

Chapter 5 discusses the design response in relation to the previous analytical chapter. The 3 major scales of framework interventions are presented and discussed within the context of Magazine Hill

Chapter 5 – Proposed Frameworks

5

5.1 Background

The proposed framework focuses on 3 major scales of intervention: the urban framework (the monumental landscape), the precinct framework (Military Reserve) and the site framework (Magazine Hill). Each framework will be separately discussed for the purpose of the dissertation.

5.2 Proposed Urban Framework

The proposed urban framework concentrates on the vast indigenous landscape where Monument Hill, Magazine Hill and the Groenkloof Nature Reserve meet. This hilltop landscape contains numerous South African military monuments as well as commemorative architectural memorials. In the urban framework, a series of weather balloons are proposed that rise once a month at night times from all monuments located on the hills, connecting the historical sites by forming light beacons over the dark landscape. This activity does not only highlight the position of Magazine Hill in relation to the other hilltop monuments, but also connects the project back to the daily cycles of time; the weather balloons rise via hot air at dusk, and as dawn approaches the balloons descend back to ground because of heat loss, thus emphasising the cyclical dimension of time. Lastly, the number of balloons rising at Magazine Hill also relate to the number of casualties that was reported after the explosion of the Central Magazine in 1945, subsequently commemorating the tragic event.



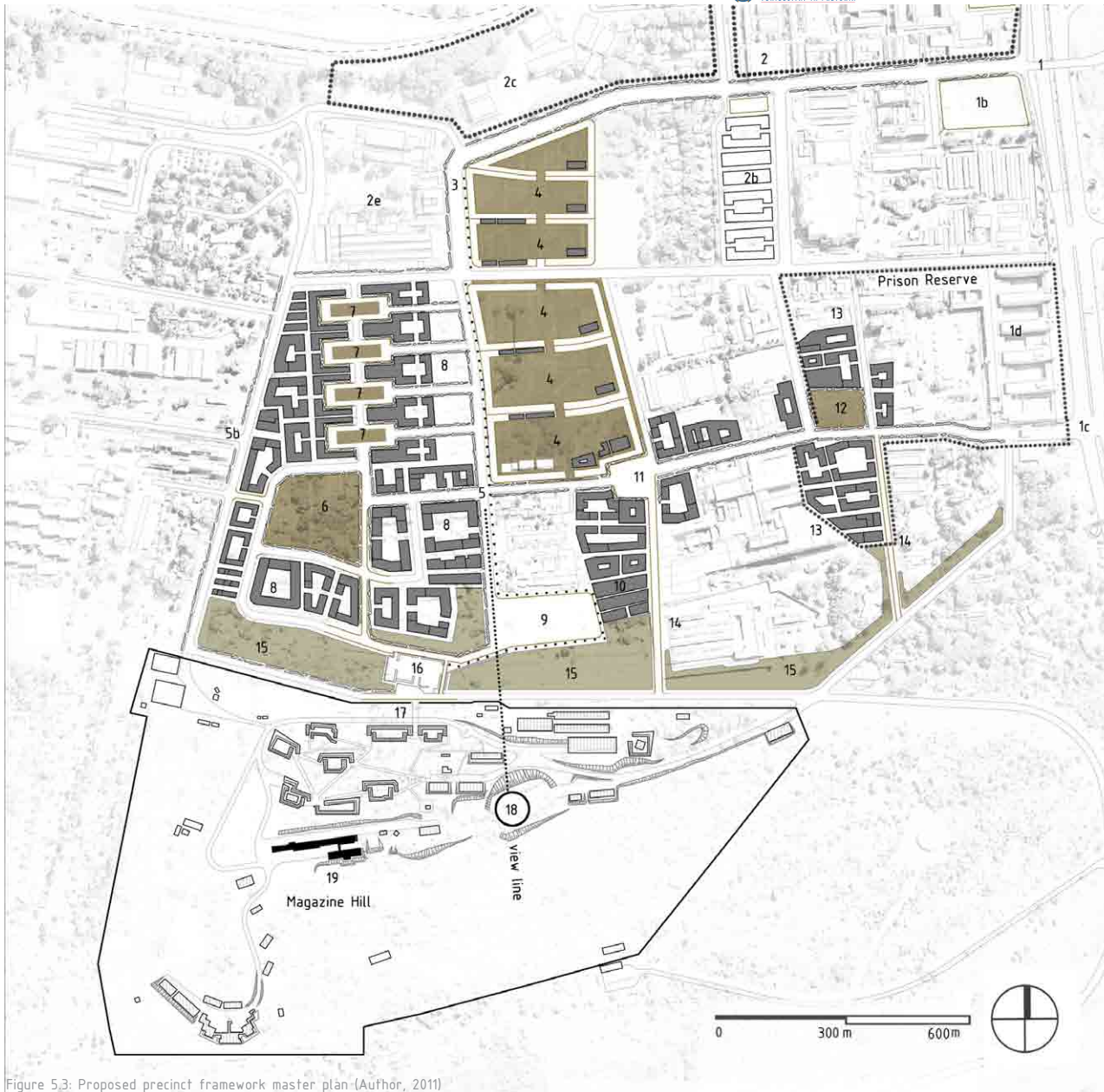
Figure 5.1 Weather balloon from hilltop monuments (Author, 2011)



Figure 5.2: Weather balloons illuminating the night sky (Author: 2011)



5.3 Proposed Precinct Framework



- 1: Existing entrance into military precinct (Dequar Road)
- 1b: Existing open space, proposed Rekgabisia parade grounds
- 1c: New proposed entrance into precinct (Klawer Street)
- 1d: Pretoria Correctional Services
- 2: Existing SA Army Administration Headquarters
- 2b: Proposed Indoor shooting facilities (SANDF projections)
- 2c: Military vehicle repairs
- 2d: SA Army Health Depot
- 3: Proposed main road into precinct (Dequar road)
- 4: Existing military recreational grounds, proposed parade ground network
- 5: View of Red Magazine Crater on Magazine Hill from Dequar road, light avenue guiding visitors to Magazine Hill
- 5b: Existing Magasyn Street, alternative route to Magazine Hill, tree lane as urban guide to Magazine Hill
- 6: Existing open space, proposed parade ground network
- 7: Proposed smaller formation parade ground network
- 8: Military formation and brigade residential zone (high density)
- 9: Proposed parade ground network
- 10: New proposed military institutional buildings (high density)
- 11: Proposed multifunctional intersection/parade space
- 12: Proposed parade ground network for Prison Reserve
- 13: New proposed prison administration buildings
- 14: New access road to Magasyn Street
- 15: Urban Agricultural belt serving prison and Military Reserve
- 16: Magazine Hill Parking structure, serving both Magazine Hill and military precinct
- 17: Entrance into Magazine Hill opposite parking structure in agricultural belt
- 18: Red Magazine crater on Magazine Hill, visible from Dequar Road
- 19: Existing Flame Tracer Building, proposed site for brass foundry

Figure 5.3: Proposed precinct framework master plan (Author, 2011)

5.3.1 Parade Ground Network

The parade ground network forms part of the future development projections of the military precinct, as well as the conceptual premise of mediation between the military and the public. Each regiment or military brigade functions around a parade ground where training, drills and parades take place. This network is thus laid out according to the residential zones where soldiers are housed. When public military events such as parades, music festivals, exhibitions and auctions take place, the parade ground network acts as a series of public spaces that facilitate the different events. The parade ground network forms a multifunctional platform, serving both the public during military events, and the SANDF in military training.



Figure 5.6: View of parade ground (Author, 2011)

5.3.2 Precinct guides

The main arterial route and access road to the precinct, Dequar Road, is laid out perpendicularly to Magazine Hill, with its street view framing the crater of the Red Magazine on the hill. This view to the south forms a metaphysical link between Magazine Hill and the military precinct. A light avenue (existing Dequar Road) that serves as an urban guiding system, leading the visitor to the hidden parking structure of the site is proposed. An existing additional route, Magasyn Street, to access the parking structure from the west is also proposed. This alternative route is specifically vegetated, serving as the second urban guide to the site. No new routes leading directly to Magazine Hill are proposed, for the site has a secretive character that needs to be p r o t e c t e d .



Figure 5.7: View of Red Magazine from Dequar Street (Author, 2011)



Figure 5.4: Proposed parade ground network (Author, 2011)

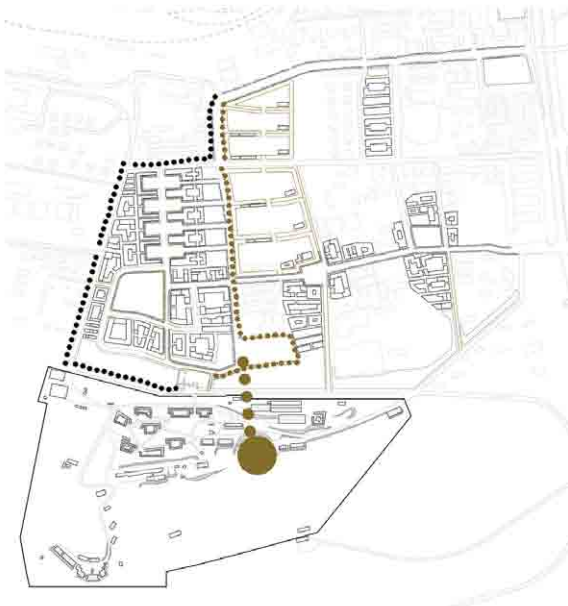


Figure 5.5: Proposed urban guides (Author, 2011)

5.3.3 Precinct housing strategy

The low density of the current housing typology in the precinct serves a small percentage of military personnel that enters the precinct on a daily basis. This military area accommodates the headquarters and training facilities for more than 20 brigades and regiments, where insufficient housing typologies only caters for higher ranked personnel. A new densified typology is proposed to accommodate all regiments and brigades around a series of proposed parade grounds.

5.2.4 Urban agriculture

This proposed open space provides ground for peri-urban agriculture, serving the military regiments in the residential sector to the north and the Prison Reserve to the east. Additionally, this urban element provides a buffer between the built fabric of the proposed precinct framework and Magazine Hill, respecting the isolated character of the site both visually and physically. The agricultural grounds are maintained by military personnel as well as the Prison Reserve inmates, and Correctional staff.

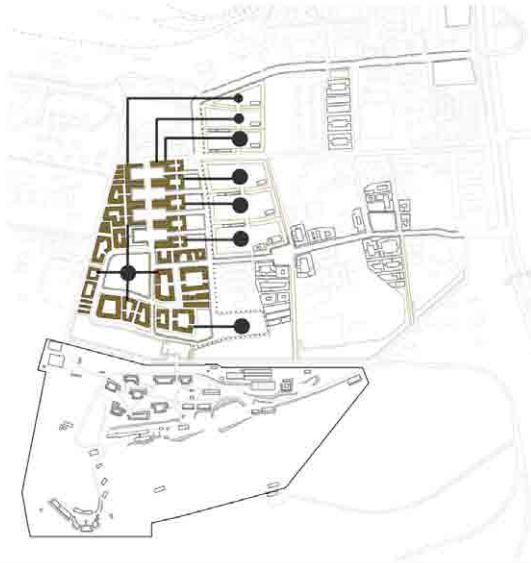


Figure 5.8: Proposed housing sector (Author, 2011)



Figure 5.10: Proposed housing typology (Author, 2011)



Figure 5.9: Proposed Urban agricultural belt (Author, 2011)



Figure 5.11: Proposed urban agricultural buffer (Author, 2011)

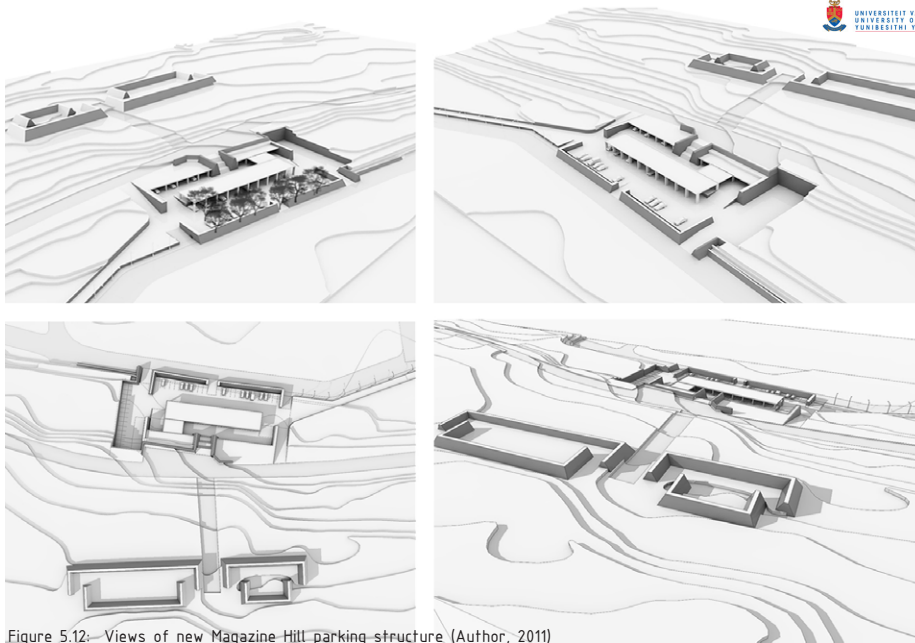


Figure 5.12: Views of new Magazine Hill parking structure (Author, 2011)



Figure 5.14: North eastern view of parking structure (Author, 2011)

5.3.5 Magazine Hill Parking structure

The proposed parking structure for Magazine Hill forms a prelude to the site by introducing similar design intentions, material use and spatial qualities of the ammunition bunkers on site. This parade becomes an analogy for the ammunition bunkers, with both structures veiled within the landscape. The design of the submerged parking is also aimed at forming a noise barrier between vehicular activity and the experience on site. The parking structure is situated within the urban agricultural buffer to serve both Magazine Hill and the military precinct, forming the end destination where the light and tree avenues meet as urban guides to the site. It is from the submerged parking bunker that the visitor crosses Magazine Street and enters Magazine Hill.

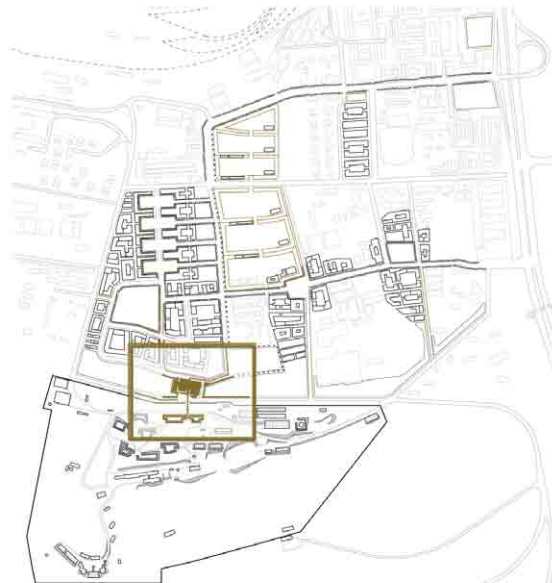


Figure 5.13: Magazine Hill parking structure (Author, 2011)



Figure 5.15: North western view of parking structure (Author, 2011)

5.4 Proposed Site framework

5.4.1 Background and site users

Magazine Hill can be considered a unique architectural remnant, not to be categorised under the rest of Pretoria's military ruins, for a number of characteristics set it apart from any other typology of military architecture. In contrast to the Forts of the second fortification plan for Pretoria, Magazine Hill is not designed as a single post for military retaliation, but rather an intrinsic military-industrial process. It is in this complexity where the true essence of the site lies. This aspect also entails a great challenge to introduce Magazine Hill back into the public realm, for all initial concepts inherent in the site design should also inform the overlaid design intentions for the future projection of the site.

The site framework is laid out with the SANDF still retaining ownership of Magazine Hill, therefore both public and military use are proposed, where a process of interaction is now possible. In essence, Magazine Hill forms a platform for the SA Army to stimulate a public relation, at the hand of industrial recycling and art. It is also now possible for industrial suppliers of the SANDF like Denel PMP to benefit from this public interface, thus forming the main client of the proposed brass foundry on Magazine Hill.

In the proposed site framework, 4 main users access and utilise the site on a daily basis. The military forms the entity, entering the site at the controlled access point located at the eastern part of Magazine Hill. The 91 ammunition depots buildings are adaptively reused for the Graphic Design and Visual Arts department of the SA Army, while the new public character of Magazine Hill brings great

exposure for the specific military department in the form of public exhibitions and installation art presented on Magazine Hill. Private parking and accommodation is also provided at the 91 ammunition depot buildings for military use only.

The second proposed private user of Magazine Hill is the SANDF trucks accessing the western entrance of the site, providing the spent ammunition shells and raw material for the brass foundry. The north western ammunition bunker is dedicated as a drop-off zone for the ammunition shells, where the brass material is distributed to the ammunition pit in front of the foundry. The western entrance is also used as a private access point for the 3rd private user, the artist and foundry worker. The fourth site user, the visitor, accesses the site from the main entrance located between 2 ammunition bunkers at the northern edge of Magazine Hill. As one enters the site, a journey of discovery is embarked upon.

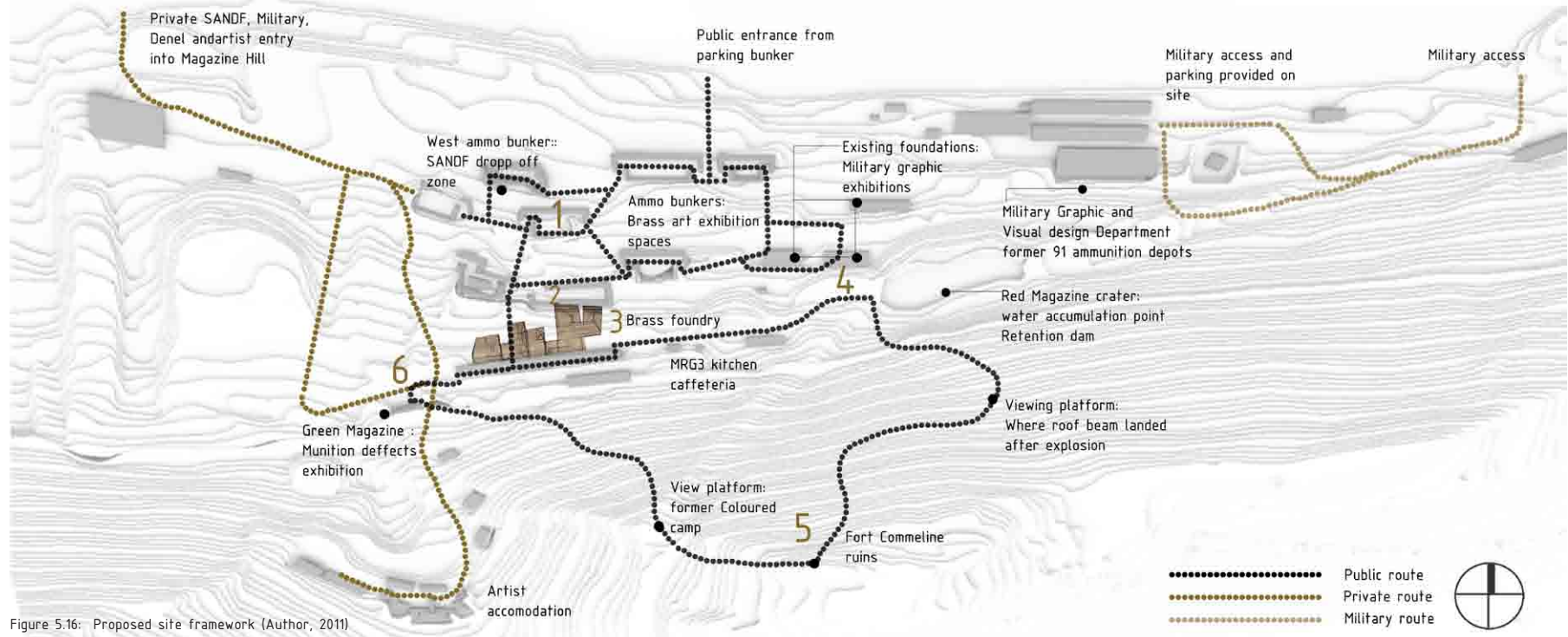


Figure 5.16: Proposed site framework (Author, 2011)

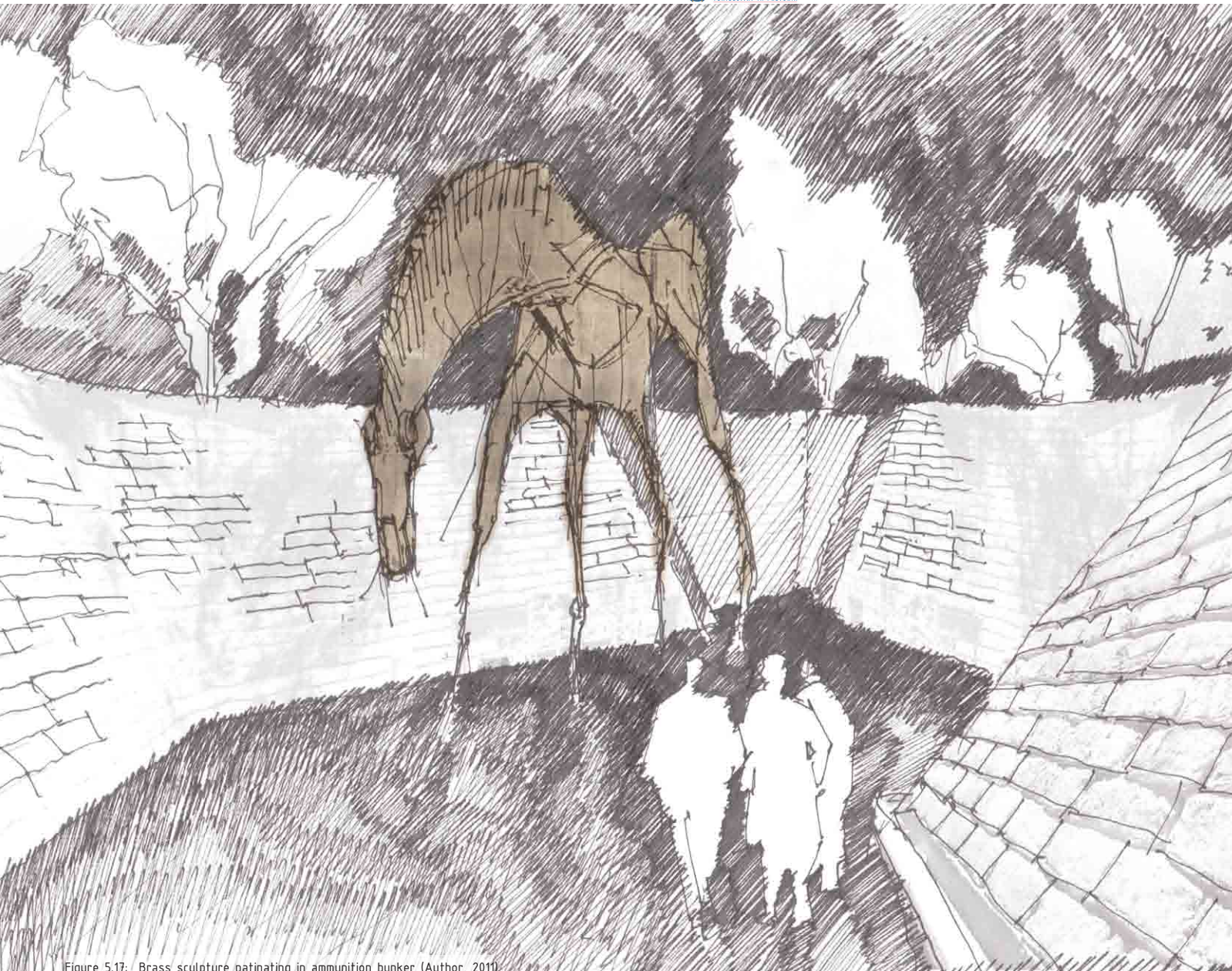


Figure 5.17: Brass sculpture patinating in ammunition bunker (Author, 2011)

5.4.2 The route through Magazine Hill

The route through the site is laid out according to the conceptual premise of revealing and concealing, where different unique spaces and architectural artefacts are discovered as one progresses through the site. Not only is the spatial architectural experience based on revealing and concealing, but also the experience of the ammunition reduction process in the brass foundry. The visitor would enter Magazine Hill from the main entrance leading directly into the labyrinth of concealed ammunition bunkers. From this point all bunkers are explored, for some ammunition bunkers now serve as space for temporary installation art exhibitions. Other bunkers are designated for brass and bronze patination, where the art pieces are left in an outdoor space (ammunition bunker) to weather and enhance surface deterioration. (1 on map)

The labyrinth of discovered spaces ends at the main ammunition bunker that is located in front of the brass foundry. The floor surface of this bunker forms an ammunition pit where operated foundry cranes hoist the empty shells into the adjacent furnace towers. The visual perception of the ammunition reduction process is enriched by sensory experience, noticing the sound of industrial cranes and falling ammunition shells. (2 on map)



Figure 5.18: Ammunition pit with foundry cranes loading the shells into the furnace tower. (Author, 2011)

The route continues into the brass foundry where the empty ammunition casings are washed, sorted and melted according to alloy composition and content. Ammunition reduction in the form of brass castings are observed as one progresses through the weathered interior of the existing Flame Tracer building, a structure that once represented ammunition production. A series of artist studios are crossed along the length of the Flame Tracer building, where smaller brass works are presented by various types of artists. The sensory experience of the foundry ends in an enclosed courtyard where brass fine arts and sculpting practices conclude the ammunition reduction process, leaving the visitor at the foot of an unknown route, leading into the undiscovered remnant of Magazine Hill. (3 on map)

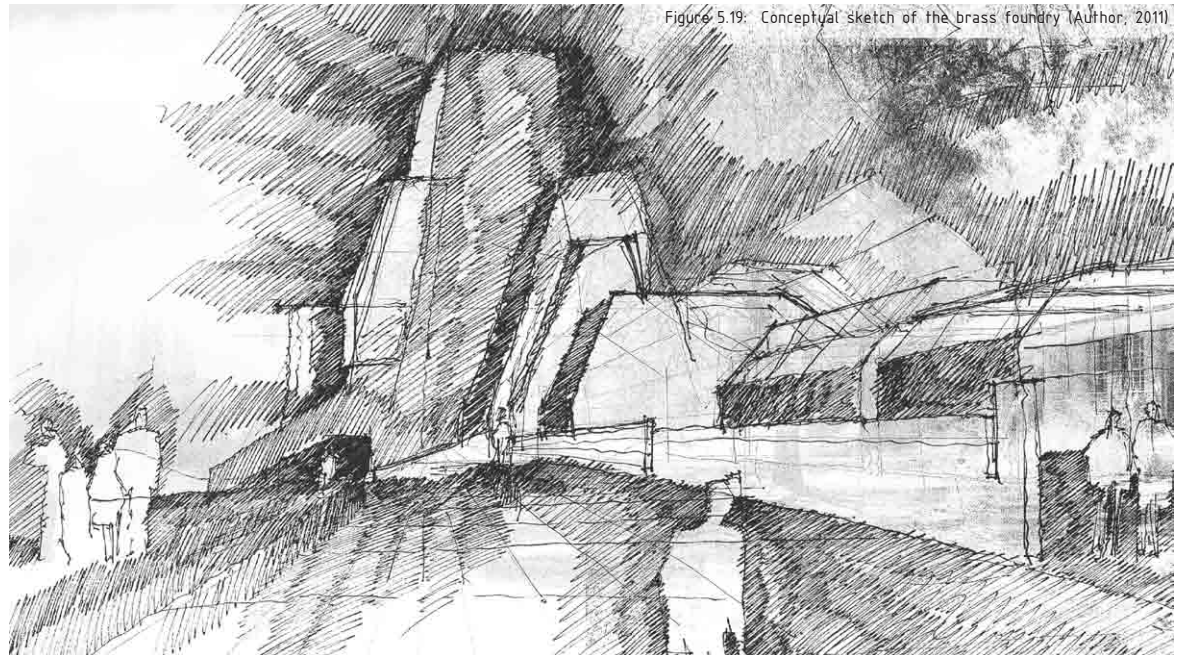


Figure 5.19: Conceptual sketch of the brass foundry (Author, 2011)

As the visitor leaves the brass foundry the route continues east towards the Red Magazine crater, passing the MRG3 kitchen building that served the employees of Magazine Hill from the late 1930's. This building is remodelled as a cafeteria, acting as a hiatus, in the journey through the site. The Red Magazine crater is now formalised as a catchment area, harvesting all runoff rainwater from the steep hill in order to be reused in the brass foundry. Where the explosion represented a process of dispersion, it is now utilised as a point for natural accumulation. 34 brass measuring rods rise from the water, commemorating the casualties reported after the explosion in 1945. (4 on map)

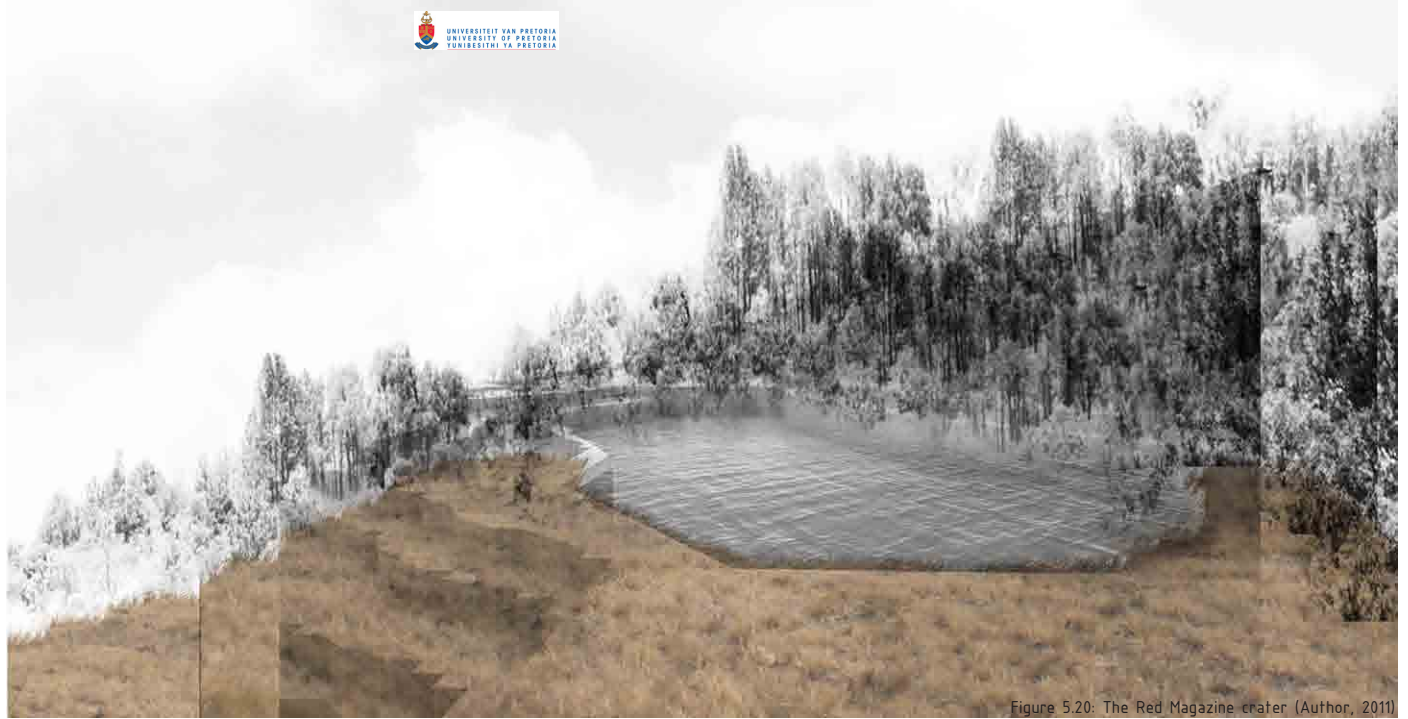


Figure 5.20: The Red Magazine crater (Author, 2011)

From the crater the route progresses south up the hill into the natural realm of Magazine Hill. Viewing platforms are strategically located at anchor points on the hill, showcasing distributed explosion debris along the route. As one reaches the summit of the hill, the forgotten ruins of Fort Commeline is explored, forming the highest viewing platform on Magazine Hill. As the route descends down the northern slope of the hill, the former Coloured camp is passed, serving as the last viewing platform on the hill. At the base of the hill the route concludes at the existing Green Magazine, now utilised as the Munitions Defects Museum, showcasing the Apartheid government's dismantled nuclear weapons among other temporary exhibitions. From the Green Magazine, individuals can disperse for further exploration. (5 and 6 on map)

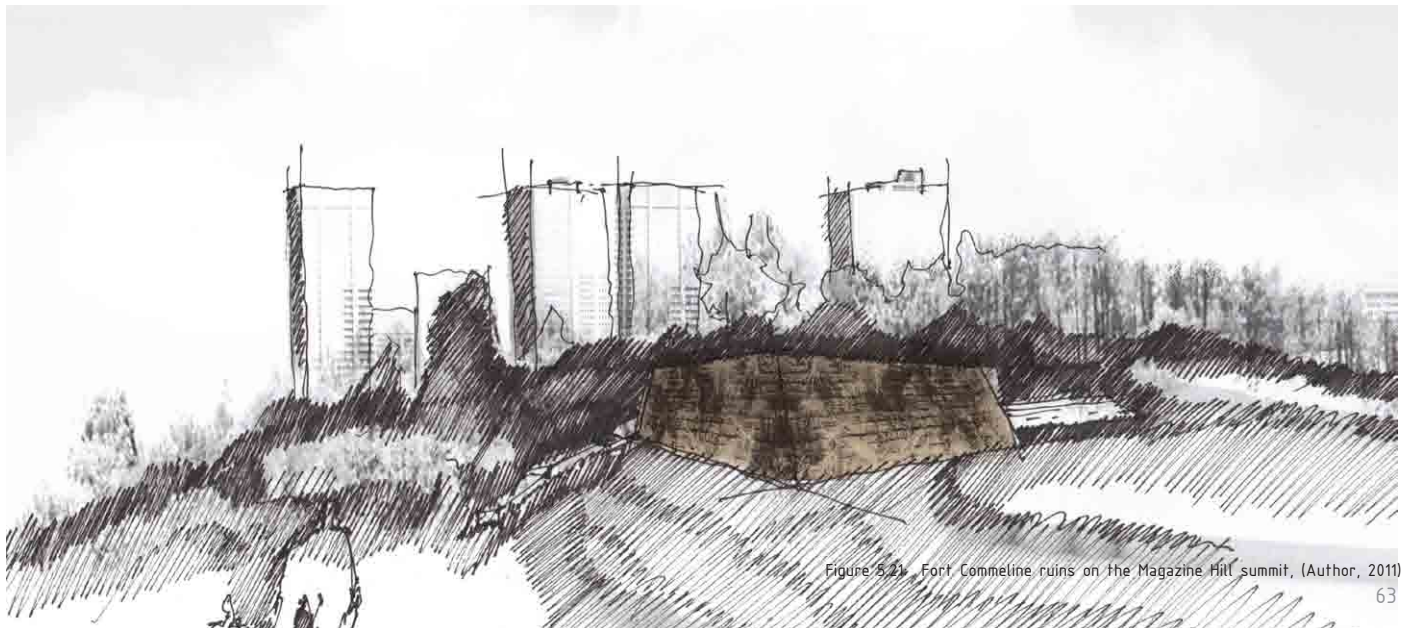


Figure 5.21: Fort Commeline ruins on the Magazine Hill summit, (Author, 2011)