

# Statement of Case

**Project:** Orchard Farm, Pershore

**Subject:** Statement of Case Inputs

|                      |                  |                  |    |
|----------------------|------------------|------------------|----|
| <b>Client:</b>       | Hollybrook Homes |                  |    |
| <b>Project No:</b>   | 06842            | <b>Version:</b>  | P1 |
| <b>Document Ref:</b> | 06842-SOC-002    | <b>Author:</b>   | AC |
| <b>Date:</b>         | 14/06/2024       | <b>Approved:</b> | AC |

## *Qualifications and Experience*

- 1.1.1 My name is Alison Caldwell. I currently lead the Water Sector within PJA, a consultancy specialising in the provision of transport planning, engineering and placemaking advice.
- 1.1.2 I hold a Masters Degree in Civil Engineering and I am a Chartered Engineer with the Institute of Civil Engineers (ICE), a licences body of the Engineering Council.
- 1.1.3 I have 14 years' experience in the field of water.

A handwritten signature in blue ink, appearing to read 'Alison Caldwell'.

## *Introduction*

- 1.1.4 This chapter has been prepared by the Appellant's flood risk and drainage consultant, PJA.
- 1.1.5 The following document has been prepared and submitted to Wychavon District Council to support the outline planning application:
- Flood Risk Assessment, Surface Water Drainage Strategy and Foul Water Drainage Strategy (Ref. 06842-FRA-001-P11)
- 1.1.6 The proposed development is wholly in line with National and Local Policy and Guidance, in terms of flood risk and drainage.

1.1.7 No objections to the development proposals have been received with regard to flood risk and drainage matters from any of the following consultees:

- Wychavon District Council
- Worcestershire County Council in their role as Lead Local Flood Authority (LLFA)
- Environment Agency
- Severn Trent Water

*Flood Risk*

1.1.8 A Flood Risk Assessment ('FRA') has been undertaken, in accordance National and Local Policy and Guidance, which identifies the Site to be at low or very low risk of flooding from tidal sources, reservoirs, groundwater and sewers.

1.1.9 With regard to fluvial flood risk, in accordance with the publicly available Flood Map for Planning, the majority of the Site is identified to lie within Flood Zone 1 (approximately 98.8% of the Site), outside the maximum extents of identified potential flooding during the 1 in 100 year (1% AEP) event and 1 in 1,000 year (0.1% AEP) event associated with the fluvial flood extents of the River Avon. The southern boundary of the Site, comprising Defford Road, has been identified to lie within Flood Zone 2 (Approximately 1.2% of overall Site area). None of the Site is identified to lie within Flood Zone 3, nor within an area that is identified to be at potential fluvial flood risk in the 1 in 100 year (1% AEP) plus climate change event.

1.1.10 The publicly available Long-Term Flood Risk Information, Flood Risk from Surface Water map identifies that the Site is predominantly at very low flood risk from surface water flooding. There is a prominent surface water flow route identified, which is mirrored in the Site topography, that is identified to be at medium to high surface water flood risk and is understood to be associated with the existing ditch (i.e. unnamed, ordinary watercourse) network in this location.

1.1.11 During public consultation, surface water flooding along Defford Road which is consistent with the national surface water flood risk mapping, was identified. Through the development proposals, specifically through the provision of a sustainable surface water drainage strategy within the Site, improvements to existing highway drainage within Defford Road and integration of additional mitigation measures within the Site, a significant improvement to existing surface water flooding within Defford Road is proposed.

1.1.12 Site-specific hydraulic modelling has been undertaken, which identifies a significant reduction to potential surface water flood risk is identified in post development conditions, as compared

to the existing baseline conditions, in all modelled events. Most notably, a reduction of 78% will be provided in surface water flows entering and crossing Defford Road in the 1 in 100 year plus climate change event under post development conditions, as compared to existing baseline conditions.

#### *Surface Water Drainage Strategy*

- 1.1.13 The surface water drainage strategy has been developed in accordance with national and local policy and guidance.
- 1.1.14 It is proposed to sustainably manage surface water from the application via above ground, natural sustainable drainage systems (SuDS). The SuDS will capture, attenuate and treat surface water within the Site, limiting all outflows from the Site to the existing site-specific QBar discharge rate in all events up to, and including, the 1 in 100 year plus 40% climate change event, discharging to existing, onsite unnamed ordinary watercourses.
- 1.1.15 In addition to management of surface water, the proposed SuDS will offer amenity value and enhance biodiversity within the Site. These SuDS features will have varying geometry, hydraulic profiles and some may contain permanently wetted areas, thereby providing habitat enhancement and variation.

#### *Highway Drainage*

- 1.1.16 An outline drainage design to provide access to the proposed development and enhance the existing highway drainage within Defford Road has been undertaken at the Site.
- 1.1.17 The outflows at the headwall utilised to discharge the highway drainage demonstrates a proposed betterment to Defford Road within the 1 in 5-year, 1 in 30-year, 1 in 100-year and 1 in 100-year plus 40% climate change event, which will reduce the currently observed surface water flooding within Defford Road. A betterment to the existing highway drainage of approximately 20% is demonstrated within the 1 in 100-year plus 40% climate change event in Defford Road.

#### *Foul Water Drainage Strategy*

- 1.1.18 The proposed development will discharge at two points on third party land. The first being a manhole (MH7510) to the northeast of the Site in an existing residential development. For the second, a connection is proposed via an existing manhole to the east of the Site (MH7202) on the A4104 (Defford Road). A new Severn Trent Water foul sewer is proposed from the south of the Site to the manhole along the A4104. All flows are proposing a gravity discharge.

1.1.19 A connection to the proposed Severn Trent Water network at the identified manholes can be achieved through requisition to the public sewer under Section 98 of the Water Industry Act (1991).

1.1.20 Proactive liaison has been undertaken with Severn Trent Water who have undertaken sewer modelling to better understand the existing capacity of the network. Severn Trent have confirmed that the modelling results demonstrated that “*the proposed development would not have any adverse effect on the receiving network*” thereby confirming that there is adequate capacity within the existing Severn Trent Water network to accommodate proposed foul flows from the development.

*Conclusions*

1.1.21 As set out above, the application meets national and local policy and guidance with regard to flood risk and drainage.

1.1.22 No objections to the development proposals have been received with regard to flood risk and drainage matters from any of the following consultees:

- Wychavon District Council
- Worcestershire County Council in their role as Lead Local Flood Authority (LLFA)
- Environment Agency
- Severn Trent Water

1.1.23 As such there is no reason, from a flood risk and drainage perspective, why outline planning permission should not be granted.