

**Worcester City Council - New Swimming Pool
Pre Contract Stage Risk Register - December 2012**

Risk Name	Risk Description	Probability (1-5)	Time Impact (1-5)	Cost Impact (1-5)	Risk Rating (1-50)	Cost Implication	Mitigation Strategy
Budget & Funding							
Budget Exceeded	Design fails to meet Client Brief within budget	3	5	5	30		Design currently meets client brief and is expected to be within budget. Further more detailed costings to be worked up as design development progresses. WCC are keen to reduce the overall cost of the project. Options are to be reviewed during Stage D design.
Cost Plan	Cost Plan is inaccurate	1	5	5	10		Cost Consultant to be appointed for Stage D design. Cost plan is to be based on latest design information and updated regularly. Design and client contingencies have been allowed for.
Inflation	Inadequate allowance.	1	5	5	10		Use latest industry forecasts. Update on a regular basis. Obtain fixed price from contractors at the earliest opportunity. Inflation expected to be zero due to economic conditions.
Local Market Conditions	Increased tender price	1	0	5	5		Risk expected to be low. West Midlands has a strong construction market. Checks will be made on the strength of sub-contractors at the appropriate time.
Life Cycle Costs	Design fails to recognise future maintenance costs.				0		All design decisions to be taken based on full life cycle cost analysis.
Contingency	Inadequate client contingency	1	2	5	7		Ensure scheme fully reflects the brief. Client contingency is to be reviewed prior to the appointment of the contractor. Allocate funds to known risks.
Fit Out	Fit out costs exceed budget.	2	0	5	10		List of complete requirements needs to be established and quotations obtained. This risk can then be quantified. The cost plan is currently based on the appointed Operator providing most of the FF&E.
Changes	Design changed to meet revised client requirements.	5	5	3	40		Regular User Group meetings to be held to review design and agree Schedule of Accommodation from the outset. Stakeholders, funders and end users to sign off design and cost plan at each stage. No changes to be made before time and cost implications have been fully assessed. Brief to be clarified early in Stage D design. Design may be changed if tender prices are unfavourable.
Statutory Requirements							
Planning Application	Planning Permission refused / Conditions not approved in time.	1	5	2	7		An outline Planning Application has been made. It is expected that the scheme will achieve Planning Approval in February 2013. The risk of not achieving planning is expected to be low, however, this will be reviewed again once a decision has been made.
Building Regulations	Additional work required to satisfy Building Regulations.	2	3	4	14		Design Team to commence early dialogue with the local Building Control inspector. Submit a Building Regulations application prior to tendering the works. Transfer responsibility for discharging requirements to contractor where possible.
Discharge of Construction Phase Planning Conditions	Contractor not willing to accept risk associated with planning conditions we require them to take on.	2	3	2	10		Responsibility to sign off construction phase planning conditions to be transferred to contractor where possible / applicable.
Third Parties							
Rights to Light issues	New building has adverse effect on the light to surrounding properties.	0	5	5	0		Building location is not going to impact on surrounding properties.

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Neighbourly Matters	Disturbance to surrounding buildings during construction.	3	2	3	15		Planning Permission likely to impose working restriction on construction works. This will be included as a condition of the construction contract. Undertake regular consultations with neighbouring Perdiswell sports centre prior to and during construction.
Existing Users	Existing users affected during the construction period	3	2	1	9		Detailed surveys and investigations to be undertaken prior to works starting on site to minimize unexpected findings which could impact the day to day running of the existing dry side centre.
Design Issues							
Specialist Facilities	Swimming pools not designed correctly.	1	5	5	10		The design team appointed should have extensive experience in designing swimming pools.
Health & Safety	Additional measures required to maintain building.	1	5	5	10		Design team to work with CDM Co-ordinator to design out risk and ensure building is maintainable without needing to hire specialist equipment or personnel.
Client Approval	Client / stakeholders not happy with the design / progress.	2	5	2	14		Design to be signed off by all key stakeholders at the end of each RIBA design stage.
Fire Risks	Building does not comply with Building regulations	1	5	5	10		Fire Engineer to be employed if required.
Maintenance Risks	Building is not easily and readily maintainable. Staff are not correctly trained.	1	2	5	7		Design Team to produce a comprehensive maintenance strategy and training requirements are to be incorporated into the Employer's Requirements. Detailed training requirements to be outlined in the construction contract.
Chemical storage	Chemical storage not detailed correctly to allow safe operation	1	2	4	6		Risks associated with hazardous chemicals/materials associated with pool filtration. Proper storage and ventilation required, qualified personnel required to deal with chemicals.
Wet Environments	Pool floors not correctly specified	1	5	5	10		Risks associated with wet environments: drowning, slipping, etc. Lifeguard supervision critical. Floor surfaces to be specified to suit conditions. Issues associated with cleaning non-slip surfaces to be reviewed during stage D and E. Testing of tiles in situ to be included as a requirement of the ER's.
Basement escape	Basement difficult to escape from in event of emergency	1	2	4	6		Minimal basement escape, travel distances to be designed to suit. Additional means of access where possible. Design details to be reviewed throughout detailed stages.
Site Issues							
Ground Conditions	Ground conditions poorer than anticipated.	2	5	5	20		SI to be undertaken to confirm details of the soil and ground conditions.
Services	Existing services are inadequate for the proposed development.	1	5	5	10		Detailed services search has been undertaken and the review has confirmed there is adequate infrastructure in place to serve the new centre. Consider carrying out works in advance of the main contract if new services are required. Make allowance in the programme for delay.
Services	Existing services running across site need to be protected or diverted.	2	5	5	20		CAT scan completed. HV cable runs close to the proposed building location. It is recommended that an investigation trench is excavated during stage D to establish the exact location of the cable.
Procurement							
Project team	Poor management and design	1	5	5	10		Select consultant and contractor team with experience of delivering cost effective sports buildings.
Strategy	Procurement strategy not favored by contractors	1	5	5	10	0	Soft market test procurement route during Stage D design
Tendering	Lack of interest in project.	0	5	5	0		In the current market this is not envisaged to be a risk to the project.

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Construction risks	Contractors not prepared to take on design and construction risks	1	5	5	10		Apportionment of risk to be agreed with Contractor as the design progresses. Surveys to be carried out to mitigate risks to a level where Contractor can accept them.
Contract conditions	Delayed agreement	2	5	2	14		Amendments minimised to standard form of contract. All contract conditions to be agreed early in design process to take full advantage of the contractor being on board from an early stage.
Construction							
Adverse weather	Exceptionally inclement weather gives rise to an extension of time	3	5	5	30		Build an allowance for exceptional weather into contract and allow an additional programme contingency.
Quality – construction	Failure to meet agreed quality standards	1	5	2	7		Early approval of samples to set standards. Consultant PM to review quality on site.
Quality – design	Failure to meet the stakeholder requirements	1	5	5	10		Robust set of Employer's Requirements to be prepared setting out the exact requirements. Design to be closely monitored during the construction period for compliance with the Contract Documents.
Live site	Additional costs incurred due to H&S issues associated with working on a live site.	3	2	3	15		Risk to be passed to Contractor. Methodology to be agreed between Contractor and Client prior to works beginning on site. Although the site is a live site, it should be easily managed as there is a lot of space for all activities to take place in harmony.
Health & Safety	Building difficult to construct safely	2	3	3	12		Consider buildability in all aspects of design. Review buildability issues with Contractor during stage C/D. Ensure there is sufficient workspace to construct the building safely. CDM Co-ordinator to input into design from an early stage to ensure that hazards are designed out or minimised where possible.
Commissioning	Commissioning not completed by handover	1	5	2	7		Allow ample commissioning time within the construction programme. Work with contractor during second tender stage to agree a suitable period and allow contingency. Period to be no less than 12 weeks for all systems.
Contractor performance	Contractor becomes insolvent	2	5	5	20		Check Contractor is a suitable size and financially stable. Insurance backed 10% performance bond to be provided by the contractor.
Variations	Poor management of client changes	1	5	5	10		Prepare robust Contract Documents to minimise client changes. Start change order procedure once the Brief has been signed off.
Hand over	Extensive snagging required	2	5	2	14		Quality standards to be set from the beginning of the contract. Initial snagging lists to be prepared prior to the planned handover date. Practical Completion not to be issued until the building is relatively snag free. Programme for completion of snagging to be agreed with the contractor.
Operation	User not able to operate the building services and systems	1	3	4	7		Hand over programme to be agreed with the contractor and the building users. Induction sessions to be arranged to demonstrate the systems to the users. Main users to be in attendance for demonstrations. Contractor to provide dedicated person to deal with any problems.
Programme							
Completion	Building not complete by April 2016.	1	5	1	6		A realistic programme has been prepared for all stages of the project. Design timescales are to be agreed with the design team in Stage D. Allowance for construction period to be discussed with sub-contractors to ensure it is deliverable.