

APPENDIX 12.5
ENVIRONMENT AGENCY MEETING MINUTES (26.09.2016)

**Minutes of Meeting Held on 26th September 2016
Ergon House, Horseferry Road, London**

Present:	Joe Martyn	JM	Environment Agency
	Dave Cuthbertson	DC	Environment Agency
	Joe Pring	JP	Environment Agency
	Kevin Watson	KW	Gerald Eve
	Barnaby Johnston	BJ	Squire & Partners
	Robert Copeland	RC	Gillespies
	Paul Webster	PW	Hydro-Logic
	Tamara Rowe	TR	Waterman
	Ali Karbassi	AK	Waterman
	Donal O'Donovan	DO	Waterman
	Brendan McCarthy	BM	Waterman

Action

1.0 Introductions

2.0 Scheme Overview

2.1 BJ introduced the scheme, giving an overview of the existing site and defences, as well as the proposals, setting out the benefits the scheme will bring to the area (i.e. reinstating historic routes, making the river front public etc.).

2.2 BJ gave an overview of the offsets from existing buildings to the river, advising that there is a minimum of 13m from MHWS level in the river to the defences and then a minimum of 4m from the defences to existing buildings.

2.3 BJ described the proposed ground levels across the Site and how this would provide protection from breach flooding.

2.4 BJ explained that the ownership of the land between the site and the River Thames (i.e. the tow path and bank) is unknown, and needs to be confirmed before anything can be proposed in this location. The team's aspiration being to remove the self-seeded trees and bushes and provide enhancement.

3.0 Existing Defences

3.1 TR carried out condition survey of the existing defences on the 23rd September 2016. TR gave a summary of the findings and indicated a number of defects with the existing defences. This included bricks missing with daylight visible through the defence wall, previously blocked air vents damaged and showing daylight through defences, and a number of cracks in the wall (one of which runs to the entire height). The Maltings Building is currently supported internally by a steel frame and provides suitable protection in line with the present day statutory defence level of 5.94m AOD. Air vents located above this level would need to be filled in to ensure protection in the future.

3.2 The existing wall survey report would be submitted with the planning application.

TR/AK

4.0 Proposed Defences

- 4.1** DO set out that in line with the TE2100 Plan the present day statutory defence level is 5.94m AOD, which would need to be raised to 6.25m AOD by 2065 and 6.70m AOD by 2100.
- 4.2** DO highlighted that in line with the Environment Agency's response (as part of their response to PW's scoping FRA) the team has managed to incorporate the full amount of defence raising to 6.70m AOD. This would ensure that the Site would be protected up to the year 2100 and no further defence raising would be required in the future, based on current climate change predictions.
- 4.3** TR described the different options available for construction of the new defences. One option would be to pile directly on the line of the existing defences, another would be to pile on the landward side of the defences and the last to pile on the river side of the defences.
- 4.4** The preferred option would be to pile on the landward side of the existing defences. This would allow the existing defence to remain in place during construction, ensuring that the defences are maintained. JP confirmed that this would also be the Environment Agency's preferred option, as they would object to any advancement of defences on the river side of the existing wall.
- 4.5** JP/JM confirmed that if the new defence needed to be moved forward slightly this would be acceptable so long as the new defence was moved back in another location to compensate for the loss of river storage.
- 4.6** Piling installed along the river frontage to provide the new defence would tie in to the existing Maltings Building. The existing Maltings Building would be upgraded internally to ensure that that it is fit for purpose and provides protection to 6.7m AOD. This will involve removal/blocking up of air bricks located below 6.7m AOD.
- 4.7** JP indicated that although seepage through the defence wall is usually a concern, this should be mitigated through the proposed piled construction.
- 4.8** JP advised that the 1 in 1000 year standard of protection would need to be maintained throughout the construction sequence.
- 4.9** It was agreed that outline construction sequence drawings and a method statement would be submitted with the planning application. Full details would not be required at the planning stage but would be needed post planning to obtain an Environmental Permit. **TR/AK**
- 4.10** JM advised that in order to proceed to the detailed design of the new defences it will be necessary to undertake trial pits to confirm the construction of the existing defences. JM agreed to confirm if an Environmental Permit would be required to undertake this investigation. **JM**
- 4.11** DO set out that due to the existing ground levels in Ship Lane the highway currently acts as the flood defence in this area. However, it is unclear from the defence drawings provided by the Environment Agency and their Flood Map for Planning exactly where this line of the defence is located.
- 4.12** JP confirmed that due to the existing ground levels in Ship Lane (between 5m and 6m AOD) the defence level would need to be raised in the future in line with the TE2100 Plan.

- 4.13** DO advised that it would not be feasible to raise levels in Ship Lane to provide permanent protection to a level 6.7m AOD (requiring road levels to be raised by 1m) while ensuring access to properties along the river front and tying into existing accesses along Ship Lane. Whether the development takes place or not Ship Lane would therefore need to be protected by a temporary demountable defence.
- 4.14** JP indicated that the Environment Agency's preference is always for permanent defences but conceded that due to the nature of Ship Lane a demountable defence may be the only feasible option. Information would need to be provided within the planning application documents that sets out why a permanent defence would be unsuitable in this location. **DO/TR/AK**
- 4.15** PW explained that there is a precedent for the use of self-raising barriers that could be incorporated in the future as part of the TE2100 defence raising. Examples would be provided as part of the planning submission documents. **PW/DO**
- 4.16** DO referred to drawing 16019_G100_P_L (attached to these minutes) and explained that a demountable defence running from the southwest corner of the Maltings Building across to the existing public house (The Ship) would be the best location to tie the Stag Brewery Site into the River Thames defences continuing to the west beyond the Site. This location is slightly further north along Ship Lane than the Environment Agency's Flood Map for Planning currently indicates.
- 4.17** JM queried if by moving the line of defences north along Ship Lane there would be a loss in floodplain storage. PW suggested that as the River Thames is tidal in this location there would be no impact on floodplain storage.
- 5.0** **Offsets to Defences**
- 5.1** DO explained that in line with the Environment Agency's response to PW's scoping FRA, the development would be set no closer than 16m from the river edge.
- 5.2** The proposed offsets were indicated on the plan tabled at the meeting (ref: 16019_G100_P_L). The minimum offset from the existing defences to the existing building is 4m. The proposals ensure that built development would be no closer to the defences than the current minimum of 4m and in many locations would be much greater. It was also noted that the pinch point of 4m is from the defence to steps and not to a building, which is an improvement on the current situation.
- 5.3** DC queried if the offsets shown on drawing 16019_G100_P_L were measured from the existing defence or the proposed defence (as if piling took place on the landward side of the existing defence this could encroach upon the offset provided).
- 5.4** AK indicated that the distance that the piling would need to be set back from the existing defence would need to be confirmed once trial pits have been undertaken.
- 5.5** BJ confirmed that if the proposed wall encroaches on the 4m minimum offset then the proposed building/steps would be pulled back to ensure that the minimum offset would remain at 4m, as per the existing situation.
- 5.6** JM/DC/JP confirmed that the offsets shown on drawing 16019_G100_P_L would be acceptable as long as it is confirmed that the minimum offset of 4m is not encroached upon as a result of piling behind the existing defences.

- 5.7 BJ confirmed that drawings clearly showing the proposed offsets from the proposed built development and the proposed River Thames defences would be submitted with the planning application. **BJ**
- 6.0 **Maintenance of Defences**
- 6.1 JP asked that vehicle tracking is undertaken to ensure that the proposed defences could be maintained. JP indicated that the Environment Agency do not have a specific vehicle that needs to be tracked but instead it is the responsibility of the developer/consultant to confirm an appropriate vehicle can access and maintain the defences.
- 6.2 DC/JP advised that any balconies cantilevering out towards the defences should not hinder maintenance.
- 6.3 AK set out that defences would be designed with a 120 year design life. On this basis JP confirmed that the requirement for tracking would be for maintenance rather than reconstruction and so would not need to allow access for a piling rig.
- 6.4 Drawings showing tracking of appropriate vehicles would be submitted with the planning application to ensure that future maintenance is achievable. **TR/DO**
- 7.0 **Summary**
- 7.1 In summary JP/DC/JM indicated that they were generally happy with the proposals as they stand. However, some areas (as indicated above) would need to be worked up in more detail prior to submission of the planning application to full satisfy the Environment Agency.
- 7.2 DO clarified that as part of the planning submission a report would be prepared summarising all works regarding the River Thames defences. This would include input regarding proposed offsets, construction methods, maintenance etc. **DO**
- 8.0 **Any Other Business**
- 8.1 DC queried the potential works to be undertaken along the tow path/river bank, between the Site boundary and the river edge.
- 8.2 BJ reiterated that there were ownership issues that needed to be dealt with in order to facilitate any works in this area.
- 8.3 BJ/RC set out that there was appetite to undertake enhancement along the tow path/river bank subject to ownership issues being resolved. Ownership of this area would therefore be investigated. **KW**
- 8.4 JM/DC asked about the use of SuDS within the proposed scheme. It was confirmed that SuDS would be incorporated in accordance with the London Plan and Richmond policy.
- 8.5 JP/DC/JM indicated they would be happy to undertake a pre-app review of documents if required.