

**LAND SOUTH OF GLAN USK PRIMARY SCHOOL, HERBERT ROAD
NEWPORT**

ENVIRONMENTAL STATEMENT

VOLUME 2

CHAPTER 16: SUMMARY AND CONCLUSIONS

16. SUMMARY AND CONCLUSIONS

16.1 This Environmental Statement (ES) has been prepared on behalf of POBL in support of a full planning application submitted to Newport City Council in respect of a proposed residential development and other associated works. The planning application description is as follows:

'Development of 206no. dwellings and associated works at land south of Glan Usk Primary School, Herbert Road'

16.2 This Chapter summarises the findings of the Environmental Impact Assessment (EIA) for the construction and operation of the proposed development, which has been deemed as necessary for the extent of the proposed development which is the subject of this planning application.

16.3 The scope of the Environmental Impact Assessment has been discussed and agreed with officers of Newport City Council, who have in turn consulted with statutory bodies. It is therefore considered that the assessment covers all necessary technical disciplines within which a potential impact could occur.

16.4 The key technical issues identified which are the subject of this Environmental Impact Assessment are as follows:-

- Ground Conditions;
- Access and Highways
- Landscape and Visual Impact;
- Ecology and Nature Conservation;
- Flood Risk;
- Drainage;
- Noise;
- Socio-economic; and
- Air Quality

16.5 The assessment described in this Environmental Statement (ES) relates to the design of the scheme as it stands in April 2017. The ES is published in three volumes:-

- Volume 1: Non-Technical Summary
- Volume 2: Written Statement; and
- Volume 3: Appendices to Written Statement

16.6 The Environmental Impact Assessment was managed by Asbri Planning Ltd. with guidance from an expert consultant team.

16.7 Each of the technical chapters (Chapters 7 to 13) has benefitted from thorough and appropriate assessment to an agreed scope. Each respective assessment has resulted in the identification of potential impacts, the implementation of necessary mitigation and an assessment of those residual impacts which remain.

16.8 **Chapter 7** assesses the likely significant effects of the proposed development on **Landscape and Visual Impact**. The townscape and visual appraisal has considered the character of the townscape and visual amenity within the context of the Site. It is considered the proposed

development would be consistent in scale to the existing residential properties in the area and would not appear out of character with adjacent land uses. The site is able to accommodate the scale of the development proposed without harm to the character of the townscape. The main reasons for this conclusion are outlined in the following paragraphs.

- 16.9 The Site appears in public views from a number of locations, the proposed development would be viewed within the context of the built development of Newport and would not be inconsistent with the surrounding character of the area.
- 16.10 The appearance and scale of the proposed development would not appear incompatible with existing development in terms of massing, ridge height or proximity to adjacent buildings; and would be generally consistent with the building spacing of existing properties to the south of the site in East Usk.
- 16.11 The development allows the site to become better integrated with the River Usk, proposes improvement to Lottery's Reen and will improve the amenity of recreational access. This results in a beneficial impact on the landscape and townscape character of the area.
- 16.12 The proposed landscaping scheme will assist in integrating the development into views by supplementing existing vegetation patterns within and outside the site boundary.
- 16.13 Visual impacts have generally been assessed to be low since the scale of the changes resulting from the proposed development are not considered to have an adverse impact on the most relevant vantage points in the local area. Despite this there are opportunities to mitigate visual impacts by screening or filtering views of the development with planting along the river and within and around Lottery's Reen.
- 16.14 There is a considered to be a slight impact on the amenity of nearby residential properties but once the site establishes itself as part of the urban character of Newport, particularly once vegetation has established across the site this impact is considered to reduce and the permanent impact is considered to be acceptable.
- 16.15 Overall the development of the site will not have an adverse impact on the landscape and townscape of the area and will have a beneficial impact on the character of the River Usk, Lottery's Reen whilst also safeguarding the sensitive habitats along the River Usk.
- 16.16 **Chapter 8** concerns the potential **ecological and biodiversity** impacts of the proposed residential development on the site. The combination of desk study and field surveys have identified there to be no features of ecological value within the site. The site has been cleared of vegetation during the enabling works and Phase 1 of the development and as such is now dominated by bare ground.
- 16.17 The assessment indicated that the most important of ecological features associated with the Site in the River Usk SAC and SSSI, which lies immediately adjacent to the site and supports Otters, migratory fish and saltmarsh habitat. No other statutory or local nature conservation designations exist within or adjacent to the application area. The potential impact of the scheme on the ecological features has been assessed using best practice guidelines.

- 16.18 The design of the proposed development has endeavoured to protect the features of highest biodiversity value as a priority. Mitigation and protection of the River Usk SAC/SSSI has already been agreed and is in the process of being implemented. An Otter Mitigation Strategy and a Wildlife Protection Plan/Environmental Management Plan have been prepared.
- 16.19 The development site is currently dominated by bare ground and as such is of negligible value for nature conservation. Mitigation measures including a landscaping scheme incorporating native tree, shrub and flower species will have a long term beneficial impact. The adoption of measures such as the installation of bat and bird boxes and suitable native planting would probably have a beneficial long term impact on the site in ecological terms.
- 16.20 **Chapter 9** provides an assessment of the **ground conditions** and is based upon data compiled under planning condition 00/0768 and 13/1279 (Phase 1 only). All data and reports and significantly the Terra Firma (Wales) Limited Remediation Strategy Report produced for planning condition 00/0768 remain entirely relevant. The remedial works planned for the site under planning application 13/1279 are identical to those set out in the Remediation Strategy already approved under 00/0768.
- 16.21 The ground conditions beneath the site were confirmed to comprise in general made ground over soft clay and peat, over firm to stiff clay with intermittent sand and gravel lenses, over mudstone bedrock. Laboratory chemical testing of site soils found contamination from arsenic, cyanide, asbestos, lead, PCBs and polyaromatic hydrocarbons to be present. These substances were considered to present a potential risk to human health. The groundwater beneath the site and ree water were, however, confirmed to not be affected by site soil contamination.
- 16.22 Mitigation measures recommended during the construction phase include good working practices are recommended in order to ensure that no contamination risk to construction works, passers-by, neighbouring site users and surface watercourses occurs. This includes good health and safety practices, dust suppression and site screening. It is considered the risk following the successful implementation of these measures is low.
- 16.23 As a result of flood risk measures the level of the main body of the site is being raised. Screening and verification that these materials are suitable for use has and will continue to be obtained prior to use. Reen waters will continue to be monitored during fill works as a precaution. Site end users will be protected through capping of gardens and landscaped areas with 600mm clean imported soils and construction of the new access road. No remediation is required in the residential portion of Phase 1.
- 16.24 It is concluded that with appropriate mitigation and the implementation of the series of recommendations, any potential impacts can be addressed and are not considered to be significant or likely to have a significant environmental effect on receptors.
- 16.25 **Chapter 10** relates to **flood risk** considerations. Part of the Site is located within Zone C1 which suggests that the existing site is at risk from flooding however has significant infrastructure including flood defences. There are also some areas within the Site which lie within Zone A i.e. considered to be at little or no risk of fluvial or coastal/tidal flooding.
- 16.26 The site has an ordinary watercourse located across it, Lottery's reen, which provides drainage to approximately 4.865 hectares of the local area eventually draining to the river Usk.

- 16.27 The chapter sets out the hydrological regimes that currently exist and assesses the risk of flooding to the Site. The impact of the proposed development on flood risk to surrounding properties, the proposed flood mitigation measures and the residual risk/compliance with relevant planning policies are also assessed. A comprehensive Flood Consequences Assessment (FCA) has been prepared and is summarised in the Chapter.
- 16.28 In order to ensure that the proposed site remains dry during the 0.5% AEP+CC (2117) design event, even with the Upper Confidence Interval applied, it is proposed to raise site levels to 10.40m AOD for areas of the site north of the ordinary watercourse, and 9.95m AOD for areas of the site south of the ordinary watercourse.
- 16.29 Pedestrian access/egress routes are available through the gated pedestrian link adjacent to the emergency vehicle access route in the north of the site. The pedestrian link will remain open at all times. Pedestrians can use the underpass beneath the railway embankment that provides access onto Charnwood Road and higher ground to the east. An alternative option would be to remain on-site until flood waters recede, and to seek safe refuge above the high water level. This may be an option to be used in conjunction with a flood warning system.
- 16.30 The channel of the existing reeën would be reprofiled and extended to increase the capacity. This would reduce fluvial flood risk post development, and ensure no off-site fluvial flooding would take place. Reprofiling the ordinary watercourse generally results in a beneficial impact on land elsewhere. Although there are some localised areas where tidal flood depths increase as a result of raised ground levels (by 0.03m), these areas are already subject to tidal flood depths of greater than 1m, and therefore any impact is considered negligible.
- 16.31 Effects are highlighted with regard to tidal flooding to both future occupants and third parties; fluvial flooding to future occupants and third parties; groundwater flooding; increased risk from pluvial and artificial sources; and risks associated from increased runoff from impermeable areas. Most are identified as having negligible effects with some temporary, minor adverse impacts at the construction stage. Following mitigation and enhancement measures all residual effects are stated as negligible.
- 16.32 In **Chapter 11** the **drainage** sets out the drainage regimes that currently exist, and comments on the future site drainage proposals as illustrated on the site drainage plan provided by SMA. The general philosophy of approach to the development of the site layout has been to create proposals which are sympathetic to the site topography and environmental setting.
- 16.33 The surface water drainage strategy comprises two distinct disposal methods. The lower road section, located at the southern site boundary, is to be drained via conventional kerb drainage and conveyed to a geo-cellular attenuation tank situated within a parcel of land adjacent to the proposed roundabout. Attenuated water will then pass through a petrol/oil separator before discharging to the River Usk. The remainder of the development is to be discharged via piped surface water drainage system to the existing on-site watercourse at four separate points.
- 16.34 Notwithstanding the above, the watercourse (Lottery's Reeën) is to be locally widened and re-shaped as part of the development landscaping proposals to provide a wetland area. In

addition to the enhanced ecological and amenity value afforded by this area, the additional flood storage provided will help to mitigate future flood risk in storm conditions.

- 16.35 The most sustainable method of disposal of foul water discharge from the Development is via the existing mains sewerage network. Due to topographical constraints and the requirement to avoid pumping, three points of connection to the existing sewer network are proposed
- 16.36 In summary it is considered that the proposed development incorporates a range of conveyance, treatment and attenuation SuDS features located throughout the site which, as a whole, provide an effective drainage system that ensures all local planning policies and design standards are met.
- 16.37 Effects are discussed both at construction and operational stages in terms of surface water runoff increases; surface water and groundwater quality; sewer flooding; and, foul drainage. Whilst in some categories a moderate adverse significance is identified, following appropriate mitigation all will have negligible impacts, Based upon the findings of the assessment, it is therefore considered that the proposed development is unlikely to lead to any significant adverse residual effects in relation to drainage.
- 16.38 The purpose of **Chapter 12: Traffic, Transport and Movement** is to assess the likely travel characteristics of the proposed development, identify the impact of this travel on the surrounding transport network, and identify any measures required to mitigate the impact of the proposed development. The scope of the assessment was agreed with Newport City Council Highways Department to ensure the assessment was appropriate and also indicated what junctions in the local area required assessment.
- 16.39 The development will generate a total 111 two way vehicle movements in the morning peak and 120 two way vehicle movements in the evening peak. In total, the proposals would be likely to generate 22 fewer vehicle trips (two-way) in the AM peak period and 25 fewer vehicle trips (two-way) in the PM peak period, compared with the extant planning consent. Capacity analysis of junctions within the locality has been undertaken. The analysis has indicated that there will be increased traffic at all the junctions once the development is completed and mitigation would be required to reduce this impact. The implementation of a Travel Plan to promote the use of more sustainable modes of transport including walking, cycling, public transport, and car sharing is considered to reduce the impact of the development to an acceptable level.
- 16.40 The proposed development proposes a total of 371 parking spaces, an increase of 23 spaces over the previously consented scheme.
- 16.41 The development once completed will have an improved vehicle and pedestrian access on to Collier Street/Courtney Street via a simple priority junction, with pedestrian facilities. Additional pedestrian links are proposed to the north of the Site which provide a connection between the Site and the St Julian's area of Newport.
- 16.42 As part of the development offsite works will be carried out to improve pedestrian movements in the area to take account of the increased footfall in the area. These works will include:
- Dropped kerb with uncontrolled tactile crossings at northern end of Collier Street
 - Dropped kerb with uncontrolled tactile crossings at eastern end of Courtney Street

- on northern side of the road
 - Dropped kerb with uncontrolled tactile crossings and build out to improve visibility at eastern end of Courtney Street on southern side of the road
 - Extend footway across scrub land in front of palisade fence, inclusion of radius kerb and uncontrolled tactile crossing along Tuner Stree
 - Build out to improve visibility, attention to levels to ensure crossfall to gully tactile crossings
- 16.43 The cumulative effects on the existing highway network traffic of the recent development in the area including the school development and the 32no. new dwellings at the former Evans Halshaw site have been assessed within the baseline conditions of the ES chapter. It is considered the cumulative impacts of the identified developments together with the proposed scheme are negligible and have, as mentioned above, been picked up in the existing baseline conditions.
- 16.44 In **Chapter 13** the potential impacts of **noise and vibration** are assessed in terms of the likely significant noise effects on sensitive receptors (SRs) as a result of the Development. Mitigation measures are identified where appropriate to avoid, reduce or offset any adverse effects identified and / or enhance likely beneficial effects. Taking account of the mitigation measures, the nature and significance of the likely residual effects are described.
- 16.45 Noise monitoring results confirm the east of the Site to be exposed to the highest levels of noise during the daytime, evening and night-time periods where it extends closest to the rail route .
- 16.46 Calculations have been undertaken to determine the performance requirements the glazing in the worst affected façades would be required to satisfactorily control the ingress of external environmental noise within residential room spaces. This study indicates that thermal double glazing providing the required attenuation will be required in combination with an acoustically passive ventilation system. During the detailed design phase of the project, a more detailed assessment will be undertaken.
- 16.47 With regard to construction noise, short-term adverse effects of minor to substantial significance are predicted at varying stages of the Site preparation and construction works. However, with careful programming of work and the adoption of BPM, noise from construction is expected to be insignificant. With respect to construction traffic noise and vibration there are no anticipated significant effects at any location.
- 16.48 It is considered that given the temporary nature of yard noises from JS Payne Ltd, and through appropriate use of a physical barrier between Crawford Industrial Estate and the residential areas that there would be insignificant effects arising from noise upon the residential areas of the proposed Development.
- 16.49 With respect to fixed building services plant, appropriate noise emission limits have been specified, based on representative minimum background noise levels and the requirements of NCC. Providing that the limits are met, with careful attention paid to plant selection, installation and noise attenuation as appropriate then disturbance to surrounding SRs would be avoided.
- 16.50 There are no specific mitigation measures to offset the predicted noise impacts along

Turner Street as a result of operational traffic generated from the Development. As such, noise generated from operational traffic on Turner Street is likely to have residual permanent, local, adverse, effects of moderate significance on sensitive receptors. However, a Site wide Travel Plan for the Development should be implemented, with the aim of reducing the number of car trips associated with the Development. This has the potential to bring about noise benefits.

- 16.51 **Chapter 14** an assessment focuses on the impact of the proposed development **on air quality** and pays particular regard to existing sensitive receptors and future residents following occupation of the development. It considers the impacts of potential emissions from construction activities and the impact of the road traffic associated with the completed development.
- 16.52 The Site was identified as being located within the Air Quality Management Area on Caerleon Road therefore it is essential the development does not adversely impact on the air quality of this area.
- 16.53 During the construction phase it was recognised that dust emissions from demolition and construction activities and emissions from construction vehicles could have a negative impact on the air quality of the area for a temporary period of time. This can be successfully reduced to an acceptable level if routine management control measures to prevent and control dust and the implementation of a Construction Environmental Management Plan are implemented. This is considered satisfactory in reducing the impact on air quality to an acceptable level.
- 16.54 Once the development is completed the source of the risk to air quality is emissions from the traffic generation associated with development however this risk is small even without mitigation. Mitigation measures in the form of a Travel Plan to encourage the reduction of private car trips will reduce this risk even further.
- 16.55 The potential **socio-economic and community impact** of the Herbert Road development has been assessed in **Chapter 15**, as it is possible that the development will have an impact on existing residents living in the local area as well as businesses and services.
- 16.56 The land use will be permanently changed however this is not considered negative since the land is currently vacant, derelict land and will be replaced with a high quality housing scheme. Furthermore, the existing right of way across the site will be retained and enhanced for local residents to continue to use. The existing right of way will be markedly improved through the new development by its formation and added natural surveillance.
- 16.57 During the construction phase the development is considered to have a beneficial impact on the local economy by creating approximately 1,452 employment opportunities, using locally sourced materials whilst also helping increase the skills sets of the workers employed.
- 16.58 It is acknowledged there will be an impact on local residents during the construction phase which will include the change in outlook from adjacent dwellings and the temporary nuisance to these dwellings of living in close proximity to a construction site. The impact of this on local residents can be reduced through ongoing consultation between the developer and the local community. Other measures that will be adopted to reduce the impact of the

development on the local community include retention of ecological areas, adoption of a Construction Environmental Management Plan and the end use of the site as a high quality residential scheme.

- 16.59 The scheme once completed and occupied will place additional pressure on social services including schools, refuse services and recreational facilities. The developer will be required to enter a Section 106 agreement which legally obliges them to pay contributions towards local services to reduce increased pressure and improve these services. The improvement of capacity and facilities of local facility funded through Section 106 agreement is a positive impact on the local community.
- 16.60 The future occupants of the completed development will marginally increase the local population numbers this is not considered to such an extent that it would have an adverse impact on the community or change the demographics of the area. The future occupiers of the development are likely to support the local economy by increasing patronage to local businesses and increasing memberships to sport clubs and community groups. The completed development and associated construction phase will have positive impact on the local economy and the St. Julian's area.

Summary

Overall, it is considered that adverse impacts identified as a result of the proposed development can be successfully mitigated against during construction and operational phases as far as practically possible. Therefore it is concluded that the proposed scheme will have a negligible impact on the wider environment. It is also considered that the proposed development is acceptable and, assuming other material considerations dictate otherwise, should be considered favourably by the local planning authority.

Furthermore Chapter 3 confirms that there are no identified **cumulative impacts** that would result in residual impacts over and above those identified in relation to the proposed development in each individual chapter. A significant proportion of developments either proposed, completed or underway in the Newport area, adjacent to the River Usk or close to the application site are on previously developed land, and in sustainable locations near facilities and/or public transport.