
Report To:	Environment & Regeneration Committee	Date: 16 January 2019
Report By:	Corporate Director Environment, Regeneration and Resources	Report No: ERC/RT/GMcF/18.608
Contact Officer:	Gail MacFarlane	Contact No: 01475 712038
Subject:	Larkfield Road/George Road Junction Assessment	

1.0 PURPOSE

- 1.1 To advise the Committee on the outcome of the Larkfield Road/George Road junction assessment.
- 1.2 This report lists options to improve the operation of the junction.

2.0 SUMMARY

- 2.1 The Council received a petition with 1,177 signatures to install traffic lights at the junction of Larkfield Road and George Road. Prior to going to the Petitions Committee, the Head of Legal and Property Services, the Head of Environmental and Commercial Service and the Petitioner agreed that a Traffic Options Appraisal would be undertaken.
- 2.2 The Roads Service employed a consultant to carry out a transport assessment in 2019 to improve the operation of the junction.
- 2.3 The study assessed present operation of the junction and proposed the following improvements:
 - Full Signalisation
 - Signalised Pedestrian Crossing on Larkfield
 - Mini Roundabout
 - Small Roundabout
 - Pedestrian Crossing Upgrades
 - Prohibition of Vehicle Movements on George Road
 - Stopping Access to George Road
 - One Way System on George Road (Eastbound or Westbound)
 - Relief Road from Larkfield to Drumstantie Road
 - Relief Road Kirn Drive to Earnhill Road
 - Banned Turning Movements
- 2.4 The report narrows the options down to the following:
 - Junction Signalised
 - Signalised Pedestrian Crossing on Larkfield Road
 - Uncontrolled or zebra pedestrian crossing with raised tables
 - Pedestrian Crossing Upgrades
 - Relief Road Kirn Drive to Earnhill Road and One Way System on George Road (Eastbound or Westbound)

3.0 RECOMMENDATIONS

- 3.1 It is recommended that the Committee notes the findings in the Larkfield Road Options Appraisal report.
- 3.2 It is recommended that the Committee approves the reduced list of options for public consultation.
- 3.3 It is recommended that the Committee remits to the Head of Roads and Transportation to undertake a public consultation and proceed to detailed design and costing on the top 2 projects.

Gail Macfarlane
Shared Head of Service

4.0 BACKGROUND

4.1 The Council received a petition with 1,177 signatures to install traffic lights at the junction of Larkfield Road and George Road. Prior to going to the Petitions Committee, the Head of Legal and Property Services, the Head of Environmental and Commercial Service and the Petitioner agreed that a Traffic Options Appraisal would be undertaken.

4.2 The Roads Service employed a consultant to carry out a transport assessment to improve the operation of the junction. The purpose of the transport assessment was to:

- Review the road safety history of the area and ascertain any potential issues at the junction, accessibility for non-motorised users including the implications for school travel, assessment of traffic volumes and vehicle operation considering peak time performance;
- Comment on the current suitability of the current junction configuration. Consider a range of improvement options;
- Review and evaluate challenges and benefits, likely costs and acceptability of the scheme to key stakeholders and local groups; and
- Considering the current constraints and other key factors such as accessibility, affordability and deliverability, produce a recommended option for the junction.

4.3 Following the public consultation the keys issues were established as:

- Reduce traffic speed
- Reduce vehicle turning conflicts
- Increase crossing safety

4.4 The consultant evaluated each option and discounted some that feasibly could not be delivered this is summarised below:

1. Junction Signalisation

Benefits

Reduce speeds
Assist cars exiting George and Hilltop Road
Priority for pedestrians

Concerns

Conflicts with driveways
Safe operation exiting from Lambeth Walk and this may require signalisation
Visibility at stop lines impaired by Scottish Power Sub Station and private gardens
Realignment of approaches not feasible
Additional vehicle queuing on Larkfield Road
Visual impact on the residents in close proximity
Widen Lambeth Walk and construct a retaining wall
Increase in delay as the lights will have 8 different phases

Summary

This proposal will be being taken forward to public consultation however the topography of the junction reduces visibility and the installation of the lights and all the different phases will actually increase the delay on all arms of the junction.

2. Signalised Pedestrian Crossing

Benefits

Reduce speeds
Priority for pedestrians
There will be no concern with visibility as crossing can be positioned optimally

Concerns

Signals will increase journey times off peak
Congestion peak times
Visual impact on the residents in close proximity

Summary

This option will be taken forward to public consultation as it provides the benefit of reducing speed and improving the pedestrian access across Larkfield Road, however it does not help

the pedestrian access across George Road and Larkfield Road.

3. **Mini Roundabout**

Benefits

Removes conflicts between turning movements
Reduce queuing and delays for all approaches

Concerns

Geometric constraints of the junction
Narrowing of carriageway will cause further issues for large turning vehicles
Drivers may choose to ignore changes
Lambeth Walk stop lines would have to be moved, resulting in the construction of a retaining wall.

Summary

This option will not be taken forward as the topography of the surrounding area will cause issues for large vehicles.

4. **Small Conventional Roundabout**

Benefits

Removes conflicts between turning movements
Improve road safety
Reduce queuing and delays for all approaches
The raised roundabout will reduce speeds on approach

Concerns

Geometric constraints the minimum diameter of a roundabout is 28m. There is no room at the junction for this.

Summary

There is no room to construct a 28m radius roundabout.

5. **Priority Change** (Reallocating priority to George and Larkfield Road)

Benefits

Provides right of way for George and Larkfield Road
Reduces speed on Larkfield Road

Concerns

Delays on Larkfield Road when that is the dominant route
Re-routing of traffic in the area caused by delays on Larkfield Road

Summary

This option is not taken forward as it will increase delay on the dominant road.

6. **Network Management** (Bus and emergency access to George Road)

Benefits

Junction would act as 3 arm junction with only bus movements down George Road
Reduces conflicting vehicle movements

Concerns

Re-allocation of traffic could result in delays elsewhere
Restrictions would be self-enforcing and drivers may ignore
May encourage speeding on Larkfield Road
Increase journey times
Increase journey time for firemen getting to the station

Summary

This option will not be taken forward as it will be difficult to enforce and it will cause delay for firefighters travelling to the Gourock fire station.

7. **Pedestrian Crossing** (raised table at crossing or zebra crossing)

Benefits

Reduces speed on approach
Promotes safer crossing for pedestrians
Zebra would cause drivers to stop for pedestrians
Crossings can accommodate vulnerable users

Concerns

Zebra not advised where average speeds are greater than 30mph.
Speed reduction measure would need to be introduced
A refuge island would impede on large turning vehicles

Summary

This option will be taken forward to public consultation as it assists with pedestrian movement and also slows traffic and the reduced traffic speed will assist vehicles exiting Hilltop and Larkfield Road.

8. One-way System on George Road

Benefits

Would only add a small benefit by either banning traffic coming in or out of George Road
Would reduce conflict

Concerns

Additional traffic at other junctions
There would still be turning conflict at other junctions
Traffic speed on Larkfield Road would not reduce

Summary

This option could not be taken on its own it would have to be developed with option 9 to provide a one-way circular route. This will reduce conflict at the Hilltop junction. This option and option 9 below will be taken forward to public consultation together.

9. Relief Road from Larkfield Road to Drumshantie Road (one-way loop)

Benefits

Reduce conflict at the Hilltop Junction
Would increase parking on George Road as it would be one-way
Reduce delay at Hilltop junction

Concerns

Junction spacing on Larkfield Road for the new road
Increase in journey time.

Summary

Taken forward to public consultation with option 8.

10. Relief Road from Kirn Drive to Earnhill Road

Benefits

Re-route trips away from Hilltop Junction
Reduce delay at Hilltop junction

Concerns

Topography of the land would make this option unviable

Summary

Not taken forward due to the topography of the ground.

- 4.5 The junction and the topography of the surrounding area is challenging as has been highlighted by the number of options that have been considered and consequently discounted because they feasibly cannot be taken forward.

5.0 PROPOSALS

- 5.1 It is proposed to take the following options back to consultation:

- Junction Signalised
- Signalised Pedestrian Crossing on Larkfield Road
- Uncontrolled or zebra pedestrian crossing with raised tables
- Relief Road Kirn Drive to Earnhill Road and One Way System on George Road (Eastbound or Westbound)

- 5.2 Some of the options that will be presented at the public consultation may be taken together for example, one way on George Road, uncontrolled crossing and relief road.

6.0 IMPLICATIONS

Finance

- 6.1 Financial Implications:

One off Costs

Cost Centre	Budget Heading	Budget Years	Proposed Spend this Report	Virement From	Other Comments
	Roads and Feasibility	20/21	15,000		Revenue to prepare detailed design for the top two schemes.

Annually recurring costs:

Cost Centre	Budget Heading	Budget Years	Proposed spend this report (£000s)	Virement from	Other comments
N/A					

6.2 Legal

There are no legal implications arising from this report.

6.3 Human Resources

There are no specific HR implications arising from this report.

6.4 Equalities

There are no direct equalities implications arising from this report.

6.5 Repopulation

There are no direct repopulation implications arising from this report.

7.0 CONSULTATIONS

7.1 The Head of Legal and Property Services and the Chief Financial Officer have been consulted on this report.

8.0 LIST OF BACKGROUND PAPERS

8.1 Options Appraisal Report–Larkfield Road/George Road/Hilltop Road 28th November 2019
Larkfield Road Options Study, Signals Development 14th October 2019
Larkfield Road Options Study, Network Management Options 21st June 2019