City of Hobart

Planning Scheme Density Study: Review of Plot Ratio

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

Introduction and Purpose

The Hobart Planning Scheme 1982 has 'density controls' in three areas:

- Plot Ratio controls affect residential, commercial and industrial development. Such controls limit the ratio of floor space to site area. There are 'basic' ratios which all applications much fall within – except with a permit, and there are 'maximum' ratios which must not be exceeded. Developments exceeding the Basic Plot Ratio must provide specified items such as public facilities (termed 'Bonus Plot Ratio').
- Minimum lots sizes and other criteria are applied to land subdivisions.
- Minimum 'site area per dwelling' ratios affect multi-unit developments.

The principal aim of this study is to review these provisions and to make recommendations on their retention or otherwise. Comment is also made on follow-up actions.

Need for the Study

The need for the study has been identified in a number of reviews that have called the application of density controls into question. For example:

- A number of heritage studies have advocated that building envelopes should form the basis of density controls in heritage areas. This reflects the fact that the massing, spacing and form of buildings in heritage areas is established and is a key feature of the character of the area. Building envelopes can only be constructed after site-specific assessment taking the features of the area into account. Formulaic solutions are seldom able to deal with the special nature of each individual situation.

- Studies undertaken in business and mixed-use precincts have observed that demand is usually well below Plot Ratio rendering the tool largely irrelevant. A performance-based system with building envelopes provided as 'acceptable solutions' is advocated.
- A number of studies into performance-based development control have suggested this approach as a substitute for Plot Ratios and other 'density' measures. In simple terms, 'performance-based' means that for each element of development (height, car parking, set backs, open space, etc.) there is an 'acceptable solution' which is conservative and is designed to produce an appropriate outcome in all cases. Applicants are encouraged to offer alternative solutions, which can be demonstrated to meet stated performance criteria.

Operation of Plot Ratio in Hobart

A detailed review of the actual operation of density controls has been undertaken. Hobart City Council data on recent planning applications was reviewed to establish the role of Plot Ratio in development application decision-making. Overall, Plot Ratio controls are in excess of requirements and hence their effectiveness as a mechanism to control density is to a large extent invalidated. The City's average Plot Ratio standard is 0.8 (sample 866) but the desired Plot Ratio is on average 0.4 (sample 398). Very few applications sought increased Plot Ratio and of these all were for marginal increases.

Permit applications were examined for zones in the Scheme and it was observed that:

- The vast majority of applications are successful.
- Refusal is typically made on use related issues (such as parking, noise and traffic impact in residential areas) and heritage conservation issues.
- Refusals are generally not made on adherence or otherwise to quantitative standards.
- Few applications sought an increase in Plot Ratio, and most of those that did sought only a minor increase.
- Plot Ratio was not the basis of rejection in the cases reviewed.

Economic Analysis

The study also incorporated an economic analysis carried out by McNamara Taplin & Associates. This analysis found that:

- Developers are understandably driven by an economic rule and in this regard a Plot Ratio control has afforded some certainty in regards the potential of sites. Clearly this certainty should be maintained and it is reasonable to assert that if a developer is to invest money, by way of purchase price, he is entitled to expect a degree of surety as to the likely development that would be approved. This is a reasonable expectation and is a fundamental basis of real estate activity. There is factual data to assert that prices paid for potential development sites either commercial or residential are directly related to development options.
- The abandonment of Plot Ratio therefore should only occur if certainty could be replaced by an alternative method (eg. height limitations and building setbacks). Indeed, the Bonus Plot Ratio system introduces an uncertainty, which is not conducive to the economic feasibility of potential development. All the circumstantial evidence suggests the Bonus Plot Ratio control should be abandoned.

Operation of Plot Ratio Across Australia

Density controls were surveyed in twelve local government areas across Australia in order to highlight various methods used by planning authorities for a range of land use precincts including housing, retail and commercial towers.

The main findings of the case studies are as follows:

- Plot Ratio is generally not used in performance-based development control systems. Acceptable solutions employed in these systems typically specify standards for lot configuration and building envelopes, but not Plot Ratio.
- Prescriptive approaches to development control may or may not use Plot Ratio. Standards over lot size and building envelope are the most commonly used technical provisions.
- Plot Ratio is mainly applied in property markets with high property development activity and demand and generally in 'high-rise' development situations (based on the selected

review of case studies). This includes the CBD areas of Sydney and Melbourne and high-rise accommodation towers in the Gold Coast.

- Some jurisdictions have implemented changes to density controls with the general trend being abandonment of Plot Ratio in favour of performance-based approaches.

In studying experience elsewhere, particular attention was paid to the experience in Victoria where a considerable amount of work has been done on performance-based development controls for residential development. Considerable controversy has been generated in Victoria and this has been in large part due to the 'acceptable solutions' in the controls being too liberal. It has been argued that they have allowed inappropriate developments, particularly with regard to the bulk and mass of dwellings, overlooking and urban character. A recent development is the introduction of new controls (ResCode) with more conservative acceptable solutions.

ResCode in Victoria has a reference to minimum lot sizes (300 sqm or 500 sqm with a variation to the Planning Scheme) but these are not density controls as such. They are 'triggers for discretion' in that a planning permit is required for smaller lots.

In other States Plot Ratios in commercial areas have their origins in a desire to exact development contributions, more than as a density control device. Essentially, the approach was to arbitrarily select a Basic Plot Ratio, which was under the norm for the area, and make the norm the subject of 'bonuses'. To qualify for bonuses certain public goods had to be provided. However, over the past decade or so new approaches to development contributions have been developed in their own right. It is now widely accepted that if a contribution is justified it should be made without resort to pseudo density controls with an ulterior motive. The legislation to achieve this end is generally in place.

Another shortcoming of Plot Ratio controls is that they can influence land values and create an expectation of development potential over and above what is appropriate. Heritage controls, for example, might come into conflict with the indicated maximum Plot Ratio.

The trend in development control is to acknowledge that density is a 'description' rather than a determinant of the quality of the urban environment. Thus it is a feature of urban development rather than the main influence on it. It is acknowledged that it is quite possible to have a very high quality and a very poor quality outcome at exactly the same density.

Conclusions and Recommendations

This study has reviewed the operation of plot ratios in non-residential areas and the Residential 1 and 2 zones and it is concluded that:

- Plot Ratio is an indirect means by which to manage Hobart's density planning objectives. The quantitative Plot ratio standards set out in the Planning Scheme have an indirect relationship to statements of character and built form.
- Plot ratio controls are generally in excess of demand requirements and hence their effectiveness as a mechanism to control density is to a large extent invalidated.
- The Bonus Plot ratio system used in Hobart is subjective, is rarely used nowadays and adds another layer of complexity and uncertainty in the planning system.

Plot ratio controls have been dispensed with in the Wapping area where 'design based' building envelopes and associated measures define the 'acceptable solutions' and provide the requisite level of certainty to inform the land market.

It is **recommended** that in a revision of the planning scheme in the non-residential areas plot ratios be abandoned in favour of the approach adopted in the Wapping Local Area. The work done in CASP should be the starting point for the review.

Plot ratios have also been reviewed in the residential areas and it is found that hey do have a role in protecting neighbourhood character although it quite limited, especially in the Residential 1 and 2 zones, and they are sub-optimal in this regard. More sophisticated residential development controls are required but experience elsewhere is problematical and caution must be taken if importing ideas in this area.

There is a need for a more 'guidelines led' approach accompanied by more collaborative approvals processes. This would need to be backed

up by a set of relatively conservative 'acceptable solutions' in the scheme. Also required would be clear performance criteria to assist the exercising of discretion to waive 'acceptable solutions'.

Guidelines can be prepared without amending the scheme as it currently allows discretion to vary from the acceptable solutions. Ultimately, after field tests, they may become incorporated into the scheme to give them statutory effect.

For the residential areas it is **recommended**, in order of priority, that:

- The current review of the scheme dispense with plot ratios and adopt additional elements from a revised ResCode '95 (Draft).
- Residential development guidelines be prepared dealing with the areas of discretion in the scheme, particularly for those areas that do not lend themselves to 'acceptable solutions' being defined such as building appearance and neighbourhood character.
- That a review of development approvals procedures be undertaken to refocus on quality of design and a more collaborative approvals process. Information requirements of applicants should include a site analysis, but with safeguards to ensure that the information required to be submitted is relevant to the actual proposal. Hence various 'classes' of applications should be identified from the minor (with few information requirements) to the major (with more extensive information requirements).
- After field testing, the guidelines should be incorporated into the scheme to give them statutory effect.

1 INTRODUCTION

1.1 Background

The strategic direction for the use and development of land in Hobart is implemented through the City of Hobart Planning Scheme 1982 (ie. the Planning Scheme). The Planning Scheme sets out land use zones and precincts for various activities and states the objectives for those areas.

A range of development control tools or techniques are used to manage use and development in the zones and precincts, that is, to meet the objectives of the zones and precincts. A set of development controls is used to manage development 'density'. Density refers to the number of buildings in a given area and the size and bulk of the buildings.

Density control tools include standards for lot size and building number, floor area, height and setbacks. The focus of this study is on density controls tools and in particular Plot Ratio and Bonus Plot Ratio.

Plot Ratio expresses the relationship between the area of a site and the floor area of a building. In general terms, a Plot Ratio control may allow a building to occupy a large portion of a site and be 'low rise' or allow a building to occupy a small portion of its site and be 'high rise'. 'Bonus' Plot Ratio refers to provisions that enable additional floor area development in exchange for provision of certain facilities like public spaces and amenities.

Plot Ratio as a development control tool has been used in Hobart since 1976 and Bonus Plot Ratio has been operative since 1984. Since the inception of Plot Ratio and Bonus Plot Ratio controls, a number of new development trends have emerged and alternative ways of managing development have been implemented across Australia. In this context a number of research projects undertaken by Hobart City Council have called into question the relevance of Plot Ratio as an appropriate density control tool for various land use settings.

It is timely therefore to review Hobart's development density controls in light of contemporary planning practices and development trends. It is important that Hobart has the most appropriate means by which to manage development of land. This review aims to provide the basis for density provisions in a new City of Hobart Planning Scheme.

1.2 Aim and Objectives

The aim of this report is to recommend the most appropriate planning tool(s) to manage development density in a Hobart City Council context. The particular objectives of this study are:

- To assess the adequacy of Plot Ratio (and Bonus Plot Ratio) as a planning tool to manage density of development;
- To make recommendations as to the most appropriate planning tool(s) to manage density; and
- To make recommendations as to whether Plot Ratio (and Bonus Plot Ratio) should be retained or discontinued.

The key outcomes sought from the study, as stated in the study brief, are shown in the following text box.

Key Study Outcomes:

A documented summary and review of the operation of the density provisions of the Planning Scheme for the various zones and in particular 'Basic Plot Ratio' (including in relation to subdivision of already developed land and the operation of incremental increases) having regard to the overall Planning Scheme provisions, in particular those of Heritage Schedule F;

A documented summary and review of the operation of the maximum Plot Ratio provisions in precincts where Bonus Plot Ratio can be awarded under the Bonus Plot Ratio provisions of Principle 8;

A documented summary of the site development planning tools / techniques used in the most recent statutory planning schemes or plans from a selected range of locations elsewhere in Australia, including from other State Capitals, regional cities of equivalent sizes, leading suburban Councils from elsewhere in Australia and guidance issued by State and Territory planning authorities;

A summary of trends and projections of property values over the past 5–7 years and role and significance of 'Plot Ratio' – compared with say the 'height'

provisions of the scheme and other economic or other factors outside of the Scheme – in the determination of those values across the various zonal types and locations of the City of Hobart;

A comparative evaluation of the utility and merit of Plot Ratio as a planning tool / technique for regulating site development in various land use zones in relation to other planning tools / techniques such as building envelopes, lot coverage, open space ratios or other performance based provisions in the Hobart context;

A comparative evaluation of the utility, merit and impact of 'bonus' Plot Ratio as a planning tool for realising additional community benefits – as 'planning gain' or as an offset / compensation for the external impacts of a site development in relation to a reliance on Part 5 of the Land Use Planning and Approvals Act 1993 and / or other provisions that could be included in a new City of Hobart Planning Scheme consistent with that part of the Act;

Recommendations as to whether, where and how 'Plot Ratio' should be retained as a planning tool / technique for regulating site development in a new City of Hobart Planning Scheme or, as to other provisions considered more appropriate;

If 'bonus' Plot Ratio is to be retained, recommendations as to the levels that should apply in the respective areas of the 'planning area' and what features of the development of use of land (including that external to a site) should qualify and the application of a provision vis-à-vis Part 5 of the Land Use Planning and Approvals Act 1993;

Recommendations as to the appropriate or consequential provisions that need to be introduced into a new City of Hobart Planning Scheme as a complement to the overall recommendations.

1.3 Structure of the Report

Section 2 sets the context of the report by providing a brief introduction to planning and Plot Ratio. The purpose, strengths and weaknesses of Plot Ratio are introduced.

Section 3 documents the density control system in Hobart City Council as provided by the 1982 Planning Scheme. This Section provides:

- A summary of the density control system;
- A literature review of the operation of density controls;
- An analysis of planning permit applications with a view to assess the role of density controls in decision making; and

- A valuation analysis to assess the impact of density controls on the property market.

Section 4 reviews case studies and 'best practice' density control systems from across Australia. Model planning systems are introduced and a range of density control systems used in diverse metropolitan and regional jurisdictions are presented.

Section 5 documents and assesses planning and density management findings for Hobart City Council's new planning scheme. This Section presents the conclusions and recommendations of the study.

Three appendices are attached to this report:

- Appendix 1 – Glossary of terms;
- Appendix 2 – Zones and density controls in Hobart; and
- Appendix 3 – Valuation report.

2 PLANNING AND PLOT RATIO

2.1 The Role of Development Control

Development control concerns the management of land use and development. The aim is to:

- Manage land use and development in such a way that delivers net community benefit at the community level; and
- Minimise negative environmental externalities - and indeed promote positive externalities - at a local level.

Specific objectives are:

1. Containment of negative externalities by separating incompatible land uses.
2. Containment of negative externalities through provision of essential infrastructure (eg. sewerage, water and energy).
3. Containment of negative externalities by managing design of structures. This includes standards over:
   - Aesthetic quality and character of an area;
   - Heritage conservation;
   - Energy efficiency and conservation;
   - Access to daylight and sunlight;
   - Ventilation between buildings;
   - Overshadowing;
   - Privacy;
   - Car parking; and
   - Private open space.
4. Managing traffic generation and movement systems integration.
5. Promoting positive externalities by agglomerating compatible uses (eg. retail precincts, industry clusters).
6. Promoting positive externalities by preserving precincts in a consolidated fashion (eg. heritage precincts, environmental areas of significance).

Density controls are primarily used to manage aspects of point 3 and point 4 above.

The objectives and strategic directions for land are expressed through land use zones. The zones set out the environmental, social and economic objectives for land use and development on a precinct basis.

Development control concerns the administration of zones through the permit application system. The development control system assesses the impacts of proposals against standards over density, amenity, traffic and the like in order to meet the objectives of zones.

The Land Use and Planning Approvals Act 1993 establishes the mechanisms by which Hobart City Council (as the planning authority) assesses development applications.

Where a planning application meets all criteria and standards of the Planning Scheme, approval is said to be 'as of right'. Under Section 58 of the Act, Hobart City Council is bound to grant a permit. This system relies heavily on compliance with quantitative provisions.

Section 57 of the Act establishes the right for the planning authority to have discretion over approval, approval with conditions, or refusal of a development application where a planning application does not meet all quantitative provisions and standards.

2.2 Density Control

'Density' can be defined in a number of ways. It generally refers to the degree of compactness or the extent to which something is filled. In planning terms, density can refer to the number of structures per given site area, site coverage at ground level, total floor space per given site area, building bulk or combinations of these.

In Hobart, density of development refers to the built form character. Density is controlled by:

- Plot Ratio, which controls ratio of floor area over site area;
- Dwelling unit factor, which controls the number of dwellings per site area; and

- Lot configuration, which is given by minimum lot area, minimum frontage and minimum inscribed circle.

In that sense, density refers to **the number of buildings in a given area (ie. building density) and the size and bulk of the buildings (ie. floorspace density).** For the purposes of this report, density is defined on this basis.

Density controls are used to control development intensity – that is, to control to what extent notional 'building envelopes' are to be filled - in pursuit of:

- Providing spaces between buildings;
- Maintaining access to sunlight on the development site and adjacent sites;
- Maintaining ventilation between buildings;
- Providing provision of public spaces and amenities at ground level (eg. plazas, open space, parking); and
- Controlling distribution of usage or employment densities and hence traffic generation on a building and precinct basis.

The purpose of Plot Ratio is to control floor area over site area. Plot Ratios express the relationship between the area of a site and the floor area of a building. As noted earlier, in general terms, a Plot Ratio control may allow a building to occupy a large portion of a site and be 'low rise' or allow a building to occupy a small portion of its site and be 'high rise'. Also, the Plot Ratio control can in theory allow more than one building to occupy a site (for example, two 'medium rise' buildings).

The concept of Plot Ratios has been extended in many jurisdictions to award developments with bonus floor area if certain public spaces and amenities are provided as part of a development. This describes the Bonus Plot Ratio device.

3 DENSITY CONTROL PRACTICE IN HOBART

3.1 Hobart's Zones, Precincts and Density Provisions

The Hobart Planning Scheme 1982 provides 21 zones - which are divided into 59 precincts - for the City of Hobart. Precincts are allocated Density Zones which in turn are prescribed with Basic Plot Ratio and Maximum Plot Ratio. Details of the zones and precincts and the density controls that apply to them are shown in Appendix 2.

The Planning Scheme's density provisions are defined as follows:

- Basic Plot Ratio defines the preferred density of built form within each precinct (ie. this is the most developers can expect to be approved by the Council 'as a right'); and
- Maximum Plot Ratio (or Bonus Plot Ratio) enables Council (at its discretion) to allow development beyond Basic Plot Ratio where development provides certain facilities for wider benefit.

Density Provisions

Principle 7 of Hobart Planning Scheme 1982:
Basic Plot Ratio has been established having regard to the desired future character of the relevant Precincts. However, provided that all other aspects of the development are in conformity with the Principles, any existing building not subject to any legislation requiring its conservation shall be permitted to be replaced by a new building having not more that the same floor area.

Principle 8 of Hobart Planning Scheme 1982:
Bonus Plot Ratio may be awarded in respect of development which provides specific uses, facilities and features approved or required for the benefit of the city in particular precincts. Such uses, facilities and features may include:

(a) Residential uses in appropriate non-residential Precincts.
(b) Approved or required public facilities, such as plazas, terraces, through-site pedestrian links, pedestrian links over or under streets, child-care

centres, community centres, public toilets, ramps for prams and wheelchairs.

(c) The provision of sculptures, fountains or other works of art visible from public spaces.

(d) The conservation and maintenance of items deemed to be of heritage significance.

(e) The use of special materials or design features to respect, conserve and enhance the surrounding environment.

In no case shall the Plot Ratio exceed the maximum Plot Ratio for the relative density zone.

Within the Planning Area the subdivision of new allotments shall be controlled by the establishment of minimum lot areas, frontages and inscribed circle dimensions, having regard to the desired future character of the relevant Precincts.

The density of residential development shall also be controlled by the establishment of minimum site areas as per dwelling units appropriate to the objective of the zone and the desired future character of the relevant Precincts.

The Planning Scheme incorporates other mechanisms by which density is managed. This includes lot size, height, dwelling unit factor and setbacks. In addition to these, amenity and heritage standards govern development density.

Variations to Plot Ratio standards are possible. Development within Residential 1, 2, 3 and 4 Zones may have once-only floor area extensions (of up to 10% of the floor area or 20 square metres whichever is greater) provided certain development standards are met.

Furthermore, Schedule K (3.1) of the Hobart Planning Scheme includes a performance-based approach for residential development. The intent of the residential density provision is: *"To achieve a number and size of dwelling units in an area that are compatible with the existing built and natural environment"*. Performance criteria and acceptable solutions are documented in the Scheme. It is proposed that Plot Ratio in Schedule K can be varied in accordance with the performance criteria.

3.2 Operation of Density Control: Literature Review

A number of research projects undertaken by Hobart City Council and other organisations have called into question the relevance of Plot Ratio as an appropriate density control tool for various land use settings. The reports can be categorised into three streams:

- Heritage studies;
- Business and mixed-use precinct studies; and
- Performance-based planning documents.

The literature for these streams is reviewed separately.

3.2.1 Heritage Studies

The heritage studies reviewed are the North Hobart Heritage Study and the West Hobart Heritage Review.

These reports affirm that building envelopes of existing heritage buildings and precincts should form the basis of density controls in heritage areas. Principle 20 of the 1982 Planning Scheme provides a development control mechanism for heritage protection. Plot Ratio is superfluous within this context.

Principle 20 of the Planning Scheme provides for the conservation of heritage areas and heritage buildings / places. Clauses within this Principle state:

- Areas adjacent to heritage areas / properties are required to be in keeping with the heritage characteristics; and
- Development within a heritage area is to be in harmony with the density of heritage buildings (in terms of height, bulk and setback).

A summary of key points made in the reports follows.

Cultural Resource Management (1999) North Hobart Heritage Study:

Purpose: To provide recommendations for conservation and strategic management of the historically significant North Hobart area.

General Finding: The study concludes that North Hobart be promoted as a residential, retail, cultural tourism and service area. Development should complement and conserve its historical form and significant streetscape attributes.

Density Control Finding: The existing density of the area should be maintained into the future to respect the historic layout of the area. Specific recommendations include: multiple dwelling development on one lot be restricted to one or two storeys; minor adjustments to historic properties (eg. 20 sqm) be allowed for installation of modern conveniences; infill development be controlled by the setting of building envelopes that reflect appropriate characteristics of the area; new buildings be set back according to building height and not be forward of the prevailing street setback; side setbacks enable vehicular access; and that a height restriction be maintained.

Godden MacKay Logan (2000) West Hobart Heritage Review:

Purpose: To review the heritage values of West Hobart and provide recommendations for the management and conservation of heritage areas and structures.

General Finding: Heritage areas and places are identified and determined to be reasonably intact. The area's heritage values are considered to be under no significant threat from development but some change to planning and management is proposed to ensure ongoing conservation.

Density Control Finding: The report argues that development of rear gardens of heritage properties has been detrimental to heritage values in some instances and planning controls need to be tightened to ensure that inappropriate subdivision and over development of rear gardens is avoided. No specific mechanism is proposed.

3.2.2 Business and Mixed-Use Precinct Studies

The documents in this stream broadly deal with business and mixed-use zones with one document addressing Bonus Plot Ratio in particular. The main findings of the documents are as follows:

- In many areas development demand is far below allowable Plot Ratio, rendering this tool largely irrelevant in many development applications.
- The Bonus Plot Ratio system is too subjective, lacks clear rules, has little regard for planning issues and is inconsistently applied. A development contribution system based on bonus floor area is recommended to replace the system.
- Bonus Plot Ratio has been rarely used in recent years. Its application was sought generally in the late 1980s and early 1990s.
- A performance-based system of development control - with building envelopes nominated in acceptable solutions - is considered to be a more appropriate method of managing height, setback and bulk of developments. This approach is better able to assess developments on planning grounds.

Hobart City Council (1991) Central Area Strategy Plan Topic Report - Bonus Plot Ratio:

Purpose: To identify opportunities for amendment and improvement of the Bonus Plot Ratio system.
Density Control Finding: The planning scheme and system of Bonus Plot Ratio is far too subjective and lacks clear rules. This leads to the conferral of bonus receiving subjective opinion, therefore causing inconsistency in application.

A system of building envelopes is considered more appropriate to manage height, setback and bulk on planning grounds.

A new approach (using a planning incentive payment or development contribution system) is proposed to replace the means by which a developer may obtain a Bonus Plot Ratio. Specific problems with the Bonus Plot Ratio device noted in the report include: the system of bonuses is complex and inconsistent; bonuses are awarded for facilities that are standard in modern buildings; and there is little consideration of the planning issues (of solar access, weather and wind protection, views, streetscape and urban design).

Hobart City Council (1993) Central Area Strategy Plan (CASP) Study:

Purpose: To develop a built environment framework to promote development which achieves economic, physical environment and community and movement objectives in the context of the central area's townscape and heritage character.

General Finding: The main recommendation is the introduction of building envelope controls as the principal means for governing the form of the built environment, especially future high-intensity development in the Central Area.

Density Control Finding: The report found problems with Plot Ratio and Bonus Plot Ratio and recommended change to these, and even replacement of some Plot Ratio controls.

In high intensity areas, a system of building envelopes and height controls are proposed to manage development. These would have the effect of enabling development in excess of Plot Ratio standards.

It was recommended that Plot Ratio be retained on equity grounds.

The Bonus Plot Ratio system is viewed as being arbitrary and contentious. It is recommended that a development contribution system replace the existing method of obtaining bonus floor area.

For some lower intensity areas it is recommended that Plot Ratio be replaced by heritage and streetscape criteria.

Hobart City Council (1997) New Town Commercial Centre: Supplementary Report:

Purpose: To investigate the need to and options for the future rezoning of land within the New Town Commercial Centre.

General Finding: The preferred option is for minimum change to density and use whilst allowing for some additional consulting room and professional office activity.

Density Control Finding: Density controls for Commercial and Residential is a Plot Ratio of 0.9 (with a maximum of 1.2) and for Residential 1 Plot Ratio is 0.5. In both zone types actual Plot Ratio is well below permissible levels. It is concluded that the higher Plot Ratio is not realistic for the study area. This recommendation was subsequently incorporated into the Scheme as Amendment 3/97.

Frazer Read (1998) Central Service Area Review:

Purpose: To examine the nature of inner city mixed central service areas, evaluate policy frameworks and recommend planning controls for their ongoing viability and efficiency.

General Finding: Building stock in the study area displays typical characteristics of a central service area with many buildings used as warehouses and buildings of a residential nature occupied by non-residential uses. Mixed-use or service industry activity should be promoted as an essential support element in the city economy.

Density Control Finding: The study found that Plot Ratio controls are in many cases far in excess of most development applications, rendering this density tool irrelevant in most of the study area. The report recommends that the system of Plot Ratios be replaced in most of the study area with a performance-based approach. Acceptable solutions would be provided by a series of permitted building envelopes. It is argued that the proposed building envelope system would provide more certainty and flexibility for development control.

Hobart City Council (2000) Review of Precinct 16B (Draft):

Purpose: To establish whether the 1982 Planning Scheme is adequately achieving desired outcomes for Hobart's Commercial and Residential Zone.

General Finding: Planning provisions enable some development to occur in the zone (such as fast food restaurants and shops with non-discrete signage needs) that is inconsistent with the desired vision for the area.

Density Control Finding: Development in the study area is reported to be in most cases far below permissible Plot Ratio. Plot Ratio is therefore irrelevant for much of the study area.

This also applies to recent development. The report shows that of the 66 planning applications lodged for the study area between 1984 and 1999, 13 (or 20%) proposed increasing the Plot Ratio, mainly relating to extensions of existing structures. The average increase in Plot Ratio sought was a marginal 0.14.

3.2.3 Performance-Based Planning Documents

The shift to a performance-based system of development control is evident in Hobart through the preparation of ResCode (housing development code), the Sullivans Cove Planning Scheme and the Wapping Local Area Plan.

Under a performance-based system, development must demonstrate compliance with either performance criteria or deemed to comply provisions (ie. acceptable solutions). Under this approach, Plot Ratio and other prescriptive development control tools are replaced by performance criteria as the principal density control mechanism.

ResCode and the Sullivans Cove Planning Scheme are reviewed below.

Hobart City Council (1995) ResCode Building & Site Planning (Draft):

Purpose: To establish a performance-based code for residential development. The aim being to move away from a prescriptive approach to residential planning to a performance-based system.

General Finding: The performance-based approach to residential planning establishes objectives and performance criteria. Deemed to comply (ie. acceptable solutions) provisions are included. This approach is generally associated with promoting innovation in design and focusing attention on defining site-specific and environmental opportunities and constraints and delivering innovative outcomes.

Density Control Finding: Residential density is one of 10 design elements. This is controlled by performance criteria relating to building setback, character and amenity. The deemed to comply provisions, which spell out one method of achieving the objectives, documents site areas for open space and dwelling unit factors among other standards. Building bulk is controlled also by other design elements such as building setback & bulk. Building envelope standards are used in the deemed to comply provisions. (Note parts of these recommendations have been incorporated into the Scheme as Amendment 2/98).

Hobart City Council (1997) Sullivans Cove Planning Scheme:

Purpose: The Sullivans Cove Planning Scheme 1997 uses a performance-based approach to guide land use and development in this unique urban setting.

Density Control Finding: For zones or precincts in the planning area, the scheme nominates the objectives sought and the performance criteria under which applications are assessed. Where appropriate, deemed to comply standards are documented. Height standards and Plot Ratios are nominated in the deemed to comply provisions.

3.3 Operation of Density Control: Data Analysis

This section reviews planning permit data with a view to examine what role density controls - and in particular Plot Ratio – plays in the decision making process of the planning authority in terms of approving or refusing development applications. The section begins with an overview of recent development application activity and then takes a more detailed look at activity by zone.

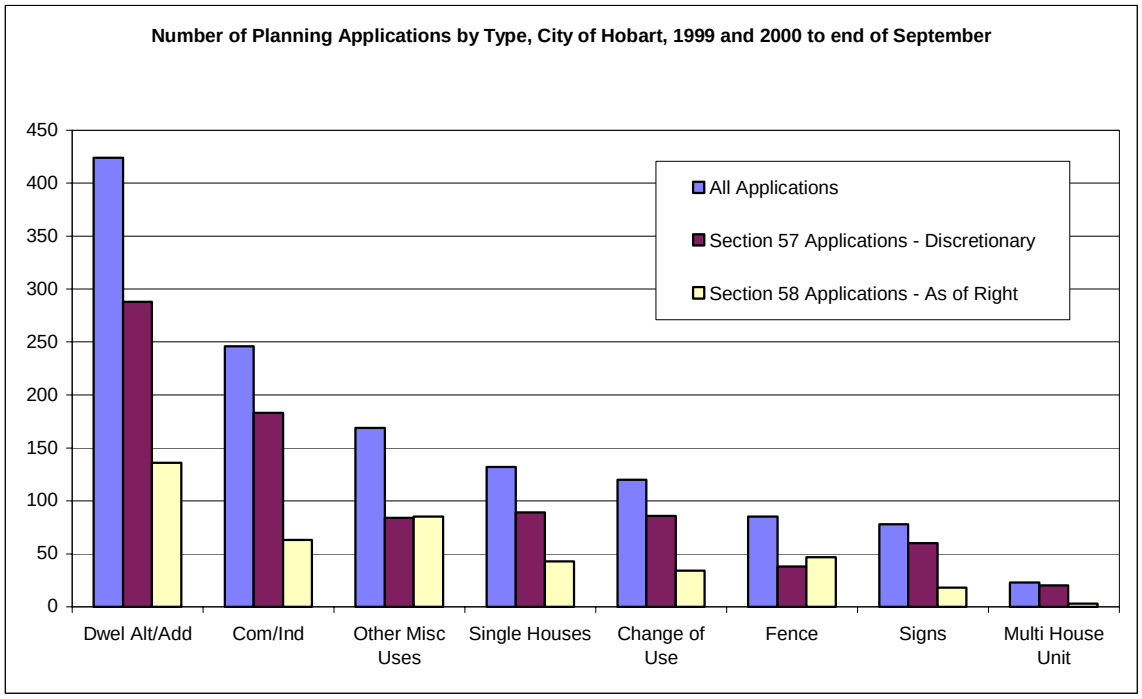
3.3.1 Overview of Recent Development Application Activity

The following chart summarises the number of planning permits assessed by Hobart City Council for 1999 and 2000 to the end of September. The chart shows total applications assessed and the breakdown between 'Section 57' applications (ie. those the planning authority has discretion over) and 'Section 58' applications (ie. those that are 'as of right').

The main features of the data can be summarised as follows:

- Alteration or addition to an existing dwelling is the main planning application category (comprising about 33% of all applications). About 68% of these applications involve discretion by the planning authority.

- About 93% of applications for new housing development is single houses (as opposed to multi-units). Again, most new housing decisions involve discretion.
- Commercial or industrial is also a significant development activity in Hobart, accounting for about 19% of all applications. About 75% of applications in this category involve discretion by the planning authority.



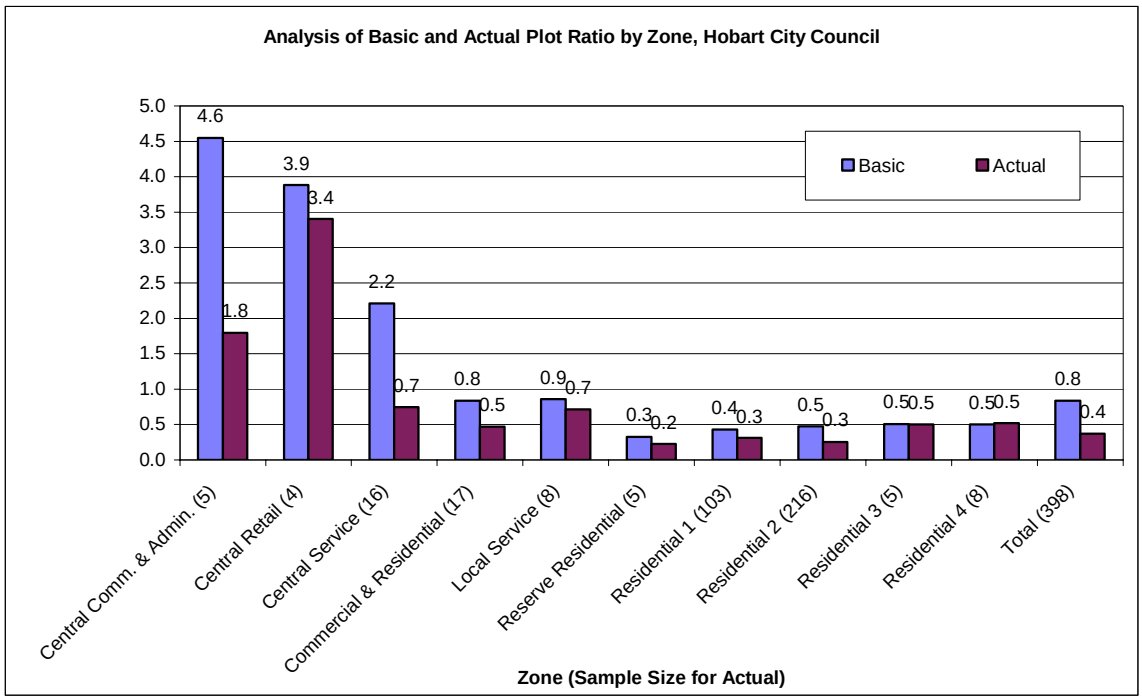
3.3.2 Overview of Plot Ratio Data

Hobart City Council data on 866 recent planning applications was reviewed to establish the role of Plot Ratio in development application decision-making.

The chart below shows the 10 zones for which Plot Ratio data is readily available. The chart summarises:

- The average allowable Plot Ratio (given the variance between precincts) in each zone and for the City as a whole, shown as Basic; and
- The average Plot Ratio sought by development proponents, shown as Actual.

Overall, Plot Ratio controls are in excess of requirements and hence their effectiveness as a mechanism to control density is questionable. The City's average Plot Ratio standard is 0.8 (sample 866) but the desired Plot Ratio is on average 0.4 (sample 398).



Note: Basic Plot Ratio shown in this chart refers to the average Basic Plot Ratio of the sample planning applications by zone. Refer to Appendix 2 for details of Basic Plot Ratio as stated in the Planning Scheme for precincts and zones.

Caution needs to be taken when interpreting the results for each zone individually given the low sample size for Actual in some cases (which is shown in brackets in the chart).

However, all zones barring Residential 4 have Plot Ratio standards in excess of development applications. It is reasonable to assume that Plot Ratio controls are ineffective where there is a significant gap between Basic and Actual.

The difference between Basic and Actual is small in the Residential 3 and 4 zones. Residential 3 and 4 zones are historic inner city housing areas for which development and redevelopment is deliberately constrained by planning objectives

and controls. These areas are generally characterised by housing on small lots built prior to 'post war' suburban housing development.

3.3.3 Analysis of Applications by Zones

The following part of the report takes a closer look at the 866 planning permit application for each zone. The zones for which data is available and hence reviewed below are:

- Central Retail Zone;
- Central Commercial and Administrative Zone;
- Central Service Zone;
- Commercial and Residential Zone;
- Local Service Zone;
- Residential 1 Zone;
- Residential 2 Zone;
- Residential 3 Zone;
- Residential 4 Zone;
- Rural Zones A, B and C;
- Recreation Zone;
- Special Uses Zones; and
- Reserve Residential.

The upshot of the data is that:

- The vast majority of applications are successful;
- Refusal is typically made on use related issues (such as parking, noise and traffic impact in residential areas) and heritage conservation issues;
- Refusals are generally not made on adherence or otherwise to quantitative standards;
- Few applications sought an increase in Plot Ratio and most of those that did this sought a minor increase; and
- Plot Ratio was not the basis of any rejection in the cases reviewed.

Central Retail Zone

- Most applications in this zone were for alteration / addition to existing premises.
- All applications were approved.
- Two of the applications sought and obtained an increase in Plot Ratio.
- DUF refers to dwelling unit factor.

Zone	**Central Retail**	
Applications / Sample Size	27	
Application Type		
Alteration / Addition	15	55.6%
Change of Use	7	25.9%
New Development	3	11.1%
Subdivision / Boundary	0	0.0%
Miscellaneous	2	7.4%
Status		
Permitted	22	81.5%
Discretion	5	18.5%
Prohibited	0	0.0%
Not Available	0	0.0%
Decision		
Approved	27	100.0%
Rejected	0	0.0%
Not Available	0	0.0%
Plot Ratio, Height and DUF		
Plot Ratio Increase Sought	2	7.4%
Height Increase Sought	0	0.0%
DUF Increase Sought	0	0.0%
DUF Decrease Sought	0	0.0%

Central Commercial and Administrative Zone

- Most applications in this zone were for alteration / addition to existing premises.
- All applications were approved.
- None of the applications sought an increase in Plot Ratio.

Zone	Central Commercial and Administrative	
Applications / Sample Size	30	
Application Type		
Alteration / Addition	17	56.7%
Change of Use	8	26.7%
New Development	0	0.0%
Subdivision / Boundary	0	0.0%
Miscellaneous	5	16.7%
Status		
Permitted	21	70.0%
Discretion	9	30.0%
Prohibited	0	0.0%
Not Available	0	0.0%
Decision		
Approved	30	100.0%
Rejected	0	0.0%
Not Available	0	0.0%
Plot Ratio, Height and DUF		
Plot Ratio Increase Sought	0	0.0%
Height Increase Sought	0	0.0%
DUF Increase Sought	0	0.0%
DUF Decrease Sought	0	0.0%

Central Service Zone

- Most applications in this zone were for alteration / addition to existing premises.
- All but one application was approved. It was rejected on the basis of parking, access, safety and noise issues.
- None of the applications sought an increase in Plot Ratio.

Zone	**Central Service and Related**	
Applications / Sample Size	32	
Application Type		
Alteration / Addition	13	40.6%
Change of Use	8	25.0%
New Development	3	9.4%
Subdivision / Boundary	3	9.4%
Miscellaneous	5	15.6%
Status		
Permitted	12	37.5%
Discretion	20	62.5%
Prohibited	0	0.0%
Not Available	0	0.0%
Decision		
Approved	31	96.9%
Rejected	1	3.1%
Not Available	0	0.0%
Plot Ratio, Height and DUF		
Plot Ratio Increase Sought	0	0.0%
Height Increase Sought	0	0.0%
DUF Increase Sought	0	0.0%
DUF Decrease Sought	0	0.0%

Commercial and Residential Zone

- Most applications in this zone were for alteration / addition to existing premises.
- About 88% of applications were approved.
- Four applications were refused on the basis of traffic, parking and alignment of building issues.
- One application sought and obtained a minor increase in Plot Ratio.

Zone	**Commercial and Residential**	
Applications / Sample Size	33	
Application Type		
Alteration / Addition	19	57.6%
Change of Use	6	18.2%
New Development	5	15.2%
Subdivision / Boundary	1	3.0%
Miscellaneous	2	6.1%
Status		
Permitted	26	78.8%
Discretion	6	18.2%
Prohibited	1	3.0%
Not Available	0	0.0%
Decision		
Approved	29	87.9%
Rejected	4	12.1%
Not Available	0	0.0%
Plot Ratio, Height and DUF		
Plot Ratio Increase Sought	1	3.0%
Height Increase Sought	1	3.0%
DUF Increase Sought	0	0.0%
DUF Decrease Sought	0	0.0%

Local Service Zone (this incorporates a few data entries for the Service and Light Industry Zone)

- Most applications in this zone were for alteration / addition to existing premises.
- All applications were approved.
- Three applications sought and obtained a minor increase in Plot Ratio.

Zone	Local Service (inc. Service and Light Industry)	
Applications / Sample Size	22	
Application Type		
Alteration / Addition	11	50.0%
Change of Use	3	13.6%
New Development	3	13.6%
Subdivision / Boundary	1	4.5%
Miscellaneous	4	18.2%
Status		
Permitted	10	45.5%
Discretion	11	50.0%
Prohibited	0	0.0%
Not Available	1	4.5%
Decision		
Approved	22	100.0%
Rejected	0	0.0%
Not Available	0	0.0%
Plot Ratio, Height and DUF		
Plot Ratio Increase Sought	3	13.6%
Height Increase Sought	0	0.0%
DUF Increase Sought	0	0.0%
DUF Decrease Sought	0	0.0%

Residential 1 Zone

- Most applications in this zone were for alteration / addition to existing premises.
- Only two out of 214 applications were refused (for a yoga centre and a hostel). Refusal was made on use, parking, heritage and side boundary set back grounds.
- Six applications sought and were granted increases in Plot Ratio.
- Seven applications sought and were granted increases in building height.
- Five applications sought a dwelling unit factor that would deliver a lower density of development. These applications refer to development or alteration of dwellings on large lots.
- Two applications sought to increase density.

Zone	**Residential 1**	
Applications / Sample Size	214	
Application Type		
Alteration / Addition	153	71.5%
Change of Use	17	7.9%
New Development	5	2.3%
Subdivision / Boundary	8	3.7%
Miscellaneous	31	14.5%
Status		
Permitted	159	74.3%
Discretion	50	23.4%
Prohibited	3	1.4%
Not Available	2	0.9%
Decision		
Approved	211	98.6%
Rejected	2	0.9%
Not Available	1	0.5%
Plot Ratio, Height and DUF		
Plot Ratio Increase Sought	6	2.8%
Height Increase Sought	7	3.3%
DUF Increase Sought	5	2.3%
DUF Decrease Sought	2	0.9%

Residential 2 Zone

- Most applications in this zone were for alteration / addition to existing premises.
- Only one out of 402 applications was refused. Refusal was made on side set back and access width grounds.
- Six applications sought and were granted increases in Plot Ratio.
- Twenty-two applications sought and were granted increases in building height.
- Seventy-five applications sought a dwelling unit factor that would deliver a lower density of development and 15 to increase density.

Zone	**Residential 2**	
Applications / Sample Size	402	
Application Type		
Alteration / Addition	246	61.2%
Change of Use	15	3.7%
New Development	83	20.6%
Subdivision / Boundary	18	4.5%
Miscellaneous	40	10.0%
Status		
Permitted	359	89.3%
Discretion	39	9.7%
Prohibited	4	1.0%
Not Available	0	0.0%
Decision		
Approved	401	99.8%
Rejected	1	0.2%
Not Available	0	0.0%
Plot Ratio, Height and DUF		
Plot Ratio Increase Sought	6	1.5%
Height Increase Sought	22	5.5%
DUF Increase Sought	75	18.7%
DUF Decrease Sought	15	3.7%

Residential 3 Zone

- Most applications in this zone were for alteration / addition to existing premises.
- All but one of the applications was approved. Refusal was made on noise and parking issues associated with a hotel proposal.
- Two applications sought and were granted increases in Plot Ratio.

Zone	**Residential 3**	
Applications / Sample Size	24	
Application Type		
Alteration / Addition	16	66.7%
Change of Use	5	20.8%
New Development	0	0.0%
Subdivision / Boundary	1	4.2%
Miscellaneous	2	8.3%
Status		
Permitted	9	37.5%
Discretion	6	25.0%
Prohibited	9	37.5%
Not Available	0	0.0%
Decision		
Approved	23	95.8%
Rejected	1	4.2%
Not Available	0	0.0%
Plot Ratio, Height and DUF		
Plot Ratio Increase Sought	2	8.3%
Height Increase Sought	0	0.0%
DUF Increase Sought	0	0.0%
DUF Decrease Sought	0	0.0%

Residential 4 Zone

- Most applications in this zone were for alteration / addition to existing premises.
- All applications were approved.
- Three applications sought and were granted increases in Plot Ratio.
- One application obtained an increase in height over the benchmark maximum.

Zone	**Residential 4**	
Applications / Sample Size	13	
Application Type		
Alteration / Addition	11	84.6%
Change of Use		0.0%
New Development		0.0%
Subdivision / Boundary		0.0%
Miscellaneous	2	15.4%
Status		
Permitted	9	69.2%
Discretion	4	30.8%
Prohibited	0	0.0%
Not Available	0	0.0%
Decision		
Approved	13	100.0%
Rejected	0	0.0%
Not Available	0	0.0%
Plot Ratio, Height and DUF		
Plot Ratio Increase Sought	3	23.1%
Height Increase Sought	1	7.7%
DUF Increase Sought	0	0.0%
DUF Decrease Sought	0	0.0%

Rural Zones A, B and C

- Most applications in this zone were for either alteration / addition to an existing premises or development of a new structure, typically a house.
- All applications were approved.
- One application obtained an increase in height over the benchmark maximum.

Zone	**Rural A, B & C**	
Applications / Sample Size	29	
Application Type		
Alteration / Addition	11	37.9%
Change of Use	1	3.4%
New Development	10	34.5%
Subdivision / Boundary	4	13.8%
Miscellaneous	3	10.3%
Status		
Permitted	22	75.9%
Discretion	6	20.7%
Prohibited	0	0.0%
Not Available	1	3.4%
Decision		
Approved	29	100.0%
Rejected	0	0.0%
Not Available	0	0.0%
Plot Ratio, Height and DUF		
Plot Ratio Increase Sought	0	0.0%
Height Increase Sought	1	3.4%
DUF Increase Sought	0	0.0%
DUF Decrease Sought	0	0.0%

Recreation Zone

- Most applications in this zone were for either alteration / addition to existing an premises or development of a new structure.
- All know results were successful.

Zone	**Recreation**	
Applications / Sample Size	10	
Application Type		
Alteration / Addition	5	50.0%
Change of Use	0	0.0%
New Development	2	20.0%
Subdivision / Boundary	0	0.0%
Miscellaneous	3	30.0%
Status		
Permitted	3	30.0%
Discretion	6	60.0%
Prohibited	1	10.0%
Not Available	0	0.0%
Decision		
Approved	9	90.0%
Rejected	0	0.0%
Not Available	1	10.0%
Plot Ratio, Height and DUF		
Plot Ratio Increase Sought	0	0.0%
Height Increase Sought	0	0.0%
DUF Increase Sought	0	0.0%
DUF Decrease Sought	0	0.0%

Special Uses Zones (Various)

- Most applications in the various special use zones were for alteration / addition to existing premises.
- All but one application was successful. The refusal was made on heritage impact grounds.
- One application obtained an increase in height over the benchmark maximum.

Zone	**Special Use**	
Applications / Sample Size	10	
Application Type		
Alteration / Addition	8	80.0%
Change of Use	0	0.0%
New Development	0	0.0%
Subdivision / Boundary	0	0.0%
Miscellaneous	2	20.0%
Status		
Permitted	8	80.0%
Discretion	2	20.0%
Prohibited	0	0.0%
Not Available	0	0.0%
Decision		
Approved	9	90.0%
Rejected	1	10.0%
Not Available	0	0.0%
Plot Ratio, Height and DUF		
Plot Ratio Increase Sought	0	0.0%
Height Increase Sought	1	10.0%
DUF Increase Sought	0	0.0%
DUF Decrease Sought	0	0.0%

Reserve Residential

- Most applications in this category were for alteration / addition to existing premises.
- All applications were successful.
- One application obtained an increase in height over the benchmark maximum.
- Five cases sought to decrease development density by proposing a lower dwelling unit factor.

Zone	**Reserve Residential**	
Applications / Sample Size	7	
Application Type		
Alteration / Addition		0.0%
Change of Use		0.0%
New Development	6	85.7%
Subdivision / Boundary	1	14.3%
Miscellaneous		0.0%
Status		
Permitted	7	100.0%
Discretion	0	0.0%
Prohibited	0	0.0%
Not Available	0	0.0%
Decision		
Approved	7	100.0%
Rejected	0	0.0%
Not Available	0	0.0%
Plot Ratio, Height and DUF		
Plot Ratio Increase Sought	0	0.0%
Height Increase Sought	1	14.3%
DUF Increase Sought	5	71.4%
DUF Decrease Sought	0	0.0%

3.4 Operation of Density Control: Economic / Property Value Analysis

The purpose of the property analysis is:

- To identify circumstances where Plot Ratio and Bonus Plot Ratio controls can be a factor in influencing property prices in Hobart given prevailing and likely future (ie. to 2015) property market conditions; and
- To comment on the role and worth of Plot Ratio and Bonus Plot Ratio from the position of the property development industry.

McNamara Taplin & Associates Proprietary prepared a valuation report for this purpose in May 2001. The following pages summarise the method, findings and conclusions of the valuation report. The report is presented in full in Appendix 3.

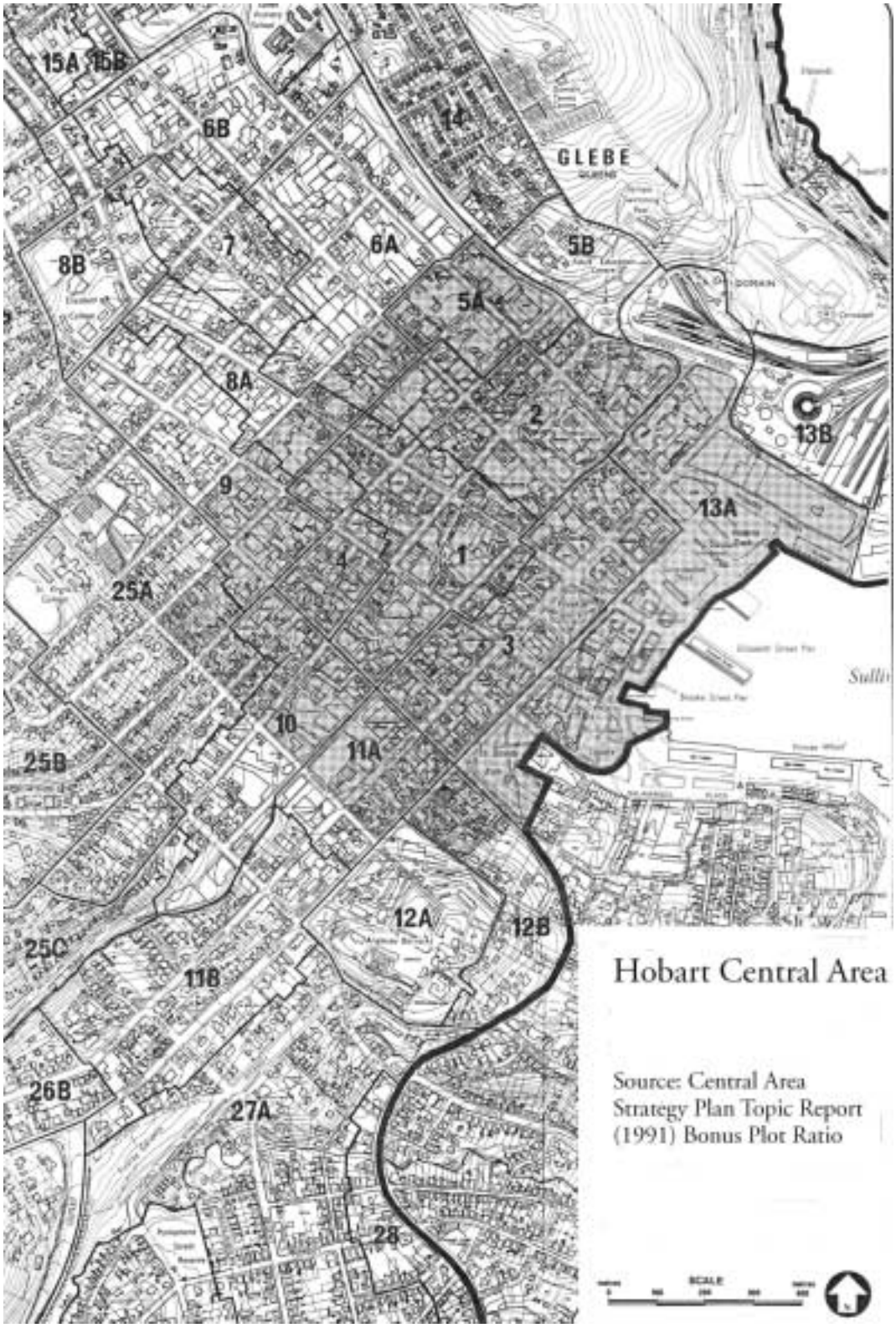
Methodology

Movement is property sale prices in relation to the Government Rating Valuation (prepared by the Office of the Valuer-General with effect from the 1 January 1996) was examined for the area covered in the Central Area Strategy Plan (CASP) (but reduced by that severed to the Sullivans Cove Planning Scheme 1997). See the map overleaf.

Property Price Movements

Property prices *declined* by an average 5.7% between 1996 and 2001 for the zones under review. The result for each zone is summarised in the following table.

ZONE	PRICE TRENDS (CASP AREA)
Central Retail (Density Rating Ref No. 1)	- 13.0%
Central Commercial & Administrative (Density Rating Ref No. 2)	- 14.5%
Central Commercial & Administrative (Density Rating Ref No. 3)	- 9.8%
Central Service (Density Rating Ref No. 4)	- 9.9%
Central Service (Density Rating Ref No. 5)	- 0.13%
Commercial & Residential (Density Rating Ref No. 9)	+ 2.3%
Residential 1 (Density Rating Ref No. 12)	+ 5.2%


15A
15B
6B
14
GLEBE
5B
8B
7
6A
5A
8A
2
13B
9
13A
4
1
25A
3
10
11A
25B
12A
12B
25C
11B
26B
27A
28
Hobart Central Area
Source: Central Area
Strategy Plan Topic Report
(1991) Bonus Plot Ratio

The data indicates:

- Multi-storey office developments are generally representative of the greatest reduction in property price. Greatest declines were experienced where Plot Ratio is at a maximum.
- The only positive trends are in the Commercial and Residential Zone and the Residential 1 Zone.

The main determinants of the downward trend in property prices is attributed to structural changes to the regional economy resulting in employment rationalisation across all sectors including private enterprise and the three arms of Government. This has had particular impact on the real estate market for all properties. The commercial, industrial and residential sectors of the market have all been affected.

The most prominent reduction is in existing multi-storey office buildings. In essence this is a product of vacancy. The vacancy factor has been quantified recently by the Property Council of Australia for Hobart office buildings, as :

- January 1997 7.0%
- January 1998 10.7%
- January 1999 15.3%
- January 2000 14.7%
- January 2001 12.9%

Future Conditions to 2015

The economic environment in Hobart is likely to remain subdued in the near future and for the purpose of this exercise, through to 2015. Specific factors that would limit property development include falling population, exodus of young people and an ageing population.

Other factors that need to be considered include the growth in computer technology with electronic mail and banking together with e-commerce. The expectations worldwide are that the new cyber City will have less demand for office accommodation even in the short term and ultimately reduced requirement for retail and supporting commercial activity. Office sharing ('hot desking') is already an established phenomenon in larger cities.

Information provided by the Property Council of Australia, as at January 2001, indicates an office floorspace supply in Hobart of about 325,000sqm, a vacancy factor of 12.9% and annual net takeup of 3,018sqm. In the broad sense the data suggests around 14 years supply of office floorspace is available.

In considering likely future conditions up to 2015, on the vacancy score alone it would appear demand for new multi-storey office development to be restrained. The takeup of existing vacant space, with falling consumption, will satisfy demand for some time.

Larger retail property has generally faired well in a depressed market with less vacancy and sale prices indicating minor growth.

Assessment of Plot Ratio and Bonus Plot Ratio

Commercial development in the Central City area has experienced substantial downturn in redevelopment activity since the early 1990s and hence there is a general lack of comparable sales evidence of pure development sites in the commercial areas to refine an analytical model to track the effect of Plot Ratio and Bonus Plot Ratio. However, one case study does provide some insight into the impact of Plot Ratio controls.

Properties in Argyle Street displayed a downward variance in price as a result of Plot Ratio. The comparison was between a site with a Basic Plot Ratio of 5.25 which sold for $272 psqm and another similar site with a Plot Ratio of 2.25 which sold for $157 psqm. This suggests that a greater the development potential equals a higher price. Whist this is not a regular pattern, it does point to the importance of development potential as an ingredient of marketability.

Industrial activity is less relevant within the City of Hobart however the Hobart scene is categorised by redevelopment in established built-up areas where sites are amalgamated. Industrial activity is dictated by area and hence the potential of a development site is directly proportional to the land size. In this

regard a Plot Ratio control is relevant but only so far as it dictates building size.

Residential development in the current Scheme, is more influenced by the Dwelling Unit Factor and marketability for sale. Plot Ratio is in the practical sense, of lesser concern, ultimately determining the size of units. This conclusion is based on a review of three case studies where the developers relinquished unit sites to achieve a better and more spacious presentation for better marketability.

Conclusion on Plot Ratio on the Property Market and Development

Developers are understandably driven by an economic rule and in this regard a Plot Ratio control has afforded some certainty in regards the potential of sites. Clearly this certainty should be maintained and it is reasonable to assert that if a developer is to part with his money, by way of purchase price, he/she is entitled to expect a degree of surety as to the likely development that would be approved. This is a reasonable expectation and is a fundamental basis of real estate activity. There is factual data to assert that prices paid for potential development sites either commercial or residential are directly related to development options.

The abandonment of Plot Ratio therefore should only occur if certainty can be replaced by an alternative method (eg. height limitations and building setbacks). Indeed, the Bonus Plot Ratio system introduces an uncertainty which is not conducive to the economic feasibility of potential development. All the circumstantial evidence suggests the Bonus Plot Ratio control should be abandoned.

Provided an alterative system is adequately and clearly documented in the planning instrument, replacement of the Plot Ratio system would not be injurious to the property market.

3.5 Synthesis

Literature Findings:

- Plot Ratio is superfluous within a heritage precinct context. Building envelopes of existing heritage buildings and precincts form the basis of density controls in heritage areas.
- In many areas development demand is far below allowable Plot Ratio, rendering this tool largely irrelevant in many development applications.
- The Bonus Plot Ratio system is too subjective, lacks clear rules, has little regard for planning issues and is inconsistently applied. It leads to uncertainty for planning authorities and developers alike.

Planning Applications Findings:

- Alteration or addition to an existing dwelling is the main planning application category. The vast majority of all applications are successful.
- Plot Ratio controls are generally in excess of requirements and hence their effectiveness as a mechanism to control density is to a large extent invalidated. The City's average Plot Ratio standard is 0.8 (sample 866) but the desired Plot Ratio is on average 0.4 (sample 398). Only in heritage residential areas is there a evenness between allowable and desired Plot Ratio.
- Development application refusal is typically made on use related issues (such as parking, noise and traffic impact in residential areas) and heritage conservation issues. Refusals are generally not made on adherence or otherwise to quantitative standards.
- Few applications sought an increase in Plot Ratio and most of those that did this sought a minor increase. Plot Ratio was not the basis of any rejection in the cases reviewed.

Property Valuation Findings:

- Property prices declined by an average 5.7% between 1996 and 2001 for the zones under review. Multi-storey office developments are generally representative of the greatest reduction in property price. The only positive trends are in

the Commercial and Residential Zone and the Residential 1 Zone.

- The economic environment in Hobart is likely to remain subdued in the near future and for the purpose of this exercise, through to 2015.
- Limited data suggests that a greater the development potential equals a higher price. However, maximum development is often foregone in pursuit of higher quality and marketable developments in a relatively depressed property market.
- Developers are understandably driven by an economic rule and in this regard a Plot Ratio control has afforded some certainty in regards the potential of sites.
- The abandonment of Plot Ratio should only occur if certainty can be replaced by an alternative method (eg. height limitations and building setbacks).

4 DENSITY CONTROL PRACTICE ACROSS AUSTRALIA

4.1 Development Control Systems

A description of performance-based and prescriptive approaches to development control is provided below. This provides a context for understanding the case studies in this section.

4.1.1 Prescriptive Development Control Systems

Prescriptive controls spell out what certain developments are to look like. For example, a prescriptive approach may detail an allowable building envelope, building height limit and building setback. In some cases a maximum density and/or plot ratio may be prescribed. The prescriptions are immutable.The main strength of this approach is that it provides certainty in environmental outcomes. The downside is that the approach may stifle innovative design solutions. The attention of planning administrators is focused on the details of the controls rather than the objectives of the controls.

Prescriptive Approaches – Perceived Strengths and Weaknesses as Noted in AMCORD 1995:

Strengths:

- It offers a measure of certainty and predictability to applicants, councils and the community.
- It simplifies the assessment of development applications, as areas where a judgement has to me made are relatively few.
- Standards are usually set at 'safe' levels, which means that no matter where they are applied, a reasonable result can be expected.

Weaknesses:

- The original purpose of and justification for the standards are often obscure.
- Standards are inclined to become overly rigid, leaving little flexibility.
- They restrict choice, are unable to respond to changing demands and stifle innovation.
- They protect outmoded practices and inhibit cost-effectiveness.
- They are often viewed as a single entity – not to be varied for fear of creating a precedent.

4.1.2 Performance-Based Systems

Performance-based approaches spell out the objectives that developments are to achieve and performance criteria that must be satisfied in order to achieve the objectives. Development proponents are able to nominate methods by which to achieve the performance criteria. (Development proponents can choose to either satisfy performance criteria or satisfy a conservative set of 'deemed to comply' numerical standards, where these are provided).

The main strength of this approach is that it focuses attention on defining site-specific environmental opportunities and constrains and promotes innovative design solutions on a site-by-site basis. However, this approach has been criticised for promoting uncertainty in outcomes (especially where performance objectives have not been clearly articulated and in cases where design and planning assessment professionals have been insufficiently trained in performance based measures).

Performance Based Approaches – Perceived Strengths and Weaknesses as Noted in AMCORD 1995:

Strengths:

- Focuses on objectives and desired outcomes.
- Offers an opportunity for diversity and choice.
- Provides flexibility to respond to market needs and preferences.

Weaknesses:

- It could involve too great a discretionary judgement, which could create uncertainty and misunderstanding.
- If the objectives and policies are too general, they may be open to too wide a range of interpretation, and lead to approval of some inferior work.
- There is a potential for delay because additional work will be required to demonstrate that the Performance Criteria have been addressed and the objectives met.
- Assessors may not have the time and expertise in administering a performance-based system.

A number of explicit and implicit performance criteria can be used to control development density using this approach. For example, AMCORD has elements and performance criteria for lot configuration and building design as follows:

- Building appearance and neighbourhood character – with performance criteria dealing with scale of building height and building mass and proportion.
- Street setbacks - with performance criteria dealing with setback of buildings.
- Building envelope and siting – with performance criteria dealing with progressive setback with height, building bulk, building height, length of boundary walls, daylight access.
- Open space – with performance criteria dealing with private open space and communal open space.
- Design for climate - with performance criteria dealing with solar access, natural ventilation and energy efficiency.

Acceptable solutions are provided for some performance criteria. Acceptable solutions typically provide conservative building envelope standards. Plot Ratios are not used in AMCORD's acceptable solutions.

4.2 Operation of Density Control: Case Studies

Density controls, as used by twelve local government areas across Australia, are summarised in the following charts. This review is not exhaustive. It aims to highlight various density control philosophies and methods used by planning authorities for a range of land use precincts including housing, retail and commercial towers.

The main findings of the case studies are as follows:

- Plot Ratio is generally not used in performance-based development control systems. Acceptable solutions of these systems typically specify standards over lot configuration and building envelopes, but not Plot Ratio.
- Prescriptive approaches to development control may or may not use Plot Ratio. Standards over lot size and building envelope are the most commonly used technical provisions.

- Plot Ratio is mainly applied in property markets with high property development activity and demand and generally in 'high-rise' development situations (based on the selected review of case studies). This includes the CBD areas of Sydney and Melbourne and high-rise accommodation towers in the Gold Coast.
- The research indicates that Plot Ratio is tool that has been used for a long time. Some jurisdictions have implemented changes to density controls with the general trend being abandonment of Plot Ratio in favour of performance-based approaches.
- In other States Plot Ratios in commercial areas have their origins in a desire to exact development contributions, more than as a density control device. Essentially, the approach was to arbitrarily select a Basic Plot Ratio, which was under the norm for the area, and make the norm the subject of 'bonuses'. To qualify for bonuses certain public goods had to be provided. However, over the past decade or so new approaches to development contributions have been developed in their own right. It is now widely accepted that if a contribution is justified it should be made without resort to pseudo density controls with an ulterior motive. The legislation to achieve this end is generally in place.

A Scan of Selected Density Control Systems Across Australia

Land Use & LGA	Density Objective	Method of Density Control	Use of Plot Ratio
Housing in Port Phillip (Melbourne) Vic (inner suburban historic)	To provide for a range of density options (provided by medium density housing and single dwelling development provisions)	Performance-based approach (that applies State-wide) nominates performance criteria and acceptable solutions with respect to density elements such as lot arrangements, building siting, design and character; Local 'overlays' deal with particular characteristics of the area by setting policy objectives for heritage conservation; No specific limit on number of structures per lot is set	Plot ratio is not used in this performance-based system and is not used in acceptable solutions / technical notes; Building envelope standards are provided in technical provisions
Housing in Nillumbik (Melbourne) Vic (outer suburban hills)	To provide for a range of density options (provided by medium density housing and single dwelling development provisions)	Performance-based approach (that applies State-wide) nominates performance criteria and acceptable solutions with respect to density elements such as lot arrangements, building siting, design and character; Local 'guideline' for medium density development was devised to set a more prescriptive method of development assessment in terms of residential character, minimum size of lots (called density), building envelopes (setbacks and height) and open space - however this was not granted legal status by the State planning authority and acts only as a guide as to what will obtain easy route of approval; No specific limit on number of structures per lot is set	Plot ratio is not used in this performance-based system and is not used in acceptable solutions / technical notes; Building envelope standards are provided in technical provisions; Plot ratio is not used in the more prescriptive guideline issued by the Council

Land Use & LGA	Density Objective	Method of Density Control	Use of Plot Ratio
Housing in Unley (Adelaide) SA (middle suburban)	To enable a range of dwelling densities on a precinct basis; Dwellings should have a visual bulk and scale consistent with structures in the area	Prescriptive approach that has different controls (provided by zone objectives and principles of development control) for precincts; Controls deal with dwelling density (in term of number of dwellings by type per lot (eg. single storey detached on individual allotment), lot area, setbacks, frontage, plot ratio (called floor area ratio); No specific limit on number of structures per lot is set	Plot ratio is used in conjunction with a range of controls and performance statements to control development scale; Plot ratios vary between single, double and three storey residential development zones
Housing in Warringah (Sydney) NSW (middle suburban)	To enable a range of dwelling densities on a precinct basis; Dwellings should have a visual bulk and scale consistent with structures in the area and should not visually dominate the street / area	Prescriptive approach that has different controls (provided by Locality Statements) for precincts; Controls deal with dwelling density (in term of number of dwelling by area, building height, front setback, rear setback, side setback and open space; Performance statements are made regarding heritage conservation; The maximum housing density is 1 dwelling per 600sqm of site area; Buildings are not to exceed two storeys and 8.5 metres in height	Plot ratio is not used is this prescriptive system of precinct-based development control
Housing in Brisbane QLD (suburban)	To provide for a range of housing types / densities on a precinct basis (5 types of residential area are nominated)	Prescriptive approach that nominates minimum lot sizes, maximum development area, type and storeys of dwelling by area; Performance-based statements of intent are included to provide a degree of flexibility and provides performance criteria and acceptable solutions but states that acceptable solutions are preferred; No specific limit on number of structures per lot is set	Plot ratio is used only in provisions for high density residential (ie. residential development up to 10 storeys); Other performance-statements and prescriptive controls govern residential development on a area-by-area basis

Land Use & LGA	Density Objective	Method of Density Control	Use of Plot Ratio
Housing in Albury NSW (regional centre)	To provide for a range of housing styles - conventional, medium density and integrated - within the one Living Area zone; To promote development that is in keeping with neighbourhood and development character on a site-by-site basis	Performance-based system that nominates objectives and matters for consideration when assessing development applications (this includes character, scale, form and bulk of development); Standards over lot sizes, setbacks, building envelopes, solar access and open space are provided and heritage conservation is included; No specific limit on number of structures per lot is set	Plot ratio is not used for any form of housing development (ie. conventional, medium density, integrated); density controls were removed from planning documents due to disputes over such controls; the performance approach is considered to be superior in terms of promoting a wider range of housing styles and is better able to assess developments on planning grounds
Housing (Multi-Unit Development) in Rockhampton QLD (regional centre)	To provide for a range of dual occupancy and group housing development	Prescriptive approach that nominates mandatory requirements over minimum site area, maximum number of dwelling units, type of units (by size and bedrooms), maximum site coverage, maximum height and minimum open space; For Division 3 'Multi-Unit development' - any development of dual occupancy or group housing development on any allotment within Res. A Zones should meet these requirements: a) minimum site area - 600sqm b) maximum no. of units/site - 12 c) maximum site coverage of buildings, garages and outbuildings - 50% of site area. For those in Res. B Zones, maximum no. of units/ site is 20, and in Res C Zones it is 40	Plot ratio is not used in this prescriptive approach

Land Use & LGA	Density Objective	Method of Density Control	Use of Plot Ratio
Housing in Whyalla SA (regional centre)	To provide for a range of housing types (detached, semi-detached, row, multiple unit, flat) in keeping with the character and density of residential development in the locality	Performance-based approach provided by principles of development control which deal with privacy, overshadowing, height, setbacks, lot coverage, open space, character and density (some of these have prescriptive standards); No specific limit on number of structures per lot is set	Plot ratio is not used; Density control is not an issue in Whyalla primarily due to the stagnant / declining population base; lack of development pressure and availability of development sites
High Rise Accomm. & Housing (over 4 storeys) in Gold Coast QLD (regional tourist centre)	To promote slender high-rise forms and to provide generous spacing between buildings; To ensure that the potential building envelope of a site is not entirely filled; To minimise potential adverse impacts of high-rise neighbourhoods	Prescriptive approach that utilises plot ratio and other controls governing minimum lot size, lot configuration, building setback and building height; No specific limit on number of structures per lot is set	Plot ratio is integral to the development control approach; Plot ratio is derived from net site area and number of storey standards
Commercial / Business in Melbourne Vic (capital city CBD)	To ensure intensity of development is supported by infrastructure; To create consistent building frontages at the street alignment; To maintain vertical rhythm of development; To respect the scale and setting of heritage buildings	Performance-based approach that assesses applications based on a site analysis and urban context report addressing public spaces, circulation, building design and areas of transition; Guidelines for building envelopes, view lines, microclimate and sunlight penetration are provided; No specific limit on number of structures per lot is set; In terms of hight rise apartment developments three decision criteria are used (which vary on a precinct basis): height limit, heritage controls and urban design criteria	Plot ratio is basically downgraded as a reference tool as part of a performance-based approach; Plot ratio should not exceed 12:1 unless it can be demonstrated that the development is consistent with the function, form and infrastructure capacity of the city block

Land Use & LGA	Density Objective	Method of Density Control	Use of Plot Ratio
Retail Core in Melbourne Vic (capital city CBD)	To encourage development of a compact, high-density precinct to minimise walking distance for shoppers; To encourage a medium-rise pedestrian scale environment that allows good sun penetration	Performance approach combined with height controls; Height of buildings should not exceed 30 metres (or 40 metres where surrounding buildings are higher) to preserve sunlight access to the retail core; No specific limit on number of structures per lot is set	Plot ratio has been abandoned in favour of a performance approach combined with height controls
Commercial / Business in Sydney NSW (capital city CBD)	To control the scale, bulk and intensity of development on a precinct basis; To provide sufficient floorspace for the foreseeable future; To regulate generation of vehicular and pedestrian traffic; To provide equity in relation to development potential of sites; To provide certainty for stakeholders; To provide a system of awarding transferable development rights (for protection of heritage buildings)	Prescriptive approach that utilises plot ratio (called floor space ratio) with a variety of other controls over height and performance-based design standards (relating to character, solar access / overshadowing) and heritage provisions; No specific limit on number of structures per lot is set	Plot ratio is integral to the development control approach; Plot ratio can be extended where the development authority deems this appropriate on amenity and intensity of use grounds

4.3 The Evolution of Performance-Based Housing Development Control in Victoria

In studying experience elsewhere particular attention is paid below to the experience in Victoria where a considerable amount of work has been done on performance-based development controls for residential development. Actual cases have been examined.

4.3.1 Review of the Victorian Performance-Based Housing System

Up until mid 2001, Victoria used two State-wide codes for subdivision and housing development control: the Good Design Guide (GDG) for Medium Density Housing and the Victorian Code for Residential Development (VicCode 1). Subdivision and residential development control is a local authority responsibility.

VicCode 1 applied to subdivision for residential development and single dwellings on lots between 300 sqm and 4,000 sqm. This code was devised to primarily deal with new estate development. The code contains 13 'elements'. Each element has objectives, performance criteria and (all but one) has performance measures (or a suggested method to meet the criteria and objectives).

Planning approval is not required for development of one dwelling where the following elements of the code are satisfied: E2 Building Siting and Design, E3 Private Open Space, E4 Vehicle Parking and E11 Utilities Provision. Measurable standards are provided. Generally, the direction and requirements for subdivision and single house development is clearly articulated by this document.

The Good Design Guide (GDG) applied to medium density housing, primarily urban infill development. Specifically, it dealt with development of or extension to two or more dwellings on one site, one dwelling on a lot less than 300 sqm and residential buildings such as boarding houses.

The GDG contains 11 'elements'. Each element has objectives, criteria, design suggestions and techniques. Techniques apply to five elements. They provide more specific guidance on meeting the criteria and objectives. The techniques were not intended to be a standard for design, but only a reference point in the performance-based design process. A permit is required for all developments under this code.

The GDG takes a more liberal approach to the performance-based system that VicCode 1. Emphasis is on objectives and criteria. Development need not meet the techniques if the planning authority rules that the criteria and objectives are met.

Considerable controversy has been generated in Victoria under these models. This has been in large part due to:

- The 'acceptable solutions' (in the GDG in particular) being too liberal. It has been argued that they have allowed inappropriate developments, particularly with regard to the bulk and mass of dwellings, overlooking and urban character.
- Development of dwellings in established areas without need for a permit or requirement to meet the same performance criteria that apply to medium density housing. A planning permit is not required for development of single dwellings on lots equal to or greater than 300 sqm. This system enabled subdivision of large lots in established areas to 300 sqm and development of some 'out of character' and intrusive housing in established and heritage areas.

Criticisms about Victoria's housing codes in the late 1990s triggered a review. A Standing Advisory Committee was appointed by the State Government to conduct a review and make recommendations for a new consolidated housing code[1].

The Committee recommended that VicCode 1 and GDG be replaced by a single residential code that applies to all dwellings.

A recent development (mid 2001) is the introduction of the new control (ResCode) with more conservative acceptable solutions.

[1] Review of the Good Design Guide and VicCode 1 Final Report, March 2000.

ResCode in Victoria has a reference to minimum lot sizes (300 sqm or 500 sqm with a variation to the Planning scheme) but these are not density controls as such. They are 'triggers for discretion' in that a planning permit is required for smaller lots.

4.3.2 Density Findings

The Committee singled out the density provisions in the GDG as being particularly unsuccessful and recommended the deletion of all references to density in the new ResCode.

Density in the Victorian provision relates only to the typical size of lot suitable for a dwelling.

The main findings with respect to density are as follows:

- The objectives of density generally related to increasing urban consolidation and housing yield in established areas and increasing housing diversity and choice on appropriates sites and locations. Performance criteria spell out more detail (eg. density should be in keeping with site attributes and location and higher densities should be promoted near facilities).
- Techniques provide a guide to benchmark densities. For the most common lots, the benchmark suggested that one dwelling per 300 sqm is acceptable. For many developers, this was read as a standard to be applied across the State.
- In recent years there has been a trend for construction of 'bigger' houses in Melbourne (eg. double storey homes with three bedrooms and double garages). The construction of bigger homes on 300 sqm lots has been the genesis of many overlooking, overshadowing and visual bulk complaints. The problem is seen to lie in the use of the density technique (typically showing 1 dwelling per 300 sqm) as the developer's guide as opposed to the intended assessment of site opportunities and constraints in the neighbourhood setting.
- The Committee considered a number of options for density control. With respect to Plot Ratio, the Committee concluded that it is a more useful tool (than the dwelling to site area approach) in terms of better addressing intensity of development but still lacked the ability to ensure appropriate

development outcomes in all circumstances (unless set at a conservative and inflexible level).

- It was concluded that the critical issue with density is the building envelope package for sites (regardless of the number of dwellings / structures that occupy the appropriate envelope).
- The Standing Committee recommended the deletion of all reference to density in the new housing code.

4.3.3 ResCode – New Provisions for Residential Development in Victoria (2001)

ResCode introduces tighter controls and higher standards into the performance-based planning model in order to deliver greater certainty in residential development.

Single house developments only require a building permit and not a planning permit if stated standards are met in relation to:

- Street set back;
- Building height;
- Site coverage;
- Side and rear setbacks;
- Walls along boundary limits;
- Daylight , overshadowing and overlooking provisions; and
- Private open space provisions.

Where standards are not met, a planning permit is required. The code states that standards should normally be met but if the authority is satisfied the proposed solution meets the objective then approval can be granted.

For single house developments (including extensions) that do require a planning permit, the above standards apply plus other standards over neighbourhood character.

A planning permit is required for a single house on a site below a certain size (300 sqm but this 'trigger' can be set at 500 sqm with a local council variation) and / or in an area with a 'Neighbourhood Character Overlay'.

For multi-house developments - all of which require a planning permit - the above standards apply plus a number of others. None of the additional measures have a significant additional impact on density.

The net result is that more single house situations will be discretionary and not as of right. This has implications for workloads in the development control system.

Adoption of ResCode (to replace the GDG and VicCode 1) explicitly excludes references to density. The thinking behind this is that density, while it is a 'feature' of residential character, is not a determinant. The determinants are the separation of buildings and their bulk and mass. These are dictated by setbacks, heights and open space provision.

4.3.4 Example Under GDG and VicCode 1

Outcomes under Victoria's previous performance-based approach to housing control (ie. under the GDG and VicCode 1 model) are shown in the examples below. These examples show how the performance system can deliver innovative and responsive outcomes.

Example 1 - Modern housing development in a heritage area of Middle Park. The development respects the density, height, setbacks and bulk of neighbouring buildings.

Example 2 - Modern development in a heritage area of Albert Park. The development respects the density, height, setbacks and bulk of the neighbouring building.

Example 3 – New 'low density' house in Eltham. Typical of the setting and character of Nillumbik.

Example 4 – New medium density development in a low density residential setting in Eltham. The following photo shows an adjacent building. This shows that the new development is consistent with its neighbour's height and bulk and, although not a typical style of development for the area, meets performance criteria of the State's housing code.

4.3.5 What Can be Learnt from the Victorian Experience

As stated in Section 4.3.1 the Victorian system has been steeped in controversy and the new ResCode is unproven. It does not take effect until August.

The controversy that surrounds the Good Design Guide has revolved around the minimal 'acceptable solutions' (setbacks too low, buildings too high, etc.) but there is another aspect which is the effectiveness of the approvals process. Generally, what has occurred is:

- Multi-unit developments are routinely taking around twelve months, even without appeals.
- Councils are requesting the maximum amount of information permissible, even for minor applications. This is time consuming and expensive.
- Councils have non-statutory policies, which are in conflict with the Guide – which they enforce.

ResCode has in fact increased the amount of information that Councils are able to request and the likelihood is that they will continue to use this device as a means of imposing non-statutory policies.

The over emphasis on information requirements in ResCode (most of which could be satisfied by a site inspection) stand in contrast to the lax attitude to the actual appearance of buildings which is arguably the most contentious issue. This is of course a difficult area but if there is going to be more resources put into the process this is perhaps where they should go.

4.4 Synthesis

Prescriptive and Performance Approaches to Development Control

- Prescriptive development controls spell out what certain developments are to look like. The main strength of this approach is that it provides certainty in outcomes. The downside is that the approach may stifle innovative design

solutions and turn the focus on numbers rather than objectives.

- Performance-based approaches spell out the objectives that developments are to achieve and performance criteria that must be satisfied in order to achieve the objectives. The main strength of this approach is that it focuses attention on defining site-specific environmental opportunities and constrains and promotes innovative design solutions on a site-by-site basis.
- However, the performance approach has been criticised for promoting uncertainty in outcomes where performance standards have not been clearly articulated and in cases where design and planning assessment professionals have been insufficiently trained in performance-based measures.

Density Case Studies

- Plot Ratio is generally not used in performance-based development control systems. Acceptable solutions of these systems typically specify standards over lot configuration and building envelopes, but not Plot Ratio.
- Prescriptive approaches to development control may or may not use Plot Ratio. Standards over lot size and building envelope are the most commonly used technical provisions.
- Plot Ratio is mainly applied in property markets with high property development activity and demand and generally in 'high-rise' development situations (based on the selected review of case studies). This includes the CBD areas of Sydney and Melbourne and high-rise accommodation towers in the Gold Coast.
- The research indicates that Plot Ratio is a tool that has been used for a long time. Some jurisdictions have implemented changes to density controls with the general trend being abandonment of Plot Ratio in favour of performance-based approaches.
- In other States Plot Ratios in commercial areas have their origins in a desire to exact development contributions, more than as a density control device. It is now widely accepted that if a contribution is justified it should be made without resort to pseudo density controls with an ulterior motive.

The Victorian Housing Experience

- Recent changes to the Victorian model of performance-based housing control highlights the need to clearly articulate objectives and standards when adopting a performance-based planning system. Considerable controversy has been generated in Victoria and this has been in large part due to the 'acceptable solutions' in the controls being too liberal.
- Victoria's new housing code (ResCode) has more conservative acceptable solutions. There is merit in providing a choice for applicants to either meet performance criteria for flexibility or prescribed standards for certainty.
- Adoption of ResCode explicitly excludes references to density. The thinking behind this is that density, while it is a 'feature' of residential character, it is not a determinant. The determinants are the separation of buildings and their bulk and mass. These are dictated by setbacks, heights and open space provision.
- ResCode in Victoria has a reference to minimum lot sizes (300 sqm or 500 sqm with a variation to the Planning scheme) but these are not density controls as such. They are 'triggers for discretion' in that a planning permit is required for smaller lots.
- The net result in Victoria under the new ResCode will be that more single house situations will be discretionary and not as of right. This has implications for workloads in the development control system.
- ResCode is unproven and appears to have information requirements that make the approvals process cumbersome.

4.5 Implications for the City of Hobart Planning Scheme 1982

It is clear from experience elsewhere that density / plot ratio controls are out of favour although density controls (generally lot size) are commonly applied to determine 'triggers' whereby greater scrutiny is given to applications. When the triggers are invoked the regime of development controls becomes more complex.

ResCode in Victoria introduces consideration of 'Neighbourhood Character' and requirements for extensive documentation of the

site analysis and design process. The detailed design of buildings also becomes an issue.

In ResCode (Vic) neighbourhood character is discussed in relation to (amongst other things):

- The pattern of development of the neighbourhood.
- The built form, scale and character of surrounding development including front fencing.
- Architectural and roof styles.
- Site size, shape, orientation and easements.

It is stated that the 'design response' must respond to these factors. Density is not explicitly stated as it is intended to be a factor determined by the application of all design criteria in combination.

In Hobart, 'density' has long been regarded as an important ingredient of 'desired future character' and plot ratios and dwelling unit factors have been employed on this basis. The research documented in this report highlights the fact that plot ratios in the non-residential zones are not taken advantage of and are superfluous. This overwhelmingly the case in the Residential 1 and 2 zones also.

However, in the residential zones (particularly Res 3 & 4) plot ratios are sometimes fully exploited, mainly on smaller lots in older areas. This may indicate that a cautious approach is warranted. There is a definite trend Australia-wide towards larger and larger houses, not for more people in the house but for new lifestyles. Separate areas for entertaining, recreation, studying and computing are often provided. Room dimensions are increasing and entrances/circulation areas are becoming more generous.

In areas where the traditional housing is of the 'cottage in the garden' type, there can be a significant impact on the character of the neighbourhood if a large bulky house is introduced, notwithstanding the fact that overlooking, etc. may be attended to.

It is quite feasible to replace plot ratio controls with a site cover 'acceptable solution', which could be based on the established

norm in a street or neighbourhood. The extent of second storey additions would be dictated by an acceptable solution reflecting the bulk and mass of buildings in the area. For example it might be set at 50% of the site cover 'acceptable solution'. Performance criteria for additional site cover would determine the circumstances where site cover could increase.

4.6 Comments on Residential Developmet Controls in the City of Hobart Planning Scheme 1982

In the light of the research undertaken in this study the following comments are made o the current scheme provisions.

K.3.1 Residential Density

The 'acceptable solution' of having a 10m X 5m right angle triangle of rear garden area will affect 'density', but given that it can include outbuildings and separate garages the effect may be minimal in some cases.

The dwelling unit factors indicate relatively low densities (eg. 300sqm for each additional dwelling) if small 2BR single storey dwellings are erected. However, large houses on these lot sizes would be 'high density'.

Hence the plot ratio provisions which relate the size of the house to the size of the lot. In this context plot ratios have some logic.

Despite this logic though, there remains the question of what impacts it is sought to control and what other means there might be that are more effective. Plot ratios limit the amount of living area a household can enjoy on a block – but if it can be demonstrated that more space can be provided without detriment (including to neighbourhood 'character') should this not be facilitated?

One could envisage a circumstance where a single storey house with a 50% site coverage is the subject of an application to develop bedrooms within the existing pitched roof. The shape of the house hasn't changed but the plot ratio could conceivably be 70%.

Plot ratio is also a difficult concept for lay people to understand. Concepts such as site coverage, setbacks and height are more easily assimilated.

It is noted that the Council has discretion to waive plot ratios but it is relevant that plot ratio is simply a 'number' which is difficult to relate to any particular environmental impact (unlike a setback or a height criterion). It is therefore difficult to formulate meaningful guidelines on the exercising of this discretion.

K.3.2 Private Open Space

The minimum, private, open space provisions operate in tandem with Schedule K.3.1 to affect 'density'. However, amounts of 50 sqm and 25 sqm represent only 16% and 8% respectively of a 300 sqm block and therefore taken alone would allow very high densities.

K.3.3 Parking and Access

These are relatively conventional provisions.

4.7 Comments on Rescode '95 (Draft)

This document was the basis of the controls reviewed above but it was not fully adopted. The elements excluded from he scheme are commented on below.

Street Setback

The 'acceptable solution' for developing areas is related to road classification which relies on traffic volumes. There is a logic in this but its practical application may be difficult. The principal could be applied to determine the appropriate setback on a street by street or an area basis though. This could be incorporated in the scheme.

In established areas the acceptable solution is 25% less than that of adjacent development. ResCode (Vic) is based on the same setback as adjacent development. Perhaps the more conservative approach in ResCode (Vic) is more appropriate.

Building Setback and Bulk

In this section an 'envelope' is proposed starting at the boundary (with limits to building on the boundary) and with setbacks (at 45°) above 3.5m to a height of 12m maximum. A shortcoming with this approach

is that some dwellings are designed to fully exploit the envelope and end up looking like the envelope and not a conventional house.

The 45° line appears to be harsh on two storey dwellings in that considerable set backs are required. This may be appropriate where overshadowing is a problem but not in other situations (adjacent a blank wall for example).

Building Appearance

An attempt has been made to write 'acceptable solutions' for this element but this is extremely difficult when dealing with subjective aspects. In certain areas control over appearance is appropriate but new ways of doing this must be found.

Privacy and Security

The provisions appear to be sound and should, after updating, be incorporated into the scheme.

Solar Access and Energy Efficiency

This perhaps should be a refocussed on protecting solar access for neighbours and the aspects of the new proposal should be dealt with in a similar manner as suggested for 'Building Appearance'. Perhaps and element 'Building and Site Design' should be introduced.

Site Facilities

These aspects could also be incorporated into the Building and Site Design element.

Front Fences and Walls

The low fence (1.2m) plus 50% transparent extension to 1.8m. may be appropriate in most circumstances but there is still a subjective design element included. Fences too could be included into the Building and Site Design element.

4.8 An alternative Approach to Residential Development controls

There is no development control model elsewhere that can be said to be working well. There has been a tendency to make the process more onerous for applicants, but it is arguable that the real shortcomings exist in:

- Poor information and guidelines.
- A lack of collaborative processes in the design phase between applicants, neighbours and development controllers.

The Council is aware of the shortcomings of current controls and has recently commissioned market research to highlight the Issues *(Residential Development research Report, June 2001, Enterprise Marketing and Research services).* A review is underway to re-evaluate the ResCode 95 design elements with a view to introducing them into the Scheme.

This review should carefully examine the information requirements of applicants. In Victoria there is a requirement for a site analysis and there is merit in this. A good site analysis demonstrates that there has been some rigour in the design process. Where the problems arise is when the maximum information requirements are normally insisted upon whether they are relevant or not to the particular proposal. A solution to this would be to have graduated information requirements from minor matters to major developments.

In established areas area-specific design guidelines could be prepared. A collaborative approach could involve pre-application workshops with applicants. Specialist designers could be engaged by the Council to attend in some instances.

5 CONCLUSIONS AND RECOMMENDATIONS

This study has reviewed the operation of plot ratios in non-residential areas and the Residential 1 and 2 zones and it is concluded that:

- Plot Ratio is an indirect means by which to manage Hobart's density planning objectives. The quantitative Plot ratio standards set out in the Planning Scheme have an indirect relationship to statements of character and built form.
- Plot ratio controls are generally in excess of demand requirements and hence their effectiveness as a mechanism to control density is to a large extent invalidated.
- The Bonus Plot ratio system used in Hobart is subjective, is rarely used nowadays and adds another layer of complexity and uncertainty in the planning system.

Plot ratio controls have been dispensed with in the Wapping area where 'design based' building envelopes and associated measures define the 'acceptable solutions' and provide the requisite level of certainty to inform the land market.

It is **recommended** that in any revision of the planning scheme in the non-residential areas plot ratios be abandoned in favour of the approach adopted in the Wapping Local Area. The work done in CASP should be the starting point for the review.

Plot ratios have also been reviewed in the residential areas and it is found that hey do have a role in protecting neighbourhood character although it quite limited, especially in the Residential 1 and 2 zones, and they are sub-optimal in this regard. More sophisticated residential development controls are required but experience elsewhere is problematical and caution must be taken if importing ideas in this area.

There is a need for a more 'guidelines led' approach accompanied by more collaborative approvals processes. This would need to be backed up by a set of relatively conservative 'acceptable solutions' in the scheme. Also required would be clear performance criteria to assist the exercising of discretion to waive 'acceptable solutions'.

Guidelines can be prepared without amending the scheme as it currently allows discretion to vary from the acceptable solutions.

Ultimately, after field tests, they may become incorporated into the scheme to give them statutory effect.

For the residential areas it is **recommended**, in order of priority, that:

- The current review of the scheme dispense with plot ratios and adopt additional elements from a revised ResCode '95 (Draft).
- Residential development guidelines be prepared dealing with the areas of discretion in the scheme, particularly for those areas that do not lend themselves to 'acceptable solutions' being defined such as building appearance and neighbourhood character.
- That a review of development approvals procedures be undertaken to refocus on quality of design and a more collaborative approvals process. Information requirements of applicants should include a site analysis, but with safeguards to ensure that the information required to be submitted is relevant to the actual proposal. Hence various 'classes' of applications should be identified from the minor (with few information requirements) to the major (with more extensive information requirements).
- After field-testing, the guidelines should be incorporated into the scheme to give them statutory effect.

APPENDICES

Appendix 1 – Glossary of Terms

Density – The number of buildings in a given area (ie. building density) and the size and bulk of the buildings (ie. floorspace density).

Plot Ratio – A numerical figure that expresses the relationship between the area of a site and the floor area of a building.

Externalities – Positive or negative impacts imposed on surrounding areas as a result of a land use / development.

Building Envelope – The two or three dimensional outline of a building on a site.

Deemed to Comply / Acceptable Solutions - Conservative numerical planning standards used in performance-based development control systems.

Appendix 2 – Zones and Density Controls in Hobart

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
Central Retail	To maintain and strengthen the primary shopping centre of Metropolitan Hobart.	Central Retail Precinct - No.1	The overall townscape should be primarily determined by intense activity at pedestrian levels; streets should be characterised by continuous facades; above awning level design of buildings should reinforce the existing character of ornate and intricate 'walls' to the street.	4.00	5.00	none	45	4.5	4.5	Permitted Height of New Building - 42 metres
The Central Commercial and Administrative Zone	To provide for the administrative, commercial, financial and professional headquarters of the State, for intensive generators of employment, and for cultural and community activities and supporting uses.	Central Commercial Precinct - No.2	The precinct should be characterised by closely linked activities at high densities; the current stock of vacant or under-utilised sites and derelict buildings should be progressively re-developed; development throughout the precinct should have a high level of vehicular accessibility for deliveries and business communications.	5.25	7.00	none	60	4.5	4.5	Permitted Height of New Building - 42 metres
		Central Administrative Precinct - No.3	The precinct should continue to evolve as the focus of the State's civic and administrative functions, with activities here and in adjacent precincts reinforced by retail facilities on Collins Street, and supportive small shops etc through the precinct.	5.25	7.00	none	60	4.5	4.5	Permitted Height of New Building - 42 metres
		West Central Precinct - No.4	Should continue to redevelop and intensify with a diversity of activities appropriate to the central area; areas of vacant land should be progressively eliminated; overall townscape should express the transition between the highly intense development of the Central Retail Precinct and the lower heights and densities of other nearby Precincts.	5.25	7.00	none	60	4.5	4.5	Permitted Height of New Building - 42 metres

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
		Lower Brooker Precinct - No.5A	Should continue to consolidate its education, administrative and public utility functions; new development should reflect scale and form of existing fabric.	2.25	3.00	none	360	10	10	Permitted Height of New Building - 12 metres
		Elizabeth Street Precinct - No.8A	Should maintain its function as a retail, wholesale and office area with residential use an important subsidiary activity; new development should maintain the linear image of Elizabeth St which is a dominant feature of the overall character of the Precinct.	2.25	3.00	none	120	6	6	Permitted Height of New Building - 4.8 metres
		Macquarie - Davey Precinct - No.11A	Should continue to function predominantly as an area for professional offices and medical activities together with the protection of associated residential usage; intensity of activity should be transitional from the central area, reducing toward the boundary with Precinct 11B and buildings on west side of Davey St should be maximum 3 to 4 storeys.	2.25	3.00	none	120	6	6	Permitted Height of New Building - 12 metres

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
The Central Service Zone	To provide for a changing diversity of general non-resident uses reflecting the transition between other Central Zones, the waterfront, and inner residential areas.	Argyle Precincts - No.6A and 6B	Should continue to develop with a mixture of medium density activities such as small offices, retailing, wholesaling, light industry and automotive uses; the present excess of vacant and under-utilised land should be progressively reduced; higher density development is encouraged in 6A as opposed to 6B.	(6A) 2.25, (6B) 1.2	(6A) 3.0, (6B)1.6	(6A) none, (6B) 120	(6A) 360, (6B)360	(6A/B) 10	(6A/B) 10	Permitted Height of New Building - (6A) 12 metres, (6B) 9 metres
		Murray Precinct - No.9	Should contain a diversity of uses such as wholesaling, light industry and automotive businesses; On-site landscaping should be encouraged where possible; height and scale of new development should lessen in areas adjacent to residential development.	2.25	3.00	120	360	10	10	Permitted Height of New Building - 12 metres
		Liverpool Precinct - No.10	Should contain activities which reflect its position as a transitional link between the City Centre and Residential Precincts; low intensity and speciality shops, entertainment and community services and wholesaling should continue to locate within the Precinct.	2.25	3.00	120	360	10	10	Permitted Height of New Building - 12 metres

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
The Commercial and Residential Zone	To provide for a diversity of commercial and professional uses and some important associated residential uses at densities responsive to the character of historic areas and buildings and/or adjacent Precincts.	The Elizabeth Street Precinct - No.8B	Should evolve as a retail and community service area between adjacent residential Precincts; new development should be of lesser density than that to the South.	0.9	1.2	120	480	15	15	Permitted Height of New Building - 9 metres
		The Macquarie - Davey Precinct - No.11B	Should continue to function as an area for offices and institutions together with the protection of residential uses and the encouragement of its further development; new development should respect existing streetscape character (Victorian and Georgian town houses).	0.9	1.2	120	480	15	15	Permitted Height of New Building - 9 metres
		The Barracks Precincts - Nos. 12A and 12B	Should continue to be dominated by the Barracks complex, surrounded by an inner city mixed use area with the main uses being commercial and administrative; development in precinct 12B should reinforce the existing character of the residential scale buildings surrounded by extensive landscaped open space.	(12A) 2.25, (12B) 0.9	(12A) 3.0, (12B) 1.2	(12A) 120, (12B) 120	(12A) 360, (12B) 480	(12A) 10, (12B) 15	(12A) 10, (12B) 15	Permitted Height of New Building - 9 metres
		The Elizabeth Street North Precinct - No.16B	Should continue as a mixture of residential and business use with existing buildings converted to flats or office use; buildings should be set back from street to allow a landscaped frontage; new development should not exceed two storeys and should be of a scale and design which is sympathetic to the existing development.	0.9	1.2	160	480	15	15	Permitted Height of New Building - 4.8 metres
		The New Town Road Precinct - No.18	Should continue to be an appropriate location for local shopping facilities and major road commercial uses as well as for residential flat development; increased provision of seating and shelter for pedestrians and landscaping of street frontages is desirable.	0.5	0.5	120	480	15	15	Permitted Height of New Building - 4.8 metres

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
The Local Service Zone	To provide for local social, community and shopping facilities for nearby residential Precincts, with predominant retail and service functions supported by local offices and small scale places of entertainment.	The Elizabeth Street North Precinct - No.16A	Should continue to function as the North Hobart shopping centre, servicing surrounding Precincts and passing trade for local and specialist shopping needs; development should be built to the street edge with new facades complimenting existing development; higher densities are considered more appropriate in this Precinct than Precinct 16B.	0.9	1.2	120	270	9	9	Permitted Height of New Building - 4.8 metres
		The Sandy Bay Village Precinct - No.28	Should sensitively evolve as a social, community and shopping focus for the surrounding and residential Precincts; the current environmental image of the Precinct should be maintained and further developed.	0.9	1.2	120	270	9	9	Permitted Height of New Building - 4.8 metres
		The Sandy Bay Point Precinct - No.32	Should continue to develop as a small, vibrant shopping centre contained within a setting of parklands and nearby beaches.	0.9	1.2	120	270	9	9	Permitted Height of New Building - 4.8 metres
		The Mount Nelson Precinct - No.37B	Should develop as a small centre for local shopping and community services; activities such as local shops, medical and education related services should be located here; the importance of the tree lined slopes and the preservation of the skyline reserve should be given major consideration in any new developments.	0.4	0.4	550	550	6	18	Permitted Height of New Building - 4.8 metres

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
The Residential 1 Zone	To sustain and enhance the character and amenity of established residential areas with diverse dwelling-types with minimal intrusion or further development of non-residential uses not necessary to serve local residents.	The Trinity Hall Precinct - No.7	Should maintain its traditional role as an inner urban residential area; any further development should reflect and accentuate the hillside character of the Precinct, acknowledging the townscape dominance of the Church and its view corridor.	0.5	0.5	160	480	6	15	Permitted Height of New Building - 4.8 metres
		The East New Town Precinct - No.17	Should continue as an inner urban residential area consisting principally of single detached houses set mainly on small to standard size allotments; commercial activities will generally be restricted to existing non-conforming uses or be allowed on the scale of a domestic business.	0.4	0.4	240	480	6	15	Permitted Height of New Building - 4.8 metres
		The West New Town Precincts - Nos. 19A and 19B	Should continue as an inner residential suburb supported by local shopping and community facilities; development of further commercial facilities generally prohibited; slightly higher density of development is encouraged in Precinct 19A opposed to 19B.	(19A) 0.5, (19B) 0.4	(19A) 0.5, (19B) 0.4	(19A) 160, (19B) 240	(19A) 480, (19B) 480	(19A/B) 6	(19A/B) 15	Permitted Height of New Building - 4.8 metres
		The Lenah Valley Precinct - No.21A	Should continue to be characterised by predominantly single housing of one or two storeys and medium density residential development, particularly in the vicinity of Augusta Road; supporting activities should be confined to their existing locations, with only minor expansion allowable.	0.4	0.4	240	480	6	15	Permitted Height of New Building - 4.8 metres

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
		The Inner West Hobart Precincts - Nos. 25A, 25B, 25C, and 25D	Should be conserved and reinforced as an inner city residential area of major heritage and overall townscape importance; Precincts 25A and 25B should continue to contain their significant education institutions, and a gradual decrease in density of development is encouraged from 25A through 25B and 25D to 25C.	(25A) 0.5, (25B/D) 0.4, (25C) 0.4	(25A) 0.5, (25B/D) 0.4, (25C) 0.4	(25A) 160, (25B/D) 240, (25C) 360	(25A) 480, (25B/D) 480, (25C) 550	(25A) 6, (25B/D) 6, (25C) 6	(25A)15, (25B/D) 15, (25C) 18	Permitted Height of New Building - 4.8 metres
		The South Hobart Precincts - Nos. 26A and 26B	Should enhance their primarily residential function along the ridge slopes of the valley formed by the Hobart Rivulet, Macquarie Street and, to a lesser extent Davey Street, should continue to accommodate local services and already established community activities.	(26A) 0.5, (26B) 0.4	(26A) 0.5, (26B) 0.4	(26A) 160, (26B) 240	(26A) 480, (26B) 480	(26A) 6, (26B) 6	(26A) 15, (26B) 15	Permitted Height of New Building - 4.8 metres
		The Sandy Bay/Dynnyrne Precincts - Nos. 27A and 27B	Should continue to function as an inner residential area with a range of accommodation types from large family houses to smaller houses and flats, and accommodation for students; a slightly higher density of development is encouraged in Precinct 27A.	(27A) 0.5, (27B) 0.4	(27A) 0.5, (27B) 0.4	(27A) 160, (27B) 240	(27A) 480, (27B) 480	(27A) 6, (27B) 6	(27A) 15, (27B) 15	Permitted Height of New Building - 4.8 metres
		The Lower Sandy Bay Precinct - No.30A	Should continue to function as an area in which medium density housing predominates; non-residential activities should be discouraged from establishing here.	0.4	0.4	240	480	6	15	Permitted Height of New Building - 4.8 metres

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
		The Mount Nelson Precinct - No.37A	Should maintain its bushland residential setting; medium density cluster housing should be designed to have minimal impact on the existing detached houses.	0.4	0.4	240	480	6	15	Permitted Height of New Building - 4.8 metres
The Residential 2 Zone	To sustain and enhance the character and amenity of areas of predominantly detached houses, with limited development of complementary dwelling-types and minimum intrusion or further development of non-residential uses not necessary to serve local residents.	The Lenah Valley Precinct - No.21B	Should continue to be characterised by single detached housing; new building should respect topography, aspect, vegetation and, as far as practicable, existing views from residences; the existing open space buffer will be maintained between the Brickworks and adjacent uses.	0.4	0.4	360	550	6	18	Permitted Height of New Building - 4.8 metres
		The Upper Lenah Valley Precinct - No.22	Should continue to evolve with predominantly detached houses designed to take advantage of the bush setting and views; the development of more than one house per lot will only be permitted where specific provision has been made at the subdivision stage.	0.4	0.4	360	550	6	18	Permitted Height of New Building - 4.8 metres
		The Mount Stuart Precinct - No.23	Should continue to serve as an inner residential area with non-residential uses excluded other than local shops and community facilities.	0.4	0.4	360	550	6	18	Permitted Height of New Building - 4.8 metres

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
		The West Hobart Precinct - No.24	Should continue its primary residential function and the introduction or extension of non-residential uses, which are not strictly local services, should be precluded.	0.4	0.4	360	550	6	18	Permitted Height of New Building - 4.8 metres
		The West Hobart Precinct - No.24A	Should exemplify, through careful design of service infrastructure, allotments and buildings, a sustainable approach to residential development; non-residential uses will be precluded unless they provide a strictly local service, or compliment the bushland, conservation and recreational use of the Knocklofty Reserve, Hobart Rivulet Reserve or Cascade Gardens and are compatible with residential amenity.	0.3	0.3	550	750	6	24	For properties within Precinct 24A overall height will be restricted to a maximum of 7.5 metres.
		The South Hobart Precinct - No. 26C	Should continue its function as a residential area of predominantly detached dwellings; two storeys should generally be the maximum, although on the higher slopes three storeys may also be appropriate.	0.4	0.4	360	550	6	18	Permitted Height of New Building - 4.8 metres
		The Sandy Bay/Dynnyrne Precinct - No.27C	Should continue to be an area of detached single dwellings, with densities lower than those found in Precincts 27A and 27B.	0.4	0.4	360	550	6	18	Permitted Height of New Building - 4.8 metres

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
		The Lower Sandy Bay Precinct - No.30B	Should continue to be characterised by predominantly single family detached houses supported by a limited number of medium density housing developments and a range of small local shops; further development of offices and non-local shops should be discouraged.	0.4	0.4	360	550	6	18	Permitted Height of New Building - 4.8 metres
		The Riverview Precinct - No.33	Development in the Precinct should be confined to residential activities and should acknowledge the fine river views and vistas afforded to residents and motorists alike.	0.4	0.4	360	550	6	18	Permitted Height of New Building - 4.8 metres
		The Cascades Precinct - No.34A	Should continue to develop as a low density residential area set in bushland; new residential development should be in the form of single dwellings or single dwellings with an ancillary flat, or reflect that form of openness.	0.4	0.4	360	550	6	18	Permitted Height of New Building - 4.8 metres
		The Waterworks Precinct - Nos. 35A, 35B and 35C	Should continue to function as an area for progressive residential expansion; new development should cater for primarily low density detached housing, with slightly higher densities permitted in Precinct 35A; supporting local services and facilities should be encouraged as the area evolves.	(35A/B) 0.4, (35C) 0.3	(35A/B) 0.4, (35C) 0.3	(35A/B) 550, (35C) 550	(35A/B) 550, (35C) 750	(35A/B) 6, (35C) 6	(35A/B) 18, (35C) 24	Permitted Height of New Building - 4.8 metres

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
		The Mount Nelson Bends Precinct - No.36	Should continue to develop its residential function at low densities with predominantly detached dwellings to permit substantial retention of natural vegetation and landscaped open space.	0.4	0.4	550	550	3	18	Permitted Height of New Building - 4.8 metres
		The Mount Nelson Precincts - Nos.37C and 37D	Should continue to develop primarily with detached housing in a bushland setting; two storey houses will be allowed where they do not interfere with the skyline; Precinct 37D is reserved for residential subdivisions pending the availability of services.	(37C/D) 0.3	(37C/D) 0.3	(37C/D) 550	(37C/D) 750	(37C/D) 6	(37C/D) 24	Permitted Height of New Building - 4.8 metres
		The Porter Hill Precinct - No.39	Should evolve as a residential area with associated compatible activities; the overall townscape image of landscaped hillside housing should continue with particular attention being paid to minimising impact on the skyline.	0.3	0.3	550	750	6	24	Permitted Height of New Building - 4.8 metres

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
The Residential 3 Zone		The North Hobart Precinct - No.15A	Should be rehabilitated as an inner city residential area with particular emphasis on the protection and extension of the stock of low cost housing; there should be minimal intrusion or further development of non-residential uses not necessary to serve local residents.	0.5	0.5	160	480	6	15	Permitted Height of New Building - 4.8 metres
The Residential 4 Zone		The Glebe Precinct - No.14	Should be conserved as an inner city residential Precinct of unique historic and aesthetic character; there should be minimal intrusion or further development of non-residential uses not necessary to serve local residents.	0.5	0.5	160	480	6	15	Permitted Height of New Building - 4.8 metres
The Rural A Zone	To maintain the character of an independent small community in a rural setting generally within the present boundaries of its village clusters of residential lots and supporting non-residential development.	The Fern Tree Precincts - Nos. 43A, 43B and 43C	Should maintain their character as part of a small, independent community on the margin of an extensive regional recreational facility; the locality's commercial, retail and entertainment activities should be contained within Precinct 43C.	none	none	10 000	10 000	6	18	Permitted Height of New Building - 4.8 metres

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
The Rural B Zone	To provide for uses suited to broad-acre subdivision consistent with the character of the natural and rural landscape and the proper management of rural enterprises and public utility services.	The Old Farm Road Precinct - No.41	Should continue as a semi-rural area; broad-acre subdivision, development of a single house on an existing lot and development associated with the maintenance of the existing rural enterprises and public utility services.	none	none	40 000	40 000	6	18	Permitted Height of New Building - 4.8 metres
		The Ridgeway Precinct - No.44A	The Precinct is set aside as an area for rural/residential activities; new development should be compatible with the semi-rural character and generally be restricted to single dwellings on large lots.	none	none	20 000	20 000	6	18	Permitted Height of New Building - 4.8 metres
The Rural C Zone	To retain an area of natural bushland beyond the fringe of urban development, generally with on detached house only per broad-acre allotment.	The Brushy Creek Precinct - No.40	The Precinct should be protected as a largely natural area; more intensive subdivision should be discouraged.	none	none	40 000	40 000	6	18	Permitted Height of New Building - 4.8 metres
		The Ridgeway Precincts - Nos. 44B and 44C	Should be retained as a natural area in which further subdivision is discouraged; recreational activities such as horse riding and bushwalking are appropriate; fire trails and riding trails should be reserved and maintained at a minimum width of 4 metres.	none	none	40 000	40 000	6	18	Permitted Height of New Building - 4.8 metres

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
		The Albion Heights Precinct - No.45	Should remain as a natural area in which recreational activities such as bushwalking and horse riding are appropriate; broad-acre subdivisions will only be allowed if adequate sewerage and drainage can be provided; any new buildings should be sited and designed to blend with the natural setting.	none	none	40 000	40 000	6	18	Permitted Height of New Building - 4.8 metres
		The Fern Tree Precincts - Nos. 43D and 43E	Should continue to be dominated by their verdant bushland; within this setting, buildings should be unobtrusively sited and particularly not impinge on the tree dominated skyline.	none	none	40 000	40 000	6	18	Permitted Height of New Building - 4.8 metres
The Recreation Zone	To continue to provide areas of natural bushland and facilities for the passive and visual recreation and enjoyment of residents, workforce and visitors to Hobart, and to accommodate various utility services where necessary, by eventual public ownership.									
The Special Use Zones	To make provision for groups of uses and development unique to their respective Precincts under conditions unlikely to be appropriate elsewhere in the Planning Area.									

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
Special Use Zone 1		The St John's Park Precinct - No.20	Should be maintained as a major centre for health, welfare and community facilities serving metropolitan Hobart.	(as determined by council)						Permitted Height of New Building - 4.8 metres
Special Use Zone 2		The University Precinct - No.29	Should continue to develop as a major tertiary education centre of the State.	(as determined by council)						Permitted Height of New Building - 4.8 metres
		The College Precinct - No.38	Should continue to develop as a centre of higher learning supported by cultural, community and recreational uses, or alternatively be adapted for other public functions; further development should attempt to mellow the institutional image of the complex.	(as determined by council)						Permitted Height of New Building - 4.8 metres
Special Use Zone 3		The Wrest Point Precinct - No.31	Should continue to function as a self-contained tourist and entertainment complex; no further increase in floor space should be permitted, and development confined to the replacement of existing accommodation and related activities.	0.9	1.2	120	480	15	15	Permitted Height of New Building - 4.8 metres

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
Special Use Zone 4		The Lower Brooker Precinct - No.5B	Should continue to serve its education functions, but major extensions or large new development should be discouraged; historic buildings should be conserved.	0.5	0.5	(as determined by council)				Permitted Height of New Building - 4.8 metres
Special Use Zone 5		The Cascade Precinct - No.34B	The Precinct is set aside to allow the continued economic use of the Cascade Brewery Complex and its conservation and enhancement as an historic complex of both local and national significance.	(as determined by council)						Permitted Height of New Building - 4.8 metres
Special Use Zone 6		The Turnip Field Precinct - No.42	The Precinct forms an important part of the water supply area of the City, consequently, development that may affect water quality should not be permitted.	(as determined by council)						Permitted Height of New Building - 4.8 metres
Special Use Zone 7		The Calvary Hospital Precinct - No.46	Should continue to function primarily as a general hospital with associated health services.							Permitted Height of New Building - 4.8 metres

				Density Controls						
Zone	**Objective/Description**	**Precinct**	**Objective/Description**	**Basic Plot Ratio**	**Maximum Plot Ratio**	**Dwelling Unit Factor**	**Minimum Lot Area (m2)**	**Minimum Frontage (m)**	**Minimum Inscribed Circle (m)**	**Height Schedule**
The Service and Light Industry Zone	To retain established areas suitable for the convenient location of principally service and light industries.	The North Hobart Precincts - Nos. 15B and 15C	These Precincts permit the continuation of existing and introduction of principally service and light industrial activities; development should provide sufficient setback and/or landscape buffers to maintain the residential amenity of existing residences and adjacent residential areas.	(15B) 0.9, (15C) 0.6	(15B) 1.2, (15C) 0.8	(15B) 120, (15C) 160	(15B) 360, (15C) 360	(15B) 10, (15C) 10	(15B) 10, (15C) 10	Permitted Height of New Building - 4.8 metres

Appendix 3 – Valuation Report by McNamara Taplin & Associates Proprietary

HOBART CITY COUNCIL DENSITY REVIEW

MARKET TRENDS

1.1 In order to examine market trends in the central area, all sales data has been examined but for this exercise, restricted to the area covered in the Central Area Strategy Plan (CASP) but reduced by that severed to the Sullivans Cove Planning Scheme 1997. The original area is defined in the CASP Bonus Plot Ratio Topic Report (1991) and CASP (1993).

1.2 I have specifically examined movement in sale prices and as a comparative basis, I have considered movements in relation to the Government Rating Valuation prepared by the Office of the Valuer-General with effect from the 1 January 1996. This is the most recent rating valuation, noting that a current general revaluation is in process for the Hobart municipal district. Sales with contract date on or after the 1 January 1996, to the current date, only have been examined.

1.3 It is important to respect that the following is raw data only, as available through the Land Information Systems Tasmania (LIST). The sample has been altered only by the removal of the obvious "non-arms length" transactions.

1.4 Conclusions should be tempered by the circumstance that structural alterations could have occurred between the 1996 revaluation and the date of sale, without recognition in the rating base. Similarly, there is the imperfection that the market level fluctuates over time and not necessarily in regular patterns.

1.5 The following data is an extract of the LIST Property Sales Report as at the 24 May 2001, a copy of which is attached to this document. To emphasise the density factor and respecting the limited data, I have examined clusters of sales in the Density Rating areas, as set out in Schedule B Table B1 of the City of Hobart Planning Scheme 1982, as revised. Price movements are identified as follows:-

DENSITY RATING REF NO	PRECINCT NO 1 Basic PR 4.0	PROPERTY ADDRESS	SALE DATE	SALE PRICE $	CAPITAL VALUE $
1	1	"New Sydney Hotel" – 87 Bathurst St	10/07/97	750,000	700,000
1	1	83 – 85 Bathurst St	15/08/97	210,000	180,000
1	1	"Trafalgar on Collins" – 110-114 Collins St	15/01/97	8,675,000	9,750,000

1	1	79 Collins St	08/03/00	1,910,000	1,600,000
1	1	77 Collins St	19/05/00	1,050,000	1,050,000
1	1	116-118 Collins St	05/06/98	500,000	525,000
1	1	143-145 Collins St	31/12/98	220,000	390,000
1	1	108 Elizabeth St	03/05/00	215,000	420,000
1	1	131 Elizabeth St	08/10/00	180,000	220,000
1	1	"ANZ" Bank Collins St – 40 Elizabeth St	19/06/00	1,600,000	2,200,000
1	1	34-36 Elizabeth St	22/11/99	1,735,000	1,550,000
1	1	104-106 Elizabeth St	07/02/00	400,000	600,000
1	1	"Former Westpac Bank" – 38 Elizabeth St	05/11/98	800,000	1,900,000
1	1	110-112 Elizabeth St	26/05/98	242,000	400,000
1	1	110-112 Elizabeth St	26/02/96	310,000	380,000
1	1	66-70 Elizabeth St	17/12/98	1,300,000	1,200,000
1	1	52 Elizabeth St	29/07/98	9,501,000	8,700,000
1	1	85-91 Elizabeth St	25/01/96	622,000	875,000
1	1	35 Elizabeth St	03/10/00	565,000	590,000
1	1	77-81 Harrington St	30/06/99	394,000	450,000
1	1	120 Liverpool St	03/06/99	600,000	900,000
1	1	119 Liverpool St	12/06/96	470,000	420,000
1	1	140-148 Liverpool St	02/01/96	700,000	1,275,000
1	1	Suite 3, 122 Liverpool St	31/01/97	545,000	455,000
1	1	74 Liverpool St	11/06/99	290,000	290,000
1	1	168 Liverpool St	30/10/98	872,000	1,075,000
1	1	164 Liverpool St	02/09/99	140,000	210,000
1	1	103 Liverpool St	10/12/98	600,000	600,000
1	1	162 Liverpool St	07/03/01	240,000	310,000
1	1	35 Murray St	19/08/96	850,000	750,000
1	1	64-66A Murray St	18/09/97	1,215,000	1,050,000
1	1	"Commonwealth Bank Murray St" 45-47A Murray St	15/08/97	1,650,000	2,200,000
1	1	Suite 13/Level 8 – 65 Murray St	31/05/99	63,000	105,000
1	1	Suite 13/Level 8 – 65 Murray St	03/12/96	65,000	105,000
1	1	41-43 Victoria St	21/11/97	235,000	275,000
1	1	45-47 Victoria St	02/06/97	290,000	340,000
1	1	"Brunswick Hotel" – 67 Liverpool St	06/10/97	620,000	750,000
1	1	"Centrepoint" – 76 Murray St	10/03/98	10,510,000	8,500,000

1.6 An analysis of the above market data indicates a percentage movement in the Rating Valuation of Precinct No 1, as at the 1 January 1996 (capital value) reflecting an average reduction of **13.0%.**

DENSITY	PRECINCT		SALE	SALE	CAPITAL

RATING REF NO	NOS 2, 3 & 4 Basic PR 5.25	PROPERTY ADDRESS	DATE	PRICE $	VALUE $
2	2	Suite 1/44 Argyle St	04/09/96	121,000	150,000
2	2	72-82 Argyle St	28/06/00	1,500,000	1,250,000
2	2	Suite 3/44 Argyle St	04/12/00	80,000	140,000
2	2	34 Argyle St	23/04/96	560,000	1,200,000
2	2	"Duke of York" – 60 Argyle St	19/12/97	280,000	435,000
2	4	118-124 Bathurst St	19/05/97	437,000	400,000
2	2	35-37 Bathurst St	08/05/00	75,000	160,000
2	2	35-37 Bathurst St	08/08/00	60,000	160,000
2	2	31-33 Bathurst St	30/08/00	235,000	235,000
2	4	128-130 Bathurst St	15/04/97	280,000	200,000
2	3	186 Collins St	30/07/97	330,000	275,000
2	3	168 Collins St	05/01/98	910,000	1,000,000
2	3	31 Davey St	13/12/96	505,000	565,000
2	3	"AMP Building" – 27 Elizabeth St	26/08/99	5,810,000	9,000,000
2	3	"ANZ Centre" – 22/26 Elizabeth St	11/08/00	9,670,000	15,000,000
2	4	121 Harrington St	01/10/98	50,000	60,000
2	3	73 Harrington St	11/04/97	375,000	370,000
2	4	3 Harrington Lane	16/08/96	80,000	56,000
2	4	105-111 Harrington St	09/10/97	310,000	350,000
2	4	143 Liverpool St	31/07/97	290,000	425,000
2	2	"Tasmania Police Admin HQ" – 47 Liverpool St	03/07/98	9,700,000	7,200,000
2	4	181-181A Liverpool St	01/09/97	175,681	275,000
2	4	189 Liverpool St	29/07/97	135,000	180,000
2	4	"Legener House" – 169 Liverpool St	21/03/96	1,510,000	4,300,000
2	4	185 Liverpool St	08/05/96	210,000	200,000
2	2	"Christian City Church" Suite 1/69 Liverpool St	24/07/97	430,000	550,000
2	4	153 Liverpool St	14/09/99	150,000	220,000
2	4	"ABC Odeon" 163-167 Liverpool St	03/06/00	610,000	750,000
2	4	179 Liverpool St	03/07/97	150,000	200,000
2	3	"AHC Carpark" 152 Macquarie St	22/11/96	3,300,000	2,300,000
2	3	40-44 Murray St	17/03/96	650,000	650,000
2	4	Murray St	09/09/98	275,000	275,000
2	3	"Colonial Trust Bank Murray St" 26 Murray St	01/10/00	600,000	1,100,000
2	4	107 Murray St	27/03/97	300,000	270,000
2	3	25-27 Murray St	01/07/98	250,000	325,000
2	4	"Hobart Saloon Bar" 7 Watchorn St	24/12/97	250,000	300,000
2	3	"Reserve Bank" – 111 Macquarie St	01/08/00	4,575,000	7,500,000

1.7 An analysis of the above market data reflects a percentage movement in the Rating Valuation of Precinct No 2, No 3 & No 4, as at the 1 January 1996 (capital value) indicating an average reduction of **14.5%.**

DENSITY RATING REF NO	PRECINCT NOS 8A, 11A & Basic PR 2.25	PROPERTY ADDRESS	SALE DATE	SALE PRICE $	CAPITAL VALUE $
3	11A	5 – 7 Barrack St	26/10/99	500,000	520,000
3	11A	1 Barrack St	09/06/00	342,000	320,000
3	11A	188 Collins St	09/06/00	8,300,000	21,000,000
3	11A	81 Davey St	15/11/96	234,000	220,000
3	11A	71 Davey St	21/05/97	600,000	300,000
3	8A	130 Elizabeth St	08/04/99	200,000	210,000
3	8A	"Black Prince Hotel" – 145 Elizabeth St	06/12/99	525,000	875,000
3	8A	173 Elizabeth St	12/12/96	141,000	120,000
3	11A	"Macquarie Manor" – 172 Macquarie St	08/03/96	650,000	950,000
3	11A	Suite 1, 190 Macquarie St	29/06/00	285,000	275,000
3	8A	61 Melville St	17/12/96	159,000	147,000

1.8 An analysis of the above market data indicates a percentage movement in the Rating Valuation of Precinct No 8A, No 11A & No 13A, as at the 1 January 1996 (capital value) reflecting an average increase of .17%. Disregarding the distortion of the sale of No. 71 Davey Street to the adjoining owner, Australian Hospital Care (MSH) Pty Ltd [St. Helens Hospital], the adjusted data indicates an average reduction of **9.8%.**

DENSITY RATING REF NO	PRECINCT NOS 5A & 6A Basic PR 2.25	PROPERTY ADDRESS	SALE DATE	SALE PRICE $	CAPITAL VALUE $
4	6A	98 – 110 Argyle St	06/05/97	627,500	520,000
4	6A	28 – 30 Brisbane St	15/04/98	700,000	725,000
4	5A	"Royal Exchange Hotel" – 57 Campbell St	25/02/00	415,000	450,000
4	5A	99 Campbell St	11/06/99	155,000	160,000
4	5A	"Officeworks" Site – 105-109 Campbell St	03/08/98	500,000	475,000
4	5A	98 Campbell St	01/10/99	870,000	3,950,000
4	5A	103 Campbell St	27/05/99	80,000	85,000
4	5A	101 Campbell St	01/02/00	70,000	75,000

1.9 An analysis of the above market data reflects a percentage movement in the Rating Valuation of Precinct No 5A and No 6A, as at the 1 January 1996 (capital value) indicating an average reduction of **9.9%.**

DENSITY RATING REF NO	PRECINCT NOS 9, 10, 12A Basic PR 2.25	PROPERTY ADDRESS	SALE DATE	SALE PRICE $	CAPITAL VALUE $
5	10	25 – 29 Barrack St	24/11/97	145,00	135,000
5	10	23 Barrack St	09/12/98	620,000	700,000
5	10	"Hobart Vista Hotel" – 166 Bathurst St	01/10/96	8,650,000	6,500,000
5	9	120 Brisbane St	16/5/00	98,000	90,000
5	10	175 – 177 Collins St	02/06/99	1,400,000	4,750,000
5	10	"Village 7 Cinema Complex" 179-183 Collins St	24/12/97	10,000,000	7,000,000
5	9	136 – 138 Harrington St	27/01/98	308,000	320,000
5	9	165 Harrington St	27/06/00	120,000	140,000
5	10	110-112 Harrington St	23/03/00	600,000	500,000
5	9	167A Harrington St	15/03/00	145,000	150,000
5	10	232-242 Liverpool St	18/06/99	1,745,000	1,200,000
5	10	230 Liverpool St	04/03/99	112,500	200,000
5	9	120 Melville St	13/03/99	92,000	105,000
5	9	170 Murray St	25/07/97	275,000	275,000

1.10 An analysis of the above market data indicates a percentage movement in the Rating Valuation of Precinct No 9, No 10, No 12A & No 13B, as at the 1 January 1996 (capital value) reflecting an average reduction of **0.13%.**

DENSITY RATING REF NO	PRECINCT NOS 8B, 11B, 12B, 31 Basic PR 0.9	PROPERTY ADDRESS	SALE DATE	SALE PRICE $	CAPITAL VALUE $
9	12B	"Country Womens Association" 68 Davey St	18/10/99	180,000	175,000
9	12B	"RSLA State Headquarters" – 70 Davey St	02/08/00	360,000	450,000
9	12B	141 Hampden Rd	30/06/00	545,000	500,000
9	12B	3 Heathfield Ave	07/04/97	270,000	230,000

1.11 An analysis of the above market data reflects a percentage movement in the Rating Valuation of Precinct No 8B, No 11B, No 12B, No 18 & No 31, as at the 1 January 1996 (capital value) indicating an average increase of **2.3%.**

DENSITY RATING REF NO	PRECINCT NOS 7, 14, 15A, 19A, 25A, 26A & 27A Basic PR 0.5	PROPERTY ADDRESS	SALE DATE	SALE PRICE $	CAPITAL VALUE $
12	25A	61 Barrack St	24/03/97	85,000	95,000
12	25A	63 Barrack St	24/11/00	123,250	110,000
12	25A	Unit 2 – 67 Barrack St	15/07/99	74,000	80,000
12	25A	Unit 4 – 67 Barrack St	06/05/97	77,000	80,000
12	25A	Unit 3 – 67 Barrack St	13/11/98	85,000	80,000
12	25A	Unit 1 – 67 Barrack St	01/03/00	62,000	80,000
12	25A	Unit 4 – 177 Bathurst St	20/06/97	176,000	177,000
12	25A	Unit 4 – 177 Bathurst St	28/08/99	160,000	177,000
12	25A	"Strutt Cottage" – 163 Bathurst St	19/02/99	133,000	126,000
12	25A	169 Bathurst St	01/07/96	99,832	125,000
12	25A	"Glenesk" – 181 Bathurst St	01/11/99	110,000	130,000
12	25A	"Dulce Domon" – 176 Bathurst St	23/10/00	150,000	160,000
12	25A	171 Bathurst St	18/11/96	185,000	175,000
12	25A	174 Bathurst St	03/04/00	155,000	150,000
12	25A	Unit 2 – 177 Bathurst St	14/01/97	173,062	177,000
12	25A	Unit 1 – 177 Bathurst St	18/09/96	180,000	177,000
12	25A	Unit 3 – 177 Bathurst St	18/09/96	180,000	177,000
12	25A	36 Goulburn St	23/07/97	86,000	90,000
12	25A	16 Goulburn St	05/12/96	157,000	175,000
12	25A	24 Goulburn St	29/03/97	145,000	165,000
12	25A	19 Goulburn St	03/08/99	180,000	200,000
12	25A	38 Goulburn St	13/06/98	100,000	95,000
12	25A	40 Goulburn St	30/04/99	80,000	90,000
12	25A	28 Goulburn St	05/02/00	76,000	100,000
12	25A	39 Goulburn St	14/03/00	77,500	105,000
12	25A	158 Melville St	13/01/99	120,000	130,000
12	25A	"Lumeah" – 155 Melville St	23/12/99	150,000	150,000
12	25A	147 Melville St	04/06/99	245,000	185,000
12	25A	161 Melville St	29/09/00	181,500	140,000
12	25A	161 Melville St	30/11/98	168,500	140,000
12	25A	161 Melville St	27/03/97	158,000	140,000
12	25A	133 – 141 Melville St	20/03/98	280,000	105,000
12	25A	127 Melville St	17/11/98	310,000	180,000

1.12 An analysis of the above market data reflects a percentage movement in the Rating Valuation of Precinct No 7, No 14, No 15A, No 19A, No 25A, No 26A & No 27A, as at the 1 January 1996 (capital value) indicating an average increase of **5.1%.**

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1.13 It should be emphasized that some of the above clusters include only a small sample of sales and therefore those circumstances are unsound in terms of statistical indicators. On the basis of all the data, it does provide a reasonable interpretation of market trends with an obvious movement downwards since 1996. That trend is highest where Plot Ratio in the current scheme is at maximum.

1.14 The above data is summarized having regard to zonal types:-

ZONE	PRICE TRENDS (CASP AREA)
Central Retail (Density Rating Ref No. 1)	- 13.0%
Central Commercial & Administrative (Density Rating Ref No. 2)	- 14.5%
Central Commercial & Administrative (Density Rating Ref No. 3)	- 9.8%
Central Service (Density Rating Ref No. 4)	- 9.9%
Central Service (Density Rating Ref No. 5)	- 0.13%
Commercial & Residential (Density Rating Ref No. 9)	+ 2.3%
Residential 1 (Density Rating Ref No. 12)	+ 5.2%

1.15 The only positive trends are in the "Commercial & Residential" Zone and the "Residential 1" Zone. The "Residential 1" Zone is somewhat distorted by a few high sales. This zone also in recent times has experienced a tendency towards residential refurbishment which would not be reflected in the rating base. The "Commercial & Residential" Zone is only a small sample for definitive guidance.

1.16 Perusal of the CASP area reveals for the seven (7) clusters above, an overall average/average reduction of **5.7%.** An inspection of the specific data reveals multi-storey office developments as opposed to retail premises, to be generally representative of the greatest reduction.

1.17 During the processing of the above data, other significant property sales became evident, namely:-

Ex "Commonwealth Bank" 45/47a Murray Street	Sold $3,450,000
99 Bathurst Street	Sold $12,970,000
"Forestry Building" 79/85 Melville Street	Sold $10,930,000
"Executive Building" Murray Street	Sold $20,637,000

1.18 This latest data could not be confirmed through the LIST system and has not been included in the above calculations.

ANALYTICAL MODEL

2.1 The "Topic Report – Bonus Plot Ratio" dated February 1991 and co-authored by the Writer, was able to demonstrate the effect of Basic Plot Ratio and Bonus Plot Ratio in terms of market activity that was then relevant. That Report was completed in a fiscal environment cogent to significant growth and redevelopment activity. At that time, the rate/psm of land area had been found to be unreliable in the assessment of central City land values. The commonly accepted method was then rate/sm of building area, either existing or proposed. This opinion was substantiated by experience in the larger Cities of Australia and beyond.

2.2 Since that time, there has been substantial downturn in redevelopment activity in the Central City area and since the Report, the only major redevelopments in the CASP area comprise inter alia:- "ANZ Centre" – 22/26 Elizabeth St., "Forestry Tasmania" including "Freedom Furniture" – 79/85 Melville St and "Officeworks" – 99/103 Campbell St. Original acquisition of the development sites for the "ANZ Centre" and "Forestry Tasmania" were complicated by the existing and partial reuse of existing buildings. There is a general lack of comparable sales evidence of pure development sites in the commercial areas to refine an analytical model to track the effect of Bonus Plot Ratio.

2.3 The only evidence that was available concerns the sale of the "Officeworks" site and the old "Websters" property at No. 72/82 Argyle Street. The ex. "Websters" property is identified in the Rating Valuation as comprising buildings of no added value. If you adopt that pretext, the Sale Price of $1,500,000 for a land area of 5508sm represents a rate of $272psm. The Sale Price of the "Officeworks" site at $500,000 for a land area of 3191sm represents a rate of $157psm. The locational variance is relatively minor, suggesting that variation is a product of Plot Ratio. The comparison is a Basic Plot Ratio of the ex. "Websters" property at 5.25 and the "Officeworks" site at 2.25. Clearly, the greater potential site, has greater value.

2.4 It is possible to apply the basis outlined in the "Topic Report – Bonus Plot Ratio" that is to analyse the rate psm of potential building area. This of course has regard to the different Plot Ratios. Such an analysis reveals $51-87psm for the ex "Websters" property and $69-74psm for the "Officeworks" site. Whist this is not a regular pattern, it does point to the importance of development potential as an ingredient of marketability. The lack of market data prohibits the development of a formal equation and indeed the Hobart market is not sufficiently sophisticated to isolate the variables.

2.5 The Sullivans Cove Planning Act 1995 required the preparation of a Planning Scheme for the Cove. The resultant Scheme commenced in December 1998, it

incorporates land that was in and around the fringe of the CBD and includes additional developments/redevelopments which are not considered in this Report.

RELEVANT DATA

3.1 As previously indicated, the "Topic Report – Bonus Plot Ratio" completed in 1991 reflected the "boom" times of the 1980's. The trend in Hobart in the last 10 years is a significant slow down in real estate development cogent to a reduction in market prices. Despite our geographic isolation, fiscal changes have resulted from the effects of globilisation including financial deregulation and a more competitive trading policy. Employment rationalization has occurred across all sectors including private enterprise and the three arms of Government. This has had particular impact on the real estate market for all properties. The commercial, industrial and residential sectors of the market, have all been affected.

3.2 The List market data reproduced for this Report clearly identifies the most prominent reduction in existing multi-storey office buildings. In essence this is a product of vacancy. The vacancy factor has been quantified recently by the Property Council of Australia for Hobart office buildings, as :-

January 1997	7.0%
January 1998	10.7%
January 1999	15.3%
January 2000	14.7%
January 2001	12.9%

3.3 A more disturbing trend has been the vacancy level in the larger and newer office buildings recently exposed to the market. These vacancy levels are:-

Commonwealth Bank	45/47 Murray Street	72%
AMP Building	27 Elizabeth Street	12%
ANZ Centre	22/26 Elizabeth Street	12%
Legener House	169 Liverpool Street	40%
Reserve Bank	111 Macquarie Street	25%
Ex Trust Bank Building	39 Murray Street	60%
Ex TGIO Building	144/148 Macquarie Street	10%

3.4 With an expectation by potential purchasers, of higher investment yields, the higher level of vacancies has driven down prices for this type of property. In considering likely future conditions up to 2015, on the vacancy score alone it would appear the demand for new multi-storey office development to be restrained. The takeup of existing vacant space, with falling consumption, will satisfy demand for some time. The cost of

the ANZ/Delfin development at 22/26 Elizabeth Street at around $25 million is also an indication of restricted investment return for this building, first occupied in 1992.

3.5 The majority of the larger office buildings which traditionally have been in institutional ownership, have sold in recent years with the potential of added value by refurbishment and occupancy. A good example is the ex Commonwealth Bank Building at 45/47a Murray Street which sold on the 15th August 1997 for a price of $1,650,000 and just recently resold for $3,450,000. The next "generation" ownership of these mulit-storey office buildings are likely to have a closer eye to management and yield.

3.6 Larger retail property has generally faired well in a depressed market with less vacancy and sale prices indicating minor growth. "Centrepoint", "Target" store (52 Elizabeth Street) "Angus and Robinson" (34-36 Elizabeth Street) "Coogans" (79 Collins Street) "Stallards" (66-70 Elizabeth Street) are all market transactions which reflect that niche of the commercial market.

3.7 Industrial activity is less relevant within the City of Hobart Planning Scheme, the larger developments tending to move towards the metropolitan extremities where larger vacant sites are more readily available and there is less conflict with existing development. The Hobart scene is catergorised by redevelopment in established built-up areas where sites are amalgamated and often there is perception of intrusion into and antagonism with residential precincts. Industrial activity is dictated by area and hence the potential of a development site is directly proportional to the land size. In this regard a Plot Ratio control is relevant but only so far as it dictates building size. The locational element is a lesser factor within an industrial precinct.

3.8 Residential development in the current Scheme, is more influenced by the Dwelling Unit Factor. Plot Ratio is in the practical sense, of lesser concern, ultimately determining the size of units. To consider recent activity in residential unit development, I have considered three (3) projects, respecting the lack of larger residential unit growth within the study area.

3.9 "Newdegate Close" at 53 Newdegate Street North Hobart comprised the site of the old "Derwent Bowls Club". This property was sold by contract dated the 31st January 2000 for the price of $383,000. Allowing an added value for the existing clubhouse (to be utilized in Stage 2) the sale of 4519sm of land area, reflected a rate of around $19,000 per unit site for the 18 sites as advertised in the marketing brochures. This unit rate is consistent with other sales evidence. The ultimate development, within Precinct No. 24 of the City of Hobart Planning Scheme, will be completed in two (2) Stages which will achieve a total of fourteen (14) townhouses comprising two or three bedroom accommodation. In the final analysis, this indicates the developer relinquished 4 unit sites to achieve a more marketable overall project.

3.10 The "Orina" Mayfair townhouses were constructed in Sandy Bay within Precinct No. 12 B of the City of Hobart Planning Scheme. Discussions with the developer Mr Ron Banks, indicated the seventeen (17) townhouses each comprising around 130sm with three bedrooms and undercover car spaces (2) did not represent the maximum number of units for the site. Again the number of potential units was sacrificed to achieve a better presentation.

3.11 "Beaumaris Gardens" is a complex of 14 two storey apartments constructed in Sandy Bay Road within the Battery Point Planning Scheme. Development by Mr George Giameos of Giameos Constructions achieving two to four bedroom apartments ranging in size from 94sm to 164sm. Discussion with the developer indicates again the forsaking of potential unit sites to achieve a modern acceptable style.

3.12 In relation to residential development, on the balance of the evidence, it appears Plot Ratio is not the major component in determining price but rather a consideration of potential with respect to the economic rationilisation of the "law of diminishing returns".

PLOT RATIO AND BONUS PLOT RATIO

4.1 The "Topic Report – Bonus Plot Ratio" of 1991 concluded that the system of Bonus Plot Ratio should be retained but suggested inter alia additional procedures such as:-

(a) Quantification of bonus features
(b) Heritage refurbishment to be included in Bonus Features
(c) Building Envelopes
(d) Planning Incentive Payment
(e) Specific departure provisions

4.2 I have had recent exposure to Planning Schemes operating currently in Singapore and Hong Kong. These are much larger cities and have retained the system of Planning Incentive Payment for additional Plot Ratio.

4.3 Arguments against the ratio codes by those administering the various Schemes, are as follows:-

(i) The system of bonuses is complex.
(ii) Provision is made in the award of bonuses for facilities which are now standards inclusions in developments.
(iii) There are only limited requirements for sun access, weather and wind protection and consideration of view, streetscape and urban design.
(iv) Zone Objectives and Statements of Desired Future Character should all reflect Contemporary Planning through land use "direction".

4.4 The development constraints of Plot Ratio are currently in accordance with the City of Hobart Planning Scheme 1982 incorporating the decisions of the Special Commissioner in 1984.

4.5 Precincts are allocated Density Zones which in turn are prescribed with Basic Plot Ratio and Maximum Plot Ratio. Basic Plot Ratio (inter alia) is the most developers can expect to be approved by the Council "as a right". This ratio can be exceeded with the conferral of bonus but not exceed the Maximum Plot Ratio. Principal 8 indicates that-

"Bonus Plot Ratio may be awarded in respect of development which provides specific uses, facilities and features approved or required for the benefit of the City in particular Precincts. Such uses, facilities, and features may include;

(a) Residential uses in appropriate non-residential Precincts.
(b) Approved or required public facilities, such as plazas, terraces, through-site pedestrian links, pedestrian links over or under streets, child care centres, public toilets, ramps for prams and wheelchairs.
(c) The provision of sculptures, fountains or other works of art visible from public spaces.
(d) The conservation and maintenance of items deemed to be of heritage significance.
(e) The use of special materials or design features to respect, conserve and enhance the surrounding environment.

In no case shall the Plot Ratio exceed the Maximum Plot Ratio for the relative density zone".

4.6 The economic environment in Hobart is quite different in 2001 and is likely to remain subdued in the near future and for the purpose of this exercise, through to 2015. Specific indicators as outlined by the Australian Bureau of Statistics, that would limit property development include:-

(a) Falling Tasmanian population down form 435,700 (only Australian State not experiencing a degree of population growth)
(b) Exodus of young people
(c) An ageing population

4.7 Other factors that need to be considered include the growth in computer technology with electronic mail and banking together with e-commerce. The expectations worldwide are that the new cyber City will have less demand for office accommodation even in the short term and ultimately reduced requirement for retail and supporting commercial activity. Office sharing (hot desking) is already an established phenomenon in larger cities.

4.8 If you consider information provided by the Property Council of Australia, as at January 2001, indicating an office floorspace availability in Hobart of 324,797sm, vacancy factor of 12.87% and annual net takeup of 3018sm, in the broad sense, it suggests around 14 year supply of office floorspace is already available.

4.9 No trend data exists to definitively conclude as to weather Plot Ratio and Bonus Plot Ratio have an impact on property values. Bonus Plot Ratio was initially developed as a quasi-tax to assist in the provision of public facilities. Contemporary planning has seen a move towards performance based planning which is a more effective application of planning principles. The essential controls on development have now emerged as design, heritage and height. Important elements of overshadowing, wind effect, vistas and streetscape can now be more easily assessed by use of computer models.

4.10 The Bonus Plot Ratio system introduces an uncertainty which is not conducive to the economic feasibility of potential development. All the circumstantial evidence suggests the Bonus Plot Ratio control should be abandoned.

4.11 Developers are understandably driven by an economic rule and in this regard a Plot Ratio control has afforded some certainty in regards the potential of sites. Clearly this certainty should be maintained and it is reasonable to assert that if a developer is to part with his money, by way of purchase price, he is entitled to expect a degree of surety as to the likely development that would be approved. This is a reasonable expectation and is a fundamental basis of real estate activity. There is factual data to assert that prices paid for potential development sites either commercial or residential are directly related to development options.

4.12 The abandonment of Plot Ratio therefore should only occur if certainty can be replaced by an alternative method. If there are good planning reasons, which seems to be the circumstance, then surety must be replaced by an equally decisive set of rules. It would appear from a planning perspective that such could be achieved by height limitations and building setbacks. Provided these are adequately and clearly annunciated in the planning instrument, replacement of the Plot Ratio system would not be injurious to the property market.

4.13 It is widely contended that Plot Ratio control has the ultimate effect of producing taller buildings which it might be argued, does not benefit the City. Whilst all potential purchases are not development orientated, the other category relates to owner occupation from which there is a less critical view of maximum development. The more recent "stand alone" retail developments to the north of the City such as "Harvey Norman," are examples. However even in these circumstances the owner/occupier has the notion of maximum development which he must economically address. From the market data available it is clear the marketplace does not distinguish between owner/occupiers and investors.

CONCLUSION

5.1 Whilst the immediate future does not anticipate significant demand for new multi-storey office development it is necessary to widen the time frame and for the purpose of this exercise to consider likely future conditions up to 2015. The property market in the Hobart metropolitan area is relatively small and history reveals it does not react to the steep fluctuations of other cities. The commercial precincts however have less resilience and changes in lifestyle patterns are likely to have a more long term effect. Employment rationalization by national companies and both the Commonwealth and State Governments has had a significant impact on occupied office space in the Central Business District which suggests the unlikelihood of mulit-storey development in the near future. This of course does not preclude such development and it is likely that significant changes now to the Planning Scheme will have adequate time frame to digest any new rules.

5.2 The 1991 "Topic Report – Bonus Plot Ratio" identified that the value of bonus, needs to be reduced by the cost involved in achieving such bonus. This is usually significant and in the current economic climate the anecdotal evidence is that removal of the Bonus Plot Ratio system would not have any detrimental effect on property values. The other important fact to consider is that Bonus Plot Ratio in the current Scheme allows for an increase of up to 33.3% which is substantial, however for the reasons indicated above its continuance is not considered to be a financial enhancement to property values in the current environment.

5.3 As previously indicated, Plot Ratio does afford some surety to developers and there is a strong case to retain such certainty. It is important that for real estate to maintain its appeal as an investment alternative, that avoidable uncertainty is removed. There appears good planning reasons to discontinue the Plot Ratio system however it would need to be replaced by a transparent alternative. Clearly the treatment of facades, setbacks and height is better considered as integrated components rather than a sum of individual characteristics. The thrust of this report is to extol the certitude of development rules and limitations of discretion. Removal of existing rules should be on the basis of achieving an assertive document with clear ramifications.

5.4 The traditional forms of property disposal such as private treaty, expressions of interest, tender and public auction should not be distracted. In the writers opinion, on the balance of evidence and experience, removing Plot Ratio control from the Planning Scheme will not detrimentally effect property values provided there is no confusion as to replacement rules, and hence potential development.

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