Union Canal - Meadows Cycle Route



Options Appraisal Workshop

City of Edinburgh Council

25th July 2014

CH2MHILL®

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CH2MHill acquired Halcrow Group Ltd in 2012

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Executive Summary

Project Purpose

The purpose of this project is to provide a connection between the Union Canal at Lochrin Basin and the North Meadow Walk that is suitable for an unaccompanied twelve year-old child to cycle.

Options Appraisal Workshop

The purpose of the workshop was to

- Inform participants of the opportunity;
- provide stakeholders with the opportunity to decide on their preferred design options; and
- collate valuable local insight and knowledge from stakeholders to enhance the design.

The output from the workshop will be used to inform the overall design process.

Participants

The City of Edinburgh Council went to significant lengths to ensure that views were broadly representative of the various local users and

wider stakeholders, incorporating the following interests:

- Local residents;
- Community groups;
- Local traders;
- Local cyclists and pedestrians;
- · CEC staff (planning, traffic, local neighbourhood team); and
- Police.

Key recommendations

A summary of the full route recommended by the participants is provided below. The key recommendations are summarised in Table 1.

TABLE 1

Key participant recommendations

Segregated cycleways on Home Street and Brougham Place

Close Tarvit Street to through traffic and provide more people space

Increase pedestrian space throughout and improve the people environment to benefit locals and businesses

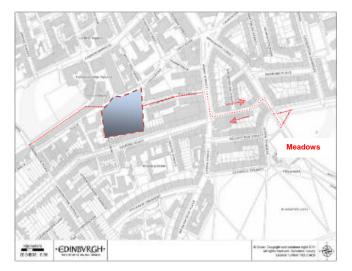
Reductions in parking & loading capacity is acceptable if evidence-based

Reductions in through vehicle flow is welcomed, subject to impact assessment of displaced traffic

The enforcement of regulations is critical to success, especially parking/loading restrictions

Provide more cycle parking at key trip generators

Ensure disabled access is central to street design



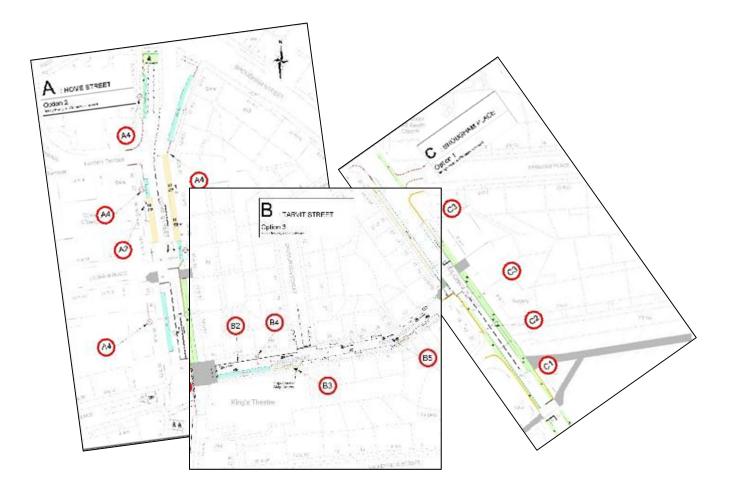
Preferred Route Summary

Groups were presented three design options for each of the route sections listed below. Each design options varied in terms of balancing the impacts for each of the design user groups. The preferred design options are listed in Table 2 and summarised below.

TABLE 2 Full route preferred option

Route section	Preferred Option
A: Home Street	Option 2: segregated cycleway, with some elements of Option 3
B: Tarvit Street	Option 3: closure to through traffic to improve people space
C: Brougham Place	Option 1: segregated cycleway

Figure 1 – Preferred Route Option



Home Street

The participants asked CEC to progress Option 2, incorporating some elements of Option 3 (Options illustrated in Appendix A). The key elements of the design are:

- Segregated cycleway on the east side of Home Street;
- Conversion of the existing Pelican to a Toucan for use by cyclists;
- Increases in pedestrian space;
- Reductions in carriageway lane widths, with further analysis of reductions in the number of lanes
 :
- Further analysis of splitting existing bus stops to reduce bus congestion and improve waiting facilities; and
- Reduction of total loading capacity with potential increase in flexible short stay spaces elsewhere, including Tarvit Street.

Tarvit Street

The participants asked CEC to progress Option 3 (illustrated in Appendix B), with consideration of some additional elements. The key elements of the design are:

- Closure of Tarvit Street to through traffic to
- A step change improvement in people space outside the Kings Theatre;
- Two-way cycle flow on Tarvit Street;
- Raised pedestrian priority at side roads;
- Space for two articulated vehicles can access the Kings Theatre stage doors;
- To increase capacity, consider end-on parking on Drumdryan Street; moving some Pay and display or residents' bays to Brougham Place; and introducing 'dual use' spaces; and
- Conversion of some loading bays to short term parking.

It should be noted that the option of introducing a segregated cycleway on Tarvit Street (Option 2) was not completely ruled out, however parking bay displacement would require to be offset by increases on surrounding streets.

Brougham Place

Option 1 (illustrated in Appendix C) was overwhelmingly the preferred option. The key elements are:

- Segregated cycleway on the east side of Brougham Place;
- Rationalisation of under-utilised parking spaces, possibly to accommodate changes to Tarvit Street;
- Move the existing Pelican crossing and convert to a Toucan for use by cyclists; and
- Minor improvements to connecting paths.

Next Steps

The next steps for the project are to:

- Finalise this report following workshop participant comments
- Finalise the preliminary design based on participant comments and further analysis
- Public Consultation on preliminary design late 2014
- Statutory Consultation late 2014
- Finalise detailed design early 2015
- Construction aim to deliver during financial year 2015/16

Acronyms and Abbreviations

ATAP The City of Edinburgh Council's Active Travel Action Plan

CEC The City of Edinburgh Council

FCN Family-Friendly Cycle Network

NCN National Cycle Network

NCN1/ NCN75 National Cycle Network Route 1 / Route 75

UCM Union Canal – Meadows cycle route

RT Right Turn manoeuvre

N/B or S/B Northbound / Southbound movement

Introduction

1.1 Project Purpose

The purpose of this project is to provide a connection between the Union Canal at Lochrin Basin and the North Meadow Walk (hereafter 'UCM'), that is suitable for an unaccompanied twelve year-old child to use.

The UCM route is a critical missing link in Edinburgh's cycle network. This link forms part of the National Cycle Network Route 75 and is a section of the proposed Edinburgh Family Cycle Network (FCN). The design user of these networks is an unaccompanied 12 year old child. The existing UCM route does not cater adequately for the design user.

CH2MHill was commissioned by the City of Edinburgh Council to conduct the options development stage, including the facilitation of stakeholders to indicate a preferred solution(s). The following tasks have been undertaken to date:

- Consultation:
 - Identification of land use opportunities and constraints;
 - Scheme Objectives Setting Workshop
- Data collection and analysis:
 - Traffic signalling options analysis;
 - Analysis of parking & loading throughout the study area;
 - · Analysis of through traffic on Tarvit St; and
- Options identification:
 - Identification of a preferred route alignment based on directness, coherence and safety;
 - Development of options drawings for comparison by stakeholders
- Facilitation of stakeholders at an Options Appraisal Workshop that is the subject of this note.

1.2 Workshop Purpose

The workshop was held on 28th February 2014 from 9:30am to 2pm at Barclay Viewforth Church, 1 Wright's Houses, Bruntsfield, Edinburgh, EH10 4HR.

CH2MHill's role was to act as a facilitator and prepare sufficient information to develop discussions between participants.

The purpose of the workshop was to

- Inform participants of the opportunity;
- provide stakeholders with the opportunity to discuss and collectively decide on their preferred design options for the cycle route and related street uses; and
- collate valuable local insight and knowledge from stakeholders to enhance the design.

The output from the workshop will be used to inform the overall design process. Wherever possible, the CEC will seek to implement any areas of consensus. However it was highlighted to participants that there may be other reasons that CEC is not currently aware of that may constrain full implementation of the workshop preferences.

1.3 Report purpose

The purpose of this report is to summarise the discussions and decisions made during the workshop and to identify the next steps required to deliver the project.

SECTION 2

Methodology

The workshop methodology was designed to ensure that participants were afforded the full opportunity to steer the direction of the project and were sufficiently informed to do so. The structure included the following elements.

2.1 Participants

To ensure that the views were broadly representative of the various local users and wider relevant stakeholders, The City of Edinburgh Council (CEC) invited some organisations by name and made public announcements through Twitter and the Tollcross Community Council for others. <u>Table 2.1</u> lists the participants present. As well as the project team, the group was formed to represent the following interests:

- Local residents;
- Community groups;
- Local traders;
- Local cyclists and pedestrians;
- CEC staff (planning, traffic, local neighbourhood team); and
- Police.

TABLE 2.1

Workshop Participants

Name	Organisation	Project Role	Workshop Group
Andrew May	Gilmore Place business owner and member of former Traders' Association	Stakeholder	Green
Andrew Sikes	CEC Planning Officer	Stakeholder	Red
Andy Jones	Police Scotland	Stakeholder	Green
Andy Mulholland	CH2M HILL	Project Team	n/a
Brian Louden	Kings Theatre	Stakeholder	Blue
Chris Brace	CEC Transport Policy	Project Team	Green
Colm Smyth	CH2M HILL	Project Team	Green
David Doig	CEC Environment Officer	Stakeholder	Green
David Rule	CEC Edinburgh South Town Centre Coordinator	Stakeholder	Blue
Heather Goodare	Friends of the Meadows	Stakeholder	Blue
John Ramsay	CH2M HILL	Facilitator	Red
John Russell	Living Streets	Stakeholder	Red
Jon Plant	CH2M HILL	Facilitator	Blue
Krystal Ritch	Home Street business owner	Stakeholder	Red
Oliver Chapman	Local resident	Stakeholder	Blue
Paul Beswick	Tollcross Community Council	Stakeholder	Red
Paul Downie	Sustrans	Stakeholder	Blue
Paul Matthews	CEC Transport Policy	Project Team	Blue
Paul Tucker	CEC Traffic Signals Officer	Stakeholder	Blue
Phil Noble	CEC Transport Policy	Project Team	Red

TABLE 2.1 Workshop Participants

Name	Organisation	Project Role	Workshop Group
Richard Grant	Spokes	Stakeholder	Green
Sara Dorman	Pedal on Parliament	Stakeholder	Red
Susan McIvor	CH2M HILL	Facilitator	Green
Wendy Chisholm	CH2M HILL	Administrator	n/a

Participants were introduced to the project team at the start of the workshop.

2.2 Advance information

Participants were provided with email communications in advance of the workshop to inform them of the project background, workshop format and ask for input into the issues. The issues raised were fed into the Issues Identification discussion described in <u>Section 2.4</u>.

2.3 Project Background

The design team outlined the background and purpose of the project to ensure stakeholders had a similar level of understanding. This summarised the elements outlined in <u>Section 3</u> of the report and included the issues faced by cyclists using the existing route.

2.4 Issues identification

Drawing on the issues submitted by participants in advance, a plenary session was held to give stakeholders an opportunity to raise and discuss problems and opportunities they were aware of in the local area. This is summarised in Section 4.

2.5 Appraisal

The project team has split the route into three main sections as illustrated in <u>Figure 2.1</u>. This is to aid decision-making by focusing on key issues in each section. The Sections are:

- Section A Home Street (including the east ends of Lochrin Terrace, Lochrin Place, Gilmore Place, and the north end of Leven Street)
- Section B Tarvit Street (including Drumdryden Street)
- **Section C Brougham Place** (including the south end of Brougham Street, the east end of Tarvit St and consideration of the impact on Panmure Place, Lonsdale Terrace and Leven Terrace)

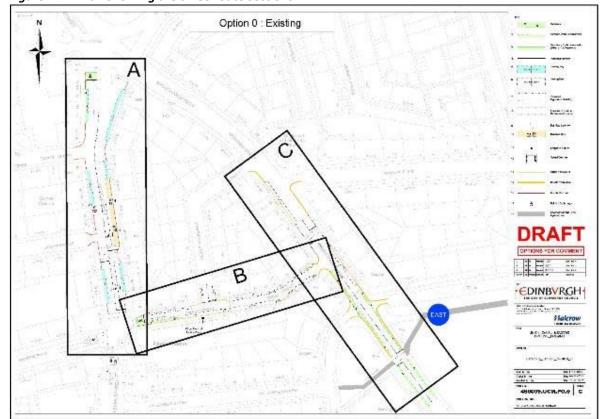


Figure 2.1 – Plan showing the three route sections

NB It should be noted that the full route extends further west to the Union Canal, however the options there are more limited and do not require full stakeholder appraisal at this stage. It should also be noted that as part of this scheme, CEC will also attempt to improve existing conditions for on-carriageway cycling on Gilmore Place.

Participants were presented with three 'do something' options for each route section. They were asked to discuss the proposals and identify a preferred option(s) for each section.

The options presented are interchangeable across route sections. Therefore while a decision in one section may have an impact elsewhere, there is no technical constraint preventing any combination of options. Any amendments and suggestions were noted for consideration at subsequent design stages. The Options drawings are provided in <u>Appendix A.</u>

To focus the discussions, some of the key design issues that require consideration were outlined by the facilitators. A number of other design issues were raised by the groups. Reference should be made to the related UCM Workshop 2 Presentation for details of the issues, and issue references are provided on the plans in Appendix A.

At the close of the discussion on each route section, the facilitators fed back the findings of each group to the whole Workshop. Sections 5 to 7 of this report summarise the discussions held.

2.6 Preferred Option Validation

The facilitators presented the preferred options back to participants to validate the findings and discuss any further issues for consideration. A summary of the route is provided in Section 8.

Project Background

Phil Noble presented the project background to the stakeholders. This is summarised below.

3.1 Policy and Strategy

Active Travel is at the heart of the Council's Transport 2030 Vision and Local Transport Strategy 2007, as well as the Road Safety Plan for Edinburgh to 2020.

The City's Active Travel Action Plan, 2010 (ATAP) sets out the core Active Travel objective 'to increase the numbers of people in Edinburgh walking and cycling, both as means of transport and for pleasure'.

In May 2009, The City of Edinburgh signed up to the Charter of Brussels. This commits the City to achieve a target of 15% of all trips by bicycle by 2020 and a reduction in the risk of a fatal accident for cyclists by 50% by 2020.

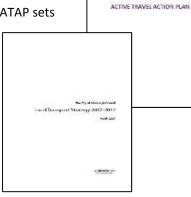
To achieve its core objective and meet the Charter of Brussels, the ATAP sets out four broad areas of action on cycling:

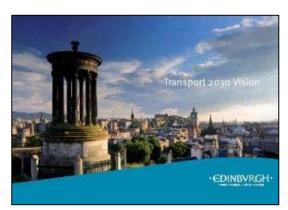
- Network Improvements;
- Cycle Parking;
- Infrastructure maintenance; and
- Marketing and Promotion.





The City of Edinburgh Council





3.2 Impact of cycle-friendly infrastructure

Infrastructure improvement is a driver of change to achieve CEC's targets.

There is a direct correlation between urban infrastructure that is accessible by bicycle and cycling mode share. The evidence in Edinburgh is illustrated in <u>Figure 3.1.</u>

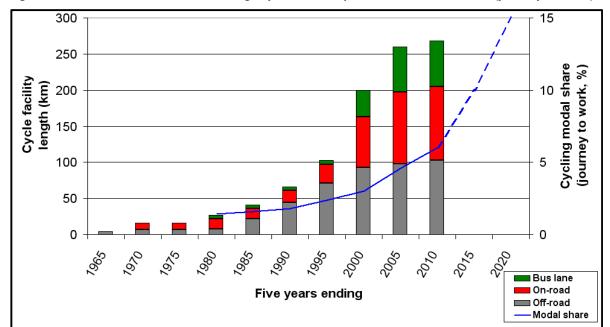


Figure 3.1 – Correlation between Edinburgh cycle network provision and mode share (journey to work)

3.3 The 'Family-Friendly' Cycle Network (FCN)

A critical element cutting across the ATAP actions is the development and improvement of the 'Family-Friendly' Cycle Network (FCN). The purpose is to 'develop a network, predominantly on quiet roads and off-street, aimed at feeling safe and secure for less confident cyclists including family groups and older unsupervised children'. (Appendix E of the ATAP outlines the design standards for this network.). Figure 3.2 illustrates the type of cyclists that the FCN should cater for.

Figure 3.2 – Examples of the Design Cyclists of the FCN



There is an ATAP action to 'fill key gaps in the FCN / National Cycle Network (NCN) routes, and link the network to key destinations, by April 2014'. One of these stated key gaps in the FCN is between the Union Canal and the Meadows path network.

3.4 Issues with the existing Union Canal – Meadows alignment

The current route alignment forms an important link for people from the west of Edinburgh to access the local services in the Tollcross area as well as the wider path network to the City Centre and destinations to the east and south.

This important desire line currently forms part of the National Cycle Network Route 75 (NCN75), linking with NCN1 and is a strategically important link in the FCN, as illustrated in <u>Figure 3.3.</u>

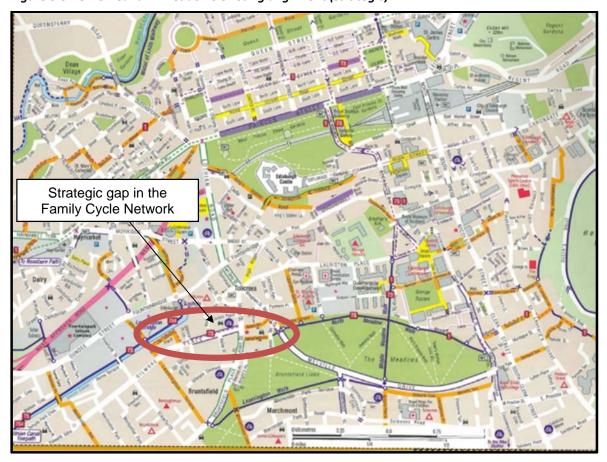


Figure 3.3 - Union Canal – Meadows existing alignment (strategic)

The design team's analysis of the route concludes that the section indicated in <u>Figure 3.4</u> by the dashed line is not compatible with the Design Approach of the FCN. This effectively severs the route for the design cyclists illustrated in <u>Figure 3.2</u>. A short summary of the issues is listed in <u>Sections 3.4.1 to 3.4.4</u>.

Union Canal

Walleyfield Street
one-way Eastbound

Valleyfield Street
one-way Eastbound

Valleyfield Street
one-way Eastbound

Figure 3.4 - Union Canal – Meadows existing alignment (local)

3.4.1 Gilmore Place

- Cyclists are required to merge with the high volume of traffic;
- Parking, loading and bus stops on both sides of the carriageway are hazards for cyclists;
- The Gilmore Place approach arm to the junction with Home Street is too narrow to provide a full cycle lane approach to the Advanced Stop Line;
- Cyclists are required to turn right across opposing traffic to travel south on Leven Street towards
 Valleyfield Street. The alignment of the junction makes this an uncomfortable and hazardous manoeuvre, unsuitable for the design user.

Busy roads, parking, loading and bus stops are hazards for the FCN's design cyclists

3.4.2 Leven Street

- The carriageway on the Leven Street section has a high volume of loading activity, meaning cyclists are required to remain in the main traffic flow;
- The carriageway surface is extremely poor at the Gilmore Place junction and into Home Street. This is a hazard for cyclists;

3.4.3 Valleyfield Street/ Tarvit Street

- The one way system means that the route is relatively indirect and not intuitive for cyclists.
- During peak periods a high proportion of the trips on Tarvit Street are through trips, resulting in higher vehicle speeds than would be the case for local access traffic.
- Observations indicate that there is a significant number of cyclists that choose, instead of
 accessing Valleyfield Street, to contravene the one-way restriction on Tarvit Street, suggesting
 that this is a strong desire line;

- Cyclists require to travel from Tarvit Street to Gilmore Place. The alignment of the junction makes this a hazardous manoeuvre, with cyclists entering the junction straight into the path of right turning traffic, and often 'squeezed out' by motor vehicles overtaking;
- The casualty record in the study area is illustrated in <u>Figure 3.5</u>. This indicates a disproportionate number of cyclist casualties.; and
- Observations indicate that cyclists that perceive the Gilmore Place junction to be too dangerous, mount the footways and use the signalised pedestrian crossing;

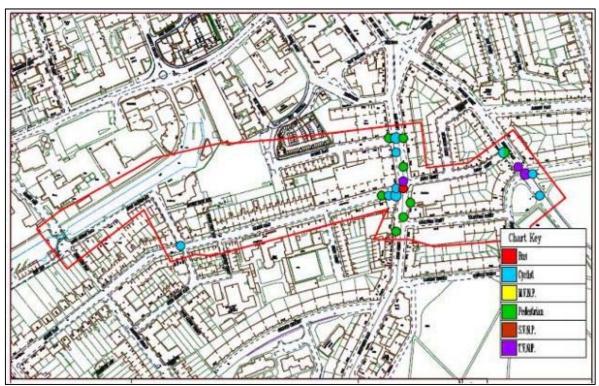
3.4.4 Brougham Place

- Cyclists are required to form part of the high volume of traffic;
- The desire line for westbound cyclists exiting Middle Meadow Walk is not fully catered for; and
- Evening parking on Brougham Place requires cyclists to enter the main traffic flow.



Tarvit St/ Home St/ Gilmore
Place/ Leven Street junction
hazards: Cyclists travelling
westbound enter the junction
directly into the path of right
turning traffic and are 'squeezed
out' by overtaking vehicles

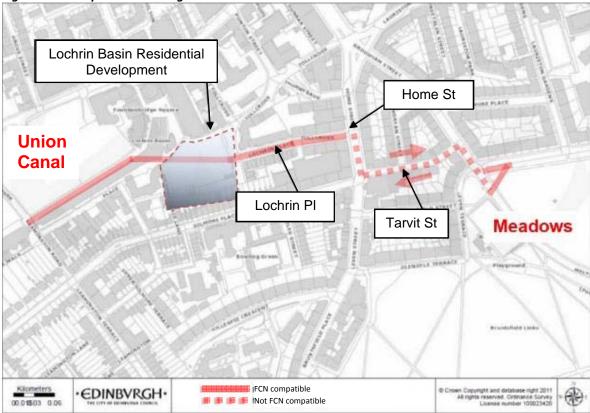
Figure 3.5 – Five year accident-related casualties by mode



3.5 The proposed alignment

The aim of the project is to upgrade this link to provide a direct, safe and coherent route compatible with the Design Approach of the FCN. To remove some of the constraints indicated above, an alteration to the route alignment is proposed. As illustrated by Figure 2.6, without any further work, it can be seen that the length of the section that is not compatible with the FCN (dashed line) is far shorter than for the existing alignment.

Figure 3.6 - Proposed route alignment



The Lochrin Basin residential development indicated by the dashed red line, provides the opportunity to utilise the quiet Lochrin Place for the route, instead of Gilmore Place. As part of the planning conditions, the developer will be required to construct a cycle route through the development. This will link Lochrin Basin with Lochrin Place, allowing a future route alignment to be developed that bypasses Gilmore Place.

East of Lochrin Place, the route could be aligned via Valleyfield Street or Tarvit Street. In consideration of the constraints, the design team has identified the following problems with the Valleyfield alignment:

- It is less direct and may not capture the existing desire line that contravenes the Tarvit Street one-way direction;
- There are a number of parking and loading requirements on Leven Street between Lochrin Place and Valleyfield Street;
- The buildout at the entrance to the King's Theatre is a pinch point for cyclists travelling south. It cannot be reduced in area due to the high level of pedestrian volumes (and this would most likely need to be reduced if a dedicated cycle facility was implemented).

For these reasons, it was determined that the option development process should focus on the design of a solution on the Tarvit Street alignment, in particular to address the sections currently unsuitable for the design cyclists, as indicated by the dashed line in Figure 3.6. The final design should also accommodate the Gilmore Place desire line for cyclists and should improve safety for cyclists using this link.

3.6 Summary

The existing route alignment is not suitable for the design cyclists of the Family Cycle Network. The new Lochrin Basin residential development provides an opportunity to improve the route alignment illustrated in Figure 2.6, however further infrastructure improvements are required to provide an environment suitable for a 12 year old unaccompanied child cyclist. The options presented aim to address this shortfall in provision.

Issues

4.1 Task description

Participants were asked to identify and discuss the key issues in the study area from the perspective of their own experiences.

4.2 Issues discussed during workshop

In advance of the workshop, participants were invited to submit some of the key issues they wished to discuss. These were used as a starting point for an open discussion on issues. Participants were free to offer any opinion without comment from the facilitation/ client team. The issues identified by participants are listed in Table 4.1.

TABLE 4.1 Issues discussed during workshop

Home Street

- Footways cluttered, narrow, congested. NW corner Gilmour Place poor pedestrian storage need space
- Poor general pedestrian provision. Most business traffic is from pedestrians but they are poorly considered
- Proliferation of commercial bins on Lochrin Place
- Theatre customer waiting and loading area is inadequate
- · General lack of cycling provision
- Cycle-vehicle conflict at Home St junction
- Cyclists' right turns difficult
- Hazardous kerb layouts for cyclists at footway builtouts (?)
- Buses frequently queue past Lochrin Place, blocking the street
- Difficult for pedestrians and cyclists crossing the road. Pedestrian crossing on Home Street poor facility.
 Pedestrians wait too long. The location of the existing pedestrian crossing conflicts with the Cameo bus stops. The crossing could be moved northwards but conflict with bus stops
- Gillespie Crescent area cyclists provision to access cycle network
- Signals at Gilmour Place poor for cyclists, Tarvit Street phase conflict with RT's
- RT from Tarvit Street and poor provision for cyclists
- Cycle access improvement to Gilmore Place is important
- Short-term parking on Home Street/Tarvit Street. Like for like parking replacement.
- Pedestrian/cyclist conflict on pavements (accidents)
- Adult cycle training should be provided
- Buses at S/B Interchange conflict with pedestrian movements
- General degradation of environment (bins, litter etc) Budgets
- Tollcross junction too beneficial to cars, poor for pedestrians
- Pedestrian load at Kings's Building, especially frontage a better drop off for disabled users is required
- Christmas especially tour coach congestion on Leven Street
- Road surface very poor in area Pot Holes
- Wider pavements required on west side of Gilmore Place/Leven Street junction
- Getting onto new cycle link/network especially from SW Tollcross, i.e. turning right into Tarvit Street from Level Street
- 20mph limit is it possible/considered?

Tarvit Street

- Tarvit Street loading for Kings Theatre sometimes for long periods long vehicle access required
- 'Rat-running' traffic is an issue on this street
- Loaders and parkers block pedestrians and cyclists

Brougham Place

- The cycle lanes are discontinuous
- There is a lack of outdoor seating

Other/ General

- More cyclists on Union Canal may mean that the capacity of the existing paths is exceeded and they will need to be widened
- Cyclists regularly contravene one-way flow restrictions (eg Glengyle Terr)
- Cycles/ peds require more space
- Include Lower Gilmore Place in the study are for improvement to surfaces and widths
- Motorcycle parking

4.3 Incorporating the comments

CEC will collate these comments as part of the design drafting process to ensure opportunities for improvement are taken wherever possible.

Home Street Appraisal (route section A)

This section summarises the findings of the Home Street Appraisal.

5.1 Key Design Issues

Figure 5.1 illustrates the existing street layout, with the following key design decisions annotated:

- A1 cross section of the street: the options vary available space for pedestrians, vehicles and other uses
- **A2 northbound bus stops**: the designs offer different options for bus stop locations and passenger space
- A3 all-day loading: the options offer different arrangements and proportions of loading bays
- A4 off-peak loading: the options offer different arrangements and proportions of loading bays Reference can be made to the related UCM Workshop 2 Presentation for details of the issues.

5.2 Home Street Options

The three Home Street Options, illustrated in Appendix A are:

- 1. 3m cycleway, west side footway narrowed;
- 2. 3m cycleway, traffic lanes narrowed; and
- 3. 4m cycleway, wide footways, traffic lane reduction to three lanes.

5.3 Consideration of Key Design Issues

The following bullet points summarise the main discussion points under each of the key decision areas. They are organised under the different groups and provided without qualification to try to represent the discussion accurately.

5.3.1 A1. Cross Section of Home Street

5.3.1.1 Green Group

- In Option 1 the footway space is considered too narrow, particularly for disabled users.
- Introduction of Toucan crossings in all options considered a positive.
- Very desirable to include the wider footway on the east side of Home Street as in Option 3, making it the preferred option.

5.3.1.2 Red Group

- West side Footway has much greater pedestrian use in rush hour and therefore needs more width than the east
- Tweak Footway and cycle path widths to address any concerns re northbound vehicle space narrowing
- 4m cycle path un-necessary no overtaking needed here

5.3.1.3 Blue Group

- Reduction in footway width on west side considered to be unacceptable in Option 1
- Provision of a Toucan crossing on the cyclist desire line seen as positive across all three options, however, fundamental query raised as to whether this can be accommodated in such close proximity to the junction as it appears to be far to close at present and thus below standard
- Wider footways welcomed in Option 2 and Option 3. Agreed that street clutter needs to be addressed to ensure space is useable
- 3.0m wide segregated cycleway welcomed in Options 1 and 2, as was the 4.0m cycleway in Option 3.

 However, consensus that implications of reduction in allday and off-peak loading due to a 4.0m cycleway would be unacceptable. Furthermore it was felt that there is the potential to achieve a 3.0m wide cycleway across a longer section of the route rather than just Home Street.

5.3.2 A2. Northbound bus stops

5.3.2.1 Green Group

- Option 3 northbound additional bus stop may cause conflict with fire service emergency route via Lochrin Terrace if buses back up here.
- However, the additional stop in Option 3 was seen as a positive measure to potentially reduce the number of buses waiting at each stop at any one time.

5.3.2.2 Red Group

 Bus stops need to be together to facilitate transfers. Possibly relocate off-peak parking and have all N-bound bus stops between Lochrin Terrace and Lochrin Place.

5.3.2.3 Blue Group

- Inclusion of additional stop in Option 3 seen as positive to reduce pedestrian and bus vehicle congestion.
- Bus users use the canopy at the Cameo Cinema as a shelter moving the bus stop in Options 2 and 3 would mean that provision of alternative shelter would be required.

5.3.3 A3. All-day loading

5.3.3.1 Green Group

- All options considered slightly negative for all-day loading as in each there is a reduction in number of spaces.
- Option 2 considered slightly more preferable as reduction in spaces is less.

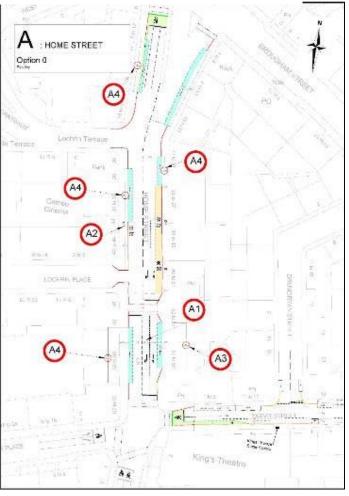
5.3.3.2 Red Group

• Total loss of loading on south section of home Street a bit of a concern – potential compensation by using Gilmore Place for west side shops?

5.3.3.3 Blue Group

- Reduction in all day loading in option 3 seen as potentially unacceptable
- All day loading provided to the north of the Lochrin Place junction in Option 2 mitigates the removal of the all day loading to the south as a result of the cycleway. The group welcomed this
- Option 2 considered more preferable as reduction in spaces is less.

Figure 5.1 – Home Street Existing Layout



5.3.4 A4. Off-peak loading

5.3.4.1 Green Group

- Option 1 and option 3, southbound possibility of a conflict over use of road space as buses back up from bus stops into off-peak loading bay.
- Overall Option 3 results in the biggest negative for off-peak loading (this was seen to be offset by the potential for a positive outcome for bus services, if conflict zones addressed, cycling, disabled users and pedestrians).

5.3.4.2 Red Group

• Need on-street short term parking on Leven Street – widen study area.

5.3.4.3 Blue Group

- Noted that off peak loading spaces often used by disabled drivers/passengers for quick access to businesses.
- Option 1 and option 3, southbound possibility of a conflict over use of road space due to buses backing up from bus stops into off-peak loading bay.
- Option 3 results in the biggest negative for off-peak loading (this was seen to be offset by the
 potential for a positive outcome for bus services, if conflict zones addressed, cycling, disabled
 users and pedestrians).
- Reduction of spaces in option 3 seen as too great a reduction. Enforcement would be an issue for option 3 as vehicles may still park for loading purposes (illegally) and thus block the road and reduce footway width.

5.3.5 Other key decisions discussed

5.3.5.1 Green Group

- Option 1 at Lochrin Place there is concern over the loss or residential parking. Also junction with Home Street/Lochrin Place considered a potential conflict zone with different users.
- For all options there may be a conflict with street cleaning vehicles and the contraflow cycleway.
- Building out the Footway at the northside junction of Gilmore Place/Home St was also suggested which may allow for additional loading on Gilmore Place.
- There was a suggestion to provide segregation for pedestrians and cyclist at shared space junctions.

5.3.5.2 Red Group

- Shared space areas have potential for conflict.
- Home Street/ Lochrin Place shared space area is narrow and presents potential for conflict between cyclists crossing the main pedestrian flow.
- Shared space on east side of Home Street opposite Lochrin Place only needs to be half the size.
- Shared space on east side of Home Street at Tarvit Street how to manage pedestrian/cycle conflicts.
- Toucan crossing will need increased crossing phase frequency.
- Bins are a problem need management/reduction.
- Have a designated/segregated cycle route on south side of Lochrin Place.
- Footways on NW and SW corners of Gilmore Place/Home Street junction are too narrow.
- Home Street/Lochrin Place shared space has potential for conflict with cyclists crossing pedestrian flow.
- Loss of N-bound "bus lane" a major issue will cause significant delays.
- Lochrin Terrace need to improve pedestrian crossing make a raised table/crossing.
- Enforcement of parking rules is critical.
- 20mph zone will this apply here?

5.3.5.3 Blue Group

• Leven Street/Tarvit Street/Home Street/Lochrin Place junction – issue of right turning cyclists should be addressed (including right turning cyclists from Leven Street to Valleyfield Street

- Could the cycleway on Home Street be on the west side of the street as opposed to the East side? This could assist with the location of the Toucan.
- Option 1 at Lochrin Place there is concern over the loss or residential parking.
- Concern with regard to vehicle conflict at Lochrin Place/Home Street junction in all options but particularly Option 3. In particular, further consideration required as to whether the location of the new Toucan crossing on Home Street is feasible.
- Pedestrian/cyclist conflict an issue particularly during Kings Theatre audience arrival/departure.
- There was a suggestion to provide segregation for pedestrians and cyclists at shared space junctions.

5.4 Discussion of preferred option

Following the discussion of the key decisions, participants were asked to identify a preferred option. The groups were provided with a copy of the scheme Design Objectives to assist this process. The Design Objectives are detailed in Appendix D.

The determination of each group is summarised below.

5.4.1 Green Group

Design Objective	Option 1	Option 2	Option 3*		
Bus services	✓	✓	✓		
	(neutral impact)	(neutral impact)			
Cycling	✓	✓	✓		
Disabled users	×	✓	✓		
	(narrowing of the footway)	(neutral impact)			
Parking & Loading	✓	✓	×		
	(slightly negative but not considered significant)	(slightly negative but not considered significant)	(number of spaces lost)		
Pedestrians	×	✓	✓		
	(narrowing of the footway)				
Through traffic	✓	✓	×		
	(neutral impact)	(neutral impact)	(slight negative for through traffic as there may be implications for emergency vehicles at the additional bus stop)		
✓	Objective met (positive or neutral impact)				
×	 Objective not met (negative or insufficiently positive impact) 				
*	Preferred Option				

Notes of the discussion included:

- Option 3 is the overall preferred option.
- The order of preference is Option 3, Option 2 and least preferred is Option 1.
- Whilst Option 3 results in the biggest loss for parking and loading spaces, it was considered a positive option for bus services (if conflict areas at bus stops are addressed), cycling, disabled users and pedestrians. No other option presented as many positives.
- All three options have the potential for conflict with street cleaning vehicles on the cycleway and this needs to be considered.
- Consideration could also be given to providing segregation of cyclists and pedestrians at shared space junctions.
- The potential to build out the Footway on the north side at the junction of Gilmore Place and Home Street was also suggested. This may allow for some additional loading on Gilmore Place.
- Effect on fire service (blockage of Lochrin Terrace) should be considered
- RT into Lochrin Terrrace and conflict with straight ahead traffic needs to be thought through
- NW/Gilmore Place corner build out would be preferable and parking on Gilmore Place i.e. one lane

5.4.2 Red Group

The Red Group chose Option 2 as the preferred option. The key discussions were:

- Ensuring the phasing of the Toucan crossing reduces pedestrian delay
- Reduce pinch points for pedestrians
- Bus stops separation not preferable because the Cameo shelter provides protection
- West side footway width more important for pedestrians
- Option 3 was onsidered a step too far Too great an impact on traffic

The red group did not formally appraise the Design Objectives for each option.

5.4.3 Blue Group

Design Objective	Option 1	Option 2*	Option 3
Bus services	✓	✓	✓
	(neutral impact)		(split of bus stops positive)
Cycling	✓	\checkmark	✓
Disabled users	×	\checkmark	×
	(narrowing of the footway – objective not met)		(lack of loading bays that could potentially be used by disabled drivers/passengers)
Parking & Loading	×	✓	×
	(objective met but concern at lack of loading on east side of Home St)	(objective met, reduction not significant)	(reduction of spaces was too significant)
Pedestrians	×	✓	✓
	(narrowing of the		

	footway – objective not met)		
Through traffic	(neutral impact)	√	(although potential negative if loading restrictions not fully enforced)
× *	Objective met (positive o Objective not met (negat Preferred Option	r neutral impact) ive or insufficiently positiv	e impact)

- Option 2 should be taken forward
- The siting of the Toucan and the safe operation of the Lochrin Place/Home Street junction for all users should be considered.
- Loading not too compromised and effect on disabled drivers
- Elements of Option 3 design that should be considered are wider footways to the north of the Lochrin Place junction but not at the expense of reductions in loading spaces.
- Careful consideration of shared space potential role for education/training?
- Consideration should be given to multi-use bays particularly outwith peak times.
- RT at Lochrin Place? can cycleway be on west side conflict with pedestrians and northbound traffic
- Question over whether operationally we can split the bus stops.

5.4.4 Plenary session

Following the individual group discussions, a plenary summary was held during which the following additional points were raised:

- Street cleansing in cycle lane could be a conflict. Can cleaners access the lane and what impact will this have on users?
- Loss of the nearside lane/ loading area at the Everest could affect traffic as buses use this space to access the bus stops
- Introducing a raised pedestrian crossing, and/or narrowing the crossing distance on Lochrin Terrace will help pedestrian priority crossing is currently difficult.

5.5 Summary of Home Street Preferred Option

During the plenary session there was general consensus that Option 2 was the preferred option, with many elements of Option 3 to be considered for inclusion. The deliverability of Option 3 should be tested.

TABLE 5.1

Home Street appraisal - preferred options of each group

Home Street Option	Option 1	Option 2*	Option 3
Green Group Ranking	3 rd	2 nd	1 st
Red Group Ranking	2 nd	1 st	3 rd
Blue Group Ranking	3 rd	1 st	2 nd (elements of)

^{*} Preferred option

There was full consensus that provision should be made for cyclists to be segregated from traffic and from pedestrians on Home Street.

This should be achieved by taking the opportunity to widen footways wherever possible. Footways should not be narrowed.

Carriageway lane narrowings are considered acceptable, and the reduction of carriageway width to three lanes is acceptable, subject to future operational assessments to ensure that any additional delay to through traffic is within acceptable limits.

One group questioned whether the cycleway could be changed to the west side of the carriageway. The project team highlighted that measurements undertaken indicate that this causes problems of conflict between traffic movements at the Gilmore Place junction. This can be revisited if there is a preference for the west side.

The key amendments to Option 2 that the groups raised for consideration are:

- Splitting the northbound bus stops may help resolve bus queuing issues. Consideration needs to
 be given to interchange between services, particularly in relation to the proximity of stops and
 the quality of the pedestrian and waiting environment. An alternative may be to move the
 loading bays to increase the bus queuing space between Lochrin Place and Lochrin Terrace;
- Widening the footways north of Lochrin Place by reducing the carriageway width, as illustrated in Option 3;
- Consider the interaction of the Toucan crossing with turning traffic to and from Lochrin Place;
- The width of the west side footway should be protected and improved wherever possible; and
- While the loss of parking and loading should be minimised, there was a general consensus that
 improvements to the pedestrian environment were more important than the precise location of
 loading bays. Therefore the bays may be moved and reduced in number if the loss is offset by
 gains in the pedestrian and cycle environment.

Tarvit Street Appraisal (route section B)

6.1 Key Design Issues

Figure 6.1 illustrates the existing street layout, with the following key design decisions annotated:

- **B1. Closure of west end:** consideration of the traffic and access patterns and potential street layout changes.
- B2. Parking & Loading: the options offer different arrangements and proportions of loading bays
- B3. Kings Theatre Stage Door: articulated vehicle access to this side access
- **B4. Footway width:** different options for pedestrian improvements are presented
- B5. Creating cycling space: options include lanes, traffic calming, road closure and cycleways

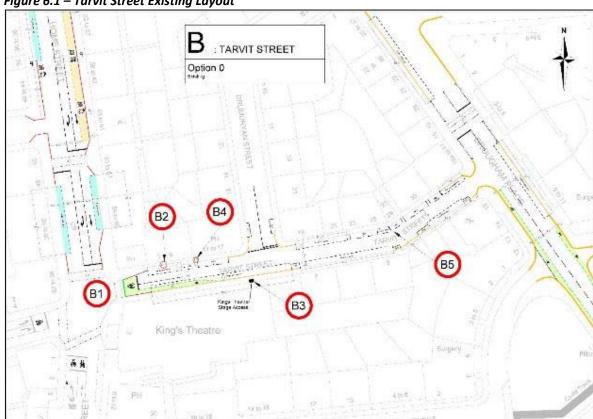


Figure 6.1 – Tarvit Street Existing Layout

Reference can be made to the related UCM Workshop 2 Presentation for details of the issues.

6.2 Tarvit Street Options

The three Tarvit Street Options, illustrated in Appendix B are:

- 1. 1.5m contra-flow cycle lane with traffic calming;
- 2. 3m cycleway, north side car parking moved; and
- 3. Road closure, wide footways.

6.3 Consideration of Key Design Issues

The following bullet points summarise the main discussion points under each of the key decision areas. They are organised under the different groups and provided without qualification to try to represent the discussion accurately.

6.3.1 B1. Closure of west end

6.3.1.1 Green Group

- Most members of the group considered the closure of the west end of Tarvit Street (Option 3) to be the most beneficial option.
- This preference was largely down to the increased safety potential for cyclists and pedestrians this option offered.
- The creation of a public space outside the Kings Theatre was also seen as a positive.
- Assuming the closure of the west end of Tarvit Street it was suggested a turning area be created at this end.
- There was also a suggestion to include a forced left turn onto Tarvit Street from Drumdryan Street.
- Option 2 was also considered a preferred option by at least one member of the group and if this
 was the option taken forward then some consideration should be given to the phasing of traffic
 signals at the junction with Home Street.

6.3.1.2 Red Group

- Creation of significant public realm outside Kings Theatre is an excellent idea.
- Will allow reconfiguring of Gilmore Place/Home Street junction.
- Not good for drivers
- Can it work? The management of dropping bollards how many people have keys?

6.3.1.3 Blue Group

- The creation of a public space outside the Kings Theatre was welcomed
- Effect of displaced traffic as a result of the closure of the west end of Tarvit Street should be assessed further.
- Concern was expressed as to the potential for conflict due to 'u-turns' at the road closure, causing conflict with cyclists and pedestrians. Clarity of signing for any closure was also noted as being of particular importance.
- Queries as to the method of access control to be used at the closure and that this would need to be investigated further.
- Could traffic calming be incorporated as part of Option 3?

6.3.2 B2. Parking & Loading

6.3.2.1 Green Group

- Options 1 and 2 were both considered to be negative options for parking and loading with substantial loss of spaces.
- Option 3 was considered neutral for parking and loading and as such the preferred option.

6.3.2.2 Red Group

- Suggestion that project team should revisit detailed allocation of P&D and permit parking.
- Reduction in overnight parking is an issue but not a showstopper.
- Suggestion that end-on parking could be introduced on Drumdryan Street to increase the number of spaces
- Suggestion to combine P&D and permit parking spaces for different timings.

6.3.2.3 Blue Group

 Options 1 and 2 were considered to be detrimental to parking and loading with significant reductions. Option 3 was considered neutral for parking and loading and as such the preferred option.

6.3.3 B3. Kings Theatre Stage Door

6.3.3.1 Green Group

• There was no clear preference identified as all options provided a bay for Kings Theatre loading. However Option 3 was expected to be the safest option.

6.3.3.2 Red Group

No comments.

6.3.3.3 Blue Group

- It was agreed that all options provided a bay for Kings Theatre loading.
- A key point was the need 2 loading bays for the King's Theatre (add one to the west of the
 loading bay already identified in each option. This is to accommodate two articulated vehicles at
 the same time are required for the King's Theatre. This should be a perquisite of whichever
 option is taken forward. The loading bay provided on the north side of Tarvit Street in option 1
 could be moved to the south of the road.

6.3.4 B4. Footway width

6.3.4.1 Green Group

- The potential for footway widening in Option 3 was seen as the preferred option, increasing safety for pedestrians.
- Option 3 may result in some conflict between cyclists and pedestrians at the share space outside the Kings Theatre.
- Option 2 also provide benefits to pedestrians but not as significant as Option 3 due to the extent of footway widening.

6.3.4.2 Red Group

- Options to widen the north side footway on the East section, even slightly, should be looked at further.
- Footway N side of Tarvit Street still too narrow in option 2.

6.3.4.3 Blue Group

- Option 3 was viewed as the preferred option in terms of footway width with significant benefits for pedestrians and disabled users.
- Real opportunity to create a pedestrian area outside the Kings Theatre in option 3
- Could streetscape/surfacing be improved as part of option 3?
- Option 2 also provides an increased width which was welcomed.
- Potential for raised table at Drumdryan Street junction should be assessed for option 2

6.3.5 B5. Creating cycling space

6.3.5.1 Green Group

- The group noted that each option provides some benefits to cyclists.
- It was considered Option 1 has positive benefits for cyclists, however transition from segregated route on Home Street to on road route is seen as a potential issue in terms of consistency of design.
- There are some safety concern regarding the cycle lane at B5, even with traffic calming measures.

6.3.5.2 Red Group

• Option 2 - Continuity of cycle provision a real positive.

6.3.5.3 Blue Group

- It was agreed that all options provided benefits to cyclists.
- Option 2 provided consistency of design aligned with measures on Home Street and Brougham Place.

- Would right turning traffic from Tarvit Street to Drumdryan Street expect straight ahead cycle movements in option 3?
- The group noted that a 12 year old cyclist could be faced with a segregated route on Home Street, cycling on road on Tarvit Street with no oncoming and minimal traffic on the west section, then cycling on road shared with traffic on east section past the Drumdryan Street junction, then back to a segregated section on Brougham Street. This represents a potential lack of continuity.
- Option 2 should the cycleway and parking be swapped so the parking is on the inside?

6.3.6 Other key decisions discussed

6.3.6.1 Green Group

- A question of whether the cycleway (eastbound) and parking could be swapped round in option 1 was raised.
- Whilst option 3 was ranked as preferred option by the majority there was at least one vote for option 2. A mix of Option 2 and 3 was suggested.

6.3.6.2 Red Group

- Drumdryan Street/Tarvit Street junction close off end of Drumdryan Street completely to improve pedestrian space? At least at raised table would help.
- Option 2 suggest that this includes a raised table at the Brougham Place end of Tarvit Street.

6.3.6.3 Blue Group

- Query as to whether a raised table could be provided at the junction of Tarvit Street/Drumdryan Street in Option 2.
- How do cyclists from the south access the area this should be considered

6.4 Discussion of preferred option

Following the discussion of the key decisions, participants were asked to identify a preferred option. The groups were provided with a copy of the scheme Design Objectives to assist this process. The Design Objectives are detailed in Appendix D.

The determination of each group is summarised below.

6.4.1 Green Group

Design Objective	Option 1	Option 2	Option 3*	
Bus services	n/a	n/a	n/a	
Cycling	✓	✓	✓	
Disabled users	×	×	✓	
Parking & Loading	×	×	√	
Pedestrians	×	√	√	
Through traffic	✓	√	×	
	✓ Objective met (positive	Objective met (positive or neutral impact)		
	× Objective not met (nega	Objective not met (negative or insufficiently positive impact)		
	* Preferred Option			

• Option 3 is the overall preferred option, although there was one vote for Option 2.

- The order of preference is Option 3, Option 2 and least preferred is Option 1.
- Option 3 offers significant gains for all key user groups. The opportunity to make a step change in cyclist safety, footway space and public realm provision for local people was seen as a positive that outweighted any inconvenience to through traffic.
- Option 2 was seen as very positive for cyclists, with continuity of the cycleway from Home Street and benefits for pedestrians. However this did not translate into significant improvements for disabled users and the impact on parking and loading is significant.
- Option 1 was seen to have some positive benefits for cyclists, however the impact on parking and loading was considered to be significant. There was consensus that there were no significant gains for disabled users and pedestrians and therefore this was marked as a negative.

6.4.2 Red Group

Design Objective	Option 1	Option 2	Option 3*
Bus services	n/a	n/a	n/a
Cycling	✓	✓	✓
Disabled users			
Parking & Loading			✓
			(although changes required)
Pedestrians			
Through traffic	✓	✓	
		(if the traffic progression is not impeded)	
✓	Objective met (positive or neutral impact)		
×	Objective not met (negative or insufficiently positive impact)		
*	Preferred Option		

• It was concluded that Option 2 is probably the best option for cyclists, but that Option 3 offers the best overall benefits for all users

6.4.3 Blue Group

Design Objective	Option 1	Option 2*	Option 3*
Bus services	n/a	n/a	n/a
Cycling	(although some concern regarding continuity and safety)	✓	(although some continuity issues)
Disabled users	×	✓	√

	(No change)		
Parking & Loading	×	×	✓
	(significant reduction – need for a double Kings Theatre bay)	(significant reduction – need for a double Kings Theatre bay)	(need for a double Kings Theatre bay)
Pedestrians	×	✓	✓
	(No change)		
Through traffic	✓	✓	×
			(Group split on whether displaced traffic would be an issue)
✓	Objective met (positive or neutral impact)		
×	Objective not met (negative or insufficiently positive impact)		
*	Preferred Options		

- Options 2 and 3 were jointly the preferred options.
- Option 2 was identified as the most favourable for cyclists. Although the loss of parking and loading was seen as extensive, some alternative layouts were suggested to mitigate that.
- Option 3 was seen as a positive option for pedestrians, disabled people and cyclists, providing
 the issues of potential U-turning traffic and route continuity were resolved. The group was split
 on whether the displaced traffic would be an issue and identified that this should be assessed
 more fully. Option 3 was seen as positive for parking and loading.
- Option 1 provides benefits for cyclists, although with some concerns regarding safety. However there was a negative impact on parking and loading, and no improvement for pedestrians.

6.5 Summary of Tarvit Street Preferred Option

During the plenary session there was general consensus that Option 3 was the preferred option, with some elements of Option 2 to be considered for inclusion.

TABLE 6.1 Tarvit Street appraisal - preferred options of each group

Home Street Option	Option 1	Option 2	Option 3*
Green Group Ranking	3 rd	2 nd	1 st
Red Group Ranking	3 rd	2 nd	1 st
Blue Group Ranking	3 rd	1 st	1 st

^{*} Preferred option

The participants largely agreed that the closure of Tarvit Street to through traffic (Option 3) achieves the maximum potential benefits for the most users. However Option 2 was also favoured by a number of participants because of the continuity of the cycleway. The proposal is to pursue Option 3 and incorporate elements of Option 2.

The key amendments to Option 2 that the groups raised for consideration are:

- Further assessment is required to identify the impact of displaced through traffic on surrounding streets.
- The balance of loading/ residents and other bays should be further assessed, with less loading and more short-term parking for customers.
- An increase in permit holder spaces should be looked at
- Opportunities to maximise parking bays should be looked at, including the possibility of end-on parking on Drumdryan Street or moving bays onto Brougham Place.
- The Kings Theatre stage access requires loading space for two articulated vehicles. This should be a re-requisite of all designs and further discussion is required with the theatre to identify the exact requirements and any possible alternative access/ turning arrangements that can be considered
- Further consideration of the management of the road closure is required, and which vehicles (if any) will be permitted access out of the west end.
- The widening of the Tarvit St north side footway should be maximised, in particular the opportunities towards the eastern end.
- Consider how to improve the continuity of the cycle route from cycleway to carriageway.
- There are also continuity issues to and from Gilmour Place and Leven Street to consider. In particular, will cyclists exiting Tarvit Street into Gilmour Place be opposed by right-turning traffic from Gilmour Place?
- Consider the potential pedestrian/ cyclist conflicts at the road closures, tables and crossings to ensure comfort for disabled users in particular.

Brougham Place Appraisal (route section C)

7.1 Key Design Issues

<u>Figure 7.1</u> illustrates the existing street layout, with the following key design decisions annotated:

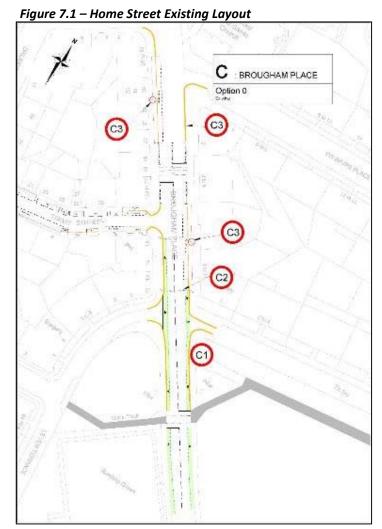
- C1. Cyclist and pedestrian desire line: between Tarvit Street and North Meadow Walk
- C2. Carriageway width: The options present different widths for general traffic, for consideration
- C3. Parking: the options offer different arrangements and proportions of bays

Reference can be made to the related UCM Workshop 2 Presentation for details of the issues.

7.2 Brougham Place Options

The three Tarvit Street Options, illustrated in Appendix C are:

- 3m cycleway, traffic lanes narrowed;
- 2. 2m mandatory cycle lanes; and
- 3. 2m advisory cycle lanes.



7.3 Consideration of Key Design Issues

The following bullet points summarise the main discussion points under each of the key decision areas. They are organised under the different groups and provided without qualification to try to represent the discussion accurately.

7.3.1 C1. Cyclist and pedestrian desire line

7.3.1.1 Green Group

- Option 1 was recommended by all to be the only option worth considering as options 2 and 3 provided little improvement for cyclists.
- Each of the options presented some benefit to pedestrians, particularly in moving the crossing to a more desired location.

7.3.1.2 Red Group

 Consideration should be given to realigning the drop kerb at end of cycle path next to Lonsdale Terrace.

7.3.1.3 Blue Group

No additional comments

7.3.2 C2. Carriageway width

7.3.2.1 Green Group

• For Option 1 there was a suggestion to reduce the footway on the east side of the street by 0.2m and the cycleway by 0.4m to allow for slightly wider carriageway.

7.3.2.2 Red Group

No additional comments

7.3.2.3 Blue Group

No additional comments

7.3.3 C3. Parking

7.3.3.1 Green Group

 Option 2 and 3 provide more overall parking but this was not considered a huge advantage for this area considering the level of demand. However it was noted that loss of parking on Tarvit Street may be accommodated on Brougham Place should space permit.

7.3.3.2 Red Group

No further comments

7.3.3.3 Blue Group

• The potential for the provision of increased parking provided by Options 2 and 3 may mitigate against loss of parking elsewhere but it was not considered hugely advantageous or critical.

7.3.4 Other key decisions discussed

7.3.4.1 Green Group

None.

7.3.4.2 Red Group

- Raised table needed at end of end of Lonsdale Terrace.
- Pavement improvements/raised table needed at Leven Terrace junction.
- Sort out segregation on existing cycle path next to Bowing Green. Currently E/W routes swap sides
- Retain existing Toucan crossing on Melville Drive.

7.3.4.3 Blue Group

None

7.4 Discussion of preferred option

Following the discussion of the key decisions, participants were asked to identify a preferred option. The groups were provided with a copy of the scheme Design Objectives to assist this process. The Design Objectives are detailed in Appendix D.

The determination of each group is summarised below.

7.4.1 Green Group

- Option 1 was considered a positive option for cycling and pedestrians. This option was considered neutral for all other objectives, bus services, disabled users, parking and loading and through traffic.
- The group thought Options 2 and 3 were similar positive for pedestrians and neutral for all
 other objectives bus services, cycling, disabled users, parking and loading and through traffic.
- Option 1 was recommended by all to be the only option worth considering as Options 2 and 3
 provided little improvement for cyclists.

7.4.2 Red Group

 Option 1 was the preferred option, considered the most positive option for pedestrians and cyclists.

- Option 2 was marginally preferred to Option 3 because it provided mandatory lanes
- Given the parking demand in the area, any reduction of bays was not considered critical.

7.4.3 Blue Group

The Blue Group spent longer discussing Section C Tarvit Street that the other groups and therefore had limited time to consider all three Brougham Place options in detail. However it was felt by all those present in the group that Option 1 was preferable since options 2 and 3 provided minimal additional benefits for cyclists over the existing situation. Furthermore it was felt that Option 1 would assist in providing a consistency of design throughout the route under consideration.

7.5 Summary of Brougham Place Preferred Option

Overall the groups found that the key design issues for Section C were less controversial than for Sections A and B. For that reason the discussion and feedback was less extensive.

Option 1 was overwhelmingly the preferred option of all three groups because of the significant benefits of a segregated cycleway. It was considered that reductions in parking on Tarvit Street could be offset by the available spaces on Brougham Place. However a reduction in Brougham Place parking bays can be accommodated due to the low demand at this location.

TABLE 7.1

Brougham Place appraisal - preferred options of each group

Home Street Option	Option 1*	Option 2	Option 3
Green Group Ranking	1 st	2 nd	2 nd
Red Group Ranking	1 st	2 nd	3 rd
Blue Group Ranking	1 st	n/a	n/a

^{*} Preferred option

Full Route Preferred Option

8.1 Key recommendations

A summary of the full route is provided below. The key recommendations are summarised in Table 8.1.

TABLE 8.1

Key participant recommendations

Key participant recommendations

Segregated cycleways on Home Street and Brougham Place

Close Tarvit Street to through traffic and provide more people space

Increase pedestrian space throughout and improve the people environment to benefit locals and businesses

Reductions in parking & loading capacity is acceptable if evidence-based

Reductions in through vehicle flow is welcomed, subject to impact assessment of displaced traffic

The enforcement of regulations is critical to success, especially parking/loading restrictions

Provide more cycle parking at key trip generators

Ensure disabled access is central to street design

8.2 Route Summary

The preferred Options are listed in Table 8.2 and summarised below.

TABLE 8.2

Full route preferred option

Route section	Preferred Option
A: Home Street	Option 2: segregated cycleway, with some elements of Option 3
B: Tarvit Street	Option 3: closure to through traffic to improve people space
C: Brougham Place	Option 1: segregated cycleway

8.2.1 Section A: Home Street

The participants asked CEC to progress Option 2, incorporating some elements of Option 3 (Options illustrated in Appendix A). The key elements of the design are:

- Segregated cycleway on the east side of Home Street;
- Conversion of the existing Pelican to a Toucan for use by cyclists;
- Increases in pedestrian space;

- Reductions in carriageway lane widths, with further analysis of reductions in the number of lanes
 :
- Further analysis of splitting existing bus stops to reduce bus congestion and improve waiting facilities; and
- Reduction of total loading capacity with potential increase in flexible short stay spaces elsewhere, including Tarvit Street.

8.2.2 Section B: Tarvit Street

The participants asked CEC to progress Option 3 (illustrated in <u>Appendix B</u>), with consideration of some additional elements. The key elements of the design are:

- Closure of Tarvit Street to through traffic
- A step change improvement in people space outside the Kings Theatre;
- Two-way cycle flow on Tarvit Street;
- Raised pedestrian priority at side roads;
- Space for two articulated vehicles to access the Kings Theatre stage doors;
- To increase capacity, consider end-on parking on Drumdryan Street; moving some Pay and display or residents' bays to Brougham Place; and introducing 'dual use' spaces; and
- Conversion of some loading bays to short term parking.

It should be noted that the option of introducing a segregated cycleway on Tarvit Street (option 2) was not completely ruled out, however parking bay displacement would require to be offset by increases on surrounding streets.

8.2.3 Section C: Brougham Place

Option 1 (illustrated in Appendix C) was overwhelmingly the preferred option. The key elements are:

- Segregated cycleway on the east side of Brougham Place;
- Rationalisation of under-utilised parking spaces, possibly to accommodate changes to Tarvit Street:
- Move the existing Pelican crossing and convert to a Toucan for use by cyclists; and
- Minor improvements to connecting paths.

8.3 Ideas Bank

During the Workshop, participants were encouraged to note down any additional issues that they thought of but that we could not cover within the scope of the Workshop discussions. The un-edited ideas are:

- Bike Parking should be incorporated in the design
- Is it set in stone to use Lochrin Place and not Gilmore Place? This would avoid right hand turns into Home Street.
- Bus Lane northbound why not?
- Refuse bin management is poor
- Enforcement of rules critical especially parking
- Clearing up of less than adequate cycle parking and concentrate parking outside trip generators, e.g. shops, Cinema etc
- Potential pedestrian/cycle conflict at busy corners NE Home Street/Tarvit Street; SW Home Street/Lochrin Place
- Home Street/Valleyfield corner cycle filter island for right turning from south

CEC will consider these issues as part of its development of the design.

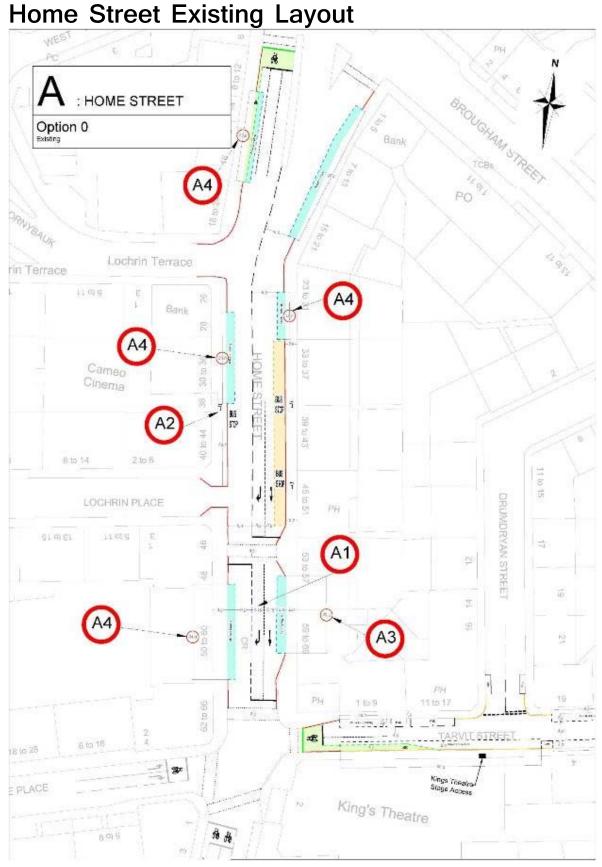
SECTION 9

Next Steps

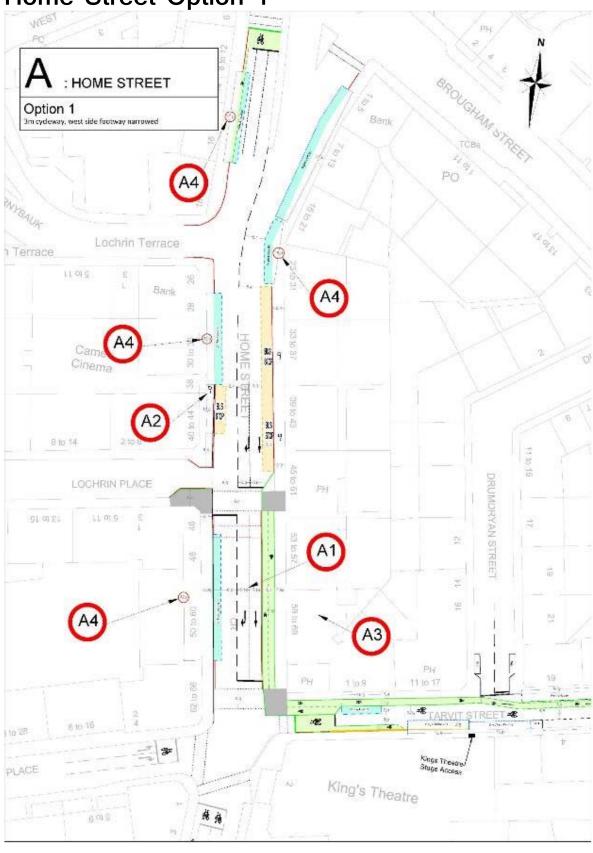
The next steps for the project are to:

- Finalise this report following workshop participant comments
- Finalise the preliminary design based on participant comments and further analysis
- Public Consultation on preliminary design late 2014
- Statutory Consultation late 2014
- Finalise detailed design early 2015
- Construction aim to deliver during financial year 2015/16

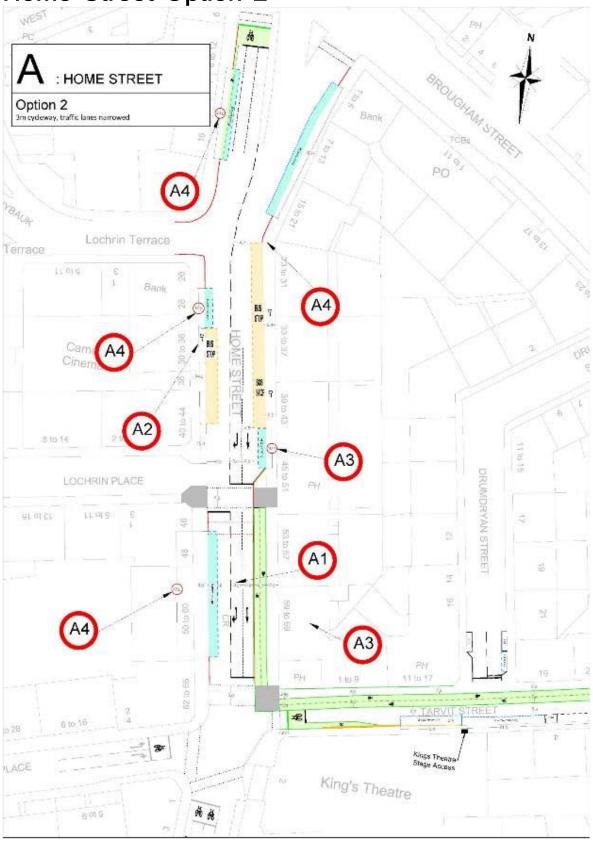
Appendix A Section A: Home Street Options



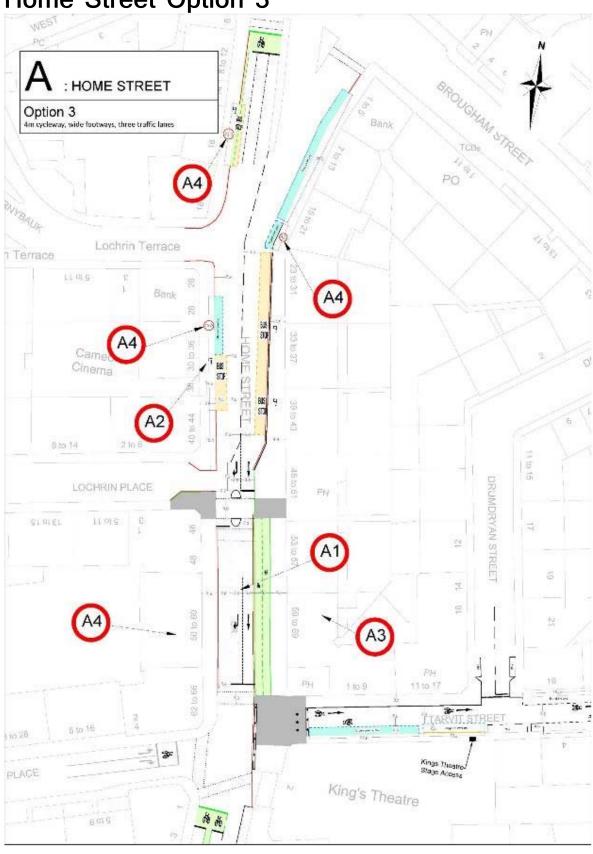
Home Street Option 1



Home Street Option 2

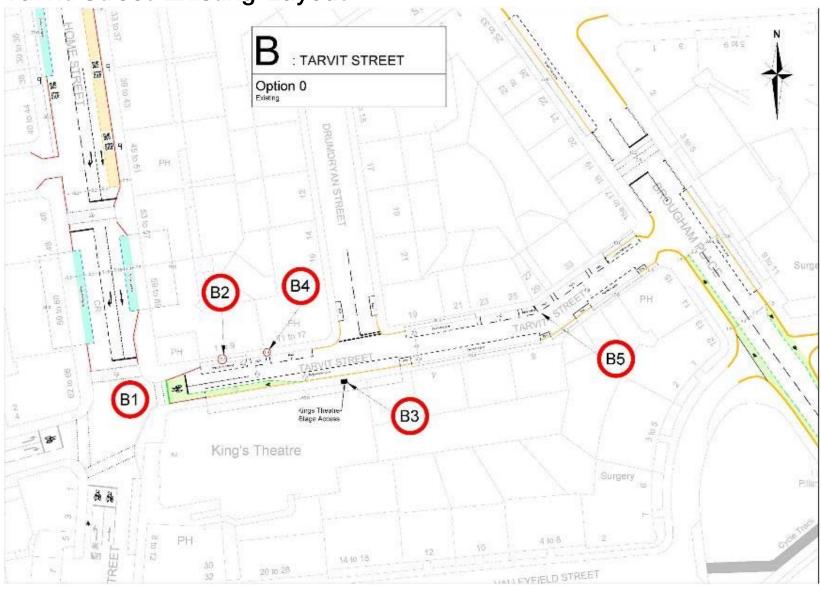


Home Street Option 3

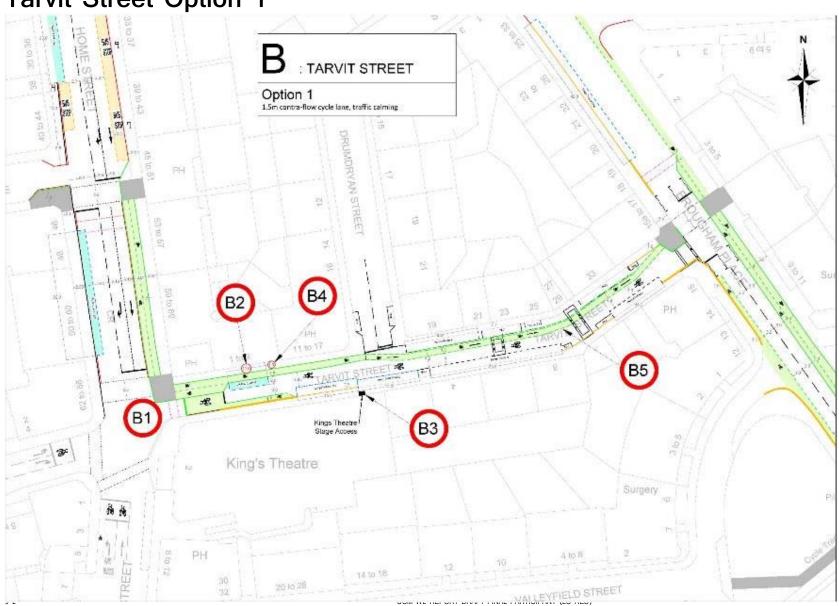


			App	endix E	3
Section	B:	Tarvit	Street	Options	3

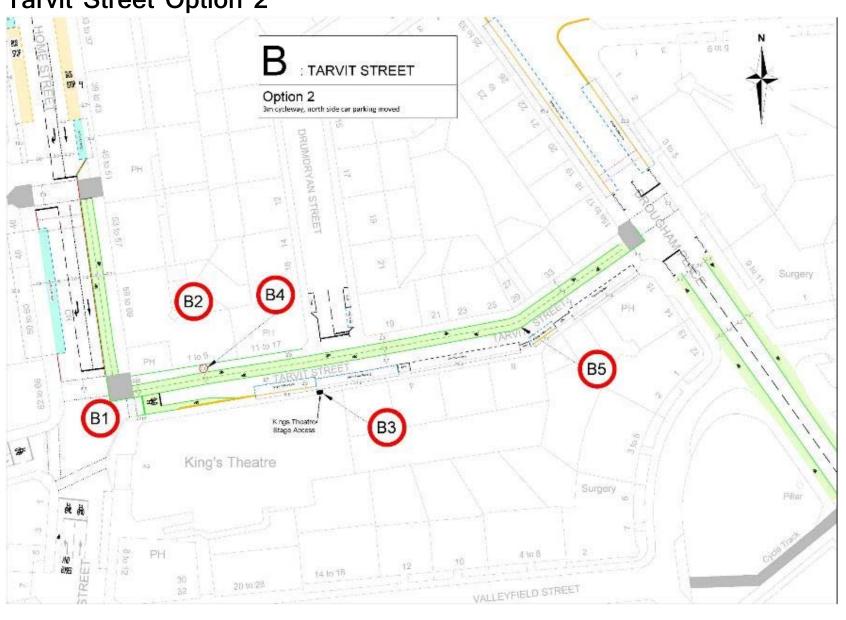
Tarvit Street Existing Layout



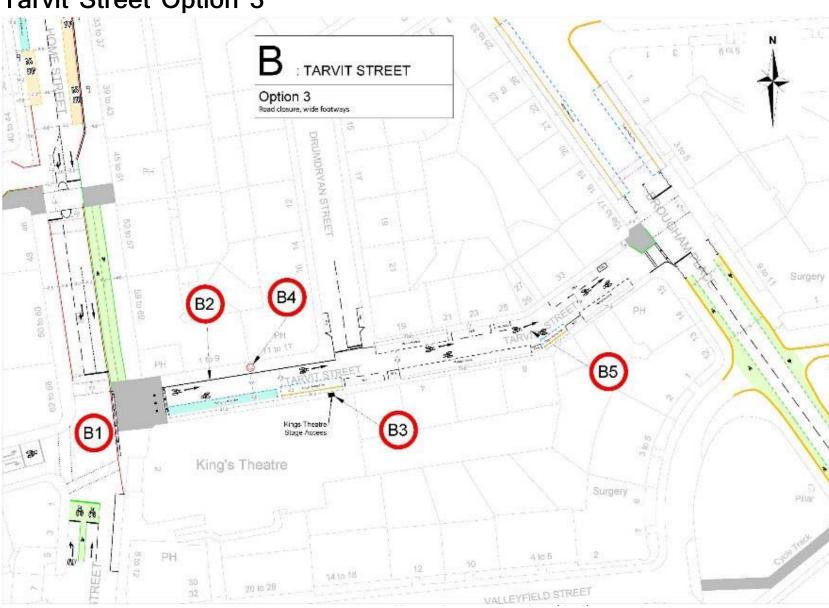
Tarvit Street Option 1

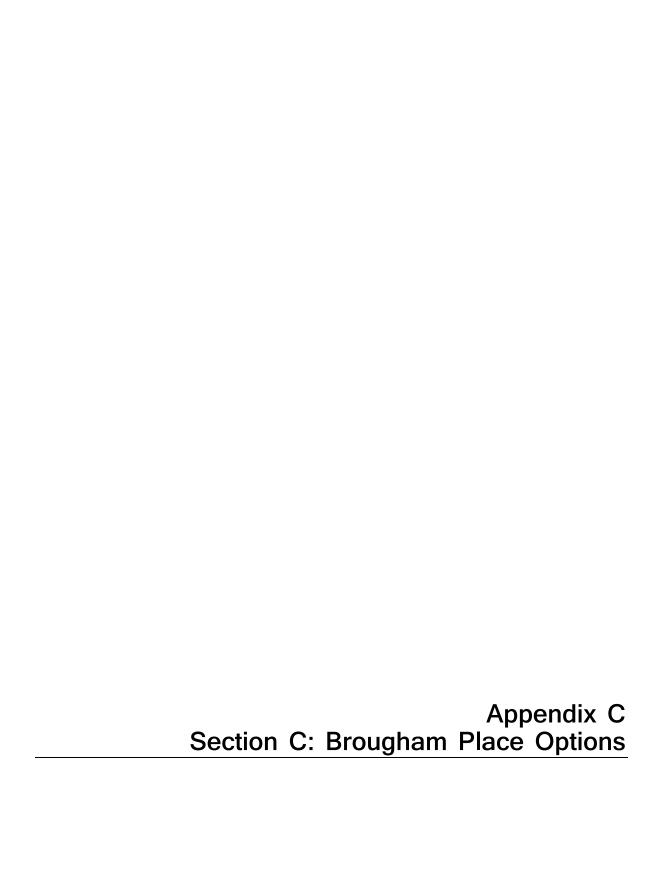


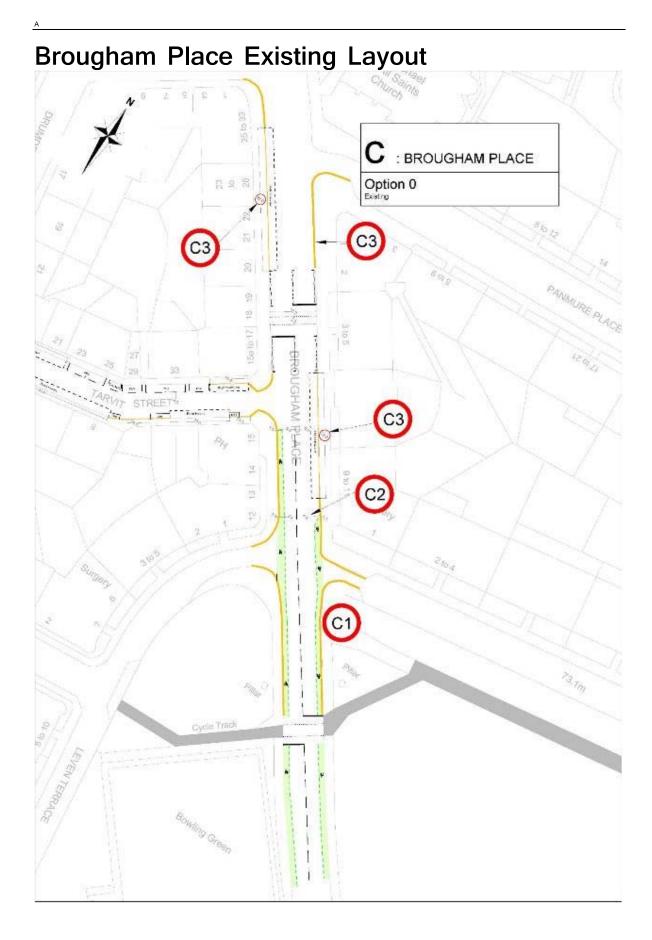
Tarvit Street Option 2



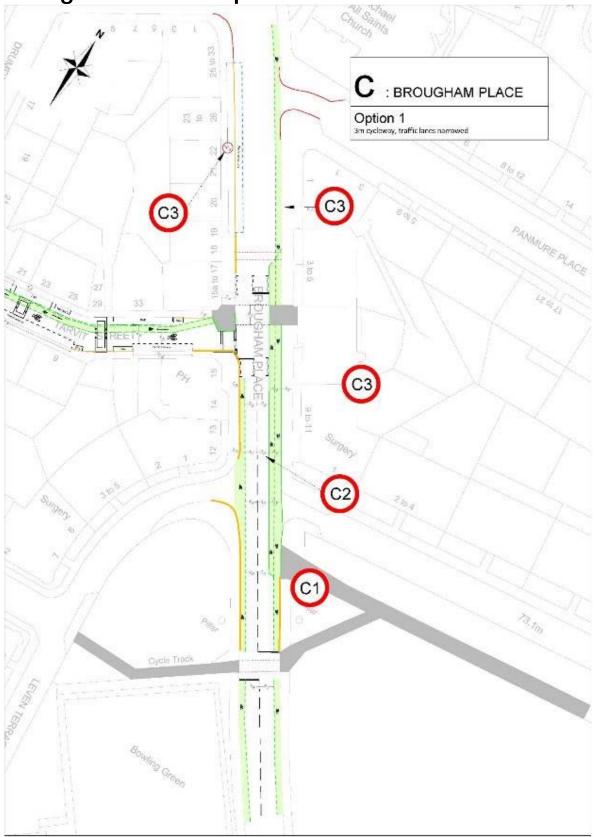
Tarvit Street Option 3

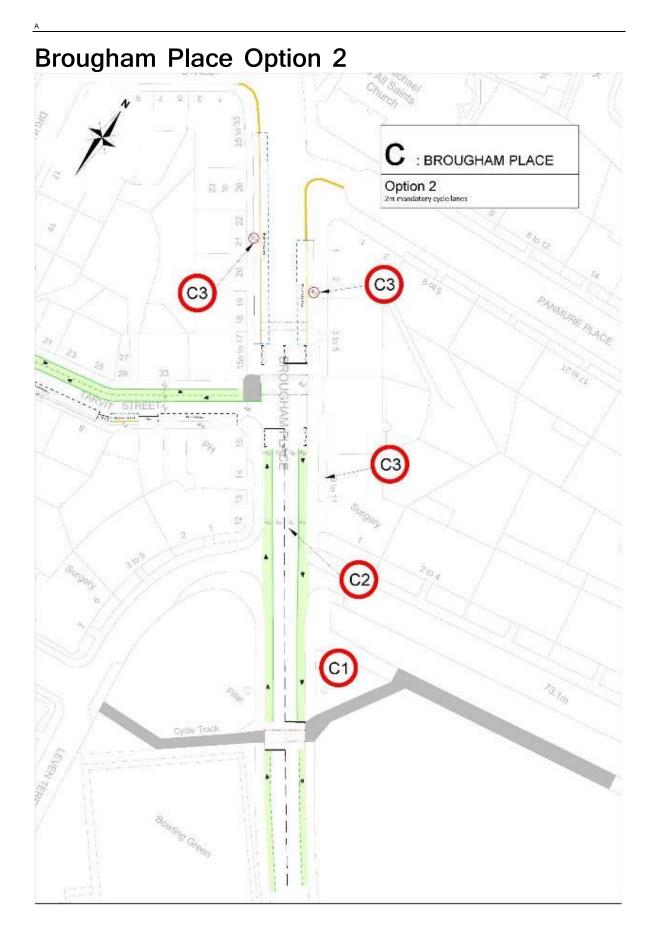




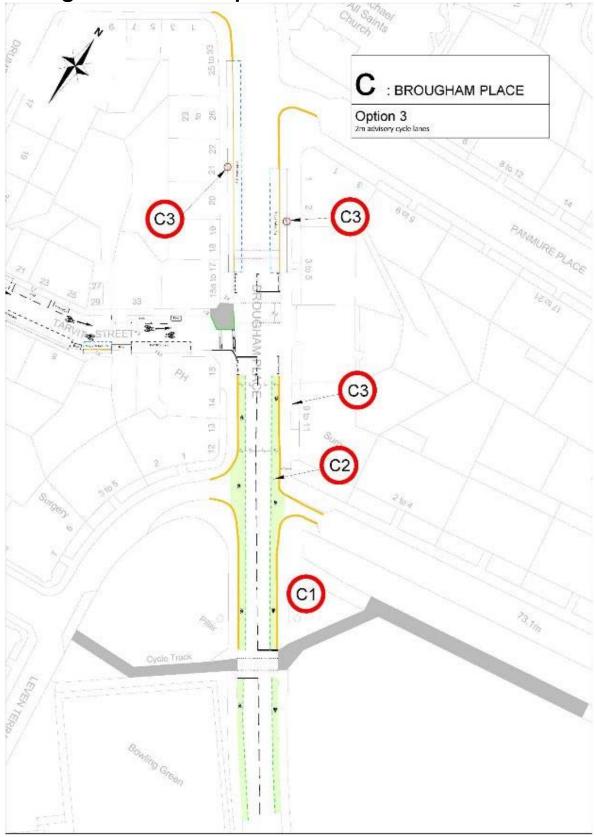


Brougham Place Option 1





Brougham Place Option 3



Appendix D Design Objectives

Design Objectives

(alphabetical order)

Bus Services	Minimise delay to bus services travelling through the study area, particularly at peak periods, and with particular consideration of bus journey time variability.
Cycling	Create a route(s) to permit cycle access to all local facilities and services, the Union Canal and North Meadow Walk, compatible with the Design Approach of the Family Cycle Network.
Disabled users ¹	Provide safe access for all vulnerable users, in particular ensure the City of Edinburgh meets its obligations under Disability Discrimination legislation.
Parking & Loading	 Facilitate practical loading and unloading that: adequately serves the practical needs of local businesses and residents; and minimises its impact on other street activities. The design must consider location and time variables to achieve this balance.
Pedestrians	Create a good quality, safe and attractive environment for pedestrians: • walking and standing • accessing all local facilities and services • waiting at bus stops; and • making through trips.
Through traffic	Minimise delay to cars and general traffic, however a small degree of additional delay may be acceptable to achieve other objectives.

Table note 1 – consideration of disabled users is an absolute requirement of the project rather than an objective. However it was retained as an objective to ensure this is achieved.