

Crystal Palace National Sports Centre
Feasibility Study Report 3.0

01.05.19

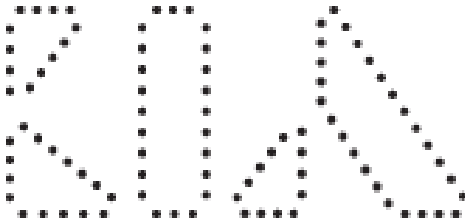
Hawkins\Brown



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1	Introduction	6
2	Executive summary	7
3	Site analysis & appraisal	11
3.1	Site history	
3.2	Site development	
3.3	Current site	
3.4	Planning context	
3.5	Work to date	
3.6	Previous consultations - key outcomes & observations	
3.7	Local context - facilities and character areas	
3.8	Opportunities & constraints	
3.9	Access & connections	
3.10	Visual connections	
3.11	Park and sports centre integrations	
3.12	Comparison of park size and density of facilities	
4		45
5	Project vision & objectives	49
5.1	Project objectives	
5.2	The essential ingredients	
5.3	Key moves	
5.4	Active programme	
5.5	Social & community impact	
6	Design studies	66
6.1	Introduction	
6.2	Development scenarios	
6.3	The main building	
6.4	The Hub	
6.5	The Lodge	
6.6	Athletics	
6.7	Raised walkway	
6.8	Outdoor pitches	
6.9	Climbing & bouldering	
6.10	Access & connections	
6.11	Key views	
7	Built heritage & planning review	114
8	Structural engineering commentary	118
9	Building services commentary	126
10	Transport & parking	136
11	Community & stakeholder engagement	142
11.1	Overview	
11.2	Approach	
11.3	Project identity	
11.4	Digital engagement	
11.5	Online questionnaire	
11.6	Pop-up exhibition	
11.7	Asset Based Community Engagement	
11.8	Design studies workshops	
11.9	Online options survey	
11.10	High impact community event	
11.11	Youth engagement	
11.12	Community Conference	
11.13	Overall engagement summary	
12	Sports stakeholder & partner consultation	165
13		174
14		193
14.1		
14.2		
14.3		
14.4		
14.5		
14.6		
15	Swimming pool options analysis	210
16		216
16.1		
16.2		
16.3		
16.4		
16.5		
16.6		
16.7		
17		227
Appendices		
1	Risks, assumptions & information used by the Project Team	
2	Planning & heritage appendices	
3	Community & stakeholder consultation feedback analysis - full report	
4	Outline Business Case appendices	
5	Parking layout plan	
6	Mayor's Design Advocates review report	

1 Introduction

This study has been produced on behalf of the Greater London Authority (GLA) to provide strategic advice regarding a future plan for Crystal Palace National Sports Centre (NSC), and deliver a feasibility report that informs the GLA on the development options for the site.

The project team appointed by the GLA in June 2018 consists of

- Hawkins\Brown - lead designer and architectural design services
- Mott MacDonald
 - Structural engineering services
 - MEP engineering services
 - Transport consultant
 - Cost consultant
- Kinnear Landscape Architects - landscape design services
- Continuum Leisure Ltd - sports consultant
- Turley - planning and heritage consultant
- Pidgin Perfect - community and stakeholder engagement consultant.

The feasibility study has involved research and investigation into the site, landscape and existing structures, planning and heritage context and current operations and usage patterns of the NSC. It has been informed by consultation with the local community, current users including sports clubs and groups, sporting governing bodies, and other stakeholders with an interest in the NSC, the park, and the wider community.

This feasibility study aims to:

- Create a sporting vision and strategy
- Set out an outline business plan
- Recommend a spatial framework
- Explore a number of development options and outline pros and cons of each
- Review operational models

This report describes opportunities and constraints. It sets out the project vision and objectives, and the design studies and development options that are proposed to achieve these. Feedback from consultation undertaken is

summarised in section 11 and integrated into the design options and analysis in section 6. The development options are then assessed in terms of capital costs, management and governance, and operational and business plan impacts. The development options are appraised against pros and cons and recommendations are made for the next steps required to progress the project further.

The work undertaken is based on the brief received in the Invitation to Tender from the GLA on 13th April 2018.

Whilst the recommendations in this study do respond to the wider park masterplan, it has not been within the scope of this study to review design proposals outside the GLA ownership boundary. Further coordination with LB Bromley is recommended at the next stage to ensure the NSC stitches successfully into the park setting.

Analysis work is based on the information available to the team at the start of this commission, some of which will require further detail to inform the next stage of work and has been outlined in the ‘Next Steps’ section of this report.

2 Executive summary

The vision

Crystal Palace Park, its leisure and sports facilities, stand as proud symbols of London's unique ability to draw and entertain locals and visitors alike. Built initially to preserve the legacy of the 1851 Great Exhibition in the form of the original Crystal Palace building, a symbol of British pioneering engineering and innovation, Crystal Palace is now entering a new era. While its national and regional significance has waned over the 160 year history, the park and its facilities are on the cusp of a new chapter, embracing their function to continue to serve local communities. Crystal Palace Park will perform this new role in the spirit of its original mission: to impress, educate, entertain and inspire.

Crystal Palace Park has a rich and unique sporting legacy in that it has sought to promote sporting activity across a wide range of disciplines, rather than championing any one particular sport. It is the original home of the Crystal Palace football club, one of London's most loyally supported teams. Athletics has played a big role with national and international events having been hosted at the NSC. Basketball, rugby and even motor racing have featured in the park's sporting history. It took the world's largest sport event, the London 2012 Olympics, to de-throne Crystal Palace as London's premier multi-sports venue, and the NSC now sees its role evolve into a more regional and local focus.

Crystal Palace is identified as one of the Mayor's Strategic Outer London Development Centres for leisure, tourism, arts, culture and sports. Crystal Palace and the NSC will continue to play a major role in inspiring people of all ages to do sport, thereby encouraging physical activity and health and wellbeing of the whole community. Spanning community events, professional training, health and wellbeing, grassroots sport and and competition, the NSC will meet the needs of local people and the sporting community alike. It is a place where people come to both participate and to watch sport.

For many years CPNSC has struggled to define its role and its wider impact. The options presented within this feasibility study of a more vibrant, inclusive and diverse offer could have a marked impact on the wider health and wellbeing of residents in the five surrounding boroughs, South London and across the South East region if implemented.

This ability to enthuse and inspire is fundamental to the success of the NSC. It is therefore imperative that the venues

present themselves as a community asset open to all, that seamlessly blend into the park setting and break down barriers to community involvement. The regeneration vision of the NSC is driven by local aspirations, captured and articulated through an extensive programme of community and stakeholder engagement. It has taken account of a range of views from user groups, sporting bodies, heritage and other amenity groups, local boroughs and organisations, including schools and clubs as well as the wider public. This has set the path for the vision of the NSC to revolve around delivering a revitalised, fit for purpose community asset that will be accessible to all Londoners, offering a wide range of activities for competitive and casual users alike.

The site

The feasibility study aims to shape a coherent vision for the NSC and integrate that with the wider park, in the spirit of the 2007 Crystal Palace Park Masterplan and 2017 Regeneration Plan.

Analysis and appraisal of the site, including existing structures, landscape, access and connectivity has been undertaken to identify key issues and constraints that are currently detrimental to the experience and performance of the NSC and its relationship with the wider park. In response, this study sets out some key moves to improve this relationship and the facilities to deliver a vibrant community facility with a sustainable long-term future.

The primary issues identified and recommended responses include:

1. **Accessibility.** The current pedestrian route from Crystal Palace station to the NSC is poor quality and unsafe. It lacks lighting and prioritises vehicles, requiring pedestrians to cross roads and car-parks. The gradients and surfaces are not accessible to wheelchair and buggy users. This study recommends that a new direct pedestrian and cycle route is integrated, that separates pedestrians and cyclists from traffic and provides a well-lit, accessible, safe and attractive route through the parkland to arrive at the NSC.
2. **Integration with park landscape.** General physical and visual connectivity between the park and the NSC has worsened since the NSC was built in 1964. High fences have been installed along the boundaries, and unmanaged undergrowth creates barriers between the NSC site and the wider park. This should be reviewed and the site boundary opened up, where possible, to encourage

permeability between the sports uses and wider park. Where boundaries are required, such as around pitches and athletics stadium, alternative methods should be explored that are more sensitive to the park setting.

3. **Identity.** There is a lack of civic or arrival space at the centre of the site as it is dominated by large pitches and high fences, with many routes leading to dead ends. The study recommends that this is addressed by relocating the larger pitches to the edges of the site, and opening up the centre of the NSC site as a new 'outdoor hub' which creates an identifiable arrival space for the centre, drawing visitors in from the park and encouraging casual participation in outdoor activities and physical activity at all levels.
4. **Restoring vistas.** Historic vistas across the park have been lost as the 'barriers' described above have been added, especially the Jubilee Stand, the high fencing, unmanaged undergrowth and raised walkway. Our studies aim to restore these vistas so that the NSC is no longer perceived as a barrier in the park but as a sensitively integrated park facility.
5. **Rationalisation of road infrastructure.** The centre of the park and the NSC site is dominated with parking, traffic and road infrastructure. Parking is poorly managed, with uncontrolled user parking including on grass verges. This is detrimental to the park landscape and the pedestrian environment. Whilst there is clearly a need for dedicated NSC parking, the location and management of this needs to be addressed.

Sporting need

The Sporting Facility Assessment commissioned by the GLA in 2018 has been used as a springboard for this study. The report's recommendations have been tested and interrogated during the process of this study, through further consultation with the community and stakeholders. It is clear that whilst the NSC's role at national level has reduced, and despite the poor condition of some of the facilities, there is still a strong demand within south London and, in the case of aquatics, the south England region for the NSC to be retained as a multi-sport venue.

The preferred development option identified through this feasibility study looks to retain, improve and/or expand the vast majority of the current sports facilities, resulting in a net increase in the sporting offer at the NSC. Where a facility is proposed to be reduced, this has been discussed extensively

with relevant stakeholders and it has been identified that the demand is being, or will be, met elsewhere in the local community. All options have been discussed with the relevant National Governing Bodies of Sport and Sport England.

In addition, this study identifies a wider opportunity to maximise the potential of the site to become a destination hub for South Londoners encouraging physical activity outside of competitive and club sports.

Project objectives

Informed by the analysis and appraisal of the site, context and sporting demand, this report sets out a series of objectives that lead towards a vision to provide a space for sports and recreation, as well as health and well-being, that meets the needs of both the sporting community and local residents. These objectives are:

A centre for everyone

Make the centre a place you want to stay all day, with high-quality spaces and activities for all ages and abilities. Increase participation and levels of physical activity for residents of the five boroughs and London.

A secure financial future

Enhance and review the existing facilities to improve the viability and sustainability so that the Centre can continue as a leading facility for sport in London.

Enhance connectivity

Improve connectivity between the surrounding park and communities.

Become part of the park

Integrate the Centre into the park, creating a parkland setting that recognises the heritage of the site.

Protect and improve the landmark building

Help the main building work better to provide an accessible and comfortable environment for physical activity whilst celebrating the architecture.

Community and stakeholder engagement

In the process of this study, the project team have undertaken intensive consultation with a wide range of stakeholders at multiple stages. The project objectives and vision have been tested with the local community, users and key stakeholders

2 Executive summary

throughout the study with a series of engagement events and online tools. Feedback from the community and stakeholders has informed the vision, design studies and proposals.

Key stakeholders consulted include the local community and public, current users and visitors of both the park and the NSC, local interest groups such as Crystal Palace Sports Partnership, resident sports clubs and groups, resident businesses, the current operator and potential future operators, local schools and colleges, local and national governing bodies of sport, local Youth Councils, Sport England, LB Bromley, LB Southwark, LB Lewisham, LB Croydon, the Crystal Palace Park Trust, Historic England, 20th Century Society. Feedback was collected through a number of mechanisms and events including:

- Online questionnaire on the ‘On Your Marks’ website, from August 2018 – March 2019.
- Pop-up exhibition in the foyer of the NSC, from August 2018 – March 2019.
- ‘Coached by Community’ workshops open to the public in August and September 2018.
- ‘Trialling the Design Options’ workshops open to the public in October 2018.
- Online survey collecting feedback on the design options October 2018 – March 2019.
- BEAM High-impact public event in the park in November 2018.
- Community Conference in February 2019.
- Youth Council workshops, January – February 2019.
- Engagement with national governing bodies, statutory authorities, operators, resident businesses, the Park Trust, CPSP and the 20th Century Society has been ongoing throughout the study on a one-to-one workshop basis.

We have found that there is very strong community support for the retention of the NSC as a multi-sport venue, but that issues relating to accessibility, connectivity and the poor condition of the facilities and surrounding parkland require significant improvement. Issues that arose frequently in consultation included:

- The need to improve the routes to the NSC from the station and from Penge.

- The need to improve accessibility, in particular on and around the raised walkway.
- The need for adequate dedicated NSC parking.
- The poor condition of some of the current facilities including changing rooms.
- The uncomfortable environmental conditions in the main building caused by the pool and sports hall existing in the same space, lack of openable windows and working blinds.
- The need to retain facilities to meet current demand, in particular aquatics.

The Crystal Palace community has gone through a number of different consultation processes over recent years relating to proposals for the NSC and the park. An overriding message from the community is that they want to see the NSC improvements happen.

Design studies

The design team have developed options for each area of the site, which have been reviewed and appraised, and assembled into six site development ‘scenarios’ which provide the GLA with a range of routes and considerations. The scenarios range from the minimum intervention required to keep the NSC operational on a subsidy basis for the next 25 years, to more substantial redevelopments of the site to deliver significant improvement and opportunity.

Heritage and planning

Crystal Palace Park is a Grade II* registered park, and the NSC main building is also Grade II* listed. There are a number of other heritage assets on and around the GLA site. This study includes a heritage and planning appraisal of each of the design studies, highlighting opportunities and risks.

Our analysis has identified a degree of tension between the heritage values of the post-war modernist NSC development and the earlier 19th Century landscape design by Joseph Paxton, in particular relating to the raised walkway and the stadium. The 2007 park masterplan addressed some of these issues in favour of the Victorian landscape. This approach has been tested and challenged in this study, and the preferred development option represents a more balanced relationship between the two elements.

Outline Business Case

This study explores options for the future business plan and operation of the site, including management and governance, operations and opportunities for revenue generation to reduce the annual GLA subsidy currently required to keep the centre open.

The future of the NSC must be based on a sustainable business plan and facilities that are both more commercially astute and meet the needs of a modern fit-for-purpose sport and community hub. The re-development must address the lack of investment over the years and build on a sustainable and long-term management plan. Key to its commercial success is an increase in visitors/members and their dwell time, so making the facility more desirable to spend time at before and after sporting activities is an important driver.

This detailed feasibility study and options appraisal has found that doing nothing is no longer an option for the NSC, and a major redevelopment is required to deliver a commercially viable centre that meets the current and future sporting needs of Londoners and is affordable for the GLA.

The Outline Business Case (OBC) has been prepared in accordance with the HM Treasury “Guide to Developing the Project Business Case” and applying the Five Case Model Methodology.

The OBC makes the case for change, identifying a preferred option which optimises public value following a detailed options appraisal, setting out a potential procurement solution and confirming the affordability and value-for-money of the preferred option and the arrangements for the successful delivery of the project.

The Outline Business Case is based on high-level capital cost plan options, which align with the development scenarios.

Recommendations

The design studies and scenarios were reviewed with the GLA at the midpoint of this study, and have been further tested through consultation, and in relation to the emerging business plan and cost options.

The emerging preferred development scenario, described in section 6 and 16 and illustrated on the next page, involves the retention and improvement of the majority of the sporting

facilities currently offered at the NSC, with sports facilities expanded to meet demand where appropriate. It proposes to significantly improve the park setting of the NSC, opening up views, responding to the historic context and improving connectivity and accessibility. It looks to refurbish and enhance the heritage assets, including the main NSC building, whilst addressing some of the later ad-hoc additions to the site. The proposed masterplan aims to provide stronger central identity and a heart to the NSC, relocating community facilities to a central hub to encourage a vibrant place where sports, recreation and activity is encouraged throughout the day.

Whilst improving facilities for the existing sports users, the preferred scenario also looks to open up the site to a wider audience of park users and local community, encouraging more informal physical activity, wellbeing and a pathway into sport.

The preferred development option includes the following key design moves.

The main building and pools

The building is refurbished and reconfigured internally to create clusters of sports to improve wayfinding and accessibility. Health and fitness facilities are relocated to the front of the building to improve visibility with the aim to attract new users. Additional gym studios are constructed to enhance this offer. An internal glazed screen is proposed to separate the pools from the sports hall – along with refurbishment of the building façade and envelope, which would significantly improve the environmental conditions for users.

Extensive consultation and investigation has been undertaken in order to identify whether it should be recommended to retain and refurbish the 25m pool, or remove it and consolidate the aquatics facilities into the main building by installing a movable floor and boom in the 50m pool. The current direction is that retention of the separate 25m pool is preferred as this will allow the aquatics programme to expand to meet demand (for lessons and club training) and for the centre to retain its strategically important role as a competition and long course training venue. However this requires further review at the next stage of the project and once surveys of the 25m pool building have been undertaken to establish the condition of the structure.

2 Executive summary

The Hub

It is proposed to refurbish the disused bar building an adjacent indoor 5-a-side pitch to create a new hub at the heart of the centre. This will consolidate activity around one central space, creating a social heart of the NSC that all users can identify with. The hub would contain a bar/café, club rooms and social space, changing facilities for the outdoor sports, teaching space, conference facilities and flexible floor space that could be used for a number of facilities including sport-related workspace, the Crystal Palace physiotherapy clinic, soft play, accommodation, or sports-related retail.

The Lodge

Several design options have been explored for refurbishing the Lodge buildings. Due to the current poor condition and level of intrusive and extensive refurbishment that would be required, particularly for the tower, to meet current standards, this study recommends that the Lodge buildings are removed, facilities consolidated into the Hub building, and the area returned to parkland. This requires further review at the next stage.

Athletics

As acknowledged in the 2018 Sporting Facility Assessment and re-affirmed in this feasibility study, the capacity of the current stadium exceeds demand. This study recommends reducing the capacity to create a more affordable facility that can be more widely accessible to the local community, thus increasing use. Various options for reducing seating and built form were explored, with the preferred option being to remove the Jubilee Stand and replace it with a smaller, lightweight indoor athletics building, retain and refurbish the West Stand and seating directly below, and remove the remaining external seating, replacing it with grass banks that encourage informal spectating. Of the two stands, the Jubilee Stand compromises the NSC's integration into the park most, by blocking views, creating barriers and contributing to the poor quality of the boundary areas. The West stand is better integrated into the topography of the landscape and also forms part of the set piece of the original 1964 NSC, so it is recommended to retain the West stand and remove the Jubilee Stand.

Raised walkway

The raised walkway that runs through the centre of the site, along the historic 'Paxton Axis', creates another barrier in the site. It has been a topic of particular interest in discussions with many stakeholders during this study. Feedback suggests that many users find it makes access to the NSC more difficult

and is perceived as contributing to an uncomfortable and inaccessible environment, particularly for visitors approaching the NSC from Penge.

A range of options have been explored, from removing it entirely to retaining and reconfiguring it. Our studies have identified that there is merit in retaining at least part of the raised walkway as it is integral to the way visitors enter the Grade II* listed main building. In a reconfigured and refurbished form it could provide a fantastic location for views across the wider park landscape and also to the sporting activities below. However, a number of issues should be addressed including opening up the space below the structure to allow for north-south permeability, reconfiguring the Penge end with improved access, and constructing additional access points between ground and walkway level to improve connectivity.

Outdoor pitches

This feasibility study recommends the relocation of large sports pitches to the perimeter of the site, opening up the centre with the 'outdoor hub', which encourages a wider community use, informal physical activity, play as a pathway to sport and brings green space and parkland into the centre of the site.

The outdoor pitches are re-organised into clusters for each sport, to aid wayfinding.

Access & connections

A number of interventions are recommended to address the issues highlighted in the 'Site' section above. These include a new pedestrian and cycle route from Crystal Palace station, a new car-park location, the removal of traffic except service vehicles from the perimeter 'Jubilee Stand Road' to create a safer environment for pedestrians, cyclists and wheeled sports.

This preferred development option was identified through an options appraisal exercise that reviewed the proposals against a number of factors including: value for money, deliverability, social and community output, quality, and sporting value. The appraisal of the scenarios was undertaken with input from the GLA ensuring the Mayor's priorities and ambitions for the NSC are met.

Our analysis demonstrates that there are significant benefits to investing in the NSC in the near future to give it a new lease of life with a broader outreach and make it a more sustainable facility in the long term. The trend that emerged through

the options appraisal was that initial capital investment to consolidate, intensify and upgrade the facility leads to more positive social and wellbeing outcomes as well as offering improved revenue potential reflected in reduced whole-life-cycle costs.

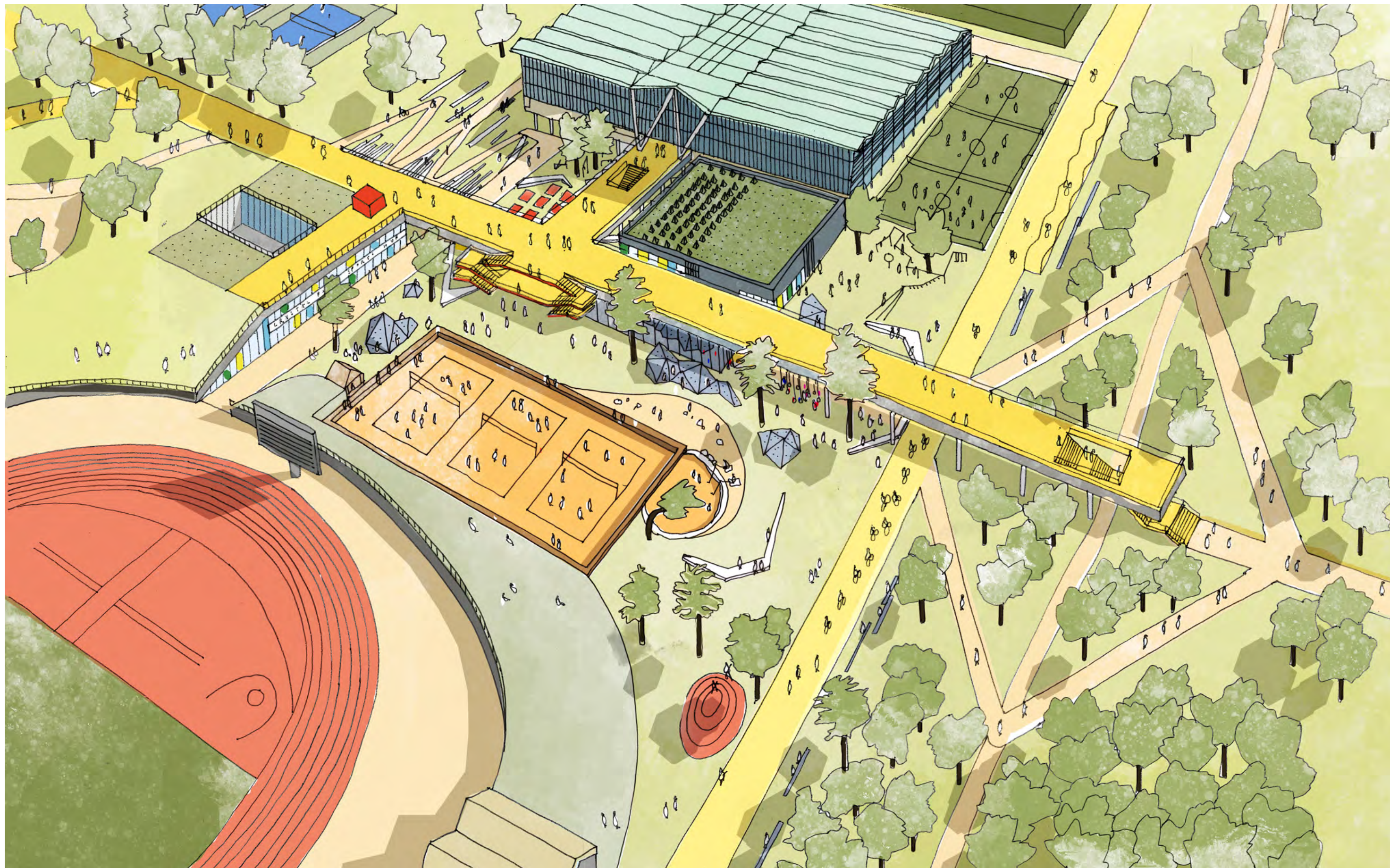
The preferred option was selected as it offers the greatest potential for integrating the centre into the park and meeting the landscape vision and objectives, as well as the biggest improvement in delivering social, community, wellbeing and sporting output within a sustainable facility that is accessible to all.

Summary

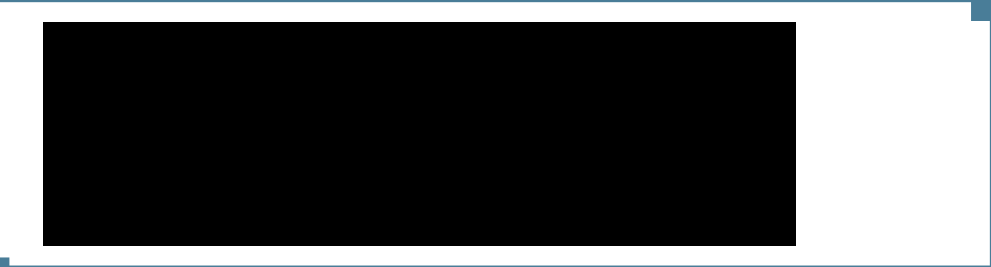
A new, improved Crystal Palace NSC would result in benefits that reach far beyond the site itself. A more accessible and open centre that continues to provide for high performance sport but also for greater and more diverse opportunities for local people will impact significantly on the health and wellbeing of the wider community of the five boroughs.

The proposed options presented within this feasibility study strike a clear chord with the Mayor's own leading strategic documents on sport and activity, reducing health inequalities, social cohesion and investment into community infrastructure.

The feasibility study has shown that, based on the current liabilities of both the building itself and the longer term financial commitment required by the GLA, there is a more effective and affordable route for the GLA to take that can secure the future of Crystal Palace and meet the growing demands for sport, physical activity and health and wellbeing across South London.



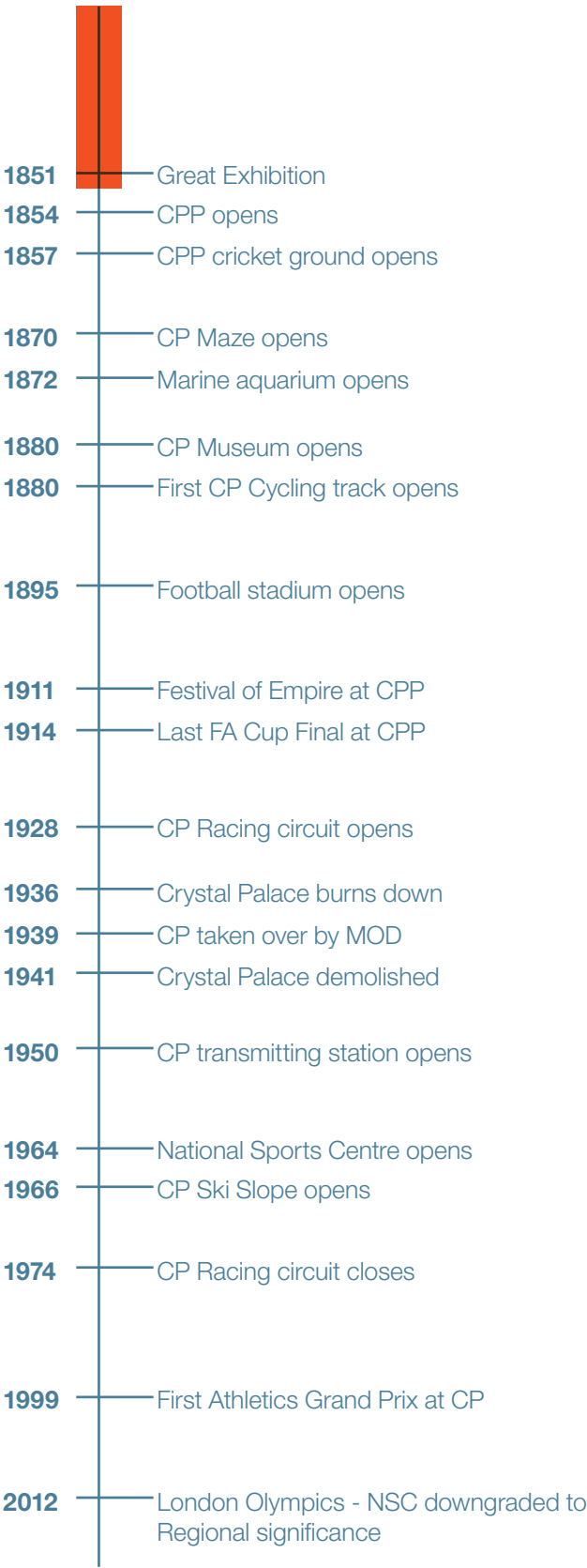
Above
Illustrative view of the
vision for the NSC



3 Site analysis & appraisal

3.1 Site history

3.1.1 Penge Common and the Great North Wood



The site now occupied by Crystal Palace Park was once part of the Great North Wood which covered a large area of South London, stretching from Deptford to Croydon. Only small areas of the Great North Wood remain, including Sydenham Hill Wood, half a mile north from Crystal Palace Park.

As the Great North Wood diminished over time as timber was felled for use in construction, Penge Common was formed between Penge and Upper Norwood. In the late 18th century Penge Place, a mansion house with a large estate, was built on the site of an old farm on the edge of Penge Common.

The land of Penge Place, Penge Common and some neighbouring rural properties was acquired by the Crystal Palace Company to build the park in 1852.

The Fresh Air Suburb

Upper Norwood has historically been advertised as a healthy suburb to live in and visit due to its relatively elevated position at the top of the 'ridge', lifting it above the London smog. This claim continued after the opening of the park, and 'fresh air' was one of the attractive features of a day trip to visit the Crystal Palace.



Top left
Historic sketch of Penge Common before the construction of the park.

Top right
1920s postcard advertising Upper Norwood as the Fresh Air Suburb.

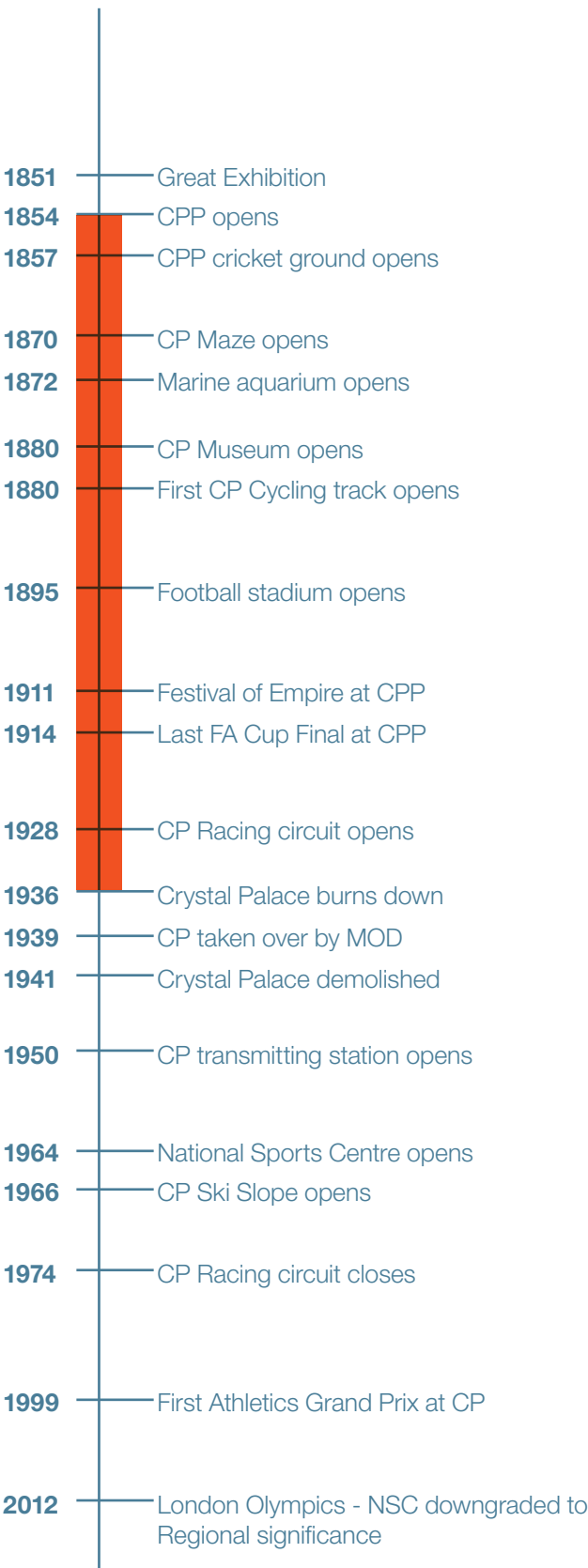
Left
1745 map of the Penge Common and the Great North Wood.



3 Site analysis & appraisal

3.1 Site history

3.1.2 The Crystal Palace Park - Paxton Era



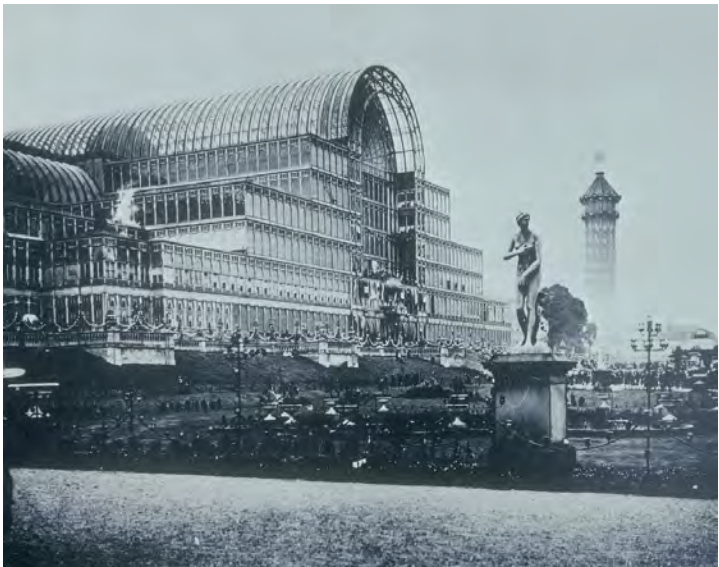
Crystal Palace Park was designed by Joseph Paxton and Edward Milner to house the Crystal Palace, which Paxton designed and built for the 1852 Great Exhibition in Hyde Park. The palace needed to be relocated to a permanent home, and Penge Common was identified as a suitable site.

Construction of the park and palace began in 1852 and was completed in 1854. The construction of the park was a very ambitious and expensive project. Paxton set out to rival the gardens of Versailles with the landscaping and waterworks. The main fountain jets reached a height of 85 metres. Due to the huge scale and expense of running the fountains, they were only turned on for an hour at a time, 4 to 5 times a year. This was a major national attraction, and thousands of visitors would attend the fountain displays. The construction of the waterworks systems cost more than the park and palace combined.

The park was intended to provide ‘refined recreation, calculated to elevate the intellect, to instruct the mind and to improve the heart.’ It encouraged outdoor activity, fresh air and recreation. The park also aimed to educate visitors, as it was designed to display the history of geology, evolution and design in the range of landscapes and sculptures, united by a Grand Central Walk.

The golden era of the park was 1854-65, whilst it was still under the direction of Paxton. After Paxton’s death it was subject to substantial and frequent change. The fountains were the first to go, as the complicated engineering and scale of the machinery was not financially sustainable.

In 1911 the whole site was transformed for the Festival of the Empire.



Top
Image of the park with grand fountains.

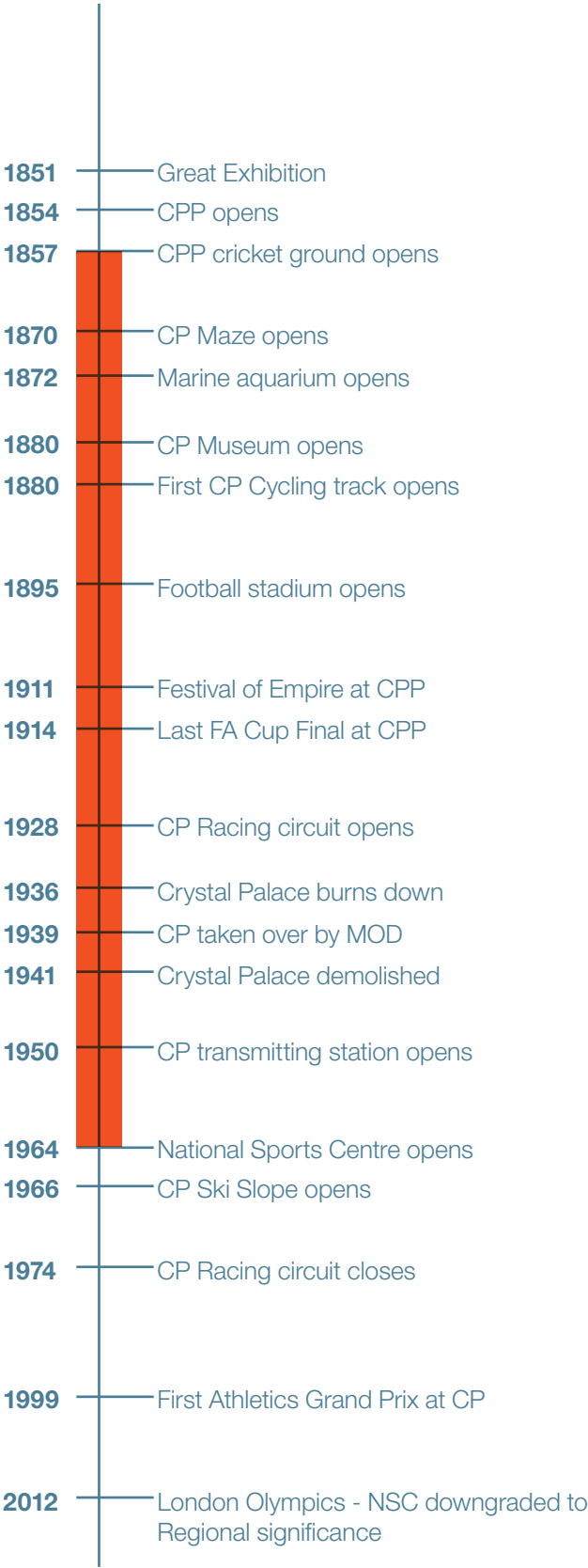
Above left
Photograph of the Crystal Palace.

Above right
Photograph of the Festival of the Empire, 1911.

3 Site analysis & appraisal

3.1 Site history

3.1.3 Sports use pre-NSC

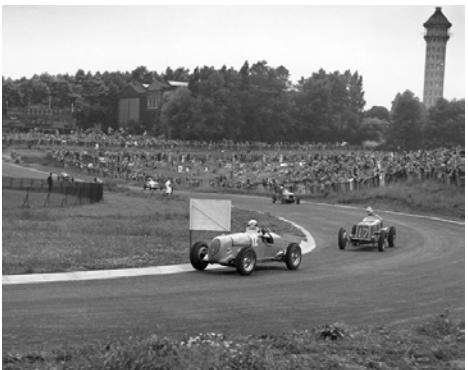
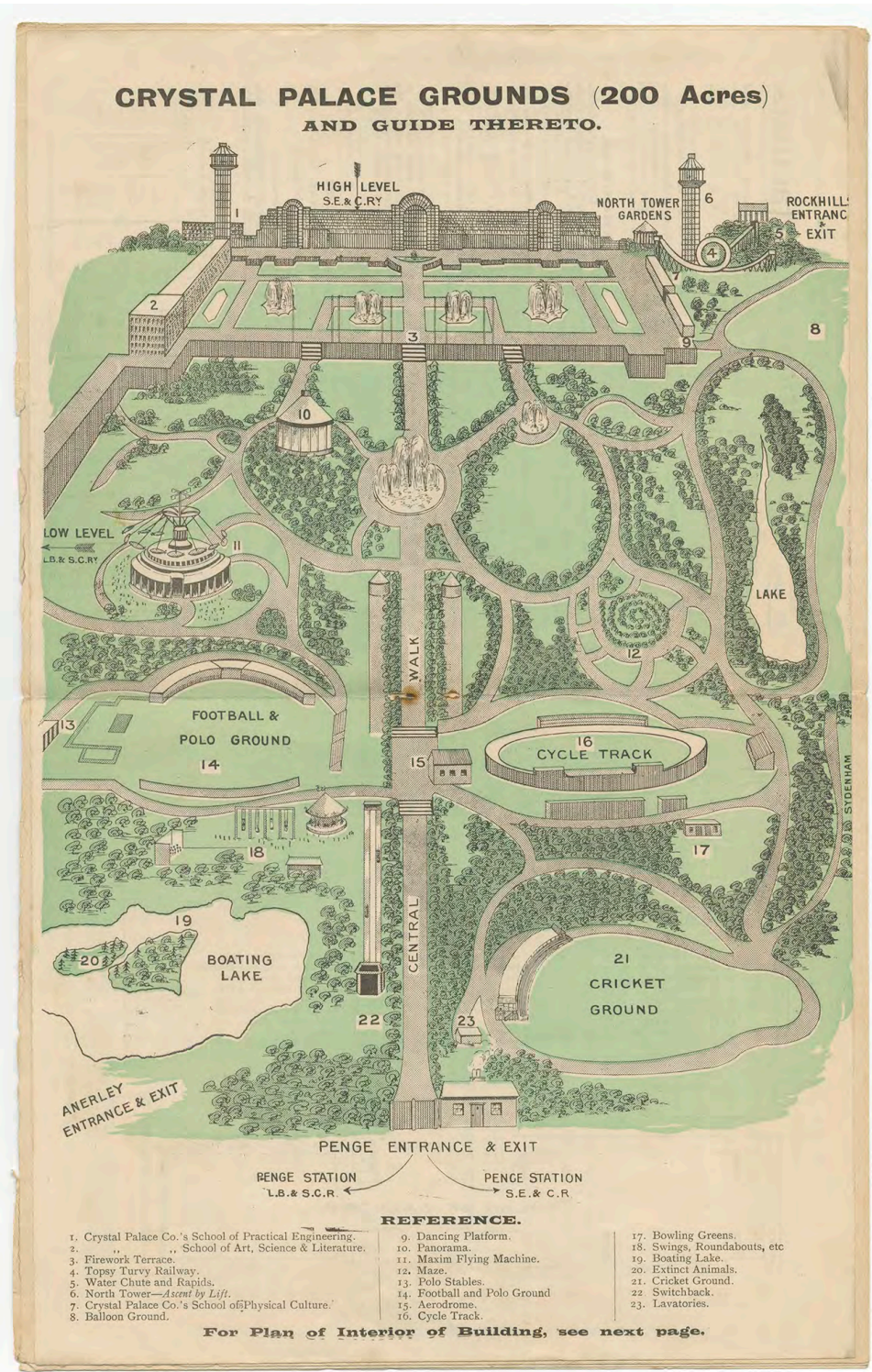


The park has a rich sporting heritage that pre-dates the National Sports Centre.

The cricket ground first opened in 1857 whilst the park was still enjoying its golden era under the direction of Paxton. In 1880, a cycling track opened and cycling has remained an important sport at the site ever since.

In the 1890s the fountains were dismantled, the grand fountain basins filled in and a football and polo ground and new cycling velodrome built in their place. FA Cup finals were held in the football ground from 1895 to 1914.

In 1928 a motor racing circuit opened and was used for Grand Prix events. The circuit was a popular feature of the park for many decades and was also incorporated into the 1964 design of the NSC.



Left
Map of the park with fountain basins converted to football ground and cycle track, c. 1895.

Top
Cycling event at Crystal Palace.

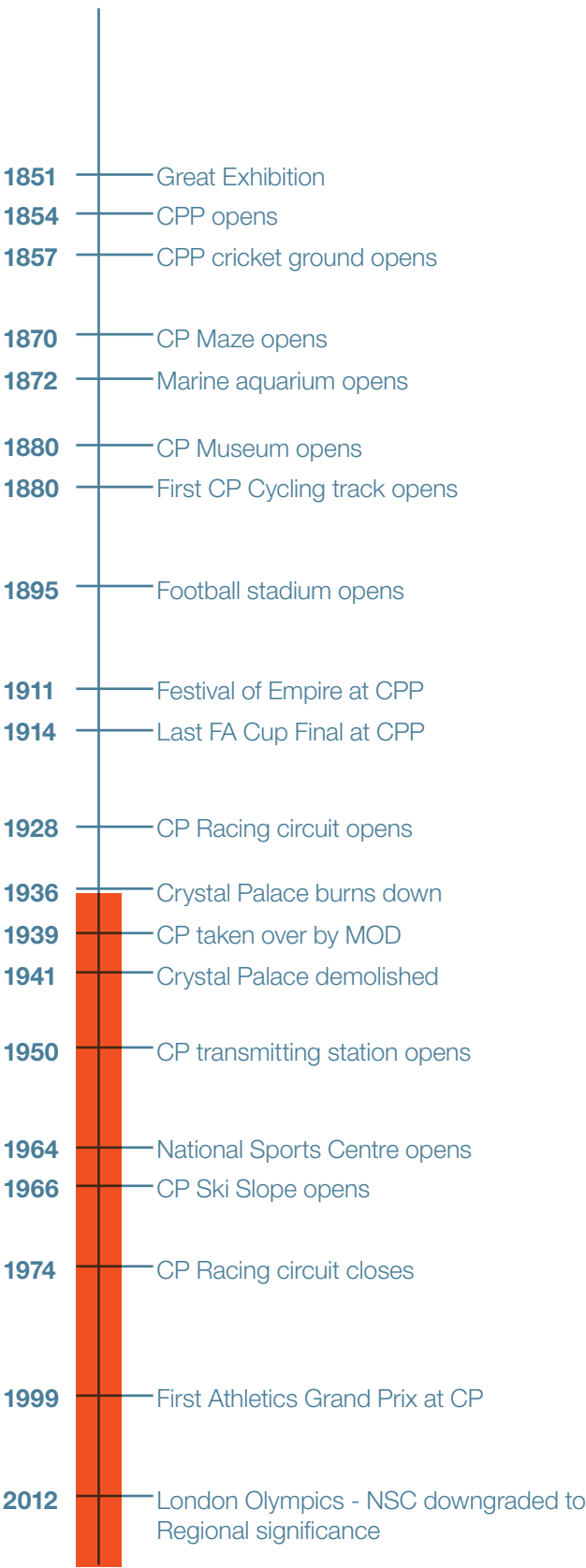
Middle
Motor racing event at Crystal Palace

Bottom
FA Cup final at Crystal Palace, 1905.

3 Site analysis & appraisal

3.1 Site history

3.1.4 The decline of the Victorian park



The Crystal Palace was destroyed by fire in 1936. Following this, the park quickly began to fall into disrepair. The site of the palace, the upper terraces, remained closed for over 40 years.

The whole park was closed during WWII and used for bomb rubble storage and dismantling damaged vehicles. This severely damaged the original landscape and topography and many original trees and planting areas were destroyed.

Most of the stonework was sold during the 1950s.

Over the period between 1945-1960 many plans were proposed for rebuilding on the palace site and redeveloping the park, but none were implemented.



Top left
Remains of the Crystal Palace after the 1936 fire.

Top right
Derelict Victorian structures in the park.

Bottom left
Overgrown landscaping in the park.

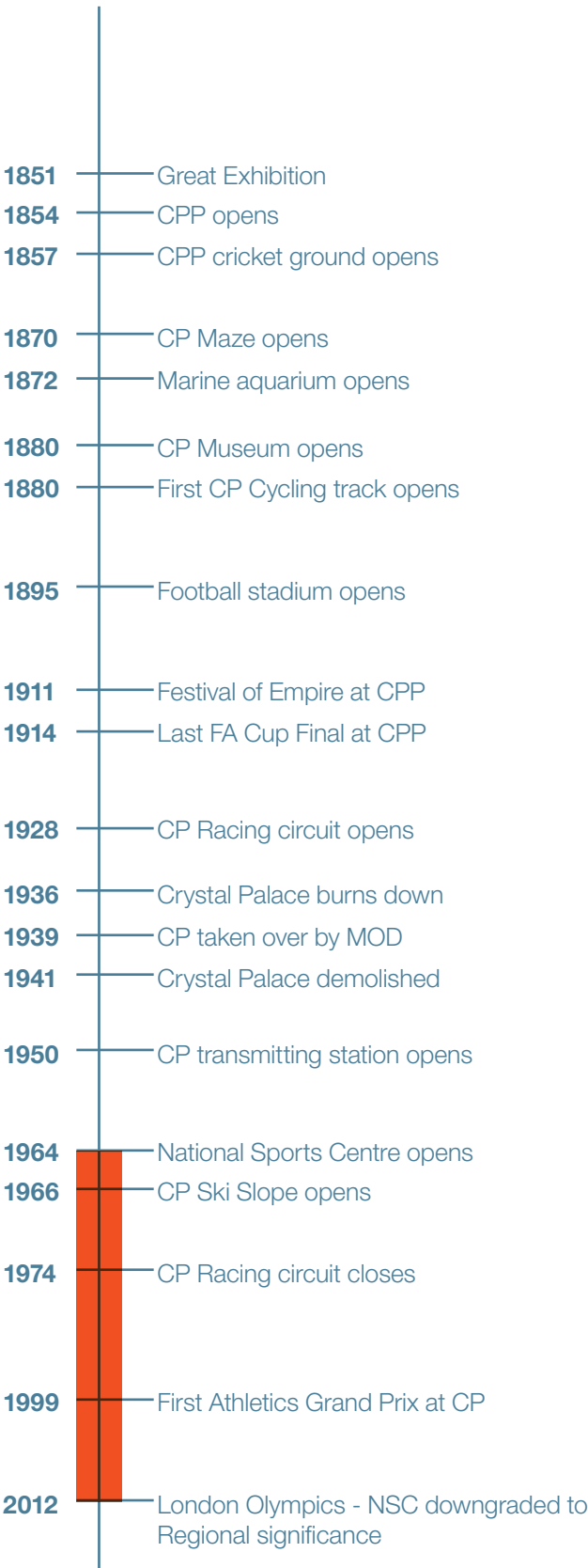
Bottom right
View across the park.



3 Site analysis & appraisal

3.1 Site history

3.1.5 The National Sports Centre

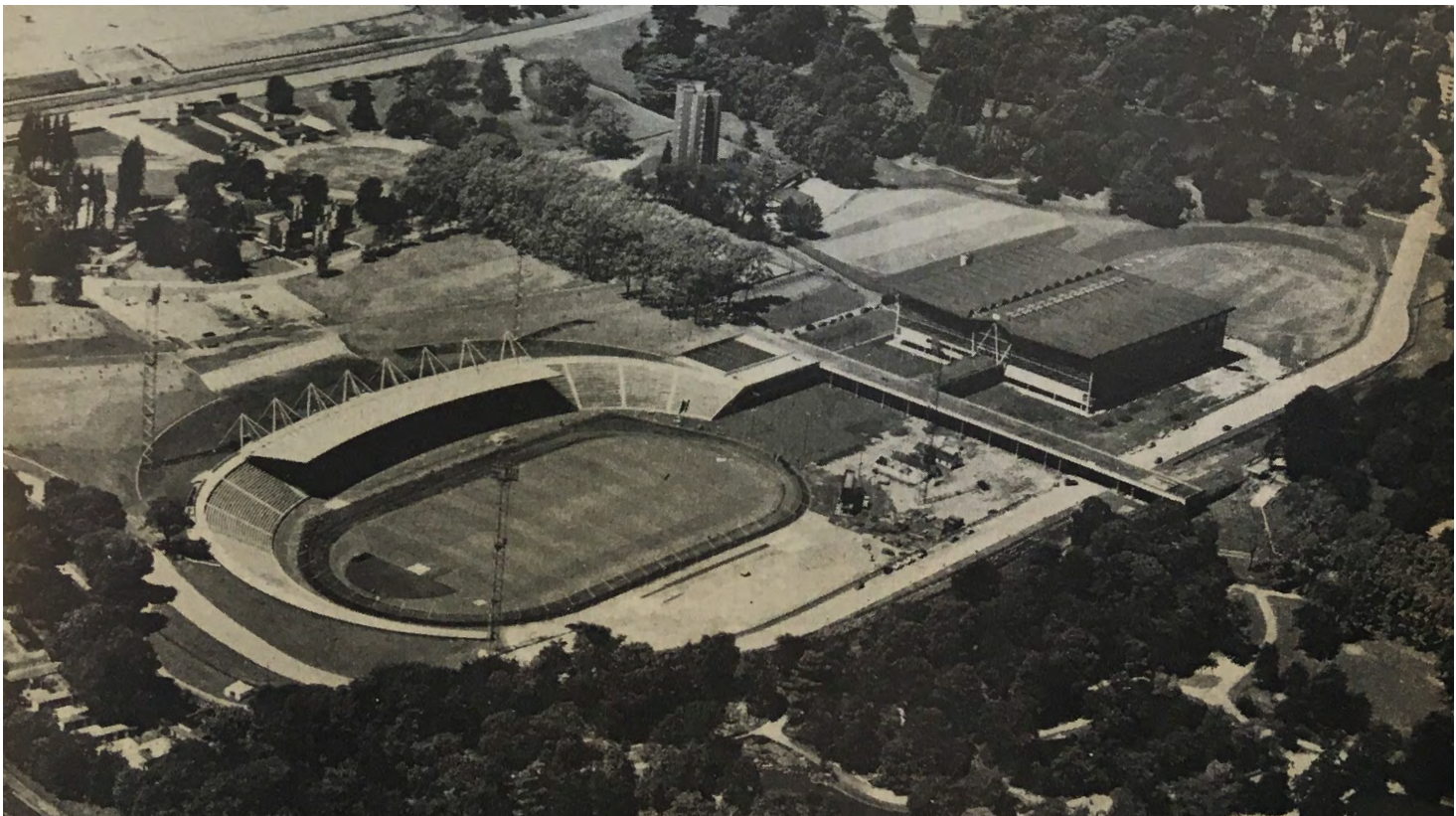


The National Sports Centre was designed by Leslie Martin for London City Council and opened in 1964. It was the first multi-sport facility of its kind in Europe. It was designed to house facilities for a wide range of sports, with a particular emphasis on swimming as there was no other Olympic sized swimming pool in southern England at the time.

The NSC was unique in the range and scale of facilities it offered, and also in its ambition to host international events for multiple different sports - swimming, athletics and indoor court sports. It also provided education and conference facilities, and accommodation facilities for international visitors and training camps. It is these unique ambitions, alongside the mid-century architecture, that have led to its Grade II* listed status.

The NSC was built at a time when the park was in a bad state of disrepair, and was intended to give the park a new lease of life. Restoration and conservation of the Victorian park was unlikely to have been a high priority at the time.

The NSC has been home to many sports and has an important legacy. It has a history of welcoming new and innovative sports, such as a dry ski slope in the 1960s, beach volleyball, and underwater hockey. The NSC hosted the London Grand Prix international athletics events in the stadium for many years. It was one of the 5 National Sports Centres in the UK run by Sport England.



Top
Aerial view of the National Sports Centre, 1964.

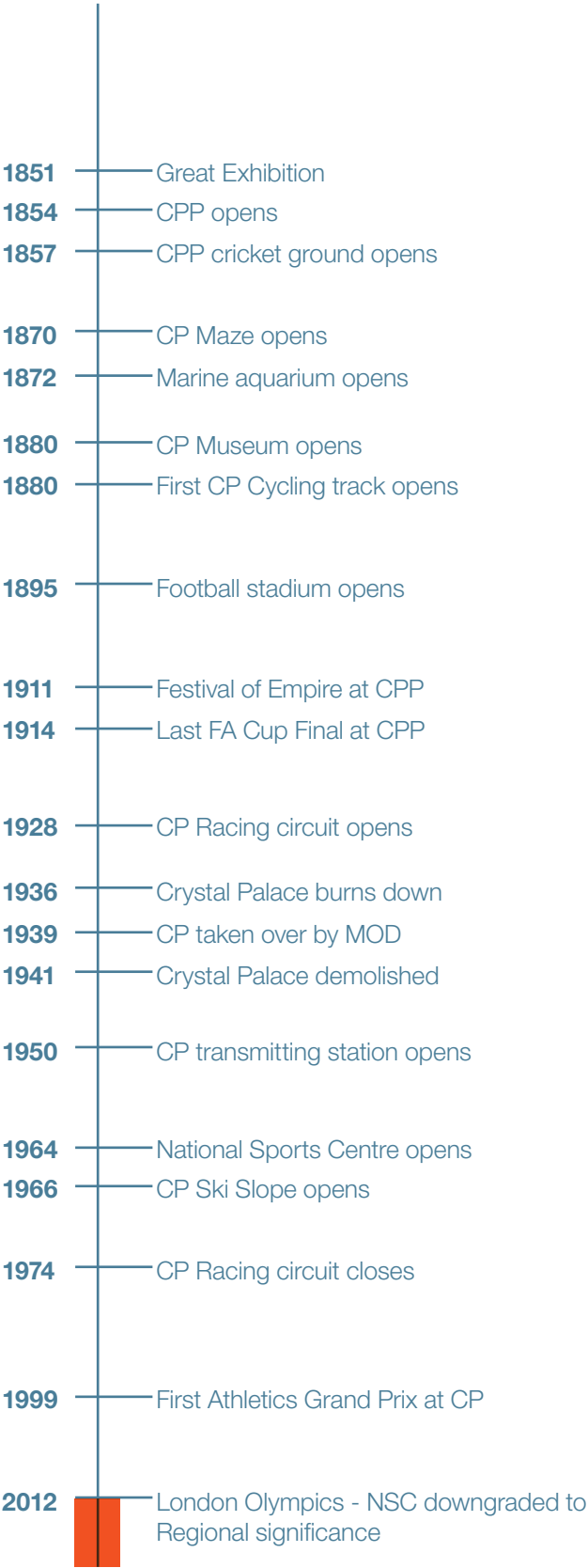
Bottom left
Crystal Palace dry ski slope, c. 1960.

Bottom right
Mo Farah at the Aviva London Grand Prix at Crystal Palace, 2012.

3 Site analysis & appraisal

3.1 Site history

3.1.6 Post-London 2012



Following the construction of the Olympic Park for London 2012, Crystal Palace NSC was downgraded to ‘Regional’ rather than ‘National’ significance by Sport England. This affects the funding available and the types of events that happen at the centre.

The NSC still plays an important role in providing a large range of sports and community facilities for South London and in some cases the south of England.

This feasibility study intends to develop a plan to re-define the NSC in the post-2012 era to secure a sustainable future as a sports, recreation and community asset.



Top left
Swimming gala in the 50m pool.

Bottom
Event at the skate park.

Top right
Cycling event around the NSC and park.

Middle left
Poster for London Royals basketball match.

Middle right
Gymnastics at the NSC.

3

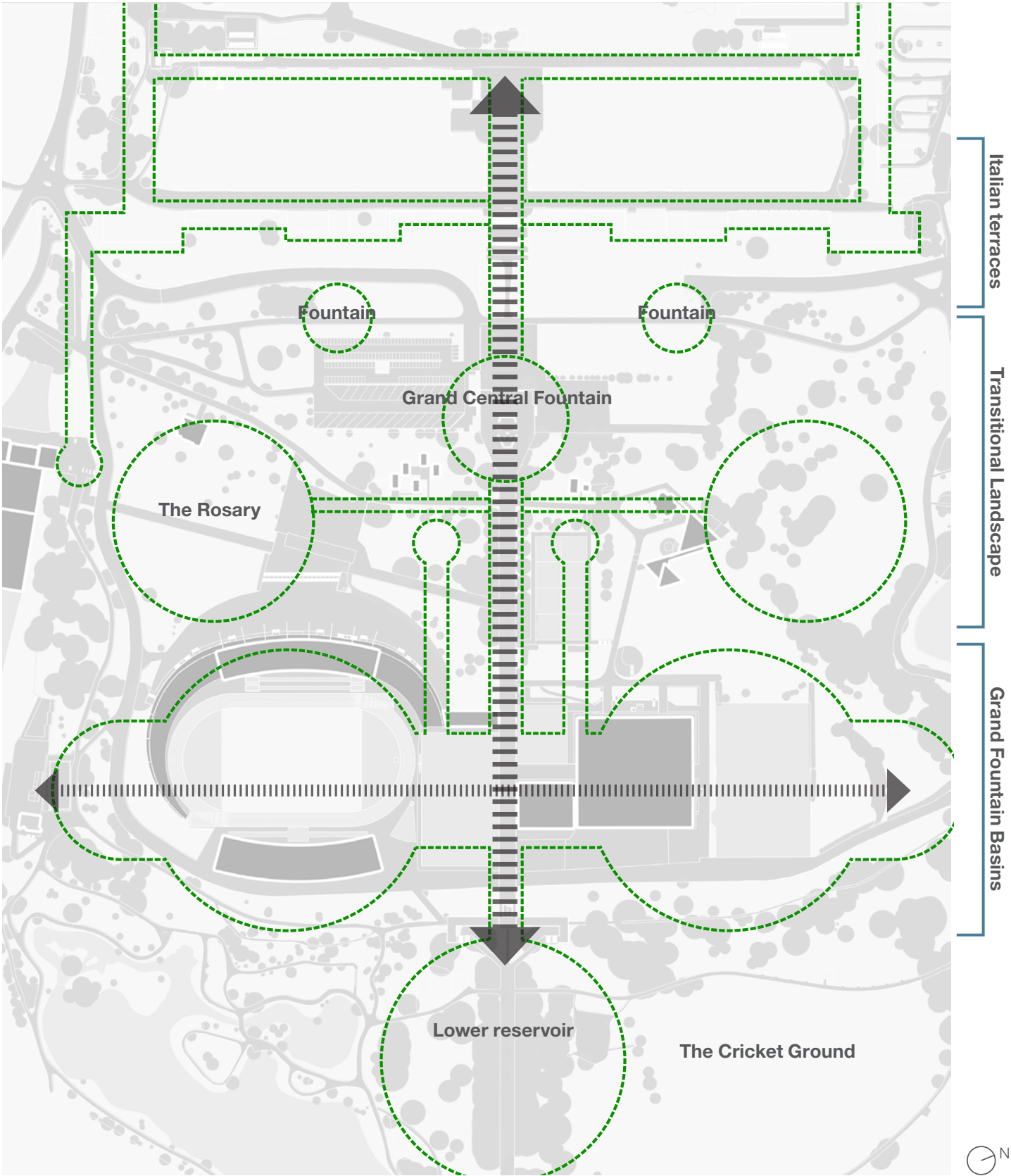
Site analysis & appraisal

3.2

Site development

3.2.1

Underlay of the Victorian Park



These diagrams demonstrate how the history of the site as described in section 3.1 are manifest in the physical features of the park and site, and how the ad-hoc growth since the completion of the NSC in 1964 has eroded these features and affected the relationship between the park and the sports centre.

Historic landscape character

The Crystal Palace and Park was designed by Joseph Paxton and built under his direction between 1852 and 1855.

The Crystal Palace Park Conservation Management Plan (CPP-CMP), Couch 2007 describes the ambition of the project: “The construction of the Palace and Park was an exceptionally ambitious and expensive project. Paxton set out to surpass Versailles with the spectacular Park waterworks.”

Grand Central Walk

The Grand Central Walk or Paxton Axis (as it is referred to in this report) is the main unifying element within the Park. Originally 29m wide the axis has undergone many changes in the lifetime of the park. Today the axis varies in width and surface treatment, and whilst the lower and central sections are still tree-lined, only the lower section is consistent. The biggest change to the Paxton Axis was the introduction of the elevated walkway in the 1960’s as part of the NSC building.

The Rosary

The CPP-CMP describes the Rosary as “a large, circular, arched, wrought-iron structure, planted with roses. There were 120 lattice columns with 12 arches 32 feet high and 16 feet wide, roofed with corrugated iron and hidden with ‘clustering roses’.”

Historically the Rosary was a focal point within the park, it’s elevated position offering views out over the Grand Fountain basins and across the park. The Rosary was removed in 1904 and in the 1960s the landform was damaged by the construction of road infrastructure for the NSC.

The Grand Central Fountain Basins

The grand fountains opened in 1865 and were relatively short lived - by 1874 they were broken and overgrown before being filled in 1894. Following this there was a cycle track and athletics track in the northern basin and a football stadium in the south.

Transitional Landscape

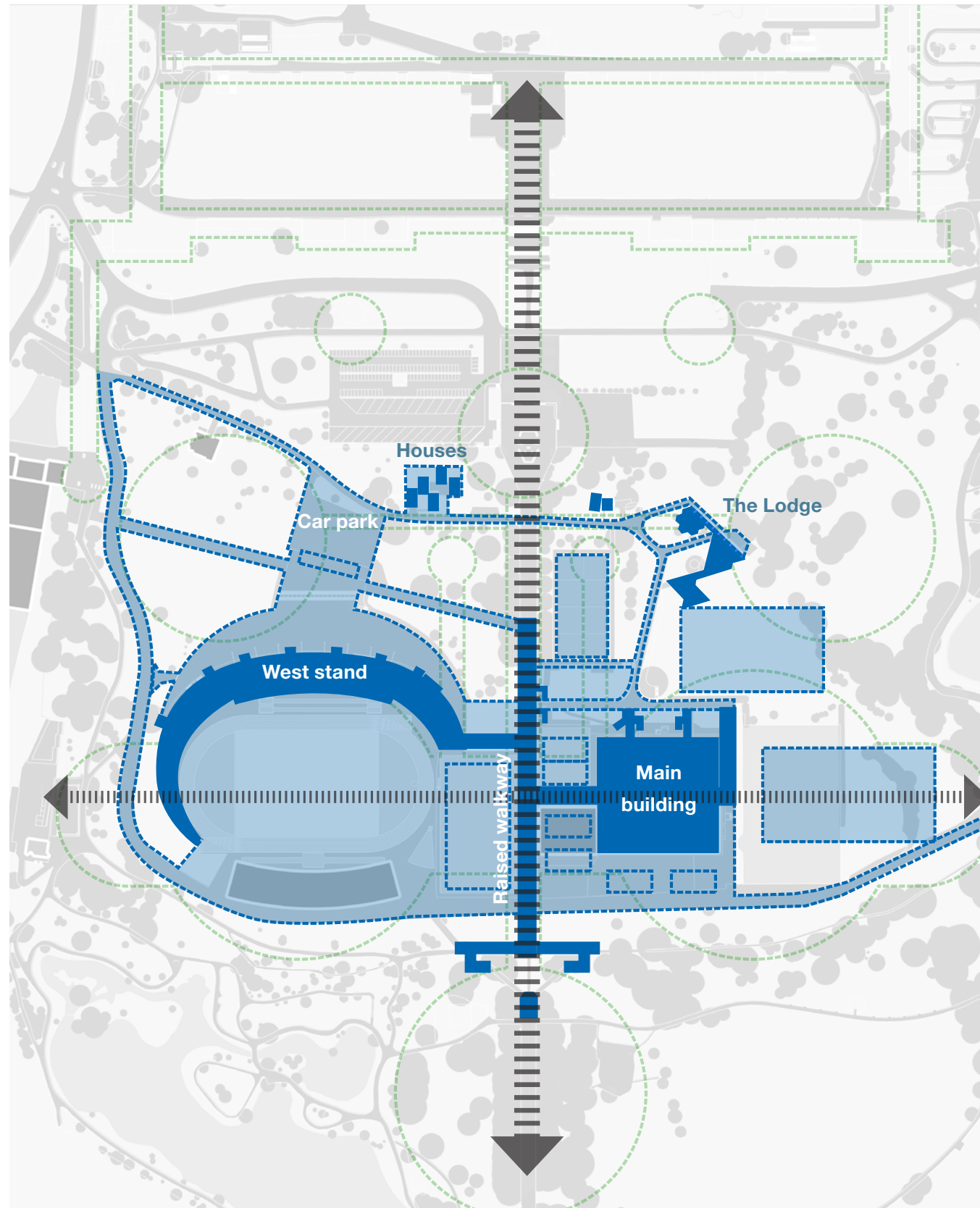
The Transitional Landscape in Paxton’s design was just that, a transition between Italian terraces to the west and the Grand Fountain Basins. They incorporated pre-existing cedars and a cherry tree and introduced island beds of rhododendrons which were fashionable at the time.

The transitional area included undulating lawns with beds of rhododendrons and shrubs, known as the Valley of Rhododendrons.

3 Site analysis & appraisal

3.2 Site development

3.2.2 1964 layout



The 1964 layout

The construction of the NSC, raised walkway and stadium significantly altered the character of the landscape, placing built form rather than open space at the heart of the Park.

Whilst it was a major intervention it did respond to the alignment of the Paxton Axis and the Grand Fountain basins, and the built form of the West Stand and main building was generally sympathetic to the park setting.

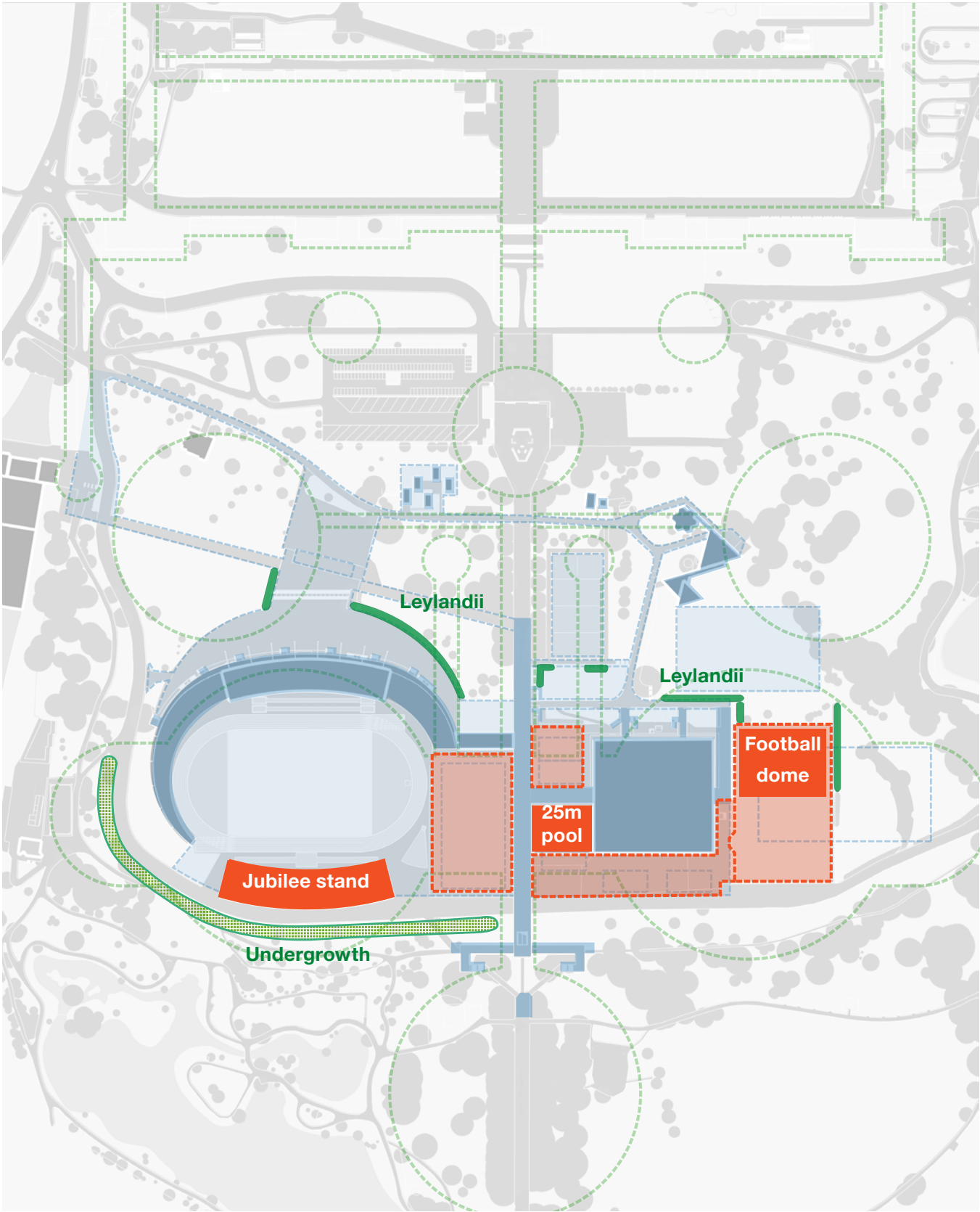
However, the associated road infrastructure was not sympathetic to the park setting and the transitional landscape became dominated by hard-standing.

The development significantly altered the character of the Central Axis through the introduction of the raised walkway - an elevated concrete structure that provides a high-level route across the NSC site and into the main entrance of the NSC. In terms of Paxton's vision of the park this has been problematic, interrupting views and breaking the direct route through the park.

3 Site analysis & appraisal

3.2 Site development

3.2.3 Ad-hoc growth



Unlikely bedfellows
A major sports centre and a park are unlikely bedfellows. To date the evolution of the two has not been harmonious with increasing separation in terms of physical and visual connection.

Previous reports have made the point that the NSC is incongruous with Paxton's vision for the park; but while the NSC was not wholly sympathetic both visions do share characteristics in ambition, simplicity, scale and clarity.

Ad-hoc growth
This simplicity has been eroded over time by the ad-hoc growth that has occurred around the NSC and its boundaries with the park.

Barriers and fencing have been installed creating impermeable boundaries. New structures - the Jubilee Stand, 25m pool and football dome - have been constructed, which are less sensitive to the park setting than the original NSC. There has been un-managed growth of shrubs, undergrowth and poorly planned Leylandii planting in the park around the NSC.

The park and the NSC have turned their backs on each other, which has affected permeability, routes, views and overall visitor experience.

Current parking along the central section of the Paxton Axis is inappropriate, and parking generally around the NSC site is sprawling and poorly managed.

The following pages address issues of access, barriers, legibility and shared programme to examine how the NSC and the park can develop greater cohesion, building on the unique character stemming from their juxtaposition.



Top right
The Grand Fountain Basins from the Builder 28.6.1856 (courtesy Jan Piggott).

Bottom right
Aerial Photograph of NSC dated 1965.