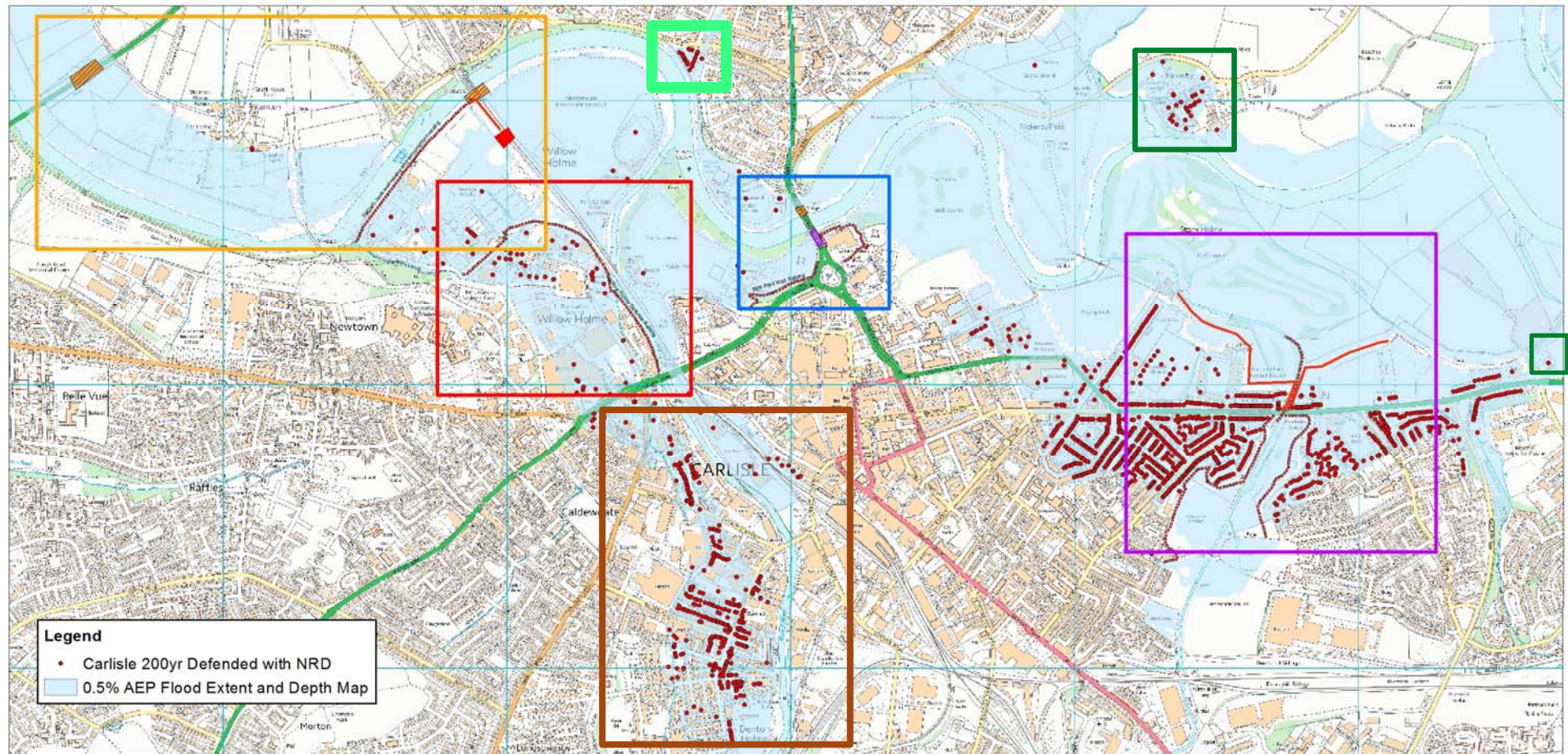


# Carlisle District Future Flood Investment

## Options Short Listing for Scrutiny Committee

8th Feb 2018

# OVERVIEW OF KEY AREAS OF LIKELY FUTURE OPTIONS

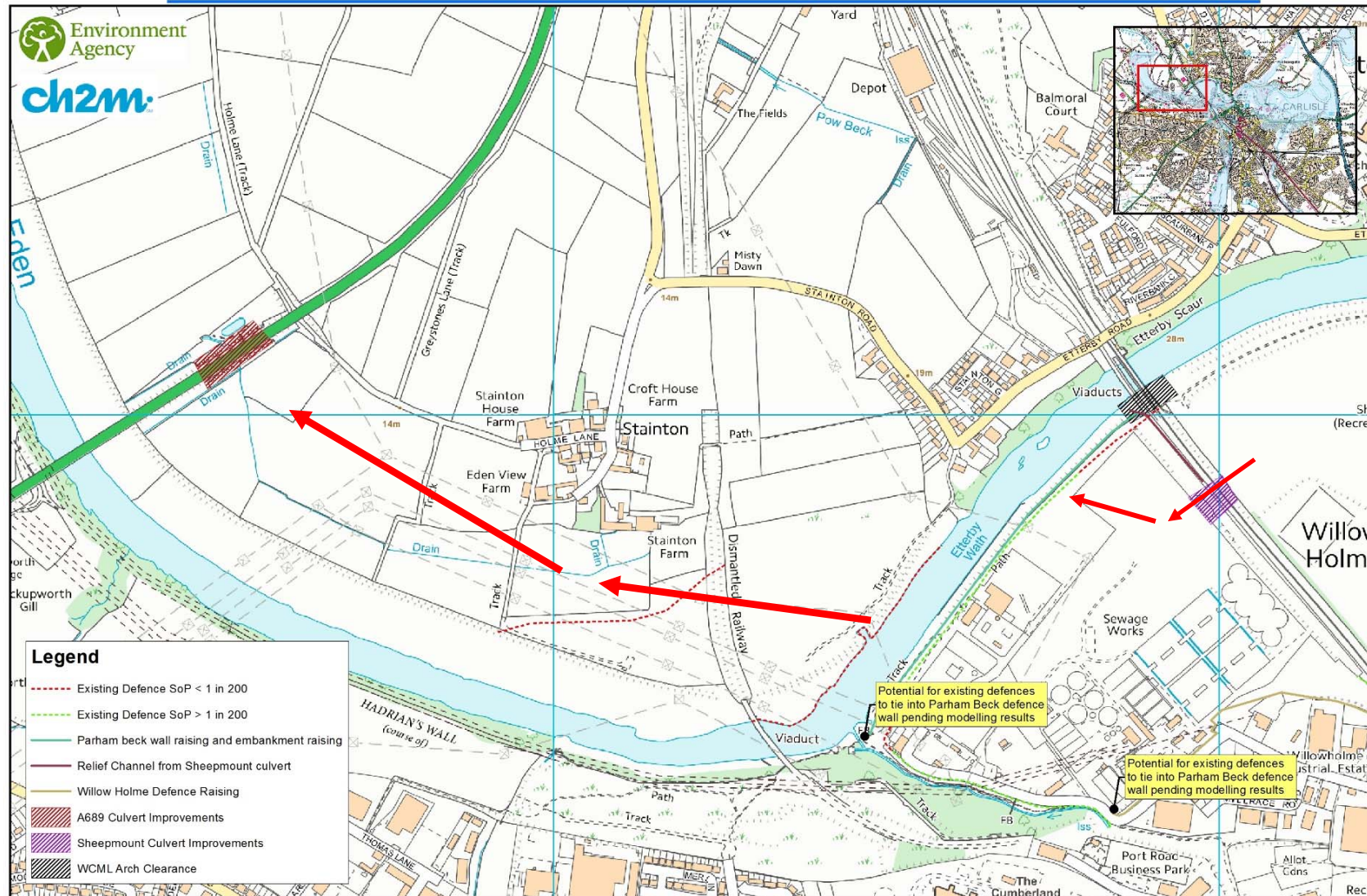






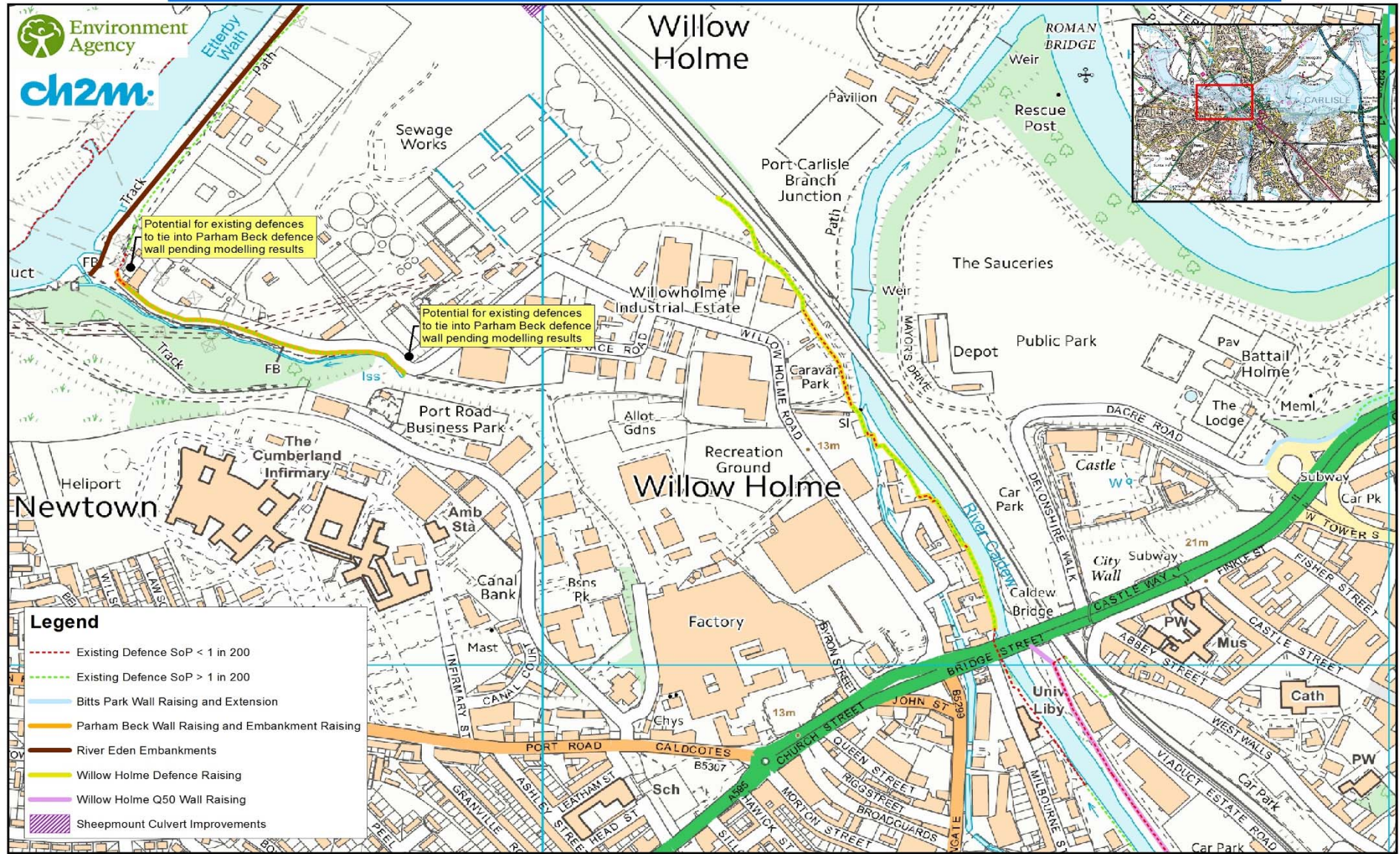


# STAKEHOLDER ENGAGEMENT CARLISLE APPRAISAL





## STAKEHOLDER ENGAGEMENT CARLISLE APPRAISAL





# STAKEHOLDER ENGAGEMENT CARLISLE APPRAISAL



# Linear Defences

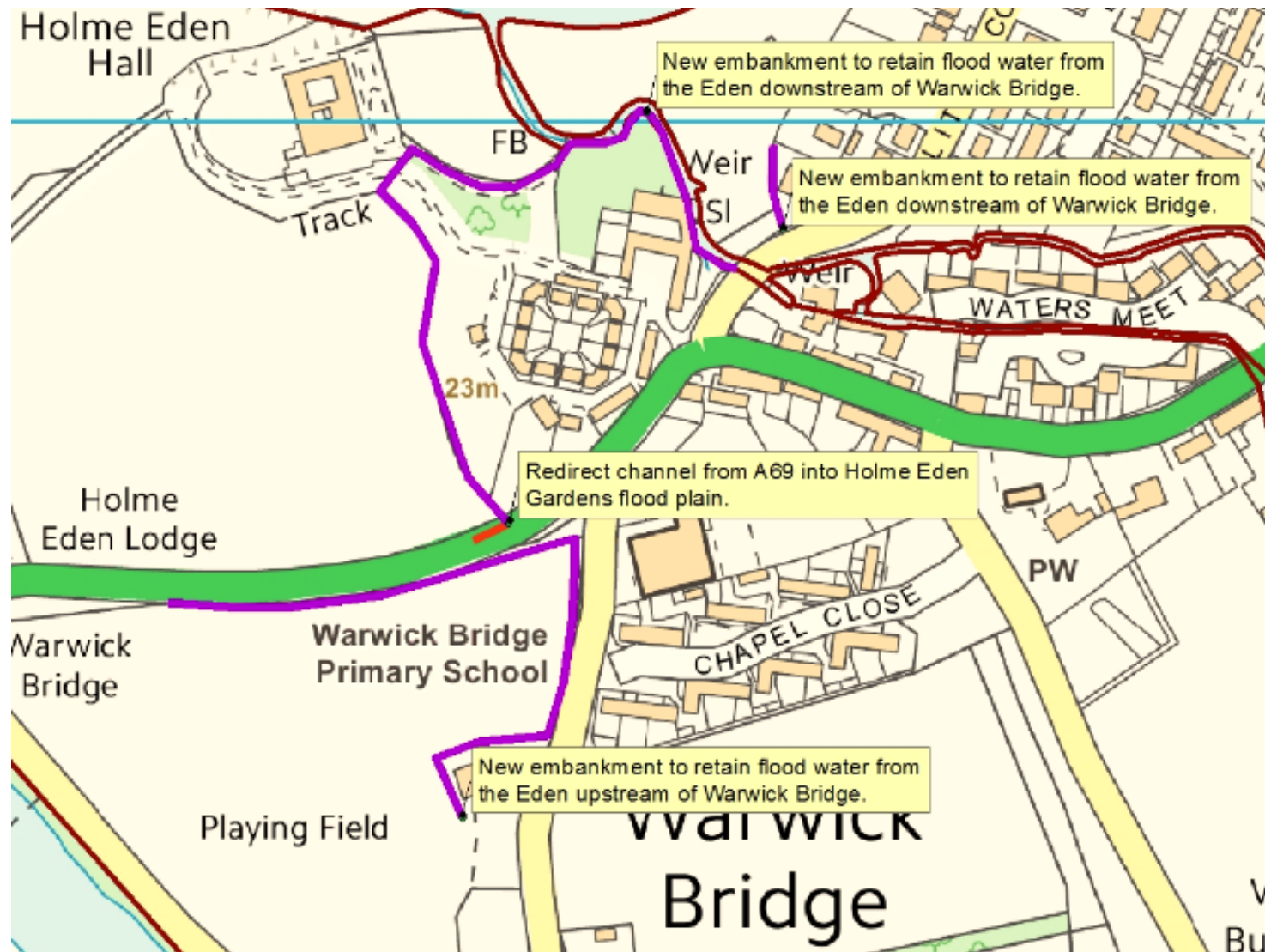
## Locations:

- Parham Beck and Eden wall and embankment works. Construction/enhancement of an earth embankment to the left bank of the River Eden, immediately downstream of the West Coast Main Line.
- West Coast Main Line Arches. Clearance of arches under the railway line, construction of defence walls to provide increased protection to the bridge abutments
- Willow Holme Defences. Construction of flood defences in the form of walls and embankments along the left bank of the River Caldew.
- Etterby Terrace and Eden Place defences
- Bitts Park Works. Construction of an earth embankment and minor wall raising to the Bitts Park and The Sands areas.
- Melbourne Park. Extension and raising of earth embankments upstream of Betcherby Bridge, along the River Petteril.



[illegible]

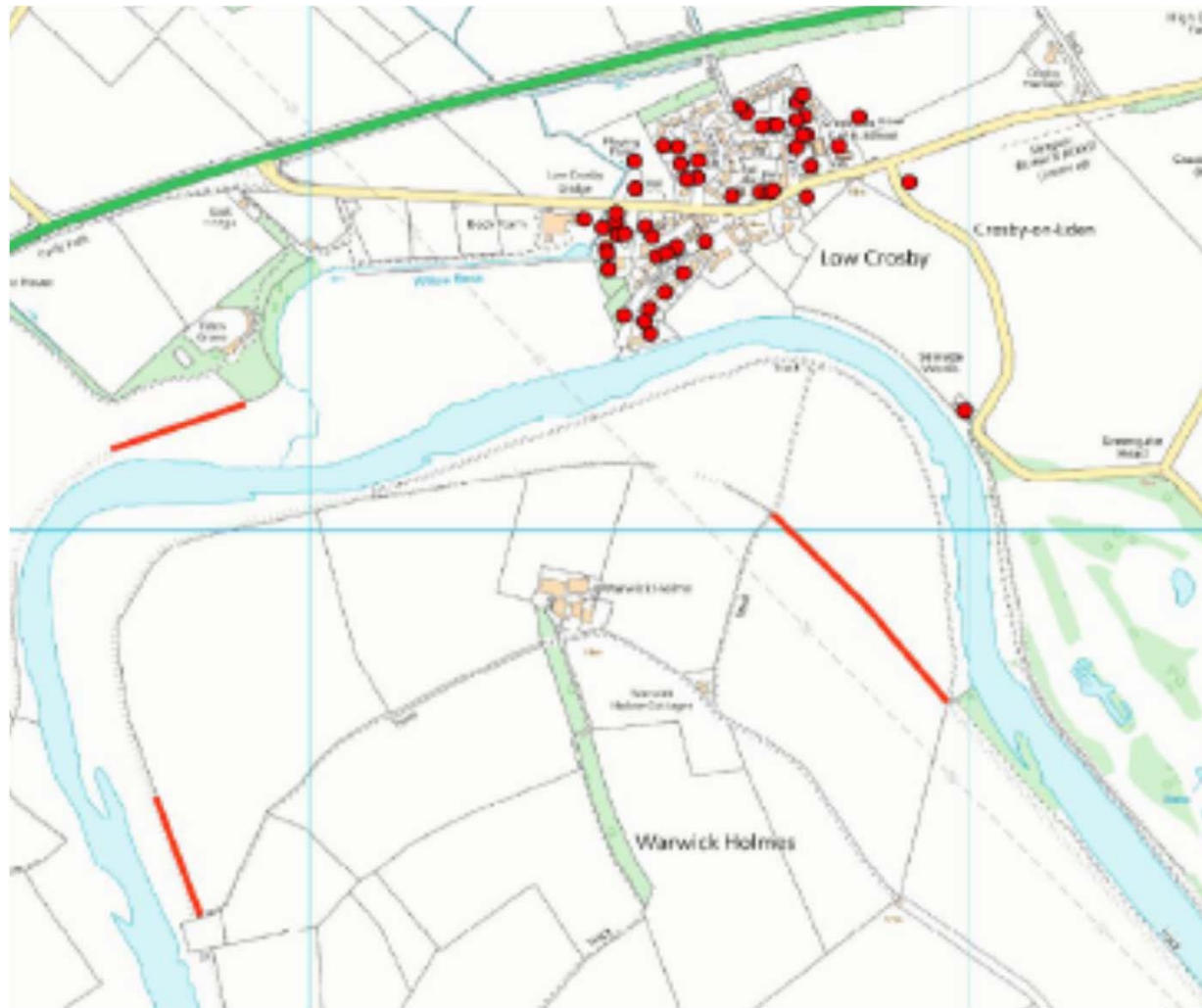








# Warwick Holme options



# Outline Delivery Programme

Winter  
2017/18

- Strategic Outline Case submitted for approval

Winter  
2017/18

- Development of and consultation on the shortlist of options

Summer  
2018

- Submission of planning application for preferred option

Autumn  
2018

- Submission of Final Business Case for approval

Winter  
2018

- Start scheme construction

Summer  
2022

- Complete scheme



## We want a project that is:

- Affordable
- Efficient & effective
- Delivers the maximum it can in terms of flood risk and other benefits
- Trusted and supported

Much of this comes from strong working with others.

# Communications & Engagement

- Key org's to enable delivery – Carlisle City Council; Cumbria County Council; Network Rail and United Utilities.
- Will meet bi-monthly to ensure all aligned to the same goals; works proactively & resolves issues.
- Informal multi agency project team
- Increasing work with community groups as details develop and move to construction.



# So what do we have?

- Short list of options for City and wider lower Eden area
  - Short list options – enhance existing scheme i.e. raised defences
  - New works to manage conveyance at key structures (CNDR, WCML, Eden Bridge)
  - Potential upstream storage opportunities on Petteril and Caldew & on the Eden at Warwick Holme
- Programme for delivery
- Assurance process through to FBC mapped out and first part of business case approved
- Identified key partners

# Next steps

- Further develop understanding of short list options and put through 4 tests
  - Move to preferred combination of options
- Detailed design
- Planning applications
- Approval of full business case
- Construction
- Partner and community engagement throughout