Applicant Information

Local authority name(s)*: Peterborough City Council

Bid Manager Name and position: Mark Speed – Transport and Infrastructure Planning Team Manager

Name and position of officer with day to day responsibility for delivering the proposed scheme.

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SECTION A - Project description and funding profile

A1. Project name: Bourges Boulevard Improvement Scheme: Bright Street to Crescent Bridge

A2. Headline description:
Bourges Boulevard is a dual carriageway which bisects Peterborough city centre, severing the railway station and associated strategic brownfield opportunity sites from the commercial core. The scheme outlined within this bid consists of a series of local network improvements that will unlock major development sites and improve network operation by deterring through trips. The scheme includes the signalisation of one junction and the introduction of two at-grade pedestrian crossings that link development sites, as well as a series of significant public realm improvements. This scheme is part of a wider city centre transport and regeneration strategy.

A3. Geographical area: Bourges Boulevard borders the western and southern edge of the city centre. Historically Bourges Boulevard marked the edge of the city centre; however it is now a significant barrier to growth.

The area considered within this bid accommodates Peterborough railway station, multi-storey car parks, a hotel and three identified development sites.

The area can suffer from congestion and delays during peak periods, and the environment is extremely poor for pedestrians and cyclists. The lack of a right-turn facility from the railway station forces a significant number of vehicles to u-turn at the Bright Street roundabout. This combination of factors is a significant deterrent to investment.

OS Grid Reference: 518839,298894
Postcode: PE1 1QL

A4. Type of bid (please tick relevant box):

Small project bids

Scheme Bid	☒
Structure Maintenance Bid	☐

A5. Equality Analysis

An Equality Impact Assessment was undertaken as part of the development of Peterborough's Third Local Transport (LTP3). Improvements to Bourges Boulevard, including the introduction of pedestrian crossings, along this section are referenced in the Major Schemes chapter and are covered by this assessment. A more complete Equality Analysis will be conducted on the final design.

A6. Partnership bodies

Skanska, the council's highway services framework partner will be a key partner for the project. Skanska will provide assistance with detailed design and site supervision.

Great Northern Hotel – owner of the Great Northern Hotel development site, and landowner directly adjacent to the scheme

Peveril Securities – Owner of the former Royal Mail sorting office site, and landowner directly adjacent to the scheme.

SECTION B – The Business Case

B1. The Scheme - Summary

☒ Improve access to a development site that has the potential to create housing
☒ Improve access to a development site that has the potential to create jobs
☒ Improve access to urban employment centres
☐ Improve access to Enterprise Zones
☐ Maintain accessibility by addressing the condition of structures
☒ Ease congestion / bottlenecks
☒ Other(s), Please specify – improved public realm, improved facilities for pedestrians and cyclists and access for people with disabilities

B2. The Strategic Case

a) What is the problem that is being addressed, making specific reference to barriers to growth and why this has not been addressed previously?

Peterborough was designated a new town in 1967 and has a long history of sustainable growth. The population of the city grew by over 17% between 2001 and 2011, to 184,500 residents, placing it in the top ten for population growth. Peterborough is forecast to be England's fastest growing city by 2025 (McKinsey report 2011).

The Council has an adopted Core Strategy which includes provision for 25,000 new homes and 20,000 new jobs by 2026.

The highway network to support the new town was designed to accommodate the car. Bourges Boulevard, a dual carriageway alongside the western and southern edge of the city centre core, severs the railway station (which is subject to significant ongoing investment) and the Station Quarter opportunity area from the commercial core of the city. At present, there are no at-grade routes into the commercial core for pedestrians and cyclists from the railway station.

Bourges Boulevard acts as a significant barrier to movement. It is a key gateway for arrival in to the city, particularly for those arriving at the railway station, the poor accessibility and the low quality environment of Bourges Boulevard represent a significant barrier to inward investment and growth. The Station Quarter opportunity area, located on the land surrounding the rail station is a strategically important and highly accessible development opportunity and is less than 50 minutes by direct and frequent train service to Kings Cross. Waitrose have recently relocated their store to this area, from the Queensgate Shopping Centre, and the scheme proposed will support access to the site by foot and bicycle through the provision of at-grade crossings, and an improved environment for pedestrians and cyclists. In addition, the North Westgate development area, to the north-east of the study area will also benefit from the proposed scheme.

Crescent Bridge roundabout at the southern end of the scheme forms the junction between Bourges Boulevard and the A1179 Thorpe Road. Crescent Bridge roundabout is heavily congested during peak periods with extensive queuing during the morning on the Thorpe Road approach which itself forms the western gateway into the city centre.

To overcome this, a staged approach is being taken to improve access across Bourges Boulevard between the Bright Street Roundabout and the Rivergate Gyratory. The first stage of this programme is the section of Bourges Boulevard between Bright Street roundabout and Crescent Bridge roundabout and is the scheme proposed within this bid.

The primary objective of the scheme is to directly unlock nearby development opportunities through:

*Increased accessibility
*Reduced severance
*Improved public realm
*Improving a key gateway to the city centre
*Reduced traffic congestion and delay on the western gateway approach to the city centre
*Reducing the number of through trips using Bourges Boulevard

The Station Quarter includes over 32,000 square metres of mixed commercial floorspace that has the benefit of planning consents and will deliver over 1,500 permanent jobs. North-Westgate, on the alternate side of Bourges Boulevard is a major mixed-use redevelopment site of 3.26 hectares. The Western Gateway development area includes housing development sites at Station west; 250 new homes and the old hospital site; 350 new homes.

In addition to this, the secondary aims of the scheme are:

*Reduction in accidents
*Environmental improvements
*Fewer u-turns at Bright Street roundabout by including a right turn out of the station

Improving accessibility across Bourges Boulevard, regulating traffic flows, introducing at-grade pedestrian crossings and good quality public realm will significantly improve accessibility for pedestrians and cyclists and fully integrate the identified development opportunities to the west of the dual carriageway with the city centre commercial core. The re-development of Bourges Boulevard is essential to creating an integrated transport system in the city which will encourage fewer car journeys and increase levels of walking, cycling and public transport.

The proposed scheme will improve connectivity throughout the area, unlock the identified development sites and deliver wider economic benefits. The scheme is also anticipated to reduce congestion in the area by discouraging through traffic and removing u-turning traffic from Bright Street roundabout.

The proposed scheme was tested using a VISSIM micro-simulation model in 2012, since when there has been insufficient funding to progress the scheme to detailed design.

b) What options have been considered and why have alternatives have been rejected?

The following options have previously been considered for reducing severance and enabling development at this site.

Upgrading the existing footbridge - this would go someway to addressing the issue of severance, however it would not deliver the wider economic benefits associated with unlocking development opportunities. Updating the existing footbridge is considered to be less desirable than providing an at-grade crossing, which is preferred by pedestrians, and would also enable cyclists to cross.

3-lane contra-flow along Bourges Boulevard – the creation of a single lane carriageway in each direction, with a third central lane changing direction by peak. Following the collection of traffic data it has been established that there is no dominant direction of travel at either peak hour and the reduction of lanes would lead to further congestion and delays.

Partial closure of Bourges Boulevard between Westgate and Crescent Bridge – this option would completely sever the link and lead to increased congestion on alternative routes, have a negative impact on the local economy, increase the likelihood of rat-running through the city centre and would reduce accessibility to the railway station from other parts of the city, particularly to the north.

c) What are the expected benefits / outcomes? For example, job creation, housing numbers and GVA and the basis on which these have been estimated.

The primary objective of the scheme is to bring forward the development of three sites that border the scheme areas. The developments are in line to be unlocked with the improvements identified for Bourges Boulevard, and include:

Development	Use Type	Floor Area (sqm)	Expected Job Creation	Expected GVA benefits (£) per year in 2008 prices
Great Northern - Office	Employment	16,007sqm	1000	24,086,000
Great Northern – Hotel	Employment	5,585sqm	40	963,440
Former Royal Mail Sorting Office site – Office	Employment	6,000sqm	400	9,634,400
Former Royal Mail Sorting Office – commercial	Commercial	5,377sqm	200	4,817,200
Northwestgate	Mixed Use including residential	3.26 hectares	1000+	24,086,000
Total				**63,587,040**

GVA contribution of £24,086 per filled job in 2010 in Peterborough. Source: Office of National Statistics. GVA benefits are at 2010 prices.

One of the significant benefits from the proposed scheme is the improvement in pedestrian and cyclist accessibility and the environment through the public realm, both of these will be key factors in enabling the identified developments.

The benefits to pedestrians have been calculated using Transport for London's (TfL) 'Valuing Urban Realm Tool', assuming the existing footbridge remains. This considered all existing pedestrian traffic (including those currently using the footbridge) as well as future pedestrian traffic generated by the new developments.

The assessment was based on the PM peak hour and pedestrian data was taken from 12 hour surveys undertaken specifically for this purpose. The 'Valuing Urban Realm Tool' quantified the benefits as £5.6m over 10 years (£560,000 per annum). The PVB value is calculated at £17m at 2010 Market Price and discounted to 2010

The PVC of the scheme is calculated at £4.173m at 2010 Market Price and discounted to 2010, and this allows a notional increased annual maintenance cost of 1.7% per annum of the construction cost.

The Benefit Cost Ratio is therefore calculated at greater than 4.0, demonstrating the scheme as very good value for money. Nevertheless, the BCR excludes the GVA calculations.

d) What is the project's scope and is there potential to reduce costs and still achieve the desired outcomes? For example, using value engineering.

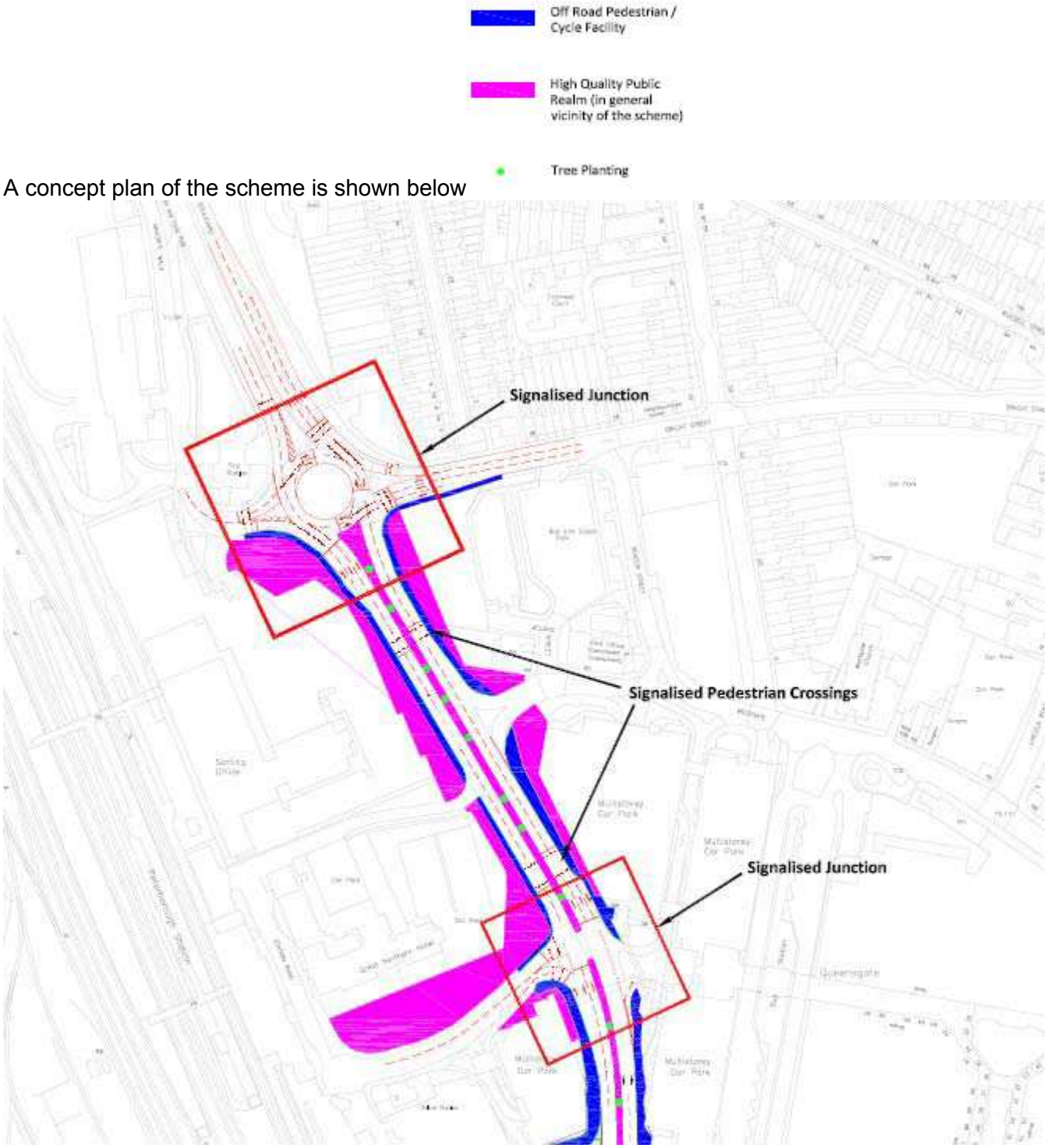
The proposed scheme consists of the following elements:

* Signalisation of the junction between Bourges Boulevard and Station Road (access to the railway station). This will enable the addition of a right turn out of the station which will reduce u-turning trips at the Bourges Boulevard / Bright Street / Mayors Walk Roundabout.
* Implementation of an at-grade pedestrian crossing approximately 30m north of the Bourges Boulevard / Station Road junction.
* Implementation of an at-grade pedestrian crossing between the Bourges Boulevard / Bright Street / Mayors Walk roundabout and Westgate.
* Provision of an off-road pedestrian and cyclist facility alongside of Bourges Boulevard to encourage sustainable transport along the route, again lessening congestion on an otherwise heavily utilised section of road.
* Creation of high quality public realm to stimulate development.
* Implementation of a 30mph speed limit throughout the length of the scheme.

It is not believed that any of the listed elements could be removed without compromising the desired outcomes.

The removal of the existing footbridge is beyond the scope of this particular bid. The future of the footbridge will be considered as future phases come forward. Excluding the removal of the footbridge from this scheme will also ensure that pedestrian access over Bourges Boulevard is maintained throughout the duration of the works.

A concept plan of the scheme is shown below



Due to the city centre location of the scheme, and the disruption that will be associated with the works, it would be desirable to deliver this scheme in a single phase. The removal of the footbridge discussed above will create additional disruption following the main scheme; however this can be carefully managed to be kept to an absolute minimum.

e) Are there are any related activities, that if not successfully concluded would mean the full economic benefits of the scheme may not be realised. For example, this could relate to land acquisition, other transport interventions being required or a need for additional consents?

The full economic benefits of the scheme, including job creation, housing delivery and growth, would not be fully realised if the proposed development of the sites adjacent to Bourges Boulevard were not progressed within a reasonable period of time following scheme completion.

However, given the length and nature of the discussions surrounding these sites (particularly the two to the west of Bourges Boulevard), the Council is confident that the scheme will be the catalyst for investment. There are recent planning consents in place and S106 agreements for two of the development sites (Great Northern Hotel and the Former Royal Main Sorting Office site), both of which make financial commitments toward the provision of improvements including pedestrian crossings over Bourges Boulevard, and which are included within the Council's match funding element for the scheme.

All other benefits such as reduced severance, increased accessibility and the improvement in operation of the road network and surrounding streetscape would still be realised upon scheme completion.

f) What will happen if funding for this scheme is not secured - would an alternative (lower cost) solution be implemented (if yes, please describe this alternative and how it differs from the proposed scheme)?

Although S106 money has been identified and agreed upon for the pedestrian crossings elements of this scheme to be progressed, no other funding has been identified for the remaining elements. Given the city centre location of the scheme, and the likely disruption associated with the works, it is not considered reasonable to implement only part of the scheme at any one time. The implementation of the pedestrian crossings on their own would not be sufficient to deliver all of the benefits associated with the wider scheme. This is also the first phase of a wider improvement scheme along Bourges Boulevard and forms part of a wider city centre transport strategy.

g) What is the impact of the scheme – and any associated mitigation works – on any statutory environmental constraints? For example, Local Air Quality Management Zones.

There are no statutory environmental constraints within the scheme area.

The overall scheme will have a positive impact on the environment, particularly at a local level by facilitating more efficient travel, reducing congestion and its associated negative impacts (noise and CO2) - thus will be positive for air quality and climate change. The landscaping associated with the public element realm of the scheme, particularly the tree planting along the central reservation will also have a positive impact on biodiversity.

B3. The Financial Case – Project Costs

Please complete the following tables. **Figures should be entered in £000s** (i.e. £10,000 = 10).

Table A: Funding profile (Nominal terms)

£000s	2013-14	2014-15	2015-16	Total
LGF Funding Sought			2,100	2,100
Local Authority contribution	150	3,126	(-1,606)	1,670
Third Party contribution			1,100	1,100
TOTAL	**150**	**3,126**	**1,594**	**4,870**

Table B: Cost estimates (Nominal terms)

Cost heading	Cost (£000s)	Date estimated	Status (e.g. target price)
Detailed Design	140	March 2015	Time Charge
Construction Costs	4,496	March 2015	Target
Supervision Costs	234	March 2015	Time Charge
TOTAL	4,870		

B4. The Financial Case - Local Contribution / Third Party Funding

a) The non-LGF contribution may include funding from organisations other than the scheme promoter. If the scheme improves transport links to a new development, we would expect to see a significant contribution from the developer. Please provide details of all non-DfT funding contributions to the scheme costs. This should include evidence to show how any third party contributions are being secured, the level of commitment and when they will become available.

The following section 106 agreements have been secured, and contribute toward the cost of the scheme.

Great Northern Hotel S106 – shall pay the council the sum of £500,000 as a contribution to the cost of enhancing Bourges Boulevard and associated linkages to the station, to satisfy the increased highway demand generated by the development.

Former Royal Mail Sorting Office Site S106 – a maximum sum of £614,275 to be used by the Council firstly for the provision of a pedestrian crossing across Bourges Boulevard…..and thereafter for the provision of local highway improvements in the vicinity of the development. This will be paid no later than 3 months prior to implementation of the development.

b) Where the contribution is from external sources, please provide a letter confirming the body's commitment to contribute to the cost of the scheme. The Department is unlikely to fund any scheme where significant financial contributions from other sources have not been secured or appear to be at risk.

Have you appended a letter(s) to support this case? ☒ Yes ☐ No ☐ N/A

B5. The Financial Case – Affordability and Financial Risk

A Quantified Risk Assessment (QRA) has been undertaken to identify all foreseeable risks, which have been identified in a composite Risk Register. Each risk will be analysed to quantify the likelihood of the risk manifesting itself. With careful planning, risks can be further reduced or eliminated at the design stage or by adopting bespoke implementation practices backed up by method statements during construction.

The Risk Register will be a live functional document that will both inform project management staff and act as a tool to monitor and control costs throughout the whole project timeline. As the project develops issues will come to light that will be put through the QRA process and be added to the risk register. Similarly as the project progresses some identified potential risks will be eliminated and can be reduced to zero likelihood and cost. The Risk Register will be a fixed item on the scheme project management meeting agenda where it will be examined and updated on a regular basis. Following this process scheme budgets can be closely monitored and controlled, giving the best opportunity to remain on or under budget.

a) What risk allowance has been applied to the project cost?

The project cost has been calculated based on a Pmean (P50) risk allowance, and an Optimism Bias of 3%.

b) How will cost overruns be dealt with?

Cost overruns will be reported via monthly Project Highlight Reports submitted through the Corporate Project Management System (Verto). Clearly project spend profiles can vary from month to month and come back to predicted spend. Serious funding issues would be immediately alerted via the Corporate

Issues Log/Risk Register and a collective decision would be made by senior management at the Corporate Governance Board, as to where the funding could be found to address the shortfall.

c) What are the main risks to project delivery timescales and what impact this will have on cost?

The main risks to project delivery timescales are considered to be:

Failure to secure adequate funding for scheme build – scheme would be significantly delayed resulting in the proposed developments not coming forward.

Inclement Weather – The risk that the contractors fall behind with the build programme if adverse/extreme weather is encountered possibly escalating the costs. A certain amount of funding will be included in the risk register to allow for this eventuality. The works programme will be scheduled to avoid the worst of the weather where possible.

Procurement Delays – Peterborough City Council intend to procure the design, build and supervision elements of the scheme through the Midland Highway Alliance (MHA), which with early contractor involvement and streamlined contract letting processes should result in best value and short lead times.

Hidden or Unrecorded Utilities – Delays could result from discovering utilities which may require relocation. A full utilities search will be carried out with Service Providers to establish where services are located – this information will be included in the contractors design package. An element of funding will be included in the risk register to cover this issue.

Site Contamination / Unforeseen Ground Condition – As with any construction scheme there is a risk that hazardous materials are discovered during excavation, and extra costs will be encountered in handling and disposing of this safely. A certain amount of funding will also be included in the risk register to allow for this eventuality and any other unforeseen risks.

Scope – The potential risk of extra infrastructure improvements requests from member of the public, local developers or internal PCC departments has been considered, however it is considered unlikely that they will be entertained and such requests would be strongly resisted.

d) How will cost overruns be shared between non-LGF funding partners?

Peterborough City Council has accepted the risk for scheme cost overruns.

B6. The Economic Case – Value for Money

Economic Benefits

The scheme will also have significant economic benefits associated with unlocking development that are not captured by the traffic modelling, these include:

Job creation – the Bourges Boulevard scheme will directly assist in unlocking a number of allocated development sites located close to the city centre. The permitted development at the Great Northern Hotel Site and the former Royal Mail sorting office site are expected to create 1,640 jobs, and the development land at the North-Westgate site could create substantially more.

Housing – the scheme will also assist in the delivery of approximately 800 new homes in the allocated North Westgate, Station West and Old Hospital site developments through transformation of public realm quality and improved connectivity to the train station, enabling ready access to London which is less than 50 minutes by train.

Economic growth – the sites identified for development will bring forward office, residential, leisure and retail use. This in turn with the job creation will lead to the city core expanding and increased economic growth both through visitors and the investment of companies locating to the area.

The economic value of the scheme has been calculated, and the Gross Value Added (GVA) is reported in the table below in 2010 prices. Note that these values are "per annum".

Development	Use Type	Floor Area (sqm)	Expected Job Creation	Expected GVA benefits (£) per year in 2008 prices
Great Northern - Office	Employment	16,007sqm	1000	24,086,000
Great Northern – Hotel	Employment	5,585sqm	40	963,440
Former Royal Mail Sorting Office site – Office	Employment	6,000sqm	400	9,634,400
Former Royal Mail Sorting Office – commercial	Commercial	5,377sqm	200	4,817,200
Northwestgate	Mixed Use including residential	3.26 hectares	1000+	24,086,000
Total				**63,587,040**

Based on a GVA contribution of £24,086 per filled job in 2010 in Peterborough. Source: Office of National Statistics. GVA benefits are at 2010 prices.

Development and regeneration of the area – Bourges Boulevard is currently a barrier to people accessing the city centre. With the exception of the hotel, the development sites are either derelict or being used as temporary commuter car-parking. With the completion of this scheme the highlighted developments will be able to move forward along with the associated public realm. The Appraisal Summary Table shows these impacts and is available within the supporting information.

Increased accessibility – the scheme will see the removal of central reservation barriers and the creation of two signalised pedestrian crossings which will lead to better accessibility from the Rail station to the city centre and a greater integration of passenger transport hubs.

Public Realm Assessment

The scheme will see transformational public realm improvements which will make the area more attractive and accessible for all transport users, this will help to regenerate the area and lead to a vibrant entrance to the city centre from the railway station and the west.

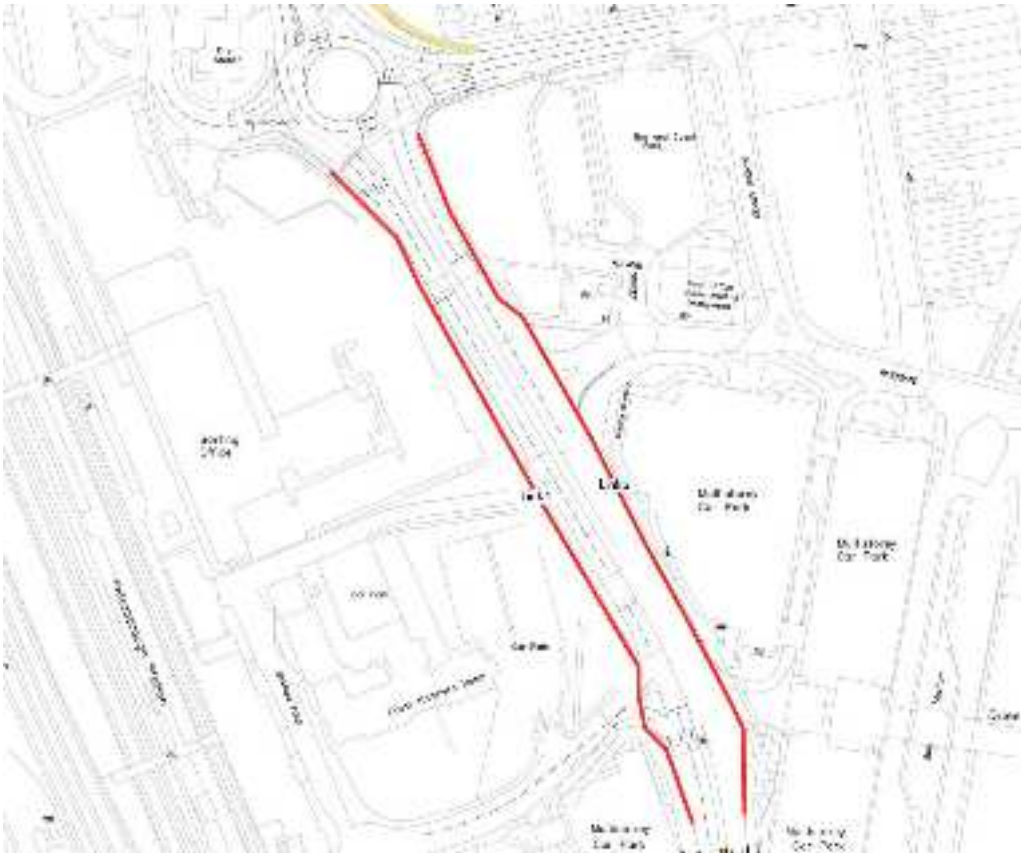
As much of the value in this scheme is associated with the public realm and accessibility improvements, a Pedestrian Environment Review System (PERS) has been undertaken for the current layout and

proposed scheme to enable the value of benefits to be quantified using the TfL's 'Valuing the Urban Realm' Toolkit.

For the purpose of the review, the study area was considered as two links:

Link 1 is the western footway from south of Station Road (south access) to Bright Street Roundabout (approximately 270m).
Link 2 is the eastern footway parallel to Link 1. Each of these were considered one link as the pedestrian environment is consistent along the link, and there are few opportunities for entering or exiting the link.

As the at-grade crossing facilities are new in the future case, the crossings were not assessed separately. Their impact is recognised in the permeability score of each link.



PERS or 'Pedestrian Environment Review System' is a walking audit tool. PERS is used to assess the level of service and quality provided for pedestrians across a range of pedestrian environments. A PERS assessment reviews the pedestrian environment from the perspective of the user and particularly considers the needs of vulnerable users.

An initial desktop assessment for the existing layout was undertaken by Atkins based on notes and photographs from the Peterborough Walkfriendly project, OS data and Google Maps. Particular issues concerning gradient and slip and trip hazards were then checked during an onsite visit. This PERS assessment was then reviewed with Anne Griffith, our most experienced PERS user.

The PERS assessment of the new design was carried out from the plans and visualisations available. It was assumed that the quality of urban realm and the workmanship would be high. The tables below show the PERS score for each link. The unweighted score for each parameter is shown with the existing layout on the left, and the proposed layout on the right.

	EXISTING		PROPOSED	
PARAMETER	SCORE	COMMENTS	SCORE	COMMENTS
Effective Width	1	Approx 5m wide, shared use path. Atkins Peterborough team reports cycling numbers low	1	No change in width of path, approx 5m wide, shared use path. No data available on future cycling numbers.
Dropped Kerbs	-2	No dropped kerbs across Station Road (north access)	0	Assumed all crossings will have dropped kerbs
Gradient	-1	Steep gradient on Station Road (southern access) dropped kerbs	-1	Score unchanged as insufficient information as to whether this issue will be resolved in the new design.
Obstructions	-2	Bridge Structure, traffic signs and bollards at intersection with Station Road (southern access) restrict pedestrian flow and increase risk on crashing into peds coming around the corner. However, it doesn't interfere too much with journeys along length of link. North of Station Road (northern access) road signs completely obstruct pedestrian section of footway	-1	Assumed decluttering but road signs and Bridge Structure will still be required.
Permeability	-3	Permeability very poor. Station Road (south access) and Footbridge are only opportunity to divert from link. In addition, there is continuous guardrail on the central road island and ankle breakers" or kerbing roadside edge"	2	Two new at-grade crossings on link. Assume guard rail and "ankle breakers" pavers removed.
Legibility	-1	Legibility along link is poor, except for signs towards railway station. In addition, there are empty frontages along route with limited information on services inside.	0	Assumed a street name sign would be added. New buildings will face onto Bourges Boulevard improving sense of place.
Lighting	0	Adequate lighting	0	Assumed same standard of lighting maintained
Tactile Information	-2	At crossing points, but colopur contrast poor. Delineation of ped/cycle path more of a trip hazard than helpful. None around other obstructions.	0	Assume improved and built to standard.
Colour Contrast	-1	Limited at dropped kerbs. Footway patchy elsewhere which may result in unintended consquences. Poor contrast north of Station Road where pebble dash paving is located.Colour contrast at end of cycle paths is poor because of cleaning.	0	Assume improved and built to standard.
Personal Security	-1	Few areas for attackers to hide but no active frontage. Cars provide natural surveillance during busy periods. Likely to be unwelcoming at night.	0	New Active Frontage and additional people in area. Few areas for attackers to hide". May still be unwelcoming at night
Surface Quality	-1	Reasonably good quality, but patchy appearance from reinstatement.	3	Design specifies high quality public realm. Assume design supports ease of maintenance and reinstatement, if required.
User Conflict	-2	Fast traffic creates unpleasant environment, potential conflict point at Station Road with vehicles, and also pedestrians rounding the corner. Cycle lane abruptly stops either side of junction, leading to potential conflicts.	-1	Assumed cycle issues resolved in new design. Potential conflict point at Station Road with vehicles remains, as does fast traffic.
Quality of the Environment	-1	Fast traffic, 4 lanes, with no active frontage, means it is not a particularly nice area to walk along.	2	Active frontage and improvements to central reserve will improve amenity. However still a fast busy road.
Maintenance	1	Hedges well trimmed and footways well maintained	1	Assume current level of high maintenance will continue.

Parameter	SCORE	COMMENTS	SCORE	COMMENTS
Effective Width	0	This footway is adequate width. It is not formally shared use. Atkins Peterborough team not aware of high cycling demand.	-1	TBC proposal for shared use?
Dropped Kerbs	-2	Dropped kerbs at service entrance off desire line. No dropped kerbs if continuing north over Westgate.	0	Assume all crossings will have dropped kerbs
Gradient	0	Flat gradient along length of link.	0	Flat gradient along length of link.
Obstructions	-2	Bridge Structure, Advertisement sign. Numerous Traffic Signs. Guard rail on approach to Westgate diverts users from desire line.	-1	Bridge Structure will remain but assume decluttering of other signs
Permeability	-3	Permeability very poor. Footbridge is only opportunity to divert from link. In addition, there is continuous guardrail on the central road island and on approach to Westgate	-1	Two new at-grade crossings on link but Westgate informal crossing point will still be off desire line. Assume Guard Rail removed.
Legibility	-1	Legibility along link is poor, only one pedestrian sign at foot of bridge. In addition, there are empty frontages along route with limited information on services inside.	0	Assumed a street name sign would be added. New buildings will face onto Bourges Boulevard (west pavement) improving sense of place, although benefit less on this side of the road.
Lighting	0	Adequate lighting	0	Assumed same standard of lighting maintained
Tactile Information	-2	Tactile information around JC Decaux Sign only. None on entrances to service entrance.	0	Assume improved and built to standard
Colour Contrast	-1	Poor colour contrast on tactiles around JC Decaux sign	0	Assume improved and built to standard
Personal Security	-2	Due to service entrances and need to use footbridge to access Station (may be unpleasant during hours of darkness)	-1	Due to service entrances and lack of active frontages
Surface Quality	-1	Reasonably good quality, but patchy appearance from reinstatement.	3	Design specifies high quality public realm. Assume design supports ease of maintenance and reinstatement
User Conflict	-1	Conflict point with vehicles at service entrances.	-1	Service entrances remain and shared use with cyclists introduced.
Quality of the Environment	-2	Although there is some well maintained planting this is not as pleasant as the west side as there is no option to exit the link, users are closer to traffic due to narrower footway, service entrances and guard rail.	1	Active frontage on eastern and improvements to central reserve will improve amenity. However still a fast busy road.
Maintenance	1	Planting appears to be maintained.	1	Assume current levels of maintenance are maintained

Note that Red represents a decrease in the PERS score, Yellow represents no change in the PERS score and blue represents an improvement in the PERS score from the current layout to the proposed scheme.

The information from the PERS assessment was then used in the TfL's Valuing Urban Realm Toolkit. This is a special valuation tool for urban realm investment which allows third parties to determine the expected public and private benefits arising from improvements in the standard of public open space. The Valuing Urban Realm toolkit can assess a number of factors. For this project, the factors assessed were the improvements in the pedestrian environment (PERS Assessment) and the improvements in pedestrian journey times arising from the introduction of at-grade pedestrian crossings.

Pedestrian counts were undertaken in February 2013 at six locations which were sampled for 10 minutes every half an hour between 07:00 and 19:00. Hourly totals were then multiplied up from the sample counts.

Future pedestrian activity on the links was taken to be existing activity plus the additional trips generated by the new developments at the Great Northern Hotel and the Old Sorting Office site. It was assumed that purely pedestrian trips generated from the development would be split 50% towards origins and destinations in west Peterborough and 50% from the east. It was assumed that all bus users would need to use the crossings, based on the existing bus stops and bus station location. The existing and anticipated pedestrian flows are shown beneath.

Do Something Pedestrian Activity	Link 1	Link 2
Existing Activity	24	18
New - West O/D using link	187	
New - East O/D using link	609	609
TOTAL	820	627
Southern Crossing (New)	345	
Northern Crossing (New)	264	

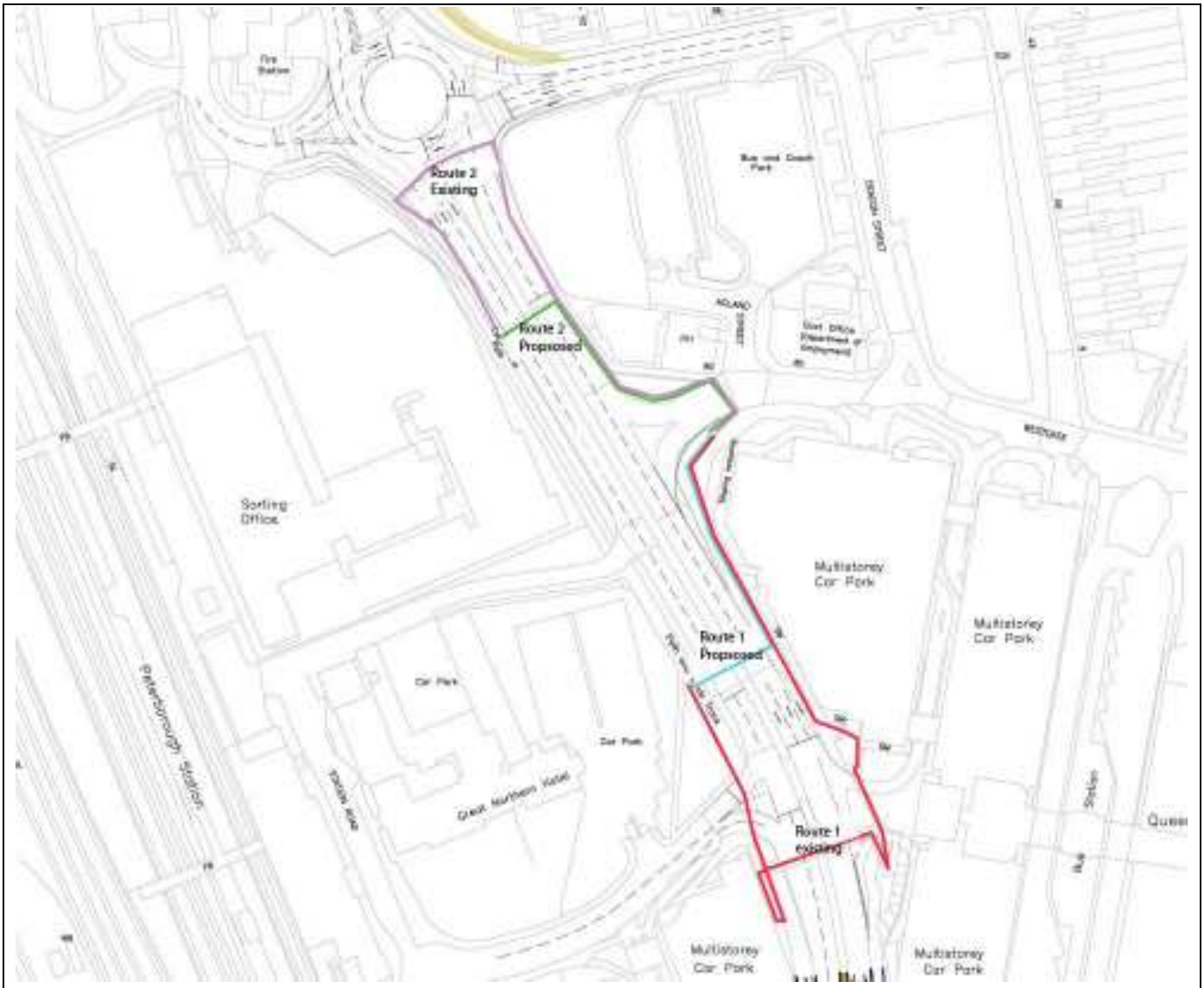
Note that these flows are based on the retention of the footbridge above Bourges Boulevard. If this footbridge were to be removed, then the predicted pedestrian flows throughout the scheme are even higher, as shown below:

Do Something Pedestrian Activity	Link 1	Link 2
Existing Activity	24	18
Bridge Users (existing)	564	564
New - West O/D using link	187	
New - East O/D using link	609	609
TOTAL	1384	1191
Southern Crossing (New)	909	
Northern Crossing (New)	264	

As well as PERS, the Valuing Urban Realm toolkit allows users to quantify the benefit of journey time savings for pedestrians. Two routes were identified as they are likely to form the core section of most journeys east – west:

Route 1 is from the intersection of Bourges Boulevard and Westgate to the mid-point between the two crossings in the new design, via the south.
Route 2 is from the intersection of Bourges Boulevard and Westgate to the middle of the northern at grade crossing introduced in the new design.

The routes were measured from GIS and a walking time calculated using TfL's suggested walking speed of 1.4m/s. Atkins Peterborough office provided average wait times for pedestrians using the at-grade crossings in the proposed design.



The results from the journey time assessment are provided below.

	Existing Route 1	Proposed Route 1	Existing 2	Proposed 2
	From Westgate to southern crossing, using pedestrian footbridge.	From Westgate to southern crossing, using at-grade crossing (southern).	From Westgate to Northern Crossing (west side) using informal crossings at Bright Street Roundabout.	From Westgate to Northern Crossing (west side), using at-grade crossing (northern).
Journey length (m)	234	99	222	78
Journey Time (s) using 1.4m/s walking speed	163	68	148	64
No of level change	2			
Delays - Level Change	20			
Delays - Road Crossing		30	20	30
Total Journey Time (s)	183	98	168	94

The Valuing Urban Realm Toolkit calculated that the monetised economic benefit from improving the Urban Realm over a 10 year period is **£5,688,908.61**.

In addition to the benefits calculated using the Valuing Urban Realm Tool, the scheme would also improve road safety, particularly for pedestrian users. Bourges Boulevard is currently a 40mph dual carriageway with central barriers to prevent crossing, however pedestrians are regularly observed crossing the dual carriageway and climbing over the central reserve when walking from the city centre to the Rail station and vice-versa. The proposed scheme will cater for this direct desire line and enable people to cross safely through the implementation of two new signalised pedestrian crossings and the

introduction of traffic signals at junctions either ends of the stretch of road which will better regulate traffic.

Traffic Model Assessment

The proposed scheme has been modelled using the Bourges Boulevard VISSIM micro-simulation model. With supporting inputs from LINSIG and the SATURN based Peterborough Transportation Model (PTM). The model has been fully calibrated based on traffic data, journey times and queue lengths. The VISSIM micro-simulation model is a comprehensive model that covers the full extent of Bourges Boulevard and the City Centre. The wider impacts of the scheme have been tested on the SATURN based PTM.

The assessment of the scheme uses a small part of the Bourges Boulevard VISSIM model (namely that part focused on the scheme area) and shows it to have a number of positive impacts.

Although the model shows a modest increase in journey times along the route, it clearly demonstrates that the network will operate effectively under the proposed scheme whilst delivering the benefits identified with enabling development.

The modelling has identified that the introduction of traffic signals and pedestrian crossings will increase journey times and deter through traffic, encouraging only those trips whose destination is in the vicinity of the area to use the route, thus reducing severance and unlocking development.

The addition of a right-turn facility out of the station entrance will lead to a reduction in vehicle distance travelled by vehicles travelling to / from the Rail station as those vehicles will no longer be required to turn left out of the station and U-turn at the Bright Street roundabout to then travel to the south of the city. A reduction in vehicle distance travelled will see a net reduction in transport related C02.

An Appraisal Summary Table (AST) for this scheme is available within the supporting documents.

B7. The Commercial Case

a) Please provide evidence to show the risk allocation and transfer between the promoter and contractor, contract timescales and implementation timescales (this can be cross-referenced to your Risk Management Strategy).

A contract will be let with a contractor / contractors through the Midlands Highway Alliance for construction of the scheme. Design and supervision will be delivered through the highways delivery partnership with Skanska.

b) What is the preferred procurement route for the scheme and how and why was this identified as the preferred procurement route? For example, if it is proposed to use existing framework agreements or contracts, the contract must be appropriate in terms of scale and scope.

This scheme would be procured through the Midlands Highway Alliance Framework 'Direct Call-Off' route. Through this process a contractor is selected based on a quality assessment and a price based on tendered prices for a scheme considered similar. Using this process it would be possible to appoint a contractor through a competitive process within a matter of days, whilst ensuring the best value for money. This route has been successfully used by Peterborough City Council for recent schemes.

B8. Management Case - Delivery

a) A detailed project plan (typically in Gantt chart form) with milestones should be included, covering the period from submission of the bid to scheme completion. The definition of the key milestones should be clear and explained. The critical path should be identifiable and any key dependencies (internal or external) should be explained. Resource requirements, task durations, contingency and float should be detailed and easily identifiable. Dependencies and interfaces should be clearly outlined and plans for management detailed.

Has a project plan been appended to your bid? ☒ Yes ☐ No

A project plan in the form of a Gantt Chart is included with the supporting documents

b) Please provide summary details of your construction milestones (at least one but no more than 5 or 6) between start and completion of works:

Table C: Construction milestones

	Estimated Date
Mobilisation	February 2014
Start of works	April 2014
Opening date	July 2015
Completion of works (if different)	

c) Please list any major transport schemes costing over £5m in the last 5 years which the authority has delivered, including details of whether these were completed to time and budget (and if not, whether there were any mitigating circumstances)

PROJECT	**Start/End Date**	**Delivery**	**Budget**	**Spend**
A1139 Fletton Parkway J2-3	Aug 07/May 08	On time	£7.01m	£7.23m
A15 Paston Parkway	Aug 07/Feb 08	On time	£5.88m	£5.87m
A15 London Rd Gateway	Jun 07/Apr 08	On time	£6.24m	£6.14m
Junction 8 Signalisation	April 10/Jan 11	On time	£4.85m	£5.15m

B9. Management Case – Statutory Powers and Consents

a) No planning permission will be required as works are going to be carried out on highway land. The total Bourges Boulevard scheme is detailed in the Major and Minor Schemes of the Peterborough Local Transport Plan 3 2011-16 (LTP3). LTP3 was subject to extensive public consultation and Council approval.

B10. Management Case – Governance

Key Project Staff
Senior Responsible Officer – Simon Machen (Corporate Director Growth and Regeneration)
Project Manager - Mark Speed (Transport Planning & Infrastructure Delivery Manager)
Design and Supervision Lead – Ian Hodgkin
Head of Peterborough Highway Services– Andy Tatt
Principal Programme and Project Office – Amy Petrie
Head of Finance – Nick Hutchins
Senior Contracts & Partnerships Manager – Andrew Cox
Director of Governance – Kim Sawyer
CDM Co-ordinator – Andy Baker

Project Governance
All projects of significant value are passed through a four stage corporate project gateway process as follows: concept appraisal, project evaluation, financial evaluation and delivery. Projects failing to meet the requirements of each gateway do not progress to the next stage. This process ensures only viable projects, which accord with strategic fit and provide best value are delivered, protecting valuable resources. A full Business Case is required at stage 3 and this ensures sufficient finances and other resources are in place or allocated giving assurance that the project can be successfully delivered the following financial year. Project Highlight Reports are submitted on a monthly basis through the Corporate Project Management System (Verto). These use traffic light systems to report on factors like budget, timescales, scope, benefits and risks. Risk Registers and Issues Logs are used to draw attention to problems as they arise and alert either the Transport Project Board or Corporate Governance Board, depending on the significance of the problem, so they can take appropriate action.

B11. Management Case - Risk Management

A QRA is included as part of the supporting documentation for the business case.

B12. Management Case - Stakeholder Management

a) Please provide a summary of your strategy for managing stakeholders, with details of the key stakeholders together with a brief analysis of their influences and interests.

This scheme was identified as a requirement in the Peterborough Local Transport Plan 3 (2011-2016) and the Peterborough Long Term Transport Strategy (2011-2026). These policy documents were consulted on extensively with key stakeholders and local residents throughout 2010. Stakeholders including transport operators, Councillors, neighbouring LA's, emergency services, community associations, special interest groups etc were invited to a series of workshops to air their views on issues and challenges on the transport network. Leaflets were distributed to all households in the Peterborough area and information was made available on the Council website inviting the public's views. Public exhibitions were held and consultation carried out at Neighbourhood Council Meetings.

Once the scheme outline designs are progressed the Council will hold a Public Exhibition (PE) outlining scheme proposals, benefits and potential timescales for delivery. The public will have an opportunity to air their views on the scheme at this time. Scheme proposals will be put on the Council website and the public will be alerted to this via the local media and the PE.

b) Can the scheme be considered as controversial in any way? ☐ Yes ☒ No
If yes, please provide a brief summary (in no more than 100 words)

Bourges Boulevard is currently dual carriageway and the proposed scheme does not alter this. The improvements identified for this section of road will increase accessibility across Bourges Boulevard for sustainable modes, and improve access and egress to the rail station. These measures are not considered controversial.

c) Have there been any external campaigns either supporting or opposing the scheme?

☐ Yes ☒ No

If yes, please provide a brief summary (in no more than 100 words)
N/A

SECTION C – Monitoring, Evaluation and Benefits Realisation

C1. Benefits Realisation

Please provide details on the profile and baseline benefits and their ownership. This should be proportionate to the size of the proposed scheme.

Job creation – the scheme will assist in unlocking development which is expected to create 1,655 jobs, and the development land at the Northwestgate site could create an additional 1,000 jobs.

Housing – the scheme will assist in unlocking development to create approximately 200 new homes

Economic growth – the sites identified for development will bring forward both retail and office use. This in turn with the job creation will lead to an expanded city core and increased economic growth both through retail visitors and the investment of companies locating to the area.

Increased accessibility – the scheme will see the removal of central reservation barriers and the creation of two signalised pedestrian crossings which will lead to better accessibility from the Rail station to the city centre and a greater integration of passenger transport hubs.

Public realm improvements – the scheme will see a number of transformational public realm improvements which will make the area more attractive and accessible for all transport users. The proposed scheme will deliver significant improvements for a key arrival gateway to the city.

Improved road safety – as present, Bourges Boulevard is a 40mph dual carriageway with central barriers to prevent crossing, however pedestrians have been observed crossing the dual carriageway and climbing over the central reserve when travelling from the city centre to the Rail station and vice-versa. The scheme will cater for this direct desire line and enable people to cross safely through the implementation of two new signalised pedestrian crossings and the introduction of traffic signals at junctions either ends of the stretch of road which will better regulate traffic.

C2. Monitoring and Evaluation

Please set out how you plan to measure and report on the benefits identified in Section C1, alongside any other outcomes and impacts of the scheme

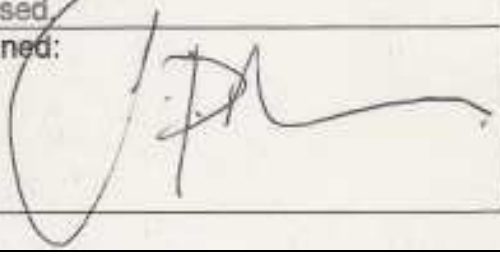
Job creation – measured against the total number of jobs that will be created once the developments have been built.

Increased accessibility – pedestrian counts to take place at intervals after completion of the scheme.

Public realm improvements – the success of the public realm improvements will be monitored through the increase in pedestrian activity in the area, these will be undertaken as post scheme completion surveys.

Improved road safety – accident statistics to be monitored analysed for pre and post scheme completion.

SECTION D: Declarations

D1. Senior Responsible Owner Declaration	
As Senior Responsible Owner for the Bourges Boulevard Improvement Scheme, I hereby submit this request for approval to DfT on behalf of Peterborough City Council and confirm that I have the necessary authority to do so. I confirm that Peterborough City Council will have all the necessary statutory powers in place to ensure the planned timescales in the application can be realised.	
Name: Simon Machen Position: Head of Planning, Transport and Engineering Services	Signed: 

D2. Section 151 Officer Declaration	
As Section 151 Officer for Peterborough City Council I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that Peterborough City Council - has allocated sufficient budget to deliver this scheme on the basis of its proposed funding contribution - accepts responsibility for meeting any costs over and above the LGF contribution requested, including potential cost overruns and the underwriting of any funding contributions expected from third parties - accepts responsibility for meeting any ongoing revenue requirements in relation to the scheme - confirms that the authority has the necessary governance / assurance arrangements in place and, for smaller scheme bids, the authority can provide, if required, evidence of a stakeholder analysis and communications plan in place	
Name: John Harrison, Executive Director of Strategic Resources Pp Steven Pilsworth	Signed: