

PROJECT RISK EVALUATION

where IMPACT OF RISK x LIKELIHOOD OF RISK OCCURRING = DEGREE OF RISK

IMPACT				X	LIKELIHOOD				II	DEGREE OF RISK						
Rating	Reputation (Rep)	Programme/Budget (P/B)	Safety/Health/Environmental (SHE)		Commercial	5	4	3		2	1	Likelihood (LH)				
												Degree of Risk	Risk Level			
5	-Threat to business survival and company credibility -Catastrophic impact on share price, city loses faith in plc company	-Budget overrun which impacts on client's business -Programme overrun resulting in penalties above termination threshold -Client/Business stakeholder interests severely damaged	-Multiple fatality -Major environmental incident involving threat to public health or safety -Criminal liability	> £1m	Almost Certain (>70%)	Probable (50-70%)	Possible (30-50%)	Unlikely (10-30%)	Negligible (<10%)	Impact (max rating)	5	5	10	15	20	25
	4	-Threat to future trading and core Client/Business objectives -Significant impact on share price	-Significant and non-recoverable impacts in budget spend -Programme overrun resulting in penalties and additional client audits	-Worker/Public fatality -Environmental incident leading to breach -Criminal liability and compensation costs	£100k - £1m							4	4	8	12	16
3		-Client dissatisfaction and damage to stakeholder relationships -Negative effect on share price	-Minor and recoverable budgetary fluctuations -Minor and recoverable programme overrun that impacts critical path	-Major injury to worker or third party -Operation likely to cause damage, complaint or nuisance	£10k - £100k						3	3	6	9	12	15
	2	-Client and stakeholder relationships strained -Some negative reporting in city on plc company	-Minor budgetary fluctuations within allowance given by client -Minor delays not impacting on critical path	-Minor injury to worker or third party -Environmental impact requiring management response to recover	£1k - £10k						2	2	4	6	8	10
1		-Negligible impact	-Negligible impact	-Negligible impact	<£1,000						1	1	2	3	4	5

Likelihood (LH)

Degree of Risk	Risk Level
1 to 4	Trivial
5 to 8	Tolerable
9 to 12	Substantial
13 to 25	Unacceptable

PROJECT RISK ASSESSMENT

Client: Cheshire East Highways
Contract: Street Lighting Energy Reduction
Provider: Cheshire East Highways (CEH)

No.	Risk	Consequence	Assessment before Mitigation						Risk Mitigation Measure	Owner	Assessment after Mitigation						Comments (Include details of costings included to cover risk mitigation measure)
			Impact				Likelihood	Degree of Risk (max)			Impact				Likelihood	Degree of Risk (max)	
			Rep	P/B	SHE	Com					Rep	P/B	SHE	Com			
1	If the Public react negatively to large scale roll out of part night lighting	Then Public pressure and negative press leads to a political decision to change approach with impact that £2m cannot be used in timescales to reduce energy	5	4	2	2	4	20	Therefore ensure cabinet are informed of the proposals and that they support the approach. Develop communication strategy building on the trials. Inform and consult with wards/members over the proposals. Incorporate feedback. Promote enhancement work in town centres		2	2	1	2	2	4	
2	If Energy Supplier re-structures tariff as a result of lower energy consumption at off-peak times.	Then Energy and Carbon Savings are achieved but Cost Savings are not.	3	4	1	2	4	16	Therefore model the changes in overall load and timings. Enter into early discussions with Energy Supplier to ascertain likely scenarios and agree a new framework.		2	2	1	2	3	6	If the consumption reduces by more than the 15% tolerance allowed there may be a charge by Npower, as any purchased volumes would need to be sold back to the wholesale market. We cannot estimate what this charge would be as it is completely dependent on the portfolio and market price at the time it is sold. If Npower are notified of likely reductions this charge may be avoided. However, the notification would need to fit into the timescales for agreeing our portfolio volumes. We agree the portfolio volumes in November/December each year for the following financial year. The portfolio shape is then extracted, which gives us a profile of consumption for all our consolidated volumes (volumes which fit into a flat profile of baseload or peak) we then have to trade the residual volumes (volumes which don't fit into a flat profile) on the wholesale market. It is difficult to predict how a reduction in street lighting may affect the portfolio shape, but believe it would reduce the amount of baseload volumes and increase the peak volumes (which is typically more expensive to buy). By reducing volumes between 00:00 and 05:00 which is the cheapest Use of System Charges, this means that Npower will under-recover the charges, as the profile/costs are based on the previous year's consumption, this means that Npower may charge you a penalty, or include any under recovery in the following years charges.
3	If Energy Suppliers seek to maintain present Income Stream.	Then Cost Savings resulting from reduced energy consumption are not achieved.	3	4	1	2	4	16	Therefore ensure Energy Supplier has minimal opportunity to impose penalties by ensuring that:- Inventory is accurate, PECU array is accurate, Part-Night photo cells are proven to perform accurately and that there is a testing regime in place as they are installed and operated and that Capacitors are tested and replaced to provide acceptable power factor.		2	2	1	2	3	6	
4	If a traffic accident or crime causes the proposals to be criticised leading to a claim.	Then bad press, scheme abandoned, claim against Council, reduced energy savings	4	2	4	2	2	8	Therefore Risk Assess all proposals to demonstrate safety is not compromised and crime is not adversely affected. Develop a clear strategy and work within the agreed framework. Ensure site surveys of all proposals to tailor the scheme. Consider if Safety Audits required. Review white lining / hazard signing prior to removing lighting.		2	1	2	1	2	4	
5	If the up front development and design works delay commencement of works on site	Then Spend profile will not be met and loss of funds for 2012/13	2	4	1	3	3	12	Therefore develop robust design and implementation plan. Work in packages (wards) to enable design to continue as works are ongoing.		1	2	1	2	2	4	
6	If future works to improve the asset condition resulting in re work.	Criticised for not completing as part of project	4	3	2	2	3	12	Therefore ensure that short term strategy (2012/13) is compatible with medium and longer term strategy to address asset condition.		2	2	2	2	1	2	
7	If opportunities are missed to combine Routine Maintenance activities with the Energy Reduction programme	Repeat visits and repeated costs	3	1	1	2	3	9	Therefore ensure Implementation Plan is modelled around the Routine Maintenance Cycles for the Borough.		1	1	1	1	1	1	
8	If opportunity is missed to introduce lighting improvements	Then Cost savings and quality improvements not maximised	3	1	1	2	3	9	Therefore ensure Implementation Plan is modelled around the Routine Maintenance Cycles for the Borough.		1	1	1	1	1	1	
9	If opportunities are missed to optimise routine maintenance budgets in conjunction with this Plan	Then ongoing Cost saving opportunities are not maximised	3	1	1	2	3	9	Therefore Revise bulk lamp change cycles to reflect longer lamp life achieved through part-night operation.		1	1	1	1	1	1	
10	If Dimming is expected to be part of the Energy Reduction strategy	Then recognise that Per-unit cost of dimming equipment is relatively high and payback period is relatively long	1	3	1	3	4	12	Therefore early modelling of options, refine strategy and only implement where other aspects have precedence (e.g. T-Centres/ high traffic routes)		1	1	1	2	2	4	
11	If existing 15ft conc cols with 35w SOX TE lanterns are not dealt with	Then possibility of this equipment disintegrating causing injury and/or damage	1	1	2	4	5	20	Therefore identify numbers involved and identify further funding for long-term Replacement Plan		1	1	1	2	2	4	
12	If existing luminaries fitted miniature or NEMA socket units	Then identification is necessary, column-by-column, for ordering equipment.	1	1	1	2	5	10	Therefore this may require full survey unless this data is available in SBS Confirm.		1	1	1	1	3	3	If info is not available, site visit and confirmation HAS to be carried out. Alternatively, Drip-feed Order equal quantities of both types, keep both types on-stock in Maintenance vehicles, install as appropriate at each column.
13	If the Implementation Plan meets with resistance/influence	Then ensure Plan aligns with a logical, economical rationale that can be defended.	1	3	1	4	5	20	Therefore explain Implementation Plan within Report. Roll-out to be in conjunction with planned cyclic activities to maximise efficiencies.		1	1	1	1	1	1	
14	If we do not Implement an Energy Reduction Strategy	Then CEH will fail to deliver on it's contribution towards the overall Carbon Reduction requirements applicable to the Borough	5	2	1	5	1	5	Therefore ensure that a positive message and can-do approach is maintained. Ensure that CEH receive full buy-in from Elected Members		1	1	1	1	1	1	
15	If we prioritise Traffic Route Zones	Potential to affect the roll out of strategy in residential area due to budget constraint	3	1	1	2	2	6	Establish cost profiles to manage in budget to achieve targets		1	1	1	1	2	2	Reprofile of savings. Include as many Residential Zones as possible in year 1 to deliver saving.
16	If we encounter spurious data in the inventory relating to duplications and omissions.	Potential issues that affect accuracy of energy payment	2	3	1	2	5	15	Therefore RJ to be made aware of details and implement parallel review/amend activity		1	2	1	2	4	8	Corrections must be done as and when anomalies are found.