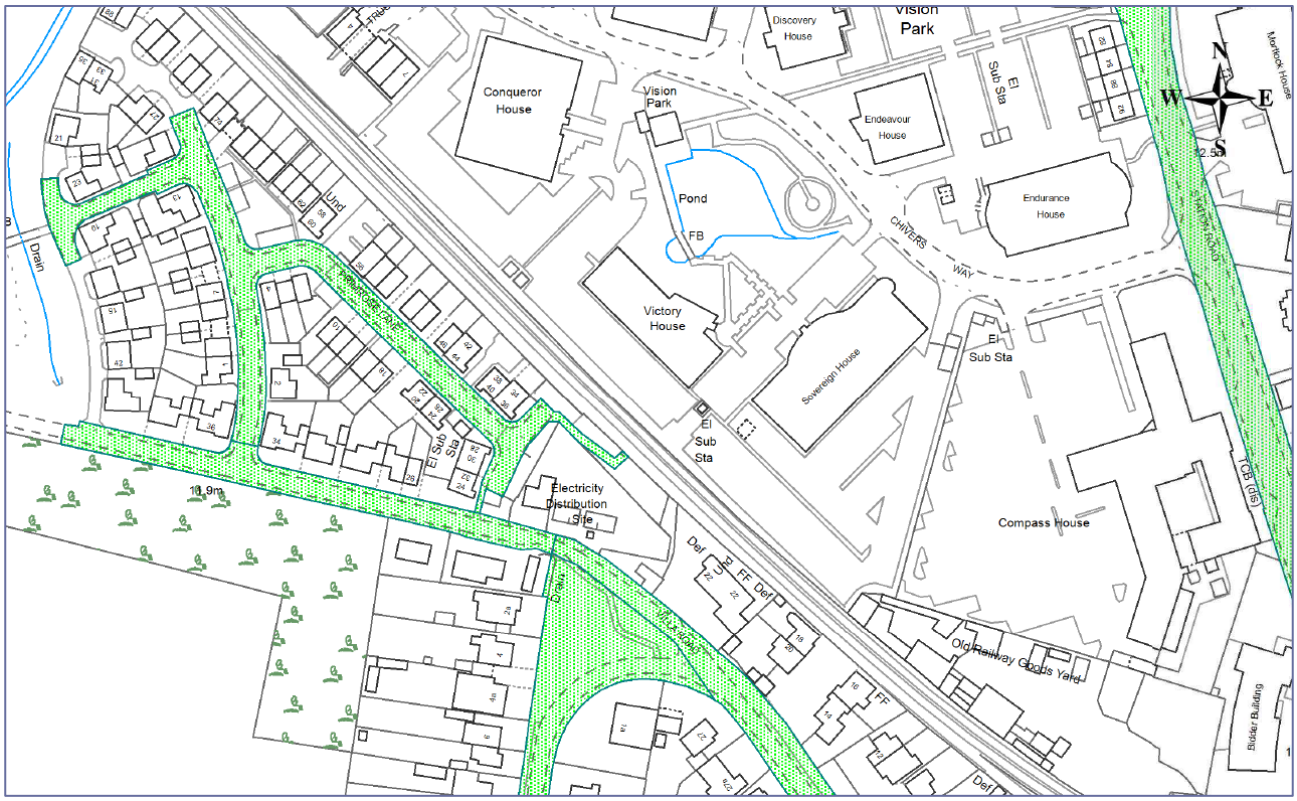
Figure 6: E-scooter and Electric bike hub – Villa Road

2.3 Local Highway Network

2.3.1 Along the site frontage, Villa Road is a two-way single carriageway which is typically approximately 5m wide and operates with a 30mph speed limit. There is a footway along the northern side of Villa Road opposite the site which serves the residential development at Primrose Lane. East of the site, there is a footway on the southern side of Villa Road which continues east to The Crescent and Cambridge Road.

2.3.2 West of the Primrose Lane development, Villa Road is an unadopted private road serving a substation, agricultural buildings and some light industrial land uses. The extent of adopted highway within the vicinity of the site is illustrated in Figure 7.

Figure 7: Extent of Adopted Highway



2.3.3 East of the site, there is a pinch point which reduces the width of the carriageway on Villa Road to approximately 3.7m, and briefly restricts traffic to one-way working with priority given to eastbound vehicles. The width restriction is illustrated in Figure 8. East of the pinch point, Villa Road widens and a minimum width of 5m with two-way working is restored.

Figure 8: Villa Road Width Restriction (Looking West)

2.3.4 It is understood that the narrowing of the carriageway was introduced as part of the Primrose Lane development (which was granted planning permission in September 2012) in order to allow the provision of a footway to connect the site with the wider pedestrian network, as shown in Figure 8. Prior to this, the carriageway on this section of Villa Road was wide enough to allow for two-way working.

2.3.5 A similar traffic calming measure is in place on Cambridge Road approximately 125m to the south of the junction with Villa Road and The Crescent, which gives priority to all southbound vehicles and northbound cyclists. This arrangement is illustrated in Figure 9.

2.3.6 Cambridge Road serves a significantly larger number of dwellings and other land uses than Villa Road, and traffic flows would therefore be expected to be significantly higher. The presence of the pinch point give-way feature on Villa Road would therefore not be expected to inhibit development within the area, and the proposed development would not be expected to result in a significant increase in queueing or congestion at the pinch point. Furthermore, as a traffic calming feature and promotion of walking and cycling ahead of car use, the pinch point could be argued as a benefit to development of the site.

Figure 9: Cycling Route / Traffic Calming on Cambridge Road (Looking North)

2.3.7 Cambridge Road connects with Bridge Road (B1049) to the south, which in turn connects with junction 32 of the A14. The A14 forms part of the Strategic Road Network (SRN) and is maintained by Highways England (HE). South of the A14, the B1049 continues southeast towards the centre of Cambridge. The site is therefore considered to be very well connected to local, regional and strategic road networks.

Road Safety Review

2.3.8 A review of the previous three years' of data available on the Crashmap website indicates that no collisions were recorded on the entire extent of Villa Road. A single collision, categorised as 'slight', was recorded at the junction of The Crescent / Cambridge Road to the east of Villa Road.

3 Proposed Access Arrangements

3.1 Introduction

3.1.1 This section of the IAA will look at potential access options of the proposed development in the context of the existing local highway network. It is noted that the proposed site access arrangements will be subject to further detailed design and confirmation of appropriate survey data.

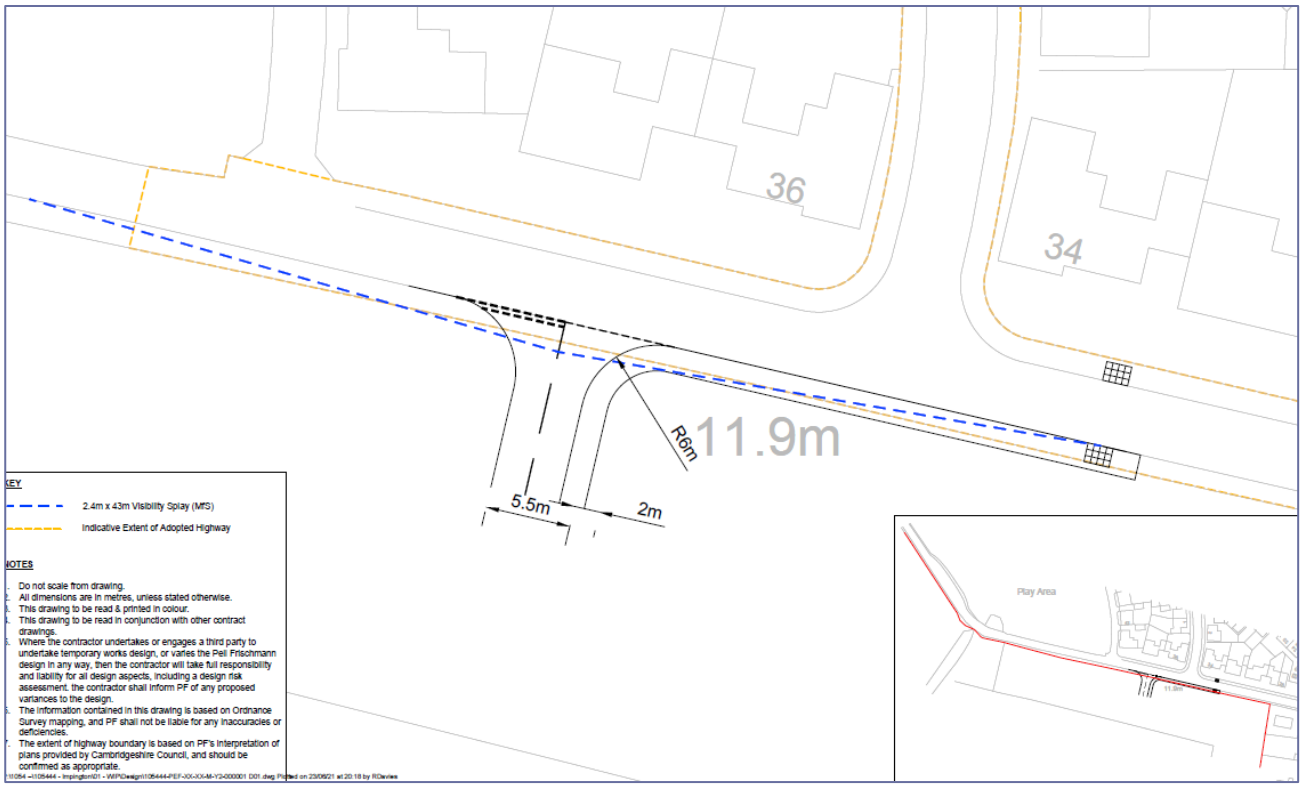
3.2 General Design Considerations

3.2.1 The potential site access arrangement options detailed in this section have considered the guidance provided within the Cambridgeshire Design Guide (2021) and Manual for Streets (MfS) (2007), particularly with regards to carriageway widths, kerb radii and visibility requirements. The site access arrangements presented are therefore considered to represent an appropriate and workable access solution for the development.

3.3 Access Arrangements

3.3.1 Access to the site is currently proposed in the form of a priority junction from Villa Road to the north of the site. The indicative proposed site access arrangements are presented in Figure 10 and Appendix A.

Figure 10: Proposed Site Access Arrangements



3.3.2 As illustrated, the indicative site access arrangements provide a 5.5m wide carriageway into the site with a 6m radii, as per the Cambridgeshire Design Guide for an access road serving up to 100 dwellings. The proposed site access location also meets the Design Guide's requirement for appropriate stagger distances between the junctions with Primrose Lane and the private drive on the northern side of Villa Road.

3.3.3 Visibility splays of 43m have been shown, in accordance with MfS requirements for roads with a design speed of 30mph. It is noted that the visibility splay to the left is currently shown to require the use of third party land, as per PF's interpretation of the highway boundary plan provided by CCC. Further clarification will be required as to the status of this section of road and the precise extent of adopted highway. It is also noted, however, that the recorded speeds along this section of Villa Road would be expected to be below 30mph, given the residential nature of the road and limited residential units and other land uses served. It may therefore be possible to argue for a reduction in the visibility splays required, subject to a speed survey.

3.3.4 Consideration for pedestrian and cycle access has been incorporated into the proposed site access. A 2m wide footway to the east of the site access has been illustrated, with an uncontrolled pedestrian crossing to the existing footway on the northern side of Villa Road. This in turn would connect the site with the wider pedestrian and cycle network, including the guided busway to the north.

4 Summary

4.1.1 Pell Frischmann (PF) is instructed by Cirrus Land Limited (the 'Client') to provide transport and highways consultancy services, and to prepare this Initial Access Appraisal (IAA) report, in connection with land at Villa Road, Impington, Cambridgeshire (the 'site').

4.1.2 The purpose of this IAA report is to provide an appraisal of the site in terms of future access options and potential off-site highways implications. It is understood that there are aspirations to provide up to 180 residential units (use class: C3) at the site. The local highways authority is Cambridgeshire County Council (CCC), and the local planning authority is South Cambridgeshire District Council (SCDC).

4.1.3 The site is located to the south of Villa Road, Impington, Cambridgeshire. Impington is located approximately 4km northwest of the centre of Cambridge, and 1km north of junction 32 of the A14. The site benefits from an excellent level of accessibility to sustainable and active travel modes. It is located within a short walking distance of the Cambridgeshire Guided Busway, which provides frequent bus services as well as segregated walking and cycling connections to the centre of Cambridge and local railway stations. Existing footways within the vicinity of the site are also of a suitably high quality.

4.1.4 East of the site, there is a pinch point which reduces the width of the carriageway on Villa Road to approximately 3.7m, and briefly restricts traffic to one-way working with priority given to eastbound vehicles. It is understood that the narrowing of the carriageway was introduced as part of the Primrose Lane development (which was granted planning permission in September 2012) in order to allow the provision of a footway to connect the site with the wider pedestrian network.

4.1.5 A similar traffic calming measure is in place on Cambridge Road approximately 125m to the south of the junction with Villa Road and The Crescent, which gives priority to all southbound vehicles and northbound cyclists. Traffic flows on Cambridge Road would be significantly higher than on Villa Road, and the presence of the pinch point give-way feature on Villa Road would therefore not be expected to inhibit development within the area. The proposed development would not be expected to result in a significant increase in queueing or congestion at the pinch point, given the number of units proposed and the excellent accessibility to sustainable travel modes.

4.1.6 A potential indicative site access arrangement has been presented in the form of a priority junction from Villa Road. The indicative site access junction has been designed in accordance with the guidance provided within the Cambridgeshire Design Guide (2021) and Manual for Streets (MfS) (2007), particularly with regards to carriageway widths, kerb radii and visibility requirements. The site access arrangements presented are therefore considered to represent an appropriate and workable access solution for the development, subject to confirmation of land ownership, highway boundary information and an appropriate speed survey.

Conclusion

4.1.7 Overall, the development site is extremely well located both relative to sustainable modes, and in regard to connectivity to the wider highway network and key destinations included the Cambridge Science Park, regional college, the city centre and railway stations. Cambridge County Council places a heavy emphasis on sustainable travel choice and particularly active travel and the site aligns perfectly with this. As such it would be possible to justify a very low vehicle trip rate from the site, the principle of which the county has accepted elsewhere. The site has sufficient frontage onto Villa Road to deliver an appropriate site access junction and the suitability of Villa Road for residential development has been established with the construction of the scheme to the north of the road.

4.1.8 In light of this, and notwithstanding the necessary surveys etc which would form part of the planning application process and agreement with CCC, it is considered reasonable to argue that the potential delivery up to 180 units could be justified at the site from a highways and transport perspective.

Report Ref.	**105444 Impington Access Appraisal 20210623.Docx**
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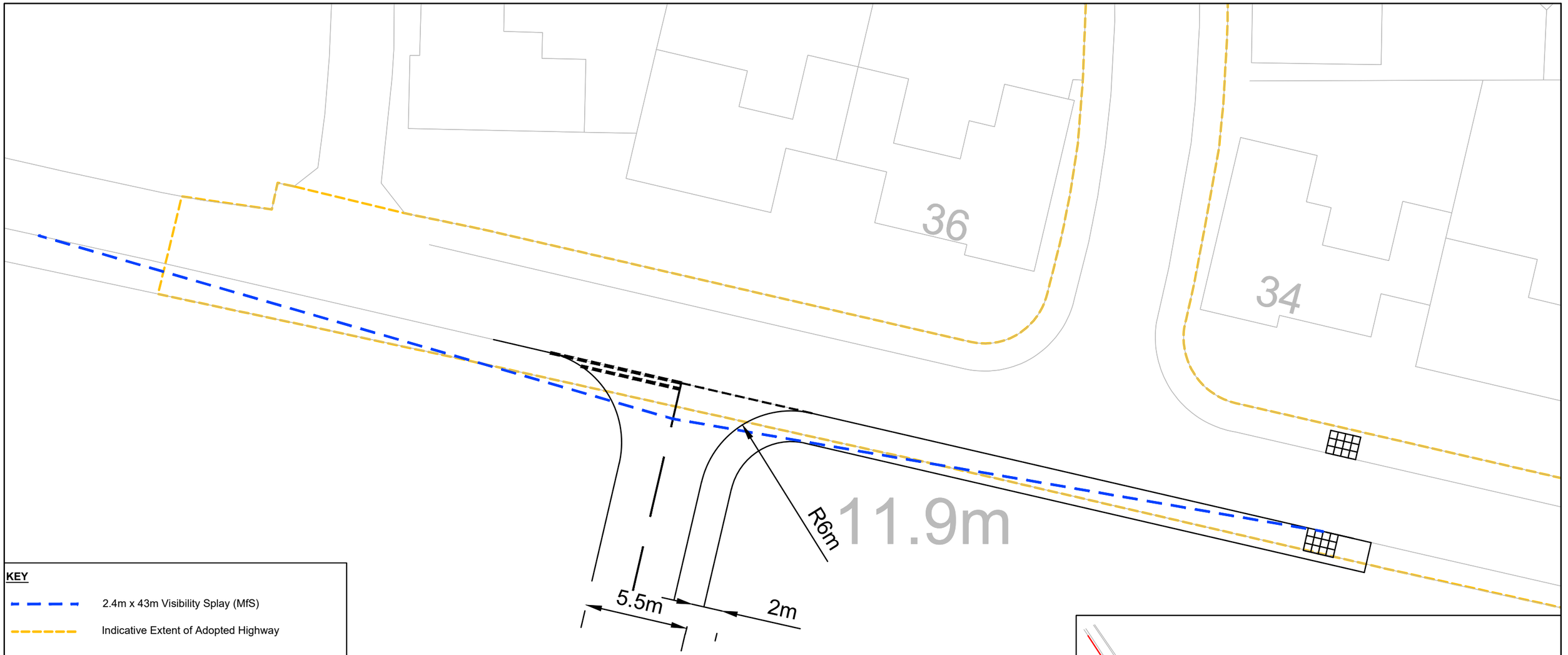
Rev	Suit	Description	Date	Originator	Checker	Approver
D1		Draft for client review	23-Jun-21	PA/RD	RD	PC

Ref. reference. Rev revision. Suit suitability.

Appendix A Access drawing

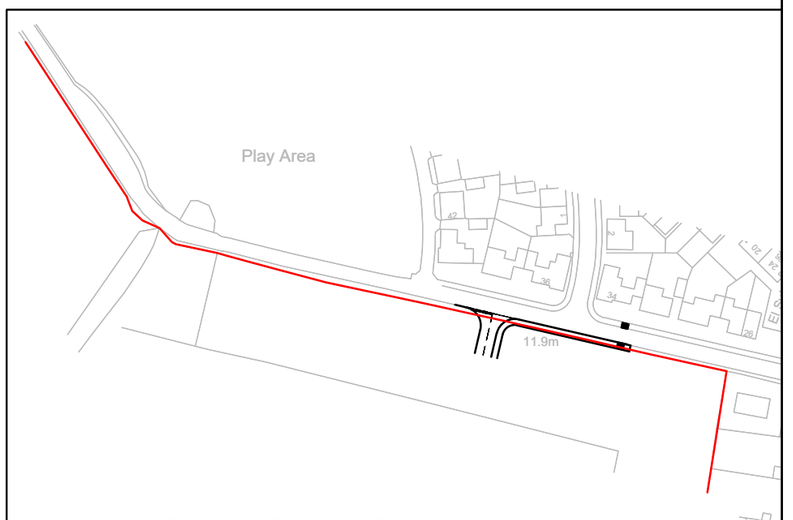


KEY

- 2.4m x 43m Visibility Splay (MfS)
- Indicative Extent of Adopted Highway

NOTES

1. Do not scale from drawing.
2. All dimensions are in metres, unless stated otherwise.
3. This drawing to be read & printed in colour.
4. This drawing to be read in conjunction with other contract drawings.
5. Where the contractor undertakes or engages a third party to undertake temporary works design, or varies the Pell Frischmann design in any way, then the contractor will take full responsibility and liability for all design aspects, including a design risk assessment. the contractor shall inform PF of any proposed variances to the design.
6. The information contained in this drawing is based on Ordnance Survey mapping, and PF shall not be liable for any inaccuracies or deficiencies.
7. The extent of highway boundary is based on PF's interpretation of plans provided by Cambridgeshire Council, and should be confirmed as appropriate.



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Pell Frischmann

5 MANCHESTER SQUARE LONDON W1U 3PD

Telephone +44 (0)20 7486 3661
Email: pflondon@pellfrischmann.com
www.pellfrischmann.com

Project

LAND AT VILLA ROAD, IMPINGTON

Drawing Title

INDICATIVE PROPOSED SITE ACCESS ARRANGEMENTS

	Name	Date
Drawn	RD	JUNE 2021
Designed	RD	JUNE 2021
Checked	PC	JUNE 2021
Approved	PC	JUNE 2021

Scale: 1:250 (1:2000 INSET) @ A3

File No.: 105444-PEF-XX-XX-M-Y2-000001 D01.dwg

Drawing Status: Draft

Drawing No.: 105444-000001

Revision: -