This section documents all visible factors of the context.
1. Site information:

Erf number: R 1340, portion 33/866  
Coverage: 60%  
Height restriction: 22m  
Zoning: residential  
FSR: 2  
Location: Pretoria, Sunnyside

Climate:

Temperature:

Summer average max: 32°C  
Summer average min: 18°C

Winter average max: 22°C  
Winter average min: 4°C

Wind:

Light moderate from a northeasterly direction  
Southern winds in spring and during thunderstorms

Rainfall:

Mean annual precipitation of 700mm per year  
Summer: 250mm  
Autumn: 100mm  
Winter: 25mm  
Spring: 100mm

Sunshine percentage: 60% in summer and 80% in winter

1. Aerial photo of chosen site
The narrowest portion of the site is situated on its southern boundary, along Jacob Mare Street. A landmark structure, as proposed by the NMDC, is proposed for this portion. Sloping roofs and water collection tanks can represent a definite attempt to harvest water during the rain season. This will aid the textile production process by alleviating water bills. The western façade receives the most sun exposure and heat generated by the road surface of Nelson Mandela drive can cause a hot environment. This façade will need to be passively designed with overhangs and ventilation systems to counteract overheating.
**Sun angles**

- **Summer morning** 08:00 _24°_
- **Summer midday** 12:00 _89°_
- **Summer afternoon** 16:00 _9°_
- **Winter morning** 08:00 _17°_
- **Winter midday** 12:00 _41°_
- **Winter afternoon** 16:00 _24°_

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1: Shadow patterns

*visual journal_climate*
The sections through the site indicate the interesting environmental transition from the Apies River to a built-up setting. This transition will need to be designed in order to promote interaction between them. The new building height will provide surveillance of the riverside that has been lacking, consequently making it a very dangerous region. The prominent existing building facades from the MOTH Club and the Breytenbach Theatre will require unobtrusive design solutions for the proposed building.
visual journal, photo map
1: Figure ground

2. Ground figure
2. Urban Design Principles: According to Trancik

Linkage between the following elements and the lost space determined by the figure ground generates a base map for the design process:

Path: Locals orientate themselves in terms of experiences along the path; and visitors according to landmarks.

Edge: Strongest when not only visually prominent, but also continuous in form and function.

Node: Anchor points that need support from surroundings to create sense of place.

Gateways and Landmarks: Visual and physical integration of public open spaces into the urban context.

Streets: Develop as liveable spaces, where dwellers have rights within protected neighbourhoods. The emphasis lies on two level street systems with slow-speed streets and environments for children. These should not become urban barriers.

By overlaying these identified elements according to the historical and natural context, social and cultural perceptions and existing human needs, a place emerges from the context itself. The following aspects are also important in terms of the building quality that will be generated:
Human Scale: The most functional office depth is 12m. The ratio of elevation to street should be no more than 1:4 or it loses the energy of an active urban environment.

Accessibility: Facilitate ease of movement through the building. All amenities must be within a 5 minute walking distance or 500m radius.

Variety: Different usage zones should be integrated, variety must exist in horizontal and vertical fields and functions. A conscious effort to create mixed use facility must be made.

Robustness: Develop building footprints that can change over time accommodate different uses in the future.

3. The study of place

The Apies River Urban Design Framework

The framework states that the Apies River is a cultural and natural asset of Pretoria and should be visually and physically accessible. It must be designed...
and planned so that it serves as a multifunctional civic spine that promotes opportunities for cultural interaction. The discourse site is allocated as part of the Urban Gateway development. Suggestions are made that all developments adjacent to the Apies must be of a multifunctional nature and must prove to be economically sustainable and viable. Business, tourism and socially interactive places must be established in order to address community needs. The developments must provide round-the-clock safe environments for pedestrians and cyclists.

**Nelson Mandela Development Corridor**

The NMDC functions as a bridge between the inner city and the residential areas of Sunnyside and Arcadia. Currently, the land along this spine is underutilized and provides ample development opportunities. A buffer zone exists, with the Apies River running through it, providing a natural resource that allows interesting design responses. The framework identifies the following aspects that need to be addressed:

- Poor links/connections between inner city precincts/neighborhoods
- Lack of balanced integration of urban users
- Mismanagement and neglect of natural resources

![Diagram of Nelson Mandela Development Corridor](image-url)
features
- Poor management of the informal economy
- Lack of mixed-use facilities and amenities
- Mono-functional, poorly defined public open spaces
- Ignored historical fabric
- Lack of identity/vision for the precinct

These aspects will be addressed by the NMDC. The context generates the identity that needs to be reshaped in order to create a safe, sustainable environment.

The NMDC’s ideal is to enhance social interchange of users through interactive urban nodes with a broad set of amenities and functions, allowing the market and new development initiatives to generate a healthy economy.

The NMDC is divided into districts; the discourse site is situated in the Arts and Culture Precinct. Esselen Street forms a vital link to the district. A series of public spaces and landscape initiatives links Esselen Street with the Oeverzicht area.

The Arts and Culture Precinct’s plan enables future expansion that will provide offices, apartments and retail facilities. This will promote public interaction with the existing theatres and art village.

The discourse site is assigned to host a landmark. It is suggested that the landmark must form part of the building structure and provide visual orientation.

SITE

“The urban site will always overwhelm as an object of critical and theoretical reflection. With blatant

2: Landmark proposal

1: Landmark design and placement
disregard for designs, orderly presentations, the images and identities of the city remain elusive. This is because the urban site is not a stable place, but instead a transitory and multivalent space - an aggregation of ever shifting scales, programs, and actors, all set within a temporal framework that holds both prior traces and future modifications.” (KAHN 1995:199)

Kahn states that an urban condition is qualified by behaviour that defies simple verification. The method of site construction lifts out the implanted urban values of the site, creating a discernment of various scaled site-specific characters from physical and non-physical qualities.

The urban values of the discourse site are the following:

- The creation of movement patterns will be the primary focus for the site to obtain urban energy
- The physical lifting of the site will allow it to respond to the existing urban fabric
- The site boundaries allow interesting environments to be shaped in response to the surroundings
- The existing green zone is in line with the reactive axis initiated from the NMDC, this will automatically provide a sense of arrival when movement systems are implemented
- A historical sensitivity and response will highlight the rich past that the area hosts.

3. Landuse map

4. Alley between MOTH and residential building.
1. View from southern point of site in northerly direction.

2. Southern view, Meintjieskop.

3. Eastern residential block at gate of site.

4. Residential gateway, west of site.

5. Existing building function analysis
6. Eastern entrance to site.

7. Vehicular access to site.

8. Vehicular access from Gerard Moerdyk Street.

9. Vehicular access to Breytenbach Theatre offices.
4. S.W.O.T. ANALYSIS:

Strengths of the site:
- It provides a rich cultural experience along Nelson Mandela drive; buildings of prominent historical significance exist in Oeverzicht.
- New Framework: strong and dense
- Mix of population and languages in region: wide variety of opportunities for tourism and richness.
- Prominent existing pedestrian movement generated by scholars, residents and taxis
- Trading and entertainment opportunities

Weaknesses and Problems:
- Public spaces: very unsafe environment
- Buildings are individually isolated
- Little economic activity
- Community infrastructure: lack of public amenities
- Lack in variety concerning social activities
- Pedestrians secondary to vehicles
- Heritage not priority: absence of preservation zones/few green spaces
- Decentralisation: due to competition from other urban centres on the periphery
- Lowering in the quality of urban life and environment
- Lack of identity

Opportunities:
- Use proposed pedestrian boulevard to fulfil potential of connection with Esselen Street
- Preserve and increase the amount of green space
- Establish green spaces along walkways and cycling routes
- Fulfil the need for public interaction; provide offices, workshops
- Fulfil the need for community empowerment through job creation
- Enhance historic fabric
- Facilitate conditions for pedestrians within the city
- Integrate landmarks and enhance and protect urban heritage
- Realise economical potential
- Encourage mixed uses and tenures

- Create an entrance to the city.
- Achieve a higher quality of living

Threats:
- Disappearing culture
- Drug use and trading among students

Recall:
- Maintain continuity of Nelson Mandela drive with an active western façade
- Respect the existing silhouette of buildings and landscape and the heritage involved
- Prevent scale anomalies of masses due to the response required from the Apies River
- Respect existing rhythms of facades and spatial elements
- Enhance spatial patterns of public space usage

1. Linen crepe scarf
2. Tube weave dress

3. Plastic raincoat

express