

Town Hall, Darlington DL1 5QT
DX 69280 Darlington 6
website: <http://www.darlington.gov.uk>

LT.PLAN@dft.gsi.gov.uk

Date : 30 June 2017
Please ask for : Dave Winstanley
Direct Line : 01325 406618
Email address : Dave.Winstanley@darlington.gov.uk
Your Reference :
Our Reference :
Document Name: \\COM-SERVERV1\Groups\Secretary\AD - TRANSPORT AND CAPITAL PROJECTS\ANDY\NPIF Bid\Covering letter.docx

Dear Sir/Madam

Darlington Borough Council NPIF Bid (Tees Valley Combined Authority)

Darlington Borough Council is pleased to submit its application to the National Productivity Investment Fund for the Tees Valley Key Road Network (KRN).

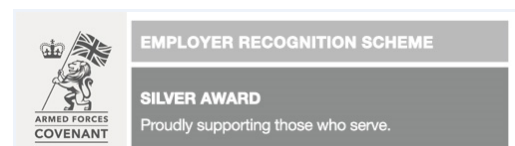
Our bid, Darlington Growth and Enterprise Zone Connectivity, is for £3.374m from the fund and we are providing a further £1.477m (30.4%) local contribution from other public and private sector sources. It focuses on access improvement and capacity enhancements to our Growth and Enterprise Zone where Economic Investment and Housing Strategies are focussed.

Darlington's economy is growing and we are working with new companies to invest and existing companies to develop their business. The NPIF delivery window fits with the aspirations of these investments and the bid seeks to unlock those projects. There is an additional £4m of infrastructure planned as part of this approach that has not been included as match contribution but will form part of the holistic approach to the area wide solution, including private and public sector (Highways England £478k).

The package of measures has the potential of unlocking 4,300 jobs, £17.5m GVA and 2,600 homes. This Economic Assessment undertaken by Systra shows an exceptional BCR of 15.3 and strong economic case that delivers the essential and desirable outcomes that the fund seeks to achieve.

Darlington has a successful history in demonstrating its commitment to sustainable transport and all the proposals seek to improve access by public transport (bus and rail). The schemes also expands and improves the walking and cycling networks as part of our door to door strategy, which in turn helps to address local priorities for health, which are highlighted are being piloted nationally in our Healthy New Town project located within the bid area.

Cont...



DBC has a proven track record in delivering projects with an established multi discipline project team to manage risk, delivery, expenditure and communications.

The Bid is supported by the Tees Valley Combined Authority and LEP, the Tees Valley Mayor and Darlington MP. The partner and stakeholder engagement in developing this bid has resulted in letters of support from the following, which are available on request:

- Highways England
- Nobia (Magnet)
- DB Symmetry
- PD Ports
- Darlington EE (BT)
- Teesside University
- Disclosure and Baring Service
- Arriva North East – Public Transport Operator
- Business Central Darlington
- Darlington College
- CPI Biologics
- Bellway Homes
- Story Home
- Keepmoat

We look forward to working with you to help unlock this potential and bring forward these investment opportunities.

Yours faithfully



Dave Winstanley
Assistant Director – Transport and Capital Projects

Enc – Table of Appendices

Appendix Ref	Description
A2	Plan showing proposed Project
A3	Location Context Plan
A6	Relevant support letters
A7	Tees Valley Combined Authority (TVCA) support letter and TVCA Multiple Bid Ranking Note
A8	<ul style="list-style-type: none"> • Tees Valley Local Enterprise Partnership (TVLEP) support letter • Housing Developers support letters
B5	<ol style="list-style-type: none"> 1. Projects Impacts proforma 2. Description of data sources and forecasts 3. Appraisal Summary Table
B7	Project Plan (Gantt Chart)
B9	Project Management Structure
B10	<ul style="list-style-type: none"> • Quantified Risk Assessment (QRA) • Risk Management Strategy • Risk Register
B12	MP Letter of Support

National Productivity Investment Fund for the Local Road Network Application Form



Department
for Transport

Applicant Information

Local authority name(s)*: Darlington Borough Council

Bid Manager Name and position: Andy Casey, Head of Highway Network Management

Contact telephone number: (01325) 406701 **Email address:** Andrew.Casey@darlington.gov.uk

Postal address: Darlington Borough Council
17 Allington Way
Darlington
DL1 4QB

Combined Authorities (Tees Valley Combined Authority)

Name and position of Combined Authority Bid Co-ordinator: Mark Wilson, Head of Transport

Contact telephone number: (01642) 524453 **Email address:** Mark.Wilson@teesvalley-ca.gov.uk

Postal address: Tees Valley Combined Authority
Cavendish House, Teesdale Business Park
Stockton on Tees
TS17 6QY

Please specify the weblink where this bid will be published: www.darlington.gov.uk and www.teesvalley-ca.gov.uk

SECTION A - Project description and funding profile

A1. Project name: Darlington Growth and Enterprise Zone Connectivity

A2 : Please enter a brief description of the proposed project (no more than 50 words)

Improvements on the Tees Valley KRN from the A66 (SRN) to Central Park Enterprise Zone that:

- Unlocks growth sites with 2600 houses and 4300 jobs potential.
- Improving connectivity to regional transport assets including Darlington Station, DTVA and the A66 SRN.
- Provides resilience and capacity on the KRN maximising other investment.

(Map at **Appendix A2 and A3** for context)

KRN – Key Road Network (Tees Valley), SRN – Strategic Road Network, DTVA – Durham Tees Valley Airport

A3 : Please provide a short description of area covered by the bid (no more than 50 words)

The eastern side of Darlington from the A66 (SRN) to the Central Park Enterprise Zone. The improvements focus along two KRN Roads; the B6279 DETC and the B6280 Yarm Road.

Adjacent to these roads are the housing and economic growth sites the bid seeks to bring forward.

(Map at **Appendix A2 and A3** for context)

OS Grid Reference: **NZ322137**

Postcode: **DL1 4WD**

A4. How much funding are you bidding for? (please tick the relevant box):

Small project bids (requiring DfT funding of between £2m and £5m)

A5. Has any Equality Analysis been undertaken in line with the Equality Duty?

Yes No (available on request)

A6. If you are planning to work with partnership bodies on this project (such as Development Corporations, National Parks Authorities, private sector bodies and transport operators) please include a short description below of how they will be involved.

Tees Valley Combined Authority (TVCA) and Tees Valley Local Enterprise Partnership (TVLEP) - This bid has been developed with the TVCA and is supported by TVLEP. The newly elected **Tees Valley Mayor** has endorsed the bid as the outcomes contribute towards both Darlington's Sustainable Community Strategy and the TVCA Strategic Economic Plan.

Central Park Enterprise Zone - Housing and Commercial –30hectare mixed use scheme, set to deliver over 350 new homes, in excess of 50,000sqm high quality commercial space and a local centre, alongside the education campus. The commercial area is an Enterprise Zone, with a focus on life-sciences and digital sectors. Investment of £25m+ is anticipated during 2018/20.

Keepmoat – housing developers at Central Park currently delivering 50 new homes on site every year, a delivery rate significantly over projected sales rates. 170 units of 350 are now occupied.

Homes England (HCA) – The Council and HCA have partnership agreements in place for Central Park and Morton Palms.

CPI – Have their catapult National Biologics Manufacturing Centre at Central Park and have plans to build the Healthcare Futures Centre providing incubator laboratory space for SME's. Both focus on the development of bio-medicines and related technologies, taking them from concept to commercialisation.

Business Central – An HCA and ERDF funded business incubator led by Darlington Council, offering 3,200sqm high quality serviced office space; facility is 80% occupied 12 months ahead of the projected take up.

An Education Campus has been established with Darlington College and Teesside University. TVCA and DBC are funding a new footbridge to connect the Campus and Central Park to Darlington Rail Station

Darlington Eastern Growth Zone

The plan at **Appendix A2** outlines the interrelationship of the area wide approach with private sector and public sector investment to manage congestion and unlock growth. We will work in partnership to deliver the outcomes and manage the disruption during construction phases.

Highways England has secured funding for a Congestion Relief Fund scheme to relieve existing congestion on the SRN and Local Road Network at the A66/A67/B6280 Morton Palms junction which is scheduled for implementation in 2018/19. This supports the proposals in this project to provide corridor improvements that ease congestion and can unlock growth.

Ingenium Park – a new employment site focussed on advanced engineering and manufacturing, with associated warehousing, capable of delivering 100,000sqm floor space, accessed from Yarm Road. It adjoins the rear of Cummins and Cleveland Bridge and has the potential to provide a connection to Alderman Best Way at Morton Palms. The Council, with funding support from TVCA are working to deliver the enabling infrastructure including access road and utilities, to enable the first occupiers to be in place and operational within 2019/20.

Link 66 Development has outline planning consent comprising for 127,000 sq/m distribution and logistics and other uses will create upwards of 3,900 jobs. The Developer and Council are developing a new link road to serve the development and provide an additional access point onto the local network to help distribute traffic to manage congestion. The estimated cost of this private investment is in the order of £2m.

Burdon Hill Housing – a significant housing allocation comprising 1250 dwellings to the west of the A66. National housing builders Storys and Bellways have passed through pre-application discussions and a planning application is imminent. This is an important element of the Council's Local Plan over all housing need of approximately 10,000 homes over the next 20 years and assists with its five year housing supply.

Lingfield Point is a successful business park, home to 25 businesses including the Student Loans Company, who employ around 1,500 staff operating on shift patterns, as well as Capita, AMEC, the NHS and NFU Mutual. Accessed from McMullen Road, employees will benefit from reduced journey times.

Morton Palms Business Park– home to Disclosure and Barring Service with 400+ employees and privately managed office space accommodating 15+ businesses. The site is delivered in partnership between the Council and HCA. Interest in developing in the gateway plot for a range of commercial uses is currently being explored.

The Healthy New Towns Project is one of ten demonstrator sites in England. The Council is the lead organisation in partnership with NHS healthcare organisations, County Durham and Darlington Fire and Rescue Service, Keepmoat Homes, EE, Groundwork and Age UK Darlington. The project covers the residential areas of Red Hall, Burdon Hill and Lingfield Point. The project work streams are Regeneration and Housing; New Models of Care; and Digital Technology Transformation. The project aims to improve physical and mental health through increasing levels of walking and cycling.

Existing Businesses

Some of Darlington's biggest employers are based in this area and are key stakeholders. Congestion and capacity is a concern in terms of employee retention and expansion plans.

We will work in partnership with them to ensure that work has minimal impact on their operations but maximises benefits in terms of journey time savings for employees, access at shift change times and improved sustainable transport to the wider area. They include:

Cummins employ over 750 people in the development of new engine technology.

Cleveland Bridge – a global design, fabrication, construction and engineering company with over 250 employees
EE, the telecommunications provider employ 2,200 people in their regional centre.

Nobia (Magnet) one of the country's largest kitchen specialists whose head office is situated on Yarm Road employing 230.

Arriva North East Strong partnership working exists with Arriva who currently provide commercial bus services in this area. We will work in partnership in detailed design to ensure bus priority is provided where feasible as well as appropriate bus passenger facilities. Junction improvements and developments will provide options to increase frequencies and potentially provide new routes on a commercial basis.

Letters of support at **Appendix A6**.

A7. Combined Authority (CA) Involvement

Have you appended a letter from the Combined Authority supporting this bid? Yes (See **Appendix A7**)

TVCA have provided a Multiple Bid Ranking Note that has identified six bids from within the Tees Valley all of which have **equal** ranking and are to be considered on individual merits by the DfT (included at **Appendix A7**).

A8. Local Enterprise Partnership (LEP) Involvement and support for housing delivery

Have you appended a letter from the LEP supporting this bid? Yes (See **Appendix A8**)

For proposed projects which encourage the delivery of housing, have you appended supporting evidence from the house builder/developer? Yes (See **Appendix A8**)

SECTION B – The Business Case

B1: Project Summary

Please select what the project is trying to achieve (select all categories that apply)

Essential

- Ease urban congestion
- Unlock economic growth and job creation opportunities
- Enable the delivery of housing development

Desirable

- Improve Air Quality and /or Reduce CO2 emissions
- Incentivising skills and apprentices

Other(s), Please specify -

- Sustainable Transport
- Improved resilience on the SRN (A66)
- Improved performance and resilience on the KRN and local road network.
- Improved access to Tees Valley national and international gateways (DTVA, Darlington Station and Teesport)
- Reduce displacement of local trips onto SRN (A66) due to congestion on KRN

B2 : Please provide evidence on the following questions (max 100 words for each question):

a) What is the problem that is being addressed?

The Eastern Growth Zone and Central Park Enterprise Zone will accommodate the majority of the Darlington's employment growth over the next ten years and in excess of 2,600 homes.

The KRN suffers from traffic congestion at peak times which increases journey time and reduces productivity. The KRN cannot accommodate the additional development trips without significant improvements at key locations on the network.

Darlington is surrounded by SRN with the A66 to the south and east and A1(M) to the west. If congestion does increase there will inevitably be an impact on the SRN which will have a negative impact on productivity in the wider Tees Valley economy.

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

As part of development of the Local Plan a number of options for development locations were tested and the EGZ and Central Park were considered the best fit with the emerging Local Plan policies and the National Planning Policy Framework.

Do Nothing – This would increase congestion, reduce productivity, delay development and reduce economic growth.

Do minimum – Limited intervention would not resolve the current congestion or accommodate development trips on KRN.

Do maximum – The full scheme reduces journey time delay and facilitates the creation of 4,300 jobs by 2020 and the development of 2,600 homes over the next ten years.

c) What are the expected benefits/outcomes? For example, could include easing urban congestion, job creation, enabling a number of new dwellings, facilitating increased GVA.

The project is expected to deliver the following:-

- Reduced congestion in opening year.
- Improved business productivity on the KRN that compliments planned improvements on the SRN.
- Unlocks 4,300 potential planned jobs at the Eastern Growth Zone and Central Park Enterprise Zone by 2020.
- Enable housing sites to be developed and brought forward that will facilitate a build programme of 2,600 new homes.
- Secure investment on development sites, particularly employment sites such as Central Park.
- Deliver an estimated GVA value of £17.5m.

d) Are there any related activities that the success of this project relies upon? For example, land acquisition, other transport interventions requiring separate funding or consents?

- Highways England to deliver their Pinch Point scheme at A66 Morton Palms roundabout – this is a funded scheme that is currently being developed and is programmed for construction in 2018/19.
- Development of a new access road as part of Link 66 commercial development. Outline planning permission is in place and detailed discussions are ongoing with the developer to bring forward a major development. This will provide a new link between B6279 DETC and B6280 Yarm Road to reduce congestion at A66 (SRN) junctions and McMullen Road (KRN).

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

An alternative solution is not viable. The KRN and SRN would become more congested leading to reduced productivity for existing and new employers. Delays on the SRN would impact on the Tees Valley, specifically on the efficient movement of goods and materials to our logistics and manufacturing bases such as Hitachi, Cummins Engine Parts and Cleveland Bridge.

Economic Growth could be stifled and developments slower to come forward impacting on Tees Valley SEP targets. The TV is a net exporter with a strong focus on advanced manufacturing and logistics. Additional journey time delays harm trading both in national and international markets.

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

The project does not have any impact on statutory environment constraints.

B3 : Please complete the following table. Figures should be entered in £000s

(i.e. £10,000 = 10).

Table A: Funding profile (Nominal terms)

£000s	2018-19	2019-20
DfT funding sought	1519	1855
Local Authority contribution	842	635
Third Party contribution	0*	0* (*See note below)
TOTAL	2361	2490

This represents a local contribution of 30.4%

The profile shows the majority of the match funding will be spent in 2018/19 and the DfT grant expenditure will be weighted towards 2019/20. DBC would be willing to re-profile to meet any specific profile requirements to assist DfT.

* Whilst there are no specific third party contributions included in the bid, Section B4 identifies that there will be circa £4m investment in access roads as part of the Link 66 and Burdon Hill developments. In addition, HE are investing £478,000 in an improvement to A66 Morton Palms roundabout. This is in addition to the LA contribution above.

B4 : Local Contribution & Third Party Funding : Please provide information on the following questions (max 100 words on items a and b):

a) Provide an outline of all non-DfT funding contributions to the project costs, the level of commitment, and when the contributions will become available.

£2.2m TVCA funding allocated for B6280 Roundabout and New Access infrastructure; £1.175m specifically for highway capacity improvements. (Available Jan 2018).

A total Local Contribution Funding of £1.477m has been allocated to the project. This comprises £1.175m TVCA Funding (above) and £0.302m from DBC Capital Funding (This funding is secured and available).

Third party funding **not** included in bid but planned includes:

Highways England £478k SRN Pinch Point committed for construction in 2018/19.

£4m investment in access roads and junctions onto the B6279 to unlock Link 66 and Burdon Hill developments (See **Appendix A2**).

b) List any other funding applications you have made for this project or variants thereof and the outcome of these applications, including any reasons for rejection. N/A

B5 Economic Case

A) Requirements for small project bids (i.e. DfT contribution of less than £5m)

a) Please provide a description of your assessment of the impact of the project to include:

Scheme Impacts

- A reduction in travel time delays leading to an extremely strong BCR of 15.3.
- A 289,660 tonne reduction in carbon.
- Improved air quality through the efficient movement of traffic.

- Unlocking of multiple development sites to bring forward 4,300 jobs with an estimated GVA of £17.5m.
- Enabling 2,600 homes to be developed.
- Improving Sustainable transport choices and infrastructure.
- Improving the road user experience and creating the right conditions for new investors and existing business to invest further as outlined in letters of support (**Appendix A6 and A8**)
- Further details of the benefits of the scheme are included in the Appraisal Summary Table.
- Details of the calculations towards the VOT and BCR values are available on request.

Risks and Uncertainties

The proposed development quantum in terms of jobs and homes is considered robust and contributes to the TVCA SEP targets. The development enquiries coming forward are extremely positive and this package of measures will assist to secure further private sector commitment. Central Park and the Eastern Growth Zones are attracting high levels of investment. However, there remains uncertainty across the UK on the wider economic position, which could place uncertainty on investment in the next two years.

Modelling Methodology

- A technical note covering the modelling methodology, data sources and forecasts is attached at **Appendix B5**.

b) Small project bidders should provide the following in annexes as supporting material:

Has a **Project Impacts Pro Forma** been appended? Yes See **Appendix B5**

Has a description of data sources / forecasts been appended? Yes as part of the Technical note (**Appendix B5**)

Has an **Appraisal Summary Table** been appended? Yes See **Appendix B5**

B6 Economic Case: For all bids the following questions relating to **desirable criteria** should be answered.

Please describe the air quality situation in the area where the project will be implemented by answering the three questions below.

i) Has Defra's national air quality assessment, as reported to the EU Commission, identified and/or projected an exceedance in the area where the project will be implemented? Yes No

ii) Is there one or more Air Quality Management Areas (AQMAs) in the area where the project will be implemented? AQMAs must have been declared on or before the 31 March 2017 Yes No

iii) What is the project's impact on local air quality? Positive Neutral Negative

- Please supply further details:

The Council has a diffusion tube at the B6280 Yarm Road McMullen Road roundabout which measures local air quality against the national air quality objective for nitrogen dioxide which is 40µg/m³ (annual mean). Annual data is available from 2011 – 2016. The highest level is 29.4 and the most recent data is 26.2, well within the national target.

Whilst traffic levels overall are set to grow with the development of 2600 new homes and the creation of 4300 new jobs, there are a number of factors that lead us to believe that overall air quality will not be compromised, though monitoring will continue:

- The VISSIM traffic model shows that there will be additional trips, generated by the potential new developments and background growth, which suggests a negative impact. However this is counteracted by the schemes significant journey time savings. The model outputs indicate that the scheme will save 289,660 tonnes of Carbon which indicates that it will have a slight beneficial effect.
- The reduction in carbon emissions and journey time savings are a reliable proxy to suggest that there will also be a slight beneficial improvement in air quality. This will be brought about by cars moving through built up areas more efficiently, reducing the dwell time of those vehicles and the concentration or density of those vehicles over any given length of highway.
- Due to the nature of some of the commercial developments it is anticipated that there will be significant amounts of shift work which will distribute the traffic through the day/night and not just concentrate the traffic growth in the AM and PM peaks.
- Sustainable transport options will be improved as part of the package of measures, increasing the sustainable modal share;
- Public transport options will be improved, increasing the number of trips by bus and the local bus operators continue to invest in lower emission vehicles including gas furred buses.

iv) Does the project promoter incentivise skills development through its supply chain? Yes No N/A

- Please supply further details:
In line with the Transport Infrastructure Skills Strategy Darlington Borough Council's procurement processes aim to recognise those companies that invest in the skills of their workforce. Our procurement for major capital schemes is based on a cost and quality assessment, usually 70:30 or 60:40. The quality aspect typically includes benefits to the local economy and social/community benefits, promoting skills development through initiatives such as Building My Skills Programme and apprenticeships.
- v) Where other material factors not mentioned above also have particular relevance to the bid, these should be captured in applications. These could relate to benefits to road safety, bus services, sustainable modes (walking and cycling) and accessibility. We would expect these benefits to be evidenced in your bid. For example, the anticipated reduction of road accidents or increase in the use of sustainable transport modes.

Cycling

All of the scheme designs include facilities for cyclists and will contribute to improving and extending the cycle network in the east side of Darlington, particularly to the new and existing employment areas. Research undertaken in 2014 by AECOM as part of Darlington's longitudinal travel behaviour research recorded that 5% of trips to work are by bike. With the creation of 4300 new jobs this would generate a further 215 trips by bike per working day; approx. 60,000 trips per year. This does not take into account the additional short journeys made by bike for access to existing employment sites, education, leisure, shopping etc. that would be created for new and existing residents through the new cycle facilities on Lingfield Way, Salters Lane and Yarm Road.

Bus Services

All the schemes improve the expeditious movement of traffic and have benefits for bus services through reduced delay at junctions and therefore associated journey time savings. Research undertaken in 2014 by AECOM as part of Darlington's longitudinal travel behaviour research recorded that 4% of trips to work are by bus. With the creation of 4300 new jobs this would generate a further 172 trips by bus per working day; approx. 45,000 trips per year. This does not take into account the additional short journeys made by bus for access to education, leisure, shopping etc. that would be generated by residents in the new homes. The research shows that 8% of all trips are made by bus. In addition the new bus priority measures and link roads will create the opportunities to better serve the existing employment areas and therefore increase the % of travel to work by bus, in particular for those living in Darlington, Stockton and Middlesbrough. Arriva the commercial bus operator has been consulted on the proposals and is fully supportive of the plans.

Road Safety

The three main junction locations currently have good road safety records for vulnerable road users. The B6279/Haughton Road roundabout is currently signalised and has specific phases for pedestrians and cyclists. This has resulted in no RTA casualties for vulnerable road users in the past five years. The detailed design will need to ensure that this record can be maintained. The B6280 Yarm Road/Lingfield Way junction also has no pedestrian or cycle casualties in the last five years. A nearby toucan crossing provides a safer place to cross. This will be re-provided as part of the scheme design to retain this excellent record. The B6280 Yarm Road/McMullen Road roundabout has had one pedestrian and one cycle casualty in the last five years. The scheme design will include improved facilities for pedestrians and cyclists to reduce the road safety risk for vulnerable road users.

B7. Management Case - Delivery (Essential)

- a) A project plan (typically summarised in Gantt chart form) with milestones should be included, covering the period from submission of the bid to project completion.

Has a project plan been appended to your bid? Yes See **Appendix B7**

- The elements of the project that are funded from DfT NPIF do not require statutory approval.
- Planning permission is required for the Ingenium Park access road and reserved matters are required for the Link 66 access road. Neither of these are funded from the DfT NPIF.
- The project requires service diversions. C3 estimates and trial-hole information have been obtained to inform the design and costing. C4 orders will be developed (as part of the advanced payment code) and ready to be placed once the funding is confirmed to meet project milestones.

High level Project plan attached at **Appendix B7**

- b) If delivery of the project is dependent on land acquisition, please include a letter from the respective land owner(s) to demonstrate that arrangements are in place to secure the land to enable the authority to meet its construction milestones.

Has a letter relating to land acquisition been appended? Yes No N/A

- c) Please provide in Table C summary details of your construction milestones (at least one but no more than 6) between start and completion of works:

Table C: Construction milestones

	Estimated Date
Start of works	1 April 2018
Completion of Phase 1 B6280 McMullen Road/Yarm Road	1 April 2019
Completion of Phase 2 Ingenium Parc Link Road	12 July 2017
Completion of Phase 3 B6280 Yarm Road/Lingfield Way Sustainable Transport Improvement	1 November 19
Completion of Phase 4 B6279 Haughton Road Roundabout Improvement	20 March 2020
Completion of Project	20 March 2020

- d) Please list any major transport projects costing over £5m in the last five 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)

- Tees Valley Bus Network Improvement – a £57m project across the Tees Valley over a five year period, of which DBC delivered £10.152m of infrastructure improvements. The project was completed on time and budget and included an accelerated DfT funding profile (at DfT request) with the majority of DfT grant being spent in the early years of the project.
- DBC has been awarded funding a Highway Maintenance Challenge Fund that included a bridge strengthening scheme and a borough-wide street lighting renewals and LED conversion programme. (£7.7m total project value, of which £5.8m DfT funding). This three year programme will be complete in March 2018 and will be within budget.

In addition we have completed the following large scheme:-

- Pinch Point funding – We successfully delivered a Pinch Point Scheme to stabilise an embankment that supports the A67 at Carlbury. The scheme was a complex one due to the presence of two cast iron trunk water mains carrying in the region of 30 million litres of water a day, which required diverting. The scheme was delivered on budget but was delayed by two months due to problems Northumbrian Water Limited experienced diverting their water mains. The overall scheme budget was £3.919m of which £2.445m was from DfT.

B8. Management Case – Statutory Powers and Consents (Essential)

- a) Please list if applicable, each power/consent etc. already obtained, details of date acquired, challenge period (if applicable), date of expiry of powers and conditions attached to them. Any key dates should be referenced in your project plan.

- The elements of the project that are funded from DfT NPIF will be carried out under Part 13 - General Permitted Development Order and do not require any statutory consent.

- b) Please list if applicable any outstanding statutory powers/consents etc. including the timetable for obtaining them.

- Planning permission is required for the Ingenium Park access road and reserved matters are required for the Link 66 access road. Neither of these are funded from the DfT NPIF

B9. Management Case – Governance (Essential)

Please name those who will be responsible for delivering the project, their roles (Project Manager, SRO etc.) and responsibilities, and how key decisions are/will be made. An organogram may be useful here.

The responsibilities and governance described below should be read in conjunction with **Appendix B9 – Governance Structure**.

Senior Responsible Officer: Dave Winstanley: Assistant Director responsible for the Highway Authority Function and delivery of the Council's Major Capital Projects.

A NPIF Project Board will be chaired by the SRO to manage the delivery of the programme and consider any decisions required to deliver the programme.

The SRO will report highlight reports on progress against programme to the Council's Capital Programme Board which is chaired by the Director of Resources (and S151 officer. (Time, financial and quality). Any potential risk

with that results in a 5% deviations to time or cost must be reported to the Board with a proposed strategy to mitigate for approval by the Board.

The **Project Sponsor**– Andy Casey – Head of Highway Network Management will manage the Business Case and programme gateways and seek approval from the SRO to sign-off the gateway process (Control Points CP):-
CP1 – Project Brief
CP2 – Project Initiation Document
CP3 – Design Approval
CP4 – Construction Stage
CP5 – Post Project Review

A Project Execution Plan will be developed that covers programme, risk, resources, outcomes and cost plan. The Sponsor is responsible for monitoring the plan and producing a report to the NPIF Board.

Project Manager and Principal Designer (CDM) – Noel Walecki – Principal Design Engineer

Responsible for the operational management, co-ordination and control of all aspects of the project team. The Project Manager is required at all times to keep the Project Sponsor and escalate matters to the SRO by exception.

The Project Manager has an extended **project team** to assist coordinate and deliver the programme. See Project Management Structure at **Appendix B9**

The project decision making process is ISO 9001 certification accredited. The SRO will receive regular delivery highlight reports on a monthly basis, exception reports and risk management updates from the Project Sponsor and Project Manager.

B10. Management Case - Risk Management (Essential)

All projects will be expected to undertake a Quantified Risk Assessment (QRA) and a risk register should be included (See **Appendix B10**). Both should be proportionate to the nature and complexity of the project. A Risk Management Strategy should be developed that outlines how risks will be managed.

Please ensure that in the risk/QRA cost that you have not included any risks associated with ongoing operational costs and have used the P50 value.

Has a QRA been appended to your bid? Yes See **Appendix B10**

Has a Risk Management Strategy been appended to your bid? Yes See **Appendix B10**

Please provide evidence on the following points (where applicable) with a limit of 50 words for each:

- a) What risk allowance has been applied to the project cost?
The QRA has produced a Scheme P50 value of £4,851,181 which includes the risk value. The estimating uncertainty value is £86,924 and the client contingency is £244,303 providing an overall risk value of £331,227.

Operating costs are excluded from both the P50 scheme value and the risk value.
- b) How will cost overruns be dealt with?
The cost estimates and risk allowance are considered robust. Costs will be monitored by the Cost Control Officer with a mitigation plan produced to address any potential overrun. Early warnings of overrun to DfT and put mechanisms in place to manage them
- c) What are the main risks to project timescales and what impact this will have on cost?
The main risk relates to service diversion company response times, potential changes to planned diversions and subsequent delays. We have built significant time into the programme for service investigation and ordering of diversions (including a 20 week lead in for orders) to minimise the risk.

B11. Management Case - Stakeholder Management (Essential)

- a) Please provide a summary in no more than 100 words of your strategy for managing stakeholders, with details of the key stakeholders together with a brief analysis of their influences and interests.
- The NPIF projects form part of the investment strategy for this area. Stakeholders have been engaged and are committed to bringing forward economic and housing investment. They are providing infrastructure investment

above that included in the bid ensuring to compliment the NPIF schemes and ensure the KRN creates the right environment for housing and commercial growth. **Section A6** supports the inclusive approach that has included Highways England, housing and commercial developers, businesses, TVCA, TV Mayor and Darlington MP.

- The stakeholder plan involves all at the design, implementation and post project-review stages to ensure buy-in and effective management of the project.
(DBC produces Communications and Stakeholder Engagement Strategies for all capital projects).

b) Can the project be considered as controversial in any way? No

c) Have there been any external campaigns either supporting or opposing the project? No

B12. Management Case – Local MP support (Desirable)

e) Does this proposal have the support of the local MP(s);

Name of MP(s) and Constituency

1 Jenny Chapman, Darlington

Yes (See **Appendix B12**)

B13. Management Case - Assurance (Essential)

We will require Section 151 Officer confirmation (Section D) that adequate assurance systems are in place.

- Section D has been completed by the Section 151 Officer

SECTION C – Monitoring, Evaluation and Benefits Realisation

C2. Please set out, in no more than 100 words, how you plan to measure and report on the benefits of this project, alongside any other outcomes and impacts of the project.

We will undertake a post project review and measure the success of the project using:

- Actual journey time saving on KRN.
- Number of jobs created/consented by 2020.
- Number of houses built/consented by 2020.
- Percentage change in bus patronage on core services 2, 9, 10, 12 and X67.
- Bus punctuality on core services 2, 9, 10 and 12.
- Air quality at B6280 Yarm Road and Haughton Road/Haughton Village
- Number of businesses/employees accessible by cycle.
- Monitor travel to work through the travel plans at employers including EE, Cummins, Lingfield Point, Business Central and CPI.

SECTION D: Declarations

D1. Senior Responsible Owner Declaration

As Senior Responsible Owner for Darlington Growth and Enterprise Zone Connectivity, I hereby submit this request for approval to DfT on behalf of Darlington Borough Council and confirm that I have the necessary authority to do so.

I confirm that Darlington Borough Council will have all the necessary statutory powers in place to ensure the planned timescales in the application can be realised.

Name: Dave Winstanley

Position: Assistant Director – Transport & Capital Projects

Signed:



D2. Section 151 Officer Declaration

As Section 151 Officer for Darlington Borough Council I declare that the project cost estimates quoted in this bid are accurate to the best of my knowledge and that Darlington Borough Council:

- has allocated sufficient budget to deliver this project on the basis of its proposed funding contribution
- accepts responsibility for meeting any costs over and above the DfT 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 project
- accepts that no further increase in DfT funding will be considered beyond the maximum contribution requested and that no DfT funding will be provided for this bid in 2020/21.

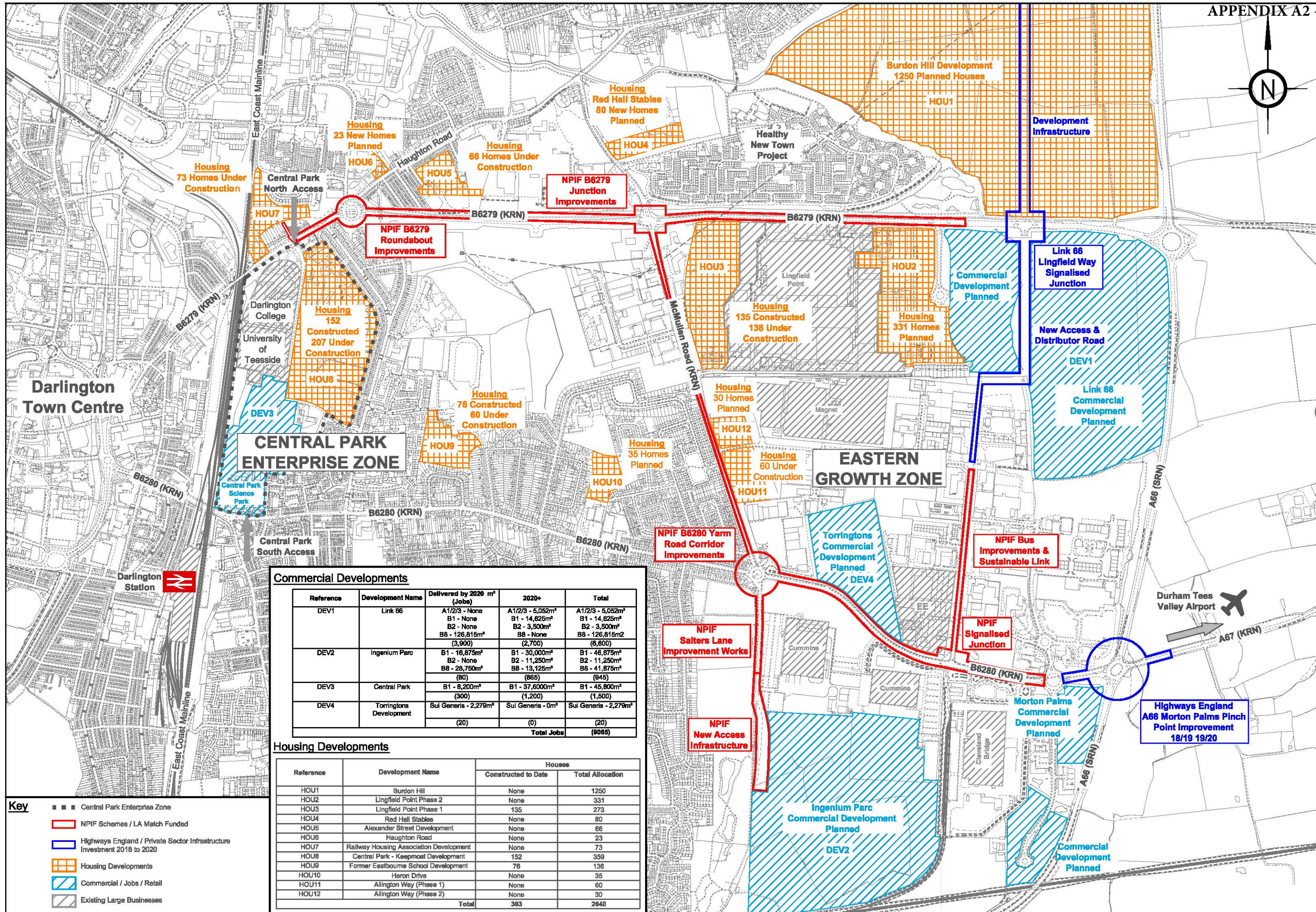
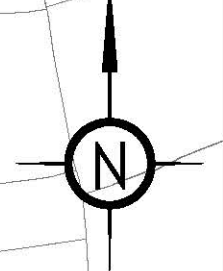
- confirms that the authority has the necessary governance/assurance arrangements in place and, for smaller project bids, the authority can provide, if required, evidence of a stakeholder analysis and communications plan in place
- confirms that if required a procurement strategy for the project is in place, is legally compliant and is likely to achieve the best value for money outcome

Name: Paul Wildsmith
 Director of Neighbourhood Services and Resources

Signed: 

HAVE YOU INCLUDED THE FOLLOWING WITH YOUR BID?

Combined Authority multiple bid ranking note (if applicable)	<input checked="" type="checkbox"/> Yes	See Appendix A7
Map showing location of the project and its wider context	<input checked="" type="checkbox"/> Yes	See Appendix A2 and A3
Combined Authority support letter (if applicable)	<input checked="" type="checkbox"/> Yes	See Appendix A7
LEP support letter (if applicable)	<input checked="" type="checkbox"/> Yes	See Appendix A8
Housebuilder / developer evidence letter (if applicable)	<input checked="" type="checkbox"/> Yes	See Appendix A8
Land acquisition letter (if applicable)	<input checked="" type="checkbox"/> N/A	
Projects impact pro forma (must be a separate MS Excel)	<input checked="" type="checkbox"/> Yes	See Appendix B5
Appraisal summary table	<input checked="" type="checkbox"/> Yes	See Appendix B5
Project plan/Gantt chart	<input checked="" type="checkbox"/> Yes	See Appendix B7



Commercial Developments

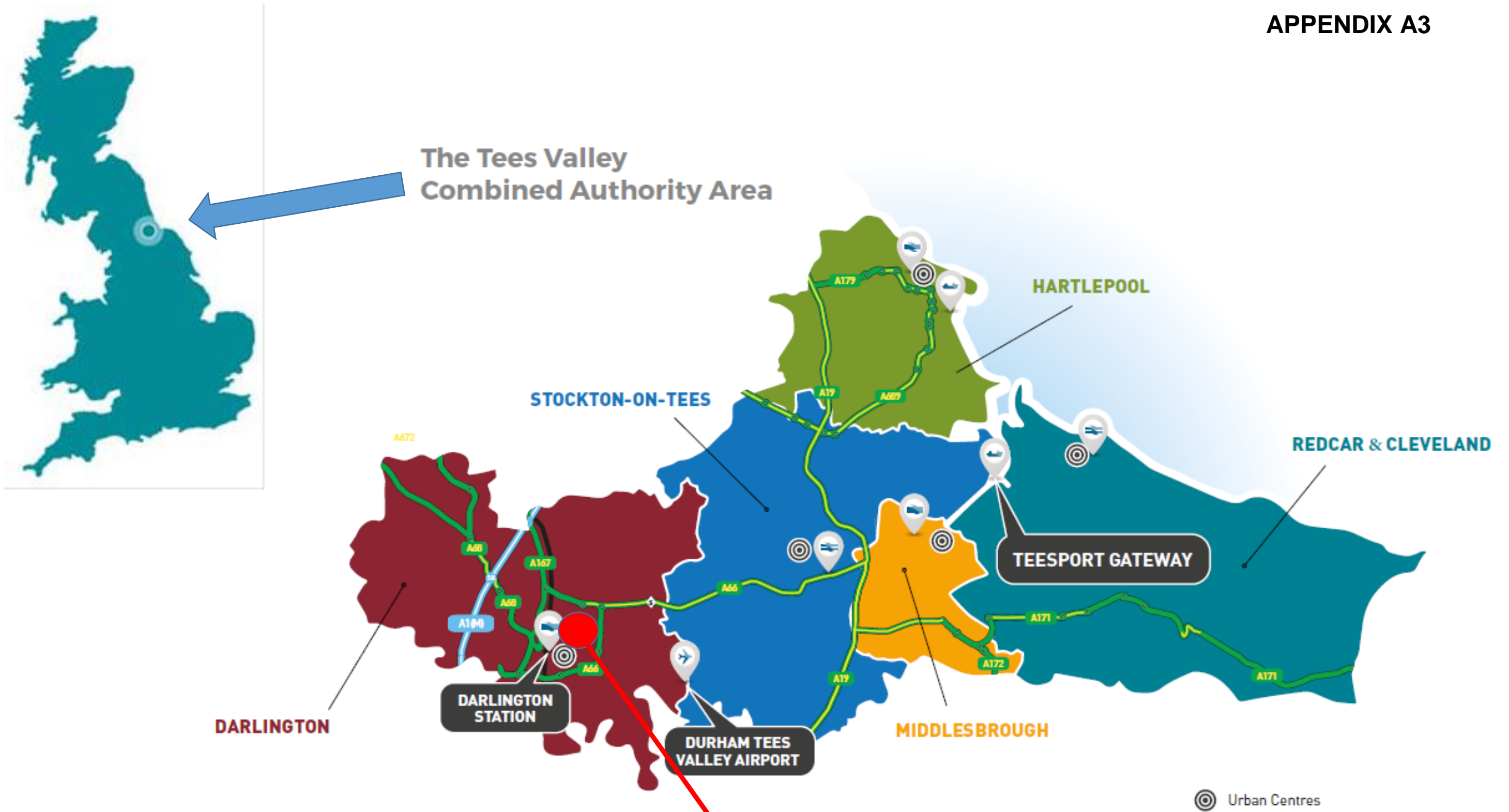
Reference	Development Name	Delivered by 2020 m ² (Jobs)	2020+	Total
DEV1	Link 66	A1/2/3 - None	A1/2/3 - 5,052m ²	A1/2/3 - 5,052m ²
		B1 - None	B1 - 14,625m ²	B1 - 14,625m ²
		B2 - None	B2 - 3,500m ²	B2 - 3,500m ²
		B8 - 126,815m ²	B8 - None	B8 - 126,815m ²
		(3,900)	(2,700)	(6,600)
DEV2	Ingenuim Parc	B1 - 16,875m ²	B1 - 30,000m ²	B1 - 46,875m ²
		B2 - None	B2 - 11,250m ²	B2 - 11,250m ²
		B8 - 28,750m ²	B8 - 13,125m ²	B8 - 41,875m ²
		(80)	(865)	(945)
DEV3	Central Park	B1 - 8,200m ²	B1 - 37,600m ²	B1 - 45,800m ²
		(300)	(1,200)	(1,500)
DEV4	Torringtons Development	Sui Generis - 2,279m ²	Sui Generis - 0m ²	Sui Generis - 2,279m ²
		(20)	(0)	(20)
				Total Jobs (9085)

Housing Developments

Reference	Development Name	Houses	
		Constructed to Date	Total Allocation
HOU1	Burdon Hill	None	1250
HOU2	Lingfield Point Phase 2	None	331
HOU3	Lingfield Point Phase 1	135	273
HOU4	Red Hall Stables	None	80
HOU5	Alexander Street Development	None	66
HOU6	Houghton Road	None	23
HOU7	Railway Housing Association Development	None	73
HOU8	Central Park - Keepmoat Development	152	359
HOU9	Former Eastbourne School Development	76	136
HOU10	Heron Drive	None	35
HOU11	Allington Way (Phase 1)	None	60
HOU12	Allington Way (Phase 2)	None	30
Total		363	2640

Key

- ■ ■ Central Park Enterprise Zone
- ▭ NPIF Schemes / LA Match Funded
- ▭ Highways England / Private Sector Infrastructure Investment 2018 to 2020
- ▭ Housing Developments
- ▭ Commercial / Jobs / Retail
- ▭ Existing Large Businesses



The Tees Valley
Combined Authority Area

DARLINGTON
STATION

DURHAM TEES
VALLEY AIRPORT

TEESPORT GATEWAY

DARLINGTON NPFI BID LOCATION
INCLUDING:

- CENTRAL PARK ENTERPRISE ZONE
- EASTERN GROWTH ZONE
- UNIVERSITY OF TEESIDE & DARLINGTON COLLEGE

Our ref:
 Your ref:

Richard Marshall
 Regional Director
 3 South
 Lateral
 8 City Walk
 Leeds LS11 9AT

Dave Winstanley
 Assistant Director: Transport and Capital Projects
 Darlington Borough Council Depot
 17 Allington Way
 Darlington
 DL1 4QB

Direct Line: 0300 470 2507

30 June 2017

OFFICIAL

Dear Mr Winstanley

NATIONAL PRODUCTIVITY INVESTMENT FUND: DARLINGTON

Thank you for speaking to Highways England about the Council's bid to the National Productivity Investment Fund.

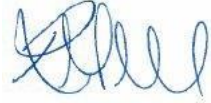
As you are aware, we have been working closely with Darlington Borough Council and the Tees Valley Combined Authority to develop a programme of schemes on the Strategic Road Network and Tees Valley Key Route Network that complement each other and support the economic growth of the region over the short, medium and long term.

Through our work with you we recognise that the Central Park Growth Zone and Eastern Growth Zone are generating high numbers of economic and housing related enquiries that have the potential to start in the timeframe of these funds. Our joint ambition has been to find ways to facilitate the delivery of this and we have taken every opportunity to leverage investment into the network. With your support, we have secured £478,000 to improve the A66/A67 Morton Palms roundabout from the Congestion Relief Fund announced in the 2016 Autumn Statement, which helps unlock some of the development coming forward in this area in the short term. The package of measures proposed through this bid to the National Productivity Investment Fund will complement this improvement and provide a comprehensive package of improvements which will both improve the operation of the A66 and facilitate and accelerate the economic development in Darlington. As such, we wholeheartedly support this proposal and if successful we look forward to working with you to ensure its efficient delivery.

In the medium to longer term our work in partnership with the Council and the Combined Authority on the A66 East West programme, funded by the DfT through the Large Local Majors programme, will address the needs of the network in the longer term to support the development of Darlington and its contribution to the economic growth aspirations for Tees Valley and the North of England.

If there is any way that Highways England can further help the Council to realise its economic aspirations, please let us know and we will be glad to work with you in any way we are able to.

Yours sincerely



Richard Marshall
Regional Director
Operations Yorkshire & North East
Email: richard.marshall@highwaysengland.co.uk

nobia (Magnet)

Allington Way

Darlington,

Co Durham

DL1 4XT

Tel: 01325 469441

To whom it may concern,

Following meetings with Darlington Borough Council we would like to lend our support to the council in their bid to improve the transport network in and around the Darlington area. Over the last couple of years it has become increasingly dangerous on the roads which adjoin our Darlington site.

We have met with the council on many occasions to complain about the volume of traffic that collates outside our factory on Allington way. The Volume of traffic causes us issues with vehicles trying to enter and exit site. Our staff have also suffered as a result of the volume of traffic between 16:00 and 17:30 on an evening when our staff all leave they can take 20 mins to exit the car park.

Having read the councils proposals we recommend that they be supported with funding and can see that as a result our business could benefit with reduced delays for the vehicles accessing and regressing from the site. We believe anything that reduces the volume of traffic will benefit our employees as they access and regress from site especially around the peak times.

Most importantly and above all else our main reason for entering into discussions with the council is that we need to see the safety of the public on the roads outside of our business. In the last year we have had four of our employees either knocked off bikes, motorbikes or had crashes as a result of the traffic. Therefore we see this investment and improvement as imperative before someone is seriously injured or worse.

Regards

Paul Colman

Darlington Factory Manager

Paul.colman@nobias.com

5th Floor Old Bank Chambers
2 Old Bank Street
St Anns Square
Manchester
M2 7PW

+44 (161) 2973000
db symmetry.com

Sue White
Business Growth & Investment Officer
Darlington Borough Council
Town Hall, Feethams
Darlington DL1 5QT

29th June 2017

Dear Sue,

National Productivity & Infrastructure Fund bid

Thank you for sharing details of the above with me.

As you know our site at Symmetry Park, Darlington extends to 90 acres and has the capacity to deliver up to 1.4m sq. ft. of logistics and distribution floor space. Situated directly alongside the A66 and the Eastern Transport Corridor the site provides prominence for occupiers and excellent transport links into the national and trunk road network.

db symmetry are working closely with the council to bring forward the former Link 66 site and are actively progressing reserved matters applications, and are currently in advanced discussions with a potential operator of a large distribution warehouse.

Having read the council's proposals we recommend that they be supported with funding and can see that the proposed highways improvements would improve the attractiveness of the site to prospective operators and assist in accelerating developer interest.

Additionally, the proposed improvements would unlock existing pinch points, leading to a more efficient local road network, reducing traffic delays and in so doing improving productivity of prospective operators on the site.

We whole heartedly support the bid.

Yours Sincerely,



Simon Dixon
Development Director



A Brookfield Ports Company

17 - 27 Queen's Square
Middlesbrough
TS2 1AH
Tel: +44 (0) 1642 877 200
Fax: +44 (0) 1642 877 057
www.pdports.co.uk

28th June 2017

Mayor Houchen
Tees Valley Combined Authority
Cavendish House
Teesdale Business Park
Stockton-on-Tees
TS17 6QY

Dear Mayor Houchen,

I am writing as Chief Operating Officer of PD Ports, and also in my capacity as member of the Tees Valley Local Enterprise Partnership, to support Tees Valley Combined Authority's bid to the National Productivity Investment Fund for 2018/19 and 2019/20.

As you are aware, PD Ports is the statutory harbour authority for the deep-sea ports of Tees and Hartlepool and also operator of PD Teesport. We are responsible for a ten-mile stretch of operational river which, together with the harbour at Hartlepool, provides eighty individual berths for shipping and handles 4000 ship arrivals each year. The two ports provide a key strategic role for international trade, and have helped to position the Tees Valley as a major UK gateway for consumer goods, attracting major distribution centres for high street names such as Tesco, Asda, Argos, Sainsbury and Taylors of Harrogate. PD Ports has invested significantly in its own container handling facilities at Teesport and enjoyed a rise in container throughput of more than 20% since 2013.

A robust road network is vital to our business and that of the wider shipping community and local economy. We welcome the package of improvement schemes proposed by the Tees Valley Combined Authority and feel this will significantly improve resilience of the Tees Valley's Key Route Network (KRN), ensuring an appropriate level of capacity to handle freight movements so PD Ports may continue to invest confidently in its own world class facilities.

I would like to wish you every success with the bid and look forward to hearing the outcome in due course.

Yours sincerely,

Jerry Hopkinson
Chief Operating Officer and Vice Chairman





Mr Mark Carrigan
Economy Manager
Darlington Borough council
Darlington
DL1 5QT

26 June 2017

Dear Mark

NPIF bid

EE, part of the BT group, is one of Darlington's largest employers with around 2000 people on the Darlington campus. We are continuing to grow the workforce as we deliver the commitment of BT and EE to answer all calls in the UK, with more than 130 new jobs created here in the past few months.

Road access, whether by car or public transport, is essential to this site and with so many people based here congestion in the surrounding area is an issue. Around half of our workforce travel from within Darlington, with others commuting from neighbouring areas in the Tees Valley but also County Durham and North Yorkshire. Access from the widest possible area is critical to recruiting and retaining the skilled people we need as we continue to develop our operations on the site.

We are therefore delighted to offer you our support for this bid to improve road access around the site and to the wider regional network.

Yours sincerely

Simon Roberson

(by email)

Simon Roberson
Regional Partnership Director NE

BT Regions
1 Harton Quay
South Shields
NE33 1JN

Tel: +44 (0)331 654 0955
Email: simon.roberson@bt.com

British Telecommunications plc
Registered office:
81 Newgate Street
London EC1A 7AJ
Registered in England No 1800000
www.bt.com

Laura Woods

Director

Department of Academic Enterprise
Teesside University Middlesbrough
Tees Valley TS1 3BA UK

T: +44 (0)1642 384412
F: +44 (0)1642 384411
www.tees.ac.uk



28 June 2017

Jill Thwaite
Programme Manager
Regeneration Projects Division – Economic Growth Group
Darlington Borough Council
Town Hall
Feethams
DARLINGTON
DL1 5QT

Dear Jill

NPIF bid: Proposed Improvements to Haughton Road and Yarm Road/A66 Roundabout, Darlington



I am writing in support of the Council's bid to the National Productivity and Investment Fund.

Teesside University's Darlington Campus on Central Park is accessible only via the Haughton Road/Vicarage Road junction. Users of the campus, which is our Centre for Professional and Executive Development, frequently experience delays in their journey because of congestion in accessing and egressing Central Park. They include the professional delegates to our CPD programmes at the centre, business users of the campus, staff and suppliers. Reductions in journey time would increase productivity not only for our suppliers and staff, but also for delegates to our programmes who are typically running or employed by local businesses and public sector organisations.

Improvements to Yarm Road would similarly enhance efficiency by significantly improving access to the other end of Central Park. In early 2019, the University will be opening the National Horizons Centre (NHC), a national training, education and innovation facility for the bioscience sector. Complementing the R&D activity of the National Biologics Manufacturing Centre, the NHC will be the training and education base for bioindustry companies from across the country. The NHC will be accessible only from the Yarm Road junction. By reducing journey times to and from the A66 and helping to open up the whole Central Park development, the Yarm Road scheme would promote usage of the NHC and related facilities on Central Park, stimulate the wider development of the site, and support the growth of job and training opportunities in the area.

We regard these proposed improvements as essential for the full exploitation of Central Park as a strategic development site in the Tees Valley.

Yours sincerely

Laura Woods
Director of Academic Enterprise



Disclosure &
Barring Service

DBS
PO Box 181
Darlington
DL1 9FA

www.gov.uk/dbs

Disclosure & Barring Service,
Alderman Best Way,
Darlington,
DL1 4WB

Dear Sir,

As a significant employer in Darlington, with approximately 334 staff working out of our offices at Morton Palms we wholeheartedly support the funding bid as proposed.

Road access, whether by car or public transport, is essential to this site and with so many people working within a key economic area of the town congestion in the surrounding area is an issue. The volume of traffic causes our staff issues with vehicles trying to enter and exit the site as well as gaining access into the local road network, this is particularly the case at peak times.

Having read the councils proposals we support their funding bid which will unlock existing pinch points leading to a more efficient local road network, reducing traffic delays and in so doing improve the productivity and efficiency of all businesses within this key economic growth zone.

Yours Sincerely

Elaine Carlyle

Elaine Carlyle
Head of Security and Facilities
Information Directorate
Disclosure and Barring Service, Shannon Court, 10 Princes Parade, Princes Dock,
Liverpool, L3 1QY

Tel: 0151 676 1559, **Mobile:** 07766420398, **Email:** elaine.carlyle@dbs.gsi.gov.uk

www.gov.uk/dbs

Arriva North East
Admiral Way
Doxford International Business
Park
Sunderland
SR3 3XP

Tel 0191 520 4200
Fax 0191 520 4222
www.arrivabus.co.uk

Sue Dobson
Sustainable Transport Manager
Darlington Borough Council
Town Hall
Feethams
DARLINGTON
DL1 5QT
Your ref: JR/SD/270617

77 June 2017

Dear Sue

Arriva currently operates commercial bus services in Darlington and operates services along the two KRN routes, serving Darlington Station, the employment areas including Lingfield Point, Yarm Road Business Park and Industrial Estates and Morton Palms Business Park and Durham Tees Valley Airport. Our MAX service X67 also links the area to Stockton and Middlesbrough.

We work in close partnership with DBC and through the Punctuality Improvement Partnership have identified the need to make improvements in these locations. The Council involves us in early discussions on potential developments to explore how residential and commercial developments can be served by commercial bus services, without impacting punctuality and service operations during the course of the works.

We support this bid to the National Productivity Investment Fund and believe that it will meet the aims to:-

- a) Ease urban congestion;
- b) Unlock economic growth and job creation opportunities; and
- c) Enable the delivery of housing development

We believe that for Arriva these schemes will:-

- Enable the development of the Eastern Growth Zone, which will create a new customer base with 2000 additional houses and significant numbers of new jobs in Link 66 and Ingenium Park. This will provide us with options to increase service frequencies;
- Provide us with an opportunity to input into the scheme designs to ensure that bus priority is provided where feasible as well as appropriate bus passenger



Arriva North East is a trading name of Arriva North East Limited, Registered in England 121299, and Arriva Northumbria Limited, Registered in England 237558. Registered office: Admiral Way Doxford International Business Park, Sunderland SR3 3XP
A subsidiary of Arriva plc

facilities. This will help to ensure that punctuality and reliability is retained and improved, especially at peak times;

- Enable us to consider new routes to better serve the new and existing commercial and residential developments through junction improvements and new access roads; and

By working in partnership with Darlington Borough Council this will enable bus services to provide a genuine alternative to car travel to Central Park and the Eastern Growth Zone for those living in Darlington and the wider Tees Valley and South Durham.

We are therefore happy to support this proposal and look forward to working with colleagues at Darlington Borough Council on the implementation.

Yours sincerely

John Rochford

**Head of Operations Tees Valley and North Yorkshire
Arriva North East**



Arriva North East is a trading name of Arriva North East Limited, Registered in England 121299, and Arriva Northumbria Limited, Registered in England 237558. Registered office: Admiral Way Doxford International Business Park, Sunderland SR3 3XP A subsidiary of Arriva plc



North East Business & Innovation Centre

C/O Business Central

2 Union Square

Central Park

Darlington,

DL 1 1GL

25.6.17

Ref: DBC Bid to Department for Transport (NPI Fund)

To whom it may concern,

We as NEBIC, would like to lend our support to the DBC bid to DFT (NPI Fund) in relation to Central Park as a current commercial occupier of the original building on the South of Central Park, which we manage as a multi occupancy building of 60 Grade A serviced offices. We have over 40 businesses currently in situ, over 20 also using co-working space, we provide meeting room space for external business's and events and business support.

The works proposed in the bid include the Haughton Road Through-about as well as works to junctions and roundabouts along Yarm Road. The scheme on Haughton Road, is to convert it to a conventional signal controlled roundabout (i.e. take the route through the centre out but they are also considering a signalised roundabout). The initial modelling work they have done shows that both would have significant benefits for traffic though the junction. Similarly, the improvements along Yarm Road would increase journey times to and from the A66.

We wholeheartedly support this proposal of improvements as NEBIC ,and on behalf of our clients and their business's, because it will reduce journey times to and from the site and mean fewer delays and improved access onto and from the A66, from both approaches and the current housing estate. This benefits the business's here and their clients, potential clients and any visitors. It will also enable the full development of Central Park to go ahead, which as can be seen from the high occupancy we have achieved, there is clearly a need for, in terms of economic development.

In turn those all create employment opportunities (in our building alone there are already over 100 people employed in just over two years). The full development of Central Park will also have a positive effect on existing businesses and the environment in the local area, some of which we have already seen as part of the first phase in the South section.

The potential for Central Park as a destination is huge and with the correct access and infrastructure, we believe the possibilities for Darlington and the region are enormous.

We hope you will consider our comments in your review,

Yours sincerely,

A handwritten signature in black ink that reads "V. Wood". The letters are cursive and fluid, with a large 'V' and 'W'.

Vanessa Wood

Centre Manager

North East Business & Innovation Centre

From: Kate Roe [mailto:KRoe@darlington.ac.uk]
Sent: 28 June 2017 15:54
To: Jill Thwaite
Subject: Infrastructure Funding - Letter of Support
Importance: Low

I write in support of the bid by Darlington Borough Council for improvements to the Haughton Road through-about as well as junctions and roundabouts along Yarm Road as the current solution gives us a great deal of issues at key times of the college day.

Darlington College is a General Further Education College that was built in 2006 as part of the original Central Park development. We cater for upwards of 2500 full & part time students and 500 staff that have to use the junction on Haughton Road either as a pedestrian, a user of public transport, hired coaches, taxis, cyclists or private vehicle.

Since the college was built, it has seen year on year increases in traffic congestion at the Haughton Road /Vicarage Road junction, caused by the pinch point at the through-about. This has been exacerbated by the addition of the Teesside University Campus building in 2011 and the private housing development which has been ongoing since 2015, both of which have increased the number of users of the junction by significant numbers.

The principle role of the college is to provide an excellent, safe and supportive learning environment for our local and regional community. Ideally we like to have our students on site for 8.30 -8.45 to provide them with a healthy breakfast in preparation for lessons begin at 9.00am, the aim for our tutors is to provide dynamic start to the learning. This intention is consistently interrupted by the late arrival of students due to traffic issues. As a large number of our cohort are brought in from North Yorkshire via coaches, up to 50 students per vehicle can be disrupted at any one time which affects all areas of our curriculum programmes. When congestion holds them up, they arrive frustrated and distracted and miss the opportunity to have a free nutritious breakfast, which for a number of students is their first sustenance for a number of hours.

Leaving site provides a daily challenge for many as the phasing of the lights at peak times often only allows 3 or 4 cars or ½ buses to leave at a time. I am aware that traffic surveys have been carried out that have resulted in changes of priority and a yellow box has been painted on the road, actions that have had not had any impact. Turning right onto Haughton Road from Vicarage Road causes drivers high levels of frustration as the lights go through a full phase with no ability to move from Vicarage Road. The nose-to-tail traffic heading towards the through-about often sees drivers conducting unsafe manoeuvres by using the Vicarage Road junction to perform U-turns. These acts continue to have safety implications to pedestrians that use the junction in a correct manner. Queuing traffic from Vicarage Road turning left onto Haughton Road could be eased if there was a left turn only green filter (similar to the left turn on North Road to Whessoe Road) as there are occasions when there is no traffic from the through-about.

The college would wholeheartedly support improvements to the Haughton Road through-about, believing that it will give;

- A positive effect on easing the congestion around our campus.
- More students an opportunity to get into college on time to get nourished prior to learning.
- Decreased instances of disruption to lessons because of the late arrival of students, an issue which affects all within the lesson.
- A reduction in risk to pedestrians who may be affected by the actions of frustrated drivers performing illegal manoeuvres at the junction.

Kind Regards

Kate Roe
Principal & Chief Executive

From: Fergal O'Brien [mailto:Fergal.O'Brien@uk-cpi.com]
Sent: 30 June 2017 12:31
To: Jill Thwaite
Subject: Supporting Letter for the NPIF Bid

Dear Jill

I am writing to support DBC's bid for funding from the National Productivity and Investment Fund. The scheme would benefit CPI and National Biologics Manufacturing Facility through the reduced delays to goods being delivered, staff accessing and egressing the premises improving the efficiency and productivity of the Centre which carries out strategically important translational R&D for the UK Biopharmaceutical sector.

As a national centre we also receive a continuous stream of influential visitors, so far in 2017 CPI has hosted visits from Greg Clark, the Secretary of State for Business, Energy and Industrial Strategy and Paul Drechsler, President of the Confederation of British Industries. In addition to hosting national scientific events, local events hosted in include the recent launch of Tees Valley Combined Authority and Darlington Council's transformational vision for Darlington Station anticipating HS2. The improvements to transport infrastructure that the bid outlines will greatly improve the access to the Centre for delegates attending these events.

CPI fully supports DBC in its bid.

Yours faithfully
Fergal O'Brien

Fergal O'Brien

Director
CPI Biologics

The National Biologics Manufacturing Centre
1 Union Square, Central Park,
Darlington, County Durham,
United Kingdom, DL1 1GL

t +44 (0)1325 376810
m +44 (0)7920 823 225
e fergal.obrien@uk-cpi.com
w www.uk-cpi.com

This email was sent by Centre for Process Innovation Limited, a company registered in England and Wales, registered number: 05002194, registered office: Wilton Centre, Wilton, Redcar, Cleveland, TS10 4RF, UK or where so indicated, by its trading subsidiary CPI Innovation Services Limited, a company registered in England and Wales, registered number: 05735040, registered office: Wilton Centre, Wilton, Redcar, Cleveland, TS10 4RF, UK.

EMAIL CONFIDENTIALITY NOTICE: This email and all of its attachments are confidential. If you have received this email in error, please contact us and remove it from your system. In such circumstances you must not copy it, forward it or use it in any way.

29 June 2017

Mayor Houchen
Chair - Tees Valley Combined Authority
Cavendish House
Teesdale Business Park
Stockton-on-Tees
TS17 6QY

Dear Mayor Houchen,

I am writing on behalf of Tees Valley Unlimited, the Local Enterprise Partnership for the Tees Valley, to support Tees Valley Combined Authority's bid to the National Productivity Investment Fund for 2018/19 and 2019/20.

The package of schemes put forward in the bid will significantly improve the capacity and resilience of the Tees Valley's strategic road network, now termed our Key Route Network (KRN). The KRN plays a vital role in supporting the Tees Valley economy as it directly links all our key economic, employment, retail, educational and healthcare centres as well as our Enterprise Zones and existing and future housing growth sites.

There are increasing constraints and pressures on the KRN that are threatening to stifle future growth so Tees Valley Unlimited very much welcomes this bid which will directly address many of these by tackling congestion and improving access to key employment and housing sites. Such investment in transport infrastructure is vital if Tees Valley Unlimited and the Combined Authority are to deliver the 25,000 new jobs, 22,000 new homes and an additional £2.8 billion into the local economy over the next 10 years, as outlined in our Strategic Economic Plan.

I would like to wish you every success with the bid and look forward to hearing the outcome in due course.

Yours sincerely,



Paul Booth
Chair - Tees Valley Unlimited

Tees Valley Combined Authority, Cavendish House, Teesdale Business Park, Stockton-on-Tees, TS17 6QY
Tel: 01642 524400 | Email: info@teesvalley-ca.gov.uk | Web: www.teesvalley-ca.gov.uk



Combined Authority multiple bid ranking note

This note explains the process used by the Combined Authority to arrive at a package of proposals for inclusion in the TVCA's preferred submission to the National Productivity Investment Fund.

The Combined Authority has recently defined a Key Route Network (KRN). The KRN has been used as a strategic decision making tool to assist in the development of a programme of complementary NPIF proposals that improve its performance and contribute to economic growth and job creation.

The KRN:

- Incorporates Highways England's Strategic Road Network (SRN) within the Tees Valley
- Incorporates Transport for the North's Major Road Network (MRN) within the Tees Valley
- Includes a series of additional links (limited to A and B roads) that link important economic centres to the KRN
- Incorporates strategic freight routes

As part of the bid development process the TVCA as Transport Authority instigated a call for proposals from its constituent Highways Authorities. This resulted in a long-list of 20 proposals from partners. These were prioritised in to a preferred package of 6 interventions using the following considerations:

- Fit with NPIF guidance (including demonstrable contribution to congestion reduction, jobs creation or housing growth)
- Fit with the aims and objectives of the Tees Valley Strategic Economic Plan (SEP)
- Contribution to the efficient operation of the TVCA Key Route Network
- Synergistic benefits to other planned schemes – in particular programmed Highways England Schemes and the Large Local Major schemes being developed by TVCA
- Deliverability

The package of 6 proposals that all have equal status and are strongly supported by the Tees Valley Combined Authority is as follows:

- **A177 Horse and Jockey and Crathorne Interchange Improvement**
- **A66 East/West Cargo Fleet Roundabout Improvements**
- **Darlington Enterprise & Growth Zone Connectivity**
- **Elwick Bypass Improvement**
- **Stainton Way and B1365 Capacity Improvements**
- **Swans Corner to Flatts Lane Improvements**



TEES VALLEY MAYOR
BEN HOUCHEN

Office of the Mayor of the Tees Valley
Cavendish House
Stockton-on-Tees
TS17 6QY

Jesse Norman MP
Parliamentary Under Secretary of State
Department for Transport
Great Minster House
33 Horseferry Road
London SW1P 4DR

Dear Minister,

30 June 2017

As the newly elected Mayor of the Tees Valley, my focus is on driving economic growth and job creation in the area. I work in partnership with the five councils of Darlington, Hartlepool, Middlesbrough, Redcar & Cleveland and Stockton, working closely with the business community and other partners to make decisions that support the growth of the local, northern and national economy. My election provides a unique opportunity to extend a strong partnership with national government, co-investing to improve our local infrastructure, and our connectivity within the UK and internationally.

I am therefore pleased to present the Tees Valley's application to the National Productivity Investment Fund. This initiative is a valuable opportunity to address barriers to connectivity. We have focused specifically on a key route network to connect areas of economic opportunity, including our Enterprise Zones, housing growth sites, Port and Airport, with the strategic route network, and population centres which improve the catchment area for local jobs.

The proposals contained within this application have been prioritised into a package of sensible interventions by my Combined Authority, demonstrating the value of the partnerships which have been strengthened by our devolution deal and the new mayoral leadership arrangements.

I am confident that the overall proposal meets the objectives of the National Productivity Investment Fund and contributes to a number of key local and national objectives. It aligns with investment on the A19 and A66, which we are working on jointly with your department and Highways England.

T: (01642) 524467
E: ben.houchen@teesvalley-ca.gov.uk
W: teesvalley-ca.gov.uk



TEES VALLEY MAYOR
BEN HOUCHEN

I am confident that our package proposal makes a significant contribution to the delivery of our Strategic Economic Plan, the objectives of Transport for the North and those of the government's Industrial Strategy. The schemes we have prioritised will improve the performance and productivity of the Tees Valley, and enable key businesses within the Transport sector to grow by improving their ability to access and distribute goods and services.

I look forward to working with you and your team to deliver these proposals.

Yours sincerely,

Ben Houchen

Mayor of the Tees Valley



28 June 2017

Mr D Winstanley
 Assistant Director of Transport & Capital Projects
 Darlington Borough Council
 17 Allington Way
 Darlington
 DL1 4QB

Bellway Homes Limited

North East Division

Bellway House

Kings Park

Kingsway North

Team Valley

Gateshead

Tyne & Wear

NE11 0JH

Telephone 0191 4828800

DX 745710 Gateshead 7

www.bellway.co.uk

Dear Mr Winstanley

Darlington Growth Zone and Enterprise Zone Connectivity

Bellway understands that Darlington Borough Council is proposing to submit a bid to the National Productivity and Infrastructure Fund for improvements aimed at easing urban congestion by improving peak hour traffic flow and journey times on the A66, the Darlington Eastern Corridor and B6280, Yarm Road.

Bellway would welcome such funding as we have an interest in a number of housing sites in the Darlington area, specifically the Burdon Hill urban extension to the east of Darlington that would benefit from such improvements and will assist us to deliver much needed housing numbers.

Yours sincerely

Mark McKelvey
Land Director

Bellway



Bellway is proud to be supporting Cancer Research UK as their charity of the year.

Registered Office: Bellway Homes Limited, Seaton Burn House, Dudley Lane, Seaton Burn,
 Newcastle upon Tyne, NE13 6BE. Registered in England Number 670176
 Bellway Homes Limited is a member of the Bellway p.l.c. Group of Companies

From: Ian Prescott [mailto:ian.Prescott@keepmoat.com]
Sent: 22 June 2017 13:06
To: Jill Thwaite
Cc: Martin White (Martin.White@hca.gsi.gov.uk); Claire Slater
Subject: RE: Infrastructure Funding - Request for Letter of Support

Jill

Thank you for your email which outlines the Council's proposals to bid for funds from the National Productivity and Investment Fund (NPIF) to improve highway capacity and through put on the eastern side of Darlington. As developers of several new approved housing sites in the town we fully support the Council's bid. In particular traffic improvements along Haughton Road would improve the access into Central Park, a key regeneration project in the Tees Valley.

If you require anything in addition to the contents of this email please do not hesitate to contact me.

Regards Ian

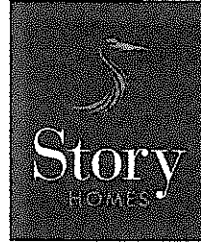
Ian Prescott
Land & Partnerships Director



t. 0191 495 4500 | m. 07971539878 | f. 0870 191 8670 | w. keepmoatcorporate.com

Keepmoat is a trading name of the Keepmoat group of companies. This email is issued by a Keepmoat group company. The Keepmoat group companies include, among others Keepmoat Limited (company number 1998780) and Keepmoat Homes Limited (company number 2207338); which have their registered offices at The Waterfront, Lakeside Boulevard, Doncaster DN4 5PL. All of these companies are registered in England and Wales.





Panther House, Asama Court,
Newcastle Business Park,
Newcastle Upon Tyne NE4 7YD

T: 0191 226 7260

E: info@storyhomes.co.uk

www.storyhomes.co.uk

28 June 2017

Our ref: SA

Your Ref:

Dave Winstanley
Assistant Director - Transport & Capital Projects
Darlington Borough Council
17 Allington Way
Darlington
DL1 4QB

Dear Dave

**Darlington Growth Zone and Enterprise
Zone Connectivity**

Story Homes understands that Darlington Borough Council is proposing to submit a bid to the National Productivity and Infrastructure Fund for improvements aimed at easing urban congestion by improving peak hour traffic flow and journey times on the A66, the Darlington Eastern Corridor and B6280, Yarm Road.

Story Homes would welcome such funding as we have an interest in a number of housing sites in the Darlington area, specifically the Burdon Hill development that would benefit from such improvements and will enable us to deliver much needed housing numbers.

Yours sincerely

A handwritten signature in black ink, appearing to be "SA", written over a faint circular stamp.

Sarah Armstrong
Land and Planning Director
For and on behalf of
Story Homes North East

E-mail: sarah.armstrong@storyhomes.co.uk

STORY HOMES LTD

Registered in England No. 2275441

Registered Office:
Story Homes Ltd, Story House,
Lords Way, Kingmoor Business Park,
Carlisle CA6 4SL

**Scheme Impact Pro Forma for Small Project Bids - Please fill in the cells highlighted in yellow
NPIF**

Year of assessment	2020
--------------------	------

Scenario	Input Data / Key Performance Indicators	Unit	AM Peak Hr Weekday	PM Peak Hr Weekday	Inter-Peak Hr Weekday
Do-Minimum	Number of highway trips affected	vehicles	13,558	13,720	10,526
	Total vehicle travelled time	vehicle-hours	1,264	1,233	823
	Total vehicle travelled distance	vehicle-km	48,235	49,237	39,745
	Highway peak period conversion factor	-			
	Number of PT passenger trips on affected routes	passenger trips			
	Total PT travelled time	passenger-hrs	33.85	33.42	30.07
	PT peak period conversion factor	-			
Do-Something	Number of highway trips affected	vehicles	13,335	13,612	10,532
	Total vehicle travelled time	vehicle-hours	1,139	1,164	775
	Total vehicle travelled distance	vehicle-km	48,845	49,603	39,574
	Highway peak period conversion factor	-			
	Number of PT passenger trips on affected routes	passenger trips			
	Total PT travelled time	passenger-hrs	28.41	28.44	27.98
	PT peak period conversion factor	-			

Note: Seperate Excel file attached

TECHNICAL NOTE

DARLINGTON NPIF BID METHODOLOGY

MODELLING NOTE

IDENTIFICATION TABLE

Client/Project owner	Darlington Borough Council
Project	Darlington NPIF Bid Methodology
Title of Document	Modelling Note
Type of Document	Technical Note
Date	28/06/2017
Reference number	104876/03/001
Number of pages	10

TABLE OF CONTENTS

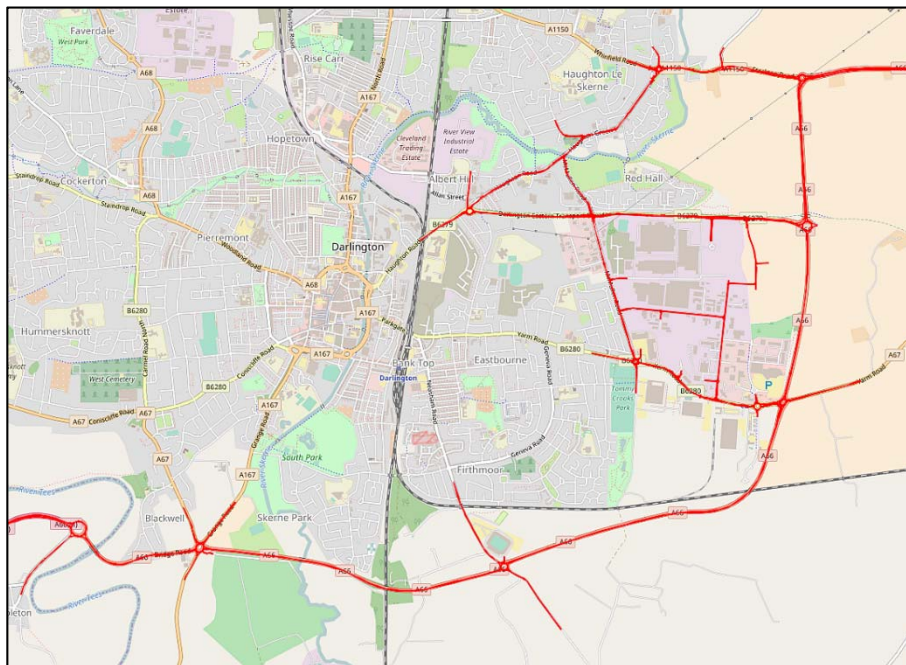
1.	INTRODUCTION	2
1.1	BACKGROUND	2
1.2	OUTLINE METHODOLOGY	2
2.	NETWORK CODING	4
2.1	'DO MINIMUM' MODEL NETWORK	4
2.2	'DO SOMETHING' MODEL NETWORK	5
3.	STRATEGIC MODEL DEMAND	8
3.1	FORECAST 2020 DEMAND	8
3.2	FORECAST DEVELOPMENT DEMAND	8
3.3	INTER-PEAK TRAFFIC DEMAND	9
3.4	PUBLIC TRANSPORT	9

1. INTRODUCTION

1.1 Background

- 1.1.1 SYSTRA was commissioned by Darlington Borough Council [DBC] to undertake VISSIM modelling for the purpose of informing a bid for NPIF funding to make improvements to the highway network in Darlington.
- 1.1.2 This note details the methodology adopted for undertaking the VISSIM modelling in terms of the highway network coding and demand matrices.
- 1.1.3 SYSTRA made use of the Darlington Eastern VISSIM model, previously built by SYSTRA, calibrated and validated to 2015 conditions. The extent of the Base VISSIM model network is shown in **Figure 1** below.

Figure 1. 2015 Base Year Darlington VISSIM model



- 1.1.4 The 2015 Base Year Darlington VISSIM model is referred to in this note from now on as the '2015 BY' model.
 - 1.1.5 Development traffic demand used for the analysis was derived from the Tees Valley Strategic Transport Model [TVSTM], which is a CUBE Voyager model. The TVSTM includes the Local Plan data for Darlington and the surrounding areas and has been used previously by SYSTRA for Local plan analysis and for various scheme bids in the area.
- ## 1.2 Outline Methodology
- 1.2.1 The assessment year for the VISSIM model analysis is 2020, used to represent the opening year of large scale development anticipated to be coming forward in the Darlington area.
 - 1.2.2 A 'Do minimum' network model was created to represent the anticipated highway network during the 2020 forecast opening year.

- 1.2.3 The 'Do something' scenario comprises the following network improvements:
- McMullen Road / Yarm Road roundabout widening;
 - Yarm Road / Lingfield Way junction signalisation;
 - Haughton Road/DETC Through-about Improvement Scheme
- 1.2.4 Development traffic demand is derived from the TVSTM. 'Core' and 'High' growth demand scenarios were derived for the 2020 forecast opening year.
- 1.2.5 The 'Core' scenario is based on local plan growth and the 'High' growth scenario includes demand from 2 large scale developments local to the modelled network.
- 1.2.6 The developments included in the 'High' growth demand scenario are those coming forward at the Link 66 and Ingenium Park sites. The respective Transport Assessments and other relevant sources of information were used to derive development demand from these sites. Assignment of the demand is calculated by the TVSTM.
- 1.2.7 Operational results extracted from the model for Cars, LGVs, OGVs and public transport are used for understanding the effects of the intervention scheme packages.



2. NETWORK CODING

2.1 'Do Minimum' Model Network

2.1.1 The 2020 opening year 'Do Minimum' model includes various network alterations from the 2015 BY VISSIM model.

2.1.2 The alterations to the 2015 BY model were made to take account of improvements to the highway network which have taken place since the 2015 BY model was constructed and also to incorporate committed highway network improvements which are due to be complete at / before the 2020 opening year analysis.

2.1.3 The following network alterations are included in the 'Do minimum' model:

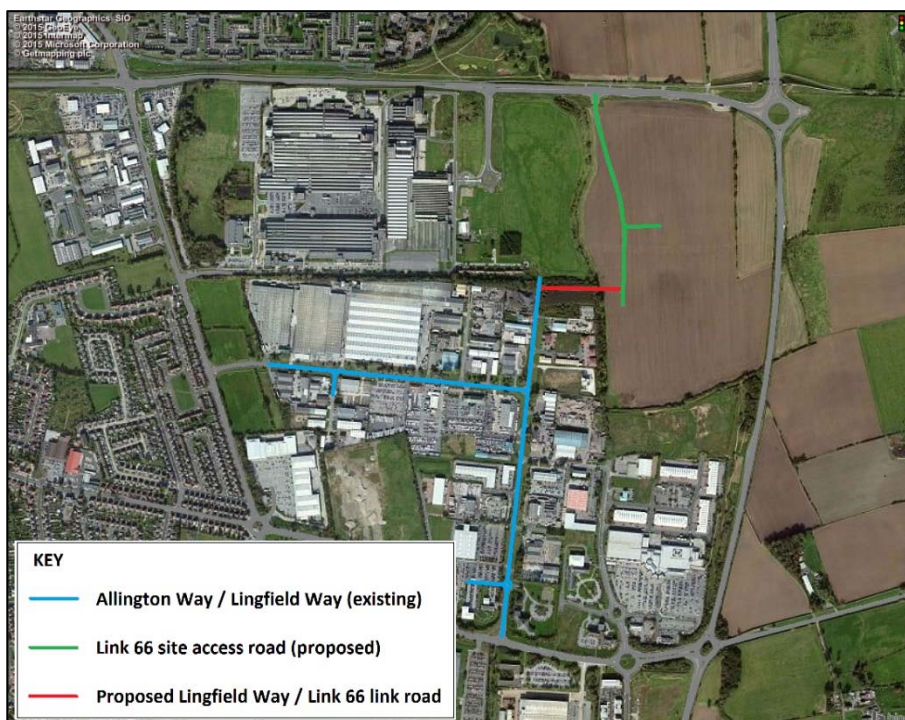
- Lingfield Way / Link 66 site link road (DBC proposed scheme);
- A66 / Morton Palms (Highways England) proposed junction improvement scheme, and;
- Lingfield Close junction signalisation (recently complete DBC scheme).

Lingfield Way / Link 66 Site Link Road

2.1.4 The proposed link road connects with the northern end of Lingfield Way, providing an access to the southern extent of the Link 66 site, primarily for traffic heading from destinations to the south. The proposed road will be an all-purpose public road.

2.1.5 To include the proposed link road in the VISSIM model network both Lingfield Way and Allington Way were coded in the VISSIM model also. The additional network included in the 'Do minimum' model is shown in Figure 2, detailing the route of the Link 66 site access road and the new Lingfield Way / Link 66 Site link road.

Figure 2. 'Do minimum' Additional Network Coverage



2.1.6 The DETC / Link 66 site access junction is signalised. Traffic signal timings are consistent throughout the model periods and were derived by synchronising with the adjacent junction cycle time to create a green wave for DETC traffic.

2.1.7 Junctions on Lingfield Way, Allington Way and the new link road are priority junctions coded to represent the existing highway network in those locations.

A66 / Morton Palms Junction Improvement Scheme

2.1.8 Improvements are proposed to the A66 / Morton Palms junction by Highways England. The proposed junction improvements comprise the following alterations:

- A67 (westbound) approach widening to provide 2 lanes for approximately 70m;
- B6280 (eastbound) approach widening to 3 lanes for approximately 50m;
- Widening of the circulatory to the western side of the roundabout to provide 3 circulatory lanes.

2.1.9 Figure 3 shows the proposed junction layout superimposed within the VISSIM model network.

Figure 3. A66 / Morton Palms Improvements Scheme



Lingfield Close Junction Signalisation

2.1.10 This scheme was complete during 2016 and includes the signalisation of the McMullen Road / Lingfield Close junction and widening of the approaches to include pedestrian islands. The signal timings were derived from data supplied by DBC.

2.2 'Do Something' Model Network

2.2.1 The 2020 opening year 'Do Something' scheme model includes the following network improvement schemes:

- McMullen Road / Yarm Road roundabout widening;
- Yarm Road / Lingfield Way junction signalisation;
- Houghton Road/DETC Through-about Improvement Scheme

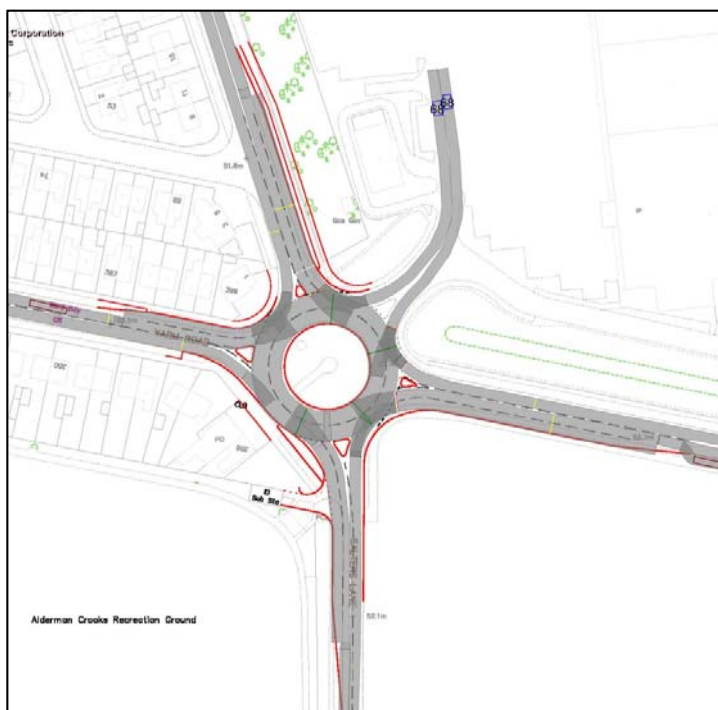
McMullen Road / Yarm Road Roundabout

2.2.2 The highway improvement scheme for the McMullen Road / Yarm Road roundabout includes widening each approach from 1 lane to 2 lanes, on the following approaches:

- B6280 Yarm Road (westbound) widening to 2 lanes for approximately 90m;
- McMullen Road (southbound) widening to 2 lanes for approximately 70m;
- B6280 Yarm Road (eastbound) widening to 2 lanes for approximately 45m, and;
- Salters Lane (northbound) widening to 2 lanes for approximately 70m.

2.2.3 Figure 4 shows the proposed improvement scheme for the McMullen Road / Yarm Road roundabout superimposed in the VISSIM model network.

Figure 4. McMullen Road / Yarm Road Roundabout Improvement Scheme



2.2.4 Priority controls at the junction use priority markers and conflict area markers to reflect the 2015 BY model network coding to ensure consistency with the 'Do minimum' network model.

2.2.5 Reduced speed areas and edge closures are utilised to replicate similar driver behaviour from the 2015 BY model coding taking account of the likely lane usage on account of the additional lanes available.

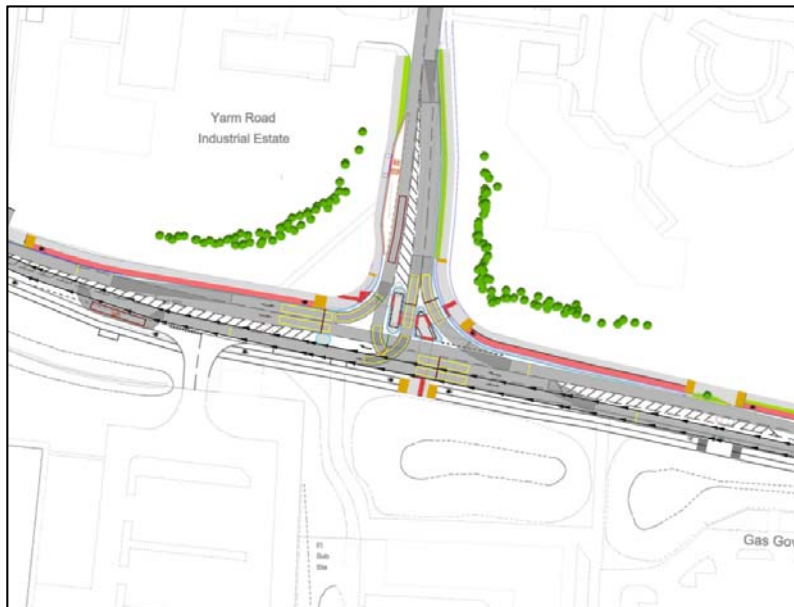
B6280 Yarm Road / Lingfield Way Junction Signalisation

2.2.6 The improvement scheme for the Yarm Road / Lingfield Way junction is primarily the use of signal control instead of priority control currently in use at the junction. In addition, Lingfield Way is widened to 2 lanes for approximately 60 metres. Both B6280 Yarm Road approaches feature 2 lanes at the stop line extending for approximately 40 - 50 metres.

2.2.7 Traffic signal timings for the junction were derived by synchronising cycle times with the adjacent retail park junction on Yarm road to the west. The signal timings were set up to

provide a green wave for Yarm Road traffic to minimise delays for through traffic along the B6280 Yarm Road corridor. **Figure 5** shows the proposed signal junction improvement scheme at B6280 Yarm Road / Lingfield Way superimposed against the VISSIM model network.

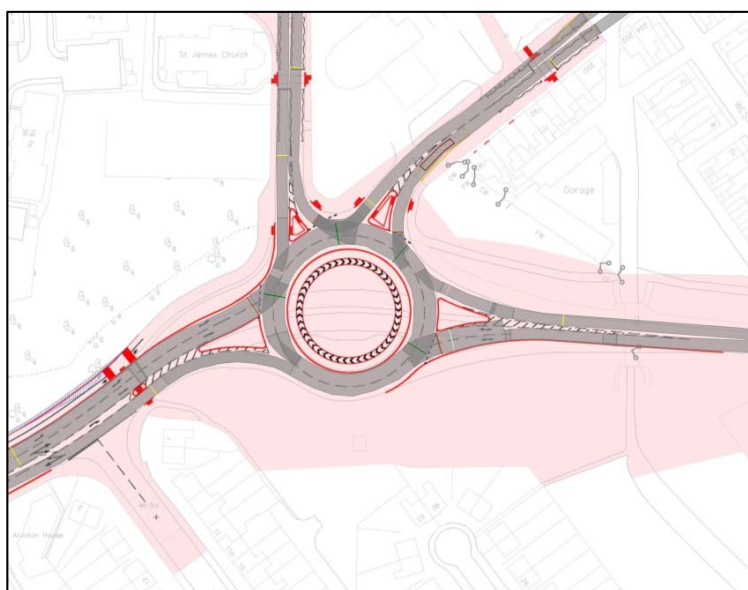
Figure 5. B6280 Yarm Road / Lingfield Way Junction Signalisation Scheme



Haughton Road/DETC Through-about Improvement Scheme

- 2.2.8 The highway improvement scheme for the Haughton Road/DETC junction involves the conversion of the existing signalised through-about arrangement to a standard priority controlled roundabout layout. **Figure 6** shows the proposed Haughton Road/DETC junction improvements.
- 2.2.9 Priority markers are used to control priority give-way movements at the junction in order to maintain consistency with other large roundabout junctions in the 2015 BY model network.

Figure 6. Haughton Road/DETC Junction Improvement Scheme



3. STRATEGIC MODEL DEMAND

3.1 Forecast 2020 Demand

3.1.1 The 2020 local plan forecasts were sourced from the Tees Valley Combined Authority. The road vehicle matrices were supplied and have been assigned to the TVSTM network and a subarea process, consistent with the methodologies previously used for the Darlington local plan and scheme bids in the local area, has been performed.

3.1.2 The output subarea matrices have then been renumbered to the VISSIM zoning system. For the two peak periods the absolute growth in vehicle trips is applied to the VISSIM model matrices. For the inter-peak period, as no existing VISSIM base model was available, the output of the subarea process was incorporated directly into the VISSIM model as an average inter-peak hour.

3.2 Forecast Development Demand

3.2.1 The additional development to be brought forward at Ingenium Park and Link 66 have been included as additional trips in the Voyager model. This was done by taking the pattern of trip making from the strategic model for the development zone, and factoring the pattern to the level of trips sourced from a trip generation exercise.

3.2.2 The Link 66 site trip generation volumes have been extracted for the *Darlington Eastern Transport Corridor [DETC] Sustainable Transport Study (May 2010)*. The Ingenium Park site trip generation volumes are calculated from the known developable site areas using Highways England generic trip rates. The trip generation utilised for the analysis is shown in Table 1 and Table 2.

Table 1. Link 66 Site Trip Generation

LAND USE	DEVELOPMENT SIZE	AM		PM	
		Arrivals	Departures	Arrivals	Departures
B1 Office	16,258 m ²	346	36	49	288
B8 Warehousing	127,742 m ²	211	135	187	239
C1 Hotel	60 beds	14	15	12	11
Total		571	186	248	538



Table 2. Ingenium Park Site Trip Generation

LAND USE	DEVELOPMENT SIZE	AM		PM	
		Arrivals	Departures	Arrivals	Departures
B8	28,750 m ²	39	20	16	36
B1c	16,875 m ²	214	33	26	184
Total		253	53	43	220

3.3 Inter-Peak Traffic Demand

3.3.1 For the inter-peak, a factoring of the peak period matrices was performed, with 73% of peak trips included as development flows.

3.3.2 This percentage was calculated from the ratio of the inter-peak subarea matrix total to the average of the peak hour subarea matrices.

3.4 Public Transport

3.4.1 To support the public transport economic benefits evaluation public transport flows were sourced from the model for the principal services benefited by the scheme. These passenger flows were then divided by the number of buses to yield a passenger loading per bus, broadly 6.5 passengers per bus on average.

3.4.2 The table below provides the calculations:

Table 3. Public Transport Loadings (TVSTM)

SERVICE	DIRECTION	AM		IP		PM	
		Flow	Flow / veh	Flow	Flow / veh	Flow	Flow / veh
9	Northbound	33		23		14	
9	Southbound	20		32		42	
10	Northbound	73		48		30	
10	Southbound	28		54		70	
Total		154	6.417	157	6.542	156	6.5



APPROVAL

Version	Name	Position	Date	Modifications
1	Author	S Williamson		28/06/2017
	Checked by	P Gray		28/06/2017
	Approved by	S Pickard		29/06/2017
2	Author			DD/MM/YY
	Checked by			DD/MM/YY
	Approved by			DD/MM/YY



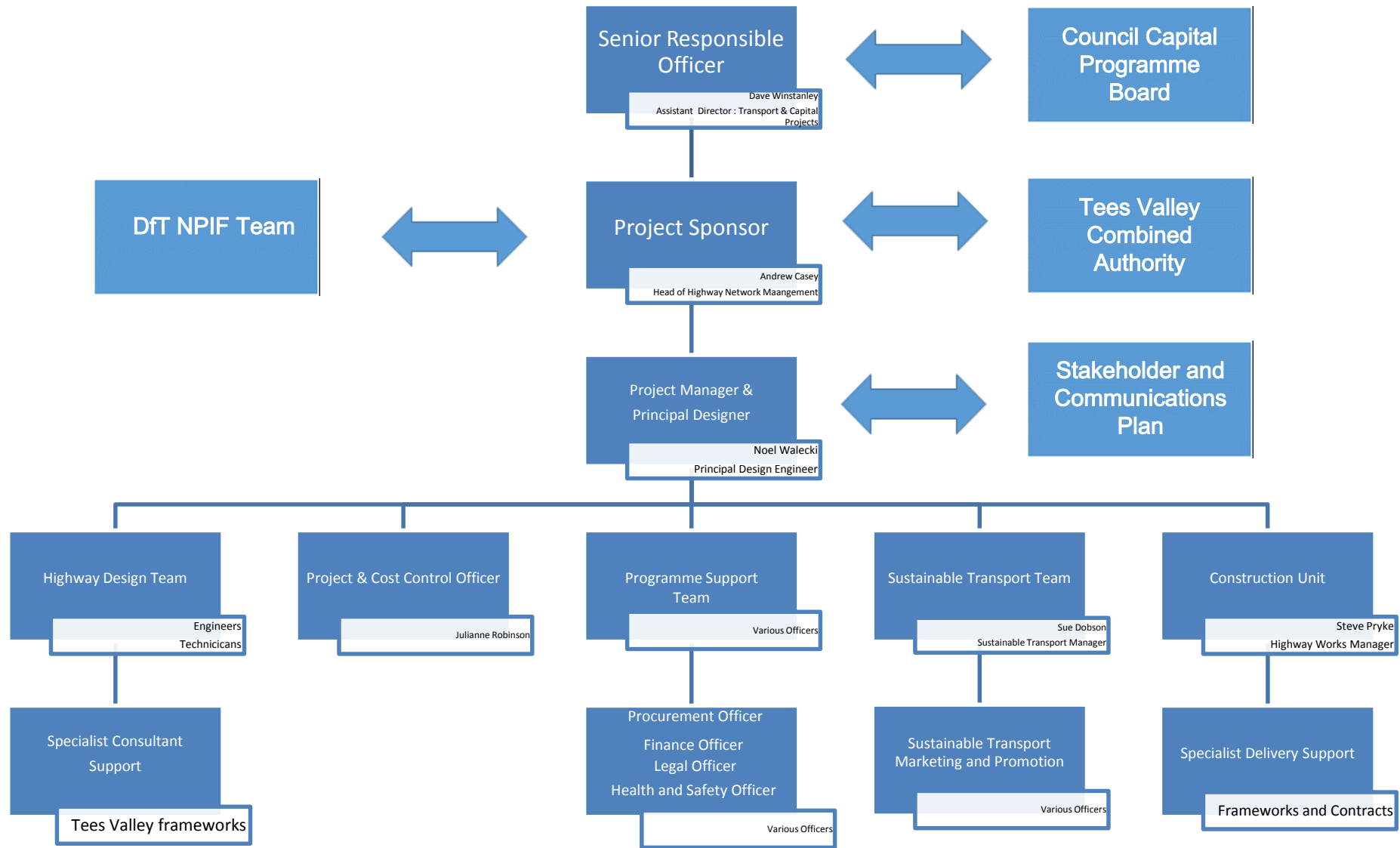
Appraisal Summary Table		Date produced:	29 June 2017	Contact:							
Name of scheme:	Darlington Eastern Growth Zone			Name	Andy Casey						
Description of scheme:	Improvements to two Key Road Network corridors linking Darlington Centre and Station to A66 (SRN) and Durham Tees Valley Airport to create capacity for the cr			Organisation	Darlington Borough Council						
				Role	Promoter						
Impacts	Summary of key impacts	Assessment									
		Quantitative			Qualitative	Monetary £(NPV)	Distributional 7 pt scale/ vulnerable grp				
Economy	Business users & transport providers	The scheme provides significant benefits to existing and prospective businesses in Darlington Eastern Growth and Enterprise Zones by reducing congestion, particularly in the peak hours and in so doing improving productivity. It also unlocks job creation opportunities at existing businesses and at commercial development sites. The scheme is supported by local business and developers (letters of support available). The reduction in congestion benefits Arriva, the main bus operator, by improving opuncuality and reliability. Increased development opportunities provide potential future customers. Improvements to the Lingfield Way/Yarm Road junction specifically deal with an issue for buses turning right out of Lingfield Way at peak times. (a letter of support from Arriva is available)	Value of journey time changes(£)	£37.551m		Beneficial	£46.569m				
			Net journey time changes (£)								
			0 to 2min	2 to 5min	> 5min						
	Reliability impact on Business users	The main benefits of the scheme arise in the peak hours at which time journey time delays and journey time reliability are at their worst. There is anecdotal evidence of businesses being avoided in the peak hour due to congestion entering and leaving sites, particularly retail sites.	Included above.			Beneficial					
	Regeneration	The Tees Valley Strategic Economic Plan has a target to create 25,000 jobs across the Tees Valley. Darlington's element of that jobs growth target is 6,000 jobs. The Tees Valley employment rate is currently 64.5% compared to the national average of 71.1%. Gross Value Added (GVA) is 77% of the national average though it still amounts to £10.7 billion per year. The SEP aims to increase employment rates to the national average and narrow gap in terms of GVA. The Eastern Groth Zone and Central Park Enterprise Zone are the main employment growth sites in the Borough and significant housing allocations. Access and congestion issues are increasingly acting as a barrier to increased employment and housing numbers. The scheme will initially unlock upto 4,300 jobs and enable the delivery of 2,600 houses to come forward. This will substantially meet our element of the SEP target.	Supporting the creation of 4,300 jobs with a GVA of £17.5m. Enabling the delivery 2,600 homes.			Beneficial	£17.5m				
	Wider Impacts	The project will assist in reducing worklessness in the Tees Valley. The Tees Valley DfT Access Fund funded project will support the scheme through the provision of personalised travel plans and working with employers to encourage the use of sustainable travel modes. The scheme will support the productivity and efficiency of the local bus routes which will ultimately reduce operating costs and maintain a stable bus network.	Not quantified.			Beneficial					
Environmental	Noise	The scheme is not in noise abatement area and has limited noise receptors. It is considered to have a neutral impact on noise.	Not quantified.			Neutral					
	Air Quality	Air quality will improve as the more efficient movement of traffic reduces the dwell time of vehicles and the concentration of those vehicles.	Not quantified.			Slightly beneficial					
	Greenhouse gases	The carbon saving is £2.261m equivalent to 289660 tonnes of Carbon (FN3).	Change in non traded carbon over 60y (CO2e)	289660 tonnes		Beneficial	£2.261m				
			Change in traded carbon over 60y (CO2e)								
	Landscape	Whilst some road side enhancements will be made the scheme is broadly neutral.	Not quantified.			Neutral					
	Townscape	The proposed scheme includes improvements to existing junctions, and reconstruction of existing carriageway. Therefore, it is expected that the scheme will provide a renewal of existing infrastructure resulting in a maintained and cared-for townscape.	Not quantified.			Slightly Beneficial					
	Historic Environment	N/A	Not quantified.			Neutral					
	Biodiversity	The scheme is in an urban environment and mostly consists of renewal and renovation. Therefore a biodiversity assessment was not undertaken as it was not deemed necessary. We do have a policy of planting wildflower meadow, which provides a rich habitat as opposed to traditional grassed highway. This will be incorporated into the detailed scheme design.	Not quantified.			Slightly Beneficial					
Water Environment	The scheme is in an urban environment and mostly consists of renewal and renovation. Therefore a Water Environment assessment was not undertaken as it was not deemed necessary.	Not quantified.			Neutral						
Social	Commuting and Other users	Darlington is a net attractor of commuter trips in the peak hour. The main journey time delays occur at peak times due to commuters accessing exisiting employment sites in the Eastern Growth Zone. Commuters are disproportionately affected by this congestion as they tend to have to travel at this time of the day to access employment.	Value of journey time changes(£)	£68.937m		Beneficial	£71.528m				
			Net journey time changes (£)								
			0 to 2min	2 to 5min	> 5min						
		Reliability impact on Commuting and Other users	The main journey time delays occur at peak times due to commuters accessing existing employment sites in the Eastern Growth Zone. Commuters are disproportionately affected by this congestion as they tend to have to travel at this time of the day to access employment. The scheme will have its biggest impact on journey to work trips.	Included above.			Beneficial				
		Physical activity	The scheme includes new cycleway/footway extentions linking development sites and existing businesses with the Town wide cycle network. Darlington is a former cycle demonstration town and has seen a trebling in cycling levels. The scheme will ensure that this significant investment in the towns cycle network is maximised through linking it directly with employment sites. Darlington is a compact Town and many journeys are undertaken on foot.	Not quantified.			Beneficial				
		Journey quality	Journey times will be significantly improved.	Not quantified.			Beneficial				
		Accidents	The project area has a comparatively good accident record. The impacts of the scheme are difficult to assess in terms of accidents. The schemes will be road safety audited which should ensure that the existing good road safety record is maintained.	Zero			Neutral				
		Security	The proposed scheme is expected to improve traffic flow and therefore reduce security risks as a result of drivers being required to stop or travel at reduced speeds.	Not quantified.			Slightly Beneficial				
		Access to services	The scheme is expected to improve access to housing, employment, retail , medical and educational destinations by supporting all modes of transport. This, in turn, could improve access to jobs and facilities, specifically those at the Eastern Growth Zone and Central Park Enterprise Zone which are expected to initially generate 4,300 jobs.	Not quantified.			Beneficial				
	Affordability	NA	Not quantified.			Neutral					
	Severance	NA	Not quantified.			Neutral					
	Option and non-use values	NA	Not quantified.			Neutral					
Public Account	Cost to Broad Transport Budget	Overall capital cost of scheme is £4,851,181 of which DfT grant funding is £3.374m and Local Authority capital investment is £1.477m				Slightly negative	-£4,581,181				
	Indirect Tax Revenues	The scheme will result in more efficient journeys which will result less fuel being used and a consequential reduction in fuel duty and VAT	Calculated			Slightly negative	-£4,369,000.00				



Project: andy project
Date: Thu 29/06/17

Task		Summary		External Milestone		Inactive Summary		Manual Summary Rollup		Finish-only	
Split		Project Summary		Inactive Task		Manual Task		Manual Summary		Deadline	
Milestone		External Tasks		Inactive Milestone		Duration-only		Start-only		Progress	

NPIF Project Management Structure



Darlington Borough Council National Productivity Investment Fund Bid

Risk Management Strategy

Risk Management is a 'Live' process through all stages of the project and embedded into the Governance Structure.

Risk and Risk Registers are reviewed at all stages of the project and as part of the programme management process outlined in **Section B9**.

The key phases' of the Risk Management Strategy are:

- **Phase 1 – Identification**
- **Phase 2 – Risk quantification and analysis**
- **Phase 3 – Mitigation**
- **Phase 4 – Monitoring**

Phase 1 – Identification

An initial risk identification exercise is undertaken with information taken from detailed feasibility stage reports produced by specialist consultants on behalf of DBC and views gathered from the DBC Project Team.

Further structured risk and opportunity identification meetings will be held with all key stakeholders. The purpose is to:

- effectively communicate project objectives
- comprehensively review the current project risks/issues,
- discuss the constraints, interfaces, assumptions and omissions,
- review any new risks and opportunities.

This would build upon the risk management position recorded and monitored in the risk register.

The risk register control process ensures:

- that the descriptions, causes and consequences of each risk are clearly understood.
- each risk is interactively scored, ranked, prioritised, and their potential impacts.
- A risk 'owner' will then be identified and agreed to ensure that there is an individual with responsibility for any mitigation actions required and to continue with the ongoing management of residual risk.
- the most appropriate mitigation or action plan can then be determined.

Risk Meetings/Workshops are recognised as an effective method to quickly improve communications on complex projects and allow lessons learned from previous projects to be more widely discussed and shared. This technique will be used on the project to develop relationships and encourage a culture of risk awareness in the Project Team.

The key deliverables from the Phase 1 is the Risk Register from which all subsequent risk management can be managed and developed. The Risk Report provides a record and findings.

The typical type of risks considered on DBC projects are listed below:

- Competitive - Cost or quality issues in respect of the ability to deliver Best Value
- Stakeholders - Failure to meet the current and changing needs and expectations of stakeholders
- Economic Risk - Investment decisions, interest rate changes, effect of central government policy decisions
- Environmental Risk - Noise, pollution, health issues
- Financial Risk - Budget problems, failed resource bids, fraud/ misappropriation
- Human Risk - Terrorism, sabotage, human error
- Legislative - Current or potential changes in national or European law

- Occupational Health and Safety Risk - Weak safety measures, failure to implement legislative requirements
- Operational Risk - Failure in service delivery, recruitment and retention problems, failure in IT provision
- Political Risk - Effects of change of government policy, UK or EC legislation, national or local political pressures or control, meeting the administration's manifesto commitments
- Social - Changes in demographic, socio-economic trends, drop in pupil numbers
- Strategic Risk - Impact of policy decisions on achievement of strategy, decisions effecting organisational priorities
- Technological Risk - Obsolescence of equipment, failure of IT systems

Phase 2 – Risk Quantification and Analysis

An initial exercise has been undertaken on risk quantification to support this funding application using industry recognised risk simulation software. Details of the exercise are contained in **Appendix B10**.

Further risk quantification and analysis process will be continued through formal risk meetings/workshops attended by the key project team members and stakeholders throughout the project. The output of the quantification and analysis will be the Risk Register.

Phase 3 – Mitigation

There are broadly four suitable ways to mitigate risk:

- Prevention – Terminate the risk by doing things differently and thus removing the risk where it is feasible to do so;
- Reduction – Treat the risk by taking appropriate action to control either the likelihood of the risk occurring or the impact if the risk occurs; this action is otherwise known as contingency planning;
- Transference – Specialist form of risk reduction that looks to insure against or transfer the risks to a third party;
- Acceptance – No separate action is identified, the risk is regularly reviewed during the project lifecycle. Should only be used where the risk falls below the risk appetite line

Risks will be recorded on the standard Darlington Borough Council Risk Log template. The Risk Register provides a description of the risk and its associated impact.

Phase 4 – Monitoring

After the initial Risk Register has been produced the Project Manager will meet with each prospective risk owner to ensure they are content with the definition of the risks assigned to them. The risk owners will be required to monitor each risk assigned to them and provide feedback to the Project Manager on any changes to the risk, the proposed mitigation and when the risk has been closed out.

The Risk Register will be reviewed at each Project Board meeting with those risks currently above the risk appetite line being highlighted for discussion at each meeting. The Project Manager will 'own' the Risk Register and will be responsible for its management until the completion of the Project.

Darlington Borough Council

National Productivity Investment Fund Bid

Risk Review Report

Monday 26th June 2017

Contents

Page

1.00	INTRODUCTION	3
2.00	METHODOLOGY	5
3.00	INFORMATION	6
4.00	KEY PROJECT RISKS	7
5.00	COST RISK ANALYSIS: MODELLING OUTPUTS	8

Disclaimer

This document and its contents have been prepared and are intended solely for Darlington Borough Council's information and use in relation to the National Productivity Investment Fund Bid.

IMPROVE (Risk & Value) Ltd assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/ or its contents.

Copyright

The copyright of this document is vested in IMPROVE (Risk & Value) Ltd. This document may not be reproduced in whole or in part without their express written permission.

1.00 INTRODUCTION

A Cost Risk review was carried out in relation to the National Productivity Investment Fund Bid for Darlington Borough Council on Monday 26th June 2017. The exercise focused on reviewing the scope of the four schemes and assumptions made in establishing the estimate; understanding the key areas of discrete cost risk events associated with the project and considering any other factors that could influence the overall costs of the planned scheme.

The 'Project Risk Register' (Appendix A) outlines the risk events which were discussed during this exercise. 'Estimating Uncertainty' ranges were also discussed which reflect the level of confidence in key elements within the estimate of each of the schemes.

Each project risk has been evaluated to determine its Likelihood and Cost Impact in order to model the cost risk exposure of the planned schemes. The identified discrete project cost risks have been modelled alongside the cost plan with appropriate 'Estimating Uncertainty' ranges applied to understand the current level of risk exposure on the bid.

The evaluation of identified risks can also be used to help prioritise them so that suitable management actions for mitigating those risks that present the greatest threat can be established. In order to ensure that these areas of uncertainty are adequately managed, risk owners for each of the risks have been established and initial mitigation defined to provide the framework for an appropriate way forward in minimising uncertainty on the project.

1.01 Key Project Risks

The key project risks (based on mean cost risk exposure) identified during the session that were modelled alongside estimating uncertainty ranges can be found below. The full Risk Register can be found in Appendix A.

Table 1: Most significant Project Risks

ID	Risk Event	Probability	ML. Cost Impact (£)	Schedule Impact (Months)
6	Costs and timescales for diverting services may exceed expectations.	50%	50 – 250k	1 - 4
7	Extent of works to realign the retaining wall on Haughton Rd throughabout site may be greater than anticipated.	50%	10 – 100k	2wk - 1
10	Diversion of telecom services in the ground adjacent to Yarm Rd/ Lingfield Rd junction works may be significantly greater than assumed.	50%	20 – 100k	1 - 3
1	Extent of contaminated material encountered in the ground may be greater than anticipated.	65%	15 – 75k	1 - 4
5	Onerous conditions may be imposed on the planning permission.	95%	10 - 50k	1 - 6

1.02 Cost Risk Modelling

Cost uncertainty values were modelled using Monte Carlo software. The outputs from this modelling is summarised in the following table. This outlines the base costs provided along with client costs and external services. These outputs show the P50 (50% confidence level) and P80 (80% confidence level). The full range of modelling outputs can be found in section 5 of this report and in the 'Modelling Output' tab in the Risk Register.

Table 2: Cost Risk Analysis - Modelling output summary

	P0	P50	P80	P100
Base Estimate	3,148,169			
Client Costs	£658,287			
Utility Costs	£713,500			
TOTAL BASE	£4,519,955			
<i>Estimating Uncertainty</i>	-£4,765	£86,924	£113,620	£226,392
<i>Client Contingency</i>	109,279	244,303	354,401	593,162
TOTAL PROJECT COST (inc Risk)	4,624,470	4,851,181	4,987,976	5,339,509

2.00 METHODOLOGY

2.01 Objectives of the session

The objectives for the session were as follows:

- Identify the areas of cost uncertainty for the project;
 - Understand factors that could give rise to uncertainty in the delivery of the planned works;
 - Cost Estimating Uncertainty ranges have been developed by considering the confidence that the project team have in key elements of the current cost plan;
 - Discrete risks were identified as part of the discussions during the exercise;
- Quantify all identified discrete project cost risks in terms of their likelihood and the magnitude of their cost and schedule impact should they occur.
- Allocation of all identified risks to a suitable Risk Owner.
 - These individuals are asked to validate the detail of the risk description and initiate the initial management responses proposed to mitigate their risks. These actions have been assigned Action Owners and Deadlines will be established at a suitable time for completing the actions proposed.

2.02 Workshop Outputs

The following outputs have been provided from this study:

- Project Risk Register which formed the basis of the analysis but should be further developed and managed as part of the ongoing project development (Appendix A);
- This workshop report, including a summary of Cost Risk Analysis outputs (Section 5).

2.03 Risk Identification

Discrete risks were identified during the session whilst reviewing the scope of the planned works, assumptions made and the specific constraints of the proposed sites.

All identified risks were evaluated in terms of likelihood of occurrence and potential cost and schedule impact. The probability and cost values have been used in the analysis to demonstrate the level of uncertainty that the scheme is currently exposed to. This evaluation also helps to prioritise the implementation of appropriate responses to mitigate the threat of identified risks which should be progressed by each risk owner.

2.04 Estimating Uncertainty

Cost estimating uncertainty is used to demonstrate the level of confidence that the project team have in key elements of the current cost plan. The cost plan was reviewed during the session and ranges applied to each key element which represents how much less than the current estimated value and how much more they could be.

3.00 INFORMATION

3.01 Project Background

Darlington's Eastern Growth Zone and Enterprise Zone are located between Darlington town centre and A66 (SRN). It is the key economic growth site in the Borough including:

- Central Park Enterprise Zone;
- Ingenium Advanced Manufacturing Park;
- Link 66 Logistics Park;
- Morton Palms Business Park.

Local access is via the B6279 and B6280 Key Road Network (KRN) which links A66 (SRN)/ DTVA to Darlington Station and the Town Centre. The project improves the efficiency and resilience of the KRN between Central Park Enterprise Zone and the wider Eastern Growth Zone, both areas of housing and employment developments. The improvements along the two KRN corridors link Darlington Station to the A66 (SRN) and DTVA, and align with planned and future improvements on A66 (SRN). The improvements increase capacity at 3 key junctions and include new link roads to open up commercial development sites. It is anticipated that the development will improve the flow of traffic whilst accommodating traffic from new developments.

4.00 KEY PROJECT RISKS

4.01 Project Risks identified

A number of key areas of uncertainty were identified during the risk session. The Project Risks that were used in the analysis are outlined in the full risk register (Appendix A) but the more significant risks are summarised below along with mitigation proposed.

Table 3: More significant Project Risks & Mitigation

ID	Risk Event	Mitigation	Owner	Deadline
6	Costs and timescales for diverting services may exceed expectations.	Outline estimates have been received for one of the 3 schemes. Further work will be undertaken to verify the costs of the other schemes as they progress.	Noel Walecki	October 2019
7	Extent of works to realign the retaining wall on Haughton Rd throughabout site may be greater than anticipated.	On site testing to be undertaken to determine nature of existing material.	Noel Walecki	May 2019
10	Diversion of telecom services in the ground adjacent to Yarm Rd/ Lingfield Rd junction works may be significantly greater than assumed.	1. Early engagement with telecoms carriers (Virgin, BT) to be carried out, meetings to be held to scope out work and most economic treatment. 2. Formal agreements to be entered in to when sufficient details are known.	Noel Walecki	April 2019
1	Extent of contaminated material encountered in the ground may be greater than anticipated.	1. Desk top study to be undertaken to establish all historical categories of use for the site. 2. Site investigations to be carried out as soon as possible.	Noel Walecki	October 2019
5	Onerous conditions may be imposed on the planning permission.	1. Planning pre-application process to be followed to flush out potential issues. 2. Regular dialogue to be maintained with Local Planning Authority.	Noel Walecki	August 2019

4.02 Estimating Uncertainty ranges

In addition to the above discrete project risks, the modelling included Estimating Uncertainty ('EU') ranges which are summarised in the 'Estimate' tab of the Risk Register (Appendix A):

5.00 COST RISK ANALYSIS: MODELLING OUTPUTS

5.01 Cost Risk Modelling

Cost uncertainty values were modelled using Monte Carlo software. The outputs from this modelling is summarised in the following table. This outlines the base costs provided along with client costs and external services. These outputs show the P50 (50% confidence level) and P80 (80% confidence level). The full range of modelling outputs can be found in section 5 of this report and in the 'Modelling Output' tab of the Risk Register.

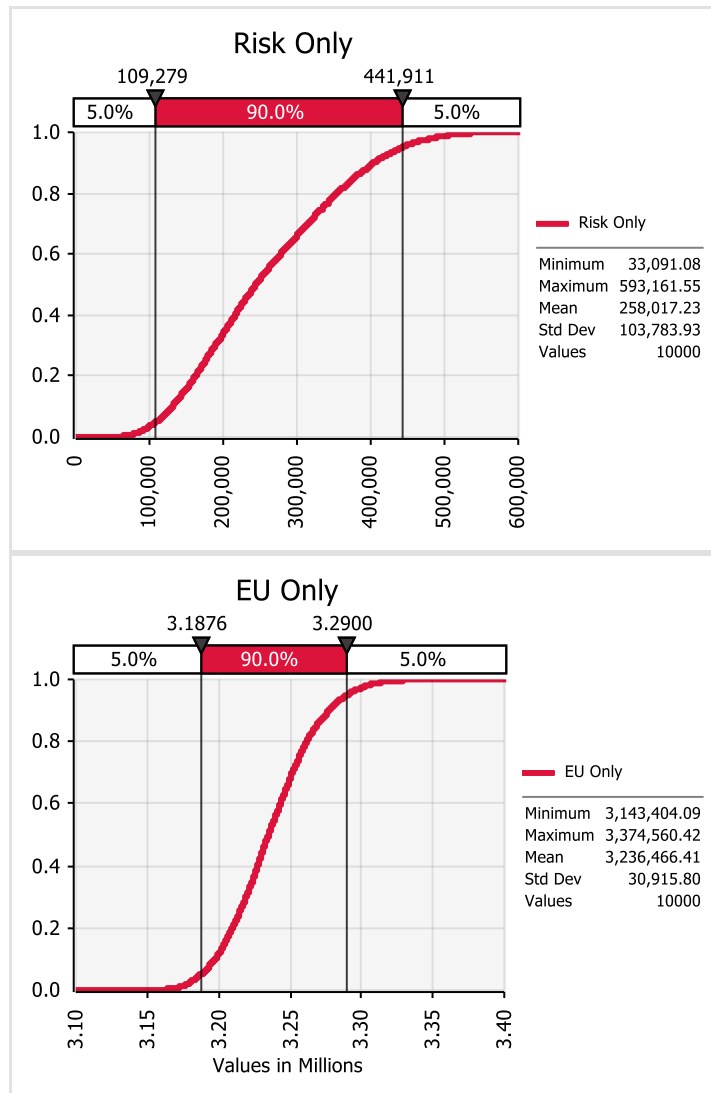
Table 2: Cost Risk Analysis - Modelling output summary

	P0	P50	P80	P100
Base Estimate	3,148,169			
Client Costs	£658,287			
Utility Costs	£713,500			
TOTAL BASE	£4,519,955			
<i>Estimating Uncertainty</i>	-£4,765	£86,924	£113,620	£226,392
<i>Client Contingency</i>	109,279	244,303	354,401	593,162
TOTAL PROJECT COST (inc Risk)	4,624,470	4,851,181	4,987,976	5,339,509

5.02 Modelling Outputs

The full range of cost risk analysis outputs is shown below. The S curve demonstrates the full range of confidence values for the modelling outputs:

Table 5: Cost Risk Analysis – Full range of modelling outputs



APPENDIX A: COST ANALYSIS - PROJECT RISK REGISTER

Issued as a separate excel document

APPENDIX B: CONTRIBUTORS

The exercise involved the following contributors:

Name	Role	Company
Brian Robson	Head of Capital Projects	Darlington BC
Noel Walecki	Principal Design Engineer	Darlington BC
Paul Disley	Risk Manager	IMPROVE Risk

AUTHORISATION
Approved for issue
..... <i>B Robson</i>
Brian Robson
Date... 30/06/17

IMPROVE (Risk & Value) Ltd

Risk Register

Review Date: 26 June 2017

Risk ID No	Category	Risk Description 'There is a risk that.....'	Cause 'As a result of....'	Consequence 'Would lead to...'	Status	Cost (£)			Schedule (months)		Management Actions	Action Owner	Deadline	
						Min	Max	£	Min	Max				
						£	£	£	£	£				
1	Environmental	Extent of contaminated material encountered in the ground may be greater than anticipated	Haughton Rd is on the site of an old railway line and has existing brownfield classification	Increased costs and timescales associated with removal and disposal of contaminated materials	Live	65%	15,000	75,000	£ 257,750	1	4	1. Desk top study to be undertaken to establish all historical categories of use for the site 2. Site investigations to be carried out as soon as possible	Noel Walecki	Oct-19
2	Specialist Resources	Requirement for specialist geotechnical information may incur additional costs	Lack of information around the ground conditions on the site	Increased costs for procuring specialist resources to undertake survey work	Live	85%	5,000	25,000	£ 12,750			Early procurement exercise to be carried out and local frameworks to be reviewed for suitable suppliers	Noel Walecki	Mar-18
3	Environmental	Unexpected environmental constraints may be encountered	1. To the north of the Haughton Rd throughout there is an area of potential environmental sensitivity (ie, could be greater crested newts or other protected species) 2. Modifications to the retaining wall may impinge on this potential sensitive habitat	Increased costs and timescales for working around or mitigating impact on environmentally sensitive areas	Live	85%	5,000	30,000	£ 14,875	1	2	1. Full walk over survey to be carried out early in the process 2. Monitoring programme to be developed and implemented if required	Noel Walecki	Mar-18
4	Environmental	Extent of Japanese knotweed encountered in the area may be greater than anticipated	Japanese knotweed has been encountered to the north of the site of the proposed Haughton Rd throughout (this needs to be verified through survey work)	Increased costs associated with treatment or methodology to work around Japanese knotweed	Live	50%	2,000	15,000	£ 4,250	0.25	0.5	1. Full walk over survey to be carried by Japanese knotweed specialist 2. Any additional areas to be identified and assessed for impact 3. Treatment programme to be developed in line with best practice	Noel Walecki	Jun-19
5	Approvals	Onerous conditions may be imposed on the planning permission	1. Proposals extend beyond the existing highways boundary 2. ecological concerns 3. Brownfield classification of the site	Increased costs and timescales associated with discharging the conditions	Live	95%	10,000	50,000	£ 28,500	1	6	1. Planning pre-application process to be followed to flush out potential issues 2. Regular dialogue to be maintained with Local Planning Authority	Noel Walecki	Aug-19
6	Construction	Costs and timescales for diverting services may exceed expectations	1. All services need to be diverted because of the need to widen the road 2. Unable to place orders for diversion of services until funding is secured	Increased costs and timescales associated with costs received from service providers	Live	50%	50,000	250,000	£ 75,000	1	4	1. Outline estimates have been received for one of the 3 schemes	Noel Walecki	Oct-19
7	Scope	Extent of works to realign the retaining wall on Haughton Rd throughout site may be greater than anticipated	1. Retaining wall is to be realigned 2. Unable to procure design services until site investigation has been undertaken (site investigation unlikely to be initiated until funding secured) 3. Build methodology is largely unknown until outcome of surveys is available	1. Volume of material to be relocated or disposed off site could be greater than assumed (if unable to reuse) 2. Additional volumes of fill could be required	Live	50%	10,000	100,000	£ 27,500	0.5	1	On site testing to be undertaken to determine nature of existing material	Noel Walecki	May-19
8	Design	Traffic modelling may result in the need for further design in order to optimise the layout	Surveys need to be verified to confirm that the new layout represents an optimal solution	Increased costs and timescales associated with redesign to optimise the layout	Live	50%	1,000	10,000	£ 2,750	1	3	Early modelling work to be carried out and reviewed by DBC Highways team	Noel Walecki	May-18



Dave Winstanley
Assistant Director, Transport & Capital Projects,
Darlington Borough Council Depot
Allington Way
Darlington
DL1 4QB

29 June 2017

Dear Dave,

I would like to provide my support for the package of measures proposed by Darlington Borough Council.

Central Park Enterprise Zone and the Eastern Growth Zone are providing real opportunities for jobs and housing. From my constituency work the congestion and capacity issues on the road network are raised regularly by both residents and businesses. From a business perspective the impact on productivity and reliability of the workforce is critical in terms of public transport and journeys by private car. I know residents will often avoid business in the area at certain times of the day and public transport reliability can be affected.

All of these matters impact on choices for investors, whether it be people choosing to set-up home, house builders planning development or business deciding to invest and create more jobs. The proposed package has been developed with partners that seeks to maximise investment from other sources of public and private sector to provide a holistic solution to the area that allows development of many sizes and scales to come forward in a sustainable way. In my opinion this package of measures would help unlock these issues and provide more opportunities for jobs and growth.

Yours sincerely,

A handwritten signature in black ink that reads "Jenny Chapman". The signature is written in a cursive, flowing style.

Jenny Chapman MP