

Capital Project Business Case Strood Civic Centre Flood Mitigation Works

### The template

This document provides the business case template for projects seeking funding which is made available through the **South East Local Enterprise Partnership**. It is therefore designed to satisfy all SELEP governance processes, approvals by the Strategic Board, the Accountability Board and also the early requirements of the Independent Technical Evaluation process where applied.

It is also designed to be applicable across all funding streams made available by Government through SELEP. It should be filled in by the scheme promoter – defined as the final beneficiary of funding. In most cases, this is the local authority; but in some cases the local authority acts as Accountable Body for a private sector final beneficiary. In those circumstances, the private sector beneficiary would complete this application and the SELEP team would be on hand, with local partners in the federated boards, to support the promoter.

Please note that this template should be completed in accordance with the guidelines laid down in the HM Treasury's Green Book.

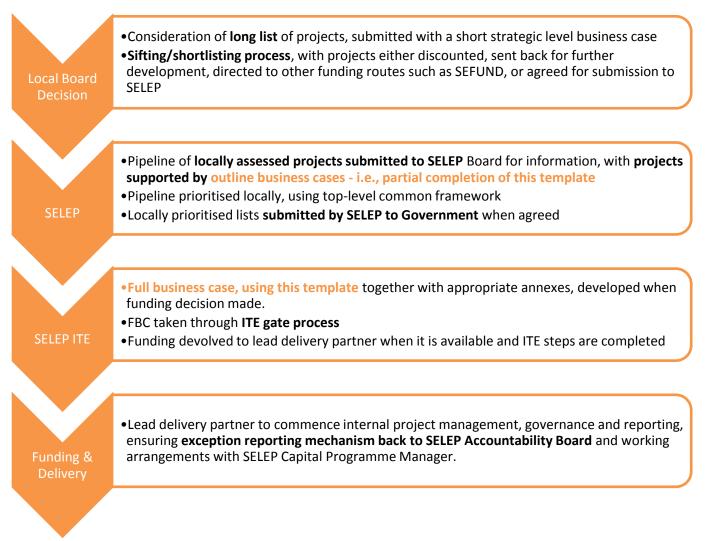
https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluationin-central-governent

As described below, there are likely to be two phases of completion of this template. The first, an 'outline business case' stage, should see the promoter include as much information as would be appropriate for submission though SELEP to Government calls for projects where the amount awarded to the project is not yet known. If successful, the second stage of filling this template in would be informed by clarity around funding and would therefore

require a fully completed business case, inclusive of the economic appraisal which is sought below. At this juncture, the business case would therefore dovetail with SELEP's Independent Technical Evaluation process and be taken forward to funding and delivery.

## The process

This document forms the initial SELEP part of a normal project development process. The four steps in the process are defined below in simplified terms as they relate specifically to the LGF process. Note – this does not illustrate background work undertaken locally, such as evidence base development, baselining and local management of the project pool and reflects the working reality of submitting funding bids to Government.



In the form that follows:

- Applicants for funding for non-transport projects should complete the blue sections only
- Applicants for funding for transport projects should complete both the blue and the orange sections

Version control		
Document ID	Strood LGF Final 211217	
Version	Final	
Author	Janet Elliott	
Document status	SELEP Gate 02 Review	
Authorised by	Tomasz Kozlowski	
Date authorised	08 February 2018	

1.	PROJECT SUM	MARY
1.1.	Project name	Strood Civic Centre Flood Mitigation Works
	i roject name	
1.2.	Project type	Flood defence works enabling mixed use regeneration development
1.3.	Location (inc.	Civic Centre
	postal address and	Strood ME2 4AU
	postcode)	
1.4.	Local	Medway
	authority area	
1.5.	Description (max 300 words)	Medway Council has identified the 3.4ha brownfield Civic Centre as a target mixed use regeneration site to meet the high demand for housing, and to contribute towards our aspirations to become a Waterfront University City by 2035. This site is within the emerging Medway Local Plan. The site is currently at considerable risk of river tidal and surface water flooding and requires protection works before it can be redeveloped. It is currently used as a car park. Once protected, i.e. raised above forecast flood levels, it will be transformed into an area of prime, high quality residential lead mixed use development with potential for premium housing, offering fantastic views of Rochester Castle and Rochester Cathedral and access to the River Medway (figure 1 below).
		Figure 1: View from the Civic Centre site
		Flood mitigation works will enable a feasible, flood resilient, mixed use regeneration site. Due to residual flood risks, ground floor space can be used for commercial premises, complementing the nearby Innovation Studios Strood as a satellite of Innovation Centre Medway. Regeneration of the site will provide employment land, targeted at SMEs, encouraging local cafes, restaurants and independent retailers, enabling job creation and innovation through sector clustering.
		Above the ground floor will be multi-storey apartments, in keeping with quality architecture of waterfront developments in Medway including Chatham Waters, and Rochester Riverside on the opposite banks of the River Medway. This will enable 564 units of housing depending on density. The combination of the construction of flood defences, housing development and commercial use will create an estimated 1033 jobs.

1.6.	Lead applicant	The overall development will make a significant contribution towards increasing employment in the area, supporting the objective of adding to the housing stock to accommodate the increasing population level and helping Medway's Regeneration Strategy for the area. In addition, the mixed use development will encourage a vibrant environment where people will enjoy living and socialising and which will grow the local economy. Medway Council
1.7.	Total project value	£112,000,000 gross development value of the proposed housing development £92,000,000 project cost
1.8.	SELEP funding request, including type (e.g. LGF, GPF etc.)	£3,500,000 Local Growth Fund round three
1.9.	Rationale for SELEP request	Medway suffers from relatively high levels of unemployment; it also has an increasing population level. The brownfield site at the Civic Centre in Strood has been identified as a site that, if developed, will generate 902 direct and 131 indirect jobs, deliver 564 units of housing, depending on density, and attract £86m of private sector investment. However, the site suffers from the risk of flooding and needs significant investment in a flood defence scheme. For that reason Medway Council is applying for £3.5m of LGF funding to invest in the flood defence for the site and therefore act as a catalyst for the development. The scheme supports a number of local policy objectives, such as the Local Development Plan, the Regeneration Strategy, Medway's Cycling Action Plan 2016/18, skills and training, physical activity and public health, as well as opportunities for housing, local employment and apprenticeships, that will support initiatives already delivered via Employ Medway and the Medway Apprentice Scheme. The Civic Centre site is situated within the <b>Thames Gateway</b> economic development area. This area is identified by the Government as a key area for growth in which the focus is upon ensuring sustainable and well-integrated communities. The development of the Civic Centre site will build upon current and previous investment in Strood as part of a wider quality improvement of land use along the River Medway, contributing to the Medway Regeneration Strategy aspiration of a Waterfront University City by 2035. The inclusion of footpaths and a river walk around the perimeter of the site, which will link to existing cycle paths will support Medway's Cycling Action Plan 2016/18. Implementing the action plan will facilitate greater participation in cycling by residents, visitors to Medway and those commuting into Medway for work to lead healthier, more active lifestyles, together with contributing to delivering growth and tackling environmental issues. Historic data demonstrates a 17% increase in cycle journeys on Medw

The South East LEP (SELEP) Strategic Economic Plan (SEP) cites Strood Civic Centre re-development as a prospective project. This is alongside complementary prospective and realised projects at Temple Waterfront, Strood town centre and Strood train station, Rochester Riverside, the new and relocated Rochester train station and the new 321 space multi-storey car park adjacent to Rochester station.

Improving productivity: the SEP cites an ambition to increase productivity by moving away from traditional, low output sectors to support growth in higher value added sectors. Commercial space at the Strood Civic Centre site will appeal to high value sectors, particularly digital; this is based on the success of and waiting list for our Innovation Centre Medway. The high quality setting and premium market positioning will make this a perfect location for high productivity digital firms, wanting to cluster with others in their sector, with the neighbouring Innovation Studios Strood commercial development, and hub offer, which support services of Innovation Centre Medway.

Building houses to restore local confidence: We want to counter the Vicious Circle cited by Wessex Economics within the South East SEP. We want to create the following paradigm as cited in the SEP: A Virtuous Circle of Investment to attract entrepreneurs and higher income households:

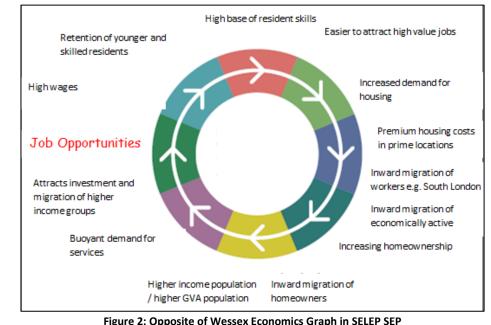


Figure 2: Opposite of Wessex Economics Graph in SELEP SEP

The proposed development is accessible to both Strood and the new Rochester train stations which have both seen extensive investment from Network Rail totalling £27.25m. (£26m Rochester and £1.25m Strood (investment which has been equally matched by Medway Council)). A new development at Strood Riverside and the Civic Centre site will provide prime real estate to attract high value workers who will be able to access high quality workspace locally (onsite at Civic Site, neighbouring Innovation Studios Strood, Innovation Centre Medway or the proposed Innovation Park Medway) or easily commute to London using the High Speed One rail link.

#### 1.10. Other funding £86,000,000 private sector investment through commercial site development. Considered low risk, as a source of funding, as the enabling work will be achieved sources through Local Growth Fund investment, and the development of other regeneration

sites, such as the nearby Rochester Riverside site, have attracted significant housing developer interest. The market is strong and the council has already been approached directly by a leading housing developer expressing a keen interest in the site due to its location. Medway Council also has access to low cost borrowing and there is also the option to direct develop through the Medway Development Company Limited (the council's own emerging housing development company).

The site will be marketed to target development partners for housing construction with transfer of the site by 2020, or included in the development programme of Medway Development Company Limited in the same timescale.

£800,000 Medway Council – the site is owned by Medway Council and this figure represents the existing land value in its current use.

Throughout the preconstruction design phase the project team consulted with the Environment Agency to verify the design and ensure the scheme meets their standards. As part of the Consultation Strategy (see Section 6.5), the team are also discussing with the Environment Agency to determine if there is additional funding available from Flood Defence Grant in Aid.

The balance of the overall cost of the project will be funded by Medway council via prudential borrowing which still allows for a viable development. The funding of the project in this way was agreed in principle by Medway's Finance team and approved by the Strood Regeneration Board in November 2016; the board is attended by elected members and senior officers. Elected members have been informed of the final cost.

1.11. Delivery					
partners	Partner Nature and/or value of involvement (financial,			(financial,	
·				rational etc.)	. /
	Commercial development Financial investment and operational				
	partner to be p	•		agement of construction.	
	included in the		-		
	programme of	•			
	Development	•			
	Limited (the co				
	development o				
	Volker Highwa		One	rational delivery of the flood defe	ance works
	VOIKEI HIghwa	ys	-	ring opportunities for local supply	
				s, apprenticeships, work experier	ice and
			-	er educational placements	-1 - 1
	Environment A	sency		rational involvement and technic	
				approval of the measures propos	
	Network Rail		-	rational consultation as the work	
				cent to the railway and Network	
	Historic Englar	nd	-	rational consultation as the site o	
				oosed works has a high to mediun	•
				ontain archaeology of Romano-Br	itish and
			post	medieval date	
1.12. Key risks					
and	Risk	<b>Risk Descriptio</b>	on	Mitigation	Risk Owner
mitigatio	Category				
ns	Financial	Best value		Use of an effective OJEU	Medway
		procurement of	of	compliant procurement	Council
		necessary		framework and experience of	
		consultancy/de	esign	the procurement team at	
		/build services	not	Medway Council, which has a	
		achieved		proven track record of	
				successful project delivery,	
				both in terms of quality and	
				value for money. The team	
				was recognised in March 2014	
				at the Excellence In Public	
				Procurement Awards 14/15	
				where the Team achieved the	
				Highly Commended Award for	
				Innovation or Initiative, and in	
				August 2014 being shortlisted	
				for two major award	
				categories in the CIPS Supply	
				Management Awards 2014	
				and 2015.	
		Underestimati	on	A detailed set of ground	Medway
		of design sche		condition surveys, ecological	, Council and
		cost		and contamination surveys	the Flood
				was carried out during the	Works
				design stage, as well as	Contractor
				consultation with key	50
				stakeholders. The final design	
				has been approved by the	
				Environment Agency and has	
				Environment Agency and has	

		been competitively tendered	
		and market tested by both	
		the preferred contractor and	
		Medway Council's project	
		quantity surveyor. An	
		iterative approach to value	
		engineering will be applied	
		during the construction	
		phase, all methodology and	
		sourcing of materials will be	
		reviewed, whilst ensuring	
		quality is maintained and	
		workshops will be held to	
		explore further efficiency	
		opportunities. During the	
		construction phase,	
		management of costs through	
		the NEC contract via the	
		compensation event process	
		will means that cost	
		predictability and certainty	
		will be accurate at any point	
		in the scheme.	
Commercial	Negative public	The Strood development	Medway
	response to	project has been informed by	Council
	proposed scheme	the Medway Local Plan and	
	design proposals	consultations took place in	
		2016, and are continuing with	
		local residents, businesses	
		and social groups, and have	
		received positive public	
		support, and support from	
		stakeholders. A further public	
		consultation is planned for	
		December 2017 – January	
		2018 for the emerging	
		Masterplan and Development	
		Brief. A stakeholder	
		management plan and	
		communications plan will be	
		used to manage stakeholders	
		and the flood defences	
		project teams from Medway	
		and the contractor will	
		manage the communications	
		as the flood defence works	
		progress.	
		Low rick as this is a prima	Medway
	No match funding	Low risk as this is a prime	meanay
	No match funding from private	regeneration site, which once	Council
	-	-	
	from private	regeneration site, which once	
	from private	regeneration site, which once appropriate flood defences	
	from private	regeneration site, which once appropriate flood defences have been established will be	
	from private	regeneration site, which once appropriate flood defences have been established will be a viable development site.	
	from private	regeneration site, which once appropriate flood defences have been established will be a viable development site. There has been considerable	

		hear arreached directly by a	
		been approached directly by a	
		leading house builder.	
		The Council has the option to	
		self deliver the site through	
		Medway Development	
		Company Limited too.	
Economic	Benefits are not	The benefits have been	Medway
	realised	estimated using best practice	Council
		guidance from UK	
		Government Departments	
		built on hard evidence from	
		schemes developed	
		previously. The impacts will	
		be monitored closely over	
		time to ensure they are being	
		realised. Any slippage in the	
		implementation of the flood	
		defence scheme and the	
		proposed level of	
		development, and therefore	
		employment and housing	
		benefits being generated, will	
		be dealt with using	
		appropriate measures to	
		speed up the construction	
		work. The Project Manager, in	
		association with the Head of	
		Regeneration Delivery, will be	
		responsible for developing a	
		Benefits Realisation Plan. This	
		plan will clearly set out the	
		benefits that the scheme is	
		expected to deliver, along	
		with a process for collecting	
		the required information to	
		allow assessment as to	
		whether the benefits have	
		been realised.	
Management	Programme	Planning permission for the	Medway
	slippage due to	flood defence works was	Council and
	delay in process	approved by the Local	the Flood
	from planning	Planning Authority on 22 <sup>nd</sup>	Works
	permission refusal,	November 2017. The scheme	Contractor
	safety audit result,	was developed with the	
	ground	approval of the Environment	
	contamination,	Agency and detailed ground,	
	ecological, or	ecological and contamination	
	technical adoption	surveys were carried out and	
	issue	informed the design and	
		methodology of construction.	
		The contractor has also	
		prepared and will adopt a	
		Health and Safety Plan that	
		covers the flood defence	
		works.	

	A Marine Management	
	Organisation (MMO) Licence	
	has been granted for	
	permission to carry out the	
	works.	
	Medway is in the process of	
	developing a masterplan and	
	development brief which will	
	be consulted on in December	
	2017/January 2018.	
	Once adopted the Brief will	
	provide supplementary	
	planning advice, expanding	
	on Policy S1 – Development	
	Strategy in the Medway Local	
	Plan 2003 and in the	
	emerging updated Local Plan.	
	It has been prepared in	
	accordance with the Town	
	and Country Planning (Local	
	Planning) (England)	
	Regulations 2012. The	
	Medway Local Plan 2003 is	
	the current development plan	
	for the authority and	
	therefore forms part of the	
	council's policy framework. As	
	it is intended to adopt the	
	Strood Development Brief as	
	a Supplementary Planning	
	Document (SPD), it will be	
	part of the development plan.	
Delay or	Low risk based on the	Medway
unsuccessful	proposed delivery team's	Council and
delivery of scheme	current track record of	Flood
due to insufficient	delivering LGF and	Works
management or	regeneration projects.	Contractor
project resource.	Medway Council and the	
	flood works contractor have	
	identified project teams to	
	deliver the flood works, and	
	all team members have	
	considerable project	
	management and engineering	
	experience - see section 6.1	
	Project Management. There is	
	also considerable senior	
	management commitment to	
	the riverside developments in	
	-	
	Strood, with the Civic site	
	being the most prestigious in	
	Medway	
Protecting ecological habitats	Low risk as ecological surveys have been carried out and the	Medway Council and

		مريام والمامير والر	design of the fleast staff and	
		could delay the	design of the flood defences	Flood
		project	has been developed with the	Works
			approval of the Environment	Contractor
			Agency, as well as the	
			proposed methodology for	
			the delivery of the works in	
			order to not disturb marine	
			habitats. The contractor for	
			the flood works has a	
			dedicated chartered	
			environmentalist who will	
			lead the team of	
			environmental specialists,	
			bringing experience of	
			working on major civil	
			engineering projects in river	
			and coastal areas. They will	
			implement the ISO 14001	
			accredited Environmental	
			Management System to	
			ensure all current legislation,	
			environmental conditions and	
	Due is at	Oursell Dusis at Disk	consents are met.	N A a di via v
	Project	Overall Project Risk	The overall project risk is low	Medway
	Delivery		as extensive detailed design,	Council and
			survey, risk, consultation,	Flood
			cost and programme review	Works
			work has taken place in	Contractor
			advance of delivering g the flood defences works. A	
			competitive procurement process has taken place, the	
			price offered has been market	
			tested, the team engaged to	
			deliver and manage the works	
			have many years experience	
			on multiple similar projects,	
			and detailed deliver plans	
			have been developed to	
			ensure the construction	
			phase will be closely managed	
			to deliver a quality product	
			that will allow the land to be	
			released to deliver much	
			needed homes to Medway,	
			whilst providing jobs, learning	
			and skills opportunities	
		r to Section 2.7 Proje sk Management and S	ct Dependencies, 5.7 Delivery Ti ection 7 risk Analysis	mescales, Section
1.13. Start			sign phase of flood defence solut	ion.
date			ices will begin January/February 2	
	mobilisation			
	House building will begin 2020 onwards			
	House building	will begin 2020 onwar	ds	

1.14. Practical completi	Estimated April 2019 completion of flood defences construction. Estimated by 2030 phased delivery of housing units, depending on methods of
on date	construction.
	Medway is exploring proposals to take forward housing development at pace on the Civic development site. The high demand for new housing in Medway is being met head on by the use of modular construction via businesses such as Latis Homes, who build new properties to promote sustainable living. Other local sites currently being delivered using off-site modular construction include Brooke Homes development at Capstone Green. Latis has a number of sites in Medway where the propose to deliver homes at pace , including Kitchener Barracks in Chatham delivering around 300 new homes, at a rate of 100 homes per year.
	Top Hat is a modular housing construction company who use a manufacturing method akin to a car manufacturing assembly line. This company was specifically mentioned in the recent government housing White Paper, as a prime example of innovation. Top Hat sees a significant market in the South East and is in discussions with Medway Council and private landowners.
1.15. Project develop ment	The options appraisal for the flood defence works was completed in August 2015. The feasibility study was completed in June 2016.
stage	Consideration has been given to expand the scope of the project to extend the flood defences to the creek upstream from Jane's Creek. However with poor access to the additional area of land no additional housing units could be delivered, which would have resulted in an unviable scheme. The Flood Defence Grant in Aid has been discussed with the Environment Agency (EA,) however further work is needed to establish whether this would be applicable for this area and the amount of grant available. Initial discussions with the EA have highlighted further difficulties of constructing flood defences in this area due to existing habitats.
	Medway is looking for funding to protect the wider Strood area and this project enables the first stage of flood defences. The flood defences have been designed to not preclude future investment and expansion of the flood defences. The planning approval for the flood defences for the former Civic Centre site has facilitated the engagement of Rochester Bridge Trust to improve their flood defences, and the Trust is currently working on a planning application for their site. Medway and the Bridge Trust are working together to ensure that both schemes can tie into each other, delivering a cohesive approach. Although further works would be needed, this initial work will help flood defend Strood High Street.
	The flood defences for Strood Riverside site, located on the opposite side of the A2 road, have also been designed in tandem with the Civic Centre site. The flood defences for Strood Riverside will be delivered during the same timeframe as the Civic Centre sites, to deliver a holistic approach. These flood defences enable additional housing and the protection of existing homes to the north of the site in Cranmere Court and Wingrove Drive
	Both these site coming forward have enabled another potential outlet for regeneration and additional housing; Orbit and Moat housing associations are in discussions with Medway regarding flood defending their Kingwear Gardens site and regenerating the area, facilitating a further 310 homes.
	Although at this stage it has not been viable to extend the flood defences beyond Jane's Creek, it has facilitated wider flood works throughout the area and attracted investment.

It is important to highlight that these works will help enable future flood defence works.

The preconstruction detailed design phase started in August 2016, and the planning application for the final scheme was submitted in May 2017. Planning approval for the scheme was granted at the Planning Committee meeting on 22<sup>nd</sup> November 2017, subject to conditions.

The works will involve the installation of a sheet pile wall around the perimeter of the site and then filling the ground by approximately 2 metres, as agreed by the Environment Agency, to protect the site from tidal flooding. See figure 3 below:

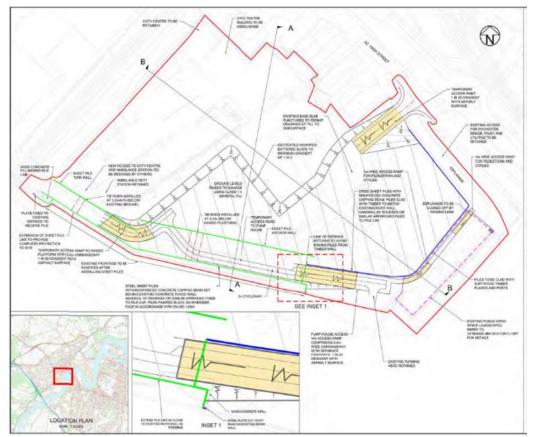


Figure 3; Proposed general arrangement of scheme

A new steel sheet pile wall will be constructed along the river frontage to a height of 6.0mAOD. A reinforced concrete capping beam will be positioned on top of the sheet pile wall taking the overall defence height to 6.1mAOD (exceeding the predicted 1 in 200-year flood event level).

Along Jane's Creek, a short (3m to 4m) length of sheet pile wall will be installed in-front of the existing flood defence wall adjacent to the railway embankment/bridge. This is needed to tie the new flood defence structure into high ground on the railway embankment and ensure protection to the entire site. Along the remainder of Jane's Creek, the new sheet pile wall will be located 2m landward of the existing concrete flood wall.

The new sheet pile wall will then divert landward at the point where the current river wall also diverts landward (a short distance east of the Pump House) and continue along the landward side of the Esplanade towards Rochester Bridge. This is to avoid raking piles, which are piles that extend diagonally downwards, located behind the existing timber wall defence in this area. As it approaches Rochester Bridge, the new wall sheet pile will divert northwards and continue to follow the Esplanade towards its junction with

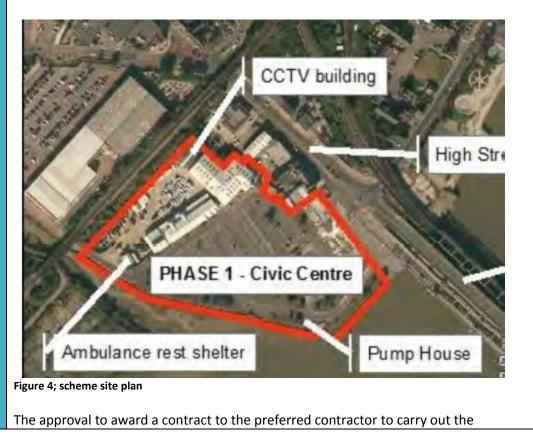
the A2 (High Street).

Two lines of secondary sheet piles will also be installed adjacent to Jane's Creek. This secondary line is required to ensure the stability of the primary sheet pile wall and will be connected using tie rods (metal rods buried below ground that connect the two lines of sheet piles together). These will be positioned parallel to the new steel sheet pile wall, 10 m and 19m landward for western and eastern sections, respectively. They have been separated and aligned in this way in order to avoid an ambulance driver rest centre. The tie rods will be placed at 3.2m intervals for the western section, and 4.2m intervals for the eastern section, between the secondary line of piles and new steel sheet pile wall. Both the secondary line of sheet piles and the tie rods will be buried below existing ground levels and will not be visible.

A section of the current flood wall along Jane's Creek between the Pump House and the railway embankment/bridge will be cut off just below silt level once the new sheet pile walls have been installed. This is because this section of wall is in a very poor state of repair and is at risk of collapsing.

The current flood defence structures alongside the Pump House and the amenity area next to the Esplanade will be retained. The amenity area will be raised to 5.1mAOD with light weight fill material. This area will be landscaped with pedestrian and cycle access provided from the east and west.

Ground raising will be undertaken across much of the site. Working closely with the masterplanner, the design has evolved to allow for a reduction in the areas to be land raised and the amount of fill material required on the site from that which was originally proposed at feasibility stage; this will allow for underground and undercroft parking to some of the proposed housing blocks. The cost per parking space is estimated to be less than would normally be expected due to the topography of the site and the height of the ground floor required by the Environment Agency.



construction works for the flood defences was given by the council's Procurement Board on 22<sup>nd</sup> November 2017.

Works are planned to start on site in February 2018, for a period of approximately 56 weeks. The preferred contractor was able to identify critical operations and disciplines that positively impact the programme and price and was able to save 17 weeks on the indicative programme, by use of multiple piling rigs for the construction of the new river wall, which will also mean less disruption to the local community.

Medway has a construction project plan from the contractor which illustrates the work will be complete by April 2019.

Following the flood defence works the land will be ready for housing development mid - late 2019, allowing for any inclement weather during the construction period; the risk of weather delays has been mitigated by the programming of critical works outside of the winter months. This programme also allows time for settlement of the new fill material.

The remaining buildings on the site were vacated by all previous occupants, including a number of Medway Council departments, in July 2017.

Work started on the demolition of the redundant buildings and redirection of utilities in September 2017 which will be completed by January 2018, as highlighted in Figure 5 below. This means that the full economic benefits in terms of housing and commercial units can be fully realised, the maximum number of homes can be delivered, and the proposed number of jobs and skills opportunities can be created.



Figure 5: Demolition of Redundant Buildings at the Civic Site in Progress

#### Strood Waterfront Masterplan and Supplementary Planning Document

The council produced a Strood Riverside Development Brief in 2006. There have been considerable changes locally and nationally since 2006 and the updated policy will reflect evolved thinking and innovations in development, and support the council's ambitions to realise the regeneration opportunities presented by the exceptional sites in Strood. This will secure investment and deliver quality development that boosts the area's economic, environmental and community wellbeing.

The proximity to the stations supports the proposal for a lower parking ratio, which is a departure from the Medway standard and is progressing towards a cleaner development. There is also the opportunity to encourage the use of "car clubs" given the urban location, and challenge car dependency behaviours outside of London.

The proposed revised Development Brief seeks to establish a clear planning policy context. It will outline the Council's ambition for the 34,374m<sup>2</sup> Civic site and the adjacent

62,720m<sup>2</sup> Riverside site, and will make provisions for the inclusion of the possible future regeneration of the nearby Kingswear Gardens, jointly owned by Moat and Orbit Housing Associations, as outlined in Figure 6. Medway Council is in discussions with both Housing Associations to bring forward their sites also as part of a possible comprehensive redevelopment. These sites present a rare opportunity to help establish Medway's modern waterfront as vibrant commercial and community spaces.

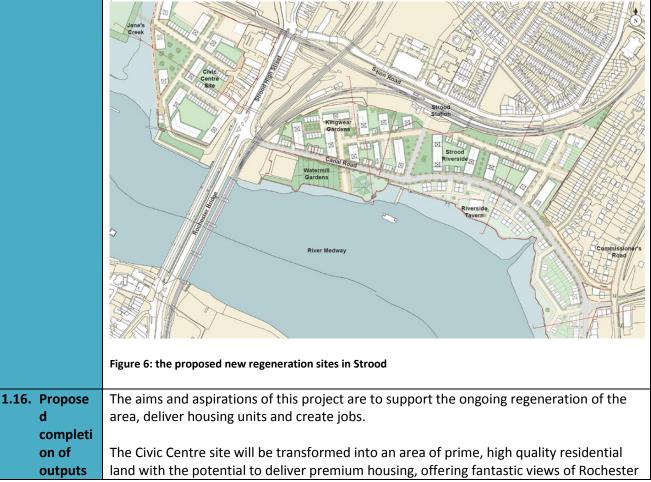
Whilst setting design parameters, the council is aware of the need for commercial viability, ensuring market confidence and deliverability, therefore the Development Brief has been tested for commercial viability, and transport issues and solutions have also been considered. Opportunities for transport improvements will be established in the emerging evidence base for the new Local Plan, also helping to inform the emerging Strategic Transport Assessment

Development quantum in the SPD shows:

- Civic Centre: 564 residential units, complemented with commercial and community land uses.
- Strood Riverside: 602 residential units, complemented with community land uses
- Kingswear Gardens: 445 residential units

Medway Council officers will be holding a public consultation for a 6 week period, starting in December 2017, in accordance with the Medway Statement of Community Involvement, 2014. A consultation plan has been drawn up to ensure that there is effective engagement with stakeholders, statutory consultees, and local residents and businesses.

Following the consultation and review of all feedback, the final document will be presented to Medway's Cabinet in May 2018.



d

Castle and Rochester Cathedral and access to the River Medway. Redevelopment of the site will provide employment land, targeted at SME's, encouraging local cafés, restaurants and independent retailers, enabling job creation and innovation.

The site is protected by existing flood defence structures which consists of a timber piled defence with a reinforced concrete flood wall built on top of the capping beam. Along the Jane's Creek frontage, the defence becomes less uniform and comprises sections of timber piles with mass concrete infill with a continuation of the reinforced concrete flood wall. The site is low lying with much of the site less than 4.0m Above Ordnance Datum (AOD).

In order to achieve this it is necessary to raise the flood defence level of the Civic regeneration site to provide defence for the 1 in 200 year storm threat, with flood levels at +6.0m AOD (above ordnance datum or above sea level), as agreed by the Environment Agency. The main risk is tidal flooding from the River but there is also significant risk of surface water flooding.

The form and appearance of the defences have been developed in order to respect the characteristics of the areas within which they are located.

Key examples of this are in relation to the scheme design close to the publicly accessible green space, and the diversion of the flood wall landward. The steel sheet piles are to be painted black, with anti-corrosive paint, in accordance with EN ISO 12944 (international standard on corrosion protection of steel structures using protective paint). Hand rails topping the flood walls will also be the same, or very similar, to the ones used in nearby developments in Rochester. This will give a consistent appearance to the Medway area, giving it a 'sense of place'.

The scheme design team worked closely with Medway's masterplanner, and the design has evolved to allow for a reduction in the areas to be land raised and in the amount of fill material required on the site from that which was originally proposed at feasibility stage; this will allow for underground and undercroft parking to some of the proposed housing blocks. The cost per parking space is estimated to be less than would normally be expected due to the topography of the site and the height of the ground floor required by the EA.



Figure 7: the Civic site in its current state

Figure 8: the Civic site after the flood defence works



## Outputs:

The flood defences will be delivered by 2019 and will consist of:

- New piled wall, raised to +6.0m AOD, in front of the existing wall and river defence along the riverside, including up to the adjacent railway bridge.
- Land raising up to a height of 6m to protect the rear of the site from flooding.

Increased flood defence will enable:

- 564 units of mixed tenure housing delivered by 2030
- 902 direct jobs created as a result of the flood defence works, mixed use development and SME use of the commercial unit opportunities these jobs will delivered by 2025.
- 131 indirect jobs created as a result of additional expenditure created from the new homes and households these jobs will be delivered by 2025.

As an output of the flood defence works between 2018 and 2019 work experience and training will be offered to:

- One under 16 year old;
- Six over 16 year olds;
- 55 to 65 school/college visits, to undertake a safety assembly, careers talk or classroom activity with regards to civil engineering and specifically construction;
- Two to four NVQ starts and completions for directly employed staff.

Development of the most prestigious site in Medway, complementing the riverside development in Canal Road and joining with a river walk – development will take place between 2021 and 2028, following the completion of the flood works in 2019

The estimated increase in economic output as measured by GVA (Gross Value Added) is estimated to be £35.7m.

Medway is exploring proposals to take forward housing development at pace on the Civic development site. The high demand for new housing in Medway is being met head on by the use of modular construction via businesses such as Latis Homes, who build new properties to promote sustainable living. Other local sites currently being delivered using off-site modular construction include Brooke Homes development at Capstone Green. Latis/Top Hat has a number of sites in Medway where they propose to deliver homes at

	e , including Kitchener Barracks in Chatham site c .00 homes per year.	of around 300 new homes, at a rate
akir the see	Hat is a modular housing construction company n to a car manufacturing assembly line. This comp recent government housing White Paper, as a pr s a significant market in the Southeast and is in d vate landowners.	any was specifically mentioned in ime example of innovation. Top Hat
bor con	dway is a significant land owner and the access to rowing creates a number of opportunities for its npany, Medway Development Company Limited. npany are expected to start in2018.	recently incorporated housing
pro	e final development of the site could be delivered posed that an expressions of interest exercise is a ments from the market including: Straight Disposal seeking unconditional and/ An OJEU compliant Procurement Process A joint venture (JV) partner to deliver the sch The delivery of the scheme on behalf of the Development Company Limited.	undertaken that will ask for or subject to planning offers neme
as v deli	e table below indicates the key milestones for the vell as the main activities needed to appoint a ho iver the scheme through Medway Development C nning.	using development partner or
Pro stag	also appendix B Gantt chart and appendix B(i) St gramme. The flood defences programme is what ge, and is subject to slight changes, but is an indic ations	was submitted during the tender
Project Output	Description	Indicative date
Flood Defences - Preconstruction Design Phase	The final design for the flood defences as approved by the Environment Agency and submission of planning application	May 2017
Flood Defences - Approved Scheme by Local Planning Authority	Presentation of the flood defence scheme to the Planning Committee	November 2017
Flood Defences Contract Award - Medway Council	Review of the final scheme, approval to proceed with the construction works and inclusion within the Capital Programme by	November 2017

Governance	Medway Council		
Flood Defences -	Work will commence on site for	February 2018 – April 2019	
Construction Works	approximately 56 weeks, following site set up	,	
Masterplan Review –	Develop a commercially viable masterplan for	April 2017 – November 2017	
Site Development	the site to be adopted as a Supplementary		
	Planning Document (SPD)		
Masterplan Review –	Consultation for a period of 6 weeks for	December 2017 – January 2018	
Public Consultation	members of the public, local residents and	,,	
	businesses		
Masterplan Review –	The final masterplan will be presented to the	May 2018	
Adoption of SPD	meeting of Medway's Cabinet for final	-,	
	approval and sign off, after which there will a		
	7 day call-in period		
Appointment of	Procurement process to appoint housing	November 2017 – November	
Housing	development partner to deliver the 600	2018	
Development	housing and commercial units. The council		
Partner or	intends to test the market by carrying out an		
engagement of	expressions of interest exercise considering		
Medway	the below:		
Development	Straight Disposal seeking		
Company Limited	unconditional and/or subject to planning		
··· , ···	offers		
	An OJEU compliant Procurement		
	Process		
	• A joint venture (JV) partner to deliver		
	the scheme		
	• The delivery of the scheme on behalf		
	of the Council through the Medway		
	Development Company Limited.		
	A similar exercise was carried out earlier in the		
	year for a new housing development in nearby		
	Chatham		
Develop Scheme and	Working with the chosen developer to perfect	November 2018 – November	
Achieve Planning	the proposed scheme and achieve planning	2019	
	permission		
Start on Site –	Enter into a development agreement/contract	January 2020	
Housing	with a developer which will become		
Development	unconditional when planning consent is		
	granted		
1.17. Links to other SELEP projects, if applicable	<ul> <li>Strood town centre was awarded funds Growth Fund to deliver a suite of impro accessibility, public realm and the retail and growth.</li> </ul>	ovements around journey time,	
	• This investment will be key to improvin	g the Strood town centre	
	environment and will have a major imp	-	
	environment close to the Civic Centre site. The Strood town centre pr complements and adds value to the Strood Civic site proposal.		
	<ul> <li>Innovation Studios, Strood to deliver 15 local SME's. This is a satellite location o which is adjacent to the Innovation Parl Kent Enterprise Zone. The scheme was tenants moved in on 7<sup>th</sup> August 2017.</li> </ul>	f the Innovation Centre Medway, k Medway site, and within the North	

# 2. STRATEGIC CASE

The strategic case determines whether the scheme presents a robust case for change, and how it contributes to delivery of the SEP and SELEP's wider policy and strategic objectives.

	ser and seller s which pointy and strategic objectives.
2.1. Challenge	The Challenge
or	There is a bigh demond for housing in Madure.
opportun ity to be	There is a high demand for housing in Medway.
addresse d	The emerging Local Plan is required to meet the area's development needs, including land for housing, employment, retail and infrastructure, and the Medway Strategic Land Availability Assessment (SLAA) January 2017 is part of the process for identifying land to be included within the Local Plan. The land on the former Civic Centre site has thus been identified as a suitable development site to deliver much needed homes, and there is the scope to deliver up to 564 housing units and offer 1033 jobs and skills opportunities.
	But the site is at considerable risk of flooding and flood risk management measures have to be implemented before any development can take place
	Medway Council is a Unitary Authority on the north coast of Kent, 30 miles from London to the west, and 40 miles from Dover to the east. It is part of the <b>Thames Gateway</b> economic development area, and is characterised by a highly populated urban area around the estuary of the river Medway, with substantial rural areas to the north and west.
	The Medway Towns are one of the largest conurbations in the South East outside London with a population approaching 280,000. Medway has an exceptional geography, a rich heritage, a dynamic and creative population and a resurgent economy. Medway has a rapidly expanding population and with the proposed development in the Thames Gateway region an increase in the general population to 330,000 over the next twenty years is anticipated. The current student population of around 12,000 will also increase with the new Universities and these factors will place further pressures on the authority's limited housing resources and housing related support. The area suffers from relatively high unemployment and low levels of employment. Moreover the centre of Strood is in need of development and regeneration.
	The emerging Medway Local Plan has shown there is a high demand for housing and specifically the need to deliver around 30,000 new homes by 2035 to accommodate the forecast growing population and meet this demand for housing. This growth figure is based on central government's Office of National Statistics (ONS) baseline projections on population and household growth.
	<b>Stakeholder engagement</b> A Medway Citizen's Panel survey was carried out in March 2016 regarding the five main town centres in Medway (Chatham, Rochester, Strood, Rainham and Gillingham). 604 people responded to the survey – 54.7% were female and 45.3% were male.
	<ul> <li>When asked Why have you not visited Strood town centre in the last twelve months?</li> <li>37.9% of people stated that the poor range of shops and services was the reason;</li> <li>25.9% of people cited the town centre environment as the reason; and</li> <li>22% of people indicated that it was due to the poor range of leisure and entertainment venues.</li> </ul>
	When asked What do you think would help to improve Strood town centre? o 11.3% of people stated that they would like to see an improvement in

traffic;

- 11.1% of people stated that they would like to see an improvement in the shopping, eating out and entertainment experience;
- 8.4% of people stated that they would like to see regeneration in the town centre.

Work is currently underway on the Strood town centre project, supported by the first round of LGF funding. This project is looking to deliver an improvement in traffic conditions in the town centre, along with public realm and accessibility improvements and the delivery of a brand new railway station, working with Southeastern Trains.

Investment is needed in Strood, and the Civic Centre is a brownfield site which has been identified as a location that could be used to create significant jobs, deliver houses and help regenerate the area. However, it suffers from a risk of tidal flooding and will continue to do so unless an improved flood defence system is introduced.

### Key economic challenges for the Medway area

#### **Gross Value Added per capita**

According to the latest ONS Data published in December 2015, GVA per capita in Medway is £17,038, below that of Kent as a whole at £20,096 and even further below the South East average of £27,012. Expressed as a percentage, Medway's economy operates at a level of 63% of the wider region.

When compared to an urban centre of closer commercial comparison such as Brighton (£24,161) and those to which Medway aspires, such as Swindon (£30,537) and Reading (£38,961), Medway currently lags significantly.

However, Medway has committed to closing these gaps. This can be partly achieved by making commercial land available that will support higher value businesses and employment, similar in part to the types of industry, research and development sites found along the M4 corridor to the west of London.

#### Capacity and quality of commercial business stock

Industrial areas in Medway's urban locations are popular and largely operating at capacity. This includes significant sites such as Strood Business Park, Medway City Estate and Gillingham Business Park. Whilst all are popular, Gillingham Business Park represents the last of these particular sites to be developed almost 30 years ago as an Enterprise Zone.

Notwithstanding the development of the Innovation Centre, a standalone initiative developed by Medway Council in 2009, and the Innovation Studios Strood in 2017, the private sector has been slow and reticent to develop new commercial business stock due to a lack of well-located land designated for employment. Therefore, the quality of the area's commercial stock is slowly deteriorating, in addition to the issues related to this burgeoning demand. Recent changes by the Government to the National Planning Policy Framework make it easier for developers to convert commercial sites into residential uses, which is adding to the capacity constraint.

It could be argued that business needs have changed, with communications infrastructure now being a high priority for technology and high growth businesses. Additionally, Medway Council's own research with growing manufacturing businesses shows that there is demand for businesses to build their own bespoke facilities rather than retro-fit traditional commercial workspace to meet their requirements. There is also demand for long-leasehold ownership opportunities, which we believe will embed high quality businesses into the area and reduce transient movement of businesses.

Medway Council commissioned GVA Bilfinger in 2015 to produce its Strategic Housing & Economic Needs Assessment (SHENA), and published the Employment Land Needs Assessment in July 2015 as a constituent part of this. This study identifies that there is 'a need to deliver a mix of industrial and warehousing stock to enable the borough to capitalise on the economic opportunities'. These are an increase in local demand for office space due to London's increasing prices and Medway's quick connection with London and existing high value engineering economic activity. Finally the strategic role of Medway Council as the key stakeholder that can facilitate the space and the infrastructure required was highlighted.

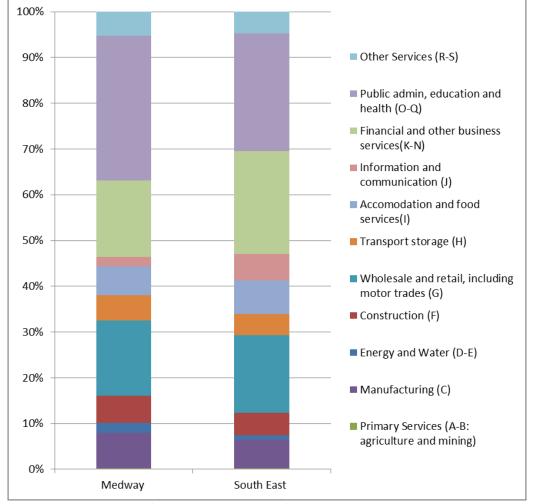
## Commercial land location to support higher value commercial activities

The Council's new SHENA identifies a requirement for 90 hectares additional employment land to meet demand until 2038. While there is sufficient land area currently in Medway to meet this demand, much of it is not ideally located and is remote from the urban core and major transport routes.

### **Employment levels (density and quality)**

Medway's employment density of 0.56 is relatively low when compared to the regional (0.83) and national (0.80) average, due in part to high out-commute patterns for better quality jobs.

The type of jobs available in Medway is also significant. Full-time jobs account for 65% (54,500) of employee jobs and part-time 35% (29,400). Nationally, full-time jobs represent 68% of employee jobs. Medway is known to have an oversupply of part-time employment, which is supported by lower quality and density employment sectors such as wholesale and retail (23%). Figure 7 below shows the structure of Medway's economy and compares it with the South East. This figure shows the reliance of the local economy on the public sector and it also shows a specialisation in manufacturing.





# Low economic base

Medway's economic base continues to be focussed on lower value, less knowledgeintensive activity. Figure 9 above shows that there is a higher share of public sector construction and primary services, and a lower share in financial and other business services and information and communication compared to the South East more generally. This is in spite of accommodating four universities, world leading research and development (R&D) facilities, notably at the University of Greenwich in Medway, and a new state-of-the-art further education college. In September 2015 Medway also saw a new University Technical College open its doors to its first cohort of 14-19 year old Engineering and Construction students.

In reality, Medway is producing skilled employees that largely go elsewhere because the economic makeup of the local area is not able to support these skilled people into employment. As a result the level of skilled people, as shown in Figure 10 below, in the Medway area is lower than the regional profile.

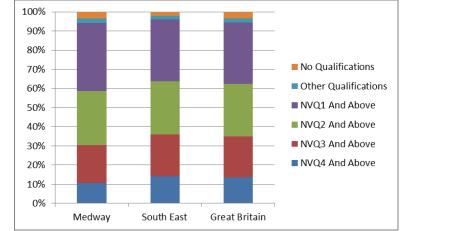


Figure 10: Qualifications: % share, NVQ levels 1-5, Source: ONS

# Over-reliance on the public sector

As mentioned above there is a significant reliance on the public sector for employment in Medway when compared with the South East region. In 2013, the public sector represented 23% of local employment. Development at the Civic Centre in Strood will provide significant private sector job opportunities.

Therefore, it is sensible to channel support towards a strong local sector such as manufacturing, in order to address an ongoing decline in the relative size of the public sector. In this way, Medway will diversify its' local economy and will become less reliant on the public sector.

## Unemployment

Figure 11 below shows the historic trend in the unemployment rate in Medway and the South East region. It demonstrates Medway's relatively higher unemployment rate when compared with that of the South East as a whole. Although the South East has recovered from the economic downturn and its latest unemployment rate is similar to pre-2008 levels, the Medway economy has not reached these levels and its economy has only partially recovered.

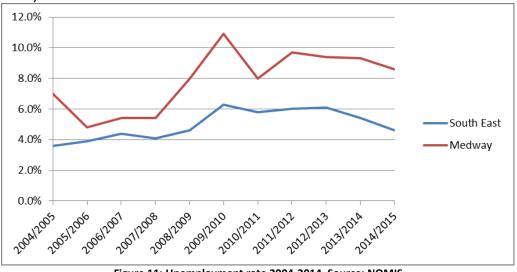


Figure 11: Unemployment rate 2004-2014, Source: NOMIS

### Demand for small business workspace

Modern, micro/small business workspace is in high demand in Medway – these businesses constitute 98% of Medway's business stock. Innovation Centre Medway and the Innovation Studios Strood, are leading examples of this, commanding an average rent of £31 per sq. ft. exclusive of rates and utilities. This is a very high rental level (at least double) compared to anything else in the Medway commercial market, and the building is fully occupied with businesses producing GVA per capita well in excess of the Medway, regional and national averages.

Other small business workspace centres also show high occupancy levels and demand greater than supply. However, one of the largest workspace centres, Medway Enterprise Centre with 96 commercial units, has closed because of its poor condition. This will exacerbate the problem caused by the lack of availability of good quality commercial space for micro and small businesses. In addition, the increasing demand and reduced supply might encourage local businesses that are expanding to move elsewhere.

## The Opportunity

The proposed development at the Civic Centre site, and the flood works required to facilitate this to mitigate the 1 in 200 year storm threat with flood levels at +6.0m AOD (above ordnance datum or above sea level), which will act as a catalyst for the housing units and the commercial development, will radically improve the living environment of the area through quality mixed use development. Activity on the currently underutilised site will help to reduce criminal activity and development is seen as a vital and complementary component to other high profile regeneration projects elsewhere within Medway.

Over recent years the Government has sought to prioritise the delivery of new housing on brownfield sites at sustainable locations. In the Government's Sustainable Communities Plan (2003) the Thames Gateway is identified as the first and the largest of four areas designed to concentrate new community growth. One of the key elements of the Plan is to address an acute housing shortage via the acceleration of the provision of housing in the Growth Areas. Up to £446 million has been allocated by the Government for investment in the Thames Gateway region alone.

Medway Council has prepared a Regeneration Strategy for the Medway Waterfront. This covers the whole Medway area in a regeneration framework. The Civic site and the adjacent Strood Riverside are identified in the Regeneration Strategy as an opportunity to create a significant residential-led development to complement Rochester Riverside and to contribute to the regeneration of Strood. The Civic Centre site (and Strood Riverside) represents a significant brownfield redevelopment opportunity and has long been on the regeneration agenda for Medway Council. Strategically located with views across to Rochester Castle and the Cathedral, it has the opportunity to transform this area in Strood and deliver a new waterfront community to complement the forthcoming development across the river at Rochester Riverside.

It is envisaged that this under-utilised and currently isolated site will be transformed into a new and vibrant urban quarter providing an exemplar in sustainable community living. Once developed the proposal will add character and enhance the overall identity of the site and create a sustainable community integrating with the existing community, within close proximity to Strood and Rochester town centres and the railways stations at Strood and Rochester, which offer journey times to London on HS1 of 38 minutes, and providing public access along the riverbank through the construction of riverside walks and cycleways.

With regards to the particular development opportunities presented at Strood, the Thames Gateway has been designated as one of four areas in which new community growth is to be concentrated. Up to £446 million has been allocated by the Government for investment in the region. Key actions within the Thames Gateway which are directly relevant to Strood include:

• Meeting the housing challenge by increasing densities, improving the quality of

the built environment and improving the mix of dwellings;

- Ensuring a strategic approach is taken to investing in key worker and social housing across the South East of England through a fund managed by the Housing Corporation;
- Bringing forward schemes to improve travel within and throughout the region;
- A commitment to delivering schemes which improve liveability.

# Medway Local Plan

Medway Council are currently in the process of updating their Local Plan for 2012 – 2035, which is anticipated to be adopted in 2019. It will contain strategic level and development management policies, land allocations, minerals and waste, and a policies map. This will provide for the number of homes and jobs, supporting infrastructure, such as transport, health facilities, schools, and parks that an area and its growing population needs over this time. It will replace the Medway Local Plan 2003.

The Medway Local Plan 2003 sets out the strategy, objectives and detailed policy for guiding development in Medway. The overarching development strategy for the plan area is to prioritise re-investment in the urban fabric. This is to include the redevelopment and recycling of under-used and derelict land within the urban area, with a focus on the Medway riverside areas and Chatham, Gillingham, Strood, Rochester and Rainham town centres, in accordance with Policy S1.

Strood Waterfront, encompassing the Civic site is designated as an action area in the Medway Local Plan 2003, as per Policy S10. Therefore, it is intended for regeneration to include residential dwellings, and community amenities such as riverside walks. Creation of new residential development and the provision of affordable housing is stated in policies H1 and H3 within the Local Development Plan.

Land along Canal Road on the opposite side of the A2, reference ME254 in the Local Development Plan, meets the appropriate size thresholds for development and has been earmarked to have the potential to contribute to these policies within Medway. Another section of land along Commissioner's Road, reference ME375 has also been identified to provide 100 units of housing. Therefore, the proposed scheme is required in order to allow for the redevelopment of this land to achieve the policies set out by Medway Council in the Local Development Plan.

# The Medway Regeneration Waterfront Strategy

This sets out a development strategy for the Medway Waterfront for the next 20 years. The Strategy encompasses 14 redevelopment sites along 11km of the River Medway, from Strood to Gillingham, with Chatham at its centre. The objective of the Strategy is to create a series of urban quarters, each different but combining to create a new linear Waterfront University City.

The Strategy sets out six themes which should be common to all areas and which act to reinforce links along the River; these themes are quality and design, sense of place, the river, economy and learning, housing and community and transport.

The strategy states that 'Strood offers an opportunity to create a significant development to complement Rochester Riverside and contribute to the regeneration of Strood as a vibrant and balanced community and place.'

As a result of the flood mitigation works, the key aspirations and opportunities identified for the site are:

• A quality well designed residential development, which takes advantage of the

views to the castle and cathedral;

- Improved access to the waterside with provision of a riverside walk and cycle path;
- Improved access to the railway station;
- Improvement of the highway network to serve the area;
- Provision of community facilities to serve the existing and emerging community;
- Preservation and enhancement of views along the riverside; and
- Achieve flood protection along the riverside, which will also have a positive impact on the nearby businesses and properties in the town centre.

# Medway Cycling Action Plan 2016/18

The inclusion of footpaths and a river walk around the perimeter of the site, which will link to existing cycle paths will support Medway's Cycling Action Plan 2016/18. Implementing the action plan will facilitate greater participation in cycling by residents, visitors to Medway and those commuting into Medway for work to lead healthier, more active lifestyles, together with contributing to delivering growth and tackling environmental issues. Historic data demonstrates a 17% increase in cycle journeys on Medway's cycle network between 2009 and 2014. This growth is likely to be an outcome of a combination of measures delivered to enable people to feel more confident and safer and an increased number of cycle routes linking more areas with key destinations.

Medway Council has shown a commitment to work with Government to deliver locally the ambitions of the national Cycling Delivery Plan. Furthermore, the long-term vision for cycling supports the national vision. The vision is that:

"Cycling and walking should become the natural choices for shorter journeys in Medway - or as part of a longer journey - regardless of age, gender, fitness level or income".

The action plan seeks to contribute to the themes of the Joint Health and Wellbeing Strategy for Medway, that aims to prevent early death and increase years of healthy life, improve physical and mental health and wellbeing. Increasing physical activity by encouraging cycling can significantly contribute to these themes. A key objective of the Medway Local Transport Plan is to encourage active travel and improve health by developing safe transport corridors that encourage cycling and walking. Proactively encouraging cycling directly contributes to this strategic objective.

# Objectives

To further develop a cycling culture in Medway, the objectives of Medway's Cycling Action Plan are to:

- Provide safe, attractive and useful facilities that deliver journey time and safety improvements for cyclists by expanding and improving the cycle network.
- Contribute to improving the health of people who live and work in Medway by increasing physical activity. Increased physical activity not only improves physical and mental health, it also delivers long term savings to the National Health Service and social care through improved health in later life.
- Contribute to growth in the local economy by making the local road network operate more efficiently during periods of congestion.
- Provide support to target users of the cycle network

Target user: Design of the cycle network should be attractive and comfortable for the less confident cyclist.

- Contribute to improving air quality by making the local road network operate more efficiently
- Contribute to reducing social isolation by encouraging more local people to become involved in cycling club activities.

The local cycle network has been enlarged and improved – 72 miles (116 km) of cycle routes now exist across the Medway Council area (as at July 2015). Many routes link up with longer distance routes including those which form part of the National Cycle Network.

Cycle parking provision has been increased through specific cycle parking schemes and as part of planning conditions for new development. By working with Southeastern and Network Rail improved facilities have been installed at a number of mainline stations, including Strood, to respond to increased demand

Medway's Cycling Action Plan will deliver actions that:

- Expand, improve and maintain the network of facilities for cyclists;
- Deliver training and participation in cycling;
- Delivers improvement by working in partnership;
- Provides information and promotional material; and
- Maintains and develops travel plans.

Collectively, these actions deliver the objectives of the action plan to expand, improve and maintain the network of facilities for cyclists

# Strategic Importance and Connectivity

The redevelopment of the Civic Centre site and Strood Riverside is considered to be of both local and strategic importance for the following reasons:

- The site itself is positioned directly adjacent to the River Medway and is located within 5 to 10 minutes walking distance of Strood town centre and 10 to 15 minutes walking distance from Rochester.
- The site is located close to areas with a significant history and character and has panoramic views across the river to historic Rochester, including the castle and cathedral, and down the river towards Chatham. Rochester has an ancient history associated both with the Romans and the nineteenth century writer, Charles Dickens, as well as a number of notable medieval and other historic buildings. Nearby Chatham Dockyard dates back to the fifteenth century and since its closure in 1984 has been the subject of considerable regeneration work. Strood's riverside position near Rochester Riverside and Chatham Dockyard makes its future development highly influential on the wider economy, character and future history of the Medway area.
- From a regional perspective Strood Riverside is located within the **Thames Gateway** Corridor. This area is identified by the Government as a key area for growth in which the focus is upon the speed of delivery of development projects whilst ensuring sustainable and well-integrated communities. The government has already invested significant capital resources from the Sustainable Communities Fund in the adjacent forthcoming Strood Riverside regeneration to bring forward development and to increase the supply of housing.

The site has excellent connectivity links:

- It is well placed for access to the M2 providing access to the coast;
- the M20 with access to Ashford International and the M25 London Orbital;
- and HS1 rail link providing regular domestic services from Strood to London via Ebbsfleet International, and other services to the Kent coast

At the local level Strood town centre, adjacent to the Civic site, acts as a hub for 3 major roads:

- The A228 to Grain to the north and the M2 motorway and West Malling to the south;
- The A2 giving access to London and the M25 to the west and Rochester and Chatham to the east;
- The A226 to Gravesend.

The proximity to the stations supports the proposal for a lower parking ratio, which is a departure from the Medway standard and is progressing towards a cleaner development. There is also the opportunity to encourage the use of "car clubs" given the urban location, and challenge car dependency behaviours outside of London.

The site is currently under-utilised and is not fulfilling its potential in meeting the longerterm community needs of both Strood and the wider Medway region.

An effective flood defence mechanism will, in time, allow for the creation of active street frontages and the protection of the biodiversity of the riverside edge. The strategy will include the raising of the land and the creation of a new river wall and will open up the river front for public enjoyment.

It is intended that proposals for the site should make the river front accessible to the local community, future residents, nearby workers and tourists alike, and add value to the wider area. A river walk footpath and cycle way and high quality public realm would create a destination in its own right. The river walk and cycle paths will in time be linked to the paths and walks in Rochester, Chatham and Temple

Achieving a high density predominantly residential development which meets local housing needs and supports local facilities both within the site and the town centre will involve:

- Incorporating complementary uses that help in establishing a distinctive and sustainable residential community and which are proposed and designed in consultation with the local community. Non-residential uses are planned at ground floor level within a new urban block where this directly fronts a defined urban square. New build residential development should be contained within housing blocks that frame high quality landscape spaces.
- Developing a safe and active street frontage within the heart of the development which will encourage evening activity and draw people into the site from surrounding neighbourhoods. Land uses should be incorporated that complement the site's location in proximity to Strood station and the town centre.

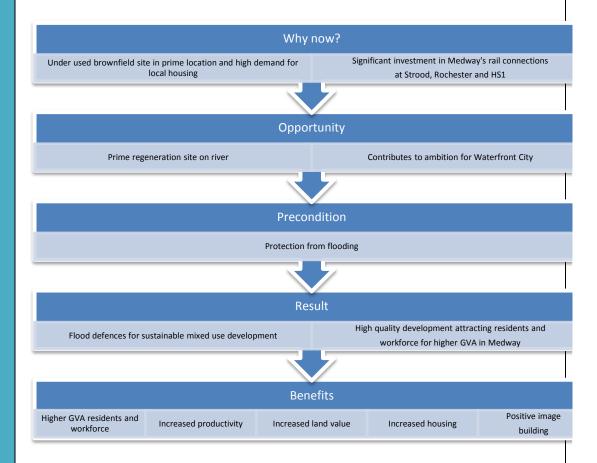
Following multi-million pound investment in Strood and Rochester from a number of partners, there is a real sense that Medway is catalysing as an area and is ready for its' next stage of development. The redevelopment of brownfield waterfront sites is transforming the quality of the Medway landscape and raising local aspirations in line with our ambition to become a Waterfront University City by 2035.

Development of the brownfield, former Civic Centre site in Strood, will enable the construction of up to 564 homes and 1,615m<sup>2</sup> (Net Internal area - NIA) of commercial space for SME's; with the potential to create 902 jobs for the local area.

The former Civic Centre site is the first stage of a wider development of Strood Riverside; a wider project that could take a decade to realise. The development of the former Civic

Centre site will unlock investment for the wider site, which will lead to an additional 564 new homes, with a target of 25% to be affordable housing, which will support local planning policy.

The current residual site value is estimated at £800,000. Residual site value following delivery of the flood defences is estimated to be £5,200,000; the total gross development value of the land following development is estimated to be £112,000,000. The future maintenance responsibility for the river wall is still to be agreed, with options either for Medway Council to fund future maintenance from land receipts or pass the responsibility onto the future land owner which would impact on the residual value of the site.



### Impact of not progressing the scheme

The key aspiration of the Medway Regeneration Strategy is for Medway to become a Waterfront University City by 2035. This aspiration will not be delivered without the transformation of the Civic Centre site, into an area of prime, high quality residential land with potential for premium housing, offering fantastic views of Rochester Castle and Rochester Cathedral and access to the River Medway.

If the project does not progress the opportunity to create commercial space for local SME's and offer considerable employment, STEM skills opportunities (STEM meaning science, technology, engineering and maths), apprenticeship and work experience opportunities will be lost as will the chance to utilise an otherwise redundant brownfield site to help meet the local demand for housing as per Figure 12 below.

	<image/>
2.2. Descripti on of project aims and SMART objective s	<ul> <li>The aims of this project are to support the ongoing regeneration of the area, deliver much needed housing units to help meet the high demand for housing as a result of the forecast rising population (according to ONS research), and create jobs, apprenticeship and STEM skills opportunities.</li> <li>Once complete, the Civic Centre site will be transformed into an area of prime, high quality residential land with the potential to deliver premium housing, offering fantastic views of Rochester Castle and Cathedral and access to the River Medway. Redevelopment of the site will provide employment land, targeted at SME's, encouraging local cafés, restaurants and independent retailers, enabling job creation and innovation.</li> <li>In order to achieve this it is necessary to raise the flood defence level of the Civic regeneration site to provide defence for the 1 in 200 year storm threat, with flood levels at +6.0m AOD (above ordnance datum or above sea level), in agreement with the Environment Agency.</li> <li>SMART objectives:</li> <li>The defences will be delivered by the end of 2019 and will consist of:</li> <li>New piled wall, raised to +6.0m AOD, in front of the existing wall and river defence along the river side, including up to the adjacent railway bridge; and</li> <li>Land raising up to a height of 6m to protect the rear of the site from flooding. The site is currently low lying with much of the site less than 4.0m Above Ordnance Datum (AOD).</li> <li>Increased flood defence of the High Street and nearby commercial and business units by 2019.</li> <li>The design of the flood defence will allow for underground and undercroft parking freeing up more space allowing for more new homes and the provision of green spaces. This means that only approximately 60% of the site will need to be land raised and the parking provision can be provided in the remaining areas. This has saved considerable cost to the project, as less fill material will need to be sourced and the duration of the works has been shortened.&lt;</li></ul>
	<ul> <li>564 units of mixed tenure housing delivered by 2030</li> </ul>

	<ul> <li>902 direct jobs created as a result of the flood defence works, mixed used development, SME use of the commercial unit opportunities – these jobs will delivered by 2025.</li> <li>131 indirect jobs created as a result of additional expenditure created from the 564 new homes and households - these jobs will be delivered by 2030.</li> <li>As an output of the flood defence works during 2018 and 2019 work experience and training will be offered to: <ul> <li>One under 16 year old;</li> <li>Six over 16 year olds;</li> <li>55 to 65 school visits, to undertake a safety assembly, careers talk or classroom activity with regards to civil engineering and specifically construction;</li> <li>Two to four NVQ starts and completions for directly employed staff.</li> <li>STEM skills opportunities</li> <li>Development of the most prestigious site in Medway, complementing the riverside development along Canal Road and joining with a river walk – development will take place between 2020 and 2030, following the completion of the flood works in 2019</li> <li>Use of modern methods of housing construction to deliver the new homes at pace where possible</li> </ul> </li> <li>The estimated increase in economic output as measured by GVA (Gross Value Added) is estimated to be £35.7m.</li> </ul>
2.3. Strategic fit	Local Context The Civic Centre site is situated in Strood which is within the Thames Gateway economic development area. This area is identified by the Government as a key area for growth in which the focus is upon ensuring sustainable and well-integrated communities. The Thames Gateway is a designated area for the growth of new communities, with Medway highlighted in the Delivery Plan <sup>1</sup> as a strategic location for investment. Strood's unemployment rate is significantly higher than the regional/national average, with nearly a third of Strood employees working in low skilled operative and elementary occupations, in comparison with the 20% national average. Average house prices in Strood are significantly below the national average at £198,000 against a national average of £280,000 <sup>2</sup> . Average prices in nearby Rochester are £230,000, and in Greater London are closer to £600,000. <b>Connectivity</b> Strood benefits from the HS1 rail link to St Pancras International, enabling commuters to reach central London within 35 minutes, as well as quick and easy access to the M2, M20 and M25 motorways, with links to the coast and London airports.
	The very modest house prices within Strood are therefore indicative of the economic pressures and congested network environment, which gives a poor perception of the town as a place to live and work. The Medway Regeneration Framework established several key development sites in and around Strood that will deliver new housing and employment opportunities.

<sup>&</sup>lt;sup>1</sup> http://www.medway.gov.uk/pdf/Thames%20Gateway%20Delivery%20Plan%202009.pdf
<sup>2</sup> http://www.zoopla.co.uk/house-prices/england
South East LEP Capital Project Business Case

Development of the Civic Centre site will support the emerging Medway Local Plan to meet the demand for housing and deliver 29,000 homes by 2035 to accommodate the rising population which is expected to increase from 280,000 currently to 330,000 in twenty years, according to ONS research.

It also supports the Council Plan 2017 - 2020 (the Council's strategic business plan) by working towards the strategic priorities of 'maximising regeneration and economic growth' and 'supporting Medway's people to realise their potential.' The Council is committed to transforming the area through bringing about positive change with new homes and jobs in major regeneration sites at Chatham, Rochester and Strood, working in partnership with the private sector and the Homes and Communities Agency.

The Medway Cultural Strategy, the Thames Gateway, Kent Plan for Growth, the Local Transport Plan and the Housing Strategy will enable the Council to work with partners to deliver these outcomes.

Redevelopment and regeneration of town centres in Medway, including the proposed development on the Civic Centre site, in terms of healthy design of new homes and residential areas also features as a key element of the Medway Annual Public Health Report 2016/17.

Major growth sites exist within a 10 minute walk of Strood town centre at Strood Riverside, Strood Civic Centre and Rochester Riverside (see below – Figure 13). In total these sites are planned to deliver 2,130 jobs and 4,375 homes.

At a meeting of the Kent and Medway Economic Partnership on 4<sup>th</sup> July 2016, Strood Civic Centre Flood Defences project was ranked joint 4<sup>th</sup> out of 39 projects in its prioritization exercise for the Kent and Medway Federated Area.

In 2014, Medway Council put together a package of schemes as part of the South East Local Enterprise Partnerships (SELEP) bid for the Government's Local Growth Fund. A number of interventions were proposed to address the issues of poor journey times, improvements to pedestrian accessibility and new cycle facilities around Strood town centre. By improving the accessibility and circulation this project will help secure improved environmental conditions in Strood, and help increase the potential of development sites and bring forward new development opportunities.

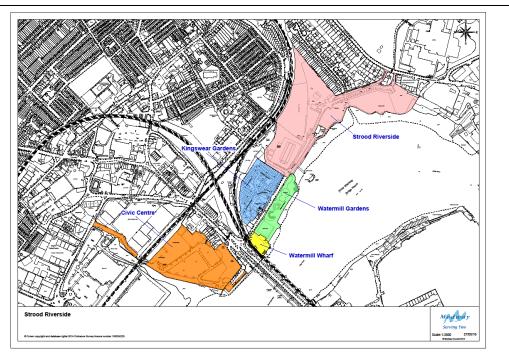


Figure 13: Site location

## Local Engagement and Community Consultation

The Civic Centre site and the planned development features in Medway Council's emerging Local Plan. A series of workshops have been held with the local community and local groups, businesses and housing developers to assess the scale and type of growth that could be accommodated in the area. Groups that contributed to the consultation include church groups, representatives from the Strood Community Project and representatives from public health groups.

This masterplan and development brief for the regeneration of Strood Waterfront which includes the Civic site, is being developed in consultation with and with participation from as wide a selection of the community as possible that live, work in and use the area, as well as key stakeholders.

Once adopted the Strood Waterfront Development Brief is intended to provide supplementary planning advice, expanding on Policy S1 – Development Strategy in the Medway Local Plan 2003 and in the emerging updated Local Plan. It has been prepared in accordance with the Town and Country Planning (Local Planning) (England) Regulations 2012. The Medway Local Plan 2003 is the current development plan for the authority and therefore forms part of the council's policy framework. As it is intended to adopt the 2017 Development Brief as a Supplementary Planning Document (SPD), it will be part of the development plan.

Public Health Medway have also been consulted as part of the master planning process to ensure the development considers health and wellbeing.

A Medway Citizen's Panel survey was carried out in March 2016 regarding the five main town centres in Medway (Chatham, Rochester, Strood, Rainham and Gillingham). 604 people responded to the survey – 54.7% were female and 45.3% were male.

When asked Why have you not visited Strood town centre in the last twelve months?

- 37.9% of people stated that the poor range of shops and services was the reason;
- o 25.9% of people cited the town centre environment as the reason;
- 22% of people indicated that it was due to the poor range of leisure and

Work is o new railw were sup start on s town cen sense of	<ul> <li>11.3% of p traffic;</li> <li>11.1% of p shopping,</li> <li>8.4% of pe town centres</li> <li>way station in Strooported by the first site early 2018, is least atre, along with pu arrival at Strood s</li> <li>here figs are from 17/18</li> </ul>	eople stated eople stated eating out an ople stated t re. y on the Stro od is due to l t round of LG looking to de iblic realm ar tation.	that they we that they we d entertainn hat they wou od town cen be complete F funding. T liver an impr	buld like to so nent experio uld like to so tre project in Decembe the town ce ovement in	see an impro see an impro ence; ee regenerati and the cons er 2017. Botl ntre project,	vement in the on in the truction of a n projects	
outputs (3.2 will Jobs (d contain jobs) more Jobs detail) (indired Homes (occupi SME Comme	17/18			<ul> <li>traffic;</li> <li>11.1% of people stated that they would like to see an improvement in the shopping, eating out and entertainment experience;</li> </ul>			
outputs (3.2 will Jobs (d contain jobs) more Jobs detail) (indired Homes (occupi SME Comme	17/18	1					
contain jobs) more Jobs detail) (indired Homes (occupi SME Comme		18/19	19/20	20/21	21/30	Totals	
more Jobs detail) (indired Homes (occupi SME Comme	lirect	15	20	100	767	902	
Homes (occupi SME Comme	ct)				131	131	
SME Commo	-				564	564	
Comme	ied)				504	504	
Jpace					1,615m <sup>2</sup>	1,615m <sup>2</sup>	
the cor (f101,0 2.5. Planning policy context, consents and permissio ns • •	<ul> <li>Location identified for improvement in the 2014 SELEP Strategic Economic Plan (SEP);</li> <li>The site has been identified by Medway Council as part of a Strategic Land Availability Assessment as a site suitable for development;</li> </ul>						

providing a framework within which councils and local communities should produce planning documents, reflecting the priorities and needs of the relevant community.

A core theme of the NPPF is the delivery of sustainable development and it confirms the three dimensions to sustainable development as economic, social and environmental. Paragraph 14 emphasises this by stating "At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development".

Paragraph 17 of the NPPF sets out 12 core planning principles that should: underpin plan making and decision taking.

- Proactively drive and support sustainable economic development to deliver the infrastructure that the country needs.
- Support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change.
- Encourage the effective use of land by reusing land that has been previously developed (brownfield land), provided that it is not of high environmental value.

The NPPF also outline Government policy relating to 13 key themes set out across separate sections of the guidance. Those applicable to the proposed development are as follows:

Theme	Summary	Relationship to proposed
		development
Building a strong,	The Government is	The proposed scheme
competitive economy	committed to securing	allows economic growth by
	economic growth, and the	facilitating future
	planning system should do	development of land for
	everything it can to	building businesses,
	support sustainable	infrastructure, services or
	economic growth.	housing.
Meeting the challenge of	Planning plays a key role in	The proposed scheme will
climate change, flooding	reducing greenhouse gas	reduce the flood risk to the
and coastal change	emissions, minimising	site, allowing future
	vulnerability and providing	development, and
	resilience to the impacts of	surrounding infrastructure
	climate change. Local	to be resilient to flooding
	planning authorities should	due to climate change.
	adopt proactive strategies	
	to mitigate and adapt to	
	climate change, taking full	
	account of flood risk,	
	coastal change and water	
	supply and demand	
	considerations.	
Conserving and enhancing	The planning system	The proposed scheme
the natural environment	should contribute to and	facilitates the re-use of
	enhance the natural and	previously developed land
	local environment by	for future development,
	minimising impacts on	preventing the use of
	biodiversity and providing	undeveloped land to future
	net gains in biodiversity	economic and social
	where possible. Planning	infrastructure needs. It
	policies and decisions	also allows room for

South East LEP Capital Project Business Case Page **38** of **124** 

		should encourage the effective use of brownfield land, provided it is not of high environmental value.intertidal habitat to retreat due to sea level rise in the face of climate change, due to the setting back of flood defences.Section 10 of the NPPF concerns meeting the challenge of climate change, flooding and coastal change. In paragraph 100, it states that where development is necessary, it should be made safe without increasing flood risk elsewhere. The proposed scheme's primary objective is to reduce flood risk to site and elsewhere, in order to allow future use of the site to be made safe, and be resilient to climate change.
2.6.	Delivery constrain ts	Options to de-risk the Civic site in Strood in terms of flood risk, and subsequently allow for suitable residential development were considered in terms of <b>do nothing, do minimum, do something and do maximum</b>
		Do nothing
		Description: No action to be taken.
		Positive Impacts:
		There are no positive impacts from taking no action.
		Negative Impacts:
		Taking no action would have a detrimental impact on the local economy of Medway as follows:
		<ul> <li>The existing flood defences are below the standards required by the Environment Agency and would not enable the development of the Civic Centre site, with the result that the site remains underutilised;</li> <li>Strood High Street would remain exposed to tidal flooding;</li> <li>The predicted impacts of climate change will exacerbate the existing situation and are likely to reduce the standard of protection further in the future, contributing to a requirement for additional investment.</li> </ul>
		Do minimum
		<i>Description:</i> This option would be to repair and re-secure the existing capping beam. The cost of this option would be £2,000,000.
		Positive Impacts:
		This option would:
		Maintain existing flood defences.

Negative Impacts:

There would be a number of negative impacts associated with the scheme as follows:

- Repairing and re-securing the existing capping beam would not provide sufficient flood protection and assurances as required by the Environment Agency to enable the land to be brought forward for development;
- The value of land would be significantly lower compared to the Do Something option;
- Strood High Street would remain exposed to tidal flooding.

# Do something

*Description:* This option would involve flood defending the Civic Centre site via land raising and a new flood defence wall at an estimated cost of £4,700,000

Positive Impacts:

This option would:

- Enable 3.4 ha of mixed use land to be brought forward on the ground level which will support the regeneration plan for the area;
- Create 564housing units that will help accommodate the forecast increase in local population, according to ONS research;
- Contribute to the aims of the Medway Waterfront Regeneration Strategy through the development of a dynamic mixed use waterfront environment stretching from Temple Waterfront, through the former Civic Centre site and onward to Strood Riverside;
- Enable the creation of a river walk/cycle path linking Medway's key regeneration sites and encourage an increase in physical activity leading to health benefits;
- Alleviate pressure to develop on greenfield sites;
- Population and skills retention through new housing and job opportunities;
- Create a more productive workforce through improved skills training.

# Negative Impacts:

There would be negative impacts associated with the scheme as follows:

• There would be a loss in car parking spaces as a result of the closure of the existing car park, although these can be reprovided elsewhere in nearby car parks

#### Do optimum

*Description:* This option would involve flood defending the former Civic Centre site and the land to the south of Janes Creek and would include land raising to a level specified by the Environment Agency for residential purposes. The estimated cost of this option is £6.9m.

Positive Impacts:

This option would:

- Provide enhanced flood protection;
- Enable the ground floor units to be used for residential purposes ;
- Contribute to the aims of the Medway Waterfront Regeneration Strategy through the development of a dynamic mixed use waterfront environment stretching from Temple Waterfront, through the former Civic Centre site and onward to Strood Riverside.

# Negative Impacts:

There would be negative impacts associated with the scheme as follows:

- There would be a loss in car parking spaces as a result of the closure of the existing car park, although these could be reprovided elsewhere in nearby car parks
- The cost of these flood remediation works would be too high to enable a viable housing development, and would not be attractive to potential developers

## **Recommended Option**

The recommended option is **Do Something.** While the Do Optimum would provide additional benefits beyond that provided by the Do Something scenario, the cost associated with this option outweighs the additional benefits generated.

Consideration has been given to expand the scope of the project to extend the flood defences to the creek upstream from Jane's Creek. However, with poor access to the additional area of land no additional housing units could be delivered, resulting in an unviable scheme. The Flood Defence Grant in Aid has been discussed with the Environment Agency (EA) however further work is needed to establish whether this would be applicable for this area and the amount of grant available. Initial discussions with the have highlighted further difficulties of constructing flood defences in this area due to existing habitats.

Medway is looking for funding to protect the wider Strood area and this project enables the first stage of flood defences. The flood defences have been designed to not preclude future investment and expansion of the flood defences. The planning approval of the flood defences for the former Civic Centre site has facilitated the engagement of Rochester Bridge Trust to improve their flood defences, who are currently working on a planning application for their site. Medway and the Bridge Trust are working together to ensure that both schemes can tie into each other, delivering a cohesive approach. Although further works would be needed this will help flood defend Strood High Street.

The flood defences for Strood Riverside (adjacent to the Civic Centre site) have also been designed in tandem with the Civic Centre site. The flood defences for Strood Riverside will be delivered during the same timeframe as the Civic Centre sites, to deliver a holistic approach. These flood defences enable additional housing and the protection of existing homes in nearby Cranmere Court and Wingrove Drive.

Both these site coming forward have enabled another potential outlet for regeneration and additional housing, Orbit and Moat housing associations are in discussions with Medway regarding flood defending their site and regenerating the area, facilitating a further 310 homes.

Although at this stage it has not been viable to extend the flood defences beyond Jane's

	<ul> <li>Creek, it has facilitated wider flood works throughout the area and attracted investment. It is important to highlight that these works will help enable future flood defence works</li> <li>Constraints</li> <li>For the delivery of the flood defences preferred the following high level constraints may present a material risk to delivery:</li> <li>Planning consent required – Low risk as planning permission was granted when the scheme was presented at the Planning Committee meeting on 22<sup>nd</sup> November 2017 subject to conditions.</li> <li>Project cost – Low risk as the capital elements of the scheme are affordable within the funds available;</li> <li>Vehicle and pedestrian access to the site – low risk as the site will be set up to ensure access is easy and posing no risk to members of the public. There is existing access to both the front and rear of the site;</li> <li>Flood defence approval – low risk as the contractor and the design team have much experience of this type of work and will be consulting regularly with the Environment Agency; the proposed design and construction methodology has been approved by the Environment Agency</li> <li>Marine licences – low risk as the works may be exempt due to the nature of the flood defences proposed. Consultation with the Marine Management Organisation at an early stage has ensured this does not pose a risk to the project, and the marine licence was awarded in October 2017</li> </ul>
2.7. Scheme depende ncies - powers and consents	<ul> <li>Delivery of the Flood Defences</li> <li>Delivery of the flood defence works is dependent on the existing buildings being demolished and the site being cleared.</li> <li>The site is owned by Medway Council and is currently being used as a public car park.</li> <li>As part of the Council's rationalisation of their service accommodation, the services previously operating from this site were relocated to other council premises at the end of July 2017.</li> <li>Work to begin the demolition of the redundant buildings and redirection of utilities started in September 2017, with completion by January 2018 to allow for the flood defence works to begin January/February 2018.</li> <li>This means that the full economic benefits in terms of housing and commercial units can be fully realised, the maximum number of homes can be delivered, and the proposed number of jobs and skills opportunities can be created.</li> <li>The scheme is dependent on planning approval being given for the flood defences proposal. This was approved at Planning Committee in November 2017.</li> <li>A Marine Management Organisation (MMO)Licence has been granted for permission to carry out the works, and the Environment Agency, as a statutory consultee, has approved the planning application for the flood defence works and agreed the proposed methodology</li> <li>There are no further dependencies on the delivery of the flood defence works. The defences have been designed to not preclude future investment and expansion of the flood defences. The planning approval of the flood defences for the former Civic Centre</li> </ul>

site has facilitated the engagement of Rochester Bridge Trust to improve their flood defences, and they are currently working on a planning application for their site. Medway and the Bridge Trust are working together to ensure that both schemes can tie into each other, delivering a cohesive approach. Although further works would be needed this will help flood defend Strood High Street.

## **Delivery of the Housing Units**

Delivery of the additional homes following the successful completion of the flood defences is dependent on planning.

Medway is in the process of developing a masterplan and development brief which will be consulted on in December 2017/January 2018. Once all comments have been received and considered the masterplan SPD will be presented to Cabinet and will be adopted as a Supplementary Planning Document.

Once adopted the Brief will provide supplementary planning advice, expanding on Policy S1 – Development Strategy in the Medway Local Plan 2003 and in the emerging updated Local Plan. It has been prepared in accordance with the Town and Country Planning (Local Planning) (England) Regulations 2012. The Medway Local Plan 2003 is the current development plan for the authority and therefore forms part of the council's policy framework. As it is intended to adopt the Strood Development Brief as a Supplementary Planning Document (SPD), it will be part of the development plan.

This approach will be de-risking delivery for developers providing a clear steer of the council's ambitions, which provides transparency and certainty and gives a positive statement of intent and confidence in securing future development.

The masterplan development brief is currently out to consultation. Key stakeholders who have responded already to the consultation are National Grid and Highways England both have no objections.

The delivery of the proposed housing units is also dependent on appointing a housing developer or development partner.

Medway is a significant land owner and the access to low cost finance through prudential borrowing creates a number of opportunities for its recently incorporated housing company, Medway Development Company Limited. First developments from this company are expected to start in2018.

The final development of the Civic site could be delivered in a number of ways and it is proposed that an expressions of interest exercise is undertaken and will ask for comments from the market via and expressions of interest exercise and considering the below:

- Straight Disposal seeking unconditional and/or subject to planning offers
- An OJEU compliant Procurement Process
- A joint venture (JV) partner to deliver the scheme

• The delivery of the scheme on behalf of the Council through the Medway Development Company Limited.

Medway has also been approached by a number of interested housing developers and has had a serious offer made by on developer, although best consideration needs to be shown before any partnership agreement is established.

The table below outlines the risks to the project

Risk         Risk Description         Mitigation         Risk Owner
---

Category	Bostvalue	Lise of an offective OIFU	Moduras
Financial	Best value	Use of an effective OJEU	Medway
	procurement of	compliant procurement	Council
	necessary	framework and experience of	
	consultancy/design	the procurement team at	
	/build services not	Medway Council, which has a	
	achieved	proven track record of	
		successful project delivery,	
		both in terms of quality and	
		value for money. The team	
		was recognised in March 2014	
		at the Excellence In Public	
		Procurement Awards 14/15	
		where the Team achieved the	
		Highly Commended Award for	
		Innovation or Initiative, and in	
		August 2014 being shortlisted	
		for two major award	
		categories in the CIPS Supply	
		Management Awards 2014 and 2015.	
	Undoractiventian		Moduce
	Underestimation	A detailed set of ground	Medway Council and
	of design scheme	condition surveys, ecological	Council and
	cost	and contamination surveys	the Flood
		was carried out during the	Works
		design stage, as well as	Contractor
		consultation with key	
		stakeholders. The final design	
		has been approved by the	
		Environment Agency and has	
		been competitively tendered	
		and market tested by both	
		the preferred contractor and	
		Medway Council's project	
		quantity surveyor. An	
		iterative approach to value	
		engineering will be applied	
		during the construction	
		phase, all methodology and	
		sourcing of materials will be	
		reviewed, whilst ensuring	
		quality is maintained and	
		workshops will be held to	
		explore further efficiency	
		opportunities. During the	
		construction phase,	
		•	
		management of costs through	
		the NEC contract via the	
		compensation event process	
		will means that cost	
		predictability and certainty	
		will be accurate at any point	
		in the scheme.	
Commercial	Negative public	The Strood development	Medway
	response to	project has been informed by	Council

	proposed scheme	the Medway Local Plan and	
	design proposals	consultations took place in	
		2016, and are continuing with	
		local residents, businesses	
		and social groups, and have	
		received positive public	
		support, and support from	
		stakeholders. A further public	
		consultation is planned for	
		December 2017 – January	
		2018 for the emerging	
		Masterplan and Development	
		Brief. A stakeholder	
		management plan and	
		communications plan will be	
		-	
		used to manage stakeholders	
		and the flood defences	
		project teams from Medway	
		and the contractor will	
		manage the communications	
		as the flood defence works	
		progress.	
	No match funding	Low risk as this is a prime	Medway
	from private	regeneration site, which once	Council
	investors	appropriate flood defences	
		have been established will be	
		a viable development site.	
		There has been considerable	
		interest in the site and	
		Medway Council has already	
		been approached directly by a	
		leading house builder.	
		The Council has the option to	
		self-deliver the site through	
		Medway Development	
Economia	Popofita ara nat	Company Limited too.	Madway
Economic	Benefits are not	The benefits have been	Medway
	realised	estimated using best practice	Council
		guidance from UK	
		Government Departments	
		built on hard evidence from	
		schemes developed	
		previously. The impacts will	
		be monitored closely over	
		time to ensure they are being	
		realised. Any slippage in the	
		implementation of the flood	
		defence scheme and the	
		proposed level of	
		development, and therefore	
		employment and housing	
		benefits being generated, will	
		be dealt with using	
		_	
		annronriato moacuroc to	
		appropriate measures to speed up the construction	

Management	Programme slippage due to delay in process	work. The Project Manager, in association with the Head of Regeneration Delivery, will be responsible for developing a Benefits Realisation Plan. This plan will clearly set out the benefits that the scheme is expected to deliver, along with a process for collecting the required information to allow assessment as to whether the benefits have been realised. Planning permission for the flood defence works was approved by the Local	Medway Council and the Flood	
	delay in process from planning permission refusal, safety audit result, ground contamination, ecological, or technical adoption issue	Planning Authority on 22 <sup>nd</sup> November 2017. The scheme was developed with the approval of the Environment Agency and detailed ground, ecological and contamination surveys were carried out and informed the design and methodology of construction. The contractor has also prepared and will adopt a Health and Safety Plan that covers the flood defence works. A Marine Management Organisation (MMO)Licence has been granted for permission to carry out the works. Medway is in the process of developing a masterplan and development brief which will be consulted on in December 2017/January 2018. Once adopted the Brief will provide supplementary planning advice, expanding on Policy S1 – Development Strategy in the Medway Local Plan 2003 and in the emerging updated Local Plan. It has been prepared in accordance with the Town and Country Planning (Local Planning) (England) Regulations 2012. The Medway Local Plan 2003 is the current development plan for the authority and	Works Contractor	

		therefore forms part of the council's policy framework. As it is intended to adopt the Strood Development Brief as a Supplementary Planning Document (SPD), it will be part of the development plan.	
	Delay or unsuccessful delivery of scheme due to insufficient management or project resource.	Low risk based on the proposed delivery team's current track record of delivering LGF and regeneration projects. Medway Council and the flood works contractor have identified project teams to deliver the flood works, and all team members have considerable project management and engineering experience - see section 6.1 Project Management. There is also considerable senior management commitment to the riverside developments in Strood, with the Civic site being the most prestigious in Medway	Medway Council and Flood Works Contractor
	Protecting ecological habitats could delay the project	Low risk as ecological surveys have been carried out and the design of the flood defences has been developed with the approval of the Environment Agency, as well as the proposed methodology for the delivery of the works in order to not disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will implement the ISO 14001 accredited Environmental Management System to ensure all current legislation, environmental conditions and consents are met.	Medway Council and Flood Works Contractor
Project Delivery	Overall Project Risk	The overall project risk is low as extensive detailed design,	Medway Council and

			survey, risk, consultation, cost	Flood
			and programme review work	Works
			has taken place in advance of	Contractor
			delivering g the flood	
			defences works. A	
			competitive procurement	
			process has taken place, the	
			price offered has been market	
			tested, the team engaged to	
			deliver and manage the works	
			have many years' experience	
			on multiple similar projects,	
			and detailed deliver plans	
			have been developed to	
			ensure the construction	
			phase will be closely managed	
			to deliver a quality product	
			that will allow the land to be	
			released to deliver much	
			needed homes to Medway,	
			whilst providing jobs, learning	
			and skills opportunities	
		Please also refer to Section 5.7 De	-	ncial Risk
		Management and Section 7 risk An	alysis	
2.8.	Scope of	The aims of this project are to support the ongoing regeneration of the area, deliver		
	scheme	housing units and create jobs.		
	and			
	scalabilit	The Civic Centre site will be transfo		
	У	land with the potential to deliver p	0	
		provide employment land targeted	<b>. . . .</b>	estaurants and
		independent retailers, enabling job	creation and innovation.	
		The scene of the scheme is to build	flood defenses in the form of a rive	ar wall and land
		The scope of the scheme is to build raising to provide defences, as spec		
		storm threat to the site to allow it t		
		transformed into an area of prime,		
		premium housing, offering fantastic views of Rochester Castle and Cathedral and access to the River Medway.		
		to the fiver meaway.		
				to a haight of
		A now stool shoot nile wall will be s		
		A new steel sheet pile wall will be c		-
		6.0mAOD. A reinforced concrete ca	pping beam will be positioned on t	op of the sheet pile
		6.0mAOD. A reinforced concrete ca wall taking the overall defence heig	pping beam will be positioned on t	op of the sheet pile
		6.0mAOD. A reinforced concrete ca	pping beam will be positioned on t	op of the sheet pile
		6.0mAOD. A reinforced concrete ca wall taking the overall defence heig flood event level).	pping beam will be positioned on t ht to 6.1mAOD (exceeding the pred	op of the sheet pile dicted 1 in 200-year
		6.0mAOD. A reinforced concrete ca wall taking the overall defence heig flood event level). Along Jane's Creek, a short (3m to 4	pping beam will be positioned on the ht to 6.1mAOD (exceeding the predem) length of sheet pile wall will be	op of the sheet pile dicted 1 in 200-year installed in-front of
		6.0mAOD. A reinforced concrete ca wall taking the overall defence heig flood event level). Along Jane's Creek, a short (3m to 4 the existing flood defence wall adja	pping beam will be positioned on the ht to 6.1mAOD (exceeding the pred m) length of sheet pile wall will be cent to the railway embankment/b	op of the sheet pile dicted 1 in 200-year installed in-front of ridge. This is
		6.0mAOD. A reinforced concrete ca wall taking the overall defence heig flood event level). Along Jane's Creek, a short (3m to 4 the existing flood defence wall adja needed to tie the new flood defence	pping beam will be positioned on the ht to 6.1mAOD (exceeding the precess) m) length of sheet pile wall will be cent to the railway embankment/b e structure into high ground on the	op of the sheet pile dicted 1 in 200-year installed in-front of ridge. This is railway
		6.0mAOD. A reinforced concrete ca wall taking the overall defence heig flood event level). Along Jane's Creek, a short (3m to 4 the existing flood defence wall adja needed to tie the new flood defence embankment and ensure protection	pping beam will be positioned on the ht to 6.1mAOD (exceeding the pred m) length of sheet pile wall will be cent to the railway embankment/b e structure into high ground on the n to the entire site. Along the rema	op of the sheet pile dicted 1 in 200-year installed in-front of ridge. This is railway inder of Jane's
		<ul> <li>6.0mAOD. A reinforced concrete ca wall taking the overall defence heig flood event level).</li> <li>Along Jane's Creek, a short (3m to 4 the existing flood defence wall adja needed to tie the new flood defence embankment and ensure protection Creek, the new sheet pile wall will be</li> </ul>	pping beam will be positioned on the ht to 6.1mAOD (exceeding the pred m) length of sheet pile wall will be cent to the railway embankment/b e structure into high ground on the n to the entire site. Along the rema	op of the sheet pile dicted 1 in 200-year installed in-front of ridge. This is railway inder of Jane's
		6.0mAOD. A reinforced concrete ca wall taking the overall defence heig flood event level). Along Jane's Creek, a short (3m to 4 the existing flood defence wall adja needed to tie the new flood defence embankment and ensure protection	pping beam will be positioned on the ht to 6.1mAOD (exceeding the pred m) length of sheet pile wall will be cent to the railway embankment/b e structure into high ground on the n to the entire site. Along the rema	op of the sheet pile dicted 1 in 200-year installed in-front of ridge. This is railway inder of Jane's
		6.0mAOD. A reinforced concrete ca wall taking the overall defence heig flood event level). Along Jane's Creek, a short (3m to 4 the existing flood defence wall adja needed to tie the new flood defence embankment and ensure protection Creek, the new sheet pile wall will b wall.	pping beam will be positioned on the ht to 6.1mAOD (exceeding the pred em) length of sheet pile wall will be cent to the railway embankment/b e structure into high ground on the n to the entire site. Along the rema be located 2m landward of the exist	op of the sheet pile dicted 1 in 200-year installed in-front of ridge. This is railway inder of Jane's ing concrete flood
		<ul> <li>6.0mAOD. A reinforced concrete ca wall taking the overall defence heig flood event level).</li> <li>Along Jane's Creek, a short (3m to 4 the existing flood defence wall adja needed to tie the new flood defence embankment and ensure protection Creek, the new sheet pile wall will the wall.</li> <li>The new sheet pile wall will then direction</li> </ul>	pping beam will be positioned on the ht to 6.1mAOD (exceeding the pred m) length of sheet pile wall will be cent to the railway embankment/b e structure into high ground on the n to the entire site. Along the rema be located 2m landward of the exist wert landward at the point where the	op of the sheet pile dicted 1 in 200-year installed in-front of ridge. This is railway inder of Jane's ting concrete flood
		6.0mAOD. A reinforced concrete ca wall taking the overall defence heig flood event level). Along Jane's Creek, a short (3m to 4 the existing flood defence wall adja needed to tie the new flood defence embankment and ensure protection Creek, the new sheet pile wall will b wall.	pping beam will be positioned on the ht to 6.1mAOD (exceeding the pred em) length of sheet pile wall will be cent to the railway embankment/b e structure into high ground on the n to the entire site. Along the rema be located 2m landward of the exist wert landward at the point where the nce east of the Pump House) and co	op of the sheet pile dicted 1 in 200-year installed in-front of ridge. This is railway inder of Jane's ing concrete flood

which are piles that extend diagonally downwards, located behind the existing timber wall defence in this area. As it approaches Rochester Bridge, the new wall sheet pile will divert northwards and continue to follow the Esplanade towards its junction with the A2 (High Street).

Two lines of secondary sheet piles will also be installed adjacent to Jane's Creek. This secondary line is required to ensure the stability of the primary sheet pile wall and will be connected using tie rods (metal rods buried below ground that connect the two lines of sheet piles together). These will be positioned parallel to the new steel sheet pile wall, 10 m and 19m landward for western and eastern sections, respectively. They have been separated and aligned in this way in order to avoid an ambulance driver rest centre. The tie rods will be placed at 3.2m intervals for the western section, and 4.2m intervals for the eastern section, between the secondary line of piles and new steel sheet pile wall. Both the secondary line of sheet piles and the tie rods will be buried below existing ground levels and will not be visible.

A section of the current flood wall along Jane's Creek between the Pump House and the railway embankment/bridge will be cut off just below silt level once the new sheet pile walls have been installed. This is because this section of wall is in a very poor state of repair and is at risk of collapsing.

The current flood defence structures alongside the Pump House and the amenity area next to the Esplanade will be retained. The amenity area will be raised to 5.1mAOD with light weight fill material. This area will be landscaped with pedestrian and cycle access provided from the east and west.

Ground raising will be undertaken across much of the site. Working closely with the masterplanner, the design has evolved to allow for a reduction in the amount of fill material required on the site from that which was originally proposed at feasibility stage; this will allow for underground and undercroft parking to some of the proposed housing blocks. The cost per parking space is estimated to be less than would normally be expected due to the topography of the site and the height of the ground floor required by the Environment Agency.

# **Reduce Project Costs:**

The scheme could be scaled back to consist of just repairing and re-securing the existing capping beam. The cost of this option would be approximately £2,000,000.

Positive Impacts:

This option would:

• Maintain existing flood defences.

Negative Impacts:

There would be a number of negative impacts associated with the reduced scheme as follows:

- Repairing and re-securing the existing capping beam would not provide sufficient flood protection and assurances for investors or the Environment Agency to enable the land to be brought forward for development as the Council wishes;
- The proposed volume of housing units would not be delivered;
- The identified number of jobs, apprenticeships, learning and skills (particularly STEM skills) opportunities would be lost
- The opportunity to use a brownfield site for development would be lost;
   The resulting value of land would be significantly lower compared to the
- The resulting value of land would be significantly lower compared to the

preferred scope;

- Strood High Street would remain exposed to tidal flooding;
- The site could still be used for car parking, although this would continue to be underutilised as the location is not central for either Strood or Rochester town centres;
- This would not constitute spending public money wisely and would not offer any added value.

## **Increase Project Costs:**

The scheme could be expanded to flood defend the former Civic Centre site and also the land to the south of Janes Creek (as shown in figure 14) and would include land raising to a level specified by the Environment Agency. The estimated cost of this option is £6.89m.



Figure 14 : Civic Centre and adjacent vacant land

Positive Impacts:

This option would:

- Provide enhanced flood protection to a wider space;
- Enable the ground floor units to be used for residential purposes;
- Contribute to the aims of the Medway Waterfront Regeneration Strategy through the development of a dynamic mixed use waterfront environment stretching from nearby Temple Waterfront, through the former Civic Centre site and onward to Strood Riverside.

Negative Impacts:

• This would not enable a viable housing scheme

Consideration has been given to expand the scope of the project to extend the flood defences to the creek upstream from Jane's Creek. However with poor access to the additional area of land no additional housing units could be delivered, which would have resulted in an unviable scheme. The Flood Defence Grant in Aid has been discussed with the Environment Agency (EA,) however further work is needed to establish whether this would be applicable for this area and the amount of grant available. Initial discussions

	with the EA have highlighted further difficulties of constructing flood defences in this area due to existing habitats.
	Medway is looking for funding to protect the wider Strood area and this project enables the first stage of flood defences. The flood defences have been designed to not preclude future investment and expansion of the flood defences. The planning approval for the flood defences for the former Civic Centre site has facilitated the engagement of Rochester Bridge Trust to improve their flood defences, and the Trust is currently working on a planning application for their site. Medway and the Bridge Trust are working together to ensure that both schemes can tie into each other, delivering a cohesive approach. Although further works would be needed, this initial work will help flood defend Strood High Street.
	The flood defences for Strood Riverside site, located on the opposite side of the A2 road, have also been designed in tandem with the Civic Centre site. The flood defences for Strood Riverside will be delivered during the same timeframe as the Civic Centre sites, to deliver a holistic approach. These flood defences enable additional housing and the protection of existing homes to the north of the site in nearby Cranmere Court and Wingrove Drive
	Both these site coming forward have enabled another potential outlet for regeneration and additional housing; Orbit and Moat housing associations are in discussions with Medway regarding flood defending their Kingwear Gardens site and regenerating the area, facilitating a further 310 homes.
	Although at this stage it has not been viable to extend the flood defences beyond Jane's Creek, it has facilitated wider flood works throughout the area and attracted investment. It is important to highlight that these works will help enable future flood defence works.
Options if funding is not secured	If funding for the scheme is not secured it will not be possible to proceed with the flood defence works and the subsequent regeneration and development of the site will not be possible. The site will remain as it is currently (as in figures 12 and 15).
	Figure 15: Depicts the underutilised site The key aspiration of the Medway Regeneration Strategy is for Medway to become a Waterfront University City by 2035. If funding is not secured this aspiration will not be delivered and the Civic Centre site will not be transformed into an area of prime, high quality residential land with potential for premium housing, offering fantastic views of Rochester Castle and Cathedral and access to the River Medway, joining with other adjacent waterfront development sites at Strood Riverside, Temple Waterfront and Rochester Riverside.
	funding is not

The opportunities to create commercial space for local SME's and offer considerable
employment, apprenticeship and work experience opportunities will be lost, as will the
chance to utilise an otherwise redundant brownfield site to help meet the local demand
for housing, and possible sites available for housing development to this scale in Medway
are few.
Do nothing could be an option. Medway Council is not able to fund the scheme and it
could be several years before the public sector could intervene and carry out the flood
defence works before developing the site, based on current land values.

3.	ECONOMIC C	ASE			
3.1.	Introduction	n This scheme involves flood defending the former Civic Centre site via land raising a new flood defence wall. This would release 3.4ha of mixed-use development with a residential element in the region of 564 units, 25% of which will be afford units, (60% of the affordable will be affordable rented and 40% will be sha ownership) which supports the Local Planning Authority's requirement for afford housing and makes a significant contribution towards the council's current need affordable homes.			
		encourage greate will connect key	er levels of active travel for b	new cycle and pedestrian links to oth pedestrians and cyclists. The link gated/off road. It will include lighting, der Medway Cycle Action Plan.	
		presents evidence		scheme offers value for money. It he scheme on the economy as well as	
		DCLG appraisal g	0	etermine the benefits, in terms of the edvelopment and DfT's WebTAG for	
3.2.	Options Assessment	A long list of opt the need for inter		address the present issues outlined in	
				uld be to take no action and make no	
		investme	nt into the land at the former	Civic Centre site in Strood.	
		• <b>Option 2: Do minimum</b> - This option would be to repair and re-secure the existing capping beam. The cost of this option would be £2,300,000 (including optimism bias).			
		• <b>Option 3: Do something</b> - This option would involve flood defending the Civic Centre site via land raising and a new flood defence wall. It will include the new cycle and walking link. This option is estimated to cost £4,025,000 (including optimism bias).			
		<ul> <li>Option 4: Do optimum - This option would involve flood defending the former Civic Centre site and the land to the south of Jane's Creek. It would also include land raising to a level specified by the environment Agency the residential purposes. This option would also involve the new cycling a walking link. The estimated cost of this option would be £7,935,0 (including optimism bias).</li> </ul>			
		The potential positive and negative impacts from implementing each option have been considered, and are summarised in a table below.			
		Options Po	ositive Impacts	Negative Impacts	
		Option 1: Th Do nothing fro sta pr	here are no positive impacts om taking no action. The site ould remain in its existing ate as a car park, and would rovide the authority with a nall amount of income	<ul> <li>The existing flood defences are below the standard required by the Environment Agency for residential development and would not enable the development of the Civic Centre site. The</li> </ul>	

		<ul> <li>result would be that the site will remain underutilised, and the opportunity for a significant number of new homes, jobs and skills opportunities would be lost</li> <li>Strood High Street would remain exposed to tidal flooding</li> <li>The predicted impacts of climate change will exacerbate the existing situation and likely to reduce the standard of protection further in the future, contributing to a requirement for additional investment</li> </ul>
Option 2: Do minimum	Existing flood defences would be maintained	<ul> <li>Repairing and re-securing the existing capping beam would not provide sufficient flood protection and assurances to enable the land to be brought forward for residential development, also resulting in the loss of jobs, skills and learning opportunities</li> <li>The value of land would be significantly lower compared to the do something option</li> <li>Strood High Street would remain exposed to tidal flooding</li> </ul>
Option 3: Do something	<ul> <li>3.4ha of mixed use land would be brought forward which will support the regeneration plan for the area</li> <li>564 housing units would be created that would help accommodate the forecast increase in local population and contribute to the outputs of the emerging Local Plan</li> <li>Contribution to the aims of the Medway Waterfront Regeneration Strategy would be made through the development of a dynamic mixed use waterfront environment stretching from Temple Waterfront, through the former Civic Centre site</li> </ul>	There would be a loss in car parking spaces and a loss of a small annual income as a result of the closure of the existing car park, although there are sufficient car parking spaces nearby that can absorb this loss, so the loss of revenue is negligible

	and onward to Strood	
	Riverside	
	• The creation of a river	
	walk/cycle path linking	
	Medway's key	
	regeneration sites would	
	be enabled which will	
	encourage an increase in	
	physical activity and the	
	resultant health benefits	
	• The proximity to the stations supports the	
	stations supports the proposal for a lower	
	parking ratio, which is a	
	departure from the	
	Medway standard and is	
	progressing towards a	
	cleaner development.	
	There is also the	
	opportunity to encourage	
	the use of "car clubs" given	
	the urban location, and	
	challenge car dependency	
	behaviours outside of London.	
	<ul> <li>Pressure to develop on</li> </ul>	
	greenfield sites would be	
	alleviated	
	• Population and skills	
	retention would be	
	increased through new	
	housing and job	
	opportunities	
	A more productive	
	workforce would be	
	created through improved skills training, in particular	
	STEM (science, technology,	
	engineering and	
	mathematics) skills	
Option 4:	The following benefits would	There would be a loss in car
Do	be achieved with Option 4, In	parking spaces and a loss of a
optimum	addition to the benefits set	small annual income as a result
	out under Option 3 above:	of the closure of the existing car
	• Enhanced flood protection	park, although there are
	and additional developable	sufficient car parking spaces
	land for more homes	nearby that can absorb this loss so the loss of revenue is
	would be provided	so the loss of revenue is negligible
	• The ground floor units	
	would be enabled for residential use and	
	development of the land to	
	the south of Jane's Creek	
	would be enabled	
1		

	Option 1: Do nothing and Option 4: Do optimum have been discarded. Option 1: Do nothing would provide inadequate protection to the site from flooding which will likely lead to a loss of value to the site if it continues to be underutilised. Option 4: Do optimum would provide additional benefits beyond that provided by the Do something scenario, however the cost associated with this option outweighs the additional benefits generated.
	Preferred Option
	The preferred option is Option 3: Do something. It supports the scheme's aims of providing a flood defence system for the Civic Centre site, thus supporting the ongoing regeneration of the area, delivering housing units and creating jobs. This option also includes cycle path/walkway linking key sites. The Civic Centre site is situated within the Thames Gateway economic development area, which is identified in the Government's Sustainable Communities Plan (2003) as the first and the largest of four areas designed to concentrate new community growth.
	This option follows the South East LEP Strategic Economic Plan, which identifies Strood Civic Centre as a prospective site, as well as contributing to the Medway Regeneration Strategy (2016) aspiration of becoming a waterfront city by 2035, the emerging Local Plan and the Medway Cycling Action Plan.
	This option also aligns with the Medway Regeneration Waterfront Strategy, which outlines a need for flood mitigation works and quality, and well-designed residential development.
3.3. Assessment Approach	The approach adopted for appraising short-listed options is consistent with the DCLG Appraisal Guide 2016 and DfT's WebTAG. It provides a clear and transparent account of costs, benefits, risks and significant non-monetised impacts for each of the short-listed options. An appraisal period of 30 years has been considered, in line with Green Book guidance, albeit the uplift in land value benefits are generated in a single year when the houses that the investment enables are built. The costs and benefits have been discounted at the standard 3.5% discount rate, also set out in the Green Book. An optimism bias of 15% has been applied to the scheme costs. This is towards the lower end of the range recommended in the Green Book Supplementary Guidance (3% to 44%) but reflects: the cost estimates being prepared by a contractor who has a considerable track record of being involved in schemes of this type (delivered over 300 similar projects approved by the environment agency); the detail of the design; the approval of the design and methodology etc by the environment agency; the fact the costs have been reviewed by a qualified QS with experience of similar projects; the procurement exercise showed best value compared to another highly reputable contractor; and the programme has been confirmed and agreed. An uplift of 19% has been applied to the costs to convert them from factor cost to market prices. Costs have also been adjusted to allow for elements of risk. Benefits-Costs Ratio (BCR) The BCR has been calculated using the estimated Present Value Benefits and dividing them by the estimated Present Value Costs. Calculation of the 'initial' BCR included impacts for which there was a strong underlying evidence base and which have been estimated based on DCLG Appraisal Guide 2016.
	Present Value of Benefits has been calculated by quantifying/monetising the private value benefits (i.e. land value uplift) of the mixed-use development. The benefits

associated with the new cycle/pedestrian link have been estimated using standard techniques and variables outlined in WebTAG to value the impact of infrastructure provision to users eg street lighting, information panels, directional signage etc. There are other qualitative benefits that have not been quantified and / or monetised e.g. air quality, crime and other environment impacts, etc. but which add to the value for money offered by the scheme. A range of additionality assumptions has been applied to gain an understanding of the net impact of the development.

Present Value Costs include public sector grants and holding costs<sup>3</sup>. The level of public sector grant for each option has been calculated based on the estimate of the anticipated flood defence costs. It has been assumed that the public sector would be incurring holding costs of 2% of the existing value of the Civic Centre Site (£800,000), i.e. £16,000 per year up to year 30. No sunk costs have been incurred by the proposed scheme to date, and none have been included in the appraisal.

Calculation of the 'adjusted' BCR took into account impacts for which the evidence base was not so well established and a number of assumptions have been made.

# Net Present Public Value (NPPV)

NPPV has been calculated using the estimated Present Value Benefits and subtracting them by the estimated Present Value Costs.

# Non-monetised Impacts

All non-monetised impacts have been considered and described in the appraisal summary table.

# **Economic Appraisal Assumptions**

The key economic appraisal assumptions are summarised in 3.5.

# Costs

The costs have been valued as the net present value costs to the public sector. These include:

- public grants, i.e. the amount of funding sought from the SELEP as set out in this business case; and
- holding costs, i.e. the Civic Centre Site is in Medway Council ownership which means it will be incurring holding costs of 2% of the existing land value (£800,000), i.e. £16,000 per year.

In line with HM Treasury Green Book guidance, costs were converted from a factor cost basis (as they exclude taxes) to a market price basis. This is because benefits are measured in market prices and costs and benefits need to be compared on a like-for-like basis to determine the Net Present Value and Benefit Cost Ratio.

# Quantified Risk Assessment

A Quantified Risk Assessment (QRA) was undertaken to adjust risks for any risks that may materialise.

The Risk Register included in Chapter 7 Sets out the risk type (in terms of Financial, Economic, Commercial and Management risks) and also includes likelihood and impact on a scale of 1 to 5: 1 is very low, 2 is low, 3 is medium, 4 is high and 5 is very

<sup>&</sup>lt;sup>3</sup> The Civic Centre Site is in Medway Council ownership, which means that holding costs per annum have been calculated.

high. A risk matrix was developed and set out in the table below. It shows the likelihood and impact of a risk and the severity associated with them materialising eg a very high likelihood and very high impact results in high severity and very low impact and very low likelihood results in very low level of severity.

	5 Very	5	10	15	20	25
	High					
-	4 High	4	8	12	16	20
Likelihood	3 Medium	3	6	9	12	15
lih	2 Low	2	4	6	8	10
like	1 Very	1	2	3	4	5
_	Low					
		1 Very	2 Low	3 Medium	4 High	5 Very High
		Low				
	Impact					

The severity of the risk and how it impacts on costs and benefits is set out in the table below.

Size of Risk	Scale of
	impact
Very Low Risk	Less than 2%
	of costs or
	benefits
Low Risk	2 – 5% of costs
	or benefits
Medium Risk	5 – 10% of
	costs or
	benefits
High Risk	10 – 20% of
	costs or
	benefits
Very High Risk	>20% of costs
	or benefits

Table below includes those risks that impact on the economic case eg excludes items such as details of contract/procurement approach impacts.

Risk	Likelihood	Impact	Total
Under-estimation	1	3	3
of design cost			
Benefits not	2	4	8
realised			
Timetable slippage	1	3	3
due to delay in			
processing planning			
applications, safety			
audits or technical			
issues			
Delay or	1	3	3
unsuccessful			
delivery of scheme			
due to insufficient			
management or			

project resource			
Protecting	1	3	3
ecological habitats, could delay the			
project			

Given the risk probability and impacts outlined above, the costs and benefits were amended accordingly for each risk to arrive at a risk adjusted costs and benefits and included in the monetised outputs ie NPV and BCR. The mid-point for the scale of impact was applied eg 1% adjustment for a very low risk and 3.5% for low risk.

Risk adjusted public sector costs (in market prices with 2010 price base) are summarised in the table below for Option 1: Do nothing (status quo), Option 2: Do minimum, and Option 3: Do something.

Public sector costs	Option nothing	1: Do (status	Option 2: Do minimum relative	Option 3: Do something relative
	quo)		to status quo	to status quo
Public Grant	£0m		£2.0m	£3.5m
Holding costs	£16k	per	£16k per annum	-£16k per annum⁵
	annum <sup>4</sup>	up to	up to year 30.	up to year 30.
	year 30			
Risk-adjusted	£0.21m		£2.0m	£3.1m
Present Value				
Costs (in market				
prices with 2010				
price base),				
including optimism				
bias				

Future maintenance of the proposed river wall will be a key part of the preconstruction design phase. The design of the flood defence structure will include a clear definition of the inspection, monitoring and maintenance requirements for the structure in the future. The contractor and the technical design consultant chosen to carry out the works have an excellent reputation and experience to deliver a robust design so major maintenance work to the flood defences should not be required for 20 years as an absolute minimum providing a standard 5 yearly inspection regime is adhered to. Opportunities to extend this beyond 20 years using lessons learnt from previous structures will be thoroughly considered. There will be a need to inspect and carry out minor maintenance and assessment after 5 years which would include inspections of the integrity of the sheet piles and condition of the concrete capping beam.

A future maintenance regime will be recommended by the contractor. The future maintenance responsibility for the new flood defence river wall could either sit with Medway Council to fund from land receipts or passed the responsibility onto the future land owner. Major long-term cyclical repairs could be met by the Environment Agency as part of their national remit and maintenance programme and there is also the potential to fund maintenance works through a service charge contribution from residents.

South East LEP Capital Project Business Case

<sup>&</sup>lt;sup>4</sup> £800,000 \* 2% = £16,000

<sup>&</sup>lt;sup>5</sup> Due to the redevelopment of the site to accommodate residential development, under Option 3 annual public holding costs are avoided.

# Benefits

#### 'Initial' Benefits

The private value has been calculated using the land value estimates:

- Under Option 2: Do minimum, the site would remain unable to be brought forward for development due to the inadequate flooding protections in place. It is assumed that the existing land value of the site will remain unchanged, and as such no private benefits are anticipated under Option 2: Do minimum. Also, no active travel link will be introduced under this option so no associated benefits have been included.
- Under Option 3: Do something, the new value of land once the residential development is complete (2027) is estimated to be £15.2m. Discounting that to the present value (using 3.5% discount factor) and subtracting the current land value of the development site (£800,000), the land value uplift is estimated to be £10.182m. Discounting to a 2010 price base gives a figure of £6.87m. Under Option 3, the present value (in 2010 price base) of the cycling and walking benefits are estimated to be £3.44m. Summing these provides a total present value of benefits of £10.31m.

The assessment has assumed a high level of additionality for Option 3: do something for a number of reasons. The following additionality assumptions have been adopted:

- Deadweight is assumed to be 0% because it is anticipated that the development site will remain unviable in the absence of public sector investment due to the relatively high costs of making the development site flood-proof. In the absence of public sector investment, the site is likely to remain in its current use, i.e. car park, thus not generating any positive changes in land value;
- Leakage is assumed to be 0% as all of the benefits are expected to go to the people living within the Medway Council area, i.e. only the development site and the adjacent area is likely to benefit from the uplift in land value. These benefits are highly unlikely to spread outside the LEP area;
- Displacement is assumed to be 25% as only a small proportion of benefits is anticipated to occur at the expense of other schemes within the LEP area. This is because the development site is located in the area of high housing needs (i.e. the emerging Local Plan has identified c. 30,000 new homes up to 2035) which the proposed development will contribute to addressing but is only going to be limited in scale.
- Substitution is assumed to be 0% as the development site has been identified for residential development rather than any alternative uses. This is supported by the Council's emerging strategy which promotes the regeneration of the key urban centre and waterfront sites as core to its vision for a successful Waterfront University City by 2035.

A multiplier of 1.33<sup>6</sup> has also been applied to reflect the additional economic activity anticipated to occur with the additional local income and local supplier spend.

Under these additionality assumptions, the present value benefits would be  $\pm$ 7.24m and the initial BCR 3.36, which would fall within the High Value for Money category.

Even when a lower additionality is assumed,<sup>7</sup> the initial BCR would still be 2.63 which would fall within the Acceptable Value for Money category, excluding the non-monetised benefits.

# Non-monetised Impacts

- Improvements in the Quality of the Public Realm: The former Civic Centre site is currently being used as a car park. The site is dominated by motor cars and is of a poor quality, with little local identity. The development of the site will improve the overall quality of the public realm and improve access to the urban waterfront as well as enabling the development of a River Walk / Cycle Path linking Medway's key regeneration sites. Development of the site would result in the loss of the existing car park, however there are alternative car parks nearby that can absorb the loss of these spaces; however, no negative impact on the local connectivity is expected due to the good existing train links.
- Enhanced Employability and Skills Training: The contractor for the construction of the flood defence scheme will undertake employability and skills training including outreach with local schools and work experience placements and will work with the Council, local Job Centre Plus and local employment agencies to ensure that all vacancies arising from the scheme are advertised locally. The project will therefore enhance local employment and training opportunities and help raise aspirations within the local community.
- **Population and Local Skills Retention**: Providing additional employment, training and housing opportunities in the local area in close proximity to both Strood and Rochester Rail Stations will contribute to population and skills retention in the local area.
- **Productivity:** Providing additional employment opportunities will lead to increased productivity in the Medway Council local authority area through increased businesses located in Strood.

3.4. Economic Appraisal Results	Appraisal summary table below provides a summary of the key economic appraisal results.
	DCLG Appraisal Sections Option 2: Do Option 3: Do something minimum relative to relative to status quo

<sup>6</sup> Multiplier value taken for a regeneration through physical infrastructure project for sub-regional level. Source: BIS/CEA guidance.

<sup>7</sup> As part of a sensitivity testing, low levels of additionality for deadweight (25%) and leakage (10%) have been assumed. Displacement is assumed to remain at 25% as the rationale remains unchanged, i.e. there is a great imbalance between the demand and supply of housing in the Council area.

		status quo	
Α	Present Value Benefits (£m)	£0	6.87m
В	Present Value Costs (£m)	£2.00m	£3.07m
С	Present Value of other quantified impacts (£m)	-	£3.44m
D	Net Present Public Value (£m) [A-B] or [A-B+C]	(£1.613m)	£7.238m
E	'Initial' Benefit-Cost Ratio [A/B]	n/a	2.24
F	'Adjusted' Benefit Cost Ration [(A+C)/B]	n/a	3.36
G	Significant Non- monetised Impacts	n/a	<ul> <li>Improvements in the Quality of the Public Realm</li> <li>Enhanced Employability and Skills Training</li> <li>Population and Local Skills Retention</li> </ul>
	Value for Manay (V/fM)		Productivity.
н	Value for Money (VfM) Category	n/a	High
I	Switching Values & Rationale for VfM Category	No present value benefits have been identified for this option so VfM category is not applicable	
J	DCLG Financial Cost (£m)	£2m in 2017/18	£3.5m in 2017/2018
К	Risks	A Quantified Risk Assessment has been carried out and costs and benefits were adjusted to account for the identified risks.	A Quantified Risk Assessment has been carried out and costs and benefits were adjusted to account for the identified risks.
L	Other Issues	23 direct construction person years <sup>8</sup>	820 direct construction person years <sup>9</sup> 82 direct FTE commercial jobs

# Plausibility of the 'Initial' BCR

The development site suffers from the risk of flooding which prevents private sector developers from investing into developing the site for residential use. Under Option 3: Do something, the site would become flood-proof via land raising and a new flood defence wall. This would then act as a catalyst for private investors to construct a

<sup>9</sup> Approximately 66 FTE construction jobs. South East LEP Capital Project Business Case

<sup>&</sup>lt;sup>8</sup> Based on the assumption that 10 years of construction employment constitute 1 FTE construction job, the estimates 20 construction person years equal to approximately 2 FTE construction jobs.

	residential development of the site. sector funds as the site would remai	This would not happen in the absence of public n prone to flooding.	
3.5. Economic	The key economic appraisal assumptions used in the option assessment a		
Appraisal	summarised in a table below.		
Assumptions	Appraisal Assumptions	Details	
	Real Growth	Residential land values have been assumed	
		to increase by 5% each year in real terms.	
		This assumption is based on the DCLG	
		Appraisal Guide 2016 (paragraph C14).	
	Discounting	All costs and benefits have been discounted	
		using a standard 3.5% discounting rate as	
		recommended by the Green Book.	
	Sensitivity Tests	Three scenarios for additionality have been	
		tested.	
		Low additionality scenario assumes	
		deadweight (25%), leakage (10%),	
		displacement (25%), substitution (0%).	
		Central additionality scenario assumes deadweight (0%), leakage (0%), displacement	
		(25%), substitution (0%).	
		High additionality scenario assumes	
		deadweight (0%), leakage (0%), displacement	
		(0%), substitution (0%).	
	Additionality	Deadweight: 0%	
		Leakage: 0%	
		Displacement: 25%	
		Substitution: 0%	
		Multiplier: 1.33	
	Optimism bias	An optimism bias of 15% has been applied to	
		the construction costs for flood works and	
		15% to the construction costs for the parking	
		element of the development ie public sector	
		costs. Values used are consistent with the	
		Green Book Supplementary Guidance on the	
		Optimism Bias. These are at the lower end of	
		the range applied to optimism bias for	
		standard civil engineering projects (range of	
		3-44%) and the mid range for standard	
		buildings projects (2-24%) but reflect the	
		detailed input that has been put in to	
		accurately estimating the figures (see above under assessment approach)	
	Appraisal period	under assessment approach) 30 years.	
	Employment	Construction jobs have been estimated based	
		on the construction costs divided by the	
		construction turnover required to support	
		one construction job in the local area	
		(£101,000, ONS).	
		FTE employment has been estimated based	
		on the potential commercial floorspace	
		multiplied by the employment densities (HCA	
		Employment Densities Guide 2015).	
	Land value uplift	DCLG "Land value estimates for policy	

	appraisal" (2015) has been used for an average land value per hectare of a residential development in the Medway Council area.
Present value year	2017
Base Year	2010
Sunk costs	No sunk costs incurred
Assumptions for Active Travel Scheme	A number of assumptions have been made based on various evidence sources, including from WebTAG databook, National Travel Survey, Census etc. These are set out in the first tab of the accompanying spreadsheet

# 4. COMMERCIAL CASE

4.1.	Procuremen t	Medway Council's Category Management Team has a proven track record of successful project delivery, both in terms of quality and value for money. This was recognised in March 2014 at the Excellence In Public Procurement Awards 14/15 where the Team achieved the Highly Commended Award for Innovation or Initiative and in August 2014 by being shortlisted for two major award categories in the CIPS Supply Management Awards 2014 and 2015 and for a further category in 2016. The Team will provide support to the Project Group throughout the life of the scheme, including pre and post delivery phases. The Governance Arrangements detailed in this business case provides additional detail on the Team's role in the project management structure.
		Initially the preferred option was to procure a contractor via the civil engineering and infrastructure service on the Scape Construction Framework, to undertake both the detailed design and carry out the construction works.
		The Scape Framework is an OJEU compliant framework, and allows officers to award a contract without the need for lengthy OJEU tender processes. Balfour Beatty was awarded a contract to carry out the preconstruction design works in July 2016, with the condition that Medway did not need to proceed with them as the works contractor should they decide not to, and would still own the design.
		As these works require significant investment, it was felt that in order to achieve best value a price comparison should be sought, and the overall programme allowed for this.
		Medway Council's Highway infrastructure Contract 2017 was competitively tendered following a full OJEU procurement process and was awarded in August 2017 to Volker Highways; the contract includes an allowance contained within to carry out capital works which are related to works outside of highway infrastructure maintenance which are usually, but not limited to, as a result of a capital funding allocation. Subsequently Volker Highways was asked to provide a full cost and programme based on the design.
		The submissions were evaluated on price and programme, based on the detailed design already completed during the preconstruction phase.
		With regards quality, both contractors demonstrated they could bring extensive experience of constructing projects similar to the Strood flood defence scheme on the Civic site, including projects for the Environment Agency. This vast experience would allow each to provide Medway with the engineering excellence, collaboration and major project management experience skills required to deliver this high profile project on time and within budget.
		The preferred contractor was able to identify critical operations and disciplines that affect the programme and price, and was able to save 17 weeks on the indicative programme, which also provided significant cost efficiencies. In particular the duration of piling for the construction of the sheet pile wall has been reduced to 6 weeks which will mean less disruption to the local community. This also provided significant cost efficiencies.
		The recommendation to award the contract to carry out the flood works to Volker Highways was recommended to Medway Council's Procurement Board on $22^{nd}$

	November 2017 and was approved.
	The project team will monitor a range of key performance indicators against the performance of the preferred contractor, including time and cost predictability, defects at completion, health and safety, client satisfaction (both product and service), supply chain satisfaction, staff survey results, environmental performance, employment and skills plan targets, SME engagement, local spend, local employment, apprenticeship opportunities and school visits.
	There will also be a dedicated public liaison manager, whose responsibilities will include managing communication with the local community during the construction phase and the employment skills plan.
	Where subcontractor support is required, for example for landscaping and earthworks, the contractor has sought businesses from within the Medway area in order to fulfil these requirements.
	Central to the contractor's sustainability strategy will be to provide work opportunities to SMEs local to the scheme. The contractor's procurement specialists have identified local suppliers to provided services and materials for the Strood flood defence works. During this competitive procurement exercise, each supplier was validated for their level of skill, resource and financial reliability. The contractor also tested the market to assure delivery of value for money for Medway.
	The works contract for the flood defences will be NEC3 Option A, which is based on the fundamental principal of good project management, where the council and the contractor work together in the spirit of mutual trust and co-operation.
4.2. Commercial dependenci es	The redevelopment and transformation of the Civic Centre site and the provision of housing (to meet with the demands of the emerging local plan), commercial space and jobs, is dependent on the delivery of the flood defences.
	The remaining buildings on the site were previously occupied by other council departments. These services have since been decanted to alternative council properties and were vacated by all previous occupants in July 2017.
	Work started on the demolition of the redundant buildings and redirection of utilities in September 2017 and should be complete by January 2018. This means that the full economic benefits in terms of housing and commercial units can be fully realised, the maximum number of homes can be delivered, and the proposed number of jobs and skills opportunities can be created.



Figure 16; Demolition of the former office buildings at the Civic site underway

The regeneration of the site will also complement the high level of investment already seen in the area, contributing to Medway's aspiration of creating a Waterfront University City by 2035.

These development projects are detailed below:

Strood Riverside regeneration is a development within the **Thames Gateway** on Canal Road in Strood which will deliver 602 homes and further commercial units for SME's, providing cafés and restaurants along the river on the opposite side of the A2 adjacent to the Civic Centre site.

Kingswear Gardens is a site currently owned by Moat and Orbit Housing Associations, who are working with Medway Council and the Homes and Communities Agency to regenerate the space to deliver a viable development and which could deliver in the region of an additional 300 homes. Both sites will incorporate green spaces and high quality public realm, and the aspiration is to link all the sites by a river walk and potentially a cycle route.

Watermill Wharf was a derelict brownfield regeneration site also on Canal Road; this has been redeveloped to deliver 15 business units and 23 storage units aimed at local SME's and start-up businesses. The development was completed in July 2017 and opened its doors to new tenants on 7<sup>th</sup> August 2017.

The development, known as Innovation Studios Strood, is a satellite of the Innovation Centre Medway, which has developed a successful business model and had a waiting list of businesses wanting workspace. The studios at Strood are full to capacity and officers are reviewing any opportunities to expand the development to react to the high demand for work space.





Figure18: Innovation Studios Strood

Strood town centre improvement project: funds were awarded from the Local Growth Fund round 1 to deliver a suite of improvements around journey time, accessibility, public realm and the retail centre to facilitate regeneration and growth. This investment will be key in improving the Strood town centre environment and will have a major impact on the quality of the environment close to the Civic Centre site. This work is planned for completion in 2018/19.

Reconstruction of Strood Railway Station. Refurbishment works to the value of £2.5m to be completed by Southeastern Trains and planned to be complete by December 2017.



Figure 19: The old station at Strood



Figure 20: the proposed Station at Strood

Rochester Riverside development site: the Council's flagship development site on the opposite side of the River Medway, delivering a mix of 1,400 mixed use residential units, hotel, primary school, flexible commercial and office space, riverside walk and retail facilities. Procurement of a development partner is complete and work to develop the site is underway and will be delivered in phases over a period of up to 15 years.

New and relocated Rochester Station opened in December 2015.

New 321 space multi-storey car park adjacent to the new Rochester Station opened in 2016.

4.3. Commercial sustainabilit
 y
 Revenue operating costs will be minimal because the land for the Civic site is already maintained by Medway Council as car parking. Furthermore, there will be a reduced maintenance liability as a result of the land in the ownership of Medway Council being sold for development and revenue operating costs could significantly reduce or end once the ownership of the site transfers to private ownership.

The future maintenance responsibility for the new flood defence river wall could either sit with Medway Council to fund from land receipts or passed the responsibility onto the future land owner.

Future maintenance of the proposed river wall was a key part of the preconstruction design phase. The design of the flood defence structure included a clear definition of

the inspection, monitoring and maintenance requirements for the structure in the future.

Medway Council applied a value engineering approach during the preconstruction design phase of the project, aimed at developing the design to deliver the outcomes within the financial limitations, whilst maintaining quality and value for money. The team reviewed all elements of the detailed design in terms of methods of construction, materials used, in particular the options for land raising materials, and early involvement of the supply chain. Workshops were also held to explore value engineering opportunities for the flood works and to establish the whole life cost.

The contractor and the technical design consultant chosen to carry out the works have an excellent reputation and experience to deliver a robust design so major maintenance work to the flood defences should not be required for 20 years as an absolute minimum providing a standard 5 yearly inspection regime is adhered to. . Opportunities to extend this beyond 20 years using lessons learnt from previous structures will be thoroughly considered.

There will be a need to inspect and carry out minor maintenance and assessment after 5 years which would include inspections of the integrity of the sheet piles and condition of the concrete capping beam. Any fill behind the walls would be subject to other construction finishes and build and would not fall into any future maintenance programme. There could be some joints in the capping beam to clear out and apply new sealant and given the choice of handrail finish there may be some painting required although if possible low to no maintenance finishes will be considered.

A future maintenance regime will be recommended by the contractor. Major longterm cyclical repairs could be met by the Environment Agency as part of their national remit and maintenance programme and there is also the potential to fund maintenance works through a service charge contribution from residents. This complements an existing charging system established in north Kent to support nesting birds (SAMMS – Strategic Asset Management and Monitoring System).

Possibilities for Medway to generate income could be via a rent charge per bedroom for housing and also at a rate per square foot for commercial space.

Further income to the council that could cover resource costs would also come from business rates from the proposed ground floor commercial units.

There is also a market for the quality private rented sector, which the council would be in a position to deliver via the Medway Development Company or via private rented sector agents, which would provide a revenue income to the council in the future.

Medway is a growing urban area, with a high demand for housing. The emerging Local Plan has identified a need for c 30,000 new homes up to 2035. The council's emerging strategy promotes the regeneration of the key urban centre and waterfront sites as core to its vision for a successful Waterfront University City by 2035.

The Civic site in Strood is a key area, and investment in this site will create the momentum to raise values in wider Strood and strengthen the town centre. The scale of housing needed in Medway means that the council needs to look broadly at options, including development in suburban and rural areas. There is strong market interest in the Civic site in particular and Medway has already been approached directly by a leading house builder expressing a keen interest to invest in and develop

		the site, due to its superb location close the mainline railway into London via HS1, links to major roads and the connectivity to other developing towns in Medway. Medway has access to lost cost finance through borrowing and could also act as direct developer via the Medway Development Company
4.4.	Compatibilit y with State Aid rules	In the case of this grant application, state resources are involved as the project will be funded by the Local Growth Fund (via the SE LEP). However, the project will be compatible with the EU rules on state aid and any assistance given to any undertakings as part of the project will not constitute unlawful state aid.
4.5.	Commercial viability	The contractor for the flood defences design and construction was procured via Medway Council's Highways Infrastructure Contract, which was competitively tendered following a full OJEU procurement process and was awarded to Volker Highways in August 2017. This contract includes an allowance within to carry out capital works which are related to works outside the highways infrastructure, usually as a result of a capital funding allocation, and which will enhance the authority's existing assets. A suite of Key Performance Indicators monitored throughout the project will include
		value for money, delivery to budget and programme. The contractor's project management team has over 100 years' combined experience of successfully delivering flood defence projects in London and the south, which will enable them to bring valuable and relevant best practice to the Civic site scheme.
		They will bring extensive experience of constructing projects similar to the Strood Riverside Flood Defence scheme including over 300 individual flood defence projects for the Environment Agency. This vast experience will enable us to provide Medway Council with the engineering excellence, customer collaboration and major project management skills required to deliver this high profile project on time and within budget.
		The contractor's engineering and tendering teams have identified the critical operations and disciplines that will affect the price and programme of the project. They will be able to make efficient use of resources, working concurrently on multiple sections of the site resulting in shortening the construction programme by 17 weeks which offers significant efficiencies and value for money.
		The flood defence works will be delivered via an NEC3 part A contract which is based on the fundamental principal of good project management. The intent of the Contract is given in the very first clause "The Employer, the Contractor, the Project Manager and the Supervisor shall act as stated in the Contract and in a spirit of mutual trust and co-operation".
		One of the main principals of the contract is that either party may advise the other of a problem or potential problem; this is done with an Early Warning Notice. The purpose is to identify potential problems before they occur, so that they can either be avoided or their effects mitigated rather than waiting until something has happened and then trying to deal with it. It promotes collaboration between the council and the Contractor. This notification results in a meeting/dialogue with the sole aim of dealing with the problem for the good of the project.
		A planning application was submitted to the Local Planning Authority in May 2017, and planning approval was granted at the Planning Committee meeting on 22 <sup>nd</sup>

#### November 2017

Following the flood defence works the land will be ready for housing development late 2019, allowing for any inclement weather during the construction period; the risk of weather delays has been mitigated by the programming of critical works outside of the winter months. This programme also allows time for settlement of the new fill material.

Officers have engaged with the Council's own Category Management and Planning Design Teams, and in order to carry out the necessary market assessment on the commercial viability of this project. This included:

- An appraisal of the current market conditions for the delivery of all aspects of the scheme;
- Consideration of various options for the development of the site once the flood defences are complete, based on varying degrees of housing density, to assess the viability of each of the proposed options;
- Consultation with project and performance management consultants for additional guidance on scheme procurement and best contracting methods;
- An examination of the cost benefits of the scheme.
- The numbers used to calculate the land value uplift and other costs have been based work carried out by chartered valuations surveyors both from within the council and external consultants

**Strood Waterfront Masterplan and Supplementary Planning Document** The council produced a Strood Riverside Development Brief in 2006. There have been considerable changes locally and nationally since 2006 and the updated policy will reflect evolved thinking and innovations in development, and support the council's ambitions to realise the regeneration opportunities presented by the exceptional sites in Strood. This will secure investment and deliver quality development that boosts the area's economic, environmental and community wellbeing.

The proposed revised Development Brief seeks to establish a clear planning policy context. It will outline the Council's ambition for the Riverside site and the adjacent former Civic Centre, and will also include the possible future regeneration of the nearby Kingswear Gardens, jointly owned by Moat and Orbit Housing Associations. Medway Council is in discussions with both Housing Associations to bring forward their sites also as part of a possible comprehensive redevelopment. These sites present a rare opportunity to help establish Medway's modern waterfront as vibrant commercial and community spaces.

Whilst setting design parameters, the council is aware of the need for commercial viability, ensuring market confidence and deliverability, therefore the Development Brief has been tested for commercial viability. The numbers used to calculate the land value uplift and other costs are based on work carried out by chartered valuation surveyors both from within the council and external consultants

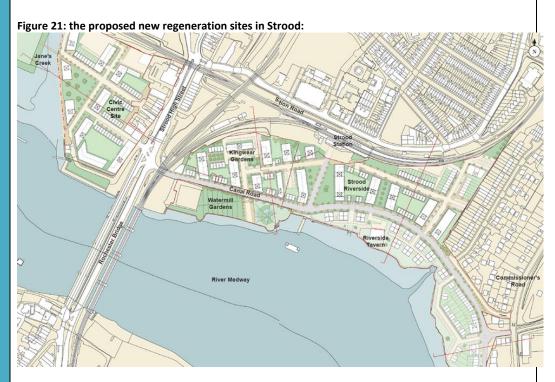
Transport issues and solutions have also been considered. Opportunities for transport improvements will be established in the emerging evidence base for the new Local Plan, also helping to inform the emerging Strategic Transport Assessment

Development quantum in the SPD shows:

• Strood Riverside: 602 residential units, complemented with community land uses,

• Civic Centre: 564 residential units, complemented with commercial and community land uses.

Kingswear Gardens: 445 residential units



Medway Council officers will be holding a public consultation for a 6 week period, starting in December 2017, in accordance with the Medway Statement of Community Involvement, 2014. A consultation plan has been drawn up to ensure that there is effective engagement with stakeholders, statutory consultees, and local residents and businesses.

Following the consultation and review of all feedback, the final document will be presented to Medway's Cabinet in May 2018.

Once adopted the Development Brief is intended to provide supplementary planning advice, expanding on Policy S1 – Development Strategy in the Medway Local Plan 2003, and in the emerging updated Local Plan. It has been prepared in accordance with the Town and Country Planning (Local Planning) (England) Regulations 2012. The Medway Local Plan 2003 is the current development plan for the authority and therefore forms part of the council's policy framework. As it is intended to adopt the 2017 Development Brief as a Supplementary Planning Document (SPD), it will be part of the development plan.

Arrangements for cost overrun during construction of the flood defences Prince 2 Project Management methodologies will be used to manage costs and risks.

Medway Council has chosen to procure a contractor via its own OJEU compliant Highways Infrastructure Contract. This was competitively tendered following a full OJEU procurement process and was awarded in August 2017 to Volker Highways; the contract includes an allowance contained within to carry out capital works which are related to works outside of highway infrastructure maintenance which are usually, but not limited to, as a result of a capital funding allocation. The contractor can bring extensive experience of constructing projects similar to the Strood flood defence scheme on the Civic site, including projects for the Environment Agency. This vast experience would allow them to provide Medway with the engineering excellence, collaboration and major project management experience skills required to deliver this high profile project on time and within budget.

The contactor was able to identify critical operations and disciplines that affect the programme and price, and was able to save 17 weeks on the indicative programme, which also provided significant cost efficiencies. In particular the duration of piling for the construction of the sheet pile wall has been reduced to 6 weeks which will mean less disruption to the local community. This also provided significant cost efficiencies.

An iterative value engineering approach will be applied during the construction phase of the project, aimed at developing the design to deliver the outcomes within the financial limitations, whilst maintaining quality and value for money. All elements of the detailed design will be reviewed in terms of methods of construction, materials used and early involvement of the supply chain. Workshops will be held to explore value engineering opportunities for the flood works and to consider the whole life cost.

A high proportion of the estimated cost is attributed to the land raising; once the programme is fixed the contractor will have more certainty of other projects in the local area that could contribute to the fill.

Management of the NEC contract allows for management of the costs via Compensation Events. These are events/issues which arise and which are not the fault of the Contractor and which could mean the Contractor could be eligible to a claim for time and money. The correct procedure for a Compensation Event will be followed:

• Notification – The Contractor notifies the Council's Project Manager of the event; the Project Manager will review and decides if it needs to be pursued. If so the contractor will be asked to provide a quotation for the work

Quotation- Contractor provides the quotation within the agreed time period
 Assessment- the council's Project Manager will reply within another agreed time period and if agreement is reached the works will be implemented; if no initial agreement is reached the event will be reviewed and revised.

• Implementation.

There are benefits of dealing with Compensation Events quickly:

• At any point on the Contract an accurate cost analysis can be carried out which means accurate spend monitoring and profiling can be prepared at every stage

• There should be no reason (save a legal dispute) for there to be any Compensation Event to be dealt with past the contract completion date

This means that cost predictability and certainty will be accurate at any point in the scheme.

Medway has also employed its own qualified project quantity surveyor and consultant design engineer for technical support throughout the construction delivery phase of the flood defences project.

 Letter from local authority S151 officer. Please refer to Appendix C for a supporting letter from Medway Council Section 151 Officer.

<u>To be complete</u> a în conju	nction with the spreadsheet in <b>Part B</b>
.1. Total project cost	Project cost of Civic Centre flood defences £4.7m.
and basis for estimates	This cost is based on a competitive procurement process and market testing by the contractor, and Medway Council's own project quantity surveyor scrutinised in detail and validated the costs. The Build Cost Information Service (BCIS) of the Roy Institution of Chartered Surveyors (RICS) has been used when producing and checking the cost of the works.
	There is no risk of price increase due to inflation as the prices offered by the preferred contractor is based on a fixed price contract, and this price is held until the end of February 2018, by which time the contract will be agreed and signed.
	The sum includes some risk allowance, and also some provisional sums totalling 3.6% of the contract sum. Should the actual cost of these be lower than anticipated then this will be reflected in the final cost of the works.
	This is lower than the risk allowance allocated at the earlier feasibility stage as the work on the detailed design has given greater design and cost certainty. The next stage of the project, preconstruction, will see further detail applied to the risk cost
	During the preconstruction phase of the project, there will be a series of risk workshops held jointly with the contractor and Medway's' technical advisors, designers, key subcontractors and stakeholders, to fully develop the risk register and detailed risk management plan. The risks will then be allocated a risk owner, costed in detail and will be reviewed regularly during progress meetings.
	A quality risk assessment was carried out and some key risks identified in terms of the construction of the flood defences were identified:
	• Underground obstructions in the line of the piles Ground condition surveys, ecological and contamination surveys were carried so there is as much detail as possible at this stage of the project, budue to the depth of the piling there could be some obstructions. The contractor will pre-dig the pile line where possible and there will be an excavator in attendance during piling.
	• Unknown quantity and type of contaminated material on site The current proposal is to sort material on site and remove obvious contamination. The remainder will be encapsulated on site under imported fill pending Environment Agency approval.
	• Third party interface: Local residents complain about the disturbance caused by noise and works activities.
	Medway and the preferred contractor will develop a detailed communications plan and will provide advance notification to residents an local businesses. The programme of works has also been planned sensitively to minimise disruption.
	<ul> <li>Service diversions: Service diversions take longer than planned and delay the programme.</li> </ul>

	applications early and pre-order diversions.
	The earlier estimated cost of £3.5m for delivering the flood defences, and subsequently this LGF ask, was based on cost estimates undertaken independently by Balfour Beatty via the Scape Construction Framework, prior to the preconstruction design phase and with limited knowledge of the site and minimal ground condition surveys being available. The requirements of the Environment Agency with regards the height of ground level that would allow a residential development had also changed, and this is now higher than at the feasibility stage.
	During the design development phase, numerous ecological and ground condition surveys, including contamination surveys were carried out and the design evolved around this. The information supplied to the contractor is the most up to date and detailed as it can possibly be at this stage for a cost to be supplied that is as accurate as possible without actually digging into the ground further.
	The state of the ground conditions meant some of the existing concrete wall that it was initially felt could be kept and reused, was not in a state acceptable to the Environment Agency. The construction methodology also needed to be reviewed to allow for the safe conservation of the river habitat.
	Allowing for the additional costs still means the site is affordable for redevelopment to deliver the housing units. The numbers used to calculate the land value uplift and other costs are based on work carried out by chartered valuations surveyors both from within the council and external consultants.
5.2. Total SELEP funding request	Revenue or capital? - Capital Grant or loan? - Grant
	Repayment schedule - Not applicable
	LGF Ask: £3.5m capital grant funding.
5.3. Other sources of funding	<ul> <li>Private sector investment in the creation of a mixed use development on the Civic Centre site: Medway is a growing urban area, with a high demand for housing. The emerging Local Plan has identified a need for c 30,000 new homes up to 2035. The council's emerging strategy promotes the regeneration of the key urban centre and waterfront sites as core to its vision for a successful Waterfront University City by 2035.</li> </ul>
	The Civic site in Strood is a key area, and investment in this site will create the momentum to raise values in wider Strood and strengthen the town centre. There is strong market interest in the Civic site in Strood and Medway has already been approached directly by a leading house builder expressing a keen interest to invest in and develop the site, due to its superb location close to the mainline railway into London via HS1, links to major roads and the connectivity to other developing towns in Medway.
	<ul> <li>Medway has access to low cost finance through prudential borrowing and Medway could be direct developer via the Medway Development Company, which is currently set to deliver a number of sites in Medway over the next 5 – 10 years.</li> <li>Value of Medway Council owned Civic Centre site;</li> <li>Possible funding from the Environment Agency – this option is being pursued to review the wider flood defence strategy in Strood</li> </ul>

•	There is a market for the quality private rented sector which could provide an income to the council, and also revenue in the form of business rates from the proposed ground floor commercial units once the flood defence are complete and the land has been released for development. Prudential borrowing of £1.2m to cover the total cost of the flood defences. The balance of the overall cost of the project will be funded by Medway council via borrowing and still allows for a viable development. The funding of the project in this way was agreed in principle by Medway's Finance team and approved by the Strood Regeneration Board in November 2016; the board is attended by elected members and senior officers.
---	---

# 5.4. Summary financial profile – expand as appropriate

(£m)		17/18	18/19	19/20	20/21	21/30	Total
Source of fu	<b>Inding</b> – Lis	t here the a	mount of f	unding soug	ght		
LGF3 ask		0.75	2.45	0.3			3.5
Applicant contribution (estimated				0.8			0.8
current residual site value)				0.8			0.0
Third party & other contributions							
(specify per row)				5.0	10.0	71.5	86.5
Private sector investment in mixed				5.0	10.0	/1.5	80.5
use development of Civic Centre site							
Borrowing			1.2				1.2
			1.2				1.2
Local contribution total (leverage)							
Total		0.75	3.65	6.1	10.0	71.5	92
(£m)	Cost estimate status	17/18	18/19	19/20	20/21	21/30	Total
Costs - List here the elements of gross	costs, exclu	ding optim	ism bias.				
Procurement							
Feasibility							
Detailed design	E	0.2		0.5			0.7
Management	E	0.1	0.2	0.2			0.5
Construction	D	0.45	3.45	5.4	10.0	71.5	90.8
Contingency							
Other cost elements							
VAT							
Total		0.75	3.65	6.1	10.0	71.5	92
Estimate st	atus: E – Br	oad estimat	te; D – Deta	ailed estima	ite		

5.5.	Viability: How					
	secure are the external sources of funding?	Туре	Source	How secure?	When will the money be available?	
		Public	SELEP LGF	Secure - if project is supported through SELEP submission	2017/18 (A)	
			Medway Council	Secure – land in Council ownership	Immediately	
		Private	Private developer	Secure	2018/19 onwards subject to planning consent and land agreement	
		A= Assumed subi	ect to agreement of SE	I FP		
5.6.	Cost overruns	Prince 2 Project Ma	anagement methodolog	gies will be used to ma	anage costs and risks.	
		<ul> <li>Medway Council has chosen to procure a contractor via its own OJEU compliant</li> <li>Highways Infrastructure Contract. This was competitively tendered following a full</li> <li>OJEU procurement process and was awarded in August 2017 to Volker Highways;</li> <li>the contract includes an allowance contained within to carry out capital works which are related to works outside of highway infrastructure maintenance which are usually, but not limited to, as a result of a capital funding allocation.</li> <li>The contractor can bring extensive experience of constructing projects similar to the Strood flood defence scheme on the Civic site, including projects for the Environment Agency. This vast experience would allow them to provide Medway with the engineering excellence, collaboration and major project management experience skills required to deliver this high profile project on time and within budget.</li> </ul>				
		programme and pr which also provide for the construction	able to identify critical ice, and was able to say d significant cost efficie n of the sheet pile wall on to the local commun	ve 17 weeks on the incension of the incension of the second	dicative programme, e duration of piling 6 weeks which will	
		phase of the project the financial limitate elements of the de construction, mate	engineering approach w et, aimed at developing tions, whilst maintainin tailed design will be rev rials used and early inv ore value engineering o life cost.	the design to deliver of quality and value fo viewed in terms of me olvement of the supp	the outcomes within r money. All thods of ly chain. Workshops	
			of subcontractors for ea re additional efficienci			
			n a competitive procur edway Council's own pr			

	detail and validated the costs. The Build Cost Information Service (BCIS) of the Royal Institution of Chartered Surveyors (RICS) has been used when producing and checking the cost of the works.
	There is no risk of price increase due to inflation as the prices offered by the preferred contractor is based on a fixed price contract, and this price is held until the end of February 2018, by which time the contract will be agreed and signed.
	The sum includes some risk allowance, and also some provisional sums totalling 3.6% of the contract sum. Should the actual cost of these be lower than anticipated then this will be reflected in the final cost of the works.
	This is lower than the risk allowance allocated at the earlier feasibility stage as the work on the detailed design has given greater design and cost certainty. The next stage of the project, preconstruction, will see further detail applied to the risk costs.
	During the preconstruction phase of the project, there will be a series of risk workshops held jointly with the contractor and Medway's' technical advisors, designers, key subcontractors and stakeholders, to fully develop the risk register and detailed risk management plan. The risks will then be allocated a risk owner, costed in detail and will be reviewed regularly during progress meetings.
	A high proportion of the estimated cost is attributed to the land raising; once the programme is fixed the contractor will have more certainty of other projects in the local area that could contribute to the fill.
	Management of the NEC contract allows for management of the costs via Compensation Events. These are events/issues which may arise and which are not the fault of the Contractor, and which could mean the Contractor could be eligible to a claim for time and money. The correct procedure for a Compensation Event will be as follows:
	<ul> <li>Notification – The Contractor notifies the council's Project Manager of the event; the Project Manager will review and decides if it needs to be pursued. If so the contractor will be asked to provide a quotation for the work</li> <li>Quotation- the contractor provides the quotation within the agreed time</li> </ul>
	<ul> <li>Guotation- the contractor provides the quotation within the agreed time period</li> <li>Assessment- the council's Project Manager will reply within another agreed time period and if agreement is reached the works will be implemented; if no initial agreement is reached the event will be reviewed and revised.</li> <li>Implementation.</li> </ul>
	<ul> <li>There are benefits of dealing with Compensation Events quickly:</li> <li>At any point on the Contract an accurate cost analysis can be carried out which means accurate spend monitoring and profiling can be prepared at every stage</li> </ul>
	• There should be no reason (save a legal dispute) for there to be any Compensation Event to be dealt with past the contract completion date
	This means that cost predictability and certainty will be accurate at any point in the scheme.
	Medway has also employed its own qualified project quantity surveyor and consultant design engineer for technical support throughout the construction delivery phase of the flood defences project.
oital Proiect Busine	ss Case

.7. Delivery	y timescales	Please also refer to App	endix B for a high level gantt chart showing th	e key project		
		milestones and Appendix B(i) for a detailed programme for the flood defence works to which this LGF ask will be allocated. The flood defences programme is what was submitted during the tender stage, and is subject to slight changes, but is an indicative programme showing task durations				
		As part of the NEC contr been produced by the p	ract a full programme of works for the flood de referred contractor.	efences has		
		The programme is a management tool and is updated at regular intervals. The Contractor is required to provide an updated programme every 4 weeks. This will be reviewed by the council's project manager with the contractor to discuss any issues or unforeseen implications prior to formally accepting it. Both parties will also discuss ways to improve efficiency and ways to prevent delays by adjusting and/or resequencing various work activities.				
		The milestones and outp detailed in the table bel	puts for the wider Strood Development progra ow:	amme are		
		Project Output	Description	Indicative date		
		Flood Defences - Preconstruction Design Phase	The final design for the flood defences as approved by the Environment Agency and submission of planning application	May 2017		
		Flood Defences - Approved Scheme by Local Planning Authority	Presentation of the flood defence scheme to the Planning Committee	November 2017		
		Flood Defences Contract Award - Medway Council Governance	Review of the final scheme, approval to proceed with the construction works and inclusion within the Capital Programme by Medway Council	November 2017		
		Flood Defences - Construction Works	Work will commence on site for approximately 56 weeks following site setup	February 2018 – Apri 2019		
		Masterplan Review – Site Development	Develop a commercially viable masterplan for the site to be adopted as a Supplementary Planning Document (SPD)	April 2017 - November 2017		
		Masterplan Review – Public Consultation	Consultation for a period of 6 weeks for members of the public, local residents and businesses	December 2017 – January 2018		
		Masterplan Review – Adoption of SPD	The final masterplan will be presented to the meeting of Medway's Cabinet for final approval and sign off, after which there will a 7 day call-in period	May 2018		
		Appointment of Housing Development Partner or	Procurement process to appoint housing development partner to deliver the 600 housing and commercial units. The council intends to test the market by carrying out	November 2017 – November 2018		

Development	<ul> <li>Straight Disposal seeking</li> </ul>	
Company Limited	unconditional and/or subject to planning	
	offers	
	An OJEU compliant Procurement	
	Process	
	A joint venture (JV) partner to	
	deliver the scheme	
	The delivery of the scheme on	
	behalf of the Council through the Medway	
	Development Company Limited.	
	A similar exercise was carried out earlier in	
	the year for a new housing development in	
	nearby Chatham	
Develop Scheme and	Working with the chosen developer to	November
Achieve Planning	perfect the proposed scheme and achieve	2018 –
	planning permission	November
		2019
Start on Site –	Enter into a development	January
Housing	agreement/contract with a developer	2020
Development	which will become unconditional when	
	planning consent is granted	

The projected end date for the completion of the flood defence works is December 2018, which is comfortably within the deadline for which the requested funds need to be spent.

Risk management is also key to ensuring the project does not overrun as this will also have an impact on cost.

Early contractor involvement in the preconstruction and construction phases for the flood defence works , and Medway Council working closely with the contractor will mean risks are dealt with quickly and plans put in place for the management of them, including review and re-profile of the programme if necessary, to ensure as little delay as possible.

As part of the NEC3 contract risks will be managed through the Risk Register. There will be regular risk reduction meetings to agree on mitigation measures and solutions and the risk register will be updated to reflect the outcome.

Resources for the flood defence works are secure; the council has a dedicated project sponsor plus project support, a Project Manager plus project support a Clerk of Works, project quantity surveyor

Risks are generally identified through Early Warning Meetings or notices by either the council's project manager or the Contractor. The early warning procedure is a key part of the NEC, and both parties both parties have a duty to notify the other if a risk could:

- Likely increase the total of the prices;
- Delay Completion;
- Delay meeting a key date or milestone;
- Impairs the performance of the works.

At the risk management meetings solutions are sought and the Risk Register is updated to reflect outcome. This is not a financial meeting.

The works contractor prepared detailed risk registers and risk management plans at

tender stage, with input from the supply chain, whilst also utilising the information provided by Medway Council in the tender documentation. Before works begin on site, a series of risk workshops will be jointly held with Medway and the contractor. These workshops will also be attended by key subcontractors, and other key stakeholders including the Environment Agency, the Rochester Bridge Trust and Network Rail.

Risk Category	Risk Description	Mitigation	Risk Owner
Category	Nogativo public	The Streed development	Madway
Commercial	Negative public	The Strood development	Medway
	response to	project has been informed	Council and
	proposed scheme	by the Medway Local Plan	Flood Work
	design proposals	and consultations took place	Contractor
		in 2016, and are continuing	
		with local residents,	
		businesses and social groups,	
		and have received positive	
		public support, and support	
		from stakeholders. A	
		stakeholder management	
		plan and communications	
		plan will be used to manage	
		stakeholders and the flood	
		defences project teams from	
		Medway and the contractor	
		will manage the	
		communications as the flood	
		defence works progress.	
Economic	Benefits are not	The benefits have been	Medway
	realised	estimated using best	Council
		practice guidance from UK	
		Government Departments	
		built on hard evidence from	
		schemes developed	
		previously. The impacts will	
		be monitored closely over	
		time to ensure they are	
		, being realised	
		Medway is exploring	
		proposals to take forward	
		housing development at	
		pace on the Civic	
		development site. The high	
		demand for new housing in	
		Medway is being met head	
		on by the use of modular	
		construction via businesses	
		such as Latis Homes, who	
		build new properties to	
		promote sustainable living.	
		Other local sites currently	
		being delivered using off-site	
		modular construction	
		include Brooke Homes	
	1		

Management	Programme slippage due to delay in process from planning permission refusal, safety audit result, ground contamination, ecological, or technical adoption issue	Green. Latis has a number of sites in Medway where the propose to deliver homes at pace , including Kitchener Barracks in Chatham site of around 300 new homes, at a rate of 100 homes per year. The Project Manager, in association with the Head of Regeneration Delivery, will be responsible for developing a Benefits Realisation Plan. This plan will clearly set out the benefits that the scheme is expected to deliver, along with a process for collecting the required information to allow assessment as to whether the benefits have been realised. Planning permission for the flood defence works was approved by the Local Planning Authority on 22nd November 2017. The scheme was developed with the approval of the Environment Agency and detailed ground, ecological and contamination surveys were carried out which informed the design and methodology of construction. The contractor has also prepared and will adopt a Health and Safety Plan that covers the flood defence works. A Marine Management Organisation (MMO) Licence has been granted for permission to carry out the works. Medway is in the process of	Medway Council and Flood Works Contractor	
		the design and methodology of construction. The contractor has also prepared and will adopt a Health and Safety Plan that covers the flood defence works. A Marine Management Organisation (MMO) Licence has been granted for permission to carry out the works.		

	emerging updated Local		
	Plan It has been prepared		
	in accordance with the Town		
	and Country Planning (Local		
	Planning) (England)		
	Regulations 2012. The		
	Medway Local Plan 2003 is		
	the current development		
	plan for the authority and		
	therefore forms part of the		
	council's policy framework.		
	As it is intended to adopt the		
	Strood Development Brief as		
	a Supplementary Planning		
	Document (SPD), it will be		
	part of the development		
	plan.		
Underestimation of	A detailed set of ground	Medway	
design scheme cost	-	Council and	
design scheme cost	condition surveys, ecological and contamination surveys	Works	
	-		
	was carried out during the	Contractor	
	design stage, as well as		
	consultation with key		
	stakeholders. The final		
	design has been approved by		
	the Environment Agency and		
	has been competitively		
	tendered and market tested		
	by both the preferred		
	contractor and Medway		
	Council's project quantity		
	surveyor. An iterative		
	approach to value		
	engineering will be applied		
	during the construction		
	phase, all methodology and		
	sourcing of materials will be		
	reviewed, whilst ensuring		
	quality is maintained and		
	workshops will be held to		
	explore further efficiency		
	opportunities. During the		
	construction phase, manage		
	of costs through the NEC		
	contract via the		
	compensation event process		
	will means that cost		
	predictability and certainty		
	will be accurate at any point		
	in the scheme.		
Delay or	Low risk based on the	Medway	
unsuccessful delivery	proposed delivery team's	Council and	
of scheme due to	current track record of	Works	
insufficient	delivering LGF and	Contractor	
management or	regeneration projects. For		

	project resource.	example, the Chatham		
		Placemaking project		
		delivering placemaking		
		improvements between		
		Chatham train station and		
		the town centre, where		
		significant growth is		
		planned, and improvements		
		to the river walk and pier.		
		This was funded through the		
		Growing Places Fund 2014		
		and Local Growth Fund		
		round 1. Since these		
		improvements there has also		
		-		
		been a reduction in anti-		
		social behaviour. The flood		
		defence works on the Civic		
		site will be managed and		
		delivered by the same team.		
		There is considerable senior		
		management and elected		
		Member commitment to the		
		riverside developments in		
		Strood.		
	Protecting ecological		Medway	
	habitats, could delay	surveys have been carried	Council and	
	the project	out and the design of the	Flood Works	
	the project	flood defences has been	Contractor	
			Contractor	
		developed with the approval		
		of the Environment Agency,		
		as well as the proposed		
		methodology for the delivery		
		of the works in order to not		
		disturb marine habitats. The		
		disturb marine habitats. The		
		disturb marine habitats. The contractor for the flood		
		disturb marine habitats. The contractor for the flood works has a dedicated		
		disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of		
		disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists,		
		disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of		
		disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil		
		disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river		
		disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will		
		disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will implement the ISO 14001		
		disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will implement the ISO 14001 accredited Environmental		
		disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will implement the ISO 14001		
		disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will implement the ISO 14001 accredited Environmental		
		disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will implement the ISO 14001 accredited Environmental Management System to		
		disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will implement the ISO 14001 accredited Environmental Management System to ensure all current legislation,		
Project	Overall Proiect Risk	disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will implement the ISO 14001 accredited Environmental Management System to ensure all current legislation, environmental conditions and consents are met.	Medway	
Project Deliver	Overall Project Risk	disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will implement the ISO 14001 accredited Environmental Management System to ensure all current legislation, environmental conditions and consents are met. The overall project risk is low	Medway Council and	
Project Deliver	-	disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will implement the ISO 14001 accredited Environmental Management System to ensure all current legislation, environmental conditions and consents are met. The overall project risk is low as extensive detailed design,	Council and	
	-	disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will implement the ISO 14001 accredited Environmental Management System to ensure all current legislation, environmental conditions and consents are met. The overall project risk is low as extensive detailed design, survey, risk, consultation,	Council and Flood	
	-	disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will implement the ISO 14001 accredited Environmental Management System to ensure all current legislation, environmental conditions and consents are met. The overall project risk is low as extensive detailed design, survey, risk, consultation, cost and programme review	Council and Flood Works	
	-	disturb marine habitats. The contractor for the flood works has a dedicated chartered environmentalist who will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will implement the ISO 14001 accredited Environmental Management System to ensure all current legislation, environmental conditions and consents are met. The overall project risk is low as extensive detailed design, survey, risk, consultation,	Council and Flood	

	flood defences works. A competitive procurement process has taken place, the price offered has been market tested, the team engaged to deliver and manage the works have
	many years experience on multiple similar projects, and detailed deliver plans have been developed to ensure the construction phase will be closely managed to deliver a quality product that
	will allow the land to be released to deliver much needed homes to Medway, whilst providing jobs, learning and skills opportunities
	Please also refer to Section 5.8 Financial Risk Management and Section 7 Risk Analysis
5.8. Financial risk management	<ul> <li>Funding risks are low because once confirmed/successful most public funds are secure. The confirmation of the public funds to deliver the necessary infrastructure to enable a viable development will in turn attract private sector funding in the form of investment in identified and agreed development sites unlocked by the Local Growth Fund.</li> <li>Initially the preferred option was to procure a contractor via the civil engineering and infrastructure service on the Scape Construction Framework, to undertake both the detailed design and carry out the construction works.</li> <li>As these works require significant investment, it was felt that in order to achieve</li> </ul>
	best value a price comparison should be sought, and the overall programme allowed for this. Medway's Highway Infrastructure Contract was used to do this and subsequently Volker Highways was contacted to provide this alternative price.
	The Highway infrastructure Contract 2017 was competitively tendered following a full OJEU procurement process and was awarded in August 2017 to Volker Highways; the contract includes an allowance contained within to carry out capital works which are related to works outside of highway infrastructure maintenance which are usually, but not limited to, as a result of a capital funding allocation.
	With regards quality, both contractors demonstrated they could bring extensive experience of constructing projects similar to the Strood flood defence scheme, including projects for the Environment Agency. This vast experience would allow each to provide Medway with the engineering excellence, collaboration and major project management experience skills required to deliver this high profile project on time and within budget.
	The preferred contractor was able to identify critical operations and disciplines that affect the programme and price, and was able to save 17 weeks on the indicative programme, which also provided significant cost efficiencies. In particular the

duration of piling has been reduced to 6 weeks which will mean less disruption to the local community. This also provided significant cost efficiencies

This cost is based on a competitive procurement process and market testing by the contractor, and Medway Council's own project quantity surveyor scrutinised in detail and validated the costs. The Build Cost Information Service (BCIS) of the Royal Institution of Chartered Surveyors (RICS) has been used when producing and checking the cost of the works.

There is no risk of price increase due to inflation as the prices offered by the preferred contractor is based on a fixed price contract, and this price is held until the end of February 2018, by which time the contract will be agreed and signed.

The sum includes some risk allowance, and also some provisional sums totalling 3.6% of the contract sum. Should the actual cost of these be lower than anticipated then this will be reflected in the final cost of the works.

This is lower than the risk allowance allocated at the earlier feasibility stage as the work on the detailed design has given greater design and cost certainty. The next stage of the project, preconstruction, will see further detail applied to the risk costs.

During the preconstruction phase of the project, there will be a series of risk workshops held jointly with the contractor and Medway's' technical advisors, designers, key subcontractors and stakeholders, to fully develop the risk register and detailed risk management plan. The risks will then be allocated a risk owner, costed in detail and will be reviewed regularly during progress meetings.

A quality risk assessment was carried out and some key risks identified in terms of the construction of the flood defences were identified:

• Underground obstructions in the line of the piles

Ground condition surveys, ecological and contamination surveys were carried so there is as much detail as possible at this stage of the project, but due to the depth of the piling there could be some obstructions. The contractor will pre-dig the pile line where possible and there will be an excavator in attendance during piling.

• Unknown quantity and type of contaminated material on site The current proposal is to sort material on site and remove obvious contamination. The remainder will be encapsulated on site under imported fill pending Environment Agency approval.

Third party interface: Local residents complain about the disturbance caused by noise and works activities.
Medway and the preferred contractor will develop a detailed communications plan and will provide advance notification to residents and local businesses. The programme of works has also been planned sensitively to minimise disruption.

• Service diversions: Service diversions take longer than planned and delay the programme.

The works contractor will work with Medway Council to prepare and submit applications early and pre-order diversions.

The flood works will be managed via NEC3 contract, and an iterative value

engineering approach will be applied during the construction phase of the project, aimed at delivering the outcomes within the financial limitations, whilst maintaining quality and value for money. All elements of the detailed design will be reviewed in terms of methods of construction, materials used, in particular the options for land raising materials, and early involvement of the supply chain. Workshops will be held to explore value engineering opportunities for the flood works and to establish the whole life cost.

Management of the NEC contract allows for management of the costs via Compensation Events. These are events/issues which arise and which are not the fault of the Contractor and which could mean the Contractor could be eligible to a claim for time and money. The correct procedure for a Compensation Event will be followed:

• Notification – The Contractor notifies the council's Project Manager of the event; the Project Manager will review and decide if it needs to be pursued. If so the contractor will be asked to provide a quotation for the work;

• Quotation - Contractor provides the quotation within the agreed time period

• Assessment - the council's Project Manager will reply within another agreed time period and if agreement is reached the works will be implemented; if no initial agreement is reached the event will be reviewed and revised.

• Implementation.

There are benefits of dealing with Compensation Events quickly:

• At any point on the Contract an accurate cost analysis can be carried out which means accurate spend monitoring and profiling can be prepared at every stage

• There should be no reason (save a legal dispute) for there to be any Compensation Event to be dealt with past the contract completion date

This means that cost predictability and certainty will be accurate at any point in the scheme.

Medway has also employed its own qualified project quantity surveyor and consultant design engineer for technical support throughout the construction delivery phase of the flood defences project.

Future maintenance of the proposed river wall will be a key part of the preconstruction design phase. The design of the flood defence structure will include a clear definition of the inspection, monitoring and maintenance requirements for the structure in the future.

The contractor and the technical design consultant chosen to carry out the works have an excellent reputation and the experience to deliver a robust design so major maintenance work to the flood defences should not be required for 20 years as an absolute minimum. Opportunities to extend this beyond 20 years using lessons learnt from previous structures will be thoroughly considered.

There will be a need to inspect and carry out minor maintenance and assessment after 5 years which would include inspections of the integrity of the sheet piles and condition of the concrete capping beam. Any fill behind the walls would be subject to other construction finishes and build and would not fall into any future maintenance programme. There could be some joints in the capping beam to clear out and apply new sealant and given the choice of handrail finish there may be some painting required although if possible low to no maintenance finishes will be considered.

A future maintenance regime will be recommended by the contractor. Major longterm cyclical repairs could be met by the Environment Agency as part of their national remit and maintenance programme and there is also the potential to fund maintenance works through a service charge contribution from residents. This complements an existing charging system established in north Kent to support nesting birds (SAMMS – Strategic Asset Management and Monitoring System).

Possibilities for Medway to generate income could be via a rent charge per bedroom for housing and also at a rate per square foot for commercial space.

Further income to the council would also come from council tax and business rates

The table below details high level risks associated with the funding and mitigation measures.

Risk	Mitigation	Risk Owner
Best value procurement of	Use of an effective OJEU	Medway
necessary	compliant procurement	Council
consultancy/design/ build	framework and experience of the	
services not achieved	procurement team at Medway	
	Council, which has a proven track	
	record of successful project	
	delivery, both in terms of quality	
	and value for money. The team	
	was recognised in March 2014 at	
	the Excellence In Public	
	Procurement Awards 14/15	
	where the Team achieved the	
	Highly Commended Award for	
	Innovation or Initiative, and in	
	August 2014 being shortlisted for	
	two major award categories in	
	the CIPS Supply Management	
	Awards 2014 and 2015.	
Underestimation of design	A detailed set of ground	Medway
scheme cost	condition surveys, ecological and	Council and
	contamination surveys was	Flood Works
	carried out during the design	Contractor
	stage, as well as consultation with	
	key stakeholders. The final design	
	has been approved by the Environment Agency and has	
	been competitively tendered and	
	market tested by both the	
	preferred contractor and	
	Medway Council's project	
	quantity surveyor. An iterative	
	approach to value engineering	
	will be applied during the	
	construction phase, all	
	methodology and sourcing of	

	materials will be reviewed, whilst		
	ensuring quality is maintained		
	and workshops will be held to		
	explore further efficiency		
	opportunities. During the		
	construction phase, management		
	of costs through the NEC contract		
	via the compensation event		
	process will means that cost		
	predictability and certainty will		
	be accurate at any point in the		
	scheme.		
No match funding from	Low risk as this is a prime	Medway	
private investors	regeneration site, which once	Council	
	appropriate flood defences have		
	been established will be a viable		
	development site. There has been		
	considerable interest in the site		
	and Medway Council has already		
	been approached directly by a		
	leading house builder.		
	The Council has the option to self		
	deliver the site through Medway		
	Development Company Limited		
	too.		

Please also refer to Section 5.7 Delivery Timescales and Section 7I Risk Analysis

During the construction phase of the flood defence project, the contractor will work with Medway and carry out the following to mitigate financial risk as much as possible:

- Risk Workshops to define the activities and actions required to reduce the risk and associated values;
- Reviews with Medway Council to check the proposed design and to develop elements of the scheme which could be refined;
- Value Engineering exercises and workshops to reduce the cost of the design by offering alternative materials, especially for the land raising, or methods of construction, whilst maintaining a quality end product. This will be an iterative process and will continue throughout the construction phase;
- Preparation of the health and safety documents required for the project, including the Project Management Plan;
- Market testing of local subcontractors to ensure best value. The main contractor will operate an open book procedure and transparent accounting;
- Ground Penetrating Radar surveys for verification of utilities within the works area, if required;
- Soil investigations and other surveys providing information for closing out the degree of remediation required;
- Determining how to manage the disposal of excavated materials most efficiently;
- Early coordination with utility organisations to manage any diversions.

5.9.	Alternative funding mechanisms	If loan funding is requested how will it be repaid?
		Not applicable
		Do you anticipate that the total value of the investment will be repaid? If not, how much will be repaid?
		Not applicable

# 6. DELIVERY/MANAGEMENT CASE

	_	
6.1.	Project managem ent	Medway Council has effective project management and governance arrangements in place to ensure effective delivery of LGF and other regeneration projects, including:
		<b>Chatham town centre placemaking and public realm package</b> Placemaking improvements along the route between Chatham train station and Chatham town centre where significant growth is planned. The scheme includes gateway improvements at Chatham station, in partnership with Network Rail, improved walking and cycling routes, hard and soft landscaping, traffic management measures, directional signage, way-marking and public art.
		Publicity of the proposed project and the news that funding has been secured has led to construction of homes in The Brook area of Chatham. To date 57 homes have been delivered and work has commenced on further homes. In total 3,682 homes will be delivered across the town centre including sites along The Brook and at the Station Gateway. Construction of these homes has generated a number of construction jobs in the area.
		Chatham town centre has benefited from works undertaken using the Growing Places Fund. This work ties in closely with the work being undertaken as part of the LGF project. The River Walk has been completed which provides pedestrians with a more pleasant environment to walk and relax. The River Walk leads to Sun Pier which has undergone remedial works using LGF funding to improve the area and provide benches and new lighting, offering similar benefits to the River Walk. Since these improvements there has been a reduction in anti-social behaviour, a benefit expected to increase as the project progresses. These changes have resulted in a more positive environment for residents, visitors and businesses.
		The same successful team will be working on this Civic flood defences project.
		<b>Medway City Estate: Connectivity Improvements</b> An integrated package aimed at addressing the barriers to movement to and from and within Medway City Estate. The scheme will include improvements for pedestrians and cyclists, with new and enhanced routes through the estate, cycle parking, benches and traffic management alterations to improve vehicular egress from the site. This project will lead to 390 jobs and 261 homes.
		Traffic management improvements have made Medway City Estate a more attractive place for businesses to invest, leading to an increase in jobs in the area. As the scheme progresses there will be further improvements to the estate environment making it a more pleasant place, whilst also increasing accessibility options opening the possibility of employment on the estate to a wider audience.
		The works completed to date have allowed the following benefits to be realised:
		<ul> <li>Reduced journey times when leaving the estate (although these will improve further as the project progresses) due to traffic management improvements and increased parking restrictions allowing free movement of traffic;</li> </ul>
		<ul> <li>Environmental improvements as a result of reduced journey times and subsequent reduction in pollution;</li> <li>Reduction in queue length as CCTV cameras are now in operation which allow people working on the estate to check traffic levels before leaving work. If traffic is heavy people delay their journeys until the traffic is reduced;</li> <li>Bus routes serving the estate have been secured for the next 18 months avoiding a reduction in accessibility options for people working on or visiting the estate. This was not funded by the LGF but is working in partnership with it to achieve the objectives of</li> </ul>

the project.

#### Project management

Medway Council has effective project management and governance arrangements in place to ensure effective delivery of LGF projects, including:

- **Project management:** an established project management toolkit based on PRINCE2 methodology. Information for staff on Medway Council's adopted approach to project management is published on the council's staff Intranet site. The information makes it clear that it is imperative that projects are not undertaken without the management and controls described in the toolkit. The Medway method for project management is applicable to all projects, both capital and revenue including change management projects. Annexed to this toolkit are template documents for use in the project management projects are following this process, with the addition that the LGF programme is being reported to the Officer Project Group on a monthly basis.
- **Governance arrangements** that involve both elected members and senior officers of the council.

The programming and monitoring delivery of the individual schemes will be handled by the management and governance arrangements in place. Appendix A details the management and governance arrangements that Medway Council has in place to deliver LGF projects.

A project plan has been prepared to show that delivery of the flood defences for which the LGF fund is being requested will be delivered within the required timescales. Please refer to Appendix B and B(i) attached for this programme.

#### **Construction Phase Project Management**

Medway Council has a project team in place to work in partnership with the contractor Volker to deliver the flood defence works on the Civic site in Strood. This includes the project sponsor from the Regeneration Delivery team, the Principal Engineer from the Highways and Adoptions team, a quantity surveyor and a chartered engineer who developed the design to ratify the construction works as they progress.

Resources for the flood defence works are secure; the council has a dedicated project sponsor plus project support, a Project Manager plus project support, a Clerk of Works and project quantity surveyor

The contractor has a team set up with proven ability to deliver the project with technical, ecological and stakeholder management experience. Please refer to appendix F for the project team structure for Medway Council and the Contractor.

The contractor chosen to deliver these works has extensive management procedures in place at both corporate and project levels for ensuring a high quality of construction output. They also have extensive arrangements for measuring the effectiveness of these procedures: A Quality Manager and third parties such as Achilles and BSI carry out regular audits and inspections. The quality management system and processes have been assessed and accredited to IS09001. They have been approved to the high standards of clients such as Highways England, the Ministry of Defence, Network Rail, Transport for London and the Environment Agency.

#### Managing quality at project level

The mechanism for delivering the Quality Management System on projects is the Quality Management Plan. It will identify in detail the specific process and control procedures to be

adopted to manage those processes. The contractor's Project Manager will ensure that the requirements of the Quality Plan are implemented on site.

A complete package of testing of materials and inspection and testing throughout the works will also be undertaken by the council's project management team. Additional consultant design engineer resource will also be available to support the teams with any design issues that may arise as the work proceeds.

Inspection, testing and monitoring of the works will be controlled by the site management team. They will utilise project Inspection and test plans, together with formal records of inspections, checking and surveillance to demonstrate meeting requirements.

#### Reviewing performance to ensure quality and continuous improvement

The contractor's Quality Manager Tracy Kennedy-Clarke will undertake site quality audits on a monthly basis. These will involve stringent checks of all Inspection and Test Plan documentation, adherence to the quality plan and independent inspection of all works completed to date. This process will ensure delivery of the flood defence works in compliance with Volker's Quality Management System; including that of all subcontractors and supplier chain.

A Chartered environmentalist will lead the contractor's team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will implement the ISO 14001 accredited Environmental Management System, to ensure all current legislation, environmental conditions and consents are met.

### Approvals Procedures Medway Council's Approvals and Escalation Process

Project managers are expected to make day to day operational decisions in order to ensure project delivery. Any issues or risks that arise which might impact on the successful delivery of the project must be reported on the monthly project dashboard report. In addition if the project manager is requesting a change to the project which will impact on budget, outcomes, outputs, delivery timetable or will signify a change in project scope or delivery approach compared to that specified in the Business Case they are required to submit a change management request for consideration at the LGF Programme Steering Group meeting.

At the LGF Programme Steering Group meeting there will be discussion regarding the issues or risks flagged up by the project manager. Advice will be given regarding how to address the risks and issues, in order to minimise the impact on project delivery. As the attendees at the LGF Programme Steering Group meeting include both Project Owners and Project Sponsors, the group is also able to consider the change management requests put forward by the project managers. The change requests will be considered from both a project and programme management perspective. A decision will then be made as to whether the LGF Programme Steering Group support the change requested. If the change supported by the Steering Group is considered to be low risk and has no budgetary implications the project manager can implement the change without further approval required. However, if the change is considered to be medium or high risk or has budgetary implications the change management request also needs to be presented to the Regeneration, Culture, Environment & Transformation (RCET) Officer Project Board.

RCET Officer Project Board is attended by senior council officers including the Director of Regeneration, Culture, Environment and Transformation. This board has greater authority to approve changes which impact on the use of council resources or which could significantly impact on project delivery.

Any project changes that have been requested will be included on the dashboard reports that go

		to Member Advisor decisions that have			nis meeting	Members o	can challen <sub>ย</sub> ์	ge project p	progress and
		If approval is neede Case the Portfolio H council's representa process. The LGF Programme as set out in the SEL that project changes change is proposed implementing the cl <b>Please also refer to</b> <b>the governance of p</b>	older for In ative on the e Managem EP Assurar s are repor Medway C hange. Appendix	nward Inve e SELEP Acc nent team nee Framew ted to Acco council is re <b>A and Org</b>	stment, Sti countability will ensure vork, is foll puntability equired to s anigram 1	rategic Rege y Board, will that the SE owed when Board. In s seek approv at the end o	eneration a be involve LEP change e required. ituations w al by Accou	nd Partners d in the ap managem This proce here a sign intability Bo	ships, as the proval ent process, ess ensures ificant pard before
6.2.	Outputs								
0.2.	Outputs	Output	17/18	18/19	19/20	20/21	21/30	Total	]
		Direct jobs		35	75	75	717	902	-
		Indirect jobs					131	131	-
		Jobs							-
		safeguarded							
		Employment				F00m <sup>2</sup>	1.400 m <sup>2</sup>	10002	-
		space				500m <sup>2</sup>	1400m <sup>2</sup>	1900m <sup>2</sup>	
		Housing starts				50	275	325	-
		Housing					564	564	
		completions					504	504	-
		Learners							
		supported -	2	2	2	10	22	38	
		apprenticeships							
6.2		Outoutou illiha ana							
6.3.	How will	Outputs will be mor	•	-	•	•	•		•
	outputs be	construction phases quarterly meetings	-		•	•		ng contract	ors and
	monitore	qualiterry meetings			le regeller	ation board	•		
	d?	For the flood defend	e works. t	hev are rec	uired to p	rovide local	employme	nt and sup	olv chain
		opportunities, which	-	•	• •		• •		•
		monitored through					•		
		contactor at quarter				•	•	•	
		and lessons learnt p		-	-			•	-
		Once the project is	•	•	•	•	• •		•
		outputs will be pres							-
		also refer to the gov		-	• •		rnance and	section 6.4	l, for further
		details on how the b	penefits an	d outcome	s will be de	elivered.			

6.4.	Mileston es and Benefits Realisati on	for developing a detaied Benefit the scheme is expected to deliver allow assessment as to whether The benefits realisation plan will The benefits realisation plan will Milestones for when the delivered over a number of year Planned method of colle Clear approach for apply been delivered; Timetable for collecting Timetable for collecting Timetable for collecting Timetable for reporting RCET Officer Project Board; Timetable for reporting RCET Officer Project Board; Timetable for reporting requirements; Whilst the Head of Regeneration benefits are realised, collection of officers. The officers will collect benefits realisation plan and rep reporting to the LGF Programme Officer Project Board, Member A	er, along with a process for collect the benefits have been realised. include the following informatio e is expected to deliver and the ir outcome in relation to each bene e benefits are expected to be deli s following completion of the pro- ecting each piece of information r ying data collected to establish he the required baseline data; data to assess benefit delivery – on process, whereas for other be completion; on benefit realisation to the LGF on benefit realisation to SELEP in a Delivery will have overall respon of monitoring data will be delega the information in accordance w ort back to the Head of Regenera Steering Group meeting, LGF Pr advisory Project Board and the St be established within four mont	clearly set out the benefits that ting the required information to n: nformation that is required to efit; wered – some benefits may be oject; needed; ow effectively the benefits have for some benefits this may enefits data won't be collected Programme Steering Group and a line with quarterly reporting nsibility for ensuring that the ted to appropriate council ith the timetable specified in the ation Delivery to facilitate rogramme Management team,
		will be reported at these		
		Meeting /Group	Attendees	Frequency
		Officer Project Board	Chaired by the Director of	Monthly
			Regeneration, Culture,	wonuny
			Environment and	
			Transformation (RCET)	
			Directorate, and supported	
			by Assistant Directors of	
			RCET, Integrated Transport	
			and Legal	Quertarlu
		Member Advisory Project	Council Leader and relevant	Quarterly
		Board	Portfolio Holders and is	
			supported by the	
			Regeneration, Culture,	
			Environment and	
			Transformation Directorate.	Quantarily
		Strood Regeneration Board	Council Leader and relevant	Quarterly
			Portfolio Holders and is	
			supported by the	

	Regeneration, Culture, Environment and Transformation Directorate, and officers	
LGF Steering Group		Monthly
Cabinet		Monthly
SELEP Accountability Board	SELEP Accountability Board Members (including 1 Council Member from each authority)	Quarterly

The monitoring process will continue to ensure the proposed benefits, i.e. the jobs and housing units, are realised.

The table below indicates the key milestones for the project to deliver the flood defences as well as the main activities needed to appoint a housing development partner and achieve planning.

Please also refer to Appendix B for a high level gantt chart showing the key project milestones and Appendix B(i) (attached) for a detailed project programme for the flood defence works to which this LGF ask will be allocated. The flood defences programme is what was submitted during the tender stage, and is subject to slight changes, but is an indicative programme showing task durations

Project milestone	Description	Indicative date	Monitoring of Milestones and Benefits/Outcomes
Project Order – Flood Defences	Following approval of the proposed design solution and estimated costs and programme by Medway Council, the formal order to proceed with the detailed design preconstruction phase will be drawn up and signed	04/07/2016	This milestone was achieved following approval via the Council's internal governance process. The benefits and outputs will be reviewed as part of the contract performance each year and presented to the procurement board. The formal agreement to proceed to the construction phase, including details of the programme and cost, will be checked by Medway's legal team prior to the agreement being signed.
Preconstruction Phase – Flood Defences	Detailed design phase – the contractor will develop the detailed design for the Civic Centre site, following on from the other adjacent sites at Strood Riverside and Kingswear Gardens	August 2016 – April 2017	The project team will work closely with the contractor to ensure the design is developed to achieve the outcomes required. This will be at regular monthly meetings, more frequently if required, and through consultation with the Environment Agency, the Homes and Communities Agency, the local planning department and other interested stakeholders.
Review by Medway Council	Review of the detailed design and	05/04/2017 -	This will be presented to the internal review boards and

1			
	approval to proceed by Medway Council. This phase will provide more cost certainty of the scheme	05/06/2017	the Directorate Management Team before the approval is given to proceed with the construction phase.
Planning Approval for the Flood Defences Scheme	Presentation to the Local Planning Committee	22 <sup>nd</sup> November 2017	This was given approval by the Planning Committee on 22 <sup>nd</sup> November
Delivery Agreement Contract Award – Flood Defences	The formal order to proceed with the construction works will be drawn up and signed	January 2017	The formal agreement to proceed to the construction phase, including details of the programme and cost, will be checked by Medway's legal team prior to the agreement being signed.
Masterplan Review – Site Development	Appoint team to create a commercially viable masterplan for the site	November 2016 – September 2017	The Masterplan and Development Brief will be created to act as a guide for potential housing developers to submit their proposals for the site. This will include the required number of housing units, commercial spaces and social and green spaces. The project team will work closely with the local planning department and design consultants and will meet regularly as the Masterplan is developed to ensure outcomes will be achieved.
Masterplan review and Consultation	Consultation for a period of 6 weeks for members of the public, local residents and businesses	December 2017 – January 2018	The process being followed is in accordance with the Medway Statement of Community Involvement, 2014.
Masterplan Adoption of SPD	Review and update of the masterplan SPD following the public consultation	May 2018	The final masterplan will be presented to the meeting of Medway's Cabinet for final approval and sign off, after which there will a 7 day call-in period
Appointment of Housing Development Partner or Engagement of Medway Development Company Limited	Procurement process to appoint housing development partner to deliver the housing and commercial units.	November 2017 – November 2018	Procurement process to appoint housing development partner to deliver the 600 housing and commercial units. The council intends to test the market by carrying out an expressions of interest exercise considering the below: • Straight Disposal

			<ul> <li>seeking unconditional and/or</li> <li>subject to planning offers</li> <li>An OJEU compliant</li> <li>Procurement Process</li> <li>A joint venture (JV)</li> <li>partner to deliver the scheme</li> <li>The delivery of the</li> <li>scheme on behalf of the</li> <li>Council through the Medway</li> <li>Development Company</li> <li>Limited.</li> <li>A similar exercise was carried</li> <li>out earlier in the year for a</li> <li>new housing development in</li> <li>nearby Chatham</li> </ul>	
Develop Scheme and Achieve Planning	Working with the chosen developer to perfect the proposed scheme and achieve planning permission	November 2018 – 2019	An iterative process with the chosen developer and the Council's team to agree the final details of the housing scheme, and inclusion of commercial space to ensure the required number of housing units are delivered. Once adopted the 2017 Strood Waterfront Development Brief is intended to provide supplementary planning advice, expanding on Policy S1 – Development Strategy in the Medway Local Plan 2003, an in the emerging updated Local Plan. It has been prepared in accordance with the Town and Country Planning (Local Planning) (England) Regulations 2012. The Medway Local Plan 2003 is the current development plan for the authority and therefore forms part of the council's policy framework. As it is intended to adopt the 2017 Development Brief as a Supplementary Planning Document (SPD), it will be part of the development plan.	
Start on site – flood defences works	Work will commence on site for approximately 56 weeks after sit setup	February 2018	Medway will attend monthly meetings with the contractor to review progress of the project, including programme, monthly valuations of work completed compared to the predicted budget, number of jobs,	

			apprenticeships and work
			experience opportunities.
Target	Construction of the	April 2019	The contractor together with
Completion Date	flood defence works		Medway's project team will
<ul> <li>– flood defences</li> </ul>	will be complete		inspect the works and all
			areas will be checked and
			signed off, and the as built
			drawings and operating
			manuals will be handed over;
			these will include
			recommendations for future
			maintenance.
Start on Site –	Enter into a	January 2020	The project team will meet
Housing	development		regularly with the housing
Development	agreement/contract		developer to monitor the
	with a developer		delivery of the housing units,
	which will become		the number of jobs,
	unconditional when		apprenticeships and work
	planning consent is		experience opportunities
	granted		being fulfilled. In addition, the
			local planning team will
			review the delivery of the
			housing units each year,
			against the numbers detailed
			for delivery each year in the
			Local Plan.

6.5.	Stakehol der manage ment &	Figure 20 below shows the stakeholder management plan and engagement approach to be used for various different stakeholders and interest groups. Stakeholder Management Plan					
	governan ce		takeholders to be handled in accordance with interest /				
		High Stake- holder Influence	To be passively monitored:	To be actively engaged and managed: SELEP; Kent & Medway Economic Partnership; Strood Regeneration Board; Senior and local elected members; Strood Community Project; Medway Public Health; Environment Agency.			
			To be passively conciliated:	<b>To be actively informed:</b> Local businesses, in particular those based in Strood;			
			Local population	Physical Disability Board; Network Rail/Southeastern.			
		Low					
			Stakehol	der Interest			
			Low	High			
		Key political stake	Figure 20: Stak	High eholder management plan the scope and nature of the scheme being	g devel		

Key political stakeholders are fully aware of the scope and nature of the scheme being developed and are fully supportive of investment in the proposed development to transform the Civic Centre site into an area of prime, high quality residential land. Formal consultation with the public on the proposed development will take place once the first draft of the masterplan is complete in November 2017. All consultations will be managed by Medway Council, in accordance with the Medway Statement of Community Involvement, 2014.

In terms of the flood defence works, to which this ask for funding relates, the contractor and technical consultants will work with Medway Council to create a strategy for stakeholder and third party liaison during the pre-construction phase.

The contractor has a dedicated Communication Coordinator who will be available during the construction stage to advise the team, with the Project Manager and Contracts Manager retained as the main points of contact and responsible for maintaining a positive and informative relationship with the onsite team and all relevant stakeholders.

Early stakeholder engagement is extremely important to the scheme. Early development of all interfaces with the local community will allow the team to mitigate any measures and potential difficulties and provide best solutions for the construction of the scheme. These considerations

will include the interface with residential properties and the provision of necessary pedestrian diversions and use of the vehicular access.

In terms of the flood defences, this type of major civil engineering works can be disruptive to local communities. For all of their projects, the contractor adopts the Considerate Constructors Scheme (CCS) best practice and in the past three years, they have won 28 CCS awards, including eight to the highest Gold standard.

The council recognises the sensitivities surrounding this scheme with reference to stakeholder management and will work with Medway Council managing communication with the public, business owners and local residents. Both project teams will work together to maintain positive relationships with stakeholders throughout the construction period. The contractor's teams have all received our customer experience training, to ensure they deliver high standards of customer service. They understand the importance of being respectful to residents and members of the public and 'getting it right first time.'

The contractor's Head of Customer Experience has over 20 years positive customer engagement experience and leads a team of coordinators who support projects throughout the UK developing comprehensive Customer Engagement Plans, creating and developing project newsletters and websites, carrying out leaflet drops and organising community meetings, school visits and workshops and community events. They will hold weekly meetings with Medway's project management team, to discuss how to address issues in order to ensure high levels of customer satisfaction within the local community.

Stakeholder management will be essential to the smooth delivery of this project due to the close proximity to third parties, and the preferred flood works contractor is proposing to recruit a local customer and stakeholder coordinator either as a permanent position or as an apprentice to be monitored by the Head of Customer Experience.

The contractor will set up a Communications and Complaints Tracker to ensure that a record of developments and complaints is maintained, and will be reviewed at all meetings between themselves and the Medway project team.

Medway Council will develop a Consultation Strategy. The Strategy will set out in tabular form a list of bodies to be consulted (e.g. businesses, statutory bodies and the general public) and the issues to be considered during the engagement exercises. A plan will be put in place with dates and type of event (e.g. one-to-one, workshops, meetings etc.) and will be monitored on an ongoing basis to ensure that all have had the opportunity to feed in. In summary, the plan will set out:

- The organisations consulted;
- Issues raised, including risks;
- Levels of support and opposition; and
- Contributions to delivery.

A dedicated task manager will be appointed to take responsibility for all consultation and engagement related tasks. They will be responsible for planning and attending events, developing an ongoing work programme, monitoring consultation progress, corresponding with stakeholders, budget and reporting to the Project Manager and Board so that all parties are kept informed of progress and issues.

#### Medway Council's Approvals and Escalation Process

Project managers are expected to make day to day operational decisions in order to ensure project delivery. Any issues or risks that arise which might impact on the successful delivery of

	<ul> <li>the project must be reported on the monthly project dashboard report. In addition if the project manager is requesting a change to the project which will impact on budget, outcomes, outputs, delivery timetable or will signify a change in project scope or delivery approach compared to that specified in the Business Case they are required to submit a change management request for consideration at the LGF Programme Steering Group meeting.</li> <li>At the LGF Programme Steering Group meeting there will be discussion regarding the issues or risks flagged up by the project manager. Advice will be given regarding how to address the risks and issues, in order to minimise the impact on project delivery. As the attendees at the LGF</li> </ul>
	Programme Steering Group meeting include both Project Owners and Project Sponsors, the group is also able to consider the change management requests put forward by the project managers. The change requests will be considered from both a project and programme management perspective. A decision will then be made as to whether the LGF Programme Steering Group support the change requested. If the change supported by the Steering Group is considered to be low risk and has no budgetary implications the project manager can implement the change without further approval required. However, if the change is considered to be medium or high risk or has budgetary implications the change management request also needs to be presented to the Regeneration, Culture, Environment & Transformation (RCET) Officer Project Board.
	RCET Officer Project Board is attended by senior council officers including the Director of Regeneration, Culture, Environment and Transformation. This board has greater authority to approve changes which impact on the use of council resources or which could significantly impact on project delivery.
	Any project changes that have been requested will be included on the dashboard reports that go to Member Advisory Project Board. At this meeting Members can challenge project progress and decisions that have been made.
	If approval is needed for a change that will result in a significant change to the project Business Case the Portfolio Holder for Inward Investment, Strategic Regeneration and Partnerships, as the council's representative on the SELEP Accountability Board, will be involved in the approval process.
	The LGF Programme Management team will ensure that the SELEP change management process, as set out in the SELEP Assurance Framework, is followed where required. This process ensures that project changes are reported to Accountability Board. In situations where a significant change is proposed Medway Council is required to seek approval by Accountability Board before implementing the change.
	Please also refer to Appendix A and Organigram 1 at the end of this report for more detail on the governance of project delivery at Medway Council
6.6. Organisa tion track record	Medway Council has a strong track record of delivering LGF projects to programme and budget. Please refer to section 6.1 Project Management for details of LGF projects being delivered by Medway Council.
	In LGF round 1 Medway Council secured £28.6m funding over a number of years for five projects covering transport and non-transport projects, including Strood town centre to deliver a suite of improvements around journey time, accessibility, public realm and the retail centre.
	£1.9m of LGF funding was allocated to Medway Council in 2015/16 and currently expenditure and programme are both on target.
	The Medway team working on the Strood Civic site flood defences project is the same team that

		the strategic route from Chat	ham Placemaking project, deliv ham station to the town centre n A contract and the methodole				
		team which has over 100 year projects in London and the so practice to the Strood schem tidal barrier, Ashlone Wharf, and Regeneration Project, Riv Package, Deptford Creek From Should the need arise the cor project managers, construction	rs combined experience of succ buth, which will enable them to e. Examples of similar schemes Ministry of Defence in Shoebur ver Arun Tidal Walls in Littlehan ntages and Colwyn Bay Waterf ntractor can make available add on managers and engineers bas of over 100 operatives located	flood defences have put together a cessfully delivering flood defence bring valuable and relevant best include the Thames Barrier, Ipswich yness, Hoe Valley Flood Alleviation npton, Thames Tideway East Marine ront litional resources from their team of ed in their nearby Deptford office. in the south dedicated to flood,			
		A Chartered environmentalist will lead the team of environmental specialists, bringing experience of working on major civil engineering projects in river and coastal areas. They will implement the ISO 14001 accredited Environmental Management System, to ensure all current legislation, environmental conditions and consents are met.					
6.7.	Assuranc e	Under the requirements of section 151 of the Local Government Act 1972, Medway Council confirms the financial administrator has adequate project assurance systems in place to verify that the scheme is fit and able to be procured and delivered using Medway Council procedures.					
6.8.	Equalitie s Impact Assessm ent	Please refer to Appendix D for the Diversity Impact Assessment.					
6.9.	Monitori ng and evaluatio n	Medway Council will seek to agree with the SELEP and Government a collection of KPIs (Key Performance Indicators) for the recommended option to monitor the delivery and success of the project. The metrics that may form the basis of the KPIs are listed below, which cover key outcomes and outputs from the project. Medway Council currently has monitoring arrangements in place to measure these indicators.					
		1. Core Metrics	2. Project specific outputs	3. Additional monitoring			
		Inputs	Outputs				
			Flood defences delivered				
		Funding breakdown		1			
		In-kind resources provided					
			Outcomes				
		Direct jobs connected to the	Site flood secure enabling				
		-	development to commence				
		Commercial floor space	Commercial floor space				
		constructed	occupied				
		Housing unit starts					
		Housing units completed					
		Medway Council will put in place an evaluation plan which will seek to monitor agreed outputs and outcomes throughout the lifetime of the project and beyond. As part of the Prince2 project management methodology there will be a review of the project at the end of each phase, including what went well and what lessons can be learnt. A record of this will be kept with the project management documents that can be referred to by colleagues from Medway Council.					
		Project Business Case					

	Officers report on the progress of projects and status of the delivery of outputs and outcomes monthly to LGF Programme Steering Group meeting, monthly to Officer Project Board and quarterly to Member Project Board.					
	As part of the Council's procurement process and contract review a formal report will be produced and presented to the Strood Regeneration Board and the Procurement Board on the performance of the contractor and the outcomes delivered.					
	In addition, the contractor will be monitored against a range of key performance indicators, including time and cost predictability, defects at completion, health and safety, client satisfaction (both product and service), waste management, employment and skills plan targets, SME engagement, local spend, local employment, apprenticeship opportunities and school visits.					
	There will also be a dedicated Communication Co-ordinator, whose responsibilities will inclumanaging communication with the local community during the construction phase and the employment skills plan.					
	Council officers are required to complete quarterly updates which are circulated to elected members and which detail the progress of key projects, and how they are contributing to the commitments set out in the Council Plan, and the measures of success as shown below:					
	Commitment - Delivering new homes to meet the needs of Medway's residents					
	Measures of success:					
	<ul> <li>Delivery of the development programme including the 5 key regeneration sites, one of which is Strood Riverside and the Civic Centre.</li> </ul>					
	Commitment - Jobs, skills and employability Measure of success:					
	<ul> <li>Percentage of young people aged 16-18 not in education, employment or training;</li> <li>Jobs created and safeguarded;</li> <li>Gross Value Added levels (not measured in 2016/17).</li> </ul>					
6.10. Post	Completion of the flood defences by late 2018 will make the site a viable proposition for future					
completi	development. Depending on the market conditions at the time the Council has various options:					
on	<ul> <li>Dispose of the freehold of the site to a developer who will then develop it;</li> <li>Carry out a procurement exercise to identify a suitable developer for the site who will then develop the site;</li> </ul>					
	<ul> <li>Enter into a JV (joint venture)or development agreement to secure the development whereby the Council will retain the development or parts of it to generate income, which could be in the form of letting residential units within the private rented sector (revenue return) and/or disposing of units to end users/householders (capital return) or a combination of both.</li> </ul>					
	<ul> <li>Include the Civic site in Strood in the development programme of the Medway Development Company Limited</li> </ul>					
	More investigation will need to be carried out in respect of the above and any other options before the Council makes a final decision on the way forward and the outcome of this will in part be influenced by the condition of the property market and economy when the site is ready for development. Once the preferred option is decided on the process will be managed by the project team and supported by the Council's Category Management Team, property team and external consultancy advisors.					
	How the development will be refinanced when it is completed will depend on which of the above options the Council goes forward with and what the developer's/Council's exit strategy is. For					

example, if the developer or the Council builds the units to sell then short term finance will be
used to build them and this will be repaid when the units in the development are sold.
However, if the developer or the Council retains the development for revenue return then the
project is likely to be refinanced for a longer term.
Whele life eaching is being considered in the desire of the flood defenses to build a final analysis
Whole life costing is being considered in the design of the flood defences to build a final product
that needs as little maintenance as possible. On completion a future maintenance regime will be recommended by the contractor. Major long-term cyclical repairs could be met by the
Environment Agency as part of their national remit and maintenance programme and there is
also the potential to fund maintenance works through a service charge contribution from
residents.
residents.

### 7. RISK ANALYSIS

Financial Best value procurement of necessary consultancy/design/build services not achieved	1	3	Mitigation	
of necessary consultancy/design/build	1	3		1
			Use of an effective OJEU compliant framework and experience of the procurement team at Medway Council, which has a proven track record of successful project delivery, both in terms of quality and value for money. The team was recognised in March 2014 at the Excellence In Public Procurement Awards 14/15 where the Team achieved the Highly Commended Award for Innovation or Initiative, and in August 2014 were shortlisted for two major award categories in the CIPS Supply Management Awards 2014 and 2015, with a further category in 2016.	Medway Council
Under-estimation of the design cost	1	4	A detailed set of ground condition surveys, ecological and contamination surveys was carried out during the design stage, as well as consultation with key stakeholders. The final design has been approved by the Environment Agency and has been competitively tendered and market tested by both the preferred contractor and Medway Council's project quantity surveyor. An iterative approach to value engineering will be applied during the construction phase, all methodology and sourcing of materials will be reviewed, whilst ensuring quality is maintained and workshops will be held to explore further efficiency opportunities. During the construction phase, management of costs through the NEC contract via the compensation event process will mean that cost predictability and certainty will be accurate at any point in the scheme.	Medway Council and Preferred Contractor

South East LEP Capital Project Business Case Page 106 of 124

private investors			site, which once appropriate flood	Council
			defences have been established will be a viable development site. There has been considerable interest in the site and Medway Council has already been approached directly by a leading house builder. The Council has the option to self deliver the site through Medway Development Company Limited too.	
Commercial		2		
Negative public response to proposed scheme design proposals	2	3	The Strood development project has been informed by the Medway Local Plan and consultations took place in 2016, and are continuing with local residents, businesses and social groups, and have received positive public support, and support from stakeholders. A stakeholder management plan and communications plan will be used to manage stakeholders and the flood defences project teams from Medway and the contractor will manage the communications as the flood defence works progress.	Medway Council and flood works contractor
Economic				
Benefits not realised	2	4	The benefits have been estimated using best practice guidance from UK Government Departments built on hard evidence from schemes developed previously. The impacts will be monitored closely over time to ensure they are being realised. Any slippage in the implementation of the flood defence scheme and the proposed level of development, and therefore employment and housing benefits being generated, will be dealt with using appropriate measures to speed up the construction work. The Project Manager, in association with the Head of Regeneration Delivery, will be responsible for developing a Benefits Realisation Plan. This plan will clearly set out the benefits that the scheme is expected to deliver, along with a process for collecting the required information to allow assessment as to whether the benefits have been realised.	Medway Council and flood works contractor
Management	1	2	Dispusing permission for the first date	
Timetable slippage due to delay in processing planning applications, safety audits, technical issues or approval to work on the river	1	3	Planning permission for the flood defence works was approved by the Local Planning Authority on 22nd November 2017. The scheme was developed with the approval of the Environment Agency and detailed ground, ecological and contamination	Medway Council and flood works contractor

South East LEP Capital Project Business Case Page 107 of 124

			surveys were carried out and informed the	
			design and methodology of construction.	
			The contractor has also prepared and will	
			adopt a Health and Safety Plan that covers	
			the flood defence works.	
			A Marine Management Organisation	
			(MMO) Licence has been granted for	
			permission to carry out the works.	
			Medway is in the process of developing a	
			masterplan and development brief which	
			will be consulted on in December	
			2017/January 2018.	
			Once adopted the Brief is will provide	
			supplementary planning advice,	
			expanding on Policy S1 – Development	
			Strategy in the Medway Local Plan 2003,	
			and in the emerging update Local Plan. It	
			has been prepared in accordance with the	
			Town and Country Planning (Local	
			Planning) (England) Regulations 2012. The	
			Medway Local Plan 2003 is the current	
			development plan for the authority and	
			therefore forms part of the council's policy	
			framework. As it is intended to adopt the	
			Strood Development Brief as a	
			Supplementary Planning Document (SPD),	
Deleverungungenetul	1	2	it will be part of the development plan	N 4 a du va v
Delay or unsuccessful		3	Low risk as the resources for the project	Medway
delivery of scheme due			from Medway Council have been secured –	Council and
to insufficient			see section 6.1 Project Management. And	flood works
management or project			these are based on the proposed delivery	contractor
resource			team's current track record of delivering	
			LGF and regeneration projects. For	
			example, the Chatham Placemaking project	
			delivering Placemaking improvements	
			between Chatham train station and town	
			centre, where significant growth is	
			planned, and improvements to the river	
			walk and pier. This was funded from	
			Growing Places Fund 2014 and Local	
			Growth Fund round 1. Since these	
			improvements there has also been a	
			reduction in anti-social behaviour.	
			Considerable senior management and	
			elected Member commitment to the	
			riverside developments in Strood.	
			The flood defence contractor has	
			established an experienced team to deliver	
			this work –see section 6.1 above, and the	
			proposed programme has been reviewed	
			and verified. Throughout the construction	
			phase, as part of the NEC3 contract	
			conditions, the programme will be	
			reviewed regularly and any rescheduling	
			carried out to ensure the final end date is	

			not exceeded.	
Protecting ecological	1	3	Low risk as ecological surveys have been	Medway
habitats, could delay the			carried out and the design of the flood	Council and
project			defences has been developed with the	flood works
			approval of the Environment Agency, as	contractor
			well as the proposed methodology for the	
			delivery of the works in order to not	
			disturb marine habitats. The contractor for	
			the flood works has a dedicated chartered	
			environmentalist who will lead the team of	
			environmental specialists, bringing	
			experience of working on major civil	
			engineering projects in river and coastal	
			areas. They will implement the ISO 14001	
			accredited Environmental Management	
			System to ensure all current legislation,	
			environmental conditions and consents are	
			met.	
Overall Project Risk	1	3	The overall project risk is low as extensive	Medway
			detailed design, survey, risk, consultation,	Council and
			cost and programme review work has	flood works
			taken place in advance of delivering g the	contractor
			flood defences works. A competitive	
			procurement process has taken place, the	
			price offered has been market tested, the	
			team engaged to deliver and manage the	
			works have many years experience on	
			multiple similar projects, and detailed	
			deliver plans have been developed to	
			ensure the construction phase will be	
			closely managed to deliver a quality	
			product that will allow the land to be	
			released to deliver much needed homes to	
			Medway, whilst providing jobs, learning	
			and skills opportunities	

# Please also refer to Section 5.7 Delivery Timescales and Section 5.8 Financial Risk Management

## 8. DECLARATIONS

8.1.	Has any director/partner ever been disqualified from being a company director under the Company Directors Disqualification Act (1986) or ever been the proprietor, partner or director of a business that has been subject to an investigation (completed, current or pending) undertaken under the Companies, Financial Services or Banking Acts?	<del>Yes</del> /No
8.2.	Has any director/partner ever been bankrupt or subject to an arrangement with creditors or ever been the proprietor, partner or director of a business subject to any formal insolvency procedure such as receivership, liquidation, or administration, or subject to an arrangement with its creditors	<del>Yes</del> /No
8.3.	Has any director/partner ever been the proprietor, partner or director of a business that has been requested to repay a grant under any government scheme?	<del>Yes</del> /No

If the answer is "yes" to any of these questions please give details on a separate sheet of paper of the person(s) and business(es) and details of the circumstances. This does not necessarily affect your chances of being awarded SELEP funding.

I am content for information supplied here to be stored electronically and shared in confidence with other public sector bodies, who may be involved in considering the business case.

I understand that if I give information that is incorrect or incomplete, funding may be withheld or reclaimed and action taken against me. I declare that the information I have given on this form is correct and complete. I also declare that, except as otherwise stated on this form, I have not started the project which forms the basis of this application and no expenditure has been committed or defrayed on it. I understand that any offer may be publicised by means of a press release giving brief details of the project and the grant amount.

8.4.	Signature of Applicant	Plealor
8.5.	Print Full Name	Tomasz Kozlowski
8.6.	Designation	Assistant Director – Physical and Cultural Regeneration
8.7.	Date	24 November 2017

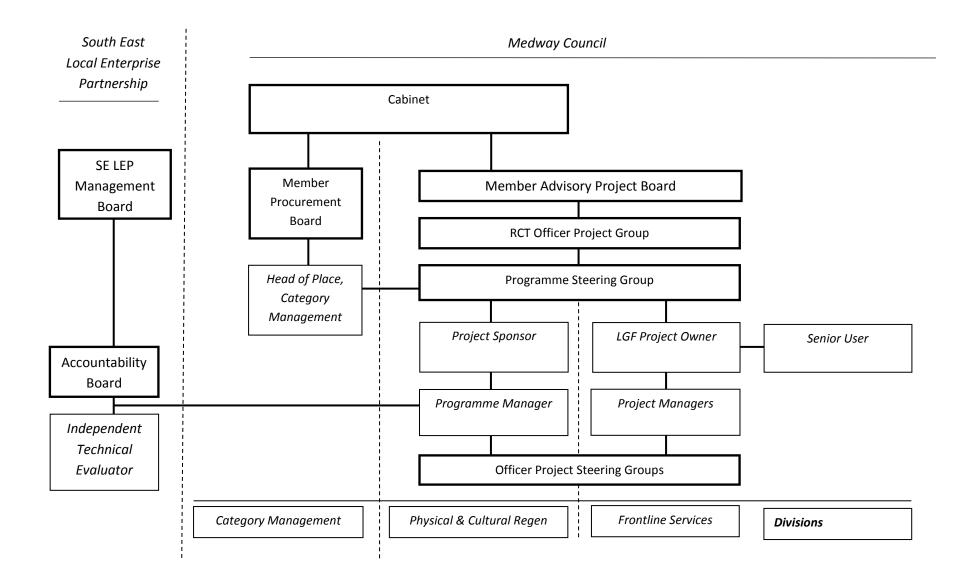
APPENDICES		
Appendix		
А	Governance and Organigram	
В	Gantt Chart	
B(i)	Flood Defences Gantt Chart – attached as separate appendix	
С	Supporting letter from Medway Council Section 151 officer	
D	DIA – Diversity Impact Assessment	
E	Independent assessment of costs	
F	Flood Defences Project Team Structure Chart	
G	Strood Economic Impact Model – attached as separate appendix	

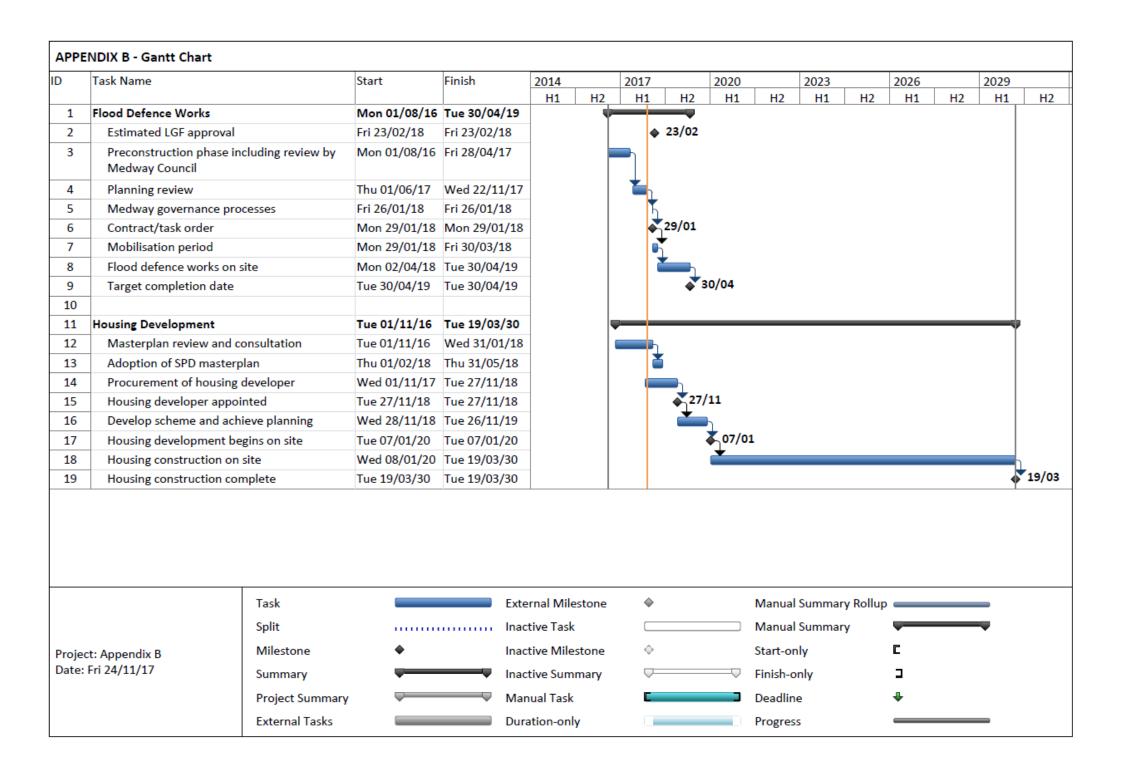
Medw	ay Council key management and governance arrangements		
Responsible group	Responsibility		
or officer			
Cabinet	Member group that manages council business including high value/high		
	risk procurement and projects including LGF projects. Cabinet meets		
	every three weeks.		
Member Advisory	Member overview of project development and delivery. The Board		
Project Board	reviews, analyses and scrutinizes progress on the directorate's		
	capital programme and, where relevant, specific large/complex		
	projects. Board is chaired by Frontline Services Portfolio Holder. LGF		
	reports are regularly considered by this Board.		
Strood	Member overview of project development and delivery specifically		
Regeneration	for development projects in Strood. The Board reviews strategies to		
Board	regenerate Strood, coordinates regeneration initiatives, projects		
	and funding streams related to Strood Regeneration, pursues		
	external funding opportunities, ensures all appropriate		
	development opportunities are appraised and pursued as		
	appropriate and ensures a positive message regarding Strood		
<b>D</b>	Regeneration is effectively communicated.		
Procurement	Member Board that agrees and scrutinises procurement activity. This		
Board	Board will consider the procurement strategy for each LGF project,		
	consider submitted tenders and scrutinise outcomes.		
Officer Project	Senior officer project management of all LGF projects.		
Group for	The Group is responsible for the strategic management of the project and		
Regeneration	has authority to commit resources to the project in accordance with the		
Community & Culture Directorate	Council's Constitution. General tasks include:		
(RCC)	<ul> <li>appointing the project manager;</li> </ul>		
	<ul> <li>signing off the project brief and business case;</li> </ul>		
	<ul> <li>approving the PID;</li> </ul>		
	<ul> <li>agreeing project controls;</li> </ul>		
	<ul> <li>authorising project start;</li> </ul>		
	<ul> <li>authorising variations to expenditure;</li> </ul>		
	<ul> <li>managing key risks in the highlighted risk log;</li> </ul>		
	authorising project closure.		
	An LGF update report is a standing item on the agenda. The Group meets every four weeks.		
Project Sponsor	Independent of the project and provides challenge to ensure project is		
	delivered on time, within budget and achieving the anticipated benefits.		
Project Owner	Ensures governance arrangements and Medway project management		
	principles are adhered to.		

	Ensures the project is technically and financially viable and compliant
	with the organisation's corporate standards and strategic business plans.
	Owns the Business Case, funding and cost allocation for the project.
	Provides leadership and direction throughout the project.
	Is responsible and accountable for ensuring the project remains focussed on achieving its objectives and that the anticipated benefits can be achieved.
	Attend the directorate Officer Project Board to lead discussions on the project.
	Provides sufficient induction for the Project Manager to ensure s/he has the best understanding of the project.
	Chair implementation board if required.
Project Manager	Responsible for delivering the project on behalf of the project owner and officer project board.
	Leads and manages the Project Team with the Authority and
	responsibility to run the project on a day-to-day basis.
	Delivers the right outputs, to the required level of quality and within the specified constraints of time, cost, resources and risk.
	Prepare project information, including PID, Project Plan and Business Case.
	Identify and evaluate risks, determine and manage actions, and maintain the risk log.
	Manage and control changes to scope, requirements, personnel etc.
	Ensure project's resource plans and costs include sufficient, properly skilled support.
	Monitor and report progress against plans, quality and costs.
	Liaise with the Project Owner and Officer Project Board for their approval and decisions at key project stages.
Head of Local Growth Fund Projects	Lead on managing and being responsible for Medway's LGF programme of projects. Includes operating at a high level with government, SE LEP and the Independent Technical Evaluator.
	This post filled and operational.

Section 151 Officer	Responsible for signing acceptance of the grant and its attached conditions, overviewing financial transactions and challenging where necessary, sign off of financial statements requested from SELEP.
Head of Place,	Lead on providing procurement advice.
Category	
Management	
Head of Internal	Lead on providing financial governance advice. Involved in the
Audit	programme from an early stage.

# **ORGANIGRAM 1 - GOVERNANCE & MANAGEMENT ARRANGEMENTS FOR LGF PROJECTS**







Please contact: Phil Watts Your ref: 20171124 SELEP S151 Date: 24 November 2017

Adam Bryan Managing Director South East Local Enterprise Partnership Essex County Council

BY EMAIL

Business Support Department Gun Whaf Chatham Kent ME4 4TR Telephone: 01634 306000 Direct line:01634 332220 Facsimile: 01634 332839 e-mail: phil.watts@medway.gov.uk

Dear Adam

Section 151 support – Local Growth Fund capital bids Projects:

Strood Civic Centre – Flood Defences

I confirm I am satisfied that the business case listed above for the Medway Council area is a fair reflection of the project as it currently stands and Medway Council will be willing to act as sponsor for the projects should it be awarded for funding.

The information contained in the business cases details the make-up of funding for the project, the provisional funding profile and the arrangements for cost overruns.

Medway Council has a strong track record of delivering LGF projects to programme and budget. In LGF round 1 Medway Council secured £28.6m funding over a number of years for five projects covering transport and non-transport projects.

Yours sincerely

6 Into

Phil Watts Chief Finance Officer





#### **APPENDIX D – DIA – Diversity Impact Assessment**

<b>TITLE</b> Name / description of the issue being assessed	Strood Civic Centre site
<b>DATE</b> Date the DIA is completed	1/07/2016
<b>LEAD OFFICER</b> Name, title and dept of person responsible for carrying out the DIA.	Janet Elliott/ Elizabeth Carter

#### 1 Summary description of the proposed change

The 3.4 ha brownfield Civic Centre site is currently at considerable risk of river tidal and surface water flooding and requires protection works before it can be redeveloped. It is currently used as a car park. Once protected, i.e. raised above forecast flood levels, it will be transformed into an area of prime, high quality residential land with potential for premium housing, offering fantastic views and access to the River Medway, Rochester Castle and Rochester Cathedral (figure 1).

Flood mitigation works will enable a feasible, flood resilient, mixed use regeneration site. Due to residual flood risks, ground floor space can be used for commercial premises, complementing the nearby Watermill Wharf as a satellite of Innovation Centre Medway. Regeneration of the site will provide employment land, targeted at SMEs, encouraging local cafes, restaurants and independent retailers, enabling job creation and innovation through sector clustering.

Above the ground floor will be multi-storey apartments, in keeping with quality architecture of waterfront developments in Medway including Chatham Waters, and Rochester Riverside on the opposite banks of the River Medway. This will enable 564 units of housing. The combination of the construction of flood defences, housing development and commercial use will create a target of 902 jobs.

### 2 Summary of evidence used to support this assessment

### **Customer satisfaction results**

The Citizens Review Panel, which was carried out in March 2016, the panel consults members of the public regarding Strood town centre. 604 people responded to the survey – 54.7% were female and 45.3% were male. There is a requirement within Medway for an additional 29,000 homes by 2025; therefore there is high demand for housing and leisure infrastructure.

Of the people who answered the survey 68.9% visit Strood for the purpose of food shopping. As the Civic Centre site is located in close proximity to the town centre the 300- 350 new housing units will have a positive effect on the footfall in the town centre, encouraging a more diverse range of local businesses. Additionally the ground floor units on the Civic Centre site itself will be for restaurant, café and bar use, which directly enhances the leisure offer in Strood. Other local businesses can capitalise on the increase footfall, acting as a catalyst for further regeneration in the town centre. When people were asked why they had not visited Strood in the last 12 months, 37.9% specified that it was due to a poor range of shops/services, 25.9% cited the town centre environment and 22% the poor range of leisure/entertainment venues.

### **Profile of current users**

*Age:* Broken down by age group at the 2011 census, 24.5% (64,724) of Medway's population are aged 0-18, 61.5% (162,196) are 19-65 and 14% (37,005) are over 65. The last ten years has seen an increase in the number and proportion of the 65+ category and a decrease in the number of children (0-18) in Medway. The decrease in the population of young people is likely to be reflective of a decline in births from 1997 onwards, although it should be noted that births have started to increase again from 2007.

*Gender:* As recorded in the 2011 census, the population in Medway is almost evenly split along gender lines with 49.6% male and 50.4% female.

*Disability:* The majority of Medway's population, 82%, is in good or very good health. 16.4% of the population state that their day-to-day activities are limited, and 24.9% of households report having at least one person in the household with a long-term health problem or disability.

Race: Medway's Profile: White (89.6%), Asian (5.2%), Black (2.5%), Mixed (2%), Other (0.7%).

*Religion or belief:* Medway's Profile: Christian 57.8%, No Religion 29.9%, Religion Not Stated ((6.8%), Muslim (2%), Sikh (1.5%), Hindu (1%), Other Religion (0.5%), Buddhist (0.4%) Jewish (0.1%)

*Gender reassignment:* There are no accurate local estimates of the transsexual population.

*Marriage and civic partnership:* Of the population aged 16 or over, 46.1% (97,095) were married in 2011. The proportion of the population aged 16 or over who are single and have never married has increased by just over 17,200 or up by 5.8 percentage points. This will in part reflect Medway's younger age profile, and the national trend of declining numbers of marriages.

*Pregnancy and maternity:* In 2011 there were 4,714 conceptions within Medway; a rate of 86.3 conceptions per 1,000 women aged 15 to 44, higher than the Kent, South East and England and Wales rates.

*Sexual orientation:* Whilst there is no specific data available with regard to sexual orientation, research suggests that the lesbian, gay and bisexual (LGB) population account for between 5 and 7% of the population (DTI, Final Regulatory Impact Assessment: Civil Partnership, 2004). Using these figures and the Medway mid-2012 population estimate, the Medway LGB population (18+) is likely to be between 10,300 and 14,500 people.

The above statistics show that there is a diverse population in Medway, with a number of protected characteristics that must be considered as part of this assessment.

The Civic Centre site is currently underutilised, with some of the land having a meanwhile use as car parking. Currently the site lacks identity, with no uniform profile of current users. As the site is neglected it can act as a catalyst for antisocial behaviour.

The Civic Centre site developed would be a crucial asset in Strood's economy, regenerating a dilapidated site in the heart of Strood. 300-350 housing units would dramatically boost the inward investment in the area and would re issue the site with a positive identity, as a cohesive community. The developed site will increase the diversity of the leisure, commercial and housing offer. The open space will be designed to meet the needs of a variety of users from elderly to young to ensure that the provisions complement and enhance each other.

# Who will be impacted

The flood wall will provide opportunities for the local labour and local supply chain. This will result in the creation of 131 new jobs, 902 construction jobs and a range of wider benefits. The scheme will deliver retail units, which will help to meet the need identified for 45,400m<sup>2</sup> of retail space in Medway over the

2012-2035 period in the new Local Plan. The retail, café and restaurant units will help to provide opportunities of SMEs and start up companies.

# Consultation

Consultation will be undertaken for the housing delivery in alignment with statutory planning duties. Additional public consultation will be arranged once a contractor has been appointed. In Spring 2016 planning consultations in Strood were set up. Groups that contributed to the consultation include church groups, representatives from the Strood Community Project, and representatives from public health groups.

This masterplan for the regeneration of the Civic site will be developed in consultation with and participation from a wide selection of the community as possible that live, work in and use the area and key stakeholders.

Public Health Medway will also be consulted with as part of the master planning process to ensure the development also considers health and wellbeing.

# 3 What is the likely impact of the proposed change?

### Is it likely to :

The proposed flood defences will enable a mixed use regeneration scheme, of the housing stock 25% will be affordable housing to help meet the demand for housing. The development will aid to establish a cohesive community fostering positive relations between residents and visitors, enabling Strood's economy to thrive.

Protected characteristic groups	Adverse impact	Advance equality	Foster good relations
Age		1	1
Disabilty		1	1
Gender reassignment		✓	1
Marriage/civil partnership		$\checkmark$	1
Pregnancy/maternity		<b>v</b>	*
Race		✓	1

Religion/belief	*	¥
Sex	*	V
Sexual orientation	*	1
Other (e.g. low income groups)	✓	*
4 Summary of the likely impacts		

The development of the site, will improve the accessibility to green space, commercial and leisure facilities to all residents and visitors. The nature of the mixed use regeneration scheme will enhance provisions for a diverse range of people and benefit Strood's local economy.

Consultation with Public Health has already begun and the benefits of improving access to greenspace and being able to expand the cycle and footpath along the river wall include active travel, increase walking, cycling and use of sustainable transport methods. Other benefits include;

- Improving facilities to encourage residents/visitors to engage with the waterfront.
- Revitalising Strood town centre will help to combat negative perceptions of Strood and encourage further inward investment to the area.
- The proposed plans will enable job creation, both post and during the construction phase.
- Supporting local businesses in Strood.
- Utilising the high speed link to London (30 mins to St Pancras) to encourage further investment and further innovative businesses to be situated in Strood.
- Strengthening social cohesion in the local community, while changing internal and external perceptions of the area, by providing the infrastructure for communities to flourish.

# 5 What actions can be taken to mitigate likely adverse impacts, improve equality of opportunity or foster good relations?

The scheme will deliver 25% of its housing stock as affordable housing in compliance with Medway's Planning Policy. Therefore, no groups will be adversely affected and the scheme will help to foster good relations.

Access to greenspace, leisure and commercial facilities will be significantly improved by the development of the site. Consultation throughout the master planning stage will be undertaken to ensure the scheme fosters and enhances good relations, with equal opportunities for all.

# 6 Action plan

	Action	Lead	Deadline or review date
Planning consultation		Planning	2017

Public Consultation for housing	Planning	2017/18
Environment Consultation (Flood defences & Housing)	JE/EC	2017

# 7 Recommendation

Officer recommendation is for the scheme to proceed. The alternative is to do nothing, the site currently attracts antisocial behaviour and is an under utilised asset. If funding for the scheme is not secured it will not be possible to proceed with the flood defence works and the subsequent regeneration and development of the site will not be possible.

The key aspiration of the Medway Regeneration Strategy is for Medway to become a Waterfront University City by 2035. If funding is not secured this aspiration will not be delivered and Civic site will not be transformed into an area of prime, high quality residential land with potential for premium housing, offering fantastic views and access to the River Medway, Rochester Castle and Rochester Cathedral, and joining other adjacent waterfront development sites at Strood Riverside, Temple Waterfront and Rochester Riverside.

The opportunity to create commercial space for local SMEs and offer considerable employment, apprenticeship and work experience opportunities will be lost as will the chance to utilise an otherwise redundant brownfield site to help meet the local demand for housing, and possible sites available for housing development to this scale in Medway are few.

As a prime housing site the scheme will attract significant investment to the area, from which the town centre can capitalise upon, encouraging further regeneration in Strood.

# 8 Authorisation

The authorising officer is consenting that:

- the recommendation can be implemented
- sufficient evidence has been obtained and appropriate mitigation is planned
- the Action Plan will be incorporated into the relevant Service Plan and monitored

### **Assistant Director**

Date

20<sup>th</sup> July 2016



23rd November 2017

interaction a

AD/2018/122

Helen Dyer Project Officer, Local Growth Fund Projects Medway Council Gun Wharf Dock Road Chatham Kent ME4 4TR

Dear Helen,

#### Strood Flood Defences Business Case - Cost Review

Further to your enquiry regarding the above. The business case is prepared on the basis of the recent procurement exercise summarised in the Contract Award Recommendation Report dated 26<sup>th</sup> October 2017.

As part of that exercise assisting Medway Council's Project Manager, we reviewed the various elements of the scheme and the prices received from both Balfour Beatty and Volker Highways / Volker Stevin. In our view the cost items expected to be there are included and the rates have been demonstrated to be competitive through market testing. There remain some provisional sums and risk items, however, we believe these are reasonable provisions and in line with industry standard.

Yours sincerely,

Andrew Diplock Associate Woodley Coles LLP

Partners: Steven Coles BSc MRICS Daniel Deed BSc (Hons) MRICS Christopher Norris BSc (Hons) MRICS Nigel Woodley MA (Cantab) MRICS Associate: Andrew Diplock BSc (Hons) MRICS

Innovation House, Discovery Park, Sandwich, Kent, CT13 9FF Tal: 01304 806090 Email: Info@woodleycoles.com Also located in: London and Cambridge

www.woodleycoles.com



The Woodley Coles LLP is a limited liability partnership, registered number. OC304717

#### **APPENDIX F – Flood Defences Project Team Structure Chart**

