

Petersham Nurseries: February 2024 Survey Results

Ref: JCB/BC/AH/ITL8120-008B TN

Date: 20 May 2024

SECTION 1 Background

1.1 This note sets out the results of the surveys undertaken at and surrounding Petersham Nurseries in February 2024. The surveys included:

• An Automatic Traffic Count (ATC) survey recording vehicle volumes along Petersham Road (A307) between Wednesday 7 and Tuesday 13 February 2024.

 A drone survey undertaken on Wednesday 14th February 2024 (Valentines Day) to record all movements generated by Petersham Nurseries using the following roads:

- Church Lane
- River Lane
- Cedar Heights
- Russell School car park
- Tree Close
- Meadow Close

 A questionnaire survey undertaken at Petersham Nurseries on the same evening as the drone survey to measure the mode split of visitors.

1.2 The main vehicular route, parking locations (as picked up from the survey) and the walking routes to Petersham Nurseries are shown in **Figure 1**.



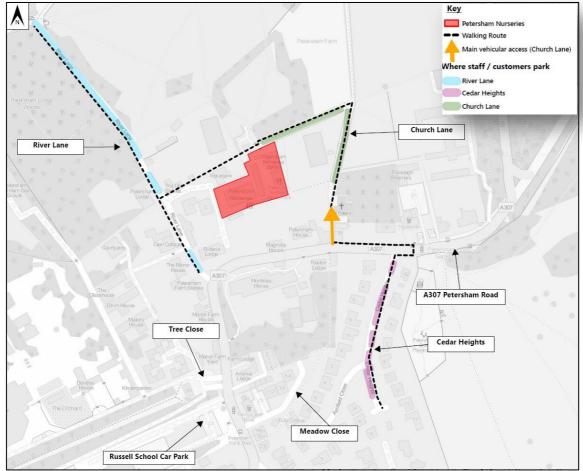


Figure 1: Parking and Walking Plan

Source: Consultant

SECTION 2 Petersham Road ATC Survey

2.1 The survey data is included in **Appendix** A. The results of the Petersham Road ATC survey are summarised in **Table 2.1**.

Table 2.1: Average Weekday Traffic Flows¹

| Hour | Eastbound | Westbound | Two-Way |
|---------------|-----------|-----------|---------|
| 00:00 - 05:00 | 279 | 200 | 479 |
| 05:00 | 136 | 66 | 202 |
| 06:00 | 433 | 193 | 626 |
| 07:00 | 662 | 370 | 1,033 |
| 08:00 | 572 | 370 | 942 |
| 09:00 | 556 | 400 | 955 |

¹ Based on data outside of the half-term week, i.e., 7th – 9th and 19th – 20th February.



| Hour | Eastbound | Westbound | Two-Way |
|---------------|-----------|-----------|---------|
| 10:00 | 499 | 380 | 879 |
| 11:00 | 508 | 393 | 901 |
| 12:00 | 502 | 409 | 911 |
| 13:00 | 501 | 416 | 917 |
| 14:00 | 490 | 450 | 940 |
| 15:00 | 554 | 473 | 1,026 |
| 16:00 | 562 | 505 | 1,067 |
| 17:00 | 673 | 700 | 1,372 |
| 18:00 | 662 | 679 | 1,340 |
| 19:00 | 493 | 483 | 976 |
| 20:00 | 446 | 382 | 828 |
| 21:00 | 408 | 335 | 743 |
| 22:00 | 330 | 301 | 631 |
| 23:00 | 233 | 186 | 419 |
| Daily | 9,497 | 7,690 | 17,188 |
| 09:00 – 17:00 | 4,172 | 3,425 | 7,597 |
| 17:00 – 00:00 | 3,244 | 3,065 | 6,310 |

Source: Paul Castle ATC Survey (February 2024).

SECTION 3 Traffic Movements

3.1 **Overview**

3.1.1 The drone survey was undertaken between 9.30am and 11.30pm on 14 February 2024. The drone survey observed the following area:



Photo 3.1: Drone Survey Image



- 3.1.2 Whilst part of the survey was undertaken during a period of darkness, it is possible to accurately measure movements by a) adjusting the camera settings; b) the local area is reasonably well lit; and c) using car head lights.
- 3.1.3 The survey data are included in **Appendix B**. The survey measures movements to and from the nurseries using local roads:
 - Church Lane
 - River Lane
 - Cedar Heights
 - Russell School car park no nurseries' movements were observed
 - Tree Close no nurseries' movements were observed
 - Meadow Close no nurseries' movements were observed

3.2 **Church Lane – Traffic**

3.2.1 **Image 3.1** summarises the traffic movements along Church Lane observed to be generated by Petersham Nurseries (staff and visitors) across the survey day, as well as non-Nurseries related traffic.



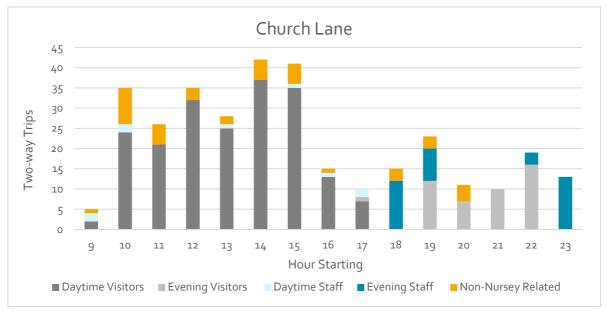


Image 3.1: Church Lane Traffic Movements

Source: Paul Castle Drone Survey

3.3 River Lane - Traffic

3.3.1 **Image 3.2** summarises the traffic movements observed on River Lane.

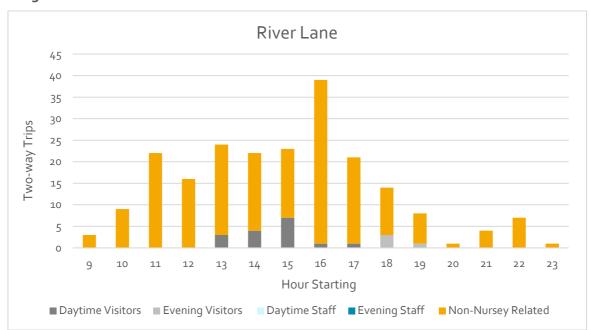


Image 3.2: River Lane Traffic Movements

Source: Paul Castle Drone Survey

3.4 **Cedar Heights - Traffic**

3.4.1 **Image 3.3** summarises the traffic movements observed on Cedar Heights.



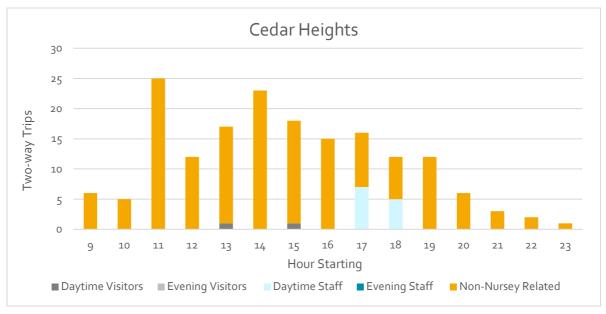


Image 3.3: Cedar Heights Traffic Movements

Source: Paul Castle Drone Survey

3.5 **Total Traffic Movements**

3.5.1 **Image 3.4** summarises the total traffic flows Church Lane, River Lane, and Cedar Heights:

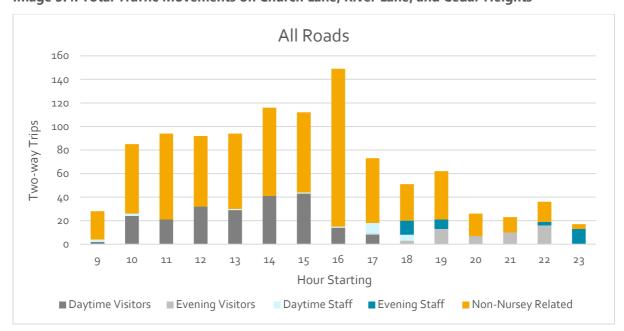


Image 3.4: Total Traffic Movements on Church Lane, River Lane, and Cedar Heights

Source: Paul Castle Drone Survey



SECTION 4 Mode Share

4.1 A travel questionnaire survey was undertaken at Petersham Nurseries on the same day as the drone survey during the evening. The survey data are provided in **Appendix C** and the travel mode share is shown in **Image 4.1**.

Pedestrian
Cycle
Motorcycle
Car Driver
Car Passenger
Taxi Passenger
Bus

Image 4.1: Travel Mode Share to/from Petersham Nurseries via On-Site Questionnaire

Source: Questionnaire Survey

SECTION 5 Parking Accumulation

5.1 **Introduction**

5.1.1 The drone survey undertaken on Wednesday 14th February 2024 also recorded the vehicles parked along Church Lane, River Lane, and Cedar Heights.

5.2 **Church Lane**

5.2.1 **Image 5.1** presents the vehicle parking accumulation along Church Lane.



40 35 Number of Vehicles 20 15 10 5 0 10:00 11:00 12:00 13:00 14:00 15:00 16:00 18:00 20:00 Time ■ Nurseries ■ Non-Nurseries

Image 5.1: Church Lane Parking Accumulation

Source: Paul Castle Drone Survey

5.3 River Lane

5.3.1 **Image 5.2** presents the vehicle parking accumulation along River Lane.

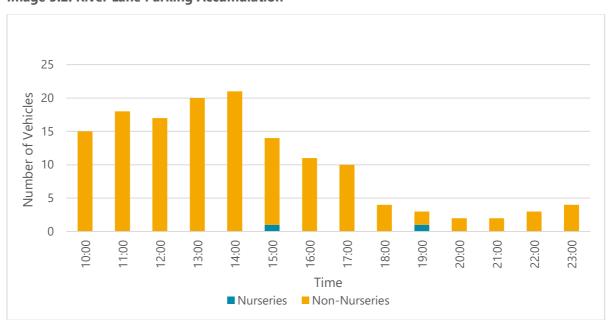


Image 5.2: River Lane Parking Accumulation

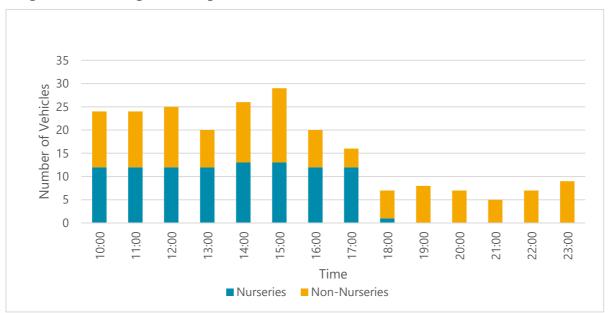
Source: Paul Castle Drone Survey



5.4 **Cedar Heights**

5.5 **Image 5.3** presents the vehicle parking accumulation along Cedar Heights.

Image 5.3: Cedar Heights Parking Accumulation



Source: Paul Castle Drone Survey

APPENDIX A. ATC DATA

APPENDIX B. FEBRUARY 2024 DRONE SURVEY DATA

Official

APPENDIX C. FEBRUARY 2024 QUESTIONNAIRE SURVEY