

COUNCIL INNOVATION FUND BIO-ENERGY PILOT PROJECT FINAL REPORT

EXECUTIVE SUMMARY

The Bio-Energy Pilot Project was approved for Council Innovation Funding of \$170,000 to support Parks Foundation Calgary in the development of a plan to restore a large brownfield site to a condition of productive use. Matching funds were secured by Parks Foundation Calgary from a private third party to provide a total project budget of \$340,000.

Using a four stage method the consultant, Ground3 Landscape Architects, developed a generic process for brownfield redevelopment and used the process to evaluate and select the Old Refinery Park as the pilot site. Detailed site research and a year long Biophysical Impact Assessment led to a draft Master Redevelopment Plan and implementation strategy, including estimated costs for the pilot site.

The deliverables of the project include the Generic Brownfield Site Planning Process (Attachment 1) and Master Redevelopment Plan which is currently in a draft state.

Based on the draft master redevelopment plan, the work that goes beyond The City's current plans for risk management of the site, have been estimated to be approximately \$32 million for full plan implementation. If this plan is used for the site, the funding would be addressed as a separate project. Furthermore, Provincial approval of a detailed Risk Management Plan (RMP) for the former Imperial Oil Refinery is required before redevelopment work can occur on the site. At this time the RMP has been filed with the Province but has not been approved. The RMP does not include the concept of this Master Redevelopment Plan.

ADMINISTRATION RECOMMENDATION(S)

Administration recommends that the Priorities and Finance Committee recommend that Council:

- 1) Receive this report for information, and
- 2) Direct Administration to return to the Priorities and Finance Committee with a presentation on the final master redevelopment plan.

PREVIOUS COUNCIL DIRECTION / POLICY

On 2012 November 19, Council approved the report PFC2012-0787, as amended, to provide funding from The City of Calgary Council Innovation Fund for the Bio-Energy Pilot Project.

On 2013 March 18, Council adopted Alderman Carra's NM2013-11, Amendment to Council Innovation Fund Application RE: Bio-Energy Pilot Project, which directed the Steering Committee for this project bring a report to the 2013 April 02 Regular Meeting of Priorities and Finance Committee. PFC2013-0344 confirmed the private third party funding and directed that Administration provide a final report by December 2013.

On 2013 December 10, Council approved the approved a deferral request (PFC2013-0464) of the Council Innovation Fund Bio-Energy Pilot Project report to no later than 2014 January.

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BACKGROUND

The City of Calgary and Parks Foundation Calgary have a long-standing partnership in developing projects with mutual benefits. The emergence of new technologies for soil remediation provided an opportunity to explore innovative approaches to developing The City's large brownfield sites with an objective to return them to productive use. An opportunity to demonstrate success on a site within the city has the potential to spur further innovation and applied research.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

The *Generic Brownfield Site Planning Process* is an eight step generic process that was developed to demonstrate a rigorous, rational, and transparent site assessment and planning procedure (Attachment 1). While some steps are current practice, the evaluation of a site's suitability and capability is an innovative addition to the process.

- Site suitability considers the combination of topography, proximity to existing infrastructure, and available views to identify where site facilities could or should be situated;
- Site capability includes factors such as flood potential, presence of severe contamination, and noise generation help determine where facilities could not or should not be situated.

Following the development of the generic process to assess brownfield sites for redevelopment, the City-owned Old Refinery Park (in the Millican Ogden area) site was investigated and determined to be suitable as a pilot case. The complexity, size and location of the site were unique aspects that passed the rigour of the steps in the *Generic Brownfield Site Planning Process*.

Detailed information from the site suitability and capability assessments were overlaid onto a Compatibility and Suitability Composite Map. With this starting point, the project team developed a conceptual plan for the site which was then refined into the Master Redevelopment Plan. An overview of the draft Master Redevelopment Plan is attached (Attachment 2). The intent of the redevelopment is to return the site to productive attractive use within the urban community.

Four areas of planning led to an integrated master plan, driving towards a net zero energy and water site. These four areas included:

1. Water Management
2. Green Energy
3. Urban Agriculture
4. Brownfield Restoration

Prior to this pilot project being funded, The City and the site operator Imperial Oil, submitted a detailed Risk Management Plan (RMP) to Alberta Environment and Sustainable Resource Development (AESRD). The RMP requires approval before redevelopment work can occur on the site. At the time of the writing of the report, the RMP has not been approved and does not include the concept of this Master Redevelopment Plan.

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Stakeholder Engagement, Research and Communication

The Bio-Energy Pilot Project was a collaborative effort between Parks Foundation Calgary, The City, Olds College, and members of Council. The development of a plan to restore a brownfield site to productive use via the Bio-Energy Pilot Project will also require the engagement of the owners or land stewards of properties under consideration, potential technology providers, regulators, and the continued engagement of the collaboration participants.

Olds College agreed to participate in the pilot project with input during this planning stage and indicated interest in providing possible research and educational resources in the future if the redevelopment plan is implemented.

The project Steering Committee included representation from the Millican Ogden Community Association and the general concept of the project was presented at an association meeting. The Calgary Disc Golf Association was also engaged to understand their current use of the site.

Strategic Alignment

This report supports UEP 2012-2014 Business Plan action 3P4.1 Deliver brownfield redevelopment, Corporate waste management, greenhouse gas and air quality programs that align to environmental goals.

Social, Environmental, Economic (External)

The Bio-Energy Pilot project has the potential to positively impact the environment by developing a *Generic Brownfield Site Planning Process* for restoration of large brownfield sites to productive use. This pilot project also provides a site-specific restoration master plan that can have a positive social impact by providing a site with the potential for multiple uses for the public. This would be done by leveraging private funds, development of a specific plan for the selected site, and ensuring that it would be completed economically.

Financial Capacity

Current and Future Operating Budget:

Implementing the Bio-Energy Pilot Project was managed within the approved total budget of \$340,000. The City of Calgary Council Innovation Fund provided \$170,000 for the pilot project.

Current and Future Capital Budget:

The project does not require a capital budget. Any work resulting from the pilot project will be planned and funded as a new project.

Risk Assessment

Approval of the Risk Management Plan (RMP) by Alberta Environment and Sustainable Resource Development (AESRD) is a critical aspect of the management of the Old Refinery Park site. No further work beyond this Master Redevelopment Plan is contemplated until AESRD approval is received for the current RMP. At that time, if the plan is to be further considered, all regulatory processes would be undertaken.

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REASON(S) FOR RECOMMENDATION(S):

On behalf of the Bio-Energy Pilot Project Stakeholder Committee, Environmental and Safety Management (ESM) recommends that this report be received for information as the final deliverable for the project.

ATTACHMENT(S)

1. *Generic Brownfield Site Planning Process*
2. Overview – “Old Refinery Park Redevelopment Master Plan”