# Design and Access Statement

Single deck car park extension to
Metrodome Leisure Complex
Queens Ground
Queens Road
Barnsley
S71 1AN

Prepared by

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Gateway Plaza
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On behalf of

Barnsley Premier Leisure
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# Contents

# 1.0 Introduction

Barnsley Metrodome Leisure Complex is currently operational as a multifunctional venue, offering a wide range of leisure activities, including swimming and aquatic activities at Calypso Cove Waterpark, bowling, café and lounge area, and hosting parties, concerts and celebrations within the Metrodome Arena.

## 1.1 Clients brief

The brief outlined by Barnsley Premier Leisure was for the NPS Group to develop a previously commissioned masterplan Figure 1 right for the facility by Hive 51 Limited.

The project is to involve the extension of the existing car park to the east (rear) of the building to increase capacity alleviating current parking problems, to provide parking to the Metrodome Arena and futureproof the facility.


Figure 1: External Masterplan.

## 2.0 Physical Characteristics

### 2.1 Site location

The site is located in Barnsley, which is a town in South Yorkshire, located halfway between Leeds and Sheffield. The site is located to the east of Barnsley town centre, as shown in Figure 2 right. Barnsley has a population of approximately 92000 people, and the site is well located to be accessible for the residential areas of Barnsley.

The leisure facility that was opened in 1989 located is 5 minutes from the Barnsley Interchange and accessed along Queens Road.

To the west of the proposed development site is the existing carpark with the building bordering this, to the north is a stone wall with allotments beyond this, to the east rough land and playing fields to the south.

An in depth study as to the location is included in the supporting Transport Statement document provided by BSP consulting.


Figure 3: Arial Photograph

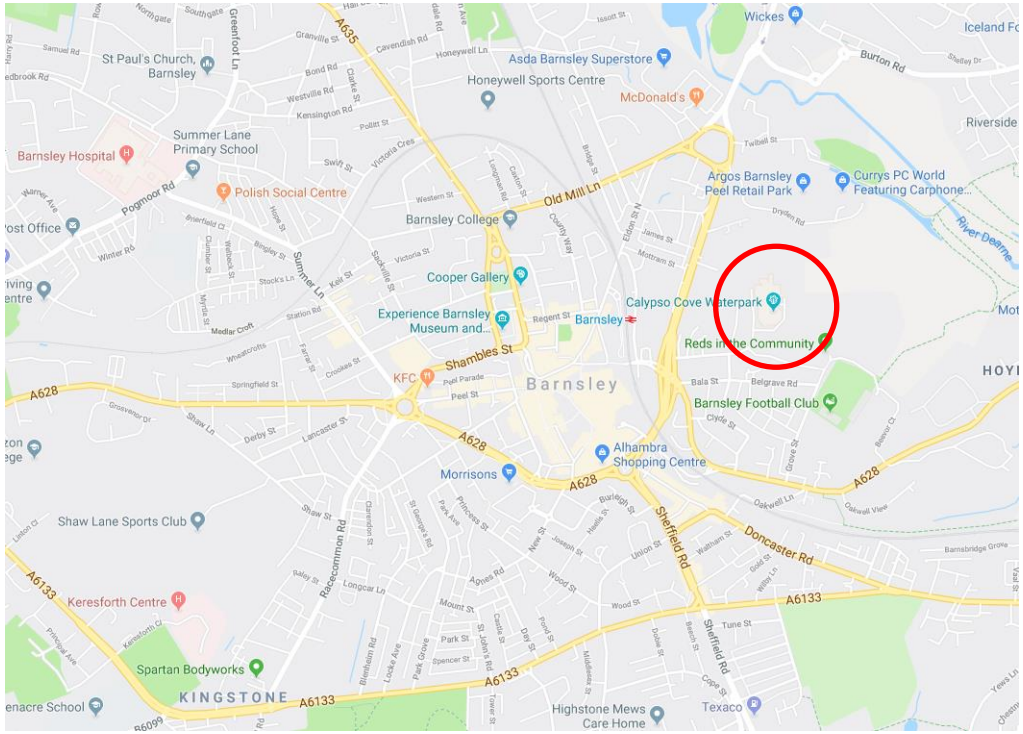


Figure 2: Site Location Plan

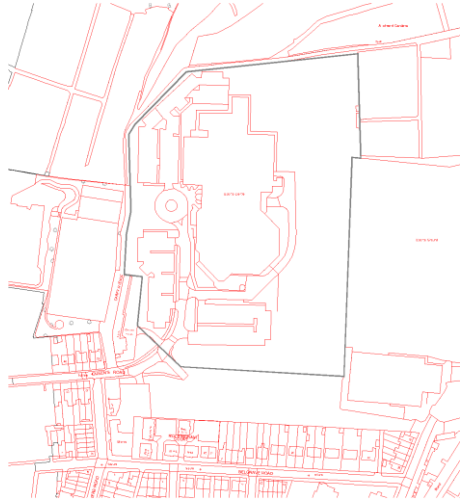

Figure 4: Ordnance Survey Plan

## 2.0 Physical Characteristics

### 2.2 Site context and photos

Site photographs with location plan

Photo 1 Entrance

Photo 2 Exit

Photo 3 Drainage Channel

Photo 4 Boundary

Photo 5 Allotments Beyond Boundary

Photo 6 Site Panoramic

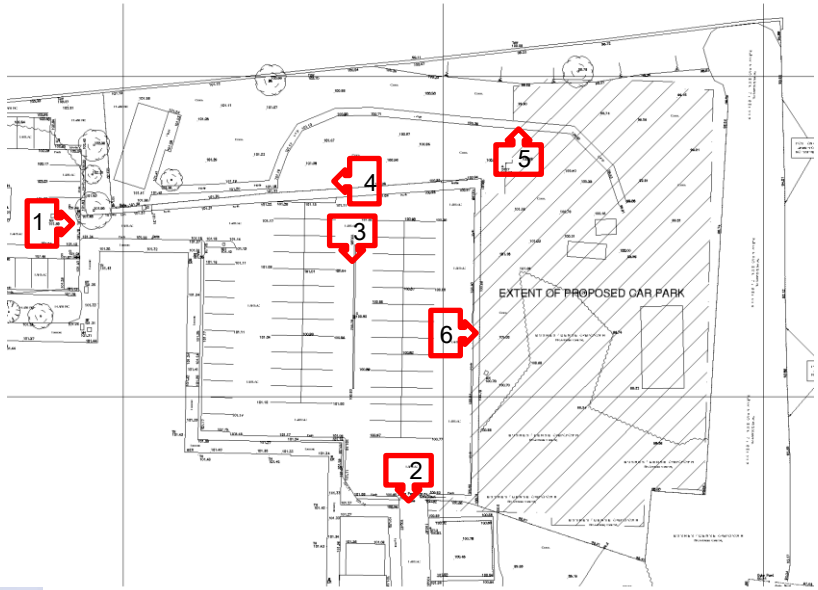


Figure 5: Site Photograph Locations

## 2.0 Physical Characteristics

### 2.3 Tree Survey

A BS 5837:2012 Tree Survey was undertaken by Ecus Ltd as part of planning application was submitted with the planning documents.

In summary in the  Tree Constraints and General Design Advice section it is reported that:

3.1.10 Trees recorded within the survey are not of any great quality. The trees growing on the
slope (T001 to TG011) are unlikely to be affected by development within the allotment
area due to their positioning and past soil level changes.

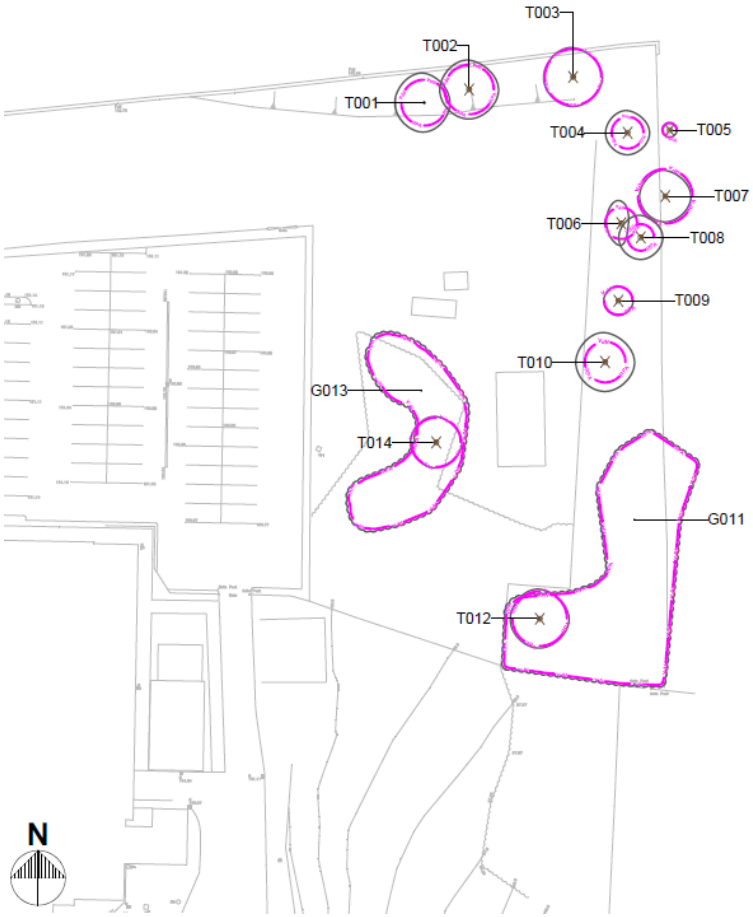


Figure 6: Tree Survey and Tree Constraints Plan

## 2.0 Physical Characteristics

### 2.4 Japanese Knotweed

Vegetation Management Ltd were previously requested by Barnsley Premier Leisure to investigate
possible Japanese Knotweed growing at The Metrodome Complex, Barnsley. Japanese
Knotweed is suspected to be growing on the site but its whereabouts and extent were
unknown at the time.

The objectives of this report was to:
• Confirm the baseline location and extent of the Japanese Knotweed
• Set out the responsibilities of the property owner to manage Japanese Knotweed
• Present a means by which the Japanese Knotweed will be managed over 5 years.

Following the investigation Well-established stems were to the perimeter of the proposed car park. Some of the stems have been cut down others were newly emerged.

Areas of Japanese Knotweed were also observed outside the boundary at to the East of the site.

Although the management and treatment has already begun the eradication of the knotweed is required prior to commencement of the works.

Ashtrees are providing a solution for excavating a 7 metre zone and licensed disposal of the removed soil.

This will be closely monitored by NPS throughout the process.


Figure 7: Extract of Knotweed Report

# 3.0 Design

## 3.1 Proposed Site Plan

The proposed extension is a continuation of the existing car park to provide an additional 96 car parking spaces within the boundary of the Metrodome. A vehicle sweep plan analysis was undertaken on the existing car park and a number of bays were omitted due to a potential conflict. The remaining existing bays exceeded the standard 2.4 metre wide bays so these will be set out remarked to gain 4 of the lost bays.

The current overflow carpark is accessed via a gate from the main carpark to the West (front) of the complex and the exit through another gate to the East (rear) of the building this will remain as the access to and from the car park extension.

The land to be used was analysed and a Ground Investigation Report produced. It was recommended to strip the top 2.0m of low quality loose Clayey Sand filled containing plastic debris and remove from site, the intention will be to build up the level to within an average of 1.5 metres below the existing car park.

The higher ground will be retained by a stone gabion basket dressed retaining wall with connecting traffic ingress and exit ramps.

Pedestrians will have access via a part M compliant ramp.

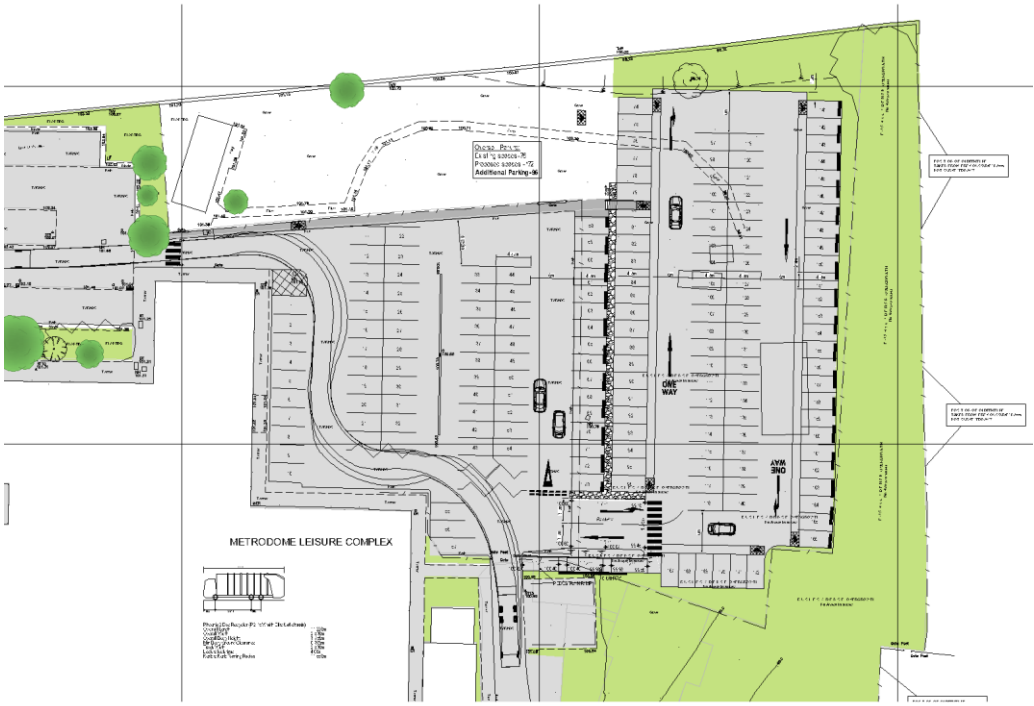


Figure 6: Proposed Plan

# 3.0 Design

## 3.2 Drainage

Following a CCTV survey of the existing drainage it was established that the existing carpark surface run off was serviced by a central channel and the right hand bays laid to falls towards a gully.
Both these runs exit the car park via a petrol interceptor then to a soakaway.

With the development of the carpark extension drainage will be provided by two drainage channels via petrol interceptors into two lengths 50metre x 4.5metre of crate soakaways, this will also connect into the existing carpark drainage discharge.

This information can be found on BSP Consultant's Drainage Layout drawing METR-BSP-ZZ-XX-DR-C-040.

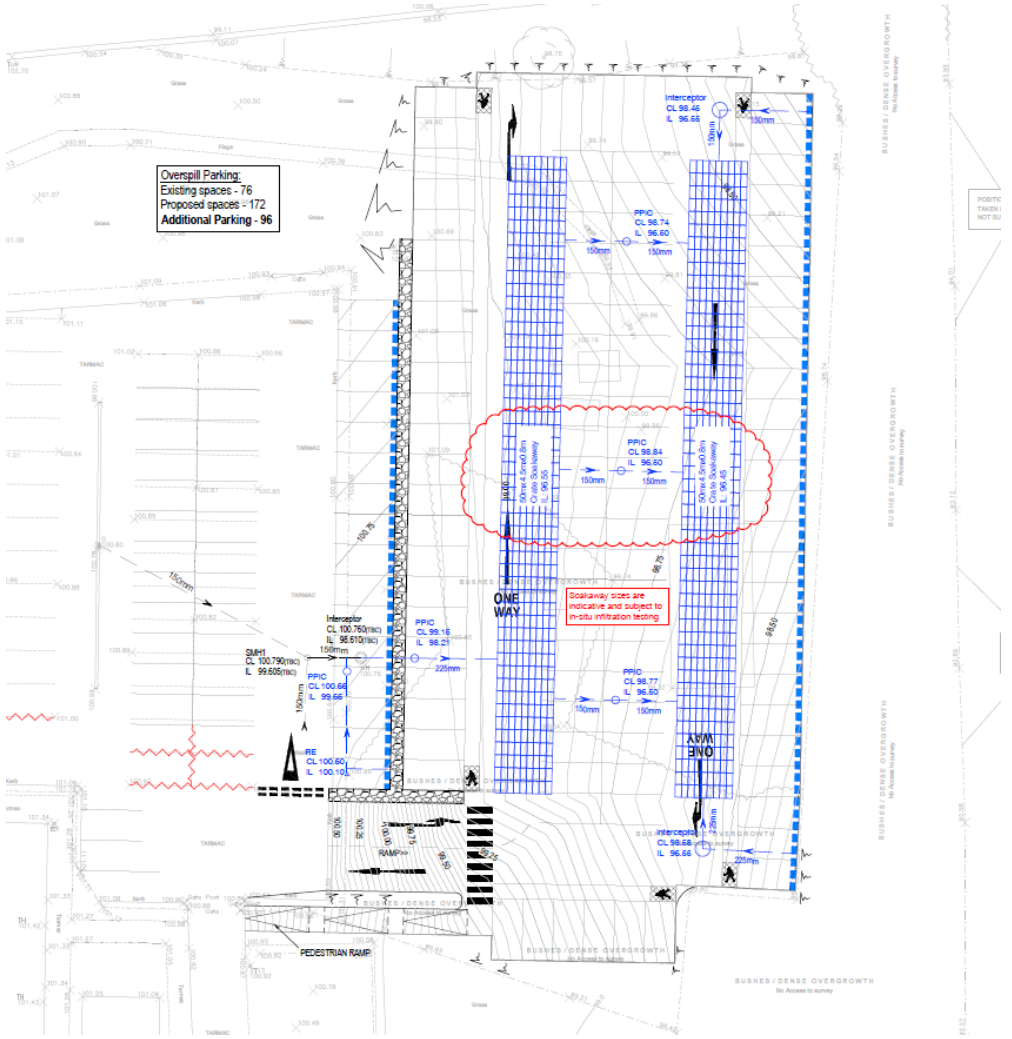


Figure 8: Proposed Drainage

# 3.0 Design

## 3.3 Lighting

Six number, four meter high lighting columns are proposed to allow the additional car parking to be used in the evenings and winter mornings.

The lighting to the perimeter of the parking bays are to be 99w LED Juno D floodlight. Asymmetric Distribution.

Between the bays are to be 177w LED Juno D floodlight. Symmetric Distribution.

The area being bounded to the west with the complex, to the north with allotments and to the east and south playing fields will ensure that there is no significant light pollution to the any properties in the vicinity.

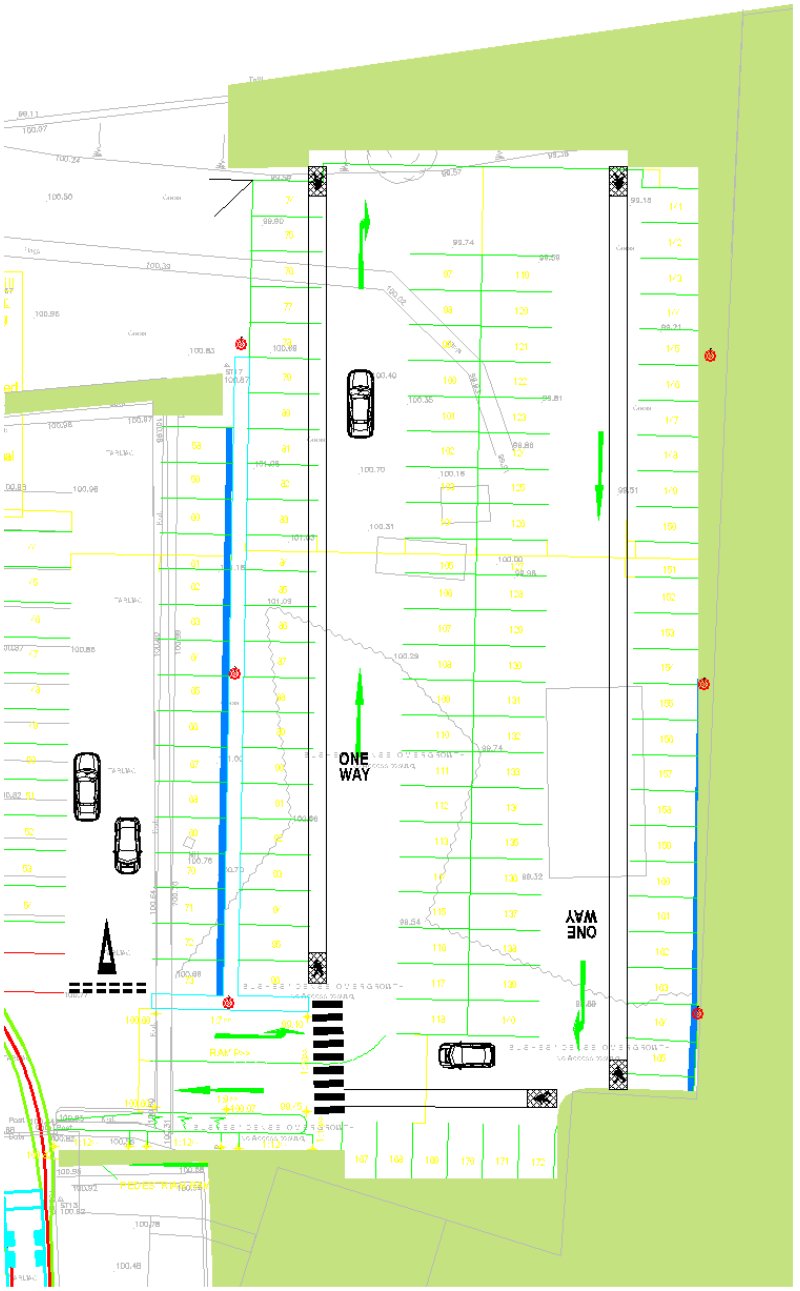


Figure 9: Proposed Lighting

## 6.0 Supporting Documents

| Document Type | Name | Prepared by |
|---|---|---|
| Report | Transport Statement BMCE-BSP-ZZ-XX-RP-D-001-P1 | BSP Consulting |
| Report | 12739 Barnsley Metrodome Tree Survey V1 | Ecus Environmental Services |
| Drawing | NPS-XX-P-00-DR-A-100-P1 – Location Plan<br>NPS-XX-P-00-DR-A-101-P1 – Site Plan Topo<br>NPS-XX-P-00-DR-A-103 – P1 – Existing Car Park Plan<br>NPS-XX-P-00-DR-A-200-P3 - Car Park Extension | NPS Group |
| Drawing | METR-BSP-ZZ-XX-DR-C-020-P1_Car_Park_Sections<br>METR-BSP-ZZ-XX-DR-C-002-P2_Car_Park_Levels<br>METR-BSP-ZZ-XX-DR-C-040-P1_Car_Park_Drainage | BSP Consulting |
| Report | Japanese Knotweed Report & Management Plan | Ashtrees Ltd |


Metrodome Leisure Complex