

## LAND DRAINAGE, WATER CONSERVATION, etc.

### ***CE/26 – Land drainage, water conservation, foul drainage and sewage disposal***

**Proposes SUDS integrated with the green corridor and water park to regulate run-off from the site. Establishes the requirement to ensure sewage treatment capacity is available and take appropriate measures to prevent contamination of surface and groundwater by foul discharges. Also establishes the requirement to install water conservation measures reducing average consumption by 25%.**

Sustainability Appraisal Objectives [abridged in some cases]	Assessment			Comments / Proposed Mitigation
	Short	Med.	Long	
1.1 Minimise irreversible loss of undeveloped land and productive agricultural holdings	~	~	~	
1.2 Reduce the use of non-renewable resources including energy	~	~	~	
1.3 Limit water consumption to sustainable levels	+	++	+++	Water conservation measures mandated for all new development therefore effect cumulates.
2.1 Avoid damage to designated sites and protected species	~	~	~	No designated sites within the vicinity. Core Strategy policies on construction practices will be required to prevent contamination particular from runoff.
2.2 Maintain / enhance range and viability of characteristic habitats and species	+	+	+	Supportive in principle. Current surface drainage is through a set of artificial drains and the replacement system and SUDS should maintain natural patterns and levels (acknowledged in 3(iii)).
2.3 Improve opportunities for people to access the countryside and wild places	+	+(+)	++	Drainage features incorporated into green corridor/separation system.
3.1 Avoid damage to designated historic sites and their settings	~	~	~	
3.2 Maintain diversity and distinctiveness of landscape	(+)	(+)	(+)	Primary benefit from green corridor which connects Coldhams

and townscape				Common with exterior open land, but drainage system is a component of this system.
3.3. Create places and spaces that look good and work well	(+)	(+)	(+)	As above.
4.1 Reduce emission of greenhouse gases and other pollutants	~	~	~	
4.2 Minimise waste production and support recycling	~	~	~	
4.3 Limit or reduce vulnerability to flooding and other climate change impacts	+	++	+++	<p>One of the principal objectives of this policy. However the limited current drainage facilities and increase in impermeable surfaces are likely to result in increased runoff. As noted in the assessment of CE/17 the main site slopes very gently south from Newmarket Road to a shallow depression along the proposed line of the green corridor before the land rises to Cherry Hinton Lane. In the depression the land slopes gently westwards towards the Barnwell Road local nature reserve and beyond towards Coldham's Common, therefore the drainage plan appears consistent with the current topography and its likely subsurface effect on drainage.</p> <p>Given the limited surface drainage at present it will be essential to ensure there is a drainage plan in place before construction begins to ensure runoff is handled and does not increase local flood-risk. Note that drainage of the east side of the site passes close to the north side of Teversham, and there is a small corridor land at risk from a 100-year event along its course.</p> <p>See also comments for this objective in the assessment of policy CE/17, which refers to the c?</p>

5.1 Maintain and enhance human health	(+)	(+)	(+)	Indirect contribution (this issue is not specified as a decision-making criterion) from measures to ensure sewage treatment capacity is available and prevent water contamination.
5.2 Reduce and prevent crime and the fear of crime	~	~	~	
5.3 Improve the quantity and quality of publicly accessible open space	~	~	~	Addressed through policies on open space but drainage system contributes.
6.1 Improve the quality, range and accessibility of services and facilities	~	~	~	
6.2 Redress inequalities in age, gender, race, location, faith, disability, etc.	~	~	~	
6.3 Ensure all groups have access to decent, appropriate and affordable housing	~	~	~	
6.4 Encourage and enable active involvement of local people in the community	~	~	~	
7.1 Help people gain access to satisfying work appropriate to skills, potential and location	~	~	~	
7.2 Support appropriate investment in people, places, communications and infrastructure	+	++	+++	Clearly contributes to provision of key community infrastructure without which the settlement cannot function.
7.3. Improve the efficiency, competitiveness, vitality and adaptability of the local economy	~	~	~	
<b>Summary of assessment:</b> Clearly a sustainable policy to ensure a key component of community infrastructure is available as the development begins. The proposals integrate drainage and flood risk alleviation measures into other landscape features of the urban quarter and its surroundings. The two principal issues which cannot be resolved at this stage are [a] the detail of how accumulation of stormwater runoff in the green corridor can be contained to prevent any increased in flood risk on the Cam, and [b] the timetable for relocation of Cambridge Sewage Treatment Works, which has a crucial role in determining when development of the site can begin.				

***Summary of mitigation proposals:*** Incorporation of the detailed SUDS/drainage plan in the construction strategy for the site, together with measures to ensure runoff into appropriate water courses and other drainage infrastructure is effective during construction.

***Secondary, cumulative or synergistic effects:*** Given the open nature of the site, development will increase run-off and this will cumulate as more of the urban quarter is built. Since it is impractical to provide temporary facilities, drainage infrastructure scaled to the extent of the completed development will need to be installed in each part of the site at the start of construction to ensure local flood risk is contained, to direct runoff appropriately, and to apply measures to prevent water contamination. The principal potential secondary effect is the impact of the local runoff pattern on any vegetation that is retained within the site.