

# A496 - Llanbeder Access Improvement

## PROJECT RISK REGISTER

Ref	Risk Description	Impact	Phase of impact	Probability	Impact	Matrix Score	Mitigation	Key Action	Status Closed (Y/N)	Ownership
1	A change on the Client's funding priorities requires the scheme to be delayed.	Scheme will not proceed		4	5	20	Review currently being carried out - risk of scheme delay remains		N	
2	Funding priorities reduce the scope for landowner discussions.	Cost and programme	Design	5	4	20	A finite allowance has been made for the discussions with landowners.		N	
3	Lack of access to some areas of land.	Cost and programme	Design, Construction	1	5	5	Meet with landowners to discuss the works and request access to land for required surveys, access now granted, but this can be revoked, therefore impact is still applicable		Y	
4	Lack of definitive information about the future development of Llanbedr airfield - risk to robustness of the WeITAG study	Programme and Design Costs		2	4	8	Inform stakeholder group as early warning		N	
5	No client comments (GC) received on draft Planning stage report.	Programme and Design Costs		2	4	8	WG asked to review and approve		Y	
6	Potential for requirement to complete WeITAG Stage 2	Programme and Design Costs		2	3	6	Liaison with WG once preferred option known		Y	
7	That the Consultants find an 'environmental showstopper' on the proposed route which has to be avoided.	Programme and Design Costs	Pre contract	3	5	15	Undertake appropriate surveys to determine environmental issues.		Y	
8	New Health and Safety Legislation could impact on construction process	Programme and Design Costs	Pre contract	1	3	3	Ensure compliance with current legislation		N	
9	Challenge under European Law e.g. by NRW or third party.	Programme and Design Costs	Design	1	5	5	Potential showstopper - unlikely that WG would pursue scheme in the event of a challenge - cost of scheme closedown		N	
10	Changes in requirements of Natural Resource Wales	Programme and Design Costs	Design	1	1	1	Ensure adequate liaison with EA - possible comments on addendum to Environmental Statement		Y	
11	Changes in requirements of Gwynedd Council as LLFA	Programme and Design Costs	Pre contract	1	1	1	Ensure adequate liaison with Gwynedd County Council - possible comments on addendum to Environmental Statement		N	
12	Changes in requirements of SNPA	Cost and Programme	Pre contract	1	1	1	Ensure adequate liaison with SNPA - possible comments on addendum to Environmental Statement		N	
13	Delays caused by liaison with external bodies, statutory undertakers, etc.	Cost and Programme	Construction	2	3	6	Discuss diversion works with all Statutory Undertakers. C3 to be issued ASAP		N	
14	Unexpected diversions to statutory undertakers plant during construction.	Cost and Programme		1	1	1	Small number of private dwellings hence consequences of risk minimal.		N	
15	Accuracy of statutory undertaker estimates	Cost and Programme	Cost	5	2	10	Ensure that information regarding alignment design is correct prior to issuing C3 notices		N	
16	Statutory Undertakers cannot deliver to our current programme of works	Cost and Programme	Pre-contract design and construction	1	5	5	Ensure on-going liaison with external bodies - residual risk remains with the Employer		N	
17	Challenge by local landowners	Cost and Programme	Pre-contract and Design	4	3	12	Early and continuous consultation.		N	
18	Difficulties in obtaining land required for scheme	Cost, Programme and Quality	Pre-contract and Design	3	5	15	Ensure that land plans are correct and adequate for the construction works including any accommodation works and drainage works.		N	
19	Archaeological discoveries	Cost and Programme	Pre-contract and Design	2	5	10	Assessment underway, requirement for trial trenching will be required before planning approval.		Y	
20	Risk of scheme progressing to public enquiry.	Cost, Programme and Quality	Pre-contract and Design	2	5	10	Continuous discussions with landowners to minimise probability of Public Inquiry		N	
21	The scheme will be rejected during Public Inquiry	Cost and Programme	Pre-contract and Design	1	5	5	Ensure all documentation is correct and checked thoroughly		N	
22	Drainage scheme assumes direct discharge to fields is acceptable to landowners	Cost and Programme	Pre-contract and Design	1	3	3	Following preparation of drainage design, discuss with landowner to check suitability		N	
23	Identification of protected species during the works.	Cost and Programme	Pre-contract and Design	1	5	5	Baseline surveys underway		N	
24	Adequacy of cost estimates, estimate, management, pricing, special circumstances presented by job.	Cost and Programme	Pre-contract and Design	1	1	1	Monitor scheme costs and implement value management as appropriate, ensure adequate policing of risk register, ensure that cost control procedures are in place.		N	
25	Changes in DMRB.	Cost and Quality	Construction	1	1	1	Ensure on-going compliance with standards to minimise risk		N	Contractor

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26	Current scheme estimate greater than that indicated in forward programme	Cost and Programme	Construction	1	2	2	Ensure rigid cost estimate is produced.		N	Contractor
27	Location of site within environmentally sensitive area.	Cost and Programme	Pre-contract and Design	2	4	8	Baseline surveys underway		N	
28	Dry stone walls to be incorporated into the design to aid continuity of the proposed improvement.	Cost and Programme	Pre-contract and Design	4	2	8	Additional costs to the scheme, some issues may arise with items not covered by standards		N	
29	Level of the proposed improvement to be kept as low as possible to minimise the impact on the adjacent properties. The inclusion of an artificial embankment may be used with a stone wall on top to	Cost and Programme	Pre-contract and Design	3	3	9	Some issues with alignment standards may affect the level of the proposed improvement. Any additional embankment included within the proposal will affect the footprint of the works and may		N	
30	Additional screening to the east of the proposed improvement near Swn yr Afon property.	Cost and Programme	Pre-contract and Design	3	4	12	Additional cost to the scheme, additional land take would be required to incorporate the required screening requirements		N	
31	Stone cladding of structures to be evaluated to aid their integration into the landscape	Cost and Programme	Pre-contract and Design	2	4	8	Additional costs and additional weight on the structure to be included in any design calculations		N	
32	Lighting design to be evaluated. Arcadis to be informed of all lighting design ASAP.	Cost and Programme	Pre-contract and Design	3	3	9	Current standards require lighting. Assessment to be carried out on lighting requirement		N	
33	Evidence of Badger set been discovered, unable to go within 30 meter of the set till badger licence been obtained.	Programme and Design Costs	Pre-contract and Design	5	1	5	Environmental team will required to have badger licence to be able to work within 30 meters of the set. Environmental team seek clarification from NRW.		N	
34	Ground Investigation (GI) to be carried out to determine ground conditions	Programme and Design Costs	Design, Construction	5	5	25	Bore holes and trial pits to be carried out to mitigate risk. Reduced access in some areas and Badger set location. 6 weeks delay to be able to carryout investigation in Badger set location.		Y	
35	Require topsoil strip before contract award for archaeological potential.	Programme and Design Costs	Design, Construction	5	5	25	Task usually carried out during site clearance before any major works to be carried. Dialog with planning to discuss. Agreement from Snowdonia National Park will be required.		N	
36	Standing stones - Cadw required the scheme not to impact the noise or visual aspect of the standing stones. Potential Religious impact.	Programme and Design Costs	Design, Construction	3	3	9	Dialog with Cadw to made regarding Standing stones.		N	
37	Geometric design been revised due to change of depth of construction	Programme and Design Costs	Design	5	3	15	Potential for change due to challenges, Drainage design.		N	
38	Review for roundabout at Shell Island Junction, ask requested my PM and AM.	Programme and Design Costs	Design	3	4	12	Assessment to be carried out for design justification for roundabout. Traffic counters information for Shell Island.		Y	
39	Traffic information - changes in requirement.	Programme and Design Costs	Design	3	3	9	Traffic information feed into the Environmental statement. New requirement for prediction for traffic for 5, 10 etc. years. Data provided to Acadis		N	
40	Bat mitigation from Snowdonia National Park. Introduction of new Bat roust. Bat been discovered in the old aquarium.	Programme and Design Costs	Design	3	3	9	Requirment from Snowdonia National Park.		N	
41	Schedule monument in Llanbeder	Programme and Design Costs	Design	3	3	9			N	
42	BCIS announcement that Tender Price set to rise 28% over the next five years according to RICS .New work output in the UK construction industry is forecast to grow by a fifth over the next five years. BCIS predicts it will	Cost and Programme	Construction	5	3	15	Include allowance in Risk Allowance, for estimate for future construction.		N	
43	Estimate risk	Cost and programme	Construction.	2	5	10			N	
44	Contractor Bankruptcy	Cost and Programme	Construction	2	5	10	Cost Consultancy have access to Duns information		N	
45	Sub-Contractor Bankruptcy	Cost and Programme	Construction	3	3	9	Ensure contractor undertakes financial checks as part of their sub-contractor tender process. Consider inclusion of performance bond and evaluate wither the contractor has bought the job.		N	
46	Local Weather conditions	Cost and Programme	Construction	5	3	15			N	
47	Variations in Construction Period	Cost and Programme	Construction	3	3	9			N	
48	Major Injury / Fatality	Cost and Programme	Construction	2	5	10	Contractor H&S history to be considered. Designer to highlight risk.		N	
49	Additional Planting and Landscaping	Cost and Programme	Construction	3	3	9	Landscaping design to be carried out		N	
50	Failure to manage materials	Cost and Programme	Construction	2	3	6	Monitor payments and procurement procedures.		N	

