

CMI URBAN DESIGN FRAMEWORK



P R E F A C E

The need to utilise a co-ordinated and integrated urban design process for the Central Motorway Improvements (CMI), has emanated from:

- guidelines within the Transit New Zealand Policy Planning Manual
- advice of the International Review Panel report on the Central Motorway Junction project, dated November 2000, and from
- instruction from Transit New Zealand's CMI liaison group and CMI urban design group.

TRANSIT NEW ZEALAND POLICY PLANNING MANUAL

The Transit New Zealand Policy Planning Manual (the 'green book') states that the operation, maintenance, improvement and construction of state highways, can have adverse effects on the environment.

Section 2 of the manual is particularly concerned with environmental effects. Section 2.1 of the manual notes that, as well as a list of other matters, these effects include:

- social and economic effects
- visual effects.

Section 2.2 of the manual advises that Transit New Zealand's environmental objectives include:

- "provide, maintain and improve state highways in such a way as will, as far as practicable, avoid, remedy or mitigate any adverse effects on the environment
- achieve a safe, efficient and comfortable travelling environment for motorists, goods vehicles, public passenger road transport users, cyclists and pedestrians
- plan state highway development to achieve a balance between transport needs and environmental protection."

Whilst the manual is perhaps in the main focussed on the effects of state highways within rural areas or smaller settlements, there exists a clear imperative to consider the social, economic and visual effects when designing for any highway sections and to fulfil a series of pertinent environmental objectives.

In urban areas, such as that of the CMI, urban design analysis can be utilised to consider the relevant effects and recommend methods to fulfil these objectives.

INTERNATIONAL REVIEW PANEL REPORT ON THE CENTRAL MOTORWAY JUNCTION PROJECT

The International Review Panel Report discusses "citizens' interest" in considering the effects of projects such as the CMJ (one component of the CMI project).

This interest "goes beyond mere mitigation of adverse visual, noise or other impacts, to a desire to develop a project that preserves and indeed enhances the surrounding environment".

Context-sensitive design is another way of saying "to think beyond the pavement" about the impact a travelway will have on the area it traverses, including the people who live, work, or pass through the area. Context-sensitive design asks questions first about the need and purpose of the transportation project, and then addresses equally

safety, mobility and the preservation of scenic, aesthetic, historic, environmental and other community values."

The International Panel strongly urged that Transit New Zealand adopt a planning process that incorporates principles of context sensitive design. The notion of context-sensitive design has application to the reconstruction of the CMJ, given its location, importance and potential for impacts (both positive and adverse) on the Auckland downtown and surrounding areas.

The International Review Panel goes on to discuss:

- "a design challenge of interchange reconstruction should be to enhance, rather than detract from, the visual environment in the area through which the interchange is located
- SH 1 should serve as a visual gateway to the City and region, rather than merely an anonymous road
- the design of the road and its elements (structures, retaining walls, landscaping) should provide the traveller with a coherent set of visual images based on an underlying theme or themes."

Discussion is also provided by the International Review Panel as follows:

- "provision for pedestrian and bicycle facilities across the CMJ, consistent with the City's bicycle plan should be provided as part of the masterplan. These can be attractive urban design features if planned and designed properly."

It is considered that the International Review Panel's advice could readily apply to the CMI project as well as only one of its three component projects. Urban design issues are regarded as the best application or manifestation of the context-sensitive design principles referred to as being so important by the International Review Panel.

TRANSIT NEW ZEALAND CMI LIAISON GROUP AND CMI URBAN DESIGN GROUP

The Transit New Zealand CMI liaison group recognises that because the CMI project could involve remodelling of much of the CMI corridor, it is important that the various design teams recognise the urban design opportunities that this presents.

The CMI project represents an opportunity to enrich the lives of Aucklanders over many years. Such an opportunity may not arise again for at least a quarter of a century.

The liaison group recognises that motorway corridors in urban situations, such as that of the CMI, can too often:

- be utilitarian and unattractive in nature
- be 'self contained' in terms of urban design interaction with the surrounding landscape / townscape
- detract from the surrounding urban environment
- not contribute to / or detract from the 'sense of place' of the environment or series of environments through which the corridor passes.

Consequently, urban design issues will be regarded as being of equal importance to other project tasks, for example, road geometry and structural design.



C O N T E N T S

- introduction
- purpose of this document
- use of this document
- the urban design review process

TIER ONE - CMI URBAN DESIGN OBJECTIVES

- vision
- urban design objectives
 - ▼ 1. improve / maximise connectivity of the local movement network
 - ▼ 2. promote Auckland's distinctive visual and spatial character
 - ▼ 3. encourage environmentally responsive design
 - ▼ 4. facilitate efficient land-use and development potential

TIER TWO - CMI URBAN DESIGN GUIDELINES

- scope and structure of the guidelines
- urban design guidelines

SECTION A - BUILT ELEMENTS

- ▼ bridges
- ▼ retaining walls and abutments
- ▼ bus, pedestrian and cycle facilities
- ▼ acoustic walls
- ▼ road safety barriers
- ▼ gantries, sign support structures and poles
- ▼ road lighting
- ▼ signage
- ▼ feature lighting

SECTION B - NATURAL ELEMENTS

- ▼ embankments and cuttings
- ▼ landscaping

SECTION C - DEVELOPMENT OPPORTUNITIES

- ▼ buildings
- ▼ open space



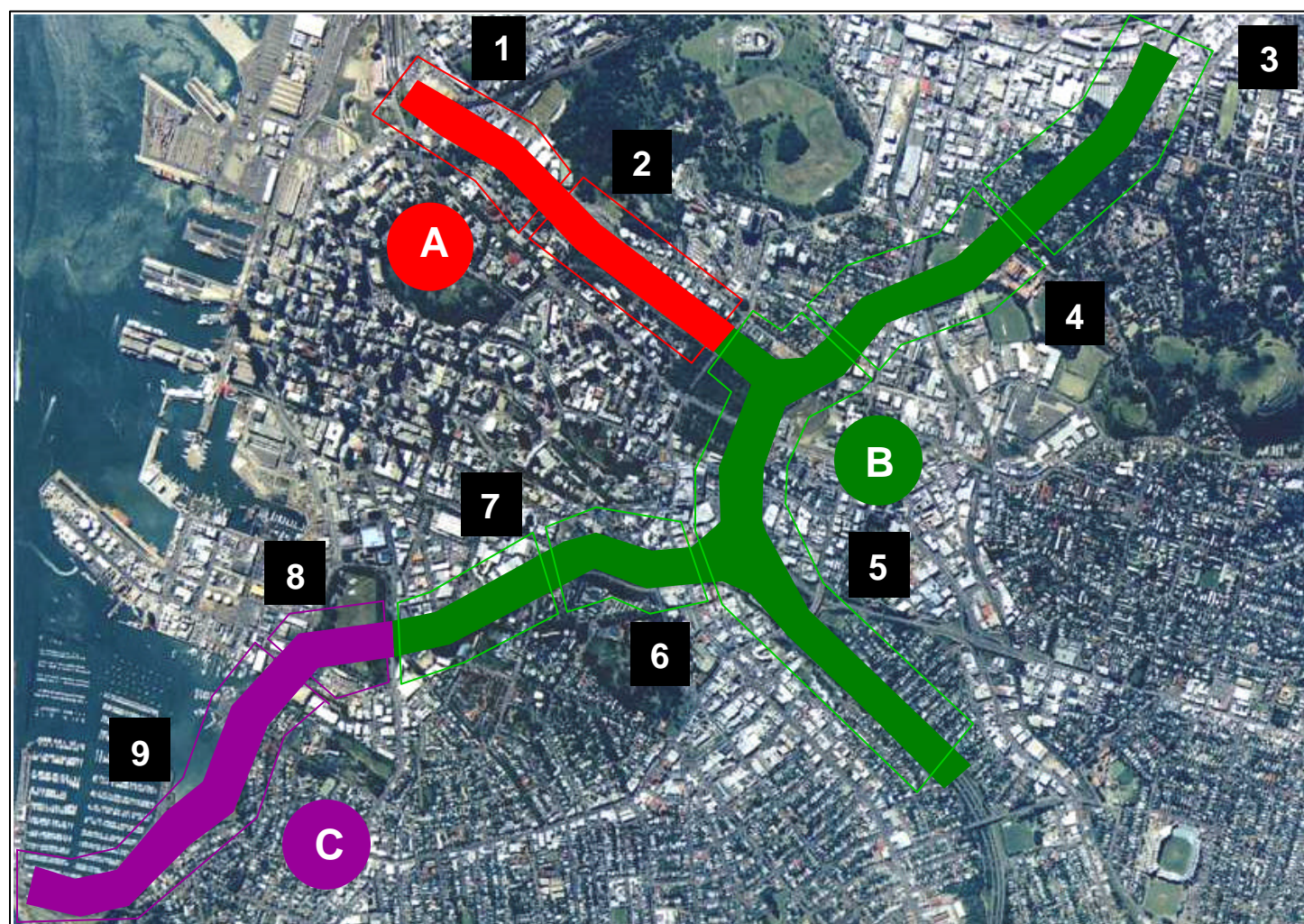
INTRODUCTION

Transit New Zealand is embarking on a major project to upgrade the motorway corridors in central Auckland. The project is split into three distinct areas: Grafton Gully (GGP), Central Motorway Junction (CMJ) and Harbour Bridge to City (HBTC). Collectively the projects are known as Central Motorway Improvements (CMI). These projects will have an impact on surrounding urban environments and communities, as well as on each other. This, together with the need for a co-operative approach between Auckland City Council and Transit New Zealand, has highlighted the need for an integrated urban design approach for utilisation by the designers of the projects.

Motorway systems are often regarded as mere utility corridors with matching utilitarian character. They are however, also important public spaces given that so many people spend so much time on them each day. Users will experience the motorway as one space, so there is a need to integrate the urban design approach for the three projects.

The three CMI projects are to utilise urban design input, analysis and recommendations as part of their design development and later construction. It is important to note that whilst the three different projects are indeed quite different, the CMI urban design team believes that all three projects can be readily implemented to achieve urban design coherence.

As for any construction project, cost is a major consideration for all these CMI projects. Good urban design outcomes should not necessarily mean significant extra cost. For some elements, it is only the difference between considered and ill-considered design. Elements that require major additional cost should be identified early for review. A method for review of urban design costs needs to be agreed and integrated into the separate project costing processes.



CMI PROJECTS



CMI PRECINCTS

- 1 - 2 - Grafton Gully Project
- 3 - 7 - Central Motorway Junction
- 8 - 9 - Harbour Bridge to City



PURPOSE AND STRUCTURE OF THIS DOCUMENT

Given that an opportunity to enrich the experience for all users through remodelling at this scale will not occur again for many years, it is essential that all stakeholders, including the designers of the three CMI projects, are made aware of the opportunities to improve or maximise the urban design quality of this urban environment.

In order to achieve the best integration of this motorway corridor (CMI) into the surrounding urban environment, it is essential to establish an urban design framework, against which all functionally driven proposals can be assessed.

It should be noted at the outset, that this framework document is not intended to be a comprehensive concept specification for designers.

The urban design framework (as illustrated below), is made up of three tiers. This document establishes the first two tiers.

■ TIER ONE

This tier begins by defining the CMI vision. It then establishes several key over-arching Urban Design Objectives and identifies preliminary initiatives for achieving them.

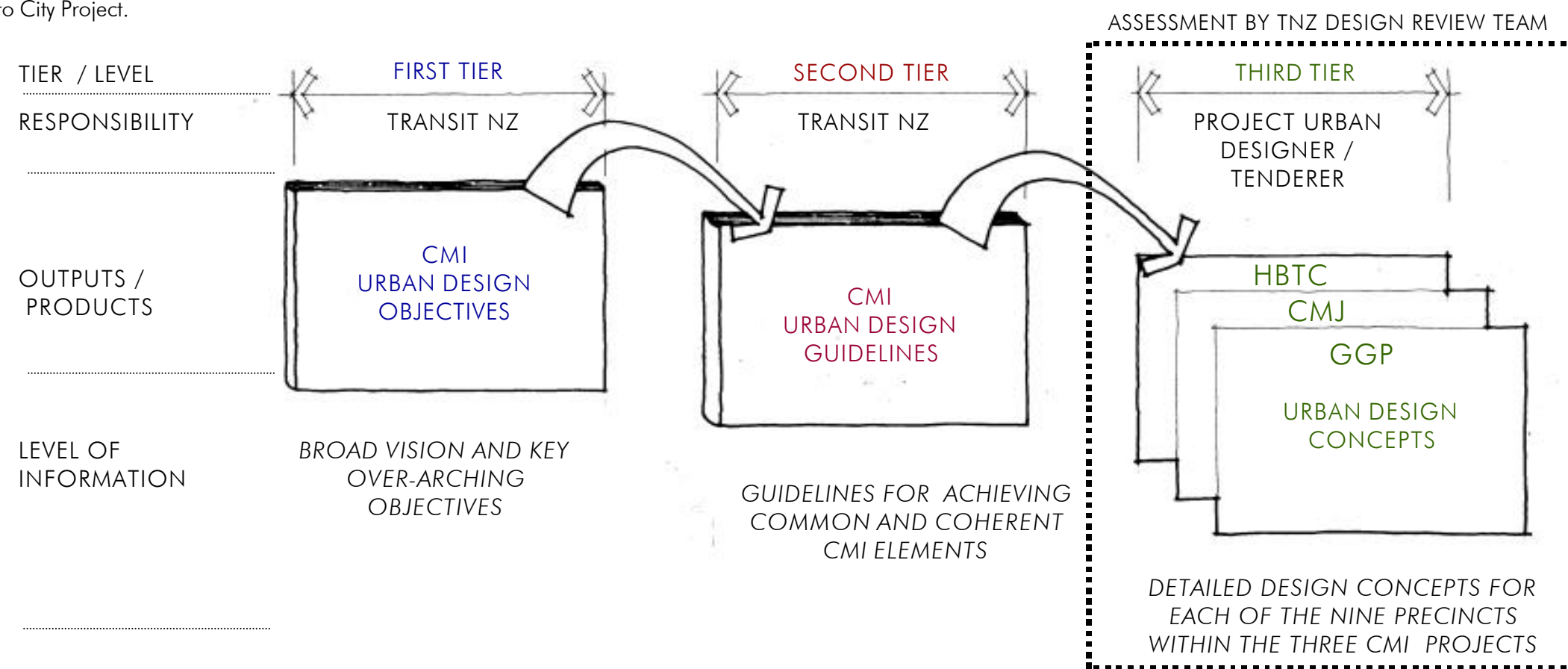
■ TIER TWO

Urban Design Guidelines are then established for each of the common CMI elements. Their purpose is to provide a further level of common or coherent detail in terms of urban design guidelines for the whole CMI project.

■ TIER THREE

The third tier of the framework, is the Urban Design Concepts. These are to be produced by the urban designers for each of the nine precincts identified within the three CMI projects, namely the:

- ▼ Grafton Gully Project
- ▼ Central Motorway Junction Project
- ▼ Harbour Bridge to City Project.



USE OF THIS DOCUMENT

This document is intended for various users as follows:

1. URBAN DESIGN TEAMS FOR EACH OF THE THREE PROJECTS.

These are charged with the task of developing the *Conceptual Designs* that will be the major bid document submitted as part of the tender for any of the three projects. Tenderers must demonstrate that they have understood the outcomes sought and clearly show how their proposal will address each of the issues.

2. TENDER ASSESSMENT TEAM

The tender assessment team will be assisted by an "urban design review team" charged with ranking the conceptual designs.

3. PRINCIPAL'S REPRESENTATIVE

During the course of the contract design, reviews will be employed for the following:

- during the course of design work by the appointed project team (at specific points for deliverables)
- when assessing or reviewing the work of the construction contractor.

4. INTERNAL REVIEW

Urban designers from each of the three teams must audit the design work of their own teams, or the construction contractor, in order to ensure that designs, or site work conforms to these requirements.

5. PROPERTY DEVELOPERS

Auckland City Council may refer to these documents to people seeking to develop land abutting CMI to ensure that the outcomes are consistent.



THE URBAN DESIGN REVIEW PROCESS EXPLAINED

URBAN DESIGN REVIEW PROCESS

The Urban Design Framework forms part of the contract. The main criteria in this assessment will be this framework document and the individual urban design concepts.

Following appointment of the successful full contractor, a series of urban design reviews will be undertaken as detailed below. Sign-off from Transit New Zealand and its urban design review panel will be required before work can progress to the next stage.

Urban design reviews shall be undertaken between the contractor's urban design team, and its project leader/manager with Transit New Zealand's project manager and urban design advisor(s). Outcomes and minutes of the meetings shall be provided to Transit New Zealand's project manager.

PROJECT STAGE	URBAN DESIGN OUTPUT	REQUIREMENTS
Pre-design	Urban design master plan	Illustrative urban design report Response to urban design specification List of urban design requirements that cannot be met List of urban design requirements that depend on co-ordination/cost sharing with stakeholders Overall concept plan at maximum 1:1000 scale Schedule of all road materials, elements and planting themes Bridges and structures report by urban design/architectural consultant Artwork opportunities report
Developed design	Developed urban design master plan	Series of plans at 1:500 scale covering in detail each of the three specification concept plans Cross-sections, elevation and perspectives to support the masterplans Initial town planning work for surplus land designations Revised schedules of materials Developed artwork concepts Initial cost estimates
Contract documentation	Detailed documentation	Contract documents, documentation drawings, details, schedules and specifications for full review Artwork documentation Detailed cost estimates
Construction period	Supervision reports	Monthly urban design reports and site visit reviews Fortnightly reports on landscape construction during implementation
Maintenance period (if applicable)	Built elements & landscape maintenance manual	Final completion inspection As-built and maintenance manuals including on-going planting programmes and schedule of inspections by full delivery team.

FULL DELIVERY TEAM SELECTION

The Urban Design Framework provides a set of defined criteria that will be used as part of the selection process for the contractor. Each bidding team will forward the personnel and CV details of their urban design team, and provide a maximum two-page response to the Guideline & Specification. Methodology for successful urban design outcomes should be included in the response.

OTHER STANDARDS

Any requirements of the Urban Design Framework should not contradict the safety and efficiency requirements for the road network. Full delivery teams should be aware of the requirements of Transit New Zealand's Planning Policy Manual, Planning Practice Guidelines and other relevant Transit documents.

