

Summary of proposed surface water runoff mitigation measures detailed in the WCS (Ref:4)

Development site	Development details	Details of drainage solution
New Road, Great Barford	Residential development located in Flood Zone 3 where finished floor levels are 600mm above the 1%AEP flood level	Soakaway constructed above ground level. To implement this technique localised land raising is required in the south east corner of the site to form the swale basin.
Land at Shortstown (Former RAF site)	Residential development located in Flood Zone 1	A dry balancing pond with a Greenfield discharge rate equivalent to a local watercourse.
Shortstown (rear of airships sheds)	425 units of residential development located within the IDB district.	A dry balancing pond is recommended to attenuate surface water runoff to the Greenfield rate which is not located within the IDB district.
Shortstown (Frontier)	The site is situated in Flood Zone 1 within the IDB district.	Surface water will be attenuated to the Greenfield runoff rate with the IDB requiring that pond volumes cater for the 1%AEP plus climate change event. Negotiations are ongoing for IDB to maintain the dry pond in perpetuity.
Land north of Norse Road	Residential development mainly in Flood Zone 1 with a small area falling in Flood Zone 3.	The proposal is that surface water is controlled either a SUDs approach or surface water drainage to three balancing ponds prior to discharge to Renhold Brook.
North of Brickhill	Residential development including provision of a country park mainly in Flood Zone 1 but there is a small area in Flood Zone 3.	Surface water will be attenuated to the greenfiled rate, with the IDB requiring that the final ponds can cater for the 1%AEP plus climate change event. It is proposed these wet ponds will be maintained by Bedford Borough Council.
Land north of Bromham Road	The development partly is located within Flood Zone 3 and the floodplain of the River Great Ouse although no development is proposed to be situated within Flood Zone 3.	A FRA has been submitted with the planning application which demonstrated that surface water is controlled to ensure there is not a net increase in runoff from the site.
Biddenham Loop	The development includes residential and commercial units along with open space and is partially located within Flood Zone 3.	Surface water will be discharged to a large balancing pond.
Land west of Kempston	The development predominately lies outside the floodplain with only a small proportion of the commercial area situated within the floodplain.	Runoff from the western portion of the site will be attenuated though onsite site balancing ponds. There is also potential for off site flood mitigation works. Runoff from the development in proximity to Elstow Brook is currently unresolved due to a legal issue.
North of Fields Road,	The site is predominantly	Proposal embrace the Surface Waters

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Wootton	outside the floodplain of the Wootton Drain.	Plan by promoting a strategic solution. It is proposed that an offline flood reservoir is constructed in addition to watercourse improvements through the site.
South of Fields Road, Wootton.	The residential development is located outside floodplains although the commercial area is vulnerable to shallow flooding with water conveyed between Berry Farm and Woottons Drains.	Surface water will be managed based on principles of the Surface Waters Plan. The site will either contribute to the IDBs Master Plan for Developments West of Bedford or development online and offline storage facilities.
Wixams	The site predominately lies outside the floodplain envelope of the Medbury Outfall and is located within the IDB district.	The extensive nature of the development requires a catchment based approach to managing surface water that's embraces the principles outline in the Surface Waters Plan. It is proposed that a combination for watercourse improvements, channel diversions and large strategic reservoirs will be development to ensure flood risk downstream is not increased as a result of the development.
Britannia Works, Kempston Road	The residential development is partially situated in Flood Zone 3 and protected by defences.	The site has been re-contoured to ensure the residential development is located outside Flood Zone 3. The site will discharge in Kings Ditch and as such the development is required to contribute to the permanent pumping station proposals.
Land off Cambridge Road	Significant areas of the development lie within the floodplain of Elstow Brook. It has been demonstrated that the compensation measures proposed allow for ground raising on site.	Strategic solutions to flood risk and run-off management have been proposed in addition to small scale measures incorporated within the scheme along with the provision of storage on the site.
Land south of Interchange Retail Park	The site lies wholly within the Elstow Brook floodplain and is situated within the IDB district.	Onsite solutions have been deemed not suitable. It is proposed that a large scale lagoon is constructed off site that would throttle the surface water discharge sufficiently.
Kempston Hardwick	The site lies outside an floodplains.	The site would utilise the large Kempston Hardwick Pit lakes to attenuate surface water flows. This Pits have been identified in the Surface Waters Plan as an opportunity for providing a flood risk management asset.
Land North of Wixams beside B530	The site is outside the floodplains however this site is known to have drainage problems.	The strategy for managing surface water runoff from the site is unknown at present.