

7. KEIGHLEYS ROAD AND MCGREGORS ROAD (HAY ST TO BROMLEY ROAD) SAFETY IMPROVEMENT PROJECT

General Manager responsible:	General Manager City Environment, DDI 941-8656
Officer responsible:	Transport and Greenspace Unit Manager
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PURPOSE OF REPORT

1. The purpose of this report is to seek the approval of the Board to proceed to final design, tender and construction of the Keighleys Road-McGregors Road (Hay Street to Bromley Road) safety improvement project, as shown in **Attachment 1 - Scheme Plan**.

EXECUTIVE SUMMARY

2. The initiating aim of the project was to implement safety works to improve the roading environment for pedestrians, cyclists, motorists, and the Bromley School community. The issues and crash history relating to this section of road suggest treating the route, rather than the individual locations of concern, may be more effective.
3. The project was initiated by the Network Operations Team as part of the Safety Improvement Programme, and has resulted from earlier investigations in 2002 in the Bromley LATMS (Local Area Traffic Management Scheme).
4. After assessing the range of issues raised by Council officers, and from an initial survey of directly affected parties, the objectives for this project were determined as follows:
 - To improve the safety for all road users along Keighleys Road and McGregors Road between Hay Street and Bromley Road, including the Keighleys Road/Korora Street, Keighleys Road/McGregors Road, and Hay Street/McGregors Road/Butterfield Street intersections.
 - To reduce the speed of vehicles along Keighleys Road and McGregors Road between Bromley Road and Hay Street.
 - To provide a safe crossing point at Bromley School.
 - To provide a safer environment for pedestrians at the Keighleys Road/Korora Street intersection.
 - To maintain access for buses to Korora Street at Keighleys Road.
5. The preferred option is shown in **Attachment 1 - Final Plan**.
6. The preferred option is a route treatment consisting of intersection realignments, pedestrian facilities, cycle facilities, and raised platforms at intersections and mid-block locations. Key features include:
 - Traffic management on Hay Street between the intersections of Kuaka Crescent and Butterfield Avenue including the closure of the Hay Street 'slip lane' to vehicular through traffic.
 - Intersection treatment at McGregors Road/Keighleys Road.
 - Intersection treatment at Korora Street/Keighleys Road.
 - Relocation of the Bromley School crossing point.
 - Footpath extension in the vicinity of Bromley School with adjacent parking.
 - Threshold treatment on Keighleys Road at the Bromley Road intersection.
7. The preferred option was selected as it meets the project aims and objectives, and takes into consideration all identified asset management issues, best practice guidelines, safety issues, safety audit recommendations and legal considerations associated with this project. It was also achieved as a result of internal and external consultation processes.
8. Facets of the project that were open for feedback from the community included location and type of street treatments, landscaping, footpaths and pedestrian facilities.
9. Following an initial issues identification consultation, community consultation on the preferred option was undertaken in June and July 2006. Approximately 1,550 households in the area, and interest groups including, the Bromley Residents Group and Bromley School, were consulted. Primarily this was done via the project publicity leaflet, the Council's "Have Your Say" website, and also included two public meetings, as well as phone and email feedback and discussions. Sixty one responses were registered, of which 72% were in support of the proposal, 21% unspecified, and 7% did not support. Many respondents made comments on aspects within the proposal.

10. In August 2006 an additional letter and plan was delivered to those within the Hay Street/McGregors Road intersection area. The purpose of this was to:
 - Highlight the proposed cycle lanes, and the fact that the provision of pedestrian facilities and road space for cyclists would result in a loss of parking outside some properties.
 - Put forward a revised design for the McGregors Road 'slip lane' which included additional parking.
 - Relocate a bus stop omitted from the original publicity leaflet.
11. An on-site meeting with residents was held on 23 August 2006 to discuss the design of the McGregors Road 'slip lane' and the surrounding intersection. Issues raised included the loss of on street parking and the bus stop location. As a result of further investigations and design, a revised preferred option was produced providing for additional on street parking on Hay Street. The bus stop location was confirmed.

FINANCIAL AND LEGAL CONSIDERATIONS

12. The Safety Improvement Project for Keighleys Road and McGregors Road (Hay Street to Bromley Road) is programmed in the Transport and Greenspace Units' capital programme for the 2006/07 financial year. The budget is made up of four projects which have a combined budget total of \$454,657. The estimated cost of this project is \$449,239.
13. There are protected trees shown on Webmap2 on private property, and they have the same status as trees protected by subdivision. These trees are "to be preserved and maintained in accordance with good arboriculture practice". These trees are not subject to resource consent.
14. There are no historic or heritage buildings, places or objects identified in the City Plan.
15. Community Board resolutions are required to approve the traffic restrictions.

STAFF RECOMMENDATIONS

It is recommended that the Board:

1. Approve the Keighleys Road and McGregors Road (Hay Street to Bromley Road) Safety Improvement Project to proceed to final design, tender and construction, as shown in Attachment 1 - Final Plan.
2. Approve the following traffic and parking restrictions:

No Stopping:

- (a) That the stopping of vehicles be prohibited at any time on both sides of Kuaka Crescent, commencing at its intersection with Hay Street and extending 12 metres in a northerly direction.
- (b) That the stopping of vehicles be prohibited at any time on both sides of McGregors Road, commencing at its intersection with Hay Street and extending 15 metres in a northerly direction.
- (c) That the stopping of vehicles be prohibited at any time on the west side of McGregors Road, commencing at its intersection with Hay Street and extending 40 metres in a southerly direction.
- (d) That the stopping of vehicles be prohibited at any time on the east side of McGregors Road commencing at its intersection with Hay Street and extending 16 metres in a southerly direction.
- (e) That the stopping of vehicles be prohibited at any time on the east side of McGregors Road, commencing at a point 29 metres south of its intersection with Hay Street and extending 25 metres in a south westerly direction.
- (f) That the stopping of vehicles be prohibited at any time on the north side of the McGregors Road slip lane, commencing at its intersection with Hay Street and extending 41 metres in a westerly direction.

- (g) That the stopping of vehicles be prohibited at any time on the west side of Keighleys Road, commencing at a point 9 metres north of its intersection with the north side of Bromley Road and extending 47 metres in a southerly direction.
- (h) That the stopping of vehicles be prohibited at any time on the west side of Keighleys Road commencing at a point 100 metres north of its intersection with the north side of Bromley Road and extending 105 metres in a northerly direction.
- (i) That the stopping of vehicles be prohibited at any time on the east side of Keighleys Road commencing at a point 124 metres north of its intersection with the north side of Bromley Road and extending 31 metres in a northerly direction.
- (j) That the stopping of vehicles be prohibited at any time on the east side of Keighleys Road commencing at a point 194 metres north of its intersection with the north side of Bromley Road and extending 18 metres in a northerly direction.
- (k) That the stopping of vehicles be prohibited at any time on the north side of Hay Street, commencing at its intersection with the east side of Kuaka Crescent and extending 15 metres in an easterly direction.
- (l) That the stopping of vehicles be prohibited at any time on the south side of Hay Street, commencing at a point 40 metres west of its intersection with the west side of McGregors Road and extending 10 metres in a westerly direction.

Cycle Lane:

- (m) That a cycle lane be installed adjacent to the kerb, on the north side of Hay Street, commencing at the east side of its intersection with Kuaka Crescent and extending 176 metres in a westerly direction.
- (n) That a cycle lane be installed adjacent to the kerb, on the south side of Hay Street, commencing at a point 19 metres east of the east side of its intersection with Kuaka Crescent and extending 144 metres in a westerly direction.

Bus Stop:

- (o) That the existing bus stop be revoked from the north side of Hay Street at its present position commencing 16 metres east of the intersection with McGregors Road and extending 12 metres in an easterly direction.
- (p) That a bus stop be installed on the north side of Hay Street, commencing 15 metres east of the intersection with Kuaka Crescent and extending 15 metres in an easterly direction.

“Give Way”:

- (q) That a “Give Way” sign be placed against the north approach of McGregors Road at its intersection with Hay Street.
- (r) That a “Give Way” sign be placed against the west approach of McGregors Road at its intersection with McGregors Road and Keighleys Road.
- (s) That the existing “Give Way” sign placed against Butterfield Avenue at its intersection with Hay Street be revoked.

“Stop”:

- (t) That a “Stop” sign be placed against Butterfield Avenue at its intersection with Hay Street.

Remove all existing no stopping:

- (u) That all existing ‘No Stopping at any Time’ areas in the aforementioned areas be revoked.

CHAIRPERSON’S RECOMMENDATION

That the staff recommendation be adopted.

BACKGROUND

16. Keighleys Road and McGregors Road (Hay Street to Bromley Road) are located in the Hagley Ward, and fall within the jurisdiction of the Board. The surrounding area is residential in nature, with the Linwood Cemetery, Bromley Cemetery, and the Cypress Gardens Reserve located nearby.
17. Keighleys Road and McGregors Road (Hay Street to Bromley Road) is 700 metres in length. In the roading hierarchy defined in the City Plan, Keighleys Road, McGregors Road and Bromley Road are classified as local roads, and Hay Street is classified as a collector road. McGregors Road north of Keighleys Road has a volume of 1,553 vehicles per day, and Keighleys Road south of Korora Street has a volume of 1,884 vehicles per day.
17. The Land Transport New Zealand crash analysis system shows there have been 16 crashes recorded for the five-year period between 2001 and 2005. There have been six loss of control crashes along the route length, resulting in one minor injury.
18. This project is comprised of four safety improvement projects:
 - Hay Street/McGregors Road
 - Keighleys Road/McGregors Road
 - Keighleys Road/Korora Street; and
 - Bromley School Safety.
19. These projects were initiated by the Network Improvements Team and the Transport Planner - Cycles and Pedestrians, as part of the Safety Improvements Programme. The Bromley LATMS adopted in 2002 identified residents' concerns about traffic issues.
20. Internal Council consultation and investigations were undertaken in November 2005, which resulted in the identification of a number of project issues which needed to be resolved. These included:
 - The provision of pedestrian crossing points.
 - Ensure a cycle friendly street environment.
 - Concerns over vehicle speeds (in particular the 85% and maximum speeds) and crash rates.
 - Access to passenger transport (buses).
 - Integration with Greenspace Unit issues in relation to pathways and frontages.
21. A number of specific issues related to Bromley School were identified. These included:
 - Speed of vehicles travelling past the School.
 - Shifting of the existing school crossing point to improve visibility and connectivity to the new school entrance.
 - Drop off and pick up issues at the school entrance.
22. In addition, as part of a Safe Routes to School study at Bromley School, issues identified included:
 - A need for crossing points on Hay Street.
 - A need for crossing points where McGregors Road intersects with Keighleys Road.
 - Cycle and pedestrian traffic at the Keighleys Road/Korora Street intersection.
23. Community consultation was undertaken in January 2006 to further identify the concerns of the community. The main issues arising from this were the speed of vehicles, and pedestrian crossing facilities for children.
24. In response to these investigations, and in conjunction with the original initiating aim of the project to improve the safety for vehicles, cyclists and pedestrians along the route, the following objectives for the project were established:
 - To improve the safety for all road users along Keighleys Road and McGregors Road between Hay Street and Bromley Road, including the Keighleys Road/Korora Street, Keighleys/McGregors, and Hay/McGregors/Butterfield intersections.
 - To reduce the speed of vehicles along Keighleys Road and McGregors Road between Bromley Road and Hay Street.
 - To provide a safe crossing point at Bromley School.
 - To provide a safer environment for pedestrians at the Keighleys Road/Korora Street intersection.
 - To maintain access for buses to Korora Street at Keighleys Road.

25. In order to address these issues, two options were developed during the concept design phase; and from these a preferred option was determined. Following a seminar with the Board at its 24 May 2006 meeting to obtain feedback, the preferred option was released for consultation in June and July 2006.
26. Approximately 1,550 households in the area, and interest groups including the Bromley Residents' Group and Bromley School were consulted. Primarily this was done via the project publicity leaflet, the Council's "Have Your Say" website, and also included two public meetings, phone and email feedback, and discussions. Sixty one responses were registered, of which 72% were in support of the concept plan, 21% unspecified, and 7% did not support. Many respondents made comments on aspects featured within the proposal.
27. Council officers attended two residents' group meetings to discuss the proposal, one prior to the scheme being developed and one after the consultation leaflets had been distributed. Bromley School has been consulted and informed on a regular basis.
28. In August 2006 an additional letter and plan was delivered to those within the Hay Street/McGregors Road intersection area. The purpose of this was to:
 - Highlight the proposed cycle lanes, and the fact that the provision of pedestrian facilities and road space for cyclists would result in a loss of parking outside some properties.
 - Put forward a revised design for the McGregors Road 'slip lane' which included additional parking.
 - Relocate a bus stop omitted from the original publicity leaflet.
29. An on-site meeting with residents was held on 23 August 2006 to discuss the design of the McGregors Road 'slip lane'. Issues raised included the loss of on street parking and the bus stop location. As a result of further investigations and design, a revised preferred option was produced providing for additional on street parking on Hay Street. This was achieved through a reduction in the length of both the pedestrian island taper and cycle lane outside 88 & 90 Hay Street. The proposed bus stop location was confirmed.
30. A summary of the submissions received, and an evaluation of the issues raised is shown in **Attachment 2 - Summary of Consultation**.
31. The key issues raised during the scheme plan consultation phase were:
 - Bromley School - speed, pedestrian and parking concerns.
 - Butterfield Avenue/McGregors Road/Hay Street Intersection - alignment and visibility concerns.
 - McGregors Road slip lane - parking and access.
 - Hay Street - location of pedestrian islands.
 - Keighleys Road/Bromley Road intersection - speed and heavy vehicle concerns.
32. As a result of the above consultation and proposal development, the main features of the Plan for Board approval is shown in Attachment 1- Final Plan. The key features include:
 - Realignment of the McGregors Road/Hay Street/Butterfield Avenue intersection, including pedestrian and cycle facilities.
 - Raised platform outside 55 and 64 McGregors Road.
 - Raised platform and narrowing at McGregors Road/Keighleys Road intersection.
 - Raised platform and narrowing at Keighleys Road/Korora Street intersection.
 - Landscaping of the existing Bromley School crossing point - Keighleys Road.
 - Relocation of the Bromley School crossing point - Keighleys Road.
 - New footpath opposite Bromley School adjoining the new parking area - Keighleys Road.
 - Raised platform and narrowing at Keighleys Road/Bromley Road intersection.
 - Street lighting upgrade.

OPTIONS

33. Two options were developed for comparison during the concept design process.

Option 1

McGregors Road/Hay Street Intersection Area

34. An island will be installed on the McGregors Rd south approach to the intersection with a facility for pedestrians to cross, and a gap to allow vehicles to turn into the slip lane.
35. A painted median will be installed on Hay Street and will incorporate two islands to provide safe areas for pedestrians to cross. There is not sufficient room for the painted median, motorised vehicles, cyclists, and parking. Parking will be banned adjacent to the kerb, and this will be marked by having the cycle lane marked adjacent to the kerb.
36. The slip lane from Hay Street east into McGregors Road will be closed to motorised traffic at its eastern end. A gap for cyclists to access the slip lane will be available. On street parking will be available on one side of the slip lane.
37. The existing 'Give Way' control on Butterfield Ave will be changed to a 'Stop' sign to provide consistency with the McGregors Road south approach.
38. A raised platform will be installed outside 55/64 McGregors Road.

McGregors Road/Keighleys Road Intersection

39. The main feature of the work at this intersection is a raised platform. Alterations to the kerb alignment on the corners is also proposed.

Keighleys Road/Korora Street Intersection

40. A raised platform is proposed at this intersection with minor changes to the kerb alignment on the corners.

Bromley School

41. The main feature of the works at Bromley School is the relocation of the school crossing point to the bend, south of the school. The path marking the existing crossing point will be removed and landscaping installed. The path will be extended opposite the school past the new crossing point to towards Bromley Road. Adjacent to this new path will be new kerb and shoulder construction to form additional parking.

Keighleys Road/Bromley Road Intersection

42. The kerb from the new parking area to the south of the school will be extended through the Bromley Road intersection reducing the width at the intersection, and a raised platform will be installed just to the north of the Bromley Road intersection.

Option 2

McGregors Road/Hay Street Intersection Area

43. This option is similar to Option 1 except that the slip lane would be narrowed by installing a kerb build-out on the property side of the lane to reduce the width.

McGregors Road/Keighleys Road Intersection

44. This option proposed alterations to the kerb alignment at the intersection with a raised platform on the McGregors Road southwest approach.

Keighleys Road/Korora Street Intersection

45. This option is similar to Option 1 except that the raised platform is proposed to be located on the Korora Road approach to the intersection rather than within the intersection.

Bromley School

46. This option involves the installation of a 40km/hr speed zone at the school with no other physical works.

Bromley Road/Keighleys Road Intersection

47. A raised threshold similar to Option 1 is proposed in this alternative, except that the threshold would be placed seven metres back from the intersection.

PREFERRED OPTION

48. Option 1 was recommended as the preferred option for consultation with the following change:
- (a) The cycle lane through the slip lane at Hay Street has been reduced in length to allow more on street parking for residents.
49. The preferred option is described in paragraphs 35 to 43 above.

SECTION THREE – ASSESSMENT OF OPTIONS

Maintain the Status Quo

50. The option to maintain the status quo essentially means to undertake no capital works. This option would be inconsistent with the Community Outcomes outlined in the LTCCP, and would be inconsistent with Council strategies, in particular the Road Safety Strategy, and the Pedestrian Strategy. Therefore, it is considered inappropriate to maintain the status quo given the opportunity to ensure an efficient, safe and sustainable transport system within this area of the city.

Option 1 - Preferred Option

51. The objectives of the project are met by the preferred option as follows.

McGregors Road/Hay Street Intersection Area

52. The preferred option has significant safety benefits for all users at this intersection. Removing the high speed slip lane will alter the nature of vehicle behaviour as it enters the McGregors-Keighleys route, forcing them to reduce speed at this end of the street. Cyclists, pedestrians, and adjacent property owners will also benefit from the removal of high speed vehicles from this area. The implementation of the flush median will assist in reducing speeds and make it safer for through traffic and right turning traffic along this section of Hay Street. The pedestrian median islands within the flush median will improve safety for pedestrians.
53. The raised platform proposed at 55/64 McGregors Road will assist in speed reduction and provide consistency to the route.

McGregors Road/Keighleys Road Intersection

54. The raised platform and kerb alterations will slow vehicle speeds and provide improved pedestrian crossing facilities.

Keighleys Road/Korora Street Intersection

55. The works proposed at this intersection will provide a safer environment for pedestrians to cross the road and reduce vehicle speed. The alignment at the intersection and the 50mm height of the platform ensures this is an appropriate treatment for a bus route.

Bromley School

56. Pedestrian safety will be greatly enhanced by the relocation of the school crossing to the bend in Keighleys Road, and by the proposed changes to parking near the school. The proposals along the McGregors/Keighleys route will all contribute to a safer environment at the school by reducing vehicle speeds.

Keighleys Road/Bromley Road Intersection

57. The raised threshold treatment at this intersection will slow vehicle speeds and highlight to motorists that this is a local road environment.

Option 2 – Alternative Options

McGregors Road/Hay Street Intersection Area

58. The treatment of the slip lane for this option was rejected due to the significantly higher costs and the lack of corresponding benefits to that cost.

McGregors Road/Keighleys Road Intersection

59. The alternative threshold treatment at this intersection was rejected as it would have no traffic calming effect on the Keighleys Road/McGregors Road route.

Keighleys Road/Korora Street Intersection

60. A Type C threshold was rejected as it had no traffic calming effect on Keighleys Road, and was inconsistent with other proposed treatments along the route.

Bromley School

61. The 40 km/hr school speed zone was considered as a possibility to assist in speed reduction before and after school. It was not a solution that was going to assist in reduction of speeds outside these hours, and did not address all the issues raised during consultation.
62. Once funding was confirmed from the Pedestrian Safety initiatives budget for physical works that would better meet the objectives of the project the 40km/hr speed zone was not considered to be the best solution.

Keighleys Road/Bromley Road Intersection

63. This option was rejected as it is considered the threshold treatment in this location would have more impact located closer to the intersection.