OGC Gateway™ Review 1: Business justification
Project Title: Oxford Flood Alleviation Scheme
OGC Gateway™ ID: [Insert designated number]
Privacy Marking: [Insert privacy markings (in capitals) or UNCLASSIFIED]

OGC

Office of Government Commerce

OGC Gateway™ Process
Review 1: Business justification

Version number: Final

Date of issue to SRO: 1st May 2015

SRO: David Rooke

Department: DEFRA

Agency or NDPB: Environment Agency

OGC Gateway™ Review dates: 28/04/2015 to 30/04/2015

OGC Gateway™ Review Team Leader:
Alex Bywaters (Highways England)

OGC Gateway™ Review Team Members:
Gary Stockbridge (Highways England)
Jonathan Daley (Department for Transport)

This report is an evidence-based snapshot of the project's status at the time of the review. It reflects the views of the independent review team, based on information evaluated over a three to four day period, and is delivered to the SRO immediately at the conclusion of the review.

OGC Gateway™ Review 1: Business justification

Project Title: Oxford Flood Alleviation Scheme

OGC Gateway™ ID: [Insert designated number]

Privacy Marking: [Insert privacy markings (in capitals) or UNCLASSIFIED]

OGC Gateway Delivery Confidence Assessment

Delivery Confidence Assessment	**AMBER**
The Review Team finds that it is likely that the project will achieve its objectives and can be delivered successfully. To better ensure its success attention is needed on key issues affecting "buildability" and cost. Management of the project should be enhanced to reflect the movement into the next stage through putting in place further project controls and human resources. To provde clarity and deliver at pace processes and responsibilities should be reviewed. The issues identified appear capable of early resolution and if addressed will provide greater delivery confidence. The scheme is being delivered using an exemplar and innovative partnership approach that not only covers funding but is also achieving public and political support.	

The Delivery Confidence assessment RAG status should use the definitions below.

RAG	Criteria Description
Green	Successful delivery of the project/programme to time, cost and quality appears highly likely and there are no major outstanding issues that at this stage appear to threaten delivery significantly
Amber/Green	Successful delivery appears probable however constant attention will be needed to ensure risks do not materialise into major issues threatening delivery
Amber	Successful delivery appears feasible but significant issues already exist requiring management attention. These appear resolvable at this stage and if addressed promptly, should not present a cost/schedule overrun
Amber/Red	Successful delivery of the project/programme is in doubt with major risks or issues apparent in a number of key areas. Urgent action is needed to ensure these are addressed, and whether resolution is feasible
Red	Successful delivery of the project/programme appears to be unachievable. There are major

This report is an evidence-based snapshot of the project's status at the time of the review. It reflects the views of the independent review team, based on information evaluated over a three to four day period, and is delivered to the SRO immediately at the conclusion of the review.

	issues on project/programme definition, schedule, budget required quality or benefits delivery, which at this stage do not appear to be manageable or resolvable. The project/programme may need re-baselining and/or overall viability re-assessed

Summary of Report Recommendations

The Review Team makes the following recommendations which are prioritized using the definitions below.

Ref. No.	Recommendation	Critical/ Essential/ Recommended
1.	That a Procurement Strategy is produced, informed by market assistance eg with Tier 1, 2 and 3 Contractors and other infrastructure organisations, to gain innovative ideas on the materials issue.	Essential – by end September 2015
2.	Early engagement be sought with the planning authority to explore likely planning conditions and constraints affecting scheme construction and maintenance.	Critical
3.	That a communication plan and strategy is produced and regularly reviewed	Essential – by end May 2015
4.	To put in place an effective risk management regime.	Critical
5.	The project team apply appropriate resources to address key issues affecting cost, programme and deliverability	Essential- by end May 2015
6.	Project team to put in place key project control documents and processes.	Critical
7.	That a resources plan is developed which identifies the requirements of the project team based on the programme plan and implemented	Essential – by end June 2015
8.	That project organisation is augmented by introducing a single point of leadership and accountability.	Critical
9.	That the approvals processes and the IAAP be reviewed to incorporate the updated RACI chart and that these are communicated to all concerned.	Essential – by end May 2015
10.		

Critical (Do Now) – To increase the likelihood of a successful outcome it is of the greatest importance that the programme/project should take action immediately

Essential (Do By) – To increase the likelihood of a successful outcome the programme/project should take action in the near future. [Note to review teams – whenever possible Essential recommendations should be linked to project milestones e.g. before contract signature and/or a specified timeframe e.g. within the next three months.]

Recommended – The programme/project should benefit from the uptake of this recommendation. [Note to review teams – if possible Recommended recommendations

OGC Gateway™ Review 1: Business justification
Project Title: Oxford Flood Alleviation Scheme
OGC Gateway™ ID: [Insert designated number]
Privacy Marking: [Insert privacy markings (in capitals) or UNCLASSIFIED]

should be linked to project milestones e.g. before contract signature and/or a specified timeframe e.g. within the next three months.]

This report is an evidence-based snapshot of the project's status at the time of the review. It reflects the views of the independent review team, based on information evaluated over a three to four day period, and is delivered to the SRO immediately at the conclusion of the review.

OGC Gateway™ Review 1: Business justification

Project Title: Oxford Flood Alleviation Scheme

OGC Gateway™ ID: [Insert designated number]

Privacy Marking: [Insert privacy markings (in capitals) or UNCLASSIFIED]

Background

The aims of the project:

The aims of the project are to reduce flood damage to at least 1000 homes and businesses currently at flood risk in Oxford, reduced flood impacts on transport waste water and infrastructure, safeguard private investment confidence in Oxford, create new recreational opportunities and habitat, and deliver the medium term measure from the Oxford Flood Risk Managment Strategy.

The Oxford Flood Risk Managment Strategy investigated more than 100 options for managing flood risk over the next 100 years. The strategy was approved by the Environment Agency's Board in 2010. This set out short, medium and long term measures to reduce flood risk and adapt to climate change. The short term measures have already been delivered. The current project aims to deliver the medium term measure of improved flow conveyance. Longer term adaption to climate change in the strategy is by providing upstream flood storage. This longer term adaptation is outside of the projects scope.

The driving force for the project:

Oxford experiences regular flooding from the River Thames and via a complicated local braided river network. There are over 4300 properties at risk of flooding in the 1:100 year 'do nothing' flood envelope in Oxford as well as key local and national infrastructure. The majority of these properties continue to benefit from the Environment Agency's (and others) ongoing operation and maintenance of the existing watercourses and weirs, but 1800 properties remain at risk, with many of these in the very significant risk band (greater than 1:20 year risk). These figures are predicted to rise significantly under current climate change models.

The Oxford Flood Risk Management Strategy supports a medium term project to increase flow capacity through the flood plain to the west of Oxford. This medium term option was not economically viable in 2010 based on incremental cost benefit ratios, but the Oxford Strategy concluded that should climate change materialise as predicted it would become viable in the future and this need should be reviewed at regular intervals.

Following the Winter 2014 flooding and a local flood summit hosted by Oxfordshire County Council (lead local flood authority) this first review has now been completed. This has used a new Oxford model (which had been updated independently); incorporated the latest climate change guidance as baseline and updated costs/risks from the Oxford StAR based on a 2018 start on site. A number of model runs were completed that has allowed the project to confirm a medium size channel through the western floodplain, costed at £120m capital cost (£141m pv costs) is now viable with a benefit:cost ratio of 7.3 and iBCR of 1.22. The main reason for the schemes viability is that the additional 5 years baseline hydrology has changed with far more frequent, low order flood events.

The scheme contributes to the Environment Agency's 6 year Flood and Coastal Erosion Risk Management Capital Programme.

This report is an evidence-based snapshot of the project's status at the time of the review. It reflects the views of the independent review team, based on information evaluated over a three to four day period, and is delivered to the SRO immediately at the conclusion of the review.

OGC Gateway™ Review 1: Business justification

Project Title: Oxford Flood Alleviation Scheme

OGC Gateway™ ID: [Insert designated number]

Privacy Marking: [Insert privacy markings (in capitals) or UNCLASSIFIED]

The procurement/delivery status:

The procurement for the appraisal work to develop the Outline Business Case has already been completed using the Environment Agency's Water and Environmental Management (WEM) Framework and the contract has been awarded to CH2M Hill (Halcrow).

The procurement strategy for the delivery contract is being developed as part of the Outline Business Case.

Current position regarding OGC Gateway™ Reviews:

This is the first OGC Gateway review that the project has undertaken. Therefore there are no previous recommendations to assess.

The project has gone through internal Environment Agency assurance and approvals through their Large Projects Review Group, Executive Directors Team and FCRM Committee of the Environment Agency's Board.

The Review Team have not seen evidence that the Accounting Officer has been assured regarding the 'common causes of failure' and the skills/experience track record for the SRO and Programme / Project Manager have not been examined, although were tested as part of verbal evidence given.

Purposes and conduct of the OGC Gateway™ Review

Purposes of the OGC Gateway™ Review

The primary purpose of an OGC Gateway Review 1: Business justification, is to confirm that the Strategic Outline Business Case is robust – that is, in principle it meets business need, is affordable, achievable with appropriate options explored and likely to achieve value for money.

Appendix A gives the full purposes statement for an OGC Gateway Review 1.

Conduct of the OGC Gateway™ Review

This OGC Gateway Review 1 was carried out from 28 April 2015 to 30 April 2015 at the Environment Agency's Osney Depot, Oxford. The team members are listed on the front cover.

The people interviewed are listed in Appendix B.

The Review Team would like to thank the EA Project Team, especially Chris Savage, and interviewees, for their time, support and openness, which contributed to the Review Team's understanding of the Project and the outcome of this Review

OGC Gateway™ Review 1: Business justification
Project Title: Oxford Flood Alleviation Scheme
OGC Gateway™ ID: [Insert designated number]
Privacy Marking: [Insert privacy markings (in capitals) or UNCLASSIFIED]

Findings and recommendations

1: Policy and business context

The Review Team found that the Preferred Option of a medium channel is technically feasible and is the option being taken forward through the Strategic Outline Case (SOC) into the next phase of appraisal.

The proposal includes ancillary environmental and access measures and is judged that it will meet the strategic objectives set by stakeholders. Whilst the primary purpose of the scheme is flood risk mitigation, it will also contribute to the wider region economic wellbeing through improved infrastructure resilience and connectivity leading to higher economic potential.

The scheme contributes to the Environment Agency's 6 year Flood and Coastal Erosion Risk Management Capital Programme.

2: Business Case and stakeholders

The Review Team note that the Strategic Outline Case (SOC) has yet to be approved by DEFRA and HM Treasury. However, DEFRA are closely involved with the scheme preparation and it is expected that approval will be forthcoming subject to the requirements of the Treasury Five Case Business Model being adequately met. Appropriate specialist advice has been employed in the preparation of the SOC.

The Review Team found that the Business Case is robust with a BCR of around 7:1. Benefits are likely to be understated as there are wider non-monetised benefits to property owners and local businesses. In addition cost estimates are carrying a relatively high optimism bias reflecting the current stage in the delivery of the scheme.

There is currently a significant shortfall in funding of the scheme, although it is accepted by the Review Team that this reflects the current stage in the scheme delivery. The Review Team found that funds that have to date been promised are sufficiently secure, albeit given the potential for political changes in funding priorities Key stakeholders (inc DEFRA) were comfortable at this stage in the project.

There is recognition that the funding gap may not easily be closed but the extent of the gap cannot be accurately assessed at this stage in the scheme life cycle. The current cost estimate is likely to be pessimistic given, the optimism bias being applied; the conservative assumption made that the excavated material will have no value and will need to be disposed of off-site; and the as yet unexplored potential for efficiencies, incentives and innovation through use of an appropriate procurement strategy. The cost estimate will be refined through the next stage in the scheme appraisal and value engineering should be applied to design assumptions made.

This report is an evidence-based snapshot of the project's status at the time of the review. It reflects the views of the independent review team, based on information evaluated over a three to four day period, and is delivered to the SRO immediately at the conclusion of the review.

OGC Gateway™ Review 1: Business justification
Project Title: Oxford Flood Alleviation Scheme
OGC Gateway™ ID: [Insert designated number]
Privacy Marking: [Insert privacy markings (in capitals) or UNCLASSIFIED]

Recommendation 1: That a Procurement Strategy is produced, informed by market assistance eg with Tier 1, 2 and 3 Contractors and other infrastructure organisations, to gain innovative ideas on the materials issue.

The Review Team found that the nature of the scheme is such that planning consent is required. However, there was no evidence to suggest that engagement had been sought with the planning authority in terms of exploring likely planning conditions and constraints. These have the potential to affect the "buildability", consruction period, and cost of the scheme.

Recommendation 2: Early engagement be sought with the planning authority to explore likely planning conditions and constraints affecting scheme construction and maintenance.

The scheme is being delivered using an exemplar and innovative partnership approach that not only covers funding but is also achieving public and political support. The Review Team found that there is a high degree of delivery confidence in the scheme, expressed not only by the project team but also by stakeholders in the partnership. Care is needed in using the partnership approach to avoid scope creep and late technical changes with consequent time and cost overruns.

Most stakeholders were aware of key project issues, for example materials disposal (cost, logistics, permissions) and Network Rail plans.The Review Team found strong evidence of communications being coordinated by the Sponsoring Group members. Despite the lack of evidence of a formal communications strategy and plan, all stakeholders were, broadly, on the same message.This coordination will need to continue as the project progresses and public and stakeholder engagement increases.

Recommendation 3: That a communication plan and strategy is produced and regularly reviewed

3: Risk management

The Review Team found limited evidence of effective risk management, including any evidence of a comprehensive risk assessment and managed risk register.

Recommendation 4: To put in place an effective risk management regime.

4: Readiness for next phase – Delivery strategy

OGC Gateway™ Review 1: Business justification
Project Title: Oxford Flood Alleviation Scheme
OGC Gateway™ ID: [Insert designated number]
Privacy Marking: [Insert privacy markings (in capitals) or UNCLASSIFIED]

The Review team found that there are certain issues (materials disposal and transportation, planning restrictions, land acquisition, Network Rail plans), which need to be addressed early, and could influence and impact key decisions relating to cost, programme and deliverability.

Recommendation 5 : The project team apply appropriate resources to address key issues affecting cost, programme and deliverability

The project team has developed an outline programme with milestone dates and review points, however a number of key project control documents eg Project Plan, Change Control, Communications Plan, Risk Register and Risk Management Plan, are absent and will need to be developed and regularly reviewed as part of the project's management process.

Recommendation 6 : Project team to put in place key project control documents and processes.

The Review Team found evidence of funding being in place for the next phase of the project up to Outline Business Case. The project team is well established, there are contracts for expert advisers in place and key staff within the Environment Agency have been identified to support the development of the Outline Business Case. There are currently posts related to project support and communications which are either vacant or where the project team requires a greater input.

Recommendation 7: That a resources plan is developed which identifies the requirements of the project team based on the programme plan and implemented

The review team found that excellent work has been carried out in the different areas (technical / project development and stakeholder / partnership) to get to the current stage. There is potential for a disconnect between stakeholder aspiration and technical solutions which presents a significant risk to fulfilling expectations and the perceived success of the project. The Review Team consider that the project would greatly benefit from closer integration of these two work streams through a more focused, dedicated individual who would provide direction, giving strong project leadership, control and accountability (to the SRO), for all aspects of the project.

Recommendation 8 : That project organisation is augmented by introducing a single point of leadership and accountability.

The Review Team found that that there is a complex approvals process involving multiple reporting lines within the Environment Agency as well as the Sponsoring Group Members and DEFRA. The project team has prepared a RACI chart that needs to be reviewed to include all aspects of the project.
There is an opportunity to realise benefits from the approvals process by providing greater clarity and seeking efficiencies in it.

This report is an evidence-based snapshot of the project's status at the time of the review. It reflects the views of the independent review team, based on information evaluated over a three to four day period, and is delivered to the SRO immediately at the conclusion of the review.

OGC Gateway™ Review 1: Business justification
Project Title: Oxford Flood Alleviation Scheme
OGC Gateway™ ID: [Insert designated number]
Privacy Marking: [Insert privacy markings (in capitals) or UNCLASSIFIED]

Recommendation 9: That the approvals processes and the IAAP be reviewed to incorporate the updated RACI chart and that these are communicated to all concerned.

The next OGC Gateway™ Review is expected September 2016.

This report is an evidence-based snapshot of the project's status at the time of the review. It reflects the views of the independent review team, based on information evaluated over a three to four day period, and is delivered to the SRO immediately at the conclusion of the review.

OGC Gateway™ Review 1: Business justification
Project Title: Oxford Flood Alleviation Scheme
OGC Gateway™ ID: [Insert designated number]
Privacy Marking: [Insert privacy markings (in capitals) or UNCLASSIFIED]

<u>**APPENDIX A**</u>

<u>**Purposes of the OGC Gateway™ Review 1: Business justification**</u>

- Confirm that the Business Case is robust – that is, in principle it meets business need, is affordable, achievable, with appropriate options explored and likely to achieve value for money.

- Confirm that appropriate expert advice has been obtained as necessary to identify and/or analyse potential options.

- Establish that the feasibility study has been completed satisfactorily and that there is a preferred way forward, developed in dialogue with the market where appropriate.

- Confirm that the market's likely interest has been considered.

- Ensure that there is internal and external authority, if required, and support for the project.

- Ensure that the major risks have been identified and outline risk management plans have been developed.

- Establish that the project is likely to deliver its business goals and that it supports wider business change, where applicable.

- Confirm that the scope and requirements specifications are realistic, clear and unambiguous.

- Ensure that the full scale, intended outcomes, timescales and impact of relevant external issues have been considered.

- Ensure that the desired benefits have been clearly identified at a high level, together with measures of success and a measurement approach.

- Ensure that there are plans for the next stage.

- Confirm planning assumptions and that the project team can deliver the next stage.

- Confirm that overarching and internal business and technical strategies have been taken into account.

- Establish that quality plans for the project and its deliverables are in place.

- Confirm that the project is still aligned with the objectives and deliverables of the programme and/or the organisational business strategy to which it contributes, if appropriate.

This report is an evidence-based snapshot of the project's status at the time of the review. It reflects the views of the independent review team, based on information evaluated over a three to four day period, and is delivered to the SRO immediately at the conclusion of the review.

OGC Gateway™ Review 1: Business justification
Project Title: Oxford Flood Alleviation Scheme
OGC Gateway™ ID: [Insert designated number]
Privacy Marking: [Insert privacy markings (in capitals) or UNCLASSIFIED]

APPENDIX B

Interviewees

Name	Role
Richard Harding	Project Executive
Barry Russell	Operations Manager
Jo Larmour	Project Director
Amanda Nobbs	Chair Regional Flood and Coastal Committee
Emily Williamson	Project Manager
Nigel Tipple	Chief Executive Oxfordshire Local Enterprise Partnership
Celia McNally	DEFRA
Mark Kemp	Funding Lead – Oxfordshire County Council
Scott Lawrence	Procurement Manager
David Rooke	SRO

OGC Gateway™ Review 1: Business justification
Project Title: Oxford Flood Alleviation Scheme
OGC Gateway™ ID: [Insert designated number]
Privacy Marking: [Insert privacy markings (in capitals) or UNCLASSIFIED]

APPENDIX C

Recommendations from previous OGC Gateway™ Review

Recommendation	Progress/Status
Not applicable	First review

This report is an evidence-based snapshot of the project's status at the time of the review. It reflects the views of the independent review team, based on information evaluated over a three to four day period, and is delivered to the SRO immediately at the conclusion of the review.