

B478 Playhatch Road



David Bullock CEng MICE Strategic Manager Asset Management





Introduction

- Background / History
- What has been done
- What is proposed
 - Why?
 - Objective
 - Options & Next steps
 - Funding Opportunities
- Summary





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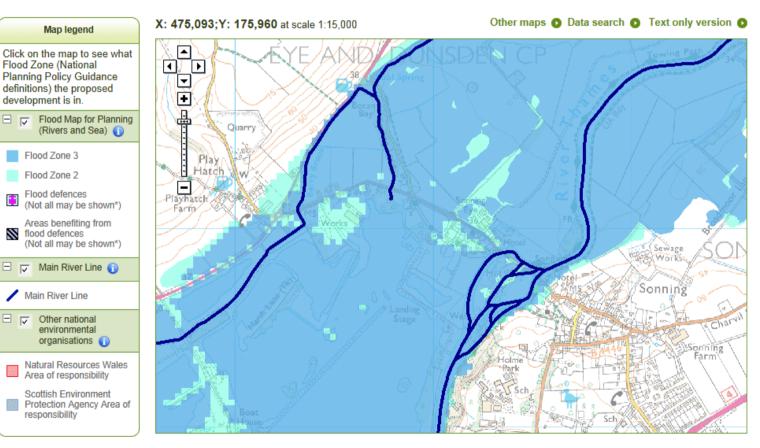


- The road is frequently closed due to flooding and in 2013/14 was closed as a result of severe erosion and scouring to the embankment (single lane 10 months)
- Road is closed due to flooding at 5yr flood events
- Vulnerable to flooding, scour damage and erosion





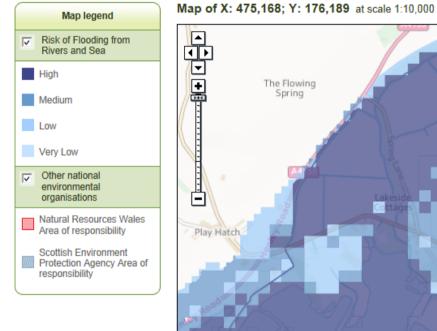
Environment Agency Flood Map: 1 in 100 year flood event

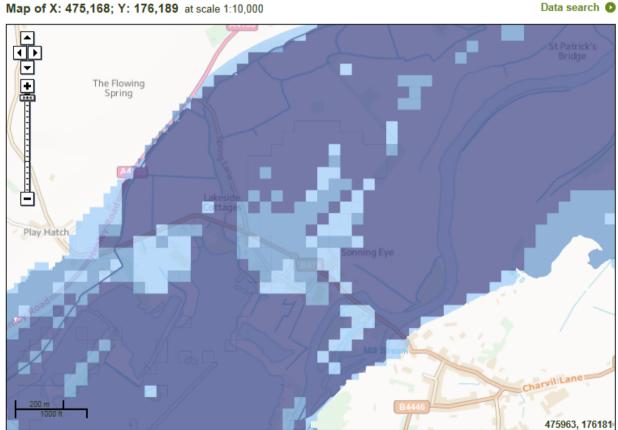






Environment Agency Flood Map: Risk of Flooding









Environment Agency Flood, Risk of Flooding Definition

- **High** greater than to equal to 1 in 30 (3.3%) chance in any given year
- Medium less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year
- Low less than 1 in 100 (1%) but greater than or equal to 1 in 1,000 (0.1%) chance in any given year
- Very Low less than 1 in 1,000 (0.1%) chance in any given year







What has been done

- Site investigation
- Flood modeling



- Localised repairs to defects
- Drainage cleansing/jetting toward Henley Road
- Surface dressing
- Bid to DfT Jan 15







Why?

- Demands for improvement from 13/14
- Improve the resilience of this route
 - Strategic link across the Thames
 - AADT of 13,600 vehicles
- Economic benefits
 - Alternative routes either or 7 miles via Reading, 11 via Henley
 - Key link for employment
- Safety, reduction in risk of accidents
- Lower cost of long-term maintenance





Objective

- Increase the roads structural resilience
- Decrease the frequency with which the road needs to be closed due to flooding
- No increase in flood risk
- Raise the road level to a minimum 20 year flood event (initial flood modelling by Atkins)





Options & Next Steps

- Do minimum left current state
- Option 1 Road level raised to 36.15m (1 in 20 year) 1 culvert positioned at each of 3 low spots
- Option 2 Road level raised to 36.15m 2 culverts positioned at 3 low spots
- Option 3 The same as option 2 but more culverts added at low spots near Frizers Farm These culverts were applied to maintain flow paths for the 1 in 100 year event. They are inactive for the 1 in 5 and 20 year events.
- Option 4 Minimising road raising and increasing the number of flood elevation structures. Approximately 10 to 20 culverts.

Option 1, 2 and 3 are close variants. Option 4 for minimal road raising may result in less impact on flood levels.





Options & Next Steps

- Undertake feasibility and build a business case
 - Economic benefits
 - Liaison with EA, flood modelling
 - Outline design / methodology
 - Environmental impacts
 - Estimated costs
 - Develop bidding document
- Outline proposal April 2016





Funding Opportunities

- OCC Capital Reserves
 - Significant need to be demonstrated
 - Resources very limited, funds other priorities
- DfT Challenge Fund 2017/18
 - Specific for infrastructure projects that increase the life of assets
 - Strong business case and economic benefits
 - Funding up to £20M available
 - Very competitive with bidding from Local Authorities nationwide



Summary

Issues

- Flooding at 5 year events
- High cost of maintenance
- Disruption to local / commuting traffic

Actions

- Undertake feasibility
- Scheme min 20 year event
- Agreement with EA
- Determine economic benefits
- Develop business case for funding







Your Questions

- Why OCC deem this is necessary?
- How much of their limited funds they will be investing in this project?
- Then can somebody please conjoin that position to the increasing and unmitigated risk that adjacent extraction is raising.

Thank you

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