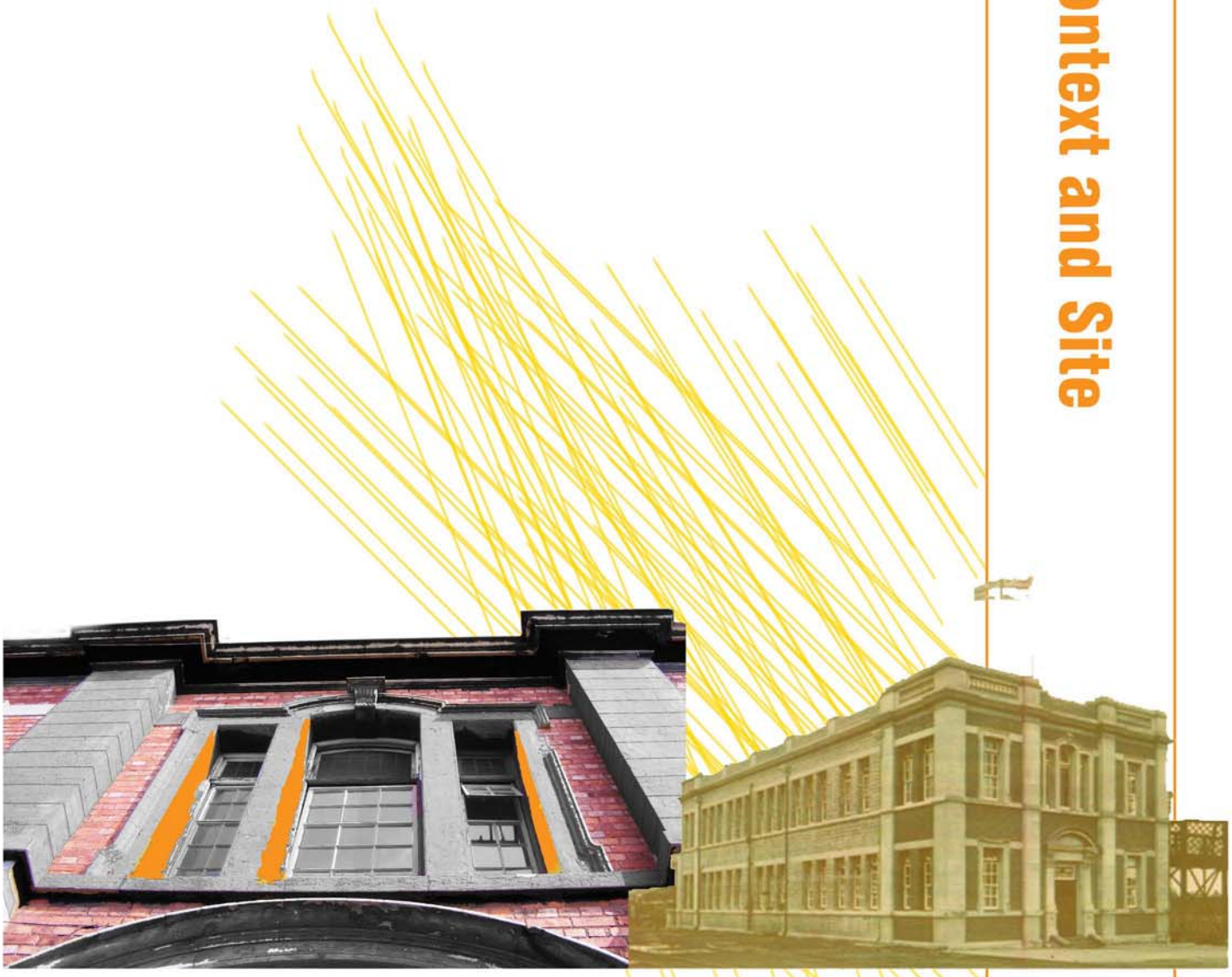
2

Context and Site



Illus 2 2011 POPUP (Author, 2011) and 1909 CEO (Bakker, 2002) edited by (Author, 2011)

2.1 INTRODUCTION

This chapter will serve to elaborate on the project context and site. Firstly, a broader contextual locality will be provided, highlighting the position of Salvokop, the area of study, within a greater context. Thereafter, the area of Salvokop will be explained and its significance highlighted. A historical time line for the Salvokop region will be provided as being especially significant to the individual design process. Finally, the group framework proposal will be introduced.

The remainder of the chapter intends to clarify an understanding of the chosen site. The site is defined in focus on a number of scales. Since the 1909 CEO / 2011 POPUP building finds context in a number of scales, it is these contexts which will be explored and analysed. The study will consider both, the entire POPUP site, and the 1909 CEO / 2011 POPUP building.

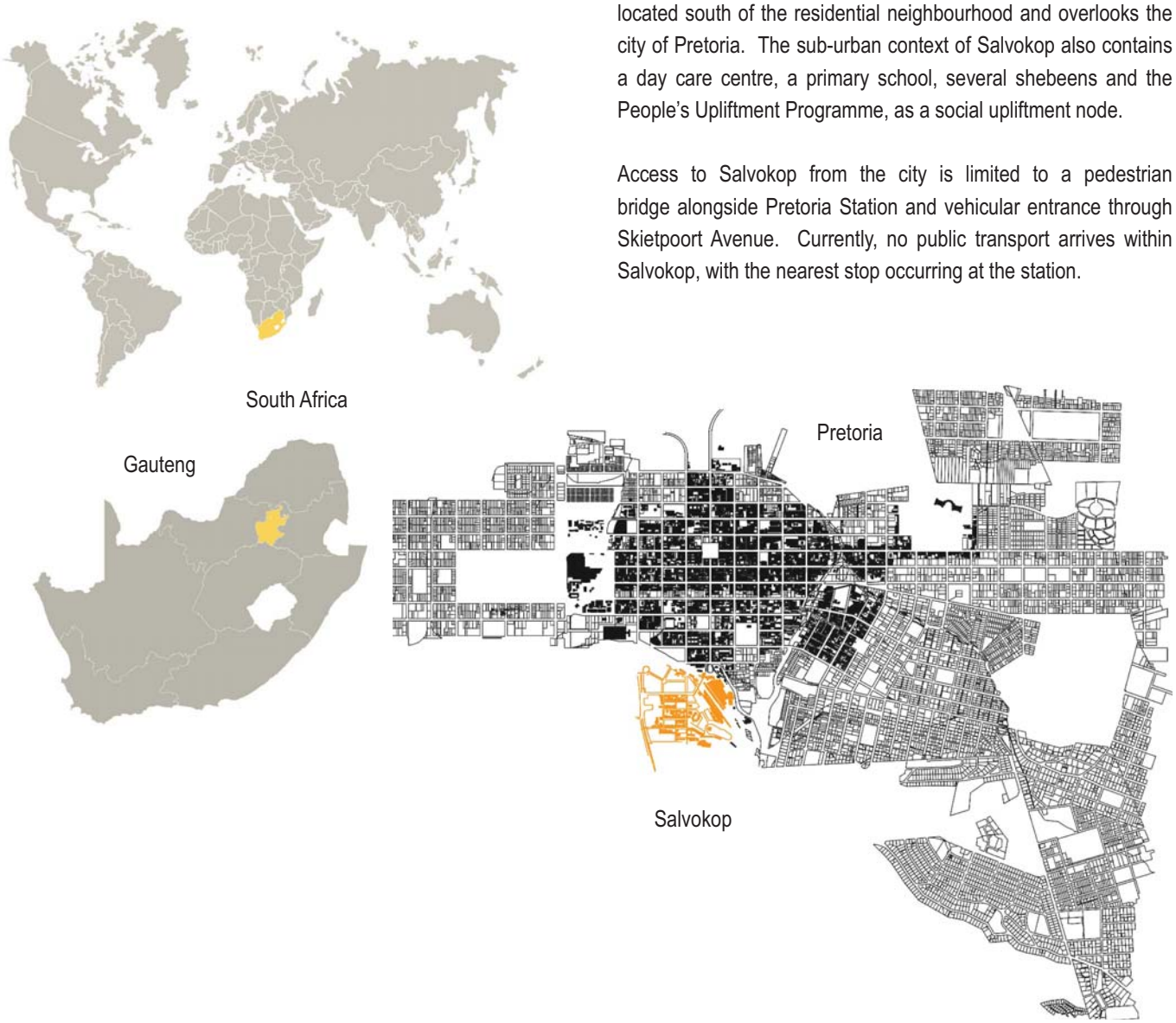
Analysis and outcomes will be explained. The chapter will then be concluded with the impact of these exercises on the design project being highlighted.

2.2 GREATER CONTEXT

The laboratory of study is located in Pretoria, South Africa. The neighbourhood of Salvokop is within immediate proximity of the city centre of Pretoria.

The region of Salvokop is located south of Pretoria's central business district (Illus 2.1). Its current programme predominantly consists of low density housing in historical railway houses as well as informal structures. Freedom Park, a world heritage site, is located south of the residential neighbourhood and overlooks the city of Pretoria. The sub-urban context of Salvokop also contains a day care centre, a primary school, several shebeens and the People's Upliftment Programme, as a social upliftment node.

Access to Salvokop from the city is limited to a pedestrian bridge alongside Pretoria Station and vehicular entrance through Skietpoort Avenue. Currently, no public transport arrives within Salvokop, with the nearest stop occurring at the station.



Ilus 2.1 Locality Maps (Author, 2011)

Illus 2.2 Aerial photo, Salvokop (Google Earth, 2011) edited by (Author, 2011)

The positive contextual characteristics have been identified as:

Illus 2.3 Residential Character (Author, 2011)

1. Residential (Illus 2.3): The historical railway houses of Salvokop provide a distinct character to the neighbourhood. Their scale, relationship with the street edge and interior to exterior transition (stoep) all form positive urban characteristics in this neighbourhood, creating a pleasant pedestrian environment.

Illus 2.5 Historical Character (Author, 2011)

3. Historical (Illus 2.5): The neighbourhood of Salvokop was developed to service the railway line from the 1880's. The settlement's legacy of historical architecture and infrastructure remnants has partially survived. Currently, while many historical buildings still exist, their presence is threatened by the development of the new Gautrain station along the railway line, access routes to Freedom Park and lack of maintenance. These historical structures include two typologies of railway housing, the 1909 Chief Engineer's Office (now occupied by POPUP), an abandoned shed along and several obsolete railway lines.

Illus 2.4 Breathing Space (Google Earth, 2011) edited by (Author, 2011)

2. Breathing Space (Illus 2.4): The neighbourhood of Salvokop can be strongly characterised by the substantial landscape buffer between the city and Salvokop, along the edge of the railway line. This green space isolates Salvokop and protects it from the noise, pollution and traffic of the city.

Illus 2.6 Ecological Systems (Google Earth, 2011) edited by (Author, 2011)

4. Ecological Systems (Illus 2.6): The ecologically diverse landscape systems in this region have been predominantly destroyed due to lack of maintenance. The restoration of these historical landscapes has been partially addressed in Freedom Park (Freedom Park, s.a.). This provides opportunity for precedent in landscape rehabilitation and the creation of green urban spaces.

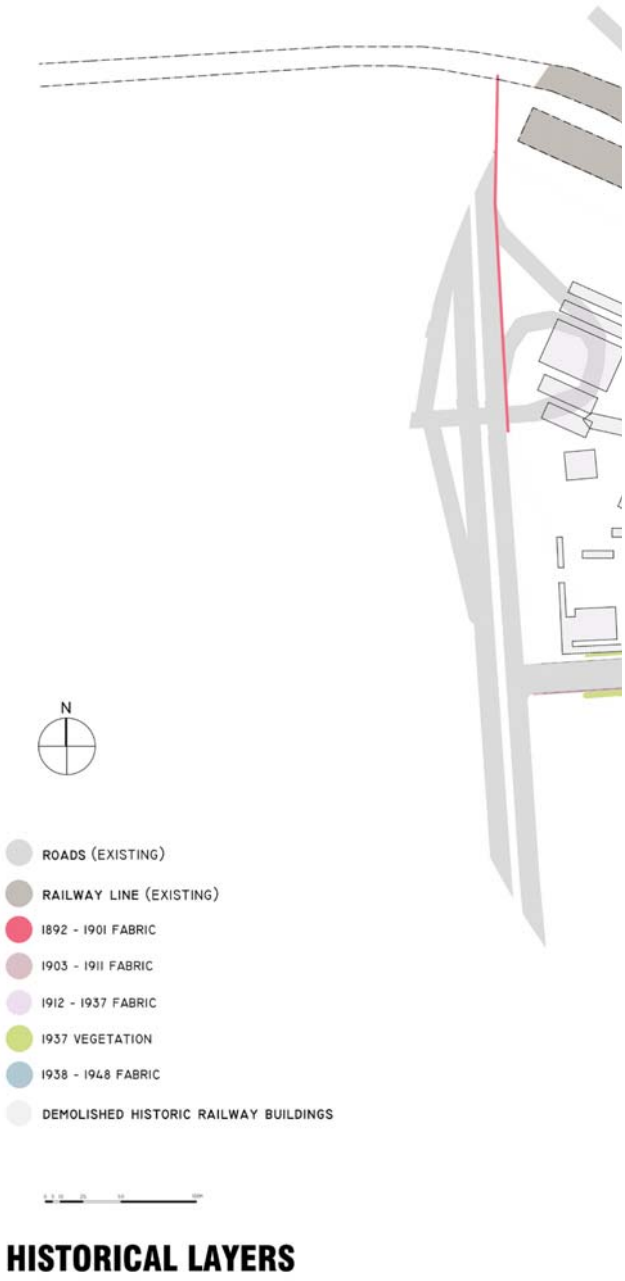
2.3 HISTORICAL CONTEXT

The time line (Table 2.1) illustrates the significance of the railway to the building's individual historical context. The loss of a typological relationship to the railway line has also led to a physical loss of connection. This provides the opportunity for site development which involves and encompasses the railway edge. The revival of railway interest through the Gautrain development and station opposite the railway line from the site creates a possibility for a renewed railway connection which assumes new technology, symbolises progress and is of immediate relevance.

A record of building development through time has been mapped as demonstrated alongside in Illus 2.7.

The mass demolition of fabric in the maintenance yard is of note and could provide design direction, especially with regards to expressing memory.

This map contextualises the relationship between the 1909 Chief Engineer's Office and other built fabric in Salvokop over time.



HISTORICAL LAYERS

Illus 2.7 Time Mapping, Salvokop (Author, 2011)

1892 - 1901
NZASM houses are built

1903 - 1911
CSAR houses are built

1855	Pretoria is named capital of Transvaal
1877	Pretoria becomes a seat of British control
1881-1882	Anglo Boer War
1883	Paul Kruger gains permission from Portugal to run a railway line through Mozambique
1886	Discovery of the Rand Gold Reef creates ample capital for railway development
1887	Nederlandsche Zuid-Afrikaansche Spoorweg Maatschappije (NZASM) is established
1888	NZASM's first building (engineer's residence) is built on the corners of Minaar and Paul Kruger Streets
1895	Pretoria - Pietersburg Spoorweg Maatschappije (PPSM) is formed to create a rline beteen Pretoria and Pietersburg
1899	Telegraph Office Building completed
1899	Second Anglo Boer War: South African Republic (ZAR) takes control of railway, workshops are used to create weapons
1902	Peace is achieved, PPSM, NZASM and the Free State Railway combine to form the Central South African Railway (CSAR)
1903	Completion of Findlay Reservioir: First Municipal Water in Salvokop and Pretoria
1909	Chief Engineer's Office is completed
1910	CSAR, Cape and Natal railway administration merge to form South African Railways and Harbours (SAR [&H])
1912	Pretoria Station, designed by Herbert Baker, is completed
1920s	Demolition of NZASM station buildings
1925	Re-erection of Paul Kruger statue in Station Square

Table 2.1 Time Line, Salvokop
(Bakker, 2002) formatted by (Author, 2011)

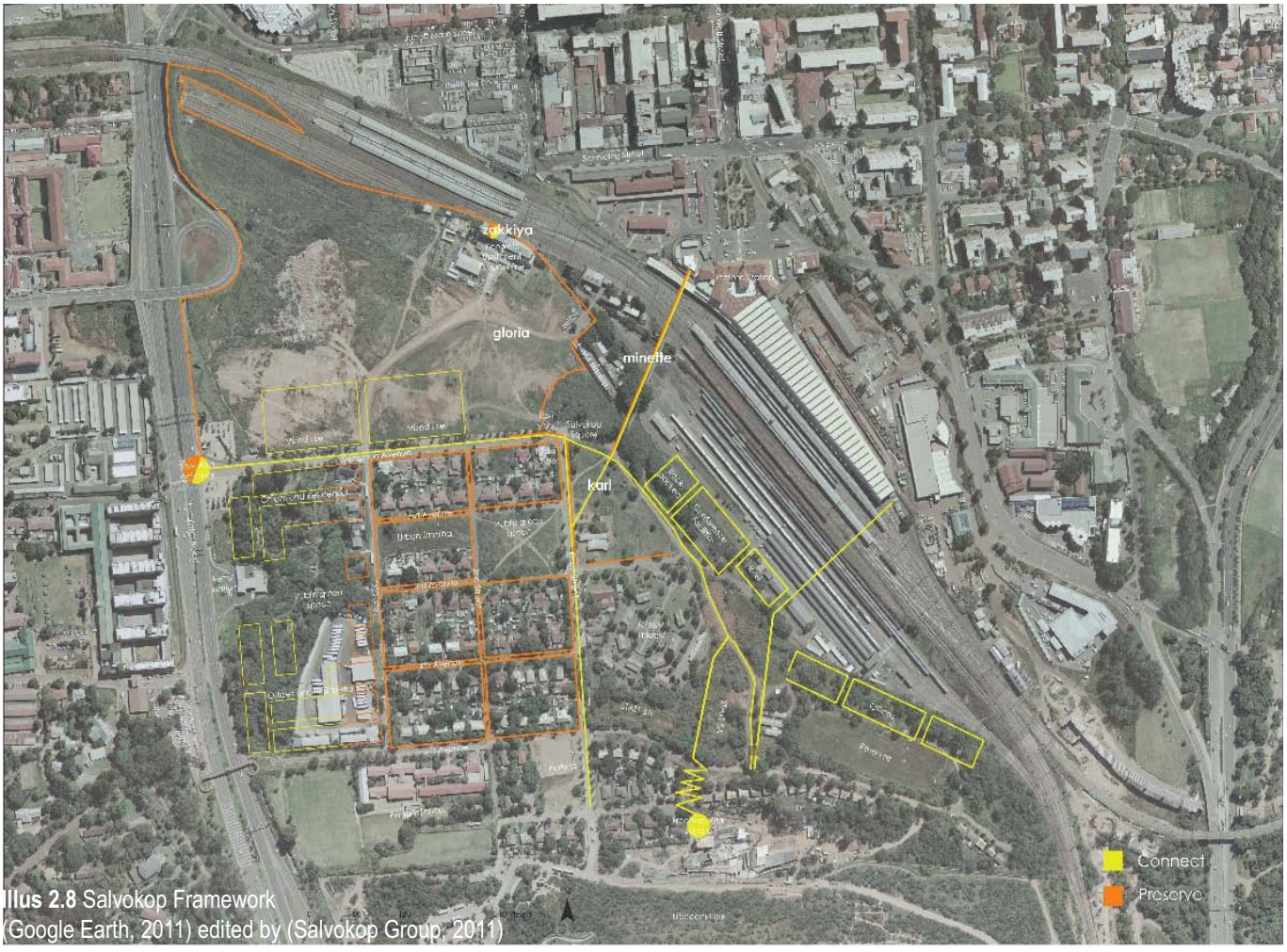
Railway Audit Building constructed	1928
Belgrave Hotel (Art Deco style) is built	1929
SAR & H at its busiest, many new constructions in railway zone and camp	1912-1950's
Sunken gardens in Pretoria Station are completed before 1947 royal visit	1946
Relocation of compound workers to Mamelodia and other townships (Apartheid)	1948-1955
Last Salvokop houses are built	1960-1970
Demolition of NZASM offices on Minaar Street	1961
Administrative organisation of railways become South African Transport Services (SATS)	1981
Rovos Rail Headquarters in Victoria Hotel	1989
Transnet is established, closure of uneconomical lines.	1990
NZASM centenary celebrated by Transnet	1995
Freedom Park Trust Framework	2001
Paul Kruger Street Spine Spatial Framework	2001
Pretoria Station burnt by angry commuters	2001
GAPP/MMA Framework	2002
Freedom Park is completed	2008
Gautrain Station to be completed	2011

2.4 URBAN FRAMEWORK

The group framework, “Preserve Connect” aims to react to the existing positive characteristics of Salvokop as well as to establish a connection between Salvokop and the city.

The framework map, Illus 2.8, indicates “connect” through increased access points between Salvokop and the city, mixed use development, commercial development, and a new high street. “Preserve” involves optimising the character of the current residential, ecological and historical zones and the breathing space.

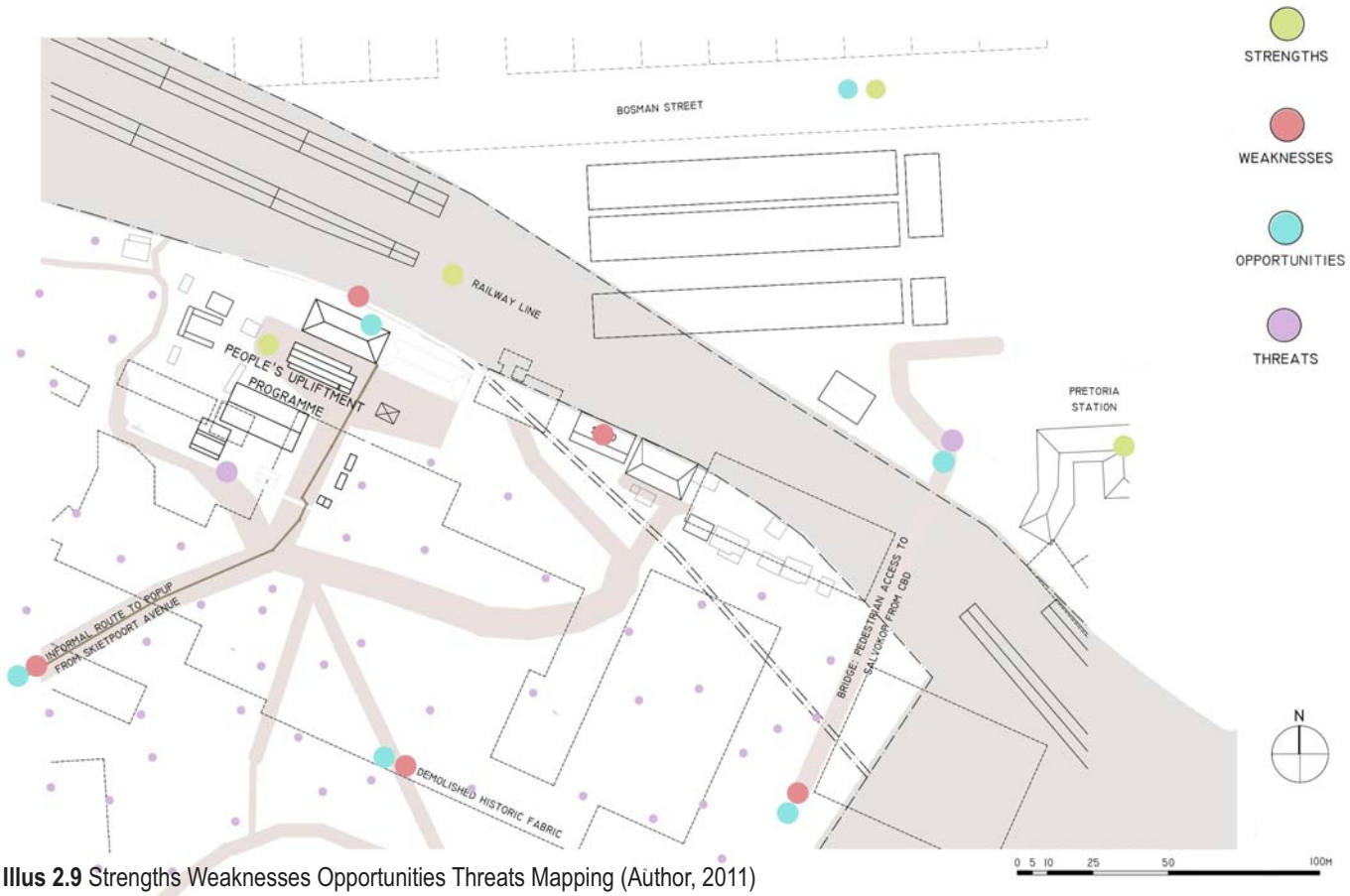
See Appendix A for further framework analysis.



Illus 2.8 Salvokop Framework
(Google Earth, 2011) edited by (Salvokop Group, 2011)

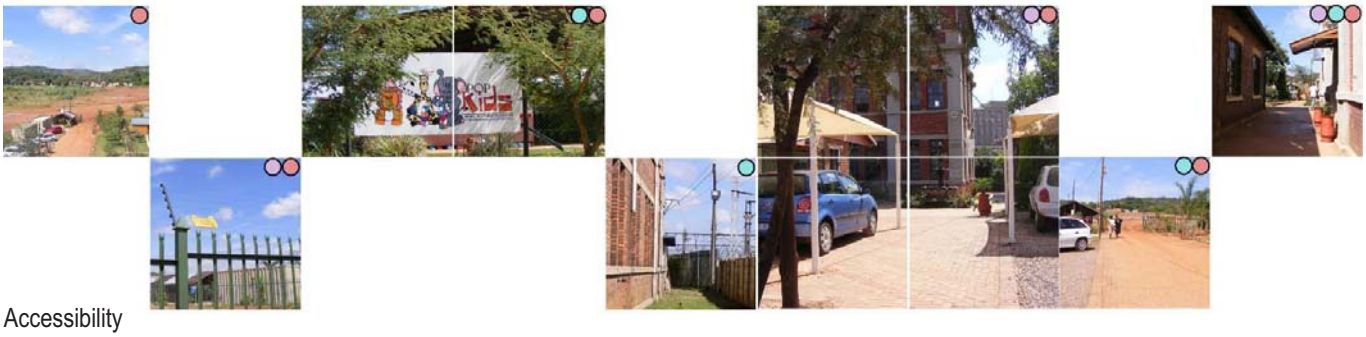
2.5 SITE ANALYSIS

The following site analysis (Illus 2.9, Illus 2.12) is limited to the boundaries of POPUP's site. The analysis identifies the existing allocation of programme on POPUP's site and analyses the site through the following categories: Urban to Interior (Illus 2.10), Sense of Place (Illus 2.11), Internal Spatial Quality (Illus 2.13), Space and Use (Illus 2.14), and Alterations and Additions (Illus 2.15). The analysis is represented through identification of strengths, weaknesses opportunities and threats and extends itself to the interior of the 1909 CEO / 2011 POPUP building.



Illus 2.9 Strengths Weaknesses Opportunities Threats Mapping (Author, 2011)

2.5.1 Urban to Interior (Illus 2.10)



Illus 2.10 Urban to Interior (Author, 2011)

Accessibility

POPUP's site is accessed from the South through an informal dirt road. Its site is located along the railway edge and is isolated from the nearest street (Skietpoort Ave) by the unprogrammed landscape described as the "breathing space" in chapter 2. Its accessibility is visually and physically poor. POPUP's site is completely fenced, further removing it from its context.

Way Finding

Way finding is dependant on literacy as all indication of POPUP's presence is indicated through signage, only in English. There is no indication of programme allocation on the site apart from a sign indicating the crèche.

Environment

POPUP's site is disconnected and buildings are scattered and isolated. Structures range from permanent and load bearing (brick and concrete) to lightweight and temporary (portal frames and prefabricated classrooms). The railway environment is not acknowledged.

Presence

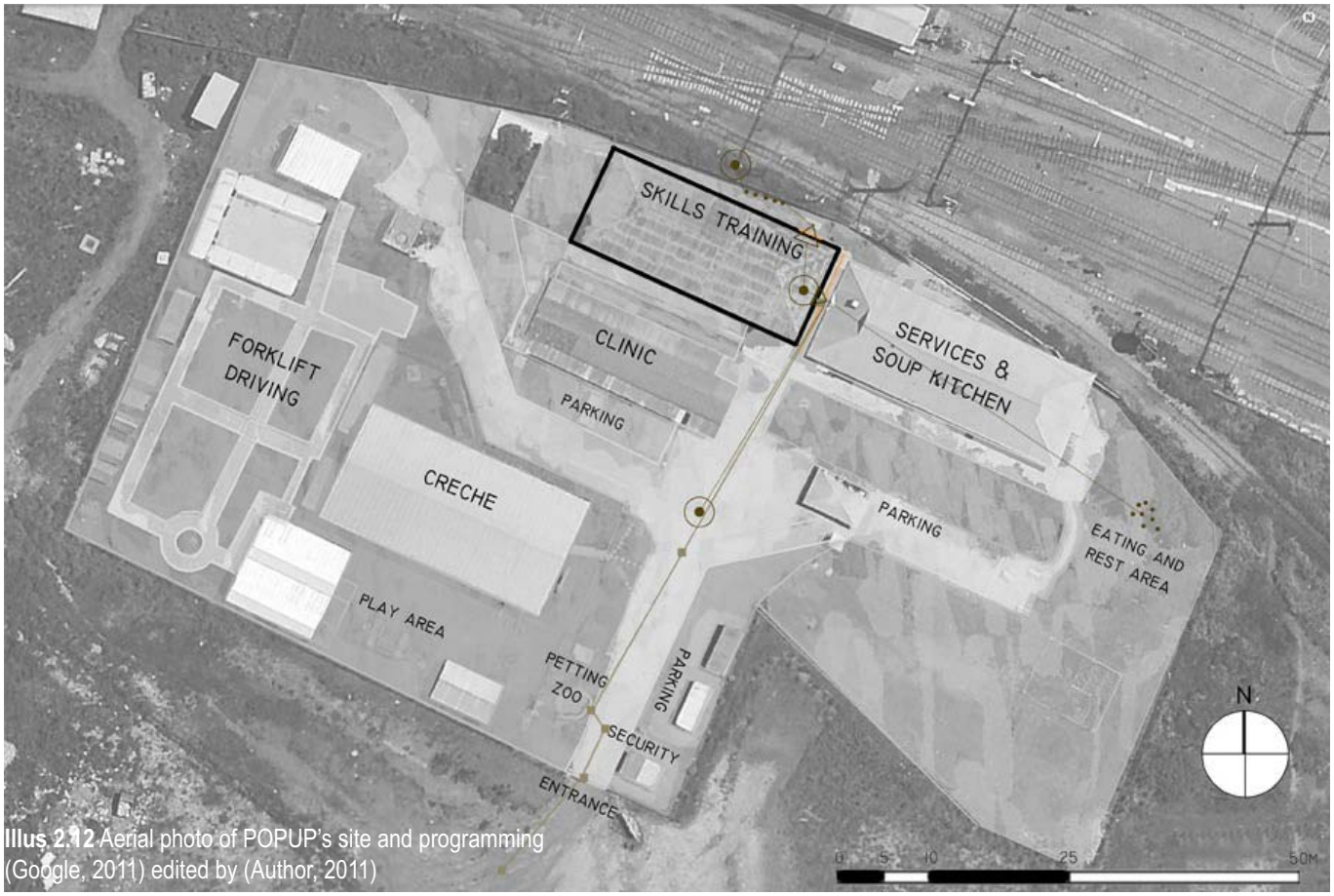
The 1909 CEO / 2011 POPUP building is crowded by carport structures, the brick medical clinic and the brick services and soup kitchen buildings alongside.

Entrance

There is a poor sense of entrance to any of the buildings since they exhibit poor relationships to each other. The entrance to the 1909 CEO / 2011 POPUP building is overcrowded by the services and soup kitchen building, a wasted opportunity given the hierarchal elements celebrating the entrance, symmetry and axis.

Strengths Weaknesses Opportunities Threats

Illus 2.11 Sense of Place (Author, 2011)



Illus 2.12 Aerial photo of POPUP's site and programming (Google, 2011) edited by (Author, 2011)

2.5.2 Sense of Place (Illus 2.11)

Views and Vistas

POPUP's site displays potential for the incorporation of views and vistas. From the 1909 CEO / 2011 POPUP building, immediate views to the railway line, as well as distant views to Salvokop's neighbourhood are available but under utilised. Interior vistas include the staircase, which is open and visible from the lobby of each level in the building. The staircase is a beautiful building element with arts and crafts influence.

Heritage Response

The building, although having been restored partially in 2002 (Bakker, 2002) is still incomplete in a sense. The historical bridge leading from the building across the railway line had been removed. Its void has been uneventfully enclosed by a sheet of shutter board, posing aesthetic and safety threat to the building.

Social Response

POPUP is a charitable organisation that is concerned with social upliftment through health care, skills training, food and clothing donation and child care. Although its ideals are admirable, its site is unaccessible, difficult to navigate and unwelcoming since it is barricaded and there is no sense of entrance.

Railway Response

POPUP's site does not address the railway edge. It is removed from its context and chooses to fence itself in as opposed to integrating with its historical connection to the railway line. The Gautrain Station development on the opposite side of the railway line provides the opportunity to revive this connection and interest to the building and POPUP's site. Although the site is located along the railway edge, frequency of trains through the day are minimal and the noise from these momentary, providing little disturbance.

2.5.3 Internal Spatial Quality (Illus 2.13)

Strengths Weaknesses

Illus 2.13 Internal Spatial Quality (Author, 2011)

Light and Volume

The 1909 CEO / 2011 POPUP building exhibits excellent consideration for natural light and volume. Its high and frequent windows allow the passage of natural light into the building. The ground and first floors are double volume, creating a sense of public hierarchy. The open staircase, emphasises the building volume and is surrounded by windows and well illuminated. The 2nd floor, an addition to the building in the 1950's represents a weakness in this regard. It is single volume, enclosed, depends on artificial light during the day and has no visual connection to the exterior, making it a threatening environment.

Materials

The historic materiality of the building has been partially preserved, restored (windows and frames) and replaced (floor tiles). The original floor finish of terracotta tiles still cover most of the floors. Other floor areas have been finished with vinyl, screed and ceramic tiles. Walls are brick and mortar finished with plaster and paint. The third floor also contains wood panel partitioning. The staircase balustrades consist of carved varnish posts and cast iron filling.

Thermal Response

The building is naturally ventilated through windows. Passages pose a potential problem in ventilation, being far from windows and could require assisted ventilation. The building is thermally comfortable.

2.5.4 Space and Use (Illus 2.14)

Flexibility

The rectangular floor plan of the building implies versatility since it is not prescribed or particular. The double volume creates opportunity for the development of new mezzanine spaces. The symmetrical structure and frame and infill system can allow ease of removal of fabric and expansion.

Hierarchy

The building facade displays strong hierarchal sense of entrance and arrival through ornamented openings. Once inside the building, however, an idea of public to private spaces is only understood through signage and is otherwise implied by seating furniture in the lobby of each floor.

Signage

Signage style varies from temporary to permanent and does not have a sense of continuity in the building. Its locality is inconsistent on each floor. Signage on the third floor, brushed aluminium wall mounted rectangular signage, is more permanent, informative and tactile.

Illus 2.14 Space and Use (Author, 2011)

Opportunities Threats

Illus 2.15 Alterations and Additions (Author, 2011)

Ergonomics
There is no definite consideration for ergonomics in the building. The restriction of affordability has controlled many decisions in terms of furniture and alterations in the building. The 1909 CEO / 2011 POPUP building displays sensitivity to user comfort through its large windows providing views across the railway line. The staircase is comfortable, although the balustrade height is low and poses a safety risk.

Inclusive Design
The building is exclusive in terms of access. The fenced in plot in not welcoming. Circulation to the upper floors of the building is limited to the staircase which is problematic for wheelchair users.

Access to Facilities
The building facilities are adequate and well-maintained. Water closets are found on each floor. They are, however unisex, which could be threatening and uncomfortable to the users. Pay phones are also available within the building. This is a valuable resource since users are low income and probably do not own personal cellular phones.

2.5.5 Alterations and Additions (Illus 2.15)

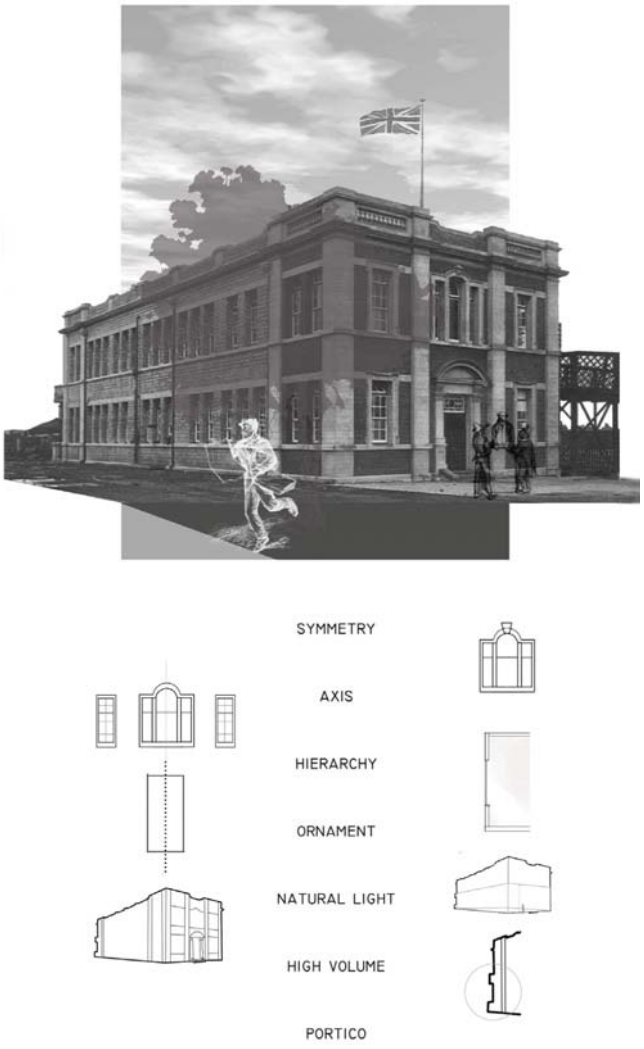
Restoration
The building has been restored in several areas. Extensive restoration of timber door and window frames have occurred. Some doors have also been restored. Several portions of the concrete door and window ornament have been restored.

Preservation
The building has been preserved in several aspects: the terracotta tiles, the staircase and its cast iron fill have been preserved.

Removal
A bridge from the building across the railway line to Scheiding Street had been removed. The void has been covered with a shutter board sheet.

Addition
The addition of a second floor occurred in the 1950's. The parapet gables were used as a means to inform the continuity of the facade. A gabled roof on timber trusses now caps the building. The enclosure of the portico on the west of the building occurred concurrently.

2.6 ESTABLISHING IDEAL

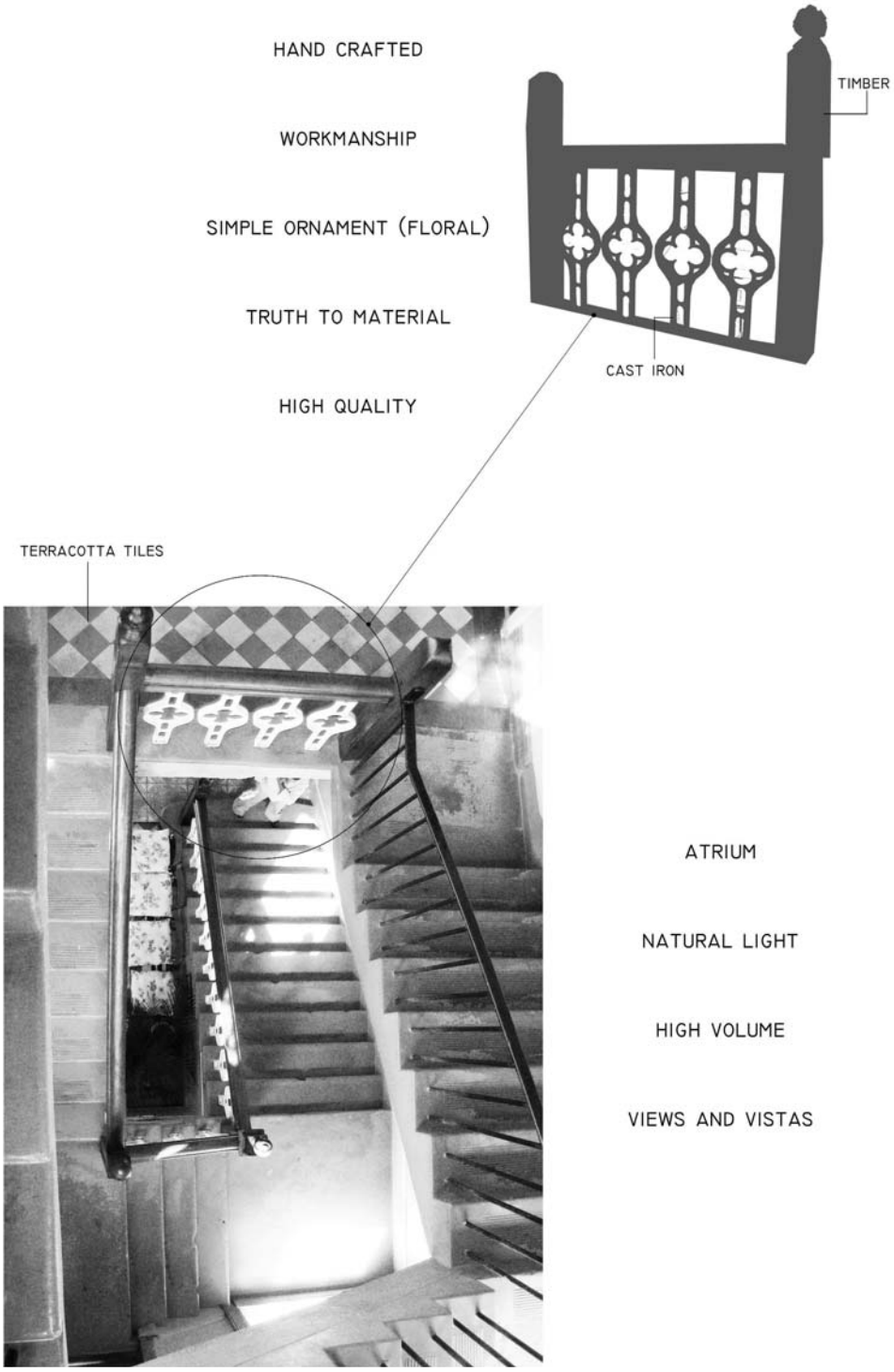


Illus 2.16 Establishing Ideal (Author, 2011)

The stripping back method, as outlined by Fred Scott (2008: 108) has been considered as the design method for treating the altered building. The process of stripping back involves three stages, the firvst of which is "establishing the ideal" (Scott, 2008: 108). The ideal is defined as the building's utopian form, its original vision. To determine the "historical ideal" of the 1909 CEO / 2011 POPUP building, an analysis of the building's early image has given rise to the recognition of its major design elements. The figure alongside (Illus 2.16) illustrates these principles in diagrams. The historical character pertaining to these principles are predominantly evident on the building facade.

Also illustrated is the building's internal staircase (Illus 2.17), identified as an "ideal" element as a result of its distinctive character and balustrades of arts and crafts style. The application of terracotta tile finish on the staircase and first floor are notable.

Site character is depicted overleaf in Illus 2.18 (page 30).



Illus 2.17 Establishing Ideal (Author, 2011)

Illus 2.18 Site Character (Author, 2011)

2.7 CONCLUSION

The contextual analysis has served to highlight the distinctive characteristics of the neighbourhood of Salvokop. These observations, are recognised as providing a notable sense of place, worthy of preservation and deserving of emphasis. The framework strives to achieve this by using the existing as a means to react.

The historical mapping and time line of Salvokop highlight its significance as an historical landscape, associated predominantly with the railway development. The survival of some of these historical structures and settlement have become a strong contributor of the neighbourhood character and are to be protected and emphasised by the framework proposal. The extensive demolished fabric of the maintenance yard is to be expressed in memory through abstract elements.

The contextual study provides crucial relevance to the individual study concerning the 1909 Chief Engineer's Office / 2011 POPUP Skills Training Centre, through its findings historically and characteristically. The results lend strongly to the conceptual methods of "reading the existing" as a means to generate design response through reacting to what is, "palimpsest", as a means to express the memory of lost and demolished fabric and "symbolism" to represent the past relationship with the railway, which forms a significant part of the building's history.

The framework study is relevant to the individual study in its ideals of emphasising the existing, which coincides with "reading the existing". The framework will serve to establish a character and contextual atmosphere in which the building will find connection. Access, green spaces, circulation and axes will influence and be influenced by the framework proposal.

An extensive analysis of the 1909 CEO / 2011 POPUP building has been conducted. The strengths, weaknesses, opportunities and threats of the building and the arrival to the building has revealed openings for design potential to rectify or optimise the existing. A sense of connection between the building and its physical and historical contexts is unaddressed and should be considered in the design process.

The building's ideal (distinctive historical characteristics) has been established. This process has clarified the vision of the building as the 1909 CEO and its intention can be revived through the process of stripping back while considering the change in typology, user and time.

The documentation of rotted fabric and its intended removal will be reflected in further analyses and design drawings. The process of enabling works will be further explained in the design chapter.