

DESIGN AUDIT

PROJECT: Shripney Road, Shripney – New priority access junction with Shripney Road with associated pedestrian crossing facilities and modifications to the existing Shripney Lane pedestrian crossing.

DATE: February 2020

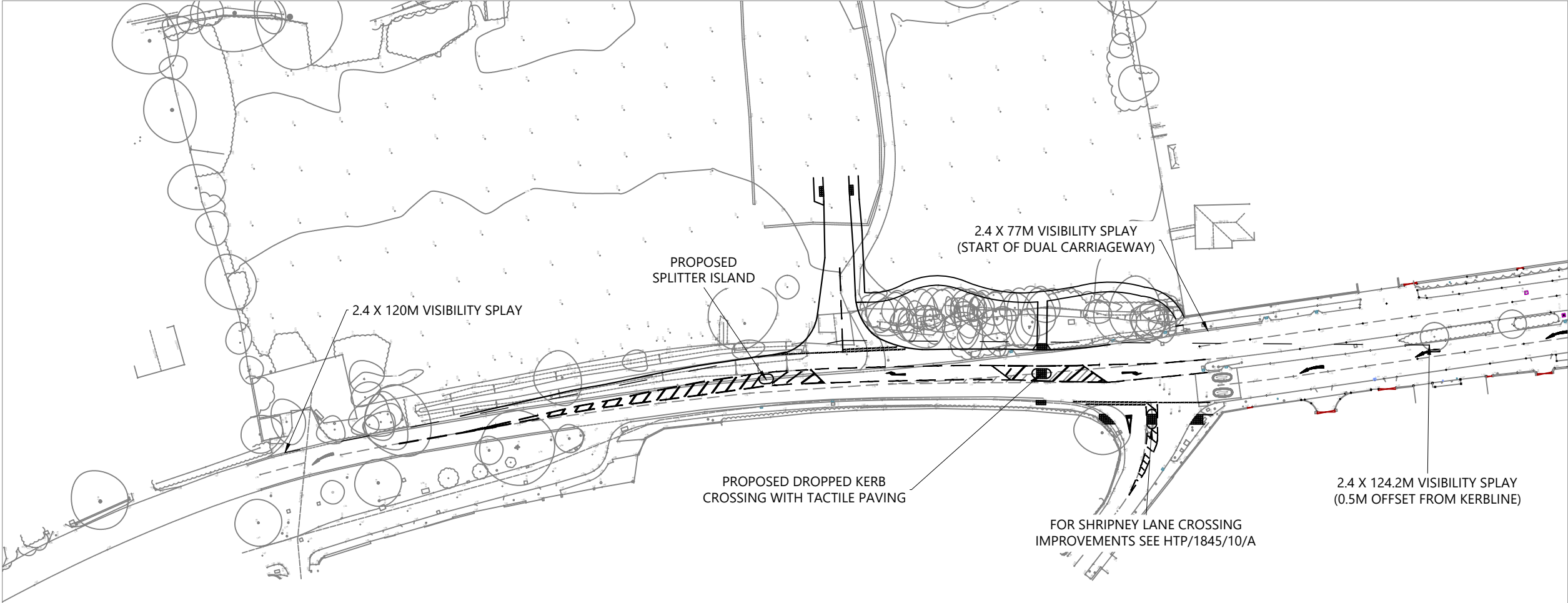
DRAWINGS:

- HTp/1845/09 Revision B Proposed site access works
- HTp/1845/10 Revision B Proposed Shripney Lane pedestrian crossing modifications

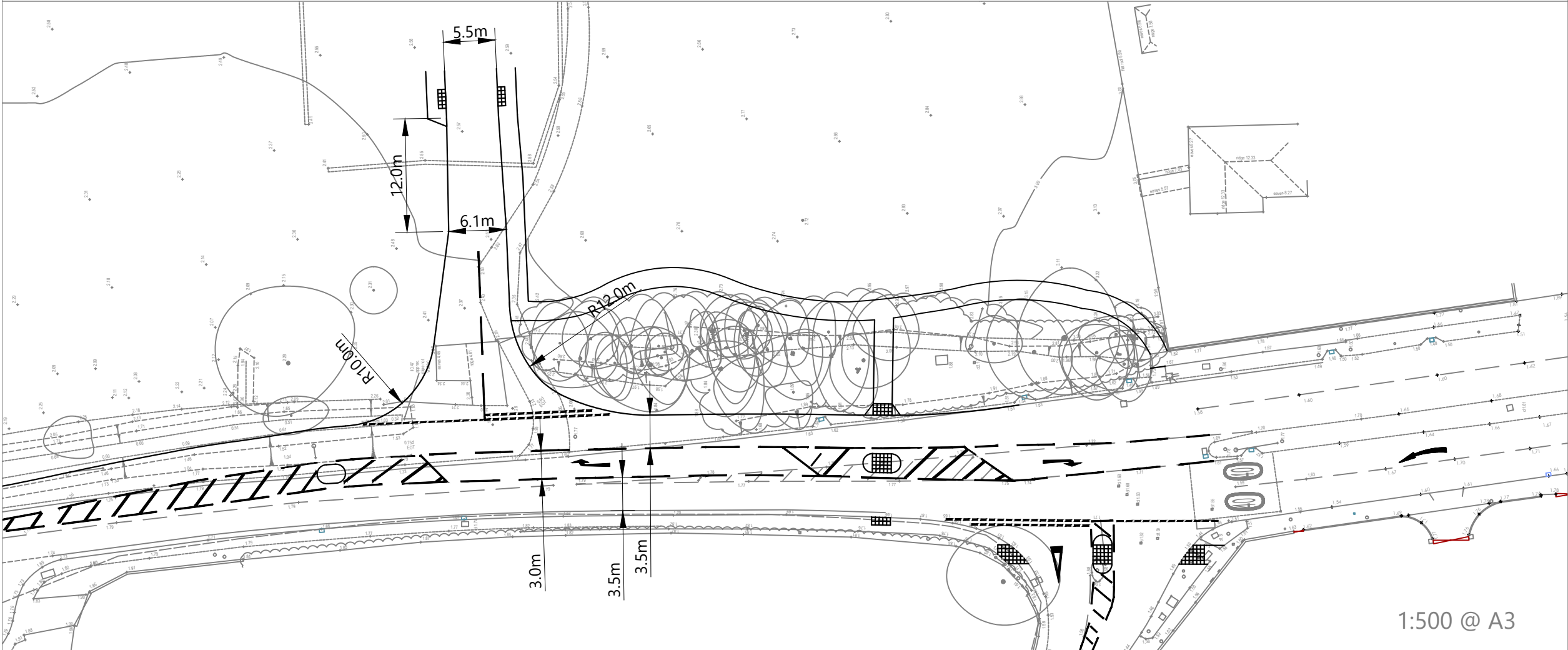
Item number	Design Guide Reference	Summary	Provision	Commentary
1	DMRB CD 109 Table 2.10 DMRB CD 123 Chapter 3 Visibility	The visibility splays at a junction ensures there is adequate inter-visibility between vehicles on the major and minor arms. An X-distance of 2.4 metres should normally be used. The Y distance should be based on the derived SSD based on vehicular speeds and be shown to the nearside kerb line.	A visibility splay of 2.4 x 120 metres has been provided to the north which is appropriate for the DMRB design speed of 70 kph (c43.8 mph), which exceeds the measured speed and is shown to the nearside kerblane and is therefore appropriate and accords with standards. A visibility splay of 2.4 x 124.2 metres has been provided to the north which is appropriate for the DMRB design speed of 44.8 mph which equates to the surveyed 85 th percentile vehicle speeds (using the equation $SSD = vt + v^2/2(d+0.1a)$ with a reaction time of 2 seconds and deceleration rate of 0.375g as set out in DMRB TD 42/95) and is shown a 0.5 metre offset from the central reservation kerblane.	Any vehicle travelling within 0.5 metres of the central reservation kerblane will be wide enough to be visible within the visibility splay. In any event it is unlikely that vehicles travelling at close to the 85 th percentile surveyed speed would travel close to the kerblane. This has been agreed with the highway officer.
2	DMRB CD 123 Chapter 2 Junction selection	The surveyed 85 th percentile speeds of the Shripney Road in the vicinity of the proposed access junction and the existing Shripney Lane junction is around 35-45 mph (56-72 kph) depending on location and direction. The minimum stagger distance for a road with central treatments with a design speed of 70-85 kph is 75 metres. For roads with a design speed of 60-70 kph the minimum stagger distance is 60 metres.	A stagger distance of around 65 metres is provided.	Given that Shripney Lane and the proposed development are cul-de-sacs, the number of vehicles travelling between the two minor junctions will essentially be zero.
3	DMRB CD 123 Chapter 5 Geometric design of priority junctions	At ghost island junctions where no diverge or merge tapers are provided the corner radii should be 15 metres followed by a corner taper of 1:6 over a distance of 30 metres.	Corner radii of 10 metres have been provided with no tapers.	The development will generate very few movements by larger vehicles that benefit from merge and diverge tapers. Such movements will only occur broadly weekly by refuse and recycling collection with other infrequent movements by larger delivery vehicles for white goods. This has been agreed with the highway officer.

Further comments

It has been agreed with the highway officer that the modifications to the Shripney Lane crossings represent an improvement to the existing pedestrian crossing provision. Notwithstanding this, limits on the availability of land limit the potential improvements at the Shripney Lane junction.



1:1,000 @ A3



1:500 @ A3

NOTES:

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Drawing based on Geomatic Surveyors Site Survey 657SH04

B	Updated based on highway officer comments	27/01/20
A	Updated based on highway officer comments	22/01/20
ISSUE	REASON FOR REVISION	DATE

PROJECT:

SHRIPNEY ROAD, SHRIPNEY

CLIENT:

HANBURY PROPERTIES

PROJECT REFERENCE:	DRAWING NUMBER:	SCALE:
1845	09	VARIES

Highgate*Transportation*

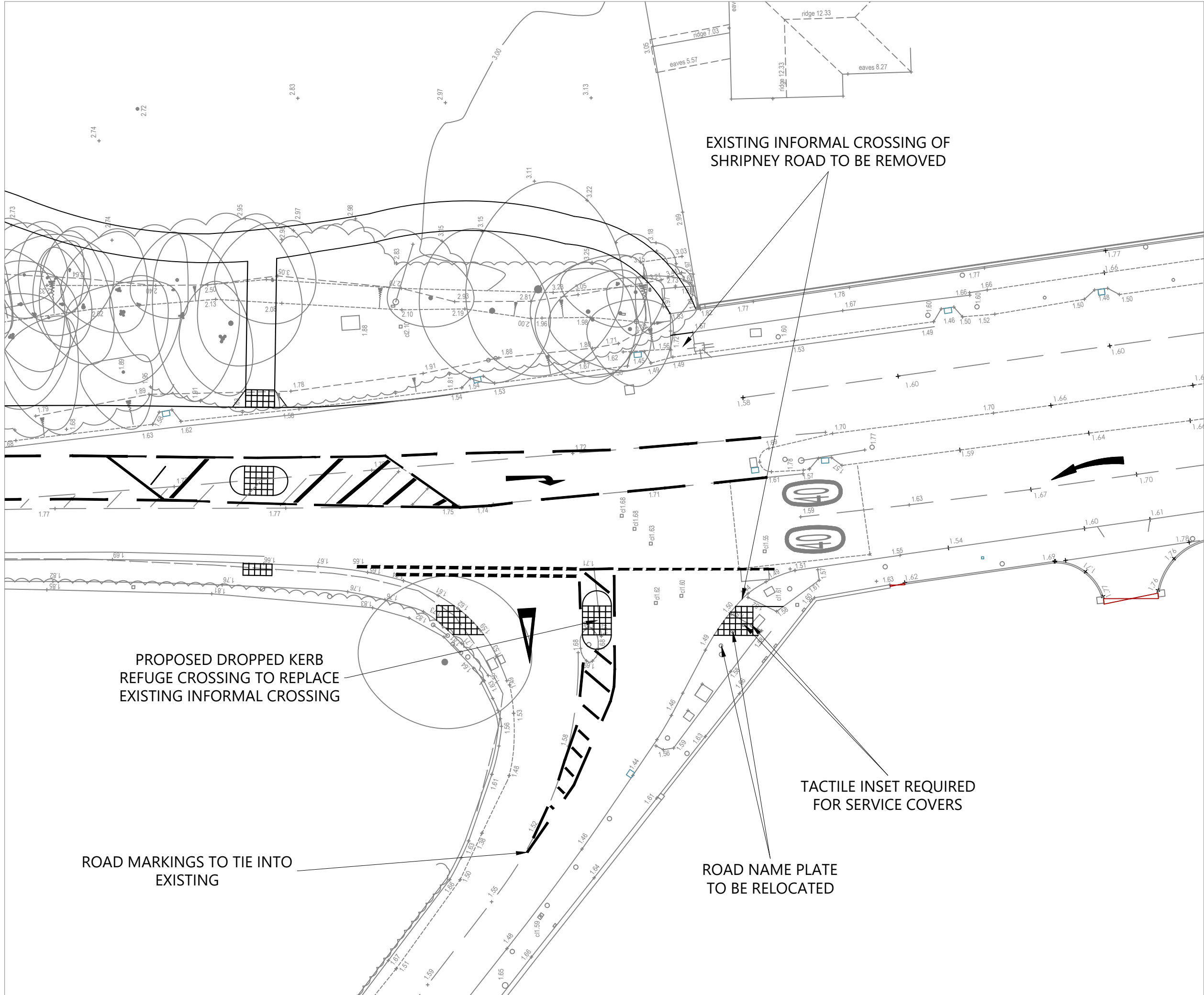
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TITLE: PROPOSED ACCESS ARRANGEMENTS AND
SHRIPNEY ROADPEDESTRIAN CROSSING
IMPROVEMENTS

DATE:	DRAWN BY:	CHECKED:
17/01/20	BL	DT



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B	Updated based on highway officer comments	27/01/20
A	Updated based on highway officer comments	22/01/20
ISSUE	REASON FOR REVISION	DATE

PROJECT: SHRIPNEY ROAD, SHRIPNEY		
CLIENT: HANBURY PROPERTIES		
PROJECT REFERENCE: 1845	DRAWING NUMBER: 10	SCALE: 1:250 @ A3

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TITLE: PROPOSED ACCESS ARRANGEMENTS AND PEDESTRIAN CROSSING IMPROVEMENTS		
DATE: 06/01/20	DRAWN BY: BL	CHECKED: DT