



APPLICATION FOR WATER CONNECTION

*Please complete in block capitals and return to above address.
Incomplete applications will not be processed..*

Name of Applicant: _____ Address for correspondence: _____

Tel. No.: _____

Applicants P.P.S. Number: _____

Location and postal address of proposed connection: _____

Type of connection required – Tick appropriate box:

- | | | |
|--|--|---------------------------------------|
| <input type="checkbox"/> Private House | <input type="checkbox"/> Farmhouse | <input type="checkbox"/> Guesthouse |
| <input type="checkbox"/> Housing Development | <input type="checkbox"/> Cattle Trough | <input type="checkbox"/> Caravan Park |
| <input type="checkbox"/> Licensed Premises | <input type="checkbox"/> Piggeries | <input type="checkbox"/> Hotel |
| <input type="checkbox"/> Shop Premises | <input type="checkbox"/> Factory | <input type="checkbox"/> Restaurant |
| <input type="checkbox"/> Other (Please give details) _____ | | |

Note:

Section A below must be completed for a required water supply less than or equal to 0.01 litres/second (i.e. normal domestic house)

Section A & B below must be completed for a watermain supply greater than 0.01 litres /second

SECTION A

Estimated maximum water demand in peak periods (litres per second) _____

Is Planning Permission required for the development? Yes No

If yes please quote Planning Reference Number: _____ Date Granted: _____

Have you an existing connection from the council? Yes No

Are you being charged for or availing of any of the following Council services. If so please tick appropriate box.

Housing Loans Rents/Tenant Purchase Rates Refuse

If yes please state your account number _____

Is the watermain to which it is proposed to make the tapping part of a Group Water Scheme? Yes No
(If yes, attach written approval from the Secretary of the Group Scheme to allow tapping)

PLEASE SUBMIT THE FOLLOWING:

- A map to a scale of not less than **6" to 1mile** in rural areas and **1:2500** in urban areas being an extract from an **Ordnance Survey map**, with site/location outlined in red. The map reference number must be clearly shown on the map.
- A site location map to a scale of not less than **1:500**, indicating the location where you require connection to be made marked with a **red "X"**. A coloured red wooden peg is to be erected on site at this location.
- Evidence that a development charge if applicable has been paid. Applications will not be processed until development charges have been paid.

THE WATER CONNECTION, IF APPROVED, WILL BE GIVEN AT THE NEAREST POINT ON THE PUBLIC WATER MAIN AND NOT THE PROPOSED DEVELOPMENT

SECTION B

The applicant is requested to submit further details as outlined in Section 1.0 of South Tipperary County Councils "SPECIFICATION FOR LAYING OF DISTRIBUTION WATERMANS". All water mains and fittings are to be laid in accordance with this specification.

NOTIFICATION OF PERMISSION

A decision to grant or refuse permission for a new water connection will be issued, together with the appropriate connection fee due as soon as possible after receipt of application.

FOR OFFICE USE ONLY

WATER CARETAKER REPORT

Main Size/Type	Distance from connection point to main	Service Size	Nearest Pressure	Is connection off group	Road Crossing	Width of Road Crossing	Connection Type

Observations (if any) _____

Signed : _____ Date: _____
Water Caretaker

NOTE: Location of main to be drawn on attached map showing type and size

FOR COMPLETION BY ENGINEER

Report: _____

Estimated Cost of new connection: _____ Proceed with application Yes No

Signed : _____ Date: _____
Executive Engineer

FOR COMPLETION BY SENIOR STAFF OFFICER

Connection Fee Paid _____ Date Paid _____ Receipt No. _____

Development Charge Paid _____ Date Paid _____ Receipt No. _____

Signed: _____ Date: _____
Senior Staff Officer

PLUMBERS REPORT

Date Connection	Metered/Unmetered M ³ /Gallon/Litres	Location of meter	Reading at Insertion Quote all figures	Serial No. Of Meter

Signed: _____ (Plumber)

SOUTH TIPPERARY COUNTY COUNCIL

SPECIFICATION FOR THE LAYING OF DISTRIBUTION WATERMAINS

1. PLANS

Submission of Plans to Water Section for Approval

Before any work is put in hand, the following information shall be submitted to the Water section:

PART 1

- A completed water connection application form
- 2 no. plans to a scale of not less than **6" to 1mile**. showing the location of the proposed development.
- 2 no. plans to a scale of not less than **1:2500** showing the proposed development, including all proposed roads, watermains and connect details, fittings and other services.
- 2 no. sections through proposed roads and footpaths showing location of all services including watermains and fittings.
- 2 no. vertical sections showing locations of all fittings.
- Details of proposed pipes and fittings to be used.
- Design calculations used to determine pipe size, air and scour valve locations, etc.

PART 2

Before a water connection is made the customer shall, on completion of the water supply system, submit the following:

- Any charges that may be applicable. (On completion of PART 1 the customer shall be notified in writing of the charge.)
- 2no. sets of "as constructed drawings"
- Completed Form T1 – Watermain Pressure Test
- Results of Chlorination and Bacteriological Test.
- Certification from Engineer that the Water Supply system has been designed, constructed, installed and tested in accordance with the relevant specification and/or Building Regulation.
- Commissioning certificate for the electronic bulk meter.

2. REGULATIONS

All plumbing works shall comply with the current relevant Statutory Regulations and Standards.

3. TIME OF COMMENCEMENT

The Contractor shall notify South Tipperary County Council Water Section in writing **1 month** prior to the date on which it is proposed to commence work.

4. INSPECTION

A South Tipperary County Council representative may inspect the work from time to time. The connection to the Council main will only be given when the Council is satisfied that: -

- a) The watermains have been laid in accordance with this Specification.
- b) All plumbing work complies with the current relevant Regulations and Standards, and the Guidelines for the Management of Water Services and the Conservation of Drinking Water 2004.
- c) Pressure, Chlorination and Bacteriological Tests have been carried out and approved.

5. MATERIALS

No materials shall be used without the prior approval of South Tipperary County Council, Water section. It is the responsibility of the Contractor to ensure that all materials/fittings to be used on the site have been approved for use by the South Tipperary County Council Water section in advance of work commencing. A copy of the STCC Water section Standard Details is available on request.

6 PIPES & FITTINGS

General

All pipes shall be the product of an approved manufacture. In accordance with the relevant standard each pipe and fitting shall have cast, stamped or indelibly painted on it the following appropriate marks:

- Manufactures name, initials or identification mark.
- Nominal size.
- Class designation.
- The number of the relevant standard.
- Angle of bends, in degrees.
- Date of manufacture.
- Class of pipe.

And pipes shall comply with the latest relevant Irish Standard or equivalent British Standard.

Watermain Pipes shall be either:

- a) uPVC – pipes shall, as a minimum be **Class D**
- b) MDPE – pipes shall be of type PE-X-80 and have an SDR rating of 11
- c) Ductile Iron – pipes shall be either Class K9 or K12.

6.1 Service Pipes & Fittings

As a general rule, service pipes should be MDPE. In certain circumstances and, subject to prior written approval from the Council Water Section, malleable copper pipes and/or copper alloy fittings may be used.

MDPE pipe and fittings should be of type PE-X-80 and have an SDR rating of 11. They shall conform to the UK Water Industry Specification No. 4-32-02 and or BS 6572 for pipe sizes up to 63mm OD. No. 4-32-04 for fusion joints and fittings.

Malleable Copper pipes where approved for use shall conform to IS EN 1057:1996 and fittings for use in conjunction with these shall conform to IS EN 1254 part 1 (capillary) OR part 2 type B (manipulative).

Copper Alloy fittings where approved for use shall be approved gunmetal and conform to BS 2872 or BS 2874. (Material CZ132 resistant to de-zincification)

The Water section Plumbing Inspectorate must approve the diameter of the service pipe in advance. All pipes & fittings must be of a type submitted and approved by STCC.

6.2 Water Control Unit (WCU)

All service pipes shall include the installation of a Water Control Unit with integral stopcock (note that the use of the traditional stopcock has been discontinued) and meter. Contractors shall consult with the STCC Water section in relation to approved types of boundary box.

6.3 Sluice Valves

Sluice valves shall be double flanged; ductile iron resilient seal gate valves for Water section purposes and shall comply with the relevant requirements of BS 5163: 1986 Type B and have the BS Kitemark. The number of turns to open/close the valve must be $n=2N + 1$ where N = the equivalent diameter in inches. All flanges shall be drilled to P.N. 16. The spindle shall be fitted with a cast iron oval false cap (complete with grub screw) of standard STCC pattern.

All sluice valves shall be **ANTI-CLOCKWISE CLOSING**.

6.4 Hydrants

Hydrants shall be manufactured in accordance with BS 750: 1984, Type 2 and shall incorporate a screw-down valve, underground, "guide in head" type, with bayonet iug outlets and false spindle cap of standard STCC pattern. A contractor may not use hydrants (which are provided for emergency supply) without the written permission of STCC.

The hydrant valve shall be **ANTI-CLOCKWISE OPENING** i.e. the opposite of a sluice valve.

Note: Both sluice valves and hydrants shall be coated with an electrostatic epoxy powder spray, or bitumen - trichloroethylene solution to U.K. National Water Council and STCC approval.

6.5 Air Valve

Air Valves shall be manufactured in accordance with BS 750.

6.6 Valve Chamber

All Chambers shall be construct in accordance with the National Roads Authority Road Construction Details for Statutory Undertakers.

6.7 Surface Covers

Valves and hydrants when installed shall be covered with approved heavy-duty metal surface covers to I.S EN 124: 1994. These approved metal covers shall conform to the STCC Specification for valve and hydrant covers.

6.8 Marker Plates

Marker plates and baseboards shall comply with B.S. 3251 while sluice valve indicator plates and baseboards shall comply with the STCC Specification. They shall be mounted at the boundary of the public thoroughfare nearest to the hydrant or valve.

6.9 Bulk Meter

Where the flow to a development / estate exceed 5,000 litres per day (the equivalent of 10 domestic houses) the Contractor shall supply, install and fully commission at locations specified, bulk flow Water Meters with Readout and Pressure Sensing equipment with Kiosk to the following specification:

Bulk Meter.

The bulk flow meter shall be of high Accuracy to Plus or Minus 0.2% of indicated value, and shall be of the Electromagnetic type Mains Electricity Powered with Battery back-up which will last for 3 years in the event of Power failure, with no moving parts and adequately sized to suit current and future flows through the pipeline. The meter body shall be Flanged to BS4504 –PN16 have NWC approved Lining have Stainless Steel Internal Electrodes or Earthing Rings be fully potted for IP68 Environmental Protection and have 10 metres of cable, It shall have a Remote Display for Mounting in the Kiosk which will Indicate, Forward Reverse and Nett Total flow through the Meter and supply 3 Pulse Outputs, it shall have Internal Diagnostics and displays which will Indicate Metering Status and Faults in the Measurement.

The meter shall be installed on the Pipeline in Accordance to the Manufacturers Specifications and in a Chamber with Access Cover, which will allow easy removal of the meter for future maintenance.

The meter shall be similar or equal in Specification to Magmaster-Aquamaster Tm –

Pressure Measurement

A Pressure tapping shall be made on the pipeline in the meter at a distance which is 4 Times the pipe Diameter Measured from the Centre of the Flow meter installed and on the Outlet flow side of the Meter.

The tapping shall consist as of a Self Tapping Saddle with ½” HG Pipe back to the Kiosk where an Isolation Valve a 2 Wire Pressure Sensor and Connection to the Low Power Radio Transmitter.

Metering Kiosk.

The Telemetry Metering Kiosk shall be manufactured from 3mm Mild Steel hot dipped Galvanised throughout S/S Earth Terminal and Earth Strap provided between main cabinet and door. Flush fitting door hinges with stainless steel pins and nylon bushes EPDM Door Seal 15mm Wide and 6mm thick. Door.

Kiosk to Incorporate full backing board in 12mm external grade Plywood.

Kiosk Dimensions

- 606mm Wide
- 920mm High
- 277mm Deep
- 350mm Deep Mounting Plinth.

The Kiosk shall be fully wired on site to meet the requirements of the Irish Electricity Supply Board and an Electrical Installation Completion Certificate Issued for the installation a copy of which is to be forwarded to the nearest E.S.B. area Office as a request for them to connect to the supply.

Site Ducting

The Contractor shall Supply all Site Ducting between the Meter Chamber and Kiosk and Electricity Supply Pole or Pillar Box for the Site.

The Contractor shall negotiate with the local Electricity Supply Office and agree the Pole or Pillar-box location.

7. DEPTH AND POSITION OF PIPES

All pipes shall have a minimum depth of cover of 750mm and maximum depth of 900mm horizontal distance of 300mm between the distribution watermain and other utilities, cabinets, poles, junction boxes or chambers. **No other service shall be laid above along the line of the watermain. There shall be a minimum vertical clearance of 100mm where other services cross over the watermain. Pipes/ducts, cabinets, poles, junction boxes or chambers shall not be constructed on top of a watermain.**

See Appendix 1 for clearances from arterial watermains.

8. PROTECTION OF PIPES

All ductile iron pipework shall be coated internally with a centrifugally applied cement mortar lining containing a sulphate resistant cement and shall be sealed with an approved bitumen or epoxy resin sealcoat in accordance with BS 4722: 1988. External protection shall include a zinc coating to EN 545 under bitumen based coating to BS 3416: 1991.

9. WARNING MESH

All pipework shall have a 400mm wide water warning mesh, - Plyage HR 40D blue polyethylene warning mesh or similar - laid directly over the centreline of the pipeline and tied to valves, at a depth of 350mm below the finished ground surface. Supply pipes shall have a mesh 200mm wide laid at the same depth.

10. PIPE JOINTS

Pipe joints shall be one of the following three types:

- Push-in rubber ring joint.
- Bolted flanged joints.
- Flexible couplings, e.g. Viking Johnson couplings with Rilsan coating, or similar approved types.

All joints shall be made strictly in accordance with the manufacturer's instructions.

11. CLEANING PIPES

All pipes shall be examined internally for dirt, stones, or any foreign matter and shall be thoroughly cleaned before laying in final position. To prevent foreign matter or vermin entering the main as it is being laid, all open ends of laid pipes shall be plugged until the next pipe is ready for insertion.

12. BEDDING MATERIAL

All pipes shall be laid on a 150mm bed of rounded single sized pebble of 10mm nominal diameter and haunched and covered to a depth of 150mm with similar material. Pipes shall not be supported by stone or rock at any point. Rock shall be excavated to a depth of 150mm below the actual depth of trench required and backfilled with DOE Clause 805 prior to laying the pebble bed.

In ground that contains ashes or chemicals or material that could accelerate corrosion or deterioration of the pipe, the material to be used and method of laying shall be agreed in writing with the Council Water Section prior to laying.

13. BACKFILLING MATERIAL IN OR ADJACENT TO ROADWAYS

All trenches shall be backfilled in accordance with the DOE "Guidelines for the Opening, Backfilling and Reinstatement of Trenches in Public Roads".

14. DESIGN CRITERIA

Unless otherwise stated in this specification, the watermain shall be designed in accordance with the DOE "Recommendations for Site Development Works for Housing Areas"

All watermain branches are to designed in such a way that they can be isolated i.e. at a ("T") tee junction 3no. sluice valves are required, at a ("+") cross junction 4no. sluice valves are required.

The watermain is to be looped internally to allow for only one connection to the Council watermain.

15. **TESTS**

After the pipes have been laid and jointed, the main shall be tested as outlined.

15.1 *Pressure Test*

The Customers shall notify the Council in writing **1 week** prior to testing the watermain, and shall be responsible for all aspects of the test. All pipelines shall be tested before being brought into service. The test shall be a hydrostatic test performed by filling the pipe with water and raising the pressure to the selected test pressure. The Customer shall supply necessary water pumps, gauges, jacks, struts and all apparatus necessary for carrying out the tests. He shall provide for transmitting the unsupported end thrusts to solid ground and ensure that the anchorages of bends is complete. The pipes shall be tested in such lengths and at such times as the Engineer may direct and pipe joints shall be left exposed. Testing shall not be permitted against a closed valve and these shall be in fully open position and sealed with blank flanges. Air valves and hydrants shall be subjected to the test pressure but these should be inspected whilst the main is under pressure to ensure that they are not leaking. The length of pipeline to be tested shall consist of one class of pipe only.

Test Pressures

UPVC 1.5 times the working (design) pressure of the pipe.

Ductile Iron 1.5 times the max. operating pressure of the pipe

The test pressure shall be applied for a period of not less than 6 hours or more than 24 hours. The leakage rate shall not exceed 0.11 litres per mm bore of main per km of pipeline per 24 hours.

15.2 *Chlorination Test*

All mains shall be swabbed and disinfected before being put in to supply. The pipelines shall be disinfected with water having a minimum concentration of 20mg/l of free available chlorine. This can be achieved using a sodium hypochlorite solution. Many hypochlorite solutions are available on the market, such as Chlorox, Eirochlor, Chemchlor, Sodium Hypochlorite etc. and these contain 10 - 14 % of available chlorine by weight. These may be purchased in any good chemical supply company.

The recommended dosage of sodium hypochlorite solution is as follows:

<u>Main Diameter</u>	<u>Vol. of sodium hypochlorite per 100m of main</u>	
	<u>10%</u>	<u>14%</u>
100mm	150ml	110ml
150mm	350ml	250ml

Other dosage figures can be extrapolated from the above figures.

The chlorinated water shall be left in the main for a period of at least 24 hours. Chlorine residual tests shall be taken at the end of the main furthest from the point of injection. The sterilisation process shall be repeated if the chlorine residual is less than 10mg/l.

The chlorinated water shall be discharged into a foul sewer and never into a surface water sewer or water-course and shall be subject to the prior approval of the STCC Water Pollution Engineer

15.3 *Bacteriological Test*

The main shall then be refilled and a sample of the water shall be taken for Bacteriological Analysis. Great care shall be taken when obtaining samples for testing and only sterile containers shall be used. This sampling shall be carried out in the presence of the Engineer and or his/her representative. Samples shall be tested within 6 hours of collection. Water samples may be tested in any approved or accredited laboratory.

Note: The Water Section will not connect the new main to the existing network until a copy of a satisfactory bacteriological test report has been submitted to the STCC Water section for approval.

15.4 *Plumbing Inspection*

All internal plumbing in every development must comply with the STCC Water section Plumbing Regulations and the Guidelines for the Management of Water Services and the Conservation of Drinking Water 2004. Arrangements must be made to have the internal plumbing inspected and approved by a representative from the Water section Plumbing Inspectorate. All developments requiring internal water pumps must submit details of the pump and break tank arrangement to the Plumbing Inspectorate for approval.

It is strongly suggested that Contractors consult with the Water section Plumbing Inspectorate at an early stage so as to ensure that only approved materials/fittings are used.

A water connection approval will not be issued until the internal plumbing has been approved.

16. CONNECTION TO COUNCIL MAINS

Connections to mains, which are the property of the STCC, may be made by the Council only. No other person shall interfere in any way with these mains. Such connections will be made by the Council at the expense of the Applicant. The estimated cost of such connections shall be lodged with the Council before the work is undertaken. The lodgement should be made at the Cashiers Office, County Hall, Emmet St., Clonmel, Co. Tipperary..

17. FLUSHING

When mains have been satisfactorily tested and connected to the Council main, they shall be flushed out with potable water through a standpipe placed on the end hydrant before the main is brought into use.

Appendix 1

SOUTH TIPPERARY COUNTY COUNCIL WATER SECTION

CLEARANCES BETWEEN ARTERIAL WATERMAINS AND OTHER UTILITIES

1. Where pipes/ducts are to be laid in close proximity to existing watermains, the Water Section must be notified in writing a minimum of one week in advance of the works. In case of large diameter or strategically important pipes, ducts or watermains, the Water Section must be notified in writing at least one month in advance of the works. These notification requirements are in addition to any necessary formal procedures, wayleave application etc.
2. Care to be taken while laying pipes/ducts so as not to damage any watermain or fittings. Any damage to be immediately reported to South Tipperary County Council. Anybody attempting to repair watermains or fittings will be liable to prosecution under Section 60 of the Waterworks, Clauses Act, 1847.
3. Pipes/ducts, cabinets, poles, junction boxes or chambers must not be laid on top of watermains or fittings.
4. The following horizontal clearance from arterial watermains must be maintained between pipes/ducts, cabinets, poles, junction boxes or chambers.
5. 500mm to watermains greater than 300mm diameter and less than 450mm diameter.
6. 3m to watermains 450mm or greater except for a foul sewer where the minimum horizontal clearance shall be 5m.
7. Where pipes/ducts cross over watermains, a minimum vertical clearance of 500mm should be maintained for watermains of 300mm diameter or greater. In addition, all such intersections shall be positioned such that they are at least 500mm from any watermain joint.
8. Where a foul sewer crosses over an arterial watermain, the foul sewer shall be constructed in an approved type of unjointed pipe between manholes. The distance between the manholes and the watermain shall be agreed with the Water section in advance of the works.