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115 Tabor Road
Morris Plains, NJ 07950
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January 23, 2018

Mr. Edward Hammerberg
Technical Specialist/RCE Supervisor
Waste Division and Utilization Program
Maryland Department of the Environment
1800 Washington Boulevard, Suite 645
Baltimore, MD 21230

Re: Transmittal of Quarterly Site Progress Report, Fourth Quarter 2017 2000 Race Street Site, Baltimore, Maryland

Dear Mr. Hammerberg:

Please find attached the Fourth Quarter 2017 Site Progress Report for the 2000 Race Street Site, Baltimore, Maryland. This document is provided on behalf of Honeywell and the Mayor and City Council of Baltimore pursuant to the requirements of Section III.A of the 2000 Race Street Site Consent Order effective May 23, 2007.

As we indicated previously, I have now assumed responsibility for this project as the Remediation Manager for Honeywell. My colleague Chris French will continue the project as the Construction Manager. If you have any questions or require additional information, please do not hesitate to contact me at 973-455-3302, or by e-mail at Maria.Kaouris@Honeywell.com.

Very truly yours,

Maria Kaouris
Remediation Manager

cc: Mr. Ed Dexter/MDE
Mr. Al Simpkins/MDE
Mr. Michael Daneker/Arnold & Porter
Ms. Dawn Lettman/City of Baltimore
Mr. Ravic Miller/City of Baltimore
Mr. Christopher French/Honeywell

Enclosure

Fourth Quarter 2017 Race Street Quarterly Site Progress Report, 2000 Race Street, Baltimore, Maryland

Prepared for

Honeywell and Mayor and City Council of
Baltimore, Maryland

January 2018



CH2M Hill Engineering, Inc.
2411 Dulles Corner Park, Suite 500
Herndon, VA 20171

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Fourth Quarter 2017 Race Street Quarterly Site Progress Report, 2000 Race Street, Baltimore, Maryland

1. Introduction

Honeywell International Inc. (Honeywell) and the Mayor and City Council of Baltimore (City) are submitting this Quarterly Site Progress Report for the 2000 Race Street Site (Site) pursuant to the May 23, 2007, Administrative Consent Order (Consent Order) between the Maryland Department of the Environment (MDE), Honeywell, and the City. Quarterly Site Progress Reports will be submitted to MDE for the duration of the Consent Order. As specified within Section III.F of the Consent Order, the reports are required to include the following information:

- Work completed and documents submitted to MDE in the preceding quarter;
- A schedule and submittals for the upcoming quarter; and
- Any delays, modifications, or changes anticipated in the upcoming quarter.

This report covers Site-related activities conducted under the Consent Order during the fourth quarter of 2017, from October 1, 2017, through December 31, 2017.

The Site is located at 2000 Race Street, in Baltimore, Maryland (ZIP Code 21230). It occupies approximately 10.3 acres and is bounded on the north by the Baltimore Gas and Electric Spring Gardens facility, on the south by Swann Park, on the east by Race Street, and on the west by the Middle Branch of the Patapsco River. In addition, two elevated spans of Interstate 95 (I-95) oriented from east to west, overlie the Site on the northern half of the property. A chain-link security fence is present at the perimeter of the Site. The Site has no onsite building structures and is currently vacant.

Controlled hazardous substances are contained on the Site and covered with an engineered cap consisting of the following materials from top to bottom: asphalt, gravel base, and compacted clay. Cap maintenance is ongoing. Additional information regarding the Site is provided in several documents, including the May 23, 2007, Consent Order; the *Site Characterization Work Plan*, dated September 2007; the *Site Characterization Report*, dated September 2009; the *Near Shore Investigation Report*, dated December 2009; and the *Interim Remedial Measures Assessment Investigation and Pilot Test Report*, dated July 2012.

2. Quarter in Review

Site-related activities performed during the fourth quarter of 2017 include the following:

- October 1-30: Permeable Reactive Barrier (PRB) installation (sheet piles and soil excavation) in process;
- October 26: Monthly Site status inspection (Appendix A);
- October 30: Third Quarter 2017 Site Progress Report submitted to MDE;
- October 30: Arsenic Shed Assessment Work Plan submitted to MDE;
- November 1-30: Permeable Reactive Barrier (PRB) installation (soil excavation) in process;
- November 9: Project Coordinator call with MDE;

- November 27-30: Mobilization for Arsenic Shed Site Characterization;
- November 29: Bridge-monitoring equipment maintenance site visit;
- November 30: Monthly site status inspection (Appendix A);
- December 1-31: Permeable Reactive Barrier (PRB) installation (concrete plug and cage construction) in process; and
- December 21: Monthly site status inspection (Appendix A);

3. Upcoming Work and Submittals during the First Quarter of 2018

The following activities and submittals are anticipated to occur in the upcoming quarter:

- Conduct monthly Site status inspections and participate in monthly Site status calls with MDE (January, February, and March);
- Submit the Fourth Quarter 2017 Site Progress report;
- Perform quarterly SAA/inclinometer readings;
- Submit Supplemental Site Characterization report for Assessment of former Arsenic Shed Area; and
- Complete construction of the PRB and site restoration.

4. Schedule

A schedule of Consent Order activities anticipated during the first quarter of 2018 is provided below.

Milestone	Anticipated Date
January 2018	
Perform monthly site status inspection	1-25-18
Submit Q4 2017 Site Progress report	1-30-18
Complete PRB installation	1-2018
Prepare PRB Operation, Maintenance and Monitoring plan	1-2018
February 2018	
Perform cap restoration	TBD
Perform monthly site status inspection	TBD
Perform quarterly inclinometer/SAA readings	TBD
March 2018	
Perform monthly site Status inspection	TBD
Perform quarterly inclinometer/SAA readings	TBD
Complete cap maintenance following PRB construction	TBD

Appendix A
Site Inspection Reports

**2000 Race Street
Monthly Site Inspection Checklist**

Inspector:	Scott Sickles	Date of Inspection:	26-Oct-17
Title:	Construction Manager	Date of Last Inspection:	28-Sep-17
Organization:	CH2M HILL	Weather:	Mostly cloudy, cool

Site Inspection Results				
Task	Observations	Actions Taken	Date Completed	Comments/Additional Observations
1. General				
Inspect site for presence of surface debris. Identify type, approximate volume of debris, and location via description or on Site Plan (attach to Monthly Site Inspection Checklist).	5: Sediment and debris accumulation. 8: Sediment and debris accumulation with vegetation growth.	None	NA	Sediment, debris, and vegetation to be removed in 2018 as part of scheduled site maintenance and cap repairs
Inspect site for presence of vegetation. Identify estimated amount and location of vegetation via description or on Site Plan (attach to Monthly Site Inspection Checklist)	None	None	NA	None
2. Interstate 95 Footings and Joints				
Inspect around pier footings for settlement. Identify settlement off-set from grade and location via description or on Site Plan (attach to Monthly Site Inspection Checklist)	None	None	NA	NA
	None	None	NA	NA
3. Engineered Cap				
Inspect cap for alligator cracking. Identify estimated area of cracking and location via description or on Site Plan (attach to Monthly Site Inspection Checklist)	7: Alligator cracking in asphalt near fence line.	None	NA	Surface cover repairs to be addressed in 2018 as part of scheduled site maintenance and cap repairs.
Inspect cap for holes. Identify number of holes, width and depth, and location via description or on Site Plan (attach to Monthly Site Inspection Checklist)	9: Hole in asphalt outside of fence 4: Damage to asphalt covering slope.	None	NA	Surface cover repairs to be addressed in 2018 as part of scheduled site maintenance and cap repairs.
Inspect cap for cracks less than 0.5 inches wide. Note number of cracks. Identify location of cracks via description or on Site Plan (attach to Monthly Site Inspection Checklist).	3: Crack with vegetation between inlet grate and asphalt. 2: Crack in asphalt with vegetation growth 6: Crack between pier footing and asphalt.	None	NA	Surface cover repairs to be addressed in 2018 as part of scheduled site maintenance and cap repairs.
Inspect cap for cracks greater than 0.5 inches wide. Note number of cracks. Identify location of cracks via description or on Site Plan (attach to Monthly Site Inspection Checklist).	None	None	NA	NA
Inspect cap for any signs of ponding of water	1: Ponding water on asphalt	None	NA	Surface cover repairs to be addressed in 2018 as part of scheduled site maintenance and cap repairs.
Inspect shorefront embankment for evidence of erosion or releases	None	None	NA	NA
Identify any other observations related to the condition of the cap and potential for cap damage	None	None	NA	NA

**2000 Race Street
Monthly Site Inspection Checklist**

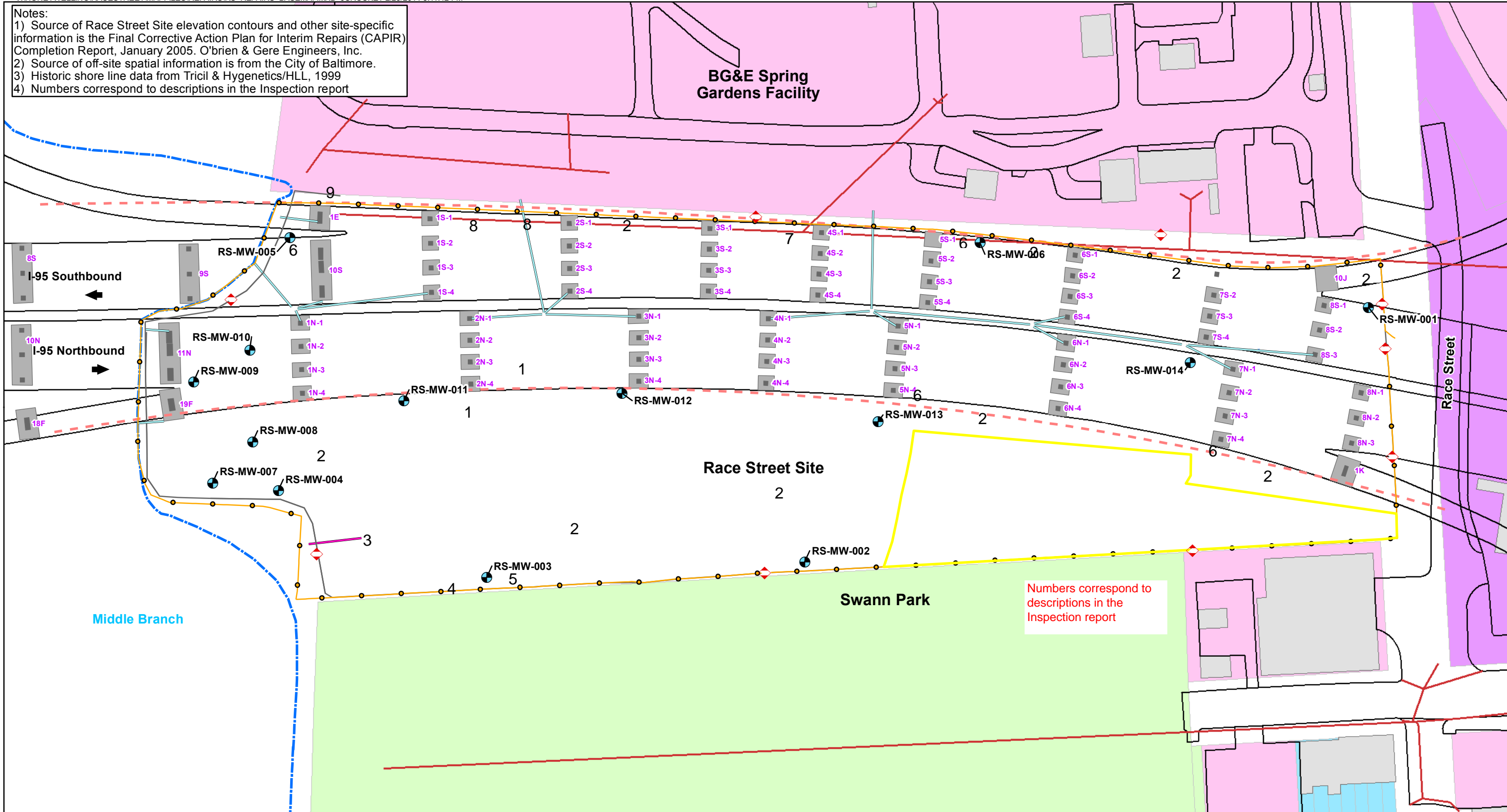
Site Inspection Results				
Task	Observations	Actions Taken	Date Completed	Comments/Additional Observations
4. Fence				
Inspect fence for holes. Note number of holes. Identify location of holes via description or on Site Plan (attach to Monthly Site Inspection Checklist).	None	None	NA	NA
Inspect fence to determine if there is any erosion compromising the integrity of the fence	None	None	NA	NA
Inspect fence to determine if barbed wire is in good condition	None	None	NA	NA
Inspect gates, chains, and locks for damage	None	None	NA	NA
Inspect fence to determine if any vegetation is damaging or otherwise compromising fence	None	None	NA	None
Inspect fence to determine if there is any burrowing beneath fence	None	None	NA	NA
Identify any other observations related to the condition of the fence and potential for fence damage (e.g., points of weakness, corrosion)	None	None	NA	NA
5. Aboveground Stormwater Conveyance System				
Inspect aboveground stormwater conveyance system including piping, downspouts, and drain in southwest corner of site for proper operation	None	None	NA	NA
6. Vandalism				
Inspect site for any vandalism including any dumped material on-site and damage to monitoring wells	None	None	NA	NA
Identify any other observations related to vandalism on the site	None	None	NA	NA
7. Signage				
Inspect warning signs on exterior perimeter of fence to determine condition and readability. Identify number of signs removed/damaged/unreadable and locations via description or Site Plan (attach to Monthly Site Inspection Checklist)	None	None	NA	NA
8. Miscellaneous Items				
Any interaction with people on or adjacent to the site? If yes, identify who, title, organization, contact information, and content of interaction	Sylvia Osis and Al Simkins of MDE and Ravic Miller of the City of Baltimore DOT were onsite for the monthly inspection. A construction crew from Abscope was onsite working on PRB construction.			
Other Comments/Observations?				

Notes:
 1) Source of Race Street Site elevation contours and other site-specific information is the Final Corrective Action Plan for Interim Repairs (CAPIR) Completion Report, January 2005. O'Brien & Gere Engineers, Inc.
 2) Source of off-site spatial information is from the City of Baltimore.
 3) Historic shore line data from Tricil & Hygenetics/HLL, 1999
 4) Numbers correspond to descriptions in the Inspection report

BG&E Spring Gardens Facility

Race Street Site

Swann Park



Numbers correspond to descriptions in the Inspection report

Legend		
<ul style="list-style-type: none"> Warning Signs Monitoring Well Locations Edge of Pavement Approximate Limits of I-95 Former Below Ground Stormwater System (Abandoned) Below Ground Stormwater System 	<ul style="list-style-type: none"> Existing Shoreline Fence/Approximate Property Boundary and Limit of Engineered Cap Fence Installed on Jersey Barriers Baltimore Stormwater Pipe Commercial Exempt Commercial Industrial Residential 	<ul style="list-style-type: none"> Buildings Concrete Column Concrete Footer

Monthly Inspection Map
 Race Street Site
 Baltimore, MD

October 26, 2017

**2000 Race Street
Monthly Site Inspection Checklist**

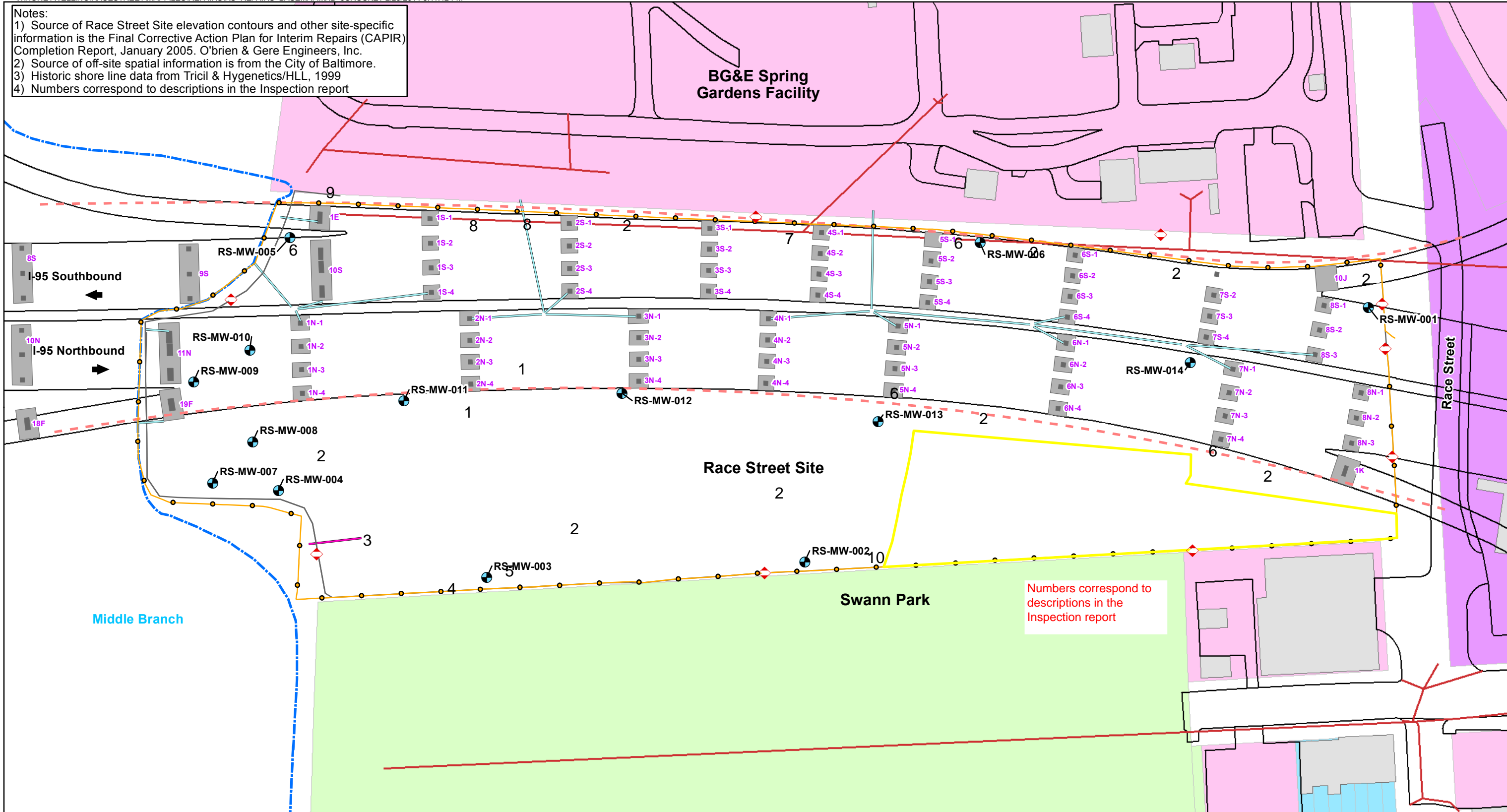
Inspector:	Scott Sickles	Date of Inspection:	30-Nov-17
Title:	Construction Manager	Date of Last Inspection:	26-Oct-17
Organization:	CH2M HILL	Weather:	Mostly cloudy, cool

Site Inspection Results				
Task	Observations	Actions Taken	Date Completed	Comments/Additional Observations
1. General				
Inspect site for presence of surface debris. Identify type, approximate volume of debris, and location via description or on Site Plan (attach to Monthly Site Inspection Checklist).	5: Sediment and debris accumulation. 8: Sediment and debris accumulation with vegetation growth.	None	NA	Sediment, debris, and vegetation to be removed in 2018 as part of scheduled site maintenance and cap repairs
Inspect site for presence of vegetation. Identify estimated amount and location of vegetation via description or on Site Plan (attach to Monthly Site Inspection Checklist)	None	None	NA	None
2. Interstate 95 Footings and Joints				
Inspect around pier footings for settlement. Identify settlement off-set from grade and location via description or on Site Plan (attach to Monthly Site Inspection Checklist)	None	None	NA	NA
	None	None	NA	NA
3. Engineered Cap				
Inspect cap for alligator cracking. Identify estimated area of cracking and location via description or on Site Plan (attach to Monthly Site Inspection Checklist)	7: Alligator cracking in asphalt near fence line.	None	NA	Surface cover repairs to be addressed in 2018 as part of scheduled site maintenance and cap repairs.
Inspect cap for holes. Identify number of holes, width and depth, and location via description or on Site Plan (attach to Monthly Site Inspection Checklist)	9: Hole in asphalt outside of fence 4: Damage to asphalt covering slope.	None	NA	Surface cover repairs to be addressed in 2018 as part of scheduled site maintenance and cap repairs.
Inspect cap for cracks less than 0.5 inches wide. Note number of cracks. Identify location of cracks via description or on Site Plan (attach to Monthly Site Inspection Checklist).	3: Crack with vegetation between inlet grate and asphalt. 2: Crack in asphalt with vegetation growth 6: Crack between pier footing and asphalt.	None	NA	Surface cover repairs to be addressed in 2018 as part of scheduled site maintenance and cap repairs.
Inspect cap for cracks greater than 0.5 inches wide. Note number of cracks. Identify location of cracks via description or on Site Plan (attach to Monthly Site Inspection Checklist).	None	None	NA	NA
Inspect cap for any signs of ponding of water	1: Ponding water on asphalt	None	NA	Surface cover repairs to be addressed in 2018 as part of scheduled site maintenance and cap repairs.
Inspect shorefront embankment for evidence of erosion or releases	None	None	NA	NA
Identify any other observations related to the condition of the cap and potential for cap damage	None	None	NA	NA

**2000 Race Street
Monthly Site Inspection Checklist**

Site Inspection Results				
Task	Observations	Actions Taken	Date Completed	Comments/Additional Observations
4. Fence				
Inspect fence for holes. Note number of holes. Identify location of holes via description or on Site Plan (attach to Monthly Site Inspection Checklist).	None	None	NA	NA
Inspect fence to determine if there is any erosion compromising the integrity of the fence	None	None	NA	NA
Inspect fence to determine if barbed wire is in good condition	None	None	NA	NA
Inspect gates, chains, and locks for damage	None	None	NA	NA
Inspect fence to determine if any vegetation is damaging or otherwise compromising fence	None	None	NA	NA
Inspect fence to determine if there is any burrowing beneath fence	None	None	NA	NA
Identify any other observations related to the condition of the fence and potential for fence damage (e.g., points of weakness, corrosion)	10: Damage to the fence.	None	NA	Fence repairs to be addressed in 2018 as part of scheduled site maintenance and cap repairs.
5. Aboveground Stormwater Conveyance System				
Inspect aboveground stormwater conveyance system including piping, downspouts, and drain in southwest corner of site for proper operation	None	None	NA	NA
6. Vandalism				
Inspect site for any vandalism including any dumped material on-site and damage to monitoring wells	None	None	NA	NA
Identify any other observations related to vandalism on the site	None	None	NA	NA
7. Signage				
Inspect warning signs on exterior perimeter of fence to determine condition and readability. Identify number of signs removed/damaged/unreadable and locations via description or Site Plan (attach to Monthly Site Inspection Checklist)	None	None	NA	NA
8. Miscellaneous Items				
Any interaction with people on or adjacent to the site? If yes, identify who, title, organization, contact information, and content of interaction	Sylvia Osis and Al Simkins of MDE and Ravic Miller of the City of Baltimore DOT were onsite for the monthly inspection. A construction crew from Abscope was onsite working on the PRB construction.			
Other Comments/Observations?				

Notes:
 1) Source of Race Street Site elevation contours and other site-specific information is the Final Corrective Action Plan for Interim Repairs (CAPIR) Completion Report, January 2005. O'Brien & Gere Engineers, Inc.
 2) Source of off-site spatial information is from the City of Baltimore.
 3) Historic shore line data from Tricil & Hygenetics/HLL, 1999
 4) Numbers correspond to descriptions in the Inspection report



Numbers correspond to descriptions in the Inspection report

Legend			
◊ Warning Signs	Existing Shoreline	Buildings	
● Monitoring Well Locations	Fence/Approximate Property Boundary and Limit of Engineered Cap	Concrete Column	
— Edge of Pavement	Fence Installed on Jersey Barriers	Concrete Footer	
- - - Approximate Limits of I-95 Former Below	Baltimore Stormwater Pipe		
— Ground Stormwater System (Abandoned)	Commercial		
— Below Ground Stormwater System	Exempt Commercial		
	Industrial		
	Residential		

Monthly Inspection Map
 Race Street Site
 Baltimore, MD

November 30, 2017

0 50 100 Feet
 1 inch = 100 feet

**2000 Race Street
Monthly Site Inspection Checklist**

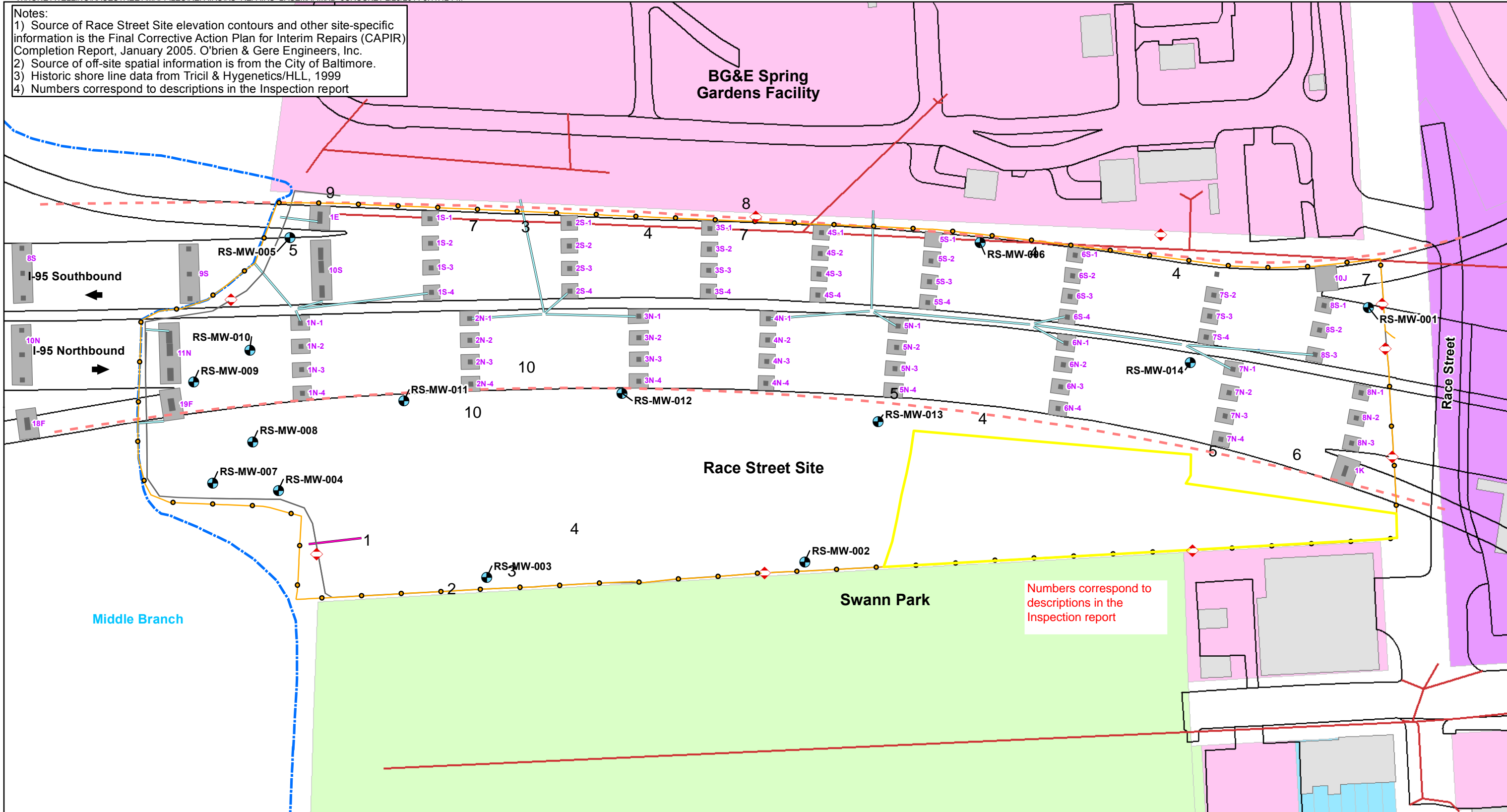
Inspector:	Bill Morris	Date of Inspection:	21-Dec-17
Title:	Environmental Engineer	Date of Last Inspection:	30-Nov-17
Organization:	CH2M HILL	Weather:	Clear, cool

Site Inspection Results				
Task	Observations	Actions Taken	Date Completed	Comments/Additional Observations
1. General				
Inspect site for presence of surface debris. Identify type, approximate volume of debris, and location via description or on Site Plan (attach to Monthly Site Inspection Checklist).	3: Sediment and debris accumulation.	None	NA	Sediment, debris, and vegetation to be removed in 2018 as part of scheduled site maintenance and cap repairs
Inspect site for presence of vegetation. Identify estimated amount and location of vegetation via description or on Site Plan (attach to Monthly Site Inspection Checklist)	None	None	NA	NA
2. Interstate 95 Footings and Joints				
Inspect around pier footings for settlement. Identify settlement off-set from grade and location via description or on Site Plan (attach to Monthly Site Inspection Checklist)	None	None	NA	NA
	None	None	NA	NA
3. Engineered Cap				
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Inspect cap for holes. Identify number of holes, width and depth, and location via description or on Site Plan (attach to Monthly Site Inspection Checklist)	9: Hole in asphalt outside of fence 2: Damage to asphalt covering slope. 8: Erosion in grass covered slope.	None	NA	Surface cover repairs to be addressed in 2018 as part of scheduled site maintenance and cap repairs.
Inspect cap for cracks less than 0.5 inches wide. Note number of cracks. Identify location of cracks via description or on Site Plan (attach to Monthly Site Inspection Checklist).	1: Crack with vegetation between inlet grate and asphalt. 4: Crack in asphalt with vegetation growth 5: Crack between pier footing and asphalt.	None	NA	Surface cover repairs to be addressed in 2018 as part of scheduled site maintenance and cap repairs.
Inspect cap for cracks greater than 0.5 inches wide. Note number of cracks. Identify location of cracks via description or on Site Plan (attach to Monthly Site Inspection Checklist).	None	None	NA	NA
Inspect cap for any signs of ponding of water	10: Ponding water on asphalt	None	NA	Surface cover repairs to be addressed in 2018 as part of scheduled site maintenance and cap repairs.
Inspect shorefront embankment for evidence of erosion or releases	None	None	NA	NA
Identify any other observations related to the condition of the cap and potential for cap damage	6: localized damaged asphalt surface	None	NA	Asphalt to be swept and inspected in 2018 after completion of PRB construction.

**2000 Race Street
Monthly Site Inspection Checklist**

Site Inspection Results				
Task	Observations	Actions Taken	Date Completed	Comments/Additional Observations
4. Fence				
Inspect fence for holes. Note number of holes. Identify location of holes via description or on Site Plan (attach to Monthly Site Inspection Checklist).	None	None	NA	NA
Inspect fence to determine if there is any erosion compromising the integrity of the fence	None	None	NA	NA
Inspect fence to determine if barbed wire is in good condition	None	None	NA	NA
Inspect gates, chains, and locks for damage	None	None	NA	NA
Inspect fence to determine if any vegetation is damaging or otherwise compromising fence	None	None	NA	NA
Inspect fence to determine if there is any burrowing beneath fence	None	None	NA	NA
Identify any other observations related to the condition of the fence and potential for fence damage (e.g., points of weakness, corrosion)	None	None	NA	NA
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Any interaction with people on or adjacent to the site? If yes, identify who, title, organization, contact information, and content of interaction	AI Simkins of MDE was onsite for the monthly inspection. A construction crew from Abscope was onsite working to complete PRB construction.			
Other Comments/Observations?				

Notes:
 1) Source of Race Street Site elevation contours and other site-specific information is the Final Corrective Action Plan for Interim Repairs (CAPIR) Completion Report, January 2005. O'Brien & Gere Engineers, Inc.
 2) Source of off-site spatial information is from the City of Baltimore.
 3) Historic shore line data from Tricil & Hygenetics/HLL, 1999
 4) Numbers correspond to descriptions in the Inspection report



Numbers correspond to descriptions in the Inspection report

Legend			
◊ Warning Signs	— Existing Shoreline	■ Buildings	
● Monitoring Well Locations	— Fence/Approximate Property Boundary and Limit of Engineered Cap	■ Concrete Column	
— Edge of Pavement	— Fence Installed on Jersey Barriers	■ Concrete Footer	
- - - Approximate Limits of I-95 Former Below	— Baltimore Stormwater Pipe		
— Ground Stormwater System (Abandoned)	■ Commercial		
— Below Ground Stormwater System	■ Exempt Commercial		
	■ Industrial		
	■ Residential		

Monthly Inspection Map
 Race Street Site
 Baltimore, MD

December 21, 2017