



# Innovative Construction Products: Guidance notes





## This procedure and guidance note is to be read in conjunction with S104 (Adoption), S185 (Diversion) and S98 (Requisition) applications.

### Philosophy

New products are being regularly introduced to the construction industry. The products typically provide health and safety, environmental, cost and programme benefits for developers and contractors. Product approval or acceptance is usually sought where it is proposed to use them on development sites where the sewers are offered for adoption.

Northumbrian Water does not issue letters of “Approval” or “Acceptance”, or operate a list of “Approved” or “Accepted” products or systems. We will issue a **Technical Approval for adoptable sewers on a site** and this will include all products proposed in relation to adoptable sewers on the site. Use of a product on a previous adoption site does not guarantee technical approval will be given for another site.

Northumbrian Water supports the use of innovative products when used appropriately. We have instigated a process to reduce the risk of early sewer failure through inappropriate use, design or construction. They should be designed and installed to the required standards to ensure serviceability and design life. Consequently the applicant must provide sufficient detail relating to Innovative Construction Products to enable Technical Approval of the sewers to be adopted.

New products may represent a risk to the adopting Sewerage Undertaker for the following reasons:

- The product will not have a long history of successful use, demonstrating long term serviceability, durability and the ability to meet minimum design life required.
- Developers’ and/or contractors’ unfamiliarity with a product may lead to incorrect usage, design, installation, handling, storage etc. which could result in inability to provide required serviceability, durability and design life.
- The products you propose to use may be bespoke rather than “off the shelf”. This is likely to make technical approval of the site more complex.
- Our unfamiliarity with the product affects our ability to ensure the quality of construction on the development site.

### Procedure

The designer/developer/consortia should nominate a single point of contact for discussions and issuing information. This should normally be the organisation which submits the S104, S185 or S98 application. One of our New Development Project Managers (NDPM) will be nominated to deal with your application.

Please contact our New Development team (see contact details below) to discuss the proposed products and their intended use. You should provide evidence of Basic Requirements 1 and 2 (see below) at this point. The NDPM can advise whether the product has the potential to be included as part of the Technical Approval for adoptable sewers on the site or if it should not be used. If Basic Requirements 1 and 2 are met the NDPM will advise you to submit an Innovative Construction Products Sheet (see website). This can be submitted either with or in



advance of the S104/S185/S98 application. The application should contain all the information requested in Basic Requirements 1-6 (see below).

If appropriate, please make the NDPM aware your programme constraints.

During the construction phase, Site Delivery Notes should be provided to our Clerk of Works to confirm the correct products are being installed. Post construction it may be appropriate for you to provide us a copy of the Health & Safety File in accordance with the Construction Design and Management Regulations 2007. This will include provision of as-built drawings, product information and operation and maintenance manuals.

## Basic Requirements

We now ask that developers demonstrate the product meets the following basic requirements, by providing evidence in the following key areas:

Ref	Basic Requirement	Description
1	Accreditation / certification <b>MANDATORY</b>	The product/system has certification for UK Water Industry use (e.g. WRc certification)
2	Competent installer <b>MANDATORY</b>	The product manufacturer provides certification that the contractor is competent to install the product, by providing training, support etc. as required.
3	Site specific design with verification	Site specific design is undertaken; demonstrated by design calculations and drawings with evidence of application of quality assurance procedures
4	Site-specific information	Sufficient site-specific information is provided in the design and/or construction drawings to enable technical vetting, and inspection of installation by our Clerk of Works.
5	Method statements	Method statements, sufficiently detailed to describe the installation and any testing, to inform NWL site inspections.
6	Programme	Key programme dates for site inspections

In order to satisfy the above please complete as many fields as possible in Section 3 of the Innovative Construction Product Sheet.

Information provided about Basic Requirements should be tailored to our requirements (i.e. it does not need to be specifically written for us, but we should only receive information that is relevant to your application). Evidence of site specific design should be clear from the evidence provided in respect of 4 and 5 above. Typically we do not require design calculations, but they should be available for review upon request. They should be submitted if evidence of bespoke design is required or to demonstrate adherence to QA procedures. Much of this information will also usually be contained in detailed design or construction drawings. Generic terms such as “to be confirmed on site” (or similar wording) for key dimensions or product characteristic will generally be deemed to be insufficient detail where relating to significant bespoke designed and manufactured products.



Please note, until evidence of the above is provided (and deemed to be sufficient), the NDPM will only be able to issue provisional advice.

Due to the variation in products on the market, from significant installations (e.g. storm tanks) to individual components (e.g. manhole bases) it is not possible to provide a cover-all list of requirements. For complex product systems we may also need to ask for additional information.

## Timescales

For products where their inclusion in the latest version of Sewers for Adoption is not easily demonstrable, it could take longer than the normal timescales to provide Technical Approval. In all cases we recommend you have pre-application discussions with the NDPM so that we have a full understanding of your proposals and we are able to assess your application with the minimum of delay.

Late introduction of innovative products after Technical Approval has been given will mean we will need to issue a revised Technical Approval for the site. In order for us to provide this in a workable timescale, it is essential that all the information required is provided in a timely fashion. Developers, contractors, designers and other parties must all be aware of the potential risks and programme delays of late introduction of innovative products.

For some bespoke design products with a significant civil engineering component, it may be necessary for our consultants to formally verify the design. In this case you will be advised of the timescales as soon as practicable.

## Contact Details

Should you require any further information or assistance please contact our New Development Team at:

New Development Sewerage Team  
Northumbrian Water  
Leat House  
Pattinson Road  
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