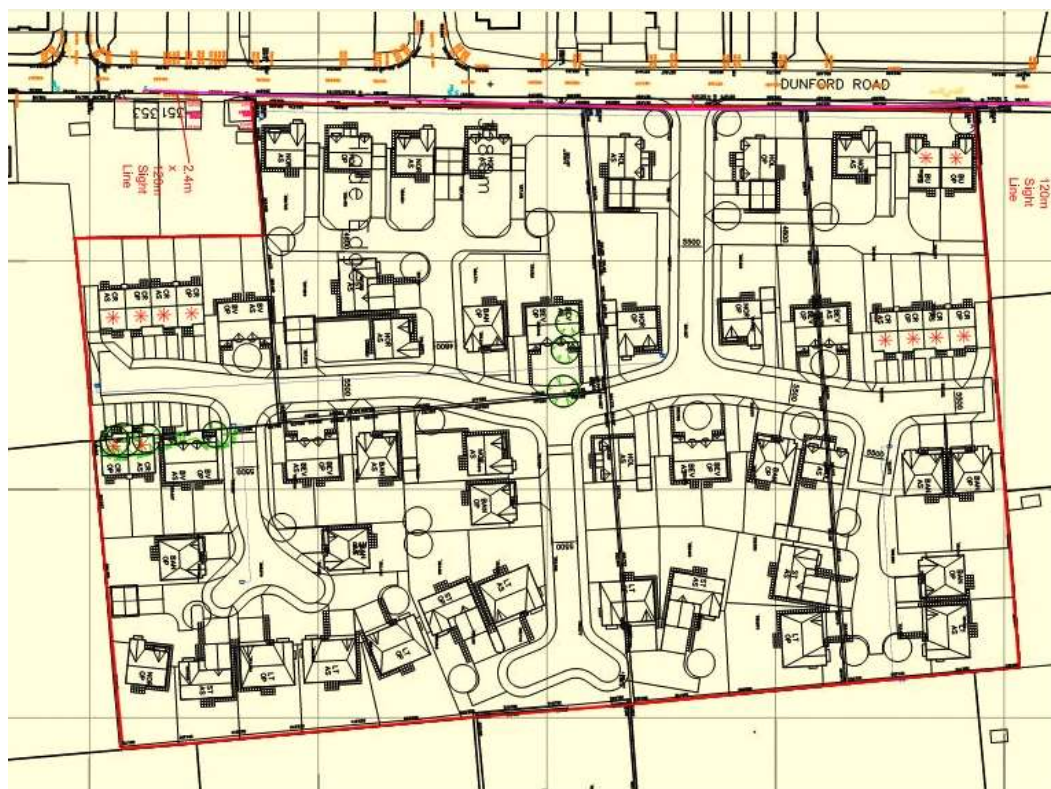


Prepared on behalf of

Jones Homes (Yorkshire) Limited



**Proposed residential development of 59 dwellings
(including affordable housing)
Dunford Road Hade Edge**

Transport Statement

Acknowledgements:

*The latest TRICS database has been used in this report to calculate traffic generations
The latest version of PICADY has been used for priority junction assessment modelling
Information on highway adoption and public rights of way has been obtained from Kirklees Council
Crashmap has been used to provide an initial indication of road traffic accidents
Information on public passenger travel has been obtained from WY Metro*

Disclaimer

The methodology adopted and the sources of information used by Sanderson Associates (Consulting Engineers) Ltd in providing its services are outlined within this Report.

Any information provided by third parties and referred to herein has not been checked or verified by Sanderson Associates (Consulting Engineers) Ltd, unless otherwise expressly stated within this report.

This report was checked and approved on the n/a and the Report is therefore valid on this date, circumstances, regulations and professional standards do change which could subsequently affect the validity of this Report.

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Appendices

APPENDIX A

LPA Highways Engineers report on Outline planning - ref: 2016/60/91967/W

Stage 1 Road Safety Audit and Designers Response

Site location plan

Site layout plan

Vehicle swept path examination

Access arrangement 9173-001

Series of photographs March 2016 of local highway network

APPENDIX B

LHA highway adoption details

Speed and traffic flow ATC survey Dunford Road

Figure 2 800m and 2km walking distance and bus stop location plan

Figure 3 5km cycle distance plan

APPENDIX C

TRICS Data

Crashmap accident data

APPENDIX D

PICADY Data

1 Introduction

- 1.1 Sanderson Associates have been appointed to provide highway consultancy services to Jones Homes (Yorkshire) Ltd with respect to their proposals for to develop 59 dwellings on land off Dunford Road, at Hade Edge, near Holmfirth. The general location of the proposed development is as indicated in Figure 1, Appendix A of this report.
- 1.2 This Transport Statement, ref: 9173/002/01 supports the “Full planning application” for the development. The Statement is based upon an earlier report ref: 9173-001-04 which currently supports an undetermined Outline Application for development of the site, LPA reference 2016/60/91967/W. The Outline Application proposed 66 dwellings together with a modest convenience store, and provision of public open space.
- 1.3 Both the Full and Outline applications have the same single point of access to Dunford Road, the same general road layout, and works to improve pedestrian facilities on the site frontage to Dunford Road.
- 1.4 The Council’s highway engineer has been consulted on the Outline application and raises no objections in principle to the development, subject to two design checks (swept path analysis of the proposed road layout and the provision of a Stage 1 Road Safety Audit). A copy of the highway engineer’s consultation response is included in Appendix A of this report.
- 1.5 Both of the required checks have been carried out and information has been formally submitted to the Council to complete the highway assessment, copies of which are included in Appendix A of this report. Final comments from the highway officer are awaited and at this point there is nothing to suggest that this will not be positive.
- 1.6 The application site lies on the eastern flank of Dunford Road and has an area of approximately 2.495 ha or 6.16 acres. At the time of the Outline application its

status was part of an area of Provisional Open Land (POL). Since that date however the site has now been given a draft allocation by the LPA for Housing and is now referenced (Ref: H288a) in the emerging Local Plan, with an indicative site capacity of 66 dwellings.

- 1.7 The remaining Provisional Open Land which comprises of land to the north (ref: SL2170b) and south (ref: SL2170a) now has a draft allocation as 'Safeguarded Land' for future development.
- 1.8 The overall POL allocation (sites SL2170a and SL2170b), comprises a further 3.05 hectares and has frontages to both Dunford Road and Greave Road and it is expected, given the scale of the development, that more than one access would be provided with linkages within the estate to provide vehicular and pedestrian connectivity.
- 1.9 Fifty nine dwellings are proposed on the application site with ten provided as "affordable housing". The remainder of the POL allocation (sites SL2170a and SL2170b), is expected to deliver a further 90 dwellings.
- 1.10 It should be noted that whilst the proposed dwellings have an elevation to Dunford Road direct access, either vehicular or pedestrian is not proposed. The current dry stone wall to the site frontage will remain or will be set back for a short distance behind the sight lines of the proposed junction with Dunford Road.
- 1.11 It should be noted that this Transport Statement covers the assessment of the application site **only**, and any subsequent examination of the remainder of the POL will be subject to the provision of further information to the Local Planning Authority at that time. Notwithstanding the above, the potential for safeguarding access to the remainder of the POL is discussed in this report.
- 1.12 Prior to commencement of our examinations discussions have taken place with highway officers of the Council on the principle of access to the development from

Dunford Road, and appropriate highway standards. In respect of the latter the standards are drawn from both *Manual for Streets (1 and 2)* and the *Design Manual for Roads and Bridges*.

1.13 In accordance with Guidance on Transport Assessments, this Transport Statement will consider in detail the following aspects:

- the local highway network and its road traffic accident record
- the access arrangements to the proposed development
- the proposed development and its operational characteristics
- the impact of the development on the local highway network in terms of highway safety
- accessibility of the site in relation to sustainable transport and local facilities and means to encourage the use of sustainable transport

1.14 For the purpose of this report the site, the local highway system and its surroundings have been visited, and measurements and photographs taken to validate statements and assertions made in this report.

1.15 Surveys have been undertaken of existing traffic flows and speed on Dunford Road together with indications of on-street parking on Dunford Road in the vicinity of the proposed site entrance.

1.16 Given the scale of the proposed development a Travel Plan would not normally be required; however, this report contains reference to basic measures to increase the use of sustainable modes of travel.

1.17 The publication of the *National Planning Policy Framework* (NPPF) on 27 March 2012 provides the most up to date guidance on transport and its role within the planning system. Paragraph 32 of National Planning Policy Framework states: -

All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;*
- safe and suitable access to the site can be achieved for all people; and*
- improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.*

1.18 This Transport Statement demonstrates that the cumulative impacts of the development are not severe and consequently the planning application should not be refused on transport grounds.

2 The Application Site and the Local Highway Network

- 2.1 The application site lies on the eastern flank of Dunford Road and has an area of approximately 2.495 ha or 6.16 acres. It is generally divided into several rectangular walled parcels of pasture land, each with its own access point to the local highway network.
- 2.2 Within the application site and the overall POL allocation 2170 there are no definitive public rights of way as recorded on the Kirklees Council PRoW website, although there are definitive public routes nearby.
- 2.3 Dunford Road is the name of the main local street within Hade Edge, and runs south to north to its junction with the B6106 approximately 550m from the centroid of the application site. Southwards from Hade Edge Dunford Road runs into open countryside as a rural route towards Dunford Bridge in Barnsley district. At approximately 1.2km to the south of the application site, Dunford Road is joined by Flight Hill/Law Common Road by which, travelling north-eastwards access to the B6106 can again be gained.
- 2.4 The B6106 is a “B” class road and is the local distributor route connecting Holmfirth to Penistone. Although within the local settlements through which it passes it has urban features, in the main in the direction of Penistone it is a rural route and is subject to the national derestricted speed limit of 60 mph for such routes.
- 2.5 In the vicinity of the application site Dunford Road is subject to a 30 mph speed limit and street lighting is provided to main road standards. There are currently no Traffic Regulation Orders which would prohibit the parking or loading of vehicles from the highway.
- 2.6 There appears to be a suggestion however that the speed of traffic may be regularly above the “urban limit” as it noted that advisory signage denoting POLICE

– “CHECK YOUR SPEED” is located on the approaches to the Greaves Road cross roads junction and the local school.

- 2.7 To validate this an automatic traffic survey was carried out on Dunford Road in the vicinity of the application Site access to determine both traffic flow and approach speed. The survey was carried out over the 24/7 period between 27/11/2015 and 3/12/2016, and it was first ascertained that there were no circumstances, including adverse weather, which would have resulted in drivers not being in “free flow conditions”. A plan showing the location of the ATC is provided in Appendix B together with full details of the survey.
- 2.8 The results of the speed survey indicate that the average 85th percentile speed throughout the seven-day period was 37 mph northbound and 39 mph south bound. As weather conditions throughout the week’s survey is not known it is proposed for robustness to treat the 85th percentiles as “wet weather values” for sight line calculation purposes.
- 2.9 During this traffic flow data was collected which indicates that the average five-day peak hour two-way flow on Dunford Road is 57 vehicles in the morning (08.00 to 09.00) and 58 vehicles in the evening (17.00 to 18.00).
- 2.10 Opposite the application site Dunford Road has a carriageway width of approximately 6.2 m with a near verge of approximately 2m and a far footway of 2m. There is a slight fall in the vertical profile of Dunford Road as it runs south to North towards Greave Road.
- 2.11 Greave Road runs west to east and joins Dunford Road as a side road crossroad. It continues east and provides a second more direct link to the B6106 for traffic travelling towards Penistone.
- 2.12 Dunford Road serves the majority of the existing settlement of Hade Edge and dwellings either take access directly to it or via side roads or private drives.

Between the southern limit of the POL allocation and Greave Road there is in the order of 62 dwellings that would gain access via this route. This relatively low number of existing dwellings qualifies the findings of the traffic survey in relation to current peak hour use of Dunford Road.

- 2.12.1 With respect to the occurrence of road traffic accidents an initial search has been carried out via the internet source *Crashmap* for the period from 2012 to 2016, which are the last full five years of data available. Details of the accidents and their location are indicated in Appendix C of this report, with an extract of the accidents locations below.



Crashmap extract - full details obtained from Crashmap in Appendix C

- 2.12.2 During this 5 year period, there has been only one accident on Dunford Road, located in the vicinity of the Hopefield Court junction. This accident was serious in nature and a collision between two vehicles, one of which may not have been motorised and was driven by a young person aged between 11 and 15. This accident is as indicated by the red pointer on the map.
- 2.12.3 Two slight accidents, shown by the purple pointer, have occurred at the junction of Greave Road with the B6106, one involved a turning car and a pedal cycle in

August 2012, and the second, in wet conditions in January 2012 between two cars, one of which was turning right.

- 2.12.4 The third slight accident, shown by the final yellow pointer, occurred on the B6106 in the vicinity of J Brindon Addy Butchers and involved a single vehicle in snow conditions in December 2010.
- 2.12.5 None of the above indicate deficiencies in the local road network and may have been caused by driver behaviour or weather conditions, or a combination of both.
- 2.13 As mentioned previously the site has been visited on a number of occasions in 2016 and a series of photographs contained in Appendix A indicate the general characteristics of the local highway network. In addition, highway adoption information has been obtained from the Council and is included in Appendix A of this report.
- 2.14 Finally, a topographical survey has been produced for the site and the immediate section of Dunford Road and this has been used as the base for the design of the access to the proposed development.

3 Sustainable Travel

3.1 Introduction

3.1.1 This section of the report considers the accessibility of the development by the following modes of transport;

- Accessibility on foot;
- Accessibility by cycle;
- Accessibility by bus;

3.2 Accessibility on Foot

3.2.1 Walking is the most important mode of transport in the local level and can replace short car trips in journeys under 2km, which contribute to congestion and pollution, and the need for car parking. Walking is the most sustainable form of transport and provides one way of reducing pressure on the environment. People walking are also travelling at a pace that gives them a greater connection with their surroundings and can have positive benefits in relation to a community's security through increased surveillance.

3.2.2 Walking stimulates both personal health and the health of communities and local economies. Government health improvement advice states that just 30 minutes brisk walking 5 times a week can bring about significant reductions in the risk of coronary heart disease, high blood pressure and diabetes.

3.2.3 In relation to acceptable walking distances, *Manual for Streets* is the latest national guidance on the design of residential roads and offers the following guidance in Section 4.4 "The walkable neighbourhood".

3.2.4 "Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes (up to about 800m) walking distance of residential areas which residents may access comfortably on foot. However, this is not an upper limit and PPG13 states that walking offers the greatest potential to replace short car

trips, particularly those under 2 km. MfS encourages a reduction in the need to travel by car through the creation of mixed-use neighbourhoods with interconnected street patterns, where daily needs are within walking distance of most residents.” It is noted that PPS 13 has been superseded by NPPF but the general guidance offered in PPG13 is considered relevant.

- 3.2.5 Appendix A (Figure 2) identifies 800m and 2000m walking radii from the site. It is noted that walking routes will not follow the simple radius of this plan and the plan is provided as an indication of where destinations lie and the general extent to which the local area can be accessed on foot.
- 3.2.6 Within approximately 275m walking distance from the centroid of the site there are bus stops located Dunford Road, and at approximately 190m (via the overall allocated site) bus stops are also located on Greeves Road.
- 3.2.7 Also within 800m are facilities such as Hade Edge Jr & Infant School, Hade Edge Football field and recreational area, Hade Edge Band Room, the “Algy Public House”, and J Brindon Addy (local Butchers and Food Hall)
- 3.2.8 Footways are provided along sections of Dunford Road together with appropriate street lighting.

3.3 Accessibility on Cycle

- 3.3.1 Like walking, cycling has an important part to play in reducing congestion, improving accessibility and reducing pollution. A further benefit of cycling is linked to increased general health and fitness which has personal benefits as well as economic benefits for the nation in terms of health service costs. The bicycle is generally more affordable than the car and hence there are social equity benefits to the promotion of cycling. Cycling may also allow people without cars to reach destinations that they may otherwise be unable to reach.

- 3.3.2 In relation to the application site; cycling distances from local residential centres within 5km, along with the corresponding cycle time based on 12 km per hour are as follows. The plan at Appendix A (Figure 3) indicates destinations which lie within a 5.0km radius of the application site. It is noted that cycling will not follow the simple radius of this plan and the plan is provided as an indication of where destinations lie and the general extent to which the site is accessible by cycle.

Origin/Destination	Distance	Time
Scholes	2.9km	14 ½ minutes
Hepworth	3.2km	16 minutes
Holmfirth	3.4km	17 minutes
Jackson Bridge	3.5km	17 ½ minutes
Netherthong	4.8km	24 minutes
Thongsbridge	5.0km	25 minutes
Holmfirth High School	5.0km	25 minutes

- 3.3.3 Signed national and county wide cycle routes are found in relatively close proximity to the application site and from observations the area is particularly popular with leisure cyclists.

3.4 **Bus Travel**

- 3.4.1 The closest bus stops to the site are located on Dunford Road and Greave Road at approximately 400m from the centre of the site. Appendix A (Figure 4) details the location of these stops and a summary of the services are as follows;

Dunford Road

Direction of Travel: Buses travelling North Bound

Facilities: Bus Timetable, Shelter, Bus Border Kerbs and time table information

Bus services: 25, 25A, H7, X7

Direction of Travel: Buses travelling Eastbound
Facilities: None
Bus services: 25, 25A

Greave Road

Direction of Travel: Buses travelling North Bound
Facilities: None
Bus services: H7

Summary of services		Frequency		
Route Number	Overall Route	Daytime Frequency (Mon - Sat)	Evening Frequency (Mon – Sat)	Sunday Frequency
25/25A	Penistone - Hade Edge - Holmfirth	120 Mins	120 Mins	120 Mins
H7	Holmfirth - New Mill Hepworth	AM Service only	-	-
X7	Hade Edge- Thongsbridge - Huddersfield	AM Service only	-	-

3.4.2 As can be seen from the previous table, there are services that can be used to access Penistone, Huddersfield and Holmfirth, where other options for public transport are available.

3.5 **Summary**

3.5.1 As would be expected given the location of the application site there are basic but limited opportunities for the use of sustainable modes of travel. This is however not uncommon in settlements in upland parts of the Kirklees district and it is interesting to note that in these areas there is a higher percentage of residents that “work from home” compared to those who reside in the overall Kirklees District.

3.5.2 From statistics of the “Lower Super Output Area”, Middle Super Output Area and overall areas the following table has been drawn.

	Kirklees 059 (Holmfirth Wider Area)	Kirklees 059A (Scholes & Jackson Bridge)	Kirklees 059C (Hade Edge)	Kirklees 059D (Totties / Town End)	Kirklees	England
Method of Travel to Work	% working	% working	% working	% working	% working	% working
Work Mainly at or From Home	8.0	8.1	10.2	6.4	4.5	5.4
Underground, Metro, Light Rail, Tram	0.1	0.1	0.1	0.3	0.1	4.1
Train	1.9	1.2	1.4	2.0	2.8	5.3
Bus, Minibus or Coach	4.8	3.6	2.7	7.5	7.9	7.5
Taxi	0.1	0.1	0.0	0.5	0.9	0.5
Motorcycle, Scooter or Moped	0.7	0.6	0.6	0.8	0.7	0.8
Driving a Car or Van	71.3	76.8	73.1	65.0	65.3	57.0
Passenger in a Car or Van	4.7	4.6	4.8	5.6	6.5	5.0
Bicycle	0.8	0.3	1.1	0.6	1.0	3.0
On Foot	6.9	3.7	4.9	11.1	9.9	10.7
Other Method of Travel to Work	0.7	0.7	1.1	0.2	0.5	0.6

3.5.3 As will be noted in the wider Holmfirth Area (059) 8% of residents work mainly at or from home, with this figure rising to over 10% in the specific area of Hade Edge. As such it is likely that for those residents the availability of sustainable transport arrangements has already been a consideration in their choice of where to live.

3.5.4 In policy terms variations in the availability of sustainable modes of travel is recognised in para' 29 of the National Planning Policy Framework. This states:

“Transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives. Smarter use of technologies can reduce the need to travel. The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel. However, the Government recognises that different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas”.

4 Multi Modal Trip Generations

4.1 It is normal to review the impact of the proposed development in “person trips”, and this has been undertaken using the industry standard software of TRICS. The Transport Statement which supports the Outline Application currently under consideration by the LPA makes use of the 2016 version of the database, TRICS 7.2.4, and traffic generations from that have been accepted by the Council’s highway engineer as robust. As such and for consistency the same data base for the “land use category 03-Residential A-Houses Privately Owned” is used in this report.

4.2 To ensure a robust assessment, the output of the TRICS Database has been refined to **exclude** Greater London and Ireland. Only sites within Suburban Area, Edge of Town locations, and “sites with between 20 and 150 dwellings” have been used.

4.3 The following provides details of the multimodal two-way trip rates along with the corresponding modal percentage split. The data has been split between AM (0800-0900) and PM (1700-1800) weekday periods. A separate 24-hour modal trip rate has also been provided.

Residential Development of 59 Houses			
	2 Way Trip Rate per dwelling	% Modal Split	Generations (rounded up)
AM Peak Hour Modal Split			
Pedestrians	0.211	20.3%	12
Cyclists	0.028	2.7%	2
Public Transport Users	0.022	2.1%	1
Vehicle Occupants	0.776	74.8%	46
Total People Trips	1.037	100.0%	61
PM Peak Hour Modal Split			
Pedestrians	0.148	15.8%	9
Cyclists	0.033	3.5%	2
Public Transport Users	0.026	2.8%	2

Vehicle Occupants	0.729	78.0%	31
Total People Trips	0.935	100.1%	55
24 Hour Modal Split			
Pedestrians	1.547	18.8%	91
Cyclists	0.227	2.8%	13
Public Transport Users	0.169	2.1%	10
Vehicle Occupants	6.374	77.6%	376
Total People Trips	8.218	100.0%	485

Table 2.4 Multimodal Trip Rates and Percentage Split Residential Use

- 4.4 Full TRICS outputs for “land use category 03-Residential A-Houses Privately Owned” are contained in Appendix C of this report.
- 4.5 As will be noted during the critical peak hour the level of generated pedestrian, cyclist and public passenger travel movements are low and could therefore be accommodated on the existing infrastructure. In addition, the above predictions have not been adjusted to include residents who may work from home, which given the percentage indicated in para’ 3.5.2 would potentially give rise to a reduction in peak hour trips.
- 4.6 Notwithstanding this it is acknowledged that sustainable transport options from the site are limited by virtue of its location and as such in the following section of this report it is proposed that robust 85th percentile vehicle trip rates are used for calculation purposes.

5 Traffic Generation

5.1 *Proposed Development Maximum of 59 Dwellings*

- 5.1.1 The TRICS v7.2.4 database accepted in 2016 by the Council's highway engineer has again been utilised to estimate the likely amount of traffic generated by the proposed development users. The land use category 03-Residential A-Houses Privately Owned has again been used to calculate the likely traffic generated by the proposed development. The surveys have been taken from multimodal surveys and exclude any sites in London and Ireland.
- 5.1.2 The resultant traffic generation for the proposed 59 houses are tabulated as follows for the typical network peaks in the AM and PM peak periods, as well as daily information. Full copies of the TRICS output are included at Appendix D of this report.
- 5.1.3 As stated in previous paragraph 4.4, given the location of the proposed development, it is suggested that **85th percentile** vehicle trip rates are more appropriate in this instance.

	85 th Percentile Trip Generations		Vehicle movements for 59 houses		
	Arrivals	Departures	Arrivals	Departures	Two-Way
0800-0900	0.183	0.521	11	31	42
1700-1800	0.609	0.130	36	8	44
Daily Rates	2.821	2.714	166	160	326

Table 5.1 Vehicle Trip Rates and Generations (85th Percentile)

- 5.1.4 Based on the above 85th percentile trip rates the proposed development of 59 dwellings would result in 42 vehicle movements in the AM peak hour, 44 vehicle movements in the PM peak hour and 326 vehicle movements throughout the day.
- 5.1.5 If however the "work from/at home" statistic for the Lower Super Output Area is applied then up to 10% of these trips could potentially be discounted, leading to approximately 4 less two way trips in each peak hour. **For robustness however**

this value is not applied to any modelling undertaken in this report or in the predicted distribution of traffic from the development.

- 5.1.6 If following a full development of the POL allocation sustainability transport options are improved to match the increase in size of the settlement, then it may be appropriate to consider the impact of the housing development in average trip rate terms. For completeness the following table indicates the traffic impact of the development using average trip rate values.

	Average Residential Trip Generations		Vehicle movements for 59 houses		
	Arrivals	Departures	Arrivals	Departures	Two-Way
0800-0900	0.163	0.390	10	23	33
1700-1800	0.352	0.195	21	11	32
Daily Rates	2.361	2.423	139	143	282

Table 5.2 Vehicle Trip Rates and Generations (Average Rates)

- 5.1.7 Based on the above average trip rates the proposed development would result in a reduction to around 33 vehicle movements in both peak periods, and some 282 vehicle movements throughout the day. **Again no adjustment for working from/at home has been applied.**

5.2 Future Development 90 Dwellings

- 5.2.1 Although not part of the development an indication is given of the traffic generation of the remainder of the POL site (sites SL2170a and SL2170b), assuming up to 90 dwellings were to be developed. Using the same values as above but only examining the higher 85th percentile predictions the resultant traffic generation for the 90 dwellings are tabulated as follows for the AM and PM peak periods, and daily flow.

	85th percentile Trip Generations		90 Houses (sites SL2170a and SL2170b),		
	Arrivals	Departures	Arrivals	Departures	Two-Way
0800-0900	0.183	0.521	16	47	63
1700-1800	0.609	0.130	55	12	67
Total Rates	2.821	2.714	254	244	498

Table 5.3 Vehicle Trip Rates and Generations (85th Percentile)

5.2.2 Based on the above 85th percentile trip rates a future development of 90 house would result in an additional 63 vehicle movements in the AM peak hour, 67 vehicle movements in the PM peak hour and 498 vehicle movements throughout the day.

5.2.3 Combining the results of the 85th percentile trip rates used in Tables 5.1 and 5.3, for an overall development of the application site and the two areas of safeguarded land, based on a development of 149 dwellings, the development would generate the following trips in the critical peak hours.

	Vehicle movements 149 Houses		
	Arrivals	Departures	Two-Way
0800-0900	27	78	105
1700-1800	91	20	111
Daily Rate	420	404	824

Table 5.4 Vehicle Generations (85th Percentile) overall POL site

5.2.4 In relation to the distribution of residential vehicle trips from the site it is reasonable assume that the vast majority of traffic will turn north from the site access to Dunford Road, and will either continue north to the B6106 and onwards to Holmfirth, or will travel north and then turn right onto Greave Road and hence right onto the B6106 to travel towards Penistone. This latter route provides the quickest means of joining the B6106 for Penistone bound traffic, because given its rural nature there is no material advantage in using the longer route of Dunford Road south and Flight Hill/Law Common Road to the B6106.

- 5.2.5 Using the 85th percentile trip rates for the 59 and 149 dwellings and assigning them on the basis mentioned above, the suitability of access arrangements to Dunford Road are now examined.

5.3 *The site access to Dunford Road*

- 5.3.1 It proposed to provide a simple priority road junction to access the development site. The junction will comprise of a 5.5m wide carriageway, with junction kerb radii of 6m. A 2m wide footway will be provided to either flank of the carriageway and the footway will be extended along all of the frontage of the application site to Dunford Road. This is as indicated on plan 9173-001 Appendix A.

- 5.4 With respect to the sight lines which would be provided at the access; the development of the site would urbanise both sides of a significant length of Dunford Road and would bring about a change its character, even though it currently is subject to a 30 mph urban speed limit. From the ATC data recently collected the average 85th percentile speed throughout the seven-day period was 37 mph northbound and 39 mph south bound. As weather conditions throughout the week's survey is not known for robustness the 85th percentiles are treated as "wet weather values" for sight line calculation purposes. As such this normally brings the sight lines into the application of *Manual for Streets* standards.

- 5.5 However, the long straight nature of this section of Dunford Road and light traffic flow on it gives rise to conditions where the 30 mph speed limit is regularly exceeded and the survey indicates that 85th percentiles through some parts of the day are in the low 40's (mph). This situation has been discussed with the highway officer of the Council, and as a precautionary measure it is proposed to use *DMRB* sight line standards for the Y component of the sight line, notwithstanding the average 85th percentile speeds of 37 and 39 mph.

- 5.5.1 Applying *DMRB* standards (TD41/95) the extracted table below indicates that for 70 kph (43.5mph) a Y component of 120m is required. Vision at 2.4m which is the

recommended set back in urban areas, is therefore provided to 120m in either direction of view to Dunford Road.

2.22 The "Y" distance along the major road, the all purpose trunk road, shall be determined from Table 2/1:

Design speed of major road (kph)	120	100	85	70	60	50
"Y" Distance (m)	295	215	160	120	90	70

Table 2/1: Value of "Y" Distance

Note, these figures correspond to the Desirable Minimum Stopping Sight Distances set out in Table 3 in TD9 (DMRB 6.1.1). Relaxations are not available on these figures.

- 5.5.2 Using the ATC data described in Section 2 of this report two-way peak hour traffic flows on Dunford Road (over a 5 working day average) are 57 and 58 respectively. In the morning this is composed of 37 north bound and 20 southbound, in the evening this reverses to 30 southbound and 28 northbound, and as will be judged is light in traffic volume terms.
- 5.5.3 For the application site the 59 dwellings would generate in the order of 326 two way movements, and on the basis of one single access the whole of the POL area (sites SL2170a and SL2170b), would generate 824 two way vehicle movements for the 149 overall dwellings.
- 5.5.4 As this later value exceeds 500 vehicle movements per day it is appropriate to consider the DMRB requirement for a right turning lane in Dunford Road, to provide a refuge for traffic waiting to turn into the proposed side road.
- 5.5.5 In this situation given that almost all of the generated traffic is assumed to turn right out of the access northbound on Dunford Road, and return turning left into the access then the right turning lane would be of little practical value. Notwithstanding

this for sensitivity purposes, an assumption of an 80/20 split of north/south bound traffic has been applied to test the junction using the computer model PICADY. **It should be noted that testing is only carried out in relation to the overall 149 dwelling scenario as this indicates a “worst case” for modelling.**

5.5.6 Appendix D of this report indicates modelling of the junction in the base year of the survey 2015 plus total development traffic. Given the scale and location of the Hade Edge settlement, with the exception of a modest potential area allocated for housing off Long Ing Road, (ref H3.29), there are no proposals in the KMC UDP for significant increases in the overall housing numbers in Hade Edge. To the south of Hade Edge Dunford Road continues into open countryside and the Peak District National Park. As such there would be no realistic requirement to consider the impact of “committed development” or to consider modelling in future years.

5.5.7 In the PICADY model it is assumed that with the Dunford Road carriageway width of 6.20m a vehicle awaiting a right turn into the site from Dunford Road would block through traffic travelling north towards the B6106 and/or Greave Road. However even with this scenario the very light flows on Dunford Road are such that no adverse impact occurs, with the highest ratio of flow to capacity indicated in the following extract of the AM/PM modelling predictions.

Dunford Road / Site Access

Arm A – Dunford Road North

Arm B – Site Access

Arm C – Dunford Road South

Arm to Arm	AM Peak (0800-0900)		PM Peak (1700-1800)	
	RFC	Queue	RFC	Queue
B-AC	0.176	0.21	0.046	0.05
C-AB	0.008	0.01	0.029	0.03

- 5.5.8 As such it is clear that whilst the numerical threshold for consideration of a right turn lane is reached by the combination of the application site and the safeguarded land, the circumstances of Dunford Road do **not** warrant the provision of a right turning lane in Dunford Road, and indeed such provision would appear significantly out of place in the street scene of the settlement and have a potential detrimental impact.
- 5.5.9 Notwithstanding the above it should be noted that the safeguarded land (sites SL2170a and SL2170b) has frontages to Greave Road (approximately 105m) and to Dunford Road south of the application site (approximately 90m). As such and subject to a satisfactory access design, there is the potential for alternative accesses to the safeguarded areas to be considered so that the safeguarded sites are not reliant on one single access through the application site.
- 5.5.10 In relation to the design of these accesses, it is reasonable to assume that traffic speeds will be lower on Greave Road than Dunford Road due to the constraints of its length between the Dunford Road and B6106 junctions, and thus *Manual for Streets* standards should apply. In relation to an access to Dunford Road south of the application site, it may be the case that additional traffic calming measures are needed on the approach to the settlement, which may then permit *Manual for Streets* standards to be used.
- 5.5.11 It is stressed however that the consideration of access arrangements to the safeguarded sites SL2170a and SL2170b will have to be the subject of further detailed examination before any confirmation can be given, and acknowledging the likely scale of the remaining development, this will require off site as well as basic access arrangements to be undertaken.**
- 5.5.12 In terms of the 59 dwellings which are the subject of this application, it is clear that a simple priority junction is appropriate, and that for this level of development a right turn lane for northbound traffic to turn into the site is **not** required. In this respect it is noted that even with a full development of the draft allocation and the

safeguarded sites there is no adverse issue of capacity at the proposed junction of the site with Dunford Road, and thus it is not considered that the sight line setback should be increased to 4.5m above the normal urban setback of 2.4m. This is directly in line with the latest *Manual for Streets* standards where in urban situations junctions with higher setbacks than 2.4m are shown to be less safe for vulnerable road users.

5.5.13 As mentioned previously the design of the proposed junction has been the subject of a Stage 1 Road Safety Audit, which together with a Designers Response is included in Appendix A of this report. With regard to the four points raised in the RSA, drainage/street lighting /termination of new footway/removal of tree in sight line, the Designers Response indicates that these matters will be addressed at the point of detailed design/Section 38 road adoption submission.

5.5.14 With regard to the proposed road layout within the site, this has been reviewed by swept path analysis and Appendix A contains a layout plan on which the examination has been made. The vehicle used for refuse collection is the large four axled vehicle, although it should be noted that KMC actually uses three axled units for domestic refuse collection.

5.6 *Impact on the wider network*

5.6.1 In relation to the impact of the predicted traffic that is associated with the 59 dwellings, in the morning and evening peak hour this relates to 42 and 44 two way movements respectively.

5.6.2 Although in sensitivity testing of the junction in section 5.5 above, some allowance has been made for traffic to arrive and depart from the south, in practice most drivers would be expected to travel north from the site access and then continue northwards to the B6106 to Holmfirth, or turn right onto Greave Road to join the B6106 to travel in the direction of Penistone to Penistone and Barnsley, or potentially travel north via Scholes Moor Road to Paris, New Mill and the direction

of Wakefield. Turning north from the site access to Dunford Road also applies if residents drop their children off at the Hade Edge Primary school enroute to work.

- 5.6.3 On the assumption that all main destinations are of equal attraction to residents of the proposed development, then using the 85th percentile AM generations in the morning peak period, the 32 departing vehicles would first turn right out onto Dunford Road and split approximately 50/50 towards Holmfirth and right on Greave Road towards Penistone or towards Scholes, giving 16 additional outbound vehicles on these two routes in the morning peak. Given that Holmfirth is more likely to be the destination for most returning traffic it is predicted that the 11 arriving vehicles are likely to be drawn from that direction.
- 5.6.4 In respect of the junction of Dunford Road and the B6106, this is a simple priority junction where the side road joins the main road at an oblique angle. Vision for drivers looking right to the B6106, in the direction of Penistone, is unlimited but to the left towards Holmfirth is restricted by the vertical alignment of the B6106 as it climbs up from the town. Likewise, as the junction lies on the crest of the hill on the B6106 Penistone bound traffic has somewhat limited visibility of the whole of a vehicle if it is awaiting a right turn to Dunford Road.
- 5.6.5 It is understood from pre-submission discussions with local members and feedback from objectors to the Outline application that the layout of this junction is a concern to existing residents.
- 5.6.6 Whilst the layout of this junction produces a local difficulty as not all of the southbound approaching vehicle is visible the operation of this junction does not appear problematic in respect of its accident record. **From the initial search carried out via *Crashmap* there have been no reported injury accidents at this junction in the period from 2012 to 2016 inclusive.**
- 5.6.7 Although this section of the B6106 is subject to an overall 60 mph speed limit, in the vicinity of the bend on the hill and approaching Hade Edge there is a localised

traffic calming and advisory signage indicating a “maximum speed of 30mph”, which have been provided by the Council to improve safety.

- 5.6.8 Finally, just before this junction there is a triangular area of land which is hard surfaced and in the section directly opposite Bent Lane a partially surfaced through route has been demarked by large stones to either flank, which provides a connection which is at right angles to the B6106 and which gives significantly better visibility. This route is indicated in the series of photographs in Appendix A of this report.
- 5.6.9 From discussions with KMC Highway Registry it is understood that at present the Council has no record of any public rights of way existing over this area. Notwithstanding this the route does appear used by vehicular traffic and depending on the time during which this has been occurring – and if this has been without “let or hindrance” of the land owner - there may be the potential for a right of way to be claimed through uninterrupted use.
- 5.6.10 It is clearly stated however that it is not the purpose of this report to promote or justify the use of this connection over what appears to be privately owned land, and these comments are made simply as recognition of the physical existence of the connection.**
- 5.6.11 During the determination process of the Outline application the LPA highway engineer has indicated that this junction is not the subject of any planned improvements, and his consultation response, Appendix A, has not expressed caution at the suggested increase in use.
- 5.6.12 The local highway network is basically unchanged since the date of the Council’s UDP and the junction arrangement would have been considered both at the time of the original POL allocation and at recently when the application site was given its draft housing allocation and the adjacent land “safeguarded”.

-
- 5.6.13 Finally although the present arrangement of the junction of Dunford Road and the B6106 is not ideal the Local Highway Authority does not appear to consider preventing a right turn from the B6106 into Dunford Road, whereby traffic intending to turn right would be directed to Greave Road and hence into Hade Edge as an alternative.
- 5.6.14 Notwithstanding the above vehicles travelling in the direction of Penistone generated by the proposed development would use the Greave Road B6106 junction which is the most direct and convenient route to the classified road southbound. This junction is a simple priority junction which with the minor road of Scholes Moor Road opposite forms a cross road. Adjacent to the junction is the unmade track known as Snittle Road.
- 5.6.15 Visibility from Greaves Road to the B6106 and across to Scholes Road is good because of the layout of the highway and the wide verges to either flank. In the search period of 2012 to 2016 there have been 2 recorded traffic accidents at this junction. These are described in section 2 of this report, and as will be noted the general nature of the accidents relates to actions by drivers or weather conditions rather than the layout of the local road network.
- 5.6.16 In relation to both the Dunford Road and Greave Road connections to the B6106 it is considered that the low increase in peak hour traffic associated with the 59 dwelling proposal, and the existing low level of background traffic on the local network would not materially adversely affect the operation of the highway system.
- 5.6.17 Finally, as an overview, it should be noted that at the date of the UDP the land allocations for residential development at Hade Edge and the original POL allocation would all have placed increased traffic on these junctions, and there is nothing to suggest that at the time of the plans assessment that any restrictions or limitations were placed on their use. As stated in 5.6.12 above, this situation has not changed in the recent draft allocation of the application site or the safeguarding of the adjacent sites.

6 Summary and Conclusions

- 6.1 Sanderson Associates have been appointed to provide highway consultancy services to Jones Homes (Yorkshire) Ltd with respect to their proposals for the development of 59 dwellings on land off Dunford Road, at Hade Edge, near Holmfirth.”
- 6.2 This Transport Statement, ref: 9173/002/01, supports the “Full planning application” for the development. The Statement is based upon an earlier report ref: 9173-001-04 which currently supports an undetermined Outline Application for development of the site, LPA reference 2016/60/91967/W. The Outline Application proposed 66 dwellings together with a modest convenience store. Both the Full and Outline applications have the same single point of access to Dunford Road, the same general road layout, and works to improve pedestrian facilities on the site frontage to Dunford Road.
- 6.3 The Council’s highway engineer has been consulted on the Outline application and raises no objections in principle to the development, subject to two design checks (swept path analysis of the proposed road layout and the provision of a Stage 1 Road Safety Audit). Both of the required checks have been carried out and information has been formally submitted to the Council to complete the highway assessment. Final comments from the highway officer are awaited and at this point there is nothing to suggest that this will not be positive.
- 6.4 The application site is a draft housing allocation in the Kirklees Local development Framework and is expected to deliver a maximum of 66 new dwellings. Safeguarded land for future development is adjacent to the draft allocation and is expected to accommodate a further 90 dwellings. This Transport Statement however covers the assessment of the application site **only**, and any subsequent examination of the safeguarded land will be subject to the provision of further information to the Local Planning Authority at that time.

- 6.4.1 The ability to access the site by sustainable modes of travel has been considered, and as would be expected given the location of the application site there are basic but limited opportunities for the use of sustainable modes of travel. This is not uncommon in settlements in upland parts of the Kirklees district and in policy terms is recognised in para' 29 of the National Planning Policy Framework, which states:

“Transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives. Smarter use of technologies can reduce the need to travel. The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel. However, the Government recognises that different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas”.

- 6.4.2 Notwithstanding two points apply:

First, during the critical peak hour the predicted level of generated pedestrian, cyclist and public passenger travel movements are low and could therefore be accommodated on the existing infrastructure, and second, local statistics of the existing settlement area indicate a relatively high proportion of residents who work from/at home compared to the surrounding district.

Predicted traffic movements recognising that sustainable transport options from the site are limited by virtue of its location and thus TRICS 85th percentile vehicle trip rates are used for calculation purposes. On this basis the 59 dwellings would result in 42 vehicle movements in the AM peak hour, 44 vehicle movements in the PM peak hour and 326 vehicle movements throughout the day.

- 6.4.1 Although not part of the development an indication has been provided of the traffic generation of a further 90 dwellings using the same 85th percentile predictions has been given. This indicates that a future development of 90 house would result in

an additional 63 vehicle movements in the AM peak hour, 67 vehicle movements in the PM peak hour and 498 vehicle movements throughout the day.

- 6.4.2 It proposed to provide a simple priority road junction to access the development site, and it has been demonstrated that this can be provided in accordance with the appropriate design standards for geometry and visibility.
- 6.4.3 Junction modelling of the proposed access to Dunford Road has also been carried out using the potential for 149 dwellings on the draft allocation and the safeguarded sites. For sensitivity purposes an assumption of an 80/20 split of north/south bound traffic has been applied to test the junction.
- 6.4.4 The findings of the PICADY computer indicate that due to the very light flows on Dunford Road no adverse impact occurs, with the highest ratio of flow to capacity indicated as 0.176 and 0.046 at the site access arm. In relation to the right turn into the site from Dunford Road the maximum RFC is 0.029. For reference a priority junction normally operates satisfactorily up to an RFC level of 0.85.
- 6.4.5 As such it is clear that whilst the numerical threshold for consideration of a right turn lane is reached by the development of the application site plus the safeguarded land using the single access, the circumstances of Dunford Road do **not** warrant the provision of a right turning lane in Dunford Road, and indeed such provision would appear significantly out of place in the street scene of the settlement and have a potential detrimental impact.
- 6.4.6 Notwithstanding the above it should be noted that the safeguarded sites adjacent to the draft allocation have frontages to Greave Road and Dunford Road, and subject to a satisfactory access design there is the potential for alternative accesses to the remaining POL allocation to be considered so the POL site is not reliant on one single access.

-
- 6.4.7** It is stressed however that the consideration of access arrangements to the safeguarded sites will have to be the subject of further detailed examination before any confirmation can be given, and acknowledging the likely scale of the remaining development, this will require off site as well as basic access arrangements to be examined.
- 6.4.8 In terms of the 59 dwellings which are the subject of this application it is clear that a simple priority junction is appropriate, and that for this level of development a right turn lane for northbound traffic to turn into the site is not required. In this respect it is noted that even with a full development of the application site and the safeguarded land there is no adverse issue of capacity at the proposed junction of the site with Dunford Road, and thus it is not considered that the sight line setback should be increased to 4.5m above the normal urban setback of 2.4m.
- 6.4.9 The design of the junction has been subject to a Stage 1 Road Safety Audit and the four minor issues identified are to be addressed at the subsequent design stage.
- 6.4.10 The proposed road layout has been examined with respect to its practical operation and vehicle swept path analysis carried to demonstrate its functionality.
- 6.4.11 In relation to the impact of the predicted traffic of the 59 dwellings on the local network the layout and safety record of the local highway system has been reviewed and it has been demonstrated that once distributed onto the potential access routes there would be no material adverse impact. This review has included the junction of Dunford Road with the B6106, which is understood to be of concern to local residents.
- 6.4.12 Finally, as an overview, it should be noted that at the date of the UDP the land allocations for residential development at Hade Edge and the original POL allocation would all have placed increased traffic on these junctions, and there is nothing to suggest that at the time of the plans assessment that any restrictions or

limitations were placed on their use. This situation has not changed in the recent draft allocation of the application site or the safeguarding of the adjacent sites.

6.4.13 In relation to the determination of this application, paragraph 32 of the *National Planning Policy Framework* is the most relevant. This states:

“All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- *the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;*
- *safe and suitable access to the site can be achieved for all people; and*
- *improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe”.*

6.4.14 In respect of this application a Transport Statement has been requested by the LPA and is now provided by this report. Existing arrangements provide reasonable options given the settlements location and recognising NPPF guidance, and acknowledging the current indication of residents in the existing settlement either working from or at home. The design of the access points to the site are compliant with standards and provide a safe and suitable access for all people, and proposed pedestrian routes from the overall site to the surrounding area could provide improved linkages. The transportation impact of the development has been considered in relation to both person trips and vehicle movements, and in relation to the former the level of additional movements can readily be accommodated by the existing infrastructure. The predicted vehicle movements from the 59 dwellings are modest and once the B6106 is gained would not be discernable against normal

daily fluctuations in traffic flow. There are therefore no requirements for off –site highway improvements and there will be no residual cumulative adverse impact on the local highway network.

- 6.4.15 As such the impact of this development could not be considered as “*severe*” in the context of para 32 of the *NPPF* and the Local Planning and Highway Authority is requested to confirm the findings of this report and grant planning consent for the development.

RIG/May 2017

APPENDIX A

LPA Highways Engineers report on Outline planning - ref: 2016/60/91967/W

Stage 1 Road Safety Audit and Designers Response

Site location plan

Site layout plan

Vehicle swept path examination

Access arrangement 9173-001

Series of photographs March 2016 of local highway network

**KIRKLEES METROPOLITAN COUNCIL
TOWN AND COUNTRY PLANNING ACT 1990
HIGHWAYS DEVELOPMENT CONTROL KP20H**

PLANNING REF 2016/60/91967/W0/AM
CATEGORY Small Major

PROPOSAL OUTLINE APPLICATION FOR
RESIDENTIAL DEVELOPMENT AND
CONVENIENCE STORE, AND
PROVISION OF OPEN SPACE
SHLAA REF 187

LOCATION LAND AT, DUNFORD ROAD,
HADE EDGE,
HOLMFIRTH,
HD9 2RT

APPLICANT TOWNSEND PLANNING
CONSULTANTS

HDC Ref. No. K3-43/6
Highway Officer Alistair McMurray
O. S. Ref. 414743 405350
Date Received 08/08/2016
Target Date 29/08/2016
Date Returned 04/10/2016
Decision
Route No. C20
Road Name DUNFORD ROAD
Adopted Yes
Road Name GREAVE ROAD
Adopted Yes
Road Name ABBEY CLOSE
Adopted Yes
Road Name ABBEY COURT
Adopted Yes
Road Name SNITTLE ROAD
Adopted Yes
Footpath No
Highway scheme No
N/A
Checked by / date Sarah Holdroy 10/08/2016

This proposal consists of an outline application for a residential development of some 66 dwellings with 143 associated parking spaces with access only being considered.

As such, this office is commenting upon the access element of the proposal and the principle of development only.

Access to the site is proposed via a simple priority junction to Dunford Road. The geometric design of the access provides for a carriageway width of some 5.5m with 6m kerb radii. A 2m wide footway is also proposed adjacent to the carriageway and across the site frontage.

In terms of geometric parameters the proposed access is considered acceptable and in line with the required design features.

The application is supported by a Transport Statement (Sanderson Associates May 2016). As part of the assessment, 7 day ATC data was obtained for the length of Dunford Road associated with the proposed access. The ATC data confirmed that the 85th %ile wet weather speeds are circa 37-39mph and as such, in excess of the 30mph speed limit currently in operation.

In line with this, the submitted assessment (in agreement with discussions with Kirklees Council) utilises DMRB standards for Vehicular Visibility Splays rather than the standards as prescribed with Manual for Streets. This approach is considered robust and is supported.

Vehicular visibility splays of 2.4m x 120m are achievable and provided at the site access. This is considered acceptable and is supported.

An interrogation of the TRICS database has been utilised in order to form a valid dataset to be obtained for the purposes of calculating vehicular trip rates and resultant traffic generation from the proposed development. The trip rates obtained are considered sufficiently robust and would predict circa 47 two-way trips during the AM peak and 50 two-way trips during the PM peak.

In addition to the residential element, vehicular trips have also been obtained for the retail unit proposed resulting in around 11 two-trips during each peak hour.

As such, for the proposed development vehicular traffic in the region of 58 and 61 vehicular movements is predicted during the AM and PM peak hours respectively.

Notwithstanding the above, as access only is being considered and due to the underlying nature of the likelihood of excessive vehicle speeds and that DMRB standards are being utilised, Highways Development Management requests that the proposed access arrangements be supported by a Stage 1 Road Safety Audit.

Highways Development Management also notes that the submitted Transport Statement does not contain any swept path analysis in relation to the proposed access arrangement. (This can be considered within the Stage 1 RSA.

Metro have been consulted as part of this application and they make the following comments:

Good pedestrian access to/from the site to/from bus stops should be provided taking into consideration the needs of the elderly and mobility impaired.

We recommend that the developer contributes towards sustainable travel incentives to encourage the use of public transport and other sustainable travel modes through a sustainable travel fund.

The fund could be used to purchase discounted MetroCards for all or part of the site.

Based on our current RMC scheme, there is an option for the developer to purchase (in bulk) heavily discounted Residential MetroCards (circa 40% discount) as part of a wider sustainable travel package.

Other uses could include personalised travel planning, car club use, cycle purchase schemes, car sharing promotion, walking / cycling promotion and or further infrastructure enhancements.

The payment schedule, mechanism and administration of the fund and RMC scheme would be agreed with KCC and WYCA and detailed in a planning condition or S106 agreement. The contribution appropriate for this development would be £31,762.50

Subject to the Stage 1 RSA requirements as detailed above, Highways Development Management raises no in-principle objections to this proposal, however further comment is reserved upon receipt of the requisite Stage 1 RSA.

On behalf of
S. Sampson - Group Engineer
Highways Development Control

KIRKLEES METROPOLITAN COUNCIL
TOWN AND COUNTRY PLANNING ACT 1990
HIGHWAYS DEVELOPMENT CONTROL KP20H

PLANNING REF 2016/60/91967/W0/AM
CATEGORY Small Major

HDC REF

Prepared on behalf of

Jones Homes (Yorkshire) Ltd



**Outline application for residential development
(including affordable housing and 1.no convenience store)
Dunford Road Hade Edge**

Designers Response to Road Safety Audit

Acknowledgements:

Disclaimer

The methodology adopted and the sources of information used by Sanderson Associates (Consulting Engineers) Ltd in providing its services are outlined within this Report.

Any information provided by third parties and referred to herein has not been checked or verified by Sanderson Associates (Consulting Engineers) Ltd, unless otherwise expressly stated within this report.

This report was checked and approved on the n/a and the Report is therefore valid on this date, circumstances, regulations and professional standards do change which could subsequently affect the validity of this Report.

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Report Ref:	9173/003/01	October 2016	
Author:	Robert Greenwood I Eng FIHE Associate Director		
Checked & Approved:	n/a	Date:	n/a

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Appendices

Appendix A

Road Safety Audit ref: 9616/AND/001/01

1 Introduction

1.1 Sanderson Associates have been appointed to provide highway consultancy services to Jones Homes (Yorkshire) Ltd with respect to their proposals for an Outline Planning Application for residential development (including affordable housing and 1.no convenience store) on land off Dunford Road, at Hade Edge, near Holmfirth.”

1.2 The outline planning application has been lodged and is referenced 2016/60/91967/WO/AM. As part of the Council’s Highway Engineer’s response to the application further information has been requested as follows:

Notwithstanding the above, as access only is being considered and due to the underlying nature of the likelihood of excessive vehicle speeds and that DMRB standards are being utilised, Highways Development Management requests that the proposed access arrangements be supported by a Stage 1 Road Safety Audit.

Highways Development Management also notes that the submitted Transport Statement does not contain any swept path analysis in relation to the proposed access arrangement. (This can be considered within the Stage 1 RSA.

1.3 Sanderson Associates (Consulting Engineers) Limited have carried out a Stage One Road Safety Audit for the proposed access of the new residential estate road in accordance with this request. The audit team are independent of the project team for this development.

1.4 A copy of the RSA reference 9616/AND/001/01 is attached as Appendix A to this report, and this response to the items identified follows the format of the issues identified in Section 2 of that audit report.

1.5 With respect to swept path analysis of the proposed estate road junction this has been provided to the Council’s Highway Engineer and the Road Safety Audit Team, and has been considered by the latter in the above referenced audit.

2 Response to identified Items raised in the Audit

A1 GENERAL

A1.4.1 Problem: Drainage

Location: Site Access/General

Summary: The proposed site access and footway will affect the existing drainage on the east side of Dunford Road, which includes free edge drainage, together with a number of kerbed gullies. This drainage arrangement would not be compatible with the proposed footway arrangements. Should adequate drainage not be provided, this could result in standing water, which would create a skid hazard for passing traffic.

Recommendation: Provide alternative drainage arrangements along the site frontage that are affected by the works.

Response: This recommendation is accepted, and at detailed design stage drainage arrangements will be provided to address the above to ensure that the proposed footway is free from any obstructions which would arise from retention of the current drainage arrangements. The detailed design stage would require the provision of detailed construction plans and specifications to ensure that the works were in accord with the adopted public highway standards (an application under Section 38 Highways Act) of the Local Highway Authority.

A1.5.1 Problem: Landscaping

Location: Eastern verge to the north of the site access

Summary: There is an existing tree located in the eastern verge to the north of the site access. Should this tree be retained, it would block visibility from the site access, which could result in turning type collisions at the site access. The tree would also create an obstruction to pedestrians on the proposed footway.

Recommendation: The tree should be removed.

Response: This recommendation is accepted, and the tree will be removed. The tree appears to be “self-seeded” and is inappropriate in the highway verge being a hard unprotected object that would add to potential injuries in the event of vehicle run off. It is understood that the tree is not covered by any Preservation Order and as it lies within the highway verge would be under the control of the Local Highway Authority, whose consent for removal would be sought under the Section 38 Highways Act application to adopt the new estate road and footway to Dunford Road.

A4 NON-MOTORISED USER (NMU) PROVISION

A4.2.1 Problem: Pedestrian

Location: Both ends of the proposed footway

Summary: The footway proposed along the site frontage does not tie-in the wider footway network. Therefore, pedestrians would need to cross Dunford Road to access the footway on the west side of the road. Should no facilities (dropped crossings) be provided to assist pedestrian crossing at the end of footway, this could result in pedestrian trips; or pedestrians crossing at inappropriate locations eg close to drives/junctions, where they could be struck by turning vehicles.

Recommendation: Provide dropped crossings at appropriate locations to provide access to the western footway.

Response: This recommendation is accepted, and will be again be addressed at detailed design stage design stage for the Section 38 Highways Act application to the Local Highway Authority.

A5 ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING**A5.2.1 Problem:** Street Lighting**Location:** Site Access/General**Summary:** The proposed site access and footway will affect the existing street lighting on the east side of Dunford Road. Should the street lighting columns not all be relocated, these could create obstructions to pedestrians on the proposed footway.**Recommendation:** Affected street lighting columns should be relocated to the back of the proposed footway.

Response: This recommendation is accepted, and will be again be addressed at detailed design stage design stage for the Section 38 Highways Act application to the Local Highway Authority. Under the Section 38 procedure the design of street lighting and any changes to the present lighting on the public highway is undertaken by the Council. The provision of the footway to Dunford Road is along the development site frontage and widening of the current verge is required to achieve the required junction sight lines and footway width. The ability to set lighting columns back at the rear of the new footway is therefore in the applicants control and can be implemented as part of the development. All works to the street lighting will be in accordance with the Council's requirements at Section 38 stage.

Appendix A

Road Safety Audit ref: 9616/AND/001/01

Prepared on behalf of

Jones Homes (Yorkshire) Limited

Dunford Road, Hade Edge

Stage 1 Road Safety Audit

Disclaimer

The methodology adopted and the sources of information used by Sanderson Associates (Consulting Engineers) Ltd in providing its services are outlined within this Report.

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Report Ref:	9616/AND/001/01	October 2016	
Author:	Adam Darwin		
Checked & Approved:	Darren Hawkyard	Date:	11 th October 2016

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Appendices

APPENDIX A

Marked Up Plan

1 Introduction

- 1.1 Sanderson Associates (Consulting Engineers) Ltd have been appointed Jones Homes (Yorkshire) Limited to carry out a Stage 1 Road Safety Audit of their site access proposals at Dunford Road, Hade Edge.
- 1.2 A new site access is proposed on to Dunford Road as shown on drawing 9173-001.
- 1.3 A supporting Transport Statement has also been provided to the Audit Team as part of the Audit brief, together with the consultation response from the Local Highway Authority. Swept path drawings 9173-001 and 9173-003 have also been provided.
- 1.4 The Audit Team membership is given in Section 3 of this report. The Audit took place on site on Friday 7th October 2016 and was discussed further at the office of Sanderson Associates. During the site visit the weather was dry and traffic conditions appeared to be normal.
- 1.5 The Audit report follows the Stage 1 table of contents list in Annex A of HD19/15. For instance a problem identified under list A1: General, item – Access will be referenced A1.8.1 where A1 refers to the particular list, 8 refers to the eighth item in list A1 i.e. Access and the third figure refers to the problem number. Therefore if a second problem has been identified under the same list and item this will be numbered A1.8.2.
- 1.6 The Audit considers and reports on the safety implications of the proposed highway works. Comments made in this report relate to those points that are considered to be worthy of attention in respect of safety only.
- 1.7 A marked up plan is included in **Appendix A**, which identifies the general location of problems that have been raised. General problems or those with multiple locations have not all been shown.

-
- 1.8 Any recommendations included within this report should not be regarded as being prescriptive design solutions to the problems raised. They are intended only to indicate a proportionate means of eliminating or mitigating the identified problem. It is noted that there may be alternative methods of addressing a problem that would be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.

2 Items raised at the Stage 1 Audit

A1 GENERAL

A1.4.1 **Problem:** Drainage

Location: Site Access/General

Summary: The proposed site access and footway will affect the existing drainage on the east side of Dunford Road, which includes free edge drainage, together with a number of kerbed gullies. This drainage arrangement would not be compatible with the proposed footway arrangements. Should adequate drainage not be provided, this could result in standing water, which would create a skid hazard for passing traffic.

Recommendation: Provide alternative drainage arrangements along the site frontage that are affected by the works.

A1.5.1 **Problem:** Landscaping

Location: Eastern verge to the north of the site access

Summary: There is an existing tree located in the eastern verge to the north of the site access. Should this tree be retained, it would block visibility from the site access, which could result in turning type collisions at the site access. The tree would also create an obstruction to pedestrians on the proposed footway.

Recommendation: The tree should be removed.

A4 NON-MOTORISED USER (NMU) PROVISION

A4.2.1 **Problem:** Pedestrian

Location: Both ends of the proposed footway

Summary: The footway proposed along the site frontage does not tie-in the wider footway network. Therefore, pedestrians would need to cross Dunford Road to access the footway on the west side of the road. Should no facilities (dropped crossings) be provided to assist pedestrian crossing at the end of footway, this could result in pedestrian trips; or pedestrians crossing at inappropriate locations eg close to drives/junctions, where they could be struck by turning vehicles.

Recommendation: Provide dropped crossings at appropriate locations to provide access to the western footway.

A5 ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING**A5.2.1 Problem:** Street Lighting**Location:** Site Access/General

Summary: The proposed site access and footway will affect the existing street lighting on the east side of Dunford Road. Should the street lighting columns not all be relocated, these could create obstructions to pedestrians on the proposed footway.

Recommendation: Affected street lighting columns should be relocated to the back of the proposed footway.

3 **Audit Team Statement**

- 3.1 We certify that we have examined the works with the sole purpose of identifying any features, or combination of feature that could be modified such as to improve the overall safety of the scheme. The problems this Road Safety Audit identifies have been noted together with suggestions for improvement, which we recommend for consideration. No one on the Audit Team has been involved with the scheme design.

Audit Team Leader:

Adam Darwin FIHE

Associate at Sanderson Associates (Consulting Engineers) Ltd

Signed: 

Dated: 11th October 2016

Audit Team Members:

Darren Hawkyard MIHE

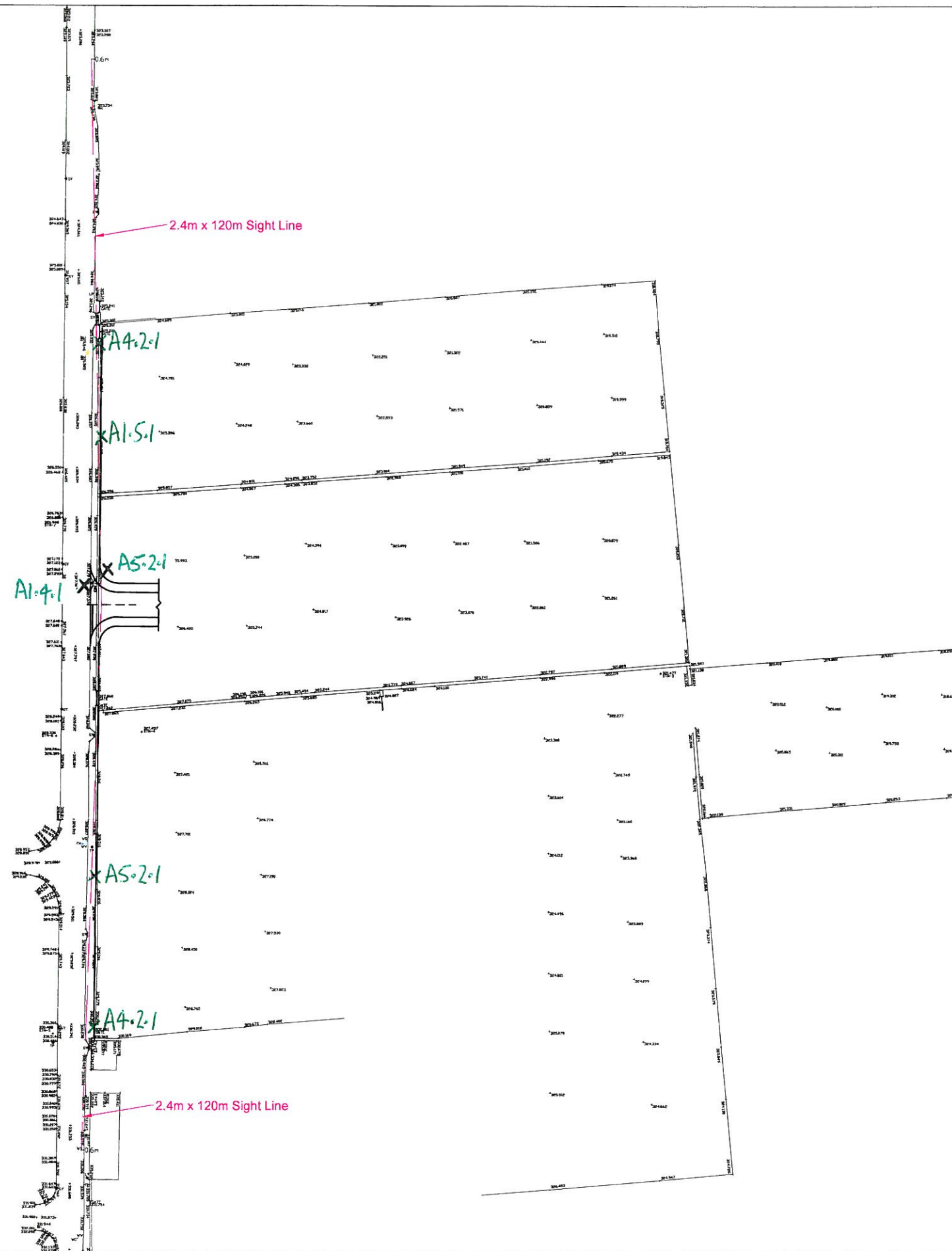
Senior Engineer at Sanderson Associates (Consulting Engineers) Ltd

Signed: 

Dated: 11th October 2016

APPENDIX A

Marked Up Plan



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Rev	Amendment	Drawn	Date	Checked

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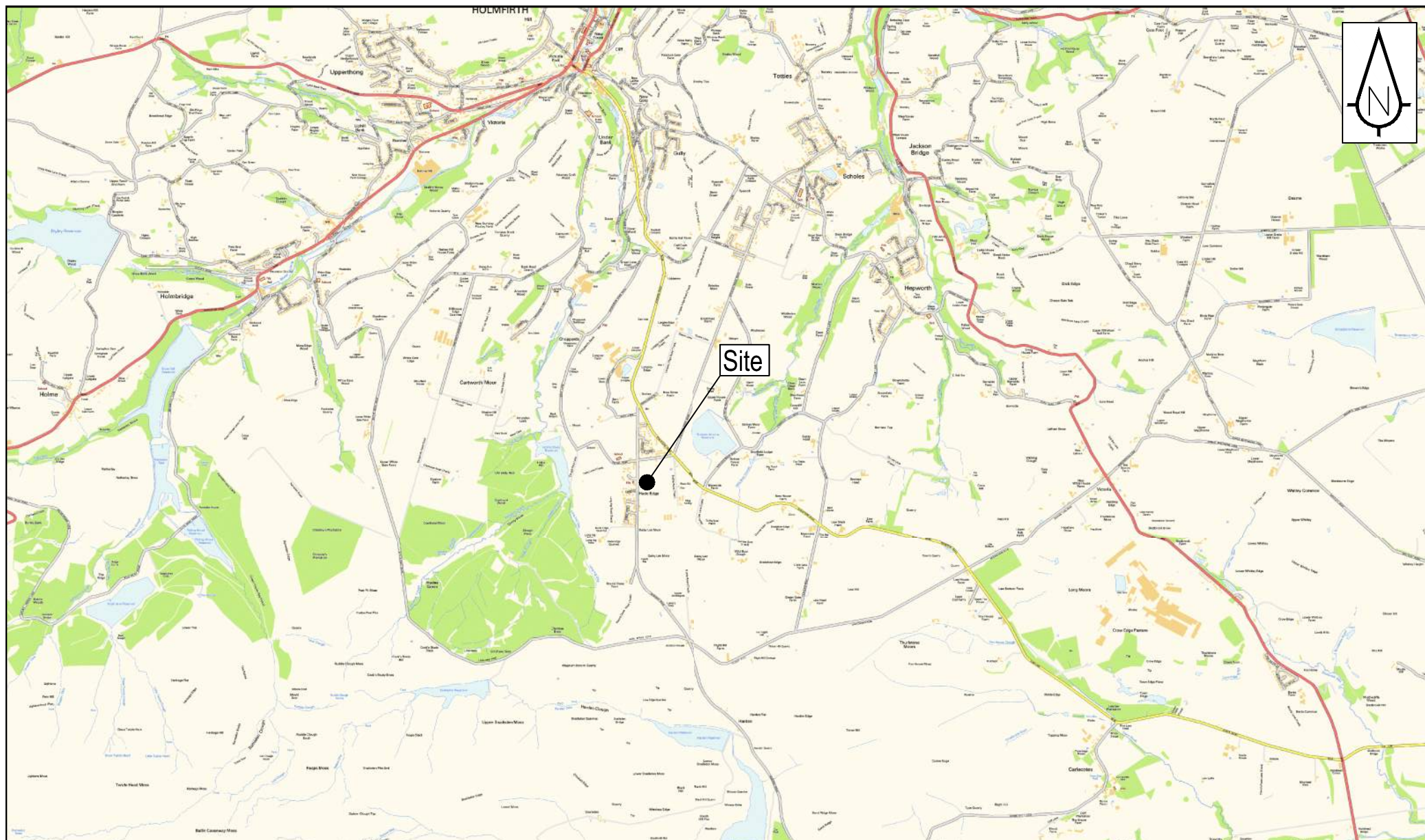
Client
Jones Homes Yorkshire Ltd

Project Title
Proposed Outline Residential Development
Dunford Road, Hade Edge

Drawing Title
Proposed Access Arrangement

Scale 1:500	Drawn By SB
Drawing Size A1	Checked By RIG
Date May 2016	Approved By RIG

 Drawing Number 9173-001	Rev
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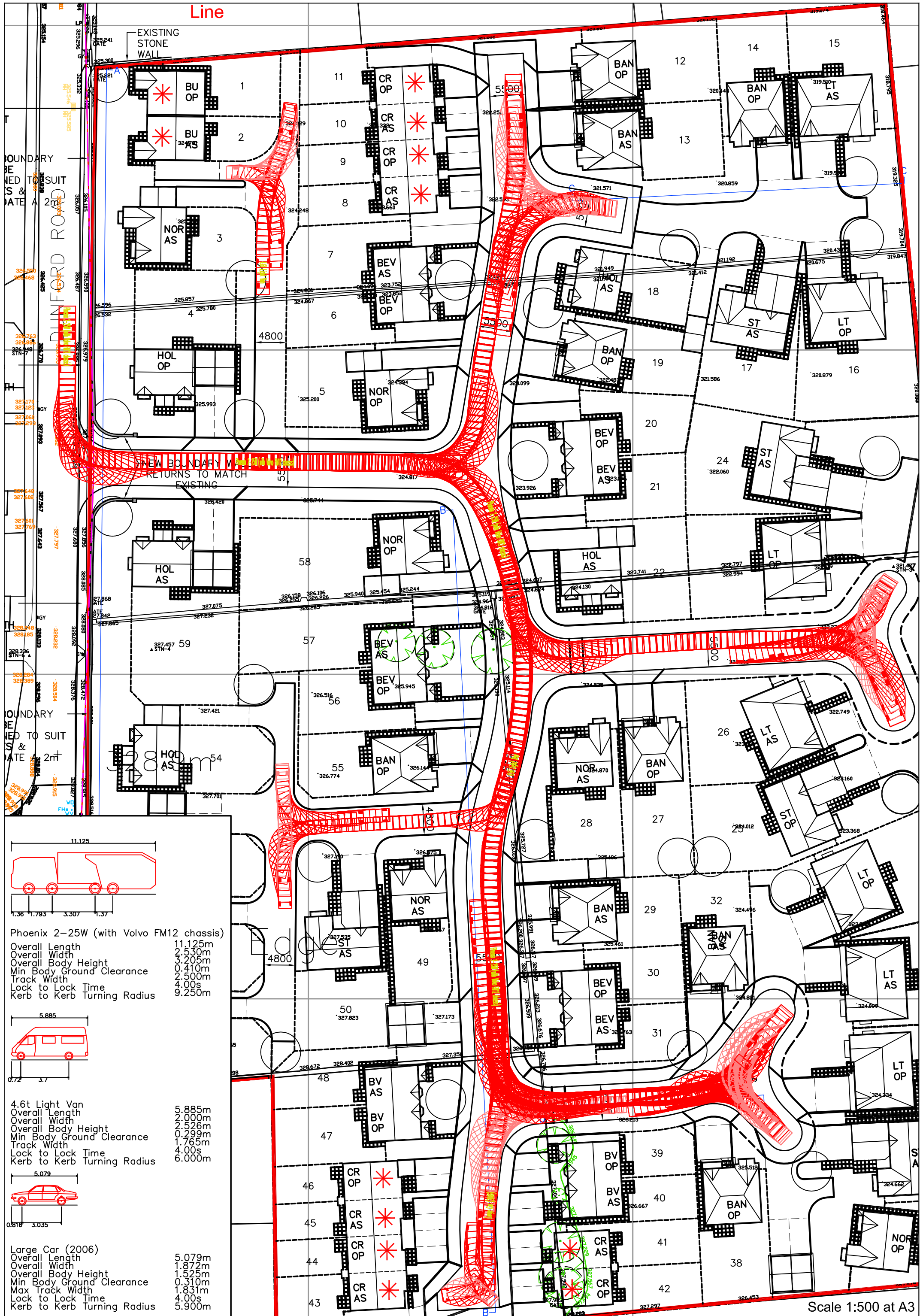
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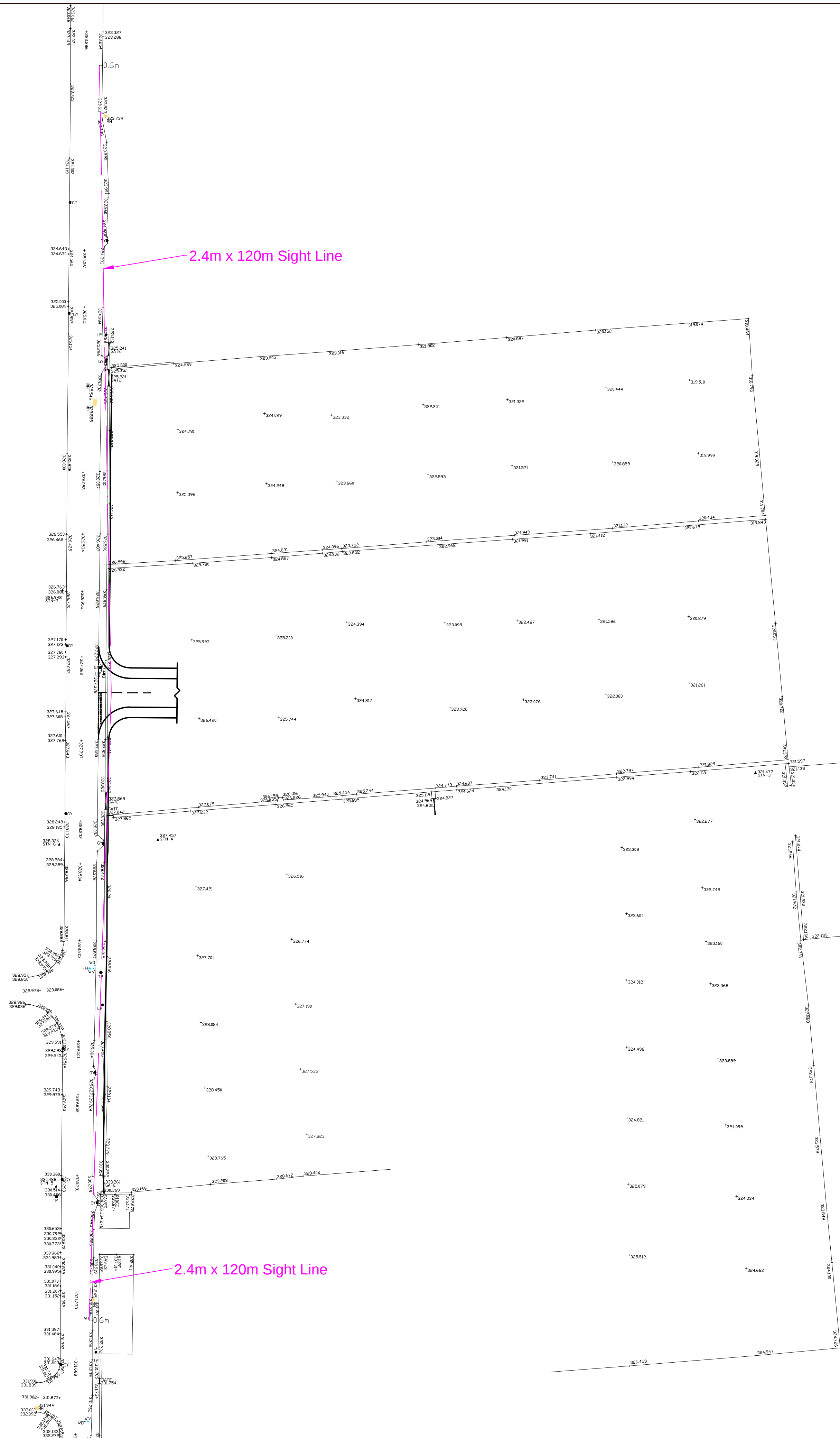
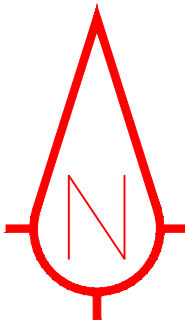
Drawn AA	Scale NTS	
Checked RIG	Date March 2016	
Approved RIG	Drawing Number Figure 1	



2.4m
x
120m
Sight
Line

2.4m
x
120m
Sight
Line





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Rev	Amendment	Drawn	Date	Checked

Sa

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Client

Jones Homes Yorkshire Ltd

Project Title

Proposed Outline Residential Development
Dunford Road, Hade Edge

Drawing Title

Proposed Access Arrangement

Scale	1:500	Drawn By	SB
Drawing Size	A1	Checked By	RIG
Date	May 2016	Approved By	RIG

	Drawing Number	Rev
	9173-001	

Series of Photographs Dunford Road 2016



Dunford Road looking north – site on right



Dunford Road looking south – site on left



Greave Road junction with Dunford Road looking south



Greave Road junction with Dunford Road looking north



Greave Road looking east – POL site on right



Greave Road Junction with B6106 looking in Penistone direction



Greave Road Junction with B6106 looking in Holmfirth direction



Dunford Road Junction with B6106 looking in Penistone direction



Dunford Road Junction with B6106 looking in Holmfirth direction



View of vehicle approaching Dunford Road Junction with B6106 – photo looking in Holmfirth direction



Dunford Road from B6106 looking south



View of route across land between B6106 and Dunford Road from Bent Lane