

<b>TO:</b>	<b>CHAIR AND MEMBERS AUDIT COMMITTEE MEETING ON NOVEMBER 29, 2012</b>
<b>FROM:</b>	<b>MARTIN HAYWARD MANAGING DIRECTOR CORPORATE SERVICES, CITY TREASURER, CHIEF FINANCIAL OFFICER</b>  <b>JOHN BRAAM MANAGING DIRECTOR, ENVIRONMENTAL &amp; ENGINEERING SERVICES &amp; CITY ENGINEER</b>
<b>SUBJECT:</b>	<b>BROWNFIELDS UPDATE</b>

<b>RECOMMENDATIONS</b>
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That, on the recommendation of the Managing Director Corporate Services, City Treasurer, Chief Financial Officer and the Managing Director Environmental & Engineering Services & City Engineer

- i) the report dated November 29, 2012 with respect to brownfields management **BE RECEIVED** for information;
- ii) the Next Steps regarding brownfields management to be undertaken in 2012 and 2013, as contained in the report dated November 29, 2012, **BE ENDORSED**; and,
- iii) the Civic Administration **BE DIRECTED** to submit a report to Audit Committee in November 2013 providing an update regarding progress on this matter.

<b>PREVIOUS REPORTS PERTINENT TO THIS MATTER</b>
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BROWNFIELD ADMINISTRATION POLICY PROJECT, June 28, 2012, Audit Committee

DUE DILIGENCE FOR SITE REMEDIATION, January 16, 2012, Finance & Administrative Services Committee

QUARTERLY REPORT ON INTERNAL AUDIT RESULTS, December 7, 2011, Audit Committee

<b>BACKGROUND</b>
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Previous reports to Audit Committee and Finance & Administrative Services Committee have raised a number of issues pertaining to brownfields, including the importance of establishing a brownfields strategy for the City of London. A summary and status update on these issues is attached as Appendix A.

In 2012, the Business Planning area began to undertake research in brownfield's management in other Ontario municipalities. Internally, several contacts were identified in a number of services across the corporation. The initial work focused on activities occurring in the Environmental & Engineering Services area but soon included many more areas of the corporation. The larger scope of the project became very evident after a number of details became available from other municipalities (e.g., Hamilton, Vaughan, Ottawa, Niagara).

Based on the previous reports and recommendations, information and data processes have evolved in 4 key areas:

- Management of Contaminated Sites Administrative Procedure (including brownfields)
- Brownfields/Contaminated Sites Database
- Understanding Associated Risks with Brownfields/Contaminated Sites
- Next Steps for 2012 and 2013

Further details are provided in the next four sections.

## **MANAGEMENT OF CONTAMINATED SITES ADMINISTRATIVE PROCEDURE**

In the June 28, 2012 report to Audit Committee, Civic Administration identified the establishment of a brownfields policy/procedure and the development of a database to house related information as two key components of a brownfields strategy.

Following this meeting an interdisciplinary team was engaged to begin work on the policy/procedure and database, with representation from the following areas:

- Environmental & Engineering Services: Environmental Programs and Solid Waste, Wastewater and Treatment, Water, Roads and Transportation, Construction Administration
- Development & Compliance Services: Development Services
- Planning: Zoning, Policy Planning & Programs
- Human Resources: Health & Safety
- Legal Services: Environmental, Municipal, Risk Management
- City Clerk: Information & Privacy
- Finance: Realty, Purchasing

Much work has been completed since that time and a Management of Contaminated Sites Administrative Procedure has been completed in draft. This draft procedure provides a framework for how information related to brownfields/contaminated sites is both shared and catalogued and is based upon the following guidelines:

- compliance with legislative requirements and related City policies;
- protection of the health and safety of all persons working on the project;
- protection of the health and safety of the public;
- information related to contaminated sites is captured and managed in a consistent manner;
- identification and management of the contamination risks as early as possible in project development;
- development of a protocol/guide for staff on how to manage contaminated sites; and
- City staff who understand the legislative requirements for all phases of project development.

Work on the draft procedure will be completed in 2013 and thereafter will be reviewed and updated on annual basis to ensure accuracy and relevance.

## **BROWNFIELDS/CONTAMINATED SITES DATABASE**

Project team members also reiterated the importance of a database, which is integral to the success of the Management of Contaminated Sites Administrative Procedure and the broader brownfields strategy. As a result, an interim solution has been put in place whereby the Director, Environmental Programs & Solid Waste and his team will begin collecting and cataloguing brownfield/contaminated sites information using an approach similar to that used for documenting closed landfills.

The establishment of an initial database will be done by using existing resources in 2012 and then augmented with the addition of a co-op university student (January to April or August 2013). This project will be done as time permits in 2012 (and balanced with other needs). It should be noted that the addition of co-op students into the Environmental Programs & Solid

Waste area has occurred for the last 5 years and has been an important component of the relationship with Western University, Fanshawe College and other universities.

## **UNDERSTANDING ASSOCIATED RISKS WITH BROWNFIELDS/CONTAMINATED SITES**

The majority of the risks associated with brownfields/contaminated sites fall into one of the 4 categories identified below:

### Health & Safety

The Occupational Health and Safety Act (OHSA) and regulations are provincial legislation intended to protect workers in Ontario from workplace hazards and to assist employers in providing a safe and healthy workplace. Although this legislation has no specific requirements for brownfield sites, there is a significant overriding obligation in the legislation to protect the health and safety of workers where a hazard exists and when there is a potential risk from injury or illness as a result of a hazard.

### Financial

When contamination of any amount or level is found under a road, on a parcel of land or under a building, there will be a financial impact of some proportion as additional measures must be put in place to protect workers (noted above under Health & Safety) and the environment (noted below under Environment). The goal should be to always limit the financial impact by ensuring that as much information is available on site conditions and nearby sites. This is where historical information becomes essential. Lack of information can result in a significant unexpected cost increase and possibly end a project.

Generally, a Phase One site investigation is the key means of gathering information to determine if a site is contaminated. Site investigations can be done in one or two stages. A preliminary site investigation involves searching existing records for information about a site, interviewing people who are or have been involved with the site, and determining the general location and degree of any contamination. If more information is needed, then a detailed site investigation is undertaken (Phase Two). In this case, investigators conduct more detailed work to determine the location, extent, and impact of contamination. The information gathered is usually sufficient to develop a remediation plan, or a human health or environmental risk assessment. Sometimes both stages are combined. Future phases either deal with more comprehensive delineation of the impact of contamination and the cleanup activities.

### Investment

There may be lost investment opportunities on properties that are brownfields (that can be reclaimed) or on properties next to a brownfield that scare away investment due to lack of details, etc. It is worth noting that a study of brownfield development in Canada found that every \$1 spent in the Canadian economy on brownfield development generates approximately \$3.80 in total economic output in all industries in the Canadian economy (National Round Table on the Environment and the Economy, 2003 "Cleaning up the Past, Building the Future: A National Brownfield Redevelopment Strategy for Canada). A growing body of studies in other U.S. and Canadian cities have found that brownfield development can increase neighbourhood property values and increase property tax revenues.

Depending on the involvement in a brownfield redevelopment project – whether it be as the lender considering financing a project, the environmental practitioner evaluating options for remediation, the developer weighing the costs and benefits of a brownfield redevelopment project, or the municipal staff person making a decision on a proponent's application – a different perception of the risks and ultimate investment in the site will occur. Understanding and managing the financial and environmental risks in a brownfield redevelopment project is absolutely key to the success of the project.

The level of risk a project has will vary depending on the type of property contamination, the method of remediation to be employed and the tolerance level of those involved (e.g., property owner, financial lender, potential purchaser, etc.). For example, a property where there is a high degree of certainty that all contamination can be addressed will likely be perceived to have a low level of environmental "risk" by lenders, developers and property owners. The opposite is likely true as well. A property where the contamination is complex and will require on-going

management to prevent off-site migration will likely be perceived differently and may be more problematic from an investment viewpoint. There are various mechanisms today to mitigate concerns about risk, for example:

- the parties involved will complete important market research and environmental due diligence in advance of completing any transaction;
- the risk will be quantified in the price of the property as part of a purchase/sale agreement;
- contractual agreements are used to clarify the future response of parties involved (i.e., who does what should unanticipated items turn up);
- insurance products are used to cap costs of remediation or address the potential for future liability (short term).

Ultimately, any brownfield redevelopment project carries with it some degree of financial uncertainty and environmental liability. With good information and the right team, those risks can often be managed effectively and a strong business case can be made for moving forward on a brownfield project.

#### Environmental

Generally, the impact of contaminated site awareness, cleanup and brownfield development on the environment has both a positive impact on the site as well as the local areas. Based on experience, environmental restoration of individual sites can have a cumulative positive impact on the environment, quality of soil, the protection of groundwater resources, wetlands and wildlife habitat.

In 2001, a study of brownfield versus greenfield development in six cities in the United States examined 48 brownfield projects. This study found that every acre of brownfield land developed would have required 4.5 acres of greenfield land (Deason, J.P., Sherk, W.G. and G. A. Carroll. 2001. "Public Policies and Private Decisions Affecting the Redevelopment of Brownfields: An Analysis of Critical Factors, Relative Weights and Areal Differentials"). This highlights the potential of brownfield development by using existing infrastructure, brownfield development can also reduce the costs of urban sprawl and the associated environmental impacts which tend to be higher with greenfield sites.

Brownfield redevelopment, which is often associated with parcels of London that are already serviced and in good proximity to transportation systems, may also produce an overall lower carbon footprint when turned into productive uses.

#### **NEXT STEPS FOR 2012 AND 2013**

Civic Administration will continue its work on the draft Management of Contaminated Sites Administrative Procedure, the overall Contaminated Sites/Brownfields Management Program and Implementation Strategy (including database and inventory) over the coming months and will report in the future to Civics Work Committee its proposals and progress on this matter in early 2013. It can be anticipated that a business case will go forward to the 2014 Budget process to address resourcing issues.

Environmental & Engineering Services has currently been assigned the overall lead noting that within the overall management strategy, specific areas may be led by others (e.g., the Community Improvement Plan for Brownfield Incentives, approved in 2006, is led by Planning; Health and Safety requirements are led by Human Resources).

It has been fully recognized that the overall management of brownfields crosses many service areas within the City. As such, a "team approach" containing representatives from across the corporation will ensure that input, advice and strategic direction is available to the Environmental & Engineering Services area. The team would include representatives from Environmental & Engineering Services, Development & Compliance Services, Planning, Human Resources, Legal Services, City Clerk and Finance.

The ability to move this program forward in an appropriate timeframe will be a function of the potential need for new human and financial resources. A business case is being prepared that will highlight how this program can move forward under a number of different investment scenarios ranging as follows i) no new investment, ii) limited new investment, iii) reasonable new investment, and iv) comprehensive investment. This work will also include further organizational review by Human Resources.

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## APPENDIX A

### ISSUES TO BE ADDRESSED FROM THE PRICEWATERHOUSECOOPER AUDIT REPORT DECEMBER 7, 2011

Recommendations/Issues		Status
Develop processes for brownfield site developments that incorporates the following:		
1.	Establish Project Liaison role;	<b>In progress</b> (90% complete)
2.	Ensure collaboration with and obtain regular updates from third party environmental consultants; incorporate this requirement in the documented process	<b>In progress</b> (50% complete)
3.	Establish formal sign-off step for risk assessments; incorporate this requirement in the documented process	<b>In progress</b> (75% complete)
4.	Obtain assignment of probabilities with the determination of remediation costs; incorporate this requirement in the documented process	<b>In progress</b> (50% complete)
5.	Define the reporting structure between the General Contractor, Sub-Contractors and the City, including timing and expected content; incorporate this requirement into appropriate clauses within project contracts	<b>In progress</b> (50% complete)
6.	Implement periodic project status reports by the Project Liaison to the City, including Council approval for additional remediation or estimates	<b>In progress</b> (25% complete)
7.	Establish formal project debrief meeting phase; incorporate this requirement in the documented process	<b>In progress</b> (25% complete)
8.	Develop standardized formal agreements to standardize the General Contractor relationship and any limits to City liability	<b>In progress</b> (50% complete)

### ISSUES TO BE ADDRESSED FROM JANUARY 16, 2012 REPORT TO THE FINANCE & ADMINISTRATIVE SERVICES COMMITTEE

Recommendations/Issues		Status
1.	Lead manager or staff members with expertise	<b>In progress</b> (90% complete)
2.	Database to house information from a variety of sources – receiving, tracking, sharing and maintaining information	<b>In progress</b> (25% complete)
3.	Continuous improvement – project post mortems reviews	<b>In progress</b> (25% complete)

### ISSUES TO BE ADDRESSED FROM JUNE 28, 2012 REPORT TO AUDIT COMMITTEE

Recommendations/Issues		Status
1.	Contaminated land/Brownfields management policy/procedure	<b>In progress</b> (75% complete)
2.	Establish Database to house information	<b>In progress</b> (25% complete)