







Drivers

- OCC decided following the passing of the FWMA to implement a lot of the clauses
- This has allowed teams to be set up that understand what is required and it has helped iron out any bugs pre Section 3 of Act coming into place.
- Planners must learn to understand what SUDS means to them and how it effects the layout of all schemes
- We in Oxfordshire have always worked with the local Planning Authorities, and set up working groups to deal with medium and large sites.
- These groups have the typical membership of Planners, Developer, Highways, Drainage, Master Planners ,Landscape Architects Rights Of Way officers etc
- Other stakeholders attend as and when required or are included in minutes .

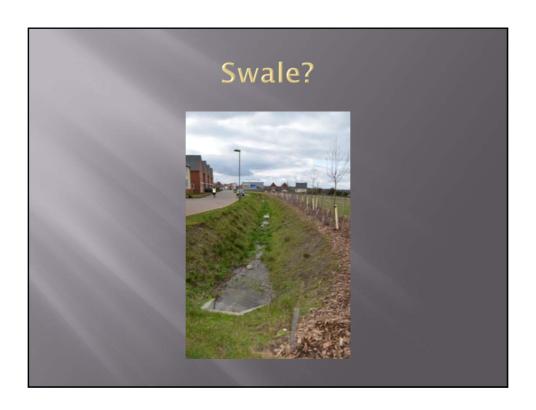
Design Ctitera

- All schemes are design to cope with standard rainfall plus climate change requirement
- Runoff to watercourses/sewers is kept to green field runoff or below
- All schemes in Oxfordshire are required to be design using SUDS, and when working with the Planners on the Design Teams SUDS requirements are set out in the Design Code or Framework Document for the Development. All SUDS types are acceptable
- Their is a lot interaction between the Developers Consulting Engineers and the OCC Drainage Team, but it is all referred back to the Design Team, so that any requirements (land take, visual appearance can be agreed with all stakeholders).
- This way the drainage network can evolve.
- This technique is followed with development parcels, so the detail house drainage can fit in to the master drainage design
- Challengers always arise but going back first principles and lateral thinking can over come problems

Adoption

- As the master drainage scheme is being worked up, then decisions can be made as what can be adopted under 1980s Highways Act, as part of the S38 Agreement or S278 Agreement.
- Any SUDS feature that falls within the highway envelope is adopted in Oxfordshire as part of the S38 Agreement. Typically swales filter trenches, small ponds, cascades, water gardens, rills etc.
- Other features that fall out side the highway are shown on a drawing and the cost and commuted sum are agreed with the developer and this is written into the \$106
 Agreement.
- This not as bad as it sounds the Developer constructs the feature and a large amount
 of the construction Bond is returned to him as normal. The Developer is offered the
 choice on the maintenance of features
- Let the Drainage Authority carry out the future maintenance
- Or carry the work out himself or via a maintenance company
- If electing to carry the work himself then each year he can draw down on the commuted sum held by the Drainage Authority

Lesson 1 Consultants both for the drainage master plan and for the development parcels must be fully aware of what they are trying to achieve



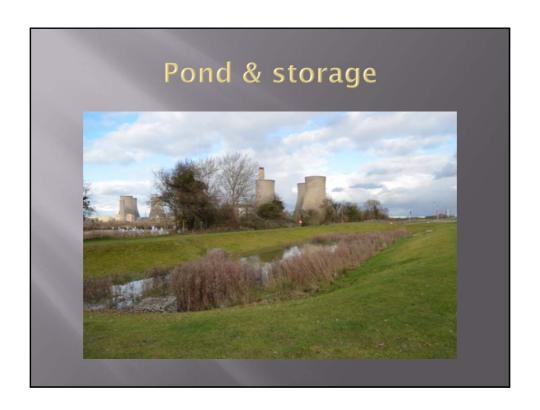






















Disciplines/organisation working together

- Most disciplines and organisation are working together but it must be impressed on all parties that they must see there what we are all trying to achieve, in this case high quality SUDS that helps prevent flooding both on the development and down stream.
- There is also the European Water Directive which requires us to improve water quality
- Also lifting the quality of the development water within the development will help achieve this
- Oxfordshire are already practicing the requirement of the FWMA