Southend-on-Sea Borough Council

Report of Corporate Director for Place

To Cabinet on 15th March 2016

Report prepared by: Paul Mathieson (Group Manager) and Karen Gearing (Major Schemes Project Manager) Major Projects and Strategic Transport Policy Group Agenda Item No.

A127/A1015 Kent Elms Corner Junction Improvement - Local Growth Fund Scheme

Place Scrutiny Committee Executive Councillor: Councillor Terry

Part 1 Public Agenda Item (save for Appendix 8 which is not for publication by virtue of Paragraph 3 of Part 1 of Schedule 12A of the Local Government Act 1972)

1. Purpose of Report

To advise Cabinet that:

- 1.1 Advance works to create a new surface pedestrian crossing of the A127 are complete.
- 1.2 Preliminary options for the main junction improvement works have been developed with a suggested preferred option to be taken forward for detailed design, consultation, and implementation in 2016/17.
- 1.3 Options for a replacement bridge have been developed for consideration by Cabinet and public consultation.
- 1.4 Traffic Regulation Orders and utilities diversions will be required in advance and during the main works in accordance with the New Roads and Street works Act.
- 1.5 The procurement of the contractor for the main works will be made through the Eastern Highways Alliance Framework or Southend Borough Council Term Contract for New Works.
- 1.6 A Workshop with Councillors took place on 4th February 2016 to discuss the site constraints, the design proposals and consider and suggest options. A presentation on value engineering was made by Councillors Aylen and Byford.
- 1.7 The consultation on scheme options including the preferred scheme will commence post Cabinet in March for four weeks.
- 1.8 The budget for the remainder of the works is being sought from the Local

Growth Fund with a contribution from the Council's capital programme for 2016/17

2 Recommendations:

- 2.1 That the options for the highway and footbridge designs are taken forward for public consultation with the advantages and disadvantages set out.
- 2.2 That Cabinet considers Highway and Footbridge Options 1, 2 and 3 as set out in this report and confirms a preference for Highway Option 1, together with Footbridge Option 2, to be presented as such in the consultation and that in the meantime detailed design continues together with any necessary work relating to planning applications, land negotiations and utility diversions:
- 2.3 That Cabinet also confirms that should the land negotiations and/or the cost of diverting underground utilities in the south east verge be prohibitively expensive and therefore not likely to be successfully concluded within the necessary timescale to drawdown the funding, then Options 2 and 3 be considered and proceed concurrently with Option 1 through the consultation and negotiation stage;
- 2.4 Once the results of the public consultation have been considered, that delegated authority be given to the Chief Executive and Corporate Director for Place, in consultation with the Portfolio Holder for Public Protection, Waste and Transport to agree the final option to be taken forward to detailed business case submission, implementation, advertisement of any necessary traffic regulation orders, land acquisition and planning permissions following circulation of these details to all Members and discussions with Group Leaders;
- 2.5 That Cabinet notes that there is no current capital budget for the additional maximum option cost of £1.5million and that once the position of any potential external funding of the scheme is established, there will be a further Cabinet report on the funding of the additional maximum £1.5million.

3. Background

3.1 The South East LEP Strategic Economic Plan identifies the A127 as a key corridor for growth. The A127 links London with Basildon and Southend and Rochford. In Basildon, the A127 corridor is home to one of the largest single concentrations of advanced manufacturing companies in the South of England. It makes substantial contributions to the prosperity of the SELEP area and offers considerable growth prospects. London Southend Airport, now with scheduled air services to Europe and hub airports for onward global travel, and planned business parks, will prove attractive to a wide range of global companies and offers capacity for at least 4,200 additional jobs up to 2021 and a further 3,180 post 2021. Southend and Rochford have agreed the Joint Area Action Plan (JAAP) to unlock these opportunities and the Council has appointed a development partner.

- 3.2 To enable growth in Thames Gateway South Essex the A127 requires substantial improvement and a higher level of maintenance. The 'A127 Corridor for Growth Economic Plan', approved by Cabinet, sets out the rationale and supporting evidence in detail. The A127 Corridor for Growth package is a partnership project between Essex County Council and Southend-on-Sea Borough Council. The Southend element includes A127 Major Scheme Highway Maintenance; Highway and bridge maintenance identified through asset management surveys and the bridge maintenance programme together with the A127 Kent Elms and A127 The Bell junction improvements.
- 3.3 Elements of the A127 Corridor for Growth package have been designated as a "retained" scheme which, subject to the approval of the business case, will be supported by the Local Growth Fund.
- 3.4 The A127/A1015 Kent Elms Corner junction improvement works are programmed to commence construction in 2016/17. The provision of the new pedestrian surface crossing supports the delivery of the main scheme and supports access for pedestrians during the main works. Negotiations are underway with the utility companies in order for the completion of the junction improvement and finalisation of costs. The completion of the main works will be undertaken through the Eastern Highways Alliance Framework (EHAF) or Southend Borough Council Term Contract for New Works with works proposed to commence in 16/17.
- 3.5 The new surface crossing will support a means of crossing the A127 to access amenities for local residents during the main construction works.
- 3.6 The current layout is shown in **Appendix 1** including the new surface crossing completed in December 2015.

4. Options

4.1 Option 1 - Preferred Option – Appendix 2

- 4.1.1 This option provides maximum benefit of the junction improvement with three lanes heading eastbound on the A127 and a right hand turn lane providing improved capacity through the junction. To utilise lane widths of 3.5m and to provide a 3.0m wide footway cycleway to the north, a small amount of land will be required on the north east corner outside the highway boundary.
- 4.1.2 An additional lane is also provided heading westbound on the A127, again providing greater capacity through the junction. To accommodate the widening, the existing verge on the southeast corner (within the highway boundary) will be constructed as carriageway. However, this will have an impact on a significant number of utilities that require diversion. The southwestern side of the junction will also require a small amount of land outside the highway boundary.
- 4.1.3 The existing pedestrian footbridge is affected by the carriageway widening associated with this proposal as the bridge supports will be within the east and west bound running lanes and require the removal of the stepped footbridge.

4.1.4 The newly constructed surface pedestrian crossing remains in place in all the options, but will be modified to suit the new widened layout.

4.2 Option 2 – Appendix 3

- 4.2.1 This option is an alternative to option 1, it still provides three lanes heading eastbound on the A127 and a right hand turn lane, however in this option the lane widths are reduced to 3.25m and the footway/cycleway to the north is reduced to 2.0m which results in no land take.
- 4.2.2 The reduction in lane widths is also applied to the southern side of the junction to lessen the impact on the utilities located in the southern verge. This places the southern channel line on the same alignment within the preferred option, and will still require land outside the highway boundary.
- 4.2.3 The impact on the pedestrian footbridge will also remain the same as the bridge supports will be within the east and west bound running lanes and will require the removal of the stepped footbridge.

4.3 Option 3 – Appendix 4

- 4.3.1 This is a further iteration to Options 1 and 2. As with the alternative option 2 the lane widths are reduced to 3.25m and the footway/cycleway to the north is reduced to 2.0m which results in no land take.
- 4.3.2 The significant change is to the westbound carriageway, this is maintained as two lanes to remove the need to utilise land outside the highway boundary. There is also a lessened impact on utilities. Whilst this removes the need for land it will not provide any increased performance at the junction for westbound traffic and will provide little benefit to the junction capacity.
- 4.3.3 Again the footbridge will still require removal under this option as the supports to the north will be within the east bound running lane and require the removal of the stepped footbridge.

4.4 Pedestrian Routes

4.4.1 Any widening to the carriageway will result in the removal of the pedestrian footbridge as the bridge supports will be within the running lanes on both the east and westbound carriageways. Improvements to the existing bridge to ensure it is retained are not practical as the existing span is inadequate to traverse a widened carriageway, nor is it feasible to retain the approach ramps as the steps are not compliant line with DDA requirements.

4.5 Footbridge Option 1 – Appendix 5

- 4.5.1 This option provides a replacement footbridge that conforms to recommended design requirements within the current design standards. In order to meet these requirements steps and ramps at a gradient of 1 in 20 will need to be provided.
- 4.5.2 The gradient will result in a ramps that are approx. 124m in length on both sides of the junction. Due to available space the configuration on the southern side of

the junction this will require the ramp to wrap around itself several times occupying the majority of the grassed area adjacent to Broomfield Road. This will also have a visual impact on the adjacent properties and restrict their view from the frontage. In order to accommodate the ramps on the northern side, land would be required from both the Eastwood Academy and the car park to the Kent Elms Health Centre.

- 4.5.3 There is also an environmental impact on the existing trees around the junction, as a number of tress would require removal in order to accommodate the structure.
- 4.5.4 Costs associated with a structure of this size is currently estimated to be in the region of £1.5M.

4.6 Footbridge Option 2 – Appendix 6

- 4.6.1 This option provides a replacement footbridge that conforms to the minimum requirements of current design standards. The most significant reduction in standards is the gradient of the ramp to 1:12.
- 4.6.2 This reduced gradient does reduce the length of ramps, but requires landings to be provided at a much greater frequency, which contributes to the overall length. The ramps associated with this gradient are approx. 90m in length on both sides. This reduced length does enable the ramps to be accommodated fully within the highway boundary, it also as a reduced visual impact on the adjacent properties, and impacts on fewer trees.
- 4.6.3 Costs associated with a structure of this size is currently estimated to be in the region of $\pounds 1.3M$

4.7 Footbridge Option 3 – Appendix 7

- 4.7.1 This option provides a replacement footbridge without access ramps, served by steps on each side of the structure. The structure, therefore does not provide a route for wheelchair users or those with mobility impairments meaning that any users who are unable to use the footbridge will be required to cross via the surface crossing.
- 4.7.2 The provision of this structure is a departure from standards which will need to be granted by Southend-on-Sea Borough Council as the Highway Authority in order for it to be implemented.
- 4.7.3 Costs associated with this structure is currently estimated to be in the region of £0.8M

5. Reasons for Recommendations

5.1 Main Scheme Option

5.1.2 Highway Option 1 is the recommended scheme option, this option maximises the junction improvement with negotiated minimum land take (refer to **Appendix**8 for further information on land negotiations). It also maximises the delivery of

the JAAP ambition for 7,380 new jobs and future Rochford and Southend growth, provides access to pedestrians, local businesses, local schools and access to Kent Elms Health Centre and Library, and provide no future expectations to widen the junction in the near future.

5.1.3 The design will be developed further during the detailed design process as the recently installed Phase 1 works are continued to be monitored post opening, along with public consultation and engagement with local schools, businesses and local residents.

5.2 Footbridge Option

- 5.2.1 The choice as to whether a new footbridge is installed at the junction should be based on local conditions and circumstances and the outcome of the public consultation process. From a purely technical point of view there are many junctions of a similar layout that do not have a footbridge.
- 5.2.2 However, paying special regard to the circumstances it is recommended that the footbridge option be considered alongside the highway options and that the preferred option should also include a footbridge as a response to local conditions including the proximity of schools as well as the post monitoring of the pedestrians, which has shown a smaller number of pedestrian still using the bridge. The footbridge option can be further refined into the three options with
 - Option 1 fully compliant with greater cost, visual impact and land required from the playing field and car park;
 - Option 2 is DDA compliant with a relaxation of standards, but has less impact on properties, has a reduced visual impact, requires less green space and is cheaper than Option 1;
 - Option 3 is not DDA compliant, but does provide an alternative route for most pedestrians and has less impact on properties than Option 1 and Option 2 and less cost.
- 5.2.3 The design of the footbridge will be carefully considered in terms of design and appearance to minimise as far as possible the visual intrusion to the area and residents.

6. Corporate Implications

- 6.1 Contribution to Council's Vision & Corporate Priorities
- 6.1.1 This scheme contributes to the Council's visions, particularly in terms of creating a thriving and sustainable local economy and move towards a safer borough by upgrading the junction to the latest design standards.
- 6.2 Financial Implications
- 6.2.1 In total the A127 Corridor for Growth package will draw down £16.6m of growth funding subject to the approval of the Business Case. The funding profile for the projects is as follows:

A127 Bridge and Highway Maintenance Funding Profile

| Funding Profile | FY 2015/16 | FY 2016/17 | FY 2017/18 - 2020/21 | Total |
|------------------|------------|------------|-------------------------|-------------|
| DfT LGF | £400,000 | £300,000* | £7,300,000* | £8,000,000* |
| Southend Capital | 03 | £0 | £0 | £0 |
| | | | | |
| | £400,000 | £300,000 | £7,300,000* | £8,000,000 |

A127 The Bell Junction Improvement Funding Profile

| Funding Profile | FY 2015/16 | FY 2016/17 | FY 2017/18 - 2020/21 | Total |
|------------------|------------|------------|-------------------------|-------------|
| DfT LGF | £0 | £0 | £4,300,000* | £4,300,000* |
| Southend Capital | £100,000 | £100,000 | £520,000 | £720,000 |
| | £100,000 | £100,000 | £4,820,000* | £5,020,000 |

A127/A1015 Kent Elms Corner Junction Improvement Funding Profile

| Funding Profile | FY 2015/16 | FY 2016/17 | FY 2017/18 - 2020/21 | Total |
|------------------|------------|-------------|-------------------------|-------------|
| DfT LGF | £500,000 | £3,800,000* | £0 | £4,300,000* |
| Southend Capital | £0 | £600,000 | £120,000 | £720,000 |
| | £1,000,000 | £4,900,000* | £121,000 | £5,020,000 |

^{*}Subject to business case approval

6.2.2 As shown on the A127/A1015 Kent Elms Junction Improvement funding profile table, budget cost for the project is estimated at £5.020m which includes the completed Phase 1 new crossing works. The 2015/16 funding has been received from DfT, with the 2016/17 funding subject to the approval of the final business case. The contribution from the DfT Local Growth Fund is £4.3m with the remaining £720,000 contribution from the Council capital programme. Following approval from Cabinet to proceed with the preferred option, the Business Case will be submitted to SELEP for the remaining LGF contribution. SELEP has confirmed that it is possible to vire up to 10% within the combined project envelope between individual schemes. Therefore it is possible to increase the £5.02 budget by £800k from the A127 Bridge and Highway Maintenance funding profile will support the £5.8m preferred scheme.

- 6.2.3 Option 1 with negotiated land take for a new eastbound and westbound carriageway = £5.8m

 Option 2 with negotiated land take for the westbound carriageway = £5m

 Option 3 with no land take = £4m
- 6.2.4 Including a footbridge raises the cost, therefore the budget will need to increase as set out below, taking into account the estimate additional cost for a replacement bridge:
- 6.2.5 Footbridge Option 1 £1.5m Ramps at 1 in 20 DDA compliant Footbridge Option 2 £1.3m Ramps at 1 in 12 relaxation to DDA compliant Footbridge Option 3 £0.8m no ramps not DDA compliant
- 6.2.6 The Council will continue to work with SELEP to identify the potential to introduce greater flexibility in the programme, within the overall £16.6m, to ensure maximum benefit can be achieved on schemes that can be delivered in the 16/17 programme.
- 6.2.7 If no or limited external funding is identified to support the inclusion of a footbridge at £1.5million then there may be a need to increase the Council capital contribution to this scheme as currently there is no capital budget within the approved capital programme for the inclusion of a footbridge at a cost of £1.5million.
- 6.2.8 The project programme as set out below is dependent upon ongoing negotiations with utility companies and advance diversions:
 - Cabinet approval to proceed with a preferred option 15th March 2016
 - Public Consultation commences on Monday 21st March 2016 for four weeks closing on Friday 15th April
 - SELEP Business Case Approval June 2016
 - Construction commences Summer 2016
 - Completion of main construction works March 2017
- 6.3 Legal Implications
- 6.3.1 Elements of the traffic management features will require the advertisement of Traffic Regulation Orders with two options requiring land negotiations (refer to Appendix 8 for further information on the land negotiations). It is proposed to re-use the A127/B1013 Tesco compound for these works which will require planning approval.
- 6.3.1 If the option is chosen for a replacement bridge, planning approval may be required.
- 6.3.2 Should the footbridge option 3 be chosen, then a departure from standard will need to be granted by Southend Borough Council to install a footbridge that is not DDA compliant.
- 6.4 People Implications

- 6.4.1 All options provide a pedestrian and cycle crossing at the Kent Elms Junction to allow people with mobility issues to cross the A127 and access local amenities. The scheme affects the lives of all those who live, work and visit the town. The implications are positive as the intention is to provide an improved accessibility and safety.
- 6.4.2 Should footbridge option 3 be chosen it will not be able to accommodate pedestrians who are unable to navigate the steps and will require those pedestrian to cross the surface crossing.
- 6.5 Property Implications
- 6.5.1 Land negotiations are ongoing supported by external professional advice and input from the Group Manager Asset Management and Legal services to ensure that any land transactions conclude at an acceptable appropriate cost. The outcome of these negotiations is not yet decided, but from current discussions there is an appetite to continue to work with the Council to implement Option 1. Refer to **Appendix 8** for further information on the land negotiations.
- 6.5.2 Should footbridge option 1 be chosen it will require land from both Eastwood Academy and Kent Elms Health Centre, as well as have a visual impact upon the properties on Broomfield Road.
- 6.6 Consultation
- 6.6.1 The consultation process for this work is based on the "Southend Together" toolkit which seeks to engage and inform residents businesses and key stakeholders throughout the life of the project.
- 6.6.2 A127 schemes were reported to Cabinet on 8th January 2013 with cross party support towards developing the schemes. Proposals for consultation were contained within that report. The consultation process commenced focusing on community engagement conversations to explore the issues and problems around the junctions to hear the views of residents, businesses, key stakeholders and drivers. The consultation plan for A127/A1015 Kent Elms junction will be reviewed to meet the scheme programme.
- 6.6.3 The engagement consultation exercise for the three A127 schemes commenced in February 2013, with all Councillors given the opportunity to attend a discussion, focus group or feedback session to consider and offer input about potential improvements to the junctions, together with Opposition Group Transport Leads briefings. This was followed by a focused business group session in March 2013 and on site engagement and an online questionnaire.
- 6.6.4 A workshop with Councillors was undertaken on 4th February 2016 to discuss the site constraints and the design proposals and provide an opportunity to offer input into the improvements at Kent Elms Junction. A number of these have been included within the scheme options or are being looked at further to see if they can be delivered and are affordable within the scheme business case. This was accompanied by a value engineering presentation by councillors Aylen and Byford.

- 6.6.5 A further public consultation exercise is proposed for all options included within this report to identify the scheme taken forward to construction.
- 6.6.5 Engagement with local schools, residents and businesses were carried out during Phase 1 advance new crossing works and will continue during the consultation and construction and with consideration during the detailed design process for the main junction improvement works.
- 6.6.6 The A127 Kent Elms consultation process will continue throughout the life of the project and those principles of the Better Southend communications plan will be adopted. The Better Southend website will inform residents, businesses and visitors of the progress of the works throughout the design and construction. Officers will also engage further with those businesses located at the junction.
- 6.6.7 Consultation with the local schools will continue during the detailed design and construction process. As with the A127/B1013 Tesco Junction Improvement a dedicated Public Liaison Officer will be appointed via the contractor to ensure residents, businesses, schools and drivers are kept up-to-date and engaged on the progress of the works.
- 6.6.8 The principles of the Better Southend Transport Access Routeing Plan (TARP) will also be adopted, which seeks to minimise disruption and delay to road users. Investigation and consultation will continue during the design and construction process to determine the best way to maintain access to the businesses, residents and the town during the construction of the works.
- 6.6.9 Due to the ongoing commercial negotiations regarding land acquisition it is recommended that, subject to Cabinet approval to proceed with Option 1, the negotiations be rapidly concluded to provide certainty when submitting the Business Case.
- 6.7 Equalities and Diversity Implications
- 6.7.1 Best practice will be adopted in the design proposals with the aim to improve accessibility for pedestrians, cyclist and the disabled which will be a major factor in the development of the scheme.
- 6.7.2 Footbridge Option 3 will not accommodate all pedestrian user groups and the structure can only be accessed by steps rendering the footbridge non DDA compliant. The surface crossing will provide an alternative.
- 6.8 Risk Assessment
- 6.8.1 Risks are reviewed throughout the life of the project and mitigation measures undertaken to reduce risks.
- 6.9.9 Value for Money
- 6.9.1 The business case for the project is required to provide value for money.
- 6.10 Community Safety Implications

6.10.1 The scheme improves access to local amenities and provides a route for pedestrians, cyclists, wheel chair users to cross the A127 at this location. Improvements to road safety and community safety will be delivered through good design and consideration to standards.

6.11 Environmental Impact

- 6.11.1 The scheme will help deliver an improved local environment and contribute positively towards sustainable transport objectives. Landscape and environmental measures will be considered further during the detailed design.
- 6.11.2 Footbridge option 1 has a greater intrusive and visual impact upon properties on Broomfield Avenue than footbridge option 2 which has a visual impact upon properties on Broomfield Avenue.

7. Background Papers

- 7.1 LTP3 (2011-2026) and the LTP Implementation Plan
- 7.2 Framework for Prioritising Strategic Transport Infrastructure in the SELEP area
- 7.3 Devolving local major transport schemes DfT 31st January 2012
- 7.4 SELEP response to Devolving local major transport schemes
- 7.5 Devolving local major transport schemes: consultation responses
- 7.6 Local frameworks for funding major transport schemes: guidance for local transport bodies DfT 23rd November 2012.
- 7.7 Report to Cabinet 8th January 2015: A127 Kent Elms, A127 The Bell Corner and A127 Tesco Junction Improvements and progress of South East LEP Local Transport Body
- 7.8 Report to Cabinet 17th March 2015: A127/1015 Kent Elms Corner Junction Improvement Local Growth Fund Scheme
- 7.9 A127 Corridor for Growth An Economic Plan March 2014

8. Appendices

8.1 **Appendix 1** – Existing layout plan with new surface crossing

Appendix 2 – Option 1

Appendix 3 – Option 2

Appendix 4 – Option 3

Appendix 5 - Bridge Option 1

Appendix 6 - Bridge Option 2

Appendix 7 – Bridge Option 3

Appendix 8 - (Confidential)