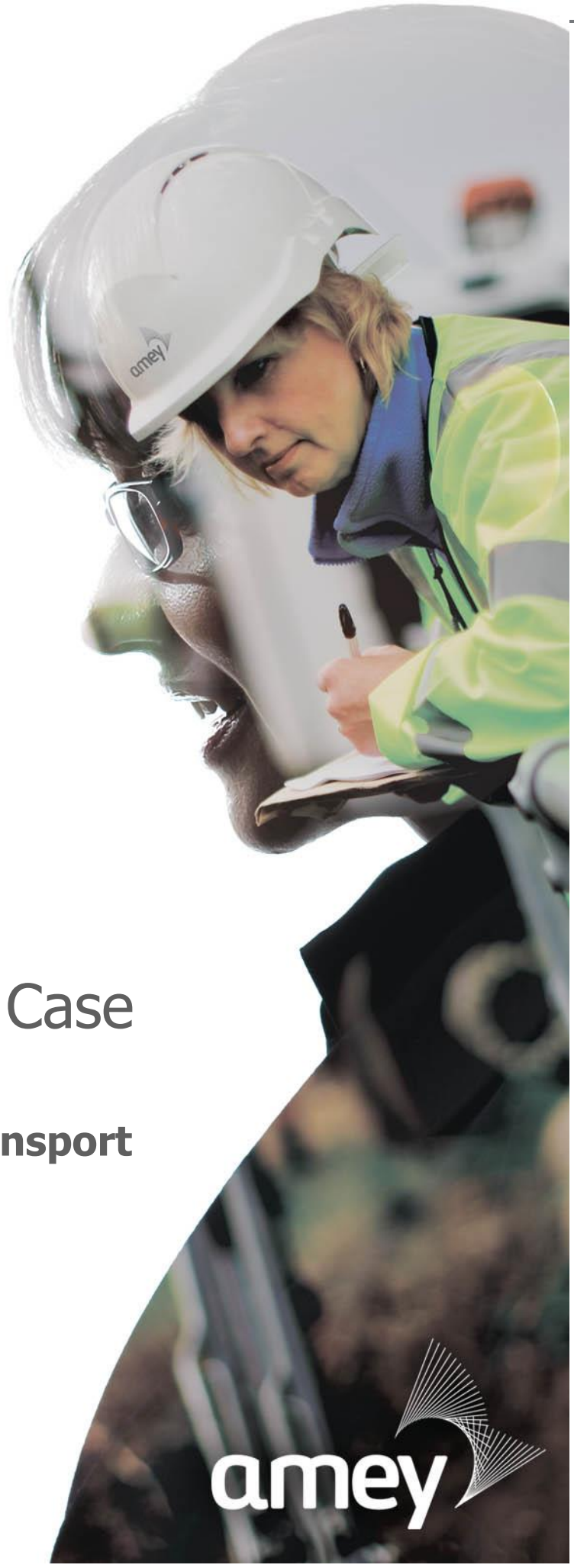

Transport Business Case Report

Maidstone Integrated Transport Package – Phase 2

CO04300618/003 Revision 02

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Contents

1 Introduction

1.1 SELEP Schemes – Business Case Preparation

1.1.1 Amey have been commissioned by Kent County Council (KCC) to develop proportionate business cases for various South East Local Enterprise Partnership (SELEP) schemes being promoted by Kent to be funded by the South East Growth deal as part of the Government's Local Growth Fund. This report supports the application for SELEP funding for the Maidstone Integrated Transport Package.

1.2 Maidstone Integrated Transport Package

1.2.1 The Maidstone Integrated Transport Package (ITP) aims to reduce congestion and ease traffic movements through the town. The scheme's purpose is to help fulfil the strategic aims of delivering the SELEP housing and employment growth targets, delivering the Maidstone Borough Council Transport Strategy and Local Plan, while complying with DfT transport scheme performance and approval criteria to justify investment of capital funds. The packages of measures were agreed at the Maidstone Joint Transport Board in 2015.

1.2.2 Due to the proximity of a built-up area in the neighbouring Tonbridge & Malling (T&M) district, some elements of the emerging T&M local plan are also pertinent.

1.2.3 The overall Maidstone ITP has an estimated value of £13.9 million. This total is broadly split across funding years from 2016 to 2020 and comprises of £8.9 million LGF contribution and £5.0 million private sector contribution. Additional potential for funding from the Local Authority is under review.

1.2.4 The Maidstone ITP is intended to be delivered in a phased approach as the exact scheme proposals for some elements of the package would be developed in greater detail. The first phase of the Maidstone ITP are the proposed junction improvements at either end of Willington Street, located to east of Maidstone town centre. This phase is going through detailed design and consultation currently. Through the development of the remaining schemes within the package, challenges have presented themselves which has meant a change in priority to ensure continuity of delivery whilst achieving the LGF spend profile.

1.2.5 The second phase, and the focus of this business case, is the proposed improvements to and around Coldharbour roundabout on the A20 to the north west of Maidstone

town centre. Coldharbour roundabout is the intersection of the A20 and a link road to the M20 J5. The scheme is needed at this stage due to the considerable growth in the local area. The recent planning application to the South of the site will have an increased impact on the existing congestion currently experienced. It is therefore imperative that infrastructure is implemented to ensure that congestion is reduced, and journey time reliability is improved to allow extensive growth in the surrounding areas.

1.2.6 The improvement works are also required now to allow delivery which will compliment the Managed Motorway works between junctions 3 and 6 of the M20 and before extensive works are carried out around M20 Junction 5.

1.2.7 Coldharbour roundabout is a signalised roundabout which is a key pinch point due to traffic movements on the A20 between the Maidstone and Malling (Ditton) built-up areas; and movements from each of the built-up areas to and from the motorway.

1.2.8 The scheme is predominantly the enlargement of the roundabout; whereby it is changed to a non-signalised roundabout. The scheme costs are covered in a later chapter but are broadly £4m, with the total scheme costs, in addition to the construction, including a land-take and associated works at nearby junctions.

1.3 Area Description

1.3.1 The scheme is located very close to the Maidstone Borough border and is just into the Borough of Tonbridge and Malling (T&M) however it is still very interlinked with the built up area (BUA) of Maidstone. The Malling portion of T&M (known as Ditton in the census built-up areas) is almost contiguous with Maidstone BUA. The proposed scheme is located on the A20 which is one of the key radial routes leading through the Maidstone built-up area to the town centre, via a P&R site and new housing sites. The A20, in the opposite direction also, serves a built-up ribbon through Malling (initially Aylesford and Royal British Legion Village). The location is shown in Figure 1-1.

1.3.2 In the immediate vicinity ¼ mile west, this ribbon development includes a variety of retail parks, the Royal British Legion Village, developing housing sites, and serves as a key route to Maidstone Hospital (B2246 Hermitage Lane) and the Maidstone NW strategic allocation.

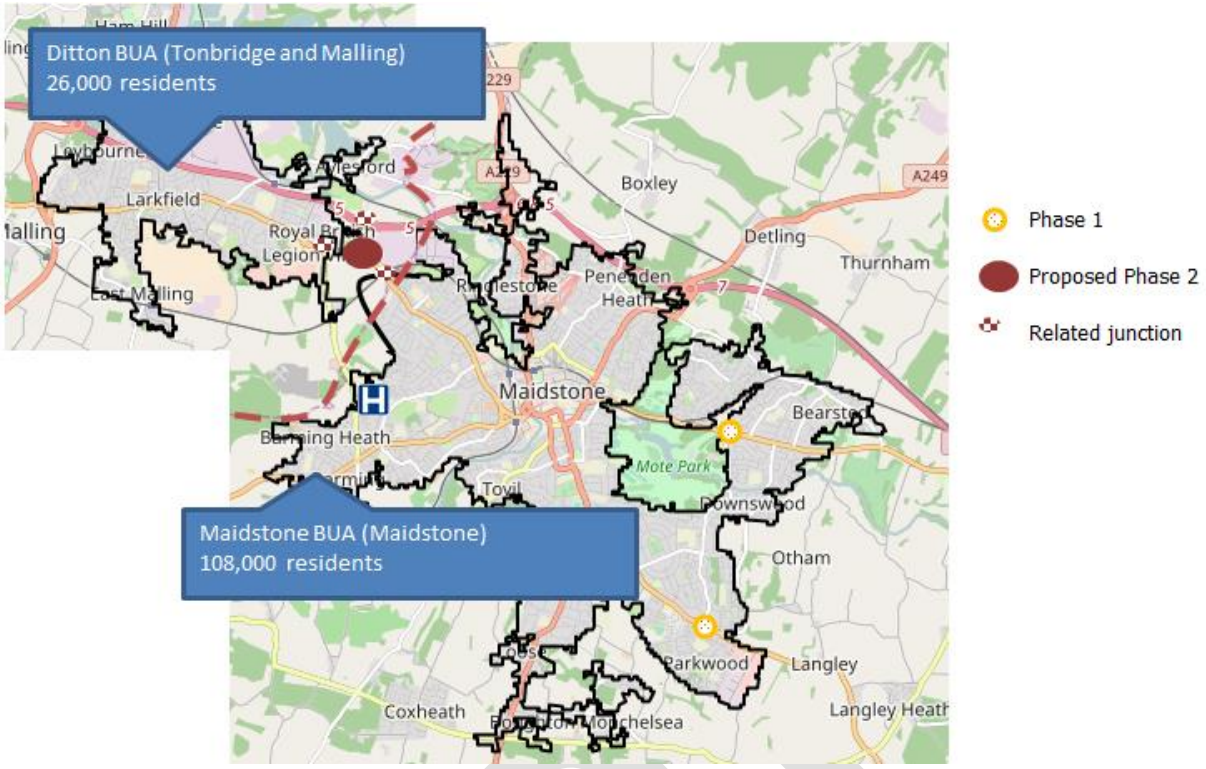


Figure 1-1 : Maidstone and Ditton built-up areas (scheme shown)

1.3.3 To the west of the site, the A20 continues into Tonbridge and Malling passing through the settlements of Ditton, Larkfield and Leybourne. This section of the A20 experiences congestion and some queueing at junctions.

1.3.4 The M20 passes to the north of Maidstone town centre and can be accessed from Maidstone from Junction 5 to 8. It can be accessed from the T&M district at J4.

1.4 Background of the Transport Business Case

1.4.1 In July 2014, the government negotiated a Growth Deal with 39 Local Enterprise Partnerships (LEPs), which were awarded a significant proportion of a £12 billion Local Growth Fund.

1.4.2 The South East Local Enterprise Partnership (SELEP) brings together key leaders from business, local government, further and higher education in order to create the most enterprising economy in England through exploring opportunities for enterprise while addressing barriers to growth covering Essex, Southend, Thurrock, Kent, Medway and East Sussex. It is the largest strategic enterprise partnership outside of London.

1.4.3 SELEP has secured £442.2 million in funding from HM Government to boost economic growth – with a particular focus on transport schemes that will bring new jobs and homes until 2021. This includes £358.2 million for new growth schemes on top of £74

million already committed for large transport projects. For Kent the funding allocation is £104 million which was won by the Kent & Medway economic partnership – the local arm of the SELEP.

1.4.4 The government asked all LEPs as part of their Growth Deal to sign up to working with them to develop a single assurance framework covering all Government funding flowing through LEPs, to ensure all LEPS have robust value for money processes in place. The purpose of this LEP assurance framework is to develop confidence in delegating funding from central budgets and programmes via a single pot mechanism. As part of their Growth Deal, LEPs will be expected to use this national framework to inform how they work locally, which must be set out in their own local assurance framework.

1.4.5 It is important that all LEPs have robust arrangements in place to ensure value for money and effective delivery, through strong project management, project and options appraisal, prioritisation, and business case development.

1.4.6 The methodology used to assess value for money and the degree of detail to which business cases are developed in support of particular projects or programmes should be proportionate to the funding allocated and in line with established Government guidance including the HM Treasury Green Book. Typically the Government expect business cases to address, in a proportionate manner, the 5 cases set out in supplementary guidance to the Green Book.

1.5 Purpose of this Document

1.5.1 This report follows the 5 case model guidance issued by DfT for Business Case preparation. The intention of the report is to provide robust evidence to SELEP of the merits of the Phase 2 improvements and their role as a key part of a wider integrated transport strategy for Maidstone; and justifying the application for the earmarked 2018/19 funding allocation.

1.6 Structure of the Document

1.6.1 This report is structured in accordance with the Department for Transport's guidance on Transport Business Case, which was updated in January 2013. Following this Introduction, the remainder of the document is structured as follows:

- Chapter 2 provides a description of the scheme;

- Chapter 3 states the Strategic Case;
- Chapter 4 presents the Economic Case including the Value for Money Statement;
- Chapter 5 outlines the Financial Case;
- Chapter 6 details the Commercial Case; and
- Chapter 7 provides the Management Case.
- Chapter 8 offers Conclusions and Recommendations.

2 Coldharbour Roundabout

2.1 Introduction

2.1.1 The Coldharbour roundabout experiences significant congestion particularly during the AM and PM peak periods.

2.1.2 The scope of the scheme is to enlarge the roundabout using available land to the north-west of the roundabout (owned by the Royal British Legion Village).This is shown as Figure 2-1.

Figure 2-1: Scheme proposal

2.1.3 The Scheme will include:

- Enlarging of the roundabout to 100m+;
- Additional entry lanes allowing lane designations that better align with volume;
- Removal of signalisation.

2.1.4 Plans showing the specific improvements proposed at the junction are contained within Appendix A of this report.

2.2 Purpose of the Scheme

2.2.1 The scheme will both reduce congestion and unlock housing sites.

2.2.2 In addition the new design will remove an accident conflict point where only one lane from the west serves the two exit lanes to the M20; which causes queue-jumping by using the other approach lane.

2.3 Complementary Measures

2.3.1 Consideration of some changes to the M20 J5 interchange is also being looked at to ensure benefits are locked-in. If necessary the off-slips can be signalised.

2.3.2 There is also developer-funded work at Hermitage Lane; and a possible new link to the south between Hermitage Lane and 'Poppyfields' roundabout (adjacent junction to the east).

2.3.3 These associated junctions are shown in Figure 2-2.

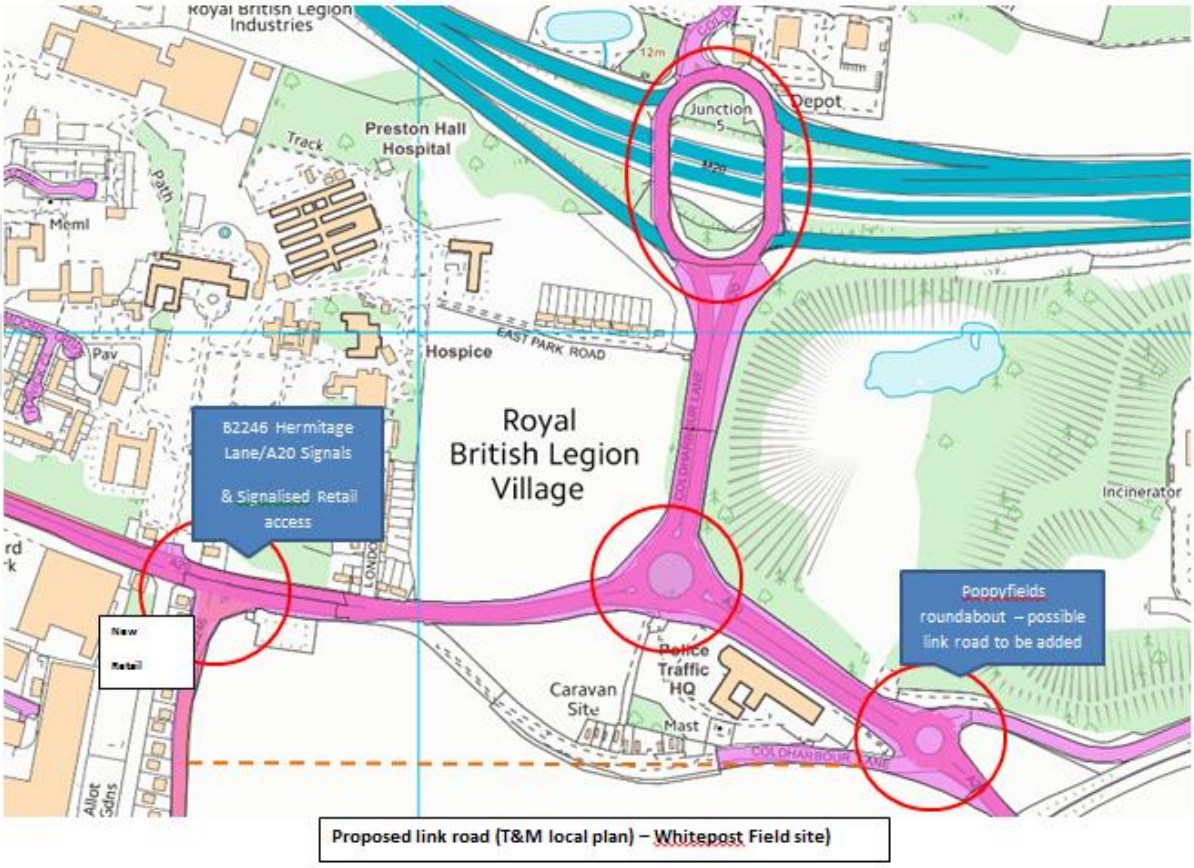


Figure 2-2: Associated junctions

3 Strategic Case

3.1 Introduction

3.1.1 This section sets out the 'case for change', by explaining the rationale for making investment and presenting evidence on the strategic policy fit of the proposed scheme. This section also sets out the scheme options under consideration.

3.1.2 The Strategic Case establishes the:

- Context for the business case, outlining the strategic aims and responsibilities of Kent County Council (KCC);
- Transport related problems that have been identified, using evidence to justify intervention and examining the impact of not making the investment;
- Specific, Measurable, Achievable, Realistic and Time-bound (SMART) objectives that solve the problem, identified through alignment with KCC's strategic aims and responsibilities;
- Measures for determining successful delivery of the objectives;
- Scheme scope, determining what the project will and will not deliver;
- Analysis of constraints and opportunities for investment;
- Breakdown of interdependencies on which the successful delivery of the scheme depends;
- Details of main stakeholder(s); and
- Evaluation of the options considered.

3.2 Strategic Context

National Transport Priorities

3.2.1 The Government has long-term objectives aimed at improving the economy, environment and society. These are the three tenets against which major transport infrastructure projects are assessed, and will continue to be assessed in the future.

National Infrastructure Delivery Plan 2016-2021

3.2.2 In its National Infrastructure Delivery Plan 2016-2021, the Government presents Highways England's 8 objectives during Road Period 1:

- Making the network safer: with a target of 40% reduction in the number of people killed or seriously injured on the SRN against 2005-09 period by the end of 2020;
- Improving user satisfaction: by March 2017, 90% of people responding to the National Road Users' Satisfaction Survey need to be either fairly or very satisfied;
- Supporting the smooth flow of traffic: minimise delay and inconvenience to road users and ensuring at least 97% of the SRN is available to road users and ensuring at least 85% of incidents are cleared within 1 hour;
- Encouraging economic growth by working to minimise delay on the SRN;
- Delivering better environmental outcomes;
- Helping cyclists, pedestrians and other vulnerable road users of the SRN;
- Achieving real efficiency: delivering total capital savings of at least £1.2 billion by the end of Road Period 1; and
- Keeping the SRN in good condition: including an ambitious resurfacing programme.

3.2.3 The scheme is aiming to reduce congestion for the study area, both private motor vehicles and for the bus routes between Maidstone and Malling. Important bus routes are the 71/72 Arriva Greenway (Maidstone – Ditton), and one of the routes from the hospital to the town centre. These are shown in Figure 3-1.

Figure 3-1: Bus routes

National Planning Policy Framework 2012

3.2.4 The National Planning Policy Framework (NPPF) was published in March 2012 and is designed to set out how planning authorities are expected to enable sustainable development. In order to achieve this it sets out an overarching presumption in favour of sustainable development, taking account of the three dimensions of:

- An economic role relating to building a strong responsive and competitive economy. In relation to the planning system this is fundamentally about ensuring that sufficient land is available to enable job creation, together with the infrastructure to support this;
- A social role in supporting strong, vibrant and healthy communities, with an emphasis on the provision of housing in the context of high-quality built environment and access to local services; and
- An environmental role in terms of protecting and enhancing the local environment and helping mitigate and adapt to climate change.

3.2.5 Transport and connectivity play a key role in all three of these dimensions and the NPPF contains a section which outlines this and sets out a number of key requirements in terms of planning and decision making by local planning authorities. Much of this is about limiting the impacts of developments and improving their long term

sustainability.

Regional Transport Priorities

South East LEP: Growth Deal and Strategic Economic Plan 2014

3.2.6 In March 2014, the SELEP submitted their Strategic Economic Plan (SEP). Within the six year period covered by the SEP (2015/16 to 2020/21) several considerable developments are planned within Kent. Kent is South East England's fastest recovering region and has potential for successful economic growth. Over the last 20 years Kent has seen 100,000 more people living in the county, housing stock increase by over 60,000 homes and 130,000 more cars on the road. The pace of change is set to accelerate further over the next 20 years with a projected 8% population increase.

3.2.7 Through the Kent and Medway Growth Deal (as part of the Strategic Economic Plan), the public and private sectors intend to invest over £80 million each year for the next six years to unlock potential through:

- Substantially increasing the delivery of housing and commercial developments;
- Delivering transport and broadband infrastructure to unlock growth;
- Backing business expansion through better access to finance and support; and
- Delivering the skills that the local economy needs.

3.2.8 The integrated transport package for Maidstone has been included in the South East Local Enterprise Partnership provisional allocation for transport schemes starting in 2016-17 and beyond. The proposed Phase 2 is a key feature of the integrated transport package.

Local Transport Priorities

Growth without Gridlock/ LTP4 2016-2031

3.2.9 Growth without Gridlock is the delivery plan for transport investment in Kent, published in 2010. It sets out the priorities for transport investment and how these will be delivered in order to meet the current and future demands of the County in the context of its crucial role in the UK and European economy.

3.2.10 The overarching goal of Growth without Gridlock is to enable growth and prosperity for Kent and the UK as a whole. Although predating the South-East LEP Strategic Economic Plan, the key elements of both are entirely in accord. This has enabled the

development of an effective package of transport schemes to be brought forward as part of the Local Growth Fund investment.

3.2.11 In Growth without Gridlock, Maidstone is identified as an area experiencing severe congestion. The key transport challenges facing the town are;

- Tackling congestion hotspots and areas of poor air quality, particularly in the town centre and on the A roads into Maidstone;
- Providing multi-modal access to the town for development proposed to meet the Borough's challenging housing target;
- Maintaining accessibility to the town centre by public transport;
- Maintaining and enhancing rail services, particularly to the City of London.

Local Plans – Maidstone and Tonbridge and Malling

3.2.12 The scheme is one of a number of improvements that have been agreed by Maidstone Borough Council and Kent County Council JTB (Joint transportation Board) in the list of measures in the Maidstone ITP.

3.2.13 The Coldharbour area is acknowledged as being outside the district boundary but still significant with regards to the successful delivery of the Maidstone Local Plan (adopted). In addition some elements of the Tonbridge and Malling Local Plan (emerging) are also relevant.

3.2.14 Therefore, for this phase of the Maidstone ITP, it is more important to focus in on aspects of both local plans. The key locations is close proximity are shown in Table 3-1 and Figure 3-2.

Table 3-1 Proximal development sites to Coldharbour roundabout

		Dwellings
Maidstone NW	Maidstone	1200
Whitepost Field, Aylesford (Gladman)	Malling	800
East Malling Research (EMR)	Malling	1300
Preston Hall	Malling	200
Nursery Fields	Maidstone	400
Total		3900

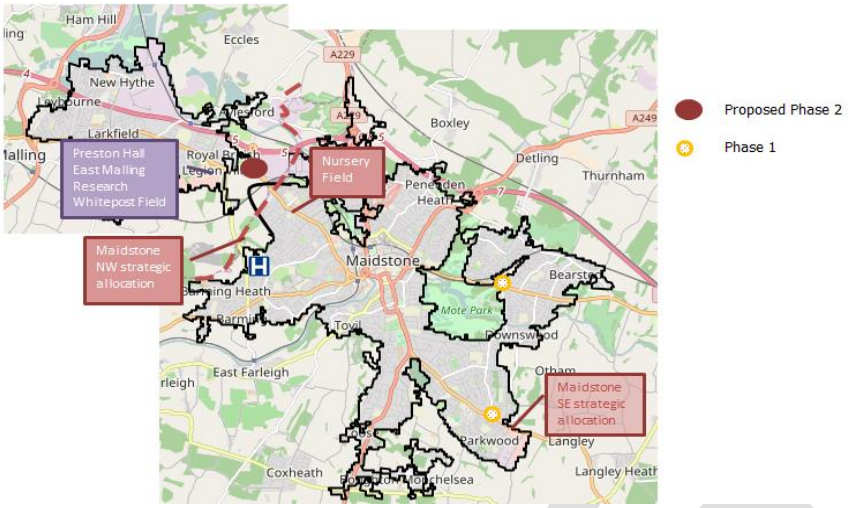
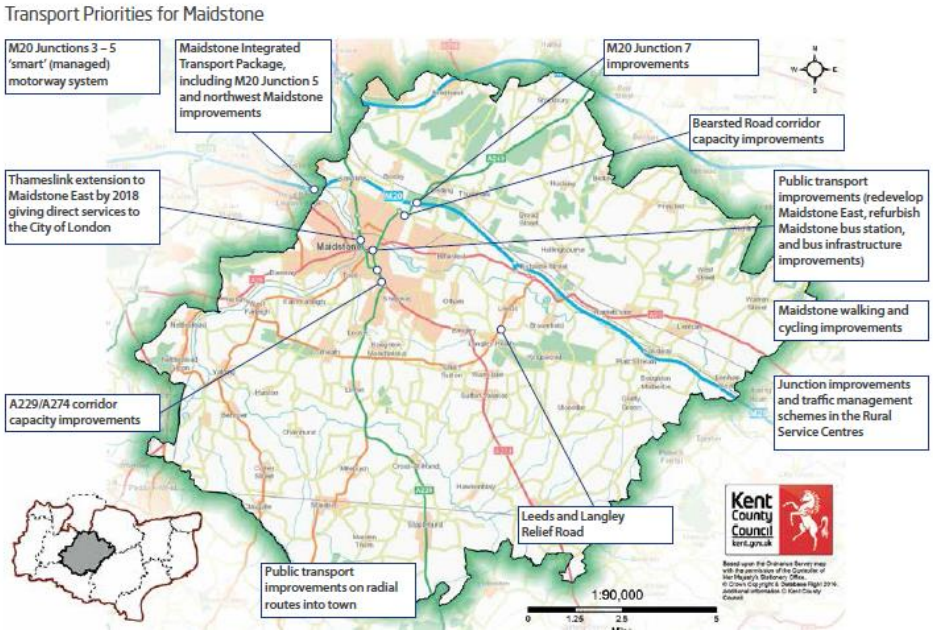


Figure 3-2: Development sites

3.2.15 In addition there is broader growth in both Maidstone and Malling, of which a notable proportion will load the scheme area.

Local Transport Plan 4: Delivering Growth without Gridlock 2016–2031

3.2.16 Maidstone and the ITP are clearly identified in this document; aiming to build on a delivered LGF scheme of the Maidstone Bridges Gyratory.



Air Quality Management Area

3.2.17 The scheme is not within an AQMA but significant queuing, can cause network affects to nearby AQMAs in both the districts of Maidstone and Tonbridge & Malling.

3.3 Problem Identified

3.3.1 Kent's LTP4 identified the following key transport related issues affecting the county;

- Transport congestion;
- Supporting economic growth;
- The need to improve access to jobs and services;
- The need for a resilient;
- Importance as a UK gateway; and
- A safer and healthier county.

3.3.2 The urban area of Maidstone currently suffers from severe traffic congestion with excessive delay on many of the major radial routes into the town during the peak periods. The highway network of Maidstone is dominated by radial routes and the potential to move between these main corridors is limited. Consequently there are a number of key locations where traffic converges which have been identified as congestion 'hotspots'.

3.3.3 Throughout the urban area of Maidstone the highway network is operating close to capacity during the peak periods. The existing heavy delays are prone to rapid escalation in response to problems that arise at recognised congestion hotspots and from any interruption to traffic flow, however small. This situation is exacerbated by any incidents on the M20 locally and on the M20 corridor generally, the impact of which rapidly spills over into and across the whole town. Delays and congestion through the town result in traffic searching out alternative routes, often on inappropriate roads.

3.4 Current Conditions

3.4.1 The existing traffic conditions in the study area have been captured through the collection of manual classified turning counts and queue length surveys.

Manual Classified Junction Turning Counts

3.4.2 The peak hour turning movements are summarised in Figure 3-3.

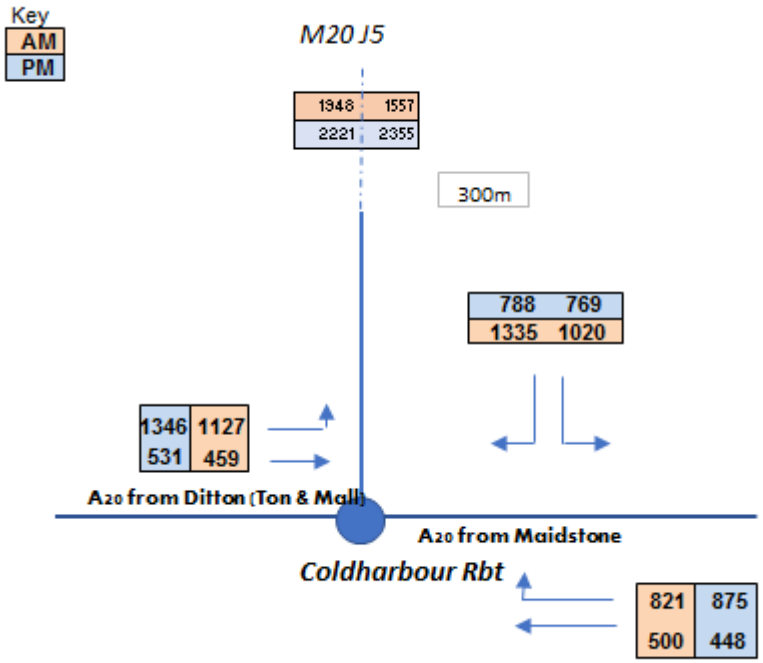


Figure 3-3 Turning Movements (Vehicles)

3.4.3 The notable points are the high flow of traffic from the motorway in the AM, and high flows from the Ditton side in both time peaks.

Queue Length Surveys

3.4.4 Queue length surveys are shown in Figure 3-4. All 3 links (6-arms) exhibit queueing at certain points. In addition forcing behaviour is observed in the circulatory movements due to the minimal stacking capacity.

Accidents

3.4.5 The site appears 8th on the Tonbridge and Malling crash cluster list (76th in the county overall). In addition, as previously mentioned, there is a layout issue that lends itself to a crash-type in heavy traffic conditions.

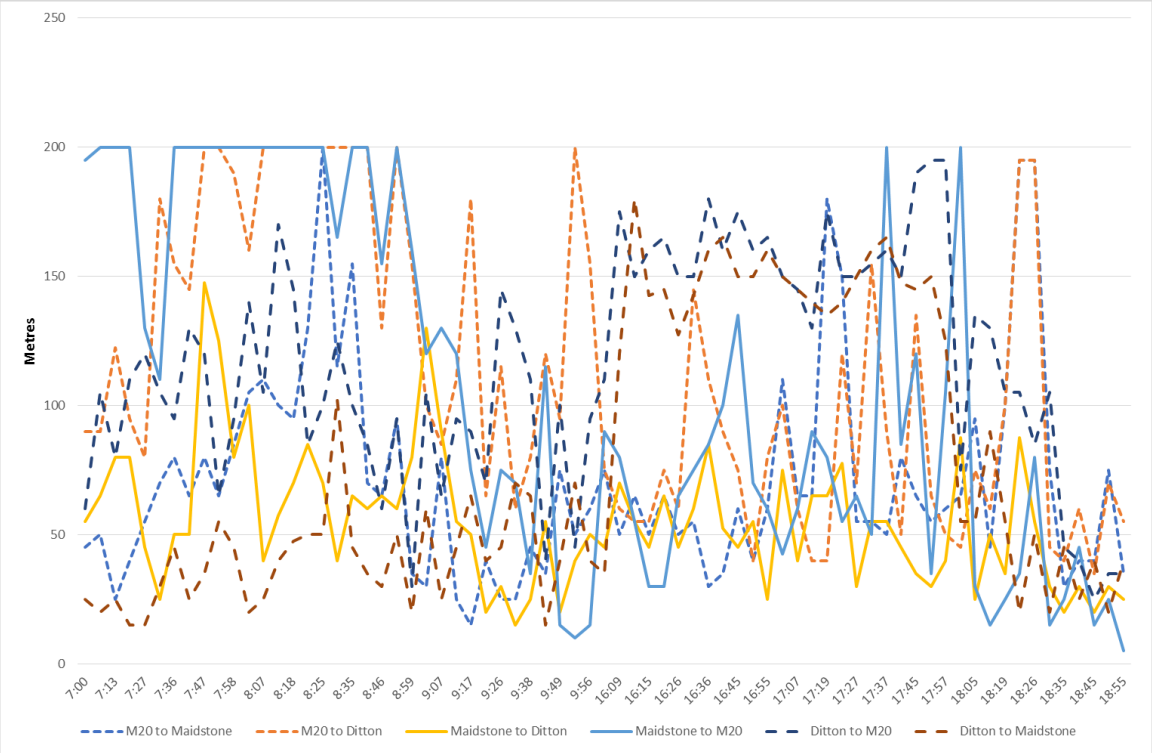


Figure 3-4: Queue Survey

3.5 Impact of No Change

3.5.1 Allowing the existing situation to continue is likely to worsen the levels of congestion and delays described above. This will present a constraint to the planned development aspired for the west side of Maidstone Borough and the east of Tonbridge & Malling Borough.

3.5.2 The introduction of further homes and employment opportunities to the local area will inevitably increase the number of people using the already saturated highway network. Increasing delay and congestion will encourage drivers to use inappropriate minor roads and to take longer circuitous routes to their destinations.

3.5.3 Bus services will be exposed to the same delay and congestion which will worsen journey times and the reliability of services.

3.5.4 Although the air quality recorded at the monitoring stations is above the recommended threshold it will deteriorate as a consequence of additional traffic travelling through the congestion 'hotspots'.

3.5.5 Excessive congestion at key points on the network will further inhibit movement around the town. This in turn will make the town less accessible and consequently less attractive as a retail and business centre.

3.6 Internal Drivers for Change

3.6.1 A key delivery strand of 21st Century Kent Unlocking Kent's Potential, "Growth without Gridlock" outlines how economic growth and regeneration can be delivered in a sustainable manner and also details the infrastructure required to deliver an integrated transport network which is fit for purpose in the 21st Century. If Kent is to accommodate this growth, its transport network must have sufficient capacity and resilience to provide for efficient and reliable journeys.

3.6.2 A main objective of the proposed improvements is to reduce delay and congestion through the junction. This will allow the surrounding network to operate more efficiently and also present some potential capacity to accommodate the future trip growth arising from the new development in and around Maidstone and Tonbridge & Malling.

3.7 External Drivers for Change

3.7.1 Journey time reliability and congestion are the primary drivers and the planned growth of housing and jobs across the South East will exacerbate the existing problems. Whilst KCC has the power and ability to control what happens within its boundaries, it cannot be accountable for development elsewhere in the South East which may have repercussions within its boundaries.

3.8 Objectives

3.8.1 The objectives of the scheme align with both local and national strategic aims. The main purpose of the scheme is to increase the efficiency of the junction, to ease congestion and enable future growth and redevelopment of Maidstone and Tonbridge and Malling area.

3.8.2 The following are the primary objectives associated with the scheme:

- Objective 1: Improve the efficiency of the junction thereby relieving congestion;
- Objective 2: Improve journey times and journey time reliability for those travelling through the junction.

3.8.3 Achieving the primary objectives will inevitably lead to a number of secondary objectives being realised although these may not be directly linked. These are likely to be:

- Arrest the deterioration in air quality;
- Improve access to the 20-20 Business Park and South Aylesford Retail Park; and
- Increase capacity on the network to accommodate further development.

3.8.4 It can be seen that both primary and secondary objectives accord well with the strategic aims of both the local authority and national policy.

3.9 Measures for Success

3.9.1 It is envisaged that the measures of success will be gauged by the easing of travel delays through the study area during the peak hours, the delivery of planned housing and employment growth within the area and improved queueing at the junction.

3.10 Constraints

3.10.1 The key constraints likely to affect delivery of the scheme are summarised below:

- KCC committee approval;
- Statutory procedures must be completed in time for works procurement, construction preparation, and the main works;
- LGF funding allocation granted by SELEP.

3.11 Interdependencies

3.11.1 This second phase of the ITP is aligned with Phase 1 and the likely following phases, towards mitigation of traffic growth impacts in SE and NW Maidstone.

3.12 Stakeholders

3.12.1 Key stakeholders have been identified by KCC who will play a key role in ensuring that the scheme is not only delivered successfully, but also operated and maintained in future. The list of Stakeholders identified by KCC is neither definitive nor exhaustive and will be added on to during the transport business case process. The following have been identified at this stage:

- Maidstone Borough Council;
- Tonbridge & Malling Borough Council;

- Royal British Legion Institute (RBLI);
- Highways England;
- Arriva (buses);
- Land-use developers;
- South East Local Enterprise Partnership;
- Local residents and businesses; and
- Regular users of affected transport facilities (road, walk and cycle).

3.12.2 In addition to these stakeholders, it is anticipated that a number of KCC staff will be consulted across a range of departments.

3.13 Options

3.13.1 Due to the proximity to the motorway, and the high proportion of users heading to/from there, the options have been limited to highway improvements rather than demand management or public transport interventions.

3.13.2 An earlier intermediate scheme of a dedicated lane from W to N was rejected due to having a minimal design life.

3.13.3 KCC have considered alternative solutions to improve the operation of the A20 Coldharbour roundabout.

- Converting to signalised T-junction
- Enlarged signalised roundabout

3.13.4 These were dismissed as they provided less capacity, and there was a preference to remove/avoid signals if possible.

4 Economic Case

4.1 Overview

4.1.1 The Economic Case provides evidence of how the scheme is predicted to perform, in relation to its stated objectives, identified problems and targeted outcomes. The Economic Case determines if the proposed scheme is a viable investment, whose strengths outweigh its weaknesses and which provides good value for money.

4.2 Appraisal

4.2.1 The appraisal was based on the time-savings between the current design (modelled in LINSIG) and the proposed design (modelled in ARCADY). A spreadsheet based (TUBA-like) comparison of vehicle-hours between the DM ('without'-scheme) and DS ('with-scheme) was undertaken. Whilst this method is deemed appropriate for this intervention, it is noted that it does not provide all the output, and 'spreads' that TUBA is able to do. For instance indirect-taxation changes are ignored. Nonetheless, this approach quantifies the key metric of delay (s) changes, as a proxy for journey-time benefits. This is broken down by time-peak.

4.2.2 The approach used is consistent with the appraisal used in Maidstone ITP Phase 1 and other SELEP schemes such as A226 London Rd/St Clements Way, Dartford.

4.2.3 Previous experience of comparing a scheme change between two junction types (from signals, or signalised roundabout, to non-signalised roundabout), and therefore between different modelling software, suggested caution in interpreting the results. ARCADY was seen to generally show lower delays (s) than LINSIG. This was addressed with sensitivity tests.

4.2.4 Due to the technicalities and subjectivity of modelling signalised roundabouts, two variations of the LINSIG of the DM situation were constructed. The first was based on assuming users did not violate the circulatory stacking, and the second allowing some violation to provide a better representation of informal capacity. The former was the basis for comparison in the scheme sifting, particularly in the forecast situation; and the latter as the conservative input to appraisal.

4.2.5 Assumptions and points of note

- A conservative approach has been used. If such an approach achieves a high value-for-money uncertainty of the value-for-money is minimised.

- AM and PM weekday peak-hours only, annualised at 253 days. Whilst there may be peak-shoulder and inter-peak benefits, these are not expected to be significant and are not included.
- For simplicity all vehicles assumed as cars.
- Value of time is kept constant.
- Highest optimism bias of 44% (Table 8 WebTAG A1.2) has been used. This will be sufficient to cover any increase in either construction or land costs.
- Current flows used for both opening year and forecast year. This is to be both conservative and to reflect a proposed new link which will mitigate traffic growth. This new link will potentially mitigate the traffic growth in the area, but not to the extent of reducing traffic.
- Small uplift to reflect bus users.
- Opening year assumed as 2019
- Appraisal limited to 15 years, broadly the local plan end-date. This was chosen as the most representative horizon to use, considering the advice given in WebTAG A1.1. The unknown nature of the network situation beyond the end of the local plan is the key factor. As the intervention is only a junction improvement this is deemed reasonable; in comparison to the appraisal for a network-changing scheme such as a bypass.
- Maintenance and renewal costs are excluded; due to both the short appraisal period, and the ease of subsuming the network change into the on-going network maintenance.
- No downstream capacity constraints are expected. The adjacent junctions are being considered and would be modified if required
- Wider network reassignment due to the Phase 2 intervention has been considered but broadly dismissed; as there are no likely O-D pairs which would re-route. However, the appraisal spreadsheet has been adjusted to undertake, as a sensitivity test, an approximation of reassignment in the DS ('with'-scheme scenario).

- The proximity of the Phase 2 intervention to Phase 1 was considered with regards to any concern about double-counting of benefits. No requirement was identified. Phase 1 is in the SE Maidstone strategic area and Phase 2 is in the NW Maidstone strategic area.
- The low delays (s) showed in the DS 'with-scheme' ARCADY assessment was considered in comparison to the high delays (s) in the DM 'without-scheme' LINSIG assessment. Whilst the scheme is expected to greatly reduce delays some caution was applied to the results, noting the ARCADY was showing an almost free-flow situation. Sensitivity tests will be undertaken reducing the difference in delay.
- Only Coldharbour roundabout modelling results are used. Other junctions are deemed, at worst neutral.
- Full scheme costs, including land-cost and works to other junctions are included. For simplicity the costs were entered as a single-year.

4.3 Initial BCR

4.3.1 The initial BCR is shown for both 44% and 15% optimism bias in **Error! Reference source not found.** and Table 4-2:Initial BCR with 15% optimism biasTable 4-2. High value for money is indicated, when the developer contribution is accounted. Developer contribution is subtracted from both PVB and PVC. The PVB was considered in terms of time-peak and a relatively even spread between AM and PM was noted, with AM being the higher proportion.

Scheme Summary Analysis of Monetised Costs and Benefits (2010 present values and prices)		
Net Outcome: Do-Something Preferred Scheme minus Do Minimum	**Present Values in 2010 market prices and values (£)**	**with dev contribution**
User Present Value Benefit (PVB)	**£11,504,548**	**£10,492,035**
Capital Present Value Cost (PVC)	**£4,618,932**	**£3,606,419**
Scheme Net Present Value (NPV) = PVB - PVC	**£6,885,616**	**£6,885,616**
Scheme Initial Benefit to Cost Ratio (BCR) = PVB/PVC	**2.5**	**2.9**

Table 4-1: Initial BCR with 44% optimism bias (15-year appraisal)

Scheme Summary Analysis of Monetised Costs and Benefits (2010 present values and prices)		
Net Outcome: Do-Something Preferred Scheme minus Do Minimum	**Present Values in 2010 market prices and values (£)**	**with dev contribution**
User Present Value Benefit (PVB)	**£11,504,548**	**£10,492,035**
Capital Present Value Cost (PVC)	**£3,688,730**	**£2,676,218**
Scheme Net Present Value (NPV) = PVB - PVC	**£7,815,817**	**£7,815,817**
Scheme Initial Benefit to Cost Ratio (BCR) = PVB/PVC	**3.1**	**3.9**

Table 4-2:Initial BCR with 15% optimism bias (15-year appraisal)

4.4 Sensitivity test

4.4.1 Two main sensitivity tests were undertaken. Firstly the difference in delay (DM to DS) was reduced, and secondly an approximation was undertaken of reassignment due to the scheme.

4.4.2 For the core scenario, the difference in delay was about 3½minutes for AM, and 2¼minutes for PM. By factoring the LINSIG results (0.75) this difference was reduced by about 45s for AM and 30s for PM. This resulted in a BCR of 2.1 (44% optimism bias).

4.4.3 To test for reassignment due to the intervention, an increase in DS flow of 10% and an increase in delay of 10s was assumed. This reduced the BCR from 2.9 to 2.7 . An increase in delay of 30s reduced the BCR to 2.3

4.5 Value for Money Statement

4.5.1 The initial BCR shows a high value for money, and can be adjusted upwards to reflect journey reliability, improved safety, other time peaks, and unlocked housing.

4.5.2 It is more important to consider any negative aspects that should be considered. The land-take is the key consideration, but as it is brownfield/poor greenfield land adjacent to a motorway link road; no significant detriment is recognised.

4.5.3 An AST (Appraisal Summary Table) is included as Appendix D.

4.5.4 A high value-for-money is reasserted. This declaration notes a relatively short appraisal period and a conservative optimism bias.

5 Financial Case

5.1 Overview

5.1.1 The Financial Case for Phase 2 of the Maidstone ITP gives a breakdown of the expected project cost components and the time profile for the transport investment. It considers if these capital costs are affordable from public accounts at the times when the costs will arise. It also identifies where contributions of anticipated funding will be obtained, to meet the scheme costs and it assesses the breakdown of funds between available sources and by year and considers how secure these funds are likely to be. Finally, it reviews the risks associated with the scheme investment and examines possible mitigation.

5.2 Phased Approach

5.2.1 The Maidstone ITP has been developed in conjunction with the Maidstone local plan (approved 2017), and for this phase the emerging Tonbridge and Malling local plan. The objective of the strategy is to accommodate and manage the current heavy travel demand as effectively as possible, and the expectation of the forecast development in the Local Plan.

5.3 Project Funding

5.3.1 Funding for the wider Maidstone ITP is sought from SELEP (LGF) with supporting funds from developer contributions. The total SELEP contribution sought for the wider strategy is £8.9 million. A breakdown of the funding sources for the strategy is summarised in Table 5-1.

Funding Sources	Maidstone ITP £(m)	Phase 1 of ITP £(m)	Phase 2 of ITP £(m)
LGF Funding	£8.9	£1.3	£2.7
Developer Funding / Contribution	£5.0	£0.4	£1.3
Other Local Funding / Contribution	To be confirmed		
Total	£13.9*	£1.7	£4.0

**The current total project funding reported here excludes 'other local funding' which is under review/awaiting confirmation.*

Table 5-1: Maidstone ITP – Funding Sources

5.3.2 Funding contributions have been secured through Sec106 agreements totalling **£1,308,908** towards the delivery of the Coldharbour Roundabout improvement scheme. Monies have been secured from developments at Bridge Nurseries, East of Hermitage Lane, West of Hermitage Lane and Oakapple Nursing Home. Due to the phased approach of the funding mechanisms, the full amount will not be collected until the last year of construction (2020).

5.4 Project Costs

5.4.1 The scheme costs for Phase 2 are summarised in Table 5-2 and the breakdown of the main works is included in Appendix B.

Item	Cost (£m)
Main works – Coldharbour rbt /including risk	2.50
Land (RBLI) / LCA	0.29
Associated junctions	0.50
Fees (Business Case / forward design)	0.06
Contingency	0.30
Inflation	0.35
Total	4.00

Table 5-2: Phase 2 Breakdown of Costs

Source	2018/19	2019/20	2020/21	Total
LEP (£m)	**0.5**	**2.0**	**0.2**	**2.7**
Developer (£m)		**1.3**		**1.3**
Total (£m)	0.5	**3.3**	0.2	**4.0**

Table 5-3 Spend Profile

5.4.2 These costs include forward design on the remaining elements which are set out in Table 5-4 and shown in Figure 5-1.

Loose Rd Corridor	A274 Sutton Road junction with A229 Loose Road 'Wheatsheaf junction'
	A229 Loose Road junction with Cripple Street/Boughton Lane
	A229 Loose Road junction with Armstrong Road/Park Way
	B2246 Hermitage Lane junction with St Andrews Road/A26 Tonbridge Road junction with Fountain Lane
	A20/Hall Rd/Mills Rd

Table 5-4: Forward design

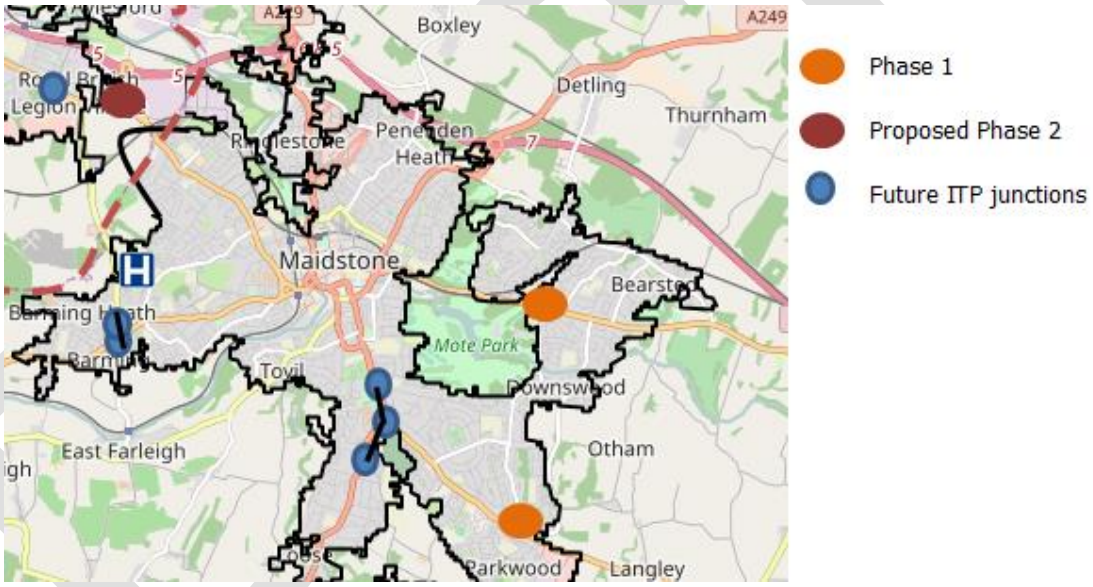


Figure 5-1: Future ITP phases

5.5 Spend Profile

5.5.1 Table 5-5 summarises the breakdown of the funding stream for the wider Maidstone ITP from 2016 to 2021. Funding for this scheme is sought from SELEP for the second phase of the wider Maidstone ITP, programmed for the funding period 2018/19 and 2019/20. The SELEP contribution being sought for this phase is £2.7 million.

Funding Period	£(m)
Phase 1	£1.3
Phase 2	£2.7
Future phases	£4.9
Total	£8.9

Table 5-5: Spend Profile

5.6 Risks / Leverage

5.6.1 The Coldharbour roundabout improvement scheme, under Phase 2 is dependent on SELEP LGF funding of £2.7 million and £1.3m funding from developer contributions. Should scheme costs escalate, delivery will be hindered.

5.6.2 A Risk and contingency allowance of £0.3m has been identified and allowed for in the total budget for Phase 2 of the Maidstone Integrated Transport Package.

5.7 Optimism Bias

5.7.1 Optimism bias refers to the tendency for scheme promoters to be overly optimistic about scheme costs. DfT WebTAG unit A1.2 sets out the recommended contingency which should be added to the scheme costs. However, in line with HM Treasury guidance document "Early financial cost estimates of infrastructure programmes and projects and the treatment of uncertainty and risk- March 2015" optimism bias has been excluded from project funding. The risk-adjusted scheme cost estimate is considered robust but will be reviewed as the scheme proceeds.

5.8 Funding Constraints

5.8.1 Phase 2, Coldharbour roundabout, is dependent on £2.7m SELEP funding and £1.3m Developer contribution to meet the project cost of £4m. Negotiations have commenced with the land owner in relation to the acquisition of the privately-owned land required to deliver the Coldharbour Roundabout scheme. During negotiations it became apparent that the land is subject to an overage from **2016** for a **15 year period**. All associated stakeholders are due to meet to discuss the removal of the overage on the parcel of land required to deliver the scheme. This remains a risk to the project until such time an agreement has been reached in relation to the overage charge.

5.9 Section 151 Officer Sign Off

5.9.1 A signed letter by KCC's Section 151 Officer providing appropriate assurances was lodged with the Phase 1 submission. Any cost over runs above the identified risk allowance will be accounted for by KCC. A further signed letter from KCC's Section 151 Officer is attached (Appendix C) to confirm KCC's financial commitment and ability to fund the scheme.

6 Commercial Case

6.1 Overview

6.1.1 The Commercial Case provides evidence that the proposed investment can be procured, implemented and operated in a viable and sustainable way. The aim is to achieve best value during the process, by engaging with the commercial market.

6.2 Expected Outcomes from the Commercial Strategy

6.2.1 The outcomes which the commercial strategy must deliver are to:

- Confirm that procedures are available to procure the scheme successfully;
- Check that available/ allocated capital funds will cover contractor and construction costs;
- Verify that risk allowance is sufficient;
- Ensure that arrangements have been made to handle cost overruns.

6.3 Scheme Procurement Strategy

Procurement Options

6.3.2 KCC have identified two procurement options for the delivery of their LEP funded schemes. The alternative options are:

Full OJEU Tender

6.3.3 This option is required for schemes with an estimated value over £4,322,012.

6.3.4 KCC will then need to opt for an 'open' tender, where anyone may submit a tender, or a 'restricted' tender, where a Pre-Qualification is used to whittle down the open market to a pre-determined number of tenderers. This process takes approximately one month and the first part is a 47 day minimum period for KCC to public a contract notice on the OJEU website.

6.3.5 The minimum tender period is 6 weeks but could be longer for larger schemes. Once the tenders are received they must be assessed and a preferred supplier identified. There is a mandatory 10 day 'standstill' period, during which unsuccessful tenderers may challenge the intention to award to the preferred contactor.

Delivery through existing Amey Highways Term Maintenance Contract (HTMC)

6.3.6 This option is strictly not procurement as the HTMC is an existing contract. The HTMC is based on a Schedule of Rates agreed at the inception of the contact. The price for each individual scheme is determined by identifying the quantities of each required item into a Bill of Quantities. Amey may price 'star' items if no rate already exists for the required item. If the scope of a specific scheme is different from the item coverage within the HTMC contract a new rate can be negotiated.

Preferred Procurement Option

6.3.7 The preferred procurement route is to externally procure through an open tender route to encourage competition and drive value for money. This option has been selected even though the construction value of the scheme is less than £2.5m and is below the OJEU scheme value threshold.

6.3.8 Currently the construction industry is facing a resurgence in the industry. Discussions with the supply chain leaders indicate that highway projects are starting to increase in numbers and the market is becoming more competitive. The value of works currently being promoted is substantial and would be highly sought after by the supply chain. This allows KCC the opportunity to achieve greater economies and to drive the economies through the contract, demonstrate that value for money has been obtained.

6.3.9 Risks for KCC are the possibility that the size of the contract will only attract a limited number of suppliers. Early discussions indicate that there is interest in contracts of this nature. This contract will promote early contractor involvement and allow greater time to plan future work, and offer greater opportunity to provide value engineering solutions. Current values of Major Project schemes are circa £5m which is a substantial incentive to suppliers to bid competitively.

6.3.10 Previous experience has been gained by successfully procuring Local Growth Funded projects, M20 J4 and Maidstone Bridges Gyratory. These followed the County Councils approach to "Spending the Councils' Money".

6.3.11 Reports are presented to the Strategic Commissioning Board to demonstrate the preferred procurement route. A further report is delivered to the Procurement Board once PQQ's have been carried out highlighting the next stage of ITT.

6.3.12 All documents are entered onto the procurement portal for ease of access and transfer of details. An award report is taken back to the Procurement Board once the evaluation has been carried out, with the scoring and weighting identified with a recommendation of the preferred bidder. The Director or Corporate Director then signs off the award report and the contract are awarded accordingly.

6.4 Commercial Risk Assessment

6.4.1 The commercial risk assessment is on-going from Phase 1, and in particular relates to ensuring robust scheme procurement

6.5 Potential for Risk Transfer

6.5.1 It is expected that many of the design risks will only be able to be resolved through rigorous design and review processes, once the design options are clear and scope of land acquisition, planning requirements, environmental requirements and statutory services issues are fully identified, the primary risks will be related to construction. There is potential for transferring these risks through the construction procurement process. This will be explored further as the scheme progresses.

7 Management Case

7.1 Overview

7.1.1 The Management Case outlines how the proposed scheme and its intended outcomes will be delivered successfully. It gives assurances that the scheme content, programme, resources, impacts, problems, affected groups and decision makers, will all be handled appropriately, to ensure that the scheme is ultimately successful. It also covers monitoring of the scheme.

7.2 Project Delivery Programme

7.2.1 An overall Project Delivery Programme has been developed for Maidstone ITP, which also sets out the key stages of this second phase of the project (Figure 7-1).

7.2.2 The key project milestones are:

- Complete outline design – March 18
- Complete detailed design – November 18
- Complete procurement – April 19
- Public Engagement – October 18
- Site clearance and preparation – February 19
- Complete construction –February 20

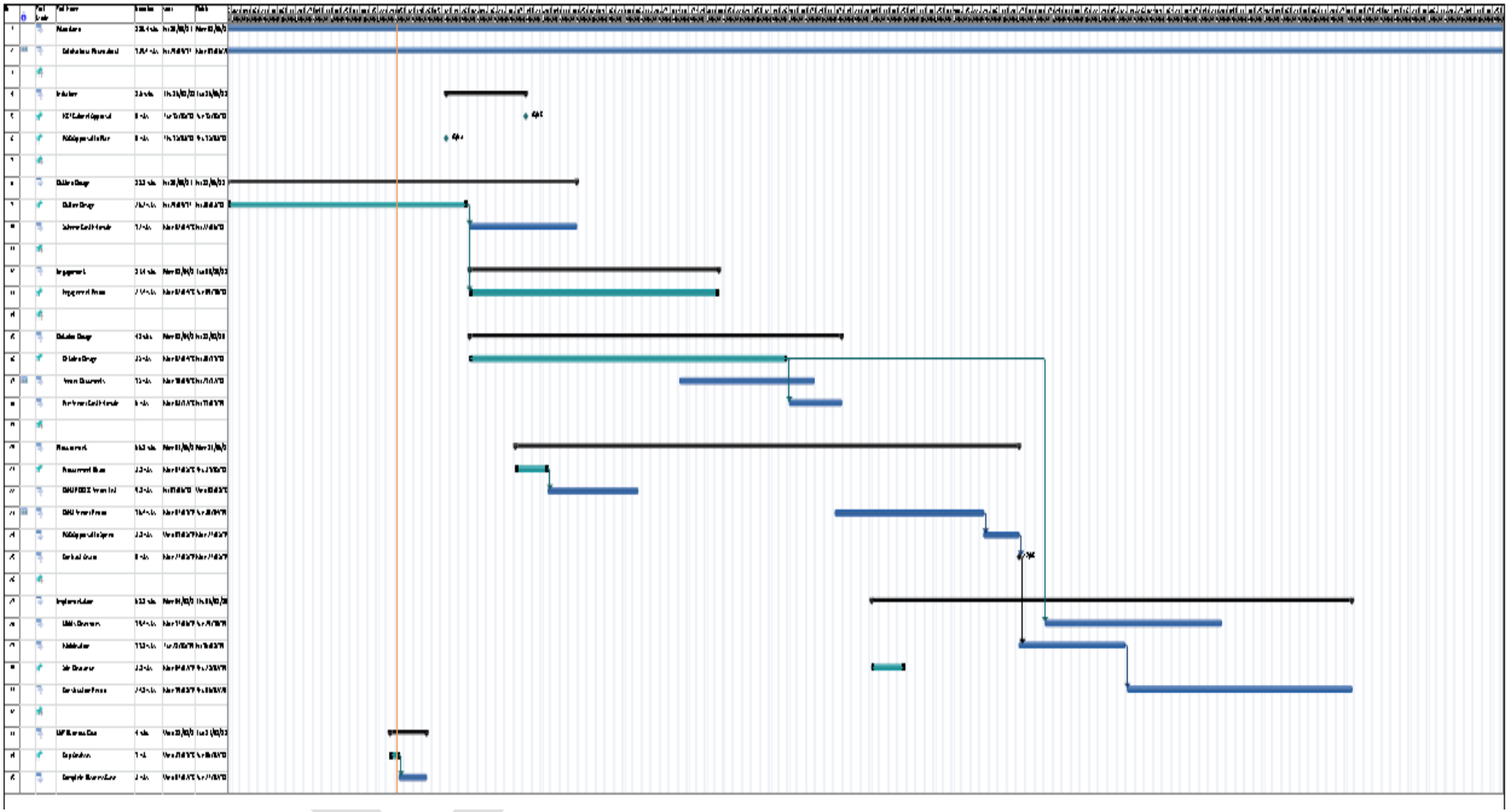


Figure 7-1: Maidstone ITP Delivery Programme

7.3 Project Governance, Roles and Responsibilities

7.3.1 KCC have set up a clear and robust structure to provide accountability and an effectual decision making process for the management of the LEP funded schemes. Each scheme will have a designated project manager (Russell Boorman for the Maidstone ITP) who is an appropriately trained and experienced member of KCC staff.

7.3.2 Figure 7-2 provides an outline of the overall governance structure implemented to manage the delivery of each scheme.

KCC LGF Meeting Governance Diagram

Local Growth Fund	High level Agenda	Frequency	Attendees	Format	Scope	Agenda Items	Key Deliverables/Feedback	Templates
Sponsoring Group	Planning Design Construction Post Scheme Monitoring	Every two months - Can be called in emergency if required	**Chair: TR** MW/BC/RW/KS/CH/MG Supported by PB attendees as required	Face to face meeting	To discuss programme (i.e. high level progress/preview next steps and discuss and resolve issues.	LEP programme (high level) progress to date Programme Financial reporting Communicatio/Stakeholder Engagement Issues/Risk/Change Decisions	Minutes of Meeting Action List/Decision Log Output distributed to all attendees + Programme Board Attendees where appropriate	**Agenda** **Minutes** **Decision list**
Sponsoring Group Progress Report	Decisions Needed	Every two months	LB	Report	To record progress/outstanding actions/issues that require a decision made by the board		Action list ready for the Sponsoring Group	**Progress Report**
Programme Board Meeting	Planning Design Construction Post Scheme Monitoring	Bi- Monthly	**Chair: LB** LB/KCC PMs/ External Suppliers	Face to face meeting	To discuss progress/preview next steps and discuss and resolve issues. Escalate issues/decisions required to the Sponsoring Group	LEP programme progress to date Programme financial reporting Communicatio/Stakeholder Engagement Issues/Risk/Change Internal Governance	Minutes of Meeting Action List Output distributed to all attendees + Steering Group attendees where appropriate	**Agenda** **Minutes**
Highlight Report	Identify key points for Programme Board Meeting	Monthly	LB	Report	To collate and streamline all reports highlighting areas of interest for the Programme Board meeting.		Used for Programme Board Meeting. Highlight report shared with PB attendees.	**Highlight Report**
Steering Group Meeting	Progress Update	Monthly/Fortnightly as required	**Chair: KCC PMs** All input staff - Project Team/KCC PMs/External Suppliers	Face to face meeting	Individual meetings per project (including each stage of the LEP process to discuss progress in detail).	LEP project progress to date/MS Programme Project financial reporting Issues/Risk/Change Actions	MS Programme Update Progress update in template for each project e.g Risk Register/ Issues Log	**Agenda** **Minutes** **Progress Report**

List of Initials:

MW	Mike Whiting	Cabinet Member Planning, Highways, Transport and Waste
BC	Barbara Cooper	Corporate Director Growth, Environment and Transport
RW	Roger Wilkin	Director of Highways, Transport and Waste
KS	Katie Stewart	Director of Environment, Planning and Enforcement,
CH	Cath Head	Head of Financial Management Strategic and Corporate Services.
TR	Tim Read	Head of Transportation for Growth, Environment and Transport
MG	Mary Gillett	Major Capital Programme Manager for Growth, Environment and Transport
LB	Lee Burchill	Local Growth Fund Programme Manager for Growth, Environment and Transport

Figure 7-2: KCC Project Governance Structure

7.3.3 A detailed breakdown of the meetings (along with the attendees, scope and output of each) which make up the established governance process is set out below.

Project Steering Group (PSG) Meetings

7.3.4 PSG meetings are held fortnightly to discuss progress on the scheme. Progress is discussed in technical detail raising any issues or concerns for all to action. A progress report, minutes of meeting and an update on programme dates are provided ahead of the Programme Board (PB) meeting for collation and production of the Highlight Report.

Highlight Report

7.3.5 The Progress Reports comprise the following updates; general progress, project finances, issues, risks and governance meeting dates. The Highlight Report identifies any areas of concern or where decisions are required by the PB meeting or higher to the LCC LEP Programme Manager. An agreed version of the Highlight Report is issued to the PB meeting attendees during the meeting.

Programme Board (PB) Meeting

7.3.6 The PB meeting is held monthly and is chaired by the KCC LEP Programme Manager. Attendees include representatives from all three stages of the schemes (i.e. KCC LEP Management, KCC LEP Bidding, KCC Sponsors, KCC PMs, External Consultant and Construction Representatives). This meeting discusses project progress to date, drilling into detail if there is an issue or action (as identified in the PSG meeting), financial progress, next steps and actions. Outputs of this meeting are the Highlight Report and the minutes of the meeting.

Escalation Report

7.3.7 A list of actions and decisions that the PB meeting was unable to resolve is prepared ready for the Sponsoring Group (SG) meeting to discuss and ultimately resolve.

Sponsoring Group (SG) Meeting

7.3.8 The SG meeting is held monthly and chaired by Tim Read (KCC Head of Transportation). Attendees are Barbara Cooper (Corporate Director), Roger Wilkin (Director of Highways, Transportation and Waste) and Mary Gillett (KCC Major Projects Planning Manager). This meeting discusses high-level programme progress to date, financial progress, next steps and closes out any actions from the escalation report.

Output is sent to Mary Gillett for distribution. Technical advisors are invited if necessary to expand upon an issue. All actions from the start of this meeting cycle are to be closed out by the SG when they meet (i.e. no actions roll over to subsequent meetings). The project roles and responsibilities are set out in Table 7-1.

Role	Name
KCC SELEP Schemes Delivery Manager	Lee Burchill
KCC Commissioning Officer for specific scheme (Project Sponsor)	Russell Boorman
KCC Cabinet Member	Mike Whiting

Table 7-1: Project Roles and Responsibilities

7.4 Suitability and Availability of Resources

7.4.1 The scheme is intended to be delivered using a collaborative approach between KCC staff and the selected partner organisation. KCC have identified appropriately trained and experienced staff that will be responsible for the delivery of the scheme. The staff identified fulfilling the Project Sponsor and Project Manager roles for the scheme have been ring-fenced to support the scheme throughout its duration and will have more junior staff available to support them.

7.5 Evidence of Previously Successful Scheme Management Strategy

7.5.1 KCC have a successful track record of delivering major transport schemes within the county. The most recent of which were the Local Growth funded, LGF, **Maidstone Bridges Gyratory (MBG)** project, M20 Junction 4 bridge widening, Local 'Pinch Point' funded Westwood Relief Strategy, Poorhole Lane, North Farm Improvements and the East Kent Access Phase 2 (EKA2).

7.5.2 The MBG, completed in March 2017, was designed to reduce congestion, improve journey time reliability and support economic growth. A complex project within the heart of a busy county town was successfully delivered on time and to budget whilst maintaining access for local businesses and commuters alike. Excellent working relations with Maidstone Borough Council have been formed which will be beneficial to the delivery of the Maidstone Integrated Transport Package project, should this bid be successful. The total value of the scheme was £5.74m of which £4.6m was funded by LGF.

Maidstone Bridges Gyratory

7.5.3 **M20 Junction 4 Eastern Overbridge Widening** was implemented to reduce congestion and support local housing growth in the surrounding area. A project that had a significant level of interface with Highways England to ensure safety to all network users through delivery was completed in January 2017. This was a £5m LGF scheme delivered on time and within budget.

7.5.4 **Westwood Relief Strategy, Poorhole Lane Widening** was a 'Local Pinch Point' funded scheme that has seen the reduction in congestion at the highly trafficked location near the Westwood Cross shopping centre in Thanet. The £5m project was successfully completed in June 2015 within budget despite being a challenging construction scheme due to the amount of utility diversions required and large number of fibre optic cables requiring a close working relationship with a diverse range of companies.

7.5.5 **North Farm Improvements,** also funded through 'Local Pinch Point' was completed in October 2015 on budget but delayed due to very complex utility diversions and lack of co-operation from Statutory Undertakers. KCC has mitigated this risk on subsequent projects of a similar nature by engaging a dedicated Statutory Undertaker Co-Ordinator. With a total project cost of £7.35m, the scheme, similar in nature to the MBG was delivered to reduce congestion, improve journey time reliability and benefit the air quality in a busy business area. Engagement with the adjacent business community was key to the successful delivery of the scheme. A complex retaining structure was constructed which required the need for a multidisciplinary project team.

7.5.6 The **East Kent Access 2** scheme, completed in May 2012, was designed to support

economic development, job creation and social regeneration, improving access with high quality connections between the urban centres, transport hubs and development sites in East Kent. The overall objectives of the scheme were to unlock the development potential of the area, attract inward investment and maximise job opportunities for local people. The scheme was successfully delivered within budget and ahead of programme through the adoption of a robust management. The total value of the scheme was £87.0m of which £81.25m was funded by Central Government and was awarded a regional Institution of Civil Engineers (ICE) Excellence Award.

7.6 Risk Management

7.6.1 Project risk is managed as an on-going process as part of the scheme governance structure, as set out in section 7.3 of this report. A scheme risk register is maintained and updated at each of the two-weekly Project Steering Group Meetings. Responsibility for the risk register being maintained is held by the KCC PM and is reported as part of the monthly Progress Reports.

7.6.2 Any high residual impact risks are then identified on the highlight report for discussion at the Programme Board (PB) meeting. Required mitigation measures are discussed and agreed at the PM meeting and actioned by the KCC PM as appropriate.

7.6.3 An example scheme risk register is shown in Figure 7-3.

Figure 7-3: Example Risk Register

7.6.4 Table 7-2 shows a summary of the project risk assessment. This includes higher level risks associated with the improvements, their potential, effects, likelihood of occurring and mitigation. The scoring is based on a 5 point scale where 1 = unlikely and 5 = extremely likely.

		Project Risk Management Strategy			
Risk description	**Likelihood**	**Impact**	**Likelihood x Impact**	**Owner**	**Mitigation**
Increase in Scheme Costs	2	3	6	KCC/Consultant	Investigate scheme design and amend to achieve greater BCR & VFM
Funds do not cover costs	2	3	6	KCC/Cost Consultant	Lobby alternative sources for shortfall in funding
Changes in direction (from government, LEP, Local Authority)	2	3	6	KCC	Ensure co-operation and communication between all concerned parties
Scheme Performance e.g. downstream capacity erodes benefits	2	3	6	KCC	Mitigation if necessary
Statutory Undertakers	1	4	4	KCC/Consultant	KCC to ensure that relevant searches along scheme corridor are conducted as early as is practicable to flag up any issues at the earliest possible juncture
Issues uncovered during construction (environmental, archaeology etc.)	1	4	4	KCC/Consultant	Early liaison with geotechnical, environmental and archaeology specialists to minimise impact

Opposition to scheme (Residents/ Cyclists/ Road Users)	3	2	6	KCC	Ensure clear and effective consultation is undertaken with all relevant consultees providing fullest possible information

Table 7-2: Project Risk Assessment

7.7 Scheme Risks

7.7.1 As with any transport scheme there are a number of risks and issues that must be managed. Through the management arrangements established to progress the improvement scheme, there are risk management arrangements in place. For the purposes of this Business Case, the main risks associated with proposed investment to progress Maidstone ITP are summarised in Table 7-3.

Risk	Likelihood	Impacts	Owner	Mitigation
Scheme becomes unnecessary due to failure of wider main schemes	Low	High	KCC	Constant programme review and reallocation of funds
Stakeholders reject scheme as unsuitable or inappropriate	Low	Moderate	KCC	Active consultation, building on existing relationships
Highway design issues prove costly	Low	Moderate	Consultant	Early engagement of highway design specialists
Key stakeholders (e.g. LEP or DfT) insist on additional quantitative appraisal	Low	Moderate	Consultant	Prepare Transport Business Case with as much quantitative information as possible
Related highway scheme designs affect scheme or scheme affects these schemes	Low	Moderate	Consultant	Co-ordination of design and explicit requirement in design brief
Benefits achieved do not match those predicted in the example used in the Business Case	Moderate	Moderate	KCC	Use scheme selection process to ensure best schemes are selected

Table 7-3: Key Project Risks

7.7.2 In considering the need to manage the risks associated with this important scheme, there are considerable and possibly greater risks of not proceeding with the Maidstone ITP. These risks have previously been outlined and are as follows:

- The constraints of the existing transport conditions will act as an inhibitor to growth with private sector investment attracted to other areas with better accessibility;
- The significant pockets of disadvantage in Kent will worsen;
- Kent's reputation as the UK's front door may be damaged without effective highway management; and
- The ongoing Air Quality issues in Kent will be exacerbated without the mitigation afforded by the scheme.

7.8 Communication and Stakeholder Management Strategy

7.8.1 Consultation is a key element of the project. Early engagement with stakeholders has commenced and will continue throughout the project's lifecycle. To date, this includes Maidstone Borough Council, Tonbridge and Malling Borough Council, landowners adjacent to the highway and Highways England.

7.8.2 Businesses and the local population will be engaged through a full programme of events, briefing sessions and project newsletters.

7.8.3 Planned stakeholder engagement will be undertaken with public transport operators on the route (Arriva and Nu-Venture) and the Parish Councils.

7.8.4 A formal Stakeholder and Communication Strategy will be adopted.

7.8.5 This approach was recently adopted on the successfully completed SELEP project, Maidstone Bridges Gyratory. The approach to the management of different stakeholders and other interested parties is illustrated in Figure 7-4.

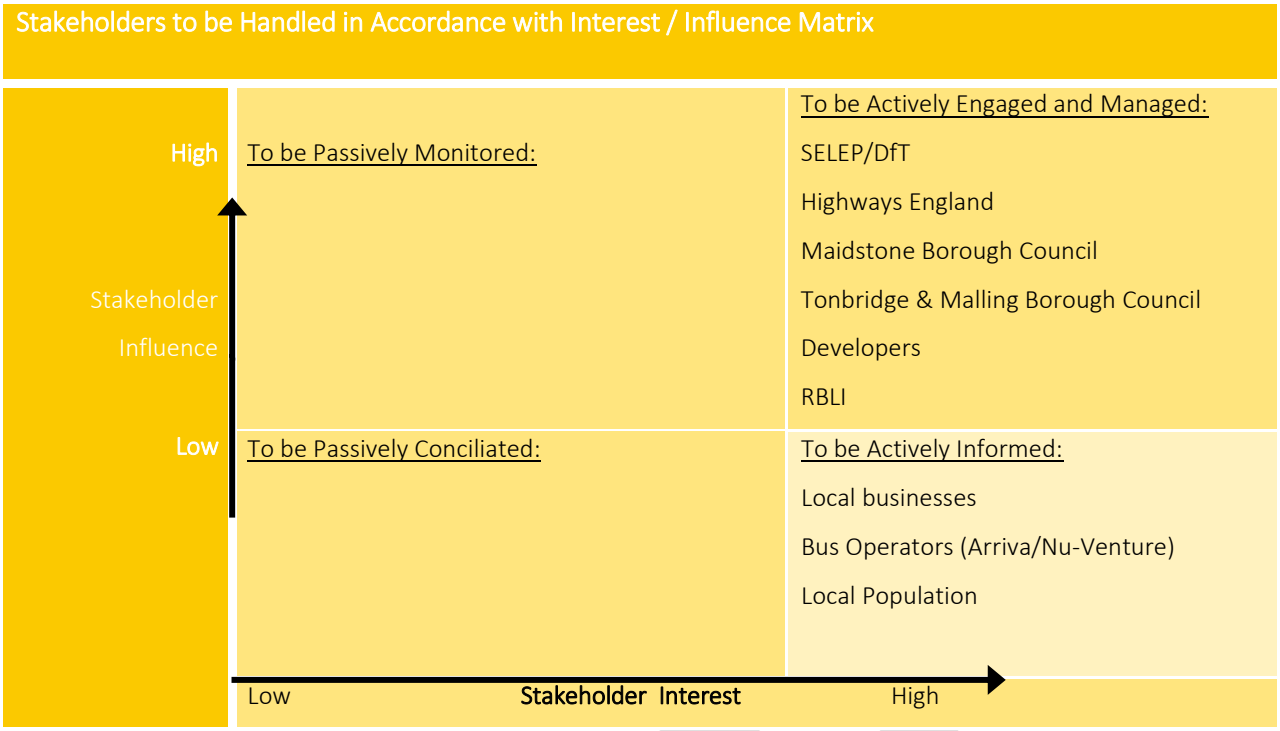


Figure 7-4: Stakeholder Management Plan

7.9 Benefit Realisation Plan and Monitoring

7.9.1 Tracking of the scheme benefits will be a key element in understanding the success of a specific intervention. The realisation of benefits is intrinsically linked to the Monitoring and Evaluation plan.

7.9.2 The scheme objectives set out in Section 3.8 have been used to develop the desired outputs and outcomes for the scheme. The desired outputs are the actual benefits that are expected to be derived from the scheme and are directly linked to the original set of objectives. The definition of outputs and outcomes are:

- **Outputs** – tangible effects that are funded and produced directly as a result of the scheme; and
- **Outcomes** – final impacts brought about by the scheme in the short and medium/long term.

7.9.3 To determine whether the scheme benefits are being realised, the outputs and outcomes have been converted into measurable indicators of scheme benefits; these are set out in Table 7-4.

Measures	Monitoring	Benefits Realisation	Comments

Measures	Monitoring	Benefits Realisation	Comments
Travel-time improvement	Journey times Queues	KCC	One and five year post-opening
Air Quality improvement	Nitrogen Dioxide	MBC/TMBC	
Impact on accidents and safety	Number and type of accidents	KCC	Five year post-opening
Impact of potential change in traffic routing	Traffic Flows on A20, M20 link and B2246	KCC	One and five year post-opening
Growth (housing, jobs)	Not measured directly – part of wider LGF package	Realisation involves other schemes, including non-transport (e.g. development)	
Wider economic benefits	Not measured directly – part of wider LGF package	Realisation involves other schemes, including non-transport (e.g. development)	Part of SELEP SEP Performance Management and Local Plan management

Table 7-4: Benefits Realisation Plan

7.9.4 KCC will conduct a full evaluation of the impact of the scheme in the period after it is completed. The Council will prepare evaluation reports one year and five years after scheme opening, using the information to be collected as set out above to gauge the impact of the scheme on the traffic network, and assess the success of the scheme in meeting the objectives of the Maidstone ITP scheme. Unexpected effects of the scheme will be reported upon and, where appropriate, remedial measures identified.

7.9.5 This monitoring will be done incrementally to both assess the individual schemes and the complete ITP as it is delivered.

7.10 Powers and Consents

7.10.1 Statutory Powers and Consents are not required for the delivery of the Coldharbour roundabout scheme.

7.10.2 Planning permission may be required to deliver the scheme, however negotiations with the adjacent land owner have commenced with a positive outcome. Further discussions are planned to be carried out for negotiations to be taken to the next stage.

7.10.3 The majority of works to implement the proposed scheme are contained within the existing highway boundary. Negotiations have commenced with the land owner in relation to the acquisition of the privately-owned land required to deliver the Coldharbour Roundabout scheme. During negotiations it became apparent that the land is subject to an overage from **2016** for a **15 year period**. All associated stakeholders are due to meet to discuss the removal of the overage on the parcel of land required to deliver the scheme. This remains a risk to the project until such time an agreement has been reached in relation to the overage charge.

7.10.4 The scheme is located on the Local Authority Network and does not require consents from Highways England.

7.10.5 The scheme does not require Side Roads Orders.

7.10.6 There are no outstanding statutory powers / consents that this scheme is reliant on for delivery.

8 Conclusion

8.1 Summary

The Coldharbour roundabout on the A20 near M20 J4 scheme is Phase 2 of the Maidstone Integrated Transport Package (ITP). This scheme in association with Phase 1 and the subsequent elements of the Maidstone ITP will assist in the provision of infrastructure to support the Maidstone Local Plan.

8.2 Initial BCR / Value for Money Statement

The scheme is deliverable and will provide high value-for-money. This is based fundamentally on monetising the improved journey time along this section of the A20.

8.3 Recommended Next Steps

The development and delivery of the scheme, as the second phase of Maidstone ITP, should be approved and delivery should proceed. This requires the release of an LGF ask of £2.7m from SELEP to KCC.

Appendix A Scheme Drawing

Appendix B Main works breakdown

Description	Amount
ROADWORKS	
Preliminaries	£ 338,741.84
Site Clearance	£ 33,894.13
Fencing	£ 10,625.00
Safety Fencing	£ -
Drainage	£ 56,325.00
Earthworks - General	£ 303,146.27
Pavements	£ 536,241.28
Kerbs Footways & Paved Areas	£ 127,162.79
Traffic signs	£ 14,275.00
Road Markings	£ 4,000.00
Lighting	£ 38,220.00
Electrical Work	£ 5,250.00
Signals	£ -
Landscaping & Ecology	£ -
Accommodation Works	£ -
Statutory Undertakers - Diversions	£ 13,065.00
Contingencies	£ 293,576.26
	£ 1,774,522.55

Appendix C Section 151 Letter

Appendix D AST