Nick Culhane
Highway Consultant

Change of Use of a Former Police Station to a Children's Day Nursery
2 Murray Road, Northwood HA6 2NY

Transport Statement

March 2024

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Appendices

1. Introduction

1.1. Nick Culhane Highway Consultant Ltd has been appointed by Azaf Investment Ltd to produce a Transport Statement to accompany a planning application submission to Hillingdon Borough Council for a change of use of a Listed former Police Station as 2 Murray Road to provide a 117 space children's day nursey. The location of the site is shown below.

1.2. This Transport Statement addresses key transport issues including:

- the local highway network
- the access arrangements to the proposed development
- the existing use of the site
- the proposed development and its operational facilities
- the impact of the development on the local highway network in terms of highway safety
- accessibility of the site in relation to sustainable transport and local facilities

1.3. This Transport Statement demonstrates that there will not be an unacceptable impact on highway safety associated with the development proposals and that the residual cumulative impacts of the development are not severe. As such, there are no transport reasons why planning should not be granted.

1.4. A Travel Plan Framework is also submitted under separate cover which sets out travel targets and measures to promote the uptake of sustainable travel amongst visitors. The Travel Plan Framework and Transport Statement reports should be read in conjunction.

1.5. The remainder of the Statement will address the following issues:

- Planning History
- Planning Policy
- The Existing Situation
- Development Proposals
- Traffic Impact
- Summary and Conclusion

2. Planning History

2.1. The site was the subject of an application for a change of use under reference 46639/APP/2022/60 to a mixed-use place of worship (Class F.1) and community centre (Class F.2), along with minor alterations to car park layout.

2.2. Although this application was supported with. Comprehensive Transport Statement, the application was refused consent, and the following highway reason was included.

> The application submission fails to fully demonstrate that the proposal would not give rise to adverse impacts upon the highway network to the detriment of traffic congestion, parking stress and highway safety. Based on the information submitted, the proposed development is considered to have an unacceptable impact on highway safety. As such, the proposal is contrary to Policies DMT 1, DMT 2 and DME 4 of the Hillingdon Local Plan: Part 2 (2020), and Policies T2, T4 and T5 of the London Plan (2021) and is refused in accordance with paragraph 111 of the National Planning Policy Framework (2021).

2.3. The likely traffic impact and parking demand from this current application is significantly different from that of the above refused application, and this will be discussed further in the Sections below.

3. Planning Policy

3.1. National Planning Policy

3.1.1. In July 2021, a new revision to the National Planning Policy Framework (NPPF) was published. The NPPF sets out the Government's planning policies for England and how these are expected to be applied.

3.1.2. NPPF paragraph 104 states that;

> Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:
>
> a) the potential impacts of development on transport networks can be addressed;
>
> b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example, in relation to the scale, location or density of development that can be accommodated;
>
> c) opportunities to promote walking, cycling and public transport use are identified and pursued;
> d) the environmental impacts of traffic and transport infrastructure can be

identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and

e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.

3.1.3. Paragraph 110 under the heading 'Considering Development Proposals' goes on to state:

In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, give the type of development and its location;

b) safe and suitable access to the site can be achieved for all users; and

c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and

d) 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.

3.1.4. Paragraph 111 confirms that:

Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

3.2. Regional Planning Policy

3.2.1. The London Plan (March 2021) is "the overall strategic plan for London" and "sets out an integrated economic, environmental, transport and social framework for the development of London over the next 20–25 years". The London Plan is part of the Development Plan and must be taken into account when planning decisions are taken in any part of Greater London, noting in particular the explicit support at Paragraph 5.1.11 of the Plan for unused facilities to be brought into use to support the work of voluntary and community groups.

4. Existing Situation

4.1. The Site and Surrounding Area

4.1.1. The application site, 2 Murray Road, is the former Northwood Metropolitan Police Station and is bounded by Murray Road to the north-east, Maxwell Road to the north- west and existing residential properties to the south.

4.1.2. The building is understood to have been vacant since 2019 when police operations had reduced to an occasional presence by local volunteers. Prior to this however, the building was a fully operational Metropolitan Police Station, providing a broad range of policing facilities, including front desk, charge room and a number of cells, interview rooms, family liaison suite, welfare facilities for officers, as well as offices for both police and CID. At its peak, the station was understood to accommodate up to 40 police and civilian staff, in addition to movements associated with patrolling officers and visiting members of the public.

4.1.3. The current unrestricted, lawful use of the property as a Police Station fall within a sui generis use and any comparative assessment of existing and proposed traffic movements should be made on this basis.

4.1.4. The site has an existing vehicle access in the form of a footway crossover towards the south-eastern corner of the site on to Murray Road where visibility is fully in accordance with current geometry guidance. Within the site, there are some 15 car parking spaces plus additional space is available for the turning requirements of servicing and delivery vehicles.

4.2. Highway Network

4.2.1. Murray Road has a wide two-lane carriageway with a width of some 6.75m, and benefits from highway verges and wide pedestrian footways on both sides of the road. It benefits from street lighting and is subject to a 30mph speed limit.

4.2.2. The road falls within a Controlled Parking Zone (CPZ) (Ref: 'N') which prohibits vehicle parking from Monday to Friday between the hours of 1pm – 2pm. Single yellow lines are also present on both sides of the road in proximity to the site which restrict on-street parking from Monday to Saturday between the hours of 8am – 6.30pm. An additional traffic regulation order (TRO) is also present which restricts the stopping of buses and >5T vehicles between Midnight – 8am and 6.30pm – Midnight.

4.2.3. At the northern extent of the site, Murray Road meets Maxwell Road as the minor arm of a priority T-junction. To the north of this junction, Maxwell Road passes through Northwood Local Centre which is a 20mph zone.

4.2.4. Maxwell Road, from its junction with Green Lane some 80m to the north of Murray Road to its junction with Anthus Mews and 80m to the south of Murray Road, is a 'Ticket and Meter' zone with Pay & Display on-street parking available from Monday to Saturday between the hours of 8am – 6.30pm, with a Max Stay of 2 hours. A total of 20 parking spaces (including 2 number disabled bays) are present.

4.2.5. To the south of the Ticket and Meter zone which terminates at Anthus Mews, Maxwell Road is within CPZ 'N' which prohibits vehicle parking from Monday to Friday between the hours of 1pm – 2pm. Anthus Mews is a residential cul-de-sac which has signage to indicate that this is a private road for residents only, and that on-street car parking is monitored.

4.2.6. All roads surrounding the site have street lighting and have footways on both sides of the road. Dropped kerbs with tactile paving are present across minor road junctions and a zebra crossing facility is located along Maxwell Road in proximity to the roundabout junction with Green Lane.

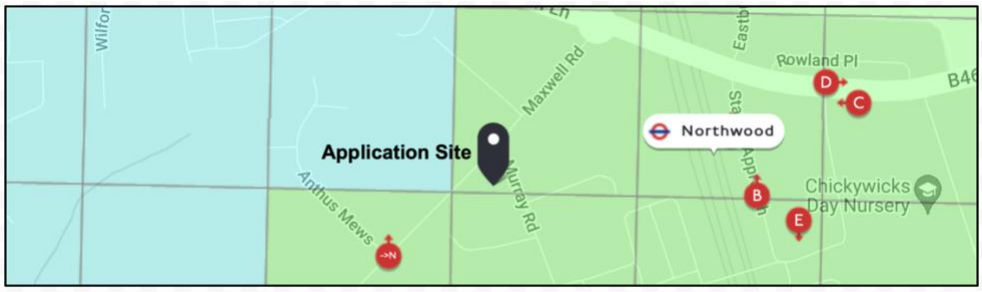
4.3. Road Traffic Accident Review

4.3.1. A review of the Accident history for this area has been undertake using Crashmaps. Usually, data from the last 3 years is required, or 5 years where there is a known accident problem. In this case there is no such problem, and a review of the accident history has established that within the last 3 years, there have been no accidents that have resulted in injury on Murray Road, or its associated junctions. This would suggest that the highway network in the vicinity of the Application site is operating in a safe and efficient manner.

4.3.2. From the accident history it is considered that there are no existing accident trends on the local highway network that are likely to be adversely affected by the proposed development.

4.4. Accessibility by Sustainable Transport Modes

4.4.1. A PTAL Public Transport Access Level (PTAL) assessment has been undertaken using TfL's WebCAT planning tool. As can be seen from the extract below, the site has a PTAL Rating of 3 which represents a 'moderate' level of accessibility, on a scale of 1a (lowest) to 6b (highest).



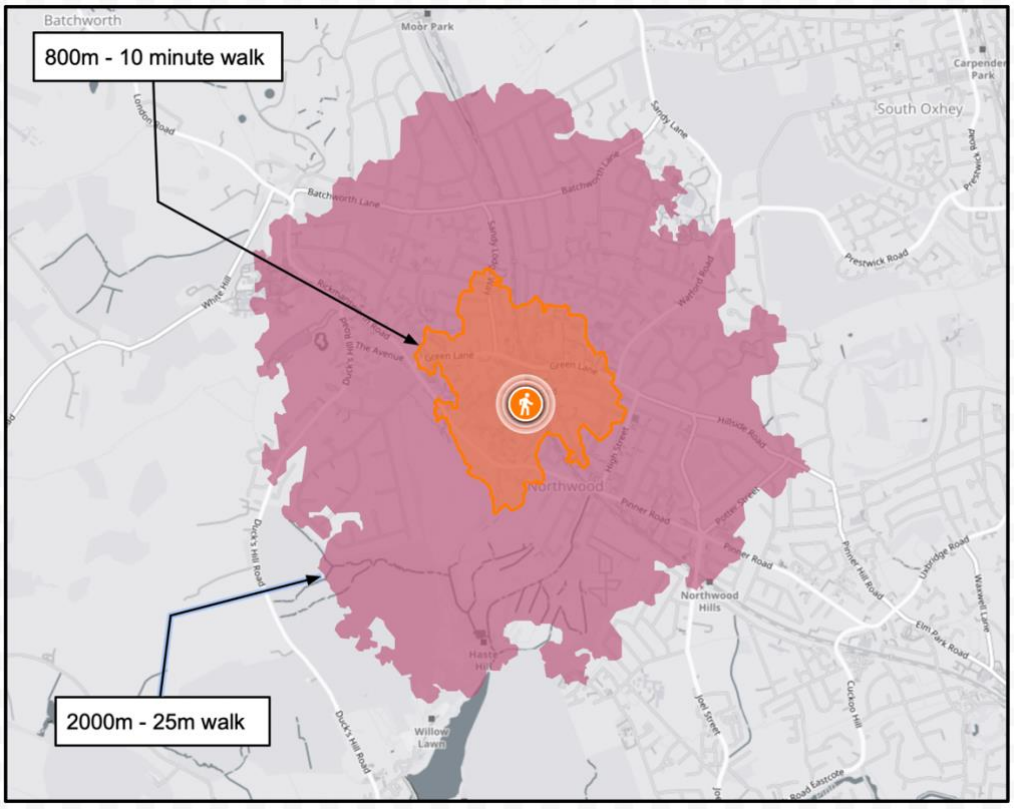
4.5. Accessibility on Foot

4.5.1. Walking is the most common form of travel in Britain and has the greatest potential to replace short car trips, particularly those under 2km. Department for Transport guidance 'Building Sustainable Transport into New Developments' (2008) also offers the following advice:

> Walkable neighbourhoods are typically characterised as having a range of facilities within 10 minutes walking distance (around 800m).

However, the propensity to walk or cycle is not only influenced by distance but also the quality of the experience; people may be willing to walk or cycle further where their surroundings are more attractive, safe and stimulating.

4.5.2. The diagram below demonstrates the location of the site in relation to an 800m (10 minute) walk, together with a 2km (25minute) walk.

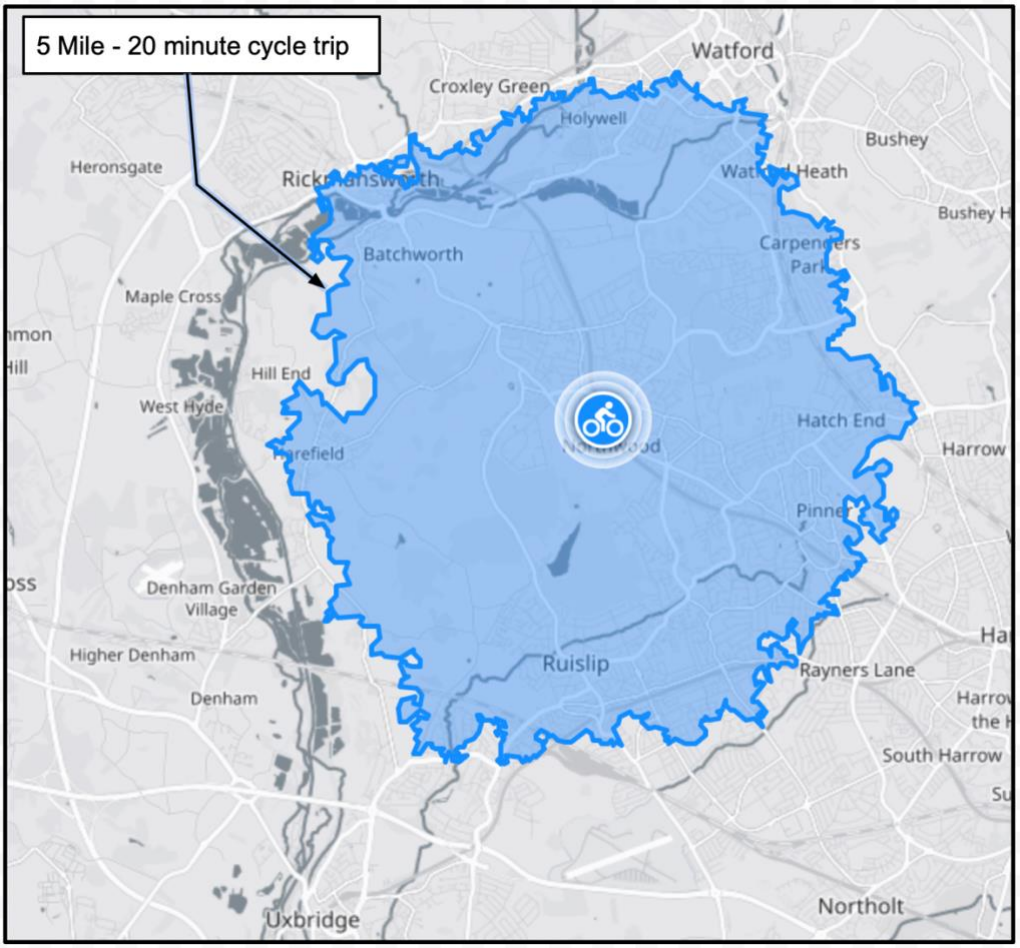


4.5.3. The diagram indicates that the bulk of the residential catchment of Northwood is located within the preferred maximum walking distance of 2km from the site, meanwhile, Northwood local centre is located comfortably within the site's 800m "walkable neighbourhood.

4.6. Accessibility by Cycle

4.6.1. The Chartered Institute of Highways and Transportation's document Planning for Cycling (2014) states that the majority of cycling trips are for short distances, with 80% being less than five miles and with 40% being less than two miles. However, the majority of trips by all modes are also short distances (67% are less than five miles, and 38% are less than two miles); therefore, the bicycle is a potential mode for many of these trips. Electric bicycles extend the range that can be cycled comfortably, and combined cycle-rail or cycle-bus journeys offer an alternative to car travel for many longer trips

4.6.2. The diagram below demonstrates the location of the site in relation to a 5 Mile (20 minute) cycle journey.



4.6.3. It can be seen that a 5-mile cycle journey extends to as far as Croxley Green , Rickmansworth, Harefield, Ruislip, Pinner and Hatch End.

4.7. Accessibility by Public Transport

4.7.1. The closest bus stops to the site are located on Maxwell Road, Green Lane and Station Approach, and are all within a walking distance of less than 250m or a 3-minute walk, whilst Northwood Underground Station is within just 200m of the site. The locations of bus stops and Northwood Underground Station are shown below.

4.7.2. The bus stops provide access to TfL bus services 282, H11 & 331 which provide a collective frequency of 12 buses per hour, and Arriva service No.8 which operates two buses per hour between Mount Vernon Hospital and Abbots Langley.

4.7.3. Northwood Underground Station is located on the Metropolitan Line of the London Underground Network which, in-turn, can be used to access the London Overground, TfL Rail and National Rail services.

5. Development Proposals

5.1. Overview

5.1.1. This application seeks a change of use of the former Police Station to a Children's Day Nursery, together with ancillary car parking and a turning area. The details of the site layout are included as Appendix 1 to this Statement.

5.1.2. The maximum number of pupils would not exceed 117, whilst the use would generate a need for around 28 full-time equivalent staff members.

5.1.3. The make-up of the pupils is shown below

- 6 months – 2 years ---------- 21 pupils
- 2 – 3 years ---------- 46 pupils
- 3 + years ---------- 24 pupils
- 4 years ---------- 26 pupils

5.2. Operational Characteristics

5.2.1. The Day Nursery would be operational Monday through to Friday from 7:30 AM to 6:30PM. Staff would arrive at 7:00AM and would depart once the last Pupil had been collected.

5.2.2. Children would be brought at specific pre-arranged times rather than arriving ad hoc, and this would be spread over the course of an hour or more at the start and end of each day, to ensure that congestion was minimalised.

5.2.3. Although the number of pupils will be limited to 117, it is anticipated that a small element of pupils will be attending for just a half day, either within the morning or the afternoon. The likely impact from patents dropping children of and collecting will therefore be spread across the day, rather than concentrated to the AM and PM peak periods.

5.2.4. Pick up and drop off for the nursery will be undertaken from the on-site parking bays whilst there are also opportunities for pick up and drop off from on-street parking bays on Murray Road and Maxwell Road. as well as the Green Lane public car park, a short distance from the site.

5.2.5. The site accommodates a total of 11 parking spaces (including a dedicated disabled parking bay) and staff will be discouraged from using the on-site parking. A secure and undercover cycle – buggy store is also provided which will accommodate cycles to a ratio of 1 spaces per 8 FTE staff members.

5.2.6. Typical dwell time for pick up and drop off at a nursery is 5-10 minutes, therefore taking an average of 7.5 minutes, each parking bay can accommodate up to 8 vehicles per hour. The 10 general use on-site parking bays for the nursery could therefore accommodate up to 80 pickups / drop offs per hour.

5.2.7. Parents will be allocated a specific time frame in which to drop off an collect their children. Failure to adhere to the time frame will result in a polite warning, followed by a fine for any second offences.

5.2.8. Drawing numbered NJC-002 is included as Appendix 4 to this statement that shows the access to the site which can affectively accommodate up to 4 vehicles queuing within the access road, should the car park be full at any one time, which is unlikely.

5.3. Traffic Impact

5.3.1. In order to provide a robust analysis of the likely traffic impact that the Day Nursery could have on the surrounding highway network, the TRICS database v7.10.3 has been interrogated. TRICS Data for Day Nurseries is fairly limited, therefore in order to select suitable comparison site, the following criteria has been used.

- Land Use – Education – Day Nursery
- Number of Pupils – 49 to 111
- Date Range 01/01/12 – 07/06/22
- Location – Edge of Town and Suburban Area
- PTAL Rating – none

5.3.2. Based on a Day Nursery with a maximum of 117 Children the likely impact can be summarised below, whilst the TRICS output data is included as Appendix 2 to this Statement.

TRICS Trip Rates for Day Nurseries (Per Child)									
	AM (0800 -0900)			PM (1700-1800)			Total Two Way		
	Arrival	Depart	2 Way	Arrival	Depart	2 Way	Arrival	Depart	2 Way
Vehicles	0.170	0.134	0.304	0.136	0.172	0.308	0.762	0.762	1.524
Pedestrians	0.098	0.032	0.130	0.044	0.091	0.135	0.516	0.534	1.050
Cyclists	0.011	0.003	0.014	0.000	0.003	0.003	0.019	0.016	0.035
Pub Transport	0.017	0.001	0.018	0.004	0.008	0.012	0.072	0.071	0.143

5.3.3 Using the above Trip Rates, the table below shows the likely traffic impact from a 117 pupil Day Nursey.

Traffic Impact Based on 117 Children									
	AM (0800 -0900)			PM (1700-1800)			Total Two Way		
	Arrival	Depart	2 Way	Arrival	Depart	2 Way	Arrival	Depart	2 Way
Vehicles	19.89	15.68	36	15.91	20.12	36	89.15	89.15	178
Pedestrians	11.50	3.74	16	5.15	10.65	16	60.37	62.50	123
Cyclists	1.29	0.35	1	0.000	0.35	0	2.22	1.87	4
Pub Transport	1.99	0.12	2	0.59	0.94	2	8.42	8.31	16

5.3.5. From the above, it can be seen that based on TRICS data a 117 Child Day Nursery could generate some 36 two-way vehicular movements in the AM peak period, 36 two-way movements in the PM peak period and a total of some 178 movements on a daily basis.

5.3.6. Interestingly, the data also shows that there is a higher number of pedestrian, cycle and public transport inward movements in the AM peak as opposed to outward movements. This would suggest that the majority of these movements is generated by staff, rather than parents. The same is true in the PM peak, with a greater number of outward trips by such modes than inward movements.

5.4. Primary and Secondary Trips

5.4.1. It is likely that the trips associated with the Nursery will be a mixture of Primary and Secondary trips. Arrival and departure trips from development fall into two main categories, primary trips and secondary trips. A primary trip is defined as a 'single purpose trip' whereby the journey is from an origin to a destination and back to the origin. A secondary trip is defined as a 'multi-purpose trip' whereby there are multiple destinations visited on a journey.

5.4.2. Secondary trips are made up of pass-by, diverted and transferred trips. These are outlined below.

- Pass-by trips are journeys that visit the development without having to make any significant diversion from their existing route;
- Diverted trips are journeys that deviate off their normal route to visit the new development; and
- Transfer trips are journeys that visit a similar destination elsewhere, but due to the new development the trip would transfer to the new development.

5.4.3. In this case it is likely that all traffic movements associated with staff members will be primary trips, these being a trip from home, to work and back again.

5.4.4. Parental trips will be a mixture of primary trips, but mostly secondary trips in the form of pass-by trips as well as transfer trips from other nurseries that maybe less well related to the location of their origin residence.

5.4.5. Given the above, it is therefore likely that some vehicles associated with the proposed use will already be on the highway network, so not all traffic movements will be new.

5.5. Staff Travel

5.5.1. The site will employ around 28 full time equivalent staff as some of these will be part time, given that the Nursery will be operating between 7:30AM and 6:60PM. Some staff will therefore work a half day, whilst some staff will also not work a full 5-day week.

5.5.2. Staff will not be permitted to park on-site, although it is the experience of the Operator, that staff generally do not drive, but tend to be local, therefore they either walk or use public transport. This is recognised by some degree through the TRICS data given above. Staff will be encouraged to travel by alternative transport modes where possible and a number of incentives will be put into place to achieve this. A Travel Plan Framework has been produced and as the Nursery is not currently operating, once up and running, travel habit surveys will be undertaken, and a suitable Travel Plan will be formulated. The Travel Plan Framework is a separate document and forms part of the formal submission for this application.

5.5.3. Although the sit falls within a PTAL zone with a rating of 3 which represents a moderate level of accessibility, the site is located close to a number of bus stops that provide a good level of service, together with Northwood Underground Station which is located on the Metropolitan Line. This offers a range of services to various destinations. In the northbound direction, the station is served by trains to Watford (4tph), Amersham (2tph) and Chesham (2tph) trains (at peak times, 'fast' trains do not stop at stations between Harrow-on-the-Hill and Moor Park). In the southbound direction, off-peak services generally run 4tph to Baker Street and 4tph to Aldgate.

5.5.4. A secure and undercover cycle store is to be provided and the building will be provided with changing facilities for staff who cycle.

5.5.5. The site is also located close to two public car parks, these being Green Lane which provides 157 spaces, whilst Northwood Station provides 185 spaces. Car parking is therefore available locally for staff who do decide to travel by car, but again in this case, staff will be encouraged to car share.

5.5.6. A Car Parking Management Plan has also been produced and this is presented as a separate document which forms part of the formal planning application submission.

6. Access and Visibility

6.1. Vehicular access to the site is to be taken from Murray Road, a residential access road that benefits from pedestrian pavements on both sides of the road, together with a verge between the pavement and carriageway on both sides.

6.2. The road is subject to a 30mph speed limit, therefore, to accord with advise contained within Manual for Streets, visibility splays of 2.4m by 43.0m would be required.

6.3. Drawing numbered NJC-001 is included as Appendix 3 which shows the access together with the required splays, both of which can be accommodated wholly within the extent of the public highway.

6.4. In order to accommodate two-way flow of traffic at the site access, it is proposed to widen this 5.0m and to provide a pedestrian footway on the southern side of the access road. This is shown on drawing numbered NJC-002 which is included as Appendix 4 to this statement. The drawing also show swept path tracking for a large (4.89m) long vehicle entering the site from both the northerly and southerly directions, whilst another car is waiting to leave.

7. Summary and Conclusion

7.1. Summary

7.1.1. This Transport Statement has been produced to support a planning application for a change of use of a former Police Station to a Children's Day Nursery at 2 Murray Road, Northwood.

7.1.2. The site is located within an urban area that is served by a number of public transport options whilst public car parking is also available nearly. On-street parking in the vicinity of the site is controlled through various Traffic Regulation Orders, including a Residents Parking Zone.

7.1.3. The proposal seeks to provide a 117 space Nursery which will employ up to 28 full and part time staff members. The site will include 10 parent parking spaces together with a dedicated disable parking space. Secure undercover cycle parking will also be available.

7.1.4. The Nursery will accommodate children from age 6 months to 4 years and will be operational from 6:30AM until 6:30PM Monday to Friday.

7.1.5. Using TRICS data, it has been demonstrated that the site would generate around 36 two-way traffic movements in each of the Am and PM peak periods. Such a number of additional traffic movements will not have any detrimental impact to highway safety.

7.1.6. Adequate car parking is provided for the needs of the Day Nursery and Staff will be encouraged to use alternative measures, which will be supported through the production of a Travel Plan.

7.2. Conclusion

7.2.1. It is concluded that the proposal of a Children's Day Nursery at 2 Murray Road is fully in accordance with both National and Regional Planning Policy, particularly in regard to the National Planning Policy Framework in so much as the development would not have an unacceptable impact on highway safety, nor would the cumulative impact be severe. The change of use is therefore considered to be acceptable from a highway point of view

Nick Culhane March 2024

Appendix 1

Site Layout Plan

Tree to be removed in order to allow two way traffic into and from car park

0 2 m 4 m 6 m 8 m 10 m

MURRAY RD

Restored perimeter fence

Plant room

Enter

Electricity sub-station

Re-located sub-station

Bike/buggy store

Bin store

WC

Change

WC

ramp

ramp

Reception

Enter

New Entrance Pavilion

Office

New close-boarded acoustic fence on the inside of laurel bushes

Restored Blue light'

Lift

Store

Plant room demolished

Accessible WC

Prep kitchen

Year 2 rooms

Store

Laundry

Baby Rooms

Store

Change

Small, self-seeded tree in car park to be removed

Fire escape

New oak fence to match perimeter fence, with gates, to either side of ramp

Change & WC

sleep room

Fire escape

New close-boarded acoustic fence on the inside of laurel bushes

New close-boarded acoustic fence on the inside of laurel bushes

Fire escape

Restored perimeter fence

New pedestrian gate in perimeter fence

MAXWELL RD

THE ARCHITECTS PRACTICE

JOB 2 Murray Road, HA6

TITLE Proposed Site Plan

DRAWING MRN/P/22

DATE February 2024

SCALE 1:200 @A4

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Appendix 2

TRICS Data

Contents

Appendices

Calculation Reference: AUDIT-405201-231101-1106

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
Category : D - NURSERY
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	WS	WEST SUSSEX	1 days
04	EAST ANGLIA		
	SF	SUFFOLK	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
	NN	NORTH NORTHAMPTONSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	DR	DONCASTER	1 days
08	NORTH WEST		
	EC	CHESHIRE EAST	1 days
09	NORTH		
	TW	TYNE & WEAR	2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Number of pupils
Actual Range:	49 to 111 (units:)
Range Selected by User:	49 to 111 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/12 to 07/06/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	3 days
Wednesday	2 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	8 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town Centre	3
Suburban Area (PPS6 Out of Centre)	5

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	7
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	5 days - Selected
Servicing vehicles Excluded	3 days - Selected

Secondary Filtering selection:

Use Class:

E(f)	8 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

10,001 to 15,000	1 days
15,001 to 20,000	3 days
25,001 to 50,000	4 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000	1 days
75,001 to 100,000	3 days
125,001 to 250,000	2 days
250,001 to 500,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	3 days
1.1 to 1.5	3 days
2.1 to 2.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	8 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	8 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

The 'browse and select' feature in TRICS was used to choose the sites to be included in this selected set. The TRICS user browsed the full list of sites for this land use category and selected directly from this list.

1 DR-04-D-01 NURSERY DONCASTER
BAWTRY ROAD
DONCASTER

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 111
Survey date: FRIDAY *13/05/22* *Survey Type: MANUAL*

2 EC-04-D-01 NURSERY CHESHIRE EAST
CHESTER ROAD
MACCLESFIELD

Edge of Town Centre
No Sub Category
Total Number of pupils: 70
Survey date: MONDAY *24/11/14* *Survey Type: MANUAL*

3 LN-04-D-01 NURSERY LINCOLNSHIRE
NEWARK ROAD
LINCOLN
SWALLOW BECK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 49
Survey date: TUESDAY *31/10/17* *Survey Type: MANUAL*

4 NN-04-D-01 NURSERY NORTH NORTHAMPTONSHIRE
ROCKINGHAM ROAD
KETTERING

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 90
Survey date: TUESDAY *07/06/22* *Survey Type: MANUAL*

5 SF-04-D-03 NURSERY SUFFOLK
CAMP ROAD
LOWESTOFT

Edge of Town Centre
Residential Zone
Total Number of pupils: 110
Survey date: WEDNESDAY *10/12/14* *Survey Type: MANUAL*

6 TW-04-D-02 NURSERY TYNE & WEAR
ETTRICK GROVE
SUNDERLAND
HIGH BARNES
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 110
Survey date: WEDNESDAY *28/11/12* *Survey Type: MANUAL*

7 TW-04-D-03 NURSERY TYNE & WEAR
JUBILEE ROAD
NEWCASTLE UPON TYNE
GOSFORTH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 108
Survey date: TUESDAY *21/05/19* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8	WS-04-D-01 FARNCOMBE ROAD WORTHING	NURSERY	WEST SUSSEX

Edge of Town Centre
Residential Zone
Total Number of pupils: 75
Survey date: FRIDAY *13/05/22* *Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.27

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	90	0.108	8	90	0.044	8	90	0.152
08:00 - 09:00	8	90	0.170	8	90	0.134	8	90	0.304
09:00 - 10:00	8	90	0.053	8	90	0.046	8	90	0.099
10:00 - 11:00	8	90	0.015	8	90	0.015	8	90	0.030
11:00 - 12:00	8	90	0.024	8	90	0.025	8	90	0.049
12:00 - 13:00	8	90	0.054	8	90	0.068	8	90	0.122
13:00 - 14:00	8	90	0.053	8	90	0.065	8	90	0.118
14:00 - 15:00	8	90	0.018	8	90	0.021	8	90	0.039
15:00 - 16:00	8	90	0.062	8	90	0.057	8	90	0.119
16:00 - 17:00	8	90	0.061	8	90	0.068	8	90	0.129
17:00 - 18:00	8	90	0.136	8	90	0.172	8	90	0.308
18:00 - 19:00	8	90	0.008	8	90	0.047	8	90	0.055
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.762			0.762			1.524

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	49 - 111 (units:)
Survey date date range:	01/01/12 - 07/06/22
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
MULTI-MODAL PEDESTRIANS
Calculation factor: 1
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	90	0.055	8	90	0.012	8	90	0.067
08:00 - 09:00	8	90	0.098	8	90	0.032	8	90	0.130
09:00 - 10:00	8	90	0.033	8	90	0.008	8	90	0.041
10:00 - 11:00	8	90	0.015	8	90	0.012	8	90	0.027
11:00 - 12:00	8	90	0.028	8	90	0.041	8	90	0.069
12:00 - 13:00	8	90	0.098	8	90	0.095	8	90	0.193
13:00 - 14:00	8	90	0.058	8	90	0.059	8	90	0.117
14:00 - 15:00	8	90	0.012	8	90	0.012	8	90	0.024
15:00 - 16:00	8	90	0.033	8	90	0.040	8	90	0.073
16:00 - 17:00	8	90	0.041	8	90	0.095	8	90	0.136
17:00 - 18:00	8	90	0.044	8	90	0.091	8	90	0.135
18:00 - 19:00	8	90	0.001	8	90	0.037	8	90	0.038
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.516			0.534			1.050

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	90	0.021	8	90	0.001	8	90	0.022
08:00 - 09:00	8	90	0.017	8	90	0.001	8	90	0.018
09:00 - 10:00	8	90	0.007	8	90	0.001	8	90	0.008
10:00 - 11:00	8	90	0.001	8	90	0.000	8	90	0.001
11:00 - 12:00	8	90	0.000	8	90	0.008	8	90	0.008
12:00 - 13:00	8	90	0.014	8	90	0.018	8	90	0.032
13:00 - 14:00	8	90	0.003	8	90	0.006	8	90	0.009
14:00 - 15:00	8	90	0.003	8	90	0.003	8	90	0.006
15:00 - 16:00	8	90	0.001	8	90	0.008	8	90	0.009
16:00 - 17:00	8	90	0.001	8	90	0.003	8	90	0.004
17:00 - 18:00	8	90	0.004	8	90	0.008	8	90	0.012
18:00 - 19:00	8	90	0.000	8	90	0.014	8	90	0.014
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.072			0.071			0.143

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
MULTI-MODAL CYCLISTS
Calculation factor: 1
BOLD print indicates peak (busiest) period

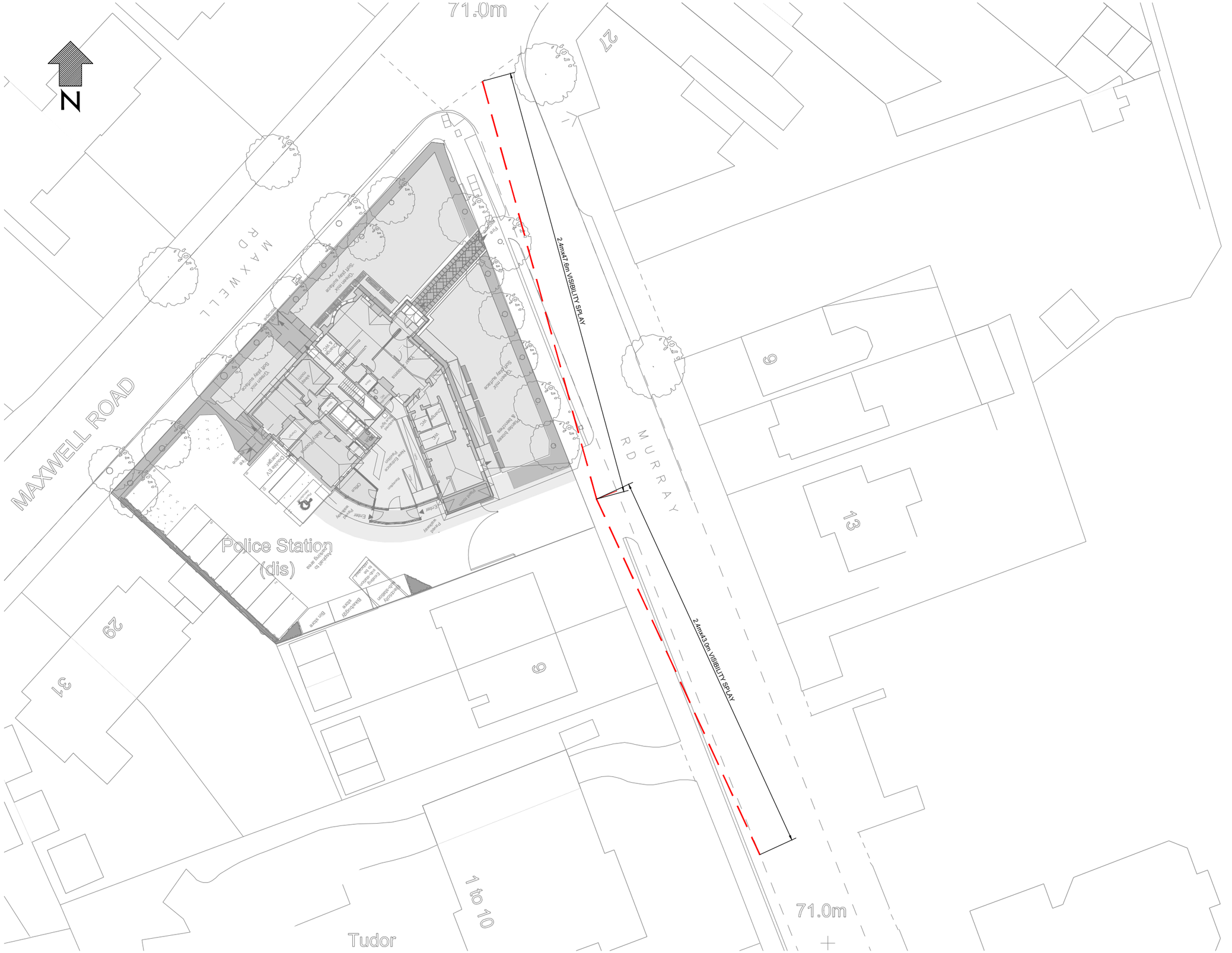
	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	90	0.003	8	90	0.000	8	90	0.003
08:00 - 09:00	8	90	0.011	8	90	0.003	8	90	0.014
09:00 - 10:00	8	90	0.000	8	90	0.000	8	90	0.000
10:00 - 11:00	8	90	0.000	8	90	0.000	8	90	0.000
11:00 - 12:00	8	90	0.000	8	90	0.000	8	90	0.000
12:00 - 13:00	8	90	0.004	8	90	0.001	8	90	0.005
13:00 - 14:00	8	90	0.001	8	90	0.003	8	90	0.004
14:00 - 15:00	8	90	0.000	8	90	0.000	8	90	0.000
15:00 - 16:00	8	90	0.000	8	90	0.003	8	90	0.003
16:00 - 17:00	8	90	0.000	8	90	0.000	8	90	0.000
17:00 - 18:00	8	90	0.000	8	90	0.003	8	90	0.003
18:00 - 19:00	8	90	0.000	8	90	0.003	8	90	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.019			0.016			0.035

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Appendix 3

Access and Visibility



Client

Nick Culhane
Highway Consultant

Project

PROPOSED NURSERY
AT MURRAY ROAD, NORTHWOOD

Drawing Title

ACCESS AND VISIBILITY

Drawing Status

FOR INFORMATION

Date	Scale	Size
MAR 2024	1:200	A1

Drawing No.	Rev
NJC-001	-

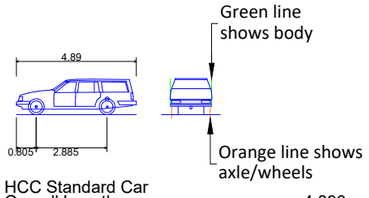
Appendix 4

Access and Vehicular Tracking

INGRESS-SOUTH

INGRESS-NORTH

VEHICLE DETAILS:



HCC Standard Car

Overall Length	4.890m
Overall Width	1.940m
Overall Body Height	1.452m
Min Body Ground Clearance	0.217m
Track Width	1.817m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	4.950m

Design speed 5kph for all Forward movements

Design speed 2.5kph for all Reverse movements

Nick Culhane
Highway Consultant

Project

PROPOSED NURSERY
AT MURRAY ROAD, NORTHWOOD

Drawing Title

SWEPT PATH TRACKING

Drawing Status

FOR INFORMATION

Drawn	Designed	Date	Scale	Size
PN	NC	MAR 2024	1:250	A3

Drawing No. NJC-002

Rev -