

# Transport and Environment Committee

10.00am, Tuesday, 4 June 2013

## Pedestrian Facilities, Ferry Road/Granton Road - Motion by Councillor Jackson

Item number	7.6
Report number	
Wards	4 - Forth

### Links

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Coalition pledges	None Applicable
Council outcomes	<a href="#">CO22</a>
Single Outcome Agreement	<a href="#">SO1</a>

### Mark Turley

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# Executive summary

## Pedestrian Facilities, Ferry Road/Granton Road - Motion by Councillor Jackson

### Summary

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At the Transport, Infrastructure and Environment Committee on 18 June 2012, Councillor Jackson raised a motion that the “Committee notes that the traffic signalised junction of Granton Road/Ferry Road has a pedestrian phase north/south but not east/west and calls for a report to establish if the existing signals can be altered to allow an east/west phase to be retrofitted or if a new signal installation is necessary along with associated costs”.

An initial investigation of the traffic signals at the junction was undertaken which concluded that the age of the traffic signal equipment at this location did not allow for an additional pedestrian phase to be added and the whole installation would therefore require to be replaced. A full renewal of the traffic signal infrastructure to include this facility would cost in the order of £185K. However, further investigation has highlighted the opportunity to utilise surplus traffic signal equipment from the tram project which will allow a limited cost refurbishment of the junction for around £70,000.

In road safety terms the location has a low collision record with no pedestrian accidents recorded at the junction. A pedestrian survey found demand for the east/west crossing over Granton Road to be low. Traffic modelling identified that, depending on the usage of the new facility, the signal changes required for this crossing could result in increased delays and congestion to the immediate road network, with a detrimental impact on air quality.

### Recommendations

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It is recommended that the Transport and Environment Committee:

- 1 notes the content of the Report;
- 2 considers whether to approve a limited cost refurbishment of the junction to provide additional pedestrian facilities; and
- 3 discharges the Motion.

## Measures of success

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Traffic flows for all modes through the junction are maintained at satisfactory levels, particularly with regard to maintaining pedestrian safety.

Crossing facilities are much improved allowing easier pedestrian movement around the junction and immediate area, particularly for vulnerable groups.

## Financial impact

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The capital costs for the limited cost replacement of the signal equipment at this site are estimated at £20,000 for the installation of the used traffic signal equipment, £45,000 for the civil engineering works and £5,000 for design / site supervision.

The traffic signal equipment proposed for this work is currently surplus stock from the tram project and was used for temporary traffic diversions around the City Centre. This equipment, while used, is to current standard and will allow this junction to be refurbished at much reduced cost.

There is provision within the existing traffic signal refurbishment capital budget to carry out these works though this site is not ranked top of the prioritised list.

## Equalities impact

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There will be a positive impact on equalities should the recommendations of this report be accepted.

The new crossing facilities will make the junction and immediate area far more accessible to pedestrians, particularly vulnerable groups such as children, the elderly or visually impaired.

## Sustainability impact

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The traffic signal equipment proposed for this refurbishment is much more energy efficient than the current installation saving between 65% and 70% of the current electricity costs and around two tonnes of CO<sub>2</sub> per year.

Offset against this is the potential detrimental impact to traffic at the junction if the additional crossings are heavily used. Indications from surveys carried out on site currently suggest this should not be the case.

## **Consultation and engagement**

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A meeting was held with Councillor A Jackson on 9 April 2013 to discuss the matters surrounding this report.

Councillor Jackson understands the content of the report and will be able to feed back to his constituents.

Councillors Cardownie, Day and Redpath have also been advised of the content of the report.

## **Background reading/external references**

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### [Transport 2030 Vision](#)

Appendices attached:

- Appendix A: Proposed Junction Layout.

## **Pedestrian Facilities, Ferry Road/Granton Road - Motion by Councillor Jackson**

### **1. Background**

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- 1.1 Granton Road/Ferry Road is a “T” junction, incorporating a pedestrian island on the Granton Road approach, which separates the eastbound and westbound traffic movements. Controlled pedestrian crossings are provided from the north-east corner of Granton Road and Ferry Road to the island and then from the island across Ferry Road to the south footway. An uncontrolled crossing is provided from the northwest corner of Granton Road and Ferry Road to the pedestrian island. There are no direct crossings over Granton Road or the eastbound and westbound sides of Ferry Road; all movements must go via the island.
- 1.2 The existing arrangement, without a full pedestrian provision, originates from a time when it was general policy to design for traffic demand and minimise delays. Prior to and just after its construction, pedestrian usage surveys indicated that the level of pedestrian demand for this east/west movement was insufficient to justify the inclusion of a controlled crossing from the northwest corner of Granton Road and Ferry Road to the pedestrian island therefore an uncontrolled crossing was provided.

### **2. Main report**

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- 2.1 An initial investigation was undertaken to determine the technical requirements of adding an additional pedestrian crossing to the existing traffic signal controlled junction at Granton Road/Ferry Road and assess the impact of this alteration on the immediate road network.
- 2.1 The traffic signal equipment at this junction was last updated in 1995 and has had no significant upgrade since that date. This equipment is now obsolete with replacement and upgrade parts being in limited supply or unavailable.
- 2.2 2.2 Based on the age and condition of the site, and its accident history this installation is ranked 59 out of 76 installations with partial pedestrian facilities identified for improvement across the city.

- 2.3 Local amenities that may attract pedestrians using the junction include; Inverleith Parish Church (adjacent) and Wardie Primary School (0.5Km). There are also three pre-school nurseries within a 0.5Km radius of the junction.
- 2.4 A review of the accident data for the area indicates that there have been three accidents at this site in the last five years; one of these involved a pedestrian however this was remote from the crossing and alcohol was a contributory factor.
- 2.5 The current traffic signal sequence combines the appearance of the pedestrian crossings with certain traffic movements which do not bring pedestrians and vehicles into conflict eg traffic can exit Granton Road while pedestrians cross from the triangular traffic island and the South footway at the church. This minimises delay by not halting all the traffic at the same time.
- 2.6 In order to accommodate the additional controlled crossing over Granton Road, a new pedestrian-only stage would need to be added to the traffic signal sequence. This also requires the provision of pedestrian beepers and tactile rotating cones to alert visually impaired and/or hearing impaired users to the appearance of the green man. Additional street furniture is required in the form of poles, lanterns and push button boxes for the new crossing point.
- 2.7 Physical changes would also be required to the layout of the junction. The pedestrian island requires enlargement to accommodate the additional poles needed for the new controlled crossing and allow pedestrians more room. New dropped kerbs and texture paving would require to be installed at all crossing points, to ensure a consistent approach and that the site is compliant with current pedestrian and disability access standards.
- 2.8 It was estimated, depending on the condition of the existing infrastructure that the costs of providing these all-new facilities in the traditional way could be up to £185,000: a significant sum not currently identified within departmental budgets.

Traffic signal equipment including extra crossings and facilities for the visually impaired	£35,000
Extension/renewal of underground cable ducts and repair of road surface	£40,000
Reconstruction of island, installation of new pedestrian crossing points and tactile paving	£70,000
Street lighting and road markings	£10,000
Design and contingencies	£30,000

- 2.9 Other options for the improvement of pedestrian facilities in the area were considered including a stand-alone Puffin pedestrian crossing and a Zebra crossing. Both these facilities would have required to be sited a minimum of 50 metres from the junction taking them too far off the pedestrian desire line and affecting the bus stop, parking and property frontages.
- 2.10 Such facilities were estimated to cost between £25,000 and £70,000 depending on whether a Zebra or Puffin Crossing was selected. Zebra crossings, while cheaper than Puffin facilities, do not offer the same benefits to vulnerable pedestrians.
- 2.11 Given the limitations of these alternative facilities it was considered, despite the significant cost, that the upgrading of the traffic signal junction would be the only effective method of providing a pedestrian facility across Granton Road.
- 2.12 With this in mind, following a review of surplus traffic signal equipment used for the tram construction, an opportunity has arisen to implement a limited cost refurbishment scheme at the junction. This will utilise traffic signal equipment previously installed for the tram scheme traffic diversions and minimise on street works to only those essential to provide the additional pedestrian facilities. There would be no wholesale renewal of footways or carriageway as part of this option.
- 2.13 The traffic signal equipment proposed for this option is only two or three years old, conforms to the latest technical standards and uses much less energy than the current equipment. Adopting this approach should allow these facilities to be delivered for around £70K. It should be recognised however that, depending on how often the new facility is used, this facility could have an impact on traffic and residents in the area.
- 2.14 Unlike the current pedestrian facilities at the junction, use of the additional crossing will require all traffic to stop when the green man is in operation. Traffic modelling indicates that frequent use of the new facility would increase traffic delays particularly during peak periods. However, pedestrian surveys carried out on site do not indicate a high level of demand for the facility and consequently these impacts should be limited.
- 2.15 While not indicated by the pedestrian survey data, if this new crossing facility was to be heavily used it could have a negative impact on the air quality in the immediate vicinity of the junction and result in a localised increase in pollutants and CO<sub>2</sub> emissions.
- 2.16 A portion of this increase will be offset by the use of more energy efficient traffic signal equipment which will save 65% to 70% of the current electricity costs for the site together with a reduction on CO<sub>2</sub> of around two tonnes per year.

2.17 Nonetheless, the upgrading of the traffic signal equipment at this location, as well as the introduction of an additional controlled crossing route, is considered to provide sufficient benefits to pedestrians to override these concerns.

### **3. Recommendations**

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3.1 It is recommended that the Transport and Environment Committee:

3.1.1 notes the content of the Report;

3.1.2 considers whether to approve a limited cost refurbishment of the junction to provide additional pedestrian facilities; and

3.1.3 discharges the Motion.

**Mark Turley**

Director of Services for Communities



## Links

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<b>Coalition pledges</b>	None Applicable
<b>Council outcomes</b>	CO22 - Moving Efficiently – Edinburgh has a transport system that improves connectivity and is green, healthy and accessible.
<b>Single Outcome Agreement</b>	SO1 – Edinburgh’s Economy Delivers increased investment, jobs and opportunities for all
<b>Appendices</b>	Appendix A – Proposed Junction Layout

# Appendix A

## Proposed Junction Layout

