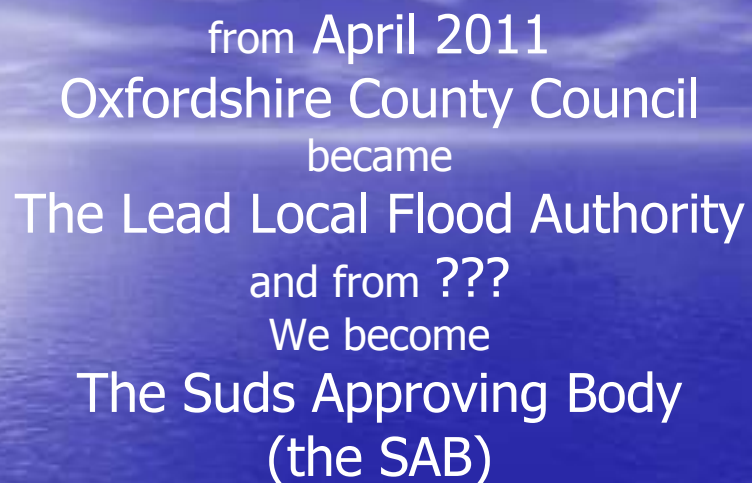Delivering SuDS. in
Oxfordshire

GORDON HUNT
COUNTY DRAINAGE ENGINEER

from April 2011
Oxfordshire County Council
became
The Lead Local Flood Authority
and from ???
We become
The Suds Approving Body
(the SAB)

But in the Meantime
Oxfordshire leads by example on its own Developments

- All County Council Developments will have a SUDs element.

- I have found generally we can get some type of SUDs in.

- But as with any development you have to be realistic.

At present:-

- In Oxfordshire our Legal team have concerns that adopting any non-highway suds will put liabilities on the County Council.
- Therefore they do not want to enter into legal agreements (Section 106 or 38) stating that Oxfordshire will adopt non - highway SUDs.
- We do add that when we become The SAB we have the option of taking on non highway SuDs with the unused agreed maintenance money.

This does not help when dealing with Developers:-

- When using SuDs on a Development we need to deal with the site as a whole.

- Which means that non Highway SuDs drain into Highway SuDs and vice versa and then drain to outfalls.

- We need to look at the whole picture and decide what is best for the site.

At present we work closely with Oxfordshire's District Councils promoting:-

- SuDS on all Developments
- We check and approve the Design of the SuDS at no cost to the Developer, but this will change when we are the SAB
- Check their Construction (watching brief - Section 38)
- Adopt and Maintain Highway SuDs to the required Standards using OCC standards until the National Standards arrive)
- Insist on a financed Management Company to maintain non-highway SuDs. We use our spreadsheet to cost the maintenance
- If the development is spread over several years the maintenance sum can also be deposited in proportion.

The Suds Procedure at present:-

- At the present time we see all major planning applications via the Single Response
- This will change when we become the SAB to using the APAS system with a new SuDs module
- This system will be more efficient and will allow us to consult with other bodies more easily and link to our GIS system and the Councils Web site

Design and Maintenance of SuDS to New National Standards
To be Issued in 2015?

- Until that time OCC have produced some basic SuDs standards, which are based on the CIRIA standards and good practice learnt over the years.

- We issue these to Developers and Consultants to get consistency across the County.

Types of SuDs used at present

- We look to and will always encourage new ideas drainage design – soft and hard SuDs

Types of Swales and outfalls

Check Dams in Swales – we have used local stone, but it was a bit soft, but it works fine.

Swales, Check dams and Crossings

Discharges and Swales

Types of Ponds

Ponds and Swales

- Use Detention ponds with wet areas for biodiversity – easier and cheaper to maintain.
- Have easy access to ponds from one side – this allows more planting for trees etc.
- Don't let the swales be too deep – the shallower they are the easier to maintain.
- Also crossings can be laid through the swale rather than having small piped sections.
- Have compost areas set aside on the developments to take the waste material.

Porous Pavement Sites

Porous Paving and Central reserve Drains
Over the edge drainage works well

Porous Pavements – Maintenance

- Make sure that the pavement is not laid in a rush because the blocks can move over sewer trenches.
- Try not to let Contractors cut blocks rather than move man hole frames to match the patterns
- If laid properly – the following will work fine

- Suction sweeping – twice a year
- Weed killing every 2 years

Effective Sites