

Urban renewal, masterplanning and design information management: A New Zealand waterfront case study

John G. HUNT

School of Architecture and Planning, University of Auckland, Auckland, NEW ZEALAND

Received: July 2010

Final Acceptance: April 2011

Abstract:

In the context of a very limited body of literature on urban masterplanning processes, this paper presents a case study of the recently completed masterplanning process for the urban waterfront of the city of Auckland, New Zealand. The focus of the paper is on the management of design information during this process. The paper outlines the workshop-based collaborative decision-making of the masterplanning team, and in particular the management of the shift from the problem-focused design brief development phase of the initial workshops to the creative design work undertaken in later workshops. The importance of developing overarching design themes to guide the decision-making process, and the potential for these thematic statements to link the design brief priorities with subsequent design-generative work, and to knit together design work at different scales within the masterplan, is identified. The paper concludes by assessing the case study process in relation to the characteristics of successful methodologies for urban renewal projects suggested by Mayer et al (2005).

Keywords: *Urban planning, masterplanning, waterfront development, design process, information management, urban renewal methodologies.*

Introduction

The Auckland city waterfront, like urban waterfronts in many cities, is undergoing significant change. In anticipation of both functional and physical changes, the waterfront has been the subject of a number of studies and at various points key stakeholders and the public at large have participated in consultative processes. The most recent and most significant of these was undertaken jointly by the Auckland City Council (responsible for the waterfront public realm) and the Auckland Regional Council (responsible for the waterspace and the wharves and other built structures within the waterspace, and through a subsidiary company for the operation of the commercial port area.) The outcome was the publication in December 2005 of the "Auckland Waterfront Vision 2040" document, containing a strong public dimension to the consultation on which the document was based.

The Vision 2040 document signaled a political commitment to manage the future development of the waterfront in a way that would meet wider public

expectations as well as commercial imperatives associated with a working waterfront and container port. However, the document stopped short of offering an integrated physical interpretation of the overarching vision that it set forth, and in the period following its release several independent development projects for parts of the waterfront continued to be promulgated. These included the expansion of the commercial marina facility at the western end of the waterfront (Westhaven), proposals for a reconfigured and possibly relocated America's Cup base in an area known as the Viaduct Harbour, the expansion of ferry terminal facilities located at the foot of the city centre's principal street, and a proposal in 2005 for a rugby stadium to accommodate the recently secured Rugby World Cup event (to be held in 2011). This latter project attracted significant public debate (both for and against the proposal) and following successful public opposition to the project the City Council resolved to prepare a strategic masterplan for the five kilometer length of the waterfront that has direct functional and/or physical links to the city centre.

This strategic masterplan would provide a basis for deciding on future development projects and as a basis for waterfront precinctual and site-specific masterplans. The strategic masterplan would also need to accommodate the already developed masterplan for a brownfields area (Wynyard Point) towards the western end of the waterfront. By virtue of the close links expected between the Vision 2040 document and the strategic masterplan, it was possible for the masterplan design team to look beyond the ten to twenty year budget timeframes in terms of which the City Council typically operates, and identify longer term initiatives. These included a waterfront light rail option, a significantly extended pedestrian and cycle network, and ways in which currently inaccessible land used for commercial port operations might eventually be converted for public use.

The draft masterplan was published in August 2007 and was the subject of a further round of public and stakeholder consultation. Following this consultation the finalized masterplan was generally positively received by a number of stakeholders and has been formally adopted by the City Council (although it does not have statutory authority.)

From waterfront vision to physical proposals: Organization of the masterplanning process

The challenge that faced the City Council is perhaps best expressed as how to prepare a masterplan that would demonstrably address the multiple outcomes from prior stakeholder and public consultation while also offering an inspired urban design proposal, capable of fulfilling the aspirational vision advanced in the Vision 2040 document. This document called for a waterfront which would become a "world-class destination that excites the senses and celebrates our sea-loving Pacific culture and maritime history" and "a place for all people, an area rich in character and activities that link people to the city and sea."

In describing the masterplanning process the focus of this paper will be in relation to this dual obligation to both previously defined stakeholder and public expectations and requirements on the one hand and to delivering a high quality (indeed visionary) urban design outcome on the other. Such an account has potential value in contributing to knowledge development in an area where (as Bell 2005, p.82) observes, despite growing use of

masterplans, “little academic attention has been given to this type of plan making.” A key issue becomes how to organize the decision making process to ensure that the myriad of stakeholder requirements and expectations needing to be addressed in the final masterplan are not overlooked, while at the same time ensuring full opportunity for the creative capabilities of the design team to be brought into play in the conception and development of the masterplan. Without the former there is a risk of information loss during the design phase of the process and a deficient design outcome. Without the latter there is a risk that the plan will fail to excite and inspire.

In response to these two kinds of considerations the waterfront masterplanning process was structured around a clear sequence of ten workshops held between 2nd March and 15th May 2007. Workshops 1, 2 and 3 focused on the development of a “strategic framework” document that incorporated a design brief. These workshops align with the first phase of the masterplanning process advocated by CABA (2004). Workshops 4, 5 and 6 were devoted to developing a high level (conceptual) masterplan proposal based on a number of key themes (initially referred to as “the big ideas”) developed by the design team, and to identifying the key urban design elements (initially referred to as “key design moves”) in response to these themes. Within the context of the understandings developed by design team members during the first three workshops, the focus of this second phase of the process was to encourage lateral thinking and creative design responses. The stated aim of workshop 6 was “to complete a waterfront masterplan vision”, expressed by way of a conceptual plan for the whole of the waterfront, before addressing the various precincts in greater detail. These precinct-based studies were undertaken during workshops 7, 8 and 9. The final workshop reviewed the outputs from these precinctual studies in relation to earlier conceptual work for the waterfront as a whole, in order to ensure consistency and integration between them.

In addition to the preplanned sequence of workshops, a further distinctive aspect of the process was the constitution of the masterplanning design team and the role of a core group within the team. A decision was made to constitute the team entirely of persons with urban planning and urban design expertise, rather than to include stakeholder representatives. A core group comprising seven City Council staff with planning, urban design, transport and property development expertise was joined by an external group comprising three members of the Council’s independent urban design panel and a fourth person with an established reputation for high quality urban development projects. The City Council’s urban design group manager chaired the twelve person team. The decision to have a core group carry out work in preparation for each of the workshops and in instances to circulate this prior to these workshops, ensured that the relatively short time for each workshop could be used to maximum benefit. This also ensured that the depth of collective knowledge held by members of this core group (by virtue of prior involvement in waterfront related workstreams within the City Council) was captured during the workshop process. The limited time availability of the external group members was a further consideration in organizing the process in this way.

Developing the ‘strategic framework’ and masterplan design brief

As noted above, a decision was taken to adopt the broad structure for the masterplanning process as advocated by CABA (2004, sections 2.2, 2.4).

The CABE process identifies an initial phase as the preparation of a 'strategic framework'. This is a potentially misleading term, and certainly in a New Zealand context could be confused with a strategic urban design framework (being a high level plan prepared prior to a masterplan). The CABE guide (p.32) explains that as the term 'strategic framework' is not in common use it has been adopted to describe the initial stage of the process, in which a masterplanning brief is developed. In the case of the Auckland waterfront project the strategic framework document began as a background document capturing the available information and summarizing outcomes from prior investigative studies on topics as diverse as existing and projected resident, worker and visitor populations; existing open space provision benchmarked against other cities; projected needs of the cruise ship industry, and so on. During the early workshops this framework document was further developed to include a masterplan design brief.

The design brief was structured in a way that sought to both capture existing information and new information generated in the early workshops, and to do so in a way that clearly differentiated between different types of information. A tabular format was adopted, organized in terms three columns: 'principles', 'priorities' and 'recommendations'. Principles were derived initially from the Vision 2040 document, in which a number of so-called 'principles' were identified, and these were supplemented with similar kinds of statements derived from other waterfront proposals and policy documents and from the initial masterplanning workshops. A total of eighty five such principles were identified. A number of these were high level aspirational statements and as such had no immediately obvious impact on the physical form of the future waterfront, while others had sufficient precision to be treated as urban design objectives. In order to provide greater focus for the masterplanning work these principles were restated as a smaller number (sixteen) of masterplan priorities. The third category – masterplan recommendations – expanded on the sixteen statements of priorities, and represented the detailed brief for the design phase. A total of 147 such recommendations were identified, reflecting the complex nature of the waterfront and its functions. In the context of urban renewal projects Mayer et al (2005, p.405) refer to this as "system complexity ... the many interdependent physical and social variables in the urban system", in contrast to political complexity. Each of the categories of information (principles, priorities and recommendations) included in the masterplan brief was organized under seven headings that related to the whole of the waterfront and a further five headings for each of the waterfront precincts as defined in the Vision 2040 document. Waterfront-wide categories were as follows: activities; transport, access and links; public open space, water space and access; views; heritage; built form and design; and environmental sustainability. Precincts were identified as the Port Area, Central Wharves, Viaduct Harbour, Wynyard Point, and Westhaven (indicated in figure 1). An example page from this part of the strategic framework document is reproduced in Appendix 1.

From brief to masterplan: themes and urban design elements

An important moment in any design process is the point at which the process shifts from being problem-focused to solution-focused. The early stage of the solution- focused, design-generative, phase needs to distance itself from the micro-thinking that typically characterizes the later stages of any design brief development, in order to adopt a holistic and expansive

stance towards the project. In the case of the Auckland waterfront masterplanning process this was achieved by devoting the fourth workshop to identifying what were initially referred to as the “big ideas” for the whole of the waterfront (and which were subsequently relabeled as “themes”). These were to be high level or abstract notions that would be sufficiently powerful and all-encompassing to drive the subsequent more detailed decision-making process. Each member of the masterplanning team was asked to come to this workshop with his or her own list of three or four “big ideas”, to ensure that multiple perspectives would inform the group-agreed final list. In order to encourage creative responses there was no expectation that each of the big ideas would need to be justified by its proponent against the previously agreed masterplan brief. On this basis the workshop identified five such thematic ideas as follows:

1. **Working waterfront:** recognition that waterfront currently accommodates a diversity of marine-related commercial activities and operations, and that this is integral to its distinctiveness and future viability
2. **Auckland's playground:** recognition that the waterfront also hosts and supports a variety of recreational activities, including land and water-based organized events and spectacles
3. **Waterfront access:** the need for the waterfront to become more publically accessible than has previously been the case
4. **Cultural threads:** celebrating the cultural dimensions of the waterfront, both historical and contemporary
5. **Sustainable design showcase:** the potential for the future waterfront to become a sustainable environment, and wherever possible to demonstrate the means whereby this has been achieved

The fourth workshop concluded with a group exploration of ways in which these themes might be physically interpreted, in anticipation of the focus of the fifth workshop, in which the key urban design elements for each theme were to be identified.

Between the fourth and fifth workshops the core group returned to the masterplan brief and checked how the sixteen statements of masterplan priorities might relate to the five themes arrived at during the first of the design generative workshops. This was an important check on the capacity of the (yet to be developed) masterplan structured in terms of these five ‘big ideas’ to also accommodate the priorities established in the masterplan brief. While the design generative process which leads to such a masterplan needs to be able to transcend the inevitable limitations of the design brief, at some point that generative process must be reviewed for its comprehensiveness in relation to the originating brief. Table 1 below reveals the way in which the sixteen statements of priorities variously associated with the seven waterfront-wide briefing categories (noted previously) were redistributed amongst the five “big ideas” or themes identified by the design team, suggesting that this list of themes was comprehensive in relation to the masterplan brief.

Table 1. Relationship between design brief priorities and masterplan themes

Design Brief category	Priority statement	Assigned to theme
Activities	1.1 support working waterfront 1.2 promote working waterfront as a distinctive experience 1.3 develop waterfront as major visitor attraction 1.4 functional requirements of working waterfront to be prioritized in masterplan	1 1 2 1
Transport, access and links	2.1 pedestrian focused waterfront 2.2 public transport to support accessible waterfront 2.3 enhance existing transport hub adjacent to central waterfront	4 4 4
Public open space, water space and access	3.1 create open space network that achieves public access to waterfront 3.2 develop hierarchy of open spaces associated with water spaces	2 2
Views	4.1 recognize views and sightlines as important for “sense of place” and distinctive identity of waterfront	4
Heritage	5.1 protect and enhance intrinsic heritage and local character 5.2 re-establish historic connection between Queen Street and Queens Wharf 5.3 retain distinctive character areas but reconnect and reintegrate these	3 3 3
Built form and design	6.1 built form to enhance public open space and water spaces 6.2 future waterfront as showcase for high quality architecture	2 2
Environmental sustainability	7.1 take all steps needed to create a sustainable waterfront	5

At the fifth workshop the design team discussed and elaborated the previously established five ‘big ideas’ and identified some fifty urban design moves (subsequently referred to as ‘elements’) that would support these five themes. Conceptual diagrams were developed during this and subsequent workshops with the aid of a whiteboard, in order to give focus to the group discussion. Following this workshop the core group prioritized these elements either as “waterfront transforming proposals” or as “supporting proposals” and these categories were further examined at the sixth workshop, with the intention that this would provide sufficient material for an initial masterplan proposal. However, at this sixth workshop the team decided to defer the production of an initial plan until after the outcomes of each of the precinct-based workshops had been completed. There are several different explanations for this departure from the intended path. Possibly team members felt that each of the themes needed to be tested in the context of more detailed precinctual studies before committing to them. Possibly the team felt that the list of transforming and supporting proposals were sufficiently clear in their implications for any masterplan to avoid the need to synthesize them into an overall plan at this point in the process. Alternatively it could have been felt that taken together, the list of sixteen

“transforming proposals” and thirty one “supporting proposals” represented an insufficient basis for generating an initial masterplan. Whatever the individual reasons, the whole team was sufficiently confident to move on to the greater detail of masterplans for each of the precincts without such an overarching plan at this stage.

Precinctual masterplanning

The outcome of the sixth workshop was an agreed set of transforming and supporting proposals in terms of which each of the waterfront precincts could be considered in more detail. (Refer to Appendix 2 for an example sheet from this document.) Workshop 7 was the first of the precinct-focused design sessions and addressed the Westhaven area, home to the largest marina facility in the southern hemisphere, to maritime industries operating along its eastern edge, and incorporating public recreational boating facilities and water spaces. The marina had been recently purchased by the City Council in order to control the future development of this highly visible part of the urban waterfront. The marina is also an important source of revenue for the Council and its future development is expected to be consistent with financial performance requirements. The design team was provided with the outcomes of earlier studies which addressed marina expansion in this context, and in response to this issue and a number of other challenging conditions existing within the precinct, the team developed design proposals which have more recently informed the preparation of a firm masterplan for the marina, currently being implemented. As well as schematic drawings, the outcomes from this workshop (and each of the other precinctual workshops) were recorded in terms of *priorities* as identified in the masterplan brief, and in terms of *urban design elements/proposals* as identified under each of the five thematic categories established in workshops 5 and 6. This ensured that the outcomes from these precinctual workshops would build on and extend the information base established in the earlier workshops and avoid any information loss. In the case of the Westhaven precinct, the extent of these precinct-specific additions (17 priorities and 29 elements) is indicative of the value of this workshop session.

Workshop 8 addressed the Wynyard Point and Viaduct Harbour precincts. While these together represent a large portion of both the land area and waterfront edge within the whole of the urban waterfront zone, the Viaduct Harbour development is largely complete (stimulated by earlier Americas Cup events based there) and a comprehensive urban design proposal exists for the Wynyard Point area and its hinterland (together now referred to as the Wynyard Quarter). The reduced outcomes from this workshop (8 priorities and 11 elements) reflect the extent to which the future of these parts of the waterfront has largely been determined.

Workshop 9 addressed the central wharves and container port areas and identified some 17 priorities and 22 elements. Home to Auckland’s historic port, the central wharves precinct includes wharves that were originally extensions of the city’s principal north-south streets. Currently these wharves accommodate a mix of public and port (private) activities, although there are signs that the Port Authority will progressively relinquish the use of this area in future and perhaps eventually confine itself to the container port that dominates the eastern end of the urban waterfront zone.

Following the precinct-based workshops the core team developed an overall plan incorporating the drawn and written outcomes of the various workshops, for discussion and review at the final workshop.

Preparation of the masterplan document

The draft version of the masterplan document was prepared within three months of the final workshop, with minimal resources required for its production. While the presentation drawings were separately commissioned, the structure and content of the masterplan document closely reflects the outcomes of the ten workshops. Following the presentation of the plan itself, the five themes are effectively employed to explain the underlying intent of the overall plan, with the masterplan features that are a response to each theme highlighted in a tailored version of the overall plan, and with brief descriptive text in support. (Figure 3 shows the plan prepared for the theme of *waterfront access*.) Each of the precincts (referred to in the final document as 'masterplan areas') is then addressed by way of a more detailed plan, together with textual and graphic depiction in terms of each of the five themes. In this way the connections between the overall plan and its component areas are made evident, being in effect knitted together by means of the five themes. The thematic rationale for each of the urban design elements is also evident.

The draft document was the subject of a further round of stakeholder and public consultation and a final version of the masterplan has since received political endorsement.

The following images illustrate the waterfront location and aspects of the masterplan proposal.

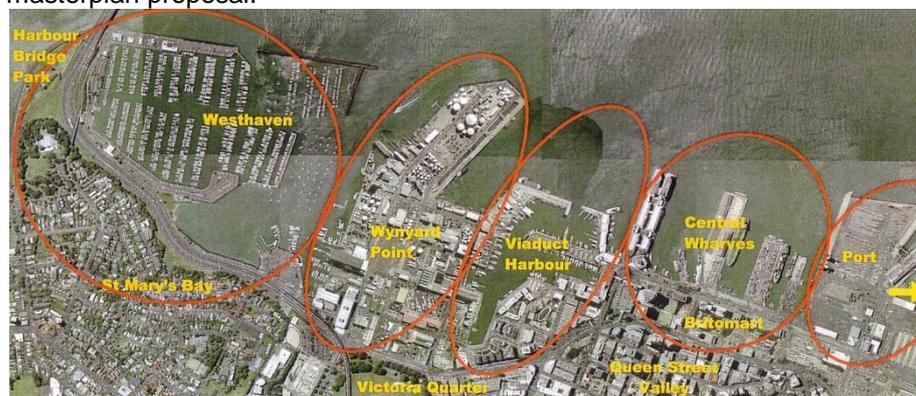


Figure 1. Aerial photograph indicating waterfront precincts

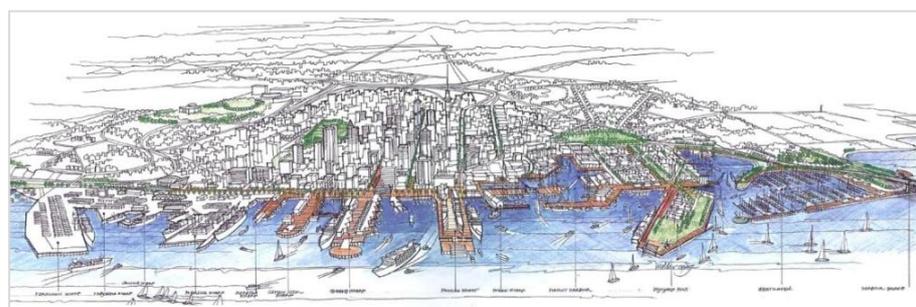


Figure 2. Aerial sketch of masterplan proposal



Figure 3. Masterplan showing pedestrian promenade, cycle and light rail routes, and proposed linking bridges



Figure 4. View from Westhaven towards Port area at eastern end of waterfront



Figure 5. Public access to the working waterfront: the North Wharf fishing fleet

Conclusions

The process followed for the development of the Auckland waterfront masterplan has been driven by a concern to manage project information complexity in a way that achieves an effective design decision making process. This effectiveness can be thought in a number of ways. A key consideration noted at the outset of this paper is the risk of information loss – the failure to capture relevant information during the process or to retain it once captured. Project information, once captured, also needs to be organized in a way that assists the design team members to grasp its significance in the context of the design task. Taken together, these two considerations approximate to what Mayer et al (2005, p.406) refer to as the *integrative* characteristic of successful methodologies for decision making in urban renewal projects, and it can be argued that the decision making process for this case study project has been a highly integrative one.

Effectiveness can also be measured in terms of the extent to which productive interactions between team members are promoted during the decision making process. This became a feature of the workshop sessions, to the extent that while discussions were intensive they were also conflict-free, suggesting that the process allowed for negotiation between design team members as and when required. Mayer et al have also identified the importance of *interactive* and *transparent* processes, and while their work focuses on the political dimension of urban renewal project complexity, it can be suggested that such attributes are no less important when dealing with the design challenge, specifically what these authors have referred to as 'system complexity'.

Mayer et al also suggest that effective methods will be *fast and easy to use*. While acknowledging that considerable work was undertaken by some core team members between successive workshops, it could be argued that the total time required of most team members was modest in comparison to the complexity of the waterfront masterplanning task, and that there appeared to be no confusion regarding the purpose of each of the steps involved. These represent further measures of decision making effectiveness.

Finally, and perhaps most importantly, effective decision making will need to balance the rigour of reasoned thinking with the creativity that is intrinsic to all successful design-based processes. In respect of rigour it will be evident from the preceding descriptions of the case study project that this was a pre-occupation throughout the decision making process. While Mayer et al do not refer to decision making rigour directly, their mention of the need for *authoritative* processes, meeting recognized analytic standards, implies such a need. However, on the matter of creativity these authors are silent. While recognition of this aspect of decision making was implicit in the focus and sequence of workshops, any claim that the Auckland waterfront masterplan represents a creative outcome must be for others to judge

References

- Auckland City Council (2007) CBD Waterfront Masterplan: linking people city and sea
- Auckland Regional Council & Auckland City. (2005) Auckland Waterfront Vision 2040

- Bell, D. (2005) "The Emergence of Contemporary Masterplans: Property Markets and the Value of Urban Design," **Journal of Urban Design** 10,1, 81-110.
- CABE (Commission for Architecture and the Built Environment) (2004) *Creating Successful Masterplans: a guide for clients*
- Mayer, I. van Bueren, E., Bots, P. and van der Voort (2005) "Collaborative decisionmaking for sustainable urban renewal projects: a simulation – gaming approach", **Environment and Planning B: Planning and Design** 32, 403-423

Appendix 1. Excerpt from the masterplan brief

Waterfront wide category: TRANSPORT ACCESS AND LINKS		
Principles	Priorities	Recommendations
<ul style="list-style-type: none"> ● Strengthen links between the waterfront and adjoining areas- particularly the CBD. ● Improve pedestrian and cycling connections and opportunities. ● Ensure passenger transport services and supporting infrastructure, including water-based services, are fully integrated into future development. ● Design streets to provide a safe and pleasant environment for pedestrians, residents and workers. ● Ensure future development is within the capacity of the existing road network. ● Keep a grid-based street pattern to improve connectivity and accessibility. ● Strengthen connections between Victoria Park and the Wynyard Point. ● Ensure consideration of issues and options related to the future harbour crossing do not compromise achieving the vision. 	<p>Achieve a showcase pedestrian focused waterfront environment that has seamless pedestrian connections to the CBD and the city.</p> <p>Create passenger transport services that support access to the waterfront and the CBD.</p> <p>Enhance Britomart as the regional transport hub with medium and long-term consideration for expansion of passenger transport services.</p>	<p>2.1 Develop a continuous pedestrian promenade around the entire perimeter of the waterfront including waterside access around the perimeter of wharves, reclamations and beaches.</p> <p>2.2 Reduce barriers to north-south pedestrian movement to ensure easy access between the waterfront, CBD and suburban areas of Freemans and St Mary's Bay.</p> <p>2.3 Design a legible and fine-grained street environment with visual and physical connections that strengthen the relationship between the harbour, waterfront, CBD and suburban areas.</p> <p>2.4 Design Te Wero opening bridge for pedestrians, cyclists and passenger transport to connect Quay Street to Jellicoe Street while also allowing marina activity in Viaduct Harbour and events to occur on Te Wero Island and the proposed marine events centre.</p> <p>2.5 Provide dedicated cycle lanes along the entire perimeter of the waterfront.</p> <p>2.6 Consider the parking needs of public attractions on the waterfront.</p> <p>2.7 Road freight movements through the CBD should be minimised.</p>

Appendix 2. Example of theme-based urban design elements/proposals

Theme 3: CULTURAL THREADS		
Design brief priorities	Elaboration of theme	Urban design elements
<p>Protect and enhance the intrinsic heritage and local character qualities (including urban form, activities and heritage items) that contribute to the distinctive qualities of Auckland's waterfront.</p> <p>Create a physical, visual or symbolic connection between Queen's Wharf and Queen Street to re-establish access between the waterfront, CBD and wider city.</p> <p>Create a waterfront masterplan that achieves a seamless integration with the Britomart masterplan, Wynyard Point masterplan, Westhaven masterplan (when completed), Queen Street Valley and Quay Park areas while retaining distinctive environments that express the history and character of each area.</p>	<p>Includes:</p> <ul style="list-style-type: none"> • Heritage interpretation • Showcase creativity and innovation, • Heritage items along the waterfront • heritage connection to CBD, • Maori sites, stories and biodiversity, • maritime history, art and sculpture, • great architectural design, • geology, • colonial sites and stories, • historic shoreline, • seafaring legends and history, • sense of place. 	<p>Waterfront transforming proposals:</p> <p>Development of an east-west heritage waterfront axis associated with the port, fishing and marine activity. Achieved by retaining heritage/character buildings/structures, interpretative material, artworks, retention of the original 'finger' wharves, retention of some activities in their original locations (ferries, fishing, marinas) – all connected by the waterfront boulevard.</p> <p>Development of a heritage precinct that connects the CBD with the waterfront, by protecting groups of character/heritage buildings, restoring the original waterfront lane network.</p> <p>Includes Britomart and Queen Street; old town (Fort, Shortland and Lorne Streets); west town (Hobson, Federal Streets)</p> <p>Maori culture and interests represented through interpretation centre, place/street names, sustainability objectives such as water quality, art/sculpture, indigenous planting on waterfront.</p> <p>Supporting proposals</p> <ul style="list-style-type: none"> • Visitor attractions – theatres - indoor, outdoor, amphitheatre • Heritage interpretation - to convey a continuum of waterfront history along entire length – possible link to major Auckland interpretation centre. • Artworks/sculpture along entire waterfront – could express both Maori, colonial and contemporary culture