

Evidence ET-2: Measurements and Analysis Regarding Proposed Access E

*This document has been prepared by Elmsbrook Traffic and Parking Group (ETPG), May 2023
for the Appeal regarding*

LAND AT ELMSBROOK, BICESTER: PROPOSED RESIDENTIAL DEVELOPMENT

Planning Inspectorate Ref.No. APP/C3105/W/23/3315849

Cherwell District Council Application No. 21/01630/OUT

Cherwell District Council Appeal No. 23/00062/NON

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EXECUTIVE SUMMARY

Technical errors on all four drawings submitted by the Appellant regarding proposed Access E contain errors regarding the highway boundary and visibility splay – with respect to both the splay line locations and distances.

Visibility splay lines can in fact be drawn to 160 metres (west) with no encroachment problems.

Photographs are included to show this, along with overlaid Google Maps images and Exemplar Phase plans, and the visibility splay analysis for the Home Farm entrance, given consent in 2001.

If visibility splay lines were shown correctly, the drawings supplied by VTP show that Access E could be entirely suitable for a permanent access junction.

1.0 INTRODUCTION/BACKGROUND

- 1.1 Firethorn’s highways and access consultants, VTP, originally told a member of ETPG (by ‘phone in Spring 2021) that OCC Highways had constrained the Firethorn proposal to only use the two existing B4100 access points (Charlotte Avenue and Braeburn Avenue).
- 1.2 In a video call between ETPG and OCC Highways on the 15th of September 2021, Highways stated that this was not correct: that OCC Highways had never made such a constraint, and that converting the proposed temporary construction access to a permanent one (i.e. a separate third B4100 access for traffic) would be a viable and sensible way to access the proposed Eastern Parcel homes.
- 1.3 A member of ETPG reported this back to VTP (see ET Appendices, Appendix 2); and at that point, VTP stopped communications with ETPG (NB: this was after an open, friendly and professional start). When new documentation from VTP was added to the CDC planning portal, ignoring this Highways clarification, ETPG sought advice from OCC Highways and CDC as to whether to write again to VTP – OCC Highways advised ETPG *not to do so*.
- 1.4 ETPG asked OCC Highways at several points, from September 2021, during 2022, and also in 2023 (the latest occasion being during a video call on the 23rd of February), why making Access E permanent was not being considered, in the light of the issues continually reported regarding the Charlotte Avenue modifications proposed (design flaws) and traffic impact analysis: the reply was that OCC Highways can only assess what is presented to them.
- 1.5 At the 9th of March 2023 planning committee, Mark Kirby of VTP stated the following points:
 - a) A priority junction would be the only realistic option for that parcel. The Eastern Parcel would deliver 138 homes’ worth of traffic at 40% trip rate which would create in excess of 562 trips per day. That in turn would require a right turn lane – as this is in excess of the limit of 300 trips limit in a day given in DMRB CD-123.
 - b) The Appellant does not have the frontage to provide that means of access.
 - c) The Appellant couldn’t reconfigure the junction to the Home Farm scheme, because this would impact on the character of Home Farm/St. Lawrence’s Church.
 - d) OCC Highways have no problem with the proposed design to widen Charlotte Avenue, taking account of LTN1/20 as well. Cyclists could share some parts of the Elmsbrook Spine Road.
- 1.6 It was further stated that making Access E into a permanent one had been explored very early on in the project, had been found to be impossible due to the location of a third-party owned drain impacting on the visibility splay, and discounted. (NB: This had never previously been related to ETPG, or as far as we know, to OCC Highways.)

2.0 ANALYSIS AND MEASUREMENTS OF VISIBILITY SPLAYS

- 2.1 Regarding point 1.6 regarding visibility splay encroachment: discussion with independent Highways Consultant D. M. Mason identified that the drain could represent the corner of third-party owned land, and thus be used as a “ransom strip” – which would make the build non-viable. The location of the drain was identified to be at the end of a roadside ditch area, as shown in Figure 1, which is taken from VTP’s proposed Access E design drawing (“4600-1100-T-011 RevF-Site Access E-Construc E Parcel.pdf”).

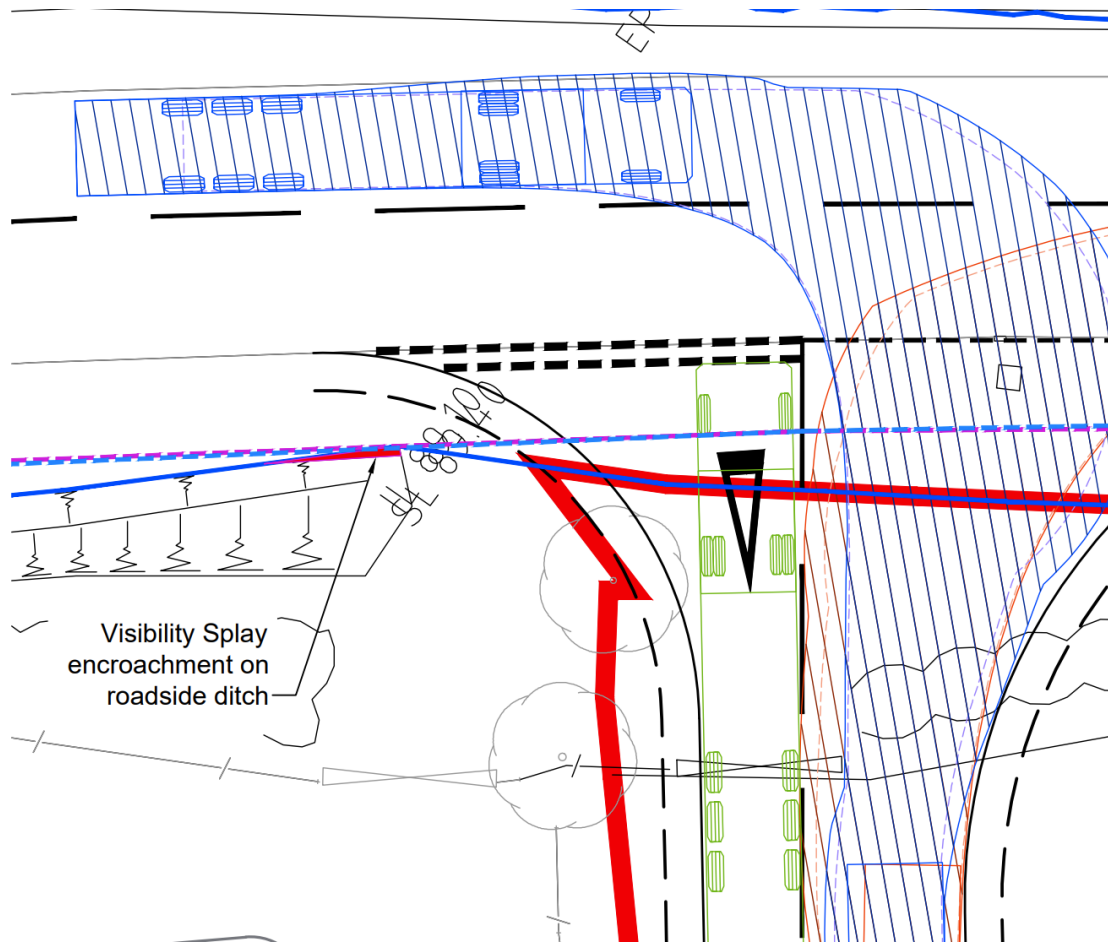


Figure 1: NW corner of Eastern Parcel, showing proposed Access E entrance, and the potential Visibility Splay encroachment identified and marked by VTP, to the left side of this.

- 2.2 Based on its location, there are only 2 possibilities for ownership of the drain: (1) A2Dominion, who own the land adjacent to the Eastern Parcel, at the extreme edge of Elmsbrook Phase 3; and (2) the council, who own the “service strip” - the land immediately adjacent to the B4100 itself, i.e. within the agreed highway boundary line.
- 2.3 According to DMRB CD-127 Cross-sections and headrooms, Figure 2.1.1N1e ‘Dimensions of cross-section components for rural all-purpose roads mainline’ (page 20), single carriageways require a minimum of 2.50 metre verges; on page 13, it is explained that this is within the highway boundary.
- 2.4 Very simple measurements were undertaken with a measuring tape, at and just beyond the corner of the Eastern Parcel immediately adjacent to the B4100 Banbury Road. These were followed by simple calculations. Figures 2(a) and 2(b) below show overlays of the measurement results and calculation information onto: 2(a) a Google Maps aerial view of the location; and 2(b) from the North field site plan 03_006C, from 10/01780/HYBRID.



Figure 2 (a): Aerial View of area/drain, from Google Maps

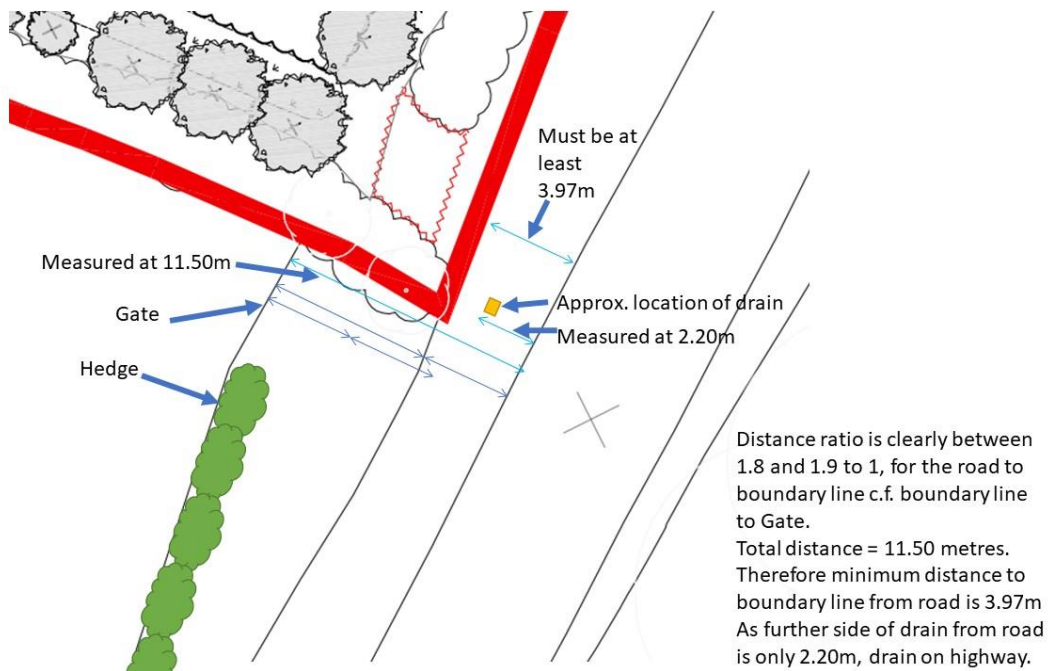


Figure 2 (b): Results shown on view from Plan 03_006C, from 10/01780/HYBRID

2.5 Tape measurement from the road to the gate found this distance to be 11.50 metres. From comparison of the arrows on Figure 2(b), the ratio of the road-to-A2-boundary (red line at this corner, giving a conservative underestimate) to the A2-boundary-to-Gate distances is 1.9:1. This means that the A2 boundary must be at least 3.97 metres from the road; from approximate measurement (a ditch centre is not a clear boundary) it is actually likely to be more 4.0 metres at the defined "corner", and increases heading west along the B4100.

- 2.6 The drain(s) lie within 2.20 metres of the road edge (as shown in Figure 7), which is within the minimum required 2.50 metre width of verge within the highway boundary. It seems clear that, as is common by Riparian ownership at a field boundary, A2Dominion owns up to the middle of the ditch. By measurement and calculation, the corner of the A2Dominion land is at least 4.0 metres from the roadside (at the nearest point).
- 2.7 **Conclusion #1:** This means that the drains and surrounding area lie *outside* of A2Dominion land: the area of up to 4.0 metres at the corner has been adopted by Oxfordshire County Council, as the local council with Highway Authority, as part of the highway boundary.
- 2.8 Since the visibility splay point starts at 2.40 metres from the road edge (in the centre of the proposed Access E), it is immediately logical that any visibility splay drawn west from here, with the very gentle curve present, *cannot possibly* cut across the boundary into A2Dominion land. Even if it did, A2Dominion are not allowed to undertake any action to prevent another developer who is constructing an adjacent Ecotown phase to their own.
- 2.9 **Conclusion #2:** In both of these cases, there could not possibly be a “ransom strip” to be avoided in the visibility splay analysis. This means that the “visibility splay encroachment” stated by VTP is in fact not an encroachment.
- 2.10 The ramifications for this affect the following 4 drawings:
 “4600-1100-T-011 RevF-Site Access E-Construc E Parcel.pdf” (part of design requ. consent)
 “4600-1100-T-075-A - Alternative Site Access - Ghost Island.pdf” (part of Site Visit Itinerary)
 “4600-1100-T-076-A - Alternative Site Access - Simple Priority-Opt 1.pdf” (“)
 “4600-1100-T-077-A - Alternative Site Access - Simple Priority-Opt 2.pdf” (“)
- 2.11 For all 4 of the above drawings, there is a technical error regarding the visibility splays: these should have been drawn back to the *midpoint* of the drain, as opposed to the corner. However, given the A2Dominion clause noted in 2.8, it could have been drawn back even further (though based on the angles involved, it would not require this).
- 2.12 **Conclusion #3:** On all 4 of the drawings listed in 2.10, the highway boundaries are drawn in the wrong place, and the visibility splays are drawn incorrectly; the points referenced as ‘Visibility Splay encroachment on roadside ditch’ and ‘Point of highway boundary that cant [sic] be crossed with visibility splay’ (in all caps) are both incorrect to state so. A clear visibility splay of 120 metres to kerb-side is fully achievable, and thus Access E is viable.
- 2.13 The drawings also each state that the 40 mph visibility splay minimum goes to 90 metres; however, D. M. Mason Consulting state, in their evidence report (EH1, section 9.9), that this figure is incorrect: it should be 120 metres, according to DMRB CD-109 Highway link design (this is given in Table 2.10, assuming the correct design speed has been used: Table 2.5).
- 2.14 **Conclusion #4:** The drawings are therefore all labelled inaccurately: the lines should be ‘Visibility Splay 2.4m x 120m (40 mph)’ and ‘Visibility Splay 2.4m x 90m (30 mph)’. This is why D. M. Mason Consulting state, in their independent evidence report (EH1, sections 9.13-9.14): “the visibility splays at the proposed construction access E do not meet standards. I am uncertain how the splays shown can be considered to be adequate. It is my view that the junction design is unsafe.”

- 2.15 **Conclusion #5:** There is nothing to obstruct an accurately drawn visibility splay going over the area surrounding this drain. Referring back to the drawings for the original Home Farm access permission, granted in 2001 – see Figure 3 – it was found that 210 metres visibility each way is possible there, provided 31 metres of hedge to the north was realigned (NB: the hedge here needs trimming back, which is a triviality; the splay is still there).
- 2.16 Since the proposed Access E entrance sits *within the western 210 m splay*, and is located almost exactly 50 metres from the Home Farm entrance, this means that in theory a visibility splay of 160 metres is possible – more than required for the 120 metres for the 40 mph speed limit.

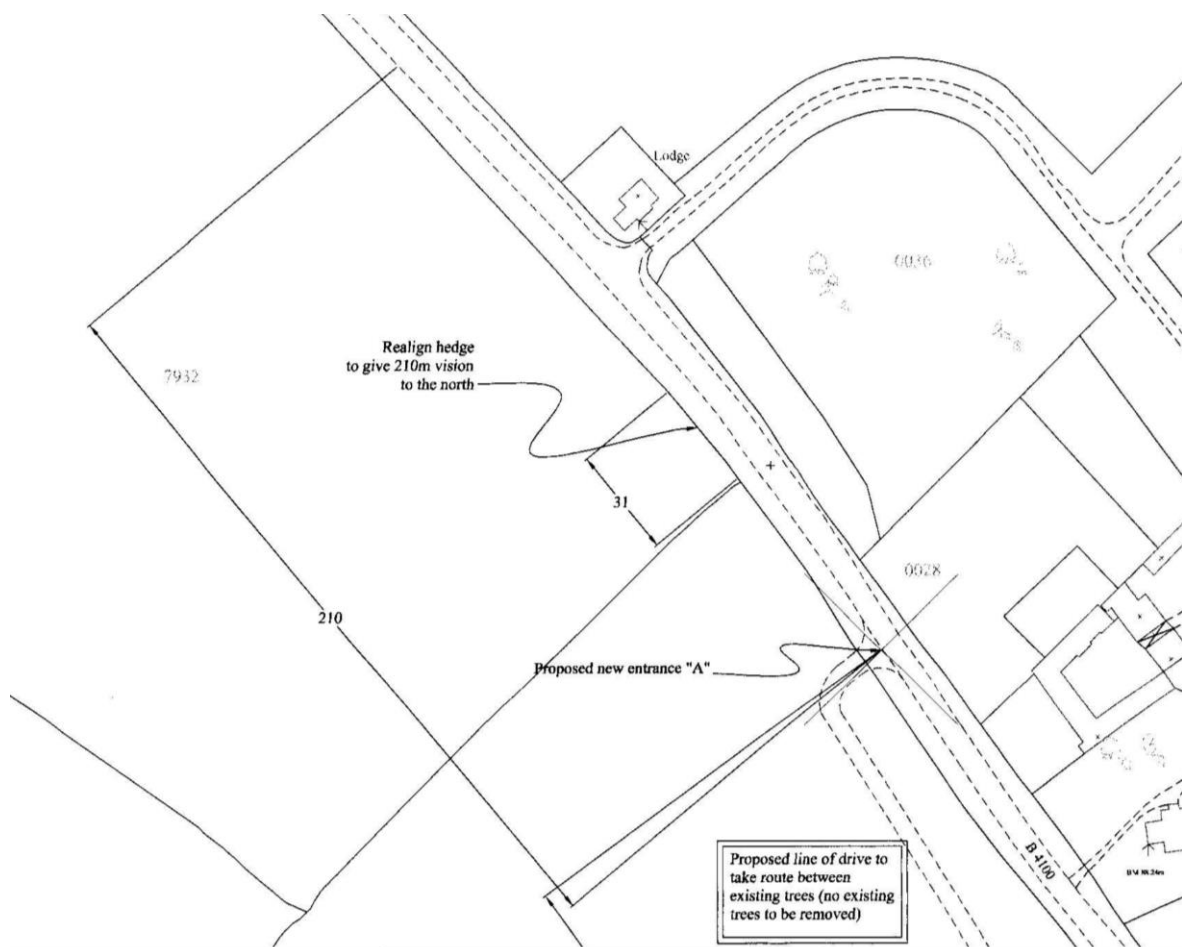


Figure 3: Taken from the Home Farm access Planning Permission 01/01836/LB, from drawing OP4/a by Roger N Cross Services.

3.0 ANALYSIS OF THE OTHER 9th of MARCH 2023 VTP POINTS

- 3.1 While VTP had stated at the 9 March Planning Committee meeting that they could not fit a Ghost Island right-turn lane – as required by CD-123 – for a Priority Junction with over 300 vehicles AADT (i.e. trips per day), there are a further two issues with this comment:
- 3.2 Firstly, VTP stated that this was for 138 homes accessing via the Eastern Parcel, which at the trip rates used would create in excess of 562 trips per day. However, the Eastern Parcel is

only proposed for 120 homes; the other 18 homes proposed for access via Access A and Charlotte Avenue are located in the *Western Parcel*. All this in fact implies is that *slightly fewer homes* could be built and their access only require a 'simple' junction: a simple scaling calculation indicates this would enable up to 74 homes access.

- 3.3 Secondly, VTP have since (30 March 2023) produced "4600-1100-T-075-A - Alternative Site Access - Ghost Island.pdf" – and it was included as part of the Site Visit Itinerary pack on the 17th of April 2023. This includes the same visibility splay issues – but it appears to show that there *is* room to fit the ghost island/right turn lane as required.
- 3.4 **Conclusion #6:** Irrespective of the ghost island noted in 3.3 being unclear on the drawing: either solution given in 3.2/3.3 (plus a correctly drawn visibility splay) would then meet the 40mph requirement of 120 metres in both directions; this means that Access E is viable as a Permanent Access, according to guidelines.
- 3.5 Regarding the point made concerning impacts on the character of Home Farm and St Lawrence's Church: it seems illogical to imply that the junction entrance to Home Farm could not be reconfigured purely due to the visual impact on the historic building of St Lawrence's Church and Home Farm's buildings – when the application is proposing putting 120 homes on the Eastern Parcel with barely any 'buffer' along any edge of it: the housing would have a much more detrimental impact for both St Lawrence's Church and Home Farm, compared to minor modifications to the junction.
- 3.6 **Conclusion #7:** (Relative) Impacts on character does not appear to be a valid reason.
- 3.7 Finally, regarding the point stated that OCC Highways were in support of the proposed modifications of Charlotte Avenue: other Highways and Access objections and evidence prepared by and for ETPG (e.g. EH1/EH2, ETs 1-5) show that OCC Highways *made significant errors* in their assessments of the proposed modifications of Charlotte Avenue: in fact, there are clear technical reasons why OCC Highways *should not* have supported them.
- 3.8 Another significant and relevant point here is regarding the need to remove the canopy-lining trees, as referred to in ETPG's evidence document ET1, "Charlotte Avenue Distance Measurements" – where it is pointed out that in the Tree Policy for Oxfordshire (2022), Policy 11 does not allow tree removal for a road capacity scheme for the scenario which is proposed (which is not mentioned in the Officer's Report for the 9th of March 2023 planning committee, which is where the need to remove the trees is first identified).
- 3.9 **Conclusion #8:** ET1 shows that tree removal is required, but is not allowable under the Tree Policy for Oxfordshire (Policy 11); for this (and other reasons covered in ET1) the Appellant's proposed Access A and B are not technically feasible.
- 3.10 Since it is a road capacity scheme, there is also the Oxfordshire Local Transport and Connectivity Plan (OLTCP), Policy 36. This policy requires that all other options should be explored before undertaking a design such as that proposed (i.e. *if it were feasible*). In the video call meeting of the 23rd of February 2023, OCC Highways confirmed that no other options had been explored with them. Furthermore, by email on the Appellant's legal team also confirmed this (evidence of this is provided in section 5).
- 3.11 **Conclusion #9:** OLTCP Policy 36 is therefore also contravened, as stated at the 9 March 2023 Planning committee meeting.

4.0 PHOTOGRAPHS



Figure 4: View looking East along the B4100, standing 2.4 metres back from the road edge at the location of the proposed Access E. The similar reference point on the Home Farm entrance can be seen in mid-picture, showing alignment with Access E in the visibility splay consented in 2001.



Figure 5: Figure 4: View looking West along the B4100, standing 2.4 metres back from the road edge at the location of the proposed Access E. The drain discussed in this report, located within 2.20 metres from the road edge, can be seen via the light coloured access hatch in mid-picture. The ditch is overgrown currently with weeds; the hedge is actually further to the left: this all simply needs trimming back to restore the visibility splay 'in perpetuity' for Home Farm.



Figure 6: Closer-up view of the drain, also showing where the hedge/weeds on the left are covering the left-hand half of the sunken area.



Figure 7(a): Measuring tape with 0.0 metres located above the edge of the B4100 (NB: there is no kerb or pavement here: the carriageway tarmac is visible on the left side of the photograph.)



Figure 7(b): Measuring tape from Figure 7(a), other end, showing the right hand edge of the drain located within 2.20 metres from the road edge.

5.0 EMAILS REGARDING ALTERNATIVE ACCESS OPTIONS

5.1 In an email from Pete (Bicester Bike Users Group) to the Appellant's lawyers (Cc: NWBA) on the 17th of April 2023, at 15:59, it was noted in relation to a section of the Site Visit Itinerary:

5.2 "Finally, in section G there appears to be drawings relating to the alternative access. It also suggests that there has been a formal assessment by OCC deeming these unsuitable. Can these drawings and the correspondence with OCC be made available please? None of this appears to have been made public record."

5.3 In response (at 16:45 on the same date), the Appellant's lawyer wrote in reply:

5.4 "In relation to G, the original wording was my mistake (apologies) and this has been corrected in the attached."

5.5 The original version of this section, entitled "**Alterative Access Options**", read:

- A number of Alternative Access Options to the Eastern Parcel have been considered:
 - 1) Drawing Ref: 4600-1100-T-075 Rev A – Ghost Island Right Turn Lane – OCC accept that this is not deliverable in the highway land available.
 - 2) Drawing Ref: 4600-1100-T-076 Rev A – Simple Priority Junction - OCC accept that this is not deliverable in the highway land available, due to visibility splays.
 - 3) Drawing Ref: 4600-1100-T-077 Rev A – Ghost Island Right Turn Lane - OCC accept that this is not deliverable in the highway land available, due to visibility splays and the junction spacing.

5.6 The updated version of this section, kept for the final submitted version, reads as follows:

- A number of Alternative Access Options to the Eastern Parcel have been considered:
 - 4) Drawing Ref: 4600-1100-T-075 Rev A – Ghost Island Right Turn Lane – VTP suggest that this is not deliverable within the highway land available.
 - 5) Drawing Ref: 4600-1100-T-076 Rev A – Simple Priority Junction - VTP suggest that this is not deliverable within the highway land available, due to visibility splays.
 - 6) Drawing Ref: 4600-1100-T-077 Rev A – Ghost Island Right Turn Lane - VTP suggest that this is not deliverable within the highway land available, due to visibility splays and the junction spacing.

5.7 **Conclusions:** This change indicates that OCC Highways had never accepted anything regarding these *concepts*, not just the drawings – because they had never been submitted to OCC Highways for consideration or alternative option exploration. The alternative options were published on 30 March 2023, long after OCC Highways had finished all assessment of this case. NWBA applaud the production of these documents for consideration, even at this late stage, and once the visibility splay errors are discussed, recognised and corrected, then Access E would be viable and resolve a significant issue for all parties.