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Sevenairs Consulting Ltd

Lady Ann Road, Batley, Kirklees

Road Safety Audit Stage 1

December 2023

Document Control

Report Title:

Lady Ann Road, Batley, Kirklees – Road Safety Audit Stage 1

Date of Site Visit

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Report Prepared By:

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On behalf of

Paragon Highways – Office 20/21 The Rear Walled Garden, Nostell Estate, Wakefield WF4 1AB

Highway Authority / Overseeing Organisation

Kirklees Council

Document History:

Revision	Date	Description	By
0	07.12.2023	For Issue	HV

Introduction

Commissioning and Scope

This report results from a Stage 1 Road Safety Audit carried out at the site of a residential development off Lady Ann Road in Batley, Kirklees, at the request of Leigh Ogden, Managing Director, Paragon Highways on behalf of the developer of the site.

The Road Safety Audit team membership was as follows:

The Audit Team	Haydn Vernals FCIHT FIHE CMILT MSoRSA Directive 2008/96/EC (Certificate of Competency), Road Safety Team Leader in accordance with GG119 Sarah Vernals BAHonsQTS NPQH, Road Safety Team Member in accordance with GG119
Audit Observers	None

A site visit took place comprising of the RSA team on Thursday 7th December 2023 between 09:15 and 09:45 hours during which the weather was raining and the road surface wet. Traffic conditions were light and free flowing with a small number of pedestrians and no cyclists observed.

The main project is the development of the site for residential use with 65 new homes and a single point of access onto Lady Ann Road. Further accommodation works are proposed at the junction of Lady Ann Road with Soothill Road. These comprise of footway buildouts either side of the side road to improve visibility. The scope of this audit is to review the site access, internal access road and the accommodation works.

The audit has been carried out in accordance with the principles of the National Highways document GG 119 Road Safety Audit. A formal Road Safety Audit Brief was provided to the Audit Team, this contained details of the Road Safety Audit team and was approved by Adam Darwin, Kirklees Council. Information regarding the site was also provided via email alongside the relevant scheme documents and drawings. This was considered by the Audit Team to provide sufficient detail to undertake the appropriate stage of audit.

The audit also comprised of a desk-top study where all documents and plans provided by the Design Team were reviewed. No departures from standard have been brought to the attention of the RSA team with regard to the scheme as designed.

Documents Supplied

- E-mail proposal background
- 1247-201D - Junction Improvement Scheme Lady Ann Road/ Soothill Lane – August 2023
- 1247 VTADP 001 rev C – Visibility Drawing Inc Dimensions – November 2023
- 1247 VTADP 002 rev B – Refuse Vehicle Tracking – November 2023
- 1247 PL 501 – Long Section Chainages – November 2023
- 1247 PL 502 – Long Sections Roads 1 and 2 – November 2023

- 1247 PL 503 rev A – Long Sections Roads 3 (Part 1 of 2) – November 2023
- 1247 PL 504 rev A – Long Sections Roads 3 (Part 2 of 2) – November 2023
- 1247 PL 505 – Long Sections Road 4 – November 2023
- 10703-SELF-P-ZZ-A-M3-001 rev N – Proposed Site Plan – November 2023
- 10703-SELF-P-ZZ-A-M3-301 rev A – Site Layout Plan (Adoptable Highway) – November 2023
- 1247D – Transport Statement – December 2022
- 1247G - Transport Statement Addendum No 2 – November 2023

Terms of Reference

The terms of reference of this Road Safety Audit are as described in the National Highways document GG119 Road Safety Audit. The 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 designs to any other criteria. No member of the Audit Team has been directly linked to the scheme design.

Each of the auditors' responses is classified as a 'Problem' that is likely to result in a significant road safety hazard. All comments and recommendations are referenced to the detailed design drawings and the locations have been indicated on the plan at the end of the report.

Where recommendations are made, these do not comprise design decisions, and it remains the responsibility of the Design Team to incorporate any changes into the scheme and consider any interactions between design elements.

Previous Road Safety Audits

The audit team have not been made aware of any previous Road Safety Audits.

Problems Raised at this Stage 1 RSA

PROBLEM – A-01

Location: Junctions and bends on the internal development roads

Summary: Visibility – Insufficient forward visibility into side roads and around bends may increase the risk of collisions involving pedestrians.

Forward visibility appears to have been checked on one of the internal road bends, but not the left turns between development roads where parking provision may obstruct forward visibility for left turning vehicles in particular. Insufficient forward visibility around bends or into turning heads may increase the risk of collisions involving pedestrians, especially in roads where children may be playing.

RECOMMENDATION

It is recommended that forward visibility around the inside of bends and in particular into left turns is assessed and that the visibility envelope is kept clear of obstructions such as planting, fencing, walls, areas for parking etc, in line with Manual for Streets. i.e. planting when mature should not exceed 600mm from the adjoining carriageway surface with the underside of any tree canopy to be above 2000mm.

PROBLEM – A-02

Location: Main access and internal development roads

Summary: Drainage – Insufficient surface water drainage may increase the risk of skidding type collisions at the junction as well as slips and falls by pedestrians

At this early stage, no details have been provided on the proposed drainage arrangements. It was noted that the development site graded significantly down towards Lady Ann Road. As such, this may require measures to manage surface water towards at the junction with Lady Ann Road to reduce the risk of standing water and detritus in the turning heads that may consequently cause skidding type collisions in this area. Also, the Road 3, appears to grade down at each end. Without suitable provision for surface water, these areas may become prone to standing surface water, detritus and icy patches that may increase the risk of slips and falls which can be life changing for older pedestrians.

RECOMMENDATION

It is recommended that drainage details are provided at the next stage of road safety audit including gully locations, levels and contours.

PROBLEM – A-03

Location: Internal development roads – Road 1 and Road 3

Summary: Skidding Resistance – Insufficient skidding resistance may increase the risk of loss of control type collisions.

No details have been provided of the polished stone values (PSV) of the bituminous materials, especially with consideration of the proposed estate road gradient on Roads 1 and 3, which have a maximum gradient of 6.66%. In addition, there are likely to be inspection chamber covers on gradients and near junctions. Insufficient carriageway construction with low PSV values or covers with a low PSV may increase the risk of overshoot, rear shunt or collisions involving pedestrians and may also increase the risk of skid/loss of control type collisions for powered two-wheel users.

RECOMMENDATION

It is recommended that a minimum 55 PSV is provided where gradients exceed 5% and that inspection chamber covers provide a similar level of skidding resistance to the surrounding carriageway surface.

PROBLEM – A-04

Location: Existing Watercourse and Wetland Areas

Summary: Fences and Road Restraint Systems – Lack of barrier protection to the existing beck may increase the risk that pedestrians or other road users enter the beck or wetland areas and sustain injuries or drown.

A beck is indicated passing under the proposed development access, along with an area of wetland, it is however unclear from the highway drawings if any barrier or fence will be provided in the proposed state. Regardless of the depth of water or level difference between the water and surrounding embankment tops, there is a risk that pedestrians or other road users may fall into the beck or wetland area sustaining injuries, with an additional consequential risk of drowning. There is also a risk that an errant vehicle may enter the beck or wetland areas. As such, an evaluation of this risk should be undertaken to establish what type of road restraint system is required on this interface. A lack of appropriate barrier protection may increase the risk that pedestrians or other users enter the beck or wetland areas and sustain injuries or drown.

RECOMMENDATION

It is recommended that a barrier treatment proportionate to the level of risk is provided between the beck/wetland areas and areas where pedestrians and other road users may use.

It is also recommended that any parapet arrangement over the beck is located to the back of the junction visibility envelope of the development access onto Lady Ann Road.

PROBLEM – A-05

Location: Internal development roads

Summary: Specific Road Users – Lack of dropped crossings on desire lines may increase the risk of collisions involving users with mobility issues.

There may be desire lines for pedestrians between footways which have no provision for pedestrians with mobility issues, specifically those users with prams, wheelchairs or mobility scooters. The alternatives for these users may require them to use drop kerbs provided for driveways or to cross at locations where visibility to approaching vehicles may be otherwise compromised. This lack of dropped crossing on a desire line may increase the risk of collisions involving users with mobility issues.

RECOMMENDATION

It is recommended that a dropped pedestrian crossing with (ideally) tactile paving should be provided at these locations. Specific locations will need to consider the risk of vehicle overrun damage to the tactile paving by large vehicles, in particular refuse collection vehicles.

Including but not limited to;

- Across Road 1 – Across junction mouth
- Across Road 1 – Around Chainage 30m
- Across Road 1 – Around Chainage 70m
- Across Road 2 – Across junction mouth
- Across Road 3 – Around Chainage 25m
- Across Road 3 – Around Chainage 45m

PROBLEM – A-06

Location: Internal development roads – Road 3

Summary: Pedestrians – Insufficient provision may increase the risk of collisions involving pedestrians and other active modes.

Footway provision ends on Road 3 around Chainage 80m, forming a shared use road to the northern extremity that will be 230m long. Noting the provision of vertical traffic calming, the audit team consider that this would be too long a distance for a shared use road, in particular with the lack of any bends, junctions or buildouts. Insufficient provision may increase the risk of collisions involving pedestrians and other active modes.

RECOMMENDATION

It is recommended that a footway is provided along at least one side of Road 3 for the majority of the road length.

PROBLEM – A-07

Location: Proposed Development Roads and pedestrian links to adjacent roads.

Summary: Lighting – Lack of or insufficient carriageway lighting may increase the risk of collisions, trips and falls during the hours of darkness.

It is unclear from the information provided if any carriageway lighting is to be provided either on the development road or on the footways linking the development to other adjacent roads. A lack of carriageway lighting, footway lighting or insufficient levels of illumination may increase the risk of collisions between vehicles and active mode users as well as trips and falls by pedestrians during the hours of darkness.

RECOMMENDATION

It is recommended that carriageway lighting is provided on both the development roads and all footway links.

It is also recommended that any carriageway lighting provided within the development is located such that columns are clear of being a hazard for manoeuvring vehicles. i.e. not placed between adjacent parking spaces.

PROBLEM – A-08

Location: Junction of Lady Ann Road and Soothill Road

Summary: Skidding Resistance – Insufficient skidding resistance may increase the risk of junction overshoot type collisions.

The existing carriageway surface on the Lady Ann Road approach has significant evidence of surface defects on the approach to the existing give way line. There has been a single slight collision near the junction which would suggest a lower investigatory level here. With the nature of the road, commercial vehicle use is expected to be less than 250 cv/lane/day on the Lady Ann Road approach. Insufficient skidding resistance and surface defects may increase the risk of junction overshoot type collisions

RECOMMENDATION

It is recommended that the carriageway on the Lady Ann Road approach is resurfaced and provided with a skidding resistance commensurate to DMRB CD 236, Table 3.3a or Table 3.3b based on the relevant site categories and traffic levels.

PROBLEM – A-09

Location: Junction of Lady Ann Road and Soothill Road

Summary: Pedestrians – Insufficient provision may increase the risk of collisions involving pedestrians and other active modes.

An improvement to the existing dropped crossing across Lady Ann Road is proposed as part of the works, providing tactile paving. Observations at the junction would suggest that footway overrun is a regular occurrence here, due largely to the tight radii and narrow side road width. This was particularly a problem for vehicles turning left into the side road.

Physical constraints of the railway and housing prevent any reasonable highway geometry improvements however there remains a risk that the footway overrun will continue. This firstly places pedestrians waiting to cross at risk of being hit by a vehicle overrunning the footway and secondly, increases the risk of damage to the tactiles and consequential trips and falls by pedestrians.

RECOMMENDATION

It is recommended that, in the first instance, a non-passive bollard is provided to protect the tactile dropped crossing on the footway corner from vehicle overrun. Should this be impractical due to statutory undertakers equipment under the footway surface, then construction of the footway and tactile paving in this area should be sufficient enough to withstand regular overrun by large goods and refuse vehicles.

Audit Team Statement

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

Road Safety Audit Team Leader

Haydn Vernals FCIHT FIHE CMILT MSoRSA, Directive 2008/96/EC (Certificate of Competency)

Sevenairs Consulting Ltd
20 High Bank, Thurlstone, Sheffield,
South Yorkshire, S36 9QH

Signed: 

Date: 7th December 2023

Road Safety Audit Team Member

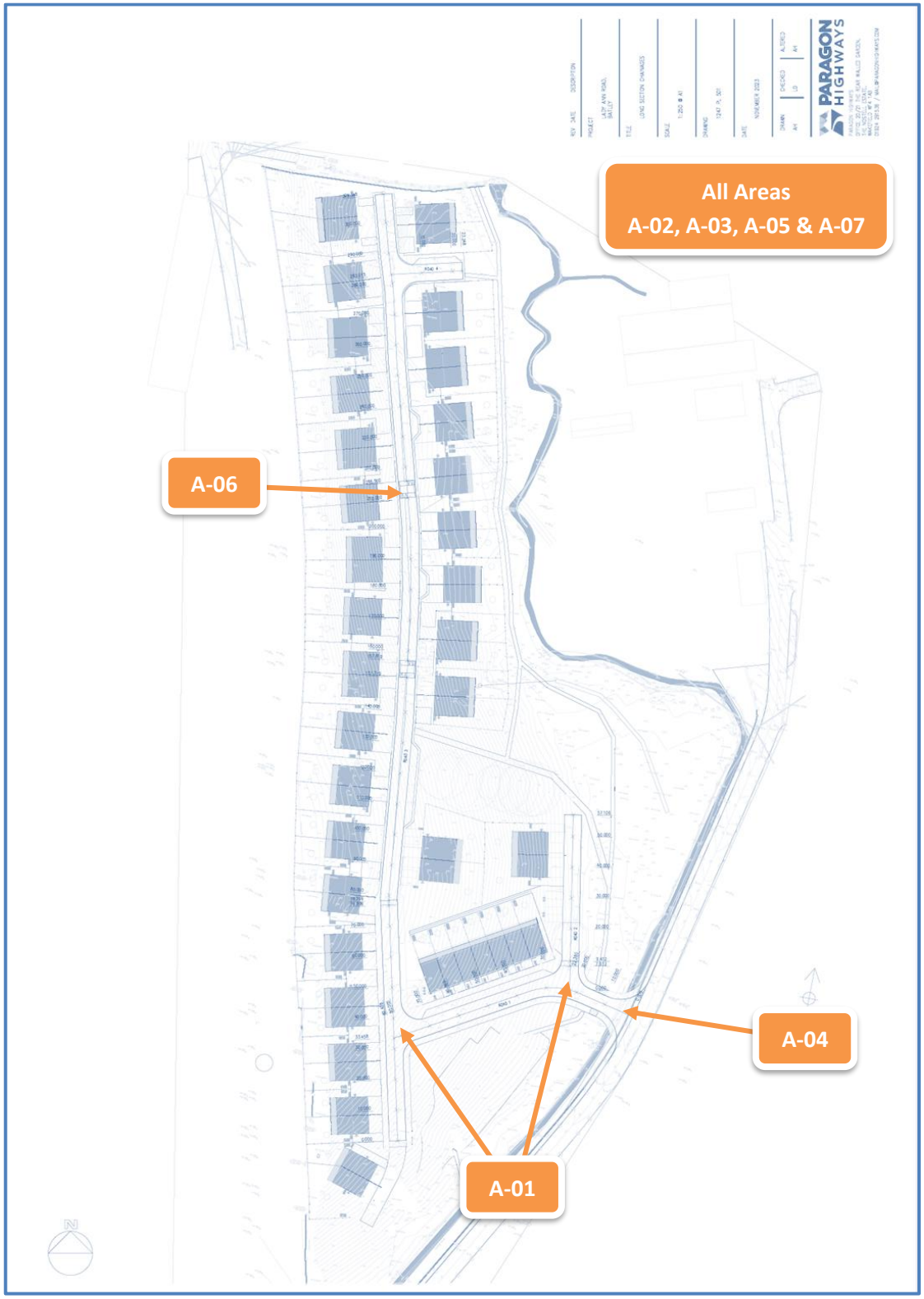
Sarah Vernals BAHonsQTS NPQH

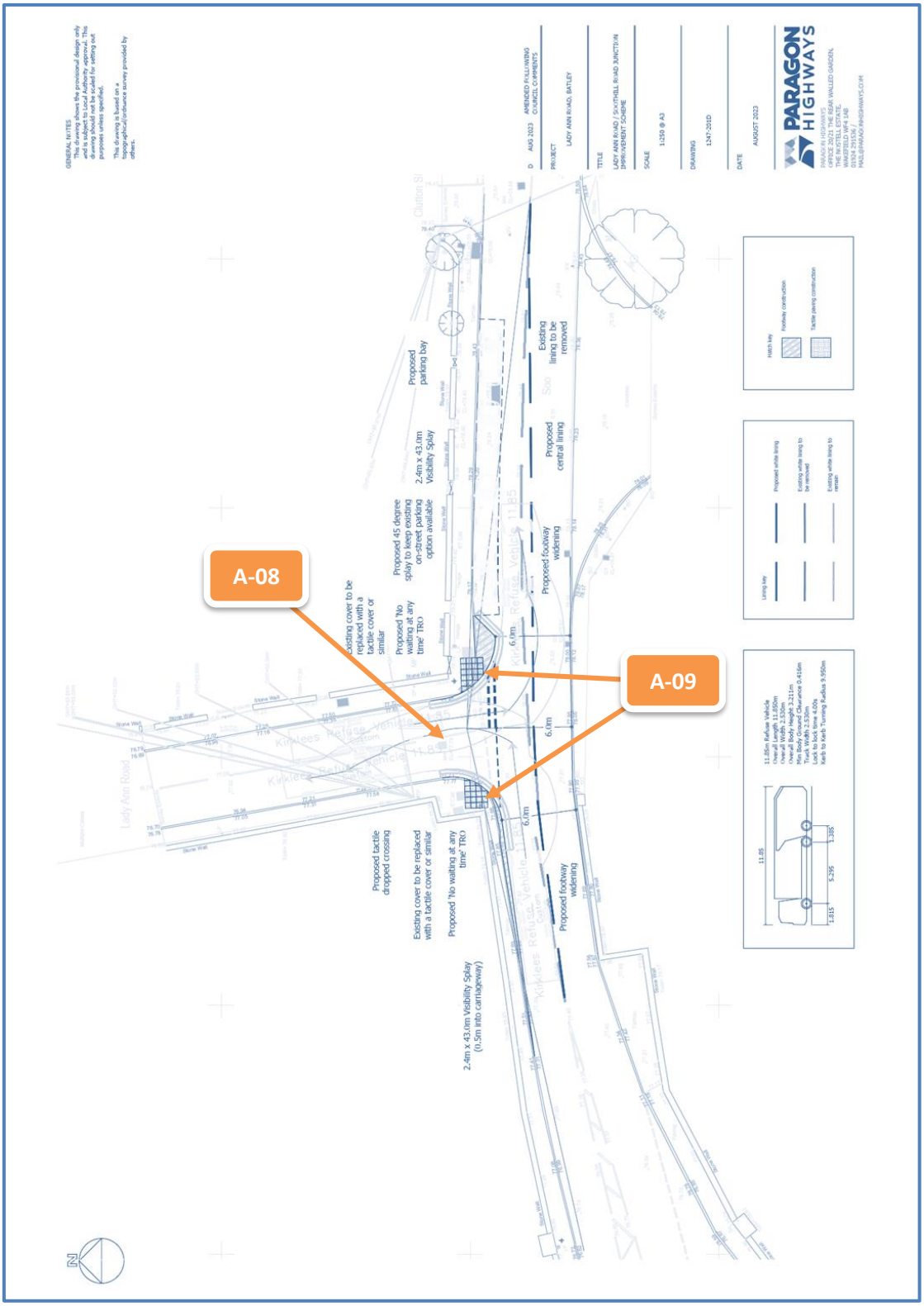
Sevenairs Consulting Ltd
20 High Bank, Thurlstone, Sheffield,
South Yorkshire, S36 9QH

Signed: 

Date: 7th December 2023

Problem Location Plan




A-08
A-09
Proposed parking bay
Existing lining to be removed
Proposed central lining
2.4m x 43.0m Visibility Splay
Proposed 45 degree splay to keep existing on-street parking option available
Proposed footway widening
Existing cover to be replaced with a tactile cover or similar
Proposed 'No waiting at any time' TRO
Proposed tactile dropped crossing
2.4m x 43.0m Visibility Splay (0.5m into carriageway)
6.0m
PARAGON HIGHWAYS
LADY ANN ROAD / SOUTHILL ROAD JUNCTION IMPROVEMENT SCHEME
AUGUST 2023