Dean Forest Greenway from Parkend to Lydney

Planning Application details

Parkhill Inclosure

West Dean Parish Council together with Greenways & Cycleroutes Limited

November 2021

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Report prepared for West Dean Parish and Lydney Town Councils with the Dean Forest Railway and Forestry England, by Greenways and Cycleroutes in January 2020

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Proposals for a Dean Forest Greenway from Parkend to Lydney

West Dean Parish Council together with Greenways and Cycleroutes Limited November 2021

1 Outline of proposal with Location Plan

The Dean Forest Greenway Project runs for 5.8kms from its start near the Fountain Inn at Parkend to its end on the Co-Op path in Lydney.

The Greenway will be built to the same standard as the family trail at Beechenhurst and will be designed to provide a safe and attractive route for pedestrians and cyclists connecting Lydney to the heart of the Forest of Dean.

View of family trail near Beechenhurst

The route will be traffi c free over its whole length, save for 4 road crossings, and will be designed with easy gradients to be suitable for wheelchair users. At Norchard a bridge over the railway will provide a link from the Greenway to the station.

The project is being promoted by West Dean Parish Council and is designed and managed by Greenways and Cycleroutes who opened the Chepstow and Tintern Wye Valley Greenway in April 2021. This has proved to be immensely popular with the public.

Location plan of the Greenway

2 Purpose and ambition of the proposed Dean Forest Greenway

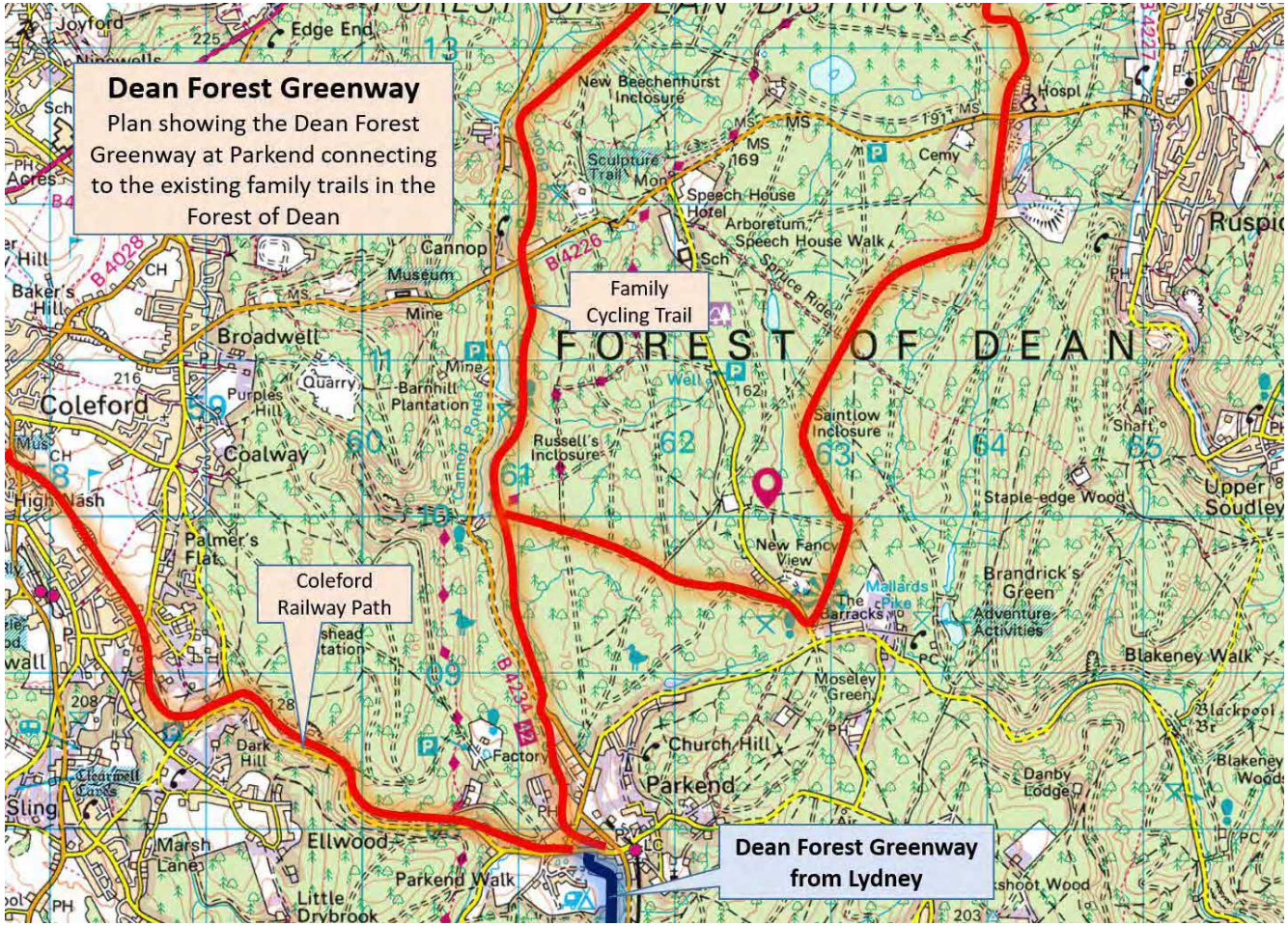
This project has been developed in response to strong local demand for making a safe way from Lydney to Parkend bypassing the notoriously unpleasant Forest Road.

Picture showing cyclist using Forest Road

Our ambition is to link Lydney Station and town to the heart of the Forest with such an attractive walking and cycling route that this becomes the normal way of travelling between the Forest and Lydney. This will allow the public to travel without a car, to travel for pleasure, fi tness and health, and to appreciate the forest and its seasons more closely.

The project incorporates tree planting, hedges and copses to create the illusion if not the reality, that the Forest has reached out to Lydney so that the town becomes known as the Gateway to the Forest of Dean.

At the same time as being an attraction for visitors and tourists, the route will be suffi ciently direct, and evenly graded, for it to act as an attractive everyday route to school, the shops and for business.



Map showing existing public paths connecting with the Greenway

3 Description of the overall route with plan

The route proposed is the end outcome of a number of surveys over the years, and of detailed discussion with landowners without whose support high quality traffi c free routes of this kind would be impossible.

The route starts from the road a little to the west of the Fountain Inn at Parkend. From here a gravel track along the old railway to Coleford leads to both the Coleford Railway Path and the Family Trails past Beechenhurst.

The fi rst section of the Greenway runs through the Parkhill Inclosure partly under mature trees, partly along the edge of recently felled parcels (20/21) and partly on existing forest tracks. There will be no requirement to fell any further mature trees over these sections, and the path will be constructed on the appropriate cellular rootguard material when passing under the canopy of trees.

View showing open nature of Parkhill Inclosure

This whole section is set well to the west of the main road, and west of the Brook, so that traffi c noise is scarcely audible.

Emerging from the Forest, the path will cross over the main road and ramp up to join the 'Coffi n' path alongside the railway all the way through to Whitecroft Station. The details of the road crossings are hugely important so that the route is attractive ad suitable for all users. At the Parkhill Inclosure we suggest repositioning the 30mph entry so as to allow the crossing to be just inside this gateway so as to emphasise the signifi cance of the crossing here. In addition we propose advisory cycle lanes on the main road which will be suitable for most cyclists.

Table of crossings - detailed in Section 7

1 Fountain Inn - red highlight with give way markings

2 Parkhill - relocate 30mph gateway, red highlight

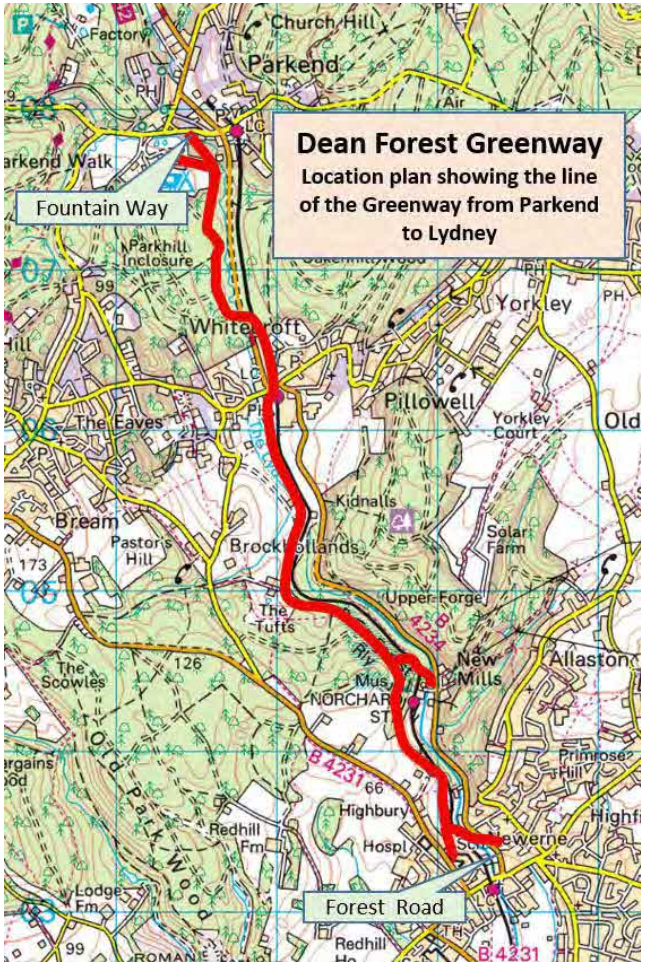
3 Parkhill level crossing - red highlight

4 Light Fantastic - toucan lights

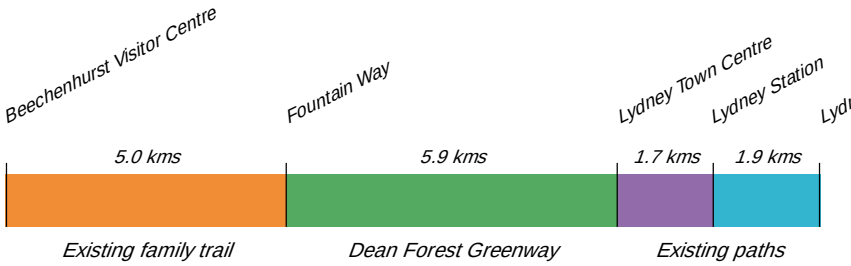
At the Miner's Arms the path will follow Turnout Farm access road for a little way before joining the Dean Forest Railway land and running along the boundary of this as far as Norchard Wood. There is one deviation at the bridge over the Cannop Brook where a new bridge and fi eld edge path is proposed in order to bypass a constricted section of the railway land.

At Norchard Wood we have the only reverse climb of any signifi cance where we will need to ramp up almost 15m to reach the woodland levels. After a short section through the beechwoods the route follows a colliery track and then the existing forest road for the whole of the remainder of the way through Norchard Wood. Part way along we propose a new bridge over the railway to make a link to Norchard Station. From Norchard Wood it is downhill all the way to Lydney. A new path needs to be cut across the open hillside and a way carved through the old quarry workings below the Redding. The Greenway will cross the Green Lane up the hill to the Bream Road and make for a good connection to the Lydney C of E Primary School. The main Greenway to the town centre continues along the fi eld edge, and passes down under the Dean Forest Railway in a new underpass to bridge the Cut. After following this for a short section we bridge the Cut twice more, cross the main road and fi nally bridge the River Lyd to join the existing paths to the car parks, the Co-op and the town centre.

From here recently opened paths lead through to Lydney Station, Lydney Harbour and the open views over the Severn Estuary.



Location plan of the Greenway



Route diagram with distances from Beechenhurst to Lydney Harbour showing the Dean Forest Greenway making the essential connection

4 Detailed route proposals with cross sections and photographs to illustrate the design of the route

The bulk of this document shows the maps and details of the proposed Greenway route. Given its length and the varying terrain along the way it is inevitable that there are numerous confi gurations and arrangements which are shown in these details.

Throughout we are working to show a 3m wide path, fi nished in limestone dust as in the Family Trail at Beechenhurst and arranged so as to provide a smooth, hard and dry surface throughout the year.

This is similar to the Wye Valley Greenway opened in April 2021.

View of Wye Valley Greenway

View of marker posts on Wye Valley Path

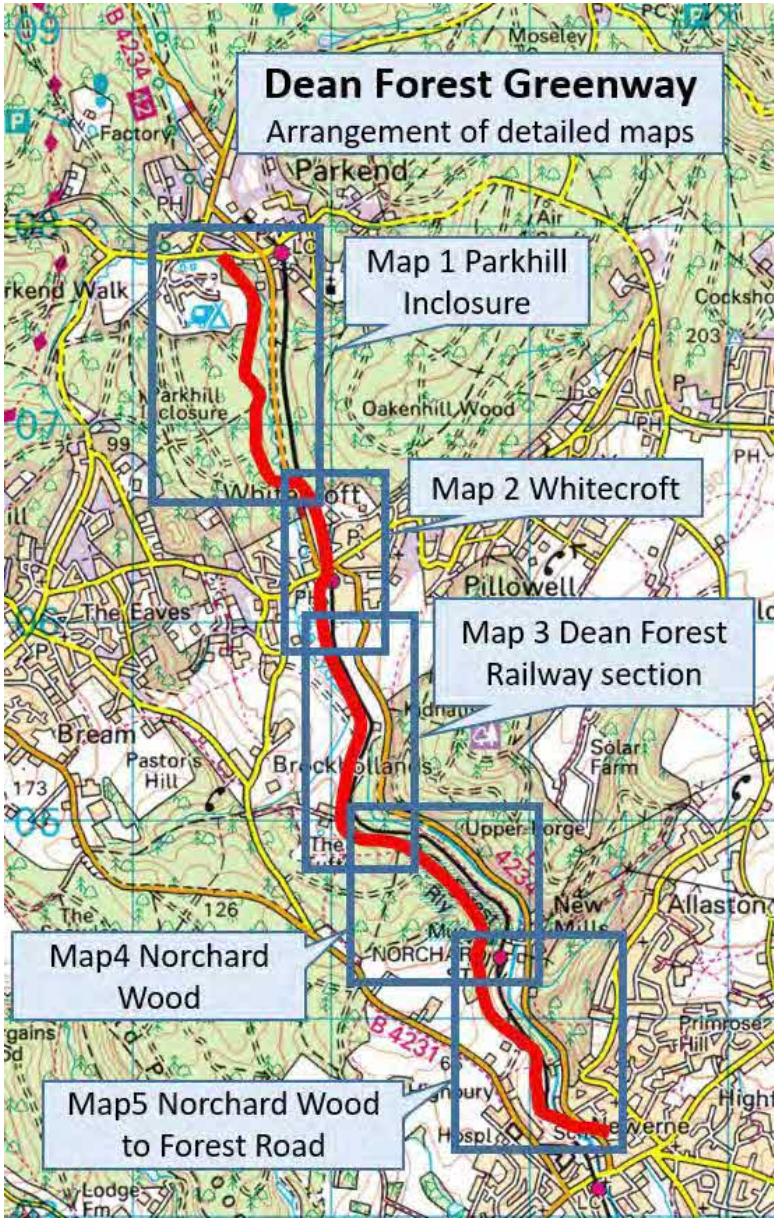


Diagram showing arrangement of maps

Technical Details along the Dean Forest Greenway Route

This section sets out to describe all the details of this Greenway Project through a series of plans, photographs and sketches. The objective is to construct a sound, all-weather path for walkers and cyclists to a similar standard to the existing family trail at Beechenhurst.

This path will be suitable for use throughout the year. It will not be lit. Due to a number of narrow sections, and its close proximity to the Steam Railway, it has not been possible to include provisions for equestrians.

Map 1: Parkhill Inclosure

Introduction

This fi rst section of the Greenway runs through Parkhill Inclosure. Our aim has been to set the path well to the west of the main road so that the public can enjoy a tranquil journey largely out of the sound of traffi c. The Greenway links up sections of existing forest road with new links so as to make a fairly direct route. Some sections of new path will thread through existing stands of trees, whilst others keep to the boundaries of clearance work being carried out in 2020/21/22.

a Fountain Way start

b New bridge over brook

c Greenway to run through areas of mature woodland

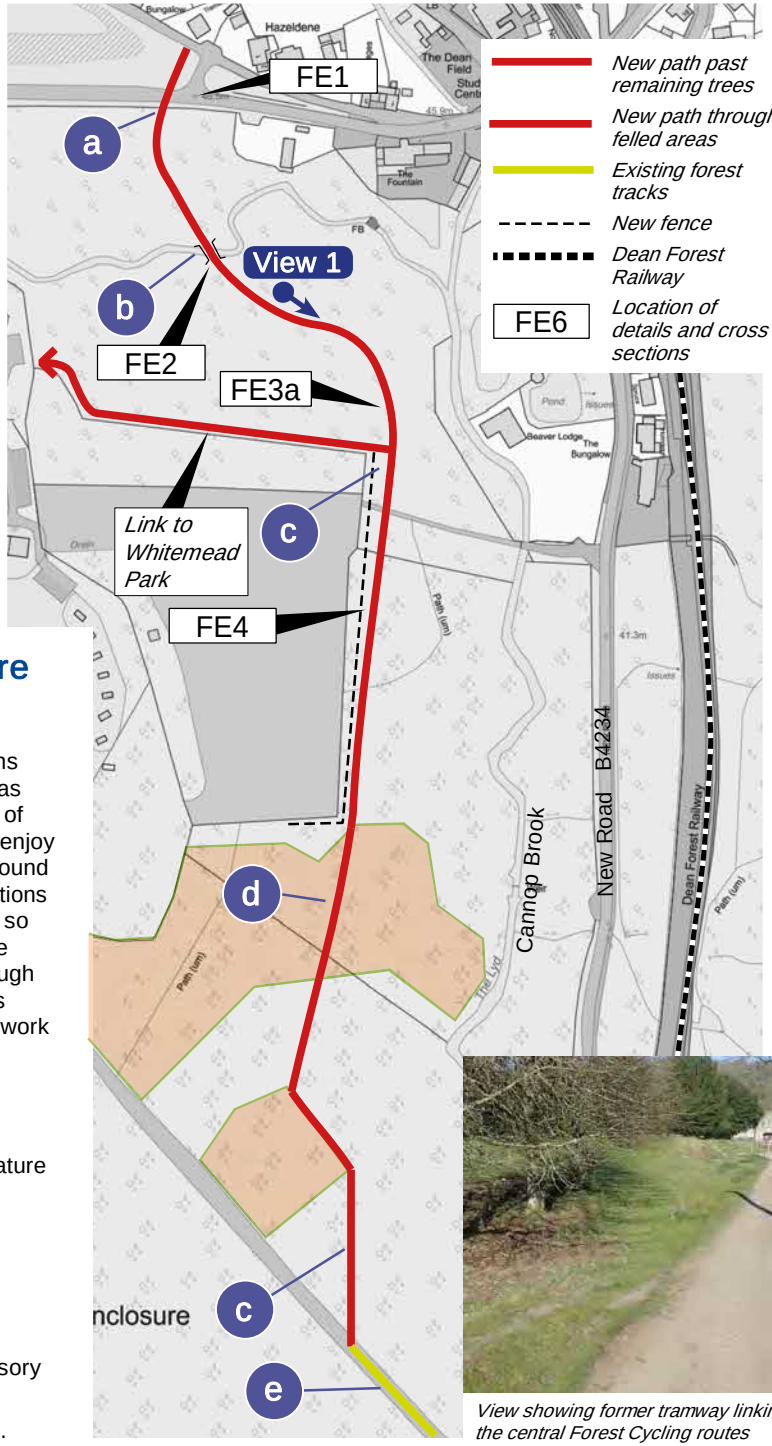
d Greenway past areas being cleared 2020/21

e Existing forest road

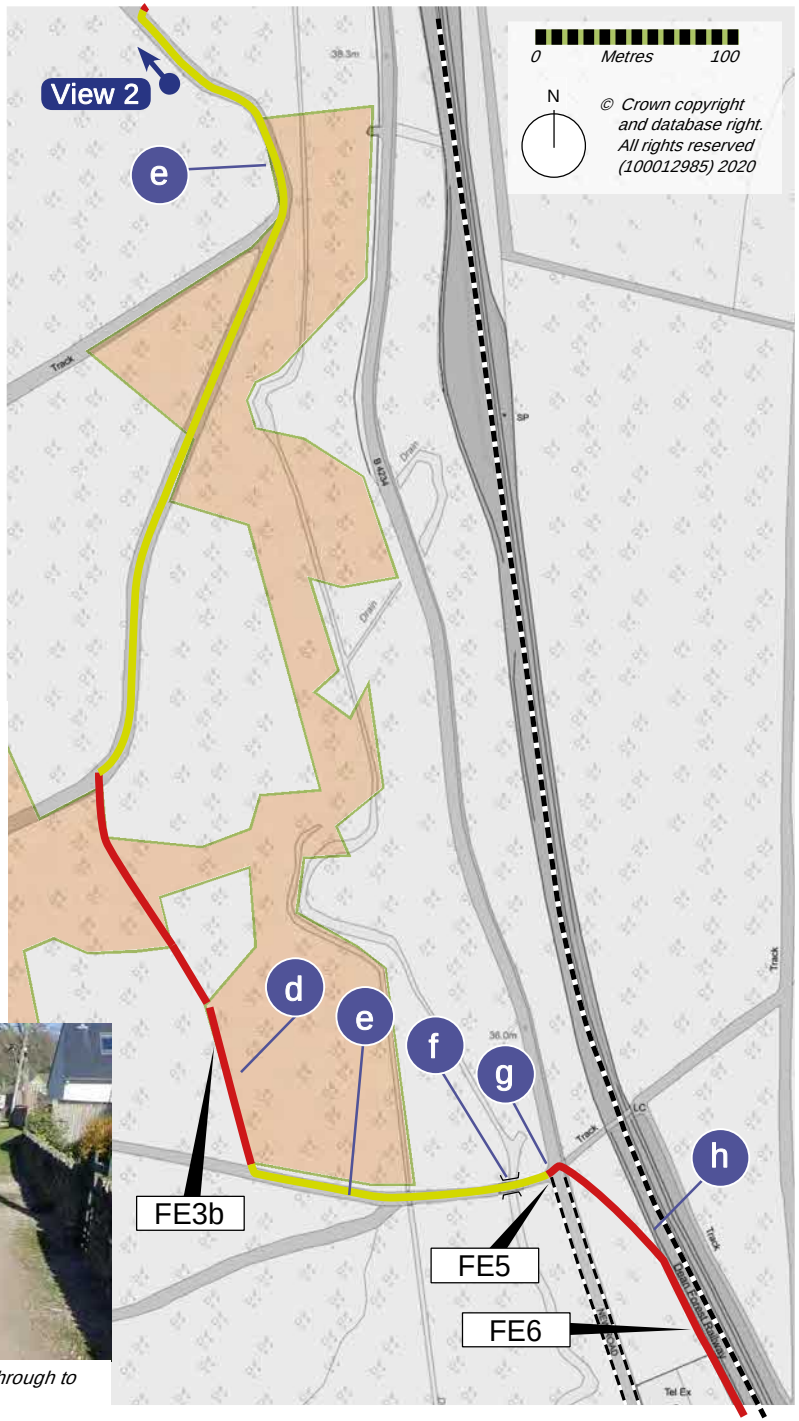
f Existing bridge over Cannop Brook

g New Road crossing and start of advisory cycle lane to Whitecroft

h Existing path along railway boundary.



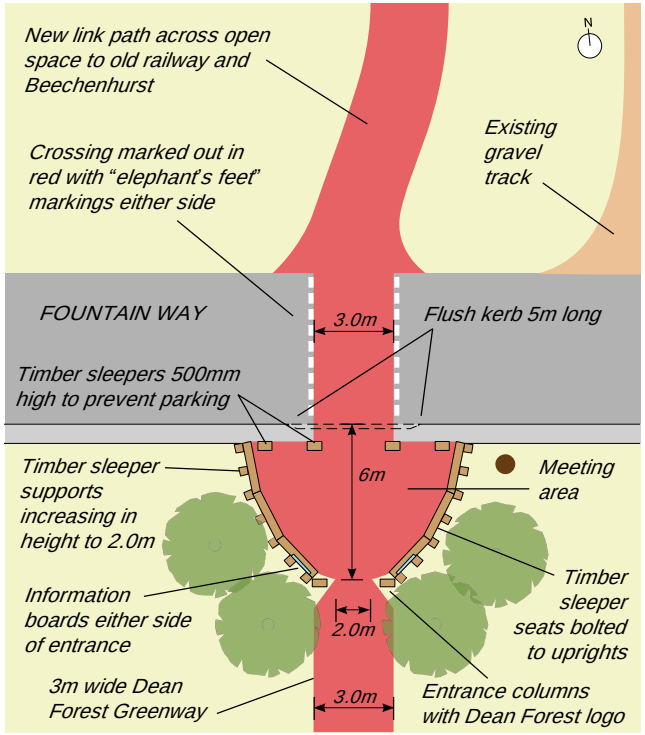
View showing former tramway linking through to the central Forest Cycling routes



Map 1: Parkhill Inclosure

FE1: Start of Greenway at Parkend with meeting place and information

This is an important detail because this may be where friends and groups assemble, before they walk or cycle off. For those coming from Lydney they will need clear directions to refreshments, to Beechenhurst and to Coleford. For this reason, the sketch proposes a small threshold area with some seats, information about the whole route to Lydney and a map of the cycling routes in the Forest, all with clear directions in the style used throughout the Forest trails.

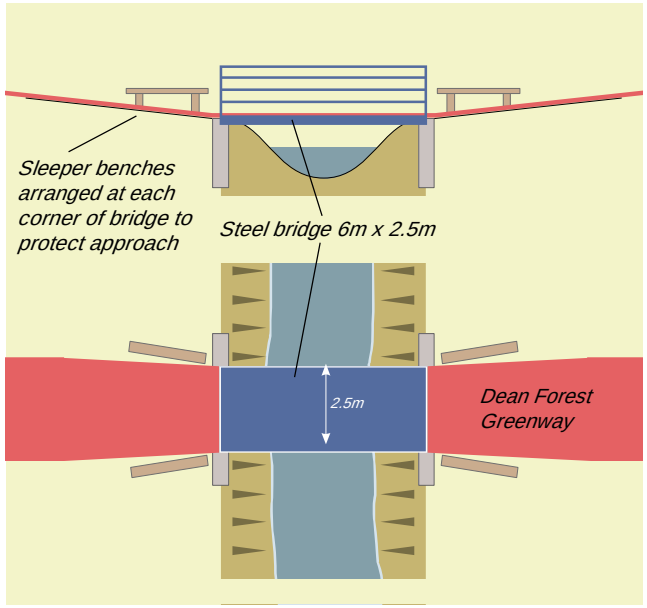


FE1: Sketch showing Fountain Way entrance arrangement based around reused railway sleepers or similar

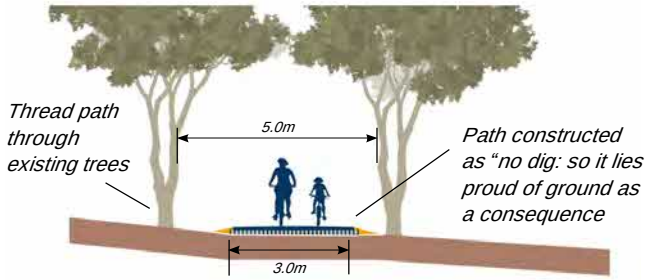
FE2: Bridge over Brook

The approaches to this bridge will be built up as low embankments so that the path is well clear of any fl oods. The bridge is prefabricated and can be assembled by hand if required as Greenways did on its recent Waddesdon Greenway project.

Picture of Fleet Marston Bridge. Here the approaches to the bridge itself were designed as seats to take advantage of this existing attractive setting.



FE3a Sketch showing the construction details for the path throughout this project



The fi rst section of the route will run past mature trees and here the path will be constructed on 'tree cell', a cellular reinforcement designed to allow water and air to tree roots.

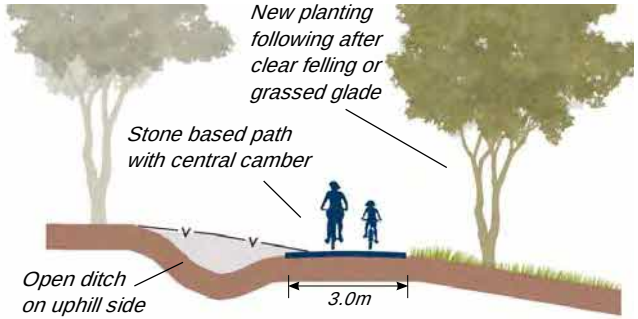
Picture showing construction through woodlands using "tree cell": view of completed path below. Ashton Park Estate, Bristol, February 2020

Map 1: Parkhill Inclosure

View 1 *showing existing mature woodlands on line of Greenway*

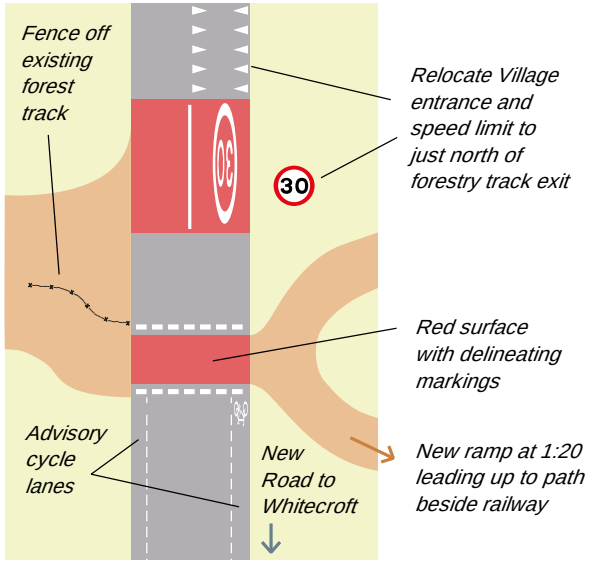
Where the route is running through open areas or sections of the forest which have been felled then a simpler arrangement can be used.

FE3b - path as minor forest road



View 2 *showing existing forest track*

FE5 Crossing New Road
This sketch is also GH1 Gloucestershire Highways



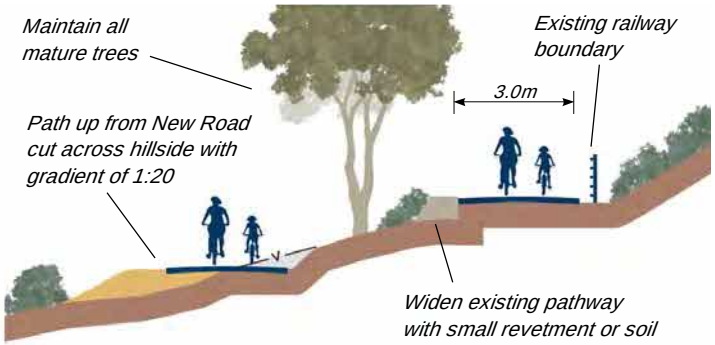
This sketch shows the 30mph village entrance signage and markings being relocated from by the Telecom Exchange to this point so that vehicle speeds are reduced to allow for a safer crossing of the road at this point.

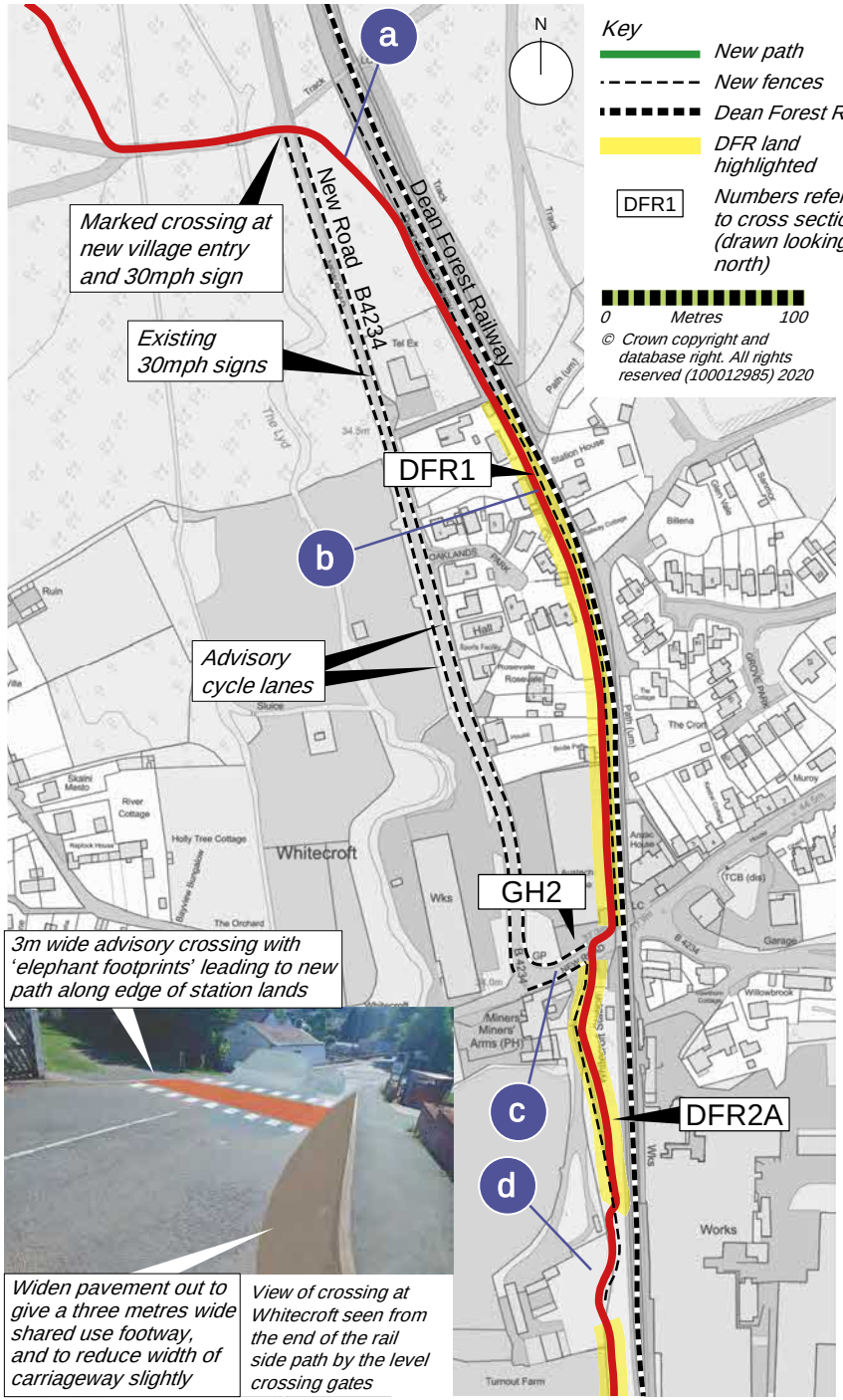
The existing space used by casual car parking would be narrowed off here so that vehicles do not block up the access way. Note we expect many cyclists to continue through Whitecroft via the road rather than following the path as this will be quicker. To encourage this, advisory cycle lane markings will be run down the road.

View of existing 30mph arrangement on approach to Whitecroft

FE6 Sketch showing path alongside railway fence

The existing public footpath “Coffi n Path” can provide the basis for the Greenway which will only be 2.5m wide over this section.





Map 2: Whitecroft

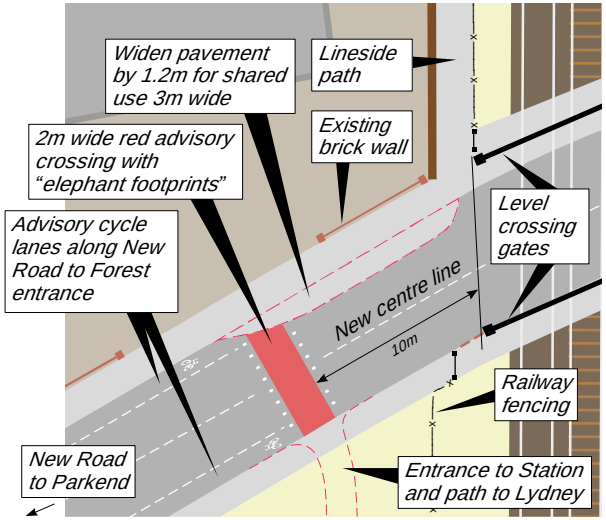
This section of the Greenway uses the existing path running beside the railway. Although this is rather narrow (2m plus) it will be suitable for family groups and inexperienced cyclists. However we think that many more confi dent or regular cyclists will use the road over this section. Once over the road the project will follow the edge of the DFR land and work with Turnout Farm to bypass the constricted area of railway lands.

a Path beside railway on Forestry land

b Path alongside railway –iron railings to be repaired and refurbished

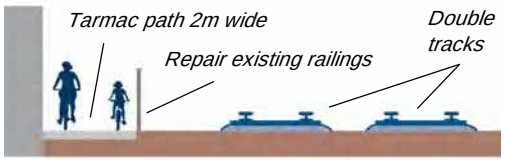
c Crossing of the main road

d Turnout Farm land at constricted location.



DFR1 Railside Path

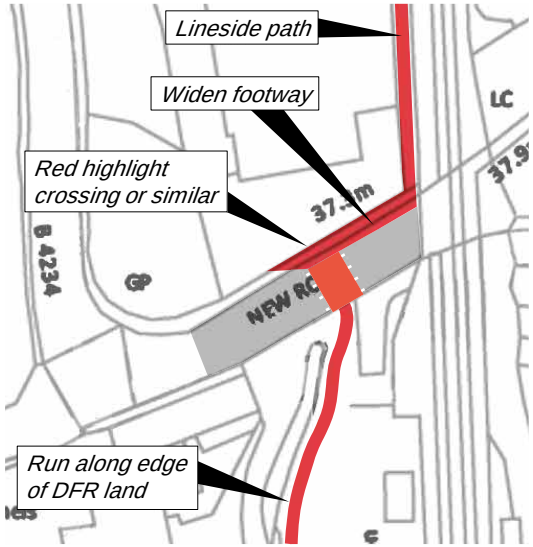
The existing iron railings are near the end of their life –posts are missing, the footrail is rotten and a 30-metre-long section is gone altogether.
The project will contribute towards their restoration or replacement.



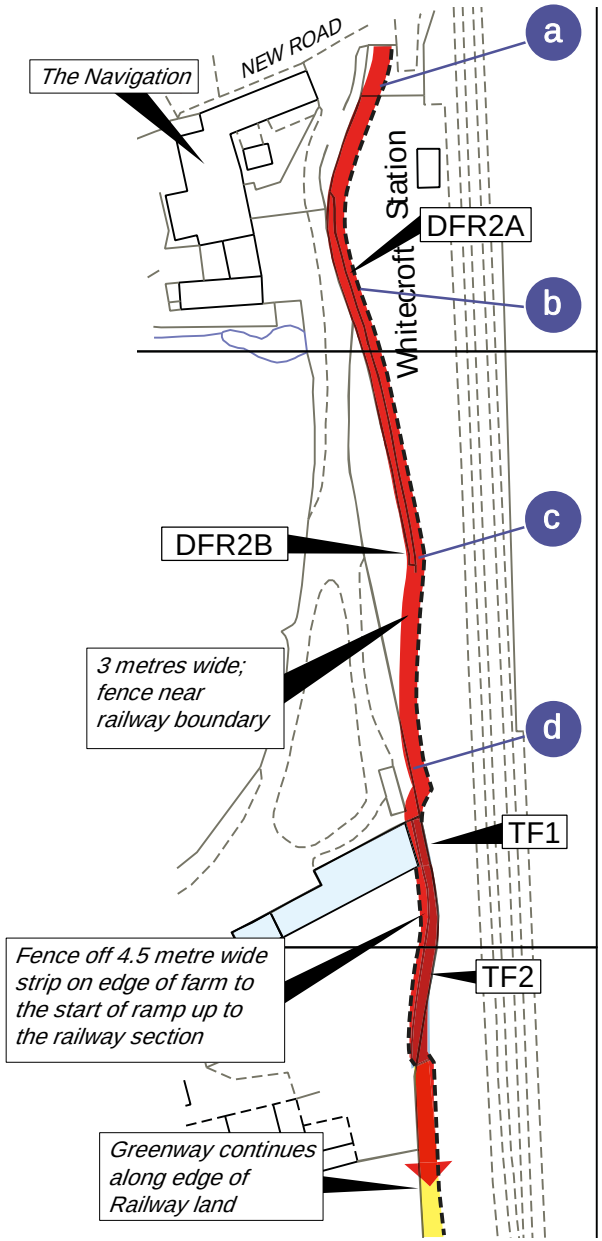
View of existing path

GH2 New road crossing to be designed by Gloucestershire Highways

Here the way will be marked out as an advisory passage. Traffi c speeds are low as we are within the 30mph area and the adjacent level crossing gates slow vehicles down. The footway on the south side can readily be widened to 3m for shared use.



Map 2: Whitecroft –details at Turnout Farm to bypass restricted section of railway land



a Incorporate Greenway entrance into station gate arrangement, or set path to the west side of the existing gates.

b Path to run close to railway boundary as shown in the sketch. This section of the path could be designed as a works access road for DFR in which case the fence should be set a little further back. Once the station developments are complete DFR may wish to replace this fence.

c At the south end of the existing retaining wall construct a new revetment to keep path and fence to line agreed with DFR.

View at Turnout Farm with retaining wall

d Leave DFR land beside copper beech tree. At present the width of the Greenway will be restricted to 1.8m at pinch points past Turnout Farm, but if the existing buildings are demolished then we have asked for a 3m width which would allow access for DFR through to their land beyond the pinch point.

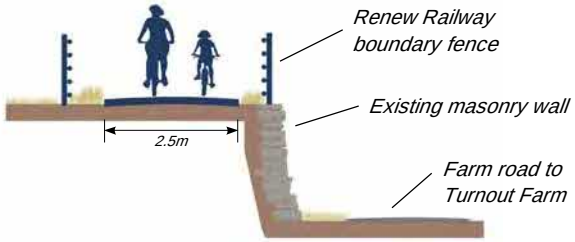
TF1 Past the old farmhouse

Here the space is narrow for a very short distance, but this route enables the Greenway to avoid the adjacent area of railway land which is congested with services including gas mains.

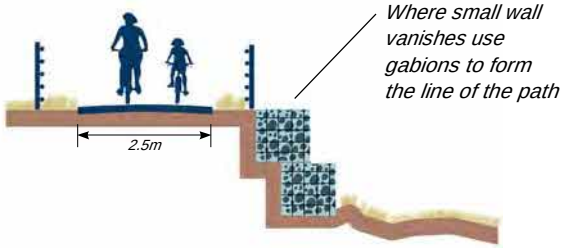
TF2 The last section on Turnout Farm land

This last section on Turnout Farm land will be fenced off from the farmyard and will run as far as the boundary hedge leading to the railway land.

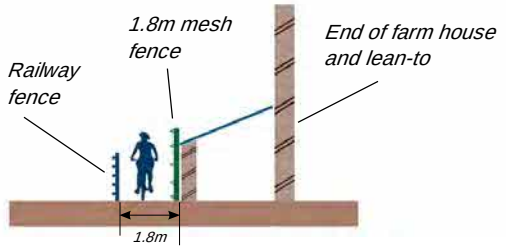
DFR2A: View towards Turnout Farm showing retaining wall in good condition



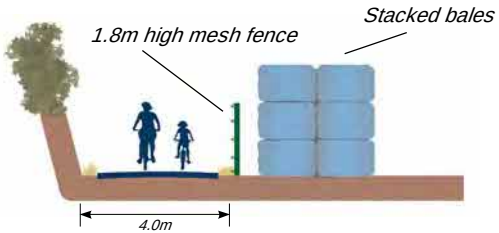
DFR2B: View towards Turnout Farm showing new path supported by gabions



TF1



TF2



Map 3: Dean Forest Railway Land

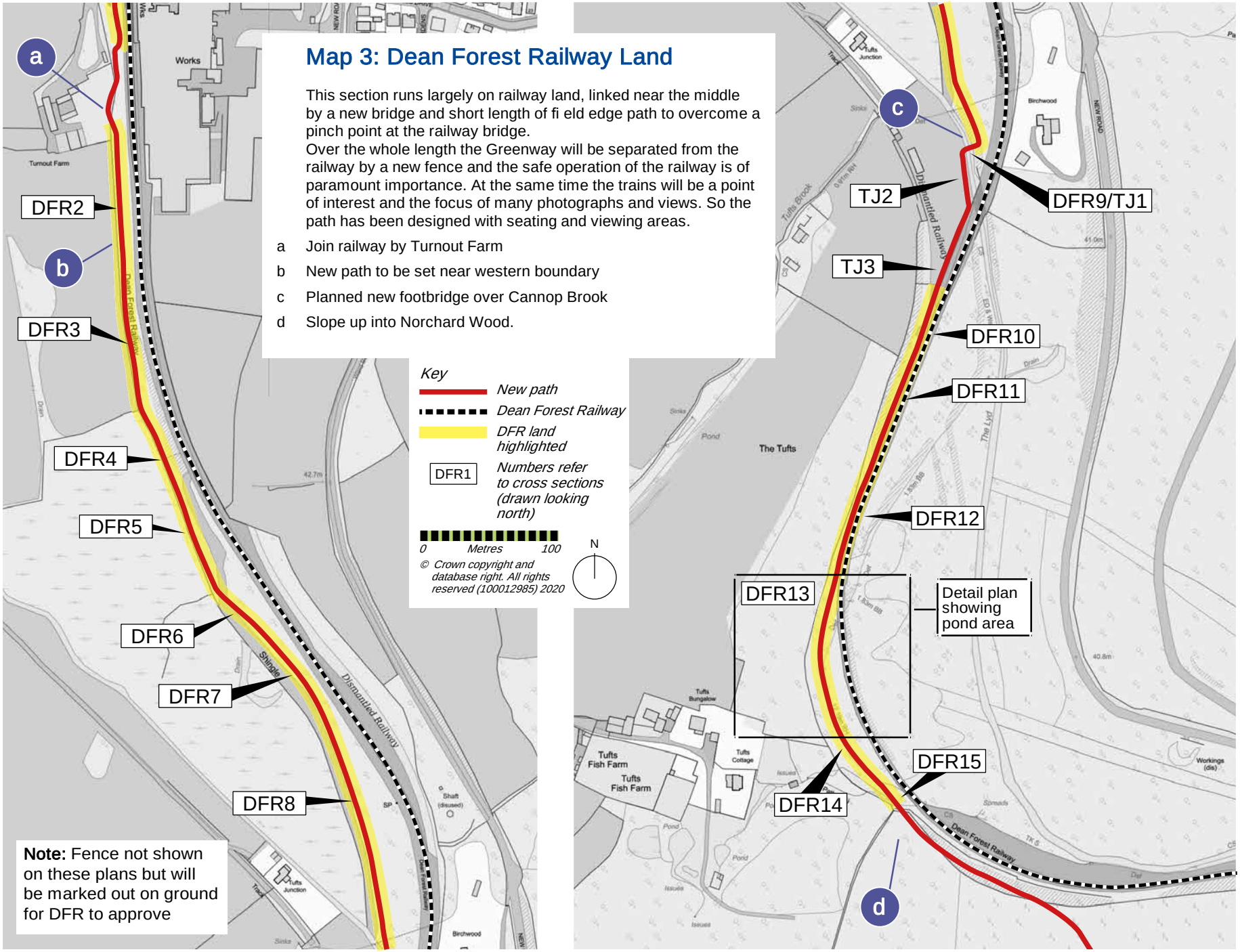
This section runs largely on railway land, linked near the middle by a new bridge and short length of fi eld edge path to overcome a pinch point at the railway bridge.
Over the whole length the Greenway will be separated from the railway by a new fence and the safe operation of the railway is of paramount importance. At the same time the trains will be a point of interest and the focus of many photographs and views. So the path has been designed with seating and viewing areas.

a Join railway by Turnout Farm

b New path to be set near western boundary

c Planned new footbridge over Cannop Brook

d Slope up into Norchard Wood.

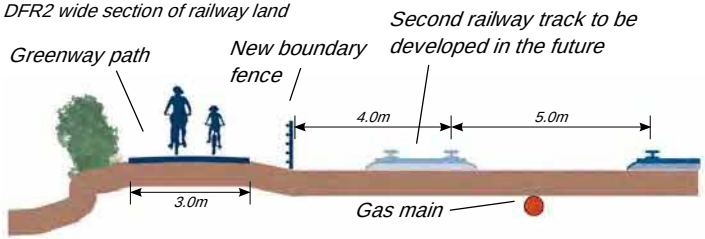


Note: Fence not shown on these plans but will be marked out on ground for DFR to approve

Map 3: Dean Forest Railway Land

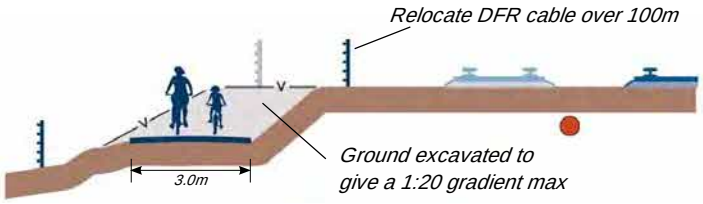
DFR2 To start with the Greenway can run on the wide margin of the railway lands, set well back from the track. The whole way will be fenced off from the railway with gates provided for farm crossings and rights of way.

DFR2 wide section of railway land



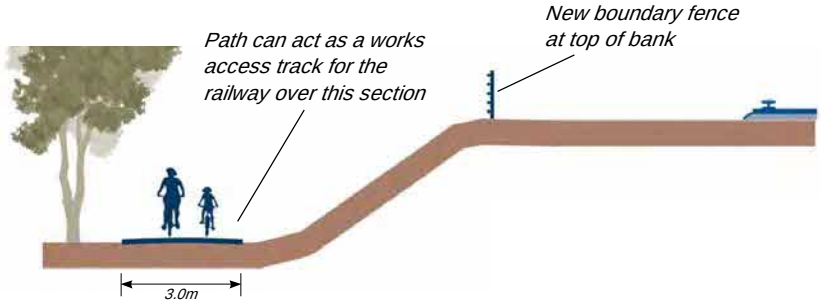
DFR3 As the level railway land tapers in, so the path will drop away by sloping down the side of the old fi ll material to run close to the boundary fence. The gradient will not exceed 1:20. The path will end up at a lower level on railway land adjacent to its boundary wall.

DFR3 path drops away down side of this bank



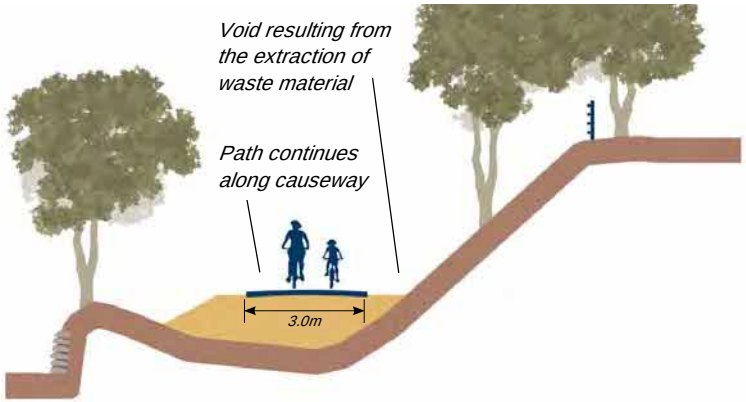
DFR4 Lower level

The path runs through an open space beside mature trees on the boundary.



DFR5 At the low level

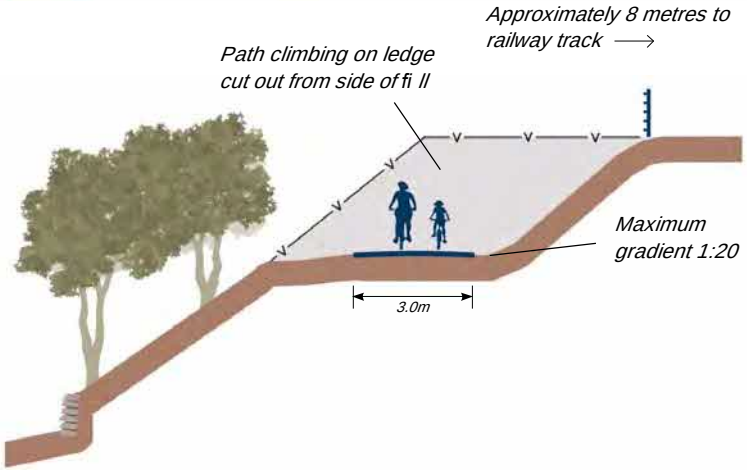
Here the path has a good new lookout over the Cannop Brook meadows which are often fl ooded in the winter. Our path will run through level on a causeway where necessary, and include a culvert to pick up existing railway drainage.



DFR6 Embankment Ramp

The southern part of the railway land was fi lled with waste material from the nearby iron foundry. The Greenway will gradually ramp up to the old sidings level by excavating a “notch” out of the side of the bank. This material will be used to level through the low area shown in DFR5.

This is the fi rst section of the route where the Greenway project will need to fell any trees. Note that through Parkhill Inclosure the Greenway has either been threading through areas of mature trees or following areas clear felled in 20/21, so no additional felling was required on that section.

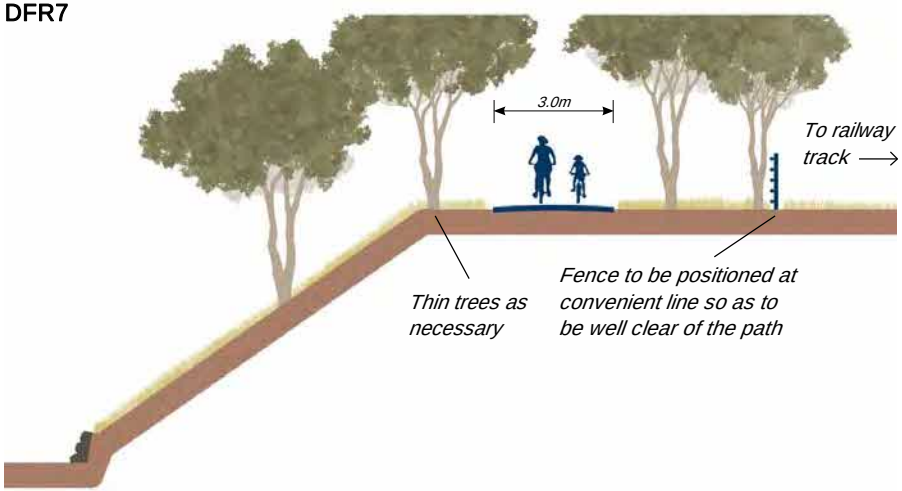


Map 3: Dean Forest Railway Land

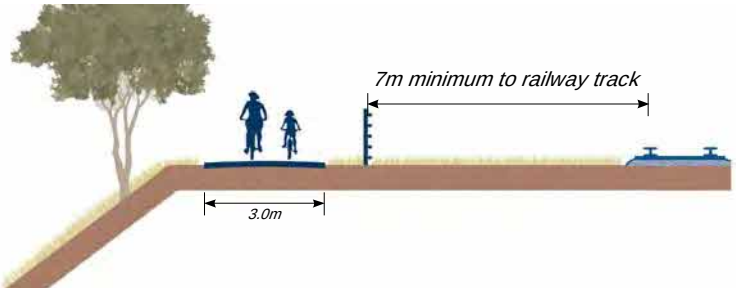
DFR7 and DFR8 Along the top of the landfi ll sidings

This broad area is well set back from the Dean Forest Railway tracks, and partly separated by stacks of concrete sleepers. Where possible the boundary fence will be set away from the side of the path so that the area feels open and not too constrained. DFR7 shows the narrowest point.

DFR7



DFR8

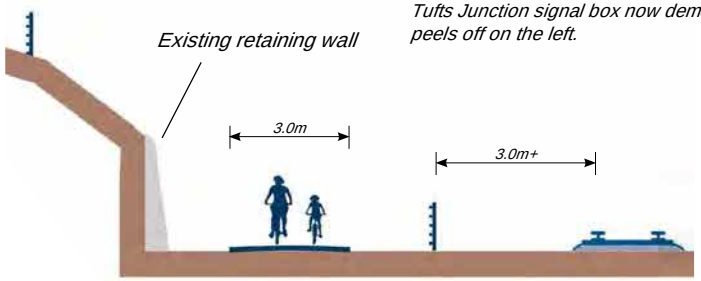


DFR9 Bridge over the Cannop Brook see next page

DFR10 Tufts Junction Signal Box area

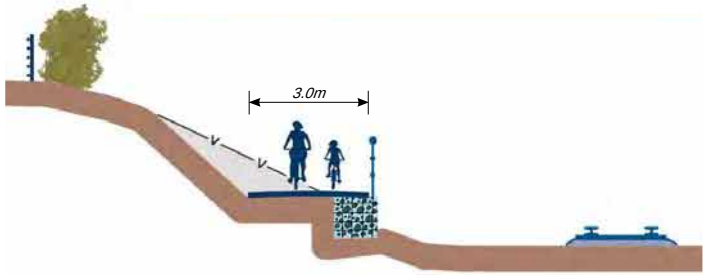
Although the signal box has been relocated to Whitecroft Station, the area is still interesting with its masonry retaining wall which can be a feature of the path in this area.

Tufts Junction signal box now demolished. The Oakfi eld Branch peels off on the left.



DFR11 The hillside cutting

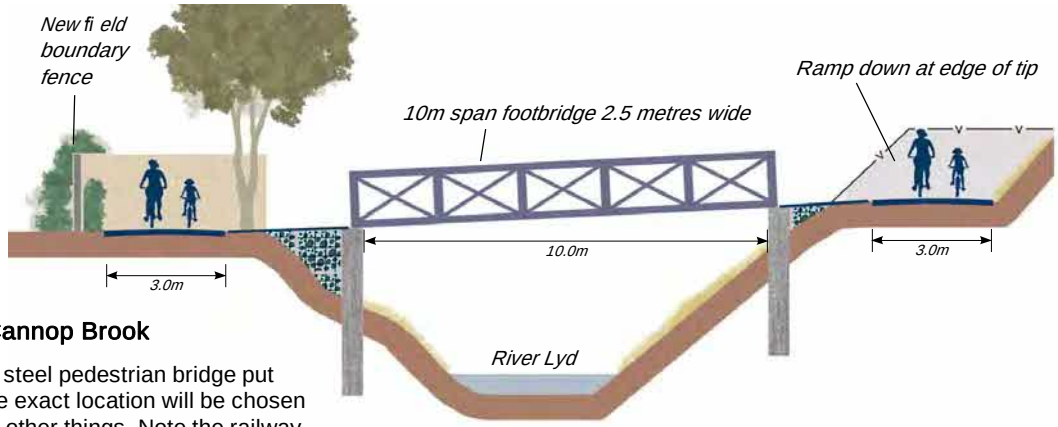
The next 200 metres involves a series of separate details to show how the Greenway will run long the railway land in a narrowing corridor of space. This fi rst section shows the path partly cut into the hillside and partly supported on gabions. The absolute minimum space allowed between the new dividing fence and the nearside rail is 3.0 metres, so as to allow a railway maintenance vehicle to drive along the route. Generally a greater spacing will be achieved.



Map 3: Dean Forest Railway Land

Tufts Junction

At Tufts Junction there is insuffi cient space on the railway bridge, so the path crosses the river on a new bridge and runs around the fi eld edge to rejoin the railway at the existing gate.

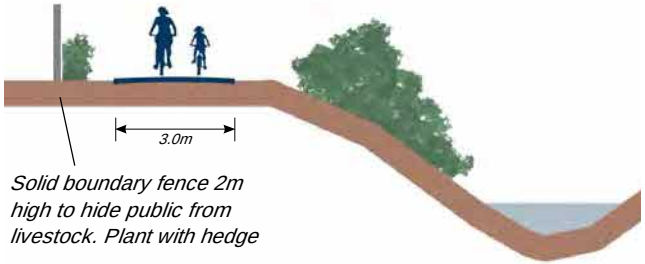


DFR9 / TJ1 Bridging the Cannop Brook

This section shows a standard steel pedestrian bridge put square across the Cannop. The exact location will be chosen to minimise tree loss, amongst other things. Note the railway bridge a little downstream has a 6m span.

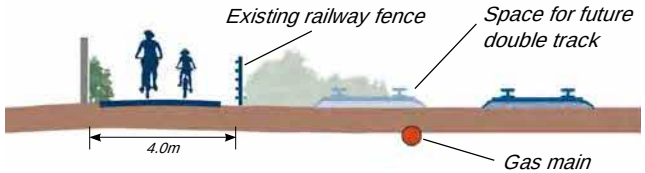
TJ2 beside the Cannop Brook

Here the path runs along the top of the riverside bank. It is proposed to install a solid fence so as to minimise any intrusion into neighbours' land.



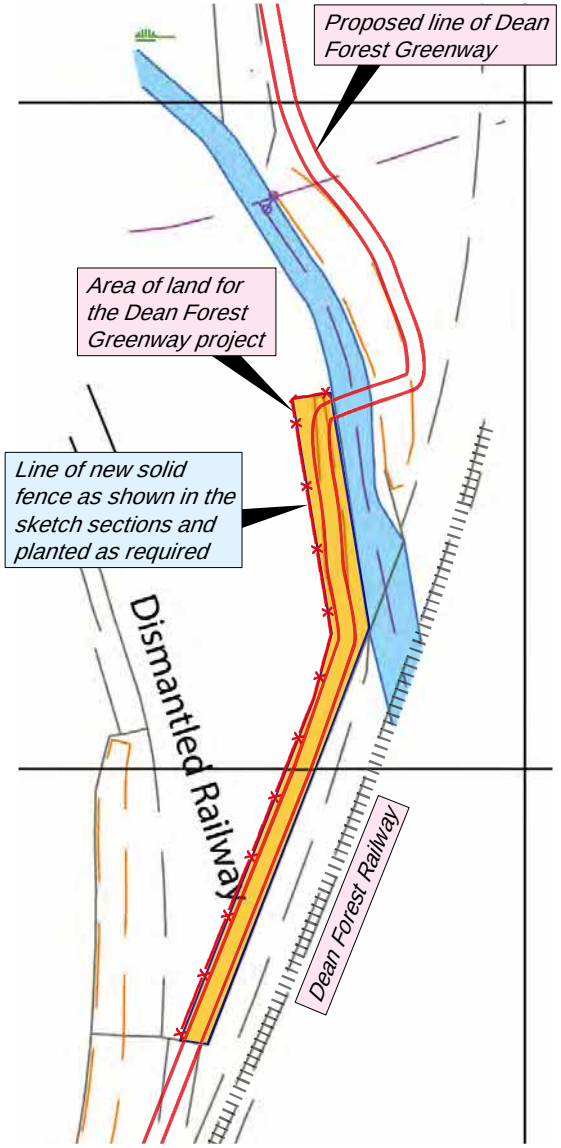
TJ3 To Tufts Junction

Over this section the path follows a narrow strip at the edge of the fi eld through to the gate at the start of the branch line where we re-join the railway land. Again it is important to have a solid fence on the boundary so that young livestock which may be in the adjacent fi eld are not disturbed.



TJ3 view along fi eld edge by railway fence

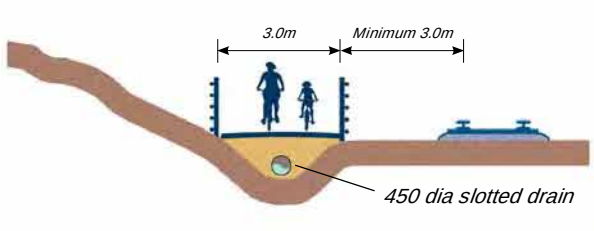
Plan showing link at Tufts Junction



Map 3: Dean Forest Railway Land

DFR12

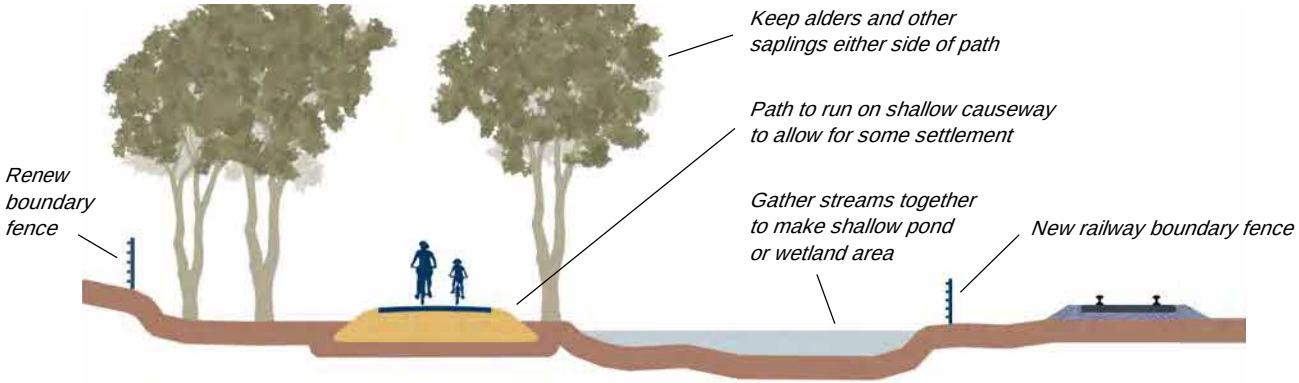
Over a 100 metre section the space narrows before it widens right out below the Fish Lakes. Along this section the existing railway ditch will be culverted and the path constructed above. The minimum distance between the fence and the rail is 3.0 metres.



Picture showing the narrowest point

View of alders and ponds adjacent to railway

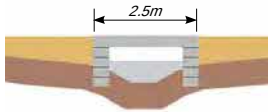
DFR13



Over the next 150m the railway was built out into the valley on a wide embankment, which redirected the course of the Cannop Brook. Originally it swept around nearer the hillside and the earlier tramway followed what is now the fence boundary. The intervening “hollow” has fi lled up with silt and materials over the years to make the current swampy area. The path will run through this on a causeway built high enough in anticipation of some settlement.

DFR14

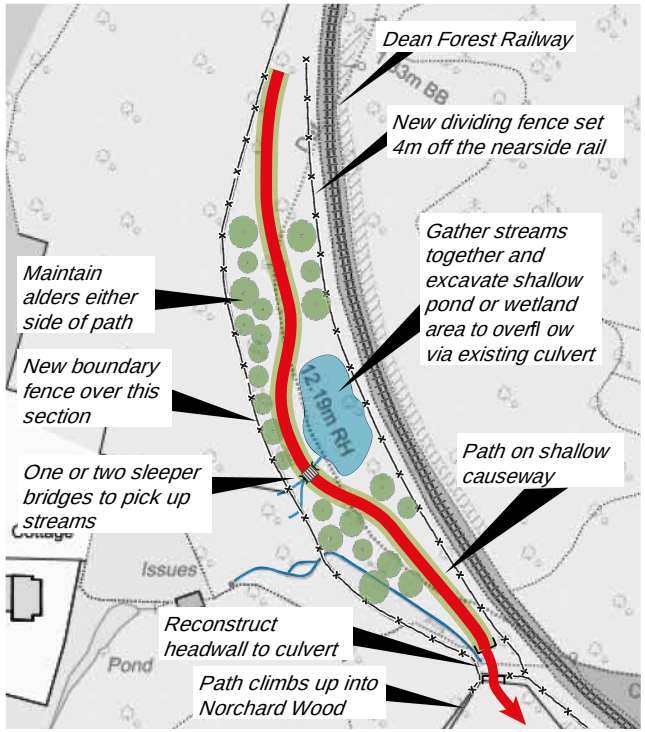
At 3 or 4 locations small bridges will cross the main streams. These will be constructed from concrete railway sleepers similar to those used at the Falls of Killin on the main cycle route through the Trossachs.



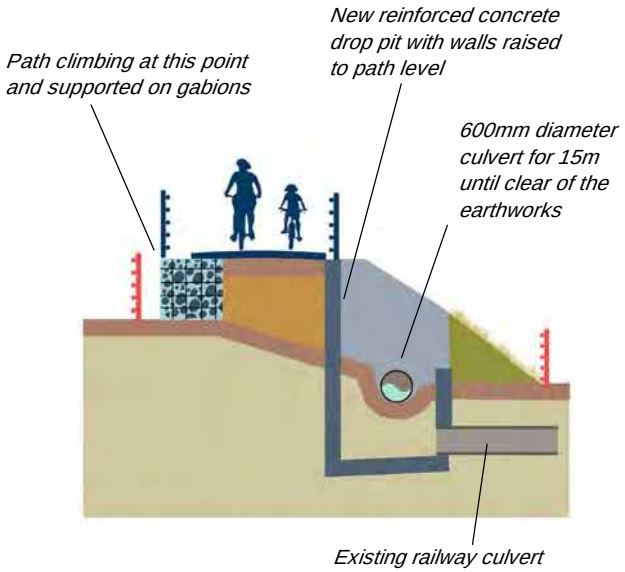
Concrete sleeper bridge

View of concrete sleeper bridge at Callander

DFR14 Sketch showing wet area opened up as a pond with path passing by on low causeway



DFR15: Drop-pit at swamp



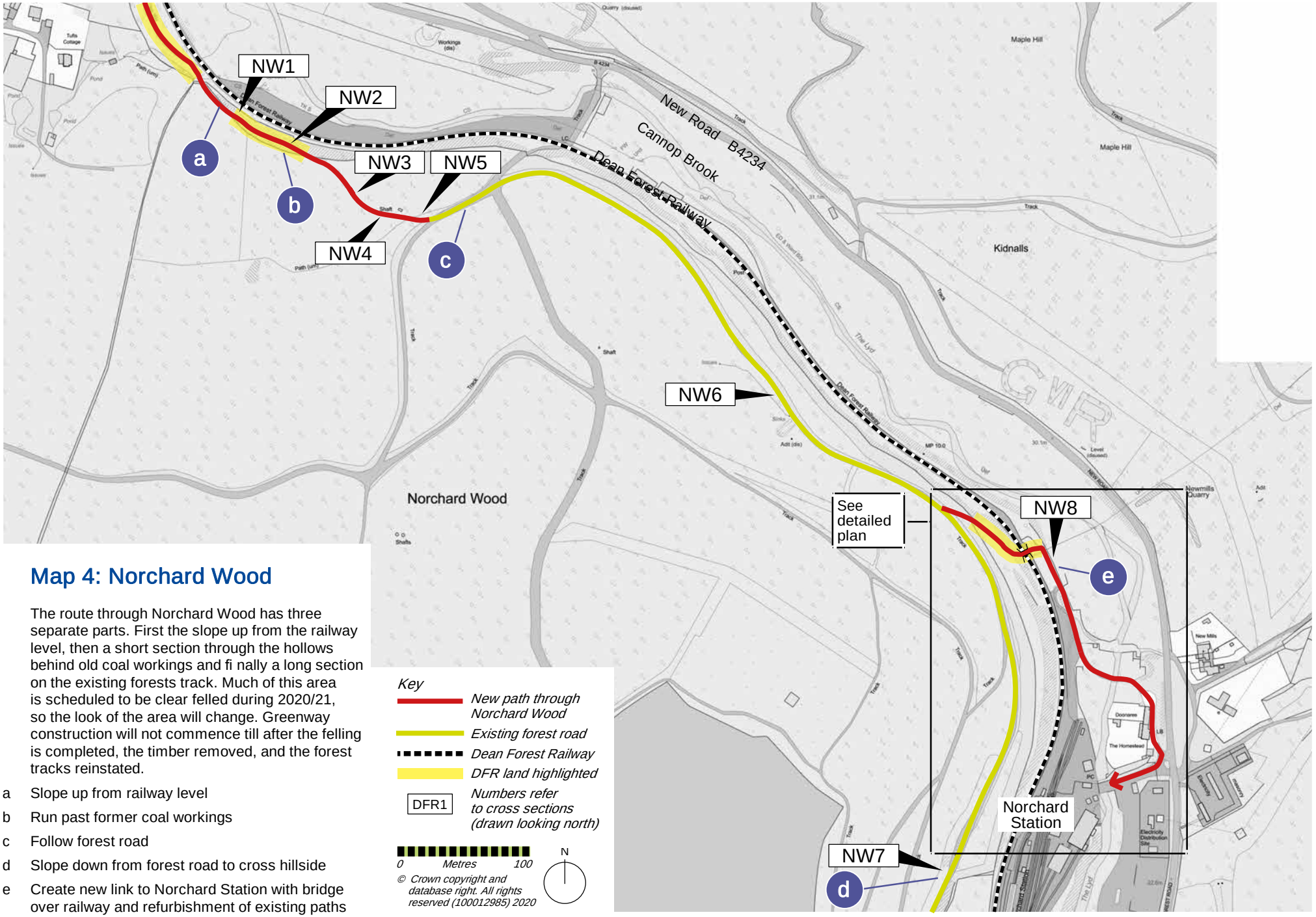
DFR Fence Specifi cation

The lineside fencing will be similar to the example shown here. Posts will be at 2.0m intervals, with 7 strand sheep netting and 2 lines of smooth wire. At recognised deer crossing timber rails will be added to prevent injury to the animals.

The fence line will be marked out and approved by DFR before any installation. Unless expressly agreed otherwise the minimum distance from the fence line to the nearside rail will be 3.0m.

Once the fence is erected to DFR's satisfaction then Greenways will be permitted to carry out works and construct their path.

Example of fencing with top protection at known deer crossings



Map 4: Norchard Wood

The route through Norchard Wood has three separate parts. First the slope up from the railway level, then a short section through the hollows behind old coal workings and fi nally a long section on the existing forests track. Much of this area is scheduled to be clear felled during 2020/21, so the look of the area will change. Greenway construction will not commence till after the felling is completed, the timber removed, and the forest tracks reinstated.

a Slope up from railway level

b Run past former coal workings

c Follow forest road

d Slope down from forest road to cross hillside

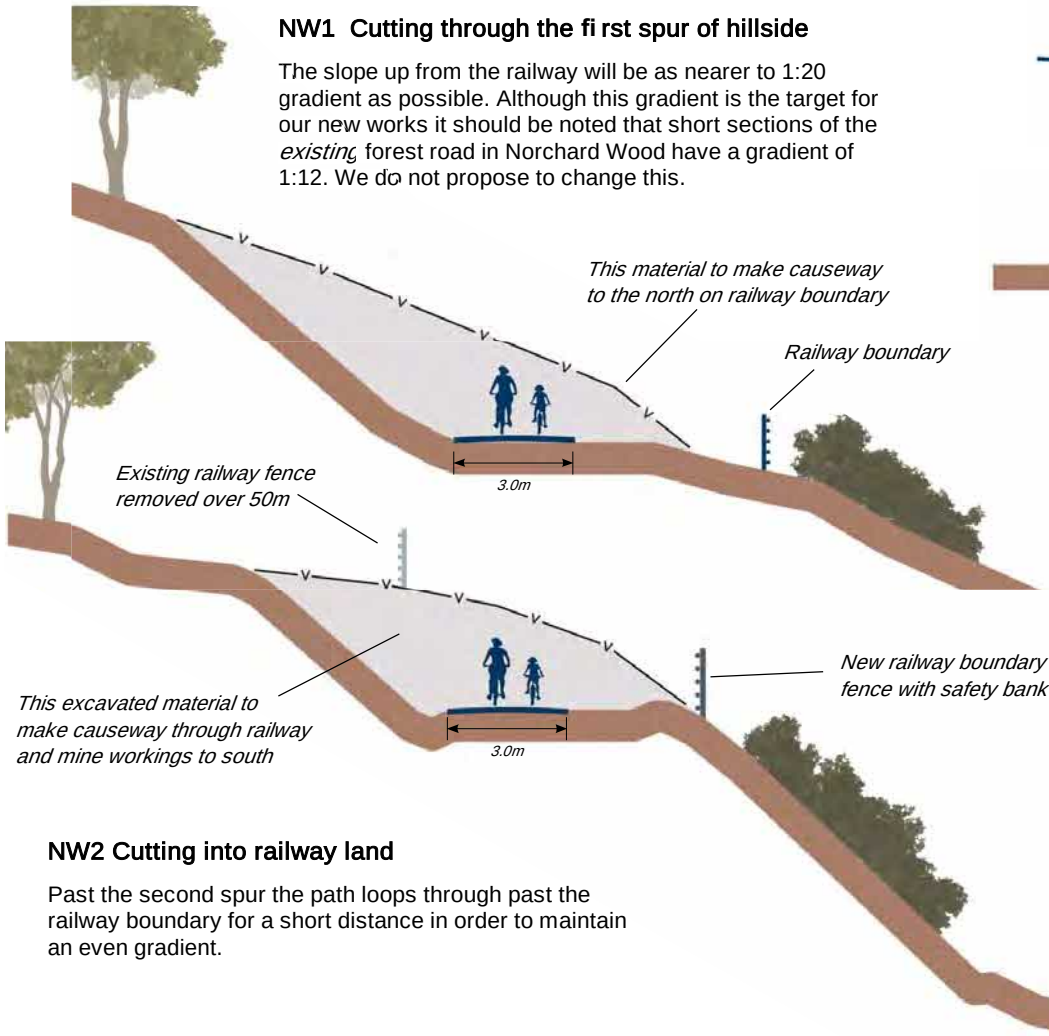
e Create new link to Norchard Station with bridge over railway and refurbishment of existing paths

Map 4: Norchard Wood

The route through Norchard Wood has three separate parts. First the slope up from the railway level, then a short section through the hollows behind old coal workings and fi nally a long section on the existing forests track. Much of this area is scheduled to be clear felled during 2020/21, so the look of the area will change. Greenway construction will not commence till after the felling is completed, the timber removed, and the forest tracks reinstated.

NW1 Cutting through the fi rst spur of hillside

The slope up from the railway will be as nearer to 1:20 gradient as possible. Although this gradient is the target for our new works it should be noted that short sections of the *existing* forest road in Norchard Wood have a gradient of 1:12. We do not propose to change this.

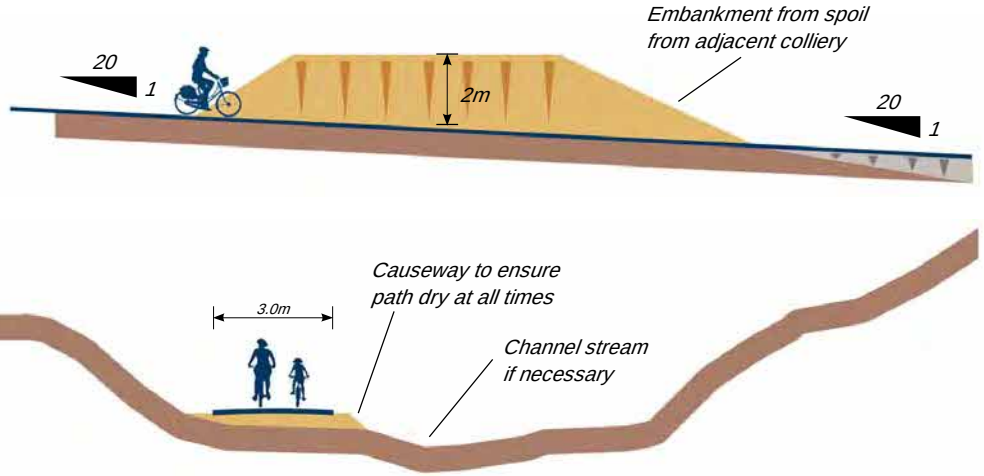


NW2 Cutting into railway land

Past the second spur the path loops through past the railway boundary for a short distance in order to maintain an even gradient.

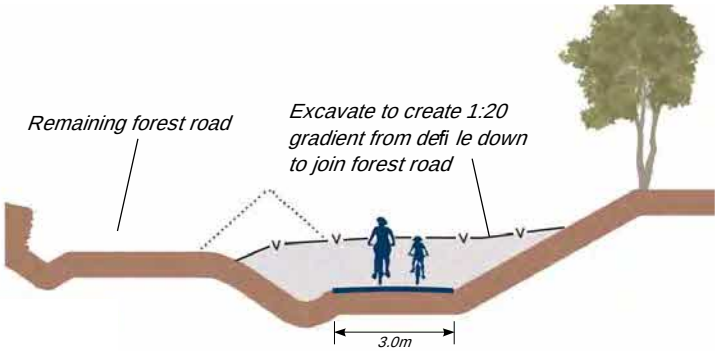
NW3 Section across colliery embankment

At the top of the slope the path cuts through an old railway embankment made from colliery waste. This cutting leads through to the gullies and valleys leading to the old colliery workings. The material from the excavation here will be used to make a low causeway through the cutting. (NW4). At two points culverts or railway sleeper bridges will cross water courses.



NW5

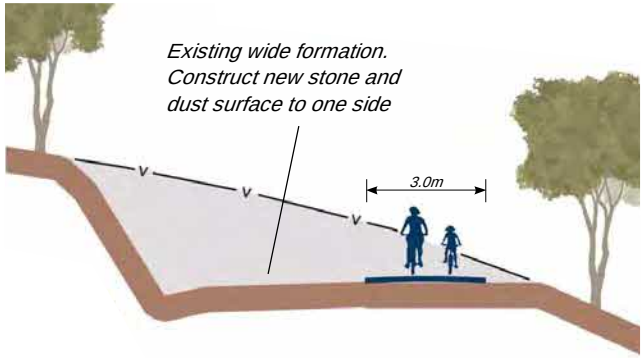
The existing public footpath runs through a cutting at this point which was possibly associated with the colliery. So as to ensure good drainage and to ease the gradient this will be excavated down to make a smooth connection with the forest track.



Map 4: Norchard Wood

NW6 The forest track

This forest road is very wide for the most part and where possible the Greenways path will be constructed on the outer side of the track, so as to leave space for forest vehicles on the hillside.

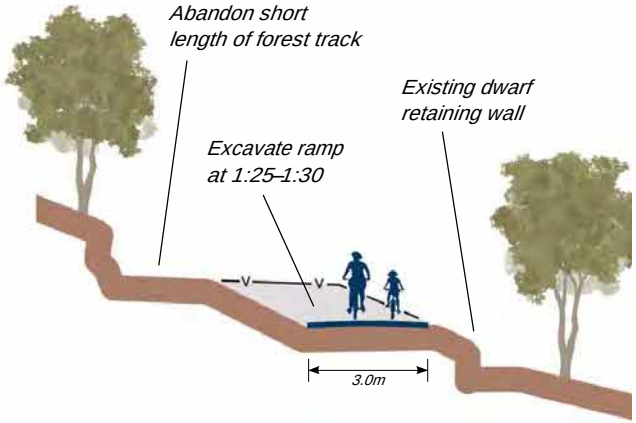


NW6 existing track in Norchard Wood

NW6 The existing forest track above the railway through Norchard Wood. This has a sound shape but would need a new stone surface

NW7 Start of long run down to railway level. Cut into stub end of forest road

Finally, at the southern end of Norchard Wood, the path begins its descent to Middle Forge by cutting though into the end of the unused section of forest track.

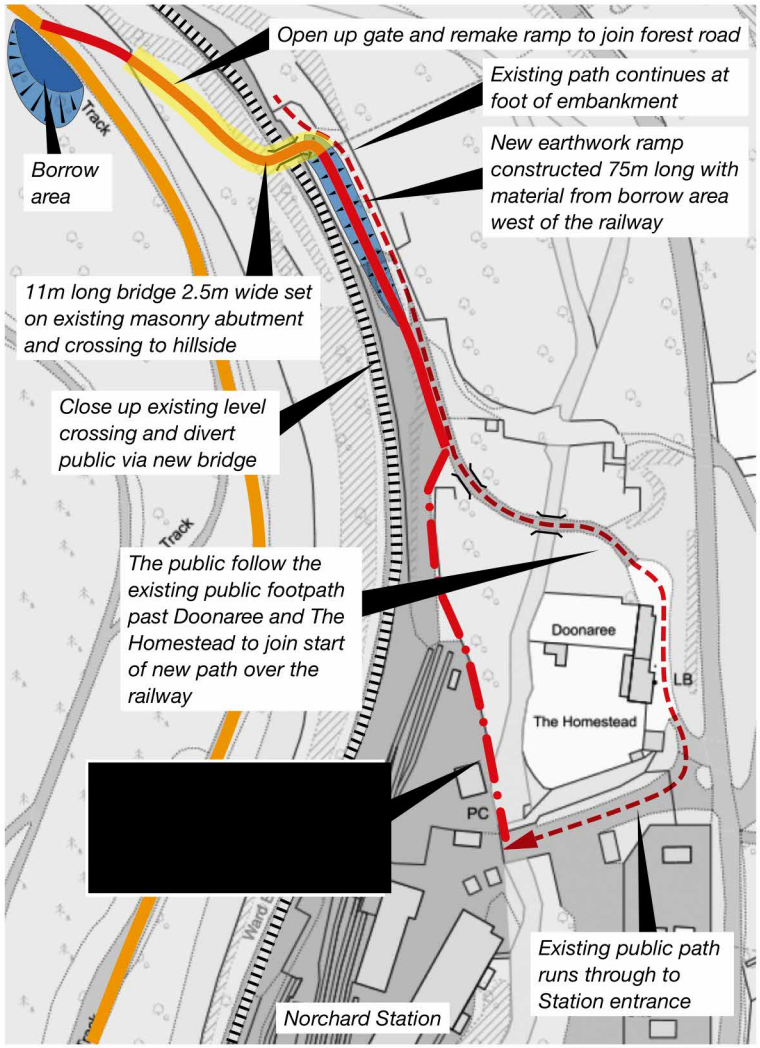


View of Norchard Wood with level forest track above Norchard Station

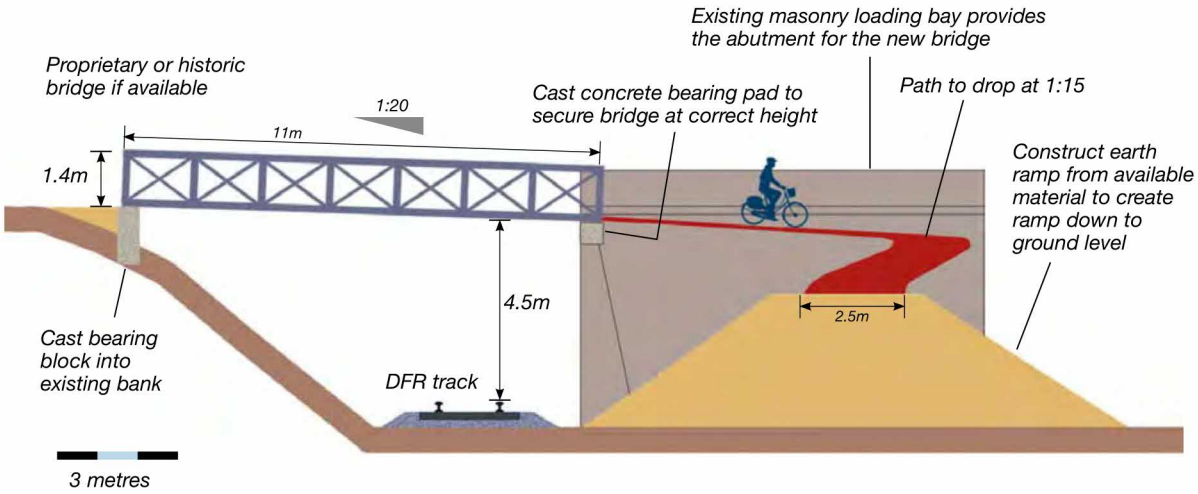
Map 4: Norchard Wood

The link to Norchard Station

The detailed plan shows the recovery of the old access track from the woods, to make a link to a new bridge spanning the railway from the side of the cutting to the substantial masonry bastion which formed the basis of a coal loading operation. From here a path on a new embankment leads down to join an existing path to the Station entrance.



DFR16 proposed Norchard Station Link Bridge



View of existing masonry bastion from the north

LPE1 Replacing the Cannop Brook Bridge

The existing bridge is in a poor condition so the Greenway Project will provide a replacement.

View of existing river bridge to be replaed by County Council

Map 5: Norchard Wood to Forest Road

The southern section of the Dean Forest Greenway slopes down across the hillside with views over the railway at Norchard Station. It then passes along a quarried section of the hillside to join the fi elds edge opposite Middle Forge. The fi nal link into Lydney is made by passing under the Dean Forest Railway to reach the side of the Cut. After a short distance along this water feature the route will bridge over it, cross Forest Road and fi nally bridge the River Lyd to reach the existing path to the Co-op and Town Centre.

a Drop down hillside at an easy gradient

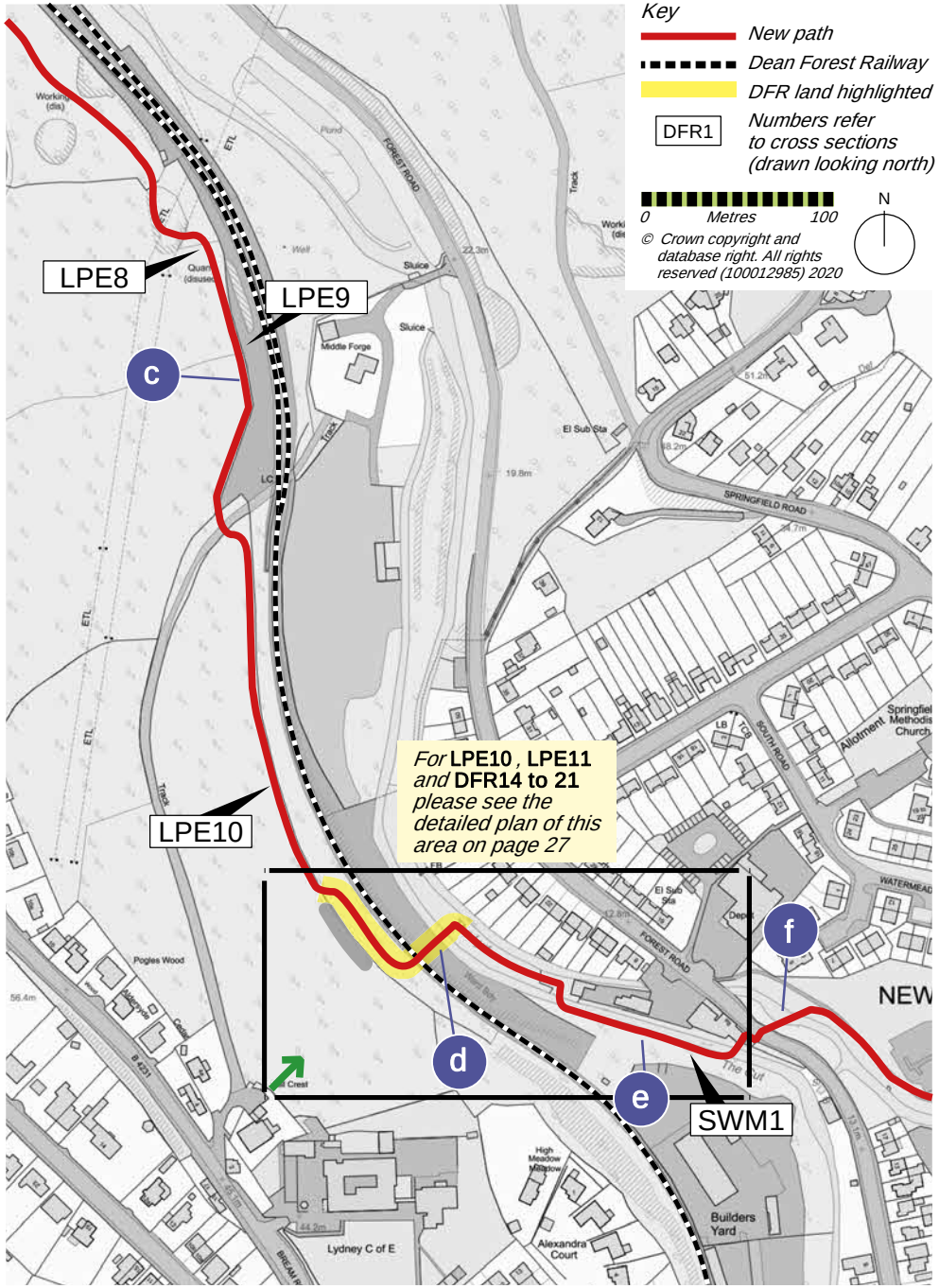
b Plant a continuous hedge and copses of trees averaging 10 metres wide in order to create a protected corridor for bats to progress from Norchard Wood further south towards Quarry Woods and beyond

c Field edge

d New underpass beneath railway

e Link beside the Cut including 3 small bridges

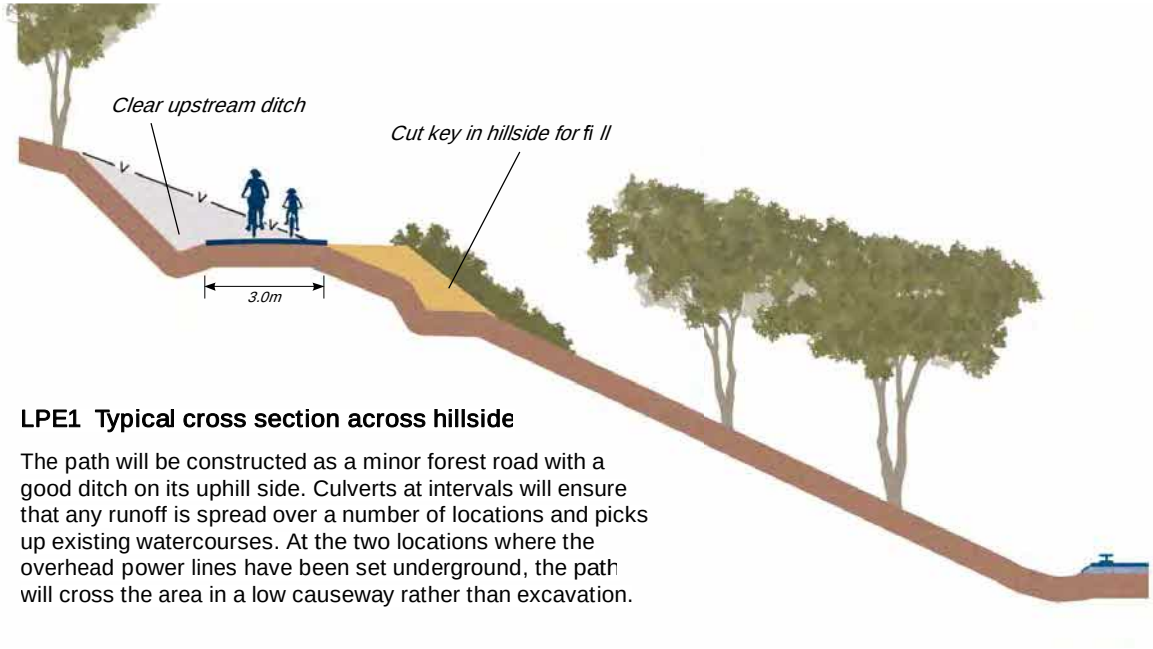
f Cross Forest Road and River Lyd.



Map 5: Norchard Wood to Forest Road

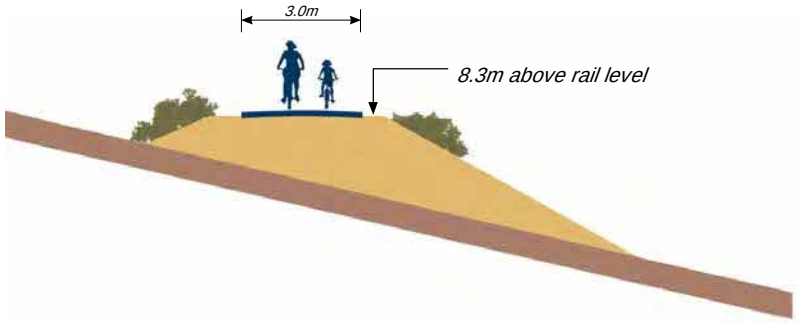
The southern section of the Dean Forest Greenway slopes down across the hillside with views over the railway at Norchard Station. It then passes along a quarried section of the hillside to join the fi elds edge opposite Middle Forge. The fi nal link into Lydney is made by passing under the Dean Forest Railway to reach the side of the Cut. After a short distance along this water feature the route will bridge over it, cross Forest Road and fi nally bridge the River Lyd to reach the existing path to the Co-op and Town Centre.

View of Norchard Wood above the station



LPE1 Typical cross section across hillside

The path will be constructed as a minor forest road with a good ditch on its uphill side. Culverts at intervals will ensure that any runoff is spread over a number of locations and picks up existing watercourses. At the two locations where the overhead power lines have been set underground, the path will cross the area in a low causeway rather than excavation.



LPE2 Cross section at crossing of old trackway

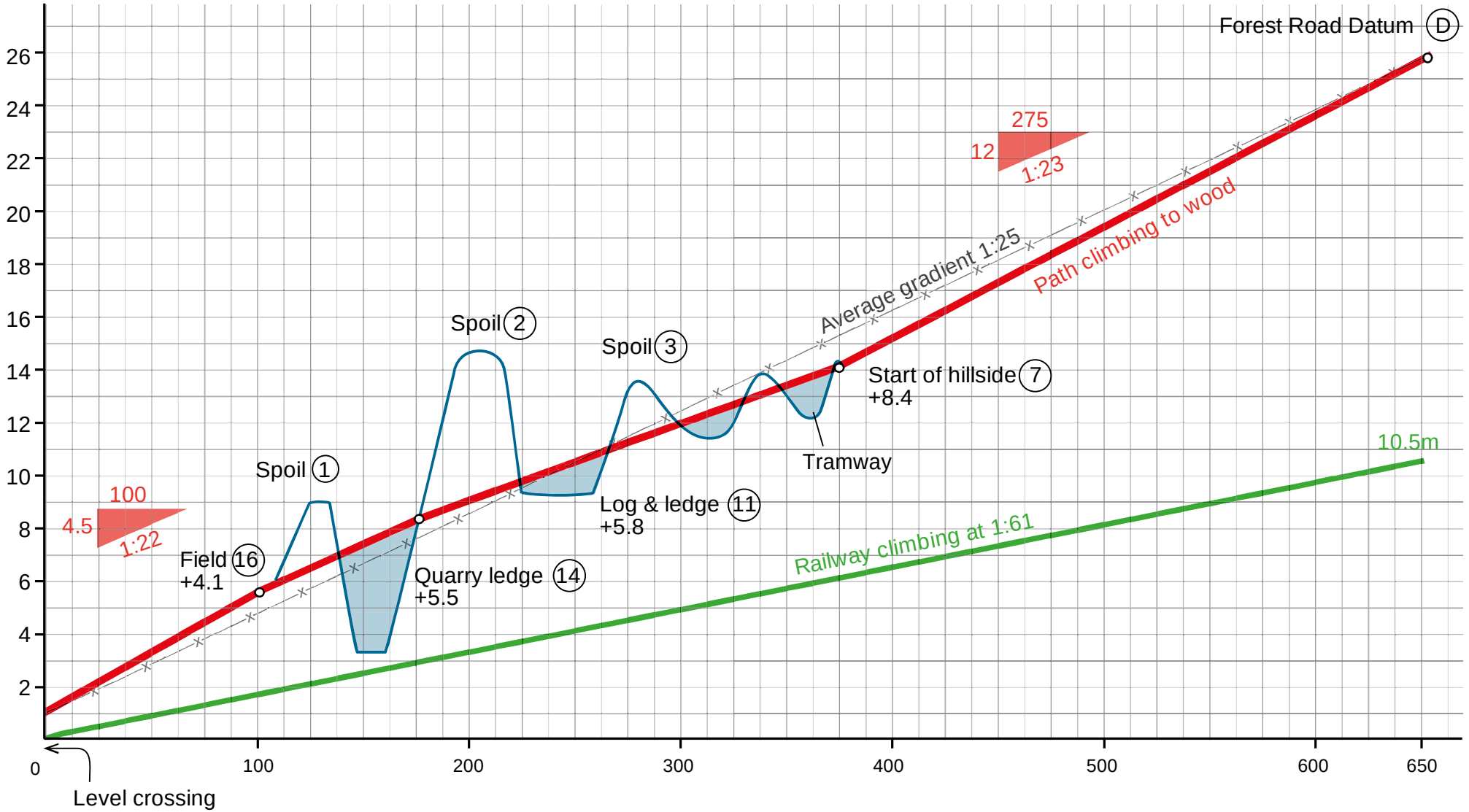
Here the path is to be constructed on an embankment in order that there is no excavation in the vicinity of a line of mature beech trees.

This section marks the start of the quarry part of the route.
A number of trees will need to be felled here and these are covered in the separate Tree Walkover report.

Map 5: Norchard Wood to Forest Road

Gradient Profi le

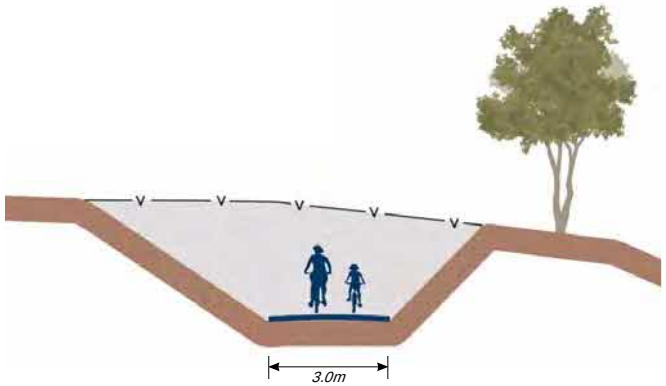
The gradient profi le will help to illustrate the nature of this next section. The Greenway is climbing at an average gradient of 1:25 compared with the railway which is climbing at 1:61. From running at the same level as the railway at Middle Forge, the Greenway joins the Norchard Forest Road some 15m above the railway track. Through the quarry area, the path cuts through 3 spoil heaps and backfi lls low areas including the large quarry at the south end.



Map 5: Norchard Wood to Forest Road

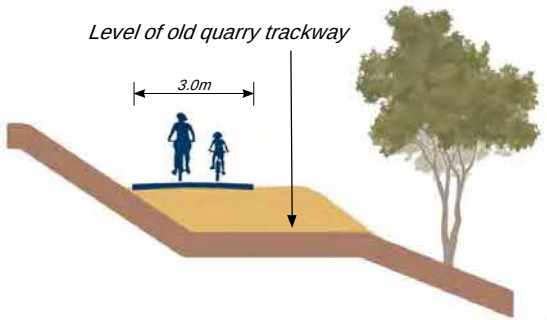
LPE3 Cut through 3rd spoil heap opposite peg 10

Cutting through the third spoil heap. The material excavated will be used to fi ll the hollows in either direction.



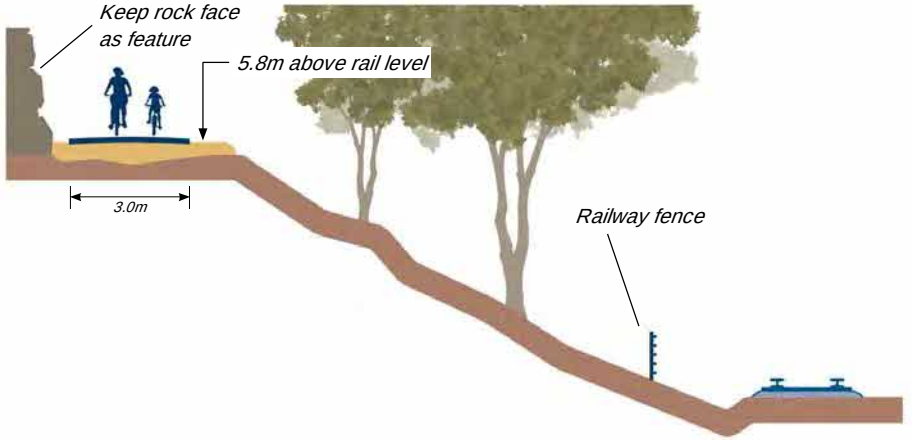
LPE4 Crossing the level

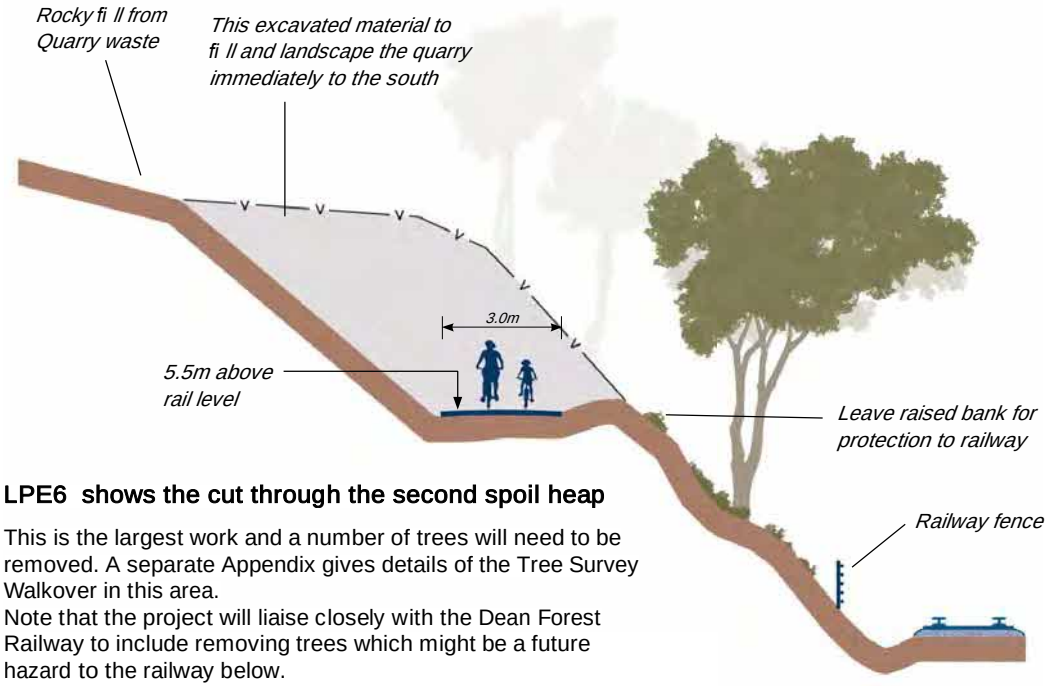
Near the middle of this section there is a short length of old trackway on the line of the Greenway. This will have to be built up to achieve our level. The cross sections refer to the survey pegs for future reference.



LPE5 South end of level from peg 11

Here the path runs close to a low rock face which can be viewed as an interesting feature of this route.





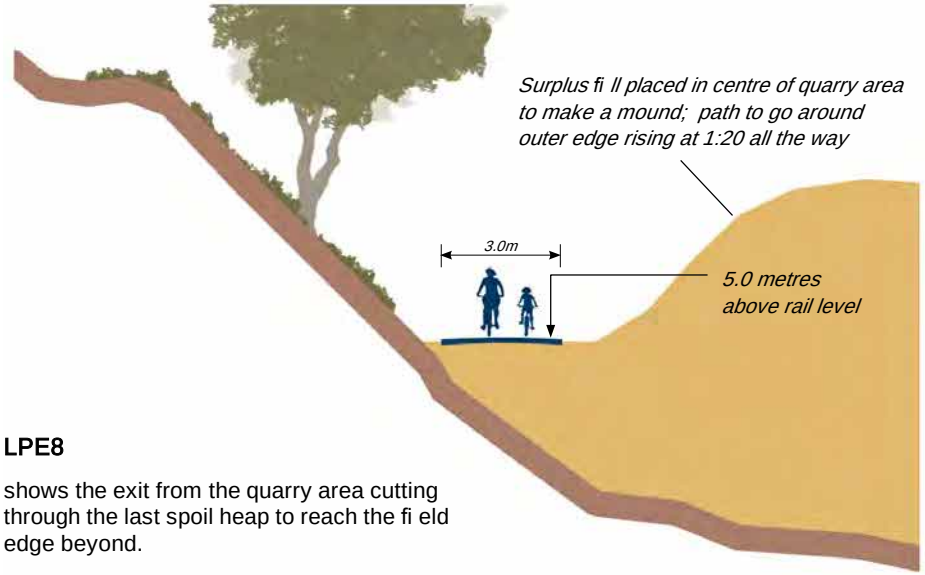
LPE6 shows the cut through the second spoil heap

This is the largest work and a number of trees will need to be removed. A separate Appendix gives details of the Tree Survey Walkover in this area.
Note that the project will liaise closely with the Dean Forest Railway to include removing trees which might be a future hazard to the railway below.

Map 5: Norchard Wood to Forest Road

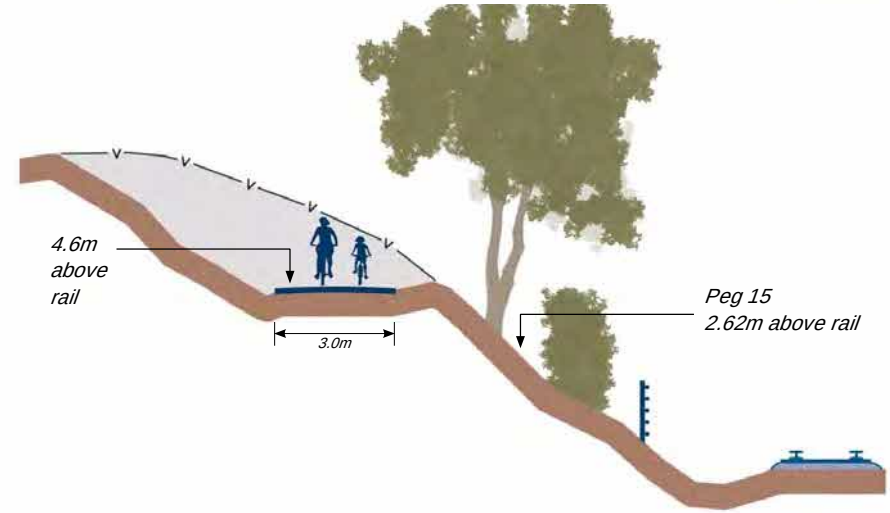
LPE7 The quarry area

The material from LPE6 will be used to fi ll this quarry area to a height of 5 metres above the railway. If there is room, the path could with advantage snake around the fl oor of the fi nished area in order to gain a little more height.



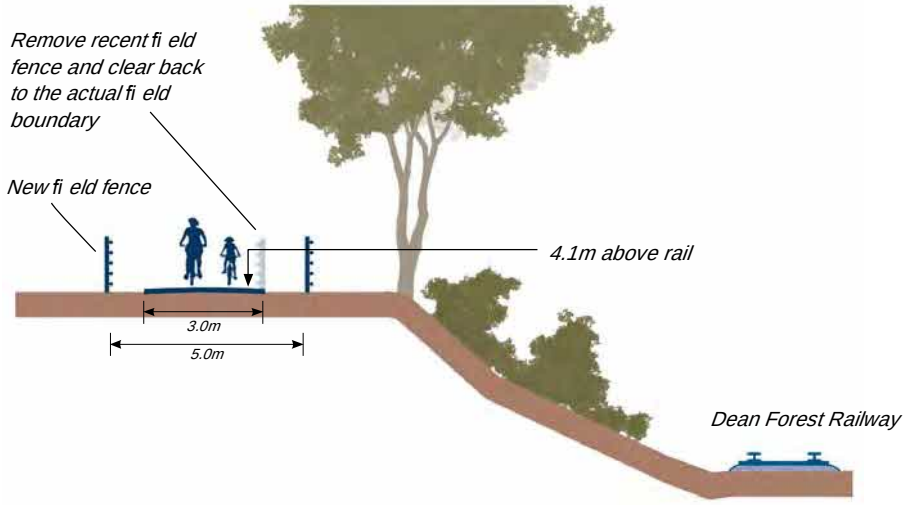
LPE8

shows the exit from the quarry area cutting through the last spoil heap to reach the fi eld edge beyond.



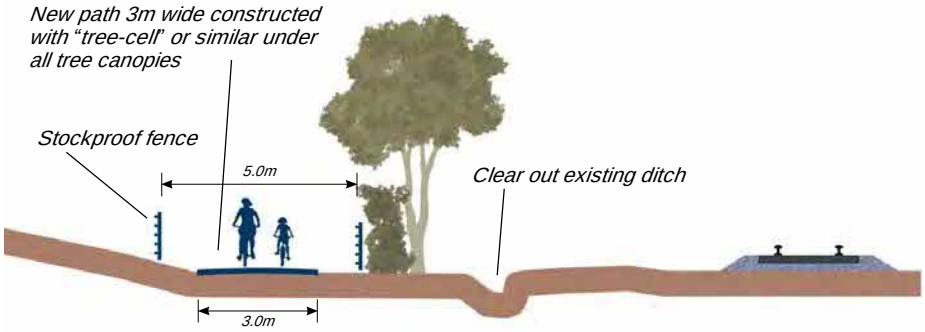
LPE9 The fi eld edge

Over most of this section the recent farm fence stands a little way in from the actual rail boundary. This recent fence will be removed, the ground cleared back and a new fence erected 5m from the boundary.



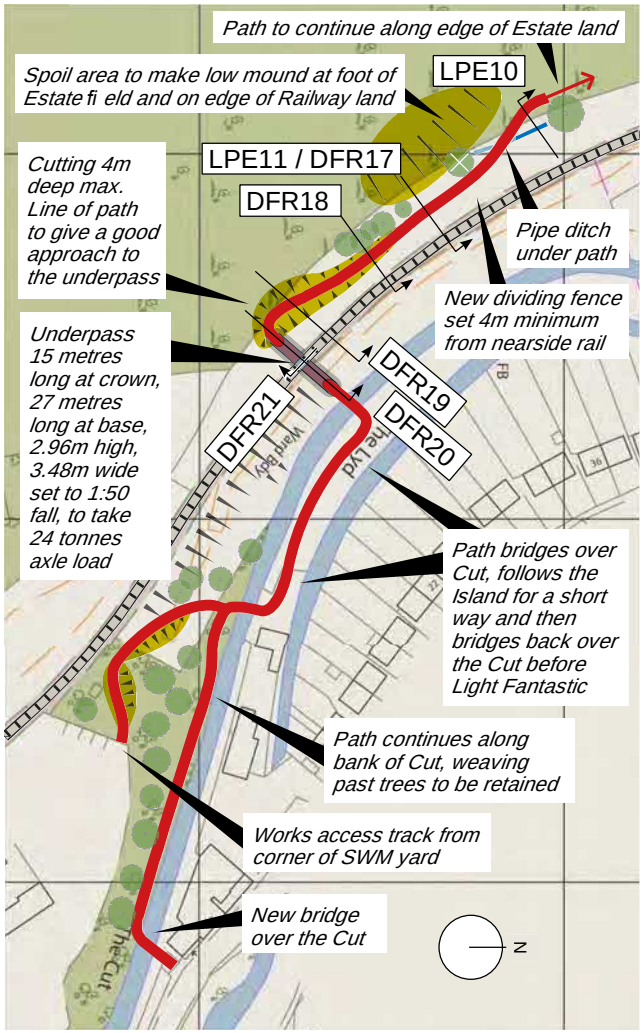
LPE10 The fi eld edge south of Green Lane

This section of the path will include a good ditch to take not only the runoff from the fi eld, but also the water from the lane which currently fl oods over the railway and the gardens of Middle Forge below.



Map 5: Norchard Wood to Forest Road

Plan of approach to Lydney

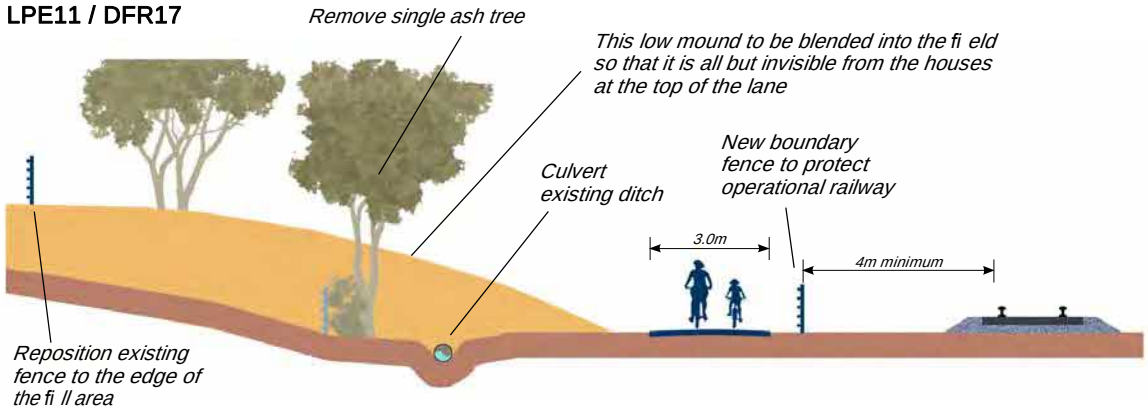


LPE11 / DFR17, DFR18 Approach ramp to underpass

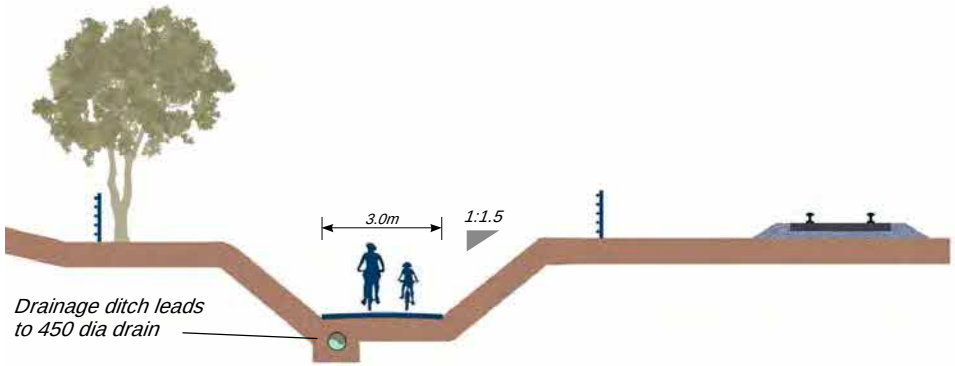
The ramp will need to be some 100 metres long as the path drops down to pass under the railway. This can be excavated partly on Lydney Park Estate land and partly on railway land where they have additional width left over from the earlier tramway. Through the cutting the drainage water is carried away in a 450mm dia slotted pipe. The hedge line trees will be reinforced with new planting to create the illusion of the Forest approach.

The low mound will be finished off so as not to obstruct the view of the railway from the houses at the top of the hill

LPE11 / DFR17



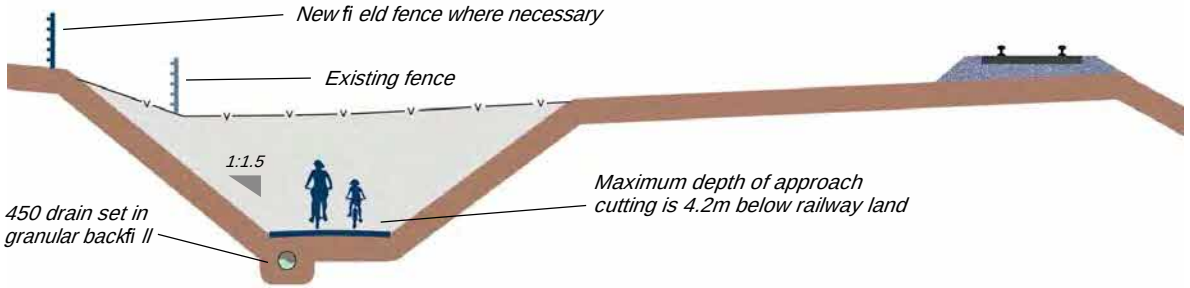
DFR18



Map 5: Norchard Wood to Forest Road

DFR19

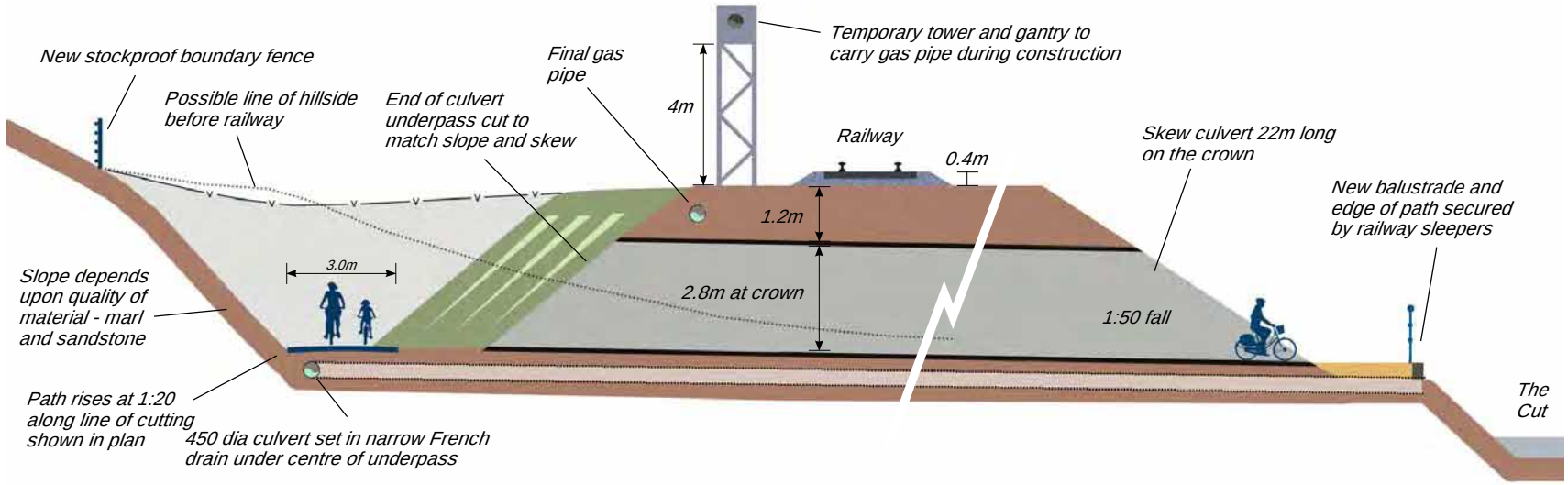
The approach ramp is near its full depth, and its side slope cuts into the fi eld for a short distance.



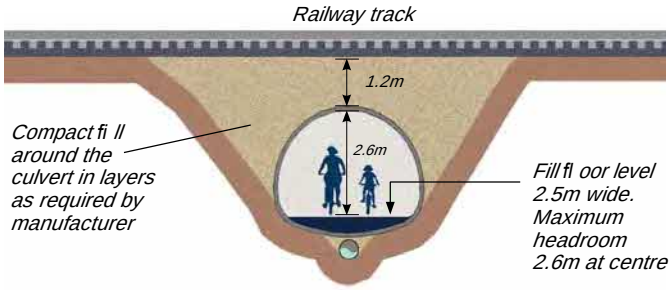
DFR20

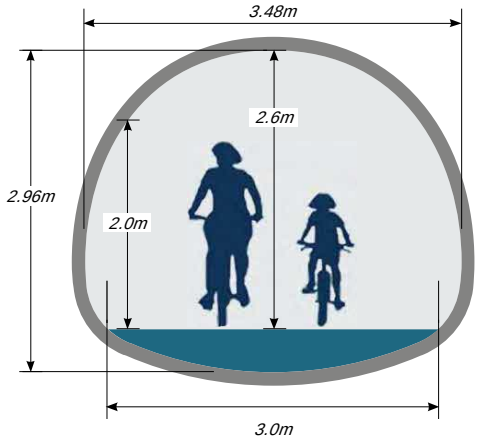
Given the diffi culty of access to this location, a standard multiplate underpass unit would probably be the most practical arrangement.

The work needs to take account of the gas main running adjacent to the railway. This work would be carried out at a time when the railway was closed. The existing levels from the underpass are close to the bank of the Cut, as may be seen in DFR17.



DFR21 Cross section of "Multi-plate 200" underpass passing beneath DFR track



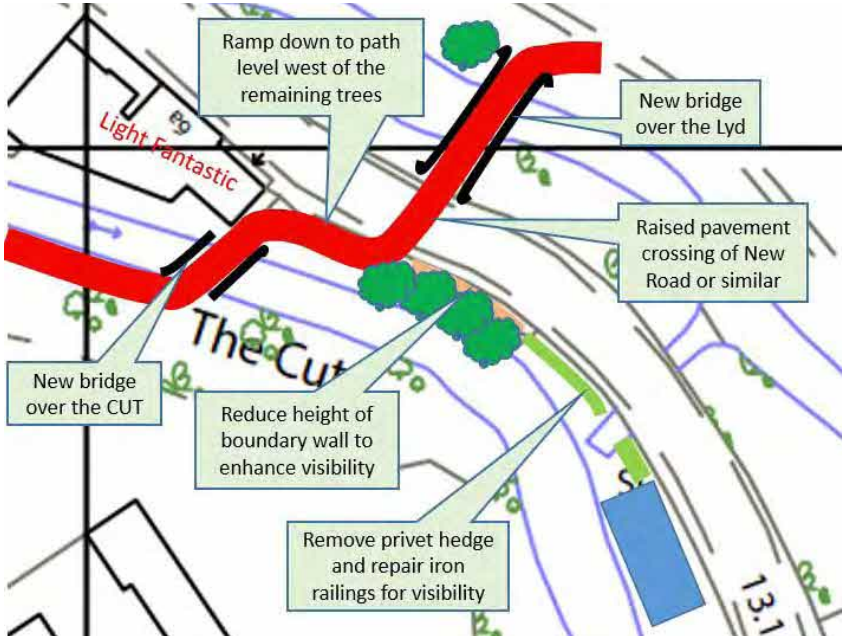


Cross section of underpass profi le, showing dimensions

View of typical steel underpass, Cleator Moor

Map 5: Norchard Wood to Forest Road

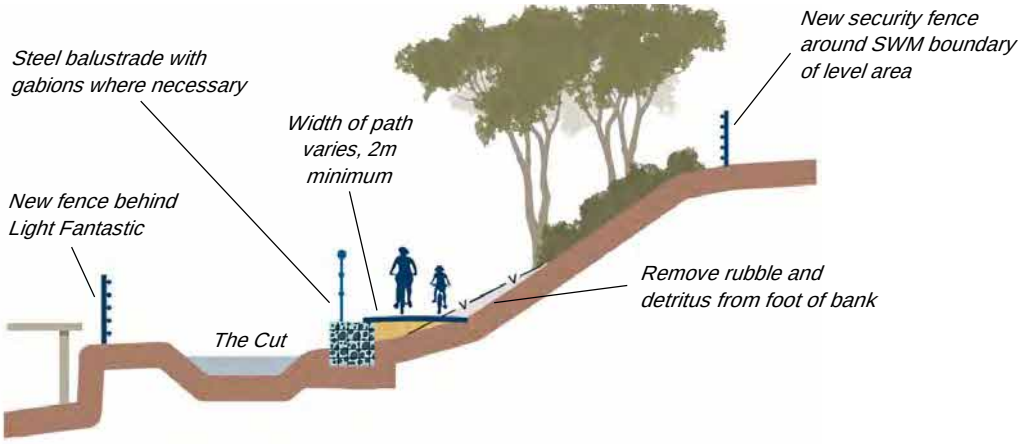
Principal components of entry into Lydney



View of the Cut by Light Fantastic

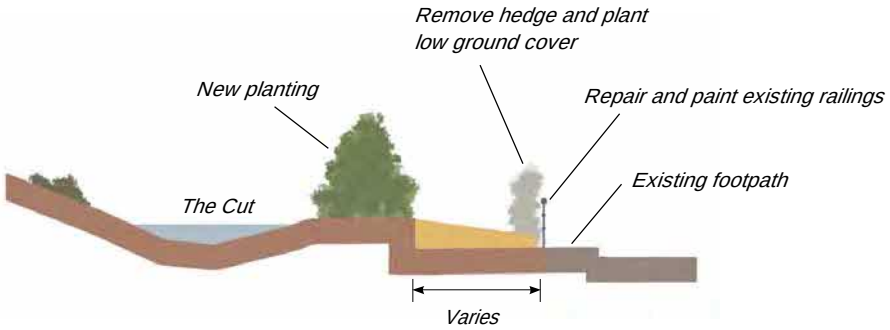
SWM1 Sections along the Cut

The bank above the Cut is made from fi ll used to make the former station sidings and yard area. The space available varies and different solutions to making the path will be used along the way. The Cut water level is controlled, and its level is almost constant. It is not susceptible to fl ooding.



GH5 section showing space for visibility

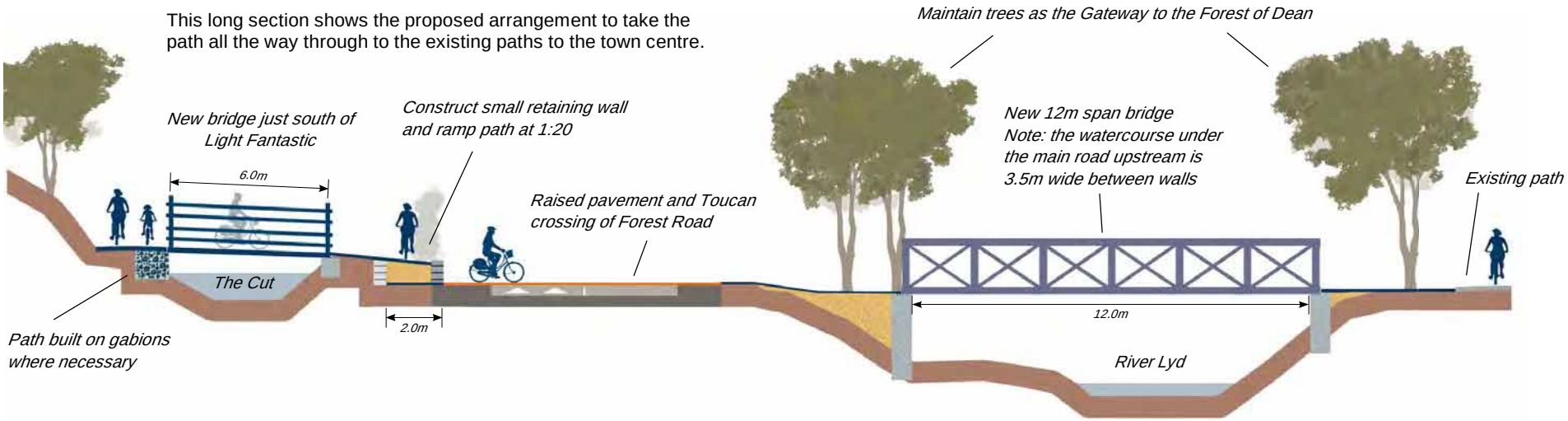
Just to the south of the row of beech trees there is a small garden with a privet hedge. This is to be removed so as to provide good visibility towards Lydney.



Map 5: Norchard Wood to Forest Road

SWM2 and GH3 Bridge over the Cut and detail through to River Lyd and Cooperative path

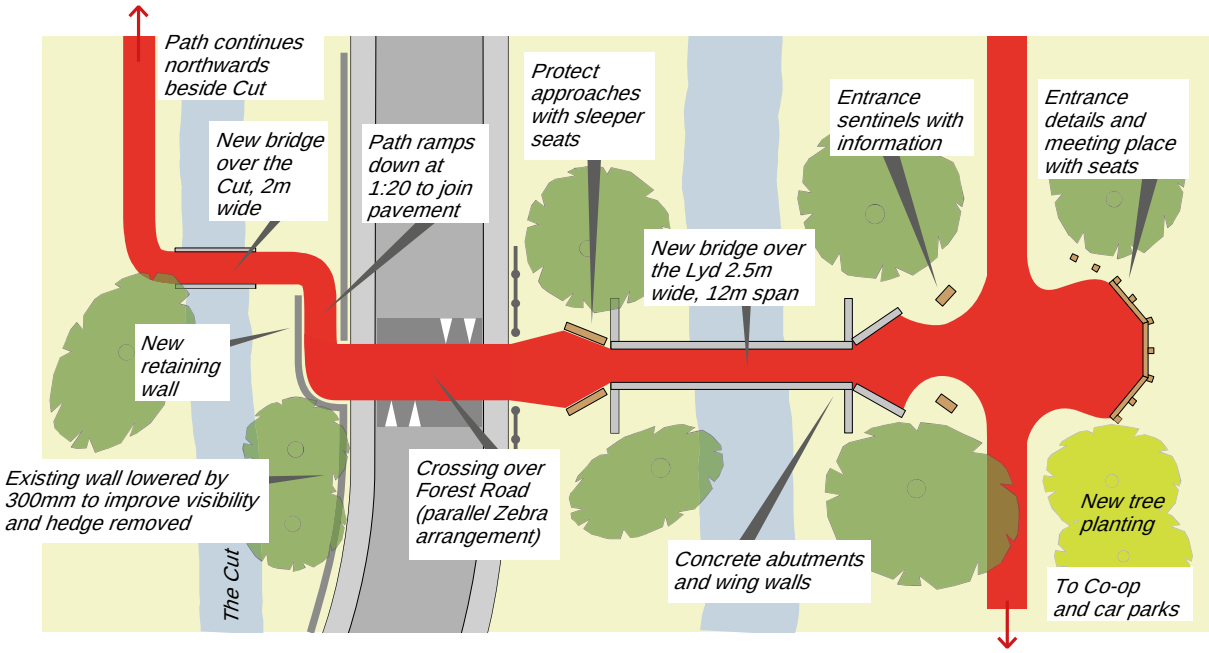
This long section shows the proposed arrangement to take the path all the way through to the existing paths to the town centre.



GH4 Plan of ramp down from Cut and raised pavement over the road through to Co-op path

This detail shows how the path is planned in this area.
It is proposed that the 20mph zone is extended further north of Light Fantastic in order that a raised crossing can be installed here, and traffi c speeds are slowed.

Here we are suggesting a meeting area, to mimic or refl ect the arrangement at the north end of the Greenway at Fountains Way. This would be a place where walkers or cyclists could meet up and assemble before they start their journey up to the Forest of Dean.



5 Ecological Matters

The extensive ecological studies carried out over 2020/21 are set out in a series of detailed Appendices.

Appendix 2a sets out the case for construction of this community route through sections of Ancient Woodland. As these woodlands are extensive in this area there is no possibility of creating a good quality path and popular route except by passing through parts of the ancient woodlands. The Appendix examines a wide range of issues and concludes that there there are wholly exceptional reasons justifying the creation of this traffi c free route connecting Lydney and Parkend, and that the public benefi t would clearly outweigh the loss or deterioration of habitat. (National Planning Policy Framework para 180c and footnote).

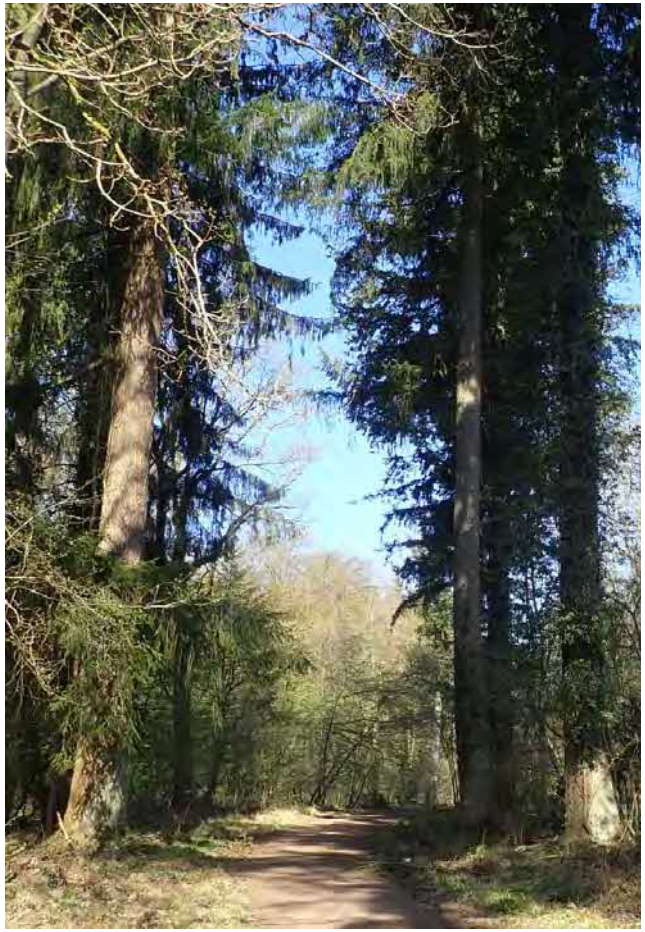
Appendix 2b comprises the report on a wide range of studies carried out by Wessex Ecological Consultancy starting in April 2020 with an extended Phase1 Survey. Following that work a series of detailed surveys were undertaken between April and November 2021. This covered surveys of the vegetation and habitats, of birds, of invertebrates, badgers, otters, water vole, reptiles and amphibians. The appendix sets out a range of mitigation works all of which the project will undertake to deliver an overall positive outcome.

Appendix 2c sets out the fi ndings of the Bat Survey carried out by Clarke Webb Ecology January to October 2021. This survey found an extensive presence of bats as was to be expected in this area. The consultants proposed a range of measures to extend the continuity of cover by way of planting so as to create a continuous route for bats from one end of the project to the other. The project will adopt all their recommendations. The consultants consider that once these measures are in place they will mitigate any effects of construction and result in net gain in habitat for the local Greater, and Lesser Horseshoe bat populations as a result of an overall increase in potential foraging habitat and increased connectivity.

Appendix 2d sets out the fi ndings of the Dormouse Study carried out by The Wildlife Trusts Consultancy Service over May through to November 2021. Unfortunately this did not fi nd a single example in all the 700 nest tubes set out during this period even though they were inspected at regular intervals. Local rumour has it that the population has been decimated by the increasing wild boar population.

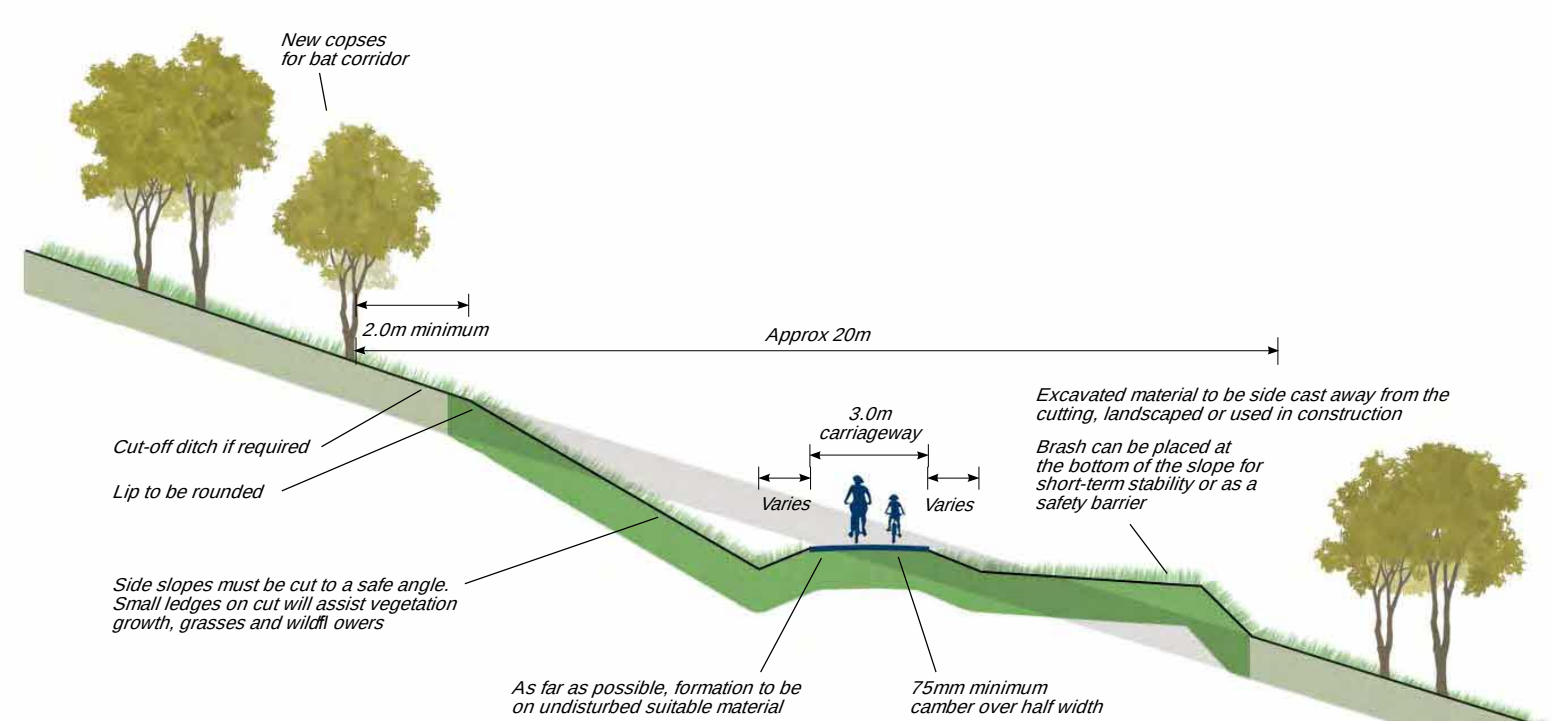
Appendix 2e reviews the impact on trees for the whole route, and sets out the method statement for working near trees. Where the path passes under the canopy of trees the work will be constructed on ‘tree-cell’ or similar specialist materials as appropriate so as to provide full root protection. The appendix includes a detailed tree study for the southern end of the project in the vicinity of the Cut. This is the only section of the whole project where path construction will fell any trees greater than 200mm diameter at chest height. Elsewhere Forestry England have confi rmed that trees in their area will be felled prior to path construction as part of their ongoing management and harvesting, and the project will be taking advantage of work by the Dean Forest Railway to remove trees on safety grounds.

Overall it is considered that the Dean Forest Greenway will have a positive effect on the ecology and environment of the area, not only by providing an Active Travel route into the heart of the Forest with the potential to reduce vehicular traffi c, but also in allowing a wide range of the general public to increase their mental and physical well-being, and to appreciate and observe the forest habitat at close quarters, without needing to stray from the path or damage the adjacent vegetation in any measurable way.



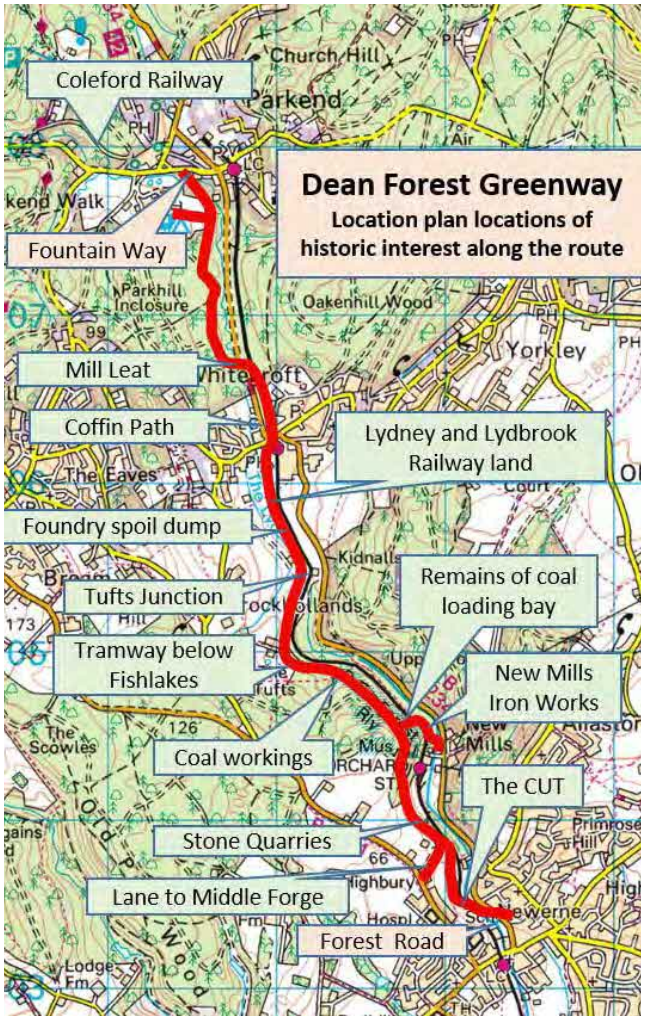
Section of existing Forest track showing the nature of the overall Dean Forest Greenway proposal

Cross section across open hillside



6 History and local industrial archaeology

The Forest of Dean has a long history of coal and ironworking which was widespread through the area. Appendix 3 draws together all known activities in the corridor of the Greenway.



Map showing the location features of interest along the Greenway

The Greenway will touch lightly on a number of features along the valley, many of which could usefully be the subject of interpretation panels. Starting from Parkend, the Greenway connects with the line of the Parkend and Coleford Railway 1860. As it enters Parkhill Inclosure the path will cross some of the old forest boundary banks but otherwise the line bypasses any industrial workings in the area.

Leaving the Inclosure along the existing forest track the route crosses the remains of the leat or millstream to Whitecroft Forge (first built in 1628 and latterly a cornmill).

After crossing Forest Road the path joins the line of the 'Coffin' path from Parkend to St Paul's church. The current alignment of this was made at the time Severn and Wye railway was built in 1868. Prior to that time the path may have followed the Lydney and Lydbrook tramway which was built through to Parkend in 1810.

Once past the Whitecroft level crossing the path follows the edge of the railway land including a long section of waste dumped from the iron foundry at Whitecroft. At one point the path passes through an area where this material was again extracted probably for road aggregate in the Forest.

Tufts Junction signal box now demolished. The Oakfield Branch peels off on the left.

At Tufts Junction the path passes through the site of the former signal box and then runs onto the watery area below Tufts fishing lakes. Here the tramway ran around the contour of the hillside, whereas the later railway eased the curve to leave a gulley which has since filled with detritus. We plan a small pond here to add to the interest along the route.

Passing now into Norchard Wood the route cuts through the waste bank from one of the numerous small coal workings in the area and joins the track which went to one of Morrell's mines at Tufts (1841). For most of the way the path through Norchard Wood follows the line of the Forestry track which was built mid 20th century but probably followed an earlier path. At any rate it has obliterated any traces of what colliery scrapes and workings there may have been in the area.

The proposed link to Norchard Station bridges over the line onto the remains of a coal loading plinth and reinstates the incline which would have served this. The link then follows the existing path which crosses the substantial stone overflow culvert associated with the New Mills ironworks (1824) and then will replace the existing very poor bridge over Cannop Brook before joining the road serving a pair of cottages on its way to Norchard Station.

Returning to the Greenway route, this leaves Norchard Wood, crosses an open hillside and runs through a small area of old stone quarries below The Reddings. These were probably associated with the tramway and almost certainly have not been used since the opening of the railway in 1868. The path then runs along the edge of open fields, crossing the Green Lane which once served Middle Forge before the New Road was built in 1806. The route then joins a short section of the tramway again, passes under the railway in a new culvert and runs alongside the Cut for a short distance. This canal, built in around 1760, once took tub boats to Middle Forge. It now serves to provide fresh water to the Glatfelter Works and is essential for their paper production.

The route ends by crossing the main road just below Light Fantastic, and bridging the river to reach the existing path to car parks, the Co-op and the town centre.

Coal Mining Risk Assessment report (Appendix 3)

This sets out the details of the colliery activities along the length of the Greenway route. The work has been compiled by an extensive search through the Coal Board records.

Although there are a number of shafts in the vicinity of the proposed route most are far enough away to be of no consequence although in a few cases it would be wise to repair existing protective fencing.

Just above Norchard station there are records of two possible vent shafts. Here it is recommended that limited exploration with an excavator should check whether these shafts have been capped, and if not, then the project will cap them before completing the path in the vicinity.

As with other industrial workings it would be of great interest to make up some information boards illustrating the extent of the coal industry in this area.

7 Design and access details including road crossing arrangements

The design of the Greenway is based around constructing a sound, durable, dry and all-weather surface sympathetic to the surroundings and conducive to popular walking and cycling. We are adopting the limestone dust fi nish which has worked well on the Beechenhurst Family Trail as our standard.

The stone will generally be laid on polypropylene fi lter fabric to provide strength and ensure the integrity of the surface. Its fi nished level will be slightly above general ground level so that it drains dry at all times even when the surrounding ground is saturated.

Through the woodland areas where the path passes close to trees and under their canopy, the path will be laid above the ground level using a root protection cellular material in order to ensure that the trees are not damaged.

Existing forest tracks will be repaired and rebuilt where necessary to a similar standard. The maximum gradient sought will be 1:20, although for short sections of the existing forest roads we have to accept sections which are steeper – 1:12 maximum.

The line of the path will be fl uid to follow the natural ground and line of trees. Through the woodland areas the exact fi nal route will be staked out and agreed with Forestry England. It will avoid all mature trees and generally pass equidistant between adjacent trees. The objective will be to create a woodland walk from Lydney to Parkend, one which gives the illusion of walking through the forest, but one with views out across the valley wherever this is possible.

Road crossings will be designed to provide easy continuity of the route and will be arranged so that pedestrians and cyclists are valued equally to motorists - perhaps more so in that they are making the effort to travel in a sustainable manner.

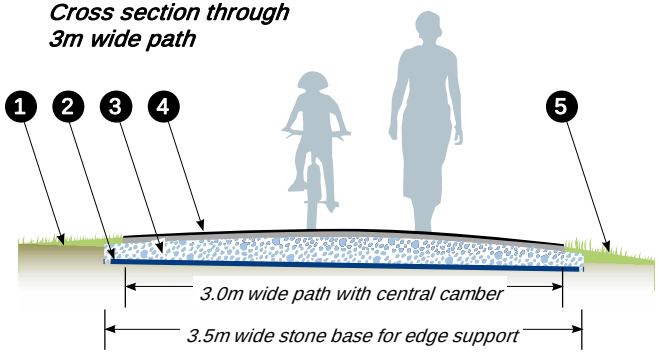
The path will be permissive in nature and not a public right of way except over the section adjacent to the railway at Whitecroft, for a short distance in Norchard Wood and for the link to Norchard Station where the Greenway takes the same routing as existing public footpaths. Over these sections the rights of way on foot will remain whilst the path will only be permissive for cyclists.

The plan shows the connection to existing public paths including the Green lane from Middle Forge which will be reconstructed to make a good route to Lydney C of E school.

There will be no lighting along the route other than incidental illumination at roads and elsewhere.

Signing will follow existing Forest standards, again so as to give continuity all through to Beechenhurst and beyond.

Cross section through 3m wide path



1 *Excavate a thin layer of soil: use to build up shoulders of path*

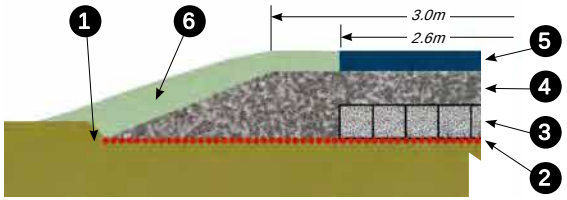
2 *Polypropylene fi lter fabric*

3 *Stone base 150mm thick and 3.5 metres wide*

4 *Lay the fi nished surface layer 3.0 metres wide. Final wearing layer fi nished with limestone dust brushed in to give a natural look and a colour that fi ts within the landscape.*

5 *Soil verges sloping away from the path at 1:5.*

Cross section through path through woods



1 *Minimum clearance of ground just suffi cient to remove tree and shrub roots.*

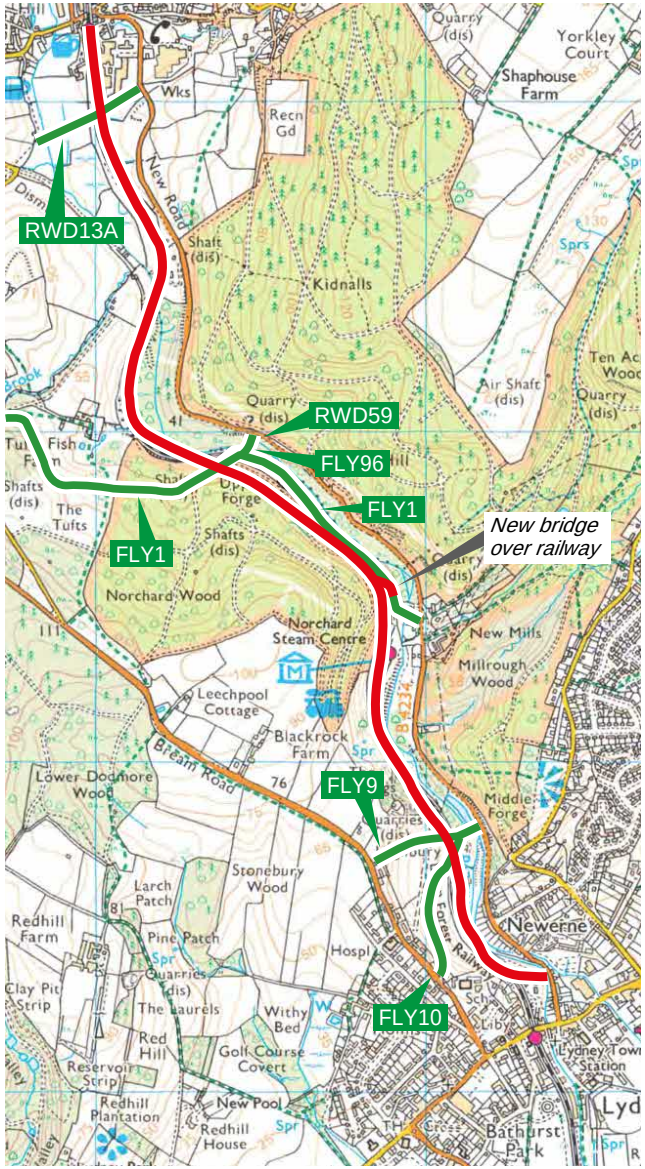
2 *Polypropylene fi lter fabric 4.0m wide*

3 *'Strataweb' or similar cellular root protection material*

4 *Base stone, scalpings, planings or similar*

5 *Machine laid DBM*

6 *Verge and shoulders built out level with the path using available materials.*



Plan showing the Dean Forest Greenway providing the link to all the existing paths and routes in the heart of the Forest

7 Crossing details

Fountain Way at Parkend, New Road at Whitecroft and Forest Way in Lydney

The Dean Forest Greenway is a traffi c free path designed for pedestrians, cyclists and people with disabilities, of every age, skill and experience. The path crosses public roads on four occasions, in each case within 20 or 30mph speed areas. This project is proposing that at three of the crossings a simple advisory design is used similar to the one shown here at Instow in Devon on the popular Coast to Coast Tarka Trail. In this arrangement walkers and cyclist do not have any priority but their presence is clearly signalled to motorists on the road. In the case of the New Road crossing north of Parkend we suggest extending the existing 30mph village gateway signing to just north of the entrance to Parkend Inclosure and so north of the proposed crossing.

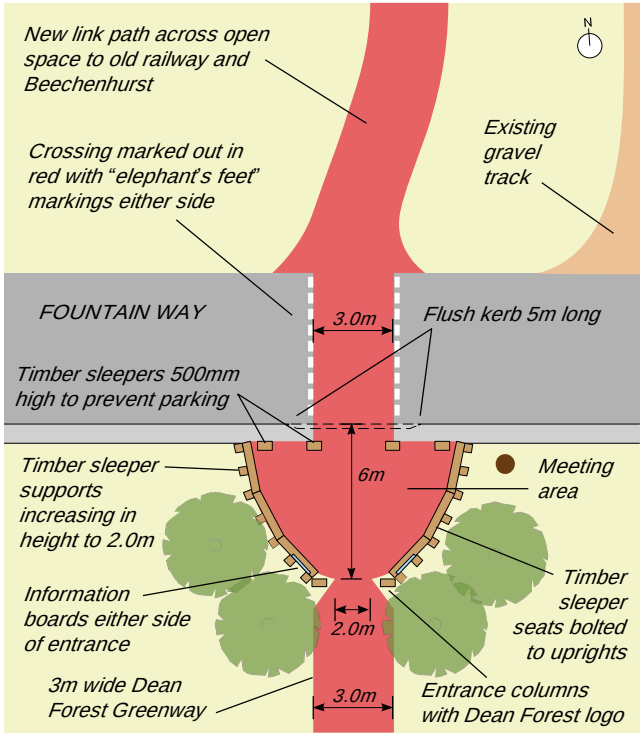
Advisory crossing, Tarka Trail, Devon

In the more urban situation close to Light Fantastic in Lydney, we propose a zebra or light controlled crossing similar to the example shown here. To make this possible the existing 20mph zone will need to be extended to just north of Spring Meadow Road, and visibility improved by removing the private hedge adjacent to the road south of the proposed crossing.

Gloucestershire Highways are the masters of these public roads and we anticipate that they will require details and arrangements which the Greenway will have to meet as well as the fi nal design of each crossing being undertaken to their requirements.

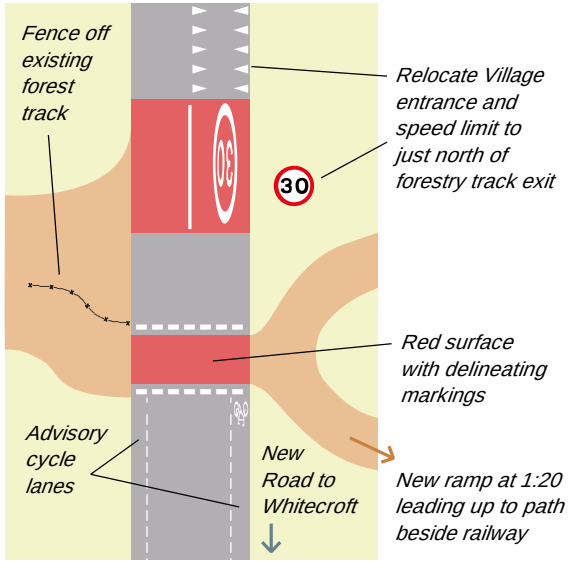
Light controlled crossing

FE1: Sketch showing Fountain Way entrance arrangement based around reused railway sleepers or similar

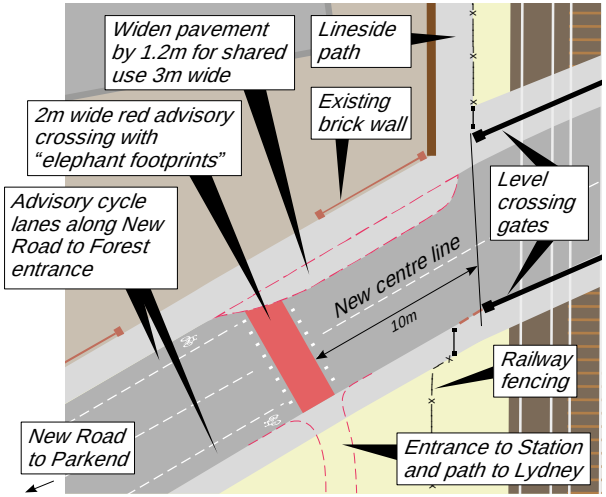


7 Crossing details, continued

FE5 Crossing New Road: This sketch is also GH1 Gloucestershire Highways

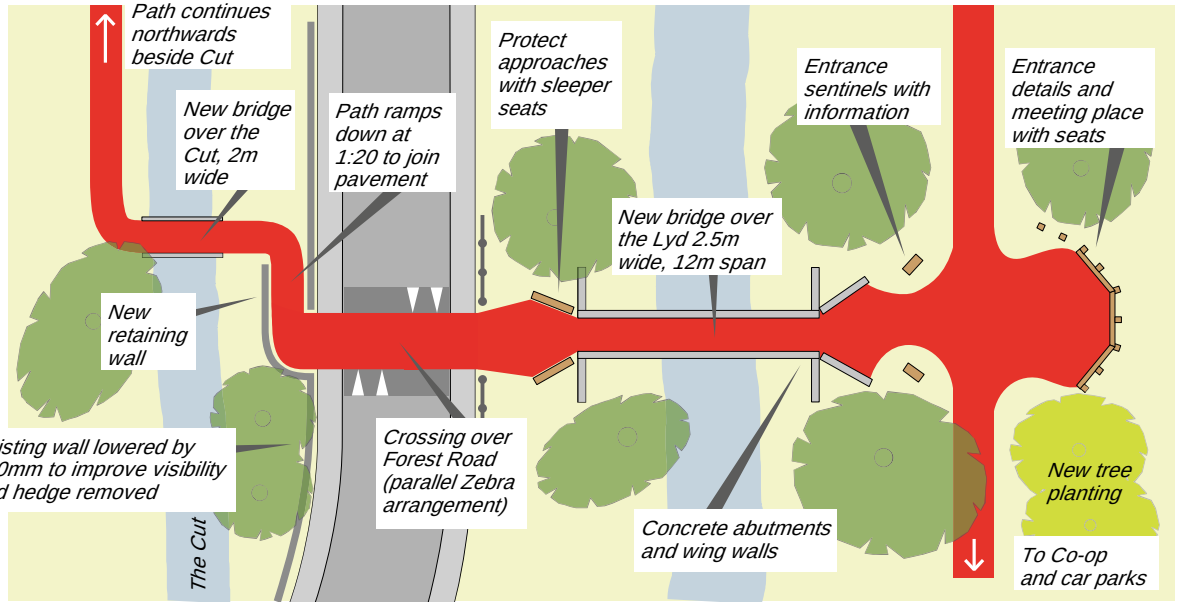


Plan of proposed crossing of New Road at Whitecroft



View of crossing at Whitecroft seen from the end of the rail side path by the level crossing gates

GH4 Plan of ramp down from Cut and raised pavement over the road through to Co-op path



8 Flood Risk Assessment, River crossings and drainage

The whole general line of the path is at a level above the fl ood plain. The route crosses the Cannop Brook, or its feeders at fi ve locations and at these points it crosses the fl ood plain for a short distance. Elsewhere at locations the path crosses ditches or drains, culverts will provide a dry passage. Where necessary these will require Land Drainage consent. In the area below the fi shing lakes at Tufts these culverts can take the form of small bridges in order to provide a more attractive passage through this watery area which will be treated as a feature along the route.

At streams and the Cannop Brook crossing, bridges will be provided. These will be of a larger span, and with a soffi t set higher than nearby bridges where relevant. The details of these bridges will be submitted to the Environment Agency in the usual way.

The schedule of bridges is as follows:

1 **Oakwood Brook** –6 metre span set 1.5 metres above general stream level. The approaches to this bridge will be on low causeways with the path set 300mm above the general ground level.

2 **Cannop Brook to New Road** the path follows the existing forest track and uses the existing bridge over the brook.

3 **Cannop Brook upstream from railway bridge.** This bridge has a 6 metre span between abutments. Here we propose a 10 metre span bridge set 3 metres above the general stream level.

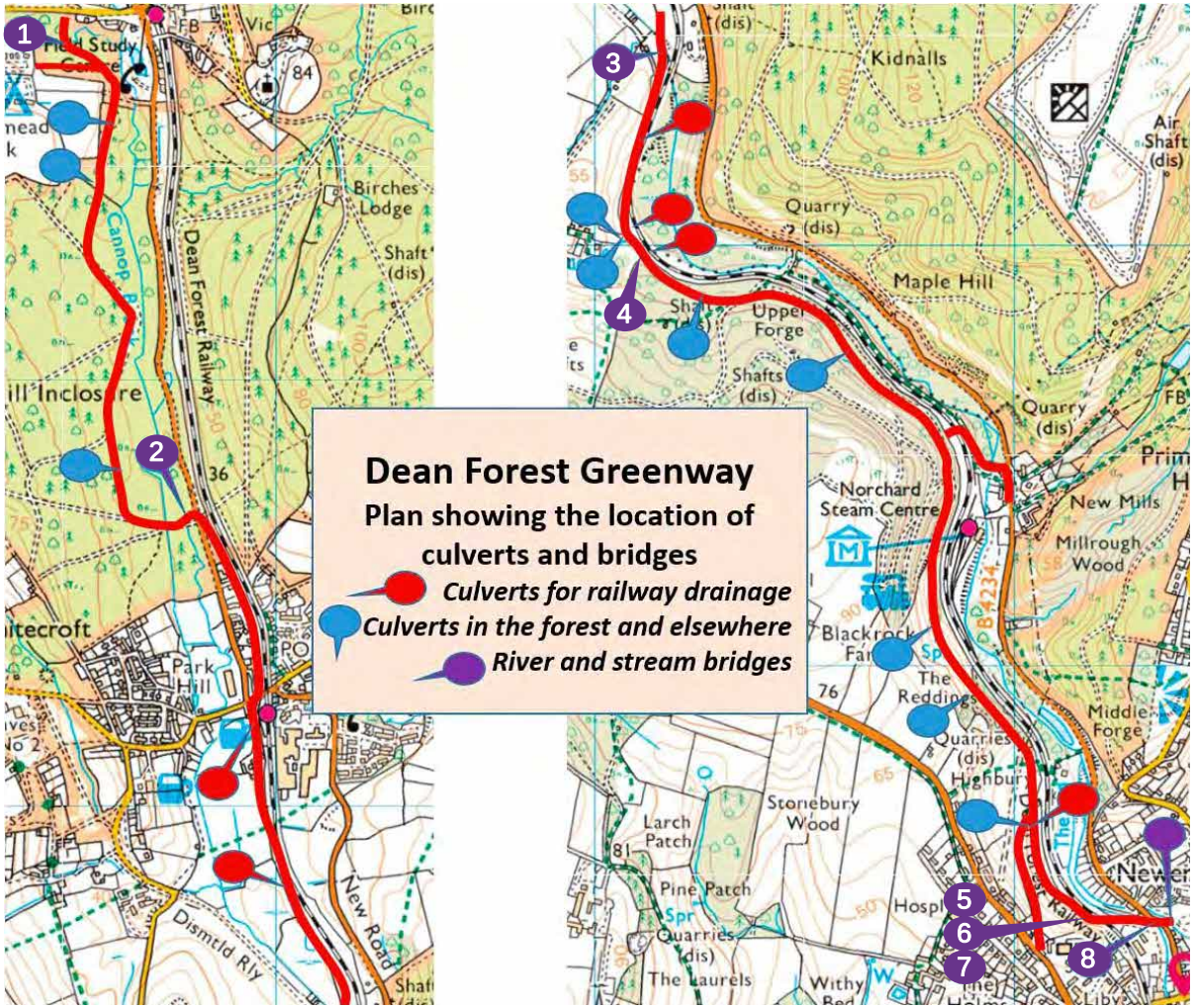
4 Small bridge from concrete sleepers crosses stream from the lakes.

5, 6, 7 Three small 5m span bridges across the Cut set at 400mm above normal control water level set on concrete footings.

8 **The Lyd River** –12m span set 0.5m higher than the nearby Forest Road. This bridge has a waterway of only 3.5m between training walls.

The bridges will be steel units similar to the example Greenways constructed on their recent Waddesdon Greenway project.

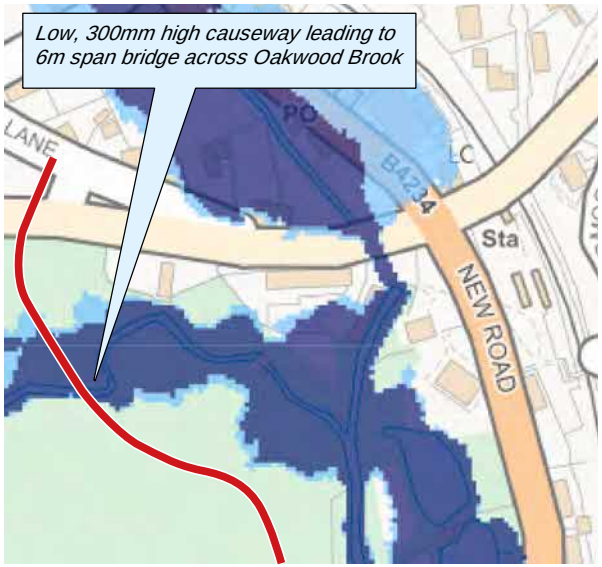
View of Greenways bridge at Fleet Marston near to Aylesbury



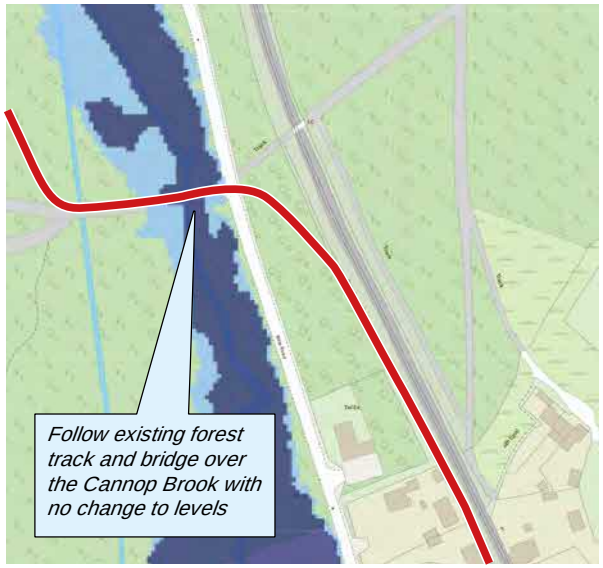
Location of drains and ditches to be culverted, and streams to be bridged

Interfaces with Flood Plain

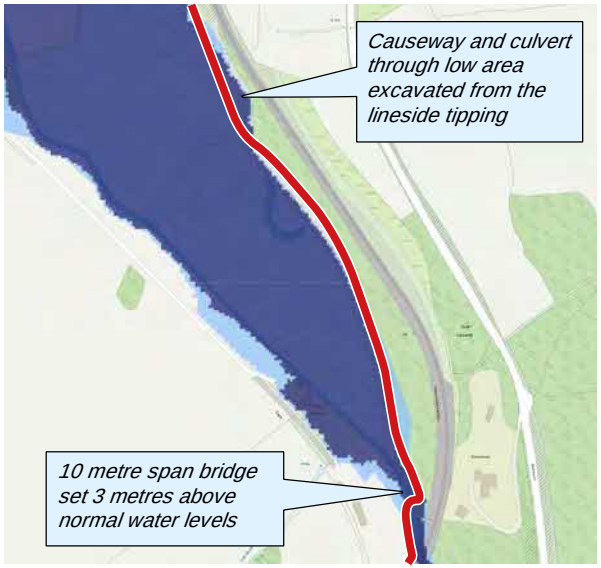
1 Fountain Way, Parkend



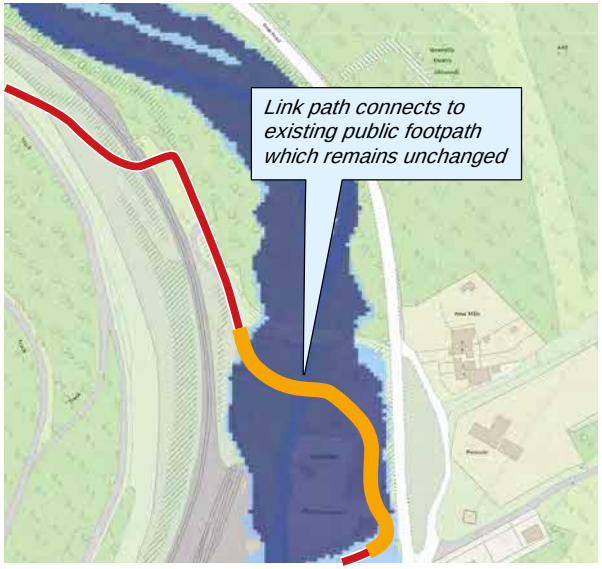
2 North of Whitecroft



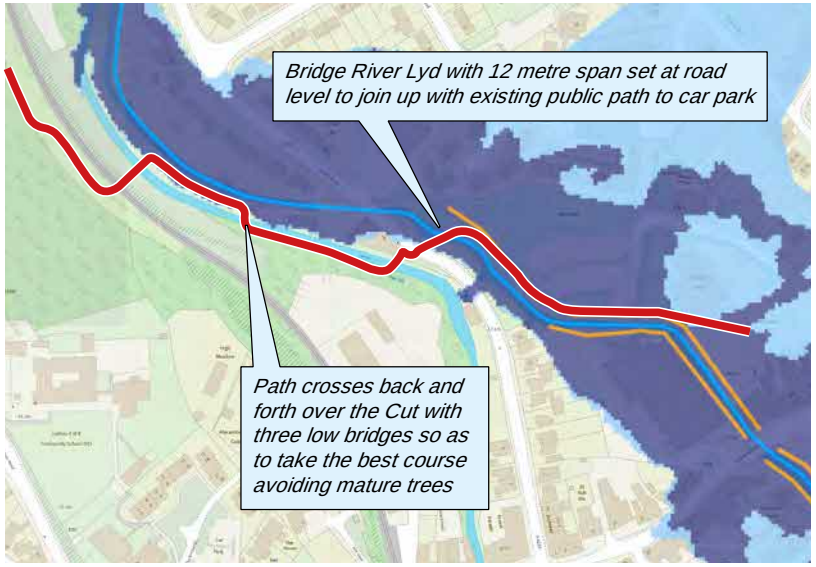
3 North of railway bridge over Cannop Brook



4 North of Norchard Station



5 South of Light Fantastic approaching Lydney



Thumbnail maps showing Zone 3 sections of the Greenway route

9 Construction Access

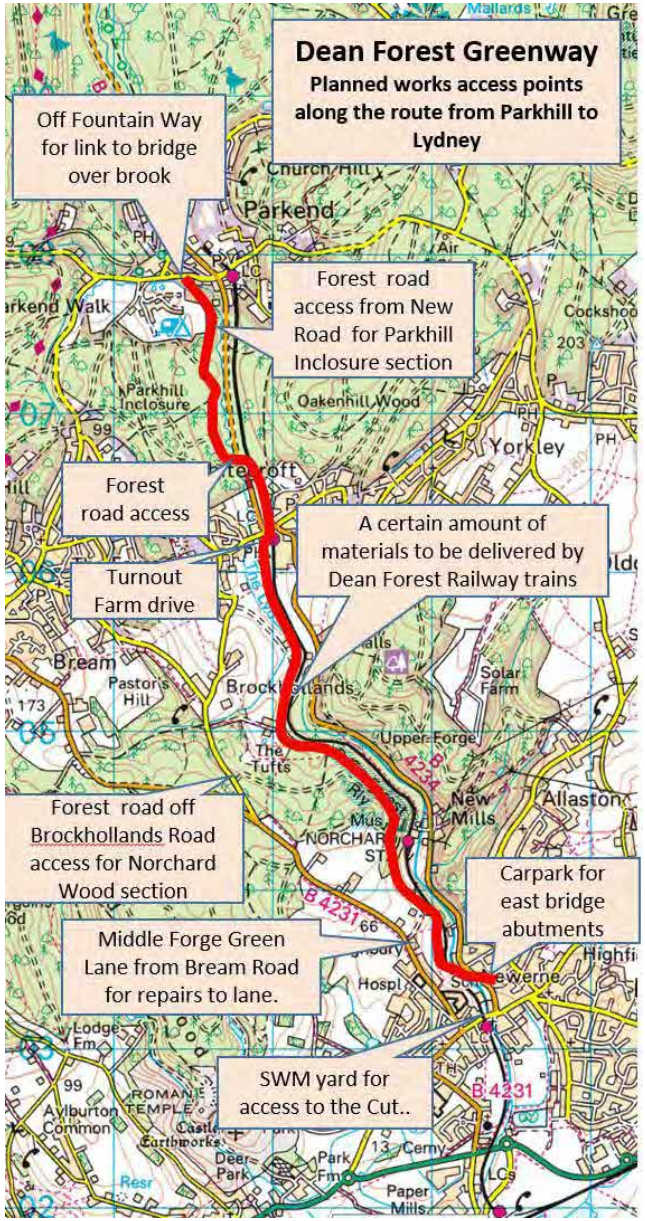
The construction of the Greenway will be carried out by local contractors working at a small scale together with Greenways annual summer workcamps where volunteers tackle the most labour intensive aspects of the project such as bridge construction, similar to their recent works on the Wye Valley Greenway from Chepstow.

The work is likely to be spread out over 15 –18 months to take account of the various ecological, weather and railway access constraints, and the fact that the work is best done in a low key manner to give time to take account of local conditions as they arise. Clearance, felling and planting will be done through the winter periods.

Most of the materials required is local stone and aggregates, together with a small amount of concrete and steel for bridge works and fencing materials. Approximately 150 -200 lorry loads will be delivered over the whole period of construction.

The works accesses will be spaced along the route as shown on the plan. Mostly stone will be delivered to a stockpile near the road entrance and then transported to the construction site with dumpers. Due to the small scale nature of the work it is unlikely that there will be anything other than a mobile site offi ce which is able to deal with matters as they arise along the whole route.

There is only a very limited interface with public roads and should any partial and temporary road closures be required these will be as part of any highway crossings the County Council decides to put in place. Public access along affected footpaths will be maintained as necessary.



Plan of works access points

10 Maintenance matters

The whole Greenway will be maintained under the direction of West Dean Parish Council, working closely with Lydney Town Council and Greenways volunteers. The latter will undertake much of the day to day work including acting as informal rangers to support the general public. From time to time Forestry England may have to undertake felling or other forest maintenance work, and should the paths be severely damaged as a result of this then it is anticipated that they will repair those sections.

Eventually we anticipate that the whole network of paths and traffi c free routes in this area will best come under a single common maintenance, management and promotion unit for convenience and consistency.

11 Conclusion

The proposed Dean Forest Greenway described in these notes has the ability to radically change access to and from the Forest, to transform local journeys and to create an immensely popular route which is the pride of the local area.

It is the nature of these long paths that they evolve as they progress through the planning and constructions process to reach even better detailing and a wider vision than we can set out here.

West Dean Parish Council
together with Greenways & Cycleroutes Limited

November 2021