
REPORT

65208321

**LEITH CONNECTIONS PHASE 1B - COMMERCIAL STREET
STAGE 1 ROAD SAFETY AUDIT**



P01

65208321-000-T-Z-0002

14 December 2022

Prepared by
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On behalf of
CITY OF EDINBURGH COUNCIL
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EDINBURGH, EH8 8BG

Change list

VER.	DATE	STATUS	REVIEWED	APPROVED
P01	14/12/2022	OVERSEEING ORGANISATION DRAFT		

Project Details

Report Title	Leith Connections Phase 1b – Commercial Street Stage 1 Road Safety Audit
Date	Wednesday, 14 December 2022
Document Reference and Revision	65208321-000-T-Z-0002 P01
Prepared by	Sweco UK Ltd
On behalf of	City of Edinburgh Council

Key personnel

Client	Overseeing Organisation
City of Edinburgh Council Waverley Court, 4 East Market Street Edinburgh, EH8 8BG <i>Contact:</i> [REDACTED]	City of Edinburgh Council Waverley Court, 4 East Market Street Edinburgh, EH8 8BG <i>Contact:</i> [REDACTED]
Designer	Road Safety Audit Team
Aecom 1 Tanfield Edinburgh EH3 5DA <i>Contact:</i> [REDACTED]	Sweco UK Ltd Quay 2, 139 Fountainbridge Edinburgh, EH3 9QG <i>Contact:</i> [REDACTED]

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1 Introduction

1.1 Scheme Description

The City of Edinburgh Council have commissioned AECOM to develop a segregated cycle track from the Foot of Leith Walk to Ocean Terminal following an initial active travel appraisal. Alongside this, a low traffic neighbourhood is also being developed which encompasses the route of the proposed cycle track.

A design for improvements to Commercial Street / Lindsay Road junction that will include cycle protection through the junction and then continuing on Lindsay Road/ Ocean Drive and also cycle segregation to the east of Dock St junction are currently being developed by another designer.

No information has been made available at this Stage 1 road safety audit on street lighting, drainage or traffic signal sequences. These will be made available for the Stage 2 road safety audit.

1.2 Road Safety Audit Report

This report results from a Stage 1 Road Safety Audit carried out on the Scheme proposed by City of Edinburgh Council and designed by AECOM at the request of [REDACTED], the Roads Authority Project Sponsor. The Road Safety Audit was carried out during December 2022.

1.3 Road Safety Audit Team

The Road Safety Audit Team membership approved by [REDACTED], from the Overseeing Organisation was as follows:

Team Leader	[REDACTED]
Team Member	[REDACTED]

1.4 Road Safety Audit Brief

The Road Safety Audit Brief was accepted by the Road Safety Audit Team.

1.5 Road Safety Audit

The Road Safety Audit took place at the Edinburgh Office of Sweco Ltd on Thursday, 01 December 2022. The Road Safety Audit was undertaken in accordance with the Road Safety Audit Brief prepared by City of Edinburgh Council and approved by [REDACTED], City of Edinburgh Council.

The Road Safety Audit comprised an examination of the documents provided, and these are listed in Appendix A.

1.6 Terms of Reference

The terms of reference of the audit are as described in GG 119 Rev.2. The team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria. This Road Safety Audit has been undertaken based on the Road Safety Audit Team's previous

experience and knowledge in undertaking Collision Investigation, Road Safety Engineering and Road Safety Audits.

The scheme has been examined and this report compiled only regarding the safety implications for road users of the scheme as presented. It has not been examined or verified for compliance with any other Standards or criteria. However, to clearly explain a safety problem or the recommendation to resolve a problem, the Audit Team may on occasion have referred to a design standard for information only. Any audit comments should not be construed as implying that a technical audit has been undertaken in any respect.

Any recommendations included within this report should not be regarded as being prescriptive design solutions to the problems raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, in accordance with GG 119, and in no way, imply that a formal design process has been undertaken. There may be alternative methods of addressing a problem which would be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.

All comments and recommendations are referenced to the detailed design drawings and the locations have been indicated on the plan supplied with the Road Safety Audit Brief in Appendix B.

1.7 Departures from Standards

The audit team have not been made aware of any Departures from Standard for this scheme.

1.8 Strategic decisions

The City of Edinburgh standard arrangement for the interface between a pedestrian area and cycle path is to use a splay kerb arrangement with a 75mm upstand as shown in Dwg: 60592779-RSA-C-CSCD-0006.

1.9 Site Visit

The site was visited by all Road Safety Audit Team members as detailed below:

Day/Date	Time from	Time to	Light Conditions	Weather	Surface	Traffic
Thursday, 01 December 2022	0930	1100	Daylight	Raining	Wet / Damp	Motor Moderate Cyclist Moderate Pedestrian Moderate


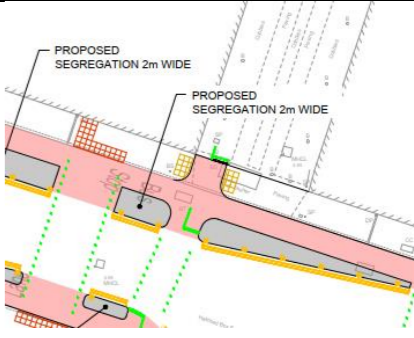
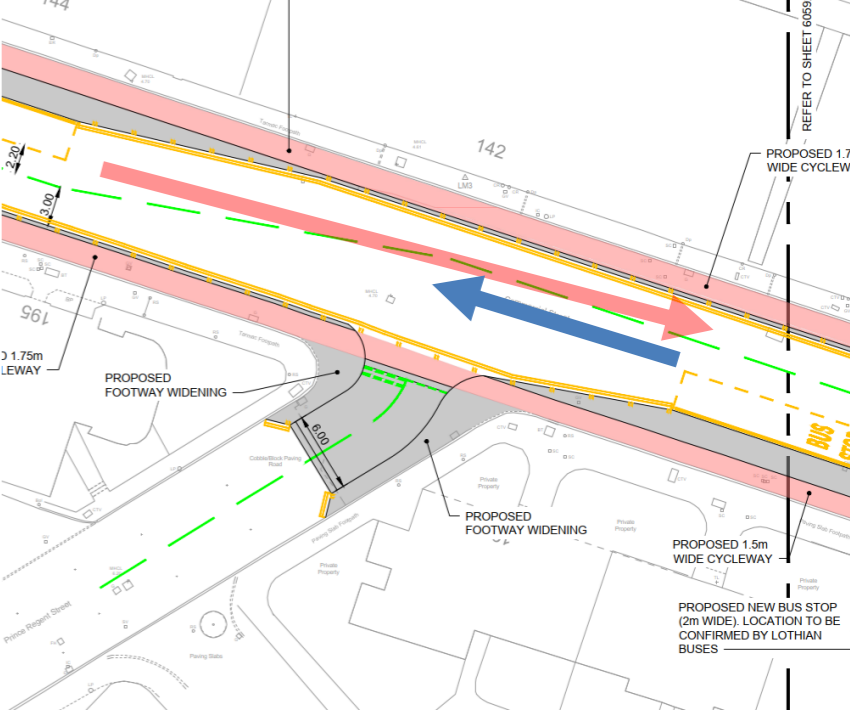
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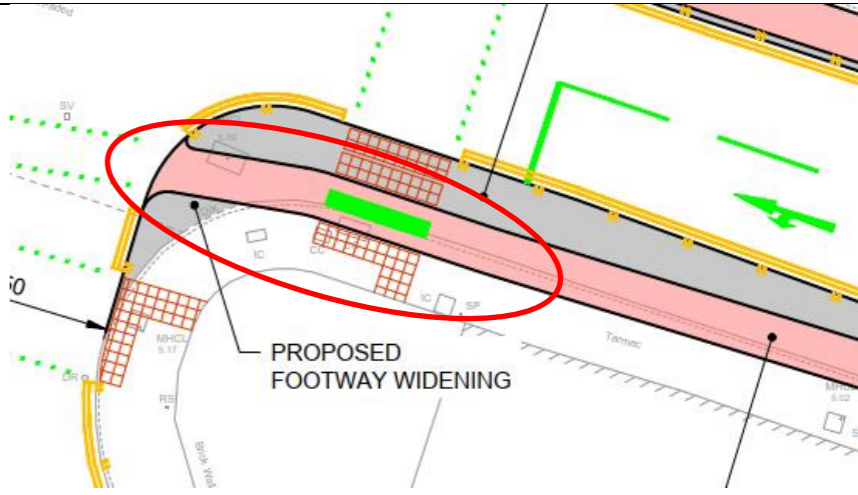
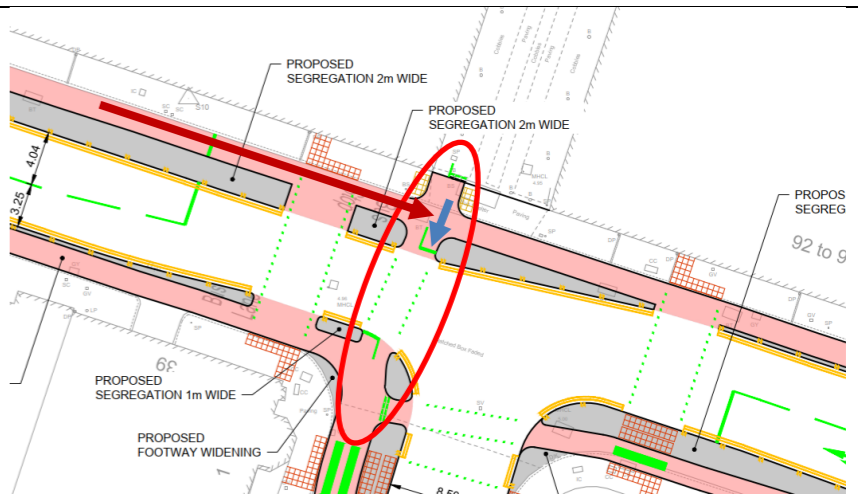
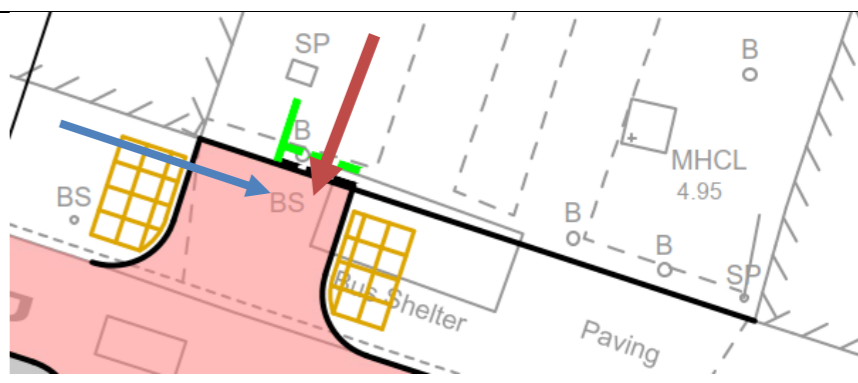
The levels of traffic observed are relative to the average traffic flows expected on the site.


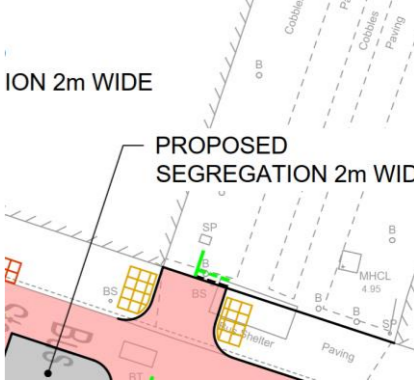

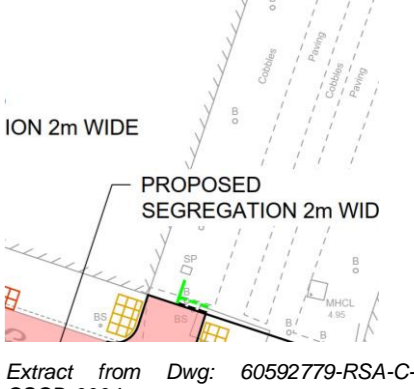
2 Items raised in previous road safety audits

No previous road safety audits of this scheme have been undertaken.

3 Items raised at this Stage 1 road safety audit.

Reference	Location	Collision type	Description	Recommendation	Photographs / Plan
3.1	Kerbs and Footways				
3.1.1	North side of crossing leading to Victoria Quay.	Pedestrian and Cyclists collisions with street furniture.	The proposed route from the crossing leads into the existing bus shelter, bollards and street art. This may lead to cyclists and pedestrians colliding with street furniture.	It is recommended that the positioning of street furniture is altered to allow a clear route from the crossing.	  <p>Extract from Dwg: 60592779-RSA-C-CSCD-0004</p>
3.2	Traffic Signs and Road Markings				
3.2.1	Commercial Street at its junction with Prince Regent Street.	Risk of head on collisions.	The centre line alignment on Commercial Street does not follow the natural path that eastbound vehicles are likely to follow. This may result in vehicles cutting across the opposing lane and risk collisions with opposing traffic.	It is recommended that the centre line marking follows the natural alignment between the two bus stops.	 <p>Extract from Dwg: 60592779-RSA-C-CSCD-0002</p>


Reference	Location	Collision type	Description	Recommendation	Photographs / Plan
3.2.2	Junction with Dock Street Westbound cycle lane approach.	Cycles colliding with other traffic.	No stop line has been provided for the eastbound cycle lane. This may result in cyclists assuming priority over the signalised junction which may lead to collisions with other road users including pedestrians and cyclists using the junction.	It is recommended that a stop line is provided for eastbound cyclists.	 Extract from Dwg: 60592779-RSA-C-CSCD-0004
3.2.3	Junction with Dock Street.	Cyclists colliding with cyclists.	The stop line on the cycle lane for crossing Commercial Street may result in cycles blocking the east west cycle lanes. This may result in collisions with other cyclists.	It is recommended sufficient storage space is provided between the stop line and the eastbound cycle path.	 Extract from Dwg: 60592779-RSA-C-CSCD-0004
3.2.4	Cycle path from Victoria Quay towards Commercial Street.	Pedestrian collisions with cycles.	The give way line for cyclists entering Commercial Street is in line with the Commercial Street building frontage, which would afford minimal view to the right of pedestrians approaching, resulting in cycle collisions with pedestrians.	It is recommended that the footway and give way line are moved out from the building line to afford inter visibility.	 Extract from Dwg: 60592779-RSA-C-CSCD-0004

Reference	Location	Collision type	Description	Recommendation	Photographs / Plan
3.2.5	Path from Victoria Quay onto Commercial Street.	Pedestrian collisions with cycles.	There is no indication on the path to Victoria Quay, that there is segregation between cycles and pedestrians. This may result in conflict between the two user groups.	It is recommended that signing is provided on the path to advise users of its layout.	  <p>ION 2m WIDE PROPOSED SEGREGATION 2m WID</p> <p>Extract from Dwg: 60592779-RSA-C-CSCD-0004</p>
3.3	General				
3.3.1	Path between Victoria Quay and Commercial Street.	Cyclist loss of control.	<p>The cycle path from the Commercial Street crossing leads directly onto an area of setts.</p> <p>This type of surfacing is uneven and may lead to cyclists losing control, particularly in wet conditions.</p>	It is recommended that a smoother surface is provided for the cycle path.	  <p>ION 2m WIDE PROPOSED SEGREGATION 2m WID</p> <p>Extract from Dwg: 60592779-RSA-C-CSCD-0004</p>

4 Audit team statement

We certify that this Road Safety Audit has been carried out in accordance with GG119 Revision 2.

Road Safety Audit Team Leader

Name 


Signed

Qualification BEng MSc MCIHT MSoRSA

Position Senior Engineer

Date:

Road Safety Audit Team Member

Name 

Signed

Qualification MCIHT FSoRSA FIHE RegRSA(IHE) Certificate of Competence

Position Principal Engineer

Date:

Appendix A – Documents forming the audit Brief

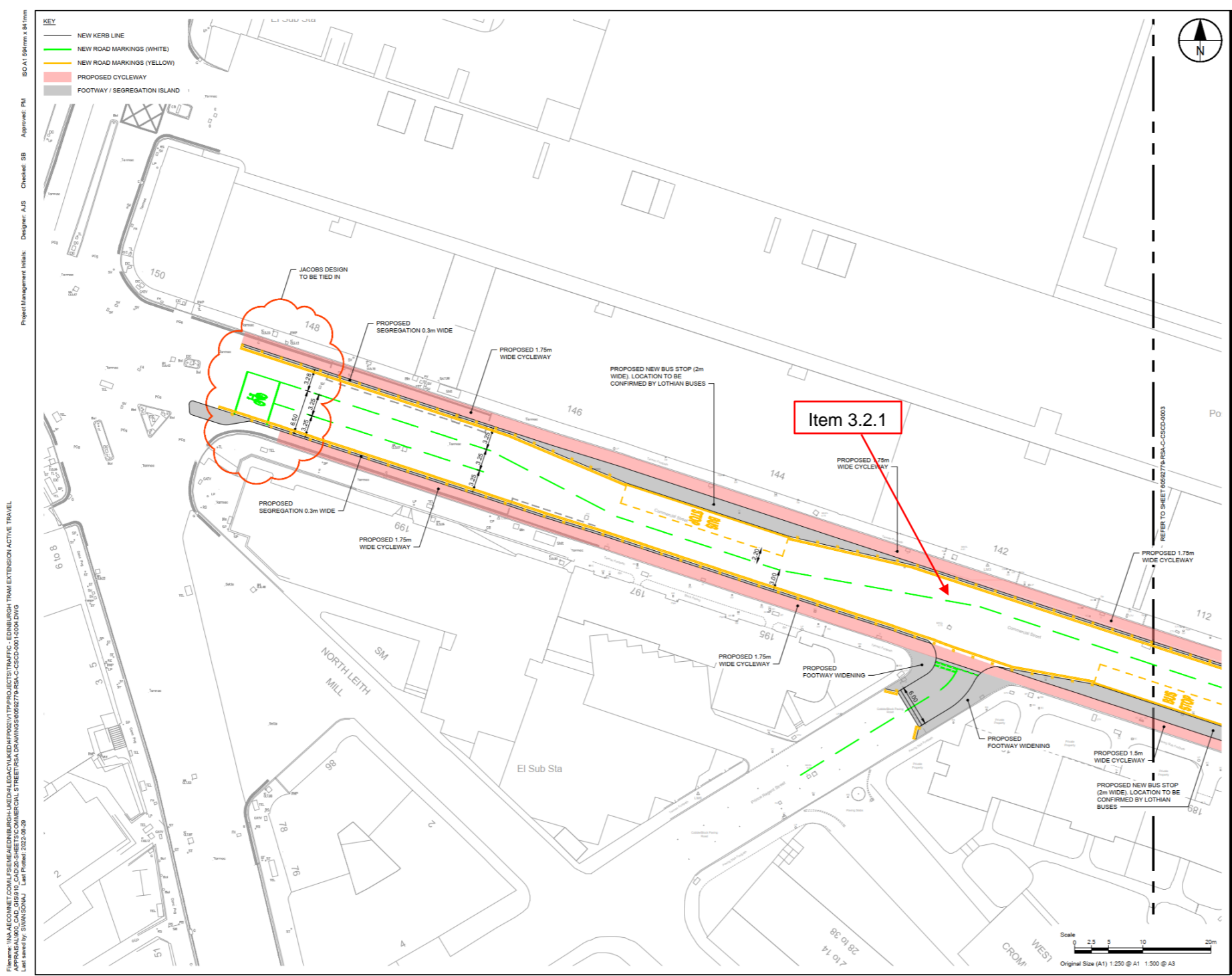
Documents

Ref	Title	Date
RSA/21/032b	Road safety audit brief	20/07/2022
	Collision report	04/07/2022
	Traffic Data Summary 20210721_v0.4	
	Leith Connections – Foot of the Walk to Ocean Terminal route and Low Traffic Neighbourhood	19/08/2021
	Collision Plot	04/07/2022

Drawings

Drawing Number	Title
60592779-RSA-C-CSCD-0001	Commercial Street Concept Design RSA Stage 1 Overview
60592779-RSA-C-CSCD-0002	Commercial Street Concept Design RSA Stage 1 Sheet 1 of 3
60592779-RSA-C-CSCD-0003	Commercial Street Concept Design RSA Stage 1 Sheet 2 of 3
60592779-RSA-C-CSCD-0004	Commercial Street Concept Design RSA Stage 1 Sheet 3 of 3
60592779-RSA-C-CSCD-0005	Commercial Street Swept Path Analysis RSA Stage 1
60592779-RSA-C-CSCD-0006	Commercial Street Typical Cross-section RSA Stage 1

Appendix B – Annotated scheme drawings



Project Management Initials: Designer: AUS Checked: SB Approved: PH
 ISA A1 50mm x 84mm
 Files: I:\AECOM\NET\COM\65208321\RSA-C-SCSD\000\1\TRAM\TRAM EXTENSION ACTIVE TRAVEL
 APPROVALS: CAD_019110_CAD_020_SHEETS\COM\COMMERCIAL STREET\RSA-C-SCSD\000\1\000.DWG
 Last saved by: SWANBONAJ Last Printed: 2022-08-29

AECOM

PROJECT
 Leith Connections

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- NOTES
1. ALL WORKS TO BE EXECUTED IN ACCORDANCE WITH THE SPECIFICATION FOR HIGHWAY WORKS - THE MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS, DESIGN MANUAL FOR ROADS AND BRIDGES, TRAFFIC SIGNS MANUAL AND LOCAL COUNCIL GUIDELINES.
 2. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE. ALL LEVELS ARE IN METRES AND RELATE TO ORDNANCE DATUM.
 3. DO NOT SCALE FROM ANY DRAWING. WORK TO FIGURED DIMENSIONS ONLY. ANY DISCREPANCIES IN DIMENSION ARE TO BE REFERRED TO THE DESIGNER BEFORE WORK IS PUT TO HAND.
 4. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE BY THE CONTRACTOR PRIOR TO PREPARING ANY WORKING DRAWINGS OR COMMENCING ON SITE.
 5. ALL WORKS BY THE CONTRACTOR MUST BE CARRIED OUT IN SUCH A WAY THAT ALL REQUIREMENTS UNDER THE HEALTH AND SAFETY AT WORK ACT ARE SATISFIED.
 6. ALL WORK IS TO BE CARRIED OUT IN COMPLIANCE WITH THE REQUIREMENTS OF THE STATUTORY AUTHORITIES AND CONSTRUCTION DESIGN AND MANAGEMENT REGULATIONS.
 7. DRAWING BASE RECEIVED FROM OTHERS. SURVEY CARRIED OUT BY OTHERS. AECOM CANNOT GUARANTEE THEIR ACCURACY. CONTRACTOR TO SATISFY THEMSELVES AS TO THE ACCURACY OF SUCH INFORMATION.

ISSUE/REVISION

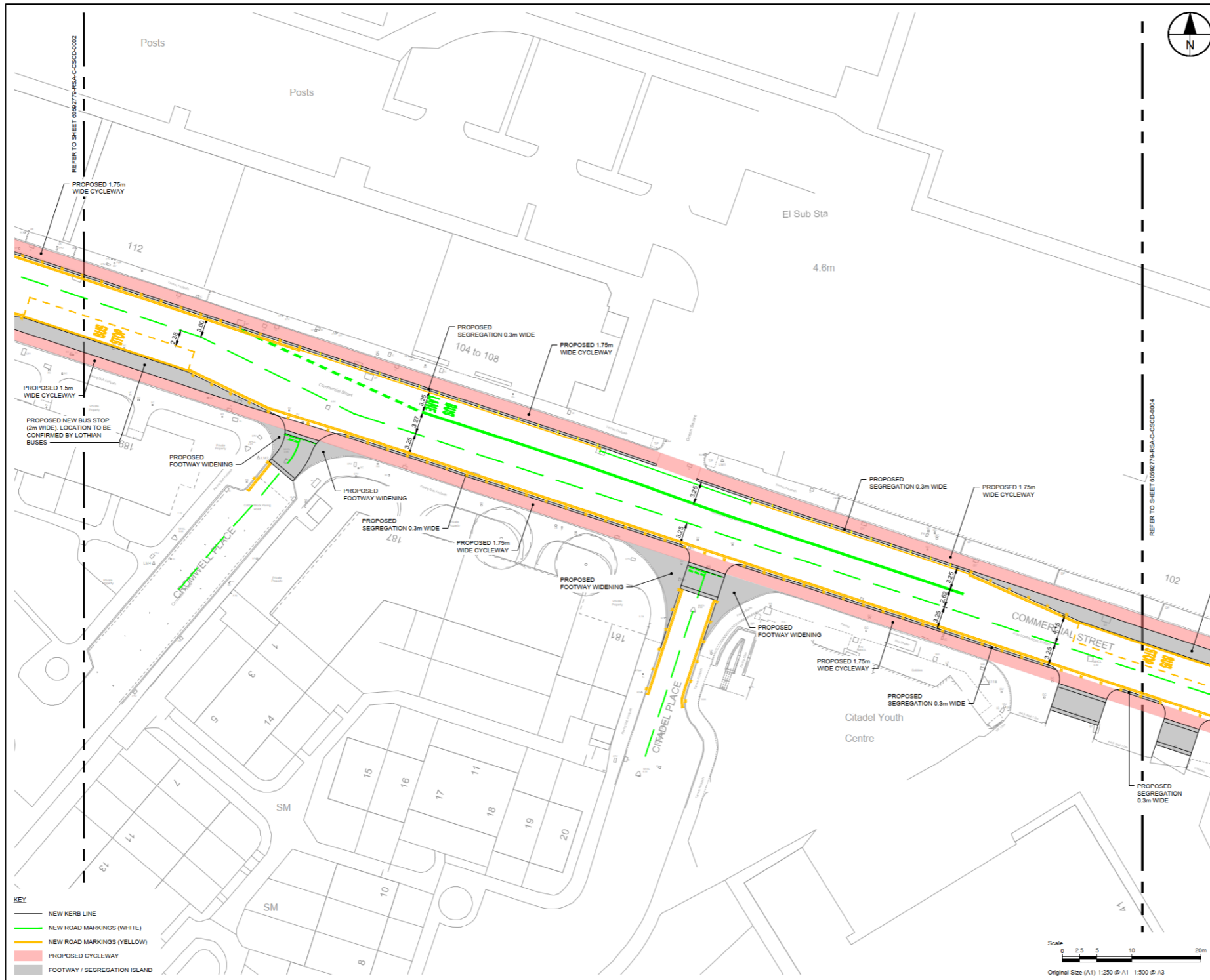
IR	DATE	DESCRIPTION

KEY PLAN

PROJECT NUMBER
 60592779
 SHEET TITLE
 COMMERCIAL STREET
 CONCEPT DESIGN
 RSA STAGE 1 - SHEET 1 OF 3
 SHEET NUMBER
 60592779-RSA-C-SCSD-0002

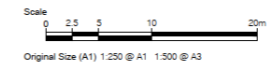
BASED UPON THE ORDNANCE SURVEY MAPPING WITH THE PERMISSION OF HER MAJESTY'S STATIONERY OFFICE (C) CROWN COPYRIGHT. LICENCE NO. AL 100008220. ALL LOCATION IMAGES SOURCED FROM GOOGLE MAPS.

PROJECT NUMBER: 60592779-RSA-C-CSCD-0002
 PROJECT TITLE: COMMERCIAL STREET CONCEPT DESIGN
 SHEET NUMBER: SHEET 2 OF 3
 DESIGNER: AJS
 CHECKED: SB
 APPROVED: PM
 DATE: 14 DECEMBER 2022
 SCALE: A1 1:250 @ A1 1:500 @ A3



KEY

- NEW KERB LINE
- NEW ROAD MARKINGS (WHITE)
- NEW ROAD MARKINGS (YELLOW)
- PROPOSED CYCLEWAY
- FOOTWAY / SEGREGATION ISLAND



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ISSUE/REVISION

NO	DATE	DESCRIPTION

KEY PLAN



PROJECT NUMBER
60592779

SHEET TITLE
COMMERCIAL STREET
CONCEPT DESIGN
RSA STAGE 1 - SHEET 2 OF 3

SHEET NUMBER
60592779-RSA-C-CSCD-0002

