

[1779]



# VICTORIA GOVERNMENT GAZETTE

Published by Authority

[Registered at the General Post Office, Melbourne, for transmission by post as a newspaper.]

No. 48]

TUESDAY, JUNE 17

[1969

## YALLOURN NORTH SEWERAGE AUTHORITY.

BY-LAW NO. 1.—RELATING TO CONSENTS, LICENCES, FEES, TRADE WASTE AND OTHER MATTERS NOT INCLUDED IN THE UNIFORM BUILDING REGULATIONS RELATING TO HOUSE CONNECTION WORK.

THE Yallourn North Sewerage Authority pursuant to and in exercise of the powers and authorities conferred upon it by the Sewerage Districts Acts and of any and every other power and authority in any wise enabling it in that behalf doth hereby make and prescribe the following By-law (that is to say):—

### DEFINITIONS.

Section 1.—In the construction and interpretation of this By-law unless inconsistent with the context or subject matter—

“Acts” means the *Sewerage Districts Act 1958* and any amendment thereof, and any Act incorporated therein, or amendment of such Acts.

“Authority” means the Yallourn North Sewerage Authority within the meaning of the *Sewerage Districts Act 1958*.

“Combined Drain” means a drain which serves two or more properties.

“Drainer” means any person holding a drainer's licence issued by the Authority.

“Engineer” means the Engineer of the Authority, and shall also include any officer or person appointed by the Authority for the purpose of discharging the duties or exercising the powers of the Engineer.

“Plumber” means any person holding a plumber's licence issued by the Authority.

“Regulations” includes the appropriate clauses relating to house connection work of the *Uniform Building Regulations, 1961* with any amendments thereof made under the *Local Government Act 1958* with any amendment thereof.

## INTERPRETATION.

In the construction of this By-law the meaning which, in the Acts or the Regulations, is assigned to any word shall be the meaning of the same word where occurring in this By-law, unless inconsistent with the subject matter or context.

“Trade Waste” means the liquid refuse from any business, trade or manufacturing property, other than domestic sewerage, stormwater, or unpolluted water.

### PART I.—GENERAL.

#### DIVISION 1.—APPLICATION FOR CONSENTS, ETC.

Section 2.—Applications for the Authority's consent to connect with the sewerage system or to do plumbing and drainage work connected therewith, must be made in writing by the owner of the property to be so connected or by his authorised agent.

Section 3.—Such application shall give the precise location of the property, the name of the owner, and the name of the person employed to do the work, and shall be in the form prescribed by the Authority. For any wilful misrepresentation in such application the owner or authorised agent as aforesaid shall be guilty of an offence against the By-laws. No consent given by the Authority shall be deemed to authorise anything not stated in the application nor to confer or grant the right to lay a drain through any land intervening between the sewer of the Authority and the land proposed to be connected, and every owner or agent applying for the Authority's consent shall satisfy himself as to his legal right to drain through such intervening land, and he shall be solely responsible for any trespass or damage thereon or thereto.

Section 4.—Consents to make connections with the sewerage system will be issued only when the plumbing and draining in the property to be connected is planned to be made in accordance with the rules for plumbing and draining as prescribed in the Regulations and this By-law and after such plan has been inspected and approved of by the proper officer appointed by the Authority for the purpose, or, in the case of new buildings, when a proper plan of the plumbing and of the drainage of the building

into the branch of which the Authority shall have fixed the position, has been approved of in writing by the Authority. All connections with drains or sewers and all plumbing and drainage connections therewith shall be made under the direction of the proper officer of the Authority.

**Section 5.**—No person shall be engaged or employed as a workman in the actual performance of any plumbing or drainage work unless he is the holder of a licence issued by the Authority authorising him to do such work. Any person who shall at any time or at any place make up, form, affix, alter, or repair, any fitting, pipe, bend, trap, or other thing connected or intended to be connected with the sewerage system, unless he be the holder of a licence from the Authority authorising him to do such work, shall be liable to a penalty not exceeding forty dollars.

**Section 6.**—If any person, whether he is or is not the holder of a licence from the Authority, alters, removes, or in any way interferes with any drain, fitting, pipe, bend, trap, or other thing, which drain, fitting, pipe, bend, trap or other thing is connected with the sewerage system, he shall, unless he has previously received consent, in accordance with the provisions of this Division for the execution of such work, and such consent is in full force and effect, be guilty of a breach of the By-laws and/or Regulations shall be liable to a penalty of not more than forty dollars.

**Section 7.**—Where the sanction, permission, authority, consent, approval, satisfaction, order, direction, opinion, indication of notice of, or from the Authority is necessary, whether specified in writing or otherwise, with regard to any act, matter or thing mentioned in the By-laws and the Regulations, the same may be given by and under the hand of the Chairman of the Authority, or of the proper officer personally or through an inspection officer appointed under him, who severally shall be competent to give the same and be authorised on behalf of the Authority to prescribe any conditions attaching thereto, and subject to and in accordance with which only the same shall be deemed to have been given.

**Section 8.**—If, after the receipt of a written application from the owner for modification or alteration of the By-laws the Authority shall be of the opinion that a compliance with any of the provisions of the By-laws and the Regulations would in any particular case be vexatious or be needless in the interest of public health, it shall be lawful for the Authority, by resolution, to dispense with or forbid such compliance in whole or in part as it shall think fit, or to authorise or direct such a modification or alteration of such provisions as shall, in its opinion, most nearly adapt the principle of those provisions to the particular case. It shall be unlawful to comply with any provision, or part of any provision, with which compliances shall have been forbidden, or to act contrary to or otherwise than as directed by such modification or alteration. Notwithstanding the above stipulation, no technical provision or requirement of the By-laws shall be modified or waived, except on the written recommendation of the Engineer.

**Section 9.**—Any permission for or approval of any variation of any of the provisions of the By-laws and the Regulations which may be given by the Authority will be given only before the work in respect of which the variation is proposed has been commenced.

#### DIVISION 2.—PENALTIES, RECOVERY OF COST OF WORK, ETC.

**Section 10.**—Where anything is by the By-laws and the Regulations directed to be done or forbidden to be done, or where any power is given to the Authority or any of its officers to direct or forbid anything to be done, and such act so directed to be done remains undone, or such act forbidden to be done is done, then, and in every such case, the person making default as to the said direction or prohibition respectively shall be guilty of an offence against the By-laws and the Regulations.

**Section 11.**—Every person guilty of an offence against the By-laws or the Regulations, or the Act, unless otherwise specially provided for by or under the authority hereof, shall be liable for every such offence, besides any costs or expenses which may be incurred in the taking of proceedings against such person guilty of such offence, as well as any costs or expenses which may be incurred in remedying such default as particularly provided for in the By-laws or the Regulations or the Act, to a penalty not exceeding forty dollars, and to a further penalty of ten dollars for each day during which such offence is continued by such person after notice of the offence shall have been given by the Authority to him; and such penalty shall be recoverable notwithstanding that the Authority may not have chosen to exercise any power given to it by the By-laws, the Regulations or the Act to remedy such default.

#### DIVISION 3.—PLUMBING AND DRAINAGE PLANS.

**Section 12.**—Copies of the Authority plans and/or designs of sewerage installations of individual properties will be furnished by the Authority upon application and payment of the prescribed fee and subject to such conditions as follows:—

(a) Where the Authority designs the work and has same carried out for the owner—

1. A charge shall be made equal to ten per centum (10 per cent) on the capital cost of the work for designing, specifying, letting of contract, and supervising all details associated with such work.
2. Consent for additions to and/or amendments of approved plans or to works previously approved will be made only on the application of the owner or his authorised agent, and on payment of a fee of two dollars (\$2).

(b) When the Authority designs work for the owner and the owner then carries out his own work—

1. For plan for drainage a fee of eight dollars (\$8) plus one dollar (\$1) for each fixture.

For design of a plumbing installation the charge will be computed according to the time occupied thereon by the Authority's Officers at the rate of four dollars (\$4), per hour.

2. For making and/or examining any alterations or additions to a plan previously issued or approved by the Engineer, a fee of two dollars (\$2) for each fixture or drain altered or added.
3. For inspecting and testing drains by the proper Officer a fee of four dollars (\$4) for up to 20 fixtures plus two dollars (\$2) for each additional 10 fixtures in the installation plus a further fee of two dollars (\$2) for each additional inspection due to faulty work.
4. For inspecting and testing of plumbing by the proper Officer a fee of four dollars (\$4) for each ten (10) fixtures or part of ten fixtures in the installation, plus two dollars (\$2) for each additional inspection necessary due to faulty work.
5. For the final inspection by the Authority's Engineer a fee of four dollars (\$4) for each ten (10) fixtures or part of ten fixtures in the installation, plus two dollars (\$2) for each additional inspection necessary due to faulty work.
6. The Engineer may during construction of the work order the owner to carry out such additions and/or amendments as may be necessary for the satisfactory completion of the work.

The works will not be passed until the installation, together with the amendments ordered, have been completed to the Engineer's satisfaction.

(c) Where an owner designs and carries out his own work—

1. For the supply of a block plan a fee of one dollar (\$1). For buildings exceeding 4,000 square feet in ground floor area and/or properties exceeding 2 acres in extent an additional fee of one dollar (\$1) shall be charged for each additional 4,000 square feet or part thereof and/or for each additional 2 acres or part thereof.

2. The owner shall submit for examination a properly drawn drainage plan on tracing cloth or similar to a scale of 40 feet to an inch with sufficient natural surface levels to Authority's datum together with a typewritten specification.

For all buildings of more than one storey the owner shall also submit for examination a typewritten specification and a properly drawn plumbing plan to a scale of 8 feet to an inch on tracing cloth or similar showing the following:—

- (i) plan of each floor including ground floor and basements (if any) upon which fixtures are or are proposed to be installed showing clearly the nature and position of all fixtures and the size and arrangements of all soil, waste, combined waste and vent pipes and the position size gradient and approximate depth of all drains. Upon such plans fixtures shall be designated and the various pipe lines shall be delineated as follows:—

Soil Pipes	Heavy full line
Combined Waste Pipes	} Full line
Waste pipes	
Vents	Broken line

- (ii) the intended use of each room in which a fixture has or is proposed to be installed and of each room which opens directly into a water closet or urinal apartment;
  - (iii) sectional line diagram showing clearly each soil waste combined waste or vent pipe or stack together with their sizes and the positions of all fixtures connected thereto and where required the gradient of the soil waste or combined waste pipes;
  - (iv) such other information as the Authority may require.
  - (v) The specification shall be supplied to the Authority in triplicate. The work shall not proceed until the owners plans and specification have been approved by the Engineer and a copy returned to him with the official endorsement.
3. For the examination of the owners plans and specifications a fee of four dollars (\$4) for each plan of from one to ten fixtures plus one dollar (\$1) for each five fixtures over ten.
- Where an owner in writing requests the Authority to prepare a design of a plumbing installation only the charge will be computed according to the time occupied thereon by the Authority's officers at the rate of four dollars (\$4) per hour.
4. For examining any alterations or additions to a plan and/or specification previously issued or approved by the Engineer, a fee of one dollar (\$1) for each fixture or drain altered or added.
5. For inspecting and testing drains by the proper officer, a fee of four dollars (\$4) for up to twenty (20) fixtures plus two dollars (\$2) for each additional ten (10) fixtures in the installation plus a fee of two dollars (\$2) for each additional inspection necessary due to faulty work.
6. For inspecting and testing plumbing by the proper officer a fee of four (\$4) for each ten (10) fixtures or part of ten fixtures in the installation, plus two dollars (\$2) for each additional inspection necessary due to faulty work.
7. For the final inspection by the Authority's Engineer, a fee of two dollars (\$2) for each ten (10) fixtures or part of ten fixtures in the installation, plus two dollars (\$2) for each additional inspection necessary due to faulty work.
8. The Engineer may during construction of the work, order the owner to carry out such additions and/or amendments as may be necessary for the satisfactory completion of the work. The works will not be passed until the installation, together with the amendments ordered, have been completed to the Engineer's satisfaction.
- (d) where an owner has elected one or another of the methods set out in Sub-Sections (a), (b) or (c) above, but subsequently desires to adopt another of such methods, he may be so provided that no contract has been let for the work and that he pays to the Authority the following fees which shall be additional to fees which will become due in respect of the newly adopted method:
- (i) Where the change is from the method set out in sub-section (a) an amount equal to 6 per centum of the estimated capital cost of the work.
  - (ii) Where the change is from the method set out in sub-section (b) the fees prescribed in sub-section (b) 1 and (b) 2.
  - (iii) Where the change is from the method set out in sub-section (c) the fees prescribed in sub-section (c) 1, (c) 3 and (c) 4.

#### DIVISION 4.—LICENCES.

Section 13. (1) The Authority may refuse to grant a licence to any person, or may suspend or cancel any licence previously granted, if, in its opinion:—

- (a) such person has been guilty of an offence against the By-laws of the Authority and/or the Regulations;
- (b) such person has failed to comply with the instructions issued by any responsible officer of the Authority;
- (c) such person at any time or place has so conducted himself as to warrant, in the opinion of the Authority, the refusal, suspension, or cancellation of such licence or permit.

(2) Every person to whom a plumber's licence or drainer's licence is to be issued shall, before the licence is issued to him, sign in a register, to be kept by the Authority, a declaration that he will conform to and comply with the conditions of the licence hereinafter contained and the By-laws and Regulations.

(3) On application for renewal, the Authority may renew any such licence.

(4) All plumbing work for sewerage shall be done and carried out only by licensed plumbers and/or by the persons in this division hereinafter mentioned, but subject in all things to the conditions and terms of the said division.

(5) The Authority may, if it thinks fit, and subject to the provisions of sub-sections (1), (2), (3) and (6) of this section, issue a plumber's licence to any person who is the holder of a Certificate of Competency issued by the Sanitary Plumbers Examination Board of Victoria.

(6) The Authority before issuing such plumber's licence may require the applicant to satisfy it that he possesses the requisite knowledge of the Act, By-laws and the Regulations relating to the sewerage system of the Authority, and it shall appoint officers to examine the said applicant as to his knowledge, and after the consideration of the report thereon of such officers, may refuse to grant such licence, if, in its opinion, the applicant has not the requisite knowledge of such Act, By-laws and Regulations.

(7) No person, other than a plumber's apprentice, holder of a Certificate of Competency or the holder of a plumber's licence, shall be engaged or employed as a workman in the actual performance of any plumbing installation.

(8) No such plumber's apprentice or holder of a Certificate of Competency shall be permitted to work in the actual performance of, or to do, any plumbing installation, except under the supervision of a licensed plumber, who shall be responsible for such work and for compliance with the By-laws and Regulations in respect thereof.

(9) No person other than a plumber's apprentice, holder of a Certificate of Competency, holder of a plumber's or drainer's licence, shall be engaged or employed as a workman in the actual performance of any drainage installation.

(10) The holder of a drainer's licence shall only be engaged or employed on drainage work under the supervision of the holder of a plumber's licence responsible for the particular sewerage installation at any one time except where the sewerage installation comprises only drainage work wholly located below ground level. In such cases the work may be carried out under the supervision of a holder of a drainer's licence who shall be responsible for such work and for compliance with the By-laws and Regulations in respect thereof.

The Authority may issue a drainer's licence to any person who is to the satisfaction of the Authority competent to carry out the work of drainer, and for that purpose may require such person to satisfy it as to his competency by passing an examination conducted by the Engineer and such other examiners as the Authority may appoint or in such other manner as the Authority may determine, or in any particular case may decide that he has a thorough knowledge of the following subjects:—

*Plans.*—The reading of plans and the meaning of scales and of elevation, plan, and section drawing.

*Levelling.*—The use of the straight-edge, spirit level, and boning rods.

*Excavation, Timbering and Backfilling.*—The use of tools for excavation, the protection of trenches by timbering or sheeting, the treatment of different soils, tunnelling and tunnel timbering or sheeting precautions near buildings, and manner of backfilling trenches and tunnels.

*Drain-laying.*—The preparation of the bottom of trenches, the laying and jointing of vitrified clay, concrete, copper and cast iron pipes, cement bitumen, lead and neoprene ring joints, laying of drains under houses and in soft ground, and the depth of drains below surface.

*Drainage Details.*—Junctions to sewers, diminishing of sizes of pipes, yard gullies, grease and other traps, inspection openings and cast iron drainage details.

*Drainage Works.*—The provisions of the By-laws and of the Act and the Regulations as they relate to the work and duties of drainers in regard to the construction, maintenance, and protection of the sewerage system and the construction and use of drains and drainage traps.

Candidates for drainer's licences shall give notice, in writing, to the Authority of their intention to submit themselves to examination, and this examination shall be at such

a time and at such a place as shall be appointed by the Authority. Candidates must provide themselves with their own tools and materials, and pay a fee of five dollars (\$5) for each examination.

Section 14.—The Conditions upon which all plumbers' licences and drainers' licences will be issued are:—

- (1) That every licence will be subject to suspension or cancellation at the will of the Authority, and that all such licences or renewals thereof will expire on the 31st day of December next following.
- (2) That every holder of a licence from the Authority who shall have received the consent of the Authority to execute any works associated with a sewerage installation, or who shall (where such consent of the Authority is not required before the execution of any such works) have notified the Authority of his intention to carry out such works—
  - (a) shall obtain permission 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; and
  - (b) shall pay any fees demanded by the Municipal Authority for opening any street, road, or thoroughfare, or otherwise in connection with the works; and
  - (c) shall execute such works in accordance with the provisions of the Act, the By-laws and the Regulations and any special directions or orders given or issued by the Authority or its proper officer; and
  - (d) shall use materials approved by the Authority only and free from defects; and
  - (e) shall employ only competent operatives or assistants; and
  - (f) shall execute such works in a thorough and tradesmanlike manner to the satisfaction of the Authority as expeditiously as practicable, and leave site clean and undefaced; and
  - (g) shall in the execution of such works take such proper and necessary precautions that no accident or damage or unnecessary inconvenience may be directly or indirectly occasioned thereby; and
  - (h) shall restore any part of any street, road, or thoroughfare interfered with by the work to the satisfaction of the Municipal Authority having control thereof upon the completion of the work; and
  - (i) shall restore any other property interfered with by the work to the satisfaction of the proper officer of the Authority; and
  - (j) shall in all cases notify the proper officer immediately upon completion of any work in hand, promptly amend any defects therein, and again at once notify the said officer, and subsequently take steps forthwith for the issue of certificates of completion to the owner; and
  - (k) shall not interfere, remove, cut, or in any way damage any portions of any electrical, gas, water, or telephone installation, and/or any other municipal or public utility, or service. When portion of any such installations interferes with the works the responsible licence holder shall communicate with the secretary or engineer of the utility or service concerned in order to arrange for that portion of the electrical, gas, water, telephone, or other installation to be so located as not to cause further interference; and
  - (l) shall, when so directed by the Authority, make good at his own expense any defect found within twelve months of the date of completing of any such work which, in the opinion of the Engineer, is due to faulty workmanship or defective material.

Section 15.—Prior to the issue of any licence the person to whom the same is to be issued shall pay to the Authority the fee named hereunder:—

For every plumber's licence	..	..	\$4.00
For every drainer's licence	..	..	\$1.00
For the renewal of any licence	..	..	\$1.00

## PART II.—GENERAL.

### DIVISION 5.—USE OF SEWERS AND DRAINS—PROHIBITION OF CERTAIN DISCHARGES—OPENINGS TO BE ABOVE FLOOD LEVEL.

Section 16.—*Use of Sewers and Drains.*—The owner and the occupier of any sewered property shall discharge into the sewerage installation:—

- (a) 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
- (b) such trade or manufacturing liquid refuse as the Authority may authorise, subject in each and every case to such conditions as it may impose.

Section 17.—*Prohibited Discharges.*—The deposition or discharge of any of the following substances into any sewerage installation or sewerage system is prohibited:—

- (a) any animal matter other than is specified in Section 16, fleshings, wool, hair, dead animal, grease, dust, ashes, rubbish, garbage, offal, vegetable and fruit or their parings, rags, oil, silt, mud, sand, gravel, or like substances, or any other substance which is in the opinion of the Authority or its proper officer liable to be injurious to any part of the sewerage system or to any employees of the Authority engaged in the operation or maintenance of same;
- (b) any petrol, or other inflammable or explosive substance, whether solid, liquid, or gaseous;
- (c) any rain, roof, surface or flood waters, except by special permission of the Authority;
- (d) the contents of any night-soil cart, cesspool, privy or septic tank;
- (e) any liquid, trade waste or other substance which has not been neutralized to the approval of the proper officer of the Authority, or which is above the temperature of 100 degrees Fahrenheit or such lower temperature as may be prescribed by the Authority, having regard to the special circumstances of the case;
- (f) any liquid which contains such percentage of common salt or any other mineral, salt, acid, or gas, as is, in the opinion of the proper officer of the Authority, injurious to, or liable to form compounds injurious to, any part of the sewerage system or to employees of the Authority engaged in its operation or maintenance.

Section 18.—*Openings to be above Flood Level.*—No person shall place in position for use any fitting or fixture having the inlet or opening below the highest recorded flood level as determined by the Authority. Where any doubt is raised in connection with any of the clauses of the By-laws and the Regulations as to the highest flood level, the Engineer after inquiry shall fix such flood level, and his decision shall be final and conclusive. Where any inlet or opening to any fittings or fixtures is situated in any area liable to flooding the Authority may suspend the operation of this section subject to and so long as the following conditions are observed:—

- (a) That the owner applies in writing for permission to fix an approved sluice valve in every drain on which the inlet or opening is placed, and furnishes the Authority with an undertaking that such sluice valve will be fixed at his risk, and indemnifies the Authority against all damage, suffered by such owner or anyone claiming under him arising out of and incidental to such valve;
- (b) that the owner undertakes whenever there is danger of flooding to close or cause to be closed every such valve before flooding occurs, and to keep closed or cause to be kept closed every such valve until the flood water shall have subsided to such an extent that there is no longer danger of the flood water entering the inlet or opening;
- (c) that pursuant to such permission and undertaking, an approved sluice valve shall have been fixed in every drain and approved of by the Engineer.

## DIVISION 6.—TRADE WASTES.

**Section 19.—Conditions of Discharge.**—No person shall discharge any trade or manufacturing liquid, refuse or waste into any sewer, unless and until the following conditions are complied with:—

- (a) Application for permission to discharge any such trade wastes shall be made, in writing, and accompanied by plans and specifications of the work to be done and of the apparatus to be used, and shall include such details concerning the nature of the waste including chemical composition and the quantity and rates of discharge of the proposed effluent as considered necessary by the proper officer of the Authority.
- (b) The permission of the Authority, in writing, shall be obtained and an agreement containing a covenant to comply with the By-laws and the Regulations and with any further stipulations required by the Authority shall be executed. The volume of liquid refuse or waste discharged shall, if ordered, be measured and determined by meter or by some other approved means of measurement provided and installed by the Authority.

The maximum daily aggregate quantity of effluent which may pass from any trade premises into a sewer, the maximum permissible rate of such discharge the size and capacity of the drain or pipe for conveying such effluent from the trade premises to the sewer, and the hours during which such flow will be permitted shall be determined by the Authority.

- (c) All such liquid refuse or waste shall be passed through such settling, screening, and/or neutralizing chambers and/or such other appliances and/or otherwise treated as ordered or approved by the Authority to ensure that the resulting effluents shall comply with the conditions of the agreement.
- (d) Every settling, screening, neutralizing, or other chamber, appliance, or apparatus for the treatment of trade wastes in accordance with the By-laws and the Regulations shall be cleansed, operated, and maintained by the occupier at his own expense and at such intervals as may be considered necessary by the Authority or its proper officer to ensure the efficient operation of such chamber, appliance, or apparatus and in no case shall such chamber, appliance or apparatus be altered without the approval, in writing, of the Authority first being obtained.

## DIVISION 7.—SUBSOIL WATER.

**Section 20.**—The discharge of subsoil water into drains and/or sewers shall be prohibited except by permission of, and under conditions approved by the Authority.

## DIVISION 8.—INSPECTION TESTS AND MAINTENANCE.

**Section 21.—Notice.**—The responsible licence holder shall give at least forty-eight (48) hours notice to the Authority, in writing using the relevant forms available at the Authority's office of his intention to commence work and of work ready for inspection. He shall, within seven (7) days of the completion of the work, notify the Authority in writing using the relevant forms available at the Authority's office that the work has been completed. All work shall be left unpainted, uncovered and accessible for examination until inspected and approved.

**Section 22.—Water Test.**—The water test may be applied to the sewerage installation in its entirety or in sections. It 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 a height of 6 feet above the highest point of the section, or if considered necessary, to such additional height as the proper officer may order and every joint carefully examined for leaks. Any such leaks will be made good as directed by the proper officer. Water test shall be maintained for a period of fifteen (15) minutes or such longer period as determined by the proper officer. The amount of water added after each fifteen (15) minutes test in the case of neoprene ring joints shall not exceed: One quarter (¼) pint per inch diameter per 100 feet of drain.

**Section 23.—Defective Work.**—Should the responsible licence holder fail to replace any defective materials or to make good any defective work within fourteen (14) days of his having been ordered, in writing, by the Engineer so to do, the replacement or work may be carried out by the Authority at the responsible licence holder's expense.

**Section 24.—Maintenance by Plumber and/or Drainer.**—Every person who holds a licence from the Authority and who executes any work in connection with a sewerage installation, shall make good within fourteen (14) days at his own expense, when directed by the Engineer so to do, any defects which occur in such works within twelve (12) months of the date of their completion, and which are, in the opinion of the Engineer, attributable to faulty workmanship or materials.

**Section 25.—Maintenance by Owner or Occupier.**—Should the owner or occupier of any premises fail or neglect satisfactorily to maintain and cleanse any appliances, the Authority may, after twenty-four (24) hours notice, in writing, have the necessary work carried out at the expense of the owner or occupier.

## DIVISION 9.—MATERIALS AND WORKMANSHIP.

**Section 26.—Testing.**—The Authority may accept material such as pipes, fittings and fixtures previously tested by other Sewerage Authorities as approved by the Authority from time to time. Materials damaged during testing shall not be the responsibility of the Authority.

**Section 27.—Precautions.**—Adequate precautions shall be adopted by the person carrying out the work to prevent injury to workmen, property, or the public, and the Authority will accept no responsibility for claims for injury arising from the inadequacy of such precautions.

**Section 28.—Concrete Mixing and Placing.**—The cement, sand and aggregate shall be thoroughly mixed and the whole batch completely turned over three times in the dry and turned over again at least three times while the water is being added. If a concrete mixer is used the minimum time of mixing in the machine after all the materials have been added shall be one and a half minutes. All concrete shall be placed within twenty minutes of the time of mixing.

**Section 29.—Cement Mortar—Placing.**—Cement mortar shall be used within twenty minutes of the time of mixing. Retempering is forbidden.

## PART III.—DRAINAGE.

## DIVISION 10.—DRAINAGE—GENERAL.

**Section 30.—(1)** Every property shall be separately drained unless a combined drain shall have been ordered or approved by the Authority. Owners desiring to have the drainage of their properties combined must sign a request for a combined drain, and obtain the approval of the Authority.

(2) In any case where a combined drain serves two or more properties the Authority, with the consent of the owners of the properties served by such combined drain, may take over such combined drain, and thereafter such combined drain shall be and remain a sewer of the Authority.

(3) In every case of a combined drain the Authority will determine as between the respective owners and occupiers of the properties drained thereby, the proportions in which the cost of such combined drain shall be paid. In every case of the occurrence of an obstruction in a combined drain the Authority will also determine by whom and in what proportion the cost of removing such obstruction and/or effecting any necessary repairs to drains shall be paid.

(4) Owners and occupiers of premises are responsible for clearing stoppages in drains within their properties or between their properties and the sewers into which the branches lead, but must employ only licensed plumbers or drainers to clear such stoppages.

(5) Before a licensed plumber or drainer commences to clear a stoppage in a sewerage installation he must notify the Authority, in writing, of the time when he intends to clear the stoppage, so that the Authority's proper officer may attend and pass the work in accordance with the provisions of the Act and the By-laws and the Regulations.

**Section 31.—Cast-iron Pipes.**—Cast-iron drainage pipes and their fittings shall comply with the requirements of Australian Standard Specification No. A.88-1959 as amended from time to time.

**Section 32.—Vitrified Clay Pipes.**—Vitrified clay pipes and their fittings shall comply with the requirements of the Sewerage Authority.

**Section 33.—Concrete Pipes.**—Concrete pipes and their fittings shall comply with the requirements of Australian Standard Specification A.35-1957 as amended from time to time.

**Section 34.—Neoprene Joint Rings.**—Neoprene Joint Rings shall comply with the requirements of the Melbourne and Metropolitan Board of Works Specification 66.A.38.

**Section 35.—Concrete.**—Concrete placed above ground level around fittings and fixtures shall be carried below ground level to a depth of not less than 6 inches.

**Section 36.—Inspection Openings—Method of Sealing.**—Inspection openings in vitrified clay and concrete drains shall be sealed by means of vitrified clay plugs and neoprene rings inserted into the inspection opening and secured by an approved non-corrosive clip.

Inspection openings in cast-iron pipes shall be sealed by an approved flanged cover fixed to a mating flange with non-corrodible bolts or studs and approved insertion cloth between the flange faces.

Inspection openings in galvanised waste pipes shall comply with Australian Standard Specification A.74-1952 as amended from time to time.

Inspection openings in copper tubes up to and including 3 inches diameter shall comply with Australian Standard Specification A.74-1952 as amended from time to time and for 4 inches diameter and larger shall be manufactured from material as defined in Australian Standard Specification A.74-1952 as amended from time to time and in respect of essential dimensions shall comply with Australian Standard Specification No. A.88-1959 as amended from time to time.

Each circular door shall be secured to the seat by three and each rectangular door by four  $\frac{1}{8}$  inches diameter hot pressed brass hexagon head Whitworth set screws and shall be fitted with approved sealing gaskets.

**Section 37.—Drain Openings not in Use.**—(a) All disused surface fittings such as Disconnector Traps, Inlets, Yard Gully Basins, etc., are to be removed and the drain pipes severed below ground level.

(b) All disused branches from drains which are to remain in use are to be cut and sealed at the appropriate oblique branch.

(c) The house branch sewer when no longer required, is to be cut and sealed at the building line.

#### DIVISION 11.—BASEMENT AND CELLAR DRAINAGE.

**Section 38.—Seepage Drains.**—In no case shall seepage drains from cellars, basements, or any floor below ground level be discharged into a sewerage system without the consent of the Authority. Where such a discharge is permitted, the seepage shall be raised by ejector, siphon or other approved mechanical appliance to such height as ordered, and discharged into the sewerage system or elsewhere as and where directed.

#### DIVISION 12.—POLLUTED AREAS.

**Section 39.—Connection.**—The Authority may if it thinks fit authorise or require that any of the following places, namely, stables, cow sheds, dairies, market places, abattoirs, areas for washing vehicles, and any other polluted place, be connected with the sewerage system subject to such conditions as the Authority may impose.

**Section 40.—Conditions governing connection.**—No such connection shall be made unless the following conditions have been complied with—

- (a) The area to be connected shall, if required, be so roofed as to prevent the entry of rain water from it to the sewer system and in no case shall rain water be permitted to discharge onto such place from adjoining surfaces.
- (b) The area to be connected shall be paved and kerbed where directed above the level of the yard with approved materials, and graded to the satisfaction of the proper officer of the Authority.
- (c) The drain from any such place shall be provided with an approved trap with a removable grating and connected with the drain inside the boundary line of the property. A water tap connected with a satisfactory water service shall be provided in a suitable position over the area.

#### DIVISION 13.—LAYING DRAINS, ETC.

**Section 41.—Position and Line.**—Every drain and every fitting, etc., connected therewith shall be laid and fixed where directed by the proper officer of the Authority. As far as possible all drains shall be laid in straight lines; where changes of direction occur they shall be made in manholes, or by a suitably curved pipe with an inspection opening on each straight pipe next adjoining the curve, or by installing an inspection branch in the curve itself, or by such other means as the proper officer may direct.

**Section 42.—Oblique Junctions.**—Where any drain joins another drain, or a sewer, the junction shall be made obliquely at an angle of not greater than forty-five (45) degrees with the direction of flow of such drain or sewer.

**Section 43.—Connection to Sewerage System.**—The position of the Authority's point of connection to any property shall be located prior to the commencement of any other drain works.

The first straight pipe in the drain shall have an inspection opening. The vitrified clay plug at the point of connection to the sewerage system shall not be removed until the drain laying is to commence. The vitrified clay plug shall be carefully removed so as not to damage the socket or allow any water, sand, earth or other prohibited discharge to enter the sewerage system.

Immediately after the removal of the vitrified clay plug at the point of connection, an approved watertight plug shall be inserted in the drain at the first inspection opening and downstream of this opening. This plug shall not be removed until the drain is to be filled with water for testing and no water, sand, earth or other prohibited discharge shall be allowed to enter the sewerage system during testing.

Should any person contravene the provisions of this section at any other time unless directed by the proper officer, the responsible licence holder for the works shall be liable for such offence, besides any costs or expenses which may be incurred by the Authority in making good damages attributed to the offence, and to a penalty not exceeding \$100.00; and such penalty shall be recoverable notwithstanding that the Authority may not have chosen to exercise any power given to it by the Act, the Regulations or by the By-laws to remedy such default.

**Section 44.—Gradients.**—All drains shall be laid on even gradients, and, except by special permission, in writing, from the Engineer such gradients shall not be less than the following:—

4 inches diameter	..	..	..	1 in 40
5 inches diameter	..	..	..	1 in 50
6 inches diameter	..	..	..	1 in 60
9 inches diameter	..	..	..	1 in 90

In cases where the grades of drains are steeper than 1 in 15, concrete anchorage blocks shall be placed at each one foot vertical rise along the drain or as directed by the proper officer.

Such blocks shall be let into the sides of the trench at least (6) inches on each side and shall extend not less than three (3) inches above and below the barrel of the pipe and for a length of twelve (12) inches along the pipe.

**Section 45.—Clear cover over drains.**—Drains of vitrified clay or concrete pipes, unless bedded on and encased in concrete not less than four (4) inches thick over the faucet of the pipe, shall be laid with a clear cover to the top of the faucet or inspection opening, whichever is the higher, of not less than the following:—

- (a) In public thoroughfares, rights-of-way, or other open spaces subject to vehicular traffic—two feet six inches (2' 6").
- (b) In private property subject to vehicular traffic—two feet (2' 0").
- (c) In private property not subject to vehicular traffic—one foot (1' 0").

No person shall alter the surface over any drain so as to deprive it of the minimum clear cover specified by the preceding paragraph, unless approved measures are adopted to protect the drain.

**Section 46.—Laying Drains.**—All pipes shall be laid to such lines and grades as may be shown on the plans or directed, and except where otherwise ordered shall be bedded on approved sand or other approved bedding material up to one-third of the diameter of the pipe so that there shall be at least three (3) inches or such greater depth as ordered of the bedding material below the barrel of the pipe.

In water-charged ground, or where the foundation is inadequate, or near the roots of trees, or where directed, the drain shall be formed of cast iron pipes, or, if of vitrified clay or concrete pipes, they shall be bedded on crushed metal and/or encased in concrete as ordered, and, if ordered, supported upon approved timber foundations as directed. The thickness of concrete encasing and form of concrete haunching shall be as directed by the proper officer.

Drops or bends in vertical or inclined drains shall have a concrete support placed under and around the drain as directed.

**Section 47.—Jointing.**—(a) *Vitrified Clay and Concrete Pipes.*—The pipes shall be jointed, except when directed by the proper officer with neoprene ring joints of a type approved by the Authority. Should the proper officer direct the use of mortar joints the faucet shall be filled in solidly with cement mortar neatly played off. After

each such joint is made the interior of the joint shall be wiped clear of surplus mortar before the next pipe is laid.

(b) *Cast Iron Pipes.*—All joints in cast iron pipes must be stemmed with approved gaskets and so filled and caulked with lead or other approved material as to make them gas and watertight.

(c) All connections between vitrified clay, concrete and cast iron or copper pipes shall be mortar joints.

*Section 48.—Connections to Drains.*—All disconnector traps shall be provided with a level inlet or adjustable top. Waste pipes shall enter vertically the top openings of all level inlets.

#### DIVISION 14.—DRAINAGE TRAPS.

*Section 49.—Classes of Traps.*—(a) Disconnector and Gully traps "intercepting gases only", shall be of round section and self-cleansing form, but not such as to empty by momentum or suction.

(b) Silt Traps "intercepting both gases and solids", shall have slightly tapered sides, flat bottom and rounded angles, and be provided with approved means of catching and removing solids.

(c) Grease Traps "solidifying and collecting grease, fatty domestic wastes, and other semi-fluid or viscous material liable to foul the pipes", shall be designed for the requirements of the particular drain. The design and capacity shall be to the approval of the Engineer. The interior surfaces shall be to an approved standard and it shall be equipped with non-corrodible baffles, the whole trap being designed for easy cleaning.

(d) Acid Traps or Neutralizers for neutralizing acid or other aggressive water prior to its entering a drain.

(e) Oil Traps "for collecting oil", shall be of such form as approved.

*Section 50.—Yard Gully Location.*—A yard gully when provided shall be as near as practicable to the kitchen or back door, but shall not be situated within a building or outbuilding.

*Section 51.—Details of Yard Gullies and Gratings.*—Yard gullies shall be fitted with gully basins and domed gratings, the gully basins being in one piece with the trap or jointed thereto by spigot and faucet or as otherwise approved.

The depth of the gully basins to the grating shall not be less than five (5) inches. The grating of every gully basin shall not be less than six and seven-eighths ( $6\frac{7}{8}$ ) inches diameter.

The grating to every level inlet and adjustable top shall not be less than an approved minimum diameter, and shall be domed with an opening of suitable outlet capacity. Every grating shall be fixed down in an approved manner with bitumen or lead wedges.

*Section 52.—Kerb and/or Surround to Gully Basins, Level Inlets, etc.*—Gully basins and the tops of level inlets

*Section 54.—Sizes of Soil Waste and Combined Waste and Drain Pipes.*—This section shall be read in conjunction with clause 4002 of the Uniform Building Regulations as amended from time to time.

#### PERMISSIBLE MAXIMUM NUMBER OF FIXTURE UNITS.

##### Grade Not Less Than:

Diameter of Pipe.	Minimum Permissible Grade 1 in 50.	1 in 40 (a).	1 in 12 (b).	1 in 4 (c).	Vertical Stacks.
Inches.					
5 .. .. .	210	230	330	440	680

*Section 55.—Sizes of Vents.*—This section shall be read in conjunction with clause 4003 of the Uniform Building Regulations as amended from time to time.

#### MINIMUM PERMISSIBLE DIAMETER OF MAIN OR BRANCH VENTS.

Diameter of Soil Combined Waste or Waste Pipe.	Total Number of Fixture Units Served.	Total Length of Vent in Storeys.									
		1.	2.	3.	4.	5.	6.	7.	8.	9.	10 and Over.
Inches.											
5 .. .. .	145-288 ..	2½	2½	3	3	3	3	3	3	3	4
	289-432 ..	2½	2½	3	3	3	3	3	4	4	4
	433-720 ..	2½	3	3	3	3	4	4	4	4	4
	721-1020 ..	2½	3	3	3	4	4	4	4	4	4*

\* 5 inches above 14 storeys.

and adjustable tops shall be so kerbed and/or surrounded with an approved concrete as to prevent the access of surface water to the drains and, if directed, the wall at the rear of the gully basin, 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 a 24 gauge galvanized sheet iron apron. The internal diameter of kerbing around a gully basin measured from the face of cement rendering shall not be less than fifteen (15) inches, and shall be neatly rounded to meet the gully basin top. The top of all kerbs and surrounds shall be at least six (6) inches above the level of the surrounding surface as determined by the proper officer.

#### PART IV.—PIPE CAPACITIES.

#### DIVISION 15.—CAPACITIES OF SOIL COMBINED WASTE DRAINS AND VENT SIZES.

*Section 53.—Fixture Units.*—For the purpose of determining the size of any soil waste combined waste drain or vent pipe the following equivalent fixture units shall be adopted unless otherwise directed by the Authority and the least nominal outlet diameter shown hereunder for any fixture shall be the minimum outlet diameter for such fixture except as provided in clause 4136 of the Uniform Building Regulations as amended from time to time.

Fixture.	Waste—Diameter.	Fixture Units.
	Inches	
Urinal—		
up to 3 stalls .. .. .	2	3
4 to 6 stalls .. .. .	2½	3
7 to 9 stalls .. .. .	3	3
9 stalls and over .. ..	4	½
		per stall
Lavatory Basin (new installation) ..	1½	1½
Lavatory Trough .. .. .	2	3
Potato Peeler .. .. .	2	3
Circular Lavatory Trough .. .. .	3	4
Bed Pan Washer .. .. .	3	4
Medical Sink .. .. .	1½	2
Dish Washing Machine .. .. .	..	3
Clothes Washing Machine .. .. .	..	3
Sink—2 Bowl—Common Trap .. .. .	2	4
Showers—in pairs—common trap .. ..	2	6
Foot Bath .. .. .	2	3
Trough—1 compartment .. .. .	2	4
Circular wash fountain .. .. .	2	6

This section shall be read in conjunction with clause 4002 of the Uniform Building Regulations as amended from time to time.

## PART V.—PLUMBING.

## DIVISION 16.—SOIL WASTE, COMBINED WASTE AND VENT PIPES.

**Section 56.—Wrought Iron Pipes.**—All wrought iron pipes and fittings shall comply with Australian Standard Specification B.105-1960 as amended from time to time. The wall thickness shall be class "Heavy" as designated in the above Standard. The pipes shall be galvanized where directed and lined with an approved material to the approval of the Authority.

**Section 57.—Requirements for Copper Tube, Cast and Tubular Fittings, and Installation Procedure.**—(a) All cast fittings for use with copper tube shall be manufactured in accordance with the relevant dimensions, profiles and material specified in Australian Standard Specification A.74-1952 Corrosion-Resistant Alloy Fittings for use in Sanitary Plumbing Installations as amended from time to time. Cast bends 4 inches diameter and larger shall be formed with a centre line radius not less than 6 inches. Sockets shall be provided with a landing shoulder equal in width to the gauges of the appropriate size of copper tube.

(b) All fabricated copper tube fittings and special assemblies shall be of a full and uniform bore and be free from any lips or other defects which may interfere with the free flow of sewage. All joints in such fittings shall be lapped joints and the minimum length of lap shall be a quarter of an inch.

(c) All copper tube bends shall be machine-made bends of uniform diameter and the finished bend shall have a minimum wall thickness at any point equal to the standard gauge thickness of the appropriate size of copper tube. Radius of bends and all sockets shall be in accordance with the requirements for cast fittings.

(d) All offsets in copper tube stacks shall be formed with approved cast fittings and a cast bend shall be used at the base of all such stacks. Copper tube vents, graded wastes and combined wastes may be offset by bending to a maximum angle of 15° to the longitudinal axis of the tube and such offsets shall be formed to the satisfaction of the proper officer of the Authority.

(e) All special prefabricated assemblies shall be constructed in accordance with a design submitted to and approved by the Authority and with the foregoing requirements. All such assemblies shall be inspected and stamped by an officer of the Authority prior to their being installed.

## DIVISION 17.—WATER CLOSET AND URINAL FLUSHING APPARATUS.

**Section 58.—Storage Tanks—Flush Valve Supply Pipes.**—The water supply pipes from storage tanks to flush valves shall not be less than the sizes determined from:

- (a) The available head measured vertically, in storeys, from the level of the first flush valve served by the portion of supply pipe under consideration to the normal water level of the storage tank; and
- (b) the total number of flush valves served by that portion of the supply pipe under consideration; in accordance with the following table:—

Available Head in Storeys.	Diameter of Portion of Supply Pipe Under Consideration.	Maximum Permissible Number of Flush Valves Served by Portion of Supply Pipe under Consideration.	
		Galvanized Wrought Iron Pipe.	Copper or Brass Pipe.
1 ..	Inches.		
	1½	1	2
	2	10	15
	2½	30	50
2 ..	3	100	150
	1½	2	3
	2	15	30
	2½	50	150
3 ..	3	100	150
	1½	2	4
	2	25	50
	2½	100	150
4 or more	1½	2	6
	2	40	100
	2½	100	150

Where the flush valves to be supplied exceed the maximum number above stated, or where more than 20 flush valves are subject to an available head of less than 20 feet, the case shall be submitted to the proper officer for special investigation.

- (c) The maximum static head on flushometers shall not exceed 130 feet.

**Section 59.—Urinal Flushing Requirements.**—The discharge from a urinal flushing apparatus shall not be less than one gallon for a single urinal stall and 2½ gallons for two or three urinal stalls. In no case shall more than three stalls be served by a single flushing apparatus. For the purpose of the By-laws 3 feet of slab type urinal is to be taken as equivalent to one urinal stall.

## DIVISION 18.

**Section 60.—Sinks, Baths, Basins and Closet Pan Seats.**—Sinks, baths, basins, cisterns, and closet pan seats shall comply with the following Australian Standard Specifications and as amended from time to time:—

Sinks .. .. .	A.49	1947
Baths .. .. .	A.47	1946
Basins .. .. .	A.48	1946
Closet Pan Seats .. .. .	A.53	1960

## DIVISION 19.

**Section 61.—Flashing.**—(1) When the timber stud walls of shower compartments are finished with rendered cement mortar the mortar shall be bedded on an approved steel mesh securely fixed and backed with approved tar paper.

(2) All internal corners of shower compartments shall be flashed with 26 gauge angle iron.

(3) Where a shower rose is located above a bath any wall within 3 feet of the rose shall be constructed and flashed as for a shower compartment to not less than 6 feet above the bottom of the bath.

(4) Basins placed such that the sides of the basin are not less than 3 inches from any wall are not required to be flashed.

## DIVISION 20.—CONNECTIONS TO FIXTURE TRAPS.

**Section 62.—Connecting pieces between fixtures and fixture traps shall be of an approved non-ferrous material.**

## DIVISION 21.—WATER CLOSETS.

**Section 63.—Closet Pans.**—Vent horns shall be provided on pans where directed by the Authority, even if no anti-siphonage vent is required; if not used for a vent, such vent horn shall be sealed with a lead disc, bituminous filler and a lead cap piece, or by other approved method.

## DIVISION 22.—VENTILATION.

**Section 64.—Length of Unvented Wastes.**—Waste pipes from circular wash fountains and dental units need not be vented unless they exceed a total length of 25 feet when connected to a circular wash fountain or 20 feet total length when connected to a dental unit.

**Section 65.—Pipe Clips.**—Copper tubes shall be fixed with hooks or clips fabricated from galvanized mild steel or otherwise given approved anti-corrosive treatment.

Approved insulation securely bonded to the steel clip or to the copper tube shall be provided between the clip and the tube. Under no circumstances will loose sheet insulation be permitted.

**Section 66.—Galvanized Sheet Iron Vents in Roofs.**—Where galvanized sheet iron vent pipes pass through the space between the roof and ceiling of any building they shall be enclosed throughout such space by a sleeve of 22 gauge galvanized sheet iron or other approved material. Entry of water between the sleeve roof and vent pipe shall be prevented by fixing of suitable flashings.

## DIVISION 23.—SHOWER COMPARTMENTS.

**Section 67.—Construction of Shower Compartments.**—Shower compartments shall be constructed in complete accordance with the requirements of Clause 3018 of the Uniform Building Regulations as amended from time to time.

The above By-law was made and passed by the Yallourn North Sewerage Authority on the 5th December, 1968 and confirmed on the 13th January, 1969.

In witness whereof the common seal of the Authority was hereto affixed in the presence of—

N. A. HARWOOD, Chairman.  
(SEAL) W. J. C. PEACOCK, Member.  
J. F. BOAG, Secretary.

This is a certified copy of the By-law No. 1 approved by the Governor in Council at the Executive Council Meeting, held on 22nd April, 1969.—W. J. WILSON, Assistant Secretary, State Rivers and Water Supply Commission. 8410