

Co. Kildare Library, Newbridge, Co. Kildare


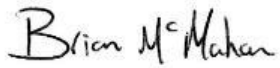


Road Safety Audit
Stage 1 Report

Kildare County Council

Project number: 60669624
RSA 1

June 2022

Quality information

Prepared by	Checked by	Verified by	Approved by
			
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1. Introduction

AECOM were commissioned to undertake a Stage 1 Road Safety Audit on the proposed redevelopment of the existing Kildare County Library buildings in Newbridge, Co. Kildare. The Audit was carried out at the request of Kildare County Council. This Road Safety Audit concerns works for the proposed scheme.

The Road Safety Audit team membership, was as follows:

Team Leader: R Lyons BEng CEng MIEI MSoRSA
Principal Engineer, AECOM
(Certificate of Competency in Road Safety Audit)

Team Member: B McMahon BE MSc CEng MIEI
Associate Director, AECOM
(Certificate of Competence in Road Safety Audit)

This Safety Audit represents the response of an independent Audit Team to various aspects of the scheme. The recommendations contained therein are the opinions of the Audit Team and are intended as a guide to the designers on how the scheme as designed can be improved to address issues of road safety.

The terms of reference of the Road Safety Audit are as described in TII GE-STY-01024. The Road Safety Audit 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 design to any other criteria.

The scheme has not been examined or verified for compliance with any other standards. However, in order 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.

2. Scheme Description

2.1 Received Information

A summary of the drawings and documentation information received to carry out the audit is included in Appendix A.

Scheme drawings including all associated documents and information was provided by AECOM. A formal Stage 1 Audit Brief was not provided. Only details as provided have been considered as part of this Stage 1 Audit.

2.2 Traffic Flow Information

Traffic survey information was not provided.

2.3 Collision Information

Collision statistics data in the vicinity of the proposed development site was not provided at this time.

2.4 Departures from Standard

No departures from standards have been notified to the Audit Team on the scheme.

2.5 Scheme Details

The proposals consist of an upgrade to the existing Kildare County Library building, which is located in Newbridge, Co. Kildare. The works will include demolition of part of the existing structure and construction of a new library, relocation of the existing access from the R445 (Main Street) to the R416 (Athgarvan Road) and a reduction of car parking within the internal courtyard. The proposals also consider the reduction of on-street parking along the R445 (Main Street) with a new loading bay, bus stop and a cycle lane.

The R445 is designated as a regional road which features car parking along the southern side of the carriageway and loading bays and a taxi rank along the northern side of the carriageway, in the vicinity of the subject site. There is a signalised junction to the north-east of the subject site with the R416, this includes a dedicated left-hand turn, straight through and right turn pocket for traffic approaching from the west. The existing vehicular access point into the Kildare County Library accesses onto the R445 which is approximately 25m from the R445 / R416 signalised junction. There is public street lighting along both sides of the R445. Further west along the R445 there is parallel parking along both sides of the road with various signalised pedestrian crossings.

The site access being re-located from the R445 (Main Street) to the R416 (Athgarvan Road) will serve the needs of staff for the proposed development and deliveries for the Riverbank Arts Centre. All other deliveries associated with the proposed development and the Riverbank Arts Centre would be to the new loading bay along the R445 (Main Street). The site access is to be designed to prioritise pedestrian movements along the R416 with a raised table to be provided at the entrance into the development.

It is proposed that 13 no. spaces would be provided within the internal courtyard which would consist of 10 no. standard car parking spaces and 1 no. mobility impaired space and 1 no. service vehicle parking space which is for the mobile library.

2.6 Site Inspection

The Audit Team visited the site on the afternoon of Thursday the 26th May 2022 between the hours of daylight 13:30 and 14:30. Traffic flows were moderate and free flowing during the inspection. The weather conditions during the site visit were clear. The carriageway and footway surfaces were dry. The posted speed limit is 50km/hr.

Photographs were taken, and notes were written in order to document impressions of the scheme prior to the writing of this report.

The report indicates each of the problems identified together with recommendations to resolve or mitigate the problems, the Audit Team Statement and a schedule of documents reviewed.

All comments and recommendations are referenced to the design drawings and where applicable, the locations of problems are shown in conjunction with the scheme proposals in Appendix B where the reference numbers relate to the problems identified in this report.

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 TII GE-STY-01024, 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.

Where applicable, the locations of problems are shown in conjunction with the scheme proposals in Appendix B where the reference numbers relate to the problems identified in this report.

3. Items Raised at Previous Road Safety Audits

The Audit team are not aware of any previous Road Safety Audits that have been carried out within the vicinity of the scheme.

4. Items Raised at this Stage 1 Road Safety Audit

Problem: 4.1.1

Location(s): At the signalised crossings of Main Street and Athgarvan Road

Drawing(s): KCL-MET-ZZ-00-DR-A-100001-SitePlan

Summary: Uncontrolled junction tactile paving is indicated at controlled signalised crossings



Description:

The blister tactile paving layout proposed around the radius on the Main Street and Athgarvan Road junction is used at uncontrolled pedestrian crossing points. This junction is currently a signalised junction with a single crossing point on the radius with the appropriate associated controlled crossing tactile paving installed and a pedestrian call button for a 2-stage signalised pedestrian crossing.

The proposal shows two separate crossing locations for Main Street and Athgarvan Road. If this junction is remaining as a signalised junction then the proposed tactile paving at the new crossing locations shown do not have a stem to the back of the footpath, as required with a controlled crossing.

At a signalised pedestrian crossing, if the stem of the tactile paving does not extend to the back of the footpath or to the building line, there is a risk of the visually impaired missing the intended crossing point. This could lead to the visually impaired trying to cross the road at locations where it is unsafe to do so and colliding with vehicles on the carriageway.

Recommendation:

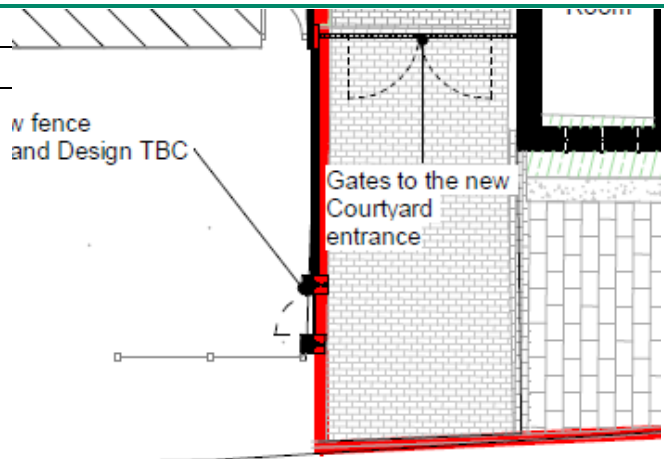
Provide tactile paving at pedestrian crossing points appropriate to the crossing type.

Problem: 4.1.2

Location(s): Various locations through the site

Drawing(s): KCL-MET-ZZ-00-DR-A-100001-SitePlan

Summary: Lack of definition of priorities across shared surfaces can lead to pedestrian collisions.



Description:

The car park for the library is accessed from the Athgarvan Road. An access route has been identified but it is unclear whether the vehicular access is at the same level as the adjacent footpaths, as no dropped kerb has been shown at the road carriageway edge.

A lack of definition across the vehicular access lane may lead to drivers thinking that vehicles have priority at this location and there is a risk that footpath users could collide with vehicles while crossing this access.

Recommendation:

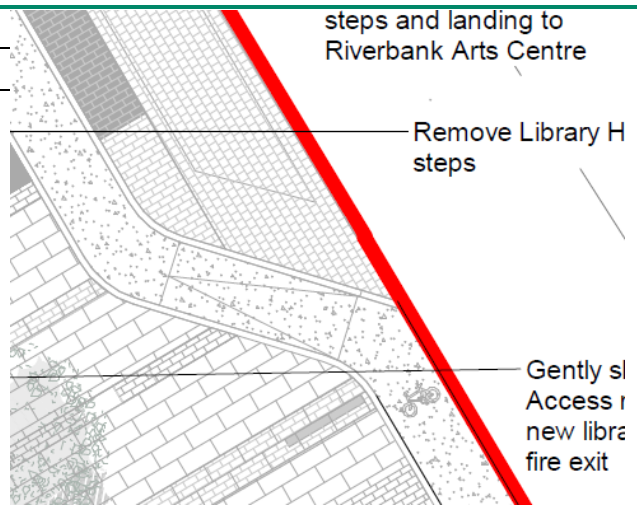
The design should clearly indicate that pedestrians have priority over vehicles. Provide a raised access so that there is no change in level to the pedestrian footway and a clear delineation of pedestrian priority.

Problem: 4.1.3

Location(s): Cycle path on Main Street

Drawing(s): KCL-MET-ZZ-00-DR-A-100001-SitePlan

Summary: Risk of cyclists losing control due to geometry of cycle track, leading to falls



Description:

The cycle path along the frontage of the library on Main Street is being diverted to accommodate a proposed loading bay. The geometry of these radii of this uni-directional cycle route appears tight, particularly on the approach to a ramp. This could cause issues for cyclists, but in particular users on longer bicycles, such as recumbent, cargo or tandem bicycles. This can lead to cyclists losing control, particularly in wet conditions, which could lead to falls, resulting in cyclist injuries.

Recommendation:

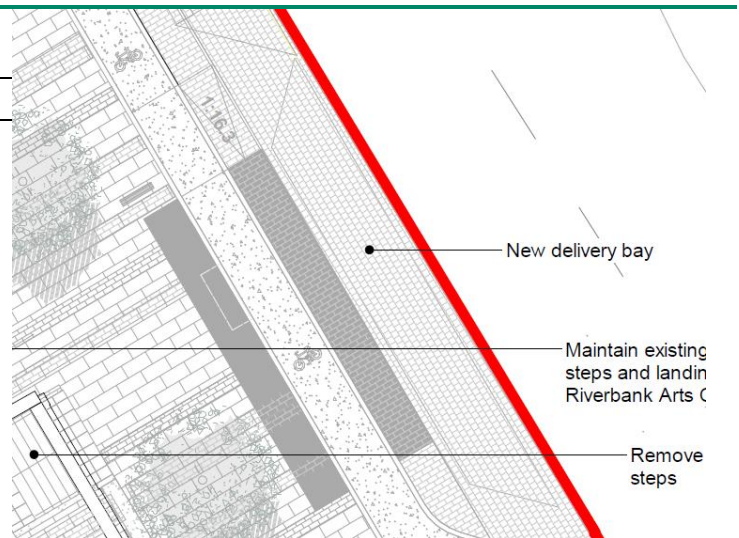
The proposed radii should be in line with the Nation Cycle Manual. Undertake swept path analysis on the proposed layout using different types of bicycle and that the design is appropriately amended, if required.

Problem: 4.1.4

Location(s): Cycle path at Loading Bay on Main Street

Drawing(s): KCL-MET-ZZ-00-DR-A-100001-SitePlan

Summary: Risk of trip hazards and cycle path being blocked by loading bay equipment

**Description:**

A loading bay is proposed outside the library frontage on Main Street downstream of the signalised crossing. It is unclear how segregation of the cycle path from the footpath and loading bay is proposed, if an upstand is proposed either side of the cycle track to provide segregation cycle path or if road markings are to be used.

No provision of dropped kerbs are indicated on the drawings to allow access for delivery staff or wheeled delivery trollies across the cycle track onto the footpath or a raised crossing if upstand kerbs are provided both side of the cycle path. If insufficient segregation is provided between the loading bay and the cycle path, there is a risk of the cycle path being blocked by delivery vans which could lead to cyclists veering abruptly onto the carriageway resulting in collisions with vehicles on Main Street. A lack of appropriate crossing facilities from the loading bay can be a trip hazard and may lead to trips and falls by people travelling between the loading bay and footway which could result in personal injury.

Recommendation:

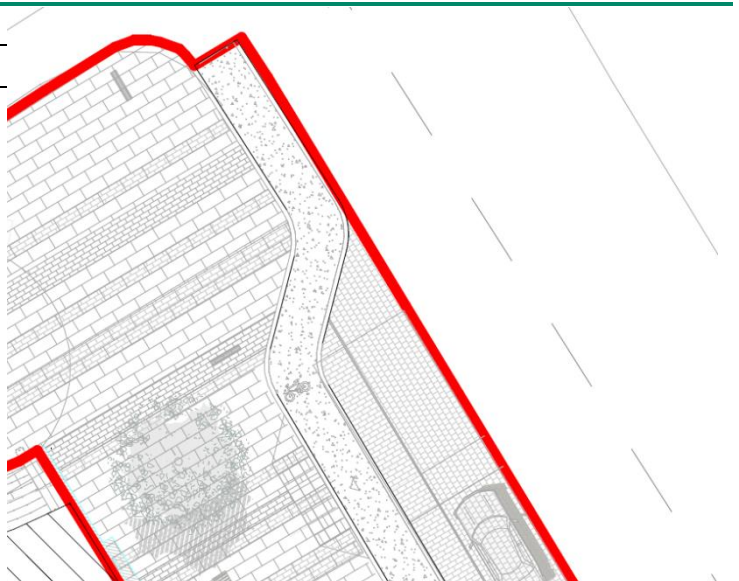
Provide appropriate segregation from the loading bay and ensure that appropriate access is provided to delivery routes from the loading bay to the footpath.

Problem: 4.1.5

Location(s): Cycle path at Bus Stop

Drawing(s): KCL-MET-ZZ-00-DR-A-100001-SitePlan

Summary: Risk of pedestrians sustaining personal injuries when attempting to transition between footway and bus boarding area due to lack of crossing across cycle track

**Description:**

A bus stop is located on Main Street outside the Riverbank Theatre. It is unclear if a street level or a raised crossing is provided across the uni-directional cycle track between the footway and the bus stop. If a raised crossing across the cycle lane is not provided, cyclists may understand that they have priority at this crossing location and there is a risk that bus users with mobility or visual impairments could collide with cyclists and sustain personal injuries whilst attempting to transition from the footway to the bus stop.

Recommendation:

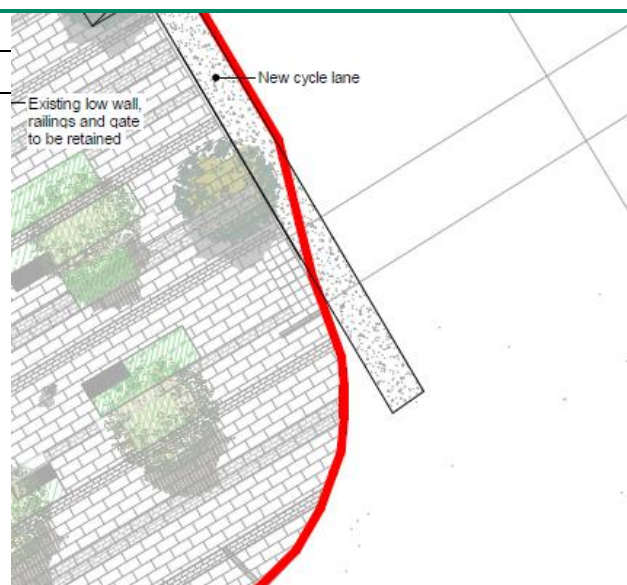
Provide appropriate infrastructure to enable all footpath users to transition safely between the footway and bus stop.

Problem: 4.1.6

Location(s): Cycle path at Athgarvan Road

Drawing(s): KCL-MET-ZZ-00-DR-A-100001-SitePlan

Summary: Risk of cyclists colliding with pedestrians at controlled crossing.



Description:

The cycle track is shown to begin to the east of the controlled pedestrian crossing on Main Street. The cycle track is shown to continue through the pedestrian crossing at this location. This can lead to cyclists thinking that they have the right of way at all times through this section, and not being aware of an active pedestrian phase. This can lead to cyclists colliding with pedestrians crossing Main Street during the pedestrian green phase resulting in injury to pedestrians and cyclists.

Recommendation:

Provide a stop line for cyclists in advance of the pedestrian crossing and discontinue the cycle track hatching/surfacing through the pedestrian crossing.

End of problems / recommendations raised in this Stage 1 Road Safety Audit.

5. Audit Team Statement

We certify that this Road Safety Audit has been carried out in the accordance with the Transport Infrastructure Ireland Road Safety Audit Guidelines GE-STY-01027-01 and Standard GE-STY-01024-07.

The Road Safety Audit has been carried out with the sole purpose of identifying any features of the design that could be removed or modified in order to improve the safety of the scheme.

No one on the audit team has been involved with scheme design.

ROAD SAFETY AUDIT TEAM LEADER:

Rowan Lyons

Signed



BEng (Hons) CEng, MIEI MSoRSA (Certificate of Competency)

Principal Engineer

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Date

23 June 2022

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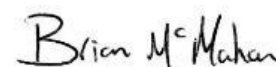
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