



FULL BUSINESS CASE

Sect	ion A: Project Overview			
A.1	Please confirm completion of			
7 (6.1	Summary of Scheme Details template for PMO purpose	Yes		No
A.2	Date of Business Case submission (DD/MM/YYYY)	12 th June 2023		
A.3	Combined Authority Business Partner and contact details	Emily Williams PMO Portfolio Manager Emily.williams@westyorks-co	ca.gov.uk	
A.4	Type of organisation (Promoter)	Local Authority		
A.5	Lead contact postal address (Promoter)	The Borough Council of Cal 1st Floor, Princess Buildings Princess Street Halifax HX1 1TP		
A.6	Other delivery partners and roles			
	If your organisation is within the property complete following questions.	private sector or a not for p	rofit org	anisation, please
A.7	Main activities of organisation (max 50 words)			
A.8	Registration number of the organisation			
A.9	Size of the organisation	Does your business employ		
		Fewer than 50 employees		
		50 - 249 employees		
		250 employees or more		
A.10	Private sector only	Do you have trading history least 12 months? Please pro evidence as an appendix.		
		What is your company's turnover/balance sheet for the shee	he last	





	Is there any personal and/or working relationship with anyone within the applicant organisation and anyone within the Combined Authority that can raise a perception of conflict of interest? Please provide details.	
--	---	--

A.11	Main Funding Programme	West Yorkshire + Transport Fund
A.12	Sub Funding Programme (if applicable)	N/A
A.13	Estimated project cost at Activity 2	£53,350,000 (After 2022 inflation Review)
A.14	Estimated project cost at Activity 4 (Preferred Option)	£64,139,795
A.15	Total development costs allocated up to Activity 4	£6.329,000
A.16	Funding applied from the Combined Authority at Activity 4	£64,139,795
A.17	Other public sector funding amounts and sources	N/A
A.18	Private sector funding amounts and sources	N/A
A.19	Percentage split of funding for all sources	N/A

s any information in this form is onsidered exempt from release under Section 41 of the Freedom of onformation Act 2000? Please
nsidered exempt from releas der Section 41 of the Freedo





Section B: Declaration and Submission

Declaration 1: SRO named in Section A to complete the declaration below to confirm that the information provided in this FBC document has been reviewed by the named person and is to the best of their knowledge, correct at the time of writing. The named SRO also declares that they approve the content of the business case.

Name	Jess Thompson
Organisation	The Borough Council of Calderdale
Department	Major Projects
Position in the organisation	Corporate Lead for Major Projects
Signature	(Please insert digital signature)
Date of approval	

Declaration 2: Combined Authority's named Programme/Project Manager in Section A to complete the declaration below to confirm that the information provided in this OBC document has been reviewed by the named person and is to the best of their knowledge, correct at the time of writing. The declaration also confirms that named person has checked the complete OBC submission package and can confirm that all products used to develop the business case and/or referred to in the business case have been submitted in full.

Name	Emily Williams
Organisation	West Yorkshire Combined Authority
Department	Portfolio Management and Appraisal Team
Position in the organisation	PMA Portfolio Manager
Signature	(Please insert digital signature)
Date	





Section C: List of Products (please refer to the guidance document)

List of Appendices		
Appendix	Title	Submission confirmed?
D1	Scheme Description	
D2	Calderdale Electric Vehicle Policy DRAFT	
E1	Policy Identified at previous FBC Submission (June 2020)	
E2	Policy Identified for this FBC Submission	
E3	Scope and Demand for the scheme	
E4	Other Schemes	
E5	Statement of Community Involvement	
E6	Informal TRO Consultation Report	
E7	A629 Phase 2 EqIA Stage 1 Initial Screening Assessment	
E8	A629 Phase 2 EqIA Stage 2 of the EqIA	
E9	A629 Phase 2 (Halifax Town Centre) Bus Routing Options	
E10	Calderdale The Next Chapter: Communications Strategy Summary	
F1	Scheme Drawing	
F2	Forecasting Report	
F3	Economic Assessment Report (EAR)	
F4	Wider Economic Analysis	
F5	AMAT	





F6 Social and Distributional Impact Report F7 Place Based assessment F8 Economic cost development G1 Calderdale Procurement Strategy G2 Tender Assessment Summary Report G3 Risk Register for QCRA G4 A629 Phase 2 Halifax Town Centre Environmental Statement Vol II G5 Galliford Try Tender Response: Health, Safety and Environment G6 Analysis of Tenders Returned G7 Risk Management Strategy H1 Cost Breakdown Summary H2 Galliford Try Tender Response: A629 Phase 2 Activity Schedule H3 Analysis of Tenders Returned H4 Risk Register for QCRA H5 Cost Comparison Summary H6 Land Cost Schedule H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile I1 Project Initiation Document (PID)		,	
F8 Economic cost development G1 Calderdale Procurement Strategy G2 Tender Assessment Summary Report G3 Risk Register for QCRA G4 A629 Phase 2 Halifax Town Centre Environmental Statement Vol II G5 Galliford Try Tender Response: Health, Safety and Environment G6 Analysis of Tenders Returned G7 Risk Management Strategy H1 Cost Breakdown Summary H2 Galliford Try Tender Response: A629 Phase 2 Activity Schedule H3 Analysis of Tenders Returned H4 Risk Register for QCRA H5 Cost Comparison Summary H6 Land Cost Schedule H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	F6	Social and Distributional Impact Report	
G1 Calderdale Procurement Strategy G2 Tender Assessment Summary Report G3 Risk Register for QCRA G4 A629 Phase 2 Halifax Town Centre Environmental Statement Vol II G5 Galliford Try Tender Response: Health, Safety and Environment G6 Analysis of Tenders Returned G7 Risk Management Strategy H1 Cost Breakdown Summary H2 Galliford Try Tender Response: A629 Phase 2 Activity Schedule H3 Analysis of Tenders Returned H4 Risk Register for QCRA H5 Cost Comparison Summary H6 Land Cost Schedule H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	F7	Place Based assessment	
G2 Tender Assessment Summary Report G3 Risk Register for QCRA G4 A629 Phase 2 Halifax Town Centre Environmental Statement Vol II G5 Galliford Try Tender Response: Health, Safety and Environment G6 Analysis of Tenders Returned G7 Risk Management Strategy H1 Cost Breakdown Summary H2 Galliford Try Tender Response: A629 Phase 2 Activity Schedule H3 Analysis of Tenders Returned H4 Risk Register for QCRA H5 Cost Comparison Summary H6 Land Cost Schedule H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	F8	Economic cost development	
G3 Risk Register for QCRA G4 A629 Phase 2 Halifax Town Centre Environmental Statement Vol II G5 Galliford Try Tender Response: Health, Safety and Environment G6 Analysis of Tenders Returned G7 Risk Management Strategy H1 Cost Breakdown Summary H2 Galliford Try Tender Response: A629 Phase 2 Activity Schedule H3 Analysis of Tenders Returned H4 Risk Register for QCRA H5 Cost Comparison Summary H6 Land Cost Schedule H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	G1	Calderdale Procurement Strategy	
G4 A629 Phase 2 Halifax Town Centre Environmental Statement Vol II G5 Galliford Try Tender Response: Health, Safety and Environment G6 Analysis of Tenders Returned G7 Risk Management Strategy H1 Cost Breakdown Summary H2 Galliford Try Tender Response: A629 Phase 2 Activity Schedule H3 Analysis of Tenders Returned H4 Risk Register for QCRA H5 Cost Comparison Summary H6 Land Cost Schedule H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	G2	Tender Assessment Summary Report	
G4 Environmental Statement Vol II G5 Galliford Try Tender Response: Health, Safety and Environment G6 Analysis of Tenders Returned G7 Risk Management Strategy H1 Cost Breakdown Summary H2 Galliford Try Tender Response: A629 Phase 2 Activity Schedule H3 Analysis of Tenders Returned H4 Risk Register for QCRA H5 Cost Comparison Summary H6 Land Cost Schedule H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	G3	Risk Register for QCRA	
and Environment G6 Analysis of Tenders Returned G7 Risk Management Strategy H1 Cost Breakdown Summary H2 Galliford Try Tender Response: A629 Phase 2 Activity Schedule H3 Analysis of Tenders Returned H4 Risk Register for QCRA H5 Cost Comparison Summary H6 Land Cost Schedule H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	G4		
G7 Risk Management Strategy H1 Cost Breakdown Summary H2 Galliford Try Tender Response: A629 Phase 2 Activity Schedule H3 Analysis of Tenders Returned H4 Risk Register for QCRA H5 Cost Comparison Summary H6 Land Cost Schedule H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	G5		
H1 Cost Breakdown Summary H2 Galliford Try Tender Response: A629 Phase 2 Activity Schedule H3 Analysis of Tenders Returned H4 Risk Register for QCRA H5 Cost Comparison Summary H6 Land Cost Schedule H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	G6	Analysis of Tenders Returned	
H2 Galliford Try Tender Response: A629 Phase 2 Activity Schedule H3 Analysis of Tenders Returned H4 Risk Register for QCRA H5 Cost Comparison Summary H6 Land Cost Schedule H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	G 7	Risk Management Strategy	
H3 Analysis of Tenders Returned H4 Risk Register for QCRA H5 Cost Comparison Summary H6 Land Cost Schedule H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	H1	Cost Breakdown Summary	
H4 Risk Register for QCRA H5 Cost Comparison Summary H6 Land Cost Schedule H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	H2		
H5 Cost Comparison Summary H6 Land Cost Schedule H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	Н3	Analysis of Tenders Returned	
H6 Land Cost Schedule H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	H4	Risk Register for QCRA	
H7 Land Acquisition Position H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	H5	Cost Comparison Summary	
H8 QCRA Report H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	H6	Land Cost Schedule	
H9 Funding Strategy Summary H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	H7	Land Acquisition Position	
H10 Operation Maintenance Summary H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	Н8	QCRA Report	
H11 Maintenance Cost Breakdown H12 Development Cost Breakdown H13 Funding and Spend Profile	Н9	Funding Strategy Summary	
H12 Development Cost Breakdown H13 Funding and Spend Profile	H10	Operation Maintenance Summary	
H13 Funding and Spend Profile	H11	Maintenance Cost Breakdown	
	H12	Development Cost Breakdown	
I1 Project Initiation Document (PID)	H13	Funding and Spend Profile	
	I 1	Project Initiation Document (PID)	





12	Land Acquisition Position
13	Informal TRO Consultation Report
14	Phase 2 Programme
15	Galliford Try Tender Response: Delivery, Methodology and Programme
16	Risk Register for QCRA
17	Galliford Try Tender Response: Proposed Staff
18	Monitoring and Evaluation Plan June 2023
19	A629 Phase 2 Monitoring and Evaluation Cost Overview
I10	Risk Management Strategy
l11	Project Management Team

Glossary of Terms	
Acronym	Full Title
AMAT	Active Mode Appraisal Toolkit
ANPR	Automatic Number Plate Recognition
AQMA	Air Quality Management Areas
ASR	Appraisal Specification Report
ASST	Appraisal Specification Summary Table
ATC	Automatic Traffic Count
всс	Borough of Calderdale Council
BCR	Benefit to Cost Ratio
BID	Business Improvement District
BRP	Benefits Realisation Plan
CEMP	Construction Environmental Management Plan





CIP	Corridor Improvement Programme
СРО	Compulsory Purchase Order
CSF	Critical Success Factors
СТС	Classified Turning Count
DI	Distributional Impact
DLUHC	Department for Levelling Up, Housing and Communities
DMRB	Design Manual for Roads and Bridges
EIA	Environmental Impact Analysis
EQIA	Equality Impact Assessment
FBC	Final Business Case
FTE	Full Time Equivalent
HSG	Halifax (Railway) Station Gateway
HGV	Heavy Goods Vehicle
HTCDP	Halifax Town Centre Delivery Plan
ITT	Instructions To Tendering
LCR	Leeds City Region
LCR LSTF	Leeds City Region Local Sustainable Transport Fund
LSTF	Local Sustainable Transport Fund
LSTF NTEM	Local Sustainable Transport Fund National Trip End Model
LSTF NTEM OBC	Local Sustainable Transport Fund National Trip End Model Outline Business Case
LSTF NTEM OBC PWF	Local Sustainable Transport Fund National Trip End Model Outline Business Case Preferred Way Foreward
LSTF NTEM OBC PWF P&D	Local Sustainable Transport Fund National Trip End Model Outline Business Case Preferred Way Foreward Pay and Display
LSTF NTEM OBC PWF P&D QRA	Local Sustainable Transport Fund National Trip End Model Outline Business Case Preferred Way Foreward Pay and Display Quantified Risk Allowance
LSTF NTEM OBC PWF P&D QRA RSI	Local Sustainable Transport Fund National Trip End Model Outline Business Case Preferred Way Foreward Pay and Display Quantified Risk Allowance Roadside interviews





TAG	Transport Analysis Guidance
TCF	Transforming Cities Fund
TRO	Traffic Regulation Order
VAT	Value Added Tax
VDM	Variable Demand Model
WYCA	West Yorkshire Combined Authority
WYKRN	West Yorkshire Key Route Network





Section D: Executive Summary

This section should be suitable for publishing on applicant's and the Combined Authority's websites.

Project description (max 500 words)

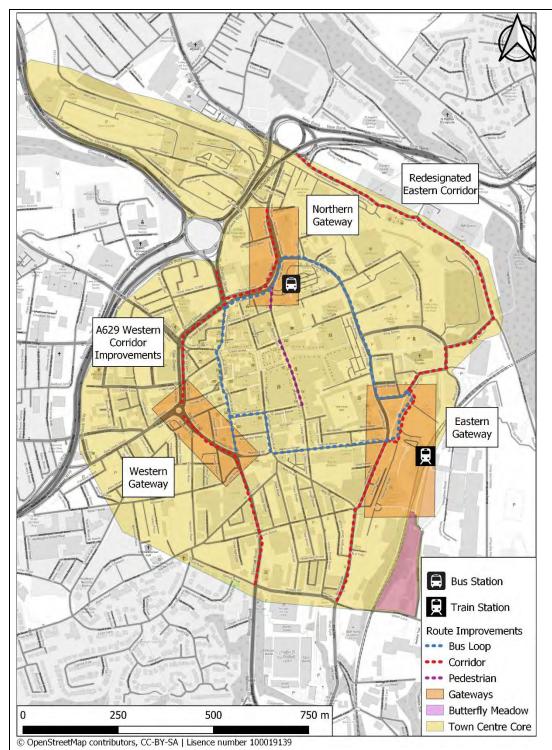
The Halifax town centre scheme is the second phase of the A629 corridor programme linking Halifax and Huddersfield. The scheme will improve pedestrian and cycle access into and around the town centre area by addressing severance, re-routing traffic (and capitalising on placemaking opportunities through pedestrianisation and the creation of public spaces). A revised bus network around the town centre will be implemented providing greater coverage and improved connections between the railway and bus stations.

The scheme is described in detail in appendix D1, key features of the proposals are shown in Figure 1 and include:

- Gateway entry points to improve the sense of arrival into Halifax town centre from the North, (South) East and (South) West, in particular for pedestrians and cyclists;
- Public realm improvements including the pedestrianisation of Market Street and part of Northgate, and public space at the Eastern Gateway;
- Provision of electric vehicle charging points;
- Creation of an anti-clockwise 'bus loop', maximising bus penetration to the town centre core, as well as boosting access to development sites to the East (e.g. Cripplegate and the Library);
- Enhanced bus-rail interchange opportunities at the Eastern Gateway;
- Re-designation of the eastern corridor to improve the efficiency and attractiveness of the route, thereby reducing through traffic in Halifax town centre and re-balancing traffic movements on the eastern and western corridors;
- Modified A629 western corridor to improve the efficiency and attractiveness of the route, reducing through traffic in Halifax town centre.







N.B the Butterfly Meadow is no longer part of the A629 Phase 2 – Halifax Town Centre project Figure 1 A629 Phase 2 Scheme Summary

Once completed, the scheme will:

- Encourage development and inward investment within the town;
- Provide enhanced pedestrian crossing facilities and reduce through traffic levels on Square Road/Winding Road and provide better connections between the town centre core and the wider area;





- Deliver enhanced cycling facilities in central Halifax, with designated cycle crossings, on highway non-segregated and segregated cycle facilities and cycle parking;
- Improve the quality of arrival within Halifax, through the creation of gateways into the town;
- Enhance the pedestrian environment through improved public spaces;
- Re-distribute disabled (blue badge) parking provision across the town centre with a net increase of two bays;
- Improve bus-rail interchange, through the creation of the Eastern Gateway and introduction of new bus stops;
- Improve non-motorised access to the railway station, key employment and leisure sites;
- Provide greater bus coverage around the town centre;
- Provide smart signalling throughout the town;
- Improve connectivity between the Bus Station and the Railway Station, through the revised town centre bus network and public realm enhancements.
- Help address the climate emergency on a local scale for Halifax by encouraging residents to choose lower carbon travel options through increased quality and facilities for active mode users, improvements to the bus network, infrastructure to implement electric vehicle (EV) charging points in the future and decreased car park provision.

Project's SMART objectives (maximum of five).

Five SMART objectives have been identified for the scheme as outlined below, these have been condensed from the original eight objectives included in the previous submission. These were originally developed to encompass the Halifax Town Centre Delivery Plan and the wider A629 objectives. Although the measurable targets of the objectives remain largely unchanged the reasoning behind the choice of objectives is subtly expanded.

The objective relating to town centre prosperity and inclusive economic growth is of increased importance in a post-pandemic era due to the declining importance of retail and reduced town centre working post Covid-19 pandemic. It is crucial that Halifax remains competitive in attracting and retaining businesses, moreover, increasing the attractiveness of the public realm to pedestrians will support the increasing role of the leisure and tourism sector in the Halifax town centre economy.

The role of the scheme in encouraging people to move away from private vehicles as a mode of transport is more important than ever. The Covid-19 pandemic has had a lasting impact on bus patronage with bus passenger numbers remaining stubbornly below their pre-pandemic levels, the A629 Phase 2 scheme will play an important role in increasing the attractiveness of the mode.

Encouraging sustainable and active mode travel is also of an increased importance from an environmental point of view. BCC declared a climate emergency in January 2019 and released the draft Calderdale climate action plan in 2022 which highlights the importance of improving transport mode choices in achieving its net zero goal.

Improvements in sustainable and active modes are also beneficial in relation to equality, diversity and inclusion (EDI) themes. Several groups of persons with protected characteristics, including children and older people and those from ethnic minority groups, as well as low income earners are more likely to be dependent on public transport and active modes as their main mode of transport.

The objective around cyclist numbers has been reduced, this was in light of a review of the forecasts at the last decision point which concluded that 300% was over ambitious, a revised target of 50% was therefore agreed.

The bus patronage target has also been reduced and now targets mode share rather than patronage directly this is to ensure that the target remains realistic and achievable against a backdrop of passenger numbers remaining stubbornly down post covid-19 pandemic, resulting in declining numbers of bus services offered by providers.





The objective around town centre rerouting has been changed to target a reduction in traffic on the western corridor directly, previously the objective targeted the increase in traffic on the eastern corridor which is expected to occur as a result of the downgrading of the western corridor. Targeting traffic reduction improves the consistency of this objective with the other objectives around sustainable and active modes.

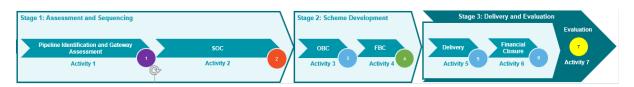
Objective No.	Objective Overview	Objective Goal	Objective Targets
1	Town Centre prosperity	Inclusive economic growth More people in Halifax town centre Attracting and retaining business investment in Halifax Aid unlocking of development sites Enlarged town centre core Improved sense of place and pedestrian environment	Increase footfall by 20% five years after scheme delivery 5% increase in the percentage of commercial units occupied five years after scheme delivery.
2	Increased active and sustainable travel	Inclusive growth in line with equality, diversity, and inclusion (EDI) themes Improved public health Modal shift away from private car Reduced congestion	Increase cyclists crossing Halifax town centre by 50% after completion of the A629 corridor programme. Increase bus mode share in Halifax town centre by 5% five years after scheme delivery
3	Environment	Contribution to climate emergency Improved public health	Air quality levels at monitoring and evaluation sites DT2P2, DT3P2, DP10P2, DP11P2 and DT12P2 will meet the relevant standards by 2029. Noise levels (LA10, 18hr values) at monitoring and evaluation sites ML1, ML3, ML5 & ML6 will not exceed 68dB by 2029.
4	Town Centre Highway routing	Reducing town centre severance around western corridor Improved active mode environment Reduced congestion Improved air quality	15% reduction in traffic on the western corridor five years after scheme delivery.
5	Safety	Reduced conflict in traffic movements Improved travel safety	42% reduction in casualties, five years after scheme delivery.





Improved public health

D.3 Project timescales (MM/YYYY)



Key Milestones	Dates as stated in OBC	Current Estimate at FBC	Reason for change
Strategic Assessment (Decision Point 1)			
Strategic Outline Case approval (Decision Point 2)			
Outline Business Case approval (Decision Point 3)	2016		
Full Business Case approval (Decision Point 4)		08/2023	Original FBC wasn't passed, since then design standards have changed so scheme needed further development, this was completed in the knowledge of WYCA
Approval to Proceed		08/2023	
Start of Delivery (on site)		11/2023	
Completion of Delivery/Outputs (Decision Point 5)		11/2027	
Financial Closure (Decision Point 6)		04/2030	
Project Evaluation (Activity 7)		10/2032	

D.4 Key activities undertaken by the project after Decision Point 3. Please separately identify which of these were funded by the Combined Authority and provide funding and cost breakdown. (max 500 words)

Key activities since the 2020 FBC submission can be categorised into the following key areas and are described below;

- Detailed design development
- Land assembly
- Statutory and regulatory approvals
- TRO consultation





- Tender exercise
- FBC Re-submission

These activities have all been funded by the Combined Authority, cost breakdown is provided in Appendix H12.

Detailed design development

A number of detailed design changes were required following a LTN1/20 design review.

At the request of BCC, staggered pedestrian crossings were added to the design at the Skircoat Road junction with Prescott Street, and Bull Green junction with Cow Green, with the aim of improving pedestrian access and managing delays to general traffic, in particular bus service which serve these corridors.

The pause and pipelining of the Halifax Station Gateway scheme in late 2022 meant a redesign of the Horton Street junction with Church Street was necessary with the junction being changed from a 3 arm to 4 arm junction. The pipelining of the Station Gateway scheme also resulted in the Butterfly Meadows element of this scheme being dropped from the scope of the A629 Phase 2 project.

These design changes impact on the details of the scheme, they do not materially affect the overall scheme scope or outputs.

Land Assembly

BCC have continued negotiations with land owners and are currently in the process of pursuing a CPO. Land negotiations are taking particular focus on the Wester Corridor which is the first phase of delivery.

Statutory and regulatory approvals

The following planning conditions submissions have been made:

- PC02 Written scheme of archaeological investigation
- PC07 Eastern Gateway service management plan
- PC11 Provide detailed drainage information
- PC12 Construction Method Statement review
- PC17 Construction Environment Management Plan
- PC18 Invasive Species Management Plan

All conditions were discharged in June 2023 which enabled the project to meet the planning deadline.

In addition, Union Street planning application will be submitted for the site compound with a decision expected prior to award of the construction contract..

TRO Consultation

In February 2023 an informal public consultation exercise was conducted to support the necessary TRO.

Tender Exercise

BCC have conducted a tender exercise for the procurement of a principal contractor. This exercise was in the form of a mini competition undertaken via the YORCivils2 framework. At the time of submission of this FBC a preferred contractor has been selected, however neither they, nor the unsuccessful bidder, has been notified of their status.

FBC Re-Submission

In August 2022 discussions took place with the West Yorkshire Combined Authority Portfolio Management Appraisal (PMA) Team regarding the most appropriate route for ongoing approvals. It was agreed that BCC would re-submit a Full Business Case and include tendered costs which would demonstrate ongoing viability.





Conditions set at Decision Point 3 and evidence of discharge. Provide evidence as an appendix. (max 500 words)

Condition	Discharged? (Yes/No)	CA Programme/Project Manager Comment	Reference for Evidence
Address key issues around VfM raised in economic case appraisal (e.g. removal of Heritage benefit from Adjusted BCR and justifying or revising active mode growth).	Yes, subject to review of this FBC submission	VfM has been calculated based on revised active mode growth assumptions and excluding heritage benefits	Economic Appraisal Report See Appendix F3
Provide a revised economic appraisal using updated CSTM suite if it becomes available.	Yes, subject to review of this FBC submission	Modelling for the economic appraisal has used the new Calderdale Kirklees Strategic Transport Model (CKSTM)	Economic Appraisal Report See Appendix F3
Present a detailed procurement report setting out the costs and commercial arrangement behind the operation of delivering 2 x EV Charge Points (which should detail the cost of charge point infrastructure, operational costs / maintenance arrangements, the user charging policy, the income/revenue share arrangements, and the Enforcement mechanism (user penalty))	Yes, subject to review of this FBC submission	Electricity infrastructure for the EV chargers at Bull Green car park will be input as part of this scheme and are included in delivery costs. This will allow at least 2 x 43KW chargers to be added at a later date. The later procurement of EV charging points will be in accordance with BCC's draft Electric Vehicle Policy and forthcoming Electric Vehicle Infrastructure Deployment Strategy.	BCC Draft Electric Vehicle Policy, see Appendix D2.
Present a detailed land acquisition report setting out the evidence base behind the sale values and transfer of ownership	Yes, subject to review of this FBC submission	Negotiations with land owners are continuing and Compulsory Purchase Orders are being pursued.	An update on the progress towards acquiring each parcel of land is contained in appendix H7.

Strategic Case – Summary (max 300 words)

The A629 Phase 2 is of strategic importance in facilitating the socio-economic development of Halifax and further strengthening its position as the epicentre of economic and social activity within Calderdale. The scheme provides an excellent opportunity to promote inclusive growth by transforming the centre of Halifax; increasing its attractiveness for business investment, reducing severance, capitalising on its heritage to enhance its leisure/tourism offer, and shifting focus towards sustainable and active travel thus resulting in health and environmental benefits.

The strategic justification for the scheme remains valid in light of local, regional and national objectives and priorities. The need for improved connectivity in urban areas and the corresponding requirement for suitable infrastructure remains real and is arguably more urgent in a post pandemic





era where it is crucial to stave off economic decline and promote inclusive growth by investing in sustainable transport to stimulate greater economic activity especially in town centres.

The scheme is the linchpin for the success of other projects including A629 Phase 1a/1b, Halifax Bus Station and Future High Streets Fund schemes.

Engagement with local communities, influence groups and stakeholders has been undertaken by BCC to inform the development of the scheme. Engagement took place from the early design stage of the project in 2016 through to submission of planning applications in February 2020, most recently an informal consultation was undertaken as part of the TRO process. Feedback from respondents was overwhelmingly positive with respondents focusing on air quality, improvements for cyclists and improvements for Halifax town centre as key reasons why they support the project.

An Equality Impact Assessment has been completed for the preferred option making use of evidence including a demographic profile data, a literature review and stakeholder engagement findings. The completed scheme is not expected to have any adverse effects on persons with protected characteristics.

7 Economic Case – Summary (max 500 words)

The Economic Case has been developed based on the changes to the PWF proposals and changes to the tools and methodologies as agreed with WYCA and included in the Appraisal Specification Report.

These, most notably, include the use of the newly available Calderdale and Kirklees Strategic Transport Model (CKSTM) and changes to appraisal elements included, particularly removed of a previous culture / heritage element. An expanded Wider Impacts Assessment, based on DLUHC methodologies and guidance was also undertaken.

A fairly standard approach to economic appraisal has been taken with most economic and social impacts considered following the relevant TAG guidance, including an extensive appraisal of active mode impacts.

Scheme costs have been processed using DfT / Green Book guidance, and, appropriately excluding most "sunk costs". The QRA value at P50 has been considered and was found to be close to the initial 20% value of optimism bias recommended for this sort of scheme at this stage in TAG guidance.

In terms of the environmental appraisal, detailed noise and air quality assessments have been undertaken alongside WYCAs Carbon Impact Assessment Tool and high level appraisals of other environmental factors.

The high level appraisal results are shown in the table below and demonstrate that the BCR is higher, but broadly consistent with that calculated in the 2020 submission. Active mode health benefits, particularly accruing to pedestrians make up a large proportion of the benefits. Highway users see a disbenefit overall due to reduced highway speeds and accessibility, but this is partially offset by improved PT conditions. There is also an accident saving, due primarily to reduced highway flows.

The adjusted BCR also includes an assessment of land-value uplift due to the increased footfall and improved attractiveness of the town centre driven by the proposed scheme. This paints a picture of a town centre benefitting from investment to improve the attractiveness and usability of the environment for non-highway users, consequently, creating a more attractive environment for businesses to invest and contribute to the regeneration of the town centre and surrounding area.

Scenario	PVB (£1,000s)	PVC (£1,000s)	BCR
2020 Initial	45339	35162	1.29
2020 Adjusted	72446	35162	2.06
2023 Initial	42387	28943	1.46
2023 Adjusted	65651	28943	2.27





The initial BCR fits into the "low" value for money category (BCR between 1 and 1.5) with the land value uplifts of the adjusted BCR improving this to the "high" value for money category (BCR between 2 and 4).

Given the current level of BCR, significant cost increases would be necessary to move the scheme into a lower VfM category, in both the initial and adjusted BCR situations.

The value for money position of the scheme can be considered to be relatively strong. Whilst the initial BCR fall in the low value for money category analysis shows that this is a robust position. The further monetised elements included in the adjusted BCR, alongside further elements not appraised in detail (i.e. further regeneration impacts) demonstrate a scheme that offers good value for money.

8 Summary of the Shortlist of Options (max 300 words).

Option	Description	2020 FBC Cost OBC Cost (£)	FBC Cost (£)	Value for Money Position
Do Nothing/Do Minimum*	N/A	N/A	N/A	N/A
Less Ambitious Preferred Way Forward**	N/A	N/A	N/A	N/A
Preferred Option Preferred Way Forward	Scheme as described in section D.1	£52.2 million	£64.1 million	Low(Initial BCR) High (Adjusted BCR)
More Ambitious Preferred Way Forward	N/A	N/A	N/A	N/A

^{*}Delete as appropriate. ** Can be Do Minimum, please delete as appropriate.

Financial Case – Summary (max 500 words)

The total capital cost to deliver the A629 Phase 2 scheme is broken down below;

_ltem	Cost	
Project Development	£	5,754,375
Land Assembly	£	2,122,865
Delivery	£	42,277,896
Benefits Realisation Reporting	£	550,765
Risk	£	9,373,164
Inflation	£	4,060,700
Total	£	64,139,765

Scheme delivery costs have been calculated using construction costs provided by the preferred contractor following a tender exercise. Robustness of delivery costs has been ensured through the provision of detailed works information, specification and activity schedule within the construction tender pack. These have been subject to an independent cost assurance review exercise.





The risk cost included is the p50 total mean risk calculated following a Quantitative Cost Risk Analysis (QCRA) undertaken by independent risk specialists with input from BCC.

Negotiations surrounding acquisition of the necessary land are at an advanced stage, with a particular focus on the Western corridor as the first phase of development, and Compulsory Purchase Orders are being pursued where required.

It is intended that the scheme will be funded entirely by the West Yorkshire-plus Transport Fund, however at present there is a funding gap as recent inflationary pressures, particularly within the construction industry, have resulted in a total cost which exceeds the £51.386 million originally applied for. This funding gap has been identified to the WY+TF programme, a subsequent PAT Information report will be submitted to PMA to sit alongside this FBC, subsequent reports will expand and explore funding opportunities following direction from senior officers within BCC and WYCA.

Maintenance costs will be covered by the existing highway maintenance budgets. Lifetime maintenance of the proposed scheme has been compared with existing maintenance costs and a modest saving of circa £4M is expected over a 60yr period.

BCC have determined that there are no Subsidy Control considerations by obtaining external legal advice via Geldards LLP.

Commercial Case – Summary (max 500 words)

Calderdale Council is in the advanced stages of procuring a main contractor for the construction of the A629 Phase 2 scheme and has now selected a preferred contractor. Procurement is being undertaken following a mini competition via the YORCivils Major Works framework. The contractual arrangements with the preferred contractor will utilise NEC3 Option C – Target Cost with Activity Schedule, this was the preferred arrangement as the option allows financial risks to be shared thus encouraging collaborative working between client and contractor. BCC have engaged thoroughly with their internal Legal Department to undertake the drafting and contractual review of the construction contracts. The contract documents were written to demonstrate immediate availability of works and a comprehensive ITT was provided specifically detailing all phasing, restrictions and constraints within the Works Information. Tenders were assessed on the basis of price (30%) and quality (70%). Bidders were asked to demonstrate quality in terms of:

- 1. Health, Safety and the Environment
- 2. Competence in delivering similar type and scale of projects
- 3. Delivery methodology and programme for the overall project and ability to meet the requirements
- 4. Proposed Staff/Delivery team
- 5. Customer and stakeholder communication
- 6. Social Value.

To administer the Phase 2 Contract on site, the Council will assemble a supervisory team including a full time NEC3 accredited Project Manager, Assistant Project Manager, NEC3 accredited Site Supervisor and Quantity Surveyor. In addition, a part time programme/planning resource will be required. Ongoing design support throughout construction will be provided by AECOM, procured via the Scape Framework.

The Council recognises the benefits of delivery of Social Value via its procurement to ensure that all Council spend can better contribute to economic, social and environmental improvements within the borough. Demonstrating a commitment to social value was key to the procurement process, with the social value question having a 15% weighting in the overall quality score. The preferred contractor has committed to abide by Social Value Act 2012 - PPN 06/20, the United Nations Sustainability Goals, the National TOMs and the Council's Inclusive Economy Strategy.

The Health and Safety Executives Construction Design and Management Regulations (CDM) will be adhered to and implemented throughout the delivery of the project. A Construction





Environmental Management Plan (CEMP) was prepared as part of the application for planning consent for the A629 Phase 2 scheme and will be further developed by the preferred contractor. As part of their tender response the preferred contractor has indicated they will undertake all practicable measures possible to ensure safety and wellbeing of their staff, supply chain partners and the general public. Their health and safety culture is underpinned by ISO:45001 H&S Management System and behavioural safety programme, Challenging Beliefs, Affecting Behaviours (CBAB), in line with Construction 2025 vision. Procedures and systematic controls for managing health and safety risks and establishing consistent standards across operations will be managed through the Business Management System (BMS).

Management Case – Summary (max 500 words)

The A629 Phase 2 scheme will be delivered in three phases over a four year period, this approach has been taken to minimise disruption within the town centre and allow for the necessary approvals and land acquisition to be undertaken. Key project activity and milestones are included in the table below.

Key Milestone	Start	Finish
FBC Submission	12/06/2023	12/06/2023
PAT	26/07/2023	26/07/2023
Approval to Proceed		
Western Corridor	01/08/2023	13/09/2023
Eastern Corridor	01/01/2025	12/02/2025
Central Corridor	01/07/2026	12/08/2026
Tender Issue	31/10/2022	24/02/2023
Tender Award	03/10/2023	03/10/2023
Planning Application Submission and Approval Planning Condition	01/02/2020	01/06/2020
Submissions	04/07/2022	20/09/2024
TRO	04/07/2022	20/09/2024
CPO and Land Acquisition	04/07/2022	20/09/2024
Delivery	06/11/2023	04/11/2027
Western Corridor	06/11/2023	17/03/2025
Eastern Corridor	18/03/2025	02/09/2026
Central Corridor	03/09/2026	04/11/2027

Planning approval for the scheme was obtained on 18 June 2020 (application 20/00217/FUL). Further planning conditions submissions have since been made in relation to that application and were discharged in June 2023:

- 1. PC02 Written scheme of archaeological investigation
- 2. PC07 Eastern Gateway service management plan
- 3. PC11 Provide detailed drainage information
- 4. PC12 Construction Method Statement review
- 5. PC17 Construction Environment Management Plan
- 6. PC18 Invasive Species Management Plan

Negotiations surrounding acquisition of the necessary land are at an advanced stage, with a particular focus on the Western corridor as the first phase of development, and Compulsory Purchase Orders are being pursued where required.





The project management will be led by BCC. The Council's approach to project management is based on a clear structure with lines of accountability running throughout the delivery team, connecting each part of the team to senior leadership within the Council, enabling monitoring of progress, accountability, and the ability to escalate issues where required.

The Major Projects team at BCC are leading on A629 Phase2 to ensure that this scheme's development and delivery is closely aligned with the wider WY+TF portfolio, and Calderdale's growth ambitions. PRINCE2 or APM are BCC's preferred management tools and all project managers are appropriately trained to use it, other team members are also working towards a relevant qualification. The project governance structure aligns with the council's Major Projects Governance Framework to facilitate clear and consistent communication between stakeholders, resulting in a more efficient decision-making process.





Section E: Strategic Dimension

E.1

Please confirm that the Strategic Case continues to be aligned with local, regional, and national priorities. If there are any change from OBC, then please describe below what has changed and justify why changing the strategic case at Activity 4 is necessary. Please provide any supporting evidence as appendix and refer to it here. (max 1,000 words).

The strategic justification for the scheme remains valid in light of local, regional and national objectives and priorities. The need for improved connectivity in urban areas to stimulate economic activity is more relevant than ever in the post-pandemic era as reflected in the vision for the A629 illustrated below.



Source: WY+TF (2020): A629 Phase 2: Compulsory Order 2020 Statement of Reasons

The policy priorities identified at the previous submission (Appendix E2) remain relevant. Other policies have since been formulated with the relevance to the scheme set out below. Appendix E1, provides more detailed discussions of how this scheme supports and aligns.

National:

Bus Back Better 2021 (National Bus Strategy for England)





Buses are at the centre of the public transport network, making 4.07 billion journeys in England in 2019/20¹. The strategy considers the Government's commitment to support bus services as a key mechanism for managing economic recovery post pandemic. The A629 scheme will improve routing for buses within the town centre, providing more convenient bus stops and improved connectivity with rail services to drive long term modal shift.

Gear Change: A bold vision for cycling and walking (Cycling and walking plan for England) 2020

Increasing cycling and walking are identified as helping tackle societal challenges like poor air quality, combatting climate change, improving health and wellbeing, addressing inequalities and tackling congestion.

A629 Phase 2 will provide enhanced LTN 1/20 compliant active mode provision and improved public realm to create spaces better conducive to living and working as well as, healthier and more sustainable communities.

Regional

Strategic Economic Framework (SEF)

The SEF provides the context for investment and decision making within the WYCA region. The document ensures alignment of all WYCA policies with the vision for West Yorkshire as below:

"To be recognised globally as a place with a strong, successful economy where everyone can build great businesses, careers and lives supported by a superb environment and world-class infrastructure"

The SEF is underpinned by the following five priorities:

- Boosting productivity
- Enabling inclusive growth
- Tackling the climate emergency
- Delivering 21st century transport
- Securing money and powers

Phase 2 aligns with the first four of these as outlined in appendix E2.

Mayoral pledges

The West Yorkshire Mayor set out 10 <u>pledges</u> upon appointment to office. Of these, the following are supported by the scheme.

- Prioritise the safety for women and girls in the region.
- Prioritise skills and training to ensure everyone in West Yorkshire has the skills they need to secure work.
- Support local businesses and be a champion for the regional economy.
- Tackle the climate emergency and protect the environment.

Strategic Transport Plan for the North of England (2019)

Transport for the North's (TfN) vision is to promote "a thriving North of England, where world class transport supports sustainable economic growth, excellent quality of life and improved opportunities for all". Strategic transport investment in key corridors is promoted as a way of spearheading a £100 billion growth in GVA and creation of 850,000 jobs by 2050. 7 strategic corridors are identified for investment. The A629 fits within corridor B, and through improved connectivity will help facilitate new economic, training and leisure opportunities.

West Yorkshire Bus service improvement plan (WYCA 2022)

¹ DfT (2020) Local bus passenger journeys, Table BUS0103: Passenger journeys on local bus services by metropolitan area status and country: Great Britain, 2019/20. Available online at: https://www.gov.uk/government/statistics/annual-bus-statistics-year-endingmarch-2020





WYCA, in conjunction with bus operators developed a Bus Service Improvement Plan (BSIP), as part of the Bus Back Better strategy. Key initiatives include an enhanced and more cohesive bus network and bus priority measures as promoted by the A629 scheme. The scheme supports this through the creation of the bus loop providing improved connectivity and priority measure such as the Church Street bus gate.

Local

Calderdale Visitor Economy Strategy 2019-2024

The importance of the visitor economy is understood within Calderdale and the wider region. Within Calderdale tourism is worth almost £350m per year (almost £100m more than 2010), supporting 5,000 FTEs in the borough². The strategy aims to market the borough as the 'must experience' visitor destination, providing a diverse and contemporary offering in leisure, culture and shopping. The redevelopment of the Piece Hall has started this process. The improvements contained in the A629 proposals will enhance connectivity to key cultural attractions like Dean Clough, Eureka! and help open up other parts of the town centre to locals and visitors.

The Economic and Reputational Impact of the Regeneration of the Piece Hall (2019)

Since its reopening in 2017 the Piece Hall transformation has boosted tourism in the area by £26m with over 5million visitors. The A629 will connect Halifax Rail Station to the centre through a new town gateway and reroute traffic away from the town centre. Further enhancing the environment and encouraging visitors.

Future highstreets fund business case

BCC's successfully bid for £11m from the Government's Future High Streets Fund, which aims to renew and reshape town centres in a way that drives growth, improves experience, and ensures future sustainability. The phase 2 scheme complements this by improving access and creating welcoming spaces.

Wellbeing Strategy 2022 - 2027

The strategy sets out how key stakeholders can work together to make Calderdale a safer, healthier and more fulfilling place to live. The A629 scheme will improve mental and physical wellbeing, through improved public spaces and encouraging more active travel.

Calderdale Draft Climate Action Plan 2022-25

In 2019 BCC declared a climate emergency and set the target of achieving Net Zero by 2038. Tackling transport emissions is crucial with 41% of Calderdale's direct CO2 coming from transport. Improving transport choices, so you can get where you need to go without needing a car, is crucial. The scheme contributes by improving attractiveness of sustainable and active modes.

Summary

The A629 and its objectives align with relevant policies at the national, regional and local level. The key themes of connectivity, sustainability, and using transport improvements as a way of improving the tourism and leisure offer and therefore stimulate economic growth are consistent with the scheme. Marketing Halifax as the prime tourist and cultural destination of the North is likely to attract domestic and international visitors, forming a sound basis for further investment and economic growth in a post pandemic recovery.

E.2

Please discuss scope and justify demand for the scheme. If the scheme has completed an OBC, please state any new evidence that has become available after Decision Point 3 (OBC) on likely demand for the scheme. This should include

² https://www.halifaxcourier.co.uk/news/politics/council/tourism-important-area-growth-next-five-years-calderdale-981372





changes in market, development, and infrastructure at national, regional and scheme impact area level (max 500 words).

The scheme will transform the centre of Halifax promoting inclusive growth by increasing its attractiveness for business investment, reducing severance, capitalising on its heritage to enhance its leisure/tourism offer, and shifting focus towards sustainable/ active travel resulting in health and environmental benefits. Project scope and demand are discussed in more detail in appendix E3. The scheme is the linchpin for the success of a range of current projects as discussed in appendix E4.

Increasing attractiveness for Business Investment

The Regeneration Impact Assessment Report (GVA Grimley Ltd) highlights unprofitability issues faced by developers, an issue likely worsened by changing trends since the Covid-19 pandemic. The report found public realm improvements can impact on commercial and retail rents by up to 24% and 22%. A Living Streets study (2018) found public realm improvements can boost commercial trading by up to 30%, with footfall increasing by a third. Key employers in Halifax raise concerns that congestion and perceived remoteness negatively impact efficiency and connectivity.

By addressing connectivity issues and poor spatial form, the scheme will assist in bringing developments forward and attracting/retaining businesses and visitors.

The role of the A629 Phase 2 in aiding town centre growth is even more critical given the pausing of the Station Gateway scheme.

Improved connectivity and reduced severance to foster a sense of place

Severance is a major issue with the peripheral town centre areas perceived as being disassociated from the core as illustrated in Figure 2. The scheme will reduce severance caused by the highway network and incorporate the peripheral neighbourhoods into core, through bus and active travel interventions.

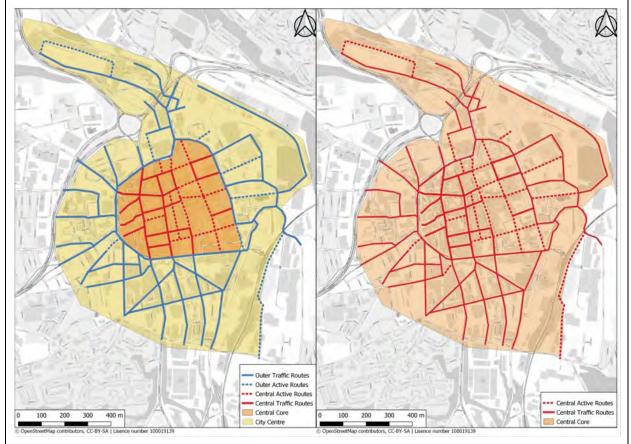


Figure 2 Current (left) and Proposed (right) Situation

Capitalising on heritage to development Halifax as a leisure destination





The scheme will support the tourism/leisure sector's role in the town centre economy through the delivery of several public spaces, capitalising on the historical townscape creating high-quality public realm and moving away from vehicle dominated streets.

The scheme aims to build on the Piece Hall success boosting tourism.

Encouraging a shift to sustainable/active travel

Existing bus travel is low (5.7% of journeys to work^[1]), in part due to the Covid-19 pandemic, with bus travel remaining 10% below pre-pandemic levels^[2] nationally. A review of Calderdale's bus network (2013), highlighted slow journey times and bus infrastructure deficiencies, resulting in poor town centre penetration. A Bus Accessibility Study (BCC, 2015) identified factors discouraging bus usage including a congested central area impacting on reliability, ill-suited bus stop distribution, and poor railway station accessibility by bus.

These challenges will be alleviated through re-designation, revised stop locations and reduced severance through improved pedestrian links.

Key junctions around the town centre are traffic-dominated offering poor quality gateways for pedestrians/cyclists. The scheme increases priority for non-motorised users including at the Bull Green/Barum Top, Cow Green/Broad Street, Broad Street/Northgate, and Northgate/Dean Clough junctions.

Environment

The investment in sustainable/active travel will help to prevent air quality decline in Calderdale, particularly in the context of the housing and employment growth forecast by the Draft Local Plan. Together with impacting on the wider climate emergency, this will benefit the health of the population.

- Census 2021, travel to work, excluding work from home
- [2] Department for Transport, Daily usage of transport by mode: Great Britain, since 1 March 2020

Please provide a summary from all consultation that has taken place. Please demonstrate how engagement with local communities, key influence groups and stakeholders has shaped the scope of the scheme and designs to date. Please provide any supporting evidence as appendix and refer to it here. (max 500 words).

The Statement of Community involvement (SCI), see appendix E5, summarises initial engagement with local communities, key influence groups and stakeholders undertaken by BCC to inform the development of the scheme. Engagement took place from the early design stage of the project in 2016 through to submission of planning applications in February 2020.



Figure 3 Timeline of engagement and planning stages





Groups and individuals that would be impacted or interested in the proposals were identified at project inception and were reviewed and updated throughout the project development;

- Accessibility groups;
- Business representative groups;
- · Calderdale Council members and officers;
- Developers;
- Interest groups;
- · Key attractors;
- · Land owners;
- Local businesses;
- Major employers;
- Statutory stakeholders; and
- Transport services.

Engagement activity with each of these stakeholders is detailed in the SCI and has included workshops, presentations, meetings and email correspondence. The SCI outlines how stakeholder feedback has influenced the design of the scheme.

Feedback from accessibility groups has helped inform the redesign of the Bull Green public realm including the removal of blended steps from the design, and changes to the layout of Market Street to encourage the safety and separation of pedestrians and cyclists.

Public exhibitions were held in July 2017 and in May 2018. The drop-in sessions consisted of display boards and plans and were attended by project teams covering a range of technical specialities. Key information was also provided as handouts. The events were widely promoted through the local press and digitally. Feedback from visitors was captured on a comments form, which included questions on what features people would like to see included in the public space at various locations within Halifax.

At the May 2018 session 100% of respondents supported the plans for the project. Respondents focussed on air quality, improvements for cyclists and improvements for Halifax town centre as key reasons why they support the project.

Feedback from key stakeholders and the public have been included within the design proposals as shown in Figure 2.





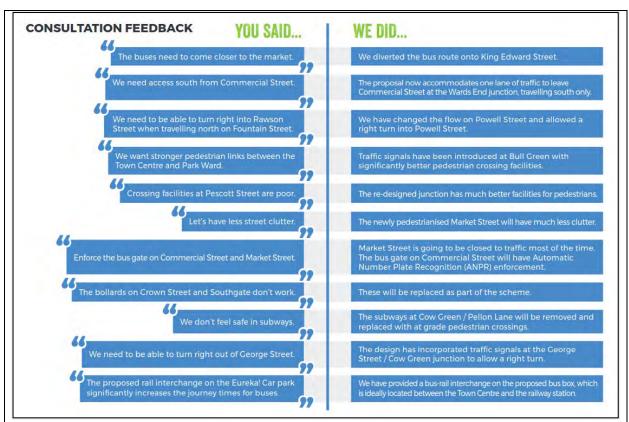


Figure 4 You Said, We Did

Following the withdrawal of the initial planning application in 2019, further design work was undertaken to incorporate the former Hughes Corporation building into the design and to respond to other concerns raised from the initial planning application. On-going stakeholder engagement was undertaken during this process.

Further engagement has taken place with the advertisement of the Informal Traffic Regulation Order (TRO) for Halifax Town Centre, an initial informal consultation was undertaken in January 2019, feedback was used to update the detailed design whilst implementing the emerging LTN 1/20 Cycling Infrastructure Design requirements.

A further informal TRO consultation was conducted in February/March 2023. This was via the Council's Traffweb portal and gave the public the opportunity to view and comment on the order. Additionally, 1800 letters were sent to residents and businesses within the town centre and its vicinity and briefings were undertaken with key stakeholders. The feedback received will inform the final TRO, which will require Statutory Consultation, later in 2023. A report detailing the outcomes is in Appendix E6.

E.4

Please complete Equality Impact Assessment of the project's short list options and discuss key findings here, with full detail provided as appendix (if applicable). (max 500 words)

An Equality Impact Assessment has been completed for the preferred scheme and is included as appendices E7 and E8. The assessment made use of evidence including demographic profile data, a literature review and stakeholder engagement findings.





The <u>completed scheme</u> is expected to have largely positive effects on persons with protected characteristics.

Moderate positive impacts are anticipated for children, young people^[1] and older people^[2] as these groups are more likely to be dependent on active/public transport modes, they will therefore see greater benefits including improved access to employment opportunities, education, recreation and community facilities. Those from ethnic minority backgrounds are also more likely to be dependent on active modes and public transport so will also benefit.

There may be some disbenefits for elderly bus users with mobility issues, and those with disabilities, as a result of the bus loop increasing walking distances to bus stops from key points of interest on Market Street, particularly when coupled with the topography of the town.

Children and older people are more susceptible to health problems resulting from poor air quality, these age groups will therefore benefit most from improvements to air quality resulting from reduced traffic. This effect will also be beneficial to those with heart and lung conditions, whilst reduced traffic noise may benefit those with autism.

Pedestrianised areas will be easier for wheelchair users to navigate leading to benefits in terms of independence and accessibility to employment, education, recreation and community facilities. Pedestrianised areas will also be safer for those with visual and auditory impairments to navigate.

Persons from minority ethnic groups or religions, members of the LGBT+ community, women and older people are more likely to have concerns around personal safety, the design of the schemes active travel environment are likely to positively impact feelings of safety and security benefiting these groups.

During the <u>construction phase</u> there are likely to be some adverse effects for those groups previously mentioned as being more dependent on active and public transport modes due to temporary changes to pedestrian routes and bus routes/stop locations. The impact of this effect can be reduced through early notification of changes and effective bus disruption planning (see appendix E9).

Temporary changes or closures to pedestrian routes may have a disproportionate impact on disabled people. In particular wheelchair and mobility scooter users, who require more space to manoeuvre, may be affected if the construction sites temporarily reduce overall widths of pedestrian access routes. During construction, car parking may need to be rearranged, this could differentially affect disabled people, particularly if disabled parking bays are impacted. Again, early notification of changes can reduce the impact by allowing for groups to make alternative plans and arrangements.

Changes during construction may affect users' perceptions of safety/security, such as changes to lighting, passive surveillance or CCTV. This effect can be mitigated via the use of best practice activities such as; appropriate temporary lighting and relocated CCTV. With these arrangements employed, it is expected that there will be minimal impact on perceptions of safety/security.

- Those aged 16-24
- ^[2] Those over 65

E.5

Please provide an account of the key strategic risks, constraints, and dependencies. (max 1,000 words). Risks will be further explored in the Management Dimension.

The key strategic risks, constraints, and dependencies, can be categorised into four main areas business case approval, continued support for the scheme, dependencies and changes to complementary schemes, and acquiring the necessary statutory and other approvals.

Business Case Approval





There is a risk that the business case is not accepted by WYCA. This risk will be managed by working closely with WYCA, including regular meetings throughout the business case development process.

There is also a risk that the business case is not approved due to funding gap discussed in section H.4. To mitigate against this the funding gap has been identified to the WY+TF programme in advance of this submission. A subsequent PAT Information report will be submitted to PMA to sit alongside this FBC, Subsequent reports will expand and explore funding opportunities following direction from senior officers within BCC and WYCA.

Continued Support

There is a slight risk of a loss of political support, the scheme has a four year delivery period during which there will be both general and local elections. It will therefore be vital to maintain an ongoing communication and engagement strategy with elected members, the cost of this will depend on the extent of political change.

There is also some slight risk of opposition to elements of the scheme from key (Eureka!, Nestle, Piece Hall, Lloyds, Dean Clough) and other stakeholders (residents and other businesses). To mitigate against this, a communications strategy (Appendix E10) has been prepared focussing on who the stakeholder is, their interests and their ability to influence the highway proposals. Continued stakeholder management is key to the success of the scheme and it may be necessary to make changes (e.g. to access plans) to maintain stakeholder support. Such opposition may include objections to the reduction in the number of parking spaces.

Late objections may also come about if the Traffic Regulation Order is subject to statutory public consultation. This risk will be reduced through a pre-consultation exercise prior to formal advertising of the order but could necessitate legal advice and potentially result in redesign works.

There is also a risk that environmental campaign groups start local campaigns, involving press coverage, against the scheme. Reactive communication may be necessary highlighting the impacts set out in the Environmental Impact Assessment.

There is a slight risk of a possible lack of support for the introduction of the bus box amongst bus operators and other user groups, this may risk compromising current service level and could delay the scheme if objections are raised. The risk of such an eventuality has been mitigated through dialogue with operators during design and an ongoing dialogue throughout construction is proposed.

Dependencies and Changes to Complementary Schemes

There is a risk that delays to, and reduced reliability of, public transport during construction could result in significant reductions in bus patronage which may be difficult to restore, meaning that actual benefits of the scheme are less than those forecast. To reduce this risk a strategy has been devised to address how public transport provision will be delivered during the interim construction period to minimise delay and disruption to the public (see appendix E9). This strategy is aligned and takes cognisance of the outcomes from the bus accessibility study which has been developed by AECOM. Engagement with operators and WYCA will be necessary to devise an optimal implementation strategy.

Statutory and Other Approvals

The final strategic risk area relates to acquiring the necessary statutory and regulatory approvals potentially resulting in delays which impact on the ability to meet deadlines in securing scheme funding.

There are also risks associated with land acquisition and the necessary use of compulsory purchase order. The first risk is that the CPO requires public inquiry, increasing the risk of further objections being raised and with significant financial implications. The second risk is that land acquisition via CPO fails, necessitating major redesign works. To reduce this risk Calderdale employ a dedicated Asset Portfolio Officer to progress negotiations. Work continues to progress the removal of the 2 objections to the CPO which will allow this to progress without Public Inquiry.

All risks identified are reviewed on a monthly basis as per the Risk Management Plan.





Section F: Economic Dimension

F.1 Please confirm that the PWF Preferred option remained unchanged after approval was received at Activity 3 Outline Business Case (OBC). If there were changes made after OBC, please provide a description of the changes made and a comparison with other PWF options. Please justify why this change was necessary and provide evidence for approval of this change. Please confirm that the revised Preferred Option will still deliver all spending objectives and will satisfy all Critical Success Factors (CSFs) and submit an updated Option Assessment Report (OAR). (max 1,000 words). (max 1,000 words).

As noted previously in the FBC, the preferred option has been further developed for the inclusion of the LTN 1/20 compliant cycling infrastructure since the previous submission in 2020. The scheme description is covered in Section D.1 and is briefly summarised here:

- Gateway entry points to improve the sense of arrival into Halifax town centre from the North, (South) East and (South) West, in particular for pedestrians and cyclists;
- Public realm improvements including the pedestrianisation of Market Street and part of Northgate, and public space at the Eastern Gateway.
- Provision of electric vehicle charging points;
- Creation of an anti-clockwise 'bus loop', maximising bus penetration to the town centre
 core, as well as boosting access to development sites to the East (e.g. Cripplegate and the
 Library);
- Enhanced bus-rail interchange opportunities at the Eastern Gateway;
- Re-designation of the eastern corridor to improve the efficiency and attractiveness of the route, thereby reducing through traffic in Halifax town centre and re-balancing traffic movements on the eastern and western corridors;
- Modified A629 western corridor to improve the efficiency and attractiveness of the route, reducing through traffic in Halifax town centre.

Changes to the proposed scheme have been as follows:

- Development of the detailed design of the scheme, both as part of a natural process of developing the detailed design and the requirement to ensure the inclusion of LTN1/20 cycle infrastructure design guidance.
- Removal of certain scheme elements (Bailey Hall and Butterfly Meadow). The pause and
 pipelining of the Halifax Station Gateway scheme in late 2022 meant a redesign of the
 Horton Street junction with Church Street was necessary with the junction being changed
 from a 3 arm to 4 arm junction. The pipelining of the Station Gateway scheme also resulted
 in the Butterfly Meadows element of this scheme being dropped from the scope of the
 A629 Phase 2 project

F.2

Please provide a full list of all outputs of Preferred Option, highlighting changes made to it since OBC (if applicable). Please note, these outputs will be recorded for future monitoring and evaluation. (max 500 words).

Highway Improvements





Item	Description			
EASTERN CORRIDOR				
Church Street/ South Parade (E03C)	Widening of Church Street, alteration of existing crossings. Signalisation of junction between Parade / Prescott Street / New Road / Church Street with signalised cycle and pedestrian facilities.			
Eastern Gateway (E05/06F)	Closure of Square Road and realignment of Eastern Corridor, using former Church Street alignment.			
Cripplegate/ Bank Bottom/ Berry Lane (E07/08/09B)	Church Street / Lower Kirkgate / Berry Lane mini-roundabout retained as existing, changes in priority of junction between Bank Bottom and Lower Kirkgate / Cripplegate with priority junction. Realigned highway, along Bank Bottom / Charlestown Road.			
Charlestown Road E11B	Mini roundabout access to Charlestown Road Retail Park retained as existing.			
Charlestown Road/A58 Junction (Junction E13A)	Road widening on the north side to provide two northbound approach lanes.			
Charlestown Road (E14C)	Resurfacing.			
WESTERN CORI	RIDOR			
Prescott Street (W03)	Signalisation of junction with Skircoat Road/ Portland Place and Prescott Street, with minor carriageway widening, improved crossing points.			
Commercial Street/ Fountain Street/ Ward's End (W05A)	Banned right turn into Ward's End, improved pedestrian and cycle crossing facilities through junction.			
Bull Green/ Cow Green (W07/08A)	Replacement of roundabout with traffic signals to increase capacity, improved pedestrian facilities.			
Pellon Lane/Cow Green (W09)	Closure of the subway and introduction of at-grade pedestrian facilities at junction, to reduce pedestrian severance. Provision of a cycle lanes and cycle crossing facilities			
Orange Street (W13C)	Pedestrian crossings across Broad Street, cycle lane.			
Northgate/Cross Hills (W12C (W))	Signal controlled pedestrian facilities across North Bridge Street and Cross Hills, enhanced provision for cyclists and pedestrians			
CENTRAL AREA				
Junction W12C © –Winding Bus Station and Winding Road	Bus station exit only onto Broad Street, improved cycle and pedestrian facilities. Closure of Northgate (north) with improved urban Realm			





Northern Loop including Princess Street/ Old Market	Modified northern town centre access loop for vehicles, Town Hall Street, Crossley Street, Princess Street, Old Market and Northgate. Relocation of bus stops/ taxi ranks and parking. Cycle path on Northgate.
Southern Loop including Horton Street/ Union Street	Modified southern town centre access loop off Market Street for vehicles, Albion Street, King Edward Street, Commercial Street, Alexandra Street and Westgate. Includes section of Horton Street from Ward's End in west to its junction with Church Street (and interface with the eastern corridor). Relocation of bus stops/ taxi ranks and parking.
Winding Road/ King Street	Public realm improvements, (re-surfacing, tree planting, enhanced pedestrian crossing facilities, traffic island alterations, junction improvements and carriageway alterations to accommodate a 1.5 m wide cycle lane). Two way bus gate on Charles Street between King Street and Hatters Fold.

Cycling improvements are proposed around the town centre:

- Signalised crossings for cyclists at key crossing points of the Western and Eastern Corridor;
- Cycle lanes, 'Quiet Street' cycle facilities on key links identified in the cycle routing strategy.

Alterations to parking / loading restrictions, broadly maintaining existing provision.

Rerouting of bus routes in the town centre, using a new "bus box".

Appendix D1 provides detail.

F.3

If the Preferred Option has been changed in any way, then please describe key changes made in the revised Appraisal Specification Report (ASR). If no ASR is available, then please describe what changes were made in appraisal methodology to account for the changes made. (max 500 words).

Key changes in the ASR are as follows:

- Use of the newly developed Calderdale and Kirklees Strategic Transport Model (CKSTM) to model the impacts of the scheme on highway and public transport users. The CKSTM is an improvement on the previous model used for assessing the scheme in that it uses a more up-to-date base year of 2019 and includes highway and public transport assignment models along with an overarching variable demand model. The model was developed to TAG guidelines and a full description of its development, data sources, validation and operation is provided in the ASR.
- The newly released version of the NTEM demand growth forecasts (NTEM8) have been used in the model forecasting.
- Scheme and development uncertainty logs were revised and incorporated into the model drawing on the latest information available as of late 2022.
- The latest TAG guidance was followed to develop sensitivity tests using the Common Analytical Scenarios. As well as the core scenario the high economic, behavioural change and technology scenarios were also used to assess the scheme.
- In terms of appraisal, the approach was generally unchanged with updated software versions and economic parameters used where required. The exceptions to this are as follows:
 - Following consultation with WYCA, impacts during construction were assessed using CKSTM and TUBA rather than QUADRO. (The method was changed from the previous submission in agreement with the WYCA modelling and appraisal team. The use of SATURN and TUBA to assess the impacts during construction overcomes the





limitations of QUADRO and allows the full impacts of rerouting and phased construction impacts to be captured, reflecting a truer picture rather than based on high level assumptions)

- An assessment of Wider Economic Impacts following DLUHC guidance was undertaken.
- The WYCA Carbon Impact Assessment process was used to assess carbon impacts.

F.4

Please describe the maturity of scope and design of Preferred Option. Please supply all evidence as appendices and refer to it here. (max 500 words).

Detailed scheme design drawings have been developed for use in the tendering process with amendments and clarifications undertaken as necessary during this process. This is consistent with all relevant design standards and guidance, including DMRB and LTN1/20. Relevant surveys, including all necessary topographical and geotechnical surveys have been undertaken to inform the scheme design which has been developed to its current status over a number of years.

A preferred contractor has now been selected. Therefore, there is a high level of cost certainty for the project with the QCRA, as discussed in later sections, reflecting this certainty appropriately.

Any further design activities will be minor changes made during the scheme construction process.

Given the level of design maturity and the fact that a preferred contractors tendered scheme implementation programme has been developed. This is presented in more detail in the Management Dimension.

The detailed scheme design drawing is appended as Appendix F1.

F.5

Please describe any changes since OBC that affects the economic appraisal. These may include but not limited to - benefits, dis-benefits, monetisation and quantification techniques, appraisal period, models, base demand, uncertainty log, forecast demand, contribution from public and private sectors, estimated maintenance regime and cost etc. (max 1,000 words).

The key factors that may affect the economic appraisal of the scheme are as follows:

- Benefits and Dis-benefits: Wider economic impacts are monetised using DLUHC guidance techniques and can be used in the adjusted BCR calculation.
- Cost: scheme cost has been updated following changes to the specification of the scheme, the proposed appointment of a preferred contractor and the use of up-to-date rates and inflation assumptions following changes in the wider national and global economy. This is discussed in Section F.11.
- Models, monetisation and quantification techniques: As noted in Section F.3, the new CLSTM has been used for the assessment of the scheme with outputs used to inform large parts of the appraisal of the scheme. This includes TUBA and COBALT appraisals as well as providing input to environmental appraisals. Up-to-date NTEM8 growth forecasts have also been used alongside the recommended Common Analytical Scenarios used for sensitivity testing.
- Appraisal period: a 60 year appraisal period is still used for the primary economic appraisal although this has been adjusted due to the slippage in the forecast scheme opening date.
 This affects scheme costs and benefits when presented in 2010 values and prices as





larger deflation and discounting factors are now used. The active mode assessment has an appraisal period of 20 years.

- Base demand: this was effectively revised in that the CKSTM model, with a base year of 2019, was used for the modelling of the scheme. Other appraisal, e.g. the active modes appraisal were also revised to make use of the most recent data available to inform base assumptions.
- Uncertainty Log: transport scheme and development scheme uncertainty logs were revised and incorporated into the modelling and assessment of the scheme. This drew on knowledge from other modelling work carried out in the area, the most up-to-date WYCA pipelining work (Autumn 2022) and information from other organisations, such as National Highways.
- Construction: Both the most up-to-date expectations in terms of how the scheme will be constructed (e.g. phasing) and an alteration to the assessment technique (use of SATURN / TUBA rather than QUADRO) will affect assessment of this impact.
- Operation and Maintenance: an updated assessment of maintenance impacts (considering highway, public realm maintenance etc.) has been carried out considering the design of the scheme and current expectations of rates etc.
- A Forecasting Report is included in Appendix F2.

Please describe all monetised benefits and dis-benefits (excluding environmental impacts) from appraisal of Preferred Option (both intended and unintended) that were used in calculation of Initial and Adjusted Benefit to Cost Ratio (BCR). Please provide a comparison of results presented at OBC and justify. (max 1,500 words).

The following monetised benefits and disbenefits have been used in the calculation of the initial and adjusted BCR.

TAG guidance has been used where appropriate alongside WYCA tools and recommended methodologies. The approaches used were agreed with WYCA in a meeting in August 2022 and subsequently incorporated into the revised ASR, as discussed in Sections F.3 and F.4 above.

Detailed reporting of the approaches followed and results are included in the Economic Appraisal Report (EAR) in Appendix F3. This section provides a summary of the key elements of the EAR.

All benefits are presented in 2010 values and prices as recommended by TAG. This has achieved either through the use of recommended TAG/DfT software (e.g., TUBA, COBALT, AMAT) where appropriate with guidance in TAG, particularly Unit A.1. which discusses approaches that should be taken to deal with discounting, deflation and converting to the common 2010 price and value base.

Economy

Business users and transport providers: Assessed using the TUBA software using model outputs from the CKSTM as primary input. Highway and Public Transport impacts were assessed using TUBA. High level results are as follows (values in 1,000s) showing a net disbenefit of -£1.33m to business users and transport providers.

Scheme Benefits	Highway	Public Transport	Combined
Business User Benefits: Travel Time	-1048	431	-617
Business User Benefits: Vehicle Operating Costs	-722	0	-722





Business User Benefits: User Charges	0	9	9	
Private Sector Provider Impacts: Investment Costs			0	
Total Present Value of Benefits (PVB)	-1770	440	-1330	

Construction and maintenance: Delays during construction have been assessed through alteration of the SATURN model to reflect the expected construction arrangements (reductions in capacities, closures etc.) and a modified TUBA assessment. Maintenance impacts when the scheme is completed have been assessed through considering potential changes to road maintenance requirements and costs through the appraisal period. This is covered in the section on scheme costs, below. High levels results are as follows showing a small disbenefit of -£175,000 for highway business users.

Scheme Benefits	Highway
Business User Benefits: Travel Time	-109
Business User Benefits: Vehicle Operating Costs	-66
Business User Benefits: User Charges	0
Private Sector Provider Impacts: Investment Costs	
Total Present Value of Benefits (PVB)	-175

Reliability: Reliability on the highway network for business users has been assessed using appropriate TAG guidance, considering journey time changes and the expected research-based reliability changes expected as a result. No assessment of public transport reliability impacts has been undertaken. The high level reliability impact for highway users is **-£0.803m** (covering all user classes).

Wider Economic Benefits: these have been considered through the calculation of the following according to DLUHC standard guidance and methodologies. The benefits are considered to belong more properly as part of the adjusted BCR.

- Wider land value uplift (LVU) benefits attributed to residential and retail properties in close proximity to the routes in Halifax centre improved by the scheme. The improved streetscape and priority given to pedestrians in Halifax will provide several benefits, including, increased permeability and connectivity in the town centre, reduced severance for pedestrian movements, improved wayfinding and legibility for pedestrian routes an overall improved quality of environment. Considering the potential value improvements to residential and retails properties, applying approved valuations and rate uplifts from industry sources, yields a benefit of £17,337,074. This is assumed to be a one-time benefit to the identified properties in Halifax.
- Sports participation benefits from an increased uptake in cycling. In addition to the direct
 health benefits etc. identified for active mode users a "willingness to pay" benefit
 concerning the well-being impacts of sports-based participation. This is valued at £828 per





year for individual sports and, applying this to the increases in cycling identified for the scheme results in a benefit of £140,414 (over 5 years)

- Distributional benefits for the scheme. Halifax has a high level of income disparity and large areas of deprivation, which contributes to lower-than-average household incomes. If an area's Gross Disposable Household Income (GDHI) is lower than nationally, Green Book guidance allows for a distributional uplift to be applied to all other benefits to compensate for this. Considering relative income levels in Halifax and England and applying a multiplier ratio of 1.3 yields a multiplier effect (applying to all other calculated benefits) of £5,786,523.
- Overall Wider Economic Benefits, to be considered in the adjusted BCR, are £23,264,011
- A report covering this analysis in detail is included in Appendix F4.

Social

Commuting and other users: Assessed using TUBA as for business users and transport providers as above. High level results are as follows. Combined benefits to commuter and other users are £1.088m.

Scheme Benefits	Highway	Public Transport	Combined
Consumer User Benefits: Commuting Travel Time	-2024	2341	317
Consumer User Benefits: Commuting Vehicle Operating Costs	-477	0	-477
Consumer User Benefits: Commuting User Charges	0	36	36
Consumer User Benefits: Other Travel Time	-8059	10098	2039
Consumer User Benefits: Other Vehicle Operating Costs	-1235	0	-1235
Consumer User Benefits: Other User Charges	0	408	408
Total Present Value of Benefits (PVB)	-11795	12883	1088

Construction and maintenance: impacts have been assessed using the same methodology as for business users above. High levels results are as follows showing a disbenefit of -£1,285,000 for highway commuting and other users.

Scheme Benefits	Highway
Consumer User Benefits: Commuting Travel Time	-455
Consumer User Benefits: Commuting Vehicle Operating Costs	-46
Consumer User Benefits: Other Travel Time	-703





Consumer User Benefits: Other Vehicle Operating Costs	-81
Total PVB	-1285

Reliability: As per the reliability assessment for business users with the total benefits to all users stated above.

Physical activity: A series of AMAT based assessments have been undertaken to assess the physical activity impacts, primarily considering health and absenteeism benefits. This considers all active mode users, including cyclists and pedestrians accessing the town centre directly as well as those users arriving in the town centre by rail, bus and car and subsequently walking in the scheme area. The latest version of the AMAT software tool has been used with various key assumptions documented in detail in the report contained in Appendix F5. The high level results of the assessment are as follows. The health benefits, to pedestrians in particular, are considerable and reflect the expected increases in footfall in the town centre (20-40%, depending on specific location) as a result of the scheme.

Benefit	Cyclists (£000s)	Pedestrians (£000s)	Total
Health	£2,656.62	£41,733.68	£44,390.30

Journey quality: Journey quality impacts are also assessed as part of the AMAT assessments for active mode users. The high level results are as follows. Benefits derive from existing users benefitting from improved cycling and pedestrian provision, including improved public realm, improved cycle lanes, crossing etc.

Benefit	Cyclists (£000s)	Pedestrians (£000s)	Total
Journey Quality/Ambience	£64.77	£575.07	£639.84

AMAT model shift impacts: The AMAT tool also assesses the benefits of model shift as people shift to active modes from motorised modes as a result of the scheme. This includes impacts such as decongestion, reduced accidents, reduced emissions etc. Due to the way these impacts are presented they don't fit neatly into the FBC template so they are included here.

Benefit	Cyclists (£000s)	Pedestrians (£000s)	Total
Mode Shift	£251.34	£2,051.70	£2,303.04

Accidents: The COBALT software has been used to assess the impacts of the scheme on highway accident and casualty numbers and costs. High level results are as follows. These show that, primarily due to the reduction in car kilometres caused by the scheme, a reduction of 71 accidents over the appraisal period is forecast with a monetary valuation of £2.22m.

Economic Summary (£000s)	
Total Without-Scheme Accident Costs	142,955.60
Total With-Scheme Accident Costs	140,731.20





Total Accident Benefits Saved by Scheme	2,224.40
Accident Summary (in numbers)	
Total Without-Scheme Accidents	4054.5
Total With-Scheme Accidents	3983.1
Total Accidents Saved by Scheme	71.4

Scheme Costs

Scheme costs have been assessed using standard TAG guidance to produce a Present Value of Costs (PVC) in 2010 values and prices. Scheme costs are considered in detail in the Financial Dimension and in responses to sections F.10 (risk) and F.11 below.

F.7

Please describe how environmental impacts were assessed for Preferred Option. This may include but not limited to - carbon impacts, air quality (NOx, PM2.5 etc), noise, biodiversity, water environment, landscape, townscape, historic environment etc. Please use the Combined Authority's carbon impact toolkit. Please provide a comparison of changes since economic appraisal presented at OBC and justify. Please use the Combined Authority's carbon impact toolkit. Please provide a comparison of changes since economic appraisal presented at OBC and justify. (max 1,500 words).

Noise

The quantification of the impact on noise is ongoing. An addendum will be issued prior to full approval presenting the results.

Air quality

The guidance in Tag Unit A3 has been followed to determine the plan level calculations. The DMRB spreadsheet (v9) (National Highways, 2021) has been used to calculate the regional estimation of these NO_x and PM_{10} emissions. PM_{10} emissions are subsequently converted to $PM_{2.5}$ using a factor of 0.635. The TAG air quality valuation spreadsheet (dated November 2022) taking the findings from the plan level calculations and the regional emissions of NO_x and $PM_{2.5}$ has been used to calculate a monetary air quality valuation for the proposed scheme.

The air quality assessment determined that there would worsening over the 60 year appraisal period for both PM_{2.5} and NO₂. This equates to a net present value of carbon dioxide equivalent emissions of -£95,098 over the 60-year appraisal period.

Greenhouse Gases

The DMRB spreadsheet (v9) (National Highways, 2021) has been used in the estimation of CO2 emissions. The assessment was undertaken using all of traffic data provided rather than a specific affected area to ensure all potential changes in emissions are captured within the assessment.

The Greenhouse Gas assessment determined that there would be a net increase in carbon emissions over the 60-year appraisal period if the scheme were implemented for road user emissions. The scheme would result in an increase of 16,767 tonnes over the 60 year appraisal period. In the opening year, the scheme is anticipated to result in an increase of 358 tonnes.

This equates to a net present value of carbon dioxide equivalent emissions of -£1,259,565 over the 60-year appraisal period.

Carbon





The assessment method for assessing carbon follows TAG Unit A3 Environmental Impact Appraisal (May 2019, Department for Transport). The WYCA Carbon Impact Assessment (CIA) Stage 2 proforma has been used to assess the impacts following the guidance in the CIA Stage 2 Reporting Requirements.

The Carbon assessment determined that there would be a net decrease in carbon emissions over the 60-year appraisal period if the scheme were implemented for road user emissions. The scheme would result in a decrease of 983,233 tCO2e in operational carbon over the 60 year appraisal period. In the opening year, the scheme is anticipated to result in an increase of 9,333 tCO2e in capital carbon.

Landscape

The assessment method for landscape value follows TAG Unit A3 Environmental Impact Appraisal. The scheme is located in an urban area, and, as such, the issues of landscape have not been considered in great detail. Due to the scheme's location, in a town centre, the impacts are primarily considered in the following section on townscape.

Townscape

The proposed scheme includes highway widening, the replacement of existing highway infrastructure, such as roundabouts with new junctions, and limited lengths of new highway within areas of existing derelict land. The highway realignments will result in the creation of new public spaces, the enhancement of the streetscape within the primary retail area, the reinstatement of historic street layouts and the implementation of additional green infrastructure across the townscape as a whole.

The public realm interventions have been designed with consideration of their physical and cultural context, including the use of natural materials to reflect those currently dominant within the Conservation Area and the implementation of additional green infrastructure to aid the integration of the proposed scheme into the townscape.

It is predicted that this will result in a slight beneficial impact on the townscape overall.

Historic Environment

There will be no direct physical impacts on listed buildings. There is potential for direct physical effects on both recorded and unrecorded heritage assets. There is also potential for (beneficial and adverse) impacts on the setting of heritage assets. The overall impact on heritage is expected to be **neutral.**

Biodiversity

The proposed development will be implemented within an urban area dominated by areas of hardstanding and buildings. Such areas support very few ecological habitats, although there are areas of broad-leaved woodland, scattered mature trees and dense/ scattered scrub which are all considered to be of Local Nature Conservation Value. The proposed construction works will be undertaken in accordance with the CEMP which will include measures to appropriately manage impacts upon ecology, protect vegetation to be retained and ensure legal compliance. With appropriate design of proposed development, and with the implementation of the mitigation measures included within the CEMP, there will be no significant adverse effects upon ecology and nature conservation. The impacts on biodiversity are expected to be **neutral**.

Water Environment

There is only one water feature that could be potentially affected by the proposed development, namely Hebble Brook. All construction activities will be undertaken in accordance with the CEMP, which will include a range of measures to protect surface water. With the implementation of such measures, significant effects upon Hebble Brook will be avoided, whilst also preventing an increase in flood risk. The proposed development will include an appropriate surface water drainage design such that operational phase water and flooding effects will be negligible. Overall the impact on water environment will be neutral to **slight beneficial**.





F.8

Please describe how other potential social and Wider Economic Impacts (not accounted for in the Initial or Adjusted BCR) were assessed for this appraisal. It may include security, affordability, cultural impact etc. (max 1,000 words).

Security

An assessment following the guidance in TAG Unit 4.1 has been carried out considering highway, pedestrians and bus-stops. Overall the security assessment for the highway and for bus-stop users has been appraised as neutral, with a large positive result for pedestrian environments, benefitting from improvements to informal surveillance, landscaping and lighting and visibility. This is particularly important to vulnerable users providing a safe, secure environment opening up sustainable transport solutions that can be used all 24/7 whilst supporting the mayoral pledge to put keeping women and girls safe. The overall appraisal score has been assessed as **slight beneficial**.

Severance

A qualitative assessment has been undertaken to ascertain the social impact on severance at the notable areas of impact in close proximity to the scheme. A TAG worksheet for severance has been used to assess severance at the key junctions on the eastern and western corridors, in key locations in the town centre core and along Winding Road. Overall, analysis of the impact of the scheme on severance has been concluded to be **Moderate Positive**. This is due to the closure of poorly lit and maintained subways in favour of at-grade super crossings and improvements made to existing provision, with the installation of new facilities for non-motorised users.

Journey Quality

A qualitative assessment has been undertaken. The biggest benefits are anticipated to be experienced by pedestrians, with some factors being experienced by highway and bus users. On balance, the scheme will have a **moderate beneficial** impact on overall journey quality for users. The highest benefits are expected to be experienced by pedestrians (large beneficial), with highway users experiencing slightly beneficial impact on their journey due to less congestion. Bus users can expect the scheme to yield moderate beneficial impact on their journey quality mainly to anticipated improvements in journey times as buses are re-routed within the town centre, and less congestion overall. Whilst the bus stops are located further away from the heart of the town centre the modelling results taking into account the full journey time including access and egress demonstrates an overall benefit.

Access to Services

Accessibility has various interpretations within TAG Unit 4.1, not least, the ability to get to a given place. Other interpretations provided within the guidance include the physical access onto a public transport vehicle or indeed being able to access information about a particular public transport service. Overall the scheme has been assessed as **moderate beneficial** impact on accessibility, particularly for key town centre destinations. This is mainly because buses operating within and around the vicinity of the scheme and wider impact area will reap direct benefits of improvements to journey times and journey time reliability arising from re-routing effects and reduced congestion as a result of the scheme. The new bus stop infrastructure will enhance the offer to disabled users, providing better bus stops, with wider access routes and more accessible service information.

Affordability

Research shows the cost of travel can be a barrier to mobility for some groups of people in terms of their ability to access some destinations. Similar to option values and non-use values, this scheme does not directly affect the monetary cost of public transport travel, and for this reason this indicator has been discounted from the assessment.

Summary





The table below summarises the results of the social assessment, noting that Accidents, Physical Activity and some aspects of the Journey Quality benefits are monetised and covered in that respect in Section F.6, above.

Social Indicator	Assessment Conclusion
Accidents	Slight beneficial
Physical Activity	Large beneficial
Security	Slight beneficial
Severance	Moderate beneficial
Journey Quality	Moderate beneficial
Accessibility	Moderate beneficial
Option Values and Non-Option Values	Not assessed
Personal Affordability	Not assessed

A report covering this analysis in more detail is provided in Appendix F6.

F.9

Please describe any relevant Place Based (local, regional or sub-UK) analysis developed to support this appraisal. (max 1,000 words).

Place based analysis has been undertaken, considering the results of the TUBA user impacts and COBALT accident appraisal.

This is based on data analysis carried out for the assessment of distributional impacts. The following analyses have been produced and are included below.

TUBA results

- zonal benefits for "commuting" users.
- zonal benefits for "other" users.

COBALT results

- · casualty changes for all classes
- casualty changes for children
- casualty changes for older persons
- · casualty changes for pedestrians
- · casualty changes for young men.

In terms of TUBA benefits, the maps shows that there is a mixed picture in the spatial distribution of benefits with some areas close to the town centre seeing benefits and other areas showing disbenefits. This is consistent with the nature of the scheme, which includes a range of closures, changed priorities and other network and routeing changes which have inconsistent impacts across the town centre as a whole.

The accident benefits show a similar picture overall, with benefits and disbenefits sometimes occurring on adjacent links for similar reasons to above.

Appendix F7 includes the maps produced.





F.10

Please describe how project's risks (delivery and operational phases) were assessed and monetised. Please refer to the risk register as appropriate. Please demonstrate how these were reflected in the Optimism Bias used in economic appraisal. (max 1,000 words).

BCC appointed Turner and Townsend to provide a Quantitative Cost Risk Analysis (QCRA). A risk register has been developed and risks assessed in relation to schedule and cost impact. The risk register (see A629 - Risk Register for QCRA - 05.10.22) was populated by the project team in 2020, with recent validation workshop held on the 22nd September 2022, and an additional verification & new risk identification workshop on 5th October 2022.

The QCRA gives levels of confidence of the risk exposure associated with the risk profile for each option. By simulating the probability and impacts of the risks multiple times, statistical confidence levels can be gained on the level of risk exposure. The QCRA also highlights which risks have the highest significance to the overall risk profile. This allows clear focus on key risks, either to understand and accept them, or if possible, implement mitigation measures to eliminate or reduce the risks. The below table includes the technical detail for the risk model used.

The industry standard @Risk software has been used for appraising the identified risks with details of assumptions used shown in the table below.

The risk items were identified in the risk workshop with both BCC officers, design and cost consultants present. The cost consultants then undertook the calculations using @Risk with the findings then reviewed and a further workshop to discuss and update, with a final approval to the QCRA provided by BCC officers and project team.

The risk assessment and monetisation has been accepted and approved by the project board and carried forward to the project cost estimates.

The risk assessment covers the project from the date of the risk workshop to practical completion.

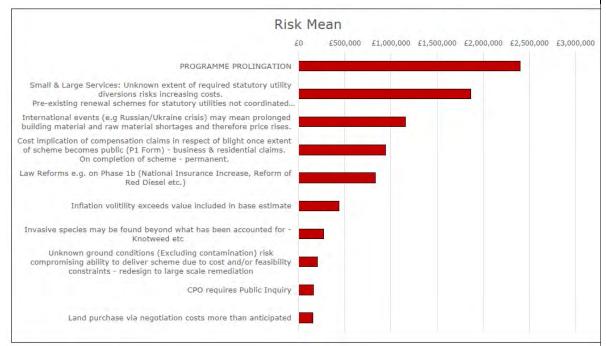
Item	Detail	Notes
Tool	@Risk	
Sampling Method	Latin Hypercube	
Number of Iterations	10,000	
Seed	1	This seed will allow the analysis to be replicated if required
Distribution Type (Risks)	Triangular	Triangular distribution was used for all risks, as there was an adequate level of
		certainty surrounding the maximum, minimum & most likely values provided.
Correlation (Risks)	Not Applied	No seen common links between the risks to be in a position to correlate the risks
Assumptions	-	 No Opportunities have been modelled.
		 No Estimating Uncertainty forms part of the model.





- Only the risks detailed in the risk register have been included in the model.
- No risks have been excluded from the model.
- No closed risks have been modelled.
- All inputs and outputs are owned by BCC.
- The analysis was run on the values for pre mitigated assessment only.

The key project risks are covered in more detail elsewhere in the Business Case but the high level risk values for the most significant items are illustrated below showing the mean risk exposure of each risk, highlighting which risk have the biggest impact on the overall distribution. This is a useful tool to identify the key risks within the register in order to prioritise / focus on associated risk treatment. It is important to understand that this is the mean risk figure and therefore the values should not be taken / carried forward as limit values for any cost assessments, and should be used for indicative purposes only.



A risk probability of P50 has been adopted for the project (£9,373,164). This value adds approximately 19% to the project cost.

In terms of optimism bias, TAG guidance shows that the default value for a road scheme (the closest approximation to the type of scheme) at the FBC stage is 20%.

This suggests that the risk value is generally appropriate for this type of scheme at this stage of development. On this basis, the PVC, as discussed in more detail in the following section, will adopt the standard Optimism Bias figure of 20%.





F.11

Please describe how the project's costs used in the Economic Case were estimated. Please provide a comparison of costs used in the Financial Case and the Economic Case with an explanation for the difference. Please provide a comparison of cost of Preferred Option at OBC and FBC and justify the difference. (max 1,000 words).

The TUBA software has been used to calculate the PVC based on the costs presented in the financial case. This has been carried out with reference to TAG guidance, particularly Unit A1.2. The approach adopted was agreed with WYCA in a meeting in August 2022 and included in the ASR.

As noted in Section F.4, the scheme design is at a detailed stage, with contract drawings produced for the tendering process and a preferred contractor proposed. Relevant surveys, including all necessary topographical and geotechnical surveys have been undertaken to inform the scheme design which has been developed to its current status over a number of years.

Monitoring and evaluation costs have been derived based on an analysis of typical market rates for survey and analytical requirements. In the case of the baseline surveys, a cost has been agreed with an external contractor to undertake the works. 1 year and 5 year surveys and reporting have been derived based on knowledge of existing market rates.

Operation and maintenance costs have been derived by BCC based on current unit carriageway etc. maintenance rates per area / item to be covered. This considers the forecast existing (do minimum) maintenance costs and forecast costs with the scheme in place. Maintenance costs are forecast to fall with the scheme in place and this is reflected in the economic appraisal.

There are no expected future revenue costs expected or included in the appraisal.

As noted in Section F.10, a comparison of the QCRA value and the default optimism bias value in TAG Unit A1.2 has been made with a very close correlation between the two (19% v 20%). As such, it is considered that the 20% optimism bias figure represents an appropriate values and it is used in the calculation of the PVC.

As such, the scheme costs can be considered to be a close representation of expected costs with this reflected in the QCRA.

These costs are presented in contemporary 2023Q1 prices so a GDP deflator of 133.39 has been adopted as per the latest TAG databook (January 2023) to allow the correct deflating of the costs to 2010 prices. The standard approach to discounting costs to 2010, as built into the TUBA software, has been used.

The following costs elements are included in the calculation of PVC.

- Land acquisition costs prior to 2023/24 (this is on the basis that, whilst the land has
 previously been purchased for use on the project it still carries a cost to the project as it
 could potentially be out to an alternative use).
- All project development, land assembly, delivery and benefits realisation costs occurring in 2023/24 onwards.
- Optimism bias (20% of all costs occurring 2023/24 onwards).

The following cost elements are not included in the calculation of PVC.

- Project development costs prior to 2023/24.
- Inflation 2023/24 onwards (on the basis that costs are deflated to 2010 anyway all costs are assumed to be in 2023Q1 prices so there is no need to allow for inflation beyond this point).
- Risk (on the basis that a 20% value of optimism bias is assumed so no risk allowance needs to be included).

Taking the above alterations into account, the "Raw" costs prior to the calculation of PVC (discounting, deflating) are £55.295m compared with the total project cost in the financial case of £64.140m.

The individual items leading to this difference are:





- Project development costs prior to 2023/24 not included (£5.248m) NB Land assembly costs prior to 2023/24 are included
- Risk not included (£9.373m)
- Inflation not included (£4.061m)
- Optimism bias included (£9.837m)

Appendix F8 provides more details on the differences in the costs set out in the Financial Case and those input to TUBA.

Comparing with the most recently submitted Business Case for the scheme, 2020s FBC submission, shows that the project cost has changed. The PVC in 2020 was calculated at £35.162m compared with £28.943m for the current submission.

The main reasons for this difference are as follows:

- The scheme cost estimate has been updated in the light of some changes to the scheme design (particularly LTN1/20 design standard compliance), wider economic/industry impacts and the fact that a contractor cost tender has now been received.
- Discounting and deflation impacts to convert to 2010 prices have changed due to the different year of appraisal and updated assumptions regarding the GDP deflator.
- Risk has been reassessed and revalued due to changes both at project level and in the wider economy since 2020.

Some elements of the scheme have changed. In particular, the previous iteration of the scheme included interventions at Bailey Hall/Butterfly Meadow to the east of the railway line which no longer form part of the scheme. This is due to the pausing of the Halifax Station Gateway scheme following the 2022 WY+TF and TCF inflation review.

F.12

Please describe how Preferred Option's benefits and costs are distributed to the different groups of our society and economy. Please supply a Distributional Impact Report.

(max 1,000 words).

Key Item	Brief Description of Impacts from Report	Impact Category
User Benefits (highway)	Slight adverse due to disbenefits falling to users in the most deprived category.	Slight adverse
User Benefits (public transport)	Slight beneficial due to benefits falling to users in the most deprived category.	Slight beneficial
User Benefits (combined)	Slight beneficial impact overall.	Slight beneficial
Accidents	The results of the assessment indicate a largely neutral impact across all vulnerable user groups. Furthermore, users in all social groups experience a reduction in casualty rates, particularly among children, the elderly, cyclists and pedestrians. Overall, the impact of the scheme on accidents is considered to be neutral	Neutral
Severance	The western corridor has an overall neutral impact (Table 14), with the town centre core and eastern corridor seeing slight positive impacts – the result of road closures and improved pedestrian crossing facilities compared to the current situation. The overall assessment is slight beneficial.	Slight beneficial





Security	Given that improvements to security are generally restricted to four locations, with limited improvements elsewhere, the overall security score can be considered neutral. However, given the high number of users within the town centre on a daily basis (>10,000), the small benefits at these locations will be felt on a larger scale and the overall result could be considered to be beneficial. Therefore, the overall security result is slight beneficial.	Slight beneficial
Accessibility	Overall the scheme has been assessed as moderate beneficial impact on accessibility, particularly for key town centre destinations.	Moderate beneficial
Personal Affordability		Not assessed
Noise		TBC once noise assessment complete
Air Quality	Due to the marginally impact on the scheme this assessment was scoped out.	Not assessed

Across the indicators assessed, the scheme generally has a neutral or slight beneficial impact in terms of distributional assessment.

F.13

Please provide an account of how Preferred Option performs in cost benefit analysis and Value for Money based on Initial and Adjusted BCRs. Please provide a comparison of results of OBC and FBC. Please justify why the prevailing Preferred Option is the best performing option amongst all of PWF options. (max 1,000 words).

The Analysis of Monetised Costs and Benefits (AMCB) for the Preferred Option (Initial BCR) has been completed and is presented below. This demonstrates a **BCR of 1.46**. The scheme delivers estimated monetised benefits **(PVB) of around £42.4m** set against a cost **(PVC) of £28.9m**.

The key components of scheme benefits are the benefits to active mode users, making up £44m of the benefits.

PVC is somewhat lower than the £64.14m figure presented in the financial case due to the discounting / deflating of the costs, the removal of most sunk costs prior to 2023 / 24 and scheme maintenance savings when compared with the Do Minimum (i.e. present) situation.

Analysis of Monetised Costs and Benefits

Noise	TBC	(12)
Local Air Quality	-95.098	(13)
Greenhouse Gases	-1259.565	(14)
Journey Quality	639	(15)
Physical Activity	46693	(16)
Reliability	-803	(16a)
Accidents	2224	(17)





Construction and Maintenance	-898	(18)
Economic Efficiency: Consumer Users (Commuting)	-123	(1a)
Economic Efficiency: Consumer Users (Other)	1214	(1b)
Economic Efficiency: Business Users and Providers	-5617	(5)
Wider Public Finances (Indirect Taxation Revenues)	413	- (11) - sign changed from PA table, as PA table represents costs, not benefits
Present Value of Benefits (see notes) (PVB)	42387	(PVB) = (12) + (13) + (14) + (15) + (16)+(16a) + (17)+(17a) + (1a) + (1b) + (5) - (11)
Broad Transport Budget	28942	(10)
Present Value of Costs (see notes) (PVC)	28942	(PVC) = (10)
OVERALL IMPACTS		
Net Present Value (NPV)	13445	NPV=PVB-PVC
Benefit to Cost Ratio (BCR)	1.46	BCR=PVB/PVC

Note: This table includes costs and benefits which are regularly or occasionally presented in monetised form in transport appraisals, together with some where monetisation is in prospect. There may also be other significant costs and benefits, some of which cannot be presented in monetised form. Where this is the case, the analysis presented above does NOT provide a good measure of value for money and should not be used as the sole basis for decisions.

An adjusted BCR can also be calculated, considering the wider economic benefits presented above. These benefits, covering land valuer uplift and sports participation benefits are valued at £23.264m. This increases the **PVB to £65.651m** generating an adjusted **BCR of 2.27**.

The table below compares the 2020 initial and adjusted PVB, PVC and BCR values against those calculated most recently.

Scenario	PVB (£1,000s)	PVC (£1,000s)	BCR
2020 Initial	45339	35162	1.29
2020 Adjusted	72446	35162	2.06
2023 Initial	42387	28943	1.46
2023 Adjusted	65651	28943	2.27

It can be seen that the current appraisal produced slightly higher BCR values than the 2020 submission although the figures are broadly comparable. The reason for the increases are 1/ lower PVC values due to changes in the scope of the scheme, as noted above, and updates to the scheme cost estimates, inflation and discounting assumptions and 2/ slightly higher benefits, primarily due to higher health benefits from active mode users and higher accident benefits.

The adjusted BCR previously used Heritage and Wellbeing benefits, which we have been directed not to include in this submission. However, Land Value Uplift and Sports Participation benefits were included in the current submission producing broadly similar levels of benefit.





F.14

Please describe how the economic appraisal of PWF Preferred Option may vary under different assumptions of future demand (goods, services, travel etc). (max 2,000 words).

The following scenario model runs were undertaken using CKSTM and TUBA appraisal only, drawn from TAG guidance Unit M4 covering forecasting and uncertainty. The following tests, each of these being one of the recommended Common Analytical Scenarios, were undertaken:

- Core scenario;
- High Economic (representing a high trip growth scenario);
- Behavioural Change (representing a low trip growth scenario);
- Technology (representing a similar level of trip growth to the core scenario but with some alterations to model parameter values such as values of time, to be taken from the CAS databook).

These tests were agreed with WYCA and included in the ASR. Together they provide the robust analysis necessary to understand how the highway and public transport user impact elements of the appraisal might vary across a range of higher level economic, policy and behavioural scenarios.

Detailed results are presented in the EAR with the results across the scenarios summarised here. The forecasting report also compares the specific on-the-ground impacts for each scenario.

Present Value of Benefit	Highway PVB (£1,000s)	Public Transport PVB(£1,000s)	Combined PVB (£1,000s)
Core	-£17,522	£12,954	-£4,568
High Economy	-£20,332	£13,474	-£6,858
Behavioural Change	-£17,726	£12,318	-£5,408
Technology	-£18,534	£12,866	-£5,668

The results demonstrate that the core scenario show the best TUBA benefit overall, mainly down to the smaller disbenefit seen to highway users. The high economy scenario, with the higher highway demand expected, performs the worst of the scenarios due to the greater highway disbenefits expected. The behavioural change and technology scenarios produce largely similar results.

Overall, however, there is a relatively small difference between the results across the scenarios giving reasonable confidence in the highway and public transport user impacts of the scheme across a range of plausible future demand scenarios.

F.15

Please describe how the economic appraisal of Preferred Option may vary with variation in estimated benefits and costs. (max 2,000 words).

In addition to the scenario testing undertaken above, specific sensitivity testing has also been undertaken on the active mode users element of the appraisal. This covered the following alterations to key input assumptions:

Half increase in uplift i.e. 10% for pedestrians (20% for central locations) and 25% OR
12.5% for cyclists depending on intervention. The active mode benefits are affected by the
assumptions adopted for usage uplifts with the scheme in place. Whilst the initial
assumptions are evidence based and subjected to previous WYCA peer review, a more
conservative scenario, halving the uplift assumptions has been tested to demonstrate the
robustness of the calculated benefits





- Quarter increase in uplift i.e. 5% for pedestrians (10% for central locations) OR 12.5% or 6.25% for cyclists depending on intervention. Similarly, to above, the assumed uplifts are assumed to be one-quarter of the initial assumptions.
- Half of base inputs plus original uplifts i.e.20% for pedestrians (40% for central locations) and 50% or 25% for cyclists. Due to limitations in survey data, baseline cycling and pedestrian levels have been derived from other sources. This test reduced these numbers in a similar way to the above test to demonstrate the robustness of the scheme to these assumptions.
- 50% reduction and 50% increase in pedestrian and cyclist "how much of an average walking trip uses the intervention". As noted in the Active Model Appraisal Report, due to the nature of the scheme, it is not always clear what proportion of each trip will actually benefit from the scheme. A plausible initial assumption is used with these tests increasing and decreasing this assumption.

High level results of these tests are as follows. This shows that the final test has a very small impact on the results. This is because, in this case, the majority of benefits arise from health benefits due to increased levels of physical activity, especially for pedestrians, rather than the journey ambience benefits of the scheme.

The other tests, focusing on either base trips or uplift assumptions have the expected impact in that they largely reduce benefits in proportion with the changes to input assumptions. The quarter uplift assumption, for example, reduces overall benefits to around 26% of the core scenario benefits.

Benefit	Cyclists (£000s)	Pedestrians (£000s)	Total
Core	£2,973	£44,360	£47,333
Half Increase in Uplift	£1,569	£22,432	£24,001
Quarter Increase in Uplift	£804	£11,468	£12,271
Half base + Original Uplifts	£1,556	£22,169	£23,725
50% Reduction in 'how much of average trip uses intervention'	£2,940	£44,073	£47,013
50% Increase in 'how much of average trip uses intervention'	£3,005	£44,648	£47,653

The PVC has also been recalculated using the P80 scheme risk value. This is £11.878m compared with the P50 value £9.373m.

This has the impact of increasing the PVC to £30.298m and reducing the BCR for the core scenario to 1.42. This demonstrates that the economic performance of the scheme remains robust when subjected to a higher risk P-value.

F 16

Please confirm all relevant models, tools, appraisal files and tables as well as all reports related to economic appraisal work have been provided and give clear reference here. (max 500 words).





The following appendices are included with specific information contained as indicated.

- F1: Scheme Drawings
- F2: Forecasting Report covering scheme modelling and forecasting assumptions, methodologies and results.
- F3: Economic Appraisal Report containing methodologies and results of the economic appraisal together with relevant output files (TUBA and COBALT) and relevant TAG appraisal tables.
- F4: LVU report detailing the approach taken to the DLUHC style Land Value Uplift calculations included in the Adjusted BCR.
- F5: Active Mode Appraisal containing detailed trip forecasting and appraisal methodologies and assumptions pertaining to the Active Mode Appraisal.
- F6: SDI report containing methodologies and results of the social and distributional impact appraisal together with relevant TAG appraisal tables.
- F7: Place Based maps maps produced for the place based analysis carried out.
- F8: Financial PVC comparison comparison of the costs presented in the financial case with those used in the calculation of the PVC.

F.17

Please provide an account of how switching values can change BCR and Value for Money (VfM) Category along with likelihood of the switching value materialising. Does it alter ranking of Preferred Option in relation to other options? Please justify. (max 1,000 words).

An analysis of extent to which the Present Value Benefits or Present Value Costs would need to increase or decrease for the VfM Category of the proposal to change has been undertaken.

The core initial BCR is 1.46 (low value for money between 1 and 1.5 with the adjusted BCR at 2.27 (high value for money between 2 and 4).

For the initial BCR to decline to the next lowest category (1 or lower) would require an increase in costs from £28.943m to £43.288mm (£14.345m or 49%).

Scheme costs, likewise, would have to increase significantly to reduce the Value for Money category to poor. For context, the P100 risk value, assuming that all identified risk come to pass without mitigation, is around £8.2m greater than the P50 risk value adopted, a lower figure than the £14.345m increase that would be needed to reduce VfM to the poor category.

The adjusted BCR value of 2.27 would require a smaller cost increase of £4.333m (15%) to reduce the BCR to 2 and fall in the medium VfM category. Nevertheless, this is the equivalent of raising the risk value to somewhere between P80 and P90.

This analysis suggests that the VfM categories are robust in terms of scheme cost increases, and, in the case of the initial BCR, could see an increase in VfM category if plausible changes to robust appraisal assumptions were made.

F.18

Please provide an account of unvalued costs, risks and non-monetised benefits along with likelihood of those materialising. Please discuss any significant Distributional Impact or Equality Impact that may affect PWF options differently. Does any of these can alter ranking of Preferred Option in relation to other options? Please justify. (max 1.000 words).

Costs and risks

It is considered that all costs have been suitably identified and accounted for through the scheme cost estimates and risk assessments. As noted above, the scheme is well developed and at a high level of design maturity so, at this stage, the scheme costs and risks represent a true reflection of





the financial input that will be necessary to deliver the scheme. Any further costs are considered to be highly unlikely.

Non-monetised benefits

In addition to the monetised benefits discussed above, further non-monetised benefits have been identified and are discussed in section F.8. These benefits are generally slight and, whilst they do not form a significant part of expected scheme benefits are considered relatively likely to occur in practice.

A further element of potential benefits that has not been fully appraised is the impact of regeneration. Whilst the adjusted BCR includes a significant element of land value uplift, the further benefits of investment and regeneration in and around the town centre, primarily driven by the expected increased footfall and visitor numbers expected, has not been reflected in the appraisal. To illustrate the potential scope of impacts, the regeneration of the Piece Hall has been found to have increased footfall in the adjacent Woolshops centre by 1 million in the first two years following its reopening. Additionally, an early exploratory analysis suggest that increase in asset values of around 11% in the area surrounding the Piece Hall may be the case. The Phase 2 scheme could reasonably be expected to have positive effects in these respects with the impacts of the Piece Hall demonstrating the potential impacts of the improvements to the town centre as a whole and, as demonstrated elsewhere in this FBC, the key role the Phase 2 scheme plays in this.

At present, against a background of decline in the traditional high street and falling investment in some town centres, it is possible that a significant investment in a town such as Halifax, on top of successful improvements to an asset such as the Piece Hall, could have a positive impact when considered against the alternative of zero or limited investment. The area has seen further growth in the tourism economy in recent years on the back popular TV series (such the the BBCs Gentleman Jack) and the increased profile of attractions such as Shibden Hall. When combined with the potential well-being benefits from increasing access to further cultural and heritage activities, the potential further non-assessed benefits of the scheme can be considered to add a further argument in favour of implementing the scheme.

19 Please provide an account of the final Value for Money (VfM) position for Preferred Option taking account of Adjusted BCR, switching values and an assessment of unvalued costs and benefits. Please provide an account of uncertainty and sensitivity scenarios in relation to the VfM.

(max 1,000 words).

The table below summarises the initial and adjusted BCR positions as detailed in section F.13.

Scenario	PVB (£1,000s)	PVC (£1,000s)	BCR	VfM Category
2023 Initial	42387	28943	1.46	Low
2023 Adjusted	65651	28943	2.27	High

These show that the initial BCR fits into the "medium" value for money category (BCR between 1.5 and 2.0) with the land value uplifts of the adjusted BCR improving this to the "high" value for money category (BCR between 2 and 4).

Analysis in this section shows that the scheme benefits are firstly driven by the health and fitness benefits of increased footfall, particularly pedestrian users who, as research elsewhere shows, can be expected to increase visits to the town centre with the scheme in place.

There are also benefits to public transport users, mainly due to improved waiting environments for bus users although this is more than offset by disbenefits to highway users, who experience longer journey times in some cases due to closures of certain roads in the town centre.





The further land value uplift benefits arising from this, as added in the adjusted BCR are also considerable and paint a picture of a town centre benefitting from a well-designed targeted investment to improve the attractiveness and usability of the environment for non-highway users creating a higher number of visitors for all reasons and consequently, creating a more attractive environment for businesses to invest and contribute to the regeneration of the town centre and surrounding area.

The analysis of switching values, considering what changes in the scheme benefits and costs would be necessary to the scheme change value for money category, shows the following:

"For the initial BCR to decline to the next lowest category (1 or lower) would require an increase in costs from £28.943m to £42.387m (£13.444 or 46%). The adjusted BCR value of 2.27 would require a smaller cost increase of £3.883m (13%) to reduce the BCR to 2 and fall in the medium VfM category. Nevertheless, this is the equivalent of raising the risk value to somewhere between P80 and P90. Given the current level of BCR, significant cost increases would be necessary to move the scheme into a lower VfM category, in both the initial and adjusted BCR situations."

The value for money position of the scheme can be considered to be relatively strong. Whilst the initial BCR fall in the medium value for money category the switching value analysis shows that this is a robust position. The further monetised elements included in the adjusted BCR, alongside further elements not appraised in detail (i.e., further regeneration impacts) demonstrate a scheme that has considerable benefits to the town centre and Calderdale more widely and offers good value for money as a whole.





Section G: Commercial Dimension

G.1

Please detail the selected procurement strategy and the proposed contractual arrangements for the project.

- Please provide full detail in an appendix and provide summary here. How has the strategy been developed? What are the pros and cons of options? Etc.
- Please confirm that selected procurement strategy is consistent with directives, regulations, policies, and guidance relating to the procurement of supplies, services and works for the public sector.
- Please outline use of particular contract.
- Please describe key contractual issues, including change control, dispute resolution, break clauses etc.
- Please set out personnel implications.
- Please set out accountancy treatments and how VfM through procurement costs will be achieved.

(max 1,500 words)

The Calderdale Council Procurement Strategy (see appendix G1) has informed the identification of the preferred procurement option, the following issues informed the decision-making process:

- Achieving best value;
- Price certainty is critical;
- Provision for appropriate traffic management and works;
- Minimise the impact of the works on the travelling public during construction;
- Phasing of the scheme relative to other programme elements.

Options for procurement of the construction contractor included use of existing frameworks, a competitive tender process or use of internal construction teams. The advantages and disadvantages of the three sourcing options are described below;

Advantages

Disadvantages

Existing Frameworks (e.g. YORCivils)

- Pre-qualification process to be appointed to frameworks reduces the procurement resource required.
- Frameworks developed for delivery of transport schemes which demonstrate suppliers experience in delivering similar infrastructure projects.
- Provides the opportunity to direct award saving time and money to the client organisation
- Value for money proven in assessment criteria on appointment to framework

- Tender period would be required (when running mini competitions) which would have programme implications.
- There can be additional fees associated with using an existing framework.
- Suppliers may not carry niche skills for the works required.
- Potential lack of capacity to deliver the works due to existing commitments.





Competitive Tender

- Client able to choose the form of contract.
- Restricted tender has an added advantage with initial criteria that bidders must fulfil prior to being invited to tender.
- Drives competitive processes and delivers value for money.
- Builds in the need for suppliers to demonstrate commitment to social value for the local area.
- Local authority resource requirement to manage the tender process.
- There are significant timescales associated with a compliant tender period.
- Depending on existing demands in the marketplace, there may be no tenders submitted
- Developing the specification is critical to safeguard local authorities and ensure the scheme is delivered as expected.
- Challenges to the award by unsuccessful bidders can delay the programme for many months

Delivered In-House – Direct Labour Organisations

- Removes tender period from programme.
- Local authorities have a proven track record.
- Governance structures in place to manage risks.
- Engagement throughout design and delivery provides continuity.
- Retained understanding of the built scheme aids future maintenance.
- Use of local labour, increasing social value.
- Potential for this to be perceived as less competitive and not provide the best value for money outturn. This can be mitigated with an independent validation of costs.
- Lack of capacity with the construction teams.
- · Client absorbs all risk.
- Potential lack of niche skills for elements of the scheme.

Due to the scope of the project the decision was taken at an early stage that the scheme would be a traditional contract single stage and would follow the conventional procurement path which sees the appointment of a Client design resource throughout the development cycle to completed detailed design with design liability remaining with the design team engaged by the Client. The Contractor's role extends to construction only via a separate tendered exercise based on the Client supplied information within the works package and priced accordingly.

It was decided that procurement of the contractor should be direct award to a single principal contractor following a mini competition undertaken via the YORCivils framework. The decision to use the YORcivils framework was made based on excellent previous experiences using the framework to commission contractors for the A629 Phase 1a & 1b schemes. The YORcivils team provide a first-class service, always on hand throughout the entire process, provide specialist NEC advice and has delivered similar types of schemes for their own council employer in Sheffield alongside supporting all Authorities within West Yorkshire. YORCivils is a standard, regularly used, procurement approach and as such is consistent with all directives, regulations, policies and guidance relating to the procurement of supplies, services and works for the public sector. Phase 2 utilises the Major Works lot which includes 8 pre-qualified Tier 1 contractors. The standard YORCivils contract has benefitted from lessons learnt on previous projects in relation to contractual issues, including change control, dispute resolution, pain/gain shares and risk transfer.

The procurement process utilised NEC3, Option C – Target Cost with Activity Schedule (Pain/Gain) all other options were considered fully but essentially discounted. NEC3 offers three options for the allocation of risk between the Employer and the Contractor with a sliding scale of risk allocation. Options A and B (greatest contractor risk) and the cost reimbursable Option E at the opposite extreme (greatest employer risk). NEC 3 Option C was the preferred contract as whilst the scope is





defined there are known risks which will require mitigation by all parties and this option allows financial risks to be shared, encouraging collaborative working. This agreement has very clear and robust risk and cost management mechanisms alongside open book accounting, which align with BCC being open and transparent.

The Pain/Gain element of the contract is based on the following share percentages and the share ranges providing the contractor with a clear incentive to adhere to the accepted activity Schedule:

Share Range	Contractors Percentage Share
Less than 105%	50%
From 105% to 115%	70%
Greater than 115%	100%

The contract clearly notes known risks to the project and where possible identifies the owner between both Client and contractor.

In Autumn 2015, West Yorkshire Combined Authority held a 'meet the buyer' event, which provided contractors with the opportunity to network with West Yorkshire-plus Transport Fund Project Managers and to gather an understanding on the types of schemes that would be delivered in the coming 5 years by authorities within the Leeds City Region. A number of Meet the Contractor events have taken place since 2020 the latest being November 2022 which allowed the project team to ensure ongoing interest from the marketplace. The events were supported by YORcivils who assisted in the compilation of the ITT following dialogue with individual contractors based on their expectations and to ensure a greater level of returned tenders. A similar exercise was conducted for Phase 1a and 1b within the A629 CIP Programme and resulted in the maximum number of returned tenders.

BCC has utilised both YORcivils Framework support and their internal Legal Department to undertake the drafting and contractual review of the construction contracts. The contract documents were written to demonstrate immediate availability of works and a comprehensive ITT was provided specifically detailing all phasing, restrictions and constraints within the Works Information.

To administer the Phase 2 Contract on site, the Council will assemble a supervisory team including a full time NEC3 accredited Project Manager, Assistant Project Manager, NEC3 accredited Site Supervisor and Quantity Surveyor. In addition, a part time programme/planning resource will be required. Experience from similar schemes within the programme of works has proved these personnel are essential to ensure compliant contract management.

BCC currently does not have the resources to provide the expert supervisory team required to administer/ manage this highly technical contract. Therefore, the options are to either recruit the resource directly either as short-term contracts / agency, or by consultancy. Previous market testing carried out has proven that direct employment with BCC does not attract the right personnel, primarily due to the competitive salary consultancy services are able to offer. On balance consultancy offers several advantages.

- Resource, appropriate skill set, and experience are available
- · Framework arrangements are available
- Centralised support is offered
- · Resilience and continuity are offered

The Project Team recently met with representatives from YORconsult2 to discuss procurement routes, appropriate contract methods and ascertain market interest.

The intention is that procurement of the required personnel will be in place prior to works starting on site in Summer 2023. The preferred contract method is NEC Professions Services Contract – Option A (Target Cost – Activity Schedule). The requirement of each individual role is specific and therefore should be treated as any other consultancy appointment.

Throughout the construction period there is also a requirement for ongoing design support to assist the Project Team in delivering the works throughout construction. Duties include:





- Resolve any technical queries
- Onsite technical/design assurance
- Design changes
- Design risk control and management
- Contractor liaison
- · Stakeholder engagement and management

AECOM were originally commissioned in December 2016 to refine the outline scheme, develop detailed design, prepare the required planning applications, and produce the full business case for the A629 Phase 2. AECOM are unequivocally considered best placed to provide these services, they have the required knowledge of the detailed design, tender documentation including the works information as well as having the broad skill sets needed to support the BCC project team.

The current contract in place with AECOM does not include the above requirements and the Project Team consider this is an appropriate juncture in which to firm up the contractual arrangements and ongoing requirements.

In these circumstances the most appropriate method to award is via direct appointment which can be achieved through the Scape Framework which AECOM have confirmed they are party to.

As the scope of support required over the 4-year construction period cannot be quantified at the present time procurement of these services will be via the NEC Professional Services Contact – Option A (Activity Schedule).

With respect to previous review comments concerning the procurement of the Butterfly Meadow element of the scheme, it should be noted that, since this has now been removed from the scheme, the procurement method proposed reflects the current construction and implementation requirements and, as such, many of the comments previously raised are no longer applicable.

G.2 Please describe the scope of the procurement:

- Please set out key requirements and outputs.
- Please set out quality expectations.
- Please provide evidence of workshop undertaken to discuss and agree these aspects of potential Deal (if applicable)
- Please provide key activities and timescales in the below table.
- Please detail any incentives that will be offered for the contractor to keep to time/ quality.
- Please highlight any procurement risks.

(max 1,500 words)

The key requirements and outputs as detailed within the contract documents are as follows:

- Significant additional cycle infrastructure
- Prioritisation of pedestrian access and pedestrian space
- Rerouting of public transport and creation of a 'bus box'
- Reallocation of road space and review of on street parking
- Public realm improvements and creation of pedestrian areas
- Rationalisation of signal junctions and introduction of hybrid MOVA/SCOOT control
- Widening of Clark Bridge and realignment of Berry Lane
- Drainage, signing and lighting improvements
- Footway and carriageway improvements





A comprehensive and complete tender package was issued to all bidders, this included instructions to tendering, contract documents, site information, works information and a complete set of detailed design drawings for review.

Tenders were assessed on the basis of a mixture of Price (30%) and Quality (70%).

The information assessed in respect of the tenderer's quality submission is given below, bidders were asked to demonstrate quality via the following criteria:

1. Health, Safety and Environment

Describe and illustrate the constraints, risks and hazards associated with undertaking this type of work in close proximity to the public highway and third party assets in an urban environment. Also describe and illustrate the environmental risk and impact of the works. Explain how you will manage/mitigate these risks and demonstrate your understanding of health, safety and environmental issues related to the proposed works.

2. Competence in delivering similar type and scale projects

Please demonstrate your work and delivery of previous similar projects (ideally within the past 10 years) to illustrate how lessons learned can be applied in delivery of this project/contract.

3. Delivery methodology and programme for the overall project and ability to meet the requirements

Please provide details on how you plan to meet the requirements of the project including mobilisation, methodology for traffic and pedestrian management, project programme, management of project programme.

4. Proposed Staff/Delivery Team

Tenderers shall provide CVs for the people listed in Contract Data Part 2.

5. Customer and Stakeholder Communication

How will you engage and manage relationships with those who have a direct interface with the works?

6. Social Value

Please describe how you will enhance Social Value (over and above that required by the mandatory Employment and Skills Plan (ESP)).

A copy of the Tender Assessment summary report can be found in Appendix G2.

Throughout the tender period briefings were undertaken with all bidders on 2 separate occasions, the 14th of November 2022 and 17th January 2023 this allowed each tenderer to discuss any aspects of the contract package which they felt needed further consideration and the Council to detail their position.

The contractor is being procured using NEC3 Option C (Activity Schedule with Target Cost) which includes a Pain/Gain mechanism to incentivise the contractor to work to the agreed programme, any delay would escalate costs and therefore negate any Pain/Gain element. The quality aspect will be checked with an appointed full time NEC Site Supervisor who will oversee the works.

The most disruptive procurement risk would have been insufficient tender returns, or sufficient returns but all at costs significantly exceeding expectations, fortunately this is not the case. Two tender returns were received and although costs were higher than originally expected they were within an acceptable range, given the recent period of high inflation, particularly within the construction industry.

There are also procurement risks around the buildability of the scheme tendered. The risk of unforeseen buildability issues has been reduced through the completion of feasibility work to inform engineering feasibility and costs.

The remaining risks to procurement focus on the availability of skills.

Internal to BCC there is a risk that the resource demands of existing programmes delivered
by other directorates limit the availability of internal resources, for example legal resources.
This risk has been minimised by advising support functions of required inputs and
programme from the outset. BCC will continuously review support requirements
throughout the procurement and programme to mitigate this risk.





- A further internal risk is that the internal project team requires recruitment for additional resources and skills, and the associated cost of that recruitment and training. This risk is being mitigated against via robust programme management, monitoring procedures and resource planning.
- There is also a risk that external partners struggle to resource the project with sufficient skills, resulting in delays and recruitment/training costs. To reduce this risk service providers will be engaged with at the earliest opportunity and BCC will put in place robust programme management and monitoring procedures to ensure quality resource planning. Moreover, ability to demonstrate rapid mobilisation was key to the tender assessment process and has been demonstrated by the preferred contractor.

Key Procurement Activity	Start (MM/YYYY)	Completion (MM/YYYY)	
Design Consultant AECOM	December 2016	September 2023	
Ongoing Design Support Construction Period-AECOM	October 2023	November 2027	
Contractor	October 2023	November2027	
NEC3 Project Management Team	September 2023	May2028	

G.3

Please describe the agreed strategy for risk apportionment.

- Provide full detail in appendix and a summary here.
- Please set out any incentive mechanism for the transfer of risks.

(max 1,500 words)

Risk will be managed proactively at both a programme and project level throughout the development and delivery stages of the project according to the risk management strategy (appendix G7). Remaining risks will be proactively monitored and managed throughout the delivery of the project using the working risk register. The risk register will continue to be developed and updated as the project progresses. Monthly risk reduction and opportunity meetings will be held throughout the construction phase jointly between the Designer, Contractor and client.

A copy of the quantified risk register is contained in Appendix G3. The outstanding risks in this register cannot currently be eliminated, thus have been costed using the monte carlo analysis and monies attributed to cover these should they occur. Where appropriate, risk owners have been allocated risks and are responsible for ensuring the likelihood of their occurrence is minimised by eliminating, reducing, sharing, informing, controlling these risks and/or planning/implementing mitigation measures.

BCC has an established approach to the contractual management of risk. The NEC3 contract will be used for the procurement and subsequent management of a contractor to deliver the A629 Phase 2 scheme. An NEC3 contract lists the Contractor and Client responsibilities very clearly; stating who carries the liability for these risks. Risks given or shared with the Contractor were outlined in the ITT. Incentivising the risk transfer conditions of the contract has so far proven very successful for BCCs A629 Phase 1a scheme – as such, this approach will be implemented for this project.

Under NEC conditions there are very clear process for Contractors to follow to ensure they are reimbursed if there are cost increases or time overruns. 'Compensation Events' give BCC a single





assessment that deals with the entire effect of an event on time, cost or quality. A strict procedure must be followed to ensure these are dealt with fairly and in a timely fashion.

The NEC contract promotes collaboration and partnership between delivery partners and the Client. It utilises open book accounting to prevent an adversarial approach seen in more traditional construction contracts. BCC will share risk and opportunity with the Contractor/Consultant in order to align the goals of all parties to ensure they are all working towards the best outcome for the project. In this vein, a Target Cost contract, with a pain/gain share mechanism will be employed. This will incentivise the Contractor to stay within the scheme 'Target Cost' to allow them to 'gain' (profit) if they can complete the project under this figure. Adversely, 'pain' (lost income) will occur if the contract exceeds this value. These amounts are likely to be shared 50/50, meaning any saving or exceeded spend will only need to be covered/received 50% by the Promoter/Funder. Along with competitive tendering for the construction works, elements of the target cost will be 'negotiated' to ensure the project Target Cost is not above the value of the works. An Activity Schedule will be used, instead of a Bill of Quantities. This will mean that unexpected works are more likely to have been priced and have agreed (competitive) rates under the contract to minimise the likelihood of high costs for additional works required under the contract.

With regard to transferring certain risks to the Contractor, in practice, this can only be achieved when the risk can be clearly defined, and the Contractor is in the strongest position to manage these risks should they occur in the process of carrying the works. At the same time, consideration will be given as to whether the consequences of the risks occurring, merit the anticipated extra costs requested by the Contractor to accept the risk.

However, when risks are transferred to the Contractor, there are implicit incentives or disincentives when the Contractor chooses to accept or reject risks. In most cases the Contractor will price risk conservatively to minimise potential losses, whilst for the Employer, having a price allocated to a particular risk allows for more accurate project budgeting. Yet, with regard to the Contract Programme, unless there are unforeseen problems or changes to the Works Information, the Contractor will be naturally incentivised to work efficiently to the agreed Contract Programme at the risk of paying liquidated damages or compounding unwanted losses. The choice of form of contract also has a role in the Contractor accepting the transfer of risk and how any additional costs for the Contractor, as a result of these risks, can be mitigated.

Under the framework and NEC contracts, delays can be claimed back from the contractor in the form of damages.

The marginal risk, including risk associated with planning consents will also remain with BCC. However, planning will be resolved before entering into any construction contract (per scheme programmes in FBC).

A minimum limit of indemnity insurance will be required from the successful Contractor and Consultants involved during the next phase of development/construction. External, specialist construction legal support has been utilised to draft the construction contract to ensure the Promoter and Funder's risks are minimised, the contract is tailored to suit their requirements whilst incentivising the Contractor. It must though be noted the contract does not impose too much of a burden onto the Contractor, to ensure the commission was appealing to the market so as to ensure competitive and high-quality tenders were received.

The updated Risk Register clarifies roles and responsibilities and risk transference, for instance the principal contractor under the terms of the tender is required to co-ordinate all specialist service activities and utility interventions within his programme.

A Client site supervisory team will be appointed to oversee the daily works and progress. They will be available immediately to the Contractor to make decisions on issues that arise to minimise contract delays awaiting resolutions. Reporting will be the responsibility of the Project Manager who will in turn require support from the commissioned works supervisory team. Any programme level risks which implicate time delay and cost will be reported via the Project Manager to Programme Manager and then Programme Board for mitigating action decisions.

Contractual cost overruns are subject to successful Risk Management and contractor delivery overseen with robust supervisory measures in place. Contractor early warnings or compensation events will be managed during the course of the works by the Site Team and Project Manager, who





combined bring specialist NEC3 and a wealth of large construction supervisory experience to ensure appropriate Client resources are being engaged.

Contractual claims having cost and programme implications will be reported in daily / weekly site logs which will be assessed by the scheme Project Manager who report to the BCC Programme Manager; who will escalate to the BCC West Yorkshire-plus Transport Fund Programme Board if appropriate.

Additional monies required for valid claims will be drawn down from the QRSA budget. Any, unlikely, expenditure beyond this limit is understood to be payable by BCC.

West Yorkshire Combined Authority will be provided with monthly PIMS updates. Also, monthly meetings with the WYCA Programme Manager to discuss project progress. Reporting by exception for any other items requested will also be available.

G.4

Please confirm how procurement will be used to maximise social value and National and Combined Authority's TOMs (Themes, Outcomes and Measures). (max 500 words)

The Council recognises the benefits of enabling delivery of Social Value through its procurement and is committed to a performance and evidence-based approach to Social Value, ensuring that all Council spend can better contribute to economic, social and environmental improvements within the borough.

Demonstrating a commitment to enhancing social value was key to the procurement of the main contractor, with the social value question having a 15% weighting in the overall quality score. The preferred contractor has committed to abide by Social Value Act 2012 - PPN 06/20, the United Nations Sustainability Goals, the National TOMs and the Council's Inclusive Economy Strategy, as demonstrated by the following proposals:

Support Calderdale's economy – commit to directly hiring or retaining 80% of local full-time people or through supply chain partners, including hire and retention of 4 unemployed people on the project. Commit to 150hours of employment support for unemployed young people through providing career advice, cv writing support and training.

Engaging with local schools – Commit 300hours to continuous engagement with local schools, colleges and universities about opportunities in construction. Programmes will include STEM activities in primary schools, and more construction career focused sessions e.g. cv writing, mock interviews in secondary schools, colleges and universities.

Apprenticeships –prioritise local residents for vacancies and utilise and manage trainees in project delivery. Opportunities will be diverse in skills levels and proficiency required providing a wider pool of participation.

Upskilling workforce – Provide 100 weeks support and training for existing lower paid employees to upskill, create opportunities for career advancement through internal and external training courses.

Living standards – Pay staff and apprentices the real living wage with periodic increments, as per guidance from the Living Wage Commission.

Local supply chain – Apply the 'Proximity Principle' to procure local materials, services and labour and support local MSMEs by engaging them for non-specialist items, e.g. aggregates, kerbs, and ironwork. Suppliers will be local, ensuring 90% of spend is with established local suppliers.

Health and wellbeing – Staff access to health and wellbeing providers to promote good physical and mental health in the workplace.

Sustainability and the Environment – Embed the 'whole life carbon approach' within the project, in compliance with PAS 2080, PPN 06/21, and ISO 14001 accredited environmental policies to reduce the carbon footprint of the scheme and help meet BCC's Net Zero Emissions ambition





2038. A Carbon Action Plan will be developed to set a carbon baseline, monitor emissions, record, and create progress reports at all project stages. Target a maximum carbon footprint of 1.30 tonnes of Scope 1 & 2 emissions per £100k of revenue. A Construction Environmental Management Plan (CEMP) and risk register will be developed to define and record mitigation measures for materials with higher embodied carbon.

Ethical labour practices – Use Builders Profile (part of the Constructionline Network) to ensure compliance with PAS91, including the Ethical Labour Policy and Modern Slavery Act 2015. Other compliance checks e.g. criminal convictions and regular spot-check audits of our supply chain, including physical checks on individual CSCS Cards to maintain ethical operations.

G.5

Please confirm any potential supply chain impact which may deliver against the Combined Authority's strategic priorities (e.g. inclusive growth, equality and diversity, climate emergency etc). (max 500 words)

Social value was a stringent criterion (15% of overall quality score) in selecting a contractor. In the current economic climate, public expenditure must not only deliver meaningful social value impacts that secure better outcomes, but should also tackle deprivation and inequality, and boost employment and skills to create beneficial growth for all.

The contractor will prepare an Inclusive Action Plan detailing the practical measures to support the delivery of WYCA's strategic priorities and Calderdale's growth objectives including investment, access to good work, young people, and lifelong learning. Social value return on investment will be maximised through established partnerships with Calderdale and other organisations, ensuring any measures adopted comply with Calderdale's Social Value Charter. The following sections outline implementation processes, highlighted by the preferred contractor, with potential supply chain impact.

Supply chain support – the contractor will support supply chain partners to use the CECA Social Value Toolkit which supports forecasting, delivery and measurement of their social value impacts.

Training, Apprenticeships – the contractor will liaise with supply chain partners to identify additional internships, trainees and work placements. Supply chain partners will signpost funding streams/other available support and offer trans company secondments to expand experience pool. Vacancies for apprenticeships will be widely advertised to allow sufficient time for uptake through collaboration with local job centres, specialist apprenticeship recruitment agencies, career fairs etc.

Logistics – the contractor indicates materials will be shuttled from the main compound to the working areas using an EV and utilise Marshall's yard for storage, reducing double/triple handling of materials. Only ultra efficient plant that use sustainably sourced HVO fuel will be used. Support and training on low carbon journeys will be provided for supply chain partners, in accordance with Net Zero Partners initiative and Gold Membership of the Supply Chain Sustainability School (SCSS). In addition, the green fleet policy supports staff use of electric or hybrid vehicles with appropriate infrastructure provided on site. This, in addition to the travel plan will help to encourage mode shift and contribute to the Council's net zero targets.

Environment – A Site Waste Management Plan and a Materials Management Plan will be prepared, and contractor will follow CL: AIRE Code of Practice to monitor/report progress to divert all waste from landfills. All monitoring will be via WRAP's Materials Facility Reporting Portal. Low-carbon construction techniques, including energy-efficient plant and equipment, circular economy principles and offsetting initiatives will be used to minimise on-site emissions. In addition, a Sustainable Procurement Plan will align with BES 6001 and BRE Green Book, will ensure use of sustainable materials/products.

Ethical Labour Practices – supplier contracts will include a clause on modern slavery and human trafficking. Suppliers who do not meet the Modern Slavery Act 2015, Section 54, or are of medium to high risk will undertake an MSAT and results shared with the government. To protect the project





from poor supply chain resilience, Builders Profile KPI results will be queried to assess suppliers' previous performance.

G.6

Please describe the confirmed approach to health and safety during delivery and operation.

- Provide full detail in appendix (if necessary) and a summary here.
- If applicable, please describe how Construction Design and Management (CDM) Regulations will be adhered to and implemented.
- Please clearly set out roles and responsibilities, setting out clearly what implications it may have on the Combined Authority.

(max 1,000 words)

The Health and Safety Executives Construction Design and Management Regulations (CDM) will be adhered to and implemented throughout the delivery of the project. CDM regulation delegates specific roles and duties to individuals and organisations which will be implemented as shown Table 1. As clients BCC will be able to draw on their experience managing other similar schemes such as the A629 Phase 1a and b to ensure that CDM regulations are correctly implemented and adhered to. AECOM, as principal designers, also have significant experience fulfilling the CDM duties whilst use of the YORCivils framework for the appointment of the principal contractor will ensure comparable experience there.

Table 1 CDM Roles and Duties

CDM Duty holder	Organisation	Role/Main Duties
Client	BCC	Make suitable arrangements for managing a project. This includes making sure:
		 other duty holders are appointed;
		 sufficient time and resources are allocated.
		Make sure:
		 relevant information is prepared and provided to other duty holders;
		 the principal designer and principal contractor carry out their duties;
		 welfare facilities are provided.
Principal Designers	AECOM	Plan, manage, monitor and coordinate health and safety in the pre-construction phase of a project. This includes:
		 identifying, eliminating or controlling foreseeable risks;
		 ensuring designers carry out their duties.
		Prepare and provide relevant information to other duty holders.
		Provide relevant information to the principal contractor to help them plan, manage, monitor and coordinate health and safety in the construction phase.
Principal Contractors	To be appointed via	Plan, manage, monitor and coordinate health and safety in the construction phase of a project. This includes:
_		liaising with the client and principal designer;





	YORCivils	 preparing the construction phase plan;
	framework	 organising cooperation between contractors and coordinating their work.
		Ensure:
		 suitable site inductions are provided;
		 reasonable steps are taken to prevent unauthorised access;
		 workers are consulted and engaged in securing their health and safety; and
		 welfare facilities are provided.
Contractors	Any sub- contractors appointed by principal contractor	Plan, manage and monitor construction work under their control so that it is carried out without risks to health and safety. For projects involving more than one contractor, coordinate their activities with others in the project team – in particular, comply with directions given to them by the principal designer or principal contractor.
Workers	Those employed by the principal or other contractors	 They must: be consulted about matters which affect their health, safety and welfare; take care of their own health and safety and others who
		may be affected by their actions;
		 report anything they see which is likely to endanger either their own or others' health and safety;
		 cooperate with their employer, fellow workers, contractors and other duty holders.

The Construction Environmental Management Plan (CEMP) (see appendix G4) was prepared as part of the application for planning consent for the A629 Phase 2 Halifax Town Centre scheme and will be updated by the appointed contractor in consultation with BCC. The CEMP sets out a series of proposed measures to be applied by the appointed contractor(s) throughout the construction period to provide effective planning, management and control to control potential impacts during construction upon people, businesses and the natural and historic environment. The appointed contractor will be responsible for working in accordance with CEMP with overall responsibility for implementation of the CEMP lying with BCC.

As part of their tender response the preferred contractor has outlined their approach to health and safety and developed a draft Construction Phase Plan (CPP) in accordance with the CDM 2015 regulations. They have indicated that they will undertake all measures possible to ensure safety and wellbeing of their staff, supply chain partners and the general public. The H&S culture is underpinned by ISO:45001 H&S Management System and behavioural safety programme, Challenging Beliefs, Affecting Behaviours (CBAB), in line with Construction 2025 vision. Procedures and systematic controls for managing health and safety risks and establishing consistent standards across operations will be managed through the Business Management System (BMS).

The preferred contractor's approach to health and safety (appendix G5) can be summarised in the following key areas:

Identify project specific hazards and constraints – The contractor will identify potential H&S hazards and constraints along each of the 3 development corridors.

Identify project specific risks, modalities for assessment and mitigation measures – The risk assessment approach will include actively influencing the mitigation of HSW hazard and risk management at the earliest opportunity using the Safety by Design, Principles of Prevention





hierarchy (ERICPD). Early engagement with BCC, AECOM, Supply chain partners, statutory undertakers and other key stakeholders will ensure risks are identified and eliminated or mitigated for at the earliest possible opportunity.

Outstanding risks will be addressed through the Construction Phase Plan (CPP) to ensure they are managed at every construction stage through to delivery. The CPP provides clear expectations and accountability and forms the basis for communicating safety arrangements to all involved in the construction phase and will remain a live document to be updated regularly as work progresses

Apt and timely communication through inductions, daily briefings and dynamic risk reviews will equip staff with full understanding of the required controls and any changes they need to be aware of such as changes to TM, access and interface arrangements with other works sharing the workspace - including statutory undertakers, essential maintenance and other projects.

Ongoing monitoring will be undertaken via weekly site inspections, monthly Leadership Safety Tours, monthly HSW Safety Advisor inspections, and internal and via an external (ISO45001) audit programme.

Awareness of environmental impact – the preferred contractor operates an ISO14001-certified Business Management System (BMS) to provide structure for reducing environmental impacts throughout the project lifecycle, is PAS:2080-compliant and currently working toward accreditation to the ISO20400:2017 standard for sustainable procurement. The Construction Environmental Management Plan (CEMP) will be further developed and agreed with Calderdale and statutory consultees to support environmental impact mitigation and improvement.

Identify project specific H&S training – the contractor will identify relevant training specific to project requirements, ensuring that all staff and supply chain partners are competent in mandatory H&S competency standards.

G.7

Please describe what due diligence has been undertaken to ensure the capacity, resilience, and capability of the supply side. (max 1,000 words)

The following actions demonstrate the due diligence which has been undertaken to ensure the capacity, resilience and capability of the supply side;

Use of the YORCivils Major Works framework for the procurement of the construction contractor: The procurement of the contractor follows a mini competition undertaken via the YORCivils framework and was thus only open to the 8 pre-qualified Tier 1 contractors appointed to the framework, as part of the pre-qualification process contractors are required to demonstrate their experience delivering similar infrastructure projects.

Clear and detailed Works Information and Specification issued as part of the Invitation to Tender

As part of the tender pack the following information was provided to potential tenderers;

- Instructions for Tendering
- Appendix 1 Methods of Evaluation of Tender
- Appendix 2 Subcontractors and Suppliers
- Appendix 3 Pre-Tender Health & Safety Information
- Appendix 4 Not Used
- Appendix 5 Employment & Skills Plan
- Contract Data
- Contract Data Part One
- Contract Data Part Two





- Form of Tender
- Activity Schedule
- Works Information
- Specification
- Site Information
- Sample Form of Agreement
- Performance Bond
- Declaration of Non Collusive Tendering
- Declaration of Commercially Sensitive Information
- Privacy Notice

The provision of this information, together with responding to 242 tender queries ensured that potential tenderers had an excellent understanding of the works involved and that the bids received were compliant with the Instructions for Tendering (as confirmed by Calderdale's Project, Legal and Insurance Teams) and demonstrated a good understanding of the scheme and construction requirements.

Invitation to Tender Quality Questions

The information assessed in respect of the tenderer's quality submission is given below, bidders were asked to demonstrate quality via the following criteria:

- 1. Health, Safety and Environment
- 2. Competence in delivering similar type and scale projects
- 3. Delivery methodology and programme for the overall project and ability to meet the requirements
- 4. Proposed Staff/Delivery Team
- 5. Customer and Stakeholder Communication
- 6. Social Value

Quality Evaluation

The quality returns were reviewed in accordance with the Instructions for Tendering by a range of personnel with relevant experience to the project.

Evaluation scores were considered by the following.

- Jess Thompson Corporate Lead for Major Projects
- Jonathan Cole Corporate Lead for Green Space & Street Scene
- Mohammed Shah Programme Manager West Yorkshire + Transport Fund
- James Driver Assistant Programme Manager (Previously Highways Design and Regulation Team Lead)
- Ruth Bragg Project Manager
- Harriett Sunderland Assistant Project Manager
- Michelle Thompson Assistant Project Manager
- Martin Ellis Consultant, AECOM (design partners)

Individual quality evaluation returns were completed by the 13th of March 2023. A group moderation took place on the 14th of March 2023.

Price Evaluation

The returned amounts were subject to an independent Cost Assurance Review which was undertaken by Turner and Townsend. Their report can be found in Appendix G6.

The clarifications detailed within the report were checked by Calderdale's Legal and Procurement Teams for suitability against the information included within the Instructions for Tendering.





Appropriate questions were presented to both parties, none resulted in an amendment to the prices.

G.8

Please describe what due diligence has been undertaken to ensure proposed contract is robust and enforceable. (max 1,000 words)

Calderdale Council were supported by both the YorCivils Framework Manager (South & West) and AECOM Contract Consultant in the preparation of the Contractor contact documents. These have been reviewed fully by Calderdale's Legal and Procurement teams who continue to be fully engaged with the development and execution of the contracts. We are satisfied that all regulations have been followed and the contracts prepared meet requirements.

The Contractor contract will be managed independently by an NEC Project Management Team consisting of;

- NEC Accredited Project Manager
- NEC Assistant Project Manager
- NEC Accredited Site Supervisor
- Programmer
- Quantity Surveyor

The contract for the NEC Project Management Team is currently being compiled with the support of the YorConsult Framework Manager (South & West) and will also be reviewed by Calderdale's Legal and Procurement Teams to ensure all due diligence has taken place prior to upload via the YorHub Framework.





Section H: Financial Dimension

- H.1 Please provide an account of the project's capital costs to deliver the Preferred Way Forward options (max 1,000 words).
 - Please complete the embedded Cost Breakdown Summary spreadsheet
 - Please submit a detailed breakdown of costs such as a cost plan (attached as an appendix)
 - Please confirm that all methodology used is consistent with government guidance and the local Assurance Framework (provide clear reference)

The cost breakdown summary spreadsheet (appendix H1) provides a cost breakdown for the preferred way forward and is summarised in Table 2. The cost breakdown has been provided for the preferred way forward only as all other options have previously been discounted. Due to the advanced stage of scheme development only a single central estimate has been provided, it is expected that this estimate is highly representative of the actual scheme cost.

Table 2 Cost Breakdown Summary

Item		t
Project Development		5,754,375
Land Assembly	£	2,122,865
Delivery	£	42,277,896
Benefits Realisation Reporting	£	550,765
Risk	£	9,373,164
Inflation	£	4,060,700
Total	£	64,139,765

Project development costs include claimed spend to date and committed spend to include submission of this FBC up until the first Approval to Proceed which is expected to take place in August.

Land Assembly costs include both land costs and the cost of licences and associated fees. The land assembly cost included above is made up of £322,865 cost claimed to date and covering the purchase of sites on Horton Street and Church Street, and a committed spend of £1,790,000 which is the estimated cost of purchasing the remaining sites. Land costs have been estimated by external consultants based on comparable land sales. A detailed breakdown of the estimated land cost, and method used, for each site is contained in appendix H6.

No works are required to be undertaken prior to decision point 5 therefore no **Enabling Works** are included in the cost breakdown summary.

Scheme delivery costs include the construction costs of the preferred contractor and an estimate of £8,060,974 to cover other expected costs during the construction period. These other expected costs include internal staff costs and utilities diversions including the cost of the putting in electricity infrastructure for the electric vehicle charging points at Bull Green car park. Costs associated with breaking ground in order to meet the planning deadline of 17th June 2023 (and detailed in the April 2023 Change Request) are also included. The total construction costs of the preferred contractor are £34,216,920. The preferred contractor has provided a detailed cost activity schedule (appendix H2) summarised Table 3. The returned amounts were subject to an independent Cost Assurance Review which was undertaken by Turner and Townsend. Their report can be found in Appendix H3. The clarifications detailed within the report were checked by Calderdale's Legal and Procurement Teams for suitability against the information included within the Instructions for Tendering.





Appropriate questions were presented to the preferred contactor and did not result in an amendment to costs.

Table 3 Preferred contractor construction costs

		Direct	Subcontract	
Item	Detail	Works	Works	Price
Preliminaries	People	£6,273,324	£0	£6,273,324
	Other	£4,506,858	£30,000	£4,536,858
	Additional Surveys	£0	£133,200	£133,200
	Prescott Street: Prescott		2233,200	2133,233
Western Corridor	Street Junction	£6,755	£568,508	£575,263
	Commercial Street: Portland			
	Place, Wards End Junction,			
	Fountain Street	£245,710	£1,040,952	£1,286,662
	Bull Green: Cow Green, Bull	,	, ,	, ,
	Green Junction	£186,120	£2,210,858	£2,396,978
	Cow Green: Pellon Lane	ŕ	•	• •
	Junction	£63,191	£1,091,912	£1,155,103
	Orange Street: Broad Street	-		
	and Orange Street Junction	£8,455	£653,666	£662,120
	Bus Station: Northgate, Cross			
	Hills Junction, Winding Road			
	Junction	£10,808	£1,323,811	£1,334,619
	Church Street: Prescott			
	Street Junction, Church			
Eastern Corridor	Street	£51,164	£837,522	£888,686
	Eastern Gateway: Eastern			
	Gateway, Horton Street			
	Junction	£449,380	£1,991,039	£2,440,419
	Cripplegate: Berry Lane,			
	Cripplegate, Bank Bottom,			
	Mulcture Hall Road	£0	£1,580,942	£3,109,044
	New Bank, Charlestown Road			
	West, Charlestown Road			
	East: Charlestown Road	£11,540	£422,504	£434,044
	New Bank: New Bank			
	Junction	£3,989	£283,823	£287,812
	Winding Road: King			
	Street/Smithy Street/Charles			
	Street	£7,300	£571,522	£578,821
	Bus Station, Winding Road:			
Central Corridor	Winding Road, Smithy Street	£10,516	£705,419	£715,935
	Southern Loop, Horton			
	Street: Stage 1 - Westgate			
	Loop, Union Street, Thomas	60.40=	62.47.746	6257.456
	Street, Horton Street	£9,407	£347,749	£357,156
	Bus Station, Northern Loop:			
	Northgate (Crossley Street to	6452.245	6006 000	64 050 047
	Broad Street)	£153,245	£896,802	£1,050,047





	Market Street: Market Street			
	(Albion Street to Old Market)	£316,831	£1,044,832	£1,361,663
	Southern Loop: Market Street	1310,831	11,044,832	11,301,003
	(Westgate to Albion Street)	£149,990	£417,352	£567,342
-	Bus Station, Northern Loop,	1145,550	1417,332	1307,342
	Market Street: Northgate			
	(Old Market to Crossley			
	•	C190 F63	CEO2 OEO	C702 F21
	Street)	£189,562	£593,959	£783,521
	Southern Loop, Horton			
	Street: Stage 5 - Southern	60 205	6570 540	6500.026
	Loop	£9,295	£579,540	£588,836
Subtotal				
excluding				
Contractor's fee		£12,663,440	£17,325,910	£31,517,453
Contractor's				
direct works fee	at 7.75% on Subtotal	£981,417		£981,417
Contractor's				
subcontract				
works fee	at 8.3% on Subtotal		£1,438,051	£1,438,051
Subtotal				
including				
Contractor's fee		£13,644,857	£18,763,961	£33,936,920
	Provisional Sum for general			
Contingency	contingency during the works			£250,000
YORcivil Major				
Works				
Framework				
Access Fee				£30,000
Tendered Total				
of the Prices				£34,216,920

Benefit Realisation Reporting costs have been estimated and an indicative breakdown for the cost of the monitoring and evaluation exercise is shown below;

Baseline/Pre-construction £145,485.00

Construction: £7,200.00

1 year after completion: £185,093.265 years after completion: £212,986.38

The **risk cost** is the P50 total mean risk. The calculation of this cost follows a risk monetarisation exercise undertaken by Turner and Townsend who provided Quantitative Cost Risk Analysis (QCRA). A risk register was developed, and risks assessed in relation to schedule and cost impact. The risk register (see appendix H4) was populated for the previous FBC submission by the project team in 2020, with a recent validation workshop held on the 22nd of September 2022, and an additional verification & new risk identification workshop on 5th October 2022.

Contingency cost has not been included as a separate item in the cost breakdown summary. The preferred contractor has included a sum for general contingency during the construction works.

Inflation cost has been calculated by applying inflation estimates to the preferred contractor's construction costs. Inflation rates of 6.2% for 2023/4 and 3.5%, 3.5% and 3% for the following 3 successive years of the construction period have been assumed. These compounding interest rates have been applied in line with the anticipated spend profile. Internal staff costs and utilities are not expected to be subject to inflation in the same way as the contractor costs therefore





inflation rates have not been applied to these. This assessment of inflation has been approved internally at BCC within the NEC PM team. Inflation volatility beyond these rates is considered in the QCRA.

H.2

Please provide a comparison of the scheme cost at Activity 4 (FBC) compared to Activity 3 (OBC). Please explain any key cost variances (max 1,000 words).

The cost comparison summary spreadsheet has been completed and is included as appendix H5. The scheme has a complicated history and has changed significantly since OBC with major elements of the original scheme dropped, or developed as separate projects (e.g. Halifax Bus Station). Comparison of the scheme costs which form part of this FBC submission with those reported at OBC would therefore be overly complex and not especially helpful. A decision has therefore been made to compare current scheme costs with those reported as part of the previous, June 2020, FBC submission instead.

Project development costs have increased substantially since the previous FBC submission. After submission of the previous FBC, several detailed design changes were required following a LTN1/20 design review as requested at the FBC appraisal. At the request of BCC and Leeds UTMC (who perform the UTC function on behalf of BCC), staggered pedestrian crossings were added to the design at the Skircoat Road junction with Prescott Street, and Bull Green junction with Cow Green, with the aim of improving pedestrian access and managing delays to general traffic, in particular bus service which serve these corridors. The pause and pipelining of the Halifax Station Gateway scheme in late 2022 meant a redesign of the Horton Street junction with Church Street was necessary with the junction being changed from a 3 arm to 4 arm junction. The pipelining of the Station Gateway scheme also resulted in the Butterfly Meadows and Bailey Hall/Nestle elements of the scheme being dropped from the scope of the A629 Phase 2 project. These design changes impact on the details of the scheme but they do not materially affect the overall scheme scope or outputs.

Project development costs also increased due to the resulting need to resubmit the FBC. In August 2022 discussions took place with the West Yorkshire Combined Authority Portfolio Management Appraisal (PMA) Team regarding the most appropriate route for ongoing approvals. It was agreed that BCC would re-submit a Full Business Case and include tendered costs which would demonstrate ongoing viability. Due to the sectional completion / phased delivery stages required on the western, eastern and central corridors throughout construction it was also agreed that multiple Approvals to Proceeds would be submitted, the first coinciding with the re-submission of the FBC. This approach would enable the delivery of the first phase of work which is focused on the western corridor (Prescott Street – North Bridge).

Land Assembly costs have been subject to re-estimated by BCC's Asset Portfolio Officer with the new estimate being higher than the value used at previous submission. The increased values are reflective of the increase in land values seen in Halifax since the last submission. As shown in Appendix H6 the costs reported include the land costs themselves as well as licence, fees and other compensation costs.

Enabling works and Delivery costs were separate items in the previous FBC submission but have been combined for this submission since no works are required to be undertaken prior to decision point 5. **Scheme delivery costs** now include the construction costs of the preferred contractor and are therefore fully reflect the cost of the scheme rather than being an estimate as they were for the previous submission. The higher delivery costs seen in this submission are reflective of the rapidly increasing costs in the construction industry seen in recent years. Although delivery costs are increased some value engineering has been undertaken, without which delivery costs would be greater still, resulting the in the removal of the realigned Berry Lane.

A new estimate of the benefit realisation reporting cost is included in this submission whilst risk and contingency have now been combined and re-estimated.

Inflation is significantly higher to account for the current inflationary pressures seen across the economy.





H.3 Please provide evidence of steps taken to ensure robustness of costs at FBC (max 1,000 words).

- Please discuss design maturity. The Detailed Design stage should be fully completed.
- Please discuss the procurement of all necessary assets (land, building, equipment etc). They should all be acquired now.
- Please provide an update on the key assumptions and exclusions listed at OBC.
- Please discuss the risk monetisation method used and the robustness of the monetised value, including its comparison to that at OBC.
- Please discuss any further Sensitivity Analysis carried out at FBC.
- Please discuss how inflation has been accounted for and justification for this.

Construction costs are those submitted by the preferred contractor. Within the tender pack bidders were provided with detailed works information, specification, and activity schedule. The scheme design tendered for has been progressed to a detailed level as required for use in the tendering process. Specifically, design has covered the following standard design packages in the Manual of Contract Documents for Highway Works:

- Series 0100 Preliminaries
- Series 0200 Site Clearance
- Series 0300 Fencing
- Series 0500 Drainage and Service Ducts
- Series 0600 Earthworks
- Series 0700 Road Pavements General
- Series 1100 Kerbs, Footways, Cycleways and Paved Areas
- Series 1200 Traffic Signs
- Series 1250 Traffic Signals
- Series 1300 Road Lighting Columns and Brackets, CCTV Masts and Cantilever Masts
- Series 1600 Piling and Embedded Retaining Walls
- Series 2700 Utilities
- Series 3000 Landscape and Ecology

At the previous submission a number of assumptions and exclusions were listed related to total cost. Many are no longer relevant as the construction costs presented in this submission come from the preferred contractor's tender response, others (for example unexpected costs) are now covered in the assessment of risk. Remaining assumptions are;

 Rates are at current prices (February 2023), with inflation to the end of the construction period being accounted for separately.

Exclusions are as follows:

- Value Added Tax (VAT).
- Project insurances (beyond Main Contractor's Third Party and Works insurance).

Appendix H7 details progress to date on the procurement of the necessary assets to enable development of the A629 Phase 2 scheme. BCC has already acquired some parcels of land and are in advanced stages of negotiation with landowners on the other sites required. Compulsory





Purchase Orders (CPOs) are being pursued. Particular focus is on the Western Corridor which is the first phase of delivery:

- 1. Broad Street Plaza –Objection to CPO received. Issues around fire exit, Calderdale have procured an independent fire safety report based on the design within this area who confirmed sufficient capacity and compliance with the minimum widths detailed within the Disability Discrimination Act, negotiations ongoing. Engagement continues with the agent who has reviewed the fire safety report. They fully understand BCC's requirements and timescales and continues to work with the 3rd party licensees to gain their agreement. Geldard's the Council's external legal support have also prepared an undertaking for signature to allow construction to take place within this area. This is currently being reviewed by the agent and all relevant parties.
 - 2. Bull Green Car Park Area of unregistered land. Currently used as a Council car park. Engagement with internal Highways Legal Team. Detailed discussion with our external CPO legal support. Legal support has confirmed that it is unlikely there will be any competing claims to ownership from third parties. The intention is that this area will be subject to a S228 notice (Notice of Adoption) once the works are complete. The risk of objection deemed by all parties as low.

The eastern corridor is the second phase of delivery with works due to begin in Autumn 2024, here there are 7 areas of land requiring acquisition:

- 1. Charlestown Road Near completion. Heads of terms agreed and progressing with owner's solicitor and BCC legal team.
- 2. Horton Street Sale complete
- 3. Church Street Sale complete on the initial land identified. Additional area identified as required with the additional land now under new ownership. Engagement has commenced and a new offer was made in October 2022. Awaiting feedback.
- Cripplegate These sites form part of the former Transco gasworks site. Several of these
 sites are already in BCC ownership. Where they are not negotiations are ongoing and
 formal offers for licences or acquisition have been made and are currently being
 considered.
- 5. Matalan Part of the Matalan retail store carpark. Design works have been concluded to accommodate the owners requirements and revised offers have been made.
- 6. Hughes Corporation Building Part of the car park north of the premises. Ongoing engagement since 2020, offer made December 2022 and under review by the owner.
- 7. Deal Street Offer sent October 2022. BCC legal department encouraging the owner to negotiate. Negotiations on-going with the owner's agent.

The central corridor does not require land/building acquisition.

Risk monetisation was undertaken by Turner and Townsend who provided Quantitative Cost Risk Analysis (QCRA). A risk register was developed and risks assessed in relation to schedule and cost impact. The risk register (see Appendix H4) was populated for the previous FBC submission, with a recent validation workshop held on the 22nd September 2022, and an additional verification & new risk identification workshop on 5th October 2022.

The QCRA gives levels of confidence of the risk exposure associated with the risk profile for each option. A Monte-Carlo simulation has been used to monetarise the risks, by simulating the probability and impacts of the risks multiple times, statistical confidence levels can be gained on the level of risk exposure. The QCRA also highlights which risks have the highest significance to the overall risk profile. This allows clear focus on key risks, either to understand and accept them, or if possible, implement mitigation measures to eliminate or reduce the risks. Further information on risk monetarisation is available in the QCRA report (Appendix H8)

A total P50 mean risk value is £9.37m has been calculated for this submission, this is higher than the £7.567m risk presented at the last submission, in part due to the identification of additional risks and reclassification of risks. Robustness in the present estimate has been ensured by continued discussions around risk, as evidenced by the 2022 workshops, and the use of monte-carlo simulation for monetisation. The P50 risk value was considered appropriate due to the advanced





design stage, significant land negotiations undertaken and the fact that a preferred contractor has been selected for appointment.

Inflation has been accounted for as described in section H.1. This assessment of inflation has been approved internally at BCC within the NEC PM team, moreover inflation volatility beyond these rates is considered in the QCRA.

Please complete the Funding Strategy spreadsheet and attach as appendix to demonstrate that all funding required for scheme delivery is in place at FBC.

In your summary below, reflect on the funding position at FBC by discussing (max 1,000 words):

- the steps taken to secure funding that was outstanding at OBC
- any approvals to funding secured outside of the Assurance Framework, i.e., Project Board or Programme Reviews (please append evidence base)
- if a funding gap still exists and the strategy to address it
- update on any interdependencies, spend constraints or criteria attached to all the funding sources required to deliver the Preferred Way Forward scheme.

If a Funding Strategy Report was provided at OBC, please update it and attach as appendix.

The funding strategy spreadsheet has been completed and is included as appendix H9. It is intended that the scheme will be funded entirely by the West Yorkshire-plus Transport Fund however at present a funding gap exists as the total cost of the scheme now exceeds the £53.335m agreed during the 2022 WYCA Inflation Review.

This funding gap has been identified to the WY+TF programme, a subsequent PAT Information report will be submitted to PMA to sit alongside this FBC, Subsequent reports will expand and explore funding opportunities following direction from senior officers within BCC and WYCA.

H.4

If it was identified at OBC that a CA contribution is required to fund a viability gap, please detail further work carried out at FBC to confirm the CA funding amount required (max 500 words).

Please append the detailed appraisal report to the FBC.

This wasn't established in either the OBC or previous FBC submission so is not applicable here. The strategy to address the funding gap now identified is discussed above.

H.6

Please list the headline financial risks that still exist at FBC (reflected in the Risk Register) and the proposed mitigation measures (max 500 words).

The total mean risk value is £9.37m. The table below shows the risks which have the largest impact on the total.

Risk	Action Plan
Ref 100: Program	Risk mitigation through appointment of NEC Project
Prolongation	Management Team including a Programmer also continued
	engagement with the Contractor and Statutory Undertakers
	throughout the construction period.





Ref 28: Small & Large Services: Unknown extent of required statutory utility diversions risks increasing costs.	Risk mitigation through early engagement with BCC Highways and Streets works team to understand where statutory utilities are located and determine any conflicts with the proposed interventions. Preliminary design to initiate detailed statutory utilities searches on commencement of next stage of work.
Ref 102: International events (e.g. Russian/Ukraine crisis) may mean prolonged building material and raw material shortages and therefore price rises.	
Ref 20: Cost implication of compensation claims in respect of blight once extent of scheme becomes public (P1 Form) - business & residential claims. On completion of scheme - permanent.	Risk reduction through the development of a comprehensive communications strategy. Robust justification as to why these interventions are being made and what the benefits will be. Considerate design to minimise any blight issues with respect to neighbouring properties. Include social responsibilities in tender
Ref 17: Inflation volatility exceeds value included in base estimate	Risk mitigation through appropriate allowances included within the cost plan based on anticipated start of the construction works. Include in regular update of cost plan - in conjunction with WYCA guidance. Include significant inflation value.
Ref 101: Law Reforms e.g. on Phase 1b (National Insurance Increase, Reform of Red Diesel etc.)	Risk mitigation through lessons learned on other projects and workshops undertaken to assess and understand upcoming changes.
Ref 87: Invasive species may be found beyond what has been accounted for - Knotweed etc	
Ref 57: Unknown ground conditions (Excluding contamination) risk compromising ability to deliver scheme due to cost and/or feasibility constraints - redesign to large scale remediation	Risk reduction through completion of preliminary research study to identify constraints and requirement for further intrusive investigation / surveys
Ref 55: CPO requires Public Inquiry	Risk mitigation through the employment of an Asset Portfolio Officer to facilitate ongoing discussions with all landowners.
Ref 53: Land purchase via negotiation costs more than anticipated	Risk mitigation through the employment of an Asset Portfolio Officer to facilitate ongoing discussions with all landowners.

H.7

Please confirm that the operation & maintenance costs (O&M) set out at OBC to support delivery of the project outputs are still valid, and that commitments made by the lead promoter and/or third party to fund these costs are still in place. Please discuss below (max 300 words).

Please complete the O&M cost summary spreadsheet <u>only if</u> there is a material variance at FBC to the estimated O&M costs. In your response below, please set out relevant details including why this has occurred and confirmation of Finance Officer





sign off to any cost to the public sector and/or commitment to fund ongoing costs by a third party (max 300 words).

The lifetime maintenance of existing roads and footways is generally expected to be covered by existing highway maintenance budgets where the cost of maintenance is expected to be slightly lower than existing over the same duration. Other maintenance costs will be associated with increased areas of public realm including soft landscaping, additional cycle parking and wayfinding, however, these are expected to partly balance against reduced cost of maintaining existing highways due to the reduction in road space.

These Operating and Maintenance Costs are excluded from the total project outturn cost; however, an assessment of the costs of maintenance and renewal over a 60 year period has been calculated see Appendix H10 and the operation maintenance cost summary spreadsheet has been completed as appendix H11.

Table 4 60 year Maintenance Costs

	A629 Phase 2	Existing	Saving to BCC
Pavement	£22,417,594.00	£27,283,232.60	£4,865,638.60
Landscaping	£2,227,200.00	£1,581,120.00	-£646,080.00
Signals	£422,400.00	£347,100.00	-£75,300.00
Lighting	£953,628.00	£898,623.08	-£55,004.92
Structures	£428,000.00	£428,000.00	£0.00
Total	£26,448,822.00	£30,538,075.68	£4,089,253.68

H.8 Please confirm all income the project will generate and how it impacts scheme affordability and the sharing of monetary gains with the public sector.
 If there has been no material change at FBC from OBC, please state this supported by justification (max 500 words).

The scheme is not expected to generate income directly therefore income generation does not impact on scheme affordability and no sharing of monetary gains between the private and public sector is required.

H.9 Please provide itemised cost spent to develop the FBC by completing the FBC development cost spreadsheet. Please attach as an appendix.

In your response below:

- please highlight the Activity 4 (FBC) spend against any approval secured at Activity 3 (OBC), including a detailed analysis of spend towards land acquisition or enabling works
- explain any underspend or exceedance of budget and how this has been managed by the scheme

(max 500 words)





Scheme development costs to submission of this FBC and the first Approval to Proceed are included in the Development Cost Breakdown spreadsheet (appendix H12). The total development costs detailed here is £7.877 million, this includes claimed and committed land assembly cost. Excluding the land cost element, the cost of developing the scheme to the point of this FBC submission is £5.754 million. This is broadly in comparable with the £5.844 million total forecast spend to decision point 5 (FBC+) approved in the PAT report from the 26 August 2020 meeting.

H.10

Please complete the forecast spend profile spreadsheet and append to the FBC. In your response below, please discuss any significant variances in the spend profile to that submitted at OBC and why they occurred.

Please also set out how the spend profile correlates with the scheme's delivery programme timescales and meets any known spend timescale restrictions (max 500 words).

The forecast spend profile spreadsheet has been completed and is included as appendix H13.

Scheme funding is required over 4 years of construction from 2023/4 to 2026/7 along with smaller amount of pre and post scheme funding. The bulk of the funding is required in 2024-2027 when the majority of the construction work is scheduled to take place. Monitoring and Evaluation will continue up until May 2033.

The spend profile differs significantly from the profile presented in the June 2020 submission. The timing of the scheme has been pushed back to facilitate the necessary design changes discussed elsewhere in this submission. The construction period is now phased over four years rather than three so as to minimise disruption to travel within Halifax town centre. The construction programme and subsequent spend profile presented here is based on information received from the preferred contractor and is therefore unlikely to change significantly going forward.

,

H.11

Please discuss Subsidy Control considerations and the Legal advice that has been sought and received (max 500 words).

Calderdale Council have determined that there are no Subsidy Control considerations by obtaining external legal advice via Geldards LLP and considering the following key questions.

1. Is the financial assistance given, directly or indirectly, from public resources by a public authority?

Yes – Any assistance is funded by public resources through the West Yorkshire Combined Authority.

2. Does the financial assistance confer an economic advantage on one or more enterprises?

No

3. Is the financial assistance specific? That is, has the economic advantage been provided to one (or more than one) enterprise, but not to others?

No





4. Will the financial assistance have, or is it capable of having, an effect on competition or investment within the UK, or trade or investment between the UK and another country or territory?

No

Following the completion of the A629 Phase 2 – Halifax Town Centre land requirements, all land will be developed as part of the project and will be access as part of improvements to existing transport infrastructure within the ownership of the Council.

The project will deliver against the SMART objectives and will be accessible to all modes of transport, i.e. not on a selective basis to any organisation that could potentially distort competition and trade in the EU. Therefore, the fundamental definition of the scheme does not contravene Subsidy Control.





Section I: Management Dimension

Please confirm that a Project Initiation Document (PID) (or similar document) is provided as an appendix to this FBC and that it covers all areas listed below. This may simply be a resubmission of the PID provided at OBC with updates.

 \boxtimes

Please fill in the reference column to signpost where detail can be found within the PID (or similar document) or attached appendices.

Topic	Reference within PID (See Appendix I1):
Project definition	Section 3
Project approach	Section 7
Project governance	Section 9
Project plan	Section 15
Project controls	Section 16
Project barriers and constraints	Section 6
Project interfaces and dependencies	Section 6
Lessons management	Section 7
Quality management	Section 12
Risk management	Section 11/Appendix I10.
Change management	Section 13
Communications management	Section 14

Please confirm that all statutory and regulatory approvals required for scheme delivery have been secured. Please set out engagement had with key stakeholders and Regulatory Bodies and append evidence base to support your response. Should approvals still be outstanding, please highlight the approach that is to be taken to secure these approvals ahead of the main delivery programme starting. (max 1,000 words)

The following planning conditions submissions in relation to application 20/00217/FUL decision dated 18th June 2020 have been made:

- 1. PC02 Written scheme of archaeological investigation
- 2. PC07 Eastern Gateway service management plan
- PC11 Provide detailed drainage information
- 4. PC12 Construction Method Statement review
- 5. PC17 Construction Environment Management Plan
- PC18 Invasive Species Management Plan





These conditions were discharged in June 2023 to enable start on site prior to the 16th June 2023 planning deadline.

In addition, the supplemental planning application, 22/00958/FUL to amend the road alignment along Church Street and the red line boundary of planning permission 20/00217/FUL was approved on the 21st November 2022. This application was submitted due to the demolition of a previously listed mill which allows the highway re-alignment to be completed on the western side of Church Street. This removes the CPO objection from the residential properties located on the eastern side.

Planning will be required for the site compound needed for the construction works due to the duration this will be in place. BCC have identified a council car park at Union Street and have agreement with Parking Services that this can be used for the duration of the project. We have undertaken engagement with Calderdale's planning services regarding the required application and are awaiting feedback as to the most appropriate way to progress this as the application will require information from the successful bidder.

Land Assembly & Compulsory Purchase Order

BCC have continued negotiations with landowners and are currently in the process of pursuing Compulsory Purchase Orders (CPOs) and removing the two outstanding objections received. Particular focus is on the Western Corridor which is the first phase of delivery. Within this section there are 2 key areas of land:

- Broad Street Plaza Objection to CPO received. Negotiations are ongoing with the owner's agent to address considers regarding the shortening the footpath directly outside their fire exit. To address this Calderdale have procured an independent fire safety report based on the design within this area. The report demonstrates that post construction there continues to be sufficient capacity and remains compliant with the minimum widths detailed within the Disability Discrimination Act.
 - Engagement continues with the agent who has reviewed the fire safety report. They fully understand BCC's requirements and timescales and continues to work with the 3rd party licensees to gain their agreement. Geldard's the Councils external legal support have also prepared an undertaking for signature to allow construction to take place within this area. This is currently being reviewed by the agent and all relevant parties.
- 2. Bull Green Car Park Area of unregistered land. The area required is currently in use as a Council car park. We have engaged with both our internal Highways Legal Team and discussed this area in detail with our external CPO legal support. Having reviewed all relevant titles surrounding this area which are all owned by Calderdale our legal support has confirmed that it is unlikely there will be any competing claims to ownership from third parties due to its previous and ongoing use as a public car park. The intention is that this area will be subject to a S228 notice (Notice of Adoption) once the works are complete the risk of objection at this time and throughout construction has been deemed by all parties as low.

A further objection to the 2020 CPO was received by Matalan to address the objection, re-design of the highway to maintain their current access has taken place. In March 2023 we were advised that a new agent had been appointed to enter into negotiations regarding the land acquisition. An onsite meeting took place at the end of April 2023 where the new design and BCC's requirements were discussed fully. Their agent has subsequently provided a list of questions which BCC are working to address with consultant support. Negotiations are ongoing and we consider the likelihood of Matalan maintaining their objection is low.

It has been confirmed by BCC's external legal support that once the two objections are removed the lead in time to have the CPO's confirmed by the Department for Transport is currently around 3 weeks

BCC continue to progress voluntary land sales with all owners as demonstrated within the land update in Appendix I2.





Traffic Regulation Order (TRO) Consultation

In February 2023 an informal public consultation exercise was conducted to support the necessary statutory TRO. Consultation took place via the ParkMap platform with over 1000 residents engaging. his also resulted in a significant increase of online traffic to the A629 Phase 2 Halifax Town Centre project page on Calderdale's Next Chapter website. The consultation was also advertised by a Press Notice, online engagement via social media and targeted meetings with key stakeholders. The accompanying report is included within Appendix I3. The informal TRO outcomes will be discussed by the Governing Body on the 7th of June 2023. This will inform the final statutory TRO consultations that will take place in line with the phased approach to construction. The first of which will be for the Western Corridor and is expected to take place in July 2023.

1.3 Check here to confirm that a Programme Gantt Chart or equivalent has been provided as an appendix to this FBC.

In your response below, please list the key activities and milestones, including a clear update on activities carried out since OBC.

Please also highlight any variances to the achievement of milestones from the timescales presented at OBC, supported by an explanation on:

 \boxtimes

- why these variances occurred
- the impact on the scheme programme
- the steps taken to mitigate the impact

(max 500 words)

A Programme Gantt Chart is contained in appendix I4, the delivery aspect of this has been informed by the programme provided by the preferred contractor as part of their tender response (appendix I5). A summary of the timing of key activities and a comparison of timescales presented in the previous FBC is contained in Table 5 below.

The entire programme has been pushed back due to the need to redesign elements of the scheme and re-submit the FBC. In addition, the phasing of the delivery is now over four rather than three years, with separate approval to proceed for each corridor.

The scheme is diverse, covering a large park of Halifax Town centre, and considerable effort has therefore been put in to planning the construction to ensure the scheme is deliverable with minimal disruption to traffic accessing the centre of Halifax and within the other constraints as set out below. The outcome of this planning exercise was that disruption would be minimised with a longer constriction period.

The impact of time constraints of the CPO process for land acquisition has resulted in a decision to deliver the project over a number of phases, Western, Eastern and Central, with separate approvals to proceed for each corridor. Of these corridors only the Eastern Corridor is potentially at risk of delay due to required land take. Negotiations on land required for the Western corridor are at a very advanced stage and completion is expected in sufficient time for works to begin.

The preferred contractor has adhered to the guidance provided in the works information covering these points in their project programme. The delivery of the Western corridor will commence immediately upon appointment of the preferred contractor and will take approximately fourteen months to complete. Delivery of the Eastern corridor will follow, beginning in October 2024 by which point the CPO process should have completed. The Central Corridor will be undertaken last, this will limit any overlap in disruption caused by the Halifax Bus Station scheme and this scheme. Within their project programme the preferred contractor has built time risk allowance into all activities, with time risk allowance generally in the range of 5-10%. If this time risk allowance is not required scheme construction should complete in February 2027. The inclusion of this float in the programme mitigates against the risk of programme prolongation.





Table 5 Key	Activities and	Milestones
-------------	----------------	-------------------

	FBC Re-Submission		June 2020 FBC	
Key Milestone	Start	Finish	Start	Finish
FBC Submission	12/06/2023	12/06/2023	01/07/2020	01/07/2020
PAT	26/07/2023	26/07/2023	12/08/2020	12/08/2020
Approval to Proceed				
Western Corridor	01/08/2023	13/09/2023		
Eastern Corridor	01/01/2025	12/02/2025		
Central Corridor	01/07/2026	12/08/2026		
Tender Issue	31/10/2022	24/02/2023	30/09/2020	30/09/2020
Tender Award	03/10/2023	03/10/2023	07/04/2021	07/04/2021
Planning Application Submission and Approval Planning Condition	01/02/2020	01/06/2020	01/02/2020	01/06/2020
Submissions	04/07/2022	20/09/2024		
TRO	04/07/2022	20/09/2024	04/01/2021	20/04/2021
CPO and Land Acquisition	04/07/2022	20/09/2024	16/06/2020	06/12/2021
Delivery	06/11/2023	04/11/2027	07/04/2021	17/05/2024
Western Corridor	06/11/2023	17/03/2025	07/04/2021	09/09/2022
Eastern Corridor	18/03/2025	02/09/2026	04/06/2021	06/04/2024
Central Corridor	03/09/2026	04/11/2027	12/08/2021	17/05/2024

1.4 Check here to confirm that a risk register has been submitted as an appendix to this FBC.

Please use the Combined Authority's risk register template if possible. Promoters can use their own template if it contains the same level of information.

 \boxtimes

1.5 Please discuss the headline risks that still exist at FBC, and the mitigation measures put in place (max 500 words).

The headline risks from the risk register (appendix 16) are:

- Program prolongation: The preferred contractor has included a time risk allowance in their programme to mitigate this risk.
- Small and large services: Unknown extent of required statutory utility diversions risks
 increasing costs. Risk mitigation through early engagement with BCC Highways and
 Streets works team to understand where statutory utilities are located and determine any
 conflicts with the proposed interventions. Preliminary design to initiate detailed statutory
 utilities searches on commencement of next stage of work.
- Cost implication of compensation claims in respect of blight once extent of scheme becomes public (P1 Form) - business & residential claims. On completion of scheme permanent. Risk reduction through the development of a comprehensive communications strategy. Robust justification as to why these interventions are being made and what the benefits will be. Considerate design to minimise any blight issues with respect to neighbouring properties. Include social responsibilities in tender
- Inflation volatility exceeds value included in base estimate. Risk mitigation through appropriate allowances included within the cost plan based on anticipated start of the





construction works. Include in regular update of cost plan - in conjunction with WYCA guidance. Include significant inflation value.

- Law Reforms e.g. on Phase 1b (National Insurance Increase, Reform of Red Diesel etc.)
 Risk mitigation through lessons learned on other projects and workshops undertaken to assess and understand upcoming changes.
- Difficulties relating to land purchase, including the risk that land purchases via negotiation
 cost more than expected, that compulsory purchase orders require costly public inquiries,
 and that additional land purchases are required (compound sites etc). Risk mitigation
 through the employment of an Asset Portfolio Officer to facilitate ongoing discussions with
 all landowners.
- Unknown ground conditions risk compromising ability to deliver scheme due to cost and/or feasibility constraints, potentially requiring redesign to large scale remediation. Risk reduction through completion of preliminary research study to identify constraints and requirement for further intrusive investigation / surveys

1.6 Check here to confirm that a completed Evaluation Plan (Parts 1 & 2, including a Detailed Logic Model) and Monitoring Plan has been provided as an appendix to this FBC. Please confirm that all evaluation outcome will be shared with the Combined Authority in a prompt manner.

If there have been any significant revisions to the scheme at FBC which has impacted the Evaluation Plan, please discuss them below. (max 500 words).

The evaluation and monitoring plan was developed as part of the 2020 FBC submission. This has recently been updated to reflect the updated programme of works after the 2022 Inflation Review and to include the baselining scope as agreed earlier this year, please see Appendix I8.

Appendix 19 provides details of the Monitoring and Evaluation cost overview.

Has adequate due diligence been undertaken as part of key decisions or direction chosen by the scheme at FBC? Please provide your update, supported by evidence base appended as appropriate (max 500 words).

The broad concepts and overall scheme design are unchanged since the previous FBC submission. Changes since then are largely revisions to conform with LTN 1/20 requirements. These revisions consist of junction amendments to incorporate signalised cycle crossing and were discussed and approved at a series of design workshops with BCC.

The Skircoat Road / Prescott Street and Bull Green / Cow Green amendments were a direct request from BCC in order to improve pedestrian access by providing a straight across crossing. These changes were discussed and approved at a series of design workshops.

All design changes were made after full consultation with key stakeholders to ensure they were fit for purpose and met individual needs.

The Horton Street / Church Street amendments were to reinstate the current junction layout at the Rail Station due to the pausing of the Station Gateway Scheme in the November 2022 spending review. Butterfly Meadow has also been removed as a result of the pausing of the Station Gateway scheme.

As the changes are amendments to pedestrian / cycling facilities largely necessitated by external factors (changing design standards and the dropping of complementary schemes) due diligence is not considered necessary.





1.8

Please provide project plan for management of contract, delivery of project, future operation, maintenance and evaluation. Please highlight resource requirements and if there is any vacancy then how it is intended to fill the vacancy. (max 1,000 words).

The Council's approach to project management is based on a clear structure with lines of accountability running throughout the delivery team, connecting each part of the team to senior leadership within the Council, enabling monitoring of progress, accountability, and the ability to escalate issues where required.

The Major Projects team at BCC are leading on A629 Phase 2 ensure that this scheme's development and delivery is closely aligned with the wider WY+TF portfolio, and Calderdale's growth ambitions. PRINCE2 or APM are BCC's preferred management tools and all project team members are appropriately trained to use it. The project governance structure aligns with the council's Major Projects Governance Framework to facilitate clear and consistent communication between stakeholders, resulting in a more efficient decision-making process.

Delivery Approach

The team for the delivery of the project is led by two experienced Project Managers and two Assistant Project Managers, with support from the Assistant Programme Manager (see Appendix I11). The team benefit from lessons learnt from the Programme Manager and Assistant Project Manager in the successful delivery of highway schemes, supplemented by a wealth of wider experience within the team from both the public and private sector. The team has developed to be an 'intelligent client' and whilst not large enough to produce all the outputs required for the WYCA's Assurance Framework directly, this team has the knowledge and experience to get the best value for money and highest quality work from the consultants and contractors commissioned to undertake the project development/delivery.

Project Management deliverables include:

- Monthly highlight reports (prepared by the Project Manager)
- Monthly meetings with the WYCA Programme Manager for Calderdale's WY+TF projects.
- Quarterly claim forms to WYCA.
- Attendance at peer and PAT review sessions.
- Use of WYCA's PIM system process administered by the project support team; including logging monthly updates.
- By exception reporting or board meetings as required.
- Weekly Design Progress Meetings with AECOM
- The construction team currently being procured includes an NEC accredited ECC Project Manager, Assistant Project Manager, NEC Supervisor with Quantity Surveying and Programme support. Delivery will utilise consultant support for Technical Assurance of the scheme design.

The preferred contractors proposed staffing structure for the delivery of A629 Phase 2, and the details pertaining to specific roles and responsibilities are contained in Appendix I7.

The Project Management deliverables will remain consistent throughout the delivery phase with the introduction of the following.

- Contractor Early Warning meetings
- Contractor risk review/collaboration meetings
- Compensation Event review meetings
- Contractor programme review meetings
- Contractor progress review meetings





• Stakeholder Engagement Meetings

The frequency these meetings will take place will be agreed with the contractor and NEC Project Management Team upon appointment and will be subject to change should this be required.

Future Operations

Upon completion and after the contractual defect period has expired ongoing operation of the infrastructure delivered will be assimilated to the following groups.

- Calderdale's Highway Department
- Calderdale's Green Space & Street Scene Team
- Calderdale's Community Safety Team
- Calderdale's Parking Services
- West Yorkshire Combined Authority Highways Department (Bus Infrastructure)

All departments have been consulted throughout the design development and understand their responsibilities upon the scheme completion.

Monitoring and Evaluation

Scheme evaluation will entail monitoring the scheme's delivery and the ultimate outputs that are realised after its completion. The evaluation will draw upon findings from a range of sources and feedback from many stakeholders and end users. A systematic engagement approach is proposed during and immediately following the delivery of the various scheme phases to receive feedback on the delivery process and the outputs achieved. Progress will be monitored via monthly meetings with the WYCA Programme Manager and PIMS updates, in addition to WYCA Project Appraisal Team meetings, as and when required.





Section J: Supporting Information

Does your Project require a Data Protection Impact Assessment to be completed?

If the Combined Authority is the promoter for the Project, then you must complete the Data Protection Impact Assessment Part A screening tool to indicate if a full impact assessment is required.

For Projects that are not promoted by the Combined Authority, the promoter should follow their own processes for determining whether a Data Protection Impact Assessment

Select an answer from the drop down box below and then provide a rational for your answer

Data Protection Impact Assessment Template

(Please save in your own area prior to editing)

No - Rational provided below

The A629 Phase 2 scheme is being promoted by BCC and not the Combined Authority therefore a Data Protection Impact Assessment is not required. It has been determined that a Data Protection Impact Assessment is not required according to BCC processes because the project output is not directly collating, managing, and storing personal or sensitive material, other than those associated with the consultation and engagement activities, the feedback from which is already subject to such processes in line with General Data Protection Regulations (GDPR).

J.2 Please state what process was undertaken for Programme/Project Board review and approval of the submitted FBC document.

Please state what process was undertaken for the review and approval of appropriate/assigned Programme/Project Manager from the Combined Authority. Please provide all evidence as an appendix (max 500 words).

BCC have completed a full review of the business case as outlined within the Major Projects Governance Framework.

The document was subject to review by all Corporate Leads including.

- Jess Thompson Corporate Lead for Major Projects
- Bona Maturi Corporate Lead for Design and Asset Management
- Mary Farrar Corporate Lead for Transportation

Formal approval of the FBC has been gained via obtaining a signed Decision Request Form in accordance with the Major Projects Governance Framework

The FBC was also reviewed by the following personnel at WYCA

- Emily Williams PMA Portfolio Manager
- Adam Kendal Ward Senior Transport Planner
- Donna Ambler Project Officer





In addition to the Corporate Lead review and approval the Programme and Project Management Team reviewed the FBC.

The process involved preliminary review of the document via email before a meeting took place to discuss and collate all comments and updates required.

The document was uploaded internally on a dedicated Teams folder which enabled each party to review/amend or comment until agreement had been reached.