# Building Over or Near a Public Sewer Guidance Notes





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# Introduction

We've put together these 'build over a public sewer' guidance notes as additional background information for those wishing to build a new extension over or near-to public sewer(s) within our region. They'll take you through everything you need to know before making an application.

You may be considering a new extension, conservatory, or garage at your property. This kind of work can sometimes impact the public sewer network serving your own and neighbour's properties. It's important we protect both your home and our pipes from any damage during and after your construction works, including maintaining access to the public sewer for maintenance and repairs.

The following guidance explains what you need to consider for any proposed structure being built over or within 3 metres of a public sewer.

We've included information to help you determine whether you need to make an application, some helpful diagrams, and frequently asked questions.

We don't allow building over water mains and therefore this is not covered in this guide. If you are aware of a water main close to your new structure and foundations, then do contact us to discuss your options such as a <u>water main diversion</u> or the relevant <u>stand-off distances</u>.

Each application and design proposal we receive is unique and therefore approval is given on a case-bycase basis. However, we are here to help you with guidance and support to progress your application.

# The background

#### Why is our approval necessary to build over/near the public sewer?

You might be wondering why you need our permission to build over or near a public sewer in the first place, especially if it's already within your land. We need to give approval for your works for a few reasons:

- **To prevent damage to the sewer** We'll check to make sure that the building works have the necessary precautions not to add additional loading on, or cause damage to, our sewer(s) during or after construction has taken place.
- For maintenance and repair access We need to ensure the works still allow for us to have 24-hour access to all public sewers and manholes to carry out routine inspections, maintenance, and repairs.
- To achieve the building control completion certificate or 'sign off' for your works. They will expect to see our permission for the build over/near taking place.

If a new structure doesn't take into account protecting the sewer it can lead to the sewer collapsing from the additional weight. This may lead to structural damage to the property, interrupted drainage for other properties and increased risk of sewage internal flooding. The sewer would have to be repaired immediately, even if it involved demolishing the structure.

If you're thinking of selling your property in the future, the buyer's solicitor may ask for a copy of the build over agreement showing our permission for the building works. If you don't have it, it could lead to complications selling your property.

Finally, if it's harder for us to access and maintain our sewers in the long term it could increase costs to customers and cause significant disruption to your home when we do need to have access. The good news is that if you're aware of the guidance early, you can plan your building works with the sewer pipe included early in the design process.

# What should I consider before I begin?

First, you'll need to determine if there are any public sewer pipes or manhole chambers on your land and identify whether they are within 3 metres of the proposed new structure and footings. If so, there are two options to consider:

**Modify the plan –** To avoid the sewer, so that buildings are at least 3 metres away. This is often the cheapest and easiest option.

**Divert the sewer –** If the plans cannot be modified, the sewer may need to be diverted.

Otherwise, you would need to apply for a Buildover/near-to application if your building works are within 3 metres of a public sewer. If your proposed structure is at least 3 metres from any non-critical public sewer, then it is likely you would not need our approval, but if unsure you can still <u>contact us</u> for guidance and we'll check your proposal and advise accordingly.

If you're exempt from building regulations, you will still need our approval if building over or near to our sewers.

## The variation of application

When you apply to us there are two routes your application can take depending on your design:

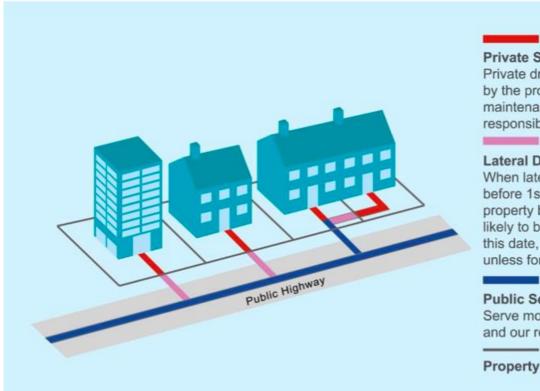
**Build Over Self-Declaration** – We'll start by asking you specific questions about your design proposal. If you can answer yes to all the points, then you would be able to self-certify your works.

**Build Over Formal Approval Application –** If you are unable to meet the self -certification points, or if you are unsure regarding some of the questions, we'll automatically transfer the application to a build-over/near-to application at an additional fee. One of our team will technically review your proposals, provide guidance and a response accordingly.

We provide further information regarding both routes later in these guidance notes.

## Who is responsible for what?

You will need to confirm ownership of the sewer to understand if it is a public sewer and therefore if an application is required. The below diagram indicates who is typically responsible for sewers laid before 1<sup>st</sup> July 2011. If your property and associated sewer and lateral drain was laid after 1st July 2011 it would be assumed private unless formally adopted by us.



#### **Private Sewers**

Private drains are owned by the property owner and maintenance remains their responsibility

#### Lateral Drains

When lateral drains connected before 1st July 2011 leave the property boundary they are likely to be public. If laid after this date, they remain private unless formally adopted by us.

#### **Public Sewers**

Serve more than 1 property and our responsibility

**Property Boundaries** 

#### **Transfer of private sewers**

Private gravity sewers that were constructed and connected to our network prior to 1st July 2011 are now our responsibility as public sewers under S105a of the Water Industry Act when they were officially transferred on 1<sup>st</sup> October 2011. Providing clear ownership and better long-term maintenance for the sewer network. Lateral drains (which is a pipe that serves only one property) continued to be privately owned and maintained up to the property boundary, from which it then becomes a public lateral drain.

As a result of the transfer, the number of sewers we are responsible for has increased by approximately 19,000 km. Many of the transferring sewers had not been mapped and so their location and condition are unknown and won't be shown on our mapping records

Due to the absence of this detailed information about the transferred sewers it must be presumed that they will be present within gardens and in land to be developed and are therefore likely be affected by any building proposals.

We'll need you to help identify any sewers near your build during your application. You should assume that

any sewerage that is located on your land or discovered during your work is public apparatus and, in our ownership, unless it can be shown to be otherwise. If your property and associated sewer was

# **Our Area of Operation**

Traversing over 700 miles of coastline, national parks and forests, as well as numerous Areas of Outstanding Natural Beauty, our region is as diverse as the populations we serve.

The map below shows our area of operation for water supply and wastewater treatment, as well as the areas other water companies serve. laid after 1<sup>st</sup> July 2011 it would be assumed private unless formally adopted by us as Southern Water.

So, although we may supply your water, we might not be responsible for the public sewers in your area. You can check if you're in our wastewater area by entering your postcode in our <u>'In your area' feature</u>.



# Can I apply through my local Building Control?

If you are constructing a new extension, the first thing is to check if it is subject to the Building Regulations. If it is, then you are required to confirm it meets the standards set out in section <u>H4 of the Building</u> <u>Regulations</u> and this can be assessed by a Local Authority Building Control (LABC) department or an independent approved inspector as per your choice.

Some LABCs or inspectors may be able to progress your proposals in consultation with us, rather than submitting an application with us. You can use this route if your development meets all the following points:

- Pipe size is 225mm or less.
- Pipe depth is less than 3m.
- The total length of the public sewer built over
- is less than 6m.
- Access to the public sewer is unimpeded and you're not building boundary to boundary (within 1m of property line).
- It's an extension not a new detached structure.

If your proposal doesn't meet all the above requirements, then it is likely you'll need to apply for a Build-over Formal Approval application with us directly.

# Locating wastewater pipework within your property boundary

You will need to locate any public sewers to confirm whether you are building within 3 metres of them and determine their ownership, here are some helpful ways to do that:

#### Sewer and water maps

You can request a <u>sewer or water map</u> online and where known the map identifies:

- The location of public sewer (note that these are indicative and will need to be confirmed by a site investigation).
- The location of water mains in our water supply area.
- Size and material of the sewer pipe.

**Left:** Pipes forming a junction suggests your property may be part of a shared run with other properties. **Right:** Examples of manhole/inspection covers you may find.





# Signs of a sewer in your property?

If you want to identify if a sewer runs through your property, it's location (often through back gardens in towns), locations of connections and direction of flow, you can often do so with some simple investigative work with the below tips.

- Check your legal documentation relating to your property, it may include details of drainage arrangements and plans.
- Your architect or builder maybe able to help you to find out if there's a public sewer or drain within your property. Or employ a specialist drainage company to help.
- Look for manholes in and around your property and ask neighbours if they have any on their land. Visually trace a potential line of the sewer from these manholes and cautiously dig a trial hole to locate the pipe.
- Run your tap or flush drain tracing dye down your toilet and have a look with a torch down a manhole to work out the direction of flow and where your property connects to the sewer.

If you're going to lift a manhole cover, be careful as they may be heavy, and you may need help. If another sewer line branches onto it, then it is most likely a public sewer. You may be able to visually determine information that can be added to your drawings.

# I should also be aware

# When can't I build over a sewer?

There are situations where we never allow the building over/near to of our sewers, these include:

- Building over or near to public water mains, pumped or rising mains, vacuum mains and strategic or 'trunk' sewers.
- Building over or near to existing sewers on new development sites or re-development sites. Instead, you can look to divert the sewer, or to save cost, modify your plans so that your building is at least 3 metres from the sewer.
- Where there would be an internal manhole or change in pipe direction (i.e. Y-connection or a junction of a public sewer) within the proposed building. These are not allowed due to potential odour and flooding issues. We will need to have access to the sewer. You'll need to relocate these outside the property to get approval.
- If there are easements or restrictive covenants on the pipework by your proposed works, you won't be allowed to build near or over the pipework.
- The pad, raft and cantilever foundation types over the public sewer are not permitted as it can impact our future access to repair the adjacent public sewer and significantly increase the risk of damage to the structure during repair works. We also do not permit reinforced concrete floor slabs over public sewers for the same reason
- If you are filling in a gap between two buildings/structures and working within three metres of an existing sewer, then Southern Water will not grant a Build over permit. You should review our guidance again and look to revise your plans.

#### **Easements**

An easement is a legal right to ensure a defined stand-off distance is maintained from a length of pipe. If there are easements or restrictive covenants on the pipework by your proposed works, you won't be allowed to build near or over the pipework.

#### **New sewer connections**

If you are proposing to make a new sewer connection into our network, you'll need our approval. These are dealt with separately and you'll need to apply for a <u>wastewater connection</u>.

#### Sewer diversions

If the affected sewer requires a diversion (relocation not replacement of existing line) you'll need to apply for a sewer diversion and will be responsible for the costs. A diversion is preferable to allow easier access for maintenance and repair and to reduce the impact on your building.

For minor sewers on a single property (if the pipe size is 225mm or less and the depth of the sewer is <3.0m) you have the option of requesting a small sewer diversion through a Build over formal approval application. In addition to our standard application requirements, you will need to submit the proposed diverted sewer plan in line with the <u>Design and</u> <u>Construction Guidance</u> appendix C.

You will also need to provide consent from neighbouring landowners if the diversionary work takes place on their land.

A <u>Sewer Diversion</u> application will be required for critical sewers (if the pipe size >225mm or the depth of the sewer is >3.0m) or where there is more than one property. However please note the timeframes involved will be longer and potentially costly for critical sewer diversions, so plan this early into your project schedule if required.

## **Pre-application checklist**

Locate the sewer using maps or CCTV

Check if your proposal is within 3m of the sewer

Consider options such as a diversion or altering plans

Check if you can apply through Building Control

# Build Over Self-Declaration

Building over one public sewer, where the total length of sewer built over is less than 6m, the sewer to be built over is a non-critical public sewer with an internal diameter of 225mm or less, less than 3m deep, and not a boundary-to-boundary extension then it's likely it can be progressed under a self-certified build over approval known as a Build Over Self-Declaration. As part of the application process, we ask all applicants to complete a list of questions to determine if you meet criteria.

We'll only provide you with a self-certified Declaration approval if you meet all our consent criteria.

#### **Consent Criteria**

- Your development involves a single or double storey residential extension, conservatory, annexe or garage which is attached to the existing property.
- You are not aware of any historic blockages, flooding, odour or other operational issues with the public sewer or public lateral in the last 12 months.
- There are no easements or restrictive covenants which relate to the pipework.
- The public sewer/public lateral is gravitybased foul, storm water or combined flow from domestic properties, flows freely and is not pressurised.
- The depth of the pipe from the existing ground level to the pipe channel (invert) is less than 3 metres.
- The diameter of the sewer/drainis225mmor less.
- The proposed structure/foundations will have a minimum of 500mm horizontal clearance of any public access point (manhole, inspection chamber or rodding eye). If the proposed structure is to be built over an existing access point, this may be resolved by relocating it to a new external chamber or if the shape of the proposed build/extension is adjusted to meet this requirement.
- The development proposals will utilise strip or trench fill foundations.
- The pipe material is clay, concrete or ductile iron. If it's pitch fibre, brick, asbestos cement, or plastic it can potentially be resolved if the pipework is replaced with new vitrified clay or ductile iron before building begins.

• The development proposals will utilise strip or trench f ill foundations.

• Your foundations are designed to be at least 150mm below the pipe invert when located within 3m (horizontally) of the public sewer.

# If the proposal is to build over the sewer, the following points are also applicable:

- The sewer pipe being built over is in a good condition established by either exposing the length of pipe being built over/near for a visual inspection by our Adoption Manager, or through an internal CCTV survey with sonde location equipment. Poor pipe condition can be resolved if the defective pipe is replaced at your expense.
- Excluding where the sewer may pass through a load bearing wall, 500mm horizontal clearance will be achieved between the edge of the new foundations, walls or ground beams and the public sewer.
- There is no change in diameter, direction, material, or gradient inside the area of the proposed structure - Minor inconsistency (excluding changes to sewer layout) can potentially be resolved by carrying out agreed minor amendments before building, i.e., relocating a manhole chamber to an external location.
- You do not intend to build across the full width of your garden (a minimum width of 1m will be required between the boundary and the proposed extension).
- Total coverage of the sewer is less than 6 metres (including pipework already built over).
- Your design incorporates a minimum of 300mm headroom between the underside of the new floor slab and the crown of the pipe.
- If the public sewer/public lateral passes through a load-bearing wall, the foundation design complies with H4 Building Regulations standards and our design criteria.

# Build Over Self-Declaration process and application fees

#### Step 1 – You apply online and pay a fee

Fill in our online form, submit required documents and pay a fee for the self-declaration of works. We'll review your application within 5 days and let you know if we have everything we need to progress.

#### Step 2 – We send you a conditional approval letter

We'll do a review and send you a conditional approval letter within the next 2 weeks. This confirmation will need to be shared with your builder. If you are relocating a manhole chamber or undertaking minor pipe repairs, you will need to pay an inspection fee of  $\pounds 84$ .

<b>Fee Type</b>	Cost (£)
Build Over Declaration	£102.00
application fee	(incl. 20% VAT)

You will need to include the following with your application:

- An existing and proposed site plan (.pdf) (1:100 or larger clearly showing the location of sewers and manholes)
- A site location plan (.pdf) (1:1250 or larger).
- A cross section foundation design (.pdf) (1:100 or larger).
- Copies of all drawings submitted for building regulations approval.

# **Build Over Formal Approval Application**

If your application answers do not meet the Build Over Self-Declaration criteria, your application will automatically progress it to a Build Over Formal Approval Application.

We'll technically assess your proposal to determine that it adequately protects the public sewer and our future access to maintain it. We'll suggest any changes or conditions that will need to be made to assist you in progressing your application to approval stage (if required).

It is possible that you have applied for a Build Over Self-Declaration, however upon review we found that it does not meet the Self-Declaration criteria. In this case, we will switch your application to the Build over Agreement application. You won't need to reapply, but you will need to make payment using BACS or card payment over the phone for the additional fee for the application and CCTV survey (if applicable).

For some sites we may also ask you to complete a Sewer Protection Agreement (SPA) with us to ensure the protection of access for any future maintenance and repairs of the stretch of sewer being built over. This will be clearly identified in our conditional approval letter and the reason it is required.

## **CCTV Survey**

As part of the Build Over process to determine the condition and actual location of the affected sewer, we will need to carry out a CCTV survey. The CCTV survey will trace the line of the sewer and show the condition of the pipe. Our CCTV contractor InSewer will be in contact with you to arrange a mutually convenient time to visit your site and carry this out. Once the survey is complete you will be provided with the CCTV plan (full report is not included in this service), which will be included in the conditional approval.

If you carry out and provide your own CCTV survey it must be

- dated within 6 months
- include a detailed (.pdf) report and site photos
- include a supporting plan showing dimension, layout of manholes and position of sewers

Please submit this with your application and if it is meeting our requirements, we'll refund the part of your application fee of £200 in line with what it would have cost us to undertake the survey ourselves. Also, if the CCTV is not required, we will refund you the money.

**Top**: Pipe in good condition, no cracks, water flowing freely.

**Bottom**: Pipe in poor condition with fracture, longitudinal crack and collapsed section ahead.



If you are providing your own CCTV plan, please check an <u>example</u> to make sure your plan has all information that we need.

#### **Build Over Formal Approval Application process and fees**

#### Step 1 - You apply online and pay your fee

Fill in our online form and pay application fee. We'll review your application and let you know if we have any questions within 5 days.

#### Step 2 – We carry out a CCTV survey

We will carry out a CCTV survey within 20 days to determine the condition and exact location of the affected sewer. You have an option to provide/carry out your own CCTV survey.

#### Step 3 – We send you a conditional approval

We review CCTV survey report and your plans and send you a conditional approval letter within 8 days. Depending on your project you may need to progress with Sewer Protection Agreement (SPA).

#### Step 4 – You book an inspection

If you are relocating manhole chamber or undertaking minor pipe repairs, you will need an inspection. We

will let you know if this is needed in our conditional approval letter.

#### Step 6 - We send you a Build Over Agreement

We will send you a Build Over Agreement letter within 7 days, permitting you to proceed with your building works.

Fee Type	Cost (£)
Build Over Agreement	£720.00
application fee	(incl. 20% VAT)

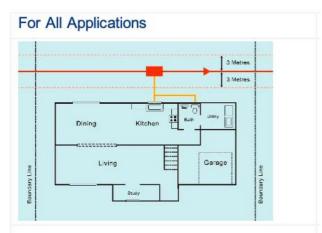
The fee is including a CCTV survey. If you have your own CCTV survey, which meets our criteria, share your CCTV survey when submitting your application and we will refund you £200.

Fee Type	Cost (£)
SPA Residential/Domestic	£250.00 (inc. 20% VAT)
SPA Commercial	£400.00 (inc. 20% VAT)

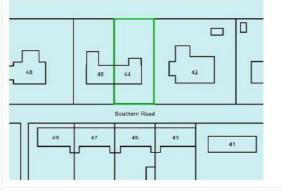
You will need to include the following documents with your application:

- An existing and proposed site plan (.pdf) (1:100 or larger clearly showing the location of sewers and manholes).
- A site location plan (.pdf) (1:1250 or larger).
- A cross section foundation design (.pdf) (1:100 or larger).
- Copies of all drawings submitted for building regulations approval.
- CCTV plan (if available, which includes sonde tracing, dated within the last 6 months)

# Drawings to include with your application

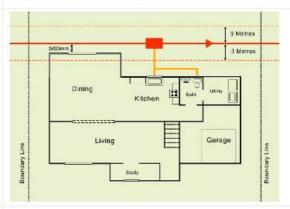


**Existing Site Plan (.pdf) (1:100 or larger)** Existing building and drainage layout including the location of sewers, manholes, flow direction and your private pipe.

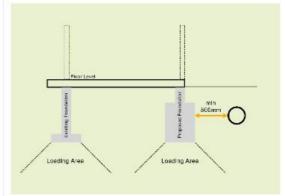


Site Location Plan (.pdf) (1:1250 or larger) Showing the location of the property with the site boundary (in green), roads and adjacent buildings clearly shown.

#### Build Near a sewer



Proposed Site Plan (.pdf) (1:100 or larger) A detailed drawing showing the proposed plans including any known existing drainage arrangements and clearly showing the sewer you intend to build near to.



Cross Section Foundation Design (.pdf) (1:100 or larger)

A detailed drawing showing the foundation design and details in relation to the pipe.

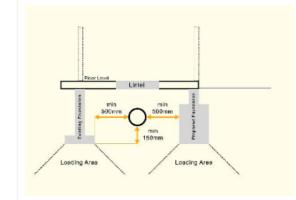
## What is a Sewer Protection Agreement, and will I need one?

Depending on the circumstances of your site, we may ask you in our conditional approval letter to complete a Sewer Protection Agreement (SPA) with us so we can ensure the protection of the public sewer and our future maintenance access.

A SPA is a legal agreement between us - Southern Water - and the property owner to protect the public sewer that is being built over.

# Build Over a sewer

**Proposed Site Plan (.pdf) (1:100 or larger)** A detailed drawing showing the proposed plans including any known existing drainage arrangements and clearly showing the sewer you intend to build over.



# Cross Section Foundation Design (.pdf) (1:100 or larger)

A detailed drawing showing the foundation design and details in relation to the pipe.

If the below criteria apply to your plans, then a Sewer Protection Agreement will be required:

- Covering 8 metres or more of a public sewer.
- If the proposal spans from boundary to boundary of your property (i.e. there must be a gap of 1m from the boundary to the new foundations on at least one side of the extension for it not to be deemed a boundary to boundary extension).
- Unconventional construction that is not compliant with our Guidance Notes.
- Impedes access to maintain the public apparatus.
- If the proposal covers two or more sewers.

The Protection Agreement is required because we, as a Water Company, have a legal obligation to service and maintain public sewers in our area of operation. If the above points apply, then the proposed build-over will make it hard for us to access, repair and maintain the sewer (our statutory duties) in the future to ensure it continues serving our customers effectively. The agreement ensures the rights of access to repair and maintain that public sewer in the future at the landowner's expense.

A SPA is made against the property, not the property owner, so you must disclose the SPA to any potential new owners in the future should the property be sold.

Once the agreement is ready you will be asked to sign this agreement before commencing works on site. The whole process of paying, drafting, and signing the Sewer Protection Agreement may take a month or more.

Once the Sewer Protection Agreement is progressed by our legal team, they will advise you. If an SPA is required, it will be Condition 1 in the approval letter. Works should not commence on site until the legal SPA is signed.

#### Supporting documents for Sewer Protection Agreement

If a Sewer Protection Agreement is required, details of the required drawings and proof of ownership will be included in the Conditional Approval response letter. What we need for Sewer Protection Agreement is:

- An electronic copy (PDF format) of the comprehensive drawing to incorporate the items details above, indicating the length of sewer that is being impeded by the works and being built over; marked "A-B" and coloured red. The perimeter of the site should be coloured green
- 2. A copy of the location plan at 1:1250 scale (PDF format). The perimeter of the site should be coloured green.
- 3. The name and address of your solicitors if you wish to be represented by a solicitor. If you want to represent yourself, please confirm.
- 4. Proof of ownership. This should be in the form of up to date:
  - Official Copy of Title Register Entries

• Title Plan relating to your property. If you do not have a copy that is dated within the last 6 months, then please check <u>https://www.gov.uk/government/organisations/</u> <u>land-registry</u> and search property ownership information. The Title plan can be found on

the same page of the land registry website as the title deed – it is available in a link directly under where the title deed / copy of ownership register is found.

5. Building Regulation Number (if applicable).

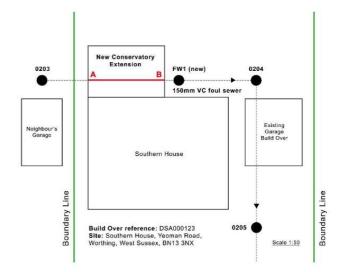
The Sewer Protection Agreement will be sent to you by our legal team using DocuSign.

Our Legal Team will prepare an agreement document for you and will ask you to pay a fee to them directly. The Sewer Protection Agreement legal fee is approximately £250 for domestic/residential properties and £400 for commercial properties.

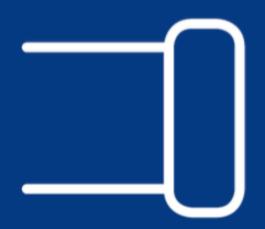
# Sewer Protection Agreement Drawing

If we ask you for an SPA, you will need to provide an additional drawing for our legal team, which is a site plan with the length of the public sewer(s) being built over marked with a solid red line and lettered A and B at each end to clearly identify the sewer length(s) that the SPA applies to.

It should also include your reference number, site address, new extension details, the site boundary coloured in green and be to a scale of either 1:50 or 1:100.



# **Build Over/Near** Technical Specification



# **Glossary of Terms**

Term	Definition
Build Over	Building on top of (over) a sewer.
Build Near (or Close to)	Building within 3 metres of the outer face of a manhole or sewer.
Public Sewer	A sewer that is owned and maintained by the statutory undertaker (Southern Water), typically serving at least two properties.
Public Lateral Drain	The section of drain that extends beyond the property's boundary to connect to the public sewer.
Property/Private Drain	The section of drain that is within the property's boundary and remains private.
Manhole	A covered opening from where a worker can enter to examine or repair a sewer.
Inspection Chamber	A covered opening from where the sewer or drain can be examined or flushed.
Rodding Eye	A small access point that allows for 'rodding' the sewer in cases of blockages.
Combined Sewer	A sewer that carries both foul sewerage and surface water.
Foul Sewer	A sewer that carries only foul sewerage.
Surface Water Sewer	A sewer that carries only surface water.
Invert Level	The lowest level inside of the pipe, the flow line level.
Soffit Level	The highest level on the inside of the pipe.
Crown Level	The highest level on the outside of the pipe.
Cover Level	The highest level on the manhole cover.
Easement	A legal right to ensure a defined stand-off distance is maintained from a length of pipe and therefore not allowed to be built near.
Sewer Protection Agreement	A legal agreement for certain criteria that is between us - Southern Water - and the property owner to protect the public sewer that is being built over.
Minor Sewer	Sewers 225mm in diameter or less, and less than 3 metres deep (minor sewers) - such sewers often run along the back of older properties and are affected by extensions to the rear of the property. These are common in properties built before 1 <sup>st</sup> October 1937.
Critical Sewer	Critical sewers are usually defined as large diameter strategic sewers but may also be classified by material, depth and/or location.

# **Technical Specification**

#### **Approved materials**

Where a public sewer is to be built over its must be in a good condition and in an approved material. It must be able to <u>withstand a jetting pressure of 2600 psi</u> (180 bar). Approved materials allowed are:

- Vitrified Clay (VC)
- Ductile Iron (DI)

New works should be completed in the same material as found existing or replaced with an approved material (if applicable).

## Piling

Where piling works are proposed, the position and condition of the sewer should be established through a CCTV survey and Sonde location. Should the survey show that the sewer is likely to be within 3 metres of the proposed piles, trial holes must be carried out to establish the exact location of the sewer.

Auger bored piles are the preferred method of piling as they cause the least risk of damage to the existing sewer.

The piling method (e.g., auger bored or percussive/driven) and acceptable distance of the piles from the sewer must be agreed with us prior to the commencement of any work on site.

- Care must be taken to avoid any damage to the public sewer.
- No auger piling should be permitted within 1.0 metre of the public sewer.
- No driven or percussive methods of piling works will be accepted within 3.0 metres of the existing public sewers.
- Detailed plans and the type of piling works to be utilised will have to be submitted for our approval.
- Piles will need to be at least 150mm below the public sewer invert level.
- A repeat CCTV survey will be required on completion of the works to confirm that no damage has been caused as a direct result of any piling works. There will be an additional fee for this final survey.

## **Foundation types**

The common foundation types that are acceptable to be built over/near the public sewer are:

- Strip foundation
- Trench fill foundation

The following foundation types over the public sewer are not normally permitted as they can restrict future access to maintain the public sewer and could impact the proposed structure:

- Pad foundation
- Raft foundation
- Cantilever foundation

## **General guidelines**

- Works should be done in accordance with <u>Building Regulations</u> and the <u>Design and</u> <u>Construction Specification</u> (Appendix C).
- No additional loads must be added to the sewer.
- All surveys or diversions are carried out at the applicant's expense.
- Manholes cannot be built over or be located internally (even if double sealed).
- Boundary to boundary (within1mof boundary) will most likely not be allowed if adjacent properties have already done so.
- New development site properties and detached structures are not allowed to be constructed over the public sewer.

#### Building over/near to minor sewers - standard protective measures

If you are planning to build over or near to sewers less than 225mm diameter and less than 3 metres deep (minor sewers), in most instances this will be permitted providing that certain protective measures are taken as follows:

• A CCTV survey or exposing the length of the sewer being built over will be required to determine the exact location and/or condition of the affected sewer.

Should this show that the affected length of sewer is not in a suitable condition to be built over and/ or has

an unapproved pipe material of either pitch fibre, asbestos cement or plastic which is not able to withstand 2600 psi, it must be replaced, at the applicant's expense with our approved pipework material that can withstand the required jetting pressure as advised in the conditional approval letter.

- Foundations built within 3m of a minor sewer must be taken down 150mm below the sewer invert level.
- No structures (footings, walls etc.) running parallel to the line of the sewer will be allowed within 500mm of the sewer or manholes.
- Any crossings of the sewer must be supported using pre-cast (or adequately designed cast in-situ) concrete lintels/beams.

# Minor Sewer realignments/diversions

For minor sewers (if the pipe size is <225mm and the depth of the sewer is <3.0m) you can include a minor sewer diversion (i.e., less than 3 manholes and are within your property boundary of the sewer) through a formal Build over application. This cannot be progressed under a self-declaration application because you are realigning the sewer pipework. In this case you will need to submit the proposed diverted sewer plan around your proposal (i.e., extension) in line with the Design and Construction Guidance in addition to our standard application requirements mentioned above. If it extends to the neighbouring land, you will need to obtain their formal permission.

The <u>Design and Construction Guidance (DCG)</u> is covered under Appendix C of the Sewer Sector Guidance document, which replaced Sewer for Adoption (SFA). The DCG details the new design and construction standards for adoptable foul and surface water systems.

For critical sewers (if the pipe size >225mm or the depth of the sewer is >3.0m) you can undertake this through a S185 Sewer Diversion application. If the affected sewer requires a diversion (relocation not replacement of existing line) you will be required to apply for a <u>sewer diversion</u>.

#### **Critical sewers**

Critical sewers are usually defined as large diameter strategic sewers but may also be classified by material, depth and/or location. Under no circumstances is construction allowed directly over a critical sewer, manhole, pumping or rising main. Restrictions may also apply as to how close you can build to such sewers, please refer to our <u>stand-off</u> <u>distances</u>. For rising mains, we normally require an additional 1 metre stand-off compared to gravity sewers depending on depth. Please also review the guidance for <u>locating rising mains</u>.

Although we will consider every case sympathetically, it is likely that permission to build over a sewer which is greater than 225mm diameter and/or 3 metres deep will not be given.

It is, therefore, in your interest to contact us in the preliminary design stage to avoid abortive costs, delays or other problems.

#### Gradients

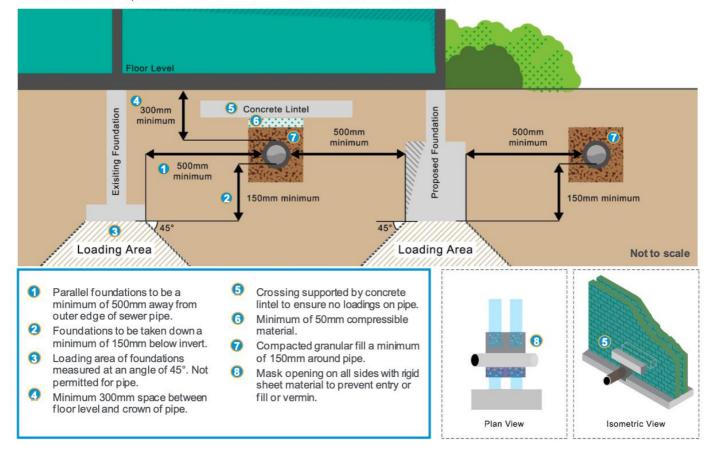
If relaying the pipe, you will need to ensure the sewer can maintain a self-cleansing gradient i.e., 1:80 minimum gradient for a 100mm diameter or 1:150 for a 150mm diameter foul sewer pipe.

#### Health & safety

You should refer to the <u>Southern Water Health and</u> <u>Safety Advisory.</u>

#### Typical foundation details and pipework protection

The below drawing shows our key requirements for the permitted locations of foundations in relation to existing and proposed sewers, detailing minimum distances and protection measures where walls or foundations are built and cross over.



# **Frequently Asked Questions**

## **Still have questions?**

We understand that all projects are different, and it might be hard to understand what the right and most costeffective option is. Please refer our <u>Frequently Asked Questions page</u> for more guidance or simply ask our team member to <u>call you back</u> and help.