

Medway Council

Lead Local Flood Authority

Technical Guidance for Planning Applications and Condition Discharge Applications

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DISCLAIMER

Medway Council, as far as it can ascertain, acknowledges that this technical guidance document is suitable for the purposes set out in in the National Planning Policy Framework and accompanying guidance with respect to the management of surface water.

Drainage systems and mitigation measures to prevent flooding and pollution are the sole responsibility of the applicant and Medway Council cannot accept any responsibility for any omission or error contained in any such plan, or for any loss, damage or inconvenience, which may result from such plan's implementation.

The guidance will be reviewed on a regular basis – (at least every three years) or when information changes that requires it to be amended – to ensure that the guidance is consistent with good practice and use the latest available information.

1 Background and scope

- 1.1 The following document aims to provide detailed guidance for planning submissions requiring Lead Local Flood Authority (LLFA) input, including major outline, full and reserved matters applications and standard conditions. Guidance is also included for minor applications where LLFA input is required.
- 1.2 The document will describe the supporting technical information expected at each planning stage, drawing from the latest local and national advice as well as up to date research and best practice industry guidance.
- 1.3 The guidance has been produced to ensure planning applications requiring LLFA input within Medway achieve a consistent standard. The guidance should help to inform exactly what is required, which can improve lead times on responses as well as reducing the need for additional/further submissions.
- 1.4 This document complements the guidance contained within our latest Strategic Flood Risk Assessment and will be periodically updated to reflect changes in national and local guidance and legislation.

2 LLFA Statutory Consultee Role

- 2.1 The role of statutory consultee is defined through the Town and Country Planning Act 1990; Town and Country Planning (Development Management Procedure) (England) Order 2015; and Planning and Compulsory Purchase Act 2004.
- 2.2 Major development is classified as development involving any one or more of the following;

(a) the winning and working of minerals or the use of land for mineral-working deposits;

- (b) waste development;
- (c) the provision of dwellinghouses where-
 - (i) the number of dwellinghouses to be provided is 10 or more; or
 (ii) the development is to be carried out on a site having an area of 0.5 hectares or more and it is not known whether the development falls within sub-paragraph (c)(i);

(d) the provision of a building or buildings where the floor space to be created by the development is 1,000 square metres or more; or

(e) development carried out on a site having an area of 1 hectare or more.

2.3 Statutory consultees have a duty to respond to statutory consultations within 21 days in accordance with Article 22 of the Development Management Order. The 21-day period does not begin until the statutory consultee in question has such information to enable a substantive response.

3 Medway Strategic Flood Risk Assessment

- 3.1 Medway Council have produced an updated Strategic Flood Risk Assessment (SFRA) to support the Local Plan, which complements this guidance.
- 3.2 The SFRA defines occasions where a Surface Water Management Strategy and or Sustainable Drainage (SuDs) proforma should be submitted and identifies circumstances whereby the LLFA may request additional information or make representations on non-major planning applications where there is a need to consider drainage and surface water issues.
- 3.3 Medway Council require <u>all</u> developers to submit a detailed Surface Water Management Strategy (SWMS) for major developments. A SuDs proforma should be completed alongside, which summarised the relevant sections of the SWMS.
- 3.4 The SFRA identifies 'Sensitive Drainage Areas' (SDA's) to determine areas known to the be sensitive or at risk whereby additional information is required. These areas have been identified using;
 - Medway Preliminary Flood Risk Assessment (this assessment identifies 'nationally significant' Flood Risk Areas).
 - Surface Water Management Plans (Plans containing assessment of the risk of surface water flooding and options to manage risk to an acceptable level).
 - Catchment areas.
 - Historic flood incident mapping.
 - Geological and topographical maps.
- 3.5 A map of the Sensitive Drainage Areas is included at Appendix A.7 of the SFRA 2020.
- 3.6 If a minor development proposal, including minor proposals positioned within 5m of a watercourse, is shown be to be located within an SDA, the LLFA may make a representation and request that a SuDs Proforma is submitted which outlines the method of surface water management, to ensure that risks to and from the site are appropriately managed.
- 3.7 Further information is available in Section 5 of the SFRA 'Management of Surface Water Runoff' and Appendix A.6 of the SFRA.

4 Submission requirements

4.1 The following section outlines LLFA requirements with respect to the type of planning application. The level of assessment considered will be dependant on the nature and scale of the development. The 'overview' section includes a number of aspects that should be considered at all planning application stages and should be cross referenced with the SFRA.

Overview

1

- 4.2 It is strongly recommended that pre application advice is sought from the Council's Planning Service. This will automatically include advice from the LLFA. Further information is available on our <u>website</u>.
- 4.2 Broadly, any scheme should be designed in accordance with the National Non-Statutory Standards for Sustainable drainage (NNSSS), ¹however, more site-specific advice can be sought which may result in a departure from the standards where this is supported by local evidence (such as Surface Water Management Plan outputs, and flood incident data).
- 4.3 The LLFA, in collaboration with other LLFA's in the South East region, have produced a guide for master planning sustainable drainage into large and small developments. The consideration of sustainable drainage early in the design process allows for consideration of how drainage issues may impact site layout and provides opportunity to maximise wider planning objectives and benefits.
- 4.4 Above ground SuDs (such as ponds and basins) should be designed to be multifunctional and contribute towards amenity provision and designed to aesthetically accord with landscaping and urban design and biodiversity planning objectives in order to add value to the development.
- 4.5 Medway Council will generally not adopt and/or maintain SuDS except where SuDs are used to mainly manage highways runoff, under a <u>S38 Highways Adoption</u> <u>Agreement</u>. The Council expects as part of any planning application that includes SuDS, that information is provided to demonstrate that suitable adoption and maintenance arrangements are in place that can be secured long term.
- 4.6 Where sites are identified to be at risk of surface water flooding, the sequential approach should be applied which is outlined in the latest SFRA, whereby more vulnerable elements of the scheme are directed to areas of lowest risk and appropriate mitigation applied to ensure that the development can remain safe for its lifetime, consistent with the Exception Test outlined in NPPG: *Flood and Coastal Change*.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/415773/ sustainable-drainage-technical-standards.pdf

- 4.7 At a detailed design stage, the most up to date (for example, Flood Estimation Handbook) rainfall data should be used where appropriate, although it may be prudent to use Flood Studies Report (FSR) rainfall data to test a scheme under shorter duration events.² Modelling outputs using industry appropriate software should be provided for the critical duration for a 2-year storm, a 30 year storm and a 1 in 100 year storm including the most up to date <u>allowances for climate change</u>.
- 4.8 The drainage scheme should be typically be designed to manage runoff from the entire developable area rather than solely the impermeable areas unless the permeable areas drain directly to a watercourse. The reason for this is to ensure that runoff can be appropriately managed from permeable areas during intense and prolonged rainfall events where infiltration capacity may be exceeded. The approach will be site specific and consider the local geography and topography and should be agreed with the LLFA early in the design process.

Outline Planning Application

- 4.9 To ensure that an appropriate, workable scheme can be realised at Full Planning stage, it is imperative that a means of surface water management is established prior to the layout being developed to ensure that the proposals are feasible.
- 4.10 At minimum, the SWMS should include the following;
 - Assessment of surface water flood risk at the site including an examination of overland flows.
 - Indicative existing and post development runoff rates for 1, QBar, 30- and 100-year storm events, including 1 in 100 year +40% climate change rate.
 - An assessment and commitment to the most appropriate SuDs features based on opportunities and constraints from initial desk study.
 - Assessment of attenuation requirement to manage runoff in the context of Long-Term Storage provision where required.
 - Site Investigation to determine infiltration feasibility and geotechnical consideration. Where access to a site is not available, an alternative strategy can be presented alongside an infiltration option using best available information (for example, <u>British</u> <u>Geological Society</u> mapping). This should include the proposed locations and volumes of storage features, proposed discharge rates, and consideration of levels to ensure such features can be designed to achieve landscaping objectives.
 - Information should be submitted to show why the selected route of discharge has been selected over options further up the hierarchy of drainage options, outlined in Paragraph 80 of the National Planning Policy Guidance *Flood and Coastal Change*.
 - Where infiltration SuDs are proposed;

² Section 24 of the CIRIA SuDs Manual details considerations with rainfall runoff methods.

- I. Evidence supported by infiltration testing in accordance with BRE365.
- II. If the site is located within a Groundwater Source Protection Zone (as defined by the Environment Agency, the risk of contaminating groundwater and control measures required to mitigate this should be considered.
- III. Assessment of geotechnical risks which may preclude infiltration measures.
- Consideration of how open space provision can be combined within the surface water proposals and landscaping objectives without detriment to the open space provision.

Full Planning Application

- 4.11 A full planning application should present a favoured strategy taking account of the results of a full Site Investigation, as well as the following;
 - Detailed site layout.
 - Topographical survey of the site including contours, with a demonstrated understanding of how surface water would flow across the site pre and post development supported by modelling where necessary.
 - A statement on how the proposed strategy contributes towards wider planning objectives including water quality, landscaping, biodiversity, amenity, and public open space.
 - An assessment of water quality requirements using industry best practice guidance contained within CIRIA SuDs Manual.
 - Layout plan of the proposed drainage scheme including dimensions, storage volumes, pipe sizes, cover and inlet levels, gradients, proposed discharge rates (where applicable) and flow control features.
 - Consideration of how exceedance flows will be managed and mitigated on site without significantly increasing flood risks (both onsite and offsite). This should be supported by a site plan illustrating the post development site, and indicative flow paths including depths/extents and indicative flow paths.
 - Such areas should avoid access and entrance areas. Where this is not possible, an
 assessment of flood hazard in the context of safe access and egress should be
 undertaken with reference to <u>Defra/Environment Agency R&D Technical Report</u>,
 <u>Flood Risk Assessment Guidance for New Development, 2005.</u>
 - Details of any offsite works required, together with necessary consents where relevant.

• A site-specific maintenance and management plan for the unadopted parts of the drainage system

Planning Application for Conversions or Refurbishments where there is no change in building footprint

- 4.12 Applications for conversions or refurbishments with no change in building footprint or hardstanding area, should be supported by a drainage statement containing the following as minimum;
 - a. An assessment of surface water risk at the site.
 - A rationale for incorporating SuDs on site with the drainage hierarchy (NPPF and Building Regs). Where SuDs are not deemed suitable or feasible, justification should be provided.
 - c. When considering infiltration SuDs, this should be supported by a Site Investigation and infiltration test in accordance with BRE 365.
 - d. A site layout plan showing indicative layouts and sizing (dimensions and volumes) of SuDs proposed any connection and discharge locations and an indicative pipe layout.
 - e. Consideration of SuDs and property level protection retrofit and betterment opportunities to improve current on site drainage, particularly within areas identified at risk.

Planning Application for conversions or refurbishments where there is a change in building footprint

- 4.13 Applications for conversions or refurbishments including a change in building footprint should include the following as minimum in addition to the above.
 - a. Calculations of;
 - i. Change in impermeable areas between the current and proposed site.
 - Existing and proposed Greenfield Runoff Rates for a range of storms up to and including the 1 in 100 year + 40% climate change events.
 - b. A scheme to demonstrate that the proposals can meet the Greenfield Runoff Rate for Brownfield sites as detailed in the NNSTSS. If this is not possible a detailed justification will be required.
 - c. An assessment of water quality needs and considered improvements in terms of environmental and social benefits.

5 LLFA planning conditions

- 5.1 Medway LLFA will seek to minimise the number of conditions recommended whilst ensuring the opportunity to submit the required information early on in the planning process.
- 5.2 A number of standard conditions are used which seek to ensure that the appropriate information is submitted at the appropriate stage where this has not been provided at planning application stage. The following section outlines the typical standard planning conditions that may be added to achieve that.

6 Standard drainage condition

6.1 The following condition is usually applied to Outline Planning Applications to allow submission of further detail at a Full or Reserved Matters stage. This condition may also be added where sufficient information has been submitted at Full Planning Stage to demonstrate a workable scheme, but where certain detailed elements are not known at that point (for example, the long-term maintenance options or phasing or phased implementation).

<box>

Condition: No development shall take place until a scheme based on sustainable drainage principles, has been submitted to and approved in writing by the Local Planning Authority in consultation with the Lead Local Flood Authority.

Those details shall include (where applicable):

- i. Details of the design of the scheme in conjunction with the landscaping plan.
- ii. A timetable for its implementation (including phased implementation).
- iii. Operational maintenance and management plan including access requirements for each sustainable drainage component.
- iv. Proposed arrangements for future adoption by any public body, statutory undertaker or management company.

The development shall be undertaken in accordance with the agreed details.

- **Reason:** To manage surface water during and post construction and for the lifetime of the development as outlined at Paragraph 165 of NPPF.
- 6.2 Note that there is a request that the drainage scheme is submitted alongside landscaping plans where applicable, to ensure that the plans are congruent.

- 6.3 Details of phased implementation should be submitted, demonstrating the appropriate management of surface water through the construction process, including details of any temporary drainage. This should accord with details submitted as part of a condition discharge application relating to the submission of a Construction Surface Water Management Plan where this is requested.
- 6.4 Where the proposed arrangements for future adoption and maintenance via statutory undertaker or management company are not available, only a partial condition discharge can be offered. Outstanding information should accompany the verification report condition discharge application where applicable.

7 Verification Report condition

- 7.1 With increasing development across Medway, and with SuDs now a material consideration as part of a planning permission for a major development, it is important to ensure that SuDs are adequately designed and recorded.
- 7.2 There are occasions where site conditions require a subtle departure from an agreed drainage strategy, in which case the council will need to be aware of any changes and how this impacts the pre-approved drainage scheme design.
- 7.3 Further, Section 21 of the Flood and Water Management Act 2010 requires a lead local flood authority (LLFA) to:

- establish and maintain a register of structures or features, which in the opinion of the authority, are likely to have a significant effect on a flood risk in its area and;

- establish and maintain a record of information about each of those structures or features including information about ownership and state of repair.

- 7.4 Medway Council are therefore requesting a verification report to be submitted, post construction to:
 - a. Confirm that the drainage scheme has been constructed in accordance with the approved design,
 - b. Confirm any changes to the design which divert from the approved design.
 - c. Submit details of the critical components of the drainage scheme, for addition to the LLFA Asset Register.
- 7.5 In order to discharge this condition, a Verification Report should be submitted detailing the as built drainage system, its compliance and any departure from the

agreed design, as built drawings, materials test results, the results of any performance re-testing and any surface water simulation re-runs where required.

- 7.6 The Verification Report should be prepared by a suitably qualified and competent person. The individual or company should have suitable professional indemnity insurance and will normally be independent of the developer/contractor/subcontractor to ensure there is no conflict of interest.
- 7.7 The verification report should be accompanied by a list of critical components³ including details of the location, material, size (depths, diameters) levels volume, discharge rates and details of the Service Management Company (if not priorly provided) for addition to the Medway Council Asset Register.
- 7.8 Medway Council will expect details of the individual or maintenance company submitted as part of the discharge of this condition if they have not already been submitted as part of a maintenance plan at an earlier stage.
- **Condition:** Prior to occupation (or within an agreed implementation schedule) a signed verification report carried out by a qualified drainage engineer (or equivalent) must be submitted to and approved by the Local Planning Authority to confirm that the agreed surface water system has been constructed as per the agreed scheme and plans. The report shall include:
 - I. details and locations of critical drainage infrastructure (such as inlets, outlets and control structures) including as built drawings.
 - II. An operation and maintenance manual for the unadopted parts of the scheme as constructed.
 - III. Proposed arrangements for future adoption by any public body, statutory undertaker or management company (where not previously provided).
- **Reason:** This condition is sought in accordance with paragraph 165 of the NPPF to ensure that suitable surface water drainage scheme is designed and fully implemented as agreed so as to not increase flood risk onsite or elsewhere.

³ *Critical Component – A component of the drainage network whereby failure would result in flooding (Includes all SuDS features, Outlets and Manholes with flooding under a 100-year event)

8 Flood resilience condition

- 8.1 Where a proposal is situated within an area considered to be at risk of surface water flooding, the development should be sequentially designed in order to avoid areas at high and medium risk. It is accepted that the low surface water flood risk outline is associated with more uncertainty so development within these areas may be possible subject to the use of flood resilience and resistance measures.
- 8.2 Where residential development is proposed to be located within those areas, and where it can be demonstrated that this will not be detrimental to the local hydrology the use of flood resilience and resistance measures should be considered in order to safeguard for the lifetime of the development.
- 8.3 Such measures may include the use of land raising where it can be appropriate from a flood risk and planning perspective, and, or the use of measures such as solid floor construction, raised sockets and utilities and impermeable materials. More information can be found in *'Improving the Flood Performance of New Buildings, Flood Resilient Construction'*. ⁴

9 Construction Surface Water Management Plan (CSWMP) condition

- 9.1 A Construction Surface Water Management Plan (CSWMP) is required for most major developments to ensure that the risks of flooding and need for drainage are considered and managed throughout the construction phase in order to reduce the risks of flooding and pollution of the water environment arising from construction activities.
- 9.2 This condition will be added where the proposals will result in significant construction activity. The plan is similar in nature to a Construction Environmental Management Plan (CEMP) but with focus on the management of surface water during construction, to avoid, minimise, and mitigate construction effects on the water environment by;
 - Preventing contamination of the water environment by chemicals and silt.
 - Managing rainfall and runoff during construction to ensure that flood risks are not increased on or off site.

⁴

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7730/flo od_performance.pdf

- Monitoring runoff during the construction phase to ensure the success of mitigative actions.
- 9.3 The plan should take account of any phased approach for the development where applicable. The condition is a pre-commencement condition and should be discharged prior to any construction related activities occurring on the site.
- 9.4 The following section is intended to signpost developers and contractors to industry best practice guidance and to provide an example template for the completion of a plan. The measures identified should inform and accompany Risk Assessments and Method Statements (RAMS), identifying the perceived risks to the aquatic environment, the potential pollution pathways, and the mitigation measures to be employed.
- 9.5 The plan should therefore include the following;
 - Site details including location.
 - Roles and responsibilities
 - Phasing of construction and drainage where applicable.
 - Details of any temporary drainage system.
 - Flood risk controls for severe weather events.
 - Pollution, water quality and emergency pollution control measures (including silt management)
 - Construction site plan including compounds, material storage areas and temporary site parking
 - Details of proposed site excavations and details of areas to be used for the storage of substrate and soil.
 - Detailed plan demonstrating a suitable buffer between location of refuelling, storage of oil and fuel, concrete mixing and washing areas (at least 10m away from any watercourse).
 - Risk and Method Statement
 - Required consents (e.g., Land Drainage Consent, Environmental Permit).
- 9.6 This list is not exhaustive and should be used as a starting point for considerations to be made. The condition has been devised to assist developers and contractors to ensure they meet legislative requirements and best practice guidance throughout the construction phase.
- 9.7 The LLFA will make recommendations based on the submissions but are unable to comment on the success of the scheme in practice and are therefore not in a position to take responsibility relating to any failure of the system which results in flooding or a pollution incident.
- 9.8 An example template is included at Appendix 2.

Appendix 1: Verification Report template



Planning Reference	Serving You
Date	
Site / Location	
Developer Details Company and Contact Details	*Critical Component – A component of the drainage network whereby failure would result in flooding (Includes all SuDS features, Outlets and Manholes with
	flooding under a 100-year event)

Critical Component*	Maintenance Company/Individual and Contact Details	Details E.g. Heights, Lengths, Diameters, Depths, Levels, Materials, Discharge Rates, Volume, Etc.	Changes from Agreed Plans	Northing/ Easting

Critical Component	Maintenance Company/Individual and Contact Details	Details E.g., Heights, Lengths, Diameters, Depths, Levels, Materials, Discharge Rates, Volume, Etc.	Changes from Agreed Plans	Northing/ Easting

Appendix 2: Example template for CSWMP submission.

Construction Surface Water Management Plan Suggested Template

Site Name:

Contractor Name:

Reference Number:

Related Planning Application No:

Date:

- 1 Contents
- 2 Site details
- 3 Roles and responsibilities
- 4 Managing surface water during construction
- 5 Flood & Weather Alert
- 6 Legislation and guidance
- 7 Company / Contractor Accreditation (e.g ISO) and Environmental policies
- 8 Appendices List

1 Site details

Use this section to insert location, maps, and relevant planning references.

2 Roles and responsibilities

Use this section to identify the key roles and responsibilities for the scheme. This should include the relevant out of hours contact details for the Project Manager/Contractor as relevant in case there is a need for the council to contact the site management.

Role	Contact	Company Name	Contact no and email

3 Managing surface water during construction

This section should also confirm which of the following options you intend to use during the construction phase and supply details and include key information and plans referenced at Section 5 and should reference how drainage will be managed during construction via;

Option 1: Construct a new permanent surface water drainage system to utilise during construction phase.

Option 2: Install, use, and remove, a temporary surface water drainage system.

Option 3: Utilise existing system with pollution control measures

Item	Checklist 🗸
Site details including location	
Roles and responsibilities	
Phasing of construction and drainage where applicable.	
Details of any temporary drainage system	
Identification of vulnerable receptors in vicinity of development site with	
reference to EA surface water flood risk maps.	
Flood risk controls for severe weather events.	
Pollution, water quality and emergency control pollution measures	
(including silt management).	
Construction site plan including compounds, material storage areas and	
temporary site parking.	
Details of proposed excavations and details of areas to be used for the	
storage of substrate and soil.	
Detailed plan demonstrating a suitable buffer between location of	
refuelling, storage of oil and fuel, concrete mixing and washing areas (at	
least 10 m from any watercourse).	
Risk and Method Statement.	
Required consents (e.g., Land Drainage Consent, Environmental Permit).	

4 Flood and Weather Alert

The Project/Construction Manager should up to the <u>Environment Agency Flood Warning System</u> if constructing a site within a tidal or river Flood Zone 2 or 3. The following table should be used to record actions necessary to be taken on receipt of a flood warning.

Definitions:

- **Flood Alert**: Flooding is possible, be prepared.
- **Flood Warning**: Flooding is expected, immediate action required.
- Severe Flood Warning: Severe flooding, danger to life

Alert Level	Definition	Action	Responsibility
Flood Alert	Flooding is possible – be prepared		
Flood Warning	Flooding is expected – immediate action required		

Severe Flood	Severe flooding,	
Warning	Severe flooding, danger to life	

4.1 Weather Alerts (Surface Water Flood Risk)

Project/Construction Manager should sign up to the <u>Met Office Weather Warning system</u> to keep aware of any rain weather warnings which could impact site operations during construction.

Brief definitions of weather warnings are included below, more detailed description is available on the Met Office website.

• Yellow: Be Aware

Yellow warnings are issued when it is likely that the weather will cause some low-level impacts.

• Amber: Be Prepared

There is an increased likelihood of impacts from severe weather.

• Red: Take Action

Dangerous weather is expected.

Alert Level	Action	Responsibility
Yellow: Be Aware		
Amber: Be Prepared		
Red: Take Action		

5 Legislation and guidance

The Water Environment (England and Wales) regulation 2009

Land Drainage Act 1991

<u>SEPA Engineering in the Water Environment Good Practice Guide Temporary Construction</u> <u>Methods</u>

Control of Water Pollution from Construction Sites – Guide to Good Practice (SP156)

<u>Control of Water Pollution from Construction Sites – Guidance for Consultants and</u> <u>Contractors (C532)</u>

Control of Water Pollution from Linear Construction Projects – Technical Guidance (C648)

Control of Water Pollution from Linear Construction Projects – Site Guide (C649)

Environmental Good Practice – Site Guide (C741)

The SuDs Manual (C753)

BS 8582 Code of Practice for surface water management for development sites

<u>PPG5: Works in, near, or over watercourses, pollution prevention. Environment Agency</u> (withdrawn).

- 6 Company/Contractor Accreditation (e.g., ISO) and Environmental Policies
- 7 Appendices List