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May 21, 2015

Ms. Jeannette DeBartolomeo
Maryland Department of Environment
Oil Control Program
1800 Washington Blvd. Suite 620
Baltimore, Maryland 21230-1719

AECOM Project: 60144763

Subject: Additional Well Installation Work Plan
7-Eleven Store No.22281
2400 Pleasantville Road
Fallston, Maryland
Facility ID No. 0006365
MDE Case No. 2005-0120HA

Dear Ms. DeBartolomeo:

On behalf of 7-Eleven, Inc. (7-Eleven), AECOM is submitting this Work Plan for installation of an additional off site monitoring well at the above-referenced location. The well will be clustered with the current off site monitoring wells MW-8A and MW-8B located north of the property across MD Rt. 152. The new well will be labeled MW-8C with the purpose of acting as a sentinel well for any potential future migration of documented on site impacts.

Background and Objective of Well Installation

The site is currently an active 7-Eleven store with retail gasoline operations. Two gasoline underground storage tanks (USTs) (a 10,000 gallon and a 15,000 gallon) are in use at the site, and were installed during tank replacement activities in September 2008. A comprehensive remedial evaluation and evaluation of the current groundwater contaminate plume stability was presented to the MDE in a letter dated February 7, 2014. The letter discussed remediation efforts and goals to date and described how the methyl tertiary butyl ether (MTBE) plume size has remained stable with decreasing concentrations; however the plume itself is migrating in the down gradient direction. Recently several residential potable wells were installed in a small development located directly down gradient of the site. 7-Eleven feels it is prudent as a precautionary measure to install a sentinel well to monitor for any potential future off site plume movement towards these wells.

AECOM has produced a lithologic cross-section encompassing the 7-Eleven site, the down gradient residential properties and associated wells. The cross section illustrates the makeup of the subsurface deposits and bedrock including water bearing fractures within the potable wells as noted on driller's logs. The cross section and a map showing the location of the cross section transect are included as **Attachment A**. The sentinel well's location was determined based on the data used to produce the cross section and AECOM's knowledge of the site's history and plume movement.

Monitoring Well Installation

Prior to drilling, a private and public utility locator will be contracted to identify and mark all utilities in the area of the proposed boring location. In addition, the first five feet of the boring will be cleared utilizing air knife (soft dig) technology. The proposed MW-8C well installation will entail logging of subsurface soils and bedrock as the boring progresses via air rotary drilling techniques. The new

monitoring well MW-8C is intended to act as a sentinel well for any migrating impacts, so AECOM proposes to install the well as a 6-inch steel-cased well into the bedrock at approximately 90 feet below ground surface (bgs) or 440 feet above mean sea level. The well will then be left as an open bedrock borehole to approximately 190 feet bgs or 340 feet above mean sea level. The annular space surrounding the casing will be grouted to prevent vertical migration of percolating surface waters into the well. A flush-mount 18-inch diameter manhole with a concrete pad will complete the well installation. The newly installed monitoring well will be developed by a Maryland-licensed well driller using a combination of pumping and surging; and the purge water will be treated with carbon and discharged in the surrounding grassy area. Top of casing elevation will be surveyed to obtain water level elevation data. After proper development and completion of the well, AECOM proposes to conduct borehole geophysics to determine the existence and orientation of any fractures in the well that would be helpful in determining the hydrodynamics of the well. The proposed monitoring well location is shown in **Figure 1**.

Groundwater Sampling

Groundwater samples from the monitoring well will be collected during regularly scheduled sampling events associated with the 7-Eleven property. The monitoring well will be gauged with an oil/water interface probe prior to sample collection. The groundwater samples will be collected with dedicated bailers, and will be placed on ice and submitted to Test America Inc. of Nashville, Tennessee, and analyzed for full suite VOCs, including fuel oxygenates, via EPA Method 8260 and for TPH-GRO via EPA Method 8015B.

Upon approval of this work plan, AECOM will notify the MDE five days prior to initiating the well installation activities. A summary of the well installation activities and boring log will be incorporated into the subsequent Quarterly Monitoring and Sampling Report submitted to MDE.

If you have any questions or require any additional information regarding this Work Plan, please contact the undersigned at (301) 289-3900.

Yours sincerely,



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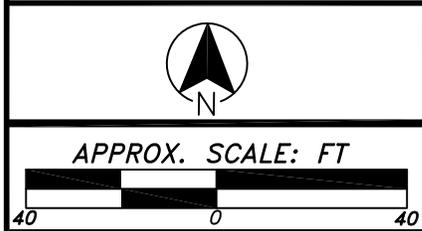
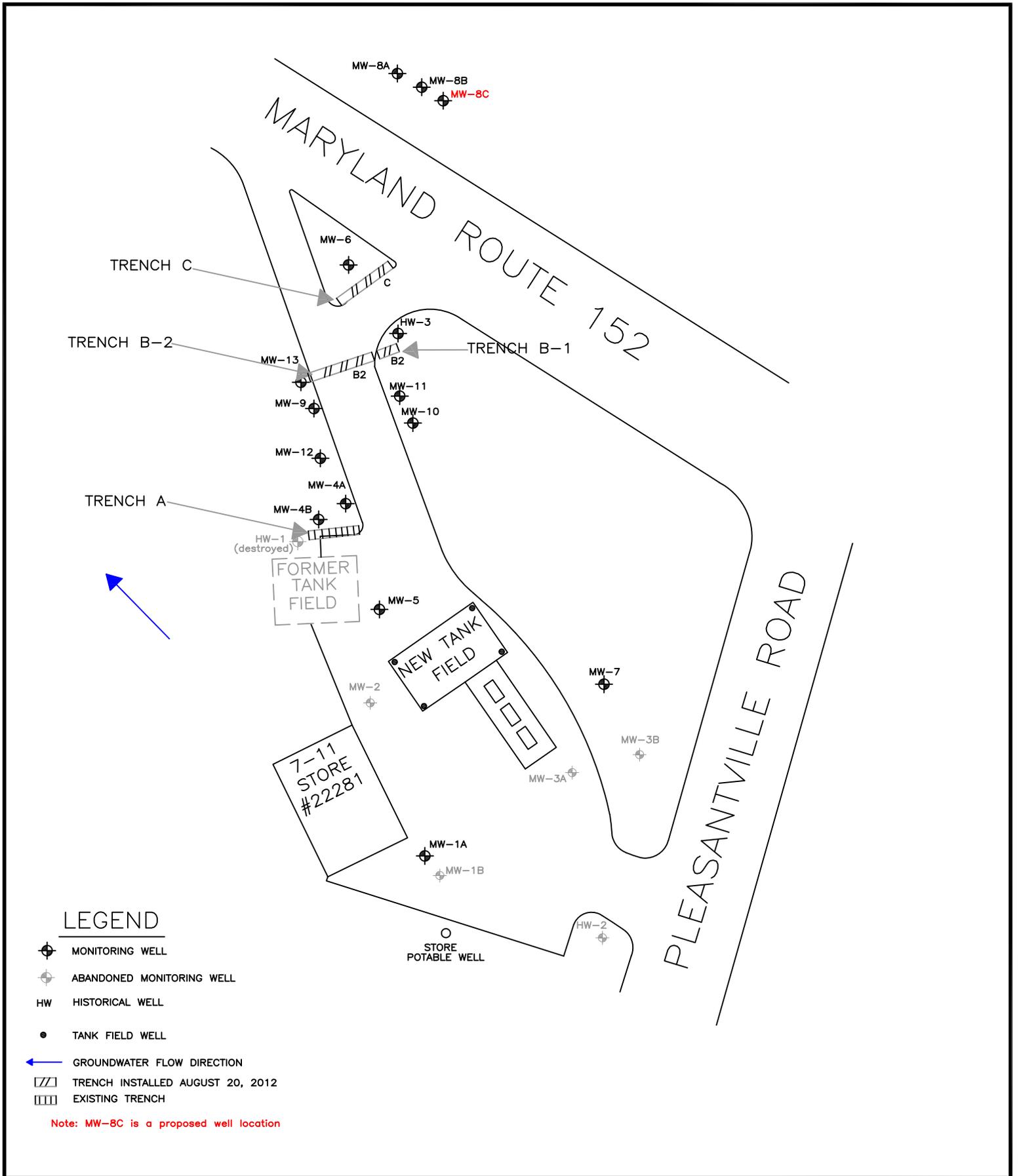
Attachments:

Figure 1 – Site Map

Attachment A – Lithologic Cross Section

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FIGURES



SITE PLAN

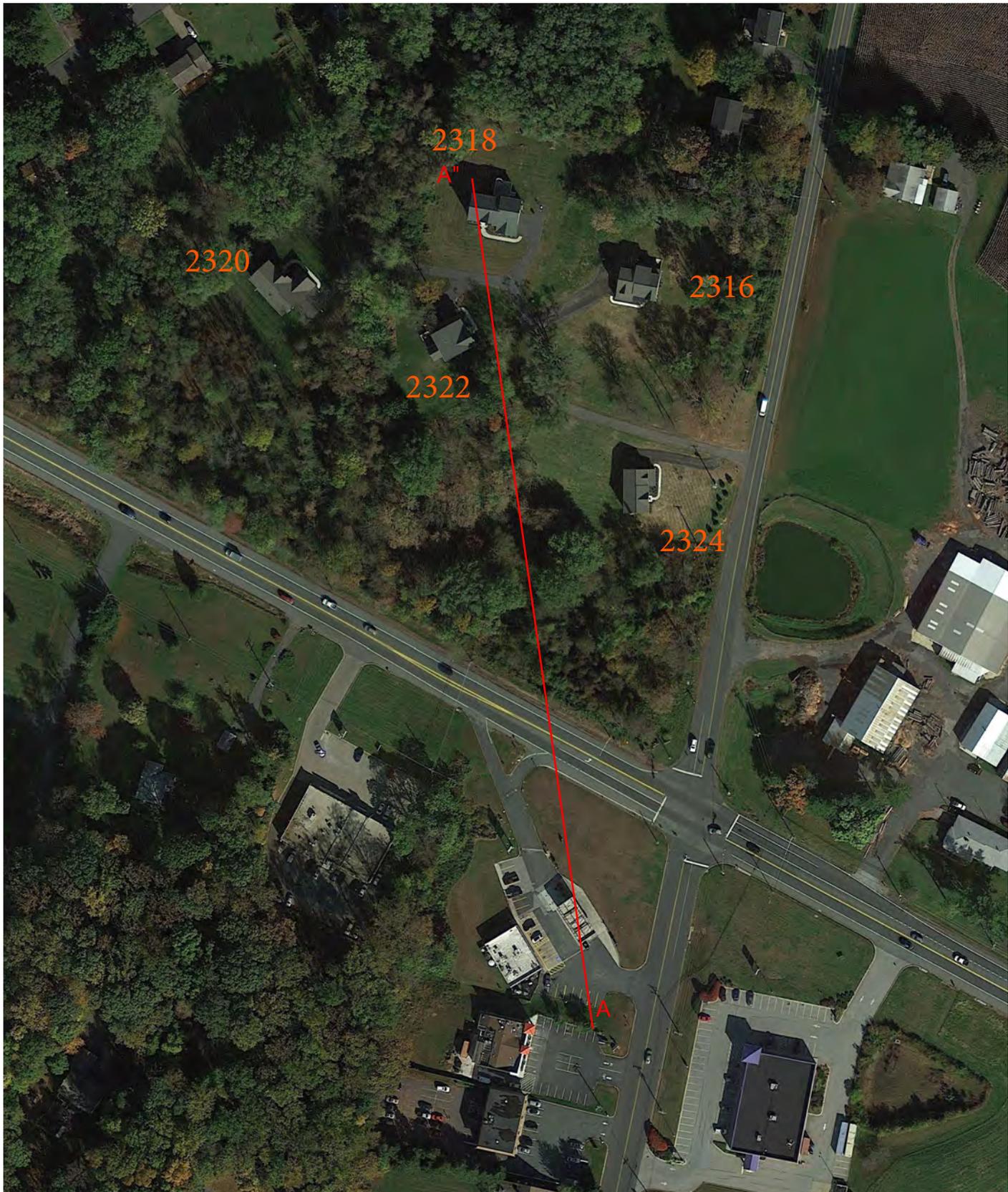
Drawn By: SD Reviewed By: RA

7-ELEVEN Inc.
 STORE No. 22281
 2400 PLEASANTVILLE ROAD
 FALLSTON, MARYLAND

Project No.: 60144763

FIGURE 1

ATTACHMENT A



APPROX. SCALE: FT



Site Plan
Cross-Section A to A''

7-ELEVEN Inc.
STORE No. 22281
2400 PLEASANTVILLE ROAD
FALLSTON, MARYLAND

FIGURE 1

Drawn By: JG

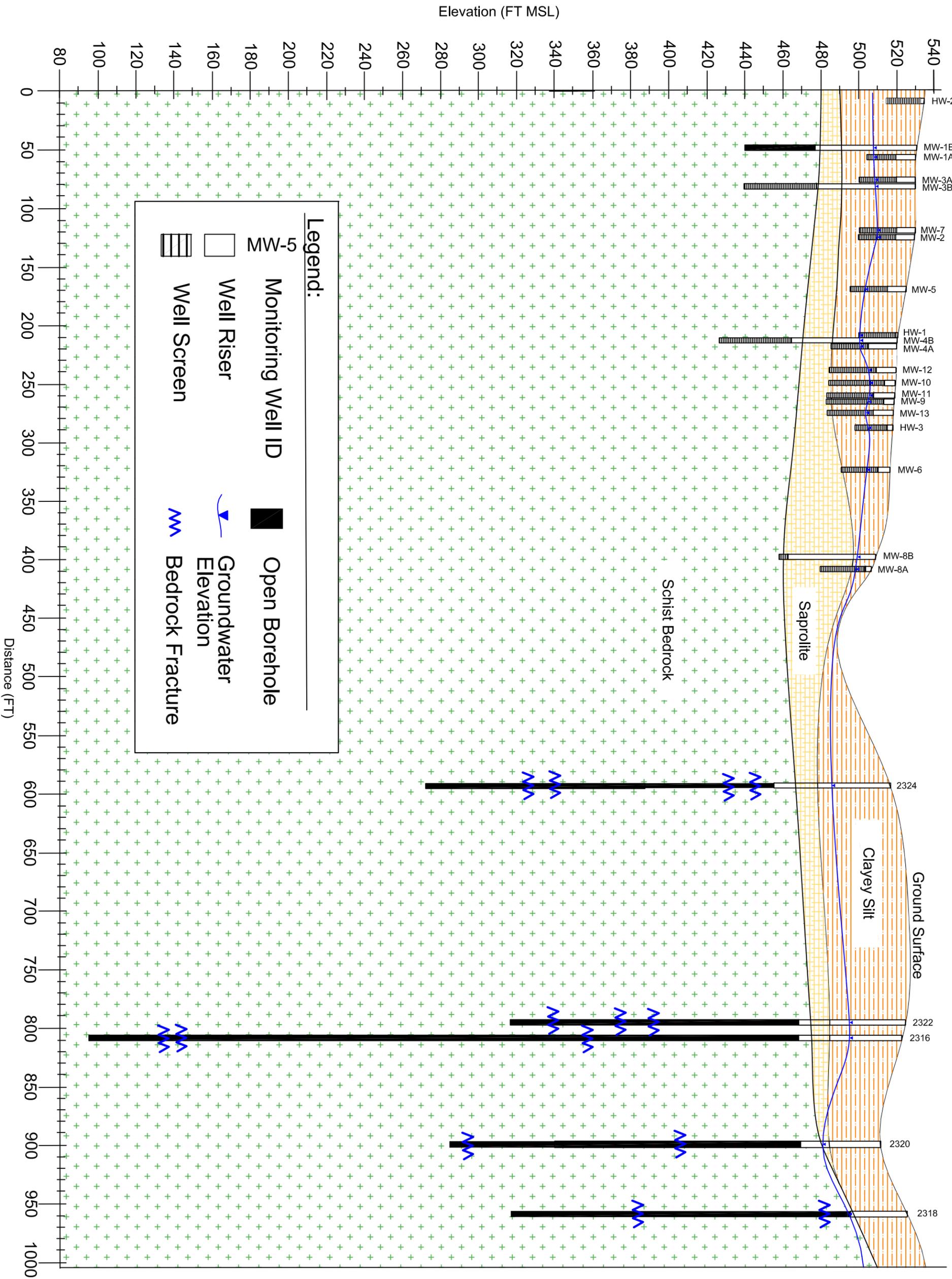
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South A

North A



Lithologic Cross-Section A-A"

7-Eleven Store No. 22281
2400 Pleasantville Road
Fallston, MD

SCALE:	DATE:	PROJECT NUMBER:
SEE FIGURE	3/27/2015	60144763



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DESIGNED BY:	REVISIONS			
SD	NO.:	DESCRIPTION:	DATE:	BY:
DRAWN BY:				
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CHECKED BY:				
RA				
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FIGURE NUMBER:
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1 OF 1