

Healthy n Happy Community Development Trust Cambuslang Community Council



Clyde Walkway and Cycle Path Feasibility Study

SUMMARY REPORT

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1. INTRODUCTION

Ironside Farrar Ltd (IFL) was commissioned by Healthy n Happy Community Development Trust (HnH) and Cambuslang Community Council (CCC) in February 2015 to investigate the feasibility of constructing a woodland walk and cycle path along the route of an historic Right of Way from Cambuslang Bridge to Dalmarnock Bridge. The path is part of the Cambuslang Cycling Project and the CamGlen Bike Town initiative which seeks to increase cycling in the Cambuslang and Rutherglen area by improving awareness, training, infrastructure and facilities. The route is to accommodate both commuter and recreational activities.

This feasibility study has been funded by Transport Scotland via the Central Scotland Green Network Trust. The Steering Group for the study was the Infrastructure Sub-Group of the CamGlen Bike Town Initiative comprising Healthy n Happy Community Development Trust, Cambuslang Community Council, South Lanarkshire Council, Central Scotland Green Network Trust, Clyde Gateway, the Forestry Commission, and Sustrans.

The study comprised:

- a walkover / photographic Survey by IFL partly with CCC and HnH;
- desktop analysis of topography, land-use and other available data;
- a consultation with landowners;
- route design and costing;
- the identification of key constraints /issues; and
- consideration of demand and funding opportunities.

This edited summary version of the Main Report of the study provides a detailed description of the route of the walkway and cycle path, an outline of the land ownership issues, an assessment of demand, the potential constraints, and the estimated costs of constructing and maintaining the path. More details on these issues as well as further information on the design issues, bills of quantities, indicative construction drawings, socio-economic baseline, potential external funding sources, and supplementary figures and maps are provided in the Main Report.

2. ROUTE OF THE WALKWAY AND CYCLE PATH

The existing Right of Way follows the south bank of the River Clyde from Cambuslang Bridge through to the Cuningar Loop, with a length of 4.712 km (see Figure 1). The current state of the route varies greatly. Parts of the route were found to be narrow and subject to encroachment by vegetation, adjacent land uses and tipping along significant sections particularly at the Cambuslang Bridge and Farme Cross stages. The central sections were clearer with several options for recreating the existing route through regenerating woodland or the flood plain of the River Clyde. One section (behind Farme Cross Industrial Estate) was fenced off by the landowner and impassable.

Ironside Farrar Ltd have broken the route down into a series of distinctive sections each of which have different characteristics and issues associated with the path proposals. These are summarised in Table 1 below.

Table 1: Lengths of sections of the route

Section	Description	Approximate Length (m)
Primary route sections		
A	Cambuslang Bridge Ramp	288
B	Dawn Homes to Scottish Enterprise Site	375
C	Scottish Enterprise Site to Bogleshole Bridge	535
D	Bogleshole Bridge to M74	704
E	Existing path below M74	66
F	M74 to Tata Steel Substation	770
G	Tata Steel Substation to UPM	320
H	UPM to Farme Cross Industrial Estate	193
I	Farme Cross Industrial Estate to Cuningar Loop	376
J	Cuningar Loop	1,085
Total		4,712
Alternative route options		
K	On Road Options through Farme Cross Industrial Estate (alternative route)	98
L	Mathieson Road Link (alternative route)	1,573
M	Tata Steel Access Road (alternative route)	1,167
N	Cambuslang Road Link (alternative route)	68
O	Existing Clyde Gateway Routes	1,238
Total		4,144

Summaries of the path routes and selected photographs for each path route are provided as follows.

2.1 Cambuslang Bridge Access

The proposed access point is currently a broad surfaced area associated with the old road / bridge crossing. A small way-marker notes the access to the existing Right of Way.

The access point links with the footpath on Bridge Street and also NCN 75 which crosses the river at this point. There is a bus stop on Bridge Street at this point which currently serves the Morrisons supermarket opposite.



There is significant space to create a prominent entrance point to the proposed cycle route with options for including hard and soft landscaping and even public art. This would not only signify the commencement of the route but would be viewed as a signifier of the wider regeneration and health aims of the project.

2.2 A: Cambuslang Bridge Ramp

The Right of Way follows a relatively steep ramp from the access down towards the river. The embankments on either side are also steep (approximately 1 in 2) and wooded. Some encroachment / tipping was noted from the industrial plots above. The Right of Way is partially obstructed by fallen trees and tipped material and the ground is very uneven in places.



The level area is only presently wide enough for the existing Right of Way (around 1 - 1.5m). Any widening to Cycling by Design Standards would require both earthworks and slope retention. The long fall along the path is also relatively steep, and further earthworks would be required to meet the required standards. These earthworks would evidently have an impact on existing woodland vegetation.

2.3 B: Dawn Homes to Scottish Enterprise Site

The Right of Way follows a level route along the river bank. The embankments either side are steep (approximately 1 in 2) and wooded. Some encroachment / tipping was noted from the derelict site above. The Right of Way is partially obstructed by fallen trees and tipped material, and the ground is very uneven in places. As above, the level area is around 1-1.5 m wide and therefore both retention and earthworks would be required to construct a cycle route. Again, this is likely to involve disruption to existing emerging woodland vegetation.



Dawn Homes are planning a housing development on the adjacent site, and their proposals include an enhanced footpath along the river. There may be an option to incorporate the widened path as part of these proposals. The timescales however for the Dawn Homes development remain uncertain at the time of this report.

2.4 C: Scottish Enterprise Site to Bogleshole Bridge

The path corridor opens out at this point into a broad gently sloping area which forms part of the River Clyde flood plain. The Right of Way would appear to run along a small bund above the high water line with an overgrown native hedge either side. Marker posts for a high pressure gas main are noted on the west side of the bund.

The bund is not wide enough to accommodate the cycleway proposals to Cycling by Design Standards without the removal of the mature hedge which would also remove some cover and screening. The path route is otherwise flexible at



this location with options for either side of the bund. The presence of invasive weeds closer to the river may place some restrictions on the path alignment. The gas main may also present restrictions on its location or construction.

2.5 D: Bogleshole Bridge to M74

The Right of Way passes under the Bogleshole Road Bridge at the start of this section. There is some evidence of anti-social behaviour such as small fires and drinking under the bridge. The height clearance is > 2.4 m and would not present any restrictions to the cycle route. There is an option to create a ramped link up to Bogleshole Road and a broad (3 m) footway linking to places of employment. The footpath will need to ramp down under the bridge and back up the other side. This is considered relatively straightforward with some minor additional earth works required.



Beyond this point the path corridor is fairly broad and level with no particular need for earthworks or significant retention. Some minor clearance of self-seeded trees and fly-tipped material would be necessary.

Network Rail have expressed some initial concerns about the path location and will require to check the proposals with their clearance team. This may require some further structural assessment / checks but should not be significantly affected by the proposed path.

2.6 E: Existing path below M74

The Right of Way has been routed under the new motorway bridge at this point and is a 2 m wide surfaced path. The height clearance is 2.4 m. No works would be required for this short section, but simple alignment changes to reduce speed on the approaches would be recommended due to tight curves and poor forward visibility.



2.7 F: M74 to Tata Steel Substation

The path continues along through this section at the top of the river bank. The route is fairly level and there is sufficient space for a 3 m route with no notable constraints. Some tree clearance would be required to form a clear cycle corridor.

Within the Tata Steel site there is an existing surfaced access road which takes a more direct route alongside the M74 to their access from Farme Cross Industrial Estate. This would offer a low-cost option to link this last section with the



industrial estate. It would also reduce the distance of the route which would be of particular interest to commuter cyclists and walkers. The road appears to be on Tata Steel land, but discussions with them suggest it is actually operated by Transport Scotland.

2.8 G: Tata Steel Substation to UPM

The path corridor narrows and steepens considerably over this section as it passes substation buildings and settlement lagoons / outfall structures. The existing Right of Way narrows to a small worn path along the top of a steep slope following the line of the security fence to the ponds. The path is relatively undulating at these points and crosses several drainage outfalls, ditches and access steps from the same ponds. Some fencing and / or screen planting would be required to direct path users past this area and minimise any associated Health and Safety issues.



Any path within this location would require a significant amount of retention and also multiple bridges or pipe crossings. An elevated boardwalk structure might be more cost effective although this would require careful design, detailing and specification to enable cycle use.

2.9 H: UPM to Farme Cross Industrial Estate

The path corridor widens again over this section again following the top of the river bank. The existing path remains visible in a couple of locations. However, it is blocked by fallen trees / overgrown vegetation. The route is level but predominantly wooded with developing self-seeded trees and significant clearance would be required to form the path corridor and maintain good visibility. The area is blighted by substantial amounts of litter. Evidence of anti-social behaviour including fires, wire burning and drinking was noted.



2.10 I: Farme Cross Industrial Estate to Cuningar Loop

The path corridor narrows again at this point as the Right of Way runs behind a series of industrial properties. The path follows a level shelf typically 2 – 3 m wide.

The route becomes progressively more difficult as it dips below the industrial estate level and passes under a small bridge. Clearance at the bridge is only 2.2 m which would be a restriction to cycle use. Masonry / concrete / gabion retaining walls form the western boundary of the route and fallen trees and tipped materials obstruct the route in places.



The final section through Aitken Electrics boundary is particularly difficult with no clear route and significant level changes. Japanese Knotweed and Giant Hogweed were noted throughout this section together with a variety of tipped materials including asbestos sheeting. The route is blocked by a palisade fence at the Clyde Gateway boundary.



2.11 J: Cuningar Loop

The right of way is completely blocked for the first 60 m where it appears to pass through private property with palisade fences on both boundaries. The area is level and part grassed / part hardstanding. These fences terminate at the top of a steep bank down to the river and no other route is passable. This area is indicated as in Clyde Gateway ownership, but this is understood to be in dispute.

Beyond this point the Right of Way enters the Cuningar Loop site. Access was limited here due to ongoing construction works, and only some sections were able to be inspected. The Right of Way is not clear and passes through an area of woodland currently managed by the Forestry Commission. Although a route through could be made, Clyde Gateway noted that forestry operations, contamination issues and badger activity may place restrictions on this.

After approximately 750 m, the Right of Way meets the Clyde Gateway Path. From this point the route is a boardwalk structure along the riverside linking with the proposed bridge to the Athletes Village site. The boardwalk is not designed to be suitable for cycling, although it is newly completed and in good condition. Other cycleable routes through the site also exist from this point, and the new bridge will also be suitable for cyclists.

2.12 K: Road Options through Farme Cross Industrial Estate (alternative route)

As part of the study, the existing roads through Farme Cross Industrial Estate were also surveyed. In general, the roads are to industrial standards with 7.3 m or wider carriageways and 2 m footways or verges. Formal cycle routes could be created either through shared-use footways, but these would typically only be 2 m. This may be acceptable given the relatively few pedestrian movements.

On-road sections would also be possible, although conflict with heavy vehicles in the industrial estate would not be particularly desirable.

2.13 L: Matheson Road Link (alternative route)

This short link would be an ideal short-cut for any on-road route through Farme Cross Industrial Estate. It links Cunninghame Road with Matheson Road. The route is through private property however it is level with no obvious constraints. The route could skirt the existing fenced boundary. The route is within the curtilage of Speyside Distillers.

2.14 M: Tata Steel Access Road (alternative route)

This is an existing 3 – 4 m wide surfaced access road. This is a private access, but it would be suitable for cycling if agreement could be reached with the site owner. Discussions with Tata Steel have suggested this would be feasible in whole or in part and would offer an alternative to the retained section past the settlement ponds (Section G). Some amendments to security fencing / gates would be required however these are not considered significant issues.

2.15 N: Cambuslang Road Link (alternative route)

The short link would also offer a useful shortcut from Cunninghame Road to the cycle path on Cambuslang Road (below the M74). The route is through private property, although it is level with no obvious constraints. The route could skirt the existing fenced boundary. The route is within the curtilage of Watson Package Ltd.

2.16 O: Existing Clyde Gateway Routes

From the path the Right of Way is wholly within the new Clyde Gateway Forest Park. The Right of Way has been upgraded to boardwalk which would not be suitable for cyclists however a network of other paths exists which connect with the new bridge and Downiebrae Road to Dalmarnock Bridge.

The Downiebrae Road section has an existing surfaced footpath which provides access to Dalmarnock Bridge. Clyde Gateway are currently progressing a study to upgrade this to a cycle route.

3. LAND OWNERSHIP

The route passes through numerous different landownership areas although the Right of Way is typically between the perimeter fence (often dilapidated / incomplete) and the banks of the River Clyde. The main exception to this is where the route passes through the Tata Steel site where there is no obvious boundary.

A total of 21 landowners or tenants were identified with the following having a significant interest in the project.

- **Dawn Group** own a 16 hectare site accessed off Somervell Street. This site is earmarked for housing and the current proposals include a new / enhanced riverside walkway.
- **Scottish Enterprise** own the adjacent Site 22 accessed off Bogleshole Road. This site is currently being considered for a new closed-road cycle circuit developed by a partnership comprising Cambuslang Community Council, Healthy n Happy Community Development Trust, South Lanarkshire Council, South Lanarkshire Leisure & Culture, and East Kilbride Road Club.
- **Tata Steel** are probably the most significant landowner along the route, owning sections on both side of the M74 Motorway. The western section is effectively landlocked by the

Motorway. Security for the plant and sub-station would need to be addressed through appropriate fencing.

- **Clyde Gateway** are nearing completion of the Cuningar Loop project which includes woodland walks, cycle routes and a new bridge across the River Clyde. The Cuningar Loop site is owned by Clyde Gateway and would link with the path proposals west of Farme Cross Industrial Estate. The existing Right of Way follows the river bank around the Cuningar Loop site.

The majority of the landowners are supportive of the project, but some owners of industrial sites at Cambuslang Bridge and Farme Cross Industrial Estate have raised security concerns that increased activity may bring. One occupier (thought to be in dispute with Clyde Gateway) has blocked a section of the Right of Way at Farme Cross Industrial Estate. The final section through Clyde Gateway property is currently not open to the public due to contamination issues.

During landownership discussion it was highlighted that the route should be seen as an asset to the owners offering greatly enhanced cycling community opportunities to these workplaces. Further details on the correspondence and meetings with individual landowners are provided in the Main Report.

4. DEMAND

IFL have carried out an assessment of demand based on a review of the literature and assessment of the cycle network in the Cambuslang / Rutherglen area. The River Clyde corridor is a potentially highly attractive route traversing a riparian landscape with the new parkland and bridge at Cuningar Loop providing a clear destination or stopping-off point in terms of a longer sustainable transport journey. There is, therefore, not only a route linking two town centres and areas of employment but also a recreational purpose to the route. This is likely to provide an immediate demand and purpose for the route encouraging cycle journeys. The strategic importance and priority of this within the Glasgow and Clyde Valley Area Network is likely to stimulate demand from adjacent communities and beyond.

Sustrans analysis of demand and use of routes within broadly comparable locations indicate that the provision of new high-quality traffic-free cycling and walking routes encouraged more people to get around by foot and by bike. This was increased where the paths were part of a more extensive network of routes, were of high environmental quality (especially waterside locations) and tackled anti-social behaviour.

Demand particularly for commuting is likely to increase considerably as development opportunities along the southern banks of the river emerge. This is relevant both to the site (for example, Dawn Homes) and also outwith the site - Newton Farm residential development to the east, Shawfield Business Park to the west, and the continuing regeneration of the Dalmarnock area to the north being undertaken by Clyde Gateway and their partners.

5. POTENTIAL CONSTRAINTS

Key issues likely to affect the construction of the path include following.

- **Invasive weeds:** Site survey work identified substantial stands of invasive species which are particularly detrimental to riparian habitats. The three major invasive species are: Himalayan balsam; Japanese Knotweed; and Giant Hogweed.
- **Major utilities:** The path is typically remote and therefore local / small public utilities are mostly not recorded. There are however several major utilities that cross / follow the site. These include: a 300 mm medium pressure gas main which follows the line of the Right of Way from Cambuslang Bridge to Bogleshole Bridge; a 400 mm diameter sludge main crossing the path and river south of Bogleshole Bridge; several large diameter sewers crossing the path; and 275 kV overhead transmission lines crossing the proposed path at three locations.
- **Flood risk:** the majority of the route is within medium to high flood risk zones (as defined by SEPA) from the River Clyde. A high risk zone is generally a 1 in 10 year event (10% chance of happening in any one year). The flood risk would not in itself prevent construction or upgrading of the path for cycle use. Construction work would have to ensure that the site drained freely after any flooding, and there may be slightly increased maintenance responsibilities to clear paths of debris or silt after flood events.
- **Topographical challenges:** The existing Right of Way follows the river embankment which, although relatively level, does have some local topographical challenges. There are three locations in particular where topography is sufficiently challenging to require both design solutions and compromise in terms of path width to achieve a quality feasible link suitable for both pedestrians and cyclists.
 - Cambuslang Bridge towards Dawn Homes site: Sections of the embankment are 1:2 or steeper. There is evidence of embankment slips in some locations though this may be partially as a result of loose tipping of materials.
 - West of Tata Steel adjacent to M74: Narrow and restricted section of river corridor where slopes are in excess of 1:2 and with little opportunity for regrading works or avoidance.
 - Adjacent to Farme Cross Industrial Estate: Restricted corridor with steep slopes in excess of 1:2. There is some evidence of embankment slips within this section probably as a result of loose tipping of material. Retention of slope would be an essential element of any design solution.
- **Landscape and biodiversity issues.** The Clyde Corridor associated with the existing Right of Way is blighted by fly-tipping, sections of vandalism, and erosion of the river bank. Whilst much of the corridor appears wooded, many trees are in poor condition, partly because of tipping of materials on the bank. There are mature trees which would restrict earthworks options in places. The development of the route would provide both the impetus and

necessity to undertake a series of environmental improvements both to accommodate the route and to provide a landscape corridor that will help to promote healthy use and access by being stimulating, attractive, safe and more readily maintainable.

- **Ecological considerations:** The development of the path will require a wider level surfaced route than is presently on site. For this to be constructed it will inevitably result in the loss of vegetation during the process of the works and the potential disturbance of habitat areas, including forage and cover for protected species such as badgers and otters, as well nesting birds. Whilst these are constraints, the works can also be viewed as providing an opportunity for habitat improvement and management to create a healthier and more biodiverse corridor.

6. COSTS OF DEVELOPING THE PATH

6.1 Construction costs

In the Main Report, Ironside Farrar provide detailed design proposals based on guidance in Cycling by Design (2010). This comprises a 3 m bound surfaced path reducing to 2 m where space is restricted. The path includes lengths of retention, fencing / barriers and significant woodland management / replanting to accommodate the path corridor. This design standard was chosen to help maximise the commuting potential of the routes.

The total capital cost of the proposals is estimated as £1,829,000 excluding VAT and professional / legal fees. These costs have been subdivided by section reference to allow possible phasing of the works to be considered, as shown in Table 2.

Table 2: Estimated costs of the sections of the path

Section	Description	Costs	
		Clear Right of Way	2 / 3 m Bound Route
A	Cambuslang Bridge Ramp		£177,000
B	Dawn Homes to Scottish Enterprise		£115,000
C	Scottish Enterprise to Bogleshole Road		£108,000
D	Bogleshole Road to M74		£258,000
E	Existing path below M74		£0
F	M74 to Tata Steel Substation		£201,000
G	Tata Steel Substation to UPM		£134,000
H	UPM to Farme Cross Industrial Estate		£57,000
I	Farme Cross Industrial Estate to Cuningar Loop		£110,000
J	Cuningar Loop		£285,000
	Other Works		£80,000
	Prelims / Contingencies		£304,000
Total (excluding VAT)		£50,000	£1,829,000

It should be noted that these costs are based on the proposals detailed in the Main Report with allowances for abnormal costs (e.g. contamination / invasive weeds). Further study or a value engineering exercise may be required depending on the available budget.

It is recognised that this is a significant cost and due to funding, landowner and site constraints (invasive weeds / contamination issues) it may not be possible to implement all the works in a single phase. It is however recommended that early efforts are made to re-establish accessibility of the Right of Way to ensure that the link is maintained. This could be limited to tree / debris clearance in the first instance.

It is noted that these costs are based on the original brief route following the Right of Way. Other options were also explored including altering the existing path through Tata Steel's property and also un-road sections around Farme Cross Industrial Estate. Both these options would be significantly cheaper and would bypass some of the more challenging sections of the route.

In addition an invasive weed eradication programme needs to be undertaken. This would likely take several growing seasons to be effective and if not carried out would result in increased costs for certain sections.

6.2 Maintenance liabilities

Maintenance of the route is an important consideration and appropriate provision for long-term management and maintenance of the footpath corridor should be considered. The path is predominantly in private ownership and therefore any maintenance burden would lie with the owner. It is considered that this ownership / maintenance arrangement is the main reason the Right of Way has fallen out of use with fallen trees, encroachment and fly-tipping / littering.

Options for maintenance could include:

- formal adoption by South Lanarkshire Council;
- maintenance agreement by South Lanarkshire Council;
- maintenance arrangement by Sustrans volunteers;
- maintenance by private contractors.

Maintenance would likely comprise the following activities with budget costs as noted in:

Table 3: Maintenance costs

	Frequency	Rate	Annual Cost
Sweeping / clearing of path surfaces	weekly	£150	£7,800
Litter picking	weekly	£250	£13,000
Verge / grass cutting	monthly	£250	£3,000
Ad-hoc clearance of fly-tipped material / fallen trees	ad-hoc		£3,000
Inspection and repairs to gates, bollards, boundary features etc	monthly		£3,000
Hedge cutting and woodland management	annual		£3,200
Gritting / snow clearance (entrance area only)	ad-hoc		£2,500
Total costs (excluding VAT)			£35,500

These costs assume a high level of maintenance by a private contractor. It is likely other maintenance arrangements could be carried out at a lower cost. It is noted however that the proximity of the path to the river flood plain means regular maintenance will be necessary to ensure a clear route at all times.

The typical lifespan of the capital works would be around 25 years following which resurfacing and other major works may be anticipated.

