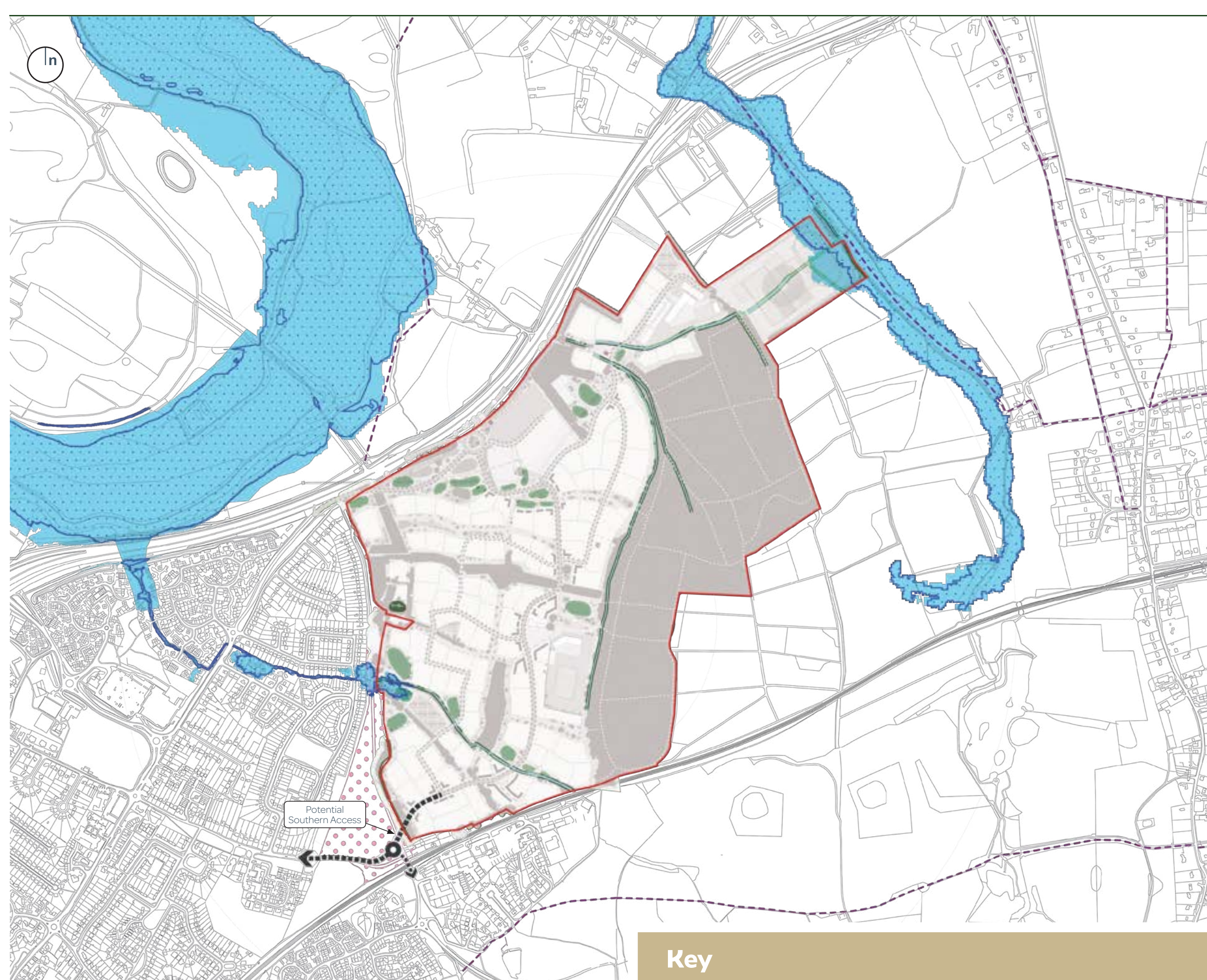




FLOODING MITIGATION AND BLUE INFRASTRUCTURE



Key

- Site Boundary
- Public Rights of Way (PROW)
- Potential Southern Access
- Flood Zone 2
- Flood Zone 3
- Sustainable Urban Drainage Feature
- Watercourses (such as existing field ditches)
- Common Land

Flood Risk

- The proposed site mostly lies in Flood Zone 1, with a small area of Flood Zone 2 and 3 linked to the watercourse that runs through the site.
- Built development will only be located in Flood Zone 1.
- Surface Water flooding does impact the site in association with the watercourses and ditches on site. However detailed modelling in liaison with the council has been undertaken to further refine this risk.
- Built development will only be located in areas that are not at risk from surface water flooding.

Surface Water Drainage Strategy

- In accordance with the hierarchy stipulated in national and local policies, Infiltration is not possible on the site due to the underlying geology, therefore in line with the drainage hierarchy it is proposed to discharge to the watercourses on site.
- Sustainable Drainage Systems (SuDS) will be used throughout the site in the form of attenuation basins and on parcel SuDS such as permeable paving.
- The SuDS will enable the restriction of the discharge rates on site down to less than the normal amount of water that would run off the site in a fairly frequent storm (greenfield rate). This rate would be used for all storm events, thereby reducing the peak flows off site and reducing flood risk to all sensitive receptors downstream.
- The attenuation basins and on-parcel SuDS would be designed to attenuate storms that have a 1 per cent chance of happening in any year including the recommended climate change allowance.

- The strategy includes an allowance for urban creep to reflect that people may extend their houses and drives in the future.
- The SuDS features will all also provide amenity, biodiversity and water quality benefits to the wider area.

Foul Drainage Strategy

- Consultation with Thames Water is underway to ensure that there is sufficient capacity within the sewer network in line with the phased construction of the site.
- Pumping stations located on site will be required to pump flows into the existing Thames Water foul sewer network, buffers would be included to houses to reduce any impact of noise, vibration and smells associated with pumping stations.

Engineering Levels and Earthworks Strategy

- Areas of the site are steeply sloping. This will be addressed through careful levels design to seek to minimise retaining walls and work within the constraints of the site. An earthworks strategy will be developed considering the proposed phasing, and seek to minimise material movement both onsite and offsite.

