

Plans for Exe Estuary Trail maintenance works at Courtlands Boardwalk, Lypstone

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- Courtlands boardwalk – inspection outcomes
- Proposed works
- Impact of proposed works – potential temporary diversion route

Aims:

- Engagement with various local stakeholders and receive feedback on the proposed works

Courtlands boardwalk

Structure details

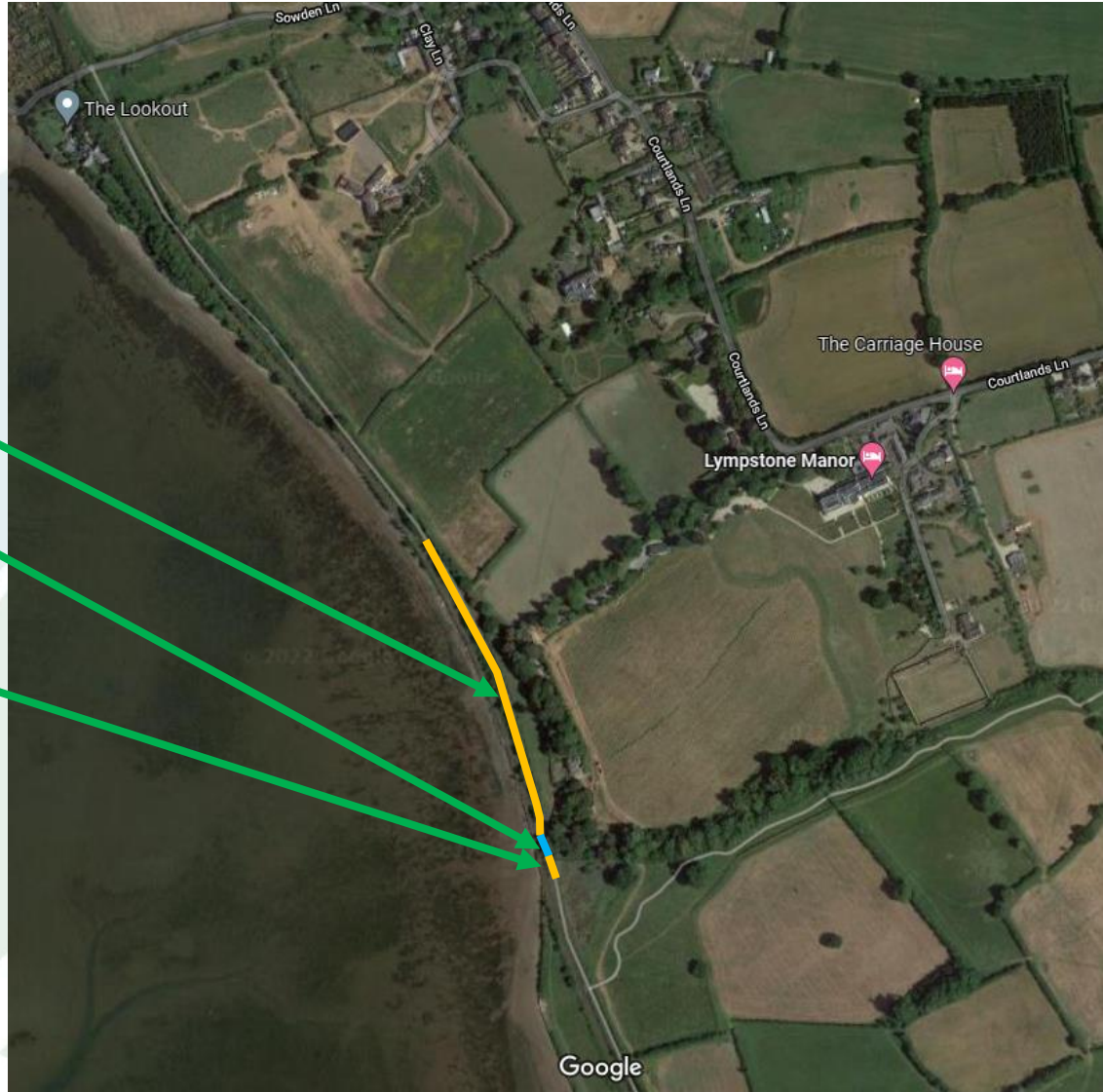
- Between Lympstone and Exmouth
- Built in 2007
- Raised timber boardwalk spanning an area of marshy wetland



Courtlands boardwalk

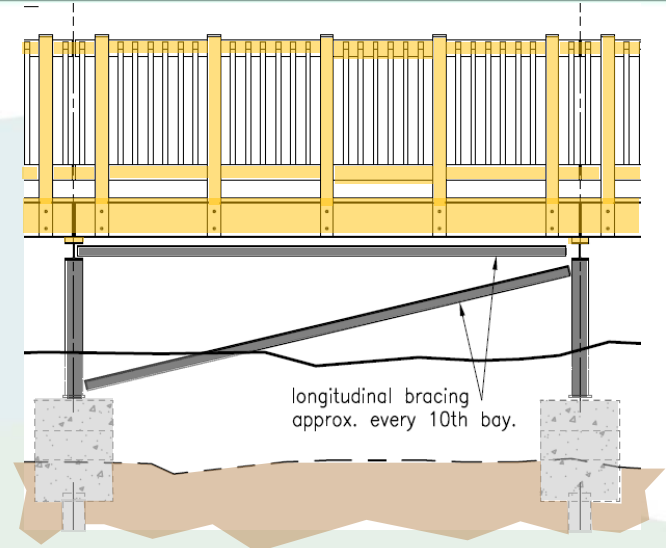
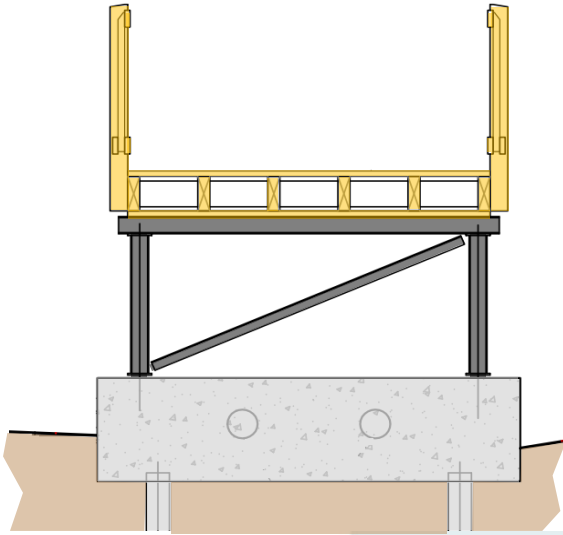
Structure details

- 72 spans in total
- 69 consecutive spans
- Steel bridge structure
- 3 more spans



Courtlands boardwalk

Courtlands boardwalk



Principal inspection May 2019 - Outcome and conclusions

- Touching distance inspection of the whole structure
- Extensive rot / deterioration of the timber superstructure
- Steel trestles in good condition
- Reinforced concrete pile caps in good condition
- Timber parapets mostly in good condition
- Recommendation:
 - Investigate options for repair / replacement of the timber superstructure
 - Regular monitoring inspections and patch repairs in the interim



Options study

- Repair of the timber superstructure – not viable
- Replacement of the timber superstructure
 - Like-for-like timber
 - Fibre-reinforced polymer (FRP)
 - Galvanised steel beams + FRP deck
 - Retain the timber parapets if possible

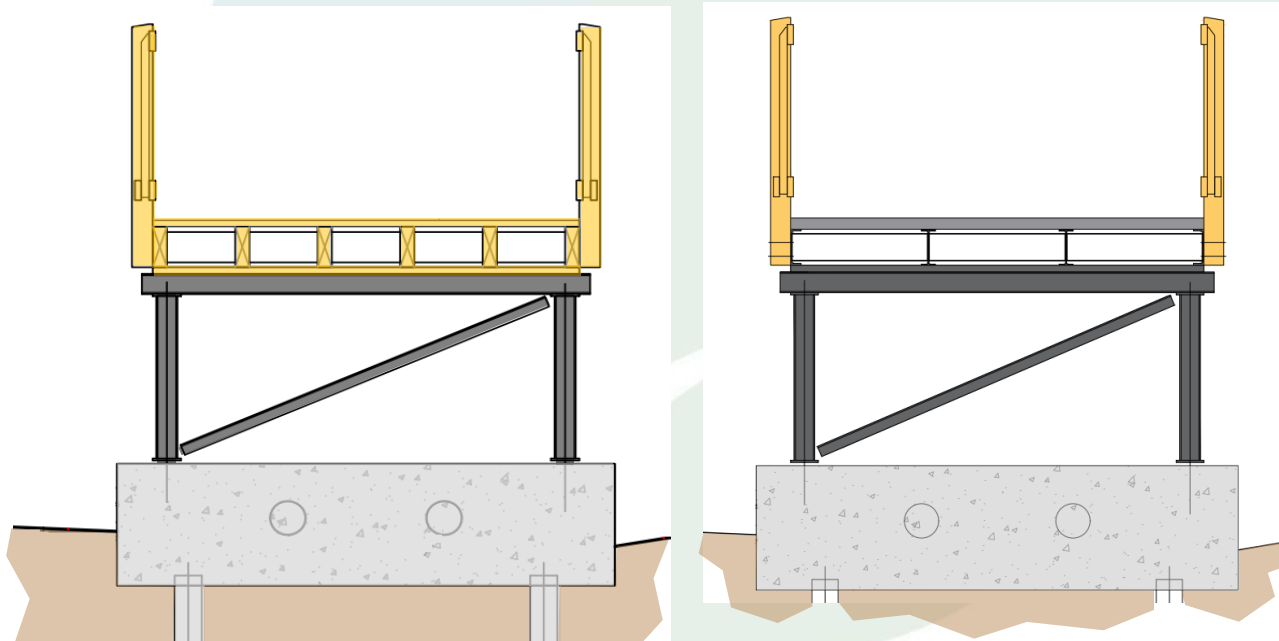
Options study

- Considerations:
 - Capital cost
 - Whole-life cost / maintenance
 - Environmental – impacts on designated sites
 - Durability / design life
 - Buildability / potential project risks (speed of construction / minimising any closure of the trail)
 - Appearance

Courtlands boardwalk

Options study recommendation (not finalised):

- Replacement with steel beams and FRP deck
 - Favourable capital and whole-life cost
 - Very durable / minimal maintenance
 - Spans can be pre-fabricated and lifted in – speed of construction

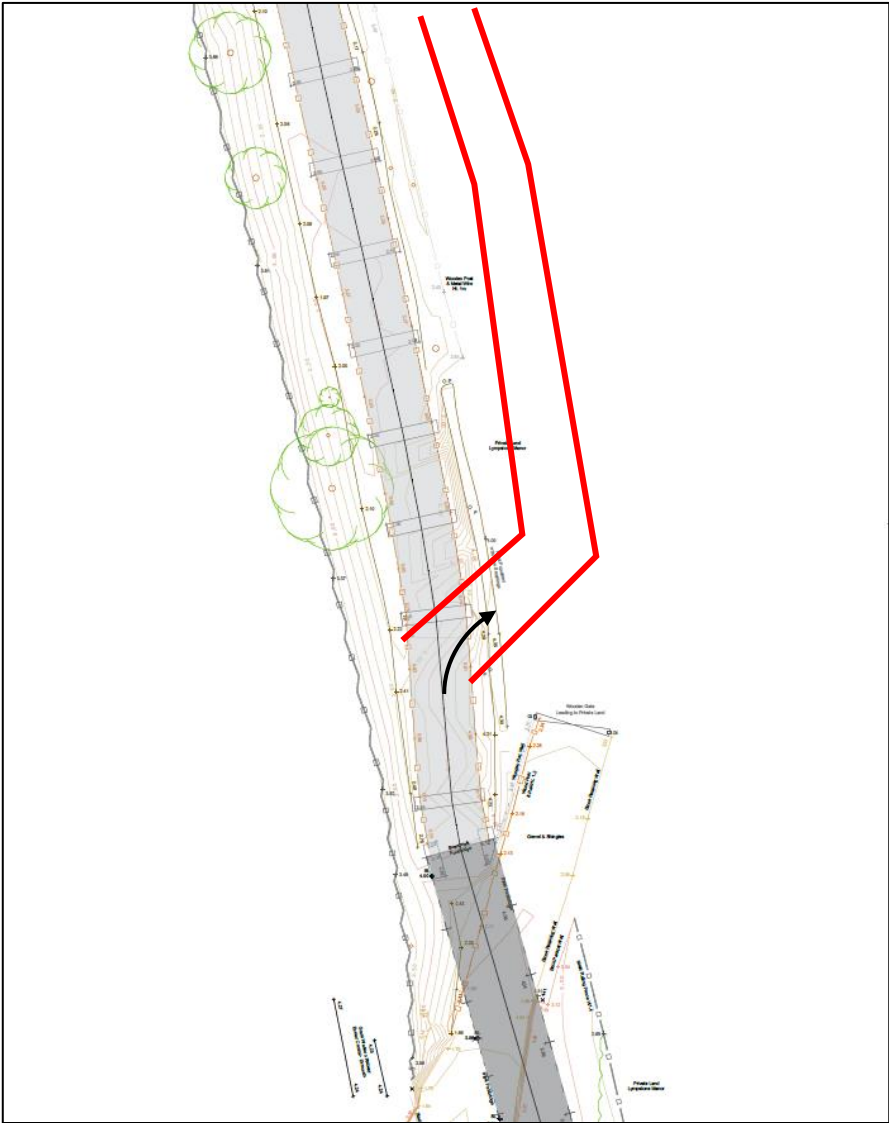


Courtlands boardwalk

Impact of proposed works – potential diversion route

- Considered options to keep the trail open during works:
 - Construct an adjacent temporary structure/walkway?
 - Construct in 2 longitudinal halves?
- Will likely require a closure of the trail

Courtlands boardwalk



Courtlands boardwalk







Impact of proposed works – potential diversion route

- Current programme is to be confirmed
 - Possible construction winter 22/23
 - Depending on discussions regarding ecology
 - Budget considerations
- Likely to be carried out in winter months to avoid the busy summer period
- Duration of works: to be confirmed

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