

Chapter 23

Revitalising Mine Dump

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Introduction

The Mooifontein Sports Centre project is an ambitious urban regeneration initiative located under the Mooifontein mine dump, an area historically disconnected from the surrounding communities of Diepkloof, Soccer City, and the NASREC precincts. Situated within Johannesburg's industrial mining belt, the site presents both challenges and opportunities for revitalisation. The vision for the project is to transform this forgotten landscape into a thriving sports hub, with a key focus on promoting women's football, particularly through the development of a football academy for Banyana Banyana, South Africa's national women's football team.



Figure 1: Proposed site. Johannes Schoeman 2024

The revitalisation of the Mooifontein site not only seeks to support sports development but also addresses critical issues of social integration, environmental sustainability, and urban connectivity. By cutting the mine dump in half and designing a hill over the N1 highway, the project introduces a new urban landscape with multiple access points, connecting the area to nearby neighbourhoods. Central to the design is the creation of inclusive spaces—ranging from athlete housing and sports facilities to social housing and public amenities—that aim to bridge socio-economic divides and foster community interaction.

At the heart of this project is the belief that sport, specifically women’s football, can be a powerful force for social change. By providing world-class facilities for Banyana Banyana and promoting grassroots football, the Mooifontein Sports Centre has the potential to become a symbol of unity and empowerment for women in sports while also contributing to the broader urban fabric of Johannesburg.

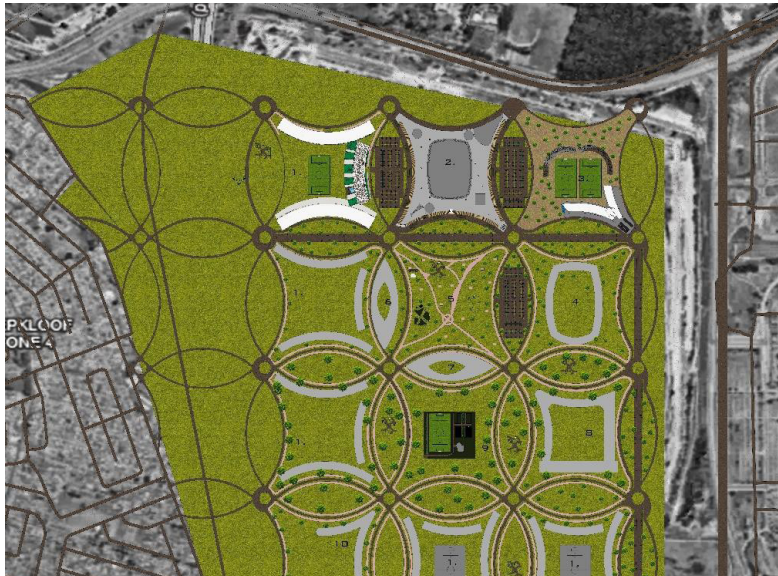


Figure 2: Proposed site plan. Johannes Schoeman 2024

Methodology

The first step in the methodology involved an in-depth site analysis. The site, a former mine dump, presented both environmental challenges and opportunities for redevelopment. It is strategically located between the communities of Diepkloof, Soccer City, and the NASREC precinct. These areas lack cohesion due to historical spatial divides. To address this, the design proposal included cutting the mine dump in half and creating a hill over the N1 highway to serve as a central landmark. This not only bridged the physical divide but also created multiple access points, improving the connectivity between the precincts.

The urban design approach focused on establishing a walkable, accessible environment by designing road layouts at 400-metre intervals, enhancing the connection between the sports centre, public amenities, and social housing. Functional zoning is used to define key areas such as sports facilities, athlete housing, and social housing while these zones are integrated through landscape design and public spaces. The design allows for moments between all the roads to form 'crosses'. These spaces were turned into parking, meditation areas, food gardens and play zones for kids.

In terms of social integration, the project aims to foster inclusivity by providing 2100 social housing units. These are designed to promote interaction between residents of different socio-economic backgrounds, with housing types ranging from 1 to 3 bedrooms to accommodate a variety of household sizes.

To ensure that a project is environmentally responsible, sustainability is a core focus. The design incorporates green infrastructure such as energy-efficient building systems, green roofs, and rainwater harvesting. These strategies contribute to the broader vision of a green city. By aligning with sustainability goals, the project aims to create a resilient and eco-friendly urban environment.

Design Outcomes

The project has multiple points of interest designed in such a way that promotes togetherness and the possibility for a unified community. In consideration of the idea of a cohesive and inviting community, the following spaces are proposed: sports facilities, athlete housing, public spaces and housing. These programmes are briefly outlined below:

Mooifontein Sports Centre

The sports centre is designed in such a way as to promote football. Inside the sports centre is a public gym (open to the larger community) as well as a team office and gym specifically for the Banyana Banyana team. Towards the exterior of the building, there is a clubhouse with restaurants and shops to sell Banyana Banyana related merchandise. There are also two practice fields. These can be seen from the coach's and manager's offices. Adjacent to the fields are two grandstands accommodating a total of 500 spectators.

Athlete Housing

Being near Soccer City allows for the opportunity to create athlete housing at the site. Not only does this allow Banyana Banyana to live on the site, but it also means that players are able to be in very close proximity to Soccer City for significant matches.

Public Spaces

Public spaces are central to the Mooifontein Sports Centre project, serving as key connectors between the sports facilities, housing, and surrounding neighbourhoods. The design integrates a network of green spaces, plazas, and pedestrian pathways that not only enhance accessibility but also promote social interaction and environmental sustainability. These spaces provide areas for recreation, relaxation, and community engagement, including public plazas designed for events, markets, and gatherings. The strategic placement of such spaces ensures easy access to all parts of the site while creating a welcoming environment for residents,

athletes, and visitors alike. By fostering social cohesion and supporting ecological regeneration, public spaces contribute to the overall vision of the project as a unifying, inclusive urban hub.

Social Housing

Social housing is a vital component of the Mooifontein Sports Centre project. It is aimed at promoting inclusivity and bridging socio-economic divides. The development includes 2,100 housing units, offering a range of apartment types to accommodate different household sizes and needs. These include one- to three-bedroom apartments designed to cater to both individuals and families of varying income levels. Housing is arranged to encourage interaction between residents, with shared communal spaces and easy access to public amenities. This mixed-income housing approach encourages a sense of community while addressing the area's housing demand. By integrating social housing into broader urban design, the project created a more cohesive and inclusive living environment, supporting both economic diversity and social unity.

Below is a brief outline of the various apartment types:

- **One-Bedroom Apartments:** These units are ideal for single individuals or couples. They feature a compact yet functional layout with a bedroom, a living area, a kitchenette, and a bathroom. The design maximises space efficiency and natural light, making the units feel open and comfortable despite their smaller size. These apartments are suited to young professionals or students looking for affordable housing.
- **Two-Bedroom Apartments:** Designed for small families or shared living arrangements, these units offer more space. They contain two bedrooms, a living area, a kitchenette, and a shared bathroom. The layout encourages family interaction while maintaining privacy for the occupants. These apartments are intended to provide a balance between affordability and space, catering to small families or roommates who desire to live in a communal environment.

- Three-Bedroom Apartments: These apartments are the largest of the three types and are designed for larger families or residents seeking more living space. They include three bedrooms, a spacious living room, a larger kitchenette, and one to two bathrooms. The layout prioritises family living, with ample room for shared activities and individual privacy. These units provide flexibility for growing families and are positioned to support residents with higher space requirements while maintaining affordability.



Figure 3: Apartment layouts. Johannes Schoeman 2024

Each apartment type is carefully integrated into the overall design of the social housing complex, ensuring that residents have access to shared amenities and public spaces that foster community interaction.

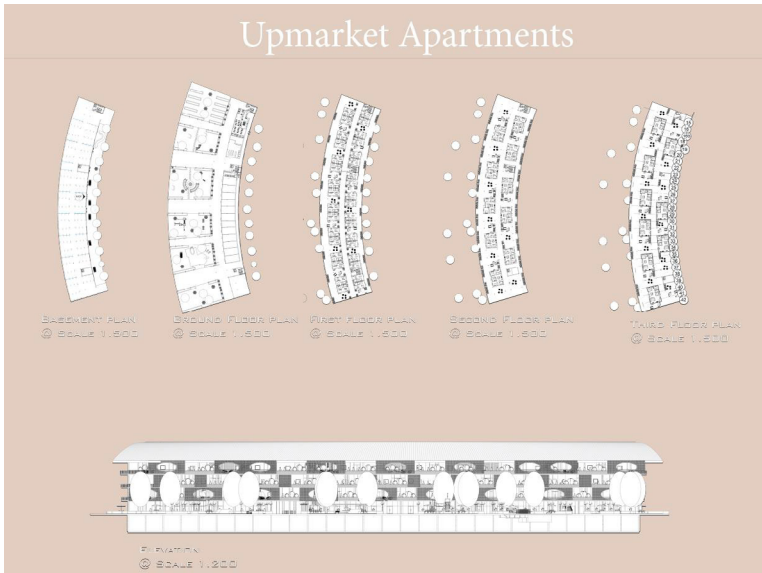


Figure 4: Upmarket apartment floor plans. Johannes Schoeman 2024

Mooifontein Sports Stadium

The Mooifontein Stadium lies at the heart of the sports facilities in the Mooifontein Sports Centre. It is designed to serve as a premier venue for both professional and community football. As the home of South Africa’s national women’s football team, the stadium meets international standards with a high-quality football pitch, modern spectator seating, and facilities for media, players, and VIPs. Its design emphasises not only high-performance sports but also inclusivity, providing training grounds and fitness centres for local teams and athletes. The stadium’s multiple functionalities extend beyond professional matches. It features public spaces and community areas that are accessible for local events, amateur football, and social gatherings. This integration of world-class sports facilities with community-oriented spaces ensures that the stadium acts as a unifying hub for sports development and social engagement, promoting the empowerment of women in

sports while creating opportunities for local participation and interaction.

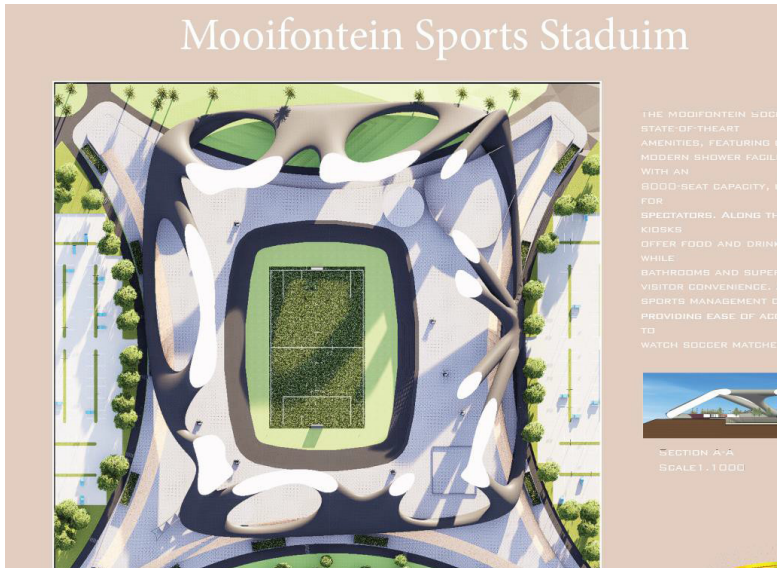


Figure 5: Proposed Stadium Design Johannes Schoeman 2024

Mooifontein Botanical Gardens:

The botanical gardens at the Mooifontein Sports Centre are a vital part of the overall design, serving as tranquil, green retreats within the bustling urban environment. These gardens not only provide space for relaxation but also play a key role in promoting ecological sustainability and community well-being. Designed with a variety of indigenous plant species, the gardens showcase South Africa's rich biodiversity while supporting local ecosystems. Pathways, shaded seating areas, and water features invite visitors to engage with nature, providing a serene atmosphere for reflection and leisure. In addition to their aesthetic and environmental value, botanical gardens serve as educational resources, with signage and interactive elements that teach visitors about native plants and the importance of environmental conservation. By integrating green spaces within the sports centre, the botanical gardens offer a balance between active

recreation and peaceful, restorative environments, making them a central element of the project's commitment to sustainability and community engagement.

Impact and reflection

The Mooifontein Sports Centre project promises to have a profound impact on both the local community and the broader landscape of urban development in Johannesburg. By integrating public spaces, social housing, and world-class sports facilities, the project creates an inclusive environment that promotes social cohesion, sustainability, and community empowerment. The design fosters interaction across socio-economic divides by providing spaces where people from diverse backgrounds can come together for recreation, education, and shared experiences. The inclusion of social housing, alongside the development of professional sports facilities, such as the Banyana Banyana stadium, ensures that the project serves both elite athletes and everyday citizens, reflecting a commitment to equity and accessibility.

A key reflection on the project is the significance of balancing modern urban development with social responsibility. The integration of green spaces, such as botanical gardens, demonstrates the importance of environmental sustainability in urban design, providing not only ecological benefits but also promoting mental and physical well-being for the community. Furthermore, the project highlights the role of sports as a unifying force, with the stadium acting as both a symbol of empowerment for women's football and a platform for local talent.

In retrospect, the Mooifontein Sports Centre project has proven that thoughtful design can create spaces that transcend functionality, becoming vital to community building, social integration, and environmental stewardship. It also reinforces the notion that architecture and urban design can serve as powerful tools for addressing broader social issues, from housing inequality to gender empowerment in sports. The lessons learned from this project emphasise the need for future developments to

be inclusive, sustainable, and community focused, ensuring long-term positive impacts on both people and the environment.

Conclusion

In conclusion, the Mooifontein Sports Centre project stands as a transformative initiative that not only revitalises a historically neglected site but also serves as a beacon of social equity and community engagement. Through the thoughtful integration of public spaces, social housing, and world-class sports facilities, the project creates an environment that encourages interaction and inclusivity among diverse groups. The emphasis on women's football, particularly through the establishment of a state-of-the-art stadium for Banyana Banyana, underscores the potential of sports to empower and inspire individuals while promoting gender equality.

Moreover, the incorporation of botanical gardens and green spaces highlights the project's commitment to environmental sustainability, enriching the urban landscape and enhancing the quality of life for both residents and visitors. The lessons learned from this project demonstrate that urban design can effectively address pressing social issues while contributing to the ecological health of our communities.

Reflecting on the impact of the Mooifontein Sports Centre, it is evident that the project not only meets the immediate needs of the community but also lays the groundwork for future developments that prioritise inclusivity, sustainability, and social responsibility. By embracing a holistic approach to urban and architectural design, architects can create spaces that not only serve functional purposes but also resonate deeply with the communities inhabiting such spaces, ultimately fostering a sense of belonging and pride among all users.