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**Specification No. S1996/2**

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## **Hutt Valley - Porirua Road Link Study Design Brief**

### **1. Background**

The Wellington Regional Council in association with the Hutt City Council, Porirua City Council and Transit New Zealand wishes to investigate the need for and the feasibility of a road link between the Hutt Valley and eastern Porirua. In recent years a link road from Grenada to Petone has been investigated but was found to be uneconomic.

### **2. Scope**

The scope of this commission is to provide a written report, plans and computer model on the options for a road link between the Hutt Valley and Porirua, complete with likely timetable for the construction work. The study will complement recent studies in the area such as the State Highway 2 strategy study, the eastern Porirua roading study and the investigations into Transmission Gully.

### **3. Objectives**

The objectives of the study to be undertaken by the Consultant are to:

- Define a road corridor between the Hutt Valley and Porirua that:
  - ◇ Provides for acceptable geometric standards
  - ◇ Addresses the demand for travel between the two areas in an efficient manner
  - ◇ Integrates well with proposals for the eastern Porirua roading study, the State Highway 2 strategy and the Transmission Gully proposal. For the purposes of this study it should be assumed that no road will be built along the Transmission Gully alignment but any Hutt Valley-Porirua

be built along the Transmission Gully alignment but any Hutt Valley-Porirua link should not preclude the construction of Transmission Gully

- ◇ Provides relief to developing congestion near the Kennedy-Good Bridge. Lower Hutt
- ◇ Provides some relief to congestion elsewhere on both State Highway 1 and State Highway 2 in the vicinity of Wellington, Porirua and the Hutt Valley
- Extend the strategic transport network in a way that is consistent with the Regional Land Transport Strategy
- Resolve the issues surrounding the future use of State Highway 58
- Provide a road link between eastern Porirua and the Hutt Valley that maximises cost effectiveness but is constrained by the requirements of the Regional Land Transport Strategy and the needs of the wider community
- Determine the likely timing of the construction of such a road link.

#### **4. Specific Requirements**

The work of the commission shall include the following components:

- Analysis of travel demand for the present day and the design year 2016
- Evaluation of alternative locations for the link road in respect to connections to eastern Porirua and the Hutt Valley and the compatibility of these connections
- Determination of alignments of feasible link roads identifying any issues of likely significant environmental impact
- Evaluation of the performance of each option using both present day and design year travel demands
- Determination of the likely role of this link road in the strategic transport network and road hierarchies of both Porirua and the Hutt Cities
- Preliminary geometric design of the route alignments and the connection details of the termini of each option
- Preliminary cost estimation of each option
- Preliminary economic evaluation of each option and, after consideration of environmental impact issues and the objectives detailed in this brief, recommendation of a preferred selection of options

- Development of a strategy for the link road involving the timing of construction of the project in conjunction with the other projects in eastern Porirua and on State Highway 2, and resolve issues surrounding the future of State Highway 58.

## 5. Required Outputs

### 5.1 The Report

The written report shall document the following:

- Land use and trip generation information for peak period and off peak times for both present day and the design year. Demand projections are to be soundly based and be consistent with information from relevant planning studies and economic investigations
- Locations of feasible road links
- Performance of the feasible road links in terms of traffic volumes using the link, impacts on the total network travel times and distances, and network travel costs. This information should be provided for peak period and off-peak times, for present day and the design year
- Geometry of the road link and key intersections described at a preliminary level of detail
- A summary of preliminary costs for the link and the intersections
- An economic evaluation with a tabulation of the environmental impacts of each feasible option in a balance sheet format
- A proposed strategy for the implementation of the link road in conjunction with other relevant projects in the Region.

Cost estimates and the economic evaluation shall have a tolerance of  $\pm 25$  percent or better.

### 5.2 Plans

The plans shall show the alignment of the feasible road links. In addition, information to a preliminary design standard shall be provided showing road link geometry and possible key intersection details.

The plans shall be prepared at A1 size on transparent polyester film. Copies at A3 size may be reproduced and bound into the report.

### 5.3 **The Computer Model**

The study shall use a computer model to evaluate the performance of the possible road links and shall assist in resolving relevant issues affecting the impact of the link road on the eastern Porirua road network, the impact on State Highway 2 and the future of State Highway 58. Operational issues such as possible intersection layouts shall be resolved on a site by site basis using standard methods.

Computer models used by the Wellington Regional Council and the Hutt City Council, and other resources will be made available subject to the approval of those organisations.

## 6. **Project Management**

The project will be overseen by a steering group that shall provide direction for the investigations and monitor progress.

The steering group may require a peer review of the draft report produced by the Consultant.

The steering group will be convened by Tony Brennand of the Regional Council. The group will also include one representative from each of Porirua City Council, Hutt City Council and Transit New Zealand.

## 7. **Relevant Information**

The following are useful references for this study:

- ⇒ The Wellington Regional Council Land Transport Strategy : 1996-2001, Wellington Regional Council, October 1995
- ⇒ The Transport Model : Wellington Regional Council, December 1992
- ⇒ 1994 Wellington Transport Planning Development Simulation : MERA, June 1995
- ⇒ The Hutt City Council Traffic Model : Hutt City Council, three Reports:
  - ◆ June 1992
  - ◆ May 1993
  - ◆ June 1995
- ⇒ Roothing Management Plan : Hutt City Council, September 1989
- ⇒ Eastern Porirua Strategic Roothing Study : BCHF, July 1994
- ⇒ State Highway 1 : Inland Route, Review of Southern Section Report 2 Takapu Road, Belmont Variant and Associated Porirua Links

- ⇒ State Highway 2 Strategy Study : Prepared by Traffic Design Group Limited for Transit New Zealand, (November 1995 not yet a public document)
- ⇒ Transport Studies for the Wellington Region : BERL, December 1995
- ⇒ Cross Valley Link Proposal and Related Issues : Hutt City Council, March 1991
- ⇒ Hutt City Council Cross Valley Link : Prepared by Gabites Porter for Hutt City Council, May 1992
- ⇒ Report to Passenger and Land Transport Subcommittee : Hutt City Council, June 1992
- ⇒ Technical Working Papers : Cross Valley Link River Bridge without connection to State Highway 2, Esplanade Restraint Measures in conjunction with Udy Street Interchange, Improved connection to State Highway 2 : Hutt City Council, 1992
- ⇒ Report to Passenger and Land Transport Subcommittee (including Background Report) : Hutt City Council, May 1993
- ⇒ Report to Passenger and Land Transport Subcommittee : Hutt City Council, July 1993
- ⇒ Roading Management Policies and Plan : Hutt City Council, September 1989, revised April 1990
- ⇒ Proposed District Plan : Hutt City Council, December 1995
- ⇒ Melling Interchange and Bridge Scoping Report : Works Consultancy Services, March 1991
- ⇒ Proposed Porirua City District Plan : Porirua City Council, October 1994
- ⇒ Choices for the Future : Draft Strategic Plan : Porirua City Council, April 1995.

## 7. **Liaison**

The Consultant shall appoint one representative who shall be responsible for managing the work being undertaken by the consultant's staff. During the term of this commission this project manager shall liaise with Tony Brennand of the Regional Council.

## 8. **Programme**

The completed report shall be presented to the steering group on 3 March 1997.

The Consultant shall prepare a draft report, complete with model and plans, for review by the steering group eight weeks prior to completion date for the final report (i.e., 6 January 1997).

## 9. **Reporting**

During the term of the commission the Consultant shall provide a written monthly report to the Regional Council detailing progress achieved during the previous month, together with details of costs incurred and work programmed for the following month. The Consultant shall provide this report during the first week of the month following the reported month.

## 10. **Conditions of Engagement and Proposal**

The conditions of engagement for this commission shall be the IPENZ/ACENZ *Short Form Agreement for Consultant Engagement - Commercial*, latest amendment.

Consultants shall submit a brief proposal detailing the following:

- Relevant experience in undertaking this type of commission
- Proposed project team with brief curriculum vitae of each team member
- Track record of similar projects with brief details
- Technical skills of personnel to be involved
- Methodology
- Price

These attributes will be assessed in considering proposals received. The relative weighting of the attributes in the assessment process shall be as follows:

- |                       |            |
|-----------------------|------------|
| • Relevant experience | 15 percent |
| • Project team        | 20 percent |
| • Track record        | 15 percent |
| • Technical skills    | 20 percent |
| • Methodology         | 15 percent |
| • Price               | 15 percent |

The Consultant shall submit a fixed price sum for the total project up to and including the presentation of the final report. The proposal should provide a breakdown of the lump sum quoted.

## 11. **Conflict of Interest**

Consultants shall indicate in their proposal whether they have any potential conflict of interest in undertaking this commission.