



# **WEDDIN SHIRE COUNCIL**

**POLICY NUMBER: 7.2.4**

## **GRENFELL SEWER CONTRIBUTIONS PLAN**

**Adopted: 18 May 2017**

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**PART 1 INTRODUCTION**

**1.1 Title:** Grenfell Sewer Contributions Plan

**1.2 Number:** Policy Number 7.2.4

**1.3 Purpose:**

This document contains the Council procedures for administration, assessment and settlement of contributions for sewerage infrastructure in Weddin, as well as a schedule of the specific rates for contribution.

The Plan also contains strategies relating to the provision of public infrastructure and the methodology for determining the contribution rates.

**1.4 Application:**

This Plan applies to all land within the boundaries of Grenfell sewer area as shown on **Figure 1**, and to any new areas proposed to be connected to the sewer.

The Contribution Plan relates primarily to development involving;

- (i) subdivision of land resulting in the creation of new allotments, and
- (ii) the erection of residential, commercial or industrial buildings on existing allotments.

Each will attract contributions levied in accordance with this Plan and all other development proposals may also attract contributions levied in accordance with this Plan.

**1.5 Associated Legislation and other references:**

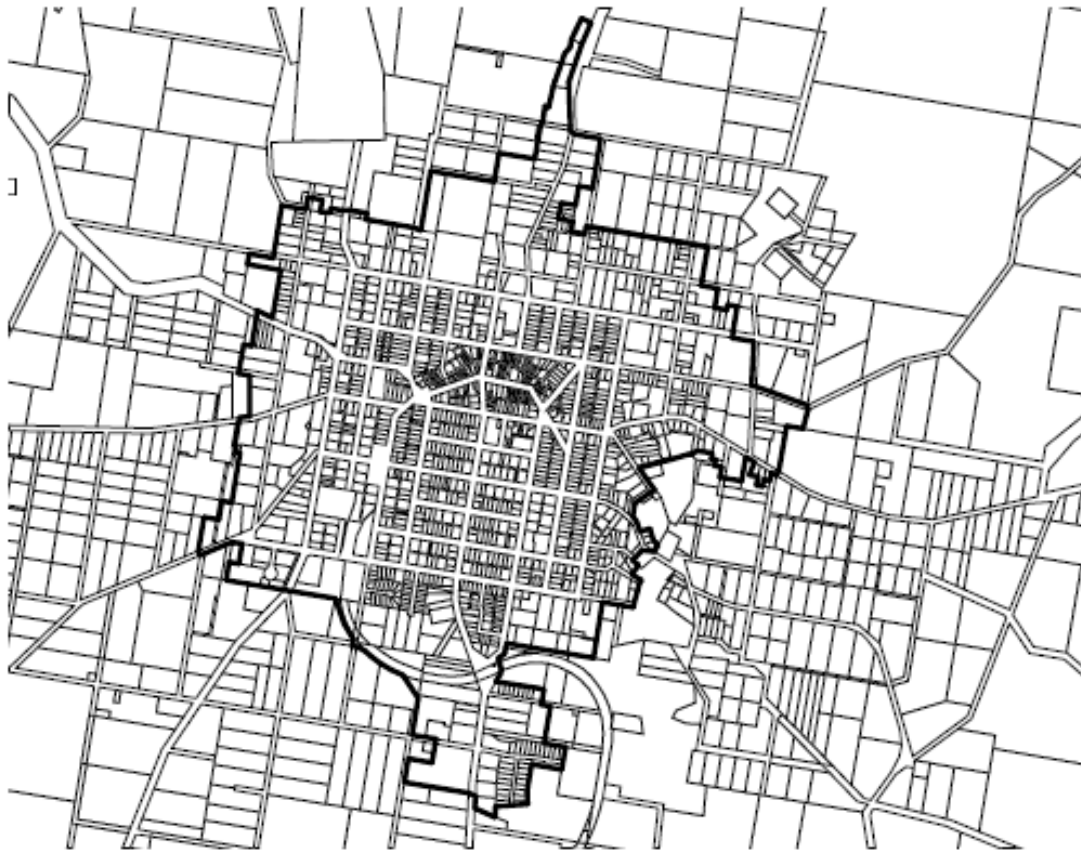
- Local Government Act 1993, section 64
- Water Management Act 2000, section 302
- Developer Charges Guidelines for Water Supply, Sewerage and Stormwater 2012 – consultation Draft (NSW Office of Water)
- Section 64 Determinations of Equivalent Tenements Guidelines, 2009 (Water Directorate)

**1.6 Aims and Objectives**

The overall aims and objectives of this Plan are to:

- Enable Council to require contributions toward the provision of sewerage infrastructure needs in Grenfell which creates a demand for those facilities.
- Enable Council to recoup funds, which it has spent in the provision of public infrastructure in anticipation of development.
- Ensure that adequate public infrastructure is provided for, as part of any new development.
- Provide a comprehensive strategy for the assessment, collection, expenditure, accounting and review of contributions on an equitable basis.
- Provide developers with clear guidance as to the contributions payable for sewerage infrastructure.

**FIGURE 1 – BOUNDARIES OF GRENFELL SEWERED AREAS**



### **1.7 Definitions**

“Applicant” means the person, company or organisation submitting an application.

“Council” means the Weddin Shire Council.

“Recoupment” means the payment of a monetary contribution to the Council to offset the value of funds (including any interest), which the Council has already incurred in providing public facilities in anticipation of development.

“Settlement” means payment (or securing, subject to Council policy) of a monetary contribution, the undertaking of a work in kind or the dedication of land required as a result of new development.

“Equivalent Tenement” or ET is considered to be the demand or loading a development will have on infrastructure in terms of the average sewage discharge for an average residential dwelling or house, based on state-wide data.

“Equivalent Person” or EP is the water supply demand or the quantity and/or quality of sewage discharge for a person resident in a detached house.

### **1.8 Determining Number of Standard ET’s**

In determining the Standard Sewer ET’s for all required developments the Water Directorate *Section 64 Determinations of Equivalent Tenements Guidelines (standard ET Figures Tables)* – see Appendix A and will form the basis of for all calculations, with consideration of the type (categories) and scale of the development.

### **1.9 Payment of Contributions**

Depending on the type of infrastructure in question, contributions may be required to be settled by one or a combination of the following methods:

- Monetary contribution
- Dedication of land
- Provision of a material public benefit (i.e. works “in kind”).

The type of contribution required will generally be a monetary payment.

### **1.10 Timing of Contributions**

Contributions are required to be paid as follows:

- Development Applications involving subdivision – prior to the release of the plan of subdivision (i.e. issue of Subdivision Certificate)
- Development Applications involving building work – prior to the time of building approval (i.e. issue of Construction Certificate)
- Development Applications where no building approval is required – prior to the issue of an Occupation Certificate.

**1.11 Deferred, Staged or Periodic Payment**

The contributions levied by this Plan are required to provide service infrastructure to new development as it comes on line.

To fund completion of this work all contributions must be paid as set out in Clause 1.8 above. Consideration will **not** be given to deferred, staged or periodic payments in order to settle contributions.

**1.12 Dedication of Land and Material Public Benefit**

Council may accept the dedication of land or the provision of a material public benefit or works “in kind” in lieu of a monetary contribution. Factors to be taken into consideration for such a request include:

- The extent to which the land, material public benefit or works satisfies a community need.
- The extent to which the land, material public benefit or works satisfies the purpose for which the contribution was sought.
- A consideration of location and other factors, which may affect usability.
- An assessment of recurrent maintenance costs to Council.

The maximum percentage of contribution that may be spent on material public benefit is 40% of the total value of the contribution.

**1.13 Review of the Contribution Rates**

Council will review the contribution rates annually as part of the annual budget preparation process to ensure that the monetary contributions continue to reflect the community costs associated with the provision of water and sewerage infrastructure.

The contribution rate will be reviewed on the basis of the Consumer Price Index for Sydney Construction in accordance the following formula:

$$C_2 = C_1 \times \frac{CPI_2}{CPI_1}$$

- Where
- C<sub>2</sub> = new contribution
  - C<sub>1</sub> = present contribution
  - CPI<sub>2</sub> = CPI for last 12 months (to December quarter)
  - CPI<sub>1</sub> = CPI for previous 12 months (to December quarter)

Council may also review the works schedule, the estimated costs of the various infrastructure or other aspects relating to the Contributions Plan.

**1.14 Transitional Arrangements**

A Development Application, which has not been determined but was submitted since the exhibition of the draft plan and prior to the adoption of this plan shall be determined in accordance with this plan.

**PART 2. DEVELOPMENT POTENTIAL**

**2.1 Background**

The Weddin Shire sewerage system serves all of the development within the town of Grenfell and does not extend to rural development. The unserviced rural properties are isolated and not economically viable to service.

Council is responsible for the installation, maintenance and operation of the sewerage reticulation pipe network, sewerage treatment plant and sludge disposal. The area serving Grenfell is approximately 325ha.

There is one sewerage treatment works (2500EP capacity) providing primary, secondary and tertiary treatment. The system comprises two trickling filters and five polishing ponds at the treatment works, 28 kilometres of reticulation, and overflow discharge to Emu Creek. Reuse water is utilized for several parks and recreational fields.

It should be noted that water is supplied by Central Tablelands County Council to the town of Grenfell.

<b>Year</b>	<b>Population</b>	<b>Avg Growth Rate</b>	<b>EP</b>	<b>Cumulative ET</b>
2008	1994	0.1	1994	997
2013	2004	0.1	2004	1002
2018	2014	0.1	2014	1007
2023	2024	0.1	2024	1012
2028	2034	0.1	2034	1017

The sewerage treatment plant has been designed for a capacity of 2500 EP which translates to approx. 1250 ET.

**2.2 Approach to Calculating Contributions**

While the total development potential for Grenfell is 1250 ETs, and although part of the township is already developed or has existing approvals, the town as a whole is expected to benefit from the sewerage infrastructure.

**PART 3. INFRASTRUCTURE REQUIREMENTS**

Public utility infrastructure is required to service the land identified for development within the contribution plan area. The nexus between the development and the contributions being levied is described below.

**3.1 Nexus**

There is a number of connected premises to the sewerage system in the town of Grenfell, it is reasonable that all development (i.e. 1250 ETs) be connected to the sewerage system and that the capital costs of the system to meet demand, and of physically bringing the system to development sites, should be borne by all new development, including existing and proposed.

**3.2 Calculation of Developer Charge**

(a) Capital Charge

From Council's draft Strategic Business Plan 2013, the cost of capital works for the sewage treatment works (excluding reticulation and the effluent scheme) is \$6,050,000

$$\begin{aligned} \text{Capital Charge} &= \frac{\text{Capital works}}{\text{Total ETs}} \\ &= \frac{\$6,050,000}{1,250} \\ &= \$4,840 \end{aligned}$$

b) Reduction Amount

$$\begin{aligned} \text{Net income per ET (estimated)} &= \$60\text{pa} \\ \text{Reduction amount (30 years)} &= \$60 \times 30 \\ &= \$1,800 \end{aligned}$$

c) Developer Charge

$$\begin{aligned} \text{Developer Charge} &= \text{Capital Charge} - \text{Reduction Amount} \\ &= \$4,840 - \$1,800 \\ &= \$3,040 \text{ per ET} \end{aligned}$$

**3.3 Funding**

The funding of the required infrastructure for new development is by developer contributions paid prior to the commencement of development of the land. This will require contributions to be paid in full in accordance with clause 1.9 and 1.10 of this plan. Funding for existing development will be via annual rates and charges.



### **3.4 Other Utility Infrastructure**

Other utility infrastructure for development in the Grenfell area includes water, electricity and telecommunications. All new subdivisions are to provide the full range of utility infrastructure. The provision of this infrastructure is made directly with the following agencies:

<b>Infrastructure</b>	<b>Agency</b>
Electricity	Essential Energy
Telecommunications	Telstra/NBN
Water	Central Tablelands Water

## **PART 4. ACCOUNTABILITY**

### **4.1 s64 Statutory Reserves**

Council has established a statutory reserve for the management of contributions under this Plan. The following separate ledger has been established:

- Sewerage.

Contributions paid into this ledger will be spent for the purpose for which they were levied generally as the works are required as a result of the developments from which the contributions have been received. It is expected the contributions will roll over each year, with some items removed as costs are discharged, and new items added with consequential adjustments to the Works Program. Interest will be calculated on funds held in each ledger and credited to each ledger as appropriate.

### **4.2 Priority of Spending**

Council may permit the short-term transfer of funds between ledgers in order to enable works to be undertaken on a priority basis.

This will only be done on the basis that:

- Full details of the transfer and subsequent reimbursement of funds are recorded in the respective ledgers.
- The transferred funds are returned to the relevant ledger by future contributions.
- There is a reasonable expectation that future contributions will be obtained to enable reimbursement of the ledger from which the monies have been transferred.
- The purpose for which the contributions are transferred is a purpose identified in the Works Program.
- The transfer of contributions will not delay or threaten the provision of any infrastructure identified in the Works Program.
- The contributions will be spent as the works are required as a result of the developments from which contributions have been received

Priorities for spending will be determined annually via Council's Operational Plan.

### **4.3 Contributions Register**

Council will maintain a register of all contributions received. The register will record:

- The origin of each contribution by reference to the Development Consent to which it relates
- The date of receipt of the contribution
- The type of contribution received (e.g. money, land, works “in kind”)
- The amount of the contribution and the purpose for which it was levied.
- The total contributions received each financial year by purpose.
- The total of contributions expended each year by purpose.
- Expenditures from the fund according to date and purpose including details of priority spending.
- Interest earned and apportionment between the ledgers.

The register will be available for public inspection, free of charge, at any time during normal office hours.

### **4.4 Annual Statement**

Council will produce an Annual Statement of contributions received and expended for a Financial Year as part of its usual Financial Statements. These Statements will be available free of charge, at any time during usual office hours.

## **PART 5. GENERAL**

### **5.1 Review and Amendment**

- This policy shall be reviewed at four (4) yearly intervals, to ensure it meets all statutory requirements and the needs of Council.
- This policy may be amended or cancelled by Council at any time following the prescribed public notice.

### **5.2 Adoption**

- This policy commences as from the date of adoption by Council, being 18 May 2017 and replaces any previous policy.

### **5.3 History**

<b>Version</b>	<b>Details</b>
7.2.1	Adopted 23 October 2008
7.2.2	Amended 24 June 2010
7.2.3	Adopted 20 June 2013
7.2.4	Adopted 18 May 2017

**APPENDIX A – STANDARD ET FIGURES**

**Table 1 – Residential User Categories**

WATER DIRECTORATE – JANUARY 2005

**STANDARD ET FIGURES – RESIDENTIAL USER CATEGORIES**

**Table 1: Standard ET Figures - Residential User Categories**

CATEGORY	STANDARD UNIT	SUGGESTED VALUES	
		WATER ET	SEWER ET
Single Residential Lots (House)			
Standard Residential Lot (450m <sup>2</sup> - 2000m <sup>2</sup> )	Lot	1.00	1.00
Small Residential Lot (< 450m <sup>2</sup> )	Lot	Use Units	
Large Residential Lot (> 2000m <sup>2</sup> )	Lot	1.20	1.00
Multi-Residential Lots (Medium Density 1 - 2 Storey)			
Dual Occ - 1 bedroom	Dwelling	Use Units for Lot Size of < 450m <sup>2</sup> / dwelling or Standard Residential Lot for Lot Size > or = 450m <sup>2</sup> / dwelling	
Dual Occ - 2 bedroom	Dwelling		
Dual Occ - 3 bedroom (or more)	Dwelling		
Duplex - 1 bedroom	Dwelling		
Duplex - 2 bedroom	Dwelling		
Duplex - 3 bedroom (or more)	Dwelling		
Units - 1 bedroom	Dwelling	0.40	0.50
Units - 2 bedroom	Dwelling	0.60	0.75
Units - 3 bedroom (or more)	Dwelling	0.80	1.00
Multi-Residential Lots (High Density)			
Multi Storey Apartments (1 bedroom)	Dwelling	0.33	0.50
Multi Storey Apartments (2 bedroom)	Dwelling	0.50	0.75
Multi Storey Apartments (3 or more bedroom)	Dwelling	0.67	1.00

**Notes**

1 Standard ET = Town Water Usage of 230 kL/a & Sewage Loading of 140 kL/a

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## Table 2 – Commercial User Categories

WATER DIRECTORATE – JANUARY 2005

### STANDARD ET FIGURES – COMMERCIAL USER CATEGORIES

Table 2: Standard ET Figures - Commercial User Categories

CATEGORY	STANDARD UNIT	SUGGESTED VALUES		COMMENTS
		WATER ET	SEWER ET	
<b>Accommodation (Permanent)</b>				
Nursing Home / Special Care Home	Bed	0.50	0.75	Limited medical facilities, communal kitchen / laundry
Self Care Retirement Units / Villas	-	<b>Use Residential Units</b>		Internal kitchen / laundry facilities
Self Care Retirement - Serviced Unit (Onsite)	-	<b>Use Nursing Homes</b>		No internal kitchen / laundry facilities
Self Care Retirement - Serviced Unit (Offsite)	Bed	0.30	0.45	No internal kitchen / laundry facilities
Boarding House	Bed	0.33	0.50	Communal kitchen / laundry
Caravan / Mobile Home Park (1 br)	Van	0.40	0.50	
Caravan / Mobile Home Park (2 br)	Van	0.60	0.75	Use if number of rooms unknown
Caravan / Mobile Home Park (3 br)	Van	0.80	1.00	
<b>Accommodation (Short Term)</b>				<b>Peak week loading - use peak occupancy</b>
Caravan Park				
Camping Site (temporary)	Site	0.50	0.63	Site approx. equivalent to average caravan site
Caravan / Cabin Site (temporary)	Site	0.50	0.63	Also use for on-site caravans / cabins
Bed & Breakfast / Guest House	Room	0.40	0.50	House based with communal kitchen / laundry
Motel / Hotel / Resort Room	Room	0.30	0.45	Consider food prep, entertainment & sporting separately
Backpackers / Hostel	Bed	0.15	0.23	Communal kitchen, small laundry, not serviced
Serviced / Unserviced Apartments	-	<b>Use multi-res lots (high density)</b>		Self contained (if not use motel)
<b>Accommodation (Medical Care)</b>				
Hospital	Bed	0.90	1.43	Includes medical facilities
Hostel (Medical)	Bed	0.70	1.11	Includes some medical facilities
Business (Excluding Food Preparation)				
General				
Single Retail Shop	Floor Area m <sup>2</sup>	0.00	0.00	
Supermarket	Floor Area m <sup>2</sup>	0.00	0.00	Includes minor food preparation
Shopping Centre	-	<b>Insufficient Data</b>		Consider amenities, food prep & specific bus. separately
Offices	Floor Area m <sup>2</sup>	0.00	0.01	
Specific				
Hairdresser / Beauty Salon	Basin	0.50	0.79	
Laundromat	Machine	0.45	0.71	
Medical Centre	Room	0.40	0.63	Based on number of consultation rooms
Plant Nursery	-	<b>Insufficient Data</b>		Consider case by case
Car Yard / Showroom	Floor Area m <sup>2</sup>	0.00	0.00	
Service Station	Lane	0.60	0.90	
Car Wash	Lane	5.70	9.03	
Escort Agency	Room	0.40	0.50	

# GRENFELL SEWER CONTRIBUTIONS PLAN (POLICY NO. 7.2.4)

WATER DIRECTORATE – JANUARY 2005

CATEGORY	STANDARD UNIT	SUGGESTED VALUES		COMMENTS
		WATER ET	SEWER ET	
Animal Boarding	-	Insufficient Data		Consider case by case
Self Storage	Floor Area m <sup>2</sup>	0.00	0.01	Consider office area only
<b>Food Preparation General</b>				
Restaurant / Café	Floor Area m <sup>2</sup>	0.01	0.01	Also use for general food preparation
Take Away / Fast Food (no amenities)	Floor Area m <sup>2</sup>	0.02	0.02	
Take Away / Fast Food (including amenities)	Floor Area m <sup>2</sup>	0.03	0.05	
Catering	Floor Area m <sup>2</sup>	0.02	0.02	
Specific Bakery	-	Insufficient Data		Use Take Away / Fast Food (non amenities)
Butcher	-	Insufficient Data		Use Take Away / Fast Food (non amenities)
Fishing Co-op	-	Insufficient Data		Use Take Away / Fast Food (non amenities)
<b>Entertainment Licensed Club</b>	Floor Area m <sup>2</sup>	Insufficient Data		Separate into Food Preparation, Entertainment, Amenities
Pub / Bar	Floor Area m <sup>2</sup>	0.03	0.05	Consider food preparation area separately
Cinema / Theatre / Public Entertainment	-	Insufficient Data		Use Food Preparation & Amenities
Function / Conference Centre	-	Insufficient Data		Use Food Preparation & Amenities
Marina	Berth	0.60	0.90	
<b>Sporting / Spectator Facilities General</b>				
Amenities & Indoor Facilities	-	Insufficient Data		Use Food Preparation & Amenities
Specific Hockey Field (artificial surface)	-	Insufficient Data		Consider case by case
Bowling Alley	Lane	0.35	0.55	Separate into Food Preparation, Amenities, Irrigation
Bowling Green	-	Insufficient Data		
Swimming Pool - Indoor	ML	Insufficient Data		Consider case by case
Swimming Pool - Outdoor	ML	Insufficient Data		Consider case by case
<b>Community Facilities</b>				
Child Care Centre / Pre-school	Person	0.06	0.10	Consider Food Preparation separately
Education - School (primary & secondary)	Person	0.03	0.05	
Education - College, University (tertiary)	Person	0.02	0.02	
Correctional Centre	Person	0.50	0.75	
Church / Place of Worship	-	Insufficient Data		Use Food Preparation & Amenities
Community Centre / Hall	-	Insufficient Data		Use Food Preparation & Amenities
Parks / Gardens / Reserves (Irrigation)	-	Insufficient Data		Consider case by case
Public Amenities Block (per shower)	Shower	0.40	0.63	
Public Amenities Block (per wc)	wc	0.40	0.63	

**Notes**

1 Standard ET = Town Water Usage of 230 kL/a & Sewage Loading of 140 kL/a  
 Assumed Residential Standard Discharge Factor: 60%

**Table 3 – Industrial User Categories (General)**

WATER DIRECTORATE – JANUARY 2005

**STANDARD ET FIGURES – INDUSTRIAL USER CATEGORIES (GENERAL)**

**Table 3: Standard ET Figures - Industrial User Categories\***

CATEGORY	STANDARD UNIT	SUGGESTED VALUES	
		WATER ET	SEWER ET**
<b>Industrial General</b>			
Light Industrial	Gross Ha	15	15
Future Unknown - Light	Gross Ha	15	15
Future Unknown - Med	Gross Ha	30	30
Future Unknown - Heavy	Gross Ha	50	50
* For industrial categories that have process water, it is suggested that a non-typical development ET is determined based on the methodology in Section 6.3 of the guidelines.			
** Additional ET figures for sewer have been included on Table 4, for a large range of detailed subcategories. These figures are provided for background information and should only be used as a general guide or where actual consumption data cannot be obtained.			

**Notes**

1 Standard ET = Town Water Usage of 230 kL/a & Sewage Loading of 140 kL/a  
 Assumed Residential Standard Discharge Factor: 60%  
 Gross Ha = Total land area of zone

**GRENFELL SEWER CONTRIBUTIONS PLAN (POLICY NO. 7.2.4)**

**Table 4 – Industrial User Categories (Detailed)**

WATER DIRECTORATE – JANUARY 2005

**STANDARD ET FIGURES FOR SEWER – INDUSTRIAL USER CATEGORIES**

**Table 4: Standard ET Figures for Sewer - Industrial User Categories (Detailed)**

CATEGORY	STANDARD UNIT	SEWER ET				PWD
		WSAA ET / Built-up Ha (N=1)	WSAA ET / Built-up Ha (N=2)	WSAA ET / Built-up Ha (N=3)	WSAA ET / Built-up Ha (N=4)	
<b>Food Manufacture</b>						
<b>Dairy</b>						
Milk	Built-up Ha	2,857	1,914	1,743	1,600	1,400
Cheese, butter and yoghurt	Built-up Ha	1,714	1,149	1,046	960	850
Ice Cream	Built-up Ha	571	383	349	320	350
<b>Fruit and Vegetable</b>						
Cannery	Built-up Ha	1,143	766	697	640	550
Condiments and Sauces	Built-up Ha	1,143	766	697	640	550
<b>Meat</b>						
Abattoir	Built-up Ha	1,143	766	697	640	550
Rendering tallow	Built-up Ha	571	383	349	320	300
Gelatine and glue	Built-up Ha	1,714	1,149	1,046	960	850
Poultry	Built-up Ha	2,286	1,531	1,394	1,280	1,100
Small-goods	Built-up Ha	1,143	766	697	640	550
<b>Grain</b>						
Flour milling	Built-up Ha	29	19	17	16	15
Starch	Built-up Ha	1,714	1,149	1,046	960	850
Edible oils and fats	Built-up Ha	2,286	1,531	1,394	1,280	1,100
Cereals	Built-up Ha	286	191	174	160	150
Bakery	Built-up Ha	29	19	17	16	15
Biscuits and cakes	Built-up Ha	286	191	174	160	150
<b>Beverages</b>						
Beer	Built-up Ha	1,143	766	697	640	550
Soft drinks and cordials	Built-up Ha	571	383	349	320	300
<b>Others</b>						
Yeast	Built-up Ha	2,286	1,531	1,394	1,280	1,100
Confectionery	Built-up Ha	143	96	87	80	80
Salt	Built-up Ha	571	383	349	320	300
<b>Textile and Leather</b>						
<b>Tannery and Hides</b>	Built-up Ha	1,143	766	697	3,640	550
<b>Wool</b>						
Wool scour	Built-up Ha	2,286	1,531	1,394	1,280	1,100
Felt and Carpet	Built-up Ha	571	383	349	320	300
Dyeing and spinning	Built-up Ha	571	383	349	320	300
<b>Cotton and Synthetics</b>						
Dyeing and spinning	Built-up Ha	1,143	766	697	320	550
<b>Chemical</b>						
<b>Petrochemical</b>						
Oil Refinery	Gross Ha	29	19	17	16	15
<b>Pharmaceutical</b>	Built-up Ha	286	191	174	160	150
<b>Organic</b>						
Liquids	Built-up Ha	571	383	349	320	300
Resins, polymers and plastics	Built-up Ha	571	383	349	320	300
Adhesives	Built-up Ha	571	383	349	320	300
<b>Others</b>						
Soaps and detergents	Built-up Ha	286	191	174	160	150
Paint manufacture	Built-up Ha	143	96	87	80	80
<b>Metal Processing</b>						
<b>Metal Finishing</b>						
Electroplating	Built-up Ha	571	383	349	320	300
Anodizing	Built-up Ha	571	383	349	320	300
Galvanizing	Built-up Ha	571	383	349	320	300

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WATER DIRECTORATE – JANUARY 2005

CATEGORY	STANDARD UNIT	SEWER ET				PWD
		WSAA ET / Built-up Ha (N=1)	WSAA ET / Built-up Ha (N=2)	WSAA ET / Built-up Ha (N=3)	WSAA ET / Built-up Ha (N=4)	
<b>Battery Manufacture</b>						
Dry Cell	Built-up Ha	286	191	174	160	150
Wet cell (lead acid)	Built-up Ha	286	191	174	160	
<b>Engineering</b>						
Machine shops	Built-up Ha	286	191	174	160	
Sheet metal	Built-up Ha	286	191	174	160	
Foundry	Built-up Ha	286	191	174	160	
Rolling	Built-up Ha	286	191	174	160	
Extrusion	Built-up Ha	286	191	174	160	
<b>Manufacture - Non-Metallic</b>						
<b>Paper</b>	Built-up Ha	143	96	87	80	80
<b>Plastics</b>	Built-up Ha	571	383	349	320	
<b>Wood</b>	Built-up Ha	143	96	87	80	80
<b>Mining (Earth)</b>						
Glass	Built-up Ha	143	96	87	80	80
Fibre cement	Built-up Ha	71	48	43	40	
Concrete products	Built-up Ha	1,143	766	697	640	
<b>Services</b>						
<b>Laboratories</b>						
Industrial and research	Built-up Ha	1,143	766	697	640	550
<b>Others</b>						
Film Processing	Built-up Ha	571	383	349	320	300

**Notes**

N = number of independent same category industrial connections

Built-up Ha = Total floor area of building

Gross Ha = Total land area of zone

For more information refer to (PWD, 1987) & (WSAA, 2002)