## **TEAM2100**

# Environment Agency

### The new revetment material

#### What will it look and feel like?

The new revetment will be made of Open Stone Asphalt (OSA). The OSA will be made of gravel stuck together with bitumen, meaning that the surface will feel rough and be grey in appearance. Bitumen is used in our current revetment repair works on Canvey Island and so there will be no significant change in colour once the OSA is laid, but the OSA will further soften in colour as time passes as shown in the adjacent photos.

#### What are the benefits of the new revetment?

The OSA will form one complete revetment along the 3.2km frontage. This means there will be no joints in revetment material. This will reduce the chance of join material being lost, and therefore reduce the risk of erosion and loss of material from under neither the revetment. The spaces between the gravel within the OSA will not be completely filled with bitumen, allowing the material to absorbing wave energy and reducing the change of material eroding.

#### Why not replace the revetment with new concrete blocks?

As outlined on our "All about Revetment" slides, the jointing material between the concrete blocks is vulnerable to erosion. This can leading to seawater removing material under the blocks which cause to blocks sink and holes to opening up. Using

Existing Revetment at Canvey Island







new concrete blocks would not remove this challenge, whereas OSA ensures the revetment is one single material. OSA is also quicker to lay than concrete blocks meaning that the project will be on-site for less time than if concrete blocks were proposed. There are also significant challenges installing concrete blocks in a tidal environment alongside modern health and safety standards.

#### What is the life expectancy of the new revetment?

The new revetment will last approximately 50 years, until 2070. We understand that there will be disruption to the community whilst we carry out this essential work but life expectancy of the revetment will mean we need to carry out significant works in this location for a while.