

Appendix D: Additional Information

This document provides additional information on elements of the proposed development of a solar carpark on the 'eclipse' leisure center. This is broken down by Design, Logistics, Legal and Project Risks. All elements of the proposal listed here can be addressed within the project process.

Design:

Below are design considerations to be addressed in the implementation of a solar carpark:

- 1.1 This provision of supply to the leisure centre would need to be negotiated with the leisure centre operator, as the operator is able to negotiate its own electricity contracts for the Eclipse Leisure Centre. Importantly, the current financing proposal would indicate that the solar car park would financially undercut the costs of any traditional electricity contract.
- 1.2 The glulam timber frame does come at a premium of 30% additional cost over the default option of a steel frame.
- 1.3 In progressing the project, the financial appraisals evaluating the different options as outlined in Option 1 and in section 4 of this report will be important.
- 1.4 High level considerations of the proposed design by 3ti are as follows:
 - 250 parking spaces covered. The proposed 295 current car park number space design will be retained. The remaining 45 car spaces will not be covered due to their location at the perimeter of the site and shading constraints.
 - 750 kWp installed DC capacity.
 - 668 MWh annual generation.
 - 137 tonnes CO₂e savings per annum.
- 1.2 The proposed design will include a battery installation that will complement the solar array, allowing the installation to continuously provide power even at night and times of "low sunlight".

Logistics:

Due to the complexity of the ongoing works around the leisure center development, we must consider timeline of implementation and logistical factors.

- 1.5 Following a decision to develop a solar carpark, the next steps would be to procure a suitable developer by January 2025 to align with the next steps of the demolition of the current leisure centre and construction of the new carpark. As part of this, the groundworks contract that is already out to tender will be amended to include provision for the earthworks and foundations required for a solar canopy. Therefore, the works must be completed in collaboration with the yet to be procured solar carpark developer. After these works, the solar canopy can be installed around Q1 of financial year 2025/2026.

Legal:

Below are the comprehensive legal considerations that will be addressed throughout the project:

- 1.6 Within the Contribution Agreement the Council covenanted with MCC (now SCC) as follows:
 - not to sell, lease or appropriate any part of the land without the consent of SCC. Such consent may be given subject to SBC paying SCC one-third of the proceeds of sale, rent or appropriation value. (For clarity there is no sale proceeds or rental income that will be generated from the solar canopy proposals).
 - not to use the land for any purpose other than as public open space, a public park, public walk, pleasure ground (part of the land can be used as a municipal golf course or for swimming baths with the prior consent of SCC, such consent not to be unreasonably withheld)
 - any buildings to be erected on the land which are not ancillary to the purposes mentioned above, require the written consent of SCC.
 - not to allow any service media (cables, wires, sewers, pipes) or allow any easement in under or over the land in this title without the consent of SCC.
 - not to cut down any trees (except those which have decayed or are a danger) without the consent of SCC.
 - to give SCC notice of any exercise of powers over the land by a statutory authority or undertaker
- 1.7 The Council has no right to do anything to the land demised to SLM and cannot grant a lease of this land or grant any rights over it without SLM's consent, whilst SLM's lease still subsists. The Council has a contractual right to break SLM's lease on six months prior written notice. This has to be done in conjunction with terminating SLM's service contract, all of which must line up with the contract with Places Leisure, the new leisure operator.
- 1.8 The children's nursery located next to the old leisure centre also has the right to use 10 designated spaces in the car park during nursery opening hours until its current lease ends on 7 June 2025. The nursery also has a right of way over the car park in order to access such spaces. These spaces had to be re-allocated when Willmott Dixon erected its site office and any further relocation of their parking must be carried out in agreement with the nursery.
- 1.9 It is understood that the Eclipse leisure centre car park is designated for planning purposes as 'urban public space'. Before any disposal of land held as open public space by way of sale or lease can take place, a public consultation procedure must be carried out in accordance with s123 LGQ 1972, by way of a public notice in a local newspaper and any objections to it must be considered.
- 1.10 The new leisure centre operator, Places Leisure, is not going to be demised the leisure centre car park under the current proposals but will have a right to

use car parking spaces for its service users on a first come first served basis. Places Leisure is expecting use of 282 car parking spaces (30 of which have to be EV charging). Places will need to be informed and in agreement with this project before it proceeds.

- 1.11 The practical impact of the proposed installation on service users to the new leisure centre, servicing of the new leisure centre and access by the fire brigade/other emergency vehicles as well as vehicles servicing the new leisure centre and waste disposal vehicles.
- 1.12 The lease of the new electricity substation contains rights for the supplier which protect the substation building and its associated cabling which mainly runs underneath the access road leading from Knowle Green to the Eclipse leisure centre car park. The route of any new cabling required for the Solar canopy installation must not disturb the substation or its cabling.
- 1.13 Willmott Dixon currently has a site office and designated storage areas in the Eclipse leisure centre car park. It will need space to carry out the build of the new centre and the demolition of the existing leisure centre, as well as any works required in compliance with the conditions to the planning consent obtained by the Council for the build of the new leisure centre; including inter alia the installation of acoustic fencing around the boundary of the Eclipse leisure centre car park. The construction of the canopy must take into account Willmott Dixon's requirements as well as the various construction which is to be undertaken to the Eclipse leisure centre car park as part of the build of the new leisure centre and its planning conditions.

Project Risk Management:

The solar carpark project risks scenarios that are considered and mitigated below.

- 1.14 The risk of variable solar intensity levels, caused by bad weather could lessen the efficiency of the installation. Therefore, this may affect the ROI of the asset given it needs to produce electricity. This risk can be managed through using a battery to offset the lower light times with peak demand, therefore lessening the impact of bad weather.
- 1.15 With any technological solution, there is a risk of the technology becoming outdated. For example, modern solar installations already provide the high efficiency rating of 22%. In 2019, this average was 19%. This risk is managed in this instance through the high return on investment, meaning that after the payback period the Council will be free to upgrade any infrastructure and not constrained by contracts.
- 1.16 Through a Council owned and operated model, maintenance and cleaning responsibilities would fall to the council. Therefore, to ensure that the asset remains at peak operation, a comprehensive contract for maintenance and cleaning must be in place to mitigate the risk.
- 1.17 A risk highlighted around the financials of the project is that the usage of electricity from the solar car park will need to be negotiated with the leisure centre operator. The operator is free to negotiate its own electricity contracts,

and will already have national contracts in place, therefore there is a risk that the Council's solar car park is not awarded this contract. The risk is minimised through the fact that the solar carpark will greatly undercut any competitive electricity contract in terms of price. Additionally, we have alternative sites which can use the electricity generated (Knowle Green, schools).

- 1.18 Through the PPA route, as the Council would not own the asset, there is a risk that the asset will be left to the Council to decommission after its usable lifetime. These risks can be mitigated through amending the contracts with any potential supplier to ensure they are covered.
- 1.19 A physical risk of the solar canopy is that it may have carpark logistical implications. Such as that drivers collide with the structure, and it could restrict vehicles over a certain height. This can be mitigated with abundant signage and route optimisation for tall vehicles (such as coaches).
- 1.20 Timeline considerations with the current planned works on the development of the new carpark and demolition and removal of the old leisure centre are a risk. If works are not scheduled simultaneously to account for this, the solar canopy project could risk delaying the overall leisure centre development carpark completion. This can be mitigated through appointing a supplier as soon as possible and including the ground works for the canopy within the carpark development contract.
- 1.21 A planning application will be required for a development of this size. This is a risk as the development will need the permission granted. This can be mitigated through starting the planning application process at the soonest possible time.
- 1.22 If the Council goes down the upfront capital expenditure route that assumes in the future the Council will have sufficient borrowing approval headroom from Department of Levelling Up, Housing and Communities.
- 1.23 The G99 application to the DNO (district network operator) may represent a risk of the DNO not approving a generation project such as the solar canopies. Therefore the risk is that the project may need to be scaled back or is made unviable. This risk is mitigated through the fact that experts have submitted the application on behalf of the Council and believe that applications under 1 GW have very high rates of success.