Carsphairn Community Woodland Outdoor Education Centre - Project Outline Plan

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I Introduction

Carsphairn Community Woodland (CCW) are seeking to acquire Muirdrochwood from Forest Enterprise Scotland to create a rural economic hub which will contribute to the regeneration of the community and to deliver a broad range of economic, social and environmental benefits. A key element of this is the establishment of an Outdoor Education Centre (OEC), to be located in the southern block, adjacent to the existing road access and car park / turning area at NX614903.

The OEC will be aimed principally at schools, who will be invited to send groups for week long stays, participating in a range of activities proven to have significant benefits in respect of aspects such as gaining confidence, team work and developmental skills, all aimed at addressing Curriculum for Excellence capacities. 5% of places overall will be offered free to disadvantaged pupils. Out-with school attendance the Centre will be open to other parties and the local community, the latter benefiting from discounted membership costs.

The location of the forest, with its loch and river frontage, quarries and extensive woodland allows for a wide range of outdoor activities to be offered. There is an opportunity to develop a superior Centre, with all facilities on site and no need to travel for any of the activities.

Activities on offer will vary from forest based activities such as canopy trails which include high ropes, tree top assault course, trapeze, Jacob's ladder, to water-based activities including sit on kayak, sailing, white water kayaking, Canadian canoes, raft building and paddle boarding. Other activities the pupils will experience throughout the forest include mountain biking, survival skills, archery, orienteering, team building, zip wire, rock climbing and abseiling in the quarry. Evening activities such as treasure hunts, water zorbing, barrel bobbing and other sporting challenges will keep the pupils occupied until bedtime.

A list of potential activities detailing their aims and learning intentions, is contained in Appendix I: this list is not exhaustive, nor is there an expectation that all of these will run or be viable. Muirdrochwood has the potential to offer sufficient activities and variation on-site to ensure the centre is a unique destination that will attract schools to visit. Integral to the activities will be an emphasis on recognition and protection of the natural environment, leading to a greater awareness and appreciation of it as part of the experience.

The Centre will be open to schools from April to October, with youth organisation events (Guides, Scouts etc.) taking place over school holidays from July to August. Over the remaining months the Centre will be offered for use by corporate team building activities, family activity holidays or open for outdoor training events. The centre will be used for environmental education during the winter. The Centre will be available for local use during periods when no organised parties are attending, with discounted rates offered to community members and groups.

Indicative costings for construction, equipping and operating the centre have been provided, and are presented in section 3. The intention is for the centre to be open for business in year three of community ownership, with year one being the development stage of the process and construction and fit-out taking place in year two.

I.I Aims

The main aims of the Centre are to incorporate a wide variety of Curriculum for Excellence (CFE), learning experiences and intentions, help to promote each pupil's confidence and establish new friendships between pupils and with teachers. For example:

- It will help promote health and wellbeing learning experiences though pupils being able to work together in solving group challenges (raft building, treasure hunt, team building exercises).
- Pupils will establish new friendships and work together to solve their group challenges.
- Pupils will be responsible for their own and their group's safety: teams are shown how to use the safety harnesses, hats, life jackets and how to be a "bucket monkey" this helps promote safety and responsibility not only for themselves but also as a group.
- Pupils will experience new activities such as canoeing, abseiling, climbing and mountain biking.
- Pupils will gain a sense of achievement and will often wish to continue to participate in some of these new activities at home after experiencing them at the Centre.

The Centre will help promote literacy through team challenges during which pupils have to work and co-operate with each other as a team, using certain skills such as listening, responding and often adapting their initial plan (such as during the raft building challenge). It is common in these situations to hear pupils praising and encouraging other pupils. Through these activities, pupils realise the importance of team work and positive praise. Furthermore pupils have to retain prior knowledge on different activities, especially with safety procedures, which helps their literacy skills.

1.2 Values

Participating in a residential centre helps to develop the Four Capacities and Skills in the Scottish based Curriculum for Excellence (CFE). These Capacities are:

- Successful learners
- Confident individuals
- Responsible citizens
- Effective contributors

The Centre will incorporate the CFE ethos: 'The journey through education for any child in Scotland must include opportunities for a series of planned, quality outdoor learning experiences.' This Centre will present opportunities to experience rural cultures and to build an appreciation for differences in terms of landscape, nature and economy. The pupils will experience a variety of CFE learning experiences and intentions and these are detailed in Appendix 2.

The Centre will cater for young people with physical disabilities and young people with additional needs. All facilities will be multi use and almost all activities will be able to be experienced by those with various special needs, either learning or physical. CCW are passionate about giving all our young people an exciting visit to our centre and striving to provide the best possible week of their educational experience.

¹ learners who are assisting with the activity and being responsible for the safety ropes – ensuring the ropes are placed carefully in the bucket while learners are climbing.

As part of the booking process the staff would highlight the range of facilities and request that the needs of any young person with special requirements within the party is discussed. Indeed each young person has their own unique needs and the Centre will be keen to create individual plans to facilitate safe and effective inclusive programs. 5% of places on an annual basis will be offered to underprivileged pupils to enable participation by those that might otherwise not be able to attend.

1.3 Governance

CCW will establish a wholly-owned trading subsidiary to take on the operation of the Outdoor Education Centre. The establishment of trading subsidiaries is common practice and has a number of potential advantages, including insulating the parent company from day to day operational management and business risk.

The best structure is yet to be determined but will likely be a Company limited by shares, with a small board including nominees from CCW and those with expertise in the field.

For simplicity this subsidiary is referred to as Carsphairn Outdoor Education Ltd (COE), although this name has not been formally agreed.

CCW will develop and own the site, COE will be responsible for all aspects of the management of the business, including the employment of staff.

COE will pay an agreed annual rent to CCW and have the capacity to gift aid surpluses to the parent, although it is anticipated that in the first few years of operation it is likely that any surpluses will be retained to reinvest and develop the business.

COE will join the appropriate industry bodies and seek all necessary licences², insurance and permissions to operate. Staff will possess appropriate accreditation and these skills will be updated through the COE as appropriate.

1.4 Benefits

There is a substantial amount of research which has gained recognition by the Scottish Government and Education Authorities of the importance to child development of outdoor education.

According to the Scottish Government, Scotland is being recognised as a leader in the field of outdoor learning³. There are many benefits to outdoor education, it provides a new stimulus to learning, many children behave differently out of a classroom environment, connections are made with the real world, it helps develop critical thinking, the multi-sensory approach to outdoor education helps learners retain knowledge easier and outdoor education provides a new learning experience in a relaxed manner.

According to international research outdoor education has many advantages for learners:

² Licensing applies to those who offer activities to young people under the age of 18 years and who operate in a commercial manner. http://www.hse.gov.uk/aala/

³ https://education.gov.scot/improvement/documents/hwb24-ol-support.pdf

- 1. Residential programmes have a positive impact on children. At-risk children who attended a week-long residential outdoor education programme increased their test scores compared with children who did not have this experience. There was a 27% increase in measured mastery of science concepts, enhanced co-operation and conflict resolution skills, gains in self-esteem, gains in positive environmental behaviour, and gains in problem solving, motivation to learn and classroom behaviour.
- 2. Field trips help young students to better articulate environmental problems. Complex environmental problems are challenging for pupils to understand. In addition to using pictures and diagrams, and examining a problem sequentially, using kinaesthetic and auditory learning approaches on field trips made a notable positive difference.
- 3. Short-sightedness in children is affected by time spent outside. Australian Government research suggests that myopia, or short-sightedness, in children appears to be positively affected by the amount of time spent outside. The vision of 6- and 7-year- olds of Chinese ethnicity in Singapore and Australia was compared. Ten per cent of the Australian children were short-sighted compared with 30% of the Singaporean children. All the children spent a similar amount of time reading, watching TV and playing computer games. However, the Australian children spent on average two hours a day outdoors, which was 90 minutes more than the Singaporean children.
- 4. Nature is a buffer of life stress. Nearby levels of nature moderate the impact of stressful life events on the psychological wellbeing of children. The life stress impact is lower among children with high levels of nearby nature than among those with little nearby nature.
- 5. Being outside affects children's behaviour. A Swedish study was carried out at two day nurseries, one an outdoor 'I Ur och Skur' kindergarten and the other a traditional nursery in new, spacious premises but which was indoors. The research team studied children's behaviour as a whole, how they played, how often they were outside, their play routines, and the development of motor function and powers of concentration during the course of a year. There findings were conclusive that children who were outside developed quicker and were more positive behaviour wise. 'When it comes to concentration capacity, the children within I Ur och Skur pre-schools are more than twice as focused as children within a normal pre-school. Their motor skills are better, they are less frustrated, restless and sick.'
- 6. The games children play outside tend to be less gender stereotyped than the ones played inside since the material children use to play with in the forest is not as associated with a specific gender⁴.

In summary, the benefits of outdoor education are clear both in terms of health and wellbeing and attainment. In fact, "a residential experience can push students beyond their comfort zone, foster stronger relationships, develop independence, team work and maturity". Moreover, the most effective personal development for learners occurs when they are pushed out of their comfort zone and into their "stretch zone". Helping learners to achieve this has a positive impact on their self-worth, confidence and attainment.

The benefits of outdoor education are also highlighted by Jill Bennet a Depute Head teacher in Aberdeen where pupils are given the opportunity to attend a week long residential activity centre. "It is a life-changing experience for many as they return more confident, more positive about their strengths. Young people who had very little confidence at the age of 14 have gone on

⁴ https://education.gov.scot/improvement/documents/hwb24-ol-support.pdf

⁵ http://www.sapoe.org.uk/wp-content/uploads/2018/09/Dissertation.-Residential-outdoor-education-in-Scotland-

 $^{^6 \, \}underline{\text{http://www.sapoe.org.uk/wp-content/uploads/2018/09/Dissertation.-Residential-outdoor-education-in-Scotland-3.pdf}$

to be School Captains, others who had little self-belief have gone on to achieve excellent exam results and others who may have disengaged with school entirely have successfully completed S4 and achieved positive destinations."⁷

1.5 Demand

There is a growing demand for outdoor education due to its increasing importance in the curriculum and pressure on funding centres through local government, leading to the desire to increase residential experiences rather than single days as expanded on below:

In 2010 the Curriculum for Excellence was implemented within the Scottish curriculum by the Scottish Government, with the aim of creating young learners who are confident individuals, responsible citizens, effective contributors and successful learners. In order to achieve these aims the Scottish Government highlighted that learning does not have to be restricted to the classroom environment and that "the outdoor environment has massive potential for learning" and "children and young people's learning experiences can be enhanced by maximising the potential of the outdoors". In Scotland, the Curriculum for Excellence states that pupils are entitled to opportunities for outdoor learning, available at their place of learning and in the wider community.

This increasing recognition of the importance to child development of outdoor education underlies the rise in demand for facilities such as the Outdoor Education Centre and an increasing number of authorities are starting to use such facilities not just in Scotland but throughout the UK. When comparing academic years 2011/12 and 2016/17, the percentage of schools accessing residential outdoor education is generally higher in 2016/17.

Some local authorities show large increases in the percentage of schools accessing residential outdoor education with Aberdeenshire showing an 88% increase, Moray a 102% increase and Fife a 98% increase. Moreover the outdoor activities undertaken by schools are tending towards residential experiences rather than single days as this is more cost effective and provides a better educational outcome.

For Scotland, the Scottish Attainment Funding/Pupil Equity Funding is providing additional money to schools depending on the amount of deprivation in the local area to try to help pupils achieve more in relation to attainment so that they reach a positive destination/outcome, which outdoor education positively impacts on.

Many local authorities have targeted funds to outdoor education. East Ayrshire have appointed a John Muir Award and Attainment Project Officer to maximise the potential of outdoor learning, with particular focus on closing the attainment gap (East Ayrshire Council, 2017). Falkirk High School have recently appointed a Targeted Wider Achievement Leader to facilitate outdoor education and raise attainment, funded by PEF (Webster, K. pers. comm.). West Lothian created Outdoor Learning Hubs, running 12 weeks of outdoor learning, which was seen to add an average of six months of mental arithmetic, two months of general maths and improve attitudes towards learning (Harvey et 31 al., 2017).

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⁷ http://www.gtcs.org.uk/News/teaching-scotland/exclusive-raising-attainment-through-outdoor-education.aspx https://www.tandfonline.com/doi/abs/10.1080/14729670285200261

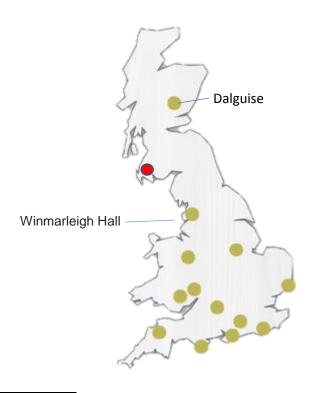
⁸ https://education.gov.scot/Documents/cfe-through-outdoor-learning.pdf

The increase in demand, however, has not been matched by the number of facilities offering residential activities. During 1982 there were 123 centres that fitted the residential description compared to 64 centres in 2018. Bed numbers have decreased by at least 11% from over 5,718 to 5,086. In 1982, 59% of centres were managed by a local authority, compared to only 17% in 2018, with the remainder being managed by a charity/commercial company. This highlights the reduction in council run educational resources despite an increase in significance within the curriculum. Outdoor activities undertaken by schools are also tending towards residential experiences rather than single days as this is more cost effective and provides a better educational outcome.

1.6 Current competitors

There are a limited number of Outdoor Activity Centres around Britain offering the wide range of activities and education focus which will be delivered at the Muirdrochwood OEC.

The main like-for-like competitor is PGL⁹ whose Centre locations in the UK are shown below (Muirdrochwood in red). The only PGL Centre in Scotland (Dalguise) is 138 miles from the location of our Centre and is 75 miles from Glasgow. Muirdrochwood is 63 miles from Glasgow and also close to the North of England. The second closest Centre to us is Winmarleigh Hall which is 141 miles from our Centre. The unique location and magical scenery and setting in the Galloway forest, along with the range of high quality activities on offer, means that Muirdrochwood will be looking to appeal to educational establishments across the UK.



⁹ PGL is privately owned and is part of the Holidaybreak group, owned by Cox & Kings.

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There are a considerable number of local activity and outdoor education centres¹⁰ offering a subset of the activities that will be provided at Muirdrochwood but lacking the fully inclusive onsite experience. The OEC will deliver a full 6/7-day residential experience rather than weekend/day trip / single activity experience for young people; and will be equipped to cater for young people with additional support needs.

Given the specific niche that the Centre aims for and the growing market generally for outdoor education and activity it is not considered that the Centre will cause undue displacement of other businesses.

1.7 Community benefits

The Centre will be a significant new resource for the Community and will provide the following benefits:

- Local employment: 10 posts = 6.5 FTE
- Additional income from visitors for other local businesses (shop, B&B etc)
- Increased provision of outdoor activities for local community and visitors
- Income for CCW to support other activities in the forest

In the longer term the Centre will contribute to increasing levels of health and fitness in the community and will help the area to increase recognition as a tourist destination.

1.8 Funding and development process

Primary funding for the Outdoor Education Centre will be sought from the Big Lottery Fund Community Assets Fund¹¹

Community Assets is focused on helping local communities to address specific inequalities or disadvantages through ownership of an asset. The Fund wishes to support applications that:

- are rooted in the community, are genuinely community-led and give the community a stake in local decision-making
- are connected to other organisations and services in the community

Ardentinny Outdoor Education Centre http://www.ardentinnycentre.org.uk/

Ardroy Outdoor Education Centre, Lochgoilhead http://www.ardroy-oec.co.uk/

Ardmay House, Arrochar http://www.ardmay.co.uk/

Arran Outdoor http://www.arranoutdoor.com/

Benmore Outdoor Learning Centre, Dunoon https://www.benmorecentre.co.uk/

Blairvadach, Helensburgh http://www.blairvadach.org.uk/

Craggan Outdoors, Grantown on Spey https://www.cragganoutdoors.co.uk/

Lagganlia, nr Aviemore http://www.lagganlia.com/

Lendrick Muir, Kinross https://www.lendrickmuir.org.uk/

Lockerbie Manor https://www.manoradventure.com/lockerbie-manor.php

¹⁰ Known Outdoor Education Centres are listed below. Most are a significant distance from Carsphairn. Scottish Outdoor Education Centres: 3 centres at Belmont (Perthshire), Broomlee (S of Edinburgh) Dounans (Lomond/Trossachs NP) http://www.soec.org.uk/

¹¹ https://www.biglotteryfund.org.uk/funding/programmes/community-assets

- show clearly the changes that will take place and why this is the best way to deliver these changes
- show the developments will be economically sustainable once the grant has ended.

Development funding is also available through Community Assets. This can be used to cover costs such as options appraisals, surveys, community consultation and strategic plan development as well as costs to engage a design team to take forward the technical aspects of the application.

The maximum grant available from Community Assets is £1 million. CCW will seek match funding from e.g. The South of Scotland Enterprise Agency, the Galloway Glens Project and LEADER or its equivalent replacement.

CCW will provide in-kind contributions in the form of timber from the mature stand of larch and stone for roading from the quarry.

CCW will follow the RIBA/RIAS "plan of work" process¹², which involves appointing a design team, typically comprising an architect, quantity surveyor, structural, civil and building services engineers and a principal designer to address the health and safety issues contained within the construction, design and management regulations. The process used to procure the design team will be publicly accountable, transparent and ensure value for money.

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¹² https://www.ribaplanofwork.com/

2 OEC Design and Construction requirements

It is anticipated that the Centre will house 42 children and up to 6 teaching staff at any one time. This section of the document identifies and provisionally costs the main infrastructure requirements. As noted above a formal design process will be followed. The design elements, layout and costings presented in this document should therefore be considered as indicative, and subject to refinement during the full design process.

2. I Main OEC building

The main building will be designed to complement the forest environment. The building will be made of wood, either full log of thick tongue and groove or ship lap cladding with the roof being zinc / shingles / tiles.

As much timber as possible will be used from the forest, primarily the stand of mature larch which is approximately 400m from the proposed OEC location. On-site milling will reduce the environmental impacts of transport. CCW will supply timber at cost.

The main building will incorporate:

- Kitchen / servery (to feed ~50)
- Dining area (to seat ~50)
- Social space
- Classrooms
- Office space
- Toilets, inc. disabled provision
- Showers
- Small shop
- Laundry facilities
- Outdoor activity area

2.2 Secure storage building

Required for equipment: kayaks, sailing boats, mountain bikes Drying rooms (one for centre equipment and one for guests' gear) Needs electricity and water.

2.3 Accommodation Units

These will be wooden chalet-type units, fixed or moveable, with electricity and heating. In the layout diagram below there are 7 units, each for 6 children, with 2 smaller units for staff. There are various possible arrangements, either with separate pupil and teacher units, or combined, with separate, adjoining rooms. The optimum configuration will be decided during the development planning process.

2.4 Toilet / Shower block and changing room

Toilet blocks with showers will be housed in a building which is halved longways, girls have one half and boys have the other. An alternative option is that toilets and showers be contained

within individual accommodation units. The optimum configuration will be decided during the development planning process.

2.5 Access

A new roadway will be created to facilitate vehicle access to the main OEC building and the secure storage building. This will incorporate:

- A turning circle for coach (minimum 25m diameter)
- Approach to secure storage building
- Bound surface area for parking 20 cars (240m²) plus approach
- Bound surface paths linking accommodation with OEC / parking areas
- CCW will supply stone from the quarry at cost.

2.6 Water / Sewerage

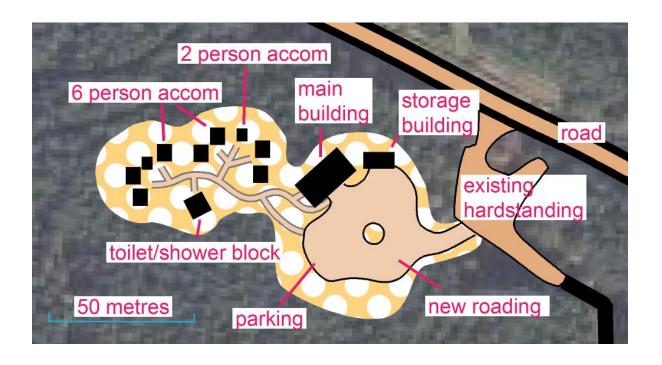
Water will be sourced from a bore hole as the nearest mains supply is more than two miles away. The Centre will need a sewage treatment plant, or septic tank, to deal with grey water and sewage.

2.7 Heating / Power

A stable power supply will be required which will feed both the main building and young people's cabins / units and toilet blocks. For heating the preference is for a wood fuel boiler using wood from the forest which could be run in conjunction with solar or ground source heating. Utilising a large thermal store of 5000 to 10000 litres will ensure a ready supply of hot water for the showers and heating of the main building and cabins.

2.8 Draft Layout

The OEC will be constructed in the southern block, using the existing main entrance to the forest. The layout below is indicative and for the purposes of estimation. The final layout will be confirmed during the design and planning process.



3. Budgets

(NB all figures are ex-VAT)

3.1 OEC overall expenditure and income projections

	Year I	Year 2	Year 3	Year 4	Year 5
Development	30,000				
Construction		1,259,294			
CCW In-kind (timber, site clearance, stone)		60,000			
Maintenance & repairs			12,593	12,593	12,593
Equipment		99,550	9,955	19,910	29,865
Minibus & trailers		30,000			
Staff		9,860	112,548	126,727	130,974
Rent			10,000	20,000	30,000
Running costs - schools		8,000	72, 4 20	87, 4 00	104,880
Running costs - other hires			10,800	13,900	17,000
Total	30,000	1,466,703	228,316	280,530	325,312
Community Assets	30,000	970,000			
CCW In-kind (timber, site clearance, stone)		60,000			
Other grant aid		436,703			
Income - schools			218,880	273,600	328,320
Income - other hires			36,000	50,500	65,000
Total	30,000	1,466,703	254,880	324,100	393,320
Surplus			26,564	43,570	68,008

3.2 OEC construction costs

Item	£
Outdoor Education Centre	630,000
Toilet Block plus changing	120,000
Secure Storage	45,000
Parking, Access, Paths, Upgraded Access	34,800
Services - water, electric, fire-fighting supply, generator	62,500
Site works - re-contouring of ground, pod bases	25,000
	917,300
Preliminaries @ 10%	91,730
	1,009,030
Contingencies @5%	50,452
	1,059,482
Professional fees @ 12% (£127,138 of which £30k in year 1)	97,138
	1,156,619
Planning, Building Warrant, Site Investigation, Topo Survey, etc @.75%	8,675
	1,165,294
Supply and Install Glamping Pods (9 No)	72,000
	1,237,294
Centre & accommodation fit out	22,000
Total	1,259,294

Indicative costings for the construction of the OEC and associated buildings and infrastructure were sought from Makar¹³, an architect-led ecological design and build company.

Initial cost estimates have been revised slightly following confirmation of specification and to reflect CCW contributions.

The table above gives a summary of indicative budget costs for the various elements including a 5% contingency and also gives professional fees assuming a total design team fee of 12% of the total construction cost. This would include Architect, Quantity Surveyor, Structural Engineer and M&E Consultant.

Actual costings will be developed by the design team as part of the formal development process and based on the detailed building specification – CCW anticipate that these will be lower than the figures presented above.

- I. Total area for the new Outdoor Education Centre based on the schedule below. Main OEC Building:
 - Dining Area for 55 75 sq.m.
 - Kitchen including storage 25 sq.m.
 - Social Space 35 sq.m.
 - Office Space 15 sq.m.
 - Male Toilets 9 sq.m.

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¹³ http://makar.co.uk/

- Disabled Toilet 4 sq.m.
- Female Toilets 12 sq.m.
- Small Shop 6 sq.m.
- Games Room (table tennis) 20 sq.m.
- Laundry Facilities/drying room 12 sq.m.
- Plant Room 12 sq.m.
- Storage 8 sq.m.

Sub-total 233 sq.m

Circulation + internal partitions 15% 34.95 sq.m.

Total 267.95 sq.m.

- Given the relatively small scale of the building a range of construction options are suitable for the OEC building including timber frame, masonry or steel. Given the rural woodland setting and environmental benefits these costs have been based on the use of a timber frame construction with timber cladding (both using homegrown timber) and profiled metal roof finish.
- 3. Square metre rates have been assumed based on recent experience, as follows:
 - OEC 268 sq.m. @ £2,500 per sq.m. Closed panel timber frame construction with concrete ground floor slab. Profiled metal roof and timber clad.
 - Toilet/shower/changing block 90 sq.m @ £1,500 per sq.m. Insulated timber frame construction with concrete ground floor slab. Profiled metal roof and timber clad.
 - Secure storage 80 sq.m. @ £600 per sq.m. Simple uninsulated steel (or timber) portal framed building with profiled metal roof and timber clad walls. Concrete floor slab.
 - For both OEC and toilet/shower/changing block there is a small reduction of costs based on CCW supply of larch cladding at cost.
 - Glamping pod costs (£9k for large pods, £4.5k for small) based on market survey. There is a very wide range of specification and cost options available. (There is an alternative option is to have toilets and showers integral to pods, rather than separate block: would reduce building costs but this is more complex to organise and it may be better to keep water supply separate from pods)
- 4. Servicing costs. The above rates would allow for a conventional private sewage treatment plant with soakaway. Similarly for surface water to soakaways. Percolation tests will need carried out to confirm suitability of the ground.

Heating and hot water could be achieved through the use of a log gasification boiler and thermal store. This could provide both heating and hot water to the OEC building and toilet/shower block.

Water – in the absence of mains water a borehole will be required to provide a private water supply. The cost of the borehole will depend on the geological ground conditions and depth required. There may also be a requirement to treat the water to potable standards depending on the chemical analysis. A budget sum of £25,000 has been included for this. A water supply for fire-fighting will also be required to meet building regulations. As no hydrant is available a 45,000 litre water tank is required. £10,000 for this assuming above ground storage tank.

Electric – again in the absence of mains electric supply photovoltaic panels can be provided to generate an electrical supply linked to battery storage. A sum of £20,000 has been allowed

for this but will require detailed calculations to ascertain the building's energy usage. It is assumed cooking would be done by bottled gas and heating/hot water through wood fuel as above. Note it may not be possible to generate an electrical supply at all times of the year therefore it may be necessary to include for a back-up generator - \pounds 7,500 allowed.

5. Figure based on layout as shown but the final solution will ultimately depend on site constraints such as views, slope, ground conditions, drainage etc.

The layout produces approximate areas and costs as follows: Area of woodland to be cleared – 5,000 sq.m. @ £5 per sq.m. Roadway, turning area and carparking in compacted type I – I,300 sq.m. @ £24 per sq.m. Paths from central area to glamping pods in unbound scalping material – 300 sq.m. @£12 per sq.m.

It will be necessary to confirm that the existing access to the public road meets Local Authority Roads Department technical standards with appropriate visibility splays.

3.3 OEC equipment costs

Item	pax	£/pax	£
Raft building	16	150	2,400
Kayaking (flat Water)	15	600	9,000
White water Kayaking	15	750	11,250
Canadian Canoeing	16	400	6,400
Paddle Boarding	15	700	10,500
Water Zorbing	15	500	7,500
Sailing	15	1,600	24,000
Rock Climbing and abseiling	15	200	3,000
Archery	15	500	7,500
Mountain biking	15	300	4,500
Orienteering			1,500
Rope courses and tree top exercises			10,000
Sundry other equipment for outdoor exercises			2,000
Total			99,550

Equipment costs provided by CCW based on Director knowledge of outdoor activity provision.

Pax = number of persons catered for.

Provision for replacement at 10% in Y1, 20% in Y2 and 30% thereafter.

3.4 OEC running costs: staff

Staff member		salary	£/hr	hrs	рау	E+P	total
Head instructor	Full time	21,000			21,000	2,380	23,380
Instructor	Full time	18,000			18,000	1,865	19,865
Instructor	Full time	18,000			18,000	1,865	19,865
Seasonal instructor	45 hrs, 26 wks		10	1,170	11,700	1,375	13,075
Seasonal instructor	45 hrs, 26 wks		10	1,170	11,700	1,375	13,075
Group Leader	32 hrs, 26 wks		10	832	8,320	800	9,120
Catering staff	32 hrs, 26 wks		9	832	7,488	670	8,158
Catering staff	32 hrs, 26 wks		9	832	7,488	670	8,158
Administrator	16 hrs, 52 wks		10	832	8,320	250	8,570
Janitor/cleaner	16 hrs, 52 wks		9	832	7,488	220	7,708
Total					119,504	11,470	130,974

Note: e+p = ENIC calculated at 13.8% of monthly pay in excess of £700, employer's pension contribution at 3% of gross salary

Recruitment of staff, and some hours, will be phased to reflect the development of the business over the first three years, as shown in the table below.

Staff member		Year 2	Year 3	Year 4	Year 5
Head instructor	From Y2 Q4	5,845	23,380	23,380	23,380
Instructor	From Y3	_	19,865	19,865	19,865
Instructor	From Y3 Q3	-	9,933	19,865	19,865
Seasonal instructor	From Y3	-	10,460	11,768	13,075
Seasonal instructor	From Y3	-	10,460	11,768	13,075
Group Leader	From Y3	-	9,120	9,120	9,120
Catering staff	From Y3	_	6,526	7,342	8,158
Catering staff	From Y3	-	6,526	7,342	8,158
Administrator	From Y2 Q4	2,143	8,570	8,570	8,570
Janitor/cleaner	From Y2 Q4	1,872	7,708	7,708	7,708
Total		9,860	112,548	126,727	130,974

3.5 OEC other running costs

Item	Year 2	Year 3	Year 4	Year 5
Rent		10,000	20,000	30,000
Insurance (for full year)	2,000	15,000	15,000	15,000
Heat & power (for full year)	1,000	10,000	11,000	12,000
Maintenance & repairs		2,000	2,000	2,000
Food (£4 / head, 7d/w) 16/20/24 wks		17,920	22,400	26,880
Marketing and promotion	5,000	7,500	5,000	5,000
Licence		2,000	2,000	2,000
Coaches		8,000	10,000	12,000
Total	8,000	72,420	87,400	104,880

Insurance estimate covers building and equipment plus operation of OEC (quote from : https://www.activitiesindustrymutual.co.uk/our-products/get-a-quote/)

3.6 OEC income - schools

Full capacity of 48 (42 pupils plus 6 staff) for 26 weeks would, at £400 head, equate to a potential gross income of £499,200.

In the early years of operations it unlikely that this level will be approached, and income projections have been calculated on a considerable lower occupancy rate, based on group's average size of 36 (30 pupils plus 6 staff) @ £400 per head, with 5% of places overall being offered free to disadvantaged pupils.

Year	Wks	Occupancy %	Gross income	Income Net of 5%
Year 3	16	46%	230,400	218,800
Year 4	20	58%	288,000	273,600
Year 5	24	69%	345,600	328,320

3.7 OEC income – other hires

Outwith the main season the Centre will be offered for use by corporate team building activities, family activity holidays or open for outdoor training events. It is also envisaged to develop an environmental education aspect for winter use. The Centre will be available for local use during periods when no organised parties are attending, with Community members being entitled to a discounted rate for the activities.

		Y 3		Y 4		Y5	
Item	£/pd	days	£	days	£	days	£
Corporate activities o/n	200	60	12,000	80	16,000	100	20,000
Corporate activities day	100	100	10,000	150	15,000	200	20,000
Community use o/n	50	100	5,000	150	7,500	200	10,000
Community use day	30	300	9,000	400	12,000	500	15,000
Total			36,000		50,500		65,000
Food		560	2,800	780	3,900	1,000	5,000
Catering staff			6,000		7,000		8,000
Additional running costs			2,000		3,000		4,000
Total			10,800		13,900		17,000

Notes

Additional running costs: most staff and centre costs are met through main season budget, this is allowance for any additional admin, heat, power and fuel costs. o/n = overnight

Appendix I: Details of Activities Offered and Benefits

Activity	High Ropes
What is the activity	This activity gives the learners the opportunity to challenge their confidence and ability "Safely" and allows the learners to understand that they can surpass their own limits and bring a new-found confidence and ability which will transfer into the classroom environment. The activity is situated approximately 10 meters off the canopy floor and involves the learner balancing on ropes while having to pass through obstacles.
Aim of the	To ensure team work is undertaken
activity	 Provide opportunity for problem solving, communication, leadership To allow learners the opportunity to surpass their boundaries To provide a platform for increasing confidence and self-belief To provide a platform for self-reflective learning Improve the learner's motivation
Learning	Learners shall be able to:
Intentions	 work independently while being encouraged through passive team work listen to instructions, collaborate and contextualise information understand that their own boundaries / fears can be surpassed understand the need for support and encouragement to reach an aim understand and contextualise to understand self-reflection and how it can be implemented after the event and how they may tackle it differently if they were to do it again. complete the activity whilst out of comfort zones understand the need for Personal Protective Equipment (PPE) applicable to high ropes

Activity	Tree Top Assault Course						
What is	This activity shall involve learners tackling certain obstacles at a height. Learners						
the	shall be safely harnessed whilst undertaking the set obstacle course.						
activity							
Aim of the	To help learners experience obstacles from a certain height						
activity	To help increase learner's confidence with heights						
	To help learners work in a team, supporting their fellow peers						
	To help learners set their own goals						
	• To help learners become independent and able to evaluate their own progress.						
Learning	Learners shall be able to:						
Intentions	work independently to overcome obstacles						
	to work as part of a team to overcome obstacles						
	• to help learners work in a team, supporting their fellow peers						
	• to help learners set their own "goals"						
	• to help learners become independent learners and be able to evaluate their own						
	progress.						
	• understand the need for Personal Protective Equipment (PPE) applicable the tree						
	top obstacle course						

Activity	Trapeze
What is	This activity will test the courage and determination of most. It requires the learner
the	to first climb to the top of an 8-meter pole with only enough room for their feet.
activity	Once the learner has managed to gain their balance and stand up they then have to jump and catch the trapeze. The distance of the trapeze can be increased from the learner's pole depending in their confidence and desire.
Aim of the	To introduce learners to the important skills of climbing a pole
activity	• To help learner's decision making skills, learners shall be required to make the decision as to whether they shall jump or not.
	To help learners work in a team, supporting their fellow peers
	To help learners set their own goals
	• To help learners become independent learners and be able to evaluate their own progress.
Learning	Learners shall be able to:
Intentions	 understand the need for Personal Protective Equipment (PPE) for the trapeze to climb the pole safely, and learn the correct techniques to use for climbing understand the specialist equipment associated with the activity understand the need to collaborate and work as a team
	 listen to instructions, collaborate and contextualise information form instructor and team mates
	support team members and peers throughout the activity
	• set their own goals
	• be confident with their own decision making, i.e make the decision as to whether if they "jump" or not

Activity	Paddle Boarding
What is	The aim of the activity is to help learners build up their confidence in the water by
the	using their balance and co-ordination to stand up on a paddle board.
activity	
Aim of the	To helps learners, increase their water confidence
activity	To help learners experience paddle boarding
	To help learners experience standing up on a paddle board
	To help increase balance and co-ordination on a paddle board
	To help learners work in a team, supporting their fellow peers
	To help learners set their own goals
	• To help learners become independent learners and be able to evaluate their own progress.
Learning	Learners shall be able to:
Intentions	• stand up on the paddle board
	 understand the safety measures and equipment for the water based activity
	be aware of the risks associated with a water based activity
	• listen to instructions, collaborate and contextualise information form instructor
	and team mates
	support team members and peers throughout the activity
	• set their own goals

Activity	Zip Line
What is the activity	This activity shall involve learners climbing to a designated zip line platform. Learners shall be securely attached to the overhead line before jumping off the platform and 'flying' across the treetops or loch. This shall aid learners confidence and decision making as they will have to decide whether to jump off the platform. It will increase their confidence once they have experienced the exhilaration of the activity
Aim of the activity	 To experience the activity To introduce the necessary safety equipment and explanation to learners To help learner's decision-making skills, learners shall be required to make the decision as to whether they shall jump or not. To help learners work in a team, supporting their fellow peers To help learners set their own goals To help learners become independent learners and be able to evaluate their own progress.
Learning Intentions	 Learners shall be able to: understand the need for Personal Protective Equipment (PPE) for the zip line to climb to the platform safely, and be aware of the correct techniques which to use whilst climbing understand the specialist equipment associated with the activity understand the need to collaborate and work as a team listen to instructions, collaborate and contextualise information form instructor and team mates support team members and peers throughout the activity set their own goals be confident with their own decision making, i.e. make the decision as to whether if
	 be confident with their own decision making, i.e make the decision as to whether if they "jump" or not

Activity	Raft building
What is	This activity begins with a walk to the water's edge where the learners will be
the	presented with the challenge of building a raft then successfully piloting the raft to
activity	the island and back. The learners will be given a set number of rope barrels and
	poles to complete the task.
Aim of the	To ensure team work is undertaken
activity	Provide opportunity for problem solving, communication and leadership
	To provide encouragement and require rational thinking
	To provide a platform for self-reflective learning
Learning	Learners shall be able to:
Intentions	work as part of a team
	listen to instructions, collaborate and contextualise information
	use different objects to build a useful raft
	• use a selection of knots to secure objects together
	• support their peers in creating a raft
	• understand mistakes made and how to correct them through group discussion and
	physical stimulation.

Activity	Sit On Top Kayak
What is	This activity allows the learner the freedom to not feel enclosed as in a traditional
the	kayak. The Sit On Top Kayaks are open and the learner sits on top of the craft and
activity	has the freedom to move about. In the event of capsize the learner will float away from the kayak. This allows for the learner to gain and build confidence including key paddling skills and memorability. Sit On Top Kayaks are ideal to play games and improve confidence in the water.
Aim of the activity	 The aim is for the learner to experience control and manoeuvrability within their own limits.
	Learners are encouraged to set their own limits
	Allows the learner to experience the world of kayaking safely and confidently.
	• To help learners make an informed choice in terms of their enthusiasm to take up the new sport of kayaking.
Learning	Learners shall be able to:
Intentions	work independently while encouraging others
	show that they have listened to instructions and then put it to the test
	• understand the need for Personal Protective Equipment (PPE) applicable kayaking
	 identify hazards and the associated risks while kayaking and have a better understanding of water hazards as a whole
	 know what actions to take in the event of accidently entering a hazard
	 understand mistakes made and how to correct them through group discussion and physical stimulation

Activity	Water Zorbing
What is	This activity shall involve learners using zorbing inflatables to walk/run on the water
the	in a safe and secure environment
activity	
Aim of the	To introduce learners to water zorbing
activity	To increase water confidence
	• To help learners work independently or as a part of a team in an organised game
	• To help learners become independent learners and be able to evaluate their own
	progress.
Learning	Learners shall be able to:
Intentions	 listen to the safety requirements of water zorbing and implement the relevant
	safety measures
	increase water confidence
	 be aware of the risks associated with a water based activity
	listen to instructions, collaborate and contextualise information from instructors
	and team mates
	 support team members and peers throughout the activity

Activity	White Water Kayaking
What is	This allows for the learner to gain and build confidence including key paddling skills
the	and memorability. Learners shall experience different grades of rapids in a safe
activity	environment
Aim of the	• For the learner to experience control and manoeuvrability within their own limits.
activity	Learners are encouraged to set their own limits
	Allows the learner to experience the world of kayaking safely and confidently.
	• To help learners make an informed choice in terms of their enthusiasm to take up
	the new sport of white water kayaking.
	 Learners shall be aware of the risks involved in white water kayaking
Learning	Learners shall be able to:
Intentions	work independently while encouraging others
	 understand the correct path to guide safely down the rapids
	 show that they have listen to instructions and then put it to the test
	 understand the need for Personal Protective Equipment (PPE) applicable to
	kayaking
	 identify hazards and the associated risks while kayaking and have a better
	understanding of water hazards as a whole
	 know what actions to take in the event of accidently entering a hazard
	 understand mistakes made and how to correct them through group discussion and physical stimulation

Activity	Mountain Biking
What is the activity	This activity shall involve learners improving their cycling skills over a specific terrain to suit their ability.
Aim of the activity	 To allow learners to experience a variety of cycling terrains to suit ability. To help learners improve their cycling abilities To help learners improve their use of braking, gears and riding positions Learners are encouraged to set their own limits Allows the learner to experience mountain biking safely and confidently. To help learners set their own goals To help learners become independent learners and be able to evaluate their own progress.
Learning Intentions	 Learners shall be able to: understand the necessary safety checks required before mountain biking understand the hazards of mountain biking understand the safety measures required when mountain biking listen to instructions, collaborate and contextualise information from instructors and team mates support team members and peers throughout the activity set their own goals

Activity	Abseiling
What is	This activity shall involve learners walking backwards from a platform on a set height
the	to the ground. Learners shall be attached with the required safety equipment.
activity	
Aim of the	To introduce pupils to abseiling
activity	 To help learners who may have issues with heights
	 To help increase learner's confidence when dealing with heights
	 Learners are encouraged to set their own limits
	To help learners set their own goals
	 To help learners become independent learners and be able to evaluate their own
	progress.
Learning	Learners shall be able to:
Intentions	abseil safely
	 understand the need for Personal Protective Equipment (PPE) applicable the
	abseiling
	 descend from the platform safely, and be aware of the correct techniques to use while descending
	 understand the specialist equipment associated with the activity
	 understand the need to collaborate and work as a team
	 listen to instructions, collaborate and contextualise information from instructors
	and team mates
	 support team members and peers throughout the activity
	• set their own goals
	 be confident with their own decision making, i.e make the decision as to whether they descend or not

Activity	Archery
What is	This activity shall involve learners using hand bows and arrows. Learners shall try to
the	aim for a specific target. Learners shall be aware of the safety measures required in
activity	order to safely undertake this activity.
Aim of the	• Learners shall be able to listen to instruction from the advisor and undertake
activity	archery safely
	• Learners shall be able to load their bow in a safe manner
	Learners shall be able to collect their bows safely
	To help learners set their own "goals"
	To help learners become independent learners and be able to evaluate their own
	progress.
Learning	Learners shall be able to:
Intentions	understand the rules of the game
	• take part in a game, competing against another team
	 understand the need to work as a team
	• listen to instructions, collaborate and contextualise information from instructors
	and team mates
	support team members and peers throughout the activity
	• set their own goals

Activity	Orienteering
What is	This activity shall involve learners using maps in order to find themselves at certain
the	points in the designated area.
activity	
Aim of the	To allow learners to experience orienteering
activity	To help learners develop map reading skills
	• To help learners become independent learners and be able to evaluate their own
	progress.
Learning	Learners shall be able to:
Intentions	 understand the different symbols on a map
	 understand the skills to read and understand a map
	 work within a group to reach certain points in a designated area
	listen to instructions, collaborate and contextualise information form instructor
	and team mates
	 support team members and peers throughout the activity
	undertake the activity safely

Activity	Rock Climbing
What is	This activity shall involve learners climbing a specified area under the supervision of
the	an instructor, whilst being attached to a safety harness.
activity	,
Aim of the	 To allow all learners to experience climbing in a safe and secure manner
activity	 To introduce learners to the different safety equipment required whilst climbing
	 To help learners become independent learners and be able to evaluate their own progress.
	To help learners set their own goals
	To help learners become more confident with heights
Learning	Learners shall be able to:
Intentions	 understand the need for Personal Protective Equipment (PPE) applicable the
	abseiling
	 understand the specialist equipment associated with the activity
	 understand the need to collaborate and work as a team
	 listen to instructions, collaborate and contextualise information from instructors
	and team mates
	 support team members and peers throughout the activity
	set their own goals

Activity	Team Building
What is	This activity shall involve pupils being given a "challenge", and in order to solve this
the	challenge learners must work together to solve problems
activity	
Aim of the	To highlight the importance of working as part of a team
activity	Ensure all learners work together
	• Learners to practice listening skills, and enhance patience – learners shall need to
	try and try certain plans to try and solve the "challenge"
	Set goals
	Increase learner's confidence
	 Learners to realise when it may be necessary to ask for help/advise
	• To help learners become independent learners and be able to evaluate their own
	progress.
Learning	Learners shall be able to:
Intentions	 understand the need for Personal Protective Equipment (PPE) applicable the abseiling
	understand the specialist equipment associated with the activity
	Understand the need to collaborate and work as a team
	• Listen to instructions, collaborate and contextualise information from instructors
	and team mates
	Support team members and peers throughout the activity
	Set their own goals

Activity	Rural Skills
What is	This activity shall introduce learners to the countryside and introduce them to a
the	variety of rural skills and knowledge.
activity	
Aim of the	To introduce learners to the countryside
activity	To introduce learners to certain flowers/animals
	To allow pupils to forage for food
	To introduce learners to hazards of the countryside
	• To help learners become independent learners and be able to evaluate their own
	progress.
Learning	Learners shall be able to:
Intentions	 understand the specialist equipment associated with the activity
	 understand the need to collaborate and work as a team
	• listen to instructions, collaborate and contextualise information from instructors and team mates
	support team members and peers throughout the activity

Activity	Survival skills
What is the	This activity shall involve learners being given a "scenario" in which they must use their given material to build a shelter, and resolve certain situations.
activity	
Aim of the	To allow learners to work in groups to solve numerous "scenarios"
activity	To introduce the survival concept to learners
	To be able to assess the strengths and weaknesses of certain shelters.
	To be able to use certain survival skills in a safe and secure environment
	• To help learners become independent learners and be able to evaluate their own
	progress.
Learning	Learners shall be able to:
Intentions	build a suitable shelter
	learn certain survival skills such as fire-lighting etc
	understand the risks involved
	 understand the need to collaborate and work as a team
	• listen to instructions, collaborate and contextualise information from instructors and team mates
	support team members and peers throughout the activity

Appendix 2: Curriculum for Excellence Learning Experiences and Intentions

Social Wellbeing

Representing my class, school and/or wider community encourages my self-worth and confidence and allows me to contribute to and participate in society.

[HWB 0-12a / HWB 1-12a / HWB 2-12a / HWB 3-12a / HWB 4-12a]

I value the opportunities I am given to make friends and be part of a group in a range of situations. [HWB 0-14a / HWB 1-14a / HWB 2-14a / HWB 3-14a / HWB 4-14a]

Physical Wellbeing

I am developing my understanding of the human body and can use this knowledge to maintain and improve my wellbeing and health.

[HWB 0-15a / HWB 1-15a / HWB 2-15a / HWB 3-15a / HWB 4-15a]

I am learning to assess and manage risk, to protect myself and others, and to reduce the potential for harm when possible.

[HWB 0-16a / HWB 1-16a / HWB 2-16a / HWB 3-16a / HWB 4-16a]

I know and can demonstrate how to keep myself and others safe and how to respond in a range of emergency situations.

[HWB 0-17a / HWB 1-17a / HWB 2-17a / HWB 3-17a / HWB 4-17a]

I know and can demonstrate how to travel safely.

[HWB 0-18a / HWB 1-18a / HWB 2-18a / HWB 3-18a / HWB 4-18a]

Planning for choices and changes

Opportunities to carry out different activities and roles in a variety of settings have enabled me to identify my achievements, skills and areas for development. This will help me to prepare for the next stage in my life and learning. [HWB 2-19a]

I am developing the skills and attributes which I will need for learning, life and work. I am gaining understanding of the relevance of my current learning to future opportunities. This is helping me to make informed choices about my life and learning. [HWB 3-19a]

Physical activity and sport

Within and beyond my place of learning I am enjoying daily opportunities to participate in physical activities and sport, making use of available indoor and outdoor space. [HWB I-25a]

Literacy

When I engage with others, I can make a relevant contribution, encourage others to contribute and acknowledge that they have the right to hold a different opinion.

I can respond in ways appropriate to my role and use contributions to reflect on, clarify or adapt thinking. [LIT 3-02a]

As I listen or watch, I can make notes and organise these to develop thinking, help retain and recall information, explore issues and create new texts, using my own words as appropriate. Using what I know about the features of different types of texts, I can find, select, sort, summarise, link and use information from different sources. [LIT 3-14a / LIT 4-14a]

Numeracy

I can budget effectively, making use of technology and other methods, to manage money and plan for future expenses. [MNU 3-09b]

Further information:

Links to studies supporting Outdoor activities and the benefits they give:

- A number of studies described here https://www.englishoutdoorcouncil.org/research.in.outdoor.learning.html
- Not just activities but broader outdoor learning https://education.gov.scot/improvement/documents/hwb24-ol-support.pdf
- https://www.outdoor-learning.org/Good-Practice/Research-Publications/About-Outdoor-Learning