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ADVENTURE PARC SNOWDONIA – TRANSPORT NOTE 01 (4595.TIN01) – NOVEMBER 2024

Introduction

Eddisons have been instructed by Global Shred Ventures Ltd to advise on the traffic and transportation issues relating to the redevelopment of the Adventure Parc Snowdonia development in the Dolgarrog area of Conwy.

This Transport Note has been prepared in support of the forthcoming planning application at the site for the following;

"Redevelopment of the existing surfing lagoon with updated wave generation technology to create a new surfing experience, engineering works to infill part of the surfing lagoon together with associated landscaping and siting of 21 lodges. Refurbishment and extension to the existing Adrenaline Indoors building to house a new leisure attraction along with all associated site infrastructure and external works."

Following this brief introduction, the Transport Note will cover the following areas to assist the highways officers at Conwy County Borough Council (CCBC);

- Existing Site;
- Development Proposals;
- Traffic Impact.

Existing Site

When operational, Adventure Parc Snowdonia provided a range of facilities including a Surf Lagoon with Surf Academy, Adrenaline Indoor building, camping pods and Bike Pump Track and Skating Bowl. The existing site plan is shown in **Plan 1**.



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Vehicular access into the site is provided for via the existing B5106 Conway Road/Clark Street priority controlled junction. The main access point for pedestrian and cyclist is via the Clark Street access, a footway is located on the northern side of the carriageway which links with the existing provision located on the B5106 Conway Road. To the north pedestrian access is provided from the Hilton Garden Inn, pedestrian and cycle access can also be achieved from the south-east via Clark Street.

Car parking for the site is provided for off Clark Street, a total of 112 car parking spaces, including 6 mobility impaired spaces are provided adjacent to the existing buildings. Whilst overflow car parking is available in the area of land to the east of the main car parking.

Servicing for the site is provided off Clark Street via the service area located to the east of the existing Surf Academy building.

Development Proposals

As stated above, the proposals are for the redevelopment of the existing site to provide the following;

- Redevelopment of existing surfing lagoon;
- Provision of 21 lodges; and
- Refurbishment and extension to the existing Adrenaline Indoor building to house a new leisure attraction.

There will be no alterations to the operation of the consented Surf Academy or Bike Pump Track which will remain as existing. The proposed site layout plan is displayed on **Plan 2**.

It is proposed that the main access into the site for vehicles, pedestrians and cyclists will be via the existing B5106 Conway Road. Whilst a secondary access for additional car parking and maintenance vehicles will be provided off the vehicular access road for the Hilton Garden Inn.

As part of the development proposals, the existing parking provision provided off Clark Street will be retained, however, two of the spaces will be converted to provide EV Charging provision. In addition, a further 24 parking spaces, including 1 mobility impaired space will be provided for off the Hilton Garden Inn access road. It is proposed that this parking provision will be for those staying in the proposed lodges.



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Based on applicant's experience of the operation of the existing development, the level of parking provided on the site will be more than sufficient to accommodate the level of demand generated by the redevelopment of the site.

As with the existing site, servicing will be undertaken via the service area located to the east of the existing Surf Academy building.

Traffic Impact Analysis

The following section of this Note will consider the traffic impact of the development proposals.

Consented Adventure Parc Traffic Generation

Prior to considering the levels of traffic that could be generated by the development proposals, consideration needs to be given to the levels of traffic generation associated with the consented Adventure Parc.

A Transport Assessment (TA) was submitted in support of the planning application, this document assumed the following development schedule, whilst the forecast visitor numbers used for the traffic generation calculations are displayed in **Figure 1** below (Table 6.2 from Submitted TA);

- A new water sports facility;
- A multi-functional 'Hub' building to potentially include ancillary retail, restaurant/café and leisure uses for visitors of the development.
- Accommodation facilities, including Class C1 and Sui Generis (Campsite/Pods)



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Visitor Attraction	Forecast Visitor Numbers
Surf Lagoon	46,716
Activity Lagoon	8,587
Friends, Family & Events	11,943
Indoor Play Centre	7,438
Total	74,684

Figure 1 – Forecast Visitor Numbers Used for Outline Consent Transport Assessment

It is important to note that the traffic impact analysis contained within the Outline TA assumed that the above forecast visitor numbers would be individual trips to the site. This provided an extremely robust assessment of the traffic impact, as experience of operation of the Adventure Parc indicates that there is high level of cross-visitation between the various uses i.e. Lagoon and accommodation and Lagoon and other activities on the site.

In addition, a high proportion of Lagoon users between 40% and 45% of sessions on the Lagoon are visitors undertaking multiple sessions on the lagoon and not individuals undertaking a single session.

The methodology used to derive the daily traffic generation for the outline consent is contained within Section 6 of the submitted TA **(Appendix 1)** of this Note but the summary of the forecast traffic generation, which was accepted by the highways officers at Conwy County Borough Council is copied below;

"Even if a robust assessment which assumes that all 266 visitors arrived in vehicles with occupancy of just two people was utilised, this would equate to 133 vehicles per day, which over a typical 9 hour period is an additional 15 vehicles per hour."

Therefore, based on the above, it was accepted that the consented Adventure Parc would result in a total of 233 two-way vehicle movements per day during the Spring/Summer months. As detailed above, this is based on robust assumptions relating to visitor numbers.



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Proposed Development Traffic Generation

As previously stated, the proposals are for the following;

- Redevelopment of existing surfing lagoon;
- Provision of 21 lodges; and
- Refurbishment and extension to the existing Adrenaline Indoor building to house a new leisure attraction.

Redevelopment of Surf Lagoon

The traffic impact assessments for the consented development assumed that the Surf Lagoon and Activity Lagoon would generate around 55,300 individual visits a year. The redesigned Surf Lagoon will have a capacity for up to 65,000 sessions a year, as discussed previously, between 40%-45% of these sessions will be multi purchased sessions, this equates to between 26,000 and 29,250 of the total sessions throughout year being visitors undertake 2 or more sessions on the bay per day.

Based on this, it is concluded that the redesigned Surf Lagoon will not result in any additional vehicular movements to the site when compared to the previously consented development.

Proposed Holiday Lodges

As part of the proposed development of the site, 29 of the existing lodges will be retained and a further 21 holiday lodges will be provided on the site i.e. a net increase on 14 lodges when compared to the consented provision.

Based on experience of the previous holiday pods, a large proportion (65%-70%) of those staying on-site are also visiting the provision on the site and this is likely to be the case for the proposed lodges. If the 65% figure is applied to the 14 additional lodges, this equates to 9 of the proposed lodges attracting standalone trips. If is assumed that each lodge generates 1 arrival and 1 departure per day, this results in just 9 additional two-way trips per day.

Based on the above, it is concluded that the proposed lodges will result in minimal increases in traffic when compared to the consented holiday accommodation and that the proposed lodges will have a minimal impact on the local highway network.



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Refurbishment and Extension to Adrenaline Indoor building to Provide Snow Tunnel Attraction

The proposed Snow Tunnel will replace the existing Adrenaline Indoors attraction (Indoor Play in Figure 1). It is proposed that this attraction will have capacity for up to 40,000 sessions a year, however, given the nature of the attraction, it is unlikely to be an attraction in its own right and a large proportion of visitors will be those visiting the development i.e. the bay.

The consented Transport Assessment assumed that this element of the site would attract 7,438 visitors per year. If for robustness it assumed that 50% (20,000 visitors) would solely to the proposed Snow Tunnel this is an uplift of 12,562 visitors.

To derive the traffic generation relating to the uplift in visitors, the methodology used for the outline TA has been utilised. It has been assumed that 65% of visits to the site will be during these summer months and the remaining 35% will be during the autumn/winter months of the year. If these splits are applied to the forecast of 12,562 uplift in visitors this equates to the following;

- Spring/Summer Months = 8,165 visitors.
- Autumn/Winter Months = 4,398 visitors.

To derive the likely number of daily visitors for the spring/summer months a total of 183 visitor days has been assumed which equates to approximately 46 visitors per day. Even if a robust assessment which assumes that all 46 visitors arrived in vehicles with occupancy of just two people was utilised, this would equate to just 23 vehicles per day and an additional 3 vehicles per hour if a typical 9 hour opening day was assumed.

The forecast increase in traffic relating to proposed Snow Tunnel will have a minimal impact on the operation of the local highway network and that no detailed analysis of the highway network is required.

Traffic Impact Summary

Based on the above, it can be concluded that the proposed redevelopment of the site will result in minimal increases in traffic movements on the local highway network when compared to the consented land-use and that these increases will result a minimal impact on the operation of the local highway network. As such, no detailed traffic impact analysis is required.



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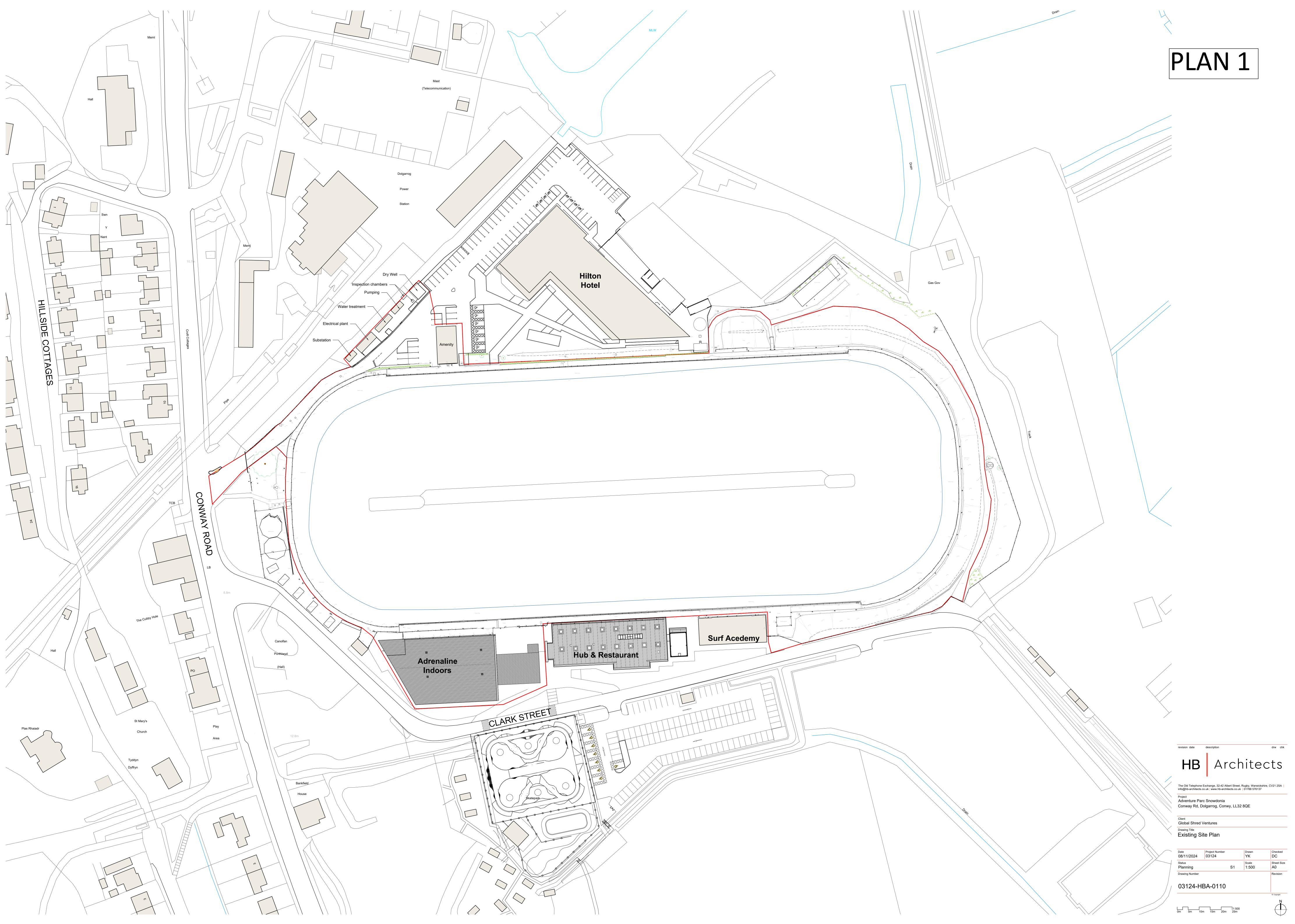
Summary

This Transport Note has considered proposals for the redevelopment of Adventure Parc Snowdonia, a number of conclusions can be drawn from the report, namely:

- The proposed development will be accessed by a safe and efficient vehicular access arrangements.
- The proposed car parking will be sufficient to accommodate the demand generated by the development proposals.
- The traffic impact assessment indicated that the proposed development can be accommodated on the local highway network.

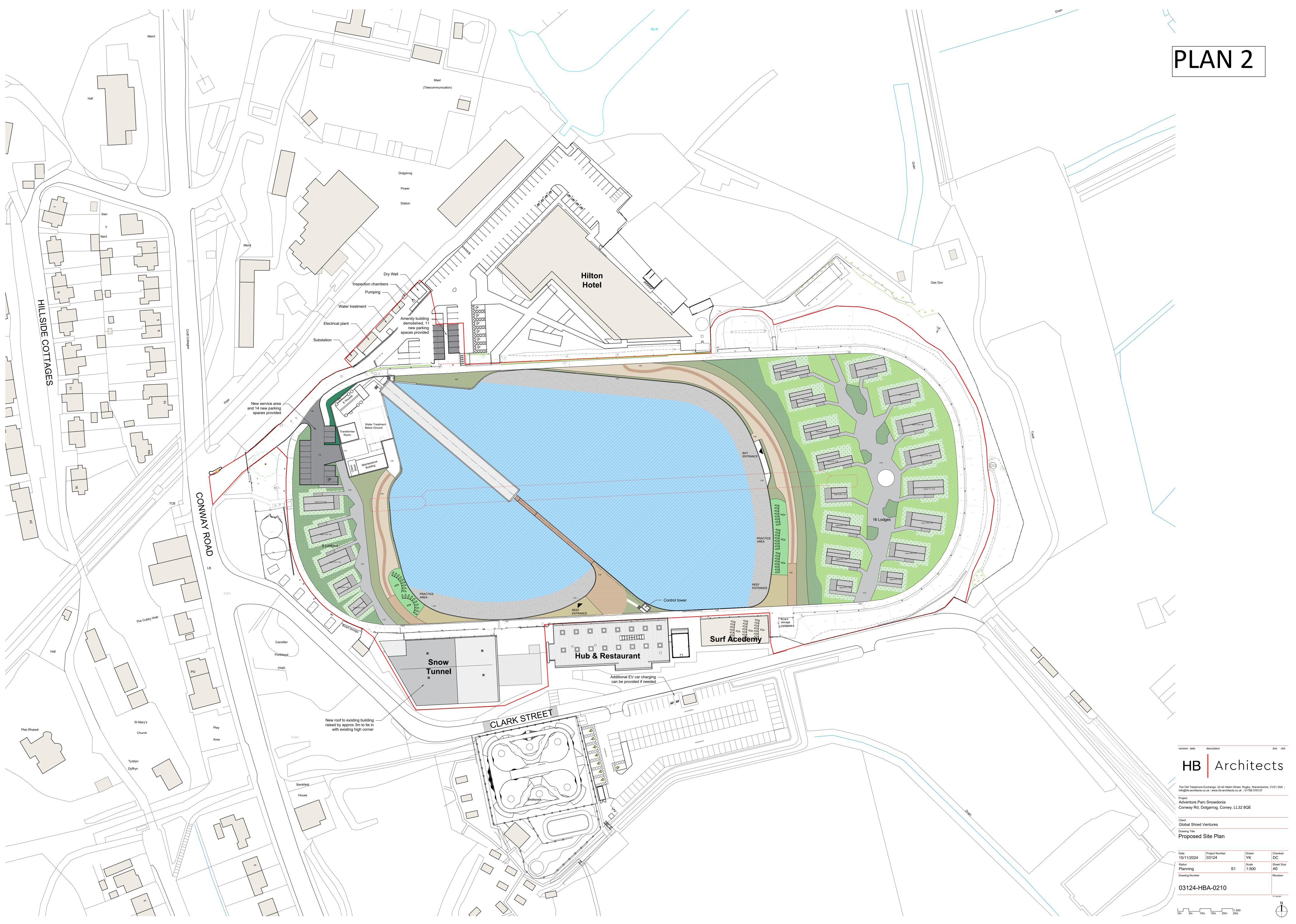
Based on the above it is the conclusion of this report that there are no material reasons why the proposed development should not be granted planning consent on highways or transportation grounds.

PLANS





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APPENDICES

APPENDIX 1

Consented Traffic Generation Information



CONWY ADVENTURE LEISURE LIMITED

SURF SNOWDONIA

DOLGARROG

Transport Assessment

February 2014

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- 6.2.10 As can be seen in Table 6.1, since the closure of the Aluminium Works in 2007 the observed traffic flows on the B5106 Conwy Road have reduced gradually each year, apart from in 2009 when the traffic levels increased slightly. In 2012, the overall 24 hour traffic flow was approximately 12% lower than those observed when the Aluminium Works was still in operation in 2006 and 2007.
- 6.2.11 It is concluded that the existing background traffic levels on the B5106 are relatively low with 3 vehicles per minute in the AM peak and 4 vehicles per minute in the PM Peak.

6.3 Proposed Development

- 6.3.1 The proposed mixed-use development will comprise of the following elements;
 - A new watersports facility;
 - A multi-functional 'Hub' building to potentially include ancillary retail, restaurant/café and leisure uses for visitors of the development.
 - Accommodation facilities, including Class C1 and Sui Generis (Campsite).
- 6.3.2 Visitor forecasts are dealt with in considerable detail in Section 5 of the Colliers Feasibility Study report. Table 6.2 below provides a summary of the forecast total visitors in a stabilised year.

Visitor Attraction	Forecast Visitor Numbers	
Surf Lagoon	38,990	
Cable Lagoon	7,726	
Activity Lagoon	8,587	
Friends, Family & Events	Family & Events 11,943	
Indoor Play Centre	7,438	
Total	74,684	

Table 6.2 – Summary of Annual Forecast Visitor Numbers



- 6.3.3 As can be seen from Table 6.2 above, Surf Snowdonia is forecast to attract around 75,000 visitors per year, in the Transport Assessment for the consented planning application the yearly forecast of 75,000 visitors was evenly spread over a 12 month period, therefore, equating to 200 visitors a day.
- 6.3.4 As requested by the highways officers at CBC, consideration has been given to the likely uplift in visitors to the proposed development during the spring/summer months i.e. April to September.
- 6.3.5 For the purposes of this Transport Assessment it has been assumed that 65% of visits to the site will be during these summer months and the remaining 35% will be during the autumn/winter months of the year.
- 6.3.6 If these splits are applied to the forecast of 75,000 visitors this equates to the following;
 - Spring/Summer Months = 48,750 visitors.
 - Autumn/Winter Months = 26,250 visitors.
- 6.3.7 To derive the likely number of daily visitors for the spring/summer months a total of 183 visitor days has been assumed which equates to approximately 266 visitors per day. Even if a robust assessment which assumes that all 266 visitors arrived in vehicles with occupancy of just two people was utilised, this would equate to 133 vehicles per day, which over a typical 9 hour period is an additional 15 vehicles per hour.
- 6.3.8 This scenario is highly unlikely to occur given that a large number of visitors to the proposed development will be part of pre-booked groups who will travel to the site in coaches/mini-buses and therefore reducing the number of vehicles movements generated by the site. For example, if just one coach with a capacity of 57 seats visited the site this would reduce the total daily number of vehicles by around 30 vehicles.
- 6.3.9 Notwithstanding the above, even if all of the 133 vehicles visited the site each day and travelled north from the proposed development towards Conwy, the additional 15 vehicles per hour would have a negligible impact on the operation of the B5106 Conwy Road due to the relatively low observed background traffic flows.