

Risk Management Register
KRSEC Project



Risk ID	Identified Risk	Observations/Comments/Current Mitigation Strategies	Likelihood (1-3)	Impact (1-3)	Risk Score (L X I) (Inherent Risk)	Risk Response / Control Strategies	Risk Response/ Control Owner	Control Effectiveness (1-3)	Residual Risk (Inherent Risk / Control Effectiveness)	Status/Other
STRATEGIC RISKS										
(*)	Insufficient project funding is generated from fundraising and grants	Fundraising campaign needs to start as soon as possible. Delays could have an impact on the ability to raise sufficient funds. Funding from other sources has exceeded expectations thereby reducing the reliance on the amounts anticipated from the Federal Government and Private sources. Should the funding from these sources not reach expectations, then longer term financing might be required or some of the building program scaled back. Grant lobbying efforts with the Federal Government continue. Market study was conducted on June 29, 2005.	2	2	4	Support and a plan for the fundraising campaign are being implemented. Arcturus/SMG Canada has the experience and expertise in marketing and achieving sales targets for suites, club seats, sponsorships and advertising. A separate ticketing study will be performed by Arcturus/SMG Canada to establish the most efficient and user-friendly ticketing system to be used for the new facility. The naming rights are unique to the region. For this reason, Arcturus/SMG has retained a company specializing in securing building naming rights. In addition to this independent approach, Kingston citizens and companies are being asked to help in the identification of potential naming rights buyers and private donors.		2	2	
(*)	Governance / Political/Management Ability of City to communicate project objectives and progress to residents	Monthly newsletters are being posted on the City's website and sent to key stakeholders. Monthly progress reports are submitted to Council and are available to the public. A webcam monitoring the construction progress on site is accessible from the City's website.	2	2	4	Communicating to residents has been ongoing and is a core City process. Monthly newsletters are being posted on the City's website and sent to key stakeholders. Monthly progress reports are submitted to Council and are available to the public. A webcam monitoring the construction progress on site is accessible from the City's website. A Project Communication Plan is being developed to define means and frequency of communication with the public. It has already been established in roles and responsibilities that the Project Director is responsible for issuing official communication. The Communications Department filters all information being issued publicly.		2	2	
OPERATIONAL RISKS										
(*)	Risk that estimated operating revenues and costs are significantly different then actual	Deloitte and Touche has reviewed and validated figures presented in the Sports and Entertainment Centre. All three companies that submitted a bid for the management and operational contract confirmed that the proposed business plan was achievable. Research was conducted for other similar facilities and compared to the Sports and Entertainment Centre business plan.	1	3	3	Deloitte and Touche has reviewed and validated figures presented in the Sports and Entertainment Centre. All three companies that submitted a bid for the management contract confirmed that the proposed business plan was achievable. Research was conducted for other similar facilities and compared to the Sports and Entertainment Centre business plan. Arcturus/SMG Canada has the experience and expertise in marketing and achieving sales targets for suites, club seats, sponsorships and advertising. A separate ticketing study will be performed by Arcturus/SMG Canada to establish the most efficient and user-friendly ticketing system to be used for the new facility. Council approved a motion to set aside any net revenues above and beyond the yearly benchmark in a reserve fund to be used to cover any future shortfalls.		2	2	
(*)	Risk that operating staff do not have sufficient time and/or training to operate facility and develop efficient operating routines	EllisDon and Arcturus are working together to integrate both the construction and operational training/testing requirements.	2	2	4	The Operator, Arcturus/SMG Canada, is experienced in all aspects of operating and opening sports and entertainment facilities. The Operator has been engaged and will be an integral part of the Project Team throughout the design, construction and commissioning of the project. Time frames for hiring and training staff will be integrated into the commissioning and opening schedules. The Project Director will be monitoring these activities on a monthly basis. EllisDon and Arcturus are working together to integrate both the construction and operational training/testing requirements. EllisDon will have substantial completion in December 2007, therefore providing the operator with about one month to test equipment and train staff.		2	2	

Exhibit C

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PROJECT MANAGEMENT / CONSTRUCTION RISKS										
	Not responding to documents issued by the D/B Contractor in a timely manner may have a negative impact on budgets (through claims) and on milestones.	Online document management and collaboration software (Edgebuilder) is controlled by D/B Contractor. City and Project Manager attend all design meetings during which any outstanding issues requiring follow up are identified. Meeting minutes capture some outstanding issues.	2	3	6	- Online document management and collaboration software (Edgebuilder) is controlled by D/B Contractor. City and Project Manager attend all design meetings during which any outstanding issues requiring follow up are identified. Meeting minutes capture some outstanding issues. Ensure City responds to RFI's and other outstanding documents in the document management system in a timely manner. - Establish a bi-weekly City generated report indicating number of outstanding documents by type (RFI, SI, JI, CN, other) and by weeks outstanding, number of new documents for the week, number of documents resolved, etc.	Tom Finan	2	3	
	The risk of approving and spending contingency budgets at a faster pace than planned reduction guidelines could result in contingency depletion before project completion, and may cause project budget over-runs.	During the preparation of the draft project status report, it became apparent that the budget did not allow for the complete scope as per City's expectations.	3	3	9	- A complete review of the budget was completed. - The contingency reduction guideline is being applied to the project in the last progress report. Need to establish a target percentage of contingency and minimal permissible contingency at various percent committed costs and/or actual progress. Current process requires for all changes in scope to be approved by council.	Lanie Hurdle Tom Finan	1	3	
	Risk of project scope creep and changes to scope within existing project baseline budget may cause project budget over-runs and may have an impact on the completion milestones.	As a result of cost saving exercise scope was removed from the construction budget but kept within the project with no corresponding budget. These items include HVAC system in restaurant/lounge area, finishes of food and beverage areas, ecology units within concessions, interior design, cabling and a number of furniture, fixtures and equipment.	3	3	9	- A complete review of the budget was completed - Establish and implement a formal Project Change Authorization (PCA) process for identifying, analyzing, documenting, and approving changes to the original scope and budget of the project. The process will also validate if (material) contemplated changes are within the approved project baseline scope. (i.e. included in the scope definition report) Current process requires for all changes in scope to be approved by council. All change orders above \$50,000 and within scope are being approved by the Oversight Committee and change orders lower than \$50,000 and within scope are approved by the project director.	Lanie Hurdle Tom Finan	1	3	
	Risk that operational needs are not identified and incorporated in the current program may result in changes to scope either late in the project or post opening.	During construction City/Operator may require or request changes to the original scope as a result of operational needs.	2	3	6	- The Operator has been involved from the beginning of the design stage and has already made a number of changes based on operational needs. Establish operations request process and forms to incorporate the requests and account for associated costs. - Establish a register for these requests - Establish a process to collect associated costs if the changes are scope changes to the project, refer to PCA process above	Lanie Hurdle Tom Finan	2	3	
	Risk of not having formal and proper project policies and procedures could result in; - Lack of communication - Lack of project cost, schedule and scope control	Some policies and procedures have been established through the project charter but a coordinated set of policies and procedures have not been finalized.	2	3	6	- Project Charter has identified some processes. Communication plan is in progress as well. EllisDon keeps list of all anticipated change orders. Prepare and approve formal project policies and procedures for the following processes (not limited to): schedule control, scope control, cost control, contract administration and close-out, document control, contingency management etc.	Lanie Hurdle Tom Finan	2	3	

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	<ul style="list-style-type: none"> - Delays to awarding of separate contracts (outside of base construction and design procurement) could impact the critical path of the project and result in schedule/milestone delays and/or increase in project costs. - Lack of a consolidated procurement plan may result in incomplete work packaging and/or missed scope items. 	Procurement of FF&E and F&B by building operator. Approval to proceed is in place from the City. Installation of FF&E and F&B contracts to be finalized.	2	2	4	Establish a consolidated project procurement plan for separate contracts by City (Misc. Consultants, FF&E, F&B, and other). The plan to cover (not limited to): <ul style="list-style-type: none"> - Listing of all separate contracts for all work packages. Operator will purchase all F&B and FF&E already included in the operational contract. Most of the consultants have already been retained through P.O.; their involvement is required mainly in the pre-construction phase. - Responsibility of finalizing specifications/ terms of reference for each contract are identified within purchase orders or contracts. - List responsibility of contractual terms are included in purchase orders. - List detailed procurement cycle dates (requisition, solicitation, selection and award) - Incorporate details of procurement plan to project master schedule. - Assign responsibility to a dedicated person to manage the procurement and contract administration function. 	Lanie Hurdle Tom Finan	2	2	
	Stakeholders, project management team and members of committees without clearly identified a) project governance structure b) roles and responsibilities may lead to misunderstandings and ineffective decision making, improper oversight and governance, procedural errors, risk of changes to scope, scope creep, and re-work.	Organizational chart, project charter and terms of reference have been developed. Oversight committee has terms of reference and meets on a monthly basis.	2	3		Organizational chart, Reporting structure, project charter and terms of reference have been developed. Oversight committee has terms of references and meets on a monthly basis. Combine individual org. structures from City, Operator D/B contractor into one coordinated project Org. structure Expand and finalize the roles, responsibilities and authority of the various Project Committees and the project team. The following are some of the topics to be covered under this document (but not limited to): <ul style="list-style-type: none"> - Types, formats and frequency of formal written reports to/from committee(s) [Cost Report, Status Report, Master Schedule Report, Problem Areas and Risk, etc.] - Matters beyond the authority of the committee(s), and team members - Communicate roles and responsibilities to all team members and key stakeholders. - Other 	Lanie Hurdle Tom Finan	2	3	
	Risk of not having a Project Master Schedule that interfaces with D/B contractor's and Building Operator's Schedule may result in: <ul style="list-style-type: none"> - Not capturing the entire scope of the project. - Not properly planning City work (procuring various remaining consultants, FF&E, F&B, other). - Not interfacing with Operator's activities. - Missing major approvals, permits or license agreements. - Underestimating the linkage and impact of the Owner's activities with that of D/B contractor - Missing opening milestones and causing project budget over-runs. 	There is a D/B schedule in place, and a pre-opening schedule including operator's tasks. There is a schedule for City's tasks. The procurement schedule is still outstanding. All schedules need to be reconciled into a master schedule.	2	3		<ul style="list-style-type: none"> - There is a D/B schedule in place, and a pre-opening schedule including operator's tasks. There is a schedule for City's tasks. The procurement schedule is still outstanding. All schedules need to be reconciled into a master schedule. - Plan and establish a Master Project Schedule interfacing with D/B contractor's and Operator's schedule. - Ensure total project scope is incorporated. - Baseline Master Project Schedule. - Regularly analyze schedule performance and progress, identify problem areas, provide recommendations for improvements. - Provide schedule updates including monthly schedule status report, critical path analysis, monthly look ahead schedule and workaround plans where required. - Assign the responsibility for development, updating and monitoring of the overall project master schedule. 	Lanie Hurdle Tom Finan	2	3	

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	Risk of not having up-to date and timely (monthly) cost reports may result in: - Not having enough information to make timely and effective decisions. - Not be able to carry out trending analysis which is essential in estimating project costs at completion.	Finance provides a monthly breakdown of all expenditures. Internal staff keep all details on invoices and committed funds through purchase orders. PMX will provide support with some cost controls.	2	3	6	Finance provides a monthly breakdown of all expenditures. Internal staff keep all details on invoices and committed funds through purchase orders. PMX will provide support with some cost controls. Establish a more detailed commitment base cost control and reporting process. Issue monthly cost reports with the following categories as a minimum: Original Budget, Revised budget, Costs to Date, Commitments to Date, or forecasted/estimated costs to commit, costs at completion and variance. Other required monthly reports; commitment reports, commitment registers, holdback reports, change order reports (Construction and non construction), CCN's/, etc. Establish a formal monthly process to review and analyze project cost at completion	Lanie Hurdle Tom Finan	2	3	
	Risk that the schedule is aggressive given the late award of the D/B contract may result in schedule adherence claim if the city and/or operator impact the critical path of the D/B schedule.	Based on other similar projects it is our belief that the schedule is aggressive. However, Ellis Don have confirmed that the schedule is achievable.	2	2	4	Expedite City, operator and other stakeholder deliverables to meet B/D schedule requirements	Lanie Hurdle Tom Finan	1	4	
	Risk of D/B contractor not in compliance with the output specifications prepared during the RFO/RFP stage may result in project not meeting City's expectations.		3	2	6	- The PM team have implemented a compliance review process. - The process will be closely monitored	Lanie Hurdle Tom Finan	3	2	
	The collective agreements which are up for negotiations in spring of 2007 could potentially have an impact on project cost and schedule.		1	3	3	Closely monitor the labour market and the status of negotiations.	Lanie Hurdle Tom Finan	1	3	
	The risk of D/B contractor not achieving LEED Certification	LEED consultant under the D/B contract is responsible for the certification process. D/B has finalized the credit list.	1	3	3	D/B has finalized the credit list. - The compliance review team will monitor the LEED Certification process	Lanie Hurdle Tom Finan	2	2	
	Risk of not having the appropriate construction Management team in place may have scope, cost, schedule and quality impacts	Senior Project Manager was assigned to the project and D/B contractor committed to an opening date with the Operator.	2	2	4	- D/B contractor on the request of the City has added a second Project Manager and additional field staff - City to monitor on an ongoing basis the performance of D/B contractor PM staff	Lanie Hurdle Tom Finan	3	2	
	Risk of not having the appropriate QA/QC processes in place may cause the facility not meeting City and Industry standards.		1	2	2	- D/B contractor to finalize and provide the QA/QC procedure for approval by City. - D/B contractor has independent third party inspection and testing in place - If required City to procure the services of a third party compliance team to monitor Quality Building Inspection staff conduct 2 to 3 inspections per week.	Lanie Hurdle Tom Finan	3	2	
	Risk of commissioning carried out by D/B consultants not meeting operator/owner requirements	The current contract calls for commissioning to be carried out by the D/B contractor	3	2	6	- Consider hiring a third party commissioning agent for the major Mechanical and Electrical components of the facility	Lanie Hurdle Tom Finan	3	2	
	Risk that the Archeological and Environmental issues may impact D/B contractor cost and schedule resulting in additional claims.	The environmental remediation and removal costs are not included in the project budget. The environmental monitoring work is complete and the archaeology work is almost complete.	3	1	3	- Environmental consulting company in place to monitor and remove any site contaminants. The environmental monitoring work is complete and the archaeology work is almost complete.	Lanie Hurdle Tom Finan	2	3	
	Risk that City may be deemed by the MOL as the Constructor under the Occupational Health and Safety Act, and take on liabilities as defined in the Act.	The City is working with EllisDon and Arclurus/SMG to include all fit out contract work under D/B.	1	2	2	- Wherever possible and practical, contract work through the D/B contractor or separate the work by time space. - Verify/audit D/B contractor H&S policy and procedures to ensure that they are in place and being implemented and enforced. - Meet with the MOL to confirm that their requirements are met. - D/B contractor to ensure that all parties having access to the site undergo the H&S orientation and that the H&S policies in place are enforced and followed.	Lanie Hurdle Tom Finan	2	2	

**Project Manager's Risk Notification Report (To be Approved by PMC)
Month Ending 01/31/2007**



Submitted To Cynthia Beach:
Submission Date: January 31, 2007
Submitted By Tom Finan and Lanie Hurdle

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FINANCIAL RISKS										
					0					
					0					
					0					
OPERATIONAL RISKS										
					0					
					0					
					0					
PROJECT MANAGEMENT RISKS										
					0					
					0					
					0					
STRATEGIC RISKS										
					0					
					0					
					0					

* PLEASE IDENTIFY ONLY NEW RISKS ARISING IN THIS REPORTING PERIOD