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LOCAL GOVERNMENT ACT 1995

**CITY OF KALGOORLIE-
BOULDER**

**SEWERAGE AND DRAINAGE
LOCAL LAWS**

**PARKING AND PARKING
FACILITIES LOCAL LAW**

LOCAL GOVERNMENT ACT 1995

CITY OF KALGOORLIE-BOULDER

SEWERAGE AND DRAINAGE LOCAL LAWS

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LOCAL GOVERNMENT ACT 1995**CITY OF KALGOORLIE-BOULDER****SEWERAGE AND DRAINAGE LOCAL LAWS**

In pursuance of the powers conferred upon it by the abovementioned Act and all other power enabling it, the Local Government of the City of Kalgoorlie-Boulder hereby records having resolved on the 28th day of June 1999 to make the following Local Law.

1. DEFINITIONS AND INTERPRETATION**1.1 Citation**

These Local Laws may be cited as the City of Kalgoorlie Boulder Sewerage and Drainage Local Laws.

1.2 Definitions

In these Local Laws, unless the context otherwise requires—

A or C Class Licence means an A class or C class licence issued by the Water Corporation of Western Australia, or an equivalent body or licence recognised by the City from time to time.

Air Gap means the unobstructed vertical distance through the free atmosphere between the lowest outlet of a pipe or fitting discharging fluid to a tank, fixture or other device; and

(a) the spill level of the receptacle for those with piped overflows, or

(b) the overflow level of the receptacle for those without piped overflows.

Approved means approved by the City or by a duly designated officer of the City.

AS 3500 means Australian Standard **3500.2** on Plumbing and Drainage as amended from time to time.

Backflow means in relation to water supply installation means the flow of water or other fluids into the water supply pipe of a property, or a watermain, from any source or sources or in a manner other than approved.

Boundary Trap (or **Interceptor Trap**) means a composite fitting incorporating a trap for preventing the passage of gases from the sewer to the property sewer.

Branch property sewer means any branch off a property sewer.

Branch Pipe means a common discharge pipe to which 2 or more fixture traps at any one floor level are connected.

Branch Vent means a graded vent at any one floor level interconnecting 2 or more individual trap-vents or group-vents.

Chief Executive Officer means the Chief Executive Officer of the City.

City means the City of Kalgoorlie Boulder Council.

City's Sewerage Works means the sewers the property of the City and all treatment works, pumps, pumping stations, ponds and machinery, fittings and things connected therewith, and all land acquired, held or used for the purposes of operating the sewers and associated works.

Combined Waste Pipe means any pipe which receives the discharge from both soil and waste fixtures and conveys those discharges to the property sewer; combined waste pipes are connected directly to the property sewer and are used only in connection with the combined pipe system.

Commercial Type means other than domestic type.

Cross Connection means any connection or arrangement, physical or otherwise, between any potable water supply system directly connected to a water main, and any fixture, storage tank, receptacle, equipment or device, through which it may be possible for any non-potable, used, unclean, polluted or contaminated water, or any other substance, to enter any part of such potable water supply system under any conditions.

Cross-Vent means a vent interconnecting a stack and its relief-vent.

D.E.P. means Department of Environmental Protection.

Diameter or Size—in reference to—

(a) any pipe of copper or brass, means the external diameter of the pipe; and

(b) any pipe of any other material, means the internal diameter of the pipe.

Disconnecter Trap means a trap used in the separate pipe system for isolating or disconnecting waste pipes from the property sewer and soil pipes and for providing inlet ventilation to the waste pipe or pipes discharging into it.

Discharge Pipe means any pipe for the conveyance of sewage or trade waste.

Domestic Sewage means all faecal matter, urine, household slops and household liquid refuse.

Domestic Type means a fixture or appliance which is designed for use in residential situations. A fixture or appliance of this type may be installed in a non-residential building, but the sewage which it discharges shall be similar to that which would be discharged if installed in a residential situation.

Drainage Plumbing means the installation, renewal, replacement, alteration, repair or maintenance of—

- (a) below ground property sewers which operate under gravity flow conditions;
- (b) sanitary drainage pumping pits and any associated pressure mains; or
- (c) any associated manholes, branch drains, fittings or industrial waste arrestors.

Educt Vent means an opening or pipe for the exit of air from a soil pipe, waste pipe, combined waste pipe or property sewer.

Exempt Building means—

- (a) a single occupancy dwelling;
- (b) a residential or industrial development containing not more than 8 units; or
- (c) a commercial development of not more than 160 fixture units.

Expansion Joint means a joint which permits relative axial movement of the jointed parts.

Fixture means a receptacle with necessary appurtenances designed for a specific purpose the use or operation of which results in a discharge into the sanitary plumbing or sanitary drainage installation and includes a soil fixture or a waste fixture.

Fixture Discharge Pipe means the discharge pipe to which the single fixture trap is connected.

Fixture Unit means a unit of measure based on the rate of discharge, time of operation and frequency of use of a fixture that expresses the hydraulic load imposed by that fixture on the sanitary plumbing installation.

Fixture Unit Rating means the system loading value in fixture units assigned to a fixture.

Flash means to cover the joint between 2 surfaces with a strip or sleeve of impervious material.

Flat means a suite of rooms used or intended or adapted for use as a separate habitation and comprised in a building containing one or more similar suites.

Floor Waste means the grated inlet within a graded floor intended to drain the floor.

Fully Vented System means a system of plumbing with provision for the separate ventilation of every fixture trap connected other than to a floor waste-gully and of the trap of every floor waste-gully.

Fully Vented System—Modified means a system of plumbing differing from a fully vented system in that the traps of any group of 2 or more fixtures, or floor-waste gullies, discharging to the same branch pipe are vented in common by one or more group vents connected to such pipe.

Gate Valve means a valve which provides a straight through passage for the flow of fluid. The body ends are in line, and a shaped gate is moved between the body seats by a stem whose axis is at right angles to the line between the body ends.

Grade means the angle of inclination expressed as the ratio of unit rise to horizontal distance.

Graded Pipe means a pipe installed on a grade flatter than 1:1.

Ground means the surface of the earth, soil, or rock which conform to the established finished grade at a specific location after all excavations have been thoroughly backfilled or otherwise closed and after all surface treatment at said location has been completed.

Group-Vent means a vent connected to a branch to which unvented fixture discharge pipes are connected.

Hot Discharge is a discharge having a temperature of 40 degrees Celsius or higher.

Induct Vent means an opening or pipe for the admission of air to a soil pipe, waste pipe, combined waste pipe or property sewer.

Industrial Waste means the liquid, solid or gaseous refuse from any business, industry, warehouse or manufacturing premises other than domestic sewage, stormwater, or unpolluted water.

Inspection Opening means an access opening in a pipe or fitting sealed with a removable plug or cover, used as access for purposes of inspection and maintenance, and testing where provided in property sewers.

Inspector means any person appointed by the City or the Chief Executive Officer for purposes connected with the administration of these Local Laws.

Invert means the lowest point of the internal surface of a pipe or channel at any cross-section.

Licensed Plumber means a person who holds a current sanitary plumber's licence issued under Local Law 30.4 and is also the holder of a current A or C Class Licence.

Long Bend means a pipe bend greater than 45 degrees having a centre line radius of curvature equal to or greater than 1.5 times its internal diameter. For the purposes of these Local Laws a 45 degree or less bend with a lesser radius of curvature is considered equivalent to a long bend.

Main Drain means the main conduit of a drainage system to which branches are connected. It is that portion of a sewerage service on private property which is normally located in the ground and which conveys or is intended to convey the discharge from all fixtures to the sewer.

Nominal Size means the size of pipe and fittings in accordance with the relevant Australian Standard.

Officer means a member of the staff of the City or any person appointed by the City to carry out any function on behalf of the City.

Offset means the pipe and fittings used to provide continuity between pipes whose axes are parallel but not in line.

Overflow Level means the level of the rim of a fixture or the invert level of an overflow pipe.

Pipework means an assembly of pipes and fittings.

Relief-Vent means a vent branching from a stack below the point of connection of the lowest fixture.

Residential Building means a building in which sleeping accommodation is provided for persons other than caretakers and their families and includes dwellings, tenements, flats, hotels, lodging houses, dormitories, hospitals and motels.

Sanitary Plumbing means the installation, renewal, replacement, alteration, repair or maintenance of above ground pipework, fittings and fixtures which convey waste to the City's sewerage works.

Sanitary Plumbing Installation means an assembly of pipes, fittings, fixtures, and appliances connected thereto, which is used for or intended to be used to convey sewage to the City's sewerage works.

Sewer means the sewer that forms part of the City's sewerage works.

Single-Stack System means a system of plumbing in which the stack and discharge pipes serve also as vent pipes.

Single-Stack System—Modified means a system of plumbing differing from a single stack system in that a relief vent is provided appurtenant to the discharge stack, and is interconnected therewith at alternative floors, or at every floor by a cross vent.

Spill Level of any fixture, storage tank or receptacle is the maximum height to which water will rise while overflowing freely either over its rim or through any channels or overflows that are provided and have a free discharge to the atmosphere under all conditions, when water is flowing into such fixture, storage tank or receptacle at the maximum rate under a pressure equal to a head of 70 m applied either at the outlet end of the pipe or at the inlet to the fitting or valve actually discharging such water, with all the service outlets of such fixture, storage tank or receptacle closed.

Soffit means the highest point of the internal surface of a pipe at any cross-section.

Soil Fixture means a water-closet pan, urinal, slop hopper, autopsy table, bed pan washer or sanitary napkin disposal unit.

Soil Pipe means a pipe which conveys the discharge from a soil fixture.

Stack means any vertical pipe extending more than one storey in height.

Stack Vent means the extension of a discharge stack above the highest connected discharge pipe.

Testing Opening means an opening with a removable cover in a pipe or fitting, of sufficient size to permit the installation of a plug for use in the hydro-static testing of a pipeline.

Trade Waste means liquid waste, other than domestic sewage and as defined by the City. See **Industrial Waste**.

Trap means any fitting designed to retain a water-seal.

Trap Vent means a vent pipe venting an individual trap to the open air or to a main or branch vent pipe for the prevention of loss of water-seal in the trap.

Unvented refers to a discharge pipe without a vent at its upstream end.

Vent means a pipe provided to limit the pressure fluctuations within the discharge pipe system.

Vented refers to a discharge pipe with a vent connected at its upstream end.

Vent Pipe means any pipe used or intended to be used for ventilating soil pipes, waste pipes, property sewers, traps, connections or sewers.

Vent Stack means a vertical vent pipe installed primarily for the purpose of providing circulation of air to and from any part of a property sewer on the sewerage system.

Vertical means any pipe which is equal to or more than 45 degrees to the horizontal. A pipe with a grade of not less than 1:1.

Water Seal or **Trap Seal** means the vertical distance between the dip and the crown weir of a trap.

Waste Fixture means any fixture, other than a soil fixture.

Waste Pipe means a pipe which conveys the discharge from waste fixtures only.

Yard Gully means a disconnector trap which is used externally and fitted with a basin top and grating.

1.3 Reference to Fees

Where a reference is made in these Local Laws to the payment of any fee, the fee payable is that specified in the City's annual budget.

1.4 Reference to AS 3500

Where a referral to AS 3500 is made in these Local Laws, persons should consult the relevant provisions of that standard, including any figures, tables or drawing associated with the relevant standard.

1.5 References to Figures

Where a reference is made to a Figure in these Local Laws, persons should consult the relevant figure in the *Metropolitan Water Supply and Sewerage and Drainage By-Laws*.

1.6 References to Acts

Where a reference is made to or attention is drawn to an Act of the Parliament of Western Australia in these Local Laws, persons shall comply with the relevant section or part of the Act.

2. REVOCATION OF EXISTING BY-LAWS

2.1 Revocation

2.1.1 On the coming into force of these Local Laws, the *Health Act (Local Authorities' Sewerage and Undertakings) Model By-Laws 1971 (WA)* made under the *Health Act 1911* and the *Country Towns Sewerage By-laws* are hereby declared to have no further application to the City's sewerage works except to the extent set out in these Local Laws.

2.1.2 The revocation of the application of the *Health Act (Local Authorities' Sewerage and Undertakings) Model By-Laws 1971 (WA)* and the *Country Towns Sewerage By-laws* shall not affect any right privilege, obligation or liability acquired, accrued, or incurred under those By-laws, or any act deed, matter, or thing lawfully done thereunder; and notwithstanding such revocation—

- (a) All proceedings and things lawfully had or done by the proper authority under or in pursuance of any of the said By-laws shall be and continue of the same force and effect, to all intents and purposes, as if no revocation had taken place.
- (b) All penalties and forfeitures imposed under any of the said By-laws, and incurred before the commencement of these Local Laws, may be enforced by the City.
- (c) All rights, liabilities, contracts, and engagements of any authority constituted under any of the said By-laws, and existing at the commencement of these Local Laws, shall be vested in and shall attach to and may be enforced by or against the City.
- (d) All actions and proceedings pending at the commencement of these Local Laws by or against any authority constituted under any of the said By-laws may be carried on and prosecuted by or against the City.
- (e) All books and documents made evidence under any of the said By-laws shall continue evidence to the same extent as if the said By-laws had not been revoked.
- (f) Except so far as there is anything in these Local Laws inconsistent therewith, these Local Laws shall apply to all matters and things made, done or commenced under any of the said revoked By-laws, as if these Local Laws had been in force at the time.

3. PROTECTION OF THE CITY'S SEWERAGE WORKS AND PROPERTY

3.1 General

3.1.1 Local Laws in this Part are intended to—

- (a) Protect the City's sewerage works and property from interference or damage that would hinder or prevent normal operation of the system.
- (b) Regulate the entry of persons onto City property and behaviour of those persons while entered thereon.

3.1.2 Attention is drawn to the penalties that may be imposed for breaches of these Local Laws.

3.2 Protection of City's Sewerage Works

3.2.1 No person shall wilfully or carelessly damage or cause damage to the City's sewerage works.

3.2.2 No person shall carry on, or cause to be carried on, any mining or quarrying operation, or make any excavation of any sort, or cause any explosion or other action in the vicinity of the City's sewerage works which may cause damage or future damage by subsidence of the ground to the City's sewerage works, without the written permission of the City and under such conditions as the City may deem necessary.

3.2.3 No person shall drive, take, ride or permit any vehicle, conveyance or animal to cross any exposed pipe, valve, fitting or apparatus forming part of the City's sewerage works except at crossing points approved by the City and indicated by sign-boards.

3.2.4 No person shall drive, take or ride any vehicle, conveyance or animal across underground pipelines or works forming part of the City's sewerage works, where warning signs have been erected by the City except at crossing points approved by the City and indicated by sign-boards.

3.3 Penalty for Destroying Sewers and Fittings

Every person, who, not being authorized by the City, wilfully or carelessly breaks, injures, or opens, or permits to be broken, injured, or opened any sewer, property sewer, or fitting, or any other work, shall for every such offence be liable to a penalty not exceeding \$2 000, besides the amount of the expense to which the City may be put in respect thereof in repairing such sewer, property sewer, fitting, or work, and the amount of such expense shall be ascertained determined and recovered in the same manner as such forfeited sum.

3.4 Protection of Grounds

3.4.1 No person shall wilfully or carelessly injure, damage, disfigure, displace, or remove any fence, stake, post, pillar, pipe, survey mark, peg, tablet or notice board belonging to, or installed by the City.

3.4.2 No person shall wilfully or carelessly injure, deface or disfigure any notice or copy of a local law, by-law, rule or regulation displayed upon any tablet or notice board erected by the City.

3.4.3 No unauthorised person shall open any gate, slip rail, manhole, door, or other entrance into, or trespass upon any enclosure of the City's property without the written permission of the City.

3.4.4 No unauthorised person shall stand, park or leave unattended any vehicle, trailer or item of mobile equipment on property, (including depots) or reserves vested in the City except in a place set aside and designated as a Visitors Car Park.

3.4.5 Any person driving or taking vehicles onto property (including depots) or reserves vested in the City shall comply with all signs erected thereon for the regulation of traffic speed and movement.

3.4.6 No person shall remove, pluck or damage any wildflower, shrub, bush, tree or other plant growing on any land or reserve vested in or the property of the City.

3.4.7 No loose paper or any refuse is to be left on any portion of the grounds of any reservoir or water, sewerage or stormwater drainage works except in the receptacles provided. Where no receptacle is provided, the loose paper or other refuse is to be removed from the site.

3.4.8 No person shall post or distribute bills, advertisements, or other notices on any portion of any reservoir or water, sewerage or stormwater drainage works, or on any portion of the ground in the vicinity thereof without permission in writing from the City.

3.5 Inspection of Communicating Property Sewers

Any person acting under the authority of the City may at all reasonable times enter into or upon any land having a property sewer communicating with the sewers of the City; to examine if there is any communication with any other property sewer or sewer into any land; and if such person is at such time refused admittance or on being admitted is obstructed or prevented from making such inspection and examination as aforesaid, the occupier shall be liable to a penalty not exceeding \$1500.

3.6 Penalty for Giving Use of Property Sewer Without Permission

If any person supplied with a property sewer, or having any property sewer or sewer which may communicate with the sewers of the City, permits any other person not having the authority or consent of the City to use any such property sewer or any branch into the same, every person so offending shall forfeit for every such offence a sum not exceeding \$1000 over and above the full amount of the damage sustained by the City by the acts or means in respect of which such penalty shall be incurred, and the City shall be at liberty to cut off from the main sewer the property sewer of every such person so offending.

3.7 Obstructing the City or Officers in Performance of Duty

Every person who obstructs the City, or any Officer of the City, in the performance of any act or thing which it or he is respectively authorized or required to do in the execution of the *Health Act 1911* or these Local Laws commits an offence.

Penalty: \$500

3.8 Penalty for Refusing to Give Up Possession of Works

Any person having charge of any works, the property of the City, who refuses, on lawful demand, to give up peaceable and quiet possession of the same to any person entitled to possession under the provisions of the *Health Act 1911* or these Local Laws commits an offence.

Penalty: \$1000

4. MAIN DRAINS

4.1 Connections to Main Drains

4.1.1 A person shall not—

- (a) otherwise than in the prescribed manner, unless authorized by the City;
- (b) otherwise than in accordance with an authorisation of the City; or
- (c) without the authorisation of the City,

connect to a main sewer any other drain conduit or fitting.

4.1.2 A person shall not, without or otherwise than in accordance with an authorisation by the City, disconnect from a main sewer any other drain, conduit or fitting.

4.1.3 A person shall not fail to maintain a drain, conduit or fitting connected to a Main Drain, so as to cause or permit the escape, misuse or contamination of water.

Penalty: \$200 and if the offence is a continuing one a further \$20 for each day or part of a day during which the offence has continued.

4.1.4 An authorisation given by the City pursuant to this section may be made subject to conditions, including conditions as to the payment of prescribed charges, and may require that the applicant or some other person enter into an agreement with the City with regard to the cost of works provided or to be provided by the City by reason of or in relation to the proposal.

5. NOTICE TO BE GIVEN TO CITY BEFORE COMMENCING OR CONTINUING SANITARY WORK

5.1 Notice to be Given

5.1.1 The owner or occupier of any land in or on which it is proposed to construct any property sewer or to construct or alter any closet or urinal or work of a sanitary nature, communicating with the sewers of the City, shall, before the commencement of the work, give notice thereof, in writing, to the City, and send to the City two copies of a plan of the proposed work, together with the fee for examining the plan.

5.1.2 In addition to the plans referred to above, where the building is not an Exempt Building, the owner or occupier is to furnish to the City a plumbing design plan.

5.1.3 Plans shall be in a form acceptable to the City and shall show the location of the building in relation to the boundaries of the land and the location and level of the proposed fixtures.

5.1.4 All plans submitted shall be drawn to a scale of not less than 1:200.

5.1.5 The City shall, within seven days after the receipt of the plan and prescribed fee, return a copy of the plan with such directions indorsed thereon as may be thought fit.

5.1.6 If the owner or occupier—

- (a) commences or causes to be commenced the construction or alteration of any work as aforesaid without giving such notice or without furnishing the plan as aforesaid; or
- (b) having given the notice and furnished the plan commences or causes to be commenced the construction or alteration of the work before the expiration of the seven days abovementioned, and before the plan has been returned by the City; or
- (c) fails to follow the directions indorsed on the plan,

he shall be liable to a penalty not exceeding \$80, and any work constructed or altered contrary to or not in accordance with the said directions may be removed by the City, and the expenses of the removal may be recovered by the City from the owner or occupier.

Provided that the above provisions of this Local Law 5.1.6 shall not apply in a case where the City declares, in writing, that it is satisfied that an emergency had arisen which rendered it necessary or desirable that the work should be constructed or altered before the directions of the City could be obtained, and that notice was given and a plan was furnished as soon as practicable.

5.1.7 If the construction or alteration of a work to which this Local Law applies is suspended for a month, two clear days' notice of the resumption thereof shall be given by the owner or occupier to the City.

5.1.8 If the owner or occupier resumes the construction or alteration of a work as aforesaid, or causes it to be resumed, without giving notice as aforesaid, or before the expiration of the time hereinbefore mentioned, he shall be liable to a penalty not exceeding \$40.

5.1.9 The fees to be paid by an owner in respect of the installation of an additional sewer junction are those specified in the City's annual budget.

6. DISPOSAL OF SEWAGE AND WASTE

6.1 Disposal of Domestic Sewage

All domestic sewage and liquid waste shall be treated and disposed of in accordance with the *Bacteriolytic Treatment of Sewage and Disposal of Effluent and Liquid Waste Regulations* of the Health Department of Western Australia.

6.2 Disposal of Other Liquid Waste

Any liquid waste not processed through a bacteriolytic treatment plant, or not capable of treatment in such a plant shall be stored in watertight tanks or receptacles (which shall be maintained in good condition) and periodically removed from the catchment area by a liquid waste removal contractor approved by the City and the D.E.P.

7. PROCEEDINGS FOR OFFENCES

7.1 Proceedings

7.1.1 Proceedings for an offence against these Local Laws may be taken by the City or an Officer of the City or a person authorized in that behalf pursuant to a delegation or authorisation given by the City.

7.1.2 Proceedings for an offence against these Local Laws shall be dealt with summarily in a court of summary jurisdiction.

7.1.3 Any penalty or forfeiture incurred under these Local Laws may be recovered in a court of summary jurisdiction on the complaint of the City or an Officer of the City or a person authorized in that behalf pursuant to a delegation or authorisation given by the City.

7.2 Application of Penalties

All penalties and forfeitures recovered under these Local Laws by the City shall be paid to the City and may be appropriated for the purposes of the City.

7.3 Saving of Civil Remedy

The institution of any proceedings, or the conviction of any person for any offence against these Local Laws, shall not affect any remedy which the City or any person aggrieved may be entitled to in any civil proceedings.

8. POWER TO CONSTRUCT COMMON PROPERTY SEWER

8.1.1 Where in the opinion of the City several portions of land in the separate occupation of several persons may be served effectively by a common property sewer, the City may, give notice to the owner or occupier of the several portions of land.

8.1.2 Where the City gives a notice pursuant to Local Law 8.1.1, the provisions section fifty-nine of the *Metropolitan Water Supply, Sewerage and Drainage Act 1909*, with such modifications as circumstances require, apply to the common property sewer.

8.1.3 Where several portions of land in the separate occupation of several persons are served by one common property sewer, such several portions of land shall be liable to the payment of the same

sewerage charges as they would have been liable to if each of such several portions of land had been connected with the sewer of the City by a separate property sewer, and the costs and charges of repairing and cleansing such common property sewer by or under the directions of the City shall be equally borne by and between each of the owners or occupiers of such several portions of land.

8.1.4 The City may discontinue the use of a property sewer as a common property sewer by giving notice in writing to the owner or occupier of each of the several portions of land that are served by the common property sewer if, prior to the giving of the notice, provision has been made for the several portions of land to be otherwise served in accordance with the Health Act or these Local Laws.

9. CONNECTION OF FIXTURES AND FITTINGS

9.1 Connection to Comply with AS 3500 and Local Laws

9.1.1 Any Fixture, sanitary fixture, fitting or appliance and all associated works are to be installed and connected in accordance with AS 3500 and these Local Laws.

9.1.2 If AS 3500 and these Local Laws prescribe different methods for the installation and connection of any Fixture, sanitary fixture, fitting or appliance or associated works, the installation and connection is to be made in accordance with the method prescribed in AS 3500.

9.1.3 For Fixtures, sanitary fixtures, fittings and appliances not specifically mentioned in AS 3500 or these Local Laws, installation and connection shall be to the requirement of the City.

9.1.4 Reference should be made to the drawings and diagrams in AS 3500 as to the correct method of installation and connection of Fixtures, sanitary fixtures, fittings and appliances and all associated works.

9.1.5 Where AS 3500 does not provide drawings or diagrams which detail the correct method of installation and connection, reference should be made to the *Metropolitan Water Supply and Sewerage and Drainage By-Laws*. For ease of reference, the numbering adopted in the remainder of these Local Laws corresponds with the numbering used in the *Metropolitan Water Supply and Sewerage and Drainage By-Laws*.

Where reference is made to "AS 3500", consult the relevant provisions of that standard, including any figures, tables or drawings associated with the relevant standard.

10.-17. Numbering to allow for consistency with the Metropolitan Water Supply and Sewerage and Drainage By-Laws

18. INSTALLATION OF FIXTURES

18.1 Installation of Fixtures

18.1.1 Installation of Fixtures

Fixtures shall be secured in position independent of support from their traps, discharge-pipes or water supply connections.

18.1.2 Position for Fixture Traps

The distance from the fixture-trap seal-level to the nearest connected fixture shall be as short as possible and in no case shall it exceed 300 mm for urinals and 600 mm for other fixtures.

18.1.3 Connection of Fixture Pairs

Waste fixtures may be connected in pairs to a single fixture-trap provided—

- (a) fixtures shall be located within the same room, and
- (b) the length of waste pipe from the outlet of the untrapped fixture to the riser of the fixture trap shall not exceed 1.0 m.

18.1.4 Fixture Gratings

- (a) The outlets of all fixtures except water closet pans, slop hoppers, bedpan washers and bedpan washer sterilizers shall be fitted with gratings.
- (b) The area and shape of waterway and fixing of any fixture grating shall comply with the requirements of AS 1589.

18.2 Air-Conditioners and Plant-Rooms

- (a) Where air-conditioning plant waste is to discharge to the sewer it shall be connected in the same manner as sterilizers and autoclaves under Local Law 18.19.
- (b) Where air-conditioning plant room waste is to be discharged to the sewer the room shall be connected either—
 - (i) through an outlet-pipe of not less than 50 mm terminating with a flap-valve over a suitably located floor-waste gully outside the room, or,
 - (ii) through an approved deep-water-seal floor-waste gully located within the room. The depth of the deep-water-seal shall be at least 75 mm plus the water gauge equivalent of the maximum pressure differential of the air-conditioning room.

18.3 Arrestors

Arrestors shall be designed, constructed and installed in accordance with the requirements of the City.

18.4 Autopsy Tables

- (a) Each autopsy table shall drain to a 50 mm waste outlet fitted with a grating, and connected to a soilpipe through a flushing floor-waste gully with a 65 mm or larger outlet.
- (b) The water supply to the flushing floor-waste shall be from a flush valve or cistern.

18.5 Bain Maries, Hydrotherms and Water Boilers

- (a) Overflows and waste outlets from bain maries, hydrotherms and water boilers shall be connected in the same manner as sterilizers and auto-claves under Local Law 18.19.
- (b) Hydrotherms and water boilers shall be installed on drained impervious surfaces, or on safe trays fitted with outlets of not less than 32 mm.

18.6 Basins**18.6.1 Installation****18.6.1.1 Inset Basins (Vanity Bowls)**

- (a) Bench tops with inset basins shall have impervious surfaces.
- (b) Inset basins (Vanity Bowls) shall be secured by removable bolts, cleats or brackets and the joints shall be made water-tight. The joint between the bowl and the bench top shall be either;
 - (i) covered by an integral self-rimming flange, or
 - (ii) covered by a continuous sealing strip of corrosion resistant material shaped accurately to cover the joint.

In both cases a water-tight seal is to be made by bedding in an approved caulking compound.

18.6.1.2 Basins Against Walls

- (a) All basins including bench top units, having integral upstands extending at least 50mm above the rims may be placed against walls.
- (b) Basins not provided with integral upstands except basin with flat backs shall be installed at least 75mm clear of walls.
- (c) Basins with flat backs, including bench top units, may be placed and secured against walls with impervious surfaces provided—
 - (i) such impervious surfaces shall extend from at least 50mm above and below the basin and 75mm on either side;
 - (ii) the flat backs of such basins are true and vertical to within a tolerance of 2mm; and
 - (iii) the surfaces, where in contact, are caulked with an approved mastic compound.

18.6.2.1 Connection of Single Basins

The traps of basins, whether 32 mm or 40 mm, shall be connected to floor-waste gullies, disconnector gullies, or directly to discharge-stacks or property sewers. Refer to Local Law 18.13.8 for connection of basins to floor-waste gullies.

18.6.2.2 Connection of Basins in Pairs

Basins may be connected in pairs to a single 40 mm fixture-trap in the manner specified in Local Law 18.1.3.

18.6.3 Unpluggable Basins

Unpluggable basins shall have domed outlet gratings or use other approved means to prevent a plug being used in conjunction with the basin.

18.7 Baths**18.7.1 Installation**

Baths shall be adequately supported and securely fixed in position.

18.7.3 Connection

Baths may be connected either—

- (a) through 40 mm traps and wastes to floor-waste gullies, disconnector gullies, or directly to discharge-stacks or property sewers; or
- (b) through 40 mm untrapped wastes to floor-waste gullies.

18.8 Bed Pan Washers and Sanitizers**18.8.1 Connection**

Bed pan washers and sanitizers shall be connected in the same manner as soil fixtures directly to soil discharge-stacks or property sewers, through traps of not less than 80 mm, and soil pipes of not less than 100 mm.

18.8.2 Flushing Installation

Bed pan washers and sanitizers shall be provided with an approved flushing apparatus.

18.8.3 Steam Connections for Sterilizing

- (a) Where pressurized steam is connected to the chamber of bed pan washers and sanitizers the units must be provided with separate and independent steam relief-vents or other devices to prevent blowing of traps.
- (b) The pressure within the units shall not be more than 0.35 kPa.

18.8.3.1 Steam Relief-Vents

- (a) Steam relief-vents shall be not less than 40 mm, terminating above the roof of the building.
- (b) The steam relief-vents from 2 or more units may be interconnected provided that the points of connection to the main steam relief-vent are at least 300 mm above the top of the units.

18.8.3.2 Main Steam Relief-Vent

- (a) Branch steam relief-vents shall be graded downwards at the points of the connection into the main steam relief-vents to give an invert fall equal to half the diameter of the branch-vents.

- (b) The main steam relief-vent shall discharge condensate to the sewer by interconnecting the base of the main steam relief-vent to the fixture-trap riser of the lowest connected bed pan washer and sanitizer.

18.8.4 Pipework and Expansion Joints

Where pressurized steam is connected to chambers of bed pan washers and sanitizers—

- (a) UPVC pipe shall not be used for soil stacks, soil-vents, or steam relief-vents connected to the unit.
- (b) Where copper tubing is used expansion joints must be provided in soil-stacks, soil-vents and steam relief-vents in accordance with the requirements of the City.

18.9 Bidets

18.9.1 Installation

Pedestal type bidets shall be set such that the base is not more than 20 mm above finished floor. They shall be fixed by—

- (a) bedding with cement mortar on concrete or tiled floors; and
- (b) by approved corrosion resistant fasteners on wooden floors.

18.9.2 Connection

Bidets shall discharge directly to disconnector gullies, discharge-stacks or drains through trapped outlets of not less than 32 mm.

18.9.3 Water Supply to Bidets

Bidets fitted with water connections below the level of the rims shall be provided with hot and cold water services without any direct connection with other pipes or apparatus supplying water for domestic purposes.

18.10 Dental Units

- (a) Single dental units shall discharge through traps of not less than 32 mm, and shall be connected directly to discharge-stacks or property sewers or through disconnector gullies.
- (b) Multiple dental unit drained to a common point shall discharge through a trap of not less than 50 mm and shall be connected directly to a discharge-stack or property sewer or through a disconnector gully.

18.11 Drinking Fountains

Where connected to sewer drinking fountains shall discharge through traps and waste pipes not less than 32 mm, and shall be connected directly to discharge-stacks or property sewers or through disconnector or floor-waste gullies.

18.12 Food Waste Disposal Units (Refer AS 3500)

18.12.1 General

Where installation is permitted by the City, food waste disposal units shall comply with the following—

- (a) the food waste disposal unit shall be approved as a domestic type;
- (b) the outlet size shall be 40 mm; and
- (c) food waste disposal units shall not discharge to a grease arrestor.

18.12.2 Connection

The outlet of food waste disposal units shall be connected—

- (a) directly to traps not less than 50 mm, discharging directly to discharge-stacks or property sewers; or
- (b) where fitted to one bowl of a double-bowl sink, the outlet may discharge untrapped above the water seal of the fixture trap connected to the second bowl. Unless otherwise approved the fixture trap shall discharge directly to discharge-stacks or property sewers.

18.13 Gullies

18.13.1 Form

Gullies shall be self-cleansing, p-trap form with plain-riser or inlet-riser sections added to the vertical legs as necessary to finish at the required level.

18.13.2 General

- (a) Gullies shall be used only for one or more of the following purposes—
 - (i) as reliefs in the event of sewage overflow;
 - (ii) as waste fittings, with integral water-seal, collecting and transmitting waste discharges; or
 - (iii) to provide disconnection between waste discharges and the remainder of the sewerage installation.
- (b) Where no fixtures discharge to a gully, an approved means shall be provided to maintain the water seal.
- (c) Unless otherwise stated, the rules applying to the connection of fixtures to the sanitary plumbing system shall also apply to the connection of gullies.

18.13.3 Gully Types

18.13.3.1 Overflow-Relief Gullies

- (a) One overflow-relief gully shall be provided on each property sewer system for each property or unit system connected to the sewer.
- (b) Overflow-relief gullies shall be fitted with loose, pop-out type, lightweight domed gratings.
- (c) The overflow-relief gully shall be located at the point of the building closest to the downstream end of the property sewer or such other approved location as the City considers to be more effective.

18.13.3.2 External Disconnecter Gullies

External disconnector gullies may serve as overflow-relief gullies.

18.13.3.3 Sealed Disconnector Gullies

Gullies other than floor-waste gullies, installed internally, shall be sealed with removable airtight tops and shall be ventilated.

18.13.3.4 Floor-Waste Gullies

Floor-waste gullies shall be installed internally with provision, where required, for the connection of waste-pipes from fixtures, and for the entry of water spillage from floors.

18.13.4 Bedding of Buried Gully Traps

Gully traps of size 100 mm or more installed in the ground shall be bedded on concrete at least 100 mm thick.

18.13.5 Size of Gullies

- (a) Overflow-relief, disconnector and sealed gullies shall have inlet and outlet sizes of not less than 100 mm.
- (b) Floor-waste gullies shall be in accordance with Local Law 18.13.8.2.

18.13.6 Overflow-Relief Gullies (Refer AS 3500.)

18.13.6.1 Installation in External Locations

The tops of vertical risers on overflow-relief gullies in external locations shall be fitted with loose, pop-out type, lightweight domed grates and finishing collars fixed not less than 150 mm below the outlet grating or overflow level of the lowest inlet fitting or fixture connected to the building property sewerage installation, and at least 75 mm above ground level.

18.13.6.2 Installation in Internal Locations

- (a) Subject to Local Law 18.13.6.3 where overflow-relief gullies cannot be located externally they shall be installed within the building, fitted with removable-sealed tops and drained and vented from the gully risers to the atmosphere by an overflow vent from the gully riser to the atmosphere of not less than 100 mm.
- (b) The overflow vent pipe shall drain to the gully riser and shall terminate with a pop-out grating at the external wall of the building to discharge at a level of not less than 150 mm below the outlet grating or overflow level of the lowest inlet fitting or fixture connected to the building property sewerage installation, and at least 75 mm above ground level.
- (c) Access for cleaning of the overflow-relief gully shall be provided by means of a screwed brass inspection shaft top or such other similar fitting as is approved.

18.13.6.3 Overflow-Relief Gullies in Paved Areas

Where the gully overflow is located in a paved area, a lesser distance above the paving may be permitted provided that the paving shall be graded in all directions away from the gully overflow.

18.13.7 Disconnector Gullies

18.13.7.1 External Disconnector Gullies

- (a) The tops of the vertical risers on disconnector gullies shall be fitted with approved loose, "pop-out" type, lightweight domed grates and the finishing collars installed not less than 150 mm below the outlet grating or overflow level of the lowest connected inlet fitting or fixture, and at least 75 mm above ground level in order to ensure that internal backflooding does not occur in the event of the gully overflowing.
- (b) Where the gullies are located in paved areas, a lesser distance above the paving may be permitted provided that the paving shall be graded in all directions away from the gully traps.
- (c) A disconnector gully (other than an overflow relief gully) may be located under a verandah or patio where—
 - (i) the verandah or patio has 3 open sides;
 - (ii) the floor grades away from the main building to an external location;
 - (iii) the gully trap is located not more than 2.5 metres from any one of the 3 open sides.

18.13.7.2 Sealed Disconnector Gullies (Refer AS 3500)

- (a) The vertical risers of sealed gully traps shall be vented by means of—
 - (i) vent pipes extended above roof level; or
 - (ii) breather pipes extended to an external wall and fitted with flush fitting wall grates.
- (b) Vent pipes shall be at least 50 mm, taken off as the highest connection from the vertical riser, and terminating at least 300 mm above the over-flow level of the lowest fixture connected to the sealed gully. Two such gully trap vent pipes may be combined at a point above the minimum

vent height of each gully trap. Three or more gully trap vent pipes may be similarly combined provided that the combined vent is increase to at least 80 mm prior to the connection of the third vent.

- (c) The top of the sealed disconnector trap riser shall be fitted with a screwed brass inspection shaft top or such other similar fitting as is approved.

18.13.7.3 Connections to Disconnector Gullies

- (a) Waste-pipes shall discharge into a disconnector gully as near as practicable above the water-seal of the trap, and may enter on grade or at an angle of 45 degrees.
- (b) Waste-pipes shall not discharge through the grating of the gully.
- (c) All pumped discharges shall rise to a height of not less than 150 mm above the overflow level of the gully and discharge into the riser at an angle of 45 degrees, or discharge through a level-inlet fitting.

18.13.8 Floor-Waste Gullies

18.13.8.1 Location

- (a) Floor-waste gullies shall be located at the lowest point of graded floors, and gratings shall be fitted at floor level.
- (b) Provided it complies with the requirements of Local Law 18.13.8 a shower outlet may be installed as a floor-waste gully.

18.13.8.2 Size

- (a) Vertical risers of floor-waste gullies shall be at least—
- 80 mm where fixtures are connected to the riser; or
 - 50 mm where no fixtures are connected to the riser.
- (b) The height of the riser shall be sufficient to prevent the surcharge of wastewater through the floor-waste grating, as per Table 18.1.
- (c) Pumped discharge shall enter floor-waste gullies at 45 degrees.
- (d) The height of vertical risers from water-seal to floor level shall not exceed 600 mm.
- (e) The size of floor-waste gully traps shall be in accordance with Table 18.2.
- (f) The size of floor-waste gully traps installed below ground shall not be less than 65 mm.

Table 18.1—Minimum Height of Floor-Waste Gully Risers

Waste Fixture Connected to Floor-waste Gully	Minimum Height of Floor-waste Gully Riser (water-seal to floor level)	
	88 1/2 deg entry	45 deg entry
Shower only	150 mm	100 mm
Baths only	250 mm	200 mm
Other fixtures	250 mm	150 mm

Table 18.2—Size of Floor Waste Gully Traps

Total Fixture Unit Rating of Waste Fixture Connected to Floor Waste Gully	Size of Floor Waste Gully Trap
Less than 3	50 mm
3-10	65 mm

18.13.8.3 Connecting to Floor Waste Gullies (Refer AS 3500)

- (a) Pipes for the conveyance of waste discharges to floor waste gullies shall be connected to the vertical riser above, and as near as possible to, the water-seal.
- (b) The following fixtures may be connected to floor waste gullies with or without a fixture-trap fitted—
- | | |
|---|------------------------|
| Ablution troughs | Sterilizers |
| Autoclaves | Glass washing machines |
| Bar sinks | Overflow pipes from |
| Baths | Hot water services |
| Bain Maries | Refrigerated cabinets |
| Cleaners sinks | Shower |
| Clothes washing machines
(note: connect to floor
waste gullies at 45 degrees
to prevent foaming) | Shower baths |

- (c) Basins and drinking fountains shall have fixture-traps fitted when connected to floor waste gullies.
- (d) The length of waste-pipe connecting a fixture to a floor waste gully shall be as short as possible and shall not exceed 1.2 m if no fixture-trap is provided, nor 2.5 m if a fixture-trap is provided.
- (e) Fixtures and fixture pairs connected to a floor waste gully riser shall be located in the same room as the floor waste gully and connected separately.

18.14 Refrigerated and Deep Freeze Cabinets

Outlet pipes from refrigerated and deep freeze cabinets shall be connected in a similar way as sterilizers and autoclaves, Local Law 18.19.

18.15 Sanitary Napkin Disposal Units

Sanitary napkin disposal units, macerating type, shall discharge directly to soil-discharge-stacks or property sewers through trapped outlets of not less than 40 mm.

18.16 Showers

18.16.1 General

For the purpose of these Local Laws **shower** shall mean—

- (a) fixed or hand-held heads;
- (b) pipes, fittings and control valves for the supply of water to shower heads;
- (c) fabricated shower-bases; and
- [(d) *deleted*]
- (e) shower outlets.

18.16.2 Form

Shower installations may comprise any of the following—

- (a) showers over baths, whether fixed or hand-held; or
- (b) individual showers, whether prefabricated or built *in situ*; or
- (c) group showers.

18.16.5 Prefabricated Shower Bases

Prefabricated shower bases shall be rigidly supported.

18.16.6 Connection

18.16.6.1 Single Showers or Shower Pairs

Single showers or shower pairs shall discharge through 80 mm removable gratings and have not less than 40 mm wastes for single showers, or 50 mm wastes for shower pairs. They shall be connected either—

- (a) trapped or untrapped to floor-waste gullies; or
- (b) trapped directly to discharge-stacks or property sewers or through disconnector gullies.

18.16.6.2 Shower Groups

Drainage channel outlets of shower groups shall discharge through removable gratings, and waste traps and pipes in accordance with Table 18.3.

Table 18.3—Size of Shower Drainage Channel Outlets

No. of Showers	Size of Outlet Grating	Size of Waste Trap and Pipe
1 to 3	80 mm	50 mm
4 to 6	100 mm	65 mm

18.17 Sinks

18.17.1 Bar Sinks

- (c) Bar sinks shall drain to 40 or 50 mm outlets connected either—
 - (i) trapped or untrapped to floor waste gullies; or
 - (ii) trapped directly to stacks, property sewers or through disconnector gullies.

18.17.2 Cleaners' Sinks

- (a) Cleaners' sinks shall drain to 50 mm outlets.
- (b) Cleaners' sinks may discharge either—
 - (i) trapped or untrapped to floor-waste gullies; or
 - (ii) trapped directly to discharge-stacks or property sewers, or through disconnector gullies.
- (c) The taps supplying water to any cleaner's sink shall be installed at a height of at least 450 mm above its rim.

18.17.3 Kitchen Sinks

18.17.3.1 Form

- (a) Kitchen sinks shall be in accordance with AS 1756, and unless otherwise approved shall be provided with an integral, fluted drainer not less than 300 mm in length extending on at least one side of the sink and graded to permit the surface water to drain into the sink.

- (b) A sink without a drainer may be fixed adjacent to a sink with a drainer provided the distance between the 2 sinks is not more than 50 mm, and both sinks are inset in a bench top in accordance with Local Law 18.17.3.2.

18.17.3.2 Installation of Inset Type Sinks

An inset type sink shall be securely fixed in position and sealed with an approved compound.

18.17.3.3 Connection

- (a) Kitchen sinks shall be connected directly to discharge stacks or property sewers, or through disconnector gullies, using fixture-traps and waste-pipes of not less than 50 mm.
- (b) Double-bowl kitchen sinks may be connected as a fixture pair, refer to Local Law 18.1.3.
- (c) Triple-bowl kitchen sinks may be connected—
 - (i) as 3 single-bowl sinks;
 - (ii) as a fixture pair and one single-bowl sink; or
 - (iii) through a single fixture-trap provided that the total length of waste-pipe between the sink outlets and the fixture-trap-seal is not more than 1.0 m.

18.17.4 Pan Room Sinks and Flushing Bowls (Refer AS 3500.)

18.17.4.1 Connection

- (a) The flushing bowls shall be fabricated with integral traps of not less than 100 mm and shall be connected directly to soil-stacks or property sewers.
- (b) Pan room sinks shall connect through traps and waste-pipes of not less than 50 mm directly to soil-discharge-stacks or property sewers.
- (c) Trapped wastes from sinks may discharge into vertical soil pipes from flushing bowl traps provided the branches are vented by a vent of not less than 50 mm connected either—
 - (i) where only one sink is fitted between the sink and flushing bowl; or
 - (ii) where 2 sinks and a flushing bowl are fitted between the sink outlets.

18.17.4.2 Flushing Installation

Flushing bowls shall be provided with approved flushing apparatus.

18.18 Slop Hoppers

18.18.1 Installation

Slop hoppers shall be set such that the base is not more than 20 mm above finished floor, and shall be fixed by bedding with cement mortar on concrete or tiled floors or by approved corrosion resistant fasteners on wooden floors.

18.18.2 Connection

Slop hoppers shall be connected directly to soil-discharge-stacks or property sewers through 80 or 100 mm soil-pipes and traps. The trap and soil pipe size shall not be less than the slop hopper outlet.

18.18.3 Water Supply to Slop Hoppers

Slop hoppers shall be provided with approved flushing apparatus. In addition, a bib tap shall be fixed directly over and at a height of not less than 450 mm above the top of each slop hopper.

18.19 Sterilizers and Autoclaves (Refer AS 3500)

- (a) Overflow and waste outlet pipes from sterilizers or autoclaves, including any blow-down pipes, shall discharge over tundishes, or suitably located floor-waste gullies along side units such that there are air gaps between the outlet pipes and the top of tundishes or floor-wastes of not less than twice the nominal size of the outlet pipe.
- (b) Tundishes shall be of copper alloy or stainless steel, and shall be connected through waste-pipes of not less than 32 mm either—
 - (i) trapped or untrapped to floor-waste gullies; or
 - (ii) trapped directly to discharge-stacks or property sewers, or through disconnector gullies.

18.20 Swimming Pools

18.20.2 Commercial Type Swimming Pools

The backwash and pool drainage from commercial swimming pools constitute an industrial waste discharge and shall be connected in accordance with the industrial waste requirements of the City.

18.21 Troughs

18.21.1 Ablution Troughs

18.21.1.1 Installation

Ablution troughs may be installed in units of maximum length of 4 m, and shall drain to 50 mm outlets. Outlet traps, where fitted shall be 50 mm.

18.21.1.2 Connection

Ablution troughs shall discharge either—

- (a) trapped or untrapped through 50 mm waste-pipes into floor waste gullies, or
- (b) trapped, directly to discharge-stacks, property sewers or disconnector gullies.

18.21.1.3 Fixture Pairs

Two adjacent ablution troughs may be connected as a fixture pair in accordance with Local Law 18.1.3.

18.21.2 Laundry Troughs

- (a) Single compartment laundry troughs shall be connected directly to stacks or property sewers or through disconnector gullies using fixture-traps and waste pipes of not less than 40 mm.
- (b) Double compartment laundry troughs shall be connected directly to stacks or property sewers or through disconnector gullies using fixture-traps and waste pipes of not less than 50 mm.

18.22 Urinals**18.22.1 Floor types Adjacent Floor and Step (Refer AS 3500)**

[(a) *deleted*]

- (b) Where the floor adjacent to a urinal is exposed to rain water, sand, mud or other materials which may enter the urinal channel, a step-up shall be provided in front of the urinal channel.

18.22.3 Connection

- (a) Floor-type urinals shall be provided with continuous channels graded at not less than 1 in 100 to minimum outlet sizes as set out below—
 - (i) 50 mm—up to 3 stalls or less than 2 m total length.
 - (ii) 65 mm—4 to 8 stalls or 2 to 5 m total length.
- (b) Channels serving in excess of 8 stalls or 5 m total length shall be provided with additional outlets on the basis of an extra 65 mm outlet for each additional length in excess of 5 m multiples.
- (c) Urinals shall be separately trapped below each outlet and be connected directly to soil-stacks or property sewers.
- (d) The connecting soil-pipes and traps shall be of copper alloy, cast iron, UPVC or other approved materials.

18.22.4 Flushing Installation

Urinals shall be provided with approved flushing systems in accordance with Local Law 19.1.(a)

18.22.5 Wall hung Urinals

- (a) Wall hung urinals shall be fabricated with 50 mm integral traps, or 50 mm traps directly coupled to the urinal outlet, and shall be connected directly to soil discharge-stacks or property sewers.

18.23 Washing Machines**18.23.1 Clothes Washing Machines (Domestic)****18.23.1.1 Pumped Discharges**

The pumped wastes from washing machines may be discharged over the rims of fixtures or into trapped standing waste pipes, or floor waste gullies.

18.23.1.2 Gravity Discharges

Washing machines with gravity discharges shall discharge through—

- (a) 40 mm fixture discharge pipes connected to floor waste gullies in accordance with Local Law 18.13.8; or
- (b) 40 mm trapped standing waste pipes.

In either case the waste pipe shall terminate not less than 25 mm above floor level and not more than 25 mm from the side of the washtub or cabinet.

18.23.2 Commercial Type Laundries

Commercial type laundry installations shall not be made until plans and specifications of the proposed work have been approved by the City.

18.23.3 Dishwashing Machines**18.23.3.2 Connection (Refer AS 3500)**

- (a) Domestic dishwashing machines whether of the fixed or portable type shall discharge—
 - (i) Over a sink with the outlet at least 25 mm above the rim;
 - (ii) Through a trapped waste-pipe of not less than 40 mm connected to a disconnector gully;
 - (iii) Through a trapped waste-pipe of not less than 40 mm, connected down-stream of another fixture, the overflow level of the fixture being at least 50 mm below the level of the base of the dishwashing compartment;
 - (iv) Provided the outlet hose extends not less than 25 mm above the overflow level of the sink, above the water-seal of a 50 mm sink-trap, the length of untrapped waste-pipe not exceeding 1.2 m; or
 - (v) Provided an air disconnection coupling is inserted at the junction of the outlet hose and the waste-pipe through a trapped waste-pipe of not less than 40 mm connected directly to a discharge stack or property sewer.
- (b) Air disconnection couplings shall be fixed in the upright position, in accessible locations. The connecting hose shall be clipped in the vertical position for at least 50 mm above the coupling.
- (c) Dishwashing machines other than domestic type shall be connected to traps not less than 50 mm discharging to grease arrestors.

18.23.4 Glass Washing Machines

The outlet hose and waste-pipe may be connected in a similar manner to domestic dishwashing machines, Local Law 18.23.3, or connected to discharge to a floor-waste gully.

18.24 Waste Disposal from Caravans

Dump and connection points for the disposal of soil and sullage wastes from caravans shall be in accordance with the requirements of AS 3500.

18.25 Water-closet Pans**18.25.1 Connection**

Water-closet pans shall be connected directly to soil-discharge stacks or property sewers through soil-pipes of not less than 100 mm.

18.25.2 Installation

- (a) Pedestal water-closet pans shall be set such that the base is not more than 20 mm above finished floor. The pans shall be fixed by bedding with cement mortar on concrete or tiled floors, and by approved corrosion resistant fasteners on wooden floors.
- (b) Wall hung pans shall be supported on approved brackets and fixed securely.

18.25.3 Flushing Installation

Water-closet pans shall be provided with approved flushing apparatus.

19. WATER SUPPLY TO SANITARY FIXTURES**19.1 Prevention of Cross Connection**

- (a) Pipework, for the supply of water to any fixture, whether directly, or indirectly through storage-tanks or flushing-cisterns, shall be so connected that the contents of any such fixtures, storage-tank or flushing-cistern cannot flow back into the supply pipes.

20. DESIGN REQUIREMENTS**20.1 Trapping of Fixtures**

The discharge from sanitary fixtures and appliances shall pass through fixture-traps or floor waste gullies before entering property sewers or soil pipes.

20.2 Trap Design and Performance**20.2.1 Trap Design**

- (a) Excepting water closet pans and slopoppers, fixture traps (including floor waste gully traps) shall have trap seals of 75mm plus or minus 5 mm.
- (b) Water closet pans and slopoppers shall have trap seals of 50mm plus or minus 5 mm.
- (c) Boundary traps, disconnector and overflow relief gullies shall have trap seals of not less than 50mm minus 5 mm nor more than 75 plus 5 mm.
- (d) Except when specifically approved, no trap which depends upon internal partitions, moving parts, unequal sectional areas or any other device for the protection of its seal, shall be used in any sanitary plumbing installation.

20.2.2 Trap Performance

- (a) Plumbing systems in accordance with the requirements of this code are designed so that under normal operating conditions the residual water-seal in fixture-traps should not be less than 25 mm.
- (b) When under normal operating conditions the water seal in any fixture-trap is reduced to less than 25 mm, provision shall be made for venting such trap in accordance with Local Law 20.10, or retention of the water seal by other approved means.

20.3 Gullies**20.3.1 Usage of Gullies**

- (a) Gullies shall only be used for one or more of the following purposes—
 - (i) as reliefs in the event of sewage overflow;
 - (ii) as waste fittings, with integral water-seal collecting and transmitting waste discharges; or
 - (iii) to provide disconnection between waste discharges and the remainder of the sewerage installation.
- (b) Refer to Local Law 18.13 for types, form and installation of gullies.

20.3.2 Fixtures Connected to Disconnector Gullies (Refer AS 3500.)

- (a) Fixtures without trap vents may be connected to disconnector gullies without trap-vents provided that such connection is in accordance with AS 3500.
- (b) Ground floor waste fixtures may be connected in accordance with Local Law 25.5.2 without vents to disconnector gullies.

20.3.3 Fixtures Connected to Floor-waste Gullies

- (a) Fixture-traps connected to floor-waste gully risers shall not have trap-vents.
- (b) Fixtures connected to floor-waste gullies shall conform with requirements in Local Law 18.13.8.

20.4 Pipe Lengths—How Measured

The length of discharge pipes shall be measured along the centre line from the trap-weir to the point of connection to gullies, discharge-stacks or graded pipes.

20.5 Connection of Branches near the Base of Stacks (Refer AS 3500)

- (a) Without approval, branches shall not be connected to the graded pipe within 2.5 m downstream nor 1 m upstream from a discharge stack entry point.
- (b) Branches shall not be connected to a discharge stack within the following distances from the base of the stack—
 - (i) For stacks not more than 5 storeys in height at least 600 mm between the base of the stack and the invert of the lowest branch.
 - (ii) For stacks more than 5 storeys in height at least 1 m between the base of the stack and the invert of the lowest branch.

20.6 Sizing of Pipes**20.6.1 Discharge Pipes**

Except where floor-waste gully risers are larger than the floor waste-gully trap outlets and for water-closet pans where 80 mm soil pipes are approved, the size of a pipe shall not be reduced in the direction of flow.

20.6.2 Vent Pipes

Except in accordance with Local Law 23.6.1 the size of a vent pipe shall not be reduced in the direction of its opening to atmosphere.

20.7 Fixture Units

- (a) For the purpose of determining the size of discharge pipes, the relative load producing effect of connected sanitary fixtures and continuous flows shall be expressed in fixture units in accordance with AS 3500.
- (b) The fixture unit rating of fixtures not listed in AS 3500 shall be determined by the City.
- (c) In certain structures such as hospitals, laboratory buildings, and other special use or occupancy buildings where the ratio of plumbing fixtures to occupants is proportionally more than required by building occupancy, and in excess of 1000 fixture units, the City may permit the rise of a diversity factor for sizing discharge pipes.

20.8 Plumbing Stack Systems

Plumbing systems in multi-storey buildings can conveniently be classified into 4 types—

- (a) Fully Vented Systems;
- (b) Fully Vented System—Modified;
- (c) Single Stack System; and
- (d) Single Stack System—Modified.

20.9 Design of Vents**20.9.1 Vertical Vent Pipes**

Whenever possible every vent pipe shall be vertical. Any offset constructed at 45 degrees or more to the horizontal shall be deemed to be vertical.

20.9.2 Prohibited use of Chimneys or Ventilating Shafts

Chimneys or ventilating shafts shall not be used for venting any discharge pipe.

20.9.3 Drainage of Vents

Vents shall be installed so that any condensation or other liquids which form in or enter the vents will drain to the sewer.

20.9.4 Vents to be Separate

The following vent pipes shall be vented to the atmosphere independently of any other system vent—

- (a) Vent pipes from waste-fixtures discharging into disconnector gullies;
- (b) Breather vents from sealed disconnector gullies;
- (c) Chamber or steam relief-vents from bed pan sanitizers and washers;
- (d) Vent pipes from ejectors except with the approval of the City; and
- (e) Vent pipes from arrestor chambers.

20.9.5 Height of Vent (Refer AS 3500)

Except where specified in these Local Laws or in AS 3500, the opening to atmosphere of a vent shall be located—

- (a) at least 600 mm above any window or other opening into any building, within a horizontal distance of 3 m from the vent;
- (b) at least 150 mm above its point of penetration through any roof covering;
- (c) at least 3 m above any roof decking used for other purposes besides weather-proofing and within a horizontal distance of 3 m from the vent;
- (d) at least 600 mm above any eaves, coping or parapet within a horizontal distance of 600 mm from the vent;
- (e) at least 2 m above or 600 mm below any chimney or similar opening, within a horizontal distance of 3 m from the vent; and
- (f) at least 5 m from any air-duct intake.

20.9.6 Ground-Vents from Boundary-Traps

Ground-vents shall be located so that—

- (a) the vent tops are at least 3 m from any door, window or other opening into a building;
- (b) the vent tops are at least 150 mm above ground level; and
- (c) they are clear of pedestrian walkways and protected from damage by vehicles.

20.10 Trap-Vents (Refer AS 3500)

- (a) Unless otherwise specified in these Local Laws or in AS 3500, fixture-traps shall be individually vented with a trap-vent sized in accordance with AS 3500.
- (b) Trap-vents shall, where practicable, be connected at a distance of 75 mm from the trap, or shall be connected as closely as possible within the following specifications—
 - (i) Subject to (ii) in the case of basins and bidets, trap-vents shall be connected between 75 mm and 300 mm from the crown of the trap;
 - (ii) If no change of direction occurs in the section of waste pipe between the trap and the trap-vent connection where a basin or bidet is fitted with a P-trap and discharges to a disconnector gully, the trap-vent may be connected to the first graded section of waste pipe between 75 mm and 600 mm from the crown of the trap;
 - (iii) Subject to (iv), (v) and (vi), in the case of fixtures other than basins and bidets the trap-vent shall be connected between 75 mm and 1.5 m from the crown of the trap, or, if there is a vent horn, at the crown of the trap;
 - (iv) Where a fixture other than a basin or bidet is fitted with a P-trap, the trap-vent shall be connected either in the first graded section of waste pipe or in the first vertical section of discharge pipe and in the latter case at least 300 mm above the bottom of the vertical section;
 - (v) Subject to (vi) where a fixture other than a basin or bidet is fitted with an S-trap, the trap-vent shall be connected in the first vertical section of discharge pipe; or
 - (vi) Where a water closet pan or a slop hopper is fitted with an S-trap the trap-vent may be connected to the first graded section not more than 1.2 m from the crown of the trap.
- (c) Trap-vents may connect into branch-vents, relief-vents, or extend separately to atmosphere.
- (d) Each trap-vent shall extend at an angle of not more than 45 degrees to the vertical to a height of at least 50 mm above the overflow rim of the trapped fixture before entering into a graded or vertical system vent pipe.
- (e) All trap-vents shall drain at a minimum grade of 1:80 to the discharge pipe system.
- (f) No other fixture shall be connected to any discharge pipe between any fixture-trap and its associated vent.
- (g) A single trap-vent may be used to vent the traps of any 2 fixtures connected back to back to a vertical discharge pipe provided—
 - (i) P-traps are used;
 - (ii) Both fixture discharge pipes are connected at the same level to a “Y” junction fitting with an included angle of 90 degrees;
 - (iii) The vent pipe is extended vertical from such junction;
 - (iv) The vent pipe is of the size appropriate to the larger fixture-discharge pipe; and
 - (v) The distance measured along the pipework from the crown of either trap to the vent connection complies with the requirements of Local Law 20.10 (b) above.

Table 20.4—Size of Trap-Vents

Fixture Trap Size—mm	Trap Vent Size—mm
32	32
40	32
50	40
65	40
80	40
100	40

20.11 Pumped Discharges**20.11.1 General**

Except with the approval of the City no device shall be used to eject sewage from any property.

20.11.2 Ejection by Compressed Air**20.11.2.1 Inlet Pipe**

The pipe conveying discharges to any ejector pot shall be sized, vented and installed as a property sewer in accordance with Part 25.

20.11.2.2 Outlet Pipe

The outlet pipe from any ejector pot shall be connected either—

- (a) to a boundary trap shaft; or
- (b) provided that the connection is at least 2.5 m distance from any other connection thereto, and the outlet pipe is connected on a falling gradient from a height of at least 300 mm above such property sewer or graded discharge pipe, to a property sewer or graded discharge pipe.

20.11.2.3 Vent from Ejector Pot

Except with the approval of the City the vent pipe from the ejector pot shall extend to its opening to atmosphere independently of any other system vent.

20.11.3 Ejection by Pumping

20.11.3.1 General

- (a) Pumping installations for the ejection of sewage shall be in accordance with the relevant provision of this Part.
- (b) Every such installation shall comprise a wet well to which sewage is gravitated, and from which the contents are pumped.
- (c) Except with the specific approval of the City, pumps, whether of the submersible or non-submersible kind, shall be installed in duplicate.

20.11.3.2 Wet Well

- (a) Wet wells shall be constructed of—
 - (i) reinforced concrete, with a smooth hard finish;
 - (ii) steel, coated internally and externally with an approved corrosion resistant material;
 - (iii) provided the wet well receives waste discharges only copper or copper alloy; or
 - (iv) other approved construction.
- (b) The bottom of the wet well shall be graded from all sides towards the entry of the pump inlets.
- (c) A ladder, or step irons, in accordance with AS 3500 shall be provided in every wet well exceeding 1.2 m in depth.
- (d) A removable cover of sufficient size to provide access for maintenance, including complete removal of the pumping unit shall be provided on each wet well. Except where approved in external locations, the cover on wet wells receiving soil discharges shall be airtight.

20.11.3.3 Inlet to Wet Well

The inlet to wet wells shall be at least the following distances above the highest working water level—

- (a) 100 mm for wet wells receiving soil discharges; or
- (b) 50 mm for wet wells receiving waste discharges only.

20.11.3.4 Control Valves

- (a) For non-submersible pump installations a full-way valve shall be provided on the inlet pipe to the pump, so the pump can be removed.
- (b) A reflux valve and gate valve shall be provided on every pump outlet pipe and in such a position that the pump can be readily removed for maintenance purposes.

20.11.3.5 Outlet from Wet Well

Except that for wet wells receiving waste discharges only, the outlet may be connected to a disconnector gully. The outlet from wet wells shall be connected as provided in By-law 20.11.2.2.

20.11.3.6 Venting to Wet Well

- (a) Where an airtight cover is provided on a wet well, such well shall be vented by a vent of not less than the following sizes—
 - (i) 80 mm for wet wells receiving soil discharges; or
 - (ii) 50 mm for wet wells receiving waste discharges only.
- (b) The vent, installed in accordance with Local Law 20.9, may extend to atmosphere separately or where approved interconnect with another system vent at a height of not less than 50 mm above the overflow rim of the lowest fixture discharging to the wet well.

21. GRADED PIPES

21.1 Minimum Grades of Discharge and Vent Pipes

21.1.1 Discharge Pipes

Except as specified in Local Law 25.4, the minimum grades of discharge pipes shall be in accordance with Table 21.1.

Table 21.1—Minimum Grades of Discharge Pipes

Discharge Nominal Size—mm	Minimum Grade
32	1:40
40	1:40
50	1:40
65	1:40

Discharge Nominal Size—mm	Minimum Grade
80	1:60
100	1:60
125	1:80
150	1:80
175	1:100
200	1:100
225	1:100
250	1:100
300	1:100

21.1.2 Vent Pipes

Vent pipes shall be constructed on grade of at least 1 in 80.

21.2 Size of Graded Discharge Pipes

- (a) Except as specified in Local Law 23.3, the size of graded discharge pipes shall be in accordance with the AS 3500.
- (b) Unless it is established to the City's satisfaction that a steeper grade can be achieved, graded branches shall be sized on the basis of minimum grade in accordance with the AS 3500.

21.3 Bends in Graded Pipes

All bends greater than 45 degrees in graded discharge pipes shall be long bends.

21.4 Connections to Graded Discharge Pipes

21.4.1 Graded Pipes to Graded Pipes

- (a) Unless specified elsewhere in these Local Laws or in AS 3500, the junction used for connecting a graded discharge pipe to a graded discharge pipe shall be either—
 - (i) a 45 degree junction, or
 - (ii) a sweep junction.
- (b) Junctions shall be swept in the direction of flow.
- (c) Double "Y" junctions shall not be used to make connections on grade, without approval.
- (d) Graded discharge pipes of different sizes shall be connected soffit to soffit.

21.4.2 Fixture Discharge Pipes to Graded Pipes

- (a) Except where maximum and minimum grades are specified in group-vented and single stack systems and the below cannot be achieved the invert level of the gully or fixture-trap weir shall be at a higher level than the soffit of the graded discharge pipe to which it connects.
- (b) Individual fixture discharge pipes shall connect into graded pipes using—
 - (i) 45 degrees junction, or
 - (ii) Sweep junction, and shall be swept in the direction of flow.

21.4.3 Discharge-Stacks to Graded Pipes (Refer AS 3500)

- (a) Bends at the base of discharge-stacks shall be the same size as the graded discharge pipe or offset. Tapered enlarging fittings shall be used in the vertical discharge-stack where necessary.
- (b) Bends at the base of discharge-stacks shall have—
 - (i) a 225 mm centre line radius for pipes up to 100 mm, and 300 mm centre line radius for pipes of 125 mm and 150 mm, or
 - (ii) two 45 degree bends separated by a straight pipe not less in length than twice the size of the pipe.
- (c) Junctions at the base of discharge-stacks shall not be more than 45 degrees to the horizontal and the length of junction branch shall be such that the vertical projection of the discharge-stack will be wholly outside the area of the junction with the graded discharge pipe.
- (d) Branch and fixture discharge pipe connections near the base of discharge-stacks shall be in accordance with Local Law 20.5.

21.5 Group-Vented Branches (Refer AS 3500)

The provision of individual fixture trap-vents in a multiple fixture installation normally intended to be fully vented may be omitted provided—

- (a) the fixtures discharge to the same graded branch in accordance with Local Law 21.5.1;
- (b) the individual fixture discharge pipes are in accordance with Local Law 21.5.2; and
- (c) the branch is group-vented in accordance with Local Law 21.5.3.

21.5.1 Size and Configuration of Group-Vented Branches

- (a) Group-vented branches shall be sized in accordance with Local Law 21.2 except when—
 - (i) the group-vent is larger than the discharge pipe to which it connects, the discharge pipe shall be increased in size to not less than the size of the group-vent; or

- (ii) for unvented fixture-discharge pipes less than 65 mm, the group-vented branch to which they connect shall be at least one size larger than the fixture-discharge pipes.
- (b) Except in accordance with Local Law 21.5.1 (c), group-vented branches shall be installed on grade throughout. Changes in direction not exceeding 45 degrees are permitted in the horizontal plane.
- (c) A vertical dropper not exceeding 1.5 m in height may be installed in a group-vented branch provided—
 - (i) a group-vent is installed downstream of the lower bend forming the dropper, and upstream of the first fixture discharge pipe junction with the branch below the dropper; or
 - (ii) all fixtures connected downstream of the dropper are trap-vented.
- (d) Changes in group-vented branch size shall be made using eccentric enlargers with the pipes installed soffit to soffit.

21.5.2 Connection of Unvented Fixture Discharge Pipes to Group-Vented Branches—

- (a) Provided the lengths and grades of the fixture discharge pipes are in accordance with AS 3500, fixtures may be connected to group-vented branches without individual trap-vents.
- (b) Provided the fixture discharge pipe is increased to 40 mm at a distance of 50 + or – 10 mm from the trap weir, using an eccentric enlarger with the pipes installed soffit to soffit basins with plugs or bidets with 32 mm P-traps may be installed without trap-vents.
- (c) Basins or bidets with 40 mm P-traps may be installed without trap-vents, and with one long-bend in the vertical plane of the fixture discharge pipe provided (Figure 21.4)—
 - (i) the length of 40 mm discharge pipe from the trap-crown to the enlarger does not exceed 2 m;
 - (ii) the enlarger is installed immediately above the junction into the group vented branch; and
 - (iii) the graded section of the fixture pipe is graded between 1:40 and 1:20 and has a length between 300 and 600 mm.
- (d) Fixture discharge pipes, not serving basins with plugs or bidets, may have a maximum of 2 long bends in the horizontal plane, 2 long bends in the vertical plane for fixtures with P-traps, and one long bend in the vertical plane for fixtures with S-traps. The length of a vertical dropper shall not exceed 1.5 m.

21.5.3 Group-Vents

- (a) Group-vents shall be sized in accordance with Table 21.4.
- (b) At least one group-vent shall be provided for every group of 10 fixtures or part thereof.
- (c) One group-vent shall be connected to the most upstream fixture discharge pipe in accordance with Local Law 20.10 Subsequent group-vents shall be installed as required approximately equidistant along the group-vented branch.
- (d) If the graded pipe varies in size along its length, the group-vent shall be sized on the largest size of branch pipe which it serves. The branch pipe served by a group-vent is that length of discharge pipe from the group-vent to the next downstream group-vent, or the junction of the branch with a stack, vented graded discharge pipe, disconnector gully or property sewer as applicable.
- (e) Group-vents may connect into branch-vents, relief-vents, stack-vents or extend separately to atmosphere.
- (f) Group-vents shall extend to a height of not less than 50 mm above the overflow rim of the nearest fixture connected to the group-vented branch before interconnecting with any other system vent.
- (g) Group-vents connected directly to the branch pipe shall extend from the top of the branch.

Table 21.4—Size of Branch-Vents and Group-Vents

Size of Branch Discharge Pipe—mm	Size of Vent—mm	
	Group-Vents	Branch-Vents
40	32	32
50	40	40
65	40	40
80	50	50
100	50	50
150	50	80

21.6 Branch Vents

- (a) Unless otherwise specified in these Local Laws every branch with more than one group-vent or trap-vent or a combination of both connected shall be vented with a branch vent sized in accordance with Table 21.4.
- (b) If the branch discharge pipe varies in size along its length, the corresponding sections of branch vent shall be sized on the largest size of branch discharge pipe which it serves.

- (c) Any enlargement in size in the branch vent shall occur prior to the junction connecting the trap-vent or group-vent which requires the branch vent size to be increased.
- (d) Branch vent may connect into relief-vents, stack-vents or extend separately to atmosphere.

22. FULLY VENTED SYSTEMS

22.1 Maximum Permissible Stack Loading

- (a) The maximum permissible loading on a fully vented stack shall be in accordance with AS 3500.
- (b) For stacks more than 3 storeys not more than one quarter of the maximum loading shall enter the stack at any floor-interval.

22.2 Size of Stacks

The size of stacks for the fully vented systems shall be determined from AS 3500.

22.2.1 Size of Stacks without Offsets

The size of stacks without offsets shall be determined by the total number of fixture units discharging into the stack. If the offsets are not more than 45 degrees to the vertical a stack shall be considered to be without offsets.

22.2.2 Size of Stacks with Offsets

- (a) The size of the stack above the offset shall be sized in accordance with AS 3500.
- (b) The size of the graded sections of offsets shall be calculated by the total number of fixture units discharging through the offsets as determined from AS 3500.
- (c) Save that in no case shall the stack be less than the size of the graded section forming the offset, the portion of stacks below offsets shall be sized by the total number of fixture units discharging into the stack as determined from AS 3500.

22.3 Entry of Branches into Stacks

22.3.1 Junctions

- (a) Subject to Local Law 22.3, the following types of junctions shall be used to make connections between any fixture or branch discharge-pipes and discharge-stacks—
 - (i) 45 degree Junctions;
 - (ii) Sweep Junction;
 - (iii) Entry at grade with throat radius; and
 - (iv) Straight entry at grade.
- (b) **Entry at grade** junctions between a stack and any fixture or branch discharge pipe less than 500 mm in length may be used only if—
 - (i) S-traps are fitted;
 - (ii) a vertical dropper occurs in the discharge pipe between the fixture and stack junction; or
 - (iii) the discharge pipe is graded at not less than 1:15.

22.3.1.1 45 degree or sweep junctions shall be used to connect 65 mm or smaller branches to stacks of the same size.

22.3.1.2 Unless in accordance with Local Law 22.3.1 (b) if the entry of 65 mm or smaller branches to larger stacks is at grade, no fixture shall be connected to such branch within 500 mm of the stack.

22.3.1.3 Straight entry of 80 mm or larger branches to any stack at grade is not permitted. Entry may be at grade with a throat radius of 50 mm.

22.4 Restrictions on Branch Connections to Stacks

22.4.1 Near Adjacent Branches (Table 22.2)

Unless the entry is at an angle of 45 degrees branches shall not be connected to stacks with the branch centre line located in the area bounded by half of the stack wall immediately opposite the next highest branch and a Distance "A" in accordance with Table 22.2 below the intersection of the next highest branch centre line and the stack centre line.

Table 22.2—Zones of Prohibited Connections

Higher Branch Size—mm	Stack Size—mm	"A"—mm
32-65	32-80	90
	100	110
80 or more	125	210
	150	250
	80 or more	200

22.4.2 Near Offsets in Stacks

22.4.2.1 Offsets 45 degrees or Less from the Vertical

Branches shall not be connected to stacks with offsets 45 degrees or less from the vertical, within 600 mm of the bends forming the offset.

22.4.2.2 Offsets More than 45 degrees from the Vertical

- (a) Subject to subparagraph (b), branches shall not be connected to stacks with offsets more than 45 degrees from the vertical in the following locations—
 - (i) for buildings not more than 5 floors in height above the offset within 600 mm between the invert level of the lowest branch and the offset;
 - (ii) for buildings more than 5 floors in height above the offset within 1 m between the invert level of the lowest branch and the offset;
 - (iii) within 600 mm above and below the bend into the lower vertical stack; or
 - (iv) within 2.5 m of the upper vertical stack along the offset.
- (b) Where in softwater areas there is a risk of foaming, the distances specified in (i) and (ii) shall be increased as necessary.

22.5 Venting**22.5.1 Stack-Vent**

- (a) Except that the stack-vent need not be larger than the stack every stack shall continue to atmosphere at its uppermost end, and shall be sized in accordance with AS 3500.
- (b) The developed length of the stack-vent shall be—
 - (i) for stacks with relief-vents the length of the relief-vent; or
 - (ii) for stacks without relief-vents the length of stack-vent and stack to the point of connection of the lowest branch.
- (c) If interconnected with the relief-vent above the overflow level of the top-most fixture connected to the stack the stack-vent may extend separately to atmosphere.

22.5.2 Venting of Fixture-Traps

- (a) Subject to (b) all fixture traps shall be vented in accordance with Local Law 20.10.
- (b) Fixture trap vents may be omitted if—
 - (i) the fixture is the topmost connected to the stack and is in accordance with Local Law 23.2, or
 - (ii) the fixture is connected to a group-vented branch in accordance with Local Law 21.5. Connection of the fixture to the group-vented branch shall be in accordance with Local Law 21.5.2.

22.5.3 Relief-Vents

- (a) Stacks 3 or more floors in height shall be provided with relief-vents which connect to such stacks at an angle of 45 degrees below the lowest branches discharging into the stacks.
- (b) Relief-vents shall be sized in accordance with AS 3500. The developed length of a relief-vent is the full length of vent pipe from its opening to atmosphere to its lowest point of connection to the stack.
- (c) Connections between relief-vents and stack-vents shall be at least 50 mm above the overflow levels of the topmost fixtures connected to the stacks.
- (d) Where the lowest fixture connected to a stack is several floors above the base of the stack the relief-vent is to be extended to the base of the stack.

22.5.4 Cross-Vents

- (a) Stacks 20 floors or more in height shall be cross-vented to the relief-vent at no more than 10 floor intervals.
- (b) The size of the cross-vent shall be the size of the main relief-vent or the size of the stack whichever is the smaller.
- (c) Cross-vents shall connect into the stack at an angle of 45 degrees.
- (d) Cross-vents shall commence below the lowest branch connection to the stack at the floor concerned and join into the main relief-vent not less than 50 mm above the overflow point of the lowest fixture, discharging into the stack at that floor.
- (e) Where foaming is anticipated in the bends forming an offset in a stack and only a few fixtures are connected to the stack below the offset, a cross-vent connected to the stack at or below the downstream offset bend and above the highest fixture connected to the stack below the offset, is to be installed.

22.5.5 Vent-Header

- (a) Except as provided in Local Law 20.9.4 the vents from the soil and waste stacks may be connected at their uppermost end into a common vent-header which shall extend to the open air at one point.
- (b) The size of the vent-header shall be determined by the equivalent number of 50 mm relief-vents connected in accordance with AS 3500.
- (c) Relief-vents serving discharge-stacks shall be sized on the total fixture units connected to the stack and the total developed length of the relief-vent to its opening to atmosphere in accordance with Table 22.4.
- (d) The size of the vent-header and vertical vent to atmosphere shall not be smaller than any vent it serves.
- (e) The size of vent-header shall be increased just before the junction requiring the vent-header size to be increased.

Table 22.4—Vent-Headers

Size of Vent-Header or Relief-Vent—mm	Equivalent Number of 50 mm Relief-Vents
50	1
65	2
80	3
100	6
125	11
150	18
175	28
200	40
250	72
300	117

22.5.6 Venting Arrangements at Offsets in Stacks

22.5.6.1 Offsets 45 degrees or less from the Vertical—An offset in a vertical stack with a change of direction of 45 degrees or less from the vertical may be sized as a vertical stack and does not require additional relief venting.

22.5.6.2 Offsets more than 45 degrees from the Vertical (Refer AS 3500)

- For offsets than 45 degrees from the vertical the relief-vent shall interconnect with the stack below the lowest branch above the offset.
- The relief-vent for the upper portion of the stack and for the lower portion may be separate in which case each shall be sized in respect to the total number of fixture units discharging into the portion of stack served. Alternatively the relief-vent shall be carried through as the one vent in which case the vent shall be sized on the basis of the total fixture unit loading on the lower portion of the stack.
- Connections between sections of relief-vents shall be at least 50 mm above the overflow level of the lowest fixture connected to the stack above the offset.
- Any offset in a stack above the topmost fixture connected to the stack shall not require relief-venting.

23. SINGLE STACK SYSTEMS**23.1 General Conditions****23.1.1 Residential Buildings**

Not more than 2 water closets., 2 kitchen sinks (with or without food waste disposal units), 2 dishwashers, 2 baths, 2 basins, 2 showers, 2 clothes washing machines and 2 laundry troughs shall discharge at each floor level into the one stack. Additional or alternative fixtures may be permitted by the City.

23.1.2 Commercial Buildings

Not more than 5 water closets., 5 basins, 5 urinals, 1 cleaner's sink and 1 kitchen sink shall discharge at each floor level into the one stack. Additional or alternative fixtures may be permitted by the City.

23.1.3 Connection of Basins with S-traps

Only unpluggable basins fitted with S-traps may discharge directly to stacks without trap-vents.

23.2 Connection of Fixture Branches**23.2.1 Residential Buildings**

- Each water closet., bath, basin, trough or sink (not discharging into a floor-waste gully) and each floor-waste gully receiving the discharge from fixtures shall be on an individual fixture discharge-pipe.
- A waste fixture discharge pipe will be considered individually connected if 2 fixture discharge pipes discharge into an oblique (45 degree) junction one size larger than the largest fixture discharge pipe provided such junction is positioned adjacent to a stack junction. (Refer AS 3500).

23.2.2 Commercial Buildings

Each water closet., urinal or basin (not discharging into a floor-waste gully) and each floor-waste gully receiving the discharge from fixtures shall be on an individual branch, except where ranges of fixtures in accordance with Local Law 23.2.4 are installed.

23.2.3 Fixture Discharge-Pipes

- Fixtures with discharge pipes conforming with Table 23.1 may be connected to stacks without trap-vents. Except when in accordance with Local Law 23.2.3 (e), all fixture discharge pipes with lengths and grades exceeding those shown in Table 23.1 shall be fitted with trap-vents.
- Provided the fixture discharge pipe is increased to 40 mm at a distance of 50 + or – 10 mm from the trap weir, using an eccentric enlarger with the pipes installed soffit to soffit basins fitted with 32 mm P-traps may be installed without trap-vents.
- Except those serving basins with plugs and bidets, each fixture discharge pipe may have a maximum of 2 long-bends in the horizontal plane, 2 long-bends in the vertical plane for fixtures with P-traps, and one long-bend in a vertical plane for fixtures with S-traps. The length of a vertical dropper shall not exceed 1.5 m.

- (d) Waste fixtures, except basins with plugs, may be connected through a vertical dropper at least one size larger than the fixture discharge pipe if required to avoid cross-flow from other fixture discharge pipes connected to the stack. (Refer AS 3500).

Table 23.1—Connection of Fixture Discharge-Pipes
Without Trap-Vents to Stacks

Fixture	Fixture Trap—mm	Maximum Length of Fixture Discharge-Pipe—m	Range Grades of Fixture Discharge Pipe	
			Min.	Max
Basins (refer to Item 23.2.3 (b))	32 mm P-traps with 40 mm waste pipe	2.5	1:40	to 1:25
	40 mm P-trap	2.5	1:40	to 1:25
Unpluggable Basins	32 and 40	2.5	1:	to 1:25
Baths	40	2.5	1:40	to 1:20
Floor-Waste Gullies	50 and 65	2.5	1:40	to 1:20
Kitchen Sinks —with food disposal units	50	2.5	1:40	to 1:20
Laundry Troughs	50	2.5	1:20	to 1:10
Showers	40 and 50	2.5	1:40	to 1:20
Urinals	40 and 50	2.5	1:40	to 1:20
Washing Machines	50 and 65	2.5	1:40	to 1:20
Water-Closet Pans	40 and 50	2.5	1:40	to 1:20
	100 mm soil pipe 80 mm soil pipe and only where approved	6 1.5	1:50	to 1:20 to 1:20

- (e) The fixture discharge pipe shall be graded within the range of 1:15 to 1:10 if—
- (i) a P-trap is used;
 - (ii) the length of fixture discharge pipe is less than 500 mm;
 - (iii) no vertical dropper occurs in the fixture discharge pipe; and
 - (iv) the stack connection is an entry at grade junction.

23.2.4 Fixture Ranges

- (a) Ranges of fixtures may be connected without trap-vents, group-vents or branch-vents provided they are in accordance with Local Laws 23.2.4.1 to 23.2.4.4 inclusive.
- (b) Ranges of fixtures which do not comply with Local Laws 23.2.4.1 to 23.2.4.4 shall be provided with trap-vents or group-vents.

23.2.4.1 Range of Basins

Up to 5 basins may be connected in a range provided that—

- (a) the basins have P-traps;
- (b) for basins with 32 mm traps the fixture discharge pipes shall be increased to 40 mm at a distance of 50 + or – 10 mm from the trap crowns using eccentric enlargers with the pipes soffit to soffit;
- (c) the fixture discharge pipes shall extend without bends not more than 1.0 m before connecting with a 50 mm common branch discharge pipe, and be graded at not more than 1:25;
- (d) the junction between the fixture discharge pipe and the common branch discharge pipe shall be made using a sweep or 45 degree junction; and
- (e) the 50 mm common branch discharge pipe shall not exceed 4.5 m in length, and shall be straight and graded at not more than 1:25.

23.2.4.2 Range of Unpluggable Basins.

Up to 5 unpluggable basins may be connected in a range provided that—

- (a) the basins are connected to a common branch discharge pipe which is one size larger than the fixture discharge pipes, and the length of fixture discharge pipes are kept as short as practicable;
- (b) the common branch discharge pipe shall not exceed 4.5 m in length, be graded at not more than 1:25, and have not more than two 45 degree bends in the horizontal plane only.

23.2.4.3 Range of Water Closet Pans.

Up to 5 water closet pans may be connected in a range provided that—

- (a) where S-trap pans are used the vertical drop from the trap shall not exceed 1.5 m in height and 2.0 m for P trap pans.
- (b) the fixture discharge pipes are straight and kept as short as practicable to their point of connection with the common branch discharge pipe;
- (c) the common branch discharge pipe shall not exceed 10 m in length, be graded at not more than 1:20, and have not more than two 45 degree bends in the horizontal plane only; and

- (d) the distance between adjacent pan connections and the distance between the stack junction and its nearest pan connection on the common branch discharge pipe shall not exceed 6 m.

23.2.4.4 Range of Wall Hung Urinals

Up to 5 wall hung urinals may be connected in a range provided that—

- (a) the urinals are connected to a common branch discharge pipe of 65 mm, through 50 mm fixture discharge pipes which are kept as short as practicable not exceeding 1.0 m ; and
- (b) the common branch discharge pipe shall not exceed 10 m in length, be graded at not more than 1:25, and have not more than two 45 degree bends in the horizontal plane only.

23.3 Entry of Branches into Stacks

23.3.1 Junctions

- (a) Subject to Local Law 23.3 the following types of junctions shall be used to make connections between any fixture or branch discharge pipes and discharge stacks—
 - (i) 45 degree Junctions;
 - (ii) Sweep junctions;
 - (iii) Entry at grade with throat radius; or
 - (iv) Straight entry at grade.
- (b) Entry at grade junctions between a stack and any fixture or branch discharge pipe less than 500 mm in length may only be used only if—
 - (i) S-traps are fitted;
 - (ii) a vertical dropper occurs in the discharge pipe between the fixture and stack junction; or
 - (iii) the discharge pipe is graded at not less than 1:15.

23.3.1.1 Fixture Discharge Pipes Serving Basins

- (a) Fixture discharge pipes without trap-vents serving basins, except unpluggable basins shall enter stacks at grade without a throat radius or with a throat radius of not more than 25 mm.
- (b) Fixture discharge pipes serving basins with trap-vents shall enter stacks in accordance with Local Law 23.3.1.2 or 23.3.1.3.

23.3.1.2 65 mm or Smaller Branches to Stacks of the Same Size

45 degrees or sweep junctions shall be used for 65 mm or smaller branches to stacks of the same size.

23.3.1.3 65 mm or Smaller Branches to Larger Stacks

If the entry is at grade, no fixture shall be connected to such branch within 500 mm of the stack, unless in accordance with Local Law 23.3.1 (b), for 65 mm or smaller branches to larger stacks.

23.3.1.4 80 mm or Larger Branches to Any Stack

Straight entry at grade is not permitted. Entry at grade with a throat radius of not less than 50 mm is permissible, for 80 mm or larger branches to any stack.

23.4 Restrictions on Branch Connections to Stacks

Unless the entry is at an angle of 45 degrees branches shall not be connected to stacks with the branch centre line located in the area bounded by half of the stack wall immediately opposite the next highest branch and a Distance "A" in accordance with Table 23.2 below the intersection of the next highest branch centre line and the stack centre line.

Table 23.2—Zones of Prohibited Connections

Higher Branch Size—mm	Stack Size—mm	"A"—mm
32-65	32-80	90
	100	110
	125	210
	150	250
80 or more	80 or more	200

23.5 Discharge-Stack Design

- (a) Discharge-stacks shall be straight for their entire length between the highest and lowest branch connections to the stacks.
- (b) One offset only shall be permitted below the lowest branch connection to the stack provided—
 - (i) The discharge pipe forming the offset is not less than 45 degrees to the horizontal; and
 - (ii) No branch connections are made to the stack within 600 mm of the bend forming the offset.
- (c) Bends at the base of stacks shall be in accordance with Local Law 21.4.3.
- (d) Single stack systems shall be sized in accordance with Table 23.3 or Table 23.4 for Residential buildings and in accordance with Tables 23.4 and 23.5 for Commercial Buildings.

Table 23.3—Single Stack Design—Residential Buildings

Stack Size mm	Relief and Cross-Vent Size Arrangement RV—Relief-Vent CV—Cross-Vent	Maximum Number of Floors	Fixture Unit Loading
100	None	10	260
	50 mm RV, 50 mm CV at alternate floors	15	290
	50 mm RV, 50 mm CV at each floor	15	390
	65 mm RV, 65 mm CV at alternate floors	20	320
	65 mm RV, 65 mm CV at each floor	20	500
125	None	15	390
150	None	30	780

Note: When a laundry trough is installed the fixture unit loading of a clothes washing machine shall be included.

Table 23.4—Single Waste-Stack
Design—Residential Buildings Or Commercial Buildings

Stack Size—mm	Fixture Unit Loading
50	6
65	15
80	30

Note: For stacks less than 80 mm the property sewer shall be at least one size larger than the stack.

Table 23.5—Single-Stack Design—Commercial Buildings

Stack Size mm	Relief and Cross-Vent Size and Arrangement RV—Relief-Vent CV—Cross-Vent	Maximum Number of Floors	Fixture Unit Loading
100	None	4	60
	50 mm RV, 50 mm CV at each floors	12	120
125	None	6	100
	65 mm RV, 65 mm CV at each floor	18	250
150	None	8	200
	80 mm RV, 80 mm CV at each floors	24	600

Note: Stack loadings are based on the “Congested” loading table of BS CP304.

23.6 Venting

23.6.1 Stack-Vents

Except that, for stacks which are not more than 3 floor levels in height and receive a discharge of not more than 30 fixture units the stack may be reduced to 50 mm above the topmost fixture branch, every stack shall continue to atmosphere at its uppermost end undiminished in size.

23.6.2 Relief-Vents

- The size of relief-vents shall comply with Table 23.3 or Table 23.5.
- The relief-vents shall interconnect with the soil stack below the entry of the lowest fixture to the stack at an angle of 45 degrees.
- The relief-vent may interconnect with the main stack-vent at a point not less than 50 mm above the overflow level of the highest fixture, or extend separately to the full required height.

23.6.3 Cross-Vents

- Cross-vents shall be the same size as the relief-vent.
- Where cross vents are required they shall interconnect with the stack—
 - At a point not less than 50 mm or more than 600 mm above the top of the highest fixture on the floor concerned and at an angle of 45 degrees; or
 - To the water closet branch Connection to the stack on the floor concerned, and as close as possible to the stack.
- Where required on alternate floors, the cross-vents shall commence on the lowest floor having a fixture discharging into the stack and then on each alternate floor above.
- Cross-vents are not required above the topmost fixtures connected to the stack.

24. INSTALLATION OF PIPEWORK ABOVE GROUND

24.1 Fixing Of Pipes

24.1.1 Brackets and Clips

24.1.1.1 Form

- (a) Brackets and clips shall be formed of mild steel or other approved material, and shall be provided with a shank or other suitable means of attachment to the structure.
- (b) Brackets and clips shall be designed to withstand the applied loads.
- (c) Brackets and clips which are exposed to corrosive conditions shall be rendered corrosion resistant by an approved treatment process.
- (d) Brackets and clips used to support pipework of copper, copper alloy or plastics shall be lined or coated with PVC or other approved non-abrasive and inert material for that section which is in contact with the pipework.
- (e) All fasteners for use with cast iron or steel pipes shall when tightened evenly, clamp the pipe securely to prevent movement.
- (f) All fasteners for use with copper, and copper alloy and plastic tubing other than at expansion joints shall, when fully tightened, permit longitudinal movement of the tubing. Fasteners for use at expansion joints shall, when tightened evenly, clamp the expansion joint-fitting securely to prevent movement.

24.1.1.2 Fixing

Brackets and clips shall be securely fixed to timber by screwed fasteners and to brickwork or concrete—

- (a) by drilling and bolting through;
- (b) by drilling and caulking with lead (wooden plugs are not permitted);
- (c) by securing with a screwed or bolted masonry anchor;
- (d) by percussive fasteners used in accordance with the relevant regulation; or
- (e) by other approved means.

24.1.2 Spacing of Brackets and Clips

- (a) Every discharge and vent pipe shall be securely supported and fixed at least at 2 points and at intervals not exceeding those shown in Table 24.1, or at other maximum distances as specified in these Local Laws.
- (b) Fixing of copper, copper alloy and UPVC pipes shall be in accordance with the requirements in Local Laws 24.9 and 24.10.

Table 24.1—Spacing of Brackets and Clips

Situation	Maximum Spacing—m
Pipes on grade	2
Vertical pipes in internal location	3
Vertical pipes in external location	2

Note: This table does not apply to plastic pipes.

24.2 Testing and Inspection Openings

24.2.1 General

All openings for testing and inspection shall be in accordance with the Australian Standard appropriate to the material used in the plumbing installation.

24.2.2 Location

24.2.2.1 Testing Openings

Openings for the hydrostatic testing of all stacks shall, unless otherwise approved, be provided in accessible positions—

- (a) Near the base of each stack; and
- (b) Elsewhere in the stack as necessary to conduct hydrostatic tests in sections of one or more floors.

24.2.2.2 Inspection Openings

Openings for inspection and maintenance, unless otherwise approved, shall be located to provide access to every part of the plumbing installation—

- (a) At the stack junction of vertical and graded discharge pipes; and
- (b) At the first change of direction downstream of any fixture trap and in no case more than 10 m from such trap, and thereafter at every second change in direction or at not more than 10 m intervals whichever is less.

24.3 Marking of Pipes

In all multi-storey buildings every soil, waste and vent pipe installed within a duct shall be clearly and permanently marked “soil”, “waste” or “vent”, in a clear and visible position by a sticker or stencil, at least at each floor.

24.4 Pipes Liable to Damage

Pipes installed in positions exposed to mechanical damage shall be of cast iron, galvanized steel tube or other approved material.

24.5 Installation of Vents

24.5.1 Vent Cowls

Approved vent cowls shall be affixed to the upper extremities of vents.

24.5.2 Staying of Vents

- (a) The top of vent pipes which are more than the maximum distances specified in Table 24.2 above the highest fastening to a structure or which have offsets above such fastenings, shall be stayed by at least 2 struts set at right angles to each other, or 3 stays set at 120 degrees to each other.
- (b) Vent pipes struts or stays shall have approved lugs secured by fasteners to bands which tightly fit the pipe, and their feet shall be securely fastened to the building or supports.

Table 24.2—Strutting or Staying of Vents

Vent Pipe Material	Maximum Height above Fastening to Structure
Galvanized steel tube	3.0 m
Copper or copper alloy tube	1.8 m
Cast iron	1.8 m
Other approved vent pipe material	1.0 m

24.5.3 Vents Through Roofs

The roof shall be flashed around the vent with approved materials and shall be made watertight or the vent pipe may be offset from a wall for a minimum distance necessary to avoid a gutter or other obstruction.

24.6 Building Pipes into Walls or Floors

24.6.1 Basement Walls

Cast iron pipes shall be used through all external basement walls of a building and shall extend for a distance of not less than 300 mm beyond the outer wall face.

24.7 Concealment of Pipes and Fittings

24.7.1 General

- (a) Pipework installed in walk-in pipe ducts, limited-access ducts, cavity walls, timber-framed walls or chases shall be in accordance with this Local Law.
- (b) Pipework shall not be embedded in concrete.

24.7.2 Walk-in Pipe Ducts

All pipework other than of galvanized sheet steel or sheet copper material may be concealed in walk-in pipe ducts which shall be constructed at least 1.5 m high and 0.6 m wide to accommodate pipework at the specified spacing (Local Law 24.8) and provide ready access for maintenance personnel.

24.7.3 Limited-Access Pipe Ducts

All pipework other than of galvanized sheet steel or sheet copper material may be concealed in limited-access pipe ducts. Pipe ducts too small for entry by maintenance personnel shall, in addition to accommodating pipework at the specified spacing (Local Law 24.8), have at least one side so constructed and fixed as to be capable of independent removal without damage to the main structure, and shall be provided with access parts in accordance with Local Law 24.7.7.

24.7.4 Pipework in Cavity Walls

All pipework other than of galvanized steel tube, galvanized sheet steel or sheet copper material may be concealed in cavity walls provided that—

- (a) pipes, are at the specified spacing (Local Law 24.8);
- (b) access ports are provided in accordance with Local Law 24.7.7; and
- (c) pipework does not touch or bear on any wall surface.

24.7.5 Pipework in Timber-Framed Walls

All pipework other than of galvanized steel tube, galvanized sheet steel or sheet copper material may be concealed in timber-framed walls provided that—

- (a) except with the approval of the appropriate Building Authority, no timber frame shall be cut or damaged;
- (b) pipes are at the specified spacing (Local Law 24.8); and
- (c) access ports are provided in accordance with Local Law 24.7.7.

24.7.6 Pipework in Chases

Pipework in cast iron, copper, copper alloy or UPVC material may be concealed in chases cut in brick, concrete or masonry walls and floors provided that—

- (a) every such chase shall be to the requirements of the appropriate Building Authority;

- (b) copper, copper alloy and UPVC tubes and fittings are lagged with an approved material not less than 6 mm thick; and
- (c) access ports are provided in accordance with Local Law 24.7.7.

24.7.7 Access Ports

Excepting where pipework is in walk-in ducts, access ports with removable covers and of a size and shape suitable for conducting cleaning operations shall be provided to all concealed pipework as follows—

- (a) At each inspection opening in the case of fixtures with 32 mm outlets, fixtures with integral traps and water-closet pans. (The outlet of every other fixture may be used to gain access to the first 10 m of discharge pipe downstream for purposes of clearing stoppages by mechanical means);
- (b) At each inspection opening on graded discharge pipes which is more than 10 m downstream of a fixture outlet;
- (c) At each inspection opening on a stack; and
- (d) At each expansion joint.

24.8 Spacing of Pipes

24.8.1 General

Where practicable, at least 50 mm of space shall separate plumbing pipes from each other and from any other pipe or service.

24.8.2 UPVC Pipework

- (a) (i) Subject to (ii) pipes of UPVC, or of other plastic material, shall, in general, be spaced as far as possible from any hot pipe.
- (ii) A clear space of at least 75 mm shall separate pipes of plastic material from any lagged hot pipe, and at least 150 mm from any unlagged hot pipe.
- (b) Horizontal pipes of plastic material, installed close to hot pipes, shall be at a lower level than such hot pipes.

24.9 Installation of Copper and Copper Alloy Pipes

24.9.1 Fixing of Copper and Copper Alloy Pipes

- (a) All fasteners for use with copper and copper alloy tubing other than at expansion joints shall, when fully tightened, permit longitudinal movement of the tubing.
- (b) All fasteners for use at expansion joints shall, when tightened evenly, clamp the expansion joint fitting securely and prevent movement.
- (c) All fasteners for use with copper or copper alloy pipes shall be lined with PVC, or other approved non-abrasive and inert material, for that part of the fastener in contact with the pipe.

24.9.2 Expansion Joints for Copper and Copper Alloy Pipes

Where specified expansion joints of approved design shall be provided in all copper and copper alloy pipes used for plumbing systems.

24.9.2.1 Stacks

- (a) Where any stack extends through more than 2 floors either above its base or above any offset bend, expansion joints shall be fixed in the following locations—
 - (i) at its base or in the vertical pipe above an offset bend;
 - (ii) at each alternate floor level when the stack is unrestrained in accordance with Local Law 24.9.3, or at each floor level when the stack is restrained or is subject to hot discharges such as from dishwashing machines; and
 - (iii) at other locations where directed by the City.
- (b) The expansion joint at an intermediate floor shall be placed immediately above the junction of the highest discharge pipe connected at the floor concerned.

24.9.2.2 Graded Discharge Pipes

Where graded discharge pipes are restrained and are more than 6 m in length an expansion joint shall be installed in the graded pipe.

24.9.2.3 Vent Pipes

Except where excessive or continuous hot discharges such as from bed pan washers and sanitizers and dishwashing machines are discharged into the stack expansion joints will not be required for vents.

24.9.2.4 Bed Pan Sanitizer and Washer

Where a bed pan sanitizer and washer is connected with steam, and is connected to a copper tube soil stack, soil-vent, or steam relief-vent an expansion joint shall be required at each floor for the soil stack, soil-vent and steam relief-vent pipe and shall be located in positions defined in Local Law 18.8.

24.9.3 Freedom from Restraint (Refer AS 3500)

A copper pipe will be considered unrestrained provided—

- (a) Where it passes through walls or floors no restraint on longitudinal movement occurs. An annular space of at least 6 mm shall be provided, and such space may be filled with an approved flexible material; and
- (b) No restraint on movement occurs on any branch discharge pipe for a distance of 450 mm from its junction with a stack. Where it traverses any floor or wall within such distance, an annular space of at least 6 mm shall be provided, which may also be fitted with flexible material.

24.10 Installation of UPVC Pipes

UPVC pipes and fittings shall be installed in accordance with the provision of AS CA67.

Table 24.3—Supports for UPVC Pipes

Pipe Size mm	Maximum Spacing of Brackets and Clips	
	Vertical Pipe	Graded Pipe
32	1.8 m	0.9 m
40 and 50	2.0 m	1.0 m
65 to 150	2.5 m	1.2 m

Note: For discharge pipes subject to hot discharge the maximum spacings for brackets and clips given in Table 24.3 above should be halved.

25. PROPERTY SEWERAGE DESIGN AND INSTALLATION**25.1 Usage of Concrete**

- (a) Subject to these Local Laws concrete shall not be less than 100 mm thick or as directed by the City.
- (b) Subject to these Local Laws, concrete shall be used in the following applications and elsewhere as directed by the City—
 - (i) Under 100 mm or larger gully traps and boundary traps in the ground;
 - (ii) Under all inspection opening junctions where the riser is brought to the surface, the concrete shall finish at least 20 mm clear of any flexible joint; and
 - (iii) Under all junctions and bends forming risers from the Main Drain.
- (c) Exposed concrete shall have a smooth finish.

25.2 Property Sewers under Buildings

- (a) If practicable, property sewers shall be designed not to pass under buildings.
- (b) Where a property sewer passes under a building, it shall be constructed as follows—
 - (i) If practicable it shall be straight for the whole distance under the building;
 - (ii) Inspection openings shall be positioned in the property sewer outside and adjacent to the building, and at any change of direction under the building. If required by the City the inspection opening shall be brought to the surface, or inspection chambers provided. Additional inspection openings in accordance with Local Law 25.9 may be required; and
 - (iii) Pipes under footings shall have a minimum clearance of 75 mm from the top of the pipe to the underside of any footing.

25.3 Size of Property Sewers

- (a) Unless otherwise approved, every property sewer shall be at least 100 mm size from its connection with the sewer to its up-stream vent or vents. 65 mm and 80 mm branch property sewers shall be in accordance with Local Law 25.5.2.
- (b) The size of property sewers shall be determined by the total number of fixture units drained or likely to be drained in Table 25.1 and Table 25.2.
- (c) Where a property sewer requires a size larger than 150 mm all details shall be submitted to the City.

Table 25.1—Size of Property Sewers

Nominal Pipe Size mm	Maximum Loading (Fixture Units)									
	1 in 150	1 in 100	1 in 90	1 in 80	1 in 70	1 in 60	1 in 50	1 in 40	1 in 30	1 in 20
100	np	np	np	120	140	165	205	260	380	450
125	np	np	320	375	425	500	630	820	1 000	1 000
150	np	840	900	995	1 050	1 190	1 420	1 700	1 900	1 900
175	np	1 700	1 850	1 975	2 150	2 350	2 600	2 600	—	—
200	2 100	2 850	3 000	3 250	3 550	3 600	3 600	—	—	—
225	3 050	4 050	4 300	4 650	5 000	5 000	—	—	—	—

Table 25.2—Size of Large Property Sewers

Nominal Pipe Size mm	Maximum Loading (Fixture Units)				
	1 in 300	1 in 250	1 in 200	1 in 150	1 in 100
300	np	5 750	6 700	7 800	9 700
375	10 000	11 500	13 200	15 200	19 000

np—not permitted.

25.4 Grades of Property Sewers

25.4.1 General

- (a) Property sewers installed at grades of less than 1 in 80 shall be laid under the control of a supervisor who is competent in establishing precise levels.
- (b) Property sewers of diameters larger than necessary shall not be used to take advantage of the flatter grades permitted for larger diameter pipes.

25.4.2 Minimum Grades

- (a) Branch property sewers of 65 mm and 80 mm shall be laid on grades of not less than 1 in 40 and 1 in 60 respectively.
- (b) Where sufficient fall exists property sewers of 100 mm and 150 mm shall be laid on grades of not less than 1 in 60 and 1 in 80 respectively.

25.4.2.1 100 mm Property Sewers

Where a grade of 1 in 60 is unobtainable in any 100 mm property sewer, the property sewer shall be installed in the steepest obtainable grade, but not less than 1 in 80.

25.4.2.2 150 mm Property Sewers

Where a grade of 1 in 80 is unobtainable in any 150 mm property sewer, the property sewer shall be installed on the steepest obtainable grade, but not less than 1 in 120.

25.5 Venting of Property Sewers

25.5.1 Location and Size of Vents

- (a) All property sewers shall be vented at their upstream end, except where an unvented branch property sewer in accordance with Local Law 25.5.2 is permitted, and at their downstream end whenever a boundary-trap is installed.
- (b) Termination of vents at their opening to atmosphere shall be in accordance with Local Law 20.9.
- (c) Any portion of a vent installed below ground shall not be less than the size of the property sewer or 100 mm whichever is the smaller.

25.5.1.1 Upstream Vents

- (a) The upstream vent on any property sewer shall be connected either—
 - (i) to the property sewer downstream of a fixture connection or gully so that the property sewer upstream from the vent connection is in accordance with Local Law 25.5.2, or,
 - (ii) to the property sewer as the vent extension of a discharge stack so as any property sewer upstream from the stack connection is in accordance with Local Law 25.5.2.
- (b) The vent size above ground shall be in accordance with Table 25.3.

Table 25.3—Size of Vents for Property Sewer

Fixture Unit Loading on Property Sewer	Minimum Size of Vent Above Ground—mm
Up to 30	50
Up to 400	80
More than 400	100

25.5.1.2 Downstream Vents

- (a) The downstream vent on any boundary trapped property sewer shall be connected—
 - (i) to the inspection shaft directly above the boundary trap; or
 - (ii) Provided no branch connections are made to the property sewer between the vent and the boundary trap to the property sewer within 10 m upstream of the boundary trap.
- (b) The vent size above ground shall be in accordance with Table 25.3.

25.5.1.3 Water closet pans in Toilet Blocks

- (a) Where 10 or more water closet pans, in any ground floor toilet block, are each separately connected to unvented branch property sewer in accordance with this Part, and the spacings of respective branch property sewer connections to the vented property sewer are such that, on the average, they are 2 m apart or less, one 50 mm vent shall be provided for the first 10 pans and an additional 50 mm vent shall be provided for each additional 10 pans or part thereof.
- (b) The vents shall be positioned to divide the pans into approximately equal groups.
- (c) Where practicable each vent shall branch from the vented property sewer, or otherwise from a water closet pan branch.

25.5.2 Unvented Branch Property Sewers.

Ground floor fixtures may be connected to an unvented branch drain provided that—

- (a) except in the case of overflow relief or disconnector gullies where the length shall not exceed 10 m, the length of pipework from the vented property sewer to the crown of the trap shall not exceed 8.5 m;
- (b) provided that the connection of basins and bidets without trap-vents shall be in accordance with Local Law 25.3.3, where the trap discharge pipe is smaller than the unvented branch property sewer the length of pipework from the reducer to the crown of the trap shall not exceed 2.5 m;
- (c) reducers located in graded pipes shall be of the eccentric type and the 2 connecting pipes shall be soffit to soffit;
- (d) the pipework from the trap to the vented property sewer may have a maximum of 2 vertical droppers not exceeding 2 m each in height and separated by not less than 300 mm of graded pipe; and
- (e) all bends, junctions and graded pipe installed in the ground shall not be less than 65 mm in size.

25.5.2.1 100 mm Branch Property Sewers

An unvented 100 mm branch property sewer may be connected to a vented property sewer or disconnector gully in the case of waste fixtures only, provided—

- (a) the unvented property sewer does not receive the discharge from more than 2 water-closet pans, and
- (b) the unvented property sewer does not receive the discharge from fixtures having a total rating of more than 30 fixture units.

25.5.2.2 80 mm Branch Property Sewers

An 80 mm branch property sewer may be connected to a property sewer of not less than 100 mm or disconnector gully in the case of waste fixtures only, provided;

- (a) the 80 mm property sewer receives the discharge from a single fixture or floor-waste gully only; and
- (b) except where approved by the City the 80 mm property sewer does not receive the discharge from a water-closet pan.

25.5.2.3 65 mm Branch Property Sewers

Provided it receives the discharge from a single fixture or floor-waste gully only, a 65 mm branch property sewer may be connected to a property sewer of not less than 100 mm or a disconnector gully in the case of waste fixtures.

25.5.3 Connections of Basins and Bidets without Trap-Vents to Branch Property Sewers.

- (a) Basins and Bidets with 32 mm unvented waste pipes, or basins and bidets with unvented S-traps shall not be connected directly to property sewers.
- (b) Basins and bidets with 40 mm P-traps and waste pipes may be connected without trap vents to property sewers provided—
 - (i) The graded section of waste pipe from the fixture trap crown to the vertical dropper is between 300 and 600 mm in length and graded between 1:40 and 1:25;
 - (ii) No bends are installed within the graded and vertical sections of waste pipe;
 - (iii) The length of waste pipe from the fixture trap crown to the enlarger at the branch property sewer shall not exceed 2 m; and
 - (iv) The enlarger in the branch property sewer is located in the vertical riser, and fitted directly to the bend in the property sewer.

25.6 Minimum Cover Over Pipes

25.6.1 With No Concrete Protection

Where no protective cover is used the minimum depth of cover from the top of the socket to the ground surface shall be in accordance with AS 3500.

25.6.2 With Concrete Protection

- (a) In public thoroughfares right of way, and other places subject to heavy vehicular traffic where less than 750 mm of cover to ground surface is provided a protective cover of at least 100 mm of concrete shall be provided.
- (b) In places not subject to heavy traffic a concrete path shall be considered as sufficient protective cover.

25.7 Excavation, Bedding and Property Sewer Installation**25.7.1 Protection of Trenches**

An excavation exceeding 1.5 m in depth, or less in depth but where the sides are not self supporting, shall comply with the requirement of the relevant Construction Safety Acts and Regulations that such trenches be adequately supported against collapse. The City may refuse to inspect or test any installation where the excavation is not so supported.

25.7.2 Width of Trenches

Trenches shall be made with a clearance of not less than 100 mm on each side of the pipe measured to the inside timbers or trench. The trench width to the level of the top of the pipe shall be kept as narrow as possible.

25.7.3 Explosives

Explosives shall be used for the excavation of trenches only when approved by all relevant Authorities, and in accordance with conditions they may specify.

25.7.4 Dewatering

Dewatering of trenches shall be carried out by pumping so as to lower the water level below the barrel of the pipes to be laid and to ensure a firm base. Ground water shall not be discharged into the connection or sewer. The water level shall be maintained below the level of the barrel of the pipes until such time as the trench or excavation has been backfilled completely.

25.7.5 Laying of Property Sewers

Pipes shall be laid to the standards required by AS CA56, AS CA67 and AS CA68 using a practice approved by the City.

25.7.6 Connecting to City's Connection

- (a) Where a trench is excavated by machine, the section of the trench within 600 mm of the City's connection shall be excavated by hand to prevent damage to the connection fittings.
- (b) When the stopper is removed from the connection fitting, care shall be taken to prevent the fitting being damaged.
- (c) If the connection is damaged the City shall be informed as soon as possible and the fault rectified before the property sewer is laid.

25.8 Installation of Property Sewers on Steep Grades

Property sewers laid on grades of more than 1 in 5 shall be anchored by approved means at—

- (a) the bend or junction at the top or bottom of the inclined property sewer; and
- (b) at intervals not exceeding 3 m or as required by the City.

25.8.1 Anchor Blocks (Refer AS 3500)

- (a) Anchor blocks shall be formed of concrete—
 - (i) not less than 150 mm thick;
 - (ii) keyed at least 150 mm into the trench floor; and
 - (iii) extend the full width of the trench where practicable, and be at least 150 mm on each side of the property sewer.
- (b) Anchor blocks shall be reinforced with two 9 mm reinforcing rods bent to 100 mm larger than the diameter of the pipe.
- (c) Anchor blocks shall not cover flexible joints.

25.9 Inspection Openings**25.9.1 Provision of Inspection Openings for Maintenance Purposes (Refer AS 3500)**

Except where inspection chambers are provided, inspection openings for maintenance purposes shall be provided—

- (a) on a water closet or slop hopper branch (The City may approve alternative access provision for maintenance of groups of water closets discharging to property sewers under buildings);
- (b) at intervals of not more than 30 m, and, where practicable, located on or immediately downstream of a bend;
- (g) where required by Local Law 25.2.

25.9.2 Provision of Inspection Openings for Visual Inspection Purposes.

Where specified by the City inspection openings for visual inspection purposes shall be provided—

- (a) if an inspection opening is not provided by the City at the connection to the City's sewer;
- (b) at each end of a straight section of property sewer;
- (c) at even spacings of not more than 30 m along the property sewer;
- (d) on inclined jump-ups, the length of which exceed 3 m provided that, if its length does not exceed 6 m, only one inspection opening is required, located centrally on the jump-up;
- (e) except when a 100 mm opening is provided in an accessible position on the water-closet discharge pipe on a water-closet branch property sewer;
- (f) on a 100 mm or larger branch property sewer, the length of which exceeds 3 m provided that, if its length does not exceed 6 m, only one inspection opening is required, located centrally on the branch property sewer; and
- (g) at the offtake of a branch property sewer if such branch property sewer is not installed and tested concurrently with the main property sewer.

25.9.3 Use of Vents

If an approved access cover is fixed to the vent near ground level, and if the vent is of the same diameter as the property sewer a vent may be used in lieu of an inspection opening for maintenance purposes.

25.9.4 Size of Inspection Openings

- (a) Subject to (b) inspection openings shall be of the same diameter as the property sewer.
- (b) Where the property sewer is more than 150 mm, an inspection opening of at least 150 mm may be used.

25.9.5 Access to Inspection Openings

Where required by the City inspection openings shall extend to ground level.

25.9.6 Sealing of Inspection Openings and Sockets

- (a) Stoppers or caps shall be used to seal all inspection openings and unused sockets.
- (b) Stoppers or caps shall be of an approved type and sealed by means of a gasket, sealing ring, or other approved method, and securely held in position by an approved clip or strap, or other approved means.
- (c) When a stopper or cap with a rubber ring or gasket is removed, a new rubber ring or gasket shall be fitted if the rubber ring or gasket has been damaged or deformed in any way.
- (d) Where the inspection opening is brought to the surface, a removable airtight cover shall be fitted. Where the cover may be subjected to external loading the City may direct special types of covers to be used.

25.10 Inspection Chambers

25.10.1 Provision

Inspection chambers shall be used where directed by the City and may be used in lieu of inspection openings.

25.10.2 Size of Inspection Chambers

Inspection chambers shall be sized in accordance with AS 3500.

25.10.3 Form and Materials

25.10.3.1 Form—Inspection chambers shall be either—

- (a) rectangular in shape and constructed *in situ* of brickwork at least 190 mm thick or concrete at least 150 mm thick; or
- (b) circular in shape and prefabricated in accordance with Local Law 25.10.3.3 or constructed *in situ* of concrete at least 150 mm thick.

25.10.3.2 Rectangular Inspection Chambers

- (a) Each inspection chamber shall be constructed on a concrete bed of at least the same external dimensions as the chamber and at least 150 mm thick.
- (b) Chamber walls of brickwork shall not exceed 1.5 m in depth measured from surface level of invert of channel. Deeper walls shall be of concrete.
- (c) Bricks used for this purpose shall be first quality, clay bricks, or solid concrete blocks.

25.10.3.3 Circular Inspection Chambers

Prefabricated chambers shall be formed of spun reinforced concrete pipes with a wall thickness of at least 60 mm.

25.10.4 Construction

25.10.4.1 Conduit

- (a) The conduit in an inspection chamber located inside a building shall be fully enclosed and incorporate an inspection opening.
- (b) The conduit in an external inspection chamber may either be enclosed as above or be an open channel of width and depth equal to the diameter of the property sewer.
- (c) The floor in an inspection chamber shall slope towards the channel, or towards the inspection opening, on a grade of approximately 1 in 12.
- (d) Formed junctions and bends in channels shall have a centre line radius of not less than 300 mm.
- (e) A fall of at least 15 mm shall be provided in the invert of every straight channel.
- (f) A fall of at least 30 mm shall be provided in the invert of a channel which curves through 45 degrees or more.

25.10.4.2 Jump-Ups

- (a) Each jump-up in an inspection chamber shall be of cast iron or UPVC pipe or of other approved material securely clipped to the wall and terminating at either end with a 90 degree bend, the higher one of which shall incorporate an inspection opening.
- (b) Where more than one jump-up is installed in any circular inspection chamber, the chamber shall be at least 1.2 m in diameter.
- (c) External jump-ups shall be in accordance with the requirements of the City.

25.10.4.3 Ladders

- (a) Subject to Local Law 25.10.4.4 (a), ladders shall be provided in chambers 1.2 m or more in depth.

- (b) (i) Ladders in inspection chambers shall be hot-dipped galvanized steel with not less than 20 mm diameter rungs at least 300 mm long and spaced at not more than 300 mm. Stringers shall be not less than 50 × 10 mm located 200 mm from the wall and fixed using stainless steel or hot dipped galvanized bolts to the wall at spacings not exceeding 3.5 m;
- (ii) If approved, ladders may be of materials and length other than that specified in (i).

25.10.4.4 Step-Irons

- (a) Step-irons may be used in lieu of ladders provided—
 - (i) the chamber is a dry chamber;
 - (ii) the chamber does not exceed 3 m in depth; and
 - (iii) the step-irons are built-in during construction of the chamber.
- (b) (i) Subject to (ii), step-irons shall be hot-dipped galvanized steel not less than 24 mm diameter with 350 mm long rungs constructed 200 mm from the chamber wall. Spacing between step-irons shall be not more than 300 mm.
- (ii) Step-irons may be of other approved materials and designs.

25.10.4.5 Cement Rendering

The walls of brick inspection chambers and the floor and channels of all inspection chambers shall be rendered with a coat of cement mortar at least 10 mm thick and have a smooth finish.

25.10.4.6 Top of Inspection Chamber

Inspection chambers may be constructed—

- (a) either full size to surface level; or
- (b) at height of not less than 1.5 m above the floor, may be tapered to an access opening, provided the access shaft is at least 600 mm diameter and does not exceed 300 mm in length.

25.10.4.7 Access Opening

- (a) A circular or rectangular access opening at least 530 mm in size fitted with a removable watertight cover, shall be provided at surface level.
- (b) Where subject to vehicular traffic or other heavy loading, the cover shall be of a heavy-duty type.

25.10.4.8 Construction Joints

- (a) No more than 24 hours shall elapse between successive pours of concrete.
- (b) The keying surface of every construction joint shall be scabbled and cleaned.
- (c) A cement slurry shall be applied to every construction joint immediately prior to pouring concrete.

25.10.4.9 Inserts

Holes broken or formed in walls of inspection chambers for insertion of pipes or fittings shall be made watertight by keying and preparing as construction joints and caulking with a stiff 2:1 mix of sand: cement mortar into the annular space between the concrete and pipe or fitting, or sealing with an epoxy based, or other approved sealant.

25.10.5 Testing

The City may order the application of a water test to an inspection chamber.

25.11 Boundary Traps (Interceptor Traps)

25.11.1 General Requirements

Where a boundary trap is required by the City it shall comply with the following—

- (a) The trap shall be the same size as the down stream property sewer to which it connects;
- (b) The trap shall be bedded on concrete;
- (c) The inlet riser shall be extended to near ground level and a cap or cover fitted to the top of the riser;
- (d) In areas subject to heavy vehicular traffic a cast iron cover and frame shall be set at ground level on a concrete base such that no traffic load can be directly transmitted to the boundary trap or property sewer; and
- (e) The boundary trap shall be vented in accordance with Local Law 25.5.1.2 and Local Law 20.9.

25.11.2 Boundary Trap Inside or Under a Building

Where a boundary trap is installed inside or under a building it shall comply with the following—

- (a) The riser shall be sealed with an air and watertight removable screwed or bolted cover in an accessible position.
- (b) Where specified by the City the boundary trap riser shall be installed in a chamber.

25.12 Reflux Valves

25.12.1 General

A reflux valve shall be installed where an overflow gully cannot be provided in accordance with Local Law 18.13, and where specified by the City.

25.12.2 Location

- (a) When required on the main property sewer a reflux valve shall be placed as close as possible to the sewer connection point.
- (b) When required on a branch property sewer to protect fixtures not protected by the overflow gully a reflux valve shall be located as close as possible to the branch offtake.

25.12.3 Reflux Valve Chamber

Except where a reflux valve is installed in an accessible position in a building or elsewhere when approved by the City, it shall be installed in a chamber complying with Local Law 25.10 and shall be centrally located in the chamber. The floor of any reflux valve chamber shall be cement rendered and graded to the reflux valve top.

25.12.4 Reflux Valve with Boundary Trap

Where a reflux valve and a boundary trap are both required by these Local Laws, the reflux valve shall be fitted downstream of the boundary trap.

25.13 Gullies

Gullies shall be in accordance with Local Law 18.13.

25.14 Testing of Property Sewers

Property sewers shall be tested in accordance with the appropriate Australian Standard or as required by the City.

25.15 Junctions in Property Sewers

- (a) Junctions used for connecting property sewers shall be either—
 - (i) equal 45 or 60 degree junctions fixed on grade, or
 - (ii) unequal 45 degree junctions fixed so that the smaller property sewer entries are at an angle of approximately 45 degrees to the horizontal.
- (b) Reducers shall be of the "level invert taper" type with the pipework connected soffit to soffit.
- (c) Sweep junctions are not permitted.

26. JOINTING OF PIPES

26.1 General

The joints between discharge pipes, vent pipes, fittings, fixtures and appliances shall be made in the following ways, or in other approved ways, as appropriate to the material used, and each such joint shall be rendered airtight and watertight.

26.2 Connection of Fixture Outlets

26.2.1 To Traps or Waste Pipes

A standard screwed connection shall be used to make the joint between any fixture outlet and a fixture trap or waste pipe. The approval of the City shall be obtained before any other type of connection is made.

26.2.2 To Soil Pipes

The joint between any water-closet pan, slop hopper, bedpan washer or bedpan washer-sterilizer and the soil pipe to which it is connected shall be made—

- (a) by compacting a sealing compound into the socket and neatly splaying off;
- (b) using a diaphragm connector; or
- (c) using other materials or connectors approved by the City.

26.3 Connection of Vents to Water-Closet Pan and Slop Hopper Outlets

Where vents are connected to vent horns on water-closet pans and slop hoppers they shall be connected using either—

- (a) an approved connector of rubber or other materials; or
- (b) a cap-piece of sheet lead at least 1.8 mm thick, and packed with a sealing compound.

26.4 Materials and Methods of Jointing Pipes and Fittings

- (a) Jointing of pipes and fittings of dissimilar materials shall be made using approved adaptors of the appropriate material and design for the pipes and fittings being joined.
- (b) The type of joint selected is dependent on the materials of the pipes, fittings and adaptors, and shall be in accordance with AS 3500, unless otherwise approved or directed.

26.4.1 Bronze Welded Joints.

- (a) Bronze welding filler rods shall be in accordance with AS 1588, and shall contain not less than 57% copper.
- (b) Joints for bronze welding shall be formed by belling, or other means used for fusion welded joints, so as to permit the satisfactory deposition of weld material.

26.4.2 Bolted Gland Joints

- (a) Bolted gland joints shall comply with AS 1631 for cast iron, and for other materials with any relevant requirements in AS 1631.
- (b) The sealing rings used in bolted gland joints shall be appropriate for the material and dimensions of the pipes or fittings being jointed.
- (c) The use of bolted gland joints below ground is prohibited except in those areas where approved by the City.

26.4.3 Cement Joints

- (a) Cement mortar joints shall be used only where approved by the City.
- (b) Cement mortar shall consist of one part of Portland cement and 2 parts of clean sharp sand, properly mixed with a minimum of water necessary to enable the joint to be caulked.
- (c) Cement mortar joints shall only be used for jointing to vitrified clay sockets.

- (d) UPVC spigots shall be coated with solvent cement for the full engagement length of the joint and quickly coated with sharp dry sand prior to making the joint.

26.4.4 Epoxy Resin Joints

Epoxy resin shall be compatible with the materials being jointed.

26.4.5 Fusion Welded Joints

Fusion welded joints shall be used only on vent pipes, and external protective coatings shall be reinstated after welding.

26.4.6 Lead Caulked Joints

Lead used for jointing shall be commercially pure lead.

26.4.7 Rubber Ring Joints —

- (a) Rubber rings used for jointing shall comply with AS 1646 and the relevant pipe and fitting Standard, viz AS 1693 and be of the dimensions, composition and hardness approved for the particular application.
- (b) Adaptors used for forming joints between pipes of other materials and vitrified clay shall have the dimensions of vitrified clay spigots or sockets as applicable.
- (c) Rubber ring joints for use in property sewers shall have a root inhibitor to the requirements of the City.

26.4.8 Screwed Joints

- (a) All tube threads shall be in accordance with AS 1722.
- (b) All fitting threads shall be in accordance with the appropriate Australian Standard for the fitting.
- (c) Where a sealing thread and a fastening thread are joined a seal shall be formed on metal threads by using polytetrafluoroethylene (PTFE) tape, hemp or pipe jointing compound and on plastic threads by using PTFE tape only.
- (d) Where 2 fastening threads are joined a seal shall be formed as in Local Law 26.4.8 (c) above or where applicable by an appropriate gasket or grummet.
- (e) After jointing, exposed areas of galvanized steel tubes from which the galvanizing has been removed shall be coated with a rust inhibiting paint.

26.4.9 Silver Brazed Joints.

- (a) Silver brazing alloys shall contain not less than 1.8% silver and shall comply with AS 1167.
- (b) Silver brazed joints shall be lapped joints in accordance with AS 1589.
- (c) All manufactured fittings shall comply with AS 1589.

Note: LAP LENGTH SHALL NOT BE LESS THAN AS SPECIFIED IN AS 1585 FOR MANUFACTURED FITTINGS

26.4.10 Soft Soldered Joints

- (a) Soft solder shall be nominally one part of lead to one part of tin.
- (b) Soft soldered joints shall only be used for jointing to sheet copper or galvanized steel vents in external locations above ground.
- (c) Soft soldered joints shall be lapped joints. Formed Joints between a main-vent and a branch-vent, and the mitre forming an elbow shall lap at least 3 mm. Circumferential joints shall lap at least 25 mm.

26.4.11 Solvent Welded Joints

Solvent welding cement shall comply with AS A185.

26.4.12 Other Joints

Joints other than those specified herein shall not be used except when approved and under conditions as may be specified by the City.

27. SEWERAGE SERVICES—GENERAL

27.2 Proof of Connections Having Been Made—Certificate of City's Officer

The certificate of an Officer of the City shall be *prima facie* evidence that a water-closet or water-closets, or drains, appliances, apparatus and connections have been provided or that the works, matters and things have been performed, as the case may be, and *prima facie* evidence as to the amount of costs, expenses, and interest recoverable in respect thereof.

27.3 Diagram of Existing Property Sewers

A person may make application to the City for a diagram of existing property sewers in any area the plans or records of which are in the custody of the City, and on payment of such sum as the City requires, be supplied by the City with a diagram of the existing property sewers in that area in accordance with those plans and records.

27.4 Plan to be Available to Officer of the Authority

An approved plan of proposed plumbing work shall be produced whenever required during the progress of work, to the City.

27.5 Notice and Plan of Intended New Building or Additions etc. to Existing Building

A person intending to erect a building, or rebuild, or to make any addition or alteration to any building, adjacent to the City's Sewerage Works shall give to the City at least 14 days' notice of such intention, and with such notice shall submit for approval 2 copies of the building plan and shall also submit

sections of such intended building, additions or alterations, drawn to a scale of not less than 1:200 showing the position of proposed fixtures and approaches thereto. When required by the City enlarged details to such scale as instructed shall be supplied.

Where any change to the siting of the building is made prior to local authority approval, or where local authority approval is conditional upon any change to the siting of the building, the plans (showing the proposed re-siting) shall be resubmitted to the City prior to any work starting on the building.

27.6 Use of Property Sewers

The owner and the occupier of a sewered property shall discharge into the sewerage system all faecal matter, urine, household slops, and household liquid refuse from such property and such other polluted water from stables, washing areas, manure bins, basements, cellars and roofed yards and, subject to these Local Laws such industrial wastes as the City has consented in writing to being so discharged.

27.8.2 Water Test —

- (a) The water test shall be applied to the property sewerage and plumbing systems and their fittings in their entirety or in sections, and shall be applied by hermetically sealing all openings below the top of the section to be tested. The system shall then be filled with water to the highest point of the section, or, if considered necessary, to such additional height as the responsible Officer may order, and every joint, fitting and pipe carefully examined for leaks.
- (b) In testing stoneware or concrete property sewers a loss allowance at the rate of 2½ per centum per hour of the capacity of the property sewer under test and at 1.5 m head shall be permitted.

27.8.3 Smoke Test

The smoke test shall be applied by forcing into the system thick smoke to a pressure of 25 mm of water by means of a smoke test apparatus, closing all openings at which smoke appears and maintaining the pressure for 5 minutes after the last opening is closed. Every joint or pipe shall then be carefully examined for leaks.

27.8.5 Defective Work

Materials, pipes, bends, junctions, fittings, fixtures, and apparatus found to be defective shall be removed and replaced by sound ones, and defective joints made tight and every part of the work shall be made to comply to these Local Laws and shall be subject to the approval of the City.

27.8.7 Maintenance by Occupier

A silt trap, grease trap, oil trap or neutralizer, and such other appliance as the City may direct, shall be maintained by the owner or occupier at his own expense and shall be cleaned at such intervals as may be necessary to ensure that such trap or appliance operates in an efficient and hygienic manner.

27.8.8 Separate or Common Property Sewers —

- (a) A house shall be separately served unless a common property sewer is ordered or approved by the City.
- (b) Where a common property sewer is ordered or approved by the City, the provisions of section 70 of the *Metropolitan Water Supply, Sewerage and Drainage Act*, and any other conditions required by the City, shall apply.

27.8.9 Provision of Water Closets —

- (a) At least one water closet approved by the City shall be provided for each house, flat, building or land required by notice from the City to be connected with the City's sewer.
- (b) After the date fixed by notice from the City to the owner of any house, building or land, requiring him to connect the same with the City's sewer, or after such further time as shall be allowed by the City, for the purpose of such connection, no privy closet other than a water closet approved by the City, shall be used in such house or building or upon such land.

27.7 Sewerage Services to Non-Rateable Properties

Applications for sewerage services to non-rateable properties shall be made on the prescribed form and the City may provide a service on payment of the prescribed annual fee, of the cost of extending the sewer to the land if the sewer is not extended thereto and of installing a property sewer to the boundary of the land. The applicant shall also bear the cost of maintaining the property sewer and of having it sealed when the service is no longer required.

The annual fee shall take the place of a sewerage rate and the general provisions of these Local Laws shall apply to such services.

28. INDUSTRIAL WASTES

28.1 Conditions of Discharge

The discharge of industrial wastes into a sewer shall be subject to the following terms, provisions and conditions—

- (a) An application for permission to discharge industrial wastes from a property into a sewer shall be made in writing to the City and shall set out —
 - (i) the processes of manufacture from which industrial wastes are discharged into the City's sewer;
 - (ii) the nature of the industrial waste from every such process;
 - (iii) the estimated maximum rate of discharge of industrial waste from every such process;
 - (iv) the hours of the day during which discharge of industrial wastes from every such process will normally take place; and
 - (v) the estimated maximum daily discharge of such industrial wastes into the City's sewer,

and the application shall be accompanied by detailed plans of the apparatus to be used for the treatment of the industrial waste and by such other information regarding the nature, quantity, rates, and times of discharge as may be required by the City;

- (b) No industrial waste shall be discharged into the City's sewer unless a written permit has been first granted by the City, and an agreement executed by the applicant containing a covenant to comply with the conditions of the permit, which shall include the following conditions, namely— That if at any time in the opinion of the City —

- (i) the quantity, quality, or rate of the discharge of the said industrial waste is not in compliance with the terms, provisions, or conditions of the permit;
- (ii) the occupier is not fully and faithfully performing and observing the terms, provisions, and conditions of the said permit and of this or any other Local Law;
- (iii) the treatment apparatus is not in efficient working order; or
- (iv) any other breach of the agreement has been made,

the City may serve a notice in writing upon the occupier of the property, by leaving it thereon or posting it addressed to him at the property, specifying the matter or matters in respect of which a breach has taken place, or as to which the occupier is in default, or concerning which there is any complaint by the City, and the notice shall require the occupier to make good the same in all things to the satisfaction of the City, within a period to be stated therein, from the date of service thereof, in the manner so specified, and the notice shall also state that the City is at liberty to terminate and put an end to the permit; and, further, that if the requirements of the notice have not been complied with on the expiration of the period mentioned therein, the permit shall automatically terminate and be deemed to be at an end, save and except as to the power of entry by the City's Officers as mentioned in the permit without any further or other notice from the City, and the City by its Officers may enter upon the property, and at the cost and expense in all things of the occupier disconnect the apparatus used to discharge the industrial waste into the City's sewerage works, and prevent and put an end to the further entry of industrial waste to the sewers, and the occupier shall be entitled to no compensation whatever in connection therewith;

- (ba) A written permit to discharge industrial waste granted by the City shall remain in operation until—
- (i) the permit is terminated under paragraph (b);
 - (ii) the permit is surrendered by the holder of the permit; or
 - (iii) there is a change of ownership or occupancy of the industrial property from which it is permitted to discharge that industrial waste, unless the City approves of the assignment or transfer of the permit;
- (c) The City shall be the sole judge as to the quality, quantity and rate of discharge of such industrial waste and as to whether the same complies with the conditions of the said permit and its decision in regard thereto shall be final and conclusive;
- (d) Except by special permission of the City, in writing, the volume of industrial waste discharged from any property into a sewer of the City shall not in any case exceed —
- (i) if the industrial waste is discharged into a 100 mm sewer of the City, a discharge rate of 3 kilolitres per hour;
 - (ii) if the industrial waste is discharged into a 150 mm sewer of the City, a discharge rate of 7 kilolitres per hour; or
 - (iii) if the industrial waste is discharged into a 230 mm sewer of the City, a discharge rate of 11.5 kilolitres per hour;
- (e) The maximum aggregate daily quantity of industrial waste which may pass from any property into a sewer, the size and capacity of the property sewer for conveying such industrial waste from the property to the sewer, and the hours during which such flow will be permitted, shall be determined by the City. The volume of industrial waste discharged shall, if ordered by the City, be determined by meter or by some approved means of measurement provided by the occupier;
- (g) All industrial wastes shall be passed through such settling, screening or neutralizing chambers or such other apparatus as ordered or approved by the City or any one or more of those chambers or apparatus to ensure that the resulting effluent shall comply with the requirements of the said permit and of this Local Law. All such apparatus or machinery shall be approved in type and general arrangement by the City, but the applicant shall determine the size, capacity and details of the treatment apparatus necessary to provide an effluent in compliance with the requirements of the said permit and this Local Law;
- (h) The occupier shall notify the City in writing of his desire to make any alteration which shall in any way affect—
- (i) the nature of the waste from any process of manufacture;
 - (ii) the estimated maximum rate of discharge from any such process of manufacture; or
 - (iii) the hours of discharge of industrial waste from any such process; and all alterations or additions to the treatment apparatus shall in all things comply with the requirements of the said permit and of this Local Law, but in no case shall any such alteration be made without the approval in writing of the City;
- (i) The person to whom the permit is granted shall notify the City in writing of any change of ownership or occupancy of any industrial property connected with the City's sewerage works, at least 14 days prior to such change;

- (j) The permit shall not be assigned or transferred, unless the consent thereto in writing of the City has been first obtained;
- (ja) Any person who, before obtaining a permit from the City, has entered into the ownership or occupation of any property from which has been discharged industrial waste which the City has permitted a previous owner or occupier to discharge into a sewer, is not permitted to discharge industrial waste into a sewer unless —
 - (i) the City has first permitted the assignment or transfer of the permit under which industrial waste was admitted into a sewer; or
 - (ii) the City has granted a fresh permit to the incoming owner or occupier to discharge into a sewer industrial waste from that property;
- (jb) A person referred to in paragraph (ja) who discharges directly or indirectly industrial waste into a sewer before obtaining the permission of the City or obtaining a fresh permit shall, in addition to any penalties prescribed in these Local Laws, be liable for all amounts in respect of the discharge of industrial waste owing at the time that person entered into ownership or occupation of the property as well as such amounts as would have been payable in respect of any discharge of industrial waste after that time if that person had obtained a permit to discharge industrial waste;
- (jc) Neither the payment of an amount referred to in paragraph (jb) nor the acceptance of that amount by the City shall in any way constitute permission to discharge industrial waste into a sewer;
- (k) The owner or occupier of any property connected with the City's sewerage works shall, if and where directed, install to the City's design an approved chamber for inspection, sampling, and measurement, and every such chamber shall at all times be readily accessible to the City's Officers;
- (l) The City or any authorized Officer, servant, agent, or workman, of the City shall be at liberty at any time and from time to time to enter upon the property and every part thereof and take samples of industrial waste for analysis and otherwise and also to inspect the treatment apparatus;
- (m) Every settling, screening, or neutralizing chamber, or other apparatus for the treatment of industrial wastes in accordance with this Local Law shall be cleansed and maintained by the occupier at his own expense and, at such intervals as may be considered necessary by the City to ensure the efficient operation of such chamber or apparatus;
- (n) Notwithstanding the permission or approval of the City, the occupier of a property shall be solely liable for and in respect of —
 - (i) accident or damage, loss, or injury directly or indirectly arising out of or resulting from the discharge of industrial waste from the property into the City's sewer, and the occupier shall agree to hold harmless and keep indemnified the City against all claims and demands for such damage, loss, or injury of any description made and/or suffered by the workmen of the City or any other persons whomsoever; and
 - (ii) damage, loss, or injury occasioned by or done to the City's sewer or to property belonging to the City or to a Company, person, or persons by reason of such discharge failing to comply with the terms, conditions, and provisions of the said permit or of the Local Laws of the City, and the occupier shall pay the cost of making good any such damage, loss or injury;
- (o) The City may from time to time without payment of any compensation exclude from its sewers all industrial waste from any property during the repairing, examination, or maintenance of the sewers or the carrying out by the City of any works in connection therewith; and
- (p) Such other conditions as may be required by the City having regard to the special circumstances of the case.

28.2 Connections Prior to Local Law

28.2.1 Subject to Local Law 28.1, where the City has, before the date of the coming into operation of this Local Law, granted to a person permission to discharge industrial waste into a property sewer or into a sewer of the City, or where a person has, before the date of the coming into operation of this Local Law, been discharging industrial waste into a property sewer or into a sewer of the City without the express permission of the City, if after the said date, such person continues so to discharge such industrial waste, the City may, if it thinks fit and notwithstanding anything contained in these Local Laws, by notice in writing, direct such person wholly to cease from discharging such industrial waste.

28.2.2 A notice under Local Law 28.2.1 of this Local Law shall specify a day, not less than 8 weeks from the date of the notice as the day on and after which such person is directed to cease discharging such industrial waste.

28.2.3 A person who fails to comply with a direction contained in the notice commits an offence.

28.2.4 In this Local Law the "City" can mean the former Town of Kalgoorlie, the Shire of Boulder and the Town of Boulder

28.3 Polluted Areas

28.3.1 Connection—The City may by notice in writing require any owner or occupier of any land to which Section 58 of the *Metropolitan Water Supply, Sewerage and Drainage Act* applies to connect with the sewer of the City dairies, market-places, abattoirs, areas for washing vehicles, or other polluted areas upon such land.

28.3.2 Conditions Governing Connection—A connection of the kind referred to in Local Law 28.3.1 shall not be made unless the following conditions have been complied with—

- (a) The place, or places, to be connected, if of a total area greater than 20 square metres, shall be so roofed as to prevent the entry of rainwater from it to the sewers, and in no case shall rainwater be permitted to discharge on to such place from adjoining surfaces;
- (b) The property to be connected shall be paved with concrete or other approved materials, with a 75 mm raised kerb and graded to the satisfaction of the Inspector; and
- (c) The property sewer from any such place shall be provided with an approved silt trap with a removable grating.

28.3.3 Prevention of Storm Water entering Yard Gullies—

- (a) Stoneware yard gully basins and the top of silt traps provided with stoneware basins shall be so surrounded with an approved impervious kerbing of concrete or other approved material as to prevent the access of surface water to the property sewers, and if the City so directs, the wall at the rear of a gully or silt trap, if of brick or stone, shall be cement rendered to the height of the top over same, and if of wood, the wall shall be provided with an approved galvanized sheet iron apron.
- (b) Rainwater pipes shall not be connected to or discharge into a gully or fixture connected to the City's sewerage works.
- (c) Gullies or pits for the disposal of road drainage, or for the disposal of storm water from a roof, yard or vacant land shall not be connected to a sewer or property sewer under the control of the City.

28.3.4 Sealed Disconnecter Traps—

- (a) Sealed disconnecter traps may be affixed inside or outside a building, or out-building, and in such cases breather pipes or fresh air inlet equal in area to the waste pipe or pipes discharging into the trap shall be taken to such height as directed.
- (b) Where the trap is inside the building or outbuilding such pipes shall be led to the outside of the building or outbuilding.
- (c) The material for the breather pipes shall be the same as for vent pipes.
- (d) Inspection openings to the traps shall be sealed with screwed plugs, or as otherwise approved.

28.3.5 Provision of Grease, Petrol, and Oil Traps

Wastes from the following fixtures and areas shall first discharge into an approved apparatus for retaining objectionable matter, that is to say—

- (a) A fixture or area from which petrol, benzene or other inflammable or explosive substance, or grease, oil or greasy or oily matter, is likely to be discharged, or conveyed into waste, combined waste, or soil pipes or into property sewers;
- (b) A sink in food-packing houses, food preparation premises, butchers' shops, lard rendering establishments, hotels, motels, restaurants, boarding houses, and such other places as the City may direct; and
- (c) Such other fixtures, areas or apparatus as the City may direct.

28.3.6 Construction of Grease Traps—

- (a) Grease traps shall be fixed outside buildings or outbuildings wherever practicable.
- (b) External grease traps shall be constructed of approved materials.
- (c) Internal grease traps shall be constructed of copper, stainless steel, or other approved material, and, if directed fixed upon a tray.
- (d) The outlet from a grease trap shall be connected to a disconnecter trap.

28.3.7 Grease Trap Ventilation

Internal and external grease traps shall have approved independent provision made for inlet and outlet ventilation as provided for waste pipes in Local Law 28.9.12.

28.3.8 Size of Grease Trap—

- (a) The dimensions of a grease trap to be provided shall be such as to ensure the retention of all grease entering such trap.
- (b) The height from the top of the outlet of a grease trap to the vent take off shall not be less than 100 mm.
- (c) The difference in level between invert of inlet and invert of outlet shall be not less than 25 mm.
- (d) The capacity of a sink shall be measured to the overflow level, or, in the event of there being no overflow, to the top of the sink.
- (e) Where hot water is being fed to a dishwasher the capacity of the dishwasher shall be taken as the amount of maximum hourly discharge.

28.3.9 Outlet Pipes from Grease Traps

The outlet pipe from a grease trap shall be at least equal to the size of the pipe which has a cross sectional area equivalent to the total area of incoming waste pipes and unless the City so permits shall not be less than 65 mm in diameter.

28.3.10 Construction of Petrol and Oil Traps

- (a) Petrol and oil traps shall be constructed in accordance with the City's type drawings.
- (b) Such traps shall be connected to a disconnecter trap and shall be provided with independent ventilation.

28.3.11 Construction of Silt Traps, Bucket Traps and Potato Peeling Machine Traps

Construction of silt traps, bucket traps, and potato peeling machine traps shall be in accordance with the City's Standard Drawings and be sized to the requirements of the City.

28.3.12 Venting of fixtures and fittings discharging into grease traps

- (a) Irrespective of the length of the wastepipe, kitchen or scullery sinks and dishwashers discharging into grease traps shall be vented.
- (b) Unless the length of the wastepipe exceeds 6 metres, bucket traps discharging into grease traps need not be vented.

28.3.13 Potato Peeling Machines

Potato peeling machines shall be fixed to a floor of impervious material of approved grade or slope and shall drain to and discharge into a silt trap through a screen or mesh of non-corrodible material of not less than 4 meshes to 25 mm.

28.4 Prohibited Discharges

The depositing or discharge of the following substances into a property sewer or sewer without prior approval of the City, shall be an offence against these Local Laws, namely—

- (a) Animal matter, other than as mentioned in Local Law 28.3.1, fleshing, wool, hair, dead animal, grease, dust, ashes, rubbish, garbage, offal, vegetable and fruit or their parings, rags, oil, fat, mud, sand, gravel, or like substance, or any other substance which is, in the opinion of the City, liable to be injurious to any part of the sewerage system or to Officers or agents of the City engaged in the operation of maintenance of the sewerage system;
- (b) Petrol or other inflammable or explosive substance, whether solid, liquid or gaseous;
- (c) Rain, roof, surface, river or flood waters, except by special permission in writing under the hand of the City;
- (d) The contents of a nightsoil cart, cesspool, or privy;
- (e) Industrial waste or any substance which has a pH outside the range of 6.2 to 9.0;
- (f) Industrial waste which is above the temperature of 38 degrees Celsius or such lower temperature as may be prescribed by the City, having regard to the special circumstances of a particular case;
- (g) Liquid which contains such percentage of common salt, or of other mineral, salt, acid, solvent or gas, as in the opinion of the City, is injurious to, or liable to form compounds injurious to any part of the sewerage system or to employees of the City engaged in the operation or maintenance of the sewerage system;
- (h) Water from a steam exhaust, blow off drip pipe or condenser;
- (i) Radio-active substances beyond the safe limits prescribed by the Radiological Council of Western Australia; and
- (j) Unless the discharge has been thoroughly disinfected, solid or liquid discharge from patients suffering from any infectious or contagious disease.

Design Notes

1 Sizes and application—See note 3 for dimension.

- (a) Size 1—Fried fish shops with maximum of 2 fixtures and 1 bucket trap.
- (b) Size 2—Small restaurants, works canteens, small hospital kitchens, licensed premises serving meals but with limited accommodation facilities and small butcher shops.
- (c) Size 3—Large supermarket butcher shops, major hospital kitchens, large accommodation hotel kitchens small food manufacturing premises.

2 Other applications not covered in 1 (a), 1 (b) and 1 (c) must be discussed with the City.

3 Trap dimensions and construction notes.

(a)

Dimensions mm	Size 1	Size 2	Size 3
A	900	1200	1800
B	450	600	750
C	300	450	450

(b) Sizes 1 and 2 to have 2 covers of equal size, size 3 to have 3 covers of equal size, and set in steel frame

(c) Baffle to be 22 mm thick slate, 6.3 mm M.S. plate (nylon, epoxy resin, or p.v.c. dipped), or 12.6 mm p.v.c.

GREASE TRAP CONSTRUCTION NOTES*Design Notes*

1 Sizes and application—See note 3 for dimension.

- (a) Size 1—Fried fish shops with maximum of 2 fixtures and 1 bucket trap.
- (b) Size 2—Small restaurants, works canteens, small hospital kitchens, licensed premises serving meals but with limited accommodation facilities and small butcher shops.

- (c) Size 3—Large supermarket butcher shops, major hospital kitchens, large accommodation hotel kitchens, small food manufacturing premises.

2 Other applications not covered in 1 (a), 1 (b) and 1 (c) must be discussed with the Industrial Waste Section.

3 Trap dimensions and construction notes.

(a)

Dimensions mm	Size 1	Size 2	Size 3
A	900	1200	1800
B	450	600	750
C	300	450	450

- (b) Where internal grease traps occur on impervious floors graded to a floor waste an overflow tray is not required.

- (c) Where trays are required the tray size shall be fabricated from grade 302 0.55 mm sheet stainless steel and have 80 mm of clearance surrounding the trap with 80 mm upstand and a safe edge. A 50 mm overflow pipe shall discharge from the overflow tray (if required) to a conspicuous position outside the building or where otherwise directed by the City.

- (d) All welds to be polished to a satin finish & left in as new condition.

- (e) Grease trap to be fabricated from grade 302 0.7 mm stainless steel on 1 & 2 but 0.9 mm on size 3.

- (f) Lid to be crimped for strength on size 1 2 & 3 but size 3 to have strengthening rib incorporated in lid.

- (g) Baffle to be formed from grade 302 0.7 mm stainless steel in each type.

- (h) Inlet and outlet sizes to be in accordance with Local Law 133.

- (i) 8 mm charge pipe to discharge into water seal from nearest low pressure point.

PREFABRICATED PETROL AND OIL TRAP CONSTRUCTION NOTES

Design Notes

1 Sizes and applications—See note 3 for dimensions.

- (a) Size 1—Small mechanical workshops, carrying out small engine servicing with 1 silt sump.

- (b) Size 2—Average sized service stations with 1 silt sump and lube bay area.

- (c) Size 3—Large service stations with 2 to 4 silt sumps, lube bay areas and manual vehicle wash area.

2 Other applications not covered in 1 (a), 1 (b) and 1 (c) must be discussed with the Industrial Waste Section.

3 Trap dimensions and construction notes.

(a)

Dimension mm	Size 1	Size 2	Size 3
A	600	900	900
B (Dia)	600	600	900

- (b) 3 Pipe sections to be used in each case.

- (c) Pipe sections to be set 25 mm. into concrete base.

- (d) Each pipe section to have square or round lid with one drop handle.

Design Notes

1 Sizes and application—See note 3 for dimensions.

- (a) Size 1—garage floor silt.

- (b) Size 2—manual car wash areas, garage engine parts wash areas.

2 Other applications not covered in 1 (a) or 1 (b) must be discussed with the Industrial Wastes Section.

3 Trap dimensions and construction notes.

Dimensions mm	Size 1	Size 2
A	450	600
B	450	600
C	450	600

SILT TRAP CONSTRUCTION NOTES*Design Notes*

1 Sizes and applications—See note 3 for dimensions.

(a) Size 1—Beach shower room installations with up to 4 shower units.

School plaster and clay rooms with up to 3 sinks.

(b) Size 2—Beach shower room installations with up to 8 shower units.

School plaster and clay rooms with up to 8 sinks.

2 Other applications not covered in 1 (a) or 1 (b) must be discussed with the Industrial Wastes Section.

3 Trap dimensions and construction notes

(a)

Dimensions mm	Size 1	Size 2
A	1 200	1 800
B	450	600
C	600	600

(b) Size 1 to have 2 covers of equal size, size 2 to have 3 covers of equal size, and set in steel frame.

SAND/PLASTER TRAP CONSTRUCTION NOTES*Design Notes*

1 Trap dimensions (Refer AS 3500)

2 Other applications must be discussed with the City's Industrial Waste Officer.

3 Two 900 mm nominal internal diameter P.V.C. lined spun concrete pipe sections to be used.

4 A P.V.C. base sheet to be welded to the P.V.C. lining of each pipe, using corner joint as shown in the standard drawing.

5 The welded joints to be spark tested in the presence of the City's Industrial Waste Officer.

6 Other joints to be sealed with an epoxy resin.

DILUTION NEUTRALIZER TRAP CONSTRUCTION NOTES**28.5 Sub-Soil Water**

Upon written application the City may grant permission in writing to a person to discharge sub-soil water into any property sewer or into any sewer of the City subject to such terms and conditions as may be imposed.

28.6 Materials and Fittings used in Connection with the City's Sewerage Works (Refer as 3500)**28.6.3 Workmanship**

Work shall be executed in a thorough and tradesman like manner to the satisfaction of the City.

28.6.4 Protection of Workmen, etc.

Adequate precautions shall be adopted, by persons carrying out work, to prevent injury to workmen, property, or the public, and the City shall not be responsible for injury arising from the inadequacy of those precautions.

28.7 Basement and Cellar Drainage**28.7.1 Risk of Back Flow**

(a) Where a cellar, basement, or floor below ground level is at such a level as may, in the opinion of the City, involve risk of back flow in the event of the sewer becoming overcharged, the sewage from fixtures therein or on shall be raised by ejector, pump, or other approved mechanical appliance to such height as ordered, and discharged into the sewer as and where directed, by the City.

(b) Reflux Valves shall not be used as an alternative to pumping.

28.7.2 Fixtures

(a) If approval is given for the connection of a cellar, basement or floor below ground level, no sink, trap, water-closet, urinal, or other fixture or apparatus shall be laid or fitted in the cellar or basement or on a floor below ground level unless the following conditions are complied with—

(i) The consent, in writing, of the City shall be first obtained, and may be revoked at any time;

(ii) The owner shall submit such information as may be required by the City and shall undertake, in writing, on an approved form, to accept all liability for damage that may occur, and shall also give to the City any indemnity that the City may require; and

(iii) Such other conditions as may be required by the City.

- (b) If on an inspection subsequent to connection—
 - (i) The fixtures and their surroundings are not in the opinion of the City, being kept in a sanitary condition; or
 - (ii) The purpose for which the cellar, basement or floor below ground level is used, has been changed,then the City may revoke its consent, and upon the expiration of 14 days from the date of revocation, if the defect has not been remedied, the closet, urinal, or other fixture shall be disconnected from the City's sewerage works.

28.7.3 Seepage Drains

A seepage drain from a cellar, basement, or a floor below ground level shall not be discharged into a sewer without the consent of the City. Where such discharge is permitted, the seepage shall be raised by ejector, pump or other approved mechanical appliance to such height as ordered and discharged into the sewer as and where directed.

28.8 Safes and Overflows

28.8.1 Safes—where required

Where in the opinion of the City there is a likelihood of damage being caused by the fixtures overflowing, unless the floor is constructed of concrete of not less than 100 mm thickness or of other approved impervious material, graded as directed, safes of approved impervious material shall be fitted under slop hoppers and water closets, and under baths, wash troughs and other plumbing fixtures.

28.8.2 Safes under Fixtures

- (a) The safe under a fixture shall discharge in some conspicuous place.
- (b) Where a water closet is on the ground floor of a house or building, where in the opinion of the Inspector, there is no likelihood of damage being caused by leakage or blockage, this Local Law shall not apply.

28.8.3 Safe Overflow

Unless otherwise permitted, a safe shall be drained by a separate 50 mm diameter pipe provided at the inlet with a brass grating and at the outlet into the open air with a flap valve of brass or other approved metal and shall not connect with any waste pipe, soil pipe, property sewer or sewer.

28.8.4 Cistern Overflows

- (a) A cistern supplied with water shall have an overflow pipe of adequate size discharging in such a position that it will not cause damage and act as a warning pipe.
- (b) On ground floors where cisterns are fixed over impervious floors graded to drain outside the room, the overflow may discharge on to such floors provided no damage is likely to arise therefrom.

28.8.5 Discharges from Safe Overflows

- (a) Overflows may discharge into the open air above ground level only when the discharge, in the opinion of the Inspector, will not cause any inconvenience or nuisance.
- (b) In all other cases the pipes shall be brought nearly to the ground surface, or be arranged to discharge where they will not prove a source of annoyance or inconvenience.

28.8.6 Existing Floors Under Fixtures

Where necessary in the opinion of the City, the existing floor under a fixture shall, at the owners cost, be regraded, and a proper discharge pipe with flap valve fixed.

28.8.7 Existing Fixtures and Fittings, etc.

Existing fixtures, fitting and apparatus not in accordance with these Local Laws and which in the opinion of the City are unsatisfactory shall be removed or replaced by approved fittings at the cost of the owner.

28.9 Plumbing General

28.9.1 Waste Pipes

Separate waste pipes shall be provided for each of the following classes of polluted water, namely—

- (a) Dirty water from baths, sinks, lavatory basins, and wash troughs and other waters containing a small proportion of soap or dirt; and
- (b) Greasy water from kitchens and scullery sinks or other fixtures, in such cases where grease traps are ordered or required.

28.9.2 Soil Pipes

Except as provided in Local Law 28.9.3, soil pipes shall be provided for soil water from water closets and other waters containing faecal matter and for urinal waters from slop hoppers and urinals, and where directed, for discharges from operating theatres and mortuaries.

28.9.3 Combined Pipe System

The combined pipe system for plumbing installations may be used subject to the following conditions—

- (a) An interceptor or boundary trap shall be provided in the property sewer in accordance with Local Law 25.11 of these Local Laws;
- (b) Fixture traps shall be vented as required by these Local Laws;
- (c) In order to prevent fouling of traps as much as possible by the discharge from water closets, slop hoppers and urinals, in the event of a blockage in the combined waste pipe—the waste pipe from baths and shower compartments or other fixtures, as determined, shall be branched into the combined waste stack; and
- (d) Such other conditions as may be imposed by the City.

28.9.4 Connections to Property Sewer

- (a) Waste pipes shall discharge under the grating and above the water seal of a yard gully or disconnector trap.
- (b) Soil pipes, including those for urinals and slop hoppers, shall be connected directly to a property sewer.

28.9.6 Sheet Metal Bends and Offsets

All sheet metal bends and offsets for flush and vent pipes, shall be bent or pressed. Mitred elbows shall not be used.

28.9.7 Painting

Except by permission of the Inspector, painting shall not be done on any part of the plumbing installation until after the work has been inspected and approved by the Inspector.

28.9.8 Inserting Junctions

- (a) Where it becomes necessary to insert a junction in an existing line of property sewer, a suitable length of property sewer shall be removed, and the junction, with an inspection opening on either side, dropped back into position, and the line tested in the usual manner.
- (b) Junctions in existing metal pipes shall not be made unless an approved closure pipe is used.

28.9.9 Outlet Fittings to Fixtures

- (a) Subject to (c), where baths, sinks, basins, troughs and similar fixtures are constructed of cast iron, plate iron, ceramic ware or concrete, the connection between such fixtures and outlet fittings shall be made with locknuts.
- (b) The outlet fitting shall be connected to the waste pipe by means of a union.
- (c) When approved fixtures are made of sheet metal lighter than 20 gauge soldered connections may be used in lieu of locknuts.

28.9.10 Waste Pipes to Troughs

Connections of waste pipes to washtroughs shall be made as provided hereunder—

- (a) Sheet metal troughs shall be connected to the waste pipe in compliance with Local Law 28.9.9.
- (b) Where wrought iron or other screwed pipes are used the plug shall be connected to the trough by means of a locknut in lieu of flange.

28.9.11 Foot Baths

Approved foot baths shall have not less than 50 mm waste pipe trapped and vented similarly to wash troughs and baths and the dimensions of such foot baths shall be approved by the City.

28.9.12 Vents Adjoining High Buildings

- (a) Where a building is erected next to an existing building of less elevation, and any door, window or other opening of the new building is located within 9 metres of a vent stack on the existing building, the owner of such new building shall defray the cost of such alterations to the vents of the existing building as necessary to conform with Local Law 28.3.7.
- (b) Upon the receipt of money, or security therefor sufficient for the purpose, from the owner of the new building, the owner of the existing building shall make the necessary alterations, or shall permit at the request of the owner of the new building the making of such alterations, by the owner of such new building.

28.9.13 Down Venting

In special cases which must be approved by the Inspector, vent pipes may be installed on the "down venting" principle. That is, the vent pipe from the fixture trap may be taken below level of the fixture and graded under the floor to an external wall or into the pipe duct and then carried up in accordance with the requirement of Local Law 22.2. An approved accessible fitting shall be provided at the lowest point of such vent for the purpose of draining off any water or condensation collected therein.

28.9.14 Lead Pipes

Joints in lead pipe shall be plumber's wiped joints.

28.9.15 Galvanized Steel Tubing to Lead Pipe

Joints between galvanized steel tubing and lead pipes shall be made by means of brass unions screwed to iron and wiped to lead.

28.9.16 Lead Pipe to Cast Iron Pipe

The connection of lead pipes or traps to cast iron pipes shall be made by means of brass sleeve; brass sleeve shall be lined with and connected to the lead pipe or trap by means of a wiped joint and connected to the cast iron by inserting the sleeve in socket thereof and making the joint in the same way as in cast iron pipe.

28.9.17 Sheet Iron Pipe to Wrought Iron Pipe

Galvanized sheet iron pipes shall be connected to wrought iron pipes by means of brass unions or thimbles soldered to the sheet iron and screwed to the wrought iron.

28.9.18 Use of Concrete

Concrete shall be used—

- (a) For gully basins as specified in Local Laws 18.13.3 and 28.3.3;
- (b) Around the top of educt vent and induct vent pipe sockets;
- (c) Around interceptor trap covers and tops of disconnector or other shafts;

- (d) Under and around bends rising vertically off oblique branches and under bases of all drainage traps;
- (e) Around property sewers which are liable to be affected by tree roots;
- (f) For property sewers under buildings as provided in Local Law 25.1;
- (g) Around property sewers having insufficient cover as provided for in Local Law 25.6; and
- (h) For floors under plumbing fixtures, where specified by the Inspector.

28.9.19 Maintenance and Defective Work

28.9.19.1

- (a) Where work is done other than in accordance with these Local Laws or, in the opinion of the City is defective, then, upon receiving notice in writing from the City, the owner or occupier, or, in the case of common property sewerage, the owners or occupiers, of the property in which the work was done shall make good the defects as required, and within the time fixed, by the City and to the satisfaction of the Inspector.
- (b) An owner or occupier who fails to comply with the terms of the notice of the City, shall have committed an offence.
- (c) If an owner or occupier fails to comply with the notice of the City, the City may make good the defects, and recover the cost incurred by it as a debt due to it by the owner or occupier.
- (d) This Local Law does not apply to work that may be the subject of a notice under Local Law 30.9.4C.1.

30. LICENCES AND PERMITS

30.2 Persons who may Carry Out Sanitary Plumbing

A person shall not carry out sanitary plumbing or drainage plumbing unless that person—

- (a) is a Licensed Plumber being the holder of a current sanitary plumber's licence issued under Local Law 30.4 and the holder of a current A or C Class Licence ;or
- (b) is authorized under Local Law 30.13 to work under the direction and supervision of a Licensed Plumber.

30.3 Penalties for Doing Work Without a Sanitary Plumber's Licence

Any person who contravenes Local Law 30.2 commits an offence and is liable to a penalty of \$2 000.

30.4 Description and Scope of Licences

The City may issue a sanitary plumbers licence to the holder of an A or C Class Licence subject to these Local Laws and any special conditions that it considers desirable.

30.5 Conditions of Licence

30.5.1 Licensed Plumbers and persons authorised to work under the direction of Licensed Plumbers—

- (a) shall execute works in accordance with these Local Laws, and any special directions or orders given or issued by the City;
- (b) shall execute works in a thorough and tradesman-like manner to the satisfaction of the City and as expeditiously as practicable;
- (c) shall on actual sewerage plumbing work, but not including property sewers, employ only such certificated operatives as provided in Local Law 30.13;
- (d) shall obtain permission from the person or authorities concerned when necessary for the execution of such works on, over, or through any private property, or any streets, roads, parks, reserves, or other public places or properties;
- (e) shall pay fees demanded by the City for opening any street, road, or thoroughfare, or otherwise in connection with such work;
- (f) shall restore any part of any street, road, or thoroughfare interfered with by such work to the satisfaction of the City, upon the completion of such work;
- (g) shall restore any other property interfered with by such work to the satisfaction of the City's Inspector; and
- (h) shall, in the execution of such work, take such proper and necessary precautions that no accident or damages or unnecessary inconvenience may be directly or indirectly occasioned thereby.

30.5.2 Without prejudice to other rights of the City when, in the opinion of the City, a Licensed Plumber has failed to comply with the conditions of the licence, the City may suspend or cancel the licence.

30.6 Licence Fees

The fee for a sanitary plumber's licence and for the renewal of such a licence shall be that specified in the City's budget.

30.7 Renewal of Licences

A sanitary plumber's licence shall be current only to the 30th June next following the date of issue and may be renewed each year for a period of 12 months expiring on the 30th June in the next succeeding year. A Licensed Plumber shall apply for a renewal of his or her sanitary plumber's licence and pay the Necessary Fee Prior To The Expiration Of The Period For Which His Or Her Existing Licence Is Current.

30.8 List of Licensed Plumbers shall be Published

A list of Licensed Plumbers shall from time to time be published at the office of the City.

30.9 Notices, Applications, Permits, and Inspection of Works**30.9.1 Definitions**

In Local Laws 30.9.2 to 30.9.4F, unless the contrary intention appears—

book of forms means—

- (a) in relation to a notice or certificate, a book of approved forms of notice and certificate; and
- (b) in relation to a multi-entry plumbing certificate, a book of approved forms of multi-entry plumbing certificate,

as referred to in Local Law 30.9.4D.1;

certificate means a certificate of completion and compliance under Local Law 30.9.3.1;

emergency work means work that must be carried out immediately by a Licensed Plumber to prevent —

- (a) the entry into the City's sewerage works of any substance or matter that is likely to hinder or prevent the proper functioning of that system; or
- (b) the escape from the City's sewerage works of foul air or offensive matter;

multi-entry plumbing certificate means a certificate under Local Law 30.9.4B;

multi-entry work means —

- (a) emergency work; and
- (b) maintenance, repair or replacement work of a kind described in each book of forms of multi-entry plumbing certificate.

notice means a notice of intention to commence work under Local Law 30.9.2;

notified work means work described in a notice;

working day means a day of the week other than a Saturday, Sunday, public holiday or public service holiday.

30.9.2 Notification of work

30.9.2.1 Subject to Local Laws 30.9.4B and 30.9.4F, a Licensed Plumber shall not carry out, or cause to be carried out, any work in connection with sewerage which is connected, or is intended to connect to the City's sewerage works unless the Licensed Plumber has lodged with the City a notice of intention to commence work not less than 2 working days before commencement of the work.

Penalty: \$500.

30.9.2.2 A notice of intention to commence work shall be in a form approved by the City, legibly completed and signed by the Licensed Plumber who is to carry out the work.

30.9.2.3 The City may refuse to accept for lodgement a notice that does not comply with Local Law 30.9.2.2.

30.9.2.4 A Licensed Plumber who lodges a notice—

- (a) is responsible for the performance of the notified work whether the work is carried out by that Licensed Plumber or by another person under the direction and supervision of that Licensed Plumber; and
- (b) shall ensure that the notified work is carried out in accordance with these Local Laws.

Penalty for contravention of paragraph (b): \$2000.

30.9.3 Certification of work

30.9.3.1 Within 7 working days of completing notified work the Licensed Plumber shall lodge with the City—

- (a) a certificate of completion and compliance in respect of the notified work; and
- (b) in the case of a property sewer installation, a diagram or diagrams of the completed work in such form or forms as the City may require.

Penalty: \$1000.

30.9.3.1A Where the City provides plan sheets for the preparation of diagrams under Local Law 30.9.3.1 (b), the appropriate fee which shall be determined annually in accordance with the City's adopted budget, is payable in respect of the provision of those sheets.

30.9.3.2 A certificate of completion and compliance shall be in a form approved by the City, legibly completed and signed by the Licensed Plumber responsible for the notified work.

30.9.3.3 The Licensed Plumber shall give a copy of a certificate lodged under Local Law 30.9.3.1 to the owner or occupier of the premises on which the notified work was carried out within 7 working days of completing that work.

Penalty: \$500.

30.9.4 Alteration, withdrawal or cancellation of notice

30.9.4.1 If after the commencement of notified work a Licensed Plumber wishes to alter or withdraw the notice lodged in respect of that work, the Licensed Plumber shall—

- (a) Lodge with the City —
 - (i) the certificate that corresponds to the notice, duly completed in accordance with the instructions set out in the book of forms; and
 - (ii) in the case of alteration, a fresh notice complying with Local Law 30.9.2.2;and
- (b) give a copy of the certificate that corresponds to the notice to the owner or occupier of the premises concerned.

30.9.4.2 Where notified work is not to be commenced the Licensed Plumber shall cancel the notice in respect of that work by lodging with the City the certificate that corresponds to the notice, duly completed in accordance with the instructions set out in the book of forms.

30.9.4.3 A Licensed Plumber who fails to comply with any of the requirements of Local Law 30.9.4.1 or 30.9.4.2 in relation to the alteration, withdrawal or cancellation of a notice commits an offence.

Penalty: \$500.

30.9.4A Work taken over by another Licensed Plumber

30.9.4A.1 Where notified work has been commenced but a Licensed Plumber other than the Licensed Plumber named in the notice (in this Local Law and Local Law 30.9.4A.2 called **the first Licensed Plumber**) is to take over and complete the work, the first Licensed Plumber shall withdraw the notice in the manner set out in Local Law 30.9.4.1 (a) (i) and (b).

30.9.4A.2 The Licensed Plumber taking over the work referred to in Local Law 30.9.4A.1 shall—

- (a) lodge with the City a fresh notice advising the City of the change of Licensed Plumber;
- (b) provide the City with written confirmation of the change of Licensed Plumber from the owner or occupier of the premises on which the work is being carried out; and
- (c) within 7 working days of completing the work, lodge a certificate in respect of the work carried out, including any work carried out but not certified by the first Licensed Plumber.

30.9.4A.3 A Licensed Plumber who fails to comply with a requirement of Local Law 30.9.4A.1 or 30.9.4A.2 commits an offence.

Penalty: \$500.

30.9.4B Multi-entry plumbing certificates

30.9.4B.1 Notwithstanding Local Law 30.9.2, a Licensed Plumber is not required to lodge a notice before commencing multi-entry work but upon completion of such work shall—

- (a) enter the details of the work in a multi-entry plumbing certificate; and
- (b) lodge with the City—
 - (i) the multi-entry plumbing certificate; and
 - (ii) in the case of any property sewer installation, a diagram or diagrams of the completed work in such form or forms as the City may require,

within one month of the date of completion of the work first described in that certificate.

Penalty: \$500.

30.9.4B.2 A multi-entry plumbing certificate shall be in a form approved by the City, legibly completed and signed by the Licensed Plumber responsible for the work described in that certificate.

30.9.4C Directions by City as to work

30.9.4C.1 Where the City is of the opinion that a Licensed Plumber—

- (a) has not commenced notified work within 12 months of the date of lodgement of a notice and has not withdrawn or cancelled that notice under Local Law 30.9.4;
- (b) has commenced notified work or multi-entry work but has failed to complete that work within a reasonable time; or
- (c) has carried out notified work or multi-entry work that is not in accordance with these Local Laws,

the City may, by notice in writing given to the Licensed Plumber or the owner or occupier of the premises concerned, direct the person so notified to ensure that the work is commenced, completed or otherwise carried out within such time and subject to such conditions as are specified in the notice.

30.9.4C.2 The City may by further notice in writing vary or cancel a notice given under Local Law 30.9.4C.1.

30.9.4C.3 A person who fails to comply with a direction contained in a notice given under Local Law 30.9.4C.1, or in such a notice as varied under Local Law 30.9.4C.2, commits an offence.

Penalty: \$1000 and if the offence is a continuing one a further fine of \$50 for every day or part of a day during which the offence continues after notice of the offence has been given by or on behalf of the City to the offender.

30.9.4C.4 Where a notice under Local Law 30.9.4C.1, or such a notice as varied under Local Law 30.9.4C.2, is not complied with, the City may refuse permission for connection of the work to the City's sewerage works.

30.9.4C.5 A person convicted of an offence under Local Law 30.9.4C.3 shall, in addition to any penalty incurred under that Local Law, pay any expense, loss or damage incurred by the City in consequence of the offence.

30.9.4C.6 The fee specified in the City's budget is payable by the person to whom a notice is given under Local Law 30.9.4C.1 for the inspection of work commenced, completed or otherwise carried out in accordance with that notice.

30.9.4D Forms

30.9.4D.1 A Licensed Plumber may obtain a book of the approved forms of notice and certificate, or multi-entry plumbing certificate from the City on payment of the appropriate fee specified in the City's budget.

30.9.4D.2 A Licensed Plumber shall comply with any instructions contained in a book of forms in relation to the completion and place of lodgement of a notice, certificate or multi-entry plumbing certificate.

Penalty: \$100.

30.9.4E False or misleading statements

A Licensed Plumber in completing a notice certificate or multi-entry plumbing certificate shall not make a statement or give any information which the Licensed Plumber knows is false or misleading in a material particular.

Penalty: \$1000.

30.9.4F Exemption

30.9.4F.1 The City may, by notice in writing given, as far as is practicable, to every Licensed Plumber, exempt a type or types of work specified in the notice from the notification and certification requirements of Local Laws 30.9.2 and 30.9.3.

30.9.4F.2 The City may by further notice in writing vary or cancel a notice given under Local Law 30.9.4F.1.

30.9.5 City may require certain tests

30.9.5.1 The City may, by notice in writing given, as far as is practicable to every Licensed Plumber, require work carried out by, or under the direction and supervision of, a Licensed Plumber to be tested by the application of the water test in accordance with Local Law 27.8.2, the smoke test in accordance with Local Law 27.8.3, or any other test that the City considers necessary and specifies in the notice.

30.9.5.2 The equipment, material, power and labour necessary for a test required under Local Law 30.9.5.1 shall be furnished by the Licensed Plumber responsible for the work to be tested.

30.9.6 Testing and inspection of Work

30.9.6.1 Property sewers or apparatus in connection with property sewers, shall not be used until the work has been tested by the Licensed Plumber responsible for the work, or by a person under the direction and supervision of that Licensed Plumber, to ensure compliance with these Local Laws.

30.9.6.2 An Inspector may inspect or test work carried out by, or under the direction and supervision of, a Licensed Plumber, and for this purpose a Licensed Plumber shall—

- (a) immediately report to the City work that is ready for inspection or testing; and
- (b) ensure that every facility is made available to an inspector for conducting an inspection or test of the work.

30.9.9 Attention is drawn to section 102 of the *Metropolitan Water Authority Act 1982* relating to connection to Main Drains.

30.9.10 An application for approval to connect to a Main Drain shall be in writing in a form approved by the City and shall be accompanied by one copy of all relevant plans.

30.9.11 Connection to Main Drain

A person shall not execute work to connect to a Main Drain without first obtaining approval from the City.

Penalty: \$500.

30.13 Persons Authorized to Carry Out Plumbing Work Under Direction and Supervision

30.13.1 The following persons are authorized for the purposes of Local Laws 30.2 (b)—

- (a) a person who has successfully completed an apprenticeship in the plumbing trade; and
- (b) a person registered under the *Industrial Training Act 1975* as an apprentice in the plumbing trade.

30.13.2 The City may authorise a person for the purposes of Local Law 30.2 (b) if the person—

- (a) provides the City with a certificate issued by an approved examining body to the effect that the person has a sufficient level of knowledge and competence to be so authorized; or
- (b) satisfies the City that the person has a sufficient level of knowledge and competence to be so authorized.

30.13.3 The City may, where it considers necessary, authorise a person under Local Law 30.13.2 (b)—

- (a) to work only under the immediate supervision of Licensed Plumber; and
- (b) for no longer than 12 months.

30.14 Registration of Certificates of Persons Provided For in Local Law 30.13

A register shall be kept at the City's Head Office of all persons authorized under Local Law 30.13.2.

30.15 Delay in Work

Licensed plumbers shall execute any work they undertake with reasonable despatch and any inconvenience to the public or the City caused by licensed sanitary plumbers by unnecessary delay in carrying out any work shall be rigorously dealt with by the City.

30.16 Damage to Pipes shall be Reported

Damage caused by Licensed Plumbers or their employees to water, sewer, gas, or other pipes shall be reported forthwith by the plumber to the authority concerned, and immediate steps shall be taken to have repairs effected, and the cost of same shall be defrayed by such plumber.

30.16A Licensed Plumbers to report certain matters

A Licensed Plumber shall immediately report to the City anything found by, or brought to the attention of, the plumber, in the course of carrying out plumbing work, that is likely to result in the entry into the City's sewerage works of any substance or matter likely to hinder or prevent the proper functioning of that system.

Penalty: \$2000.

30.17 Statement to be Signed

Before any licence is issued, the person to whom the same is to be issued shall sign a statement that he accepts the licence subject to the conditions thereof and with these Local Laws, and that he will comply therewith.

30.18 Change of Address shall be Notified

A Licensed Plumber shall, within 48 hours of any change in his address, give notice in writing thereof to the City.

30.19 Penalties for Breaches of Local Laws by Plumbers

30.19.1 A Licensed Plumber who refuses either by himself or by those employed by him to give information properly required by an Officer of the City shall be guilty of an offence and liable to a fine of \$200.

30.19.2 A Licensed Plumber who commits a breach of these Local Laws may be required by the City to show cause why his sanitary plumbers licence should not be suspended or cancelled.

30.19.3 A plumber whose sanitary plumbers licence has been suspended shall not be relicensed as a Licensed Plumber until the term of his suspension has expired, or the City has directed the reinstatement of his licence.

31. OFFENCES AND PENALTIES**31.1 Gratuities Prohibited**

Officers, workmen, or agents of the City shall not solicit or receive any fee or gratuity whatever.

31.2 Junction or Interference with Pipes, Sewers, or Fittings

No person shall make any connection or interfere with any pipe, sewer, or fitting of the City or with any, sewer, or drain communicating therewith, at any other place than shall be approved by the City.

31.3 Obstruction of Sewers and Main Drains

31.3.1 Attention is drawn to section 66 of the *Metropolitan Water Supply, Sewerage and Drainage Act* relating to construction, in, upon, over, under or in proximity to a sewer.

31.3.2 Attention is drawn to section 101 of the *Metropolitan Water Authority Act 1982* relating to construction upon, over, under or in proximity to a Main Drain.

31.4 Penalties

31.4.1 A person committing a breach of any of the provisions of these Local Laws, to which no specific penalty is attached shall be liable on summary conviction to a penalty not exceeding \$200 and in addition may be ordered to pay any expense incurred by the City in consequence of such breach.

31.4.2 In the case of a continuing breach the offender shall be liable in addition to the fine and payment of expenses to a daily penalty not exceeding \$20 for each day the breach continues after notice thereof has been given by or on behalf of the City to the offender.

31.5 Authority to Enter Premises

31.5.1 An Officer or other person authorized by the City may at all reasonable times enter any property connected, or in process of being connected with the sewers, in order to examine whether the drains, property sewers and other fittings in such property are in proper order, and any person refusing such admission or in any way hindering such Officer or other person in the execution of his duty shall be guilty of an offence.

31.5.2 An Inspector, or any assistant acting under the directions of an Inspector, or other authorized Officer may, at his discretion, at any reasonable hour, with or without notice, enter any land, house, or premises for the purpose of ascertaining whether any act or thing is being done or permitted within such property in breach of these Local Laws, and to remove, or cause to be removed, anything therein or thereon in breach of these Local Laws, or to take such steps as he may deem necessary for carrying out these provisions.

31.5.3 The cost of such removal or such other necessary act shall be borne by the owner or occupier of the property upon which such breach shall occur.

31.6 Period for Compliance with Notices

Unless otherwise provided, the time which may elapse between the giving of a notice and the doing of a thing required to be done by any Inspector or other authorized Officer shall be determined by the City according to the nature of each case.

32. DELEGATIONS**32.1 Delegation**

32.1.1 The City may delegate pursuant to the Local Government Act 1995 any of the functions under these Local Laws to the Chief Executive Officer.

32.1.2 A delegation under subsection 32.1.1 shall not limit any further delegation as deemed appropriate by the Chief Executive Officer pursuant to the Local Government Act 1995 and the instrument of delegation to the Chief Executive Officer.

32.1.3 A function performed by a delegate is to be taken to be performed by the City.

32.1.4 A delegate performing a function under this Local Law is to be taken to do so in accordance with the terms of the delegation unless the contrary is shown

32.1.5 Nothing in this Local Law is to be read as limiting the ability of the Chief Executive Officer to act through his or her Officers and agents in the normal course of business.

Dated this 6th day of August 1999.

The Common Seal of the City of Kalgoorlie-Boulder was affixed in the presence of—

P. A. ROB, Mayor.
P. L. ROBSON, Chief Executive Officer.

LOCAL GOVERNMENT ACT 1995**CITY OF KALGOORLIE-BOULDER****PARKING AND PARKING FACILITIES LOCAL LAW****TABLE OF CONTENTS****PART 1—DEFINITION AND OPERATION**

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LOCAL GOVERNMENT ACT 1995

CITY OF KALGOORLIE-BOULDER

PARKING AND PARKING FACILITIES LOCAL LAW

Under the powers conferred by the *Local Government Act 1995* and under all other powers, the Council of the City of Kalgoorlie-Boulder resolved to make the following Local Law on the 14 day of June 1999.

PART 1—DEFINITION AND OPERATION**1.1 Commencement**

This Local Law will come into operation on the fourteenth day after the day on which it is published in the *Government Gazette*.

1.2 Repeal

The City of Kalgoorlie-Boulder Local Law Relating To Parking And Use of Vehicles published in the *Government Gazette* on 10 July 1992 is repealed.

1.3 Interpretation

(1) In this Local Law unless the context otherwise requires—

“Act” means the *Local Government Act 1995*;

“Authorised Person” means a person authorised by the local government under section 9.10 of the Act, to perform any of the functions of an Authorised Person under this Local Law;

“authorised vehicle” means a vehicle authorised by the local government, Chief Executive Officer, Authorised Person or by any written law to park on a thoroughfare or parking facility;

“bicycle” means any wheeled vehicle that is designed to be propelled solely by human power;

“bus” means an omnibus as defined by the Road Traffic Act;

“bus embayment” has the meaning given to it in the Code;

“caravan” means a vehicle that is fitted or designed to allow human habitation and which is drawn by another vehicle, or which is capable of self-propulsion;

“carriageway” means a portion of thoroughfare that is improved, designed or ordinarily used for vehicles and includes the shoulders and areas including embayments at the side or centre of the carriageway, used for the parking of vehicles; and where a thoroughfare has two or more of those portions divided by a median strip, the expression means each of those portions, separately;

“centre” in relation to a carriageway, means a line or a series of lines, marks or other indications placed at, or near, the middle of the carriageway or, in the absence of any such lines, marks or other indications, the middle of the main travelled portion of the carriageway;

“children’s crossing” has the meaning given to it in the Code;

“CEO” means the Chief Executive Officer of the local government;

“Code” means the *Road Traffic Code 1975*;

“commercial vehicle” means a motor vehicle constructed for the conveyance of goods or merchandise, or for the conveyance of materials used in any trade, business, industry or work whatsoever, other than a motor vehicle for the conveyance of passengers, and includes any motor vehicle that is designed primarily for the carriage of persons, but which has been fitted or adapted for the conveyance of the goods, merchandise or materials referred to, and is in fact used for that purpose;

“district” means the district of the local government;

“driver” means any person driving or in control of a vehicle;

“emergency vehicle” has the meaning given to it in the Code;

“footpath” includes every footpath, pedestrian access way or other place—

(a) intended for the use of pedestrians only, or in the case of a dual use path, for the use of pedestrians and bicyclists only; or

(b) habitually used by pedestrians and not by vehicles or, in the case of a dual use path, by pedestrians and bicyclists and not by vehicles other than bicycles;

“Loading Zone” means a parking stall which is set aside for use by commercial vehicles if there is a sign referable to that stall marked ‘Loading Zone’;

- “local government” means the City of Kalgoorlie-Boulder;
- “median strip” has the meaning given to it in the Code;
- “metered space” means a section or part of a metered zone that is adjacent to a parking meter and that is marked or defined by painted lines or by metallic studs or similar devices for the purpose of indicating where a vehicle may be parked on payment of a fee or charge;
- “metered zone” means any thoroughfare or reserve, or part of any thoroughfare or reserve, in which parking meters regulate the parking of vehicles;
- “motorcycle” means a motor vehicle that has two wheels or, where a sidecar is attached, three wheels;
- “motor vehicle” means a self-propelled vehicle that is not operated on rails; and the expression includes a trailer, semi-trailer or caravan while attached to a motor vehicle, but does not include a power assisted pedal cycle;
- “no parking area” means a portion of a carriageway that lie—
- (a) between two consecutive signs inscribed with the words “No Parking” or with an equivalent symbol depicting this purpose and each with an arrow pointing generally towards the other of them; or
 - (b) between a sign inscribed with the words “No Parking” or with an equivalent symbol depicting this purpose, and the end of the carriageway or an area in which parking is prohibited and that lies in the general direction indicated by an arrow inscribed on the sign;
- “occupier” has the meaning given to it in the Act;
- “owner” where used in relation to a vehicle, means a person who is the registered holder of the requisite vehicle licence under the Road Traffic Act in respect of that vehicle, or if the vehicle is not licensed under that Act, the person who owns the vehicle or is entitled to its possession; and where used in relation to land has the meaning given to it by the Act;
- “park”, in relation to a vehicle, means to permit a vehicle, whether occupied or not by any person, to remain stationary for any period of time except for the purpose of—
- (a) avoiding conflict with other traffic; or
 - (b) complying with the provisions of any law when the vehicle is being driven;
- “parking area” means a portion of a carriageway—
- (a) between two consecutive signs inscribed with the word “Parking” or with an equivalent symbol depicting this purpose and each with an arrow pointing generally towards the other of them; or
 - (b) extending from a sign inscribed with the word “Parking” or with an equivalent symbol depicting this purpose in the general direction indicated by the arrow inscribed on the sign, to any other sign inscribed with the words “No Parking” or with an equivalent symbol depicting this purpose, or to the end of the carriageway or an area in which the parking of vehicles is prohibited,
- and is on that side of the carriageway of the thoroughfare nearest the sign;
- “parking facilities” includes land, buildings, shelters, metered zones, metered spaces, parking stalls and other facilities open to the public generally for the parking of vehicles with or without charge, and signs, notices and facilities used in connection with the parking of vehicles;
- “parking meter” includes the stand on which the meter is erected and a ticket issuing machine;
- “parking region” means the area described in the First Schedule;
- “parking stall” means a section or part of a thoroughfare or of a parking station which is marked or defined by painted lines, metallic studs, coloured bricks or pavers or similar devices for the purpose of indicating where a vehicle may be parked, but does not include a metered space;
- “parking station” means any land, or structure provided for the purpose of accommodating vehicles with or without charge, but does not include a metered zone or metered space;
- “pedestrian crossing” has the meaning given to it in the Code;
- “public place” means any place to which the public has access whether or not that place is on private property;
- “reserve” means any land—
- (a) which belongs to the local government;
 - (b) of which the local government is the management body under the *Land Administration Act 1997*; or
 - (c) which is an “otherwise unvested facility” within section 3.53 of the Act;
- “Road Traffic Act” means the *Road Traffic Act 1974*;
- “Schedule” means a Schedule to this Local Law;
- “sign” includes a traffic sign, inscription, mark, structure or device approved by the local government on which may be shown words, numbers, expressions or symbols, and which is placed on or near a thoroughfare or within a parking station or reserve for the purpose of prohibiting, regulating, guiding, directing or restricting the parking of vehicles;
- “special purpose vehicle” means a public utility service truck, a tow truck, a vehicle being used for official duties by a member of the Police Service, a motor breakdown service vehicle or a vehicle being used by a government authority or a local government in connection with its functions, but does not include an emergency vehicle;

“symbol” includes any symbol specified by Australian Standard 1742.11-1989 and any symbol specified from time to time by Standards Australia for use in the regulation of parking and any reference to the wording of any sign in this Local Law shall be also deemed to include a reference to the corresponding symbol;

“taxi” has the same meaning as “taxi-car” in section 47Z of the *Transport Co-ordination Act 1966*;

“thoroughfare” has the meaning given to it in the Act;

“ticket issuing machine” means a parking meter which issues, as a result of money being inserted in the machine or such other form of payment as may be permitted to be made, a ticket showing the period during which it shall be lawful to remain parked in a metered space to which the machine is referable;

“trailer” means any vehicle without motive power of its own, designed for attachment to a motor vehicle for the purpose of being towed, but does not include the rear portion of an articulated vehicle, or a side car;

“vehicle” includes every conveyance not being a train, vessel or aircraft, and every object capable of being propelled or drawn on wheels by any means; and

“verge” means the portion of a thoroughfare which lies between the boundary of a carriageway and the adjacent property line but does not include a footpath.

(2) For the purposes of the application of the definitions “no parking area” and “parking area” an arrow inscribed on a traffic sign erected at an angle to the boundary of the carriageway is deemed to be pointing in the direction in which it would point, if the signs were turned at an angle of less than 90 degrees until parallel with the boundary.

(3) Unless the context otherwise requires, where a term is used, but not defined, in this Local Law, and that term is defined in the Road Traffic Act or in the Code, then the term shall have the meaning given to it in that Act or the Code.

1.4 Application and pre-existing signs

(1) Subject to subclause (2), this Local Law applies to the parking region.

(2) This Local Law does not apply to a parking facility or a parking station that is not occupied by the local government, unless the local government and the owner or occupier of that facility or station have agreed in writing that this Local Law will apply to that facility or station.

(3) The agreement referred to in subclause (2) may be made on such terms and conditions as the parties may agree.

(4) Where a parking facility or a parking station is identified in the Fourth Schedule, then the facility or station shall be deemed to be a parking station to which this Local law applies and it shall not be necessary to prove that it is the subject of an agreement referred to in subclause (2).

(5) A sign that—

(a) was erected by the local government or the Commissioner of Main Roads prior to the coming into operation of this Local Law; and

(b) relates to the parking of vehicles within the parking region, shall be deemed for the purposes of this Local Law to have been erected by the local government under the authority of this Local Law.

(6) An inscription or symbol on a sign referred to in subclause (5) operates and has effect according to its tenor, and where the inscription or symbol relates to the standing of vehicles, it shall be deemed for the purposes of this Local Law to operate and have effect as if it related to the parking of vehicles.

1.5 Classes of vehicles

For the purpose of this Local Law, vehicles are divided into classes as follows—

(a) buses;

(b) commercial vehicles;

(c) motorcycles and bicycles;

(d) taxis; and

(e) all other vehicles.

1.6 Part of thoroughfare to which sign applies

Where under this Local Law the parking of vehicles in a thoroughfare is controlled by a sign, the sign shall be read as applying to that part of the thoroughfare which—

(a) lies beyond the sign;

(b) lies between the sign and the next sign beyond that sign; and

(c) is on that side of the thoroughfare nearest to the sign.

PART 2—METERED ZONES

2.1 Determination of metered zones

(1) The local government may by resolution constitute, determine and vary and also indicate by signs, metered spaces and metered zones.

(2) In respect of metered spaces and metered zones the local government may by resolution determine, and may indicate by signs—

(a) permitted times and conditions of parking depending on and varying with the locality;

(b) classes of vehicles which are permitted to park;

- (c) the amount payable for parking; and
- (d) the manner of parking.

2.2 Parking fee to be paid

Subject to clause 2.5, a person shall not park a vehicle in a metered space unless the appropriate fee as indicated by a sign on the parking meter referable to the space is inserted into the parking meter.

2.3 Limitation on parking in metered space

The payment of a fee under clause 2.2 shall entitle a person to park the vehicle in a metered space for the period shown on the parking meter, but does not authorise the parking of the vehicle during any time when parking in that space may be prohibited in accordance with this Local Law.

2.4 No parking when meter is expired

Subject to clause 2.5, a person shall not leave or permit a vehicle to remain parked in a metered space during the hours when a fee is payable to park the vehicle in the space when the parking meter referable to that space exhibits the sign "Expired" or a negative time.

2.5 Suspension of requirement to pay fee

The local government may from time to time by a resolution declare that the provisions of clauses 2.2 and 2.4 shall not apply during the periods and days specified in the resolution.

2.6 Vehicles to be within metered space

A person shall not park a vehicle in a metered space in a thoroughfare otherwise than parallel to and as close to the kerb as practicable and wholly within the space, provided that where a metered space is set out otherwise than parallel to the kerb the vehicle need only park wholly within the space.

2.7 Permitted insertions in parking meters

(1) A person shall not insert into a parking meter anything other than the designations of coin or banknote or such other permitted form of payment indicated by a sign on the parking meter.

(2) The insertion of a coin or banknote into any parking meter or the making of payment in such other form as may be permitted shall be effected only in accordance with the instructions printed on that particular meter.

2.8 Parking ticket to be clearly visible

A driver of a vehicle left parked in a metered zone which is regulated by a ticket issuing machine shall on purchasing a ticket from the machine for a period of parking, place the ticket inside the vehicle in such a position that the ticket is clearly visible to and the expiry time or time for which the ticket remains valid is able to be read by an Authorised Person examining the ticket from outside the vehicle.

2.9 One vehicle per metered space

A person shall not park or attempt to park a vehicle in a metered space in which another vehicle is parking.

2.10 No parking when hood on meter

Notwithstanding any other provision of this Local Law and notwithstanding any other sign or notice, a person shall not park a vehicle in a metered space if the parking meter referable to such metered space has a hood marked "No Parking", "Reserved Parking" or "Temporary Bus Stand" or equivalent symbols depicting these purposes except with the permission of the local government or an Authorised Person.

PART 3—PARKING STALLS AND PARKING STATIONS

3.1 Determination of parking stalls and parking stations

The local government may by resolution constitute, determine and vary and also indicate by signs—

- (a) parking stalls;
- (b) parking stations;
- (c) permitted time and conditions of parking in parking stalls and parking stations which may vary with the locality;
- (d) permitted classes of vehicles which may park in parking stalls and parking stations;
- (e) permitted classes of persons who may park in specified parking stalls or parking stations; and
- (f) the manner of parking in parking stalls and parking stations.

3.2 Vehicles to be within parking stall on thoroughfare

(1) Subject to subclause (2), a person shall not park a vehicle in a parking stall in a thoroughfare otherwise than—

- (a) parallel to and as close to the kerb as is practicable;
- (b) wholly within the stall; and
- (c) headed in the direction of the movement of traffic on the side of the thoroughfare in which the stall is situated.

(2) Where a parking stall in a thoroughfare is set out otherwise than parallel to the kerb, then a person must park a vehicle in that stall wholly within it.

3.3 Payment of fee to park in parking station

A person shall not park a vehicle or permit a vehicle to remain parked in any parking station during any period for which a fee is payable unless—

- (a) in the case of a parking station having an Authorised Person on duty, the appropriate fee is paid when demanded; or
- (b) in the case of a parking station equipped with parking meters, the appropriate fee is inserted in the meter or the required payment is made in such other form as may be permitted.

3.4 Suspension of parking station restrictions

The local government may by resolution declare that the provisions of clause 3.3 do not apply during periods on particular days in relation to particular parking stations as specified in such resolution.

3.5 Vehicle not to be removed until fee paid

A person shall not remove a vehicle which has been parked in a parking station until there has been paid the appropriate fee for the period for which the vehicle has been parked.

3.6 Entitlement to receipt

A person paying a fee at a parking station is to be entitled to receive a receipt on demand showing the period of parking covered by such payment.

3.7 Parking ticket to be clearly visible

A driver of a vehicle in a parking station which is equipped with a ticket issuing machine shall on purchasing a ticket from the machine for a period of parking, place the ticket inside the vehicle in such a position that the ticket is clearly visible to and the expiry time or time for which the ticket remains valid is able to be read by an Authorised Person examining the ticket from outside the vehicle.

3.8 Vehicles to be within parking stall in parking station

Unless otherwise directed by an Authorised Person, a person shall not park a vehicle in a parking station otherwise than wholly within a parking stall.

3.9 Parking prohibitions and restrictions

(1) A person shall not—

- (a) park a vehicle so as to obstruct an entrance to, or an exit from a parking station, or an access way within a parking station;
- (b) except with the permission of the local government or an Authorised Person park a vehicle on any part of a parking station contrary to a sign referable to that part;
- (c) permit a vehicle to park on any part of a parking station, if an Authorised Person directs the driver of such vehicle to move the vehicle; or
- (d) park or attempt to park a vehicle in a parking stall in which another vehicle is parked but this paragraph does not prevent the parking of a motorcycle and a bicycle together in a stall marked "M/C", if the bicycle is parked in accordance with subclause (2).

(2) No person shall park any bicycle—

- (a) in a parking stall other than in a stall marked "M/C"; and
- (b) in such stall other than against the kerb.

PART 4—PARKING GENERALLY**4.1 Prohibition and regulation of parking by signs**

The local government may by resolution prohibit or regulate by signs or otherwise the parking of any vehicle or class of vehicles in any part of the parking region but must do so consistently with the provisions of this Local Law.

4.2 Restrictions on parking in particular areas

(1) A person shall not park a vehicle in a thoroughfare or part of a thoroughfare, or part of a parking station—

- (a) if by a sign it is set apart for the parking of vehicles of a different class;
- (b) if by a sign it is set apart for the parking of vehicles by persons of a different class; or
- (c) during any period when the parking of vehicles is prohibited by a sign.

(2) A person shall not park a vehicle—

- (a) in a no parking area;
- (b) in a parking area, except in accordance with both the signs associated with the parking area and with this Local Law;
- (c) in a stall marked "M/C" unless it is a motorcycle without a sidecar or a trailer, or it is a bicycle.

(3) A person shall not park a motorcycle without a sidecar or a trailer, or a bicycle in a parking stall unless the stall is marked "M/C".

(4) A person shall not, without the prior permission of the local government, the CEO, or an Authorised Person, park a vehicle in an area designated by a sign stating "Authorised Vehicles Only".

(5) In a Loading Zone, a person shall not—

- (a) park a vehicle other than a commercial vehicle which is being loaded or unloaded with goods; or
- (b) park a commercial vehicle which is being loaded or unloaded with goods for more than 30 minutes.

(6) In paragraph (b) of subclause (5) "goods" means an article or collection of articles weighing at least 13.6kg and of which the cubic measurement is not less than 0.17m³.

4.3 Parking vehicle on a carriageway

A person parking a vehicle on a carriageway shall park it—

- (a) in the case of a two-way carriageway, so that it is as near as practicable to and parallel with, the left boundary of the carriageway and headed in the direction of the movement of traffic on the side of the thoroughfare on which the vehicle is parked;
- (b) in the case of a one-way carriageway, so that it is as near as practicable to and parallel with either boundary of the carriageway and headed in the direction of the movement of traffic on the side of the thoroughfare on which the vehicle is parked;
- (c) so that at least 3 metres of the width of the carriageway lies between the vehicle and the farther boundary of the carriageway, or between the vehicle and a vehicle parked on the farther side of the carriageway;
- (d) so that it is not less than 1.2 metres from any other vehicle, except a motorcycle without a trailer, or a bicycle parked in accordance with this Local Law;
- (e) so that it does not obstruct any vehicle on the carriageway; and
- (f) so that it is entirely within the confines of any parking stall marked on the carriageway.

4.4 Vehicle to be wholly within parking area

A person shall not park a vehicle partly within and partly outside a parking area.

4.5 When parallel and right-angled parking apply

Where a traffic sign associated with a parking area is not inscribed with the words "angle parking" (or with an equivalent symbol depicting this purpose), then unless a sign associated with the parking area indicates or marks on the carriageway indicate that vehicles have to park in a different position where the parking area is—

- (a) adjacent to the boundary of a carriageway, a person parking a vehicle in the parking area shall park it as near as practicable to and parallel with that boundary; and
- (b) at or near the centre of the carriageway, a person parking a vehicle in that parking area shall park it at approximately right angles to the centre of the carriageway.

4.6 When angle parking applies

(1) This clause does not apply to—

- (a) a passenger vehicle or a commercial vehicle with a mass including any load, of over three tonnes; or
- (b) a person parking either a motor cycle without a trailer or a bicycle.

(2) Where a sign associated with a parking area is inscribed with the words "angle parking" (or with an equivalent symbol depicting this purpose), a person parking a vehicle in the area shall park the vehicle at an angle of approximately 45 degrees to the centre of the carriageway unless otherwise indicated by the inscription on the parking sign or by marks on the carriageway.

4.7 General prohibitions on parking

(1)(a) This clause does not apply to a vehicle parked in a metered space or a parking stall nor to a bicycle in a bicycle rack.

(b) Paragraphs (c), (e) and (g) of subclause (2) do not apply to a vehicle which parks in a bus embayment.

(2) A person shall not park a vehicle so that any portion of the vehicle is—

- (a) between any other stationary vehicles and the centre of the carriageway;
- (b) on or adjacent to a median strip;
- (c) obstructing a right of way, private drive or carriageway or so close as to deny a vehicle reasonable access to or egress from the right of way, private drive or carriageway;
- (d) alongside or opposite any excavation, works, hoarding, scaffolding or obstruction on the carriageway, if the vehicle would obstruct traffic;
- (e) on or within 9 metres of any portion of a carriageway bounded by a traffic island;
- (f) on any footpath or pedestrian crossing;
- (g) on a bridge or other elevated structure or within a tunnel or underpass;
- (h) between the boundaries of a carriageway and any double longitudinal line consisting of two continuous lines or between a double longitudinal line consisting of a continuous line and a broken or dotted line and the boundary of a carriageway nearer to the continuous line, unless there is a distance of at least 3 metres clear between the vehicle and the double longitudinal line;
- (i) on an intersection, except adjacent to a carriageway boundary that is not broken by an intersecting carriageway;
- (j) within 1 metre of a fire hydrant or fire plug, or of any sign or mark indicating the existence of a fire hydrant or fire plug;
- (k) within 3 metres of a public letter pillar box, unless the vehicle is being used for the purposes of collecting postal articles from the pillar box; or
- (l) within 6 metres of the nearer property line of any thoroughfare intersecting the thoroughfare on the side on which the vehicle is parked.

(3) A person shall not park a vehicle so that any portion of the vehicle is within 9 metres of the departure side of—

- (a) a sign inscribed with the words “Bus Stop” or “Hail Bus Here” (or with equivalent symbols depicting these purposes) unless the vehicle is a bus stopped to take up or set down passengers;
- (b) a children’s crossing established on a two-way carriageway; or
- (c) the nearest rail of a railway level crossing.

(4) A person shall not park a vehicle so that any portion of the vehicle is within 18 metres of the approach side of—

- (a) a sign inscribed with the words “Bus Stop” or “Hail Bus Here” (or with equivalent symbols depicting these purposes) unless the vehicle is a bus stopped to take up or set down passengers;
- (b) a pedestrian crossing or children’s crossing; or
- (c) the nearest rail of a railway level crossing.

4.8 Parking on verges

(1) This clause does not apply to a commercial vehicle when it is being loaded or unloaded with reasonable expedition with goods, merchandise or materials, collected from or delivered to the premises adjacent to the portion of the verge on which the commercial vehicle is parked, but the commercial vehicle, by parking on the verge must not obstruct the passage of any vehicle or person.

(2) A person shall not park a—

- (a) commercial vehicle or bus, or a trailer or caravan unattached to a motor vehicle, so that any portion of it is on the verge; or
- (b) vehicle so that any portion of that vehicle is on a verge during any period when the parking of vehicles on that verge is prohibited by a sign adjacent and referable to that verge.

(3) Subject to subclause (2), a person shall not park a vehicle if any portion of the vehicle is on the verge unless he or she is the owner or occupier of the premises adjacent to that verge, or is a person authorised by the occupier of those premises to do so.

4.9 Limitation on parking of vehicles with tare in excess of 2,000 kg’s on carriageway

A person shall not park a vehicle having a tare in excess of 2,000 kg’s on a carriageway for more than two hours consecutively.

4.10 Limitation on parking of over length vehicles on carriageway

A person shall not park a vehicle or any combination of vehicles that together with anything in or on that vehicle is more than 8 metres in length, on a carriageway for more than two hours consecutively.

4.11 Authorised person may order vehicle on thoroughfare to be moved

The driver of a vehicle shall not park that vehicle on any part of a thoroughfare in contravention of this Local Law after an Authorised Person has directed the driver to move it.

4.12 Authorised person may mark tyres

(1) An Authorised Person may mark the tyres of a vehicle parked in a parking facility with chalk or any other non-indelible substance for a purpose connected with or arising out of his or her duties or powers.

(2) A person shall not remove a mark made by an Authorised Person so that the purpose of the affixing of such a mark is defeated or likely to be defeated.

4.13 No movement of vehicles to avoid time limitation

(1) Where the parking of vehicles in a parking facility is permitted for a limited time, a person shall not move a vehicle within the parking facility so that the total time of parking exceeds the maximum time allowed for parking in the parking facility.

(2) Where the parking of vehicles in a thoroughfare is permitted for a limited time, a person shall not move a vehicle along that thoroughfare so that the total time of parking exceeds the maximum time permitted, unless the vehicle has first been removed from the thoroughfare for at least two hours.

4.14 No parking of vehicles exposed for sale and in other circumstances

A person shall not park a vehicle on any portion of a thoroughfare—

- (a) for the purpose of exposing it for sale;
- (b) if that vehicle is not licensed under the Road Traffic Act;
- (c) if that vehicle is a trailer or a caravan unattached to a motor vehicle; or
- (d) for the purpose of effecting repairs to it, other than the minimum repairs necessary to enable the vehicle to be moved to a place other than a thoroughfare.

4.15 Parking on private land

(1) In this clause a reference to “land” does not include land—

- (a) which belongs to the local government;
- (b) of which the local government is the management body under the *Land Administration Act 1997*;
- (c) which is an “otherwise unvested facility” within section 3.53 of the Act;
- (d) which is the subject of an agreement referred to in clause 1.4 (2); or
- (e) which is identified in the Fourth Schedule.

(2) A person shall not park a vehicle on land without the consent of the owner or occupier of the land on which the vehicle is parked.

(3) Where the owner or occupier of the land, by a sign referable to that land or otherwise, consents to the parking of vehicles of a specified class or classes on the land for a limited period, a person shall not park a vehicle on the land otherwise than in accordance with the consent.

4.16 Parking on reserves

No person other than an employee of the local government in the course of his or her duties or a person authorised by the local government shall drive or park a vehicle upon or over any portion of a reserve other than upon an area specifically set aside for that purpose.

4.17 Suspension of parking limitations for urgent, essential or official duties

(1) Where by a sign the parking of vehicles is permitted for a limited time on a portion of a thoroughfare or parking facility, the local government, the CEO or an Authorised Person may, subject to the Code, permit a person to park a vehicle in that portion of the thoroughfare or parking facility for longer than the permitted time in order that the person may carry out urgent, essential or official duties.

(2) Where permission is granted under subclause (1), the local government, the CEO or an Authorised Person may prohibit the use by any other vehicle of that portion of the thoroughfare or parking facility to which the permission relates, for the duration of that permission.

PART 5—RESIDENTIAL PARKING PERMITS

5.1 Residential parking permit

- (1) A person may apply for a permit to park a vehicle on a thoroughfare if the person is—
- (a) an occupier of a lot fronting the thoroughfare;
 - (b) the holder of the requisite vehicle licence under the Road Traffic Act for the vehicle; and
 - (c) subject to subclause (2), described on the vehicle licence as residing at the lot.
- (2) An applicant for a permit who is not described in accordance with subclause (1)(c), may apply for a temporary permit by stating (by way of statutory declaration) on an application for such that he or she resides at that lot.
- (3) An application for a permit shall be made in the form determined by the local government.
- (4) The local government may in respect of an application for a permit for the purpose of subclause (1) or (2)—
- (a) approve it;
 - (b) approve it subject to such conditions as the local government considers appropriate; or
 - (c) refuse to approve it.
- (5) Where the local government makes a decision under paragraph (a) or (b) of subclause (4), it shall issue a permit in the form determined by it to the person who applied for the permit.
- (6) A temporary permit issued for the purpose of subclause (2)—
- (a) will expire 3 months after it is issued; and
 - (b) is not renewable.
- (7) A permit issued for the purpose of subclause (1) may be either—
- (a) an annual permit, issued for a period not exceeding one year and expiring on 31 December in the year of issue; or
 - (b) a temporary permit, issued for a period not exceeding 6 months from the date of issue.
- (8) Every permit issued for the purpose of subclause (1) is to specify—
- (a) a permit number;
 - (b) the registration number of the vehicle;
 - (c) the name of the thoroughfare to which the exemption granted by clause 5.2 applies; and
 - (d) the date on which it expires.

5.2 Conditions of exemption for residential parking permits

Where parking of a vehicle on any part of a thoroughfare within the district is prohibited for more than a specified time, or without an unexpired parking ticket being displayed within the vehicle, the holder of a permit issued under clause 5.1 is exempted from such prohibitions if—

- (a) the vehicle is parked on a thoroughfare specified in the permit, but not adjacent to retail premises where the parking of all vehicles is subject to a time restriction;
- (b) the permit is affixed to the windscreen of the vehicle in a prominent position;
- (c) the period in respect of which the permit was issued has not expired; and
- (d) if the holder of the permit at the time of parking the vehicle still resides at the lot in respect of which the permit was issued.

5.3 Removal and cancellation of residential parking permit

The holder of a permit issued under clause 5.1 who changes residence shall remove the permit from the vehicle to which it is affixed, and the permit shall be deemed to be cancelled on and from the date the holder changes residence.

PART 6—MISCELLANEOUS

6.1 Removal of notices on vehicle

A person, other than the driver of the vehicle or a person acting under the direction of the driver of the vehicle, shall not remove from the vehicle any notice put on the vehicle by an Authorised Person.

6.2 Unauthorised signs and defacing of signs

A person shall not without the authority of the local government—

- (a) mark, set up or exhibit a sign purporting to be or resembling a sign marked, set up or exhibited by the local government under this Local Law;
- (b) remove, deface or misuse a sign or property, set up or exhibited by the local government under this Local Law or attempt to do any such act; or
- (c) affix a board, sign, placard, notice or other thing to or paint or write upon any part of a sign set up or exhibited by the local government under this Local Law.

6.3 Signs must be complied with

An inscription or symbol on a sign operates and has effect according to its tenor and a person contravening the direction on a sign commits an offence under this Local Law.

6.4 General provisions about signs

- (1) A sign marked, erected, set up, established or displayed on or near a thoroughfare is, in the absence of evidence to the contrary presumed to be a sign marked, erected, set up, established or displayed under the authority of this Local Law.
- (2) The first three letters of any day of the week when used on a sign indicate that day of the week.

6.5 Special purpose and emergency vehicles

Notwithstanding anything to the contrary in this Local Law, the driver of—

- (a) a special purpose vehicle may, only in the course of his or her duties and when it is expedient and safe to do so, stop, or park the vehicle in any place, at any time; and
- (b) an emergency vehicle may, in the course of his or her duties and when it is expedient and safe to do so or where he or she honestly and reasonably believes that it is expedient and safe to do so, stop, or park the vehicle at any place, at any time.

6.6 Vehicles not to obstruct a public place

(1) A person shall not leave a vehicle, or any part of a vehicle, in a public place so that it obstructs the use of any part of that public place without the permission of the local government or unless authorised under any written law.

(2) A person will not contravene subclause (1) where the vehicle is left for a period not exceeding 24 hours.

PART 7—PENALTIES**7.1 Offences and penalties**

(1) Any person who fails to do anything required or directed to be done under this Local Law, or who does anything which under this Local Law that person is prohibited from doing, commits an offence.

(2) An offence against any provision of this Local Law is a prescribed offence for the purposes of section 9.16(1) of the Act.

(3) Any person who commits an offence under this Local Law shall be liable, upon conviction, to a penalty not exceeding \$1,000, and if the offence is of a continuing nature, to an additional penalty not exceeding \$100 for each day or part of a day during which the offence has continued.

(4) The amount appearing in the final column of the Second Schedule directly opposite a clause specified in that Schedule is the modified penalty for an offence against that clause.

7.2 Averment on complaint as to clause 1.4 (2) agreement

An averment on a complaint that this Local Law applies to a parking facility or a parking station under an agreement referred to in clause 1.4 (2), shall be sufficient proof that this Local Law applies to that facility or station, unless there is proof to the contrary that such an agreement does not exist.

7.3 Form of notices

For the purposes of this Local Law—

- (a) the form of the notice referred to in section 9.13 of the Act is that of Form 1 in the Third Schedule;
- (b) the form of the infringement notice referred to in section 9.17 of the Act is that of Form 2 in the Third Schedule;
- (c) the form of the infringement notice referred to in section 9.17 of the Act which incorporates the notice referred to in section 9.13 of the Act, is that of Form 3 in the Third Schedule; and
- (d) the form of the notice referred to in section 9.20 of the Act is that of Form 4 in the Third Schedule.

*First Schedule***CITY OF KALGOORLIE-BOULDER****PARKING REGION**

The parking region is the whole of the district, but excludes the following portions of the district—

- (a) the approach and departure prohibition areas of all existing and future traffic control signal installations as determined by the Commissioner of Main Roads;

- (b) prohibition areas applicable to all existing and future bridges and subways as determined by the Commissioner of Main Roads; and
- (c) any thoroughfare which comes under the control of the Commissioner of Main Roads unless the control of parking and parking facilities on that thoroughfare has been delegated by the Commissioner of Main Roads to the local government.

Second Schedule

**CITY OF KALGOORLIE-BOULDER
Parking and Parking Facilities Local Law
PRESCRIBED OFFENCES**

Item No.	Clause No.	Nature of Offence	Modified Penalty \$
1	2.2	Failure to pay fee for metered space	50
2	2.4	Parking when meter has expired	50
3	2.8	Failure to display ticket clearly in metered zoned	45
4	2.10	Parking contrary to a meter hood	45
5	3.3	Failure to pay parking station fee	50
6	3.5	Leaving without paying parking station fee	50
7	3.7	Failure to display ticket clearly in parking station	45
8	3.9 (1) (a)	Causing obstruction in parking station	45
9	3.9 (1) (b)	Parking contrary to sign in parking station	45
10	3.9 (1) (c)	Parking contrary to directions of Authorised Person	45
11	4.2 (1) (a)	Parking wrong class of vehicle	35
12	4.2 (1) (b)	Parking by persons of a different class	40
13	4.2 (1) (c)	Parking during prohibited period	40
14	4.2 (2) (a)	Parking in no parking area	45
15	4.2 (2) (b)	Parking contrary to signs or limitations	35
16	4.2 (2) (c)	Parking vehicle in motor cycle only area	35
17	4.2(3)	Parking motor cycle in stall not marked "M/C"	35
18	4.2 (5) (a)	Parking in Loading Zone	40
19	4.3 (a)	Fail to park on the left of two-way carriageway	35
20	4.3 (b)	Fail to park on boundary of one-way carriageway	35
21	4.3 (a)+(b)	Parking against the flow of traffic	40
22	4.3 (c)	Parking when distance from farther boundary less than 3 metres	40
23	4.3 (e)	Causing obstruction	45
24	4.7 (2) (a)	Double parking	40
25	4.7 (2) (c)	Denying access to private drive or right of way	40
26	4.7 (2) (d)	Parking beside excavation or obstruction so as to obstruct traffic	45
27	4.7 (2) (e)	Parking within 9 metres of traffic island	40
28	4.7 (2) (f)	Parking on footpath/pedestrian crossing	45
29	4.7 (2) (g)	Parking on bridge or in tunnel	40
30	4.7 (2) (i)	Parking on intersection	40
31	4.7 (2) (l)	Parking within 6 metres of intersection	40
32	4.7 (3) (a)	Parking vehicle within 9 metres of departure side of bus stop	45
33	4.7 (4) (a)	Parking vehicle within 18 metres of approach side of bus stop	45
34	4.7 (4) (b)	Parking vehicle within 18 metres of approach side of pedestrian/children's crossing	45
35	4.8 (2) (a)	Parking commercial vehicle, bus or caravan on verge	35
36	4.8 (2) (b)	Parking on verge contrary to sign	35
37	4.9	Parking vehicle with tare of over 2000kgs for over 2 hours	50
38	4.10	Parking over length vehicle in excess of 2 hours	50
39	4.11	Parking contrary to direction of Authorised Person	45
40	4.14 (c)	Parking a trailer/caravan on a thoroughfare	35
41	4.15 (2)	Parking on land that is not a parking facility without consent	50
42	4.15 (3)	Parking on land not in accordance with consent	35
43	4.16	Driving or parking on reserve	50
44	5.3	Failure to remove permit when residence changed	35
45	6.6 (1)	Leaving vehicle so as to obstruct a public place	45
46		All other offences not specified	30

Third Schedule
CITY OF KALGOORLIE-BOULDER
Local Government Act 1995
Form 1
Parking and Parking Facilities Local Law
NOTICE TO OWNER OF VEHICLE INVOLVED IN OFFENCE

Date/...../.....

To: (1)

of: (2)

It is alleged that on /..... /..... at (3)

at (4)

vehicle— your

make: ;

model: ;

registration: ,

was involved in the commission of the following offence—

.....

.....

.....

contrary to clause of the **Parking and Parking Facilities Local Law**.

You are required under section 9.13 of the Local Government Act 1995 to identify the person who was the driver or person in charge of the vehicle at the time when the offence is alleged to have been committed.

If you do not prove otherwise, you will be deemed to have committed the offence unless—

(a) within 28 days after being served with this notice;

(i) you inform the Chief Executive Officer or another authorised officer of the local government as to the identity and address of the person who was the driver or person in charge of the vehicle at the time the offence is alleged to have been committed; and

(ii) you satisfy the Chief Executive Officer that the vehicle had been stolen, or was being unlawfully used, at the time the offence is alleged to have been committed;

or

(b) you were given an infringement notice for the alleged offence and the modified penalty specified in it is paid within 28 days after the notice was given or such further time as is allowed.

(5)

(6)

Insert—

- (1) Name of owner or “the owner”
- (2) Address of owner (not required if owner not named)
- (3) Time of alleged offence
- (4) Location of alleged offence
- (5) Signature of authorised person
- (6) Name and title of authorised person giving notice

Third Schedule
CITY OF KALGOORLIE-BOULDER
Local Government Act 1995
Form 2
Parking and Parking Facilities Local Law
INFRINGEMENT NOTICE

Serial No.

Date/...../.....

To: (1)

of: (2)

It is alleged that on /..... /..... at (3)

at (4)

in respect of vehicle—

make: ;
 model: ;
 registration: ,

you committed the following offence—

.....

contrary to clause of the **Parking and Parking Facilities Local Law**.

The modified penalty for the offence is \$

If you do not wish to have a complaint of the alleged offence heard and determined by a court, the amount of the modified penalty may be paid to an authorised person at (5) within a period of 28 days after the giving of this notice.

If you take no action this infringement notice may be registered with the Fines Enforcement Registry after which your driver's licence or any vehicle licence held by you may be suspended. If the matter is registered with the Registry additional costs will also be payable.

If the above address is not your current address, or if you change your address, it is important that you advise us immediately. Failure to do so may result in your driver's licence or any vehicle licence you hold being suspended without your knowledge.

(6)

(7)

Insert—

- (1) Name of alleged offender or "the owner"
- (2) Address of alleged offender
- (3) Time of alleged offence
- (4) Location of alleged offence
- (5) Place where modified penalty may be paid
- (6) Signature of authorised person
- (7) Name and title of authorised person giving notice

Third Schedule

CITY OF KALGOORLIE-BOULDER

Local Government Act 1995

Form 3

Parking and Parking Facilities Local Law

INFRINGEMENT NOTICE

Serial No.

Date/...../.....

To: (1)

of: (2)

It is alleged that on /..... /..... at (3)

at (4)

in respect of vehicle—

make: ;
 model: ;
 registration: ,

you committed the following offence—

.....

contrary to clause of the **Parking and Parking Facilities Local Law**.

The modified penalty for the offence is \$

If you do not wish to have a complaint of the alleged offence heard and determined by a court, the amount of the modified penalty may be paid to an authorised person at (5) within a period of 28 days after the giving of this notice.

Unless within 28 days after being served with this notice—

- (a) you pay the modified penalty; or
 - (b) you—
 - (i) inform the Chief Executive Officer or another authorised officer of the local government as to the identity and address of the person who was the driver or person in charge of the above vehicle at the time the offence is alleged to have been committed; or
 - (ii) satisfy the Chief Executive Officer that the above vehicle had been stolen or was being unlawfully used at the time the offence is alleged to have been committed,
- you will, in the absence of proof to the contrary, be deemed to have committed the above offence and court proceedings may be instituted against you.

If you take no action this infringement notice may be registered with the Fines Enforcement Registry after which your driver's licence or any vehicle licence held by you may be suspended. If the matter is registered with the Registry additional costs will also be payable.

If the above address is not your current address, or if you change your address, it is important that you advise us immediately. Failure to do so may result in your driver's licence or any vehicle licence you hold being suspended without your knowledge.

(6)

(7)

Insert—

- (1) Name of owner or "the owner"
- (2) Address of owner (not required if owner not named)
- (3) Time of alleged offence
- (4) Location of alleged offence
- (5) Place where modified penalty may be paid
- (6) Signature of authorised person
- (7) Name and title of authorised person giving notice

Third Schedule

CITY OF KALGOORLIE-BOULDER

Local Government Act 1995

Form 4

Parking and Parking Facilities Local Law

WITHDRAWAL OF INFRINGEMENT NOTICE

Serial No.

Date/...../.....

To: (1)

of: (2)

Infringement Notice No. dated/...../.....
in respect of vehicle—

make: ;

model: ;

registration: ,

for the alleged offence of—

.....
.....
.....
.....

has been withdrawn.

The modified penalty of \$

* has been paid and a refund is enclosed.

* has not been paid and should not be paid.

* delete as appropriate.

(3)

(4)

Insert—

- (1) Name of alleged offender to whom infringement notice was given or "the owner".
- (2) Address of alleged offender.
- (3) Signature of authorised person
- (4) Name and title of authorised person giving notice

Fourth Schedule
CITY OF KALGOORLIE-BOULDER
Parking and Parking Facilities Local Law
DEEMED PARKING STATIONS

Dated this 6th day of August 1999.

The Common Seal of the City of Kalgoorlie-Boulder was affixed in the presence of—

P. L. ROBSON, Mayor.
P. A. ROB, Chief Executive Officer.



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