A building should be informed by its context. Site construction is the process of identifying the multiple layers of urban information which collectively forms the context.
Visual study

Paths

Edges

Nodes

Landmarks

Districts

S.T.A.R.T

Successful places
The western flank of the site is the only street edge, namely Festival street. It gazes upon the Rissik Metro train station and a small urban green space. This space is surrounded by a mix of low-rise office and residential buildings. The streetscape is shared with the Mozambican cafe which houses a small green grocer and internet shop. This building is older than sixty years, but is not protected under heritage legislation.

Although small in scale, Rissik station connects the site to the CBD and most neighbouring suburbs and townships, making it a point of high accessibility. The station contributes a large portion of the pedestrian activity, especially early mornings and late afternoons, as people travel to and from work.
The site can be viewed from various vantage points. The whole northern wing of the city property residential block overlooks the proposed area, therefore any building in this space will have a fifth elevation. The train track flanks the proposed site on the southern side, and cuts through the existing urban grid. Some of the buildings adjacent to the track therefore deviates from the urban grid, thus further emphasizing the divide caused by the track. Most of these buildings also turn their back to the track, as these areas usually have a negative visual and noise impact.
The northern edge of the site comprises of multiple buildings. The parking garage is accessed from the north in Arcadia street, and is used as additional office parking. The boundary wall of the residential block encroaches on the sites’ eastern boundary, using the gained space as extra parking.
The new City Property residential development fills the southern skyline. Due to relaxation on design coding, buildings are being erected that does not respond appropriately to the scale of Hatfield. Nevertheless, due to this transition in scale which occurs in a northern, southern and western direction, the proposed site sits within an urban amphitheater.
The junction at Hilda and Park street is a busy pedestrian zone. This street crosses all the major streets running into the CBD. Park street runs parallel to the Metro train track, and meanders past the construction area of the Gautrain station. The property marked is currently developed by City property. Sources show that the new project under construction will be a 20 floor international hotel, but there is still no information available.
The parking area is currently used by the Virgin Active gym and Damellin College. This structure is built across the space required for the Gautrain, and therefore will be demolished as track construction begins. The space adjacent to the track is clearly underdeveloped and in need of revitalization.
The Mozambican cafe is over sixty years old. Although this building is dilapidated, it has an active street edge. These enterprises are small scale, but provide a lively atmosphere to the street. The building is not a protected heritage building, yet it remains an important remnant of the past history and culture. Together with the adjacent Rissik station, these two buildings could be preserved to bring some character to the new urban fabric.
Development

The massing study of Hatfields' core area clearly shows the areas of highest density. The average building height ranges between two and four storeys, with the exception of a few. Recent development has exceeded this scale in anticipation of the Gautrain's arrival. Two new residential developments have traversed the contextual scale of the area and towers at nine to eleven meters. The old residential area to the north-east are mostly single level houses, and are used for small businesses and embassies.

The University precinct is inaccessible to the general public, thus forming an urban island. The University cannot extend any further to the north, and therefore most of their development energy is focused towards the east. There are two major green spaces in the precinct, but are predominantly under-utilised. Springbok park is unsafe, and has little residential backup to activate it, while Belgrave square is private used by the bowling club and soccer club.
PATHS

paths are channels along which an observer customarily, occasionally or potentially moves. (Lynch, 1960:47)

The paths are predominantly governed by the city's grid system. The Metro train system institutes an extra layer of division, thus reducing the block permeability even further. The grid system and train track increases travelling distances and choice of routes, leaving the pedestrian to navigate the urban environment via inadequate and pedestrian unfriendly routes.

The Gautrain will bring a large influx of pedestrian traffic to the Hatfield core area. There is an opportunity to connect the 3 major high order facilities. This route will connect the University of Pretoria with the two major transportation nodes in Hatfield. Pedestrians would be able to filter through the internal spaces that connects the University, Rissik Metro station and the Gautrain Hatfield station.

opportunities

fig. 21 Paths

fig. 22 Path opportunities

VEHICULAR

PEDESTRIAN

Gautrain station

Metro Rail

hatfield core area

university of pretoria

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edges are linear elements not are not used as paths by the observer, acting as a barrier to the public environment (Lynch, 1960:47).

The junction of Burnett and Hilda street have the most active edges, and forms the core of Hatfield’s commercial activity. The other urban blocks have fairly inactive edges due to large block sizes, underutilised space and fragmented activities. This makes it difficult for a healthy distribution of commercial and other urban activities.

By activating the internal unused spaces adjacent to the track, a variety of activities could occur on route to both stations, therefore capitalizing on the flow of people. By connecting the areas of highest accessibility, namely the University, Rissik Station and the Gautrain station, a new layer of urban order can develop. This new layer of urban order will enhance the current system, by strengthening it with a proper backbone of activity.
Nodes

Nodes are defined as strategic spots in a city into which an observer can enter, and which are the intensive foci to and from which he is travelling (Lynch, 1960:47).

The nodes indicate major links to other districts and important junctions. In the central Hatfield area, there are four major nodes as indicated. The Station node, connects to the surrounding suburbs and townships. The Commercial node marks the heart of Hatfield. The University node indicates Hatfield’s interface with the University precinct. The western node, connects Hatfield with Sunnyside, Arcadia and the city center.

Opportunities

There are two major new interventions occurring within the study area. Firstly, the Gautrain Station will bring a new level of activity and energy flow to the precinct. Secondly, the upgrade of the Metro system will improve usability and contribute positively to the developing urban fabric. Connecting these major nodes will increase the legibility of the urban fabric. A legible urban system gives a pedestrian preference, and makes it easy to find and access public facilities.
Landmarks are another type of point-reference, but in this case the user does not enter within them, they are external.

(Lynch, 160:48)

Landmarks might vary from user to user. The landmarks identified are the most prominent within the precinct. They form three very distinct landmarks by which a user can navigate through Hatfield.

Hatfield's spatial structure is fragmented. Green spaces are disconnected from places of pedestrian activity, and spaces of rest are becoming extinct. The space straddling the divide of the train track has an opportunity for an internal network of spaces, thus connecting all major points of importance, while providing spill-out spaces for the surrounding activities. This system of social space could attain landmark qualities, upgrading Hatfield's navigational system on a pedestrian scale.
The main business district forms the core of the Hatfield precinct. To the east is the low-intensity mixed-use area which links Hatfield with the Sunnyside and Arcadia residential areas. Within this precinct there are many small businesses and private enterprises. The University precinct forms a major part of the urban fabric towards the South and East, but is mostly inaccessible to the non-academic user.

Starting at Rissik Station and extending towards the Gautrain station, a station precinct produces a new layer within the heart of Hatfield. This precinct will function on a pedestrian scale, forming a hub of urban activity while providing an interface for the surrounding precincts. An urban injection from within the core could lay the foundation for future development, revitalizing dead and unused areas surrounding the Metro track.
On a precinct scale, the proposal takes the form of a developmental framework which is based on the opportunities identified within the Hatfield Metropolitan Core Urban Development Framework, the Gautrain Rapid Rail Link station functional area guidelines, and analytical observations conducted on site.

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2.32

Life, welfare, and relations of human beings in a community to make active cause to make over or renew; to re-create, reconstitute, or make over; to re-renew, or again to reform; to re-establish; method of performance; technical skill; ability to apply procedures or methods so as to affect a desired result.
**TRANSPORTATION GOES RED**

**City wide**

The proposed transportation system functions on a Metropolitan scale. The major highways feed into the city of Tshwane from all four directions. At these junctions where blue and red lines meet, there will be multi-level parking garages which will accommodate users that want to change their mode of transport in order to get to a destination in a quick, transport efficient way. These routes link all major areas, including the CBD, and the two major Gautrain stations. The main drive behind this initiative is to alleviate congestion and long travelling times. It also reduces the cost of travelling while integrating all modes of public transportation.

**Hatfield precinct**

The Vision for Hatfield is to see it grow into a bustling, vibrant, destination node in Tshwane. With the new Gautrain station at the heart, Hatfield becomes an area of high accessibility, making it a favorable place to live. The proposal therefore initiates certain strategies to enhance transportation routes, densify residential backup and commercial activities, and provide high quality public space as the canvas for social interactions and expression.

**B.R.T. (Bus rapid transit)**

**RED ROUTE**

The RED transportation system comprises of buses that run on dedicated lanes on all major axis of the city, creating a grid of continues, direct transportation channels across the metro area which integrates different modes of transportation (Manifesto for change, 1991:80). In the Hatfield precinct the drop-off points coincide with public open green spaces, thus reinforcing spatial logic of the transportation channels (Manifesto for change, 1991:80). At these stops, provision should be made for informal traders to facilitate the needs of commuters on the go.

**ACTIVITY ROUTES**

**Grosvenor**

This connector route connects the red line axis travelling in a north-south, and east-west direction. Grosvenor intersects with the Hatfield Gautrain station, therefore forming an activity spine that connects the two major modes of transportation (Manifesto for change, 1991:50). The street edge should be activated and wide enough to facilitate this intensive flow of people and activity intensity (Manifesto for change, 1991:49). Greening of this activity route is essential, thus connecting the two major green open spaces and extending the natural habitat via a green corridor. The proximity of these major transportation systems increases accessibility and minimizes the need to travel long distances to find intersecting systems.

**Burnett**

Burnett Street forms the main commercial activity spine in the Hatfield precinct. This spine is the primary flow of goods, people and capital, acting as the glue that integrates the various precincts within Hatfield. The street should give preference to pedestrians, be well defined and increase ease of movement. The street should also be well articulated with urban greenery, lighting and street furniture to define spatial hierarchy and enhance legibility and sense of place. The street texture should be cobbled where cars can travel, to increase the awareness of the streets activity. The development of this area should encourage the natural integration between larger and smaller activities, thus creating opportunities for small enterprises at these areas of highest accessibility (Manifesto for change, 1991:53).
The proposed addition to the transportation system aims to find a compromise between private and public systems. The blue route represents existing highways, and the red route the proposed additional red bus system. In principle, wherever a blue and red route meets, you will find a multilevel parking garage. This enables a user to enter the city grid by means of a public system, thus reducing congestion within the city system. This intervention secondarily aims to decrease traffic congestion around the two Gautrain stations, thus minimizing time spent in traffic and alleviating congestion on transport nodes.
BRING THE PEOPLE

For any successful urban strategy, energy is needed. This energy comes from people and the variety of activities they perform on a day to day basis. Work, sleep, eat, play, socialize, relax, and engage. The densification of three distinct areas in the Hatfield precinct will provide the energy supply needed to produce a rich, vibrant and multi-functional urban environment.

**RED**
The area east of Duncan and North of Church street forms one of the entrance gateways to Pretoria. This sector should be developed into a high density, mix-use sector, consisting of commercial activities and office space.

**ORANGE**
Areas of highest accessibility should be backed up with residential fabric. This sector currently consists of single story residential and small businesses. The sector should be densified and restricted to a building height of three to five storeys to retain the low rise character of Hatfield. This sector has easy access to all transport facilities and public amenities which makes it a sought-after place to stay.

**YELLOW**
The sector east of Duncan Street forms a large part of the University of Pretoria’s residential backup. This area currently consists of single storey communes, with a few two to three story residential developments emerging in the urban fabric. This area should be developed to respond positively to the existing character, guided by a height restriction of 3 storeys. The edges on Burnett and South street should be activated by some commercial activities, as these form the main connection to L.C de Villiers sports area.
fig. 36 Hatfield station concept

Grosvenor street
Gautrain station
There are no sure recipes or cookie-cutter solutions for making successful urban space. Each scenario must adhere to inherent spatial, contextual and cultural aspects in order to make the response unique and contextually responsive, therefore the right solution for a place; thriving urban space. However, there are characteristic present in every successful place that can be adapted to guide urban development, therefore laying the foundation for the constant process of humanity in transition.

**character** - a sense of place and history

Character is how we distinguish one place from another. It is about place-making (Dewer & Uitenbogaardt, 1991:22). It reflects local culture, tradition and context. It establishes recognizable patterns through use of natural features, distinctive landscapes, diverse spaces, and physical and psychological clues that embeds a spatial identity, the blueprint of that place. It enables environment, encapsulating timeless qualities in space.

**continuity and enclosure** - clarity of form

What should be open and what should be closed? Who should have access and who should not? Good public space has a clear hierarchy and definition between public and private space. Positive urban environments requires freedom and constraint, setting preconditions for activities and growth to occur (Dewer & Uitenbogaardt, 1991:23). Purposed articulation of urban space therefore ensures the development of healthy ownership roles and public care. Definition should occur by means of buildings that define these spaces at a scale that responds to the character of the place and that feels comfortable at a human scale.

**quality of public realm** - sense of well-being and amenity

The public realm is the zones of greatest interaction, and therefore the areas of greatest opportunity (Dewer & Uitenbogaardt, 1991:17). It is the setting for the formation of social networks and public ties (Dewer & Uitenbogaardt, 1991:18). These spaces usually have distinct and clear routes, a good sense of safety and security, provide equal access to public amenities, and are detailed with good lighting, urban greenery, street furniture and public art. These spaces are structured to respond and adapt to the needs of everyone.

**ease of movement** - connectivity and permeability

Movement is vital in our daily ritual of life, for it is the method by which we get from one place to the next. Therefore, the urban fabric should be developed to improve ease of movement with a choice of safe high quality connector routes. Roads, footpaths and public spaces should be well connected and provide high accessibility to public transport systems.

**legibility** - ease of understanding

Places should have focal points, landmarks, distinct views and gateways that act as points of reference, provide visual order and guide passage through space. Good articulation of built form, adequate lighting, signage and creative waymarkers provide the basis for a good sense of direction and provide the clues needed to equip the user to navigate public space.

**adaptability** - ease of change

Spaces that can only be used for a singular purpose, remains empty most of the time. Therefore it is essential that spaces have flexible uses, and are adaptable to current and future spatial requirements. Adaptive re-use of buildings with historic value also improves quality of the public realm and enhance the character and legibility of a space.

**diversity** - ease of choice

Monotony is the enemy. Diversity increases the range of choices that people are exposed to (Dewer & Uitenbogaardt, 1991:17). Places should be multifunctional and provide for a mix of compatible uses and programs. These places should cater for diverse communities and cultures and offer a wide spectrum of activities and communal functions. Spaces that possess healthy diversity of people, culture and architecture are the groundwork for positive social interaction and expression.