<table>
<thead>
<tr>
<th>Agenda Item</th>
<th>Item 4, Finance, Audit &amp; Risk Management (FARM) Committee, January 25, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>To provide an overview of the Corporation’s enhanced risk framework from both an enterprise-wide and capital project risk perspective.</td>
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</table>
| Key Message | • Management’s framework for the management of enterprise risk is currently under peer review by the Corporation’s internal auditors.  
  
  • Management’s proposed enhanced project governance framework has been peer reviewed by three independent experts and concluded to be appropriate and in line with industry best practice.  
  
  • Management has provided an analysis of the pros and cons of establishing a separate Capital Risk Committee. |

### Areas of note/Key issues

**Enterprise Risk**

- Waterfront Toronto’s Enterprise Risk Management (ERM) Taskforce maintains a corporate risk register designed to identify, measure, and mitigate key risks impacting the Corporation;  
  
  - The register and the process (slide 8) around it is currently being reviewed by the Corporation’s Internal Auditors, MNP LLP.  
  
  - Management will present the updated enterprise risk register, including MNP’s recommendations and two year internal audit plan to the FARM Committee March 8, 2018.

**Capital Project Risk**

- As a result of the scope and scale of the Port Lands Flood Protection project and based on best practice, management has developed an enhanced project governance framework that includes the three lines of defense model (slide 14);  
  
  - The new key components inherent in this framework include:  
    - Establishing a Program Management Office (PMO) to streamline project lifecycle workflows and manage risk (slide 15); and  
    - Creating a Peer Review Advisory Panel of experts with specific industry knowledge (slide 16).  
  
  - The Corporation recently completed an independent peer review of its proposed enhanced project governance framework to ensure it is appropriate and meets or exceeds standards for comparable projects/organizations. These peer reviewers who are some of the world’s top experts in specific industry areas included:  
    - Dutch Ministry of Infrastructure—the Rijkswaterstaat;  
    - Projectus infrastructure services; and  
    - BDO Canada, our external auditor (infrastructure advisory team).  
  
  - The results of the peer review endorsed Waterfront Toronto’s proposed framework and provided some additional considerations which are outlined on slide 17.

**Board Risk Oversight - Governance Options**

- At the request of the FARM Chair, management has assessed the pros and cons of establishing a separate Capital Risk Committee (slide 19) for discussion purposes.

### Expected Outcome

No Committee action is required.

### Key Takeaways/Next Steps

- Review of Enterprise Risk Register, including recommendations from MNP at the next FARM Committee meeting (March 8, 2018)  
  
  - Review and approval of Internal Audit Plan at the next FARM Committee meeting.
Purpose

1. To provide the FARM Committee an update with respect to the Corporation’s **Enhanced Governance and Risk Framework** at both:
   - Enterprise level; and
   - Project level.

2. To respond to the FARM Committee Chair’s request that management provide an analysis of the pro’s and con’s of separating the FARM Committee into two Committee’s, namely:
   - FARM Committee; and
   - Capital Risk Committee.
Agenda

• Background
• FARM Committee Mandate
• Enterprise Risk Management Framework
• Project Risk Management Framework
• Board Risk Oversight – Governance Options
• Discussion
Background

• Operating in a more complex business environment driven by our two recent transformational projects – Port Lands and Quayside;
• Need to ensure that we have the appropriate governance and risk management framework in place to adequately manage risk.

**Enterprise risk management** is a process, effected by the entity’s board of directors, management, and other personnel, applied in a strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within the risk appetite, to provide reasonable assurance regarding the achievement of objectives.

*COSO’s Enterprise Risk Management – Integrated Framework*
FARM Committee Mandate

The role of the FARM Committee is to assist the Board of Directors in fulfilling its oversight responsibilities with respect to the following:

- Financial Reporting
- Internal Controls
- External and Internal Auditor appointments
- Government audits
- Financial Planning
- Enterprise Risk Management
- Project Risk Management
<table>
<thead>
<tr>
<th>FARM Committee Risk Responsibilities</th>
<th>Currently Fulfilled As Follows:</th>
<th>Frequency</th>
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<tbody>
<tr>
<td><strong>1. Enterprise Risk Management</strong></td>
<td>• Review of Enterprise Risk Register and report to Board.</td>
<td>Annually</td>
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<td>The Committee will <strong>review with management significant matters involving the status of the Corporation’s enterprise risk management activities and make recommendations to the Board with respect to various material risks affecting the Corporation and the adequacy of the controls in place to identify, assess, manage and mitigate such risks.</strong></td>
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<td><strong>2. Project Risk Management</strong></td>
<td>• Review of Capital Approvals for recommendation to the Board; • Review of Project Cost, Schedule &amp; Risk Reports (five projects).</td>
<td>As required.</td>
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<tr>
<td>As outlined in the Capital Approval Process Policy, the Committee will review all projects and recommend to the Board those projects that require monitoring by the Committee. A project requiring monitoring may be defined as having many (if not all of) the following characteristics: • Budget valued in excess of $50 million; • High complexity and potential for many unknown risks; • Compressed timeline/schedule; • Self-insurance procurement model; • Multiple stakeholders; and high public profile. The Committee will provide independent monitoring with respect to project budget, scope and schedule.</td>
<td>Quarterly</td>
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Enterprise Risk Management Framework
Enterprise Risk Management Framework

• Waterfront Toronto has maintained an **Enterprise Risk Register** for over 10 years;

• The Risk Register is maintained by a cross-functional Enterprise Risk Management Taskforce, led by our Director, Financial Planning (CFO is accountable executive);

• Enterprise Risk Register includes risks with an organization-wide impact, including any major, material project risks.

• All identified risks are:
  • Identified and grouped into key categories such as Financial, Operational, Reputational;
  • Assigned risk owners and project managers to establish accountabilities for the ongoing management of risks;
  • Assessed and quantified in terms of impact, likelihood, and mitigation controls;
  • Ranked based on resulting inherent risk and residual risk levels, i.e. in terms of high, medium, and low risks.

• The Enterprise Risk Register:
  • Is reviewed by the senior management team;
  • Is presented and discussed with the FARM Committee and Board annually;
  • Forms the basis for the development of a risk-based internal audit plan.

• MNP are currently engaged to conduct a peer review of our risk register and risk assessment process and develop a two year risk-based internal audit plan;

• Waterfront Toronto is committed to continuous improvement in its enterprise risk management framework.
Next Steps – Enterprise Risk Management

<table>
<thead>
<tr>
<th>FARM/Board Meeting</th>
<th>Agenda Item</th>
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<tr>
<td>March 8, 2018 - FARM</td>
<td>• Review of Enterprise Risk Register, including recommendations from MNP</td>
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<tr>
<td></td>
<td>• Review and approval of Internal Audit Plan</td>
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Project Risk Management Framework
Capital Project Governance involves the following:

- Creating an efficient project organization with clear lines of responsibility and defined roles
- Developing policies and procedures to guide consistent performance across the organization
- Implementing systems for collecting project execution data and reporting key performance indicators
- Deploying mechanisms that identify and mitigate performance risk
Proposed Project Governance Enhancements

City of Toronto
Government of Canada
Province of Ontario

Board of Directors
BOD
Sub Committees
Chairs Committee

President & Chief Executive Officer

Chief Project Officer
Chief Financial Officer
SVP Planning & Design
Chief Development Officer
Chief Strategy Officer

Enterprise Risk Management
Finance
Audit

Project Risk Management

PMO

Stage Gate Review
Project Controls

Capital Peer Review Panel
Program Execution

VP Project Delivery

VP Development

VP Inn. Sustainability & Prosperity

VP Strat Comms & Public Engagement

VP Development

Enterprise Risk Management
Finance
Audit
Three Lines of Defense

Three Lines of Defense model is applied to project risk management by:

- Having a cohesive and proactive approach to identify, assess, mitigate, report, monitor and manage project risks
- Having a holistic and consistent approach to project risk management across the organization
- Providing appropriate coverage and identifying ‘blind spots’ which may not be identified
- Clarifying roles in each line of defense, from project management, control functions (i.e. program management offices), internal audit
**Best Practice – Lines of Defense Model**

**First Line**

**PROJECT DIRECTORS**
Project risks are identified, analyzed, owned and managed
- Own and manage project risks by implementing project controls including plans, schedules, budgets, etc.
- Risk owners are accountable for ensuring corrective actions are implemented to address project process and control deficiencies
- Project Director ensures that project risk management activities are consistent with project’s goals and objectives

**Second Line**

**PROGRAM MANAGEMENT OFFICE**
- Accountability for risk oversight through project risk assessment processes
- Coordinates risk reporting, escalation to third line and FARM
- Supports Project Directors by validating first line is properly designed and operating
- Monitors project risk management activities undertaken by Project Directors are consistent with project’s goals and objectives
- Receive risk information (scope, schedule, risk matrix, budget) to make timely decisions
- Defines, enforces and maintains standards and processes for project risk management
- Supports the organization in providing tools to manage new and merging project risks and effectiveness of project controls

**Third Line**

- Independent review through CAPITAL PEER REVIEW PANEL
- Provides subject matter expertise through support role to assist first line and second line in project risk management

- **INTERNAL AUDIT/RISK MANAGEMENT** function provides independent and objective assurance on project risk governance practices
- Assesses and monitors implementation of effective risk management practices
- Provides confidence that first and second lines of defense are operating effectively.
PMO Mandate

• PMO methodology and workflows
• Project governance and oversight – full lifecycle, every project
• Integrated reporting risks, financials, milestones and dependencies
• Peer relationships with WT VPs

PMO Roles & Responsibilities

• Manage project workflows – from new request to close-out
• KPIs - develop and monitor
• Facilitate elaboration of project plans, project documentation
• Manage projects scope, financial reviews and approvals
• Assist Finance group
• Work with VP Project Delivery
• Manage stage gate governance
• Assist audit review
## Capital Peer Review Panel

<table>
<thead>
<tr>
<th>Description</th>
<th>Capital Peer Review Panel</th>
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</thead>
<tbody>
<tr>
<td>Authority</td>
<td>Review, Advise, Recommend</td>
</tr>
<tr>
<td>Role &amp; Responsibility</td>
<td><strong>Propose:</strong> Independent advisory panel(s) reviewing</td>
</tr>
<tr>
<td>Scope of Review</td>
<td>- Capital Approvals (when Required)</td>
</tr>
<tr>
<td></td>
<td>- Quarterly Budget &amp; Schedule Reports</td>
</tr>
<tr>
<td></td>
<td>- Quarterly Risk Update</td>
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<tr>
<td></td>
<td>- Project Issues and execution status</td>
</tr>
<tr>
<td>Members</td>
<td>- Senior expertise in Construction, Engineering, Procurement, Project and Risk Management</td>
</tr>
<tr>
<td></td>
<td>- Institutional (e.g. UofT, Ryerson)</td>
</tr>
<tr>
<td></td>
<td>- Government (e.g. MoECC, RWS, IO)</td>
</tr>
<tr>
<td></td>
<td>- Private Sector (Contractors, Consultants – e.g. Van Oord, Boskalis, Arcadis)</td>
</tr>
<tr>
<td></td>
<td>- Owner/Investor (e.g. Borealis, OTPP)</td>
</tr>
<tr>
<td></td>
<td>- Industry Organisations (e.g. CCPPP CIFB)</td>
</tr>
<tr>
<td></td>
<td>- WT Board / FARM directors</td>
</tr>
<tr>
<td>Reports to</td>
<td>CPO and dotted line to Capital Risk Committee / FARM</td>
</tr>
<tr>
<td>Inputs (who)</td>
<td>VP Project Delivery via PMO provided materials</td>
</tr>
<tr>
<td>Outputs</td>
<td>Recommendation on options, level of completeness, risks management</td>
</tr>
<tr>
<td>Logistics</td>
<td>Formal reviews of Stage Gate Outputs – Risk, Cost, Schedule, Scope</td>
</tr>
<tr>
<td></td>
<td>Frequency – before FARM meetings – adhoc as needed</td>
</tr>
<tr>
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<td>PMO governed process (schedule, materials, logistics)</td>
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Participants: Projectus is a specialised project management advisory service, BDO Canada is an assurance and advisory organisation.; Rijkswaterstaat is part of the Dutch Ministry of Infrastructure and the Environment.

Independent review conducted to ensure alignment with industry best practices and to provide improvement recommendations

- Key personnel interviewed ensuring various stakeholders expectations are factored in recommendations
- Members of the Board of Directors interviewed to ensure the Board’s risk appetite is aligned with a proposed framework
- Workshops conducted including a review of WT overall internal processes, construction and contractor management and project organisation structure, stage gate process, controls and reporting

Key Findings

Positive remarks

- Internal staff has a lot of experience, is agile and able to adjust to the needs of projects
- The strategy, balancing between flexibility in budget and in time is good
- Future asset managers (e.g. TRCA) are actively involved, which is very good.
- WT has open and trustworthy administrative style.

Future Considerations

- Empower PMO with authority and responsibility not just governance (employ tools and procedures)
- Predetermine number of releases of government funds – simplify the process
- Budget contingency – determine what is held back e.g. on program level vs project level
- Safety and risk management – consider dedicated risk manager resource
Board Risk Oversight – Governance Options
<table>
<thead>
<tr>
<th>Option</th>
<th>Pros</th>
<th>Cons</th>
</tr>
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</table>
| **1. FARM Committee** | • Responsibility for risk management is maintained through one, seamless Committee;  
  • Ability to understand impacts of capital risk on entire enterprise;  
  • Utilize relationship with new Capital Peer Review Panel. | • This is a heavy workload burden for one Committee;  
  • Committee members may not have adequate time and/or expertise to dedicate to matters of particular technical risk. |
| **2. Capital Risk Committee** | • FARM Committee can prioritize focus on fiscal responsibilities of organization, as opposed to being burdened with capital risk oversight;  
  • Capital Risk Committee can focus on individual project risks and reporting;  
  • Aligns with industry best practices for oversight of mega capital projects;  
  • Capital risk governance requires technical expertise. | • Capital Risk Committee will require development of a mandate and nomination of new members to the committee;  
  • Additional cost of up to $20,000 p.a. (member fees);  
  • Two separate committees responsible for risk reporting to Board may be confusing;  
  • Potential additional layer of reporting for executive management and project management office, however this could be streamlined. |
| **3. Capital Risk Sub-Committee** | • Same benefits as under option 2, and FARM gains greater understanding of capital risk and impacts on enterprise risk;  
  • Alleviates much of the cons under option 1. | • Same as option 2.  
  • Would require some commonality of membership with FARM (workload); |
Discussion

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