

12. SULLIVAN AVENUE KERB AND CHANNEL RENEWAL PROJECT

General Manager responsible:	General Manager City Environment
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STAFF RECOMMENDATIONS

It is recommended that the Board:

1. Approve the Sullivan Avenue Kerb and Channel Renewal project, as illustrated in Attachment 1, to proceed to final design, tender and construction.
2. Approve the following traffic restrictions:

Removal of Existing “No Stopping”

- (a) That the no stopping restriction on Sullivan Avenue at intersection with Ensors Road be removed.

New “No stopping”

- (b) That the stopping of vehicles be prohibited at any time on the northeast side of Sullivan Avenue commencing at its intersection with Ensors Road and extending in a south easterly direction for a distance of 10.5 metres.
- (c) That the stopping of vehicles be prohibited at any time on the southwest side of Sullivan Avenue commencing at its intersection with Ensors Road and extending in a south easterly direction for a distance of 10 metres.
- (d) That the stopping of vehicles be prohibited at any time on the northeast side of Sullivan Avenue commencing at the common boundary of 23 and 25 Sullivan Avenue and extending in a south easterly direction for a distance of 21 metres.
- (e) That the stopping of vehicles be prohibited at any time on the southwest side of Sullivan Avenue commencing at the common boundary of 23 and 25 Sullivan Avenue and extending in a south easterly direction for a distance of 21 metres.
- (f) That the stopping of vehicles be prohibited at any time on the northeast side of Sullivan Avenue commencing at a point 16 metres from the common boundary of 43 and 47 Sullivan Avenue and extending in a south easterly direction for a distance of 41 metres.
- (g) That the stopping of vehicles be prohibited at any time on the southwest side of Sullivan Avenue commencing at its intersection with Whittington Avenue and extending in a north westerly direction for a distance of 21.5 metres.
- (h) That the stopping of vehicles be prohibited at any time on the southeast side of Sullivan Avenue commencing at its intersection with Whittington Avenue and extending in a south easterly direction for a distance of 13.5 metres.
- (i) That the stopping of vehicles be prohibited at any time on the northwest side of Whittington Avenue commencing at its intersection with Sullivan Avenue and extending in a south westerly direction for a distance of 16 metres.
- (j) That the stopping of vehicles be prohibited at any time on the southeast side of Whittington Avenue commencing at its intersection with Sullivan Avenue and extending in a south westerly direction for a distance of 12 metres.
- (k) That the stopping of vehicles be prohibited at any time on the northeast side of Sullivan Avenue commencing at a point 5 metres from the common boundary of 67 and 69 Sullivan Avenue and extending in a south easterly direction for a distance of 13 metres.
- (l) That the stopping of vehicles be prohibited at any time on the southwest side of Sullivan Avenue commencing at a point 1.5 metres from the common boundary of 67 and 69 Sullivan Avenue and extending in a south easterly direction for a distance of 18 metres.
- (m) That the stopping of vehicles be prohibited at any time on the northeast side of Sullivan Avenue commencing at its intersection with Keswick Street and extending in a north westerly direction for a distance of 15.5 metres.

- (n) That the stopping of vehicles be prohibited at any time on the northeast side of Sullivan Avenue commencing at its intersection with Keswick Street and extending in a south easterly direction for a distance of 13 metres.
- (o) That the stopping of vehicles be prohibited at any time on the southwest side of Sullivan Avenue commencing from the common boundary of 88 and 90 Sullivan Avenue and extending in a south easterly direction for a distance of 34 metres.
- (p) That the stopping of vehicles be prohibited at any time on the northwest side of Keswick Street commencing at its intersection with Sullivan Avenue and extending in a north easterly direction for a distance of 12.5 metres.
- (q) That the stopping of vehicles be prohibited at any time on the southeast side of Keswick Street commencing at its intersection with Sullivan Avenue and extending in a north easterly direction for a distance of 11 metres.
- (r) That the stopping of vehicles be prohibited at any time on the northeast side of Sullivan Avenue commencing from the common boundary of 107 and 109 Sullivan Avenue and extending in a south easterly direction for a distance of 31 metres.
- (s) That the stopping of vehicles be prohibited at any time on the southwest side of Sullivan Avenue commencing at its intersection with Judge Street and extending in a north westerly direction for a distance of 11 metres.
- (t) That the stopping of vehicles be prohibited at any time on the southwest side of Sullivan Avenue commencing at its intersection with Judge Street and extending in a south easterly direction for a distance of 10 metres.
- (u) That the stopping of vehicles be prohibited at any time on the northwest side of Judge Street commencing at its intersection with Sullivan Avenue and extending in a south westerly direction for a distance of 8 metres.
- (v) That the stopping of vehicles be prohibited at any time on the southeast side of Judge Street commencing at its intersection with Sullivan Avenue and extending in a south westerly direction for a distance of 9 metres.
- (w) That the stopping of vehicles be prohibited at any time on the northeast side of Sullivan Avenue commencing at its intersection with Richardson Terrace and extending in a north westerly direction for a distance of 14 metres.
- (x) That the stopping of vehicles be prohibited at any time on the southwest side of Sullivan Avenue commencing at its intersection with Richardson Terrace and extending in a north westerly direction for a distance of 17 metres.
- (y) That the stopping of vehicles be prohibited at any time on the northwest side of Richardson Terrace commencing at its intersection with Sullivan Avenue and extending in a north easterly direction for a distance of 10 metres.
- (z) That the stopping of vehicles be prohibited at any time on the northwest side of Richardson Terrace commencing at its intersection with Sullivan and extending in a south westerly direction for a distance of 15.5 metres.

CHAIRPERSON'S RECOMMENDATIONS

That the staff recommendation be adopted and staff be commended for the consultation process undertaken.

SECTION TWO - BACKGROUND ON SULLIVAN AVENUE KERB AND CHANNEL RENEWAL PROJECT

11. Sullivan Avenue is located in the Ferrymead Ward, and falls within the jurisdiction of the Board. The surrounding area is mostly residential with the Christchurch Polytechnic occupying a large block of land at the Ensors Road end of the street.
12. Sullivan Avenue is classified as a Local Road in the Proposed City Plan, with a traffic volume varying from 1,750 vehicles per day (vpd) at the Ensors Road end, to 650 vpd west of Richardson Terrace. Ensors Road is a four-lane, median divided arterial road and Richardson Terrace is a local road with traffic calming that runs alongside the Heathcote River.
13. Sullivan Avenue is approximately 910 metres long with several side streets - Whittington Avenue, Keswick Street, and Judge Street. It is a residential street that is zoned as Living 2 in the Proposed City Plan. The Polytechnic campus is considered a traffic generator along the southern side of Sullivan Avenue for the first 250 metres from the Ensors Road end.
14. At the Board meeting held on 31 March 2004, a deputation by the residents of Sullivan Avenue was made regarding issues in Sullivan Avenue and the surrounding streets. A petition, written submissions and other documentation were submitted in support of the deputation. A meeting had been held between the (then) Living Streets Advocate and the residents on 23 February 2004.
15. The key issues of concern raised by the residents at this time were:
 - Irresponsible driver behaviour, such as high speeds, burnouts, and street racing;
 - The poor condition of the road surface, including kerbs, channels and footpaths;
 - Recurring problems with blocked drains causing flooding;
 - Street parking for Polytechnic students;
 - Poor street lighting; and
 - Safety issues at the Ensors Road/Sullivan Avenue intersection.
16. The residents submitted their strong desire to work with the Council to resolve these issues through a living streets consultation process. At this stage, the Board sought a report addressing the issues raised, and outlining the process for creating a living street.
17. A report was submitted to the Environment and Traffic Committee on 20 April 2004, and it was recommended that the proposed street renewal work for Sullivan Avenue be brought forward to the 2006/07 financial year.
18. This project was thus initiated by the Council, as part of its kerb and channel renewal programme. The Council has allocated \$1,393,246 for the renewal of the kerb and dish channels along both sides of Sullivan Avenue between Ensors Road and Richardson Terrace.
19. An initial issues survey was undertaken by the Council in February 2005, which resulted in the major issues of traffic speed, landscaping, through traffic, personal security, pedestrian safety, cycle safety and parking being identified as major issues of concern to the 82 residents who responded. Other issues of concern included flooding and drainage problems, poor street lighting, vehicles (particularly heavy vehicles) U-turning at the Ensors Road/Sullivan Avenue intersection, poor footpath and road surfaces (including camber), hoon driver behaviour (e.g. burnouts etc), and parking of Polytechnic students.
20. As a result of the survey responses, and a traffic volume and speed survey undertaken in February 2005. A public meeting with residents of Sullivan Avenue, Whittington Avenue, Tabart Street and Judge Street was held in July 2005. The purpose of this meeting was to present and discuss three options developed by the Council and obtain feedback from the residents to reach a consensus on a preferred option for consultation.
21. The public meeting was attended by approximately 40 people, who, after much positive discussion and comment reached a consensus in favour of Option 1, with some additional modifications. One interesting point raised at the public meeting revolved around the naming of Sullivan Avenue, which the residents were keen to see recognised in some way.

22. Sullivan Avenue was named after Mr Daniel Giles Sullivan (1882-1947), who was a French polisher, trade unionist, journalist, and politician. He served on the Christchurch City Council (1915-1923 and 1925-1931), and was elected mayor in 1931. He reluctantly stepped down as mayor when he was elected to national office as part of the first Labour government, and served in government from 1935-1947, including acting as prime minister for some months in 1942 and 1944. It is proposed to include a plaque at a point along the street to ensure the history associated with the street is promoted.
23. The Land Transport New Zealand Crash Analysis System (CAS) shows that there have been eight crashes recorded in the Sullivan Avenue area for the 5-year period between 1 July 1999 and 30 June 2004. Of these eight crashes, one was minor and the remaining seven were non-injury.
24. Further consultation was undertaken with the owners and occupiers of Sullivan Avenue, and the owners and occupiers of the adjacent streets (Whittington Avenue, Tabart Street and Judge Street), as well as key stakeholders. The feedback received from the 10 respondents was considered carefully in conjunction with all previous feedback received in finalising the design of the scheme plan, which is shown as Attachment 1.
25. None of the respondents were opposed to the kerb and channel renewal, and upgrade of street lighting. Issues raised included placement of overhead wires in relation to tree planting, traffic speed from Richardson Terrace into Sullivan Avenue, spacing of traffic management treatments, road width at mid-block narrowing, seating for pedestrians, tree placement, raised rather than flush thresholds at key intersections. Where possible, the concerns raised have been addressed in the design of the preferred option. A summary of the submissions made and an evaluation of the issues raised is attached at Attachment 2.
26. The main features of the preferred option include a raised threshold at the intersection of Sullivan Avenue with Ensors Road. The Give Way control at this intersection will remain. The carriageway between Ensors Road and Whittington Avenue narrows from 14 metres to 10 metres. The kerb alignment along Sullivan Avenue is centred between the road reserves. There is a mid-block, two-way road narrowing adjacent to the Polytechnic entrance. The right turn bay on Ensors Road is remarked with a solid line.
27. There is a raised platform at the intersection of Sullivan Avenue with Whittington Avenue, and the intersection is narrowed to 7 metres wide with kerb build-outs. The Whittington Avenue approach is realigned at right angles with Sullivan Avenue. The carriageway for the rest of Sullivan Avenue is 9 metres wide. There is a mid-block, one-way road narrowing with a cycle bypass between Whittington Avenue and Keswick Street.
28. The intersections of Sullivan Avenue with Keswick Street and Judge Street are narrowed to 7 metres wide with kerb build-outs. The west corner of the intersection with Richardson Terrace will be tightened by reducing the kerb radius. The proposed kerbs will mate in with existing kerb build-outs at the intersection of Sullivan Avenue with Richardson Terrace. There are cut-down kerbs for pedestrians crossing Sullivan Avenue at the intersections with Ensors Road, Whittington Avenue, Keswick Street, Judge Street and Richardson Terrace.
29. There is a raised threshold at the intersection of Sullivan Avenue with Richardson Terrace.

OPTIONS

30. Four options were developed for comparison during the concept design process, of which three were presented for discussion at the public meeting held in July 2005. The main differences between the four options developed were restricted to the design of the section of Sullivan Avenue between Whittington Avenue and Richardson Terrace.
31. **Option 1** has a Type C flush threshold at the intersection of Sullivan Avenue with Ensors Road. The Give Way control at this intersection will remain, however, the carriageway between Ensors Road and Whittington Avenue is narrowed to 10 metres. The kerb alignment along Sullivan Avenue is centred between the road reserves. A mid-block two-way road narrowing will be installed adjacent to the Polytechnic entrance and opposite 25 Sullivan Avenue. The right turn bay on Ensors Road will be remarked with a solid line.

32. The intersection of Sullivan Avenue with Whittington Avenue is narrowed to 7 metres with kerb build-outs on Whittington Avenue, and on the northern side of the intersection. The Whittington Avenue approach is realigned at right angles with Sullivan Avenue.
33. The carriageway for the remainder of Sullivan Avenue is 9 metres in width, with a mid-block one-way road narrowing between Whittington Avenue and Keswick Street. The intersection of Sullivan Avenue with Keswick Street is narrowed to 7 metres with kerb build-outs on Keswick Street and on the southern side of the intersection. The intersection of Sullivan Avenue with Judge Street is also narrowed to 7 metres in width, with kerb build-outs on Judge Street and on the northern side of the intersection. The proposed kerbs will mate in with the existing kerb build-outs at the intersection of Sullivan Avenue with Richardson Terrace.
34. Motorists' line of sight down the street is only offset at the intersections and mid-block road narrowings. There are cut-down kerbs for pedestrians crossing the intersection of Sullivan Avenue with Ensors Road, Whittington Avenue, Keswick Street and Judge Street. Parking is banned at the thresholds, mid-block narrowings and in the vicinity of the intersections of Sullivan Avenue with Whittington Avenue, Keswick Street, Judge Street, and Richardson Terrace.
35. This option will involve the removal of 90 metres of existing kerb and flat channel due to the narrowed carriageway at the intersections to mate in with the existing kerb and flat channel. There will be no parking in the vicinity of the intersections.
36. **Option 2** has the same kerb alignment and road treatments as Option 1 along Sullivan Avenue between Ensors Road and Whittington Avenue.
37. The intersection of Sullivan Avenue with Whittington Avenue has its priority changed to divert traffic into Whittington Avenue, thus reducing the through traffic and traffic speeds on Sullivan Avenue. The kerb alignment along the rest of Sullivan Avenue is offset to the southern side of the street, where the new kerb on the southern side is renewed on the existing kerb alignment as Option 4.
38. This option will involve the removal of 110 metres of existing kerb and flat channel due to the narrowed carriageway at the intersections to mate in with the existing kerb and flat channel. There is no parking in the vicinity of the intersections.
39. The project team did not like the change in priority at the Sullivan Avenue/Whittington Avenue intersection where traffic from Sullivan Avenue would be diverted into Whittington Avenue and the adjoining Tabart Street and Judge Street. While this may reduce through traffic on Sullivan Avenue, the change in priority may encourage more "hoon" driving behaviour into this circuit of streets, and then back onto Sullivan Avenue.
40. **Option 3** has the same kerb alignment and road treatments as Option 1 between Ensors Road and Whittington Avenue. The intersection of Sullivan Avenue with Whittington Avenue is the same as Option 1 as well, and the remainder of the length has a 9 metre meandering carriageway.
41. The intersection of Sullivan Avenue with Keswick Street is narrowed to 7 metres with kerb build-outs on Keswick Street and on the southern side of the intersection. The intersection of Sullivan Avenue with Judge Street is also narrowed to 7 metres with kerb build-outs on Judge Street and on the northern side of the intersection. The proposed kerbs will mate in with the existing kerb build-outs at the intersection of Sullivan Avenue with Richardson Terrace.
42. The motorists' line of sight down the street is restricted, as it is offset continuously along the length of Sullivan Avenue, at the intersections and at the angled mid-block road narrowing. There are cut-down kerbs for pedestrians crossing the intersections of Sullivan Avenue with Ensors Road, Whittington Avenue, Keswick Street and Judge Street. Parking is banned at the thresholds, mid-block road narrowing, and in the vicinity of the intersections of Sullivan Avenue with Whittington Avenue, Keswick Street, Judge Street and Richardson Terrace.
43. This option would see the removal of 95 metres of existing kerb and flat channel due to the narrowed carriageway at the intersections, and to enable the proposed kerb to mate in with the existing kerb and flat channel. There is no parking in the vicinity of the intersections with this option.

44. **Option 4** has the same kerb alignment and road treatments as Option 3 between Ensors Road and the mid-block road narrowing outside 69 Sullivan Avenue. There is a mid-block “one way” road narrowing between Whittington Avenue and Keswick Street.
45. The intersection of Sullivan Avenue with Keswick Street is narrowed to 7 metres with kerb build-outs on Keswick Street and on the northern side of the intersection. The intersection of Sullivan Avenue with Judge Street is also narrowed to 7 metres with kerb build-outs on Judge Street and on the southern side of the intersection. The proposed kerbs will mate in with the existing kerb build-outs at the intersection of Sullivan Avenue with Richardson Terrace.
46. Motorists’ line of sight down the street is only offset at the intersections and at the mid-block road narrowings. There are cut-down kerbs for pedestrians crossing the intersection of Sullivan Avenue with Ensors Road, Whittington Avenue, Keswick Street and Judge Street. Parking is banned at the threshold, mid-block road narrowing and in the vicinity of the intersections of Sullivan Avenue with Whittington Avenue, Keswick Street, Judge Street and Richardson Terrace.
47. This option would see the removal of 95 metres of existing kerb and flat channel due to the narrowed carriageway at the intersections, and to enable the proposed kerb to mate in with the existing kerb and flat channel. There is no parking in the vicinity of the intersections with this option.
48. All four options will require a land use consent from the Council for work near protected trees. There is a notable tree (Rhododendron) at 110 Sullivan Avenue. Any work within 10 metres of the protected tree that involves disturbing soil to a depth of 75mm will require resource consent.
49. At the public meeting held in July 2005, the consensus of the meeting was to progress Option 1 with some additional modifications. A summary of the issues raised and discussed at the public meeting is attached at Attachment 2 (Summary of Consultation).
50. **Option 5** is the maintenance of the status quo.

PREFERRED OPTION

51. The preferred option is based on Option 1, with some modifications as a result of the feedback obtained during the public meeting and via the publicity pamphlet responses. This option involves narrowing the road width from 14 metres to 10 metres between Ensors Road and Whittington Avenue, and from 14 metres to 9 metres between Whittington Avenue and Richardson Terrace.
52. A mid-block road narrowing to 7 metres width is proposed for outside 25 Sullivan Avenue and the CPIT entrance with kerb build-outs. Another mid-block road narrowing to 3.5 metres width is proposed for the purpose of reducing traffic speed and flow to one lane outside 69 and 66/68 Sullivan Avenue. The intersections of Sullivan Avenue with Whittington Avenue, Keswick Street, Judge Street and Richardson Terrace will all be narrowed to 7 metres width with kerb build-outs. Please note the current (attached) plan shows a narrowing distance of 3 metres. This should be 3.5 metres and will be amended in all plans and designs.
53. Street lighting will be upgraded as part of the project and the kerb build-outs will be well lit. The kerb build-outs mid-block and at intersections are evenly spaced along Sullivan Avenue to create regular traffic calming measures, and shorter pedestrian crossing distances at desired crossing points. Holland pavers are proposed at the Sullivan Avenue/Ensors Road threshold, Whittington Avenue/Sullivan Avenue intersection, and Sullivan Avenue/Richardson Terrace threshold.
54. The existing kerb and dish channel will be replaced with kerb and flat channel, which will reduce “local flooding”, associated with vehicle crossings. The preferred option has been designed to ensure that drainage in the street is maintained or improved on that which currently exists.
55. Cycle by-pass lanes will be implemented at the mid-block road narrowing to 3.5 metres between Whittington Avenue and Keswick Street to ensure cyclist safety at this one-lane traffic area. Kerb build-outs at the intersections and mid-block road narrowings will reduce the pedestrian crossing distance to increase the safety for all users. Kerb cut-downs will be implemented at Richardson Terrace to assist pedestrians in crossing the street.

56. The intersections of Sullivan Avenue with Ensors Road, Whittington Avenue, and Richardson Terrace will have raised thresholds to further assist in reducing the traffic speed along the street. The preferred option retains most of the existing on-street parking, and better defines the parking spaces between the kerb build-outs. The carriageway will continue to accommodate parallel parking along both sides of the street.
57. The proposed trees (i.e. red maple and Japanese magnolia) and landscape planting consist of low groundcover at intersections that will not exceed 500mm in height. The landscape planting will be completed as part of the detailed design phase.
58. Construction is currently programmed to commence in August 2006, however due to early completion of the planning phase, it is likely to start earlier. Construction will take approximately nine months to complete.

SECTION THREE - ASSESSMENT OF OPTIONS

Option 1 - The Preferred Option

59. The objectives for this project are met by the preferred option, in that the existing kerb and dish channel will be replaced with kerb and flat channel. Traffic speeds and the safety of all road users will be maintained or improved. Landscape enhancement will be provided in conjunction with the kerb and channel renewal wherever possible. Street lighting will be reviewed and upgraded as required, particularly at mid-block road narrowings and intersections. The design does not exacerbate the demand for on-street parking in front of residential properties. The carriageway width is reduced as part of the preferred option.
60. The preferred option will assist in reducing "hoon" behaviour. The narrower carriageway will create a more confined road environment, supported by the narrowings at the intersections, particularly at Whittington Avenue. It is not expected to reduce the behaviour as much as Option 3 (which had a meandering carriageway) which would have created more visual obstruction. However, Option 3 was not supported as the preferred option at the public meeting. The project team is comfortable that there will be sufficient change in road configuration to change driver behaviour with the recommended option.
61. There are no land ownership issues associated with this project, as the works are all contained on Council road reserve.
62. The following consent and legal issues have been considered:
 - Trees - There are no protected trees along the length of Sullivan Avenue. There is one notable tree outside 110 Sullivan Avenue. Resource consent will be required for any works adjacent to this tree.
 - Buildings - There are no heritage or historic buildings, places or objects in the area of the proposed works.
 - Road widths - The existing roadway width of 14 metres will be reduced to 10 metres width between Ensors Road and Whittington Avenue, and 9 metres width between Whittington Avenue and Richardson Terrace. The new road widths comply with the provisions for a Local Road in the Proposed City Plan, so there is no requirement for resource consent.
 - Bylaw Changes - Amendments and/or additions will be required to the Christchurch City Traffic and Parking Bylaw 1991 for parking restrictions.

Options 2 to 4 - Alternative Design Options

63. The four options developed by the Council are outlined above in paragraphs 28 to 47 of this report. Of these options, Options 1, 3 and 4 were put forward to the residents for consultation at a public meeting held in July 2005. Option 2 was not put forward for further consultation at the public meeting, as the change in priority for traffic flow down Whittington Avenue and into the Tabart Street/Judge Street circuit would merely shift the concerns of residents from Sullivan Avenue to these adjoining streets, rather than resolve them.
64. The issues raised in regard to the three options presented at the public meeting in July 2005 are outlined in Attachment 2. Each of the three options presented to the meeting was an acceptable road configuration from the Council's perspective. The general consensus of the meeting was to progress with Option 1 with some modifications. In particular, the residents liked the "avenue

effect” of the street being centred within the road reserve, rather than offset as presented in Options 3 and 4. They also preferred the one-way road narrowing outside 69 Sullivan Avenue rather than the angled two way road narrowing at the mid-block point between Whittington Avenue and Keswick Street as detailed in Option 3.

Option 5 - Maintain the Status Quo

65. The option to maintain the status quo essentially means to do no capital works along this section of Sullivan Avenue. This would retain the road environment in its existing condition.
66. This option would be inconsistent with the Community Outcomes outlined in the LTCCP, and would be inconsistent with Council strategies, particularly the asset management plan.
67. Therefore it is considered that it would not be appropriate to maintain the status quo because of the opportunity to ensure an efficient, safe and sustainable transport system in the City, whilst providing for all modes of transportation.