

Hillyfields Open Space Flood Alleviation Scheme,

Loughton:

Memorandum of Understanding

Between

Essex County Council

And

The City of London Corporation

This Memorandum of Understanding (MoU) is made on the 18th January 2017 between:

1. Essex County Council: County Hall, Chelmsford, Essex,
CM1 1QH
2. The City of London Corporation, PO Box 270, Guildhall, London EC2P
2EJ.

Purpose of the Memorandum of Understanding (MoU)

Essex County Council (ECC) and The City of London Corporation (CLC) have a common interest in reducing flood risk to households and businesses in Loughton, Essex. This will only be achieved by adopting practices consistent with the recommendations made in the Pitt review into the 2007 summer floods, the Flood and Water Management Act (2010), Department for Environment, Food and Rural Affairs (DEFRA) and Environment Agency (EA) guidance for implementing flood and coastal resilience funding partnerships. These practices include Lead Local Flood Authorities (LLFAs) taking a proactive role in the management of local flood risk by initiating partnerships with all relevant parties involved in local flood risk management. And in turn, all relevant risk management authorities should endeavor to share information and cooperate with LLFAs in order to facilitate an efficient and joined up management of local flood risk. The purpose of this MoU is to set out the principles and framework for how ECC, CLC will work together to reduce flood risk to the residents and businesses downstream of Hillyfields Open Space, Loughton, Essex.

Background

In 2016 a Surface Water Management Plan (SWMP) was produced for Loughton, Buckhurst Hill and Theydon Bois. SWMP's identify smaller catchments at higher risks of surface water flooding, termed Critical Drainage Areas (CDAs). The EPP2 CDA was identified within this SWMP and covers Pyrles Lane and Colebrook Lane. It has been proposed that the flood risk in the CDA be managed by the construction of a landscaped earth bund within Hillyfields Open Space. This scheme is the preferred option as outlined in the EPP2 Appraisal Report as it offers the storage of flows generated in the catchment during extreme events and ensures controlled release back into the existing system. This option involves situating a landscaped bund within a large area of land (owned by CLC and The City of London Corporation) within the upper reaches of the catchment. The design of the attenuation features means that will be dry under normal circumstances and only contain water during high intensity or prolonged rainfall events.

This MoU formalises the agreement between the risk management authorities to work in partnership in order to promote, develop, design, deliver, adopt and maintain the Hillyfields Open Space Flood Alleviation Scheme (the scheme). The scheme will reduce flood risk to 70 properties in the Pyrles Lane and Colebrook Lane area. ECC as the LLFA has initiated and led the process of delivering the scheme. This document outlines the Memorandum of Understanding that will guide the nature of cooperation and partnership working between ECC, CLC during and after the development, design, delivery and commissioning of the scheme. This MoU is in accordance with the recommendations of the Pitt review into the 2007 floods, the Flood and Water Management Act (2010) and the Department for Environment, Food and Rural Affairs (DEFRA) and EA guidance for implementing flood and coastal resilience funding partnerships.

Scope of works

A new flow path interception landscaped earth bund is to be constructed in Hillyfields Open Space, Loughton with an associated raised kerb line on the cycle track to the south. This will reduce flood risk to downstream properties. The storage area will comprise of a landscaped earth bund along the southern corner of the Hillyfields Open Space boundary, with an approximate length of 60m, maximum height of 1.2m and maximum width of 8.1m. Water will discharge from the attenuation at a controlled rate via a new connection into the existing Thames Water surface water system.

The material used to construct the bund is to be cohesive clay, and it is proposed to source this from the on-site material. The bund and open excavation once constructed is topped with a minimum of 100mm topsoil.

Parameters for partnership agreement

Partners signed up to this Memorandum of Understanding (MoU) will work towards the following:

1. Sharing a common understanding of the causes and consequences of the flooding problems experienced by the residents of the EPP2 CDA as outlined in the Project Appraisal Report (PAR)
2. A shared goal of reducing the level of flood risk experienced by the residents of EPP2 CDA by agreeing that the proposed solution to the flooding problem is the construction of a bund within Hillyfields Open Space. This scheme is the most technically, financially and environmentally feasible flood risk management option as outlined in the optimisation report.
3. Agreeing to undertake enduring collaborative and effective actions aimed at the promotion, approval, funding, delivery, adoption and maintenance of the scheme
4. A formal agreement that ECC, as LLFA, will be the project lead in designing and delivering the scheme
5. A formal agreement that CLC, as the landowner will be responsible for the maintenance of the flood attenuation feature whilst tenancy is in place. Further detail around maintenance can be found below.
6. A commitment from the project lead that standards for project management, procurement transparency, budgetary and financial compliance are met and maintained throughout the design and delivery phases of the scheme
7. A commitment from all the partners to assign adequate personnel, staff and technical resources to promote, develop, design, deliver and maintain the scheme throughout its whole life
8. Establishing a formal collaboration between the executive officers, senior managers or elected members from the respective partners confirming and detailing the level of funding expected from each partner as well as a comprehensive schedule of payments for the delivery of the scheme
9. The agreement should also outline the terms and conditions for the provision of the funds, allowances should be made for any contingencies, variations and risks and other concerns about the funding should be clearly addressed in the agreement
10. Ensuring other partners meet their commitments to deliver the scheme
11. Making a commitment to establish and actively participate in an effective governance and management structure including attending regularly scheduled meetings, sharing information as and when required in the duration of the scheme, keeping partners involved with up-to-date developments as the project progresses and agreeing to implement specific action plans
12. A formal commitment to adhere to the timeline for the scheme scheduled to be delivered by the end of this financial year (March 2019)
13. Any agreements with suppliers should not be legally binding until formal partnership funding arrangements are in place

By agreeing to the aims stated above, the parties will thus agree to establish a project programme developed around the following themes:

- Funding: ECC as the lead partner will co-ordinate the funding arrangements for the delivery of the scheme.
- Delivery: ECC as the lead partner will manage the development and delivery of the scheme.
- Oversight: ECC as the lead partner will monitor, supervise and receive regular reports from the suppliers and contractors and provide strategic inputs in order to steer the development and delivery of the scheme.
- Skills and expertise: ECC as the lead partner will ensure that the design and delivery of the scheme is governed and carried out by competent and experienced officers in the Flood and Water Management Team. Charlotte Smith will be the Project Officer for the scheme and Dave Chapman will be the Project Overseer.
- Communication: ECC as the lead partner will conduct update meetings with other partners and stakeholders in order to keep all parties well-informed on developments concerning the delivery of the scheme.
- Long term maintenance: CLC as part landowners have agreed to manage the scheme upon completion and regular provision of the state of the attenuation feature for the purposes of our flood asset register whilst tenancy is in place. Maintenance will comprise of-

Embankment and Spillway	Control Structure	Access
As required		
a) Grass on spillway crest and slope to be cut as required to keep it between 75mm and 150mm length.		

Grass cuttings should be collected or mulched to ensure they do not impede growth beneath. b) Treatment of any broad leaved weeds on the spillway. c) Remaining embankments to be cut and kept tidy to allow for visual checks (approx. 2-3 cuts during the growing season).		
6 Monthly		
a) Check the embankment for any seepage, cracks, movement or damage, if evident it must be reported to the LLFA for further investigation. b) Check the embankment for any damage caused by burrowing animals or pedestrian access. If evident, it must be reported to the LLFA for further investigation. c) Ensure that all tree/bush growth is removed from the embankment and new growth controlled. d) Check that there are no obstructions (which could cause turbulence and scour) on the embankment, embankment crest and spillway (e.g. sign posts, benches or large debris).	Check that the inlet and trash screen are clear of trash/debris (clear as required)	
Prior to forecasted heavy rain		
	Check that the outfall structure and trash screens are clear of trash/debris (clear as required)	
Immediately following extreme rainfall event		
a) As 6 monthly plus: b) Check for erosion of the embankment and spillway, it must be reported to the LLFA for further investigation. c) Check for signs of seepage through the bund, particularly along the downstream toe and the area surrounding the downstream headwall.	As 6 monthly	
Annual		
a) Rodding of the filter drain along the toe of the attenuation bund to ensure water is able to flow freely.	a) Inspect the hand railing surrounding the headwalls for damage and deterioration and repair/replace if required. b) Visually check that the outlet pipe is free from blockage and sediment build up, clear as required	a) Check the condition at the base of the spillway and make good as required. b) Check the condition of the outlet structure access steps and made good as required.
Additional		
Yearly for 3 years then 5 yearly: Deformation survey to monitor settlement/movement of the embankment crest: Following an initial baseline set of 3 surveys carried out once per year the frequency can be reduced to once every 5 years. Results should be reviewed and if significant settlement is observed engineering advise should be sort.	10 yearly: carry out CCTV survey of outlet structure	

Working arrangements

	Roles	Essex County Council (Project Lead and Sponsor)
Tier 1	Project executives	Ian Doyle (Head of Operational Delivery)
Tier 2	Project managers	Dave Chapman (Project Overseer and Delivery and Enforcement Manager)
Tier 3	Project officers	Charlotte Smith (Lead Project Officer)

The parties involved in this partnership will engage in productive collaboration in order to achieve a timely delivery of the scheme. This would be carried out by adhering to the EPP2- Hillyfields Open Space flood alleviation scheme MoU governance structure. This governance arrangement comprises of three tiers of responsibility. Project steering and high level monitoring will be undertaken by the project executives who will also be the signatories to this MoU from each partner organisation. Regular project monitoring, direct supervision and overview would be undertaken by representatives at the project manager and officer levels. Informative meetings would occur between representatives from all the parties at all levels but this would be more frequent for partner representatives at the project manager and officer levels. The organisational structure of this MoU will be regularly reviewed and amended as required in order to reflect changes as the scheme progresses.

Hillyfields Open Space FAS MoU Governance Structure

The project overseers and officers will meet on a 2 weekly basis in order to ensure a seamless and timely process in the design and delivery of the scheme. Project executives would also meet up and make decisions to provide high level steering and guidance for the project managers and officers however this would not be as frequent as the overseers and officers and would be determined as and when circumstances demand.

Legal implications of the MoU

The partners recognise that this is not a legally binding document. This MoU will not affect the statutory duties, responsibilities or other legal rights and obligations of any partner.

Confidentiality

Information disclosed by any party which is declared as confidential should be treated as such. Similarly any information disclosed which the recipient should reasonable be expected to know is confidential, must be treated as such. Any sharing of data, not related to this scheme between the partners will be subject to separate legal agreements.

Duration of the MoU

It is expected that this Memorandum of Understanding will remain valid throughout the duration of the design, delivery and commissioning of the scheme.

Signatories

For Essex County Council

Name: _____

Position: _____

Signature:

Date:_____

For The City of London Corporation

Name: _____

Position: _____

Signature:

Date:_____

Statutory responsibilities of parties who have signed this Memorandum of Understanding

Essex County Council

As the Lead Local Flood Authority, we are responsible for developing, maintaining and applying a strategy for local flood risk management in our area and for maintaining a register of flood risk assets. We also have lead responsibility for managing the risk of flooding from surface water, ground water and ordinary watercourses.

The City of London Corporation

To maintain the site in accordance with any existing agreements.