



Lôn Coetmor Footway Link

Feasibility Report



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Appendix A: Plan of Chainages

Drawing No GA-LCFL/CH

Appendix B: Plan of Proposal

Drawing No GA-LCFL/PRO

Appendix C: Standard Detail Drawings

Drawing No GA-LCFL/CS

Appendix D: Photos of Existing Site Conditions

1.0 Introduction

- 1.1 Following requests by the Community Council in regards to concerns over road safety issues when walking between the Maes Coetmor estate ,Plas Ffrancon Sports Centre to the Hen Parc area near the Village of Rachub, It was agreed that an investigation be conducted to establish whether the construction of a footway provision would be feasible
- 1.2 The purpose of this report is to provide an initial design of the footway extents and the implementation costs for the proposal
- 1.3 The Land in which the proposed footway would run on is owned by the Penrhyn Estate, who has agreed in principal to donate the 2.0 meter width strip required, free of charge, with the proviso that a new stone boundary wall is re-instated as part of the new highway boundary.

2.0 Existing Conditions

- 2.1 The site is located on the Unclassified road known as Coetmor New road in the village of Bethesda
- 2.2 The length of the study area extends from the existing footway near the northern end of the Plas Ffrancon Sports Centre car park to its junction with the Class iii road known as Hen barc ,and within a corridor of 10 meters either side of the highway
- 2.3 The vertical alignment remains constant along the highway section at a height of 185 meters (+/- 1.0 m) above ODN (Ordinance Datum Newlyn).However a difference in levels of approximately 1.0 meters exists between the highway and the field located between CH 300.00 and CH 390.00.The horizontal alignment also remains constant along the survey site, with the Highway running in a straight line.s
- 2.4 Two pipe culverts exist within the survey site, located at CH 5.00 and CH 250.00, which have a diameter of 400 mm and an approximate length of 6 meters, which runs underneath the highway and are used for irrigation purposes.

2.5 Within the survey site ,Coetmor New Road , services a total of nine properties namely :

- Andy`s Tyre Service – CH 5.00 ,north western side of highway
- Bethesda Cricket & Bowling Club – CH 270.00 ,north western side of highway
- Park Villa – (same access as Cricket Club)
- Crud yr Awel – (same access as Cricket Club)
- Crosswinds – (same access as Cricket Club)
- Bronydd – CH 330.00 ,south eastern side of highway
- Bodafio – CH 340.00 ,south eastern side of highway
- Tyddyn Uchaf – CH 400.00 ,north western side of highway

Also an agricultural access is located at CH 10.00

2.6 The length of highway within the study area is within the 30 mph speed limit of the Village. a speed survey ,conducted in 2005 showed that the 85% tile speeds for the study area was 29.69 mph.Traffic calming features exist at CH 42.00 and CH 140.00 in the form of speed cushions.

2.7 The land at the back of the highway boundary, where the footway proposal extents to is of agricultural standards and used for grazing with boundary treatments of un-mortared random stone walls, supported by stock proof fencing. These are of a poor condition and in need of maintenance.

2.8 A total of ten small to medium sized Common Ash trees (*fraximus excelsior*) exist along the proposed footway route between CH 20.00 and CH 315.00 on the south eastern side of the highway

3.0 Constraints and Considerations

3.1 Environmental Agency consent Could be required for any structure in or near any water courses under the Land Drainage Act 1991

3.2 Planning permission Could be required under the Town and Country Planning Act 1990.

3.3 Local sources have indicated that a future planning application is imminent on the land currently occupied by Andy`s Tyre Service. If approved, this could pave the way

3.3 (cont) for future applications to the remaining infill land along the highway, where conditions could be applied for highway improvements under section 278 of the Highways Act 1980.

3.4 Penrhyn Estate has agreed in principal to donate a 2 meter width strip of land along the survey site, where applicable. However an additional 2 meter width would be required on a temporary basis to accommodate the construction works, this could be done under agreement of the land owner where the contractor would be required to make good any damage to the land and stock proof the site during the construction phase.

4.0 Design Standards

4.1 Any proposed footway design would seek to maintain a working width of 1.5 meters for the entire length of the survey site, which conforms to the principals of Pedestrian needs as stipulated in Chapter 5 of the Manual for Streets and Chapter 6 paragraph 6.2 of TAN 18 (Technical Advice Notes: Transport) .However were physical constraints exists a reduced working width would be implemented.

4.2 All proposed footway and Pavement design standards are to conform to D.M.R.B (Design Manual for Roads and Bridges)Volume 7 section 2 and any road signage and road markings are to conform with the standards as specified within the T.S.R.G.D (Traffic Signs Regulations and General Directions) 2002

4.3 Any proposed culvert designs would conform to the standards as set out by D.M.R.B (Design Manual for Roads and Bridges)Volume 4 section 2 part 7

4.4 For the purpose of this report ,some measurements and information are taken from GIS data

5.0 Proposal

5.1 It must be noted that all the options put forward do not include provisions for the relocation of any utility services, legal costs or any possible accommodation works.

5.2 *Proposal* – From CH 0.00 to CH 315.00, remove the existing stone wall on the south western side of the highway and civilize a 2 meter width strip of land from the highway boundary into the agricultural land, construct a 1.5 meter width footway and a 0.5 meter width 1.5 meter high unmorterd random stone wall. At CH 315.00 construct a 2 meter wide build out section which tapers into the new footway and the splay of the Bronydd entrance, this reduces the carriageway width to 3.1 meters and creates a priority system whilst still maintaining a footway provision. On the northern end of the build out section a crossing point would be placed. The crossing point would link onto a new 1.5 meter wide footway provision which would be constructed from CH 325.00 to CH 390.00 by removing the existing stone wall, constructing a retained structure i.e. Gabion baskets (1 meter high 1.5 meter wide) to counteract the difference in levels of the highway and the agricultural land which lies parallel. A new unmorterd random stone wall (0.5 wide and 1.5 meter high) would also be built parallel to the new footway. The new footway construction would cease at CH 390.00 were road marking would be placed to highlight a segregation of vehicles and pedestrians from CH 390.00 to CH 410.00

Estimated Cost of Construction : £250,000.00 (excluding any additional costs as noted in paragraph 5.1)

6.0 Conclusions & Recommendations

- 6.1 The proposal would provide an adequate footway provision of a high standard and within the desire line of its users and successfully provide a safe route along the Coetmor New Road
- 6.2 The proposal would incur changes to the existing highway layout in regards to carriageway width between CH 315.00 and CH 325.00 due to the construction of the priority system; therefore it can be assumed that the proposals would have significant effects on its 85% tile speeds.
- 6.3 The proposal would require land take from a privately owned estate of approximately 760 m² of land. The estate in question is owned by the Penrhyn Estate who has agreed in principal to donate a 2 meter width strip of land along the length of the survey site where applicable, this would greatly decrease the potential overall cost of the scheme.

6.4 The road marking section between CH 390.00 and CH 410.00 would seek to highlight drivers of pedestrian movements whilst still maintaining the highway width when pedestrians aren't present. Although this solution is not ideal in regards to road safety it is the only feasible option available due to the constraints placed by the location of property of Tyddyn Uchaf and existing highway width.

7.0 Further Investigations

7.1 Discussions with the relevant landowners would be required in order to implement the scheme

7.2 Guidance from the Planning Authority would be advisable; to investigate whether planning consents would be required for the footway or whether the proposal could be authorised via the Permitted Development route.

7.3 Environmental Agency consent would I be required for the culverts under the Land Drainage Act 1991
