Introduction to the Project

The Upper Tweed Railway Paths Group has been exploring how best to extend the current Innerleithen and Peebles route through to Biggar, Symington and Tweedsmuir. They have commissioned David Gray and John Grimshaw to work with them to prepare a detailed feasibility study setting out the opportunities for walking, cycling and equestrian routes along these railway corridors. This work is to be carried out during 2013 and will look at amongst other things how such routes would connect with, and augment, existing paths and trails and, crucially, how to draw up details which will find favour with the landowners along the way.

The overall project has been divided up into a number of standalone sections, each of which would be useful in their own right. This note describes in some detail how the Lyne to Peebles section might be arranged.

For further information contact:

James Gordon  Secretary, Upper Tweed Railway Paths  james@rachan.co.uk
David Gray  david@chain-events.co.uk  m 07770 623516
John Grimshaw  john@johngrimshaw.co.uk  0117 9105200  m 0779 2714708

For further details please look at the Upper Tweed Railway Path website: www.uppertweedrailwaypaths.org.uk
Upper Tweed Railways Paths Project

Lyne Station to Peebles section - 5kms long

This section is the most important of the whole project because it enables the public to bypass the main road which has a large amount of traffic, some tight bends cut into the hillside by Neidpath Castle and a history of cycling accidents. The former railway path is intact and is already used as a popular walking route. The works described here would make it suitable for cyclists and people with wheelchairs or buggies as well. Overall the route to Lyne would make a very attractive addition to the delights of Peebles as well as the start of longer routes through the Upper Tweed Valley. These notes describe various practical details along this section.
The Symington, Biggar, Broughton, Peebles and Talla Railway Routes: various self contained sections along the route

1 Symington and Biggar  5 kms
The Lindsaylands Road from Wolfclyde Bridge makes for a good ride to Biggar. This leaves a relatively short 1.8km length of the A72, Biggar Road, to resolve.

2 Biggar and Broughton  8 kms
The railway route is already open to the public and the Kilbucho minor road at the foot of Mitchell Hill makes for an attractive cycling route.

3 Broughton to Rachan 1.9 kms
Whilst the Dreva Road is attractive and lightly trafficked, it is hilly with a steep climb shortly after Broughton. The railway route, which was double track over this section, would be a great asset.

4 Rachan to Altarstone  3.0 kms
Here the Dreva Road would be suitable although it is quite a climb. But the railway has attractive views closer to the water and would be a much better route for walkers and possibly equestrians too.

5 The Stobo Straight  2.5 kms
By common consent this road is considered to be unsuitable for cyclists. Traffic is fast, including larger timber lorries, and there is no verge for safety. A route along the field edge or the railway is essential here. We are negotiating to use the Altarstone Wood forest track which leads through to Stobo Castle and avoids the worst part of the Stobo Straight.

6 Stobo Straight to Lyne Station  2.6 kms
This section of the main road is even more unsuitable because as well as traffic it now includes hills.

7 Lyne to Peebles  5 kms
This is probably the most valuable section of all because it bypasses the winding main road, on which a cyclist was killed in 2006. Neidpath Viaduct and Tunnel are two memorable features of this section.

8 Through Peebles  2 kms
The railway bridge under the main road remains as a useful opportunity for a riverside route and link back to join the railway route below the Hydro.

9 Peebles to Cardrona and Innerleithen  10 kms
The path to Cardrona and Innerleithen is now open and is proving popular. The route includes a link to the Glentress Mountain Biking Centre.

a Talla Reservoir to Crook Inn 4.5 kms
The St. Mary’s Loch road to Tweedsmuir village is suitable for all users and so the railway route does not really need to be picked up till near the Tweed aqueduct bridge for the final 2.0km run to Crook Inn. Alternatively a new route to the west of the main road may be possible.

b Crook Inn and Kingledores 2.9 kms
This attractive section of the railway can be seen as a local resource for the Crook Inn Enterprise, as indeed is the section from Talla Reservoir.

c Mossfennan section 2.8 kms
Over some of this length the railway formation is squeezed tightly between the road and the river making it an even more visible attractive diversion away from the traffic. But at its northern end where the railway moves out into open fields it would be better to move to the farm boundary so as to minimise interference with farming operations. Alternatively follow the farm road east of the river from Patervan to Stanhope and Drumelzier.

d Drumelzier section 3.1 kms
After a glorious length near the remote riverside the proposed route rejoins the estate boundary for its climb up to the steep bank above the Drumelzier section of the river.

e Rachan Farm section 1.0 kms
This completes the Talla Reservoir route to the minor roads after a ramped crossing up to and down from the main road where the railway bridge is lost.
A selection of photographs along the route showing its present condition

Lyne to Peebles section
Notes to accompany Map 1 (following page)

1. Existing minor road for a route around the Station House and other gardens on the railway.

2. Maintain these steps as the Lyne Viaduct and first part of the railway route will be for pedestrians only.

3. A link along the field edge will keep the general public well away from Lyne residences.

4. Cut an evenly graded path through the woodland plantation to connect with the railway. Some trees will need thinning and felling.

5. Link to Toll House.

6. Toll House to be used as a possible Tea Room with the open space below the building used as a sitting out area. This is one example of potential tourist development in the area as a consequence of opening this popular path.

7. The existing railway path curves away down the Tweed Valley. It will be important to keep down at least some of the vegetation on the south side of the path so as to open up these views. There will be the opportunity of seats* at some particularly striking viewpoints. The remaining railway ballast can be graded out to make the basis of a good stone path 1.5m wide as shown in the sketch. The first section is for walking only, linking to existing steps.

8. This agricultural crossing should be retained in case it is required in the future.

9. This hillside could be further planted to form a varied woodland backdrop and to screen the road traffic and its noise above.

10. A seat* at this point could be arranged to have a particularly extensive view over the River Tweed with the island in the foreground.

*Note - seats should be simple logs or rocks.
Upper Tweed Railways Paths Project
Lyne Station to Peebles section Map 1 of 5
See notes 1 to 10 on previous page

Typical cross section on railway path

1. Finished surface in stone dust, 1.5m wide
2. Base stone shaped and compacted
3. Remaining railway ballast and old formation
4. Plant avenue trees if required
5. Repair existing fences or renew as necessary
6. Seed verges smooth for possible horse use
7. Plant hedging and wild flowers as required

Sketch of path through plantation (4)

Clear a way through the plantation approximately 6m wide

Sketch showing path along edge of wood (3)

Remove existing fence to open up woodlands
New field fence

Note alternatively the path could be built within the edge of the wood and the fence retained
Upper Tweed Railways Paths Project
Lyne Station to Peebles section Map 2 of 5

1. In this area the Estate may require a certain amount of planting to screen off the path from the Barns House across the river, or the path could be dropped below the level of the embankment for 150m or so.

2. This Edston Farm accommodation crossing is already well equipped with gates, including a wicket gate suitable for cyclists, those using wheelchairs and equestrians should they come to use the route. It would be worth renewing the wicket gates to give good self closing units and there might be merit in adding narrow cattle grids to allow an easy passage for cyclists. It would also be useful to concrete the actual farm crossing so as to ensure dry use in all weathers.

3. The railway path continues with good views. There is space along the north side fence to plant a line of beech trees, or similar with a view to creating an avenue along this section.

4. There is a slightly complex arrangement here with the path going straight on to end in steps fenced off from a rough ramp down to Manor Valley Road. It would be better to build a good evenly graded ramp to give access to all. These steps can be removed once the proposed bridge is in place.

5. A new footbridge would need to have a clearance from the road of at least 5.5m. This would require the raising of the abutments by nearly 1.2m as shown in the sketch and 1:20 approach ramps built up from earthworks. The bridge itself need not be too wide; 1.5m will be sufficient, as it is only short (8m) and the visibility is good. This will mean that it can be positioned as far towards the river as possible to take advantage of the road dropping lower. The parapet could mimic the viaduct railings. It could be designed to display the arms of the Wemyss and March Estate as it could be seen as an entrance gateway to the Estate.

6. The existing entrance to the north of the road needs to be levelled with the road. There is no need for a gate as there is no livestock along the line, but the entrance should direct horses via the Manor Valley Road rather than on this route via the Neidpath Tunnel.
Upper Tweed Railways Paths Project
Lyne Station to Peebles section
Details at Manor Valley Road Bridge

View of abutment showing new footbridge set at 5.5m above road level

- Existing masonry plinth to remain
- Steel truss bridge 1.5m wide
- New concrete plinth cast on existing abutment
- Existing masonry wall

Section through path 3m back from bridge

- Sides of path supported by gabions or masonry wall: the ramp drops back to railway level after 30 metres
- Remaining ballast cleared of vegetation and then blended with small stone
- Existing railway embankment
- Remaining ballast cleared of vegetation and then blended with small stone

View looking along path, showing road level

Side view of abutment: looking along road

Section through path once it has rejoined the railway embankment

- Existing masonry plinth to remain
- Steel truss bridge 1.5m wide
- New concrete plinth cast on existing abutment
- Existing masonry wall

View of existing bridge

Looking across at Manor Valley Road abutment
Upper Tweed Railways Paths Project
Lyne Station to Peebles section Map 3 of 5

1. This ramp is a little steep.
2. An existing footpath runs along outside the railway boundary and down to the river bank and viaduct.
3. The small quarry here is an interesting feature and could be cleared of trees to make it more striking. The knoll on the riverside is a good opportunity for a seat off the line of the path.
4. There are some lengths of retaining wall on this section which would benefit of being cleared of tree growth which will otherwise eventually cause damage to the structure.
5. Possible location of Estate access track up to the main road.
6. Maintain these steps to the riverside walk. They give a good close-up view of the detailed construction of the viaduct and an appreciation of the workmanship which went into it.
7. The structure of Neidpath Viaduct looks to be in good shape. There is a small amount of damage to individual stones, and some water seepage, but none of these prejudices the security of the structure. If a Heritage grant can be found it would be useful to carry out this largely cosmetic repair work.
8. The parapet is the same as the Lyne Viaduct. Here there is an option of lowering the railway ballast by 0.5m to give a better parapet height. This would be an appropriate solution provided the Estate does not require using the viaduct for timber haulage in the future.
9. Start of the riverside path from this end of the viaduct. A popular path also goes away south from the railway.
10. The early photographs show this whole area cleared of trees. It would certainly be wise to open up the area as much as possible to let light into the portal of the tunnel. Also fell all trees growing within 5m of the walls so as to prevent them causing damage to the structure. Poison the stumps to prevent regrowth.
11. The tunnel portal has a low wall constructed as a parapet. This is an inadequate protection against the fairly remote chance of somebody clambering around in this area. Further protection could be added by way of three stainless steel cables stretched tight across the area. The stanchions required for these could be finished off with finials relating to the Estate.
12. This deep ditch is designed to take run-off away from percolating through to the tunnel below. However, unless it is clearly draining away it may be exacerbating the problem instead, in that it could be collecting the water just where it is least needed. This could be resolved by cleaning out the ditch, levelling any hollows, then lining the ditch with a butyl rubber sheet and protecting this with a thin layer of concrete as shown in the sketch.

Neidpath Viaduct and Tunnel Section
This is an undoubted highlight of the whole route. The viaduct curves across the river on 8 skew masonry arches all set against the backdrop of South Park Wood. The tunnel is 550m long, mostly straight except for a curve at its eastern end. The passage through the tunnel is another world from the two existing riverside walks and would undoubtedly popularise them both as an essential round walk activity for visitors to Peebles.

Concrete channel laid as a screed 75mm thick, with a light reinforcement mesh

Existing lining

Works access track to reach Neidpath Viaduct

90m from end of viaduct

Existing sawmill entrance off main road

West portal of tunnel

Existing entrance off main road 90m from end of viaduct

Neidpath Viaduct and Tunnel Section
Although the Symington, Biggar, Broughton extension to Peebles was not opened until 1st February 1864 there had been a long history of railway proposals through the valley. In 1807 Thomas Telford proposed a 125 mile horse drawn tramway from Glasgow to Berwick and in 1821 Robert Stevenson proposed something similar. In 1836 a Newcastle and Edinburgh line was proposed via Peebles where it would have branched with a route via Biggar to Glasgow. This route would have been 31 miles shorter than the current coastal route via Edinburgh.

Eventually a “cheap” scheme engineered by Thomas Bouch via Eddleston Water opened an Edinburgh and Peebles route in 1852. The railway from the west was promoted by a small independent company, the Symington, Biggar and Broughton, working loosely with the Caledonian Railway, and this was opened in 1864. The connection between the two railways with a bridge across the Tweed was achieved in 1866 when the branch to the North British Railway at Galashiels was opened.

The Caley Line, as it was known, had one important extension when in 1897 the branch from Broughton to Talla works was opened as a contractor railway to build the reservoir there. Although the railway's purpose was over, when the reservoir opened in 1905, there were early efforts to maintain it in private ownership for tourist traffic. These did not come to fruition and the tracks were lifted in 1910, although the Water Company retained ownership of the formation for most of the century which accounts for its remarkable state if completeness today and its potential for a new tourist route, albeit as for ramblers, equestrians and cyclists.

Back on the Peebles Line, the Broughton and Peebles section was finally closed to all traffic in 1954, although Smithfield meat traffic kept the Broughton to Symington section of the Caley Line open until 1966. The Peebles Railway from Penicuik closed in 1962 at the same time as the line to Galashiels.

Both these viaducts still stand and are in everyday use by the Tweed Walkway. The first, Lyne Viaduct had a steel girder over a minor road and three skew sandstone arches all totalling 133 feet in length. The Neidpath Viaduct is a very handsome structure crossing the Tweed on eight ashlar skew arches each of 32.5 feet span. Both viaducts have intricate cast iron parapets and both are in a sound condition.

Neidpath Tunnel was a requirement of Lord Elcho who owned Neidpath Castle and may have been laid out by him. It is 550 metres long and lined with 6,000 tonnes of bricks brought from Millerhill, Dalkeith and Portobello. Despite some water ingress the tunnel is in good shape and sound for its proposed use as a public route, despite its 150 year age.
1. Neidpath Tunnel is 550 metres long. It appears to be in a sound condition over its whole length. Its shape is good, and no bricks have fallen from its arch since it was constructed in 1864.

There is a certain amount of water seeping through the walls of the tunnel and, in one or two places, a steady drip or stream of water. If this latter inconveniences path users it can be dealt with by corrugated sheeting to drain the water away from the path. The wet bricks are only a problem in severe winters when the temperature is low enough to freeze the bricks and slough off their surfaces as has happened over small areas at the east portal where no doubt it is particularly cold.

There are a number of actions which could be taken including;

a) drilling drainage holes so that most of the water in the rocks behind the lining is intercepted
b) refacing the damaged areas perhaps with gunite (sprayed on cement mix) or
c) it may be that the passage of people, together with low level lighting, will provide just sufficient heat to prevent the most damaging freezing happening.

The presence of bats should be checked out although using the tunnel by the public will not really change anything from the present as the ends of the tunnel are wide open already. The recently opened Combe Down Tunnel in Bath has set its lights 3m above path level in order to leave the crown of the tunnel’s arch dark. It is anticipated that bats will benefit from this.

The surface of the path should be finished with a machine laid asphalt surface, and the drainage should be checked to see how it might be arranged although there is no sign of a manhole that can be seen at present. Usually a narrow strip of clean stone is left either side of the sealed surface to enable and seepage water to drain through to the tunnel drainage systems. All in all this tunnel is suitable for public use with little work required.

2. Again clean out and line this ditch.
3. Again protect this portal with additional stainless steel cables to back up the good fence already in place at the top of the slope. Remove the remaining brickwork in the tunnel entrance so as to maximise the light in.
4. Clean out the south side ditch over the length of this cutting.
5. Provide low parapet walls across this burn and check that the concrete slab in place at the moment is satisfactory in the longer term.

There are two riverside paths in this area and it is worth noting the following:

a. For a distance of some 40m the path scrambles along the steep bank. This is a difficult section which must preclude the route to many. So it would be worth putting some effort into making a good path here.

b. Attractive views of the Castle.

c. Well defined link path up the hillside.

d. Popular path cutting back down over the tunnel portal.

e. The riverside path continues on an easy walk.

The final section of the path crosses a reef of rough rocks where some work has been done in the past. This needs to be renewed to make for an easy walk.

g. The path on the north side is mostly easier to use and leads through to Hay Lodge Park to join back to the railway via Fotheringham Bridge. Here the route is taken through to the Town Bridge from where it is easy to reach the Town Centre. A link via the Town Suspension Bridge is also shown, as is the Hay Lodge path on the north side of the river which is a useful route for pedestrians.

6. This footbridge is demolished and a steep stone ramp has been put in its place linking the Fotheringham Bridge with the small industrial estate off South Parks. Although this offers a potential way through to Peebles, we consider it better to remain on the railway formation.

7. Fotheringham Bridge has ramped access points which are usable by cyclists.

8. The riverside path is narrow and is not suitable for shared use.

8a. Similarly the path on the north side is best left for walkers as at present.

8b. It might be possible to cycle through the park to reach the main road but this would result in mixing with the traffic to reach the centre of town.

8c. The steep track up through the small industrial estate provides a further option which avoids the former slaughterhouse area. If this route were to be adopted then some earthworks would be required to ease the gradients, particularly for wheelchair access.
**Upper Tweed Railways Paths Project**

**Lyne Station to Peebles section**

Map 4 of 5

---

**Selection of tunnel lighting solutions**

1. **Fluorescent lighting giving broad bands**
2. **LED strips are more closely spaced resulting in an even lighting**
3. **LED floor units result in an attractive effect**
4. **Often LED units are controlled by movement detectors switched on as the traveller passes through. This level of sophistication is probably not warranted on the relatively short tunnels here**

---

**KEY**

- Existing fence or erected by project
- Path
- Gate across path
- Estate access gate
- Bridge under path
- Accommodation crossing

---

**Example of balustrade work around the portal of Devonshire Tunnel in Bath**

**Lighting in Combe Down Tunnel, Bath**

---

**Tunnel east entrance**

**Tunnel east portal**

**Fotheringham bridge**
1. This wide area has some development potential and through here the path may have to be interim in nature. The stone has been lost from the track bed and this section is difficult to use at present in wet weather.

2. Follow these residential roads.

3. These roads are not heavily trafficked.

4. Rebuild the narrow footways here to give a good approach to the old railway bridge, and to the road bridge over the river.

5. Continue along this bank top.

6. The suspension bridge is suitable for shared use.
**Upper Tweed Railways Paths Project**

**Technical details and examples**

**Introduction**

At the heart of this Upper Tweed Railway Path Project we have to make the details of the scheme work for the farmers and landowners along the route. The surfacing must be suitable particularly where the track is to be used by the landowner for his everyday purposes or where the path is likely to flood, access and gates must accommodate all their varying needs and fencing must deal with all livestock issues.

These pages show examples of paths we have built and gating arrangements used. There will be other variations required but we hope that these three pages give a good idea about what we would hope to agree with the landowners along these routes.

The first page covers path finishes with examples here in Scotland, whilst the second two look at gating and fencing.

**Path details**

The examples shown here show the different finishes one can adopt. Often where equestrians are also to be accommodated a mown grass verge is allowed for so that horses can walk beside the surface and avoid the damage they would do to a sealed path. Where flooding is to be expected it is best to have a heavy bitmac surface capable of resisting any erosion, although even this depends upon the velocity with which the flood is moving.
The diagrams shown here are set against locations where they might be needed.

### Typical field edge path

- **Gate repositioned in field to allow path corridor past**
- **Farm drive open at all times, or public road**
- **Typical railway path**

#### Gate options (photo 7)

- **a** Normal; open for path users
- **b** Close off path for stock movement
- **c** Open both ways for silage etc over a number of days

- **A 1.5m gate is suitable for small plant access. If larger is required this will be by negotiation with the landowner.**

- **5 Field access gate to be provided for - on road to Symington**

- **6 Field boundary gate to be repositioned if path was to run along hedge boundary - the road to Symington**

- **7 Example of farm crossing with gates closing off path whilst stock are moved - Meldon to Lydford on the edge of Dartmoor**

- **8 Example of typical accommodation bridge requiring a new span to separate the public from livestock movements - near Crook Inn**

- **For livestock movement it may be necessary to close off the path for a short while leaving the public to watch the livestock move from field to field (b in diagram above left). This may be a direct crossing as shown in the photograph, or the animals may need to move along a section of the path. Either way the gates can be arranged to close off the path. At other times, for example at silage making, the gates need to be swung back to allow for farm vehicle to pass without hindrance and the public also to move through. (c in diagram above left).**
In some instances the farmer will use the path for access and here will need 4.5m gates plus 2.5m path in between.

Farmer may need access from the field down the path, so gate is required.

Fencing could be at top or bottom of slope.

Fencing away from path gives more room and less risk of casual vandalism.

Farmer requires use of track.

Fencing at bottom may interfere with drainage.

Fencing could be at top or bottom of slope.

Access via length of path for livestock.

Fencing of cuttings.

Fencing of embankments.

9 Railway Track required for farm use at times - approaching Mossfennan.

10 Typical railway cutting with original stone boundary walls at the top of the cutting - approaching Crook Inn.

11 Typical embankment with the railway fencing at the bottom of the earthworks - looking north from Crook Inn.

Upper Tweed Railways Paths Project  The diagrams shown here are set against locations where they might be needed.