

**Appraisal of Proposed Temporary
Highway Link from Darren Park
& The Highlands, Skewen.**

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1.0 Introduction

After a recent flooding event caused by a mine shaft discharging mine water at the entrance of Goshen Park Skewen, the coal authority and the Council have collaboratively worked together to resolve this matter. Drummau Road (outside the junction of Goshen Park) has been temporarily stopped-up to allow a constant discharge of mine water overland into the exiting watercourse.

Consequently as a result of the highway in Drummau Road being closed this has affected the vehicular access for a number of resident's properties within the estate. Currently the only vehicular access in and out is to travel West of Drummau Road.

2.0 Proposals

The proposal is to create a temporary access from Darren Park through to The Highlands. Refer to fig 2.1 below

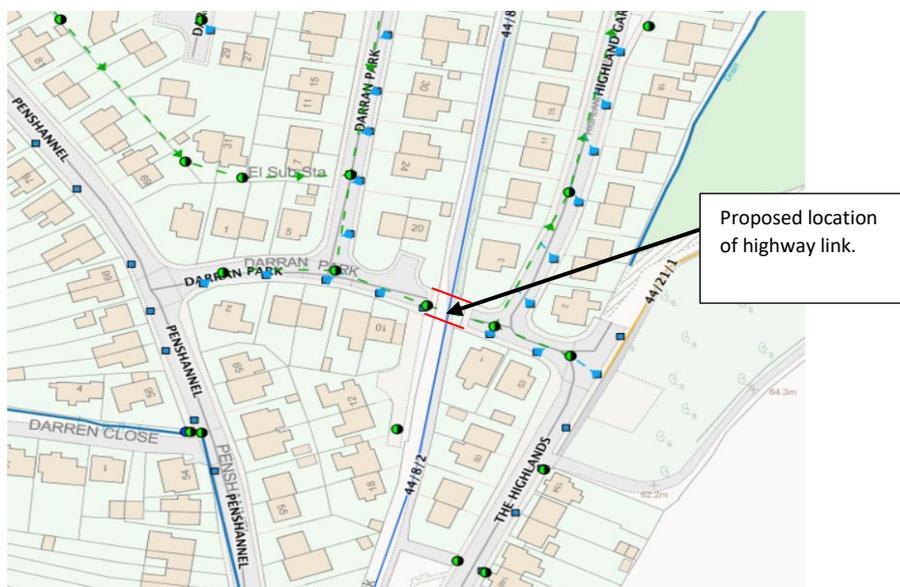


Fig 2.1

The traffic would allow for a percentage of vehicles trips in both the directions of Drummau Road and The Highlands. This initiative is suggested to alleviate the traffic congestion along Drummau Road, together with a second access point for emergency services.

As a result of the road closure the only traffic route currently available is shown in blue dashed line, with the proposed route identified in a red dashed line as shown in figure 2.2 below.

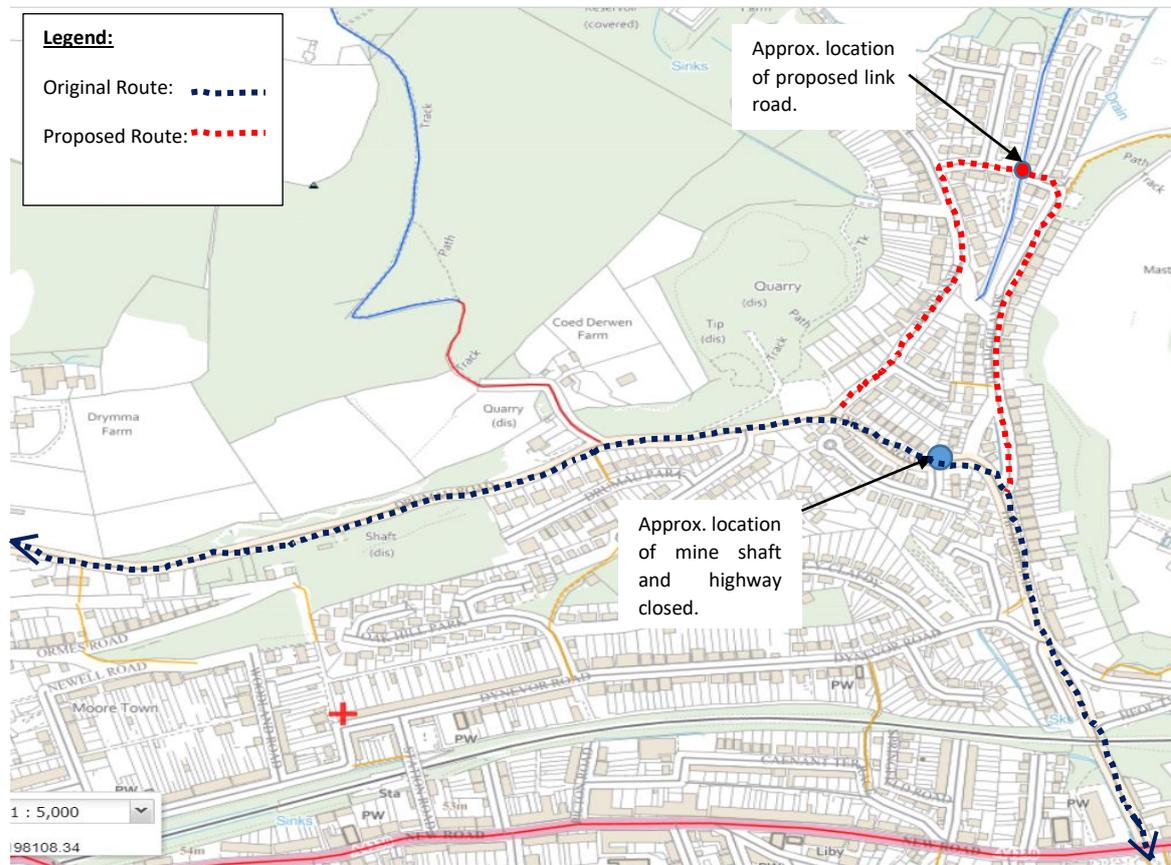


Fig 2.2 Original & Proposed Routes

3.0 Catchment area of houses affected by both the diversions.

The streets directly affected by the mine shaft flooding and diversion via Drummau Road only are:-

- Drummau Park
- Ballard Court
- Goshen Park
- 7 dwellings on Drummau Road (before entrance into Goshen Park).
- Peshannel
- Darren Close
- Darran Park

100% of vehicular users within the above streets utilise west of Drummau Road to gain access to and from their property. This is currently the only access for emergency vehicles, recycling and deliveries to these properties.

The catchment area for residential properties that are directly or indirectly affected by diversions and on street parking congestion are listed below:-

- Drummau Park
- Goshen Park
- 7 dwelling on Drummau Road (before entrance into Goshen Park).
- Peshannel
- Darren Close
- Darran Park
- Ballard Court
- Highlands Gardens
- The Highlands

There are a total of **385** residential properties within the above streets.

Of these: 87 Detached, 283 Semi-detached and 15 Terraced

The average household size in this area established from the 2011 census is 2.3

4.0 Highway Analysis

Traffic Speed

The statutory speed limit in the area is 30mph.

The most recent speed survey data undertaken on Drummau Road between 04/11/2019 to 14/11/2019 shows actual vehicle speed (85%tile) of 24mph. This indicates low traffic speeds within the estate.

Traffic Capacity

This appraisal has utilised traffic data from November 2019 which was pre-COVID and when working from home was less common place. The period selected is deemed a neutral month with schools fully operational, outside holiday periods and would have included the run up to the festive season. Trips maybe increased during this period as consequence of increased retail. The data provided from November 2019 is within 3 years and is deemed valid. The information analysed was gathered from **Site 1448** as shown in Fig 4.1 below



Fig 4.1 Location of traffic speed and counts.

Results of traffic counts

It's important to understand the relationship of traffic movements in both directions (Drummau Road) which could have an impact upon traffic congestion should the secondary access between Darran Park and The Highlands be implemented. The following data is illustrated on Tables 4.1, 4.2 and 4.3 below show traffic counts over a 7 day period and also a summary of vehicle movements.

Table 4.1 - Traffic Counters Heading Eastbound (Off the Highlands)

| | Mon | Tue | Wed | Thurs | Fri | Sat | Sun | 7 Day Ave |
|----------------|-------|-------|-------|-------|-------|-------|-------|-----------|
| AM Peak | 07:45 | 07:45 | 07:45 | 07:45 | 07:45 | 09:15 | 09:45 | 07:45 |
| | 132 | 140 | 139 | 127 | 133 | 70 | 65 | 105 |
| PM Peak | 15:45 | 15:45 | 15:45 | 15:45 | 14:30 | 12:45 | 14:45 | 15:45 |
| | 91 | 98 | 86 | 96 | 94 | 71 | 79 | 81 |

Table 4.2 - Traffic Counters Heading Westbound (Drummau Road)

| | Mon | Tue | Wed | Thurs | Fri | Sat | Sun | 7 Day Ave |
|----------------|-------|-------|-------|-------|-------|-------|-------|-----------|
| AM Peak | 08:15 | 07:30 | 08:15 | 07:30 | 08:00 | 09:15 | 10:15 | 10:15 |
| | 71 | 78 | 94 | 89 | 81 | 75 | 69 | 66 |
| PM Peak | 15:30 | 16:15 | 16:15 | 15:15 | 15:15 | 17:15 | 15:30 | 15:30 |
| | 147 | 156 | 153 | 137 | 144 | 145 | 94 | 123 |

Table 4.3 - Total Flow Average

| | Mon | Tue | Wed | Thurs | Fri | Sat | Sun | 7 Day Ave |
|----------------|-------|-------|-------|-------|-------|-------|-------|-----------|
| AM Peak | 07:45 | 07:45 | 08:00 | 07:45 | 07:45 | 09:15 | 10:15 | 07:45 |
| | 201 | 212 | 225 | 212 | 213 | 145 | 133 | 166 |
| PM Peak | 15:30 | 16:15 | 16:15 | 15:15 | 16:30 | 17:15 | 15:30 | 15:30 |
| | 233 | 243 | 233 | 220 | 216 | 207 | 166 | 201 |

The above tables demonstrate the percentage of traffic volume in both directions daily and results taken from the **7 day average** for peak times.

- At The Highlands (site 1448) **62%** of the **AM** peak shows traffic travelling in an eastbound direction. The remaining **38%** travel in a westbound direction along Drummau Road.
- Similarly at this Site the **PM** peak shows **40%** of traffic travelling in an eastbound direction, whereas **60%** of traffic travels in a westbound direction along Drummau Road.

The survey undertaken pre COVID shows a difference in AM and PM traffic split. The result of this analysis indicates consistency in respect of a 60 and 40% split for morning and evening peak times. However due to the pandemic with more people now working from home, and with the likelihood of continued home working arrangements in the short term, it is not unreasonable to assume that the traffic trips and percentages would be reduced.

Highway Safety Assessment Table – Road Safety & Mitigation Response

| Road Safety Comments | Mitigations Response |
|---|---|
| The Highlands road is narrow at the proposed connection for two way traffic especially buses and large vehicles. | <i>Currently there are delivery vehicles and refuse and recycling vehicles utilising this highway. Temporary traffic signals to be deployed on narrowing parts of the highway network. These temporary traffic signals are recommended to be manually operated at peak times for the first few days to ensure optimum performance and traffic flows.</i> |
| Visibility to the served footpath will be poor and chicane guard railing may be required to prevent pedestrians stepping straight out into the traffic. | <i>The crossing between the new proposed access road and PRoW/bridleway will need to have a Pegasus Equestrian Traffic Control lights, accessible barrier and/or gates to prevent pedestrians and equestrians conflicts with vehicular movements at this location.</i> |
| Temporary lighting may be required to illuminate the area of highway where the Link is proposed. | <i>A Street lighting assessment is required to ensure relevant highway lighting standards are met.</i> |
| Protection or lowering of underground services may be required if present. | <i>Statutory undertakers to be consulted, prior to any construction works being undertaken to identify services within the construction area.</i> |
| The trees and shrubs will need to be checked for nesting birds and other animals via Ecology section before they are removed. | <i>Biodiversity/Ecology survey required.</i> |
| Traffic speed should be low as the length of the link between Darren Park and Penshannel is approx. 120 metres. | <i>Appendix A: shows traffic speeds to be below 30mph – 85%tile of 24mph. Speed survey provides evidence that vehicular speeds and significantly lower.</i> |
| Traffic volume will increase significantly and we will likely receive on going complaints from the residents. | <i>The traffic counters prove that there are more vehicle trips Westbound than Eastbound during PM peak times. The secondary access would seek to alleviate congestion to the West.</i> <i>During AM peak times however there are more traffic movements therefore mitigation measures in the form of temporary traffic signals and frequent monitoring of highway performance is recommended.</i> <i>Street works to identify and advise on the appropriate location of temporary traffic management in accordance with Chapter 8 of the New Roads & Street Work Act 1991.</i> |
| Visibility at the junction of Darren Park onto the new link is poor due to the corner property hedge. | <i>At the junction of number 5 and 22 Darran Park and numbers 1 and 3 Highlands Gardens, temporary giveaway markings and any associated slow signage should be provided. This will assist with safety within the vicinity.</i> |

Additional mitigation measures

The junction fronting onto Drummau Road from The Highlands in a westerly direction is currently closed to traffic, which then prevents any cars parking on the area highlighted in Fig 4.1 below.

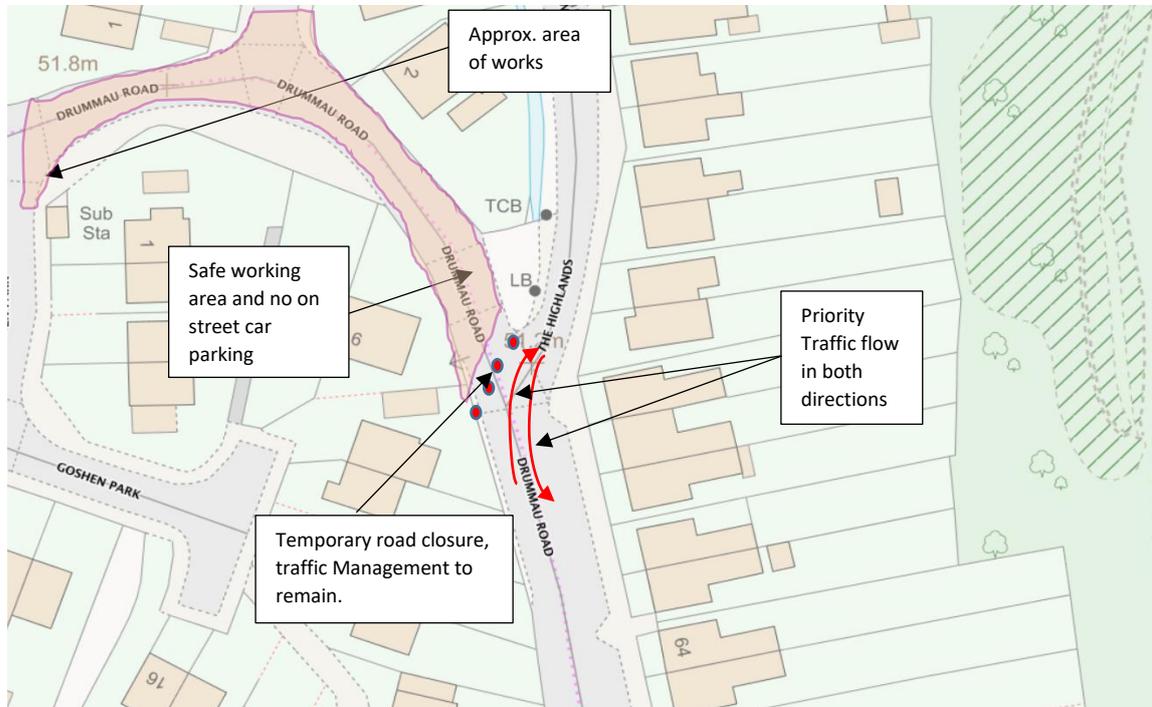


Fig 4.2

The above proposal will function as a single route of traffic connecting Drummau Road directly to The Highlands and onto the proposed link road, and will mitigate conflict at this junction until such time as the works are complete.

5.0 Existing on-street car parking

An assessment was undertaken of the existing car parking arrangements either side of the estate which has restricted access due to the mine flooding incident.

A visual survey was undertaken for both East and West areas at **am** and **pm** at the locations listed below:-

EAST

1. The Highlands
2. Highland Gardens

WEST

1. Penshannel
2. Darren Close
3. Darran Park
4. Ballard Court

Car parking survey at 18:00 pm on the 12th April 2021

Having attended Penshannel during the evening it was clear that there were very few cars parked on the highway, however there were more vehicles parked on street in the evening than that of the morning visit which took place at 9:30am on the 13th April 2021. It also was noted that there were a number of driveways within Penshannel that were unoccupied.

The on street car parking for The Highlands shows that there are a significant amount of vehicles parked close to the public pedestrian access which links Penshannel to The Highlands. The on street parking continues on the left hand side of the carriageway on exiting The Highlands down onto Drummau Road.

For an accurate assessment to be undertaken a resident survey may be required whereby each householder(s) could be asked the question of where they currently park their vehicle(s).

Please see **Appendix B** for pictures of on street car parking at 18:00pm on the 12th April 2021.

Car parking survey at 09:30am on the 13th April 2021

The Highlands on street vehicle parking shows a significant reduction compared to the evening site visit. However there were still a number of vehicles parked from the pedestrian link between Penshannel and The Highland, down to Drummau Road (This may be attributed to people working from home).

For an accurate assessment to be undertaken a resident survey may be required whereby each householder(s) could be asked the question of where they currently park their vehicle(s).

Please see **Appendix C** for pictures of on street car parking at 09:30am on the 13th April 2021.

6.0 Tree preservation orders

To provide a suitable highway link between Highland Gardens and Darran Park there would be a need to remove various trees to allow for the link road to be constructed and the provision of a Pegasus crossing for bridleway users. It is noted that the woodlands contained a number of trees that have Tree Preservation Orders (TPO). The trees are within an area TPO – T339/A1 which were scheduled on the 28th September 2016 as listed below.

- 1 small group pf Hawthorn.
- 1 small group of semi mature Hawthorn, Oak, Field Maple and Hornbeam.
- 1 semi mature Oak
- 2 young Hornbeam
- 1 semi mature Field Maple

- 1 semi mature Norway Maple

A separate report has been produced assessing the biodiversity impacts should the trees need to be removed to facilitate the proposed access link road.

7.0 Road Link Construction Budget Estimate

The budget estimate for the works is circa £74k, plus circa £26k for temporary signals on Highlands. The timescale for delivery of the project is unknown, which is dependent on the delivery of the telematics for the equestrian crossing point, design and tendering process.

An estimated breakdown of the project costs are illustrated below:

| item | Description | cost |
|------|---------------------------------------|---------------|
| 1 | Civil Work | 14,200 |
| 2 | Pegasus crossing | 25,900 |
| 3 | Trees removal and roots | 2,662 |
| 4 | Tree planting | 4342 |
| 5 | Fencing 50m long @ £120 | 6000 |
| 6 | signage | 5000 |
| 7 | Temp Traffic Signals on The Highlands | 26000 |
| | Sub-Total | 84,104 |
| 8 | add 10% contingency | 5800 |
| 9 | design and site supervision | 9585 |
| | Total cost | 99,489 |

In addition to the costs of the Road Link there is a risk that has been brought to the council's attention that requires the potential need for Temporary Traffic Signals at pinch points along the route heading west from Goshen Park along Drummau Road. An estimate has been received from Amberon Ltd of £3,288.00 per week. These lights may be required to be operational up to the predicted completion date of the mine flooding mitigation works. They may well improve vehicular safety along Drummau Road, by controlling the flow of traffic through the narrow sections of the highway.

8.0 Summary

This highway appraisal has investigated and assessed the possibility of secondary highway access from Darran Park onto The Highlands, following the closure of Drummau Road due to the mine collapse and associated flooding incident.

Circa three hundred plus dwellings are currently using west of Drummau Road as their only vehicular access to and from their properties. A secondary access will help to alleviate the traffic congestion within this estate, however the council are required to consider all eventualities in making such a decision. The valid speed surveys data and traffic counts undertaken in November 2019 provide results that suggest a second access would be acceptable with specific controls in place. Further the survey data illustrates 85%tile speed to be 24mph which is lower than the legal statutory speed limit of the highway and indicates that the average speeds in this area are low.

Prior to the incident the traffic count data on Drummau Road illustrated a 60-40 split of vehicles during am and pm peak times, vehicles at that time benefited from the option of using two directions (East and West) along Drummau Road to enter and egress the estate.

Opening a temporary second access within the residential estate would assist in reducing traffic volume forced to use west of Drummau Road access, and provide similar principles of traffic movement's pre road closure. This could operate temporarily until such time that Drummau Road highway is reopened and safe to use.

A car parking survey for both am and pm was undertaken on both sides of the estate, in order that a comparison can be derived from the amount of vehicles shown parking on the highways. It was evident that during the evening time there were significantly more vehicles parked on The Highlands Road in the vicinity of the existing pedestrian link between Penhsannel and The Highlands. It is more likely than not, that some of the vehicles parking in the Highlands are those of the residents within Penhsannel, Darran Close, Darren Park and Bollard Close, whom wish to have access to travel in to the Neath area in an easterly direction.

Should the secondary access be implemented it is recommended that the additional mitigation measures as outlined in this appraisal be implemented. In addition it is recommended that steps are undertaken to monitor the recommended temporary traffic signals to ensure efficient traffic flows during peak times, when first deployed on site.

Should the Road Link be constructed, then following the completion of the mining works and Drummau Road being reopened, for the purposes of this report, it is assumed that the Road Link would be retained as an emergency access and egress in the future, with bollards required to prevent through traffic at all other times. Subsequently the cost of removal has not been accounted for within this report.

Similarly the land owner(s) are yet to respond to the council's proposal for the use of their land in this regard, and any compensation or legal costs involved in securing the Road Link have not been taken in to account.

In terms of benefit against costs and notwithstanding the requirement to fell several trees protected by Preservation Orders, the figures are now in region of circa £100k. Time predicted to deliver the Road Link is approximately between 8 to 10 weeks from decision to proceed. This should be cognisant of the likely timescale in which the Drummau Road/Goshen Park emergency works be completed to a point where the road could be partially reopened to traffic at this location, which would then negate the need for the Road Link.

Additionally consideration needs to be given in the interim to the installation of two sets of signals on Drummau Road at pinch points for a cost of £3,288.00 per week, circa £52k to the anticipated completion of mining mitigation works at the end of August.

9.0 Conclusion

Consideration by RCG Skewen incident be given to the details contained within this report, in terms of cost, likely timescales and the requirement to fell several mature trees that have Tree Preservation Orders.

Appendix A

| Site No. | 00001448 | Site Ref. | 707 | | | | | | | | | | | | | | | | | | Grid Ref. | 272941,197865 |
|--|----------------|-----------|-----------|-----------|-------------|-------------|--------------|--------------|--------------|--------------|-------------------------------|--------------|--------------|---------------|---------------|---------------|-------------|--|--|--|-----------|---------------|
| Drummau_1 | | | | | | | | | | | | | | | | | | | | | | |
| Speed Summary (Mon-Sun)-Speed Limit 30 Mph | | | | | | | | | | | From 04/11/2019 To 14/11/2019 | | | | | | | | | | | |
| Channel: Total Flow | | | | | | | | | | | | | | | | | | | | | | |
| | Average Volume | 85th %ile | Mean Ave. | Std. Dev. | Bin 1 <5MPH | Bin 2 5-<10 | Bin 3 10-<15 | Bin 4 15-<20 | Bin 5 20-<25 | Bin 6 25-<30 | Bin 7 30-<35 | Bin 8 35-<40 | Bin 9 40-<45 | Bin 10 45-<50 | Bin 11 50-<55 | Bin 12 55-<60 | Bin 13 =>60 | | | | | |
| 00:00 | 8 | | 22 | 3 | 0 | 0 | 0 | 2 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 01:00 | 3 | | 22 | 3 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 02:00 | 5 | | 20 | 5 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 03:00 | 2 | | 20 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 04:00 | 2 | | 22 | 4 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 05:00 | 9 | | 21 | 4 | 0 | 0 | 1 | 4 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 06:00 | 34 | 24 | 21 | 3 | 0 | 0 | 2 | 12 | 19 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 07:00 | 109 | 24 | 21 | 4 | 0 | 0 | 6 | 37 | 57 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 08:00 | 159 | 24 | 21 | 3 | 0 | 0 | 5 | 51 | 94 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 09:00 | 127 | 24 | 20 | 4 | 0 | 0 | 11 | 53 | 56 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 10:00 | 117 | 24 | 20 | 4 | 0 | 0 | 11 | 47 | 53 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 11:00 | 127 | 24 | 20 | 3 | 0 | 0 | 6 | 52 | 63 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 12:00 | 133 | 24 | 20 | 3 | 0 | 0 | 6 | 53 | 66 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 13:00 | 140 | 24 | 20 | 3 | 0 | 0 | 7 | 58 | 67 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 14:00 | 140 | 24 | 20 | 3 | 0 | 0 | 6 | 56 | 70 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 15:00 | 185 | 24 | 20 | 3 | 0 | 0 | 6 | 78 | 91 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 16:00 | 188 | 24 | 20 | 3 | 0 | 0 | 8 | 74 | 93 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 17:00 | 183 | 24 | 20 | 4 | 0 | 0 | 17 | 59 | 94 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 18:00 | 129 | 24 | 20 | 3 | 0 | 0 | 6 | 49 | 67 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 19:00 | 93 | 24 | 21 | 4 | 0 | 0 | 3 | 33 | 48 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 20:00 | 61 | 24 | 21 | 3 | 0 | 0 | 1 | 22 | 33 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 21:00 | 46 | 24 | 21 | 3 | 0 | 0 | 1 | 20 | 21 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 22:00 | 29 | 24 | 20 | 4 | 0 | 0 | 2 | 11 | 13 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 23:00 | 12 | 24 | 22 | 4 | 0 | 0 | 1 | 3 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| Total | | | | | | | | | | | | | | | | | | | | | | |
| 12H(7-19) | 1738 | 24 | 20 | 3 | 0 | 1 | 95 | 666 | 871 | 103 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 16H(6-22) | 1972 | 24 | 20 | 3 | 0 | 1 | 102 | 751 | 993 | 122 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 18H(6-24) | 2013 | 24 | 20 | 3 | 0 | 2 | 104 | 765 | 1013 | 126 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| 24H(0-24) | 2043 | 24 | 20 | 3 | 0 | 2 | 106 | 774 | 1028 | 130 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| AM Peak | 08:00 | | 01:00 | 02:00 | 11:00 | 10:00 | 10:00 | 09:00 | 08:00 | 07:00 | 11:00 | 11:00 | 11:00 | 11:00 | 11:00 | 11:00 | 11:00 | | | | | |
| | 159 | | 22 | 5 | 0 | 0 | 11 | 53 | 94 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| PM Peak | 16:00 | 19:00 | 23:00 | 22:00 | 23:00 | 14:00 | 17:00 | 15:00 | 17:00 | 17:00 | 19:00 | 17:00 | 23:00 | 23:00 | 23:00 | 23:00 | 23:00 | | | | | |
| | 188 | 24 | 22 | 4 | 0 | 0 | 17 | 78 | 94 | 13 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |

Appendix B

On street car parking survey undertaken 6pm 12th April 2021 – h=Highland & p= Penshannel



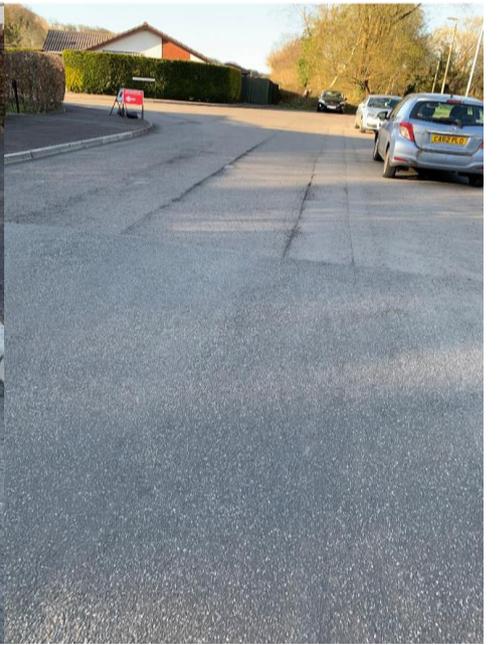
Pict



h1



h2



h3



h4



h5



h6



h7



h8

Pictures of the on street car parking at Peshannel (6pm)



p1



p2



p3



p4



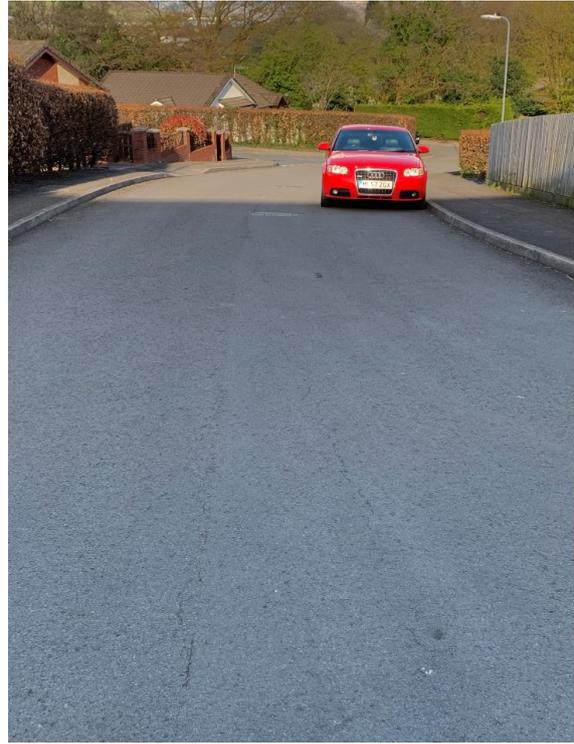
p5



p6



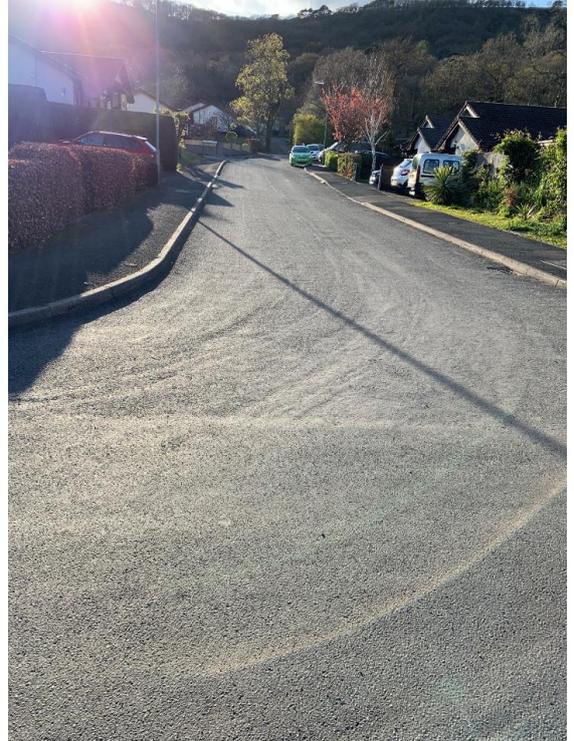
p7



p8



p9



p10

Appendix C

On street car parking survey undertaken 9:30am 13th April 2021 – h=Highland & p= Penshannel





h9



h10



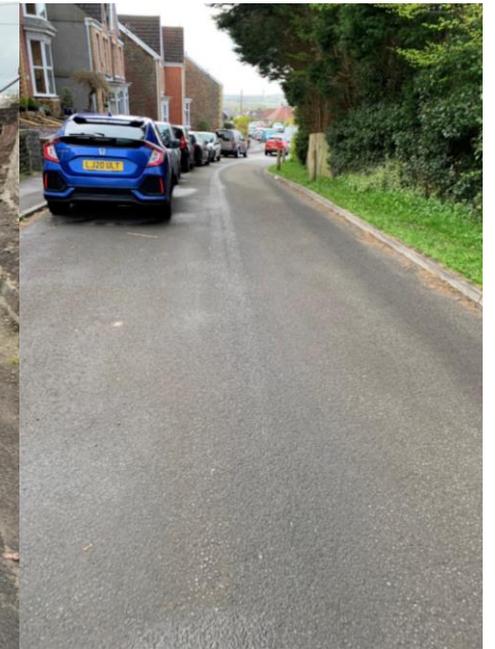
h11



h11



h12



h13



h13



h14



h15



h16

Pictures of on street car parking at the Penshannel (9:30am)



p11



p12



p13



p14



p15



p16



p17



p18



p19



p20

Appendix D

Darran Park to The Highlands

Preliminary Ecological Assessment

26/03/2021

Prepared by Countryside and Wildlife
Team, NPTC

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DECLARATION

The information, advice and opinions which we have prepared and provided is true, and has been prepared and provided in accordance with the CIEEM's Code of Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

The following report is considered a reasonable and true representation of the ecological situation on the site assessed. The report is however just a snapshot assessment therefore the authors are unable to guarantee that all biodiversity interest has been identified. In addition, if works are not undertaken as programmed re-assessment will be required. The survey information is considered applicable for one year from the date of the survey.

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EXECUTIVE SUMMARY

The proposal is to create a temporary road access from Darren Pak through to The Highlands in Skewen. This follows a road closure caused by a recent flooding event.

The area of works has been surveyed to identify any potential protected/priority species/habitats are present.

It has been concluded that the proposed works will not have any impact on any protected/priority species/habitats.

The trees/hedgerow are considered to be important natural features under Policy EN7 of the Local Development Plan. Following the closing of the temporary highway link these will be replaced.

This report concludes that there will be no lasting impact from the works on the biodiversity of the area.

1. INTRODUCTION

1.1 SITE LOCATION

The site is located between Darran Park and The Highlands in Skewen at SS73009821.



Figure 1 Site location

The site is hardstanding footpath/bridleway edged with tree lines.

1.2 DESCRIPTION OF DEVELOPMENT

The proposal is to create a temporary road access from Darren Pak through to The Highlands in Skewen. This follows a road closure caused by a recent flooding event.

The access crosses an existing PRoW which consists of hard standing with trees to both edges.

This report is based on a preliminary appraisal of proposed temporary highway link by NPTC Engineering and Transport.

1.3 SCOPE OF SURVEY

The scope of the survey was to undertake an ecological survey and identify any ecological constraints to the works. This was to include:

- The identification and assessment of habitat types present within the site
- To identify and assess likely presence of fauna within the site, especially in relation to protected species
- To assess the likely impacts of the development upon the identified habitats and species
- To propose measures to avoid and minimise any adverse impacts upon habitat and species
- To identify any opportunities for enhancement of the ecological value of the site.

2 DESK STUDY

2.1 DESIGNATED SITES

2.1.1 STATUTORY SITES

The site does not lie within, nor is adjacent to any statutory protected sites, such as Special Areas of Conservation (SAC), Ramsar Site, Sites of Special Scientific Interest (SSSI), National Nature Reserve (NNR) or Local Nature Reserve (LNR). The closest statutory sites are Crymlyn Bog/Cors Crymlyn SAC 3km to the south west, Crymlyn Bog Ramsar Site 3.5km to the south west and Glais Moraine SSSI 3.3km to the north west, Crymlyn Bog/Cors Crymlyn 3km to the south west, Fforest Goch Bog 3.7km to the north and Earlswood Road Cutting and Ferryboat Inn Quarries 3.5km to the south.

2.1.2 NON-STATUTORY SITES

Neath Port Talbot CBC have adopted the Sites of Importance for Nature Conservation (SINC) Guidelines as part of the adopted Local Development Plan, and the process of identifying sites that meet the criteria is an ongoing process. There is one site that meets the criteria which is located within 500m of the site:

- Dyffryn Woods

NPC have designated generic Woodland and Watercourse SINCs which cover all natural, qualifying features. Dyffryn Woods is the closest woodland SINC and there are Watercourse SINCs to the west and east.

All designated sites are mapped on Figure 2

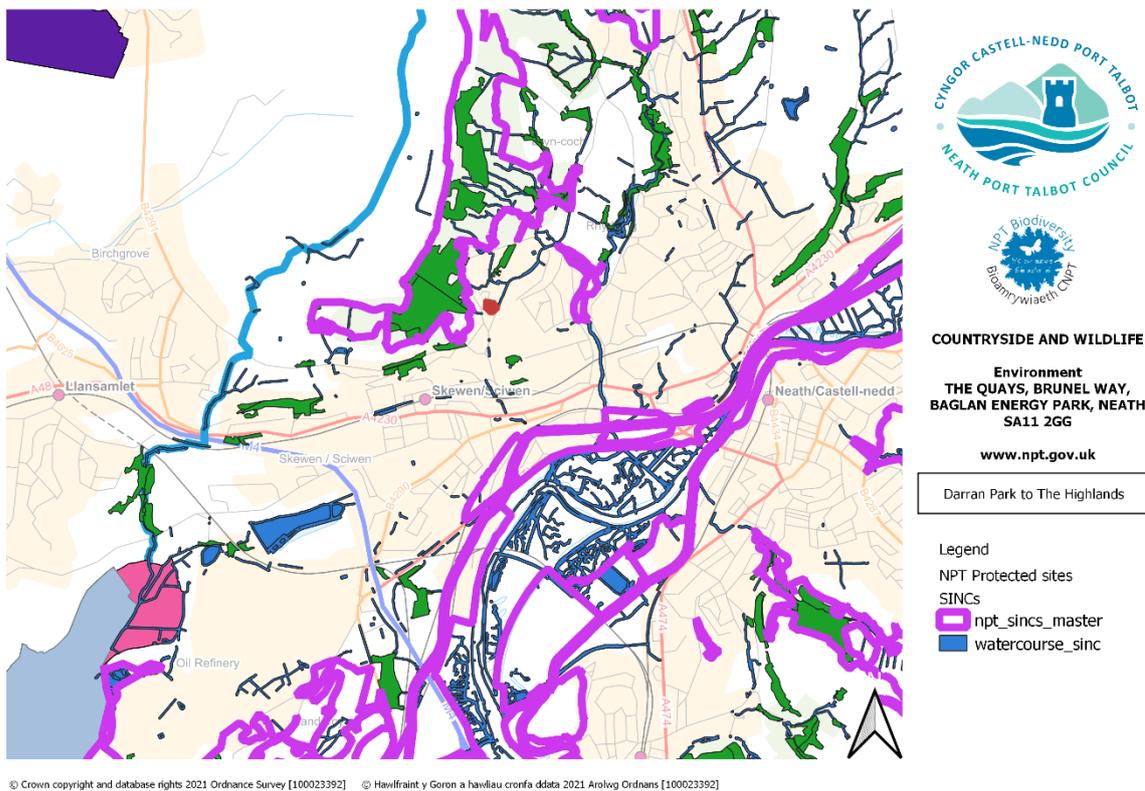


Figure 2 Designated Sites

2.2 SPECIES RECORDS

2.2.1 NPTC MAPMATE DATABASE SEARCH

A biodiversity records search was carried out on the NPTC MapMate database. Of the 32 records of priority or protected species within approximately 1km of the site it was considered that the habitats on the site had potential to support or have some value to the following species:

Mammals

- Common Pipistrelle (*Pipistrellus pipistrellus*)
- Brown Long-eared Bat (*Plecotus auritus*)

Birds

- House Sparrow (*Passer domesticus*)
- Dunnock (*Prunella modularis*)

2.2.2 OTHER RECORDS

No additional records were identified.

3 BASELINE SURVEY RESULTS

3.1 PRELIMINARY ECOLOGICAL SURVEY

3.1.1 SURVEY METHOD

The site was surveyed on 29th March 2021 in good weather conditions.

General habitats were noted and all trees potentially affected identified.

3.1.2 LIMITATIONS

There were no survey limitations.

3.1.3 SURVEY RESULTS

The area is an area of existing hard standing flanked by defunct hedgerows. The lack of management of the hedges has allowed the trees to grow in an unchecked manner resulting in densely packed trees. However, in the local area these are considered as Important Natural Features and will be treated as such.



Figure 3 Facing south

Figure 4 Facing north



Figures 5 and 6 Defunct hedgerows

3.2 PROTECTED SPECIES

3.2.1 MAMMALS

Bats

None of the trees have any obvious potential roost features from an on the ground inspection. They are quite thin without obvious features such as rot holes.

The area could be used by bats as a foraging and commuting area.

3.2.3 BIRDS

The area is known to have House Sparrow and Dunnock populations. The size of the trees provide little opportunity for nesting birds. The limited scrub at the base of the trees is regularly cleared as part of the PRow network management. Both species could use the area for foraging and commuting.

3.3 IMPORTANT NATURAL FEATURES

The NPTC Local Development Plan identifies Important Natural Features in Policy EN7. 13 semi-mature native trees were identified on site within a continuous hedgerow.

4 IMPACT ASSESSEMENT

4.1 IMPACTS ON DESIGNATED SITES

4.1.1 STATUTORY SITES

While there are several protected sites within 5km none are closer than 3km. The removal of trees and upgrading of the surface will not result in any activities that could have a pathway to affect any of these sites. The proposed works are localized and no air pollutants, other than minor localized dust emission during construction, are likely to result from the proposals. Therefore, it is considered that there is no likely route of impact upon any of the designated sites listed in section 2.1.1.

Impact Assessment: No impact

4.1.2 NON-STATUTORY SITES

The closest named SINC is Dyffryn Woods just over 100m away which is also a Woodland SINC. There is no direct connectivity with the sites as they are divided by housing. The nearest watercourse SINC is less than 50m away but is culverted. The only potential impact would be from pollutants as a result of the works but these can be stopped at source.

Impact Assessment: Short-term pollution of watercourse.

Mitigation: standard pollution prevention measures.

Residual Impact: No impact.

4.2 IMPACTS ON HABITATS

There will be no impacts on S7 habitats. The continuity of tree/hedgerow cover will be temporarily removed but this will be a very short distance and is unlikely to have a lasting impact. Once the remedial works are finished the habitat will be replaced.

Impact Assessment: Short-term removal of tree/hedgerow.

Mitigation: Replace trees following closure of the temporary link.

Residual Impact: No impact.

4.3 IMPACTS ON SPECIES

4.3.1 MAMMALS

Of the potentially impacted species only bats were considered likely to use the site. The continuity of the habitat as a commuting resource is severed around 200m to the south. Therefore, it is highly unlikely to be a commuting route. The removal of the trees would, potentially, remove foraging habitat. The localized nature of the works are highly unlikely to represent a significant reduction in foraging habitat.

Impact Assessment: No Impact

4.3.4 BIRDS

The works will remove bird foraging habitat in the form of seeds and invertebrates. The localized nature of the works are highly unlikely to represent a significant reduction in foraging habitat.

Impact assessment: No impact

4.4 IMPACTS ON IMPORTANT NATURAL FEATURES

The removal of the semi-mature native trees and hedgerow will have a temporary negative impact on the features.

Impact Assessment: Short-term loss of important natural features.

Mitigation: on closure of the temporary road a selection of native tree and hedgerow species will be planted in line with Ecology/Arboricultural advice.

Residual Impact: Short-term loss of Important Natural Features. Long-term, careful planning of replacement species and spacing will result in an increase in quality of the features.

4.5 SUMMARY OF IMPACT ASSESSMENT

The localized and temporary nature of the works, plus the mitigation proposed below leaves a negligible impact on any of the identified sites/species.

5 RECOMMENDATIONS FOR MITIGATION

5.1 SITE CLEARANCE METHOD

An Ecological Clerk of Works (ECoW) will be appointed to oversee all clearance. Pre-commencement checks will be done for nesting birds. If any nests are discovered works in that area will stop until the chicks have fledged the nest and it is no longer in use.

All trees to be assessed from the ground for potential roost features by the ECoW prior to felling. All felling will be supervised by the ECoW and inspected for the presence of roosting bats.

5.2 PLANTING

Ecological/Arboricultural advice will be sought to work up a planting scheme for the end of project. The planting will be done in the first planting season following de-commissioning of the works.

5.3 WORK TIMING RESTRICTIONS

There are no work timing restrictions. However, if nesting birds are found there will be a delay while nesting is complete.

5.4 OTHER REQUIREMENTS

Pollution prevention procedures put in place to protect the watercourses.

6 REFERENCES

- Anon. HMSO, London. All legislative references. www.legislation.gov.uk
- CIEEM. (2006). Guidelines for Ecological Impact Assessment in the UK: Terrestrial, Freshwater and Coastal Environments.
- CIEEM. (2013). Technical Guidance Series Guidance for Preliminary Ecological Appraisals.
- Joint Nature Conservation Committee. (1993). Handbook for Phase 1 Habitat Survey. A technique for environmental Audit.
- Neath Port Talbot Biodiversity Forum. (1993). Neath Port Talbot Biodiversity Action Plan 2008-2012.
- Neath Port Talbot Council. (2016). Neath Port Talbot County Borough Council Local Development Plan (2011-2026).
- Wales Biodiversity Partnership. (2008). Wildlife Sites Guidance Wales. A guide to develop local wildlife systems in Wales.
- Wales Biodiversity Partnership. Environment (Wales) Act 2016: Section 7 List of Species of Principal Importance for Conservation of Biological Diversity in Wales.