

RCT School Walking Route Assessment

Ty Rhiw to Coleg y Cymoedd (Nantgarw)

March 2025





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1. Introduction

- 1.1 Redstart has been commissioned by Rhondda Cynon Taf County Borough Council to undertake an assessment to determine the availability of the walked route between Ty Rhiw and Coleg y Cymoedd (Nantgarw).
- 1.2 A route is considered to be available and safe for a learner to walk alone or, if appropriate for the age of the learner, accompanied by an adult. In determining the comparative safety of a walking route, an assessment of the risks that escorting parents/guardians and learners might encounter along the route between home and school needs to be made.
- 1.3 Such assessments will follow the Welsh Government Statutory Provisions on the Risk Assessment of Walked Routes to School, as laid down within the Learner Travel Statutory Provision and Operational Guidance 2014.



2. Policy Alignment

- 2.1 The Learner Travel (Wales) Measure 2008 sets out the legal framework within which travel provisions are made for learners travelling from home to school. In June 2014 the Welsh Government published the Learner Travel Statutory Provision and Operational Guidance to aid local authorities in the implementation of the Measure.
- 2.2 Local authorities are under a legal duty to assess the travel needs of learners who walk to school. The Learner Travel Statutory Provision and Operational Guidance enables local authorities to determine whether a route to school is 'available' (safe) to walk or is deemed 'unavailable' (unsafe) and the safeguards that could be put in place to ensure that the route is or can become 'available' (safe) to walk.
- 2.3 The Welsh Government document requires the following issues to be considered in assessing a route;

For a route to be classed as available (safe) the route needs to be;

- A continuous adequate footway on roads which carry medium to heavy traffic; or
- "Step offs" on roads which have low traffic flow but adequate sight lines to provide sufficient advance warning to drivers and pedestrians; **or**
- On roads with very low traffic flow, no "step offs", but sufficient good sight lines to provide adequate advance warning.

If there is a need to crossroads it is recommended that there should be one of the following safety measures:

- Pedestrian refuge; or
- Visibility it should be good enough to allow vehicles to stop safely (given the 85th percentile speed rule, vehicle stopping distances are as those set out in the Highway Code); or
- Sufficient gaps in the traffic flow and sight line to allow enough opportunities to cross safely; or
- Sufficient crossing facilities (for example, zebra, pelican crossings); or
- Sufficient pedestrian phases at traffic lights (including necessary refuges); or
- Sufficient School Crossing Patrols (Iollipop people).



- 2.4 The following information should be considered as detailed in the Learner Travel document and summarised below;
 - a) Speed limits around or near schools;
 - b) Two-way traffic flows recorded in Passenger Car Units (PCUs) low traffic flow is determined below 400 vehicles in a 1-hour period, medium traffic flows between 400 to 840 and heavy traffic flows over 840 vehicles per hour. Below 240 vehicles per hour is assessed as safe to cross, equivalent to 1 vehicle every 15 seconds;
 - c) An analysis of gaps in traffic during 5 consecutive minutes is required. 4 gaps within such a 5-minute period is considered acceptable. At a walking speed of 1 metre per second most people will be able to cross two lanes of normal urban traffic in 4 to 6 seconds whilst others may need a larger gap of around 10 to 12 seconds;
 - d) A minimum of previous collision history for 3 years;
 - e) Footpath / footway width, condition, and visibility. On roads of low traffic flow a verge that can be stepped on by a child and accompanying parent when traffic is passing can normally be assumed to provide an available route;
 - f) Where roads need to be crossed, it is recommended that the availability of crossing facilities such as central refuges, pedestrian crossings or traffic signals be taken into consideration;
 - g) Potential flooding and, if necessary, safety features including signing, lighting, safety barriers should be considered:
 - h) Any planned changes to the area that may have an impact on pedestrian routes;
 - i) Level crossings;
 - j) Social danger caused by any potential anti-social behaviour;
 - k) Any changes to the characteristics of the people walking the route.
- 2.5 Social Danger is open to different interpretations and is subjective. In terms of quantifying social danger, the existence of any such dangers should be supported by evidence.
- 2.6 In conducting risk assessments, it is recommended that local authorities work in partnership with organisations/agencies which have expertise in (including responsibility for) tackling and quantifying social danger. The Police or Police Community Support Officers have responsibility for crime, disorder, and anti-social behaviour, whilst the Local Safeguarding Children Boards have responsibility for safeguarding/child protection matters.
- 2.7 Their involvement includes the exchange of information, assessment, and management of any such risks. Therefore, Redstart have not been commissioned to identify issues of social dangers caused by anti-social behaviour.



3. Procedures

3.1 Site Visit

- 3.1.1 A walking site assessment was undertaken to investigate the route and to identify hazards / possible remedial works required in order to provide a safe walking route. The route was walked at times to capture typical traffic conditions during the time that school children were walking the route.
- 3.1.2 Listed below are examples of typical site hazards that will be considered as a result of the walking assessment:
 - Inter-visibility between drivers and pedestrians, both along the route and at minor junctions;
 - Potentially high volumes of traffic at crossing points and types of vehicles using the route;
 - Condition of footway surface, usable width, and connectivity between adjacent footways;
 - Any overgrown foliage hindering pedestrian movements/narrowing the usable width;
 - Vehicles parking on the footway causing an obstruction/narrowing the usable width.

3.2 Information to be Provided

- 3.2.1 The following information is to be provided as part of the assessment:
 - a) A plan showing the routes assessed;
 - b) A report identifying potential hazards/risks and possible remediation for each potential hazard identified.

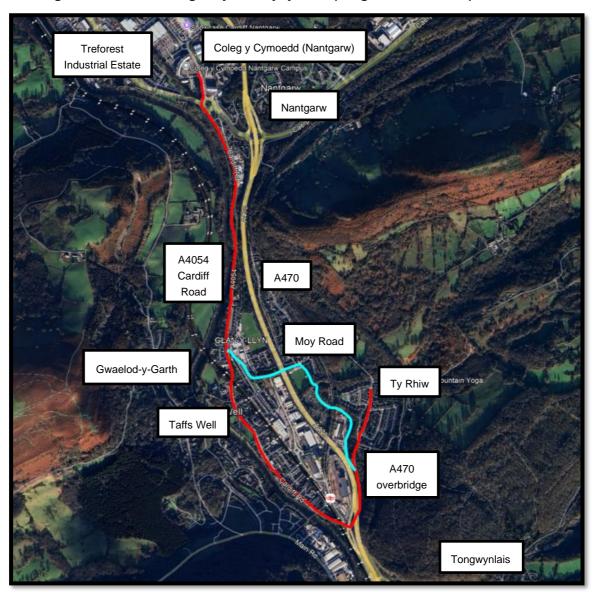


4. Site Location & Walking Route

4.1 Route Overview

- 4.1.1 The Main Route commences at Ty Rhiw CF15 7RU to Coleg y Cymoedd (Nantgarw) CF15 7QY. The route proceeds from Ty Rhiw via Cemetery Road, Cardiff Road, Oxford Street, Heol Crochendy to the main entrance to the college.
- 4.1.2 At the time of the assessment, there was a temporary footway closure in place in order to affect repairs/improvements to the A470 overbridge at the junction of Cemetery Road and the A4054 Cardiff Road. As a result of these works the Main Route was not currently available between the Cemetery Road junction with the A4054 Cardiff Road. To mitigate this for the duration of the bridge repair, an Alternative Temporary Route will be in place between Forest Road/Cemetery Road junction and the junction of Moy Road with the A4054 Cardiff Road. The Alternative Temporary Route will be via the NCN8 Active Travel Route through Taffs Well to rejoin the Main Route at the A4054 Cardiff Road at the junction of Moy Road Industrial Estate, with both routes shown in Image 4.1 below.

Image 4.1 – Routes to Ysgol Gyfun Rhydywaun (Image © 2024 Airbus)





4.2 Main Route – Ty Rhiw to Coleg y Cymoedd (Nantgarw)

4.2.1 There are continuous lengths of footway, with crossing opportunities and street lighting present along the length of the route. Generally, footways along the route are sufficiently wide allowing pedestrians to pass each other without issue. This reduces for some short sections with the requirement for pedestrians to either give way to each other or cross to the other side of the road. The route between Ty Rhiw and Coleg y Cymoedd (Nantgarw) is already available and in daily use. Links to / from Ffynnon Taf Primary School are also already available and in daily use.

Where side roads were required to be crossed vehicular/pedestrian conflict was considered low risk.

- 4.2.2 Connectivity between footways is provided throughout by zebra, signal control and other defined uncontrolled crossing points.
- 4.2.3 The speed limit along this route varies between a 20mph and 30mph speed limit, with vehicle flows observed to be low to moderate through the residential areas and moderate to high along the A4054 Cardiff Road.
- 4.2.4 In places, vegetation needed clearance to improve the usable footway width and visibility for pedestrians
- 4.2.5 Photographs 4.1 to 4.14 were taken along the walking route and are shown below.

Photograph 4.1 – Start of the route at Ty Rhiw with vehicles parked on footways reducing its usable width





Photograph 4.2 – Leaf debris and vegetation reducing the usable footway width along Cemetery Road



Photograph 4.3 – Wide crossing (with Active Travel priority for cycling) of the junction of Cemetery Road with the lightly used Forest Road





Photograph 4.4 – Temporary footway closure for repair/improvement works (under construction during the time of the assessment) at the A470 overbridge on Cemetery Road



Photograph 4.5 – Signalised crossing (under construction during the time of the assessment) at the junction with Cemetery Road and the A4054 Cardiff Road





Photographs 4.6 – Zebra crossing outside no.3 on the A4054 Cardiff Road



Photograph 4.7 – Zebra crossing outside the Co-op on the A4054 Cardiff Road





Photograph 4.9 – Vehicles parked on footway reducing its usable width along the A4054 Cardiff Road



Photograph 4.10 – Overhanging trees reducing the usable footway width on the A4054 Cardiff Road opposite the Ex-servicemen's club





Photograph 4.11 – Leaf debris and vegetation reducing the usable footway width along the A4054 Cardiff Road opposite Ferris Coaches



Photograph 4.12 – Uncontrolled crossing with pedestrian refuge island across the Oxford Street arm of the Nantgarw Roundabout





Photograph 4.13 – Uncontrolled crossing with narrow pedestrian refuge island across the Heol Crochendy arm of the Nantgarw Roundabout



Photograph 4.14 – Signalised crossing across Heol Crochendy to the main college campus building





4.3 Alternative Temporary Route – Forest Road to the A4059 Cardiff Road (joins the Main Route to Coleg y Cymoedd Nantgarw)

- 4.3.1 During the site assessment, a section of the proposed route was closed to undertake bridge repair/improvement works, and therefore the **Main Route** is not currently available between Cemetery Road (at the junction with Forest Road) and the junction with the A4054 Cardiff Road (north of the overbridge). To mitigate this for the duration of the bridge works, an **Alternative Temporary Route** will be in place between the junction of Forest Road with Cemetery Road and the junction of Moy Road with the A4054 Cardiff Road. The temporary route will be via the NCN8 Active Travel Route through Taffs Well to rejoin the **Main Route** at the A4054 Cardiff Road opposite the Ex-servicemen's club in Taffs Well.
- 4.3.2 Generally, there are limited lengths of footway along the NCN8 route, where pedestrians are required to share the carriageway space with other road users. Vehicle speeds and flows were noted to be very low due to the 'for access only' nature of the route for motor vehicles. Step-offs are available for pedestrians to use along the route to allow vehicles to pass without issue.
- 4.3.3 Where side roads were required to be crossed vehicular/pedestrian conflict was considered low risk.
- 4.3.4 Street lighting is present at the northern and southern ends of the route, with no lighting present in the more rural area through the middle section between the Robert Price timber yard and the Taffs Well Football ground.
- 4.3.5 The speed limit throughout the temporary route is 20mph with vehicle flows observed to be low.
- 4.3.6 Photographs 4.15 to 4.19 were taken along the walking route and are shown below.



Photograph 4.15 – Footway on NCN8 along Forest Road



Photograph 4.16 – Shared use space (walking, cycling and motor vehicles) along NCNC8 with footways and step-offs available for pedestrians



Photograph 4.17 – Virtually traffic free shared use space (walking, cycling and motor vehicles) along NCN8





Photograph 4.18 – Virtually traffic free route around the rear of Taffs Well football ground along NCN 8



Photograph 4.19 – Footway link on Moy Road to join the Main Route at the A4054 Cardiff Road





5. Pedestrian / Traffic Surveys

- 5.1 Learner Travel Guidance states: Where roads need to be crossed, it is recommended that the availability of crossing facilities such as central refuges, pedestrian crossings or traffic signals be taken into consideration. Where there are no crossing facilities, the route's risk assessment ought to consider each required road crossing, bearing in mind traffic speed and flows, sight lines etc.
- 5.2 If there is a need to cross roads there ought to be:
 - Sufficient gaps in the traffic flow and sight lines to allow enough opportunities to cross safely. The gap time analysis should be used where necessary **or**
 - Pedestrian refuges or
 - Crossing facilities (e.g., zebra, pelican, puffin crossing etc.) or
 - Pedestrian phase at traffic lights or
 - School Crossing Patrol.
- 5.3 If a road needs to be crossed the visibility at the location should allow a vehicle to stop, given the 85th percentile speed (the speed at which 85% of the vehicles travel below) of the traffic flow. Vehicle stopping distances should be taken as those given in the Highway Code. In many rural areas, the exercise of continuous judgement is likely to be required. No criteria can provide all the guidance or answers to every situation that may be encountered.
- 5.4 If roads have to be crossed to use a footway or to improve sight lines, it may be necessary to advise on safe crossing places. On some country roads the footway may not be continuous.
- 5.5 An informed judgement will have to be made about the availability of "step off" points.
- The difficulty of crossing at a site can be assessed by considering the number of gaps in the traffic flow that are acceptable to pedestrians. Free flowing traffic may provide gaps randomly and fairly frequently, but speeds tend to be higher, and gaps would need to be longer in order to cross the road safely.
- 5.7 An acceptable gap to cross from kerb to kerb varies with each person. Most people will be able to cross two lanes of normal urban traffic in 4 to 6 seconds. Others may need larger gaps of around 10 to 12 seconds.
- It is recommended that the survey records the number of gaps in each 5 minute period that are longer than the road crossing time, using one metre per second as the walking speed. Four gaps in each 5 minute period indicate a road that can be crossed without too much delay. Longer gaps could be classified as multiple gaps rather than as just 1 gap.
- 5.9 The Learner Travel Statutory Guidance and Operational Guidance June 2014 outlines what is required when assessing Traffic Flow on Roads.
- 5.9.1 Low Traffic flow occurs on roads that have a traffic flow below 400 vehicles in a 1 hour period; medium traffic flow occurs on roads with traffic flow between 400 to 840 vehicle per hour; and heavy traffic flow occurs on roads with a traffic flow of over 840 vehicles per hour.



- 5.9.2 Most people will be able to cross two lanes of normal urban traffic in 4 to 6 seconds. Four such gaps within a 5 minute period are considered acceptable. For this report, we have used 6 seconds and where the gap is more than or equal to 12 seconds this has been counted as 2 or more gaps.
- 5.10 The walking assessment concluded that either:
 - ➤ Footways presented as well connected, with sufficient crossing facilities present (both controlled and uncontrolled) and pedestrian phases at traffic lights for pedestrians to cross safely, **or**
 - Where there are no crossing facilities present, the assessment has considered traffic flows, speeds and sight lines, and/or if step-offs are available to allow pedestrians to wait until conditions are such that it is safe to cross.

As a result, no further traffic flows or gap survey information was requested.



6. Social Issues

- 6.1 No areas along the route were noted or showed signs of Anti-Social Behaviour during the times when school children would be walking to school.
- 6.2 There may be other issues that are not obvious from a walked assessment, which may be identified by other user groups. The local authority would need to consider these aspects with the Police and other safeguarding agencies.



7. Collision Data

- 7.1 Pedestrian collision data for the 5 years from 2020 to 2024 (verified) have been investigated through Crashmap.co.uk and Police Recorded Road Collision data. Note that the Learner Travel Statutory Provision and Operational Guidance requires assessors to incorporate 3 years of collision history into the assessment of a route.
- 7.2 The collision data has been investigated during the times that school children would be walking the route to capture typical traffic conditions during the time. These times have been set at 07:00 09:30 for the AM journey, and 14:30 17:00 for the PM journey.
- 7.3 There were no collisions that involved pedestrians along the routes during the period assessed.



8. Route Overview

- 8.1 Main Route Ty Rhiw to Coleg y Cymoedd (Nantgarw)
- 8.1.1 The route lies within 20mph and 30mph speed limits.
- 8.1.2 There are continuous footways present in reasonable condition along the route. However, during the time of the assessment a section of footway was temporarily closed to pedestrians at the following location, which impacted upon the availability of the proposed walking route:
 - The footway along Cemetery Road from the A470 overbridge up to the junction with A4054 Cardiff Road is temporarily closed due to bridge repair/improvement works.
 This loss of footway is key to the proposed route.

In order to mitigate the above issue, it is recommended that while the main footway route along Cemetery Road to the A4054 Cardiff Road junction is closed, a *Temporary Alternative Route* along the existing NCN 8 Active Travel route is used (see **paragraph 4.2** for details). The proposed walking route will then revert back to the main available route on completion of the bridge works.

- 8.1.3 Footway widths are reduced due to overhanging trees, leaf debris and overgrown vegetation along sections of the route on the A4054 Cardiff Road. Ongoing maintenance is required to maximise footway width and ensure pedestrians can pass one another safely.
- 8.1.4 On street parking obstructs visibility along the walking route and vehicles parking on the footways along the A4054 Cardiff Road restricts access. Local neighbourhood policing teams are working with residents to help reduce the risks posed to pedestrians by indiscriminately parked vehicles.
- 8.1.5 Street lighting is present throughout the route, although ongoing tree maintenance is required in some areas to ensure that lighting levels are not compromised.
- 8.1.6 Investigation into pedestrian collisions has been undertaken between 2020 and 2024. There were no collisions that involved pedestrians during the times assessed.
- 8.1.7 At side roads, the observed conditions were considered to provide a safe environment for pedestrians to cross with vehicular / pedestrian conflict assessed to be low risk noting sufficient crossing gaps to comply with Learner Travel Guidance. At the time of the site visit, when pedestrians were observed to cross, they were able to do so without issue.
- 8.1.8 There are controlled crossing facilities at the following locations:
 - Zebra crossing outside no.3 on the A4054 Cardiff Road.
 - Zebra crossing outside the Co-Op on the A4054 Cardiff Road.
 - Signalised crossing outside the main college campus building on Heol Crochendy.
- 8.1.9 There are no areas that raised concerns for anti-social behaviour during the site walkover visit along the route.
- 8.1.10 Traffic data and pedestrian crossing gap analysis were not deemed to be required, as the walking route appeared well catered for by controlled crossings for pedestrians wishing to cross the main roads.



- 8.2 Alternative Temporary Route Cemetery Road to the A4054 Cardiff Road (joins the Main Route to Coleg y Cymoedd (Nantgarw)
- 8.2.1 The route lies within 20mph speed limits.
- 8.2.2 There are limited sections of footway present along the route, where pedestrians are required to share the road space along the NCN8 Active Travel Route for the majority of the route.
- 8.2.3 Trees and bushes were observed to be overhanging localised sections of the route. Ongoing maintenance is required to maximise footway width and ensure pedestrians can pass one another safely.
- 8.2.4 Street lighting is present only along the residential sections of the route at Forest Road and Moy Road, with the rural/woodland section of NCN8 route largely unlit.
- 8.2.5 Investigation into pedestrian collisions has been undertaken between 2020 and 2024. There were no collisions that involved pedestrians during the times assessed.
- 8.2.6 At side roads, the observed conditions were considered to provide a safe environment for pedestrians to cross with vehicular / pedestrian conflict assessed to be low risk noting sufficient crossing gaps to comply with Learner Travel Guidance. At the time of the site visit, when pedestrians were observed to cross, they were able to do so without issue.
- 8.2.7 There are no controlled crossing facilities on the Alternative Temporary Route.
- 8.2.8 There are no areas that raised concerns for anti-social behaviour during the site walkover visit along the **Alternative Temporary Route**. However, the section of the route along Forest Road has limited natural surveillance, other than by passing pedestrians and cyclists.
- 8.2.9 Traffic data and pedestrian crossing gap analysis were not deemed to be required, as the walking route appeared well catered for by uncontrolled and controlled crossings for pedestrians wishing to cross the main roads.



9. Conclusions and Recommendations

- 9.1 Main Route Ty Rhiw to Coleg y Cymoedd (Nantgarw)
- 9.1.1 The **Main Route** meets the criteria and when fully opened is considered available to walk in line with the Learner Travel guidelines.
- 9.1.2 The section between Cemetery Road and the A470 overbridge / junction with A4054 Cardiff Road is temporarily closed due to bridge repair/improvement works. The overbridge repair/improvements and associated temporary footway closure are prohibiting this section of the main route from being used by pedestrians. It is therefore recommended that the Temporary Alternative Route between the junction of Forest Road and Cemetery Road and the junction of Moy Road with the A4054 Cardiff Road, along the NCN8, be used during the closure period until the overbridge works are completed. The walking route will then revert to the Main Route in its entirety on completion of these works.
- 9.1.3 Further enhancements to the **Main Route** *could be considered* to improve conditions for route users. These include the following:
 - Monitor footway obstructions. Where footways widths and visibility to crossing points continue to be restricted by parked cars, action to be taken in conjunction with the appropriate Council Department / local neighbourhood policing teams.
 - Monitor the condition of overhanging trees and foliage. Where trees and/or foliage overhang or encroach into footways, these areas should be cut back to improve the usable width, sight lines and natural surveillance. In addition to this leaf debris should be removed from footways when required.
- 9.2 Alternative Temporary Route Cemetery Road to the A4054 Cardiff Road (joins the Main Route to Coleg y Cymoedd (Nantgarw)
- 9.2.1 The Alternative Temporary Route meets the criteria and is considered available to walk in line with the Learner Travel guidelines.
- 9.2.2 Further enhancements to the walked route **could be considered** to improve conditions for route users. These include the following:
 - Monitor the condition of overhanging trees and foliage. Where trees and/or foliage overhang or encroach into footways, these areas should be cut back to improve the usable width, sight lines and natural surveillance. In addition to this leaf debris should be removed from footways when required.

REDSTART

Quest House St Mellons Business Park Fortran Rd, St. Mellons Cardiff CF3 0EY

www.redstartwales.com

