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# *The Corporation of the City of London*

## Report on Internal Audit Results

- Engineering and Environmental Services:  
Roads & Transportation - Capital Budget  
Development and Project Costing

April 29, 2015

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# *Agenda*

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## ***Rating Scale – Opportunities for Improvement***

- **Satisfactory**

Controls are present to mitigate process/business risk, however an opportunity exists for improvement.

Satisfactory



- **Needs Improvement**

Existing controls may not mitigate process/business risk and management should consider implementing a stronger control structure.

Needs  
Improvement



- **Unsatisfactory**

Control weaknesses are significant and the overall exposure to risk is unacceptable. Immediate attention and oversight from management is required.

Unsatisfactory



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***Engineering & Environmental Services:  
Roads & Transportation - Capital Budget  
Development and Project Costing***

# **Summary of Risks & Scope**

## **Engineering & Environmental Services: Roads & Transportation – Capital Budget Development and Project Costing**

### **Scope**

- Transportation Planning and Design and Stormwater Management (SWM) divisions were scoped in based on significance and risk
- Relevance and reliability of data used in annual budgeting
- Collaboration and approvals in budget preparation
- Project budgeting preparation
- Procurement process compliance and efficiency on individual projects

### **Potential Risks**

- Inappropriate information may be used to estimate future funding needs, leading to inefficient use of resources
- Key stakeholders may not be engaged in the budgeting process, both annually and on individual projects, which could cause future delays or additional costs
- Compliance with the Request for Proposal (RFP) or Request for Tender (RFT) policies may not be followed, which could result in selecting vendors without authorized approval or awarding contracts that are not in the City's best interest.
- Cost overruns incurred by third parties and charged to the City may not be appropriately approved.

### **Controls Operating Effectively**

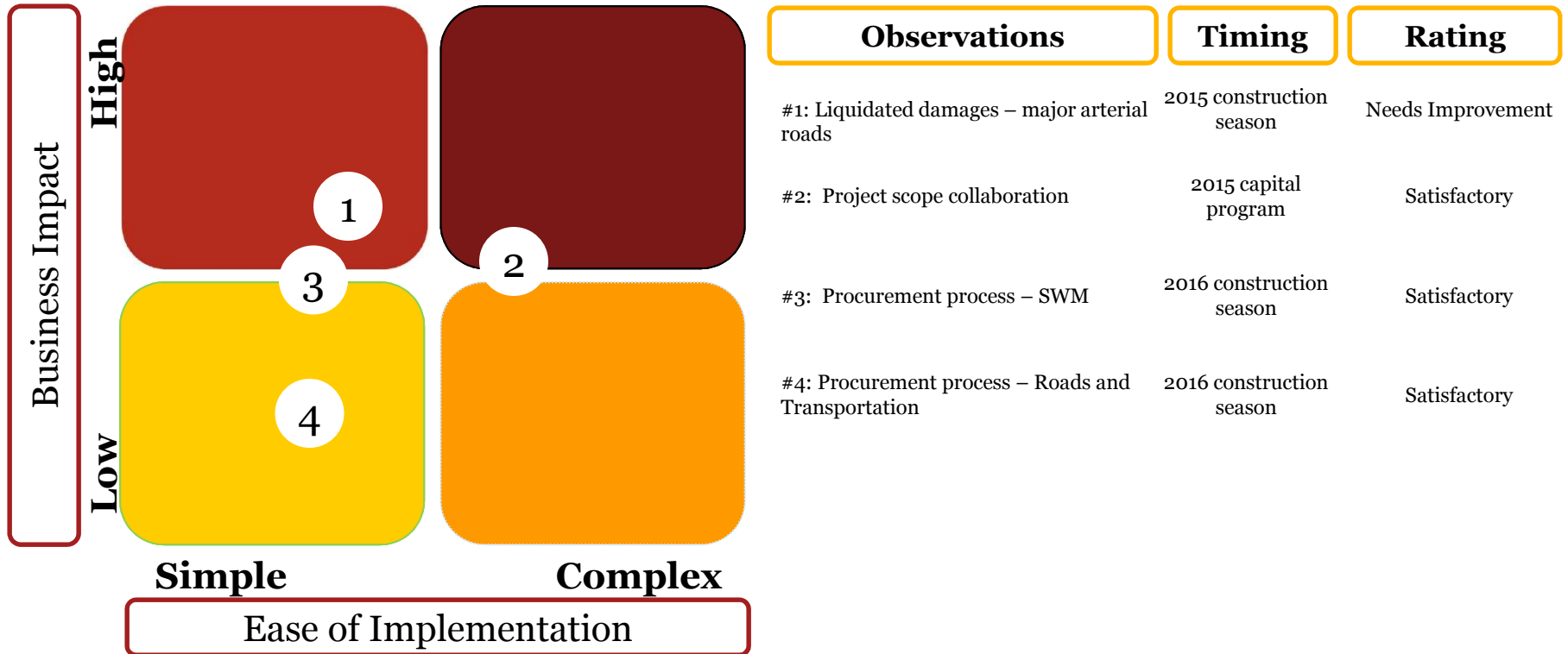
- Budgets use reports such as the Development Charges (DC) Background Study and Master Servicing Studies, which is done in collaboration with external experts.
- Master plans are used to track expected projects up to 20 years in advance. These plans are appropriately revisited periodically and are used as a basis for the annual budgeting process.
- Environmental assessments as required by the EA Act are being conducted prior to the start of projects to ensure any findings with a material impact on project scope and budget are identified in timely manner.
- Projects identified as requiring Council approval in initial PO process were appropriately presented to and approved by City Council and subject to the Request for Proposal (RFP) or Request for Tender (RFT) as required based on the dollar value of the project.

### **Value-for-Money Considerations**

- Incorporating all key stakeholders at the onset of the project design phase, and prior to the procurement process being finalized, would reduce the likelihood of incurring additional costs through construction change orders in the future, which have been as high as \$400,000 on a project historically.
- Increasing liquidated damages and the use of financial incentives/disincentives charged to contractors on major projects would increase compliance to contract schedules and social impacts to residents if contractors are delaying in completing a project.
- Efficiencies in the procurement process are identified in this report.

# Action Plan Summary

## Engineering and Environmental Services: Roads & Transportation – Capital Budget Development and Project Costing



- High Business Impact, Easy to Implement
- High Business Impact, Difficult to Implement
- Low Business Impact, Easy to Implement
- Low Business Impact, Difficult to Implement

# Observations & Action Plans -#1

Needs Improvement 

## Engineering & Environmental Services: Roads & Transportation – Capital Budget Development and Project Costing

### Observation

#### **Liquidated Damages: Penalty rates charged to contractors for delayed projects**

The current fee charged to contractors for projects that are not completed on-time may not be sufficient to incentivize them to meet the agreed-upon deadlines. The City of London charges contractors a standard penalty rate of \$500/day plus inspection rates. This has proven to result in lower overall penalties than amounts charged by other municipalities and agencies, which average around \$1,000/day.

### Business Impact

There is a potential risk that the City of London is not providing contractors with substantial enough disincentives to complete a project by the agreed-upon date. This could result in high societal costs as prolonged project durations of major arterial road construction can significantly impact the community.

### Action Plan

It is recommended that the City increase the penalty rates for delays and the use of financial incentives/disincentives on major arterial road projects, based on the impact of the project. This will reduce the risk that contractors will prioritize work for other municipalities and agencies over the City of London's projects.

### Action Plan Lead

Divisional Manager – Transportation Planning and Design  
Director of Roads and Transportation

### Timing

2015 Construction Contract Season

## Observations & Action Plans -#2

Satisfactory 

### Engineering & Environmental Services: Roads & Transportation – Capital Budget Development and Project Costing

#### Observation

##### Determining Project Scope

The current project scoping process for capital projects needs to fully incorporate a “Complete Streets” focus for above and below ground utilities in order to implement the long term vision for the public right of way.

#### Business Impact

There is a potential risk that the City of London is not capturing all respective design requirements in the project scoping process which may lead to project costing impacts. This can lead to inefficient use of resources and potential cost overruns if changes to the project from various departments are requested after a project has begun, thus changing the project scope.

#### Action Plan

It is recommended that the City implement a more formal “Complete Streets” scoping process for the design of all infrastructure capital projects. The scope of all “Complete Streets” elements need to be addressed prior to the execution phase of the project with input from the various departments and agencies, such as urban design. This would result in fewer interruptions to the project and mitigate the likelihood for higher project costs.

#### Action Plan Lead

Managing Director EES, Various EES Directors

#### Timing

2015 Capital Program



# Observations & Action Plans -#3

Satisfactory



## Engineering & Environmental Services: Roads & Transportation – Capital Budget Development and Project Costing

### Observation

#### Approval Process – SWM Projects

A separate Request for Proposal (RFP) is drafted for each phase of a project (Environmental Assessment, Design, and Construction Administration). Therefore multiple approvals are required by either the Managing Director or City Council throughout the course of a project.

### Business Impact

There is a potential opportunity for the City of London to realize efficiencies in the approval process by streamlining the EOI step into a one-time approval at the beginning of the year.

Furthermore, there is a potential opportunity for the City of London to realize efficiencies in the approval process by grouping the Design and Construction Administration phases into one RFP. This would result in a single approval process.

### Action Plan

It is recommended that the City allow projects similar in nature to be grouped into one large EOI for pre-approval by Council. This would allow projects to go straight to the RFP stage as the project rolls out, resulting in a more efficient approval process. It is recommended that the City group the Design and Construction Administration phases into one RFP. This would have to be declared upfront to all bidders invited. These measures will result in efficiencies in the process and operational savings.

### Action Plan Lead

Managing Director EES

Director of Roads and Transportation

### Timing

2016 construction contract season

# Observations & Action Plans -#4

Satisfactory



## Engineering & Environmental Services: Roads & Transportation – Capital Budget Development and Project Costing

### Observation

#### Approval Process – Transportation Projects

The procurement policy dictates a 2-step process for the appointment of Professional Consulting Services greater than \$500,000. The two stages are: Request for Expression of Interest (REOI)/ Request for Qualifications (RFQUAL) and a Request for Proposal (RFP). Approval of multiple EOIs from a single consultant can occur in one year, resulting in significant time spent on the EOI approval process.

### Business Impact

There is a potential opportunity for the City of London to realize efficiencies in the approval process by streamlining the EOI step into a one-time approval at the beginning of the year.

### Action Plan

It is recommended that the City allow projects similar in nature to be grouped into one large EOI for pre-approval by Council. This would allow projects to go straight to the RFP stage as the project rolls out, resulting in a more efficient bid and approval process. These measures will result in efficiencies in the process and operational savings.

### Action Plan Lead

Managing Director EES

Director of Roads and Transportation

### Timing

2016 construction contract season

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