



REPORT OF THE

JOINT STANDING COMMITTEE ON DELEGATED LEGISLATION

IN RELATION TO

CITY OF KALGOORLIE-BOULDER SEWERAGE AND DRAINAGE LOCAL LAW

Presented by Hon Bob Wiese MLA (Chairman)

and

Hon Tom Helm MLC (Deputy Chairman)

Report 50

JOINT STANDING COMMITTEE ON DELEGATED LEGISLATION

Date first appointed:

November 19 1987

Terms of Reference:

It is the function of the Committee to consider and report on any regulation that:

- (a) appears not to be within power or not to be in accord with the objects of the Act pursuant to which it purports to be made;
- (b) unduly trespasses on established rights, freedoms or liberties;
- (c) contains matter which ought properly to be dealt with by an Act of Parliament; or
- (d) unduly makes rights dependent upon administrative, and not judicial, decisions.

If the Committee is of the opinion that any other matter relating to any regulation should be brought to the notice of the House, it may report that opinion and matter to the House.

Members as at the time of this inquiry:

Hon Bob Wiese, MLA (Chairman)
Hon Tom Helm MLC (Deputy Chairman)
Hon Ray Halligan MLC
Hon Simon O'Brien MLC
Hon Jim Scott MLC
Mr Iain MacLean, MLA
Mr Norm Marlborough, MLA
Mr Bill Thomas MLA

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REPORT OF THE JOINT STANDING COMMITTEE ON DELEGATED LEGISLATION

IN RELATION TO:

CITY OF KALGOORLIE-BOULDER SEWERAGE AND DRAINAGE LOCAL LAWS

1 EXECUTIVE SUMMARY

- 1.1 The Joint Standing Committee on Delegated Legislation ("Committee") recommends disallowance of the *City of Kalgoorlie-Boulder Sewerage and Drainage Local Laws* ("Local Law") on the grounds that:
 - the provisions in the Local Law for the licensing of plumbers are anti-competitive and inconsistent with national competition policy under the *Competition Principles Agreement*;
 - the provisions in the Local Law authorising entry by an Officer or other person authorised by the City onto private property "at all reasonable times" and "with or without notice" go beyond the powers of entry permitted by the *Local Government Act 1995* under which these powers of entry are purportedly exercised;
 - the Local Law has not been made under the heads of power to regulate sewerage and drainage provided for under section 342 of the *Health Act 1911*. This section permits a local government to make local laws in accordance with Subdivision 2 of Division 2 of Part 3 of the *Local Government Act 1995* for the purposes specified in the *Health Act 1911* or generally for carrying into effect the provisions of that Act; and
 - the City of Kalgoorlie-Boulder has requested that the Local Law be disallowed to obtain the benefit of section 42(6) of the *Interpretation Act 1984*. This will displace any doubt that its previous regulatory regime under the *Health Act (Local Authorities' Sewerage and Undertakings) Model By-laws 1971* and *the Country Towns Sewerage By-laws 1952* has been revived upon disallowance of the Local Law.

1.2 Committee also draws to the attention of Parliament its view that when the *Water Services Coordination Amendment Act 1999* ("Amendment Act") is proclaimed, the licensing provisions of the Local Law will be void to the extent that they are inconsistent with the provisions of the Amendment Act.

REPORT OF THE JOINT STANDING COMMITTEE ON DELEGATED LEGISLATION

IN RELATION TO:

CITY OF KALGOORLIE-BOULDER SEWERAGE AND DRAINAGE LOCAL LAWS

2 INTRODUCTION

- 2.1 In the exercise of its scrutiny function, the Committee reviewed the *City of Kalgoorlie-Boulder Sewerage and Drainage Local Laws* ("Local Law") created pursuant to the provisions of the *Local Government Act 1995*.
- 2.2 Under the Committee's Joint Rules, if the Committee is of the opinion that a matter relating to any regulation should be brought to the notice of the House, it may report that opinion and matter to the House. It is also the function of the Committee to consider and report on any regulation that appears not to be within the power of the enabling legislation.

3 BACKGROUND TO THE LOCAL LAW

- 3.1 The Local Law was gazetted on October 27 1999 and tabled in the Parliament on November 9 1999.
- 3.2 The purpose of the Local Law was to replace the outdated sanitary and drainage installation procedures contained within the *Health Act (Local Authorities' Sewerage Undertakings) Model By-laws* and to replace it with current operating practices and standards that are recognised statewide.¹
- 3.3 The Local Law has been modelled on the *Metropolitan Water Supply Sewerage and Drainage By-laws 1981* made under the *Metropolitan Water Supply, Sewerage, and Drainage Act 1909* and Australian Standard AS 3500.²
- 3.4 The Local Law has been made under section 3.5 and 3.10 of the Local Government $Act\ 1995^3$ and is attached to this report as "Annexure A".

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Explanatory Memorandum attached to facsimile from the City of Kalgoorlie-Boulder to the Committee dated December 8 1999, p.1.

² Ibid, p.1.

³ Ibid, p.1.

- 3.5 The Committee first considered the Local Law at a specially convened meeting on Thursday, December 9 1999. The meeting had to be convened because the Committee had not previously been able to scrutinise the Local Law in any detail. This was due to the City of Kalgoorlie Boulder failing to provide an explanatory memorandum as soon as the Local Law was gazetted in accordance with the requirement of Premier's Ministerial Circular 9/96.
- 3.6 At its meeting, the Committee resolved to move a "protective" motion for disallowance of the Local Law. Notice of motion for disallowance was given in the Legislative Council on December 9 1999. The motion moved *pro forma* on December 16 1999.⁴

4 THE COMMITTEE'S CONCERNS

- 4.1 The Committee's concerns with the Local Law are that:
 - the provisions in the Local Law for the licensing of plumbers are anti-competitive and inconsistent with national competition policy under the *Competition Principles Agreement*;
 - when the *Water Services Coordination Amendment Act 1999* ("Amendment Act") is proclaimed, the licensing provisions of the Local Law will be void to the extent that they are inconsistent with provisions for the licensing and control of plumbers under the Amendment Act which will establish the Plumbers' Licensing Board;
 - the provisions in the Local Law authorising entry by an Officer or other person authorised by the City onto private property "at all reasonable times" and "with or without notice" go beyond the powers of entry permitted by the *Local Government Act* 1995 under which these powers of entry are purportedly exercised; and
 - the Local Law has not been made under the powers to regulate sewerage and drainage provided for under section 342 of the *Health Act 1911*. This section permits a local government to make local laws in accordance with Subdivision 2 of Division 2 of Part 3 of the *Local Government Act 1995* for the purposes specified in the *Health Act 1911* or generally for carrying into effect the provisions of that Act.

Legislative Council Notice Paper No 36; Tuesday, December 14 1999.

CONFLICT WITH THE COMPETITIONS PRINCIPLES AGREEMENT

- 4.2 The Committee considered the Local Law in detail at its meeting on December 21 1999. During this meeting the Committee identified several concerns with the licensing and permits provisions applying to plumbers in clause 30 of the Local Law. These concerns were communicated to the City of Kalgoorlie-Boulder by letter dated December 21 1999 attached as "Annexure B".
- 4.3 One of the matters dealt with in that correspondence was the anti-competitive nature of Clause 30 of the Local Law. This clause prohibits a person from carrying out sanitary plumbing or drainage plumbing unless that person is a "licensed plumber". A licensed plumber is defined in clause 1 of the Local Law as a person holding both a current licence issued by the City of Kalgoorlie-Boulder under the Local Law and the appropriate A or C class licence issued by the Water Corporation. A person who is being supervised by a licensed plumber is also permitted to perform sanitary and drainage work.
- 4.4 Under section 146(24) of the *Metropolitan Water Supply, Sewerage, and Drainage Act 1909* the Water Corporation has the power to make by-laws:
 - "(24) Regulating the examination and licensing of persons to perform work in connection with meters, pipes, sewers, drains, property sewers, fixtures, and fittings, the cancelling of such licences, and prohibiting any other than licensed persons from fixing, altering, or repairing meters, pipes, sewers, drains, property sewers, fixtures, or fittings connected with the works of the Corporation."
- 4.5 The annual cost of a licence issued by the City is \$160. The annual cost of an A or C class licence issued by the Water Corporation is \$108.80. The Committee is concerned not only with the cost of the licence issued by the City but also questions the need for the City to license plumbers. Plumbers issued with an A or C class licence by the Water Corporation are already qualified and "licensed" to perform sanitary or drainage plumbing, albeit in respect to "works of the Corporation".
- 4.6 In the Committee's opinion, the requirement of the Local Law that a plumber licensed by the Water Corporation also obtain a further licence issued by the City appears to be unnecessary, anti-competitive and imposes an additional financial burden on plumbers who are already licensed by another body to carry out this type of work. The Committee's view is that the requirement for a licence in addition to that already issued by the Water Corporation is contrary to national competition policy under the *Competition Principles Agreement* and unduly trespasses on established rights of properly qualified and licensed plumbers to pursue their trade in the district.

- 4.7 The Competition Principles Agreement ("CPA") arose out of the National Competition Policy: Report of the Independent Committee of Inquiry, known as the Hilmer Report. Local governments are subject to the requirements of the CPA under clause 7. Under clause 5 of the CPA, the guiding principle when enacting legislation, including subordinate legislation, is that it should not restrict competition unless it can be demonstrated that the benefits of the restriction to the community as a whole outweigh the costs and that the objectives of the legislation can only be achieved by restricting competition.⁵
- 4.8 There is no doubt that the requirement of licensing of plumbers already licensed by another body is fundamentally anti-competitive in that the local law restricts the number of persons who can provide the service. The decision as to whether or not to issue a licence is entirely in the hands of the City and may thereby restrict competition and inhibit lower costs. The cost of the City's licensing regime has the capacity to be passed onto the consumer in the form of higher costs for plumbing services.
- 4.9 There appears to be no additional public benefit arising from the City's separate licensing scheme given the requirement of the Local Law that a plumber must also have an A or C class licence issued by the Water Corporation as a pre-requisite for the issue of a licence by the City. The Committee understands that a notice of intention to commence sanitary work is required to be submitted to the City by an owner or occupier prior to any work being carried out on the City's sewerage scheme. Such a form is in practice submitted by the plumber and could include a requirement that the plumber provide his or her Water Corporation licence number and any other necessary information, for example to confirm identity. The City could check these details with the Water Corporation to confirm that the licence is current. This would ensure only properly qualified plumbers are undertaking the work.
- 4.10 In these circumstances, the objective of the licensing regime to ensure that only properly qualified plumbers work on the City's sewerage infrastructure is achieved but without restricting competition by the added requirements and cost of the City's licensing regime.

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⁵ Clause 5(1) of the CPA provide guidance on this "public benefit" test as follows:

⁵⁽¹⁾ The guiding principle is that legislation (including Acts, enactments, Ordinances or regulations) should not restrict competition unless it can be demonstrated that:

⁽a) the benefits of the restriction to the community as a whole outweigh the costs; and

⁽b) the objectives of the legislation can only be achieved by restricting competition.

⁶ See clause 5 of the Local Law.

FUTURE INCONSISTENCY WITH THE WATER SERVICES COORDINATION AMENDMENT ACT 1999

- 4.11 There is a potential for conflict between the licensing provisions for plumbers in clause 30 of the Local Law and the enactment of the *Water Services Coordination Amendment Act 1999* ("Amendment Act"). If the conflict transpires, the licensing scheme under the Local Law will be rendered inoperative. This matter is also dealt with in "Annexure B".
- 4.12 The Amendment Act was assented to on November 9 1999 but has yet to be proclaimed. Section 7 of the Amendment Act amends *the Water Services Coordination Act 1995* by inserting Part 5A. This Part establishes a Board for the licensing of plumbers throughout the State and provides for the Board's powers and functions. The Amendment Act is part of the reforms taking place in the water industry whereby regulatory functions are being separated from service/supply functions.
- 4.13 The Office of Water Regulation has indicated that the Amendment Act is likely to be proclaimed on July 1 2000 at which time the Plumbers' Licensing Board will become operational. If the Amendment Act becomes law and is intended to "cover the field" with respect to the licensing of plumbers in Western Australia, any licensing regime inconsistent with the scheme introduced by the Amendment Regulations will be inoperative to the extent of any such inconsistency.
- 4.14 The licensing regime set up by the Local Law will be inoperative to the extent that it conflicts with the scheme imposed by the Amendment Act. This results from the operation of section 3.7 of the *Local Government Act 1995* which provides:
 - "A local law made under this Act is inoperative to the extent that it is inconsistent with this Act or any other written law."
- 4.15 The same result would occur in the absence of section 3.7 as a result of the application of decided caselaw of the High Court of Australia in *Stevens v Perrett* (1935) 53 CLR 449 and *Clyde Engineering Co Ltd v Cowburn* (1926) 37 CLR 466. In the latter case dealing with inconsistency between State and Commonwealth laws made pursuant to concurrent powers, Isaacs J set out the primary test of determining inconsistency as follows:
 - If ... a competent legislature expressly or impliedly evinces its intention to cover the whole field, that is a conclusive test of inconsistency where another legislature assumes to enter to any extent upon the same field."⁷

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⁷ Clyde Engineering Co Ltd v Cowburn (1926) 37 CLR 466 at 489.

- 4.16 The test has been applied to inconsistency between subsidiary legislation and an Act.⁸ In cases where subsidiary legislation and primary legislation deal with the same subject matter, the subsidiary legislation will be inoperative to the extent that it impairs, alters or detracts from the operation of the Act.⁹
- 4.17 It is the Committee's view that the licensing scheme created by the Local Law will be rendered inoperative once the Amendment Act is proclaimed.
- 4.18 The Committee acknowledges that there is currently no conflict between section 7 of the Amendment Act and the licensing of plumbers under the Local Law. This is because the Amendment Act has not been proclaimed and is not yet part of the operative laws of Western Australia. There are therefore no grounds for the Committee to recommend disallowance of the Local Law on this point. However, the Committee wishes to bring this potential conflict to the attention of the Parliament.

POWERS OF ENTRY EXCEED THOSE PROVIDED UNDER THE LOCAL GOVERNMENT ACT 1995

- 4.19 The powers of entry are contained in sub-clause 31.5 of the Local Law which state:
 - "31.5.1 An Officer or other person authorized by the City may at all reasonable times enter any property connected, or in the 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 the Inspector or other authorised Officer may, at his discretion, at any reasonable hour, with or without notice, enter any land, house, or premises for he 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."
- 4.20 The powers of persons authorised by local governments to enter private property without consent appear to be limited under the *Local Government Act 1995*. Under section 3.27(1), a "... local government may, in performing its general function, do any of the things prescribed in Schedule 3.2 even though the land on which it is done is not local government property and the local government does not have consent to

Re City Area Leases Ordinance 1936 and Axiom Pty Ltd (1986) 66 ACTR 1.

⁹ Victoria v the Commonwealth (1937) 58 CLR 618 per Dixon J at 630.

do it." Item 1 of Schedule 3.2 appears to permit the local government to carry out works for the drainage of land. None of the other matters dealt with in Schedule 3.2 deal with sewerage or drainage.

- 4.21 Subdivision 3 of Division 3 of Part 3 of the *Local Government Act 1995* is headed "Powers of entry". The Subdivision sets out the general provisions for entry onto property to enable a local government to perform a function it has *under the Act* if entry is required for the performance of the function or in any other case in which entry is authorised by the Act. The Subdivision states that it does not apply to an entry that is authorised by the Act under a local law.
- 4.22 The only additional powers of entry onto private property without consent are where a warrant is issued under section 3.33 or in an emergency under section 3.34 of the Act. Section 3.31(1) of the *Local Government Act 1995* sets out the general procedure for entering property and provides that:

"Except in an emergency or if the entry is authorized by the warrant of a justice, entry by or on behalf of a local government on to any land, premises or thing is not lawful unless --

- (a) the consent of the owner or occupier has been obtained; or
- (b) notice has been given under section 3.32."
- 4.23 The Committee is of the view that a notice given under section 3.32 must be read with the powers of entry in section 3.27 so that the notice of entry must be in relation to those matters prescribed in Schedule 3.2 of the *Local Government Act 1995*. This would appear to permit the City to perform drainage works on land without the consent of the owner or occupier in the event that the City complies with the notice requirements of section 3.32 of the *Local Government Act 1995*. Section 3.32 requires that a "... notice of intended entry is to specify the purpose for which the entry is required" and "is to be given not less than 24 hours before the power of entry is exercised."
- 4.24 Except in an emergency the *Local Government Act 1995* does not appear to authorise entry onto private property without a warrant to "examine whether the drains, property sewers and other fittings in such property are in proper order". Neither does it permit entry onto private property to ascertain "whether any act or thing is being done or permitted within such property in breach of these Local Laws ...".

Drainage is a term associated with the defence of land and buildings against water, draining or diverting water from land and the management of the level of water in a watercourse. See *Land Drainage Act 1925*.

- 4.25 Clear and unambiguous words are required in a statute to alter the common law position protecting the sanctity of private property from interference by the State or entry by other persons. The common law went to great lengths to protect these property rights through the writ of trespass. Entry onto private property without the consent of the owner and which is not excused by the law is a trespass, *Plenty v Dillon* (1991) 171 CLR 635.
- 4.26 Section 3.1(3) of the *Local Government Act 1995* provides that a liberal approach is to be taken to the construction of the scope of the general function of a local government. However, the Committee's view is that in the absence of clear legislative intent, this "liberal approach" does not extend to grant a general power of entry onto private property without warrant other than in the limited circumstances permitted by the *Local Government Act 1995*.
- 4.27 The Committee's opinion is that to the extent that sub-clauses 31.5.1 and 31.5.2 authorise entry onto private property without warrant, or not in compliance with the notice procedure and limited powers of entry set out in the *Local Government Act* 1995 they are *ultra vires* that Act.
- 4.28 The Committee notes that without considerable powers of entry onto private premises, the objects of the Local Law are likely to be frustrated. The Committee considers it regrettable that the Local Law has not been made under the considerable powers contained in the *Health Act 1911*. In these circumstances, the absence of authority to enter onto private property would not have arisen due to the broad powers of entry contained in section 349 of that Act. This section states:
 - "349. (1) The Commissioner, the Executive Director, Personal Health, the Executive Director, Public Health and all public health officials, and the local government and its officers, shall have power to enter from time to time into and upon any house or premises, for the purpose of examining as to the existence of any nuisance or whether any of the provisions of this Act are being contravened, or of executing any work or making any inspection authorized to be executed or made under the provisions of this Act or any regulation, order, or local law, and generally for the purpose of enforcing the provisions of this Act or any regulation, order, or local law, at any time between the hours of 7.00 a.m. and 6.00 p.m. of any day, or in the case of a nuisance or contravention arising in respect of any business, then at any hour when such business is in progress or is usually carried on.
 - (2) Any person who wilfully and unreasonably refuses to admit any such

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See Entick v Carrington (1765) 19 St Tr 1029, per Lord Camden L C J at p.1066; Southam v Smout (1964) 1 QB 308, per Lord Denning M R at p.320 and Halliday v Nevill (1964) 155 CLR 1, per Brennan J at p.10.

officer to any house or premises commits an offence.

(3) For the purpose of making any entry or doing anything authorized under this section, it shall be lawful to employ all such assistance as may be deemed necessary, and (whenever deemed necessary) to use force whether by breaking open doors or otherwise, and to search all parts of any house or premises entered, using such assistance and force as may be deemed necessary for the purpose."

FAILURE TO MAKE THE LOCAL LAW UNDER THE HEADS OF POWER CONTAINED IN THE $\it HealthAct 1911$

- 4.29 The Local Law has been made under the powers conferred by the *Local Government Act 1995*. No other empowering Act appears to be mentioned as the basis for exercising the functions and powers under the Local Law.
- 4.30 Considerable powers to make local laws for the regulation of sewerage and drainage schemes are contained in the *Health Act 1911*. Part IV of the Act entitled "Sanitary Provisions" provides for the regulation of sewerage and drainage schemes by local governments, including connection of premises to drains and sewers, disposal of sewage and requirements for sanitary conveniences.
- 4.31 Section 342 of the *Health Act 1911* permits a local government to make local laws in accordance with Subdivision 2 of Division 2 of Part 3 of the *Local Government Act 1995* for the purposes specified in the *Health Act 1911* or generally for carrying into effect the provisions of that Act. The section requires that the local government not only follow the procedure set out in the *Local Government Act 1995* for making local laws but to also obtain the consent of the Executive Director, Public Health before making local laws. The Committee understands that the Executive Director, Public Health, has given no such consent in respect to the Local Law.
- 4.32 If an instrument recites the power under which it purports to be made, the general position is that a court will not consider whether a section of the same or another Act will empower the making of the instrument.¹² This is particularly the case in circumstances where the procedure for making the instrument differ between the empowering provisions of different Acts. The Committee notes that the procedure for making the Local Law under the *Health Act 1911* has not been followed.
- 4.33 The City of Kalgoorlie-Boulder cannot rely upon a head of power contained in the *Health Act 1911* to enter private property or to perform any other function or power

Melbourne Corporation v Barry (1922) 31 CLR 174. See also Abbott v Shire of Heidenberg [1926] VLR 199

- under that Act. This is because its Local Law has been expressly made under the heads of power contained in the *Local Government Act 1995*.
- 4.34 The consequences are a Local Law in which the purported powers of entry are *ultra* vires the Local Government Act 1995. If the Local Law did comply with the restrictions in that Act, the City would not be able to inspect sewerage and plumbing connections on private property where the owner or occupier refuses entry unless it was an emergency or the local government obtained a warrant.
- 4.35 Further problems arise in the Local Law as a result of it being made under the *Local Government Act 1995*. An example is the delegations of authority under clause 32 of the Local Law. This clause delegates powers of the local government under the Local Law to the Chief Executive Officer. The delegation appears to have been made under section 5.42 of the *Local Government Act 1995*.
- 4.36 The Committee is of the view that the delegation of power should be under section 26 of the *Health Act 1911* which states:

"Powers of local government

26. Every local government is hereby authorized and directed to carry out within its district the provisions of this Act and the regulations, local laws, and orders made thereunder: Provided that a local government may appoint and authorize any person to be its deputy, and in that capacity to exercise and discharge all or any of the powers and functions of the local government for such time and subject to such conditions and limitations (if any) as the local government shall see fit from time to time to prescribe, but so that such appointment shall not affect the exercise or discharge by the local government itself of any power or function."

5 THE VIEWS OF THE LOCAL GOVERNMENT CONSULTANT

- As a result of the initial concerns raised by the Committee in relation to the licensing and permits provisions of the Local Law, the City of Kalgoorlie-Boulder engaged the services of Local Government Consultant, Mr Ted Chown. Mr Chown is the Coordinator of the Local Laws Service of the Western Australian Municipal Association. The Association is the representative body for local governments in this State.
- 5.2 Mr Chown undertook a comprehensive review of the Local Law including consultation with the Department of Local Government and the Office of Water Regulation. Mr Chown provided his opinion to the City by memorandum dated

January 21 2000. The Memorandum was provided to the Committee under the cover of a letter dated February 11 2000 from the Chief Executive Officer of the City, Mr P.A. Rob. Mr Rob's letter and Mr Chown's memorandum are attached as "Annexure C" and "Annexure D" respectively.

5.3 In his memorandum, Mr Chown advised the City:

"In summary therefore the Local Law gazetted by you on 27 October 1999 would appear to be ill-conceived and the best course might be to repeal it, see what comes out of the "wash" with the restructuring which is taking place and in the meantime, rely on the powers contained in the Health Act 1911 for the effective administration of your sewerage scheme." ¹³

- 5.4 Mr Rob advised the Committee in his letter dated February 11 2000 that Officers of the City would be recommending to Council that the Local Law be repealed. As the repeal of the Local Law may otherwise leave the City without effective regulation of its sewerage and drainage scheme, Mr Rob indicated that upon revocation, the Council would be adopting a policy by resolution. It was proposed that this policy would apply the relevant Australian Standard AS 3500 and provisions of the *Metropolitan Sewerage and Drainage By-laws 1981* to the City's drainage and sewerage scheme. The City proposed to do this under section 77 of the *Health Act 1911* which states:
 - "77. A person who constructs or alters any drain or fitting connected with a sewer --
 - (a) without having given not less than one weeks written notice to the local government of his intention to do so; or
 - (b) otherwise than in accordance with --
 - (i) the conditions laid down in the local laws of the local government; and
 - (ii) such plans and in such manner as the local government directs, commits an offence."
- 5.5 The Committee considered the City's letter and Mr Chown's memorandum at its meeting on February 28 2000. Due to the numerous defects in the Local Law the Committee was and remains of the view that the *Local Government Act 1995* is not the appropriate Act under which to enact a local law to regulate sewerage and drainage schemes. In the Committee's opinion, the regulation of sewerage and

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Memorandum by Mr E. L. Chown, Local Government Consultant to the City of Kalgoorlie-Boulder, dated January 21 2000, p.3.

drainage schemes should be a matter dealt with by local laws made pursuant to the heads of power contained in the *Health Act 1911*.

5.6 The Committee is also of the view that the adoption by a resolution of a local government of regulations with legislative effect is inappropriate. Such a practice would by-pass the procedure for making local laws under Part 3, Division 2, Subdivision 2 of the *Local Government Act 1995*, which requires a level of consultation and advertising. More importantly, it would also by-pass parliamentary scrutiny and may also be void for non-compliance with sections 41(1) and 42(1) of the *Interpretation Act 1984*. ¹⁴

6 THE REQUEST BY THE CITY OF KALGOORLIE-BOULDER TO HAVE THE LOCAL LAW DISALLOWED

- At its meeting on February 28 2000, the Committee directed its Advisory Officer to write to the City requesting that it either confirm that the Local Law had been repealed or to give a written undertaking that this would be done. This was to enable the Committee to consider its position in relation to its motion for disallowance. The Committee's motion for disallowance was due to be put to a vote on April 5 2000. A copy of the Advisory Officer's letter dated March 3 2000 is attached as "Annexure E".
- 6.2 The City's Chief Executive Officer responded by facsimile dated March 13 2000 attached as "Annexure F". Mr Rob confirmed that the City had sought advice from the Health Department in relation to operating the sewerage scheme by way of policy resolution. Unfortunately, the advice from the Health Department was that this was not a viable option for the City.
- 6.3 This placed the City in a difficult position. If it were to repeal the Local Law it would have to have in place some other regulation of its sewerage and drainage scheme. Clause 2 of the Local Law had revoked the application of the former regulations¹⁵ "[o]n the coming into force of these Local Laws ... except to the extent set out in these Local Laws." The advice from the Health Department was that regulating by policy resolution was not viable. There was insufficient time to enact local laws under the *Health Act 1911* before the Committee's motion was to be put to a vote in the Legislative Council on April 5 2000.

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Section 41(1) of the *Interpretation Act 1984* requires that where a written law confers a power to make subsidiary legislation, it *shall* be published in the *Gazette*. Section 42(1) requires that all regulations *shall* be laid before each House of Parliament within 6 sitting days next following publication of the regulations in the *Gazette*. Regulations are defined by section 42(8) as including "rules, local laws and by-laws".

Health Act (Local Authorities' Sewerage and Undertakings) Model By-laws 1971 and the Country Towns Sewerage By-laws 1952.

- 6.4 The City was left with two choices. Firstly, it could repeal the Local Law prior to April 5 2000. If the effect of clause 2 of the Local Law was to repeal the former regulations, the Committee was concerned that the repeal of the Local Law would result in a period in which there would be no regulation of the City's sewerage scheme. This was because the former regulations would not be automatically revived by the repeal of the Local Law and it would take some time for the City to make a new local law incorporating the heads of power contained in the *Health Act 1911*. ¹⁶
- 6.5 The City's second choice was to have the Local Law disallowed by the Legislative Council and obtain the benefit of section 42(6) of the *Interpretation Act 1984*. This section revives the operation of regulations that have been amended or repealed by the disallowed instrument or an instrument which has not been tabled within six sitting days of gazettal pursuant to section 42(1). Section 42(6) states:
 - "42(6) Notwithstanding section 37 (1), where --
 - (a) regulations are disallowed under this section or are not laid before both Houses of Parliament in accordance with subsection (1); and
 - (b) those regulations amended or repealed regulations that were in operation immediately before the first-mentioned regulations came into operation, the disallowance or failure to comply with subsection (1) revives the previous regulations on and after the day of the disallowance or, in the case of failure to comply with subsection (1), on and after the day next following the last day for compliance with subsection (1)."
- 6.6 The City has requested that its Local Law be disallowed so as to ensure there is regulation of its sewerage scheme. This is likely to be a short-term measure as the Office of Water Regulation has advised the City that all water and sewerage providers will be governed by regulations made under the *Water Services Coordination Act* 1995 from July 1 2000.

7 CONCLUSION

- 7.1 The Committee recommends disallowance of the Local Law on the grounds that:
 - the provisions in the Local Law for the licensing of plumbers are anti-competitive and inconsistent with national competition policy under the *Competition Principles Agreement*;

If the effect of clause 2 of the Local Law is to repeal the operation of the previous regulations, section 34 of the *Interpretation Act 1984* provides that the repeal of a repealing enactment "... does not revive any enactment previously repealed unless words are added reviving it."

- the provisions in the Local Law authorising entry by an Officer or other person authorised by the City onto private property "at all reasonable times" and "with or without notice" go beyond the powers of entry permitted by the *Local Government Act 1995* under which these powers of entry are purportedly exercised;
- the Local Law has not been made under the heads of power to regulate sewerage and drainage provided for under section 342 of the *Health Act 1911*. This section permits a local government to make local laws in accordance with Subdivision 2 of Division 2 of Part 3 of the *Local Government Act 1995* for the purposes specified in the *Health Act 1911* generally for carrying into effect the provisions of that Act; and
- the City of Kalgoorlie-Boulder has requested that the Local Law be disallowed to obtain the benefit of section 42(6) of the *Interpretation Act 1984*. This will displace any doubt that its previous regulatory regime under the *Health Act (Local Authorities Sewerage and Undertakings) Model By-laws 1971* and the *Country Towns Sewerage By-laws 1952* has been revived upon disallowance of the Local Law.
- 7.2 The Committee also draws to the attention of Parliament its view that when the *Water Services Coordination Amendment Act 1999* is proclaimed, the licensing provisions of the Local Law will be void to the extent that they are inconsistent with the provisions of the Amendment Act.

Hon Bob Wiese MLA

1 L. Wi

Chairman

April 4 2000

ANNEXURE A



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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

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
- 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.

Consection 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.

 $\textbf{D.E.P.} \ means \ Department \ of \ Environmental \ Protection$

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. **Disconnector 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 cover, used as access in property sewers.

Inspector means any person appointed by the City or the Cheif 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

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.

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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.

 \boldsymbol{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.

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

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.

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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.
 - 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.
 - 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.
 - All books and documents made evidence under any of the said By-laws shall continue evidence
 - (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
- 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

S.o renaity 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 and 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

5.1.1 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

- 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

- $9.1.1\,\mathrm{Any}$ 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.
- of the second of the with 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
- 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.

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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 basis 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.

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.

- (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;
 - $(ii) \ \ as \ waste \ fittings, \ with \ integral \ water-seal, \ collecting \ and \ transmitting \ waste \ discharges;$
 - $\ensuremath{\text{(iii)}}$ 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.

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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 Disconnector 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.
 - 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—
 - (i) 80 mm where fixtures are connected to the riser; or
 - (ii) 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	Minimum Height of Floor-waste Gully Ris (water-seal to floor level)	
Floor-waste Gully	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

140	Table 18.2—312c of 1 1001 Waste Guily 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 Autoclaves

Sterilizers

Glass washing machines Bar sinks Overflow pipes from Baths Hot water services Bain Maries Refrigerated cabinets Cleaners sinks Shower Shower baths

Clothes washing machines (note: connect to floor waste gullies at 45 degrees to prevent foaming)

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 - (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 that the shall be connected to 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 $1.0\ \mathrm{m}$.
- 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 $450~\mathrm{mm}$ 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

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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 sewer:
- (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

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 washtrough 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;
 - 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: (iii)
 - (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 storagetanks 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 slop hoppers, fixture traps (including floor waste gully traps) shall have trap seals of 75mm plus or minus 5 mm.
- (b) Water closet pans and slop hoppers 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;
 - (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

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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.
- 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

Table 21.1 Minimum ordaes of Bischarge	· ·peo
Minimum Grade	
1:40	
1:40	
1:40	
1:40	
	Minimum Grade 1:40 1:40 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
 - (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.
- 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 $\,$
 - (ii) the enlarger is installed immediately above the junction into the group vented branch:
 - (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 $10\ \text{fixtures}$ 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
- Group-vents may connect into branch-vents, relief-vents, stack-vents or extend separately to
- 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.

- 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 $65\,\text{mm}$ or smaller branches to larger stacks is at grade, no fixture shall be connected to such branch within $500\,\text{mm}$ of the stack.
- $22.\overline{3}.1.3$ 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

gher Branch ze—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.

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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, $\frac{1}{2}$
 - (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-Ventmm	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)

- (a) For offsets than 45 degrees from the vertical the relief-vent shall interconnect with the stack below the lowest branch above the offset.
- (b) 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.
- (c) 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.
- (d) 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

- (a) 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.
- (b) 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

- (a) 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.
- (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 fitted with 32 mm P-traps may be installed without trap-vents.
- (c) 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	32 mm P-traps with	2.5	1:40 to 1:25
Item 23.2.3 (b)	40 mm waste pipe 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	50	2.5	1:40 to 1:20
disposal units	50	2.5	1:20 to 1:10
Laundry Troughs	40 and 50	2.5	1:40 to 1:20
Showers	40 and 50	2.5	1:40 to 1:20
Urinals	50 and 65	2.5	1:40 to 1:20
Washing Machines	40 and 50	2.5	1:40 to 1:20
Water-Closet Pans	100 mm soil pipe 80 mm soil pipe and	6	1:50 to 1:20
	only where approved	1.5	1:60 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 $1.0\,\mathrm{m}$ 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;
 - $(ii) \ \ a \ vertical \ dropper \ occurs \ in \ the \ discharge \ pipe \ between \ the \ fixture \ and \ stack \ junction; \ or \ and \ stack \ and \ stack \ junction; \ or \ and \ sta$
 - (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 $600 \ \text{mm}$ 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.

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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

- (a) The size of relief-vents shall comply with Table 23.3 or Table 23.5.
- (b) 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.
- (c) 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

- (a) Cross-vents shall be the same size as the relief-vent.
- (b) Where cross vents are required they shall interconnect with the stack—
 - (i) 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
 - (ii) To the water closet branch Connection to the stack on the floor concerned, and as close as possible to the stack.
- (c) 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.
- (d) 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

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

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.

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24.4 Pipes Liable to Damage

Pipes installed in positions exposed to mechanical damage shall be of cast iron, galvanized steel tube

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
- (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 $10\,\mathrm{m}$ 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

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

Table 24.3—Supports for UPVC Pipes

Pipe Size	Maximum Spacing of Brackets and Clips				
mm	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.
- - (i) Under $100 \ \text{mm}$ 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	1 in	1 in	1 in	1 in	1 in	1 in	l in	1 in	1 in
	150	100	90	80	70	60	50	40	30	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			_	

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		Table 25.2—	Size of Large Pro	perty Sewers		
Nominal Pipe Size mm		Maximur	n Loading (Fixtu	re Units)		
	1	1	1	1	1	
	in	in	in	in	in	
	300	250	200	150	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

Minimum Size of Vent Above Ground—mm	
50	
80	
100	
	Above Ground—mm 50 80

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 $% \left\{ 1,2,\ldots ,n\right\}$
 - (ii) Provided no branch connections are made to the property sewer between the vent and the boundary trap to the property sewer within $10\,\mathrm{m}$ 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—

- ${\rm (a)}$ 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;
 - $\label{eq:continuous} \mbox{(ii)} \ \ \mbox{No bends are installed within the graded and vertical sections of waste pipe;}$
 - (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
 - $\label{eq:continuous} (iv) \ \ The enlarger in the branch property sewer is located in the vertical riser, and fitted directly to the bend in the property sewer.$

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

 \dot{E} xplosives 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 $1\ \text{in}\ 5$ 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)

- (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

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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 $1.2\ \mathrm{m}$ 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 $530~\mathrm{mm}$ 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

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.

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
- (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

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

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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

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

 $Where \ vents \ are \ connected \ to \ vent \ horns \ on \ water-closet \ pans \ and \ slop \ hoppers \ they \ shall \ be \ connected \ depends on \ depends on$

- (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
- (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

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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 2% 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
 - $(i) \ \ the \ processes \ of \ manufacture \ from \ which \ industrial \ wastes \ are \ discharged \ into \ the \ City's$
 - (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
 - (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 $100~\mathrm{mm}$ sewer of the City, a discharge rate of $3~\mathrm{kilolitres}$ 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 approve 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
- (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
- (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
- (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
- 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.

 $28.2.2\,\mathrm{A}$ notice under Local Law $28.2.1\,\mathrm{of}$ this Local Law shall specify a day, not less than $8\,\mathrm{weeks}$ 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

 $28.2.4\ \text{In this Local Law the "City" can mean the former Town of Kalgoorlie, the Shire of Boulder \ and$ 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 guily 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 tap 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 Disconnector Traps-

- (a) Sealed disconnector 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— $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac$

- (a) A fixture or area from which petrol, benzine 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 disconnector 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 disconnector 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— $\frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1}{2}$

- (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
- (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;
- $(i) \quad Radio-active \ substances \ beyond \ the \ safe \ limits \ prescribed \ by \ the \ Radiological \ Council \ of \ Western$ 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
 - $Size \, 3-Large \, supermarket \, butcher \, shops, \, major \, hospital \, kitchens, \, large \, accommodation \, hotel \, kitchens \, small \, food \, manufacturing \, premises.$
- 2 Other applications not covered in 1 (a), $\overline{1}$ (b) and 1 (c) must be discussed with the City.
- 3 Trap dimensions and construction notes

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Size 1	Size 2	Size 3
900	1200	1800
450	600	750
300	450	450
	900 450	900 1200 450 600

- (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
- (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.
 - 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
- $\ensuremath{\mathbf{3}}$ Trap dimensions and construction notes.

(a)

Dimensions mm	Size 1	Size 2	Size 3	
A	900	1200	1800	
В	450	600	750	
С	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 $\frac{1}{2}$ $\frac{1$ 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
- 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	
В	450	600	
С	450	600	

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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

Size 1	Size 2	
1 200	1 800	
450	600	
600	600	
	1 200 450	1 200 1 800 450 600

(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.

${\bf 28.6~Materials}$ 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.

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
 - (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.
- 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. (b)

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.

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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

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 fixting 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

 $\label{lem:continuous} Joints \ between \ galvanized \ steel \ tubing \ and \ lead \ pipes \ shall \ be \ made \ by \ means \ of \ brass \ unions \ screwed \ to \ iron \ and \ wiped \ to \ lead.$

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 by inserting the sleeve in socket thereof and making the joint in the same way as in cast iron by inserting the sleeve in socket thereof and making the joint in the same way as in cast iron pipes.

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.

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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;

 $\textbf{emergency work} \ \text{means work that must he carried out immediately by a Licensed Plumber to} \\$

- (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;

$\pmb{\text{multi-entry plumbing certificate}} \ \text{means a certificate under Local Law 30.9.4B};$ 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.

 $30.9.2.\overline{3}$ The City may refuse to accept for lodgement a notice that does not comply with Local Law $30.9.2.\overline{2}$.

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 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;
- (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.

 $30.9.4\dot{B}.2$ 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 $\frac{1}{2}$

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~conviction~der~convictiothe 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

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

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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 moke test in accordance with Local Law 27.8.2, the moke 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.

 $30.9.6.2\,\mathrm{An}$ 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

 $30.9.10\,\mathrm{An}$ 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
- 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
- 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

 $\stackrel{-}{\text{A register shall be kept at the City's Head Office of all persons authorized under Local Law 30.13.2.}$

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.

GOVERNMENT GAZETTE, WA

[27 October 1999

 $32.1.4\,\mathrm{A}$ 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 $32.1.5\,\mathrm{Nothing}$ 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.

ANNEXURE B



JOINT STANDING COMMITTEE ON DELEGATED LEGISLATION

Our Ref: 3537/7 Your Ref:

Mr P A Rob Chief Executive Officer City of Kalgoorlie-Boulder 577 Hannan Street Kalgoorlie WA 6432

By Facsimile: 9021 6113

Dear Mr Rob

City of Kalgoorlie-Boulder Sewerage and Drainage Local Laws

The Joint Standing Committee on Delegated Legislation ("Committee") considered the *City of Kalgoorlie-Boulder Sewerage and Drainage Local Laws* ("Local Law") in detail at its meeting on Tuesday 21 December 1999.

At that meeting, the Committee resolved to write to you to regarding its concerns with the licensing requirements for plumbers under clause 30 of the Local Law. This provides for the licensing of plumbers by the City to perform sanitary and drainage work. Sub-clause 30.2 prohibits a person form undertaking sanitary plumbing or drainage plumbing unless the person is the holder of either an A or C class licence issued by the Water Corporation *and* a licence issued by the City under sub-clause 30.4 of the Local Law.

A person who is being supervised by a licenced plumber in accordance with sub-clause 30.13 of the Local Law is also permitted to perform sanitary and drainage work. A "licenced plumber" is defined in clause 1 of the Local Law as a person holding both the City issued licence and the appropriate A or C class licence issued by the Water Corporation.

The annual cost of a licence issued by the City is \$160. The Committee understands that the annual cost of an A or C class licence issued by the Water Corporation is \$108.80. The Committee is concerned not only with the cost of the licence issued by the City but with the very need for the City to license plumbers given that plumbers issued with an A or C class licence by

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the Water Corporation are already qualified and "licensed" to perform sanitary or drainage plumbing.

The requirement of the Local Law that a plumber licensed by the Water Corporation, obtain a further licence issued by the City appears to be unnecessary, anti-competitive and imposes an additional financial burden on plumbers who are already licensed by another body to carry out this type of work. The Committee's preliminary view is that the requirement for a licence in addition to that already issued by the Water Corporation may be contrary to national competition policy under the *Competition Principles Agreement* and unduly trespasses on established rights of properly qualified and licensed plumbers to pursue their trade in the district.

Competition Principles Agreement

The Competition Principles Agreement ("CPA") arose out of the National Competition Policy: Report of the Independent Committee of Inquiry, known as the Hilmer Report. Local governments are subject to the requirements of the CPA under clause 7. Under clause 5 of the CPA, the guiding principle when enacting legislation, including subordinate legislation, is that it should not restrict competition unless it can be demonstrated that the benefits of the restriction to the community as a whole outweigh the costs and that the objectives of the legislation can only be achieved by restricting competition.

There is no doubt that the requirement of licensing of plumbers already licensed by another body is fundamentally anti-competitive in that the local law restricts the number of persons who can provide the service. The decision as to whether or not to issue a licence is entirely in the hands of the City and may thereby restrict competition and inhibit lower costs. The cost of the City's licensing regime is also likely to be passed onto the consumer in the form of higher costs for plumbing services.

There appears to be no public benefit arising from the City's separate licensing scheme given the requirement of the Local Law that a plumber must also have an A or C class licence issued by the Water Corporation as a pre-requisite for the issue of a licence from the City. The Committee understands that a notice of intention to commence work is required to be submitted to the City by a plumber prior to any work being carried out on the City's sewerage scheme. Such a form could include a requirement that the plumber provide his or her Water Corporation licence number and any other necessary information, for example to confirm identity. The City could check these details with the Water Corporation to confirm that the licence is current thereby ensuring properly qualified plumbers are undertaking the work.

In these circumstances, the objective of the licensing regime - to ensure that only properly qualified plumbers work on the City's sewerage infrastructure - is achieved but without restricting competition by the added requirements and cost of the City's licensing regime.

Future Inconsistency with Written Laws

An issue which is not yet but may become relevant to the validity of the licensing requirements of the Local Law is the future creation of the Plumbers Registration and Licensing Board. The

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Parliament has passed legislation which clearly indicates its intention to establish a licensing regime for plumbers and to "cover the field" in respect to the licensing and regulation of plumbers in Western Australia.

The Water Services Co-ordination Amendment Act 1999 ("Amendment Act") was assented to on 9 November 1999. Section 7 of the Amendment Act amends the Water Services Co-ordination Act 1995 ("Principal Act") by inserting Part 5A which establishes a board for the licensing of plumbers and provides for the board's functions and powers. The Amendment Act has yet to be proclaimed and is therefore not part of the law of Western Australia. The Office of Water Regulation has indicated that the Amendment Act is likely to be proclaimed on 1 July 2000 at which time the Plumbers' Licensing Board will become operational.

If the Amendment Act is proclaimed and becomes law, any subsidiary legislation found to be inconsistent with a registration and licensing regime intended to "cover the field" of licensing of plumbers in Western Australia will be inoperative to the extent of any inconsistency. This results from the application of section 3.7 of the *Local Government Act 1995*. This specifically provides that a local law made under the *Local Government Act 1995* is "inoperative to the extent that it is inconsistent with this Act *or any other written law.*" [emphasis added].

The outcome would be the same in the absence of section 3.7 as a result of decided case law of the High Court of Australia in *Stevens v Perrett* (1935) 53 CLR 449 and *Clyde Engineering Co Ltd v Cowburn* (1926) 37 CLR 489. In the latter case dealing with inconsistency between State and Commonwealth laws, Isaacs J set out the primary test of determining inconsistency as follows:

"If ... a competent legislature expressly or impliedly evinces an intention to cover the whole field, that is the conclusive test of inconsistency where another legislature assumes to enter to any extent upon the same field."

The test has been applied to inconsistency between subsidiary legislation and an Act. In cases where subsidiary legislation and primary legislation deal with the same subject matter, the subsidiary legislation will be inoperative to the extent that it impairs, alters or detracts from the operation of the Act.

It is the Committee's view that the licensing provisions of the Local Law will be rendered inoperative once the Amendment Act is proclaimed. The Committee acknowledges that at this stage the City's licensing regime is not inoperative by reason of inconsistency as the changes introduced by the *Water Services Co-ordination Amendment Act 1999* are not yet law. However, the licensing regime appears to be anti-competitive and inconsistent with national competition policy under the *Competition Principles Agreement*.

Given the above, the Committee requests that the licensing requirements of the Local Law as they relate to a separate licence issued by the City be deleted from the Local Law. If a suitable written undertaking to this effect is received, the Committee may consider seeking the leave of the Legislative Council to withdraw its disallowance motion. Your reply should include the

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Joint Standing Committee on Delegated Legislation

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proposed re-wording of the clauses of concern. I look forward to receiving your response to the Committee by no later than 4:00pm Friday, January 29 2000.

Should you have any questions regarding the above, please contact the Committee's Advisory/Research Officer, Nigel Pratt on 9222 7406.

Yours sincerely

Hon. Bob Wiese MLA

Chairman

December 21 1999

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ANNEXURE C



City of Kalgoorlie-Boulder

577 HANNAN STREET, KALGOORLIE

OUR REE OUT00/575967 BMK:TAO 00873

YOUR REF. ENQUIRIES TO

Bob Kelly

11th February 2000

The Chairman
Joint Standing Committee
On Delegated Legislation
Legislative Council Committee Office
Parliament House
PERTH WA 6000

Attention:

Mr Nigel Pratt

Your Reference:

3537/7

Dear Mr Pratt

RE: CITY OF KALGOORLIE-BOULDER SEWERAGE AND DRAINAGE LOCAL LAWS

I refer to your correspondence of 21/12/99 in relation to the City of Kalgoorlie-Boulder Sewerage and Drainage Local Laws, and the dialogue between Council's Waste Management Officer, Mr Mike Bolt, and yourself, yesterday 10/02/00.

I also understand that in matters relating to this subject Council's Executive Support Officer, Mr Damien Martin, has been granted an extended period to report back to the Joint Standing Committee, that deadline being 11/02/00.

It has become clear that in preparing a response to the Joint Standing Committee and dialogue between Council's Local Law Consultant, the Health Department of Western Australia and the Office of Water Regulation, the adopted Local Law in question is not consistent with procedural matters of the Health Act. Further there is evidence that the Local Law is to be surpassed by a proposed By-Law/Regulation to be promulgated by the office of Water Regulation.

Council is now placed in a position, in that we need to consider :-

 The revocation of the recently adopted Local Law (City of Kalgoorlie-Boulder Sewerage and Drainage Local Laws).

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- (ii) The adoption, by resolution of Council, to call up by Policy the AS3500 and the Metropolitan Sewerage and Drainage By-Laws (effectively allowing Council to operationally implement those relevant Standards by Policy).
- (iii) The opinion that the repealed By-Laws cannot be reinstated, and nor they should, requires Council to consider the option of compliance by Policy in the interim.

The Policy adoption will be enacted in accordance with Section 77 of the Health Act 1911. Council shall be seeking a firm legal opinion through the Health Department of Western Australia regarding Section 77 of the Act, which states:

- "A person who constructs or alters any drain or fitting connected with a sewer -
- (a) without having given not less than one week's written notice to the local government of his intention to do so; or
- (b) otherwise than in accordance with -
 - the conditions laid down in the local laws of the local government; and
 - (ii) such plans and in such manner as the local government directs.

commits an offence. "

On that basis Officers of Council shall be recommending to Council to repeal the recently adopted Local Law (City of Kalgoorlie-Boulder Sewerage and Drainage Local Laws).

I have enclosed a copy of the Consultant's opinion for your information.

I believe that this will effectively absolve Council of the requirement to provide the Joint Standing Committee advice on matters raised in their correspondence of December 21st 1999.

It is unfortunate that through circumstances prevailing at present, Council has received advice not consistent with that being proposed, and is placed in this unenviable position.

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I trust that this will serve as an explanation on matters relating to your Committees queries, specifically relating to the Licensing of Plumbers, and I hope to expedite all other matters through the appropriate government instrumentalities.

Please address all queries to Mr Mike Bolt, Council's Waste Management Officer.

Yours sincerely

P A ROB

CHIEF EXECUTIVE OFFICER

Encl: Consultant's opinion

ANNEXURE D

TED CHOWN CONSULTING
2 Dericote Way
GREENWOOD WA 6024
Ph: 9448 6969, Fax: 9447 9794
Email: Ted.Chown@eepo.com.au



MEMORANDUM

To:

Damien Martin

Email: Damien Martin@kalbould.wa.gov.au

From:

Ted Chown

Date:

21 January, 2000

Dear Damien

Subject: City of Kalgoorlie-Boulder Sewerage and Drainage Local Laws

On your instructions, we have been endeavouring to find a simple way [or more particularly, an inexpensive way] to salvage something from the City of Kalgoorlie-Boulder Sewerage and Drainage Local Laws published in the Government Gazette on 27 October 1999. Unfortunately we now no longer believe that this is possible.

In reaching this conclusion, we have had phone calls with the Local Government Department and Office of Water Regulation, and visited both the Health Department and Office of Water Regulation for discussions.

The advice of the Local Government Department (Tim Fowler) is that the Local Government Act 1995 is not the appropriate vehicle for a local law of this kind. For a start, the powers of entry to private land and other powers of a local government in regard to what a person may or may not do on his/her private property are intentionally limited so as not to unduly interfere with personal liberties, also heads of power in regard to sewerage schemes exist in other legislation.

While the Department would expectedly allow time for the local law to be rectified before a disallowance were contemplated under section 3.17 of the Local Government Act, it is none-the-less concerned that perceived deficiencies are removed so that others do not follow suit.



We are inclined to the view that the proper vehicle for the making of this local law is the Health Act 1911, but then some of the provisions within your gazetted local law are outside the powers conferred on a local government by that Act, for example –

- clause 3.4, 'Protection of Grounds', contains a number of provisions that really aren't
 health matters and which would more appropriately be matters for the City's draft
 Thoroughfares Local Law.
- the word "forfeit" is used in a number of clauses, eg. 3.6, 7.13 and 7.2 and this term is not defined in the Local Government Act or Health Act, or in your local law for that matter:
- · of course the licensing of plumbers needs to be excised; and
- the delegations provisions under clause 32 are based on the Local Government Act, whereas, if they are to be included at all, they would need to be sourced to the Health Act

The content of the Local Law which you have gazetted seems to have been drawn heavily from the Metropolitan Water Supply Sewerage and Drainage Act and the Metropolitan Water Supply, Sewerage and Drainage By-laws, and have a short life expectancy due to the state of flux created by the severance of the regulatory role from the supply role in water services. Since your local law was prepared, there have already been amendments to the Metropolitan Water Supply Sewerage and Drainage By-laws, which were gazetted on 25 August 1998 and 29 September 1998, and once the Plumbers Licensing Board becomes operative after 1 July 2000, plumbing standards - after due consultation between the Office of Water Regulation and the Water Corporation, City of Kalgoorlie-Boulder and other water and sewerage providers - will be embodied in regulations under the Water Services Co-ordination Act. Mechanisms for controlling the delivery of water and sewerage services will need to be put in place by the Office of Water Regulation and the Metropolitan Water Supply, Sewerage and Drainage By-laws will largely become extinct. The good news is that you won't need to be agonizing over how to update plumbing aspects of your sewerage local laws. At that stage you, and the Water Corporation and other service providers will be operating on a common playing field, but there should be scope for you to negotiate agency or delegated powers for the City to perform functions which are not in conflict with your service provision role.

Anyway, back to your Local Law. Had it been possible to make your Local Law under the Local Government Act 1995, it would have been highly desirable, as an interim measure, to adopt provisions of the Metropolitan Water Supply, Sewerage and Drainage By-laws as amended from time to time in order to catch on-going changes, but section 3.8 of the Local Government Act does not appear to authorize this. In the Interpretation Act 1984 – "rule" means a rule made under the Act in which the term is used, and we doubt that this term is synonymous with "by-laws" or "local laws" under the Local Government Act, buy we may be wrong in this. Presumably though, this is why your solicitors did not adopt provisions of the Metropolitan Water Supply, Sewerage and Drainage By-laws by reference.

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In summary therefore the Local Law gazetted by you on 27 October 1999 would appear to be ill-conceived and the best course might be to repeal it, see what comes out of the "wash" with the restructuring which is taking place and in the meantime, rely on the powers contained in the Health Act 1911 for the effective administration of your sewerage scheme. For example, sections 72 and 73 give sweeping powers to the local government to require compliance with standards, and maybe these could be set by policy resolution as the requirements prescribed by the Metropolitan Water Supply, Sewerage and Drainage By-laws. You might be best to confirm this by legal advice.

In the longer term, introduction of an update local law may be desirable under the Health Act 1911. We understand there are something like 18 local governments in WA operating under the model by-laws "Local Authorities Sewerage Undertakings By-laws" gazetted 10 March 1971 and we have no doubt that these by laws are by now all but obsolete. A full review of these local laws would be expensive and would take time and the WAMA Local Laws WA budget is exhausted for this financial year. We will raise this matter with WAMA's Local Government Act Services Committee for direction as to how to fill this gap in the fiture.

We cannot give a definitive recommendation without undertaking further research, but on the information gathered we believe the best course of action may well be -

- repeal the Local Law gazetted 27 October 1999;
- rely on the Health Act and policy to administer your scheme pro term;
- · adoption of Health Act Local Laws in the fullness of time.

If you would like us to examine the model Local Authorities Sewerage Undertakings Bylaws to see if there is anything in this which positively ought to be reinstated, we would be happy to do this and indeed we would be happy to suggest amendments to your gazettal of 27 October 1999 to satisfy the immediate concerns of the Joint Standing Committee on Delegated Legislation, but we would see this as an attempt to fix something which is conceptually flawed.

Our account for work to date is enclosed. We await your further instructions.

E L CHOWN
Local Government Consultant

TOTAL P.07

Annexure E



JOINT STANDING COMMITTEE ON DELEGATED LEGISLATION

Our Ref: 3537/7 Your Ref: OUT00/575969 BMK: TAO 00873

Mr P A Rob Chief Executive Officer City of Kalgoorlie-Boulder 577 Hannan Street Kalgoorlie WA 6432

By Facsimile: 9021 6113

Dear Mr Rob

City of Kalgoorlie-Boulder Sewerage and Drainage Local Laws

Thank you for your letter dated February 11 2000 regarding the *City of Kalgoorlie-Boulder Sewerage and Drainage Local Laws* ("Local Law"). The Joint Standing Committee on Delegated Legislation ("Committee") considered your correspondence at its meeting on Monday, February 28 2000.

You indicated in your letter that Council officers would be recommending that the Local Laws be repealed. The Committee requests that you advise as soon as possible when the Local Laws will be repealed so the Committee can determine whether it will be necessary to seek the leave of the Legislative Council to remove its motion for disallowance of the Local Laws. Under the Standing Orders of the Legislative Council, the motion for disallowance must be put to a vote within 10 sitting days from the date the motion is moved. The Committee's motion must be dealt with on or before April 5 2000.

If confirmation that the Local Laws have been repealed or alternatively a written undertaking from Council that the Local Law will be repealed is not received prior to this date, the Committee will have no choice but to proceed with recommending to the House that the Local Laws be disallowed.

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PARLIAMENT HOUSE PERTH WA 6000 TELEPHONE +61 8 9222 7222 FACSIMILE +61 8 9222 7809 E-MAIL (GENERAL OFFICE): council@parliament.wa.gov.au

Joint Standing Committee on Delegated Legislation

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The written undertaking by Council should include confirmation that the Local Laws will not be relied upon in the interim. The Committee requests that respond by no later than 5:00pm, Friday, March 10 2000 to enable the Committee to deal with the matter at its next meeting.

Should you have any questions regarding the above please telephone me on 9222 7406.

Yours sincerely

Nigel Pratt Advisory Officer

March 3 2000

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Annexure F



FAXED

City of Kalgoorlie-Boulder

577 HANNAN STREET, KALGOORLIE

OUR REF OUT00/992528 MB:TAO 00873;00781

YOUR REF

ENQUIRIES Mike Bolt

13th March 2000

The Chairman
Joint Standing Committee
On Delegated Legislation
Legislative Council Committee Office
Parliament House
PERTH WA 6000

Attention: Mr Nigel Pratt

Your Reference: 3537/7

Dear Mr Pratt

RE: CITY OF KALGOORLIE-BOULDER SEWERAGE AND DRAINAGE LOCAL LAWS

I refer to your correspondence of 3rd March 2000, in relation to the City of Kalgoorlie-Boulder Sewerage and Drainage Local Laws, and the dialogue between Council officers, Mal Osborne, Bob Kelly, Mike Bolt and yourself, on Thursday 9th March 2000.

Correspondence received on 3rd March 2000, from the Joint Standing Committee on Delegated Legislation, requests that Council provide the committee with written confirmation that the City of Kalgoorlie-Boulder Sewerage and Drainage Local Laws will be, or have been repealed.

Council sought advice from the Health Department of Western Australia in relation to alternatively operating the sewerage scheme by Council policy under Section 77 of the Health Act 1911. On 9th March, 2000 Council received a written response from the Health Department indicating that in their opinion the aforementioned is not a viable option for Council. This determination now places Council in its initial position.

The concerns of the Joint Standing Committee on Delegated Legislation was the requirement of plumbers to be independently licensed to operate on the City of Kalgoorlie-Boulder's sewerage scheme, and subsequently a disallowance motion was to be placed before Parliament.

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The concerns of the Joint Standing Committee on Delegated Legislation was the requirement of plumbers to be independently licensed to operate on the City of Kalgoorlie-Boulder's sewerage scheme, and subsequently a disallowance motion was to be placed before Parliament.

However, as you are aware Council, also received advice from an independent consultant (Ted Chown) that there are other sections of the Local Laws relating to the power of entry that are not within Council's authority under Local Government Act 1995.

As discussed with you Council now finds itself in a gridlock in terms of having no alternative form of legislation to operate and administer Council's reticulated sewerage scheme should the Local Law be repealed.

It is my understanding that should Council not repeal the City of Kalgoorlie-Boulder Sewerage and Drainage Local Law, then the Joint Standing Committee on Delegated Legislation would recommend that they be disallowed.

If the Local Laws are disallowed, then it is also my understanding that under the Interpretation Act, the previously revoked Health Act (Local Authorities' Sewerage Undertakings) Model By-Laws would be reinstated and then would become the means of Council administering its sewerage scheme.

In the current climate, this would be the best available option for Council, as it has been confirmed that all water and sewerage providers will be embodied in regulations under the Water Services Co-ordination Act from 1 July 2000.

Having considered all of the aforementioned, I therefore advise you that it would be in the best interests of Council not to repeal the City of Kalgoorlie-Boulder Sewerage and Drainage Local Laws and allow the process of the Joint Standing Committee on Delegated Legislation to take its course.

Please refer any comment or clarification of the above to Council's Manager Compliance Health and Education, Mr Bob Kelly, on telephone 9021 9681.

Yours sincerely

P A ROB

CHIEF EXECUTIVE OFFICER