

### SMALL SCHEMES - BUSINESS CASE

for

### **Chelmsford City Integrated Transport Package:**

### Chelmsford Station / Station Square / Mill Yard

Please note that this proforma is designed to collect key information about the project. The scheme promoters are encouraged to attach any additional supporting information to this business case proforma.

Project type (rail, road, LSTF, integrated pacl	kage, maintenance etc.): Integrated package
Size of Project:	Small (total cost is below £8m)
Project Location:	Chelmsford
Project start date:	July 1, 2015
Project complete date:	March 31, 2017
Project development stage:	Implementation / Feasibility

Promoting authority name: Project Manager's name and position:

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### The Strategic Case

#### 1. Project Description

#### • Purpose

The purpose of the total project is to provide a package of improvements at the rail and bus gateway to Chelmsford in three distinct, but connected areas:

- Station Square
- Chelmsford Station
- Mill Yard

Specifically, this bid focuses on the third and final part of this package – Mill Yard. The other two elements are funded by other means (developer contributions and rail industry funds) and works are well underway. The Mill Yard part complements these works to the station, and outside on the south side, but the three parts are being progressed separately.

Overall, the package of measures is aimed to encourage increased use of sustainable transport to facilitate housing and economic development in the city centre, while reducing congestion and associated carbon emissions.

The specific objectives of the complete project are to:

- 1. Improve the quality of the station facilities and its environs (the gateway to Chelmsford), to regenerate the immediate area and enhance the image and economic prosperity of the city as a whole
- 2. Provide improved circulation and capacity within the station one of the busiest in the country
- 3. Improve linkages to the station, particularly by sustainable modes of transport, to reduce congestion and facilitate housing growth and economic development in the city centre
  - i. deliver significant environmental enhancements to the public circulation space around the station for all modes of transport, including pedestrians and cyclists
  - ii. provide better integration with the adjacent bus station
  - iii. facilitate sustainable access between station buildings and the emerging university quarter in the north of the city centre, including Anglia Ruskin University (ARU), major employers and a new large residential neighbourhood on the former Marconi site. See Appendix A1.
  - iv. Improve the health of Chelmsford citizens by providing improved walking and cycling connections to the station

#### Brief description

The project comprises 3 main elements, as shown on the plan in Appendix A2.

a) Station Square

The works to the Station [see b) below] will be complemented by improvements to the public realm around the rail and bus interchange to provide a higher quality environment through: improved public transport facilities; wider footways and a reduction in road space; higher quality paving; improved lighting; improved access (from the station building to the nearby bus stops, bus station, adjacent development and new cycle storage facilities); and an overall improved vista at this gateway to the city.

Further details can be found here: http://www.chelmsford.gov.uk/station-square



Work in progress – May 2015



#### b) Chelmsford Station



New enlarged station frontage and ticket office, to include a new ticket hall with an open-plan counter, new toilets, improved customer information systems and additional retail units. The access to the London-bound platform in the main ticket hall is also being rebuilt in order to improve the space in the ticketing area and to extend the gate line.

Construction of a new stair tower to the London-bound platform opposite the bus station, linked to the existing stair tower. Alongside improvements to the existing stair tower and secondary entrance, this will enable a better flow of people, especially at peak times, providing improved access to the bus station and significant improvements to access for the London-bound platform.

#### c) Mill Yard: Station Accessibility Improvements

Replacement of an existing tunnel (under a ramp to Mill Yard, a former goods yard) with a bridge, to open up a walking and cycling route between the station building and the emerging university quarter in the north of the city centre (which includes Anglia Ruskin University (ARU) and major employers); via a new mixed use development on the former Marconi site. The route will also improve the viability of the commercial premises on the new development, and provides a missing link in the cycleway network between the station and the north of the City.



This work will be complemented by further public realm improvements on the north side of the station (adjacent to the Mill Yard area), including reconfiguration of the station forecourt; improved emergency access, taxi and private car circulation; and additional and improved cycling and pedestrian facilities.





Existing pedestrian tunnel under Mill Yard from the south side of the station



Northern station entrance (right) and station forecourt

Mill Yard tunnel currently has no direct access to this side of the station

These three parts of the scheme, when packaged together, will respond to the objectives laid out above.

#### • Alternative opportunities

A number of alternative schemes have been considered for the Mill Yard area, and the three main proposals are shown in Appendix F.

#### Proposal 1:

Improve the lighting and materials used along the existing route, replacing the fence with bollards and utilising the full width of the railway arch, but keeping the existing tunnel under the ramp to Mill Yard. While this provides some aesthetic improvements, it does not sufficiently improve the access routes to the north of the station, nor resolve potential conflicts between vehicles, cyclists and pedestrians in the forecourt on the north side of the station.

#### Proposal 2:

As above, but also including the replacement of the existing tunnel (under the ramp to Mill Yard) with a bridge, along with landscaping of the embankment either side, to open up a direct route to the north for walkers and cyclists.

#### Proposal 3:

This recommends levelling the land under Mill Yard, and relocating the platform access ramp, to free- up



additional land for development, as well as providing a direct walking and cycling route to the north. The proposal would also provide additional capacity in the nearby multi- storey car park. This more ambitious option would require investment from third parties, is more expensive, requires much more extensive structural works and the relocation of railway equipment, and has greater associated risk due to the closer proximity of the Greater Anglia main line. It is therefore not considered to be deliverable within the LEP programme window.

The site is constrained by the railway on its southern side, and by Mill Yard itself which provides an emergency access point up to the platform level. The ramp up to Mill Yard, along with the Townfield Street multi-storey car park behind, forms the northern barrier of the site. There are embankments supporting the ramp, Mill Yard and the railway itself. Retaining walls are therefore needed to maintain structural integrity, while increasing the land available. There are railway buildings and equipment in Mill Yard itself, and aspirations from the franchisee to make better use of the railway arches under the railway. Parking facilities close to the station need to be maintained under the terms of the rail franchise.

The plan to be progressed (as shown in Appendix A3) is therefore a variation of the original Proposal 2, with the scope expanded to include more resurfacing and foot/cycle paths. Circulation arrangements for the various vehicles accessing the forecourt have also been reviewed.

#### • Strategic case

Chelmsford rail station is one of the busiest stations in England, (16<sup>th</sup> outside of London), and the second busiest station outside London in the Greater Anglia area; dealing with approximately 8.3 million passenger journeys per year (2013/2014, Office for Rail Regulation). Usage of the station is continuing to grow (up 3.5%, 2012/2013 to 2013/2014 and up 19.5% in the last five years).

The quality of the gateway from the railway station to Chelmsford city centre is critical to the image and economic prosperity of England's newest city. Coupled with the redevelopment of a number of major sites in the vicinity of the station, for housing and commercial development, the package will deliver significant environmental enhancements to the public circulation space around the station and better integration with the bus interchange, as well as providing much better circulation, connectivity and capacity improvements, and regenerating the adjacent area.

Works to improve the environment and provide better linkages to the other transport modes and the city centre have been carried out on the southern side of the station, and are almost complete. Works within the station to improve capacity and facilities are well underway. However, this work needs to be complemented by improvements on the northern side of the station, where taxis and private vehicles compete for space, and where there are only indirect, unattractive links to the adjacent areas. For pedestrians, their main access route is via a narrow tunnel and an unattractive path around a multi-storey car park, with associated poor personal security perceptions. And for cyclists, an indirect route via the busy roads of Victoria Road and New Street.

Improved walking and cycling links via an attractive off-road route will help to reduce the barrier of the railway line between the city centre and the university quarter and north-east of the city. The commercial viability of the development on the former Marconi site adjacent to the station, will also improve with the provision of a better, attractive and visible walking and cycling link to the mainline station. Non-Monetised benefits are discussed in more detail in Appendix B3.

The improvements also offer the potential for modal shift, both for journeys into the city centre, but also by making train journeys a more viable door to door transport option.

Chelmsford has a fully adopted Local Development Framework that plans for 16,000 new homes and significant economic growth, much of which is in the city centre. The growth in the plan period, to 2021, is predicated on the delivery of supporting infrastructure and improvements in and around Chelmsford Rail Station and is identified as a key infrastructure requirement within the city centre (CP4 within the adopted Core Strategy, February 2008).

The investment from SE LEP in this project is therefore fully embedded within the strategic policy framework to support housing and economic growth in the city of Chelmsford.



The SE LEP's Strategic Economic Plan (March 2014) identifies the A12 and Great Eastern Mainline Brentwood-Chelmsford-Colchester Corridor as a key driver of growth, along with additional growth in Maldon. The A12 and Great Eastern Mainline (GEML) link London with these centres and the routes provide the main access to Harwich and Felixstowe. (Separate packages of investment are proposed to address bottlenecks on the A12 and improve capacity and journey times on the GEML to support growth.)

Additional investment in rail and road infrastructure is essential for unlocking the full economic potential of this major Corridor. The Corridor has strong links with the London labour market, supporting substantial commuter flows in and out of the capital.

The Chelmsford Innovation Centre (MedBIC), part of the Anglia Ruskin Med Tech infrastructure, is being developed to support the growing life sciences and health care sector. The development of an employer-led STEM & Enterprise Skills Centre in Maldon will help develop a pipeline of skilled labour to enable the expansion of advanced manufacturing.

In north east Chelmsford, investment in the proposed Beaulieu Park station will stimulate a faster pace of development of both residential and employment areas in the urban extension. This will help attract higher value occupiers to the business park more quickly, with knock-on positive effects from this on local job creation and economic output. The proposed station is part of a wider package of journey time, capacity and reliability improvements and is being developed by the "Great Easter mainline" Parliamentary Task Force with the assistance of the New Anglia LEP and Network Rail (more information can be found here: <u>Great Eastern Rail Campaign | New Anglia LEP for Norfolk and Suffolk</u>)

This package (Chelmsford Station / Station Square / Mill Yard) is identified within the South East Strategic Economic Plan in the Mid Essex Growth Corridor Transport Investments section (Table 4.12, page 120).

Essex County Council has been working closely with the district, borough, city and unitary councils to agree where future growth should take place and together have produced the Integrated County Strategy (ICS). Investment is to be focused on principal urban areas, including Chelmsford, as these are the main locations for growth. Ensuring efficient access to and from Chelmsford station and the city centre is essential as one of the strands for the delivery of the ICS.

Investment in improvements to Chelmsford Station and the surrounding area is wholly compliant with the aspirations of the Economic Plan for Essex (EPfE) that will update and incorporate the Greater Essex Integrated County Strategy (ICS) and the ECC Economic Growth Strategy (EGS). The proposed package of improvements also supports the delivery of the Essex Local Transport Plan (LTP), and has the support of partner authorities.

Letters of support from Abellio Greater Anglia, Anglia Ruskin University (ARU), Chelmsford City Council (CCC), Essex Chambers of Commerce, and Bellway Homes (developers of the former Marconi site), are attached as Appendices E1-E5.

Essex County Council has the stated ambition to make Essex the location of choice for business and to be a county where innovation brings prosperity:

- To grow, the Essex economy depends on the efficient movement of people, goods and information, via effective and reliable transport and communications networks to provide access to markets and suppliers. It is essential, therefore, that we develop and maintain the infrastructure that enables our residents to travel and our businesses to grow;
- Support for employment and entrepreneurship across our economy is focused on ensuring a ready supply of development land, new housing and the coordinated provision of appropriate infrastructure.

This proposed investment in the station and surrounding area is essential for the delivery of this ambition.

The Local Transport Plan applies an incremental approach to ensuring that our transport network is fit for purpose and enables economic growth. This entails; prioritising the maintenance and smarter use of our existing transport network; making targeted investments to address local network pinch points and to support local development; and promoting larger scale projects, only where these are required to most effectively address the transport challenges facing Essex.

The station improvement package in Chelmsford supports the SE LEP Vision; to 'Create the most enterprising economy in England' and the single SE LEP goal; to promote steady, sustained economic growth over the next two decades. The scheme provides efficient access to, and improves the gateway for the city



centre – a key employment zone in Essex, providing improved access to employment, markets and suppliers, to maximise the economic benefits to the SE LEP economy. The scheme also promotes sustainable travel, simultaneously enhancing and protecting the valuable natural assets which make our communities and landscapes attractive and distinctive.

The importance of Chelmsford as an employment centre is demonstrated by the fact that the number of "in" commuters (mostly from other parts of Essex) almost exactly balances the number of workers commuting into London. Chelmsford is largely a commercial city which employs around 80,000 people.

Substantial economic growth will be enabled by investment in the key gateway to the city centre, supporting the delivery of 16,000 new homes (2,000 of which are in the city centre) and providing improved access between the city centre employment zone and university, ensuring that Chelmsford is an attractive location to invest, and for companies to grow, with easy access to potential employees, markets and suppliers, including those based in London.

#### • Strategic context

The Essex County Council Corporate Outcomes Framework 2014-2018 sets out the seven high level outcomes that ECC want to achieve to ensure prosperity and wellbeing for Essex residents. Securing these outcomes will make Essex a more prosperous county; one where people can flourish, live well and achieve their ambitions.

The seven outcomes are listed below:

- 1. Children in Essex get the best start in life
- 2. People in Essex enjoy good health and wellbeing
- 3. People have aspirations and achieve their ambitions through education, training and life-long learning
- 4. People in Essex live in safe communities and are protected from harm
- 5. Sustainable economic growth for Essex communities and businesses
- 6. People in Essex experience a high quality and sustainable environment
- 7. People in Essex can live independently and exercise control over their lives

The Mill Yard project directly contributes to the health (2), economic growth (5), and high quality and sustainable

environment (6) outcomes.

### Case for Change

#### 2. Business needs / Reasons

• Outline the rationale for making the investment with reference to the problems with the status quo

The aim of this package is to make Chelmsford city centre a more attractive place for visitors, shoppers, students, commuters and businesses, and residents.

The specific objectives of the overall project are to:

- Improve the quality of the station facilities and its environs, (the gateway to Chelmsford), to regenerate the immediate area and enhance the image and economic prosperity of the city as a whole
- Provide improved circulation and capacity within the station one of the busiest in the country
- Improve linkages to the station, particularly by sustainable modes of transport, to reduce congestion and facilitate housing growth and economic development in the city centre:
  - deliver significant environmental enhancements to the public circulation space around the station for all modes of transport, including pedestrians
  - o provide better integration with the adjacent bus station
  - facilitate sustainable access between station buildings and the emerging university quarter in the north of the city centre, including Anglia Ruskin University (ARU), major employers and a new residential neighbourhood.



Chelmsford rail station is one of the busiest stations in England (16<sup>th</sup> outside of London) and the second busiest station outside London in the Greater Anglia area, dealing with approximately 8.3 million passenger journeys per year (2013/2014, Office for Rail Regulation). Usage of the station is continuing to grow (up 3.5%, 2012/2013 to 2013/2014 and up 19.5% in the last five years).

The quality of the gateway from the railway station to Chelmsford city centre is critical to the image and economic prosperity of England's newest city. Coupled with the redevelopment of a number of major sites in the vicinity of the station, for housing and commercial development, the package will deliver significant environmental enhancements to the public circulation space around the station and better integration with the bus interchange, as well as providing much better circulation, connectivity and capacity improvements, and regenerating the adjacent area.

The work already underway needs to be complemented by improved linkages to the north of the station, reducing conflicts between modes, reducing personal security issues and providing a visible route to the nearby development, and a direct walking and cycle route to the university quarter.

#### • What impact does the scheme have on releasing the growth or overcoming barriers to growth ?

Additional investment in rail and road infrastructure is essential to unlocking the full economic potential of this major Corridor. The Corridor has strong links with the London labour market, supporting substantial commuter flows in and out of the capital, which will increase further when Crossrail is completed in 2018/19.

In north east Chelmsford, investment in the proposed Beaulieu Park station will stimulate a faster pace of development of both residential and employment areas in the urban extension. This will help attract higher value occupiers to the business park more quickly, with knock-on positive effects from this on local job creation and economic output. The proposed station is part of a wider package of journey time, capacity and reliability improvements and is being developed by the "Norwich in 90" Parliamentary Task Force with the assistance of the New Anglia LEP and Network Rail.

This package (Chelmsford Station / Station Square / Mill Yard) is identified within the South East Strategic Economic Plan in the Mid Essex Growth Corridor Transport Investments section (Table 4.12, page 120).

Investment in improvements to Chelmsford Station and the surrounding area is wholly compliant with the aspirations of the Economic Plan for Essex (EPfE) that will update and incorporate the Greater Essex Integrated County Strategy (ICS) and the ECC Economic Growth Strategy (EGS). The package of improvements proposed also supports the delivery of the Essex Local Transport Plan (LTP), and has the support of partner authorities.

The improvements to the internal layout of the station and the extra access points will increase the station capacity and improve linkages with the bus station, while the Station Square works link the station to the passenger transport facilities and cycle parking (CyclePoint). Works on the northern side are required to provide similar linkages to the north, maximising the potential of the Marconi development and the University quarter.

Improved walking and cycling links will help to reduce the barrier of the railway line between the city centre and the university quarter and north-east of the city. The commercial viability of the development on the former Marconi site adjacent to the station, will also improve with the provision of a better, visible walking and cycling link to the mainline station.

#### • What will happen if the proposed project is not funded from LGF ?

With the planned delivery of 16,000 new homes, of which 2,000 are in the city centre, it can be readily assumed that there will be significant growth in the number of rail passengers. The station in its current form cannot adequately handle the number of passengers and, without appropriate improvements, the situation will only get worse. While a number of improvements are being progressed - Station Square and inside the station itself - the northern side of the station is currently dominated by the taxi rank, and walking and cycling routes to the north of the city are indirect and unattractive, and will remain so without LGF funding.

#### • Is there a potential to reduce costs and still achieve the desired outcomes ?

Work has already commenced on the station redevelopment and station square, and the improvements adjacent to Mill Yard complete this package of work. It is not really possible to scale back this project, as once the tunnel (from the station forecourt through to the multi-storey car park, the new development and



ARU) is opened up, it is a case of 'all or nothing'.

#### 3. Benefits

**3.1** Estimate jobs and homes (direct, indirect, safeguarding, construction etc)

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total
Jobs	580	580	580	580	580	580	3,480
Homes	300	300	300	300	300	300	1,800

Describe the methodology of how the number of jobs and homes is estimated

The forecast increase in jobs and homes has been well established through various prior studies such as the Growing Places Fund, the SHMA (Strategic Housing Market Assessment), Strategic Economic & Housing Issues, Growth & Housing Market Renewal etc and it has been assumed that the delivery of new jobs and homes is flat-rated over the period, as shown above.

## • List all main direct and indirect; quantitative and qualitative; cash releasing and non cash releasing benefits associated with the investment

The package supports city centre housing and economic growth, but also wider development. Chelmsford city centre is undergoing rapid and major change. Significant housing and economic growth is now underway around the Rail Station and elsewhere in the city centre.

Chelmsford is poised to develop further with 16,000 new homes planned by 2021, with over 2,000 new homes in the city centre. 20,000 jobs will be delivered by 2021 through expanded retail opportunities, offering up to 100,000m<sup>2</sup> of retail space, including a new anchor store, alongside significant new business development, including an Innovation Centre.

The economic growth includes an expanding Anglia Ruskin University and the MedBIC, which is rapidly attracting new businesses; new office HQ's in the financial services sector; the refurbishment and upgrading of large office premises; the redevelopment of the nearby Essex Cricket Ground; and a major extension to the city centre's retail offering, anchored by John Lewis. Taken together, this commercial growth will deliver in the region of 3,700 new jobs in the city centre.

Alongside this, major redevelopment will bring forward significant new housing in the city centre. Sites already underway will provide in the region of 2,000 new homes in the city centre in the short term. To accommodate such growth in a sustainable way, improvements in and around the Rail and Bus Interchanges are critical to enable new commercial and residential development to be supported by public transport.

Improved walking and cycling links will help to reduce the barrier of the railway line between the city centre and the university quarter and north-east of the city. The commercial viability of the development on the former Marconi site adjacent to the station, will also improve with the provision of a better, more attractive, visible walking and cycling link to the mainline station.

These improved links will also encourage a small amount of modal shift, as walkers and cyclists will be able to utilise an attractive, more direct route than at present, providing a more viable alternative to the car. If the need to use the car to access the station is removed, this may also make the train a more viable alternative for longer journeys. However, the scale of this potential modal shift is difficult to quantify.

Environmental improvements are also important to present the city to in a positive light to potential investors, commercial occupiers and university students.

Specific sites supported by the investment in and around the Station (a plan of these sites in relation to the station is shown in Appendix A1) include:

Sites in the immediate vicinity of the Rail Station:

- City Park West 500 homes, 21,000m<sup>2</sup> commercial floor space (500 jobs). Development underway
- Marconi Evolution 400 homes, 8,500m<sup>2</sup> commercial floor space (500 jobs). Development underway
- Essex Riverside 400 homes, increase in Cricket Ground spectator capacity to 8,000 spectators (supports 250 jobs). Development underway



- New Amlin HQ 6,000m<sup>2</sup> floor space (350 jobs). Development underway
- Anglia Ruskin University (specifically the MedBIC), 1,000m<sup>2</sup> floor space (100 jobs). MedBIC open and 70% occupied
- Hyatt Place refurbished office space of 3,800 m<sup>2</sup> (320 jobs) [Existing floor space].
- Victoria House/Dorset House existing office space of 4,000m<sup>2</sup> (333 jobs)
- Eastwood House existing space of 6,000m<sup>2</sup> (500 jobs).

Large sites, elsewhere in the City Centre, linked to Rail and Bus Interchange:

- Bond Street 11,000m<sup>2</sup> floor space new John Lewis store, 15,500m<sup>2</sup> floor space additional retail and cinema (900 total jobs). Development underway
- Chelmer Waterside 350 to 500 new homes. Planning application expected late 2015.

Letters of support from Abellio Greater Anglia, Anglia Ruskin University (ARU), Chelmsford City Council (CCC), Essex Chambers of Commerce, and Bellway Homes (developers of the former Marconi site) are attached as Appendices E1-E5.

#### 4. Risks

## **4.1.** Provide a summary of key risks to the delivery of the scheme (including financial, commercial, economic and management).

A technical feasibility report has been produced for this package, to inform the detailed design stage, and a detailed QRA has been developed which is shown on Appendix G.

#### 4.2. Risk Assessment

Risk	Description of Risk	Likelihood	Impact	Factor	Risk Mitigation	Risk Owner
Construction Cost Escalation	Construction costs escalate at greater than 2.7%	1	2	2	Allow a sum for inflation in the cost estimate	Ringway Jacobs
Contaminated Material	Discovery of contaminated ground or material on site (including Coal Tar)	4	4	16	Undertake timely site investigation	CCC
Contractor Failings	Contractor has failings in delivery resulting in programme overrun	3	4	12	Tender scheme using appropriate quality questions.	ССС
Gas Utilities	Tender prices at variance with estimates and client budget leading to re-design or scheme cancellation	5	5	25	Obtain recent tender information for use in price base	ССС
Invasive Species	Invasive species found on- site, additional cost for site clearance	2	3	6	Undertake Site Survey	ССС
Noise and Vibration	Claims from nearby residents on noise and vibration	4	4	16	Undertake pre- construction monitoring, Ensure contractor is aware of responsibilities.	ССС
Protected Species	Unforeseen discovery of protected species.	4	4	16	Undertake surveys for protected species, early site clearance	ССС
Statutory Undertakers Diversion Costs	C3 prices at variance with estimates and client budget leading to re-design or scheme cancellation	5	5	25	Timely C3 and C4 requests.	ССС
Tree Preservation Orders	Cost and time overrun associated with mitigating TPO's	5	3	15	Survey Trees, discuss mitigation early	CCC



Tree Preservation Orders	Mitigation for areas of BAP affected is more costly and time consuming than anticipated.	4	4	16	Early identification of impact and mitigation.	ССС
Undeclared Utilities	Discovery of undeclared utilities apparatus during construction	5	5	25	Undertake GPR surveys and timely trial holes.	CCC
Unforeseen Ground Conditions	Soft spots / voids discovered during construction - re- design required	3	4	12	Undertake timely site investigation	CCC
Weather	Weather events hinder or delay the works	4	3	12	Programme Float	CCC
Interaction with working railway	Industry processes to be followed, working periods may be restricted	5	3	15	Programme to reflect processes and restrictions	CCC
Station Access	Access to the station by all modes needs to be maintained	5	3	15	Traffic management programme	ССС
Stakeholder support	Project is complex and requires cooperation between many stakeholders	3	5	15	Regular liaison meetings	ECC / CCC
End of Franchise period	Potential for the franchisee to change w.e.f. October 2016	3	3	9	Ensure incoming franchisee is aware of the ongoing works	CCC
Car parking	Car parking arrangements yet to be agreed	3	4	12	Ongoing discussion with stakeholders	ECC / CCC
Land consent	Consent from National Rail required to work on their land. Consent from AGA required as leaseholder	2	5	10	Regular contact with Network Rail and AGA	ССС

### The Economic Case

#### 5. Options

5.1. Please provide a description of the main options for investment, together with their relative advantages and disadvantages (a SWOT analysis)

Strengths:	Weaknesses:
<ul> <li>The only city in Essex, with a fast growing population</li> <li>Well-established partnership working with CCC</li> <li>Strong and unique connectivity to the markets of London and the south-east, with onward connections to Europe and other international markets</li> <li>High employment rate</li> <li>Significant environmental and historical assets</li> <li>Cultural and tourism appeal</li> <li>Served by major railway line with good connectivity to London</li> <li>Station in city centre location</li> </ul>	<ul> <li>Lack of appeal for passengers arriving at Chelmsford station</li> <li>Poor pedestrian and cycleway access around the station</li> <li>Lack of connected cycleways</li> <li>Conflicts between travel modes in the vicinity of the station</li> </ul>
Opportunities:	Threats:
<ul> <li>Fully utilise the land, labour and capital assets to achieve Chelmsford's economic and growth potential</li> <li>Important location for housing development</li> <li>Commercial development in the city centre</li> <li>Improving sustainable transport links</li> <li>Fully rapide the potential of acapamia linka with</li> </ul>	<ul> <li>Potential decline of London as a world financial services centre</li> <li>Prevailing economic conditions discourage private sector investment, including bringing forward key development sites</li> <li>Public concern that growth will lead to increased congestion as a result of failure to invest in adequate</li> </ul>



London, including capacity to accommodate growth to the East of London	<ul> <li>infrastructure improvement</li> <li>Project is complex and requires cooperation between many stakeholders</li> <li>Area in active use at present, project will cause disruption for in particular taxi drivers, commuters using the premium parking bays, pedestrians using the culvert and the traffic network around the station during construction</li> <li>Potential construction cost increases e.g. if ground contamination levels are higher than expected, or if the brick wall does not have structural capacity required to support a piling rig</li> <li>Possible time delays</li> <li>AGA not receiving renewed franchise and the new TOC not supporting the project</li> </ul>

#### • Do Nothing

Chelmsford is poised for significant housing and economic growth, and ensuring efficient access to the city centre gateways is essential to support this growth. Doing nothing will detract from the image of the City on arrival and will limit future growth opportunities.

#### • Do Minimum

The improved linkages and circulation improvements for pedestrians and vehicles within, outside and nearby the station, (elements a) and b) in the brief project description above), which are already under construction, are considered to be the most viable 'do minimum' option, along with improved lighting and materials for the existing route to the north (as per Appendix F: Proposal 1). While this provides some aesthetic improvements, it does not sufficiently improve the access routes to the north of the station, nor resolve potential conflicts between vehicles, cyclists and pedestrians in the forecourt on the north side of the station.

# • Do Something (best and final option; least net present cost option; highest risk adjusted NPV option; etc)

As per the 'do minimum' option, but also including the replacement of the existing tunnel with a bridge, along with landscaping of the embankment either side, to open up the walking and cycling route to the north-east; serving the new housing development and, the university and existing residential areas. Also, to include reconfiguration and improvement of the public realm and walking and cycling facilities on the north side of the station, to match the works on the south side in the do minimum scenario.

#### 5.2. Recommended Option: What is the preferred option – and why ?

The do something option above is the only option to significantly improve accessibility to the station from the north-east of the city.

The improvements to the station gateway will provide more attractive and efficient access to the city centre to support the housing and economic growth and vitality of the city.

#### 5.3. Provide key information on transport performance indicators, where applicable \*

N/A

\*The scheme promoters are encouraged to use the existing datasets and model outputs to provide this information. The preference would be to use a spreadsheet type of analysis to provide information in the above table.

#### 5.4 Transport scheme assessment approach

5.4.1 Provide a brief description of a (spreadsheet-based) modelling and appraisal methodology as well as detail of data source used

5.4.2 List all assumptions made for transport modelling and appraisal



For a detailed explanation of the methodology used to develop the economic assessment, please refer to Appendix B1.

5.4.3 Provide key positive and negative impacts of the schemes in the table below as described in the Appraisal Summary Table and Social Distribution Impact analysis, where it is appropriate, supported by evidence.

Category of impacts	Quantified/Qualitative impact	Large Beneficial to Large Adverse
Economy	Business users and providers Reliability Regeneration Wider Impacts	Neutral Small Beneficial Medium Beneficial Medium Beneficial
Environment	Noise Air Quality Greenhouse gas Landscape Townscape Heritage Biodiversity Water Environment	Small Beneficial Small Beneficial Small Beneficial Small Beneficial Small Beneficial Neutral Neutral Neutral
Social	Commuting & Other users Accidents Physical Activity Journey Quality Reliability Option and non-use values Security Access to Services Affordability Severance	Medium Beneficial Neutral Small Beneficial Medium Beneficial Small Beneficial Medium Beneficial Small Beneficial Neutral Medium Beneficial
Public Accounts	Cost to broad transport budget Indirect tax	Neutral

The scheme promoters are NOT required to use Tuba type appraisal analysis. If any scheme promoter is interested in estimating value for money then a spreadsheet based analysis should be undertaken.

#### Value for Money Statement

	Present Values in 2010 prices and values
PVB	£ 8,927,441
PVC	£ 4,428,481
NPV = PVB - PVC	£ 4,498,960
Initial BCR = PVB / PVC	2.02
Adjusted BCR	Not adjusted
Qualitative Assessment	No qualitative economic assessment undertaken
Key Risks, Sensitivities	Time frame of development, 52% reduction of journey time benefit BCR=1, no-growth scenario BCR = 1.6
VfM Category	High



#### Commercial Case

#### 6. Procurement Route

Define the approach taken to assess commercial viability

Briefly describe the procurement strategy. Set out the timescale involved in the procurement process to show that delivery can proceed quickly.

The works to the station are being delivered by contractors working for Abellio Greater Anglia and are well advanced, with completion due by Summer 2016. Detailed programming for the remaining work is currently being completed.

The Station Square public realm improvements are almost complete, and have been delivered by Chelmsford City Council (CCC), using contractors sourced via the Eastern Highways Alliance procurement framework under the supervision of Essex County Council as the Highway Authority.

The Mill Yard works will be delivered by CCC, who have led the design work on this project to date, utilising contractors on Abellio Greater Anglia's approved list, experienced in working in the vicinity of stations. CCC have a dedicated procurement team to ensure value for money, and will appoint a consultant to design an appropriate tender specification for the works. CCC, as well as delivering the Station Square works through an ECC approved highways contractor (see <a href="http://www.chelmsford.gov.uk/station-square">http://www.chelmsford.gov.uk/station-square</a>), is currently working on another public realm project at Half Moon Square elsewhere in the city centre. For more information please visit: <a href="http://www.chelmsford.gov.uk/highstreetplans">http://www.chelmsford.gov.uk/highstreetplans</a>

Procurement is programmed to be carried out in late 2015.

Essex County Council have undertaken numerous procurement processes for major schemes. Recent major schemes have included Second Avenue / A414 improvement, Harlow, Nethermayne widening, Basildon and Army and Navy roundabout improvements, all as part of successful DfT Pinchpoint funding bids. These schemes required procurement processes to appoint a principal construction contractor with adherence to restricted timescales to complete the construction works, whilst fulfilling CDM duties and Health and Safety Regulations.

#### **Risk Allocation**

AGA bears the risk for the internal station improvement works.

CCC bears the risk for the Station Square element as the client, with ECC in a supervisory role as the Highway Authority.

CCC will bear the risk for the Mill Yard element of the project as the client.

Maintenance

All highway improvement works implemented will be inspected annually and maintained by the Highway Authority (ECC). Other works will be maintained by Network Rail and Greater Anglia.

### Financial Case

#### • Total cost of the project

List here the elements of gross costs, excluding optimisation bias. Please provide the date the prices for the cost estimate is based on (e.g. Q1 2014)

The Station Square public realm improvements are being funded by Chelmsford City Council through S106 planning contributions of £1.3 million. The cost estimate for Station Square is as agreed between Chelmsford City Council and Essex County Council, prior to the start of the works (being delivered this year - 2015).

Abellio Greater Anglia is making capacity improvements and general enhancements at Chelmsford and they are also providing new stair towers which will provide an improved link between the railway station and the bus station. This has been funded by the National Station Improvement Programme and National Rail Discretionary



fund to a cost of £3.2 million. Costs for the Abellio Greater Anglia works are from their supply chain process. Works commenced in 2014 and are well advanced.

Mott McDonald have prepared an initial estimate and feasibility study for the Mill Yard works (see Appendix D1). These figures have been fed into the full cost estimate (Appendix C1).

The overall package will support and facilitate the delivery of the housing and economic growth as outlined in Section 3.

The cost estimates shown below (and in Appendix C1) are taken from a technical feasibility report and are for Mill Yard only. They have been derived using the Ringway Jacobs Cost Estimating Tool which is based upon commercially benchmarked data. The rates used, reflect construction projects of a similar size and nature, and are at current day prices (as at 3rd Quarter 2014).

Revenue implications will be incorporated into existing programmes.

#### \*Mill Yard costs only

* Cost Estimate status (E; F; D; T)	2015/16 £000	2016/17 £000	2017/18 £000	2018/19 £000	2019/20 £000	2020/21 £000
D						
D	200	170				
D	230	200				
D	66	66				
D	642	642				
D	256	256				
D	34	16				
D	72	71				
	824	763				
	676	658				
	1,500	1,421				
	* Cost Estimate status (E; F; D; T) D D D D D D D D D	* Cost Estimate status (E; F; D; T)         2015/16 £000           D         200           D         200           D         200           D         200           D         200           D         200           D         230           D         66           D         642           D         256           D         34           D         72           824         676           1,500         1	* Cost Estimate status (E; F; D; T)         2015/16 £000         2016/17 £000           D         2000         170           D         200         16           D         66         66           D         642         642           D         256         256           D         34         16           D         72         71           824         763         658           676         658         658           1,500         1,421         1421	* Cost Estimate status (E; F; D; T)         2015/16 £000         2016/17 £000         2017/18 £000           D                £000                £000                £000                £000              £000 <td>* Cost Estimate status (E; F; D; T)         2015/16 £000         2016/17 £000         2017/18 £000         2018/19 £000           D                 £000</td> <td>* Cost Estimate status (E; F; D; T)         2015/16 £000         2016/17 £000         2017/18 £000         2018/19 £000         2019/20 £000           D         -</td>	* Cost Estimate status (E; F; D; T)         2015/16 £000         2016/17 £000         2017/18 £000         2018/19 £000           D                 £000	* Cost Estimate status (E; F; D; T)         2015/16 £000         2016/17 £000         2017/18 £000         2018/19 £000         2019/20 £000           D         -

#### • Source of funding

List here the amount of funding sought

#### \*Mill Yard only

Funding Source	2015/16 £000	2016/17 £000	2017/18 £000	2018/19 £000	2019/20 £000	2020/21 £000
LGF	1,500	1,421				
Private Developers	N/A	N/A				
Borrowing	N/A	N/A				
Income	N/A	N/A				
Other (insert as many rows as required)	N/A	N/A				
Local Contribution Total	N/A	N/A				
Other Funding	N/A	N/A				
TOTAL FUNDING	1,500	1,421				

Please note that the totals for funding should match with the total for project cost.

\*Mill Yard only

Type of Funding	Funding Source	Please identify how secure the funds are	When will the money be available
	LGF	Allocated in Growth Deal subject to this business case	2015/16 and 2016/17
Public	Borrowing	N/A	
	Income	N/A	



	Other (insert as many rows as required)	N/A	
	Local Contribution Total (leverage)	N/A	
	Please list all developers	N/A	
Private			
	Private Developers Total	N/A	
	Other Funding*	N/A	

\*Funding is in place for Station Square and the Station Improvements which are already under construction. The Mill Yard component has been added to the ECC Capital Programme for 2015/16 and 2016/17 to enable its delivery.

#### 6.1. Affordability gap

• *Is there an affordability gap?* With Growth Funding support, no.

#### Management Case - Delivery

#### 7. Delivery

7.1. Provide high level information about arrangements that will ensure delivery of this project

• Project plan

	Feasibility work	Detailed design	Procurement	Start of construction	Completion of construction
Mill Yard	Q4 - 2014/15	Q1 to Q2 - 2015/16	Q3 - 2015/16	Q4 - 2015/16	Q2 - 2016/17

#### • Project management arrangement

#### Background

This plan outlines the project structures and processes that will be used to govern activities.

#### **Project Organisation**

The organisation to deliver the scheme is indicated in Figure 1 below. The roles and responsibilities of the parties indicated in the figure are described in the following paragraphs.





#### **Roles of Key Interested Parties:**

**South East Local Enterprise Partnership Board (SE LEP)** – brings together senior officers and transport portfolio holders of the partner statutory authorities promoting the scheme. Essex County Council acts as the lead authority for the scheme and provides the project's Senior Responsible Owner.

The arrangements between the statutory authorities promoting the scheme are in the process of being formalised through a joint working partnership agreement. This sets out the basis for governance of the project and for the financial contributions to be made by each party.

**Project Board** – is responsible for the direction and overall management of the scheme. The Project Board is chaired by the Senior Responsible Owner and made up of the Executive and Senior User for each of the partner statutory authorities, the Project Assurance Lead and the Business Change Lead. These roles are defined below. Project Board meetings are normally held every six weeks. The Project Manager reports regularly to the Project Board, keeping members informed of progress and highlighting any issues or concerns.

- The responsibilities of the Project Board include:
- · Setting the strategic direction of the project, in the context of local policies and the work of the SE LEP
- Defining the scope and setting the timescales for major project milestones
- Approving the appointment of the Project Manager
- Providing the Project Manager with the strategy and decisions required to enable the scheme to proceed to programme and resolve any challenges
- Securing necessary approvals through the partner statutory authorities
- Approving the project scope of work, programme and budgets, as well as any subsequent changes
- Signing off completion of each stage of the project and authorising the start of the next stage
- Monitoring project risks and taking any appropriate action to mitigate risks.

Delivery Teams - reporting to the Project Manager, the Delivery Teams (one for each partner statutory



authority) are responsible for organising and delivering work packages on the highways under the authority's jurisdiction. The Essex Delivery Team has the additional responsibility for common work packages.

**Project Support** – this team is responsible for project administration, including document control, project team communications, arranging meetings, updating plans, and chasing up the completion of actions.

#### Individual Roles:

**Senior Responsible Owner** (Paul Bird, ECC) – has ultimate responsibility and delegated authority for ensuring effective delivery of the scheme on time and on budget.

**Project Manager** (Specific role to be appointed by CCC) – is the individual responsible for organising, controlling and delivering the scheme. The Project Manager leads and manages the project team, with the authority and responsibility to run the project on a day-today basis. He also is assigned the task of running and updating the risk register and organising the monitoring of the delivery of the programme objectives.

**Executives** – represent the group in each partner statutory authority with responsibility for obtaining funding for the scheme (Chris Stevenson, ECC) and securing resources to deliver it (Danny Stanesby, ECC). In Essex County Council, this is the Transportation Strategy and Engagement Group (Alan Lindsay, ECC).

**Senior Users** (David Forkin, ECC, David Green, CCC, Alan Pickering, AGA) – represent the group in each partner statutory authority who will oversee the future day-to-day operation of the scheme.

**Project Assurance Lead** (Erwin Deppe, Ringway Jacobs) – provides an independent view of how the scheme is progressing. Tasks include checking that the project remains viable in terms of costs and benefits (business assurance), the users' requirements are being met (user assurance), and that the project is delivering a suitable solution (technical assurance).

ECC (the Executive), will delegate delivery of this project to CCC who have led the design work for the scheme to date. CCC will appoint a dedicated project manager to oversee scheme delivery.

Resources to support this project will carryover from the station square work already underway and will be prioritized to ensure efficient delivery of the Mill Yard scheme at the earliest opportunity. Additionally ECC Structures and Highways teams will be available to provide support and project assurance where necessary.

#### Stakeholders / Stakeholder Engagement

- Public consultation has already been undertaken with regard to current works, public engagement and buyin will be undertaken for the specific requirements of Mill Yard. Any outcomes of this consultation will be taken into account in the design and construction process.
- It is recognised that ongoing liaison with key stakeholders (such as bus and taxi operators, nearby schools, developers, land owners, Chelmsford City Council, Abellio Greater Anglia and Network Rail) is essential to ensure engagement and buy-in and also to ensure our work programmes are suitably aligned. Regular meetings between ECC, CCC and rail industry partners have been established.
- Various Letters of Support from key stakeholders such as Abellio Greater Anglia, Anglia Ruskin University (ARU), Chelmsford City Council (CCC), Essex Chambers of Commerce, and Bellway Homes (developers of the former Marconi site), have been obtained and are attached as Appendix E1-E5.
- The objectives for the Stakeholder Engagement Plan are that it:
  - o Communicates and reinforces the branding of the overall plan;
  - Improves awareness and understanding of the proposals;
  - Allows the Project Board to obtain timely feedback on proposals;
  - Helps gauge the level and nature of any opposition that may arise to the proposals and address these appropriately; and
  - Enables the Project Team to explore the opportunities to establish a consensus, as the basis for successful implementation of the proposals.
- Our overall aim is to involve key stakeholders as much as possible. We aim to actively involve key stakeholders in delivery and decision making through an effective stakeholder engagement process.



#### **Risk Management**

A proactive risk management procedure is in operation, including a quantified risk assessment approach, which ensures that risks are continuously identified, owners assigned and mitigation measures put in place. Regular reviews check the status of each risk and regulate their control and mitigation. Project procedures also require that should the likelihood or severity of risks be identified as increasing by this process, responsibility for its mitigation is escalated upwards through the project management chain to ensure that this is achieved.

All risks are currently owned by the partner authorities. As the project develops it is expected that some of these risks will be transferred to contractors constructing the infrastructure. In addition, Essex County Council uses a proprietary online Risk Register to assess levels of risk and to track the progress of the risk management strategy for the scheme. The §151 Officer also has access to this system. Risks are categorised into five main areas, i.e.:

- Project and programme risks related to delivery;
- Consultation and stakeholder acceptance;
- Reputational risks to the project partner authorities (and ultimately the contractors and service providers);
- Statutory Processes; and
- Financial and funding risks.

#### **Monitoring and Evaluation**

Monitoring and evaluation of the scheme will be in accordance with the strategy outlined in the Monitoring Input Spreadsheet previously submitted to the LEP.



#### Benefits Realisation Plan Summary Success Management Benefits When Responsibility How Measured Performance Туре for Delivery Indicator Delivered Economy: Improve the economic efficiency and SEP DFB Completion of full scheme Measure pre-scheme peak period traffic flows, journey Based on PRINCE II Project ECC / CCC 1. Scheme Management principles. reliability of the local road Project times baseline figures Project team will use network by reducing Managers established best practices compared to post-opening. After surveys within 3 months and then 1 year after scheme opening. Surveys on existing & new network. congestion on the main arterial roads. for this type of scheme. Economy: Encourage more DFB ECC / CCC Based on PRINCE II Project 2 SEP Completion of Measure pre-scheme peal Scheme Management principles. Project team will use people to use sustainable full scheme period traffic flows, journey time travel with improved Project baseline figures compared to post-opening - 3 months and 1 established best practices pedestrian access and Managers for this type of scheme. . upgraded cycleway year after. connections. Sustainability: Improve DFB Based on PRINCE II Project 3. SEF Completion of ECC / CCC Measure cycleway usage preand post- scheme – 3 months and 1 year after. Conduct cycle sustainability by providing full scheme Scheme Management principles. improved cycleway and Project Project team will use pedestrian connections Managers surveys to measure levels of established best practices satisfaction - 3 months after for this type of scheme. Similarly, conduct pedestrian surveys – 3 months after. Based on PRINCE II Project 4 Economy: Provide improved SEF DFB Completion of ECC / CCC Measure car peak period traffic Scheme and cost effective access to full scheme flows, journey time baseline Management principles Project Project team will use town centre. figures. Surveys within 3 months and then 1 year after scheme established best practices for this type of scheme. Managers opening. Based on PRINCE II Project Completion of full scheme Conduct specific journey time surveys once scheme is 5. Accessibility: Facilitates SEP DFB ECC / CCC access to city centre. Scheme Management principles. Project Managers complete - 3 months after Project team will use established best practices for this type of scheme. Safety: Address congestion and capacity issues to the city DNFB Based on PRINCE II Project 6. SEP Completion of ECC / CCC Pre-scheme accident baseline figures compared to post scheme Scheme Management principles. opening. After data collection within 1 centre for residential Proiect Project team will use Managers commuter and commercial established best practices year after scheme opening. Figures from ECC accident data traffic. for this type of scheme. base to be supplied by Essex Police ECC / CCC 7. Safety: Flows will be SEP DNFB Completion of Pre-scheme accident baseline Based on PRINCE II Project improved as traffic is taken scheme Scheme figures compared to post Management principles. out of the network Project opening. Project team will use Managers After data collection within 3 established best practices months and then 1 year after for this type of scheme. scheme opening. Figures from ECC accident data base to be supplied by Essex Police Environment: Ensure ECC / CCC IB ECC / CCC All current and proposed Project team will use 8 During design compliance with international, and on Scheme legislation & policies will be established best practices Locally national, regional and local plans, policy and legislation. Defined completion of full scheme Project adhered to for this type of scheme. Managers Full consultation with all key local stakeholders during process DFB ECC / CCC 9 Environment: Minimise ECC / CCC During design Monitor progress regularly Undertake early project programme slippages and delays through the early (weekly) against programme until completion of scheme. Locally and on Scheme Environmental and Defined completion of Topographical checks to Project identification of environmental full scheme Managers avoid later issues. Project topographical issues team will use established best practices for this type of scheme.

As well as the above table, it is worth noting that ECC has significant experience in monitoring schemes to show trends on sustainable transport usage, especially walking, cycling, bus and train. Pre-surveys will be undertaken to determine existing usage and journey times. After scheme completion surveys will then be carried out to show how activity may have increased as a result of the works.

#### • Contingency plans (if applicable)

N/A