H7 (V2-V3) Road safety improvements

Collision Analysis Report – H7 Chaffron Way (V2 Tattenhoe Street – V3 Fulmer Street) Milton Keynes

Project: H7 Wallinger Drive - Road safety improvements
Prepared by: Phil Jeffs / Road Safety team
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Reference: TM/26-27/6

1 - Executive Summary

- **Location:** H7 Chaffron Way (V2 Tattenhoe Street – V3 Fulmer Street) Milton Keynes
- **Study period:** Sep 2020 – Sep 2025 (5 years).
- **Collisions (Total/KSI):** 5 in total, 2 KSI.
- **Key clusters:** Wallinger Drive & Pickering Drive junction.
- **Primary patterns:** Right-turn conflicts.
- **Likely contributory factors:** sightlines, lane guidance, speed environment, conspicuity, junction control
- **Headline recommendations:** Banning right turns in and out of Pickering Drive and Wallinger Drive junctions.
- **Estimated benefits:** expected collision reduction of 100%

Decision note: To proceed to informal consultation on the proposed right turn bans – see attached plan

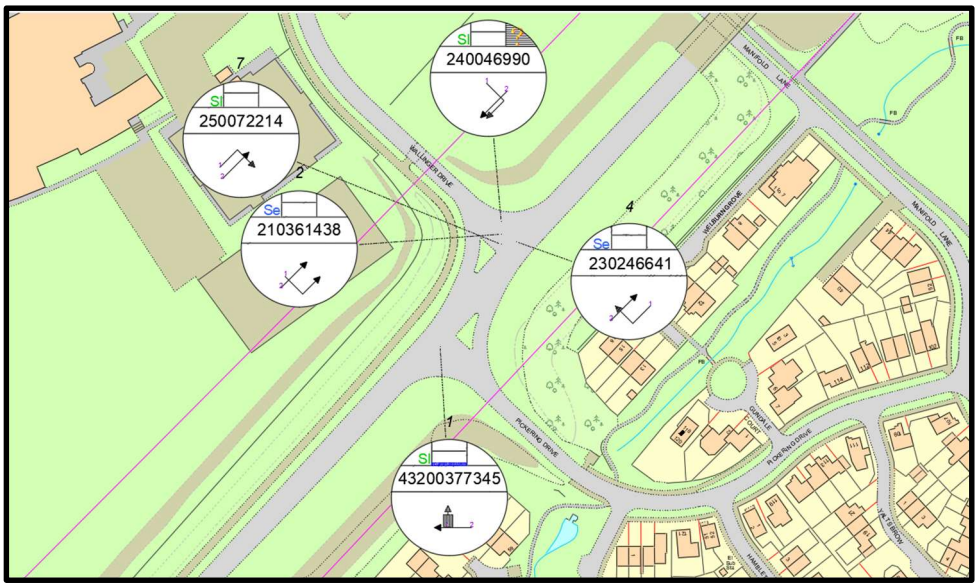
2- Scope & Study Area

- **Network Context:** H7 Chaffron Way (single carriageway)
- **Section Limits:** From V2 Tattenhoe Street to V3 Fulmer Street (1.1km)
- **Crossing Points:** No at grade crossing points.
- **Speed Limits & Features:** National speed limit

3- Introduction

In 2024, Milton Keynes City Council commissioned a report to assess the potential closure of central reserve gaps on dual carriageways and the introduction of right-turn bans on single-carriageway roads across the grid road network. Several locations were identified for review, including the site referenced above, based on the most recent collision data available to the Council.

On the H7 Chaffron Way between the V2 Tattenhoe Street and V3 Fulmer Street, there have been a high number of road traffic collisions—five in total. Four of the collisions occurred at the Walgrave Drive junction with the H7, and the other one occurred at the Pickering Drive junction (opposite). All five of the collisions involved right-turn manoeuvres either in or out of the estate.

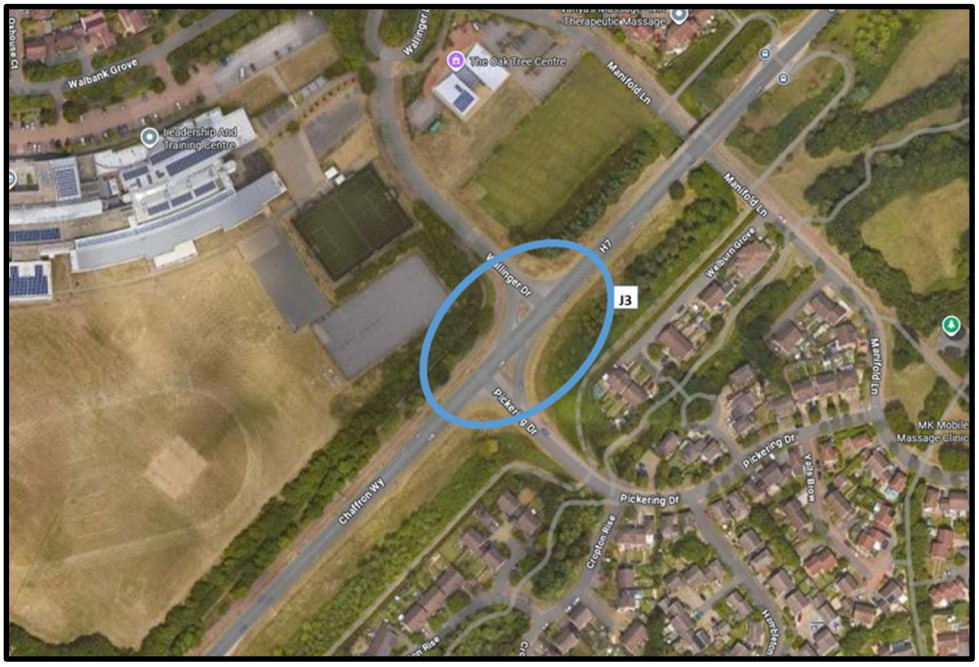


4 - Survey Results

An automated traffic count was undertaken at the location below to look at current speeds and volume in February 2026 for 1 week. See summary of results below.

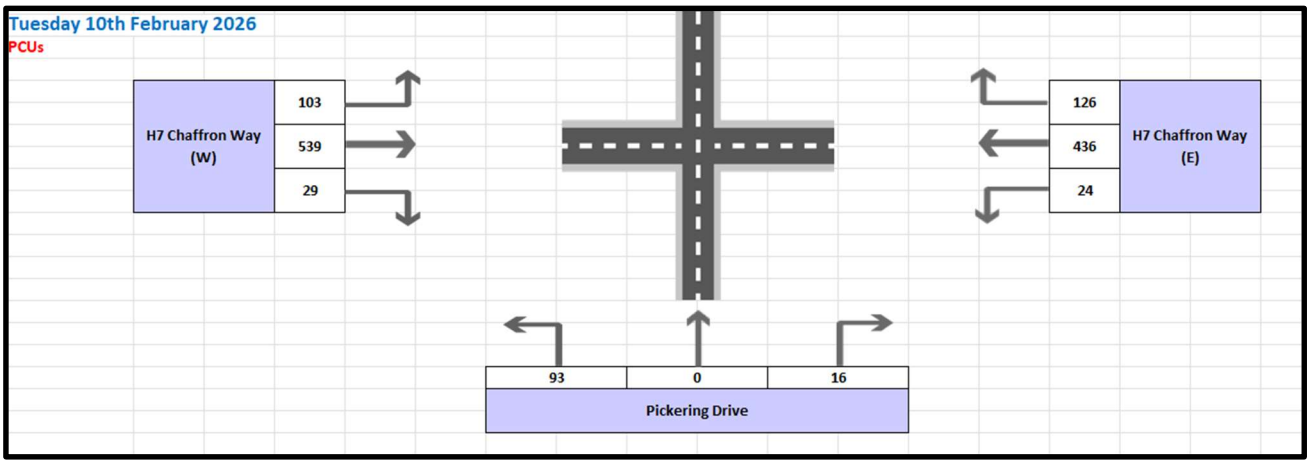
- **Speed Data:** 85th%ile – South Westbound 52.1mph & North Eastbound 48.4mph, Average - South Westbound 43.3mph & North Eastbound 41.2mph
- **Traffic Data** (AADT): 12,660 (6393 North Eastbound & 6267 South Westbound)

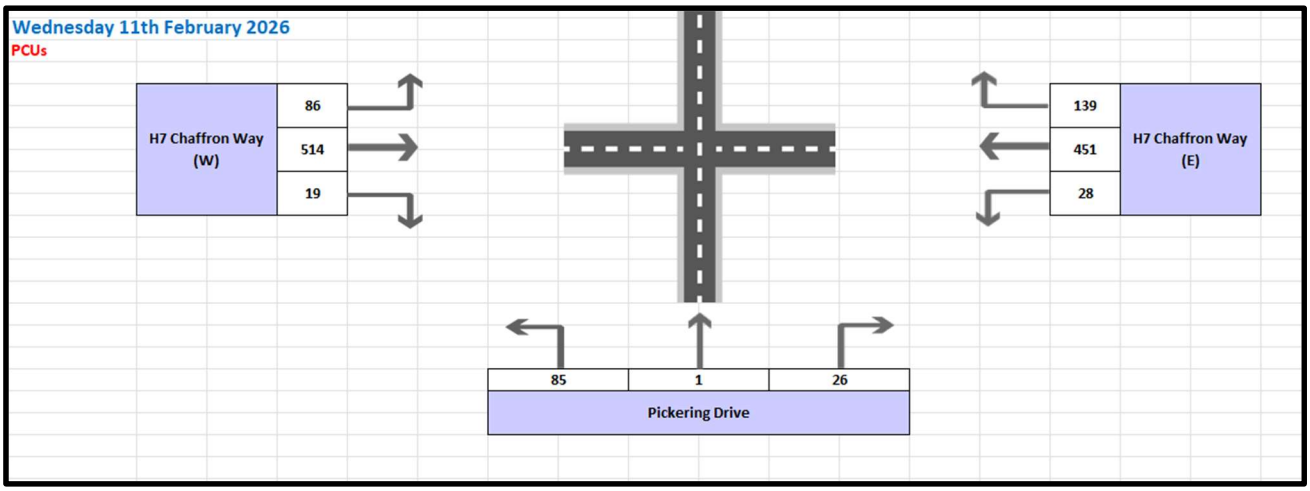
Turning counts were undertaken at both junctions over 3 days in February, between the hours of 7-10am & 4-7pm. I have picked the AM/PM peak hour to identify the number/% right turning in and out of the estate. Here is a summary of the findings of the report.

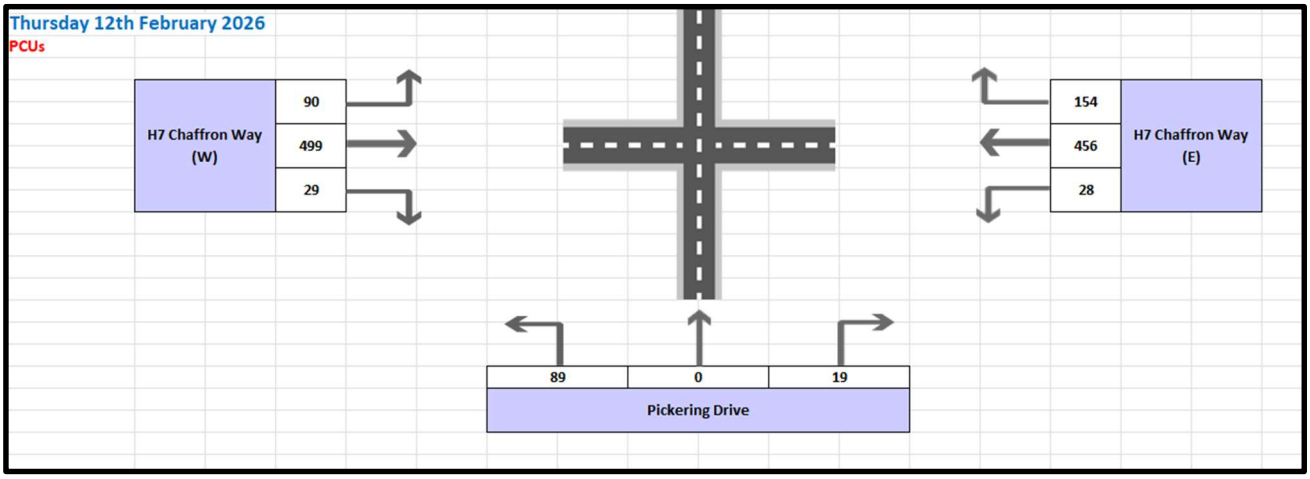


Pickering Drive – AM peak

Over the three-day survey period, **19%** of all exit movements from Pickering Drive onto the H7 Chaffron Way were right-turn manoeuvres, and **4%** of all north eastbound movements on the H7 involved right-turns into Pickering Drive.







Pickering Drive – PM peak

Over the three-day survey period, **33%** of all exit movements from Pickering Drive onto the H7 Chaffron Way were right-turn manoeuvres, and **5%** of all north eastbound movements on the H7 involved right-turns into Pickering Drive.

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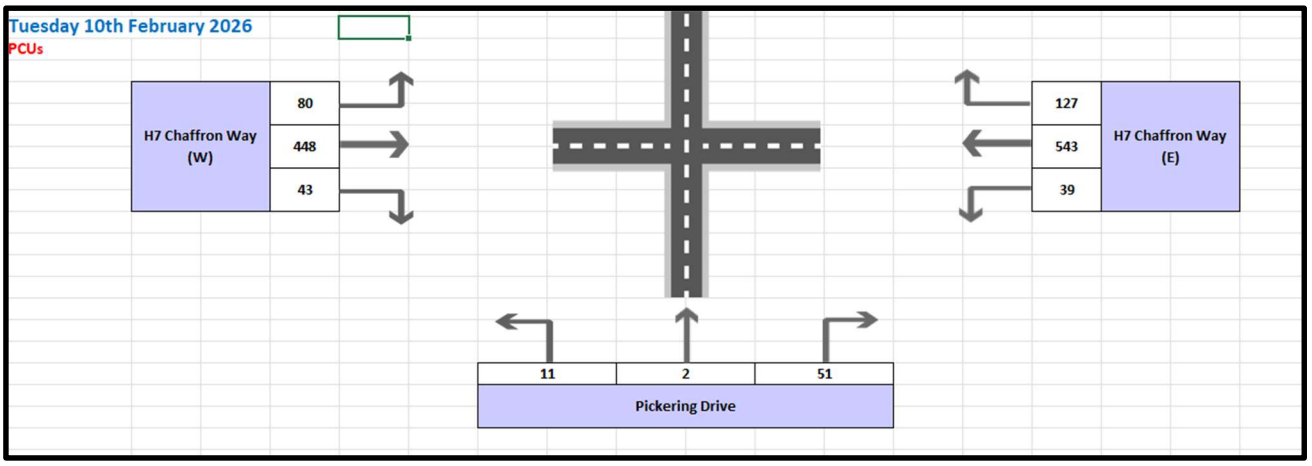
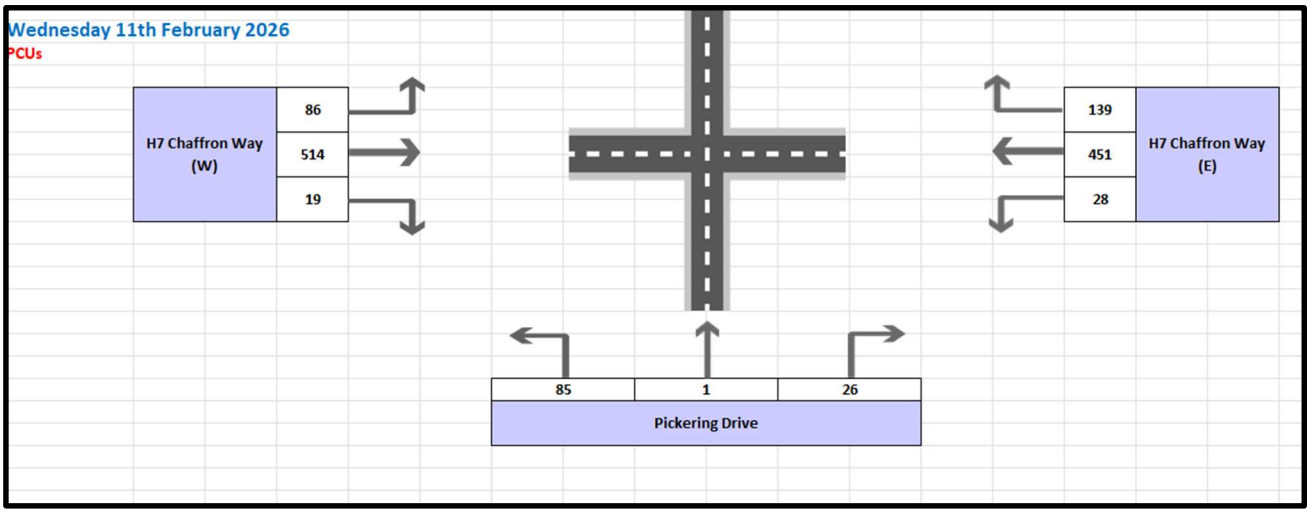
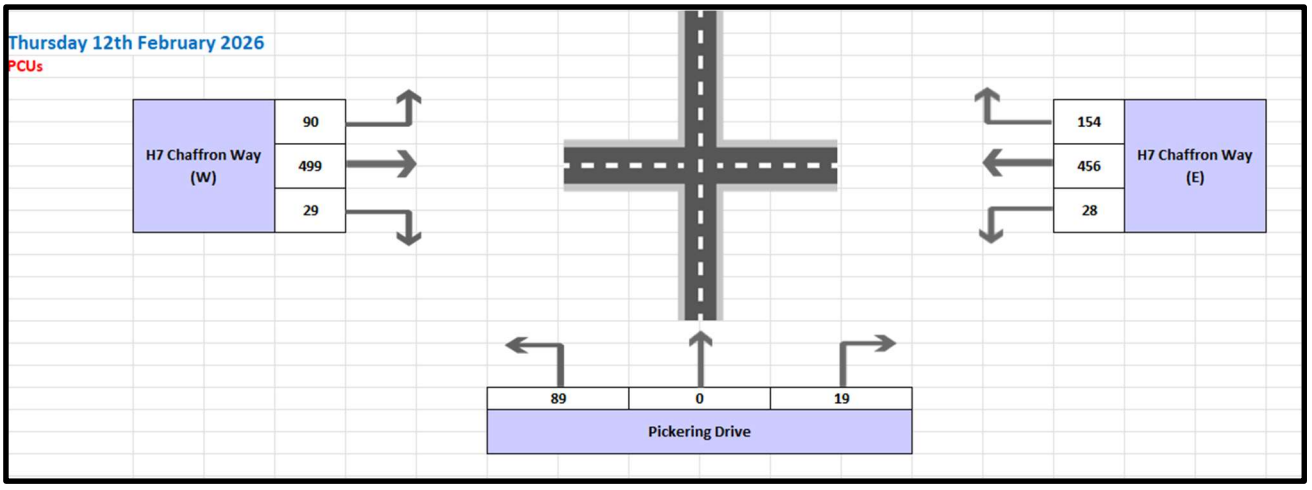






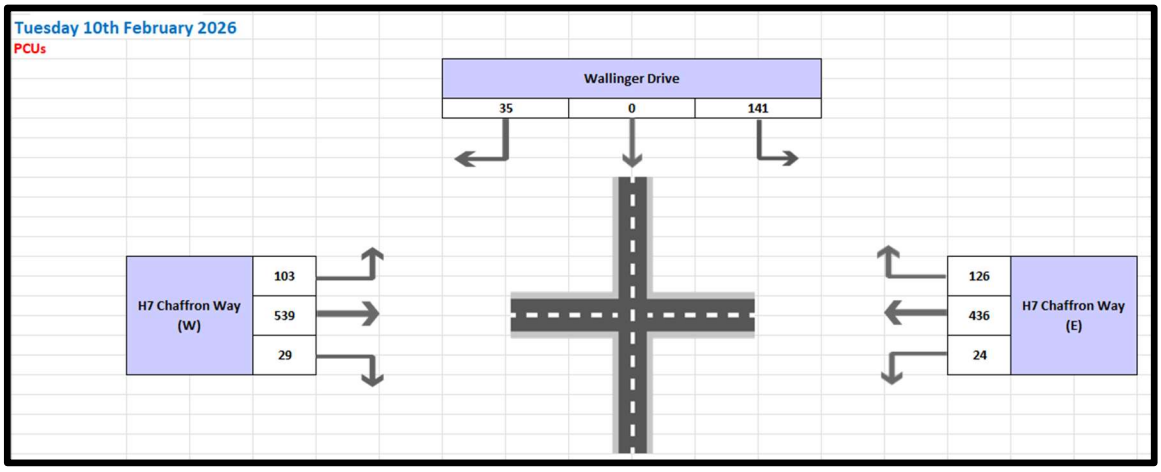
Collision Context

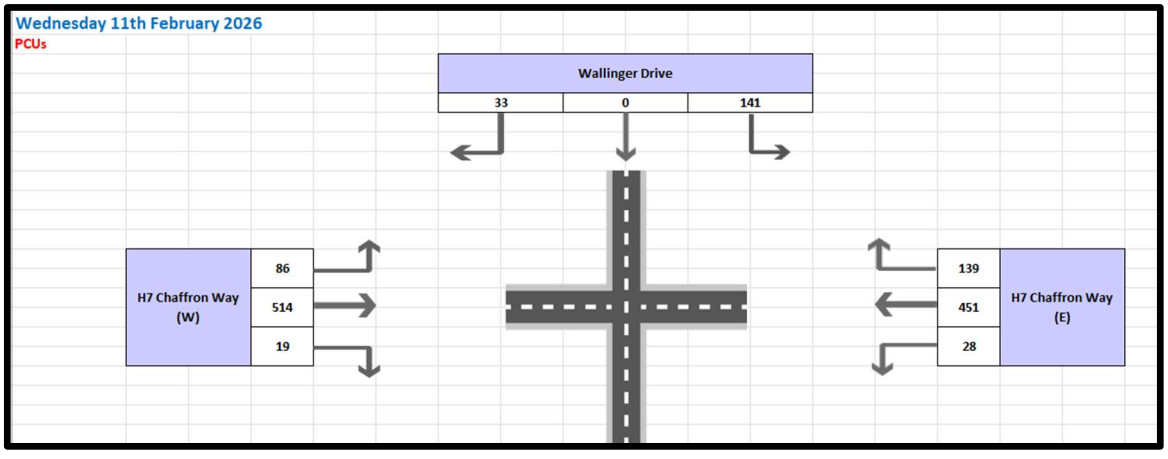
There have been a small number of right-turn-related RTCs at this location. While the collision numbers are not high, they do highlight a safety concern associated with the manoeuvre, given the speed and layout of the grid road network.

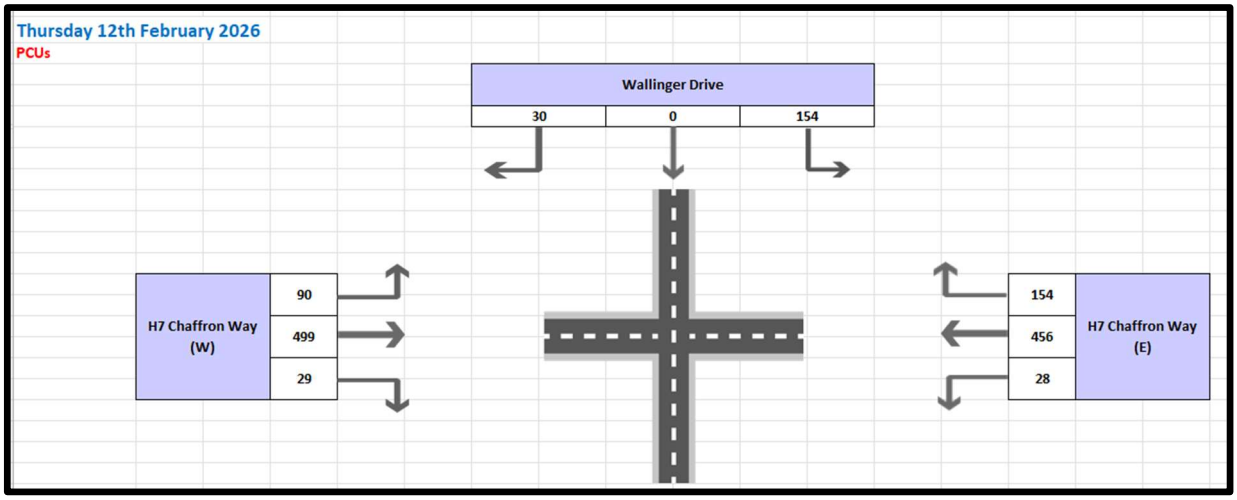
The proposed right turn ban for Wallinger Drive will force even more movements at this junction due to lack of alternative turning points, potentially causing congestion or creating new safety issues at this location.

Wallinger Drive – AM peak

Over the three-day survey period, 18**%** of all exit movements from Wallinger Drive onto the H7 Chaffron Way were right-turn manoeuvres. In addition, 23**%** of all southeast bound movements on the H7 were right-turn manoeuvres into Wallinger Drive.

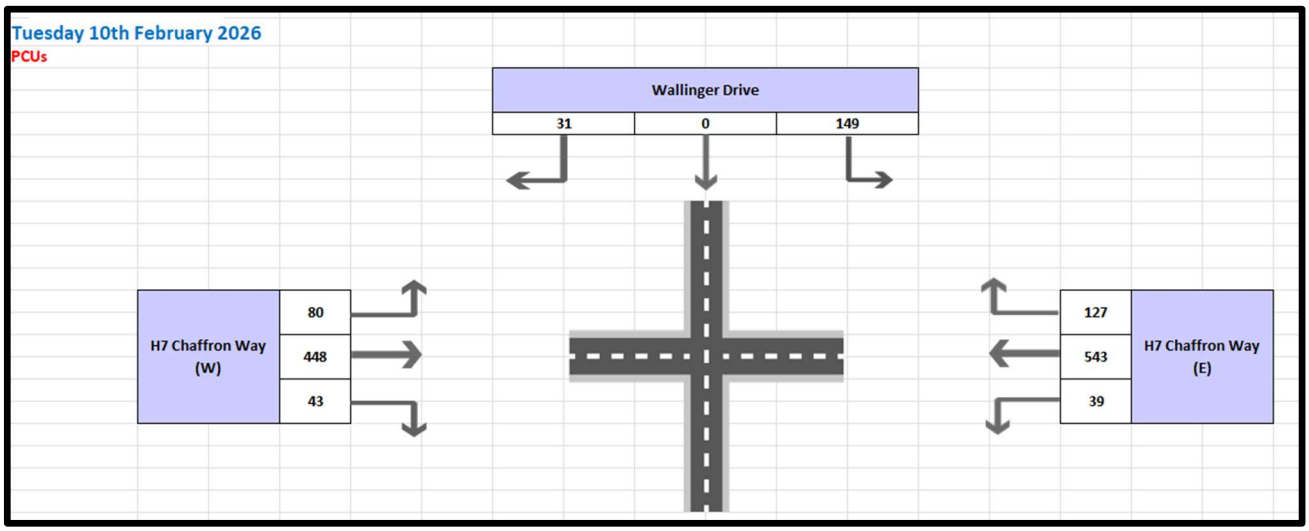


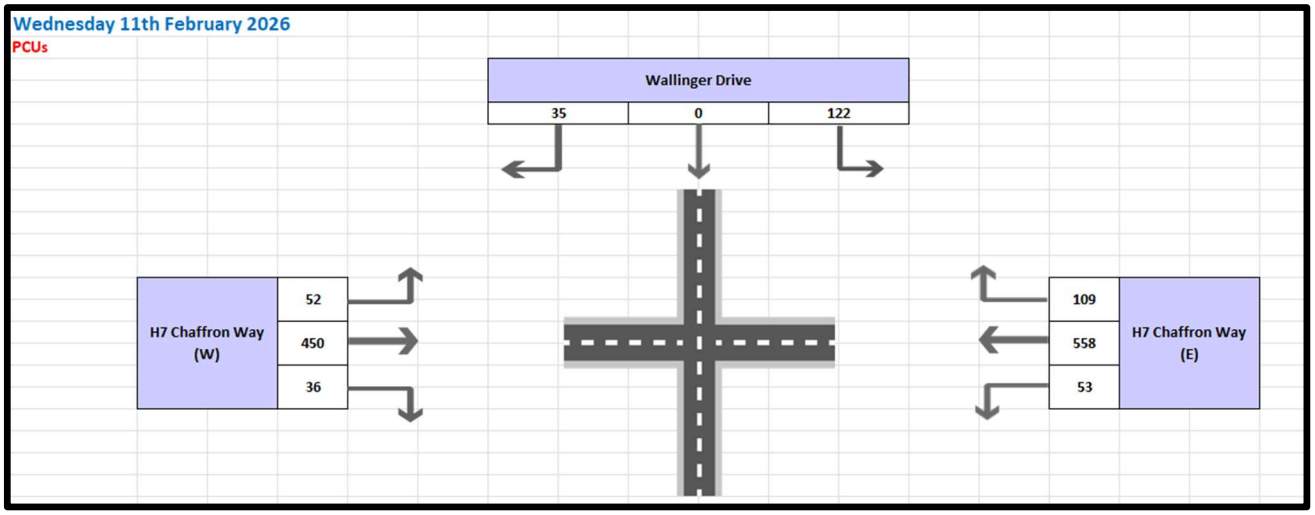


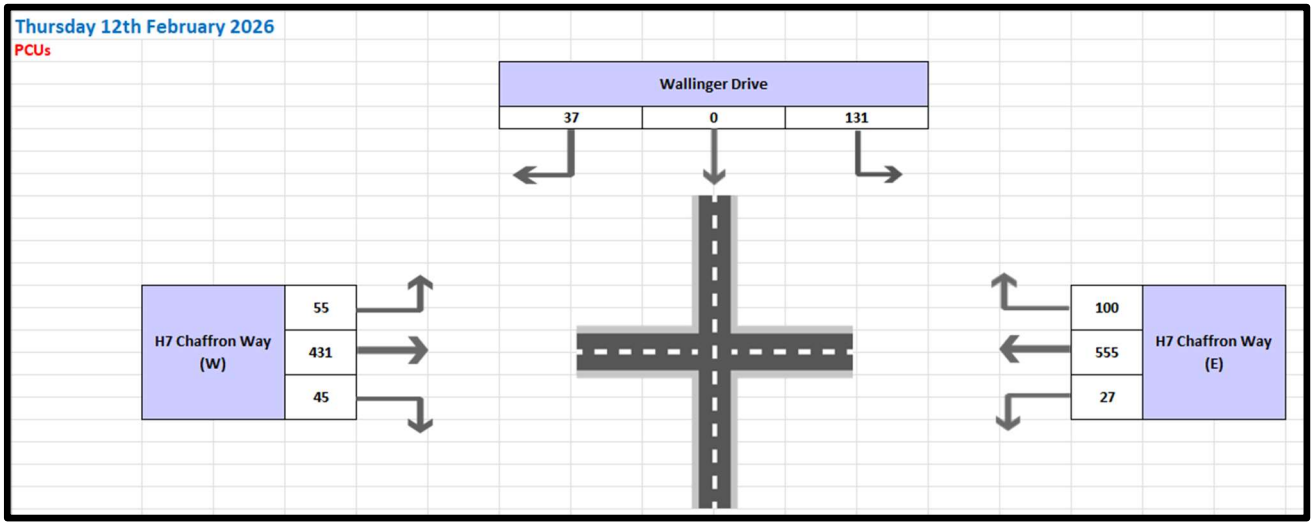


Wallinger Drive – PM peak

Over the three-day survey period, 20**%** of all exit movements from Wallinger Drive onto the H7 Chaffron Way were right-turn manoeuvres. In addition, 16**%** of all southeast bound movements on the H7 were right-turn manoeuvres into Wallinger Drive.







Collision Context

A high incidence of RTCs associated with right-turn movements at this location. Such manoeuvres expose drivers to several conflict points, including opposing high-speed traffic flows and vehicles accelerating from a standing start, resulting in an increased likelihood of side-impact and turning collisions.

The collision pattern confirms that the junction layout and prevailing traffic conditions are unsuitable for the safe operation of right-turn movements.

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5- Observations

A site visit was undertaken to assess the feasibility of prohibiting right-turn manoeuvres both into and out of the two roads. Visibility splays for vehicles exiting either road are not restricted; however, carrying out a right turn from Wallinger Drive is particularly challenging. This is due to the high volume of traffic exiting the road during school pick up and drop off times and the general busy conditions on the main carriageway.

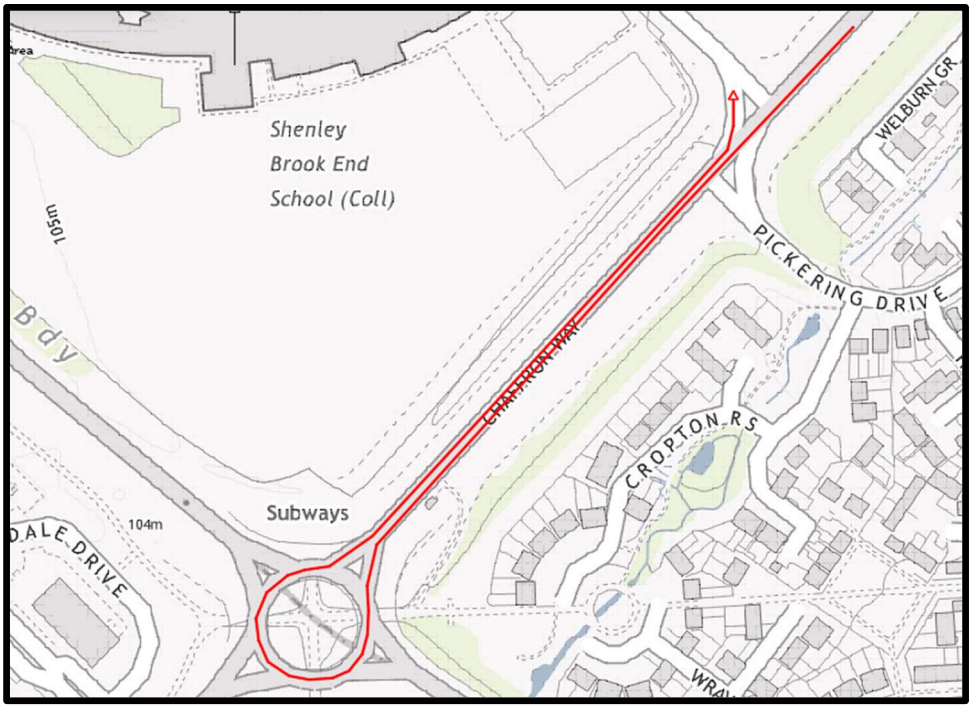
The existing traffic signs along this section of the grid road network need upgrading or replacement to bring them up to current standards. Although the road markings on the H7 remain visible, they would benefit from refreshing to improve overall clarity. Some areas of the grid road surface are showing signs of wear; however, following discussions with the surfacing team, there are currently no plans for resurfacing works.

6 - Recommendations

- **Banning right-turn manoeuvres into and out of Wallinger Drive and Pickering Drive:**
  Introduce physical traffic islands on the H7 and at the mouths of both side roads to prevent vehicles from undertaking right-turn movements. Similar treatments have previously been implemented on other sections of the grid road network, where they have proven effective in reducing collision rates significantly.

  There will be consequential impacts on journey times as a result of the proposed right-turn bans. Users of Pickering Drive are expected to experience a slight increase in travel time, while users of Walgrave Drive are likely to encounter more notable delays. Alternative access routes and associated diversion lengths have been summarised below to illustrate the expected impacts. Despite these increases in journey time, road safety remains the primary factor underpinning the proposed changes.

  Wallinger Drive proposed diversion route



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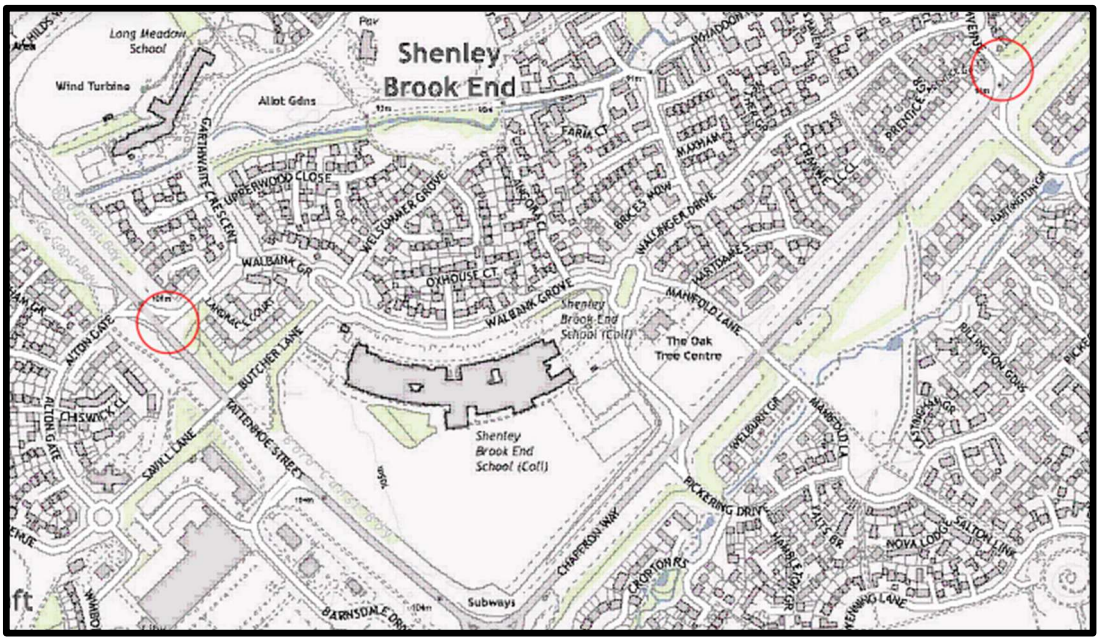
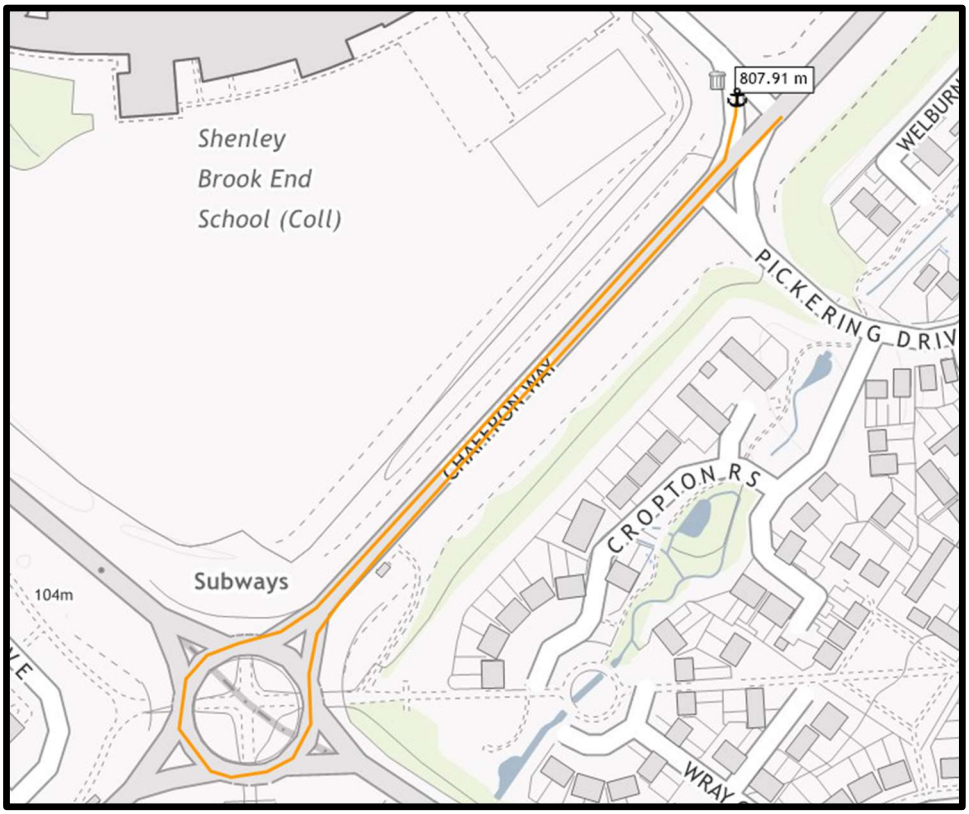
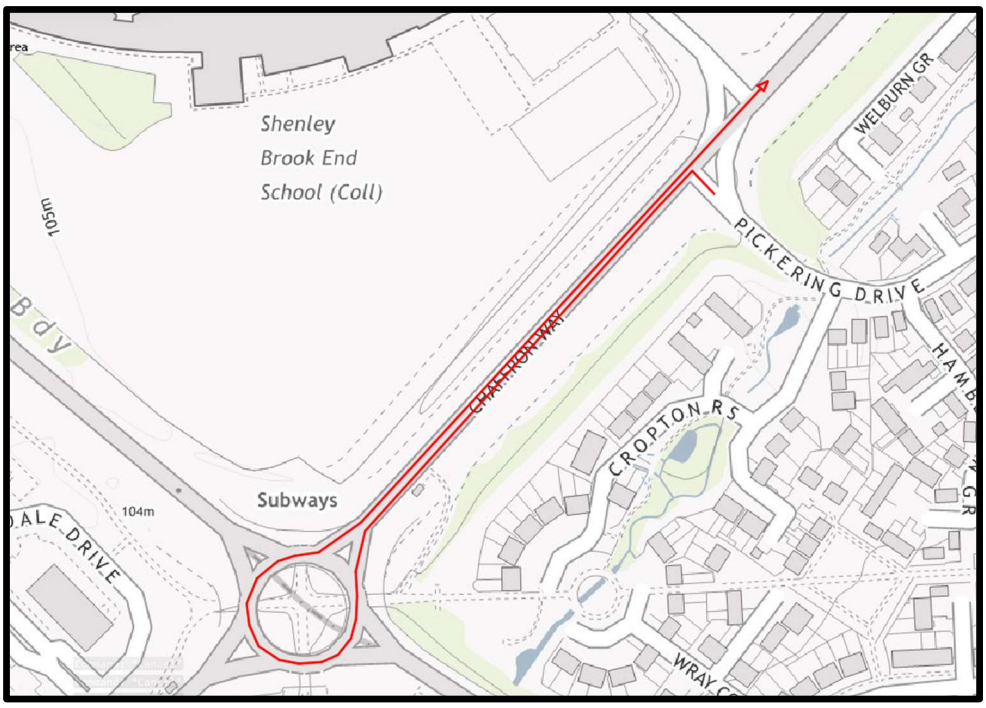
Wallinger Drive alternative access points (Walbank Grove & Cressy Avenue



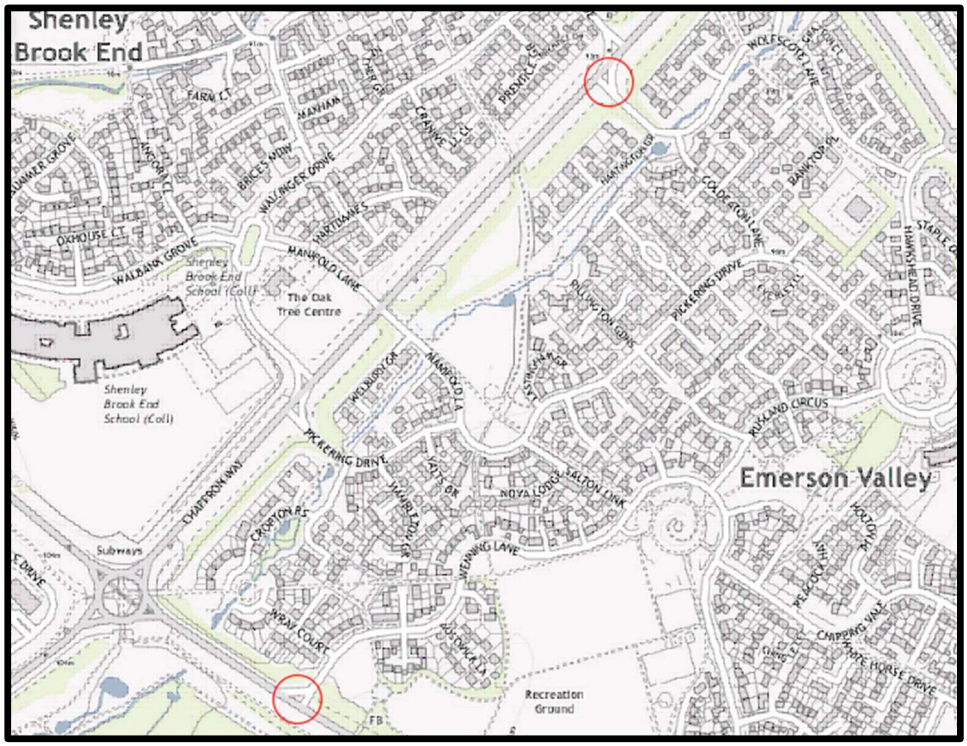
Wallinger Drive Diversion Route Distance



Pickering Drive proposed diversion route



Pickering Drive alternative access points (Cold Eaton Lane & Wenning Lane)



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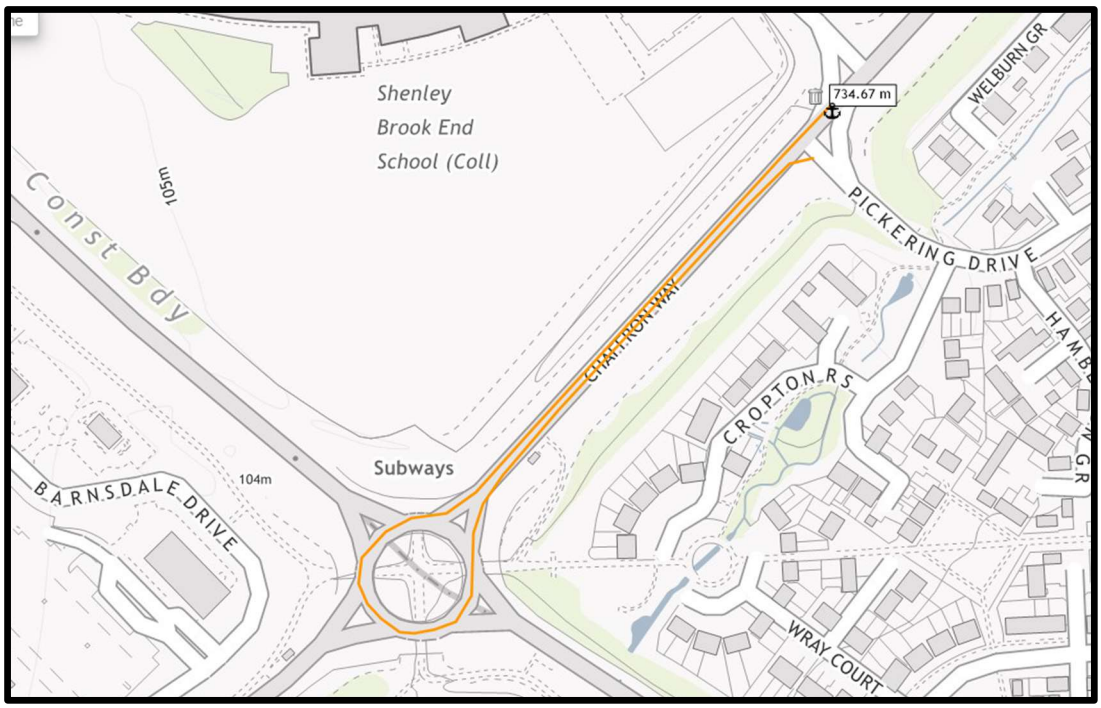

- **Refresh Road Markings:** Refresh all existing carriageway markings on the grid road and associated side roads. Additional road markings will also be required to support and clearly communicate the proposed right-turn bans, ensuring drivers are adequately guided through the new layout.
- **Upgrade/Replace Existing Signing:** Replace and upgrade any existing traffic signs that are outdated or deteriorated. Install all necessary new regulatory signage required to support the proposed right-turn bans, ensuring the restrictions are clearly communicated and fully compliant with current signing standards.

7 - Conclusion

The proposed package of measures provides a coordinated and effective approach to improving safety at the Wallinger Drive and Pickering Drive junctions. By prohibiting right-turn manoeuvres and introducing physical traffic islands, the scheme directly addresses the collision risks associated with these movements—an approach that has been proven successful elsewhere on the grid road network. While the changes are expected to result in longer journey times for some local road users, particularly those accessing Wallinger Drive, the anticipated road safety benefits outweigh this inconvenience.

Complementary measures, including the renewal of all carriageway markings and the upgrade or replacement of existing traffic signs, will ensure the revised layout is clearly conveyed and easily understood by drivers. Collectively, these interventions will improve clarity, consistency, and safety across the network, reducing conflict points and supporting compliance with the new junction arrangements.

Overall, the proposals represent a proportionate and necessary response to the identified safety concerns, delivering a safer environment for all road users.