



Sandwich Town Improvements – Introduction to the proposals

Due to be presented to the Sandwich Town Council meeting held on the 30/11/2015

Report author: Tim Middleton, Freight & Network Improvement Officer, KCC

This report outlines a number of proposals that KCC have developed in conjunction with the Sandwich Town Team.

All proposals are deemed possible and safe in principle by KCC engineers; however, transport modelling and detailed design has not been carried out to support the proposals. Until Sandwich Town Council commits funds to progress with them, there will be no further design work carried out. Estimated costs have been given in this report to illustrate the price range that could be expected to be paid; this is to help inform the Town Council's decision.

Until a detailed design is created for each proposal it will not be possible to give more accurate price estimates as this can vary considerably depending on the proposal chosen, the scale of the proposal chosen, any drainage or utilities work required, materials selected and any legal documentation that needs to be processed such as a Traffic Regulation Order.

Sandwich Town Council could employ an external consultant to carry out this work or could use S106 money to employ KCC engineers to do so.

Where two or more options have been given, KCC would accept either of them and will take guidance from the Town Council on which they feel would be most appropriate for the Town and its residents.

Contents

Sandwich Town Improvements – Introduction to the proposals	1
7.5 Tonne Weight Restriction	2
Gateways / signage	4
Breezy Corner Improvements	6
Traffic Calming – New Street / High Street / Strand Street / Moat Sole	9
Town Centre Improvements – Employ external consultant	12
Toll Bridge / Barbican Improvement.....	13
Estimated Timeline	15
Funding	16

7.5 Tonne Weight Restriction

What: Implement a 7.5 Tonne weight restriction across Sandwich - except for vehicles accessing a property in Sandwich. Therefore all business or home deliveries, buses, emergency vehicles and refuse vehicles are legally allowed to access Sandwich at all hours of the day.

Potential benefits: Reduction in HGV's entering Sandwich Town. Extend the area that the Police can enforce.

Risk: The restrictions could be ignored. The Police have limited resources to enforce against lorry restrictions.

Why: To help prevent Heavy Goods Vehicles (HGVs) from entering the town unless they are making deliveries to or picking up from the town itself.

Where: Right across Sandwich Town (see map below).

When: Installing the weight restriction can take place in the next few months. It is deemed sensible to time this with the installation of any gateways (if approved).

To install the Weight Restriction requires passing a Traffic Regulation Order (TRO). There are two available methods:

Standard – This process is likely to take 20 weeks to implement. This timescale includes advertising in a local publication, collating resident feedback and deciding whether to amend or implement the TRO. Then a 6 week period to allow for any High Court Challenges on the process before the TRO can become legal. This timescale allows the KCC team the time to manage busy workloads and ensure a smooth process. Timescales could be longer if the decision stage does not fall in line with a JTB meeting.

Experimental – This process allows the TRO to be installed immediately (after it has been advertised in a local newspaper) for up to 18 months in which time the 10 week consultation process must take place. However, there may be additional costs for moving or removing the signs if objections are received. This would have to be budgeted for.

KCC recommends determining how long it may take to install the gateways and choosing the most appropriate method to coincide with the gateway installations.

How much: It is estimated that the costs of installing the TRO will be circa **£3,500**. This includes, advertising in the local paper, the application cost and then the necessary signage that will need to be installed.

Decision required: Whether to allocate funds to install a 7.5Tonne weight restriction and request that KCC begin works.



Proposed extent of a 7.5 Tonne weight restriction.

Gateways / signage

What: Install 3 new white village gateways & appropriate multi-lingual signage (where possible) on the outskirts of Sandwich Town. Install multi-lingual signage near the existing gateway on Ramsgate Road.

Why: To create a clear threshold to the Town to welcome visitors and deter HGV's who have no need to enter the town.

Where: At 3 clear decision points. Ash Road Roundabout, Sandwich Road/Woodnesborough Road, Deal Road Roundabout (see map below).

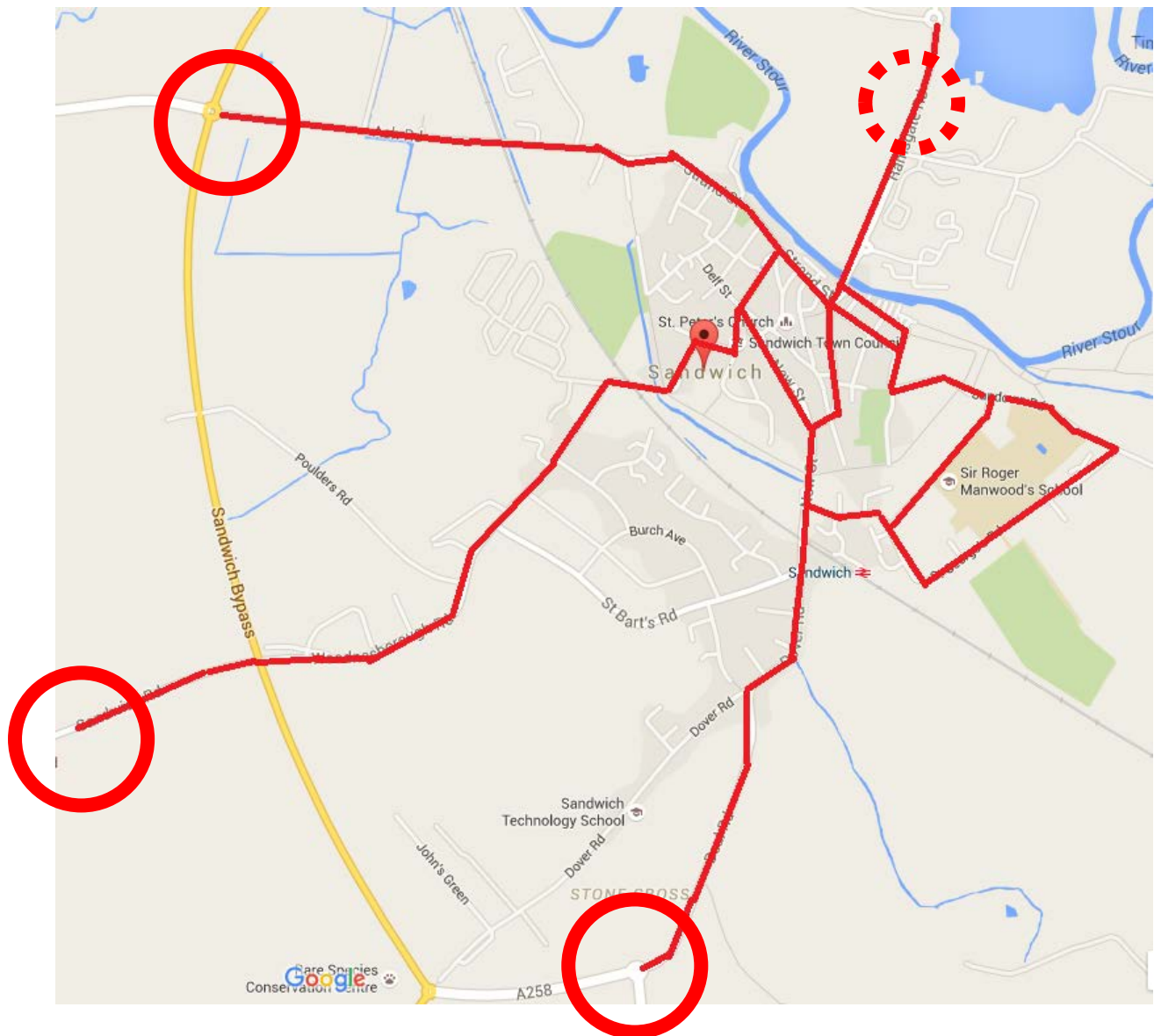
When: If approved, installation will take a few days subject to design and material choices but there may be a delay of up to 6 months before the contractor starts to carry out the work. This is due to the scheduling of programmed works to ensure the contractor can carry out works with minimal cost to KCC, and therefore Sandwich Town Council. If both the 7.5T weight restriction and the gateway proposals are approved, the aim is to install both at a similar time. The 7.5T signs would be located directly behind the gateways on metal posts.

It would be possible to employ another approved contractor to carry out the work in a much shorter timescale but the costs are likely to be higher than that charged by KCC's main contractor.

How much: It is estimated that the cost of installing the 3 new gateways and additional signage will be circa **£12,000** subject to design and traffic management needs.

Decision required: Whether to allocate funds to install 3 new gateway features and additional multi-lingual signage where appropriate and request that KCC begin the works.





Highlighted by solid red circles are the proposed locations for new gateway and signage features. The dotted circle refers to an existing gateway on the Ramsgate Road. It is not intended to replace this sign but it will be considered for enhancement with multi lingual signage.

Breezy Corner Improvements

What: To protect the premises located on Breezy Corner from large vehicles (Currently occupied by Scrumalicious Cake Company) and pedestrian users of the space.

Option 1: Undertake a detailed design of the space to extend the footway and install a bollard.



Proposal

Build out the footway and install a conservation bollard to protect pedestrians and the buildings.

To use suitable conservation materials to extend the footway away from the shop.

This diagram shows the vehicle tracking of a refuse vehicle. The vehicle is 2.4m in width and 7.9m in length.

The Red lines represent where the wheels would travel

The Green lines represent the vehicle overhang over the wheels

There would still be enough room for refuse vehicles to turn left if required.

Note: Stagecoach use shorter double decker buses currently than that shown below (10.9m long). It has not been possible to get accurate measurements to determine whether this option would affect their buses turning left onto Strand Street. Detailed analysis on site will be required.

This diagram shows the vehicle tracking of a bus. The vehicle is 2.55m in width and 12m in length.

The Red lines represent where the wheels would travel

The Green lines represent the vehicle overhang over the wheels

There would **not** be enough room for bus to turn left if required.

Note: if approved then a full design will be created. Due to the tight margins involved, the design may vary from the concept shown here.

Potential Benefits: This option could increase visibility for pedestrians located outside the Scrumalicious Cake Shop and allow for safer road crossing as they will be able to see further around the corner. It would also give pedestrians more space to manoeuvre on the footway. It could also protect the historic buildings on the corner of Harnet Street and those opposite on Strand Street.

Risk: The scheme could prevent buses from turning left onto Strand Street. Unless smaller buses can be used, which Stagecoach have indicated is not possible due to capacity need further along the route, this proposal will most likely result in Stagecoach having to re-route their West bound no 14 bus (once hourly). This will mean that no buses would be able to serve the bus stops on the Strand Street and Ash Road heading West towards Ash. It is likely the alternative route would be directed through the Barbican and along the Ramsgate Road.

It should be noted that Stagecoach, as part of the Sandwich working group, do not support this proposal if it does indeed limit their buses' capability of turning left at Breezy Corner. They have indicated that they would support the proposal if it still allows buses to turn left after the build out has been installed. It will not be possible to determine this until a full detailed analysis has taken place. This work would need to be funded.

It is possible that HGV's will try and enter St Mary's or Bowling Street to enable a left turn onto Strand Street. These routes would be even more difficult to navigate in a large vehicle. The proposal would include improved HGV routing signage at Breezy Corner and on Delph Street to try and mitigate this risk.

Option 2: Instruct an external consultant to look at the design of Breezy corner while undertaking a holistic look at Sandwich Town (see page 12).

Potential Benefits: It is possible that changed traffic flows could remove the need for large vehicles to turn left onto Breezy Corner. There is potentially an option to look at a shared surface design which could allow buses to turn left but give priority to the pedestrians.

Risks: A consultant may not be able to suggest any improvement. This could delay the timescale with which a solution could be found and implemented, owing to the process of employing a consultant.

Why: Some locals consider it a potentially dangerous location for pedestrian movements and there is evidence of damage on the buildings (particularly on the left turn).

Where: Breezy Corner, particularly the left turn.

When: If option 1 is selected and funding is identified then detailed design works could begin within the next few months.



If option 2 is selected then the design work would take place as part of a wider holistic look at Sandwich Town conducted by an external consultant.

How much: If option 1 is selected - It is estimated that the building works could cost anywhere between **£3000-£8,000** depending on whether there is drainage located under the carriageway and if any of the kerb stones can be re-used. This cost would include design fees.

If option 2 is selected it is considered the design costs would form part of the total fee charged by the consultant. The money to implement a scheme could be provided for in any funding awarded from a bid.

Decision required: Whether to allocate funds to proceed to a detailed design for the footway extension with a view for installation (option 1) **or** to include this work as part of a wider holistic look at Sandwich Town, conducted by an external consultant (option 2).

Tim Ingleton, Dover District Council: *“DDC recognises the challenges that the layout and geometry, allied to the tightly placed historic built form, gives to users of the highway network at Breezy Corner. In this regard, we welcome the opportunity that the on-going assessment work is providing to consider solutions which we would wish to ensure serve the transport and road user needs in this locality while also being acceptable from a conservation perspective.”*

Traffic Calming – New Street / High Street / Strand Street / Moat Sole

What: To calm the traffic speeds on New Street, High Street, Strand Street & Moat Sole where possible.

Option 1: Following on from the Joint Transportation Board (JTB) on Sep 10th, a review has taken place to assess all the traffic calming options available. It was deemed that Traffic Tables and therefore Cushions would be too contentious to install and not in keeping with the fabric of the town. They are included in this table for comparison and to show all 4 available traffic calming options.

	Traffic Calming method	Pro	Con
a)	<ul style="list-style-type: none"> Staggered car parking 	<ul style="list-style-type: none"> Can be relatively quick and easy to install A changing measure. At different times of the day the parking layout will change, stopping road users from getting complacent. 	<ul style="list-style-type: none"> Lose at least 1 parking space per stagger (to allow larger vehicles the space to navigate through the chicane). A changing measure. At different times of the day the parking layout will change, sometimes not existing at all. Can create traffic queues while waiting for oncoming vehicles. Large vehicles could have difficulty navigating the narrow streets . Driver visibility could be reduced in places.
b)	<ul style="list-style-type: none"> Built out chicanes 	<ul style="list-style-type: none"> Can be constructed in keeping with conservation area 	<ul style="list-style-type: none"> Unknown costs of digging into the carriageway, drainage works can be costly. Must use conservation materials which are expensive. On-going maintenance cost, with ever decreasing maintenance budget. Lose at least 1 parking space for each chicane. Can create traffic queues while waiting for oncoming vehicles.
c)	<ul style="list-style-type: none"> Cushions 	<ul style="list-style-type: none"> Bus and emergency vehicles can straddle them. Cyclists and motorcyclists can pass between the cushions. 	<ul style="list-style-type: none"> Unknown costs of digging into the carriageway. Not in-keeping with conservation area and can create noise. Can encourage motorists to straddle the cushions to avoid the bump.
d)	<ul style="list-style-type: none"> Tables 	<ul style="list-style-type: none"> Effective at slowing traffic speeds, particularly for visitors Cannot be avoided 	<ul style="list-style-type: none"> Unknown costs of digging into the carriageway, drainage works can be costly. On-going maintenance cost, with ever decreasing maintenance budget. If located too close to a property they can create noise and vibrations.

Of the 4 traffic calming options identified, KCC Engineers feel the most appropriate method would be staggered car parking but deployed only where considered safe and positive.

Option 2: Instruct an external consultant to consider traffic calming while undertaking a holistic look at Sandwich Town (see page 12).

Potential benefit: There may be more sympathetic changes that could be made as part of an external consultant's study of the town centre. Improved material choices or clever design could provide a more positive outcome than any highway measure that KCC could install. It may be prudent to wait and see what a designer is able to come up with before committing to spending money and potentially replacing the measure in the future. This is the ultimate view of KCC Engineers involved with the project.

Risk: It may be the case that no improved solution can be found therefore some time will have been spent without success.

Why: The Joint Transportation Board recommended that KCC investigate alternative traffic calming measures to tables (due to resident feedback).

Where: New Street, High Street. Additionally KCC have addressed any traffic calming options available to use in Strand Street and Moat Sole Road (on request of the Town Team).

When: If option 1 is selected then any of the 4 traffic calming measures identified could be taken through detailed design within the next few months if selected.

If option 2 is selected then the design work would take place as part of a wider holistic look at Sandwich Town conducted by an external consultant.

How much: Option 1 - traffic Calming measures vary considerably depending on road conditions and the number of features required. All costs shown are indicative only and subject to change:

	Traffic Calming Features	Cost per feature	Location	Indicative no, of features	Indicative total cost
a)	Staggered car parking	£1,000-£5,000 each	New Street	4	£4,000-£20,000
			High Street	2	£2,000-£10,000
			Moat Sole		
			Strand Street		
b)	Built out chicanes	£2,000-£5,000 each	New Street	4	£8,000-£20,000
			High Street	2	£4,000-£10,000
			Moat Sole		
			Strand Street		
c)	Cushions	£1,500-£2,500 each (min 2 per location)	New Street	18	£27,000-£45,000
			High Street	6	£9,000-£15,000
			Moat Sole	8	£12,000-£20,000
			Strand Street	8	£12,000-£20,000
d)	Tables	£10,000-£20,000 each	New Street	2	£20,000-£40,000
			High Street	1	£10,000-£20,000
			Moat Sole	1	£10,000-£20,000
			Strand Street	1	£10,000-£20,000

(All prices include design fees and associated Traffic Regulation Orders.)



If option 2 is selected the design costs would be included in the external consultant fee and it is considered the installation costs would be provided for in any funding awarded from a bid.

Decision required: To decide whether to allocate funds to further design any of the outlined traffic calming measures with a view to installation (option 1) **OR** to employ the consultant to propose some new ideas that could be incorporated into the wider look at the town (option 2).

Town Centre Improvements – Employ external consultant

What: To take a holistic look at Sandwich with the view to showcase and protect the historic buildings, improve the street scene, create pedestrian friendly streets and encourage economic prosperity for the town.

This work would be carried out by an external consultant who would be expected to analyse traffic movements, pedestrian movements, the historic fabric, on street parking, the material palette used and business needs. The consultant would be expected to take the design through public consultation.

The aim is to use the report to apply for funding in order to carry out the works.

Possible funding sources include Heritage Lottery Funding, Coastal Communities Fund.

Why: To build upon the ideas presented in the green paper produced by the Town Team. To ensure a wider improvement programme in the town beyond simple traffic measures.

Where: Focussed primarily on the historic centre (Guildhall, New Street, Delph Street, King Street, Market Street, No Name Street, The Butchery, Potter Street) but the consultant will be expected to take a wider look at Sandwich as a whole and make recommendations for improvement.

When: Subject to approval from the Town Council, work could begin immediately to find a suitably experienced consultant. Indicatively a consultant could be employed by the end of January/February with a view to them producing their results by July/August. However, agreeing terms with the consultant, holding a Public Consultation, designing time and submitting an application for funding is expected to take up to 1 year in total but could be longer depending on the scope of the project.

How much: It is estimated that a suitably qualified consultancy could be obtained for a sum in the region of **£45,000** (subject to scope of the project)

Decision required: Whether to allocate funds to employ an urban designer and request that KCC begin the procurement process.

Toll Bridge / Barbican Improvement

What: To improve traffic flows over the Toll Bridge and around the Barbican to protect the structures and increase safety to pedestrians.

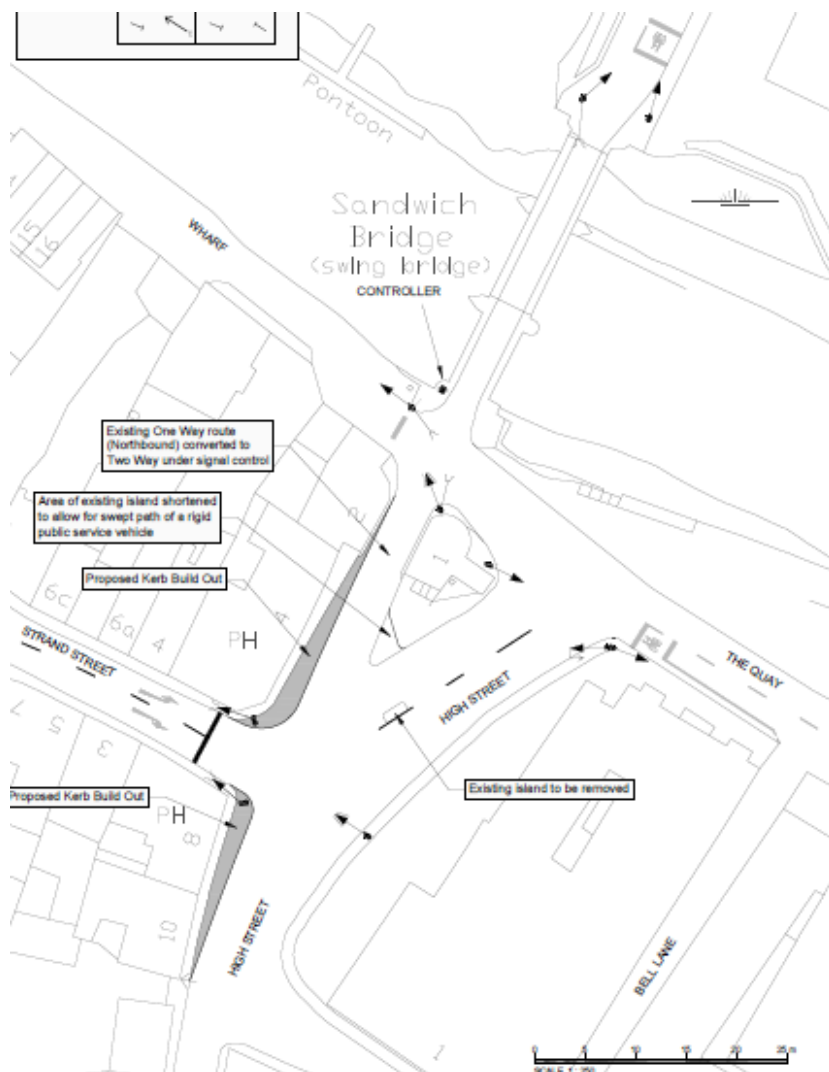
Option 1: Instruct an external consultant to look at the traffic movement over the Toll Bridge and around the Barbican while undertaking a holistic look at Sandwich Town (see page 12)

Potential Benefits: It is possible that changed traffic flows could remove the need for large vehicles to turn left after crossing the Toll Bridge. There may be a new scheme or layout that the consultant can design that is not possible within the current layout of the town.

Risks: A consultant may not be able to suggest any improvement. This could delay the timescale with which a solution could be found and implemented, owing to the process of employing a consultant.

Option 2: relocate the Traffic Signals around the Barbican and Toll Bridge to allow 2-way movement through the Barbican.

The design involves relocating traffic signals to Strand Street (see concept plan)





Potential Benefits: This design would limit the need for a left turn over the Toll Bridge, when heading south, which can result in damage to the bridge and the Barbican.

Risk: This scheme would queue traffic in Strand Street which would increase pollution levels and congestion. Although buses and other vehicles would avoid the left turn; Coaches would still need to turn left after the Toll Bridge to access the Quay. Cyclists would have a longer distance to travel on one phase from Strand Street to the Quay (although this can be mitigated with sensors that provide a longer signal phase when cyclists are detected). Increased risk of vehicles striking the inside of the Barbican as more vehicles will be travelling through it.

Why: There have been some incidents involving vehicles and pedestrians on the toll bridge and damage caused to the bridge and Barbican.

Where: Around the Barbican (See concept plan).

When: If option 1 is selected the work will form part of the wider holistic look at Sandwich and will fall within that timescale.

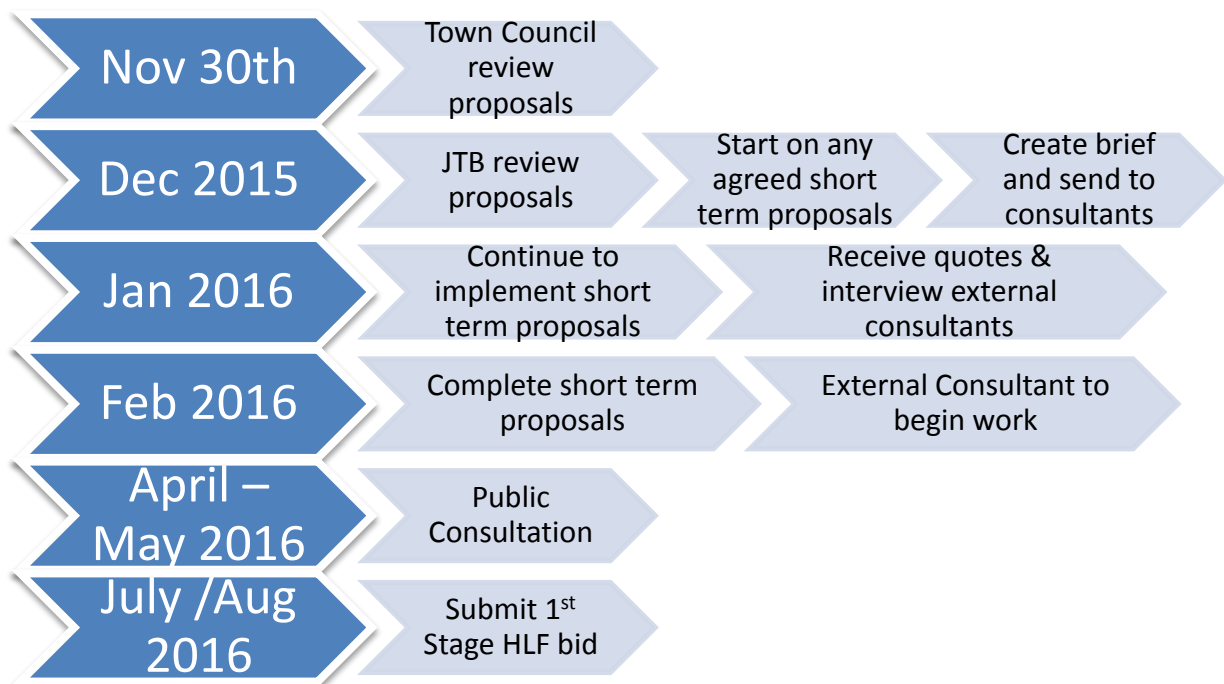
If option 2 is selected - KCC Engineers have already visited the site to determine the feasibility of the concept plan and created a detailed design. Work to implement this scheme could begin if funds are allocated.

How much: If option 1 is selected it is considered the installation costs would be provided for in any funding awarded from a bid.

If option 2 is selected - It is estimated that the building works could cost anywhere between **£65,000 - £75,000**. Until a detailed design is created, it is difficult to quantify an exact price as there are a large number of variables that will affect the cost.

Decision required: Whether to include this work in a longer term funding bid (option 1) **or** allocate funds to install the scheme in the short term (option 2).

Estimated Timeline



If all proposals were approved, this is an estimated timescale of events.

Funding

Indicative costs of proposals	Potential sources of funding:
<p><u>7.5 Tonne Weight Restriction</u> = £3,500</p>	<ul style="list-style-type: none"> • S106 money (Town Council)
<p><u>Gateways / Signage</u> = £12,000</p>	<ul style="list-style-type: none"> • Dover District Council contribution (match funding)
<p><u>Traffic Calming New Street / High Street / Strand Street / Moat Sole</u></p> <ul style="list-style-type: none"> • Option 1 = <ul style="list-style-type: none"> a) £6,000-£30,000 (staggered parking) b) £12,000-£30,000 (built out chicanes) c) £60,000-£100,000 (cushions) d) £50,000-£100,000 (tables) • Option 2 = (£45,000) 	<ul style="list-style-type: none"> • Member fund (Leyland Ridings) • Some KCC staff time • Heritage Lottery Funding • Coastal Communities Fund
<p><u>Breezy Corner Improvements</u></p> <ul style="list-style-type: none"> • Option 1 £3000-£8,000 • Option 2 (£45,000) 	
<p><u>Town Centre Improvements – Employ External Consultant</u> £45,000</p>	
<p><u>Toll Bridge / Barbican Improvement</u></p> <ul style="list-style-type: none"> • Option 1 (£45,000) • Option 2 £65,000-£75,000 	

(£45,000) = to be included in the price of employing an external consultant to conduct a holistic study of the town.

Notes:

S106 money – it is estimated that there is **£80,319** left for the Town Council to spend on Sandwich Town Improvements. Of this money, £35,000 is ring-fenced for Highways related work.

1) The Willowbank Section 106 provided £35,000

2) An extra £50,000 was added as a result of KCC carrying out a developer obligation on the Ramsgate Road.

Money spent so far:

- HGV signs £2,881
- Traffic surveys on Moat Sole & Strand Street £1,800