

## ABERDEEN CITY COUNCIL

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<b>COMMITTEE</b>	Operational Delivery
<b>DATE</b>	29 May 2018
<b>REPORT TITLE</b>	Bedford Avenue Access
<b>REPORT NUMBER</b>	OPE/18/019
<b>DIRECTOR</b>	Rob Polkinghorne
<b>CHIEF OFFICER</b>	Mark Reilly
<b>REPORT AUTHOR</b>	Ross Stevenson
<b>TERMS OF REFERENCE</b>	3

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### 1. PURPOSE OF REPORT

To report to committee the outcome of the Communities, Housing and Infrastructure 8 November 2017 committee decision to

*“Instruct the Head of Public Infrastructure and Environment to investigate the feasibility of creating a left turn exit from Bedford Avenue onto St Machar Drive, with access permitted for cars registered at properties on Powis Crescent, Powis Circle and Bedford Avenue only, and report back to the CHI Committee in March 2018;”*

### 2. RECOMMENDATION(S)

That the Committee: -

- 2.1 Note that the introduction of a barrier exit onto St Machar Drive is technically feasible.
- 2.2 Acknowledge that there is not sufficient justification for the implementation of these measures at this time, as traffic figures suggest that there would be limited use of such a facility out with peak times on the road network.
- 2.3 Notes that the provision of a route for specific residential areas would set an undesirable precedent throughout the city.
- 2.4 Agrees not to proceed with measures detailed in this report at this time and instructs officers to monitor the performance of the traffic signals at the Bedford Road / Powis Terrace junction.

### 3. BACKGROUND

#### History

- 3.1 On 8 November 2017 a report titled Review of Bedford Road Bus Gate was reported to the Communities, Housing and Infrastructure Committee. The Committee approved the following motion by Councillor Ross Grant, *“Instruct the Head of Public Infrastructure and Environment to investigate the feasibility of creating a left turn exit from Bedford Avenue onto St Machar Drive, with access permitted for cars registered at properties on Powis Crescent, Powis Circle and Bedford Avenue only, and report back to the CHI Committee in March 2018”*
- 3.2 Historically the Bedford Avenue / St Machar Drive junction was a T junction, however in 1986 a prohibition of driving was introduced and Bedford Avenue was physically closed. The records detailing the reason for this closure are no longer available, however St Machar Academy was built in 1988 and it is reasonable to assume that the closure was introduced for traffic management and road safety purposes; to remove turning movements / queueing on St Machar Drive, to improve pedestrian safety on St Machar Drive, to prevent vehicles routeing through the residential street of Bedford Avenue, or likely a combination of all these reasons. Appendix 1 shows the location of the junction and the existing road layout.
- 3.3 As reported to the Communities, Housing and Infrastructure Committee in November 2017, residents of the Powis / Bedford Avenue area had raised concerns that they were being disproportionately disadvantaged by the Bedford Road bus gate, as it was blocking access / egress to the north, with a congested Bedford Road / Powis Terrace signalised junction to the south. This situation becoming particularly difficult on match days at Pittodrie.
- 3.4 Officers consider that adjustments previously carried out to the traffic signals at the Powis Terrace / Bedford Road junction have improved both the reliability and operation of the junction.
- 3.5 The possibility of fully reopening the Bedford Avenue / St Machar Drive junction was previously discounted due to concerns about road safety. Right turning traffic would block St Machar Drive creating problems on the wider network, traffic would reroute through the residential streets to avoid the Bedford Road bus gate and Powis Terrace, and there would be increased vehicle movements near a secondary school where the number of vulnerable pedestrians is significant. Bedford Avenue is a main walking route for students at St Machar Academy from the Sunnybank area, and St Machar Drive itself is the key route to the school.
- 3.6 The proposed introduction of a left turn, exit only, for cars registered at properties on Powis Crescent, Powis Circle and Bedford Avenue has not been previously considered. To do this there are several issues which need to be considered, namely the design (can a junction be physically and safely accommodated), the type of traffic management measures (how the scheme will operate and be managed), and the enforcement of the restriction (whether

the restriction requires active enforcement, or can it be self-enforcing). Ultimately the benefits of the proposals should be assessed against any detrimental impacts and its feasibility.

### Design

- 3.7 A preliminary assessment has been carried out on the junction and officers do not consider there to be any physical reasons why a left out could not be accommodated. Should any proposals be progressed then a detailed design and cost estimate would be carried out.
- 3.8 Appendix 2 shows that there is currently no turning area on Bedford Avenue, any large vehicle travelling beyond Powis Crescent must reverse up to 140m to service these properties. Whilst this is an existing situation which is less than desirable the introduction of additional traffic into this area would exacerbate the problem. If a proposal is to be taken forward it should start from the Powis Crescent junction and if any large vehicle passes beyond this point it could exit via St Machar Drive. Appendix 2 shows an indicative layout.

### Traffic Management Options

- 3.9 Bus lane offences have been decriminalised in Aberdeen and are the only movement restrictions which can be enforced by Aberdeen City Council, all other movement restrictions must be enforced by Police Scotland. Bedford Avenue is not part of a bus route and therefore a bus gate would not be justified.
- 3.10 An alternative form of restriction would be an extension to the existing prohibition of driving (prohibition of motor vehicles), with an exemption for “permit holders” and “loading by goods vehicles”. Such a proposal would address the issue of HGVs reversing as they would be able to exit onto St Machar Drive.

### Enforcement

- 3.11 If a prohibition of driving was to be progressed it would be necessary for this restriction to be either self-enforcing, access control system, or actively enforced by Police Scotland. Given the demands on Police Scotland it may be unreasonable to expect significant levels of enforcement at this location.
- 3.12 To make any prohibition of driving self-enforcing an access control system would be necessary, of which the most practical and least intrusive form of control would be the provision of bollards, rather than a physical raised arm barrier. Raised arm barriers would be unnecessarily disruptive to other road users such as cyclists and can be subject to vandalism.
- 3.13 With 397 properties within the proposed area, lockable bollards would be unworkable; particularly managing copies of keys or replacing lost or damaged keys. Similarly, a fob or key card system would require considerable levels of management and there would be an ongoing cost to manage this. The provision of automatic rising bollards linked to an Automatic Number

Plate Recognition ANPR camera would be the most straightforward system requiring a permit based “whitelist” to be reviewed annually.

- 3.14 From reviewing the use of similar automatic bollard systems elsewhere in the country there are authorities who have introduced rising bollards and are subsequently looked to remove them in favour of alternative forms of restrictions. There is evidence suggesting technological failures or more prominently because of damage incurred as a result of repeated impacts with vehicles.
- 3.15 Should the automatic bollards fail in the lowered position then Bedford Avenue could be exposed to additional traffic routing through the residential street. Should the bollards fail in the upright position then there would be increased volumes of traffic requiring to turn within Bedford Avenue where there is no formal turning head.

#### Impacts / Feasibility

- 3.15 Parking surveys undertaken last year indicate that there are generally 140-160 vehicles parking within the Bedford Avenue / Powis area. This would suggest that the demand for permits would be less than the 397 properties within the area. Appendix 3 - Traffic surveys, show that there are on average 787 vehicles exiting Bedford Avenue onto Bedford Road, per day, during weekdays and 609 on weekends, this gives a weekday hourly average of 33 vehicles per hour and 25 vehicles per hour at weekends. The average weekday peak hour flow is 65 vehicles which occurs between 3pm-4pm and 45 vehicles occurring between 6pm-7pm at the weekends.
- 3.17 During weekdays a proportion of the vehicles currently exiting Bedford Avenue onto Bedford Road will be students / staff who park in the area for convenient access to Aberdeen University, these drivers would not be allowed to use any proposed route. Additionally, a percentage of drivers will be heading southwards, and eastwards and they would continue to use the Bedford Avenue / Road junction. It would be reasonable to forecast that approximately 40 vehicles might use any new route during an average peak hour. This number would decrease significantly during off-peak times when there is less congestion on the road network.
- 3.18 The estimated costs of the civil works to reopen the junction for left out only is approximately £30k, with the cost of automated bollards and associated systems being estimated at a further £50k.
- 3.19 If the cost of permits is linked to the implementation and maintenance cost of the access then this may be perceived as being prohibitively expensive, reducing uptake further.
- 3.20 Whilst the justification for a separate access out of the Bedford / Powis area is associated with the establishment of the Bus Gate on Bedford Road, this would set a precedent for other residential areas across the city which have other traffic managements in place which can be felt to inconvenience residents.

- 3.21 If implemented, the new route through would dissect the footpath on St Machar Drive for pupils accessing St Machar Academy and potentially local primary schools.
- 3.22 For the reasons outlined above officers do not believe that creating a left turn exit from Bedford Avenue onto St Machar Drive, with access permitted for cars registered at properties on Powis Crescent, Powis Circle and Bedford Avenue only, would be justified.
- 3.23 Due to the impact of the Bedford Road/ Powis Terrace junction on the accessibility of Bedford Avenue area residents onto the surrounding network, it is proposed to continue monitoring of this junction to optimise traffic flows. This will include ongoing community engagement to inform the assessment process.

#### 4. FINANCIAL IMPLICATIONS

- 4.1 There is no current budget for any works in this area. A budget would need to be identified if proposals were brought forward to open the junction of Bedford Avenue and St Machar Drive.
- 4.2 In addition to the costs outlined in 3.18 there would be ongoing administration and maintenance costs. If this proposal were to go ahead the committee may wish to offset these costs onto the price of the permit. If a bus / taxi gate were implemented, then the administration process would be comparable to that of applying for a parking permit and the enforcement would follow existing methodology for bus gates. If a physical barrier system were implemented there would likely be higher maintenance costs however it is self-enforcing. Ultimately it is expected that the cost of a permit would be comparable to that of a parking permit.

#### 5. LEGAL IMPLICATIONS

- 5.1 A traffic regulation order would be required if proposals to reopen the junction for specific users were to be taken forward. There is a risk, if resources are insufficient to implement the proposals, that any approved traffic regulation order may have to re-enter the legislative process if the scheme was unable to be implemented within the statutory implementation time of 2 years from the start of the public consultation.

#### 6. MANAGEMENT OF RISK

	Risk	Low (L), Medium (M), High (H)	Mitigation
<b>Financial</b>	There is no allocation in the 5 year non-housing	M	If a scheme is approved a detailed design and cost

	capital plan for any proposed works. Any scheme identified would need to seek appropriate funding source.		estimate should be developed. A subsequent report should be submitted to the Capital Programme committee
<b>Legal</b>	Traffic Regulation Orders are only valid for a period of two years from the date of Public Advertisement of the proposals. If no budget is identified then the legal process for the TRO would need to be redone.	M	
<b>Employee</b>	Introducing control measures and permitting certain residents access is likely to increase workload within teams.	M	Only vehicles registered within the relevant streets can be eligible and reviewed on an annual basis.
<b>Customer</b>	N/A		
<b>Environment</b>	Road safety levels and traffic management could be compromised if measures are progressed, leading to continued public concern.	M	
<b>Technology</b>	The introduction of a physical barrier system could result in technical failures	M	If scheme is chosen to progress include a quality element within the procurement process.
<b>Reputational</b>	Any maintenance failures with a physical barrier system could result in reputational damage.  Non-compliance with the Traffic Regulation Order could lead to reputational damage.	M	

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## 7. OUTCOMES

Local Outcome Improvement Plan Themes	
	Impact of Report
Prosperous Place	This report has links to Safe and resilient communities

## 8. IMPACT ASSESSMENTS

Assessment	Outcome
Equality & Human Rights Impact Assessment	Not required
Privacy Impact Assessment	Not required
Duty of Due Regard / Fairer Scotland Duty	Not applicable

## 9. BACKGROUND PAPERS

Communities, Housing and Infrastructure Committee 8 November 2017

## 10. APPENDICES

Appendix 1 - Location Plan

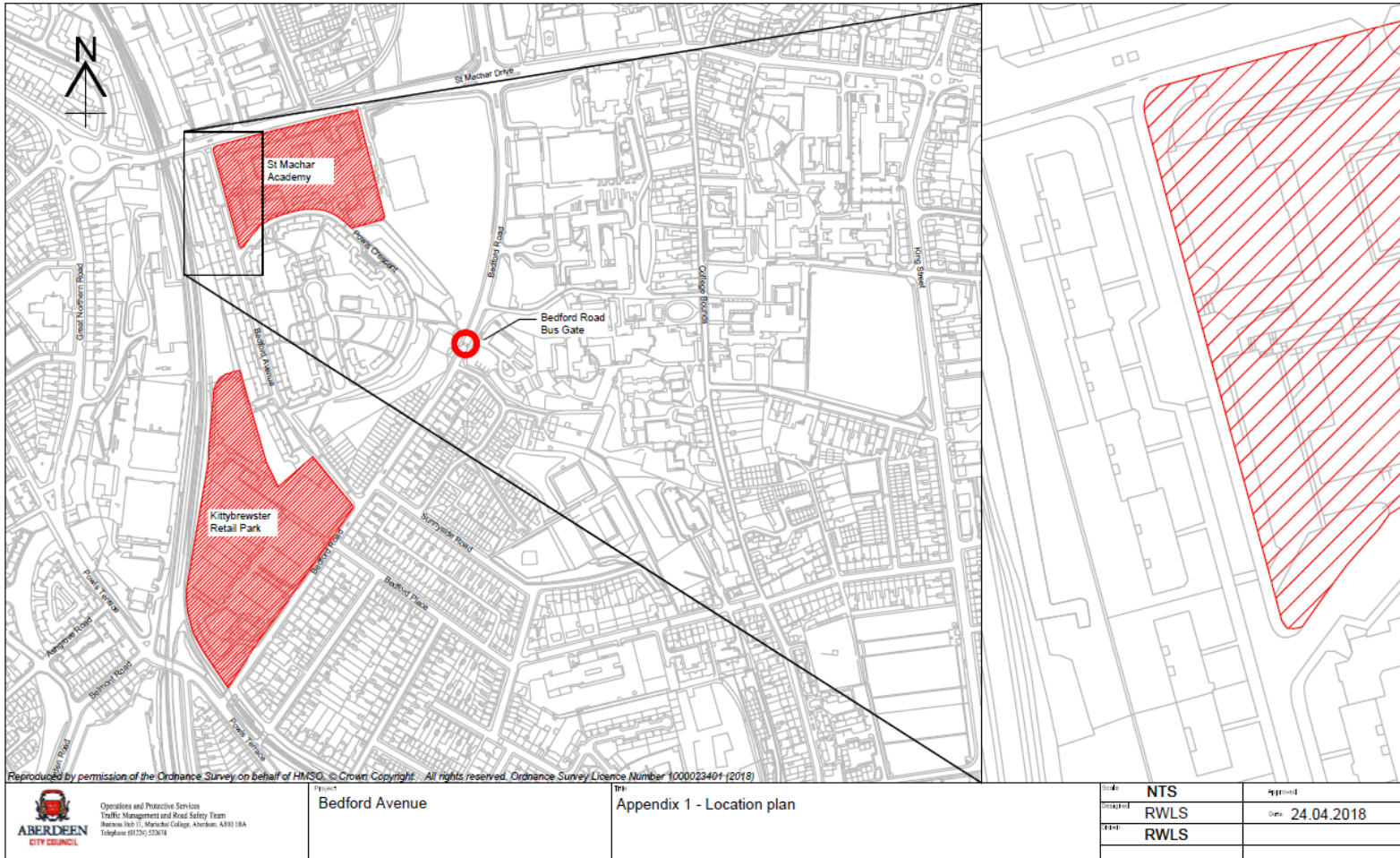
Appendix 2 – Indicative Layout

Appendix 3 – Traffic survey results for traffic exiting Bedford Avenue onto Bedford Road

## 11. REPORT AUTHOR CONTACT DETAILS

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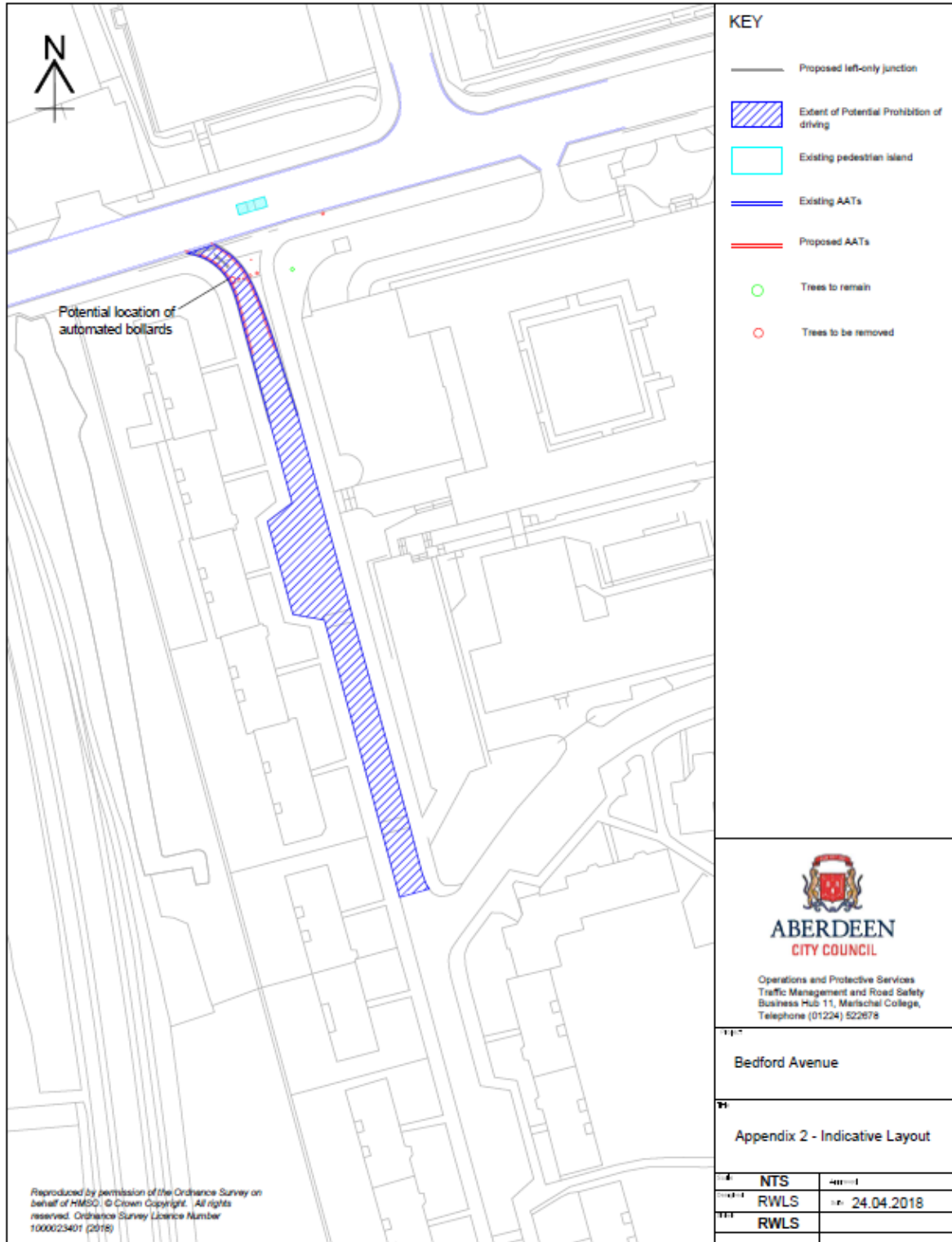
# Appendix A – Location Plan







# Appendix 2 – Indicative Layout



**KEY**

- Proposed left-only junction
- ▨ Extent of Potential Prohibition of driving
- ▭ Existing pedestrian island
- Existing AATs
- Proposed AATs
- Trees to remain
- Trees to be removed



Operations and Protective Services  
Traffic Management and Road Safety  
Business Hub 11, Marischal College,  
Telephone (01224) 522678

Bedford Avenue

Appendix 2 - Indicative Layout

NTS	40001
RWLS	24.04.2018
RWLS	

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### Appendix 3 -Traffic survey results for traffic exiting Bedford Avenue onto Bedford Road

