

APPENDIX C

Hucknall Town Centre Improvements Scheme - Risk Register

Risk Category		Sub-Category	
Policy Risk	1	Legislative Risk Policy Risk	A B
Risk on Delivering the Asset	2	Construction Risk Planning Risk Residual Value Risk	A B C
Risk on Operating the Asset	3	Operational Risk Inflation Risk Maintenance Risk	A B C
Risks on Demand and Revenue	4	Demand Risk Design Risk Availability Risk Volume Risk Technology Risk	A B C D E

No.	Risk Category	Risk Description	Min. Cost (£K)	Max. Cost (£K)	Mean. Cost (£K)	Probability (%)	Total Cost (£K)	Status	Predicted Risk Owner	Action to Minimise Risk	Calculation Notes
Financial											
1	2A	There is a risk that the scheme estimate will exceed approved budget	6	12	9	50	4.5	Open	Project Sponsor	Ensure contingencies included. Finalise design, produce revised estimate.	Re-assess and report - additional staff time 1 - 2 weeks @ 6K p/w
2	2A	There is a risk that the final scheme cost will exceed budget	6	12	9	40	3.6	Open	Project Sponsor	Ensure contingencies included. Finalise design, produce revised estimate.	Re-assess and report - additional staff time 1 - 2 weeks @ 6K p/w
3	1B	There is a risk that the approved budget may not allow for construction of 'preferred' scheme	20	40	30	10	3	Open	Project Sponsor	Maintain effective dialogue with fund holders, prepare lower revised design	Redesign work required - 2 - 4 weeks @ 10K p/w depending on scope
4	1B	There is a risk that changed project priorities (scope creep) may increase the containing budget.	6	12	9	10	0.9	Open	Project Sponsor	Project Board to be set up and roles defined. Report to members on budgetary constraints	Re-assess and report - staff time 1 - 2 weeks @ 6K p/w
5	1B	There is a risk that ADC budget allocation to the scheme could change	6	18	12	25	3	Open	Project Sponsor	Maintain effective dialogue with ADC	Additional staff costs: 1 - 2 weeks @ 6K p/w
6	2A	There is a risk that construction work will cause more congestion/disruption to existing highway network than anticipated	5	50	27.5	10	2.75	Open	Project Sponsor	Works need to be phased to maintain vehicular access. Project phasing. Liaise with Area Highways Manager.	Estimated cost of additional traffic management and public relations work.
7	2A	There is a risk that the works will cause more Interference with neighbours than anticipated	5	10	7.5	60	4.5	Open	Project Sponsor	Works to be phased to maintain vehicular access to local businesses and domestic dwellings	Redesign work required - up to 1 week @ 10K p/w depending on scope
8	2A	There may be unforeseen problems with the proposed construction method	15	100	57.5	10	5.75	Open	Project Sponsor	Early contractor involvement.	Redesign work 1-2 weeks @ 10K p/w / delays to Contract 2-3 weeks @ 40K p/w
9	2A	There may be difficulty securing and delays in acquiring specialist materials	2	40	21	20	4.2	Open	Project Sponsor	Identify lead in times and programme as necessary. Early contractor involvement. Avoid Client ordering materials	Additional staff costs in chasing orders say 2K / 1 week delay to Contract @ 40K p/w
10	1B	There is a risk that NCC/ADC are unable to agree on particulars of the scheme	10	100	55	20	11	Open	Project Sponsor	Project Board to be set up and roles defined.	Additional staff costs say 2K / 2-3 weeks delay to Contract @ 40K p/w
11	2B	There is a risk that design changes will be enforced at Public Inquiry	5	40	22.5	20	4.5	Open	Project Sponsor	Provide contingency within budget. Ensure valid design	Redesign work 1 - 4 weeks @ 10K p/w
12	2A	There is a risk that expenditure will not match funding profile (out of sync)	5	40	22.5	80	18	Open	Project Sponsor	Discuss with fund holders at inception meeting. Develop robust programme. ECI	Estimated costs to accelerate design work / accelerate construction work
13	2A	There is a risk that Utilities (Gas, Water, Electric, etc.) - estimated costs will not be accurate	3	12	7.5	90	6.75	Closed	Project Sponsor	Maintain close liaison with Statutory Undertakers	Estimated additional staff costs
14	3A	There is a risk that the value of compensation payments to adjoining landowners will exceed budget allocation (Part 1 Claims)	10	500	255	50	127.5	Closed	Project Sponsor	Situation to be monitored closely at regular intervals.	Estimate based on 500 properties @ 1K additional cost each.
15	2A	There may be an Increase in the cost of pavements / other oil-based materials	10	40	25	40	10	Open	Project Sponsor	Provide contingency within budget. Monitor costs and adjust risk register.	Based on 5% increase per year over 3 years

Notes

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Technical											
17	1B	There is a risk that the brief for the project will change (scope creep)	5	250	127.5	40	51	Open	Project Sponsor	Project Board to be set up and roles defined. Project Management in place.	Redesign work 1 week @ 10K p/w / substantial additional construction works
18	2A	There is a risk that the Utilities (Gas, Water, Electric, etc.) - will provide inaccurate estimates for diversions etc.	-50	250	100	90	90	Open	Project Sponsor	Programme control - appoint dedicated officer for task.	Values based on experience of similar sized highway schemes
19	2A	There is a risk that the Ground Investigation will identify more poor ground than anticipated	10	25	17.5	30	5.25	Open	Project Sponsor	Undertake early investigations	Additional capping material may be required @ £50 per cu.m (includes excavation of poor ground)
20	2A	There is a risk that the Ground Investigation report(s) will provide misleading information	-25	50	12.5	50	6.25	Closed	Project Sponsor	Allow for in Risk Register	Ground conditions may be better than anticipated / Additional capping material may be required @ £50 per cu.m (Includes excavation of poor ground)
21	2A	There is a risk that the on-site Ground Investigation will identify more contaminated land than anticipated	5	55	30	30	9	Open	Project Sponsor	Undertake early investigations	Disposal of contaminated material = £150 per cu.m. Potential delay: 1 week @ £40K p/w
22	2A	There is risk that an Archaeological investigation will find burial sites etc.	2	50	26	10	2.6	Open	Project Sponsor	Undertake early investigations	Staff costs say 2K / 1 week delay to Contract @ 40K p/w plus archaeological costs
23	2B	There is a risk that the Planning permission will be delayed	3	72	37.5	15	5.625	Open	Project Sponsor	Early consultation with planners, conservation officers and third parties.	1 week additional staff costs / delay to start of works
24	2A	There may be difficulties in obtaining EA approval for the culvert designs	10	100	55	50	27.5	Open	Project Sponsor	Early consultation with EA.	Say 10K redesign - 100K additional construction
25	2A	There may be difficulties in obtaining EA approval for the proposed drainage outfalls	5	50	27.5	50	13.75	Open	Project Sponsor	Early consultation with EA.	Say 5K redesign - 50K attenuation measures
26	2B	There may be more asbestos found in demolished buildings than anticipated.	1	100	50.5	10	5.05	Open	Project Sponsor	Early consultation with planners and third parties. Build planning process with lag into scheme programme	Urban site - numerous properties to demolish
27	2A	There is a risk that adverse weather conditions may be more severe than anticipated.	0	20	10	25	2.5	Closed	Project Sponsor	Allow for in Risk Register	Up to 2 weeks delay to the Contract @ 40K p/w
28	2A	There is a risk that unexpected mining works will be encountered	5	30	17.5	25	4.375	Open	Project Sponsor	Undertake early investigations, revise design as necessary.	Estimate based on encountering small scale problems only
29	2A	There is a risk that some ecological risks will be more severe than anticipated	2	200	101	10	10.1	Open	Project Sponsor	Undertake Environmental Assessment at an early stage.	2K additional staff costs / 200K major delay to the Contract
30	2A	There may be problems with meeting agreed design programme/milestones	2	20	11	50	5.5	Open	Project Sponsor	Bring in extra resource (i.e. consultants). Regular progress meetings	Estimate based on cost of accelerating design process
31	2A	There is a risk that additional stands of Japanese Knotweed will be encountered on the site	10	200	105	50	52.5	Open	Project Sponsor	Undertake early investigations, revise design as necessary.	Min. cost based on providing a sheeting barrier solution / max based on excavation of approx. 2500 cu.m material and backfill
32	2A	There is a risk that Structures work will vary from that anticipated	-10	50	20	20	4	Open	Project Sponsor	Undertake early design work, revise design as necessary. Early Contractor involvement	Estimate based on cost of additional structural design work upto 4 weeks @ 10K p/w
Contractual											
33	2A	There is a risk that the Utilities (Gas, Water, Electric, etc.) will require long lead in times to undertake diversions/provide new services	1	120	60.5	50	30.25	Open	Project Sponsor	Programme control - appoint dedicated officer for task.	1K additional staff costs / 80K 2 weeks delay to Contract @ 40K p/w
34	2A	There is a risk that the Main Contractor will cease trading	100	500	300	2.5	7.5	Open	Project Sponsor	Investigate financial status of Contractor prior to appointment	Estimates based on experience from previous Contracts
35	2A	There is a risk that the poor performance from the Contractor will cause the construction period to over-run	10	100	55	25	13.75	Open	Project Sponsor	Early Contractor involvement - develop achievable program.	Estimate based on delays to Contract @ 40K p/w
36	2A	There is a risk that Construction traffic will cause damage to the existing road surfacing	2	50	26	10	2.6	Open	Project Sponsor	Early Contractor Involvement, establish specific routes for construction vehicles.	2K for minor pothole repairs / 50K for resurfacing of 500 sq.m of carriageway @ £10 sq.m
37	2A	There is a risk that the Utilities (Gas, Water, Electric, etc.) - will perform poorly on site	5	100	52.5	40	21	Open	Project Sponsor	Programme control - appoint dedicated officer for task.	Additional staff costs / 2-3 weeks delays to Contract @ 40K p/w
38	2A	There is a risk that problems with vandalism during construction will be greater than anticipated	5	20	12.5	95	11.875	Open	Project Sponsor	Early contractor involvement	Estimate based on cost of Contractor taking on additional risk / cost of repair to 'handed over' works
39	2A	There may be unforeseen problems with site safety during construction	1	5	3	50	1.5	Open	Project Sponsor	All operations to be subject to risk assessment (CDM)	Estimate to cover the cost of additional fencing, barriers etc.
40	2A	There may be unforeseen problems with public safety during construction	2	10	6	75	4.5	Open	Project Sponsor	Scheme design and build to mitigate against impact on public safety. Early contractor involvement	Estimate to cover the cost of additional diversions, fencing, barriers etc.
41	2A	There is a risk that procedural inaccuracies will cause the procurement process will take longer than anticipated.	5	40	22.5	10	2.25	Open	Project Sponsor	Early contractor involvement	5 - 40K for additional staff costs / delay to start of Contract
42	2A	There is a risk that unauthorised occupation of buildings to be demolished will delay the Contract	40	160	100	50	50	Open	Project Sponsor	Allow for in Risk Register	1 - 4 weeks delay to contract @ £40K p/w
43	2A	There is a risk that topographical survey information is not accurate	5	25	15	90	13.5	Open	Project Sponsor	Allow for in Risk Register	Values based on experience of similar sized highway schemes

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Contractual (Continued)											
44	2A	There is risk that unchartered services will be encountered during excavation	5	250	127.5	50	63.75	Open	Project Sponsor	Allow for in Risk Register	Values based on experience of similar sized highway schemes
45	2A	There is a risk that fill material will not be as easy to obtain as anticipated	12	60	36	50	18	Open	Project Sponsor	Early contractor involvement	Estimate 12,000 cu.m @ additional cost of £1 - 12 per cu.m
46	2A	There is a risk that unexpected rock / hard material will be encountered in the drainage excavations	2	100	51	35	17.85	Open	Project Sponsor	Undertake early investigations	Additional plant / machinery costs, plus up to 2 weeks delay to Contract @ £40K p/w
Resources											
46	2A	NCC/ADC Cabinet/ Committee reporting timetables do not match.	3	3	3	50	1.5	Open	Project Sponsor	Early / regular liaison and planning to identify Cabinet dates etc.	Additional staff costs - say £3K
47	2A	There is a risk that not enough design resource will be available when required (engineering)	20	50	35	20	7	Open	Project Sponsor	Identify scope of design work and brief designers at an early stage - take on design partner	Estimate based on need to pay staff premiums / overtime
Wider/Specific											
48	4A	Bus operators - fleet type and size may change	3	20	11.5	10	1.15	Open	Project Sponsor	Regular liaison with bus companies / operators	Redesign costs to accommodate new / different bus types
49	1A/2A	There is a risk that changes in legislation will cause increased cost/delays	2	80	41	5	2.05	Open	Project Sponsor	Project Team members to highlight significant changes to Project Manager and hence Project Board.	2K additional staff costs / 80K delay to the Contract @ 40K p/w
50	2A	There is a risk that various pressure groups object to the scheme	6	20	13	50	6.5	Open	Project Sponsor	Maintain communication strategy	Additional staff costs
51	4A	There is a risk that Patronage will exceed expectation and the scheme cannot accommodate demand	10	30	20	10	2	Open	Project Sponsor	Allow for in Risk Register	Additional staff costs - redesign
52	2A	There is a risk that the effects of climate change are less / greater than anticipated	10	30	20	15	3	Open	Project Sponsor	Allow for in Risk Register	Additional staff costs - redesign
							Total	786.475			

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