

4.12 Flood Risk Assessment and Drainage Strategy

4.12.1 Surface water Drainage.

Surface water from the proposed development will discharge into the watercourse running through the site with the discharge limited to Qbar for events up to and including the 1:100 + 45% climate change/urban creep allowance event with 30% betterment provided for greenfield rates. This will ensure that flood risk is not increased in the receiving watercourses downstream of the development for the lifetime of the development.

Attenuation will be provided in a basin or pond with sewers discharging directly into it via precast concrete headwalls. The pond will have a permanent pool to provide treatment to the surface water run-off from the development. Bank slopes will be 1 in 3 in accordance with The SuDS Manual Ciria C753.

Flood routes will be provided for exceedance events, or for local failure of the drainage system (blockage, damage, etc.), and will ensure that flood flows are directed safely through or around the development to the downstream drainage system and watercourse.

The surface water drainage system will be managed and maintained for the lifetime of the development to ensure that it operates effectively.

Full details of the development levels and drainage/SuDS will be submitted for Reserved Matters planning approval or as a Discharge of Condition application.

4.12.2 Foul Drainage

The foul flows from the site will be pumped to the existing sewage network to the south in Westbury Road as confirmed by Wessex Water; full details of the connection will be agreed with Wessex Water.

The foul sewers will be adopted by Wessex Water or other approved Water/Sewerage Undertaker to ensure that they will be maintained for the lifetime of the development.

4.12.3 Flood Risk Assessment

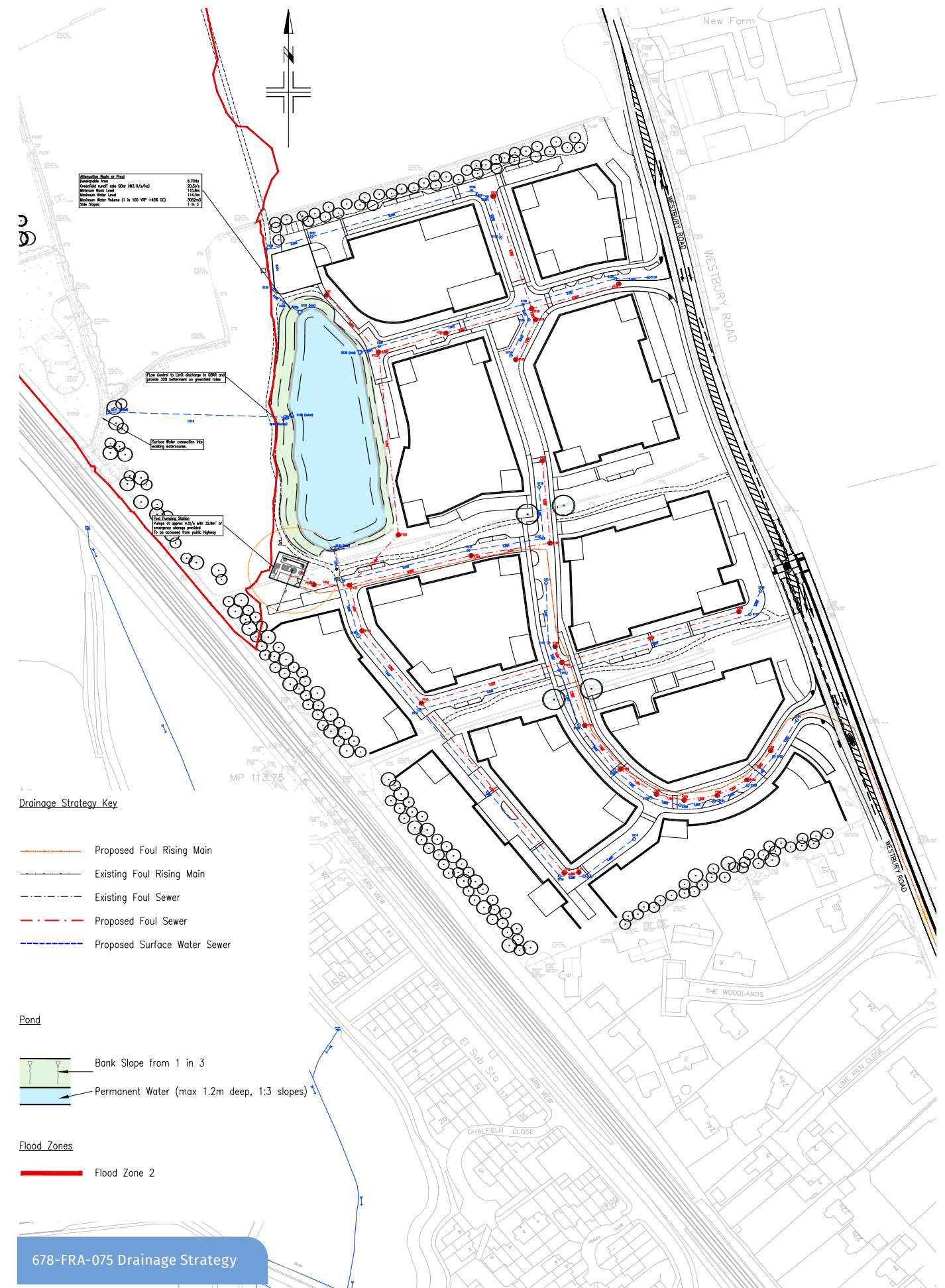
This site-specific FRA has been produced in accordance with the requirements of the NPPF, Planning Practice Guidance (PPG), and EA advice notes, and demonstrates that the proposed development will be safe from flood risk and that it will not increase flood risk elsewhere.

The site is located mostly within Flood Zone 1 with a low flood risk (less than 1:1,000 or 0.1% annual probability of flooding from rivers). The low parts of the site adjacent to the watercourse are Flood Zones 2 and 3 having a high risk of flooding. The proposed dwellings will only be in Flood Zone 1.

The proposed residential development is classified as 'More Vulnerable' and is in Flood Zone 1; the proposed residential development is suitable in this zone and the NPPF Sequential and Exception Tests are not required. Water-compatible uses will be in Flood Zones 2 and 3.

The floor levels of all dwelling will be set a minimum of 600mm above the Flood Zone 2 flood level (0.1% or 1:1,000 annual probability flood event) and safe dry access/egress provided to all dwellings. Development levels will be designed to route surface water flows away from dwellings to protect them from flooding.

Flood risk from fluvial, pluvial, sewers, surface water, groundwater and artificial sources has been assessed and it has been demonstrated that the proposed development will not be at risk from flooding from all sources.



4.13 Sustainability

4.13.1 Drainage and Water

Surface water management will include the use of sustainable drainage systems including an attenuation feature and permeable paving in private parking areas, subject to further testing and detail. Surface water runoff from the development will be attenuated including a 40% allowance for climate change.

Water consumption will be reduced through a range of water efficiency measures and homes will target a water consumption rate of 110l/p/d.

4.13.2 Waste

Waste and recycling will be managed through the provision of allocated areas within and / or close to properties to store refuse for collection via Wiltshire Council waste services.

4.13.3 Layout

The layout will provide a well planned, high quality development with a distinctive character and sense of place that uses land efficiently and has been developed from a clear understanding of the surrounding local area and wider context.

The layout support to maximise solar gain by orientation of buildings where possible.

It will provide a range of homes and tenures that respond to local needs.

4.13.4 Transport and Movement

The development provides interconnected movement routes which provide good connectivity between different areas of the site and also to a range of existing services and facilities within Warminster.

Bus stops are located on the south-eastern corner of the site on Westbury Road providing services to Warminster town centre and across Wiltshire and parts of Somerset.

Cycle storage will be provided within the development and a shared cycle way / footway is proposed from the development along the eastern side of Westbury Road.

The existing PRoW WARM18 route will also be diverted from the southwest corner of the site to the southeast corner of the site (subject to detailed diversion order), with access proposed from Westbury Road.

4.13.5 Ecology

Wildlife creation and enhancement measures will be incorporated in the north of the site to achieve a 10% biodiversity net gain.

New ponds and orchard, grassland hedgerows, chalk grassland and scrub providing a diversity of habitats to support amphibians – such as newts and common toad along with bat, birds, reptiles and invertebrates. Educational boards will enable local residents to learn more about the importance of these habitats.

4.13.6 Energy & Climate Change

The development will incorporate a range of measures to reduce carbon emissions, mitigating the effects of climate change, and adaptation measures to ensure the long term resilience of the development to the effects of climate change.

Buildings designed to reduce carbon emissions in accordance with anticipated changes to the Building Regulations through the use of energy hierarchy, using a fabric first approach to design to reduce energy demand, helping mitigate the effects of climate change, in line with Local Plan Core Policy 41 and 57, targeting emerging Local Plan Policy 4.

Refer to Sustainability and Energy Statement 03579, for further details.

4.13.7 Sustainability in Community Safety

Secured by Design is a police initiative to guide and encourage the adoption of crime prevention measures within the specification, design and build of new homes.

The references within the National Planning Policy Framework (NPPF) and the accompanying National Planning Practice Guidance (NPPG) have sought to reinforce the need and importance of a safe and secure external environment and contain specific references to Police service advice.

The key features of the development, which address designing out crime and designing in community safety are summarised below:

Layout of roads and footpaths

Primarily to be incorporated into any application for the approval of reserved matters.

- All movement routes will be visually open and direct with a clearly defined street hierarchy and are located in areas that are clearly identified as public realm.
- Pedestrian routes are generally integrated with the road network and located to the front of dwellings. Separated footpaths, and play areas are located at the building front attaining natural surveillance.
- Planting adjacent to footways will be designed to avoid places of concealment and unnecessary maintenance and will allow the footways to be open to view.
- Public footways immediately adjacent to doors or windows have been avoided.
- Footways that are to be lit will be to the relevant levels as set out in BS5489:2013 or latest British Standards.

Dwelling Boundaries

- Dwelling frontages should be open to view with formal hedgerow planting providing a clear definition between public and private realm.
- Sub-divisional fencing between neighbours should comprise at least 1.8m horizontal timber panel fencing.

Layout and orientation of buildings

- Dwellings need to be designed to face each other to allow overlooking of neighbouring surroundings.
- The development contains a mix of dwellings allowing the potential for homes to be occupied at different times of the day.
- Gable ends to dwellings overlooking the public realm may contain at least one window at ground level, and / or a 1m buffer zone defined by planting.

Car parking

- Parking are to be provided on plot in lockable garages or on hard standings.
- Visitor parking can be provided on-street in areas overlooked by neighbouring properties.
- On plot garages should be positioned to allow entrances to the dwellings to be easily observed from the street and neighbouring dwellings.

Planting in new developments

- New tree and shrub planting should be chosen to create an attractive residential setting and be designed to ensure proper maintenance.
- Dependant on location, planting should be chosen to allow good visibility, to avoid obscuring doors, windows or lighting, to avoid acting as climbing aids or potential hiding places, and to help deter graffiti.

4.14 Phasing

It is proposed that the development would be delivered as a single phase.

The delivery timings of the varying areas of open spaces, SUDS, allotments and play spaces would form part of section 106 negotiations relating to construction/occupation in the traditional manner.



Appearance 5

5.1 Illustrative Street Scenes



SECONDARY VILLAGE STREET THROUGH KEY GREEN CORRIDOR



MAIN VILLAGE STREET



TERTIARY VILLAGE STREET/LANE (TYPICALLY VIEWED FROM WESTBURY ROAD)

Conclusion

This document is proposed to support: -

An “Erection of up to 205 no. dwelling’s, community hub, public open space, access, infrastructure and associated works, with all other matters reserved”

The proposed design makes reference to appropriate contextual development, which has informed the built form and the appearance proposed.

Significant open space areas are provided on site to cater for social interaction, play, sport, general wellbeing amenity and allotments as a food growing resource.

The scheme offers an exciting new development for Warminster that is sustainable and well integrated into its surrounding environment.

Conclusion 6



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