addendum to environmental statement
land south of glan usk, newport

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non-technical summary

volume 1

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LAND SOUTH OF GLAN USK PRIMARY SCHOOL, HERBERT ROAD NEWPORT

ENVIRONMENTAL STATEMENT

NON-TECHNICAL SUMMARY

1. INTRODUCTION

1.1 This Environmental Statement (ES) has been prepared on behalf of Greenhill Construction Ltd. 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 250no. dwellings and associated works at land south of Glan Usk Primary School, Herbert Road'

1.2 A screening opinion was requested from Newport City Council on the 19th October 2013 to ascertain whether the proposed development of the application site (hereafter the Site) was considered to be an Environmental Impact Assessment (EIA) development.

1.3 On the 26th November 2013 Newport City Council provided an opinion that the proposed scheme did constitute EIA development. Newport City Council, with consultation with the statutory consultees, identified key issues which should be included within the ES.

1.4 The key 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
- Cumulative Impacts

1.5 The assessment described in this Environmental Statement (ES) relates to the design of the scheme as it stands in December 2013. The ES is published in three volumes:-

- Volume 1: Non-Technical Summary

- Volume 2: Written Statement; and
- Volume 3: Appendices to Written Statement

1.6 This document (entitled 'Addendum to the Full Environmental Statement' hereafter Addendum) relates to the whole of the application site presenting additional information that was requested from internal and external consultees in respect of the planning application. The Addendum also provides additional information in reaction to Newport City Council change in stance in relation to the prediction of future flooding risk following a Welsh Government letter to all Chief Planning Officers.

1.7 This Addendum has also been prepared to provide a comprehensive account in regards to the assessment of cumulative impacts of the proposed development together with other recent development in the area. To clarify, cumulative impacts were assessed as an integral part of original ES and the purpose of this addendum is provide further detail as to how this assessment was carried out.

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

2.0 THE EIA PROCESS

2.1 In the UK, EIA's have been undertaken for certain major developments since the implementation of the European Council Directive on Environmental Assessment in 1985. The requirements of the Directive are implemented into UK legislation through the Environmental Impact Assessment (England and Wales) Regulations 1999, as amended in 2000. The main stages of the ES are:

- Description of the project/development;
- Complete detailed baseline surveys;
- Identification of potential environmental impacts;
- Identification of potential cumulative impact;
- Prediction of impacts;
- Evaluation and assessment of significance;
- Identification of mitigation measures and modifications to the design;

- Identification of residual impacts and cumulative impacts; and
- Presentation of results of the EIA in the ES (up to 16 week decision period).

2.2 The EIA has been undertaken, and the ES prepared, taking into account UK Environmental Legislation and guidance, including the published 'Environmental Impact Assessment: A Guide to Good Practice and Procedures' and The Institute of Environmental Management and Assessment (IEMA) 'Guidelines for Environmental Impact Assessment (2004)'.

2.3 The residual significance of impacts is assessed taking into account mitigation, i.e. the assessment applies to the residual impacts. A residual impact is any impact that would remain following the implementation of proposed mitigation measures.

2.4 Using these criteria, the significance of the impacts arising from the proposed development have been categorised (where appropriate) throughout the ES using a seven point scale, as follows:-

- Insignificant;
- Minor (adverse or beneficial);
- Moderate (adverse or beneficial); and
- Major (adverse or beneficial).

2.5 The above criterion was not appropriate to assess the significance of impacts of all issues assessed in the ES. Where this criterion is not suitable a significance of impact criteria appropriate to the particular topic has been applied and this has been identified to the reader.

2.6 Impacts are assessed for all phases of the development. Construction impacts are considered to be temporary, short term impacts which occur during the construction phase only. Permanent impacts are those long terms effects which would occur as a result of the proposed development once it is in operation.

2.7 The assessment of cumulative impacts has been integral throughout the EIA process and has been assessed within all study areas of the ES. For clarity, each chapter has assessed the environmental impacts of the development along with other relevant developments and their associated environmental impacts from the outset of the preparation of the ES.

2.8 There is no prescribed approach to assess cumulative impacts in legislation and assessments are defined on a case by case basis. The process used in this ES is unique to this proposed scheme whilst drawing on good practice guidance. The following chapter set outs clearly the methodology in regards to cumulative impacts which has been applied when preparing this ES and provides an overview of the cumulative impacts associated the development in relation to each environmental discipline. The following chapter is an additional chapter and to avoid any confusion in chapter numbering will be entitled 'Chapter 2A: Cumulative Impacts'. The topic specific chapters succeeding chapter 2A will elaborate on the findings of that chapter.

CUMULATIVE IMPACTS

2.9 The impacts from a single development may not be significant on their own but when combined with the effect of other past, present and future development could collectively become significant.

2.10 The assessment of cumulative impacts has been integral throughout the EIA process and has been assessed within all study areas of the ES.

2.11 There is no prescribed approach to assess cumulative impacts in legislation and such assessments are defined on a case by case basis. The process used in this ES is unique to this proposed development whilst drawing on good practice guidance, this is discussed in more detail in the methodology section.

2.12 To assess cumulative impacts the following assessment methodology was adopted:

- Identification of Impact Area;
- A desk based data collection exercise was carried out which identified other relevant developments in the local area that required review;
- An expert technical team was appointed to assess each environmental topic identified as relevant to the proposed scheme;
- The likely cumulative impacts were scoped with the relevant authorities in the first instance;
- Information sharing within the technical team;
- Topic specific methodology was identified in terms of how they enabled the methodology of cumulative impacts;
- The cumulative impacts were then assessed separately in each topic chapter; and

- Summary and conclusions of cumulative impacts included in this chapter.

2.13 Chapter 2A provides an overview of the assessment of cumulative impacts however each individual chapter addresses assessed the environmental impacts of the development along with other relevant developments and their associated environmental impacts in more detail.

3.0 SITE CONTEXT

3.1 The Site measures 5.83 hectares and is a brownfield site, previously in industrial use.

3.2 The Site is an irregular shape comprising of three distinct land parcels. To the north of the Site are two larger land parcels which are accessed via the third land parcel which is a narrow strip of land that lies between the river bank and the adjacent industrial units and residential dwellings along Courtney Street and Morgan Street. The Site has a right of way along the western edge of the site, adjacent to the river Usk.

3.3 The Site does not have any ecological designations. It does, however, lie adjacent to the river Usk which is a Special Area of Conservation (SAC) and a Site of Special Scientific Interest (SSSI). The Site does not have any landscape designations but the river Usk front is considered to be an important vista.

3.4 The site is bounded to the north by the Glan Usk Primary School, a new constructed school with associated play grounds to the north and beyond is the Glebelands Park.

3.5 The eastern boundary lies immediately adjacent to the Newport to Hereford railway line separated by a tree planted buffer. Beyond the railway line the land use is predominantly in residential use and interspersed with typical mixed uses, for example, community halls, shops and places of worship.

3.6 The River Usk is immediately adjacent to the western boundary and although there is no formal demarcation between the site and the river Usk, the top of the river banks are clearly defined. As mentioned above, the river Usk is a SAC and SSSI.

3.7 The south of site is bounded by industrial units and associated yards and the residential streets of Morgan Street, Courtney Street and Collier Street.

3.8 The main access to the site is gained via an access point located at the convergence of the north of Collier Street and north-west of Courtney Street. A pedestrian only access to the site is available to the north via the Glebelands Park which is access via Bank Street.

4. PROJECT DESCRIPTION

4.1 The development comprises a full planning application for the construction of 250no. dwellings and associated works at land south of Glan Usk School, Herbert Road, Newport.

4.2 The vision for the application site is to develop a well-integrated residential development that responds to its riverside location, promotes national and local planning policy aims whilst providing an attractive place to live for future occupiers with particular regard given to the enhancement of the existing public right of way and ecological features to benefit existing and future local residents.

4.3 The proposals comprise a mix of houses and apartments blocks within two, three and four storey units. All of the proposed houses are two storeys in height and this represents the majority of the units. The scheme also includes a number of apartments.

4.4 The existing right of way located across the Site will be retained and enhanced as part of this proposal. The enhancements include the formalising the right of way by surfacing it, widening it to 3 metres and lighting it will appropriate street lighting. This will provide an attractive riverside walkway and link the site to the Glebelands Park to the north and the residential streets to the south including the local area of play (LAP) located centrally to Turner street, Collier Street and Courtney Street.

5.0 ASSESSMENT METHODOLOGY AND IMPACT ASSESSMENT

5.1 The determination of the significance of the impacts arising from the proposed development is a key stage in the EIA process. It is this judgement that is crucial to informing the decision-making process. However, defining what is significant is not a simple task. The following

criteria have been used (where appropriate to the issue being addressed) in the EIA to inform the assessment of the significance of an impact:-

- Type of impact (adverse/beneficial);
- Extent and magnitude of impact;
- Duration of impact (short term/long term);
- Sensitivity of receptor;
- Comparison with legal requirements, policies and standards;
- Comparison with applicable environmental thresholds; and
- Effectiveness of mitigation.

5.2 It should be noted that the residual significance of impacts is assessed taking into account mitigation, i.e. the assessment applies to the residual impacts. A residual impact is any impact that would remain following the implementation of proposed mitigation measures.

IMPACT ASSESSMENT

Cumulative impacts are the combined impact of the environmental impacts of the proposed development together with recent or development under construction and future planned development.

5.3 Potential impacts identified as a result of the development can be split into two distinct categories: those leading from the construction and those from the subsequent occupation of the development.

5.4 Mitigation measures are proposed to avoid, reduce, compensate, remediate or even enhance potential impacts. The assessment outlines mitigation measures to ensure that the local environment is adequately protected from adverse impacts during the construction and operational phases of the proposed development.

5.5 The following sub-sections summarise the impact assessment that has been undertaken for each of the key issues as summarised under paragraph 1.4.

6.0 LANDSCAPE AND VISUAL IMPACT

6.1 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.

6.2 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.

6.3 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.

6.4 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.

6.5 The proposed landscaping scheme will assist in integrating the development into views by supplementing existing vegetation patterns within and outside the site boundary.

6.6 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.

6.7 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.

6.8 The most recent development related to the site is the development of Glan Usk School and there are no identified imminent developments within the vicinity of the Site that could have an impact on the landscape in combination with the proposed development. The assessment of this chapter have taken account of the school development and there the cumulative impacts together with the proposed scheme have therefore been assessed as an integral part of this chapter are **negligible** and have, as mentioned above, have been picked up in the existing baseline conditions.

6.9 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.

7.0 ECOLOGY AND NATURE CONSERVATION

7.1 The ecological conditions of the site were assessed, a valuation of the ecological features provided and an indication of impacts/mitigation associated with the construction and operation of the proposed residential development.

7.2 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.

7.3 Valued habitat features within the site include Lottery's reen, grassland, ruderal vegetation and trees and scrub. These support a moderately diverse flora, a variety of breeding birds and common amphibians and reptiles. They also support invertebrates and provide foraging habitat for bats.

7.4 During the construction phase habitats within the site would be lost including grassland, ruderal and scrub habitats of local value for nature conservation which would have a

significant adverse impact on these habitats because they would be lost during construction. These losses would be reduced in severity as the new landscape planting as part of the final development matures.

7.5 Adverse impacts on some protected and notable species are possible during construction, but with adoption of appropriate mitigation measures these are mostly assessed as not significant. Key mitigation measures include the methods and timing for vegetation clearance, enhancement of the ditch and river-bank strip, new landscape planting, provision of bat roost boxes and bird nest boxes, and translocation of reptiles to safe habitat nearby. In addition, parts of the Glebelands Site of Importance for Nature Conservation (SINC) to the north of the M4 would be converted from species-poor grassland to flower-rich and ruderal vegetation, which would help off-set losses to the ruderal flora and invertebrate communities.

7.6 The design of the proposed development has endeavoured to protect the features of highest biodiversity value as a priority to ensure they are enhanced and retained once the development is completed. To protect the SAC/SSSI, a barrier strip of grassland and scrub habitat would be constructed as a series of ridges beside the top of the river-bank, to discourage people and dogs from accessing the saltmarsh on the banks of the river Usk. Off-site mitigation would also be provided to the north of the proposed development, fencing off part of the river-bank to give additional protection for Otters, and constructing an Otter holt. The long term beneficial effects of the measures to protect the river would help to compensate for the losses of less valuable habitats within the site.

7.7 The habitat of highest value within the site is the reed-fringed ditch at Lottery's Reen. The ditch would be retained, but would be temporarily affected during the construction phase while it is cleaned out and reprofiled. It would be reinstated with an enhanced profile and a widened reedbed to its southern side once the development is completed. The loss of ditch length caused by a new culvert would be mitigated by provision of new ditch habitat within the widened reed-bed.

7.8 The most recent development related to the site is the development of Glan Usk School and there are no identified imminent developments within the vicinity of the Site that could have an impact on the landscape in combination with the proposed development. Sufficient controls to ensure the protection of the ecological features at that site were imposed on the

school planning permission in the form of planning conditions. All successfully discharged in on completion of the school therefore the environmental impact of this development was successfully mitigated. The assessment of this chapter has taken account of the school development therefore any impact from this scheme was picked up in the existing baseline conditions and assessed within the chapter.

7.9 The combination of protection and enhancement of the SAC features and Lottery's Reen, and adoption of appropriate mitigation measures would retain the most highly valued ecological features. However, there will be an unavoidable loss of the less valuable habitats and species within the site, valued at a local or within site level, due to the need for provision of the residential units and associated infrastructure.

8.0 GROUND CONDITIONS

8.1 An assessment of the ground conditions indicates the likely significant effects of the proposed development on the ground conditions of the development site. A Site Investigation Report has been prepared to enable an appraisal and the site has been subject to a comprehensive contamination assessment, with risk being assessed in accordance with current best practice standards.

8.2 The assessment has indicated that there is a risk to the environment including human health from contaminated soils and gas at the Site during both the construction phase and operational phase should no mitigation measures be implemented.

8.3 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.

8.4 To ensure the development, once completed does not pose a risk to end users or the environment, it is proposed to cap the site with 2 metres of imported materials, gas protection measures incorporated into all new buildings and inclusion of a radon/gas barrier. These mitigation measures will eliminate the risk to the environment and site end users.

8.5 The nature of the development will require a change to the features of the site, with the current proposals intending for some cut and fill earthworks and retaining structures. The site investigation identified that piled foundations is suitable for the dwellings and that the floor slabs should be designed as suspended.

8.6 The completed development does not include any end site uses which could cause potential significant harm to the groundwater environment and there would be no additional risk to the groundwater from the proposed development.

8.7 In terms of cumulative impacts of the proposed development with other scheme in the area, the only relevant development is the school site. The school site was effectively remediated and contamination successfully removed or treated before the school was developed. There is not considered to be any residing impacts that could, together with the proposed development, lead to a cumulative impact on the wider environment. The cumulative impact of the school site together with the proposed development is considered to be negligible. Despite this, the site investigation works carried out to inform this chapter assessed the site anew and included the land north of the reen which has been previously remediated. The site investigation in respect of this scheme re-investigated this area to ensure the findings of the Ground Conditions Chapter of this ES was comprehensive and robust in its assessment of the scheme on ground conditions together with any potential cumulative impacts borne from the adjacent school development.

8.8 Chapter 8 concludes that the impact of the development on the ground conditions is negligible and the development of the Site poses a negligible risk to site end users.

9.0 FLOOD RISK

9.1

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.

9.2 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.

9.3 The impact on flood risk during the construction phase is temporary and attributed to:

- the risk of flooding of the ordinary water course
- risk of mobilisation of silt and materials in sudden rainfall event
- inappropriate stock piling of materials and potential to divert flood water
- increased impermeable area
- risk of groundwater flooding due to excavation below the water table could cause injury to site workers and delay works

9.4 To mitigate against this a hydraulic flood model have been carried out which concludes the site will remain flood free in the next two years, within which time completion of the development is likely.

9.5 To accommodate the floodwater associated with the ordinary watercourse that runs through the Site, it is proposed to retain an area of ground either side of the watercourse for both environmental benefits and flood storage. All proposed ground-raising is outside this area.

9.6 Modelling indicated there is a minor risk of flooding to the ordinary water course during construction and that during peak tide the watercourse backs up and spill onto the Site. To mitigate, the existing 2m diameter circular culvert that conveys the watercourse to outfall into the River Usk is proposed to be widened to 2.5metres and a flap-valve installed to prevent backflow of tidal waters from the River Usk in large tidal events. An unrestricted discharge from the water course in to the River Usk is proposed which is considered acceptable given the large capacity of the river in this location.

9.7 Impacts of flooding will further be mitigated though agreed construction protocols included within the Construction Environmental Management Plan that will be prepared for the Site. Other measures of reducing surface water discharged are also recommended including, amongst other things, appropriate measures as outlined in PPGs to prevent spillage of potentially polluting substances, provision of measures to intercept and treat silt-laden run-off and mud prior to it leaving the site and provision of wheel-cleaning equipment for site.

9.8 The construction phase is not considered to pose a risk to increased flooding to the Site or local area with the recommended mitigation measures in place.

9.9 It is not considered there will be any residual impacts in relation to flood risk attributable to the construction phase of development.

9.10 The flood risk of the site once developed has been assessed against the existing flood information, predicted flood risk for the future and the 'baseline' scenario which is the extant planning consent (planning permission 00/0768 and 03/1531) which is currently being built to levels of 10.4 metres.

9.11 The Site is at risk from potential tidal and fluvial flooding unless appropriate mitigation measures are implemented. The potential impact is:

- Floodwater from the Ordinary Watercourse is shown to spill out of bank onto the existing site during the 1.0%+CC and 0.1% APE fluvial events, which occur simultaneously with the peak of the mean high water spring tide event;
- The increased impermeable areas which would result in higher levels of surface water run-off which could cause the downstream system to flood in extreme rainfall events;
- The proposed development will result in increased impermeable areas, which in turn would result in higher levels of surface water run-off which will run of into the ordinary water course
- The resulting increase in discharge may increase water levels locally within the ordinary watercourse during coincident periods of tidal locking and extreme rainfall events. Hydraulic modelling has however shown that there is sufficient capacity within the channel to accommodate this additional flow. Therefore, the potential impact of increased surface water flow is considered to be **negligible**.
- The impact of raising ground levels within the proposed development site will ensure the development site remain dry in a flood event
- The proposed access/egress arrangement will be affected by floodwaters during the 0.5% probability event in 2114. Notwithstanding this, a flood-free route from the proposed site is available during the first and second modelled tidal cycles. This would allow residents, once alerted to the extreme tidal levels, to make their way off the Site onto Bank Street.
- The safest course of action during an extreme flood event would be to remain on-site

and wait for floodwaters to recede before attempting to gain access to/from the Site. The preceding two tidal cycles would act as a warning for a potential extreme tidal event, and would allow residents to take appropriate action.

9.12 In order to mitigate the potential impacts to the completed development from flooding the following is proposed:

- The proposed layout and levels have been designed to ensure that the risk of flooding to the proposed development is acceptable for the lifetime of the development.
- In order to comply with the threshold and maximum depth of flooding criteria in TAN 15 it is proposed to raise ground to form a development plateau set at 9.8m AOD and building FFLs at 9.95m AOD, which will ensure that the development remains flood free during the 100 year lifetime.
- The size of the existing 2m diameter circular culvert along the ordinary watercourse and to install a flap valve at the downstream end to increase the capacity of the pipe during periods of tide lock.
- Hydraulic modelling has shown that the prosed scheme in comparison to the scheme currently being implemented represents betterment in terms of flood risk with an overall reduction in peak water levels for the proposed scheme.
- Surface water generated from an extreme rainfall event will enter the drainage system for the proposed development, details of which are provided in Chapter 10: Drainage. This will improve the existing situation by capturing surface water run-off and preventing potential overland flow affecting existing adjacent properties. It is proposed that the drainage system will discharge into the ordinary watercourse.
- In order to accommodate the fluvial floodwater associated with the ordinary watercourse, the proposed development will retain an area of ground either side of the watercourse for both environmental benefits and flood storage. All proposed ground raising is outside this area.
- Due to the tidal nature of the outfall of the ordinary watercourse into the River Usk and the large capacity of the river at this location, the unrestricted discharge of the proposed drainage system into ordinary watercourse will not affect downstream properties.

9.13 There will be residual impacts in terms of the flood risk associated with the operation development of the scheme. This can be summarised as follows:

- Minimal disruption to the hydrological regime of the River Usk
- The proposed scheme offers betterment in terms of third party flood risk when compared to the scheme currently being implemented with flood levels decreasing by circa 30mm for the proposed scheme
- The emergency access/egress during a large tidal event, it has been not be compliant with TAN15 in terms of depth and velocity. However, an alternative pedestrian access/egress route is available at the northern part of the Site through the Glan Usk School.
- The principal mechanism of flooding is an extreme tidal event in the River Usk Estuary. NRW can provide reliable tidal flood warnings as part of their Floodline Direct Service. A tidal event has a limited duration and floodwaters will recede once the peak of the tidal cycle has passed, thus allowing normal access/egress to resume.
- Surface water generated from an extreme rainfall event will enter the drainage system for the proposed development, details of which are provided in Chapter 10: Drainage. This will improve the existing situation by capturing surface water run-off and preventing potential overland flow towards existing adjacent properties but will raise levels in the ordinary watercourse. This does not cause floodwaters to spill out of bank and initiate an overland flood flow route towards third party property.
- Fluvial floodwater associated with the ordinary watercourse will be accommodated within an area of ground either side of the watercourse that will be retained at existing levels which will provide flood storage. All proposed ground raising is outside this area.
- The increasing of the culvert size and the insertion of a flap valve on the outfall of the downstream culvert creates betterment in comparison to the scheme currently being implemented which proposes to culvert this section of the ordinary watercourse

9.14 The recent and proposed development that could potentially have an impact together with the proposed development has been assessed within the Flood Risk chapter. It has been concluded the potential impacts of the relevant developments in the area are included within the baseline conditions and therefore have been assessed as part of the overall chapter.

10.0 DRAINAGE

10.1 The drainage regime at the site was investigated and a drainage strategy has been devised to indicate the most suitable method of draining the site through the construction phase and

once the development is completed.

10.2 During construction the status quo of surface water drainage will prevail by continuing to infiltrate to the ground and shed naturally over land to Lottery's reen. To avoid any adverse impact on the existing drainage regime stockpiled materials should be appropriately sited, blockages prevented and an Environmental Construction Management Plan put into place. These measures will ensure the construction phase will have little, if any, impact on the surface water to negligible.

10.3 The site currently does not have any foul drainage thus this is not a relevant consideration during the construction phase other than to ensure that development work would not impact on the existing sewer crossing the Site.

10.4 There are two disposal techniques in relation to surface water once the development is completed.

10.5 The narrow strip forming the southern half of the development is an infiltration based design to formpave.

10.6 The remainder of the development to the north is served by a proposed piped surface water drainage system with no inherent flow/source control, which collects all impermeable area runoff and discharges to the ordinary watercourse at three separate points. Discharge to the watercourse is unattenuated on the basis that downstream properties will not be affected due to the tidal nature of the watercourse outfall to the River Usk and the large capacity of the river at this location.

10.7 Notwithstanding the above, the watercourse is to be locally widened and reshaped 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.

10.8 Once the development is completed foul drainage from the residential dwellings will be disposed of via the main sewers. Three points of connection have been agreed in principle with Dwr Cymru Welsh Water (DCWW). DCWW will need to confirm capacity within the local sewer network and wastewater treatment works as part of their connection approval process

prior to connection of flows. DCWW will only allow connection to the main sewer if there is capacity, if there is an issue with capacity the developer will be required to fund upgrading works that are necessary to ensure there is no adverse impact on the foul drainage network.

10.9 In terms of sewer drainage the existing efficiency of the sewer is unknown and DCWW have not highlighted any problems with the existing sewer. To avoid the proposed development impacting on the existing sewer operations mitigation is proposed during the construction phase to avoid any blockages. Once the development has been completed an easement will be retained over the sewer to ensure access for maintenance.

10.10 The drainage strategy for the proposed development will not negatively impact on the existing drainage network and with have neutral on the environment.

11.0 TRAFFIC, TRANSPORT AND MOVEMENT

11.1 The purpose of chapter 11 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.

11.2 The development will generate a total 133 two way vehicle movements in the morning peak and 145 two way vehicle movements in the evening peak. 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.

11.3 The proposed development proposes a total of 348 parking spaces. A sustainability assessment in relation to the site was carried out in accordance with the Newport City Council Parking Standards 2012' which indicated a reduction in parking provision was acceptable at the Site. The level of parking provided has agreed with Newport City Council Highways Department and is considered acceptable given the highly sustainable location of the Site. It is

proposed to provide 2 parking spaces per three bedroom unit and 1 space for one or two bedroom units.

11.4 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.

11.5 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

11.6 The cumulative effects on the existing highway network traffic of the recent development n 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.

12.0 NOISE AND VIBRATION

12.1 The potential impacts of noise and vibration from the construction and subsequent operation of the proposed Development upon sensitive uses on and around the Site has been assessed together with an assessment of the suitability of the Site in relation to the proposed residential uses.

12.2 Noise and vibration from the construction phase of the development would have a temporary adverse impact upon the sensitive receptors within the locality including existing residents and Glan Usk School. It is considered the use of Construction Environmental Management Plan to minimize potential adverse impacts including restricted working hours, quiet periods through day and using screen around any static plant machinery.

12.3 The site was assessed in terms of its suitability for the end use for residential properties. It was considered the potential noise levels from adjacent industrial estate would result in areas of the site exposed to unacceptable noise levels however these could be reduced to an acceptable level with the erection if a 2.6 metre façade to the effected boundaries. The incorporation of appropriate ventilation to dwellings to avoid the opening of windows is also suggested.

12.4 The noise generated by the increased traffic of the completed development is considered to be mostly negligible across the Site with a minor adverse impact on the dwellings at Turner Street. The implementation of a Travel Plan to encourage the reduction in travel by the private care will reduce this impact to negligible.

12.5 An additional noise survey has been carried out…

13.0 AIR QUALITY

13.1 This 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.

13.2 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.

13.3 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.

13.4 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.

13.5 The air quality assessment was carried out using the baseline traffic flows and future traffic growth and therefore the baseline conditions relation to air quality take account of the effects of surrounding development. There are no known future developments that require assessment within the remit of this ES. 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.

14.0 SOCIO ECONOMIC

14.1 It is possible that the development will have an impact on existing residents living in the local area as well as businesses and services. The potential socio-economic and community impact of the Herbert Road development has been assessed in Chapter 14.

14.2 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.

14.3 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.

14.4 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.

14.5 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.

14.6 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.

14.7 The completed development and associated construction phase will have positive impact on the local economy and the St. Julian's area.

15.0 SUMMARY

15.1 Overall, it is considered that any adverse impacts of the proposed development, identified in the process of Environmental Impact Assessment, can be mitigated against during the construction and operational phases as far as practically possible to reduce the impact to an acceptable level. It is, therefore, concluded that the proposed scheme will have a negligible impact on the wider environment. As such, it is considered that the proposed development is acceptable and, assuming other material considerations dictate otherwise, should be considered favourably by the Local Planning Authority.