RECTORY LANE, WITHAM FLOOD ALLEVIATION SCHEME: FREQUENTLY ASKED QUESTIONS

This document has been created based on common questions asked during engagement on similar flood schemes that Essex County Council have worked on.

1.) What is the scheme?

The scheme involves the creation of a below ground attenuation area with a shallow earth bund in the open grassed area east of Forest Road and North of Yew Close. The attenuation area will store water below ground whereas the earth bund will not and exists purely to protect adjacent properties from and water that may overtop should the area become full. Water will be captured from Forest Road and other overland routes and overtopping flows will be directed onto Forest Road and follow the route they would have prior to the scheme being built.

The proposals will ultimately involve landscaping the area to allow water to be stored during times of flood, reducing the risk of surface water flooding to those downstream. The area is currently open and accessible and it will remain so following completion. The scheme does not involve creating a pond, and water will only be stored following extremely heavy or persistent rainfall.

Plans showing the proposed design will be available for viewing during the consultation event.

2.) Why is it needed here?

Essex County Council have undertaken detailed modelling which has highlighted that the area is at high risk of surface water flooding. There are reports of surface water flooding problems in the area and with extreme rainfall events likely to increase in frequency and magnitude the scheme will help reduce risk to properties into the future.

Flood mapping and modelling information will be available for viewing during the consultation event.

3.) How big is it?

The proposed scheme will have a total footprint of around 1300m². The attenuation area will store a maximum of 930m³ of water. The bund will be 70m long and a maximum of 1m high compared to the existing ground level, though this is at the lowest point and will mostly be around 300mm or less adjacent to the houses. All slopes will be 1 in 3 to allow safe access for people and maintenance machinery.

A full table outlining the key parameters of the proposal is included in the planning statement and copies will be available for viewing during the consultation event.
4.) What will it look like?

The area is currently grassed and accessible and the area will remain so following completion of the proposed scheme. Wildflower seed will be used within the grass to improve the visual appearance and improve biodiversity. The existing saplings will be either removed and replanted or like for like replacements planted.

Visualisations have been created and will be displayed during the public engagement event.

5.) Why does the scheme not include a fence around the attenuation area? If water is stored people could fall in?

The area of land proposed to contain the scheme is currently open and accessible and the inclusion of a fence would limit this and have a significant negative visual impact on the site. A low wooden fence will be included between the storage area and the road to prevent vehicles from parking on the verge and also to alert them to the change in ground level.

As landowners, conversations are ongoing with Braintree regarding the specifics of the design and inclusion of any life rings, signage or other safety equipment will be included in line with their requirements. We will include these as part of the construction once finalised.

The attenuation area slopes are 1:3 which are safe to walk over and have no steep drops, reducing the risk of slips or falls.

6.) Who will maintain the scheme following construction?

As landowners Braintree District Council will own and maintain the bund and attenuation area upon completion. There will also be a new section of pipe under Forest Road to connect the attenuation area into the existing Anglian Water surface water sewer and we are in discussion with them to adopt this pipework. Both Braintree and Anglian Water have commented on the designs to ensure maintenance is possible and the designs changed to ensure doing some is feasible and financially viable.

A formal agreement outlining ownership and maintenance arrangements with Braintree District Council has been drafted and is currently being discussed ready for formal agreement should planning permission be granted.

A full structural inspection of the entire scheme will be conducted at least once per year by Essex County Council to ensure it remains functional and structurally sound.

7.) The scheme is in the wrong place and won’t solve the flooding problem

An option optimisation study was completed for the area which investigated undertaking the following options;

1. Do nothing
2. Bunds and storage areas adjacent to Rectory Lane and Forest Road
3. Bunds and storage areas adjacent to Forest Road and Laburnum Way including a swale at the junction of Forest Road and Rectory Lane
4. Increasing the size of the existing drainage around Forest Road and Elderberry Gardens

The current proposals (Option 2) were found to be the most financially viable way of reducing flood risk to the highest number of properties, however the storage area adjacent to Rectory Lane was removed as further modelling found it was not providing any significant benefits. The Option Optimisation report has been included as supporting documentation in the planning application submission.

It should be noted that the proposed scheme is only designed to protect properties or reduce risk to Forest Road, Yew Close and Elderberry Gardens. The scheme has been designed based on both modelled and recorded flooding incidents.

It should also be noted that the scheme is only designed to reduce the risk of flooding from surface water. The scheme will provide no protection for foul flooding or highway flooding, though both may have received an indirect reduction through the scheme reducing water reaching these systems. All reports of non surface water flooding received by Essex County Council will be passed on to the relevant organisations for further investigation.

8.) Is the scheme being installed to help with future development in the area?

No. All flood schemes we design and build take no account of any future developments and no schemes we construct should be used to support, promote or justify a proposed development. The scheme that has been designed has been informed by modelled and recorded flood risk and will solely exist to reduce flood risk to existing local properties.

9.) How long will water be stored for? Does water need to be pumped in and out of the attenuation area?

The drain down time is less than 24 hours meaning the storage area will go from being completely full to completely empty in this time. If the storage area becomes half full then it will drain in under 12 hours, and so on. The scheme has been designed specifically to do this so it can provide flood benefits whilst becoming operational again quickly and minimising the time for standing water to be present.

No pumps or pumping will be undertaken, all flows throughout the proposed scheme will occur through gravity. It should also be noted that water will only be stored during times of extreme rainfall and the area will be dry, open and accessible during normal conditions.

10.) Has local ecology been taken account of?

We have undertaken independent high level desk based ecological, arboricultural and historic environment studies to help inform initial designs followed by independent detailed ecological, arboricultural and historic environment studies, involving a full site inspection, to inform the detailed designs. No significant observation or impact to protected species were
noted, and the full high level reports have been included as supporting information in the planning application submission.

11.) Will the scheme increase the risk of flooding to properties?

No. The proposals have been designed to only reduce local flood risk and the only area that will experience increased flooding is within the designed attenuation area itself. Modelling has been undertaken to both design the scheme, calculate the benefits and confirm no increase in local flood risk. It is a planning requirement than proposed works of any kind do not increase local flood risk and applications can be refused if they do not adequately demonstrate this.

12.) I get flooded from a pipe/sewer/road. Will the scheme help me?

The scheme has been designed to reduce the risk of flooding from surface water only, however it functions by capturing overland flows, including those flowing down Forest Road. As such any properties currently impacted by this will benefit from the proposals.

All reports of non surface water flooding received by us will be passed on to the relevant authorities for further investigation.

13.) Is a section of hedgerow being removed?

No. A small area of the hedgerow between the site and the ongoing housing development will be trimmed to allow access to the site and maximise the working area. The undertaking of this has been checked with ecologists and arboroculturalists and advice has been provided surrounding the methodology and timings of these. Consultation has been undertaken with Braintree District Council throughout the design process and the area will be seeded with wildflowers following completion to provide an increase to local amenity and biodiversity.

14.) Will any trees be removed?

No. We have had extensive conversations with arboriculturalists regarding the existing trees and we have modified the scheme design so that all will be retained. A crown reduction is required to one tree to prevent root destabilisation and this will be the only change to them. Root protection areas with fencing and ground protection will be used and the machinery and methodology of works will be changed in the vicinity of the trees to stop damage to them occurring.

15.) Will the bunds encourage motorbike activity in the area?

Unfortunately sloped areas can prove attractive to those with motorbikes. The scheme design is such that it functions as a flood storage area and we are continuing discussion with the landowners, Braintree District Council, to meet any requirements they have to install
measures to minimise the likelihood of this occurring. On other schemes these have taken the form of placing logs to prevent vehicle access to the top of slopes.

For additional information or clarification, addition queries, or to request a site meeting to discuss the proposals please contact myself (Tom Palmer) or the capital programme manager, Dave Chapman;

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