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City of Fremantle

# Local Identity & Design Code: Central Fremantle

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*Fig. 1: Mouat Street*

## Preface to the Local Identity Code

The concept of a Local Identity Code was developed by Jacek Dominiczak, an architect, urban designer and educator, in his doctorate at the Technical University of Gdansk, Poland, and then advanced at Carnegie Mellon University in Pittsburgh, USA. He presented a paper at the ICOMOS Conference in Fremantle in 2006, and those who heard him were so impressed by the originality of his concept and its potential application in Fremantle that the Fremantle City Council commissioned him to prepare a Local Identity Code for the central city area. This summary has been prepared to introduce Jacek Dominiczak's work, developed with his work partner Monika Zawadzka (architect and culture anthropologist) and their Fremantle partner Agnieshka Kiera (heritage architect), to elected members and officers of Fremantle City Council; planners, developers and architects; and members of the public interested in planning, architecture and heritage issues.

Anyone reading the report for the first time may find it difficult to absorb all the detailed technical information. This overview should make it possible to understand the concept, and how it can be applied to Fremantle to help to maintain the city's special character while encouraging creative architectural design which relates to and enhances that character but is contemporary in style and function.

It is important to appreciate that the information provided by the Code's analysis of the 'structure' of Central Fremantle – the layout of its streets and the way they connect or separate particular precincts – and of the characteristics of its buildings, complements what we already know of the City's architectural, heritage and social values and does not replace that knowledge. The current procedures for assessment of the potential impact of a proposed development on those values in an identified heritage place and area will still be required.

The Code is a practical planning tool with two important functions: first, it provides a language for defining the elements of urban spaces and of the buildings in those spaces, a way of expressing the geometrical and visual characteristics which contribute to the special identity of the built environment; second, it provides property owners and developers, and their architects, with guidelines for compatible development and makes clear the criteria by which their proposals should be assessed.

The innovation of this approach is that, rather than applying specific, prescriptive standards, the Code defines the scope within which architects can explore and create new solutions. By revealing the 'deformation' of existing buildings from the perceptual prototype, it shows that variation within certain limits actually defines the unique character of Central Fremantle streets. *(Fig. 1)* The degree of deformation must remain within defined limits, but these limits should be seen as setting the boundaries of a field of design opportunities which is open for the individual architect to explore, while ensuring the harmony of the final design with what already exists. *(Fig. 2)* Most traditional cities we admire today were 'crafted' in this way in a process that has been commonly referred to as 'an art of city building' where architectural quality and amenity of urban environment was seen as a guarantee of the best return on the capital investment.

*Fig. 2: High Street*

# Introduction

## A.01 Principles of the Local Identity Code

The fundamental role of architecture is the design of quality spaces for humans to live in. It is concerned with the physical aspects of the built environment, and works with geometric elements and their relationships to create forms which have functional, technical and aesthetic value in themselves, but also contribute to the form and character of urban precincts and the city itself. If architecture has performed this complex role well, the resulting whole is greater than the sum of its parts.

Architecture is influenced by political, social, economic and environmental issues, both historic and current, and the form and character of a city reflects this complexity.

The Local Identity Code focuses only on the visual perception of the city's spaces and structures, and attributes a language or code to the defining elements of these. It is intended to support planners, urban designers and architects, developers and authorities who attempt to respect, maintain and advance the special character of an existing urban environment while they plan changes and respond to new pressures affecting it. Its information complements the knowledge usually applied to good design and conservation of heritage.

The Local Identity Code draws on Dominiczak's concept of dialogic architecture, which is the recognition that the character of an urban area results not only from the intrinsic quality of individual buildings, but more importantly from the 'encounter' or 'dialogue' between them within the urban spaces framed by those buildings. The dialogue begins with 'listening' to the 'language' of the existing architecture and understanding its present identity. It is like a conversation in which a participant draws on the information and ideas put forward by others, and gets inspiration from them to develop new ideas and concepts. The Local Identity Code provides the keys to understanding the information in that dialogue.

*Fig. 3: Diagram of Faces*

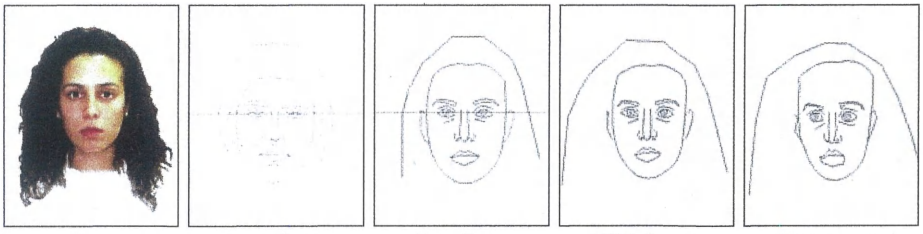


*Photo* | *Linear Photo - Prototype of generic face* | *Linear Photo - Prototype of individual face* | *25% Deformation* | *60% Deformation*

Deformation as the medium of face recognition. Studies adopted from Susan Brennan.
Author of analysis: Andreia Sousa (developed at urban design seminar by Jacek Dominiczak, 2008).

## A.02 Methodology of the Local Identity Code

The Local Identity Code analyses and transforms into practical design information a variety of data extrapolated from the existing forms and spaces of the city. The information is specifically architectural and therefore visual. It is used to describe or codify the forms and spaces as unique shapes and variations of particular geometrical prototypes.

This process is analogous to the process of human face recognition. Small differences or misalignments defining the uniqueness of a particular face are revealed when it is compared with the general form or prototype of the human face, but its overall 'likeness' to the prototype is maintained. *(Fig. 3)* Similarly, an architect may use the local code (particular prototype + unique deformations) to create buildings which are contemporary yet sensitive to the local identity of Fremantle and, particularly, sensitive to the immediate precinct in which the new building is to be located. *(Fig. 4)* On the other hand big differences create disharmony. *(Fig. 5)*

*Fig. 4: Beach Street*

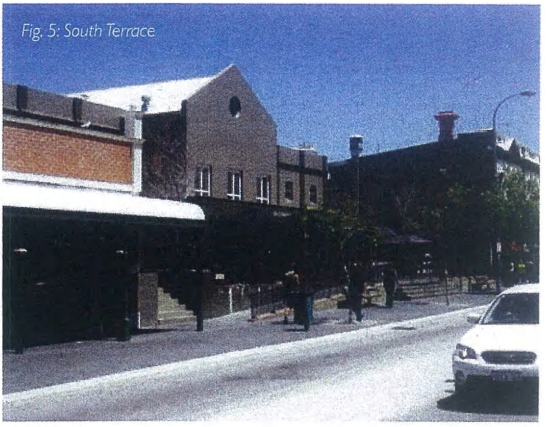


*Fig. 5: South Terrace*

## B.01 Urban Structure: Urban Prototype of Central Fremantle

Terms used in the Code are defined:

**Prototype/Form**
A prototype is analogous to a mental map – a perceptual strategy for the recognition of space. It uses basic geometric expressions to describe a street network (straight, perpendicular, diagonal etc.), or a building (height, proportion etc.) and its elements. It is a perceptual tool for the recognition of the 'deformations' of a street or building which contribute to their special identity.

**Form of a city**
The street layout generalised to a single, or multiple, geometrical prototype.

**Deform**
The complexity of the deformations from the prototype. In drawings these deformations are revealed by comparing the prototype with the reality of the existing spaces or their elements.

**Deform of a city**
The street layout described as unique deformations of particular prototypes.

**Vibration**
The sum of all deformations from the prototype in the elements of particular buildings or spaces.

**The street**
An urban interior defined by the street layout (floor) and by urban walls, generally the façades of buildings.

**Urban area**
A fragment of a city which is described by a single perceptual grid.

This section identifies 12 separate but connected areas in Central Fremantle which will be studied in detail later:

Area 001 The West End Area
Area 002 Kings Square Area
Area 003 Princess May Park Area
Area 004 Queens Square Area
Area 005 The Prison
Area 006 The Hospital
Area 007 The Fremantle Harbour Area
Area 008 The Wharf Goods Sheds Area
Area 009 The Slipways Area
Area 010 The Norfolk Street Axis Area
Area 011 The Grey Street Axis Area
Area 012 The Esplanade Area

They are also grouped under five headings: Inland Urban Areas; Waterfront Urban Areas; Riverfront Urban Areas; Oceanfront Urban Areas; and The Ring. *(Fig. 7)*

In this section the analysis of each area focuses on uncovering the local prototypes; it is structural, based on visually perceivable connections and geometrical relationships (Warp Grid 1) and also on deeply hidden connections and relationships (Warp Grid 2).

## B.02 Urban Structure:
## Urban Form and Deform of the 12 Urban Areas

The prototype reduces the complex patterns of existing spaces/streets to a simple form, making a generalisation as we do when creating a prototype of a human face. The essential elements/characteristics of the prototype, drawn from the real existing streets, constitute the form. The form varies from precinct to precinct, and even within any particular street *(Fig. 6 and 6a)*

*Fig. 6: Map of street central lines, Central Fremantle (Dr J. Dominiczak)*

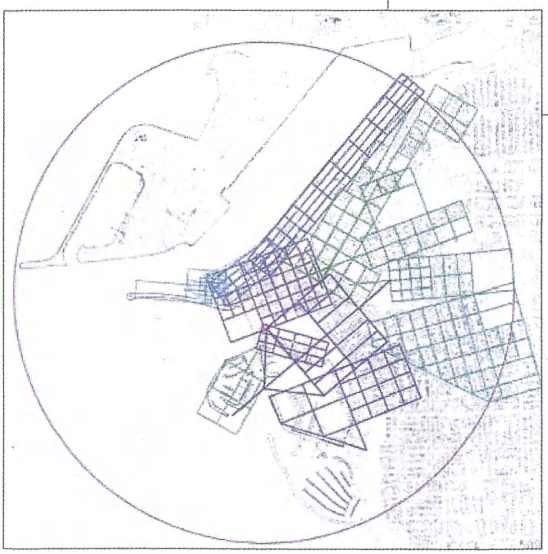


*Fig. 6a: Complete form of central Fremantle (Dr J. Dominiczak)*
*Identified urban areas of Central Fremantle*

## B.03 Urban Structure: Urban Seams Between the 12 Urban Areas

A seam is the junction between two grids, where the specific characteristics which define one area end and the adjoining area's characteristics begin. These sometimes overlap, so the junction is more complex and blurry and the seam is defined by the features of both areas.

Three types of urban seams are identified:

- a seam of joined areas – the prototypes of adjacent areas share certain characteristics, making it possible to read a smooth continuity between the areas;
- a seam of adjacent (juxtaposed) areas – the prototypes that define each area are some distance apart, so each area maintains its own characteristic prototype but allows connections to be negotiated;
- a seam of overlapping (superimposed) areas – the characteristics that define prototypes of adjacent areas partly overlap so that these characteristics become more complex and constructed by the local 'dialogue of deformations'.

The interaction between particular areas is illustrated in maps on which diagrams of the area's prototypes and the deformations from the prototype are superimposed.

*Fig. 7: Deform of central Fremantle (Dr J. Dominiczak)*

Fig. 8: High Street west


Fig. 9: High Street east

Fig. 11: South Terrace beyond Norfolk Street

## C.01 Urban Interiors: The Key Fremantle Streets

The urban space of the City is a network of urban interiors: public urban interiors (streets, squares, public gardens) and public architectural interiors (shops, cultural centres, religious centres – churches, synagogues and others – and public institutions).

The analysis of urban interiors begins by looking at fifteen key streets and identifies their place in that network and some of their characteristics. For each street there is a map showing its central line and revealing its role as a major connection between areas (as High Street connects areas 001, 002 and 003) or, sometimes, as a seam between two geometrically misaligned areas (Market Street).

Then analysis of each street's dimensions and forms provides further information on:

- urban wall consistency/inconsistency – for example, highly consistent in the West End area of High Street *(Fig. 8)* but not consistent east of Kings Square *(Fig. 9)*; consistent in Market Street and in the Cappuccino Strip *(Fig. 10)* of South Terrace but losing consistency beyond Norfolk Street. *(Fig. 11)*
- street width and building line vibration – for example in High Street between Kings Square and Queens Square there is considerable variation
- the height and prototypical proportions of the building façades

An urban interior is defined by urban walls, each made up of the façades of the buildings. But obviously the walls are not uniform or continuous; analysis of urban walls reveals gaps and layers which contribute to the character of the street or space. Understanding this character is the purpose of the Local Identity Code, and is what helps new design integrate as a positive.

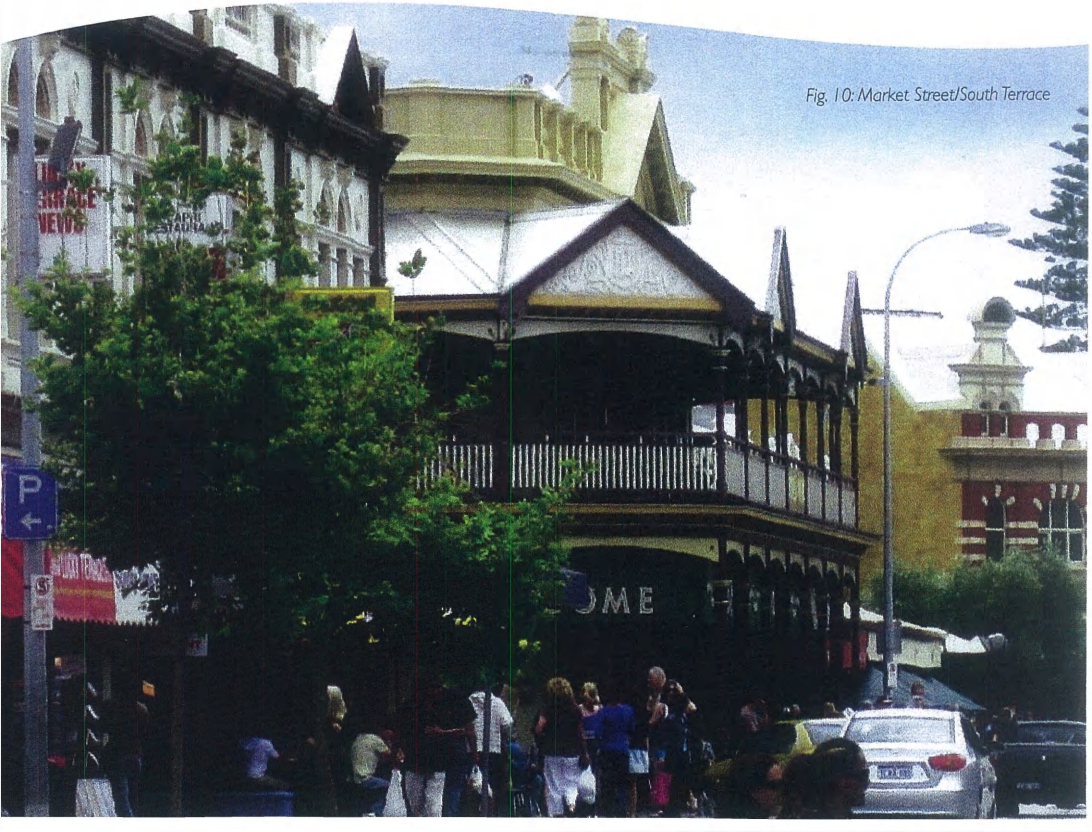


*Fig. 10: Market Street/South Terrace*

## C.02 Urban Interiors: The Gaps of Urban Walls

Gaps can vary from very architectural narrow seams to gaps which provide access between buildings, as a narrow lane or wide enough for vehicle access. A gap can also be the entrance into a building and may be decorated with an arch and iron gate.

A large number of photographs illustrate the obvious examples, like arcades and laneways, but also draw attention to the great variation, especially down smaller streets. They show how interesting, even idiosyncratic, some of the City's streets are and this information contributes greatly to awareness of the local identity of Central Fremantle. Identifying this idiosyncratic quality helps new design avoid overly formulaic solutions.

*Fig. 12: Henry Street*

*Fig. 13: Croke Street*

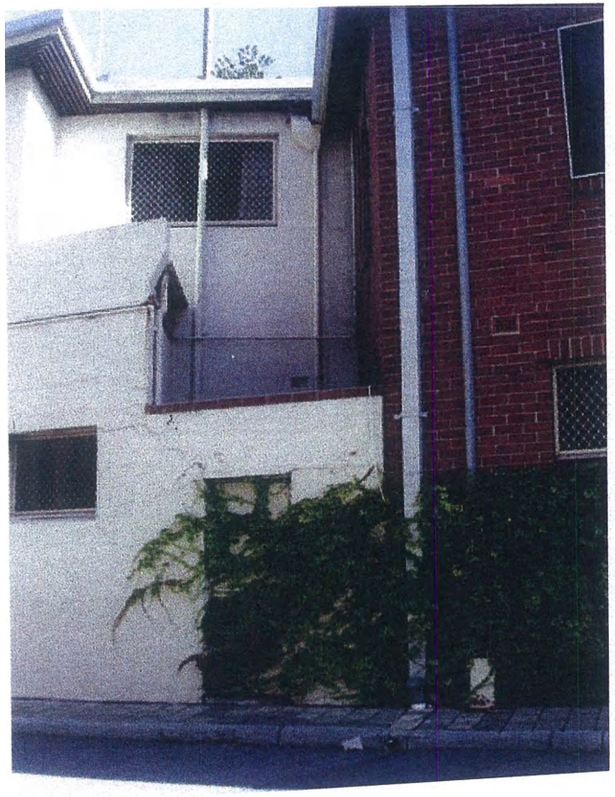
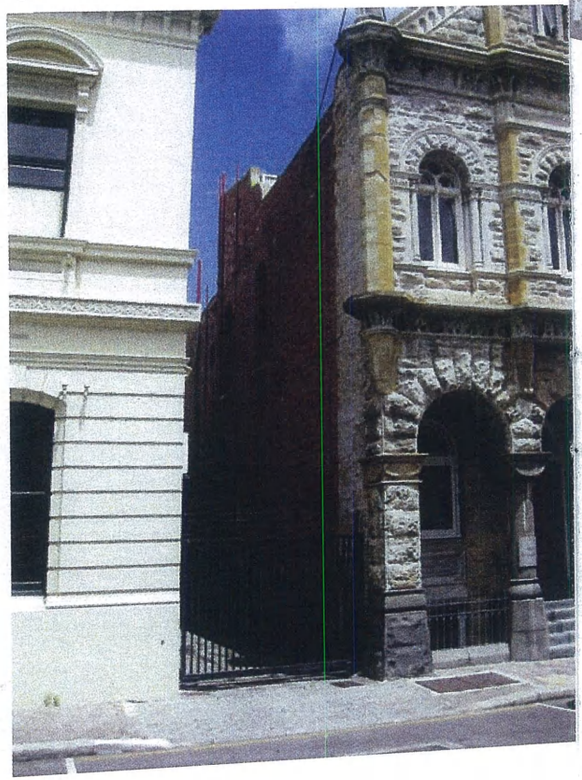


*Fig. 14: Mouat Street*



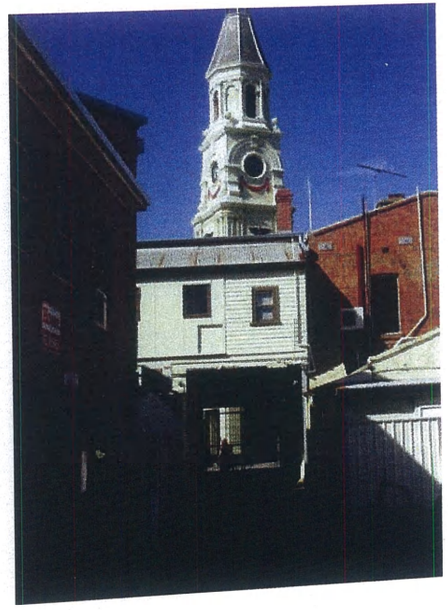


*Fig. 15: Paddy Troy Mall*

## C.03 Urban Interiors: Façade Layers of Urban Walls

In Fremantle, urban walls have a characteristic, multi-layered, 3-dimensional construction formed by verandas, awnings and canopies projecting in front of the building, and by loggias or recesses reaching behind it.

A typology of urban walls includes

- single-layered, formed by a plane façade without additive or subtractive layers *(Fig. 17)*
- double-layered, with verandas, awnings or canopies projecting into the street and forming an additive *(Fig. 18)* façade (façade layers 0, +1) or with a recess or loggia reaching into the building and forming a subtractive façade (façade layers 0, –1) *(Fig. 16)*
- triple-layered, with veranda, awning or canopy and recess/loggia forming a complex façade (façade layers 0, +1, –1) *(Fig. 19)*

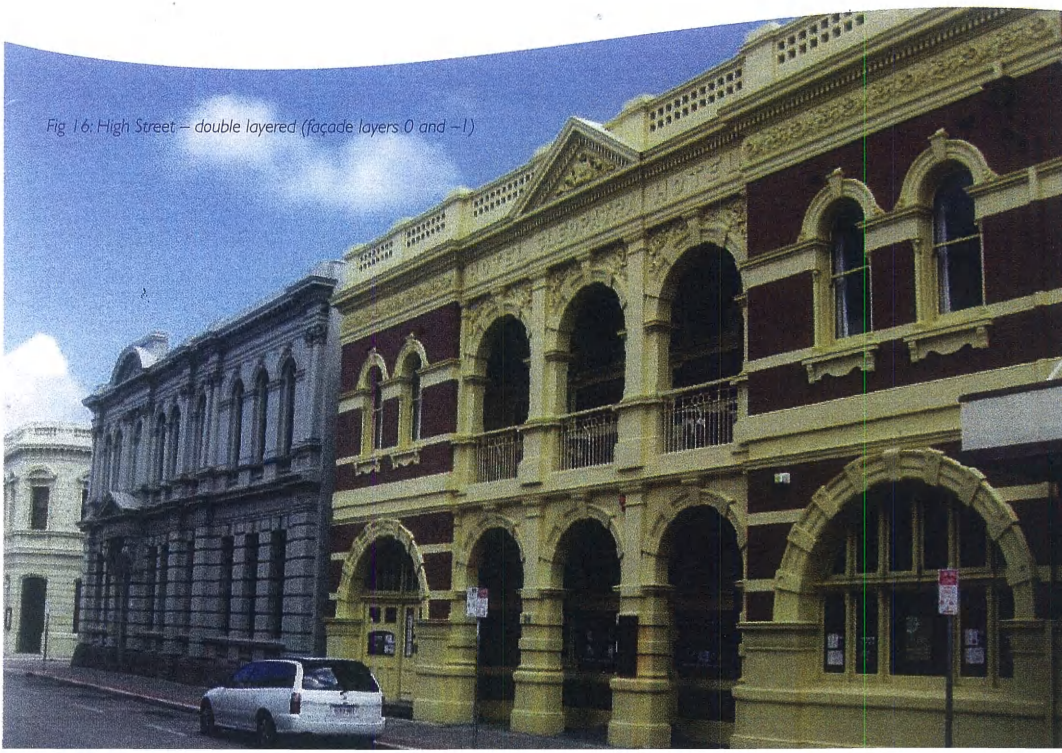


*Fig. 16: High Street – double layered (façade layers 0 and –1)*

*Fig 17: High Street – single layered (façade layer 0)*

*Fig 18: Market Street – double layered (façade layers 0 and +1)*

Photographs illustrate the variety of each of these types and the rich complexity of Fremantle street façades. There are also drawings which show the basic shape and proportions of the layered elements of a large number of buildings.

*Fig 19: High Street – triple layered (façade layers 0 and +1 and -1)*

Fig. 20: Croke Lane

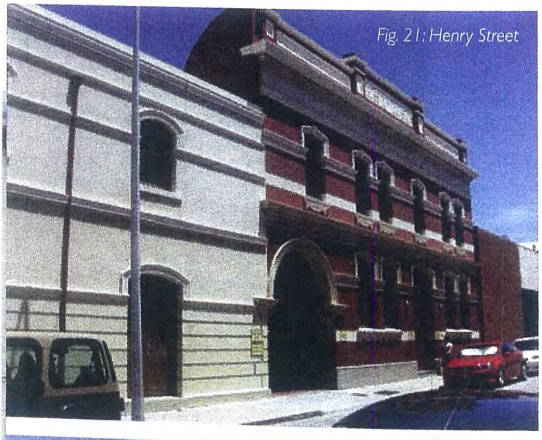


Fig. 21: Henry Street


Fig. 22: High Street cnr Pakenham Street

## D.01 Urban Architecture: Façade Outline

This section looks at individual buildings rather than streets. It examines the façades of 87 buildings to obtain information on length, wall and roof height and proportions. It reveals the relationship between a particular façade outline and the urban wall of which it is a part; some of the buildings are on street corners *(Fig. 22)* (see also E.04). The information is presented visually in photographs and drawings, making it easier to appreciate both the high level of consistency and the individuality of particular buildings.

Of particular interest is the superimposition of the outlines of buildings in each area, and of all 87 buildings, showing the overall consistency in height and proportion *(Fig. 20 and 21)*.

## D.02 Urban Architecture: Façade Openings

The examination turns then to façade openings, chiefly window systems though obviously doors and gates are also important features of an urban wall. Photographs and drawings show clearly the characteristic vertical axis of windows in many of the buildings, particularly on upper floors *(Fig. 23 and 24)*. The superimposition of drawings reveals the typical pattern and also the extent to which variations occur. There are rather different window systems in buildings in the port and fishing boat harbour areas, and small differences in façade openings in inland areas of the city *(Fig. 20 and 25)*.

Fig. 23: High Street

Fig. 24: Phillimore Street

Fig. 25: Slip Street


Fig. 26: High Street

## D.03 Urban Architecture: The Seams Of Façades

In the West End particularly there is often little or no space between buildings, and the photographs illustrate how façades 'encounter' each other on the surface of an urban wall. They show clearly that in some cases the transition is made smooth by shared architectural elements; *(Fig. 26 and 27)* in others there is significant misalignment *(Fig. 28 and 29)*.

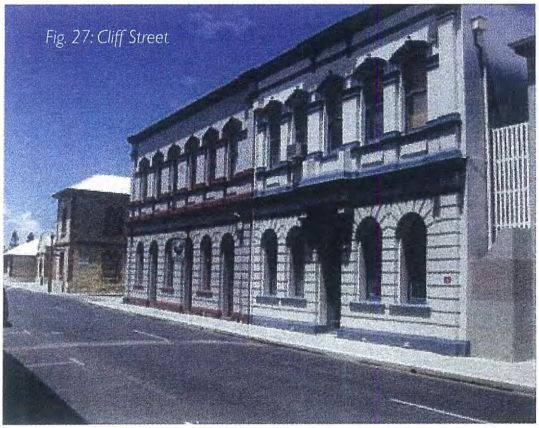


Fig. 27: Cliff Street


Fig. 28: Adelaide Street

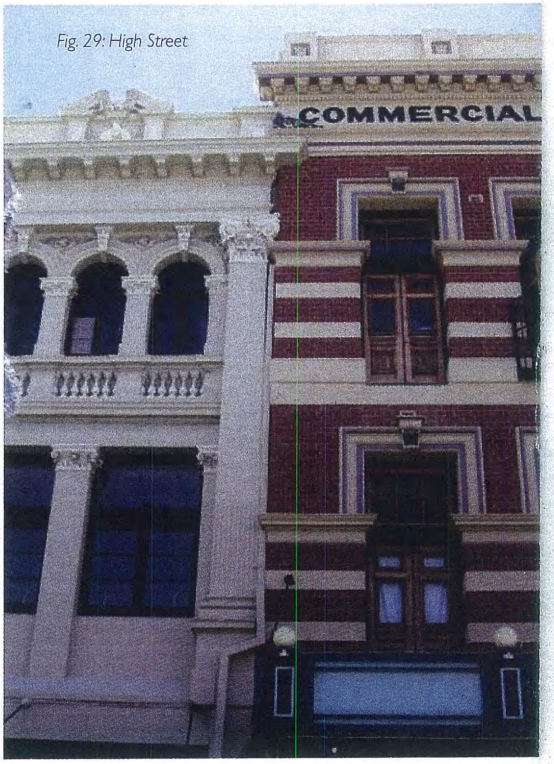


Fig. 29: High Street

## D.04 Urban Architecture: Materials and Colours

Finally, photographs of building façades in each of the 12 areas reveal similarities and differences in materials and colours; the captions summarise these and identify common characteristics of each area *(Fig. 30, 31, 33, 34 and 35).*

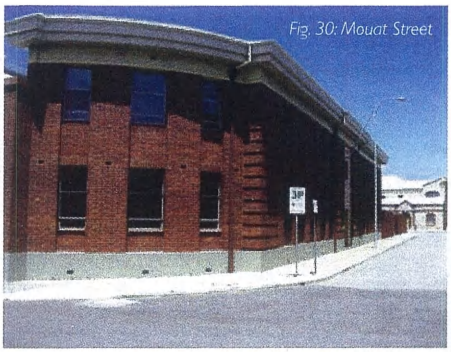


*Fig. 30: Mouat Street*


*Fig. 31: High Street*


*Fig. 32: Fremantle Park*

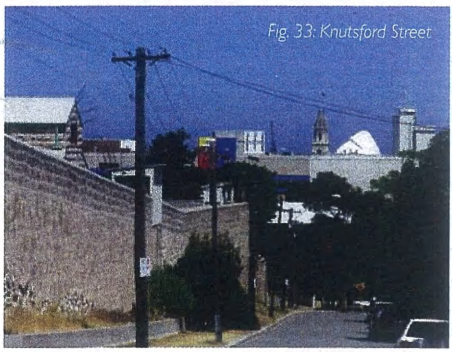


*Fig. 33: Knutsford Street*


*Fig. 34: Holdsworth Street*

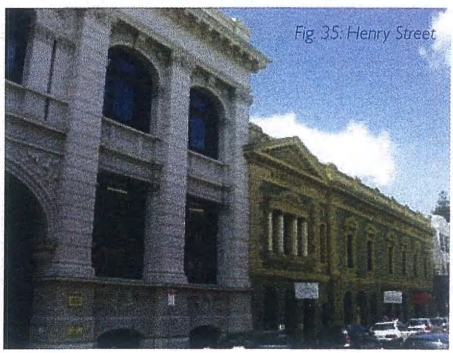


*Fig. 35: Henry Street*

## E.01 Introduction: General Design Guidelines for Compatible Development

This section outlines the role of the Local Identity Code in ensuring that any new development in the central area of Fremantle relates to, continues and reinforces the special identity of the City. It is a tool for town planners, property owners, architects, designers and developers, and provides guidelines to inform the design of new developments at all stages.

It is also a tool for quality control which can be used when assessing development applications – firstly, by letting property owners and developers, and their designers/architects, know the parameters and standards for compatible development; and secondly, by making clear the criteria by which their proposals will be judged. It does not set specific standards; instead, it defines the scope within which architects can create new designs.

The Code stresses, however, that any development application must first comply with the provisions of Local Planning Scheme No. 4 on development control. For an identified heritage place affected by the proposed development there must be assessment of its significance, and of the potential impact of the development on its heritage and aesthetic values.

*Fig. 36: Cnr Josephson and Ellen Streets*


*Fig. 37: Queen Victoria Street*

The Code complements what is already known of the history and aesthetic value of heritage places, by bringing information on urban design and architecture to the dialogue (see A.01). Its information is particularly valuable because it is derived from in-depth analysis of what already exists, and is organised, categorised and cross-referenced.

The analysis in sections B and C forms the basis for the recommendations in this section, covering:

- urban structure – city layout; important connections and views *(Fig. 39)*
- urban interiors – building line; height and scale; entrances; verandas *(Fig. 36 and 37)*
- urban architecture – details of façades (seams, windows and doors; materials and colours) *(Fig. 38 and 38a)*.

There are detailed recommendations covering all of the 12 areas.

*Fig. 38: Phillimore Street*


*Fig. 38a: Pakenham Street*

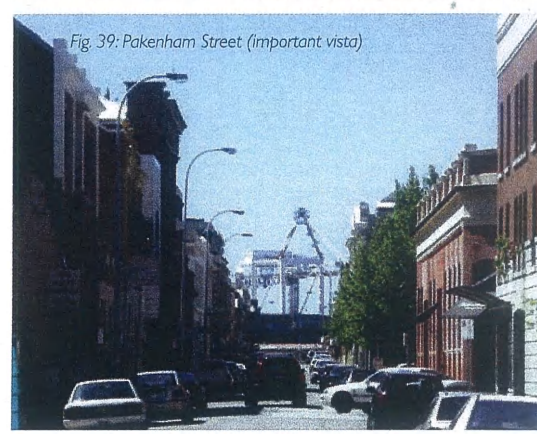


*Fig. 39: Pakenham Street (important vista)*

## E.02 Urban Structure: Design Guidelines for Compatible Development

This section deals with the structure or urban form of Central Fremantle, and of its 12 separate areas, and provides information valuable for strategic urban planning. The recommendations draw on insights already revealed in B.01 – B.03 and are cross-referenced to the relevant section. The examples given here show their scope.

It is a key urban characteristic of Fremantle that the waterfront areas lie symmetrically on either side of High Street and indeed of the whole of Central Fremantle. With the shrinking of port activities in the Victoria Quay area it is recommended that the possibility of developing new riverfront marinas be explored to maintain that balance, rather than extending oceanfront marinas with no consideration of their impact on the form of the city and how it works (E.02.01: Particular project recommendation).

The radical division between the inland area and the waterfront areas should be retained. The inland area *(Fig. 39 and 41)* should maintain its urban character defined by solid buildings which reinforce the pattern of the streets. The riverfront areas should maintain their 'urban lightness', characterised by industrial structures (E.02.01) *(Fig. 41a)*.

*Fig. 41: Beach Street*

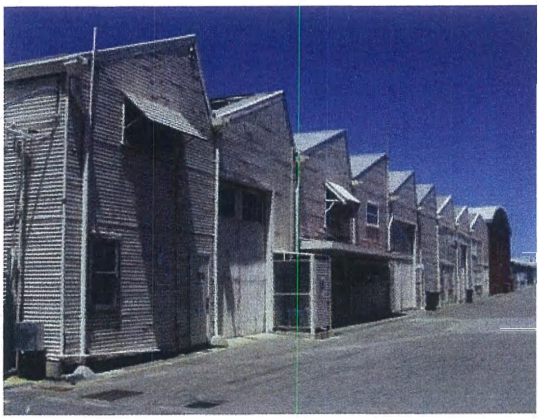


*Fig. 41a: Slip Street*

The visible seam between Princess May Park and Fremantle Harbour area should be maintained. The urban wall along the SW side of Beach and Elder Streets includes the large woolstores; future 'oversized' new buildings of comparable height should be located in this strip (E.02.01). *(Fig. 41)*

Given High Street's importance as the central geometrical line through the centre of Fremantle, it is recommended that the connection between the West End and Queens Square be reinforced (E.02.01). *(Fig. 40)* This would involve elimination of the current inconsistencies in the street's form and extension of the regular urban walls characteristic of the well-articulated parts of the city centre, i.e. the two to four storey West End system should extend east on zero setback, as recommended in E.03. (However, the report notes in E.03 that account would have to be taken of the single or two storey historic houses in the area and new development should be designed with these as an integral part.) As a particular project it is recommended that the character of Queens Square as a public urban space should be more clearly defined by the creation of a continuous hard edge of an urban wall and reorganisation of the traffic to free the square centre for public gardens.

The Code also recommends better connection between two areas; for example, the axial extension of Fairbairn Street to meet the axis of Paddy Troy Mall. The detailed study for the Spicer Site and Paddy Troy Mall Redevelopment Project shows how this can be done *(Fig. 42 and 43)*.

Fig. 40: High Street between Kings and Queens Squares


Fig. 42: Fairbairn Street east


Fig. 43: Spicer Site (potential for axial extension of Fairbairn Street)

## E.03 Urban Interiors: Design Guidelines for Compatible Development

The Code recognises that Central Fremantle is still in the process of development and refinement and may well always be. Protection of its identity does not necessarily mean preserving its urban and architectural form as it is now. In the process of change certain local characteristics must be retained but there is scope for variation, in height and design for example.

The tables in this section show the prototypical height of urban walls in particular zones, and the acceptable amplitude of vibration (i.e. variation from the prototype or deformation) *(Fig. 44)*.The recommendations are then spelt out in more detail. In each case they are cross-referenced to the relevant sections (in B.01–B.03 and C.01) of the report.

The Code again recognises the importance of High Street and its relatively high walls. It recommends replicating in the eastern section of High Street the height, proportions and urban wall layering of the western section. As noted above however, it acknowledges that reconciling this recommendation with the requirement to retain and conserve existing heritage buildings adds another dimension to the design mix.

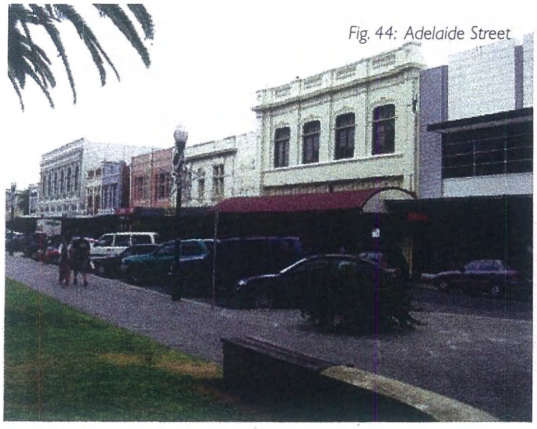


*Fig. 44: Adelaide Street*

*Fig. 45: Queen Street*

Kings Square also presents a challenge because the quality of its urban character is based on a dialogue between three different areas as defined by the Code. So the heights recommended for the urban walls along the sides of the Square can vary, reflecting the character of the other areas but in some cases involving less vibration than is generally recommended within those areas *(Fig. 45)*.

Within the Prison precinct the dominance of the Prison buildings is acknowledged, but the single storey Markets building and warders' cottages are recognised as forming a distinctive edge to the precinct where it meets the city centre *(Fig. 47 and 48)*.

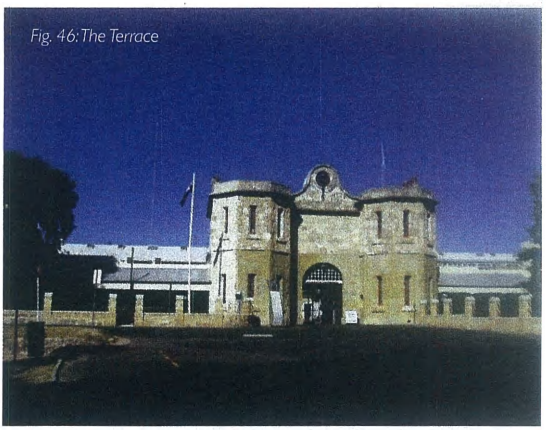


*Fig. 46: The Terrace*


*Fig. 47: Market Street*

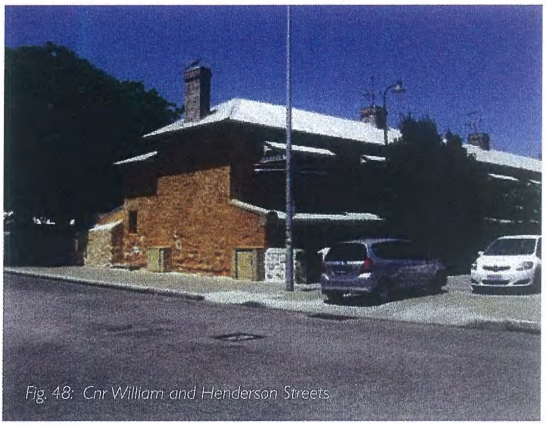


*Fig. 48: Cnr William and Henderson Streets*

## E.04 Urban Architecture: Design Guidelines for Compatible Development

This section reveals the importance of street corners in one's perception of urban interiors, and also of the dimensions and proportions of façade walls *(Fig. 49 and 50)*. Half of the refined façades in Central Fremantle are located on street corners and this is the reason why special architectural attention should be paid to corners *(Fig. 51)*. The Code recommends that no height or building line deformations be permitted for corner buildings.

On façade walls, the Code makes the general recommendation that, because of their importance in defining the character of an urban interior, urban walls should be partitioned into separate façades and should retain the dimensions and proportions characteristic of the zone in which they occur.

The detailed recommendations which follow cover each of the 12 areas, and are cross-referenced to section D where the analysis was presented under the same headings:

- learning from façade outlines
- learning from façade openings
- learning from façade seams
- learning from façade materials and colours

Fig 49: Cnr High and Pakenham Streets

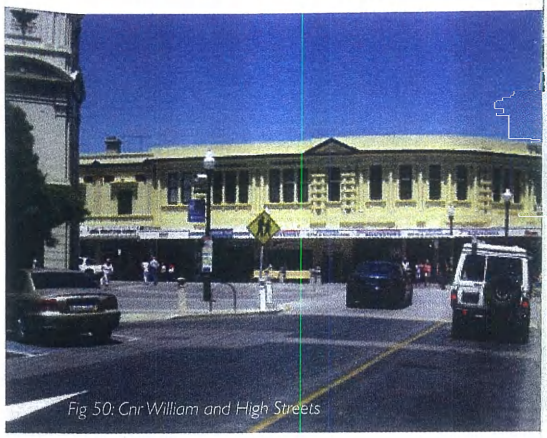


Fig 50: Cnr William and High Streets

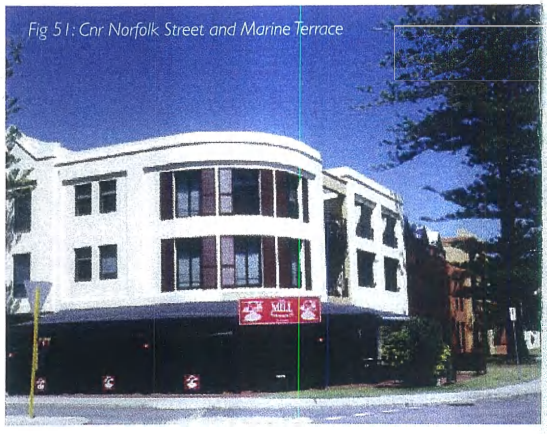


Fig 51: Cnr Norfolk Street and Marine Terrace