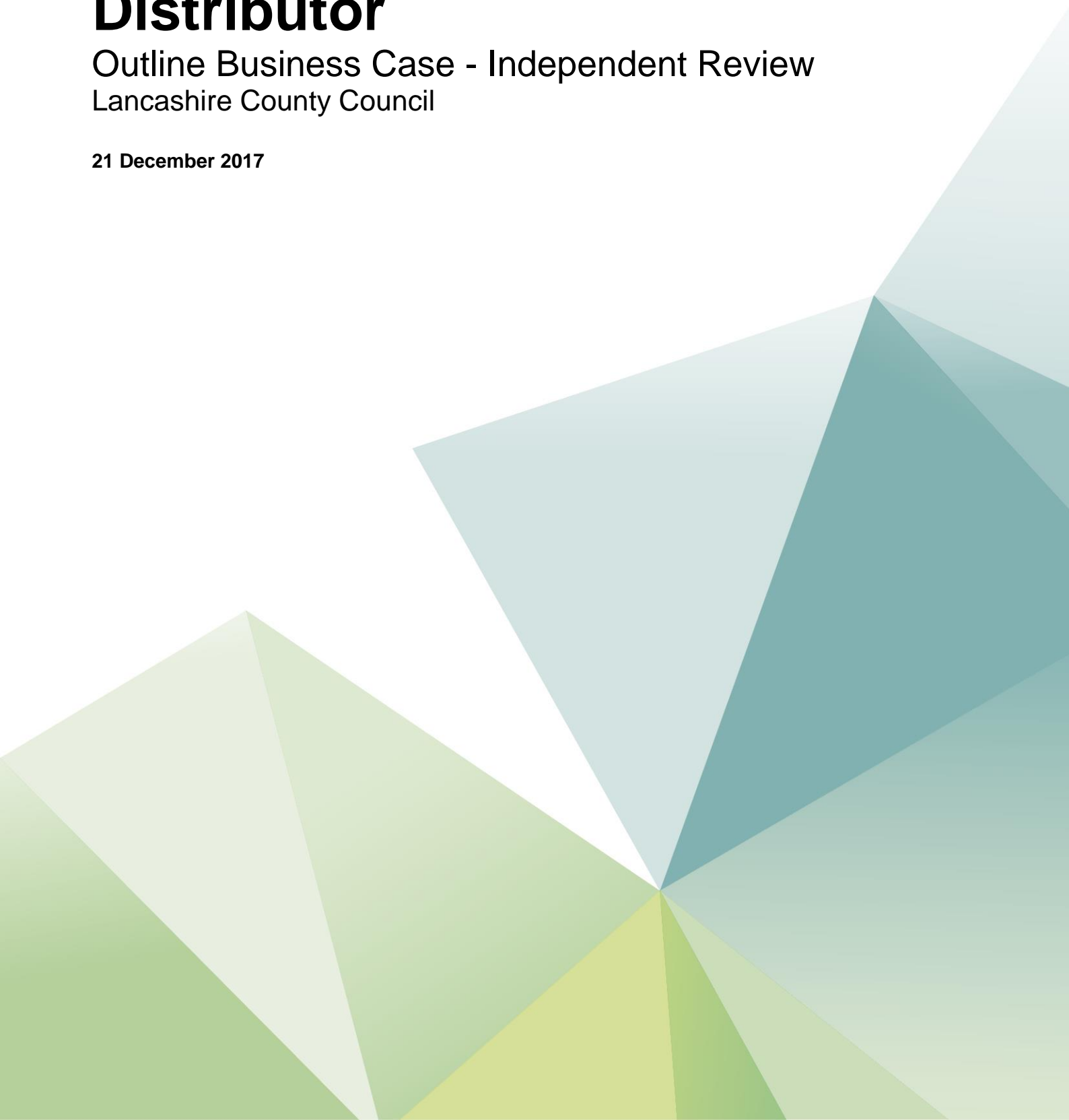


Preston Western Distributor

Outline Business Case - Independent Review
Lancashire County Council

21 December 2017



Notice

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This document has 24 pages including the cover.

Document history

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Rev 2.0	Submission to LCC	RH	NS	HF	NS	19/12/17
Rev 3.0	Submission to LCC	RH	NS	HF	NS	21/12/17

Table of contents

Chapter	Pages
1. Introduction	1
1.1. Overview	1
1.2. Methodology	1
1.3. Structure of Report	4
2. Scheme Review	5
2.1. Scheme Description	5
2.2. Strategic Case	5
2.3. Economic Case	5
2.4. Financial Case	6
2.5. Commercial Case	7
2.6. Management Case	7
2.7. Review Summary	7
Appendices	9
Appendix A. Assessment Scores	10
A.1. Summary	10
A.2. Strategic Case	12
A.3. Economic Case	14
A.4. Financial Case	17
A.5. Commercial Case	18
A.6. Management Case	19
Tables	
Table 1-1 Ranking mechanism of the scrutiny framework	1
Table 1-2 Aspects of the scrutiny framework	2
Table 2-1 Review summary table	8

1. Introduction

1.1. Overview

Atkins has been commissioned by Lancashire County Council to undertake an independent review of their business case submissions which will be put forward to the Lancashire Enterprise Partnership (LEP) to seek and obtain funding via the Local Growth Deal.

We have created a scrutiny framework to review the business case submissions which has been developed based on the Department for Transport business case guidance. The guidance details how each case model is expected to address certain aspects of the scheme in the submission. Each case model within the business case has been assessed against those aspects and judged on how well they are addressed.

In line with the LEP's Accountability Framework, it is recognised that a proportionate approach to the development of the business cases under review has been applied in the submitted business case documents. For schemes where the total costs are less than £5m, only a strategic outline business case has been developed, however, it is acknowledged that as these schemes are still seeking funding in full, some elements of outline and full business case submissions are required.

This document presents our review of the **Preston Western Distributor Outline Business Case**.

1.2. Methodology

The developed scrutiny framework has been based on a colour coded system that provides a transparent mechanism in assessing each case. Each individual aspect of the case model is given a colour of green, amber or red depending on:

- How well it has been addressed in the submission;
- How relevant it is in relation to the scheme; and
- How well it meets the acceptability criteria set out in the DfT guidance and LEP Accountability Framework.

Table 1-1 Ranking mechanism of the scrutiny framework

Element under scrutiny	Colour/ Score	Description
Requirements fully met	1	No issues of note with the submission. Project to progress as scheduled.
Requirements substantially met	2	Minor issues exist with the submission. Project to progress and issues to be resolved.
Requirements partially met	3	Medium issues exist with the submission. Project to progress and issues to be resolved urgently.
Requirements not met	4	Critical issues exist with the submission. Project to be suspended whilst issues are resolved.

The schemes receive an overall colour and rating to show the general acceptability level of each case. The individual aspects to be assessed align with the outline business case template provided by the Lancashire Enterprise Partnership under the five case models, as shown in Table 1-2.

Table 1-2 Aspects of the scrutiny framework

Case	Element	Aspects for scrutiny
Strategic Case	Strategic context	<ul style="list-style-type: none"> • Aims and objectives of the promoting organisation • What is driving the need to change at a strategic level
	Challenge or opportunity to be addressed	<ul style="list-style-type: none"> • The scope of work is clearly defined • All the current and future problems are identified • Key characteristics of the challenge to be addressed and the opportunity presented
	Strategic objectives	<ul style="list-style-type: none"> • A clear set of scheme objectives are defined • The objectives are well supported by evidence of problems and issues • Alignment with local, sub/regional and national development policy are established • The objectives are pragmatic and achievable
	Achieving success	<ul style="list-style-type: none"> • The existing arrangements cannot be better utilised without implementing fundamental changes • Experience is drawn from past project of similar nature • Scheme dependencies on any committed development and other adjacent major schemes are explored • Likely impact of “Do Nothing” scenario is presented • There is clear evidence to show the urgency of the scheme
	Delivery constraints	<ul style="list-style-type: none"> • Risks identified through the consultation process • Synergy with other relevant schemes
	Stakeholders	<ul style="list-style-type: none"> • List of stakeholders consulted or to be consulted in the course of the business case development • A clear communication strategy • Summarised outcomes of any consultation undertaken
	Strategic assessment of alternative options	<ul style="list-style-type: none"> • List of all the alternative options considered • The optioneering report is consistent with the defined scope and objectives • Option sifting process • Assessment of opportunities and constraints of the options • Detailed selection process of “Preferred”, “Next Best” and “Low Cost” option
Economic Case	Value for money	<ul style="list-style-type: none"> • Compliance with DfT WebTAG guidance
	Economic assumptions	<ul style="list-style-type: none"> • WebTAG version • Price base year of the cost • Market price • Discount rate and year • Forecast year • Opening year • Appraisal period • Traffic growth • Safety assumptions • Environmental assumptions
	Sensitivity and risk profile	<ul style="list-style-type: none"> • Cost of alternative options • Cost allocation profile • Inflation • Quantified Risk Assessment (QRA) • Optimism Bias consideration and justification • Consistency of cost with other scheme of similar size and nature • Operating cost • Maintenance cost • Renewal cost

Case	Element	Aspects for scrutiny
	Value for money statement	<ul style="list-style-type: none"> Benefit Cost Ratio (BCR) Net Present Value (NPV) VfM category
	Appraisal summary table	<ul style="list-style-type: none"> Economic assessment (TUBA) input and output information Annualisation approach Assessment of safety benefits Assessment of social benefits Assessment of environmental impact Assessment of distributional impact Cost to broad transport budget Indirect tax revenue
Financial Case	Affordability assessment	<ul style="list-style-type: none"> Assessment of affordability of all options
	Financial costs	<ul style="list-style-type: none"> Construction period Opening year Inflation Base cost Possible funding requirement Quantitative risk assessment Justification of optimism bias Adjusted scheme cost
	Financial cost allocation	<ul style="list-style-type: none"> Required funding by year Funding mechanism Available fund by different sources Alternative sources of fund
	Financial risk	<ul style="list-style-type: none"> Quantitative risk assessment Justification of optimism bias
	Financial risk management	<ul style="list-style-type: none"> Justification of funding profile by different sources
	Financial accountability	<ul style="list-style-type: none"> Funding risk allocation and ownership.
Commercial Case	Commercial case	<ul style="list-style-type: none"> Approach taken to assess commercial viability
	Procurement strategy	<ul style="list-style-type: none"> Procurement strategy Identified key stages of the procurement process Alternative procurement strategy Detail of the payment mechanism
	Identification of risk	<ul style="list-style-type: none"> Identification of risk
	Risk allocation	<ul style="list-style-type: none"> Allocation of risk
	Contract management	<ul style="list-style-type: none"> Procurement mechanism and its programme Risk allocation and transfer Promoter's procurement experience Benchmark with other procurement processes of similar schemes
Management Case	Governance	<ul style="list-style-type: none"> Project promoter is established in the document Clear management structure for the scheme delivery
	Go/No-go and decision milestones	<ul style="list-style-type: none"> Key decision points identified.
	Project programme	<ul style="list-style-type: none"> Project delivery programme, key milestones and dependencies
	Assurance and approvals plan	<ul style="list-style-type: none"> Reporting protocol and subsequent approval procedure Assurance of resource availability and allocation
	Communications and stakeholder management	<ul style="list-style-type: none"> Communication strategy between different parties History of stakeholder consultation and the outcome

Case	Element	Aspects for scrutiny
	Programme/ project reporting	<ul style="list-style-type: none">• Project delivery programme, key milestones and dependencies• Reporting risks and programme delivery
	Risk management strategy	<ul style="list-style-type: none">• Reporting procedure of risks• Delivery risks mitigation measures• Risk ownership• Benchmark of risk mitigation measures from similar past projects• Any contingency measures required for risk mitigation
	Monitoring and evaluation	<ul style="list-style-type: none">• Approach to managing realisation of scheme benefit• Approach to post scheme implementation evaluation• Post implementation cost consideration
	Project management	<ul style="list-style-type: none">• Overall approach to project management

1.3. Structure of Report

Following this introduction, this report contains the summary of the review in Chapter 2, structured as follows:

- Scheme description;
- Strategic case review;
- Economic case review;
- Financial case review;
- Commercial case review;
- Management case review; and
- Review summary

Appendix A contains the detailed notes under each case which have formed the overall review of this scheme.

2. Scheme Review

2.1. Scheme Description

An outline business case has been developed for the Preston Western Distributor (PWD) scheme.

The proposed scheme is a key component of the programme of measures set out in the Central Lancashire Highways and Transportation Masterplan (CLHTM) that collectively will support the scale of development set out in the approved Central Lancashire Core Strategy and will mitigate its impact on the transport network.

The PWD preferred option consists of construction of a new 4.3km dual carriageway road to support delivery of the North West Preston strategic housing location (5,000 new homes) and improve access to both the Strategic Road Network (SRN) in Northwest Preston, and to/from the Enterprise Zone at Warton.

The scheme includes a new all move junction with the M55 (Junction 2). It also provides direct links into existing Cottam development areas, the potential Cottam Parkway Rail Station and direct connection to the East West Link (EWL) Road. The PWD scheme will also include a combined cycleway footway along the eastern side of the proposed scheme between the A583 and the proposed EWL Road which would tie into existing footpaths and cycle facilities.

As part of the scheme several minor roads (e.g. Lea Road, Sidgreaves Lane) will be altered in the provision of a new roundabout to connect north/south and to/from the EWL Road. The EWL Road provides the spine through the Strategy Housing Development and therefore provides connectivity to the PWD of the 5,000 new homes proposed. Additionally, it connects the PWD scheme directly with existing highway network at Lightfoot Lane. The EWL Road is a separate scheme and not included in the PWD scheme.

The scheme is one of the four major highways schemes in the Preston, South Ribble and Lancashire City Deal and is in Transport for Lancashire's (TfL's) agreed and prioritised Investment Programme.

The outline business case for this scheme has been developed by Lancashire County Council and was submitted for this independent review in December 2017. The scheme promoter is Lancashire County Council.

2.2. Strategic Case

The strategic case presents a clear description and case for the scheme, linking into the aims and objectives of the Lancashire Strategic Economic Plan. The scope for the project is clear, which has allowed for the identification of potential constraints and interested stakeholder demands. The scheme has strong and broad political support and has been subject to comprehensive consultation through the planning process.

A planning application for the scheme was submitted in May 2016, and an update on its current status would be beneficial to this case. The scheme is interdependent with the EWL Road, which is a vital component in relation to housing growth. Further details regarding the delivery of this link would be of benefit to this case.

A total of twenty options have been considered for this scheme, and following an initial sifting process and then a secondary sift, which assessed each option against the supporting objectives and potential scheme costs, a preferred scheme was identified.

2.3. Economic Case

The Value for Money (VfM) statement reports a BCR of 2.29, which is classified as 'High VfM' by the Department for Transport.

The benefits for the scheme have been derived from a SATURN model known as Central Lancashire Transport Model (CLTM), which has a base year of 2013 and includes AM, Inter Peak and PM peak time periods. The base year model generally accords with the required WebTAG criteria.

The forecast traffic models have been developed for 2019 and 2041 as the schemes' opening and design years respectively. The opening year has subsequently moved to 2022 with 2037 being expected to be the new design year. The traffic growth used to construct future years' trip matrices is based on forecasts in the prevailing National Trip End Model (NTEM) 6.2 for cars and Road Traffic Forecasts (RTF) 2015 for goods vehicles. There have been newer TEMPRO 7.2 guidance as well as new values of time and vehicle operating costs since completion of the scheme forecasts. A series of sensitivity tests have been undertaken to investigate the effect on the scheme BCR including travel demand variation, new guidance and the inclusion of trips generated by dependent development. The reported BCRs for these tests showed a range of 2.01 to 2.66. It is expected that the Final Business Case (FBC) will be produced based fully on prevailing guidance at the time of submission.

A total of 20 options as stated above were identified in the business case (including the preferred option). The economic appraisal was however limited to the Core and Low-Cost options.

The Present Value of Costs (PVC) for the proposed schemes is £138.48m which includes construction, risk allocation and maintenance costs as well as an allowance of Optimism bias of 15%. The Present Value of Benefits (PVB) is reported as £317m with £273.8m resulting from benefits associated with user time savings, changes in vehicle operating costs and indirect tax revenues. The remaining net benefit of £43.2m arises from other monetised transport elements including construction and maintenance delay benefits; accident savings; air; noise and greenhouse savings.

The increase in the GVA of the local economy associated with the proposed scheme has been derived as £144.1 million over the 60-year period which consists of £104.5m from unlocking development; £28m from Agglomeration and £10.8m output change in competitive markets.

A full AST table has been provided with all scheme impacts and these have been assessed. Over 5,000 new homes are dependent on, or unlocked by, the PWD scheme. These form the basis for calculating the indirect jobs created to support the new residents, which shows a forecast increase in GVA to the local economy of £144.1m over a 60-year period that can be directly related to the PWD scheme. This comprises £104.5m in unlocked development, £23m in agglomeration (Preston), £5.8m in agglomeration (Warton), and £10.8m output change in imperfectly competitive markets.

The Distributional Impact (DI) assessment showed that all income quintiles will receive a positive impact for the User Benefits and Air Quality. The most deprived areas will experience a positive impact on personal affordability. Most income groups will benefit from decrease in noise levels with the scheme in place. Children are expected to receive a slight beneficial effect from reduction in noise levels and accidents and improvement in air quality. There will also be a reduced number of accidents and thus casualties among the older people, pedestrians and cyclists.

2.4. Financial Case

The scheme delivery budget is estimated to be £161.6m, with £58m to be funded by the Lancashire Growth Deal, £25m to be funded by Highways England's Route Improvement Strategy (RIS) and £89.9m committed as part of the Preston, South Ribble and Lancashire City Deal. The scheme delivery budget includes £8.433m QRA, although it is considered that as a consequence of the risk register appearing to include the EWL Road risks may be overstated, and 15% optimism bias as required by WebTAG guidance.

Assurance is provided via a letter from Highways England regarding commitment of RIS funds, and the scheme promoter's Section 151 officer has confirmed the Council's ability to underwrite the impact of any timing difference in relation to receipt of City Deal funding and any subsequent scheme cost increase.

The submission details the key financial risks associated with the delivery of the scheme, although the risk register appears to contain risks for both the PWD and EWL Road and therefore may overestimate the overall risks for the PWD scheme.

A spend profile has been presented appropriately within the case, although it could benefit from more details regarding the parties on whom the costs fall within the profile.

2.5. Commercial Case

The commercial case sets out a clear procurement strategy based on the existing procurement routes used within Lancashire County Council. An Early Contractor involvement (ECI) approach has been selected and the rationale for selecting NEC3 Option C (Target Cost and Activity Schedule) is sound, with financial risks shared between client and contractor in an agreed proportion. The procurement strategy is supported by a letter from the scheme promoters Section 151 Officer.

A clear project programme has been presented as part of the submission including procurement and contract timescales. Programme dates are also presented in the management case in a slightly different format and these could benefit from being standardised.

Risk assessment and allocation are presented in the risk register, which is under joint ownership as part of the ECI approach.

2.6. Management Case

The management case provides a clear governance and organisational structure suitable for managing this scheme, including technical discipline leads. The responsibilities of the named individuals are substantially defined and the reporting mechanisms and lines of communication are clear including the procedures for obtaining scheme approval.

A detailed risk register presents the quantification and management of risk, although it appears that this could be overestimated due to the inclusion of risk for the EWL Road. The communication strategy is currently being developed for the scheme and will be made available in advance of the funding decision. The PWD scheme has already been the subject of significant consultation to date through the planning process.

A logic map has been developed which provides an overview of how the outcome of the scheme will be realised, and a simple outline monitoring and evaluation plan has been defined to monitor the scheme objectives. This will be updated and made available in advance of any funding decision.

2.7. Review Summary

This review represents Atkins' independent scrutiny of the Outline Business Case (OBC) for the Preston Western Distributor scheme. The scheme, which is being promoted by Lancashire County Council, is seeking Conditional Approval from the Lancashire Local Enterprise Partnership (LEP) and funding via the Local Growth Deal.

The submission demonstrates that the project has been developed to the expected standard in most areas. A number of outstanding issues will need to be addressed in advance of the Full Business Case submission. These include securing the land required for the construction of the scheme, finalising the target price with the proposed contractor, modelling to be undertaken using new guidance and obtaining 'sign off' from the DfT.

Atkins has been in dialogue with the scheme promoter and their transport consultants as the scheme has progressed and the business case (and supporting documents) have been subject to a series of updates culminating in the final submission document received on 7th December 2017.

Overall our recommendation is that the Conditional Approval for this project be granted, with the ability to draw down funds conditional on an updated Full Business Case being submitted for approval.

The review summary table is presented overleaf in Table 2-1.

Table 2-1 Review summary table

Case	Score	Summary
Strategic Case	2	Requirements substantially met
Economic Case	2	Requirements substantially met
Financial Case	2	Requirements substantially met
Commercial Case	2	Requirements substantially met
Management Case	3	Requirements partially met
Overall Score	2	Requirements substantially met

Appendices



Appendix A. Assessment Scores

A.1. Summary


INDEPENDENT REVIEW			ATKINS	
Project Title:	Preston Western Distributor	Scheme Promoter:	Lancashire County Council	
Document Reviewed:	Business Case	Permission Sought:	Conditional Approval	
Date of Submission:	07/12/2017	Date of Review:	18/12/2017	
LEP Accountability Framework:	The scheme is seeking Conditional Approval from the LEP and funding towards its £58m cost via the Local Growth Deal. In line with the LEP's Accountability Framework, an Outline Business Case is required in order to seek Conditional Approval and draw down funds.			
Scheme Description:	The PWD preferred option consists of the construction of a new 4.3 km dual carriageway road, between the M55 and the A583/A5085 Blackpool Road/Riversway, to support delivery of the North West Preston strategic housing location (more than 5,000 dwellings) and improve access to both the Strategic Road Network in Northwest Preston, and to/from the Enterprise Zone at Warton.			
SUMMARY SHEET				
Overall Score:	2		1	Requirements fully met - No issues of note with the submission, project to progress as scheduled.
Overall Comments:	<p>This review represents Atkins' independent scrutiny of the Outline Business Case for the Preston Western Distributor scheme. It does not represent a detailed validation of technical analyses. The scheme, which is being promoted by Lancashire County Council, is seeking Conditional Approval from the Lancashire Local Enterprise Partnership (LEP) and funding via the Local Growth Deal. Whilst the OBC contains the key information for seeking the Conditional Approval from the C&W LEP there are a number of outstanding issues which need to be addressed in advance of the Final Business Case submission. These include securing the land required for the construction of the scheme, finalising the target price with the proposed contractor, Modelling to be undertaken using new guidance and obtaining 'sign off' from the DfT.</p> <p>Atkins has been in dialogue with the scheme promoter and their transport consultants, Jacobs as the scheme has progressed, including face-to-face meetings. Accordingly, the business case (and supporting documents) has been subject to a series of updates culminating in the final submission document received on 7th December 2017.</p> <p>Atkins is satisfied that the project has been developed to the expected standard in most areas. Overall, it is our recommendation that Conditional Approval for this project be granted.</p>		2	Requirements substantially met - Minor issues exist with the submission. Project to progress and issues to be resolved.
			3	Requirements partially met - Medium issues exist with the submission. Project to progress and issues to be resolved urgently.
Benefit to Cost Ratio (BCR)	The Value for Money (VfM) statement reports a BCR of 2.29, which is classified as 'High VfM' by the Department for Transport.		4	Requirements not met - Critical issues exist with the submission. Project to be suspended whilst issues are resolved.
	In addition, the Outline Business Case identifies an increase in the GVA of the local economy associated with the proposed scheme which amounts to £144.1 million over the 60-year period which consists of £104.5m from unlocking development; £28m from Agglomeration and £10.8m output change in competitive markets.			

Case	Status	Comments
Strategic Case	2	The Strategic Case demonstrates how the scheme aligns with National Planning Policies, sub-national planning policies and local planning policies including the Central Lancashire Core Strategy, Preston Local Plan 2012-2026, North West Preston Masterplan, and Preston, South Ribble and Lancashire City Deal.
		The Strategic Case provide evidence of the problems that support the need for the intervention. Problems are identified in relation to the operation of the network. The business case provides evidence of low average traffic speeds during the AM and PM peak periods impacting on key arterial and radial routes to and from the City. Existing congestion levels also impact on the Warton Enterprise Zone reducing the overall accessibility of this important site. This has led to the identification of three overarching objectives relating to unlocking housing development land, improving access to the Warton Enterprise Zone and reducing congestion.
		A planning application for the scheme was submitted in May 2016, however, no details are provided with regard to the current status of the application. Details of land ownership required for the completion of the scheme are not articulated. The scheme has interdependencies with the provision of the East-West Link Road and the Strategic Case would benefit from further details.
		The main stakeholder groups with an interest in the scheme have been identified. The scheme has strong and broad political support in LCC and has been subject to a comprehensive consultation as part of the planning application process.
Economic Case	2	A total of 20 options are identified in the business case (including the preferred option). As part of an initial sifting process these were reduced to seven. A secondary sift then took place which assessed each option against the proposed secondary objectives and potential scheme costs resulting in the identification of the preferred scheme.
		The Value for Money (VfM) statement reports a BCR of 2.29, which is classified as 'High VfM' by the Department for Transport. The benefits for the scheme have been derived from a SATURN model known as Central Lancashire Transport Model (CLTM), which has a base year of 2013 and includes AM, Inter Peak and PM peak time periods. A Local Model Validation Report (LMVR) has been produced, setting out the development and validation of the base year model, which has been used as basis to assess the PWD scheme. The base year model generally accords with the required WebTAG criteria.
		The forecast traffic models have been developed for 2019 and 2041 as the schemes' opening and design years respectively. The opening year has subsequently moved to 2022 with 2037 being expected to be the new design year. The traffic growth used to construct future years' trip matrices is based on forecasts in the prevailing National Trip End Model (NTEM) 6.2 for cars and Road Traffic Forecasts (RTF) 2015 for goods vehicles. Subsequent to development of the forecast models, new guidance has emerged with NTEM 7.2 and July 2017 Data Book which the latter provides updated values of time and vehicle operating cost. The forecast assignments have been developed using fixed demand approach as opposed to Variable Demand Modelling (VDM). This was based on results of a test undertaken by the scheme promoter which showed that the proposed scheme may not cause inducing new demand or release suppressed demand in the core model area. DfT who is a major stakeholder on this scheme needs to express its view on this aspect of the modelling. It is a possibility that DfT would ask for impact of VDM to be investigated on the modelling results prior to submission of the PWD Final Business Case (FBC). A series of sensitivity tests have been undertaken to investigate the effect on the scheme BCR including travel demand variation, new guidance and the inclusion of trips generated by dependent development. The reported BCRs for these tests showed a range of 2.01 to 2.66.
		A total of 20 options were identified in the business case (including the preferred option). These were subject to two sifting stages initially against the scheme primary objectives and feasibility/deliverability criteria. A total of 7 options were then taken forward from this initial process and assessed each option against the proposed secondary objectives and potential scheme costs. The economic appraisal was however limited to the Core and Low-Cost options.
		The Present Value of Costs (PVC) for the proposed schemes is £138.48m over a 60-year period which includes construction, risk allocation and maintenance costs. An Optimism bias of 15% has been included in the cost calculations for economic appraisal. The Present Value of Benefits (PVB) is reported as £317m. Out of total PVB, the benefits associated with user time savings, changes in vehicle operating costs, indirect tax revenues amount to £273.8m. The remaining net benefit of £43.2m arises from other monetised transport elements including construction and maintenance delay benefits; accident savings; air; noise and greenhouse savings.
		The increase in the GVA of the local economy associated with the proposed scheme has been derived as £144.1 million over the 60-year period which consists of £104.5m from unlocking development; £28m from Agglomeration and £10.8m output change in competitive markets. The environmental and social impacts associated with PWD have been assessed either quantitatively or qualitatively. These have included Noise, Air Quality, Greenhouse Gases, Landscape, Townscape, Historic Environment, Biodiversity, Water Environment, Physical Activity, Journey Quality, and Severance. The majority of scheme benefits are associated with travel time savings for road users. There would be improvement in Safety, Noise and Air Quality. Disbenefits are reported from greenhouse gases emissions and increase in vehicle operating costs as well as a small decrease in indirect tax revenue. The reported non-monetised impacts of the scheme are normally shown to be beneficial or neutral except for slight adverse effect on the local landscape, historic environment and water environment and a moderate adverse impact on biodiversity.

Continued overleaf.

Financial Case	2	The case sets out the scheme cost, which has been subject to some independent validation. It includes base costs, risk adjustment at the most robust estimate and 15% optimism bias in line with WebTAG guidance. A spend profile has been included which sets out year on year costs and breakdown by type of cost, but does not specify the parties on whom they fall. The key financial risks have been identified, an evaluation process has been undertaken along with a Monte Carlo Risk Assessment and the 80% probability risk cost has been applied to the base costs for robustness. However, the risk register appears to contain risks for both the PWD and the EWLR and may therefore overestimate the overall risks for the PDW scheme. Funding has been identified for the full scheme costs and evidence has been provided of third party funds, including Highways England RIS monies. No alternative funding has been identified and the LGF monies are subject to having a good business case with high value for money. LCC will cover any increase in funding and this has been agreed in the form of a letter provided by the Section 151 Officer. Limited information is available on the long-term financial sustainability of the scheme and affordability including any ongoing costs for operation, maintenance and major capital renewals.
Commercial Case	2	The case sets out the anticipated procurement strategy and lists the benefits of using this approach along with bodies that widely recognised this as the delivery mechanism for major civil engineering works. It is unclear exactly how the contract is set up, although the case refers to a 3 phase basis and early termination without penalty if value for money is not obtained at all times. Prompt and fair payment mechanisms are referenced, but no details of this are set out. The anticipated payment option/mechanism is stated for Phase 3, but will need to be confirmed prior to Full Business Case. Project Procurement Milestones are set out, but there is some uncertainty around the COP Public Inquiry timescales and a question around how realistic it is to set out the CPO to LCC Cabinet the day after the OBC is submitted to the LEP. A risk workshop has been held and informed a risk register that is a live document with joint ownership, which should lead to cost efficiencies. Contract management details are limited and the timescales are uncertain due to the season of commencement, this will need updating ahead of Full Business Case. The procurement strategy is supported by a letter from the Section 151 Officer, which although it states that the strategy is well established and will protect the authority from unnecessary risk and challenge, while looking to secure value for money through MEAT evaluation criteria, does not specifically reference the contract and early termination arrangements.
Management Case	3	The case sets out the governance structure and project delivery team and the key reporting lines for the programme management and delivery of the scheme. There are inconsistencies in the project programme within the management and commercial cases that need addressing, along with the realistic timescale for making the CPO. Planning permission has been granted, but the scheme is dependent on a CPO and SRO and details around the impacts are not clearly set out in the business case. Details of the reporting, approvals and assurance process are clearly set out. Limited evidence on scheme delivery has been supplied, and there is no information on how lessons learned have been applied to the delivery of this scheme. There is also limited information on the risk management strategy, although a quantified risk register is included that provides details of the risks, owners and mitigation measures. The communications strategy for the PWD is still currently being prepared and needs to be provided ahead of Full Business Case. A logic map has been provided as part of the monitoring and evaluation plan, but it is unclear how supporting objectives 4 and 8 fit into the logic map. In regard to the monitoring and evaluation plan, this sets out the metrics to be measured, but it is unclear how each of the metrics is directly related to measuring if the primary and supporting objectives have been met. The plan also sets out that a value for money assessment will be undertaken upon completion of the scheme, but no details on how this process will be done are included.

Sign-Off

Reviewer's Signature:		Date:	18/12/2017
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A.2. Strategic Case

INDEPENDENT REVIEW			ATKINS	
Project Title:		Preston Western Distributor		
Permission Sought:		Conditional Approval	Date of Review:	18/12/2017
STRATEGIC CASE				
Overall Score	2			
Atkins Comments:	The Strategic Case demonstrates how the scheme aligns with National Planning Policies, sub-national planning policies and local planning policies including the Central Lancashire Core Strategy, Preston Local Plan 2012-2026, North West Preston Masterplan, and Preston, South Ribble and Lancashire City Deal.		1	Requirements fully met - No issues of note with the submission.
	The Strategic Case provide evidence of the problems that support the need for the intervention. Problems are identified in relation to the operation of the network. The business case provides evidence of low average traffic speeds during the AM and PM peak periods impacting on key arterial and radial routes to and from the City. Existing congestion levels also impact on the Warton Enterprise Zone reducing the overall accessibility of this important site. This has led to the identification of three overarching objectives relating to unlocking housing development land, improving access to the Warton Enterprise Zone and reducing congestion.		2	Requirements substantially met - Minor issues exist with the submission.
	A planning application for the scheme was submitted in May 2016, however, no details are provided with regard to the current status of the application. Details of land ownership required for the completion of the scheme are not articulated. The scheme has interdependencies with the provision of the East-West Link Road and the Strategic Case would benefit from further details.		3	Requirements partially met - Medium issues exist with the submission.
	The main stakeholder groups with an interest in the scheme have been identified. The scheme has strong and broad political support in LCC and has been subject to a comprehensive consultation as part of the planning application process.		4	Requirements not met - Critical issues exist with the submission.
A total of 20 options are identified in the business case (including the preferred option). As part of an initial sifting process these were reduced to seven. A secondary sift then took place which assessed each option against the proposed secondary objectives and potential scheme costs resulting in the identification of the preferred scheme.				

Ref	Item	Status	Comments
S1	Is there a clear description of the components of the scheme and how it fits with the aims and objectives of the LEP, Local Authorities and DfT?	Requirements Fully Met	<p>The proposed scheme includes the following:</p> <ul style="list-style-type: none">• A new 4.5km dual carriageway road between the M55 and the A583/A5085 Blackpool Road/Riversway;• Construction of a new all moves junction with the M55 (Junction 2);• Construction of a new roundabout at the A583/A5085 Blackpool Road/Riversway;• Two new roundabouts for connection with the Cottam Link Road and the East-West Link Road (EWLR); and• Construction of the Cottam Link Road providing access into Cottam development areas and the potential Cottam. <p>The Strategic Case demonstrates how the scheme aligns with National Planning Policies, sub-national planning policies and local planning policies including the Central Lancashire Core Strategy, Preston Local Plan 2012-2026, North West Preston Masterplan, and Preston, South Ribble and Lancashire City Deal.</p>
S2	Have the problem(s) the scheme will be addressing been clearly identified – including evidence of the extent of the problem(s), specific barriers / challenges, and how the scheme will overcome them (including the scale of impact)	Requirements Substantially Met	<p>Problems are identified in relation to the operation of the network. The business case provides evidence of low average traffic speeds during the AM and PM peak periods impacting on key arterial and radial routes to and from the City. Existing congestion levels also impact on the Warton Enterprise Zone reducing the overall accessibility of this important site. The business case also states that busses in the study area suffer from poor journey time reliability, although this is predicated on the basis of general congestion rather than direct evidence related to bus journey time data. It is also indicated that accident rates on key routes are higher than the national average and that congestion is adding to air pollution.</p> <p>It is also identified that there is insufficient highway capacity to release the proposed scale of housing in the area and the growth of employment sites are being constrained by traffic congestion levels. Planning conditions are in place that require upgrades to the highway capacity in order to release large scale housing developments in the area.</p> <p>The Strategic Case evidence does not include details on the scale of the forecast impact of the scheme relative to the Do Minimum scenario and therefore what impact it would have on the identified problems.</p>
S3	Has the impact of not progressing the scheme been set out, including supporting evidence? Is there adequate rationale to support why the scheme is needed now?	Requirements Fully Met	<p>Without an intervention, evidence indicates that all the identified problems will be exacerbated in the future and will be constraining investment and growth in Central Lancashire. The business case also makes clear that a high number new homes (5,000+) will not be realised in the absence of the scheme.</p>
S4	Are there a clearly defined set of objectives for the scheme to address the problem(s) identified?	Requirements Fully Met	<p>Three primary objectives have been identified for the scheme, which are stated as being critical to delivery of the Central Lancashire Core Strategy, as follows:</p> <ol style="list-style-type: none">1. Support local economic growth by unlocking housing development in North West Preston;2. Improve access of the Warton Enterprise Zone to strategic road network and wider labour market catchment; and3. Reduce congestion and associated delays on the arterial and radial routes within the Preston urban area. <p>These are supplemented by a further eight supporting objectives which relate to the identified problems.</p>
S5	Are there any remaining high level internal/external constraints or other factors that present a material risk to the delivery of this scheme?	Requirements Substantially Met	<p>It is stated in the Strategic Case that a planning application was submitted for the scheme in May 2016, however, the current status of this application is not stated although this is referred to in other Cases. No details are provided as to whether or not all the land required to construct the scheme has been secured although it is referenced in other cases that a CPO is required in order to advance the scheme.</p>
S6	Have any inter-dependencies which may affect the success of the scheme been identified?	Requirements Partially Met	<p>The scheme is interdependent with the East-West Link Road (EWLR) which provides the spine through the Strategic Housing Development and therefore provides the connectivity to the PWD of the 5000+ houses proposed. It is stated that the funding arrangements for the two schemes are different and therefore for the purpose of the PWD OBC it is assumed that the EWLR is a separate scheme.</p> <p>The delivery of the EWLR is a vital component in the successful release of the housing in in the area and the Strategic Case would have benefited from further details regarding the delivery of this link.</p>
S7	Are any links with other schemes clear?	Requirements Partially Met	<p>See comments above.</p>
S8	Have the main stakeholder groups and their contribution to the project been clearly defined? This should include any potential constraints or conflicts between stakeholders groups.	Requirements Substantially Met	<p>The main stakeholder groups with an interest in the scheme have been identified. The scheme has strong and broad political support in LCC and has been subject to a comprehensive consultation as part of the planning application process. Where concerns were expressed mitigation measures have been incorporated into the design where possible. However, details of any constraints or conflicts between stakeholder groups are not provided.</p>

Continued overleaf.

S9	Is there a robust assessment of different scheme options, including the reasons for any options being discounted?	Requirements Fully Met	A total of 20 options are identified in the business case (including the preferred option). As part of an initial sifting process each of the options have been considered in high level terms against the scheme objectives and against a feasibility/deliverability assessment. Following this process seven options were taken forward to a secondary sift which assessed each option against the proposed secondary objectives and potential scheme costs. A summary of the process is included in the Strategic Case with further information provided in a supporting Options Appraisal report.
S10	Have details of stakeholder and public consultation been provided?	Requirements Fully Met	A consultation Report has been provided including details as to how the scheme has been refined through the consultation and stakeholder engagement process.

A.3. Economic Case

INDEPENDENT REVIEW			ATKINS	
Project Title:		Preston Western Distributor		
Permission Sought:		Conditional Approval	Date of Review:	24/11/2017
ECONOMIC CASE				
Overall Score	2	1 Requirements fully met - No issues of note with the submission.		
Atkins Comments:	<p>The Value for Money (VfM) statement reports a BCR of 2.29, which is classified as 'High VfM' by the Department for Transport. The benefits for the scheme have been derived from a SATURN model known as Central Lancashire Transport Model (CLTM), which has a base year of 2013 and includes AM, Inter Peak and PM peak time periods. A Local Model Validation Report (LMVR) has been produced, setting out the development and validation of the base year model, which has been used as basis to assess the PWD scheme. The base year model generally accords with the required WebTAG criteria.</p> <p>The forecast traffic models have been developed for 2019 and 2041 as the schemes' opening and design years respectively. The opening year has subsequently moved to 2022 with 2037 being expected to be the new design year. The traffic growth used to construct future years' trip matrices is based on forecasts in the prevailing National Trip End Model (NTEM) 6.2 for cars and Road Traffic Forecasts (RTF) 2015 for goods vehicles. Subsequent to development of the forecast models, new guidance has emerged with NTEM 7.2 and July 2017 Data Book which the latter provides updated values of time and vehicle operating cost. The forecast assignments have been developed using fixed demand approach as opposed to Variable Demand Modelling (VDM). This was based on results of a test undertaken by the scheme promoter which showed that the proposed scheme may not cause inducing new demand or release suppressed demand in the core model area. DfT who is a major stakeholder on this scheme needs to express its view on this aspect of the modelling. It is a possibility that DfT would ask for impact of VDM to be investigated on the modelling results prior to submission of the PWD Final Business Case (FBC). A series of sensitivity tests have been undertaken to investigate the effect on the scheme BCR including travel demand variation, new guidance and the inclusion of trips generated by dependent development. The reported BCRs for these tests showed a range of 2.01 to 2.66. A total of 20 options were identified in the business case (including the preferred option). These were subject to two sifting stages initially against the scheme primary objectives and feasibility/deliverability criteria. A total of 7 options were then taken forward from this initial process and assessed each option against the proposed secondary objectives and potential scheme costs. The economic appraisal was however limited to the Core and Low-Cost options.</p> <p>The Present Value of Costs (PVC) for the proposed schemes is £138.48m over a 60-year period which includes construction, risk allocation and maintenance costs. An Optimism bias of 15% has been included in the cost calculations for economic appraisal. The Present Value of Benefits (PVB) is reported as £317m. Out of total PVB, the benefits associated with user time savings, changes in vehicle operating costs, indirect tax revenues amount to £273.8m. The remaining net benefit of £43.2m arises from other monetised transport elements including construction and maintenance delay benefits; accident savings; air; noise and greenhouse savings.</p>		2	Requirements substantially met - Minor issues exist with the submission.
	<p>The increase in the GVA of the local economy associated with the proposed scheme has been derived as £144.1 million over the 60-year period which consists of £104.5m from unlocking development; £28m from Agglomeration and £10.8m output change in competitive markets. The environmental and social impacts associated with PWD have been assessed either quantitatively or qualitatively. These have included Noise, Air Quality, Greenhouse Gases, Landscape, Townscape, Historic Environment, Biodiversity, Water Environment, Physical Activity, Journey Quality, and Severance. The majority of scheme benefits are associated with travel time savings for road users. There would be improvement in Safety, Noise and Air Quality. Disbenefits are reported from greenhouse gases emissions and increase in vehicle operating costs as well as a small decrease in indirect tax revenue. The reported non-monetised impacts of the scheme are normally shown to be beneficial or neutral except for slight adverse effect on the local landscape, historic environment and water environment and a moderate adverse impact on biodiversity.</p> <p>The Distributional Impacts (DIs) of the proposed scheme have been assessed on different groups of people, including those potentially more vulnerable to the effects of transport. Eight elements of impact have been considered including Noise, Air Quality, Accessibility, Security, Severance, User Benefits (journey times and vehicle operating costs), Affordability and Accidents.</p> <p>The DI assessment showed that all income quintiles will receive a positive impact for the User Benefits and Air Quality; The most deprived areas will experience a positive impact on personal affordability; Most income groups will benefit from decrease in noise levels with the scheme in place. Children are expected to receive a slight beneficial effect from reduction in noise levels and accidents and improvement in air quality. There will also be a reduced number of accidents and thus casualties among the older people, pedestrians and cyclists.</p>		3	Requirements partially met - Medium issues exist with the submission.
			4	Requirements not met - Critical issues exist with the submission.

Ref	Item	Status	Comments
E1	Has a Value for Money Statement been provided, including a BCR?	Requirements Fully Met	The Value for Money (VfM) statement reports a BCR of 2.29 which is classified as 'High VfM' by the Department for Transport.
E2	Are there any key assumptions relating to how the BCR has been derived?	Requirements Substantially Met	<p>The benefits for the scheme have been derived from a SATURN traffic model known as Central Lancashire Transport Model (CLTM). The study area of the CLTM extends over a wide area which has been modelled in three different levels of details namely: Area of detailed modelling (Detailed); Rest of fully modelled area (ROFMA) and External Area (the rest of Great Britain).</p> <p>The model has a Base Year (BY) of 2013 covering AM peak (8:00-9:00), Inter peak (average 10.00-16:00) and PM peak (17:00-18:00). The demand data used in developing of the BY model has been collected using a mixture of observed and synthetic data, constructed following WebTAG guidance. The travel data collected include origin-destination data across twenty six roadside survey locations in and around the study area as well as traffic counts and journey time data. The synthetic demand was established using data sources including from Census, NTS, and employment survey data. The modelled network was created from the ITN network which is provided by Ordnance Survey. The modelled BY assignments by and large satisfy WebTAG criteria in terms of convergence, modelled flows and journey times.</p> <p>The forecast models were developed using growth predictions from National Trip End Model (NTEM) Version 6.2 for cars and Road Traffic Forecasts (RTF) 2015 for goods vehicles. Forecasting years developed were initially 2019 as Opening Year (OY) and 2041 as Design Year (DY) however later in the assessment the OY was moved 2022. For the Final Business Case (FBC) it is expected that the traffic forecasting and economic appraisal need to be re-undertaken for the finalised OY and DY which are likely to be 2022 and 2037 respectively. The economic appraisal for transport efficiency benefits was undertaken using DfT Transport User Benefits Analysis (TUBA) software version 1.9.8.</p> <p>There are newer guidance and software including NTEM 7.2, July 2017 Data Book for calculating new values of times and operations and TUBA Version 1.9.9. The scheme promoter has undertaken sensitivity tests to establish the impact of the new guidance (except for the use of TUBA 1.9.9) however the submission for Outline Business Case (OBC) for the core option is based on the prevailing version of NTEM at the time of developing the original forecasts i.e. 6.2.</p> <p>For the Final Business Case (FBC) the appointed consultant on behalf of the Scheme Promoter (SP) has agreed to produce a final set of forecast models and economic appraisal based on the latest guidance at the time of submission which would also include any further iteration of cost estimate that may be available at the time.</p>
E3	Is the basis for the calculation of the Present Value of Benefits (PVB) sufficiently robust?	Requirements Fully Met	The total monetised Present Value of Benefits (PVB) for the scheme over a 60 year assessment period is £317m (2010 prices discounted to 2010). The TUBA programme has been used to calculate the benefits in terms of user time savings, changes in vehicle operating costs, indirect tax revenues which amounts to £273.8m. A further net benefit of £43.2m is derived from other transport elements which can be monetised including construction and maintenance delay benefits; accident savings; air; noise and greenhouse savings. The calculations of the schemes' various benefits and its allocation have been undertaken in accordance with WebTAG guidance.

Continued overleaf.

E4	Is the basis for the calculation of the Present Value of Cost (PVC) sufficiently robust?	Requirements Substantially Met	<p>The proposed scheme Present Value of Costs (PVC) is £138.48m (2010 prices) over a 60 year period. This comprises the following:</p> <ul style="list-style-type: none">• Base cost - this includes preparation, construction, land/property and construction supervision costs.• Risk allocation - the value has been derived from the latest Quantified Risk Assessment (QRA) undertaken by Lancashire County Council and the ECI Contractor (Costain) in July 2017.• Maintenance Costs Estimates: Produced using the typical maintenance profiles, costs, durations and timings for new roads as per the DfT QUADRO manual (DMRB Volume 14).• Optimism bias - this has been applied at a rate of 15% in line with WebTAG guidance (Unit A1.2). <p>The basis of cost calculations can be considered satisfactory at this stage of the process (OBC) however should an updated version of the scheme become available prior to submission of FBC, it is expected that the scheme promoter upgrade the submission (FBC) with the latest cost.</p> <p>In addition an increase of 15% in the current PVC would result in a BCR which will be just under 2.0 which is a threshold between high and medium value for money.</p>
E5	Has an appropriate level of optimism bias been applied?	Requirements Fully Met	Optimism bias has been applied at a rate of 15% - this is in line with the guidance for schemes at Conditional Approval stage, as set out in WebTAG Unit A1.2. This is considered appropriate as it reflects the scheme cost preparation and likelihood of updating the cost prior to FBC submission.
E6	Has an appropriate level of risk cost been included?	Requirements Fully Met	<p>A Quantified Risk Assessment (QRA) for the PWD has been undertaken by LCC and Costain in order to determine the amount of risk to be applied to the base costs. The latest version of QRA updated in July 2017 has been used for this purpose. The QRA identified about 280 risks attributed to client or contractor. The risks were assessed and where possible addressed introducing mitigation measures leaving about 120 to be addressed. An evaluation process was undertaken to attribute lowest, most probable and highest value to the risks.</p> <p>The risks have also been subject to a Monte Carlo Risk Analysis which provides a normal bell curve output with different levels of probability namely 20%, 50% and 80%. The OBC states that for robustness the value of risks associated with 80% probability which amounts to £8.43m has been included into the base cost.</p> <p>Should the scheme cost be reviewed prior to FBC submission, it is expected that this exercise is re-undertaken.</p>
E7	Is the traffic modelling and forecasting approach / tools sufficiently robust? Has relevant supporting documentation been provided to substantiate that modelling undertaken is fit for purpose?	Requirements Substantially Met	<p>A Local Model Validation Report (LMVR) has been produced, setting out the development and validation of the base year SATURN model, which has been used as basis to assess the scheme. The LMVR has been reviewed for the purpose this scheme. It includes the information on performance of the base year model against the criteria set out in WebTAG Unit M3.1. The LMVR showed that the model generally accords with the observed data and use of Matrix Estimation has not significantly altered performance of the base year model.</p> <p>A technical note on the need for Variable Demand Modelling (VDM) has also been submitted for review. Within the criteria defined in WebTAG Unit M2, the model results (comparing the outputs from the fixed and elastic assignments) showed that the scheme may not result in VDM responses and therefore Fixed Demand assignments have been adopted for the forecasting.</p> <p>A Traffic Forecasting Report (TFR) has been submitted which set out how the future year matrices were developed, including application of NTEM (TEMPro forecasts 6.2) , Road Traffic Forecasts 2015 (for freight) and key developments. Future year matrices have been controlled to national forecasts (TEMPro 6.2 and RTF 2015). The modelling forecast years are currently 2019 and 2041 however the OY has been deferred to 2022.</p> <p>Given there is new guidance in place including NTEM 7.2 the consultant acting on behalf of the scheme promoter has agreed that a set of forecast based on the latest guidance would be submitted as part of FBC submission.</p> <p>In addition, the scheme promoter has been advised during the review process that there is a need to ensure that DfT and Highways England as major stakeholders for the scheme are content with the traffic modelling undertaken so far. It has been discussed at length with the scheme promoter that DfT may require VDM to be introduced to the modelling system prior to submission of FBC even if it is as a sensitivity test.</p>
E8	Have all other modelling assumptions been made clear?	Requirements Fully Met	All assumptions are documented in the LMVR and Traffic Forecasting Reports, which are appended to the business case.
E10	Are TUBA outputs robust?	Requirements Fully Met	The TUBA outputs have been submitted and reviewed.
E11	Have all relevant options been modelled / appraised?	Requirements Substantially Met	A total of 20 options are identified in the business case (including the preferred option). As part of an initial sifting process each of the options have been considered in high level terms against the scheme objectives and against a feasibility/deliverability assessment. Following this process seven options were taken forward to a secondary sift which assessed each option against the proposed secondary objectives and potential scheme costs. A summary of the process is included in the Strategic Case with further information provided in a supporting Options Appraisal report. The economic appraisal was limited to the Core and Low Cost options.
E12	Have appropriate sensitivity tests been undertaken?	Requirements Fully Met	A series of sensitivity tests have been undertaken to investigate the effect on the scheme BCR including travel demand variation and the inclusion of trips generated by dependent development potentially coming before the scheme and changes in DfT recommended values of time. The sensitivity tests have been limited to TUBA analysis only. All other assessment results were assumed to be consistent between the Core and the sensitivity test scenarios. The reported BCRs for these tests showed a range of 2.01 to 2.66.
E13	Has a completed AST been provided (with supporting worksheets where relevant)?	Requirements Fully Met	<p>A full AST table is appended to the Business Case and summarised within the Economic Case. Impacts have been assessed on a 7 point scale with a supporting qualitative statement - impacts are monetised where information is available from the appraisal. The scheme results in the following impacts:</p> <ul style="list-style-type: none">-Majority of the benefits generated by the scheme are associated with travel time savings for business and non-business road users.-Improvement in Safety, Noise and Air Quality also provide a relatively modest contribution to the total monetised benefits of the scheme.-Disbenefits are reported from greenhouse gases emissions and increase in vehicle operating costs.-There will be a small decrease in indirect tax revenue. <p>The non-monetised impacts of the scheme have also been reported and the scheme is expected to:</p> <ul style="list-style-type: none">- Largely beneficial for journey quality due to reduction in driver frustration, fear of accidents and journey uncertainty as well as the improvement in Non-Motorised User (NMU) facilities;-Have a slight beneficial impact on physical activity resulting from the provision of new facilities and slightly longer journeys;-Have a slight beneficial impact on severance due to the provision of new facilities maintaining connectivity between communities;-Have a slight adverse effect on the local landscape, historic environment and water environment and a moderate adverse impact on biodiversity;-Have neutral effect on townscape
E14	Are forecast housing, jobs and GVA impacts provided robust / realistic?	Requirements Fully Met	<p>GVA is defined as Transport-induced changes in jobs, multiplied by GVA per job, adjusted for changes in productivity (agglomeration and labour), plus savings in direct transport costs. The OBC submission determined that two types of the potential GVA benefits would be relevant for the PWD namely:</p> <ul style="list-style-type: none">-Unlocking development and Productivity uplifts : More than 5000 dwellings are expected to be built in the North West Preston, most of which are dependent on (or unlocked by) the PWD. The unlocked dwellings form the basis for calculating the 'indirect jobs' created to support the new residents. The average GVA per service industry job in Lancashire was applied to calculate the GVA uplift.-Productivity uplift will result from the PWD impact on agglomeration and output change in imperfectly competitive markets. The percentage productivity uplift due to agglomeration has been derived using a productivity elasticity for reductions in journey time. The second type of productivity benefit is the output change in imperfectly competitive markets. This captures the profit that firms make on additional outputs generated as a result of reduced transport costs. <p>Based on the analysis reported there is a forecast increase in GVA to the local economy of £144.1 million over the 60 year period which can be directly related to the impacts of the PWD. This comprises:</p> <ul style="list-style-type: none">Unlocked Development £104.5mAgglomeration (Preston) £23.0mAgglomeration (Warton) £5.8mOutput change in imperfectly competitive markets £10.8
E15	Has dependent development been accounted for?	Requirements Fully Met	<p>The PWD scheme is expected to unlock the North West Preston strategic housing location (more than 5,000 dwellings) and provide direct links into Cottam development areas and Cottam Parkway Rail Station. WebTAG categorises new development that is dependent on the provision of a transport scheme as Dependent Development. In the case of the PWD scheme, dependency refers to land use development that cannot be realised without the introduction of the PWD. Given that the dependent development is conditional to the provision of the scheme and to ensure a correct comparison between With and Without Scheme scenarios, WebTAG suggests that the dependent development should not be included into the Core demand matrices.</p> <p>Instead, a separate assessment has been made to estimate the benefits of the PWD that are attributed to unlocking housing development. The outcome of the dependency test showed that the North West Preston development, with the exception of Haydock Grange site, is dependent on the PWD.</p> <p>Assessment of the dependent development benefits of the PWD scheme reported the following monetised impact for the elements forming this test:</p> <ul style="list-style-type: none">-Planning gain arising from dependent new homes : £421.8m-Less non-transport external costs caused by dependent new homes : -£251.2m-Less transport external costs caused by dependent new homes (C) : -£118.8m

Continued overleaf.

E16	Have all (relevant) Environmental & Social Impacts been adequately assessed?	Requirements Fully Met	<p>The environmental impacts considered and assessed for PWD include monetised impacts (Noise, Air Quality and Greenhouse gases) and non-monetised impacts (Landscape, Townscape, Historic Environment, Biodiversity and Water Environment). The social impacts are not normally monetised and have therefore been assessed and reported using quantitative and qualitative information. They include Physical Activity, Journey Quality, and Severance.</p> <p>The monetised values of the environmental impacts over a 60 year assessment period include: Noise: £10.3m Air Quality: £0.7m Greenhouse gases: -£12.4m A summary of the impact of the non-monetised impacts is shown above under E13.</p> <p>It is expected that prior to submission of FBC, the traffic model would be updated with the latest guidance and possibly introduction of VDM. Should this be the case, consideration should be given to re-undertaking of the assessment of elements of environmental impacts which include inputs from the existing traffic model.</p>
E17	Have Distributional Impacts been assessed in a robust manner?	Requirements Fully Met	<p>The assessment of Distributional Impacts (DIs) is to establish the impacts of transport interventions on different groups of people, including those potentially more vulnerable to the effects of transport. Consideration of the DIs of transport schemes in accordance with WebTAG Unit A4.2 requires eight DI including: Noise, Air Quality, Accessibility, Security, Severance, User Benefits (journey times and vehicle operating costs), Affordability and Accidents.</p> <p>The DI assessment for this scheme showed the following overall conclusions:</p> <ul style="list-style-type: none">-All income quintiles will receive a positive impact for the User Benefits and Air Quality, although some income groups will experience more significant benefits than the others.-Income group 1 representing the most deprived areas will experience a positive impact on personal affordability whilst the other income groups will have a negative impact.- All income quintiles except income quintile 1 will benefit from decrease in noise levels with the scheme in place.- Children, older people, pedestrians and cyclists will be affected by the scheme. Children are expected to receive a slight beneficial effect from change in noise levels as well as from reduction in accidents and improvement in air quality. Older people, pedestrians and cyclists are expected to benefit from accident impact as there will be a reduction in numbers of casualties among representatives of these two groups when the scheme is in built. <p>It is expected that prior to submission of FBC, the traffic model would be updated with the latest guidance and possibly introduction of VDM. Should this be the case, consideration should be given to re-undertaking of the assessment of elements of DIs which include inputs from the existing traffic model.</p>

A.4. Financial Case

INDEPENDENT REVIEW			ATKINS	
Project Title:	Preston Western Distributor			
Permission Sought:	Conditional Approval	Date of Review:		18/12/2017
FINANCIAL CASE				
Overall Score	2			1 Requirements fully met - No issues of note with the submission.
Atkins Comments:	The case sets out the scheme cost, which has been subject to some independent validation. It includes base costs, risk adjustment at the most robust estimate and 15% optimism bias in line with WebTAG guidance. A spend profile has been included which sets out year on year costs and breakdown by type of cost, but does not specify the parties on whom they fall. The key financial risks have been identified, an evaluation process has been undertaken along with a Monte Carlo Risk Assessment and the 80% probability risk cost has been applied to the base costs for robustness. However, the risk register appears to contain risks for both the PWD and the EWLR and may therefore overestimate the overall risks for the PDW scheme. Funding has been identified for the full scheme costs and evidence has been provided of third party funds, including Highways England RIS monies. No alternative funding has been identified and the LGF monies are subject to having a good business case with high value for money. LCC will cover any increase in funding and this has been agreed in the form of a letter provided by the Section 151 Officer. Limited information is available on the long-term financial sustainability of the scheme and affordability including any ongoing costs for operation, maintenance and major capital renewals.			2 Requirements substantially met - Minor issues exist with the submission.
				3 Requirements partially met - Medium issues exist with the submission.
				4 Requirements not met - Critical issues exist with the submission.

Ref	Item	Status	Comments
F1	Is the expected whole life cost of the scheme robust, including the base cost and risk allowance in outturn prices drawn from industry forecasts?	Requirements Fully Met	In developing the scheme, the client engaged in Early Contractor Involvement (ECI) with Costain to provide additional confidence in the scheme design and cost. An independent verification report was commissioned in January 2017, the report (Appendix K) recognised that there were differences in sectional totals, and raised some concerns that costs did not seem to match the design drawings provided and that there was some information missing, but on a general note the estimate appeared to be robust - the difference in total cost was £1.5m which represented 1.17% of the schemes cost estimate at the time. Additional verification exercises are intended to be undertaken during further stages in the project. The cost estimate is based on BoQ informed by ground investigation, estimates from statutory authorities, land and compensation costs and QRA. The construction cost is estimated to be £110,644,087.75 and a cost breakdown is provided in Appendix L. 80% probability risk has been included at £8,433m. Optimism bias has been applied at 15% in line with WebTAG guidance. Total scheme cost is £161,597m.
F2	Has a cost profile been provided showing year on year costs, and breakdown by cost type and parties on whom they fall?	Requirements Substantially Met	Spend profiles have been provided for the £161.6m cost of the scheme in the case in the form of bar charts showing preparation, supervision, construction and lands cost, and a breakdown of outline expenditure by year is provided in Appendix P. No information is provided on parties on whom they fall.
F3	Have details of key financial risks been provided and is the risk cost allowance robust?	Requirements Substantially Met	A QRA for the PWD has been undertaken in order to determine the amount of risk to be applied to the base costs. It is based on industry knowledge and experience from other schemes which have been constructed. The Risk Register (Appendix M) identifies 279 risks, these have been assessed and where possible addressed introducing mitigation measures leaving 122 currently active. However, the register appears to be for the PWD and the East West Link Road (EWLR) and as a consequence the risks may be overstated due to the inclusion of the EWLR in the register. An evaluation process has been undertaken to attribute lowest, most probable and highest value to the risks. The risk sum for the client only in the most probable category is £4.361m, and for both client and contractor is £0.584m. 16 risks remain with a high value and these are set out in Appendix N. The risks have also been subject to a Monte Carlo Risk Analysis and the summary is provided in Appendix O. For robustness the 80% probability value has been carried forward in the scheme cost estimates and the base cost adjusted by £8,432,824.26.
F4	Are funding sources to cover the full scheme cost clearly set out?	Requirements Fully Met	LGF - £58m (this is dependent on the scheme having a strong business case and high value for money); Highways England RIS - £25m (a letter confirming this contribution is provided in Appendix Q); City Deal - £89.9m. Total funding secured is £172.9m. LCC has agreed to underwrite the impact of any timing difference in relation to receipt of funding for schemes delivered within the City Deal framework. Confirmation is provided via letter from Section 151 officer, included in Appendix R that any scheme cost increase will be covered by LCC.
F5	Is there sufficient evidence to support third party / alternative funding contributions?	Requirements Substantially Met	A letter confirming the Highways England contribution is provided in Appendix Q. The City Deal funding was agreed in Autumn 2013. The Growth Deal Funding is subject to having a good business case and high value for money. No further funding has been identified.
F6	Have the impacts of third party / alternative funding not coming forward been considered?	Requirements Fully Met	The release of City Deal Funds does not require receipt of confirmed funding from developers in advance of major road infrastructure provision. LCC has agreed to underwrite the impact of any timing differences in relation to receipt of funding for schemes delivered within the City Deal framework. In addition, LCC confirms that any scheme cost increase will be covered by LCC and this has been underwritten by the Section 151 officer (Appendix R).
F7	Has the long-term financial sustainability of the scheme been demonstrated, including robust plans to ensure the affordability of any ongoing costs for operation, maintenance and major capital renewals?	Requirements Partially Met	In developing the scheme, the engagement of an ECI contractor and availability of a framework consultant offers an excellent opportunity to value engineer the scheme during development. This includes seeking out the most economic designs, materials and construction methodology. Additionally, it offers the opportunity to professionally challenge on the widest scale the concept and methods of achieving the aims of the scheme. This provides confidence that the final designed scheme will be the best and lowest cost option. There is no further information provided on long-term financial sustainability of the scheme in terms of affordability of on-going costs, maintenance and major capital renewals.
F8	Has evidence of appropriate S151 Officer sign-off been provided?	Requirements Fully Met	A letter from the Section 151 Officer is included within Appendix R.

A.5. Commercial Case

INDEPENDENT REVIEW				ATKINS	
Project Title:		Preston Western Distributor			
Permission Sought:		Conditional Approval		Date of Review: 18/12/2017	
COMMERCIAL CASE					
Overall Score	2			1	Requirements fully met - No issues of note with the submission.
Atkins Comments:	The case sets out the anticipated procurement strategy and lists the benefits of using this approach along with bodies that widely recognised this as the delivery mechanism for major civil engineering works. It is unclear exactly how the contract is set up, although the case refers to a 3 phase basis and early termination without penalty if value for money is not obtained at all times. Prompt and fair payment mechanisms are referenced, but no details of this are set out. The anticipated payment option/mechanism is stated for Phase 3, but will need to be confirmed prior to Full Business Case. Project Procurement Milestones are set out, but there is some uncertainty around the COP Public Inquiry timescales and a question around how realistic it is to set out the CPO to LCC Cabinet the day after the OBC is submitted to the LEP. A risk workshop has been held and informed a risk register that is a live document with joint ownership, which should lead to cost efficiencies. Contract management details are limited and the timescales are uncertain due to the season of commencement, this will need updating ahead of Full Business Case. The procurement strategy is supported by a letter from the Section 151 Officer, which although it states that the strategy is well established and will protect the authority from unnecessary risk and challenge, while looking to secure value for money through MEAT evaluation criteria, does not specifically reference the contract and early termination arrangements.			2	Requirements substantially met - Minor issues exist with the submission.
				3	Requirements partially met - Medium issues exist with the submission.
				4	Requirements not met - Critical issues exist with the submission.

Ref	Item	Status	Comments
C1	Has a robust procurement strategy been clearly set out?	Requirements Fully Met	LCC has chosen the ECI to procure works and this approach was signed off by LCC Cabinet Member for Highways and Transport in November 2015. An OJEU compliant exercise was undertaken to select the contractor to be involved in the scheme - details of the process are provided in report to the Cabinet Member included as Appendix S. The appointment is on a 3 phase basis and the contract is structured so that it can be terminated without penalty should the arrangement be deemed not to be delivering the benefits to ensure value for money is obtained at all times. The case outlines that this is referred to in the S151 Officer Letter in Appendix R - which sets out that LCC has a well established procurement strategy that aims to protect the authority from unnecessary risk and challenge while looking to secure value for money using the MEAT evaluation criteria. It does not reference any contract arrangements with the contractor.
C2	Has consideration of different procurement options been demonstrated, including justification for selection of the preferred option?	Requirements Substantially Met	The case sets out the industry recognised benefits of using this approach as opposed to the "traditional method" in bullet point format and how it is recognised widely by many public and private sector bodies as the delivery mechanism for major civil engineering projects.
C3	Have the proposed payment mechanisms / pricing framework been identified?	Requirements Fully Met	Phase 1 and 2 will utilise the Professional Services contract and Phase 3 will be undertaken under the Engineering Construction Contract (ECC). The case states that prompt and fair payment mechanisms will be applied throughout the supply chain. For Phase 3 it sets out the 6 main payment options within the ECC and states that the current anticipation is that the NEC Option C procurement approach will be used for PWD construction contract - target cost contract with an activity schedule where the out-turn financial risks are shared between client and contractor in an agreed proportion.
C4	Have the procurement timescales been set out, and are they realistic?	Requirements Partially Met	The case sets out the procurement programme milestones to commencement of works. It also highlights that for some parts of the CPO Inquiry procedure there is no certainty in the timelines. The programme has been guided by experience on previous projects involving public inquiries. Programme dates are also presented in the Management Case which indicates slightly different dates - both programmes should be standardised.
C5	Have details of the proposed risk transfer / allocation been provided?	Requirements Fully Met	Risks and associated cost estimates are provided in the Risk Register (Appendix M). The risk register was initially drafted following a risk workshop and the case sets out that this is a live document that will be updated and adjustments to risks, costs and responsibilities amended as the detail design progresses. The register is under joint ownership under the ECI.
C6	Have details of contract management been provided, including contract timescales?	Requirements Substantially Met	The contract management arrangements will be administered by an ECC Project Manager and Supervisor during the implementation stage. The case refers to roles for the project being set out within the Project Governance section of the Management Case. It is anticipated that the construction contract length will be 3-3.5 years. The variance is explained as being uncertainty of the season of commencement which will influence how and when ecological and environmental mitigation measures can be undertaken.
C7	Has evidence of relevant approval been provided from Head of Procurement?	Requirements Fully Met	A letter from the Section 151 Officer is included within Appendix R.

A.6. Management Case

INDEPENDENT REVIEW				ATKINS	
Project Title:		Preston Western Distributor			
Permission Sought:		Conditional Approval		Date of Review: 18/12/2017	
MANAGEMENT CASE					
Overall Score	3				1 Requirements fully met - No issues of note with the submission.
Atkins Comments:	The case sets out the governance structure and project delivery team and the key reporting lines for the programme management and delivery of the scheme. There are inconsistencies in the project programme within the management and commercial cases that need addressing, along with the realistic timescale for making the CPO. Planning permission has been granted, but the scheme is dependent on a CPO and SRO and details around the impacts are not clearly set out in the business case. Details of the reporting, approvals and assurance process are clearly set out. Limited evidence on scheme delivery has been supplied, and there is no information on how lessons learned have been applied to the delivery of this scheme. There is also limited information on the risk management strategy, although a quantified risk register is included that provides details of the risks, owners and mitigation measures. The communications strategy for the PWD is still currently being prepared and needs to be provided ahead of Full Business Case. A logic map has been provided as part of the monitoring and evaluation plan, but it is unclear how supporting objectives 4 and 8 fit into the logic map. In regard to the monitoring and evaluation plan, this sets out the metrics to be measured, but it is unclear how each of the metrics is directly related to measuring if the primary and supporting objectives have been met. The plan also sets out that a value for money assessment will be undertaken upon completion of the scheme, but no details on how this process will be done are included.			2	Requirements substantially met - Minor issues exist with the submission.
				3	Requirements partially met - Medium issues exist with the submission.
				4	Requirements not met - Critical issues exist with the submission.

Ref	Item	Status	Comments
M1	Has the proposed governance / organisational structure been provided? Does it provide a robust means of overseeing project delivery with appropriate skills / experience?	Requirements Substantially Met	The governance structure for the programme management and delivery of the scheme is set out in Figure 7-2. The Lancashire LEP is responsible for overall governance of the City Deal, Transport for Lancashire is responsible for the transport elements of the IDP, the City Deal Programme Board is responsible for operational delivery, the Project Board is responsible for the delivery of the project, the City Deal Infrastructure Steering Group is responsible for approval of technical detail of projects. Alongside this the project delivery team is set out in detail along with information on discipline leads and reporting structures. The skills and experience of the Project Manager are not included. Monthly update reports will be provided by the Project Manager to the City Deal Infrastructure Steering Group, covering scheme design, CPO process, funding, land and planning and when funding is secured and contracts are let, adherence to programme budget, issues and decisions made within the tolerances granted and exceptions.
M2	Does the project programme demonstrate realistic delivery timescales? Does it provide an appropriate level of detail? Have critical path items and dependencies been clearly identified?	Requirements Partially Met	A high level delivery programme is provided in Appendix T and is owned by the Project Manager and is reviewed and updated as necessary prior to formal progress meetings. Changes to the project programme that could impact upon key milestones within the development and delivery of the scheme are communicated to the Project Board. The table in this case shows the month and year for each key milestone. Programme details are also presented in the Commercial Case which indicates slightly different dates - both programme tables should be standardised. No information is provided in the way of critical path items and dependencies.
M3	Have required statutory powers and consents been obtained? Are there any conditions to the powers, consents or funding and do they pose any additional risks? Is a plan in place to demonstrate how these conditions will be met?	Requirements Substantially Met	The statutory powers and consents have not been obtained as of yet. The scheme is dependent on an CPO / Side Road Order / land acquisition process including a potential public inquiry. TfL requires promoters to provide an absolute minimum 10% contribution towards total scheme construction cost and 100% of any increase in cost once TfL has granted Provisional Approval. This has been agreed in the Section 151 Officer letter provided in Appendix R. The release of City Deal Funds does not require receipt of confirmed funding from developers in advance of major road infrastructure provision. LCC has agreed to underwrite the impact of any timing difference in relation to receipt of funding for schemes delivered within the City Deal framework. The LEP will only approve schemes demonstrating high value for money, with a BCR greater than 2. The Director for Financial Resources will sign off all value for money assessments as true and accurate - and to avoid potential conflict of interest will not have any involvement in scheme development or promotion. The PWD is a DfT retained scheme and requires Ministerial approval, however, the DfT have confirmed that no DfT approval is required at this stage.
M4	Have details of the reporting, assurance and approval process been provided (including gateways in scheme development / delivery)?	Requirements Fully Met	As per the TfL Assurance Framework, LCC will submit a quarterly monitoring report setting out progress on scheme preparation and delivery, which will include a regularly updated QRA. TfL has established a consultant panel with a minimum of two independent specialist consultants to undertake business case scrutiny, reporting to the officer with overall responsibility for business case scrutiny. The LEP Board Director for Strategic Transport will have an advisory role in supporting scheme assessment and approval arrangements. The TfL three stage approval process is set out - programme entry; conditional approval; full business case. The guidance setting out expectations of DfT in relation to retained schemes is set out including the requirements for signing off funding approval.
M5	Has evidence of scheme delivery been provided, to demonstrate that the delivery body has the capability and means to successfully implement the scheme?	Requirements Partially Met	Limited information is provided in regard to evidence of scheme delivery - it notes two projects and that lessons learnt from the delivery of the projects have been shared across the highways services to ensure widespread learning. These details should be included to demonstrate how they have been applied to this project.
M6	Has a Risk Management Strategy been provided, setting out how risks have been identified, their likely impact, appropriate mitigation, and how the risks will be managed (and by whom)?	Requirements Partially Met	Risks associated with delivery of the LEP investment programme are managed according to the overall monitoring responsibilities set out in the LEP's Accountability Framework. This requires risk registers to be produced and maintained for individual schemes once approved. The Steering Group has overall responsibility for governance and risk associated with the delivery of the PWD scheme. It is responsible for managing and overseeing the risk management strategy and where appropriate agreeing and undertaking actions to mitigate key risks. No detailed information of the risk management strategy is included, only that the Programme Manager is responsible for maintaining and updating the Risk Register and planning for mitigating any risks which do not require escalation. The governance structure clearly defines and sets out the arrangements for decision making and approvals including the responsibilities regarding risk on the PWD.
M7	Does the Risk Register cover all foreseeable risks with no obvious omissions? Are suitable mitigation measures proposed? Is the Risk Register updated on a regular basis?	Requirements Substantially Met	The PWD project risk register (Appendix M) is owned by the Project Manager and updated regularly. The risk register at this stage in the programme concentrates on risks to scheme cost and programme, however, the register also appears to include risks associated with the EWLRL and as a consequence may overestimate the quantified risks. The use of ECI providing a direct market link to costs and efficient construction methodology ensure the risk register is up to date and as accurate as possible in quantifying the risks. Each risk has been allocated a 'risk owner' depending on the risk type and its proximity (i.e. when it is likely to be realised/removed). The last update to the risk register was July 2017. It includes risks such as planning delay, political decisions, land acquisition issues, legislative delays etc.

Continued overleaf.

M8	Is an appropriate time-based plan in place for proactive communications and media enquiries?	Requirements Partially Met	TfL will publish the PWD major scheme business case on its website, as will LCC alongside publicising it through regular communication channels. The OBC and supporting documentation will be made available for inspection and independent assurance by TfL's independent Assurance Team. The communications strategy for the project is framed within the wider communications strategy for the City Deal. The City Deal Communications and Marketing Strategy is not included but the proposed overarching approach and activities have been identified by communications staff from LCC, PCC, SRBC and the HCA. They are intended to establish foundations for successful communication and have directly influenced the schedule of work outlined in the IDP (including PWD). The activities are reviewed annually throughout the City Deal lifetime. A specific PWD Communications Strategy is currently being developed and will be made available to in advance of the funding decision. The PWD has gone through a significant consultation process over the past 3 years to select the preferred route and support the planning application.
M9	Is there a clear intervention logic for how the outcomes will be achieved? (e.g. logic map)	Requirements Substantially Met	A logic map is included as part of the M&E Plan. It is not entirely clear how supporting objectives 4 and 8 fit into the logic map?
M10	Has a Monitoring & Evaluation Plan been provided that identifies proposed data / performance indicators to monitor against the scheme objectives?	Requirements Partially Met	An outline M&E Plan has been prepared and is included in Appendix U. It will be updated as part of the Full Business Case submission. The full M&E Plan will provide further detail on how the scheme inputs, outputs and outcomes are to be monitored. The outputs and outcomes will be monitored using specific metrics. The Growth Deal Monitoring and Evaluation Framework guidance sets out the requirement for monitoring and evaluation of metrics. These consist of Input Core Metrics: expenditure, funding breakdown, in-kind resources provided; Output Core Metrics: housing unit starts and completions; Project Specific Outputs and Outcomes: total length of newly built roads, total length of new cycleways and type of infrastructure delivered - these will all be measured until the scheme is completed. Journey time measurement and day-to-day travel will be monitored on an annual basis, along with accident and casualty rates. It is not clear how these metrics are related to all of the primary and supporting objectives.
M11	Are there clear proposals to undertake evaluation of the overall effectiveness of the scheme?	Requirements Partially Met	The M&E Plan sets out that an assessment of the value for money of the scheme will be required upon completion - this is undertaken by considering the evidence of the outputs and outcomes monitored. No further details are included.

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