

Stamp End Flood Alleviation Scheme

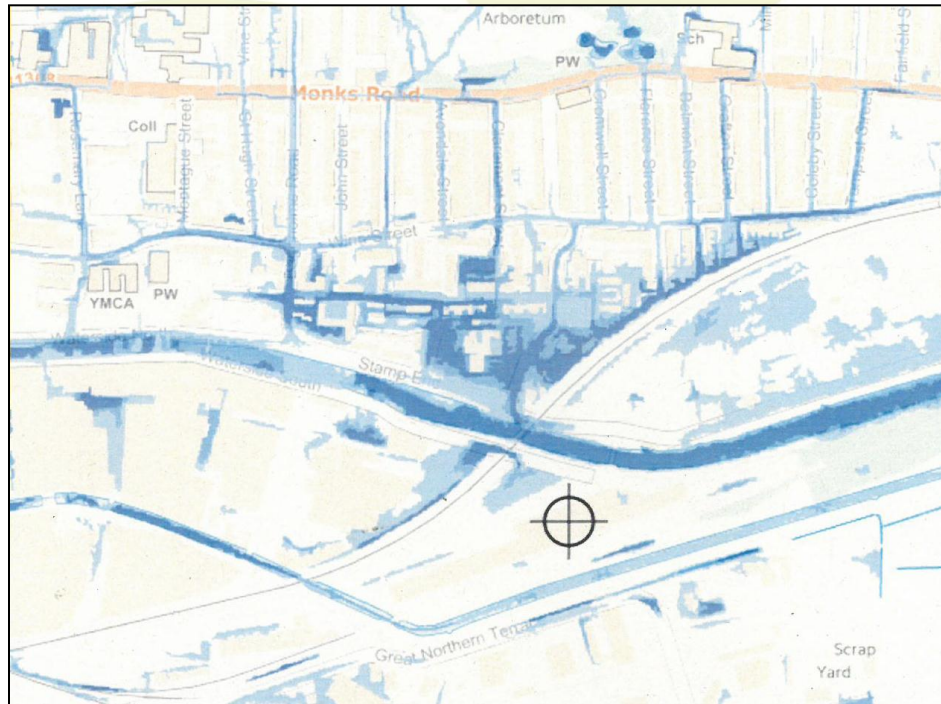
Page 7



Mark Welsh - Flood Risk and Development Manager

Agenda Item 8

Stamp End surface water flood risk map



84 homes at high risk of surface water flooding

Flooding at Stamp End in 2007



Page 9

84 homes flooded

200 residents evacuated

Stamp End funding partnership

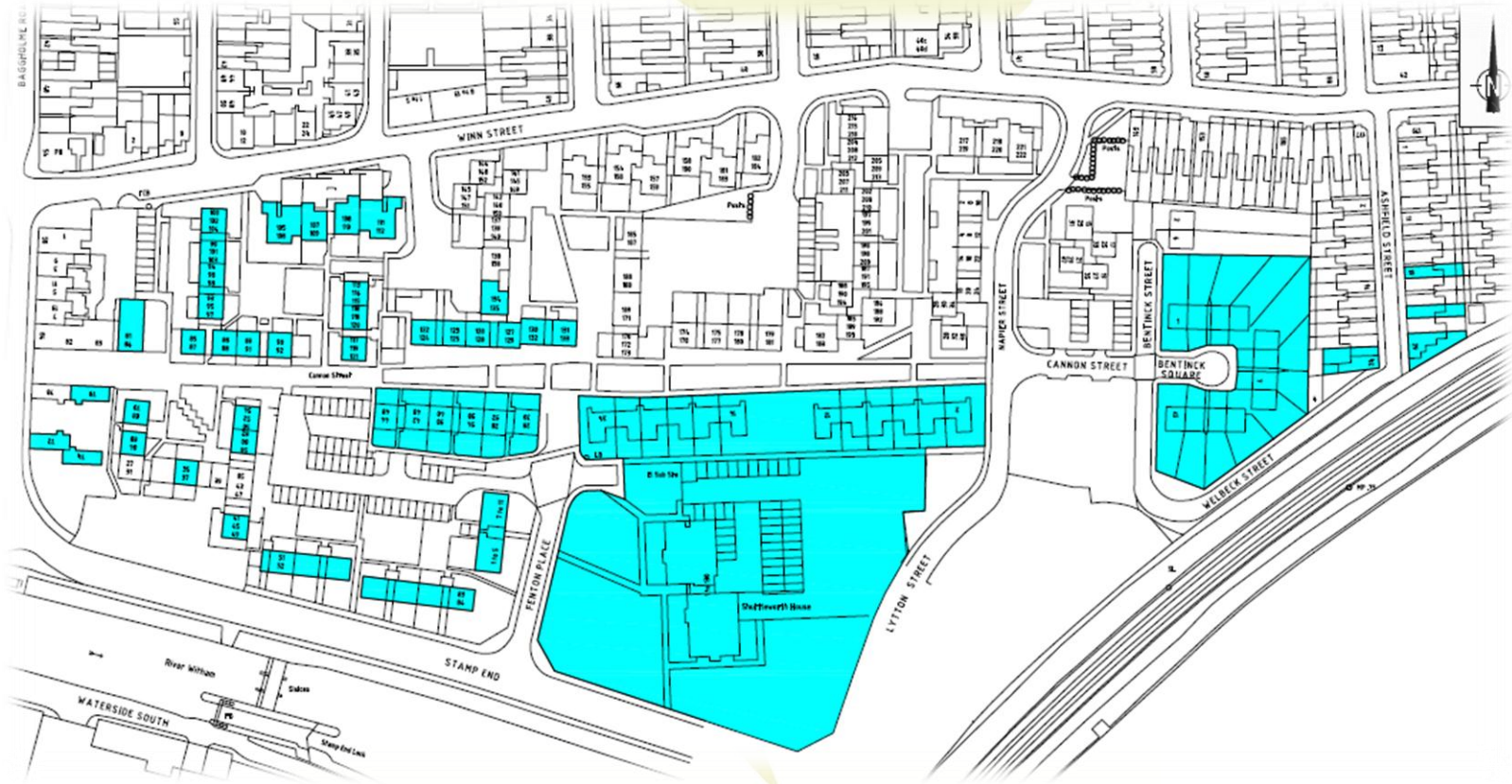
Funding partners:

	£
• Lincolnshire County Council	220,000
• Environments Agency (DEFRA Grant in Aid)	461,000
• Anglian Water	140,000
• Witham Third IDB (contribution to whole of life costs)	75,000
• Total Project Expenditure (all figures are approximate)	896,000

Lincolnshire County Councils floods infrastructure programme currently consists of 27 schemes and is managed at approximately £1.2 million to £1.3 million annually. Outputs are measured by the number of properties protected from flooding.

Flooded Properties 2007

Page 11



Investigations Undertaken

Early Partnership Working

- Lincolnshire County Council
- City of Lincoln Council
- Anglian Water
- Environment Agency
- Lincolnshire Police

Subsequent Works

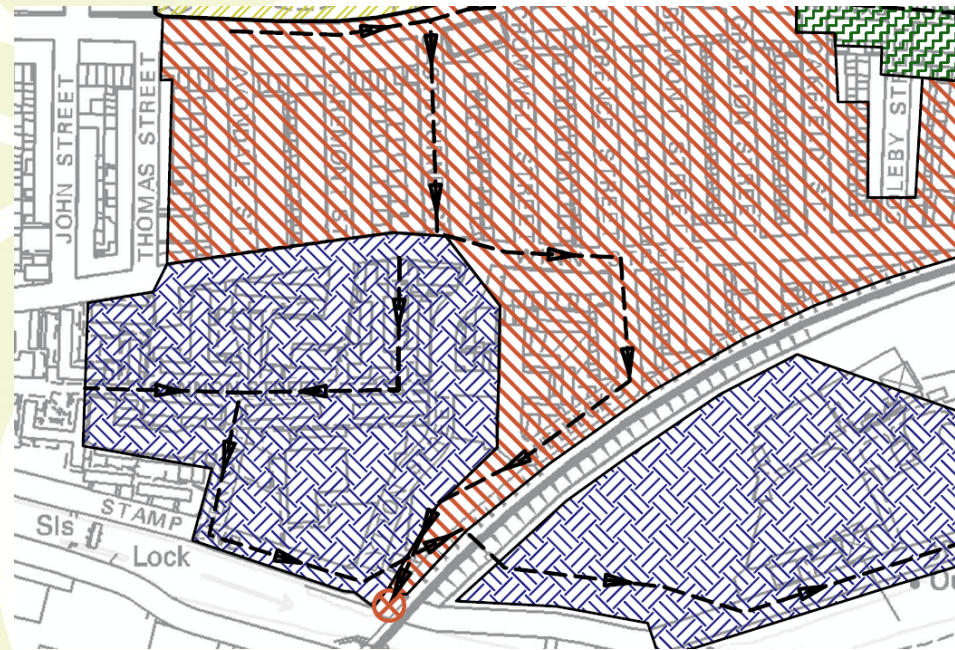
- Topographical Surveys
- Geotechnical Surveys
- Correlation of previous studies and hydraulic modelling of public sewer systems

Public Sewer Systems



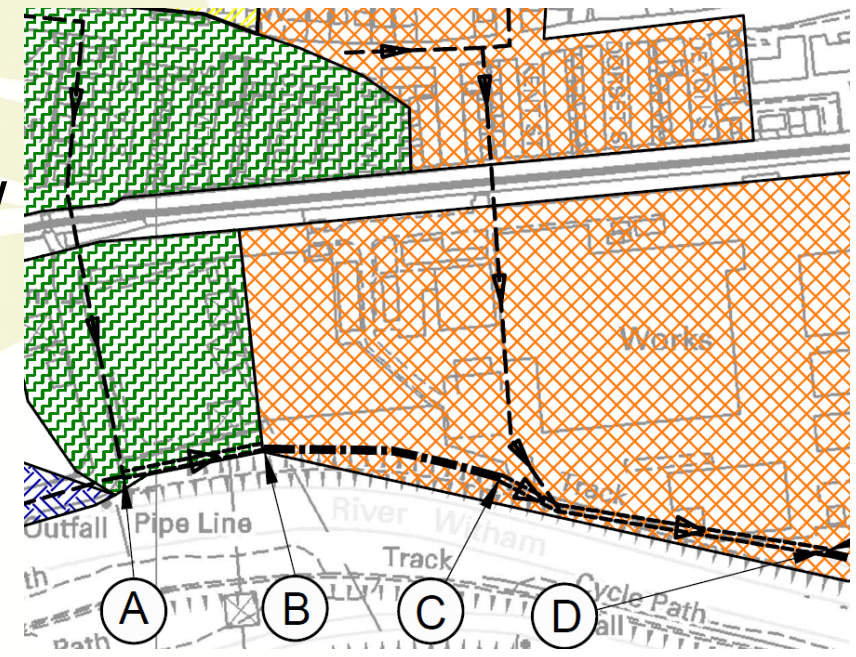
Options Considered - Stamp End Area

- Upgrade surface water systems
- Improve discharge into the River Witham
 - Gravity
 - Pumped
- Connect public sewer systems together
- Improve connectivity with North Delph area



Options Considered - North Delph End

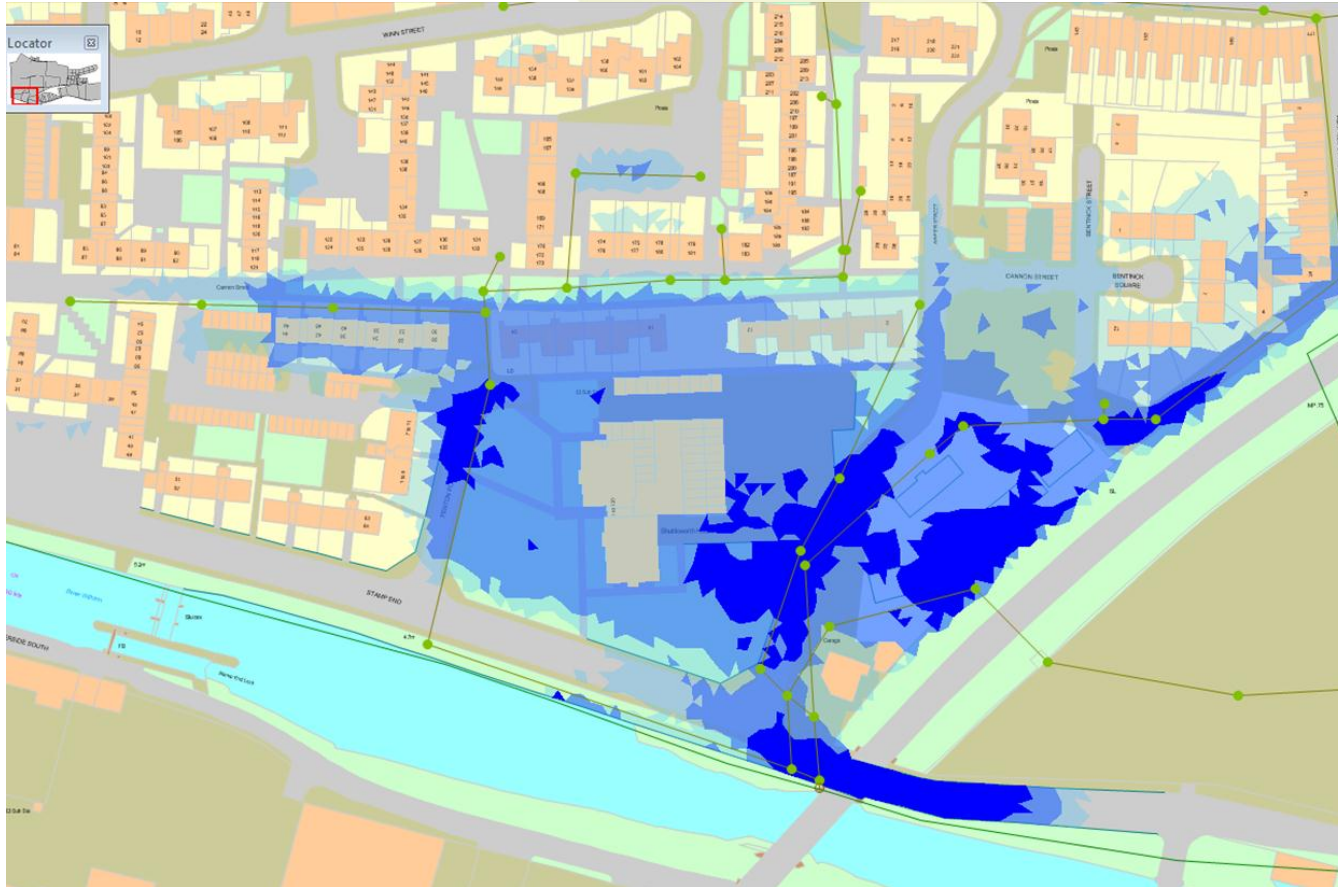
- Replace pipework with a watercourse
- Replace pipework with a new larger outfall pipe
- Improve discharge into the River Witham
 - Gravity
 - Pumped
- Improve discharge along North Delph
 - Pumping Station



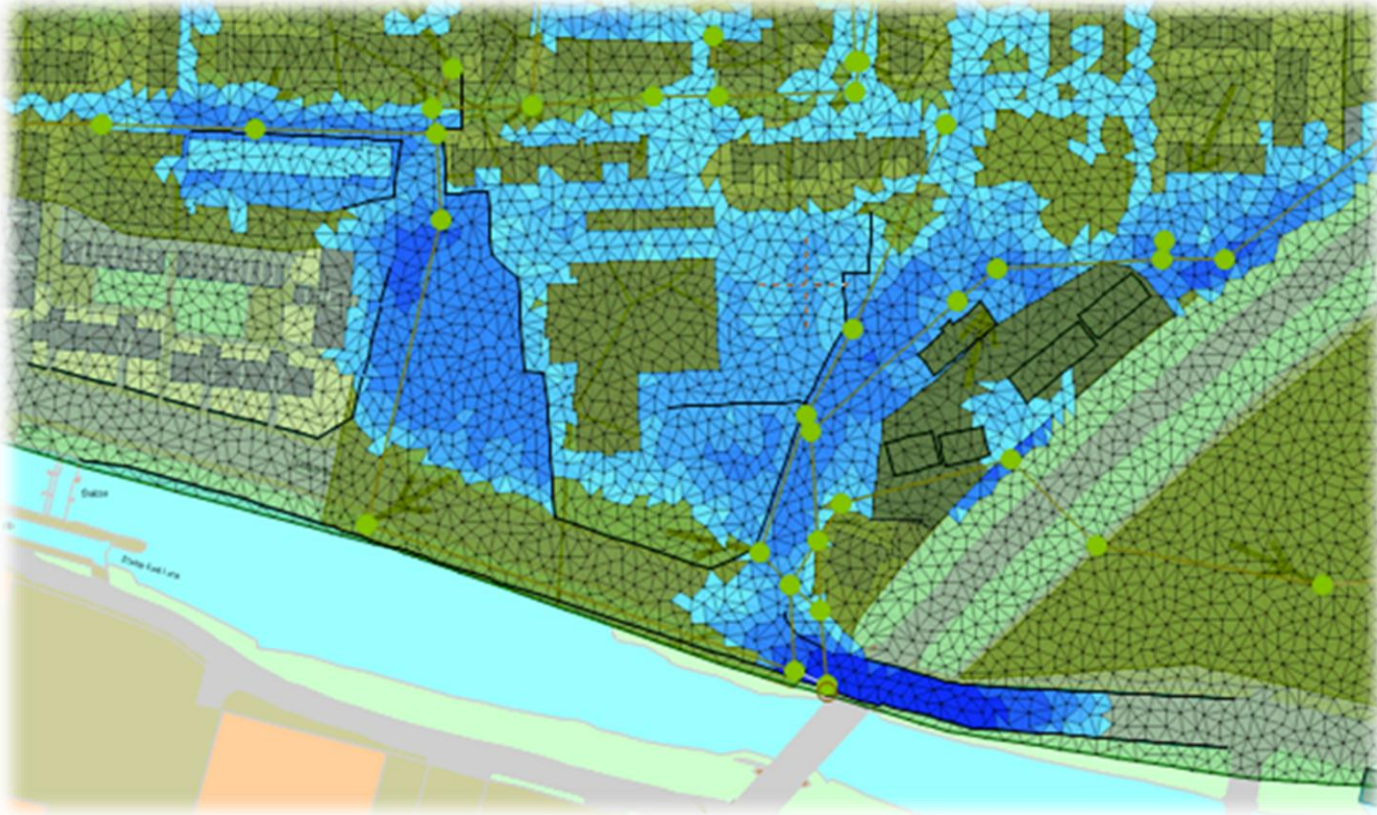
Design Options Considered

- Do Nothing
(absolutely nothing)
- Do Minimum
(routine maintenance only)
- A pumping station at Stamp End area to pump into the River Witham
- Improvements to the public sewerage system at the Stamp End area and the construction of a pumping station at North Delph.

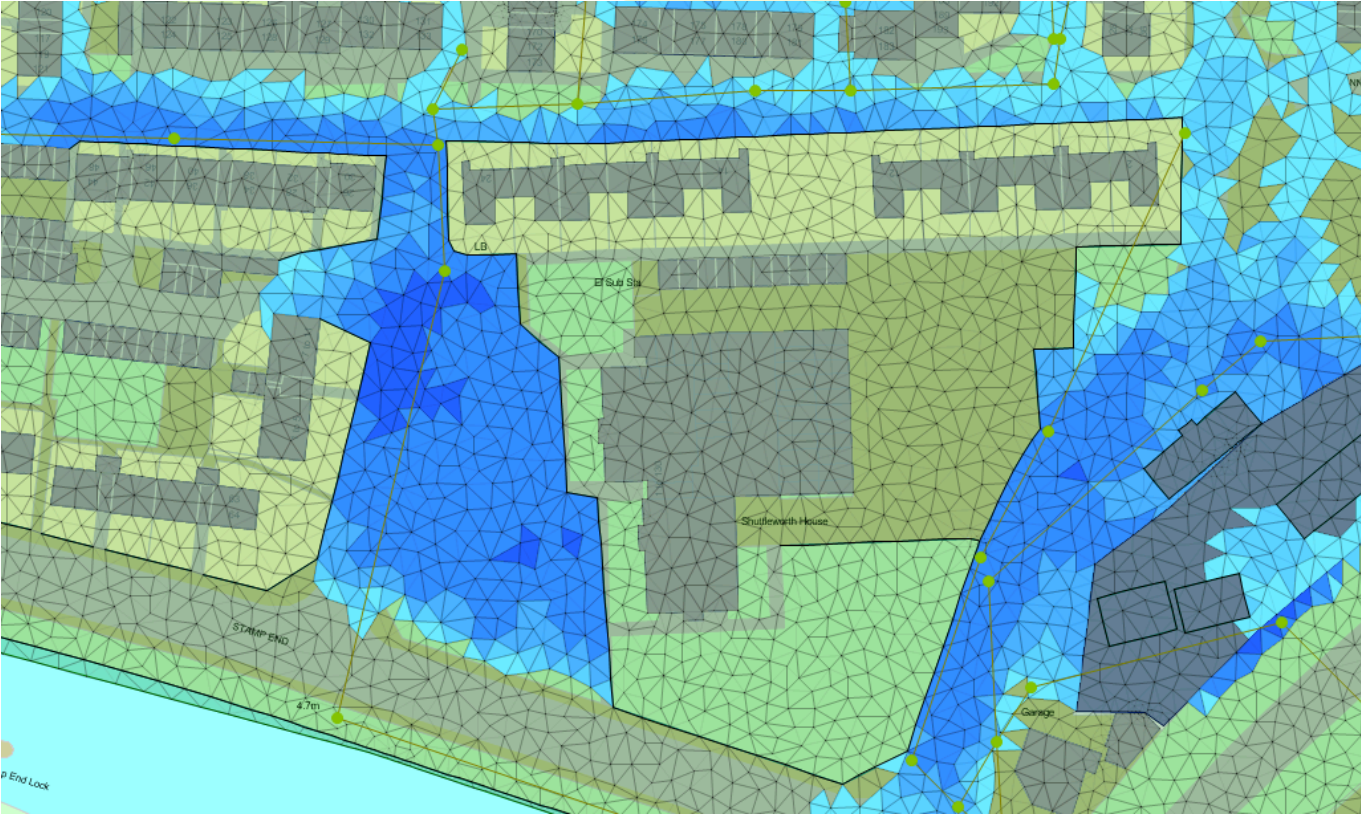
Hydraulic Model Results - 2007 Flood



Hydraulic Model Results – No Flood Barriers

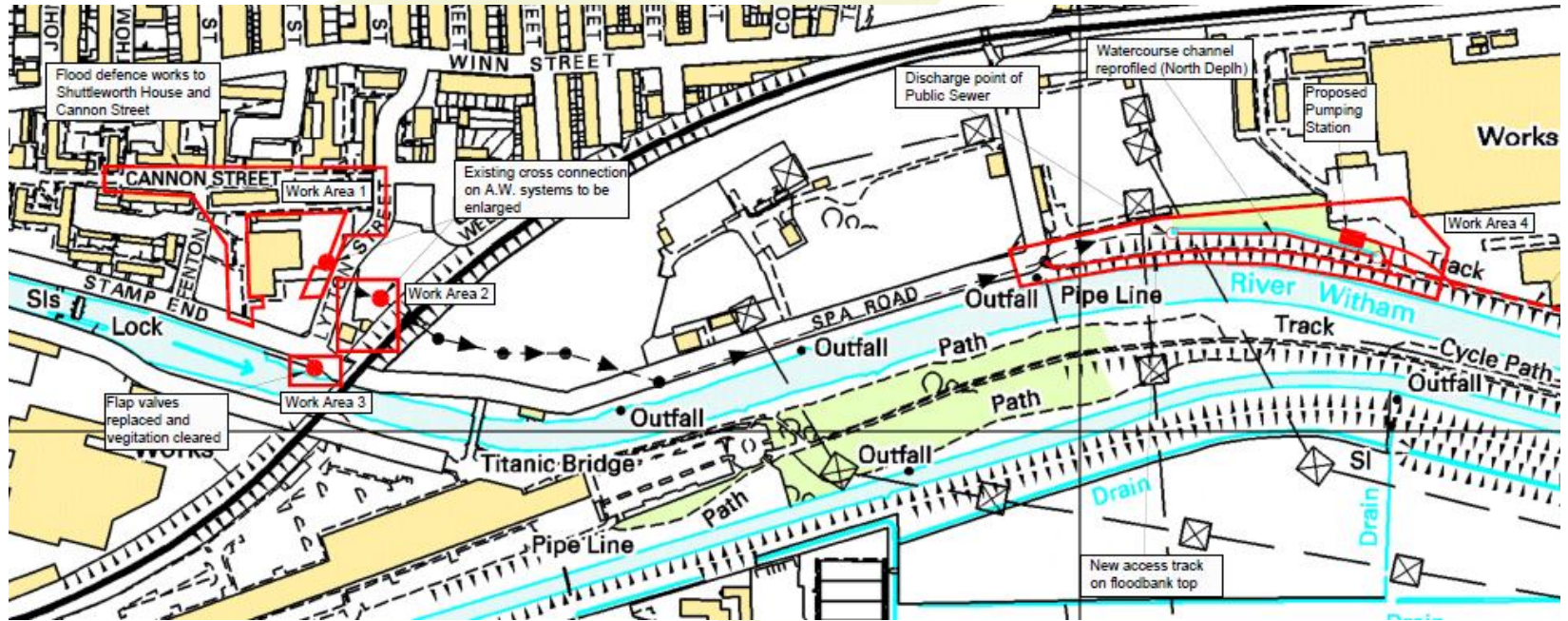


Hydraulic Model Results - Proposed Island Protection

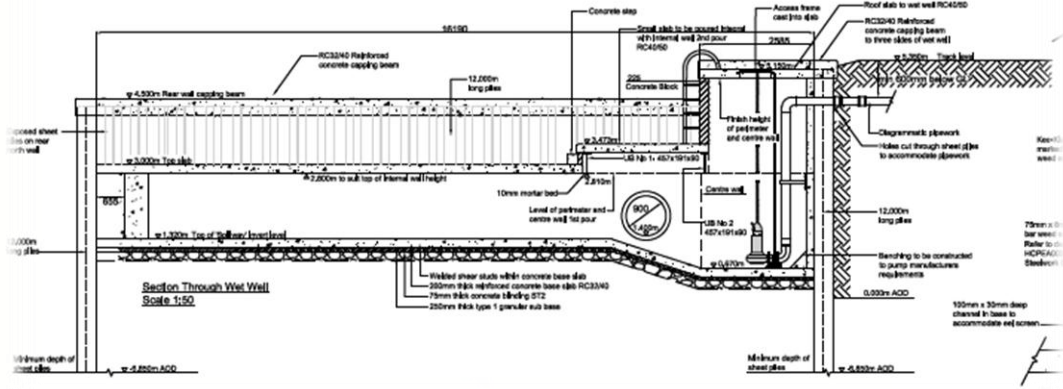
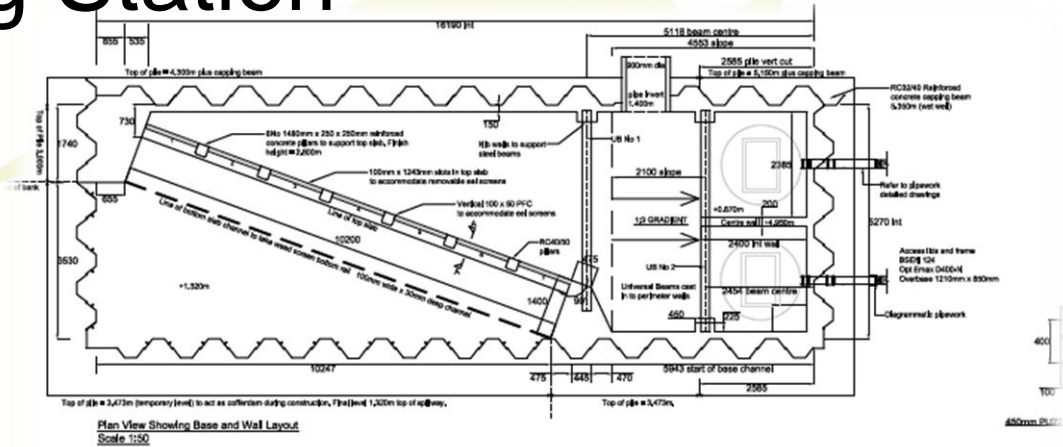


Chosen Solution

Page 20



Pumping Station

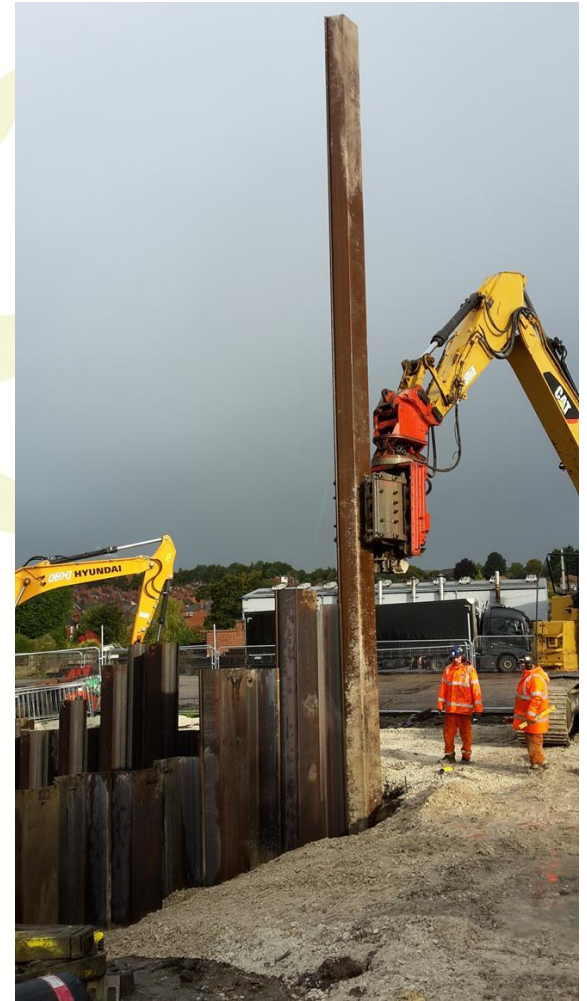


Access Road to Pumping Station

Page 22



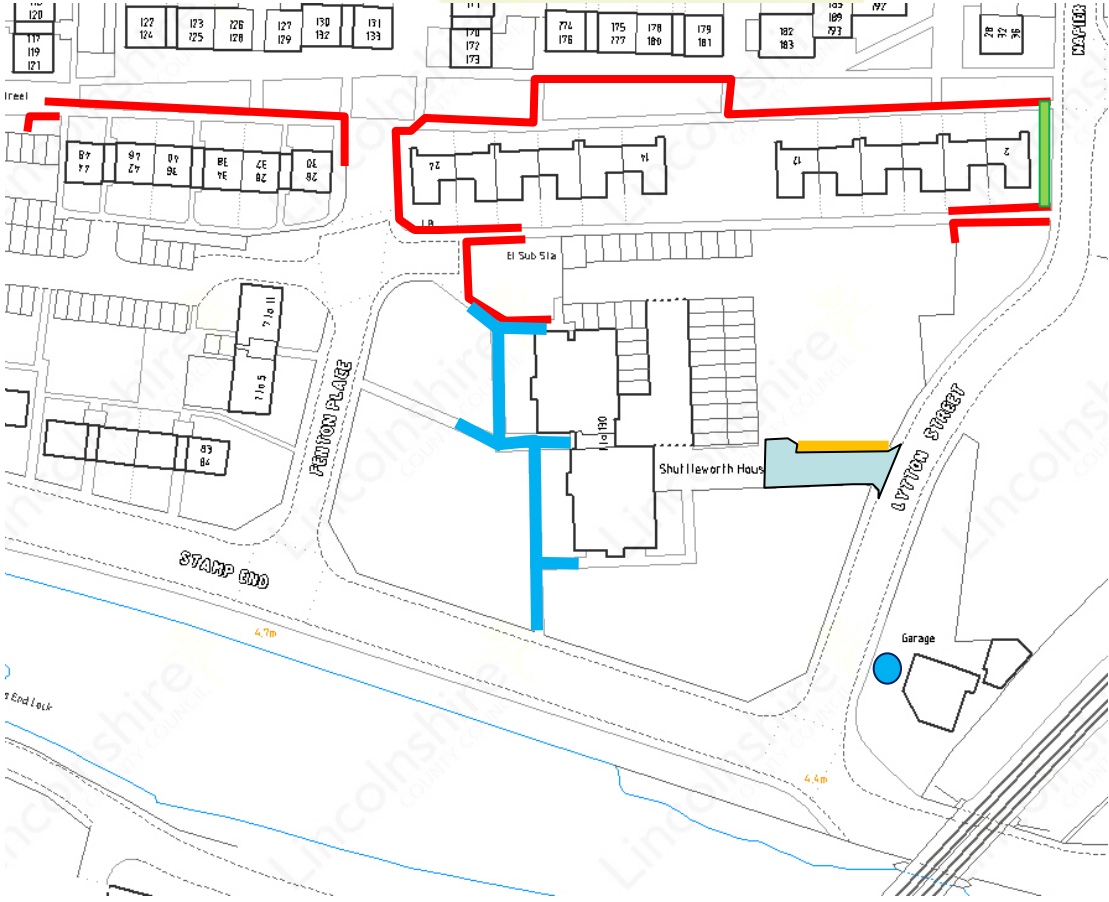
Pumping Station Site



Artist's Impression of Finished Pumping Station



Works around Shuttleworth House



Cannon Street



Shuttleworth House (west)

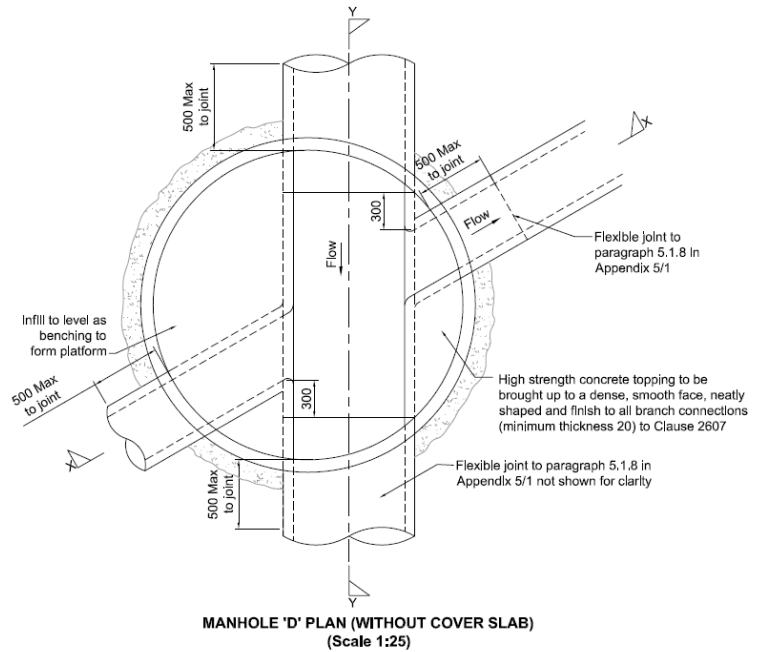
Page 27



Shuttleworth House (west)



Stamp End Service Station Overflow Chamber



Stamp End Service Station

Page 30



Stamp End Service Station

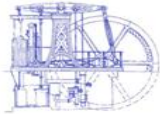


All this would not have been possible without our Partners

Page 32



Witham Third
District IDB



Stamp End
Service Station



Serving the Midlands, South West and Wales



CITY OF
Lincoln
COUNCIL





This page is intentionally left blank