1 INTRODUCTION

1.1 Overview

1.1.1 Prime Transport Planning Ltd (Prime) have been instructed by Gladman to assess the access options to a potential residential development located on land to the north of Cliff Road, to the west of Welton village in Lincolnshire.

1.1.2 The site is a draft allocation in the emerging Central Lincolnshire Local Plan (WL/WELT/001A) and is proposed to deliver circa 195 dwellings. The emerging Plan suggests that access is preferred from Heath Lane (assumed to be Cliff Road given this is the site's only frontage with the highway network). It is understood that the Inspectors for the forthcoming EIP have queried access, stating:

How will the site be accessed? Is this sufficiently clear enough to be effective?

1.1.3 The purpose of this document is therefore to determine if a suitable access strategy can be delivered from Cliff Road (noted in the Plan as Heath Lane).

1.1.4 West Lindsey District Council (WLDC) are the planning authority for the area while Lincolnshire County Council (LCC) are the Local Highway Authority (LHA).

1.1.5 The following is a desk-based assessment with no visit having been undertaken. This appraisal is therefore based on the information provided by Gladman, OS mapping and Google Imagery dated August 2022.

1.2 Site Location

1.2.1 The site is located circa 0.6km to the west of the centre of Welton Village and circa 9km north of Lincoln. The site is rectangular in shape and is bounded by Cliff Road to the south, the housing estate and caravan park located off Prebend Lane to the east with agricultural land forming the western and northern boundaries.

1.2.2 Image 1.1 shows the site's location in the emerging Plan while Image 1.2 shows the site's location in the context of Welton and the surrounding highway network.

Image 1.1: Extract from emerging Central Lincolnshire Local Plan (WL/WELT/001A)

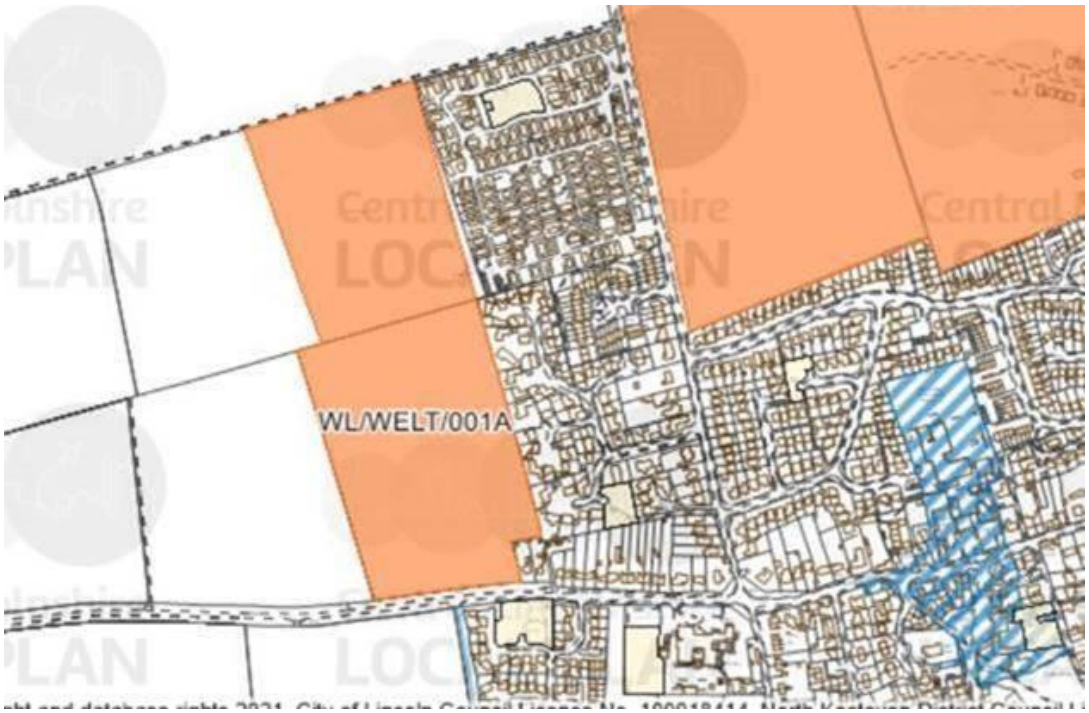
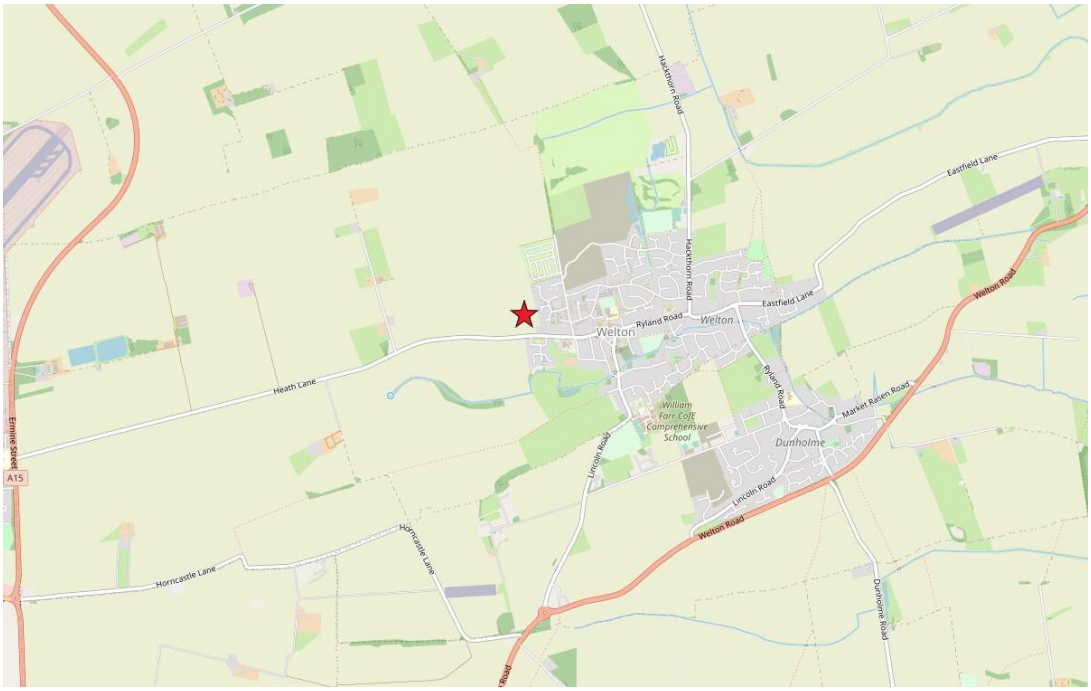


Image 2.1: Site Location



Source: OpenStreetMap®

2 EXISTING SITUATION

2.1 Highway Network

Cliff Road

2.1.1 Cliff Road forms the southern boundary of the site and runs on a generally west to east alignment, providing a connection with Lincoln Road/Ryland Road in the form of a priority controlled junction to the east, and with the A15 in the form of a ghost island right turn junction to the west. Cliff Road becomes Heath Lane west of the site. The site has frontage with Cliff Road for approximately 150m, with an existing field access located at the western end. The remainder of the site frontage is bound by a hedgerow and a number of trees, however WLDC's website suggests that the trees are not subject to Tree Preservation Orders (TPOs).

2.1.2 Along the site frontage and up to the A15, the road is rural in nature, subject to national speed limit (60mph) and no street lighting is present. Along this section, the carriageway measures circa 6m in width and has wide grass verges either side.

2.1.3 Heading eastwards into Welton Village, the speed limit changes to 30mph at the eastern end of the site frontage, highlighted with change in speed limit signage, high friction surfacing, speed roundels and a Vehicle Activated Sign (VAS). At this point, the road becomes more residential in nature with circa 1.5m - 2m wide footways either side of the carriageway and street lighting. The footway on the northern side of Cliff Road is separated by a circa 3m wide verge and the footways provide a continuous connection in the centre of the village.

2.1.4 An on-street parking lay-by is situated circa 60m from the eastern edge of the site's frontage.

A15

2.1.5 The A15 is accessible via Cliff Road/ Heath Road circa 3.3km west of the site and provides a direct connection to the city of Lincoln to the south and the M180 to the north. Along this section of road, the A15 is a single lane carriageway, subject to 50mph and has a shared footway/cycleway along the western edge down to Lincoln.

2.2 Road Safety

2.2.1 To gain an understanding as to whether there are any roads safety issues that may influence the form and location of any potential access to the site a review of accident data contained on the CrashMap database has been undertaken. This review has concentrated on the Heath Road/Cliff Road corridor from its junction with the A15 in the west to its junction with Lincoln Road in the east.

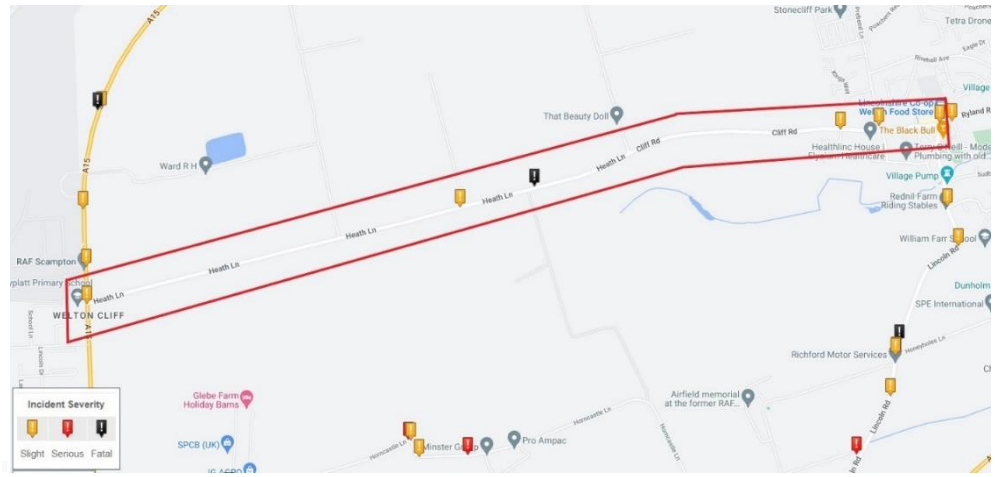
2.2.2 A review of CrashMap shows that between 2017 and 2021 (the latest information available on CrashMap) there have been three injury accidents on Cliff Road, with another three occurring along Heath Lane to the west.

2.2.3 All three accidents along Cliff Road resulted in slight injuries being sustained, the first occurring at the junction with Roman Road in February 2018 and involved a car and motorcyclist. Another incident occurred between a car and a young pedestrian at the junction with Prebend Lane in March 2020 while the third accident to occur in this direction, happened in January of 2020 resulting in cyclist sustaining slight injuries at the Lincoln Road junction.

2.2.4 Heading westwards to Heath Lane, one of the accidents which occurred in March 2019 involved a single vehicle, the driver of which lost control and collided with street furniture, this resulted in fatal injuries being sustained by the driver. The other two accidents in this direction resulted in slight injuries, both of which involved two vehicles, with one occurring along Heath Lane and the other at the junction with the A15. It is worth noting that no accidents appear to have occurred along the site frontage.

2.2.5 A review of the above would suggest that there are no deficiencies in the existing highway network, or existing safety issues within the vicinity of the site, that would be exacerbated by the development proposals.

Image 2.1 CrashMap Accidents (2017-2021)



Source: CrashMap®

3 DESIGN GUIDANCE

3.1.1 Prime contacted LCC to request the latest highways design guidance, noting there was not a guide available online and some of the information we had previously been provided from the *'Lincolnshire Design Guide for Residential Areas'* appeared outdated given the document was published in 1996. In particular, Prime requested information regarding the number of units which can be accessed via a single point of entry, junction geometries, parameters for junction spacing and visibility splay standards.

3.1.2 LCC confirmed that the previous design guidance was now out of date, instead suggesting the LHA now review sites on a case-by-case basis and offer a free pre-application advice service to look at sites in more detail and offer a more bespoke response.

3.1.3 In the absence of up-to-date LCC design guidance, design parameters for junction geometries and visibility splays set out in Manual for Streets (MfS) and Design for Roads and Bridges (DMRB) have been used to formulate the potential access strategy. It should be noted though that neither of these documents provide prescriptive guidance with regard to the spacing of junctions or the numbers of dwellings that can be accommodated via a single-entry point, therefore the outdated guidance previously issued by LCC has been applied where necessary.

3.1.4 The former *'Lincolnshire Design Guide for Residential Areas'* suggests that a 'Major Access Road' can provide access to a maximum of 200 units if provided in a cul-de-sac arrangement or 400 units if provided in a loop. As mentioned above, this guidance is outdated and clarification with regards to the numbers which can be accessed off a single point of access should be confirmed though the pre-application process.

4 PROPOSED ACCESS STRATEGY

4.1.1 Given that circa 195 units are proposed for the site allocation, it is suggested that a single point of access is likely to be sufficient to support the development based on LCC's former guidance.

4.1.2 It is suggested that a priority junction be provided onto Cliff Road, this consisting of a 5.5m wide and two 2m wide footways in accordance with MfS geometric requirements for a residential access. Given the site falls outside of the current settlement and Cliff Road is subject to a 60mph speed limit in this location, 10m radii have been provided in accordance with DMRB. Drawing P22081-001B shows the proposed access strategy.

4.1.3 Whilst it is understood the trees along the site frontage are not subject to TPOs, the access has been positioned circa 100m west of the eastern boundary to avoid the trees and maintain as much vegetation as possible. The position of the access is however relatively flexible due to the wide grass verge on the northern side of the carriageway.

4.1.4 Speed surveys have been undertaken along the frontage of Cliff Road, to which eastbound 85th percentile speeds have been measured to 42.6mph and westbound 85th percentile speeds have been measured to 47.3mph. As such, visibility splays drawn in accordance with DMRB stopping sight distances (SSD) calculations for have been shown on Drawing P22081-001B, these being 2.4m x 115m to the west and 2.4m x 136m to the east, both of which appear achievable within the extent of adopted highway.

4.1.5 It is worth noting that some vegetation may need to be removed to facilitate the access proposals and associated visibility splays, therefore a topographical should be undertaken to clarify the access point and determine the true extent of vegetation impact.

4.1.1 As part of the access proposals, we would suggest that the existing change in speed limit is relocated west of the site frontage. The relocation of the speed limit would help to reflect the change in residential nature however agreement would need to be sought with the LHA and a Traffic Regulation Order (TRO) would be necessary following the granting of planning permission for the development. 2.4m x 90m visibility splays have therefore been shown on Drawing P22081-001B, these being in accordance with DMRB requirements for a 30mph design speed.

4.1.2 The existing footway along Cliff Road should be extended along the site frontage up to the proposed access. Given the wide grass verge, this could either run alongside the carriageway or be set back to align with the existing footway further east.

5 WAY FORWARD

5.1.1 The access strategy drawings are currently based on OS mapping, therefore we would suggest a topographical survey is undertaken to obtain more precise dimensions and determine tree and hedgerow locations. A topo survey will also be useful to identify any existing utilities which may be within the northern verge, however we would suggest that a utilities search is undertaken along the site frontage to determine if the access strategy will have an impact on existing stats in the area.

5.1.2 We suggest seeking arboricultural advice to identify the true extent of the hedgerow/ vegetation loss as a result of the access proposals and to determine if the level of impact is acceptable.

5.1.3 It is recommended that the views of the highways officer's at LCC be sought in regard to the proposed access strategy, particularly in relation to number of units which can be accessed off a single point of access and the extension of the 30mph speed limit west of the site frontage.

6 CONCLUSION

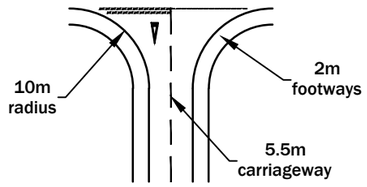
6.1.1 Based on the existing evidence, it would appear that an access via Cliff Road may be possible, subject a topographical survey, arboricultural advice and discussions with LCC.

DRAWINGS

KEY

- INDICATIVE SITE BOUNDARY
- 2.4m x 115m VISIBILITY SPLAY (BASED ON RECORDED SPEEDS @ 42.6mph)
- 2.4m x 136m VISIBILITY SPLAY (BASED ON RECORDED SPEEDS @ 47.3mph)
- 2.4m x 90m VISIBILITY SPLAY (BASED ON DMRB @ 30mph)
- HIGHWAY BOUNDARY

ACCESS DIMENSIONS



Access location positioned to avoid trees within verge. Position is relatively flexible - subject topo survey

Suggested footway is provided along site frontage to tie into existing provision

Suggest topo survey is undertaken to determine access proposals are acceptable and ascertain impact on existing vegetation/ utilities along frontage

Suggested location of change of speed limit - subject to TRO

Suggest 30mph change in speed limit is relocated west of proposed site access

HEATH LANE

BISHOP'S PLACE

24.0m

26.2m

30

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Rev	Date	By	Revision notes
B	25/11/2022	CM	VISIBILITY SPLAYS UPDATED
A	15/11/2022	CM	VISIBILITY SPLAYS UPDATED TO RECORDED SPEEDS

DISCLAIMER

- PROPOSALS ARE PRELIMINARY ONLY, NOT FOR CONSTRUCTION PURPOSES
- PROPOSALS WILL BE SUBJECT TO UTILITY AND DRAINAGE INVESTIGATIONS
- PROPOSALS WILL BE SUBJECT TO EXTENT OF ADOPTED HIGHWAY
- DO NOT SCALE THIS DRAWING. DIMENSIONS ARE FOR REPRESENTATIONAL AND INFORMATIONAL PURPOSES ONLY AND SUBJECT TO DETAILED DESIGN
- THIS DRAWING MUST ONLY BE USED FOR THE PURPOSE FOR WHICH IT HAS BEEN SUPPLIED

Project

PREBEND LANE, WELTON, LINCOLNSHIRE

Title

SUGGESTED ACCESS STRATEGY

Drawn by	Issue date
CM	28 OCT 2022

Scale(s): 1:1000 @ A3

Drawing No: P22081-001B

Status: INFORMATION