

THE DOWNS COMMITTEE

Clifton and Durdham Downs (Bristol) Act 1861

Reply to Jeremy Livitt

To : Members of the
Downs Committee

Telephone 0117 9223758
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Date Friday, 8 November 2019

The Lord Mayor and 6 City Councillors

The Rt. Hon. The Lord Mayor Councillor Jos Clark
Councillor Kye Dudd Councillor Peter Abraham
Councillor Donald Councillor Barry Clark
Alexander
Councillor Christopher Councillor Paula O'Rourke
Davies

The Master and 6 Merchant Venturers

Ross Ancell (Vice-Chair) Jonathon Baker
Gillian Camm Simon Cooper
Peter Rilett Mary Prior
 Tim Ross

Dear Member,

SUPPLEMENTARY DISPATCH – AGENDA ITEM 12 - MATTERS ARISING FROM THE MOVEMENT AND PLACE SUB-GROUP – WEDNESDAY 6TH NOVEMBER 2019- (Pages 3 - 22)

The Committee is requested to note the summary of the discussion at the Movement and Place Sub-Group on Wednesday 6th November 2019 and recommendations arising from it. The reports to be considered alongside these recommendations are also included and listed with page numbering below:

(1) Summary of the Minutes of the Movement and Place Sub-Group – Wednesday 16th November 2019 (Pages 3 to 5)

(2) Agenda Item 3: Brief for Request for Approval of a New Copse Woodland on Clifton and Durdham Downs – Granny Downs Section (Pages 6, 7 and 8)

Democratic Services Section

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(3) Agenda Item 4: Report on Cycling Provision Alongside the A4018 (Pages 9 to 13)

(4) Agenda Item 5: Leisure Loop Update Report (Pages 14 to 22)

Yours sincerely,

JL

Jeremy Livitt

12. Matters Arising from the Movement and Place Sub-Group - Wednesday 6th November 2019 - Summary Notes, Recommendations and Reports From The Meeting (Pages 3 - 22)

The Committee is requested to note the summary of the discussion at the Movement and Place Sub-Group on Wednesday 6th November 2019 and recommendations arising from it. The reports to be considered alongside these recommendations are also included and listed with page numbering below:

(1) Summary of the Minutes of the Movement and Place Sub-Group – Wednesday 16th November 2019 (Pages 3 to 5)

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(3) Agenda Item 4: Report on Cycling Provision Alongside the A4018 (Pages 9 to 13)

(4) Agenda Item 5: Leisure Loop Update Report (Pages 14 to 22)

Jeremy Livitt, Democratic Services Officer

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Summary of the Minutes of the Movement and Place Sub-Group – Wednesday 6th November 2019

Agenda Item 3 - Richard Bland Memorial

It was noted that, following the last meeting of the Downs Committee held on 23rd September 2019, the proposed Richard Bland memorial had been referred to the M and P Sub-Group for further discussion and consideration.

Page | 1

John Atkinson presented the report and made the following comments and drew members' attention to the proposal to create a tree trail.

Sub-Group members made the following comments:

- Whilst there had been initial concern about this proposal when it had originally been made at the last Downs Committee meeting, the proposals set out in the report to the Sub-Group seemed entirely appropriate as a fitting tribute to Richard Bland subject to no formal memorial being created such as a plaque. This proposal would be appropriate to go to the main Committee for endorsement
- It was noted that it could still nevertheless be informally referred to in future as the Richard Bland copse
- This memorial could be used as an opportunity to clear brambles at the site, as regularly happened throughout the Downs

Ben Skuse confirmed that the proposed site was in an area that had been used as disabled parking for the regular annual Team Love event. This was an open patch of grassland and would be cleared and mowed differently.

RESOLVED: that the Sub-Group recommends to the Downs Committee that the proposed area be set aside for the creation of the Richard Bland memorial as outlined in the report but with the understanding that there would be no formal acknowledgment of the memorial on the site.

ACTION: To Be Referred to the Downs Committee for consideration

Agenda Item 4 - Cycling Provision Alongside the A4018

The Sub-Group noted that at the last Downs Committee a vote on this issue had been postponed pending further investigation of the existing land potential of the existing cycle route if resurfaced, improved and extended and an assessment of why that could not happen.

Members noted Steven Riley's report on this issue. It was noted that a meeting had been convened with the Bristol Cycling Campaign, Bristol Walking Alliance, and the BCC Walking and Cycling officer, following which it was considered that the current shared-use pavement alongside Westbury Road is not an acceptable facility to be upgraded as it did not meet current national best practice standards.

In response, Sub-Group members made the following differing points:

- There was a sense of urgency about the need for this proposal and, following consultations, there had been a favourable response to them from the public, including the impact in helping to reduce further traffic
- One member expressed the view that cyclists did not want and would not use an unbound surfaced path.
- Any decision to put extra paths on the Downs was of concern as this would permanently change grassland from its current use. It was noted that a variety of activities had taken place on the Downs in the past such as prize fighting, steeplechasing and horse riding. However, none of these had created a permanent change
- All four reasons given in the report for the current shared-use pavement not being an acceptable facility were not applicable

It was noted that maintenance work would be required on any path on a regular basis, otherwise it would return to the landscape.

In response to the issues raised, officers pointed out that:

- Whilst confident road cyclists might not want to use an unbound path, Bristol City Council policy was to provide infrastructure that would encourage new cyclists and the design cyclist was a younger inexperienced cyclist
- There were other issues that would need to be considered in terms of maintenance, such as mowing off the path and strimming of any signs that might be provided
- A self-binding surface could be used for the path to avoid any potential for run-off

The Sub-Group also discussed the implications of any decision made on this issue in relation to the Place and Movement Framework. The following points were made in relation to this:

- The existing P and M Framework did not include any reference to losing areas of grass on the Downs
- There were 3 main proposals arising from the original framework, all of which had some support. However, none had been progressed since there had been concerns about a lack of adequate funding. It was noted, however, that until a form proposal was prepared, sources of funding could not be sought.
- It was noted that a phased approach in different parts of the Downs was one possible solution to this, rather than changes in all parts of it

RESOLVED – that the Downs Committee is recommended to reconsider the proposal for cycling provision alongside the A40178 taking into account the report produced by officers to the Movement and Place Sub-Group on this issue

ACTION: To Be Referred to the Downs Committee for consideration

Agenda Item 5 – Leisure Loop Update

The Sub-Group noted the update report on the issue and that a traffic survey was being carried out, with a further report including a recommended proposal for consideration at a future M and P Sub group meeting in 2020.

Page | 3

Members of the Sub-Group made the following comment:

The reference to only 500 metres of new path being laid on the Downs as part of the proposal was misleading since it was a new linear path. A detailed map indicating this would be required in any future report.

Officers pointed out that the existing footpath could be relayed to minimise the land surface on the Downs. One option would be to use the space between the trees and shrubs to create subtle deflections.

RESOLVED –

- (1) that the update report is noted**
- (2) that the Downs Committee is recommended to agree to a “rebrief” by Richard Goldthorpe of the Downs Place and Movement Framework in a separate informal briefing session in order to allow members to fully understand the original commission and the conclusions of the associated workshop in considering the Leisure Loop proposals. It was agreed that this session should include details of the traffic survey currently being carried out and that Vicky Cracknell (Cycle Sunday) would also be invited to attend this briefing**

ACTION: To Be Referred to the Downs Committee for consideration

AGENDA ITEM 3

Brief for Request for Approval of new Copse Woodland on Clifton and Durdham Downs (Granny Downs Section).

Downs Committee Movement and Place sub-group meeting 6th November 2019

SUMMARY:

Richard Bland sadly passed away in December 2018. Richard was possibly Bristol's leading naturalist and ecologist. He was an active member of several environmental and scientific societies in the city including Bristol Tree Forum and Bristol Naturalists; Society.

Richard was a fountain of knowledge and frequently gave up his time to support and inform a wide range of projects throughout the city. He was the 'go-to-guy' for people from Bristol City Council, Avon Wildlife Trust, Forest of Avon Trust and many others when information was required on rare trees, habitats, local effects on the environment and any aspect of natural history across the South West.

Before his death Richard was working on a project in collaboration with Mandy Livers, Avon Gorge and Downs Biodiversity and Education Manager, around a planting scheme and educational tree trail to complement the development of the education centre and café which is due to replace the old toilet block near the western edge of the circular road.

Friends of the Downs and Bristol Tree Forum have approached the Tree Bristol / One Tree per Child team at Bristol City Council with the proposal of associating the planting of the copse to remember Richard by. Richard loved the area, did much good work around education people of flora and fauna in the vicinity.

The planting will also support the overall Bristol Tree Strategy which aims to increase planting across the city to help reach the ambitious targets within the One City Plan for Bristol to be carbon neutral by 2030 and to double the city's tree canopy cover by 2050. To do this Bristol needs to plant trees across approximately 15% of its land area. This planting on the Downs represents about 0.002% of the total area of Clifton and Durdham Downs acreage.

There is an existing sponsorship scheme – Tree Bristol , where citizens can sponsor individual trees across the city, (including the Downs), and can include a small plaque to be fitted on the protective weldmesh cage.

We propose to plant a small copse in the area as per map. The general structure of the woodland copse will compose of three large oak trees at its centre surrounded by an understory of smaller woodland species with a focus on native trees to promote wildlife habitats. The species selected, schematic of the scheme and the short term and long term effects of planting have been carefully considered with advice from Becky Belfin – lead ecologist at BCC as well as considering advice from Mandy Livers, Bristol Tree Forum and Bristol Naturalist Society.

STAGES:

The following represents a summary timeline of the project:

- November 2019 Downs Committee approve proposal
- November 2019 Service checks for underground infrastructure and soil tests
- December 2019 Public consultation on scheme with local residents
- December 2019 CAT scan of woodland area
- December 2019 Tree stock ordered through Blaise Nursery
- February 2020 Woodland planted with local school & Friends of the Downs
- April 2020 onwards Maintenance programme begins

AGENDA ITEM 3- MOVEMENT AND PLACE SUB-GROUP

Richard Bland Memorial Woodland – Tree Planting Draft

Suggestions from the Steering Group that the woodland should be as the map as an area RB enjoyed and one that may be approved through the Downs Committee. BCC ecologist Becky Belfin has confirmed that, despite the Downs' status as SNCI, the grassland in this area is not particularly species rich and would be suitable for woodland. She has confirmed that non-native oaks such as *Quercus ilex* are unsuitable due to the ongoing work to clear invasive species from the Avon Gorge. The spacing should maintain some sightlines for residents along Ivywell Road.



Location of Copse / Woodland

First draft Tree Planting Plan

Agenda Item 4

A4018 Westbury Road and cycling

Introduction

The A4018 project has prepared a design for a shared-use path on the Downs alongside the A4018 Westbury Road. As well as providing improvements for identified current issues, this project is focussing on the considerable increase in traffic on the route forecast as a result of the forthcoming Filton Airfield development.

This matter has been discussed with the Downs Committee Movement and Place sub-group on a number of occasions. Recent changes made as a result of these discussions have been improved crossings of Roman Road and the southern arm of Parry's Lane (where pedestrians and cyclists have priority), consideration of rolled limestone as a surface material, and the proposal to sign the path for pedestrians only with the existing shared-use pavement of Westbury Road signed for cyclists only. It is accepted that this latter aspect could not be enforced by the council but would likely be quite well self-enforcing.

At the 23 September Downs Committee meeting, a vote was taken on granting permission to the project to submit a planning application for the path. The result was a 6-6 tie, with the project asked to provide evidence that the existing shared-use pavement could not be upgraded to provide adequate facilities for walking and cycling with no Downs land required before another vote could be arranged.

The proposal was popular with respondents to the A4018 project's consultation in February-March 2019, as shown in the below extract from the consultation results report.

The new shared-use path on the Down alongside Westbury Road

Result: proposal recommended to be kept, this change will be made

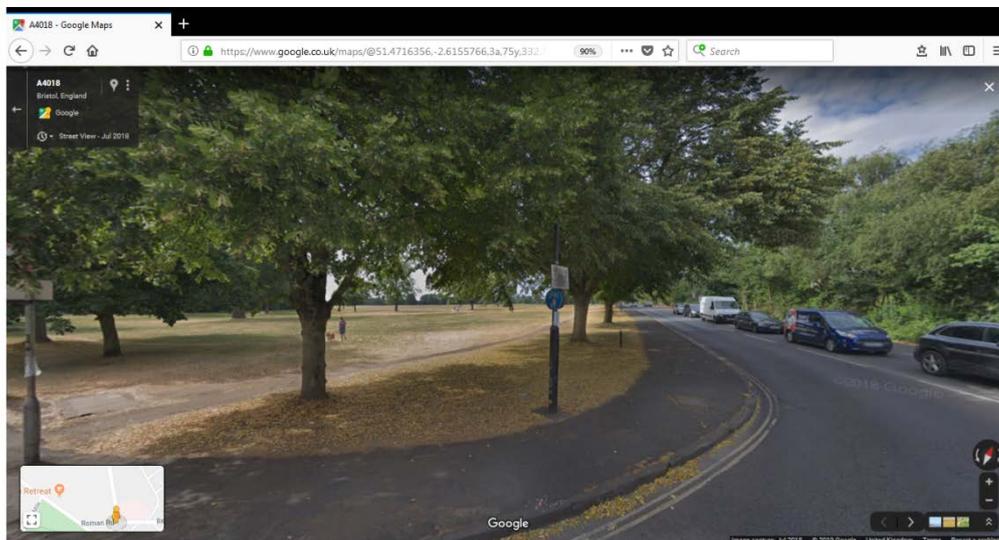
Comments in favour	Comments against
530	213

Although the level of support for this element barely surpassed half from responses to the questionnaire, a large number of people provided positive comments on it separately. For this reason, it is suggested that this element of the scheme be retained.

Agreement will also be required from the Downs Committee (whose Place and Movement sub-group support the proposal in principle as part of their aspirations for more leisure cycling routes on the Downs), which will be sought in due course. It is also the only element of the scheme that is not on public highway and will therefore require a planning application. As part of this process, detailed discussions will be held with groups representing people with disabilities, pedestrians, and cyclists to ensure the most appropriate and safest design in terms of access to the path, speeds of cycling, and whether the path is segregated, physically or by painted markings.

The existing shared-use facility on Westbury Road

For clarity, the route under consideration starts at the point shown below.



To consider this issue, a meeting was convened with the Bristol Cycling Campaign, Bristol Walking Alliance, and the BCC Walking and Cycling officer. It was considered that the current shared-use pavement alongside Westbury Road is not an acceptable facility to be upgraded for the following reasons:

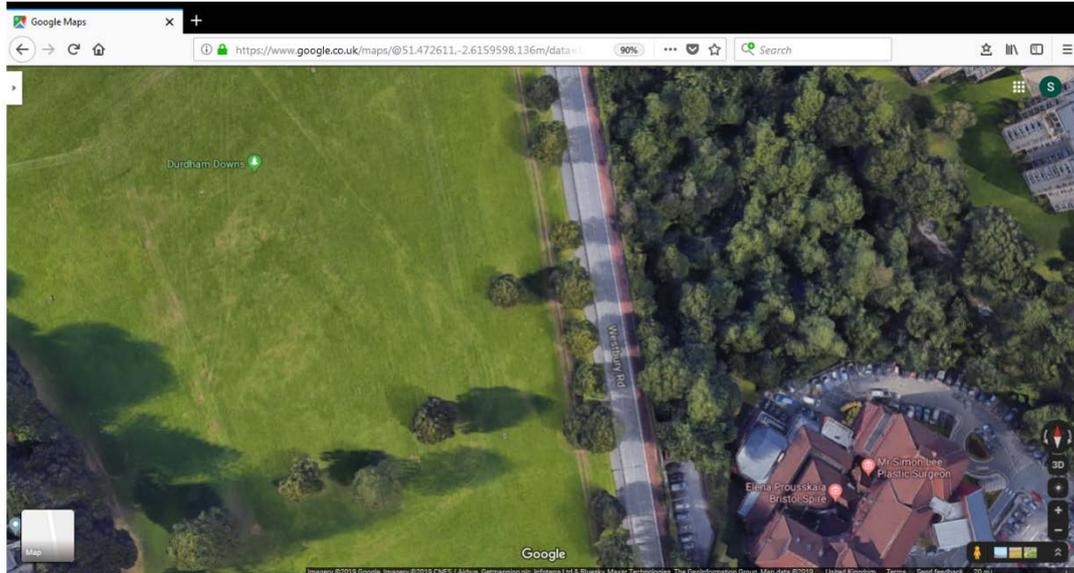
- There is no dropped kerb to access the route when travelling north from Whiteladies Road (or leave it when travelling in the opposite direction)
- Shared-use is not appropriate provision on an arterial route, and best practice both nationally and locally would be to provide segregated pedestrian and cycle provision.
- The width is inadequate for a shared pedestrian and cycle route and includes a number of obstacles such as roads signs, street lights, and bus stop boarding areas.
- There is no continuous provision for cycles (or pedestrians) at side roads or junctions, which reduces its utility and safety.

In June 2016, a series of traffic counts was undertaken to provide data for modelling traffic impact on the route. In the 12-hour measurement period of 7am to 7pm, a total of 262 cyclists were recorded travelling on the A4018 Westbury Road carriageway just south of White Tree roundabout. At the same time, only 42 cyclists were present off the carriageway (either on the shared-use pavement or adjacent grass).

This is evidence that many cyclists consider the current provision to be inadequate, choosing to use the busy and unpleasant road. Using the July 2019 results of the introduction of good quality segregated cycle paths in the city centre (such as Baldwin Street and Prince Street), there is likely to be a high level of suppressed demand that will become evident when improved provision is in place. If this were to be proved the case, there could be a significant reduction in the number of cyclists using the carriageway, raised as a matter of annoyance by many respondents to the consultation.

Related issues

In terms of visual impact on the Downs, provision of a naturally-coloured path the other side of the trees from Westbury Road would make little difference from the current situation. As illustrated on the picture in the section above, and shown more clearly below, there is such a desire line to walk and run on the Downs along Westbury Road that an informal track has already been worn.



It has been confirmed by the Downs Grounds Supervisor that this erosion leads to very muddy conditions for large parts of the year, illustrated below, which would be considerably ameliorated.



For safety reasons, it would be vastly preferable for the path to be lit. Although parts of the Downs have Dark Sky Status, that is restricted to the area around Circular Road and is not relevant alongside the A4018. The road and pavement are already lit, so the attachment to

the existing columns of additional lanterns facing in the opposite direction could light the new path with minimal impact.

The final point to be borne in mind is where users of the new path go at the northern end. The current design shows the path stopping by an existing informal crossing point just north of Henleaze Road. While this allows for movements to the east, there is limited space to cater well for the north-south demand.

With Local Growth Fund money, the A4018 project will start constructing a segregated bi-directional cycle path on the eastern side of the road from Crow Lane to Greystoke Avenue in 2020 (bid to be decided January 2020). Once this is underway, design work will be undertaken to continue provision of a similarly high-quality cycling route further south, initially as far as the Falcondale Road-Westbury Road junction. The final stage at this point would be to join this location to the Downs, for which space would be easily available if some of the parking along Westbury Road by Badminton School (greatly underused outside school drop-off and pick-up times) were removed.

Because the path on the Downs would be constructed using Section 106 contributions from the developers of the Filton Airfield site, and requires a planning application, it is unlikely that construction could commence before 2022. By this time, the cycling provision to link the northern end of the path to continuous segregated cycling facilities almost as far as the Bristol-South Gloucestershire border would be fully designed and potentially under construction (also using the s106 funding).

The planning application for this route could also incorporate the extension of the path to run alongside Parry's Lane and Saville Road. This – if funded by another source – would link to the existing path alongside Stoke Road to create the Seven Sisters Loop, part of the Downs Committee Movement and Place Framework.

Conclusions

Consultation with the Bristol Cycling Campaign and Bristol Walking Alliance has shown that the current shared-use pavement on Westbury Road is unsuitable for upgrading given the many negative points it displays. The forecast increase in demand for journeys on the A4018 as a result of the Filton Airfield development, and the council's desire to provide high-quality sustainable transport options for them, makes it increasingly important to upgrade the facilities in this area. The current use of the proposed new path location, and the damage this causes to the Downs, indicates a high level of demand for which the path would cater while mitigating the erosion.

It is requested that the Movement and Place sub-group recommends to the Downs Committee that a new vote is taken at the meeting of 18 November 2019.

If this new information allows the sub-group to give their support to the Downs Committee vote, that would be most helpful.

Agenda Item 5

1st November 2019

Dear Downs Committee,

Leisure Loop update

Route

Following discussions with members of the sub-group over the past few months, we have considered an amend to the route as follows: Crossing just after Ivywell and following the line of the narrow tarmac path that currently leads to the toilet block. This has the benefit of keeping the path route away from the pinch point on the corner with football pitches and the perimeter of the Downs Festival site. A crossing point (with pedestrian and cycle priority) would be needed just past Ivywell Road.

This change of route would mean that only approximately 500m (marked in green on the map) of the Leisure Loop route would be new path laid on the Downs. This section would cover a section that is heavily eroded.



The rest of the loop would be created by using and adapting existing tarmac paths and/or the road. All the shared use paths for the Leisure Loop would be 3m wide as detailed in the cross-sections (Leisure Loop Proposal - May 2019). This would mean that existing paths would be widened as well as being re-built.

Ultimately, a key objective for us is to provide a safe car-free route (with the exception of the crossing) all the way from Stoke Road to Seawalls. Bikes could arrive to the right of the café (as you look towards the Gorge) and adequate cycle parking would be required.

Notes from site visit to Kingston Lacy multi-user trail (22nd October)

Jonathon Baker, Richard Goldthorpe and Vicki Cracknell met with Dr Graham Clark from the National Trust (Active Outdoors Lead – Cycling). We cycled around the 3 miles (5km) trail which consists of new stretches of rolled stone path, a wooden boardwalk and some existing tarmac paths.

Multi-use trails

In recent years, the National Trust have been building ten new trails at properties across the country. The majority of them including the trail at Kingston Lacy are “multi-use”. This means they are designed to accommodate people doing a range of activities that include walking, running, pushing buggies and cycling. Subtle signage on the National Trust trails shows that the paths welcome all these users.

We refer to the Leisure Loop on the Downs as “shared-use”, as for us it is vital that the needs of all users are considered whilst enabling new users to access the area. It is not a “cycle path” but it would welcome people on bikes. We have particularly focused on children on bikes with their families. We also want to keep reminding the committee that a new shared use path would be accessible to people in wheelchairs who can’t currently access the Sea Walls area unless they own and/or can drive a car.

The expectation is that those on bikes will give way to those on foot. We believe that simple, thoughtful design and low key, appropriate signage will lead to considerate use of the shared path.

One of the objectives of the new National Trust trails is to help visitors explore beyond the houses and formal gardens into meadows, woods and farmland on the estates. It is of course a way to encourage people of all ages to exercise. The National Trust paths are popular with runners and several properties host Park Runs on the new trails.



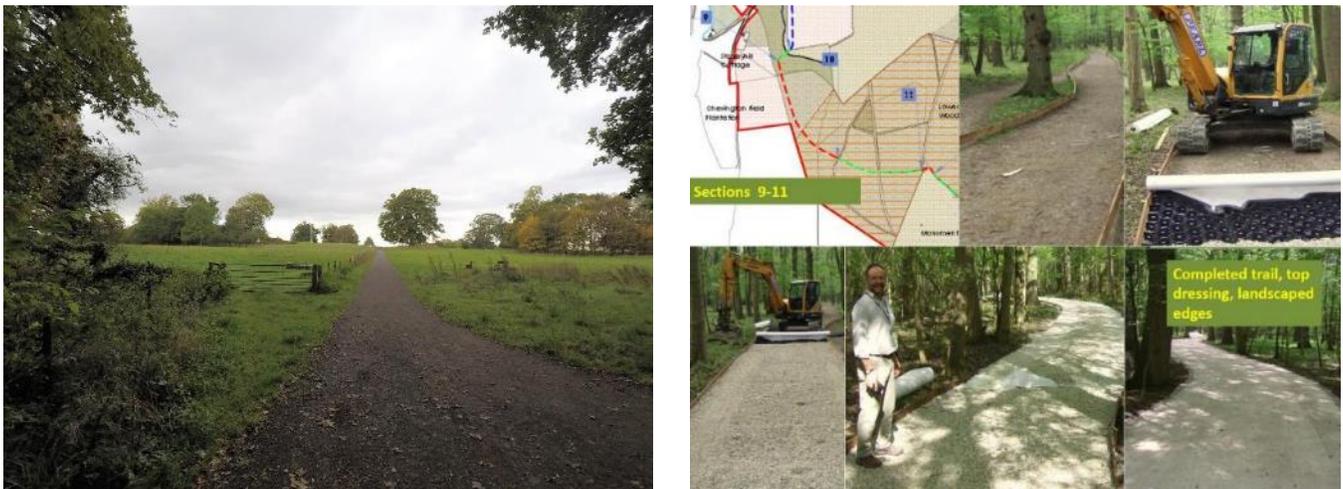
The paths have the advantage of being “softer” than tarmac paths for the user, which may reduce the runners choosing the grass and therefore creating additional paths alongside the new paths. There are clear “desire-lines” around the Downs which have been worn by runners and those walking.

Path construction

The National Trust have not laid tarmac for their new multi-user trails except where they have incorporated existing tarmac paths into the routes.

The paths are made with rock that has been crushed to specific sizes. For the top wearing course, they specify a 3-6mm to dust grade which, when laid and rolled, provides a natural self-binding surface.

Appropriate local aggregate is selected to fit within the landscape at each location. For example, the trails at Kingston Lacy are quite dark and dull in colour. In contrast a recently completed path at Ickworth (Suffolk) has been laid with limestone which is much lighter.



The National Trust have developed a set of design specifications (please see Appendix i) which deal with the range of conditions along the route including the use of geo-textile membranes in areas with tree routes next to the trail.

We discussed trail maintenance with Graham as we cycled around the loop. He explained that the National Trust use leaf blowers to remove dead leaves and have a seasonal inspection schedule. Their trails have been designed to last at least ten years, although five years was thought to be more accurate for maintenance budgets.

		£	lin m
Specification 1 (2.5 width)	Applicable to trail build within an unconstrained corridor on impermeable soils requiring positive drainage. On level ground form V - ditches to both sides of trail	£40 - 45	lin m
TOPSOIL STRIP	Excavate topsoil material, max depth approx 0.15m from formation	0.85	m2
FORMATION	Excavate and compact formation to profile on side slope 0 - 10%	0.1	lin m
GEOTEXTILE	Regulate surface to provide level platform, provide & lay to underside of capping layer as agreed on site, non - woven permeable geotextile membrane 'ecotex 07' by geosynthetics	0.97	m2
CAPPING & PAVEMENT	Provide, lay and compact commercial aggregates MOT Type 1 or as otherwise specified by engineer as surfacing; min 150mm compacted depth	10.68	m2
SURFACE DRESSING	Provide, lay & compact to falls local approved aggregate graded 6mm to dust laid wet as surfacing; min thickness 15mm.	2.09	m2
LANDSCAPING OF VERGES	Topsoiling of verges to trail margins prior to surfacing using soil windrowed along road corridor or transported from other locations, spread equally on both margins to make best use of available quantity	1.3	m2

Specification 2 (2.5 width)

Tray' construction - Applicable as default construction where trails are constrained by width of corridor or other aesthetic considerations

£40 - 45

lin m



TOPSOIL STRIP

Excavate topsoil material to form tray, max depth approx 0.15m and loosely stockpile, preferably adjacent to each section of works, for reuse to landscape subsoil arisings

0.95 m2

GEOTEXTILE

Provide & lay to underside of capping layer as agreed on site, woven permeable geotextile membrane min 140g/m2

2.94 m2

CAPPING & PAVEMENT

Provide, lay and compact commercial aggregates MOT Type 1 or as otherwise specified by engineer as surfacing; min 150mm compacted depth

10.68 m2

LANDSCAPING OF VERGES

Topsoiling of verges to road margins prior to surfacing using soil windrowed along road corridor spread equally on both margins to make best use of available quantity

1.32 m2

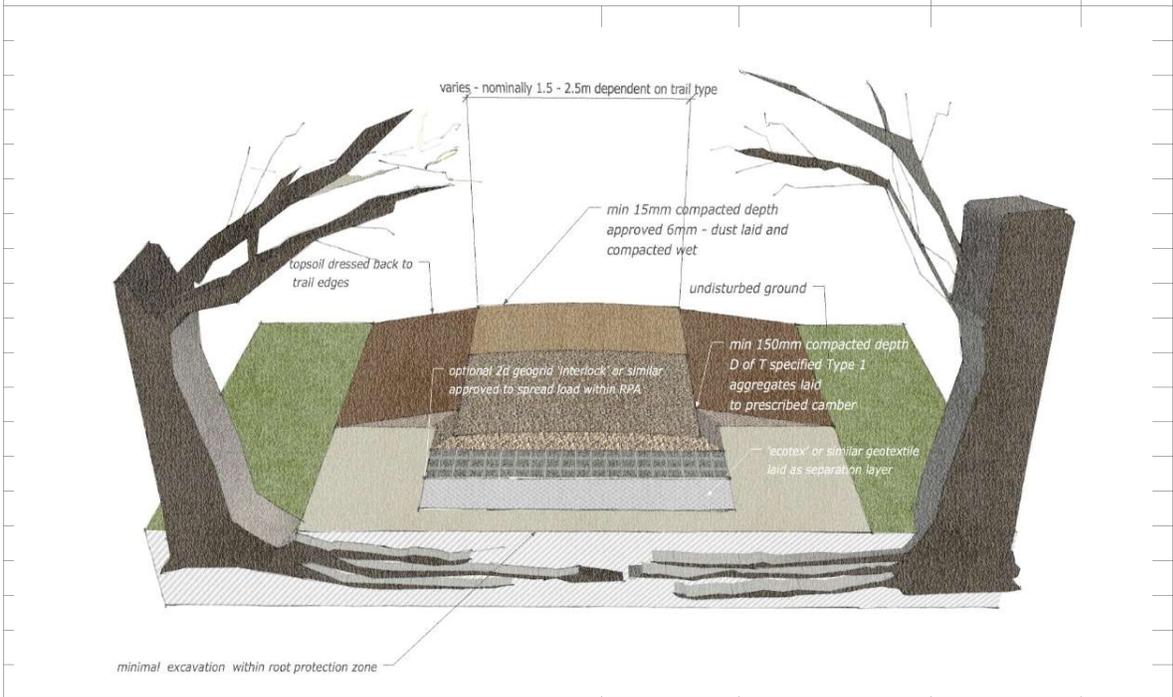
SURFACE DRESSING

Provide, lay & compact to falls local approved aggregate graded 6mm to dust laid wet as surfacing; min thickness 15mm.

2.09 m2

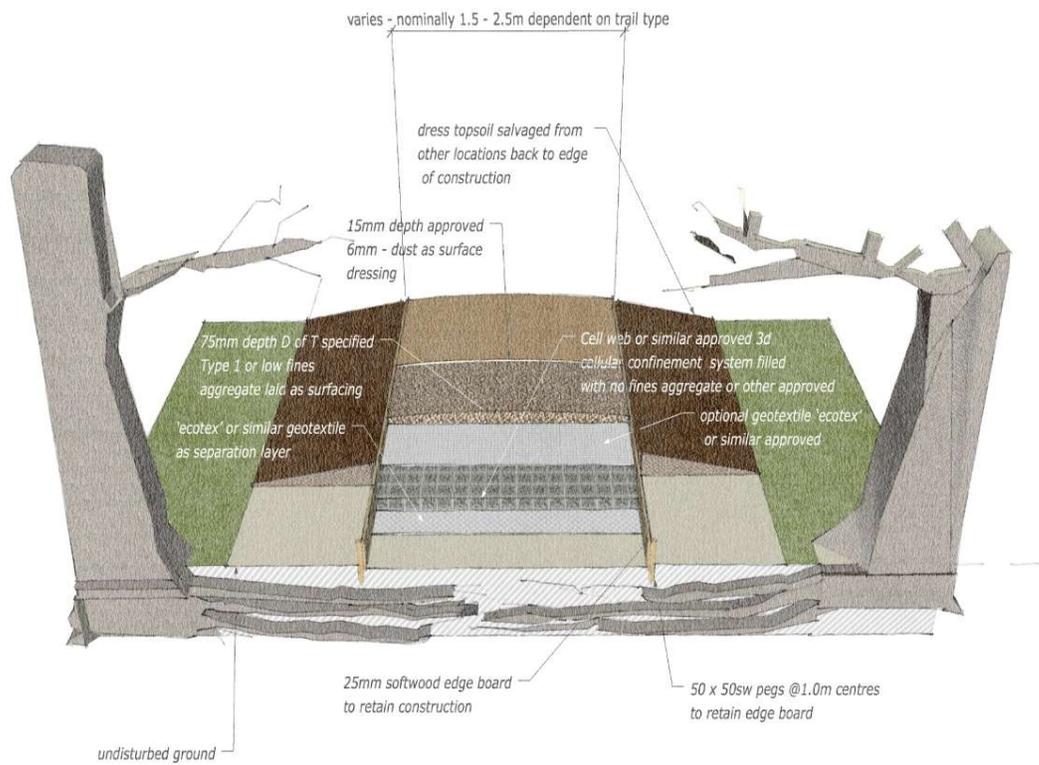
Specification 3 (2.5 width)	Specification shall be as SPECIFICATION 2 with the following additions and primarily be used in locations where drainage is critical but open v – ditches inappropriate. Incorporates filter drainage to one or both sides of trail	£85 - 90	lin m
	Drain both sides	£130 - 140	lin m
TOPSOIL STRIP	Excavate topsoil material to form tray, max depth approx 0.15m and loosely stockpile, preferably adjacent to each section of works, for reuse to landscape subsoil arisings	0.95	m2
GEOTEXTILE	Provide & lay to underside of capping layer as agreed on site, woven permeable geotextile membrane min 140g/m2	2.94	m2
FILTER DRAINAGE	Excavation of 600mm wide trench in sub-soil min depth 750mm for disposal max haul 600 metres	14	lin m
FILTER DRAINAGE	Provide & lay filter drains 100mm HDPE single wall perforated land drainage pipe.	4.4	lin m
FILTER DRAINAGE	Provision and placing bed, surround and backfill to ground level with 40mm single size drainage material - total depth of trench 750mm	22.03	lin m
FORMATION	Scarify, grade and reprofile to remove surface deformation prior to resurfacing	1	lin m
CAPPING & PAVEMENT	Provide, lay and compact commercial aggregates MOT Type 1 or as otherwise specified by engineer as surfacing; min 150mm compacted depth	10.68	m2
SURFACE DRESSING	Provide, lay & compact to falls local approved aggregate graded 6mm to dust laid wet as surfacing; min thickness 15mm.	2.09	m2
LANDSCAPING OF VERGES	Topsoiling of verges to road margins prior to surfacing using soil windrowed along road corridor spread equally on both margins to	1.32	m2

Specification 4 (2.5 width)	Applicable to locations of higher sensitivity than specification 2 where minimum or no dig is required with additional spreading of pavement load as protection of root systems. Incorporates biaxial geogrid on geotextile		£45 - 50 lin m
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TOPSOIL STRIP	Hand excavate topsoil and other extraneous material to form level platform, max depth approx 0.075m and loosely stockpile, preferably adjacent to each section of works, for reuse to landscape trail edges	0.85	m2
GEOTEXTILE	Regulate surface to provide level platform, provide & lay to underside of capping layer as agreed on site, non - woven permeable geotextile membrane 'ecotex 07' by geosynthetics	0.97	m2
2D GEOGRID	Provide & lay to underside of sub base as agreed on site, extruded plastic polymer geogrid membrane 'tenax LBO HM3L' by geosynthetics	0.99	m2
CAPPING & PAVEMENT	Provide, lay and compact commercial aggregates MOT Type 1 or as otherwise specified by engineer as surfacing; min 150mm compacted depth	10.68	m2
SURFACE DRESSING	Provide, lay & compact to falls local approved aggregate graded 6mm to dust laid wet as surfacing; min thickness 15mm.	2.09	m2
TRANSPORT TOPSOIL	Transport topsoil sourced from from other locations on the site to trail locations as necessary - max haul and return 500m	14.85	m3
LANDSCAPING OF VERGES	Topsoiling of verges to trail margins prior to surfacing using soil windrowed along road corridor or transported from other locations,	1.3	m2

Specification 5 (2.5 width)	No - dig construction to BS 5837 in areas constrained by veteran trees. Incorporates 100mm depth 'Cellweb TRP' by Geosynthetics 3 dimensional geogrid and 4 - 20mm free draining backfill	£110 - 125	lin m
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TOPSOIL STRIP	Hand excavate topsoil and other extraneous material to form level platform, max depth approx 0.075m and loosely stockpile, preferably adjacent to each section of works, for reuse to landscape trail edges	0.85 m2	
TIMBER EDGING	Supply materials and construct complete staked timber edging kerb	10.62	lin m
GEOTEXTILE	Regulate surface to provide level platform, provide & lay to underside of capping layer as agreed on site, non - woven permeable geotextile membrane 'treetex' by geosynthetics	1.68	m2
2D GEOGRID	Provide & lay to underside of sub base as agreed on site, extruded plastic polymer geogrid membrane 'tenax LBO HM3L' by geosynthetics	0.99	m2
3D GEOCELL	100 cell - Provide & lay to underside of sub base as agreed on site, extruded plastic polymer cellular confinement system Cellweb by Geosynthetics min 500g/m2 (100mm depth)	13.09	m2
CAPPING & PAVEMENT	100 cell - Provide & lay as backfill to cellular confinement approved angular, no fines aggregate graded 4 - 20mm - depth 125mm. Cells to be overfilled prior to compaction	10.74	m2
	Provide, lay and compact commercial aggregates MOT Type 1 or as otherwise specified by engineer as surfacing; min 100mm compacted depth	8.53	m2
SURFACE DRESSING	Provide, lay & compact to falls local approved aggregate graded 6mm to dust laid wet as surfacing; min thickness 15mm.	2.09	m2

TRANSPORT TOPSOIL	100 cell - Transport topsoil sourced from from other locations on the site to trail locations as necessary - max haul and return 500m	14.85 m3
LANDSCAPING OF VERGES	100 cell - Topsoiling of verges to trail margins prior to surfacing using soil windrowed along road corridor or transported from other locations, spread equally on both margins to make best use of available quantity	1.3 m2