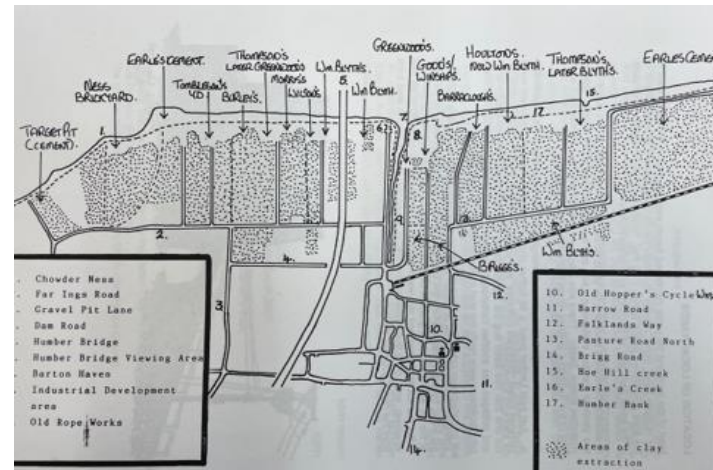


Barton to New Holland Tidal Flood Alleviation Scheme

Landscape and Heritage



Historic environment

Our archaeology and built heritage consultants have been conducting desk-based and field-based research to understand and map the complex and diverse historic environment of the Barton-upon-Humber and New Holland area.

Working with local, regional, and national historic environment organisations, our consultants have mapped 1,421 recorded historic buildings and archaeological sites.

This number includes 221 nationally important sites and buildings comprising:

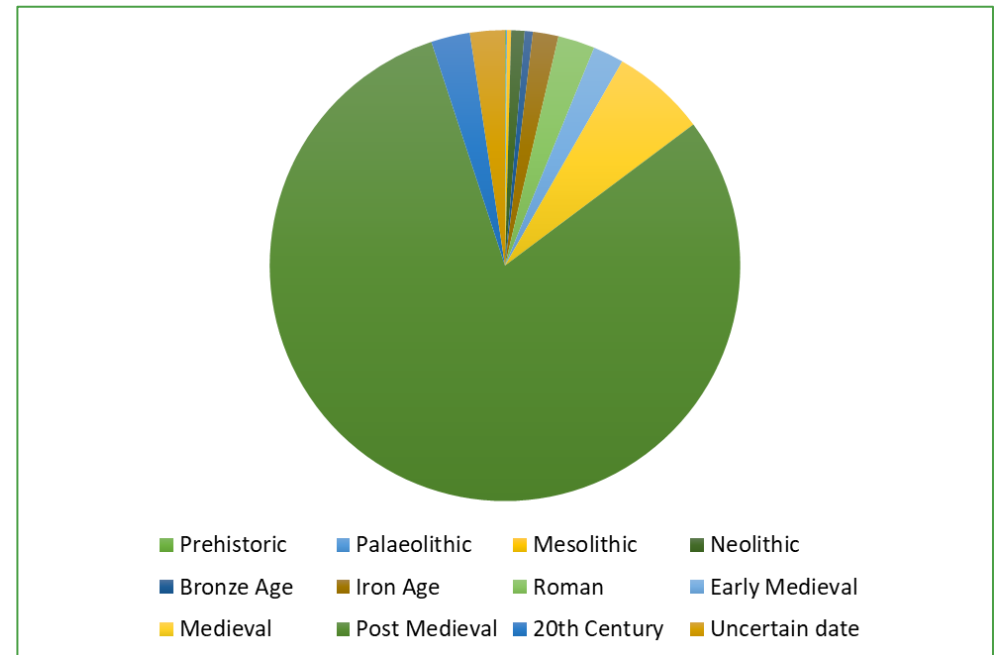
- 8 scheduled monuments.
- 4 Grade I listed buildings.
- 8 Grade II* listed buildings.
- 201 Grade II listed buildings.

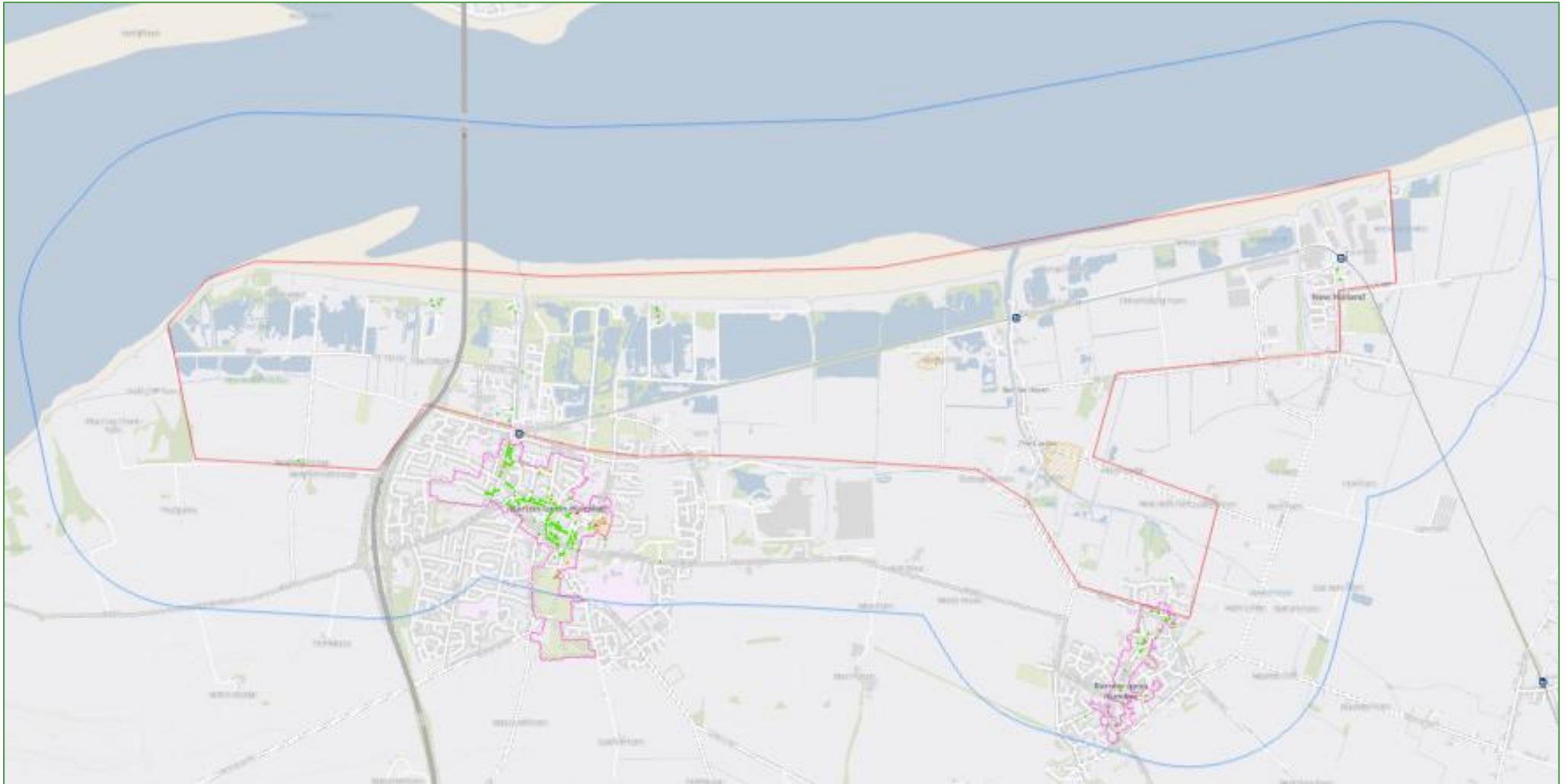
It also includes 10 sites where palaeoenvironmental deposits of have been recorded. These sites have aided in identifying buried elements of the Prehistoric land surface and shoreline, and even a forest.

Historic and modern aerial photography and LiDAR surveys have identified 21 areas of Medieval and early Post Medieval agricultural landscape features.

The archaeological sites and historic buildings present throughout the Barton-upon-Humber and New Holland area chart thousands of years of human activity and settlement. Some of these, such as a Bronze Age fish trap, are rare and do not often survive.

It is very likely that other unrecorded archaeological and geoarchaeological features and remains still survive.





Produced by Arup © 2022 using historic environment data provided by Lincolnshire Historic Environment Record © 2022. Marked on Ordnance Survey BNG mapping © 2022.

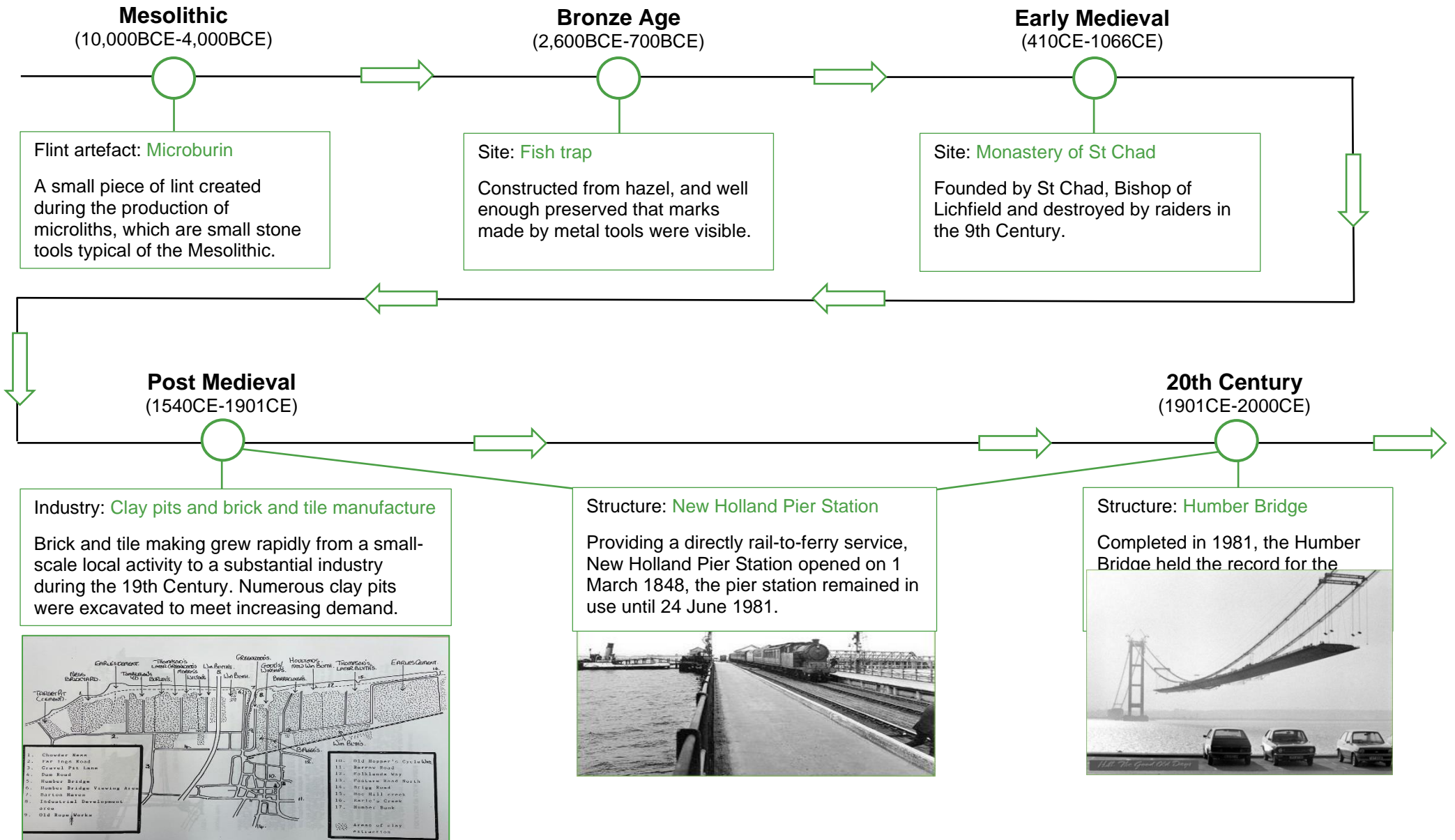
This drawing shows the 221 nationally important recorded historic buildings and archaeological sites. The **red** line is the Barton to New Holland Tidal Flood Alleviation Scheme area, and the **blue** line is our study area.



Produced by Arup © 2022 using historic environment data provided by Lincolnshire Historic Environment Record © 2022. Marked on Ordnance Survey BNG mapping © 2022

This drawing shows 1,2000 of the 1,421 recorded historic buildings and archaeological sites. It also shows the landscape features identified from historic and modern aerial photography and LiDAR surveys. The red line is the Barton to New Holland Tidal Flood Alleviation Scheme area, and the blue line is our study area.

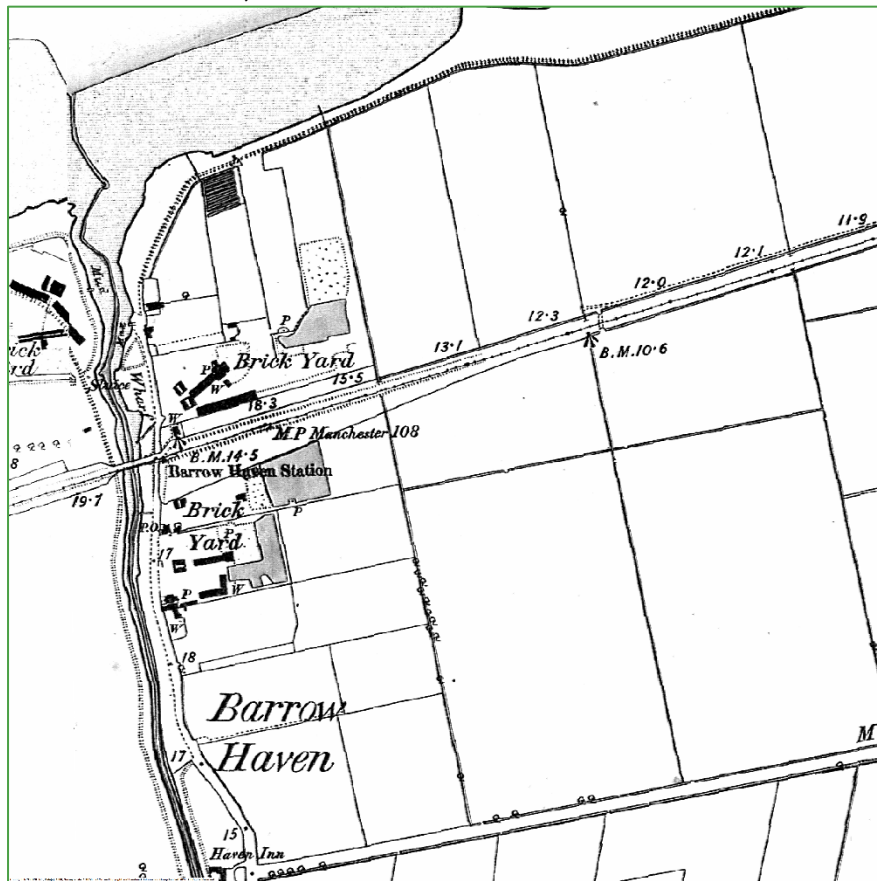
Archaeological and historical highlights



Historic maps

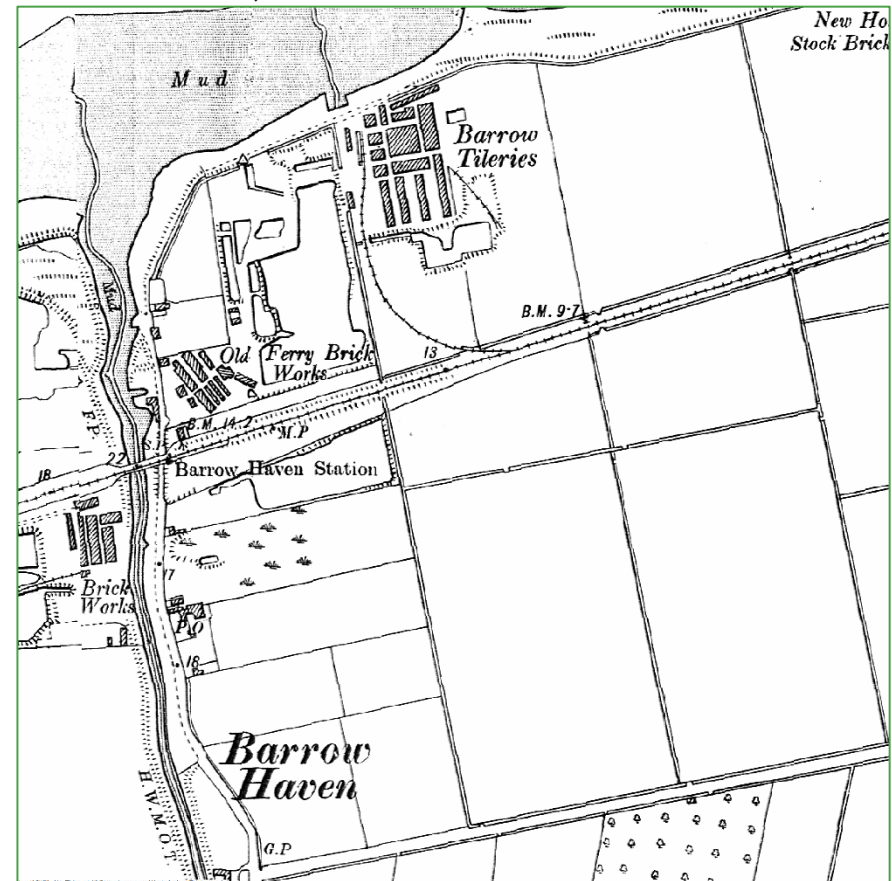
Historic maps of the Barton to New Holland Tidal Flood Alleviation Scheme area help us to understand how it has changed over time. In the 19th Century, maps started to become more accurate. The earliest Ordnance Survey map sheet of the Barton to New Holland Tidal Flood Alleviation Scheme area was published in 1855 and it is possible to see how the area changed with each published revision.

Barrow Haven, 1886



Ordnance Survey map 1886. Provided by Promap © 2022.

Barrow Haven, 1938

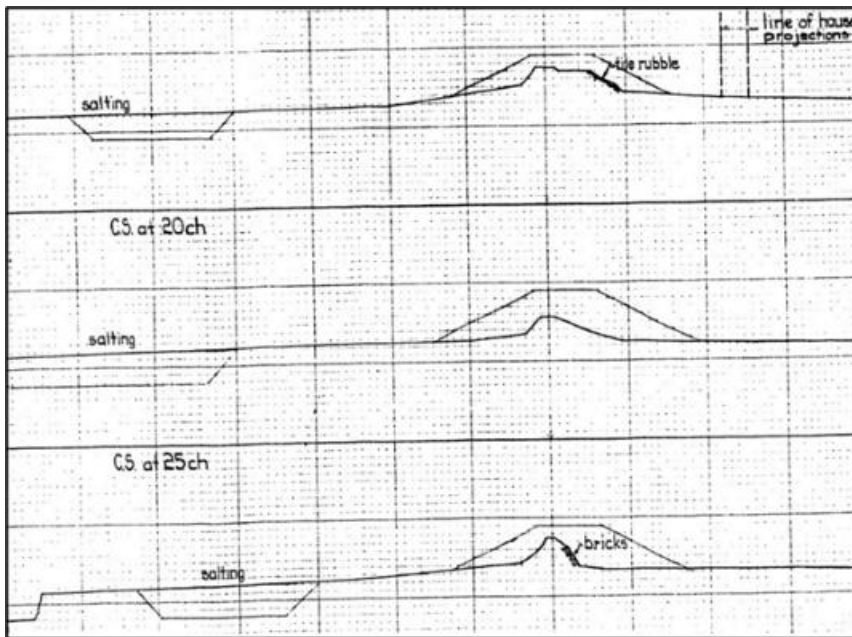


Ordnance Survey map 1938. Provided by Promap © 2022.

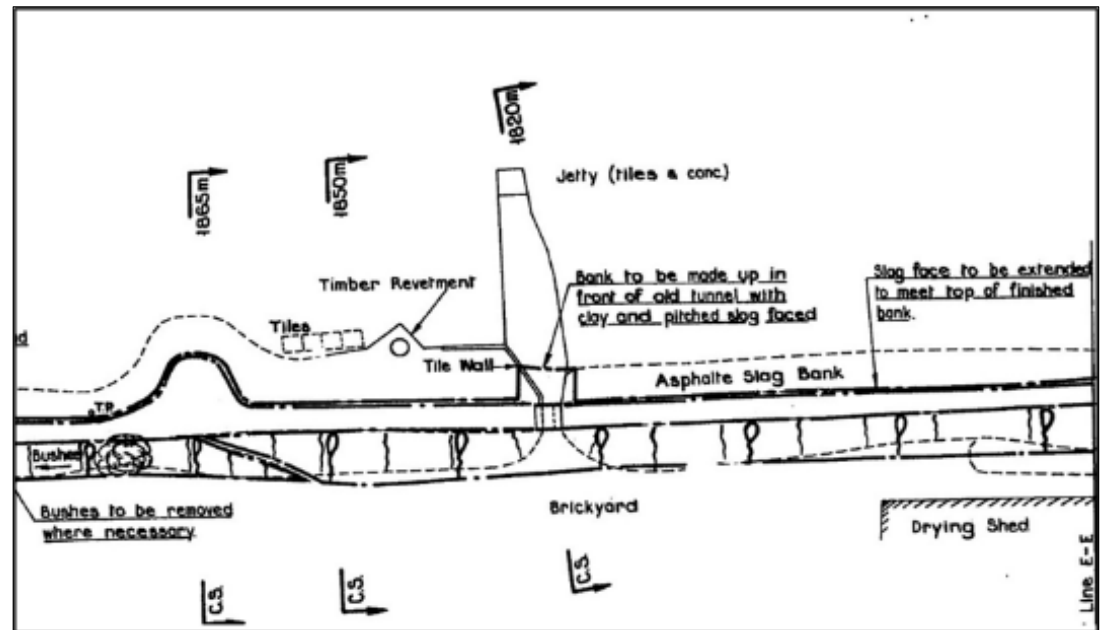


Historic plans

Design drawings and plans can also help us to understand how particular parts of the flood defences were constructed or altered. These are often associated with a specific project or set of works and are localised to a small area or plot of land.



Part of a design drawing from 1963 showing how brick and tile rubble was incorporated into the embankments fronting Barrow Haven Reedbed.



Part of a design drawing from 1974 showing an 'old tunnel' and plans to raise the embankment with clay and pitched slag.

Historic plans and drawings inform modern surveys and ground investigation work.

Geophysical survey

Between 2014 and 2018, the Environment Agency systematically scanned over 300 kilometres of flood embankments around the Humber estuary to better understand the sub-surface condition of the defences. The surveys show how Barton-upon-Humber's 19th and 20th Century brick and tilemaking industries influenced the location and construction of the flood embankments between Far Ings and New Holland.





Specialist equipment being used on site including electro-magnetic profiling (left) and electrical resistivity tomography (right)

Topographical survey

Topographical Surveys help identify the precise position and layout of the landscape to ensure that designs are buildable and efficient. In May 2023, our team completed our topography survey which provided us with a 3D grid of references and the varying heights of the ground. The findings from these surveys have helped us to assess which options will work best with existing ground conditions.