

7.2
General Issues Committee
February 6, 2013



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Public Works

**Public Works
Hamilton Water Division**

Providing services that bring our City to life !

**Biosolids Management Project - Approval to
Amend P3 Canada Funding Business Plan -
(PW11098b/FCS11112b) - (City Wide)**

General Issues Committee – February 6, 2013



Background

- In 2007, City completed a Biosolids Master Plan identifying Thermal Reduction as the Preferred Strategy,
- In 2009 an Environmental Assessment (EA) was completed and filed for Public Review. Formal 'Bump-up' request to Minister was received. Minister completed review in late 2012, rejecting request for the Part II Order, clearing City to proceed with Project,
- In 2011 Council directed staff to pursue P3 Funding while at the same time requesting that Enhanced Treatment alternatives be considered,
- The City applied for and were subsequently screened-in for P3 Canada funding, structured as a 30 year Design, Build, Finance, Operate and Maintain (DBFOM) project delivery model,
- To satisfy the P3 Canada funding requirements, a formal Business Case was developed and structured to accommodate a wide range of technology and site variability,



Business Case Highlights

The following are highlights of the City's Business Case for the Biosolids Management Project as submitted to P3 Canada;

- Identifies Thermal Reduction as the main technology ('Project') as approved in the Biosolids Master Plan and referred to as the Public Sector Comparator ('PSC'),
- Compares the overall value of the Project being delivered as a traditional Design-Bid-Build (DBB) vs. P3 Canada's approach of Design-Build-Finance-Operate-Maintain over a 30 year term,
- Business Case concludes that the P3 Canada delivery model allows for sufficient transfer of risk in key areas such as Capital and Operations and Maintained (O&M) making the Project a good candidate for P3 Funding,
- Project cost built as a full Net Present Value (NPV) accounting for capital plus 30 year O&M,
- City's PSC cost is estimated at \$80 million capital and \$31 million O&M whereby P3 Canada could contribute up to 25% of the capital (or \$20 million),
- At Councils request, Enhanced Treatment technologies was added as viable options within the Business Case.



Project Status

- Business Case completed, approved by Council and submitted to P3 Canada in June 2012,
- Since June project team has been working with PPP Canada to help understand the structure and approach of the City's Business Case,
- Feedback overall on Business Case is good:
 - No major issues with the analysis / written material
 - PPP Canada has noted that the project has many innovative features, which has been the focus of their questions, including:
 - Site variability
 - Technology variability
 - Environmental Assessment Requirements
 - Affordability Cap
 - Evaluation Criteria
- Prior to forwarding a recommendation to their Board for final approval, P3 Canada issued a formal letter to the City dated November 1, 2012 outlining remaining issues for which the City must address to remain compliant with their funding requirements,
- The Report being brought forward today outline P3 Canada's issues as follows:



Issue 1 – Site Variability

Background

- Original approach was to construct a Thermal Reduction biosolids facility on the site of the City owned Woodward wastewater treatment facility (700 Woodward Avenue) sized only for Hamilton generated biosolids (44,000 wet tonnes),
- Based on market soundings it was acknowledged that there are firms capable of offering solutions on external sites. Considering the objective of the procurement is to obtain the best overall biosolids management solution, the City's business case describes a procurement approach which allows solutions external to the City owned Woodward location.

PPP Canada Issue

- PPP Canada is of the opinion that allowing bidder's to provide an external site to that of the City owned Woodward location adds unnecessary complexity to the PPP procurement process, "... ***Adding external sites to this already complex project will cause additional challenges that are inherently related to closing or transferring privately owned land to the public sector, e.g. potential for contamination and municipal and provincial EA requirements, possible heritage and archeological restrictions, potential rezoning requirements and OMB appeals, budget and fiscal impacts on the municipality if the preferred site is to be acquired***".

Resolution

- In order to remain compliant with P3 Canada funding requirements, the City will need to limit the site to Woodward only - bidders will not be able to bring an External Site otherwise PPP Canada will not provide funding.



Issue 2 – Level of Cost Estimates

Background

➤ The capital costs represented in the City's business case was predicated on the work completed during the Master Plan which includes a cost estimate defined as Level 4 according to the American Association of Cost Estimators (AACE) and represents a - 20% and + 30% level of accuracy typical for projects at this stage of development.

PPP Canada Issue

➤ PPP Canada is of the opinion that the cost estimate for the Public Sector Comparator (Thermal Reduction – Fluidized Bed) is not sufficient and has requested a construction cost estimate that is accurate to a +/- 15%, a condition which was communicated to the City for the first time during the review process, and formalized through their correspondence of November 1, 2012.

➤ Through subsequent discussions with P3 Canada representatives, it was recognized that although this was a new condition imposed on the project team, it was made clear that this issue must be complied with in order for the City's business case to be forwarded for approval to the P3 Canada Board

Resolution

➤ In order to remain compliant with P3 Canada funding requirements, the City is being asked to increase the cost estimate of the City's PSC - Thermal Reduction to +/- 15% accuracy at a City cost of \$50,000 requiring expanded works to original consulting assignment.



Issue 3 – Technical Evaluation

Background

➤ The evaluation process represented in the City's business case outlines a pre-qualification process (RFPQ) followed by a RFP process having a set of technical and financial scoring with weighted averages of 50% Technical and 50% Financial.

PPP Canada Issue

• PPP Canada is of the opinion that considering there is a pre-qualification phase, the RFP Evaluation Criteria should be weighted as 25% Technical and 75% Financial....." **PPP Canada believes that preferred construction and operating practices that demonstrate integration with the existing facilities on the Woodward site can be captured as output specifications that must meet the Technical Compliance gate. Requirements for bidders to demonstrate innovative and synergistic practices with existing operations can be incented with 25% of the potential points being assigned to the technical requirements. This will give Hamilton the ability to assign 75% of the points to the RFP bid with the lowest NPV cost per ton of processed biosolids and the financial plan with the highest quality."**

Resolution

• In order to remain compliant with P3 Canada funding requirements, the City will need to agree to accept 25:75 weighing of RFP Technical : Financial criteria otherwise PPP Canada will not provide funding. Staff are of the opinion that the procurement process can be changed to accommodate without increasing risk to City.



Proposed - Affordability Cap

Background

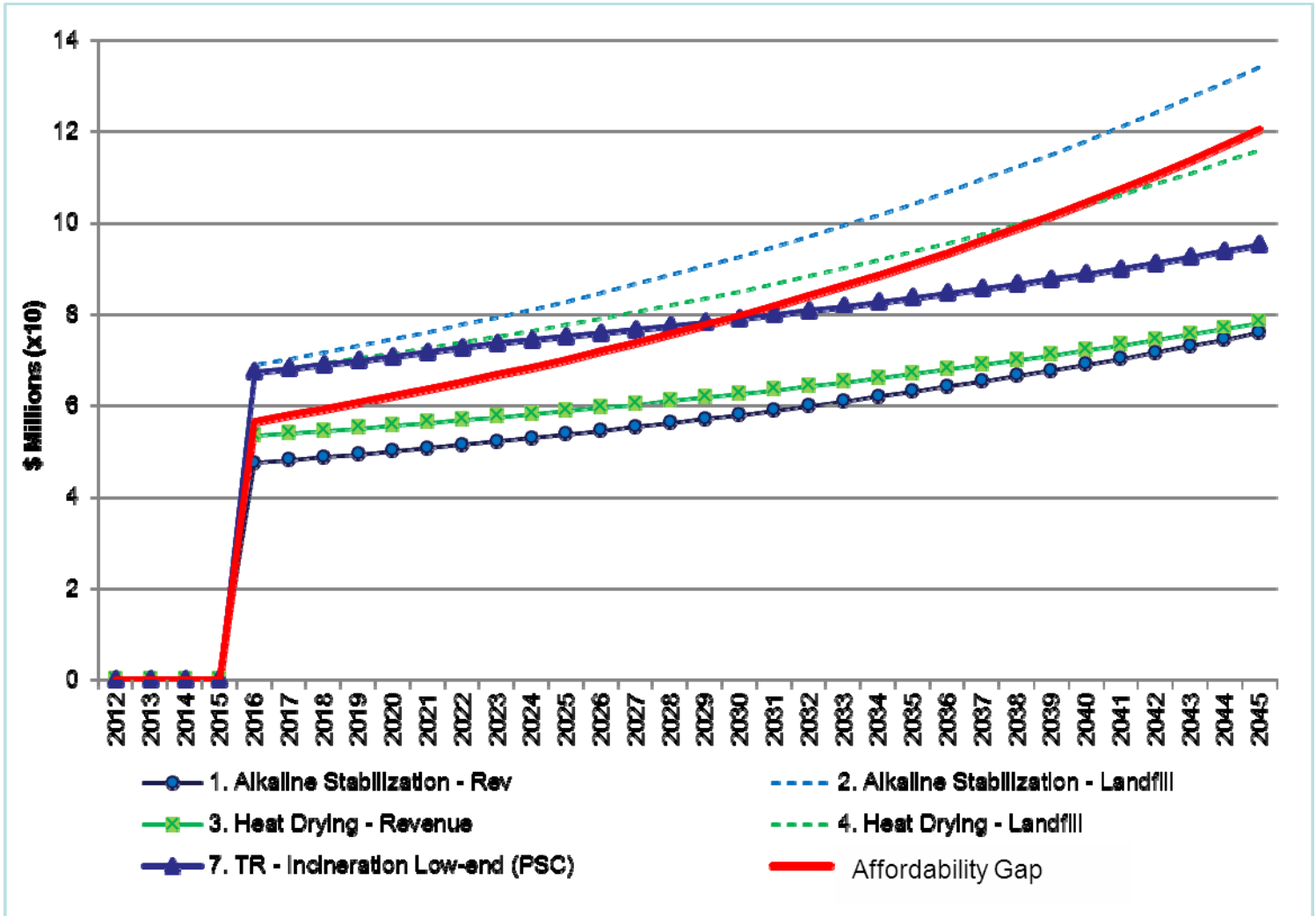
- Staff propose establishing a financial safeguard for the project by developing and including a project financial threshold referred to as an 'Affordability Cap',
- This mechanism will ensure that the project falls within the City's budgetary and financial constraints as well as provide greater clarity to the bidding community early in the process which is a fundamental concern expressed by P3 Canada,
- Those bids passing the technical review of the RFP process will have their financial submissions opened, the Affordability Cap will be a pass-fail criterion prior detailed financial review being undertaken,
- In general, the Affordability Cap was developed by calculating the cost of the current biosolids land application program on a Net Present Value (NPV) by inflating costs over the 30 year term (\$82.8 million), plus adding a cost representing an initial capital investment needed to make the program more sustainable over the same term from a logistical standpoint,
- Recommended capital cost include upgrades to the existing biosolids loading and odour control facility at the Woodward WWTP, as well as a cost representing sustainable biosolids storage equal to 45-60 days for periods of wet weather and winter months when biosolids cannot be applied directly to land (\$28-\$40 million).
- Based on this assessment, the proposed Affordability Cap equals \$111M over 30 years and is what is being suggested as the project financial threshold. Awarding the project within this threshold will provide the City the assurances of having a sustainable Biosolids program for 30 years with a stable financing model.

Affordability Cap - Market interaction

- Community
- People
- Processes
- Finance



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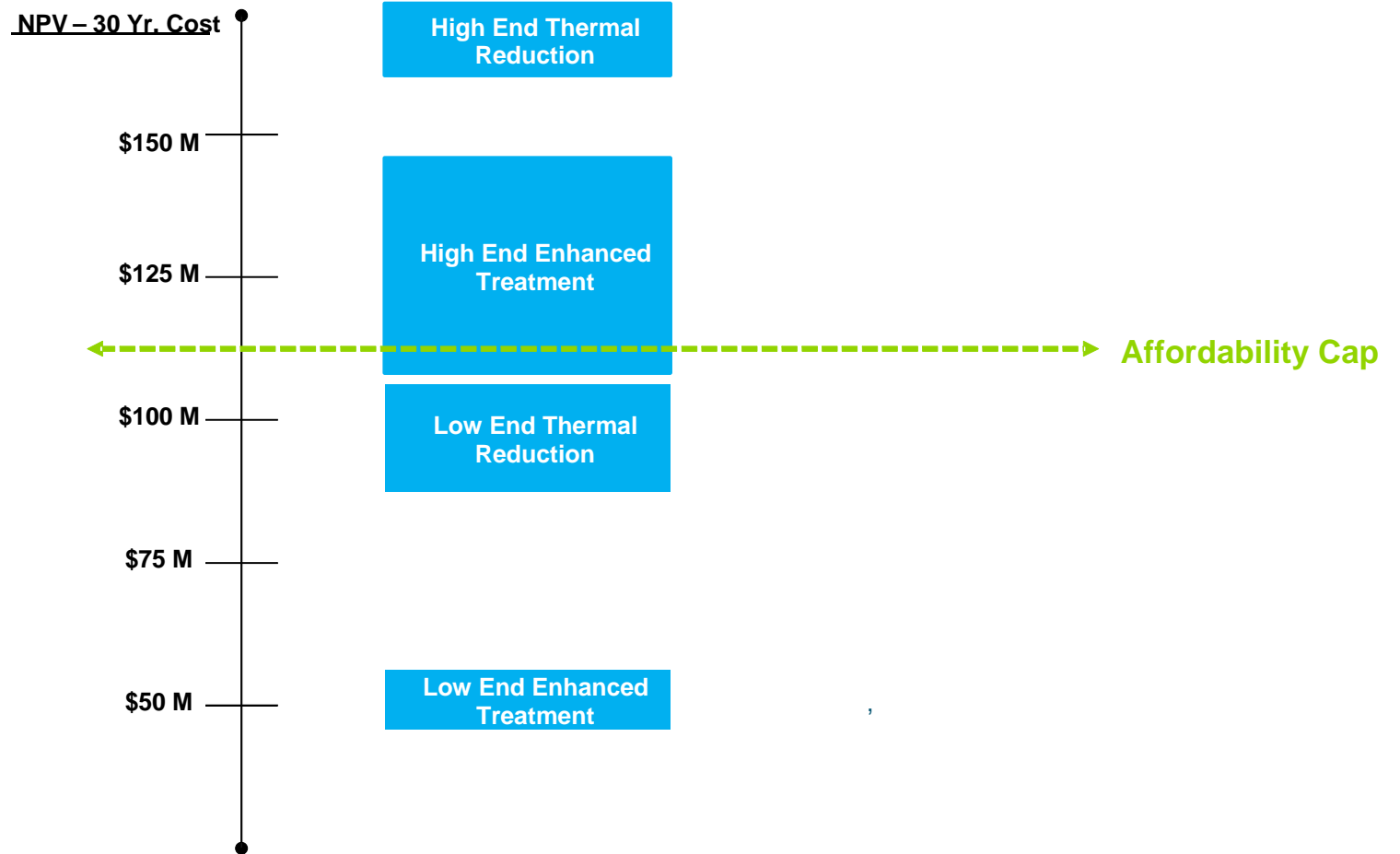


Overview of the Market

- Community
- People
- Processes
- Finance



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Affordability Cap – Application

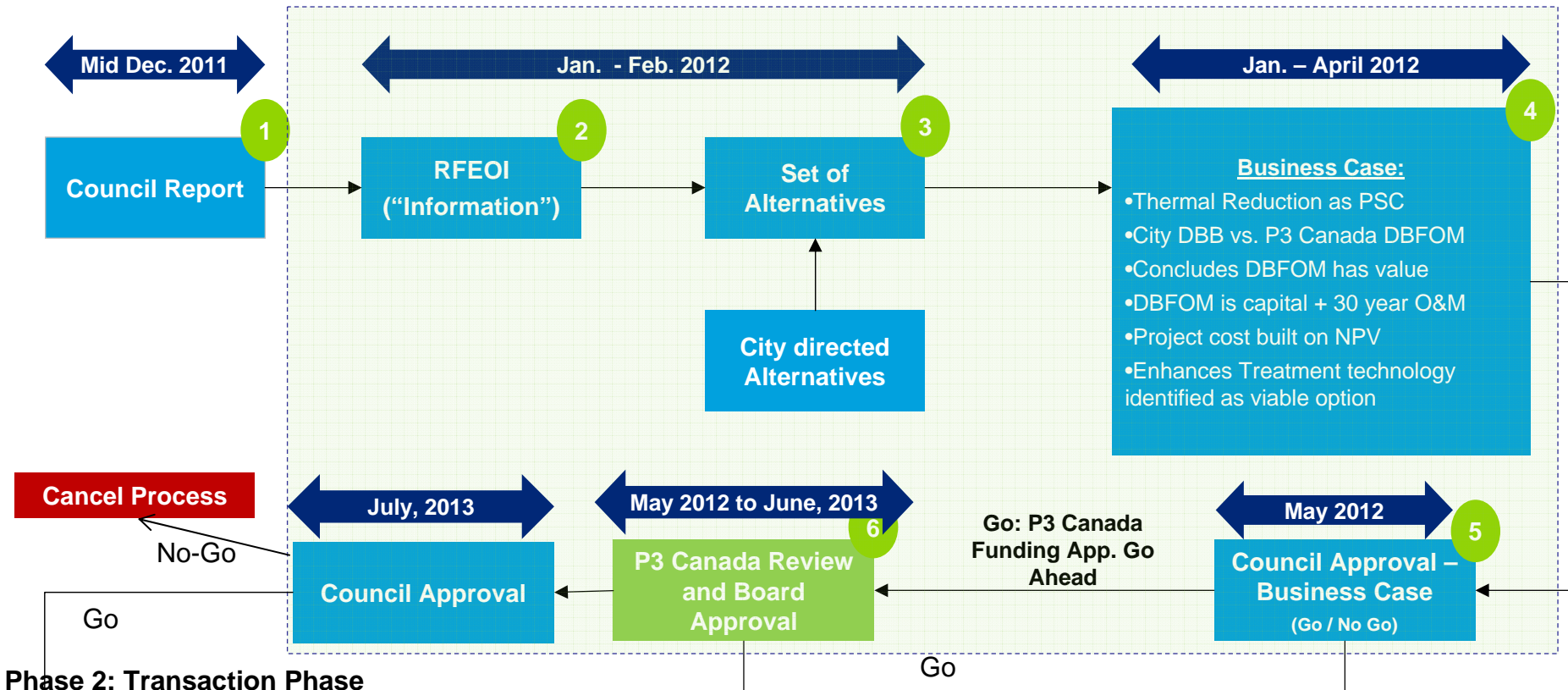
How Cap is Applied

- Bidder's will be required to ensure Annual Service Payments, net of 25% Substantial Completion Payment (from PPP Canada Funding), will be at or below the Affordability Cap,
 - Bidder's will need to sculpt payments to fit below a financial curve that will be on an annual Nominal Basis as set by the City and provided in the RFPQ and RFP.

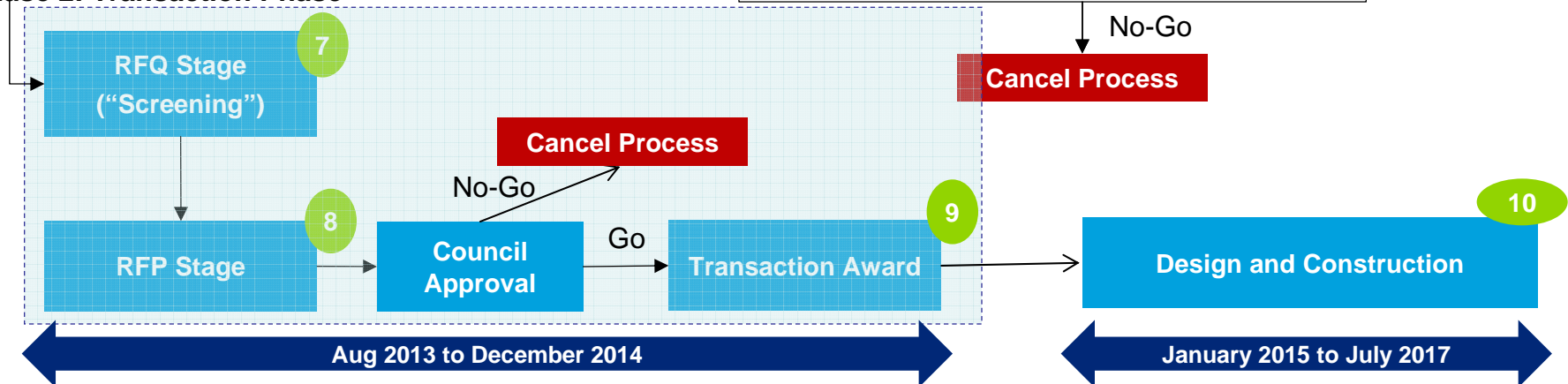
Note: NPV is only used for presentation purposes – the annual Nominal amount is all that matters to a Bidder.

P3 Canada Funding Approvals - Workplan

Phase 1: Business Case Phase



Phase 2: Transaction Phase





Recommendations

- (a) That the General Manager, Public Works be authorized and directed to amend the Public- Private Partnership Canada ('P3 Canada') Business Case as approved by Council through Report PW11098a/FCS11112a in support of receiving funding towards the City's Biosolids Management Project, as to comply with the requirements established by P3 Canada as outlined in Appendix A as follows,
- (i) Identify Woodward Avenue Wastewater Treatment Plant, located at 700 Woodward Avenue North in Hamilton as the sole location for the Biosolids Management Project;
 - (ii) Increase the accuracy of the cost estimate for the capital component of the project to a +/- 15% level accuracy;
 - (iii) Amend the weighting of the proposed evaluation criteria for the future Request for Proposal from 50% Technical and 50% Financial to 25% Technical and 75% Financial,
- (b) That the General Manager, Public Works be authorized and directed to proceed with establishing a not-to-exceed financial threshold ('Affordability Cap') for the Biosolids Management Project of \$111 Million Net Present Value ('NPV');
- (c) That the General Manager, Public Works be authorized and directed to expand Purchase Order No. 63473 to CH2M Hill Canada Limited by an estimated \$50,000 from account 5160966910 Biosolids MP Implementation, to address Recommendation (a) Subsection (ii);
- (d) That the General Manager, Public Works be authorized and directed to expand Purchase Order No. 64971 to Deloitte & Touche LLP by an estimated \$20,000 from account 5160966910 Biosolids MP Implementation, for effort required to amend the City's Business Case resulting from Recommendations (a) and (b).



Alternatives to Consider

Should Council choose to not accept P3 Canada's requirements for updates to the City's business case and desire to pursue alternatives the following may be considered;

1. Direct staff to only submit those conditions for which Council are willing to approve with the understanding that not fully complying with P3 Canada request will likely result in a negative response to the funding application,
2. Cancel P3 Canada application, continue with the current biosolids land contract which expires in 2016, and re-tender the service contract at that time to include enhanced treatment providers with a term that allows the City time to update the Biosolids Master Plan,
3. Continue with an independent procurement strategy similar to that of P3 Canada (a 30 year Design, Build, Finance, Operate and Maintain contract) without P3 partnership to allow for the full range of technology and service providers to respond to an RFP.



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Questions