



Local Plan Team  
Southend-on-Sea Borough Council  
Planning Department  
PO Box 6  
Southend-on-Sea  
Essex  
SS2 6ER

**Our ref:** [REDACTED]

[REDACTED]  
**Your ref:**

**Date:** 28 March 2019

Dear Sir / Madam

### **SOUTHEND-ON-SEA NEW LOCAL PLAN: ISSUES AND OPTIONS**

Thank you for the opportunity to comment on the Southend on Sea, new local plan, issues and options consultation. We have reviewed the issues and options document and have provided comments related to our remit following the format of your document.

#### **Introduction**

No comments

#### **Section 1: A Vision for Change**

We support the inclusion of the renewal and replacement of sea defences as one of the challenges illustrated in Figure 7. It would also be useful to acknowledge the challenges of surface water flooding (from urban drainage systems) and fluvial flooding (from watercourses) as being a significant challenge given that flooding from both of these sources has affected the Borough in the past decade. This is a challenge for both the Borough and ourselves as we both have responsibilities under the Flood & Water Management Act 2010 as respective Flood Management Authorities. We will need to work closely together over the plan period to ensure that we can meet both technical and funding challenges in seeking solutions to these issues.

The challenge to enhance the built and natural environment, should fully consider the aquatic environment. The Local Plan should have suitable Policies to cover the significant pressures posed by development on the water environment. The Local Plan should reference the Water Framework Directive (WFD) and the two key objectives of WFD: no deterioration of waterbodies and ultimately improving all waterbodies to Good status. These objectives are key requirements of WFD and we would expect to see reference to both in the Local Plan. Local Authorities must have regard to the requirements of WFD when making their plans.

From a water quality perspective; it would be useful to highlight the number of waterbodies within the borough failing WFD 'ecological status or potential' and 'chemical status'. Information about the water environment and WFD reasons for not achieving good status and reasons for deterioration can be found in the Catchment Data Explorer: <https://environment.data.gov.uk/catchment-planning/>

The Thames and Anglian River Basin Management Plans should be identified as sources of evidence:

<https://www.gov.uk/government/collections/river-basin-management-plans-2015>

The Essex Rivers Hub provides a portal for sharing information about Essex Rivers and project work aimed at achieving good ecological status:

<http://essexrivershub.org.uk/index.php/about-us>

## **Spatial Strategy**

### **Option 1 – All development provided within the existing built up area**

This option lends potential for re-development within the existing built up area to replace older conventional drainage systems on site with newer sustainable drainage systems (SUDS). This creates an opportunity to reduce peak drainage rates entering arterial surface water sewers and open watercourses from the site. Such measures could help the Council to meet NPPF objectives to reduce flood risk and offset the impacts of climate change (NPPF paras 149, 157c, 165).

The option also lends potential for re-development to restore localised green corridors adjacent to urban watercourses (Eastwood Brook, Prittle Brook, Southchurch Brook & Gunners Park Brook) and could provide net gains for biodiversity (NPPF para. 170).

Plans for redevelopment of sites near to the seafront should respect the key messages of the Thames Estuary 2100 Plan. Particularly regard should be made to opportunities to improve the riverside/seafront public spaces, access and to create new habitats as part of a riverside strategy and to not compromise the ability of the Borough Council or ourselves, to build those defences, integrating new defences with the new developments. This can be achieved as part of the Council's plans for renewing or replacing its tidal flood defences. It is important that the vision for this is enhanced by the opportunities arising from redevelopments in riverside/seafront area and that land and access for the siting, construction and maintenance of future flood defences is not compromised by the layout, form and delivery of that development.

Any work with 16 metres of a tidal flood defence would require an environmental permit.

The LPA's role is crucial in helping to deliver the TE2100 plan's recommendations. The planning system provides opportunities to implement the necessary improvements to the tidal flood defences that currently protect over 3700 homes and provide the Borough nearly £1 billion of economic benefits. Funding to renew or replace the flood defences will have to be supported, in part from local beneficiaries and from external contributions. Therefore it is very important that the Council seeks opportunities to secure contributions towards this infrastructure via developer contributions, Community Infrastructure Levy & bidding for Housing Infrastructure Funds.

#### Option 2 – Most development within the existing built up area with some development on the urban edges on greenfield and greenbelt land in Southend

There are some green field areas located adjacent to watercourses, which provide valuable green corridors and maintenance access. New development should not be allowed to encroach into these areas unless areas of public open space are to be maintained along the stream's corridor. Any work undertaken within 8 metres of a main river would require an environmental permit. Opportunities should be taken to incorporate ecological enhancements to watercourses as part of any development.

Some of these green field sites currently perform a flood storage purpose and this may be identified on the Flood Map for Planning or the Risk of Flooding from Surface Water maps. The frequency of this flood storage function is likely to become greater with the forecast impacts of climate change. The Council should therefore adhere to the sequential approach as advocated by para 157 of the NPPF and seek to avoid introducing development into areas that are required for current or future flood risk management.

We are currently in discussions with Southend Borough Council and Rochford District Council over the potential to develop a project to lower flood risk to properties from the Eastwood Brook and from surface water flooding in the areas adjacent to the Brook. The Local Planning Authority should ensure that it liaises with this project group to ensure that it adheres with NPPF paras 157 (b) and (c) to support this project and to safeguard land that may be required for future flood risk management. The EA contact for this Project is Roger Webster ([roger.webster@environment-agency.gov.uk](mailto:roger.webster@environment-agency.gov.uk)).

#### Option 3 – Option 2 & working with neighbouring authorities to develop a comprehensive new settlement on Green Belt land (Strategic scale development)

Any Garden Community in the area north of Fossetts Farm, Garon Park and Bournes Green Chase should maintain a green open space corridor for the Mucking Hall Brook, with built development sited outside of the flood plain and incorporating SuDs drainage to ensure that peak flows, post development, in the Mucking Hall Brook are not increased above pre-development levels. It should be noted that this watercourse has never been modelled by ourselves and the areas of land peripheral to it are currently shown as Flood Zone 1 (low risk) on the Flood Map for Planning.

We would therefore advise that flood modelling is carried out as part of the information requirements for the South Essex Joint Strategic Plan to help identify any zones of higher flooding risk to ensure that the Council(s) can apply a Sequential Approach and avoid areas of flood risk in preliminary plans for the siting of built development within this potential strategic growth area. As above, all opportunities for ecological enhancements should be integrated into development.

## **Section 2: Planning for Growth and Change**

Increases in density of housing on redevelopment sites across the existing built area should not compromise the ability to deliver sustainable drainage systems.

### **Residential developments**

All new residential development is required to achieve a water consumption limit of a maximum of 125 litres per person per day as set out within [the Building Regulations &c. \(Amendment\) Regulations 2015](#).

However, we recommend that in areas of serious water stress (as identified in our report [Water stressed areas - final classification](#)) a higher standard of a maximum of 110 litres per person per day is applied. This standard or higher should be included in a local plan policy.

Consideration for the waste created by growth should be considered in the local plan. Information in managing waste within planning system can be found at <https://www.gov.uk/guidance/waste>. [As a minimum developers should follow the waste hierarchy but consideration could be given to the re-use of reclaimed aggregates in road building or within foundations for building projects.](#)

### **Commercial/Industrial developments**

We recommend that all new non-residential development of 1000sqm gross floor area or more should meet the BREEAM 'excellent' standards for water consumption.

### **Promoting Southend as a Major Resort**

Significant lengths of the seafront and its associated homes and businesses are protected from flooding by tidal defences which will have to be raised in height after the year 2035 in order to combat the impacts of sea level rise and increasing flood risk. This is identified in the Thames Estuary 2100 Plan and as a "challenge" in Figure 7 of your Local Plan Issues and Option Consultation document.

Raising the defences on the existing 'footprint' would achieve the flood risk management objectives of the TE2100 Plan but would not provide any wider landscape or environmental benefits and could introduce a barrier to viewing the river/sea from the landward side.

There is therefore an opportunity to improve the riverside/seafront with the potential to improve public spaces, access, and to create new habitats both when defences are raised and repaired/replaced, and when new or re-developments are planned. This is referred to in the TE2100 Plan as the riverside strategy approach, which encourages partners to work together to implement improvements to the riverside in

an integrated way. Maintaining the standard of the flood defences will assist in creating Southend as a major resort in the future.

### Bathing Waters

Given that Southend is a coastal borough, and has numerous designated bathing water sites with varying bathing water quality, we would expect to see reference to the Bathing Water Directive in the Local Plan. Consideration should be given regarding the impacts of developments on these designated areas, particularly with regards to bathing water quality. Longer term utility planning should also consider bathing water quality as this could be affected by increases in sewage flows.

### **Providing for Vibrant and Attractive Town Centres**

No comments

### **Providing for a Sustainable Transport System**

The C2C operated rail service from Southend Central to Fenchurch Street crosses the Hadleigh Marshes which is an area a risk of flooding from the Thames Estuary and is identified in the Action Plan for Zone 6 of the Thames Estuary 2100 Plan.

The TE2100 Plan has recommended a P3 policy for the future management of the tidal defences that protect the Hadleigh Marshes. Policy P3 advocates continuing with existing or alternative actions to manage flood risk. This means that we will continue to maintain flood defences at their current height, accepting that the likelihood and/or consequences of a flood will increase because of sea level rise. This policy therefore has potential impacts for the long term sustainability of the railway line as the chance of overtopping of the tidal defences will increase over time.

Our Thames Estuary Asset Management 2100 (TEAM2100) are near to completing an appraisal to help inform a future management strategy for the tidal defences at Hadleigh Marshes.

We are therefore keen to develop the management strategy and to commence dialogue to develop a long term programme with Southend Borough Council, Castle Point Borough Council, C2C Rail Operator, Network Rail and landowners as partners to better understand resilience opportunities for the rail transport infrastructure. The strategy that we develop must ensure that long term impacts of climate change on the C2C service and Network Rail infrastructure are understood and is built into local plans for infrastructure improvement and for flood warning.

### **Section 3: Creating Good Quality and Healthy Places**

#### **Facilitating Good Design and Healthy Living and Built Heritage**

The design of quality SUDs features can lend wider benefits if combined with landscape and design of public open space associated with developments. The pressure for high density development should not detract from an aspiration to

provide these combined benefits and the associated wellbeing merits of these open space areas. Development sites should retain natural features, such as trees, which will provide shade and assist in the reduction of the urban island heat effect. Additionally natural features like trees may intercept heavy rainfall and assist in natural flood management. Similarly the adverse impact of climate change on human health maybe reduced by incorporating features such as green roofs and walls into development.

## **Providing Community Services and Infrastructure**

### Flood Infrastructure

It is important that the Council seeks opportunities to secure contributions towards tidal and fluvial flood defence infrastructure, improved sewer and surface water infrastructure and for riverside strategy improvements. This is because central government's Flood Defence Grant in Aid will not be sufficient on its own to fund necessary improvements / replacements to existing flood defence infrastructure.

As previously stated we would stress the importance of the Council in helping to secure developer contributions, using Community Infrastructure Levy & in bidding for Housing Infrastructure Funds in order to support future flood defence infrastructure that will help to sustain Southend's vitality into the future.

### Foul wastewater infrastructure capacity:

We would expect to see a section in the Local Plan looking at wastewater infrastructure and treatment. In general the Local Plan should:

- demonstrate that adequate foul drainage infrastructure can be provided in a timely manner ahead of occupation of new properties – both for sewerage network and Water Recycling Centres (WRC).
- demonstrate that the proposed development can be delivered without causing a breach of environmental legislation. Developments within the district and their associated increase in wastewater flows from Water Recycling Centres should not cause a deterioration in the receiving rivers / waterbodies.
- Demonstrate the need for all developers to liaise with the local sewerage undertaker regarding capacity of the existing sewerage infrastructure in the area.
- Sewerage networks - The plan will need to ensure there is sufficient volumetric capacity in the existing sewerage networks in each of the areas where development is planned. If no capacity is currently available, then provisions need to be in place ahead of the occupation of dwellings.
- Water Recycling Centres - The Local Plan needs to highlight which WRC within the district are proposed to receive additional flows from planned development. A thorough assessment of existing capacity and future flows against the current discharge permit should be made (this is usually done via the WCS). Any WRC predicted to exceed its permitted Dry Weather Flow will require a new discharge permit to accommodate the additional growth – this

may contain potential tighter permit limits which could provide a constraint on development.

### Contaminated Land

We would encourage the use of brownfield sites and contamination issues should be considered in relation to development and within the local plan. The guiding principles for land contamination provide guidance and considerations involved in the evaluation of the risk associated with land and water contamination. Further information can be found at <https://www.gov.uk/government/publications/managing-and-reducing-land-contamination>. Further information on the protection of groundwater can be found in the groundwater protection documentation at <https://www.gov.uk/government/collections/groundwater-protection>

### **Enhancing our Natural Environment**

We encourage you to adopt a riverside strategy approach in your local plans, strategies and guidance documents. This concept was introduced in the Thames Estuary 2100 Plan as a way for local planning authorities to ensure that future changes to the riverside take place in a planned and integrated way which maximise the potential environmental, social, cultural and economic benefits. We encourage you to work with your partners to ensure improvements to the riverside align with other relevant plans and strategies.

There is the opportunity to improve the riverside both when flood defences are raised and when they are repaired or replaced. Raising the defences on the existing 'footprint' would achieve the flood risk management objectives of the TE2100 Plan but would not provide any wider landscape or environmental benefits and could introduce a barrier to viewing the river from the landward side. If planned for, there is the potential to achieve significant improvements when undertaking flood defence works, at modest cost. This includes improved public spaces, access, and potential creation of new habitats.

We have produced a separate guidance document which sets out our aspirations for the riverside strategy approach and what this means for you as our partner. We can also provide examples for improving the riverside on request.

### Water Cycle Study (WCS)

We are aware of a WCS which was undertaken for the Southend District in 2010 – we are unaware that this has been revised or updated. The WCS will assess the likely impact of all proposed growth and development across all aspects of the water environment within the District and where necessary will detail necessary measures to ensure that environmental legislation will not be compromised. Usually the WCS will serve as an evidence base to support the Local Plan and should suggest Policies and measures to enable the delivery of all proposed development. We would therefore, usually expect to see the WCS referenced in the plan and a summary of the findings/recommendations highlighted linking to how development will be dealt with sustainably within the district.

### Green Infrastructure

We feel that green infrastructure should be given a more prominent place in this part of the plan. The plan should be looking to protect and enhance biodiversity and all development should be required to incorporate meaningful green infrastructure. Features that could be incorporated into developments include swales, ponds, reed beds and wildflower rich grasslands. Incorporating features such as green roofs and walls can be particularly effective measures providing urban habitats, increasing energy efficiency for buildings and attenuation of rain water.

Sustainable drainage systems should be promoted as they offer the opportunity to enhance the environment by providing blue infrastructure and can increase water quality, as well as providing drainage to developments.

In brief, our general requirements with regards to SuDS are:

1. Infiltration SuDS such as soakaways, unsealed porous pavement systems or infiltration basins shall only be used where it can be demonstrated that they will not pose a risk to the water environment.
2. Infiltration SuDS have the potential to provide a pathway for pollutants and must not be constructed in contaminated ground. They would only be acceptable if a phased site investigation showed the presence of no significant contamination. Other SuDS methods should be used in such cases.
3. Only clean water from roofs can be directly discharged to any soakaway or watercourse. Systems for the discharge of surface water from associated hard-standing, roads and impermeable vehicle parking areas shall incorporate appropriate pollution prevention measures and a suitable number of SuDS treatment train components appropriate to the environmental sensitivity of the receiving waters.
4. The maximum acceptable depth for infiltration SuDS is 2.0 m below ground level, with a minimum of 1.2 m clearance between the base of infiltration SuDS and peak seasonal groundwater levels.
5. Deep bore and other deep soakaway systems are not appropriate in areas where groundwater constitutes a significant resource (that is where aquifer yield may support or already supports abstraction). If deep soakaways are proposed you should contact us, as an environmental permit maybe needed.

Please also refer to the SuDS Manual (CIRIA C753, 2015), the Susdrain website (<http://www.susdrain.org/>) and the draft National Standards for SuDS (Defra, 2015) for more information.

### Planning for Climate Change

We believe that you should develop local planning policies for the development of new or renewed sea defences as this would add weight to the recommendations of the TE2100 Plan and could set a framework for protecting land that is important for



future flood defences (NPPF para 157b), and for making clear requirements for contributions towards infrastructure on sites that come forward that will benefit from those defences, or for integration of new developments with defences.

### Water Efficiency/Supply

The section on climate change does not mention the effect this may have on water supply. Water resources should be protected for people and the environment. We would like to see consideration of water supply for all new developments. We recommend an assessment regarding availability of water supply for further development and water saving measures. Development should be phased to ensure water supply demands are met.

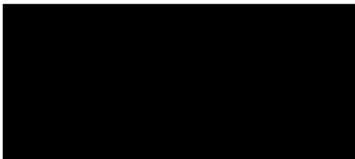
Increased water efficiency for all new developments potentially enables more growth with the same water resources. Developers can highlight positive corporate social responsibility messages and the use of technology to help sell their homes. For the homeowner lower water usage also reduces water and energy bills.

We endorse the use of water efficiency measures especially in new developments. Use of technology that ensures efficient use of natural resources could support the environmental benefits of future proposals and could help attract investment to the area. Therefore, water efficient technology, fixtures and fittings should be considered as part of new developments.

### **Section 4 – Southend’s Neighbourhoods**

No Comments

Yours sincerely



  
**Planning Advisor**

