Rural Planning & EIA Assessment 1

SRUC Edinburgh

Environmental Resource Management

Year 3

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Introduction to the Project

The proposed project is an expansion on the already existing outdoor Midlothian Ski Centre which is situated at the edge of the Pentland Hills near Hillend on the outskirts of Edinburgh. The proposal is to transform the pre-existing ski centre into a year round multi activity leisure facility and rebrand it to Destination Hillend. The main improvements would include a food court, new reception, activity dome, shops, glamping wigwams, a 150 person hotel, and a freestyle jump slope extension. The primary new attractions will be the highest Zip line in the UK and the longest alpine coaster in the UK. The council has already agreed to invest £13.8 million in capital funding and if there are no problems with the applications the site could be running as early as 2022.

The centre is currently a good recreational and educational centre with many local schools and clubs using the facilities. It is said that the new developments will bring economic benefit and growth to the local area with more tourists both from Scotland and abroad as well as providing jobs for the locals. It is estimated that Destination Hillend could generate 30 new fulltime jobs with the council as well as up to 50 permanent third party jobs relating to the project (Midlothian Council, 2019). One of the major goals of the project is to increase the number of long stay tourists in the local area. The Lothian region has a number of different attractions that cater very well for day visitors. The Destination Hillend with the addition of a new hotel hopes to increase the number of days that visitors stay in the area which would have positive effects on the economy of the local area.

Evaluation of the processes utilised in Noise and Vibration section of the Environmental Impact Assessment Report.

This chapter of the EIA report looks at the effects of the development on noise and vibration in the surrounding environment (Doherty, 2019). This chapter was written by Dan Doherty who is a principle consultant of Sweco UK limited and has 13 years of practical experience in the area of sounds, vibrations and acoustics. He has worked on a number of noise impact assessments for planning and has experience with environmental assessments of noise and vibrations. This high level of experience means that the report in this section will be of a very high standard and it is very unlikely that there will be any human error or mistakes.

The report chapter looks into the different legislation that relates to the noise and vibration section of the EIA. This legislation such as the Control of Pollution Act 1974 which includes the control of a wide range of environmental pollutants and The Environmental Protection Act 1990 specifically sections which looks at noise as a disturbance or nuisance.

The chapter considers the effects on the local environment due to noise and vibration for both the construction phase and operating phase of the proposal. The environmental noise survey was undertaken by Sweco UK and a summary of their survey methods and result sis provided in the chapter. A large portion of the data used during the analysis is predicted levels so is not 100% accurate which is a possible area of error and therefore the results and conclusions from those results are not fully reliable.

The effects during construction seen at site are stated to have less of an impact to the surrounding area as they will only occur over a short period of time. The chapter also says that the noise due to construction traffic has not been considered in the analysis as the amount of construction traffic is expected to be minimal compared to the level of road traffic already seen. As well as this the site will only be accessed by this construction traffic during the working hours. I think this is an area that they are unnecessarily missing out of the EIA report as the construction traffic will likely be louder than regular traffic as it will be predominantly larger vehicles carrying and taking away material from the site which will generate more noise pollution. The report also assumes that no piling will be needed at the site which is the process of using large machinery to create a deeper building foundation. If this changes and piling is needed then the potential noise and vibration level would increase by a significant amount. The report also assumes that there is no screening present between the source of the noise and the receptor of the noise pollution and assumes that the intervening ground at the site is 50% hard ground and 50% soft ground. They have used this as a precautionary approach so that any predictions made from this can be seen as worst case scenario when in reality the noise level may be much lower than the predicted level. This is the correct way to test these noise levels rather than testing for the true average noise level which may spike to higher levels throughout the construction time.

In terms of noise pollution during the operating phase of the proposed site predictions have been made for traffic noise levels at existing sensitive receptors near the road network in the area surrounding the site. From this the noise level can be predicted for a scenario where the development goes ahead as planned and for scenario where the development does not go ahead. This is done through the use of calculation procedures which are set out in the Calculation of Road Traffic Noise (CRTN) technical memorandum. These two scenarios can then be compared in order to identify any significant differences between the two in terms of noise level at sensitive receptor points. If there are changes at these points then the possible impact to the environment can be assessed and mitigation processes can be created.

The report also looks into the effects of noise from new the new attractions proposed at the site. This includes the zip-wire and alpine coaster. In order to calculate this they have looked at the average noise produced from each new attraction at peak times and then measured this against the lowest existing day-time ambient noise levels and compared the difference in dBL. One negative of this process is that this just takes into consideration the average level of noise for the attractions with the loudest part of the new attractions being human shouting. This therefore doesn’t take into consideration the possible effects of louder than average shouting that will occur at times at the new attractions. In order to look at this the maximum noise level at each new attraction could be compared against both the average noise and the lowest existing day-time ambient noise levels to identify any potential environmental impacts.

The chapter concludes that no significant combined effects related to noise and vibration are anticipated as a result of the proposal. Due to this no mitigation has been put forward beyond standard best practice measures of noise control and the effects of noise and vibration impacts on the local environment are unlikely to have an impact on the decision-making process of the development.

The EIA process and its and its ability to address environmental sustainability

An Environmental Impact Assessment is used to address any significant impacts of development upon the environment before consent is granted. An impact in this instance is defined by “any change to the environment whether adverse or beneficial, wholly or partially resulting for an organisations activities, products or services” (ISO, 2019). EIAs in Scotland are implemented through the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017.

In Scotland developments can fall under to different categories with them falling in either schedule 1 or schedule 2. Developments that fall within the description in Scheduled to the 2017 EIA regulations will require an EIA with no exceptions. In comparison if a development is of a type listed in schedule 2 to the 2017 EIA regulations will only require an EIA if they are deemed to have a high likelihood to have an impact on the environment. This could be due to a number of reasons such as location, nature, and size (Gov.scot, 2019). In Scotland the guidelines for an EIA differ depending on the EIA-consenting regimes the development comes under. Examples of these are planning, energy, agriculture, and transport. Destination Hillend is a Schedule 2 development and falls into the tourism category.

A complete EIA should include 6 key subject areas which are the baseline assessment, a review of plans and policies, the identification of any possible impacts, an evaluation of the significance of the possible impacts, the identification of possible mitigation measures, and finally any residual impacts. Unless the impacts to the environment are sever enough for the development to not get permission to be built then the next best option is to attempt to mitigate the impacts. The primary aim in the hierarchy for impact mitigation is to avoid the impact, if this cannot be achieved the next best option is to reduce the effect the impact is going to have on the environment. If this can’t be achieved the final option is to offset the impact to a less environmentally sensitive area where it will have a reduced impact on the environment. The mitigation of these impacts should be considered at all stages of the development including before, during construction, and during the operation of the development. If this is done correctly and the mitigation is implemented then the development will have the smallest impact on the environment as possible, this is key to environmental sustainability. However it can be hard for these mitigation process to be implemented as an EIA is a process of recording and assessing and does not guarantee that the mitigation processes proposed will be used during the construction and use of the development. If it is cheaper and does not affect whether the project will go ahead the developing team may not include the mitigation process and choose an easier/cheaper option that has a bigger impact on the environment than the proposed mitigation. This is one area of fault in the Scottish EIA system as it doesn’t guarantee environmental sustainability in some areas.

One area that should be considered when looking at the ability of an EIA to help achieve environmental sustainability is how and EIAs helps to reduce environmental impacts on a larger scale. All proposed projects will produce a certain level of greenhouse gases (GHGs) which contribute to overall climate change. The consequences of this changing climate due to human influence has the potential to have significant effects on the different possible environmental impact areas seen in the EIA directive such as pollution, soil, and fauna. The EIA process therefore at an early stage in the development influence the design and location of projects in order to limit any likely significant contribution to GHG emissions. This would help built towards a more environmentally sustainable future as well as help with the Scottish Government targets to reduce GHG levels.

An area of difficulty regarding new development plans is how to weigh the impacts to the environment provided in the EIA against the benefits that the development will provide both on a regional and national scale. For example for a new development to be built an area of trees may need to be chopped down. This will destroy local habitats, reduce the biodiversity in the area, and lead to a reduction of a carbon store. However it will benefit the local area with increases to the local economy through jobs and tourism. It is impossible to grow economically and thrive as a country without having a negative impact on the environment. A lot of the time in Scotland the advantages to the economy will out way the impacts to the environment. This is where the mitigation options proposed in the EIA need to be implemented in the development in order to keep the environmental impact of the development at its lowest possible level to address environmental sustainability.

In terms of the EIA for Destination Hillend it concluded that there will be no significant adverse residual effects to the local environment. There will be a number of positive impacts to the local economy and improvement in local accessibility to outdoor sports facilities as a result of the development. Due to this I believe the development will and should receive planning permission to start development.

In conclusion EIAs play a vital role in the planning process of any major development. They are very effective at identify possible environmental impacts at an early stage, mitigate detrimental effects associated with the development, and help reject environmentally unacceptable projects all of which help to address environmental sustainability. Current weaknesses with EIAs are that there is a lack of public participation and the environmental impacts proposed by the EIAs are often overlooked due to the economic benefits that developments offer. Overall EIAs play a very important role but are not perfect and if full environmental sustainability is to be achieved in the future then areas of the EIA will need to be amended.

Bibliography

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