APPENDIX A MONITORING AND MAINTENANCE PLAN



APPENDIX A – MONITORING AND MAINTENANCE PLAN

A.1 BACKGROUND

The 1071 Howell Mill Road Site ("Site") is an approximate 0.9-acre parcel of land located in Atlanta, Fulton County, Georgia. The majority of the Site is occupied by a 32,186 square foot vacant commercial building and a small parking lot west of the building.

As directed by the Georgia EPD, environmental assessment activities were performed in 2003 at the Site to evaluate the suspected presence of contaminated fill material. In summary, previous assessment activities have identified the presence of metals in soil, including: arsenic, barium, cadmium, chromium and lead. As a result, the Site was sub-listed on the HSI as part of Welcome Years HSI Site No. 10637 located to the north. Adjoining commercial properties to the north, east and south have also been sub-listed as part of the Welcome Years HSI Site No. 10637.

A Voluntary Remediation Plan Application (VRPA) was submitted on September 7, 2012 and approved by Georgia EPD on October 15, 2012. In conjunction with the VRPA, a Prospective Purchaser Corrective Action Plan (PPCAP) was also submitted on September 17, 2012 and approved by Georgia EPD on October 15, 2012. Both the VRPA and the PPCAP presented a Type 5 Risk Reduction Standard (RRS) which would involve implementation of institutional controls through land use restrictions set forth in the Environmental Covenant to maintain the existing integrity of the engineering controls (primarily a surficial barrier consisting of hard ground cover).



A.2 OVERVIEW

The purpose of this document is to establish a Monitoring and Maintenance Plan (MMP) as part of implementation of the Type 5 RRS to address the existing engineering controls and to ensure continued compliance during site redevelopment activities. The Type 5 RRS is designed to provide long-term protection of human health and the environment through the application of both engineering and institutional controls. This will be accomplished by periodic inspections to monitor the existing engineering controls (primarily a surficial barrier consisting of hard groundcover), implementation of a ground disturbance restoration process during future site redevelopment activities, and performance of annual groundwater monitoring for a period of five years. The institutional controls are set forth in the executed Uniform Environmental Covenant.

The corrective action elements in this MMP consist of the following:

- Restrictions and controls to ensure that site future activities will retain the existing engineering controls and any ground-disturbing activities which will temporarily breech the existing surficial barrier will be performed under an Environmental Covenant;
- Regular inspection and maintenance of the existing building floor slab, pavement and other ground cover;
- Annual groundwater monitoring.

Mr. William D. Graham, Jr., the applicant under the VRPA, has sold the property. Therefore, Westbridge Partners, as the current owner and applicant under the PPCAP, operating as 1071 WB, LLC, will supervise future site redevelopment activities. Refer correspondence as follows:

Mr. Chris Faussemagne 1071 WB, LLC 1170 Howell Mill Road, Suite 205 Atlanta, Georgia 30318 <u>chrisf@westbridgepartners.net</u> 404-849-4826



A.3 CORRECTIVE ACTION ACTIVITIES

It is the intent of 1071 WB, LLC to certify compliance with a Type 5 RRS that is protective of human health and the environment.

A.3.1 INSTITUTIONAL CONTROLS

A draft Uniform Environmental Covenant (UEC) has been prepared in accordance with the Georgia Uniform Covenants Act, OCGA § 44-16-8. The UEC includes the following basic institutional controls: (1) groundwater use will be restricted, (2) the existing concrete floor slab will be maintained as a surficial barrier to be protective of human health and the environment, (3) a written continuing care plan will be implemented to monitor and control future actions which could breech the hard cover, (4) requirements for documentation, including notices, legal recording and reporting will be specified, and (5) the responsibilities of all Parties to the agreement will be established.

The draft UEC has been included herein as Appendix B.

A.3.2 ROUTINE INSPECTION

The Site will be periodically inspected to ensure that the integrity the surficial barrier is maintained to prevent exposure to the underlying soils. The surficial barrier currently consists of the existing floor slab and pavement, which are intended to remain largely in-tact. At least one inspection per year will be conducted by the owner or its designated agent. The inspector will complete an Inspection and Maintenance Report checklist during each inspection. A copy of the Inspection and Maintenance Report checklist has been included as Attachment 1. A record of the inspection will be included in a semi-annual progress report.

A.3.3 PENETRATION OF EXISTING ENGINEERING CONTROLS

Any planned activities which require temporarily breeching of the surficial barrier to expose the underlying soils will require notification to the owner, who will be obligated to ensure that the surficial barrier is properly replaced. The owner will restrict access to the area to authorized personnel only, and require all activities involving temporary breeches of the surficial hard cover to be performed under the control of an Environmental Management Plan and Site-Specific Construction Health and Safety Plan. Additionally, if site redevelopment activities result in the alteration of the surficial barrier, restorations will be completed to maintain compliance. More specific actions related to restoration of the surficial barrier are presented in the Remediation Plan and any amendments thereto.



A.3.4 GROUNDWATER MONITORING

As requested by the Georgia EPD in its October 15th VRPA approval letter, an annual groundwater monitoring program will be implemented utilizing the following existing wells: MW-1R and MW-3. The groundwater monitoring program will be continued for a period of five (5) years. Groundwater samples will be collected using sampling protocols consistent with the latest version of the US EPA Region 4 Science and Ecosystem Support Division (SESD), Operating Procedure Number SESDPROC-301-R1.

Prior to re-sampling, the monitoring wells will be inspected for indications of damage. Well integrity will be maintained by a security lock when not being sampled. Repair to damaged wells will be implemented as necessary within 45 days of discovery. In the event a well is damaged beyond repair, proper well closure and replacement will be implemented within 60 days of discovery. The wells will be inspected for accumulations of sediment by measuring the total depth prior to sampling and comparing those depths to previous and original depths. If a significant accumulation of sediment is noted, the well will be redeveloped prior to sampling.

Before each sampling event, the water level will be gauged. The wells will then be purged to remove stagnant water and allow representative formation water to enter the well. The water quality parameters of pH, temperature and conductivity will be monitored during well purging. The wells will be purged until the water quality parameters stabilize, at which point the wells will be sampled. The samples will be collected in laboratory-supplied containers and transported under chain-of-custody protocol to an accredited analytical laboratory. The samples will be analyzed for the presence of Volatile Organic Compounds (VOCs).

The test results will be compared to previous data for increases or decreases in concentrations. The well will be sampled annually by September and reported in the October progress report.



A.4 REPORTING

As detailed in EPD's October 15, 2012 VRPA approval letter, semi-annual progress reports must be submitted to EPD every April 15th and October 15th throughout the duration of this project.

As described in Section A.3.2, the Site will be periodically inspected to ensure that the integrity of the surficial barrier is maintained. The inspector will complete an Inspection and Maintenance Report checklist during each inspection. The inspection report will provide photographic documentation of the site's engineering control system and any items that warrant documentation such as alterations or damage to such features. The Records concerning inspections will be included with each subsequent semi-annual progress report.

Following each annual groundwater monitoring event described in Section A.3.4, a report of groundwater monitoring activities will be prepared for inclusion in the October progress report and will include the following:

- Assessment of Conditions a summary of cumulative analytical data and water levels;
- Conclusions regarding changes in groundwater chemistry or dynamics, if any; and
- Recommendations for modifications to the monitoring program, if warranted.

ATTACHMENT A - 1 INSPECTION AND MAINTENANCE REPORT CHECKLIST

		1071 HO	WEL	L MII ection	LL RO and M	AD, ATLANTA, GEOI laintenance Report	RGIA
INSPECTION ITEM	OBSERV	VATION	cc	LIUN	NOL		COMMENTS
	YES	ON	NA	MN	IA		(Indicate Location)
TYPE 5 RRS COMPLAINCE							
Barrier Penetration Performed This Period							
Institutional Controls Maintained							
SURFICIAL BARRIER OBSERVATIONS							
Floor Slab							
Pavement							
Soil Barrier							
OTHER OBERVATIONS							
DATE OF INSPECTION						INSPECTOR	
							(Print)
							(Signature)
NA - No action needed							

MN - Maintenance needed IA - Immediate attention needed