

ANGUS COUNCIL

**INFRASTRUCTRE SERVICES COMMITTEE – 13 OCTOBER 2009
DEVELOPMENT STANDARDS COMMITTEE – 20 OCTOBER 2009**

**SUSTAINABLE URBAN DRAINAGE SYSTEMS
AND
SEWERS FOR SCOTLAND**

REPORT BY THE DIRECTOR OF INFRASTRUCTURE SERVICES

ABSTRACT

This report updates the committee on the publication of Sewers for Scotland which embodies revision by Scottish Water to their own adoption policies and advises the committee of the implications for the Council's road adoption policies.

1 RECOMMENDATIONS

1.1 It is recommended that both the Infrastructure Services committee and the Development Standards committee:

- (i) note the publication of Sewers for Scotland 2nd Edition (SfS2) and the emerging implications for the council's policies for adoption of roads, drainage, development control and flood management and the possible financial implications.
- (ii) note the proposed introduction of Section 7 Agreements under the Sewerage (Scotland) Act 1968 regarding arrangements between Scottish Water and Local Authorities to utilise the others drainage systems and remit the Head of Roads to liaise with other local authorities and Scottish Water with a view to proposing a Section 7 agreement for the future consideration of this committee.
- (iii) note the requirements for Drainage Assessments for future planning applications where such assessments are justified;
- (iv) agree the adoption of the document "SUDS for Roads – A Design Guide" as deemed appropriate by the Head of Roads for future development sites.

It is further recommended that the Infrastructure Services committee:

- (v) extends the remit given by the recent Strategic Policy Committee to allow the Head of Roads and the Head of Planning & Transport to consider these implications in tandem with their consideration of the implications arising from the imminent planning policy "Designing Streets" and to bring forward a report on integrated policies to a future meeting of the committees;
- (vi) remits the Head of Roads to continue discussions with Scottish Water on their position regarding their adoption or otherwise of drainage already installed on "Legacy Sites".

2 BACKGROUND

- 2.1 Traditional drainage of development sites is of three types, foul sewage; curtilage run off from roof tops/hard areas/drives; and road drainage. The latter two types, since the introduction of sustainable urban drainage systems, are often combined into a single drainage system taking run off from precipitation and are the focus of this report. Combined systems are often more efficient and reduce construction costs compared to systems dealing with each type separately and traditionally roads drainage has been combined with sewerage systems.
- 2.2 With increasing urbanisation, drainage became a major issue with rain water run off feeding into watercourses or existing culverts, both of which have a limited capacity before they overflow and cause flooding of the urban area. Therefore development designs had to take into account downstream flooding and Sustainable Urban Drainage Systems (SUDS) were developed. The main purpose of a SUDS scheme is to maintain the water flow characteristics of the undeveloped site by either using infiltration of water into the natural ground water or slowing down any run off from hard areas by attenuation, commonly in swales, ponds or underground storage so as not to overload the downstream drainage at times of peak runoff. In this way the water characteristics from the site should be unchanged and therefore not burden any downstream drainage/watercourse.
- 2.3 For over 10 years SUDS have become best adopted practice and many urban developments have included SUDS where appropriate. Their use is now a legal requirement under Water Environment and Water Services (Scotland) Act 2003, (WEWS) and are encapsulated within the development planning process and in Scottish Environmental Protection Agency's (SEPA) regulatory regimes. Good practice for the design and construction and maintenance of these systems has been developed (Construction Industry Research and Information Association (CIRIA) manual) along with Planning Guidance (SPP7). The council's interest in SUDS is as roads authority, flood prevention authority and planning authority. The council seeks to ensure developments do not create flooding in other areas and that the road is adequately drained.
- 2.4 Scottish Water (SW) is responsible for the adoption of sewers under the Sewerage (Scotland) Act 1968. A SUDS taking curtilage water and road drainage is defined as a sewer when it is vested in SW (under WEWS)
- 2.5 The legal position as to who would 'adopt' SUDS and be responsible for their future maintenance has never been fully determined to date although there has been a national understanding that SW would adopt any part of the systems underground (namely pipes, soak away chambers, buried attenuation chambers) and the council would adopt any ground level parts (swales, retention ponds etc). This understanding has allowed developments to progress over the last decade with SW and local authorities approving designs on this basis albeit without agreeing to formally adopt the systems (the so called "legacy schemes").
- 2.6 Report Number 527/07 to Infrastructure Services Committee on 14 June 2007 detailed the consultation by the Scottish Executive and Scottish Water on Sewers for Scotland Edition 2 - Technical Manual For Standards For Sewers And Suds. The Committee remitted the Head of Roads to submit a response to that consultation.
- 2.7 The final version of Sewers for Scotland 2nd Edition (SfS2) was subsequently published and many of the consultation responses were not reflected in the final document and certain components of SUDS have been precluded, in particular the components which normally serve to drain the grounds of properties in combination with adjacent roads.
- 2.8 In subsequent discussions regarding actual development sites it has become apparent that SW are no longer prepared to approve certain combined surface water SUDS and have reversed their previous position of accepting underground components to now only accepting above ground (detention ponds or basins; some detention manholes) SUDS components.

- 2.9 There is an expectation by SW and developers that other combined components of the drainage will be adopted by the council, or be left to be privately maintained.
- 2.10 Privately maintained drainage systems (even when carrying only curtilage water) are often problematic, due to the risk of lack of maintenance by the private parties. Indeed in the passing of time it sometimes becomes unclear where such maintenance responsibility lies. Subsequently the council are often contacted to resolve the issue through Building Standards, Roads Division or Elected Member involvement. Given the council's role in flood prevention, privately maintained systems may be unsuitable and unsustainable.
- 2.11 In the past councils, as Road Authorities, have contended that they could not adopt systems, which carry curtilage water, as this is legally SW's responsibility. SW propose to overcome the apparent legal constraints by entering into agreements under Section 7 of the Sewerage (Scotland) Act 1968 to formalise arrangements with councils whereby SUDS conveying surface water from curtilages and road drainage can be the responsibility of the Roads Authority.
- 2.12 These arrangements could lead to additional financial burden and greater exposure to regulatory risk for the council.
- 2.13 There are also issues to be resolved about maintenance liabilities for the "legacy" sites constructed over the past years which had been built in good faith by developers but which do not comply with Sfs2.

3 DETAILS

- 3.1 The introduction of Sfs2 has fundamental implications for Local Authorities when discharging their various statutory duties under the Planning Acts, the Roads (Scotland) Act and the Flood Prevention Acts in particular how surface water is dealt with. The exclusion of underground components of SUDS for adoption by SW; the risks and costs of adopting underground SUDS by the council; the proposals to introduce Section 7 Agreements; and the risk of using private systems, give rise to fundamental concerns for future burdens on the council.
- 3.2 SW's stance in Sfs2 has contradicted the previous approach to SUDS over the last 10 years. SW's position is limiting the costs and responsibilities that fall to their organisation. Councils have benefited from the previous arrangements that piped systems carrying curtilage and road water were maintained by SW (and indeed will remain so), which was in part reconciled by curtilage from properties being able to overflow in periods of heavy rain into road drainage.
- 3.3 The implications of the changes of Sfs2 and Section 7 agreements are complex and still emerging. A detailed discussion paper has been prepared by the Head of Roads, which has been made available in the Members Lounge for information. The primary policy considerations are in respect of duties under various statutes: -
- In term of duties as the Planning Authority, developers are required by the various regulatory regimes to apply SUDS to deal with the surface water generated by and associated with their developments. Both the quality of the water and the quantity being discharged from the site is regulated. Constraints relating to flooding within and without the development site are also imposed in planning guidance.
 - In terms of duties as the Road Authority, the Road Construction Consent process regulates the design of the road drainage, and how it's connected to any subsequent system and subsequently who is responsible for its maintenance.
 - In terms of flood management duties SUDS are an important tool; firstly by reducing the peak of flows through attenuation and secondly offering storage capacity for water during extreme storm events. Both of these reduce the likelihood of flooding in the wider area.

- 3.4 The council needs to consider its stance on the type of SUDS that will be acceptable in the future and the maintenance of such systems. If SW stance is to leave the maintenance of systems to private or council control, then the following should be considered:
- There is a foreseeable risk that systems may fall between authorities in terms of their design or construction supervision as currently the assessment/inspection of such systems does not fall to SW or the council in terms of Building Standards or Roads Standards. Consequentially such systems may not be adequately designed or constructed for the council's role in flood prevention or roads drainage;
 - There is a foreseeable risk that even adequately designed/constructed "private" systems may not be adequately maintained. For private systems the maintenance will fall to either the developer; some form of management company; or the subsequent owners of the development properties. Given the possibilities of companies either not undertaking their responsibilities or not existing in the long term, there is a risk that the system may not be properly maintained. Similarly residents/owner/occupiers may not carry out the maintenance requirements, particularly when property changes ownership in the future or when only a small proportion of the properties are affected by the lack of maintenance. This scenario is comparable with the issues surrounding unadopted roads although likely to give rise to more acute or urgent issues;
 - There is a foreseeable risk that if the council's roads drainage feeds into "private" systems that any design, construction or maintenance problem may lead to the council failing in its duty to maintain the road network or having to resolve the problem in the private system. Alternatively the council may wish to consider not adopting the road in such circumstances but noting that this will exacerbate the existing issues surrounding unadopted roads and their future maintenance.
- 3.5 As a consequence of the above it is foreseeable that the council may well be called upon in the future, particularly given the widening role in flood prevention, to resolve any problems arising from "private" systems and therefore it is considered more prudent for the council to be involved in the development proposals at conception and in the longer term to ensure their maintenance. Therefore there is a need to give early consideration to developing design standards, construction specifications and maintenance requirements akin to SfS2/Roads Standards.
- 3.6 If this position emerges as the positive way forward then the council will be faced with a new financial burden for the input into the design, construction and maintenance of these drainage systems. This new burden can be viewed in a similar way to public open space whereby a commuted sum is sought to offset the costs of future maintenance and this option is currently being explored in liaison with officers from Law and Administration.
- 3.7 The majority of schemes, which go through the Road Construction Consent /Planning process, result in systems which do not terminate in a SW device but frequently discharge to a watercourse. In these case if the council adopts the combined SUDS then there will be additional costs and be the first in line to deal with failures of not only the adopted system but also individual curtilage systems or associated private SUDS which discharge through the adopted SUDS. There is a risk that the council may be exposed to taking responsibility for the water quality aspects, with SEPA taking action against the council for a pollution incident which initiates within a private property curtilage.
- 3.8 SfS2 reactivates previous debates and generates some new issues. These issues require changes to the current policies for adoption of roads and to the associated road standards as discussed below.

3.9 Section 7 Agreements under Sewerage (Scotland) Act 1968

- 3.9.1 The first policy issue is the proposal by SW to activate agreements allowed under Section 7 of the Sewerage (Scotland Act) 1968, whereby SW can enter into an agreement with a Roads Authority as to the provision, management, maintenance or use of their sewers or drains for the conveyance of water from the surface of a road or surface water from premises. Until now this allowance has not been utilised in the arrangements for road drainage. However SW now contend that Section 7 may be used to facilitate agreements which will overcome the legal issues concerning conveyance of combined curtilage flows (for which they are legally responsible) through road drainage systems.
- 3.9.2 SW has engaged with the Society of Chief Officers for Transportation in Scotland (SCOTS) to derive a national template for Section 7 Agreements, which could be a model agreement for discussion with individual Roads Authorities noting that SCOTS have no authority to commit individual Roads Authorities to the agreement. Officers from the Roads Division have input into this process advising that specific local variation and criteria in respect of a council's complimentary duties under other statutory instruments such as Road Construction Consent, Planning Permission and flood management, which will impact on the issues considered in the Section 7 Agreement, must be included. The current draft of the national template has been placed in the Member's lounge along with the previously mentioned discussion paper (para 3.3).
- 3.9.3 SW proposes that such agreements will be applied on an overarching basis with associated schedules dealing with case by case specific details. The area wide agreement will be a fixed term agreement with SW for no more than a five year period with a review at this time. This would allow all local authorities to assess the impact of the agreement on their respective interests.
- 3.9.4 Roads Division officers have a number of concerns about Section 7 Agreements in respect of the questions raised by the introduction of SfS2 and the additional maintenance burdens, which will or could be placed on the council. There is also concerns that the council may become embroiled in regulatory debates about who is to take "remedial actions" and who will face legal sanctions should systems fail.
- 3.9.5 SW has approached each authority individually to now take these matters forward.
- 3.9.6 Such agreements will apply only to new developments and not retrospectively to existing systems irrespective of whether these systems have been adopted. In particular legacy sites, which have been "orphaned" by SfS2 will be excluded.

3.10 Adoption Policies – Roads and Drainage

- 3.10.1 In granting Road Construction Consent the council currently controls the design and monitors the construction of new roads which are to be adopted. Smaller access roads (to five houses or less) are not currently adopted. In such cases the drainage is also not adopted.
- 3.10.2 Members will be aware of the remit to the Head of Roads and the Head of Planning and Transportation to review the standards in respect of the emerging planning guidance "Designing Streets" as detailed in Report 253/09 presented to Strategic Policy Committee on 17 March 2009. This review may re-examine the types/layout of streets which may formally be adopted by the council.
- 3.10.3 It is recommended that in light of the emerging situation regarding the adoption of drainage then this should also be taken into account in the review, noting the concerns of "private" drainage systems given in paragraph 3.4. It is recommended that this remit is extended to encompass the review of drainage standards and the specifications for road surfaces. In the meantime it is also recommended that the CIRIA 2nd Edition guidance continue to be used as the basic reference document for the design of SUDS in tandem with SfS2 where appropriate.

- 3.10.4 One of the requirements of SfS2 and an existing requirement of SEPA in their document "Drainage Assessment – A Guide for Scotland" requires developers to provide a drainage assessment with their planning applications. It is recommended that this requirement is applied to all future planning applications, as appropriate giving consideration to the site specific requirements.
- 3.10.5 Planning Applications currently being processed will need to be dealt with on an individual basis.
- 3.10.6 There is a need for a comprehensive suite of detailed design, construction and maintenance standards to be developed for the more sophisticated SUDS needed for contemporary roads. This has been recognised and a joint commission has been let by Transport Scotland, SCOTS, SEPA and SW to bring forward modernised standards which can be applied throughout Scotland. The commission has resulted in the drafting of a guidance entitled "SUDS for Roads – A Design Guide" which was published on 1 September 2009. It is recommended that this document is adopted by the council and thereafter become a condition of future planning applications, as deemed appropriate by the Head of Roads.

3.11 **Adoption Policies – Public Open Space**

- 3.11.1 Adoption by the council of public open space which includes above ground drainage may also become an issue with the implementation of SfS2. SW has indicated it will not maintain any additional areas associated with ponds and basins, which have been extended to provide storage in respect of flood management as part of an area wide SUDS system. Such ponds and basins are invariably within public open space and failure to maintain the open space as operational SUDS could result in liabilities for flooding of adjacent properties for which the council could be held responsible. This unilateral stance by SW does not seem equitable given that where such devices are installed the roads drainage system will be used to convey curtilage water to the area devices. Also the division of responsibility for maintaining these devices seems to be challenging to achieve in practice and this will lead to debates about which party is responsible.
- 3.11.2 SW has also restricted these components of SUDS to passive open space and not active spaces such as football pitches or play areas. Thus it will be difficult to fit the devices in small to medium size schemes.
- 3.11.3 Another component of flood management which impacts on the maintenance of public open space is flood routes. Flood routes are the predicted/designed route for excess water to run from other areas to areas designated to be flooded in design flood situations. Recent experience has shown that these routes may need additional maintenance above that applied to the surrounding open space. Experience has also shown that it is necessary to demarcate these routes to ensure they operate as intended and are not cut or blocked off in any way. The marking of the as built flood routes is a new requirement and can be effected through a new condition on the developer.
- 3.11.4 To overcome these issues there will need to be detailed dialogue with developers and SW prior to approval of planning applications where open space is involved.

3.12 **Adoption Policies – Legacy Sites**

- 3.12.1 "Legacy Sites" is the term given to sites incorporating SUDS previously constructed which had been built in good faith by developers within the framework thought to have been in place to allow developments to proceed, but where the drainage systems do not comply with the recently published SfS2. As discussed above SW have stalled on the adoption of these drainage systems over the past 10 years.

3.12.2 A preliminary examination of developments over this period has identified 15 known sites in Angus where SUDS have been used. To date SW are continuing to stand by the previous arrangements and accept those parts of the system that they previously agreed to, although the adoption by SW is a slow process and has not been finalised in most cases. This situation will be monitored. It is also noted that if SW do adopt such systems there will be different responsibilities for drainage on different sites which may be confusing for both the public and maintenance operations in the future

4 FINANCIAL IMPLICATIONS

4.1 There are no direct financial implications for the council directly as a result of the recommendations contained in this report. However it is anticipated that there will be significant future financial implications arising from the burden of maintaining SUDS where adopted by the council for maintenance purposes but these cannot be predicted at present. A further report will be brought forward to this committee in due course as this is clarified.

5 HUMAN RIGHTS IMPLICATIONS

5.1 There are no human rights implications arising from the proposals in this report.

6 EQUALITIES IMPLICATIONS

6.1 The issues dealt with in this Report have been subject of consideration from an equalities perspective (as required by legislation). An [equalities impact assessment](#) is not required.

7 SINGLE OUTCOME AGREEMENT

7.1 The policies outlined may contribute to the following local outcomes contained within the Single Outcome Agreement for Angus.

- We live in well-designed, sustainable places where we are able to access the amenities and services we need
- We value and enjoy our built and natural environment and protect it and enhance it for future generations

8 CONSULTATION

8.1 The Chief Executive, Director of Corporate Services, Director of Neighbourhood Services, Head of Finance and Head of Law and Administration were consulted in the preparation of this report.

9 CONCLUSION

9.1 This report updates the committee on the publication of SFS2 which embodies revision by Scottish Water Authority to their adoption policies; advises the committee of the implications for the council; it advises of the proposed introduction of "Section 7 Agreements" to formalise arrangements between SW and the Council for the use of the others drainage systems and it recommends a comprehensive review of the road adoption policies and road standards. It includes draft proposals for some of these policy revisions.

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NOTE:

Background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973 (other than any containing confidential or exempt information) were relied on to any material extent in preparing the above Report.

Report 527/07 Response to Consultation on Sewers for Scotland Second Edition (Technical Manual for Standards for Sewers and Subs) - Infrastructure Services Committee - 14 June 2007

Report 253/09 Scottish Government Consultation on Designing Streets - Strategic Policy Committee - 17 March 2009.

Discussion Paper
Draft Section 7 Agreements and Appendices

Roads/JG/IAC