Harrogate Borough Council Supporting Drainage Information Chart For Planning Applications

Planning submissions must include details of how applicants propose to deal with surface water drainage. The drainage strategy must be suitable to the size and type of development as detailed below: The early submission of surface water drainage details will assist the application process. It is recommended that all applicants (major & minor) review the details outlined in this information sheet before submitting planning applications for approval. Note: major developments (and minor developments where applicable) should review the HBC Level 1 Strategic Flood Risk Assessment Here & the NYCC SuDS Design Guidance Here

Note: Prior to any planning consent being granted sufficient drainage information should be submitted (as specified below) to ensure 'major' development can be suitably drained in principle without increasing flood risk elsewhere. Applicants must demonstrate the reasoning if currently unavailable information is to be dealt with at a later stage in the process.

OUTLINE APPLICATIONS SHOULD INCLUDE THE FOLLOWING INFORMATION:

- 1. <u>SITE LOCATION PLAN</u> (Grid Reference)
- 2. <u>TOPOGRAPHICAL SURVEY</u> of the existing site catchment to include the following: contours at one metre intervals / Site survey results with regard to existing drainage arrangements.
- 3. PROPOSED SITE DRAINAGE STRATEGY including: Assessment of Flood Risk, feasibility of infiltration drainage SuDS proposals outfall location(s) rates of discharge on site storage condition survey results of existing drainage / watercourses both on/off site & if necessary, proposed remedial works / Infiltration/percolation test results

FULL APPLICATIONS SHOULD ALSO INCLUDE THE FOLLOWING:

Detailed drainage design - drainage calculations - cross sections - invert/outlet design levels - site plan showing exceedance flow routes during heavy storm conditions or prolonged rainfall events / specification drawings / flow control devices



- Applicants proposing to undertake minor extensions to existing buildings should place a tick in the appropriate box (Assessment of Flood Risk) on the application form.
- Applicants proposing to develop 1 to 9 dwellings should place a tick in the appropriate box and include drawings demonstrating how surface water will be managed. The details should include:
- On site storage requirements
- Rates of discharge
- Outfall location

Internal/external consultations may be requested by the planning officer dependent on type, size & location of the proposed development. Further drainage details could be required. Drainage conditions may be attached to any planning consent

The following hierarchy should be used when choosing a suitable surface water drainage strategy for the site (dependent on availability)

• Infiltration/soakaway

(See Note Below Regarding Central Ripon Area)

- Watercourse
- Surface water sewer
- Combined sewer

If the use of soakaways or infiltration drainage techniques are to be pursued, results from trial pits and soil infiltration tests, which comply as a minimum with those outlined in BRE digest 365 or other approved methodology, should be submitted for approval

The following hierarchy should be used when choosing a suitable surface water drainage strategy for the site (dependent on availability)

a. Infiltration/Soakaway (not to be used if ground conditions are unsuitable)

(See Note Below Regarding Central Ripon Area)

- a. Watercourse
- b. Surface water sewer
- c. Combined sewer

<u>Information Below Required To Be Discharged Via</u> <u>Condition Prior To Work Commencing On Site</u>

- Surface water management plan showing how surface water will be managed through the construction phases.
- Full drainage design drawings/specifications
- Drawings showing any surface water assets to be vested with the statutory undertaker/highway authority & subsequently maintained at their expense, and/or

Management & maintenance arrangements to secure the operation of the agreed drainage scheme throughout the lifetime of the development including details of funding arrangements for on-going maintenance - the organisation responsible for future maintenance - copies of any legal agreement to be established with future home owners - physical access arrangements - establishment of legal rights of access in perpetuity - maintenance requirements/frequency & procedures to assure on-going maintenance if the organisation responsible for future maintenance ceases to exist.

• Any requested information not previously submitted





Brownfield

Previously Developed Land

Minimum 30% reduction of existing peak flow rates plus an allowance for future climate change and urban creep (Via on site storage)

NOTE: existing permeable areas, within the site which will be replaced by impermeable surfaces must be calculated at Greenfield Rates.



Greenfield

Land That Has Never Been Previously Developed (Including Garden Developments)

1.4 Litres/Second
Per Hectare (All
storm scenarios up
to & including a 1
in 100 year event
plus an allowance
to account for future
climate change &
urban creep).

Or

As otherwise agreed with the LPA

(Developers should demonstrate the reasoning if above rates are not achievable)

NOTE: CENTRAL RIPON AREA (Major or Minor Development)

Infiltration drainage is not generally acceptable in the central area of Ripon, which has been identified as being at risk from gypsum dissolution.

As Such Other Methods Of Surface Water Disposal Should Be Fully Investigated If the site is situated in flood zones 2 or 3 according to the Environment Agency flood maps, a suitable assessment of flood risk will be required *(Not including minor extensions to existing buildings)*

Drainage systems should be designed so that unless an area is designed to hold and/or convey water, flooding does not occur on any part of the site for a 1 in 30 year rainfall event. The design should also ensure that flooding does not occur during a 1 in 100 year rainfall event in any part of a building (including a basement) or in any utility plant susceptible to water (e.g. pumping station or electricity substation) within the development, and without increasing flood risk off site.

• If drainage conditions are attached to any planning consent, the conditions must be discharged by the Local Planning Authority (LPA) prior to work commencing on site.

NOTE: (Major or Minor Development)

Risk Management Authorities Consulted Dependent on Type/Location of Development

- Lead Local Flood Authority (LLFA) (statutory consultee major development)
- Environment Agency (EA) main river flood zone 2 & 3 critical drainage areas pollution
- Yorkshire Water (YW) discharge via public sewer system (rates of discharge will need to be agreed)
- Internal Drainage Boards (IDB) IDB managed areas-IDB maintained watercourses affected by impacts of development
- Highway Authority highway related drainage

Other bodies who could be consulted – NYCC Planning – Parish Councils – Natural England - National Parks - Landscape/Conservation Officers.