



Trinity Academy, Barnsley

Transport Assessment prepared
on behalf of Bowmer & Kirkland
Ltd

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MILESTONE
TRANSPORT PLANNING

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1. Introduction

- 1.1 This Transport Assessment (TA) has been prepared on behalf of Bowmer & Kirkland Ltd to consider the highways and transport implications related to a proposed 6FE secondary school (900 pupils) on land located to the northeast of the A6133 Broadway in Barnsley. The site is currently occupied by the former Keresforth Centre, an NHS facility that ceased to operate in 2018.
- 1.2 The location of the application site in relation to the surrounding highway and transport network is shown at Figure 1.

Figure 1 **Site Location**



- 1.3 The proposed site operator is Trinity Academy. Trinity Academy is currently operating at a temporary site, Eastgate House, c. 650-metres west of Barnsley rail station. The temporary school accommodates 177 pupils.

Scope of Assessment

- 1.4 The purpose of the TA is to consider the implications of development related travel on the operation of the surrounding highway and transport networks. Furthermore, this TA will consider access arrangements, parking and application site connectivity by sustainable modes.
- 1.5 The TA will demonstrate that in terms of Planning Policy at both national and local level, with respect to issues such as sustainability and traffic impact, the application site is more than capable of accommodating the proposed level of development.
- 1.6 The TA content is as follows:

- Section 2 considers the transport planning and highways aspects of the development in the context of national and local planning policy;
- Section 3 provides a description of the site's accessibility by foot, cycle and public transport along with a description of the application site, baseline information concerning the operation and safety characteristics of the surrounding highway network;
- Section 4 details the proposed development and examines the movement and access strategy as well as proposed parking, drop-off / pick-up and servicing arrangements;
- Section 5 considers the multi-modal trip generational characteristics of the school during the weekday AM and PM peak periods for both pupils and staff;
- Section 6 assesses the impact of the development-related trips on the surrounding local highway and transport networks;
- Finally, Section 7 summarises and concludes the report's findings.

Highway Authority Scoping

1.7 A pre-application scoping report was prepared by Milestone Transport Planning (MTP) in October 2021 and shared with Barnsley Metropolitan Borough Council (BMBC) as Highway Authority. The report is provided at Appendix 1. A virtual meeting was held between MTP and Wayne Lake of BMBC Highways on 29 October 2021 to discuss the scheme proposal. A written response was provided by BMBC Highways in advance of the meeting on 28 October 2021 (see Appendix 2). The key conclusions and agreed actions resulting from the meeting are summarised below:

- Reference should be made to the shared footway / cycleway along the A6133 Broadway within the TA;
- The TA should include details of Bus Service 44;
- The TA study area for junction capacity analysis should include all junctions that experience a 30 or more two-way increase in trips as a result of the development proposal;
- Queue length surveys should be undertaken alongside any junction turning counts;
- Highway works to modify the A6133 / A628 should be taken account of;
- National Highways should be approached to scope the content of the TA;
- The TA should identify any requirement to assess the performance of M1 Junction 37;
- The study area for personal injury accident analysis is agreeable but should be increased if there is a noticeable pattern of incident elsewhere on the network that would see the passage of school-related trips;
- There should not be an acceptance that parents will park on local roads to drop-off / pick-up – any parking stress survey to be undertaken as part of the TA is for sensitivity purposes only;
- Details of road adoption for Keresforth Close need to be considered further;
- Full details should be provided within the TA of existing conditions and how potential issues / residual impacts will be managed or mitigated;
- A full accessibility audit surrounding the site should be undertaken to support the TA;

- Appropriate survey sites should be used when determining predicted pupil mode share for trip generation purposes (BMBC data provided for Barnsley schools following the scoping process);
- Staff trip generation should consider the potential for a reduction in public transport patronage over time;
- Committed development traffic flows to be confirmed by BMBC (information provided following the scoping process).

1.8 Whilst it has not been possible to engage in full pre-application discussions with National Highways prior to the submission of this application, it is proposed that this TA and other application material is provided to National Highways at the earliest opportunity to seek their views on the TA content and methodologies employed. It is otherwise deemed that the above points have been fully addressed within the remainder of this TA.

2. Planning Policy Context

- 2.1 An important consideration in the promotion of the development site is how it conforms to transport policies at both National and Local Government level.

National Planning Policy Framework (NPPF, 2021)

- 2.1 Promoting sustainable transport is a key thread of the NPPF and para. 104 highlights the importance of considering transport issues from the earliest stages of development proposals to ensure that:
- The potential impacts on transport networks can be assessed;
 - Opportunities from existing and proposed transport infrastructure, changing transport technology and usage are realised;
 - Opportunities to promote walking, cycling and public transport use are identified and pursued;
 - The environmental impacts of traffic and transport infrastructure are identified, assessed and considered – identifying opportunities for avoiding and mitigating any adverse effects and for net environmental gains;
 - Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places.
- 2.2 Paragraph 105 goes on to state that: *"The planning system should actively manage patterns of growth...Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes..."*
- 2.3 Para. 110 requires that when assessing specific allocations for development it is important to ensure that:
- Appropriate opportunities to promote sustainable transport modes have been taken up;
 - Safe and suitable access to the site can be achieved for all users; and
 - Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.
- 2.4 Para. 111 continues to state that *'...developments should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe'*.
- 2.5 Para. 112 requires that applications for development should:
- First, give priority to pedestrian and cycle movements, both within the scheme and with neighbouring areas;
 - Second, so far as is possible, facilitate access to high quality public transport, maximising catchment areas to services and implementing appropriate facilities to encourage use;
 - Address the needs of people with disabilities and reduced mobility;
 - Create places that are safe, secure and attractive which minimise conflicts between pedestrians, cyclists and vehicles;

- Allow for the efficient delivery of goods and access by service and emergency vehicles; and
- Be designed to enable charging of plug-in and other ultra-low emission vehicles.

Barnsley Metropolitan Borough Council (BMBC) Local Plan - 2019

- 2.6 This strategic document provides broad guidance on the scale and distribution of development and provision of supporting infrastructure. It sets out spatial visions, objectives and development policies. BMBC wants to ensure that the strategic vision, objectives and accompanying policies embrace sustainable components and address Barnsley's particular challenges and needs. The relevant transport policies are outlined below.
- 2.7 Policy T3 refers to new development and sustainable travel, highlighting that all new schemes will be expected to:
- *"Be located and designed to reduce need to travel, be accessible to public transport and meet the needs of pedestrians and cyclists;*
 - *Provide at least the minimum levels of parking for cycles, motorbikes, scooters, mopeds and disabled people set out in the relevant Supplementary Planning Document;*
 - *Provide a transport statement or assessment in line with guidance set out in National Planning Policy Framework and guidance including where appropriate regard for cross boundary local authority impacts; and*
 - *Provide a travel plan statement or a travel plan in accordance with guidance set out in the National Planning Policy Framework including where appropriate regard for cross boundary local authority impacts. Travel plans will be secured through a planning obligation or a planning condition."*
- 2.8 Policy T4 states the following:
- *"New development will be expected to be designed and built to provide all transport users within and surrounding the development with safe, secure and convenient access and movement."*
- 2.9 A fundamental goal of Barnsley's Local Plan is to provide for sustainable development, and it includes a spatial strategy that reduces the need to travel by promoting growth in sustainable, accessible locations. The policies are set out to ensure inclusive travel is embedded within any new development and provides opportunities for people to change their travel behaviour.

Barnsley Transport Strategy (2014-2033)

- 2.10 The Barnsley Transport Strategy establishes the way in which congestion, road safety, air quality and accessibility will be tackled in Barnsley. The strategy aims to deliver improved accessibility to a range of services.
- 2.11 The strategy focuses on reducing the need to travel and making smarter choices which involves influencing people's behaviour towards alternative methods other than the private car. This ultimately will promote the modal shift toward sustainable transport modes.

2.12 In order to achieve the transport vision, the council have highlighted four key transport priorities that they feel will promote economic growth and improve the quality of life of Barnsley's residents. The priorities are as follows:

- Promote Economic Growth and Strategic Connections;
- Promote Inclusion, Accessibility, and Better Quality of Life;
- Promote High Quality Natural Environment, Local Air Quality and Climate Change;
- Promote Safety, Security and Health.

2.13 It is envisaged that to achieve the aspirations, the transport priorities identified will be delivered through partnership providing an opportunity to build and strengthen existing partnership working and delivering real improvements at a local level and within the wider context of the Leeds, Sheffield and Manchester City Regions.

3. Baseline Conditions & Site Accessibility

Existing Site Information

- 3.1 The site is bounded by the A6133 – Broadway to the west, residential development and playing fields to the northwest, and residential properties and allotments on Raley Street to the south and east. The site is currently accessed from Keresforth Close, a private road off the northeastern edge of the A6133 carriageway. The extent of the proposed school site is illustrated at Figure 2.

Figure 2 Proposed School Site



Site Accessibility

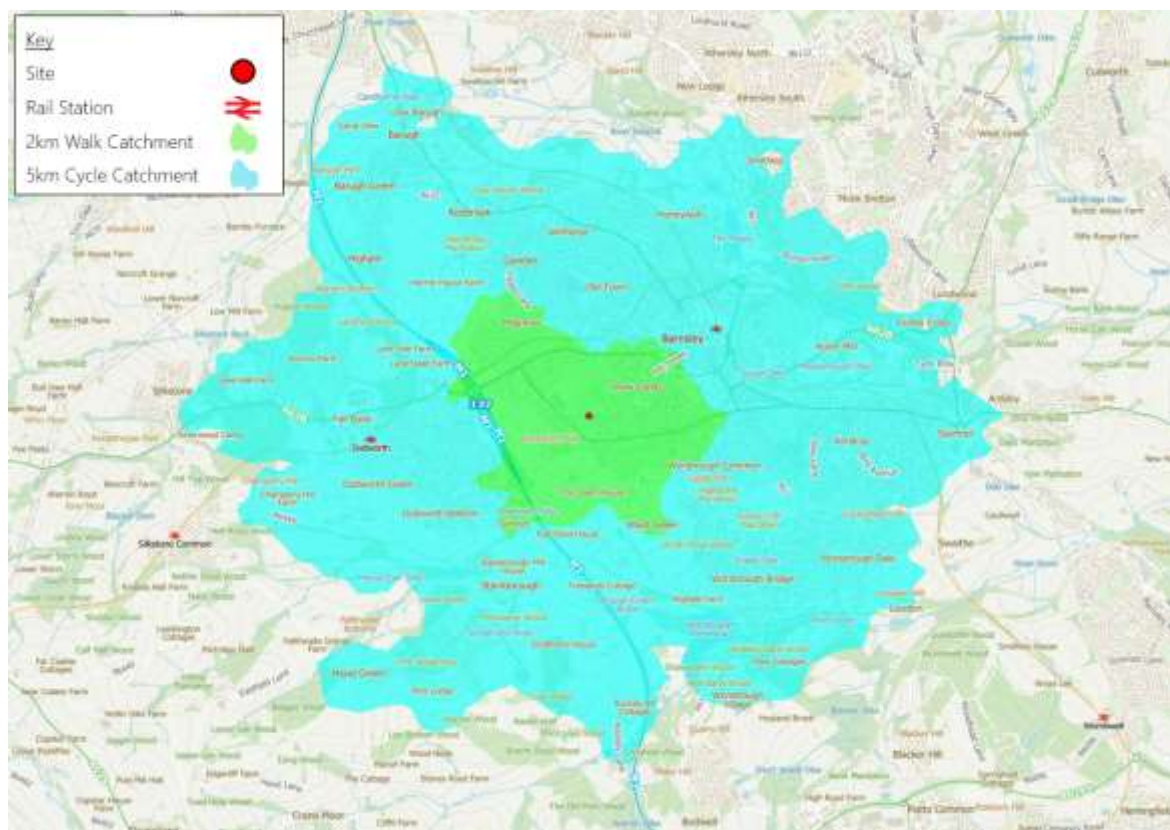
- 3.2 Planning policy at national and local level seeks to ensure that development is accessible by a range of sustainable transport modes. As such, this section of the TA examines site accessibility with respect to walking, cycling and public transport.

Pedestrian & Cycling Accessibility

- 3.3 Current planning guidance indicates that walking, as a mode of transport in itself, is the most important mode at local level and offers the greatest potential to reduce car trips, particularly those less than 2.0 kilometres. The Chartered Institute of Highways and Transportation's (CIHT's) publication '*Providing for Journeys on Foot*' (2000) recommends a maximum walk distance of 2km for journeys to school.

- 3.4 Figure 3 illustrates the potential 2km walk / 5km cycle catchment area of the school which shows that residential areas in Pogmoor and Kingstone are within a reasonable walk distance. The wider areas of Barnsley and Dodworth are accessible within a 5km catchment.

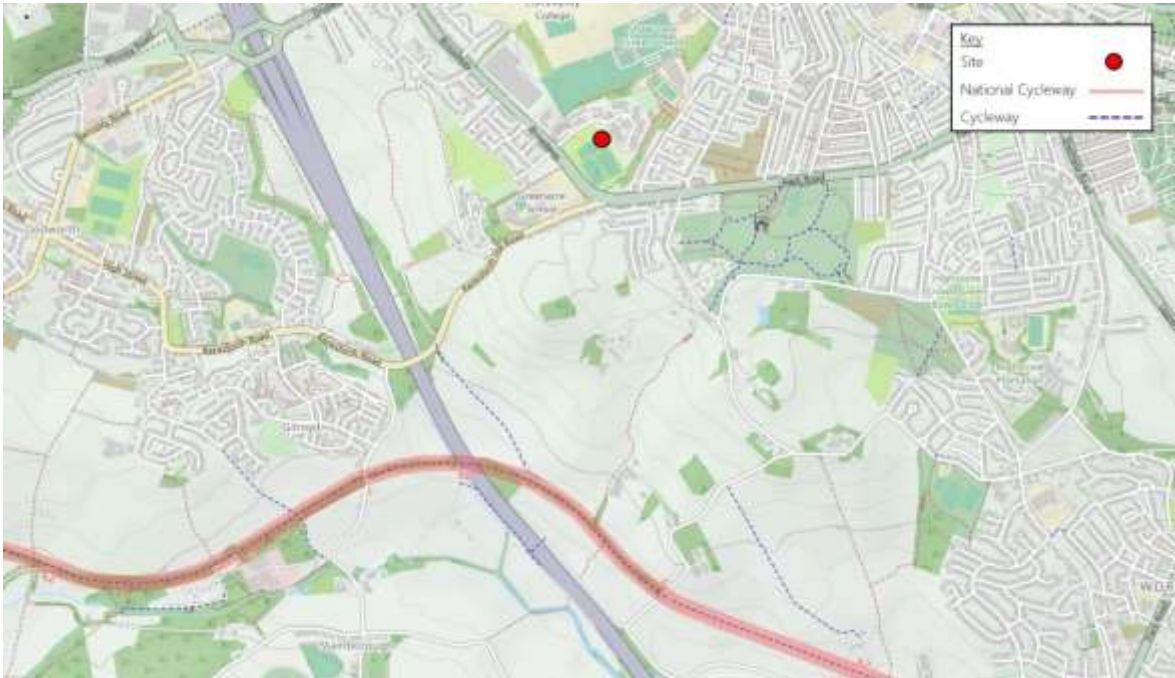
Figure 3 2km Walk Catchment



- 3.5 Local roads in the vicinity of the site generally benefit from consistent street lighting, footways on both sides of the carriageway, and where pedestrian desire lines exist, crossings are provided with dropped kerbs and / or pedestrian refuge islands.
- 3.6 There is a shared footway / cycleway on the southwestern side of the A6133 Broadway running between its junctions with Woodland Drive to the northwest and Bainton Drive to the east. To the northwest and east of these locations cyclists are diverted onto a segregated facility or the mainline carriageway.
- 3.7 There are signalised pedestrian crossing facilities on the A6133 at the junction with Keresforth Close, facilitating safe pedestrian movement between the future school and nearby residential development.
- 3.8 A public right of way (PROW), footpath 260, traverses the centre of the site from the northwest to the southeast along the eastern boundary of the playing field. A further PROW (Footpath 266) runs along the northern site boundary.
- 3.9 There are also a number of quiet residential streets in the vicinity of the proposed school that are conducive to local trips. Carriageway widths are typically wide enough to accommodate both cyclists and vehicles and visibility is generally of a good level aiding inter-visibility between cyclists and vehicles.

3.10 The local cycle routes in the vicinity of the site are illustrated in Figure 4.

Figure 4 Local Cycle Network



Public Transport Accessibility

- 3.11 The nearest bus services operate from stops on A6133 Broadway, approximately 40m southeast of the A6133 Broadway / Keresforth Close junction for eastbound services and approximately 150m northwest of the junction for northwestbound services. Bus stops are provided with pole, flag and timetable information and the southbound bus stop also benefits from shelter and seating.
- 3.12 Table 3.1 provides a summary of the bus routes operating from the stops outlined above.

Table 3.1 Summary of Local Bus Routes from Broadway / Keresforth Close Stop

Route No.	Daily Weekday Frequency (No. of buses per hour)	Route
43/44	2 per hour	Barnsley – Pogmoor Kingstone (Circular)
479	3 per hour in the AM / PM Peaks (Mon-Fri School Service)	Kendray – Kingstone (Horizon Community Coll)

Rail Services

- 3.13 The site is located 2.8km southwest of Barnsley interchange station and 2.7km northeast of Dodworth railway station. Both stations are accessible in a cycle time of 10 minutes. Barnsley station provides frequent services on the Hallam and Penistone Lines, both operated by Northern Trains. These lines include destinations such as Leeds, Sheffield, Nottingham and Lincoln Central.

Local Amenities

- 3.14 As per BREEAM guidance, the proposed school is categorised as Building Group 2 (BG2). It is therefore required to have a selection of accessible amenities within 500-metres of the site. Table 3.2 below provides details on the closest existing amenities.

Table 3.2 Local Amenities

Amenity	Distance	Walk Time (Minutes)	Cycle Time (Minutes)
Barnsley Fire Station	100-metres	1-minute	<1-minute
Co-operative	600-metres	8-minutes	2-minute
St Edwards Church	800-metres	10-minutes	4-minutes
Barnsley Post Office	1.9-kilometres	22-minutes	6-minutes
Pharmacy	750-metres	10-minutes	3-minutes
Woodland Drive Medical Centre	700-metres	9-minutes	3-minutes
Chadwell Medical Centre	1.0-kilometres	12-minutes	4-minutes

- 3.15 It should be noted that the application site, in its existing form, has several of the required amenities within 500-metres. Any amenities that fall outside of this catchment are still safely accessible by sustainable modes of transport via existing infrastructure. The time to walk to each amenity ranges from 1-22 minutes and 1-6 minutes by cycle.

Summary

- 3.16 The location of the application site reflects the requirements of the NPPF and local policy in ensuring that patterns of growth make the fullest possible use of walking, cycling and public transport, and focus significant development in locations which are sustainable. The location of the site provides a realistic choice in travel modes to cater for a number of daily journeys which would act to reduce staff and pupils / parents' reliance on the private car.

Local Highway Network

- 3.17 The site is accessed via Keresforth Close, a cul-de-sac providing access to residential dwellings and the former NHS facility on the subject site. Keresforth Close is subject to a 10-mph speed limit and features double yellow lines on either side of the carriageway. Keresforth Close is a private road.
- 3.18 Keresforth Close junctions with the A6133 Broadway in the form of a signalised crossroad junction. The junction benefits from pedestrian crossing facilities on all arms, allowing safe and convenient movements for pedestrians.

- 3.19 In a northwest direction, the A6133 head towards Pogmoor. The road forms side arm junctions with minor residential streets and footway / cycleway infrastructure lines the carriageway. A left-turn signalised junction can be found with the A628 that provides access to the M1 Junction 7 roundabout approximately 400-metres west. The M1 follows a northward route towards Leeds and a direct route to Rotherham and Sheffield in a southward alignment.
- 3.20 The A628 eastbound provides a corridor towards Barnsley centre, featuring a c. 8-metre wide carriageway with regular signalised pedestrian crossing facilities and 2-metre wide footways on either side of the carriageway.
- 3.21 The A6133 southbound from the site takes the form of a dual carriageway with a kerbed central island extending as far as its junction with Racecommon Road. This route provides a corridor through the southern quadrant of Barnsley – travelling eastward towards Measborough Dike and Stairfoot.

Road Safety Data

- 3.22 To enable a review of the road safety record of the road network in the vicinity of the proposed school, Personal Injury Accident (PIA) data has been obtained from CrashMap for the latest 5-year period.
- 3.23 PIAs are classified as '*slight*', '*serious*' and '*fatal*' depending on the severity of the injuries sustained. Analysis has been undertaken to ascertain whether there are any trends in the types or location of recorded accidents on the local highway network within the site vicinity.
- 3.24 The study area and location of each incident is illustrated at Figure 5, as agreed.

Figure 5 Proposed Study Area for Personal Injury Accident Analysis

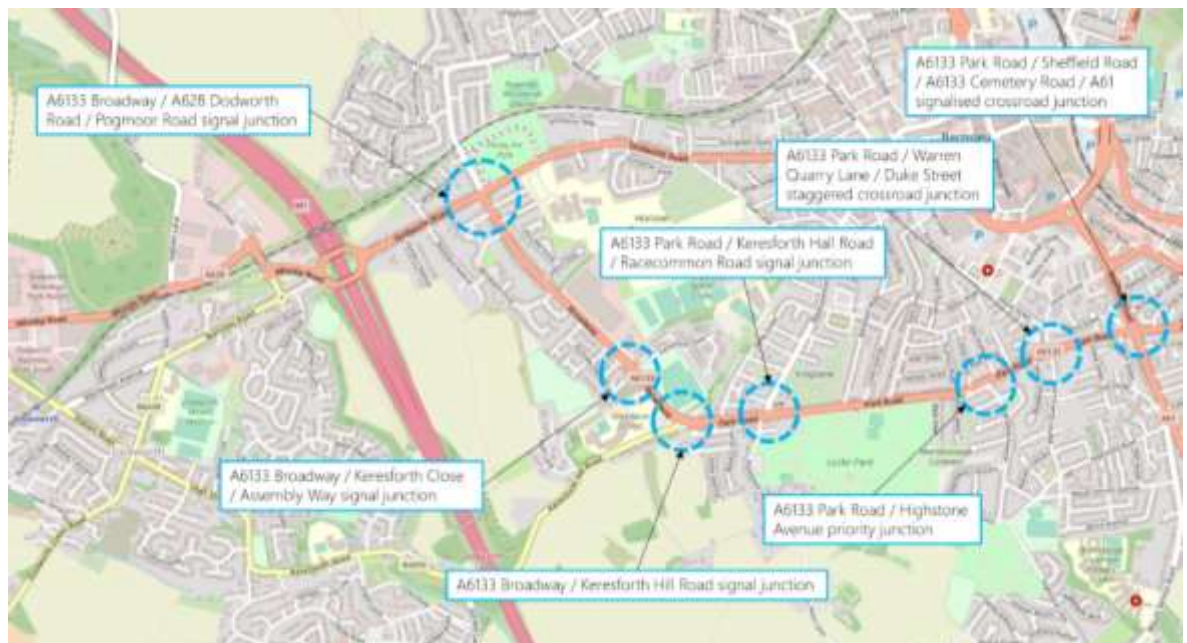


- 3.25 Figure 5 shows that a total of 23 PIAs have been recorded within the study area, however only one slight incident has been recorded at the site's frontage. CrashMap has been used to identify location and severity of incidents, however, it should be noted that details on incidents are limited and full records will be analysed on receipt of data from BMBC.
- 3.26 The A6133 Broadway / A1628 Dodworth Road junction has experienced a total of 6 incidents over the study period. All recorded PIAs at this junction have been of a slight or 'minor' nature, with 1 involving a cyclist and the remainder in private vehicles.
- 3.27 One serious pedestrian casualty was recorded directly outside Barnsley Fire Station, c. 200-metres northwest of the proposed site entrance. This is the closest and most severe incident that has occurred in the site vicinity.
- 3.28 The majority of the recorded incidents appear to have occurred in clusters along the A6133 Broadway between its junctions with Raley Street and Racecommon Road. These incidents have involved vehicles with 2 serious and 9 slight PIAs.
- 3.29 Upon an initial assessment of the junctions within the study area, there doesn't appear to be any defects or constraints at specific junctions or links – instead suggesting that the recorded PIAs are as a result of driver error / misjudgement.

Baseline Traffic Surveys

- 3.30 In order to understand the impact of school-related traffic on the local and wider highway network 6 of the 7 junctions identified in Figure 6 underwent Manual Classified Counts over the AM peak (0700-1000) and PM peak (1400-1900) on Thursday 18 November 2021. These time periods are specified to incorporate periods within which traffic from the proposed school site would be generated in addition to 'typical' peak hour traffic.
- 3.31 The study area identified in Figure 6 is reflective of the junctions that are anticipated to experience an uplift in two-way vehicle trips in excess of 30, as a consequence of the development proposals. This is evidenced on development traffic flow diagrams, as discussed later in this report.
- 3.32 It should be noted that count information for the A6144 Broadway / A628 Dodworth Road / Pogmoor Road junction will be obtained from the Transport Assessment for the proposed signalised gyratory roundabout at this location, as permitted under BMBC planning application ref: 2018/0965.

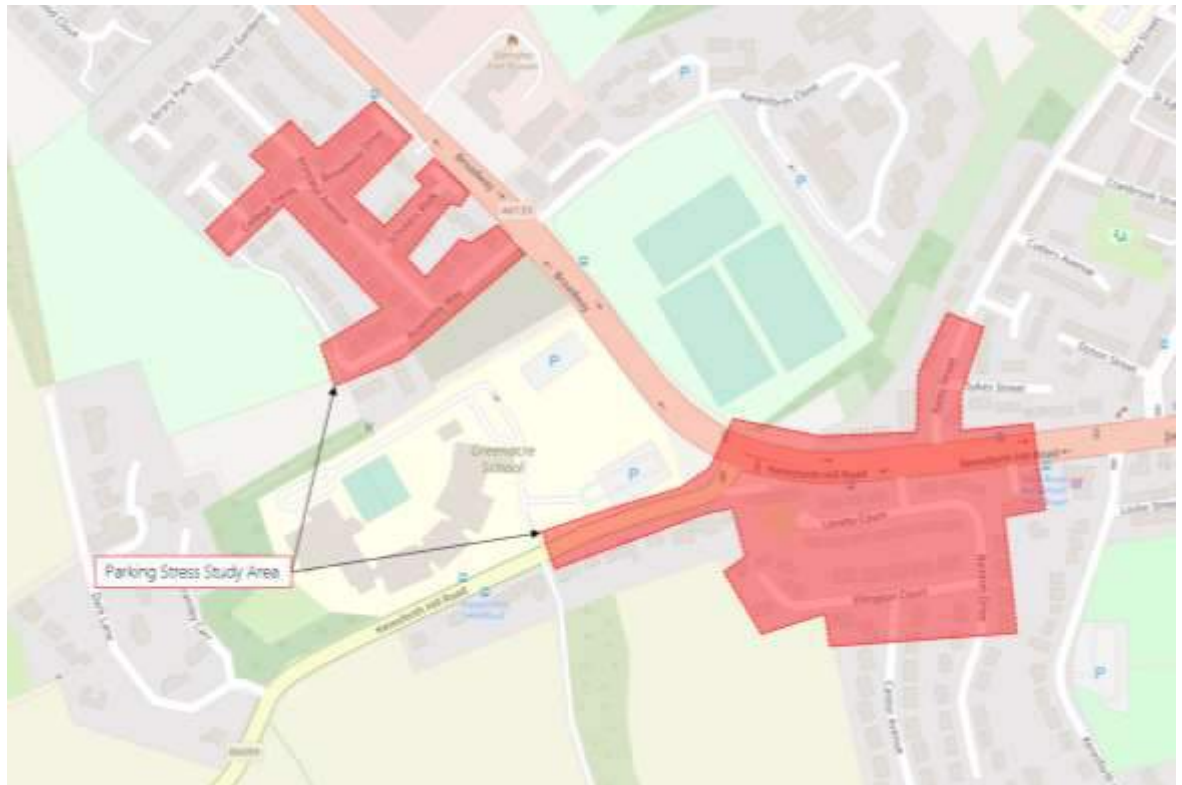
Figure 6 Highway Network Study Area



Parking Analysis

- 3.33 In order to identify existing patterns of parking in the area surrounding the school site, parking stress surveys have been undertaken. Whilst it is proposed for all school drop-off / pick-up vehicle activity to be contained within the site, it is noted that some roads surrounding the site offer unrestricted parking and therefore have the potential to be used for school drop-off / pick-up.
- 3.34 On-street parking beat surveys have been carried out by an independent survey company between 07:00-09:00 and 14:30-17:00 on Tuesday 23 November 2021. The parking beat surveys established the demand for parking in 5-minute intervals throughout the survey periods. The survey cordon is illustrated at Figure 7 below.

Figure 7 Parking Survey Cordon



3.35 The results of the parking beat surveys are included as Appendix 3. The total number of available spaces within the survey cordon, excluding established driveways, accesses and lengths of single / double yellow line totals 140 spaces. Tables 3.3 and 3.4 provide a summary of the results which show the split of available car parking spaces for the AM and PM peak survey periods.

Table 3.3 **Surveyed On-Street Parking Availability / Demand – AM Peak**

Time	Total Number Parked		Spare Capacity	
	Number	%	Number	%
0700-0705	41	29.3%	99	70.7%
0705-0710	41	29.3%	99	70.7%
0710-0715	40	28.6%	100	71.4%
0715-0720	39	27.9%	101	72.1%
0720-0725	38	27.1%	102	72.9%
0725-0730	37	26.4%	103	73.6%
0730-0735	39	27.9%	101	72.1%
0735-0740	39	27.9%	101	72.1%
0740-0745	39	27.9%	101	72.1%
0745-0750	40	28.6%	100	71.4%
0750-0755	40	28.6%	100	71.4%
0755-0800	40	28.6%	100	71.4%
0800-0805	39	27.9%	101	72.1%
0805-0810	38	27.1%	102	72.9%
0810-0815	38	27.1%	102	72.9%
0815-0820	37	26.4%	103	73.6%
0820-0825	37	26.4%	103	73.6%
0825-0830	35	25.0%	105	75.0%
0830-0835	35	25.0%	105	75.0%
0835-0840	34	24.3%	106	75.7%
0840-0845	34	24.3%	106	75.7%
0845-0850	34	24.3%	106	75.7%
0850-0855	34	24.3%	106	75.7%
0855-0900	31	22.1%	109	77.9%
Average	37	26.8%	103	73.2%

3.36 Table 3.3 shows that over a typical weekday AM period there is an average total availability of 103 on-street (unrestricted) spaces, equivalent to 73.2% spare capacity.

Table 3.4 **Surveyed On-Street Parking Availability / Demand – PM Peak**

Time	Total Number Parked		Spare Capacity	
	Number	%	Number	%
1430-1435	26	18.6%	114	81.4%
1435-1440	26	18.6%	114	81.4%
1440-1445	26	18.6%	114	81.4%
1445-1450	28	20.0%	112	80.0%
1450-1455	28	20.0%	112	80.0%
1455-1500	27	19.3%	113	80.7%
1500-1505	29	20.7%	111	79.3%
1505-1510	29	20.7%	111	79.3%
1510-1515	33	23.6%	107	76.4%
1515-1520	33	23.6%	107	76.4%
1520-1525	33	23.6%	107	76.4%
1525-1530	32	22.9%	108	77.1%
1530-1535	32	22.9%	108	77.1%
1535-1540	30	21.4%	110	78.6%
1540-1545	50	35.7%	90	64.3%
1545-1550	30	21.4%	110	78.6%
1550-1555	30	21.4%	110	78.6%
1555-1600	29	20.7%	111	79.3%
1600-1605	29	20.7%	111	79.3%
1605-1610	71	50.7%	69	49.3%
1610-1615	31	22.1%	109	77.9%
1615-1620	30	21.4%	110	78.6%
1620-1625	31	22.1%	109	77.9%
1625-1630	32	22.9%	108	77.1%

Table 3.4 **Surveyed On-Street Parking Availability / Demand – PM Peak (Cont.)**

Time	Total Number Parked		Spare Capacity	
	Number	%	Number	%
1630-1635	33	23.6%	107	76.4%
1635-1640	32	22.9%	108	77.1%
1640-1645	31	22.1%	109	77.9%
1645-1650	33	23.6%	107	76.4%
1650-1655	33	23.6%	107	76.4%
1655-1700	33	23.6%	107	76.4%
Average	32	23.1%	108	76.9%

3.37 Table 3.4 shows that over a typical weekday PM period there is an average total availability of 108 on-street (unrestricted) spaces, equivalent to 76.9% spare capacity.

4. Development Proposals

- 4.1 The development proposals consist of the construction of a 6FE secondary school with associated playing pitches, landscaping and parking. The site masterplan is included at Appendix 4.
- 4.2 It is proposed that the school will accommodate a total of 900 pupils aged 11-16 years along with 90 staff members.
- 4.3 The proposed school plans to take occupation from the beginning of the 2023/2024 academic year with a population of circa 540 pupils followed by a progressive growth until reaching its full 900 pupil occupation in the 2025/2026 academic year.
- 4.4 A breakdown of the operational hours of the proposed school site over the course of a 7-day week is included below in Table 4.1.

Table 4.1 **Operational Hours**

Day	Use	Time
Weekday	Pupils on site	0800-1600
Weekday	Cleaning, staff, evening events etc.	0700-2200
Saturday	Sports, lettings, staff, events, etc.	0800-2200
Sunday	Sports, lettings, staff, events, etc.	0800-1800

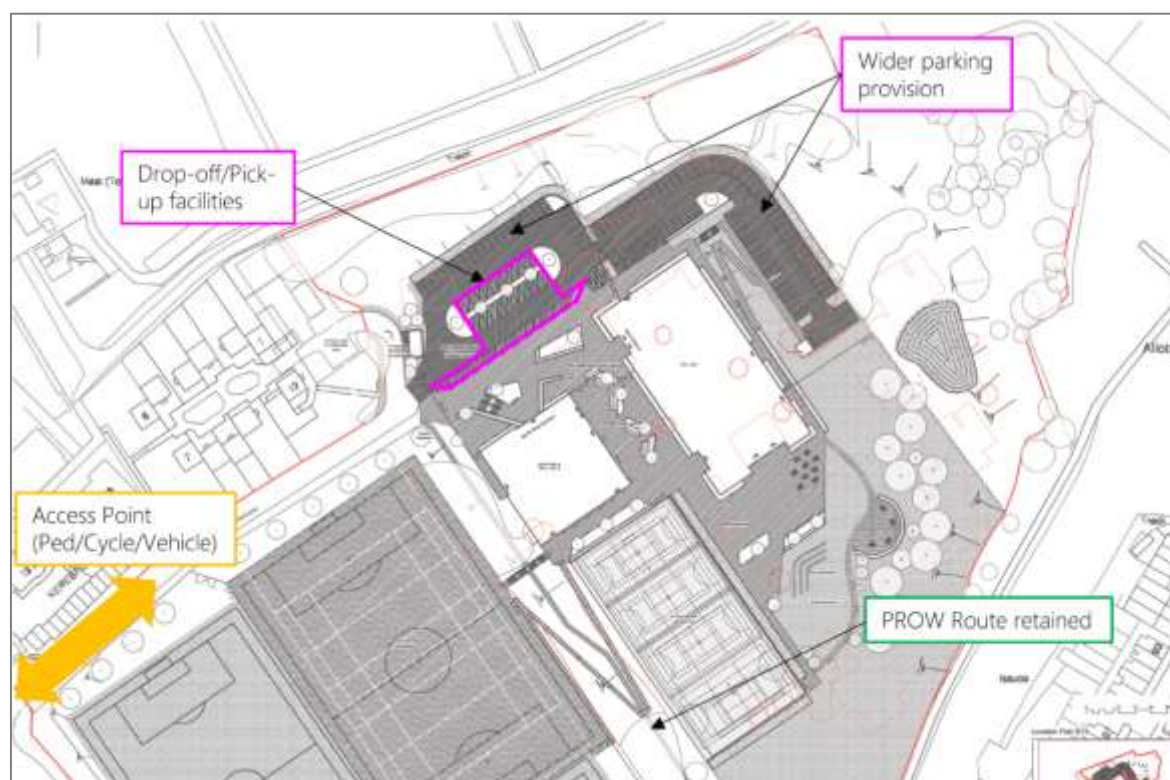
- 4.5 Trinity Academy will offer a comprehensive range of before and after-school activities which will run on a daily basis and will assist with spreading the impact of student arrivals / departures at the start and end of the school day.
- 4.6 It should also be noted that the school will be open for community use outside of school hours. End users travelling to the site by car will be able to use designated on-site parking facilities.

Movement & Access Strategy

- 4.7 Access to the proposed school will be from Keresforth Close. The road will lead directly to the school car park and will be the principal access by all travel modes.
- 4.8 It is envisaged that Keresforth Close will be made up to adoptable standard and subject to Section 37 / 38 of the Highways Act 1980, will become part of the publicly maintainable highway. Milestone Transport Planning will liaise with the BMBC Highways Department to agree the design and construction details of the highway through the planning consultation period of the development.
- 4.9 The main entrance to the school will be from Keresforth Close which will serve as the principal access for vehicles including access to car parking and drop-off / pick-up facilities. The form of access and junction with the A6133 Broadway will be retained.

- 4.10 Pedestrians and cyclists will enter adjacent to the vehicular access. A designated gated entry point will be provided directing pedestrians and cyclists to the main entrance of the school building and cycle parking, away from vehicular activity. This point of access will be used by pupils, staff and visitors.
- 4.11 A further pedestrian and cycle access will be provided via the PROW (Footpath 260) that traverses the centre of the site from Raley Street. Both PROW routes across the site will be preserved as part of the planning application proposals.
- 4.12 The pedestrian / cycle access via Keresforth Close benefits from immediate connectivity to excellent dedicated pedestrian and cycle infrastructure on the A6133 Broadway corridor.
- 4.13 Figure 8 illustrates the vehicular and pedestrian access routes to the site.

Figure 8 Proposed Pedestrian / Vehicle Movement and Access Strategy



Drop-Off / Pick-Up Strategy

- 4.14 Trinity Academy will be provided with on-site drop-off / pick-up facilities as illustrated in Figure 9.
- 4.15 The drop-off / pick-up zone will comprise parking for 26 cars (including 2 disabled bays) with a further layby accommodating up to 8 vehicles. The total capacity of drop-off / pick-up is therefore 36 vehicles.
- 4.16 On the basis that 10% of school pupils attend before-school activities and 20% of pupils attend after-school activities, cross-referencing to Section 5 of this report, during the main AM period there will be demand for 177 pupils to be dropped off by vehicle, whilst during the main PM period there will be demand for 158 pupils to be collected by vehicle.

- 4.17 It is proposed that the main drop-off / pick-up activity at the start and end of the school day will take place over a 15-minute period where in the AM period typical dwell times will be in the order of 2 minutes, whilst in the PM period dwell times will be in the order of 3 minutes.
- 4.18 Tables 4.2 and 4.3 provide a profile of drop-off and pick-up activity over the AM peak 0845-0900 and PM peak 1515-1530 periods, calculating vehicle accumulation based on the aforementioned dwell times.

Table 4.2 Main AM Peak Drop-off Accumulation

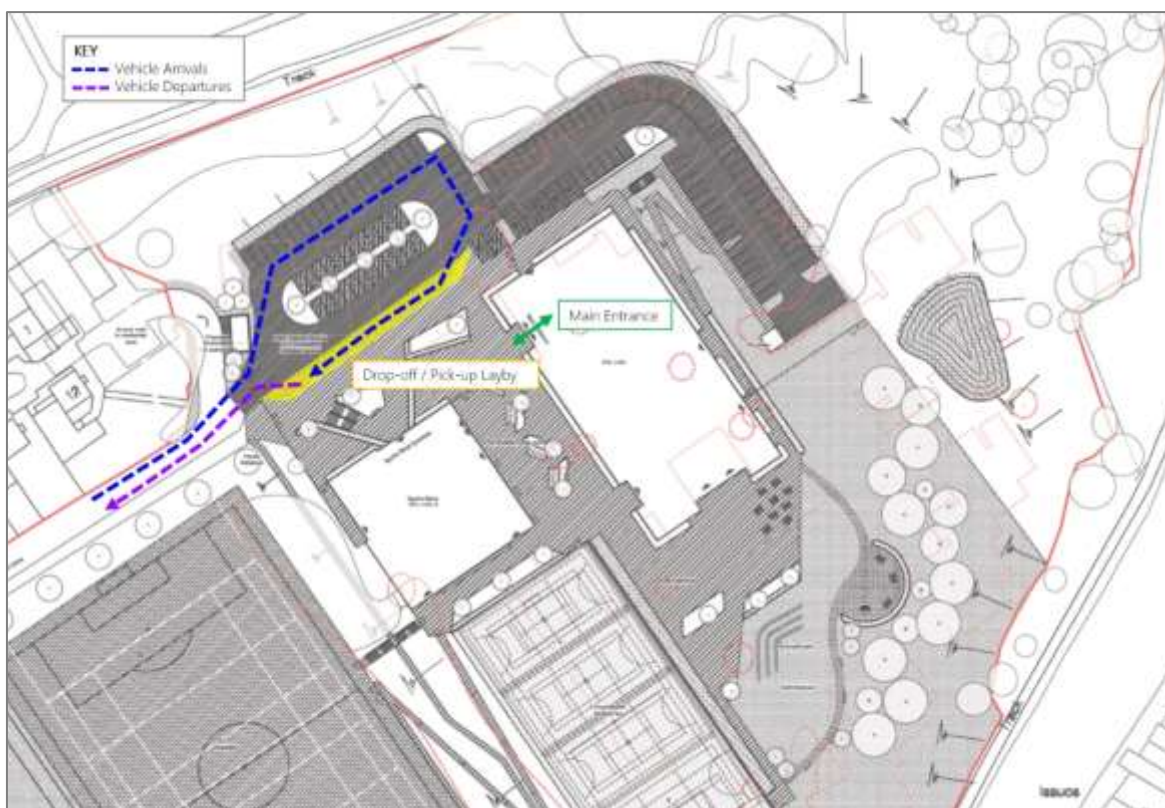
Time	No. Arrivals	No. Departures	Accumulation
0845	13		13
0846	13		26
0847	12	13	25
0848	13	13	25
0849	12	12	25
0850	13	13	25
0851	12	12	25
0852	13	13	25
0853	12	12	25
0854	13	13	25
0855	12	12	25
0856	13	13	25
0857	13	12	26
0858	13	13	26
0859		13	13
0900		13	0

Table 4.3 Main PM Peak Pick-up Accumulation

Time	No. Arrivals	No. Departures	Accumulation
1515	12		12
1516	12		24
1517	12		36
1518	13	12	37
1519	12	12	37
1520	12	12	37
1521	12	13	36
1522	13	12	37
1523	12	12	37
1524	12	12	37
1525	12	13	36
1526	12	12	36
1527	12	12	36
1528		12	24
1529		12	12
1530		12	0

- 4.19 Tables 4.2 and 4.3 demonstrate peak drop-off and pick-up accumulations of 26 vehicles (AM peak) and 37 vehicles (PM peak) respectively. This has informed the total capacity for drop-off / pick-up of 36 vehicles.
- 4.20 Parents will arrive via the main entrance from Keresforth Close, drop-off / pick-up from the designated layby / parking bays and circulate through the car park to depart back through the main entrance that exits towards the A6133 Broadway.
- 4.21 During the start and end of the school day, a member of staff will be available to manage drop-off / pick-up to ensure that dwell times are kept to an absolute minimum.

Figure 9 On-Site Drop-Off / Pick-Up Arrangements



- 4.22 As detailed in Section 3, a parking stress survey has been undertaken on nearby local roads as a sensitivity test and demonstrates there to be in excess of 100 spare on-street parking spaces within walking distance of the site during a typical weekday AM drop-off and PM pick-up period. It is clear therefore that any minimal excess drop-off / pick-up demand generated by Trinity Academy can be accommodated on-street.

Parking Provision

- 4.23 Trinity Academy will be provided with 118 car parking spaces, including 7 disabled spaces. This includes space for c. 36 cars to drop-off / pick up, as mentioned above, in the westernmost car parking area and layby (which can also accommodate 7 minibuses). Outside of drop-off / pick-up periods, these spaces will be available for visitors. Swept path analysis of a minibus traversing the car park and layby is provided on appended plan 21155/TA/TK01.
- 4.24 It is recognised that the proposed level of car parking exceeds the standard prescribed in the Barnsley Parking Standards SPD (2019). The standards advise 1 space per 3 teaching staff and 1 space per 3 non-teaching staff. The additional quantum is proposed to meet the anticipated demand generated by the school operator, but more importantly to ensure that school-related parking does not 'overspill' onto the public highway.
- 4.25 The school will be provided with a total of 32 cycle parking spaces at the outset of the development. This is to comply with BMBC adopted standards of 1 long-term space per 10-30 pupils and 1 long-term space per 40 staff. The spaces will be located between the main school building and the sports block.

Servicing Arrangements

- 4.26 Servicing and delivery vehicles will enter / exit the site via the Keresforth Close access and will be able to turn within the site and exit in forward gear. This is demonstrated for a refuse vehicle on appended plan 21155/TA/TK02.
- 4.27 Within the development fire appliances will be able to reach within 45 metres of any building. This is illustrated on appended plan 21155/TA/TK03 along with swept path analysis of a fire tender.
- 4.28 The number of service vehicles that deliver to Trinity Academy on a daily or weekly basis will be minimal. These would be limited to waste collection, and canteen and general supplies.
- 4.29 The principles of delivery and servicing at the proposed school are:
- Canteen and general supplies are serviced using the vehicular access from Keresforth Close and vehicles park in the drop-off-pick-up layby. Servicing will generally be restricted to out-of-hours, and outside of the start and finish hours of the school day;
 - Delivery times are specified to each supplier so as to eliminate the occurrence of multiple vehicles arriving or being on-site at the same time;
 - The refuse store is located within the school grounds and vehicles will use the turning head to the east of the main school building.

Promotion of Sustainable Travel to Trinity Academy

- 4.30 In advance of its first occupation in the 2023/2024 academic year, Trinity Academy will prepare and implement a Travel Plan which will be subject to standard monitoring and regular reviews. The key objective of the Travel Plan will be to set out a package of measures for reducing the number of car trips generated by parents, staff and pupils and to improve safety on the school journey.
- 4.31 The Travel Plan will be underpinned by a comprehensive and deliverable Action Plan that will clearly and concisely outline a list of actions to be undertaken by the Travel Plan Coordinator (TPC).

Travel Plan Actions

- 4.32 Key physical and management actions to be implemented within the Travel Plan include:
- Provision of travel information on the school website, prospectus, notice boards and newsletters, for example, existing facilities such as bus routes and bus stops, in addition to cycle routes in the vicinity of the school.
 - Promotion of walking, cycling and public transport initiatives as viable modes of travel for students and staff to reduce reliance on the private car. To include:
 - Promotion of participation in 'Walk to School Week', 'Walk in May', 'Walk on Wednesdays' and cycle training through the Government-supported 'Bikeability' scheme (www.dft.gov.uk/bikeability);
 - Setting up staff and student cycle clubs;
 - Cycle maintenance classes;

- Incorporation of sustainable travel education into the school curriculum;
- Raise awareness and promote cycle parking within pupil / staff inductions;
- Encouraging car-sharing by coordinating parents living in the same area and travelling to the school by car.

5. Development-Related Trip Generation

5.1 Whilst the site has previously operated as an NHS facility, this ceased to run in 2018 and therefore it is not deemed appropriate to 'net off' trips associated with the site's historical use. This section of the report therefore considers all school-related trips as new to the network.

5.2 Given that the proposed school is currently operating at a temporary site with a small population of 177 pupils, it would not be representative to use primary data to derive travel behaviour and trip generation for the scheme proposal on Keresforth Close. Therefore, an alternative first principles approach has been taken for establishing the number of trips by pupils and staff.

Pupil Trip Generation

5.3 For pupil trip generation, a TRICS approach to the calculation of modal share was first considered. However, due to the limitation on TRICS secondary school sites an alternative approach has been explored. A database has been obtained from BMBC, providing modal split data for secondary schools in Barnsley with operational travel plans over the period from 2007 to 2021.

5.4 The average modal split for Travel Plans implemented at local Barnsley secondary school sites over the latest 3-year period have been used to inform pupil trip generation for Trinity Academy. The aforementioned data is included as Appendix 5.

5.5 On the basis of the above, the predicted trip generation of pupils at full capacity (i.e. 900) over the AM arrival and PM departure periods, applying the average mode share obtained from existing secondary schools, is summarised in Table 5.1.

5.6 It should be noted that the data attached at Appendix 5 includes a dedicated bus service as a mode of travel to the school sites. Trinity Academy do not propose to include their own bus service as part of their operation; so a calculation has been run to proportionately distribute those trips across other modes.

Table 5.1 Student Trip Generation

Mode	Mode Share	AM Period	PM Period
		No. of Arrivals	No. of Departures
Car	21.9%	197	197
Car Passenger	3.3%	30	30
Public Transport (e.g. public bus or train)	27.7%	250	250
Walk	45.1%	406	406
Cycle	1.4%	13	13
Other	0.5%	4	4
Total	100.0%	900	900

- 5.7 Table 5.1 shows that the proposed school has the potential to generate 197 pupil vehicle trips during the AM arrival and PM departure periods. The majority of pupils will travel to school by public transport or on foot.
- 5.8 As detailed in Section 4, Trinity Academy will offer before and after-school activities which will run on a daily basis and will assist with spreading the impact of student arrivals / departures at the start and end of the school day.

Staff Trip Generation

- 5.9 In respect of staff trips, the 2011 Census dataset '*Location of Usual Residence and Place of Work by Method of Travel to Work*' data for the Barnsley 013 Middle Super Output Area (MSOA) has been obtained to determine the likely mode share. The output is included as Appendix 6, and the mode share has been applied to the total number of staff members i.e. 90.
- 5.10 The resultant trips by mode for the AM arrival and PM departure periods are summarised in Table 5.2.
- 5.11 It should be noted that the majority of staff will likely arrive between 07:00-08:00, before the start of the school day and before the arrival of pupils. Staff would then depart during the later network PM peak hour (e.g. 17:00-18:00), after the departure of pupils.
- 5.12 It should also be noted that the assessment accounts for all staff including those working part-time and therefore the number of trips summarised in Table 5.2 represents the worst case.

Table 5.2 Staff Trip Generation

Mode	Mode Share	AM Period	PM Period
		No. Two-Way Trips	No. Two-Way Trips
Vehicle Driver	61%	55	55
Vehicle Passenger	7%	6	6
Public Transport	16%	14	14
Walk	15%	14	14
Cycle	0%	0	0
Other (e.g. taxi)	1%	1	1
Total	100.0%	90	90

- 5.13 Table 5.2 shows that the majority of staff will travel to the school by car during the AM arrival and PM departure periods. In respect of the BMBC Highways pre-application comment regarding a reduction in public transport mode share amongst staff, 16% is considered a robust and relatively low starting point for a public transport mode share and it is not proposed to reduce this figure further.

- 5.14 Table 5.2 demonstrates that 55 staff would travel to and from the school by car generating a demand for 55 car parking spaces. As detailed in Section 4, the school will be provided with a total of 118 car parking spaces (inclusive of drop-off / pick-up and visitor spaces) which will sufficiently accommodate the demand generated.

6. Development-Related Highways & Transport Impact

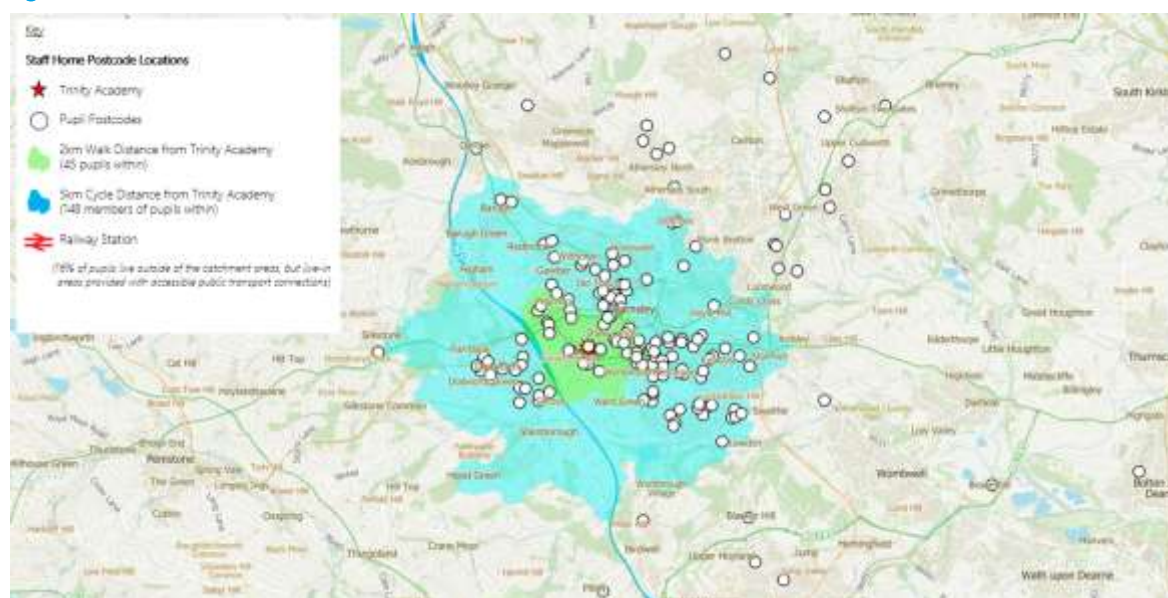
Future Assessment Year

- 6.1 To assess the future operation of the development at all junctions within the study area identified in Section 3, it was proposed to adopt a 2028 future year. This forecast year was chosen to reflect 5 years post the opening of the school in 2023.
- 6.2 The application of TEMPRO growth rates from 2021 to 2028 within the Barnsley 013 MSOA assumes a growth in housing stock of 291 and growth in jobs of 292. However, in taking account of the committed developments identified below by BMBC and their associated vehicle trip generation, for inclusion in any baseline traffic scenarios, it is clear that these developments account for a greater increase in dwellings and jobs than predicted in TEMPRO. On this basis, no TEMPRO growth has been applied to surveyed traffic counts, and committed development alone has been used as a growing tool.
- 6.3 Committed development traffic flows have been obtained from the relevant Transport Assessments for planning applications; for the following schemes, as advised by BMBC.
- 2019/0286 – Capitol Park Extension (Use Class B2/B8 scheme at Higham Lane, Dodworth, Barnsley, S75 3UB);
 - 2019/0577 – Residential Development of 70 dwellings at Former Mount Vernon Hospital, Mount Vernon Road, Worsbrough;
 - 2020/0977 – Residential Development of 140 dwellings at land off Barugh Green Road, Barugh Green, Barnsley, S75 1JY;
 - 2021/1089 – MU1 – Hybrid application (Employment scheme on land to the South East of Higham Common Road);
 - 2021/1090 – MU1 – Hybrid application (1,760 dwellings and link road on land to the South East of Higham Common Road).
- 6.4 It should be noted that an additional committed development identified by BMBC for 42 dwellings at land off Mount Vernon Road, Worsbrough under planning application ref: 2021/0142 did not include traffic flow information within the published Transport Statement. Therefore, these flows have not been accounted for within the assessed baseline traffic scenarios.
- 6.5 The impact of development i.e. school traffic has then been tested against the established baseline AM and PM peak network traffic scenarios. It should be noted that for all AM inbound and PM outbound pupil trips by vehicle, an origin or return trip by the same mode has been assumed for junction capacity assessment purposes. Traffic flows for all scenarios are provided at Appendix 7.

Route Assignment and Distribution

- 6.6 The distribution of development-related traffic for pupils has been based on an exercise using postcode data from pupils at the temporary Trinity Academy site. A postcode plot has been produced to identify exact locations, as illustrated at Figure 10 below.

Figure 10 Post Code Plot



- 6.7 Route analysis was undertaken to identify the fastest path / shortest distance from the 177 origin points to the proposed destination site. Each point has been assigned a route to the network to distribute the proposed traffic movements across the area.
- 6.8 Due to the number of trips being based on the number of pupils at the existing site, the distributed traffic has been calculated as a percentage and reassigned to the network to reflect the school operation at full capacity. The pupil route distributions and trips are illustrated within the traffic flow diagrams at Appendix 7.
- 6.9 In respect of the traffic distribution of staff trips this has been undertaken using NOMIS Travel to Work inflow data for the Barnsley 013 MSOA. The database has been used to select administrative areas within Barnsley, followed by local authorities within the Yorkshire and Humber region and thereafter on a regional basis, to determine the proportion of workers that travel to the Barnsley 013 area from various home locations. Thereafter, routes have been assigned between these home locations and the site based on the most direct route. The distribution analysis is provided at Appendix 8.
- 6.10 Staff traffic distribution and trip numbers are provided within the traffic flow diagrams at Appendix 7.

Junction Capacity Analysis

- 6.11 Analysis has been undertaken to make a comparison between 'Base + Committed Development' and 'Base + Committed Development + Development' traffic conditions within the vicinity of the site to assess the impact of development-related trips on the capacity, safety and operational characteristics of the surrounding highway network. The junctions selected for analysis reflect those that experience an uplift in trips of more than 30 two-way vehicle trips as a result of the school proposals.
- 6.12 It should be noted that this does not include M1 Junction 37, which would experience an uplift of circa 28 vehicle trips during a peak hour, recognising that in reality trips by pupils and staff are unlikely to occur in the same hourly period.

- 6.13 Traffic flow diagrams for 2028 'Base + Committed Development' and 2028 'Base + Committed Development + Development' traffic conditions are included as Appendix 7. This appendix also includes development traffic distributions.
- 6.14 Raw traffic count data, inclusive of queue surveys is provided at Appendix 9.
- 6.15 It should be noted that on reviewing traffic count and junction capacity information for the A6144 Broadway / A628 Dodworth Road / Pogmoor Road junction from the Transport Assessment for planning application ref: 2018/0965, further engagement will be required with BMBC Highways through the planning application consultation period to determine the final layout and modelling methodology for impact assessment.
- 6.16 It is recognised that there may be a requirement to utilise microsimulation or other modelling techniques beyond Junctions9 and LINSIG packages to complete assessment at this intersection.

Keresforth Close / A6133 / Assembly Way Signals

- 6.17 Table 6.1 provides a summary of the operation of the signalised junction which has been modelled using LINSIG based on the weekday AM (08:00-09:00) and PM peak (15:00-16:00) periods under 2028 'Base + Committed Development' and 2028 'Base + Committed Development + Development' conditions. The full output is included as Appendix 10.

Table 6.1 Keresforth Close / A6133 / Assembly Way Signals

Arm	AM Peak (Cycle Time 90 secs)				PM Peak (Cycle Time 90 secs)			
	2028 Base + CD		2028 Base + CD + Development		2028 Base + CD		2028 Base + CD + Development	
	DoS	Queue	DoS	Queue	DoS	Queue	DoS	Queue
A6133 (E) Ahead Left	34.1%	5.1	69.3%	12.1	34.9%	5.2	63.2%	9.7
A6133 (E) Ahead Right	35.7%	5.7	59.6%	6.1	36.7%	6.1	67.1%	9.7
Keresforth Close	7.8%	0.3	67.5%	5.9	7.8%	0.3	68.2%	7.1
A6133 (W) Ahead Left	27.1%	3.8	36.2%	5.0	26.5%	3.8	40.7%	5.4
A6133 (W) Ahead Right	28.5%	4.4	38.9%	6.0	27.9%	4.3	43.7%	6.5
Assembly Way	33.7%	2.0	46.3%	2.2	22.6%	1.0	22.6%	1.0

- 6.18 Table 6.1 shows that the junction will continue to operate well within capacity during the future year of 2028 with the inclusion of the impact of the proposed secondary school. It is notable that the increase of traffic on the site access arm (Keresforth Close) will still see this junction approach operate with minimal queue levels in the AM and PM peak periods.

A6133 / Keresforth Hill Rd Signals

- 6.19 Table 6.2 provides a summary of the signalised 'T' junction which has been modelled using LINSIG based on the weekday AM (08:00-09:00) and PM peak (15:00-16:00) periods under 2028 'Base + Committed Development' and 2028 'Base + Committed Development + Development' conditions. The full output is included as Appendix 11.

Table 6.2 A6133 / Keresforth Hill Rd Signals

Arm	AM Peak (Cycle Time 90 secs)				PM Peak (Cycle Time 90 secs)			
	2028 Base + CD		2028 Base + CD + Development		2028 Base + CD		2028 Base + CD + Development	
	DoS	Queue	DoS	Queue	DoS	Queue	DoS	Queue
A6133 (E) Left Ahead	83.1%	12.4	87.5%	14.9	80.3%	12.4	85.3%	14.5
A6133 (E) Ahead	70.1%	11.0	71.9%	12.1	72.0%	12.3	75.3%	13.6
Keresforth Hill Rd	80.7%	14.0	89.4%	17.0	78.2%	12.3	84.3%	13.9
A6133 (W) Ahead	34.0%	4.5	40.9%	5.8	33.3%	4.6	42.7%	6.3
A6133 (W) Ahead Right	41.6%	4.5	48.8%	5.6	39.1%	4.6	49.4%	6.1

- 6.20 Table 6.2 shows that during both AM and PM peak periods the junction would function within capacity and with minimal queue increases as a consequence of the school proposal.

Racecommon Rd / A6133 / Keresforth Hall Rd Signals

- 6.21 Table 6.3 provides a summary of the operation of the signalised junction which has been modelled using LINSIG based on the weekday AM (08:00-09:00) and PM peak (15:00-16:00) periods under 2028 'Base + Committed Development' and 2028 'Base + Committed Development + Development' conditions. The full output is included as Appendix 12.

Table 6.3 Racecommon Rd / A6133 / Keresforth Hall Rd Signals

Arm	AM Peak (Cycle Time 120 secs)				PM Peak (Cycle Time 120 secs)			
	2028 Base + CD		2028 Base + CD + Development		2028 Base + CD		2028 Base + CD + Development	
	DoS	Queue	DoS	Queue	DoS	Queue	DoS	Queue
A6133 (E) Ahead Left	31.9%	6.2	36.3%	7.3	36.9%	6.8	39.6%	7.7
A6133 (E) Ahead Right	40.5%	6.7	71.7%	8.3	43.9%	7.4	75.0%	8.4
Keresforth Hall Road	88.5%	13.0	97.9%	17.3	87.6%	12.2	97.4%	16.2
A6133 (W) Ahead Left	87.9%	26.1	97.2%	37.8	87.3%	23.2	97.7%	35.9
A6133 (W) Right	38.4%	2.8	45.3%	2.9	53.3%	4.6	56.5%	4.8
Racecommon Road	88.8%	13.2	97.3%	18.0	86.3%	16.1	98.0%	23.1

- 6.22 Table 6.3 shows that prior to the introduction of school traffic, three of the six junction approaches operate close to capacity with degrees of saturation of approximately 90% in both peak periods. The addition of school related traffic sees increases in degrees of saturation and queuing on these approaches, however the approaches do not exceed a 100% degree of saturation and queue increases are minimal.

A6133 / Highstone Avenue

- 6.23 Table 6.4 provides a summary of the operation of the priority junction which has been modelled using Junctions9 based on the weekday AM (08:00-09:00) and PM peak (15:00-16:00) periods under 2028 'Base + Committed Development' and 2028 'Base + Committed Development + Development' conditions. The full output is included as Appendix 13.

Table 6.4 A6133 / Highstone Avenue Priority Junction

Arm	AM Peak				PM Peak			
	2028 Base + CD		2028 Base + CD + Development		2028 Base + CD		2028 Base + CD + Development	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
Highstone Avenue Right Turn	0.26	0.3	0.29	0.4	0.20	0.2	0.21	0.3
Highstone Avenue Left Turn	0.21	0.3	0.24	0.3	0.18	0.2	0.21	0.3
A6133 (W) Right Turn	0.21	0.5	0.25	0.7	0.27	0.7	0.32	1.0

- 6.24 Table 6.4 shows that the junction will continue to operate within capacity during the future year of 2028 with the inclusion of the impact of the proposed secondary school.

A6133 / Warren Quarry Lane / Duke Street Staggered Crossroads

- 6.25 Table 6.5 provides a summary of the operation of the staggered priority crossroad junction which has been modelled using Junctions9 based on the weekday AM (08:00-09:00) and adjusted PM peak (15:00-16:00) periods under 2028 'Base + Committed Development' and 2028 'Base + Committed Development + Development' conditions. The full output is included as Appendix 14.

Table 6.5 A6133 / Warren Quarry Lane / Duke Street Staggered Crossroads

Arm	AM Peak				PM Peak			
	2028 Base + CD		2028 Base + CD + Development		2028 Base + CD		2028 Base + CD + Development	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
Warren Quarry Lane	0.33	0.5	0.38	0.6	0.26	0.3	0.30	0.4
A6133 (E)	0.40	1.1	0.45	1.4	0.25	0.6	0.28	0.7
Duke Street Left Turn	0.14	0.2	0.15	0.2	0.37	0.6	0.40	0.7
Duke Street Right Turn	0.26	0.3	0.32	0.5	0.36	0.6	0.41	0.7
A6133 (W)	0.13	0.3	0.19	0.4	0.34	0.9	0.43	1.3

- 6.26 Table 6.5 shows that the junction will continue to operate within capacity during the future year of 2028 with the inclusion of the impact of the proposed secondary school.

A6133 / A61 Signalised Crossroads

- 6.27 Table 6.6 provides a summary of the operation of the signalised junction which has been modelled using LINSIG based on the weekday AM (08:00-09:00) and adjusted PM peak (15:00-16:00) periods under 2028 'Base + Committed Development' and 2028 'Base + Committed Development + Development' conditions. The full output is included as Appendix 15.

Table 6.6 A6133 / A61 Signalised Crossroads

Arm	AM Peak (Cycle Time 120 secs)				PM Peak (Cycle Time 120 secs)			
	2028 Base + CD		2028 Base + CD + Development		2028 Base + CD		2028 Base + CD + Development	
	DoS	Queue	DoS	Queue	DoS	Queue	DoS	Queue
A6133 (E)	73.8%	7.8	84.5%	10.5	83.7%	9.8	90.4%	12.4
A61 (S) Ahead Left	75.3%	12.1	83.9%	13.9	58.3%	8.8	67.4%	9.8
A61 (S) Ahead Right	75.3%	13.1	83.9%	14.9	58.4%	9.5	67.4%	10.6
A6133 (W) Ahead Left	75.2%	9.7	81.7%	11.5	85.6%	11.5	92.5%	15.5
A6133 (W) Right	19.8%	2.1	25.4%	2.8	40.5%	4.4	44.3%	5.2
A61 (N) Left Ahead	64.1%	13.9	66.9%	14.4	85.3%	22.6	91.0%	25.0
A61 (N) Right	75.8%	4.9	81.4%	5.7	80.0%	5.5	85.7%	6.4

- 6.28 Table 6.6 shows that a number of junction approaches experience degrees of saturation of 75-85% under 'Base + Committed Development' conditions, which is increased with the addition of school traffic. The proportional increase in queueing and degrees of saturation as a consequence of school traffic is however limited and all approaches would still operate with a 100% degree of saturation under 'with development' conditions.

Pedestrians, Cyclists and Public Transport Users

- 6.29 From Section 5, it is established that, at full capacity, the school is likely to generate 420 pedestrian trips during the AM peak and PM peak periods respectively. Taking into account the operation of before-school and after-school activities and staff arriving prior to and after pupils, 339-380 trips would be concentrated into a 10-15 minute period at the beginning and end of the school day.
- 6.30 Based on the catchment area of prospective pupils as outlined earlier in this section, it is anticipated that of the 419 pedestrian and cycle trips combined in each peak period, c. 130 pupils would travel to / from the north / west to the school whilst c. 289 pupils would travel to / from the east.
- 6.31 Given the presence of the comprehensive crossing facilities along the A6133 corridor and wide / well-lit footway and cycleway infrastructure from the A6133 / Keresforth Close / Assembly Way junction and beyond, it is considered that existing pedestrian and cycle facilities will more than adequately accommodate the projected increase in trips by these modes.
- 6.32 As detailed in Section 3, the nearest bus stops to the site are located on the A6133 Broadway, a short walk from the site. The aforementioned crossing and pedestrian facilities on the A6133 will aid the transition of pupils between the school site and local bus stops.

- 6.33 At full capacity, Trinity Academy could generate up to 264 AM peak public transport arrivals and PM peak departures. This will be spread over a number of services as well as across varying arrival / departure times to account for staff arrival / departure times and before and after-school activities. It is therefore considered that the existing public transport infrastructure would be able to accommodate the demand generated by the proposed secondary school.

7. Summary & Conclusions

7.1 This Transport Assessment (TA) has been prepared on behalf of Bowmer & Kirkland Ltd to consider the highways and transport implications related to a proposed 6FE secondary school (900 pupils) on land located to the northeast of the A6133 Broadway in Barnsley. The site is currently occupied by the former Keresforth Centre, an NHS facility that ceased to operate in 2018.

7.2 A summary of the findings within this TA are outlined below:

- The site is well located in terms of proximity to frequent public transport services and established pedestrian / cycle routes which provide the opportunity to travel to and from the proposed school by means other than the private car;
- PIA data from CrashMap shows that no incidents were recorded at the A6133 Broadway / Keresforth Close / Assembly Way junction adjacent to the site, whilst those incidents registered within the study area would appear to have occurred as a result of driver error / misjudgement;
- The proposed secondary school will accommodate 900 pupils and 90 staff;
- It is anticipated that the school will open at the start of the 2023/2024 academic year and will be fully occupied by the 2025/2026 academic year;
- Access to the proposed school will be from Keresforth Close. The road will lead directly to the school car park and will be the principal access by all travel modes;
- A further pedestrian and cycle access will be provided via the PROW (Footpath 260) that traverses the centre of the site from Raley Street;
- Trinity Academy will be provided with on-site drop-off / pick-up facilities. The drop-off / pick-up zone will comprise parking for 26 cars (including 2 disabled bays) with a further layby accommodating up to 8 vehicles;
- The quantum of parking available for pick-up and drop-off is reflective of a robust assessment of vehicle accumulation during the AM peak (0845-0900) and PM peak (1515-1530) periods;
- As a sensitivity test, a parking stress survey has been undertaken and demonstrates that in the event some drop-off / pick-up activity takes place off-site, this can be accommodated on-street;
- Trinity Academy will be provided with 118 car parking spaces, 7 disabled spaces and 7 minibus spaces. This includes space for c. 36 cars to drop-off / pick up, as identified above;
- The school will be provided with a total of 32 cycle parking spaces at the outset of the development. This is to comply with BMBC adopted standards of 1 long-term space per 10-30 pupils and 1 long-term space per 40 staff. The spaces will be located between the main school building and the sports block;
- The number of service vehicles that will deliver to Trinity Academy on a daily or weekly basis will be minimal. These would be limited to waste collection, and canteen and general supplies;
- Servicing vehicles will be able to enter / exit the site from Keresforth Close in forward gear as demonstrated in the swept path analysis appended to this TA;
- In advance of its first occupation Trinity Academy will prepare and implement a Travel Plan which will set out a package of measures to target a modal shift away from car driver trips generated by parents, staff and pupils;

- Based on mode share data supplied by BMBC for other secondary schools in the borough, analysis demonstrates that future pupils at Trinity Academy have the potential to generate 197 vehicle trips, 250 public transport trips, 406 trips on foot and 13 by bicycle during the respective AM arrival and PM departure periods;
- Based on 2011 Census mode share data, the majority of staff at Trinity Academy will travel by car, accounting for c. 61% of the mode share, equivalent to 55 trips in the respective AM arrival and PM departure periods;
- The distribution of pupil and staff arrival / departure traffic across the highway network has been based on a combination of Trinity Academy pupil postcodes and 2011 Census origin-destination for work-based travel data, combined with assignment by the most direct route. Highway capacity assessment has been undertaken at junctions that would experience an uplift in excess of 30 two-way trips during a peak hour period as a consequence of the school proposal;
- Highway capacity assessments have been undertaken at six local junctions from which it is evident that, whilst the addition of school traffic will increase degrees of saturation and queuing on a number of approach arms, no individual junction approach would operate with a degree of saturation above 100% under 'with development' conditions, and increases in queueing are not significant;
- Footway / cycleway and public transport infrastructure surrounding the site will be able to adequately accommodate the increase in trips by these modes as generated by the school proposal.

7.3 Based on the findings within this Transport Assessment and in the context of the guidelines within para. 111 of the NPPF, it is considered that there are no residual cumulative impacts in terms of highway safety or the operational capacity of the surrounding road network and therefore planning permission should not be withheld on transport grounds.

Appendix 1



Trinity Academy, Barnsley

Highways and Transport Scoping Report

October 2021

MILESTONE
TRANSPORT PLANNING

Trinity Academy, Barnsley

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Appendix 2 Pupil Modal Split Output

Appendix 3 NOMIS Output – Staff Modal Split

1. Introduction

- 1.1 The Transport Assessment (TA) will be prepared by Milestone Transport Planning Limited on behalf of Bowmer & Kirkland Limited in relation to proposals to construct a 6FE Secondary School on land located to the northeast of the A6133 – Broadway in Barnsley.
- 1.2 Specifically, the purpose of the TA will be to consider the implications of development related travel on the operational and safety characteristics of the surrounding highway and transport networks. In addition, the TA will consider the appropriateness of the type of development proposed in this location in the context of transport-related policy at both National and Local level with the emphasis on ensuring that the site is accessible by all modes of travel.
- 1.3 The TA will demonstrate that in terms of Planning Policy at both National and Local level and through robust interventions including the implementation of a Travel Plan and mitigation, where appropriate, the application site and the surrounding highways and transport networks are capable of accommodating the proposed level of development.

Scope of Assessment

- 1.4 The TA structure will be as follows:
- Section 2 of the TA would examine relevant policy guidance given with respect to transport policies at both National and Local Government level;
 - Section 3 of the TA would provide a description of the application site and existing conditions, access to the site by foot, cycle and public transport as well as baseline information concerning the operational and safety characteristics of the surrounding highway network;
 - Section 4 of the TA would outline the proposed Movement and Access Strategy related to the proposed development including details of the proposed vehicular access arrangements, internal road, footways, parking, servicing and refuse collection. Details of proposals to manage person trips generated by the proposed development through promoting smarter choices in the form of a comprehensive Travel Plan will be included here;
 - Section 5 of the TA would set out the methodology to calculate development person trip generation and the assignment of development trips onto the surrounding highway network. Section 5 will also outline the future forecast years adopted for the purpose of assessment;
 - Section 6 would provide analysis of the implications of development-related traffic on the operation of highway links and junctions within the study area and identify any mitigation measures that may be required to offset the impact of development-related traffic;
 - Section 7 of the TA would provide a summary of the findings within the assessment as well as an overall conclusion.

2. Planning Policy Framework

- 2.1 This section of the TA would consider the proposed development in the context of the following policy documents:
- [National Planning Policy Framework - 2021](#)
 - [Barnsley Metropolitan Borough Council Local Plan \(BMBC\) - 2019](#)
 - [Barnsley Transport Strategy 2014-2033](#)
- 2.2 The site's internal layout would be designed with reference to guidelines set out in both volumes of Manual for Streets to ensure the layout is safe, secure and conducive to non-car modes.

3. Existing Conditions

- 3.1 Section 3 of the TA will describe the site in its current form, pre-development. It will give details of its location and surroundings, pedestrian and cycle facilities and public transport accessibility.
- 3.2 Section 3 will also describe the surrounding highway network and the study area, as well as analysing traffic flow characteristics and road safety data. The section's subheadings and a brief description of their contents are as below.

Existing Site Information

- 3.3 The location of the proposed school site is shown at Figure 1.

Figure 1 Proposed School Site



- 3.4 The site is bounded by the A6133 – Broadway to the west, residential development and playing fields to the north, and residential properties and allotments on Raley Street to the south and east. The site is currently accessed from Keresforth Close, a private road off the northeastern edge of the A6133 carriageway.

Provision for Walking, Cycle and Proximity of Local Amenities

- 3.5 Both national and local planning policy advocate walking and cycling as key modes of travel, in order to promote sustainable transport use, particularly for local trips.

- 3.6 Local roads in the vicinity of the site generally benefit from consistent street lighting, footways on both sides of the carriageway, and where pedestrian desire lines exist, crossings are provided with dropped kerbs and/or pedestrian refuge islands.
- 3.7 Approximately 20m to the northwest of the site access, there is a signalised pedestrian crossing on the A6133 facilitating safe pedestrian movement between the future school and nearby residential developments.
- 3.8 A public right of way (PROW), footpath 260, traverses the centre of the site from the northwest to the south-east along the eastern boundary of the playing field. A further PROW (Footpath 266) runs along the northern boundary.
- 3.9 There are also a number of quiet residential streets in the vicinity of the proposed school that are conducive to local trips. Carriageway widths are typically wide enough to accommodate both cyclists and vehicles and visibility is generally of a good level aiding inter-visibility between cyclists and vehicles.

Provision for Public Transport Access

Bus Services

- 3.10 This section will indicate the nearest bus stops to the site and detail the services available.
- 3.11 The nearest bus services operate from stops on A6133 Broadway, approximately 40m south-east of the site. Bus stops are provided with pole, flag and timetable information and the southbound bus stop also benefits from shelter and seating. Table 3.1 provides a summary of the bus routes operating from the bus stops outlined above.

Table 3.1 Summary of Local Bus Routes from Broadway / Keresforth Close Stop

Route No.	Daily Weekday Frequency (No. of buses per hour)	Route
43	2 per hour	Barnsley – Pogmoor Kingstone (Circle)
479	3 per hour in the AM / PM Peaks (Mon-Fri School Service)	Kendray – Kingstone (Horizon Community Coll)

Rail Services

- 3.12 The site is located 2.8km southwest of Barnsley interchange station and 2.7km northeast of Dodworth railway station. Both stations are accessible in a cycle time of 10 minutes. Barnsley station provides frequent services on the Hallam and Penistone Lines, both operated by Northern Trains. These lines include destinations such as Leeds, Sheffield, Nottingham and Lincoln Central.

Surrounding Highway Network

- 3.13 Within the TA submission a description of the characteristics of each major road / junction that falls within the study area will be provided together with an assessment of its operation.

- 3.14 Figure 2 illustrates the proposed highway network study area and junctions where capacity assessment will be undertaken, subject to confirmation from Barnsley Metropolitan Borough Council (BMBC).
- 3.15 In order to understand the impact of school-related traffic on the local and wider highway network it would typically be proposed that the junctions undergo AM peak (0700-1000) and PM peak (1400-1900) Manual Classified Counts. These time periods are specified to incorporate periods within which traffic from the proposed school site would be generated in addition to 'typical' peak hour traffic.
- 3.16 It is asked, given the current situation with COVID-19 and the subsequent limitations in undertaking traffic surveys at this time, if BMBC hold any data for the junctions within the proposed study that can be used to inform the TA.

Figure 2 Proposed Highway Network Study Area



Road Safety Data

- 3.17 Five-year accident statistics will be obtained and the findings will be analysed in order to assess whether there are any patterns in the data attributable to defective road conditions or layouts. It is proposed that data is analysed over the area identified at Figure 3.
- 3.18 Full details of the PIAs, casualty severity and consideration of the likely causation factors will be provided within the TA.

Figure 3 Proposed Study Area for Personal Injury Accident Analysis



Parking Analysis

- 3.19 In order to identify existing patterns of parking in the area of the proposed school site and surrounding roads it would typically be proposed to undertake parking stress surveys. It is noted that roads surrounding the site offer unrestricted parking and are therefore likely to be used for school drop-off / pick-up e.g. on Assembly Way / Principal Avenue / Keresforth Hill Road.
- 3.20 The school will provide on-site drop-off / pick-up facilities however, it is likely that not all students / parents will use this facility. Drop-off and pick-up on Keresforth Close will be prevented through parking restrictions following the road's adoption.
- 3.21 However, it is acknowledged that due to the current restrictions associated with COVID-19, undertaking a parking stress survey would have limited value. It is asked whether BMBC hold any relevant data that can be used to inform the TA.
- 3.22 It will be beneficial to obtain survey data reflecting school set-down and pick-up periods for a weekday morning and evening. This will assist in identifying parking levels in the vicinity of the site in order to assess the impact of the development on local parking provision. If parking stress surveys were to be undertaken, parking beats would be proposed between 07:30-09:30am and 14:30-16:30pm with regular beats over these periods (every 15 minutes).
- 3.23 If representative data to this end can be made available by BMBC, or another third party, this would be used to inform our TA.

4. Scheme Proposals

- 4.1 The emerging development proposals consist of the construction of a 6FE Secondary School with associated playing pitches, landscaping and parking. An emerging site masterplan is included at Appendix 1.
- 4.2 It is proposed that the school will accommodate a total of 900 students aged 11-16 years along with 90 staff members.

Movement & Access

- 4.3 This section of the TA will outline the proposed Movement and Access Strategy related to the proposed development. Details of the proposed vehicular access points will be provided together with details of suitable links to the pedestrian, cycle and public transport networks.
- 4.4 Access to the proposed school will be from Keresforth Close. The road will lead directly to the school car park and will be the principal access by all travel modes.
- 4.5 It is at this stage envisaged that Keresforth Close will be made up to adoptable standard and subject to Section 37 / 38 of the Highways Act 1980, will become part of the publicly maintainable highway. Milestone Transport Planning will liaise with the BMBC Highways Department to agree the design and construction details of the highway through the pre-application and planning consultation periods of the development.
- 4.6 Servicing and delivery vehicles will enter / exit the site via Keresforth Close and will be able to turn within the site and exit in forward gear. Within the development fire appliances will be able to reach within 45 metres of any building and the maximum carry distance for refuse collection will be 25 metres.
- 4.7 The arrangements for servicing and refuse collection on site will be provided which will include swept path assessments. Details from the school will be provided on the number and type of delivery vehicles to be used as well as the timing of deliveries and routing to / from the site.
- 4.8 Figure 5 illustrates the vehicular and pedestrian access routes to the site.

Figure 5 Proposed Pedestrian / Vehicle Movement and Access Strategy



Parking Arrangements

- 4.9 The school will provide on-site school drop-off / pick-up facilities. Space for circa. 36 cars to drop-off / pick-up will be designated in the westernmost car parking area. Further details of these arrangements will be detailed in the TA. Such facilities, as outlined by BMBC in pre-application feedback will reflect similar facilities for other Secondary Schools in the borough.
- 4.10 The proposed school will be provided with 118 car parking spaces, 7 disabled spaces and 7 minibus spaces. Details of the staff and visitor demand for car parking on a daily basis will be provided in the TA.
- 4.11 Cycle parking will be provided in secure, covered stores in accordance with BMBC standards.

Measures to Promote Sustainable Travel

- 4.12 This sub-section will provide details of the person trip generation management through promoting sustainable choices in the form of a comprehensive Travel Plan.

- 4.13 The Travel Plan will aim to encourage pupils, parents and staff to change their travel behaviour in favour of sustainable travel modes and to sustain these changes over the long term. A framework of effective measures and smarter choices will be identified to achieve an overall goal of reducing the impact of traffic generated by the school development and to improve accessibility for the site and wider area. The Travel Plan will be submitted separately as part of the planning application package.
- 4.14 The types of measures that will be considered to encourage sustainable transport are listed below:
- Provide travel information on School Website repeated in the School Prospectus and notice boards;
 - Active encouragement of the use of existing, local public transport services for access to the school;
 - School parents agreeing and signing a 'Travel Plan charter' committing to minimisation of car travel;
 - Promotion of participation in 'Walk to School Week', 'Walk in May', 'Walk on Wednesdays' and cycle training through the Government-supported 'Bikeability' scheme (www.dft.gov.uk/bikeability);
 - Initiate 'Walking Passport' reward scheme and undertake 'Safer Moves' practical pedestrian training;
 - Appointing Student Travel Ambassadors to engage and educate other student on sustainable travel.

5. Person Trip Generation & Distribution Assignment

- 5.1 Given that the proposed school is not currently in operation it will not be possible to use primary data to derive travel behaviour and trip generation. Therefore, a first principles approach has been taken for establishing the number of trips by pupils and staff.

Pupil Trip Generation

- 5.2 For pupil trip generation, a TRICS approach to the calculation of modal share was first considered. However, due to the limitation on TRICS Secondary School sites an alternative approach has been explored. A database has been collated of Secondary School projects undertaken by Milestone Transport Planning across the UK, from which the most comparable to the subject site have been selected (based on size, location and proximity to local settlements / catchment). Any sites within London have been discounted. The average modal split for Travel Plans implemented at these school sites has been used to inform pupil trip generation for Trinity Academy. The aforementioned data is included as Appendix 2.
- 5.3 On the basis of above, the predicted trip generation of pupils at full capacity (i.e. 900) over the AM arrivals and PM departure periods, applying the average mode share obtained from existing Secondary Schools, is summarised in Table 5.1.

Table 5.1 Student Trip Generation

Mode	Mode Share	AM Period	PM Period
		No. of Arrivals	No. of Departures
Car	24%	217	217
Car Share	1%	9	9
Pedestrian	38%	338	338
Cycle	7%	61	61
Public Transport	19%	173	173
School Bus	8%	69	69
Other	4%	33	33
Total	100.0%	900	900

- 5.4 Table 5.1 shows that the proposed school has the potential to generate 226 vehicle trips during the AM arrival and PM departure periods. The majority of pupils will travel to school by public transport or on foot.

Staff Trip Generation

- 5.5 In respect of staff trips, the 2011 Census dataset '*Location of Usual Residence and Place of Work by Method of Travel to Work*' data for the Barnsley 013 Middle Super Output Area (MSOA) has been obtained to determine the likely mode share. The output is included as Appendix 3, and the mode share has been applied to the total number of staff members i.e. 90.
- 5.6 The resultant trips by mode for the AM arrival and PM departure periods are summarised in Table 5.2.
- 5.7 It should be noted that the majority of staff will likely arrive between 07:00-08:00, before the start of the school day and before the arrival of pupils. Staff would then depart during the standard network PM peak hour (e.g. 17:00-18:00), after the departure of pupils.
- 5.8 It should also be noted that the assessment accounts for all staff including those working part-time and therefore the number of trips summarised in Table 5.2 represents the worst case.

Table 5.2 Staff Trip Generation

Mode	Mode Share	AM Period	PM Period
		No. Two-Way Trips	No. Two-Way Trips
Vehicle Driver	61%	55	55
Vehicle Passenger	7%	6	6
Public Transport	16%	14	14
Walk	15%	14	14
Cycle	0%	0	0
Other (e.g. taxi)	1%	1	1
Total	100%	90	90

- 5.9 Table 5.2 shows that the majority of staff will travel to the school by car during the AM arrival and PM departure periods.

Route Assignment and Distribution

- 5.10 Should it be possible to obtain school catchment information, it would be proposed to assign trips to the local highway network based on these origins with vehicular routing by the most direct route.
- 5.11 If school catchment data cannot be made available, we will use 2011 Census data to derive the number of Secondary school-age children within the nearest Census 'lower layer super output areas'. Concentrations of Secondary school-aged children would then be mapped using GIS software and on this basis routes to and from the proposed site would be determined.
- 5.12 Staff trip distribution will be derived using 2011 Census 'Method of Travel to Work' inflow data for work-based travel to this part of Barnsley 013G.

- 5.13 Where workplace destinations are within a comfortable walking or cycling distance of the site the TA will set out revisions to the distribution and assignment of site traffic to account for the fact that such trips would unlikely be undertaken by car.

Future Assessment Year

- 5.14 The forecast year for the development will be 2028. This forecast year has been chosen to reflect 5 years post the opening of the school which is estimated to be 2023.
- 5.15 Advice is sought from BMBC as to whether any specific committed developments should be considered when assessing the study area in addition to TEMPRO which includes Local Plan growth forecasts.

6. Impact on Highway and Transport Network

- 6.1 This section will draw upon the study area defined in Section 3. As previously stated, if available, junction turning counts will be obtained from BMBC, or another third party, in order to understand current junction operation and inform the preparation of junction models.

Junction Modelling

- 6.2 Alongside the MCC data, queue length information will be sought to calibrate the traffic models that will be built upon completion of the surveys.
- 6.3 TEMPRO will be used to growth the surveyed flows, given by the MCCs, in order to inform the 'base' level (predevelopment) of traffic for the year 2028. The junctions will then be tested with the 'base' level traffic flows, using PICADY and LINSIG as standard and accepted highway junction modelling tools.
- 6.4 The trips generated by the development will be distributed onto these junctions in accordance with the 2011 Census travel to work flows as described in Section 5. Adding these development trips to the 'base' year will then allow the 'base + development' scenario to be tested. The 'base' traffic can then be compared to the 'base + development' traffic to see if the development has had a significant impact on the study area.
- 6.5 Mitigation measures will be discussed if any adverse impact has been identified on the surrounding highway network.

Pedestrian / Cycle Connectivity

- 6.6 As referred to in Section 4, pedestrian and cycle infrastructure is well provided for to connect the proposed site to nearby residential areas which is considered to be of a suitable standard to accommodate the level of pedestrian and cycle movements generated by the proposed Secondary School.

Public Transport

- 6.7 In respect of the impact of public transport trips, and in particular bus trips, further information will be provided should dedicated school bus services be provided for the school. Where this is not the case, patronage data will be sought from BMBC in order to assess and, as required, mitigate the impact of these trips.

7. Summary

- 7.1 A summary of the TA's findings and conclusions will be provided.
- 7.2 These will be set against the aims and objectives of local and national policy and seek to demonstrate the site is capable of providing for safe and suitable access to the wider highways and transport network.
- 7.3 In respect of the Scoping Note, the views of BMBC as the Highway Authority are sought on the general principles and scope of the proposals and the Transport Assessment, particularly in regard to the current COVID-19 situation and any traffic survey data limitations. Subject to this, Milestone Transport Planning would progress the preparation of the Transport Assessment and all supporting technical and design assessments together with the preparation of a Travel Plan for submission.

Appendix 2

Toby Gosden

From: Lake , Wayne (GROUP LEADER HDC) <WayneLake@barnsley.gov.uk>
Sent: 28 October 2021 10:21
To: Toby Gosden
Cc: Burton , Andrew (GROUP LEADER- DEV MANAGEMENT(INNER AREA));
HighwaysPInGApps
Subject: RE: Trinity Main School, Barnsley

Good morning Toby,

Please find below comments in respect of the Transport Assessment scoping report:

Section 2.2 – Refers to MfS being the design standard for the internal site layout. Is this correct given the nature of the proposal?

Sections 3.5 – 3.9 Lack of reference to the shared footway / cycleway along Broadway

Table 3.1 – No reference to service 44?

Section 3.14 – The study area shall include all junctions that experience an increase of 30 or more two way trips as a result of the proposal during the assessment “peak hour” period.

Section 3.15 – Please include queue length surveys to assist validation of modelling.

Section 3.16 – Please note the major highway scheme at the A6133 / A628 junction is currently under construction. Previous assessment work undertaken for the scheme was included with the planning application reference 2018/0965.

Also I would draw your attention to Highways England pre-application response last October in respect of the TA and TP:

- The TA and TP should be scoped with Highways England and BMBC in advance of submission to ensure the key transport parameters can be agreed at the earliest opportunity;
- Given the nature of the development proposals, it is considered that the TA can be based on a ‘first-principles’ approach as the catchment areas and postcodes of pupils, as well as the postcodes of staff will be known, and as such, accurate trip generation and trip distribution profiles can be derived;
- Given the nature of the development proposals, it is considered that the mode share percentages and targets within the TP can be based on a ‘first-principles’ approach as the catchment areas and postcodes of pupils, as well as the postcodes of staff will be known, and as such, accurate information – further informed by travel to work / school surveys – can be used within the TP;

At this point in the process it is not clear whether M1 Junction 37 should be included within the study area for the TA. As such as part of the scoping process, consideration is given to the SRN to enable further discussions as to whether an assessment of the SRN is required, or otherwise;

Figure 3 – Whilst the study area appears logical, any additional critical locations on the road network with poor accident records should be identified. This is to determine if the proposed development will exacerbate existing problems or, if proposed, whether highway mitigation works or traffic management measures will help to alleviate the problems.

3.19 – This appears to suggest there will be an acceptance of school parking in and around the local area due to pick ups and drop offs. The strategy for student travel including travel plan / internal layout and operation is to be robust to ensure any parking within surrounding areas is mitigated against. Furthermore, there are concerns that this would also have a detrimental impact on the safe operation of the road and possible residential amenity issues for existing residents of Keresforth Court / Close.

3.20 – Reference to road adoption however details relating to proposals to bring the road up to satisfactory adoptable standards is lacking. Any enforceable parking restrictions are dependent on adoption and subsequent TRO process. It therefore cannot just be assumed that such restrictions will be implemented.

3.19/ 3.20 – There is a need to provide detail in respect of existing conditions and how potential issues / residual impacts will be managed / mitigated – Not just an acceptance that this will occur.

3.21 – Unclear what data is being referred to

3.23 - Unclear what data is being referred to

4.4 – There is need to ensure this is sufficient to accommodate all modes. Given the nature of the proposal, I would expect a full site accessibility audit to be undertaken in addition to isochrone type level information. Furthermore, consideration is to be given to the target level of trips by sustainable modes with the Travel Plan.

4.8 – Cycling not included within text. See comments at 4.4

4.9 – This needs to be reconciled against predicted trip generation by mode and robust travel plan / targets.

4.12-4.14 The travel plan shall also include:

Outcomes / targets

Processes, timetables and any costs associated with delivering the required outcomes and targets

Monitoring / management arrangements – together with consideration of actions to be taken should targets not be met.

Might be prudent to provide a separate TP scoping note for agreement?

5.2 / Table 5.1 – Student trip generation. – No information provided to demonstrate comparable sites have been used. Details relating to any factors that influence travel choice will be useful to corroborate. Furthermore, the information presented in Appendix 2 demonstrates a significant range of data. E.g Brentwood 7% as car driver; Chilmington Green 53%. Furthermore, is any additional data available from existing (temp school) admissions and applications ie postcodes / catchment areas etc. that may influence mode choice

I will source data relating to student mode share data for secondary schools in Barnsley and provide for further comparison purposes.

Final trip generation (by mode) to be agreed.

5.2 – Staff trip generation. Use of 2011 census data to be used with caution in respect of public transport trips given the circa 25% reduction in patronage over time.

5.10 – 5.11 – Whilst this seems a reasonable approach, a review of the final distribution methodology and results for students travel are to be presented / agreed.

5.15 - Committed developments to be confirmed with planning officers. This is to include any allocated sites that are likely to come forward within the next 3 years.

6.3 – to include “committed development”

6.6 – Requirement for an accessibility audit to be included.

6.7 - Unclear what data is being referred to

7 – The Travel Plan and Transport Assessment are not to be “standalone” documents. Whilst the TA will evaluate the impact on the transport network and travel plan will identify opportunities to effectively promote / deliver sustainable transport initiatives for students and staff, their development should be an iterative process as each may influence the other.

General Note: There is a need to have early engagement with Highways England in the scoping process given the proximity of the site to the SRN.

Kind Regards

Wayne

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From: Toby Gosden <tgosden@milestonetp.co.uk>
Sent: 12 October 2021 08:55
To: Lake, Wayne (GROUP LEADER HDC) <WayneLake@barnsley.gov.uk>
Subject: RE: Trinity Main School, Barnsley

Morning Wayne

Hope you are well.

Following the pre-application meeting a few weeks ago we have pulled together the attached scoping report to address our highways and transport approach to the application in respect of trip generation, junction assessment, movement and access and the adoption strategy for Keresforth Close.

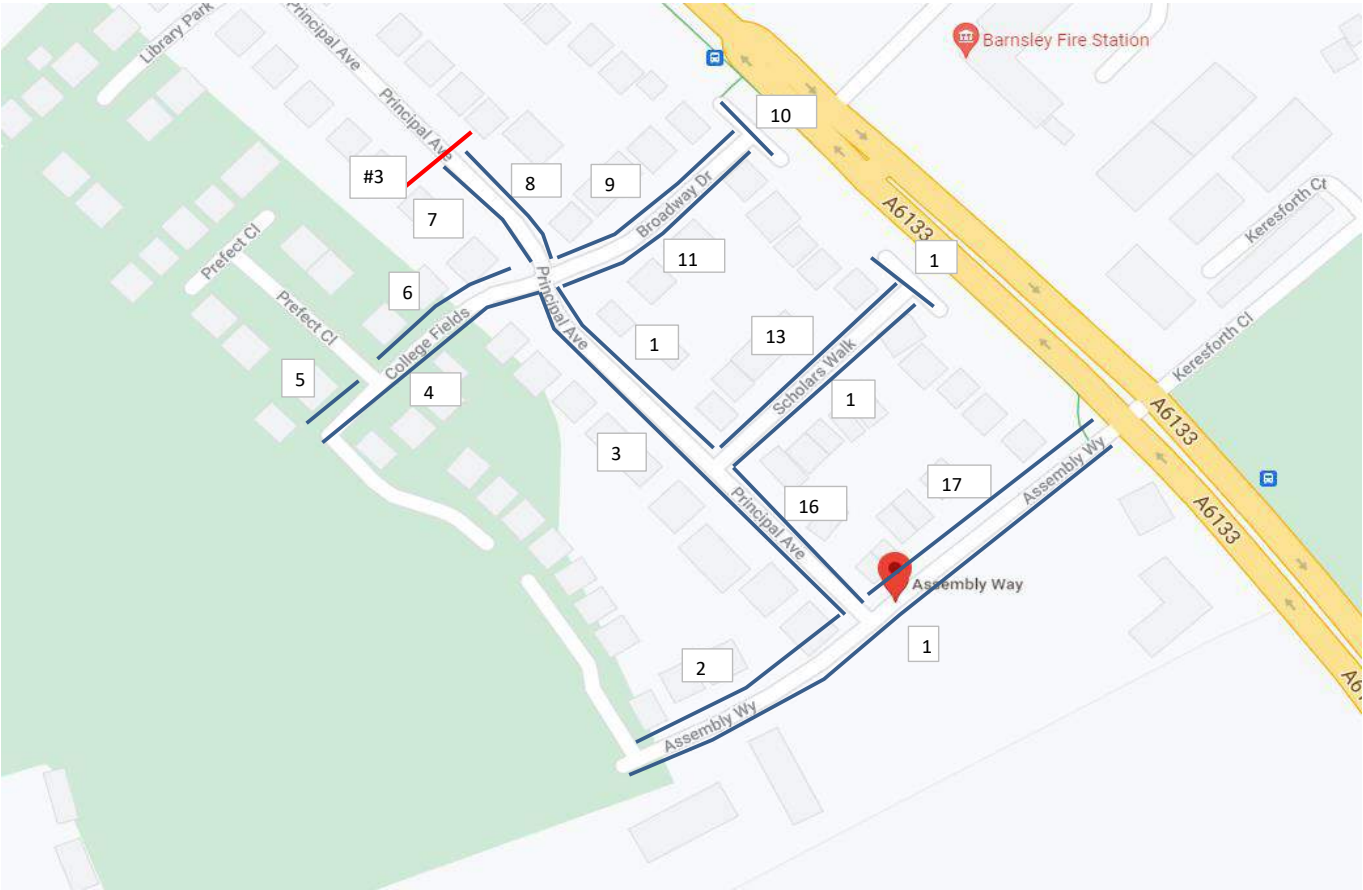
I would appreciate any feedback on the scoping principles, and then it would perhaps be useful to hold a pre-application call solely on highway matters to discuss in further detail?

In this regard I have a fairly clear diary for the next couple of weeks, save for regular meetings on Monday AM and an all day event on Thursday 21 October. Would you be able to confirm your availability and I will coordinate a date with our wider project team?

Many thanks

Appendix 3

ZONE PLANS



ZONE PLANS



PARKING BEATS



JOB NAME: 10917
SITES: BARNSLEY

DATE: 23/11/2021
DAY: TUESDAY

PARKING BEATS



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TIME	ZONE																					TIME	ZONE																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		NR & GARAGE FRONTAGE	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
RESTRICTIONS	NR & DY	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR & DY	NR	NR	NR	NR	RESTRICTIONS	NR	NR & DY	NR & DY	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR & DY	NR & DY	NR		
TOTAL SPACES	5	2	7	4	1	2	3	1	0	4	5	5	1	5	3	3	0	7	0	7	3	TOTAL SPACES	1	0	0	0	9	2	4	4	3	6	11	3	15	3	0	0	11
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TIME	ZONE																					TIME	ZONE																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21			22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
RESTRICTIONS	NR & DY	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR & DY	NR	NR	NR	NR	RESTRICTIONS	NR & GARAGE FRONTAGE	NR	NR & DY	NR & DY	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR & DY	NR & DY	NR
TOTAL SPACES	5	2	7	4	1	2	3	1	0	4	5	5	1	5	3	3	0	7	0	7	3	TOTAL SPACES	1	0	0	0	9	2	4	4	3	6	11	3	15	3	0	0	11
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