



SOUTH STAFFS WATER PLC

**SELF-LAY
MAINS AND SERVICES ADDENDUM**

REVISED – MAY 2012

TABLE OF CONTENTS

- 1. Introduction**
- 2. Contact with South Staffordshire Water Plc**
- 3. Ofwat Guidance**
- 4. Mains and Services flow diagrams**
- 5. Contestable Works**
- 6. Non Contestable Works**
- 7. What is required from a Developer**
- 8. What is required from a Developer or SLO**
- 9. Material specification and provision**
- 10. Health Screening**
- 11. Appendices:**
 - 1. Self-lay Application Form**
 - 2. Service Connections Notification Form**
 - 3. New Property Details Form**
 - 4. Standard Easement Form**
 - 5. Mainlaying Specification**
 - 6. Guideline to charges.**
 - 7. Financial worked example.**

1. Introduction.

Developers now have the choice to either requisition the Water Company to undertake the work, carry out any work themselves or employ a Self-Lay Organisation (SLO) to carry out the work for them. South Staffordshire Water Plc (SSW) is committed to providing a cost-effective service for self lay of mains and services to Developers and or Self-Lay Organisations. However, ensuring water quality and the safeguarding of the public water supply are the two most important factors.

Responsibility for the integrity and quality of the network remains with the Water Company, therefore, only upon satisfactory completion of works, will we adopt water mains laid by the Developer or SLO.

SSW has broadly adopted the Code of Practice for the Self-Laying of Water Mains and Services 2nd Edition as published by WRc plc. (COP). This addendum should be read in conjunction with the COP and will provide either additional information or variations to the COP including any details of particular requirements, procedures or charges that may apply.

SLO's intending to operate within the SSW region are required to be accredited with the Water Industry Registration Scheme (WIRS). The scheme is operated by Lloyd's Registers and is supported by the Water Industry to enable SLO's one consistent route of accreditation. Details of the WIRS scheme and the relevant application forms are available on the Lloyds Register website: www.lloydsregister.co.uk/wirs.html. or alternatively contact WIRS direct on 02476 518603.

This addendum will commence on 1st May 2012 and will supersede any earlier self-lay policy. We, (SSW) reserve the right to amend this addendum at any time without prior notice to any third parties. 8

SSW will only enter into the legal Agreement with the Developer unless an authorisation letter is received stating that the Agreement can be accepted and signed by the designated SLO for that site.

2. Contacting SSW Plc.

Information can be found on our website at: www.south-staffs-water.co.uk

All telephone and written communication should be made to:

Developer Services Unit
South Staffs Water Plc
Green Lane
Walsall
WS2 7PD

Telephone: **0845 345 1399**

Email: developerservices@south-staffs-water.co.uk

Website: south-staffs-water.co.uk/your_business/new_connections.asp

3. Ofwat Guidance

Disputes

Ofwat has powers to determine disputes about the requisitioning of mains, sewers and lateral drains. They will also consider appeals about the adoption of water mains. They have set out the processes they will follow in exercising these powers in the following guidance: - Process for handling disputes and appeals: requisitioning for water mains and public sewers and/or lateral drains and adoption of self-laid mains.

All relevant documentation can be found on the Ofwat website:

www.ofwat.gov.uk

under the Competition, Self-lay Group heading.

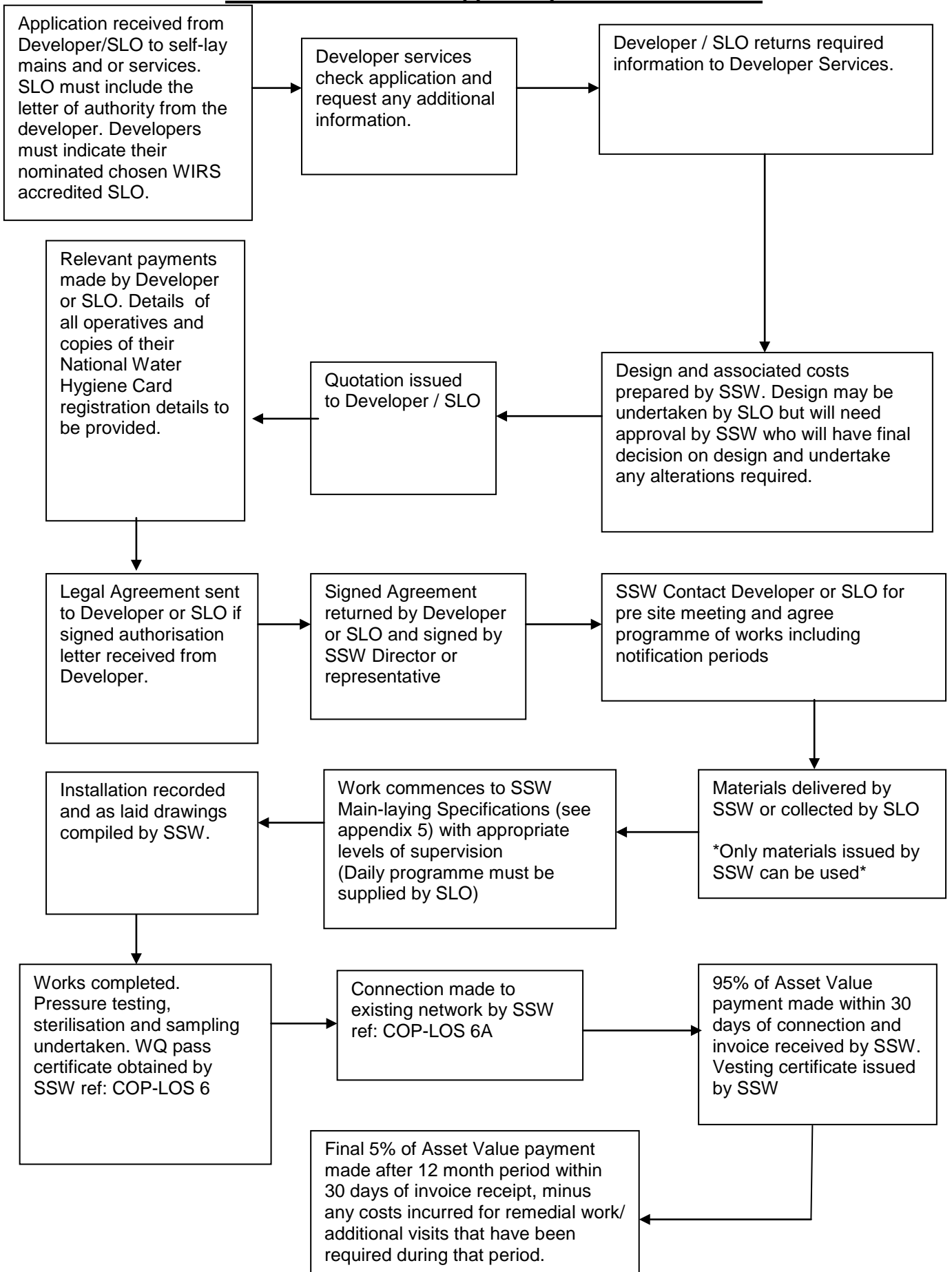
The following flow charts endeavour to follow all of the above guidance.

Timescales will be applicable, wherever possible, from COP 2nd Edition Appendix 7 –Ofwat Levels of Service.

4. Mains and Services Flow Diagrams

4.1 General flow diagram of the process – self-lay mains

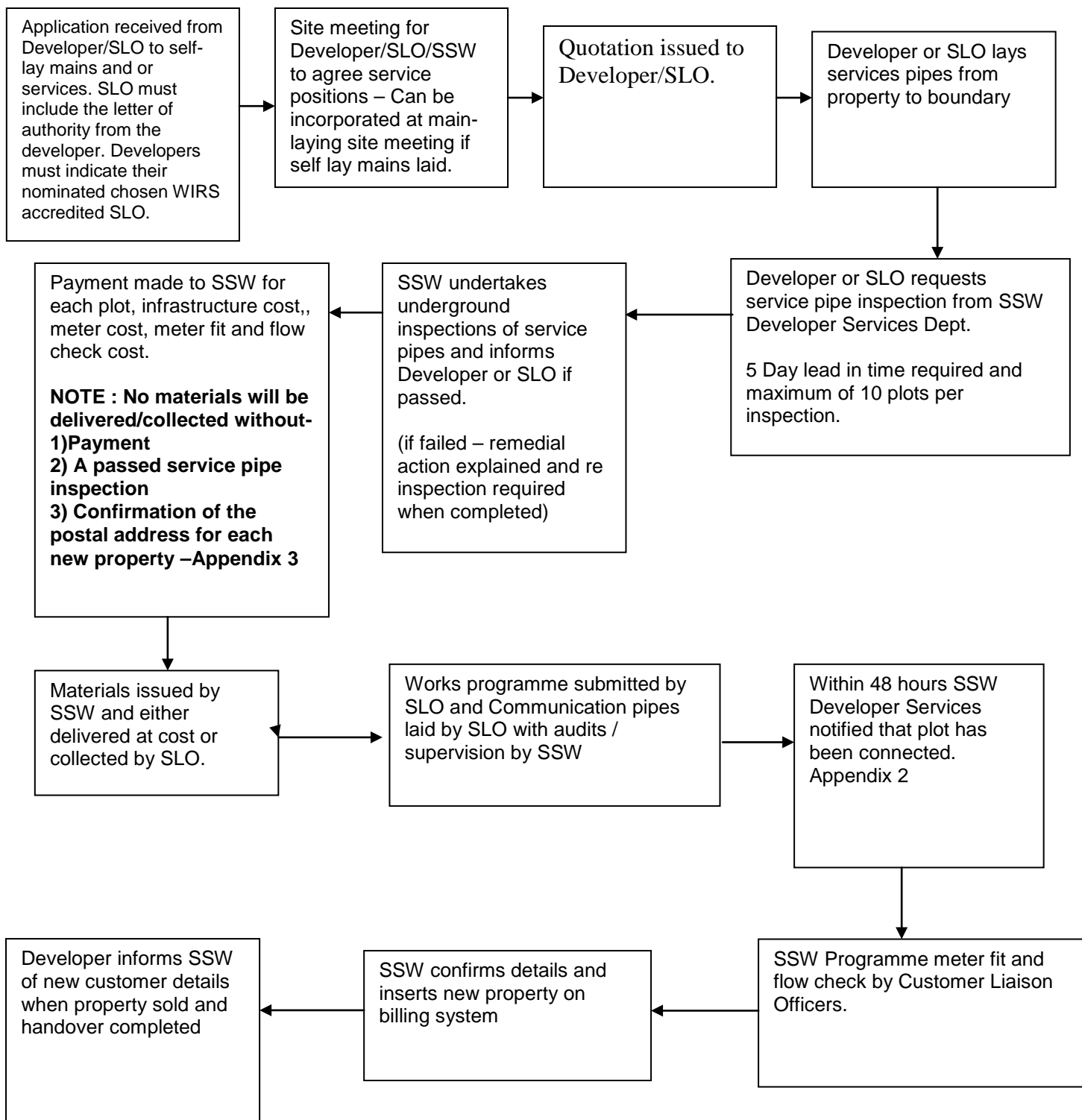
All materials will be supplied by South Staffs Water



4.2 General flow diagram of the process –Self-lay communication pipes.

Note: Communication pipes must only be connected :-

- **Using under pressure ferrules**
- **To mains which have been adopted**
- **Using only materials that are supplied by South Staffs Water**



5. Contestable works.

Activities will be in accordance with the COP 1.8 Table1 (Contestable activities in the design and construction of water mains and services).

6. Non-contestable works.

Activities will be in accordance with the COP 1.8 Table 2 (Non-contestable activities in the design and construction of water mains and services)

In addition, SSW deems the following activities as non contestable for each activity:

- Supervision and auditing
- Provision of materials for mainlaying and CP connections
- Offsite works to reinforce the existing water distribution network
- Meter Installations

7 What is required from a Developer (Where applications are made by the SLO)

- Provide written authorisation to SSW that the SLO is acting as an agent on their behalf.
- Confirm who the legal agreement is to be with.
- Confirm if the asset value payment is to be made to the SLO.

8 What is required from a Developer or SLO (Specifically in addition to the COP)

- A site location plan of 1:500 or 1:1250 scale
- Must confirm any proposed phasing of the development
- Liaison with Local Fire Authorities for allocation and fitting of any fire hydrants within the development. Guidance for this is available from the **National Guidance Document on the Provision of Water for Fire Fighting 2nd Edition**. (Copies can be obtained from Water UK)
Note: Fire Authorities are entitled to six weeks notice of any intended works. Subject to compliance with COP 1.13 Interfaces with Local Fire Brigades.
- Names, site addresses and telephone numbers of Site Managers
- Completion of SSW New Supply to land easement form where works are to be affected by easements in private land.(see appendix 4)
- Copies of the location of other Utilities or Agencies apparatus that may be affected by the self-lay works.
- Full payment of non-contestable works prior to work commencing
- The bearing of full costs associated with the removal of excess or contaminated ground from the development if appropriate but is deemed to be the responsibility of the SLO (see appendix 5 point 1.3.1)
- Notification to SSW immediately if the original design layout cannot be complied with. Reference COP Part 2 2.3 Design and Application figure 5. Additional costs will be incurred if the site layout changes and amendments are required.

9. Material Specification

SSW preferred current materials are HPPE and Ductile Iron (cement lined with an epoxy seal coat, zinc/aluminium coated externally with epoxy finishing layer) for mains and MDPE or Barrier Pipe systems for Communication pipes.

SSW will supply all water main and associated fittings materials. Delivery of materials will be contestable with the SLO having the option to pay a delivery charge or collect at their own cost from the point designated by SSW.

SSW will supply communication pipes materials, in order to maintain consistency of assets being installed. Delivery of materials to site will be contestable with SLO having the option to pay a delivery charge or collect from the point designated by SSW.

10. Health Screening --

SSW determines all water mains and service laying activities as restricted operations. All staff undertaking restricted operations work are required to be registered with the National Water Hygiene Scheme.

Whilst it is appreciated that SLOs will be WIRS accredited, prior to commencement of any work, SSW require a photocopy of both sides of the National Water Hygiene Scheme registration card to be provided for every person proposed to undertake restricted operation work on a self lay development site.

The card must be available for audit at any time whilst undertaking restricted operations. Failure to present the card to a SSW or DWI representative upon request whilst undertaking any restricted operation will result in the operative being suspended from working on the job until the card is available for inspection.

Any query regarding staff training and registration with the National Water Hygiene Scheme should be raised with: -

Energy and Utility Skills Ltd
Friars Gate Two
1011 Stratford Road
Shirley
Solihull
B90 4BN

11. Appendices:

Please forward your completed application form to:
South Staffs Water Plc
Developer Services
Green Lane
Walsall
West Mids
WS2 7PD

Appendix.1

General Information

Connection Quotation Charges

A charge of **£217 + VAT** (VAT will be charged for commercial developments) applies for the provision of detailed costings for applications requiring additional mainlaying. Your cheque for payment should be made payable to ' **South Staffordshire Water Plc** ' and should be provided at the time of application. Please note expired quotes will be reworked and charged at the above rate and a fee of **£58** will be charged for request to amend a valid quote.

1. Site Address and Site Details

SiteName _____ RegisteredLandTitleNo. _____

Address _____

Post code _____

2. Developer Details

CompanyName _____

Address _____

_____ Post Code _____

ContactName _____ emailaddress _____

DaytimeTelNo _____ Fax _____

3. Developers Solicitors

CompanyName _____ Address _____

_____ Post Code _____

ContactName _____ emailaddress _____

Daytime Tel.No _____ Fax _____

4. Self Lay Organisation (SLO)

CompanyName _____

Address _____ Post Code _____

ContactName _____ emailaddress _____

Daytime Tel.No _____ Fax _____

Appendix 2.

Ref: COP 2.4.4 figure 8 – subject to underground inspections



**Self -Lay Service Connections
Notification Form**

1. Site Development

Details:-

Developer Site Name.....
 Address.....

 Site Manager/Contact.....Tel. Nr.

2. SLO

Details:-

Company Name.....Project Manager.....
 Site Contact Name.....Tel Nr.

**3. Self Lay Service Connections
Programme**

(to be provided within 48 hrs of connections being made)

Plot Number(s)	Property Type (detached, semi, flat, other)	Date Connected By SLO	Size & Material	SSW USE	CP	SSW USE	Meter
				Audit Date		Fitted Date	

Please forward the completed notifications form to:-
 Developer Services
 South Staffs Water Plc
 Green Lane Walsall WS2 7PD

Tele : 0845 345 1399
 Fax : 01922 631779
 Email : developerservices@south-staffs-water.co.uk

Appendix. 3

South Staffs Water Plc

**NOTIFICATION OF ROAD NAMING
& NUMBERING**

To comply with COP 2.4.4 Point 5

Postal addresses for plots to be connected to be provided by SLO / Developer prior to materials been delivered or collected.

Information to be supplied on Local Authority Headed paper in line with current SSW Policy.

Appendix 4.

To: Amy Clarke
South Staffordshire Water Plc
Green Lane
Walsall
WS2 7PD

**SOUTH STAFFORDSHIRE WATER PLC ("SSW")
NEW SUPPLY TO LAND (INCLUDING UNADOPTED HIGHWAYS)**

[For SSW use only - Easement Number ...]

Developer's name and address:
Contact name
Telephone number
Fax number
Site name and location ("the Site"):
Plan to be attached showing details of:-
1 Highways to be adopted on the Site; and
2 All other land (including highways <u>not</u> to be adopted) on the Site which will be affected by the SSW water pipe.
Confirmation of ownership of the Site for development. Please supply:-
1 Identity of landown;
2 Land Registry Title Number or Numbers; and
3 A photocopy of your Land Registry Land Certificate/Charge Certificate and Land Registry plan of the Site:
4 Name and address of solicitor acting on behalf of developer at the Site:
Contact name at solicitors
Address of solicitors
Telephone number
Fax number
<p><u>PLEASE NOTE WE MAY NOT BE ABLE TO PROCESS YOUR APPLICATION FOR A NEW SUPPLY UNTIL YOU HAVE PROVIDED THIS INFORMATION TO US</u></p>

DECLARATION

We understand that it is necessary to enter into a Deed of Grant of Easement ("Deed") for new supply pipes at the Site (including any land other than adopted highway). We agree as follows:-

- 1 This Deed will be in your standard form as required by you;
- 4 We will ensure that any sale of properties on the Site will be made expressly subject to the Deed;
- 5 We understand that failure to adopt the above procedures may result in delays and in further Deeds of Easement being necessary with subsequent owners of any part or parts of the Site. We undertake to pay to you on demand any costs incurred by you in completing any such further Deeds of Easement;
- 6 We further undertake to pay to you on demand any other costs incurred by you as a result of any failure on our part in ensuring that any services on the Site are laid in accordance with the recommended procedure of the National Joint Utilities Group (NJUG).

Signed:..... (Authorised Signatory)

.....(Print Name)

For and on behalf of:.....(Name of Developer)

Date:

To all Developers

Dear Sirs,

Easements for New Mains to Developments - South Staffordshire Water Plc

Where you lay pipes in land (including under any unadopted roads) it is necessary to enter into a Deed of Grant of Easement. This is a legal document which preserves the Company's legal rights of access to the pipes for maintenance and repair purposes.

You must notify the Company of any part of your proposed development which will comprise such land (including any unadopted highway) when you submit your plans and request for a new supply connection.

You must also provide to the Company written confirmation that you are aware of the requirement for a Deed of Grant of Easement for any land (including any unadopted roads) and that you agree to enter into such a deed if required by the Company.

You must also undertake to inform potential purchasers of the existence of any such Deed of Grant of Easement and ensure that any sales to those purchasers will be made expressly subject to the Deed of Grant of Easement.

You must also confirm that you have ownership of the development land and give details of the solicitor acting on your behalf.

A standard form is enclosed which will assist you to provide the correct information. Please complete this and submit it with your plans for the new development.

Yours faithfully,

South Staffordshire Water Plc

Appendix. 5

MAINLAYING SPECIFICATION

INTRODUCTION

South Staffordshire Water PLC allows 'self construction' of supply pipes by competent installers to comparable standards to services laid by South Staffordshire Water PLC or its contractor.

Self-Lay Organisations (SLO's) are required to be Water Industry Registration Scheme (W.I.R.S) accredited in order to be eligible to install within South Staffordshire Water Plc's supply area.

(1) GENERAL

Land Entry

- 1.1 The installer must not enter on to private land other than that owned by the Developer, until expiry of any notice served by South Staffordshire Water PLC.
 - 1.1.1 When work has been completed on the site the installer shall reinstate the surface to the satisfaction of the land owner. The Developer shall indemnify the South Staffordshire Water PLC against any claim for damages costs charges or expenses.
 - 1.1.2 The Developer shall obtain all necessary consents or licences and comply with all applicable laws and statutes.

Water Hygiene

- 1.2 The installer shall comply with all South Staffordshire Water PLC Policy and Procedure statements on water supply hygiene. (Nrs 13; 646; 904)
 - 1.2.1 Compliance with CESWI 6th Edition Section 1.16 Water Supply Hygiene.
 - 1.2.2 Installers must hold a valid National Water Hygiene Scheme Registration Card for each member of the gang working on potable water supply systems. Copies of both sides of each card to be forwarded to South Staffordshire Water PLC before any work shall start.
 - 1.2.3 Installers shall not be allowed to work on potable water systems if they may come into contact with sewage or sewage sludge, until all personnel are authorised by South Staffordshire Water PLC and all tools and vehicles have been disinfected. (In accordance with Policy & Procedure '646')
 - 1.2.4 Developers must provide adequate toilet facilities for their use, this must not lead to contamination of any part of the site.
 - 1.2.5 Installers will not be allowed to carry out works that involves 'live' distribution pipework. (Connections; installing or replacing fittings on live mains or work on existing communication pipework)

Work in Contaminated Ground

- 1.3 Prior to any work commencing on the site a ground soil analysis must be provided to South Staffordshire Water PLC.
 - 1.3.1 The installer shall be responsible for removal of any toxic or harmful materials found on site in a safe manner, in accordance with the provision of the deposit of Poisonous Waste Act 1972 and Control of Pollution (special waste) Regulations 1980.
 - 1.3.2 The installer shall indemnify the South Staffordshire Water PLC against any responsibility for the disposal of toxic or other dangerous waste materials from the works. Special attention is drawn to the disposal of Asbestos Materials Regulations 1969.

Materials

1.4 Pipes and fittings used on the works must have been acquired specifically for the proposed work. They must comply with Regulation 25 1(a) of the Water Supply (Water Quality) Regulations 1989.

1.4.1 The pipes and fittings will be supplied by South Staffordshire Water PLC. No other pipes and fittings will be allowed.

Line & level

1.5 The line of mainlaying will be taken from the layout drawing supplied by South Staffordshire Water PLC or from the layout supplied by the Installer and agreed to by SSW PLC, this will be to NJUG recommendations unless otherwise stated.

Depth

1.6 The depth of main laid will be 900mm of cover from final reinstated level to the crown of the pipe for mains up to and including 200mm diameter. Pipe of larger diameter will be laid with 1000mm of cover from final reinstated level to crown of pipe.

Deviation

1.7 The South Staffordshire Water PLC will only allow deviation from the drawing, line or level following discussion and written agreement by the South Staffordshire Water PLC Technical Service Manager.

(2) CONSTRUCTION OF PIPELINES

General

2.1 The developer shall ensure that each pipe is uniformly supported throughout the length of its barrel.

2.2.1 Protective caps, disc or other appliance on the end of a pipe or fitting shall not be removed permanently until the pipe or fitting which it protects is about to be jointed.

2.2.2 Pipes and fittings including any lining or sheathing, shall be examined for damage and the joint surfaces and components shall be cleaned immediately before laying.

2.2.3 Suitable measures shall be taken to prevent soil or other material from entering pipes during installation and to anchor each pipe to prevent flotation or other movement before the works are complete.

2.3 A detectable marker tape shall be laid with all new non-metallic mains, such that it can be detected at a depth of 1.5 m with current electromagnetic detectors. Marker tape shall be continuous, laid below the pipes and adequately secured to valves and fittings, the conductor material shall be either aluminium foil or stainless steel wire and remain detectable for 50 years. The tape must be marked with a visual warning and coloured blue in accordance with NJUG publication Nr 4 - The identification of small buried mains and services. A blue coloured warning marker tape shall be laid 300mm above all new mains.

2.4 The bottom of the trench shall be graded to an even fall such that when the pipe is subsequently laid on the fine fill bed, no part of the pipeline shall touch virgin ground or other non-imported material.

2.5 All sharp stones, pebbles and other objects in the trench which are likely to cause local pressure on the pipe shall be removed before laying and preparing the 150mm deep fine fill pipe bed. The trench shall be kept free from all debris and loose soil.

2.6 Placing and compaction of fine fill surround, backfill and reinstatement shall be carried out in a manner to avoid damage to the pipe, fittings and to the internal and external protection.

2.7 All work shall comply with the New Roads & Street Works Act 1991 where applicable.

- 2.8 Liaison with Asset Information Unit (AIU) shall be required for recording information prior to backfilling – method to be agreed with AIU Manager.

(3) DUCTILE IRON PIPELINES

- 3.1 The installation of ductile iron pipes shall be laid according to 'Induct Plus' incorporating pipeline installation instructions developed by Biwater Pipes in conjunction with the WRc.
- 3.2 Flanged pipes and fittings shall be drilled to NP 16.
- 3.3 Potable water pipes shall have a cement mortar lining with a sealing coat as required to ensure full compliance with DWI Regulation 25 (1a) Fittings shall have a lining to ensure compliance with DWI Regulation 25 (1b).
- 3.4 Joint areas and simple fittings shall be protected using purpose made PE muffs. Any free end or damaged wrapping shall be fixed securely to the pipe using PVC adhesive tape.
- 3.5 Bolted joints and fittings shall be protected by the application of a self adhesive rubber based cold applied tape wrap combined with a thick PVC backing.
- 3.6 The ONLY lubricant approved for use on spigot & socket joints is **Medlube**, NO OTHER lubricant shall be allowed.
- 3.7 Pipes and fittings shall be stored such that no part shall come into contact with virgin ground, and all reasonable precautions are taken to stop contamination by other materials or animals.

(4) POLYETHYLENE PIPELINES

- 4.1 The installation of PE pipework shall be by Butt Fusion and Electro-fusion welding in accordance with IGN 4-32-08 (formerly WIS 4-32-08), using fully automatic controller equipment . The installer shall provide evidence that the equipment has been serviced and calibrated within the previous twelve months before work is carried out.
- 4.2 External bead must be removed from Butt Fusion joints labelled and identified with the specific joint record and kept for inspection by South Staffordshire Water PLC.
- 4.3 End preparation of pipes for Electro-fusion shall be carried out with specially designed mechanical scrapers which shall be approved by the South Staffordshire Water PLC prior to the commencement of works.
- 4.4 A shelter must be used in all circumstances for Butt or Electro-fusion jointing.
- 4.5 Pe-Aluminium-PE (Barrier) pipelines for use in contaminated ground are available and subject to prior approval of South Staffordshire Water PLC Developer Services Manager can be used. Fittings and jointing methods shall be agreed for each specific site.
- 4.6 Polyethylene pressure pipe systems shall comply with the relevant provisions of the UK water Industry WIS 4-32-17. Pipes shall be blue for cold water below ground, PE80 rated SDR 17. Where composite pipes are used they shall be blue coloured with four continuous brown co-extruded stripes at quarter points.
- 4.7 Mechanical jointing for polyethylene pipes shall comply with WIS 4-24-01 type 1 end load performance, or WIS 4-32-11.

4.8 Electro-fusion fittings shall comply with WIS 4-32-14

(5) THRUST BLOCKS

- 5.1 Except where self-anchoring joints are used, thrust from branches or changes in direction shall be resisted by concrete thrust blocks in contact with undisturbed ground.
- 5.2 Any additional excavation required to accommodate thrust blocks shall be carried out after the branch or bend is in position and the thrust face shall be trimmed back to remove all loose material prior to fixing.
- 5.3 poured concrete thrust blocks shall be allowed to develop adequate strength before any internal pressure is applied to the pipeline.
- 5.4 Rapid hardening cement shall not be used in concrete for thrust blocks to plastic pipes.
- 5.5 Plastic pipes shall be wrapped with a layer of heavy duty plastic sheeting before being surrounded by concrete.
- 5.6 Straps for anchoring pipes and fittings are to be 'hot dipped' galvanised in accordance with BS 729.

(6) VALVES

- 6.1 Valve positions should be considered with a target figure of 100 properties being the maximum number subject to isolation for repair and maintenance purposes.
- 6.2 All branches must be controlled by a single valve unless more are needed to satisfy the 100 property rule. Three valves are only required where the flow of water can be directed in both directions, again the 100 property rule applies.

(7) WASHOUTS

- 7.1 Where a main ends and is not connected to another main, a washout must be installed to allow flushing of the mains system.

(8) HYDRANTS

- 8.1 Hydrants / washouts shall be fixed so that the outlet of the hydrant is a maximum depth of 300mm from the top of the hydrant frame and lid.

(9) TESTING

- 9.1 Testing shall not be permitted against closed valves or air valves. A temporary duckfoot bend shall be fixed at the inlet side of any main to be tested, together with a blank plate drilled and tapped an appropriate size with a controlling gate valve or stop tap and a non-return valve .
- 9.2 Mains shall be tested and chlorinated in accordance with SSW PLC Policy and Procedure document 904 (introduction of new mains).
- 9.3 Water used for disinfection must be de-chlorinated prior to discharge to any drain or water course.

Appendix 6

Information of charges 2012/2013

DESCRIPTIVE	COST
Mains Connections to existing network	Individually costed per scheme per connection
Design	£39 / hour
Audit and Supervision	£39 / hour
Easement Administration	£1000.00 +VAT
Recording and compilation of as laid drawings	£22.00 / hour
Delivery of materials to site	£267.00 per delivery
New main pressure test	£104 / hour
New main chlorination	£104 / hour
New main sample (including washing out)	£82.87
Service pipe inspections	£37
Meter fit and flow check (normal working hours)	£77.50
New mains quote administration	£268.00 + VAT
New communication pipe quotes	£126.00 per site
New communication retention fee	5% of total communication pipe materials cost

Appendix 7.

Worked Example

In order to show how the costs for new water mains are calculated for a typical scheme, the following information is provided for example purposes only. This worked example is based on a new development of 150 properties where no network reinforcement is required. In the Self Lay Option the material cost is utilised as the basis for the security deposit.

The costs used in the example are for explanatory purposes only and do not represent actual SSW costs.

Requisitioning costs	75,000
Network Reinforcement Costs	
Less Infrastructure Charges	
Total relevant scheme cost	75,000
Cost of materials	20,000
Number of properties	150
Average income per property	132
Interest Rate for borrowing	4.00%
Discount Rate	4.00%
Long Term Annual % increase in bills	3.10%

* Network reinforcement costs are the costs of any additional work further upstream that water undertakers can recover under section 43 of the Water Industry Act 1991.

**Option 3 - Self Lay Calculation - SSW RETAINS 5% OF ASSET PAYMENT AS RETENTION FOR 12 MONTHS.
SSW PAYS 95% OF ASSET PAYMENT UPON ADOPTION.**

Requisitioning costs	75,000
Network Reinforcement Costs	0
Less Infrastructure Charges	0
Total relevant scheme cost	75,000
Cost of materials	20,000
Number of properties	150 Assume cum properties in charge is 33% yr1, 66% yr2, 100% yr3
Average income per property	132
Interest Rate for borrowing	4.00%
Discount Rate	4.00%
Long Term Annual % increase in bills	3.10%

	Income	Discount	Asset
Year	Allowance	Factor	Payment
1	0	0.96154	0
2	6,805	0.92456	6,292
3	7,991	0.88900	7,104
4	7,991	0.85480	6,831
5	7,991	0.82193	6,568
6	7,991	0.79031	6,315
7	7,991	0.75992	6,073
8	7,991	0.73069	5,839
9	7,991	0.70259	5,614
10	7,991	0.67556	5,398
11	7,991	0.64958	5,191
12	7,991	0.62460	4,991
Total		9.38507	66,216
Less cost of materials provided by SSW			(20,000)
Total asset payment			46,216

Total borrowing costs £95,896.96

