

Access Appraisal

client :	Mrs Rachel Foley
project :	Access Appraisal of Two Sites within Horsford, Norfolk
date :	March 2018

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Access Appraisal of Two Sites within Horsford, Norfolk

Mrs Rachel Foley

Revision	Description	Issued by	Date	Checked by
00	First Draft	SC	2018 / 03 / 22	MBS

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date : **2018 March 22**

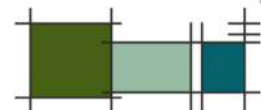
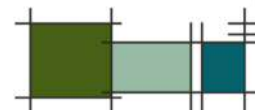


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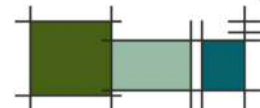
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List of Acronyms used within this report

BDC	Broadland District Council
DMRB	Design Manual for Roads and Bridges
DfT	Department for Transport
GNLP	Greater Norwich Local Plan
HE	Highways England
HELAA	Housing and Economic Land Availability Assessment
MfS 1	Manual for Streets - <i>published March 2007</i>
MfS 2	Manual for Streets - Volume 2 - <i>published September 2010</i>
NCC	Norfolk County Council
NPPF	National Planning Policy Framework
PIA	Personal Injury Accident
SBD	Secure by Design - Homes 2016 - <i>published February 2016</i>
SUDS	Sustainable Urban Drainage System
TRICS	Trip Rate Information Computer System - <i>national database of development trip rates</i>



1. Introduction

Background

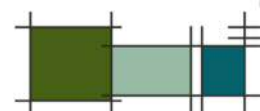
- 1.1 Orari Limited has been instructed on behalf of Mrs Rachel Foley ('The Client') to provide a transport and highways Access Appraisal of the following two sites within Horsford, Norfolk:
 - Land at Glebe Farm, off Holly Lane/Reepham Road, Horsford and
 - Land at Lodge Farm, Holt Road, Horsford.
- 1.2 This Access Appraisal report is required to support a submission regarding the two Appraisal Sites that will be made on behalf of the Client by Bidwells LLP in March 2018, in response to the emerging Greater Norwich Local Plan *Regulation 18 Consultation*.
- 1.3 A copy of a detailed location plan of each of the sites is attached at Appendix 1.

Brief

- 1.4 The purpose of this Access Appraisal is to demonstrate whether an appropriate level of access may be provided, in principle, to each of the Appraisal Sites to support the requirements of potential development within each site curtilage. The Local Planning Authority (Broadland District Council) and the Local Highway Authority (Norfolk County Council) have not been formally consulted by Orari Ltd regarding these proposals.

Reference Documents

- 1.5 Options for the proposed site layout and access requirements detailed within this report have been assessed utilising National and local design guidance, including the following principal documents:
 - 'Manual for Streets 1' - DfT 2007;
 - 'Manual for Streets 2' - CIHT 2010;
 - 'Norfolk Residential Design Guide' - Norfolk County Council, 1998;
 - 'Safe, Sustainable Development' - Norfolk County Council, November 2015;
 - 'Parking Standards for Norfolk 2007' - Norfolk County Council, 2007;
 - 'Infrastructure, Service and Amenity Requirements for New Development' - Norfolk County Council, April 2014;
 - 'Secure by Design - Homes 2016' - ACPO/SBD, February 2016; and
 - 'Design Manual for Roads and Bridges' - Department for Transport.



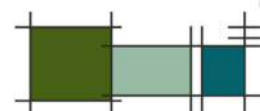
2. The Appraisal Sites

Appraisal Sites included with the emerging GNLP Regulation 18 Consultation

- 2.1 The Client's Appraisal Sites are included within the (January - March 2018) emerging Greater Norwich Local Plan (GNLP) *Regulation 18 public consultation* documents:
- Appraisal Site 1 is listed as site "**GNLP 0419 - Land at Holly Lane/Reepham Road, Glebe Farm, Horsford**" and
 - Appraisal Site 2 is listed as site "**GNLP 0422 - Land at Lodge Farm, Horsford**".
- 2.2 Extracts from the GNLP '*Housing and Economic Land Availability Assessment*' (HELAA, dated December 2017) regarding the Appraisal Sites, that have been utilised as 'supporting evidence' for the emerging Greater Norwich Local Plan (GNLP) *Regulation 18 public consultation*, are provided at Appendix 2 for ease of reference.

Appraisal Site 1 - Land at Holly Lane/Reepham Road, Glebe Farm, Horsford

- 2.3 Appraisal Site 1, occupies a greenfield site of approximately 40.65 hectares between the A1270 Norwich Northern Distributor Road and the C261 Reepham Road, south east of Drayton Lane. A copy of a site location plan is attached at Appendix 1.
- 2.4 The boundaries of Appraisal Site 1 are formed by the following features:
- North West : by the south eastern frontage of the recently realigned Drayton Lane, and its two new roundabouts;
 - North East : by the south western frontage of the A1270 Norwich Distributor Road;
 - West : by the eastern frontage of the C261 Reepham Road; and
 - South : by the northern frontage of Holly Lane.
- 2.5 The GNLP HELAA report considers Appraisal Site 1 to be suitable for "*Residential development of approx 750 dwellings, with associated access and open space*".
- 2.6 Vehicular access to Appraisal Site 1 is currently achieved via agricultural field accesses on Holly Lane. It is considered that the vehicular trip generation associated with the prevailing agricultural use of Appraisal Site 1 is likely to be very low, and for the purposes of this assessment is considered negligible.

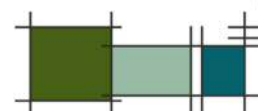


Local Highway Characteristics – Appraisal Site 1

- 2.7 Holly Lane is a Norfolk standard rural single carriageway road, of circa 6m width that extends in an easterly direction from its junction with Reepham Road to circa 20m east of the vehicular entrance to Drayton Farms. Holly Lane has no footways or street lighting, and is subject to the national speed limit (ie 60mph).
- 2.8 Prior to the recent construction of the A1270 Norwich Northern Distributor Road (NDR), Holly Lane functioned as a well-used, peak hour 'rat run' for commuters travelling between Reepham Road and the B1149 Holt Road. The eastern section of Holly Lane was 'stopped up' to facilitate the NDR route. Thus, Holly Lane is now a cul de sac providing vehicular access from Reepham Road to Drayton Farms and an electricity substation. Pedestrian and cycle access from the eastern end of Holly Lane to the 'stopped up' southern section of Holt Road is possible via an NDR underpass.
- 2.9 Reepham Road is a Norfolk standard rural single carriageway road, of circa 6m width that, within the immediate vicinity of the Appraisal Site, extends in a north-easterly direction from Hellesdon towards Thorpe Marriott. Reepham Road has no footways or street lighting, and within the vicinity of the Appraisal Site is subject to a 50 mph speed limit.
- 2.10 Reepham Road was realigned as part of the NDR side-roads scheme, to facilitate the provision of a roundabout junction with the realigned Drayton Lane. The highway SUDS attenuation pond for these new highways occupies the north-western corner of the Appraisal Site.
- 2.11 Drayton Lane was realigned to form a new circa 6.5m width single carriageway road between the new (aforementioned) Reepham Road roundabout and an NDR roundabout. The old Drayton Lane alignment has been utilised to provide pedestrian and 'off-road' cycle routes between the two roundabouts. Drayton Lane has no street lighting, and has a speed limit of 60mph.
- 2.12 The length of the NDR that forms the north-eastern boundary of Appraisal Site 1 is a dual carriageway road that connects the A140 Norwich Road roundabout near Norwich Airport at its southern end, with the Drayton Lane roundabout at its northern end.

Appraisal Site 2 - Land at Lodge Farm, Horsford

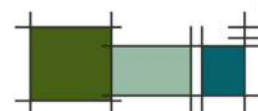
- 2.13 Appraisal Site 2, occupies a greenfield site of approximately 1.65 hectares on the eastern side of the B1149 Holt Road near Horsford Village Centre. A copy of a site location plan is attached at Appendix 1.
- 2.14 The Appraisal Site is essentially a small parcel of a large arable greenfield site. Thus, the site's northern, eastern and southern boundaries are arable agricultural land. The Appraisal Site's western boundary is formed by the rear boundary fences of existing Holt Road residential properties (numbers 78 – 94 Holt Road).



- 2.15 The GNLP HELAA report considers Appraisal Site 2 to be suitable for *“Residential development of approx. 40 dwellings with an improved access off the Holt Road”*.
- 2.16 Appraisal Site 2 is an area of open arable farmland, currently in pastoral agricultural use. It is considered that the vehicular trip generation associated with the prevailing agricultural use of Appraisal Site 2 is likely to be very low, and for the purposes of this assessment is considered to be negligible.

Local Highway Characteristics – Appraisal Site 2

- 2.17 Vehicular access to Appraisal Site 2 is currently achieved from Holt Road by:
- utilising the Lodge Farm concrete access road to travel circa 75m eastwards;
 - then turning right, through 90 degrees, to travel a further circa 130m southwards, via an existing agricultural vehicle track to the Appraisal Site boundary.
- 2.18 The B1149 Holt Road within Horsford Village, is a standard Norfolk single carriageway road, of circa 6m width, with two circa 1.8m footways, and street lighting commensurate with the Horsford village 30 mph speed limit.
- 2.19 Vehicular access to the Lodge Farm agricultural properties at the rear of no 106 Holt Road, and the adjacent arable farmland is provided via a circa 3.1m width single carriageway, concrete access road, that extends eastwards from the Holt Road carriageway for circa 75m. Agricultural vehicular tracks extend from the end of the Lodge Farm concrete access road, along the field boundaries.
- 2.20 The Lodge Farm concrete access road has no footways, designated speed limit, or street lighting.
- 2.21 The western, (Holt Road) end of the Lodge Farm concrete access road is located opposite the Horsford branch of the Co-Op and Horsford Post Office. The Co-Op's Holt Road frontage and car park entrance is protected by a 'no waiting at any time' traffic regulation order – ie 'double yellow lines' extend along the western side of the Holt Road carriageway from immediately south of the Co-Op/Post Office car park entrance northwards to the junction of Corner Lane.



3. Local Issues

Highway Safety

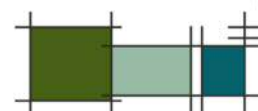
- 3.1 A qualitative highway safety assessment has been undertaken of the highway network within the immediate vicinity of the Appraisal Sites, based upon a review of the freely available to view Personal Injury Accident (PIA) data provided on the Crashmap website (www.crashmap.co.uk) for the most recent five period, 2013 - 2017 inclusive.

Appraisal Site 1

- 3.2 The western sections of the NDR (between the A1067 Fakenham Road and the A140 Norwich Road) were opened for public use in autumn 2017.
- 3.3 The construction of the NDR, its new junctions, associated side road improvements, diversions and road closures, has severely undermined the (highway safety related) value of the Crashmap PIA data recorded within the immediate vicinity of the NDR during the most recent five year period. Highway geometry, traffic patterns and traffic flows that may have contributed towards any of the recorded PIAs on the local highway network, will inevitably have been disrupted by the construction and opening of the NDR.
- 3.4 It is considered that utilisation of the Crashmap PIA data that relates to the local highway network within the immediate vicinity of Appraisal Site 1 would not provide a realistic forecast of future traffic movements and/or highway safety.
- 3.5 However, it is reasonable to assume that as all of the NDR's new roads, junctions and associated highway improvements were 'Safety Audited' before they were 'opened' for public use, the local road network within the immediate vicinity of Appraisal Site 1 may be considered to meet high safety standards of road design. Thus, it is also reasonable to conclude that there are no local highway network safety issues to preclude the use of the Appraisal Site 1 for future development.

Appraisal Site 2

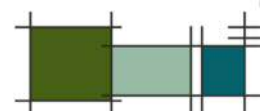
- 3.6 The plan and Crashmap PIA details attached at Appendix 3 reveal that one PIA (1 no. Slight severity) was recorded on Holt Road within the immediate vicinity of Appraisal Site 2 during the five-year study period. No Serious or Fatal severity PIAs were recorded. For ease of reference, Table 3 below provides a summary of the Crashmap website PIA data.



Holt Road - Recorded PIAs : 2013 – 2017 (inclusive)						
No	Severity	Date	Vehs	Time	Casualties	PIA Cause Summary
1	Slight	Sun 29/03/2015	2 (cars)	15.10	2 (car driver)	Veh 1 (car) driving along Holt Road, collides with the rear of Veh 2 (car) that had slowed down on Holt Road to turn left. Veh 1 (car) driver was Slightly injured. Veh 2 (car) driver was Slightly injured.

Table 3 : Summary of the recorded PIA within the immediate vicinity of Appraisal Site 2.

- 3.7 It is acknowledged that it is not possible to ascertain the precise nature of the recorded incidents or any of the contributory factors from the Crashmap website's freely available to view PIA data.
- 3.8 However, it is reasonable to conclude, based upon a review of the recorded PIA data, that the single recorded PIA on Holt Road, (that occurred immediately outside the Horsford Co-Op / Post Office entrance) was an isolated incident, as this is the only PIA recorded within central Horsford during the five-year study period.
- 3.9 Moreover, the recorded PIA was not associated with, nor could be attributable to, traffic associated with Appraisal Site 2. It is therefore reasonable to conclude that there are no highway safety issues to preclude the use of Appraisal Site 2 for future development.



4. Potential Development – Appraisal Site 1

HELAA Comments

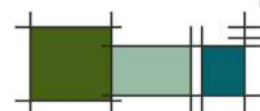
- 4.1 The GNLP HELAA report considers Appraisal Site 1 (GNLP 0419) to be suitable for *“Residential development of approx. 750 dwellings, with associated access and open space”*. For ease of reference, a copy of the GNLP HELAA evidence is attached at Appendix 2.
- 4.2 The transport-related GNLP HELAA ‘objections’ to proposed development within Appraisal Site 1 are cited as:
- *“This is a major 40 ha site isolated from existing development along the Reepham Road that is over 1,200 metres from facilities in Horsford; and, is also distant from Drayton and Thorpe Marriott.”*
 - *“To form new access points from either the Reepham Road, Drayton Lane, or Holly Lane would require highways mitigations as speed limits on these roads are in the order of 50-60 mph.”*

Potential Development

- 4.3 It is considered that describing Appraisal Site 1 as a:
- Mixed-use development, comprising a variety of employment, leisure, retail, education and residential uses”*
- accords more closely with the NPPF concept of ‘sustainable development’ than the HELAA description (cf para 4.1 above) and thus increases the site’s potential economic viability.
- 4.4 The highway design and layout of Appraisal Site 1 will demonstrate cognisance of the reference documents listed within para 1.6 above, and accord with Manual for Streets and NCC’s residential design guidance to ensure that vehicle speeds within the Appraisal Site’s curtilage do not exceed 20mph.

Vehicular Access to Appraisal Site 1

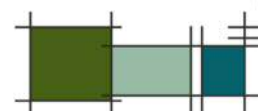
- 4.5 A mixed use development of over 40 hectares is usually provided with at least three discrete vehicular access/egress connections to the local highway network, to ensure that there is always a ‘free’ vehicular route for Emergency Services vehicles to access/egress the development if required.



- 4.6 It is considered that Norfolk County Council Highways Engineers are likely to recommend that planning permission be refused (on highway safety grounds) for applications for any of the following potential direct vehicular access/egress routes to/from Appraisal Site 1:
- Provision of a new junction onto the NDR dual carriageway;
 - Creation of another 'arm' at the NDR / Drayton Lane roundabout; and
 - Creation of another 'arm' at the Reepham Road / Drayton Lane roundabout – this would also require relocating the highway SUDS attenuation ponds, and is unlikely to be cost-effective.
- 4.7 It is envisaged that Appraisal Site 1 vehicular access/egress may potentially be provided via the following routes:
- a) A new roundabout at the junction of Holly Lane and Reepham Road – on the 'old' Holly Lane alignment, so that the existing, adjacent Hall Lane junction may form one 'arm' of the roundabout;
 - b) One or two access roads onto Holly Lane, and thence via the proposed Reepham Road roundabout onto the local highway network; and
 - c) Two 'T' junctions onto Reepham Road – each with local (Reepham Road) carriageway widening to form a short 'right turning lane'.
- 4.8 It is envisaged that the provision of new Appraisal Site 1 junctions, as described above, will also necessitate the reduction of the existing speed limits on the local highway network (highway safety) within the immediate vicinity of Appraisal Site 1, ie:
- Holly Lane: currently 60 mph speed limit – could be reduced to a 20mph speed limit, in accordance with Manual for Streets;
 - Reepham Road; currently 50 mph speed limit - could be reduced to a 30 mph speed limit along the Appraisal Site 1 frontage, ie between the proposed Reepham Road / Holly Lane roundabout and the existing Reepham Road / Drayton Lane roundabout.

Cycling

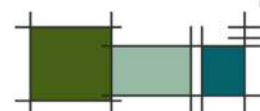
- 4.9 Cycling is a realistic option for many local journey purposes, and has the potential to replace car journeys for trips of less than 5km. A cycling time of twenty minutes (a distance of approximately five kilometres, assuming an 'Average Adult' cycling speed of 15 km/h) is usually considered the maximum 'acceptable' distance for cycle trips to directly access local facilities or amenities.
- 4.10 It is envisaged that the proposed mixed-use development layout within Appraisal Site 1 would demonstrate good pedestrian and cyclist permeability that accords with 'Secure by Design' standards.



- 4.11 The NDR project has provided several new pedestrian and cycle routes within the immediate vicinity of Appraisal Site 1. Thus, the community services and facilities within Horsford may be easily accessed by cycle from the Appraisal Site, via the new cycle facilities on Drayton Lane, or via the 'stopped up' eastern section of Holly Lane and thence the southern ('stopped up') section of Holt Road.

Public Transport

- 4.12 Horsford currently benefits from good bus based public transport connections, including regular services to Norwich, Aylsham and Cromer. It is envisaged that a mixed-use development within Appraisal Site 1 could generate sufficient numbers of new bus passengers to encourage local bus operators to 'extend' some of their existing bus routes via the Appraisal Site 1 curtilage.
- 4.13 The provision of bus services within Appraisal Site 1 would benefit Appraisal Site residents, and enable Appraisal Site businesses to offer their employees and clients an alternative mode of transport to the private car.



5. Potential Development – Appraisal Site 2

HELAA Comments

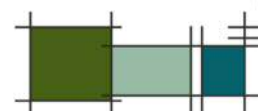
- 5.1 The GNLP HELAA report considers Appraisal Site 2 (GNLP Site 0422) to be suitable for a *“Residential development of up to 40 dwellings with an improved access off the Holt Road”*. For ease of reference, a copy of the GNLP HELAA evidence is attached at Appendix 2.
- 5.2 The transport-related GNLP HELAA ‘objections’ to proposed development within Appraisal Site 2 are cited as:
- *“This is a 1.6 ha site that has a long private access road from the Holt Road”*
 - *“Based on current evidence, there are significant constraints to creating a suitable access and achieving an adequate visibility splay onto the Holt Road.”*
- 5.3 The Highway Safety review (para 3.5 et seq above) has revealed that there are no highway safety issues to preclude development within Appraisal Site 2.

Potential Development

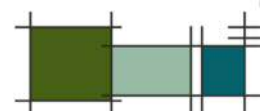
- 5.4 It is considered that describing Appraisal Site 2 as a:
- “Residential led development, along with the conversion of existing barns on the site to retail, residential and leisure uses, with vehicular and pedestrian access to Holt Road via an improved Lodge Farm access road ”*
- accords more closely with the NPPF concept of ‘sustainable development’ than the HELAA description (cf para 5.1 above) and thus increases the site’s potential economic viability.
- 5.5 The highway design and layout of Appraisal Site 2 will demonstrate cognisance of the reference documents listed within para 1.6 above, and accord with Manual for Streets and NCC’s residential design guidance to ensure that vehicle speeds on the improved access road and within the Appraisal Site’s curtilage do not exceed 20mph.

Vehicular Access to Appraisal Site 2

- 5.6 It is envisaged that the highway design and layout of Appraisal Site 2 will demonstrate cognisance of the reference documents listed within para 1.6 above, and is likely to include at least the following elements:
- The existing Lodge Farm concrete access road will need to be ‘improved’ to accord with NCC ‘Access Road’ standards, so that it may be adopted (as highway maintainable at public expense) post construction. It is envisaged that the minimum NCC requirement is likely to include a 4.8m width carriageway and at least one 1.8m width footway;



- The Lodge Farm Access Road 'extension' to facilitate development within Appraisal Site 2 ie a new, (north-south alignment) road between the Appraisal Site and the eastern end of the existing Lodge Farm access road, will also need to be built to NCC 'adoptable' standards. It is envisaged that the minimum NCC requirement for this access road is also likely to include a 4.8m width carriageway and at least one 1.8m width footway;
- The required (Manual for Streets compliant) visibility splays of 2.4m x 43m may be achieved at a widened Lodge Farm access road / Holt Road junction, utilising land within the existing public highway and land within the Client's ownership; and
- The proposed highway design and layout of Appraisal Site 2 will include suitable sized turning heads to enable all vehicles to access/egress the Appraisal Site curtilage and the Lodge Farm access road in forward gear.



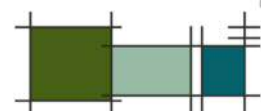
6. Summary and Conclusions

Summary

- 6.1. Orari Limited has been instructed on behalf of Mrs Rachel Foley ('The Client') to provide a transport and highways Access Appraisal of the following two sites within Horsford, Norfolk:
- Land at Glebe Farm, off Holly Lane/Reepham Road, Horsford and
 - Land at Lodge Farm, Holt Road, Horsford.
- 6.2 The purpose of this Access Appraisal is to demonstrate whether an appropriate level of access may be provided, in principle, to each of the Appraisal Sites to support the requirements of potential development within each site curtilage.
- 6.3 The Client's Appraisal Sites are included within the (January - March 2018) emerging Greater Norwich Local Plan (GNLP) *Regulation 18 public consultation* documents:
- Appraisal Site 1 is listed as site "**GNLP 0419 - Land at Holly Lane/Reepham Road, Glebe Farm, Horsford**" and
 - Appraisal Site 2 is listed as site "**GNLP 0422 - Land at Lodge Farm, Horsford**".
- 6.4 A qualitative highway safety assessment has been undertaken of the local Horsford highway network surrounding the Appraisal Sites. It is considered that there are no significant prevailing highway safety concerns to preclude development within the Appraisal Sites.

Appraisal Site 1

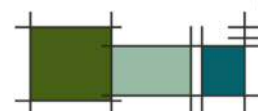
- 6.5 The review (cf para 4.1 et seq above) of the potential use of Appraisal Site 1 for a mixed-use development, comprising a variety of employment, leisure, retail, education and residential uses, with vehicular access off Reepham Road and Holly Lane, suggests that:
- a) there are no traffic generation and highway safety issues to preclude the provision of a mixed-use development, comprising a variety of employment, leisure, retail, education and residential uses, within the Appraisal Site 1 curtilage;
 - b) the highway design and layout of Appraisal Site 1 would demonstrate cognisance of the reference documents listed within para 1.6 above, and accord with Manual for Streets and NCC's residential design guidance to ensure that vehicle speeds within the Appraisal Site's curtilage do not exceed 20mph;



- c) Vehicular access/egress for Appraisal Site 1 may potentially be provided via the following routes:
- A new roundabout at the junction of Holly Lane and Reepham Road – on the ‘old’ Holly Lane alignment, so that the existing, adjacent Hall Lane junction may form one ‘arm’ of the roundabout;
 - One or two access roads onto Holly Lane, and thence via the proposed Reepham Road roundabout onto the local highway network; and
 - Two ‘T’ junctions onto Reepham Road – each with local (Reepham Road) carriageway widening to form a short ‘right turning lane’.
- d) The provision of new junctions, as described above will require the reduction of the existing speed limits within the immediate vicinity of Appraisal Site 1, ie:
- the Holly Lane: currently 60 mph speed limit - could be reduced to a 20mph speed limit, in accordance with Manual for Streets;
 - Reepham Road; currently 50 mph speed limit - could be reduced to a 30 mph speed limit along the Appraisal Site 1 frontage, ie between the proposed Reepham Road / Holly Lane roundabout and the existing Reepham Road / Drayton Lane roundabout.
- e) It is envisaged that the proposed mixed-use development layout within Appraisal Site 1 would demonstrate good pedestrian and cyclist permeability that accords with ‘Secure by Design’ standards. Thereby, enabling local cyclists to easily access the community services and facilities within Horsford, via the new cycle facilities on Drayton Lane, and/or via the ‘stopped up’ eastern section of Holly Lane and thence the southern (‘stopped up’) section of Holt Road; and
- f) A mixed-use development within Appraisal Site 1 could generate sufficient numbers of new bus passengers to encourage local bus operators to ‘extend’ some of their existing (Norwich to Aylsham and Cromer) bus routes via the Appraisal Site 1 curtilage. The provision of regular bus services would benefit Appraisal Site residents, and enable Appraisal Site businesses to offer their employees and clients an alternative mode of transport to the private car.

Appraisal Site 2

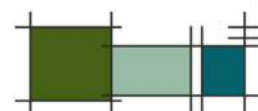
- 6.6 The review (cf para 5.1 et seq above) of the potential use of Appraisal Site 2 as a residential led development, along with the conversion of existing barns on the site to retail, residential and leisure uses, with vehicular and pedestrian access to Holt Road via an improved Lodge Farm access road, suggests that:



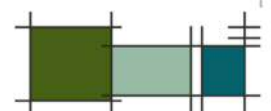
- a) there are no traffic generation and highway safety issues to preclude development within Appraisal Site 2;
- b) the existing Lodge Farm concrete access road will be 'improved' to accord with NCC 'Access Road' standards, so that it may be adopted (as highway maintainable at public expense). It is envisaged that the minimum NCC requirement is likely to include a 4.8m width carriageway and at least one 1.8m width footway;
- c) the Lodge Farm Access Road 'extension' to facilitate development within Appraisal Site 2 ie a new, (north-south alignment) road between the Appraisal Site and the eastern end of the existing Lodge Farm access road, will be built to NCC 'adoptable' standards. It is envisaged that the minimum NCC requirement for this access road is also likely to include a 4.8m width carriageway and at least one 1.8m width footway;
- d) the required (Manual for Streets compliant) visibility splays of 2.4m x 43m may be achieved at a widened Lodge Farm access road / Holt Road junction, utilising land within the existing public highway and land within the Client's ownership; and
- e) the proposed highway design and layout of Appraisal Site 2 will include suitable sized turning heads to enable all vehicles to access/egress the Appraisal Site curtilage and the Lodge Farm access road in forward gear.

Conclusions

- 6.7 In conclusion, this Access Appraisal has demonstrated that there are no transport or highway reasons why the Client's Appraisal Sites within Horsford should not be considered suitable for promotion for development within the emerging Greater Norwich Local Plan *Regulation 18 Consultation*.
- 6.8 Moreover, there are no transport and highways reasons why the Appraisal Sites should not be allocated by Broadland District Council as follows:
 - **Appraisal Site 1 (GNLP 0419) - Land at Holly Lane/Reephams Road, Glebe Farm, Horsford:** for a Mixed-use development, comprising a variety of employment, leisure, retail, education and residential uses; and
 - **Appraisal Site 2 (GNLP 0422) - Land at Lodge Farm, Horsford:** for Residential led development, along with the conversion of existing barns on the site to retail, residential and leisure uses, with vehicular and pedestrian access to Holt Road via an improved Lodge Farm access road.



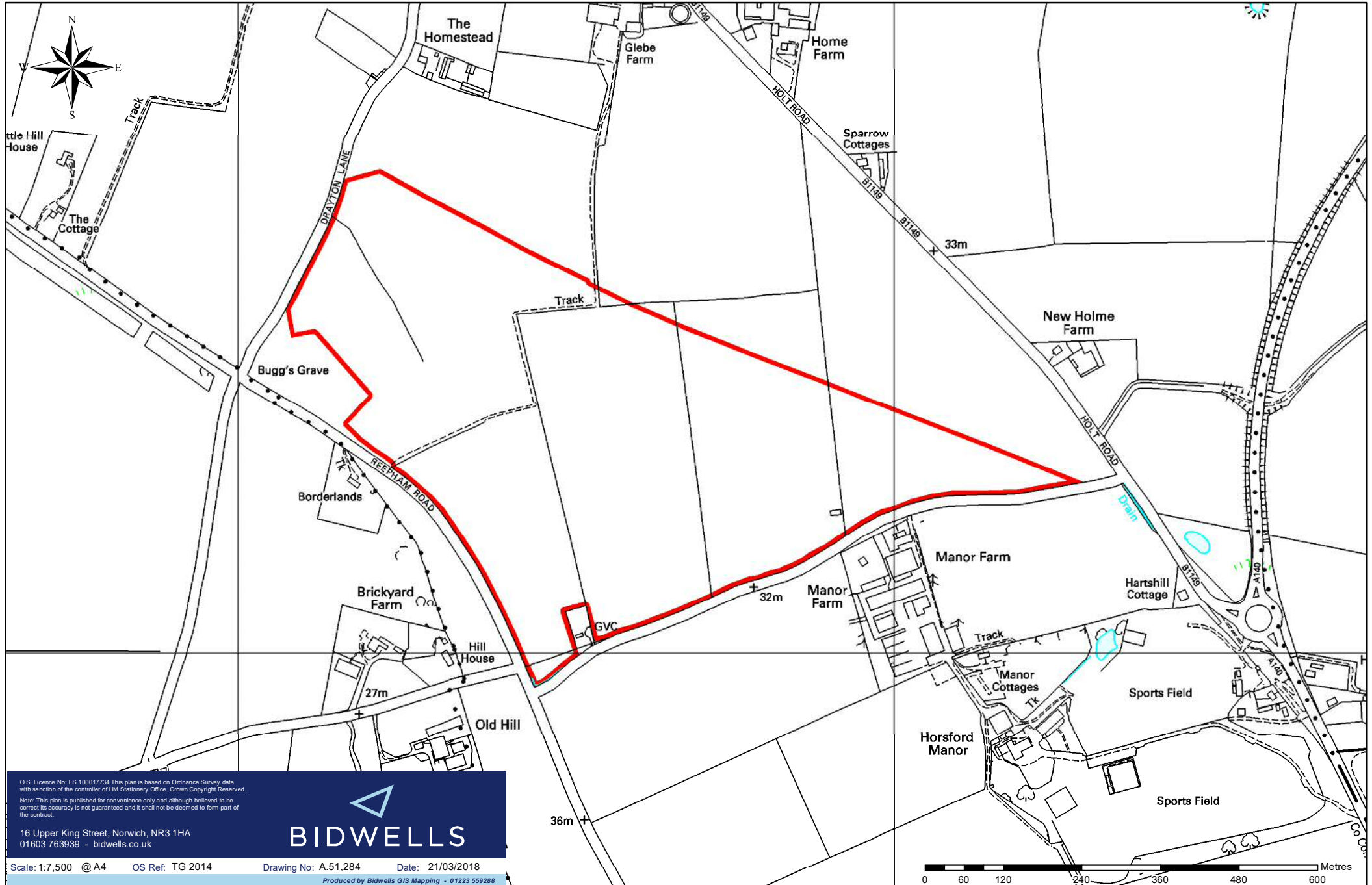
Appendices



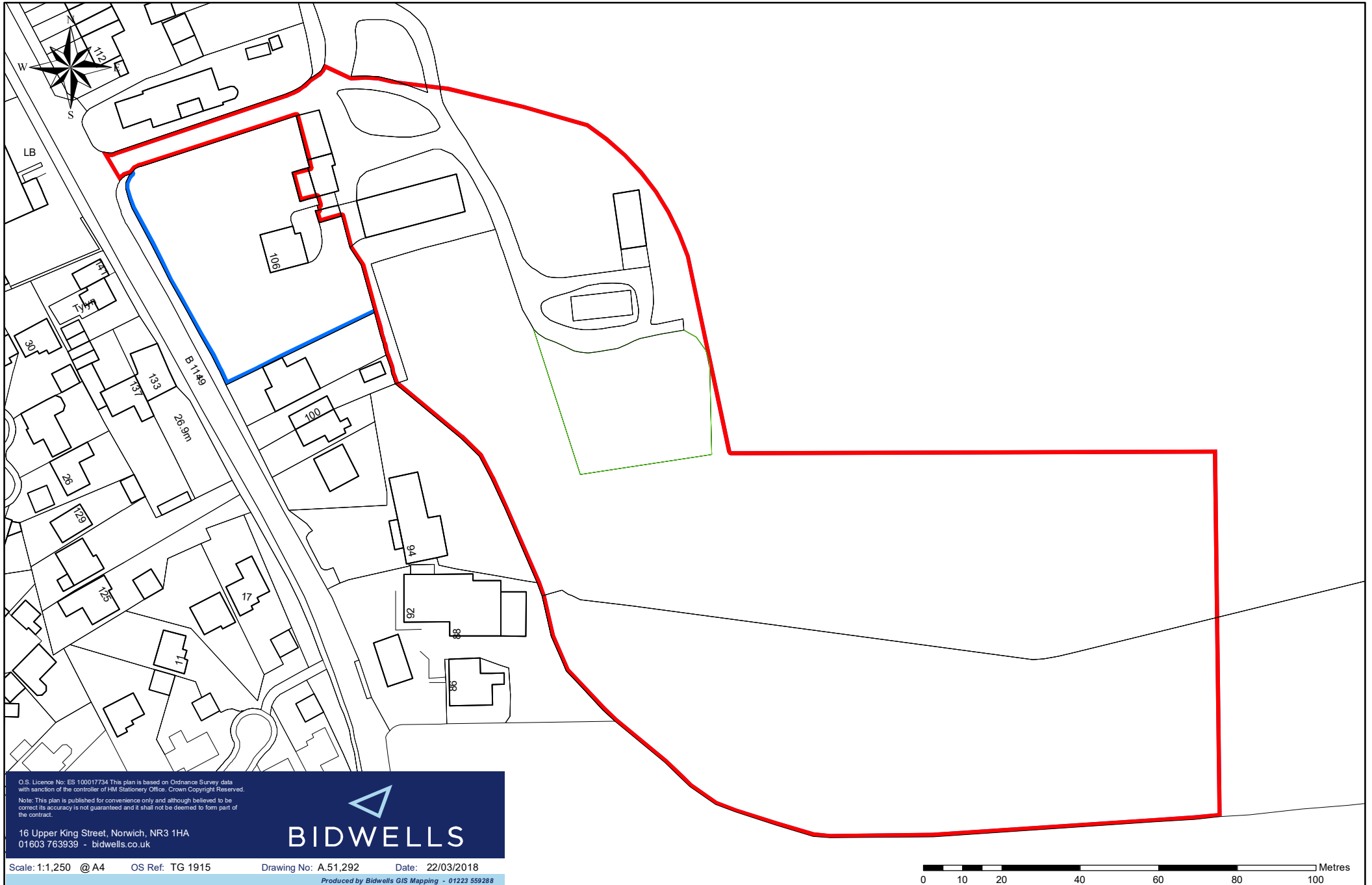
Appendix 1

Appraisal Site Location Plans

Glebe Farm South, Horsford

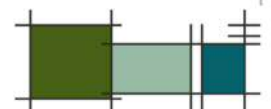


Land at Lodge Farm, Horsford



Appendix 2

Extracts from GNLP HELAA



Suitability Assessment

Site reference **GNLP0419**Site Area **40.65 hectares****LOCATION**Land at Holly Lane/Reepham Road
Glebe Farm**PROPOSED DEVELOPMENT**

Residential development of approx. 750 dwellings, with associated access and open space.

District **Broadland****CONSTRAINTS ANALYSIS**

Access

Accessibility to Services

Utilities Capacity

Utilities Infrastructure

Contamination and Ground Stability

Flood Risk

Market Attractiveness

Amber

Amber

Amber

Green

Green

Green

Green

IMPACTS ANALYSIS

Significant Landscapes

Townscapes

Biodiversity and Geodiversity

Historic Environment

Open Space and GI

Transport and Roads

Compatibility with Neighbouring Uses

Green

Amber

Amber

Green

Green

Amber

Green

SITE SUITABILITY CONCLUSIONS

This is a major 40 ha site isolated from existing development along the Reepham Road that is over 1,200 metres from facilities in Horsford; and, is also distant from Drayton and Thorpe Marriott. The site's isolation from existing development presents townscape considerations and as greenfield land inside the route of the NDR there are landscape impacts to consider as well. To form new access points from either the Reepham Road, Drayton Lane, or Holly Lane would require highways mitigations as speed limits on these roads are in the order of 50-60 MPH. The north-east and western boundaries of the site are adjacent to the Northern Distributor Road meaning some constraints possibly exist in relation to noise. The issues identified are important but are not absolute constraints and so the site is concluded as suitable for the land availability assessment.

For the purposes of the HELAA capacity assessment this site is considered to be **SUITABLE**

Availability and Achievability Assessment

Availability and Achievability Conclusions

The proposer has indicated that the site is likely to be AVAILABLE in the following timescale:	Immediately	(timescales have not been specified by the proposer if these fields left blank)
The proposer has indicated that the site is likely to be DEVELOPABLE in the following timescale:	Up to 5 years (by April 2021)	

In terms of site viability, this site has been submitted by a landowner/promoter as viable for the form of development proposed and is assumed to be developable within the plan period in accordance with the timescales above (where given). Further area-wide work on viability typologies will be done as plan-making progresses and will inform decisions on viability.

Overall Conclusions for Site GNLP0419

Based on the site suitability analysis it is considered that this site is appropriate for the land availability assessment, subject to any caveats in the Suitability Conclusions.

Suitability Assessment

Site reference **GNLP0422**Site Area **1.65 hectares****LOCATION**

Land at Lodge Farm

PROPOSED DEVELOPMENT

Residential development of approx. 40 dwellings with an improved access off the Holt Road.

District **Broadland****CONSTRAINTS ANALYSIS**

Access

Accessibility to Services

Utilities Capacity

Utilities Infrastructure

Contamination and Ground Stability

Flood Risk

Market Attractiveness

Amber

Green

Green

Green

Green

Green

Green

IMPACTS ANALYSIS

Significant Landscapes

Townscapes

Biodiversity and Geodiversity

Historic Environment

Open Space and GI

Transport and Roads

Compatibility with Neighbouring Uses

Green

Amber

Green

Green

Green

Green

Green

SITE SUITABILITY CONCLUSIONS

This is a 1.6 ha site that has a long private access road from the Holt Road. Based on current evidence, there are significant constraints to creating a suitable access and achieving an adequate visibility splay onto the Holt Road. The other constraints identified relate to townscape and historic environment factors, namely affecting undeveloped views of the Grade II listed parish church to the south. The issue about the access is important and will require further examination, but at this stage not considered an absolute constraint, and so the site is concluded as suitable for the land availability assessment.

For the purposes of the HELAA capacity assessment this site is considered to be **SUITABLE**

Availability and Achievability Assessment

Availability and Achievability Conclusions

The proposer has indicated that the site is likely to be AVAILABLE in the following timescale:	Immediately	(timescales have not been specified by the proposer if these fields left blank)
The proposer has indicated that the site is likely to be DEVELOPABLE in the following timescale:	Up to 5 years (by April 2021)	

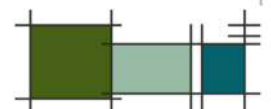
In terms of site viability, this site has been submitted by a landowner/promoter as viable for the form of development proposed and is assumed to be developable within the plan period in accordance with the timescales above (where given). Further area-wide work on viability typologies will be done as plan-making progresses and will inform decisions on viability.

Overall Conclusions for Site GNLP0422

Based on the site suitability analysis it is considered that this site is appropriate for the land availability assessment, subject to any caveats in the Suitability Conclusions.

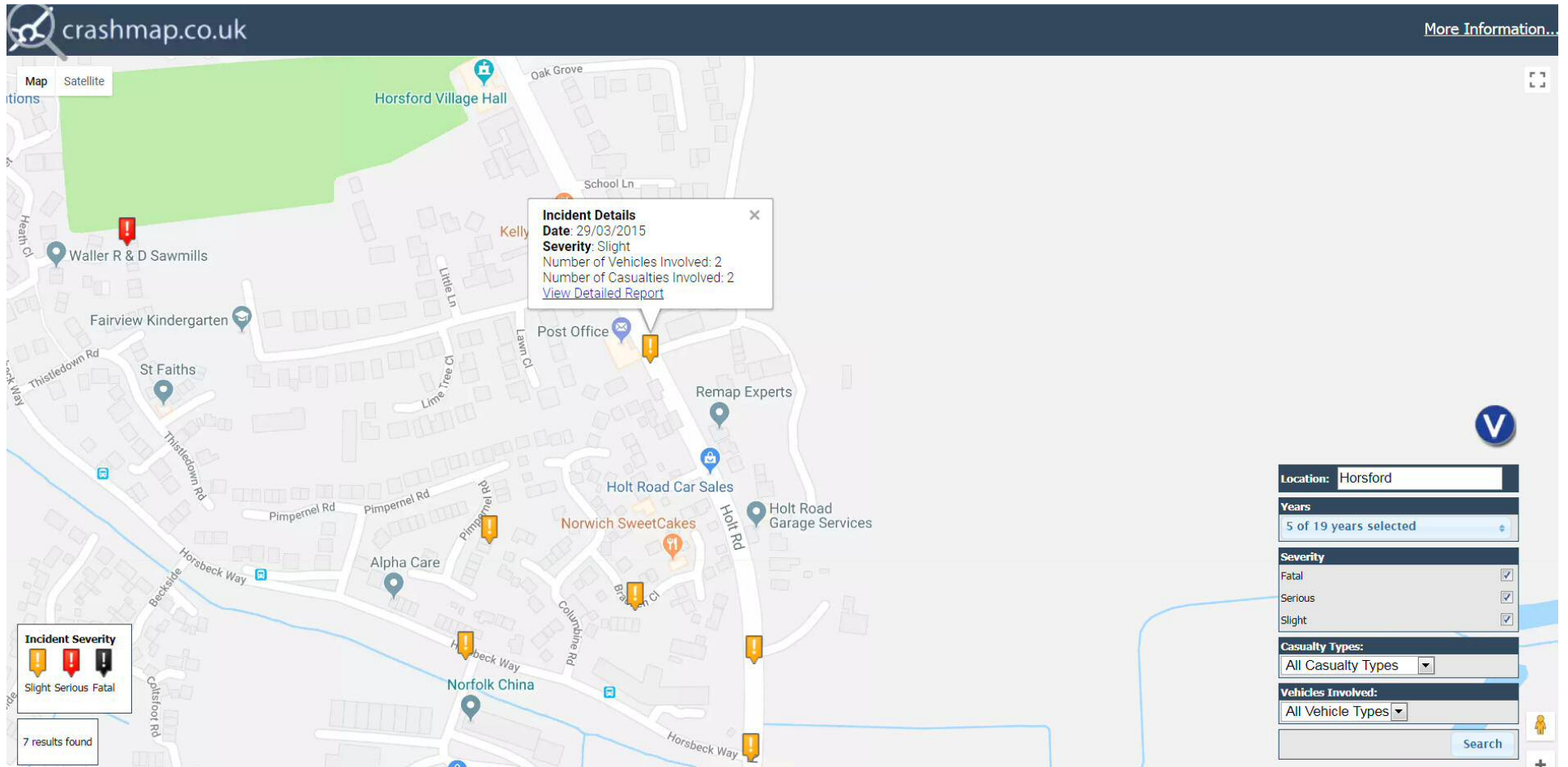
Appendix 3

Accident Data



Location of Personal Injury Accidents within Horsford, Norfolk

Extract from the Crashmap website for the five years : 2013 – 2017 (inclusive)





crashmap.co.uk

Crash Date:	Sunday, March 29, 2015	Time of Crash:	3:10:00 PM	Crash Reference:	2015360089963
Highest Injury Severity:	Slight	Road Number:	B1149	Number of Casualties:	2
Highway Authority:	Norfolk	Number of Vehicles:	2	OS Grid Reference:	619342 316044
Local Authority:	Broadland District				
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	20				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Other junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles Involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)		8 Female	66 - 75	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None
2	Car (excluding private hire)		1 Male	56 - 65	Vehicle is in the act of turning left	Back	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	66 - 75	Unknown or other	Unknown or other
2	2	Slight	Driver or rider	Male	56 - 65	Unknown or other	Unknown or other

Accident Description:

Accident description text currently unavailable for this highway authority / police force

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



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