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North Tyneside
**Surface Water and
Drainage Partnership**



Investing to Reduce the Risk of Flooding

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Main Themes

- Prioritisation of projects
- Partnership working
- Work undertaken in North Tyneside
- Challenges and things that have worked



Background

- Numerous major flooding events since late 1990s
- National recognition of the problem in 2005
- Pitt report 2007
- Flood and Water Management Act 2010
- Council's response mainly reactive



NORTH TYNESIDE AREAS IN WHICH INTERNAL FLOODING OCCURRED ON JUNE 28th 2012

based on Northumbrian Water data



Legend

- Areas reported by Northumbrian Water as Flooded
- North Tyneside Boundary
- M Metro Line and Metro Station
- A Road or Motorway

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A More Proactive Approach

Task and finish group established by Elected Mayor autumn 2012 resulted in:

- £4.75m capital funding allocated
- Development of Flood Risk Management Strategy and a 4 year programme of associated flood risk reduction work
- Increased partnership working
- Establishment of a formal governance structure
- Communication and engagement plan
- Improved emergency response



Works Prioritisation



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Works Prioritisation

1. Impact – Who/What is affected

Residential **5 Points** Business **3 Points** Infrastructure **1 Point**

2. Frequency

Number of occasions multiplied by number of properties = **x points**

3. Deliverability

- Easy – relatively straightforward engineering solution, funding in place, minimal land or 3rd party constraints ie Council owned land or infrastructure, utility services not affected etc. **5 points**
- Medium – more challenging engineering solution, 3rd party land owner etc **3 points**
- Difficult – complex and time consuming design, multiple 3rd party land owners etc **1 point**

4. Cost Benefit Ratio

This is an intuitive assessment of the cost to benefit ratio of the scheme. For example, a scheme costing £25K which protects 20 houses would score higher than a scheme costing £100K protecting 5 houses.

Other factors taken into account – obvious social, economic, environmental factors, efficiency savings, added value

- High CBR **5 points** Medium CBR **3 points** Low CBR **1 point**



Works Prioritisation (continued)

- Evaluation and scoring exercise identified :
 - 21 sites for flood risk reduction schemes ranked in order of priority
 - 5 studies
 - Numerous quick win schemes
 - 180 further schemes
- “Filler” schemes ensure no gaps in programme
- Work summarised in an implementation plan document

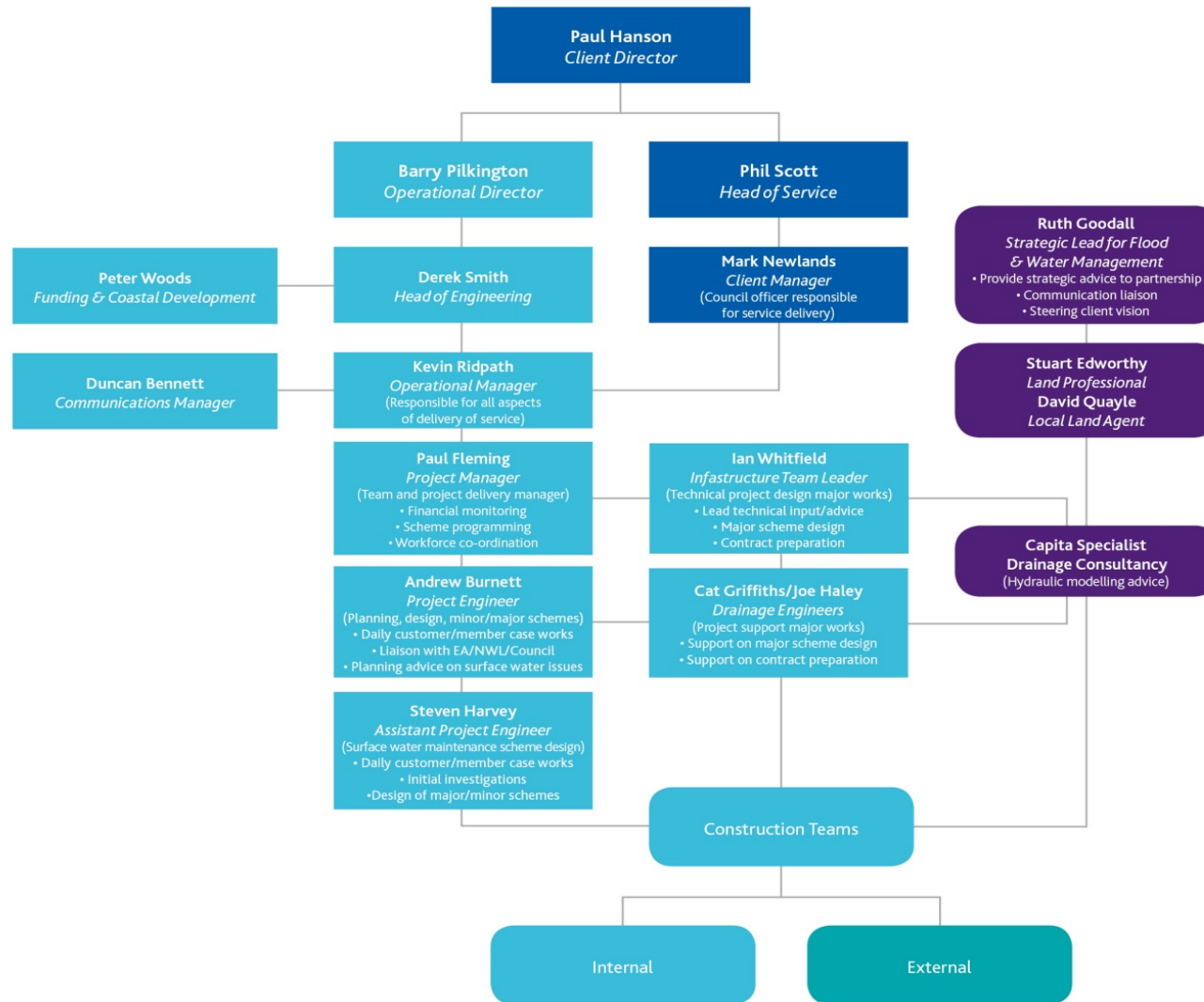


Resources

- Technical Service Partnership established November 2012
- Ability to develop and grow surface water team giving following advantages:
 - In-house team
 - Local knowledge
 - Access to specialist skills and resources
 - Ability to deal with peaks and troughs
- But we still have to pay for it!



Delivery Team

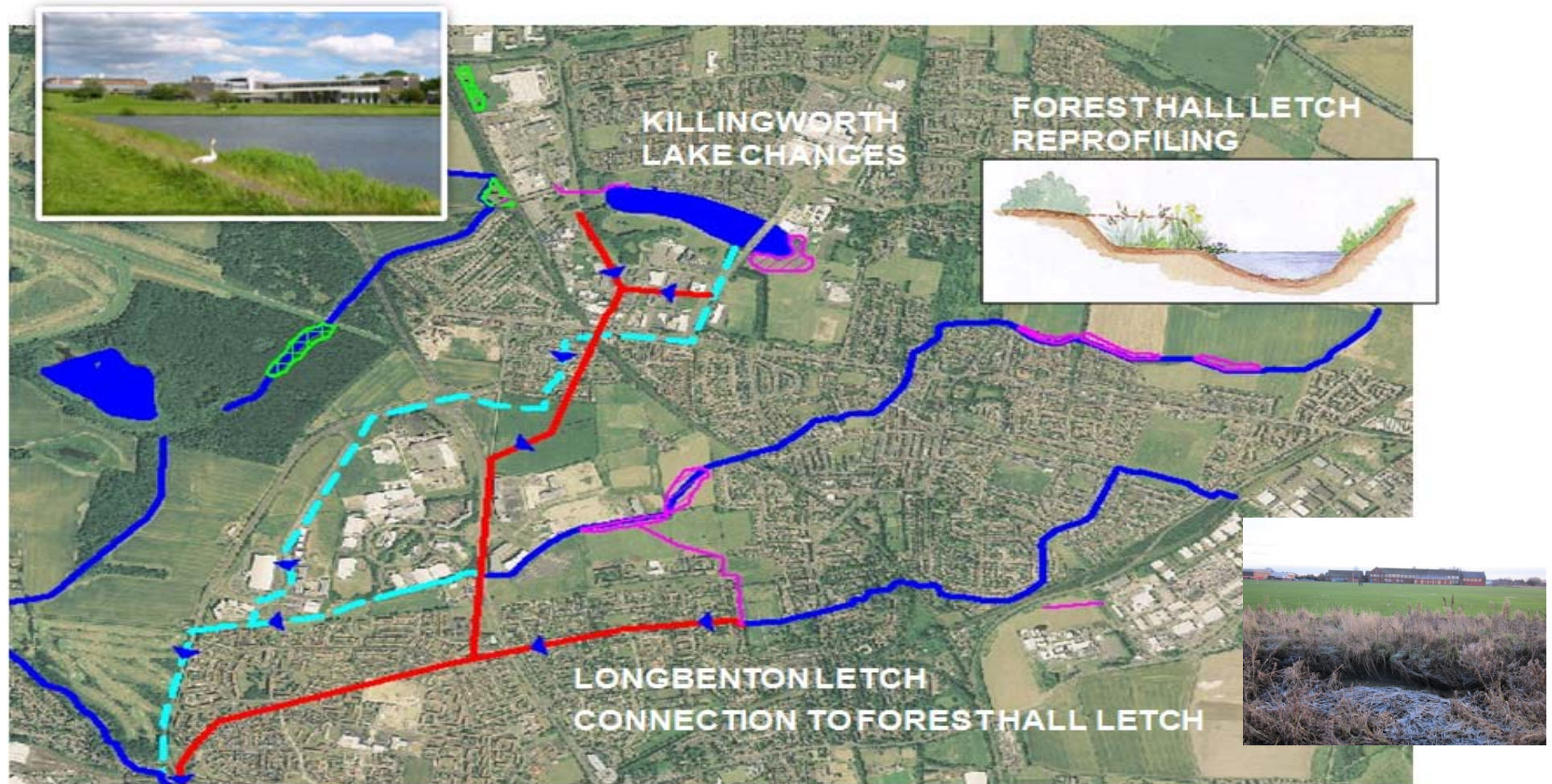


Partnership Working

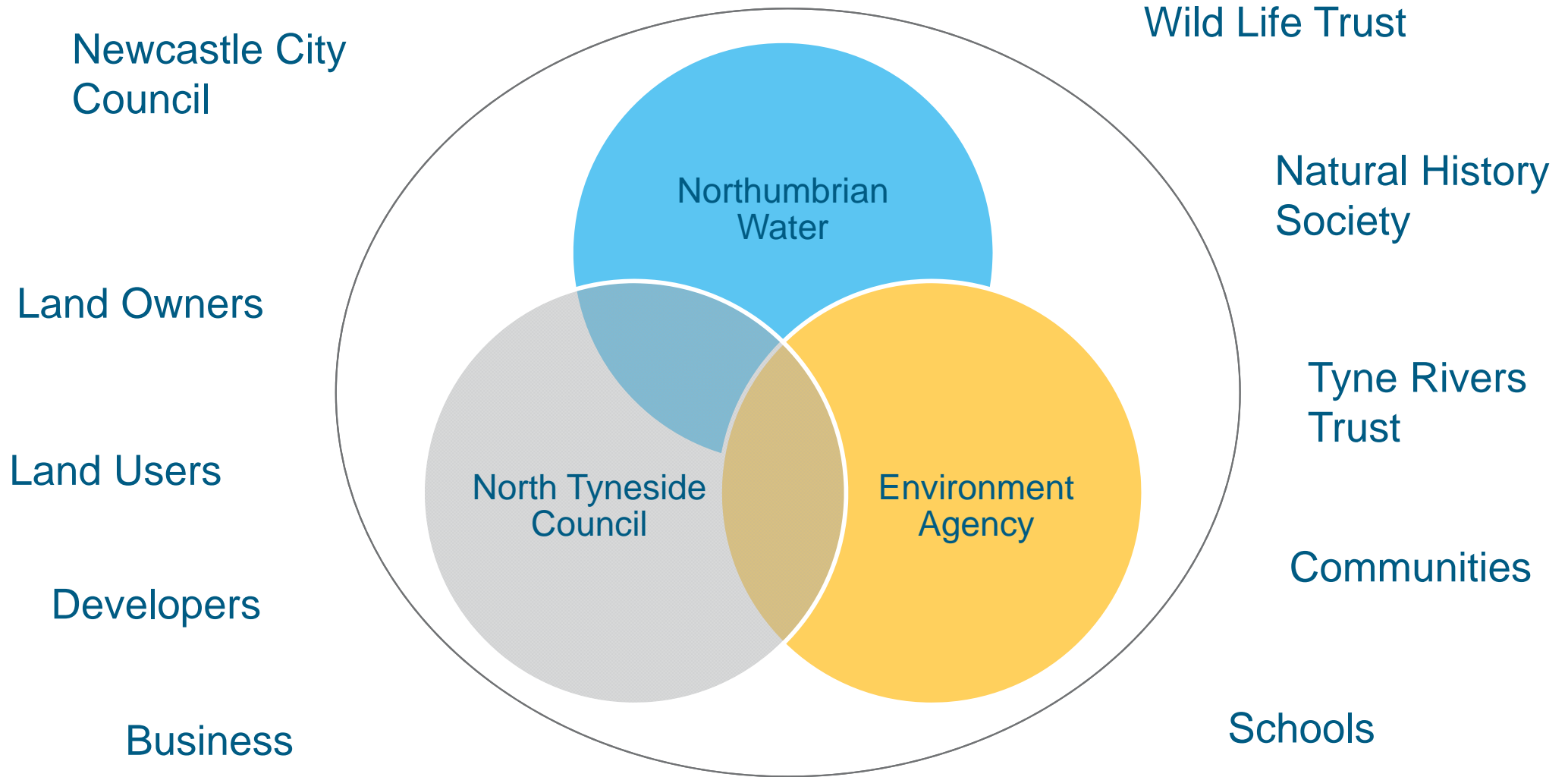
- Council's main partners:
 - Northumbrian Water Ltd
 - Environment Agency
 - Nexus
 - Other council service areas eg Housing Dept, Schools
 - Emergency Services
- Regular contact and good relationships



Partnership Working Case Study : Killingworth & Longbenton Sustainable Sewerage Project



One Team



Governance

- North Tyneside Surface Water & Drainage Partnership established March 2013
- Brings together all partners and stakeholders
- Chaired by lead cabinet member
- Director level attendance
- Directs and influences work
- Exchange of ideas and good practice
- Brand / identity :



Examples of Work Undertaken in North Tyneside



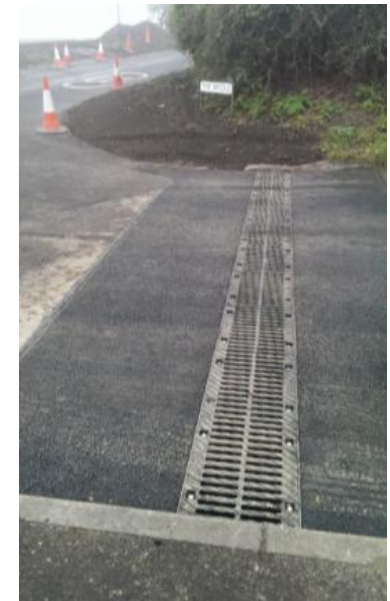
Dudley



Murton Village

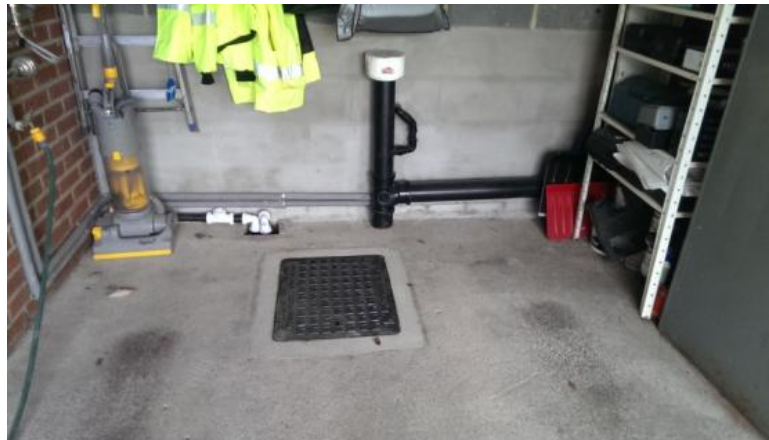
Phase 1 – Drainage Improvements

- Improved drainage of highway
- Increased storage capacity of ditch
- Vehicle speeds reduced with new road hump



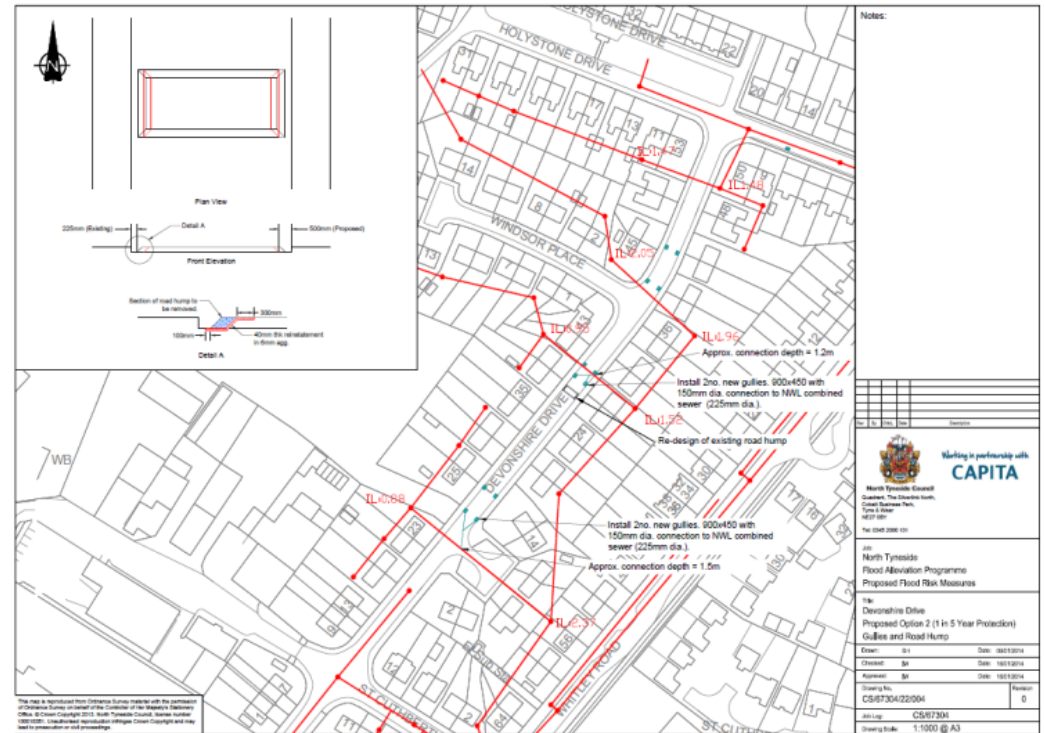
Murton Village

Property Level Protection (PLP)



Devonshire Drive

- New gullies to capture surface water
- Road hump width altered to re-establish channel



Woodburn Drive

- Gabion basket filter drain with connection to culvert
- Earth mound installed to retain surface water within bridleway and channel it towards the filter drain



Communication & Engagement

- Communication and Engagement Plan includes
 - Scheme specific engagement events
 - Quarterly update newsletter
 - Regular articles in council resident magazine
 - Dedicated pages on council's web site
 - Community flood wardens initiative
 - Branding / identity:



Emergency Response

- New Operational Flood Action Plan introduced in 2013
- 32 known flooding hotspots prioritised
- Resources tailored to each site and stored ready for quick deployment
- Deployment plan for each site
- New radio system fitted to vehicles
- Mock exercises undertaken



Challenges

- Resources
- Managing expectations
- Design complexity
- Third party land
- Co-ordination of work with partners
- Obtaining grant funding
- Capacity (construction)
- Maintaining interest / momentum



Things that have worked / went well

- Effective Leadership (buy-in)
- Financial Investment
- Capita partnership (in-house resource, no procurement chain)
- Partnership working
- Formal governance structure
- Investment in land expertise
- Strong communication plan
- Community flood wardens



Thank you

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