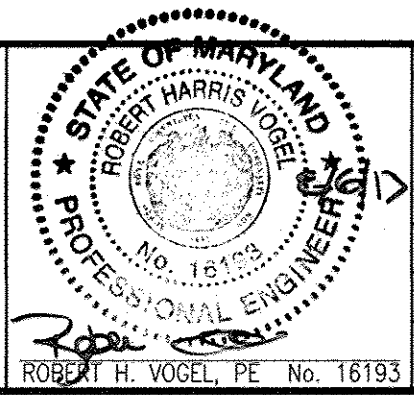
Date: 1/23/13

DEVELOPER
EASTGATE LLC
8150 LEESBURG PIKE, STE 1100
VIENNA, VA 22182

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
CHIEF, BUREAU OF UTILITIES
DATE: 01/23/13

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 01/23/13

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BY	NO.	REVISION	DATE

FINAL WATER CONSTRUCTION PLAN
PLAN & PROFILE

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7361 ASSATEAGUE DRIVE, JESSUP, MD 20794
MD WHOLESALE FOOD CENTER
CONTRACT 24-4810-D

SCALE AS SHOWN
SHEET 2 OF 2

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