The Mall at Cribbs Causeway

Environmental Statement

Volume 1: Non-Technical Summary

Cribbs Mall Nominee (1) Ltd, Cribbs Mall Nominee (2) Ltd, Baylis Estates Ltd and John Baylis Ltd

December 2014

30245/09/JF/AY
# Contents

1.0   Introduction & Methodology   1

2.0   Site Description   3

3.0   Transport   5

4.0   Air Quality   6

5.0   Noise & Vibration   7

6.0   Geotechnical and Geoenvironmental   8

7.0   Socio Economic Effects   10

8.0   Ecology and Biodiversity   13

9.0   Townscape & Visual Impact   15

10.0   Flooding & Water Resources   16

11.0   Archaeology & Heritage   17

12.0   Inter Relationships, Cumulative Impacts & Summary of Findings   18

13.0   Availability of the Environmental Statement   21

14.0   Sources of Information   21

15.0   Scheme Plans   21
Figures

Figure 2.1  Site Location .................................................................................................................. 3
Figure 15.4  Parameters Plan 4 Minimum/Maximum Siting (1 of 4) .................................................. 2
Figure 15.5  Parameters Plan 4 Minimum/Maximum Siting (2 of 4) .................................................. 2
Figure 15.6  Parameters Plan 4 Minimum/Maximum Siting (3 of 4) .................................................. 2
Figure 15.7  Parameters Plan 4 Minimum/Maximum Siting (4 of 4) .................................................. 2

Tables

Table 2.1  Indicative Phases of Delivery for the Purposes of The Mall at Cribbs Causeway EIA ......................... 5
Table 12.1  Summary of Residual Effects ............................................................................................. 18
1.0 Introduction & Methodology

Purpose of Document

1.1 This document is a summary in non-technical language of an Environmental Statement ('ES') prepared on behalf of Cribbs Mall Nominee (1) Ltd, Cribbs Mall Nominee (2) Ltd, Baylis Estates Ltd and John Baylis Ltd (together ‘the applicant’). It accompanies an outline planning application for alterations and an extension to The Mall at Cribbs Causeway.

1.2 This document can be read in conjunction with the Planning Summary document which also accompanies the application and provides additional information on the development. The proposal will involve the erection of new buildings including a bus station along with the provision of a new multi-storey car park, public realm and accesses and other ancillary works and operations.

1.3 The proposed development falls within part 10(b) (Infrastructure Projects) of Schedule 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (the ‘2011 Regulations’). Part 10(b) relates to “urban development projects” where sites are over 0.5 hectares. For such developments, EIA is required in situations where the development could give rise to significant environmental effects. The applicant has elected to undertake an EIA in respect of the proposed development.

The EIA Process

1.4 The ES sets out the findings of an Environmental Impact Assessment ('EIA') of the development.

1.5 The EIA process aims to ensure that any significant effects arising from a development are systematically identified, assessed and presented to help a local planning authority, statutory consultees and other key stakeholders in their understanding of the impacts arising from development. If measures are required to minimise or reduce effects then these are identified.

1.6 For the proposed development at The Mall, an EIA has been carried out to consider the likely significant effects that may arise during the construction and operation of the development and its potential relationship to future developments in the area. It has been completed with regard to best practice and relevant legislation and has addressed the following matters agreed with South Gloucestershire Council ('SGC') as being required to assess the impacts of the development:

1 Transport
2 Air quality
3 Noise & Vibration
4 Geotechnical and Geoenvironmental
5 Socio-Economic Effects
6 Ecology and Biodiversity
7 Townscape & Visual Impact
8 Flooding & Water Resources
9 Archaeology & Heritage
1.7 Likely effects are identified based on current knowledge of the site and surroundings, desk top assessment, survey and fieldwork and information available to the EIA team. All those matters that could be reasonably required to assess the effects of the proposals are set out in the ES; this includes effects arising from the scheme itself as well as those temporary effects arising during the construction of the proposed residential development.

1.8 The EIA team has worked with the design team to ensure that the scheme for which planning permission is sought incorporates those revisions or modifications that are necessary or appropriate to avoid or reduce significant adverse effects on the environment.

1.9 Consultation has also informed the EIA process in relation to the methods by which the EIA has been carried out, as a means to seek environmental data, to review the effectiveness of any identified mitigation measures (to be secured by planning conditions and obligations) and as a means to keep interested parties informed on the process of EIA undertaken.

**Background to the scheme**

1.10 The Mall, along with The Venue, the Cribbs Causeway Retail Parks and supermarkets, make up the Cribbs Causeway retail and leisure complex. Cribbs Causeway serves the retail and leisure needs of the local population in South Gloucestershire and north Bristol which otherwise does not have a strategic town centre capable of attracting a large number of national multiple retailers, particularly selling clothing and footwear. Beyond the local area, The Mall serves a wide catchment area attracting trade from large parts of the south west region and parts of south Wales. Overall, the influence of Cribbs Causeway and its catchment area is extensive. The character of the area directly surrounding The Mall is changing. A number of planning applications have been submitted for residential-led development to the north-west, south and west of The Mall.

1.11 The applicant is proposing to extend and update the retail and leisure offer at The Mall, along with introducing new uses in order to provide for the future needs of its existing customers and the growing surrounding communities of the Cribbs Patchway New Neighbourhood (‘CPNN’).

1.12 There are a number of deficiencies in the existing centre which the development is designed to address. These deficiencies include:

1. A shortage of modern units of the right size and configuration to meet modern retailer requirements and their associated operational needs.

2. The need to provide enhanced leisure and food and drink facilities and more generally to diversify the uses in and around The Mall to meet the needs of visitors to The Mall.

3. The replacement and improvement of the bus station and it’s associated facilities for bus users and bus drivers.
4 The need to provide dedicated public space infrastructure to accommodate community events and activities.

5 The need to improve pedestrian and cycle legibility in and around the shopping centre and connectivity to the wider CPNN area.

1.13 The purpose of the proposals is to meet identified needs for additional floorspace and services and to enable The Mall to continue to successfully perform its established role in the future.

2.0 Site Description

Site Location

2.1 The development site is situated within the overall site of The Mall, bound to the north by Pegasus Road; to the east by Merlin Road/Highwood Road; to the south by Merlin Road, except for two extensions across Merlin Road to The Venue and land to the south towards Filton Airfield; and to the west by Cribbs Causeway Retail Park and then Lysander Road.

Figure 2.1 Site Location

2.2 The main area of the development site is to the south and west of The Mall, the majority of which contains surface level and decked car parking. Some areas of the existing shopping centre including retail and lower level servicing and the existing bus station will be subject to alteration and reconfiguration to accommodate the new development and are therefore included in the development site.
Description of Development

2.3 The planning application for SGC seeks outline planning permission for the following:

“Alteration and extension of The Mall including the erection of new buildings for uses within Use Classes A1-A5 (shops, financial & professional services, restaurants & cafes, drinking establishments and hot food takeaway), D1 (non-residential institutions) and D2 (assembly & leisure), C1 (hotel), C3 (dwellings comprising apartments), provision of a new multi-storey car park and alterations to existing entrances. Erection of a new bus station including uses within Use Classes A1-A5. Provision of new public realm, including public space and landscaped areas. Provision of new roads and pedestrian routes and cycle ways, including a new pedestrian and cycle bridge over Merlin Road, and other ancillary works and operations. Temporary works including provision of temporary bus station comprising works to existing surface car parking areas and temporary contractor and car parking compounds and associated facilities.”

2.4 The maximum gross internal floorspace proposed is 146,791 sq m, including the retail, new bus station and multi-storey car park. The hotel floorspace is based on the requirements of a 60 - 120 bedroomed facility and the residential floorspace is based on the provision of up to 150 flats.

2.5 The application is ‘outline’ with all matters reserved. This means that if planning permission is granted, further details will need to be submitted in relation to the access, appearance, landscaping, layout and scale of the development. However, the ‘parameters’ of the scheme have been defined so that its impact could be assessed. Parameter plans have been prepared and are submitted with the application (and three appended to this document) and these explain the building plots and siting arrangements, the uses that are applied for, the maximum heights and the areas where there are access and landscaping works proposed.

Construction Methodology

2.6 The construction of the development is anticipated to take approximately 3 years. The vast majority of the construction will be over 3 years including all the retail and leisure elements and this is the build period assumed for assessment purposes. The residential element is programmed to be built after the main retail and leisure elements but this relates to a relatively small part of the overall development.

2.7 The construction of the proposed development will be planned as a continuous process but will be broken into a number of distinct phases. The table below provides a summary of the phases of development delivery likely to take place.
### Alternatives Considered

2.8 As part of the EIA, the main alternatives for the development which have been studied by the applicant should be considered and the main reasons for the choice which has been made, taking account of the environmental effects, discussed.

2.9 Four alternatives were assessed for the provision of new retail and leisure floorspace and two alternative locations were considered for the provision of a new bus station. The preferred options was chosen as they provide greater opportunity for transport benefits, the creation of spaces and linkages and the creation of a ‘place’ rather than a building and transport benefits.

2.10 A no development scenario has also been considered but wouldn’t address the deficiencies of the existing centre and wouldn’t give rise to the positive environmental effects anticipated from the current proposals; it has therefore not been pursued.

### Consultation and Design Evolution

2.11 SGC, statutory consultees, the local community and other stakeholders have been consulted by the applicant during the preparation of the ES and the planning application.

2.12 The applicant and the project team have sought to ensure that issues raised during the process of consultation relating to the EIA have been incorporated into the scheme as part of an iterative process.

### Transport

3.0 The assessment of the environmental effects of the proposed development in respect of transport has covered the following specific matters, in accordance with...
with established guidance: severance; driver delay; pedestrian and cyclist delay; pedestrian and cyclist amenity; accidents and safety; and public transport. Where guidance does not cover these criteria, professional judgement has been applied based on the findings of the Transport Assessment.

3.2 The proposal includes for the continued operation of the existing Staff Travel Plan, along with future implementation of Residential and Hotel Travel Plans, which will contain specific proposals for managing the demand for travel arising from the proposed development and encouraging movements by modes other than the private car.

3.3 No significant effects on the specific matters assessed are predicted to arise during the construction of the proposed development. A maximum of around 580 daily vehicle two-way movements is predicted during the construction stage, of which around 180 are estimated to be heavy vehicle movements. However, a limited proportion of those movements would occur during peak travel times, as movements would be regulated by the proposed Construction and Environmental Management Plan (CEMP).

3.4 The likely environmental effects arising from the proposed development have been assessed in 2021 (opening year) and 2031 (opening year plus 10 years). Both scenarios comprise cumulative assessments with the effects arising from other committed and proposed developments, transport interventions and mitigation measures in the surrounding area are taken into account. The assessments conclude that the classification of impacts is the same for both scenarios.

3.5 Following the completion of the development, a minor adverse impact is forecast in terms of driver delay. Proposed pedestrian and cycle connectivity enhancements, both on-site and connecting to existing off-site routes, would result in minor beneficial effects on pedestrian and cyclist delay and on pedestrian and cyclist amenity. Proposed enhancements to The Mall bus station would result in a minor beneficial effect on public transport, resulting from improvement to the quality of the bus station environment for users, and potentially resulting in greater use of this mode for travel to/from the site. Negligible impacts in relation to severance and accidents and safety are predicted.

4.0 Air Quality

4.1 The air quality assessment assesses the potential effects on local air quality resulting from the proposed development. The air quality assessment examines existing air quality, outlines the relevant air quality standards and guidelines and considers the likely effects on air quality arising from the construction and operational phases of the proposed development.
4.2 A process of review and assessment of air quality has been undertaken by SGC and an Air Quality Management Area has been designated relatively close to the proposed development due to poor air quality. However monitored data indicates that this area currently meets the relevant annual mean nitrogen dioxide objective. Monitoring undertaken elsewhere in the vicinity of the proposed development indicates that the relevant air quality objectives are met in the surrounding area.

4.3 The construction effects of the proposed development on local air quality would be primarily events where dust may arise from construction activity. The risk of dust nuisance from the proposed development has been identified as low risk for dust soiling and human health impacts following the relevant guidance. Appropriate mitigation measures have been recommended to limit the effect of construction for dust soiling and human health impacts, with the implementation of these measures, the significance of effect as a result of the construction phase is considered to be negligible.

4.4 Atmospheric dispersion modelling has been conducted using widely accepted modelling software to predict the impact to air quality as a result of traffic changes in the area, due to the operation of the proposed development. The pollutants assessed were nitrogen dioxide and fine particulate matter and concentrations have been predicted at selected locations in the baseline year and in the year of opening, both without and with the development in place. Sensitivity testing of the opening year has also been undertaken to account for the uncertainty of future emission factors of nitrogen dioxide. The predicted concentrations indicate that the effect of the proposed development on local air quality is imperceptible at all modelled receptors selected across the traffic network.

4.5 Overall the development is considered to have a negligible effect on local air quality using the relevant guidance.

5.0 Noise & Vibration

5.1 An assessment of the likely significant noise and vibration effects of the proposed development has been undertaken. The potential of the following noise sources to affect the noise climate of the area has been assessed:

1. Temporary effects from the construction of the proposed development;
2. Building services noise from commercial buildings; and
3. Changes in road traffic noise associated with changes in traffic flow on existing and proposed new roads.

5.2 An environmental noise survey was carried out to establish the existing noise climate in the area of the proposed development.

5.3 The assessment of noise from construction, commercial/industrial operation and road traffic noise has been based upon best practice and guidance.
5.4 Baseline noise levels were established by the noise survey carried out around the perimeter of the site in July 2014. Noise levels were measured at a number of locations during daytime and night time.

5.5 The construction methodology for the development has yet to be fully developed but methods of working and mitigation measures will be confirmed in the proposed CEMP.

5.6 For operational commercial noise, target noise levels have been developed which will ensure likely environmental effects relating to noise from these sources will be negligible.

5.7 For effects associated with road traffic, noise levels have been predicted for the nearest adjacent roads. For the future assessment year (2031), the entirety of nearby roads result in a negligible noise impact.

5.8 With respect to construction activity, un-mitigated daytime noise levels at all noise sensitive receptors result in effects that are considered to be negligible.

5.9 With respect to commercial / industrial noise, assuming that control measures are implemented in accordance with the adopted significance criteria, this would result in effects that are considered to be negligible.

5.10 For the future assessment year the entirety of the nearby road network experiences a negligible noise effect as a result of the proposed development.

5.11 To minimise the level of noise to which sensitive receptors will be exposed, the construction work will be conducted in accordance with the CEMP.

5.12 No specific additional mitigation measures are proposed to address the impacts of commercial / industrial noise net effects are considered to be negligible.

5.13 No specific additional mitigation measures are proposed to address the effects of increased numbers of vehicles using the existing road network. This is because the net effect of the proposed development on road traffic noise levels is considered to be negligible.

5.14 With the implementation of best practicable means, as defined in the CEMP, residual construction noise effects at receptors around the site will be negligible.

5.15 Residual effects from commercial / industrial noise and road traffic noise will be negligible.

6.0 Geotechnical and Geoenvironmental

6.1 The ground conditions assessment assesses the risks and impacts of the proposed development on construction workers, future site users and the wider impacts to the environment such as groundwater and surface waters. It is based on an assumed worst case scenario with regards to potential impacts
from the development or potential sources of contamination present and their impact on identified receptors as a result of the development. The chapter defines the baseline conditions at the site, the nature and degree of the impacts from the proposed development and outlines suitable mitigation measures where necessary to limit the potential impacts. Finally the chapter details any residual impacts deemed to exist after the implementation of the proposed mitigation measures.

6.2 The assessment uses a range of information gained from the following sources:

1. Previous site investigation data from investigations on and in the vicinity of the site.

2. Information obtained from the Groundsure Environmental, Geological, and Historical mapping report obtained for the site.

3. Consultation with the regulators.

6.3 Prior to the development of the existing Mall and the Cribbs Causeway wider retail/leisure area the site and its surrounds were occupied by open agricultural land. Development of the area started around 1970 and consisted of the incremental development of the surrounding area with retail, light industrial and leisure facilities and finally The Mall at Cribbs Causeway in 1998. Since then only minor development has taken place in the surrounding area, most notably residential development to the east. Review of the historical and current on and off-site land uses has therefore not indicated a significant risk of contamination.

6.4 Numerous site investigations have been previously undertaken on the site and its surrounds. These investigations have been undertaken to inform the design of the surrounding developments and the design of The Mall itself. They have provided useful insight into the ground conditions in the area; however, they do not include contamination testing of soils or groundwater, or ground gas monitoring. Nevertheless, review of the available data on the history of the site indicates that prior to the development of the site there was limited potential for contamination.

6.5 The current use of the site and its surroundings as retail and leisure facilities is considered to provide limited sources for contamination of the site and its environment. The main sources identified on site are the potential Made Ground present on site from construction of the existing buildings and infrastructure and possible residual contamination from leaks and spills from parked vehicles in the car parking areas. Off-site the only sources identified are further car parking and delivery areas on neighbouring sites and two fuel stations which are situated at approximately 300 and 400m to the north of the site boundary that it is considered unlikely that they would impact on the site. There is a potential for ground gas to be present on site from the importation of Made Ground to the site, the possibility of buried organics incorporated into the previous filling works and the natural geology beneath the site. However it is considered that the risk from this is considered to be low.
6.6 In summary, although chemical testing of soils and groundwater have not been undertaken on site the potential for contamination to be present is considered to be low. The potential for ground gas is considered to be low.

6.7 The potential effects of the construction on the ground conditions are considered to be relatively limited and have been generally classified as moderate to minor adverse. There is a potential impact on construction workers and site neighbours from contaminated land, however since the likelihood of significant contamination being present on site is considered to be low these risks have been classified as moderate to minor adverse. Similarly due to the low potential for contaminated land, the impact of the proposed development on the underlying groundwater or nearby surface waters is considered to be moderate to minor adverse.

6.8 Post completion the potential impact from contaminated land and ground gas on future site users is considered to be negligible based on the low likelihood of contamination on site and that the development will isolate future site users from any potential contamination from the soils and groundwater. The impact on the groundwater and surface waters post completion is considered to be negligible due to the low risk of contamination on site and that the construction materials and methods will have limited effect on these receptors. In addition, it is considered that that final development will limit infiltration on site and that surface water will be managed in a way that will not impact on the groundwater or surface waters.

6.9 With regards to the mitigation measures required to limit the potential adverse effects from the development it is considered that the specific details will be included in the site specific CEMP. However, on the basis of the conclusions drawn in the ground conditions assessment chapter of the Environmental Statement the following outline measures are required:

1. An intrusive site investigation to assess the contaminative nature of the subsurface of the site to confirm the low contamination risk assumptions.
2. Reduction of exposure pathways to construction workers and site neighbours through adoption of adequate health and safety procedures.
3. Adoption of the guidance given in Pollution Prevention Guidelines (PPG6) for Working at Construction and Demolition Sites to limit the potential impact from accidental spillages during construction.
4. Provisions within the CEMP for dealing with un-expected contamination, although the risk of this arising is considered to be low.

7.0 Socio Economic Effects

7.1 The proposed development will have a beneficial economic impact across the South West region, but this will be felt most strongly in the administrative areas of South Gloucestershire and Bristol. The Mall is located in the “North Bristol Fringe”, an area encompassing Cribbs Causeway, Filton and Aztec West
which accounts for approximately 50% of South Gloucestershire’s employment. The South Gloucestershire Core Strategy 2006-2027 recognises the role of this area in contributing to the economic growth of the region, and the proposed development falls within the definition of economic development included in the Strategy.

7.2 The population in South Gloucestershire and Bristol is expected to increase by 13.5% in the period to 2027, indicating that additional retail, leisure, education, health and community facilities will be required to serve the additional demands associated with further population growth. Between 2001 and 2011, the total population of South Gloucestershire and Bristol rose by 9.4%, whilst the number of working age people increased by 11.1%.

7.3 Population growth is also expected locally as a result of development proposals and recent developments in the local area. In particular, Policy CS26 of the Core Strategy includes a policy on the CPNN development, which makes provision for the development of approximately 5,700 dwellings.

7.4 The proposed development will provide significant employment opportunities, which could help to reduce local unemployment levels. The model-based unemployment rate in South Gloucestershire as a whole (5.1%) was lower than the South West regional (5.6%) and national rate (6.8%) between July 2013 and June 2014; however, the rate in Bristol was much higher, at 7.9%\(^1\).

7.5 Unemployment is particularly high in Patchway, the nearest residential area to Cribbs Causeway. In September 2013, the Patchway Priority Neighbourhood had a Job Seekers Allowance (JSA) claimant rate of 3.7%, compared to 1.2% in South Gloucestershire as a whole. The proportion of JSA claimants aged between 18 and 24 in the priority neighbourhood was approximately 9.2%, compared to only 3.9% in South Gloucestershire and 5.8% nationally\(^2\).

7.6 The provision of employment opportunities within the proposed development will match the aspirations of many job seekers. Of the 9,400 people claiming JSA in Bristol and South Gloucestershire in July 2014, a total of 4,000 people (42.1%) were seeking work within the sales/customer services occupation category, and another 2,000 people (22.0%) were seeking elementary occupations. Within the sales/customer services occupation category, a total of 3,700 people (62.9%) were seeking work as sales assistants/retail cashiers.

7.7 The proposed development will expand retail and leisure provision in the South Gloucestershire and Bristol area, which will complement the growth of other sectors. The employment structure in Bristol and South Gloucestershire has a higher level of representation in business services, professional occupations and the financial sectors locally than in the South West. The retail sector accounts for a broadly similar level of employment in these areas: 11.0% in South Gloucestershire, 9.0% in Bristol, and 11.5% in the South West.

\(^1\) Model-based unemployment represents the total number of people that are out of work and tends to be higher than published JSA claimant rates as some people choose not to register for unemployment benefit.

\(^2\) Source: South Gloucestershire Council Patchway Priority Neighbourhood Proxy Indicator Profile – December 2013. JSA claimant rates are not published at LSOA level, so these have been calculated from the rounded data using the relevant base population (derived from the relevant ONS mid-year population estimate).
The Mall at Cribbs Causeway: Environmental Statement

7.8 The proposal will have positive impacts in South Gloucestershire and Bristol through the creation of 3,320 temporary at the construction stage, along with the provision of 2,900 jobs created in the development itself once the development is complete. The 150 new dwellings will increase the local labour supply and have a positive economic impact through spending by new residents and increased income for South Gloucestershire Council.

7.9 The most significant socio-economic impacts of the proposed development would be:

1. Total construction value of approximately £282.6 million over a 3 year build period.
2. Up to 3,320 temporary construction jobs (equivalent to 332 FTE equivalent jobs) will be supported during the construction phase.
3. A further 500 FTE indirect and induced jobs could be supported in the South West as a result of construction-related expenditure.
4. Once completed the proposed development will generate approximately 2,900 jobs at the site (equivalent to 2,110 FTE jobs).
5. The scheme will have a significant positive impact on the local labour market, and measures will be put in place to ensure that the benefits are realised and sustained by local people.
6. The scheme will result in the following tax contributions:
   a) £11.0 million per annum in additional National Insurance and PAYE tax revenue from construction;
   b) £14.2 million per annum in additional National Insurance and PAYE tax revenue from ongoing employment;
   c) £9.7 million per annum in business rates;
   d) £1.3 million in New Homes Bonus (over 6 years); and,
   e) £200,000 per annum in Council Tax revenue.
7. Additional £212.7 million estimated additional visitor expenditure per annum.
8. The total expenditure from new residents at the proposed development is expected to be £3.5 million per annum, plus an additional £750,000 during the first 18 months of occupation.

7.10 The proposed development site comprises an area of land that currently comprises part of the car park serving The Mall at Cribbs Causeway and an area of landscaping. Despite being important to the Centre, neither of these elements generates any direct socio-economic impacts; additional car parking and landscaping is proposed as part of the proposed development. The implication of this is that there will be no loss of employment or expenditure which should be taken into consideration when assessing the socio-economic impacts of the proposed development. There will similarly be no losses arising from the reconfiguration of existing floorspace that will be required in order to integrate proposed development into the existing centre.
7.11 Given the relationship of the proposed development site to the existing buildings, it is not anticipated that any alternative development proposals would be likely to proceed. In the absence of the proposed development, the site would be expected to remain in its current use (i.e. car parking and landscaping). This “do nothing” option would not generate any socio-economic benefits for the area of assessment and would fail to make any contribution towards addressing key local economic issues such as unemployment and housing affordability. This would have significant adverse impacts in social and economic terms. The proposed development will help to enhance the profile of The Mall. Were it not to proceed it is likely that the existing socio-economic benefits of The Mall will gradually reduce over time as new developments take place elsewhere and divert trade.

7.12 The implication of this is that no deadweight impacts are anticipated and all of the impacts that have been assessed will arise as a result of the proposed development.

7.13 The proposed development represents a significant new capital investment in the area and will raise the overall level of economic activity and expenditure in the area; overall it will therefore have a beneficial economic impact.

8.0 Ecology and Biodiversity

8.1 In determining ecological conditions across the proposed development site, baseline studies were conducted, including a desk-based study, Extended Phase 1 Habitat survey, Arboricultural survey, Amphibian Suitability survey, Reptile survey, Bat surveys and Badger survey. The scope of the surveys was agreed in consultation with SGC and followed scoping advice and guidance’s from Natural England and the Environment Agency.

8.2 Within the existing soft landscaping area within The Mall, the proposed development will result in the loss of some existing category B (trees of moderate quality or value capable of making a significant contribution to the area for 20 or more years) and category C (trees of low quality, adequate for retention for a minimum of 10 years expecting new planting to take place; or young trees that are less than 15 cm in diameter which should be considered for re-planting where they impinge significantly on the proposed development) trees, as defined in the British Standard BS 5837:2005.

8.3 More mature category B trees will be lost within the semi-natural habitats south of Merlin Road. A mature ash tree within this area was also assessed to have bat potential. As such, the loss of these trees was assessed to be minor adverse at a local scale, and in the absence of mitigation the loss of a potential roost was assessed to be substantial adverse effect at a local scale; and could cause an offence under the Wildlife and Countryside Act 1981 (as amended). Mitigation through root protection zones and tree planting as part of the Landscape Strategy, alongside a bat survey (scheduled for 2015) to
determine whether roosting bats are present within the tree removes these negative effects.

8.4 The construction of the pedestrian/cycle link south of Merlin Road will be adjacent to a pond. Amphibians have been recorded within the pond, including an historic record of a great crested newt egg in 2004. In the absence of pollution control measures and construction mitigation the construction activities could result in a substantial adverse effect at a local scale; and with respect to great crested newts cause an offence under the Wildlife and Countryside Act 1981 (as amended). As such, pollution and sedimentation will be managed through a CEMP and a presence/absence survey (scheduled for 2015) will be conducted to determine whether a great crested newt licence is required and to ensure appropriate mitigation for newts is incorporated. With this in place the potential effects are reduced to a negligible level.

8.5 There is minimal loss of other ecological valued habitats, such as semi-improved neutral grassland and hedges, as a result of the proposed development. As such the effects are assessed to be negligible. A potential Schedule 9 invasive plant species under the Wildlife and Countryside Act 1981 (as amended) was recorded within The Mall car park. As such, to mitigate a potential adverse effect these will be further investigate prior to construction and removed appropriately.

8.6 The habitats south of Merlin Road were assessed as providing suitable for habitat breeding birds and hedgehogs. In the absence of mitigation the construction of the pedestrian link was assessed to be minor adverse at a local scale for these species, and in the case of breeding birds (which could also be breeding in the trees and shrubs within The Mall) could result in an offence under the Wildlife and Countryside Act 1981 (as amended). These potential effects are mitigated through ensuring any vegetation clearance occurs outside the breeding bird nesting period or involves nest checks by an ecologist prior to clearance, and is undertaken slowly to ensure animals have time to move into surrounding habitat.

8.7 The habitats south of Merlin Road were also assessed as providing suitable habitat for foraging and commuting bats, as such the permanent lighting on the pedestrian link should consider bats.

8.8 No negative effects are predicted for designated sites from the proposed development, and no evidence of reptiles or badgers were recorded within the proposed development or surrounding area.

8.9 Due to seasonal constraints experienced, further amphibian and bat surveys are programmed for spring 2015. Nevertheless, the assessment was conducted on a precautionary approach and appropriate mitigation proposed to ensure no negative effects are predicted and compliance with wildlife legislation.
9.0 Townscape & Visual Impact


9.2 Initial assessment involved desk-based analysis of the local planning policy context and reference to published landscape character assessments and other relevant information in order to establish the landscape and visual baseline of the study area.

9.3 The development site is located within the Patchway, Filton and the Stokes Landscape Character Area, as defined within the South Gloucestershire Landscape Character Assessment SPD (2014 Revision). As part of the T&VIA ten townscape sub-character areas have been defined within this broader character area, and the key characteristics and aspects of landscape and townscape value within the site and surrounding area identified. The application site is located mainly within the Cribbs Causeway Local Character Area with a small part within the Former Filton Airfield Character Area. Both character areas have low townscape value.

9.4 The assessment concludes that the proposals will result in a substantial beneficial effect on the site and a moderate beneficial effect upon the Cribbs Causeway Local Character Area. A minor adverse effect has been predicted as the result of the removal of the existing axial landscape feature and vegetation however the inclusion of numerous areas of new landscaping will provide a more robust urban landscape in replacement.

9.5 The effect of the proposed development on people in the surrounding area was considered. No protected, designated or important local views will be affected. Eleven representative views were selected, in agreement with SGC, providing an overview of the types of changes that will be experienced by people in the surrounding area. Accurate Visual Representations (AVR’s) were prepared to assess the visual effects from a number of representative viewpoints around the site. They show the maximum parameters of the proposed development and therefore represent the worst case scenario. The visual role of development on the site from the surrounding area would be significant in short to medium range views. Within longer range views its role will diminish, however The Mall will retain its landmark qualities which it currently provides within the wider panorama.

9.6 There are likely to be minor adverse visual effects on people within the site and immediate area arising from the construction of the development, however these will be of short duration and not significant.
9.7 A number of effects of moderate beneficial effects have been predicted. Generally these will be experienced by receptors within close proximity of the development, or visitors to The Mall itself, and are the result of the scale of the development. These have been assessed as being beneficial when considered alongside the current situation and the aspirations for the urbanisation of The Mall and its integration with a wider, developed CPNN.

9.8 In longer range views, the components and amenity of the views will remain similar to the current situation.

9.9 The assessment concludes that, from a townscape and visual perspective, the application site is suitable for the proposed development, with those effects predicted on townscape character and visual amenity typical for a site of this size and strategic importance, located within an urban setting.

10.0 Flooding & Water Resources

10.1 The Flooding and Water Resources chapter assesses the impact of the proposed development on flood risk, surface water and ground water resources within the site, and in the surrounding area. The assessment identifies water resources that may be impacted by the proposed development, and defines the nature and degree of impacts during the construction and operation phases of the development. Suitable mitigation measures have been defined where significant effects are identified.

10.2 In determining impacts on water resources, a baseline study of the water environment was carried out to identify water features within the study area. A number of sources were reviewed including the Environment Agency online datasets, and information sourced from consultation with the Environment Agency.

10.3 The surface water features within the site include three pond features. Two of these ponds are located within the west of the site and act as part of the water drainage network for the site by attenuating surface water run-off. The River Trym is located approximately 250m to the west of the site and is moderate in ecological quality. The River Trym flows through a surface reservoir known as the Catbrain reservoir. The Catbrain reservoir is located approximately 650m to the south east of the site and attenuates surface water run-off from the shopping centre at Cribbs Causeway.

10.4 The site is located on impermeable bedrock and therefore holds a limited amount of groundwater resource. In addition, the site is located within a low probability of flood risk from the River Trym which is also benefited from the current on-site drainage system. A surface water drain is located to the south of the site which conveys surface run-off from The Mall, via the Catbrain Reservoir, and into the River Trym.

10.5 Potential construction impacts that might pose a risk to the River Trym include polluted surface water run-off which could enter the River Trym via the
drainage system. This would have a temporary minor effect on the water quality of the River Trym if this was to occur. However, this will be managed through procedures which will be included into a CEMP. The potential impacts on the River Trym during the construction phase of the proposed development would lead to a negligible impact on flood risk, surface water drainage on the site and water availability within the downstream aquifer.

10.6 Once constructed, potential impacts include fuel spillages contaminating surface water run-off which would be washed into the surface drainage, leading into the River Trym and the onsite ponds. This is considered to be a negligible effect due to the lack of any significant change in land use in relation to the current situation. The proposed development will include additional ponds within the site to help reduce surface water runoff and onsite flooding. This will have a beneficial effect to downstream flood risk of the River Trym.

10.7 The assessment found that the residual effects during both the construction and operational phases of the development would be negligible. It is concluded therefore that the proposed development will have a low flood risk downstream of the River Trym. It will significantly contribute positively to the sustainable management of surface water across the site and also within the wider area due to the implementation of additional surface water drainage ponds.

11.0 Archaeology & Heritage

11.1 An assessment was undertaken of potential impacts upon heritage assets within 1km of the proposed development, including designated (listed buildings) and non-designated (known archaeological sites) heritage assets. This identified that while archaeological remains from a variety of periods are present within the study area, construction of the existing development would have removed any heritage assets that may have been present. One area of increased archaeological potential was identified, to the south of Merlin Road, where remains dating from the Mesolithic period may be present. A proposed pedestrian and cycle bridge in this area has the potential to impact upon any remains that are present, which has been assessed as Moderate Adverse. Mitigation, in the form of preservation by record would reduce this adverse impact to Minor Adverse.

11.2 Seven Listed Buildings, all designated Grade II, are present within the study area. The assessment concluded that due to the scale and extent of the current Cribbs Causeway development, the proposed development would have a negligible impact upon the settings of these assets, and therefore no mitigation would be required.
Inter Relationships, Cumulative Impacts & Summary of Findings

Table 12.1  Summary of Residual Effects

<table>
<thead>
<tr>
<th>Environmental Topic</th>
<th>Effects during construction</th>
<th>Effects during operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>The construction will have a negligible effect on vehicle movements, severance, pedestrian/cycle delay &amp; amenity, driver delay, accidents &amp; safety and public transport.</td>
<td>There will be no significant residual impacts.</td>
</tr>
<tr>
<td>Air Quality</td>
<td>The construction will have a negligible effect on air quality.</td>
<td>There will be a negligible effect during operation.</td>
</tr>
<tr>
<td>Noise and Vibration</td>
<td>There will be negligible residual noise effects.</td>
<td>The residual effects for commercial/industrial noise on existing receptors will be negligible. The residual indirect effects for existing roads will also be negligible.</td>
</tr>
<tr>
<td>Geotechnical and Geoenvironmental</td>
<td>Appropriate mitigation will ensure that the construction will have a negligible effect on construction workers, site neighbours/general public, soil/groundwater, accidental spillages, unexpected contamination and unexplored ordinance.</td>
<td>Upon implementation of mitigation measures residual effects are anticipated to remain the same on operation as during construction.</td>
</tr>
<tr>
<td>Socio-Economic Effects</td>
<td>A substantial positive impact is anticipated as a result of the creation of construction jobs at the site.</td>
<td>The demand created by new workers and residents for local retail, leisure, health, education and community facilities will help support the viability of services and may stimulate the need for additional employment and housing; this will represent a positive impact. Following mitigation measures included as part of the scheme or secured through a s106 contribution, any potentially adverse impacts of the development will be minimised to negligible or positive. Moderate beneficial effects will be had on expenditure by new residents, fiscal matters, the labour market and community, leisure and recreation facilities. Minor beneficial impacts will be felt on deprivation and housing and negligible effects on commuting, education and health. In relation to</td>
</tr>
<tr>
<td>Environmental Topic</td>
<td>Effects during construction</td>
<td>Effects during operation</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Effects during construction</td>
<td>retail impact, there will be a substantial beneficial impact on The Mall, minor adverse on retail elsewhere in Bristol and South Gloucestershire and a negligible impact on retail elsewhere in the catchment area.</td>
<td></td>
</tr>
<tr>
<td>Ecology and Biodiversity</td>
<td>Appropriate mitigation will ensure that the construction has a negligible effect.</td>
<td>Appropriate mitigation will ensure that the construction has a negligible effect on woodlands &amp; trees, ponds, invasive non-native plants, breeding birds, amphibians and hedgehogs.</td>
</tr>
<tr>
<td>Townscape &amp; Visual Impact</td>
<td>No significant landscape and visual effects were identified for the construction period. Any effects will be temporary. The impact is therefore negligible.</td>
<td>There would be significant beneficial townscape effects on the site arising from the creation of more attractive, active building frontages, well-designed routes and public spaces with replacement planting and a high quality bus station, an improved relationship between The Mall and Merlin Road including the new pedestrian/cycle bridge creating a local landmark signifying the entrance. There would be moderate beneficial townscape effects to Cribbs Causeway Character Area 1 owing to the improvement of the townscap...</td>
</tr>
<tr>
<td>Flooding &amp; Water Resources</td>
<td>The residual effect on water quality of the River Trym would be negligible. The residual effects on flood risk would remain negligible.</td>
<td>No mitigation is required during the operation of the development to reduce the effects on surface and ground waterbodies, as no significant detrimental effects have been identified. The residual effects to surface water and groundwater is therefore negligible.</td>
</tr>
<tr>
<td>Archaeology &amp; Heritage</td>
<td>Following mitigation that may be...</td>
<td>The completed development will have...</td>
</tr>
</tbody>
</table>
### Environmental Topic

<table>
<thead>
<tr>
<th>Environmental Topic</th>
<th>Effects during construction</th>
<th>Effects during operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heritage</td>
<td>required following a geophysical survey, the impact of construction activities will be reduced to minor adverse from moderate adverse.</td>
<td>greater massing than the current development; however it is considered that due to the existing land use of the site and distance from heritage assets, this change would have a negligible effect on the setting of heritage assets.</td>
</tr>
</tbody>
</table>

12.2 A range of mitigation measures have been identified throughout the ES which are capable of being enforced through planning conditions or a s106 Legal Agreement in relation to the development.

12.3 An assessment of potential cumulative effects has been undertaken. Based on information available, the assessment shows that any potential cumulative effects arising from the development in the local area when considered with the proposed development do not give rise to a need for additional mitigation measures that have not been previously identified in this ES or already put forward as part of the development proposals for the schemes considered in this ES.

12.4 Potential adverse effects include those on air quality and noise if a number of developments within close proximity of each other are under construction at the same time, however if best practice and appropriate and effective mitigation is implemented at all sites to reduce the effect of nuisance dust and emissions to air from traffic associated with the construction at all developments no significant cumulative effects are anticipated. A moderate adverse impact is anticipated on retail facilities in Bristol City and South Gloucestershire. Any negative impacts could be increased if a greater level of development was permitted, but if adequate mitigation measures are provided through s106 Agreements or on-site provision these impacts would be negligible. There may be possible adverse impacts on bats and amphibian following the completion of 2015 surveys. Minor adverse impacts on landscape/townscape and visual effects are anticipated initially on Filton Airfield and other CPNN developments within close proximity but maturing landscaping will significantly reduce this impact.

12.5 These effects must be balanced against the benefits associated with enabling the implementation of this project. The development will result in minor beneficial transportation effects on pedestrian, cyclists and bus users visiting and living within close proximity to The Mall. Moderate townscape and visual benefits will result to users and inhabitants of The Mall, Filton Airfield and the wider CPNN. The development will result in minor to substantial socio-economic effects on the local labour/employment market; expenditure by existing and new residents; deprivation; housing; education, health and community and leisure/recreation facilities; and, retail facilities.
13.0  
**Availability of the Environmental Statement**

13.1 If you would like to purchase a paper copy or CD Rom of the ES, please contact:

Nathaniel Lichfield & Partners, 14 Regent’s Wharf, All Saints Street, London N1 9RL (Tel: +44 (0)20 7837 4477

Reasonable charges will be applied.

13.2 Alternatively, information on the ES can also be viewed on the South Gloucestershire Council website at [www.southglos.gov.uk/](http://www.southglos.gov.uk/).

14.0  
**Sources of Information**

14.1 The planning application comprises the following:

1. Planning Application form, Certificate B and Agricultural Land Declaration
2. Site Location Plan (ref: CTL GA 00(07)001 12)
3. Planning application drawings

14.2 The following document accompany the planning application:

1. Planning Summary
2. Environmental Statement (ES) Volume I (Non-Technical Summary); II (Technical Studies); and III (Technical Appendices)
3. Planning and Retail Statement
4. Design and Access Statement (including Landscaping Strategy)
5. Transport Assessment (appended to Chapter D of the ES)
6. Statement of Community Engagement
7. Outline Sustainability Strategy
8. Outline Energy Strategy
9. Flood Risk Assessment (appended to Chapter K of the ES)
10. Tree Survey (appended to Chapter I of the ES)

15.0  
**Scheme Plans**

15.1 A copy of the following Parameter Plan are provided below (not to scale) for information.

1. Site Location Plan
2. Maximum Extent of Block Plan & Uses
3 Proposed Public Realm & Vehicular Access Works application drawings are provided (not to scale) below.

15.2 Refer to the planning application and Appendix C2 of this ES for the full suite of application drawings.