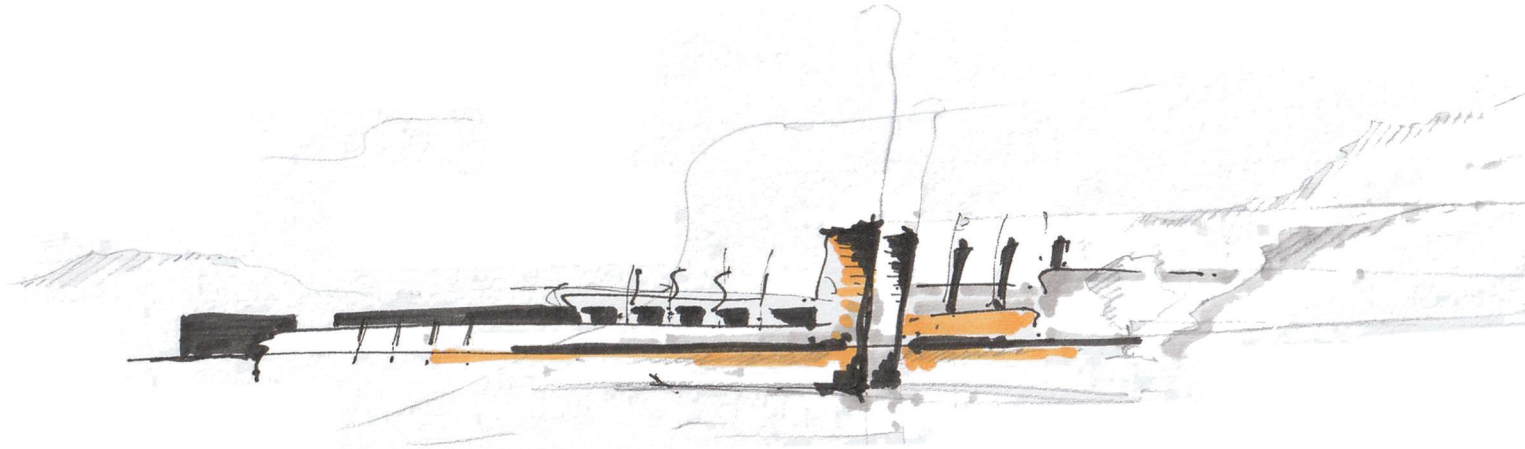

A REGIONAL GIN DISTILLERY
FOR CLARENS, EASTERN FREE STATE.

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DECLARATION

Title of dissertation
A Regional Gin Distillery For The Eastern Free-State, Clarens

This dissertation is submitted in partial fulfilment of the requirements for the degree M.Arch. (Prof).

Department of Architecture, Faculty of Natural and Agricultural Sciences
University of the Free-State.

Candidate

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05 November 2020

Supervisors

Prof. J.D. Smit, Mrs. P. Smit, Dr. G. Bosman, Mr. H. Raubenheimer

Declaration of original authorship



Aat Lindeque

The work contained in this document has not been previously submitted to meet requirements for an award at this or any other higher education institution.
To the best of my knowledge, this document contains no material previously published or written by another person except where due reference is made.

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Project Summary

Aat Lindeque - [M.Arch Prof Dissertation]

Programme_ Experiential Industry: A craft gin distillery & gin bottling facility.

Site Location_ Clarens Village Conservancy [CVC] periphery across from Hill & Main Street Junction, Clarens, Free State, South Africa.

Site Description_ The site is located on the valley bank of the stream which forms across from the Hill & Main Street Junction.

GPS Coordinates_ -28.522631, 28.414325

Clients_ Distill Ltd. [International Alcoholic Beverage and Spirit Manufacturer].
Clarens Village Conservancy, [Wildlife conservation organization protecting the Clarens Conservation area].

Theoretical Approach_ Critical Regionalism and phenomenology is synthesized with the notion of re-imagining contemporary architecture to respond critically to context and thereby re-imaging the changing industrial typology existent in the Free-State.

Archictectural Approach_ Re-imagination of the industrial industry in the Free State, which as a traditional industrial based economic province is experiencing a growth in tourism which could require a change in the approach of the typical industrial architectural program.

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ACKNOWLEDGEMENTS

I would like to thank Prof. Smit and Mrs. Petria Smit for their constant guidance and encouragement throughout the year.

Also a special thank you to my supervisor Dr. Gerhard Bosman for enduring with me and guiding me through the process. This has been a memorable journey.

Furthermore, I thank my parents Robbie and Cara Lindeque for their constant support and motivation throughout the year. Without them none of this would have been possible. A lifetime of teaching and guidance has paid off.

A special thank you to my study partner, friend and fellow M.Arch. Prof student Jakes who without, the year would have been a struggle and not nearly as enjoyable. Our late nights working on studies will go down into the history books.

Finally, this dissertation is dedicated to my heavenly father, Yahweh. The architect of all creation and who without we are but mere dust.

God with us.

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INTRODUCTION

Proposing a Regional Gin Distillery for Clarens, Eastern Free-State.

The search for relatable meaning in architecture has led many architects to investigate civilizations, past and present around the world. This dissertation aims to investigate how architecture can enhance human experience of landscape. Classic style architects understood that man is part of nature, and aimed to construct in a manner which celebrated and enhanced the features which a location's context provides to the architect. Clarens, being a tourist based town with quaint country style accommodation, marvelous natural surroundings and a variety of arts and crafts, offer architecture the opportunity to enhance the natural experience through place.

Distell which is a leading South African alcoholic spirits and beverages manufacturer offers the opportunity to investigate how a regional gin distillery in Clarens can explore this theory. Is architecture when applied appropriately able to enhance the phenomenological experience of the user by exhibiting the essence of an industrial building, instead of hiding it away behind cold facades of the existing industrial typology.

This dissertation investigates how different architectural styles developed and were influenced by nature, societies and world events. The influences of historical and traditional architecture on Clarens,and the industrial typology of the Eastern Free State countryside is investigated in order to provide clues as to what might create an appropriate contemporary solution to this investigation. Critical regionalism and phenomenology is analyzed as the foundation on which the theoretical grounding of this dissertation is based.

The dissertation aims to synthesize these elements into an architectural solution by capturing the essence of a distillery, Clarens town, the surrounding Eastern Free-State environment into a contemporary building allowing the user an experience of process, place and being.



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PROLOGUE

THE **GIN** STORY

RE-IMAGINING HISTORY

To **Distill** or not to Distill

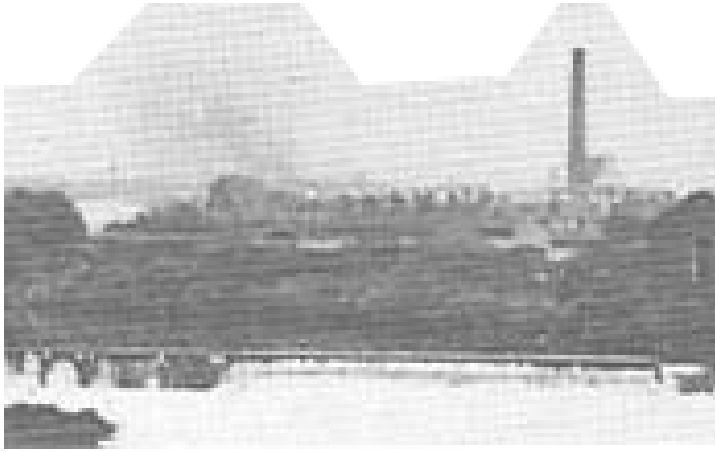
Meaning of the word "distill" in English

[Distill].

Verb US (also mainly UK distil)

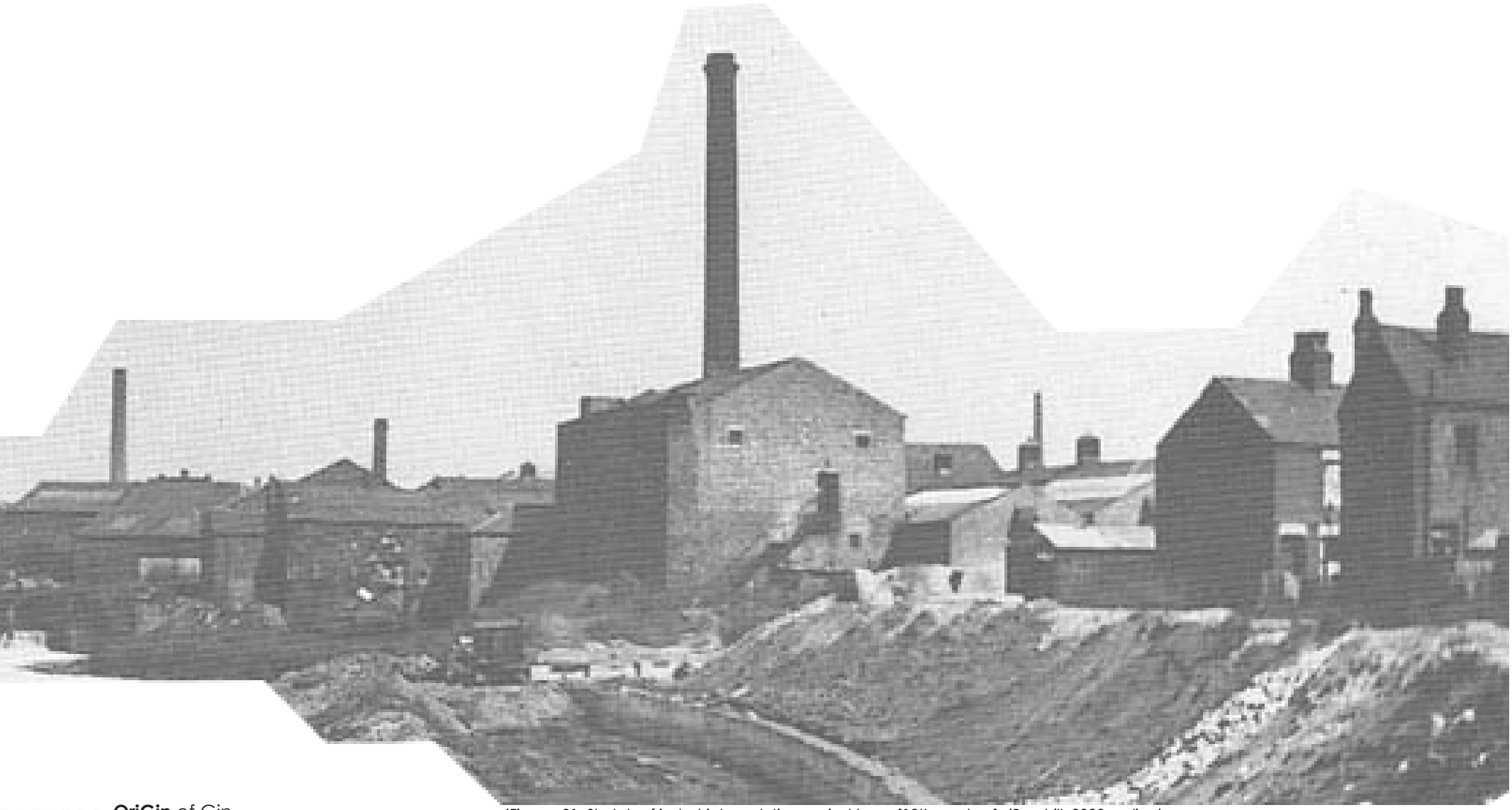
US /dɪ'stɪl/ UK /dɪ'stɪl/
-ll-
Distill verb (LIQUID)

To make a liquid stronger or purer by heating it until it changes to a gas and certain liquids evaporate, and then cooling it so that it changes back into a liquid:
Some strong alcoholic drinks such as whiskey and gin are made by distilling (Distill, 2020: online).



History of Distilling

The process of distillation (from the Latin 'de-stillare' for 'drip or trickle down') is the separation of a liquid by evaporation and condensation. The simplest example of this is when steam from a kettle becomes deposited as drops of distilled water on a cold surface. Distillation is used to separate liquids from non-volatile solids, as in the separation of alcoholic liquors from fermented materials, or in the separation of two or more liquids having different boiling points, as in the separation of gasoline, kerosene and lubricating oil from crude oil. Other industrial applications include the desalination of seawater (Distill, 2020: online).



(Figure. 01. Sketch of industrial revolution period town [18th century], (Burchill, 2020: online)

OriGin of Gin

Gin is a spirit that gets its flavour from juniper berries and it was developed based on the earlier drink Jenever, which is the traditional juniper flavoured national spirit of Belgium and the Netherlands. Jenever was originally produced by the distillation of malt wine and the herbs were added to mask the strong flavour. Juniper berries were chosen for the flavouring due to their alleged medicinal effects seen in.

This drink was originally sold as a herbal medicine in the 16th century. It was rumoured to treat gout, gallstones, stomach complaints and other issues.

The soldiers who were fighting in the low countries during the 30 year war relied on "dutch courage" in the form of a warming shot of gin. The alcoholic spirit would calm their nerves and make them feel better while they battled in the cold and damp weather. The British troops brought it back with them and the drink became a favourite with the poor (Barrett, 2020: online).

Juniper Berries (Juniperus communis) is the key ingredient to what makes Gin, Gin.

Junipers are coniferous trees and shrubs in the genus Juniperus of the cypress family Cupressaceae.

Juniper berries are a spice used in a wide variety of culinary dishes and best known for the primary flavouring in gin (and responsible for gin's name, which is a shortened version of the Dutch word for juniper, jenever). A juniper-based spirit is made by fermenting juniper berries and water to create a "wine" which is then distilled. This is often sold as a juniper brandy in Eastern Europe. Juniper berries are also used as the primary flavour in the liquor Jenever and sahti-style of beers (Barrett, 2020: online).

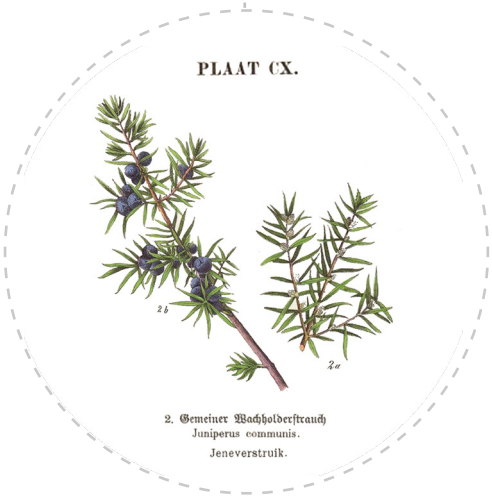


Figure 02, Juniper tree and berries which is used to distill Gin (Helena, 2019: online).

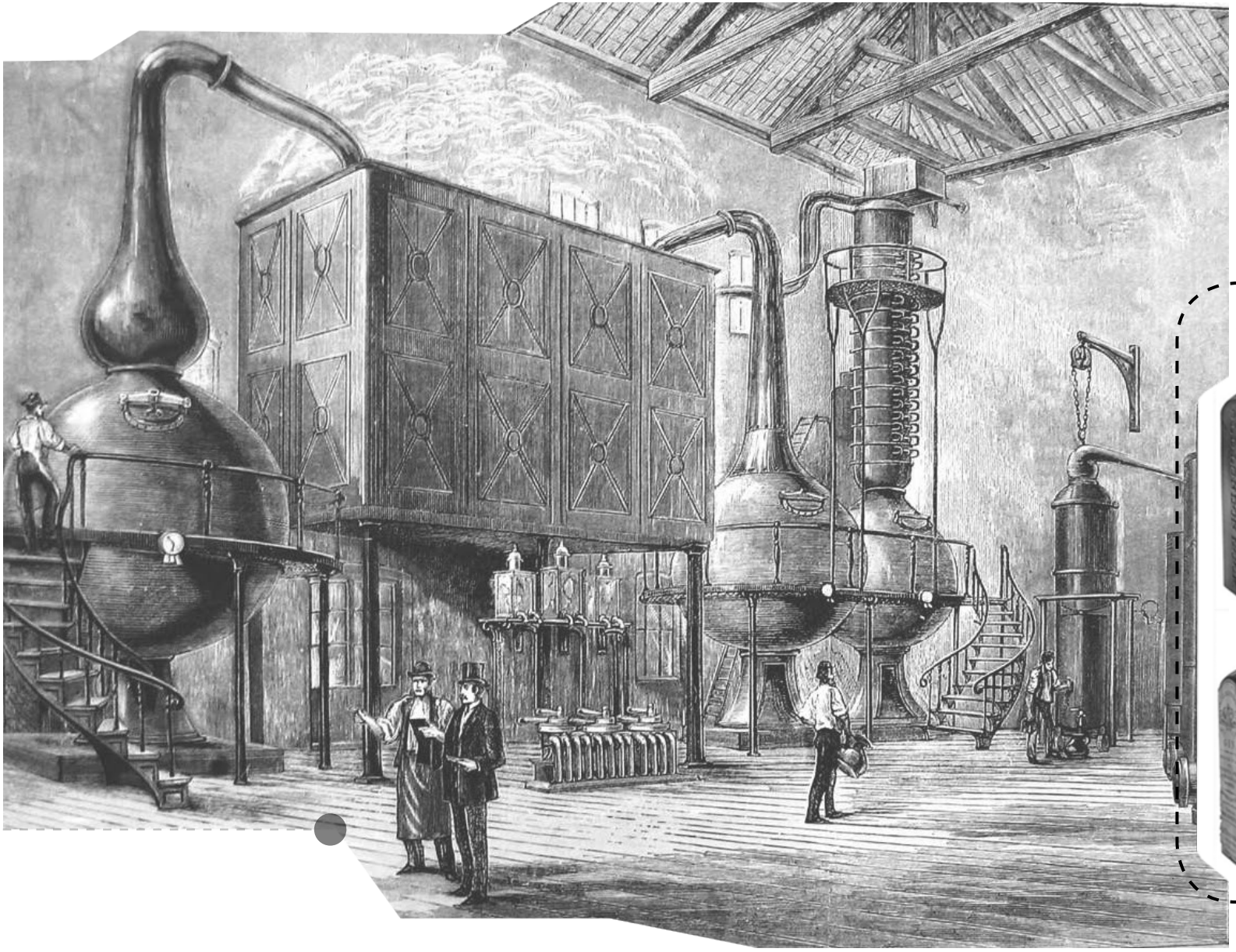


Figure. 03, Sketch of industrial period gin distillery in the 19th century (ginfoundry, 2014: online).



(Figure. 04. Vintage Old London Dock gin bottle from Bininger Gallery (Meyer F. 2013: online).

Gin **Botanicals**

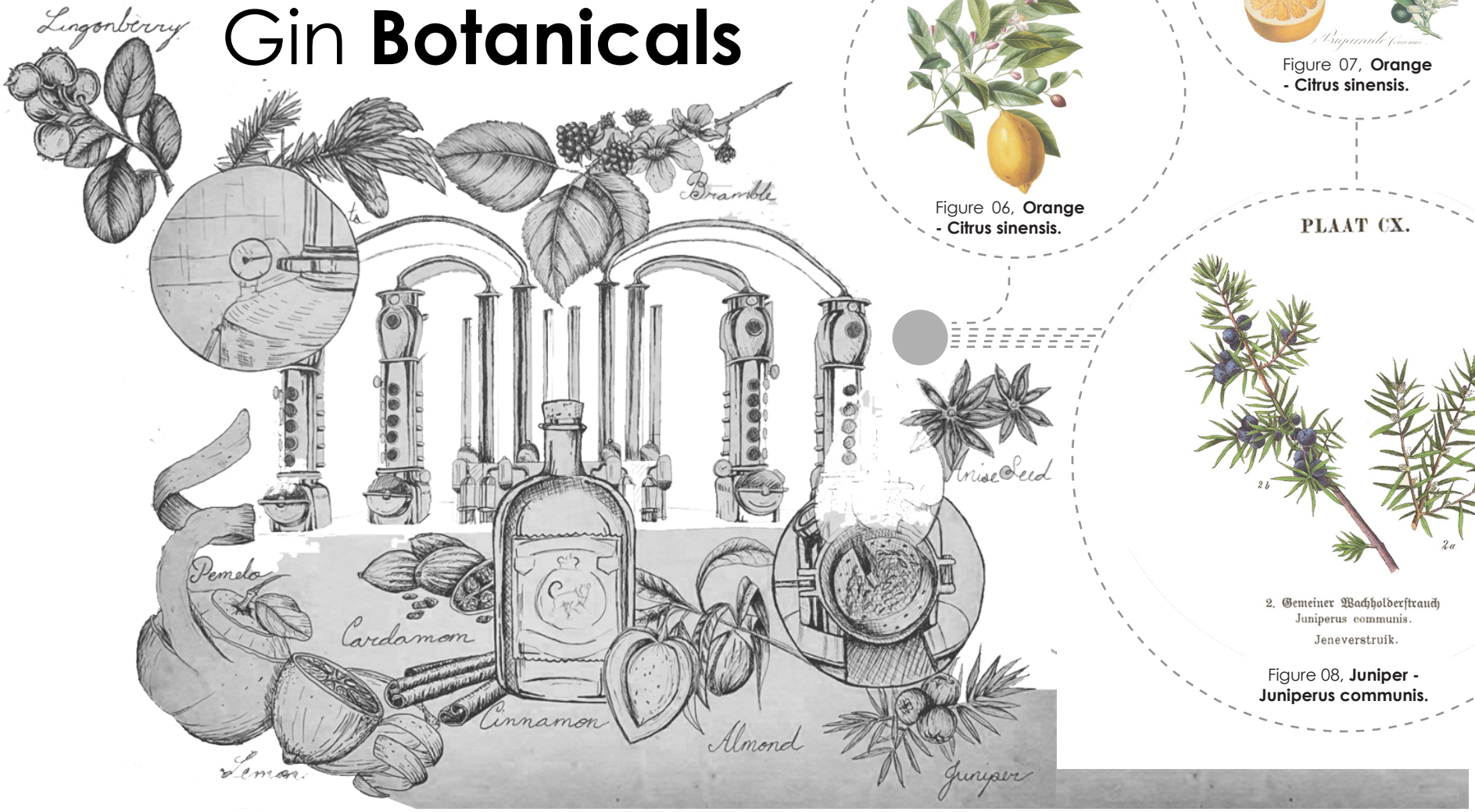


Figure 05, Historic sketch of gin with array of botanicals (Barret, 2020: online).

LOCAL BOTANICALS

Figure 06, **Orange - Citrus sinensis.**



Figure 07, **Orange - Citrus sinensis.**

Figure 08, **Juniper - Juniperus communis.**

IMPORTED BOTANICALS



Figure 09, **Almond - Prunus.**



Figure 10, **Angelica - Archangelica.**

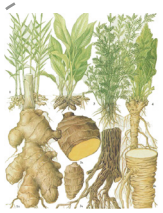


Figure 11, **Liquorice Root - Glycyrrhiza.**



Figure 12, Grains of prardise - Aframomum melegueta



Figure 13, **Cardamon - Elettaria Genera.**



Figure 14, **Coriander - Coriandrum Sativum.**



Figure 15, **Cubeb - Piper Cubeba.**



Figure 17, **Cinnamon - Cinnamonium Zeylanicum.**



Figure 16, **Cardamon - Elettaria Genera.**



Figure 18, **Nastergal - Solanum nodiflorum.**

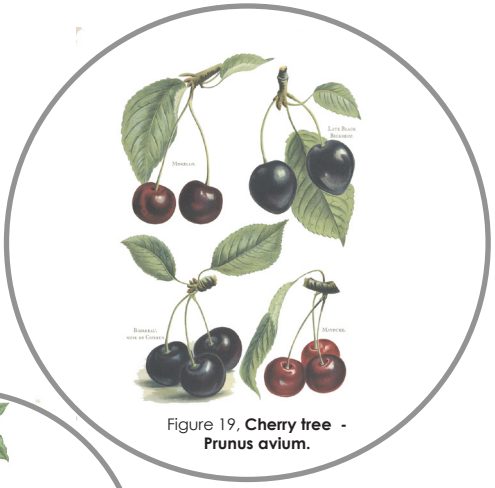


Figure 19, **Cherry tree - Prunus avium.**

CRAFT BOTANICALS

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ABSTRACT

Distilling Meaning In Contemporary Architecture.

Through the development of architecture from being culturally significant to a globally accepted style, the user has become more disconnected as architecture has developed into sculptural objects. Removable from a specific location and placeable anywhere, global style architecture often neglects to consider specific climate and context which might influence the experience of place. Some questions which arise through the application of the global style are the following: Can a critical regionalist approach to architecture allow the user to connect with each aspect thereof and truly enhance the phenomenological experience of place and function? Can the meaning which is given to architecture be more relatable to the user, instead of being relatable primarily to the architectural industry?

Has the focus on the individual instead of the community also impacted the architectural industry, creating egocentric [star]architects who design buildings that celebrate themselves instead of the user within a specific place? The understanding of historical society compared to current society is in a large way integral to understanding current architectural trends. This dissertation investigates how a gin distillery in Clarens, Eastern Free-State can answer these questions, by allowing the user to experience the entire function and process of the building whilst emphasizing the phenomenological experience of place. The history and development of Clarens, as well as the surrounding context becomes the main design-generators instead of personal design preference.

The influence of Christian Norberg-Schulz's explanation of "Genius Loci Towards Phenomenology of Architecture" will be used as a foundation to phenomenological experience through architecture (Genius Loci,1980). The contemporary applications thereof are investigated and used as precedents for the development of critical regionalism which is seen as an approach that counteracts globalism in architecture. The experience of the user becomes the primary objective, allowing the understanding of place, process and being within a specific setting, all enhanced by the architectural intervention.

INVESTIGATION
PART



01.

PART 01.

CHAPTER [01]

UNDERSTANDING THE CHANGING INDUSTRIAL HERITAGE OF THE FREE STATE

[BACKGROUND & HISTORY]



Figure. 20. Aerial Photograph of view over crop fields and grain storage silos (Stewart, 2020: online).

Figure 21. Free State provinc, central South Africa. (MineralsCouncil.org 2020)

[.]_ TOURISM IN THE **AGRICULTURAL LANDSCAPE**

Free State is a land-locked province in the central South African inland and has historically been considered as the "Granary of South Africa" with agriculture central to the province's economy, while mining on rich goldfield reefs is its largest industry. The province is primarily Sesotho and Afrikaans, respectively originating from the Basotho influence and "Voortrekkers" Both cultures cultivated the land and established settlements and towns to sustain their agriculture-based communities.

The Free State province is predominantly sustained by its industries which necessitated the development of towns where industry motivated communities reside. The majority of towns in Free State developed as a result of either agricultural, mining, or other industries and provided the province with a unique identity rooted in its industrial heritage. However, with the advent of the third millennium A.D. South Africa has seen a change in the economic structure of the country, as well as the economic dependency on agriculture in the Free State (SAHO, 2011: online).

Known for its agricultural production sector, the Free State has in the last decade reduced its dependency on this primary sector and transitioned towards becoming a manufacturing economy. Currently 14% of the province's manufacturing is classed as high-technology industries and is the highest percentage figure in a provincial economy (SAHO, 2011: online). Although the Free State only makes up 10.6% of South Africa's land mass and 5.1% of the population it contributes significantly to the national economy through its industries. The Eastern Free-State is predominantly agricultural land of which 32% is arable, and 60% is natural pastures. Most of these pastures, particularly in mountainous areas, have become nature conservation areas, which create an unique interaction between the industrial and tourist sectors (SAHO, 2011: online.)

_i. **[Agriculture]**; Free State produces 40% of Corn and 16% of Wheat in South Africa (gateway, 2020: online).

_ii. **[Mining & Mineral Exploits]**; which is the largest industry in the Free State and produces 30% South African Gold output.

_iii. **[Manufacturing & Production];** Other major industries include Sasol Energy and Chemical Company, and other mineral mining industries.

_iv. **[Tourism Industry];** A growing, yet vital component in the economy and development of Free State province.

AGRICULTURAL **INDUSTRIES** - LIFE OF THE PROVINCE

1.i.



Figure 22. Ladybrand Grain Storage (AFGRI, 2020: online)

[a.]_ **FS GRAINS** - DRY-LAND & IRRIGATED [PERCENTAGE OF SOUTH AFRICAN PRODUCTION].

Maize - [40% of SA]

Food Production & Animal feed production.

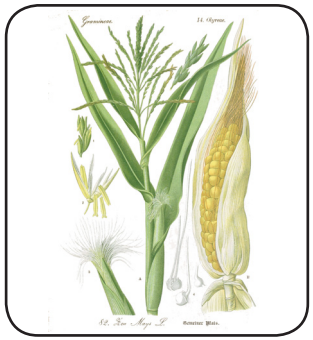


Figure 23, Maize Print (CTG Publishing, 2013).

Wheat - [16% of SA]

Primarily flour production.



Figure 24, Wheat Print (Illustratedgarden, 2020).

Sorghum - [53% of SA]

Food Production & Animal feed production.



Figure 25, Sorghum Print (Scientificillustration, 2020: online).

[b.]_ **FS CROPS** - FOOD & PRODUCTS

Sunflower - [45% of SA.]

Food Production & Animal feed production.



Figure 26, Sunflower Print (Scientificillustration, 2020: online).

Potatoes - [33% of SA]

National use & Export - Food Production.

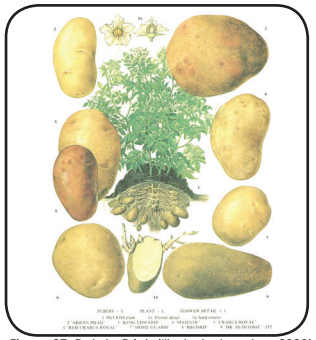
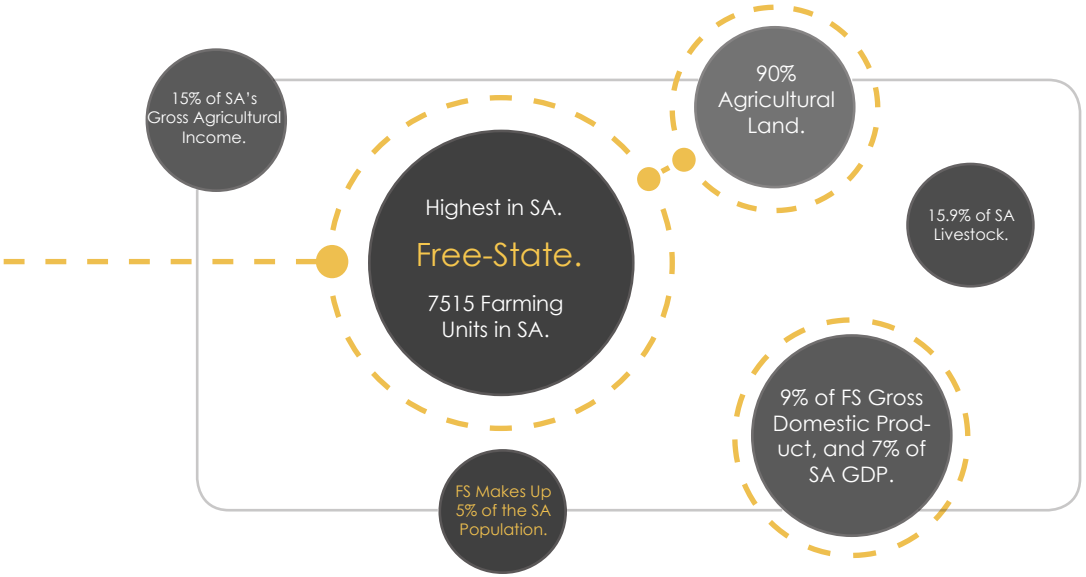


Figure 27, Potato Print, (Illustratedgarden, 2020).

Statistics gathered from Agribook, AFGRI, Travelground & FDC's latest figures.



[e.]_ CHANGE IN **PERCEPTION** AND PUBLIC USE OF **INDUSTRIES**

Since the change of the millennium and the rapid growth of the cyber -revolution in the last decade the industries have been faced with multiple challenges which include environmental responsibility and a rise in labour and processing cost, which has forced industries to restructure their strategic operation as well as adapt and introduce modern aspects related to labour use, mechanizing operations as well as diversify existing industries (Scholtz, 2019: online).

Diversification challenged industries to create multiple functions instead of a singular production or manufacturing industry, and to add a public aspect to these industries. The interest from the public in the industrial functions and processes has become a growing trend, and allowed industries to add a tourism function to existing operations

[c.]_ FRUIT - FOOD & PRODUCTS

26.4% of South African crops

Groundnuts - [32% of SA]. (Peanuts)
National use & Export - Food Production.

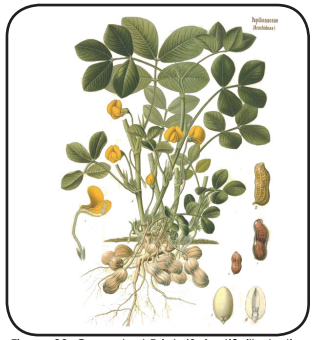


Figure 28, Groundnut Print, (Scientificillustration, 2020: online).

Groundnuts - [32% of SA]

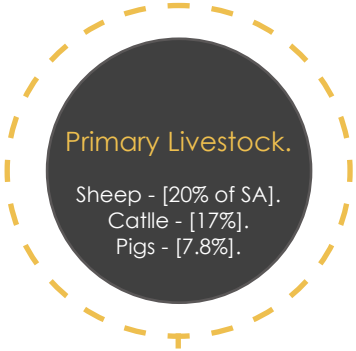
National use & Export - Food Production.



Figure 29, Dry Beans Print, (Illustratedgarden, 2020).

Livestock - [15.9% of SA]

National use & Export - Food & Wool & Leather Industries.



Cherries - [90% of SA]

National use & Export -Preserves as-well as liquor.

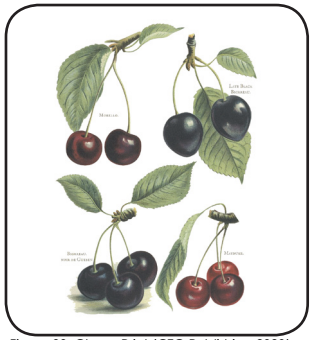


Figure 30, Cherry Print (CTG Publishing 2020).

Apples - [2% of SA]

National use & Export.



Figure 31, Apple Print, (Illustratedgarden, 2020).

[d.]_ LIVESTOCK - FOOD & PRODUCTS.

MINING **INDUSTRIES** - ECONOMIC CORNERSTONE

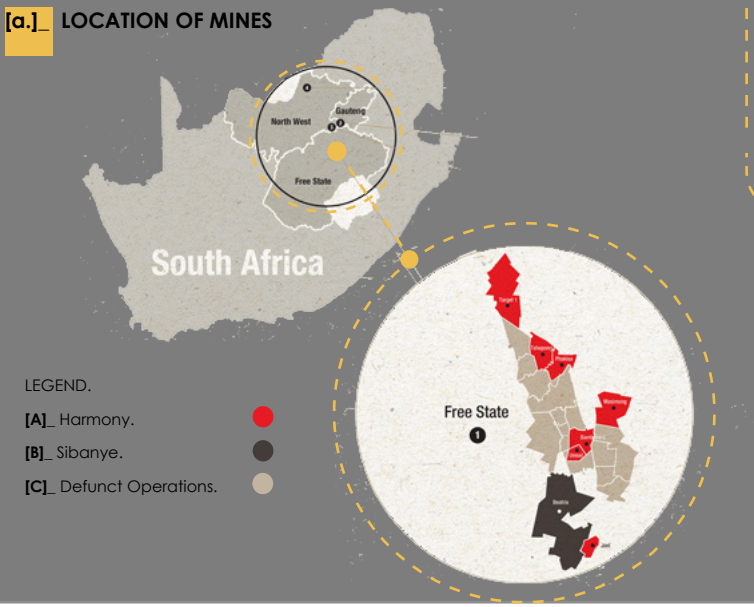
1.ii.



[1.ii.] **FS MINES** - METALS & MINERALS

South Africa, once the largest gold-producer world wide where mining has historically played a vital role in the development of Free State province, and forms part of an industry driven economy.

[a.]_ LOCATION OF MINES



[b.]_ FS GOLD MINES - [16 MINES]
North Free-State [Welkom].

Richest Gold Deposit on Earth.
South Africa.
8th Largest Gold Producing Country the World.

118.2 Tonnes per annum.

Statistics gathered from (USFUNDS, 2020: online) and (SAHistory, 2020: online) latest figures.

[c.]_ DIAMONDS - [Kimberlite]
- Shaft & Open Mines.



Figure 33, Gold Ore Print, (Etsy, 2020: online).

Figure 32. Free State mine localities (MineralsCouncil.org 2020: online)

[d.]_ GOLD ORE - [30% of SA]
- Shaft & Open Mines.
- Harmony & Sibanye Gold Mines.

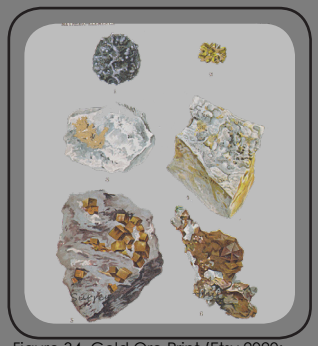


Figure 34, Gold Ore Print (Etsy 2020: online).

The South African and **Free-State** gold mines have been reducing production since 2008 due to rising production and labour costs. This resulted in closure of mines due to unprofitability (USFUNDS, 2020: online).

[e.]_ MINERAL EXPLOITS

- Coal [Vereniging, Sasolburg [10.5% of SA].
- Granite [Parys].
- Gypsum [Boshoff].
- Sand & Stone.
- Uranium.

Figure 35. President Steyn Miine, Welkom, Orange Free State (Hiltont, 1954: online)

SALT PAN - [FLorisbad Salt Pan]
[North-West Free-State].



Figure 36 , Salt Pan Exploits Print (Unknown, 2020.: online)

[33% of FS GDP]

[a.iii]_ **SASOL** REFINERY, SASOLBURG, FREE STATE

1.iii.

MANUFACTURING & PRODUCTION INDUSTRIES

[a.]_ Chemical Industries - **Refining** Crude Minerals
Three Leaders In **Chemical** & **Energy** Solutions

SASOL - [South African Synthetic Oil Liquid].
Sasolburg, Free State.

Main Production Categories:

- **Fuels:** Fuel Oils, Bitumen, GTL, Lubricants, Motor Fuels.
- **Gas:** Piped Gas, Specialty Gas, Unpiped Gas.
- **Chemicals:** Fertilizers, Ammonia, Carbon, Hydrocarbon Blends, In-organics, Mining Chemicals, Polymers, Wax, Lacquer Thinners, Chlor Alkali.

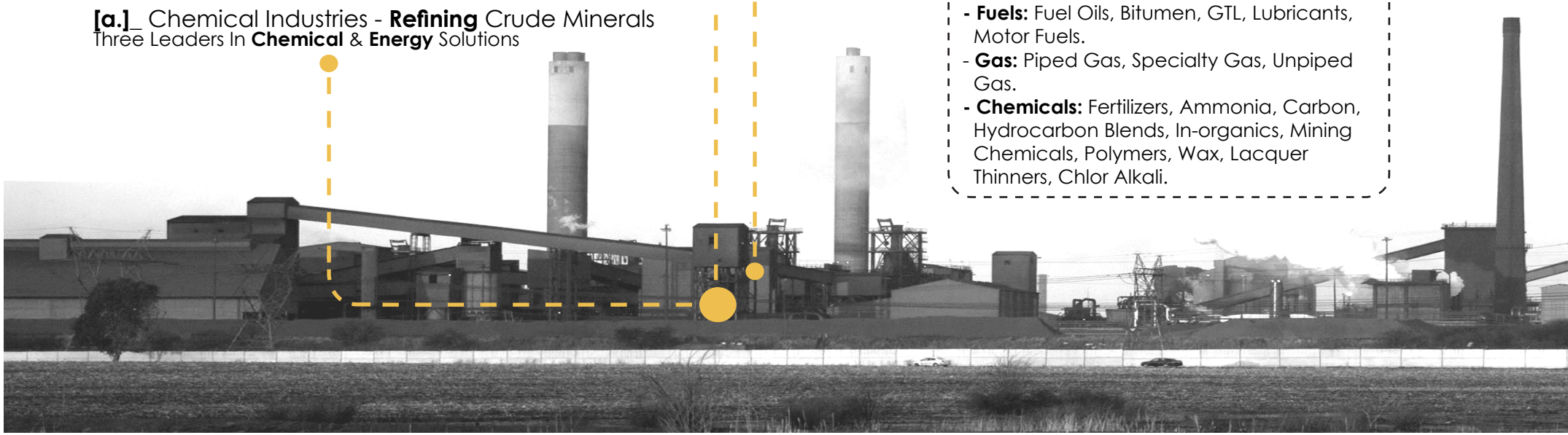


Figure 37. Sasolburg chemical plant and refinery, (iStock, 2020: online).

[b.]_ **OMNIA** HOLDINGS LTD
[Chemical Manufacturing]

OMNIA Holdings Limited. Specialize in Agriculture [Fertilizers], Chemicals [Effect Chemicals & Polymers] and mining [Explosives & Mining Chemicals]. (OMNIA, 2020: online).

[c.]_ **AECI** MINING CHEMICALS
[Chemical Manufacturing]

AECI Mining Chemicals Suppliers & Manufactures of mining chemicals based in Sasolburg, Free State. AECI primarily focuses on the mining industry and providing chemical solutions throughout South Africa (A.ECI, 2020: online).

[d.]_ **OTHER** MAJOR **MANUFACTURING & PRODUCTION** INDUSTRIES IN THE FREE STATE

- Nouwens Carpets - [Harrismith].
- Coca-Cola Bottling Plant - [Bloemfontein].
- Textiles [Bothsbelo & Phuthaditjaba].
- Engineering Small & Large - [Free State].
- Packaging [Free State].
- Furniture [Free State].
- Jewelery.

[9% of FS & 4% of SA GDP]

Manufacturing & Production
Essential sector in Free State and South African Economy.



[a.]_ Golden Gate Highlands National Park

The foothills of the Maluti Mountains & Basotho Kingdom.



THE FREE STATE TOURISM INDUSTRY

1.iv.

[b.]_ Eastern Free State Tourism [Existing].

The Eastern Free State tourism industry is predominantly based around the natural beauty of the conservation areas within the province. The accessibility to national routes as well as the centrality of the locations makes it an attractive destination for visitors from most surrounding provinces (SAgov, 2020: online).

The tourism industry is the Free State consists of arts & crafts, hospitality, cultural heritage and natural [conservation areas] sectors.

SAN Parks was Founded in 1926, by SA Parliament

South African NATIONAL PARKS

- **Annual Budget:** R 1,815,542.00
- **2018/2019: Total Revenue** R 3,001,206.00

[c.]_ South African National Parks **[SAN Parks]**

SAN Parks plays a vital role in establishing and conserving of national environmental interests. Golden Gate Highlands National Park seen in figure 38, is arguably the most well know in the province and attracts users to its breathtaking sandstone formations and mountain ranges. The park offers the user a wide variety of activities from the Basotho cultural village to hiking, bird and wildlife viewing to accommodation in its various hotels and retreats (SANPARKS, 2020: online).

[d.]_ Tourism **Budget**

R631 million, shared with Economic & Small Business Development & Environmental Affairs.



[e.]_ Tourism Sector **Economy**

The Free State tourism sector contributes [R3.1 billion] to the provincial gross domestic product (SABC, 2020: online).

Figure 38. Golden Gate Highlands National Park, Brandwag mountain photo, (iStock, 2020: online).

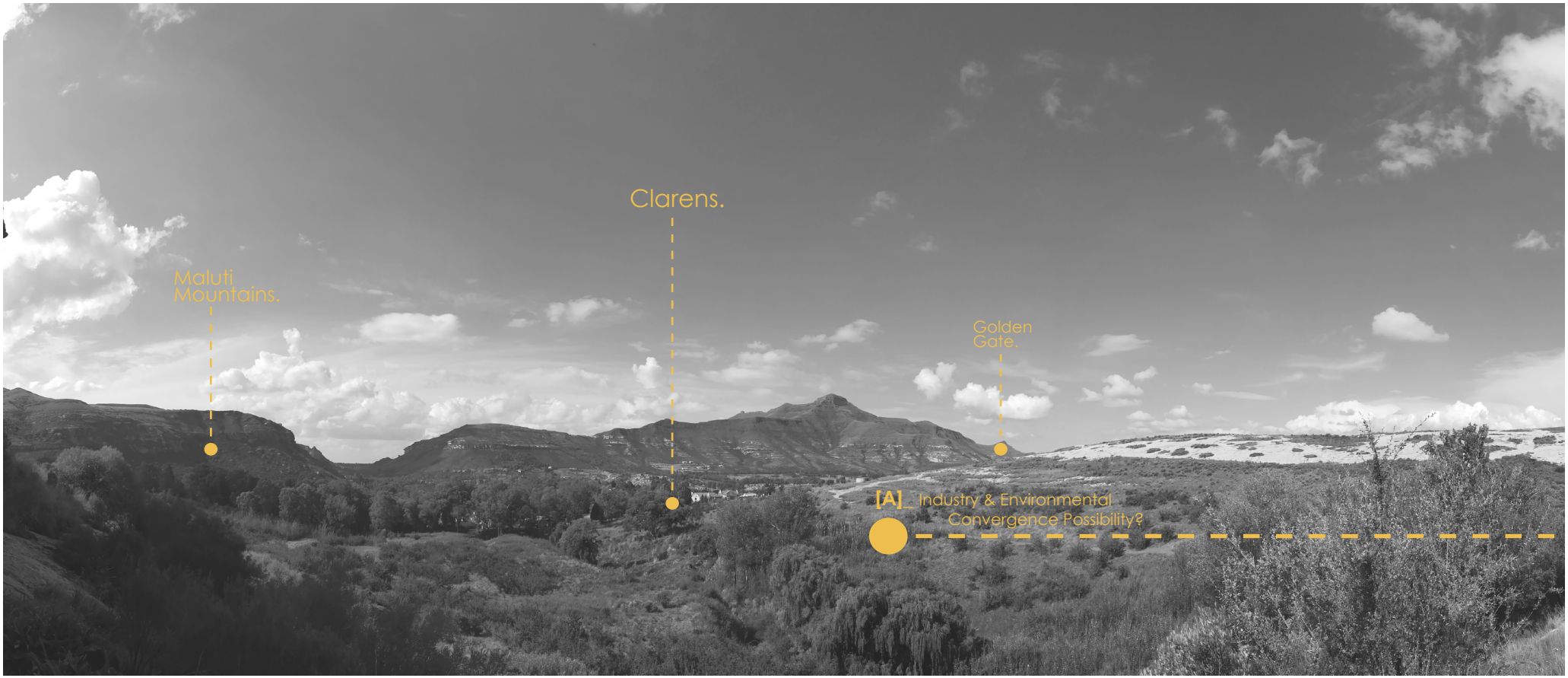


Figure 39. Hidden in the natural landscape lies Clarens, offering a converged experience of man-made in natural space (Author, 2020: online).

1.v.

[i.]_ A **DIVERSIFYING** LANDSCAPE - **USER INCLUSIVE** INDUSTRIES?

The previously considered one-dimensional industries have diversified greatly since the change of millennium. Industries have sought to add a public market to most pre-existing industries allowing different avenues of income apart from the well established manufacturing and production based market. The change and new approach to industry and the economics resulted in tourism becoming one of the fastest growing economic sectors in the Free State. How can more of these industries be re-imagined to allow tourists to experience the heritage of the majority of these communities and share in the Free State identity (GlobalAfricaNetwork, 2019: online) .

[ii.]_ PRECEDENTS OF THE **AGRICULTURAL INDUSTRY** DIVERSIFYING TO INCLUDING **TOURISM**

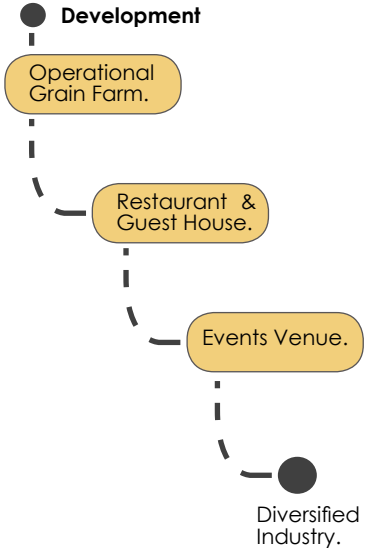
Several traditional commercial farms have diversified their industries to accommodate the public who may then through various working-farm activities experience the lifestyle, processes and functions of specific industries. Often farms that traditionally only produced food or beverage, have introduced restaurants, venue hire and accommodation. The Eastern Free State has become a tourist hub of the province.

[a.]_ Linwood Guest Farm **[Clarens]**



Figure 40, Main house/restaurant (Linwoodfarm, 2020: online).

Linwood Guest Farm [above] is predominantly an agricultural farm, grain and livestock. The farm allows guests to use the agricultural experience as a venue for events (Linwoodfarm, 2020: online).

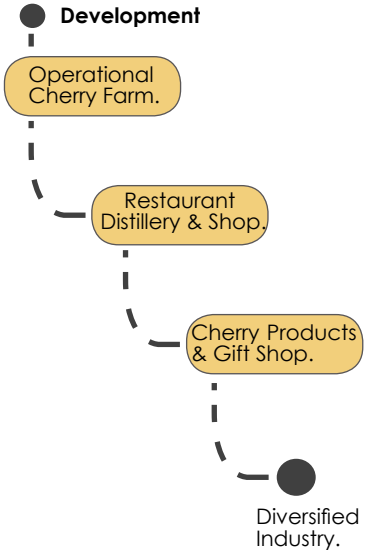


[b.]_ Constantia Cherry Farmstall. **[Ficksburg]**



Figure 41, Cherry shop (constantia, 2020: online.

Constantia Cherry Farm stall [above] was originally intended as a retail point for fresh cherries grown on Constantia farm but has developed into a cherry experience for tourists. (constantiafarmstall, 2020: online).



1.vi.

[i.]_ INTEGRATING **DIVERSIFIED INDUSTRIES** WITH TOURIST DRIVEN TOWNS

The diversification of industries throughout most parts of Free State, especially Eastern Free State which contributes significantly to the economy through tourism has encouraged similar developments to act as a catalyst for rejuvenation in many of these dying industry based towns such as Ficksburg, Fouriesburg and Clocolaan as well as current tourist based towns such as Clarens (GlobalAfricaNetwork, 2019: online). The public interest in industrial processes, specifically in craft distilleries which cater for a unique user experience of process, place and environment allows for an architectural intervention which questions how industries address the growing public market in this diversified sector.

Yet, the question to be asked from an architectural point of view is; how do we as architects approach this opportunity to address these sites which are often located in breathtaking landscapes without imposing on the natural environment as seen in figure 42, the Clarens Protea hotel being out of scale and context. Does current contemporary architecture have an appropriate response to this question? In order to better understand the opportunity as well as to deliver the appropriate response, a look at the current state of the architectural industry is necessary.

[ii.]_ UNDERSTANDING **ARCHITECTURE** - FOR THE **USER**

Relatable meaning in architecture. This is likely to be the most argued about topic in the field of architecture in the last century. Architecture has seen a great shift in emphasis in what architecture aims to tell, to provoke, yet we still seek to uncover this meaningfulness which those in history seemed to capture so effortlessly. The great debate in 1982 of 'Architectural Harmory or Discord" between Peter Eisenman and Christopher Alexander is one of many examples which indicates that we have not been able to guide architecture to a place where it achieves the same goals as classic architecture did in a modern or contemporary manner.

Architecture has grown into a profession which rightly celebrates the artistic aspect thereof, making the structure noteworthy and unique. However, to achieve this goal has the industry gone to far in trying to express this uniqueness? Has architecture become more about the architect and less about the people who will inhabit, and use the spaces we design? This dissertation aims to investigate how historical meaning was embedded into architectural works, which were spaces that the public could relate to and enjoy. And how contemporary architecture has become egocentric, celebrating the architect and the artistic feats more than acknowledging context and the user's experience of these expressionist buildings in current society.

Architecture should always be for people, creating spaces which enhance the experience that the user has in specific places, acknowledging that spaces have a unique (Genius Loci, 1908)* as discussed in chapter 6, where Norwegian architectural philosopher Christian Norberg-Schulz's investigation to phenomenology in architecture is analyzed. Architecture should be spaces which invoke meaning which is connected to history, materiality and social patterns of the place. The investigation will analyze how classical architecture achieved meaningfulness whilst looking at how many contemporary examples of architecture has failed to do so. The investigation [part 1] expands on the historical and theoretical foundations of meaningful architecture and asks how can this investigation be synthesized into an idea which informs the architect on how to design with meaning which will be relatable to those who use and experience the architectural spaces?

* [Genius Loci - Spirit of the Place] - 1 : the pervading spirit of a place. 2 : a tutelary deity of a place (Merriam Webster Dictionary).

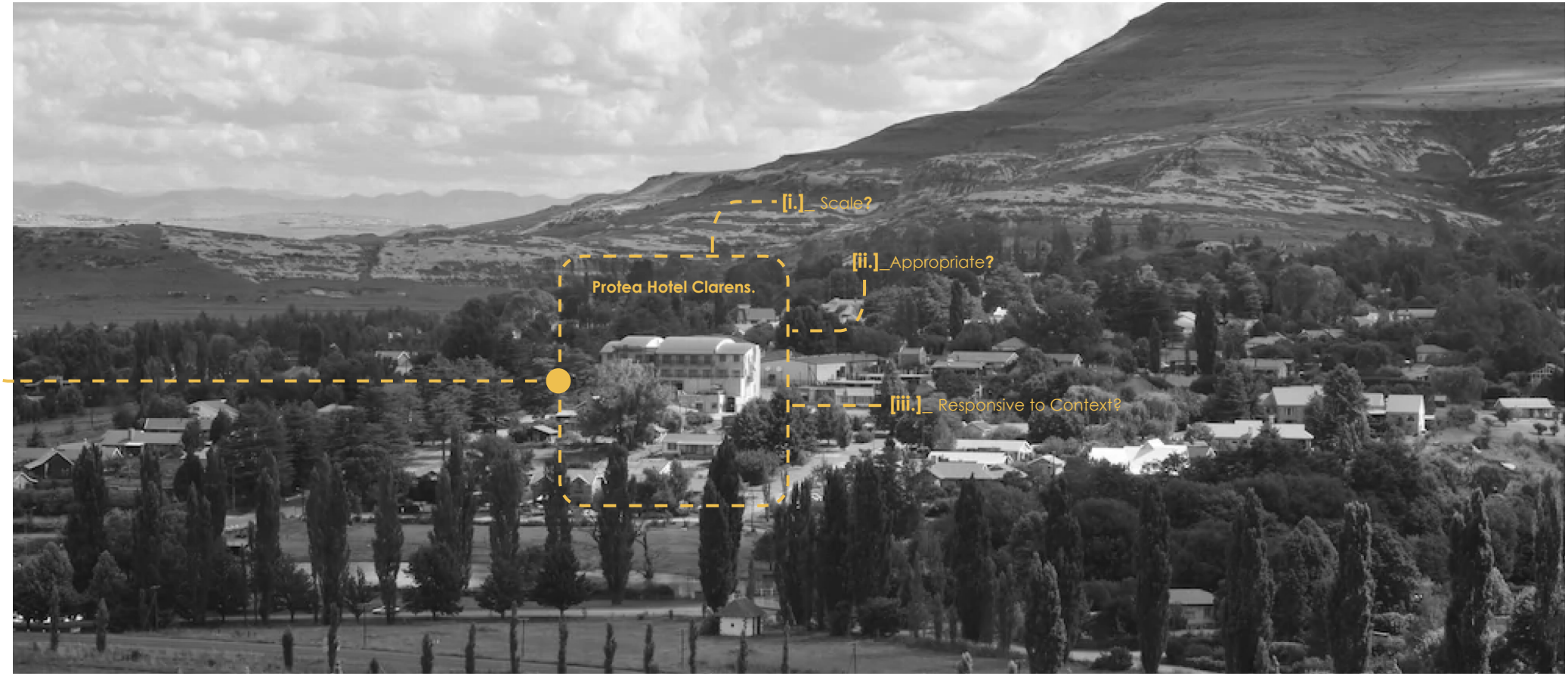


Figure 42. Bird's eye view of Clarens Town from Clarens Golf & Leisure Estate showing out of context Protea Hotel (AirAsiaGo, 2020: online).

1.vii. Problem Statement

Situated in the Maluti Mountains, Clarens seen in figure 43, has become a **destination** of choice for visitors from nearby urban regions in Gauteng as well as Kwazulu-Natal who seek to exchange the bustle of the urban for the calm of the countryside.

The problem in the context of Clarens arises when developers from urban regions of South Africa see the potential in the tourism sector in the countryside, and developing towns such as Clarens with disregard for the context and community of Clarens.

How can the potential of a tourism centered town be developed whilst taking into consideration the discussed [1.i] diversified industrial sector whilst addressing the context, culture, history and community of Clarens.

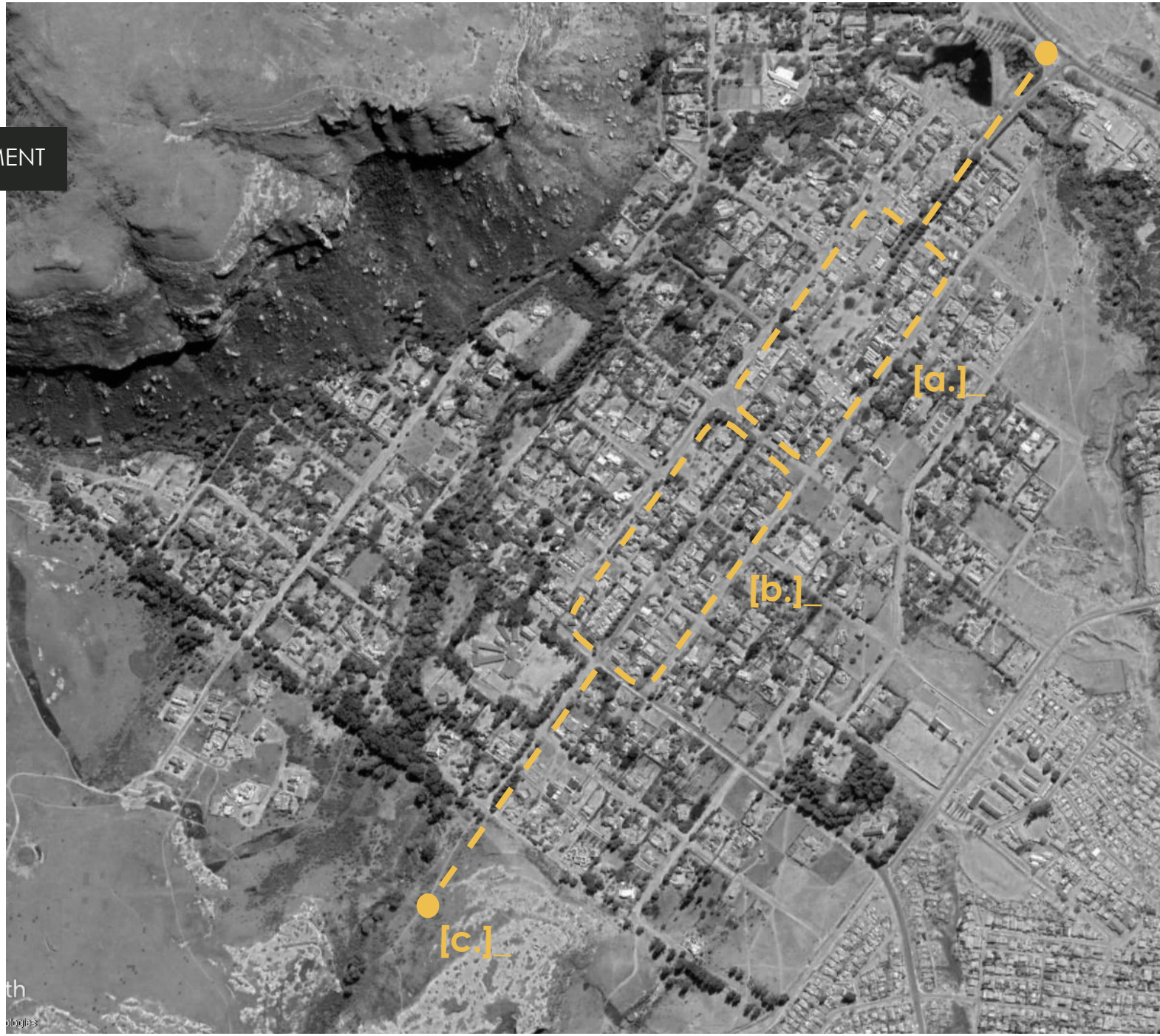


Figure 43. Clarens aerial view (Google, 2020: online).



[a.]_ Primary Business Region.
The majority of Clarens businesses, from food & beverage to arts and crafts are based around the central node of the town square shown in figure 43,[a.]. Town square has the majority of pedestrian traffic which makes this an ideal region for businesses. Yet, the majority of activity is largely restricted to this region leaving businesses in other parts of Clarens with a lack of visitors and hidden to users (Clarens.co.za, 2020).

[b.]_ Developing Business Region.
The developing business district is also on the Clarens main artery of Main Street, yet due to a lack of a destination at the end of the Main Street axis [c.] this region is struggling to sustain businesses which exist in this region of the town. Can existing small business be aided by the development of destination point at the end of Main Street axis?

[c.]_ Proposed **Destination** At End of Clarens Main Street Axis.
A destination at the end of Main Street axis through Clarens is a key part in the sustaining and development of small businesses in the town, especially in region [b.]. Clarens has two craft micro craft breweries in region [a.] shown in figure 43, yet no destination which celebrates the location, culture and industrial region of Eastern Free State. Such a intervention is proposed as a destination building at the end of the Main Street axis at region [c.].

[iv.]_ Problem Statement Summary:

- Ensuring development of industries in and around small urban landscape is appropriate and responsive to context of landscape and culture.
- Expanding existing business/public region shown in figure xxx [A] to developing business/ public region [B] in order to relieve congestion and over development of region [A].
- Clarens "main artery" of Main Street is the primary circulation route for vehicles and pedestrians through the town, yet the Main Street axis which symbolizes the start and finish of the route through the town has no destination or end-point. Instead the road is re-routed through Kgubetswana township South of Clarens towards Fouriesburg.
- How can existing tourist attractions be maximized in a destination at the end of Main Street axis to act as a catalyst for existing business to develop.



Figure 44. Distell Office (Distell, 2018: online).

1.viii. CLIENT & [JOINT VENTURE]

DISTELL

[a.]_ About **Distell**

The Distell Group is South Africa and Africa's leading producer and marketer of wines, spirits, ciders and other ready-to-drink (RTD) beverages, sold across the world. With a diverse portfolio of brands with rich provenance and authenticity, products are priced across the pricing continuum to cater to a broad spectrum of consumers. Distell employs approximately 4 400 people and have an annual turnover of R26,1 billion (Distell, 2020: online).

[b.]_ The Distell **Mission**

Distell craft distinctive alcoholic beverage brands, enhance memorable moments and inspire responsible enjoyment. The value Distell create enriches the lives of distell employees, shareholders and the communities within which the company live and work.

[c.]The **Vision**

Distell is a proud African alcoholic beverages company with heritage, global reach, world-class staff and the ability to make a meaningful impact on South African communities.

[d.]_ The Distell **Foundation**

Distell's approach is to invest in communities where they have a visible business presence with a focus on arts & culture; education and skills development linked to job creation, as well as heritage assets.

[e.]_ Client Brief

Distell has seen the potential in the [craft gin distilling industry], with the aim of opening craft distilleries across South Africa. Clarens has been identified as an ideal location due to its proximity to cities and the amount of visitors it receives throughout the year due to its established tourism sector.

The site is chosen in accordance to Dihlabeng Municipality's Integrated Development Plan [IDP} for Clarens, in which the project has the potential to create a large amount of jobs in multiple industries which is in accordance with Distell's mission of contributing to communities.

[f.]_ Joint Venture [Distell, CVC]

Clarence Village Conservancy

Distell and Clarens Village Conservancy (CVC) has entered into a partnership where Distell will contribute to the conservation efforts of CVC in the area whilst CVC requires the development to be sensitive towards nature and conforming to GBCSA regulations on buildings which are in conservation areas.

[vii.]_ [CVC]_ CONSERVATION INFORMANT

Due to the nature of Clarens as a town, built within the landscape and equally part thereof. CVC advises on how this joint venture can be beneficial to both the developer as well as the Clarens village conservancy without tainting the environment.

Clarens Village Conservancy.



Figure 45. Clarens Village Conservancy ranger installing signage. (CVC, 2020).

Based on policies of the client and CVC the brief requires the design to strive for medium to high GBCSA Green Star and Net Zero ratings.

CHAPTER 02.

MACRO [SITE ANALYSIS].

Clarens.
Dihlabeng Municipality.

EXPANDING ON THE **INDUSTRIAL COMMUNITY**
THROUGH **TOURISM.**

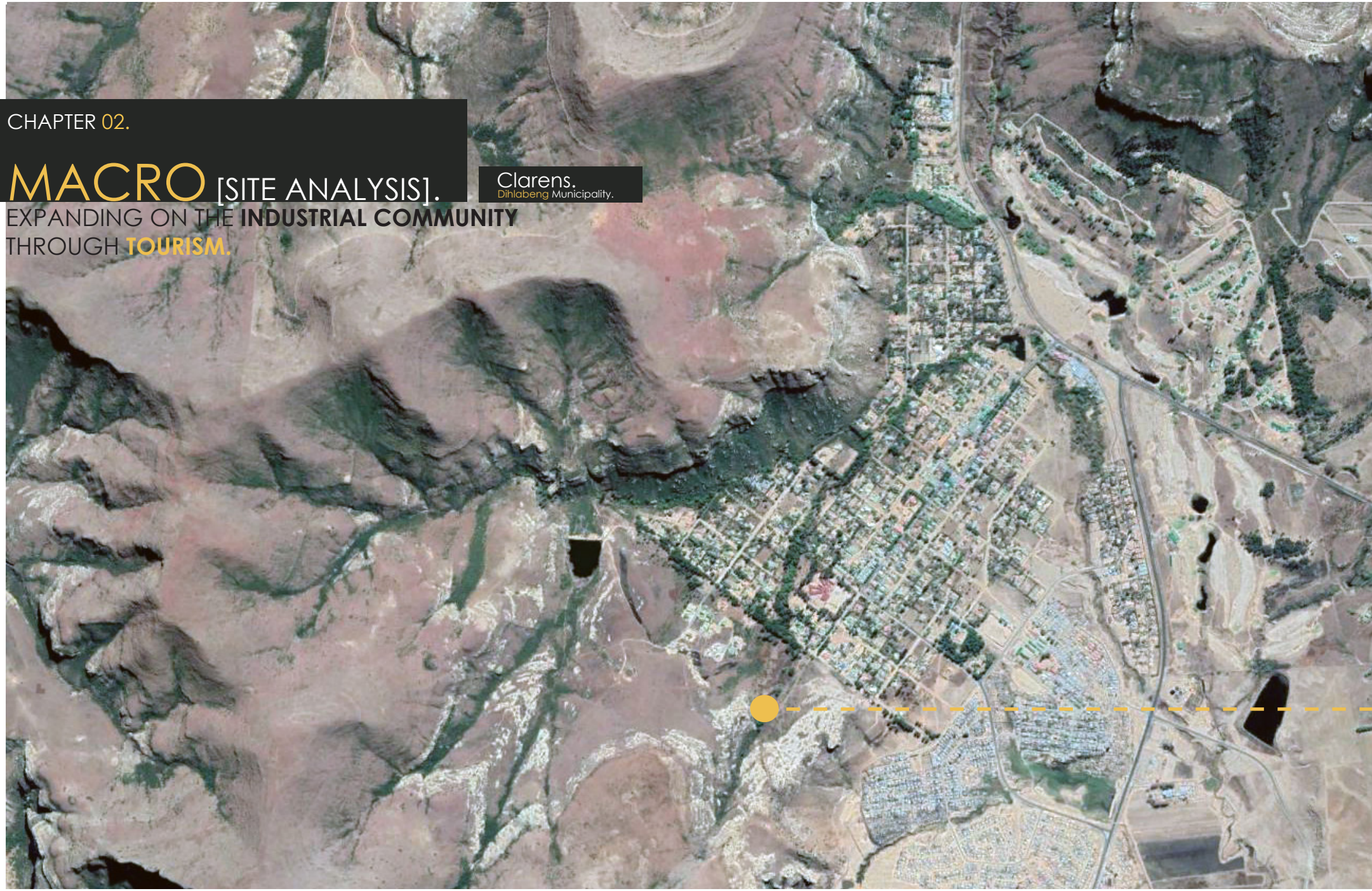


Figure 46. Map of Clarens in context.(Google Earth, 2020).



[2.i] **MACRO** SITE ANALYSIS

Clarens is situated in the Eastern Free State, which is predominantly an agricultural province. How can this typology and culture influence the design?

[2.ii] **MESO** SITE ANALYSIS

An investigation on the cultural and historical influences of Clarens? How do the metaphysical influences affect the town, community and development

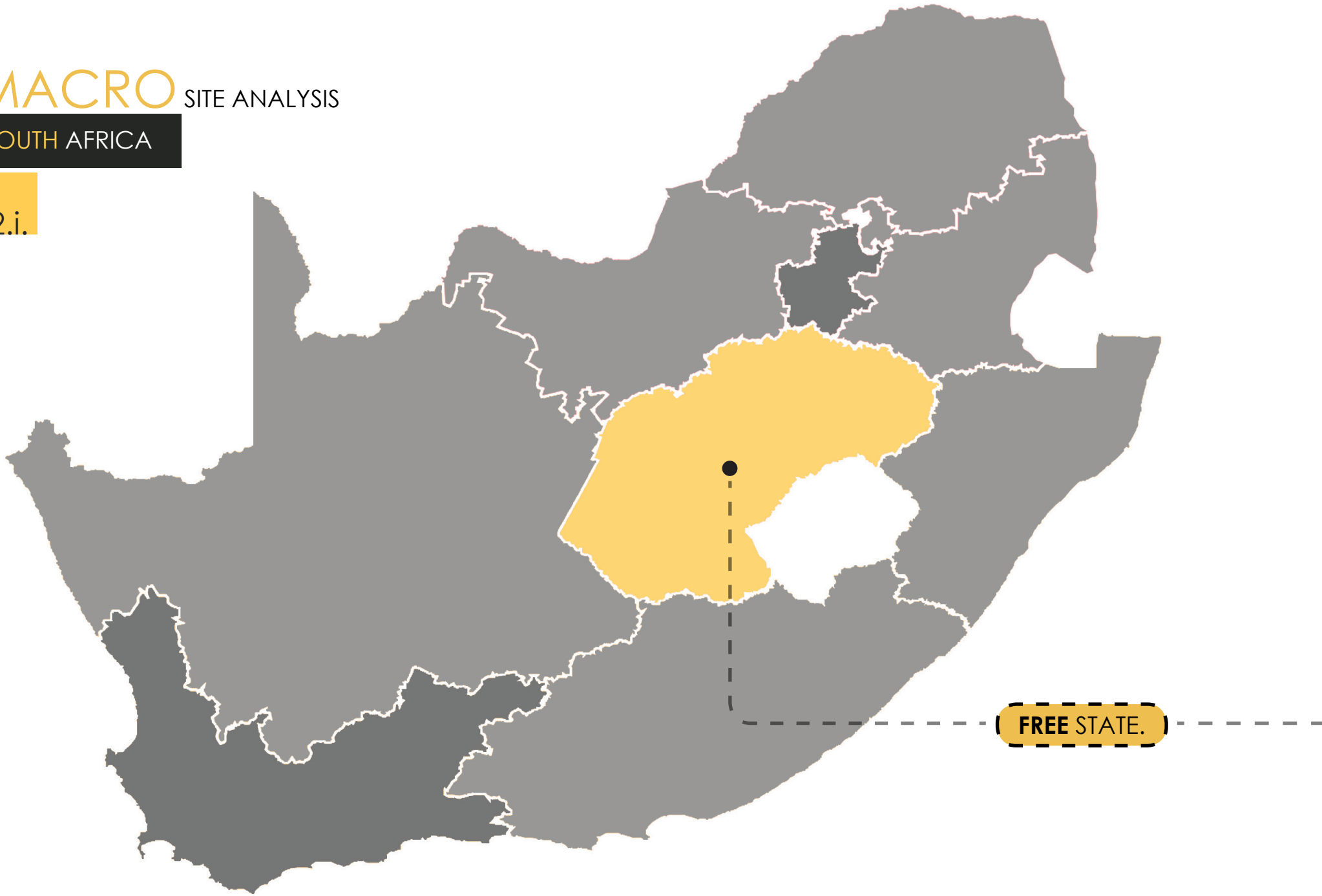
[2.iii] **MICRO** SITE ANALYSIS

The immediate site on which the design intervention is situated and influences of the topology and environment.

MACRO SITE ANALYSIS

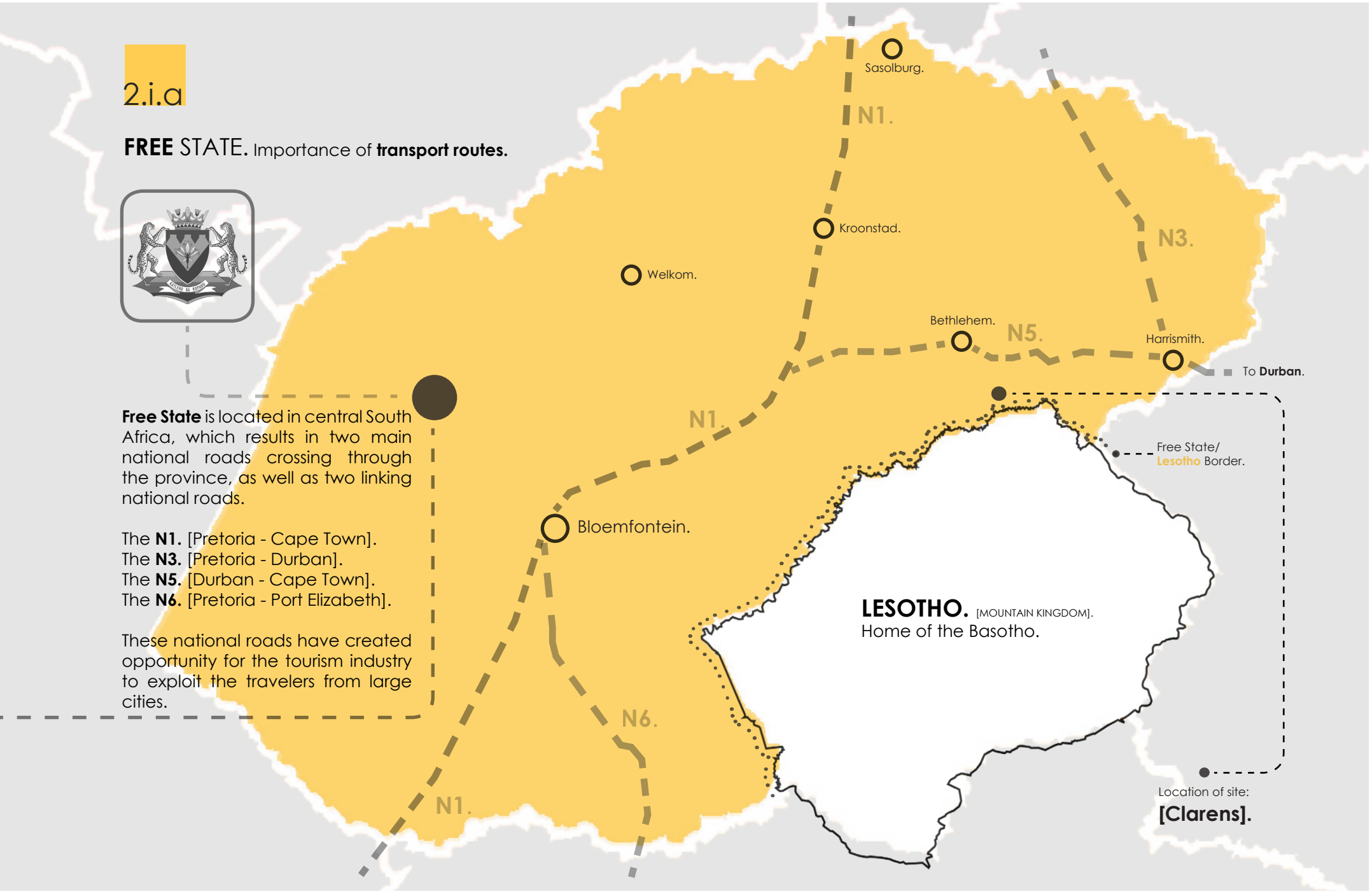
SOUTH AFRICA

2.i.



2.i.a

FREE STATE. Importance of **transport routes.**



Free State is located in central South Africa, which results in two main national roads crossing through the province, as well as two linking national roads.

The **N1.** [Pretoria - Cape Town].
The **N3.** [Pretoria - Durban].
The **N5.** [Durban - Cape Town].
The **N6.** [Pretoria - Port Elizabeth].

These national roads have created opportunity for the tourism industry to exploit the travelers from large cities.

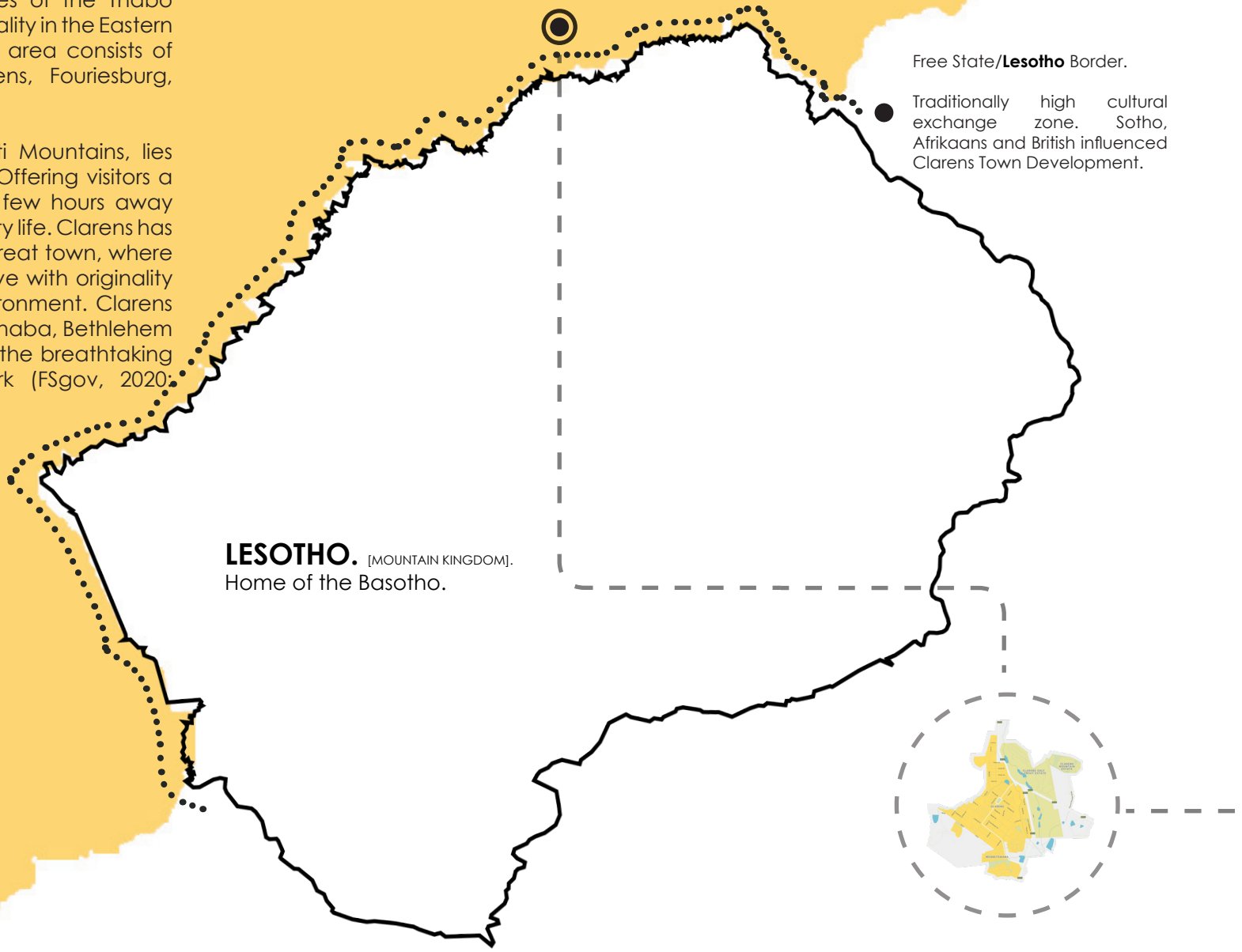
2.i.b.

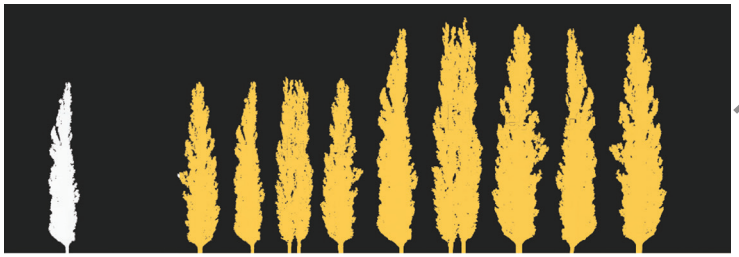
Clarens - Eastern Free-State

The Dihlabeng Local Municipality is situated within the boundaries of the Thabo Mofutsanyana District Municipality in the Eastern Free State. The geographical area consists of the towns Bethlehem, Clarens, Fouriesburg, Paul Roux and Rosendal.

On the foothills of the Maluti Mountains, lies Clarens, quaint and tranquil. Offering visitors a unique experience merely a few hours away from the hustle and bustle of city life. Clarens has the character of an artists retreat town, where the general philosophy is to live with originality and appreciation of the environment. Clarens is situated between Phuthaditjhaba, Bethlehem and Fouriesburg, and nearby the breathtaking Golden Gate Mountain park (FSgov, 2020: Online).

FREE STATE.

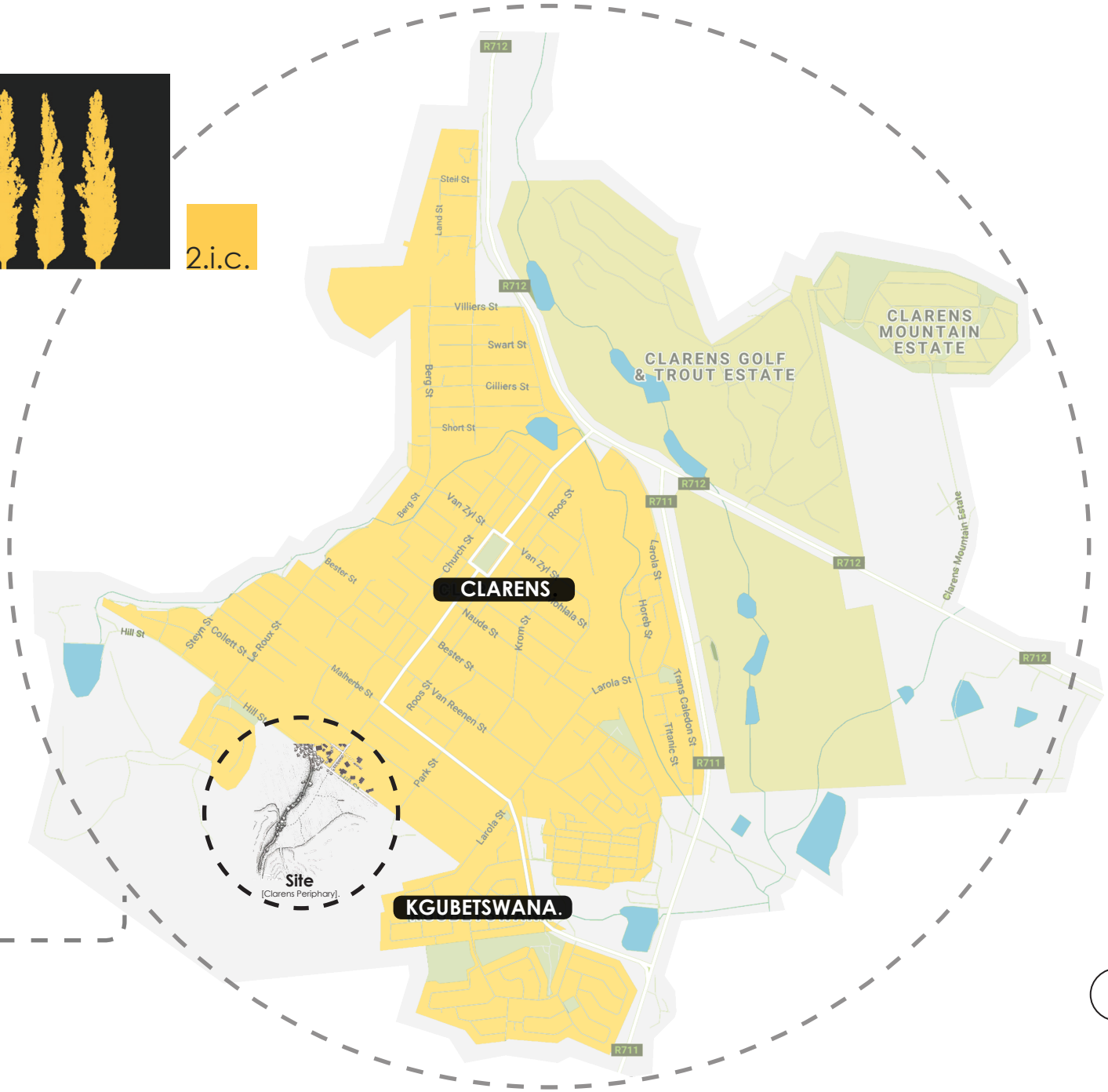




2.i.c.

Clarens - **Town Layout**

Clarens was developed along the Main Street which runs from a Northeast to a South-Westerly direction. Most businesses are situated along this axis of Main street with residential neighborhoods situated on either side of Main Street.



Maluti Mountains Range & Major Roads

SITE ANALYSIS.

DIHLABENG MUNICIPALITY - CLARENS **INTEGRATED DEVELOPMENT PLAN [IDP] 2019**

2.i.d.

[1]_ Zoning & Town Planning.

[2]_Maluti Mountains.

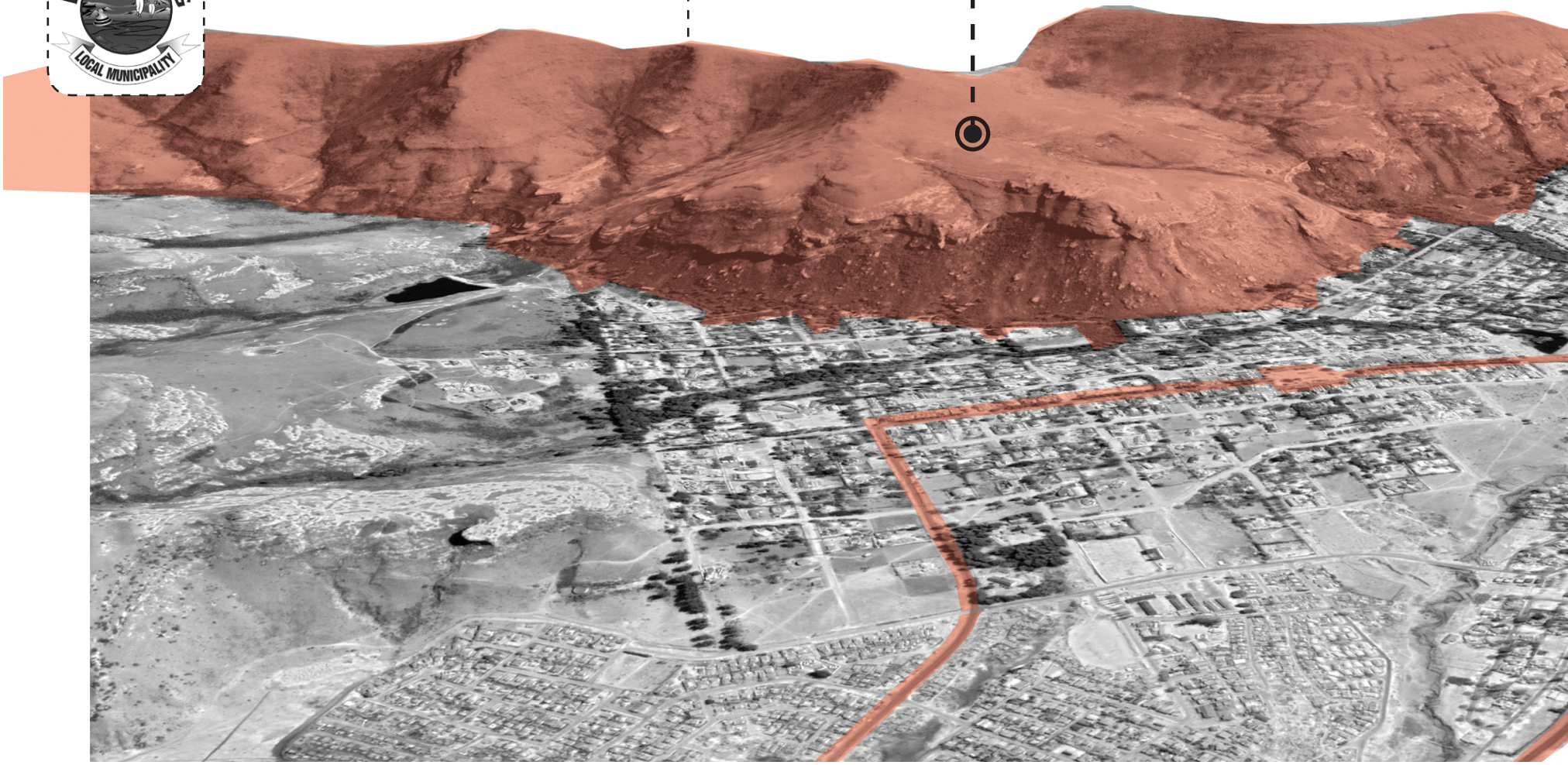
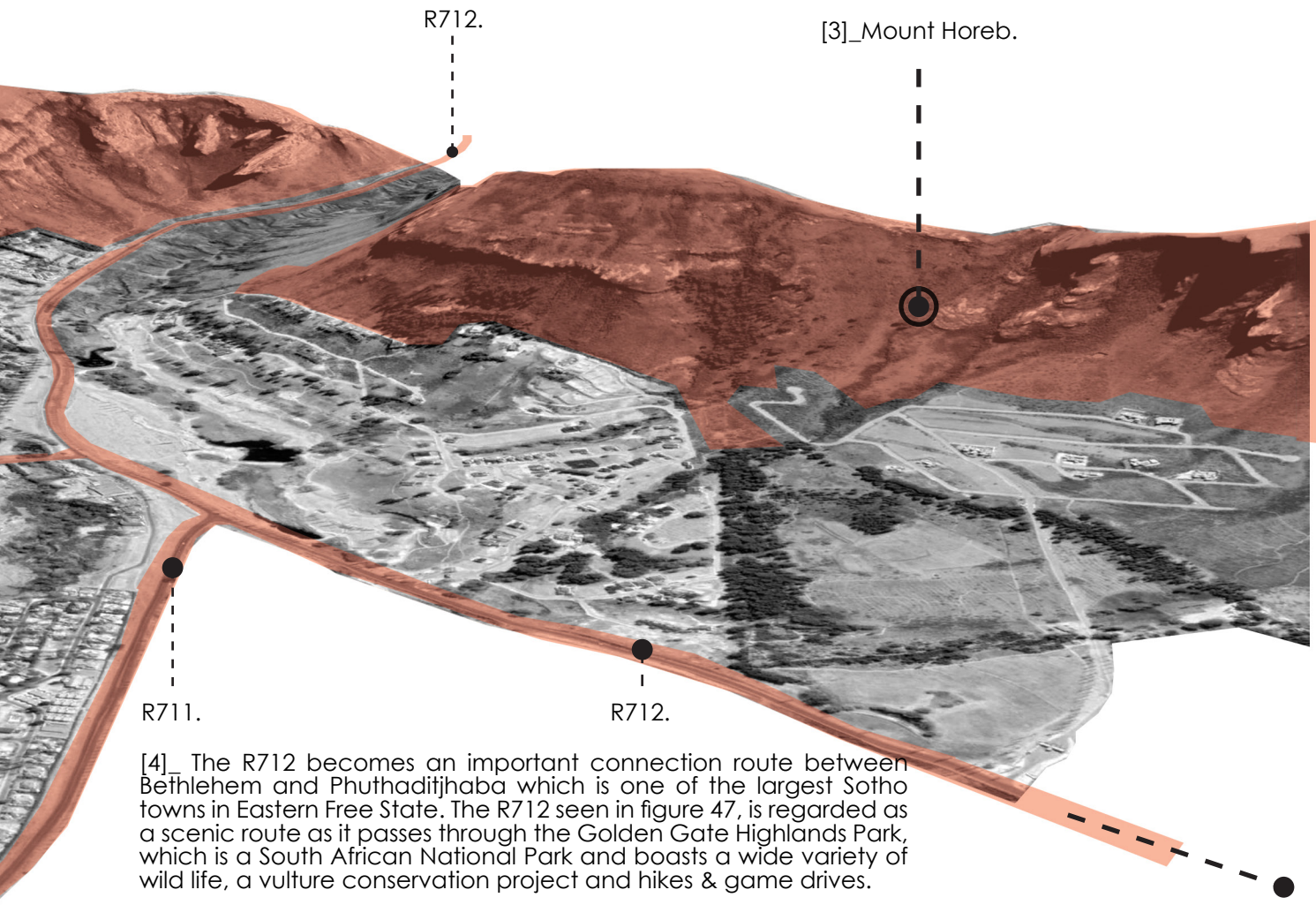


Figure 47, Clarens aerial view (Google, 2020).



[4]_ The R712 becomes an important connection route between Bethlehem and Phuthaditjhaba which is one of the largest Sotho towns in Eastern Free State. The R712 seen in figure 47, is regarded as a scenic route as it passes through the Golden Gate Highlands Park, which is a South African National Park and boasts a wide variety of wild life, a vulture conservation project and hikes & game drives.

[5]_ **Aims** of Design Proposal (Dissertation Design).

The Maluti Mountains is a key element in the "Genius Loci" or spirit of Clarens. The Design solution aims to make the user experience panoramic views of the Maluti Mountains allowing a constant connecting element between earth and sky, by means of the verticality of the

Information gathered from Dihlabeng local municipality 2019/2020 integrated development plan accessible online (dihlabeng, 2020: online)

[6]_To Golden Gate & Phuthaditjhaba.

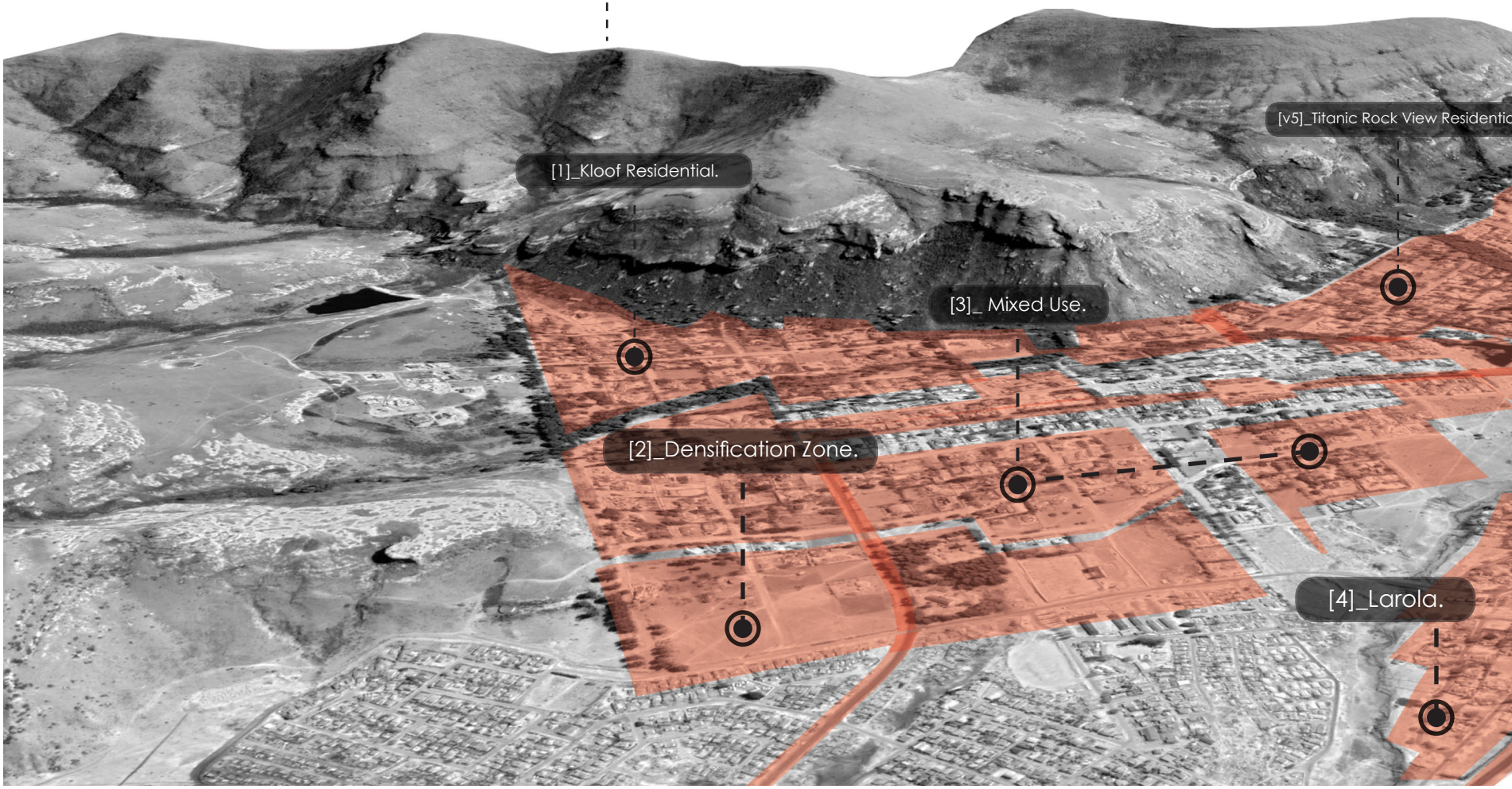
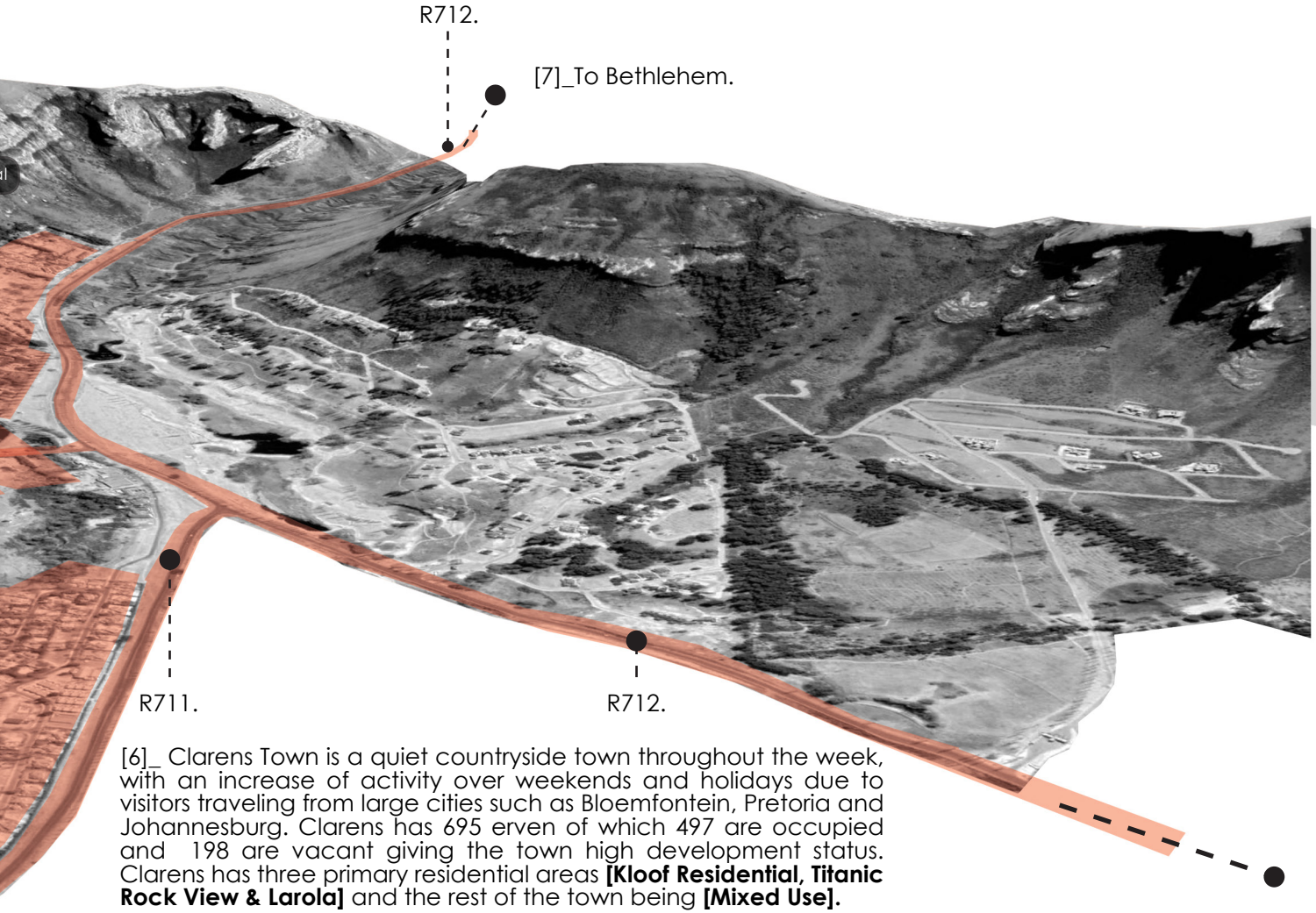


Figure 48, Clarens aerial view (Google, 2020).



[6]_ Clarens Town is a quiet countryside town throughout the week, with an increase of activity over weekends and holidays due to visitors traveling from large cities such as Bloemfontein, Pretoria and Johannesburg. Clarens has 695 erven of which 497 are occupied and 198 are vacant giving the town high development status. Clarens has three primary residential areas **[Kloof Residential, Titanic Rock View & Larola]** and the rest of the town being **[Mixed Use].**

[8]_**Aims** of Design Proposal (Dissertation Design).

The Clarens residents share an artistic retreat culture, and the design intervention aims to enhance this and create further opportunity for various business in the mixed use regions which sees a lack of visitors due to the centralized focal point of the Clarens CBD which to an extent congested with businesses.

Information gathered from Dihlabeng local municipality 2019/2020 integrated development plan accessible online (Dihlabeng, 2020: online)

[9]_To Golden Gate & Phuthaditjhaba.

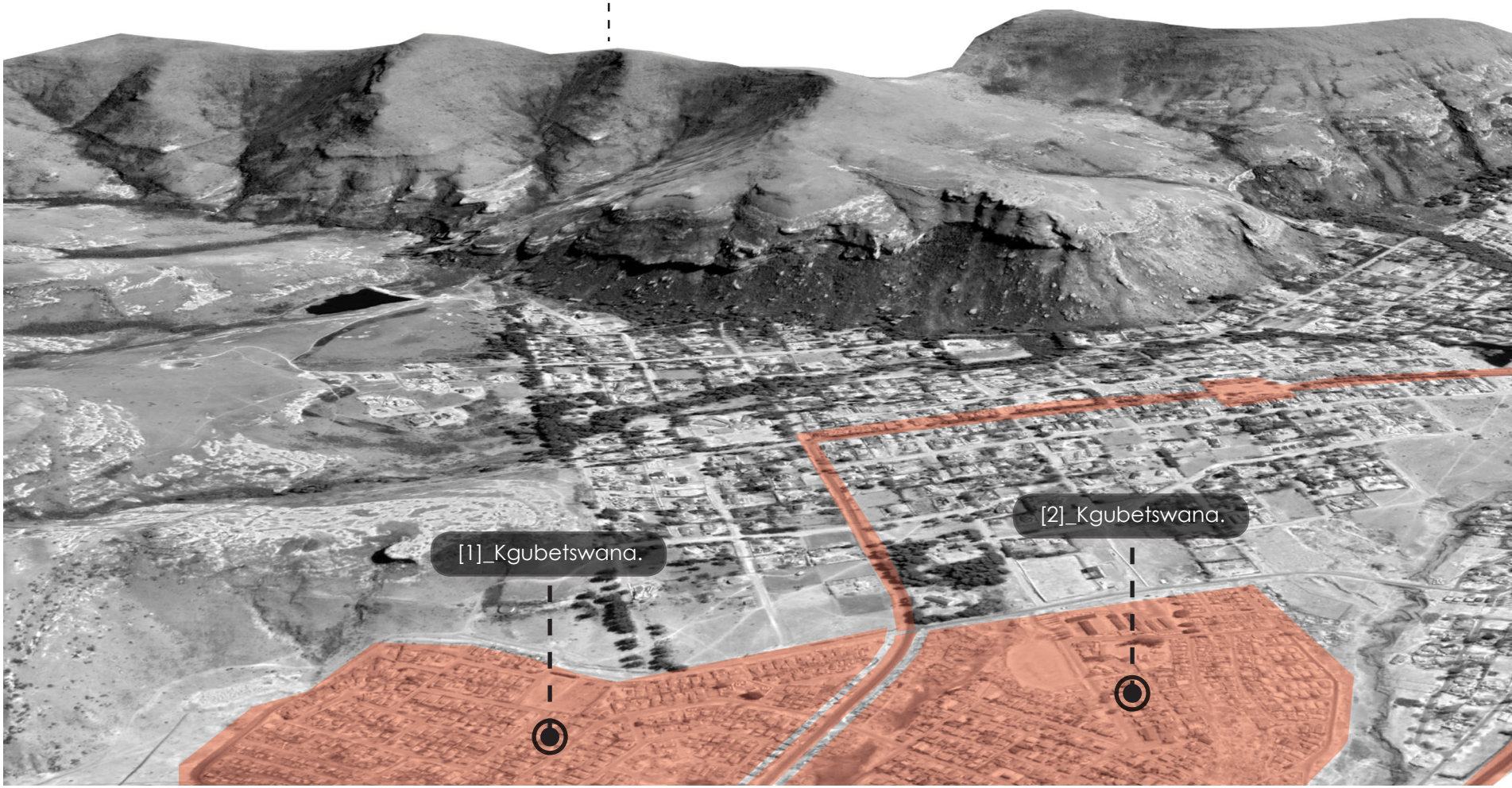
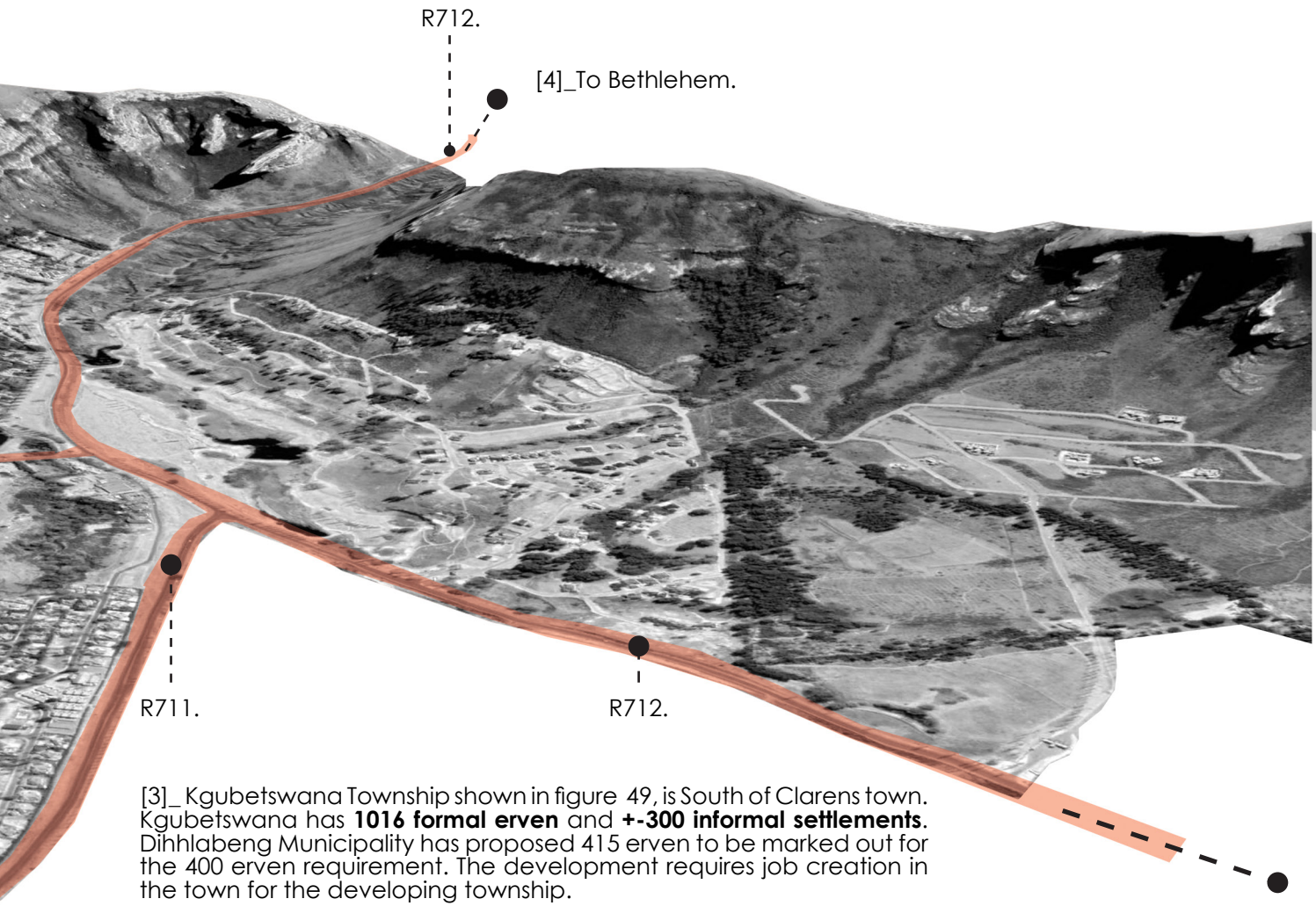


Figure 49. Clarens aerial view (Google, 2020).



[3]_ Kgubetswana Township shown in figure 49, is South of Clarens town. Kgubetswana has **1016 formal erven** and **+-300 informal settlements**. Dihhlabeng Municipality has proposed 415 erven to be marked out for the 400 erven requirement. The development requires job creation in the town for the developing township.

[5]_**Aims** of Design Proposal (Dissertation Design).
The Kgubetswana Township is rapidly developing along with the tourism sector in Clarens Town. The Municipality aims to establish 415 formal settlements. The Design solution aims to provide job opportunities in various sectors, such as hospitality, maintenance, agriculture, distillery operation & management which could assist the IDP plan for Kgubetswana and assist in integrating the communities with a project own to the wider community.

Information gathered from Dihlabeng local municipality 2019/2020 integrated development plan accessible online (Dihlabeng, 2020: online)

[6]_To Golden Gate & Phuthaditjhaba.

Major Roads, Business Zones & Estates.

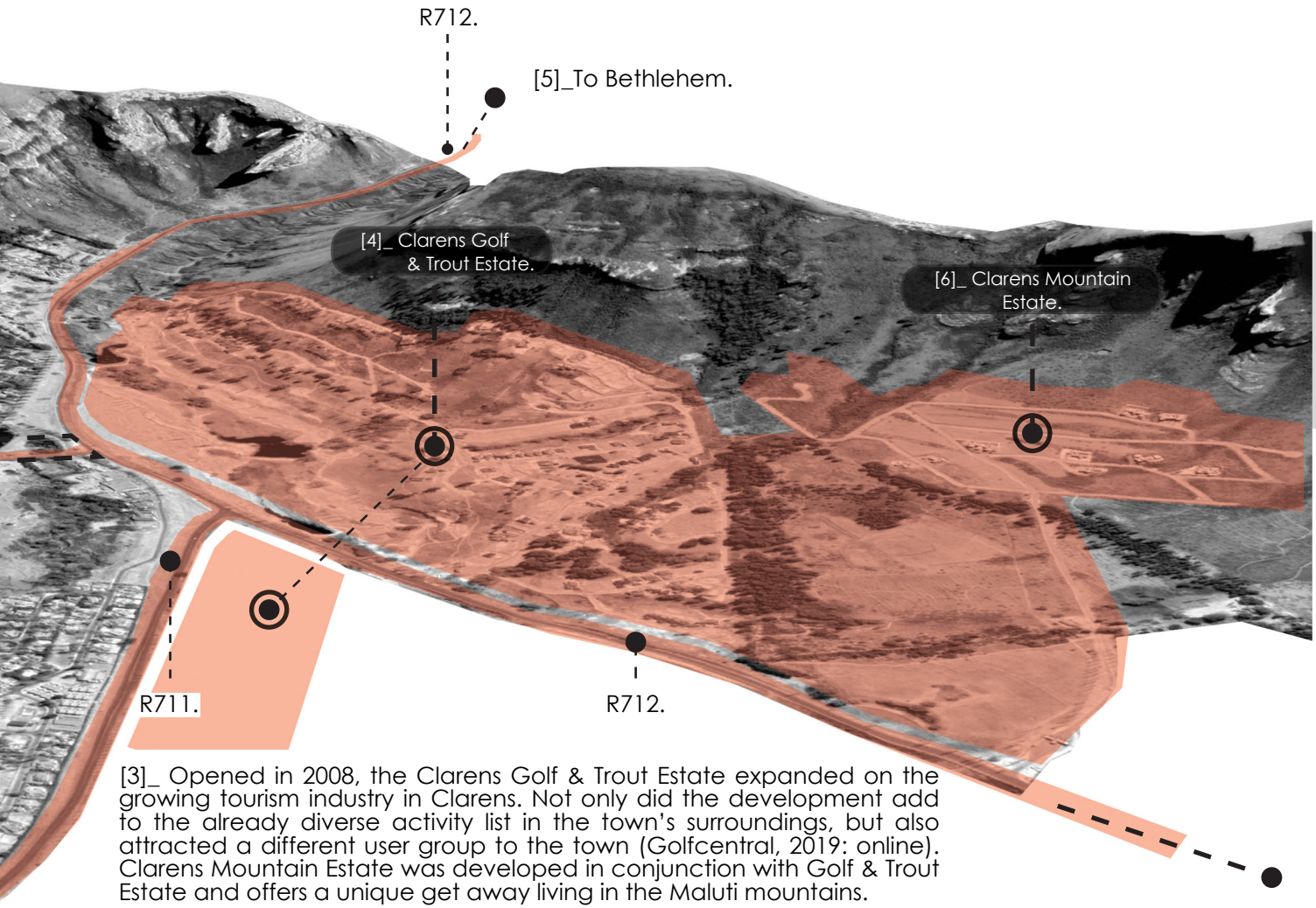
DIHLABENG MUNICIPALITY - CLARENS **IDP PLAN 2019**

2.i.g.

[vii.a]_ A primary objective of the design intervention is to develop the Main Street corridor, which aligns with the IDP plan of the Dihlabeng Municipality. A destination building at the end of the Main Street Axis would draw users through the targeted intensification corridor.



Figure 50. Clarens aerial view (Google, 2020).



[3]_ Opened in 2008, the Clarens Golf & Trout Estate expanded on the growing tourism industry in Clarens. Not only did the development add to the already diverse activity list in the town's surroundings, but also attracted a different user group to the town (Golfcentral, 2019: online). Clarens Mountain Estate was developed in conjunction with Golf & Trout Estate and offers a unique get away living in the Maluti mountains.

[7]_**Aims** of Design Proposal (Dissertation Design).
Clarens Golf & Trout Estate and Mountain Estate offer a unique experience of an existing residential function yet enhanced ,which allows the user the existing living experience within the unique environment of the Maluti mountains. The [Design Solution] aims to be a similar response to the existing function of a distillery on the opposite end of the Clarens Main Street axis, allowing users to be drawn through the town between these two points.

Information gathered from Dihlabeng local municipality 2019/2020 integrated development plan accessible online (Dihlabeng, 2020: online)

[8]_To Golden Gate & Phuthaditjhaba.

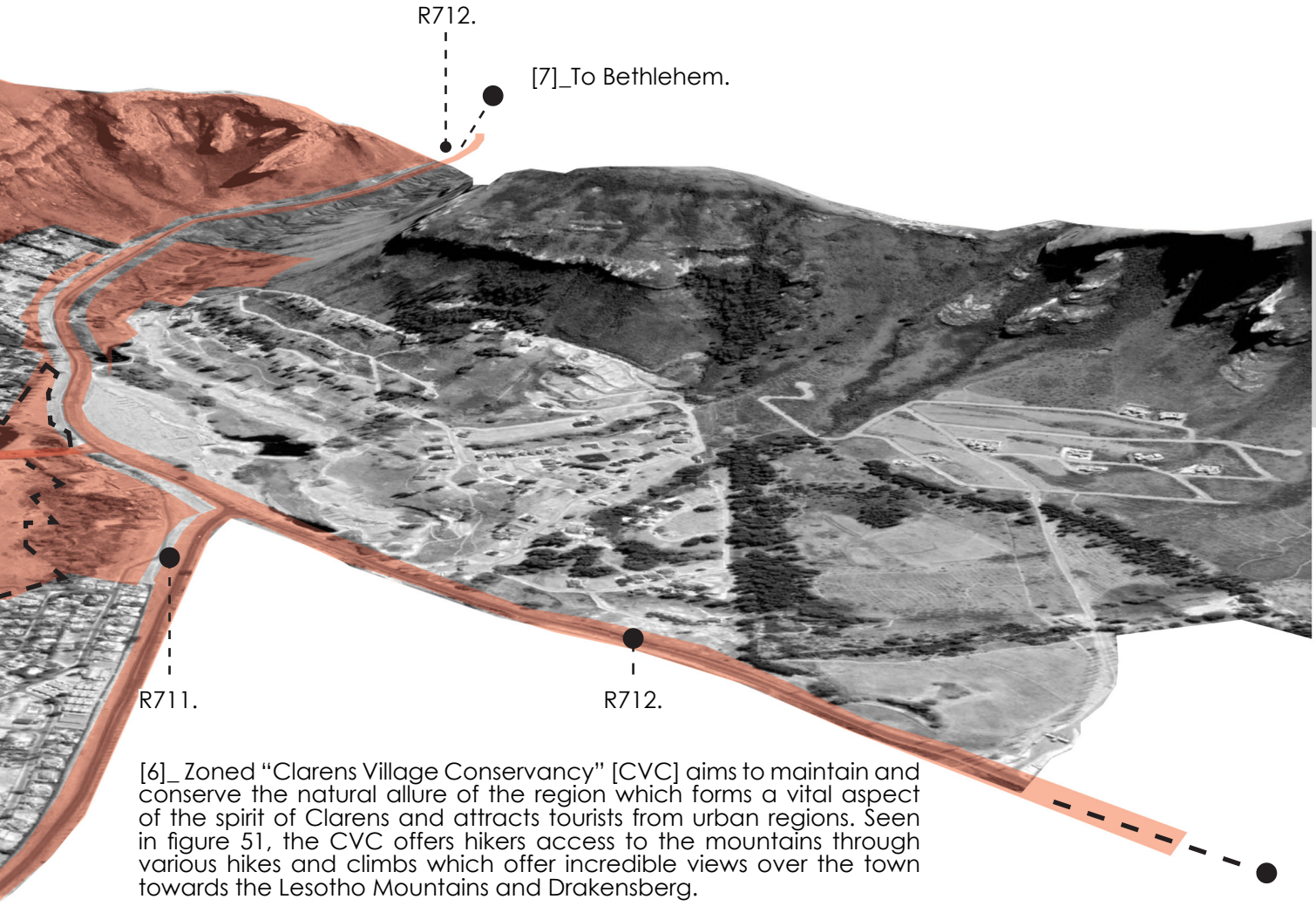
2.i.h.

Major Roads, Open Spaces & Clarens Village Conservancy.

[3]_ Surrounding Clarens town lies natural space, zoned as conservation area. However the valley which the site is located in is zoned as open space [Possible to develop] which creates the opportunity to propose the design intervention. Other open spaces are zoned for future development of the tourist town on the periphery towards the south.



Figure 51. Clarens aerial view (Google, 2020).

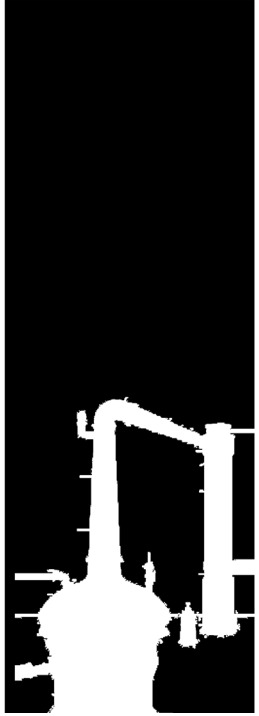


[8]_**Aims** of Design Proposal (Dissertation Design).
The zoned "open spaces" and CVC conservation area is essential to the town and community, and is required to be preserved amidst the development of the town. The design intervention aims to make use of the eroded and neglected naturals space of the valley which serves as a threshold between "urban" and natural, and form a partnership with the CVC to promote conservation and contribute towards funding conservation.

Information gathered from Dihlabeng local municipality 2019/2020 integrated development plan accessible online (Dihlabeng, 2020: online)

[6]_ Zoned "Clarens Village Conservancy" [CVC] aims to maintain and conserve the natural allure of the region which forms a vital aspect of the spirit of Clarens and attracts tourists from urban regions. Seen in figure 51, the CVC offers hikers access to the mountains through various hikes and climbs which offer incredible views over the town towards the Lesotho Mountains and Drakensberg.

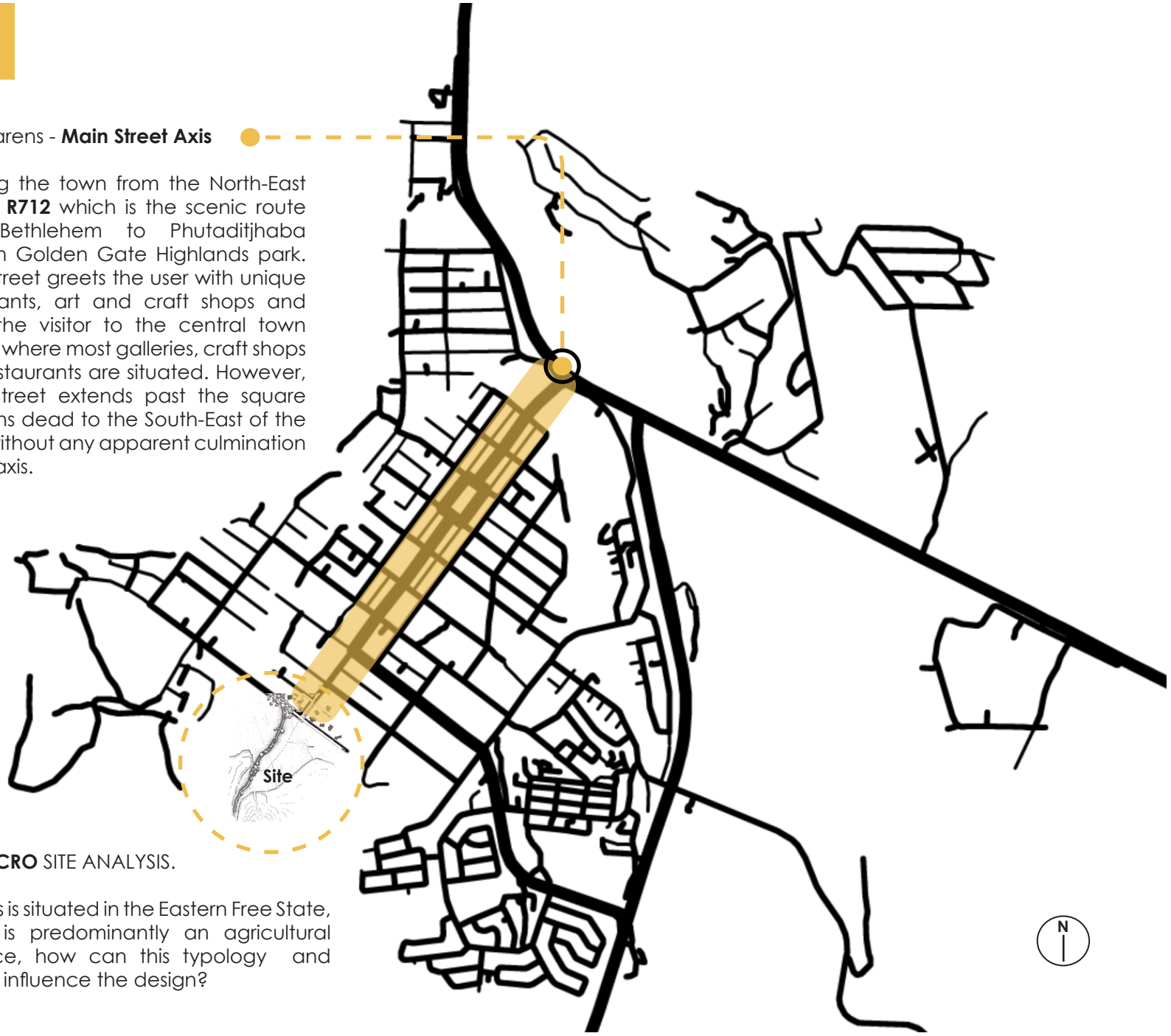
[9]_To Golden Gate & Phuthaditjhaba.



2.i.i.

[1]_ Clarens - **Main Street Axis**

Entering the town from the North-East off the **R712** which is the scenic route from Bethlehem to Phutaditjhaba through Golden Gate Highlands park. Main Street greets the user with unique restaurants, art and craft shops and leads the visitor to the central town square where most galleries, craft shops and restaurants are situated. However, Main Street extends past the square and runs dead to the South-East of the town without any apparent culmination of the axis.



[2] **MACRO** SITE ANALYSIS.

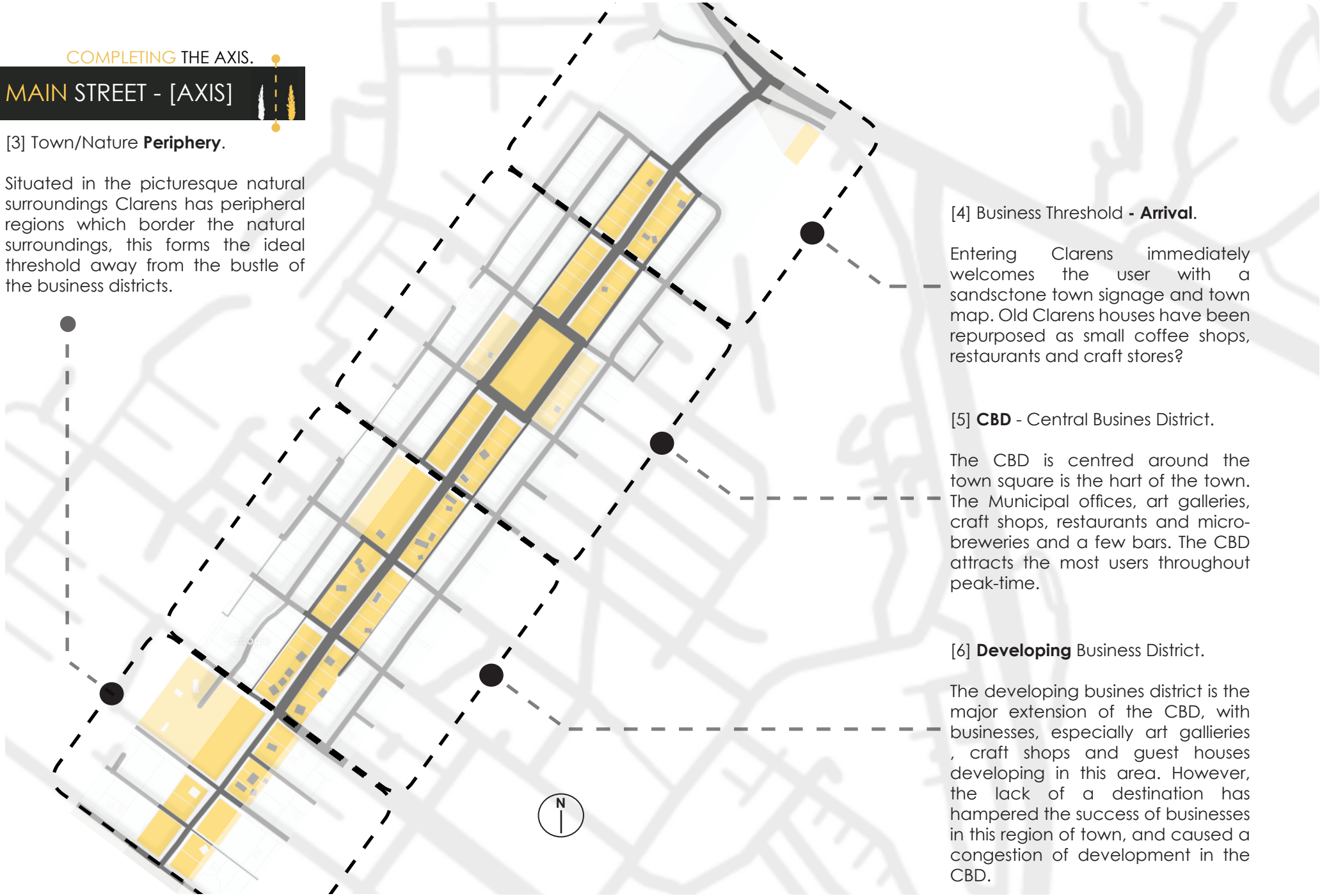
Clarens is situated in the Eastern Free State, which is predominantly an agricultural province, how can this typology and culture influence the design?

COMPLETING THE AXIS.

MAIN STREET - [AXIS]

[3] Town/Nature **Periphery**.

Situated in the picturesque natural surroundings Clarens has peripheral regions which border the natural surroundings, this forms the ideal threshold away from the bustle of the business districts.



[4] Business Threshold **- Arrival**.

Entering Clarens immediately welcomes the user with a sandsctone town signage and town map. Old Clarens houses have been repurposed as small coffee shops, restaurants and craft stores?

[5] **CBD** - Central Busines District.

The CBD is centred around the town square is the hart of the town. The Municipal offices, art galleries, craft shops, restaurants and micro-breweries and a few bars. The CBD attracts the most users throughout peak-time.

[6] **Developing** Business District.

The developing busines district is the major extension of the CBD, with businesses, especially art gallieries , craft shops and guest houses developing in this area. However, the lack of a destination has hampered the success of businesses in this region of town, and caused a congestion of development in the CBD.

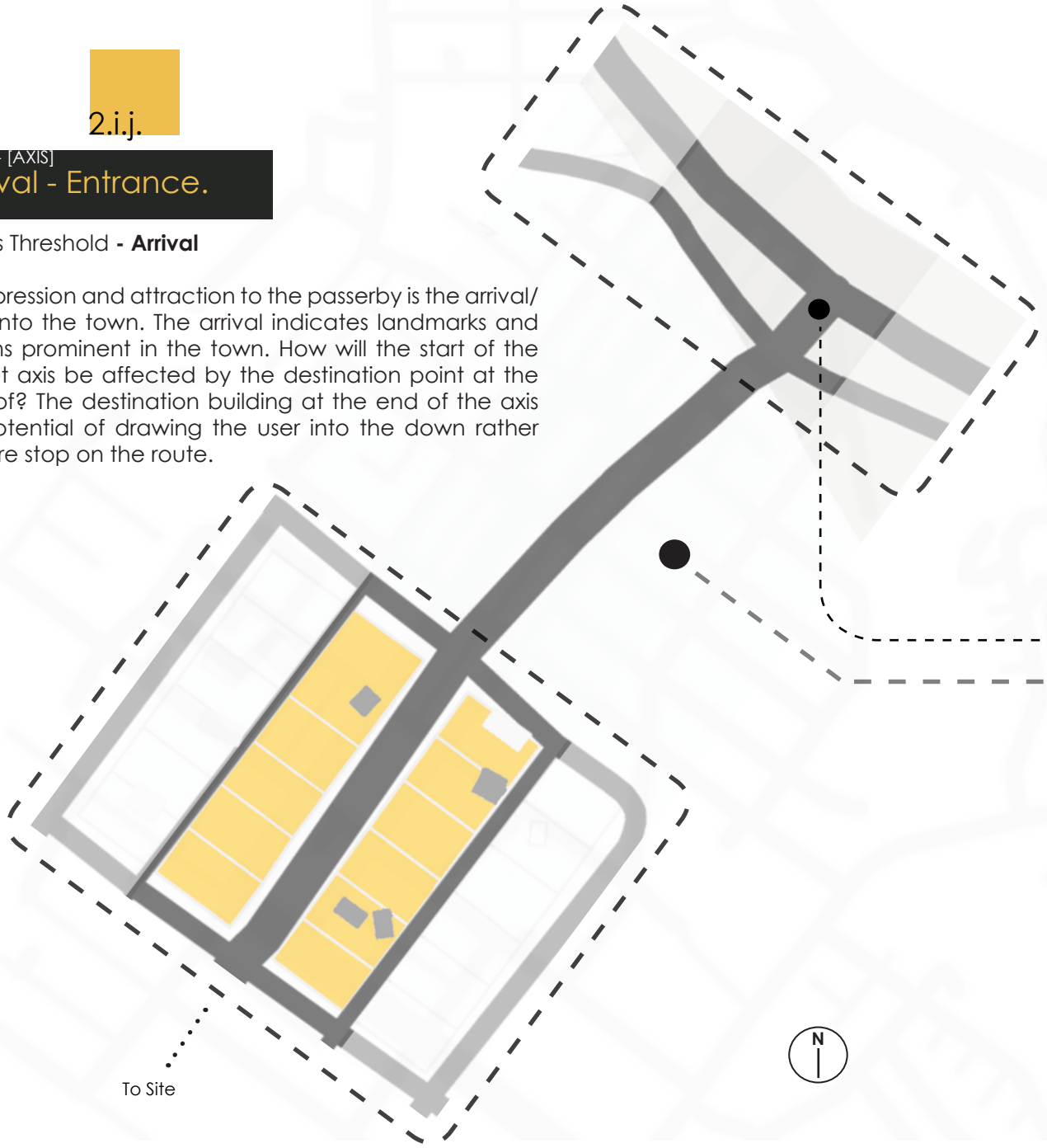
2.i.j.

MAIN STREET - [AXIS]

The Arrival - Entrance.

[1] Business Threshold **- Arrival**

The first impression and attraction to the passerby is the arrival/ entrance into the town. The arrival indicates landmarks and destinations prominent in the town. How will the start of the Main Street axis be affected by the destination point at the end thereof? The destination building at the end of the axis has the potential of drawing the user into the down rather than a mere stop on the route.



ARRIVAL & THRESHOLD

[2] Visual Standard **- [Typology]**

The user is immediately introduced to the Clarens Vernacular at the entrance to the town, which provides a roadside stop with a fuel station for the motorist traveling the scenic route which is investigated in the historical investigation in chapter 04 of the site analysis. The Clarens vernacular typology is responsive to the materials of the surrounding landscape and un-imposing in scale.

[3] Natural Threshold

The Clarens periphery is interwoven with nature allowing the town dematerialize without a "hard" urban edge. The dematerialized periphery allows the user a constant tangible interaction with the environment.
The same rationale can be applied in the design at the end of the Main Street Axis where the site of the design proposal is situated on the South-Western periphery of Clarens town.



Figure 52. Entrance into Clarens via the R712 (Author, 2020).

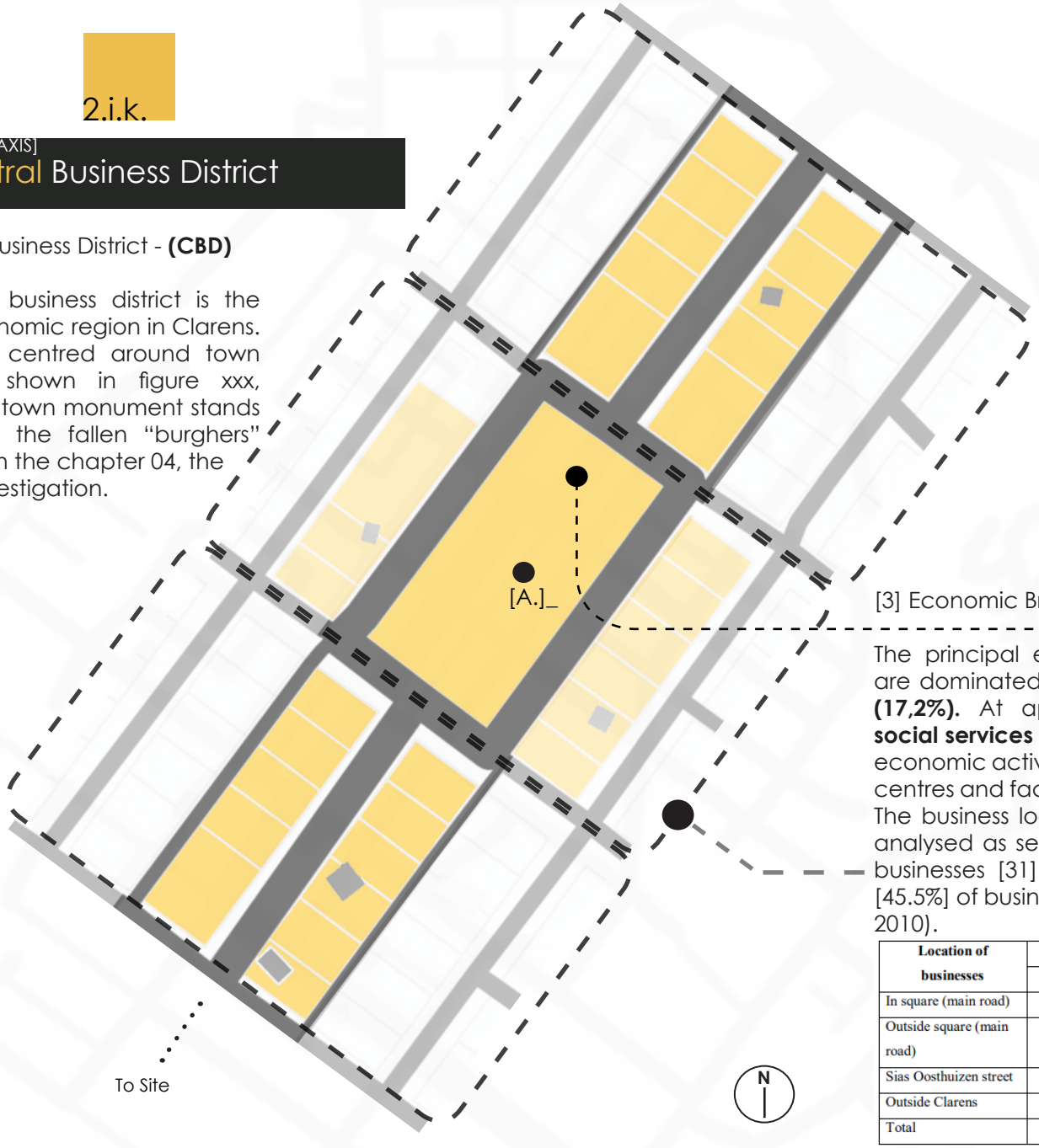
2.i.k.

MAIN STREET - [AXIS]

The Central Business District

[1] Central Business District - **(CBD)**

The central business district is the primary economic region in Clarens. The CBD is centred around town square as shown in figure xxx, wherein the town monument stands representing the fallen "burghers" mentioned in the chapter 04, the historical investigation.



TOWN **SQUARE**

[2] Heart of the CBD.

With the focus of the CBD largely being in the tourist sector, the town square becomes the heart of the business region in Clarens centre, providing users with an intermediatory pause space in the town where apart from the re-established visual connection to the surrounding environment, creates a space of social interaction. The town square hosts annual events including the Clarens Craft Beer Festival.

[3] Economic Breakdown **- CBD & Surroundings**.

The principal economic activities within the municipality are dominated by **farming (29,4%)** and **private businesses (17,2%).** At approximately **15%** and **11%** respectively, **social services** and **trade operations** are also relatively high economic activities. It has arguably some of the best tourism centres and facilities in the Eastern Free State (Statssa, 2020). The business location and type of business can be further analysed as seen in figure 53 below. The majority [47%] of businesses [31] are located in town square. The majority [45.5%] of business in town square being restaurants (Venter, 2010).

Location of businesses	Restaurant		Accommodation		Arts & crafts		Retail - other		Total	
	n	%	n	%	n	%	n	%	n	%
In square (main road)	5	45.5	3	14.3	4	57.1	19	70.4	31	47.0
Outside square (main road)	2	18.2	9	42.9	2	28.6	2	7.4	15	22.7
Sias Oosthuizen street	3	27.3	3	14.3	1	14.3	6	22.2	13	19.7
Outside Clarens	1	9.1	6	28.6	0	.0	0	.0	7	10.6
Total	11	100.0	21	100.0	7	100.0	27	100.0	66	100.0

Figure 53, Clarens business statistics (Venter, 2010: online).



Figure 54, Clarens town square overlooking Mount Horeb to the North-East (Author, 2020).



Figure 55, Clarens monument on town square, CBD, (Author, 2020).

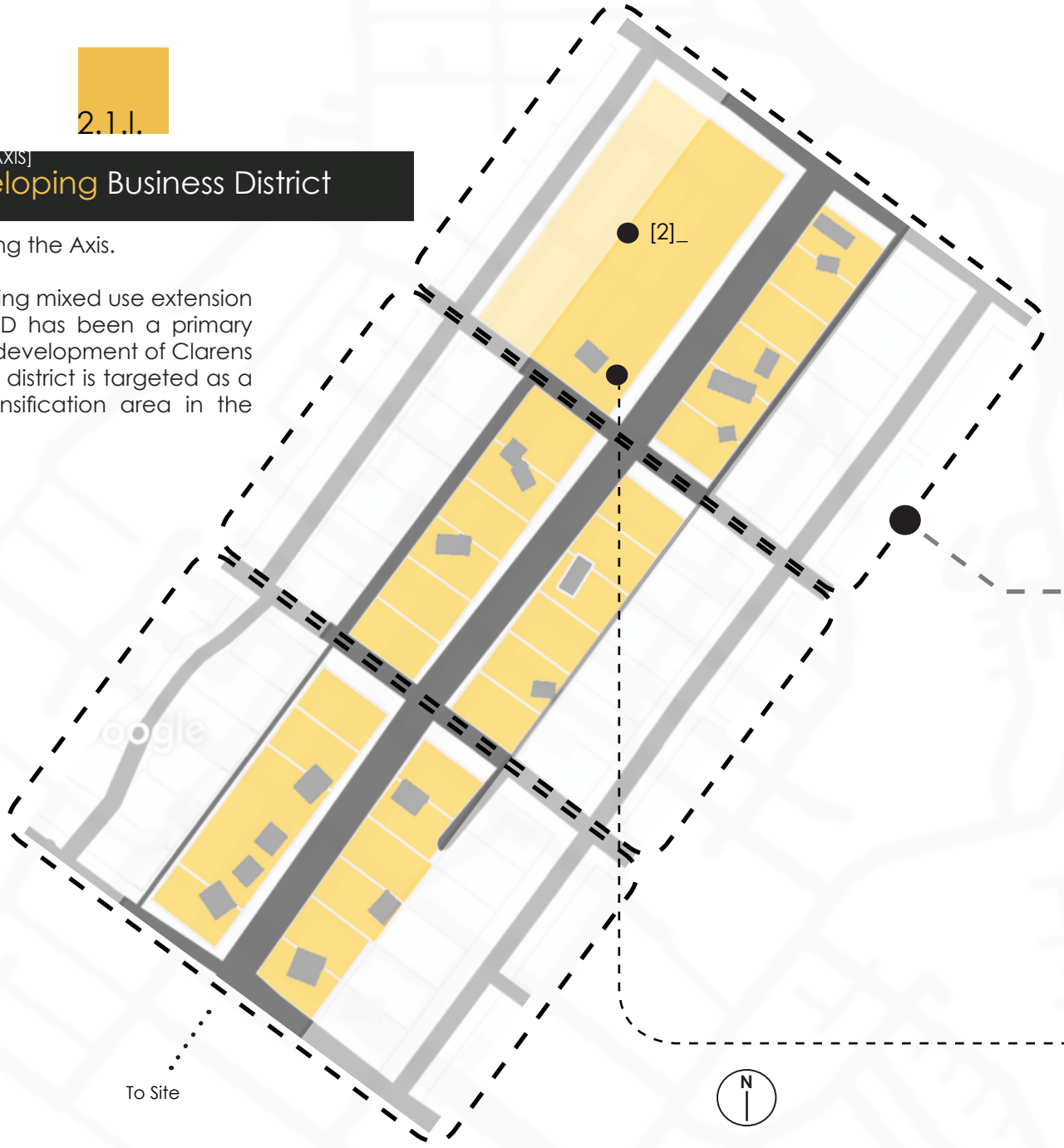
2.1.1.

MAIN STREET - [AXIS]

The Developing Business District

[1] Developing the Axis.

The developing mixed use extension from the CBD has been a primary focus in the development of Clarens at large. The district is targeted as a corridor intensification area in the Clarens IDP.



[2] Intensification Corridor - **Response.**

The intensification requires visitors to be drawn through the region. The destination point at the end of the Main Street axis will encourage visitors through the corridor.

HISTORIC **HERITAGE**

[3] Religious Heritage - **The Dutch Reformed Church.**

The Dutch Reformed Church that visitors now admire was built in 1940-1941, using sandstone from the region, with the cornerstone being unveiled by Ds JJ Le Roux on 24th February 1940. The parsonage was designed by Gerard Moerdijk in 1940-1946. The parsonage is loacted towards the Western extension of the site and has along with the church been classed as heritage buildings.



Figure 56, Historic parsonage for the Dutch Reformed Church on Main Street, Clarens,



Figure 57, Historic Dutch Reformed Church on Main Street, Clarens,(Author, 2020).

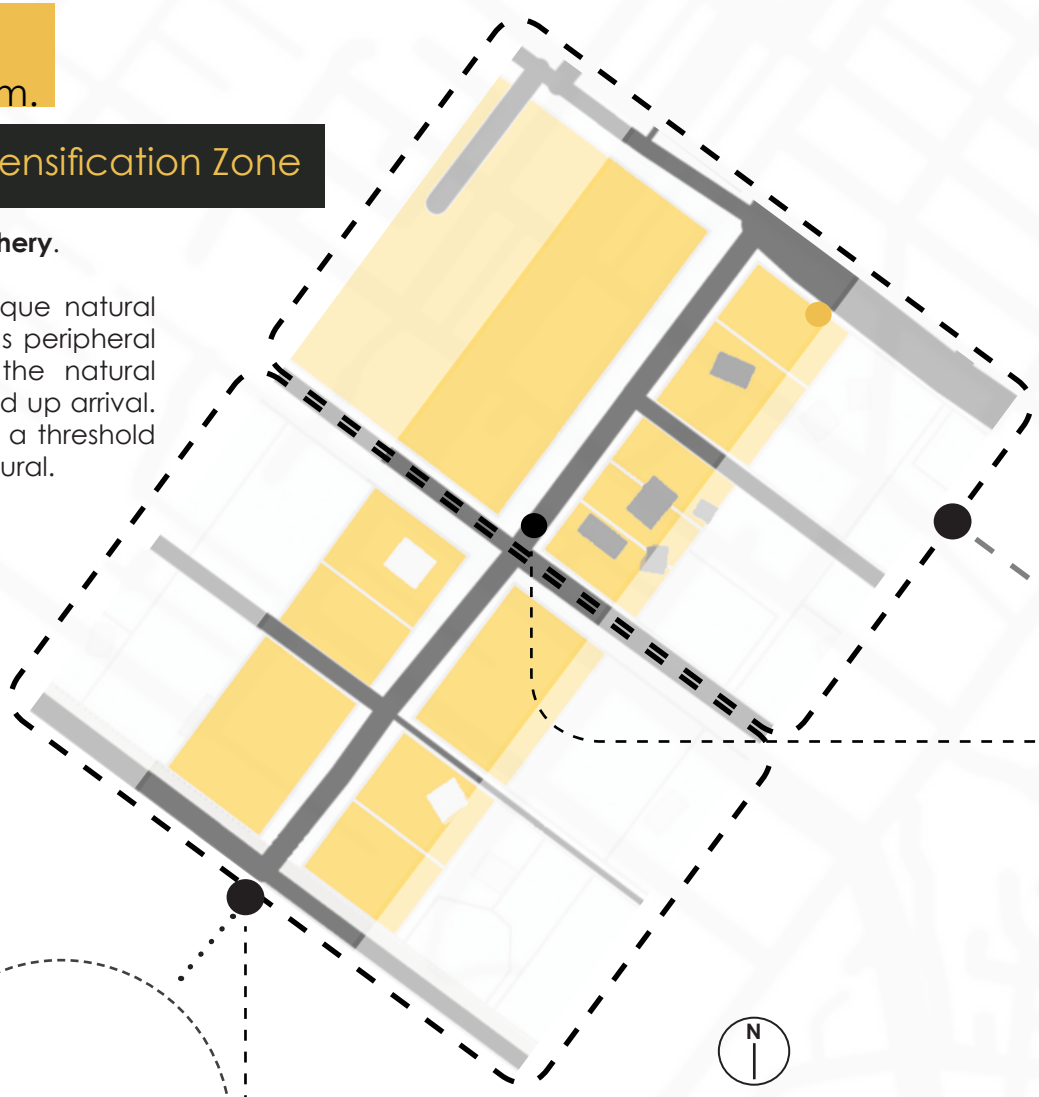
2.i.m.

The End

The Mixed Use Intensification Zone

[ix.c] Town/Nature **Periphery**.

Situated in the picturesque natural surroundings Clarens has peripheral regions which border the natural surroundings as discussed up arrival. The periphery becomes a threshold between urban and natural.



Site

HISTORIC **HERITAGE**

[1] Intensification Corridor - **Response.**

The intensification requires visitors to be drawn through the region. The destination point at the end of the Main Street axis will encourage visitors through the corridor.



Figure 58, **Leucosidea sericea** [Old Wood].



Figure 59, Overlooking Main Street towards Mount Horeb, Clarens, (Author, 2020).



Figure 60, Overlooking from Main Street towards the site, Clarens, (Author, 2020).




Figure 62, SIte Photograph (Author, 2020).


Figure 63, Main Street Photograph (Author, 2020).


Figure 64, Main Street Photograph (Author, 2020).


Figure 65, Dutch Reformed Church Parsonage (Author, 2020).

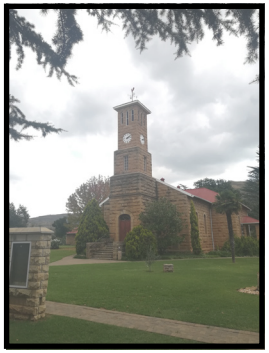


Figure 65, Dutch Reformed Church (Author, 2020).

[1] Contemporary Applications in Clarens.

Whilst Clarens has seen an increase in a diversified development throughout the tourism sector in Clarens (Venter, 2010). Architecturally there has been few contemporary examples where the vernacular Clarens typology has been re-applied. Material use generally remains consistent with the materials used in the vernacular investigated in.

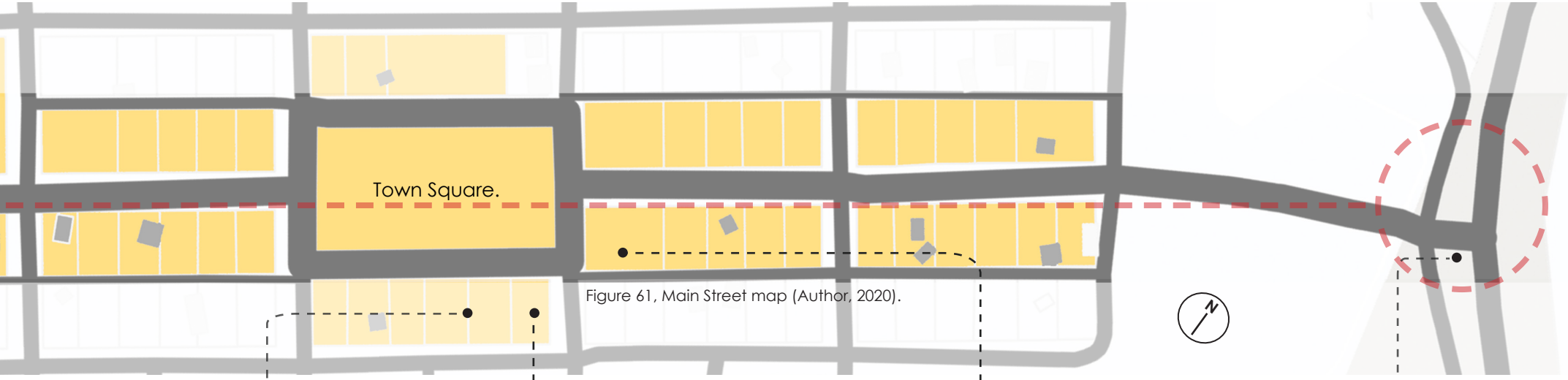


Figure 61, Main Street map (Author, 2020).



Figure 66 & 67, Clarens Brewery (Author, 2020).



Figure 68, Gosto Restaurant (Author, 2020).



Figure 69, Windmill Centre photograph (Author, 2020).



Figure 70, Clarnes Welcome Board (Author, 2020).



MESO [SITE ANALYSIS].

CHAPTER 3

Exploring Historical & Cultural Impacts On Clarens Town.

Figure 71. Map of Clarens in context.(Google Earth, 2020).



[i] **HISTORICAL** INFLUENCES.

Afrikaans, Basotho and British influences greatly impacted the development of Clarens and the building vernacular which can be seen as a layering of cultures. How can analysis thereof contribute to designing in the context of Clarens?

[ii] **CLIMATE** & NATURE.

Free State as a whole has extreme high and low temperatures. Clarens being in close proximity to Lesotho which has annual snowfall, experiences an incredible rise and fall of temperature during summer and winter seasons. This is important when designing a space which addresses the climate and remains comfortable to the user during all seasons and climates.

[ii] BUILDING **MATERIALS** & TECHNIQUES

The immediate site on which the design intervention is situated and influences of the topology, environment & flora.

FOUNDING OF CLARENS TOWN.

3.i.a.



Figure 72, Overlooking site context towards Clarens and behind it Mount Horeb (Author, 2020).

[1]_ History of Clarens, Eastern Free State.

Clarens Early Development.

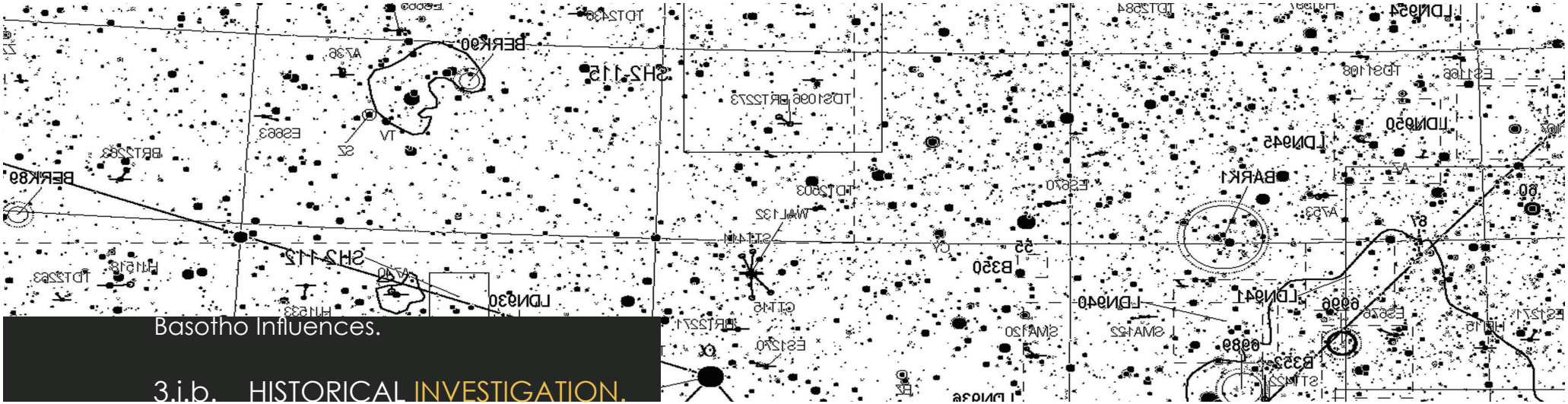
In the foothills of the Maluti Mountains lies Clarens, a small artistic town situated in the Eastern Free-State. Today Clarens is a tourist attraction and offers everything from adventure to arts & crafts. Clarens is unique in its geological and architectural features, these elements are what the town's essence is built on, open grass fields to valleys surrounded by towering sandstone formations give it its nickname "Jewel of the Free State".



[2] Abundance of building material.

Abundant sandstone and common African thatch grass was ideal and plentiful building materials due to the access to it. These materials are from which the many buildings in the town are constructed historically. This has formed a "contemporary" vernacular for homes, restaurants, and craft shops which partially gives Clarens its unique "Genius Loci". The town is surrounded by breath-taking mountain ranges and nature reserves, and offers places of activity or accommodation as a retreat from the urban(Clarens.co.za, 2020).

However, this was not always the case in Clarens, in over one-hundred years since establishment, Clarens has seen many geological discoveries throughout its existence. A great variety of fossils, gems and crystals indicate that the location of Clarens had prehistoric significance even before the Khoisan were the first human inhabitants of the location, as evident through the Khoisan rock art seen around the town. This historic significance has added to creating the alternative artistic experience of the town since it became a tourist destination in the late twentieth-century(Anon., 2019).



Basotho Influences.

3.i.b. HISTORICAL INVESTIGATION.

Agricultural Wonderers.

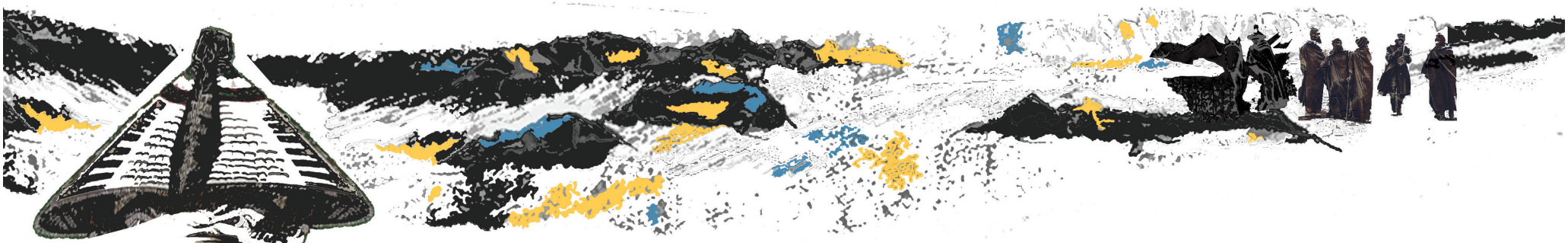


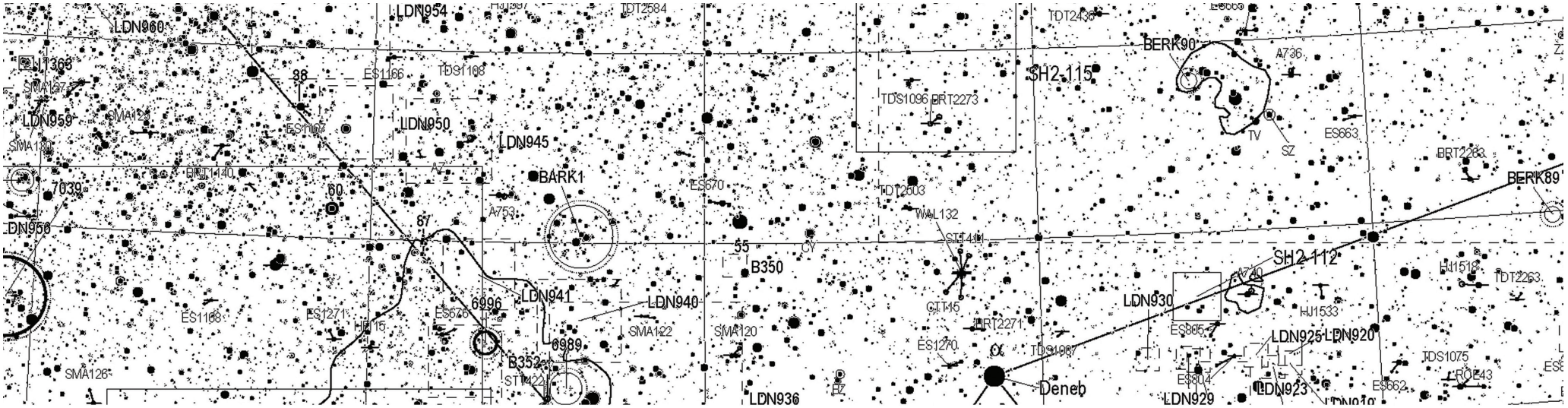


Figure 79, King Moeshoeshoe of the Basotho (Author, 2019).

[1] The **Basotho**, Apollo and Dianysis.

Gazing at the stars and having a connection with the spiritual is present from the earliest of ages in every human being. We seek to reveal not only the mystical, but in this process also reveal something about ourselves. With the coming of the enlightenment age mankind has become more rational (Apollonian), that which we can prove with science is what we believe. However, the spiritual, mystical (Dianysian) aspect of life has been ever present and regarding where one places oneself within the circle of self revelance in the connection to the stars, a specific truth becomes revealed as one studies



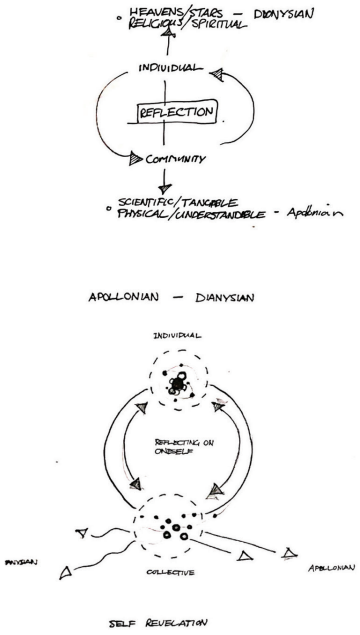


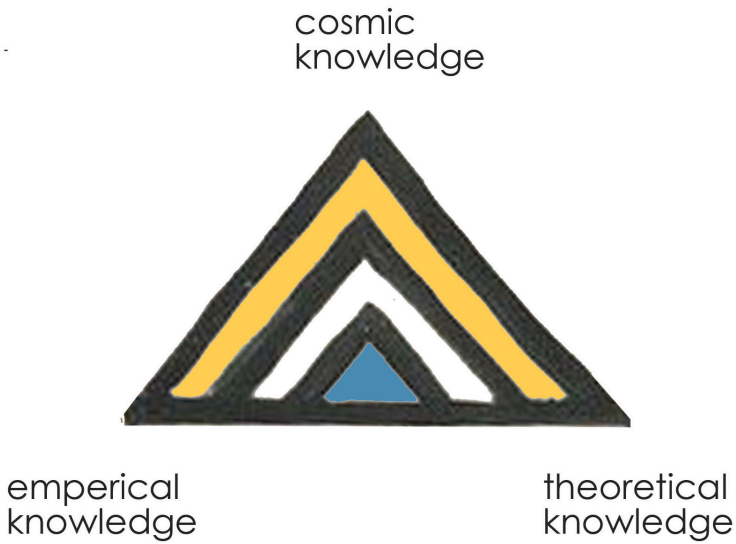
LITEMA

The Basotho people, of the Free state, believe their genesis lie within the cosmos. Their language, sense of space as well as their knowledge base is found not only on one aspect such as tangible evidence, but rather on a triad of aspects…
The triad referred to above pertains to: cosmic knowledge, which is gained from the stars, Theoretical knowledge, which is gained through logic perception, and empirical knowledge that is gained through haptic experience of the physical world.

[2] Basotho Greeting

The manner of greeting in Sotho is also very different from the traditional English or Afrikaans culture and is constituted in accordance with spatial orientation rather than mere acknowledgement.
Dumelang (Hello) seeks the agreement of the collective. Lekae (How are you?) translates to where the person is located in a specific space and ultimately, Reteng (I'm well) that is a statement that 'we' are located in this space (Z.Zulu*).





THE SANDSTONE HOUSE TYPOLOGY.

3.i.c.

[iii.a]_ **Early Basotho hut** development:

The earliest settlements of the Basotho were documented to be towards the North-West of Lesotho. These settlements consisted of corbelled stone huts. The corbelled stone huts were dry stacked houses and provided primitive living conditions. However with constant raids from the Zulu war parties under King Shaka, the Basotho were driven to higher ground and sought out the Lesotho Highlands and areas of the Maluti mountains where settlements were out of reach from the Zulu raid parties. Other groups moved South around Lesotho to the region of Thaba Nchu.

[iii.b]_ **Development** of the Ghoya Hut.

Throughout the Lesotho Highlands and the Free State, sandstone and grasslands supplied the Basotho with ample building material for the traditional corbelled hut. The Basotho used dry stacked walls with thatched grass roofs, styles in different areas of the Free-State differ marginally (Frescura, 1980).

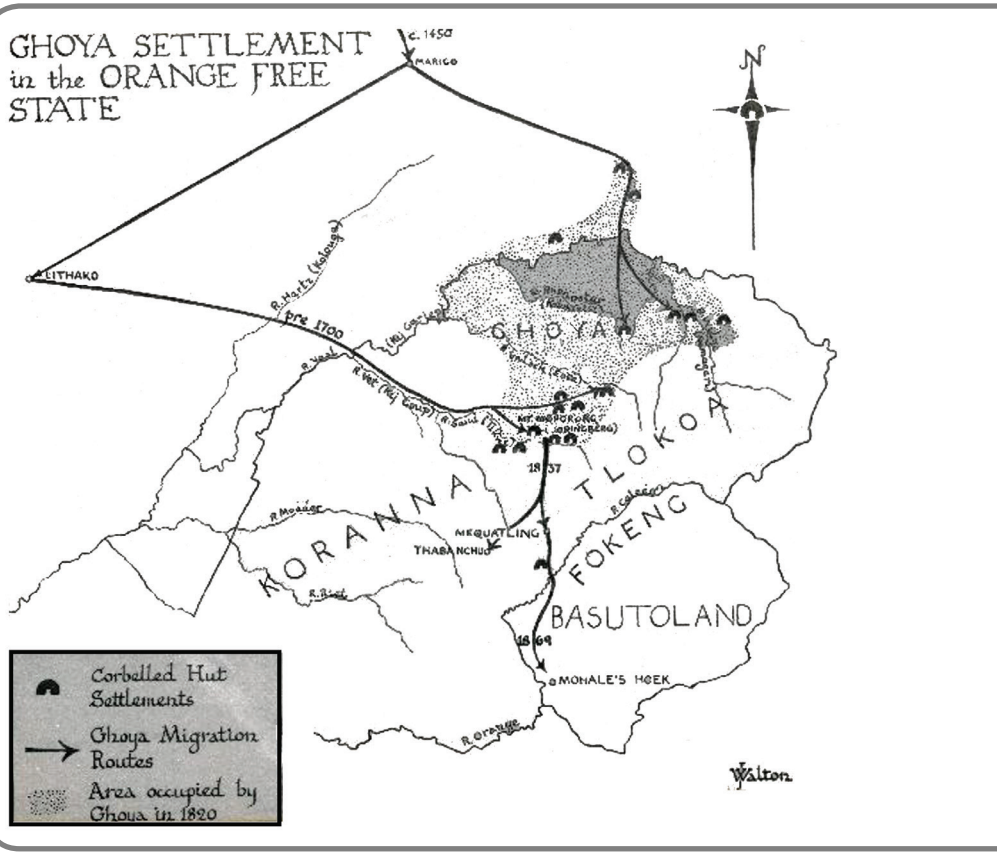
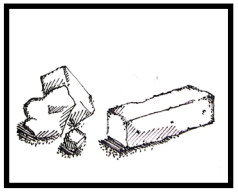


Figure 80, Ghoya settlement in the Orange Free State. (Walton, 1999),

[iii.a]_ **TRADITIONAL** MATERIALS.

The Basotho lived off the land and excelled in using what the environment offered.



[i.] Natural Sandstone.
Throughout the Free State, time and pressure has formed sandstone, which is accessible and abundant. The Basotho gathered and dry stacked, and later bonded with clay as the primary structure of the Basotho hut/Gho ya Hut.



Figure 81, Basotho corbelled Ghoya hut. Early period. (Clarens.co.za,



Figure 82, Basotho corbelled Ghoya hut. Early period. (Clarens.co.za,

Climatic conditions forced the development of the Motloanyane Home which had developed from the dry stacked stone walls of the Ghoya Hut, to acquire internal plastered walls as well as a lintol for increased climate control in the highlands of Lesotho where temperatures drop below freeze point in winter months. The development of the use of a lintol in the entrance created a distinct threshold between private and public space and allowed for the addition of a door into the structure (Pretoria, n.d.).

The Basotho hut in Lesotho and South Africa is slowly but surely being replaced by modern brick and corrugated sheeting houses which have no cultural connection or depth of meaning. A stigma that certain vernacular construction methods are outdated and regarded as rural has seen a shift away from these iconic huts to modern solutions, which in all regards do not have the same cultural, artistic or living quality meaning as the Basotho huts had.

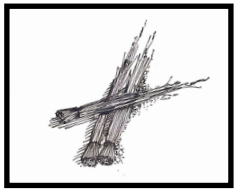
This is the same response as Western architecture had to historical architecture. Move to something that is as far removed from history as possible?



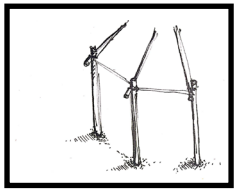
Figure 83, Basotho Motloanyane home. Middleperiod. (Clarens.co.za,



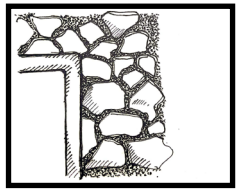
Figure 84, Basotho Motloanyane home with threshold. Late period. (Clarens.co.za,



[i.] Thatch Grass.
Hyparrhenia hirta [Common thatching grass] is abundant throughout South Africa. Basotho huts developed thatched roofs in the Ghoya hut.



[i.] Wood Tectonics.
With wood being the scarcer of resources, the Basotho used this for secondary structure in stone for primary structure.



[i.] Clay.
Abundant throughout South Africa, clay was used in the development of the Motloanyane home as a human touch was developed for the threshold.

3.i.d.
Afrikaner Influences.

CLARENS FOR THE PEOPLE.

[1]_ Paul Kruger in Clarens.

Established in 1912, the town of Clarens was formed as a result of two farms being bought for the establishment of a village in the area. Leliehoek was bought from Hermanus Steyn, and Naauwpoort from Piet de Villiers (near the Titanic rock formation) was bought by a company to establish the village for the purpose of supplying the wider community in the area.

In **Honour** Of A Great Man.

The town was named Clarens after President Paul Kruger who had great influence together with his commando who defeated the Basotho in the battle of Naauwpoortnek on the area in the Eastern Free-State and had spent his last days in voluntary exile in Clarens, Switzerland.

In the Free-State-Basotho war of 1865 – 1866 five "Burghers" from the Transvaal were murdered in the Eastern Free-State.(Clarens.co.za, 2020). As a result, war was declared between the Free-State and the Basotho, and President Paul Kruger lead the victory over the Basotho which secured the area of Clarens to the Free-State of 1866. A monument in honour of the five burghers murdered on 29 September 1865 was erected on Mount Ararat just outside Clarens, and later moved to the central town square, where it remains today.

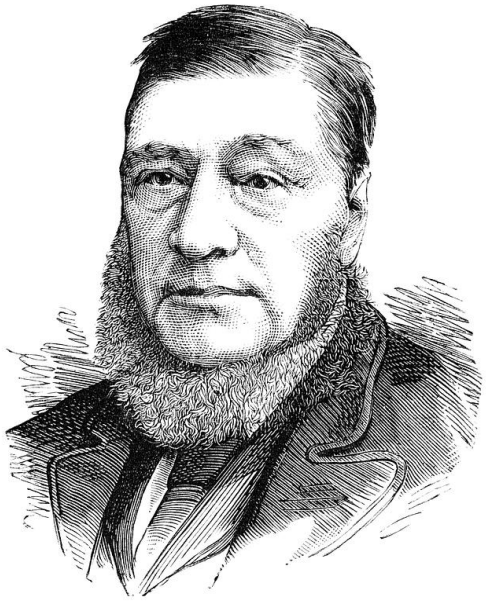


Figure 85,. Sketch of President Paul Kruger by Granger (Granger, 2016).

Basotho - Boer War.

[1858-1868].

Afrikaans, British and Basotho fight for occupation of land in and around Clarens.

Establishment of Clarens.

[1912].

Clarens Established by purchasing farms and unifying land as agricultural community centre.

[2]_ Clarens As A **Location.**

Clarens has in the last 20 years become a tourist hub in the Eastern Free State, ideally located in the foothills of the Maluti mountains and reasonably near to urban dwellers from Gauteng. This makes it the ideal location for busy city dwellers to esacape to the countryside and enjiy the tranquility of Clarens. The development of Clarens has seen it lose its quiet nature over weekends and become somewhat of a bustle.

[3]_ Before The **Tourist Industry.**

Clarens Mountain, overlooking open grass plains where now a bustling tourist town lay. The mountain now offers scenic hiking routes of the gorge as well as rich crystal sources at the peak of the mountain.



Figure 86,Typical Eastern Free State landscape analysis giving design clues to the regional industrial typology (Author, 2020).

[1912] - [1990].

Small but functional town for the farming community in the Maluti Mountain foothills with small tourism opportunity.

Operational Town.

[1990] - [Present}.

The town still operates as a community center for the agricultural industry surrounding Clarens, but have been largely transformed into a tourism based town which was started by art galleries & craft shops.

Tourism Based Community & Town.

[4]_ Early Clarens Style.

The early Voortrekker settlements in the Eastern Free-State, Clarens followed the vernacular style which was present from the Basotho people. Ample sandstone and thatching grass was accessible as building material. Early examples show similarities between the Basotho Hut and Early buildings in Clarens. However with the growing influence of the British in South Africa and the introduction of formed steel and corrugated sheeting, the true Clarens vernacular was established through the layered influences.

[a]_ Early Voortrekker Construction Techniques documented by James Walton in SAAI Journal of July 1952 .

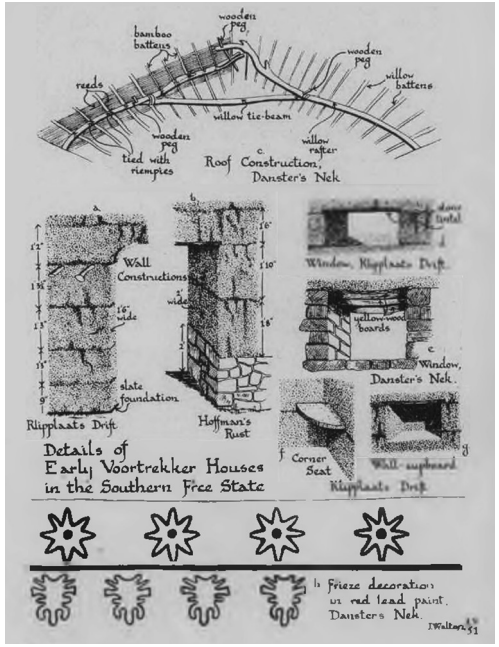


Figure 87, Voortrekker construction details (unknown, 2020).

[b]_ Early Afrikaner house in Clarens shares similarities with the Basotho hut, with internal separations allowing for rooms.

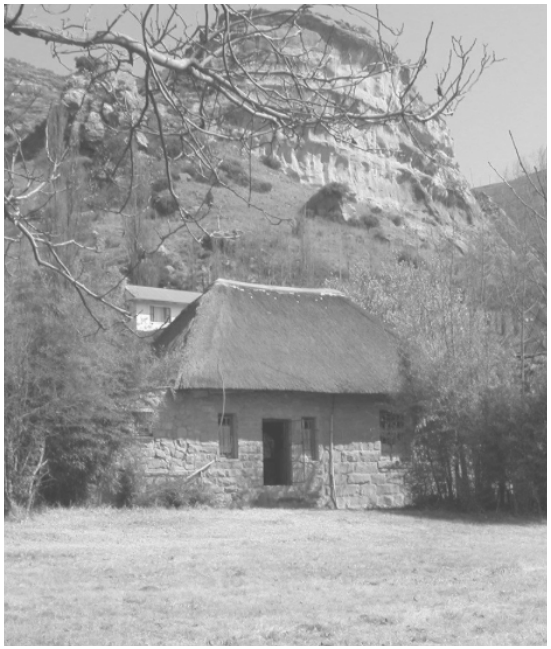


Figure 88. Early example of Clarens vernacular (property24,

[c]_ Corrugated Iron is brought to South Africa as a British patent developed in 1830 in the industrial revolution. Their influence in South Africa is seen as corrugated iron roofs replace the previously thatched.



Figure 89, British corrugated iron house (SAHO, 2020).

[d]_ Clarens **Vernacular.**

The Clarens Vernacular is quaint in many ways. Sandstone exterior, Corrugated sheeting and formed steel trims being essential to the style. The style developed as a result of the combination of influences from the Basotho, Afrikaner and the British. This combined resulted in a semi-rustic exterior with verandas and roof details creating thresholds around the main building.
The building style in general has double pitched roofs with dormer windows in certain examples allowing for rooms in the attic of the building. Flatter corrugated roofs overhang the veranda, which in most cases is orientated to the North.
The Clarens Vernacular style can be seen predominantly in the historical parts of the town with attempts to contemporize the style in the areas more recently developed.
The Clarens Vernacular is essential in the "Genius Loci" en phenomenological experience in Clarens. Buildings appear to be part of history, neither competing or imposing, but with a voice that speaks loudly of the place being Clarens, and Eastern Free-State.



Figure 90, Photograph of the Dutch Reformed Church patronage on Main Street, Clarens (Author, 2020).

3.ii.

SITE & CONTEXT.

[1]_ Clarens **Climate.**

[2]_ Clarens Temperature.

Clarens temperature overall is classed as moderate, with reasonable highs and lows during summer months. December and January are the warmest months whilst June and July are the coldest typically. Seen in figure 77, winter sees extreme variation in temperatures where night time lows are around freeze point and day time highs in the mid-high teens to twenties. The mean high (solid red line) shows the average maximum temperature for each month throughout the year seen in figure 77, and the mean low (solid blue line) shows the average minimum temperature for each month throughout the year (Meteoblue, 2020).

[3]_ Clarens Rainfall.

Clarens rainfall can be considered low to moderate with an annual rainfall of around 353mm seen in figure 78. The peak rain season is during the summer months from November through to March. On average Clarens has 215 days without any precipitation which are for most of the autumn, winter and first few months in spring (Meteoblue, 2020).

[4]_ Clarens Solar Exposure.

Due to the moderate rainfall of Clarens, solar exposure is quite high, especially throughout the winter months when there is little no rainfall, and the occasional snowfall seen in figure 78.
Clarens is surrounded by the Maluti Mountains which causes winter temperatures to drop suddenly when the sun sets behind the mountains reducing solar exposure from late afternoon resulting in the sudden temperature drop.



Figure 73, Winter Snowfall in Clarens Town (Unknown, 2020).



Figure 74. Summers day in Clarens Town (Author, 2020).

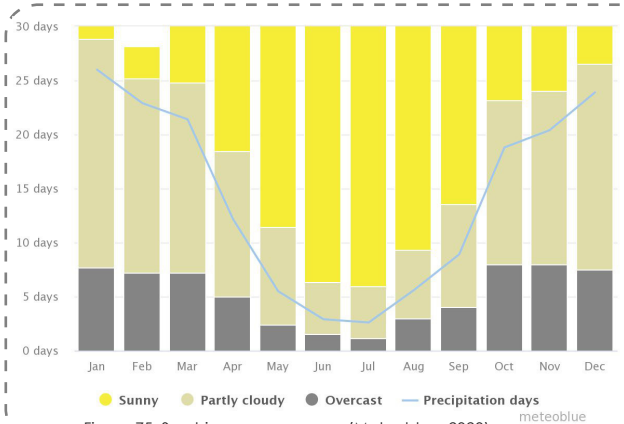


Figure 75, Sunshine years per year (Meteoblue, 2020).

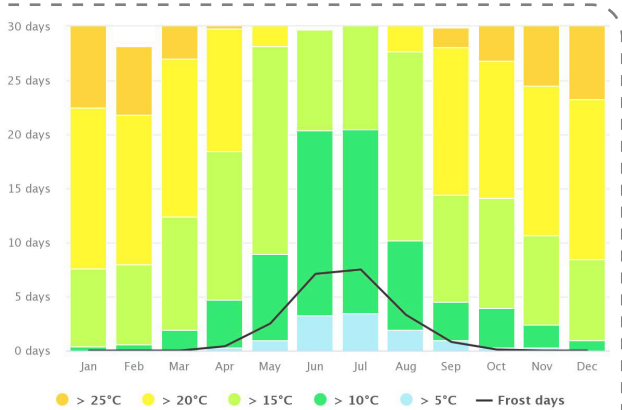


Figure 76, Temperatures highs of Clarens (Meteoblue, 2020).

[5]_ Frost.

Due to the dramatic variation in day and night winter temperature, Clarens tends to get frost in the early mornings in peak winter months. As figure xxx shows that frost mostly occur in June and July (Meteoblue, 2020).

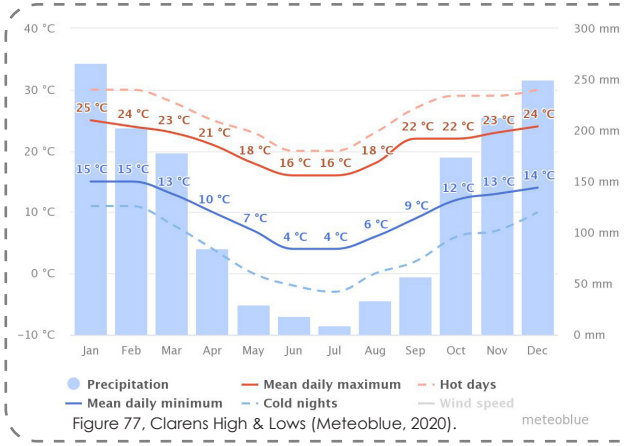


Figure 77, Clarens High & Lows (Meteoblue, 2020).

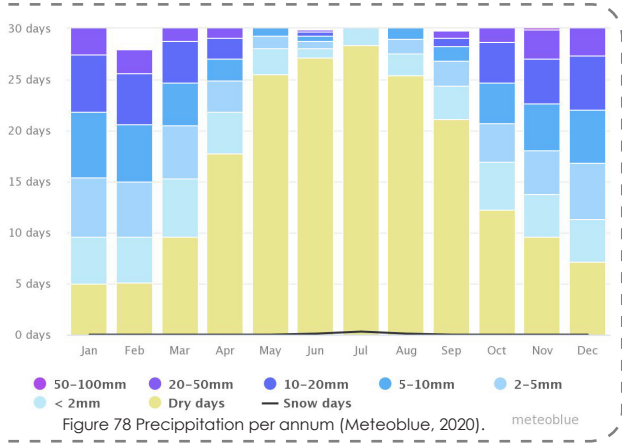


Figure 78 Precippitation per annum (Meteoblue, 2020).

[6]_ Cloud Cover.

Spring and summer months offer the highest probability of rainfall, and therewith cloud cover. Seeing the least amount of sunny days through January and the most in peak winter months, June and July. Most summer days have a 66% chance of being partially cloudy. Most partial cloudy days still have temperatures of mid to high twenties and are excellent conditions to enjoy the countryside (Meteoblue, 2020) .

MATERIAL BOARD [context feeling].

3.iii.

[1]_ Clarens Touch & Feel Of Materials.

The experience & feel of Clarens has a distinct rustic quality which has been derived from the agricultural industrial influence. The idea of contemporizing the "farm complex" creates the unique experience which urban dwellers are drawn to.

The surrounding sandstone mountains provided early settlers with an abundance of material and has since been the choice for the majority of Clarens residential and commercial buildings creating the "Clarens Vernacular Typology". Corrugated or IBR sheeting accompanies the sandstone blocks and has seen a few contemporary application attempts in the town, yet with now real success.

[2]_ The rustic material board. High-tech materials are inexplicibly out of context in the historical arts culture based town, leaving a material board which might seem under developed. Yet in order to design appropriately the material use has to respect that which is present in the existing urban fabric and re-appropriate those materials in a manner which is contemporary, yet respectful of the Clarens heritage.



Figure 91. The Windmills Center showing common material use throughout Clarens (Author, 2020).

[3]_

FEEL & MATERIALS OF CONTEXT.

CLARENS FOR THE PEOPLE.

Sandstone Blocks.



IBR Sheeting.



Basic Gum Pole Beams - [Rustic Typology].



Polycarbonate Sheeting.

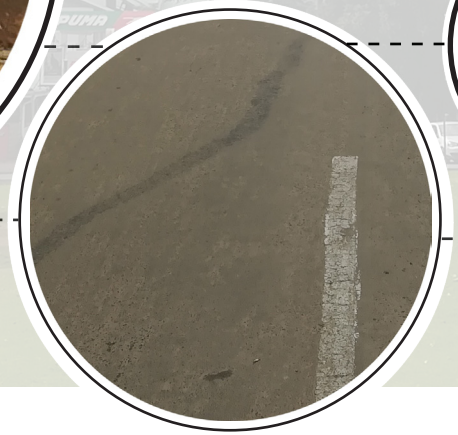


Cast Concrete Curb - [Threshold].





NFX Brick Paving.



Tarred Road - [Main Roads].



Gravel Road - [SecondaryRoads].

Clarens.
Dihlabeng Manucipality.

MICRO [SITE ANALYSIS].

CHAPTER 4

EXPANDING ON THE **INDUSTRIAL COMMUNITY** THROUGH **TOURISM.**

4.i.



Figure 92. Site map with possible routes to site (Google Earth, 2020).



[i] **ENVIRONMENTALLY** FRIENDLY ROADS.

In order to minimize the impact on the conservation area periphary, permeable grass block pavers as shown in figure xxx are used to create environmentally friendly roads, as well as decrease the

[ii] SITE **ACCESS** ROADS.

The site is divided by the natural stream which runs through the valley. In a similar way the access roads to the building is divided with the public on the North and staff & operational roads on the south of the building.

[iii] **PERMEABLE** GRASS BLOCK PAVERS.

The immediate site on which the design intervention is situated and influences of the topology and environment.

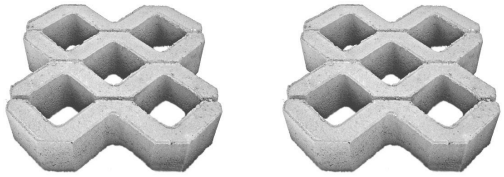


Figure 93. Permeable Grass Block Paver (Pavementmaterial, 2020).

SITE CONTOURS.

4.i.



[4.i.]_ **SITE TOPOLOGY**.

The natural contours of the site forms a valley which creates the ideal location for the [Main Street axis] end point to be situated at. Thereby expanding on the notion of responding to, and enhancing the topology of the site.

Figure 94. Site contours at 10m intervals from 1Map online. (Author, 2020).

SITE & CONTEXT.

SITE INTERESTS.



[1.]_ **Main** Street - The Axis without any end point - [Site].

[2.]_ **Blue Gum** Tree Forrest - [Eucalyptus].

[3.]_ **Hill** Street - [Threshold between Clarens Town and Clarens Village Conservency.

[4.]_ **Alien Plant Species** Infested Grass Fields.

[5.]_ **Abandoned** Water Reservoir Ruins.

[6.]_ **White Poplar** Trees [Populus Alba].

[7.]_ **Natural Sandstone** Ridge.

[8.] **Non-Running Stream** [Valley].

N

Figure 95, Sketch of site topography. (Author, 2020).

PREVAILING WIND DIRECTION.

RESPONDING TO NATURE.
Hidden in the slope.

4.ii.

[1] Topographical Design Influence.

The natural valley shown in figure 96, indicates that the possibility of embedding the building into the terrain which could have multiple benefits for the distillery in regards to addressing to climate which will be experienced by users.

[i2]_ Figure 96 shows winds in Clarens occur predominantly in a NW-SE direction.

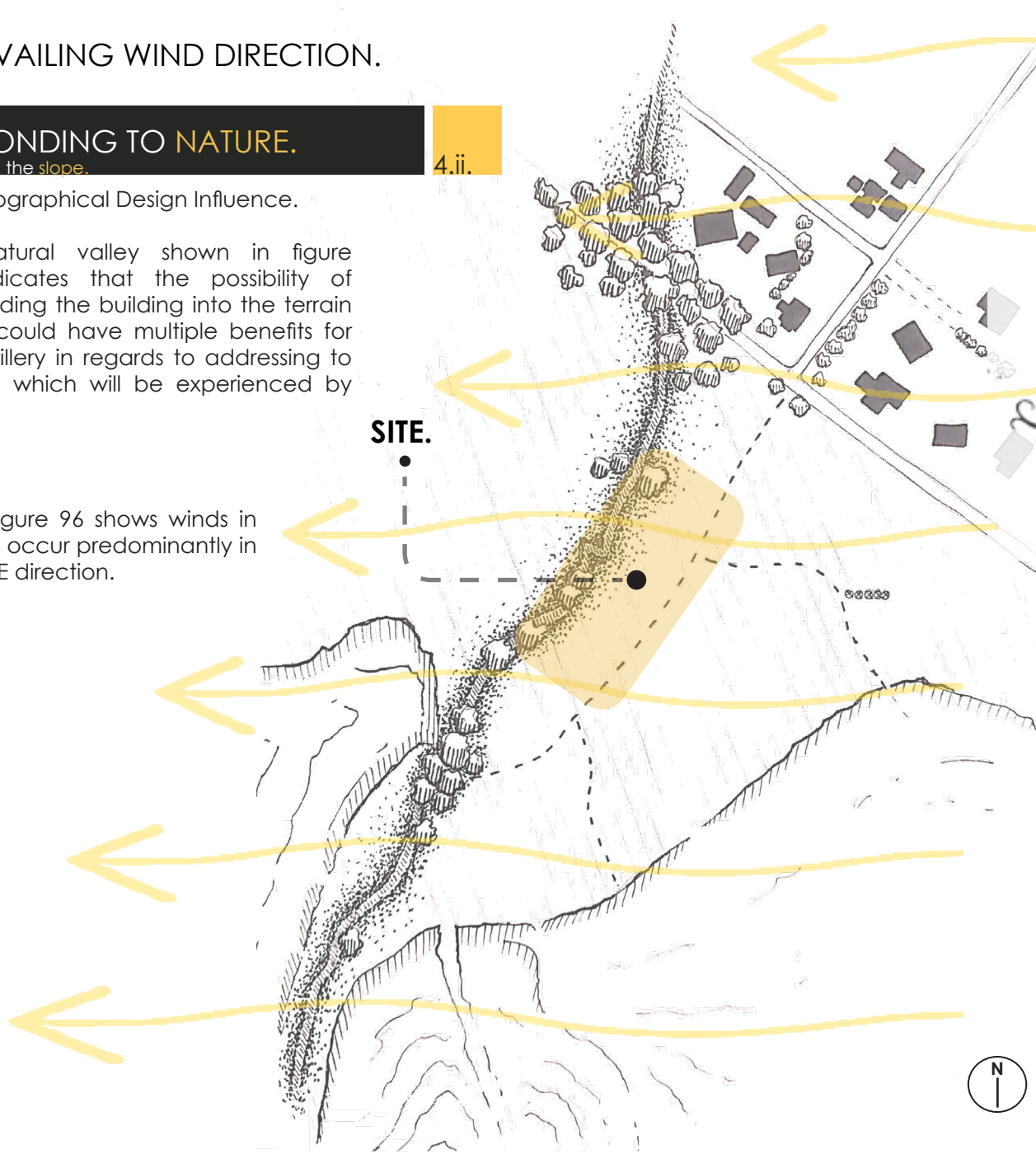


Figure 96, Sketch of site with contours (Author, 2020).

The Lesotho Winds.



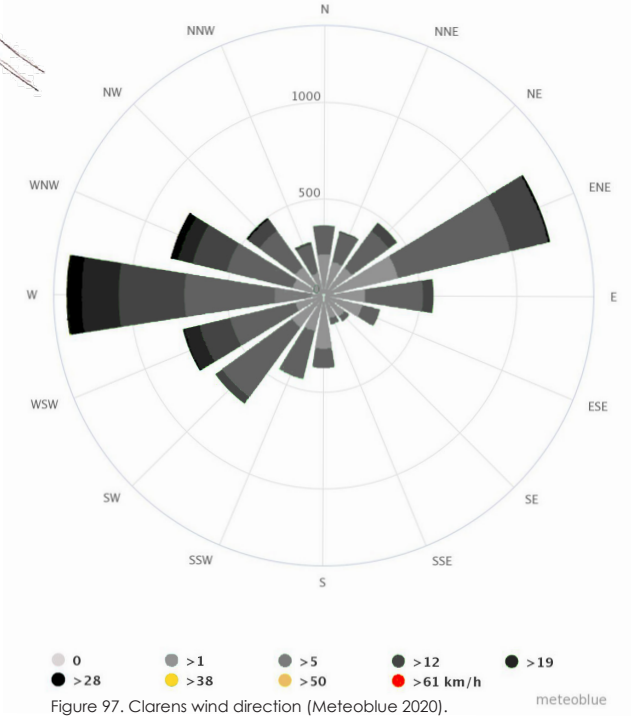


Figure 97. Clarens wind direction (Meteoblue 2020).

[3]_ As indicated in figure 98, the natural slope will provide shelter from the South-Easterly winds which is the predominant wind direction which acts on the site. This will aid in temperature control with less exposure to the varying outside temperatures.

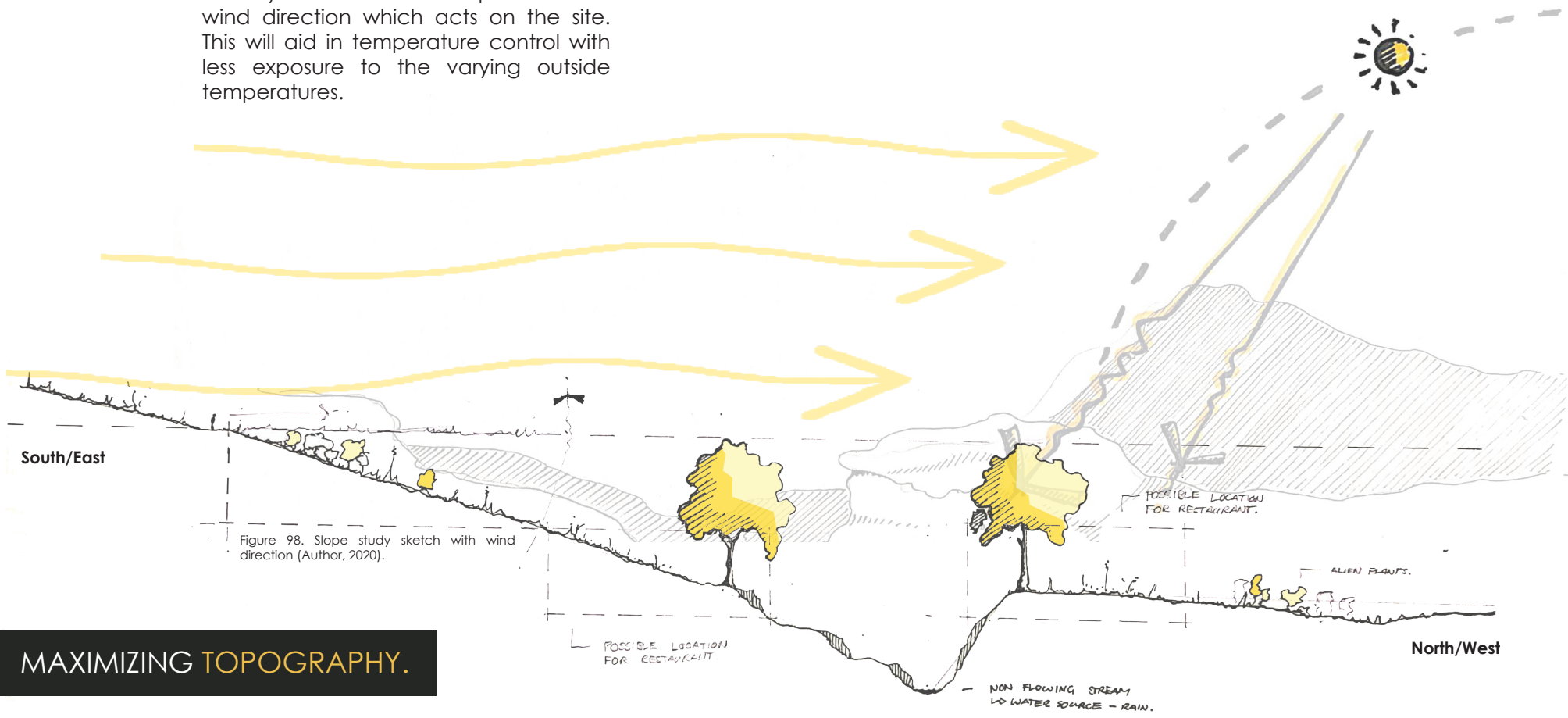


Figure 98. Slope study sketch with wind direction (Author, 2020).

MAXIMIZING TOPOGRAPHY.

[4]_ Overall Clarens does not experience excessive wind and can be classed as a low to moderate wind exposure region, similar to the general climate of the region. Due to the surrounding mountains of Clarens, wind direction tends to be predominantly form the East to the West. Windspeeds average at 15 - 25 Kmph seen in figure 97, (meteoblue, 2020) and due to the rise and fall of warm air over the mountains the winds can be gusty.

4.iii.

Views & Orientation On The Site.

CONTEXT ANALYSIS OF SITE.

[1] Flora on the site.

Looking over the site, the flora creates a semi-romantic type landscape which is rare in the Eastern Free State. Indigenous species thrive in the mini-oasis, yet also due to the proximity to Clarens town which has seen human influence, the site has various alien species which thrive on the water source.





Figure 99, Overlooking the site, Clarens towards Mount Horeb (Author, 2020)

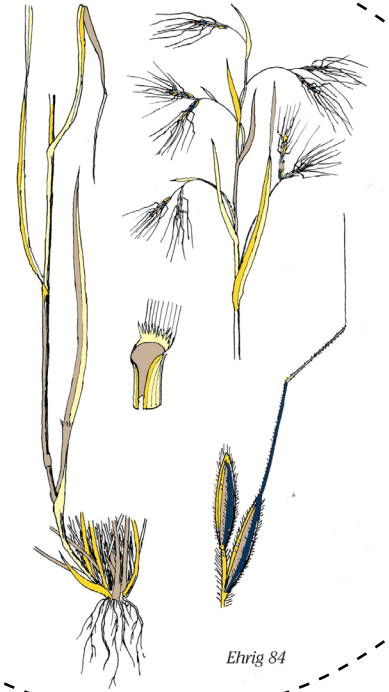
[2]_ SMALL - MEDIUM GROUND COVERAGE.

[iv.c] Surrounding Ground Coverage.

Whilst the Eastern Free State is predominantly grasslands, small ground coverage exists from the fynbos family, the shrub "Slangbos" Fig. 102, which tends to flourish in the harsh sandstone mountainous regions of the Eastern Free State, and can overgrow in areas where the natural grasslands are overgrazed.

[3]_ **Indigenous** ground coverage.

[Figure 100,]_ **Hyparrhenia hirta** [Common African Thatch Grass].

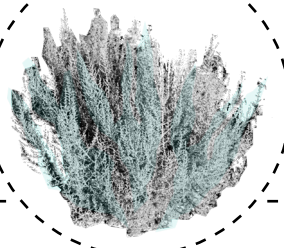


[4]_ **Intruder Species** Ground Coverage.

[Figure 101.]_ **Tagetes minuta** [Khakibos].



[Figure 102.]_ **Seriphium plumosum** [Slangbos].



[5] Ancient Wonders.

Whilst "Oubos" Fig. 103 receives its name from its seemingly old appearance, Old bush is a small to medium shrub which inhabits the highlands of the Eastern Free State.

[Figure 103.]_ **Leucosidea sericea** [Old Wood].



[6] Invase Empirical Intruder.

With the British Empire's interest in South Africa, so came an influx of infrastructure, and domesticated animals. The hay which was brought to South Africa as feed for horses contained the "Khakibos" seeds and thereby the intruder species established itself with a tenacity in the grasslands of the Free State.

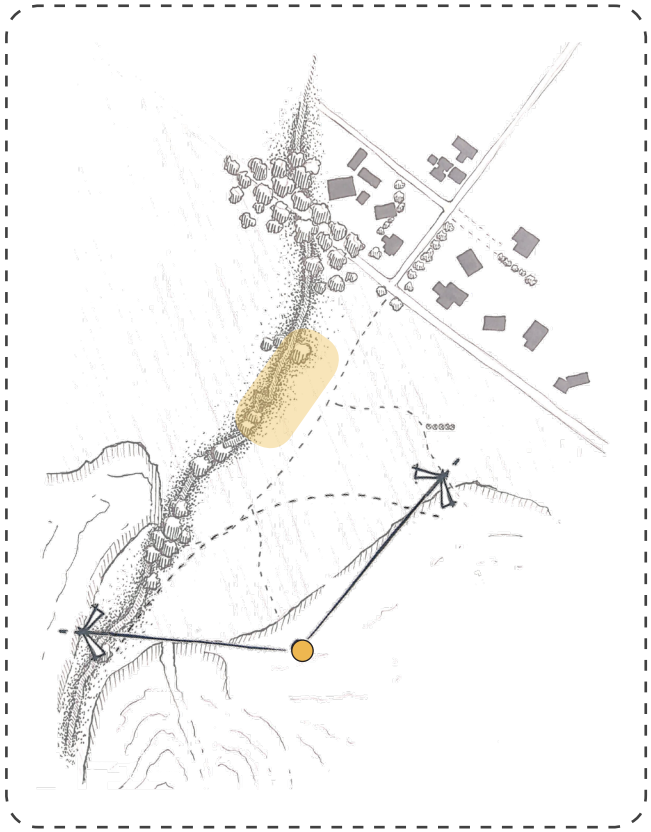
4.iv.

Orientation On The Site.

CONTEXT ANALYSIS OF SITE.

[1] Topographical Design Influence.

The natural valley at the location of the site



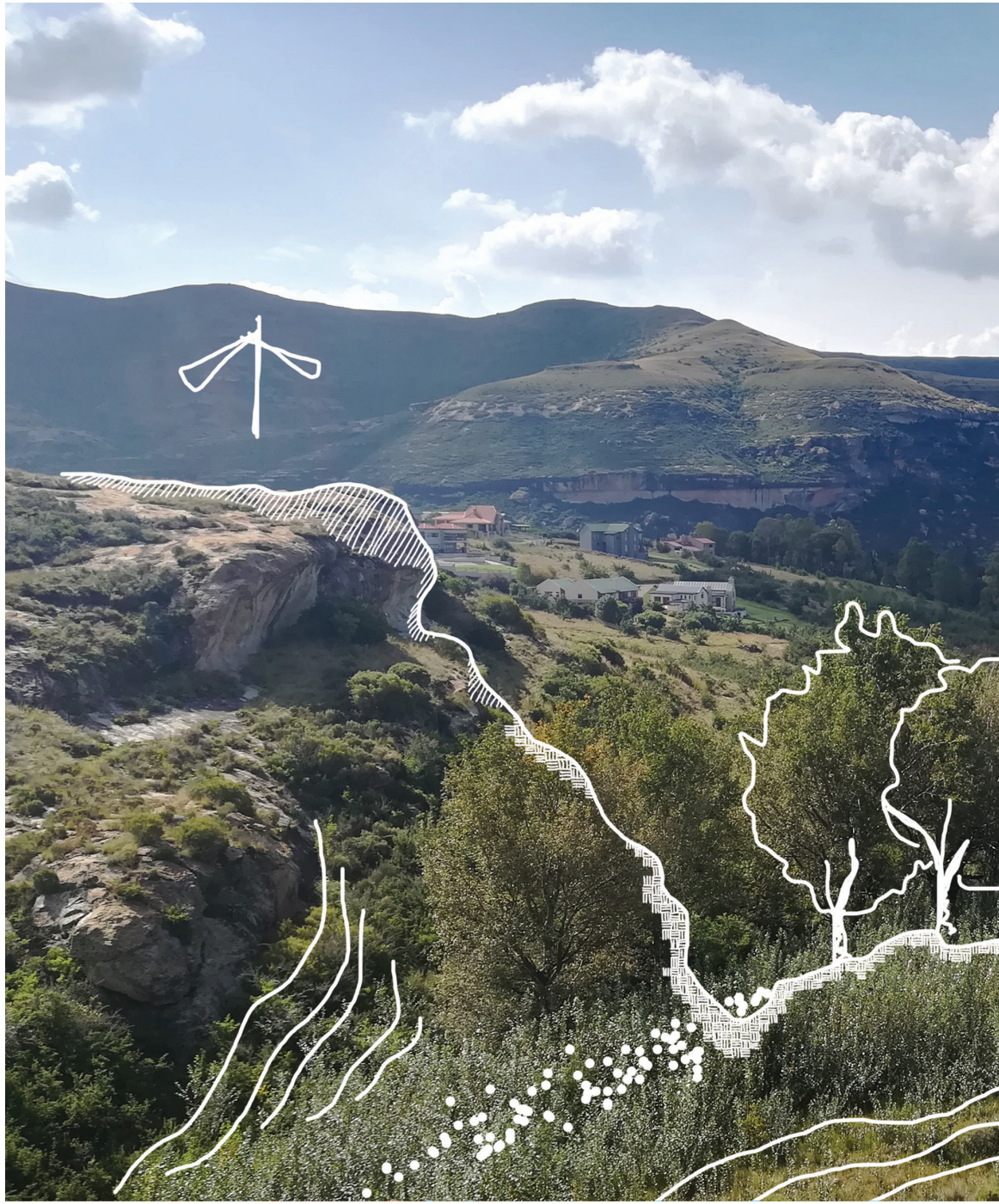




Figure 104: Overlooking the site towards Maluti Mountains (Author, 2020).

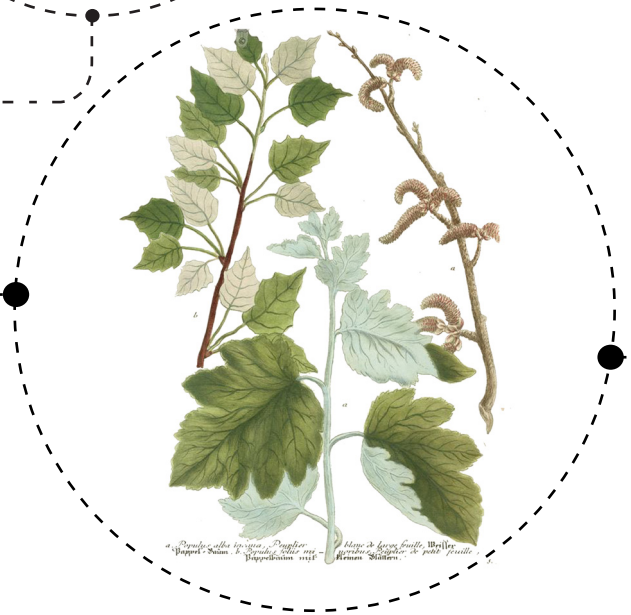
[2]_ MEDIUM - LARGE GROUND COVERAGE.



[Figure 105.]_
Euxalyptus [Blue Gum Tree].

[Figure 106.]_**Salix Babylonica**
[Weeping Willow Tree].





[3] Lack of Tree Cover in the Free State.

Free State is predominantly grasslands with small to medium shrubs which are sparsely scattered in the mountainous regions. However, with the arrival of the Dutch and British, so too arrived various tree which could adapt to the climate and provide wood to the growing communities.

[Figure 107.]_
Populus Alba [White PoplarTree].

[v.d] **Erosion.**
Due to the lack of variety of vegetation in Free State, overgrazing, fires or termites can lead to stream banks being exposed with no roots or plants preventing erosion. White Poplars were brought to Free State to counteract this issue.



CONTEXT ANALYSIS OF SITE.

[4] Topographical Design Influence.
The natural valley at the location of the site





Figure 108, Overlooking the site and Clarens towards Mount Horeb (Author, 2020).



Figure 109. Overlooking the site, valley & Clarens towards Maluti Mountains (Author 2020).



[1]_ PURPOSE OF **GREEN BUILDING COUNCIL SOUTH AFRICA [GBCSA].**

Credible and objective measurement for green buildings in South Africa & Africa
The certification processes governed by the GBCSA involve certification of buildings using the Green Star, Net Zero, EWP, EDGE rating tools. Insight into this process is provided by the technical library.

Our suite of rating systems offer tools for almost any type of building. Certification creates a universal platform for credible and objective measurement of green buildings. Each tool recognises and rewards environmental leadership and is a recognised symbol of sustainability achievement (GBCSA, 2020).

4.v.

BUILDING PERFORMANCE & [ENERGY EFFICIENCY]

(All infromation is sourced from online source, GBCSA website. [GBCSA, 2020])

GBCSA PROBLEM STATEMENT.

Why is existing and new buildings in South Africa not better regulated by the GBCSA?

[2]_ [GREEN STAR RATING TOOLS].

- New Buildings & Major Refurbishments.
- Interiors.
- Sustainable Urban Precincts.
- Socio-Economic Category.
- Green Star Custom.
- Green Star Africa.

[3]_ [Net Zero Rating].

The Net Zero rating tool is awarded to buildings that show they have no ecological impact in one or more of Water, Energy, Waste and Ecology
The **EWP** rating tool, makes up 40% of the EBP rating as it is focused on Electricity and Water Performance **(EWP)** mostly in existing building.

EDGE is a user-friendly Green Building Rating online software platform that offers a measurable way to reduce the resource intensity of residential buildings. The online tool is quickly able to determine the financial viability of including green aspects on your project.

The **EDGE** standard is set at a minimum of 20% reduction across the following categories:

- Energy Consumption
- Water
- Embodied Energy



Figure 110. Clarens and site from Western hill (Author, 2020).

CHAPTER 05.

THOUGHT, REFLECTION & FEELING.

Respecting context, culture and environment.

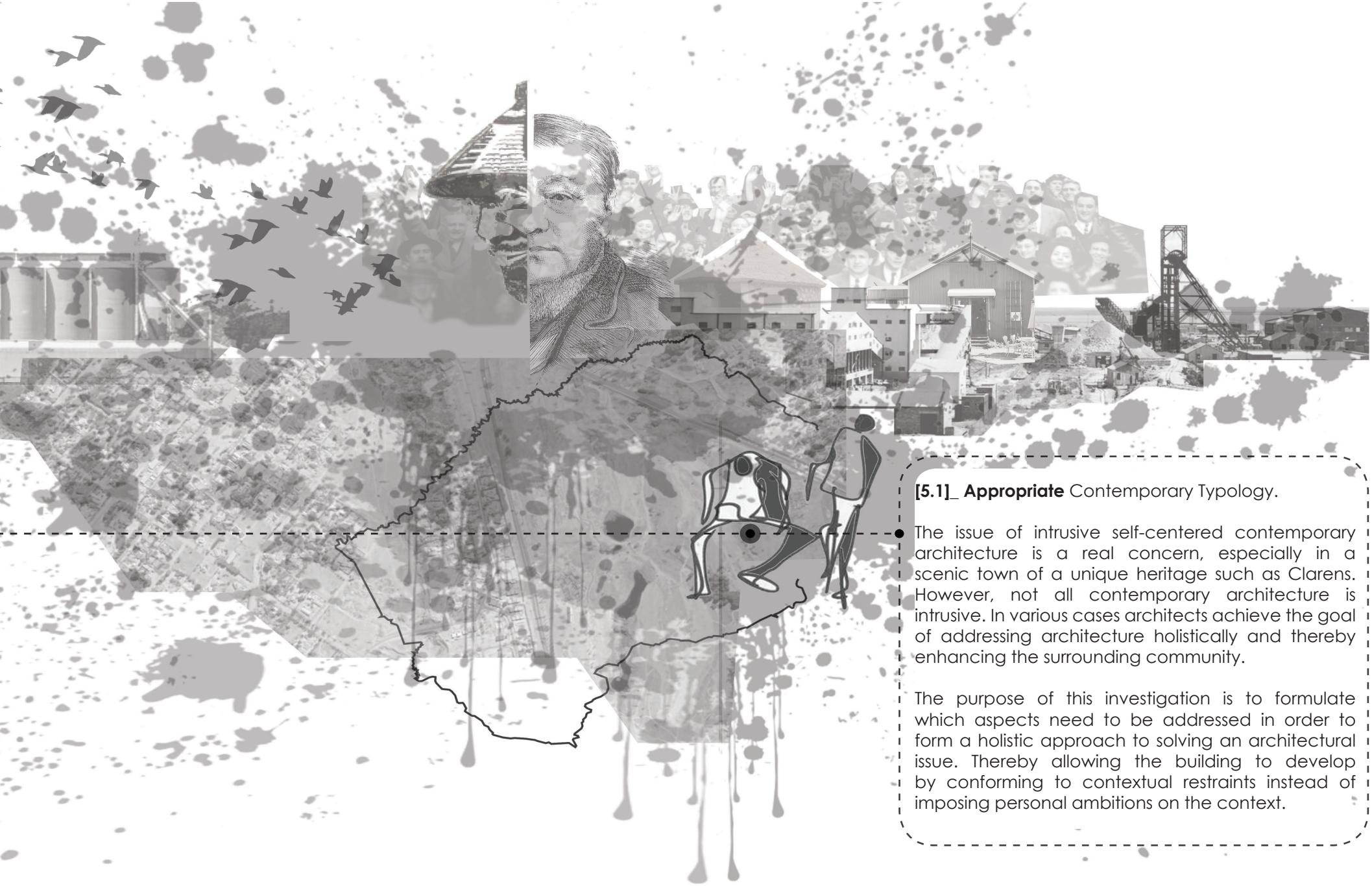


[5.1]_ Synthesizing Tangibles And In-Tangibles Into A Coherent Whole.

In a changing economic and social environment of Free State, Clarens presents the opportunity to challenge and address the evolving economic environment as well as the changing social environment. Embedded in the historical foundations of the province is the rich agricultural industrial heritage which was the predominant ambition of the Basotho, Afrikaans and the British settlements in the province. Yet Clarens represents the change in the economic and social environment as that the town has a unique blend of industry and tourism where arts and crafts have become central to the heritage of Clarens. This all in a naturally rich environment with unique sandstone mountain ranges and flora and fauna which attracts diverse groups of visitors.

With the opportunity which is provided by Clarens, how can these historical, cultural and environmental influences be synthesized into a coherent appropriate new typology which addresses a industrial typology in terms of morphology, represents the industrial sector economically whilst creating space and experience which the modern tourist can gain an enhanced experience of the rich cultural diversity which the Free State offers.

What is that experience that a modern tourist seeks? We as humans are intrigued by process, by making. The aim is to connect the user to the process by allowing each user a personal experience of the process of distillation, thereby giving the opportunity to connect and react on a personal level, which enhances the phenomenological experience of place.



[5.1]_ Appropriate Contemporary Typology.

The issue of intrusive self-centered contemporary architecture is a real concern, especially in a scenic town of a unique heritage such as Clarens. However, not all contemporary architecture is intrusive. In various cases architects achieve the goal of addressing architecture holistically and thereby enhancing the surrounding community.

The purpose of this investigation is to formulate which aspects need to be addressed in order to form a holistic approach to solving an architectural issue. Thereby allowing the building to develop by conforming to contextual restraints instead of imposing personal ambitions on the context.

5.i.



METAPHYSICAL INVESTIGATION.

[2]_ The metaphysical impacts the past, present and future culture of a site. The design solution requires the metaphysical investigation to be embedded in the response to the context in order to be an appropriate example of contemporary architecture.

[1.]_ Historical Analysis.

- Basotho.
- Afrikaans.
- British.
- Agricultural.
- Arts & Crafts.

[3.]_ Theoretical Analysis.

- Experiencing place. [phenomenology].
- Critically addressing climate, site and heritage.
- Genius Loci - Spirit of the place.

[4.]_ Current Cultural Analysis.

- Artist Retreat culture.
- Crafts hub [community opportunity].

[5]_ Topographic Analysis

- Geological Formations.
- Flora - Indigenous & intruder species creating "oasis".
- Ruins [Existing].
- Relation to CBD, extending "axis" end point.

[6.]_ Contextual Analysis

- Agricultural Typology.
- Industrial Typology.
- Clarens Typology
- Materials & Resources

[7]_ Development Strategy

- Intensification corridor.
- Dihlabeng Priority development & job creation town.

[7]_ The Physical Investigation guides the designer in the typological and morphological application of a response. The design solution is required to address the existing contextually based influences and inform the form-giving of an appropriate contemporary architectural response.

PHYSICAL INVESTIGATION.

DESIGN INVESTIGATION.

[8]_ Contemporary Industrial Typological Building

- Extend the Main Street axis from town square to site and create a destination point.
- Develop contemporary application of Clarens vernacular typological elements.
- Respond to Industrial Typology of surrounding context.
- Respond to & enhance nature through using interior spaces to frame the landscape.
- Integrate functionality & usability to allow the user a coherent experience of place and being.
- Optimize functionality of a dual purpose industrial building.

CHAPTER 06.

6. EXPANDING ON THE **INDUSTRIAL COMMUNITY** THROUGH **TOURISM.**

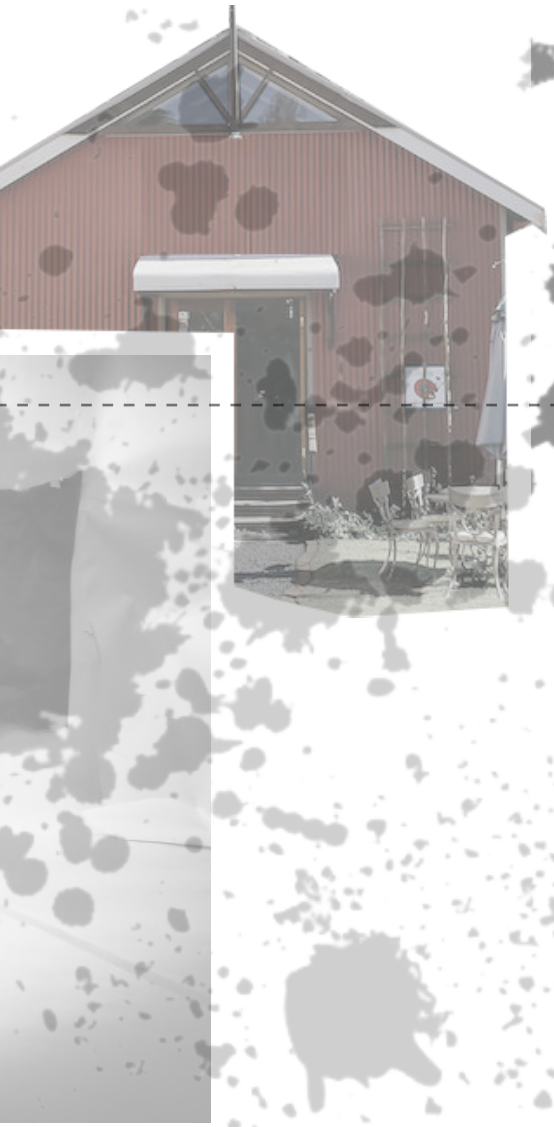
[6.i]_ Uncovering A **Personal Meaning** in Architecture.

The notion of meaning in architecture is subjective and personal. Whilst architecture shares universal experiences with those who interact therewith, Francis D.K. Ching explored how these universal principles can be broken down into architectural systems, each addressing a key response to an aspect which to be addressed by a design intervention. Yet each person experiences these systems in a personal manner.

How we as individual humans experience space, form and order is unique to a degree as each user has aspects to which the user relates , and therefore we are able to conceive original and unique ideas. Inadvertently there are elements in architecture which the larger populous would agree can be considered as meaningful, or at the very least appropriate. These elements are to be the focus of the study, and how one can distill these elements into a form of contemporary architecture which may in the future be viewed as timeless and appropriate regardless of the trends of the time.



Figure 111, Personal connection, (Takeda, 2018).



[6.ii]_ Uncovering A **Personal Meaning** in Architecture.

To substantiate a personal view on meaning in architecture the dissertation will look at how architecture played a significant and meaningful role in cultures of history gone past and how these elements of historical architecture might be implemented into a contemporary application. Contemporary architecture is a result of progression and advances in civilization as well as technology, and the advances made in construction allow these fundamental ideas of classic architecture to be re-apropriated and applied in a way which is coherent with current architectural philosophy.

Current applicable architecture philosophy which address the phenomenological experience as well as critical regionalist idealism is investigated as a means to form a design solution which addresses, history, nature and the user experience in a design solution which allows the user to experience the process of Gin Distillation instead of merely seeing the result.

How Can *Critical Regionalism* Enhance The Phenomenological Experience Of Place And Process?



6.iii.

Topics to Investigate.

[1]_ Critical Regionalism.

How can the investigation of critical regionalism of a **specific regional environment**, Eastern Free State enable an appropriate contemporary architectural response to a design problem in a given context**.**

[2]_ Place?.

Given a space, with a set context and set culture, how can place be made within a space**.** What **meaning** can and should be infused into the functional spaces to form a lasting and **appropriate** connection to the community and user.



[4]_ Phenomenology.

Phenomenology of Architecture.

The search for relatable meaning in architecture invariably leads to an investigation of the philosophy of Phenomenology. How do we perceive? Is the notion of perceiving specific ideas taught, or inherent? How do architects design in order to convey specific ideas to those who will use the spaces? Phenomenology is the study of being, between the user, objects of direct experience and its surroundings.

[3]_ Process.

Industrial typology is motivated by the **functional process** which a building is created around. How can this process be analyzed, extracted and **extrapolated** to form a dichotomy between internal process and user **phenomenological experience**.

6.iv.

THEORETICAL FRAMEWORK.

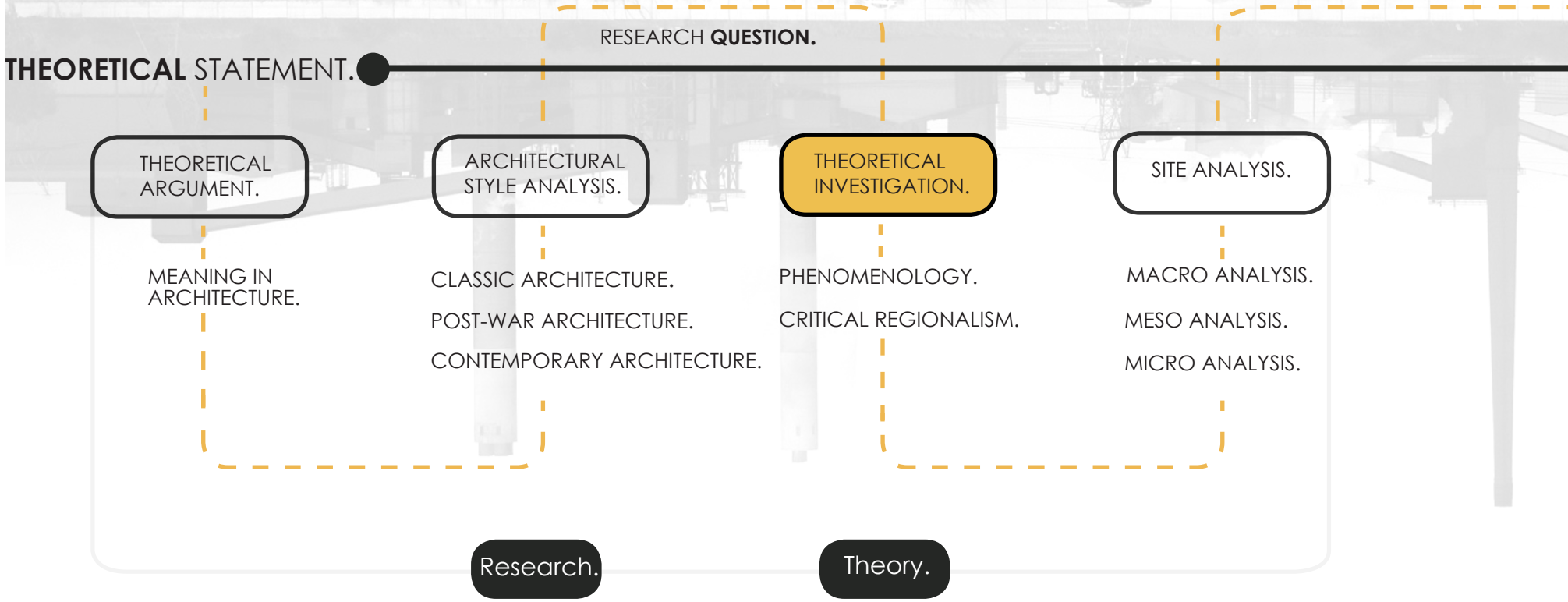


Figure xxx. Sasol, Sasolburg, (Sasol, 2019).

CONCEPT DEVELOPMENT.

DESIGN.

Design Response.

CONCEPTUAL DEVELOPMENT.

Precedent Studies.

Application to Design.

TOUCHSTONE.

CONCEPT MODEL.

DESIGN DEVELOPMENT.

FUNCTIONS OF A GIN DISTILLERY.

OPERATIONS.

TYPOLOGY PRECEDENTS.

MORPHOLOGY PRECEDENTS.

TOPOLOGY PRECEDENTS.

Design.

6.v. Theoretical Argument - **Why?**



[1]_ The Search For **Meaningful Architecture.**

A small artists retreat in the Eastern Free-State. Clarens has in the last two decades grown to become one of the primary destinations in the Free-State. Not only for the natural beauty of the surrounding Maluti mountains, but also for the unique experience which the town offers. Quaint sandstone houses, art and crafts has attracted visitors from all over South Africa to this small town. Why?



Figure 112, Personal scale of Clarens evident from bird's eye view photo, except for Clarens Proteas Hotel seemingly out of place in the tourist town (Author, 2019).

[2]_ Expanding Understanding Of Place.

Does city life with all its comforts and architectural feats not satisfy those who inhabit it? Why do city dwellers desire the experience which a small countryside town like Clarens offers? The experience of the rural setting with semi-industrial industries which offer a stark contrast to the urban rigidity from where most visitors originate. Is it perhaps that such a town does not impose, but rather allows the user to experience. The user is free to embrace the experience of being in or around nature whilst in a space which acknowledges its context instead of constricting the user?

How humans perceive and experience space is and has always been the true desire of architecture. Yet post war architecture does not seem to take this into consideration. Not always. Far to regularly do we find ourselves in cities where the purpose of the building is hidden away from the user behind endless facades of cold materials. No interaction, and no threshold. Merely buildings, neither particularly pleasing to look at, nor to experience. We might as an industry ask ourselves, how have we managed to take architecture which in the thousands of years before modernism embraced and enhanced human experience, yet in the last hundred and twenty years architecture has grown colder, and the experience has grown vague?

Does the desire to escape from these cities offer design clues as to how contemporary architecture can be successful. The Theoretical investigation looks at how different styles of architecture allow the user a different experience, and how the experience can be enhanced in order to find appropriate design philosophies within the current diversifying industrial agricultural environment of the Eastern Free State.

6.vi. **[2]**_ A Search For **Meaningful** Architecture [For The User].

Meaningful architecture; this has been one of the most debated topics in architecture in the last century. Different eras had enabled architects to express different meanings and thereby convey ideas of the a specific social group or religion through each style of architecture. Christian Norberg-Schulz started his written investigation into meaningful architecture with the very same question: Meaning in Western Architecture? This was preceded by the book; "Intentions of Architecture" which investigated the architectural ideas which were understood by the both the designer and the user (Architabanerjee, 2016). He further developed his research in "Meaning in Western Architecture" where he investigated how man symbolized his search for order in the natural environment. He synthesized his theories into "Genius Loci, Towards a phenomenology in Architecture" How man responds to the spirit of place, thereby enhancing the phenomenological experience of the user (Schulz, 1979). Genius Loci asks of the designer to respond to, instead of impose on.

However, the question that needs to be asked in the contemporary era, is whether the meaning which is embedded into architecture is relatable in current societies to those who will inhabit and use the buildings, instead of merely relating to architects who understand specific expressions which are imposed on structures. After all architecture is for people, and not only for the designers and the architecturally educated. As an industry architecture finds itself in a sort of identity crisis, with a real direction on identity being the main point of discussion all to frequently. Perhaps meaning which is relatable and appropriate to the user is part of the solution?

Peter Eisenmann and Christopher Alexander had one of the great debates of modern architecture which asked the question, who are current architects truly designing for? For ourselves and the industry? Or for the user and the by passer? Should we constantly reinterpret the way in which the user experiences architecture, assuming the user does not know what they want or need as Eisenman argued. Or should we accept and acknowledge that the user can recognize excellent architecture which addresses context and user experience as Alexander argued (Currentaffairs.org, 2019). Should we as architects design by taking ideas from the user experience, as well as past and present philosophies into consideration to synthesize into a design philosophy of a contemporary architecture which acknowledges the past, celebrates cultural context and informs the future on how architecture can enhance the experience of the user in a distinct society. An investigation into historical architecture can be a clue on how design philosophy is best understood when relatable to those of the community and context within which it is placed. Being critical to the region, social group and environment.



Figure 113, Gando library making use of abundant clay pots in roof for sky lights, giving a meaningful connection to the community (Kere, 2019).



Figure 114, One sees architecture which is coherent, and that which draws all focus on itself (Unknown, 2020).

6.vi. ARCHITECTURAL STYLE INFLUENCES.

THE **COHESION** OF CLASSICAL ARCHITECTURE.

[1]_ Meaning In Classical Architecture [Nations Unified].

In order to understand classical architecture, civilizations and societies of the times have to be analyzed and understood in order to grasp how meaning was so coherent throughout an architectural style. Classical Architecture can be loosely categorized into a period which starts from ancient Greece to the invent of Modernism at the start of the 20th century as referred to by Sir John Summerson in his book titled The Classical Language of Architecture. Even though the styles of architecture went trough an evolution of a kind, it never went through a revolution as we would see with the invent of modernism.

From the times of the early civilizations such as Ancient Greece, Ancient Egypt and Rome, architecture was a symbolic representation of a civilization. An entire empire was united under one religion, one narrative and one goal. This allowed architecture to be a state enterprise which was embedded with all the symbolism an empire stood for. Architecture was the footprint of an empire, built over the ruins of conquered cities advertising the might and power of those who had control over the land.

[2]_ **CLASSICAL** ARCHITECTURE TIMELINE.

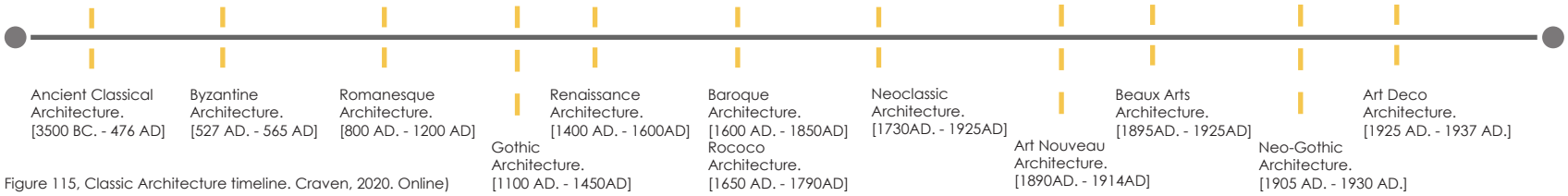


Figure 115, Classic Architecture timeline. Craven, 2020. Online)

[6.vii]_ SOCIAL COHERENCY [UNIFIED UNDER ONE ORDER].

[1]_ Greece - Mythical Philosophers.

In the early stages of classic architecture, society functioned very differently from our current societies world wide. A centralization of power was under the authority of the state, and the people bought into this idea of unification as a nation under a common idea, or goal. The advancement of their nation. Greece, independent territorially were unified under a common religion and culture (Classical Greek society, 2018) and architecture which was a product of culture and religion developed into a coherent style, recognizable as Classic Greek Architecture.

Greek architecture was based on the mythical and mathematical essence of Greek culture, with their architecture clearly displaying how it represented a culture's values and beliefs. Most famous for their architectural orders which became a foundation for much of Western society's architectural development. Illustrated in Figure xxx, Greek columns of each order was compared to human alikeness, with the Doric order being more sturdy and strong and less ornate, representing the male body. Whilst the Ionic order possessed more slender and elegant proportions with scroll like ornaments characterizing the capital which represented the female body. Lastly the Corinthian order which was the latest and most elaborate and was based on a highly ornate capital. The acanthus plant leaves was represented around the capital allowing highly sophisticated capitals in which the details were captured by light and shadow (thoughtco.com, 2019).

Greece architecture aimed to enhance the landscape. The relationship between human, nature and spiritual was essential to the experience of Classical Greek Architecture and resulted in architecture which seemed to have grown naturally out of the landscape as if it was meant to have been there. The Greek manner of response to landscape was essential to this experience of their architecture.

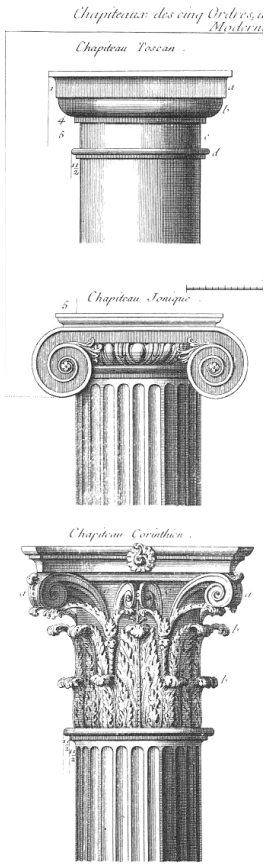


Figure 116, Greek Column orders (Unknown, 2018).



Figure 117, Parthenon, Athens. The apparent extension of the landscape (ClassicalGreekSociety, 2018)

[2]_ Enhancing Nature.

Greek Architects understood that architecture was an expression of culture, religion and this was placed in natural context which enhanced that experience to the user. Greece understood what "spirit of the place" meant.

The Parthenon and Acropolis being a excellent example of how the landscape was enhanced by the spiritual experience of holiness by raising the Parthenon above the city skyline. One Order for all to aspire to.

This can be a lesson which informs how architects should aspire to design within the contemporary context. Well grounded in context, enhancing the experience.

* "Spirit of the place" referring to the later established architectural theory of "Genius Loci" by Christian Norberg-Schulz. Schulz, 1980.

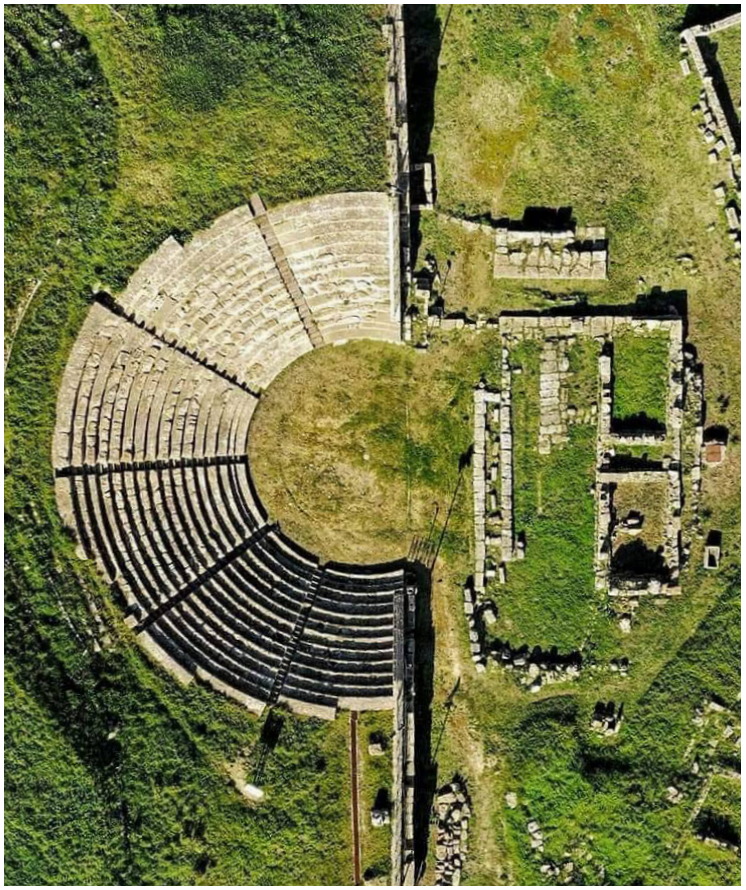


Figure 118, Greek Amphitheater situated withing the natural contours of the landscape (Kampouris, 2020).

[3]_ Two Contrasting **Empires.**

As illustrated in Figure xxx and Figure xxx, the contrast is visible how the methodology of Greek architecture was to respond to and enhance the landscape, whereas Roman architecture imposed itself on the landscape, which is a shared methodology in current contemporary architecture which roots in the global style (Cartwright, 2018).

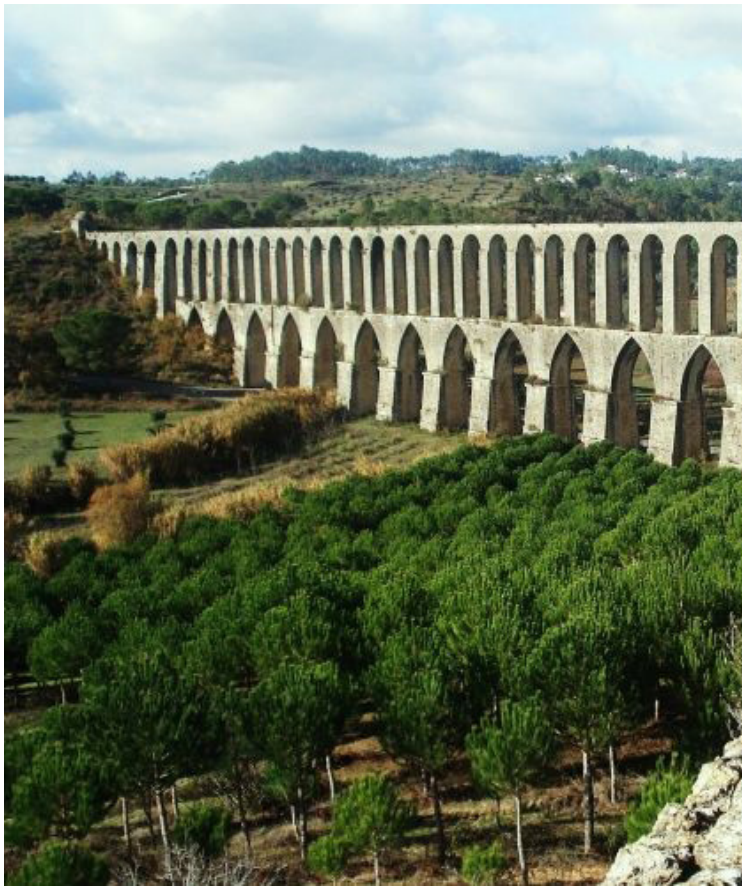


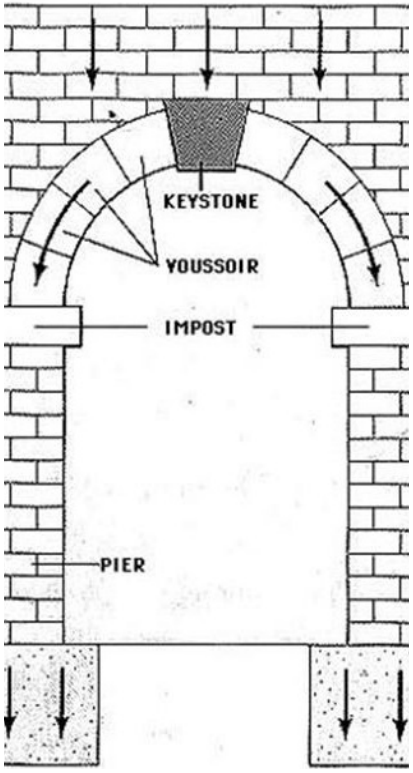
Figure 119, Roman aqueduct imposed on landscape to cross meadow, (Romanaqueducts, 2019).

[6.viii]_ ROME - EMPIRICAL **ENGINEERS.**

Rome in many ways adopted the majority of the Greek ideologies on architecture and adapted it to suite their own endeavor as a nation. The Roman Empire was built on the foundation of engineering expertise, unmatched throughout the world at the time. Expansion through conquest was the core of the Roman Empirical ideology, and central to this was an architectural style which was rooted in culture, yet based on engineering. Replicatable in order to accommodate the growing provinces of the Roman empire. The three Greek architecture orders were taken, adapted and applied to their own needs of their growing empire. The Romans took the Doric and favoured the Corinthian orders, and adapted them into Tuscan, Roman Doric and Composite Orders (Cartwright, 2018).

However, Roman and Greek philosophy was distinctly different. Where Greek architects took nature into consideration, enhancing its features by building therein, the Roman empire imposed their supremacy and dominance on nature, which was symbolic of their goal as an empire, to rule in absolute supremacy. Roman engineers laid the foundation for engineering in the modern world. Arch bridges of the modern era is based on the engineering and architectural principles applied by the Romans in their development of structural arches which carried their aqueducts throughout their empire seen in figure 120 (Zafari, 2019). These principles were all developed for a rapidly expanding world, which is an ideology shared in globalism.

The same principles of structure was then applied to some of the most well know classical architectural works such as the Colosseum, and the Pantheon amongst others.



Figures 120, Technological advancement of keystone which was essential to the aqueduct system (Cartwright, 2018).



Figure 121, Pont du Gard aqueduct built in the first century AD to carry water over 50 km to Roman colony of Nemausus, (Romanaqueducts, 2011).

[1]_ Classical Architecture Conclusion.

Greek and Roman architecture is viewed as the foundation for western architecture which followed. All of the classical styles which developed throughout Europe shared common traits, much as the Roman style had adapted from Greek architecture, so too had Gothic architecture taken elements from Byzantine and Romanesque Architecture and adapted it. Yet the principals remained constant and coherent. And this applied for all the classical styles which followed.

Architecture was a representation of a society's religion, social culture, engineering capabilities, artistic expression and of available materials. But all of the styles up to this point was constant from ancient Greece up until the start of the 20th century.

Classical architecture represented regional ideals, took society and religion into consideration and represented those who inhabited the architecture. This is the first design informing tool which can be applied to contemporary design.

- Take context into consideration.

- Represent culture through architecture.

- Respond to and enhance nature.

- Represent the notion of unity through architecture which express the ideals of a civilization.

We can then ask these questions of current contemporary architecture, does it meet these needs?

[6.ix]_ Post-War Architecture - **[Needs of the Many].**

Following Classical Architecture, the world was entering into the modern era and this brought a greater need and desire to expand nations, which in turn caused conflicts and escalated to World-War One and World-War Two. The physical, social en psychological devastation of the world wars may never be truly understood, yet the world was left with an enormous need for housing, jobs and social infrastructure. This gave rise to what is known as Post-war architecture.

Based on functional needs, rather than cultural advancement and artistic expression, Post-war architecture can be categorized from the period of early 1940s through to late 1970s, and according to Geoff Williams, the need of the public after the strain of the war dictated the need for functional architecture which provided for the social needs as seen in Figure xxx. Yet, providing the public with housing and social infrastructure came at an enormous cost to governing states, that the architecture which ensued was considered as repetitive and purely functional which developed certain characteristics that was directly based on economic need over design needs (Williams, n.d.).

This very practical architecture was as a reaction to post-war social needs, and even though it is considered as being mundane and un-imaginative the post war architecture style had many positives. As a style, these post war buildings had artistry missing, however the craftsmanship was not. They were well conceived, structurally excellent and built to last as seen in figure 122. The style has contributed to the development of construction methods which has most certainly advanced the industry. Yet without a doubt this was not the answer which society had seeked, and as war became a distant memory the search for architecture which offers more than practicality become more evident in the development of modernism.



Figure 122. Social housing changing Jinan's architecture caused by industrialized development on Shandong Province, China (Archdaily, 2016).

[6.x]_ Modernism **[Global Style].**

Human Civilization had gone through the industrial revolution, and machines had become essential to all daily operations of human life. Travel between nations had become faster and cheaper and this idea of a global citizen started to influence the ideas of society. No longer were humans bound to one country. The world was becoming accessible to those who wanted to explore it. The world wars disrupted these developments of society. However, the great social need which arose as a result of the world wars placed emphasis on functional, practical architecture.

Pioneers of the Modernist movement developed the idea that architecture should become more functional and stripped from the decorative ornamentation in previous styles which had been an important part of architecture. Instead the cleanness of horizontal and vertical lines were celebrated, greatly influenced by the De Stijl art style which was an abstractification by Piet Mondrian in which he abstractified what he saw down to vertical and horizontal lines, and the three primary colours. Gerrit Rietveld took this philosophy and applied it to architecture. He designed the Schroder in House Figure 123, in 1924 based on these principals which along with ideas from Mies van der Rohe, Le Corbusier and Frank Lloyd-Wright and others saw a new style being developed and this influenced the young architects in Europe, who were enraptured by the use of bold forms and lack of ornamentation seen in early modernism (Marcum, 2014).

The idea of a global architecture is born. A style which neglects to consider culture, religion, natural context or even the surrounding urban fabric. The social context of post war need, the distillation of what is the essence of structure, and the celebration of clean lines and celebration of forms see Modernism become the biggest change that architecture has endured in its existence.



Figure 123, Schroder House, by Gerrit Rietveld designed in 1924 on the principles of De Stijl art by Piet Mondrian (afasia, 2020).



Figure 124, Robie House by Frank Lloyd Wright exploring horizontality of landscape in his prairie style (Shin, 2018).



Figure 125, The Barcelona Pavilion by Mies Van Der Rohe exploring texture and light and composition of space and structure (Jezyk, 2020).



Figure 126, Tour-Montparnasse in Paris, clearly out of context and scale (tour-montparnasse, 2020).

[6.xi]_ Modern Architecture in classic context.

Paris, arguably one of the architectural wonder cities of the world has experienced the same struggle between how classical, post-war and modernist architecture could form part of a coherent city which respects history, acknowledges chance and embraces the future.

Yet the attempts by leading architects have caused much debate. Have we failed as a profession? Have we (distilled) architecture to such an extent that we are struggling to capture relatable meaning in the way which classic seemed to achieve so effortlessly. Have we alienated the profession from the public and created architecture for architects?

Tour Montparnasse seen in figure 126, has been a highly argumented topic under Parisians and architects alike. It was designed by architects Eugène Beaudouin, Urbain Cassan, and Louis Hoym de Marien and constructed in 1969 - 1973 and was the first and tallest skyscraper in Paris until 2011. Yet Parisians found it so distasteful and out of context, and two years after its completion a restriction was placed on skyscrapers in Paris, not allowing for more than seven storey buildings to be erected in the city.

This is one of many examples where modern - contemporary architecture has failed to consider the meaning of the context or the appropriateness towards the direct community. Instead focus is drawn to the structure itself and architects, which is a direct influence from the individualistic culture which exits currently in societies around the world.

How can we as architects address both issues? Which relates to people, history and context in a unique way?



Figure 127, In the Kunsthaus Graz by Colin Fournier one sees architecture which desperately seeks attention in a neighbourhood of coherent subtle architecture (Unknown, 2020).

[6.xii]_ Contemporary Architecture **[Form follows Form].**

[1]_ Whilst modernism was a response on societies needs after the war, people who inhabited these modernist buildings soon discovered that without the ornate and design elements of previous styles, a building can be too clean and cold which allowed no connection to the inhabitants. As a response to modernism, architecture over-corrected in post-modernism, creating buildings and spaces which were so distorted and abstract that living in these buildings were no ideal either. This lead to the development of contemporary architecture.

Contemporary architecture has no one style, it is based on societies desire to express its individualism and so doing in the buildings they inhabit. Contemporary architecture is a strong expression of form, and a sculptural presence. It has its merit, most countries in the twenty-first century are democratic, and people have a strong desire the be recognized as individuals (Grossmann, I. & Santos, H. C. 2016). According to Grossman and Santos (2016: Online) the paper on philosophy of individualism in the twenty-first century has influenced the way multiple professions operate. The notion of uniformity and unity is regarded as historic ideology, and the current society focuses on expressing the ideas of the individual in all forms.

Architects have followed suite, not only in the buildings they design for clients, but in they way they design for clients. No longer is coherency or respect for historical context the main priority of the architect. Instead we see architects designing building which draw all the attention to themselves as seen in figure 127, by any means necessary. Complete neglect of context. This ensures the architect is noticed. Is this the way we want to proceed in our profession? Even though this can not be said for all contemporary architecture as there are excellent examples of contemporary works which are sensitive to context, and history.

[2]_ Whereas classical architecture celebrated coherency, modernism - contemporary architecture has in most cases celebrated individualism, forms which draw attention to its designer and itself. When these buildings are isolated they do posses qualities which are artistically expressed. And are intriguing, but often for the wrong reasons. In an article for "Current Affairs Magazine, Brianna Rennix and Nathan J, Robinson argue that it can be compared to contemporary art or music, often by making a shocking statement do they achieve publicity, yet one can not argue that those are excellent examples of art or music. And similarly one can relate to that to architecture.

Architecture has become the development of a singular, instead of the coherency of the group. Starchitects has become a word to often heard in the industry. Why has the profession become an egotistic platform through which artists insert spaces into sculptures? Where has the connection between architecture and the community gone? Often in the current age, we find smaller, less known architects design the most appropriate buildings of the contemporary style. No ego has yet given the idea that architecture should represent the architect more than the context and the people it is designed for.

When architecture looks out of place, perhaps it is truly because it is. This raises the question of what is appropriate architecture? What is an appropriate addition to the built context? An appropriate insertion into the landscape? What is an appropriate space for the users of the community? What is appropriate towards the climate of the region?

If all these questions are answered by an architectural work, then one can only have architecture which enhance the context, and the experience of those who use the spaces.



Figure 128, In the Kunsthaus Graz by Colin Fournier one sees architecture which desperately seeks attention in a neighbourhood of coherent subtle architecture (anon, 2020).



Figure 128, Maize fields in the foothils of the Maluti mountains surrounding Clarens (Clarens.co.za, 2020).

6.xiii. THEORETICAL INVESTIGATION.

[1]_ **Phenomenology** of Architecture.

The search for relatable meaning in architecture invariably leads to an investigation of the philosophy of Phenomenology. How do we perceive? Is the notion of perceiving specific ideas taught, or inherent? How do architects design in order to convey specific ideas to those who will use the spaces? Phenomenology is the study of being, between the user, objects of direct experience and its surroundings.

Architecture was conceived as a direct expression to human needs, shelter was the first need a human required to address (Goodman, 1981). As the human advanced, so too did its experience of its interaction with its surrounding context. Human civilization grew in complexity through advancements in society, and so too did the architectural response to societies. Architecture has always been a response on society, from political and social to artistic responses. Which spoke of who a people were, what ideas and beliefs they strove to. This allowed the user a shared identity in the architecture, and thus enhanced the phenomenological experience of the user in an architectural style which represented who the user was and their connection to society. Classic styles of architecture were connected to such a layered meaning, that to this day users can appreciate various levels of this layered meaning contained in architecture of pre 20th century architecture and understand aspects of the civilization who the building belonged to. Even though phenomenology was only founded as a philosophical movement in the early 20th century by Edmund Husserl, and expanded upon by Martin Heidegger and Maurice Merleau-Ponty. The same phenomenological principals which Christian Norberg-Schulz investigated and applied architecturally have been applied historically, just without the terms which philosopher and architects have given them in an era where academic work is defined to such a level

Christian Norberg-Schulz was a Norwegian architect, theorist and historian who studied architecture at the Polytechnic of Zurich in 1949 and then continued his studies at Harvard University and at the Norwegian Institute in Rome. Norberg-Schulz was influenced in his early work by Siegfired Gideon, Walter Gropius and Mies van der Rohe. He explored phenomenology in his book, Genius Loci, towards a phenomenology of architecture which became the foundation for much of the 21st centuries architectural philosophies. However Norberg-Schulz had from an early age questioned how man responded to nature, to his experience of place, and to his existence. This led Norberg-Schulz to investigate and apply the work of Heidegger and Giedeon to architecture. What is the spirit of the place where we order nature by man made structures? How do the user experience this place, the feeling, the presence of elements. What informs the process of ordering?

[i]_ Phenomenological Experience in the Distilling Industry.

Craft spirit distilling has become a trending industry in the last decade, and has allowed opportunity for individuals to expressive their own creative endeavor through the distilling of spirits. The industry has embraced this notion of craft spirits. No longer do the same large companies dictate all aspects of the industry, instead have a voice been given to the small businesses. One might already argue that this has changed the user's phenomenological experience of the Gin Industry, however can the user's experience of place, process and craft distilling enhance the experience even further whilst redefining the experience of an industrial process?

How can phenomenological experience then be such a part of the experience in architecture and place as it used to be if architecture itself is no longer representative of a larger social meaning as in the past? Norwegian architect Christian Norberg-Schulz explored phenomenology through "Genius Loci (Spirit of the Place) Towards a Phenomenology of Architecture". Exploring the concept that all localities have a "Genius Loci" or spirit which informs the architect on how to respond to the site to convey the original phenomenological experience thereof through architecture.

The "Genius Loci" is then further broken down into three distinct concepts, which can be addressed allowing architecture to respond and convey, rather than impose and dictate.

[a}_ Typology: which addresses the type of building, ensuring that a design conveys the same architectural language as its intended function.

[b]_ Topology: designing with the intended response to context, natural and from the built environment.

[c]_ Morphology: taking clues from the surroundings how the mass/building profile is developed.

Phenomenology by means of the three components of Typology, Topology and Morphology applied to Clarens, Eastern Free-State.

[a]_ Typology

Clarens and surrounding farms is unique and strictly adheres to an eastern free state vernacular. How can one use this in a contemporary manner which results in a structure which responds to Clarens as well as an industrial type building which a distillery is in essence?

[1]_ Eastern Free-State **Industrial Typology.**

The Eastern Free State landscape is vast and mostly classic to semi-cosmic, which allows linear buildings to become part of the context with odd vertical elements in and around the context.

This typology can be seen in the industrial farming complexes which can be found throughout the province. This becomes the typology for the design proposal.

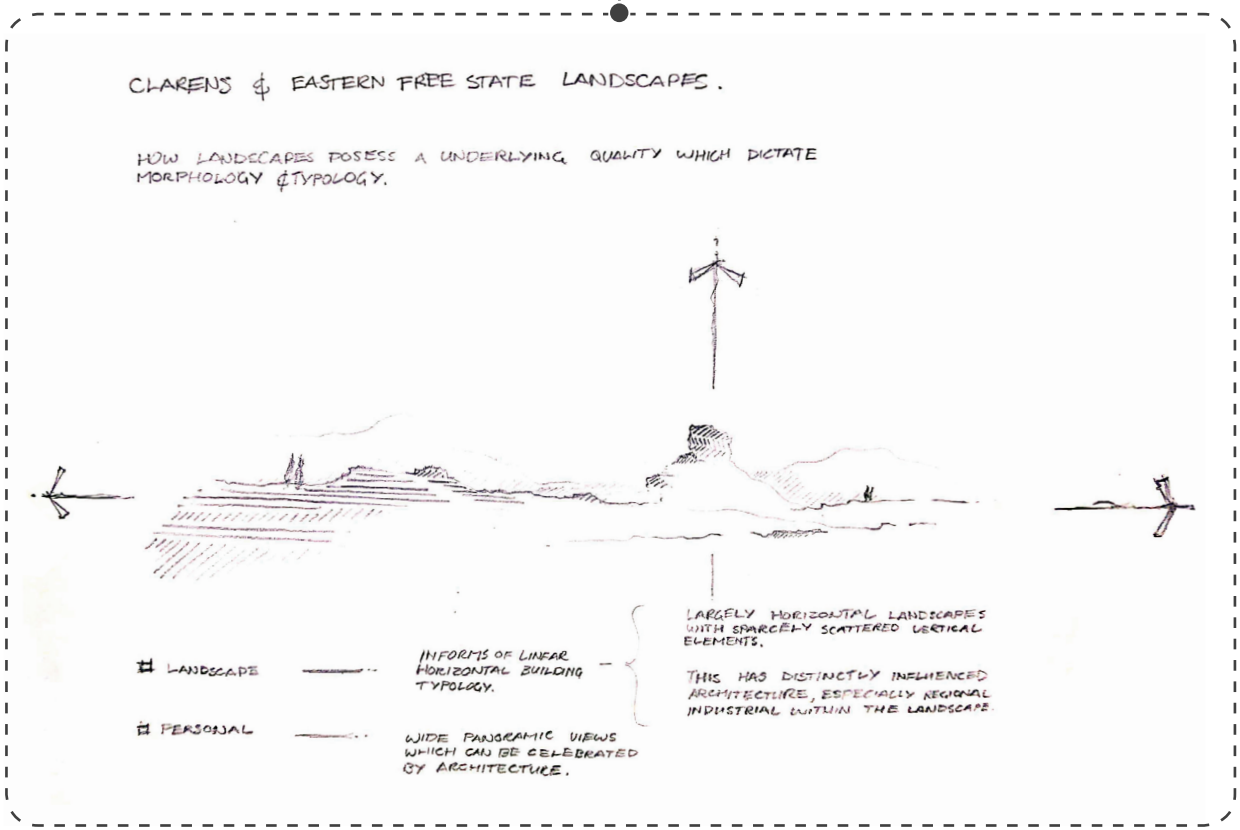


Figure 129, Typical Eastern Free State landscape analysis giving design clues to the regional industrial typology (Author, 2020).

[b]_ Topology

The site sits in a valley with romantic features with a mostly classical setting. How can the building use the topology to maximize the experience of the horizontal and axis-mundi?

The surrounding context of Clarens has more of a vertical connection due to the surrounding Maluti Mountains. This allows the design to explore the relationship or tension which the user experiences whilst moving between horizontal and vertical planes physically and visually.

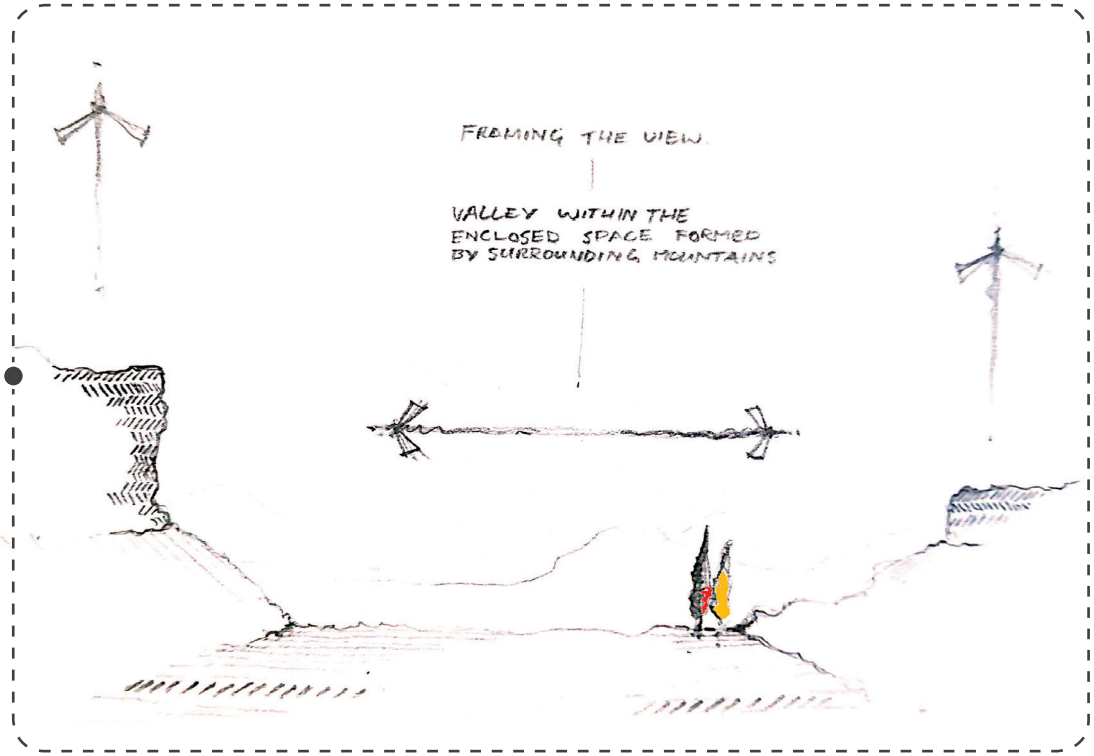


Figure 130, Typical Eastern Free State landscape analysis giving design clues to the regional industrial typology (Author, 2020).

[c]_ Morphology

The building is industrial, which has a connection to the locality of Clarens. Clarens is situated in the Eastern Free State which is a farming district. Thus, all farms have sheds, silos and industrial process features which can be used to inform the morphology of the structure to allow it to respond to existing elements within the context.

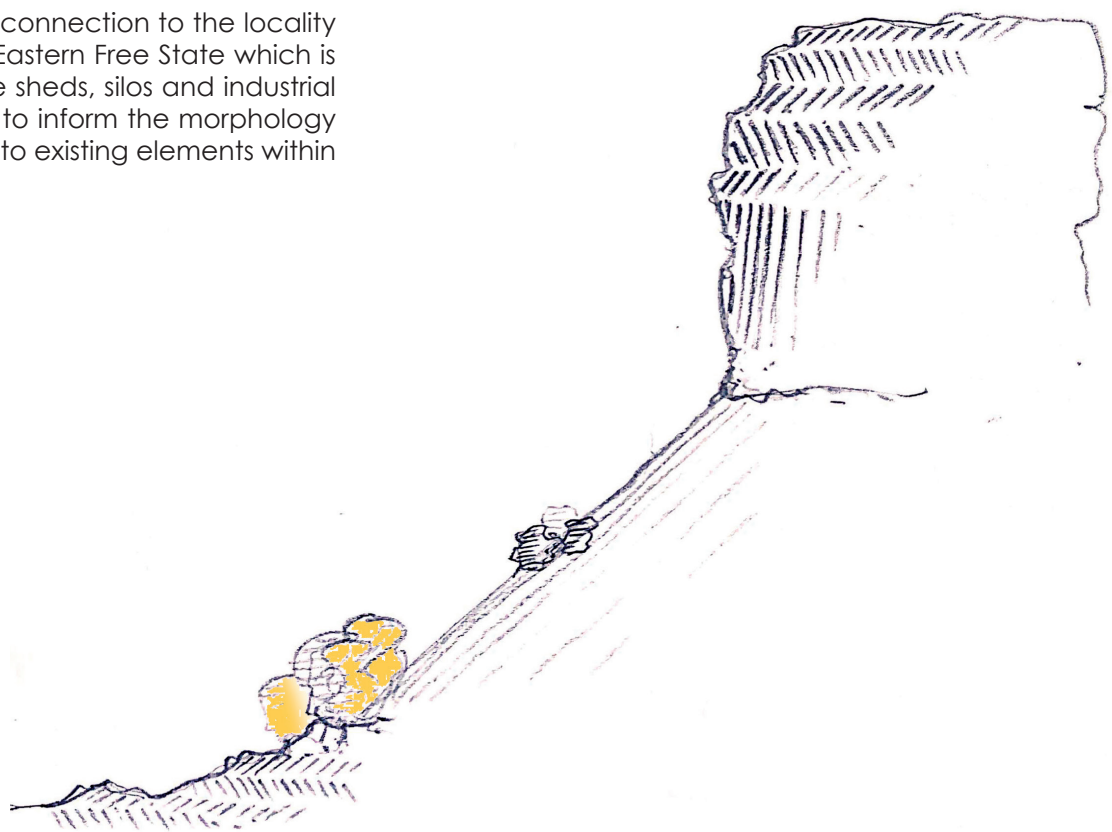


Figure 131, Typical Eastern Free State landscape analysis giving design clues to the regional industrial typology (Author, 2020).

[6.xiv]_ Critical Regionalism **[Appropriate].**

[1]_ Non-responsive

International style architecture can be seen in most cosmopolitan cities around the world due to the diverse groups of people who inhabit and influence these cities, yet it is not always well received with the local residents.

The United Kingdom goes so far as to have an annual award for Britain's worst building, called the Carbuncle Cup. The 2015 recipient – the Walkie Talkie building in London – was unanimously voted to be "the ugliest and most hated building in Britain". The judges described it as "a gratuitous glass gargoyle graffitied on the skyline" (Alvarez, 2016).

This is an extreme case, but a clear and obvious disregard for context, social appropriateness and coherency to the English capital, London.

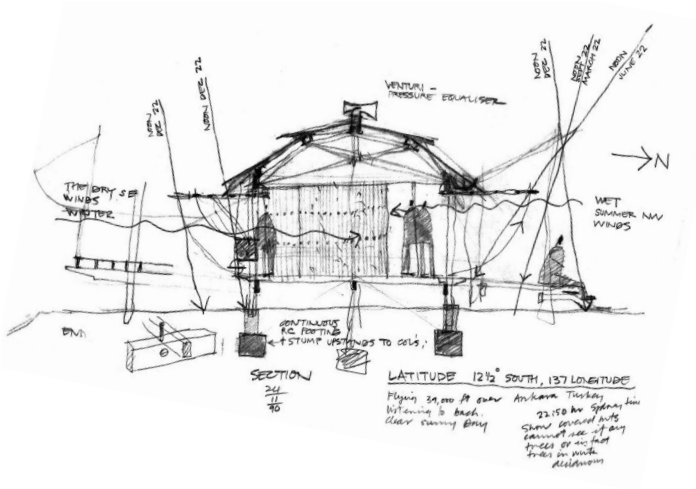
Critical regionalism is a direct response against the international style. A response which address context, culture, climate and society. Which is essential if an architect is working in a cultural or naturally sensitive landscape.



Figure 132, Typical Eastern Free State landscape analysis giving design clues to the regional industrial typology (Author, 2020).

[2]_ Critical Regionalism

Phenomenology addresses how humans perceive, and experience spaces. Yet, how can architecture address the specific location in which it is placed? Phenomenology addresses a aspect of how an architect can connect the user and the experience in a space. However, to truly connect a building not only to the user, but to the natural, social and historical context of the site, a thorough investigation into critical regionalism has to be applied to a design.



Critical Regionalism as Henneth Framptom described it, defines elements of topography, climate, light and tectonics fundamental to the art of building. As many architectural approaches is a response to a previous architectural style which might be deemed unsuccessful or no longer appropriate. Critical regionalism was a response the unplaceness of the international style, a global architecture which failed to take into consideration the key elements such as context, culture, climate and society. Architecture is an expression, a method to convey meaning. How is that possible if architecture is distilled to such an extent that it no longer connects to context or users?

Architecture is a response to the canvas on which the architect works, and critical regionalism allows the architecture to address the aspects which make the canvas unique. Architect, and one of the most prominent critical regionalist designers, Glenn Murcutt uses the approach to design architecture which responds to the unique Australian climate. Murcutt was largely inspired by the work of Frank Lloyd-Wright and Mies van der Rohe, yet realized from the early stages in his career that these influences were not applicable to the Australian climate and context. Murcutt's work is based on the Aboriginal approach of touching the earth lightly, which allows ventilation, clearance from flood plains and insects whilst looking at climatic responses in Australian vernacular architecture of the indigenous inhabitants.

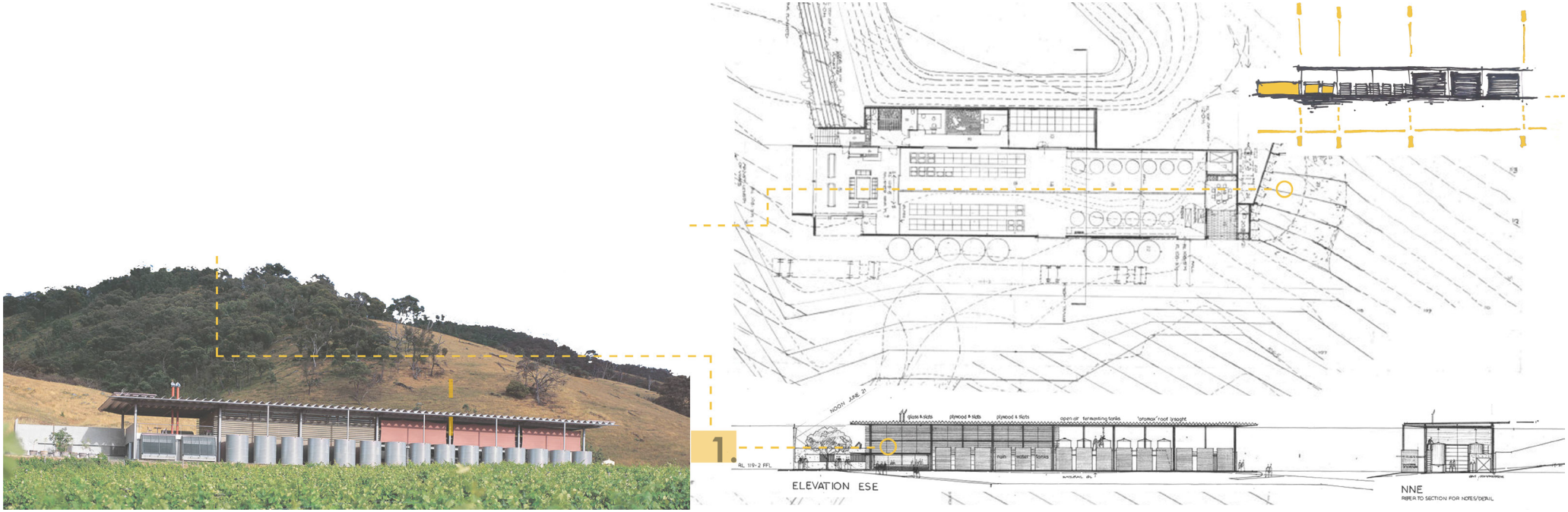


Figure 133, Lerida Estate winery, Glenn Murcutt (Area, 2020).

[6.xv]_ LERIDA ESTATE WINERY - GLENN MUR-

ASSIMILATED TECTONICS [Precedent study] - [MORPHOLOGY].

[1.]_ Topographical Response:

Situated in the hillsides of lake George, new south wales Lerida estate winery seeks to experienced as a extension of the landscape. Multiple spaces grouped together under a single flat roof which seamlessly picks up on the horizon. Landscapes and sites all have a unique voice which informs an architectural response thereto (Area, 2014: online).

[2.]_ Emulating The Process:

From the vineyard to the end product of bottled wine, the building emulates and takes the user through the journey of the process of wine making. Starting from the vineyards on the lower hills the building functions are built around a central circulation space to an exterior space where wine is served on the approach to building (Area, 2014: online).

LANDSCAPE INFORMED MORPHOLOGY.

From the vineyard to the end product of bottled wine, the building emulates and takes the user through the journey of the process of wine making. Starting from the vineyards on the lower hills the building functions are built around a central circulation space to an exterior space where wine is served on the approach to building (Area, 2014: online).

[6.xvi]_ Theoretical **Conclusion.**

Phenomenological experience of architecture can be seen as the main objective for architects throughout different eras in civilization. How this is applied however, is the concern which has arisen especially with [modernist - contemporary] architecture. History has shown that architecture has always had a significant connection to culture, and if we take a look at the various current buildings scattered across the cities throughout our world then the argument has to be made that architecture has to a degree lost its connection to culture, and has rather become universally acceptable. Has this acceptability been worth the sacrifice in appropriateness?

[6.xvii.]_ **Appropriate** Attributes Gathered From Historical Architecture.

Greek Architecture [Classic].

Intertwined in the very essence of that which the Greek Empire represented was a deep and meaningful connection to mythology, spirituality and culture. Greek architecture respected the landscape and aimed to enhance it through means of building.

Attributes.

- Use Landscape as design informant.
- Represent culture through architecture.
- Order.

Roman Architecture [Classic].

Conquering & expansion at the core of the empire. Roman architecture was built on the fundamentals of engineering. Systems, function and order was essential to the Roman Empire, in some ways similar to current contemporary architecture.

Attributes.

- Function becomes main factor of the design.
- Make use of natural attributes to advance design.

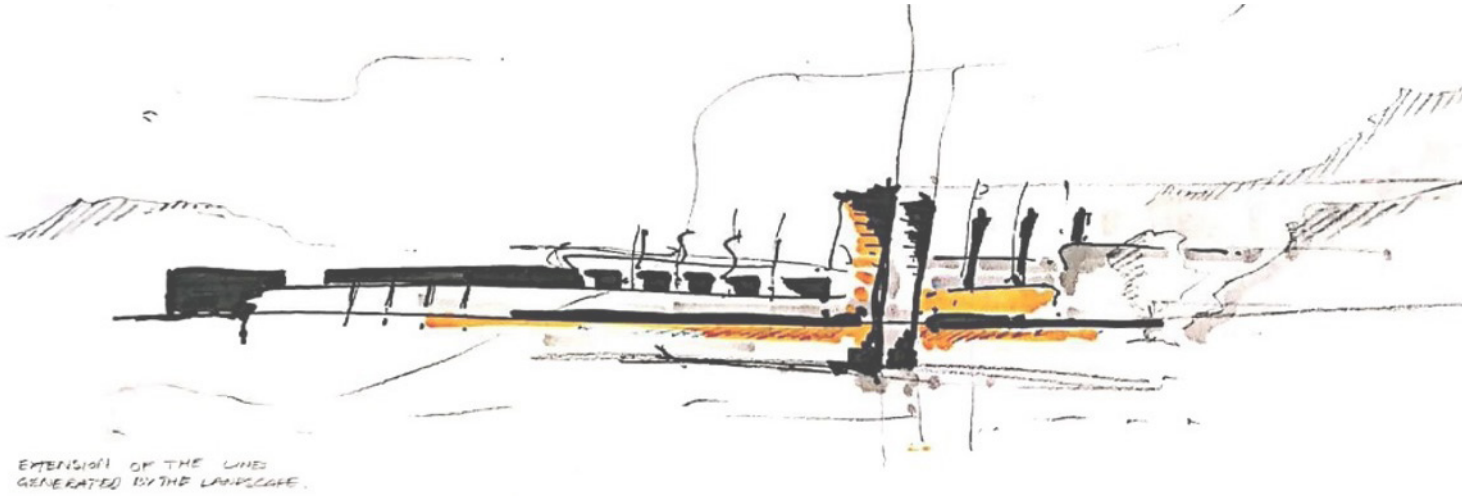
Post-War Architecture [Modern].

Post-war architecture has many critics, yet due to the nature of the need worldwide, some respect has to be given to the un-imaginative, yet simple, well constructed buildings which arose from the post-war era.

Attributes.

- Functional need becomes main factor of the design.
- Simplicity & Longevity of structure is import.
- Constructibility.

Figure 134, Timeline of theoretical investigation (Author, 2020).



Modern Architecture [Modern].

Modernism was largely a response to the growing need post war, yet also a showcase of the advances society has made in construction technology. The ideology represented human life as a machine and architecture a part thereof.

Attributes.

- Represent technological advancement through buildings.
- Functional architecture.

Contemporary Architecture [Current].

Contemporary architecure aims to address individual needs and ideologies. Yet the inappropriateness in various examples leaves the industry pondering the way forward. How to create the same timelessness which classic architecture seemed to do so effortlessly?

Attributes.

- Expression of materiality and use of light.
- Accommodating the diverse nature of contemporary civilization.

Design **Informants** [Current].

The informants from the historical investigation is the first step in synthesizing ideas into a tangible appropriate design which enhances the experience of Clarens, Eastern Free State.



DESIGN DEVELOPMENT

PART



02.



7.

[7]_ Fragments of Influence Assembled.

CONCEPT DEVELOPMENT.

Conceptualizing a New Industrial Typology.

Figure 135, Dematerialized industrial typology revealing function (Author, 2020).



[1.i]_ Contextual Assemblage - Design Generator.

Conceptual development consists of the expression of layered ideas, influences and design generators which form a coherent solution to the stated design problem. The historical, contextual and theoretical analysis allow the designer to formulate a condensed layered approach to start the design process in a manner which address the community and environment.

The rich cultural and historical development of Clarens in the industrial economy of Free State poses the question of a re-imagined typology for the industry. One which acknowledges the existing industrial economy, but equally envisions how this industry can be merged with the rapidly growing tourist industry of the Free State. Clarens has proven to be a town and community which has embraced this re-imagined typology long before the rest of the province, and may once again be the community which advances the way the province is viewed and develops.

The concept development aims to start investigating ideas as forms, tangible and interactive. Exploring the notion of user interaction through an enhanced experience.

Fragments of Influence Assembled.

CONCEPT DEVELOPMENT.

7.i.

Touchstone Analysis

DISTILLED HISTORY.

[1.i]_ Uncovering User Experience - [Three Piece Touchstone Exploration].

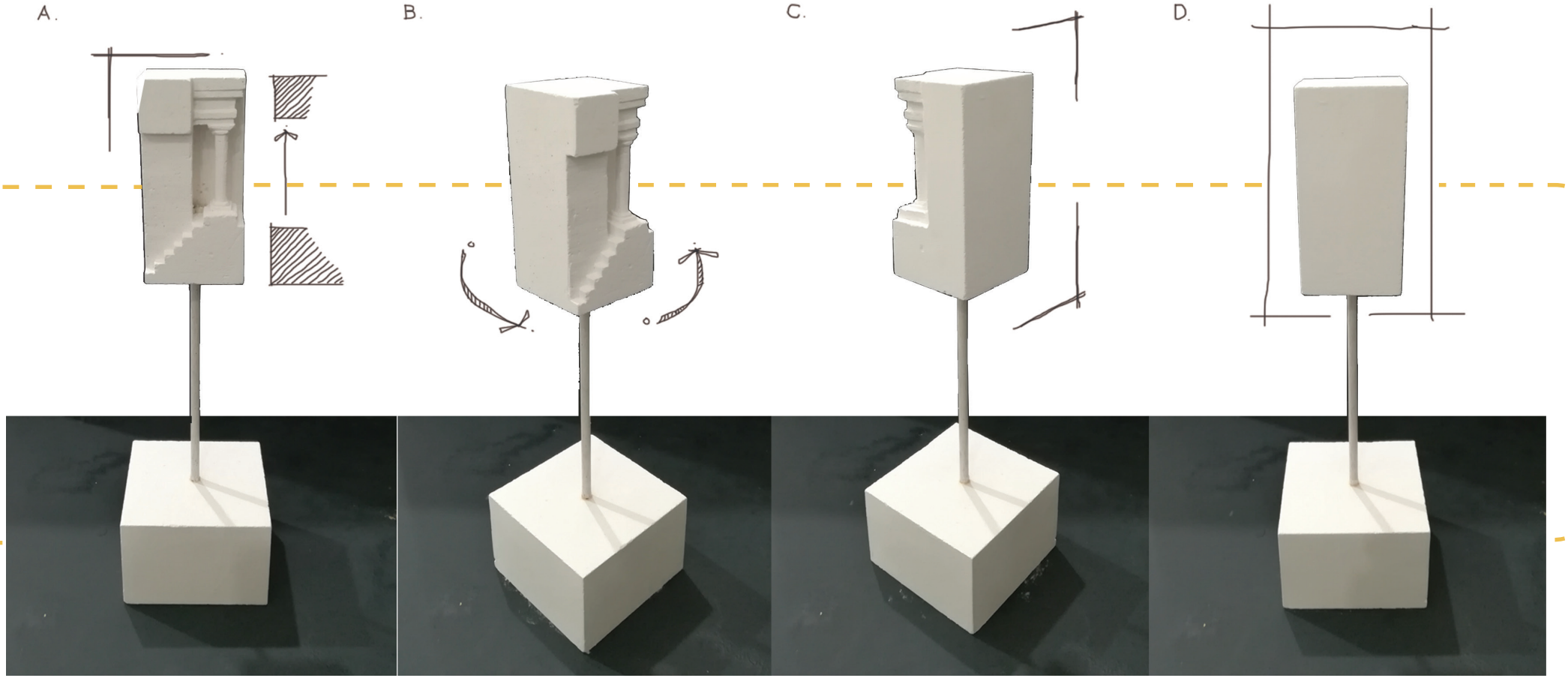
What is the difference between a building and architecture? This simple question is the basis of what drives most architectural explorations. How can theory be applied to tangible forms, thereby bestowing meaning into a shape or form which otherwise possesses no definable meaning. The three piece series touchstone explores how the theoretical concepts of experience [phenomenology] as discussed in part two has the ability to enhance the user's experience of place.

[1.ii]_ [Design Aim] Contemporary Forms.

The progression from classic architecture to contemporary expressions cannot only be seen as a negative development in the architectural profession. Breaking away from classic architecture has freed up form, giving architects the means to express in a way previously not possible. The key however, is to express is response to context rather than imposing on context.

[1.iii]_ Distilling Architecture through personal understanding.

The first part looks at how architecture once held historical meaning. Architecture was connected to a culture, and portrayed the style, characteristics as well as architectural ability of an empire. A phenomenological expression. However, modernism, post-modernism as well as contemporary architecture removed so much meaning from architecture itself. Architecture has reached an era where many buildings are merely forms, sculptural at most, harboring spaces but with little meaning and connection to the user.

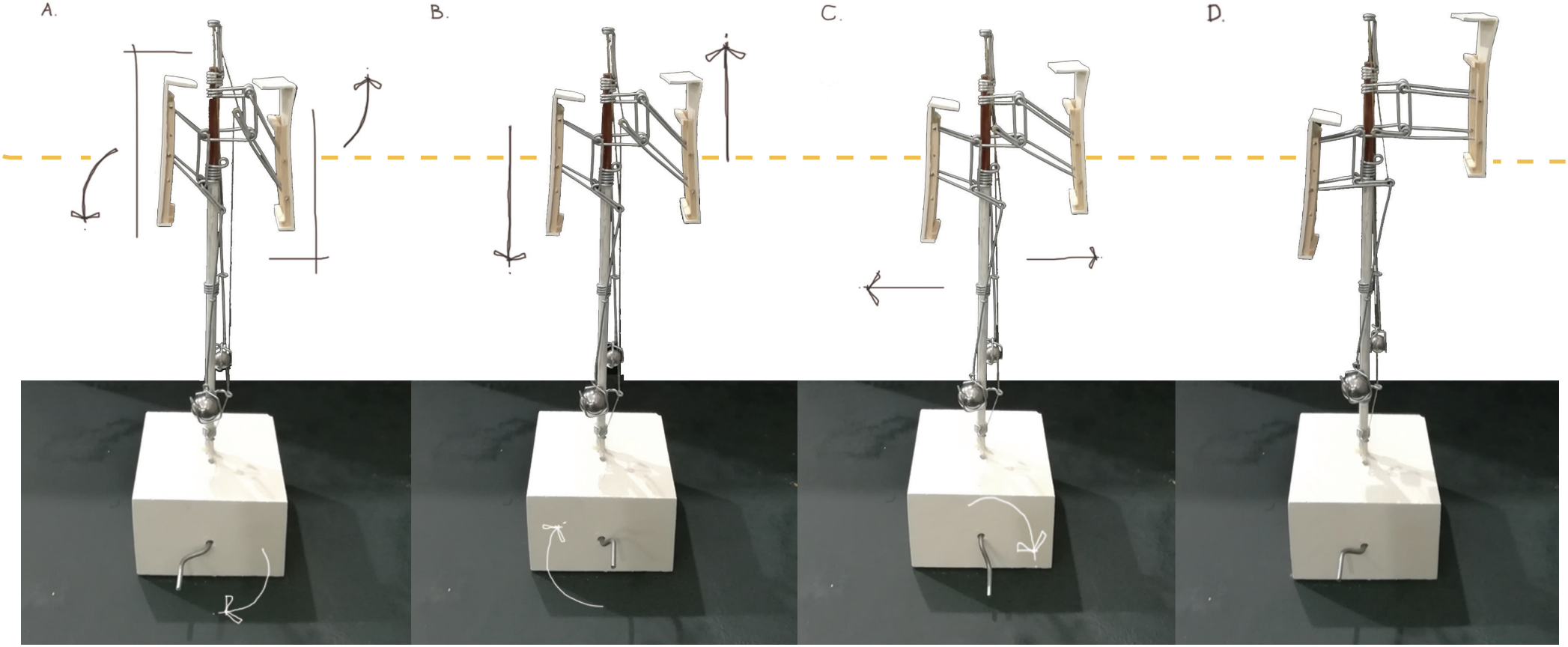


[1.iv]_ Distilled Forms & Removed Meaning.

Figure 136, Touchstone III [1.]_ A, B, C & D (Author, 2020).

Figure [A.] displays a classic architecture style representation in piece [1.] of the three piece touchstone series which contains detail resembling classic architecture and represents culture, religion and ideology of cohesion. Figure [B.] & [C.] illustrates the movement away from classic architecture towards post war architecture [Modernism & Post-Modernism] as investigated in part 2 - [historical analysis]. When rotated 180 degrees the touchstone represents a pure rectangle symbolic of contemporary architecture which is often mere expressions of form filled with functions, but lacking an intrinsic meaning.

INTENDED **FUNCTIONAL** REVELATION.



[1]_ Dematerializing The Facade To Reveal Internal Process.

Figure 137. Touchstone III [2.]_ A, B, C & D (Author, 2020).

The notion of user interaction is first explored in piece [2.] of the three piece touchstone series. The user is invited to rotate the lever in figure [A.] which through the internal mechanism of pulleys and levers raise the facade to unveil the internal function. The user becomes part of the process which changes the experience from observing a object to contributing to the process of unveiling the internal process or meaning of the object as it end in figure [D.] which remains a contemporary form, yet with more intricacies than basic geometries.

[2]_ Revelation through process.

The second part looked at how revealing the process or function which is contained in a building and using it to break open the geometric boxes it has been confined to may connect to the user, and allow them to experience the meaning of the architecture itself through understanding of the function or process. Being in, understanding and placing oneself in a space of part of the genius loci of the architecture rather than seeing its outward facade. Image 2. Turning the lever would open and close the box which represents how the facade of meaningless geometric architecture can be dematerialized allowing the process to connect to the user through the revelation of the function harbored inside.

[3]_ [Design Aim] Dematerializing The Industrial Typology.

Industrial typology factories in most cases conceal the function which is contained within. The aim of the design proposal is to challenge this typology and to dematerialize the facade and reveal the internal function to the user thereby allowing a personal interaction and experiential connection.

CONCEPT DEVELOPMENT.

7.iii. Touchstone Analysis

PERSONAL USER **EXPERIENCE.**

[1] Uncovering personal understanding.

The final part of the process identifies how this revelation of process allows to user to connect. Not only to the process/ function within the building, but also to understand the building and why such a space speaks and lives the way it does. The phenomenology of the building and that of the user combines creating a whole, a union. Thereby allowing each user a personal connection to the purpose of the architecture. Images 3. Turning the lever removes the scrim and assembles the face which portrays the user connection with the architecture through revelation of process and dematerialisation of facade.

[2]_ [Design Aim] Removing The Scrim Between User And Functional Meaning.

In the final piece [3.] of the touchstone, the user interacts with the piece in a similar manner as with [2.] by rotating a lever, the scrim is removed which acts as a facade between user and a personal experience of the function, and thereby the user reveals a part of themselves in the process of interaction and forms a meaningful connection to place.

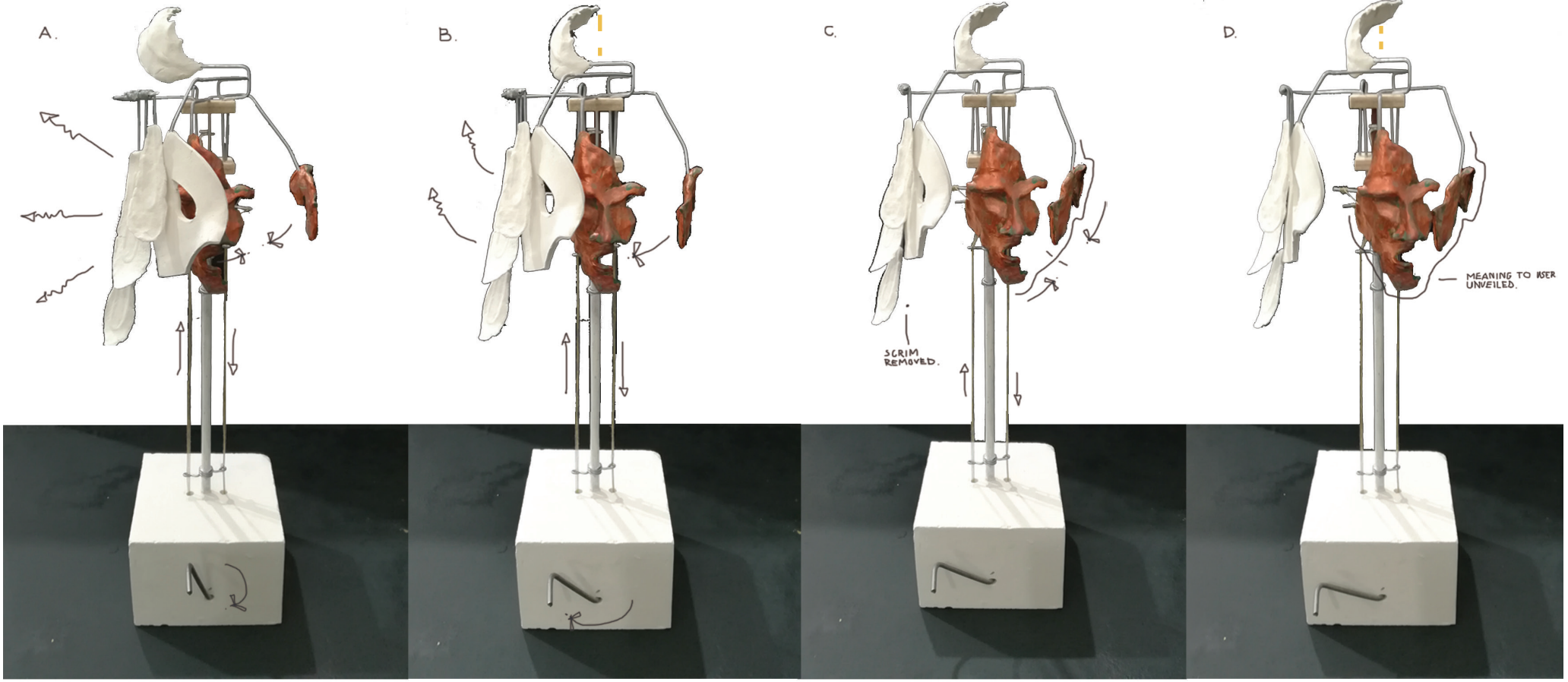


Figure 138, Touchstone III [2.]_ A, B, C & D (Author, 2020).

[2]_ [Design Aim] Personal Interaction With Place.

Opening the facade is merely the first step of the process, forming a connection with the user through interaction is the goal. Not only does this intrigue and captivate the user, but it enhances the phenomenological experience of place, being and context.

7.iv.

CONCEPT DEVELOPMENT.

Touchstone Analysis

Static Geometry.

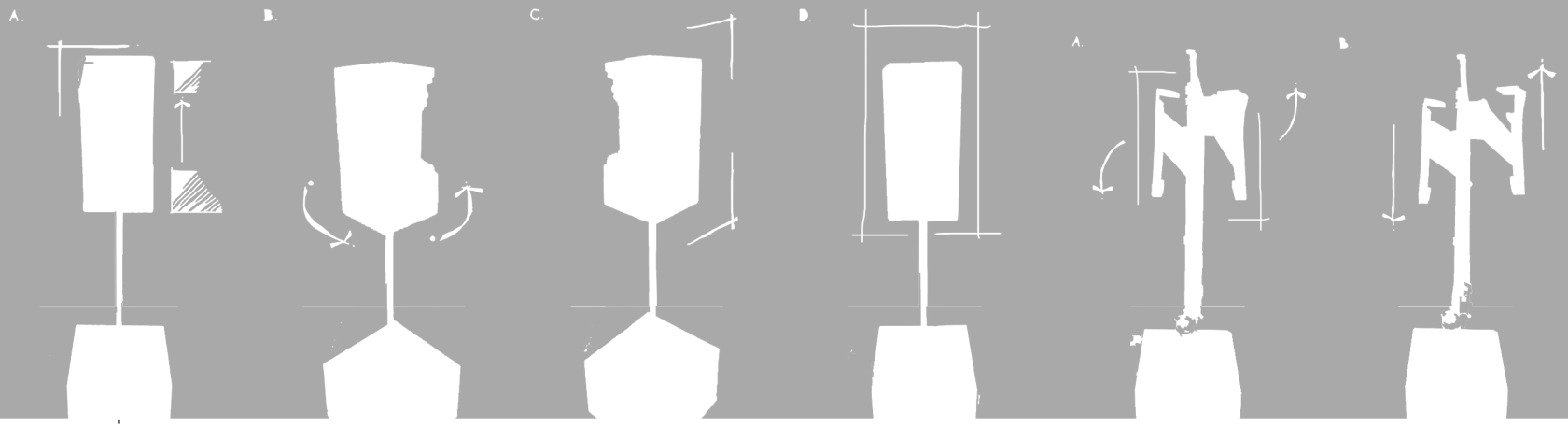
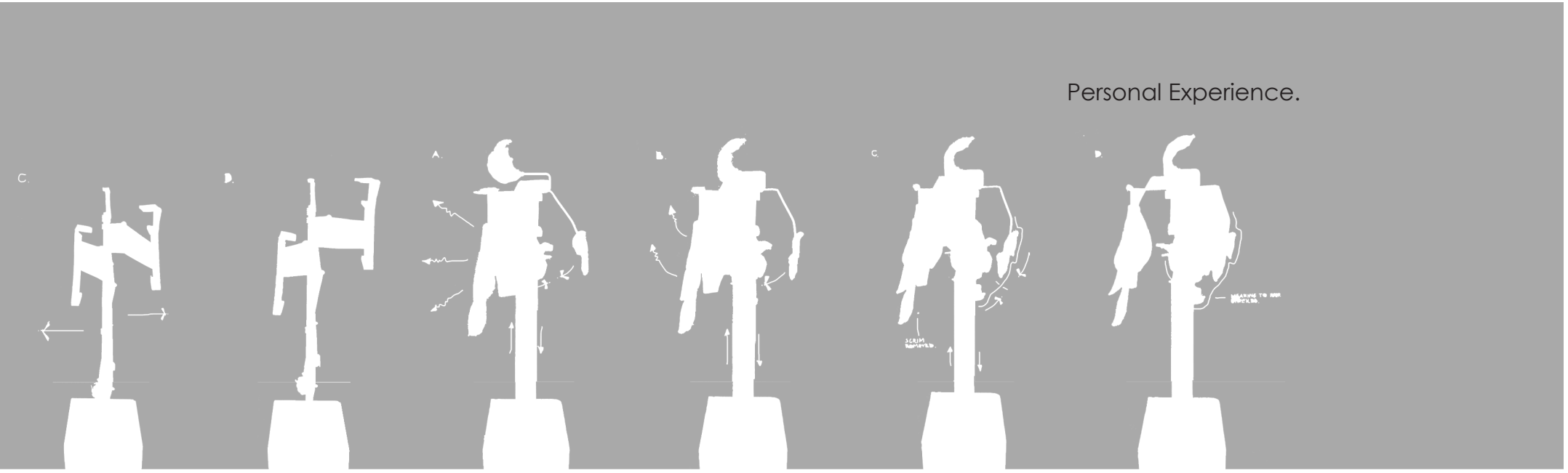


Figure 139, Touchstone series visuals [Author, 2020].

[1]_ Progression Through Experience.

Progression of simple contemporary forms - the basic geometry of the morphology has been dematerialized to unveil the meaning within the form. The design intervention aims to dematerialize the industrial typology of the agricultural industrial building which conceals instead of revealing it's process. By revealing the internal process the user is drawn into spaces to investigate and experience the functional aspect of the space, whilst using elements thereof to frame and connect the space to the exterior context.

Personal Experience.



[2]_ Morphological Development.

In the analysis of the touchstone series the interaction between the stereotomic nature of the mountains and the tectonics of the functional building interacts with a tension between the elements. The Tension represents the Axis-mundi* between earth and sky within the topological context of the site.

*Axis-mundi - In astronomy, the established axis of earth between the celestial poles.

7.v.

Fragments of Influence Assembled.

CONCEPT DEVELOPMENT.

Planning.

[1]_ Extension Of Main Street Axis.

As a primary concept, the extension of the Main Street Axis [primary axis through Clarens] dictates the site, layout and forms the base for a linear process [gin distillery] to end the axis as a destination point. The concept explores the possibility of fragments being joined by an element [datum] which informs the spaces. The fragmented spaces allow nature to infiltrate the building, leaving the user a constant experience of the functional, built and natural.

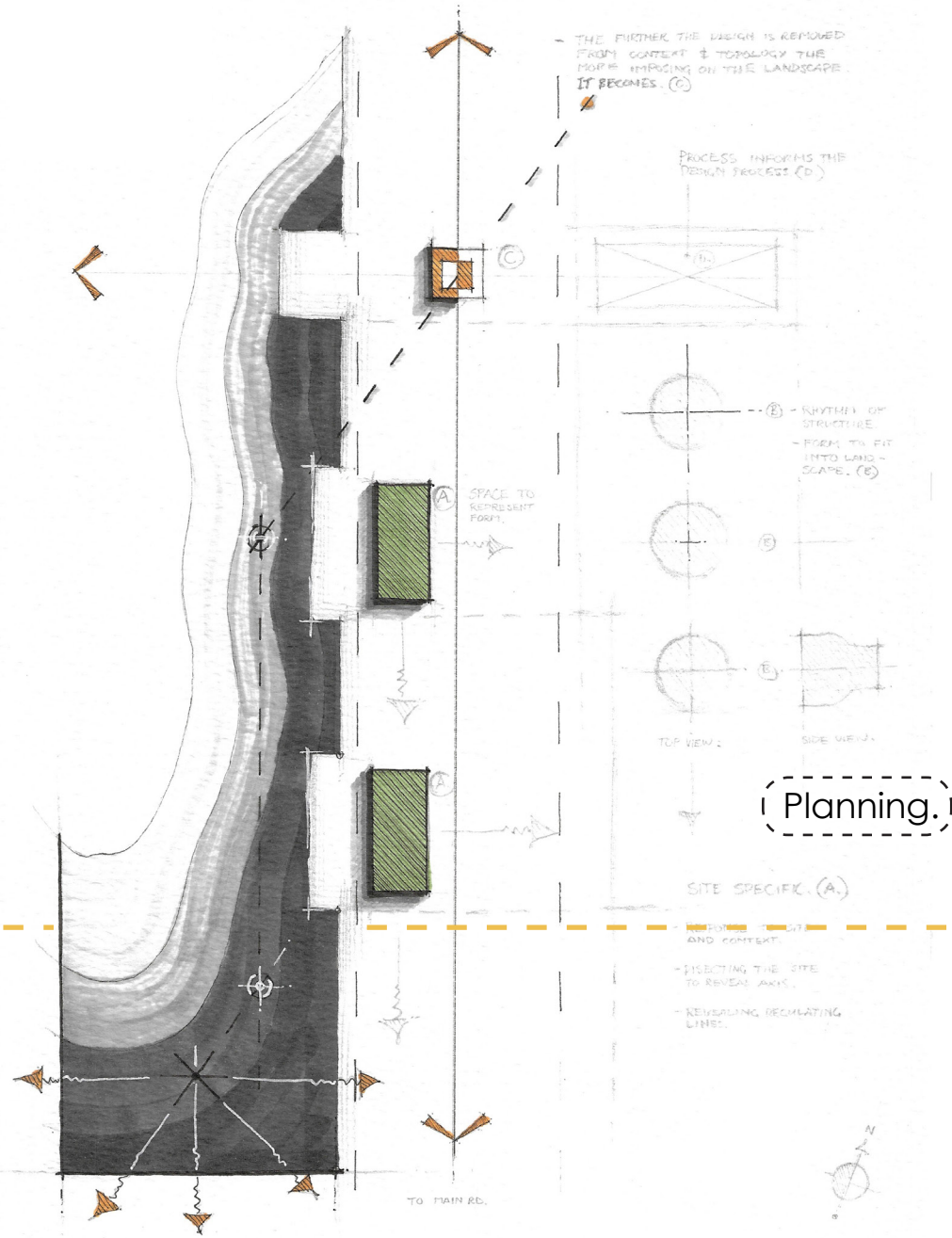


Figure 140, Sketch of concepts applied to site (Author, 2020].

[2]_ Exploring Materiality.

The use of materials which is present in a typical distillery is seen explored within the stereotomic nature of “stone” landscape being representitive of the sandstone hills.

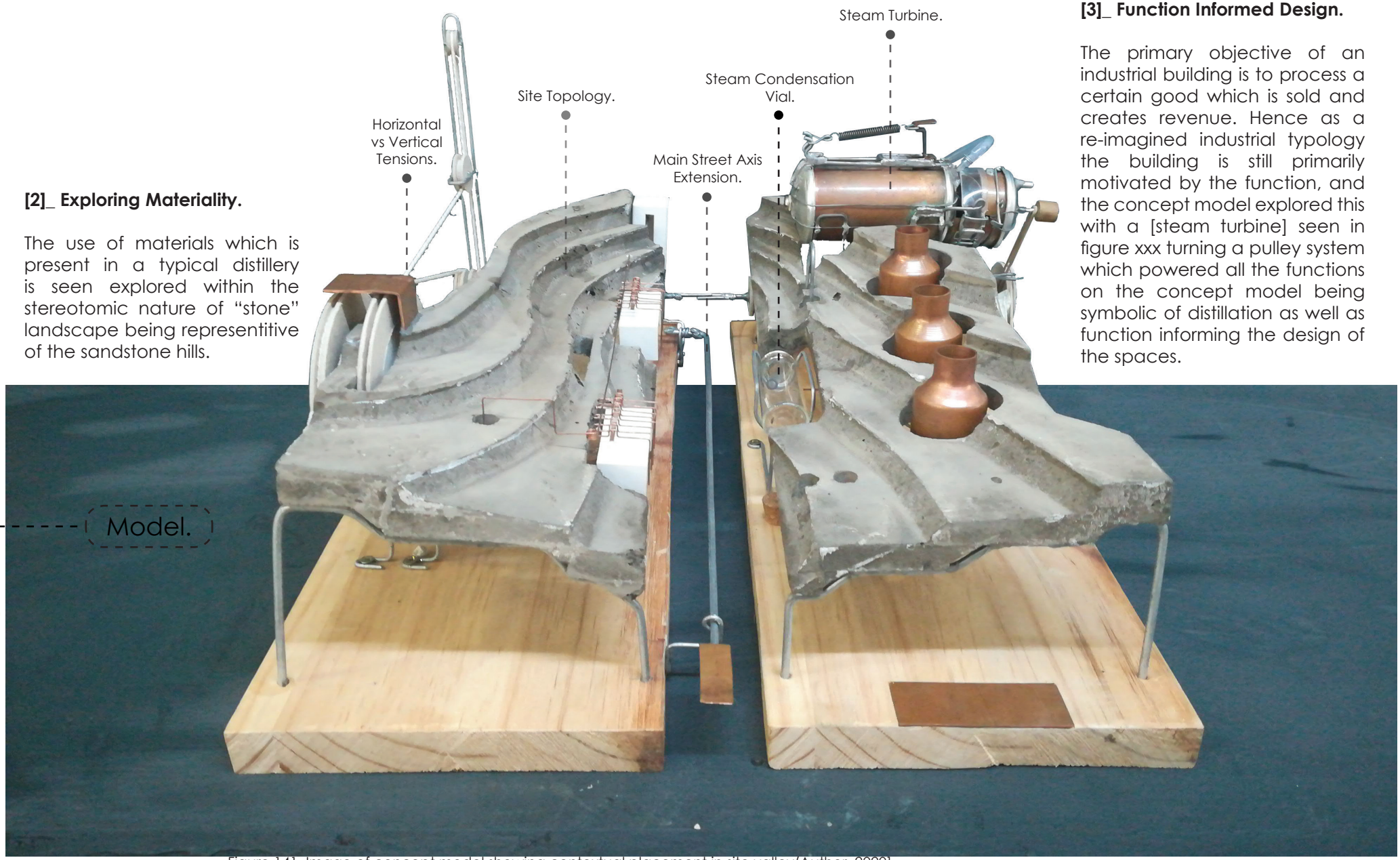


Figure 141, Image of concept model showing contextual placement in site valley(Author, 2020).

[3]_ Function Informed Design.

The primary objective of an industrial building is to process a certain good which is sold and creates revenue. Hence as a re-imagined industrial typology the building is still primarily motivated by the function, and the concept model explored this with a [steam turbine] seen in figure xxx turning a pulley system which powered all the functions on the concept model being symbolic of distillation as well as function informing the design of the spaces.

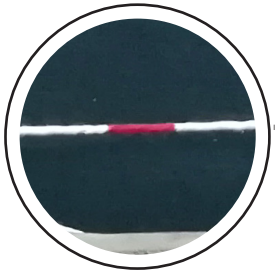
7.vi.

Fragments of Influence Assembled.

CONCEPT DEVELOPMENT.

[1]_ Tension Bewteen Horizontal & Vertical Planes.

In the town, the user is situated on a predominantly horizontal plane. Yet the surrounding mountains [context] are on the vertical plane which constantly drawing the user's sight from earth to sky, establishing the axis-mundi. The tension exists where the user moves physically in the horizontal and visually in the vertical.



Model.

[2]_ Visual Movement Of Between Planes In Tension.

The red spot on the cord moves as the cord rotates around the track representing the tension between the horizontal plane **[Physical]** and the Vertical plane **[Visual].**

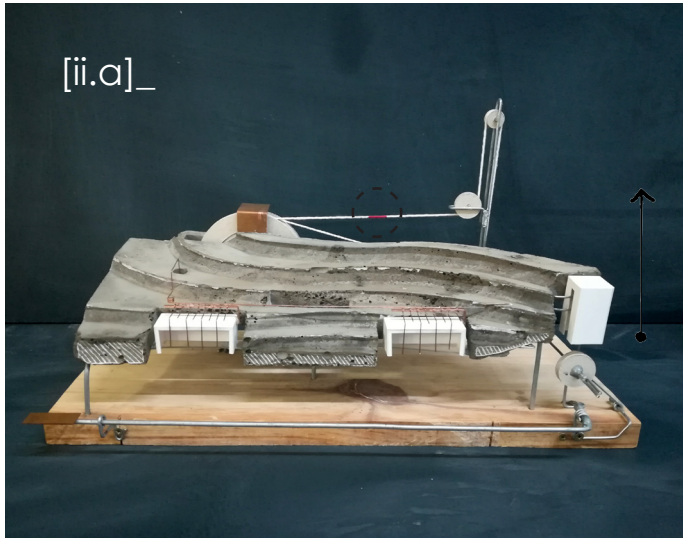


Figure 142. Sketch of concepts applied to site (Author, 2020).

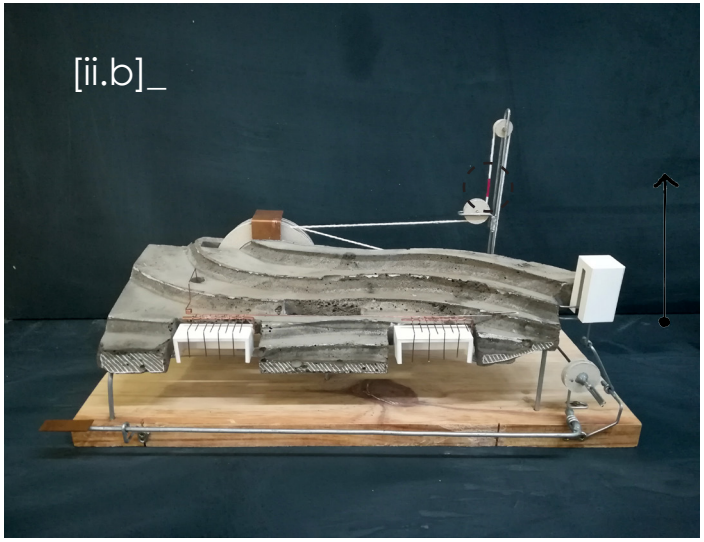


Figure 143, Sketch of concepts applied to site (Author, 2020).

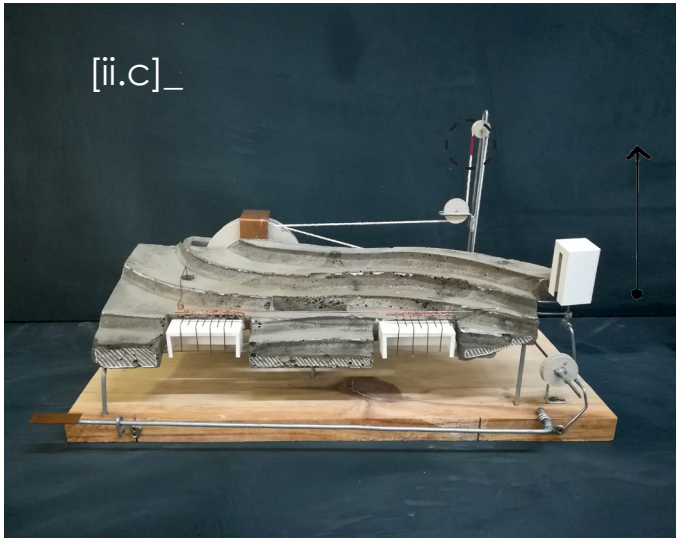
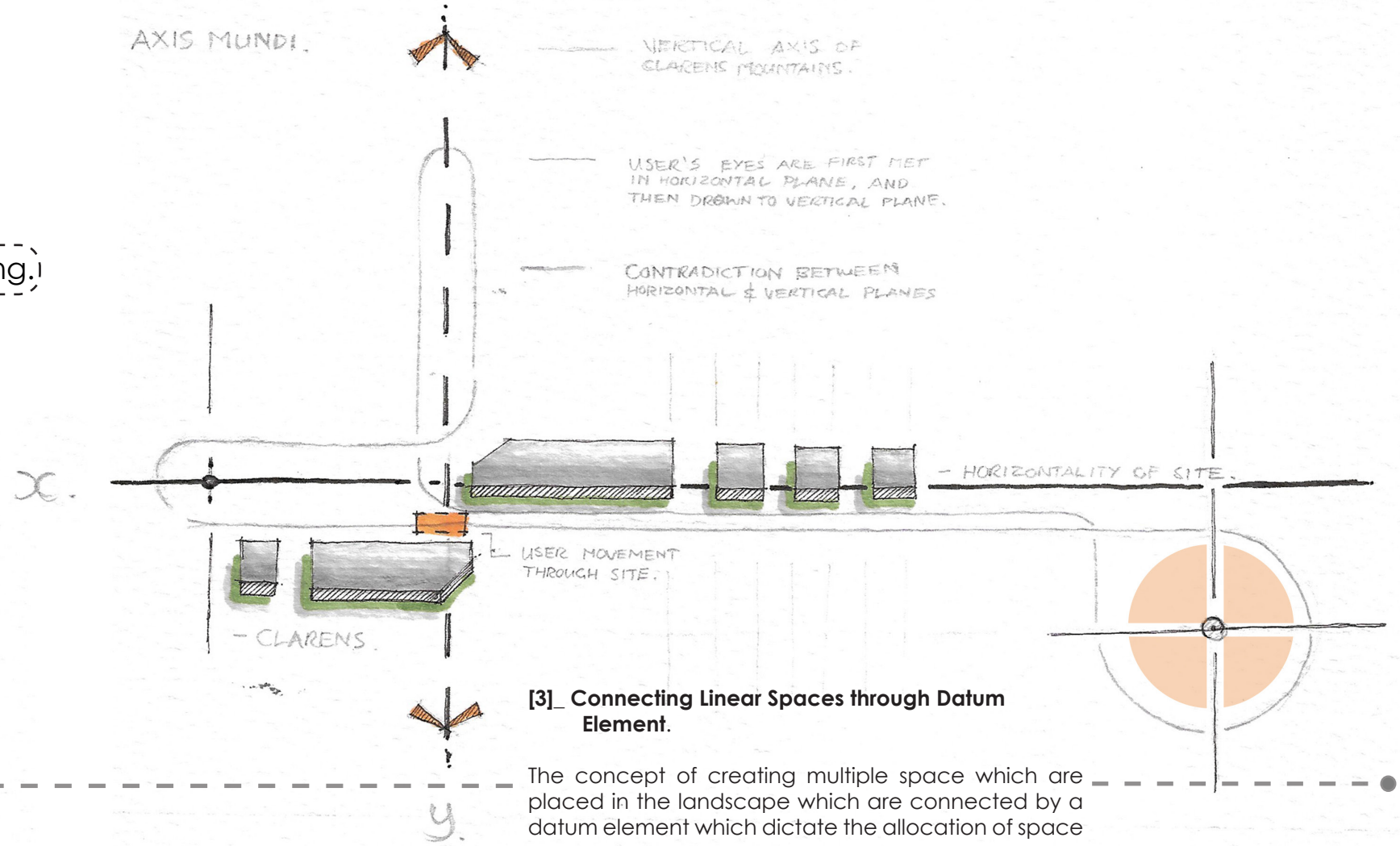


Figure 144 Sketch of concepts applied to site (Author, 2020).



[3]_ Connecting Linear Spaces through Datum Element.

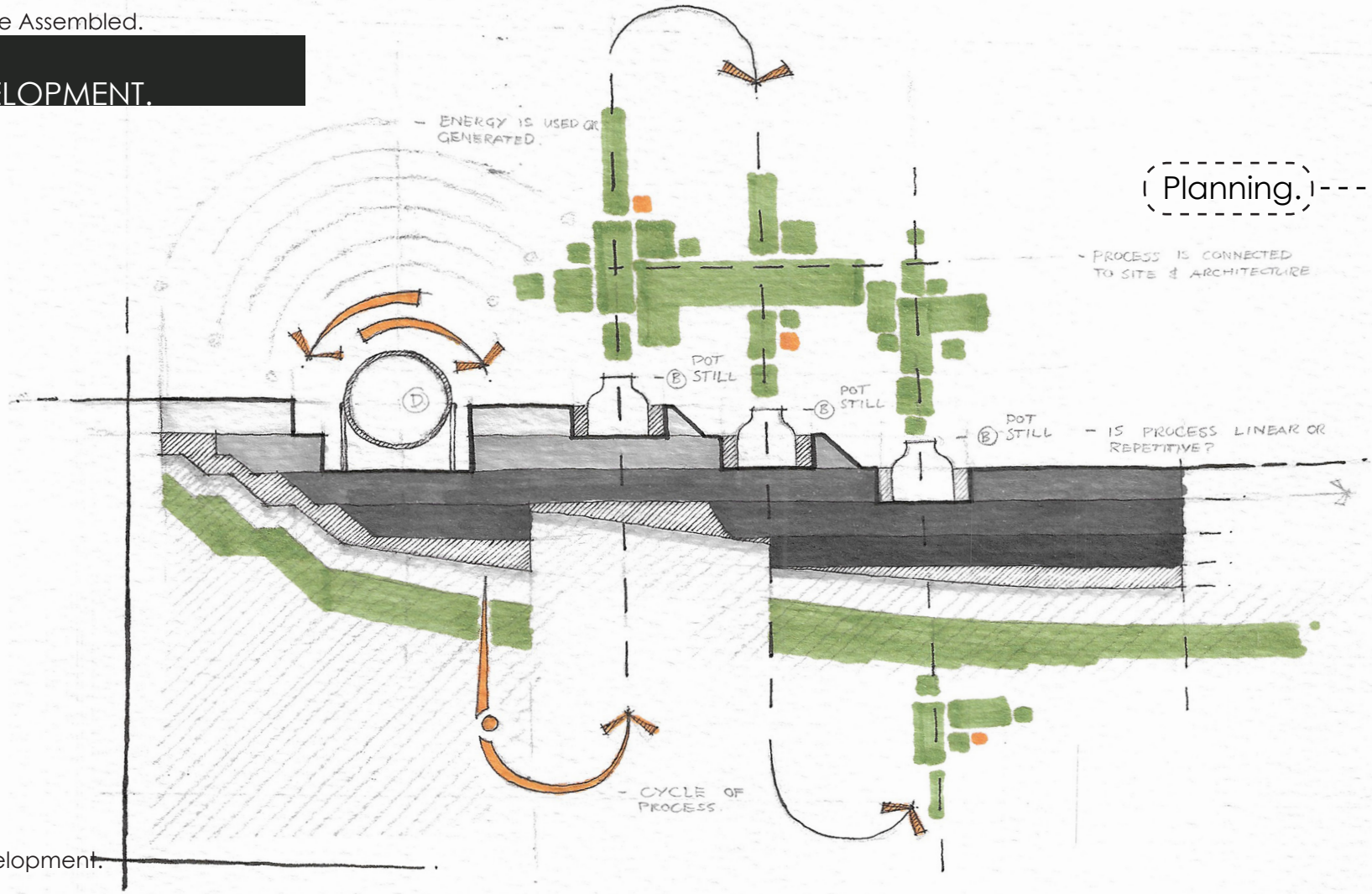
The concept of creating multiple space which are placed in the landscape which are connected by a datum element which dictate the allocation of space

Figure 145, Image of concept model showing contextual placement in site valley(Author, 2020].

7.vii.

Fragments of Influence Assembled.

CONCEPT DEVELOPMENT.



[1]_ Conceptual Development.

The search for a meaningful intervention on the periphery of Clarens has to be a synthesis of the investigation into history, culture and appropriate architecture. How can these elements inform the design to ensure that the building responds to the context and enhances the phenomenological experience of the user.

Figure 146, Sketch of planning for concept model (Author, 2020].

[2]_ Function Informed Design.

Sectioning the site in the concept model allowed the possibility to investigate how the building might respond to the natural slope, and partially submerged into the terrain thereby allowing the building to respond rather than impose itself on the topological scale as mentioned in the historical analysis in part 2.

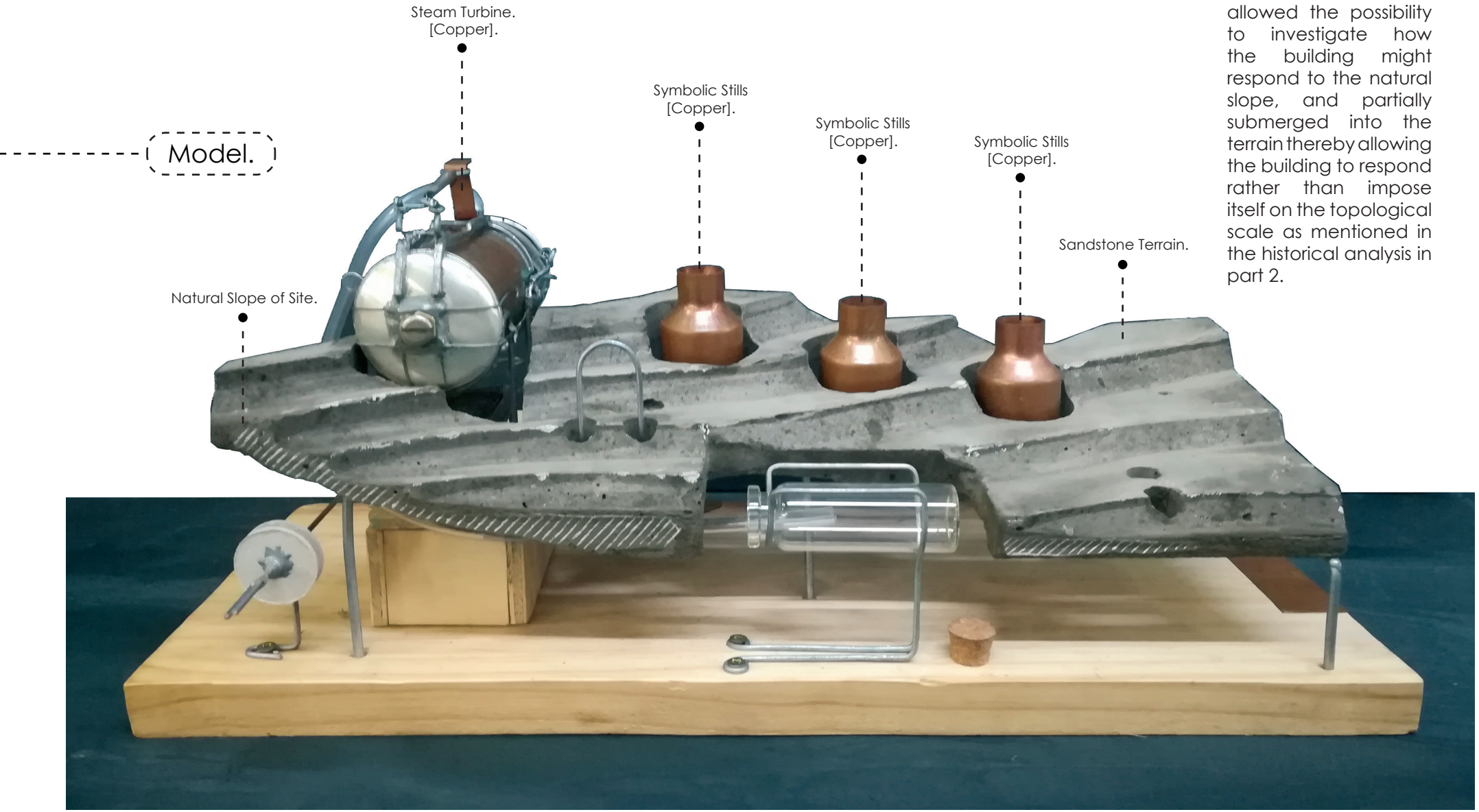


Figure 147, Image of concept model showing processes within context (Author, 2020].

7.vii.

THE GIN MAKING PROCESS

A Linear Process **[Start]** to **[Finish].**

[1]_ **Third-Party** Functions.

Off-Site Processes **- [Neutral Grain]. Spirit].**

Grains.

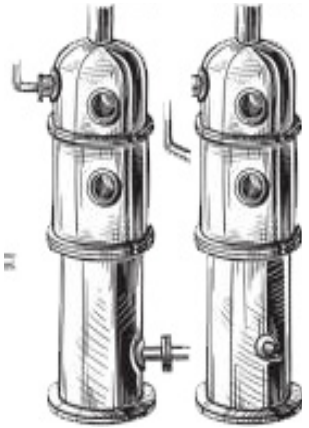
WATER. | WHEAT. | CORN. | RICE. | GRAPES. | RYE. | BARLEY.

YEAST.

FERMENTED GRAIN SPIRIT.







Grain Mash.

Heat & Mix.

[a.]_ Mashing.
Heating water and grain mixture to activate the malt enzymes.

Let Sit.

[b.]_Fermentation.
Yeast is added to a wash mixture which ferments into a grain

Rectification.

[c.]_Rectification.
Neutral Grain Spirit is distilled to produce a rectified neutral spirit which can the be used to distill gin, or other spirits.

Figure 148, Gin distillation process (Author, 2020]

[2]_ **Distillery Primary** Functions.

On-Site Processes **[Start] - [Finish]_ Gin [Various].**

According to Sam, the legal EU definition of gin means that it must be a juniper-dominated spirit, with an agricultural origin and a 37.5% ABV.

NEUTRAL SPIRIT.



Distillation Methods.



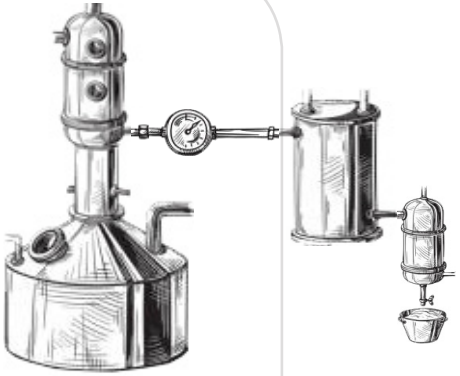
Rectification.

[d.]_Batch Rectification.
A pot still with a rectifier column and a condenser is required. The column separates the reflux from the distillate.



Steep & Boil Distillation.

[e.]_ Steep & Boil.
Carefully selected botanicals are combined and steeped [left to soak] in the neutral grain spirit which is brought to the distillery from off site. After the mixture has steeped for an adequate period the mixture is boiled which release the infused vapour through the column which then condenses to a gin. [Most common method used by craft distillers].



Vapour Infusion Distillation.

[f.]_ Vapour Infused.
Unlike in steep & boil distillation, no botanicals are added to the neutral spirit in the pot still. Instead the neutral spirit is boiled to release the vapour through a "botanicals basket" which has the carefully selected botanicals placed on copper racks through which the vapours pass releasing the oils and flavours of the botanicals. [Uncommon].

Gin Types.

[i.]_ Compound Gin.
Ingredients soaked in neutral spirit. Flavoured Gin as example.

[ii.]_ Distilled Gin.
Distilled gin, yet with added artificial flavourings and additives after distillation.

[iii.]_ London Dry Gin.
Highest-quality gin. Made from all natural ingredients with only 0.01g sugar per litre of alcohol.



7.viii.

On-Site Functions **- [Flow-Diagram].**

Public Functions.



[2]_ Public **[Receiving]**.

Public receiving can be ordered into two functions: Public User and public services.

[i.]_ Public [User]: For the user a reception and waiting area is required. These functions are required to be situated near the approach of the building to allow the user to be orientated and informed upon arrival.

[ii.]_ Public [Services]: Services offered to the public user include, museum/gallery, bar & lounge and Restaurant. These services require products to be ordered and received daily-weekly.
- Required products for operation of bar.
- Required products wet & dry for the restaurant kitchen.

[1]_ Receiving.

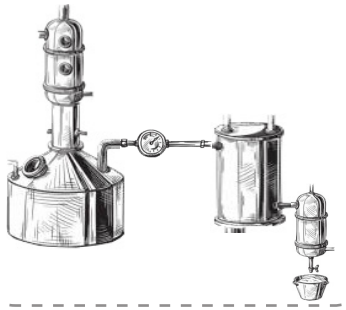
Receiving of goods/products is the first stage of the process.

The distillery will not produce it's own neutral spirit, import botanicals, bottles, or packaging. Therefore the required products need to be ordered, received on the premises and stored for use in the distillery.

[4.]_ Divergence of functions

Whilst the concept of the distillery is to allow the user full accessibility to the distillation process through guided tours, the layout of the distillery requires an element which separates the public functions from the production/process functions. The experience requires the functions to converge at moments in the building to allow the user a connection with process whilst being in the public functions.

Production Functions.



[3]_ Production **[Receiving]**.

Third-party products are required for the production of gin. Craft distilleries rarely independently produce all items on premises. The following items are ordered and received from third-party companies:

- **Rectified Neutral Spirit** - Highly Concentrated Ethanol [96-96.5% ABV].
- **Pure Distilled Water** - Used to dilute distillate to required [37.5-45% ABV] for London Dry Gin.
- **Botanicals** - Used to infuse flavours into gin [shipped from international sources].
- **Bottling** - Custom bottles are ordered from manufacturers to premises where bottling of gin is done on site.
- **Packaging & Marketing** - Labels, packaging and boxes are ordered from third-party manufacturers to premises where bottling and packing is done.

Figure 149, Gin distillation process (Author, 2020)

[5]_ Public **[Hosting Spaces Within Distillery]**.

Once the public has entered and been received into the building, the user is guided to the following functions:

- **Museum/Gallery** - Showcase of the history of Gin and Distillation
- **Bar & Lounge** - Primary bar where regular alcohol & gin is served.
- **Public Toilets** - [According to SANS regulations for occupation].
- **Guided Tour & Gin Tasting** - Guided tour of distillation process bookable twice a day during the scheduling of the distillation runs. Gin Tasting Rooftop Bar which is the end destination of the guided gin distillation tours.

[g.]_ Public **[Separate Hosting Spaces]**.

Whilst the restaurant is linked to the distillery and accessible from entry through the distillery, the main entrance of the restaurant is separate and located towards the North/West of the site, allowing independent operation of the restaurant in hours [night] which the distillery in not operational. The spaces required for the public restaurant:

- **Public & Staff Parking** - [25] Parking Bays.
- **Kitchen** with Cold & Dry Storage Space.
- **Public & Staff Toilets** [To SANS Regulations For Restaurant Occupancy].
- **Main Restaurant** with Reception, Dining Area, Lounge Area & Veranda.

[6]_ Production **[Functional Spaces]**.

The Primary function of the distillery is producing craft gin to the commercial market. The functional spaces which are required is seen as the primary form generator of the design:

- **Goods Storage Space** - Storing of primary ingredients necessary for the scheduled production of gin.
- **Pump Rooms** - Pumps are required near neutral spirit, distilled water, stills room, distillate reception room, and bottling rooms in order to move the liquids through the systems in the program.
- **Still Rooms** - Where the copper pot stills are situated, allow for production & user experience.
- **Distillate Reception Room** - Where condensed distillate is sampled and batched.
- **Master Distillers Office** - Situated in close proximity to stills and distillate reception room.

[h.]_ Production **[Bottling & Packing Spaces]**.

The final stage of the production process is quality testing, bottling, & packing and administration. The user will be taken through the building where the entire process is viewable.

- **Quality Testing Laboratory** - Recipe Development & Testing Of Products.
- **Bottling & Packing** - Situated on the ground floor for the accessibility of forklifts for the movement of packed goods.
- **Administration** - The administration block is the final part of the process, key in the operation, management and marketing of the product. Situated to overlook both public and functional spaces.

FUNCTIONAL PROGRAM

7.ix.

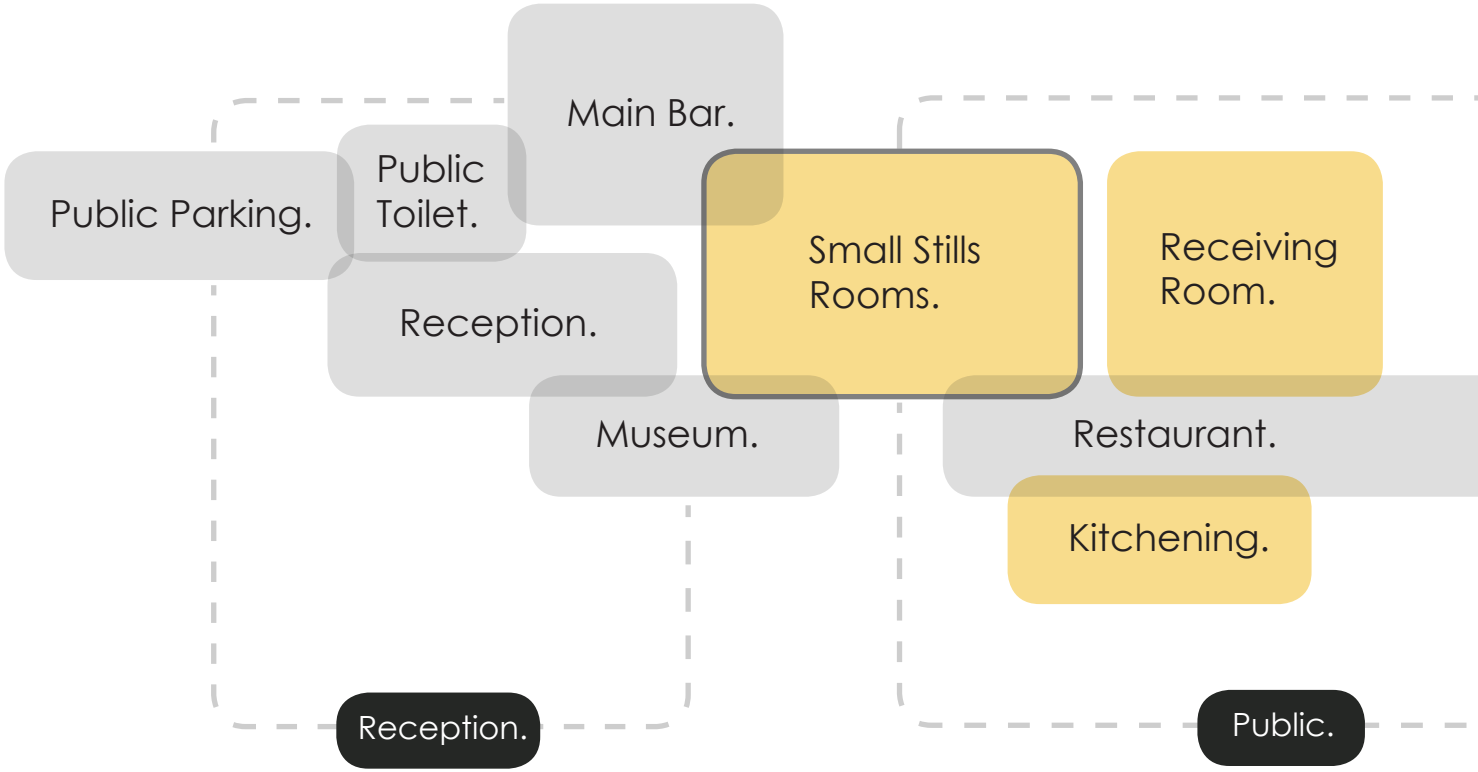
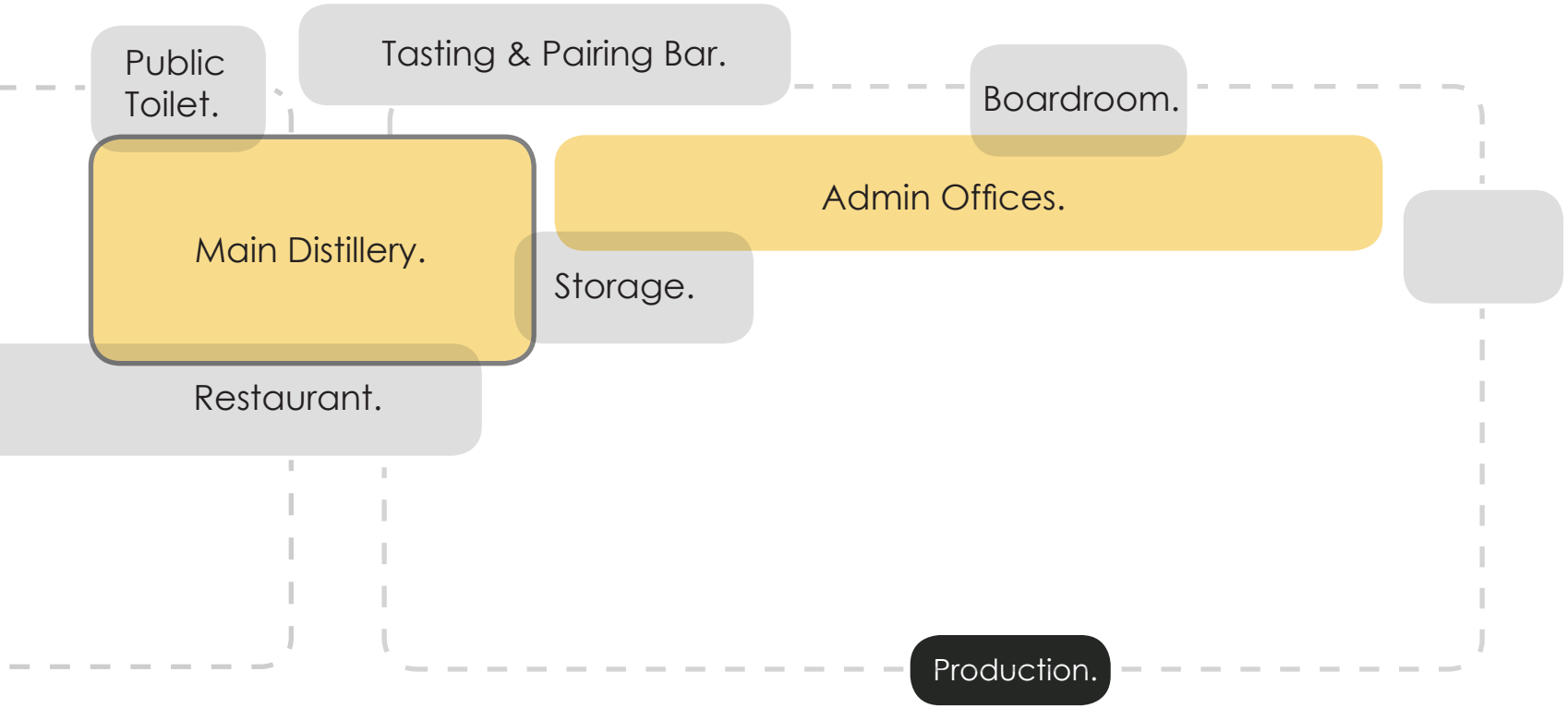


Figure 150, Functional Program (Author, 2020]


Public Toilet.
Tasting & Pairing Bar.
Boardroom.
Admin Offices.
Main Distillery.
Storage.
Restaurant.
Production.

7.x.

Fragments of Influence Assembled.

DESIGN DEVELOPMENT.

[1]_ Diagrammatic Layout.

The first development of the design was concerning the layout on the site. How can the layout best respond to the topography of the site, whilst applying the concept of axis, horizontality vs verticality of the landscape and addressing the orientation.

The diagram sketches where drawn with the [Gin Distillation Process] Program informing the layout of possible spaces.

As seen in diagrams [a, b & c] the sketches aim to respond to the linearity of the process, yet introduces a vertical element which "ends the axis' as well as breaches the cleft in the landscape caused the erosion of the stream banks.

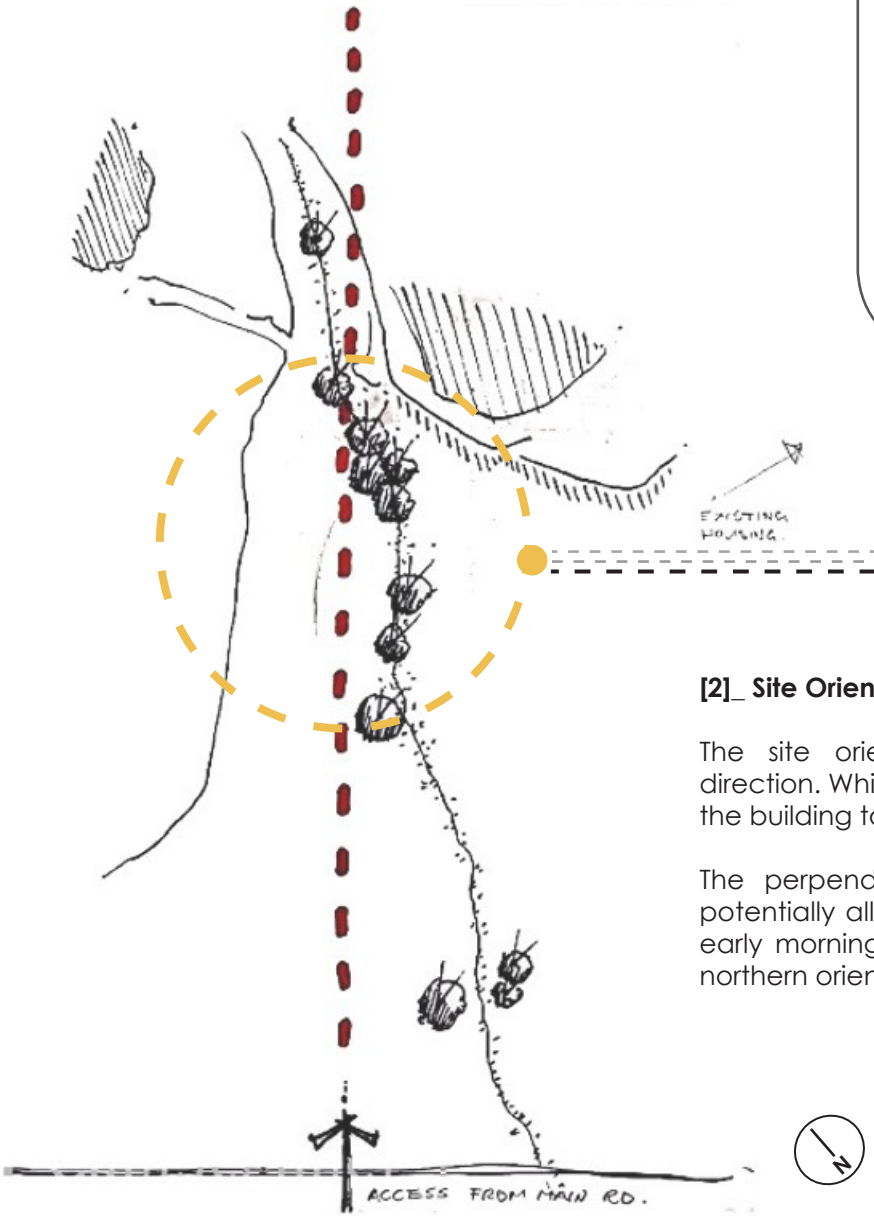
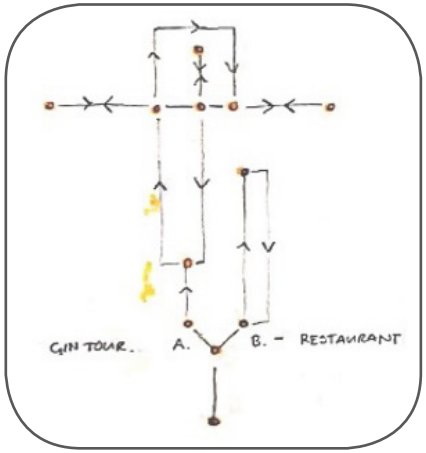


Figure 151, Site investigation sketch (Author, 2020]



[3]_ Tour Routes.
Possible routes through building as diagram generator.

[2]_ Site Orientation.

The site orientates linearly to a north-easterly direction. Which would expose the long elevation of the building to afternoon western sun.

The perpendicular element shown in figure xxx potentially allows a "courtyard space " to open to early morning eastern sun exposure and optimum northern orientation.



Figure 152, Linear diagram investigation (Author, 2020)

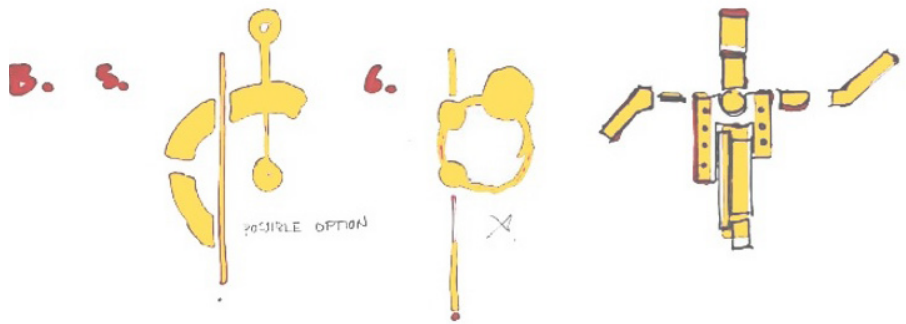


Figure 153, Gyratory diagram investigation (Author, 2020)

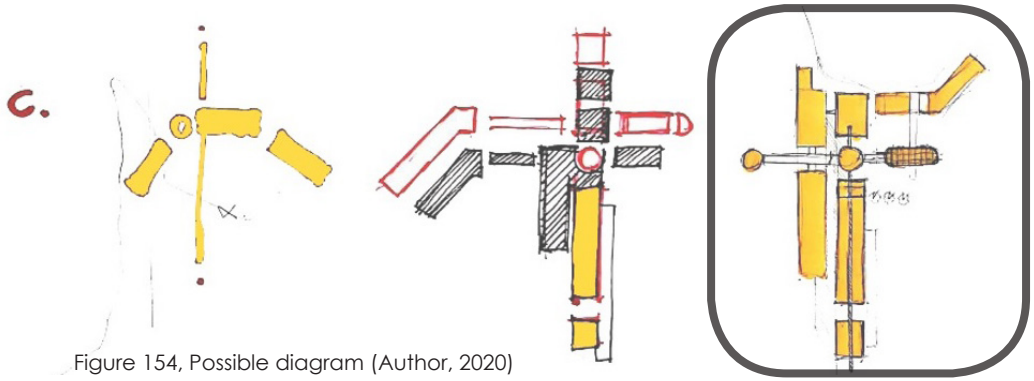


Figure 154, Possible diagram (Author, 2020)

Diagram Investigation **[4.i]_ Linear Layout**.

Extending the Clarens Main Street [axis] is used as a datum line which is extended through the site to develop the notion of extending Clarens to this end point.

Figures xxx - xxx show the investigation on how the entrance will receive the user, [entrance] being a key part of the experience of arrival & revelation.

Diagram Investigation **[4.ii]_ "Gyratory" Layout**.

In order to explore the concept of completing the axis and creating a destination point through the town.

Gyratory opens the idea of extending around a center-point. This is however contradictory to the linear gin distillation process.

Diagram Investigation **[4.iii]_ Responsive Layout**.

To optimally develop the diagram the linearity, response to climate and context, and process had to be the main design generators. The linear process and typology of the agriculture barn was used as a datum. A silo was placed as a center circulation point where the perpendicular element crosses the datum creating a point of hierarchy which dictates the spaces and movement through the building.

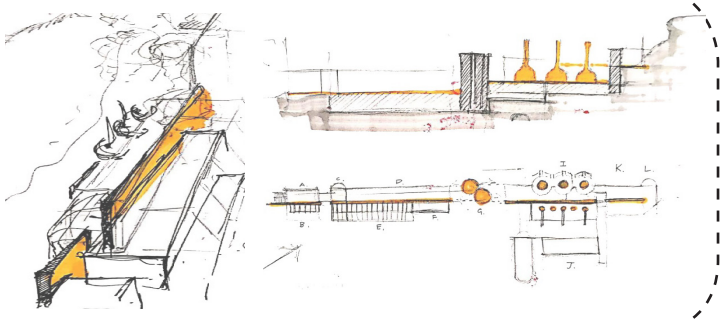


Figure 155, Datum wall dictating spaces & circulation {Author, 2020).

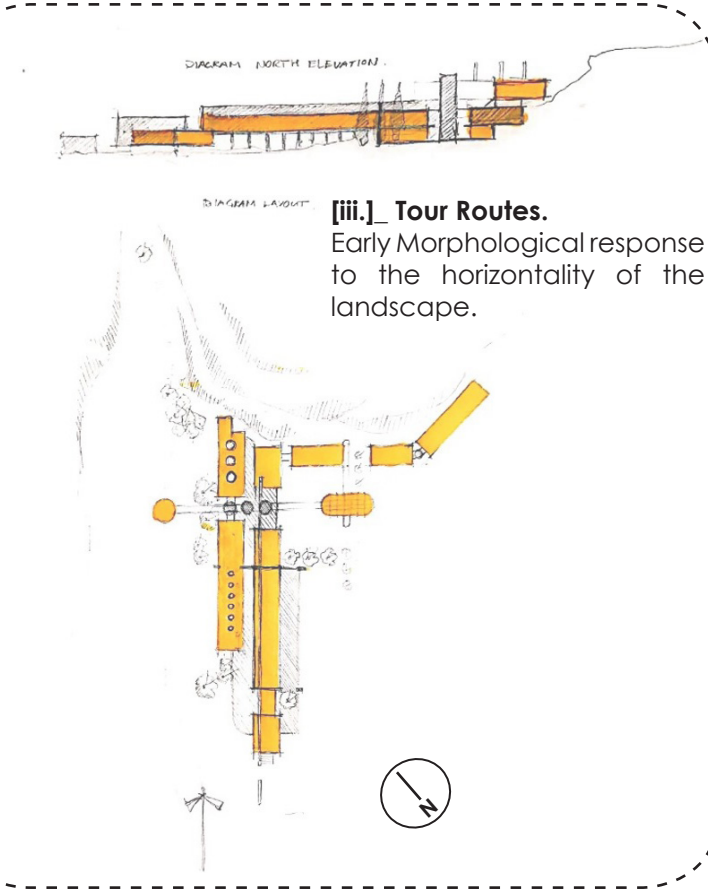
7.xi.

Fragments of Influence Assembled.

CONCEPT DEVELOPMENT.

[1]_ Diagrammatic Layout.

The first development of the design was concerning the layout on the site. How can the layout best respond to the topography of the site, whilst applying the concept of axis, horizontality vs verticality of the landscape and addressing the orientation.
The diagram sketches where drawn with the [Gin Distillation Process] Program informing the layout of possible spaces. As seen in diagrams [a, b & c] the sketches aim to respond to the linearity of the process, yet introduces a vertical element which "ends the axis' as well as breaches the cleft in the landscape caused the erosion of the stream banks.



[iii.]_ Tour Routes.
Early Morphological response to the horizontality of the landscape.

Figure 156, Datum wall dictating spaces & circulation {Author, 2020).

[2]_ Circulation [Primary Informant].

The **datum** wall guides the circulation through the assembled spaces which forms a whole when linked according sequence of the distillery tours and distillation process as referred to in chapter 8.1.

[3]_ Public Spaces.

Located at the North-East of the building are the public spaces which are **accessible** from approach & separated from the functional spaces by the circulation through the building. The public spaces have **optimum climate orientation** and views over Clarens.

[4]_ Functional Space Location.

Primary functional spaces are removed from the direct public access to allow separation from day visitors and guided tour visitors. Functional space are orientated to South-West of the building. The functional spaces

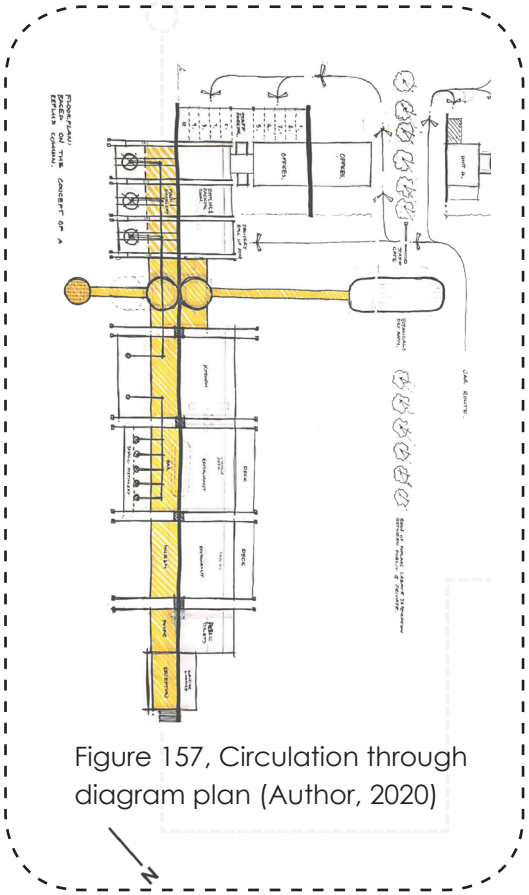


Figure 157, Circulation through diagram plan (Author, 2020)

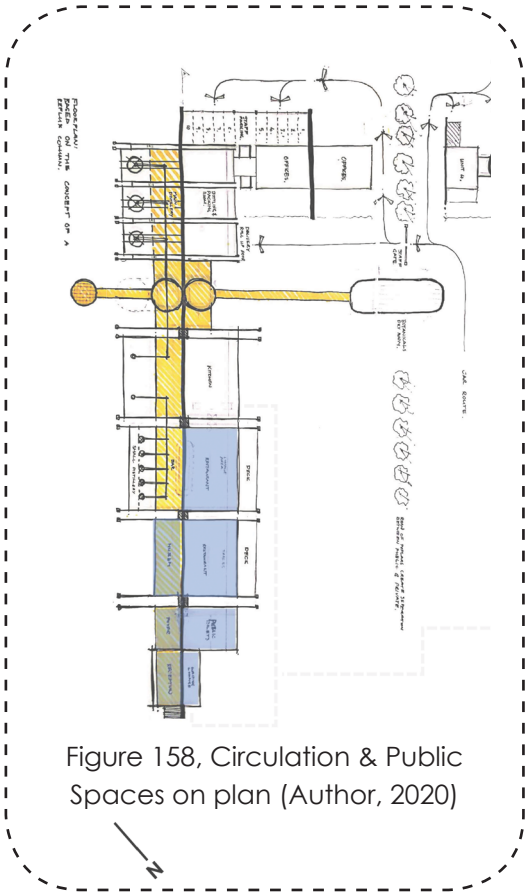


Figure 158, Circulation & Public Spaces on plan (Author, 2020)

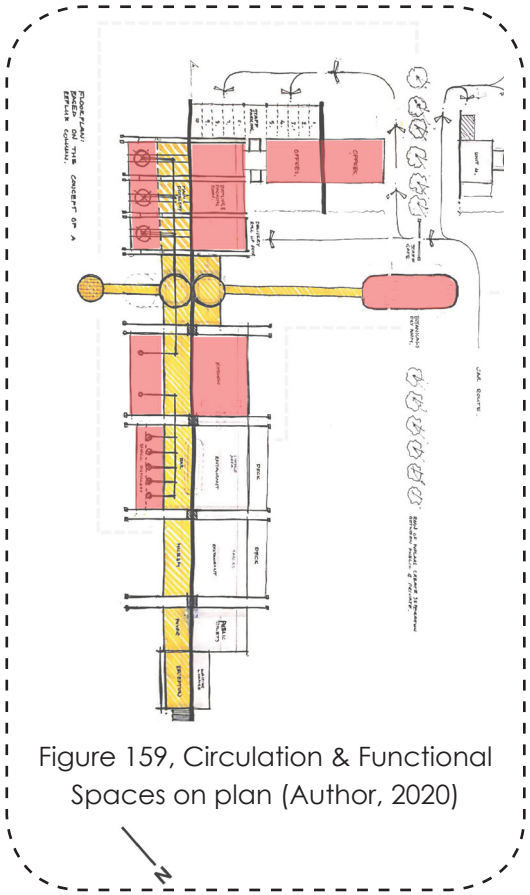


Figure 159, Circulation & Functional Spaces on plan (Author, 2020)

7.xii.

[1]_ FUNCTIONAL DRIVEN **CIRCULATION**

The primary attribute of the building is functional. Producing craft gin on a commercial scale requires an extension of the diagrammatic investigation in regards to the morphology of the building. In order to maximize the functionality of the building, the circulation becomes integral in the morphological development. As seen in , figure xxx, Glenn Murcutt purposefully placed the functions around the primary circulation route through the center of the building. The proposed gin distillery shares the program of being functional whilst providing a public program. The circulation was investigated as a threshold between the functional and public programs.

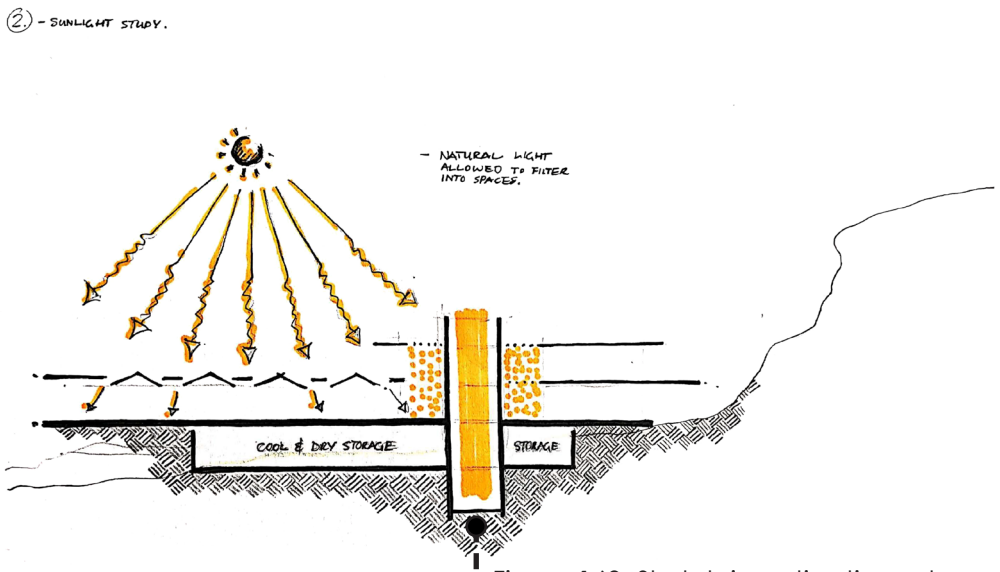


Figure 160, Sketch investigating solar exposure into the building through light shafts (Author, 2020)

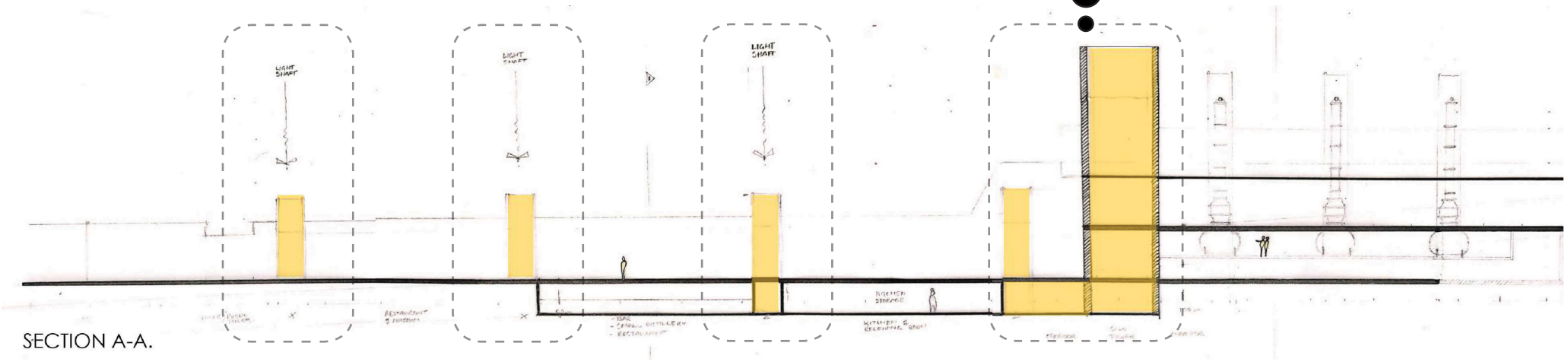
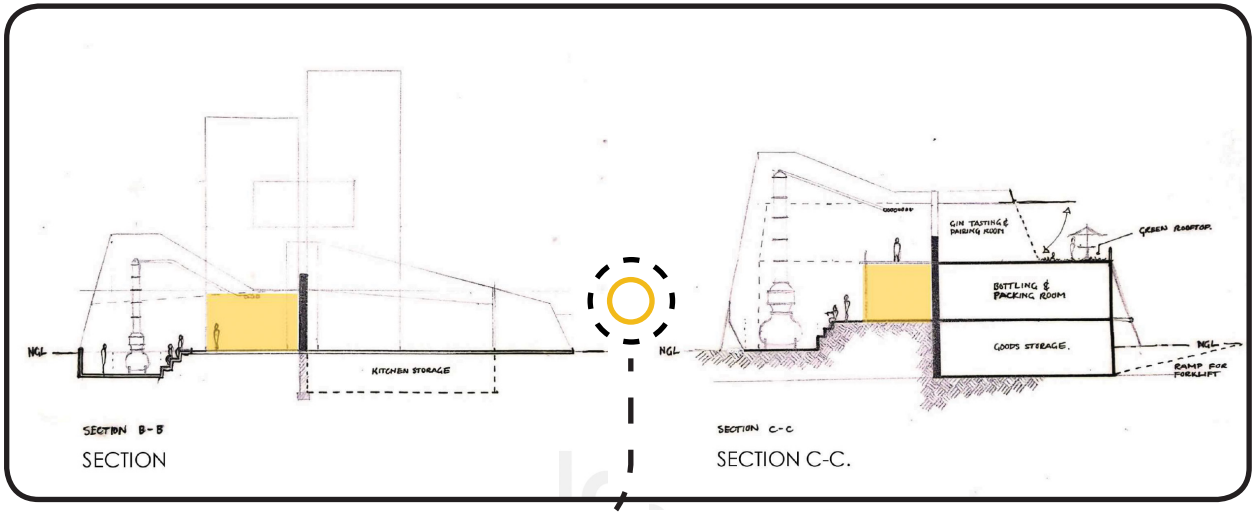


Figure 161, Allowing pause moments where the mass is dematerialized to reduce the visual mass of the morphology (Authour,2020).

Figure 163, Developing The Morphology To Circumvent The Primary Circulation.



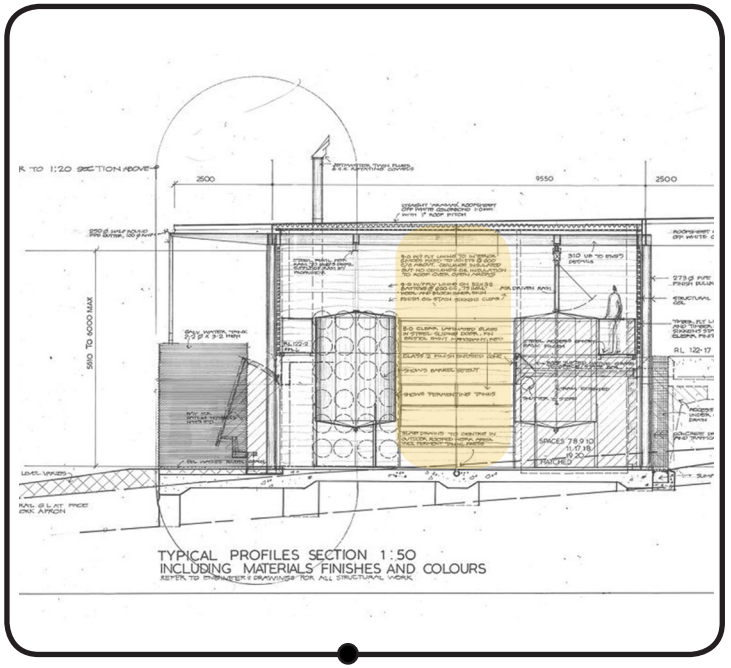


Figure 165, Lerida Estate Winery Section-circulation, Glen Murcutt (Area, 2014: online)

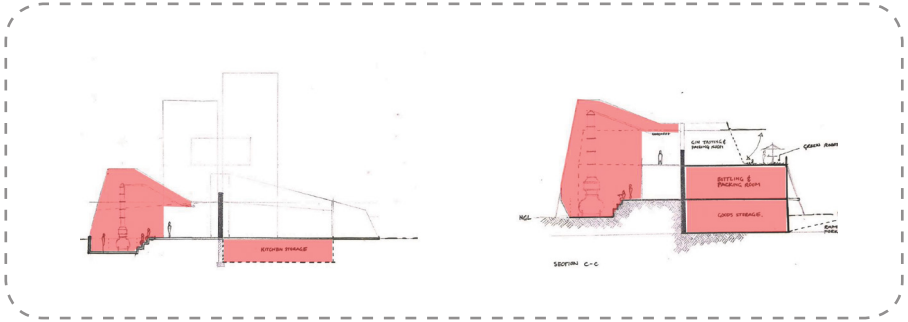


Figure 164, Functional spaces are allocated to the South (Climatic Orientation), and on ground floor (Functional).

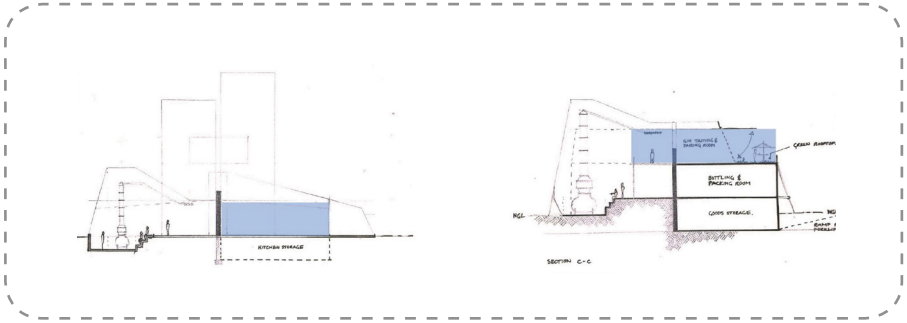


Figure 166. Public spaces are allocated to the North of the site (Primary Climate), and on elevated levels (Experience).

7.xiii.

[1]_ **FUNCTIONAL ACCESSIBILITY** INFORMING DESIGN.

[1]_ Crown C-5 Series **Forklift**

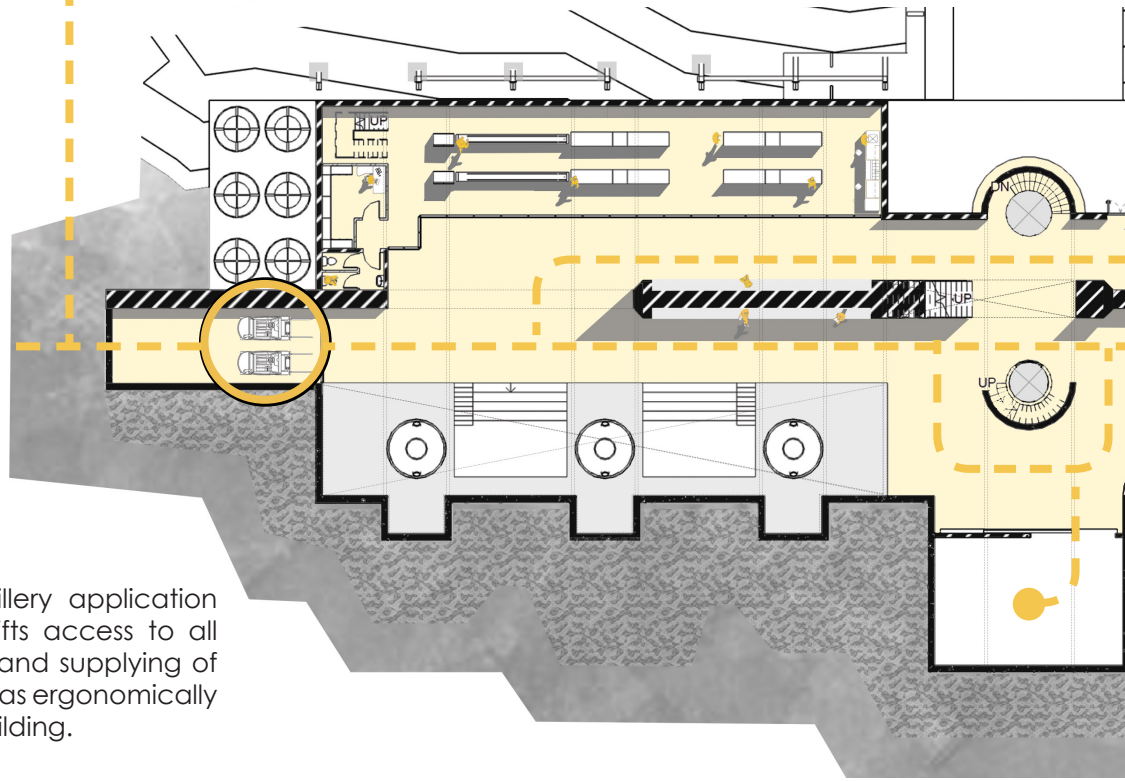
The accessibility of operational elements in the design of the singular level floor plan which allows access to the Crown C-5 forklifts through the building during installation, maintenance and general operation during the distilling process.





[2]_ **Multifunctionality** is essential in a public and functional space.

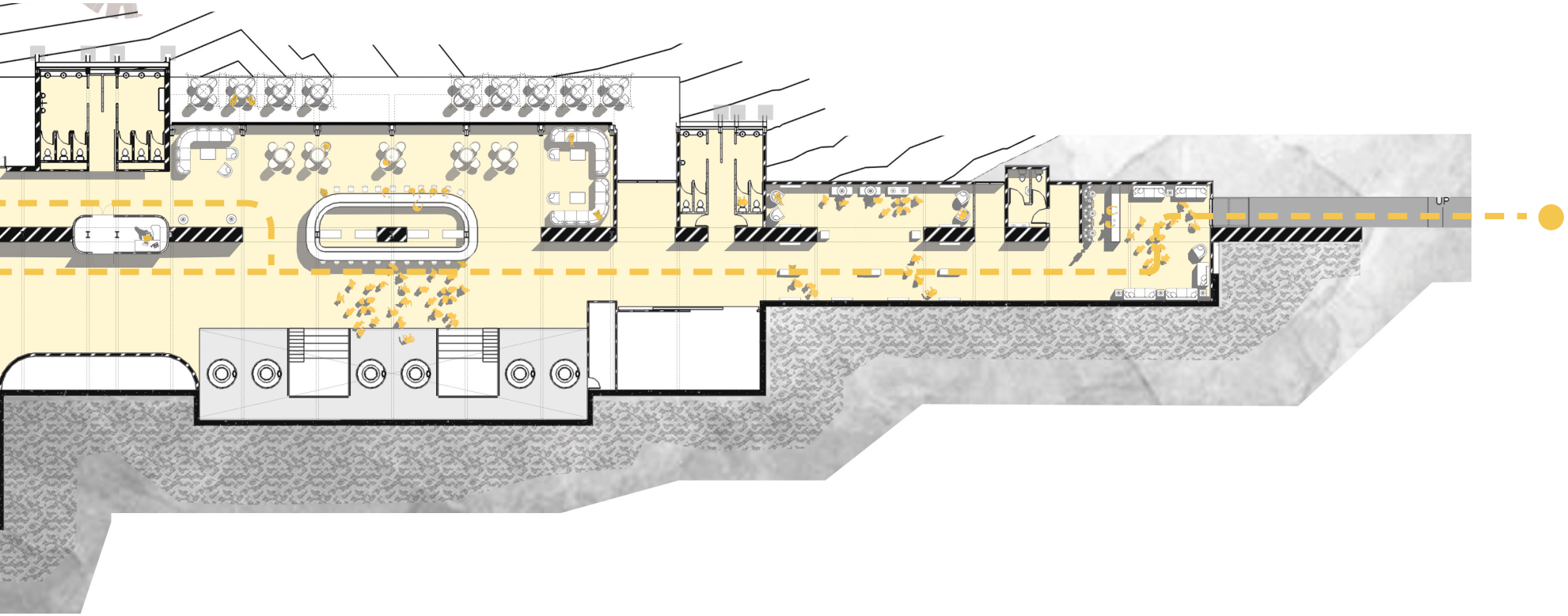
The C-5 LPG powered forklift with cushion tyres is ideal for indoor or outdoor use on "approved hard surfaces," such as concrete or blacktop.



Crown C-5 series forklifts are compactly built for the distillery application specifically. The singular level ground floor allows the forklifts access to all the public and functional spaces for movement, collection and supplying of materials used for production and hospitality. The circulation was ergonomically designed for free movement of the forklifts throughout the building.

[3]_ **Primary Functions** of the Building

The distillery offers three primary functions: Commercial Gin Production, Guided Gin Tours and a public lounge bar and a restaurant. The Crown C-5 forklifts serve operational function for each of the functions and a well syncronized schedule of operation allows the multifunctional space to function optimally. The operation and synchronization between the functional and public services are managed according to the timeframe of the batch distillation process since the circulation spaces are shared between the functions. A distillation run from start to finish takes 12 hours which allows two runs per day. The receiving and sending of ingredients, goods and the product is scheduled in the morning from 7am – 8am before the first distillation run of the day. Guided gin tasting tours are scheduled for the morning and afternoon and are to be booked in advance.



8.i.

CHAPTER 08.

CONSeption - Structural Investigation

[1]_ Touching The Earth **Lightly**

An early investigation into the tectonics of a structure which touches the earth lightly was explored through a series of sketches investigating kinetic functions adaptable to climate and function.

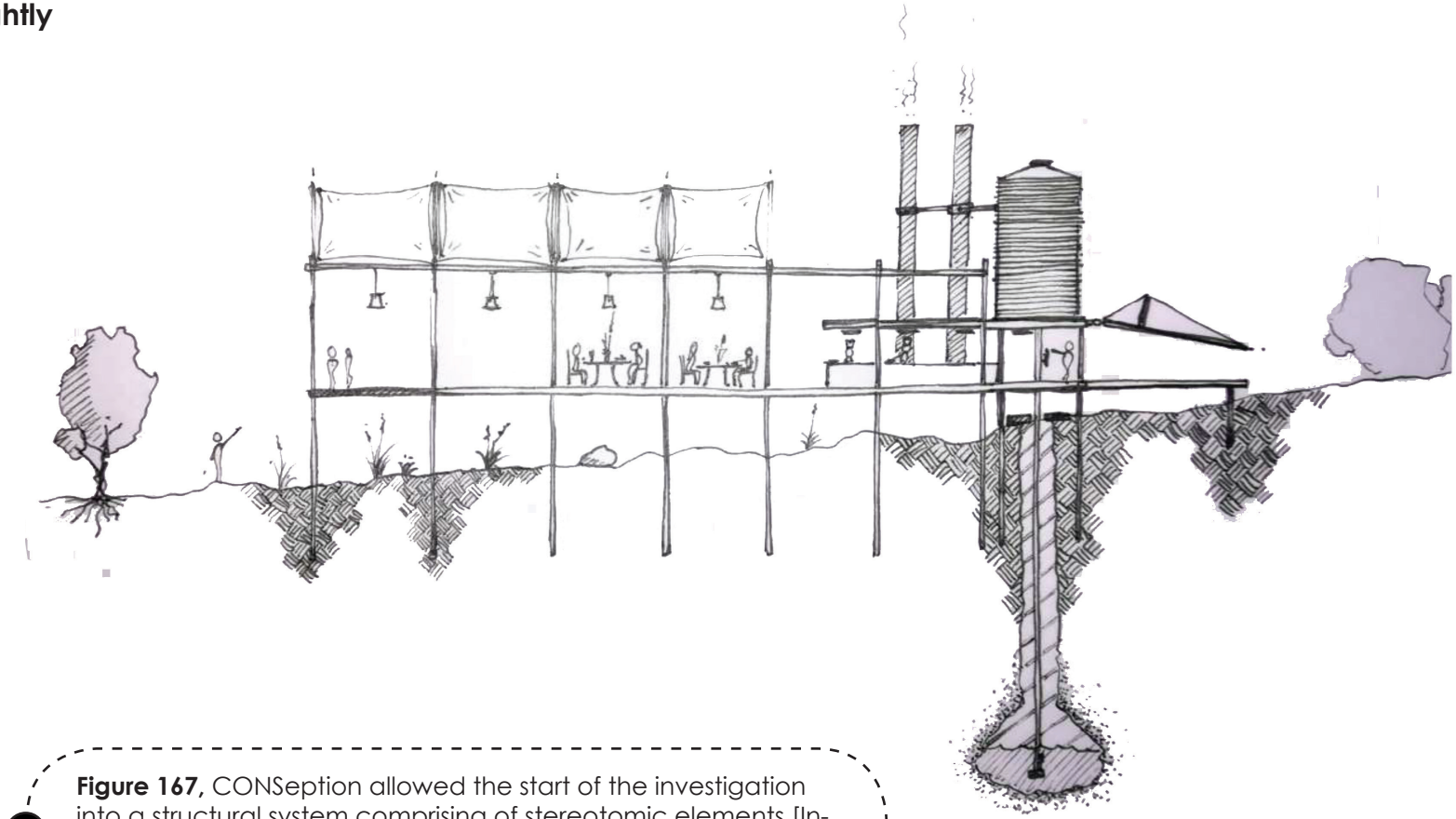


Figure 167, CONSeption allowed the start of the investigation into a structural system comprising of stereotomic elements [Intended to last in ruin] as well as tectonic elements [intended to dematerialize in time (Author, 2020)

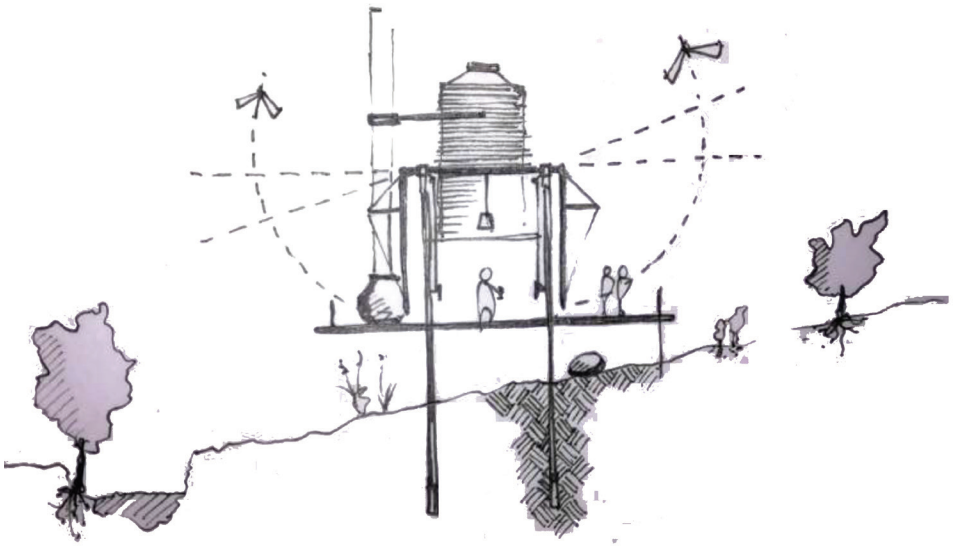


Figure 168, Sketch showing responsive architecture to extreme low temperatures of site as well as investigation into security within a conservancy(Author, 2020).

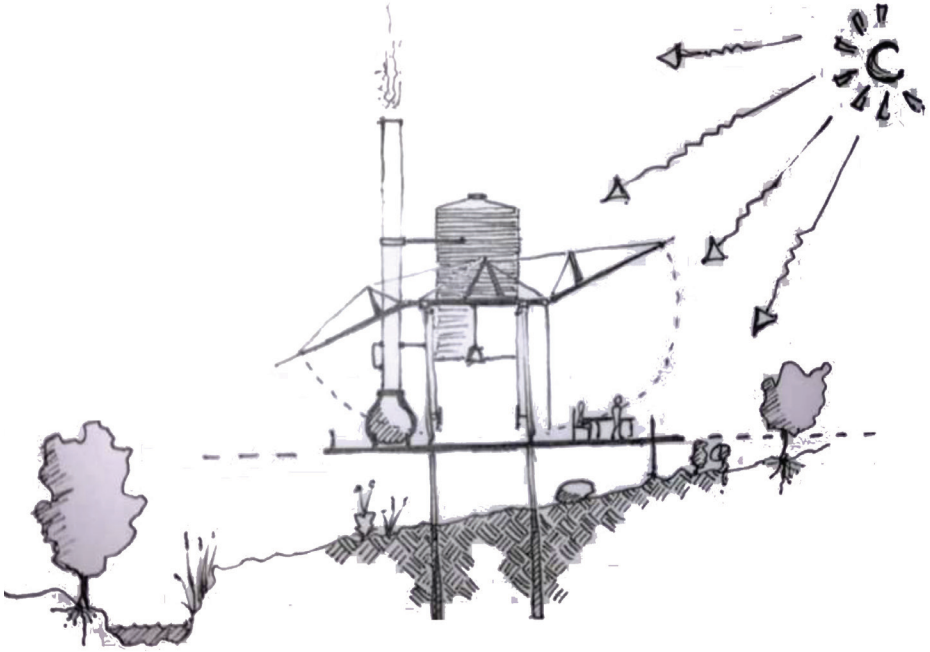


Figure 169, Sketch showing responsive kinetic architecture to extreme high temperatures during summer season of site (Author, 2020).

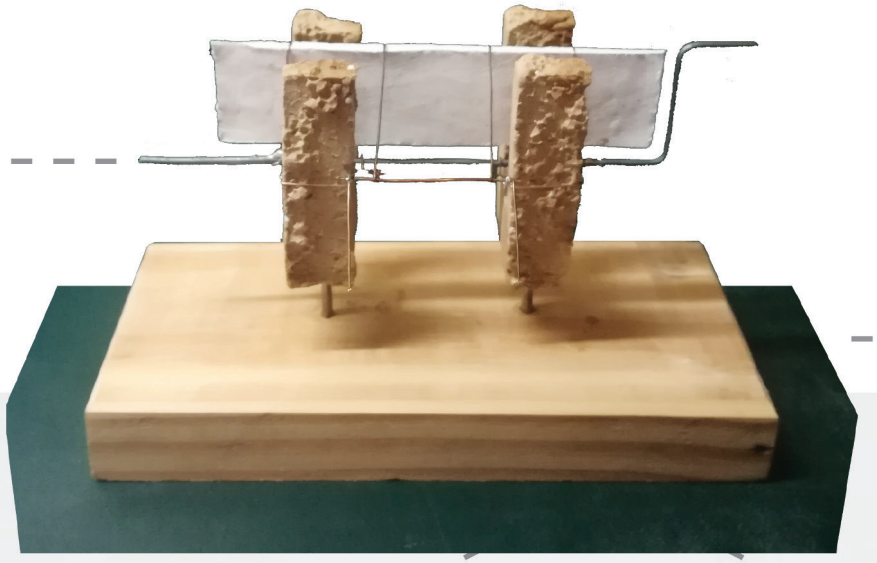
[1]_ Materiality of the context

8.ii.

- [UN] INTENTIONAL RUIN

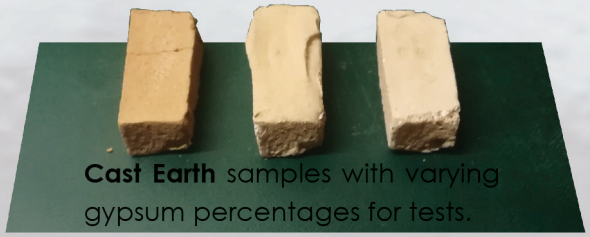
The **intentional** design of aspects to last during ruin, and others which fade away with **time** can be seen as an echo of the phillosophy of not imposing on the landscape, but rather adding **elements which enhance** the phenomenological experience there in.

This was investigated in a three piece touchstone.



1. Subtle Tectonic. Allowing views to breath-taking Clarens Mountains and a phenomenological experience of object & place.

Some key materials & construction methods where considered. For the datum which is monumental **[Stereotomic]** in nature, designed to last into ruin, and for the **[tectonic]** spatial framework which will decay as nature takes it course.



Cast Earth samples with varying gypsum percentages for tests.

Cast Earth construction makes use of soil found on site during excavation and thus allows the nature into the building in a poetic reapropriation of soil.

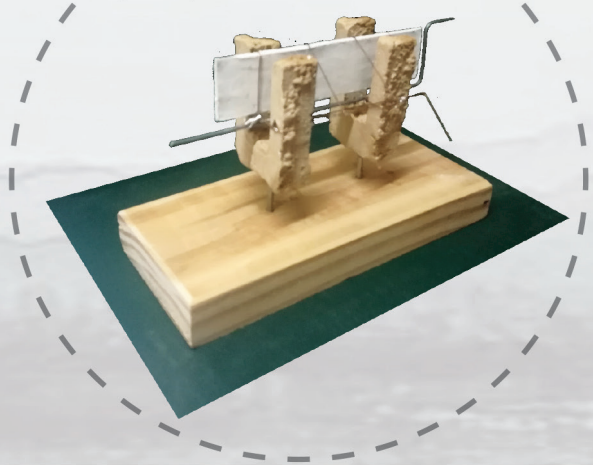
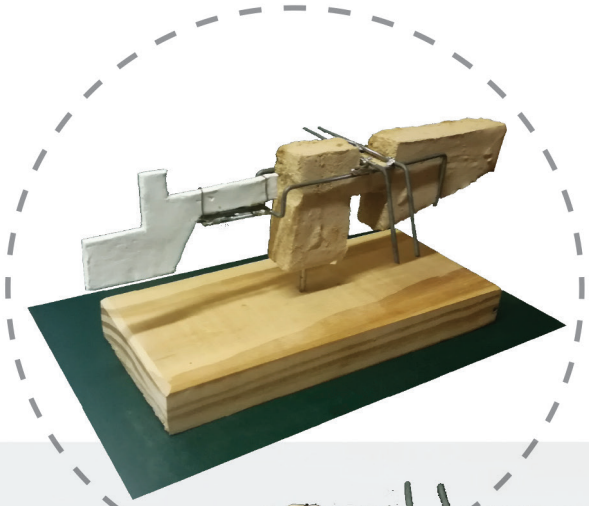
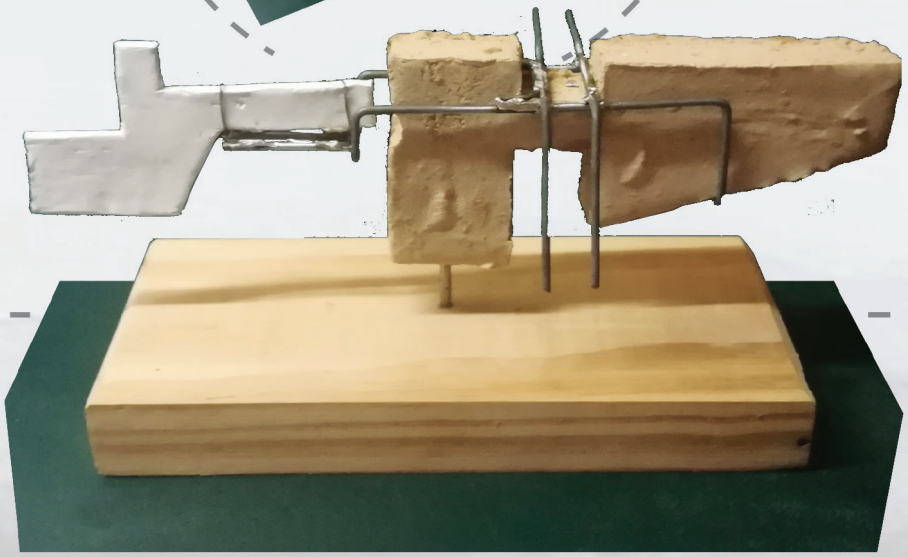
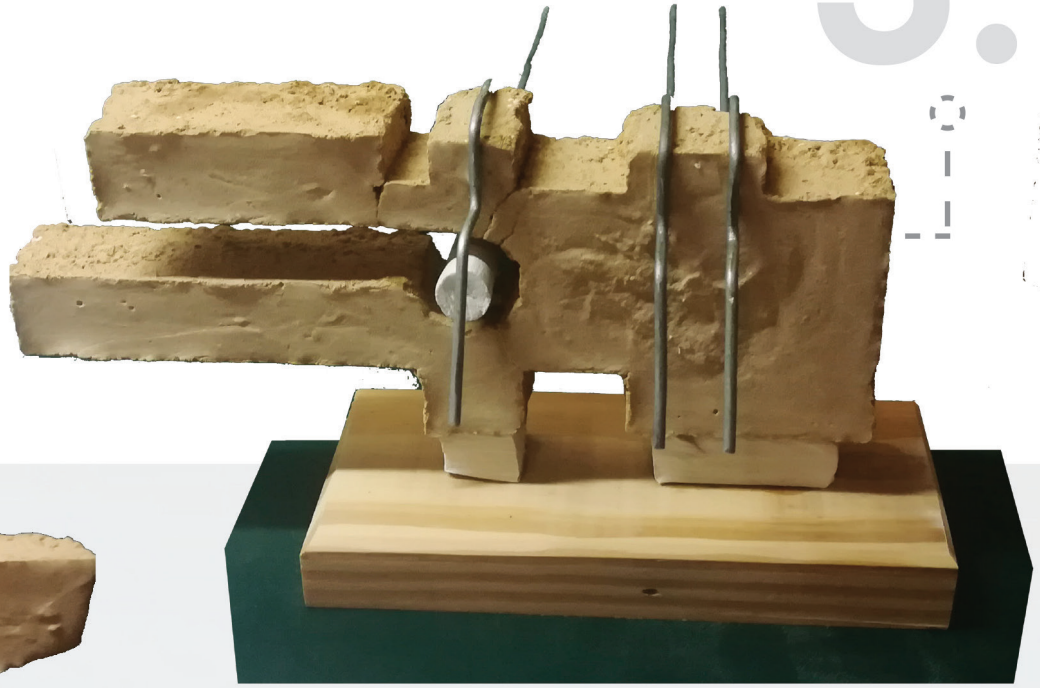


Figure 170, CONSeption exploration of materials, cast earth blocks and models (Authour,2020).

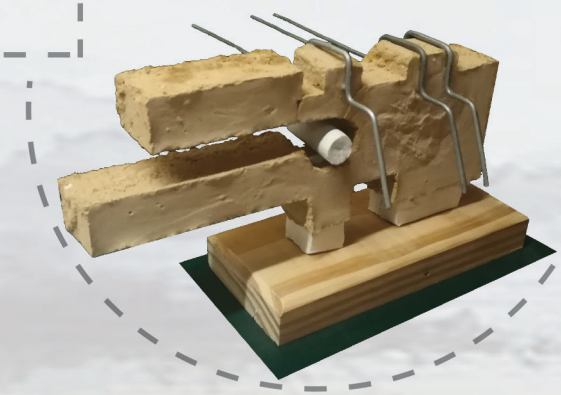




2. Combination of ideas from [1.] and [2.] Looking at how the building can leave an impression in ruin, but touch the landscape lightly in operation.



3. Monumental Stereotomic. Purposefully designing with the intention of an element to persevere through ruin. A beacon of what once was.



8.iii.

CONSeption - Structural Investigation

[1]_ Touching The Earth **Lightly**

Investigation into use of poured cast earth as a primary stereotomic structure as datum wall. Tectonic structural I-Beam ribs displacing loads and supporting to horizontal forces affecting the datum wall.

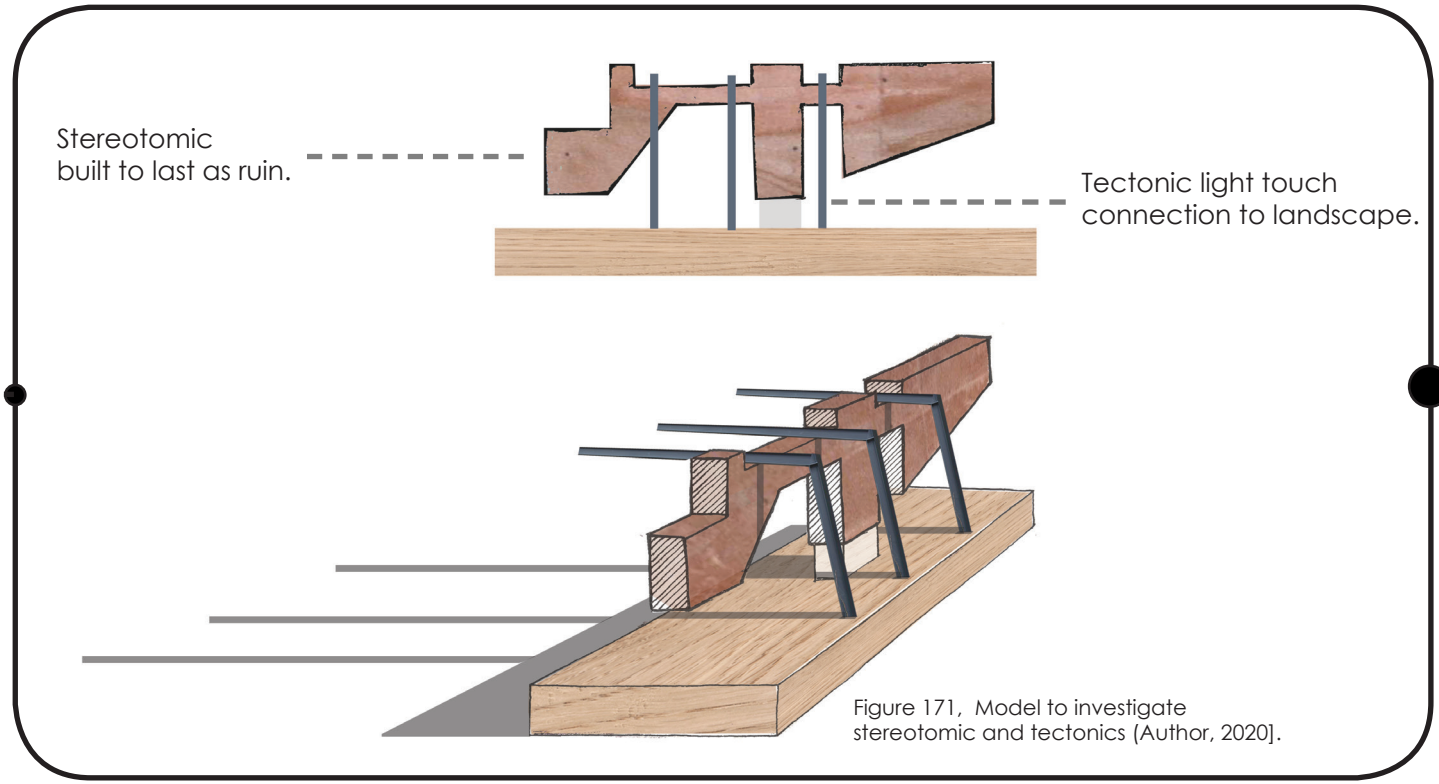


Figure 171, Model to investigate stereotomic and tectonics (Author, 2020].



Figure 172, Insulated Cast Earth walls in Pheonix, Arizona. (MountainEarth, 2020].



Figure 173, Insulated Cast Earth walls in Pheonix, Arizona. (n.i, 2020].



Figure 174, Reporposed Bricks. (Kahn, 2020].

DICTATING A LINEAR PROCESS ALONG THE DATUM.

8.iv. Developing the section to respond to climate.

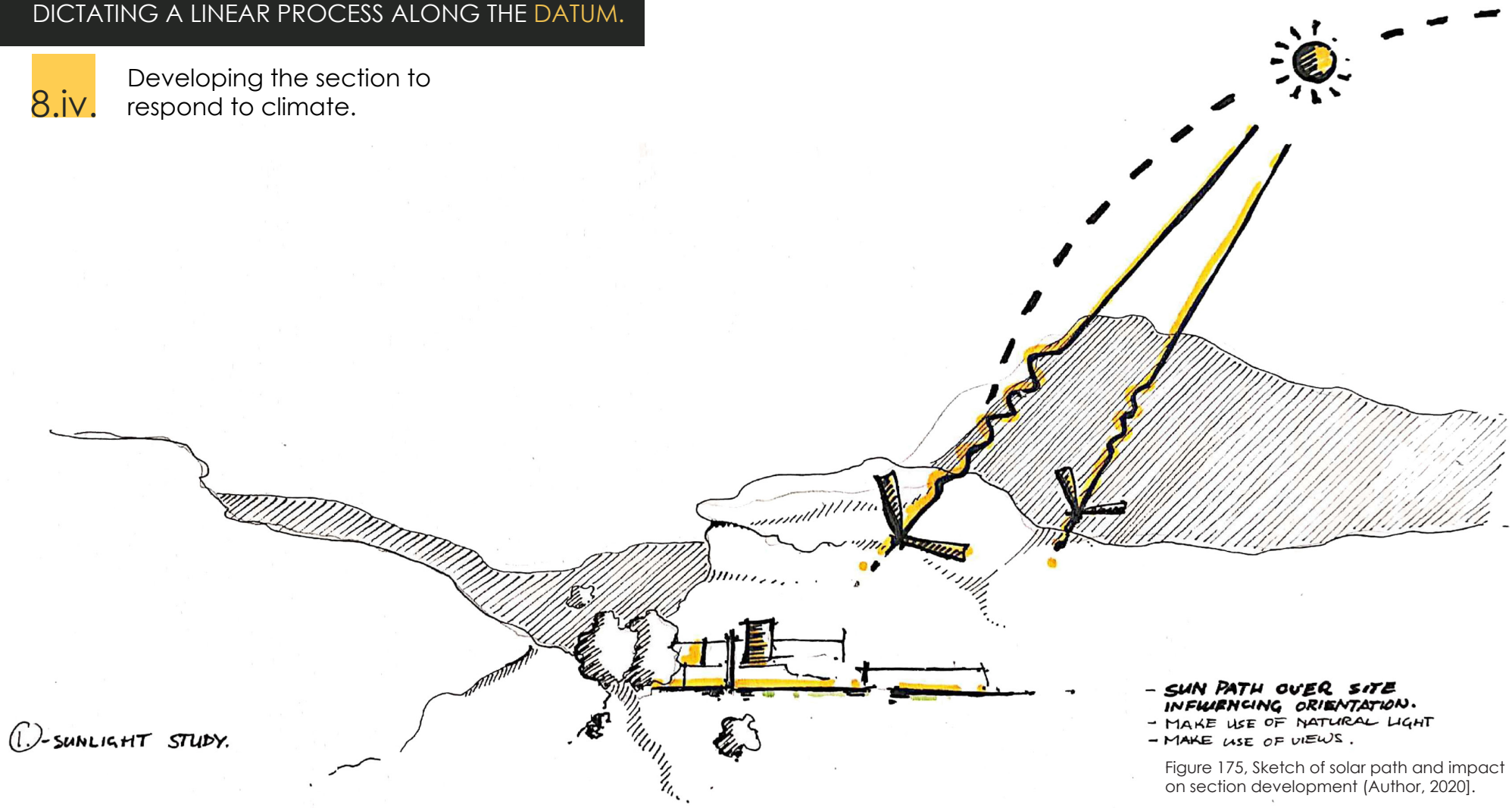


Figure 175, Sketch of solar path and impact on section development (Author, 2020].

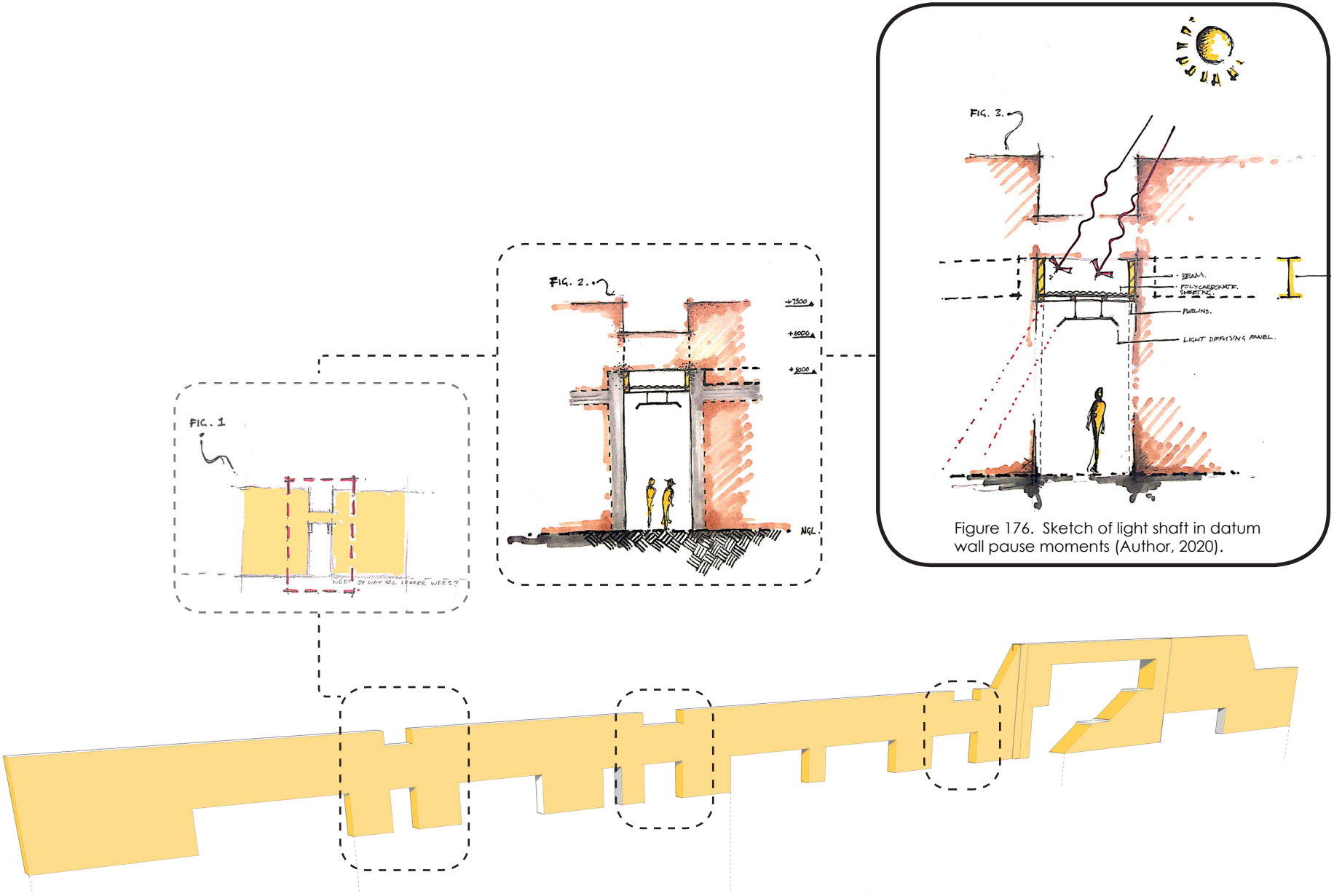


Figure 176. Sketch of light shaft in datum wall pause moments (Author, 2020).

8.v. Developing the section to respond to function

[1]_ The **Venturi Effect.**

The internal functions of the building dictated the morphological development in response to the heat released by the process of distillation. The venturi effect allows heat build up to the top of the still rooms to escape which draws cool air through the public spaces.

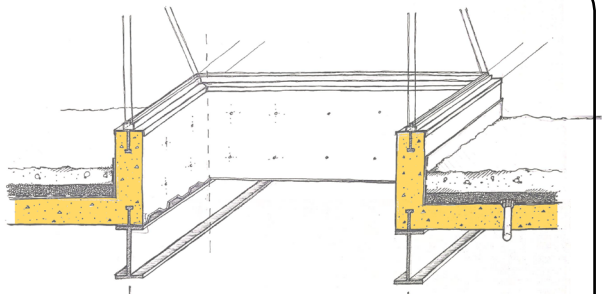


Figure 177, Section sketch of composite beam possibility (Author, 2020).

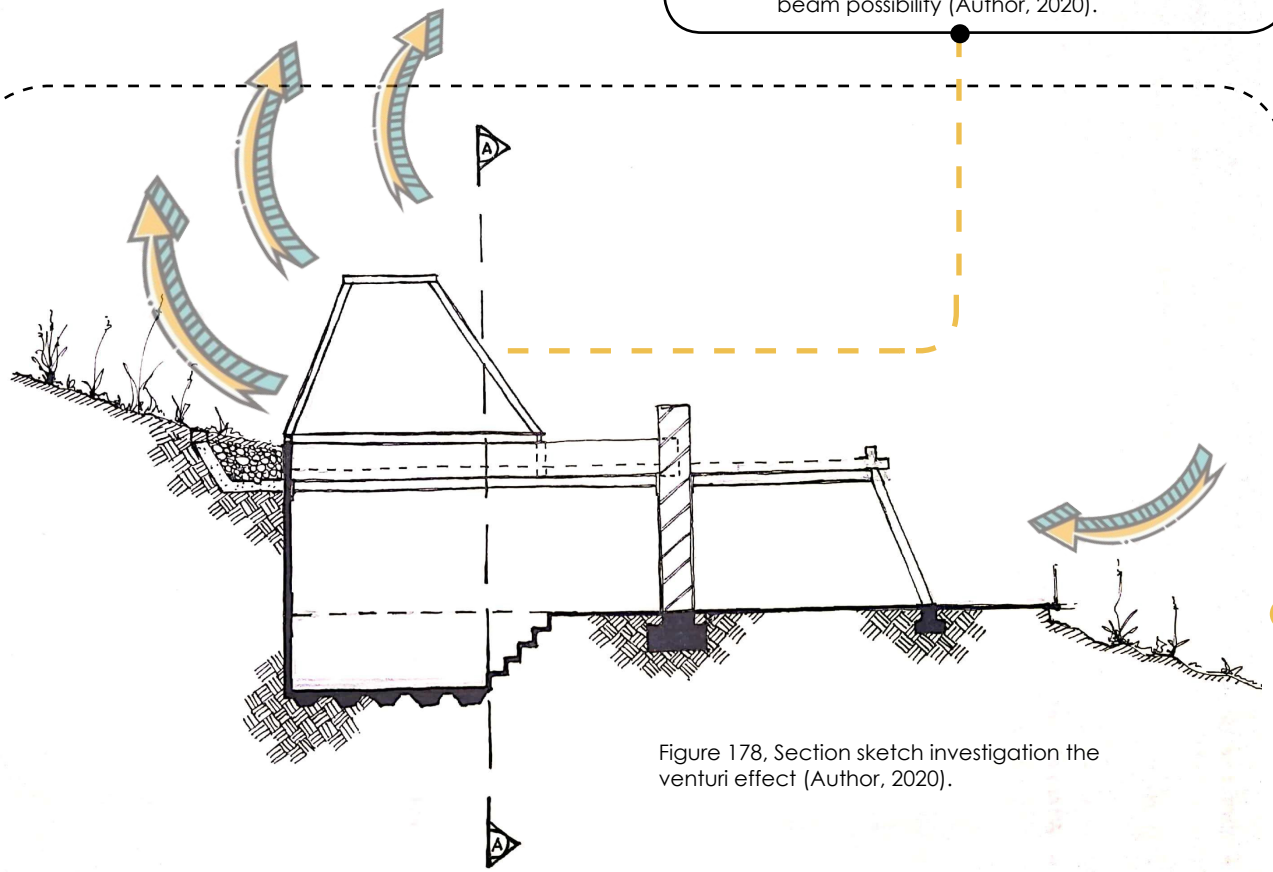


Figure 178, Section sketch investigation the venturi effect (Author, 2020).

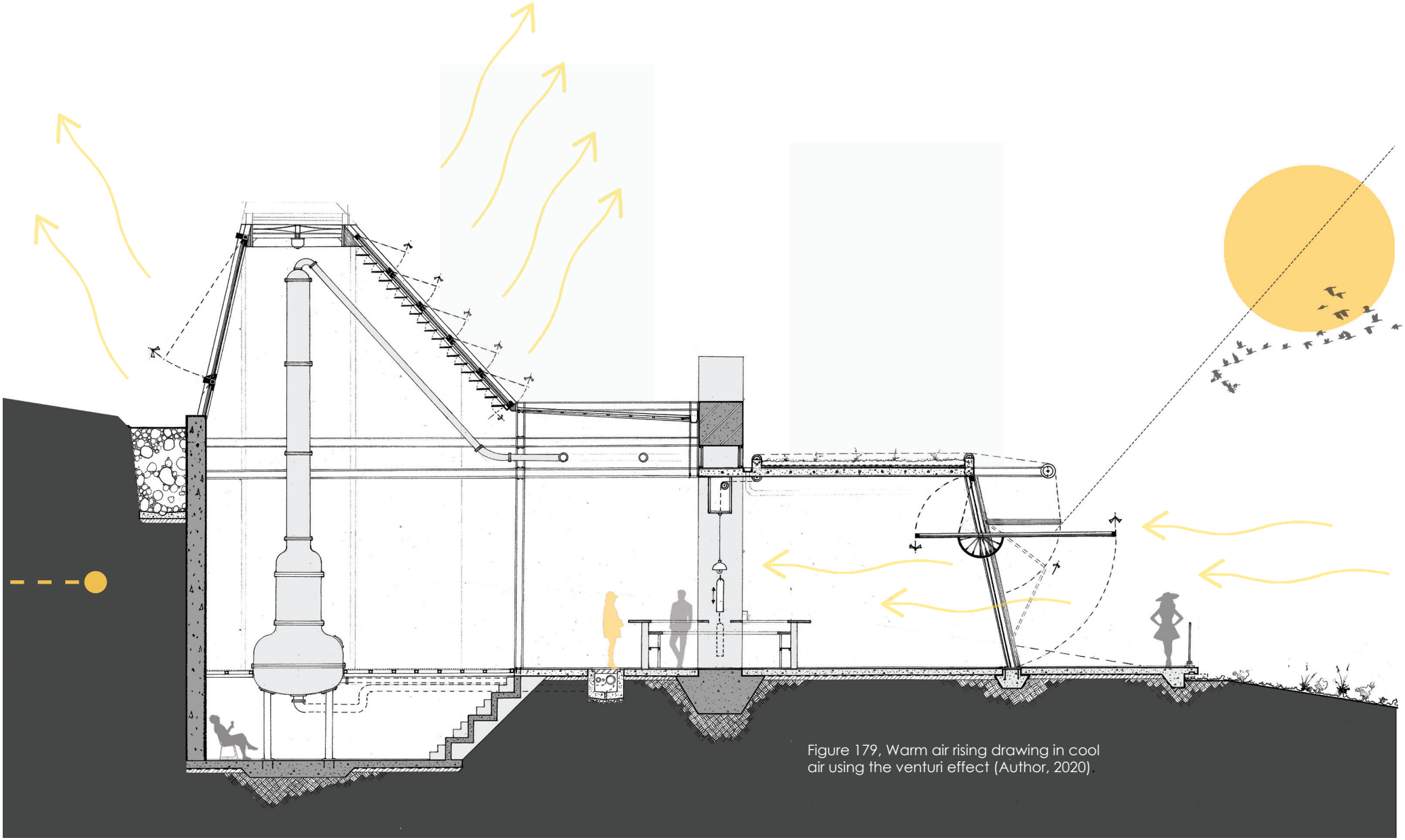
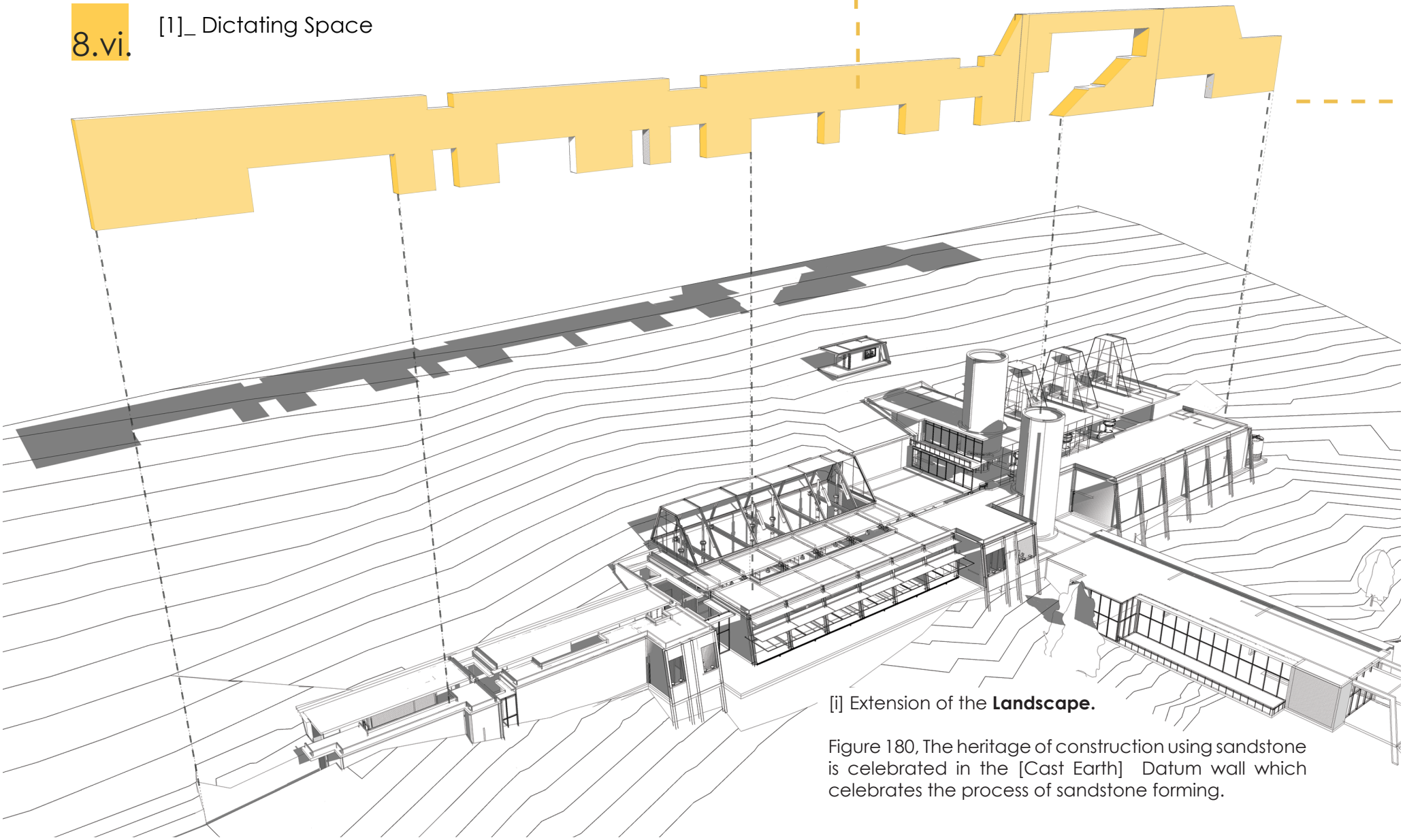


Figure 179, Warm air rising drawing in cool air using the venturi effect (Author, 2020).

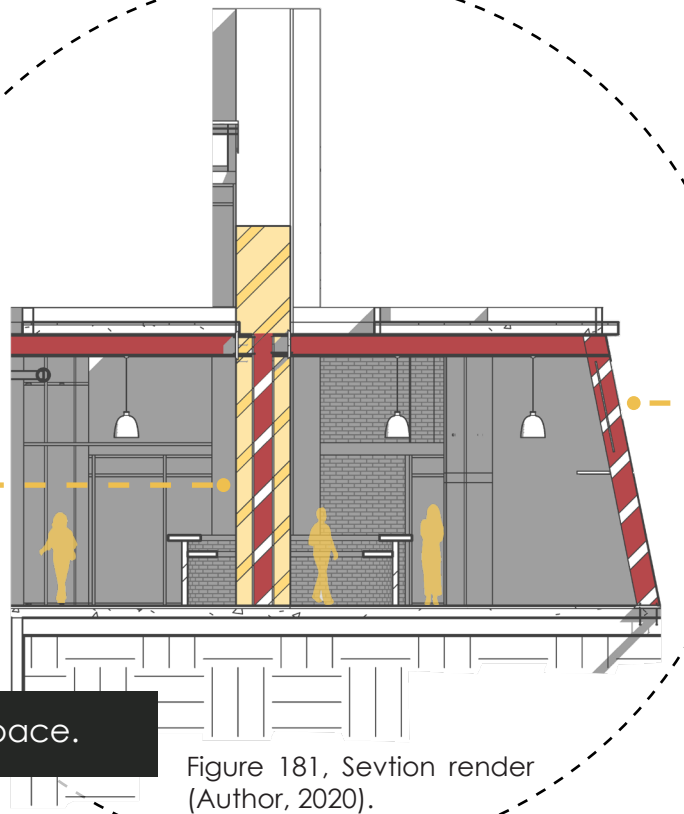
8.vi. [1]_ Dictating Space



[i] Extension of the **Landscape.**

Figure 180, The heritage of construction using sandstone is celebrated in the [Cast Earth] Datum wall which celebrates the process of sandstone forming.

FUNCTIONAL DICHOTOMY - [A PROCESS WITHIN].

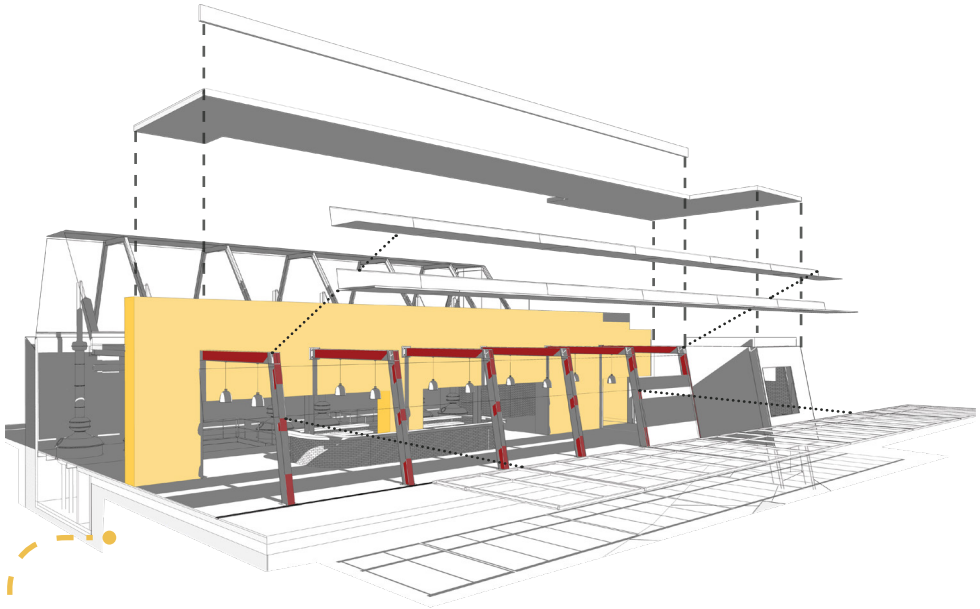


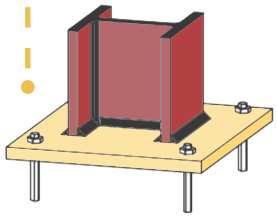
Organising Space.

Figure 181, Sevtion render (Author, 2020).

[ii] **Linearity** Of The Process.

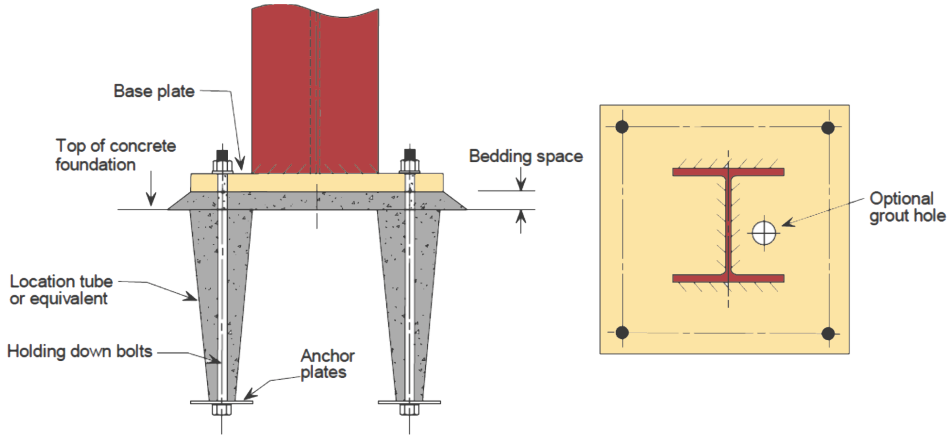
The linear datum wall organizes the spaces into the predominant functions; [A. - Tour Route] functional - non-public spaces which are only viewed during guided tours, and [B. - Return Route] the public spaces which are accessed after the guided tour on return. Thereby taking the user on the same linear process of Gin distillation.





[iii.] **Connecting** Stereotomic and Tectonic structures.

The distribution of the load of the building is carried by the datum wall and displaced through structural I-Beams to the foundations. The [base plate] as shown in Figure 181, evenly distributing the load.





[iii.] **Linearity** Of The Process.

The linear datum wall organizes the spaces into the predominant functions; [A. - Tour Route] functional - non-public spaces which are only viewed during guided tours, and [B. - Return Route] the public spaces which are accessed after the guided tour on return. Thereby taking the user on the same linear process of Gin distillation.

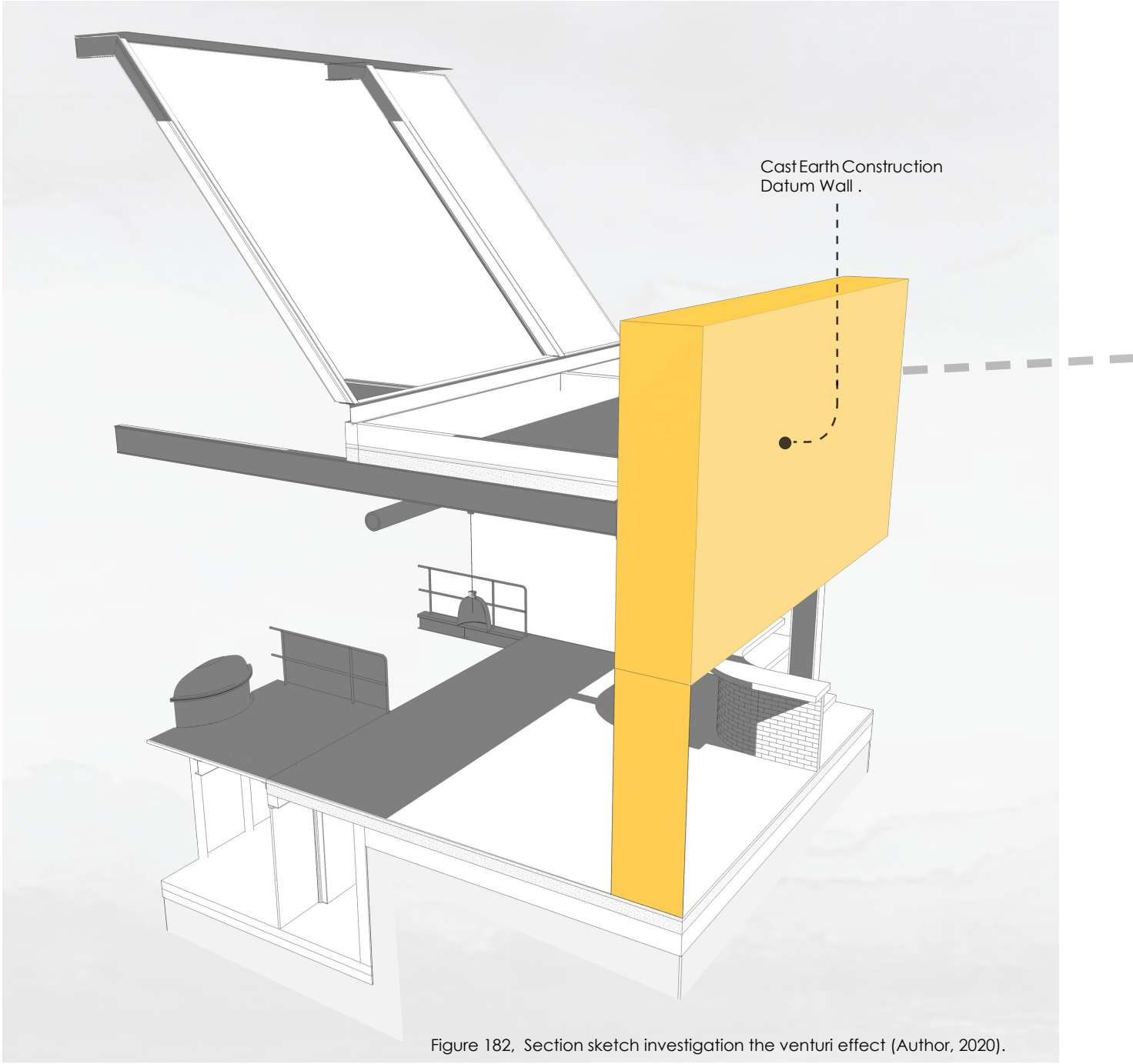
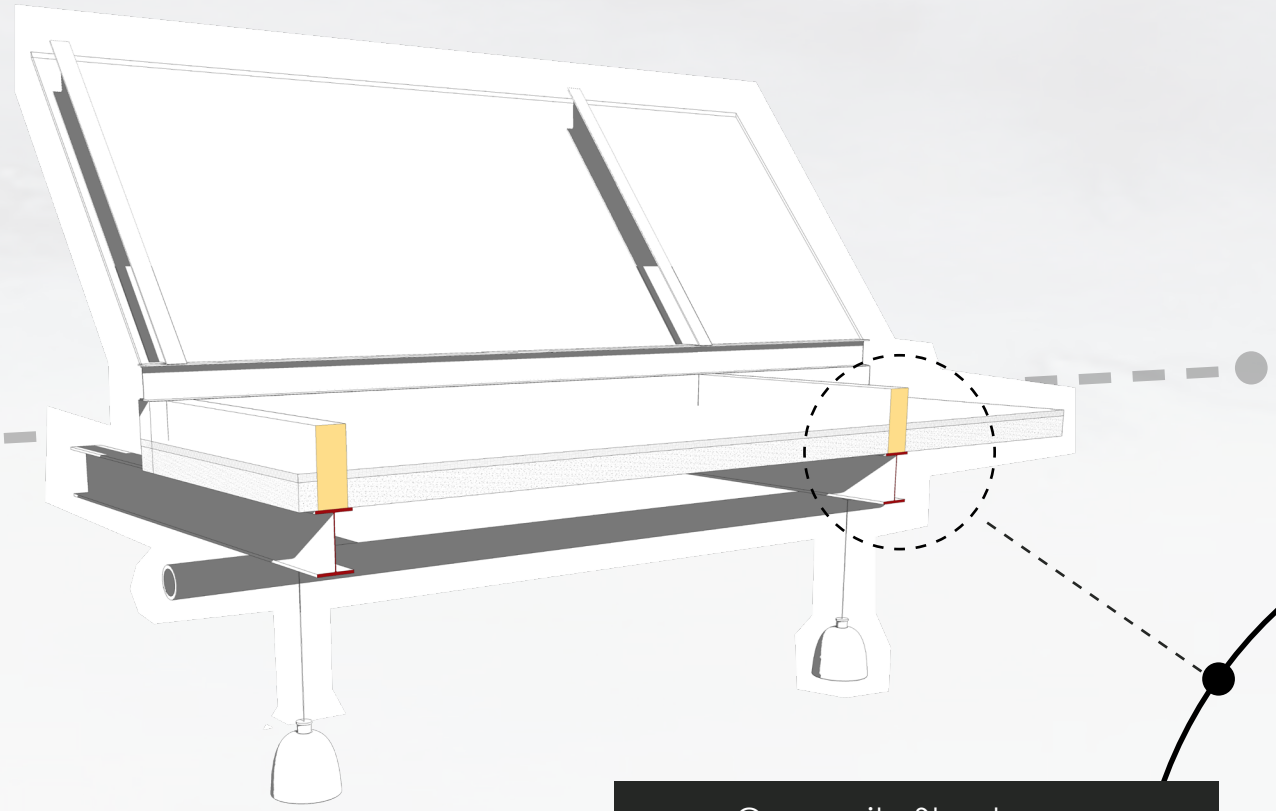
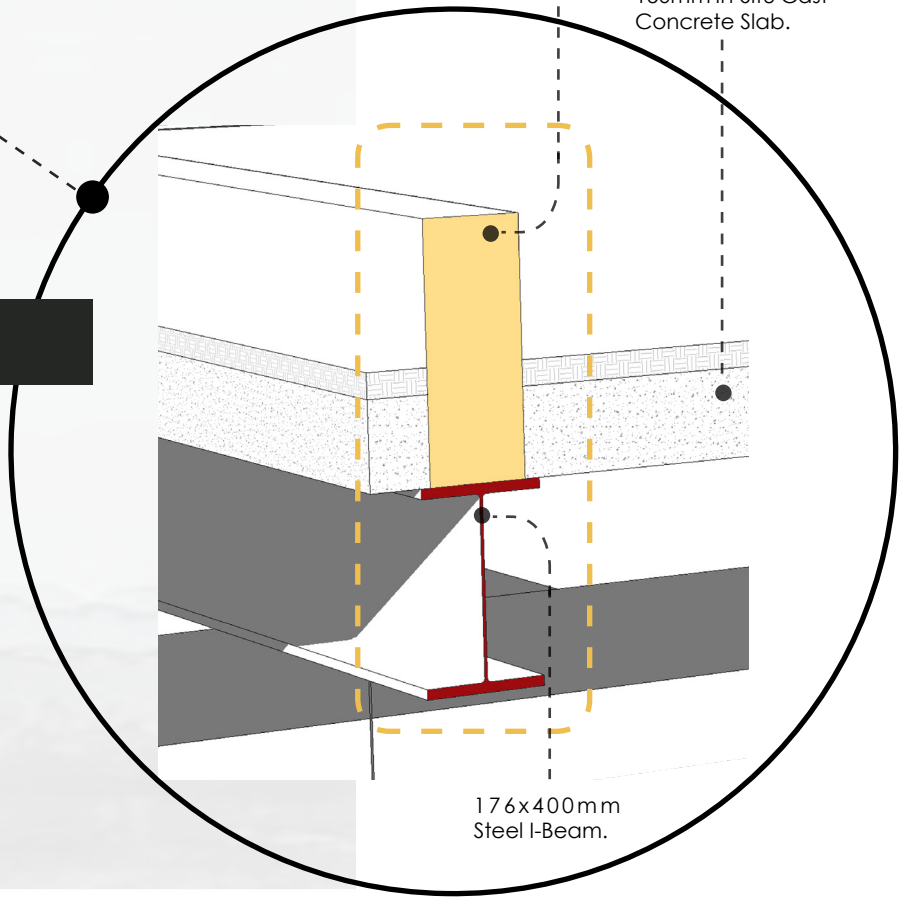


Figure 182, Section sketch investigation the venturi effect (Author, 2020).





Composite Structure.

[iv.] **Combining Properties to serve Function**.

Figure 183, The Combination of a stereotomic spine and tectonic spaces reaching out thereof has required innovative investigation into how these elements can serve a coherent functional purpose.

The [Composite Beam] uses shear studs to tie the I-Beam onto the in-situ cast concrete slab and beam to form a whole.

[1]_ Entrance & Water Storage Silos

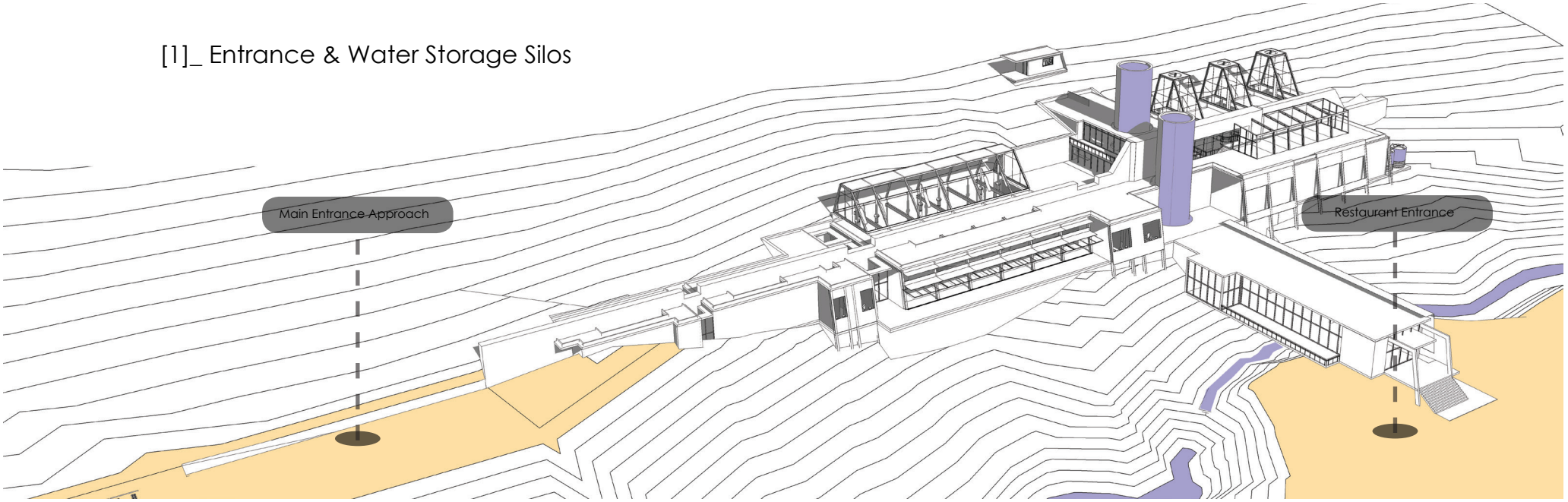


Figure 184, Render of building showing zoned spaces (Author, 2020).

DICTATING A LINEAR PROCESS ALONG THE DATUM.

Approach & Industrial Typology

[2]_ IBR response to industrial typology

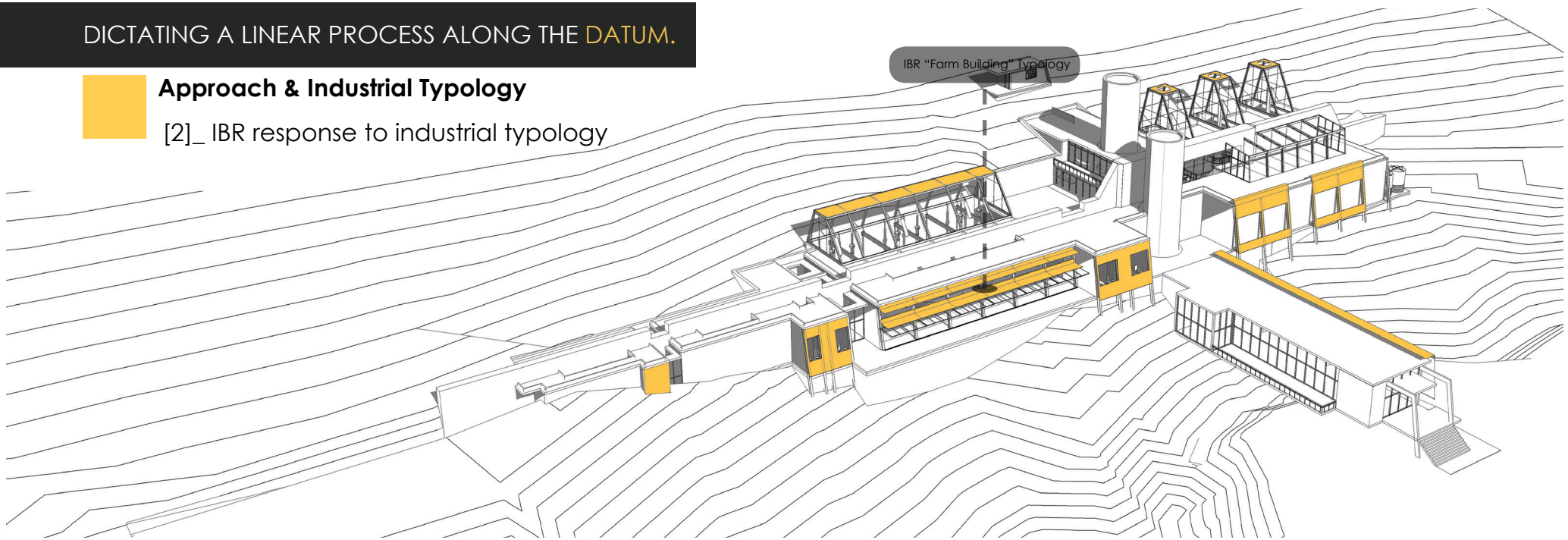


Figure 185 Render of building showing zoned spaces (Author, 2020).

[3]_ Cast Earth construction Datum Wall

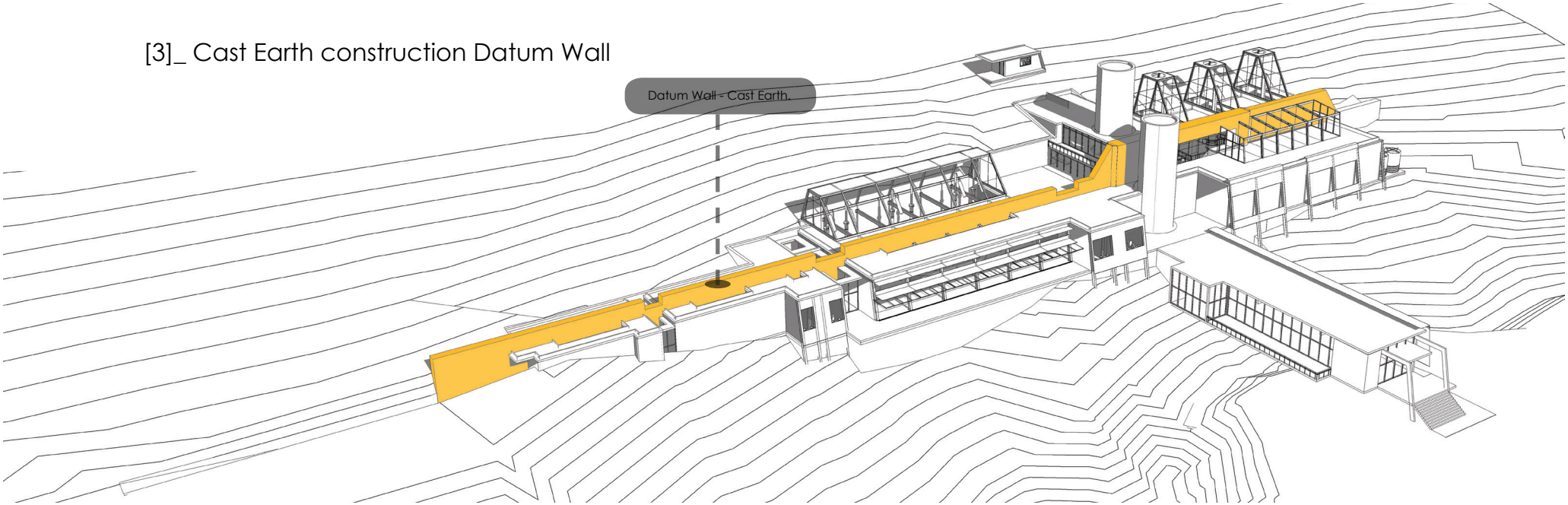


Figure 186 Render of building showing zoned spaces (Author, 2020).

DICTATING A LINEAR PROCESS ALONG THE DATUM.

Stereotomic Spine & Green Roofs.

[4]_ Cast Earth construction Datum Wall

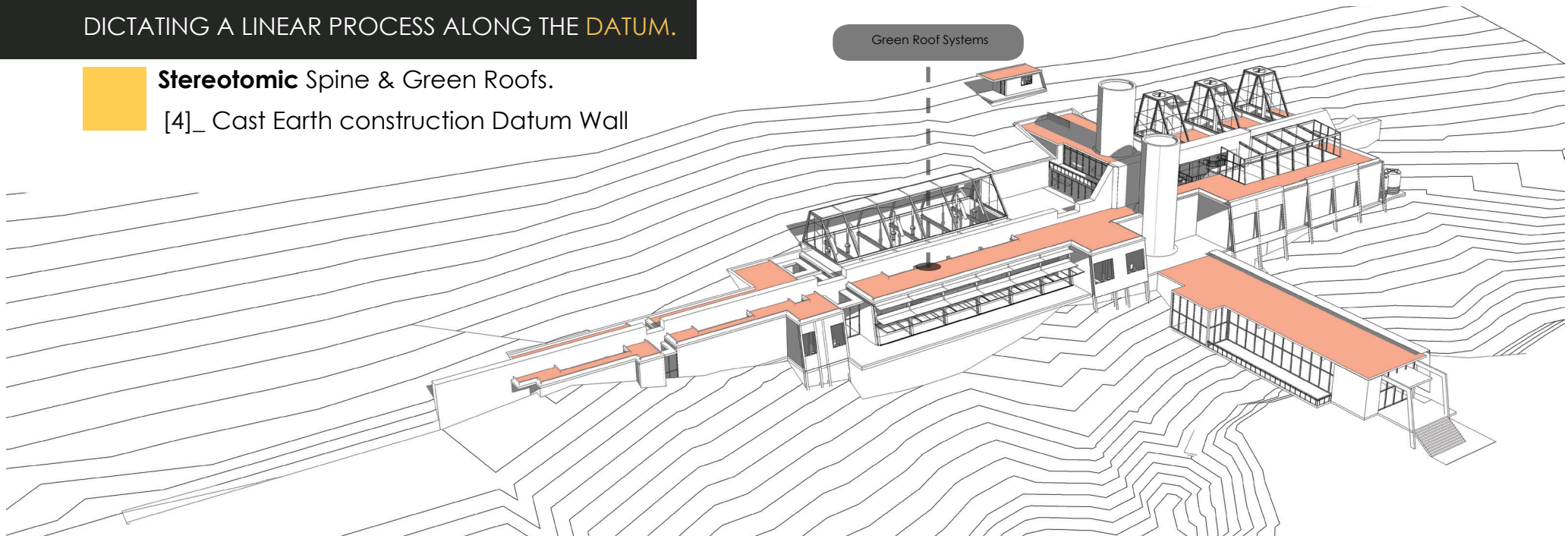
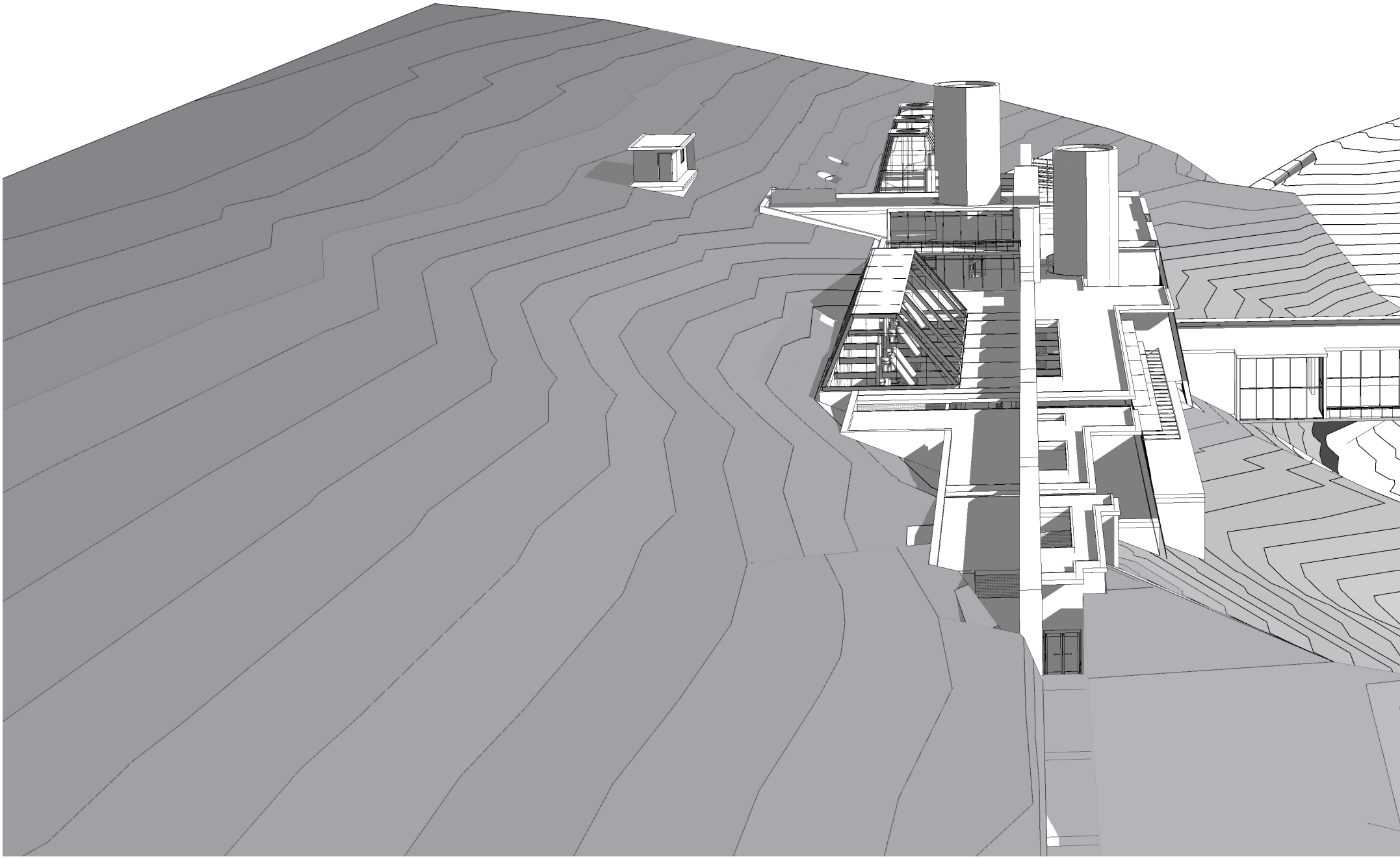


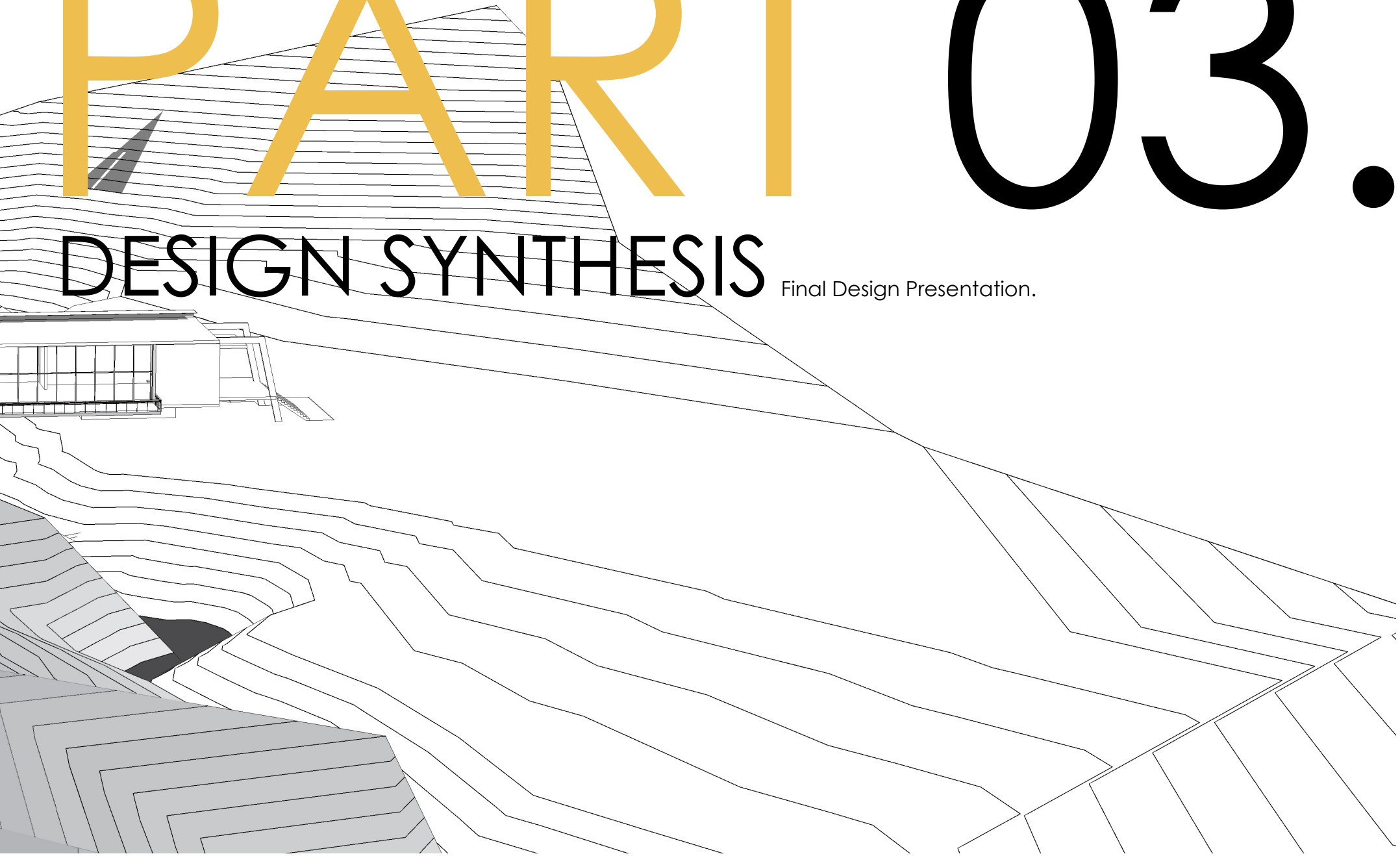
Figure 187, Render of building showing zoned spaces (Author, 2020).



PART 03.

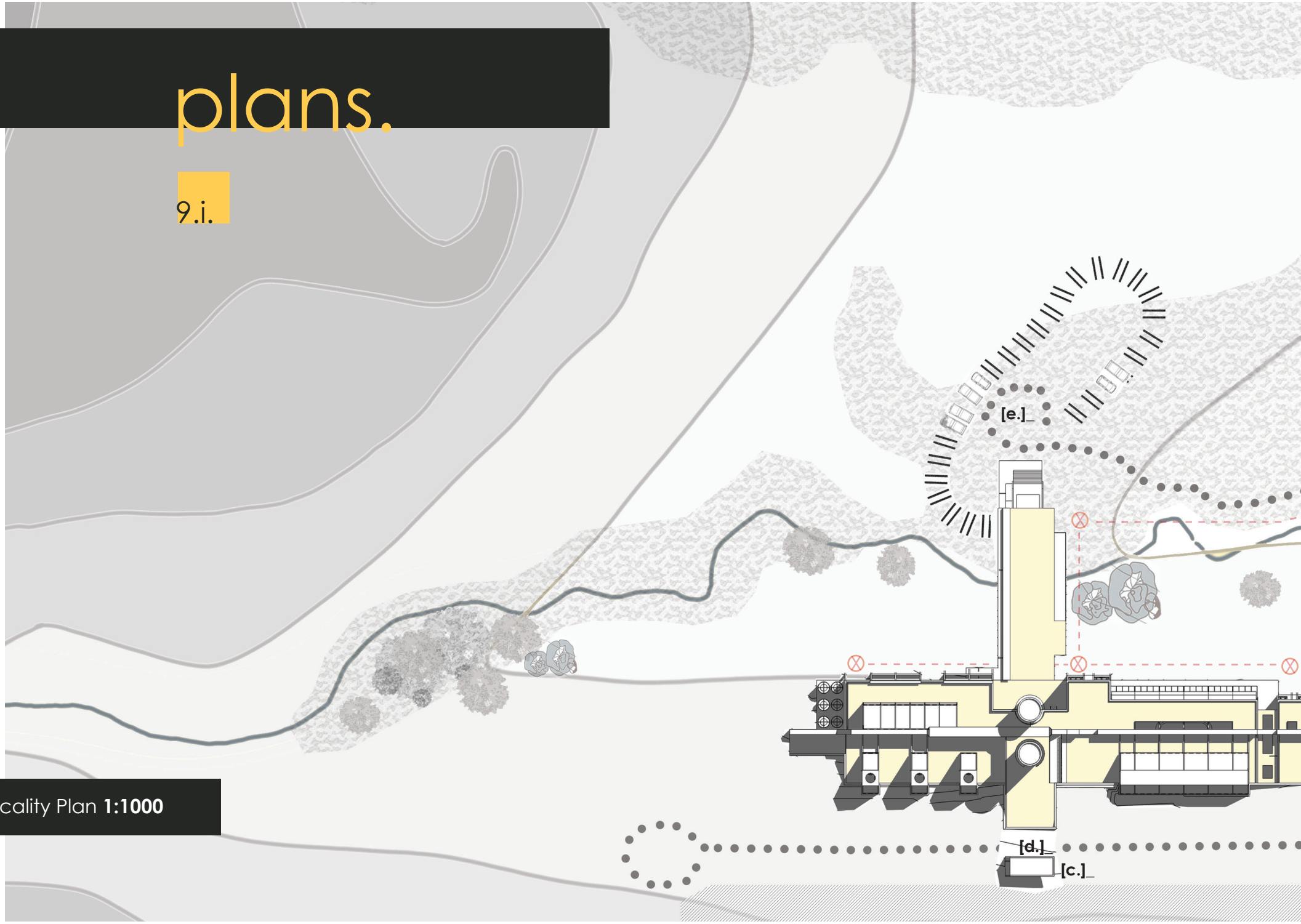
DESIGN SYNTHESIS

Final Design Presentation.

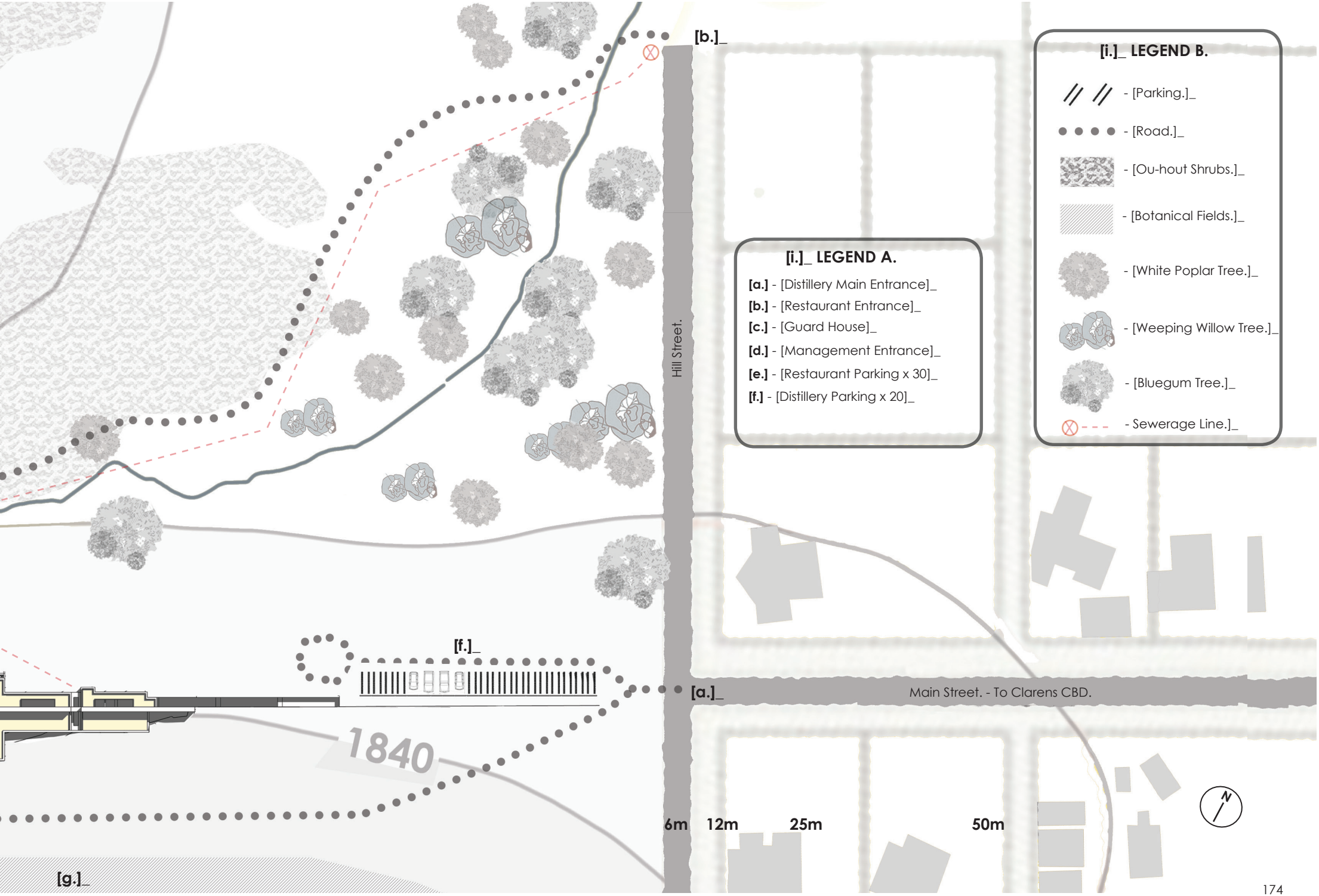


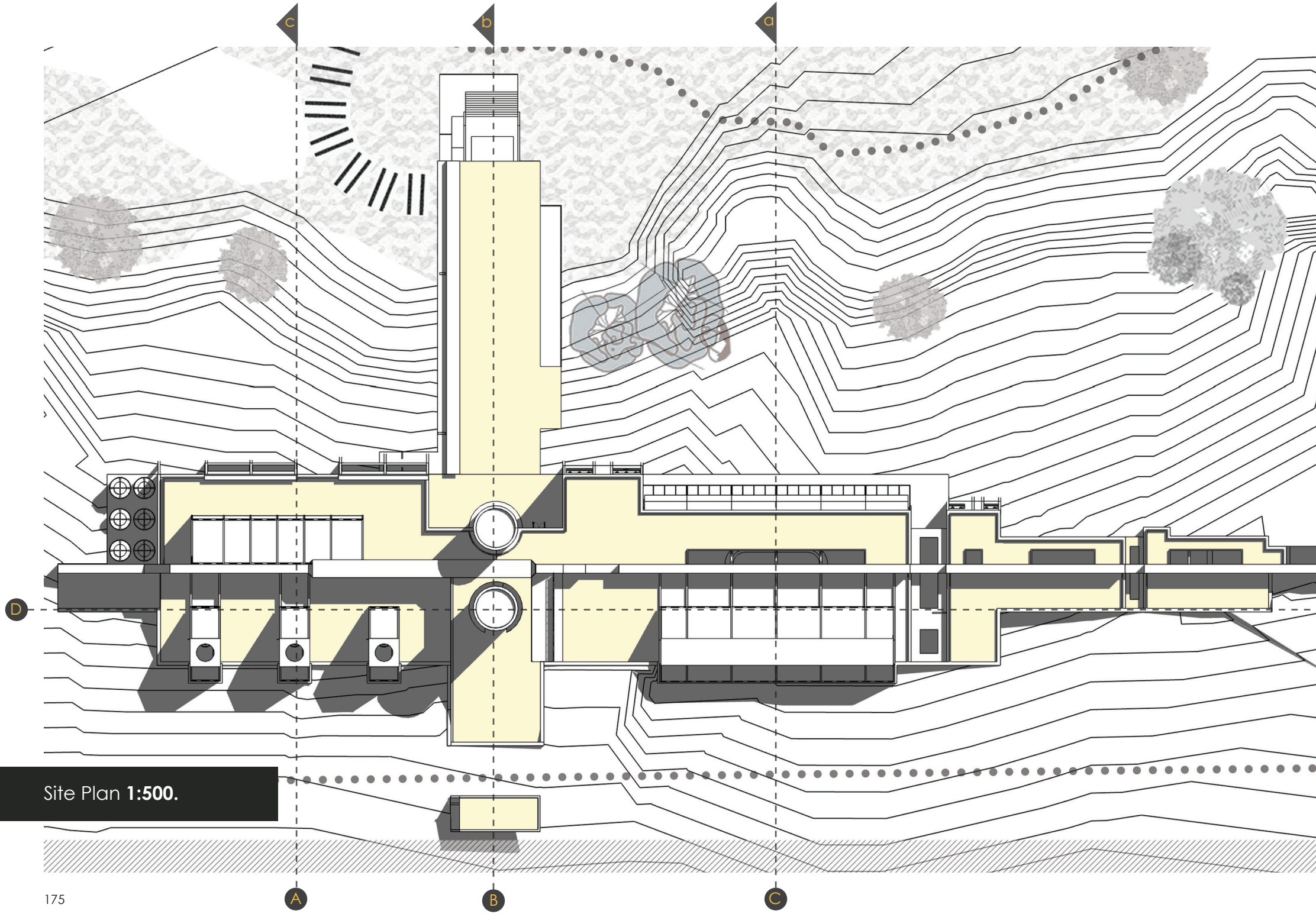
plans.

9.i.

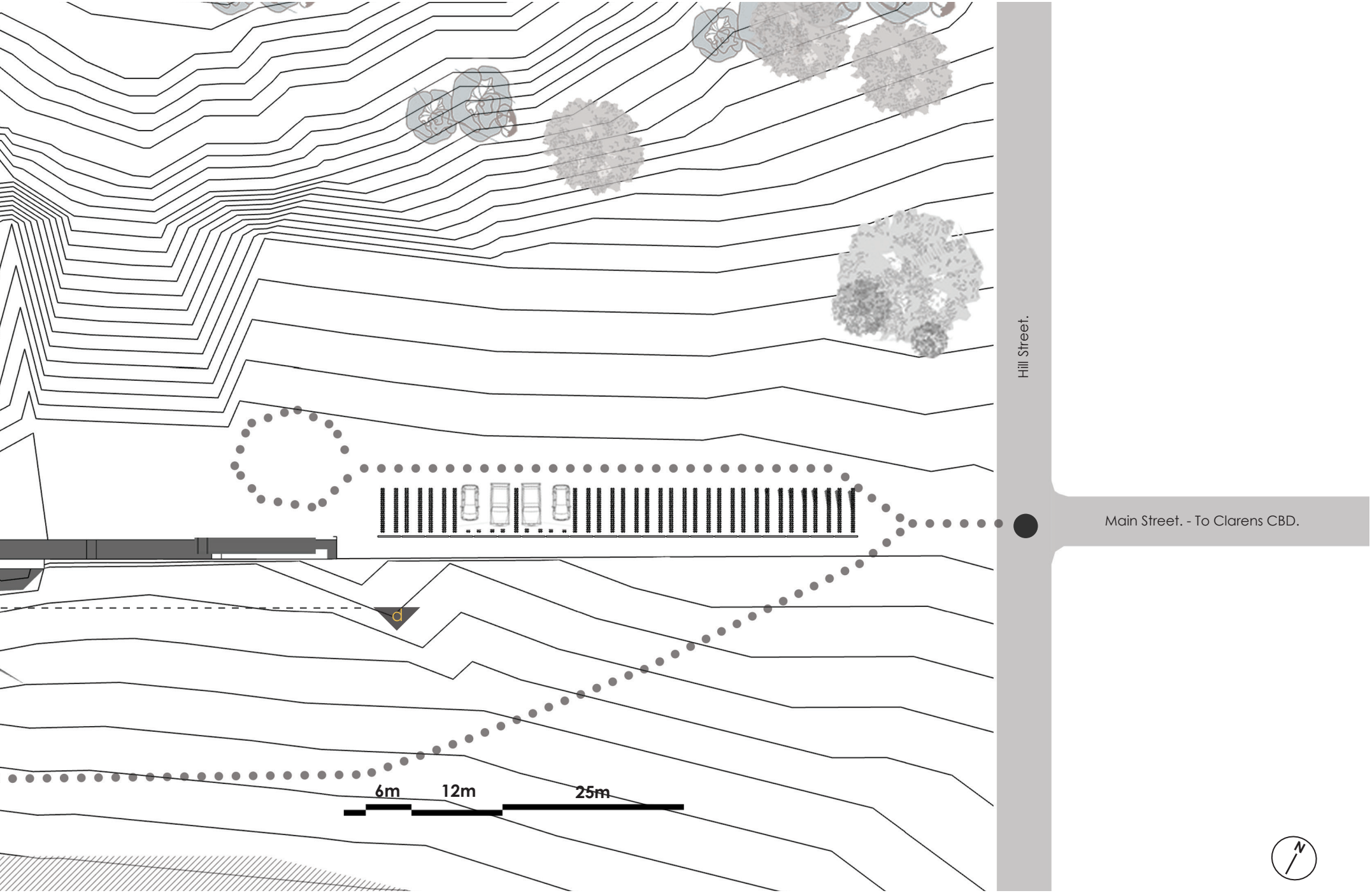


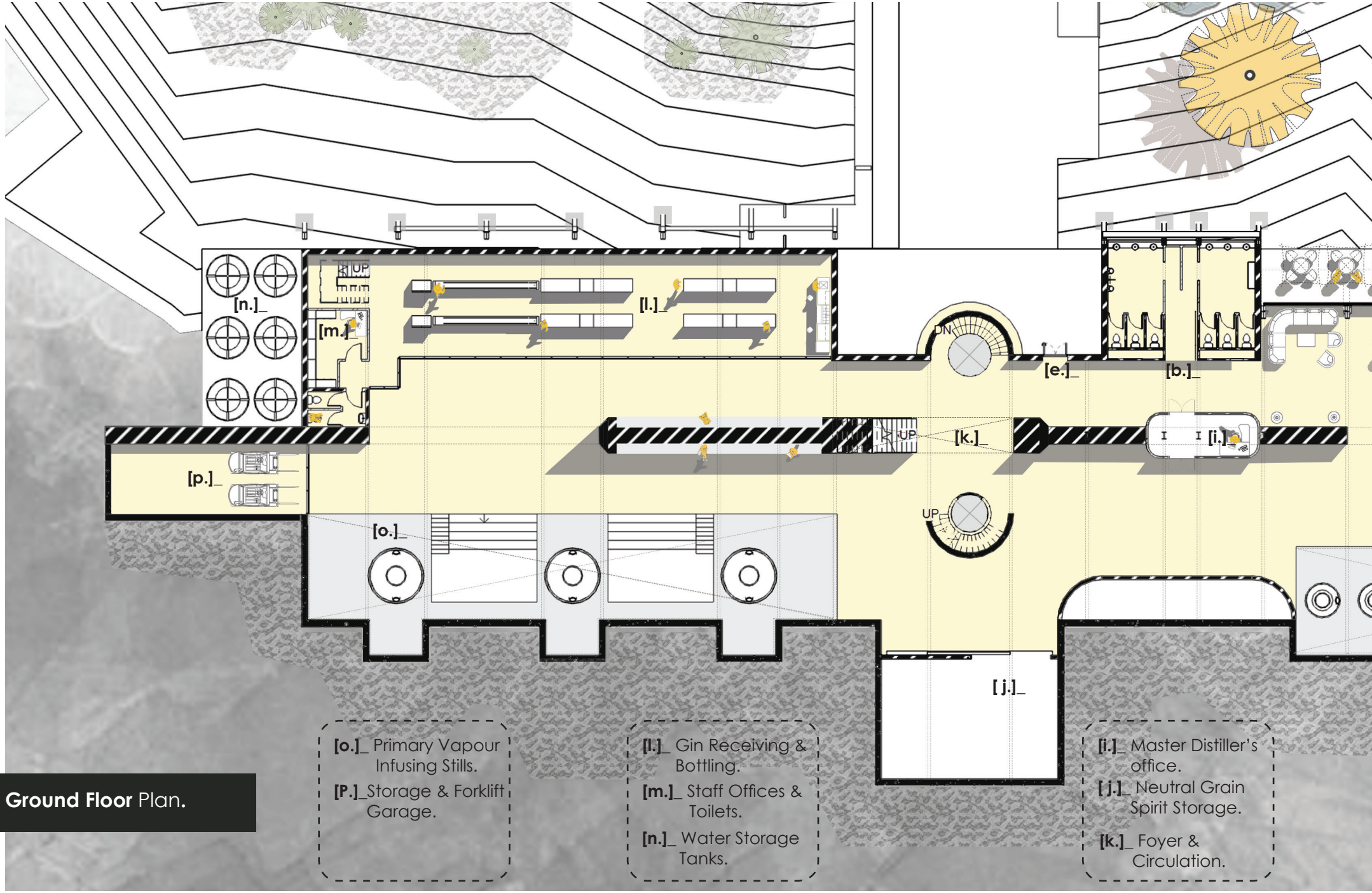
Locality Plan **1:1000**


[b.]_
Hill Street.
[i.]_ LEGEND A.
[a.] - [Distillery Main Entrance]_
[b.] - [Restaurant Entrance]_
[c.] - [Guard House]_
[d.] - [Management Entrance]_
[e.] - [Restaurant Parking x 30]_
[f.] - [Distillery Parking x 20]_
[i.]_ LEGEND B.
- [Parking.]_
- [Road.]_
- [Ou-hout Shrubs.]_
- [Botanical Fields.]_
- [White Poplar Tree.]_
- [Weeping Willow Tree.]_
- [Bluegum Tree.]_
- Sewerage Line.]_
[f.]_
[a.]_
Main Street. - To Clarens CBD.
1840
6m
12m
25m
50m
N
[g.]_



Site Plan **1:500.**


Hill Street.
Main Street. - To Clarens CBD.
d
6m
12m
25m



[o.]_ Primary Vapour Infusing Stills.

[P.]_ Storage & Forklift Garage.

[l.]_ Gin Receiving & Bottling.

[m.]_ Staff Offices & Toilets.

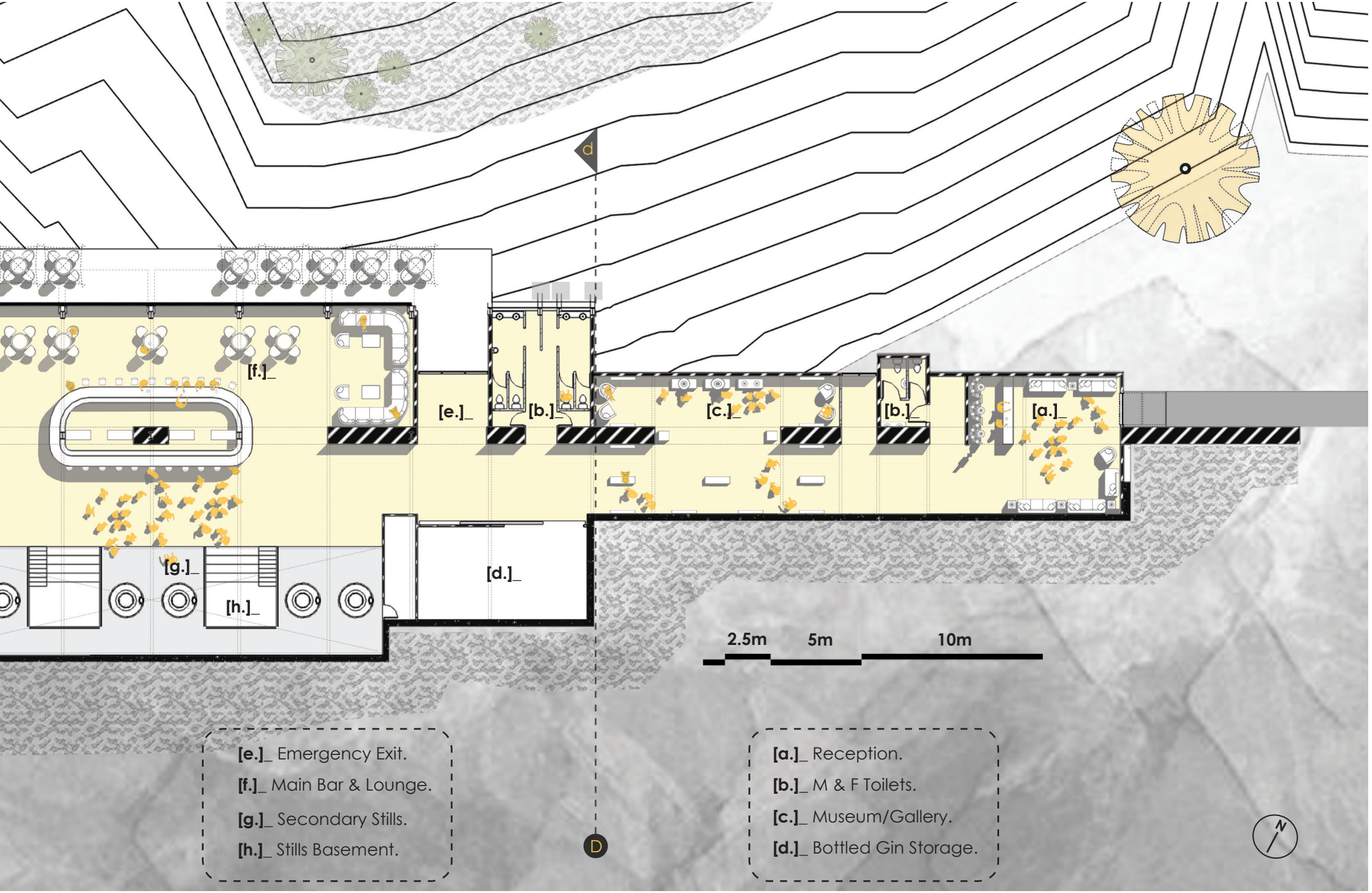
[n.]_ Water Storage Tanks.

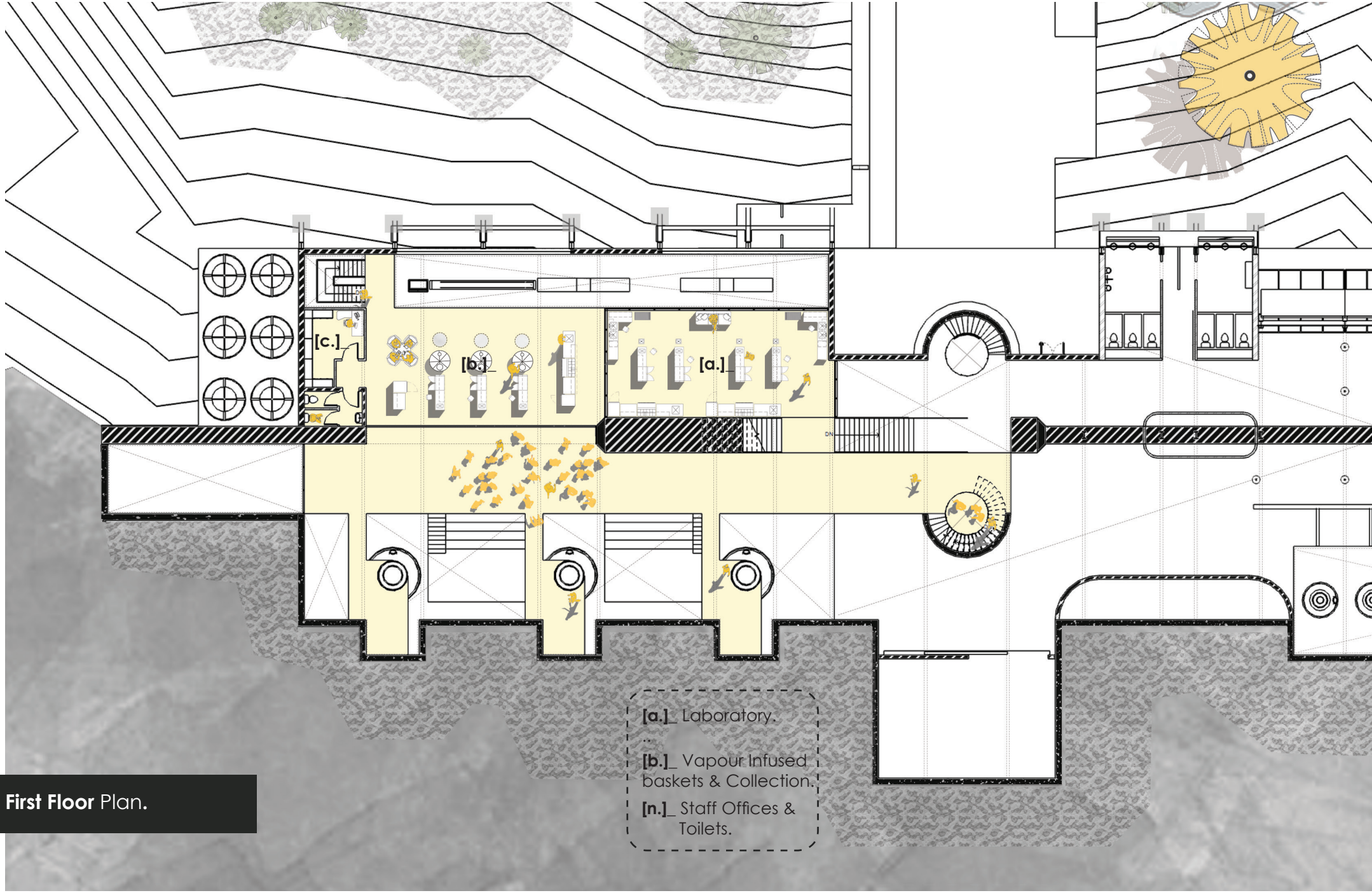
[i.]_ Master Distiller's office.

[j.]_ Neutral Grain Spirit Storage.

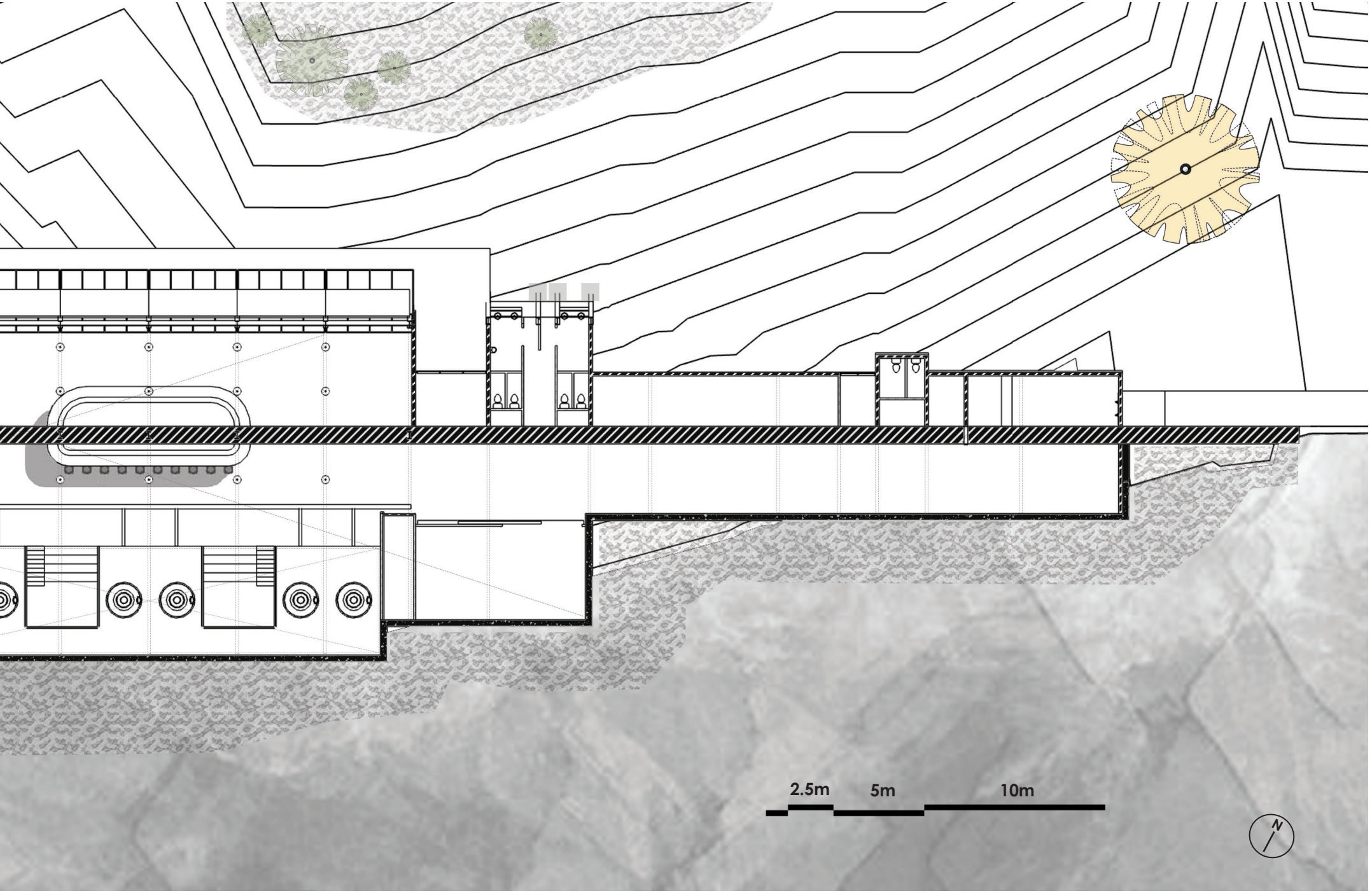
[k.]_ Foyer & Circulation.

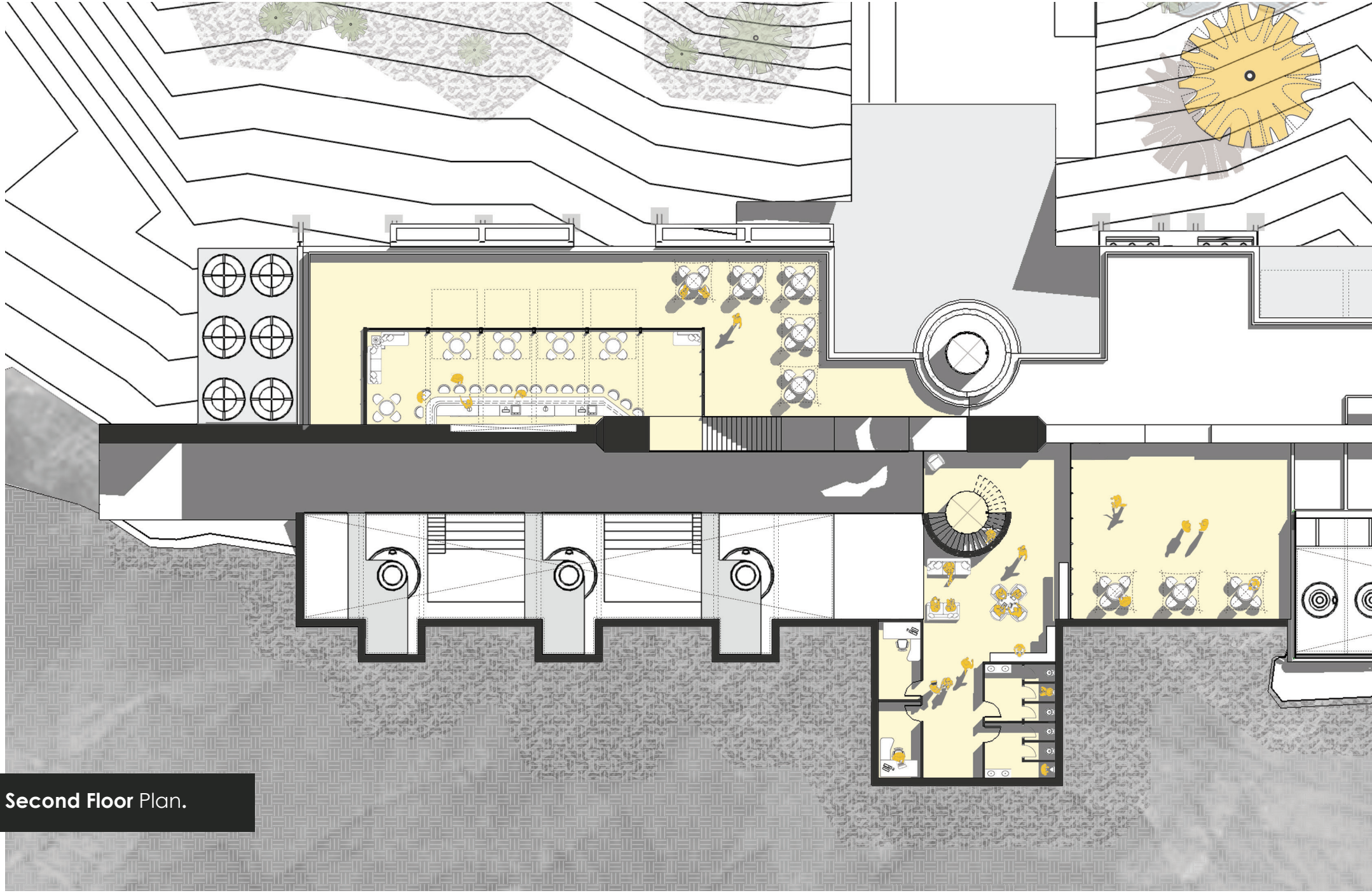
Ground Floor Plan.


d
[f.]_
[e.]_
[b.]_
[c.]_
[b.]_
[a.]_
[g.]_
[h.]_
[d.]_
2.5m
5m
10m
[e.]_ Emergency Exit.
[f.]_ Main Bar & Lounge.
[g.]_ Secondary Stills.
[h.]_ Stills Basement.
D
[a.]_ Reception.
[b.]_ M & F Toilets.
[c.]_ Museum/Gallery.
[d.]_ Bottled Gin Storage.
N

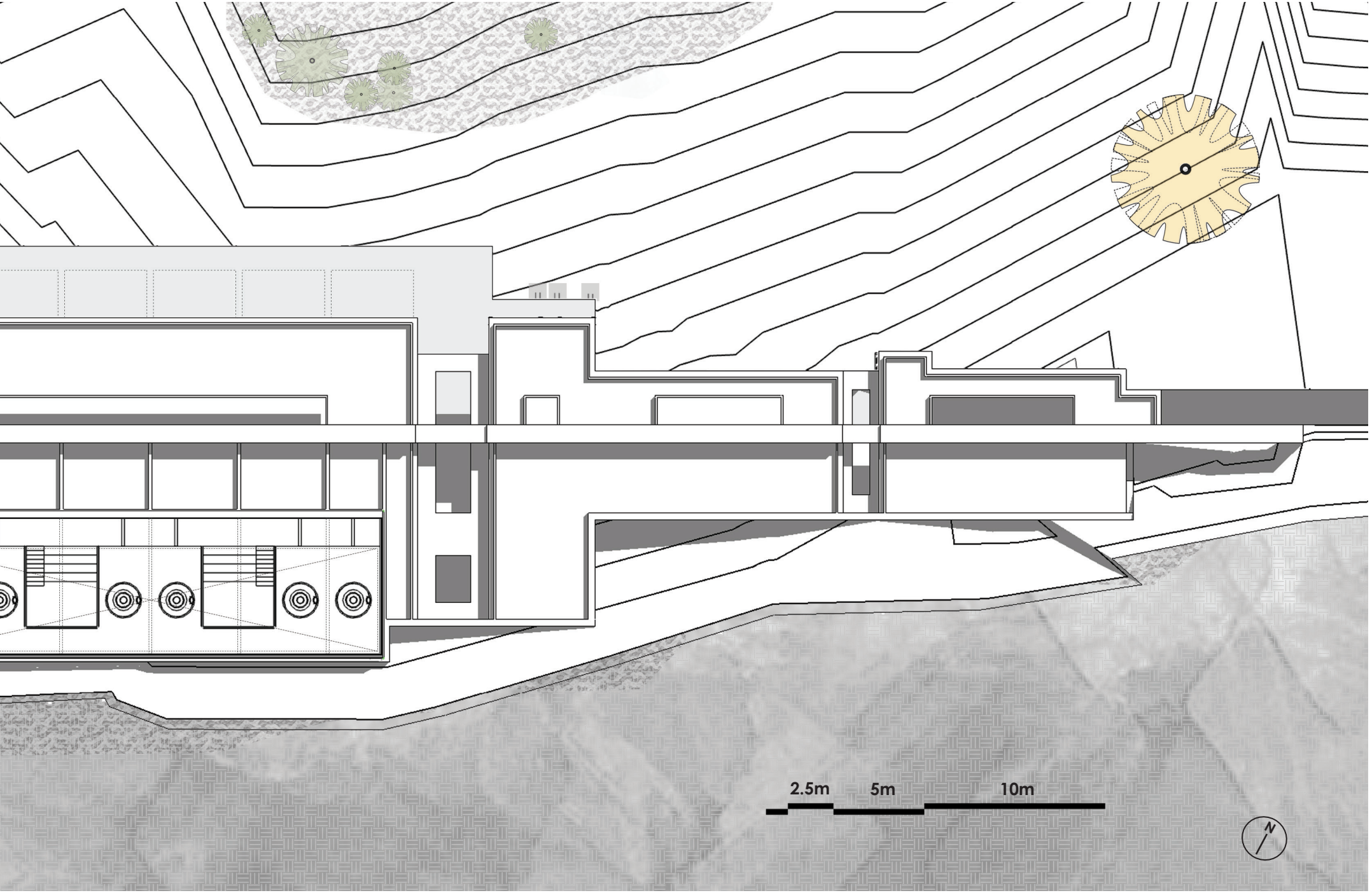


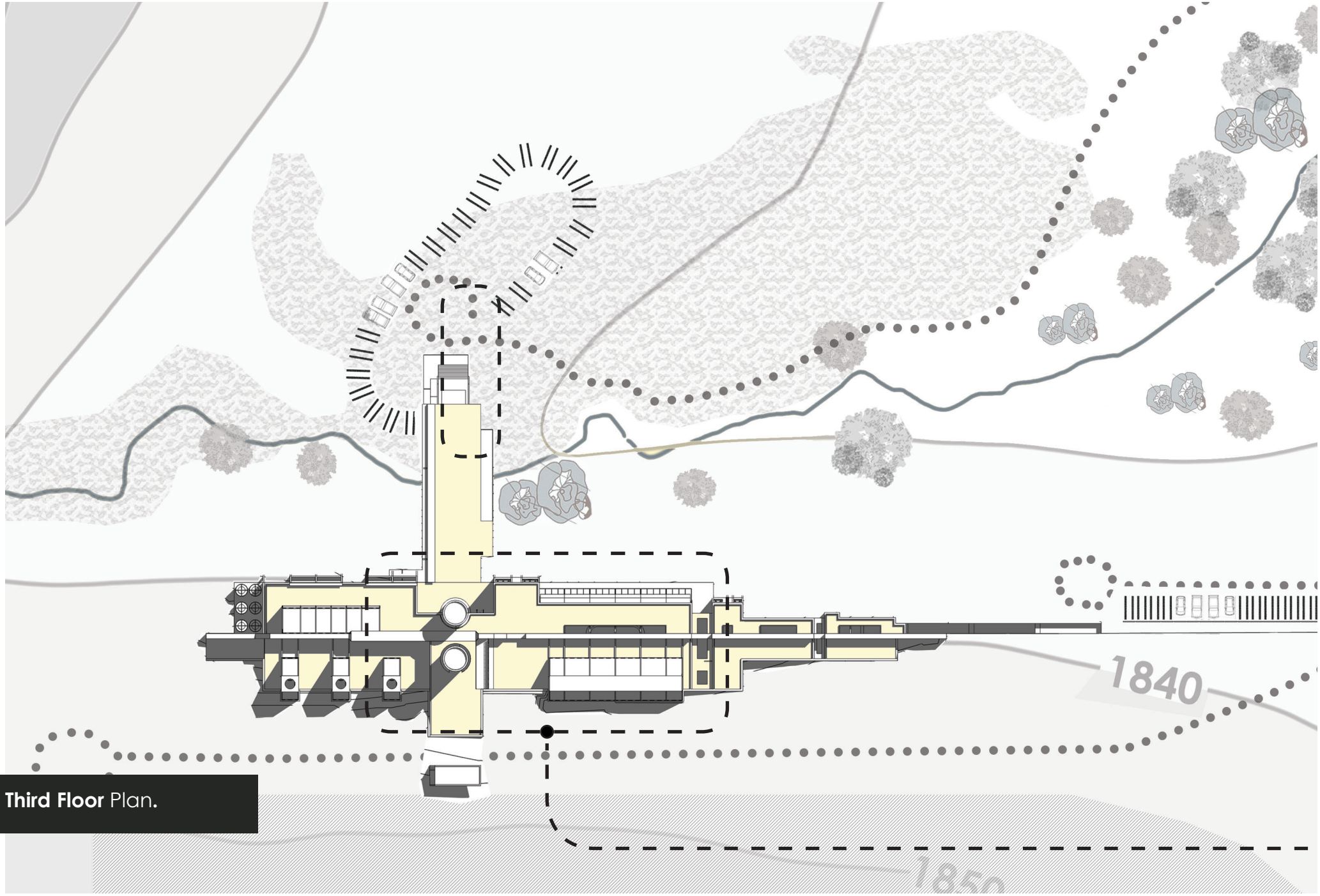
First Floor Plan.


2.5m
5m
10m
N

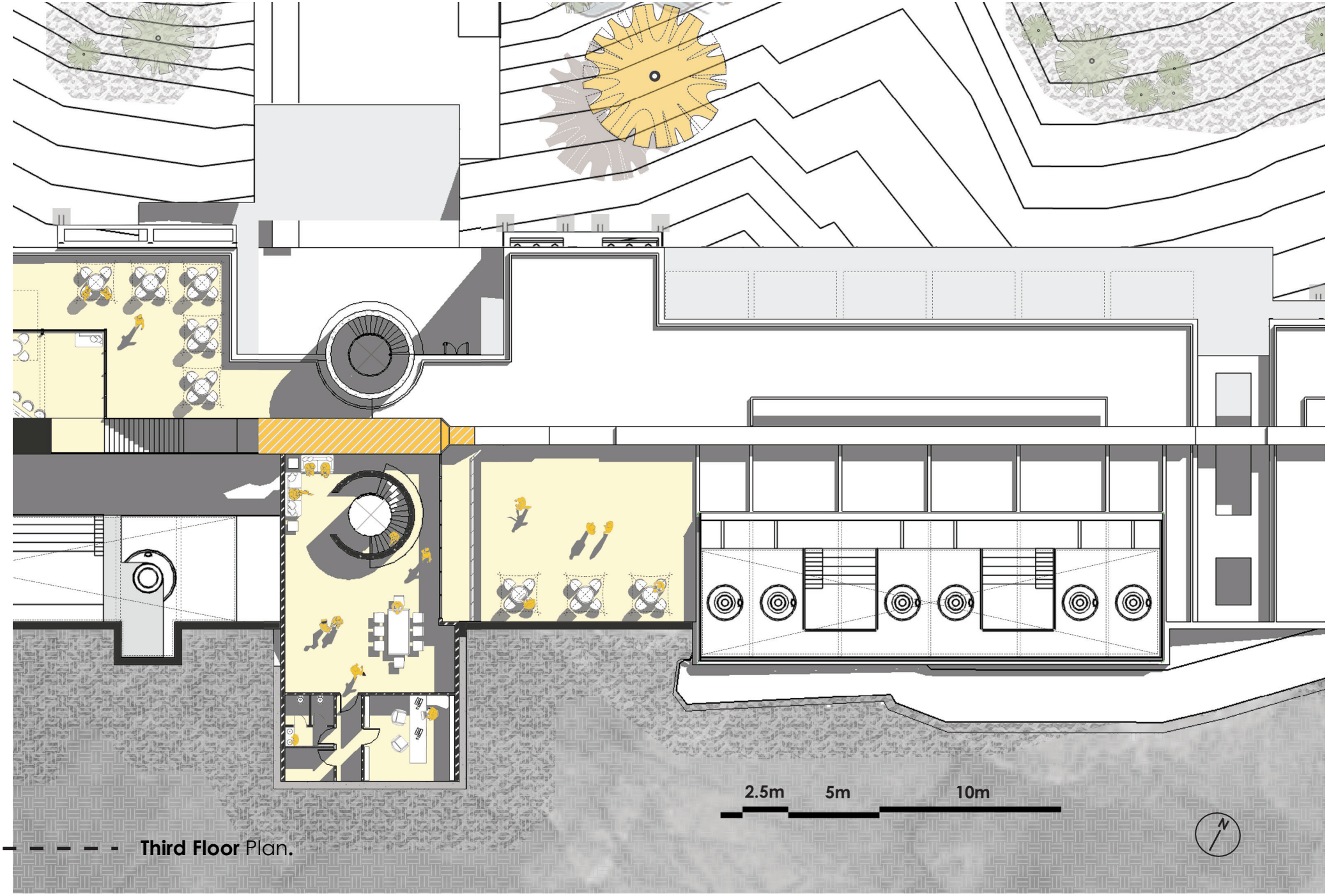


Second Floor Plan.

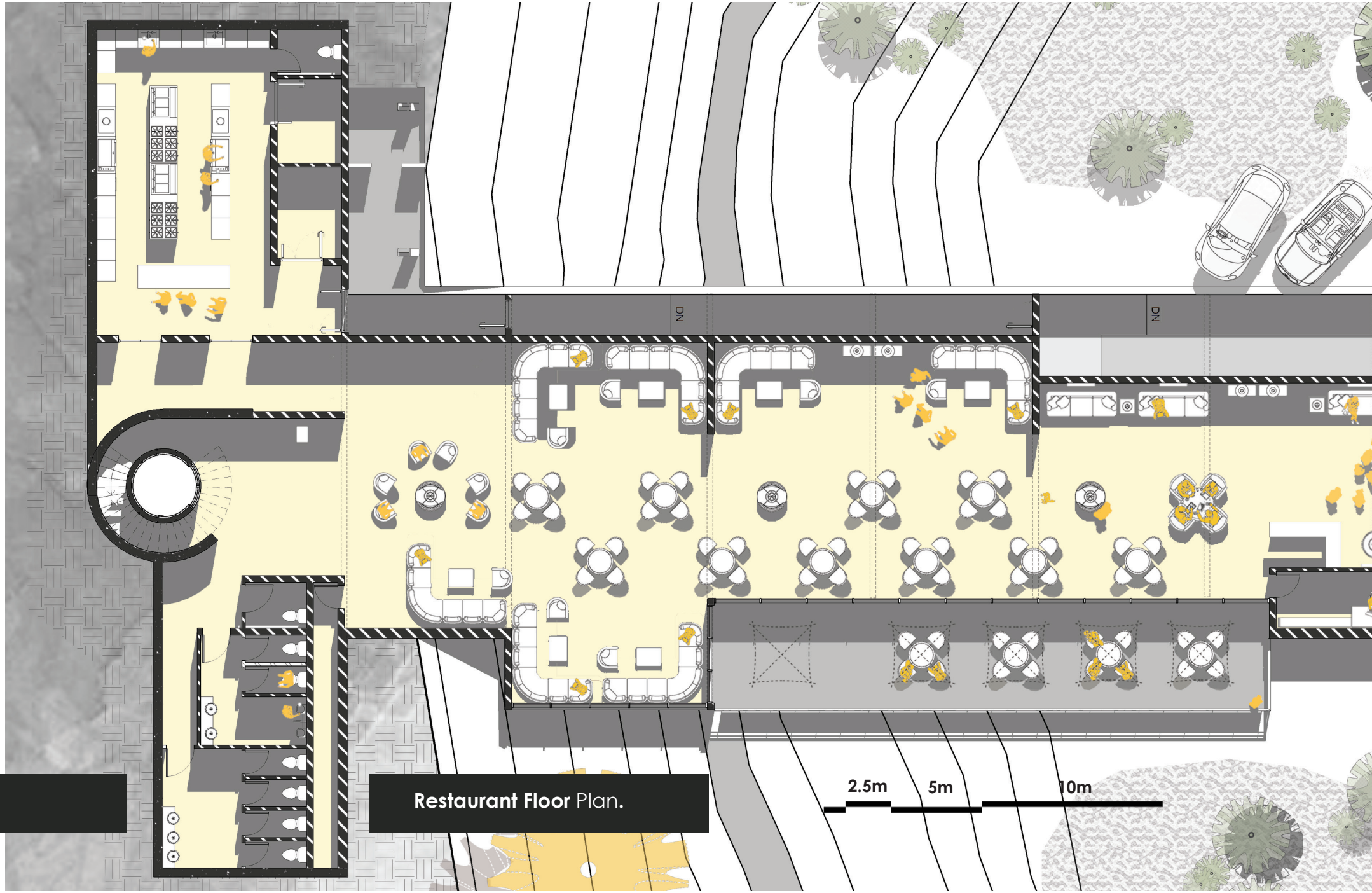

2.5m
5m
10m
N



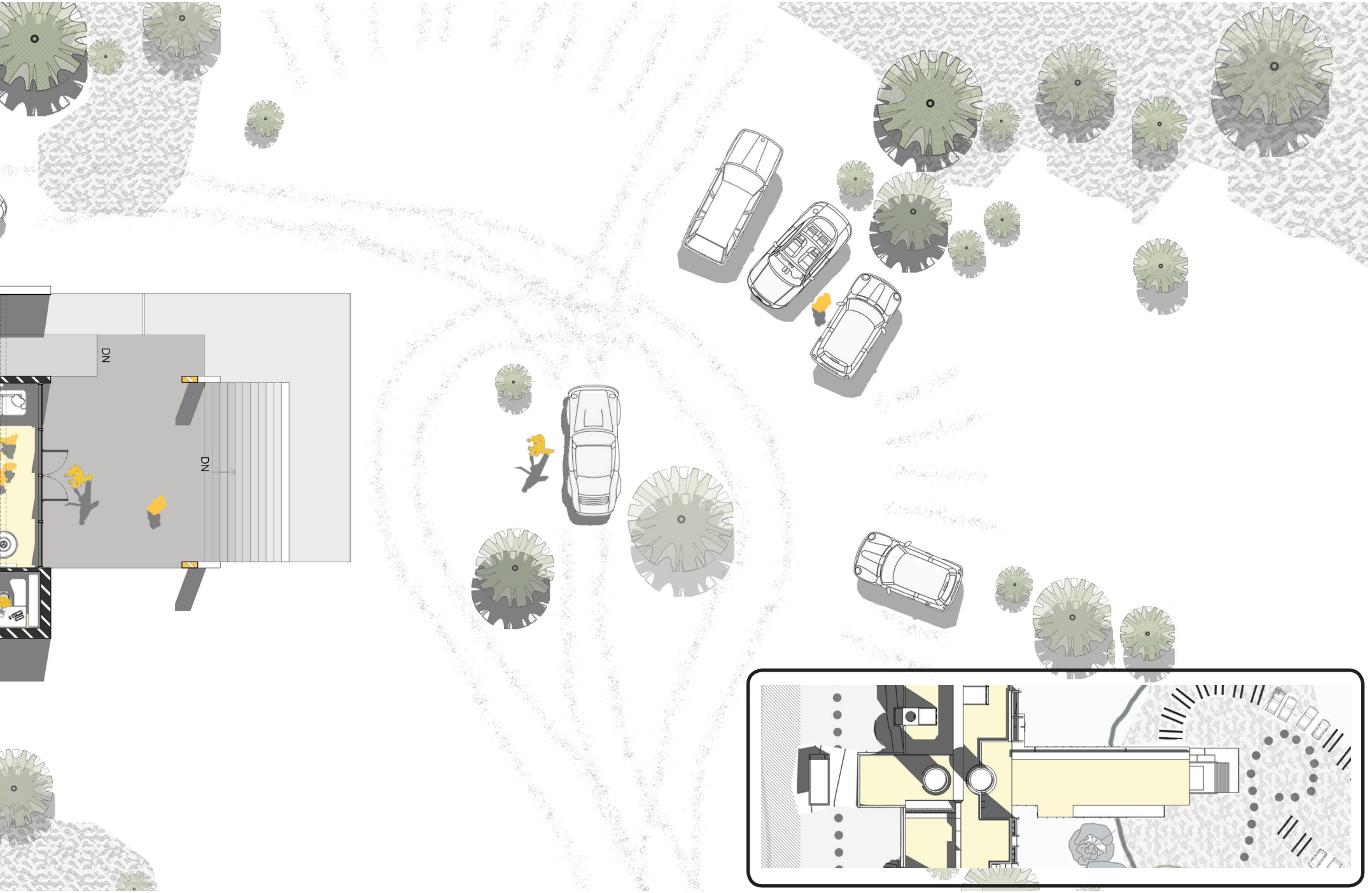
Third Floor Plan.



Third Floor Plan.

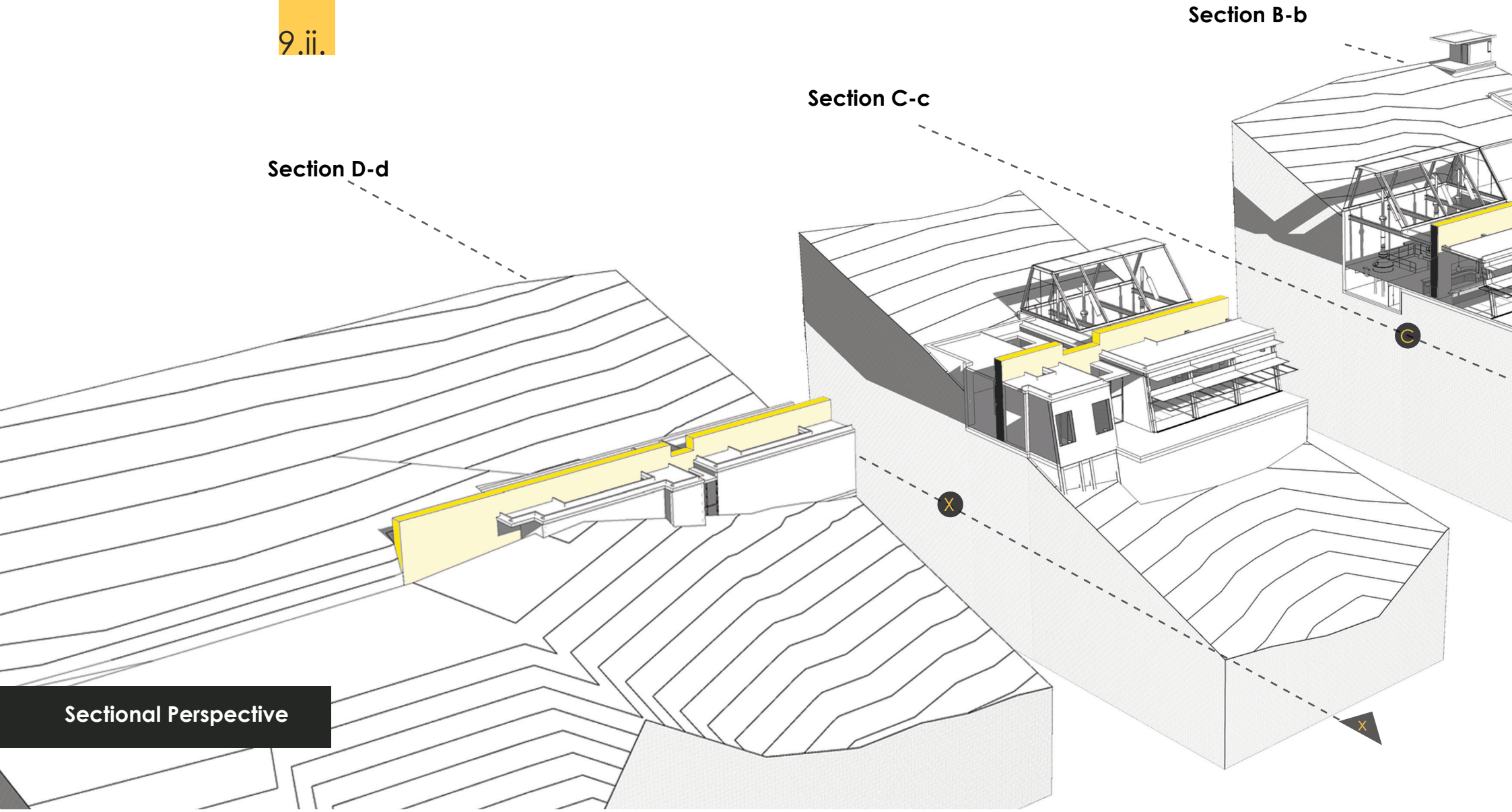


Restaurant Floor Plan.


DN
DN

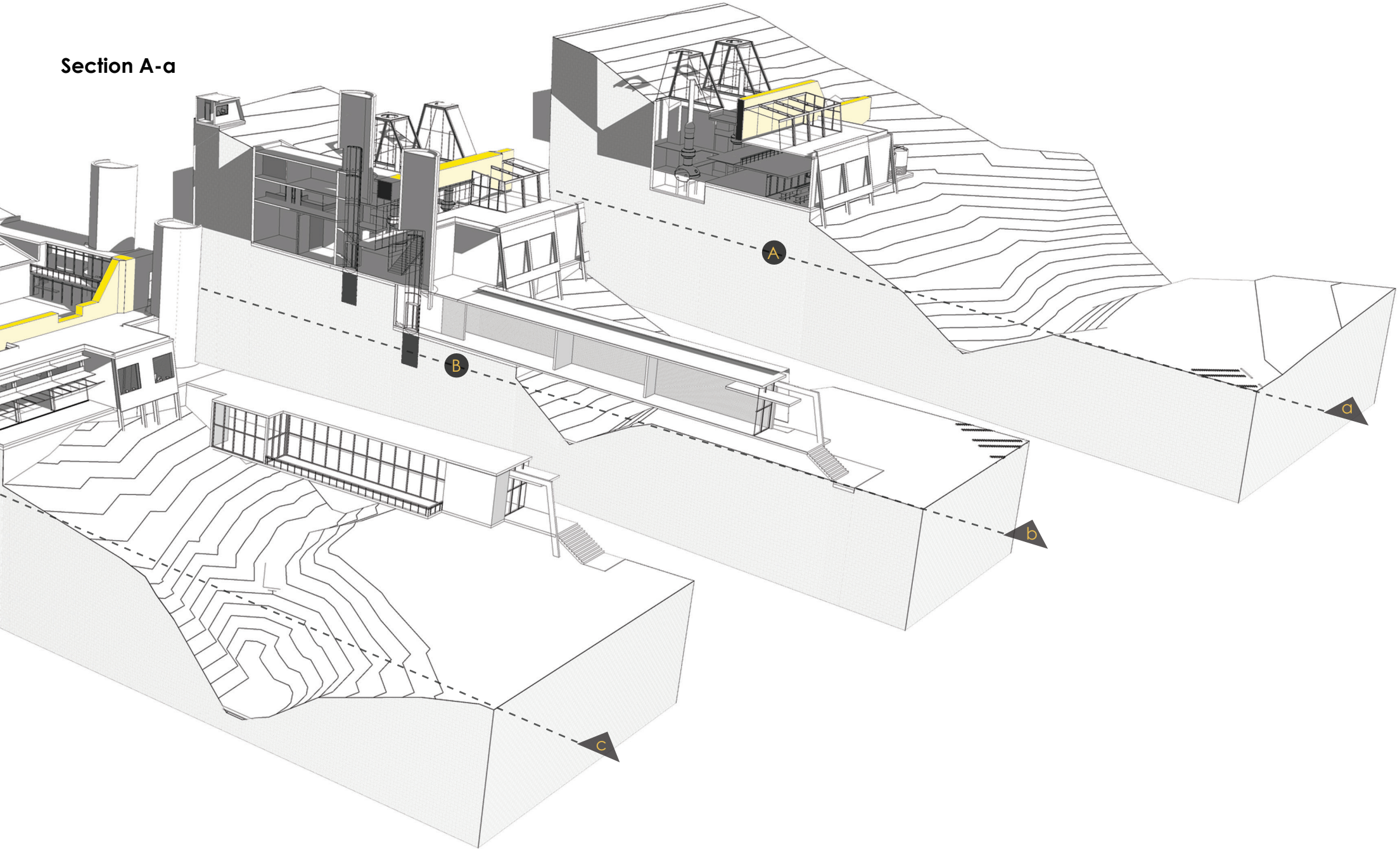
sections.

9.ii.



Sectional Perspective

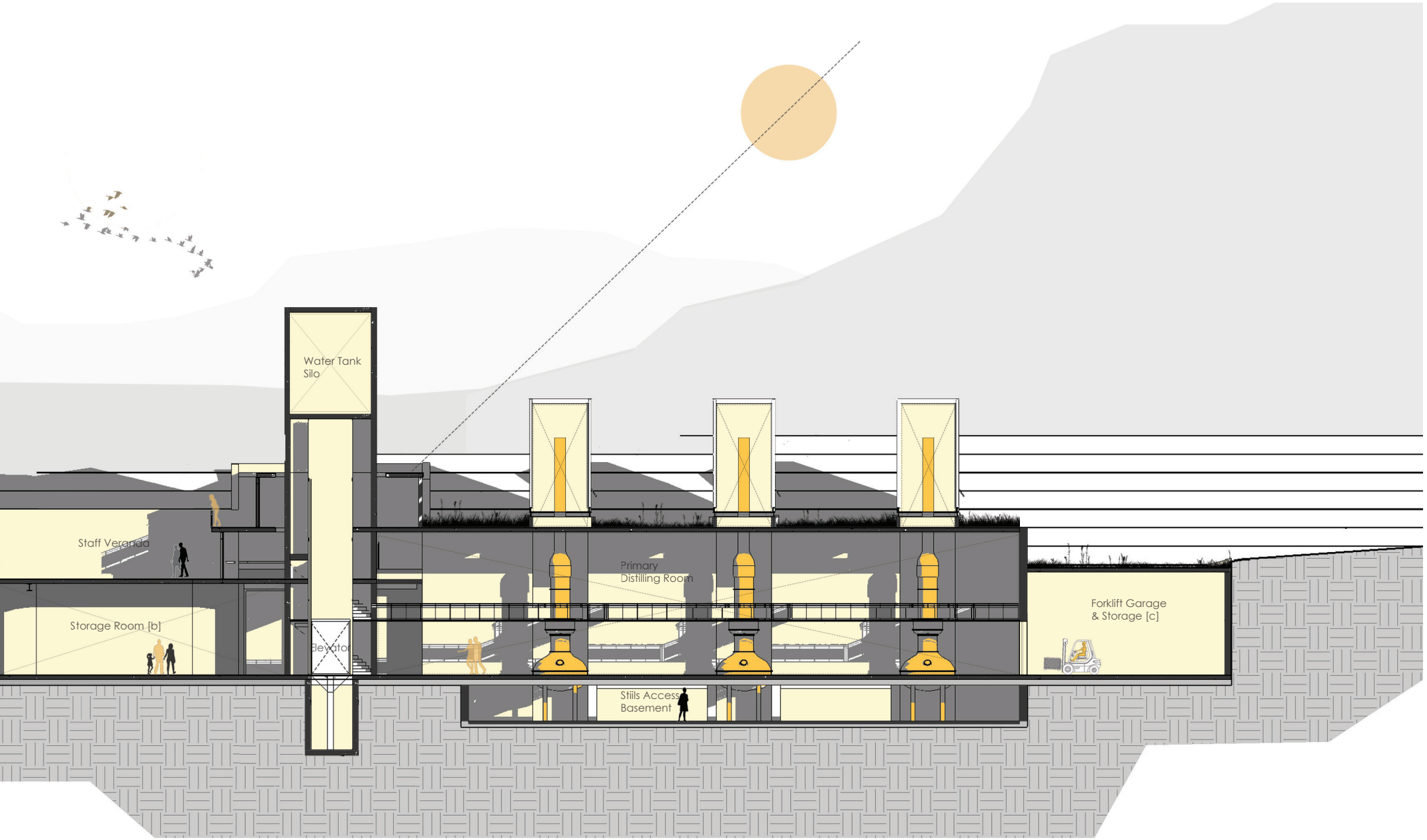
Section A-a

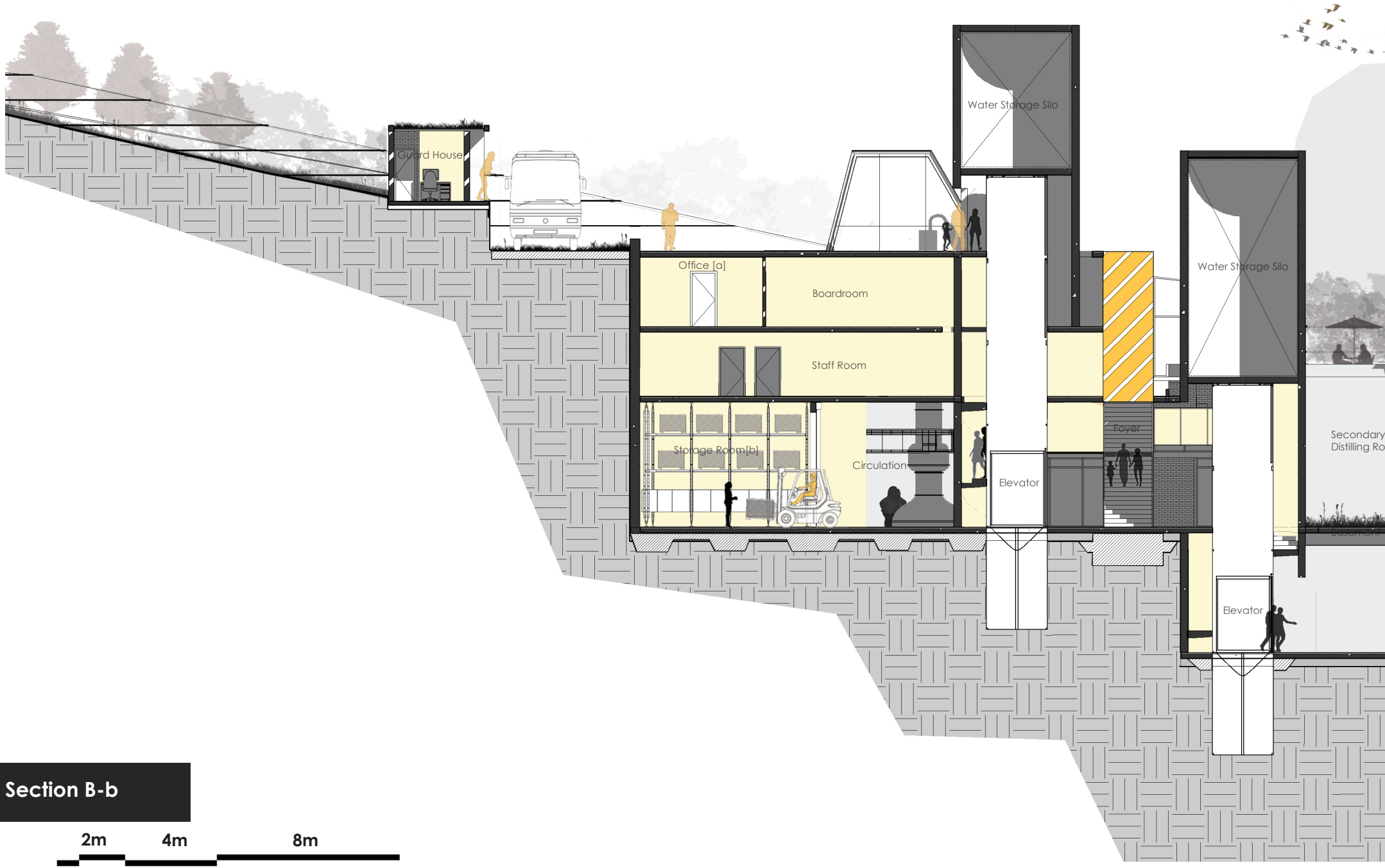




Section D-d

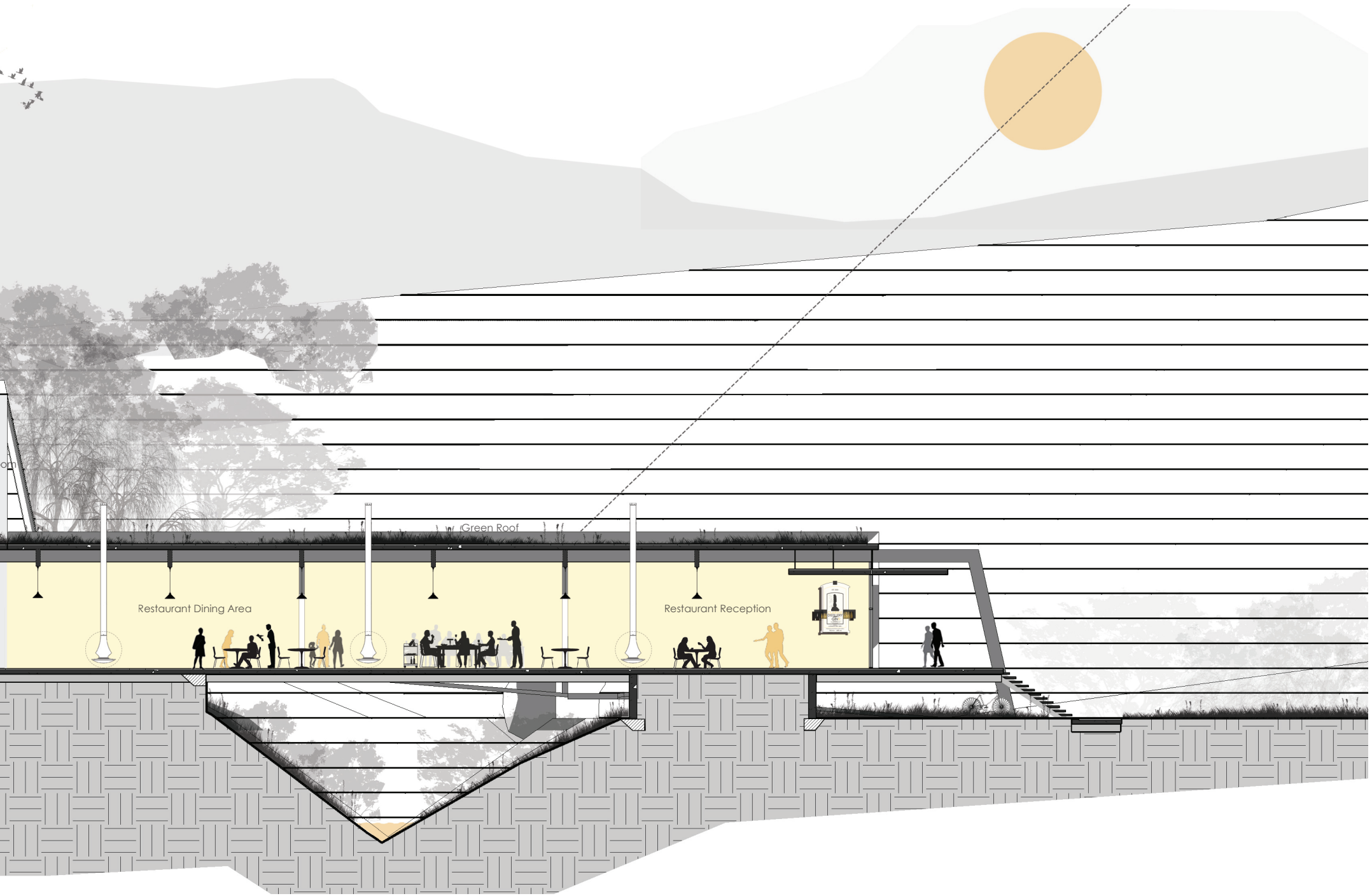
2.5m 5m 10m

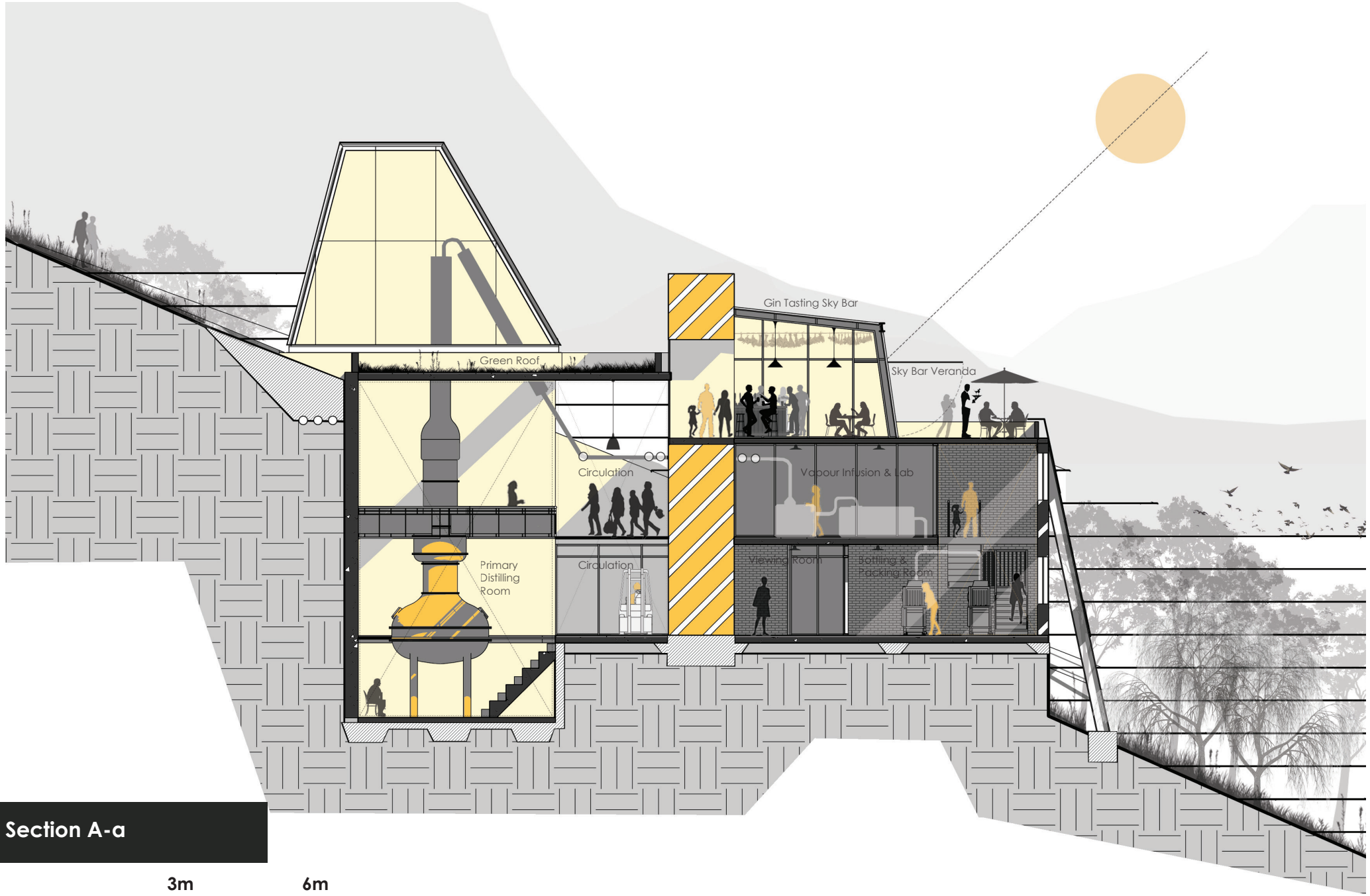

Water Tank
Silo
Staff Veranda
Storage Room [b]
Elevator
Primary
Distilling Room
Stills Access
Basement
Forklift Garage
& Storage [c]



Section B-b

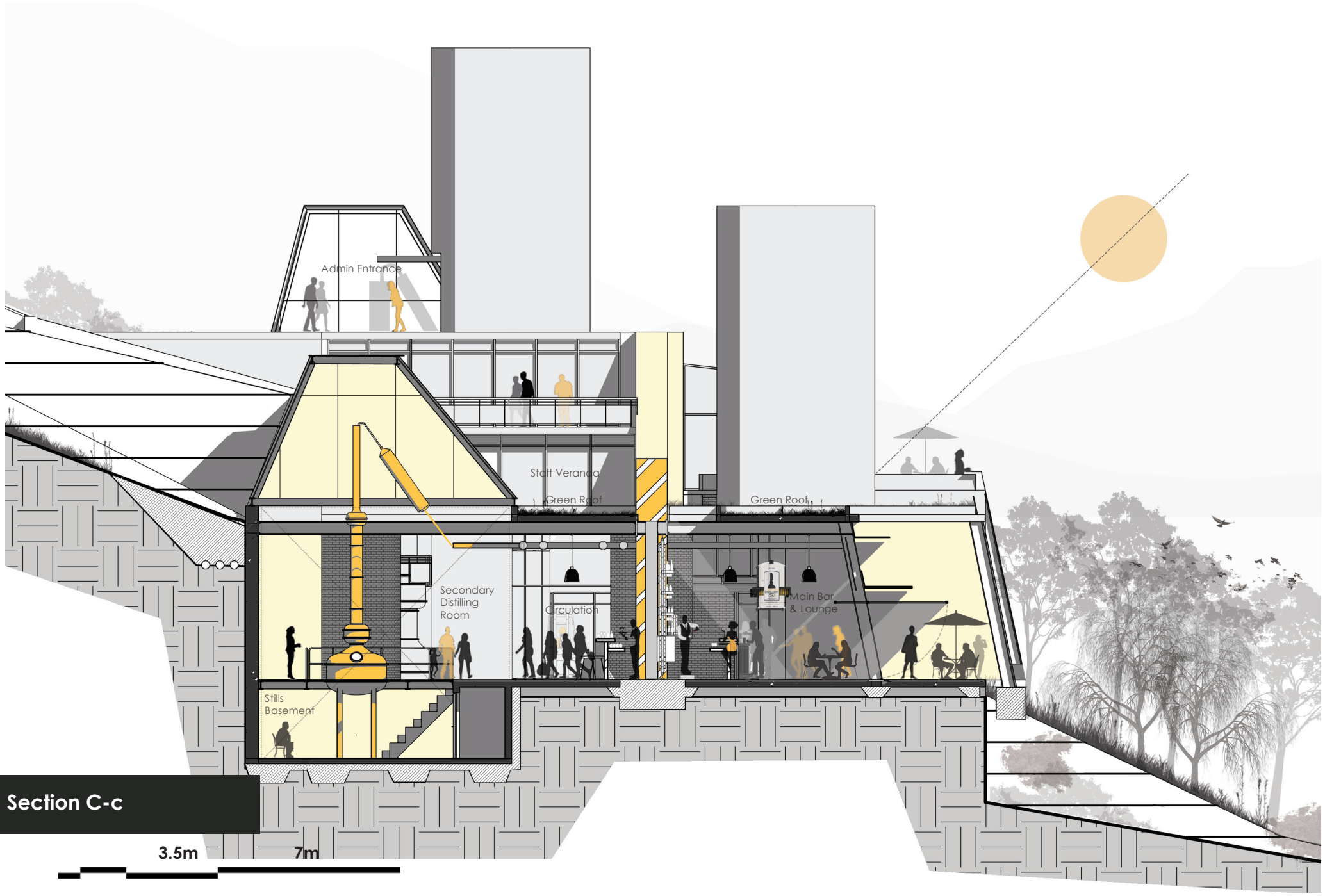
2m 4m 8m


Green Roof
Restaurant Dining Area
Restaurant Reception



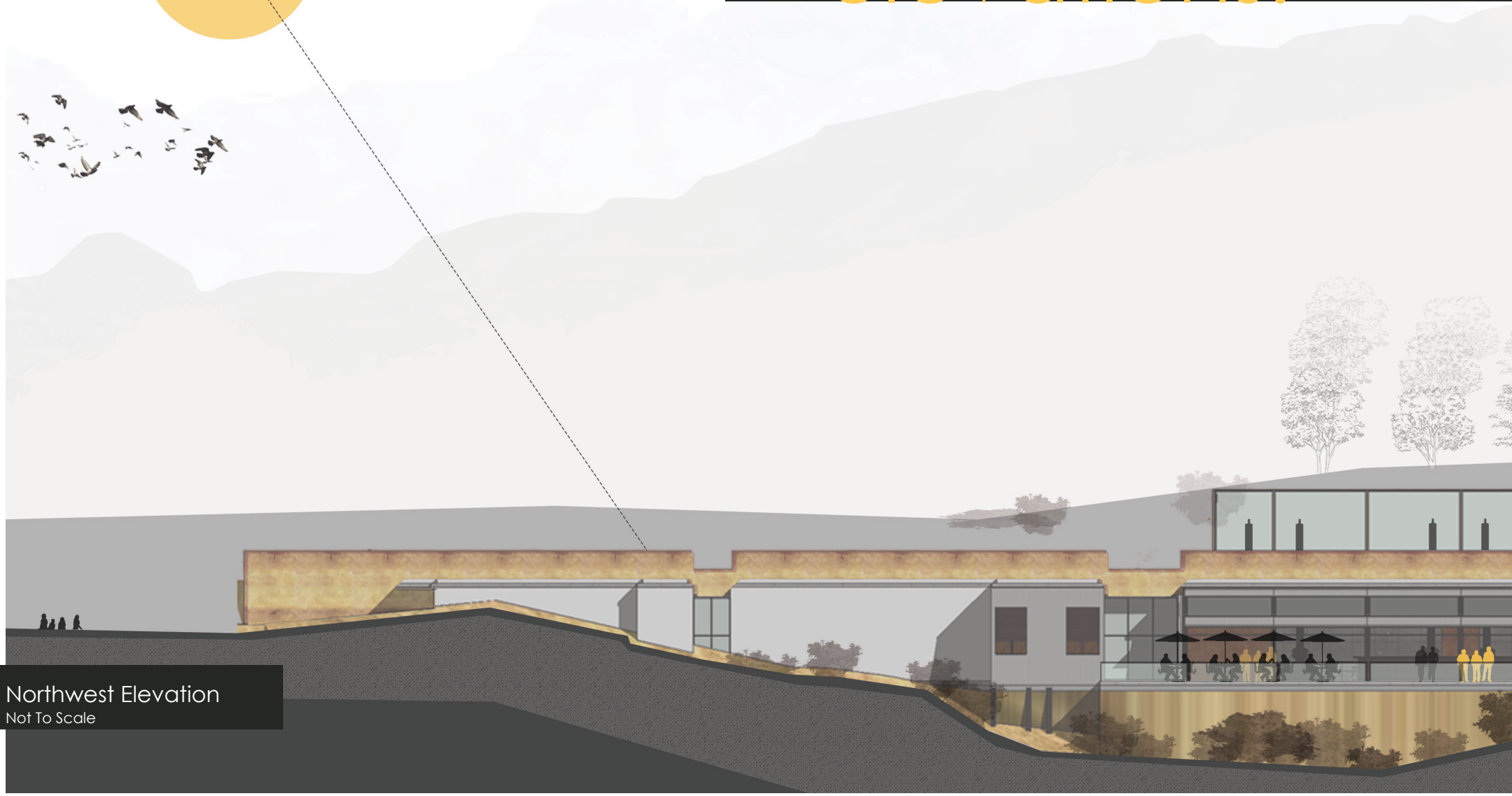
Section A-a

3m 6m


Admin Entrance
Staff Veranda
Green Roof
Green Roof
Secondary
Distilling
Room
Circulation
Main Bar
& Lounge
Stills
Basement
3.5m
7m

Section C-c

elevations.



Northwest Elevation
Not To Scale





Northeast Elevation
Not To Scale



9.iii.

perspectives.





Northern Perspective

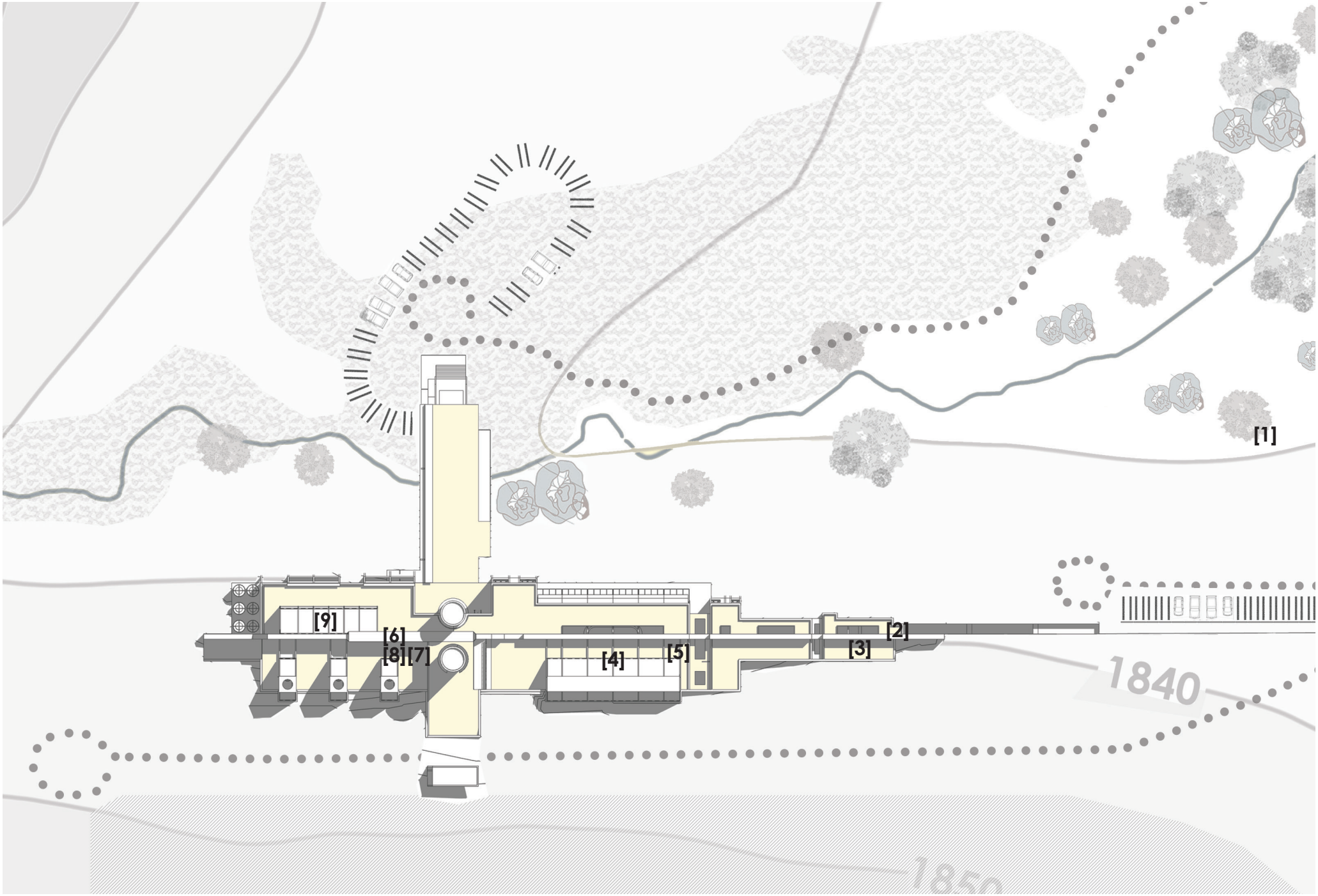


Northeast Perspective





Bird’s View Perspective [1]


[1]
[2]
[3]
[4]
[5]
[6]
[7]
[8]
[9]
1840
1850



renders

Main Building Reception [2]



Main Building Circulation Passage [3]



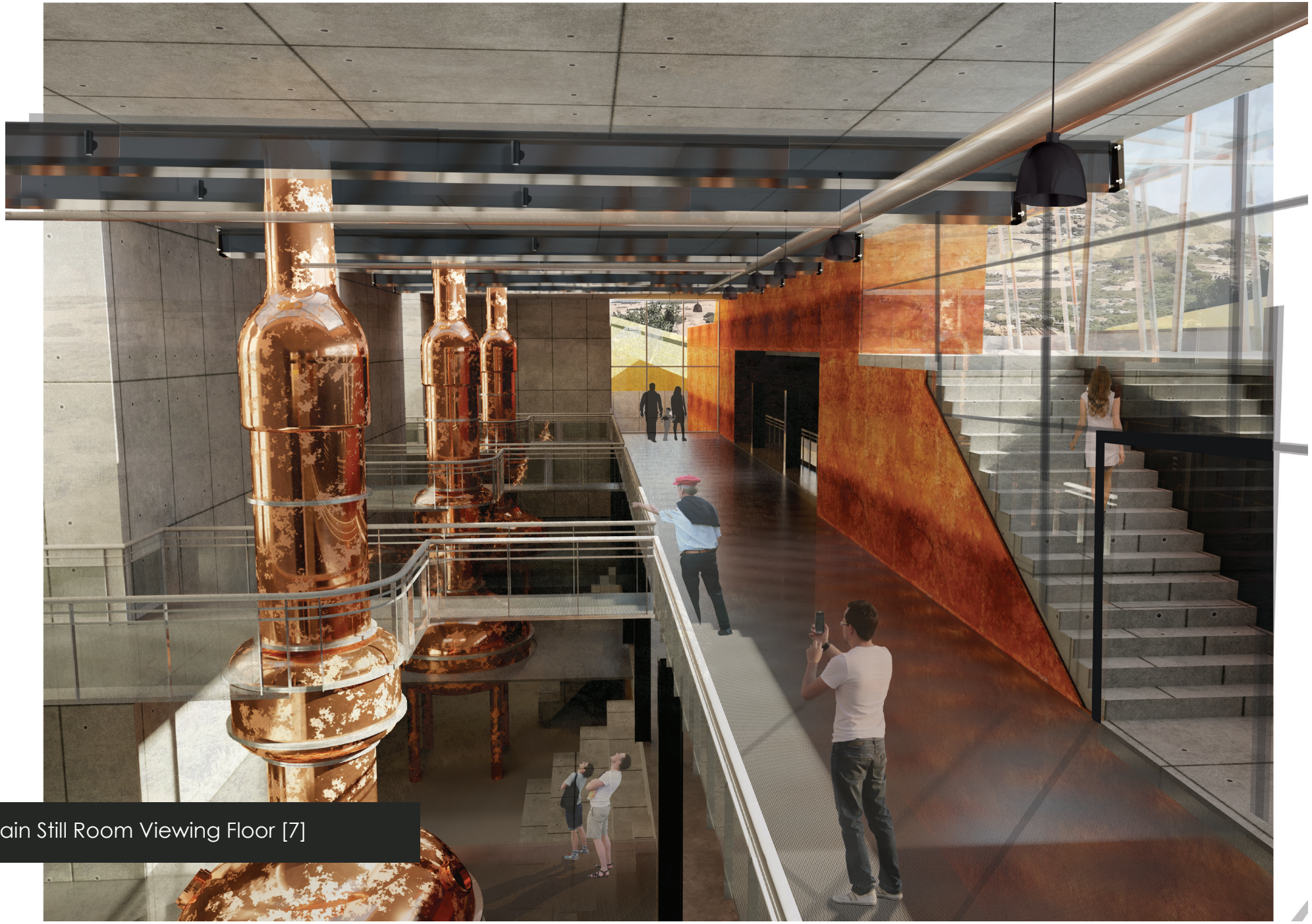
Internal Still & Main Bar Perspective [4]



Internal Still Room Perspective [5]



Main Circulation Passage Stairway [6]



Main Still Room Viewing Floor [7]



Internal Main Still Room & Passage Stairs [8]



Rooftop Sky Bar [9]

9.iv.

product.

[1]_ Establishing an **Identity**

Through the process of investigation into Clarens as a town, and the function the tourist industry plays therein it has become apparent that the town lacks a destination building, a landmark.

The Clarens Gin Distillery combined elements own to Clarens town which tourists associate with the being in this quint town in the mountains and incorporated these elements into establishing a brand identity which seeks to capture these elements into one logo.

[2]_ Primary Products

The Clarens Gin Distillery has three primary products:

- Vapour Infused **London Dry Gin.**

  Gin in its purest form. Nine botanicals sourced internationally for their renowned delicate flavours perfectly vapour infused into a Gin worthy of international adoration.

- Craft Gin [A]. **Dark Cherry Infused Gin.**

  Free State being the largest cherry producing province has allowed a unique batch distilled craft gin to be infused with dark cherry essence.

- Craft Gin [B]. **African Nightshade Infused Gin.**

  Own to Africa, the African Nightshade and produces an edible berry which gives a unique flavour own to Clarens Gin Distillery Craft Gin and the region which becomes directly associated with the Eastern Free State.



Flagship Gin.
Vapour Infused London Dry Gin.



Craft Gin [A].
Batch Distilled Infused Gin.



Craft Gin [B].
Batch Distilled Infused Gin.



conclusion.

[1]_ **Findings**

Destination: A Regional Gin Distillery for Clarens, Eastern Free-State.

The search for relatable meaning in architecture has led an investigation which required an honest inquiry into Clarens as a site. The inquiry for relatable meaning in architecture requires the design to be influenced by the unique historical, cultural and contextual influences on the site. Through this investigation the information refined ideas which informed the design and functional processes which seeks to enhance the experience of a user generated the design perspective.

Contemporary architecture aims to address that which is relevant, and can be done out of context intentionally or responsive to context. In the case of the quaint town and artist community of Clarens, to work within the context was essential. This may or may not allow the user to relate to the architecture, enabling those who use the building to experience the building in the way which the designer intended.

Architecture can not be refined to a perfect system or recipe which can be applied to a brief or site, this became evident throughout my architectural journey thus far. However, architecture which seeks to respond to context, as well as allow the user to have an enhanced experience of site can be instilled into most designs. And evidently will lead to relevant and relatable architecture.

Through my journey of this dissertation, the realization that contemporary architecture is boundless and free has become evident. However the guiding principles should remain true. A search for perfect architecture is subjective, but in the journey of searching, the true development of unique and timeless architecture may be uncovered.

Thank you.

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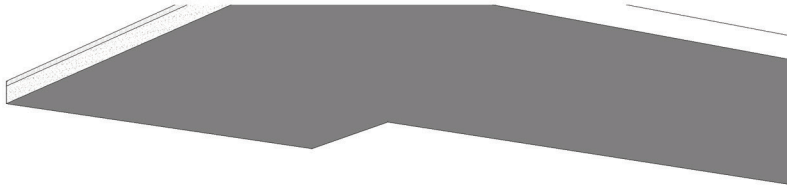
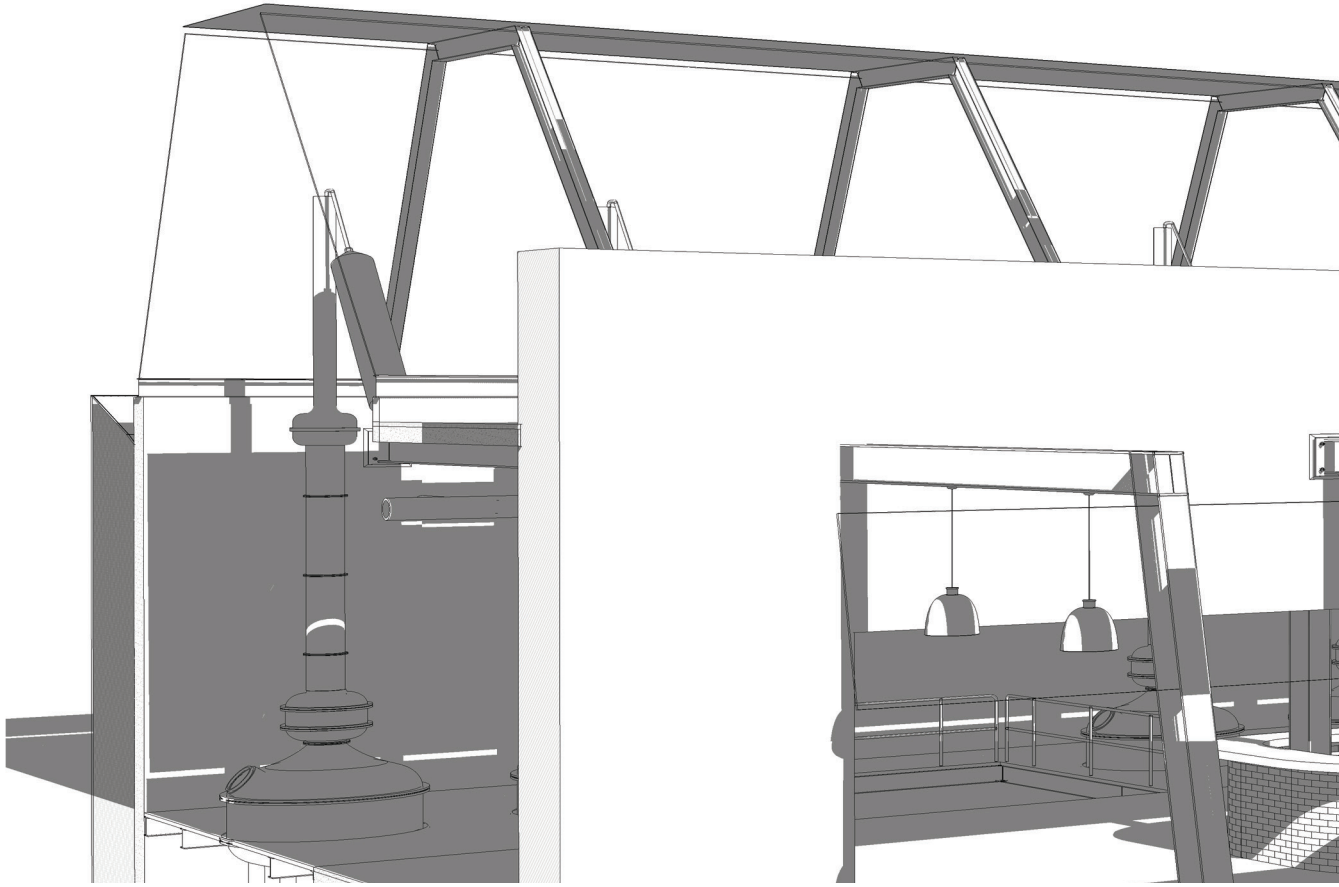
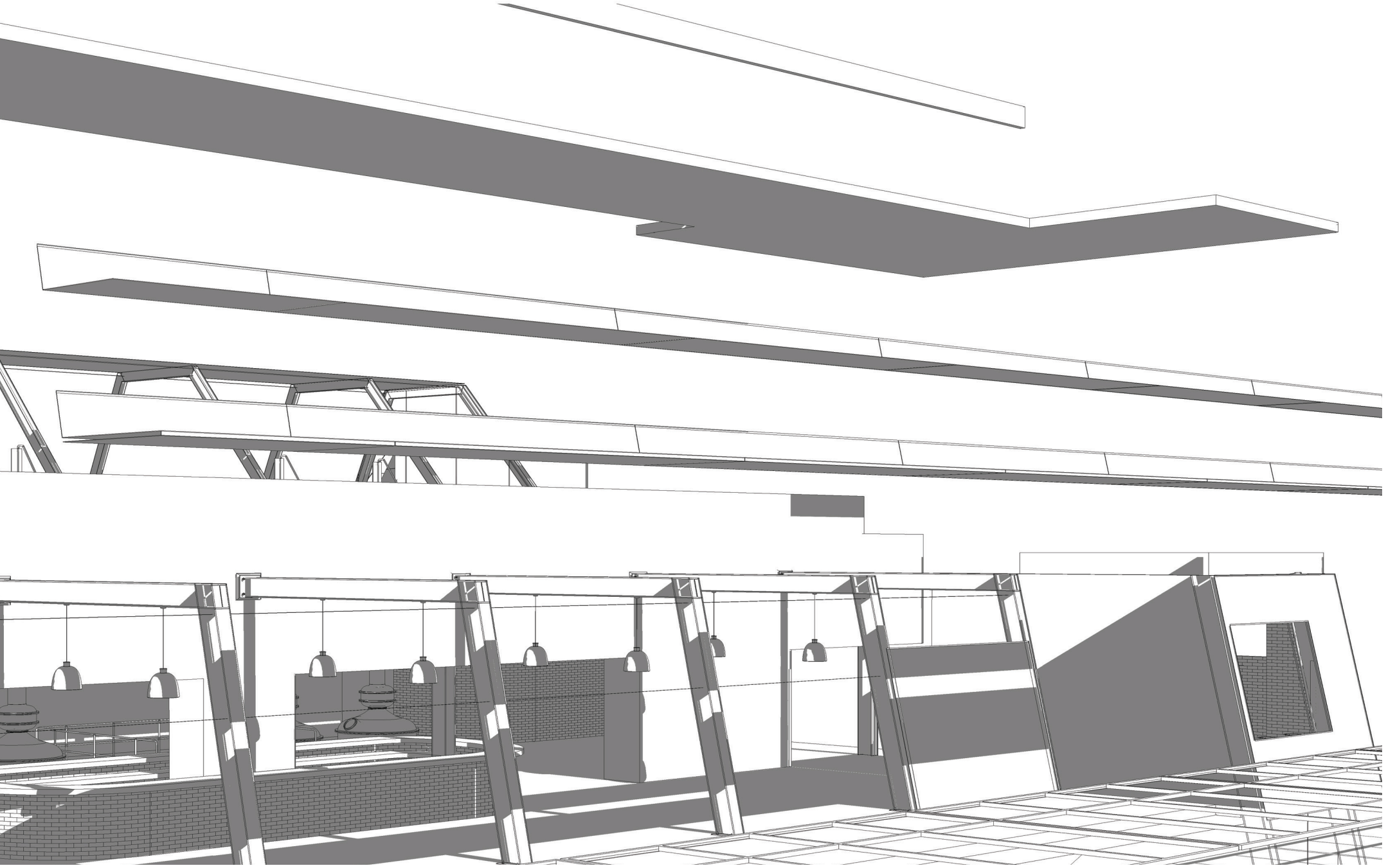
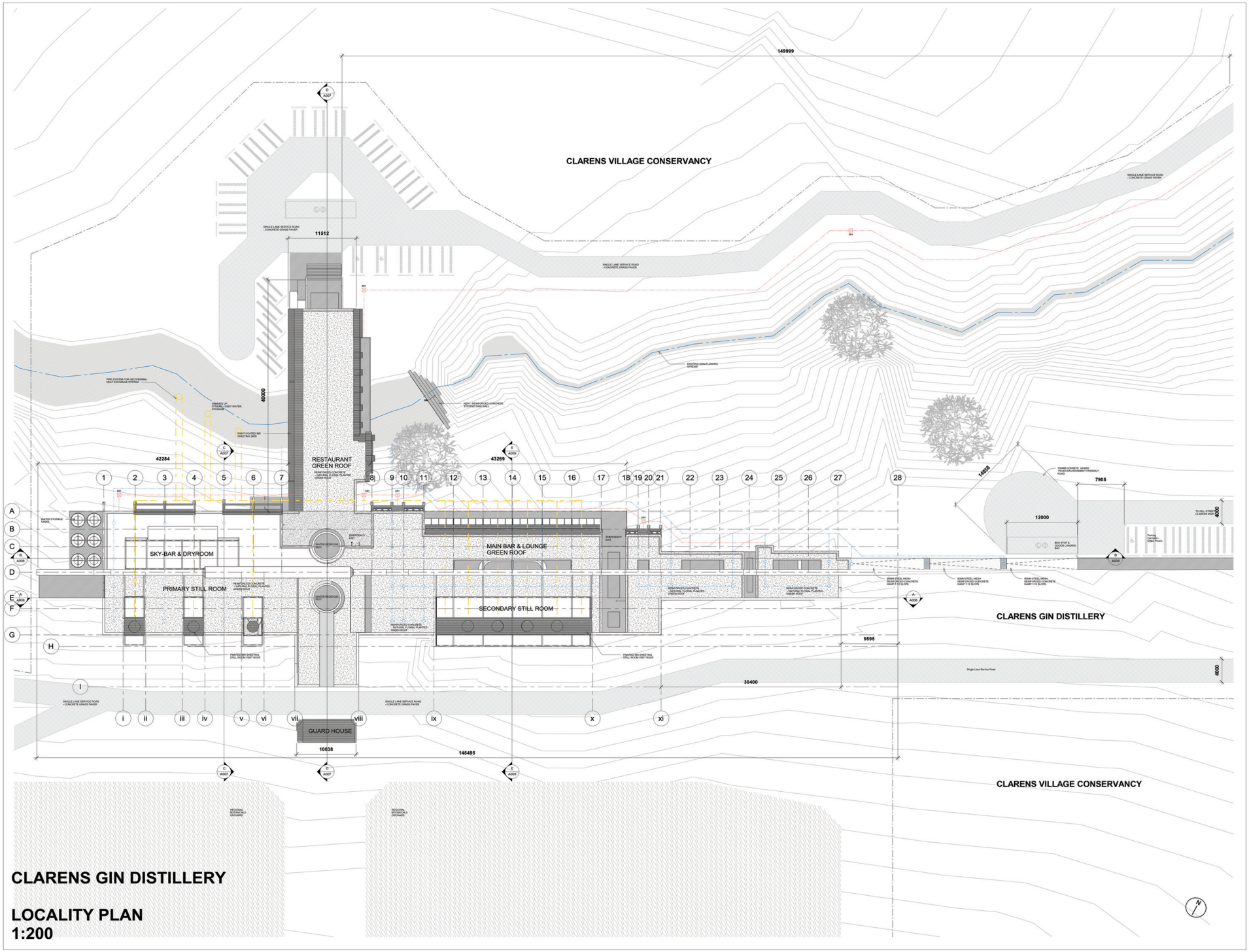
CONSTRUCTION
DOCUMENTATION

Appendix A.









CLARENS GIN DISTILLERY

LOCALITY PLAN
1:200

Project Number: S001

Client(s):

DISTELL

General Notes:

AUTODESK.

Revisions

No.	Description	Date

Legend

- CAST EARTH DATUM WALL
- CLAY BRICK WALL
- 400MM CAST IN-SITU CONCRETE RETAINER WALL
- 250X400MM TREATED STEEL I-BEAM COLUMN
- SEWAGE WASTE LINE
- DRAINAGE SYSTEM WATER LINE
- SITE BOUNDARY LINE

Schedule

Consultants

Contact Number

Council	Professional nr.	Name	Signature
SACAP	Student	A. Lindeque	

Project

Municipality:	Dihlabeng Municipality
Town:	Clarens, Eastern Free State
Erf:	Unzoned [Conservation Area with Future Development Option]
Land Parcel:	Unzoned [Conservation Area with Future Development Option]

Drawing Title - Construction Drawings -

New Building: Plan

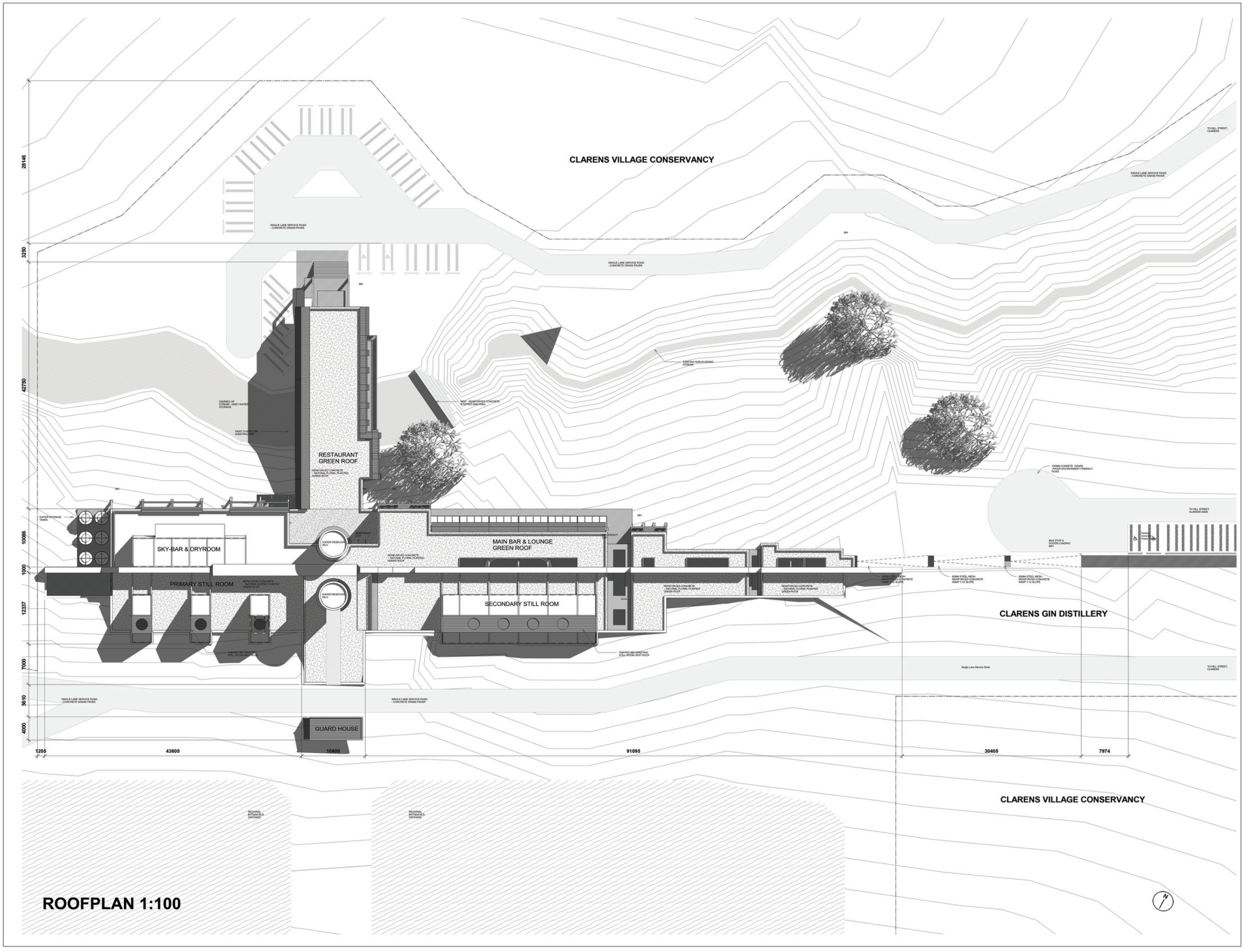
Consultants Drawing Number:

SCALE AT A0:	DATE:	DRAWN:	CHECKED:
As indicated	11/09/20	Author	Checker

This drawing is to be read in conjunction with drawing nr:

Drawing Number

PROJECT NO.	DICIPLINE	SERIES	DRAWING NO.	REVISION:
0001	A R	L P	A001	



Project Number:	S001

Client(s):

DISTELL

General Notes:

AUTODESK

Revisions

No.	Description	Date

Legend

Schedule

Consultants

Contact Number

Council	Professional nr.	Name	Signature
SACAP	Student	A. Lindeque	

Project

Municipality:	Dihlabeng Municipality
Town:	Clarens, Eastern Free State
Erf:	Un-zoned [Conservation Area with Future Development Option]
Land Parcel:	Un-zoned [Conservation Area with Future Development Option]

Drawing Title - Construction Drawings -

New Building: Plan

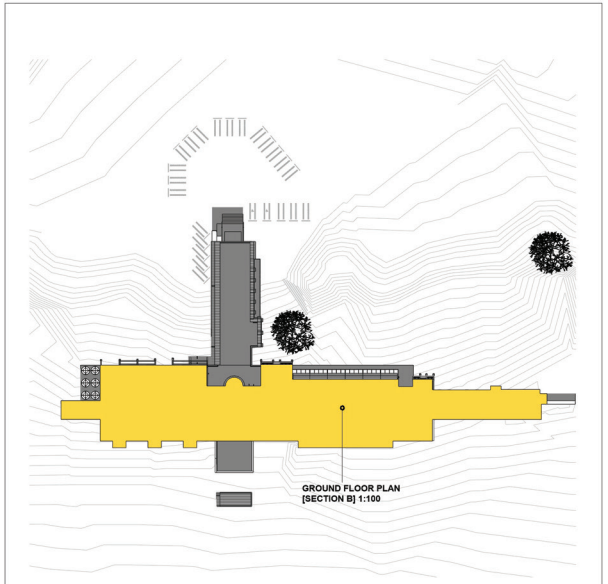
Consultants Drawing Number:

SCALE AT A3:	DATE:	DRAWN:	CHECKED:
As indicated	11/12/20	Author	Checker

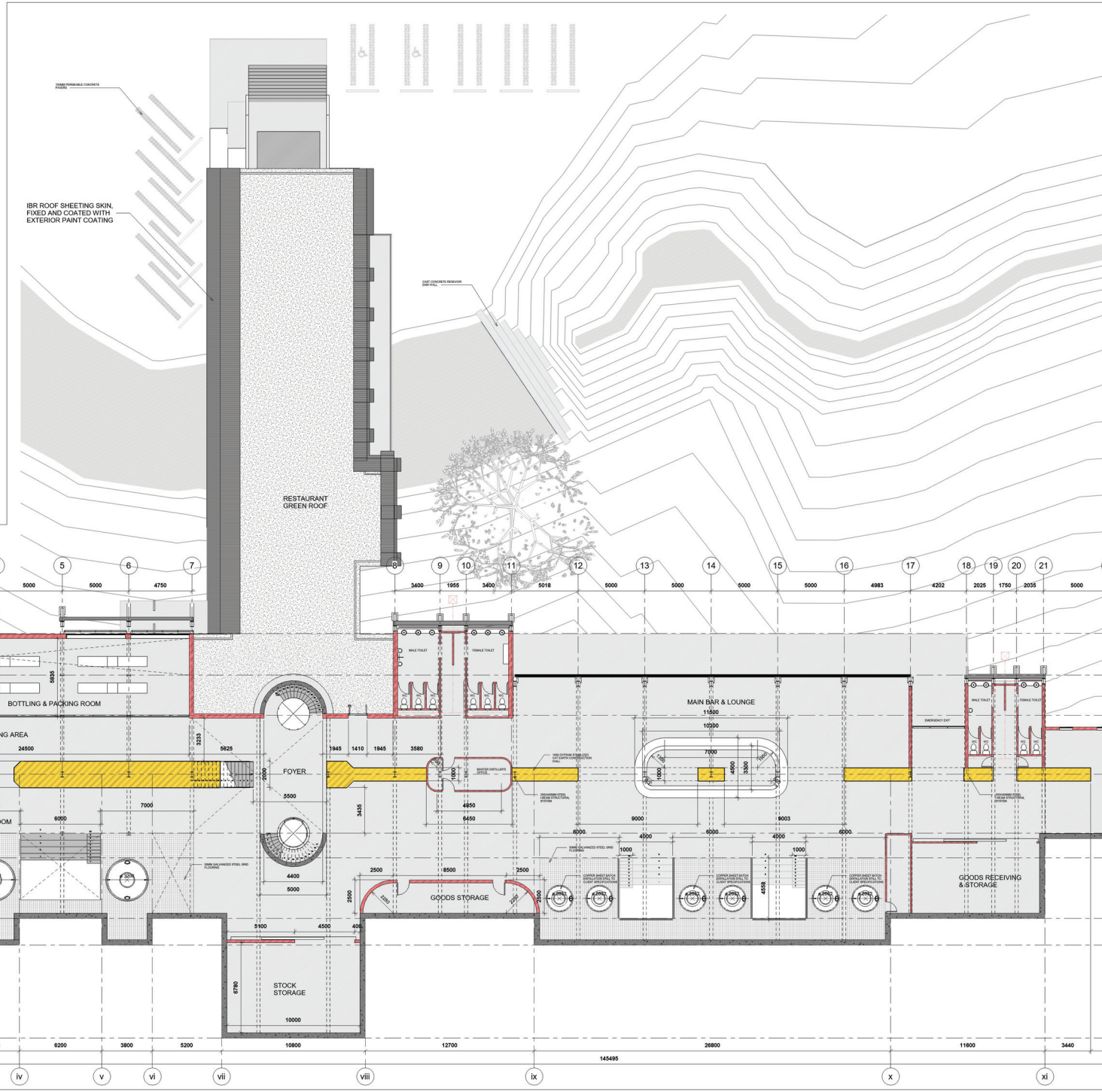
This drawing is to be read in conjunction with drawing nr:

Drawing Number

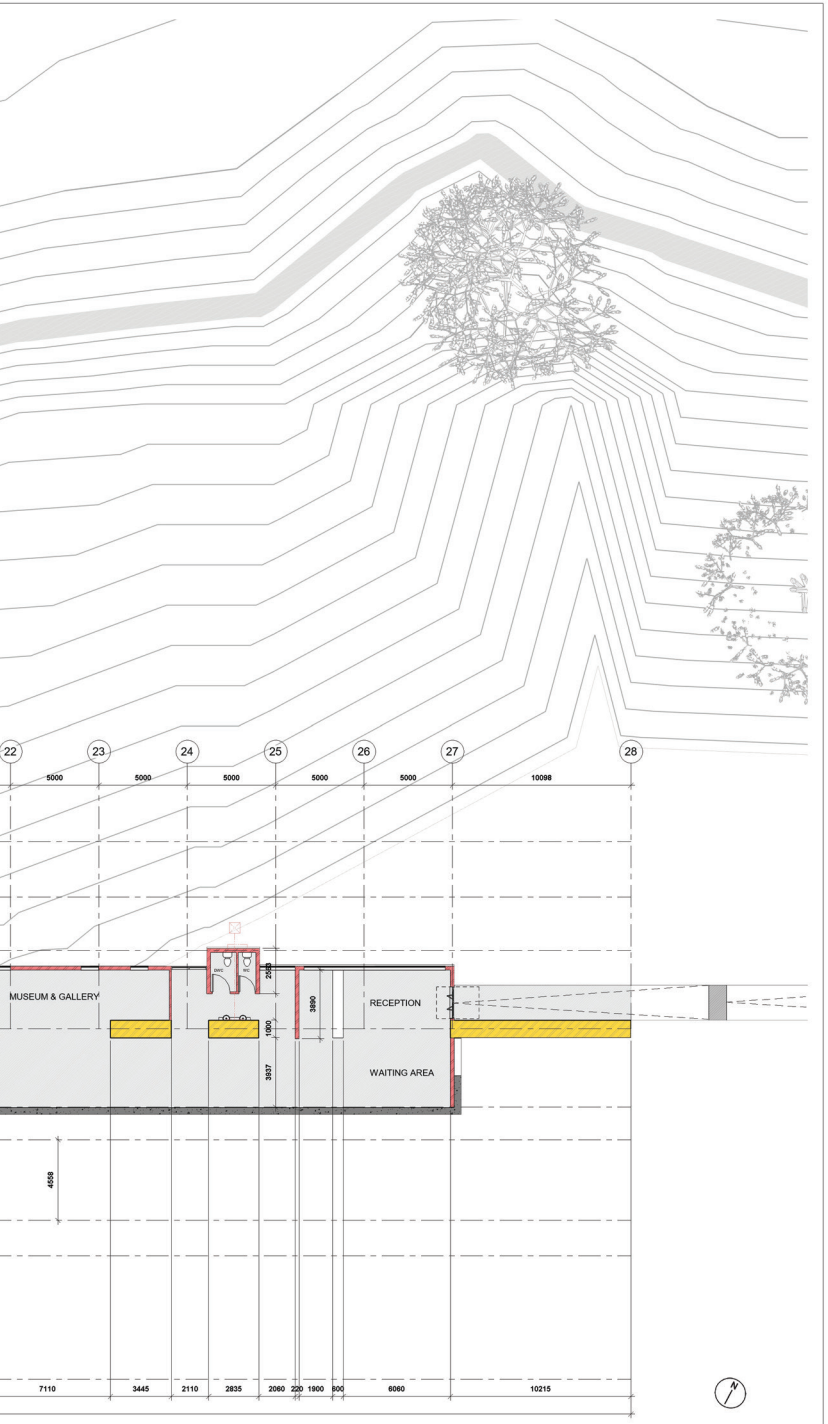
PROJECT NO:	DISCIPLINE	SERIES	DRAWING NO:	REVISION:
0001	A R	L P	A002	



LOCATION KEY PLAN
1:500



GROUND FLOOR PLAN
1:100



Project Number:	S001

Client(s):

DISTELL

General Notes:

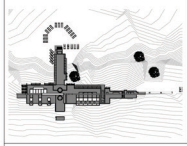
AUTODESK

Revisions

No.	Description	Date

Legend

Schedule



Consultants

Contact Number

Council	Professional nr.	Name	Signature
SACAP	Student	A. Lindeque	

Project

Municipality:	Drakenberg Municipality
Town:	Clarens, Eastern Free State
Erf:	Un-zoned [Conservation Area with Future Development Option]
Land Parcel:	Un-zoned [Conservation Area with Future Development Option]

Drawing Title - Construction Drawings -

New Building: Plan

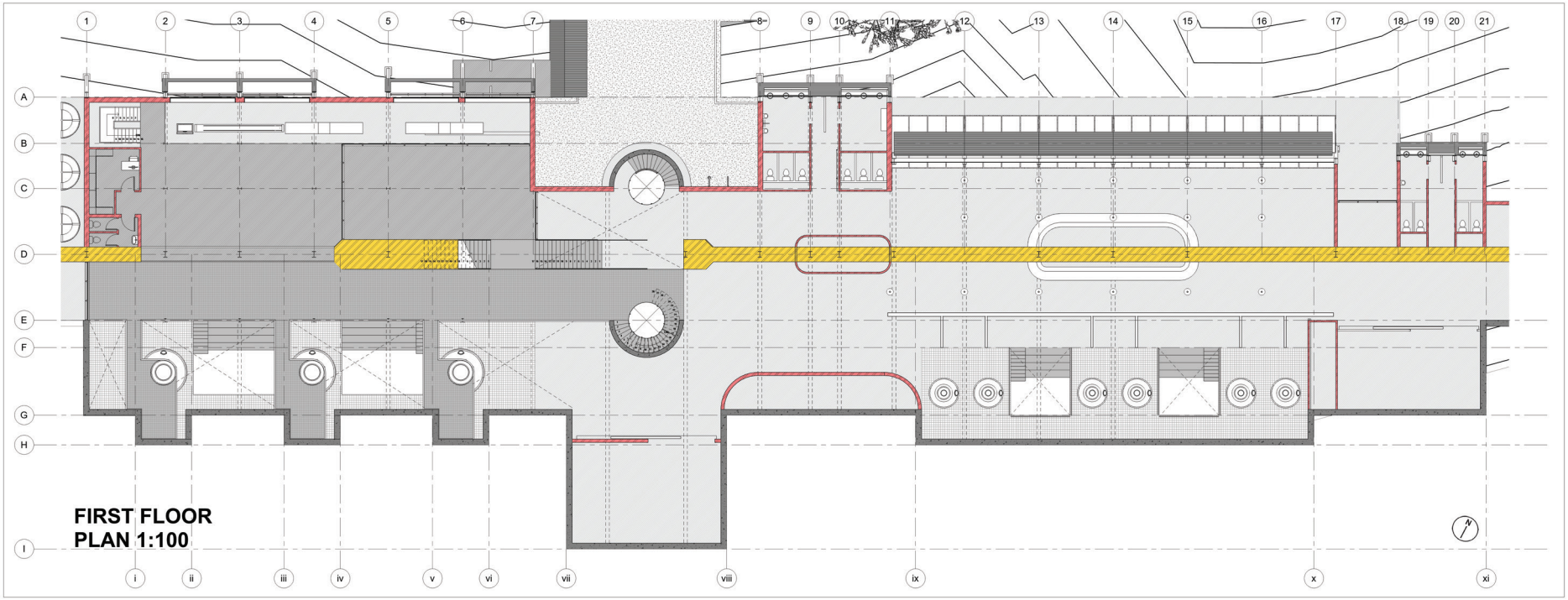
Consultants Drawing Number:

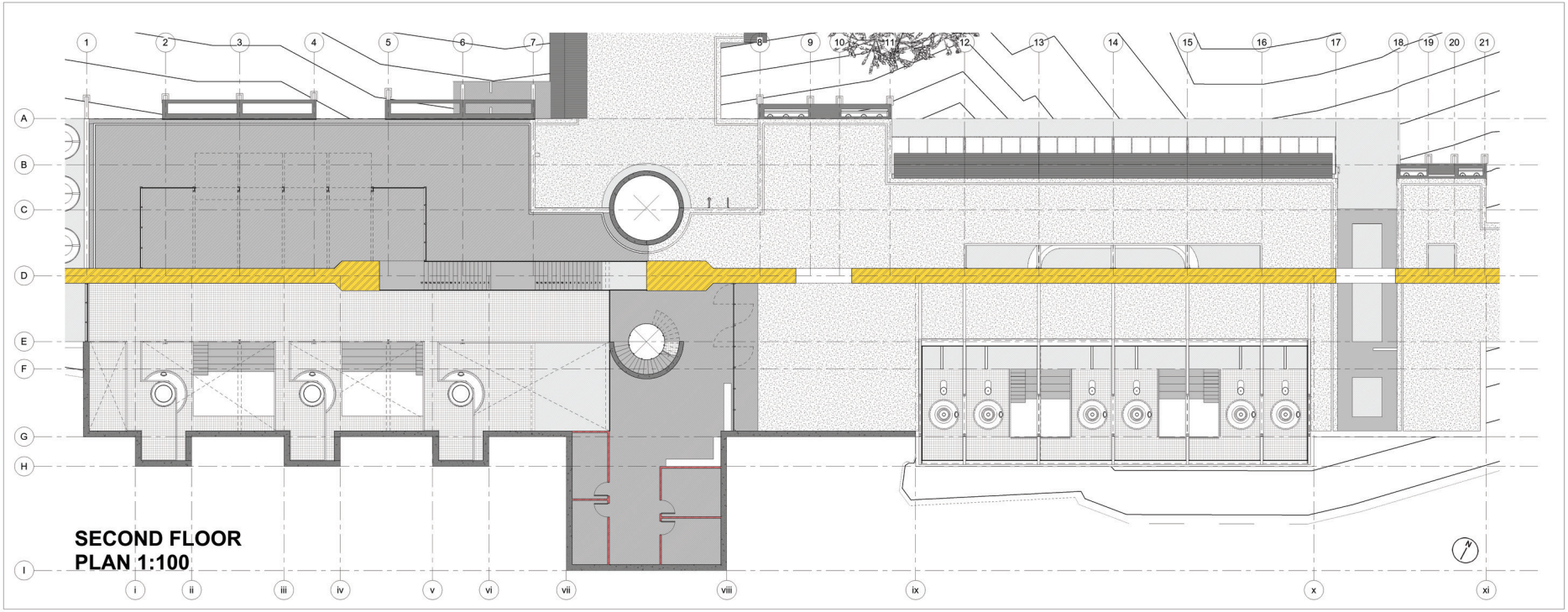
SCALE AT A0	DATE	DRAWN	CHECKED
As Indicated	11/09/20	Author	Checker

This drawing is to be read in conjunction with drawing nr:

Drawing Number

PROJECT NO.	DICIPLINE	SERIES	DRAWING NO.	REVISION
0001	A R	L P	A003	





Project Number: S001

Client(s):

DISTELL

General Notes:

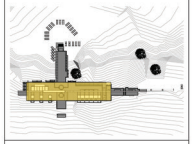
AUTODESK

Revisions

No.	Description	Date

Legend

Schedule



Consultants

Contact Number

Council	Professional nr	Name	Signature
SACAP	Student	A. Lindeque	

Project

Municipality:	Dihlabeng Municipality
Town:	Clarens, Eastern Free State
Erf:	Un-zoned [Conservation Area with Future Development Option]
Land Parcel:	Un-zoned [Conservation Area with Future Development Option]

Drawing Title - Construction Drawings -

New Building: Plan

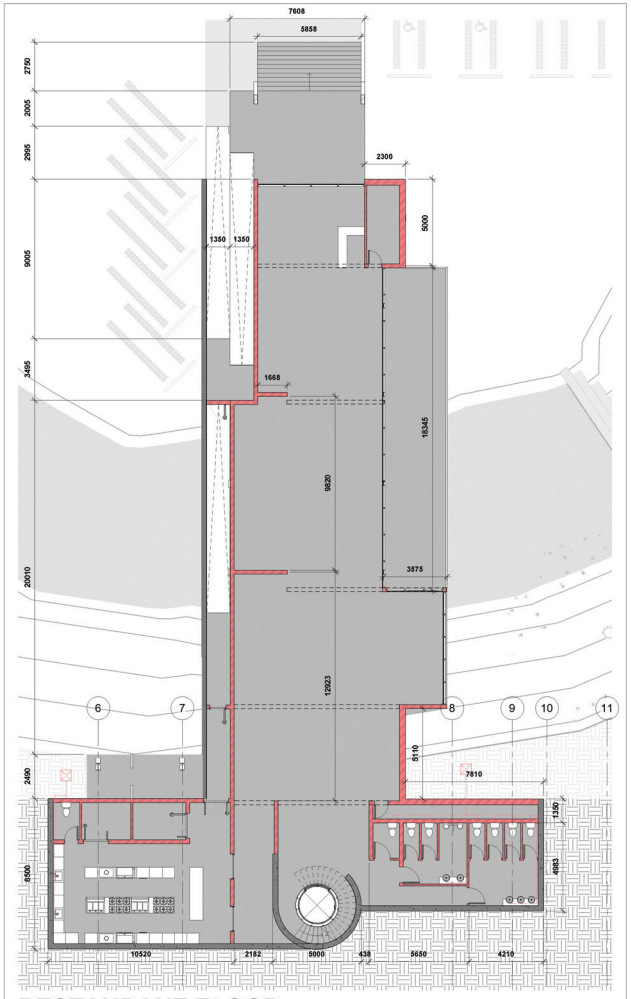
Consultants Drawing Number:

SCALE AT A3	DATE:	DRAWN:	CHECKED:
As indicated	11/10/20	Author	Checker

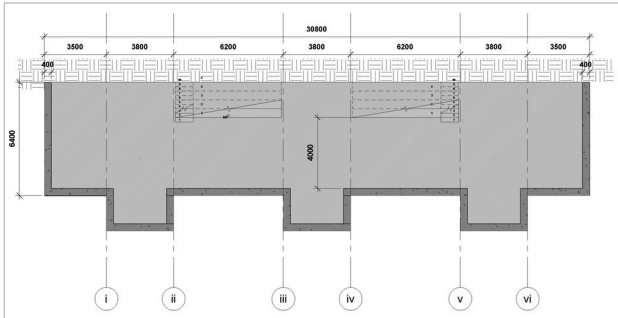
This drawing is to be read in conjunction with drawing nr:

Drawing Number

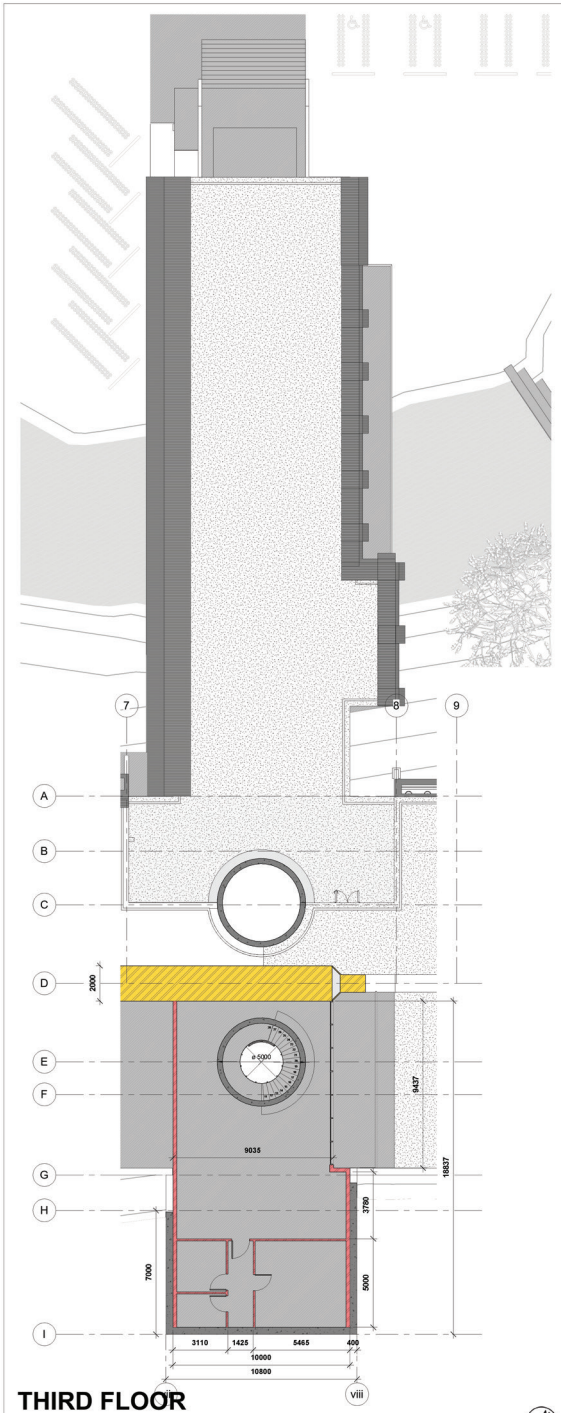
PROJECT NO.	DISPLINE	SERIES	DRAWING NO.	REVISION:
0001	A R	L P	A004	



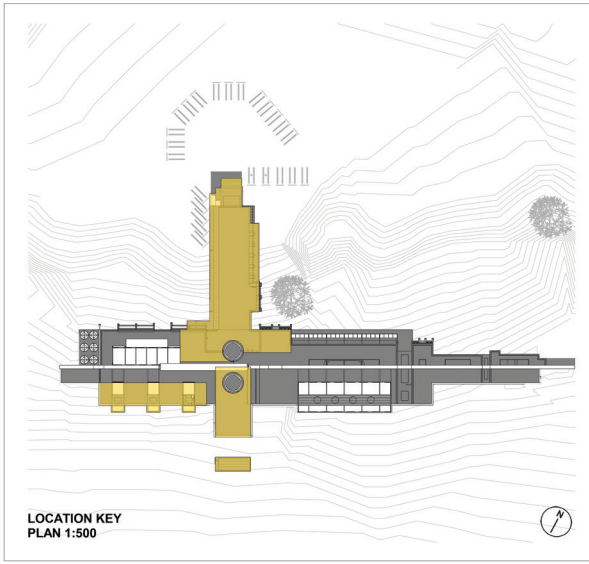
RESTAURANT FLOOR PLAN 1:100



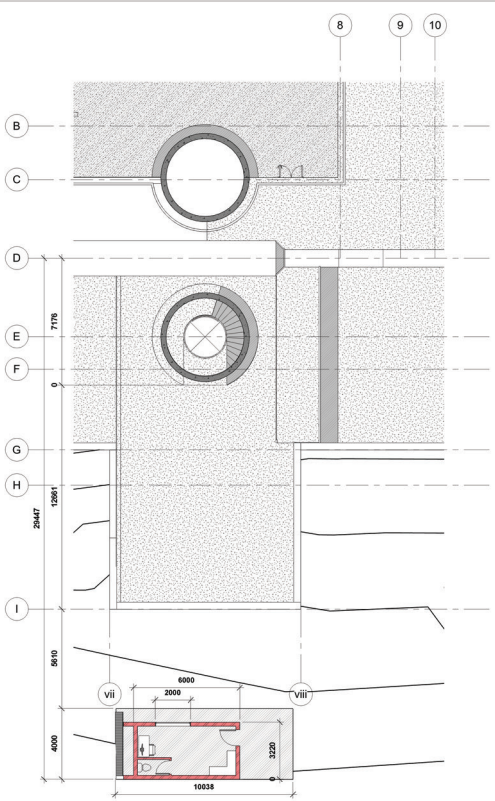
PRIMARY STILL ROOM BASEMENT FLOOR PLAN 1:100



THIRD FLOOR PLAN 1:100



LOCATION KEY PLAN 1:500



GUARD HOUSE PLAN 1:100

Project Number: S001

Client(s):

DISTELL

General Notes:

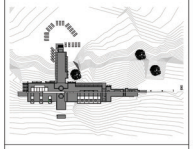
AUTODESK.

Revisions

No.	Description	Date

Legend

Schedule



Consultants

Contact Number

Council	Professional in:	Name	Signature
SACAP	Student	A. Lindique	

Project

Municipality:	Drakenberg Municipality
Town:	Clarens, Eastern Free State
Erf:	Un-zoned [Conservation Area with Future Development Option]
Land Parcel:	Un-zoned [Conservation Area with Future Development Option]

Drawing Title - Construction Drawings -

New Building: Plan

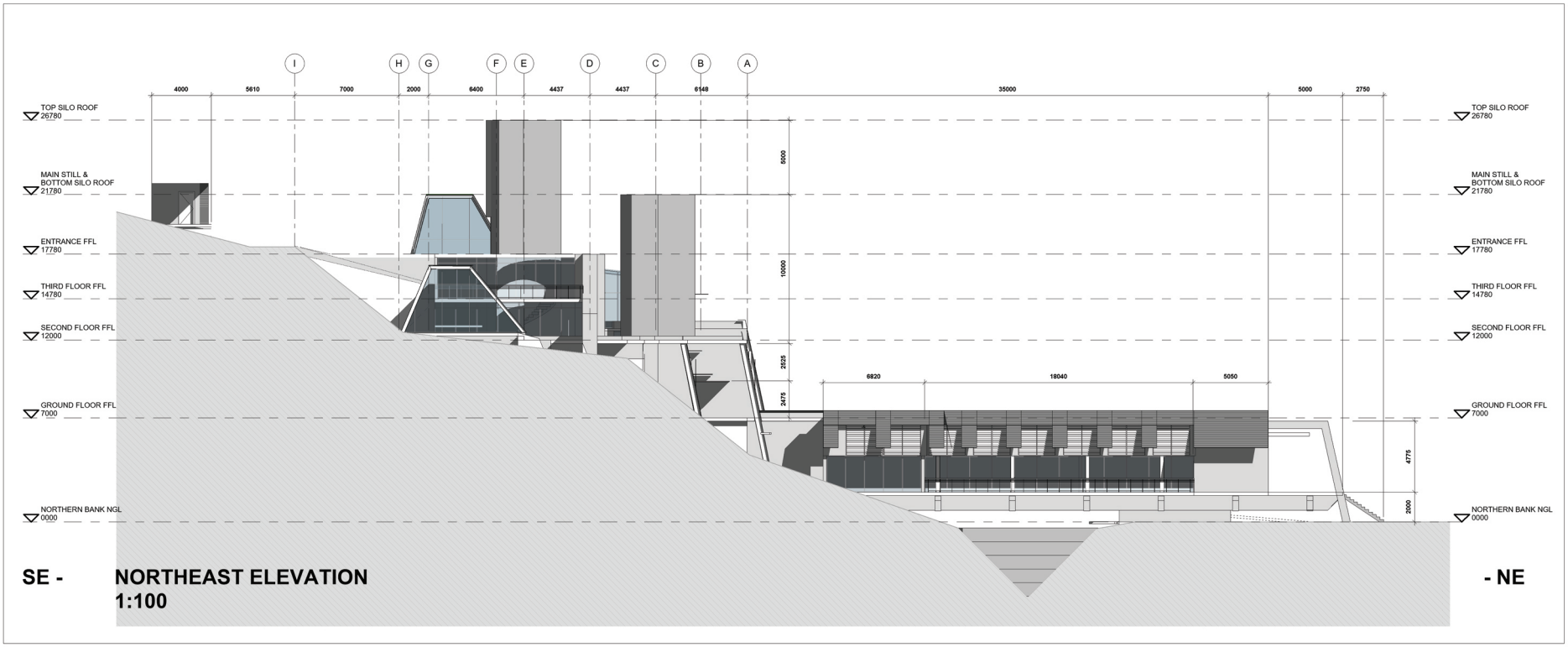
Consultants Drawing Number:

SCALE AT A0	DATE:	DRAWN:	CHECKED:
As indicated	11/12/20	Author	Checker

This drawing is to be read in conjunction with drawing no:

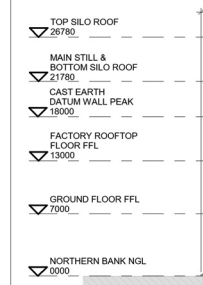
Drawing Number

PROJECT NO	DISPLINE	SERIES	DRAWING NO	REVISION
0001	A R	L P	A005	

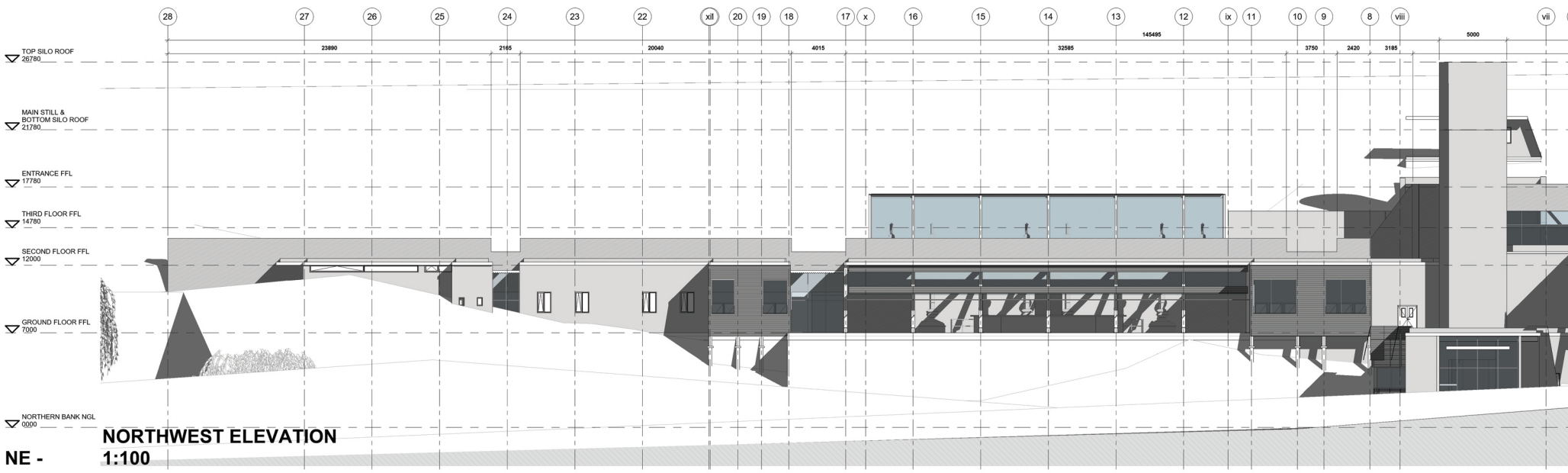


SE - NORTHEAST ELEVATION
1:100

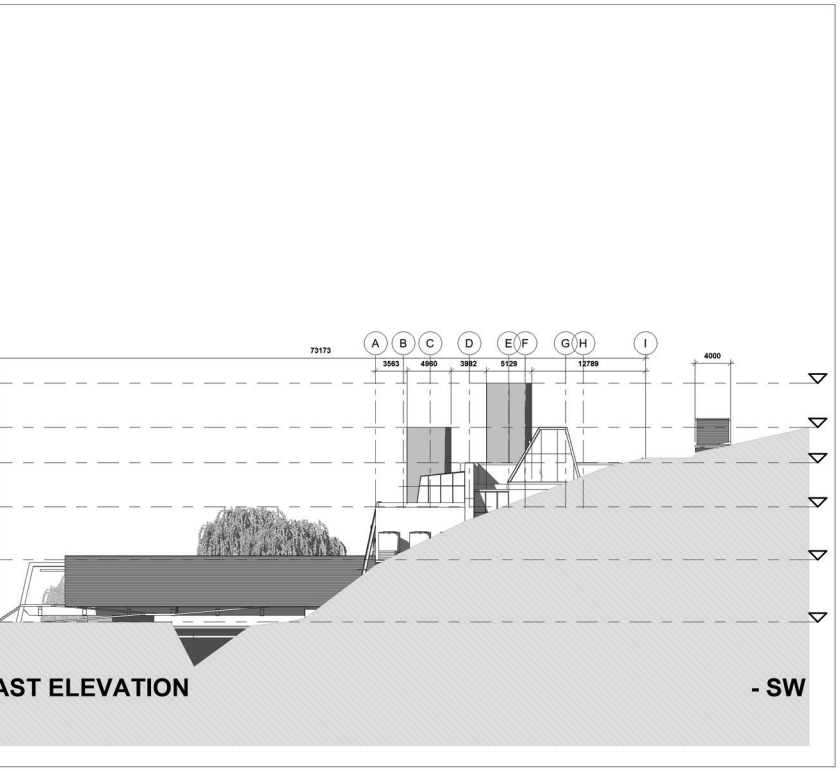
- NE

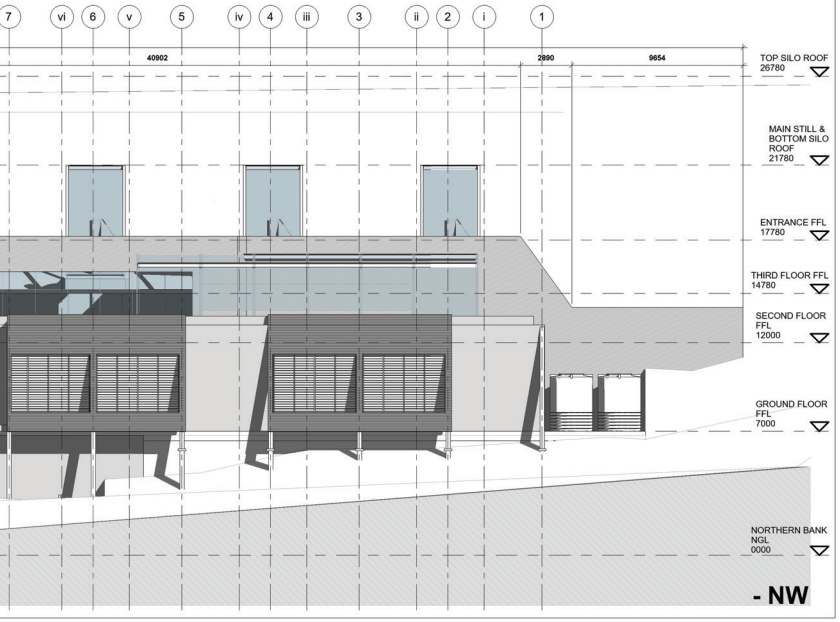


NW - SOUTHEA
1:200



NE - NORTHWEST ELEVATION
1:100





Project Number:	S001

Client(s):

DISTELL

General Notes:

AUTODESK.

Revisions

No.	Description	Date

Legend

Schedule

Consultants

Contact Number

Council	Professional no	Name	Signature
SACAP	Student	A. Lindeque	

Project

Municipality:	Dihlabeng Municipality
Town:	Clarens, Eastern Free State
Erf:	Un-zoned [Conservation Area with Future Development Option]
Land Parcel:	Un-zoned [Conservation Area with Future Development Option]

Drawing Title - Construction Drawings -

New Building: Plan

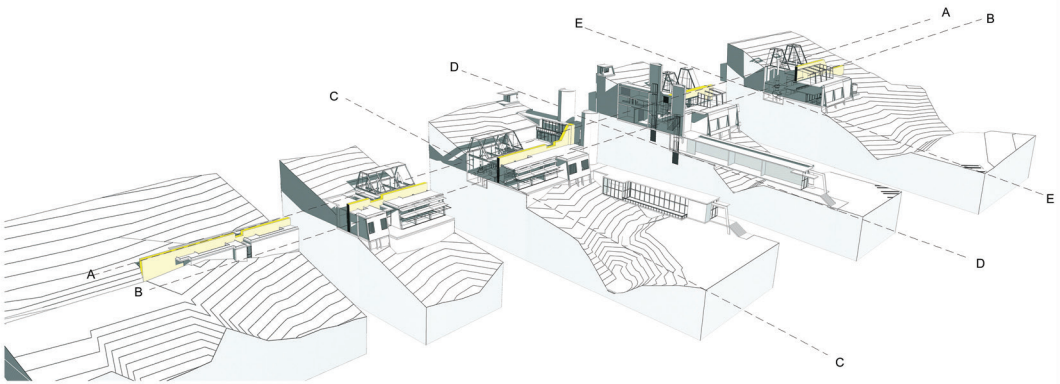
Consultants Drawing Number:

SCALE AT A0	DATE:	DRAWN:	CHECKED
As indicated	11/12/20	Author	Checker

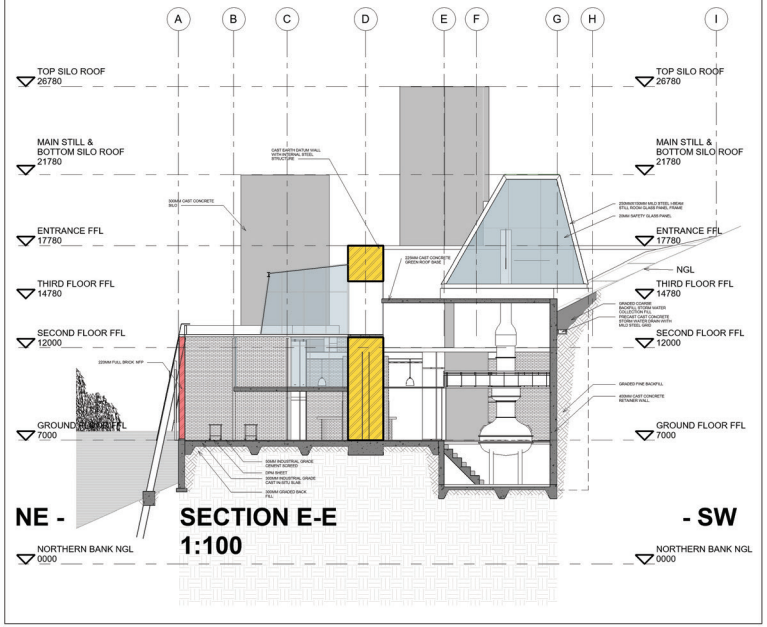
This drawing is to be read in conjunction with drawing nr:

Drawing Number

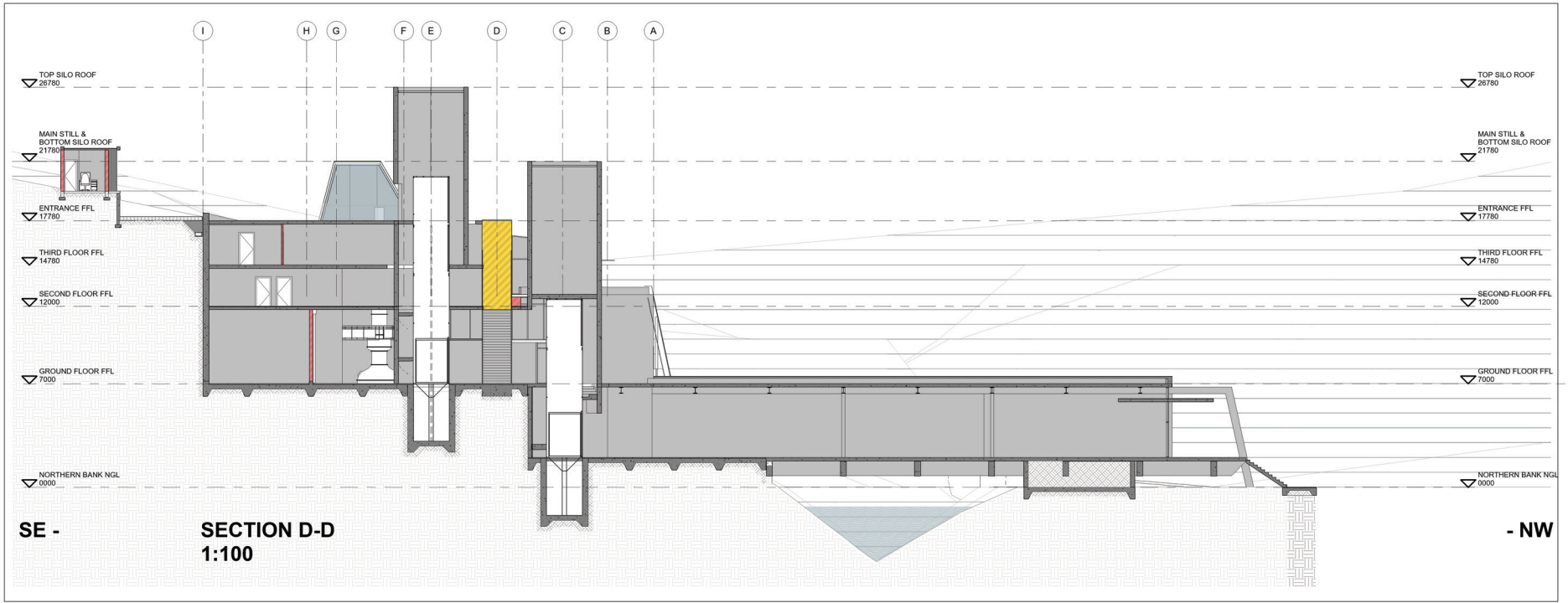
PROJECT NO	DISCIPLINE	SERIES	DRAWING NO	REVISION
0001	A R	L P	A006	



SECTIONAL PERSPECTIVE



NE - SECTION E-E 1:100 - SW



SE - SECTION D-D 1:100 - NW

Project Number:	S001

Client[s]:

DISTELL

General Notes:

AUTODESK.

Revisions

No.	Description	Date

Legend

Schedule

Consultants

Contact Number

Council	Professional nr	Name	Signature
SACAP	Student	A. Lindeque	

Project

Municipality	Dihlabeng Municipality
Town	Clarens, Eastern Free State
Erf	Un-zoned [Conservation Area with Future Development Option]
Land Parcel	Un-zoned [Conservation Area with Future Development Option]

Drawing Title - Construction Drawings -

New Building: Plan

Consultants Drawing Number

SCALE AT A0	DATE	DRAWN	CHECKED
1 : 100	11/14/20	Author	Checker

This drawing is to be read in conjunction with drawing nr:

Drawing Number

PROJECT NO.	DISCIPLINE	SERIES	DRAWING NO.	REVISION
0001	A R	L P	A007	

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FIN.

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