Titchwell Marsh

Clarifications

**General**

1. Will the site be closed to members of the public during construction works?

No

1. Can the RSPB confirm access arrangements as there are two roads off of the A419

See attached access map

1. Will the RSPB be providing an Ecological Watching Brief for the duration of the works or is this something we are expected to provide?

The reserve warden will be supervising the works for the duration of the project.

1. The RSPB has secured consent for working in the SSSI – are there any stipulations or limitations that we need to be made aware of?

No

1. Have the Environment Agency been involved in any discussions relating to the works and have they given any indication as to what permit they wish to see in place before works are undertaken?

Flood Permit will be required. RSPB will support the appointed contractor in obtaining this.

1. As no soil sampling has been undertaken is this something the RSPB wish to do under these works to help inform the design and construction of the bunds and islands?

No

1. Does any water flow from the reserve towards the sea? Are there any outflows Ecosulis will need to provide sediment control for when working in Freshmarsh?

Yes. No need for sediment control.

Is the nature reserve secured by gates? Does the RSPB believe that security will be required or would a PID system be suitable?

The site is relatively secure, PID system will be sufficient.

**Freshmarsh**

1. No specification or design has been provided for the bunds in Freshmarsh – can we assume that a Terram layer will be required, with the layers of material being installed at 300mm depths and compacted? (item 1)

Please refer to attachments FM1, FM2 and FM3 . The new bunds are very low and wide (max height of 70cm) – so Terram layer is not anticipated to be used but will consider contractor advice.

1. Once the bunds are constructed does the RSPB require topsoil or subsoils be placed over the bunds? Does the whole then require a protective matt (such as Verdamat 400 Biodegradable

Erosion Control Matting) installed beneath this to assist with erosion prevention over winter 2021 (item 1) – as shown in this picture



It shouldn’t require this due to the low height and gradient of the bunds.

1. Does the bund need seeding? If so, are Ecosulis able to recommend a wildflower seed mix for these? (item 1)

No

1. Is there a specification in regards to the locally sourced stone and geotextile for the bunds to act within small sections of anti-erosion protection? (item 1)

No

1. Does the RSPB have a location for these small sections or is the assumption being made that they are to be across the sea facing side of the bund (East on Freshmarsh design) (item 1).

Eastern side of inner bends – exact locations will be made at the time of works occurring

1. The Freshmarsh design shows 11 islands to the East of the bund and not 8 and 3 to the East, please confirm if its 8 or 11 islands to be created? (Item 2)

8 islands on the eastern section and 3 on the western section. The island locations are indicative.

1. For the large island reprofiling on Freshmarsh – please confirm where the excavated material is to be deposited (Item 2)

It will be a only a couple of cm’s removed so this can be used for islands or the bund. The decision will be made on the ground during the process of the works.

1. The northern ditch measures ~350m, please confirm? (Item 3)

Yes

1. The Eastern ditch measures ~315m, please confirm? (Item 3)

Yes

1. Water control structures – is there a specification for this or is it just a 300mm twinwall pipe installed through the bund during construction? OR do these pipes need to be made out of another material? (Item 4)

Yes to twinwall pipes

1. Do the pipes require a stone bed to be installed as a base for their construction? (Item 4)

Potentially yes but we will take the contractors advice.

1. For the reed removal in Freshmarsh (item 5) – please confirm where these are being deposited/translocated? (Item 5)

Ideally these would be macerated, however we are exploring options for depositing on other areas of the reserve or they will need to be removed off site.

**Freshwater Reedbed**

1. During the raising of the central bank (item 6) – is this being raised using excavated material and compacted in layers or does additional material need to be imported?

Using excavated material.

1. Please confirm the depth of each layer? (item 6)

We will take advice from the principal contractor.

1. Is any erosion control required to be installed during construction to protect over winter of 2021 as per item question 10? (item 6)

If you think this would be needed, then please provide a costing for this.

1. Does the bund need seeding? If so, are Ecosulis able to recommend a wildflower seed mix for these? (item 6)

No.

1. Is there a spec to improve the Improve vehicle access from the Tank road through the southern edge of the Unit 4?

No – the area is low use so we would expect it to be compacted earth.

1. For Item 9 – it is mentioned on the western side of the pool however it look to be on the eastern side. Just above the hide base area that is to be prepared – please confirm?

The existing pool is to be expanded on the western side.

1. For the reprofile area for new hide – is this just levelling of an area by tracking an excavator over or will some earth moving be required? Is there any vegetation clearance works required for access to this area? (Item 9)

Levelling by an excavator but maybe some earth moving. Limited vegetation clearance.

1. In regards to the western bank and the strengthening works – is the material from this expected to be gained from the excavation of the pool extension to the west and the fen pool works? (Item 9)

Yes

1. Can the RSPB confirm the specification for the strengthening works? (Item 9)

The banks are in existence and the work is subtle so the specification would be agreed on site.

1. Is expected that the 450mm diameter pipe through this bund be installed by excavation down through the bund and reinstatement or another way such as moling? (Item 9)

Excavation would be preferred.

1. To connect unit 3 to the triangle compartment the WW!! Road will need to be excavated subject to planning consent. Please confirm the specification for the road reinstatement?

Concrete.

1. Ecosulis will be unable to provide a price for the water control structures in Item 10 and as such will be treated as compensation event post contract agreement or as part of the final price if before contract agreement. Please confirm if this is acceptable?

Yes. Preference would be for the price to be agreed as a final price.

Clarifications

**General**

**Freshmarsh**

1. In regards to the ditch excavation works – please can the RSPB confirm where this material is to be deposited

Material can be used for the bunds and islands that are to be created.

1. In regards to the reedbed removal works – please can the RSPB provide an approximate size of the area that needs to be removed and to what depth? Ecosulis normally allow for up to 1m depth

Approx 0.4ha. Depth we are happy with up to 1m depth.

**Freshwater Reedbed**

1. In regards to the reprofiling of the existing ditches in unit 4 – please can the RSPB provide the final location of the excavated material

Ditches are in existence so much of the work will be slubbing out – the material can either be place adjacent to the ditches or be used for banks and islands that are being created withing the reedbed.

1. Please can the RSPB provide the required size and depth of the new ditches or is the assumption that they will be same depth and shape as the ones being created in Freshmarsh?

Approx. dimensions: 3m deep, 1m wide at base and 3m wide at top but with a mix profile to benefit water voles and feeding bitterns.

1. In regards to the WW11 pipe installation – can the RSPB provide information on the excavation – is the pipe to be installed at the base of this? Alternatively can you provide an estimate of the length of trench and the depth?

The pipe will need to be layed low enough to facilitate water movement between the triangle compartment and unit 3. To be confirmed with contractors on site.