# THE KNOCK, CRIEFF MANAGEMENT PLAN 2018-2023

(March 2018)



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#### 1.0 Introduction

The Knock Management Plan (KMP) is aimed for use by PKC, stakeholders, volunteers and members of the public alike.

The KMP covers landscape character and site condition, visitors and use, conservation and ecology, and archaeology. The KMP applies to only the land owned and managed by PKC (as shown on Figure I and by the coloured background on the plans), however it takes into account the adjacent Crieff Hydro land and uses, as the site is perceived as one with regards to appearance, character, public use and enjoyment

The KMP is based on data which was gathered between 2014 -2017 and should be regarded as a working document. It is aimed to review and update the KMP every 5 years with issues and actions updated accordingly.

The Management Plan is intended to be a concise user friendly document and should be read with reference to the appendices for more detail as the reader requires.

Proposals which are identified in the Action Plan (Section 8.0) are shown on Figure 5: Path Improvement Proposals, Figure 6: Furniture and Viewpoint Proposals, Figures 7 and 8: Upper and Lower Car Parks Sketch Proposals

The Knock Forest Plan in Appendix A contains information about existing tree cover and woodland management proposals.

For information on existing site infrastructure and its condition refer to Figures 3 and 4 within the main text and Figures 10 and 11 in Appendix B.

#### Site Description

The Knock is a small but distinctive 279m high hill located to the north of Crieff. The Knock takes its name from the old Scots word for hillock, which was derived from the Gaelic 'cnoc' meaning hill. The name Crieff derives from the Gaelic word 'craobh' meaning 'among trees.'

The combination of a relatively low summit, outstanding views and a good footpath network makes The Knock a very popular destination for local people and visitors for walking, jogging, horse riding and mountain biking. The Crieff Hydro is a major four star family leisure resort and hotel in Scotland. It has high year round occupancy rates, attracting national and international visitors. It is also the largest employer in the Crieff area.

The Knock is located on the Highland Boundary Fault, a national geological feature defining the southern edge of Highland Scotland running between Helensburgh in the west and Montrose in the east. As such visitors can experience the dramatic highland landscape to the north whilst also overlooking the town of Crieff, the low fertile farmland of Strathearn and distant uplands of the Ochils to the south.

The lower and middle slopes of the PKC managed area of the hill are shrouded in mixed woodland whilst the upper slopes and summit are surprisingly 'wild' in character relative to its height. The summit has strong 'upland characteristics' with heather moorland and scattered scots pine and an open aspect which creates an experience more akin to the nearby mountain landscape to the north.

The section managed by the Crieff Hydro is mainly covered in commercial conifer plantations of varying ages with a good network of paths, forest tracks and accessible viewpoints. The Hydro promotes a wide range of family outdoor activities and encourages access throughout the whole of the Knock as part of their business approach generating considerable additional use and demand on whole of the site. Refer to Figure I for Land Ownership Boundaries.

#### **Archaeology**

There are two archaeological monuments of interest on the Knock – The Cradle Stone a 'huge boulder [erratic] split into two' at grid co-ordinate 286543, 722705 and the view indicator at grid co-ordinate 286767, 722918.



View Indicator and seating at the summit

#### **Ecology**

The woodlands on the Knock are a key part of the site and there management as part of the Forest Plan is shown in Appendix A. A summary of the forest plan is outlined in Item 15 of the Action Plan.

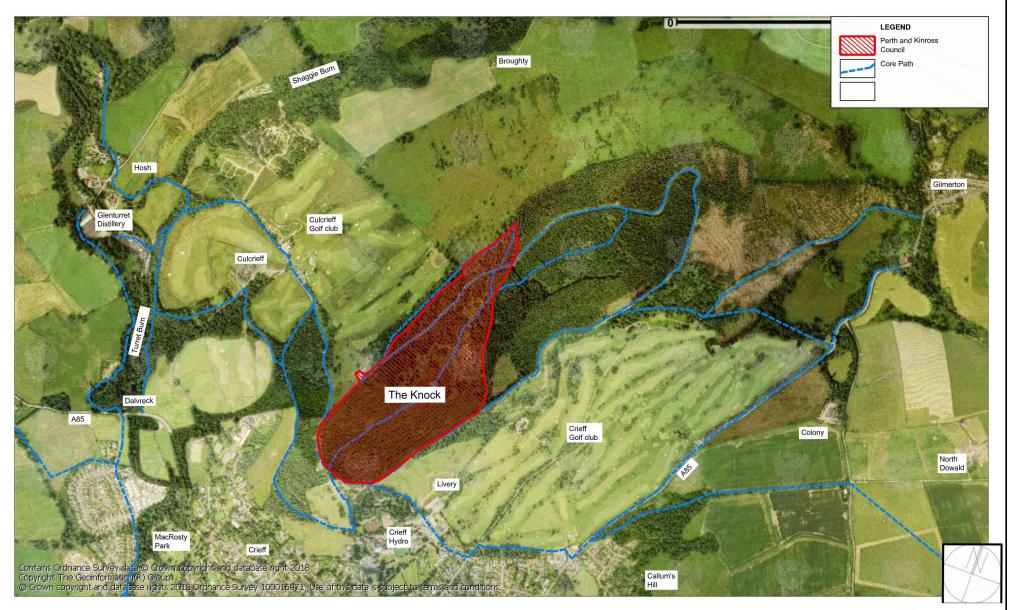
There are two known UK BAP priority species present on the Knock – the pearl-bordered fritillary butterfly and the red squirrel and one priority habitat – Lowland Heath. The Knock is also rich in other important native species, including yellow pimpernel, wood sorrel and barren strawberry tormentil.

There are possibly more flora/fauna species and habitats present on the Knock but at present there are no survey data available

# The Knock: Land Ownership and Site Context



# The Knock: Core Path Network



#### 2.0 Landownership and Interested Parties

- The land ownership boundary between PKC and Crieff Hydro is not apparent to the visitor and the whole hill is freely accessible to all. Refer to Land Ownership and Context Plan (Figure 1) above
- PKC owns 29.74 ha in the central and western areas as shown on Figure 1
- Crieff Hydro owns and manages the land on the eastern side of the hill, along with land to the south and west; including the hotel/resort, self catering cottages, golf courses and commercial forestry. The Hydro have also recently joined the Supporting Big Tree Country Scheme.

#### Interested parties include:

- Perth and Kinross Countryside Trust (PKCT): The Knock is a 'Perthshire Big Tree Country' site and they facilitate the Supporting Big Tree Country Scheme
- Monzie Estate: adjacent land owner with connecting longer distance paths
- Tayside Orienteers have orienteering maps and posts on site
- Crieff Golf Club: Adjacent land owner to the south of the knock with adjoining footpaths.
- There are footpath links to the Turret Distillery. Refer to Core Path Network (Figure 2) above.

#### 3.0 Use and Users Groups

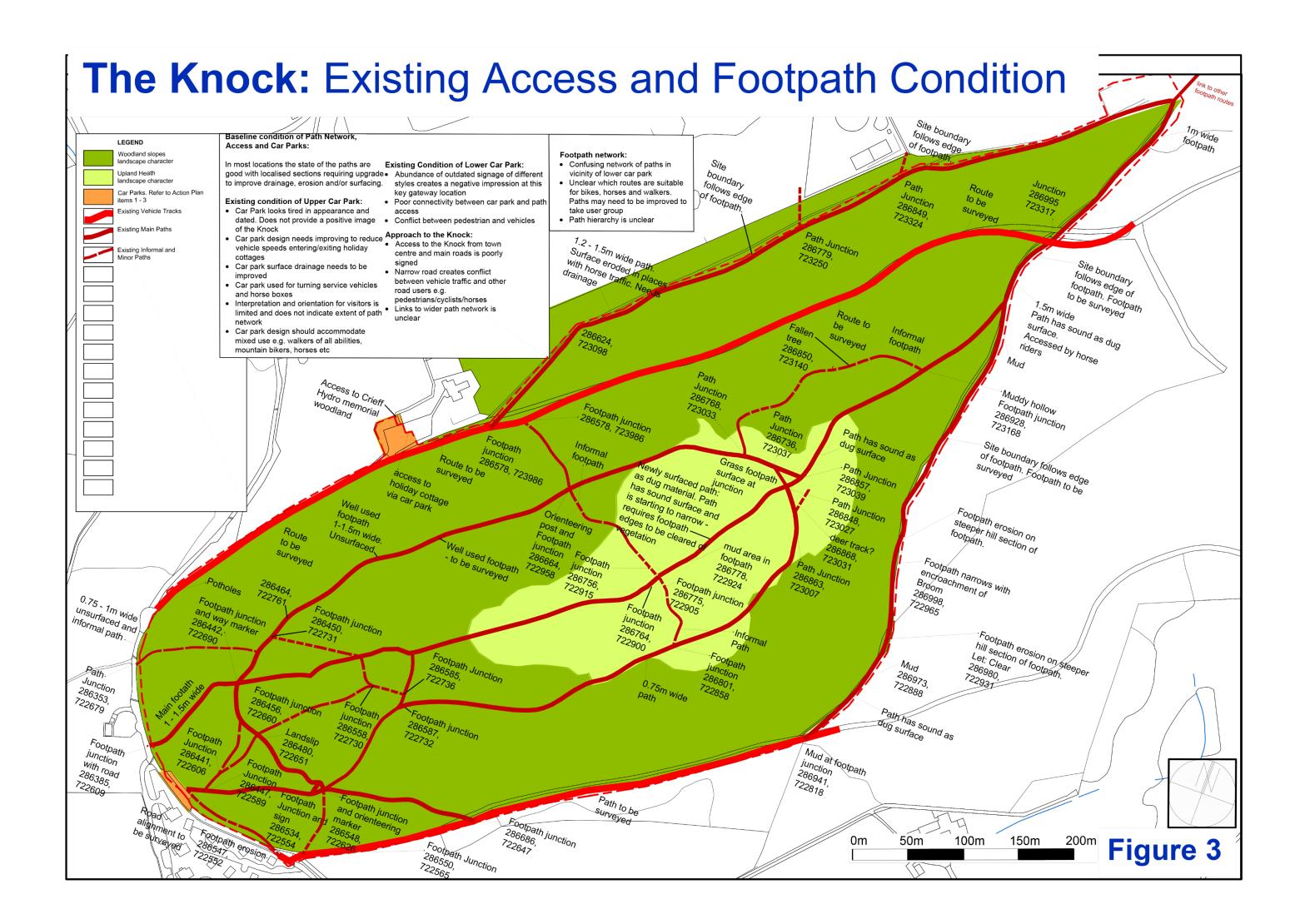
The Knock is one of the Council's most popular outdoor attractions for local residents and visitors to the area, reflected by the wide range of users below:

- Visitors from both near and far: Local residents and visitors from across Scotland, the UK and abroad. The number of more distant visitors is increased by Crieff Hydro.
- Walkers and runners: all ages and abilities from 'well seasoned' walkers to casual/'Sunday'/family walkers and those new to the outdoors; and they are equipped with a wide variety of footwear and clothing. There is also a high number of dog walkers.
- Walkers and accessibility: The existing condition and grade of routes is mainly suited
  for the more able bodied. A circular route comprising of two access points forest
  tracks around the whole hill offer more accessible circular routes for people with
  varying walking ability, wheelchair and pushchair users, visual impairment and less
  active, older generations and young children. At other locations the grade and
  condition of footpaths could restrict access and deter users.
- Many Organised Groups: walking and orienteering including Tayside Orienteers; conservation volunteers including Perth and Kinross Conservation Volunteers (PKCV) Crieff Paths Group; school and education including the cadets and Crieff High School for DoE and John Muir awards; and PKC/NHS Green Routes to Wellbeing
- Crieff Hydro Visitors: (very mixed use and ability bikes, horses, segways and walkers). The Hydro has a bike track on the eastern side of the Knock and access is via the forestry tracks located on PKC land,

- Mountain bikers: Bikers tend to choose to go to the Knock to use the woodland/upland footpaths.
- Horse riders: mixed ability and experience. Usually from the stables next to Crieff Hydro.
- Crieff Hydro events including Segways
- Crieff Hydro: Access to property and adjoining land including holiday cottages, woodland and forestry operations access.

The wide range of user groups and abilities creates a high demand for a limited resource and results in some conflict in use and heavy wear on paths (refer to Existing Access and Footpath Condition – Figure 3 and photos). For example:

- Heavy use of circular and summit footpaths by horse riders results in path deterioration on steep slopes
- Dog walking issues: dog fouling and plastic bags of dog waste and occasionally poorly controlled dogs
- Cyclists tend to use the forest tracks and travel at faster speed than walkers risk of
  collision. Erosion of paths by cyclists is not thought to be an issue at present.
- Erosion is a problem on the steeper paths and this is worsened by people avoiding the wet/eroded areas which either widens or creates new paths.
- Conflict occurs where vehicles access the holiday cottages via the upper car. The existing design of the car park entrance means that drivers often drive through the car park at excessive speed within close proximity of pedestrians and parked cars.
- Speed of traffic on the narrow road leading to the lower car park conflicts with other road users.





Erosion on path on steep gradient (along eastern boundary).

Caused by combination of foot traffic, horses and surface water run off



Potholes on access track to Upper Car Park

# Examples of Areas of Poor Path Condition on the Knock



Damage to main path to summit by horses



Varied footpath surfacing to the east of the summit



Path condition on north eastern section of upper circular route

#### 4.0 Access and Welcome to The Knock

At present there is no data on visitor numbers, however it is thought that majority of users arrive at the Knock by car with a smaller number walking from Crieff Hydro or the town centre. Although neither PKC or Crieff Hydro have any survey figures for visitor numbers, it is understood that a significant number of visitors staying at the Crieff Hydro visit the Knock .

Signage is limited and there is a lack of signs directing visitors from the main roads to the Knock car parks. This combined with the poor sense of arrival at the car parks makes access to the site by car confusing and more difficult and unwelcoming than necessary.

#### For example:

- There are no Brown signs directing visitors on the A85 to the Knock. All Brown signs point the way to Crieff Hydro or/and Murraypark.
- On approach to Crieff Hydro a single green finger post and waymarker points towards the Knock but it is not obvious and is lost in among Crieff Hydro Signage. Crieff Hydro Signage does not direct visitors to the Knock.

#### Lower Knock car park:

- The lower car park is the most obvious parking location
- On the approach and arrival at the lower car park visitors are met with negative signage such as 'lock car and remove valuables'. There is no welcome signage.
- A network of paths fan out from various points around the car park with no obvious path hierarchy or starting point for visitors to orientate themselves. The direct route to the summit is not choice.
- There is no suitable site map. A dated 'Big Tree Country' interpretation Map is on site however the path route shows a single linear route and does not show the wider network of available paths.
- Site signage and furniture appears to be randomly located without a coherent overall plan.
- Furniture is mostly out of date and coming to the end of its useful life, this combined with inconsistent styles gives an overall poor first impression of the Knock.



first impression for visitors on approach to the Lower Car Park are of negative and dated signage and poor quality furniture



Dated signage, dog bin and flight of steps form the 'focal point' for visitors. Orientation is difficult e.g. the steps link to a maze of narrow and informal paths. The main route to the summit; to the left of the car park; is not clearly signposted.

#### Upper Knock car park:

- There is a confusing array of signage at the road junction on the approach to the upper car park (mix of Crieff Hydro signage and PKC green finger posts).
- The access road to the car park is shared with Crieff Hydro visitors accessing nearby chalets.
- The car park is a wide expanse of whin dust with poor drainage.
- There is no welcome signage to state where you are and to aid orientation.
- The most visible signage relates to the memorial woodland and adjacent chalets
- Picnic benches are located on the edge of the car park where visitors can obtain
  panoramic views of the distant hills and surrounding landscape. However, the site is
  rendered unattractive due to its close proximity to parked cars and lack of privacy.
- Other site furniture is limited to bins, dog bin, viewpoint dial and a 'no permitted vehicle' sign. All are out dated and coming to the end of their useful life andare randomly located with varying styles.
- The overall impression is sparse, with no sense of identity or place. The car park in its current form does not give a welcoming impression.



General view of the Upper Car Park from the car park entrance. Note: direct route to holiday cottages.



View of 'Y' junction on approach to the Upper Car Park. Note: no interpretation, orientation or site welcome



View of Picnic benches on the edge of the car park, varying bin styles and maintenance of car park edging

The Knock can be reached by foot from Crieff town centre (15-20 minute walk approximately 1km) although it is not well signposted or promoted; The Knock is also

linked to longer distance paths via the core footpath network (refer to Figure 2) with routes to:

- Glen Turret Distillery and The Hosh to the west and north west
- The eastern edge of Crieff and Perth Road to the east
- Gilmerton to the east where the lower forest tracks over the Knock provide an alternative to route to the Perth/Crieff road.

Although The Knock is not well signposted from the core footpath routes, there is an extensive recreational path network on the west side within the Hydro's ground which is well linked and connects with the distillery, Lover's Lane, Ardvreck School and MacRosty Park.

#### 5.0 Existing Furniture and Maintenance

In total there are over 39 items of furniture across the site (shown on Figure 4 and listed in Appendix C) and they are mainly found in three locations:

- Upper Car Park: consisting of litter/dog bins, picnic benches, viewpoint and signage.
- Lower Car Park: timber bench, litter/dog bins, interpretation and signage.
- The Summit: benches, view finder and waymarker

Outwith the car parks furniture consist mainly of benches and waymarkers with benches located at the summit (4 no.), along the main path to the east of the summit (2no.) and at a viewpoint to the north of the summit (1 no.).

Existing Litter bins are located in the two carparks and are emptied twice a week. The litter bins are of a 'standard' capacity and will not be replaced by wheelie bin capacity bins. This is due to the accessibility of the car parks and the requirement for them to be emptied by personnel rather than bin lorry as there is insufficient turning space at the upper car park.

The following table summarises the number of each type of furniture on PKC land (excludes Crieff Hydro furniture) on The Knock and its condition:

Furniture	Total Number	Good	Limited	End of Lifespan	To be
			lifespan or out of character	or obsolete	confirmed
Litter bins	4	-	2	2	-
Dog bin	2	-	2	-	-
Benches	8	1	-	-	7
Picnic benches	2	-	-	-	2
Finger signs	4	-	4	-	-
Way Markers	6	-	-	-	6
Park sign	0	-	-	-	-
Interpretation	1	-	1	-	-
signage					
General signage	6	-	-	6	-
Viewpoint/finder	2	2	-		-
with stone plinth					
Steps	2	-	1	1	0

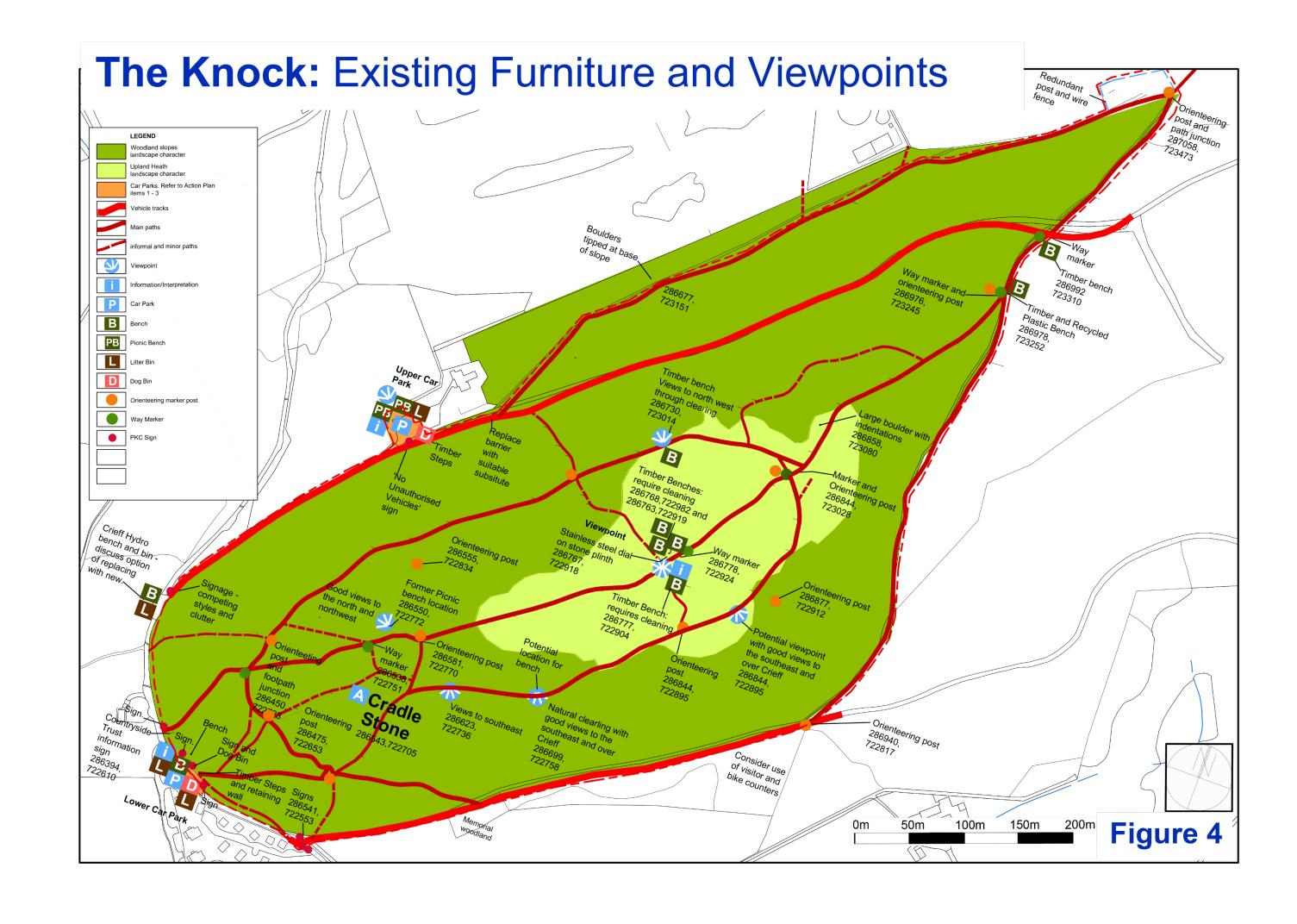
metal barrier	1	-	-	-
timber retaining wall	I		-	1

Most of the existing furniture is at the end of its useful life and needs to be replaced (refer to Appendix C). Where furniture has been replaced it has been done so 'piecemeal' using a variety of furniture styles. A replacement strategy and review of furniture locations/provision is required to revamp the furniture on the Knock, to ensure it is fit for purpose and promotes a positive image of the site.

Current maintenance by PKC is focused on the two car parks and includes bin emptying, litter picking, spraying herbicide and cutting of grass verges. Elsewhere, formal PKC maintenance is limited (e.g repair to furniture) and much of the footpath maintenance and vegetation clearance is carried out on an informal basis by volunteer groups.

At present there are 3 regular volunteer groups; Green Route Group (7 volunteers every Thursday), School Group (6 volunteers every Tuesday morning) and the path Group (up to 40 members (usually 4 per visit) every last Saturday in the month). Several corporate volunteer groups such as Scottish Water and John Muir Trust also carryout volunteer work on The Knock on an adhoc basis.

The Knock volunteer Group carry out maintenance tasks to footpaths (such as filling holes, clearing drainage channels and removing vegetation), clearing bracken, gorse/broom and tree planting on the hill itself.



#### 6.0 Summary of the Key Issues and Actions

The Knock is a superb natural asset and is highly valued by local residents and visitors alike. However, much of the site infrastructure is over 20 years old, with a piecemeal mix of styles and varying in condition. The visitor experience on arrival is poor regarding entry, welcome and orientation into or around the site; and the poor quality infrastructure creates a slightly neglected impression. Refer to Appendix C for Tabled list of existing site furniture.

Currently the Knock receives only limited general maintenance from PKC and minor improvements by volunteer groups, and a programme of infrastructure renewal is required.

The aim of this Management Plan is to provide a welcoming and attractive recreational 'countryside' site for the maximum range of visitors to use and enjoy, of a character and quality fitting to the area. The Knock Action Plan in Section 8.0 identifies key actions as listed in the themes below.

Refer to Section 8.0, Path Improvements, Furniture and Viewpoint Proposals (Figures 5 and 6) and outline proposals for Upper and Lower Car Parks (Figures 7 and 8) for more detail.

#### **Car Parks**

- Create welcoming entrances to the Knock
- Improve the poor orientation from car parks
- Create sense of place and arrival
- Develop a suitable suite of site furniture for use at entrances and across the wider site (Refer to Fiure 8)

#### Summit

- Benches: review number of benches. Consider reducing number of benches at the summit by two benches as they come to the end of their useful life. This would enable two benches to be added elsewhere on the Knock such as at viewpoints on the circular route.
- There is scope to remove several self grown trees on the summit heathland to maintain open views to the north and south.
- Viewfinder: re-orientate the existing etched metal disc viewfinder so that it lines up with the view.

#### **Maintenance**

- To be reviewed to ensure it is fit for purpose within the resources available.
- Encourage volunteers to carry out minor footpath and drainage works, small scale tree planting, bracken and gorse/broom clearance

#### **Signage**

- Replace Poor and out of date signage with new signs which are simple to construct and maintain. Refer to Figure 9 – Proposed Furniture.
- Rationalise confusing and conflicting sign types/design (PKC, PKCT, Hydro and bike track)
- Review use of green core path signs within the site

#### **Site Furniture**

- Existing site furniture to be reviewed to ensure it is fit for purpose and in the right location.
- Quantities and types of furniture to be rationalised
- Future furniture to be robust, sustainable/maintainable and simple in design. Refer to Figure 9 Proposed Furniture.

#### **Footpaths**

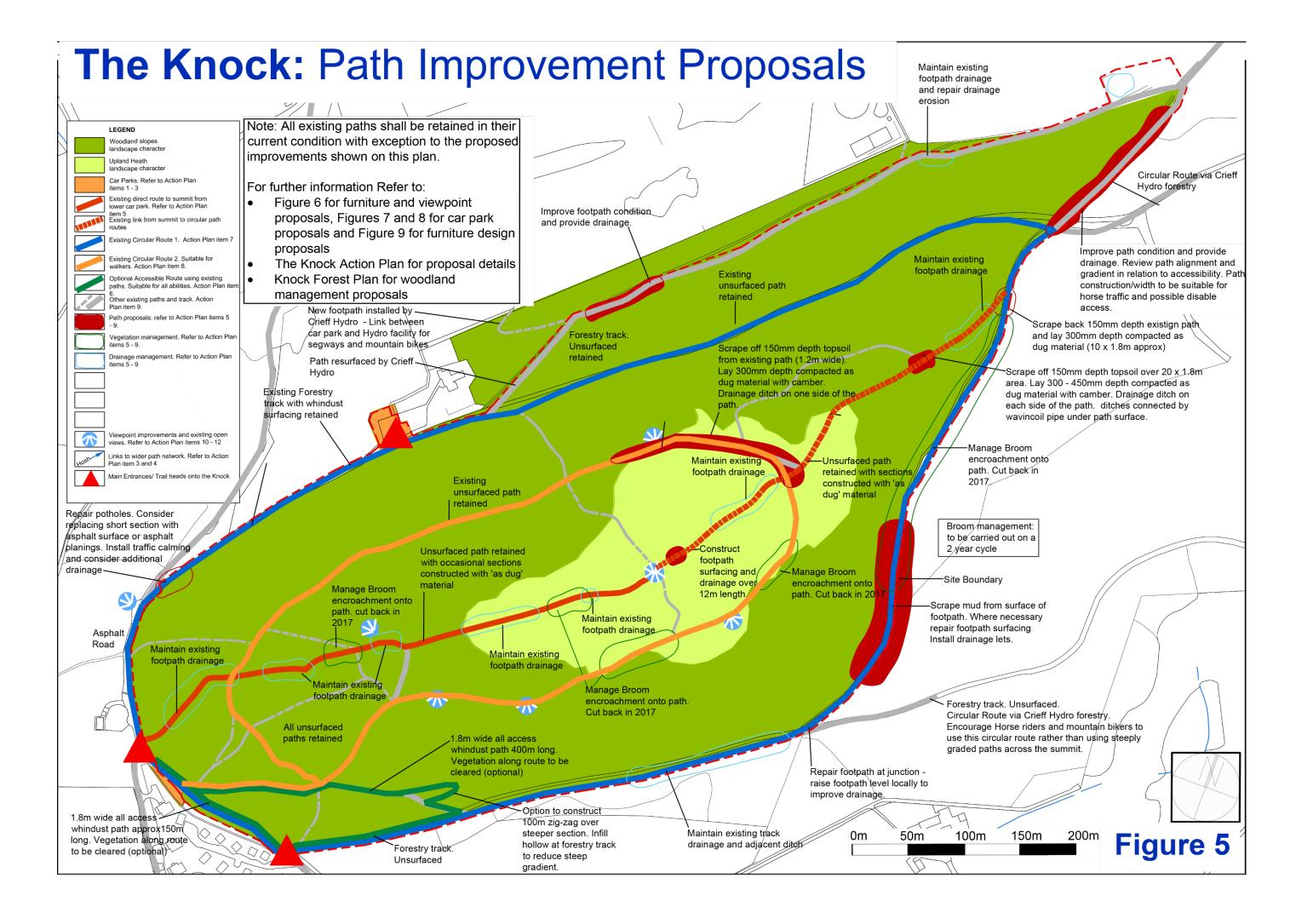
- Create a coherent footpath plan or footpath hierarchy with routes graded to national standards e.g easy, moderate, strenuous etc.
- Waymarked routes could be named to give them a local identity (rather than blue route, red route circular route etc)— the local community could be involved in this.
- Resolve conflict between user groups review existing arrangements with the Stables next to Crieff Hydro. For example this could include promoting the use of the forest track circular route for horse riders and cyclists rather than using narrow and usually unsurfaced paths across the Knock.
- Improve footpath condition and maintenance for example at key locations where there
  is poor drainage or where there is significant footpath erosion or damage.
- Consider how to make footpaths more accessible for wider range of users/walkers without changing the natural informal character.
- Improve links to wider footpath network including integration with Crieff Hydro woodlands

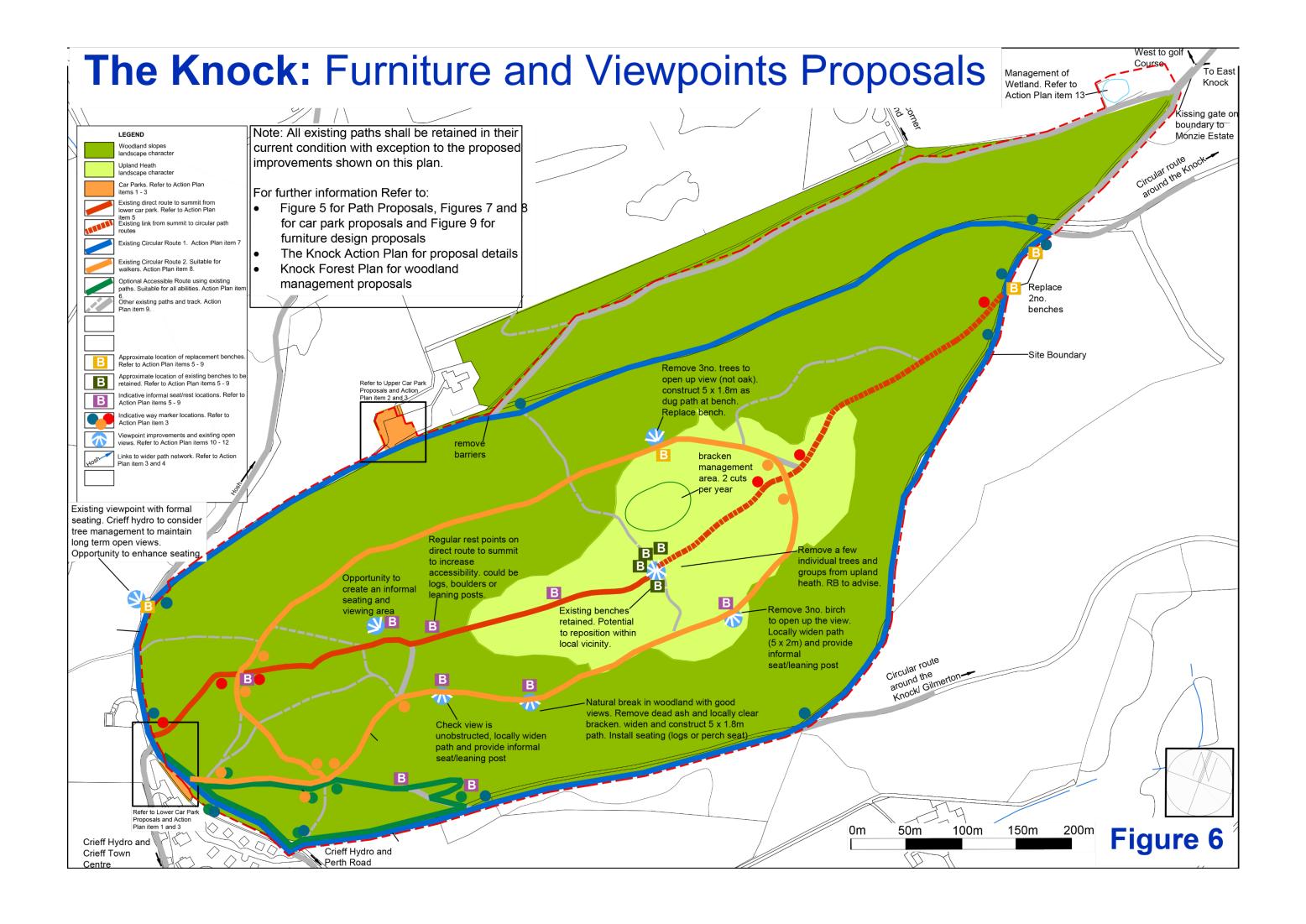
#### **Viewpoints**

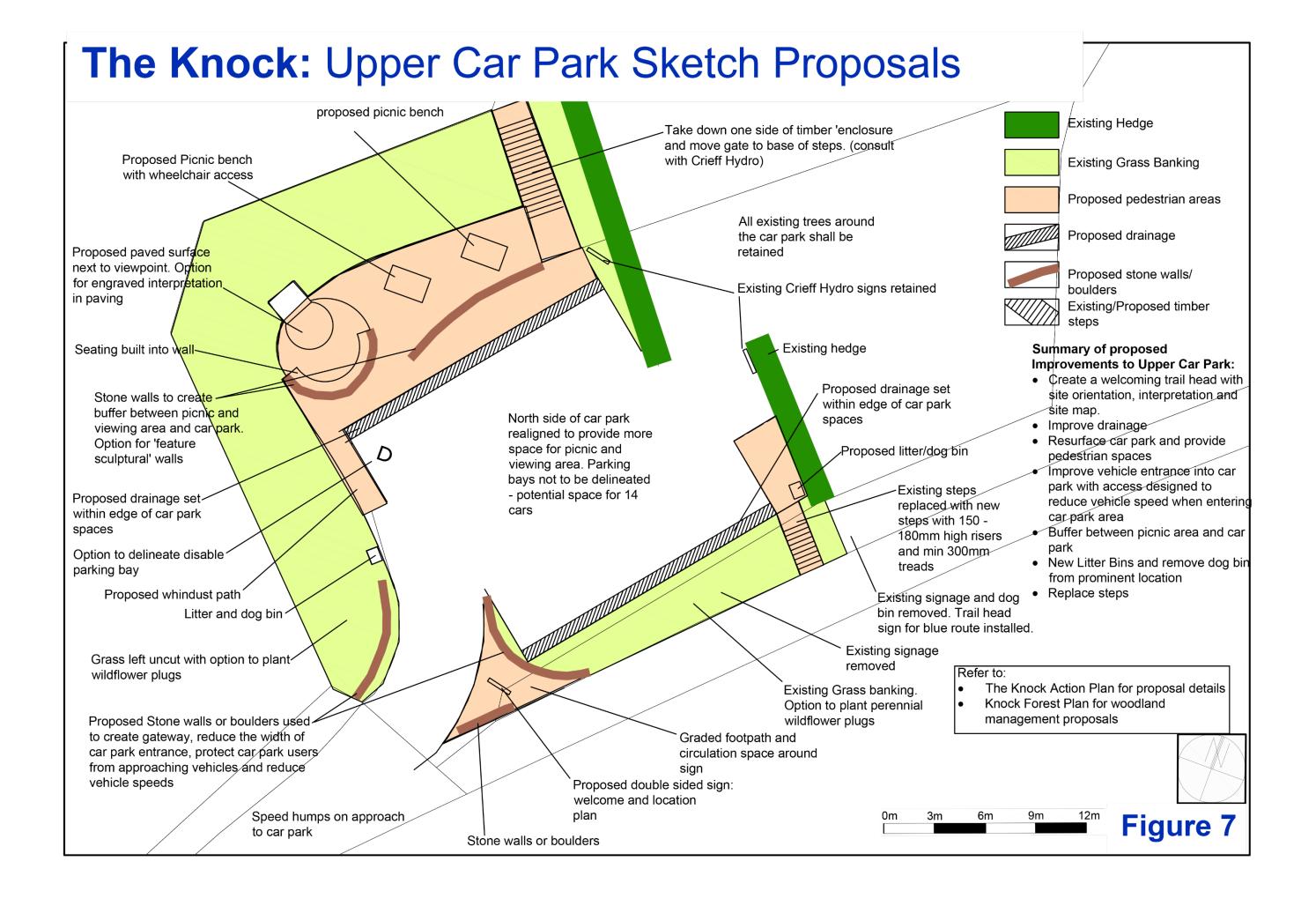
 Improve viewpoint and facilities (open up viewpoints by cutting back vegetation, install formal/informal seating and possibly add interpretation)

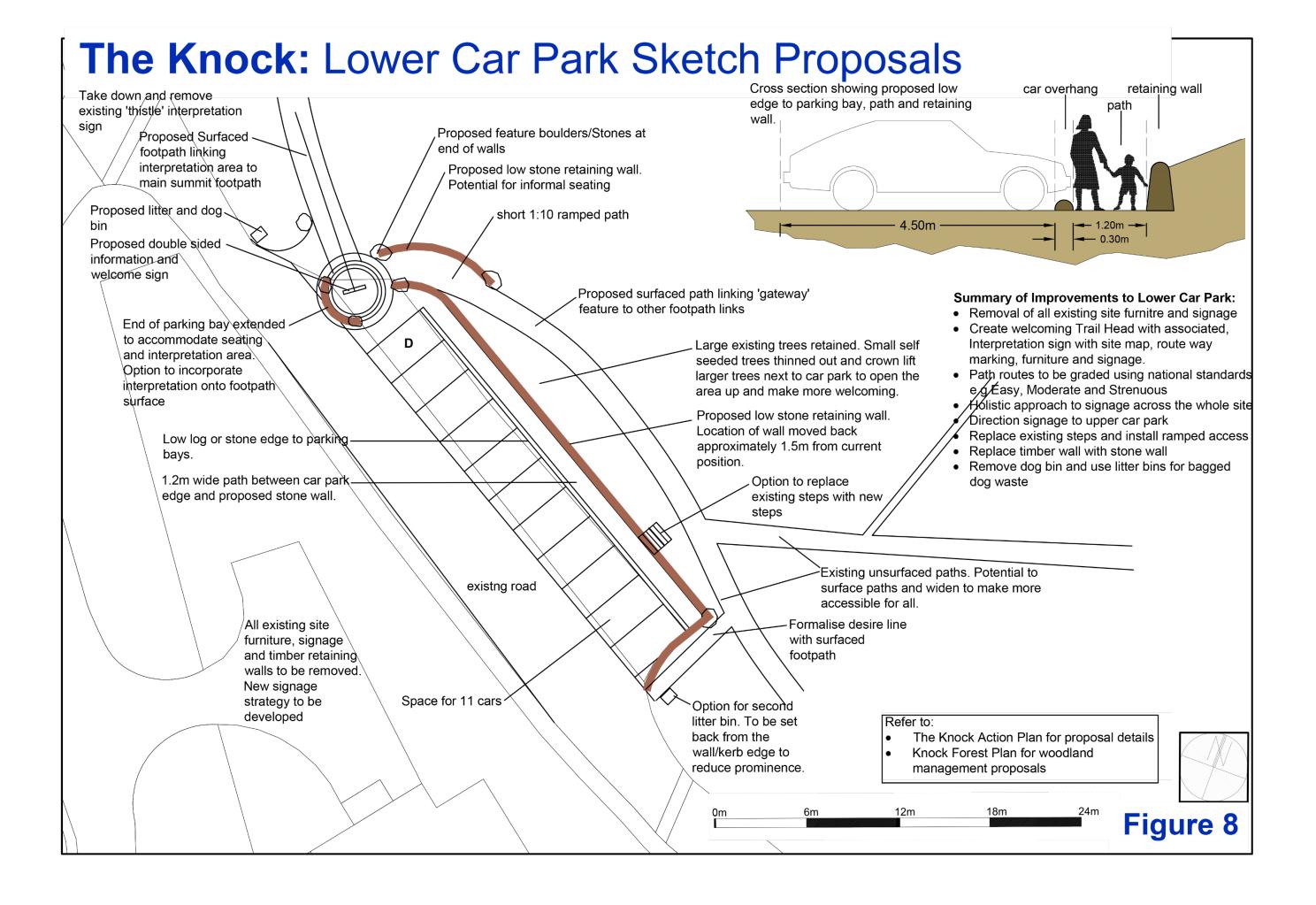
#### Forest Management

- Management Objectives (refer to Forest Plan Appendix A):
- 1) Gradually remove non-native species to create a native woodland.
- 2) Maintain the views on the top of the hill and key viewpoints throughout by removing any large trees and intervening vegetation.
- 3) Maintain and improve the heath land by removing saplings and controlling broom and bracken.
- 4) Monitor trees for pests and diseases and adapt management accordingly.
- 5) Create a varied age structure.
- 6) Continue tree safety surveys.







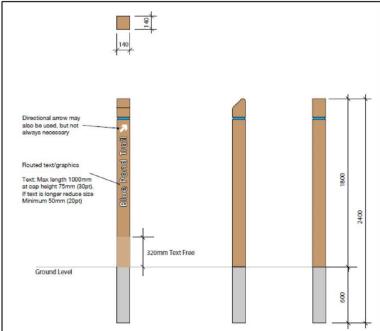






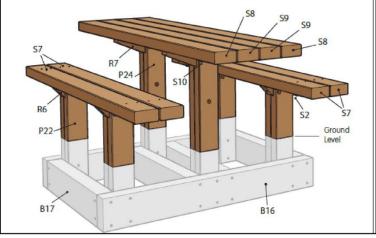
Left: J and J Learmouth
Glen Almond timber bench.
PKC could build similar
benches in house. Option to
fit metal feet increase
longevity and for fixing to
rock in areas of shallow
soil. Bench could be set in
an area of hard standing
such as paving slabs or
whindust to reduce wear at
the base of the bench

Right: Trail Head marker post - located at car park or start of way marked route. Based on Forestry Commission design - could be amended with metal foot



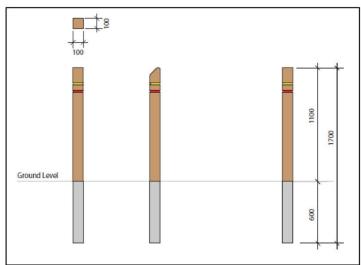
It proposed to use a simple suite of standard timber furniture and signs for PKC Countryside Sites. The images shown on this sheet are for illustrative purposes and demonstrate the range of basic furniture required for most sites.

There are significant benefits for the furniture to be made in-house using the PKC Community Greenspace squad. These benefits include value for money, good quality control for materials and workmanship, local knowledge of site conditions, easy to repair/replace, uniformity of construction method and materials across the site.



Left: Timber picnic bench based on Forestry Commission style. Propose to amend the detail to suit PKC sites and fit metal feet to base of posts. Fix onto area of hard standing such as paving slabs.

Right: Timber way markers based on Forestry
Commission design could be made in house. the design could be amended to include metal footing to reduce rotting at base of post and allow a metal plate to be fitted for fixing to rock in areas with shallow soils.

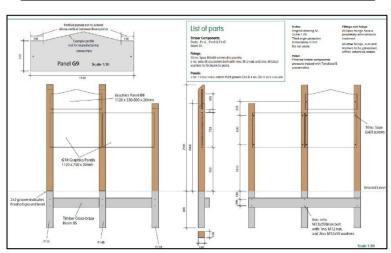


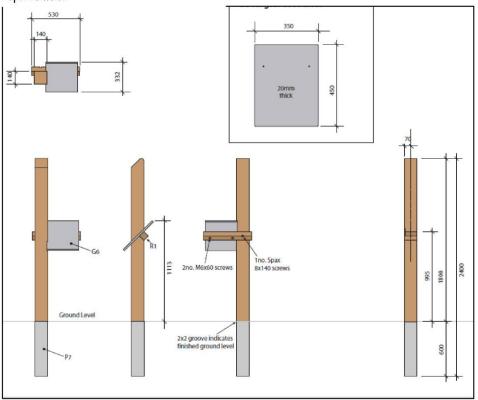
Below: Post with small map panel for Secondary Trail Heads or other lesser access points. Based on Forestry Commission design - design could be adapted to make more robust/simplify and metal foot could be added to improve longevity of the timber and for easy replacement



Left: Illustration of proposed litter bin for sites which are not accessible by bin lorries. reference: Glasdon Enviropol® 100 Litter Bin with brown slats. For sites accessible to Bin lorries wheelie bins with covers will be installed

Right: Example of Forestry Commission style map/information signage. Could be adapted for joint PKC/FC use. The number of panels could vary depending on location. Metal feet bolted to concrete foundation or rock (if close to surface).





#### 7.0 Outline Costs and Potential Funding

In order to address the issues identified in the Action Plan (Section 8.0.) indicative costs have been provided at this stage which will be refined through more detail designs and the submission of funding bids.

The outline value of the works identified in the Action is approximately £150,000 (including a 10% contingency allowance).

It has been identified that approximately £45,000 funding could be obtained from the Forestry Commission via WIAT funding and further funds may be available from the Crieff Hydro Green Hotel Scheme, SITA, Tayside Biodiversity funding and the Council's Community Environment Challenge fund. There may also be other funding available from local trusts, especially if interested local groups worked in partnership to raise the money. There is also the opportunity for volunteer groups to clear vegetation in advance of footpath work s. It is anticipated that the Council will be able to allocate funding from the approved Community Greenspace Capital Budget of around £80,000 if all the works identified and agreed were to be carried out.

#### 8.0 Action Plan

The following Action Plan outlines the existing condition of the Knock and identifies a) how the site can be improved and become more welcoming to and usable by visitors; b) address the fitness for purpose and condition of furniture and c) reduce maintenance. The recommendations are prioritised into High, Medium, Medium/ Low and Low. The proposals listed in the Action Plan should be read in conjunction with the Path Improvement Proposals (figure 5), Furniture and Viewpoint Proposals (Figure 6) and Upper and Lower Car Park proposals (Figures 7 and 8). All outline costs and potential funding figures are indicative and are for budgeting purposes. Final costs shall be reviewed at detail design stage.

Item No.	Location	Existing Condition	Priority	Outline Proposal	Key Actions/ Next steps	Responsibility	Outline Costs/ Potential Funding
	Site Welcome and Car Parks						
	Upper car park and approach road	Has stunning views over surrounding hills and landscape. However this popular but basic car park is let down by adhoc, confusing and out dated signage of varying quality and condition displaying negative information. Site furniture and steps in poor condition and out of date. No clear single footpath or orientation point. Maintenance and drainage issues. No sense of arrival. Conflict between car park users and access to holiday cottages and remembrance woods. Refer to Figure 4	High	Create gateway to the Knock (Figure 7)	Make the car park welcoming. Consolidate signage with interpretation, viewpoint, car park tidy up, clear footpath access and location plan etc. Suitable site furniture and positioning. Create sense of place. Add disable parking space. Improve access road at junction – possible tarmac with speed bumps.	PKC design. Partnership working with PKC/PKCT and Crieff Hydro. Use of contractor	Signage, furniture and footpath improvements: £30,000  Eligible WIAT funding: £5,000 approx (note excludes walls)

Item No.	Location	Existing Condition	Priority	Outline Proposal	Key Actions/ Next steps	Responsibility	Outline Costs/ Potential Funding
2	Lower car park and approach road	Adhoc, confusing and out dated signage of varying quality and condition displaying negative information.  Site furniture in poor condition and out of date. No clear single footpath or orientation point. No sense of arrival. Refer to Figures. Limited space for groups to meet and conflict between people accessing parked cars and traffic using adjacent road. Timber retaining wall coming to the end of its useful lifespan. Refer to Figure 4	High	Create gateway to the Knock (Figure 8)	Make the car park welcoming. Consolidate signage with interpretation, car park tidy up, clear footpath access and location plan etc. suitable site furniture and positioning. Create sense of place and space for groups to meet. Replace timber retaining wall with stone wall. Tree work to thin trees and crown lift. Add disabled parking space.	PKC design. Partnership working with PKC/PKCT and Crieff Hydro. Use of contractor	Signage, furniture and footpath improvements: £37,000  Eligible WIAT funding: £5,000 approx. (note excludes walls)
	Signage						
3	General	Poor condition, out of date and give negative message. Often adhoc and confusing. Does not link in with wider footpath network? Refer to Figures 3 and 4	High	Create welcoming, informative and consolidated signage across the site	Welcoming and positive signage. Rationalise and make relevant to circulation strategy e.g. 4 marked routes with links to wider network.	PKC design. Partnership working with PKC/PKCT and Crieff Hydro. Use of contractor	Signage improvements: £5,250  Eligible WIAT funding: £2,500 approx.
4	Core footpath and brown signage	To be reviewed.	High	Ensure that the Knock is adequately signposted from main roads and core footpath network	Install brown signage from main roadways. Install/update green core footpath signage.	PKC design. Partnership working with PKC/PKCT and Crieff Hydro.	TBC. £1,500 for cost estimate purposes

Item No.	Location	Existing Condition	Priority	Outline Proposal	Key Actions/ Next steps	Responsibility	Outline Costs/ Potential Funding
	Footpaths						
5	Direct route to summit from Lower Car Park (red line)	Mostly unsurfaced footpath with drainage lets. No seating provision except next to car park. Refer to Figure 3	Medium	Improve accessibility and footpath condition.	Perch seating at regular intervals and improve short sections of existing footpath to encourage walkers of all abilities	PKC Infrastructure Squad, Contractor and Volunteers	Footpath improvements Cost: £3,500  Eligible WIAT funding: £450 approx.
6	All ability routes (green lines on masterplan) from lower car park	Lower car park: existing paths are narrow, informal and with gentle gradients albiet with one short steep section Refer to Figure 3	Medium/Low	Create all ability routes	Route from lower car park would require full construction for 300m footpath length + resurfacing along 150m stretch.	PKC design. Constructed by contractor	Route from lower car park: £38,500  Eligible WIAT funding: £19,250 approx.
7	Circular Route I (Blue line)	Mostly surfaced roads and forest tracks with section of unsurfaced path. The unsurfaced path has erosion on steeper sections and is vulnerable to heavy use. Encroachment of Broom narrowing footpath. Refer to Figures 3 and 10	High	Circular route following forest tracks, surfaced road and along the northern boundary to the site. Promote horse riders and mountain bikers to use full forest track circular route rather than taking 'short cut' via the unsurfaced path.	Signage for horse and mountain bike users to promote circular forest track. Improvements to eroded sections of path on steeper ground (approx. 100 to 150m length) – may require re-routing path to enable improved surface and drainage. Remove Broom from footpaths	PKC design. Constructed by contractor. Volunteers could clear broom from footpath edges	Footpath improvements: £10,250  Eligible WIAT funding: £5,250 approx.
8	Circular Route 2 (Orange line)	Unsurfaced footpaths of varying widths. Tree cover encroachment on views. Encroachment on paths by Broom. Refer to Figures 3 and 11	High	Circular route starting at the lower carpark and taking in the mid to upper slopes of the Knock including key viewpoints overlooking Crieff. Promoted to walkers	Seating/rest points at viewpoints. Localised widening and repair of footpaths (approx. 200m length x 1.2m wide) including landslip locations. Remove Broom from footpaths	PKC design. Constructed by contractor. Volunteers could clear broom from footpath edges	Furniture and footpath improvements: £10,250  Eligible WIAT funding: £6,500 approx.

Item No.	Location	Existing Condition	Priority	Outline Proposal and visitors	Key Actions/ Next steps	Responsibility	Outline Costs/ Potential Funding
9	Informal routes (grey lines)	Mixture of narrow unsurfaced routes. Refer to Figures 3 and 5	No Priority	Do nothing	Do nothing	N/A	N/A
10	Viewpoints Summit Viewpoint	A summit with an open aspect with excellent panoramic views. Summit furniture consists of a mounted stainless steel viewing indicator on granite pedestal and steps and timber benches. The furniture is scattered over a wide area and set in grass. Benches appear randomly placed. Several scorch marks in the grass indicate the area is used for wild fires.	Medium	Minor adjustment to bench locations. Reduce bench numbers to 2 in the medium term as benches come to the end of their useful life (enabling 2 new benches to be located elsewhere on the Knock). Removal of trees encroaching on views. Reorientate viewfinder to align with the views.	Consider location of benches. Consider the surfacing around the viewpoint indicator. Check encroachment on views from nearby trees and heath management.	PKC design. Constructed by contractor	Heath management and benches: £4,750  Eligible WIAT funding: £700
11	Viewpoints on Circular Route 2	Refer to Figure 4.  Paths next to potential viewpoints can be narrow with open views partially restricted by tree cover branches. Refer to Figure 4.	Medium	Ensure clear view is obtainable.	Paths widening and seating included in item 8. Clear Bracken and individual trees to open up views	PKC design. Contractor or squad	furniture and path improvements costs and funding – see item 8 removal of selected trees: £1,500
12	Intermediate viewpoint on	Open area of rough grass interspersed with	Medium	Create a view point at former picnic	Unsurfaced/surfaced path leading off main	PKC design. Contractor or Squad.	furniture and footpath

Item No.	Location	Existing Condition	Priority	Outline Proposal	Key Actions/ Next steps	Responsibility	Outline Costs/ Potential Funding
	Direct Route to summit	broom. Refer to Figure 4.		bench site.	route to seating — could be informal log seating or carved logs.		improvements: £500 Eligible WIAT funding: none
	Woodland and Conservation						iditaling. Horic
13	Ecology	No data	Medium	Commission habitat survey	To find out which species/habitats are present on the Knock and inform any future ecological surveys/ habitat conservation.	Ecology consultant or local ecology group/schools	Seek external funding from Tayside Biodiversity fund
14	Wetland habitat Creation	Existing area of woodland made into wetland by localised flooding. Carried out by by volunteers. Refer to Figure 10 for location.	Low	Management of wetland habitat	None planned	None planned	0
15	Woodland management	Mixed woodland with upland landscape on upper slopes. Mature trees, heathland, scrub and new plantings. Refer to Appendix A	High	The long term vision is to maintain the wood as a high quality countryside visitor attraction whilst enhancing its biodiversity and nature conservation value.	Refer to work plan for work to be carried out between 2014 – 2023 as shown in the Forest Plan (Appendix B).	Contractor/ volunteers	remove individual trees from heath: £2,000  Heath management: £2,000 p/a (TBC)
				Management Objectives  I) Gradually remove non-native species to create a native woodland.			Thin out natural birch regeneration: Carried out by volunteer groups
				<ul><li>2) Maintain the views on the top of the hill by removing any large trees.</li><li>3) Maintain and improve the heath land</li></ul>			

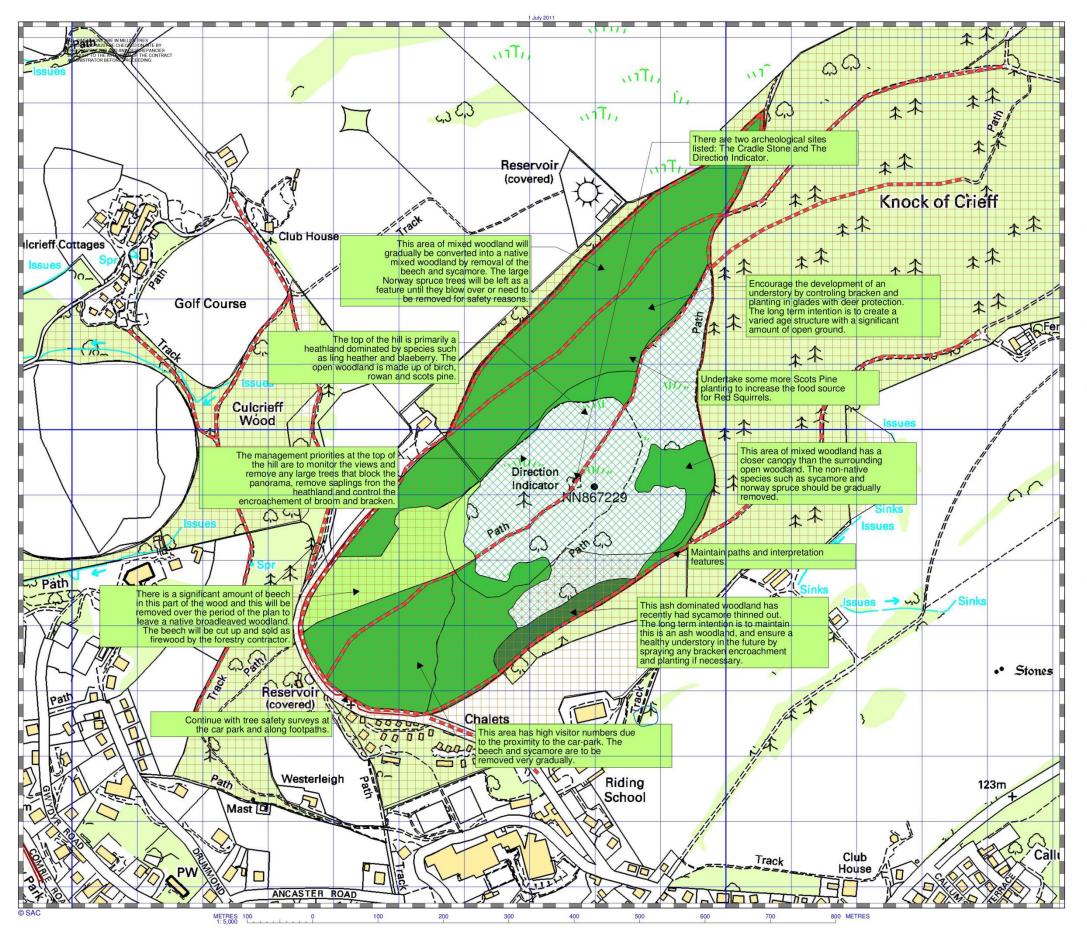
Item No.	Location	Existing Condition	Priority	by removing saplings and controlling broom and bracken. 4) Monitor trees for pests and diseases and adapt management accordingly. 5) Create a varied age structure. 6) Continue tree safety surveys	Key Actions/ Next steps	Responsibility	Outline Costs/ Potential Funding
	Site Furniture						
16	Across whole site	The condition and type of site furniture varies across the whole site. Furniture of varying ages. Some items are obsolete whilst others are in the wrong location and/or not required. In some locations furniture is absent.	High	Review current locations and types and rationalise where necessary. Furniture could be introduced to new locations such as leaning posts on the approach to the summit.	Review furniture locations and numbers Refer to Figures 6 - 9.	Contractor/squad	Costs for supply and install included in action points above
	Maintenance						
17	Across whole site	Review current maintenance practices by both PKC and volunteers	High	Review current practices. Is voluntary work effective, does it need additional resources to achieve tasks?	Review current practices	PKC operations and voluntary groups	PKC Revenue
18	Volunteers	supply equipment and footpath surfacing material	High	Review equipment	Tools and materials. Footpath surfacing materials stored at 3 -4 locations on the Hill	Voluntary groups	Cost: £1000
19	Volunteers	More corporate volunteer groups	Low	There is scope for PKC to be proactive		Voluntary Groups/ Communities Team	Cost: TBC

Item No.	Location	Existing Condition	Priority	Outline Proposal	Key Actions/ Next steps	Responsibility	Outline Costs/ Potential Funding
				in attracting more corporate volunteer groups especially when tasks are available and require larger numbers of people			Ĩ
20	Natural Play/ Outdoor Classrooms	Supply logs, stepping stones etc	Low	Create out door class room at key locations	Location to be agreed	Voluntary Groups	£500
21		Woodcarvings	Low	TBC	Location to be agreed	Wood carver	Cost: TBC

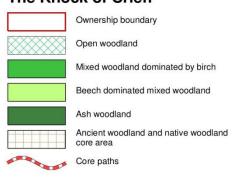
# Appendix A

# The Knock Forest Plan

(Excerpt from the PKC Forest Plan 2015 – 35)



#### The Knock of Crieff



CASE NUMBER: 441216

BRN:163200

FID:NN/86718/22936

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#### **Property**

The property is owned by Perth and Kinross Council. The Forest Plan has been written by Friendly Forestry Ltd and Perth and Kinross Council is the payee for any grant monies.

#### Soils

The majority of the hill is composed of Shields soils; freely drained humus iron podzols. The centre is mainly bare rock and scree with a shallow humus rich soil in developing places.

# Stakeholder Engagement

A community consultation meeting was held on 4 June 2013. Three people responded and they generally supported all the management proposals except one person did not support leaving deadwood on site. In addition, the RSPB commented that the woodland is in an area important for Red Kite breeding and asked that all trees are surveyed before felling and that FC note 32. Forests and Birds is followed during forest operations.

# **Long Term Vision**

The long term vision is to maintain the wood as a high quality countryside visitor attraction whilst enhancing its biodiversity and nature conservation value.

### **Management Objectives**

- 1) Gradually remove non-native species to create a native woodland.
- 2) Maintain the views on the top of the hill by removing any large trees.
- 3) Maintain and improve the heath land by removing saplings and controlling broom and bracken.
- 4) Monitor trees for pests and diseases and adapt management accordingly.
- 5) Create a varied age structure.
- 6) Continue tree safety surveys.

### **Site and Species Descriptions**

There are four main woodland types at the Knock:

- 1)Birch dominated mixed woodland (12.92 ha).
- 2) Beech dominated mixed woodland (2.27 ha).
- 3) Ash woodland (0.72 ha).
- 4) Open heath with natural regeneration (8.96 ha).

### Birch Dominated Mixed Woodland

Birch is the dominant species with rowan, ash, oak, beech, willow and hawthorn and conifers Norway spruce, Scots pine and larch. Trees are well spaced with a healthy ground flora including foxglove, blaeberry and marsh violet. This woodland type covers around two thirds of the site.

# Beech Dominated Mixed Woodland

This area includes a former beech hedge as well as previously planted and naturally regenerated individual mature beech trees. Other species include oak, birch and rowan. Generally well-spaced out with beech trees that have recently been felled creating openings in the canopy and rejuvenating the ground flora.

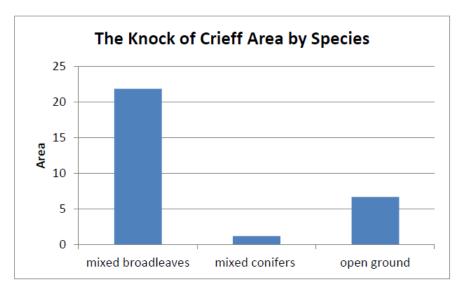
#### Ash Woodland

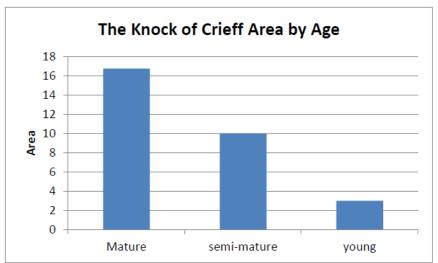
Predominantly ash, this part of the wood has an understory of sycamore that has been thinned out. There is also encroachment of bracken.

# Open Heath with Natural Regeneration

Predominantly heath land, especially towards the summit, this area has a few enclosures of newly planted Scots pine and juniper. Other tree species include birch, rowan with a few conifers (Norway spruce, Scots pine and larch). There is interesting heathland ground flora including eyebright, harebell and heath bedstraw.

# Stand Data





# Survey Data

A survey of the vascular plants found at The Knock was undertaken in 2006.

# **40.2** Analysis of Constraints and Opportunities

# **Ecological**

There are two UK BAP priority species present on the Knock – the pearl-bordered fritillary butterfly and the red squirrel. In addition, it is rich in other important native species, especially in the ground flora which includes yellow pimpernel, wood sorrel, barren strawberry tormentil amongst others. Scots Pine will continue to be planted to support the red squirrel and the Norway spruce will not be removed unless necessary as they provide an important food source for red squirrels. The primary larval food plant of the pearl-bordered fritillary is Common Dog-violet (Viola riviniana). Heath Dog-violet (Viola canina) and Marsh Violet (Viola palustris) are also used. Adults feed primarily on Bugle and Tormentil and Dandelion. The presence of these species are important to maintain the butterfly population and therefore open glades and low stoking will be maintained.

### Herbivore

Roe Deer are present although their browsing is not at a critical point where they need controlling. Red Squirrels are present.

# 40.3 Links with Scottish Forestry Strategy

Theme	Aims	Priority
Climate change	Trees uptake carbon and younger trees uptake carbon faster than older trees. In addition, soils contain carbon and soil disturbance can release carbon into the atmosphere. However, as saplings will be removed from the health land area and some mature non-native trees will also be taken down to allow space for native trees to grow. Whilst these management practices are not increasing carbon in the atmosphere, because no new planting is taking place.	Low
Timber	No saleable timber at this site.	Low
Business development	The Knock is a popular visitor attraction to tourists to Crieff. It has the potential to be the location for appropriate sustainable utilisation, such as ecology walks, film locations, weddings, etc.	Medium
Community development	Due to the proximity of the car parts the woodland has potential for active volunteer groups as well as being a site for visits from scouts/guides and other community groups.	Medium
Access and health	The walks and cycle routes are an excellent accessible way for people to enjoy the outdoors and exercise in peaceful surroundings. Walking and cycling outside improves mental health as well as physical well-being. In addition, spending time in 'semi wild' environments increases confidence and well-being and standing at the viewpoint creates a sense of place and belonging, whilst using the energy required to get up there results in a	High

Theme	Aims	Priority
	feeling of achievement	
Environmental quality	The podzol soils and tree cover are excellent natural flood defences as they reduce surface run off and increase lag time. Crieff is within and area classed as 'in bad condition' in regards to the water quality of rivers, lochs and estuaries in the Scotland river basin management plan, with the aim of getting to a good status by 2027. Trees also intercept airborne particulate pollution as well as reducing wind speeds improving the local environment.	Medium
Biodiversity	Of the HAPs in Tayside the Knock can be categorised as having three in unfavourable condition. Juniper and two bat species.	High

# **40.5 Silvicultural Policy**

The overriding silvicultural policy for the Knock is continuous cover forestry, with the occasional removal of a single tree for biodiversity or health and safety reasons. The ultimate aim, which is already closely realised, is to have a varied age structure, variety of native tree species and variable stocking across the site to allow for areas of open ground and woodland glades. Felling will be infrequent and planting will take place when required. Natural regeneration will be monitored and encouraged where appropriate, although cleaning will take place in the heathland at the top of the hill. Non-native trees will be gradually removed, except the Norway spruce. Dead or dying trees will be left in situ unless they pose a risk to the public.

# Felling and Thinning

The only thinning to take place will be the continuation of the gradual removal of beech and sycamore. Less than 20 m³ a year will be removed. Trees will be surveyed for breeding birds before felling.

#### Restructuring and New planting

Scots pine will be planted to replace the sycamore and beech. These will be planted in small enclosures with 4 to 5 saplings in tree shelters in each enclosure.

# Control of Non-native Invasive Plant Species

Although not exotic, bracken is a problem on the site and it is colonising a large part of the heath land areas. It should be sprayed annually with herbicide to stop spread and to try and reduce the area it already covers.

	(ha) et area)			Restructuring Area by Successor Crop Types (net area of species, other land to cover open ground) (ha)						
Felling Period	Area of Thinning	Area of Felling (net (ha)	Sitka Spruce	Other Conifer	Mixed Broadleaves	Native Broadleaves	Caledonian Scots Pine	Natural Regeneration	Other Land	
2014		0.08					0.08			
2016		0.38					0.08		0.3	
2018		0.08					0.08			
2020		0.08					0.08			
2022		0.38					0.08		0.3	
Totals	·	1				·	0.4		0.6	

40.6 Work Plan

Activity	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023- 2033
Remove trees										
that block the										
view from the										
summit.										
Remove non-										
native species										
such as										
Sycamore and										
Beech.										
Cut back/										
spray bracken										
and Broom										
from heath										
land areas.										
Plant Scots										
pine in areas										
cleared of										
beech and										
sycamore.										

# **40.7 Production Forecast**

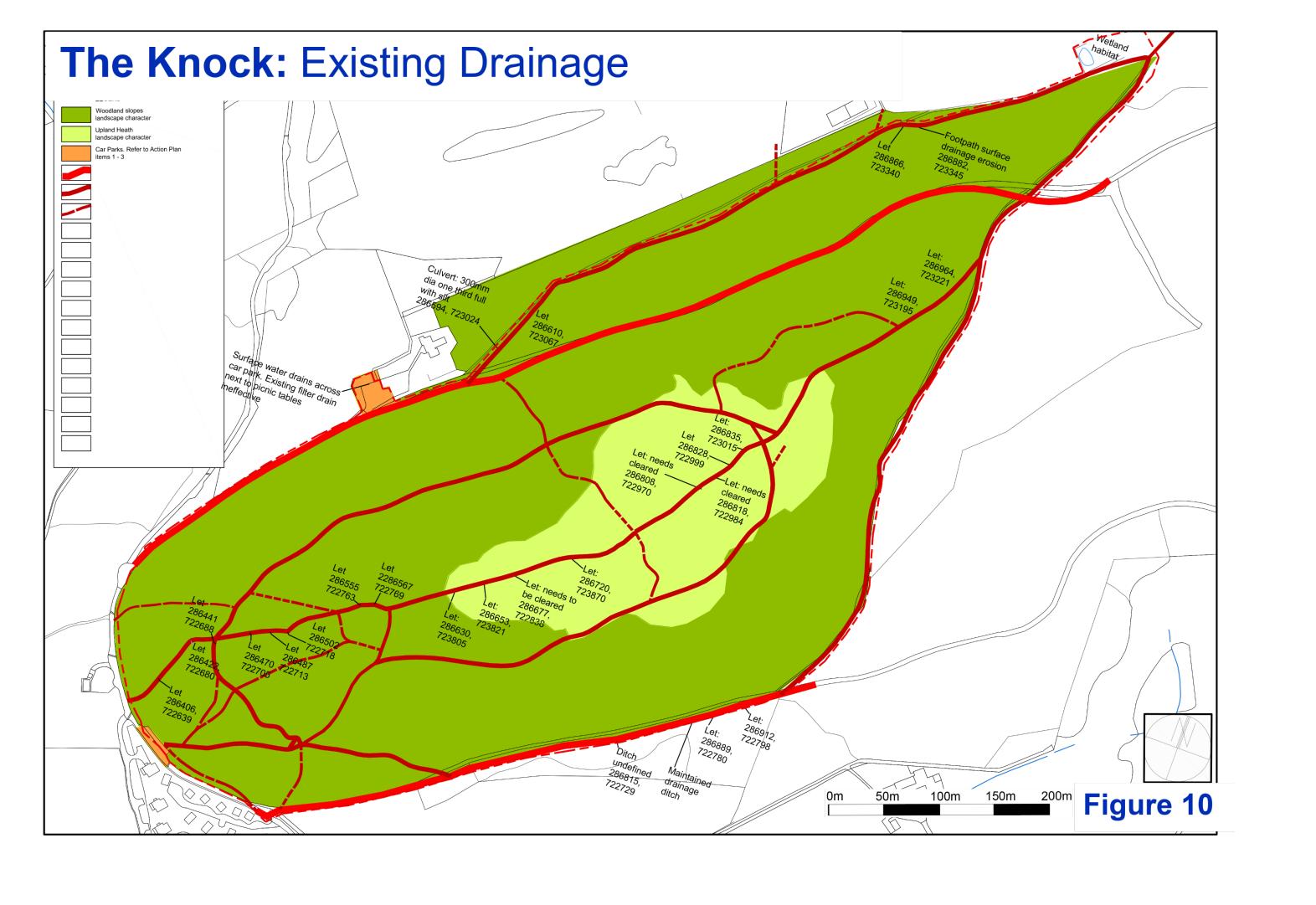
Year	Volumes
2014	<20 m³
2015	
2016	<20 m³
2017	
2018	<20 m³
2019	
2020	<20 m³
2021	
2022	<20 m³
2023	

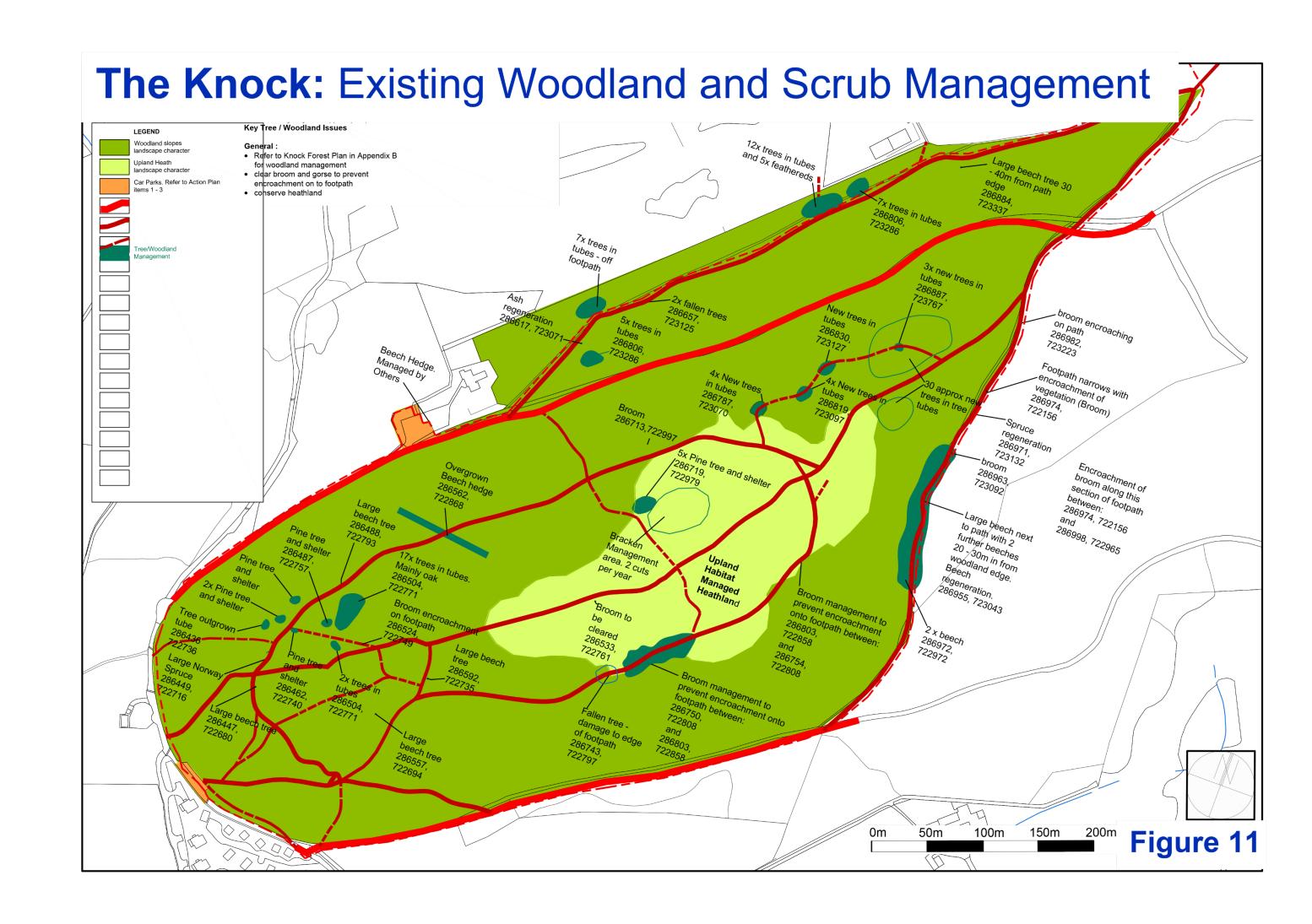
# Appendix B Existing Site Surveys (December 2014)

# Contents:

Figure 10: Existing Drainage

Figure 11: Existing Woodland and Scrub Management





# Appendix C

# Table showing condition of existing site furniture

(note: existing furniture survey carried out in 2015 and needs updating)

Reference	Item	Description	Condition	Grid co-ord	Replacement cost
Upper Car Park:			Red: needs to be replaced. Orange: will need replaced in next few years/out of character for area. Green: good condition. White: to be confirmed/missing		
	Picnic bench	Timber. On paving slabs within grass area	To be assessed		
	Picnic Bench	Timber. On paving slabs within grass area	To be assessed		
	Viewpoint interpretation panel	Stainless steel plaque on stone plinth. Grass surfacing	To be assessed		
	Dog bin	Standard Red dog bin	out of character		
	Steps	Timber risers with concrete infill	Non- standard step dimensions. Timber hand rail to be assessed		
	Sign	Timber 'No Authorised vehicles'	obsolete and requires replacement		
	Metal barrier (forest track)	Metal painted	Not required - remove		
	Litter bin	concrete bin with green lid	obsolete design and not in character for the area		
	Litter bin	Blue plastic PKC bin	Not in character for the area		
Road Junction on Approach to upper car park					
	bench	Owned by Crieff Hydro	Not fixed to base. Railing poor condition. Replace by PKC?		
	Litter bin	Owned by Crieff Hydro	Replace by PKC? End of life		
	Sign, Finger post	Green finger post – 'Knock circular path'	Covered in lichen. Out of context with Hydro signage		
	Timber fence	Timber post and railings	Approx. 5yrs old. Good condition		
	Other signs	Owned by Crieff Hydro	Do nothing		
Lower Car Park					
	Litter bin	concrete bin with green lid	obsolete design and not in character for the area		

	Litter bin	concrete bin with green	obsolete design and not in		
		lid	character for the area		
	Bench	Timber	to be assessed		
	Interpretation sign	Big Country PKCT	Requires cleaning. Sign		
		'Thistle' sign	wobbles. not in keeping		
			with the area.		
	Sign, Finger post – (next to	Green finger post –	Covered in lichen?		
	PKCT sign)	'Knock Summit'			
	Sign (next dog bin)	Timber 'The Knock'	Obsolete		
	Dog bin	Standard Red dog bin.	Post only. Bin missing		
	Steps	Timber with type I/whin dust infill – not standard	Not standard design. At end of useful life.		
		dimensions	end of useful file.		
	Retaining wall	Timber wall	At end of useful life.		
	Sign	Timber sign 'lock up car	Obsolete		
	6: (	and remove valuables'?			
	Sign (next to bench and bin)	Timber 'no vehicles beyond this point'	Obsolete		
Access road Junction with forest Track at SE corner					
Corner	Sign	Timber 'No Authorised	Obsolete		
	Jigii	vehicles'	Obsolete		
	Sign	Timber 'Caution	Obsolete		
		Ramps I 0mph'			
	Sign, Finger post	Green finger post –	Covered in lichen		
		'Gilmerton and Knock			
		Circular Path'			
Summit Viewpoint					
	bench	New timber memorial	Good condition		
		bench (installed within			
	<u> </u>	last 12 months)			
	bench	Timber memorial bench	Requires painting		
	bench	Timber memorial bench	Requires painting		
	bench	Timber memorial bench	Requires painting	20/7/7	
	Interpretation/viewpoint	Stainless steel 360 view	Good condition	286767,	
		on stone plinth and base		722918	
Other Benches					
	Bench (circular walk next to	Timber	To be assessed.		
	CH boundary)		Vegetation to be removed		
	Bench (summit walk next to	Timber	To be assessed.		
	CH boundary)		Vegetation to be removed		
	Bench (circular route 2)	Timber	To be assessed.		

		Vogetation to be removed		1
		vegetation to be removed		
Way marker (summit)	Timber post with arrow and orienteering badge	To be assessed.	286778, 722924	
Way marker (above lower car park – main route to summit)	Timber post with arrow	To be assessed.	286440, 722685	
Way marker (main route to summit)	Timber post with arrow	To be assessed.	286538, 722751	
Way Marker (north of summit)	Timber post with arrow	To be assessed.	286844, 723028	
Way Marker (north of summit)	Timber post with arrow and orienteering badge	To be assessed.	286976, 723245	
Way Marker (north of summit, junction with forest track)	Timber post with arrow	To be assessed.	286988, 723311	
	Way marker (above lower car park – main route to summit) Way marker (main route to summit) Way Marker (north of summit) Way Marker (north of summit) Way Marker (north of summit)	Way marker (above lower car park – main route to summit)  Way marker (main route to summit)  Way Marker (north of summit)  Timber post with arrow with arrow  Timber post with arrow	and orienteering badge  Way marker (above lower car park – main route to summit)  Way marker (main route to summit)  Timber post with arrow To be assessed.  Way Marker (north of summit)  Timber post with arrow To be assessed.  Way Marker (north of summit)  Timber post with arrow To be assessed.  Way Marker (north of summit)  Timber post with arrow and orienteering badge  Way Marker (north of summit, Timber post with arrow To be assessed.	Way marker (summit)  Timber post with arrow and orienteering badge  Way marker (above lower car park – main route to summit)  Way marker (main route to summit)  Way marker (main route to summit)  Timber post with arrow To be assessed.  286440, 722685  286538, 722751  Timber post with arrow To be assessed.  286844, 723028  Way Marker (north of summit)  Timber post with arrow To be assessed.  286976, 723245  Way Marker (north of summit, Timber post with arrow and orienteering badge)  Way Marker (north of summit, Timber post with arrow To be assessed.  286988, 723311

# Appendix D Summary of Current Maintenance Programme

# **Summary of Current PKC Squad Maintenance for the Knock**

- Application of Herbicide at car parks: once a year (July)
- Grass cut 25 -40mm height along verges in vicinity of car parks: 15 times a year during spring to autumn
- Grass cut 100mm height bankings, verges and paths: Once a year (July)
- Litter collection at car parks: 2 times a week all
- Bin Emptying Bins at car parks: 2 times a week all
- Cut Hedge at upper car park: once a year (October)

# Appendix E Community Greenspace Structure

# The following diagram shows the responsibilities of each section within PKC Community Greenspace for The Knock

