



Appendix E1: Essex and Suffolk Water – Sewer Assets



Valves/Regulators	Fittings/Symbols	Storage/Operations	Network Types	Specific Main Types	Area Types
<div><div>P1</div><div>P2</div><div>P3</div><div>P4</div></div>	<div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div>	<div><div><div>U</div><div>DAM</div><div>SR</div><div>OB</div><div>?</div><div>IR</div><div>HT</div><div>FM</div><div>ST</div><div>FT</div><div>CWT</div><div>C</div><div>BPT</div><div>W</div><div>SP</div><div>F</div><div>RI</div><div>IM</div><div>CP</div><div>SC</div><div>BH</div><div>ABH</div></div></div>	<div><div>Distribution</div><div>Treated</div><div>Raw</div><div>Fire</div><div>Supply</div></div>	<div><div>Abandoned Asbestos</div><div>Abandoned</div><div>Out of Commission</div><div>Private</div><div>Proposed</div></div>	<div><div>Water Quality</div><div>District Metering</div><div>Easement</div></div>

User : DAWSJ1
Title : 0000

Date : 02/12/2024
Centre Point : 577726,191050

Map Sheet : TQ7791SE



The material contained on this plot has been reproduced from an Ordnance Survey map with permission of the controller of H.M.S.O. Crown Copyright Reserved. Licence No. AC0000851702. The information shown on this plan should be regarded as approximate and is intended for guidance only. No Liability of any kind whatsoever is accepted by Essex & Suffolk Water, it's servants or agents for any omission. The actual position of any mains shown on the plan must be established by taking trial holes in all cases. Essex & Suffolk Water must be given two working days notice of their intention to excavate trial holes. Private connections are not shown but their presence should be anticipated. **WARNING.** Where indicated on the plan there could be abandoned asbestos cement materials or shards of pipe. If excavating in the vicinity of these abandoned asbestos cement materials, the appropriate Health & Safety precautions should be taken. Essex & Suffolk Water accepts no liability in respect of claims, costs, losses or other liabilities which arise as the result of the presence of the pipes or any failure to take adequate precautions. Emergency Telephone Number: 0345 782 0999

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STANDARD CONDITIONS FOR WORKING NEAR NORTHUMBRIAN WATER / ESSEX & SUFFOLK WATER APPARATUS



THE FOLLOWING CONDITIONS WILL APPLY TO ALL WORKS IN THE VICINITY OF APPARATUS OWNED BY THE COMPANY

1. In these conditions the "Company" means Northumbrian Water Limited, trading as Northumbrian Water in the North and Essex and Suffolk Water in the South. Contact should be made with the appropriate Company Area Office prior to the commencement of any work. Arrangements can then be made for the local representative to visit the site and assist in the location and protection of any apparatus affected. The Company must be given two working days notice before any works, including trial holes, are carried out within their easements. To give notice please call 0191 301 6954 for the Northumbrian Area Office or 01268 664 491 for the Essex & Suffolk area office
2. The information shown on any plan provided by the Company is for general guidance only. The position of apparatus shown should not be relied upon as being precise. You should also bear in mind that no service pipes are shown on plans. From the 1st October 2011 there may be lateral drains and/or sewers which transferred into the ownership of Northumbrian Water Limited which are not recorded on the public sewer map.
3. In the case of Trunk mains which cross development sites, no development is to take place within an agreed distance either side of the pipeline. A guide showing the easement widths for the various diameters and depths of pipe is available from the Asset Plans department. The Asset Plans department can be contacted by calling 0191 3016 954 or emailing to plans@nwl.co.uk in the North or assetplans@esw.co.uk in the South.
4. No tree planting or landscaping work is done in close proximity to Company apparatus unless otherwise agreed in writing by the Company. A planting guide is available from the Asset Plans department.
5. The actual position of apparatus must be established by taking trial holes in all cases. No machine excavation will be permitted within 1 metre either side of a main. The actual position of any apparatus must be found by hand excavation.
6. Where Company apparatus is exposed by excavation, support and protection measures are to be agreed on site. Where excavations are taken out below the invert of a main, adequate support is to be provided to prevent collapse of the excavation and subsequent undermining of the main. Special attention is to be given to the compaction of selected backfill material under the main and the Company may require the use of lean mix concrete to replace inadequately compacted or unsuitable support backfill material. The compaction of selected backfill material under, around and up to a level of 300mm above the top of any main shall be carried out by hand. Upon completion of operations, any excavation is to be left open until after inspection by the Company's representative.
7. No installation of plant may take place within the Company's easements without the prior consent of the Company and with all special conditions and arrangements being finalised before commencement of work.
8. Indiscriminate crossing of the main by heavy construction plant will not be permitted. Where applicable, Crossing Points must be agreed by the Company and any protective measures necessary taken before work begins.
9. Surface boxes and covers should not be removed without obtaining prior consent of the Company. All surface covers to washouts, valves, air valves, hydrants, stopcocks etc., are to be kept clear of obstruction and with free access at all times. If surface boxes or covers have been temporarily removed, positions should be clearly marked.
10. Where the levels of carriageway and footpath surfaces are raised or lowered, then the Company's surface covers must be adjusted as appropriate.
11. No pipes or cables are to be laid or structures placed directly over the line of Company apparatus
12. Where drains, pipes or cables cross over or under any mains, a minimum clearance of 300mm must be maintained. Where it is necessary for any plant to lay parallel to the pipelines, a minimum distance of 1 metre shall be maintained between the outside of the pipeline and any plant being installed, except in the case of small diameter plant where N.J.U.G 7 dimensions apply. The Company must agree exceptions to these conditions in writing.
13. All crossing of the Company's pipelines and easements shall be at right angles where possible. Where skew crossings are necessary, no more than 3 metres of the Company's pipeline shall be exposed at any time.
14. The Company will require three copies of proposal drawings showing the details of any proposed crossing of pipelines above 300mm diameter. The drawings must show the Company's pipelines in relation to the proposed works, to a scale of no less than 1:500 and no work shall commence until the Company has given approval.
15. Where it is necessary to carry out piling works closer than 6m to the Company's apparatus, or to carry out works using plant that is likely to damage the integrity of the Company's apparatus, the Company will require a method statement of the works shall be consulted before work commences.
16. Where the Company's pipeline is protected by a cathodic protection system, the Company will require a suitable joint testing programme to be agreed before the application of any cathodic protection scheme proposed by another authority or utility undertaking. If any bond-wires or test leads associated with the Company's cathodic protection system are damaged, disconnected or found to be in poor condition, the Company should be notified so that repairs can be made.
17. In the event of any damage to any of the Company's plant the Company must be informed immediately. Where any damage occurs to Company apparatus, the appropriate remedial work will be carried out by the Company and charged to the promoter of the works.
18. Every effort should be made to secure the site against vandalism of the Company's plant.
19. A copy of these conditions is to be made available to all Contractors or Sub-Contractors working in the vicinity of Company apparatus.

INTRODUCTION

A strategic main is a pipeline which conveys water in bulk between a reservoir, water treatment works, pumping stations or service reservoir's to a distribution network of pipes. Strategic mains are generally laid with a depth of cover of 900mm below the ground surface but there are exceptions to this. Most water mains in private land are laid under the powers of the Water Industry Act 1991 (or earlier statutes) which also entitle the company to enter land to inspect, repair, alter or renew the main.

This document sets out Essex and Suffolk Water's requirements for the protection of any existing main laid and for ESW's rights of access.

In some cases water mains are laid under a Deeds of Grant. To the extent that such deeds specify protection for the main and rights of access these take precedence over this document.

EASEMENT WIDTH

The easement width normally varies according to the diameter of the pipe as follows:

Clearances required by ESW

<i>Internal Diameter of pipe</i>	<i>Easement width, each side of the extreme edge of the pipe</i>	<i>Approximate easement width in total</i>
Greater than 600mm	6.0m	13.0m
Greater than 300mm, up to and including 600mm	4.5m	9.5m
Up to and including 300mm	3.0m	6.0m

No buildings or structures of any kind are to be erected within the clearance width specified above, nor must any works be carried out which will increase or decrease the depth of the pipe below ground surface by more than 300mm.

NOTICES AND CONSENTS

When any work other than normal agricultural cultivation is planned within the easement width, ESW must be notified and the following drawings and plans submitted for approval:

- A 1:500 scaled plan based on Ordnance Survey, to locate the proposed work and;
- A 1:200 scaled plan to show details of the proposed works. These should be cross-referenced to the 1:500 scaled plan

ESW's consent must be obtained in writing before any work is undertaken within the easement width. Five working days notice, in writing must be given to ESW of the commencement of any work within the easement width.

Before any work begins within the easement width, a member of ESW staff will give an approximate location of the main on site. The developer (this includes any contractor, landowner or other party) must determine the exact location of the main through the land affected by means of hand dug trial excavation. ESW will also supervise all work within the easement. For some of the more important strategic mains, ESW will attend the site full-time. The developer must meet the costs of locating the main and supervising work within the easement width.

DEVELOPMENT AREAS

Where a residential or industrial development is planned around a strategic main, the developer should make every effort to ensure that the strategic main is planned to be within the road verge or, if this is not possible,

within the road. Where the main is to be within the road, extra measures are needed to protect it. These must be approved in advance by ESW.

LOCATION OF PIPES

Where it is proposed to cross above or below the strategic main with a pipe, sewer or drain the minimum clearance between the strategic main and the pipe, sewer or drain shall be 300mm.

Pipes, sewers or drains must not be sited directly above or under a joint in the strategic main. On-site investigation will allow ESW to give advice to assist the developer in complying with this condition.

It is desirable that joints in pipes, sewers or drains, which cross above or below strategic mains, should not occur directly above or below the strategic main.

Where the joints in the pipe, sewer or drain are close, additional protective measures may be required.

EXCAVATIONS

The minimum width of trench necessary should be excavated so that the total length of strategic main affected is kept to a minimum.

Within 2 metres on either side of the strategic main only hand excavation will be allowed. The method of excavation within the easement width must be approved by ESW prior to the commencement of the work.

BACKFILLING OF TRENCHES

Backfilling operations should follow as closely as possible to the laying of the pipe, sewer or drain.

Where the pipe, sewer or drain is laid beneath a strategic main the backfilled material should be well compacted by hand to a minimum depth of 300mm above the top of the strategic main. The material used for backfilling should be fine grained or in certain circumstances, ESW may require gravel or lean concrete to be placed beneath the strategic main.

Where the pipe, sewer or drain is above the strategic main, granular material should first be placed under the pipe, sewer or drain and then selected granular material carefully compacted by hand added to a depth of 300mm above the pipe, sewer or drain.

ROADWAYS

Where a road is to be constructed above the strategic main, a concrete raft will normally be required over the main. In this case, shale must not be used in the road construction.

Where plant and machines have to cross over a strategic main and precautions are needed to protect the main from damage, these must be approved beforehand by ESW. A dedicated crossing point must be identified and used at all times.

DAMAGE TO THE STRATEGIC MAIN

Where a developer or other contractor is responsible for causing any damage to ESW's main(s), they must bear the repair costs.

BUILDING OVER A WATER MAIN

Where a developer wishes to erect a building over a water main or to encroach upon the clearances specified above and is prepared to meet all the costs involved in diverting the main, ESW will not unreasonably resist this proposal. However, the inconvenience which adjoining landowners or occupiers will suffer during diversion work must be taken into account when considering the benefits which the developer will obtain. Where a developer requests a diversion, this will be the subject of a separate formal agreement.