

# CHRISTCHURCH CITY COUNCIL AGENDA

**THURSDAY 16 FEBRUARY 2012** 

9.30AM

COUNCIL CHAMBER, CIVIC OFFICES, 53 HEREFORD STREET



## CHRISTCHURCH CITY COUNCIL

# Thursday 16 February 2012 at 9.30am in the Council Chamber, Civic Offices, 53 Hereford Street

Council: The Mayor, Bob Parker (Chairperson). Councillors Helen Broughton, Sally Buck, Ngaire Button, Tim Carter, Jimmy Chen, Barry Corbett, Jamie Gough, Yani Johanson, Aaron Keown, Glenn Livingstone, Claudia Reid and Sue Wells.

#### ITEM NO DESCRIPTION

PAGE NO

- 1. APOLOGIES
- 2. CONFIRMATION OF MINUTES COUNCIL MEETING OF 2.2.2012
- 3. DEPUTATIONS/PUBLIC FORUM
- 4. PRESENTATION OF PETITIONS
- 5. REQUESTS FOR INFORMATION ARISING FROM PREVIOUS PUBLIC FORUM
- 6. HAGLEY FERRYMEAD COMMUNITY BOARD 1 FEBRUARY 2012 CHAIRPERSON'S REPORT TO COUNCIL
- 7. EARTHQUAKE RECOVERY LAND AND HOUSING SUPPLY REPORT
- 8. SUBURBAN CENTRES PROGRAMME: EDGEWARE AND NEW BRIGHTON
- 9. MONTHLY INFRASTRUCTURE REBUILD PROGRESS REPORT TO COUNCIL
- 10. HERITAGE REINSTATEMENT PROGRAMME POSEIDON CAFÉ REPAIRS
- 11. HERITAGE REINSTATEMENT PROGRAMME CURATORS HOUSE EARTHQUAKE REPAIRS
- 12. FACILITIES REBUILD PLAN UPDATE REPORT
- 13. FACILITIES REBUILD PROJECT FENDALTON LIBRARY AND SERVICE CENTRE
- 14. INFRASTRUCTURE REBUILD/HOLLIS AVE/WASTEWATER PIPE RENEWAL
- 15. NOTICES OF MOTION
- 16. RESOLUTION TO EXCLUDE THE PUBLIC

## 1. APOLOGIES

Mayor Bob Parker.

## 2. CONFIRMATION OF MINUTES - COUNCIL MEETING OF 2.2.2012

Attached.

## 3. DEPUTATIONS/PUBLIC FORUM

Roger Sutton, Chief Executive, CERA.

## 4. PRESENTATION OF PETITIONS

### 5. REQUESTS ARISING FROM PREVIOUS PUBLIC FORUM

Officer responsible:	Chief Executive

#### PURPOSE OF REPORT

1. This report provides information, or an update on progress to provide that information, in response to queries arising from previous public forums.

#### EXECUTIVE SUMMARY

2. At its meeting on 1 December 2011, the Council requested that each agenda for Council Earthquake meetings include a report answering questions asked/issues raised in the public forum section of previous meetings. Attachment one provides a list of issues raised by public forum participants at the Council meeting on 2 February. It also includes additional information regarding Council resolutions from December 2011 as requested on 2 February.

#### STAFF RECOMMENDATION

It is recommended that the Council note the information contained in attachment one on responses to issues that have been raised during the public forum agenda item of the 1 December 2011 and 2 February 2012 Council meetings.

## COUNCIL 16. 2. 2012

## REPORT BY THE CHAIRPERSON OF THE HAGLEY/FERRYMEAD COMMUNITY BOARD

### 1 FEBRUARY 2012

## PART A - MATTERS REQUIRING A COUNCIL DECISION

### 6. PROPOSED TREE REMOVALS IN BROMLEY PARK, LINFIELD PARK AND CUTHBERTS GREEN

General Manager responsible:	General Manager City Environment, DDI 941 8608	
Officer responsible:	Unit Manager Transport and Greenspace	
Author:	Rico Parkinson, SCIRT Rod Whearty, Communication Coordinator Operations, SCIRT	

## PURPOSE OF REPORT

1. The purpose of this report is to present the recommendation of the Hagley/Ferrymead Community Board to the Council for approval of the removal of up to 25 trees in Bromley Park, Linfield Park and Cuthberts Green in association with the construction of Pressure Main 11.

### EXECUTIVE SUMMARY

- 2. This report, seeking approval to remove a number of trees in the above parks, has been presented to the Hagley/Ferrymead Community Board for consideration and recommendation to the Council to make the final decision in relation to the proposed tree removals.
- 3. The proposed tree removals are in association with the construction of Pressure Main 11. This is a high priority wastewater project being undertaken by the Stronger Christchurch Infrastructure Rebuild Team (SCIRT), in response to the Christchurch earthquakes, that involves the construction of a new 3.6 kilometre (1200 millimetre diameter) wastewater pipeline going from Pump Station 11 in Randolph Street to the Bromley Wastewater Treatment Plant (refer **Attachment 1**).
- 4. Pump Station 11 handles approximately 30 per cent of the city's wastewater through an existing 1200 millimetre pipeline and two 600 millimetre pipelines. The new pipeline will replace the two existing 600 millimetre pipelines that were badly damaged in the earthquakes.
- 5. The two existing pipelines are around 50 years of age and are currently damaged and unable to take any significant flows. This means that Pump Station 11 is currently unable to operate at its full capacity and is now totally reliant on the one remaining 1200 millimetre pipeline. Therefore this work needs to be carried out as soon as possible to provide a reliable and more resilient wastewater network to this part of the city.
- 6. Construction will be carried out simultaneously on at least three separate work fronts due to the significance of this project, compressed delivery timeframe and to help reduce the duration of any adverse impacts associated with the construction on the community. The first stage of the 3.6 kilometre pipeline commenced construction in Linfield Park on 16 January 2012, with further stages programmed to commence around February/March 2012.
- 7. Installation of the new pipeline unfortunately requires the removal of a number of trees in Bromley Park (two trees, possibly three), Linfield Park (two trees), Cuthberts Green (15-20 plantation trees and a small group near the boundary of the Bromley Treatment Plant, final numbers will be influenced on the proximity of the trench face to the tree). There will also be significant pruning on a number of other trees through the Cuthberts Green section of the pipeline to raise the canopy and provide clear work space for construction machinery. The trees will be replaced in other locations on all three parks during the next planting season (May to September 2012) to compensate for the removals.

8. Careful consideration has been given to the alignment of the new pipeline to minimise the number of trees requiring removal and reduce the level of adverse impact on the existing sport fields in Bromley and Linfield Parks. The importance of these sports fields has increased significantly following the earthquakes as they are some of the few remaining undamaged fields on this side of the city. The Hagley/Ferrymead Community Board approved an easement over a section of Bromley Park on 14 December 2011 for the current alignment. The easement for the section of pipeline that crosses Linfield Park and Cuthberts Green has already been approved by the Corporate Support Manager under delegated authority because those two parcels of land are held in Fee Simple as opposed to Bromley Park which is held under the Reserves Act.

#### FINANCIAL IMPLICATIONS

- 9. This project is part of the infrastructure rebuild activity that sits within the Infrastructure Rebuild Plan approved by Council on 1 December 2011. The Annual Plan has made provision for infrastructure rebuild activity in the 2011/12 financial year. Costs associated with the removal of these trees are simply part of the overall cost associated with the construction of Pressure Main 11.
- 10. While moving the pipeline alignment into Bromley Park requires the removal of two trees, it does provide a significant cost saving to the project. The alternative option is to keep the pipeline within the road corridor; however the traffic management cost alone of up to \$2,000 per day would add an additional \$60,000 in traffic management costs and an additional \$90,000 in carriageway reinstatement.
- 11. The pipeline alignment through Linfield Park is also the most cost effective and causes the least amount of disruption to the recreational activities occurring on the park. Changing the alignment to avoid removing the trees and follow the line of the existing pressure pipe (currently inoperative) would add an additional 40 metres of pipe and the associated additional reinstatement costs for the playing surfaces and the irrigation system. It would also reduce the amount of available playing area over the summer sports season. The additional cost for this realignment is estimated at \$80,000.
- 12. Changing the alignment through Cuthberts Green to avoid removing the plantation of trees completely would require purchase of all or part of an adjoining private property which would delay the project significantly and add a significant cost. No estimate has been undertaken on this option as it was not considered viable. The alignment proposed significantly reduces the number of trees requiring removal compared to a direct route through the plantation.

## Do the Recommendations of this Report Align with 2009-19 LTCCP budgets?

13. Yes as above.

#### LEGAL CONSIDERATIONS

14. The Transport and Greenspace Manager has the following delegation with respect to trees:

"In consultation with any other units affected and the relevant Community Board, authorise the planting or removal of trees from any reserve or other property under the Manager's control".

- 15. While the Transport and Greenspace Manager has the delegation to remove the trees, current practice is that in most cases requests to remove healthy and structurally sound trees are placed before the appropriate Community Board for a decision.
- 16. Under the delegations to Community Boards, the Board has the authority to *"plant, maintain and remove trees on reserves, parks and roads"* under the control of the Council within the policy set by the Council.

- 17. In response to the earthquakes, the Council has established a schedule of two meetings per month specifically to deal with decisions or issues related to the Christchurch earthquakes. The proposed tree removals will be presented to Council because the decision relates to a high priority wastewater infrastructure rebuild project which has metropolitan significance and the outcome or impact of that decision goes well beyond the local community.
- 18. This report is being presented to Council via a Part A report, and therefore Council will be aware of the Community Board's view on the proposed removals through their recommendation and able to take that into consideration when making the decision.

#### Have you considered the legal implications of the issue under consideration?

19. Yes, as per above.

#### ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

20. The infrastructure rebuild was not anticipated by the LTCCP or Activity Management Plans, but is a response to a natural disaster.

## Do the recommendations of this report support a level of service or project in the 2009-19 LTCCP?

21. Yes, the Annual Plan has made provision for the infrastructure rebuild activity in the 2011/12 financial year. Future activity will be addressed in successive Annual Plans and the 2013–22 Long Term Plan.

#### ALIGNMENT WITH STRATEGIES

22. The draft CERA Recovery Strategy provides for the development of a Land, Building and Infrastructure Recovery Plan. This work is in line with and part of the Infrastructure Rebuild Plan approved by Council on 1 December 2011.

#### Do the recommendations align with the Council's strategies?

23. Yes, as above.

#### CONSULTATION FULFILMENT

- 24. Careful consideration has been given to select an alignment that minimises the number of trees that need to be removed. The Hagley/Ferrymead Community Board recently approved an easement on Bromley Park for the current alignment. These factors, combined with the significance, timing of the project and the cost of altering the proposed alignment has meant there is limited opportunity for the community to influence the proposed tree removals.
- 25. SCIRT recognise the importance of advising local residents of the pending work and delivered an information leaflet to approximately 180 properties near the locations of the proposed tree removals on all three parks on 21 December 2011. The information leaflet provided a project overview to provide the necessary context and significance around the work and informed residents of the proposed tree removals including the intention to seek the Council's approval for the tree removals. Contact numbers were also provided for anyone who had concerns with the proposed removals or wanting further information on the project.
- 26. At the time of submitting this report, no adverse community feedback on the proposed removals had been received. A verbal update will be provided at the meeting on any community feedback that has been received prior to this report being considered.

#### STAFF RECOMMENDATION

It is recommended that the Council approve the request to remove up to 25 trees from Bromley Park, Linfield Park and Cuthberts Green as shown on **Attachments 2, 3** and **4** of this report.

#### BOARD CONSIDERATION

The Board considered a report requesting that the Board recommended that the Council approve the removal of up to 25 trees in Bromley Park, Linfield Park and Cuthberts Green in association with the construction of Pressure Main 11. The Board also received a briefing on the Pressure Main 11 Wastewater infrastructure rebuild project.

#### BOARD RECOMMENDATION

It was **decided** on the motion of Tim Carter, seconded by Islay McLeod, that the Board recommend to the Council that the staff recommendation be adopted.

#### BACKGROUND

- 27. This project is strategically significant because Pump Station 11 transfers approximately 30 per cent of the city's wastewater from Linwood to the Treatment Plant. Prior to the earthquake, this occurred via three pressure mains. One 1,200 millimetre diameter pipe which is around five years old, and two 600 millimetre pipes which are around 50 years old were due for replacement within the next 10 years.
- 28. Faults occurred on all three of these existing pressure mains during the September and February earthquakes with raw sewage spilling in a number of locations, posing a health risk to the public.
- 29. The 1,200 millimetre pipe currently takes all the incoming flow to the pump station. The older pipes have been determined to be too damaged for future use. Therefore, a new or refurbished main is needed to ensure the resilience and future security of this critical wastewater network for the people of Christchurch.
- 30. The project is a major priority for SCIRT, with Council requesting the project to be completed by the ambitious target of Winter 2012. The project is significant and will require around eight months to complete. For this reason, work is beginning as early as possible in 2012 to maximise the likelihood of meeting the target completion date. This will provide the additional benefit of being a significant recovery milestone for the people of Christchurch.
- 31. A number of options were considered, including repairing the existing pipes, replacing the existing pipes and upgrading the two 600 millimetre pipes to a single 1,200 millimetre pipe. Through a robust options analysis it was determined that a single, larger replacement pipe would provide the best value for money and the greatest security to the network including capacity for the future development of the city within the pump station's catchment. Council, as the asset owner, has endorsed this option.
- 32. SCIRT is also building resilience into the Pressure Main 11 project by carefully considering the materials and alignment for the 1,200 millimetre pipe. The pipe is a glass reinforced pipe, selected for its flexible nature. The existing 1,200 millimetre pipe is reinforced concrete which is a rigid pipe and the additional (more flexible) pipe will provide more resilience in this network for any future earthquake event. If a future earthquake event caused small changes in horizontal and vertical land positions, the flexibility of glass reinforced pipe would be subject to a lower risk of failure than the more rigid existing pressure main.

- 33. The alignment of this new pipeline has the following advantages:
  - (a) Following the alignment of the existing 600 millimetre pressure main along Aldwins and Buckleys Roads has meant that there is a corridor for the new pressure main to go down, and minimises the amount of services that will have to be diverted, thus ensuring it is a cheaper and less disruptive route. It also ensures that the existing pressure main will be removed when possible and reduce the risk of further damage to the roads if the old pipe were to collapse.
  - (b) The proposed route also avoids passing through private properties and minimises reduction of sports grounds by staying in the road reserve as much as possible, to reduce the impact of the installation and possible future maintenance of the pipe.
  - (c) It achieves the greatest separation of the two pressure mains. Two distinct pipes in different locations provide more security of service. If one pipe failed due to land movement, it is less likely the other would be impacted if it was located a reasonable distance from the other.
  - (d) It is the preferred route that minimises the impact on Bromley Park and Linfield Park sports fields which are now in high demand and two of the few that are currently available for recreational activities due to significant damage to other sports fields in this part of the city, providing an approximate cost saving of \$300 per metre, providing good value for money.
  - (e) It enables the project to be completed in the shortest possible time.
  - (f) The initial route of the pipeline where it leaves Pump Station 11 will follow the existing alignment in Randolph Street, then onto Aldwins Road via Marcroft Street. This route has been selected because the alternative route experienced significant liquefaction.

## OPTIONS

- 34. The project alignment unfortunately requires the removal of a number of trees in three areas: Cuthbert's Green, Linfield Park and Bromley Park. The project team is conscious of the value placed on trees by the people of Christchurch and has carefully considered the alignment. The aim is to provide a balance between the need for maintaining a green city, the need to complete the project in a timely fashion, the need to preserve the use of the sporting fields, the possible traffic implications and the costs associated with alternate routes. A detailed description of these sites where trees are flagged for removal and justification for the removal of trees is outlined below.
- 35. It should be noted that the chosen route minimises the number of trees requiring removal. Any trees that are removed will be replaced with new trees in slightly different locations as trees should not be planted on above pressure mains as they may cause failures in the future.

#### Bromley Park (two, possibly three trees to be removed)

- 36. The alignment at Bromley Park (as shown in **Attachment 2**) has been chosen to avoid any impact on the traffic lanes on Buckleys Road, and to avoid any impact on the playing fields. The trees at the northern end of the park overhang the road and clash with our proposed alignment, and therefore are required to be removed. The reasons for this alignment are:
  - (a) Buckleys Road is a major arterial road. The impact of placing the alignment in the live traffic lanes would be a cost of around \$2,000 per day for traffic management in addition

to the major inconvenience associated with having to reduce this section of road to one lane. There would be an additional \$60,000 in traffic management cost and \$90,000 in carriageway reinstatement if the pressure main was to stay within the road corridor running past Bromley Park. There would also be costs associated with additional bends and power to run the pressure mains.

- (b) The two or three trees that are flagged for removal currently overhang the road and footpath and present a risk to traffic and pedestrians if branches break.
- (c) Trees consist of:
  - (i) one Elm approximately 15 years old and 10 metres in height
  - (ii) one Sycamore approximately 15 years old and eight metres in height
  - (iii) one Sycamore approximately 15 years old and eight metres in height (may not have to be removed; depends on how close the trench face comes to the tree).

#### Linfield Park (two trees to be removed)

- 37. The chosen alignment is depicted in **Attachment 3**. The alignment at Linfield Park follows the southern boundary of the park. There are two trees that are required to be removed at the south western corner on the Kearney's Road frontage of the park. The reasons for this alignment are:
  - (a) Linfield Park (Cuthbert's South) is one of the most utilised playing fields in the east of the city and was one of only two parks still operational and undamaged after the earthquakes. The route along the southern side of the park was chosen as it minimises the disruption to the existing playing fields.
  - (b) If the alignment was moved north to avoid all trees, two playing fields would need to be dug up (both less than three years old). This would mean less available playing area over the summer, and alternative locations would need to be found to play softball and touch rugby.
  - (c) Moving the alignment north through the park would mean sharper bends would be required along Kearneys Road, which would add cost to the running of the pressure main.
  - (d) One of the two trees is also overhanging power lines, and its roots are believed to be within the area of two buried 11 kilo-voltage power cables. Removing the tree will reduce the risk of damage to these cables.
  - (e) Trees consist of:
    - (i) one Eucalyptus approximately 30 years old and nine metres in height
    - (ii) one Eucalyptus approximately 30 years old and 15 metres in height.

#### Cuthbert's Green (approximately 20 trees to be removed)

- 38. The chosen alignment (as shown in **Attachment 4**) runs from Kearneys Road along the southern boundary of Linfield Park to just past the first playing field and then cuts across the second playing area through to an old embankment in the small pine plantation. It then follows the embankment to Cuthbert's Green where the route follows the existing pressure main into the treatment plant. The reasons for this alignment are:
  - (a) It ensures there are not sharp bends in the pipe which would increase the cost to run the pressure main, as more power would be required for the pumps to transfer the wastewater.

- (b) The route through the plantation follows a raised embankment which is relatively clear of trees, Around 15 trees have been identified through the plantation section of Cuthberts Green and up to five trees outside of the plantation area and adjacent to the boundary of the Bromley Treatment Plant. The raised embankment reduces the risk of encountering groundwater which has the potential to add up to \$2,000 per metre to project costs for dewatering.
- (c) It provides the advantage of ensuring no other trees would be subjected to damaging wind due to being exposed by the removal of the other trees.
- (d) The route through Cuthbert's Green follows the existing alignment of the old pressure main which will enable the old pipe to be removed as part of the project. There is not enough room to move the pipe north due to other pressure mains from different parts of the city. Moving the pipe south of all the trees will mean the alignment will be parallel and closer to the other 1,200 millimetre pressure main from pump station 11.
- (e) Trees consist of:
  - (i) up to 15 Pinus radiata approximately 20 years old and 12–15 metres in height, through the "plantation" section of Cuthberts Green
  - (ii) three Pinus radiata approximately 40 years old and 25 metres in height near the boundary of the Wastewater Treatment Plant.

## 7. EARTHQUAKE RECOVERY – LAND AND HOUSING SUPPLY

General Manager responsible:	General Manager Strategy & Planning, DDI 941-8281	
Officer responsible:	Programme Manager District Planning	
Author:	Peter Eman, Principal Advisor Planning	

#### PURPOSE OF REPORT

1. The purpose of this report is to brief the Council on the work being undertaken by Council staff on the provision of land for housing as part of the earthquake recovery and related issues.

#### EXECUTIVE SUMMARY

#### **Main Points**

The following are the main conclusions from the work done to date:

- Land for 20,838 households has been rezoned in Greater Christchurch since the earthquakes began (7,815 within the City).
- It is estimated that developers will release up to 6,600 greenfield sections to the market in the next two years within Greater Christchurch (3,234 within the City) this is likely to exceed the demand from Red Zone households seeking to relocate within Greater Christchurch.
- The rate of release of sections/houses will be highly dependent on the speed the development community releases land.
- Beyond the next two years, further land release will also be dependent on the ability to supply appropriate levels of trunk infrastructure.
- A major remaining issue is providing accommodation for the rebuild workforce and temporary accommodation for households while their homes are being rebuilt/repaired.
- The now operative Regional Policy Statement identifies a total capacity for 41,370 households in greenfield locations within the UDS area of Greater Christchurch (includes the land already rezoned since the earthquakes began).

## Introduction

- 2. Shortly after the establishment of CERA last year the UDS Partners approached CERA to offer assistance in planning for the recovery of Greater Christchurch. As a result a CERA/UDS Liaison group was set up that met regularly to work on a range of issues as they arose. Although the Earthquake Recovery Act provided for the development of a recovery strategy and recovery plans, it quickly became apparent that there was a need to start work on some issues before those documents were finalised. The issue of providing sufficient land for housing was, in particular, seen to require urgent action, particularly considering the timeframes necessary to bring land to the market ahead of residents being displaced from Red Zone areas.
- 3. At this early stage there was limited information that would allow an accurate estimation of housing needs, and the government/CERA initial response was to seek the identification of significant new housing areas that could cater for relocating Red Zone households in particular. CERA advised that a target of releasing at least 6,000 sections onto the market before April 2013 should be adopted in the interim.

## Existing Greater Christchurch Provision for Urban Growth

4. The work previously undertaken in the development of the Urban Development Strategy (UDS) and Proposed Change 1 to the Regional Policy Statement was an important and valuable starting point to achieve that target, as it identified appropriate locations for a large number of additional households through to 2041 and included an infrastructure plan to support it.

- 5. At the time the recovery work was beginning on land supply, negotiations were also happening to resolve some of the appeals on Proposed Change 1 to the Regional Policy Statement. Those negotiations resulted in some additional Greenfield Areas being agreed to become part of Proposed Change 1 (e.g. Prestons and Highfield). Proposed Change 1, with these additions, was made operative by the Minister for the Canterbury Earthquake Recovery, along with the airport noise contours, in October 2011. The now operative Regional Policy Statement identifies capacity for 41,370 households in greenfield locations within the UDS area of Greater Christchurch, plus another 33,490 households through intensification within existing urban areas. The changes accepted through the RPS process specifically considered the desirability of providing additional greenfield capacity in the north-east of the City, to provide greater choice to those residents potentially dislocated from the Red Zones.
- 6. Proposed Change 1 had also proposed a specific sequencing for the release of land in the various greenfield areas, but it quickly became apparent that a greater level of flexibility in the release of land would be necessary for earthquake recovery. For this reason the provisions in the Regional Policy Statement that were made operative by the Minister last year do not include specific sequencing of Greenfield Areas. That loss of sequencing does have implications for the Council in terms of infrastructure planning and funding, which will be commented on later.

## Zoned Land

- 7. The UDS Partners and CERA identified high priority greenfield areas that could provide for the now 6,500 Red Zone households, based largely on those greenfield areas that were well through the normal plan change process under the Resource Management Act. The principle of ensuring that areas developed as part of the earthquake recovery where not poorly designed or subject to natural hazards has been accepted by CERA, the UDS Partners, and the major developers. As such, the approach has been that proposed developments should go through a resource management assessment process. The Minister has used his powers to remove appeal rights on some plan changes, but this has only been after a resource management assessment by Council's and a decision that the plan change be accepted.
- 8. Within the City sufficient greenfield land has achieved re-zoning for 7,815 households since the earthquakes began. Each residential greenfield area that has planning approval has a staff member allocated to champion and facilitate development of the area, including subdivision processes. In addition to this there is previously zoned land actively being developed with capacity for 2,073 households, plus a considerable area of land not actively being developed. (Refer Attachments 1 and 2, which are a map and table indicating greenfield land status within Christchurch City as at January 2012).
- 9. Within the Greater Christchurch as a whole, greenfield land has been re-zoned since the earthquakes for 20,838 households, in addition to the existing zoned land available before the earthquakes (capacity for 5,227 households in areas where development is being pursued, plus an additional land bank where development is not being pursued). Therefore, in terms of zoning, the UDS Partners have easily provided for sufficient zoned land to meet the initial target of 6,000 by 2013.
- 10. There is capacity for a further 13,085 households within the City in the Greenfield Areas provided for by the Regional Policy Statement (3,400 where plan changes are lodged and 9,685 in Greenfield Areas where plan changes have not yet been lodged). Of that number, a minimum of 1,300 are on land that is due to be rezoned shortly in a final decision from the Environment Court (Belfast 293) and another 2,100 households are included in a recently lodged Highfield Park plan change in the Mills Road/Hills Road Greenfield Area (although further information is required in order to progress that plan change). Proposals for another 3,772 households are the subject of pre-lodgement discussions (Spreydon Lodge at Sparks Road and development of Upper Styx Greenfield Area). Council staff have been actively involved in ensuring there is involvement and co-ordination of landowners in these proposed plan change areas, particularly where there have been multiple approaches to the Council about the development of different portions of individual Greenfield Areas. One of the key tools now enshrined in the Regional Policy Statement is the preparation of a plan for large

greenfield blocks to ensure that an appropriate and coordinated urban and infrastructure framework is in place ahead of individual subdivisions taking place. This is either achieved through the preparation of an Outline Development Plan for the whole of the Greenfield Area or, where Area Plans exist, for parts of a Greenfield Area provided it is consistent with the high level framework in an Area Plan. Most Greenfield Areas are covered by either the South-West or Belfast Area Plans. The development of Outline Development Plans for those few Greenfield Areas not covered by an Area Plan has either been completed as part of a plan change or is in the process of being completed by landowners within those areas preparing plan changes.

11. The work on the land and housing supply issue is now focusing on whether there are any constraints to the development of the zoned land that is likely to be developed after the next two years, including the provision of infrastructure, and whether the development community will be able to deliver the sections and homes required.

## Matching Housing Demand and Market Supply

- 12. CERA put out a request for information last year to the development community, asking for an indication of proposals for urban developments and any constraints that may exist to such development. UDS Partners and CERA have been working through the 110 responses, and other separate approaches that have been made for potential developments, and will respond back to each proponent in due course. A number of the proposals are outside the Urban Limits in the Regional Policy Statement and therefore would be additional to the significant areas of land already re-zoned or identified for rezoning. A number of proposals have also been considered by the Council and rejected on environmental and hazard management grounds, but some of these may need to be reconsidered in the light of the earthquakes should obvious constraints in the market appear. However the Council(s) are being encouraged to further tighten their hazard evaluations which will mean that many possible developments remain unsuitable in the future.
- Work has now been undertaken to provide an estimate of the likely timing and numbers of 13. sections to be released by developers, out of the large amount of land that has already been rezoned, particularly in the next two years when the demand from Red Zone residents is likely to be greatest. This has been informed by knowledge of known developments, responses to the CERA request for information, other developers' indications of proposed development programmes, and Memorandums of Understanding that CERA and the UDS Partners have entered into with some developers to achieve the release of specific numbers of sections over the next two years. The results of that work estimates that a total of some 6,660 greenfield sections will be released onto the market by developers in Greater Christchurch in the next two vears, of which 3.234 will be within the Christchurch City area. In addition, some 545 homes are anticipated in the next two years within the existing urban area through intensification and development of brownfield sites (generally sites previously used for business activities). CERA and the UDS Partners are currently involved in discussions with landowners of brownfield sites to determine whether it is possible to accelerate the residential development of such sites. On the basis of these estimates it appears that the development community is likely to release sufficient sections onto the market to readily achieve the initial target of 6,000.
- 14. These estimates of land that will be available on the market are, of course, subject to change through decisions made by the development community. Councils can facilitate the provision of land and housing to the market through the rezoning of land, the provision of infrastructure, and taking other steps to encourage and facilitate development. However, ultimately it will be the development community who decides how much land is actually released to the market, depending on a range of factors, including availability of workforce and machinery, and finance and insurance issues.
- 15. CERA also undertook a survey of Red Zone residents last year to determine how many are likely to wish to move to locations within greater Christchurch, rather than leaving the area. The UDS Partners have also initiated a modelling report to determine how the responses to the red

zone survey and other factors may translate into demand for housing and the potential location of that demand. Four scenarios have been developed ranging from Slow to Rapid. The provisional results of the draft report indicate that the maximum number of sections required would occur if the recovery is as per the Rapid scenario, requiring 4,160 sections to accommodate Red Zone residents and any population growth (with assumptions made to take into account current orange and white zones). In the worst case recovery scenario of Slow, no sections would theoretically be required because the demand for sections from red zone residents would not exceed the number of existing green zone residents leaving greater Christchurch. (Note: such exercises do not address the preferences of individual landowners.)

- 16. However, in addition to the demand from Red Zone residents and population growth, there is likely to be considerable demand for housing for the workforce relating to the rebuild and for residents temporarily displaced while their houses are being repaired or rebuilt. Initial estimates are that the workforce peak required could be in the order of an additional 36,000 people and the temporarily displaced households peaking at 7,000. Work is currently underway to refine those rough estimates in terms of the numbers, timing and peaks, and to determine the form and location of accommodation that may be necessary to accommodate this demand. The work may or may not determine that further greenfield land needs to be rezoned. However, it seems unlikely that this will require more greenfield land than that currently identified in the Regional Policy Statement, particularly as at least some of it should be accommodated through brownfield developments and intensification.
- 17. A monitoring system is being investigated to track the supply of land against demand, particularly over the next two years.

#### Infrastructure

- 18. One of the most challenging aspects of the recovery will be the provision of infrastructure necessary to meet housing needs. This is particularly so in respect of greenfield development. One of the fundamental planks of the Urban Development Strategy and the Regional Policy Statement was the issue of infrastructure efficiency and cost minimisation. This was to be achieved by concentrating growth in particular parts of the City, which allowed for the most efficient delivery and operation of infrastructure. Since the earthquakes began there has been an increase in the number of greenfield areas identified for development and the timing of development for many greenfield areas has been brought forward. In a number of cases the infrastructure required for the development of these greenfield areas is not in the current LTCCP, or has to be brought forward to meet earlier demand.
- 19. There are, or will be, no infrastructure impediments to the greenfield development expected in the next two years. However, work is underway to determine the infrastructure needs of the residential greenfield areas beyond that time. Decisions will ultimately need to be made as to priority of the various infrastructure projects and how they will be funded. Those decisions will naturally need to be made in the context of which greenfield areas need to be progressed when, and that will in turn be dependant on the as yet unresolved anticipated demand for sections. How these questions are to be resolved with CERA has yet to be clarified. There may be some desire to maximise the number of greenfield areas available for housing development. However, a significant and on-going oversupply of serviced land is likely to result in the inefficient provision and operation of infrastructure, with potentially significant rating costs on the community. If housing demand is spread thinly over a large number of greenfield areas the Council will potentially face the up-front construction costs for an unnecessarily large number of infrastructure projects, higher debt costs through slower repayment from development contributions for each infrastructure project, and more operational costs. These issues have been raised with CERA and will also begin to be reflected as early as the 2012 Annual Plan, as parts of the infrastructure programme become recommended for reprioritisation.
- 20. A further issue is the inability of the Council to proceed with the construction of infrastructure required for earthquake recovery in a way that is not consistent with the current LTCCP, or to recover costs for such infrastructure through development contributions, except through the

normal procedures set out under the Local Government Act. Until the end of last year there was an Order in Council that allowed the Council to construct infrastructure that was inconsistent with the LTCCP, but that has now expired. Changes to the LTCCP, and also to the Development Contributions Policy that provides for the recover of infrastructure costs, can therefore now only be made through the normal procedures under the Act. This situation may make it difficult for the Council to respond quickly to changing infrastructure needs identified as the recovery proceeds, and to recover costs for infrastructure that is not provided for in the Development Contributions Policy. Discussions are underway with CERA on the possibility of enabling the Council to make changes to these documents in a more timely fashion, and the upcoming annual plan and LTCCP amendment will also help address this.

#### **Recovery plans and programmes**

21. The draft Recovery Strategy released last year indicated that there was to be a Land, Building and Infrastructure Recovery Plan to review the provision of land for housing, business and other urban activities and the provision of infrastructure, including social infrastructure. This was both at the strategic and detailed level (e.g. the Regional Policy Statement, Regional Land Transport Strategy, and other relevant plans and strategies). CERA and the UDS partners have begun a review of the relevant documents, taking into account the issues relating to the demand and supply of housing discussed earlier, as well as business land needs. It is understood that there will be a number of changes to the draft Recovery Strategy, and that the Land Building and Infrastructure Recovery Plan may become part of a Built Environment Recovery Programme. The work discussed above is likely to be incorporated into that recovery programme. The work governance framework which CERA are currently developing.

#### **Other Issues**

22. The CERA/UDS liaison group have also been working on a number of related issues, including the provision of input into the Department of Building and Housing guidelines on the geotechnical assessments required for plan changes, subdivision applications and building. The Recovery Strategy suggests that there will be a need to provide future input into a range of other issues relating to land supply, building and infrastructure. Future work will also consider business land needs.

#### FINANCIAL IMPLICATIONS

23. The report recommendation has no financial implications, but the work being reported on will. Refer to the comments below on the alignment with LTCCP budgets.

#### Do the Recommendations of this Report Align with 2009-19 LTCCP budgets?

24. The recommendation does not affect the LTCCP, but the work being reported on has the potential to lead to inconsistencies with the LTCCP. This is particularly so in terms of the provision of infrastructure, as discussed in the report. These will be addressed as part of the upcoming Annual Plan, and LTCCP amendment, and may be addressed on an as required basis under the CERA Act 2011.

#### LEGAL CONSIDERATIONS

25. None.

## Have you considered the legal implications of the issue under consideration?

26. None.

#### ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

27. Refer to the comments above on the alignment with LTCCP budgets.

# Do the recommendations of this report support a level of service or project in the 2009-19 LTCCP?

28. Refer to the comments above on the alignment with LTCCP budgets.

#### ALIGNMENT WITH STRATEGIES

29. The work reported on is generally aligned with the UDS, with modifications in response to the earthquakes.

## Do the recommendations align with the Council's strategies?

30. The work reported on is generally aligned with the UDS, with modifications in response to the earthquakes.

#### CONSULTATION FULFILMENT

31. Various consultation is occurring in this work programme by CERA and the UDS partners.

#### STAFF RECOMMENDATION

It is recommended that the Council receive the information in this report.

#### 8. SUBURBAN CENTRES: EDGEWARE AND NEW BRIGHTON

General Manager responsible:	General Manager Strategy and Planning, DDI 941-8281		
Officer responsible:	Jenny Ridgen, Programme Manager Healthy Environment		
Author:	Dale Harris, Assistant Policy Planner		

#### PURPOSE OF REPORT

1. The purpose of this report is to seek approval for the commencement of two masterplans under the Suburban Centres programme: Edgeware and New Brighton.

#### EXECUTIVE SUMMARY

- 2. The Suburban Centres programme was approved at the 23 June 2011 Council meeting. This programme of work includes masterplans for a small number of centres, and case management for all other earthquake-damaged centres.
- 3. Following further investigations and discussions with Community Boards, it is now recommended that masterplans be undertaken for New Brighton and Edgeware. In Edgeware, the degree of damage and potential for centre revitalisation makes it a good candidate for a masterplan. For New Brighton, the changing size of the residential catchment and function of the centre mean that masterplanning would provide guidance to long-term redevelopment.

#### FINANCIAL IMPLICATIONS

4. The budget for Council-led masterplans of this size is \$50,000 per centre, excluding staff-time.

#### Do the Recommendations of this Report Align with 2009-19 LTCCP budgets?

5. Funding has been allowed for within Strategy and Planning Group budgets as confirmed in the Annual Plan.

#### LEGAL CONSIDERATIONS

6. There are no immediate legal considerations. Officers have met with officials from CERA and will continue to do so to ensure that the work is consistent with the Recovery Strategy and will inform the development of Recovery Plans.

#### Have you considered the legal implications of the issue under consideration?

7. Yes, as above.

#### ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

8. The programme was not anticipated by the LTCCP or Activity Management Plans but is a response to a natural disaster and reflects the Council's land use planning functions. Provision has been made for the Suburban Centre Programme through the Annual Plan process.

## Do the recommendations of this report support a level of service or project in the 2009-19 LTCCP?

9. Yes – the Annual Plan 2011/12 includes a revised level of service. The recovery of Suburban Centres is supported by urban design and planning initiatives.

#### ALIGNMENT WITH STRATEGIES

10. The masterplans will be consistent with the Urban Development Strategy objectives and its implementation tool Chapter 12A of the Regional Policy Statement. They will recognise the current hierarchy of commercial centres, and will be consistent with the vision of enabling the central city to be the pre-eminent business, social and cultural heart of the City.

11. The draft CERA Recovery Strategy identifies local neighbourhood plans and initiatives as one of its goals to help communities recover. The Suburban Centres Programme and these Masterplans are therefore consistent with the Recovery Strategy.

#### Do the recommendations align with the Council's strategies?

12. Yes.

#### CONSULTATION FULFILMENT

13. All Community Boards with earthquake-affected centres were briefed in October-November 2011 and potential masterplans for those wards were discussed. The Burwood-Pegasus and Shirley-Papanui Boards identified New Brighton and Edgeware respectively as centres that required more attention than case management alone could provide. Their feedback supports the recommendation for masterplanning these two centres.

#### STAFF RECOMMENDATION

14. It is recommended that the Council approve the commencement of masterplans for Edgeware and New Brighton.

#### BACKGROUND

- 15. The Suburban Centres programme aims to support the recovery and rebuild of earthquakeaffected commercial centres across the City through assisting with planning, design and transport related matters. The programme involves two areas of work: masterplans and case management. Centres for which masterplanning is underway are: Lyttelton, Sydenham, Sumner, Worcester/Stanmore (now referred to as "Linwood Village"), Ferry Road/Main Road (stage 1) and the Selwyn Street shops. All other affected centres are being 'case managed' to encourage good outcomes and provide support for landowners who may need to interface with different sections of the Council and other organisations.
- 16. When the Suburban Centres Programme was approved, six centres were identified as possible contenders for future masterplans: Aranui, Beckenham, Edgeware, Linwood (Eastgate), New Brighton and Woolston. For these centres, further investigations have been undertaken as to whether a masterplan or continued case management is the most appropriate approach. These investigations included discussions with Community Boards. From these discussions, two centres were identified as needing masterplans: Edgeware and New Brighton.

#### Edgeware

- 17. Approximately one-third of businesses in Edgeware have closed or relocated as a result of the earthquakes. At least three buildings will be (or have been) demolished, including a large area of B2-zoned land that will be cleared creating the potential for new commercial development (Hardie & Thomson site).
- 18. To date, case management in Edgeware has been proactive with both the Council and Recover Canterbury business recovery co-ordinators liaising with businesses and property owners. The Saint Albans Residents' Association has also held a number of public discussions about the future of Saint Albans.
- 19. The Edgeware centre has a history of relatively poor amenity and the area is perceived by some to be dangerous for both pedestrians and car users. A concept plan for Edgeware titled "Giving Edgeware the Edge" was prepared in 1997 but was never fully realised. The Shirley-Papanui Community Board supports a full masterplan for Edgeware, and has suggested that this document be referenced as a foundation document.

20. The degree of damage and the potential to revitalise Edgeware following the earthquakes make this centre a positive candidate for masterplanning. A master plan would build confidence in the centre for businesses and the community and provide the framework to investigate urban design, transport and parking solutions for the eventual redevelopment of both public areas and private land.

## **New Brighton**

- 21. In New Brighton, five buildings have been or will be partially or fully demolished and six others have received either red or yellow placards. These properties are spread out through the centre, so the potential for significant change through rebuilding may be limited when compared with other masterplan areas.
- 22. The reduction of the centre's residential catchment following red-zone land decisions, combined with negative public perceptions of the 'east', have adversely affected the centre's earthquake recovery and longer-term viability. The shopping area is very spread out and is considered potentially too large to function well in its role, a matter that was evident before the earthquakes but is now more pronounced.
- 23. A 'New Brighton Revitalisation Master Plan' was approved in 2002 and one of the outcomes of this Plan was the development of the slow road, although little else has been implemented from this Plan. The Burwood-Pegasus Community Board supports a full masterplan and has suggested that the centre has a lot of latent potential, especially if it becomes more destination-focused and if willing property investors and landowners are involved at the outset.
- 24. New Brighton is identified in Chapter 12a of the Regional Policy Statement as a Key Activity Centre (KAC). This identification as a KAC places certain requirements upon the Council to manage the development of the centre to support the planned community, encourage business activity, broaden the mix of uses, encourage pedestrian and cycling access and support public transport, including transport interchanges.
- 25. While the physical damage to the shops and business is limited, the impact of the earthquakes on the residential catchment and on the centre's appeal has been significant. The potential to rethink the centre's function and to catalyse redevelopment make it a good candidate for masterplanning.

## 9. INFRASTRUCTURE REBUILD MONTHLY REPORT

General Manager responsible:	General Manager Capital Programme DDI 941 8235		
Officer responsible:	Infrastructure Rebuild Client Manager		
Author:	Will Doughty, Senior Project Manager		

#### PURPOSE OF REPORT

1. To provide Council with a monthly update on the infrastructure rebuild.

#### EXECUTIVE SUMMARY

- 2. At its 28 April 2011 meeting, Council gave approval for an Alliance to be formed to deliver the reinstatement of the City's damaged infrastructure. It was also agreed that the Chief Executive would report regularly to the Council on progress with regard to the reinstatement work.
- 3. The report **(Attachment 1)** is the fifth of what will be a regular Monthly Report that is provided to both Council and the Canterbury Earthquake Recovery Authority (CERA).

#### STAFF RECOMMENDATION

It is recommended that the Council receives the Infrastructure Rebuild Monthly Report for February 2012.

## 10. HERITAGE REINSTATEMENT PROGRAMME – POSEIDON CAFÉ REPAIRS

General Manager responsible:	General Manager Corporate Services DDI 941-8528	
Officer responsible:	Property Asset Manager	
Author:	Peter Wills, Property Asset Manager	

#### PURPOSE OF REPORT

1. To seek approval to move forward with the post-earthquake permanent repair at Poseidon Café (also known as Beachcomber).



#### **EXECUTIVE SUMMARY**

- 2. Poseidon Café is a non-listed Heritage Building located on the Esplanade in Sumner. It is listed in the City Plan as a Group 3 building with heritage significance on the basis that the building was constructed over a historic wharf structure.
- 3. The building suffered minor damage as a result of the February earthquake and additional damage from the 13 June earthquake event. As a whole the building performed very well. It is designed and well constructed to modern techniques and there are no structural vulnerabilities.
- 4. Damage is typical of a weatherboard construction. There is some damage to the timber floor, plaster cracking to walls and ceilings in isolated locations and one of the timber piles has cracked.
- 5. The building is insured for \$449,678, the total repair budget is \$288,472 designed to 87 per cent of code.

#### GEOTECHNICAL SUMMARY AND ENGINEERING ASSESSMENT

- 6. A Geotechnical assessment was carried out on the site and noted tension racking within the paved areas surrounding the building, differential settlement of the building and in particular the paved area to the east of the building. This damage is a result of liquefaction and lateral spreading.
- 7. The Geotechnical recommendation is for replacement of, or additional foundations in the beach zone (northern half of the building). This recommendation has been incorporated within the design solution.
- 8. The Qualitative Assessment completed in September calculated the building's strength at 87 per cent NBS.

#### INSURANCE AND STRENGTHENING COSTS

9. Tim Stephenson (Loss Adjuster for Cunningham & Lindsey) has provided the following statement:

"Based on the specification and scope, Insight has tendered a budget of \$288,472 for the reinstatement of earthquake-related damage, without consideration of any betterment or repair of uninsured damage. This budget estimate may fluctuate as repairs progress.

Insurers accept the specification and scope as a fair and accurate reflection of insured damage and can support reinstatement accordingly, noting asset-specific sums insured apply in every case."

10. Strengthening is not required on this building. The minor damage does not require a building consent. There are no immediate plans or recommendations to further increase the strength of this building above 87 per cent NBS.

#### FINANCIAL IMPLICATIONS

11. The total cost of the project to be funded by insurers is \$288,472. This is 64 per cent of the insured value of the building (\$449,678). This amount will repair the building to its preearthquake strength of 87 per cent.

#### **BENEFIT OF REPAIR**

- 12. The repaired asset will provide the Council with a revenue stream of approximately \$23,000 per annum.<sup>1</sup>
- 13. It will allow continued use of the building as a café, restaurant and bar. This creates additional choice for a community who have lost a number of eateries as a result of earthquake damage.
- 14. It will help to reinvigorate the Sumner area, both in terms of tourism and local foot traffic to the area.
- 15. Council will be observed as supporting local businesses to get back up and running.

#### RISK OF DOING NOTHING

- 16. The community are unable to benefit from the iconic location and café facility.
- 17. Tension from the tenant and other local groups will increase as Council is perceived as doing nothing.
- 18. The area will continue to look derelict.

## Do the Recommendations of this Report Align with LTCCP budgets?

19. No. The purpose of this report is to gain approval for permanent repair/reinstatement works on heritage buildings as per Council policy.

#### LEGAL CONSIDERATIONS

20. Not applicable.

#### Have you considered the legal implications of the issue under consideration?

21. As above.

#### ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

22. No. The purpose of this report is to gain approval for permanent repair/reinstatement works on heritage buildings as per Council policy.

<sup>&</sup>lt;sup>1</sup> Figure based on revenue pre-earthquakes.

## Do the recommendations of this report support a level of service or project in the LTCCP?

23. As above.

#### ALIGNMENT WITH STRATEGIES

24. Yes. The purpose of this report supports the facilities rebuild strategy and assists with the rebuild of Christchurch.

### Do the recommendations align with the Council's strategies?

25. Yes. Refer above.

## CONSULTATION FULFILMENT

26. Not applicable. Communication and consultation will be a project workstream.

## STAFF RECOMMENDATION

It is recommended that the Council approve the insurance reinstatement/repairs for the Poseidon Café to the value of \$288,472 to be funded by insurance proceeds.

## 11. HERITAGE REINSTATEMENT PROGRAMME – CURATORS HOUSE EARTHQUAKE REPAIRS

General Manager responsible:	General Manager Corporate Services, DDI 941-8528	
Officer responsible:	Property Asset Manager	
Author:	Peter Wills, Property Asset Manager	

#### PURPOSE OF REPORT

1. To seek approval to move forward with the post-earthquake permanent repair at Curators House, located in the Botanic Gardens off Rolleston Avenue.



#### EXECUTIVE SUMMARY

- 2. Curators House is listed in the City Plan as a Group 3 heritage building. Its heritage significance is also recognised by the New Zealand Historic Places Trust Pouhere Taonga who registers the building as a Category II Historic Place.
- 3. The Curators Residence is constructed in two parts, an original two story Arts and Crafts/Tudor style building and a modern single storey addition constructed in 1999. The building was being used as a Restaurant, but is currently unoccupied due to earthquake damage.
- 4. The building suffered damage in the February 2011 and June 2011 earthquakes.
- 5. Damage includes minor cracking of stone and masonry walls, damage to chimneys in the form of brittle fractures, north wall lintel supports have cracked leaving them vulnerable to collapse, general damage to internal walls and ceilings including a crack in ring foundation.
- 6. The building is insured for \$1,105,817. The total repair budget is \$752,758, designed to 67 per cent of code (Insurer portion being \$544,491). The total cost exposure for Council is \$208,267.
- 7. The 67 per cent target aligns with the Council's 'Earthquake-Prone, Dangerous and Insanitary Buildings Policy 2010'. This policy states that the new target for structural strengthening is 67 per cent of code.
- 8. It was not deemed practicable to strengthen to 100 per cent NBS. The design solution would be significantly more complex and would cause tremendous detriment to the existing heritage fabric. For this reason it has not been further explored.

#### GEOTECHNICAL SUMMARY AND ENGINEERING ASSESSMENT

- A preliminary Geotechnical assessment was carried out which confirmed there was no evidence of liquefaction-induced settlement or lateral spreading at the site. No further geotechnical work was required.
- 10. The Qualitative Assessment completed in November calculated the building's strength as a whole at 40 per cent NBS. Kitchen Wing 79 per cent/Dining Wing 40 per cent.
- 11. The proposed repair solution will increase the overall building strength to a minimum of 67 per cent NBS.

#### INSURANCE AND STRENGTHENING COSTS

12. Tim Stephenson (Loss Adjuster for Cunningham & Lindsey) has provided the following statement:

"Insurers accept the specification and scope (without allowance for strengthening) as a fair and accurate reflection of insured damage and can support reinstatement as per the supported specification. The cost of this is presently estimated at \$544,491; however this may fluctuate as repairs progress. We observe that specific sums insured apply in every case."

- 13. The above statement is the Insurer's interpretation of the policy, whereby they are only accepting costs associated with strengthening to 34 per cent NBS. Council has not accepted this, given the Territorial Authority requires buildings to meet 67 per cent NBS. This report documents a 'worse case' scenario of the Council's cost exposure.
- 14. The cost of strengthening the building to 67 per cent NBS for the non-damaged portion has been determined at \$205,267 and included within the overall budget. The \$205,267 excludes the rebuilding cost and associated strengthening to chimneys.

#### BETTERMENT

15. There is an opportunity to insulate the roof during the repair process, i.e. when the slate is off and the bracing is being carried out. The estimated cost for this is \$3,000. This will be funded from the existing Restricted Assets 2011/12 Capex Budget.

#### FINANCIAL IMPLICATIONS

- 16. The total cost exposure for Council is \$208,267. It is recommended that existing funding within the Restricted Assets 2011/12 Capex Budget be allocated to this project.
- 17. Curators House sits within the Council's Restricted Assets portfolio. This portfolio has approximately \$1,400,000 budgeted this financial year, which is for maintenance and improvement to the Council's heritage buildings. Of this amount, \$600,000 has been allocated to Robert McDougall leaving around \$800,000 for other restricted assets. Budget had originally been assigned for works on the Sign of the Takehe and Canterbury Provincial Chambers but these works are no longer progressing. Given the current situation it will be difficult to spend the remaining budget unless it was reallocated to other assets within the restricted assets portfolio. The Curators House is an ideal candidate.

Repair Elements:	Insurer to Pay:	Council to Pay:
Repairs to NBS 40%	\$544,491	\$0
Repairs to NBS 67%	\$0	\$205,267
Other Betterment	\$0	\$3,000
TOTAL:	\$544,491	\$208,267

Option 1: TO REPAIR TO 67% NBS

#### **BENEFIT OF REPAIR**

- 18. The repaired asset will provide the Council with a revenue stream of approximately \$50,000 per annum.<sup>1</sup>
- 19. The repaired asset will serve as a reminder and evidence of our past history. In particular the tradition of employing a curator to oversee and maintain the Botanic Gardens.
- 20. It will allow continued use of the building as a restaurant. This is an iconic central city venue which is highly recognised within the hospitality industry.
- 21. It will support the revitalisation/rebuild of the central city drawing people back to the gardens and the cultural precinct.

<sup>&</sup>lt;sup>1</sup> Figure based on pre-earthquake revenue.

#### **RISK OF DOING NOTHING**

22. Repairs to the building are delayed. This will push back the Tenant's date for reoccupying the building. The asset will deteriorate.

#### HERITAGE SUMMARY

- 23. The Curators House was built in 1920 replacing an earlier cottage used for the curator and is a physical reminder that from 1872 until 1983 the curator of the Botanic Gardens lived on site.
- 24. Designed by Collins and Harman the building is a combination of the Arts and Crafts tradition known as Old English or Tudor style. The ground floor wall construction of basalt rubble establishes an interesting relationship with the Museum.
- 25. The building uses common constructions methods of its time; however the exception is that the ground floor external walls are load bearing masonry backed by single brick carried up at the same time as the masonry was built. This form of construction was not common in Christchurch.

#### Do the Recommendations of this Report Align with LTCCP budgets?

26. No. The purpose of this report is to gain approval for permanent repair/reinstatement works on heritage buildings as per Council policy.

#### LEGAL CONSIDERATIONS

27. Not applicable.

#### Have you considered the legal implications of the issue under consideration?

28. As above.

#### ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

29. No. The purpose of this report is to gain approval for permanent repair/reinstatement works on heritage buildings as per Council policy.

#### Do the recommendations of this report support a level of service or project in the LTCCP?

30. As above.

## ALIGNMENT WITH STRATEGIES

31. Yes. The purpose of this report supports the facilities rebuild strategy and assists with the rebuild of Christchurch.

#### Do the recommendations align with the Council's strategies?

32. Yes. Refer above.

#### CONSULTATION FULFILMENT

33. Not applicable. Communication and consultation will be a project workstream.

#### STAFF RECOMMENDATION

It is recommended that the Council:

(a) Approve a project of \$752,758 for the reinstatement/repairs for the Curators House to be funded by insurance of at least \$544,491.

- (b) Approve the cost of \$205,267 for strengthening to 67 per cent NBS to be funded from the existing Restricted Assets Capex Budget due to the fact that this building is a protected heritage building in the City Plan.
- (c) Approve the betterment cost of \$3,000 for roofing insulation to be funded from the existing Restricted Assets Capex Budget due to the fact that this building is a protected heritage building in the City Plan.

#### 12. FACILITIES REBUILD PLAN

General Manager responsible:	General Manager Community Services, DDI 941 8607	
Officer responsible:	Strategic Property Analyst	
Author:	Rob Hawthorne, Strategic Property Analyst	

#### PURPOSE OF REPORT

1. To provide an update to Council on recent progress with the Facilities Rebuild Project.

#### EXECUTIVE SUMMARY

- 2. The cluster of earthquakes in Christchurch from 23 December 2011 onwards resulted in only minor damage to Council's building stock. Engineering advice identified that ground accelerations were relatively modest in most parts of the city and as a result a sampling of buildings were inspected by engineers after each of the three main events. In addition to this, onsite managers in occupied buildings were asked to provide feedback on any fresh damage from these earthquakes. Where appropriate these were followed up with specific inspections.
- 3. The program of Detailed Engineering Evaluation (DEE) inspections was not substantially affected by these earthquakes.
- 4. As these were the first significant events since Council's insurance cover lapsed, the Loss Adjusters for Council's insurers intend to complete a sample assessment of buildings to reassure their clients with regard to the extent of post cover damage. This work will be completed over the next few weeks.
- 5. In November 2011 Council completed a competitive tender to establish a pool of five Structural Engineering Consultant companies to complete the program of DEE's for Council buildings. The cost of the two-year programme of work is estimated to be approximately \$6 to \$7 million.
- 6. These companies have now been engaged and are underway with DEE assessments. To date 28 buildings have moved through the DEE assessment process and are now underway with, or ready to move into, the options phase.
- 7. Approximately 79 DEE assessments are currently being worked on and a further 240 are being scoped by the five companies.
- 8. To date 19 Council buildings have been demolished.
- 9. To support more accurate estimates for strengthening and repair works a panel of six Quantity Surveyors is being sought, again via a competitive tender. The appointment of this panel is likely to be confirmed over the next few weeks with effect from 1 March 2012.
- 10. The prioritised DEE assessment programme includes 699 residential buildings/blocks. Council, like other property owners, is required to follow EQC processes in regard to residential claims and this in some cases will include structural assessments. For the majority of these buildings we are currently waiting for the EQC assessment process to follow its course. Some specific properties have a building profile that we believe justifies an early assessment to clarify the strength of the building and we have scheduled DEE's for these properties.

### FINANCIAL IMPLICATIONS

11. The building assessment work required to inform the Facilities Rebuild Plan is generally funded from insurance monies, where a buildings structure is damaged and a legitimate successful insurance claim is processed. Where the building's structure is not damaged the costs will be borne by Council.

#### Do the Recommendations of this Report Align with LTCCP budgets?

12. No. The work was not contemplated within the 2009–19 LTCCP.

## LEGAL CONSIDERATIONS

13. Not applicable.

## Have you considered the legal implications of the issue under consideration?

14. As above.

## ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

15. Not applicable.

## Do the recommendations of this report support a level of service or project in the LTCCP?

16. Not applicable.

## ALIGNMENT WITH STRATEGIES

17. Not applicable.

## Do the recommendations align with the Council's strategies?

18. As above.

## CONSULTATION FULFILMENT

19. Not applicable.

## STAFF RECOMMENDATION

It is recommended that the Council receive the information in this report.

## 13. FACILITIES REBUILD PROJECT - FENDALTON LIBRARY AND SERVICE CENTRE

General Manager responsible:	General Manager Community Services, DDI 941 8607	
Officer responsible:	Strategic Property Analyst	
Author:	Rob Hawthorne, Strategic Property Analyst	

#### PURPOSE OF REPORT

1. To seek approval to proceed with the permanent repair of earthquake damage at Fendalton Library and Service Centre, strengthening works identified by the Detailed Engineering Evaluation (DEE) of the building's structural strength (relative to the New Building Standard) and asset enhancement work required to mitigate a recently-identified health and safety hazard.

#### EXECUTIVE SUMMARY

- 2. The building suffered moderate damage in the series of earthquakes following September 2010 and following the departure of the temporary Infrastructure Recovery Office in November 2011 the facility had been intended to be returned to full service as a Library and Service Centre.
- 3. As part of the delivery of a program of DEE assessments for Council's portfolio of buildings a qualitative engineering assessment was competed in September 2011. This revealed a hypothetical structural strength of 50 per cent, relative to the New Building Strength (NBS).
- 4. This triggered the need for a quantitative assessment to model the impact of the earthquake and determine with greater rigour what the status of the building was relative to benchmark strengths of 33 per cent, 67 per cent and 100 per cent of NBS. When this was completed in November 2011 it gave a result of 27 per cent of NBS. The key elements that were below strength included horizontal roof bracing and the connections between the roof and wall structures.
- 5. With staff vacating the building in November 2011 engineers were able to lift floor tiles to assess the concrete slab more thoroughly and this revealed additional earthquake-related damage to construction joints and structural steel mesh located in the floor slab.
- 6. The cost of repairing the floor and other agreed earthquake related damage is \$70,000. Council's insurer has agreed to cover these costs as part of the insurance claim.
- 7. Upgrading the structural strength of the building to 34 per cent and 100 per cent is estimated to cost \$145,000 and \$165,000 respectively. The design and cost differential between 67 per cent and 100 per cent was minimal and these options have accordingly been merged to one.
- 8. Council's insurer disputes the need for a building consent to complete the floor repairs. It has stated that even if a building consent is required they will only cover the cost of upgrading the building to 34 per cent (not 67 per cent or 100 per cent) and only where the building element itself is part of the 'damaged portion'. The insurer contends that strengthening the roof elements does not meet the criteria set out in the insurance policy.
- 9. Council has sought preliminary legal advice and is still working through this matter with Council's insurers. The outcome of these considerations and negotiations will in effect establish a portfolio-wide position that will have a significant impact on Council's exposure to the cost of strengthening buildings.
- 10. A number of options exist, including deferring the work until greater clarity exists around the extent of the insurance liability. The staff recommendation is to proceed with strengthening work to meet 100 per cent of the NBS (given the minimal differential between that and 67 per cent), along with the other approved insurance repairs.
- 11. Staff have also scoped and priced an enhancement to the seismic fixing of lighting and equipment in ceiling spaces to mitigate the increased risks of earthquakes. The cost of this betterment is estimated at \$25,000.

13. In January a fire destroyed garages at the rear of the property along with the library's shelving units. With no insurance cover on this event staff are evaluating the need for the garages and options to replace them, to be reported as part of the Annual Plan or Long-Term Plan.

### FINANCIAL IMPLICATIONS

- 14. The total cost of earthquake related repairs, structural strengthening and asset enhancements are estimated at \$260,000.
- 15. The anticipated insurance recovery is \$70,000 leaving a net cost to Council of \$190,000.
- 16. The total sum insured is \$5,067,000 (including provision for 12 months inflation).
- 17. The cost of reinstating the earthquake damaged concrete floors and other general earthquake related damage is estimated at \$70,000.
- 18. The cost of strengthening building elements from 27 per cent to 34 per cent is estimated at \$145,000. The cost of strengthening building elements from 34 per cent to 100 per cent is estimated at \$20,000.
- 19. The cost of upgrading the seismic bracing of light fittings other equipment in the ceilings is estimated at \$25,000.
- 20. Expenditure on strengthening works and other asset enhancement works that may not be covered by insurance proceeds is proposed to be funded from the allowance made in the Council's earthquake financial strategy for Council Building/Infrastructure Shortfall.

## Do the Recommendations of this Report Align with 2009-19 LTCCP budgets?

21. No. The purpose of this report is to gain approval for permanent repair/reinstatement works on a Council building, as per Council guidelines to staff in November 2011. These were not contemplated during the preparation of the 2009–19 budgets.

#### LEGAL CONSIDERATIONS

22. Yes.

#### Have you considered the legal implications of the issue under consideration?

23. Legal advice currently being sought.

#### ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

24. No, the recommended expenditure in this report was not contemplated during the preparation of the 2009–19 LTCCP/Activity Management planning.

# Do the recommendations of this report support a level of service or project in the 2009-19 LTCCP?

25. Yes. The facility is required to support the level of service contemplated in the 2009–19 LTCCP.

## ALIGNMENT WITH STRATEGIES

26. Yes.

## Do the recommendations align with the Council's strategies?

27. The work supports the Libraries 2025 Strategy Section 3.1.2 Residents have access to a physical library relevant to local community need or profile.

#### CONSULTATION FULFILMENT

28. Not applicable.

#### STAFF RECOMMENDATION

It is recommended that the Council:

(a) Undertake permanent earthquake repairs, complete identified structural strengthening works (to 100 per cent of the NBS) and complete other asset enhancements required to mitigate recently identified health and safety risks as outlined in the table below:

Repair Elements:	Insurer to Pay:	Council to Pay:
General Earthquake Repairs	\$ 70,000	\$ 0
Strengthening works to NBS 100%	\$ 0	\$ 165,000
Enhanced seismic equipment ties	\$ 0	\$ 25,000
TOTAL:	\$70,000	\$ 190,000

(b) Approve expenditure on strengthening works and other asset enhancement works to a value of \$190,000 to be funded from the Council Building/Infrastructure - Shortfall Allowance.

#### BACKGROUND

29. The Fendalton Library and Service Centre incurred modest visible damage from the September 2010 and subsequent earthquakes. The February earthquake's ground accelerations in this area was significantly less than those experienced in the central city (see below) and the resulting damage to wall linings and fixtures was largely cosmetic. Some cracking damage and opening up of expansion joints was also evident in the concrete floor however the extent of this was difficult to assess while the facility was being used by a large number of staff.



- 30. Following the various rapid engineering assessments, associated with significant earthquakes, the property was given green placards and declared safe to occupy by Structural Engineers. Following the February 2011 earthquake it was used as the Infrastructure Recovery Office, due to the shortage of available office space for Council staff. The service centre function also remained in operation. While the facility remained in use as office space through to November 2011 part of the building was returned to library use in October 2011.
- 31. A scope of work for cosmetic damage was being developed and priced to undertake a partial repair to the building, enabling it to be reinstated to a full library/service centre. While some initial work commenced on site under urgency it became apparent that the costs could escalate beyond delegated authorities due to the potential for expenditure to sit outside the coverage of an insurance claim. As a result work on site ceased until staff could obtain additional design and cost information to support Council's claim and this report.

## **Detailed Engineering Evaluation**

- 32. As part of the program of detailed engineering assessment work (for all Council buildings) a qualitative assessment was completed in September 2011. This assessed the minimum seismic capacity in the east-west direction as approximately 50 per cent NBS (new building standard) of the current building code. This triggered the need for a quantitative assessment to model the impact of the earthquake and determine with greater rigour what the status of the building was relative to benchmark strengths of 33 per cent, 67 per cent and 100 per cent of NBS.
- 33. The results of the quantitative assessment were received in November 2011, with the major deficiencies being the strength of the roof bracing connections (36 per cent NBS) and the roof bracing itself under compression loading (27 per cent NBS). The low result for second component categorises the facility as being an Earthquake Prone Building.
- 34. While no critical weaknesses were identified it was decided to vacate the building at the end of November in accordance with the general guidance given by Council on the occupancy of facilities where the NBS rating is below 1/3.
- 35. These deficiencies did not contribute to significant building damage, largely due to the more modest ground accelerations experienced at the site to date. Nevertheless, under current design codes, these components could potentially fail if another considerable earthquake were to hit Christchurch depending on factors such as location, depth and magnitude. While the failure of these components is unlikely to result in a collapse of the structure, it could result in increased displacements at roof level and a subsequent increase in damage.
- 36. The new seismic coefficient equates to double the bracing system design code of the original building design as the forces (now) required to be resisted reflect a more conservative response to the evident earthquake risk.
- 37. The following improvements were recommended to raise the strength rating of the building:
  - strengthen the roof plane diagonal bracing by replacing them with stiffer members; and
  - strengthen the bracing connections by either replacing existing bolts with higher grade bolts, or welding the connection plates directly to each other.
- The cost of strengthening the above roofing structures to meet 1/3 of the NBS is approximately \$145,000. By comparison the additional cost to achieve either 67 per cent or 100 per cent NBS is \$20,000.
- 39. All of the above prices include the removal and reinstatement of a significant proportion of the ceiling tiles and grid, as well as building services required to be removed to enable the installation of new roof plane bracing elements and bracing connections. The prices also include allowances for professional and building consent fees, as well as some contingencies.

#### Earthquake-Related Floor Slab Damage

- 40. Vacating the space also facilitated intrusive investigations of the floor cracks which revealed that expansion joints and saw cut construction cracks (as provided for in the original design) had widened beyond their intended design and that new cracks had appeared. The facility has been occupied continuously since opening in 1998 with the original carpet still in place and no obvious signs of gaps in the concrete floor or carpet wear and tear along these lines existed prior to the earthquakes. Accordingly, this movement has been attributed to the impact of the earthquakes and staff believe the cost of flooring repairs are claimable under Council's insurance policy. Allowances have been made for some carpet replacement as a result of the floor slab repairs.
- 41. The building's structural design relies on the concrete floor slab contributing to the bracing of the building's portal frame structure. Key to the integrity of the concrete floor is the steel mesh reinforcing, which has been compromised due to the impact of the earthquake. As a result some areas require additional reinforcing ties to reinstate structural integrity of the building.



Photo 1: 25 March 2011

Photo 2: 29 November 2011

Photo 3: 29 November 2011

The cost of repairing and reinstating the structural integrity of the floor slab is approximately \$51,000, including an allowance to reinstate the carpet and other floor coverings as required.

#### Insurance Response

- 42. Council's insurer has recently (December 2011) stated that they will only fund strengthening works up to 34 per cent of the NBS where the need for a building consent triggers the requirement for a structural upgrade. They also believe there is ambiguity over the requirement to strengthen the building beyond 34 per cent of the NBS and refer to the 67 per cent figure as a Council target not a requirement. They have also taken the position that they will only support the strengthening of the 'damaged portions' of a building.
- 43. The insurance company's initial Statement of Position regarding Fendalton Library and Service Centre points to the floor slab work as not necessarily triggering a building consent. This issue is in dispute and clarification of the Building Consent Authority's requirements are currently being sought.
- 44. Even if the remedial work to the concrete floor does require a building consent the strengthening work required for the roofing elements is not considered by Council's insurers as part of the 'damaged portion' covered by the insurance policy wording. The cost of strengthening works to 34 per cent NBS and associated expenditure is \$145,000.
- 45. Council is currently seeking legal advice on the position taken by the insurers on these matters. The resolution of these issues is significant in financial terms as they potentially relate to many of Council's properties, not just the one being considered by this report.

### Earthquake-Related Cosmetic Damage

- 46. The building, and other improvements on the site such as sealed car park areas, suffered a range of modest cosmetic damage e.g. plaster board cracking. The repair methodology and cost estimates for this damage has been agreed with and approved by Council's insurers.
- 47. The cost of completing these cosmetic repairs is approximately \$70,000.

### Additional Non-Insurance Related Project Works

#### Enhanced Seismic Securing of Equipment and Fittings

- 48. As a result of the earthquake Council staff have become aware of the potential fall hazard represented by light fittings and other equipment housed in or above the suspended ceilings in many buildings. The existing means of attachment comply with historic design codes; however the weight of these fittings or items of equipment mean that if they fell or were dislodged in a significant seismic event, potential exists for them to cause serious injury. Examples exist in other facilities, such as Linwood Library, where such items of equipment fell and both staff and public were fortunate not to be injured.
- 49. While no regulatory justification currently exists it is a staff recommendation that the means of fixing these building components to the buildings structure be enhanced to mitigate these risks. The cost of completing this level of service enhancement is \$25,000 for this facility.

## Compliance Works -- Fire Egress/Systems and Disabled Access

50. The requirement of a building consent for the floor slab work would trigger a review of current compliance for the building in relation to both disabled access as well as fire systems and egress. This is currently being reviewed by Engineers; however potential exists for some additional expenditure to meet revised. Given the age of the facility the risk of significant expenditure being required is low and an allowance has been included as a contingency sum for this, if needed.

## Fire Damage/Loss

- 51. In early January 2012 a fire destroyed the garages located to the rear of the main Fendalton Library and Service Centre. The garages have since been demolished and removed and the damaged fence replaced. With no insurance cover in place, this work has been funded from the library renewals and replacement budget.
- 52. The garages were used primarily to protect Council cars stationed at the site. Consideration is currently being given to both the number of cars that need to be parked on site after hours and the nature of the enclosure, i.e. garages or cages. At the time of the fire the garages were being used to store shelving units removed from the Library and these have also been damaged beyond repair. Once further information is available along with cost estimates these will be reported via the Annual Plan process or LTP.

#### THE OBJECTIVES

- 53. The primary objective is to reinstate the facility to operation as a Library and Service Centre.
- 54. To do this we need to repair earthquake related damage, meet legal compliance requirements, comply with Council's stated (policy) response to earthquake strengthening and complete other works needed to restore and maintain the pre-existing levels of service for these activities.
- 55. A secondary objective is to enhance seismic securing of plant and equipment in ceilings to mitigate recently identified health and safety hazards.

#### THE OPTIONS

- 56. **1.** Status Quo Do nothing and do not re-occupy the facility until all insurance issues relating to earthquake repairs and structural strengthening are resolved.
- 57. This approach would allow Council to be certain about the quantum and source of funding for the earthquake repairs, strengthening works and proposed asset enhancements.
- 58. Councillors have provided staff with general guidance on the occupancy of facilities where the NBS rating is below 34 per annum to the effect that such facilities remain closed to the public and staff, pending a structural upgrade to at least 67 per cent.
- 59. The consequence of this option (remaining closed) would be a reduced level of service to the public in this area for an unknown period of time, as well as loading added pressure to other Libraries and Service Centres in this area of Christchurch (especially with the closure of the Bishopdale Library, also for an unknown period of time).
- 60. 2. Undertake permanent earthquake repairs, complete identified structural strengthening works (to 100 per cent of the NBS) and complete other asset enhancements required to mitigate recently identified health and safety risks, prior to finalising insurance issues and funding.
- 61. The option requires Council to approve expenditure on strengthening works, other asset enhancement work not covered by insurance proceeds, fees consents and contingencies. Engineers advise that the design requirements and cost of strengthening from 67 per cent to 100 per cent of the NBS was minimal, and accordingly the recommendation is to strengthen to 100 per cent. This option will be funded from the Council Building/Infrastructure - Shortfall Allowance budget.

Repair Elements:	Insurer to Pay:	Council to Pay:
General Earthquake Repairs	\$ 70,000	\$ 0
Strengthening works to NBS 100%	\$ 0	\$ 165,000
Enhanced seismic equipment ties	\$ 0	\$ 25,000
TOTAL:	\$ 70,000	\$ 190,000

Option 2: REPAIR and STRENGTHEN TO 100% NBS with OTHER BETTERMENT

62. This option enables Council to restore levels of service to the local community, upgrade the building's structural strength and complete asset enhancements to mitigate recently identified health and safety hazards.

#### THE PREFERRED OPTION

- 63. Option 2. Undertake permanent earthquake repairs, complete identified structural strengthening works (to 100 per cent of the NBS) and complete other asset enhancements required to mitigate recently identified health and safety risks prior to finalising insurance issues and funding.
- 64. The option requires Council to approve expenditure on strengthening works and other asset enhancement works that may not be covered by insurance proceeds. This will be funded from the Council Building/Infrastructure - Shortfall Allowance budget.

Repair Elements:	Insurer to Pay:	Council to Pay:
General Earthquake Repairs	\$ 70,000	\$ 0
Strengthening works to NBS 100%	\$0	\$ 165,000
Enhanced seismic equipment ties	\$ 0	\$ 25,000
TOTAL:	\$70,000	\$ 190,000

Option 2: REPAIR and STRENGTHEN TO 100% NBS with OTHER BETTERMENT

#### 14. INFRASTRUCTURE REBUILD/HOLLIS AVE/WASTEWATER PIPE RENEWAL

General Manager responsible:	General Manager, City Environment Group, DDI 941 8608	
Officer responsible:	Unit Manager, City Water and Waste	
Author:	Simon Collin, Network Planning Team Leader	

#### PURPOSE OF REPORT

1. The purpose of this report is to seek the Council's approval to replace the earthquake damaged 150 diameter wastewater pipe with a larger 225 diameter wastewater pipe.

#### EXECUTIVE SUMMARY

- 2. A technical report on this proposal (Attachment 1) has been provided by the Stronger Christchurch Infrastructure Rebuild Team (SCIRT). This report was considered by the Scope and Standards Staff Committee, which accepted the SCIRT recommendation that the rebuild option containing a betterment element should proceed and determined that a report should go to Council seeking approval for the additional funding for this option.
- 3. As shown on the plans included in the report, the wastewater pipe work in Hollis Ave was very badly damaged by the 22 February 2011 earthquake. The number of breaks in each manhole length is shown. The threshold being used to determine if renewal is warranted is six breaks or more, the standard defined prior to the earthquakes in the Council's Wastewater Asset Management Plan. On this basis three of the eight manhole lengths under consideration need replacing and four repaired. One length is undamaged.
- 3. The existing pipe is 150 millimetre diameter, but prior to the earthquakes this was known to be under capacity, and at least once per year, the network could not cope, resulting in discharge of raw sewerage out of manhole tops. Modelling work had been completed to determine the required size to prevent this happening, and it was proposed to include a capacity upgrade for all eight manhole lengths in Council's ongoing sewer renewal programme, although no specific proposal had been submitted.
- 4. Two options have been considered for repair of the main, as outlined in the **attached** report. In summary:
  - (a) Option 1 is to repair "like for like". This option will be funded through the LAPP insurance and Government funding mechanisms.
  - (b) Option 2 is to upgrade the pipeline while repairs are being undertaken.
- 5. Option 2 is recommended by the Scope and Standards Committee as the preferred option. It would be practical and economically efficient to take the opportunity while the renewal/repair is underway of renewing the whole 315 metres of pipework in the required larger 225 millimetres diameter pipe. This will prevent the regular sewer overflows that were occurring pre-earthquake, and that would continue to occur if only the "like for like" option is rebuilt.

#### FINANCIAL IMPLICATIONS

- 6. The estimated cost for the "like for like" option is \$254,000. The estimated cost of the recommended complete renewal in 225 millimetre pipe is \$587,000. The estimate for the betterment is therefore \$333,000.
- 7. It is expected construction would be complete in the current financial year. An estimated \$333,000 is therefore required to enable the betterment part of the rebuild to proceed.

#### Do the Recommendations of this Report Align with 2009-19 LTCCP budgets?

8. Not applicable as earthquake-related works.

#### LEGAL CONSIDERATIONS

## Have you considered the legal implications of the issue under consideration?

9. Yes. There are no legal considerations.

#### ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

# Do the recommendations of this report support a level of service or project in the 2009-19 LTCCP?

10. Earthquake-related works – restoration and improvement of level of service.

#### ALIGNMENT WITH STRATEGIES

## Do the recommendations align with the Council's strategies?

11. Yes. They align with Council's Strategic Direction of providing wastewater collection services that "protect public health".

#### CONSULTATION FULFILMENT

12. Not applicable.

#### STAFF RECOMMENDATION

It is recommended that the Council approves upgrading of the pipeline for the repair of the earthquake damaged sewer pipes in Hollis Avenue and allocates \$333,000 from the betterment fund in order for the project to proceed.

## 15. NOTICES OF MOTION

## 16. RESOLUTION TO EXCLUDE THE PUBLIC

Attached.