ABERDEEN CITY COUNCIL

COMMITTEE	Communities, Housing and Infrastructure
DATE	29 August 2017
REPORT TITLE	Motion by Ex-Councillor Finlayson Feasibility study on a safe route to school for pupils attending the new Lochside Academy from Cove across Wellington Road.
REPORT NUMBER	CHI/17/192
INTERIM DIRECTOR	Bernadette Marjoram
REPORT AUTHOR	Jack Penman

1. PURPOSE OF REPORT:-

1.1 To advise and update members on the work carried out by officers in relation to a motion by Ex-Councillor Finalyson at the Council meeting on 15th March 2017. The motion was:

"To instruct the Interim Director of Communities, Housing and Infrastructure to arrange for the carrying out of feasibility study on a safe route to school for all pupils attending the new Lochside Academy. The Interim Director should include in the options for either a pedestrian bridge over, or a pedestrian underpass under Wellington Road dual carriageway in the vicinity of the A956 Wellington Road/Souter Head Road roundabout.

It is essential to consider these options due to the fast moving very large volumes of traffic, including HGVs, currently using Wellington Road which will substantially increase with the opening of the Aberdeen Western Peripheral Route vehicles serving the new Recycling Plant, the new Energy from Waste Plant and the new Harbour".

1.2 To advise members that the safe routes to school were previously highlighted and agreed in the Transport Assessment, which formed part of the planning consent. Officers have carried out a feasibility study on the options proposed in the motion.

2. RECOMMENDATIONS

It is recommended that members:

a) Note the content of the report.
b) Instruct officers to implement an at-grade Toucan crossing over A956 Wellington Road, as originally stipulated in the planning consent, as it is the most suitable option in terms of providing a safe route to the new Lochside Academy for pupils.

3. MAIN ISSUES

3.1 Ex-Councillor Finlayson raised a notice of motion at the council meeting on the 15th March 2017 requesting that the feasibility of several options are considered for a safe route to the new Lochside Academy for pupils crossing the A956 Wellington Road in vicinity of the Souter Head Road Roundabout.

3.2 School Details

3.2.1 From the school role, there are 256 pupils who currently attend Kincorth Academy or Torry Academy who are likely to attend the new school once open. Pupils from the southern area of Cove are most likely to cross Wellington Road at the new traffic signal controlled junction at the Balmoral Business Park. Pupils in the northern area of Cove are more likely to cross Wellington Road in close proximity to Langdykes Road.

3.2.2 School start and finishing times have not yet been established but based on other local schools these are expected to be around 08:25 – 15:15, although some schools have a flexible finish time of either 14:50 or 15:40. These times will impact on when the likely peak demand at the crossing will be.

3.3 Current Crossing Facility

The total crossing distance at the current uncontrolled crossing point on Wellington Road is 27 metres. The central island has a width of approximately 7 – 10 metres.

3.4 Conditions attached to Planning Consent for the new Academy

Condition 6, part F of the planning consent for the development of the new school requires that the development includes “Provision of a controlled pedestrian/cyclist crossing ("toucan") on Wellington Road, just south of Souter Head Roundabout”.

This was agreed by the Planning Development Management Committee on the 29th October 2015.

3.4.1 The safe routes for all pupils highlighted in the Transport Assessment, which informed the planning consent, have been reviewed by officers following the motion and have been found to be appropriate and suitable.

The walking and cycling routes for all pupils are shown in Appendix 1.

3.4.2 The two routes from Cove (north and south) have been found to be adequate in terms of providing a safe route for secondary school pupils. The footpaths are of suitable width and are well lit. As per the planning condition noted above, the upgrading of the crossing point to a toucan crossing would provide a safe means of crossing Wellington Road for pupils travelling from the north of Cove. This has been considered to be the most effective method of delivering the crossing. It is as the existing crossing facility which is provided for pupils attending the Academy from the South of Cove, with the Toucan Crossing at the Balmoral Business Park.

3.5 Current Traffic Conditions

A review of current traffic volumes and speeds was conducted on Wellington Road in close proximity to the proposed toucan crossing site. The survey was carried out in July 2017. Table 1 outlines the average figures for work week during the predicted school peak period:

North Bound	Volume	85th% * (mph)	Average Speed (mph)		South Bound	Volume	85th% * (mph)	Average Speed (mph)
AM (07:00-09:00)	2144	38	31		**AM (07:00-09:00)**	839	41	35
PM (14:00-16:00)	996	40	31		**PM (14:00-16:00)**	1517	42	35

Table 1 Results from survey carried out on Wellington Road (Speed figures rounded).

**The 85th% speeds are the speeds at which 85% of vehicles recorded have been found not to be exceeding.*

Traffic flow volumes are higher northbound in the AM than the PM as more people are entering the city with the reverse in the evening, with higher southbound volumes. Traffic speeds, as demonstrated by the above table, are within the mandatory 40mph speed limit.

3.6 Crossing Options

The planning conditions stipulate the provision of a controlled toucan crossing however this Motion asks officers to investigate the feasibility of grade separating pedestrians and vehicles either by a fully enclosed overbridge or underpass.

It should be noted that current guidance in Designing Streets and Manual for Streets recommends maintaining pedestrians at ground level as it provides the most direct route.

Officers conducted a feasibility study comparing two options suggested in the motion and the toucan crossing as per the planning condition. The proposed options are discussed below:

3.6.1 At-Grade Toucan Crossing (as outlined in the Planning condition)

The toucan crossing would be located in close proximity to the existing uncontrolled crossing point and would allow both pedestrians and cyclists to use it.

The proposal for the toucan crossing will form part of the Road Safety Audit for the new Academy.

An indicative plan and comments on this proposal are found in Appendix 2. The exact location and layout would need to be agreed with the Traffic Management and Road Safety Team and the Intelligent Transport Systems Team.

Estimated Cost: £30,000.

3.6.2 Pedestrian Underpass

A proposed design for the shared-use underpass is provided in Appendix 3 which illustrates the proposed footprint of the scheme. It is assumed the proposal would be 4 metres deep and would require the acquisition of land on the western side of Wellington Road.

Estimated Cost: £1.5 million - based upon the depth of structure being 4 metres and the relocation of utilities as deemed necessary (See Appendix 5 for utilities map).

Additional costs of land negotiation and purchasing, installing lights and detailed environmental study would need to be agreed.

3.6.3 Pedestrian Overbridge

A proposed design for the pedestrian overbridge is provided in Appendix 4 which illustrates the proposed footprint of the scheme. It is assumed the bridge clearance over the A class road would be 7 metres. Limited room on the western side of Wellington Road for the ramp to be installed would mean the structure is very close to the SSE electricity substation.

Estimated Cost: £1.1 million – estimated from Transport Scotland for shared use over bridge crossing dual carriageway.

Additional costs of land negotiation and purchasing would need to be agreed.

3.7 Wellington Road Study

3.7.1 Aberdeen City Council is currently undertaking a study on the Wellington Road. The objectives of the study are to improve travel for people and goods along the corridor and promote a modal shift to less carbon-intensive modes of transport such as public transport and active travel.

3.7.2 One of the proposed options for improving the corridor is to consider the replacement of the Souterhead Road and Hareness Road Roundabout's with signalised junctions. If this proposal is progressed it will include pedestrian crossing facilities on all arms of the junction.

3.8 Summary

Following the Feasibility study and considering the above and appendices it is recommended that the proposed toucan crossing, as has been outlined in the planning condition, continues to be the most appropriate option. The toucan crossing meets the needs of pedestrians and cyclists seeking to travel to and from the school by the most direct route possible. It meets the Planning requirements for the site and meets current guidance for pedestrian provisions.

4. FINANCIAL IMPLICATIONS

4.1 The recommendation of this report is to proceed with the proposed toucan crossing as per the conditions of the planning consent. As such there are no additional financial implications arising from this report. The funding for the toucan crossing will be met by capital funding for the school build as outlined in the original traffic assessment.

4.2 If the recommendation of this report is not followed and one of the other proposals is to be proceeded with, an appropriate budget would have to be set and funding secured to carry out detailed design, land purchase, where required, and contract implementation.

5. LEGAL IMPLICATIONS

5.1 There are no direct legal implications arising from the recommendations of this report.

5.2 If the recommendations are not followed and the recommended works are not to be implemented prior to occupation, the Council would be in breach of condition 6 of its planning permission, ref. 151082.

5.2.1 If an over bridge/underpass were to be pursued there would need to either be (a) a fresh application for planning permission for the school based on delivery of an alternative form of crossing to ensure adequate accessibility; or (b) an application

under section 42 of the Town and Country Planning (Scotland) Act (as amended) to change or remove the relevant planning condition (condition 6).

5.2.2 The planning authority is required to ensure that planning conditions satisfy the policy tests as set out in the Scottish Government's Circular 4/1998. If the crossings recommended in the Transport Assessment are sufficient to allow for safe access to the site, then it would normally be considered unreasonable to utilise a condition to oblige an applicant to go beyond that in terms of delivering something excessively costly or otherwise unreasonable. In considering any revised application, officers would be obliged to consider whether any conditions or planning obligations relating to the provision of an over-bridge or underpass would satisfy the relevant tests, including that of reasonableness.

6. MANAGEMENT OF RISK

Financial

6.1 Estimated £1000 Per Annum maintenance cost if recommendation is accepted, this impact is likely to be low and funds will need to be agreed and added on to the existing maintenance budgets. This risk level is deemed to be low.

6.1.1 If the recommendations are not accepted an adequate budget for these works would have to be identified. Other capital schemes would be delayed or withdrawn from existing programmes. This has been deemed to have a high potential impact and deemed highly likely to occur. It was proposed by Ex-Councillor Finlayson that some of this funding could come from a bid to the Bus Lane Enforcement fund. This funding programme has been agreed for the coming year with budget being spent as it becomes available. This risk level has been deemed to be high.

Employee

6.2 N/A

Customer/Citizen

6.3 Many pedestrians prefer not to use underpasses or overbridges owing to increased distances and being taken off their desire lines. They can be difficult for those with mobility issues. Additionally there can be concerns over personal safety when using unobserved underpasses. This has been deemed to have a potentially high impact with and the likelihood of this occurring is deemed to be medium. Design features that ensure the schemes are inclusive for all and likely to be used. CCTV and lighting should be provided to mitigate fears of personal safety. The risk level has been deemed to be high.

Environmental

6.4 The underpass and overbridge will require extensive engineering, which may have a negative impact on the local environment, e.g. water table rests at 2 metres below ground proposed underpass would be 4 metres underground. The impact of this has been deemed to be high with a likelihood occurrence rating of medium. The steps to mitigate this would involve a detailed environmental statement to be carried out and recommendations from this adhered to. The risk level has been deemed medium.

Technological

6.5 N/A

6.6 **Legal**

Should the recommendations of this report not be accepted, applications to the Planning Authority as outlined in Section 5.2.1 of this report would need to be considered. The risk level has been deemed high with a high likelihood of occurring if the recommendations of this report are not followed.

Reputational

6.7

May result in additional requests for similar schemes at other sites in the city. The impact of this has been deemed to be medium with a low likelihood of occurrence. To mitigate this publicity and communications would have to be managed to ensure expectations were controlled. The risk level has been deemed to be low.

7. IMPACT SECTION

7.1 Economy

The recommendation provides a safe route across the A956 linking a significant community with a business and retail area. Furthermore it will provide a link between the community and a significant education complex.

7.2 People

The proposed toucan crossing will ensure pedestrians and cyclists are provided with a safe means of crossing the A956 Wellington Road. It will ensure they are kept on their desire lines as it provides the shortest means of crossing the road. This will ensure that those peoples with mobility issues are not required to travel a further distance than is necessary. Furthermore it will facilitate a safe route to school for pupils attending the new Lochside Academy.

The Equality and Human Rights Impact Assessment (EHRIA), has been completed. The recommendations contained within this report have been assessed and determined to have no adverse implications in relation to any groups or bodies

7.3 Place

This report will be of interest to residents/proprietors/businesses within the proposed area.

As the recommendation is to proceed with the at-grade toucan crossing, as per planning consent, there will be a positive impact on current customer experience in terms of road safety in addition to supporting active travel and safe routes to schools and businesses in our communities.

7.4 Technology

N/A

8. BACKGROUND PAPERS

Minutes of Council meeting:
https://committees.aberdeencity.gov.uk/documents/g4324/Printed%20minutes%2015th-Mar-2017%2010.30%20Council.pdf?T=1

Planning and Development Committee minutes:

https://committees.aberdeencity.gov.uk/documents/g3608/Printed%20minutes%2029th-Oct-2015%2010.00%20Planning%20Development%20Management%20Committee.pdf?T=1

Decision Notice Planning:
https://publicaccess.aberdeencity.gov.uk/online-applications/files/F76DDAE5FB4F5AAEAD2781F010A8CD1B/151082-Decision_Notice-1058875.doc

Circular 4/1998 Annex A THE USE OF CONDITIONS IN PLANNING PERMISSIONS:
http://www.gov.scot/Publications/1998/02/circular-4-1998/circular-4-1998-a

South of the City Campus, Aberdeen Transport Assessment July 2015 (Fairhurst):
https://publicaccess.aberdeencity.gov.uk/online-applications/files/0680F45368D35C0E0E560EE0BDCC047B/pdf/151082-TA_-_FINAL__July_2015-940634.pdf

9. APPENDICES

Appendix 1 - Walking and Cycling Accessibility Routes as per Transport Assessment.

Appendix 2 – Indicative plan of toucan crossing and Officers observations.

Appendix 3 – Indicative plan of shared use underpass and Officers observations.

Appendix 4 – Indicative plans of shared use overbridge and officers observations.

Appendix 5 – SSE utilities map.

10. REPORT AUTHOR DETAILS

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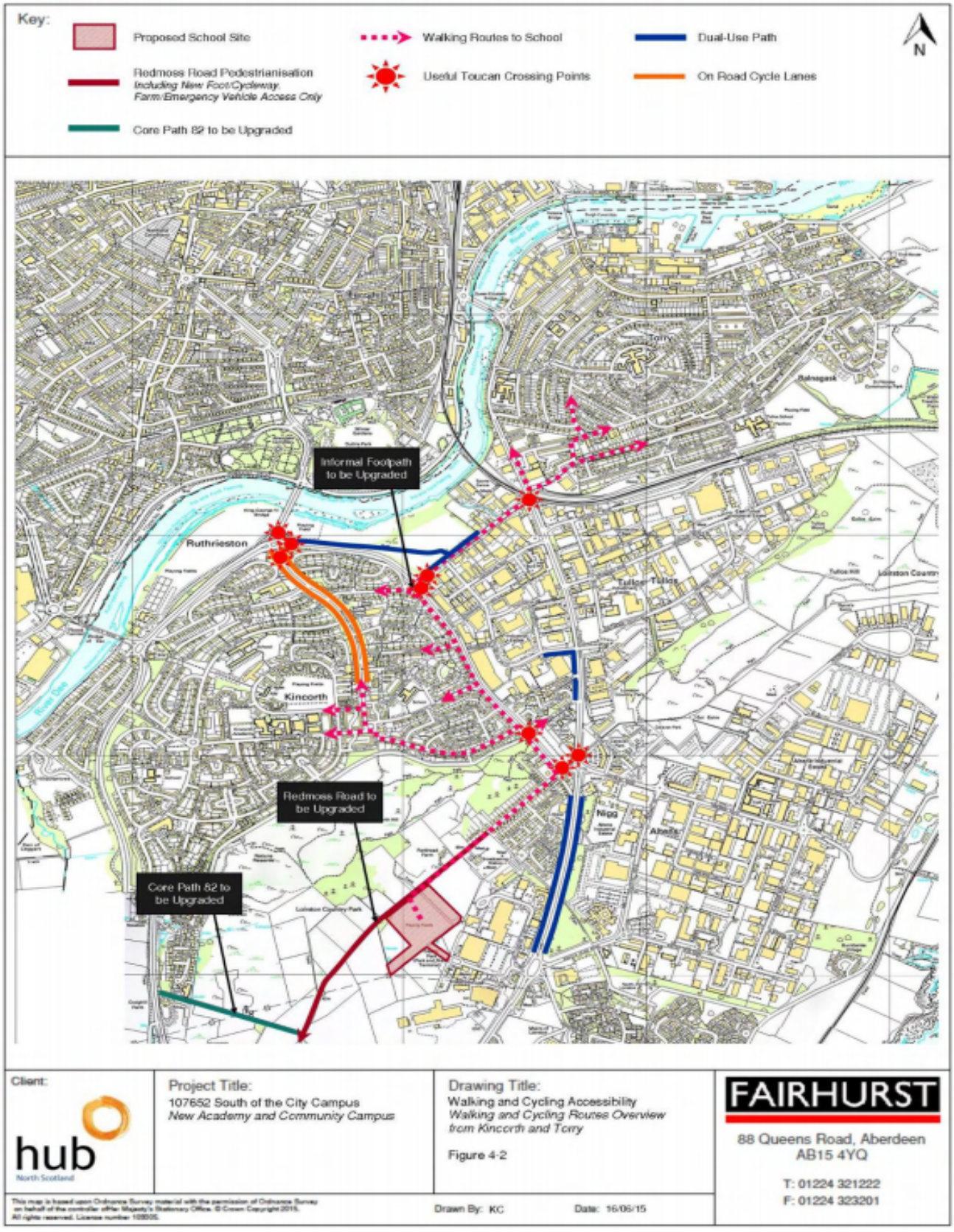
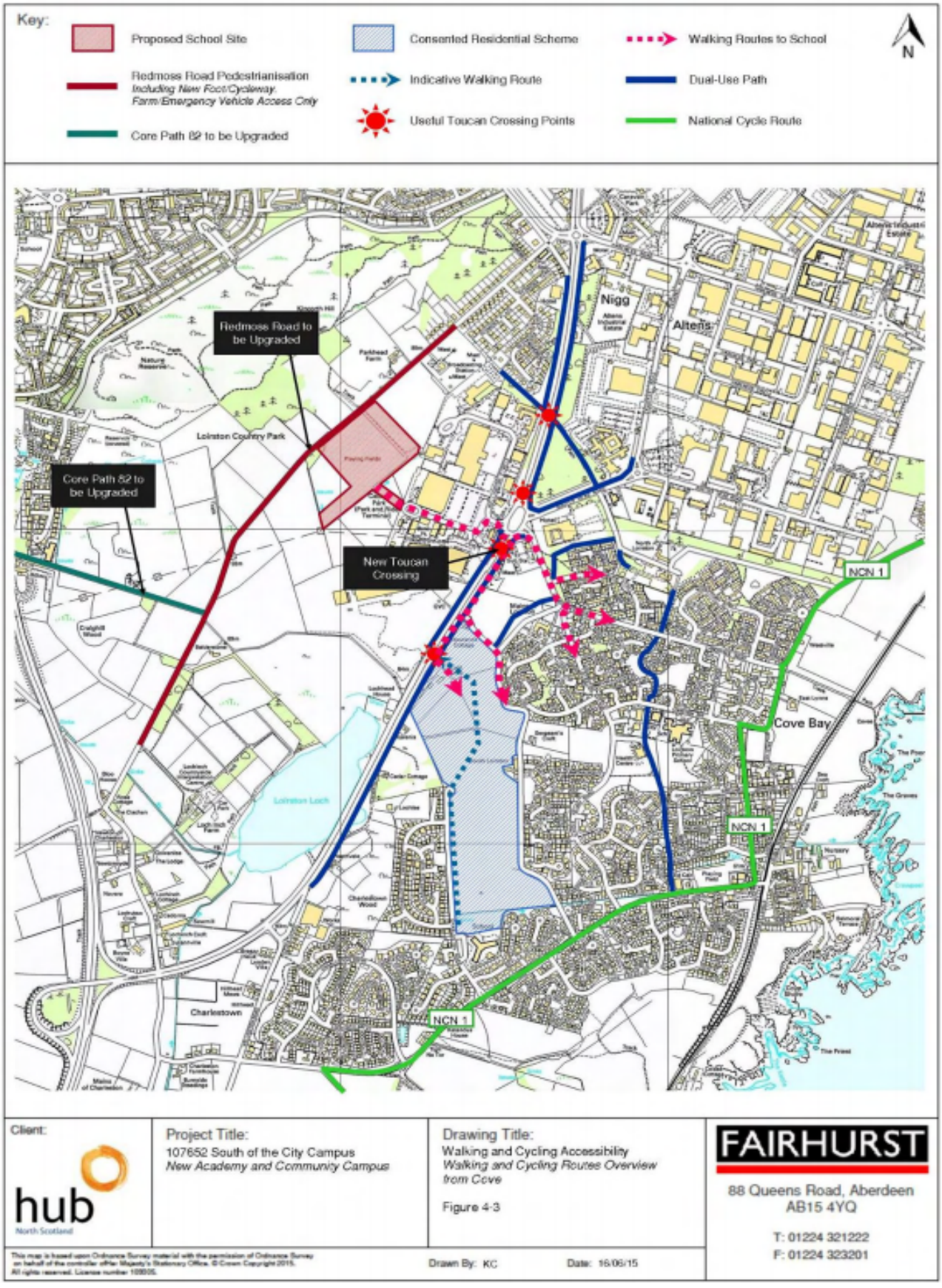
Appendix 1

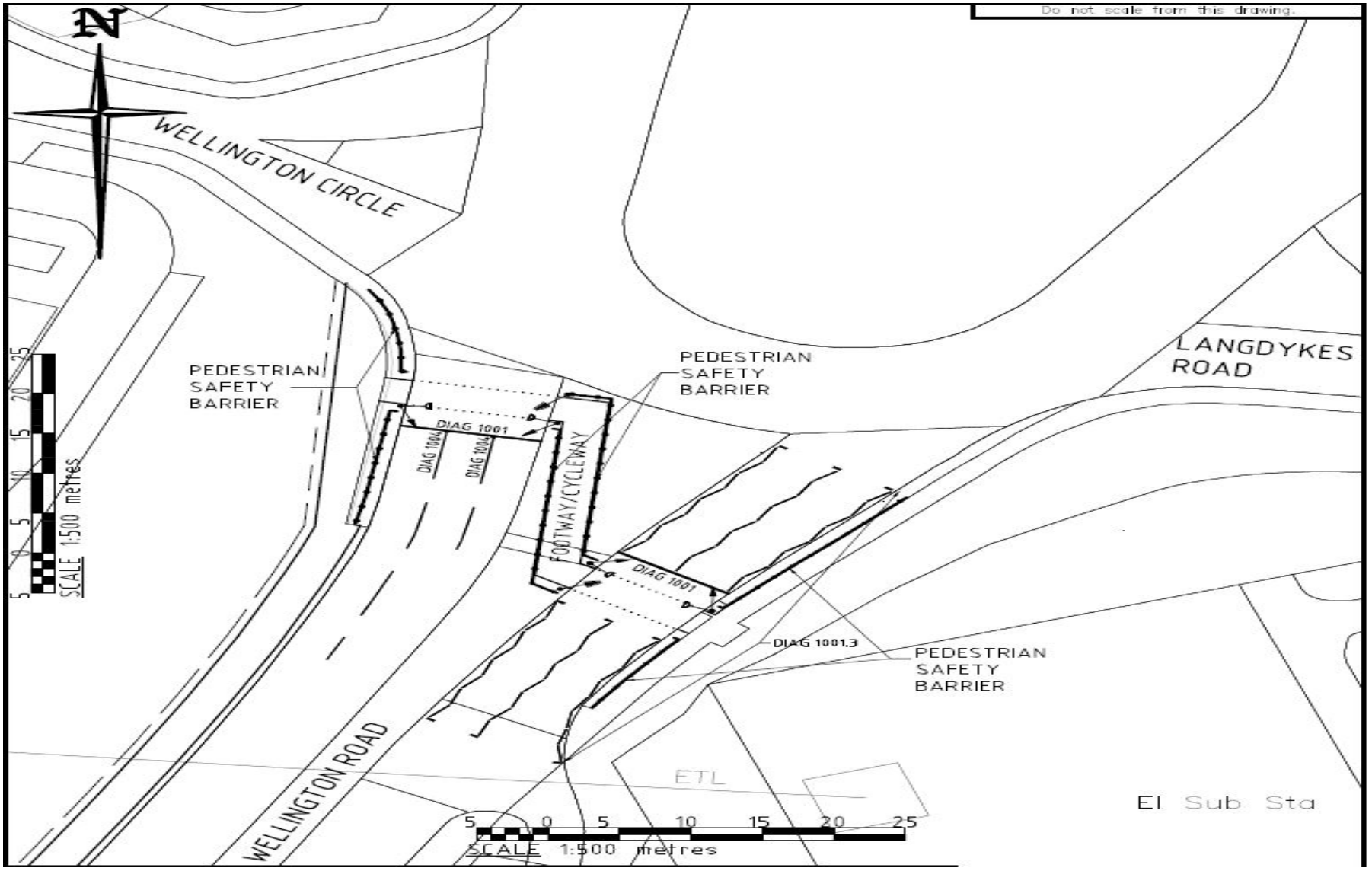
Walking and Cycling Accessibility – Routes overview Kincorth and Torry.



Walking and Cycling Accessibility – Routes overview Cove.



Appendix 2


Do not scale from this drawing.
N
WELLINGTON CIRCLE
PEDESTRIAN SAFETY BARRIER
PEDESTRIAN SAFETY BARRIER
LANGDYKES ROAD
DIAG 1001
DIAG 1001
DIAG 1001
FOOTWAY/CYCLEWAY
DIAG 1001.3
PEDESTRIAN SAFETY BARRIER
WELLINGTON ROAD
ETL
El Sub Sta
SCALE 1:500 metres
5 0 5 10 15 20 25
SCALE 1:500 metres
5 4 5 10 15 20 25

At-grade Toucan crossing:
The toucan crossing will follow roughly the route of the existing uncontrolled crossing point. The exact design and layout will need to be approved by the Intelligent Transport Systems team. It is proposed that this be set back a minimum of 20 metres from the roundabout.

Guidance states that if a single direct crossing point is greater than 15 metres a staggered crossing should be provided. The distance across Wellington Road A956 is approximately 27 metres.

The crossing will have guard rails in place to channel pedestrians to the controlled crossing point.

Pros:

- Shortest route following pedestrian/ cycle desire lines.
- Links to existing pedestrian and cycle infrastructure.
- Detailed checks would be required but it is not anticipated that there would need to be any major diversion of utilities.

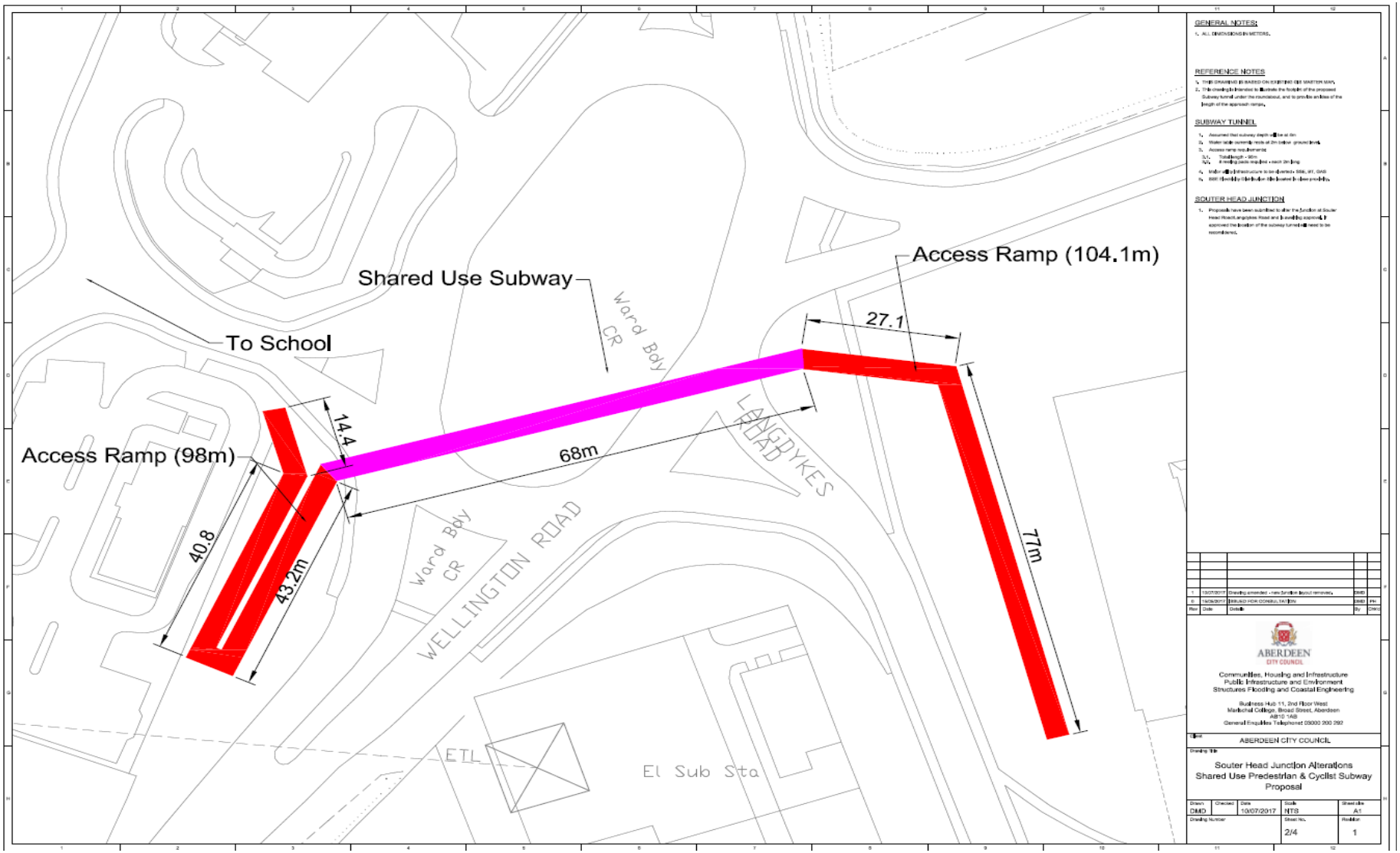
Cons:

- Crossing at-grade does not fully separate pedestrians and vehicles.
- Traffic flows will be impacted at times of high usage.

Desirable Additional Design Features to be considered in the detailed design process and through the Road Safety Audit Process:

- Part time 20mph during school peak time.
- High Friction Surfacing at approaches to crossing.

Appendix 3


Shared Use Subway
To School
Access Ramp (104.1m)
Access Ramp (98m)
27.1
14.4
68m
40.8
43.2m
77m
Ward Bdy CR
LANGDYKES ROAD
WELLINGTON ROAD
ETL
El Sub Sta
GENERAL NOTES:
REFERENCE NOTES
SUBWAY TUNNEL
SOUTER HEAD JUNCTION
ABERDEEN CITY COUNCIL
Communities, Housing and Infrastructure
Public Infrastructure and Environment
Structures Flooding and Coastal Engineering
ABERDEEN CITY COUNCIL
Souter Head Junction Alterations
Shared Use Predestrian & Cyclist Subway
Proposal
DMD
10/07/2017
NTS
A1
2/4
1

Pedestrian Underpass:
A shared-use (Pedestrian and Cyclist) underpass would have to be built at depth of approximately 4 metres. There would need to be shallow approach ramps to ensure the structure was accessible to cyclists and pedestrians, inclusive of those with mobility issues.

The underpass would need to have hand rails and contrasting surfaces and a maximum gradient of 5% with appropriate resting platforms to ensure it complied with the Equality Act 2010 and was accessible to all.

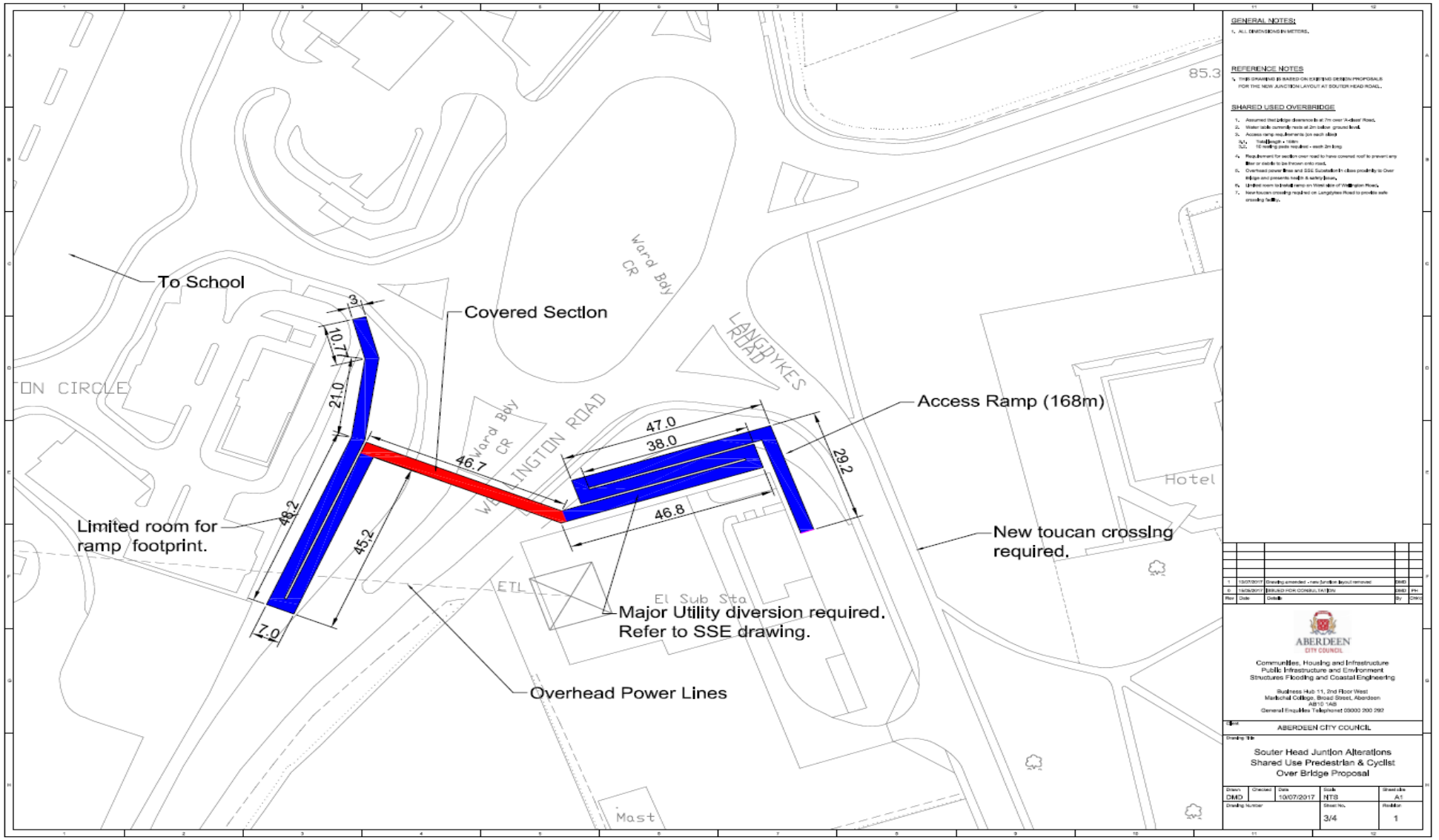
There would be a requirement to ensure adequate lighting was provided.

Pros:
- No delays to vehicles.
- Grade separation of pedestrians and vehicles creates a safe route for pedestrians and cyclists.

Cons:
- Land negotiations and purchase would be required owing to the footprint of the scheme. This could have significant time implications for the project and would not meet the proposed opening date of August 2018.
- Perceived threat to personal security owing to secluded nature of underpasses with no natural surveillance.
- Existing underpasses within the city have been prone to vandalism.
- Increased distance for pedestrians to travel, around 256 metres compared to 27 metres. This may result in pedestrians avoiding using the facility and crossing at an uncontrolled crossing point. The extra distance may negatively impact those with mobility issues.
- Construction of the underpass would require major diversion of utility infrastructure – SSE, BT and GAS. (See Appendix 5 for SSE utility map.)
- Close proximity to SSE Electricity Distribution site.
- Current water table resting at 2 metres below ground level may create issues with flooding and will require regular maintenance. Furthermore a detailed environmental study would be required.

Additional Design Features to Consider:
- Based on the length of the underpass there would be a requirement for lighting to be provided day and night.
- CCTV should be installed to increase perceived security when using the underpass.
- Consideration should be given to the installation of lifts for those with mobility issues; this would have significant cost implications for installation and maintenance.
- Rest spots should be included.

Appendix 4


To School
Covered Section
Access Ramp (168m)
Limited room for ramp footprint.
New toucan crossing required.
Major Utility diversion required. Refer to SSE drawing.
Overhead Power Lines
3
10.1
7.1
21.0
48.2
45.2
7.0
46.7
47.0
38.0
29.2
46.8
Ward Bdy CR
LANGDYKES ROAD
WELLINGTON ROAD
Hotel
El Sub Sta
Mast
GENERAL NOTES:
REFERENCE NOTES
SHARED USED OVERBRIDGE
ABERDEEN CITY COUNCIL
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Structures Flooding and Coastal Engineering
Souter Head Junction Alterations
Shared Use Pedestrian & Cyclist
Over Bridge Proposal
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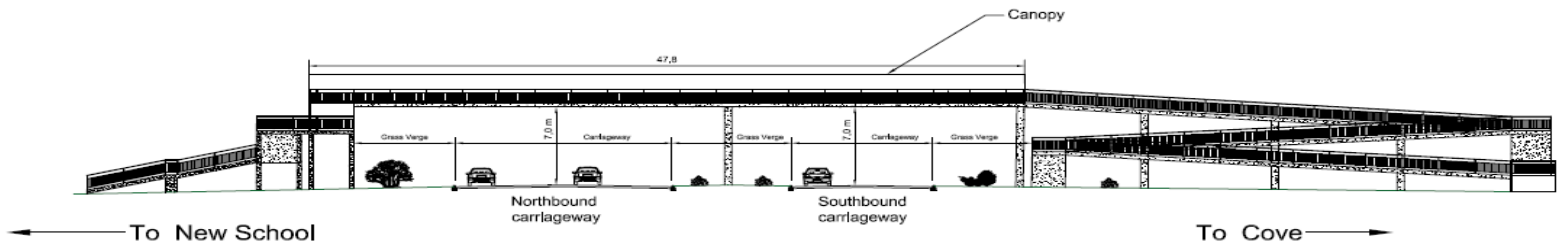

GENERAL NOTES:

1. ALL DIMENSIONS IN METERS.

REFERENCE NOTES

1. THIS DRAWING IS BASED ON EXISTING DESIGN PROPOSALS FOR THE NEW JUNCTION LAYOUT AT SOUTER HEAD ROAD.

SHARED USED OVERBRIDGE

1. Assumed that bridge clearance is at 7m over 'A-class' Road.
2. Water table currently rests at 2m below ground level.
3. Access ramp requirements (on each side):
   - 1:21 Total length = 168m
   - 1:20 16 resting pads required - each 2m long.
4. Requirement for section over road to have covered roof to prevent any litter or debris to be thrown onto road.
5. Overhead power lines in close proximity to Over Bridge and presents health & safety issue.
6. Limited room to install ramp on West side of Wellington Road.

Rev	Date	Details	By	Chkd
C	14/06/2017	ISSUED FOR CONSULTATION	DMD	

ABERDEEN CITY COUNCIL

Communities, Housing and Infrastructure
Public Infrastructure and Environment
Structures Flooding and Coastal Engineering

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Client: ABERDEEN CITY COUNCIL

Drawing Title: Souter Head Junction Alterations
Shared Use Predestrian & Cyclist
Over Bridge Proposal – Elevation

Drawn	Checked	Date	Scale	Sheet size
DMD		15/06/2017	NTS	A1
Drawing Number			Sheet No.	Revision
			4/4	0

A proposed design layout and elevation drawing for the pedestrian overbridge is provided above. This illustrates the proposed footprint of the scheme. It is assumed the bridge clearance over the A class road would be 7 metres.

The overbridge would need to have hand rails and contrasting surfaces and a maximum gradient of 5% with appropriate resting platforms to ensure it complied with the Equality Act 2010 and was accessible to all.

Concerns that litter or other debris could be dropped onto the carriageway would require the structure to be enclosed with a roof.

To fit the structure in the desired location would involve locating it to close to the SSE substation. This would be very unlikely to get permission due to safety concerns.

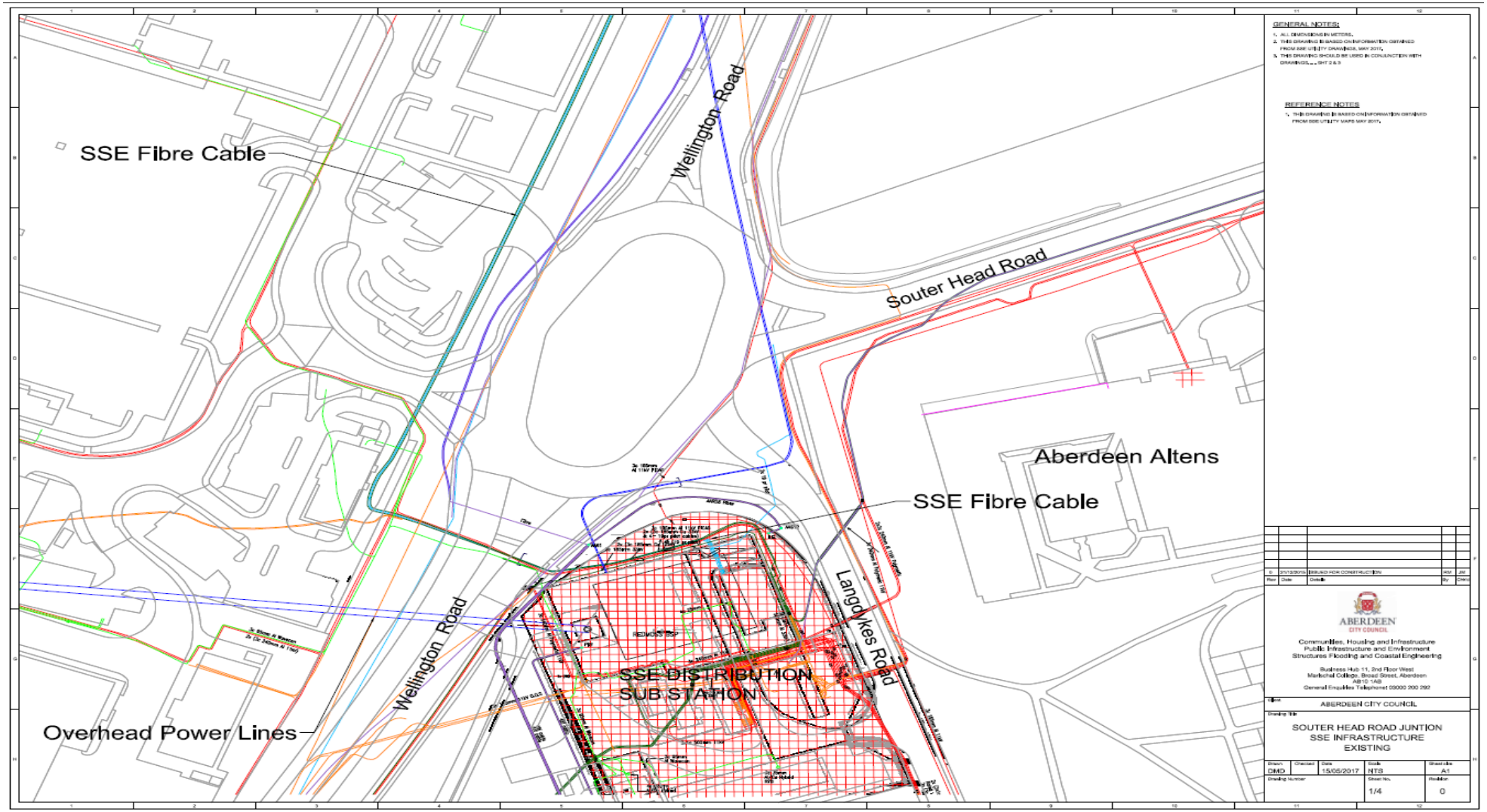
Pros:

- Grade separation of pedestrians and vehicles creates a safe route for pedestrians.
- No delays to vehicles.

Cons:

- **I**ncreased distance for pedestrians to travel, around 168 metres compared to 27 metres. This may result in pedestrians avoiding using the facility and crossing at uncontrolled crossing points.
- The extra distance may negatively impact those with mobility issues.
- Close proximity to SSE Electricity Distribution site, with overhead power lines constitutes a health and safety concern.
- Visually intrusive.
- Land negotiations and purchase required. This could have significant time implications for the project and would not meet the proposed opening date of August 2018

Appendix 5


SSE Fibre Cable
Wellington Road
Souter Head Road
Aberdeen Altens
SSE Fibre Cable
Wellington Road
Langdykes Road
SSE DISTRIBUTION SUB STATION
Overhead Power Lines
GENERAL NOTES:
REFERENCE NOTES
ABERDEEN CITY COUNCIL
Communities, Housing and Infrastructure
Public Infrastructure and Environment
Structures Flooding and Coastal Engineering
ABERDEEN CITY COUNCIL
SOUTER HEAD ROAD JUNTION
SSE INFRASTRUCTURE
EXISTING
DMD
15/05/2017
NTS
A1
1/4
0