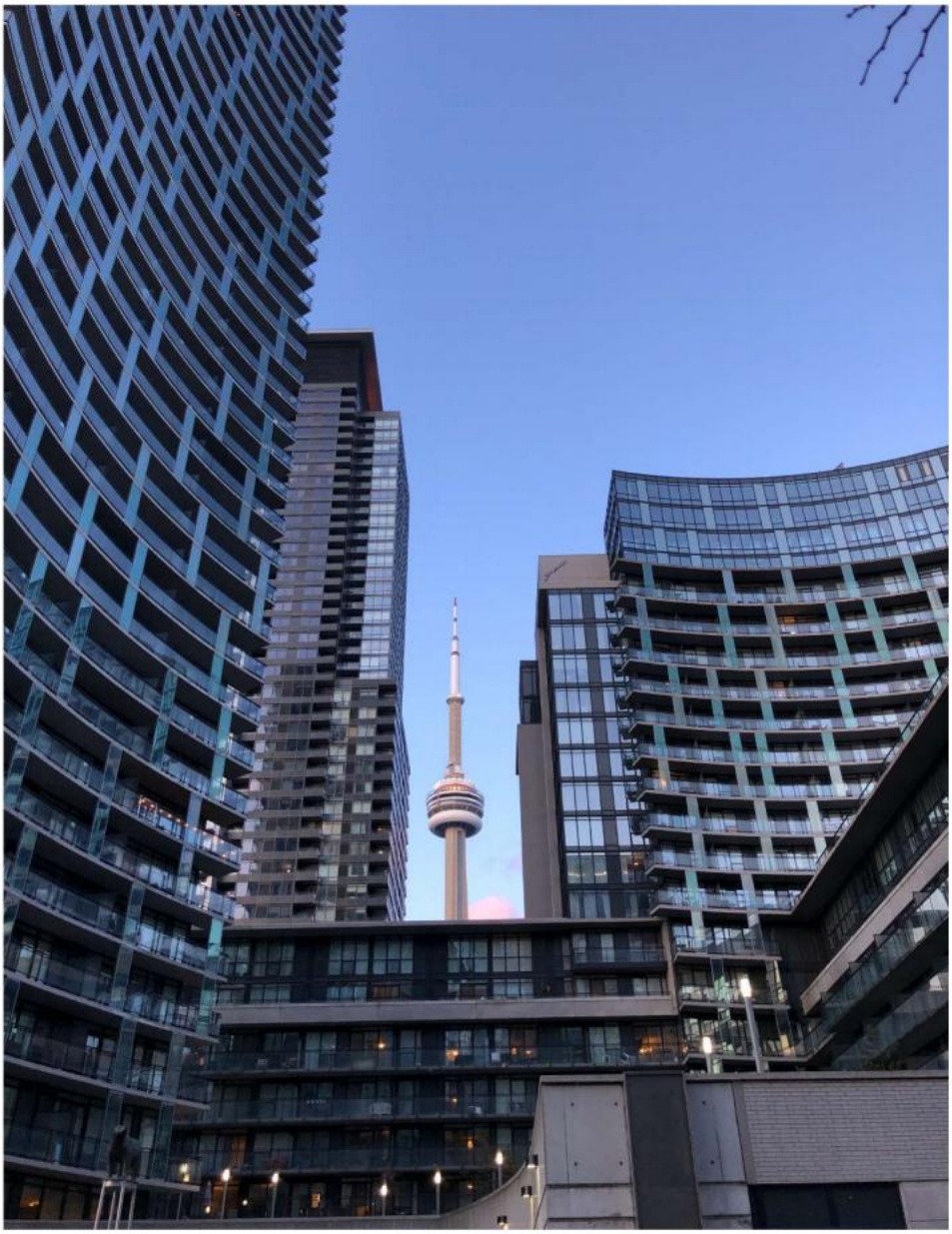
architecture PORTFOLIO

selected projects

MANOEL LOURENÇO
architect and urban planner



MANOEL LOURENÇO

my project types

residential

commercial

institutional

BIO

Young ambitious architect seeking p
growth and experience to further enha
in architecture and urban planning. Sin
shared my time and talent to promote
clusion in the society exercising my arc
urban planning knowledge.

Professional Experience

FEB 2019 – AUG 2019
JUNIOR ARCHITECT
Chris Roncato Paisagismo & Áreas Externas
Campinas, Brazil

Draughtsman. Delineation and techinical drawing of residential, commercial and institutional landscaping projects. Responsible for communicating and performing as a link with clients.

JAN 2018 – NOV 2018
JUNIOR ARCHITECT
Adriana Agostinho Arquitetura & Interiores
São Paulo, Brazil

Draughtsman. Responsible for the techinical drawings of residential, commercial and stores in malls. Creation of 3D modeling and renders.

JUN 2017 – OCT 2017
INTERNSHIP ARCHITECT
Chris Roncato Paisagismo & Áreas Externas
Campinas, Brazil

Draughtsman. Responsible for the techinical drawings of residential, commercial and stores in malls. Creation of 3D modeling and renders.

JUL 2016 – DEC 2016
INTERNSHIP ARCHITECT
Garcia Nieto Perez Arquitectos
Seville, Spain

Participation in preliminaries urban studies downtown Seville and small towns nearby. Project restoration in the old town.

NOV 2013 – DEC 2015
INTERNSHIP ARCHITECT
Hobeika Arquitetura & Engenharia
Campinas, Brazil

Created and modified drawings as rendered schematics for over 50 designs.

Education

SEP 2019 – APR 2021
GEORGE BROWN COLLEG
Diploma in Architectural
Toronto, Ontario

JAN 2012 – DEC 2017
PONTIFÍCIA UNIVERSIDAD CAMPINAS
Bachelor in Architecture
Campinas, Brazil

JAN 2016 – DEC 2016
ETSAS - ESCUELA TÉCNIC ARQUITECTURA - UNIVER
One year schoolarship in nical Drawings and Urba
Seville, Spain

DEC 2013 – MAR 2014
ILSC - INTERNATIONAL LA SCHOOLS OF CANADA
Three months full time ex focused on english as a s
Vancouver, British Columb

Volunteering

JAN 2018 – JAN 2018
UM TETO PARA MEU PAÍS
Volunteer program focus of emergency houses
São Paulo, Brazil

Summary

Architecture projects

Urban Planning projec

01| tiny house

architecture + wood fram

Tiny House

Type
Architectural +
Wood frame construction

Location
Wellington, Ontario

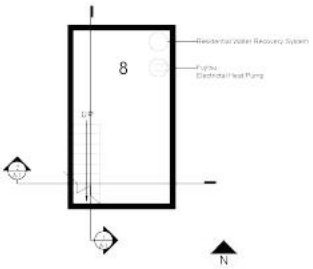
Phase
Conceptual Design +
Floor Plan, 3D Modeling

Description
This academic project is about a tiny house with maximum foot-print of 25 m2 and the maximum total floor area is 35 m2. The house is self-efficient.

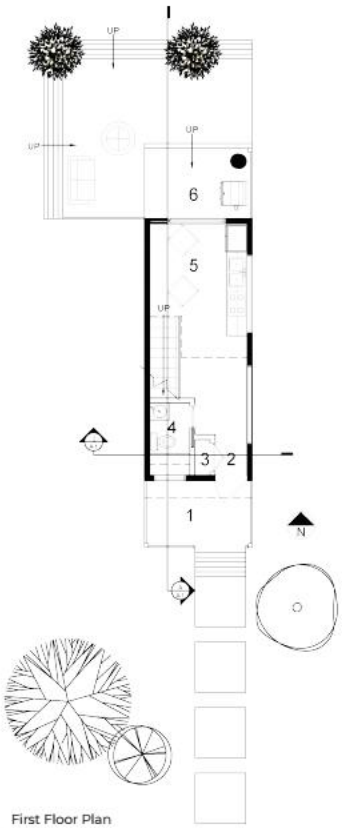
Software Used
AutoCAD, Sketchup, Photoshop.

Involvement
Sket, Development of construction details and floor plan.

Description
Tiny house project developed on 2
lington, Ontario is southern orient
view of the lake. The project as a w
take advantage of the natural heat
more eco friendly. A door in the so
were selected to be opened in the
ral air flow and circulation. In addit
panels are facing south as it is the
receiving the most amount of sunl
facing south for the same reason;
natural warmth. Some of the green
smart tinting. These windows cont
that the house is going to receive.
residential water recovery system



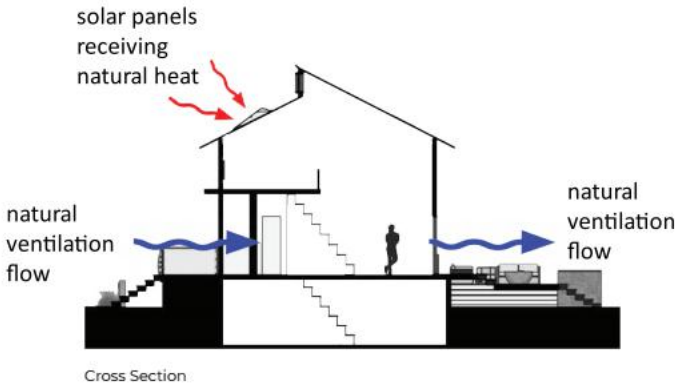
Basement
1:250



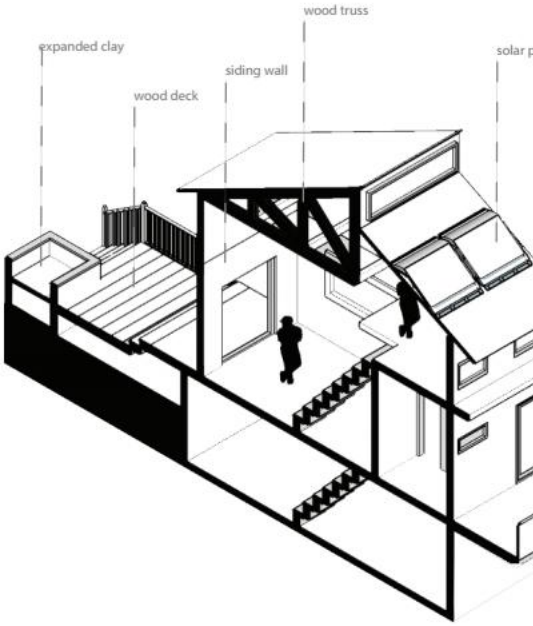
1 - Porch
2 - Entrance
3 - Closet
4 - Bathroom
5 - Living Room/ Kitchen
6 - Backyard
7 - Bedroom
8 - Mechanical Room

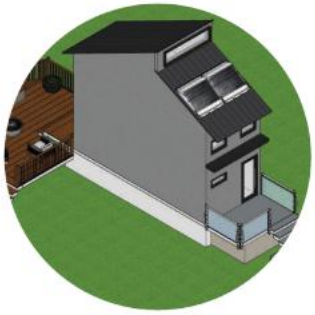
First Floor Plan
1:250

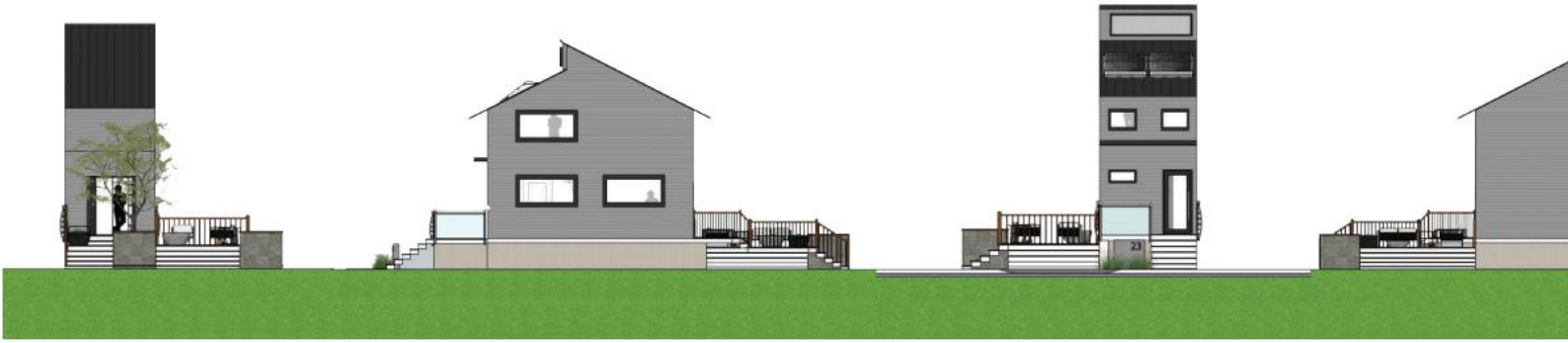
Mezanir
1:250



Cross Section







portfolio

02| wood frame house

architecture + wood fram

Wood Frame House

Type
Architectural +
Wood frame construction

Location
Toronto, Ontario

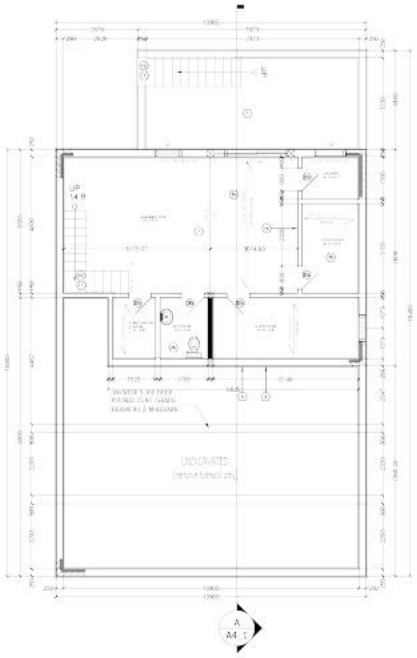
Phase
Conceptual Design +
Floor Plan, 3D Modeling

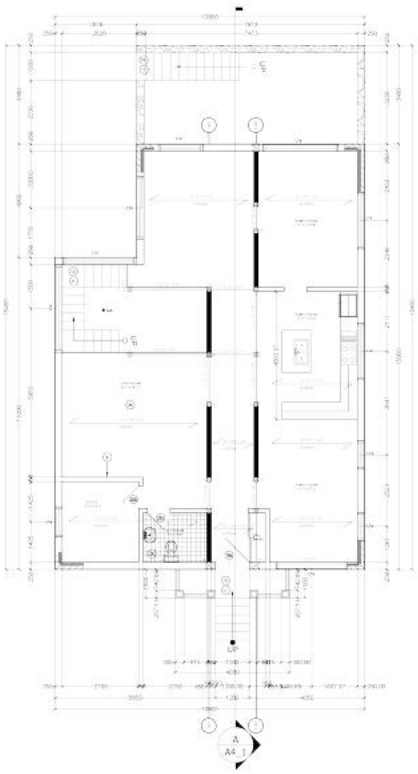
Description
Academic project focused in the design of a wood frame house, construction drawings and construction documentation according to the Building Code.

Software Used
AutoCAD, Sketchup, Photoshop.

Involvement
Development of sets of plans, building code, zoning by law.

Site Plan


Basement Floor Plan


First Floor Plan

Description

The objective of this project was to
house and produce construction d
tation. The whole house is followin
ing Code.
The idea is to create a two storey h
basement floor there is a open spa
room, this allows the owner to rent
they desire. In the first floor plan th
toilet for visitors and a open space
room. In the second floor, is where
located, followed by a master bedr
more individual bedrooms.


Secon

Construction Notes According to the Building Code

Wall Section

portfolio

03| warehouse

commercial + buildi

Warehouse

Type
Commercial +
Building Code

Location
Toronto, Ontario

Phase
Conceptual Design +
Floor Plan, 3D Modeling

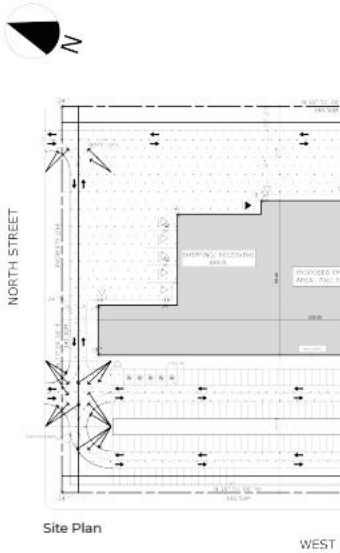
Description
Academic project designated to apply the knowledge in construction drawing and documents for a warehouse building. Steel frame construction in a 2 storey office.

Software Used
AutoCAD, Revit.

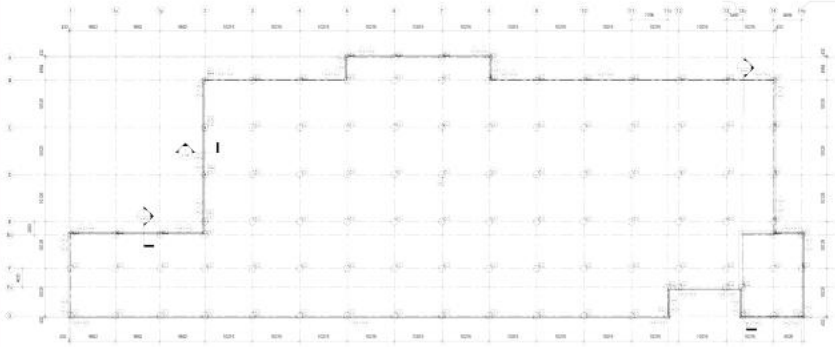
Involvement
Development of all the drawings, building code, zoning by law.

Description

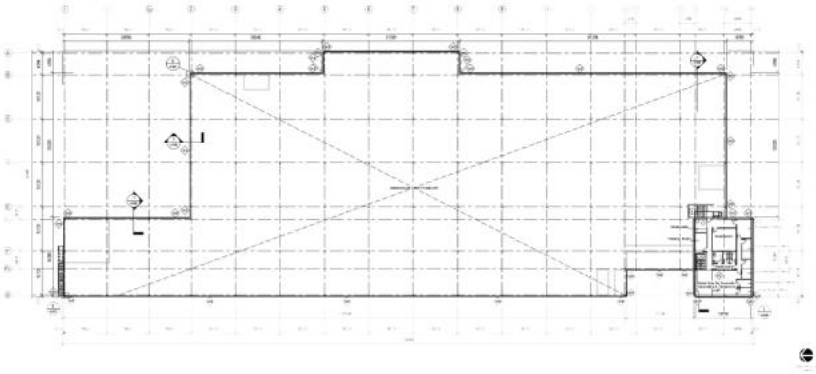
Apply the design and technical aspects of building projects utilizing steel frame building system. In addition to incorporating applicable concepts from Sustainable Materials and Structures. The project objective is to apply architectural technology, engineering principles, constructability techniques, specifications and document coordination throughout documentation phases. The client is considering the construction of a warehouse-type building for lease to a perspective tenant and requires of a set of Construction Drawings & Documentation for the building based on the municipal zoning regulations and building tenant requirements.

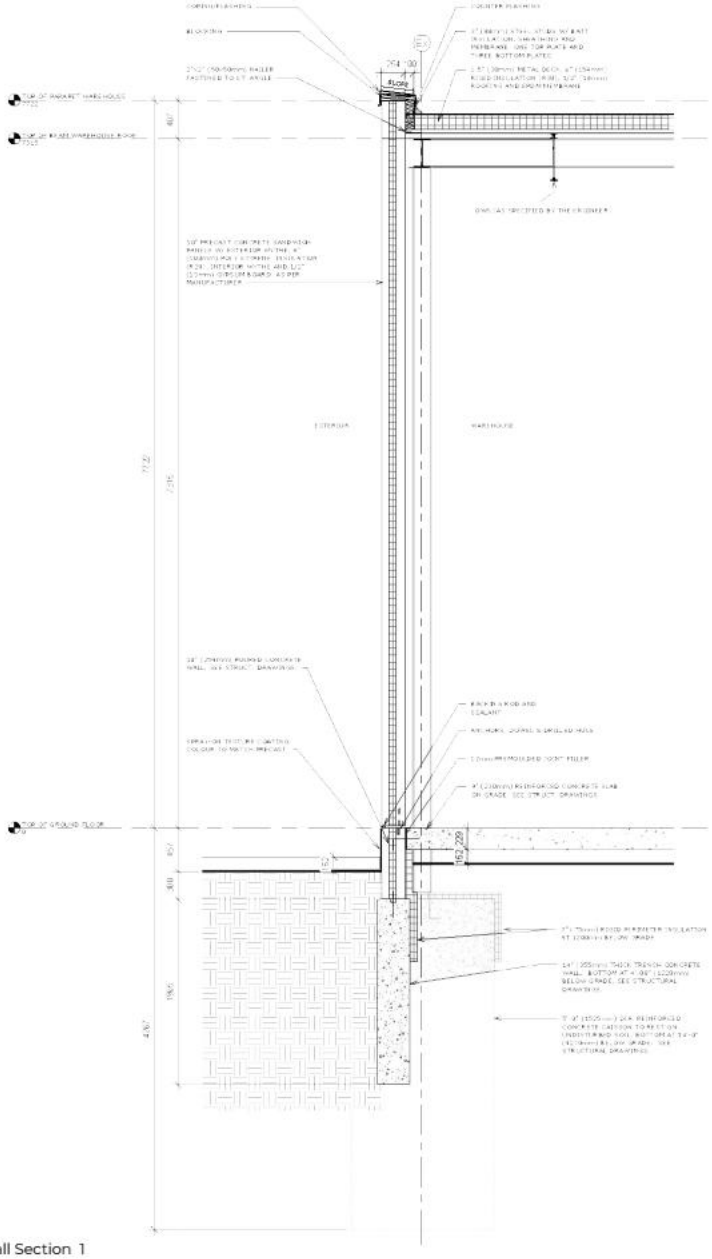


Site Plan

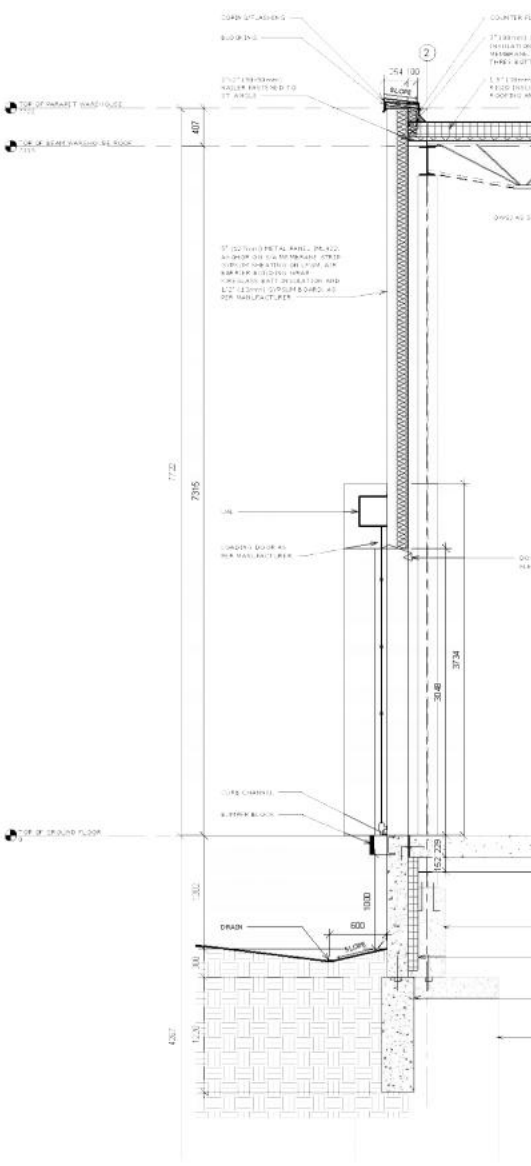


FoundationFloor Plan

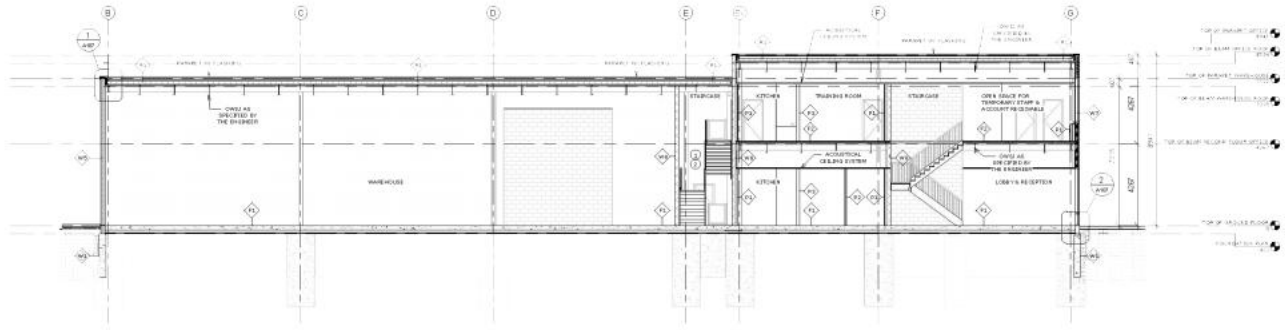




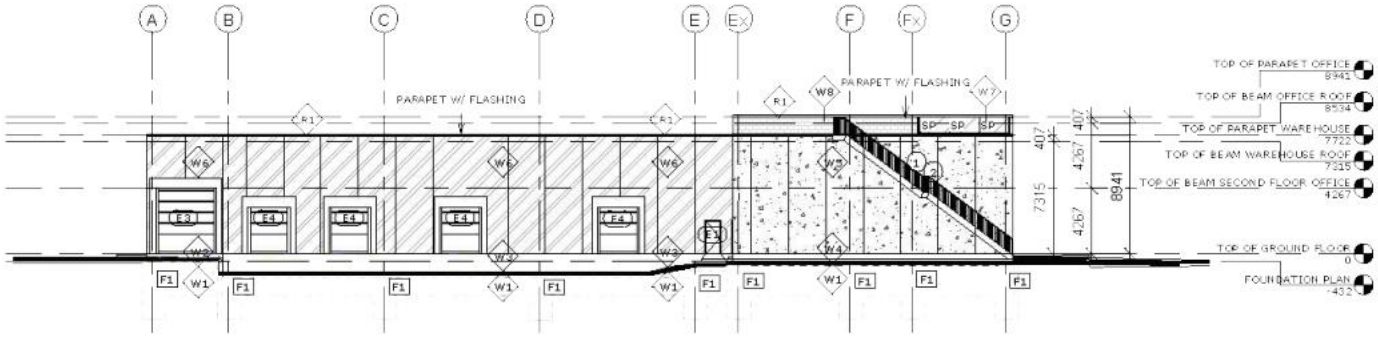
Wall Section 1



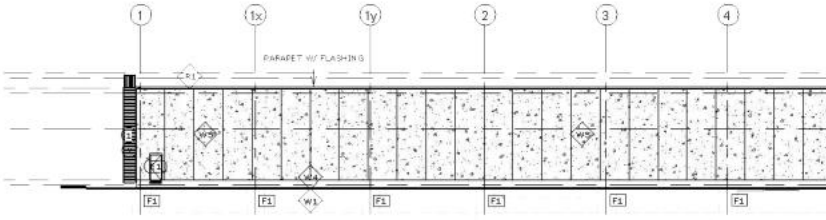
Wall Section 2



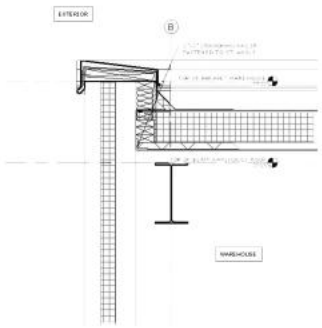
Cross Section Office



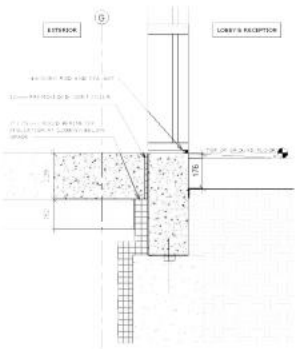
North Elevation



West Elevation



Section Detail 1



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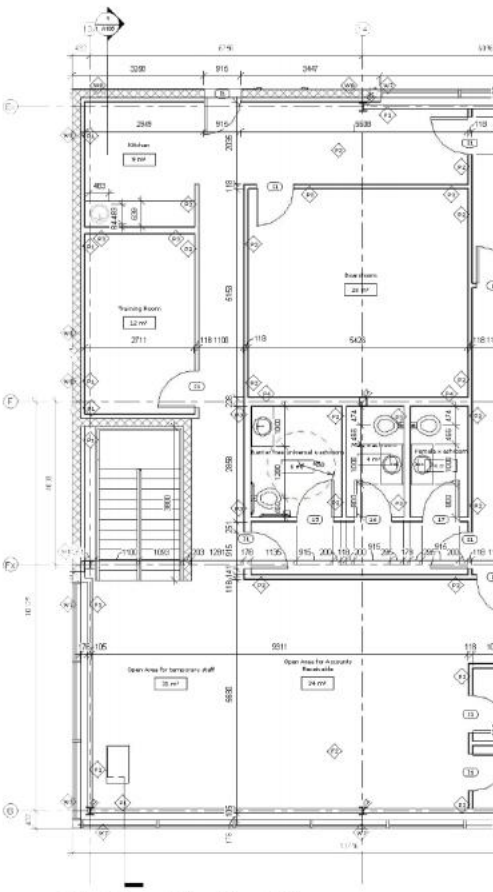
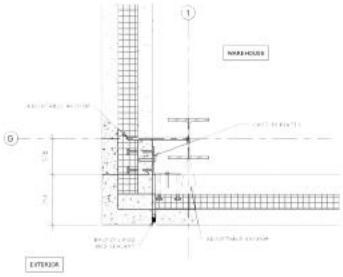
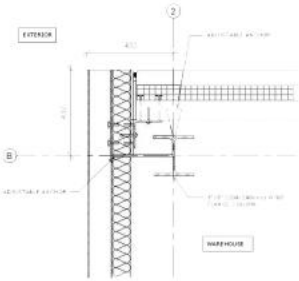


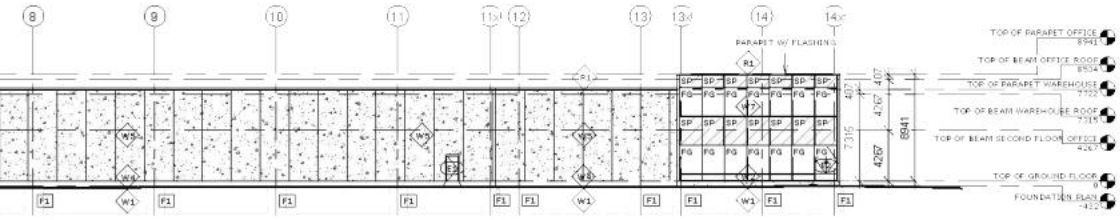
Callout Second Floor Plan - Office



Plan Detail 1



Plan Detail 2



portfolio

04| school project

architecture + institu

School Project

Type
Urban Planning +
Institutional

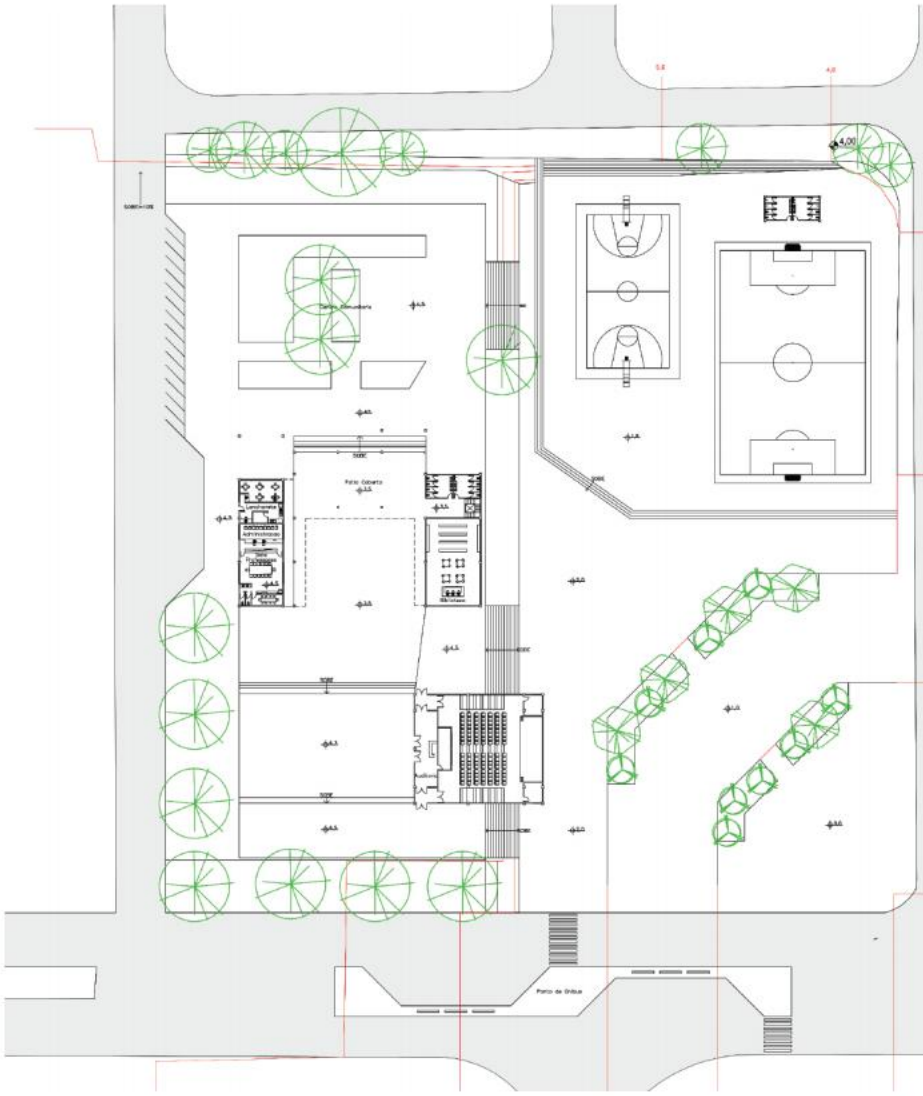
Location
Campinas, Brazil

Phase
Conceptual Design

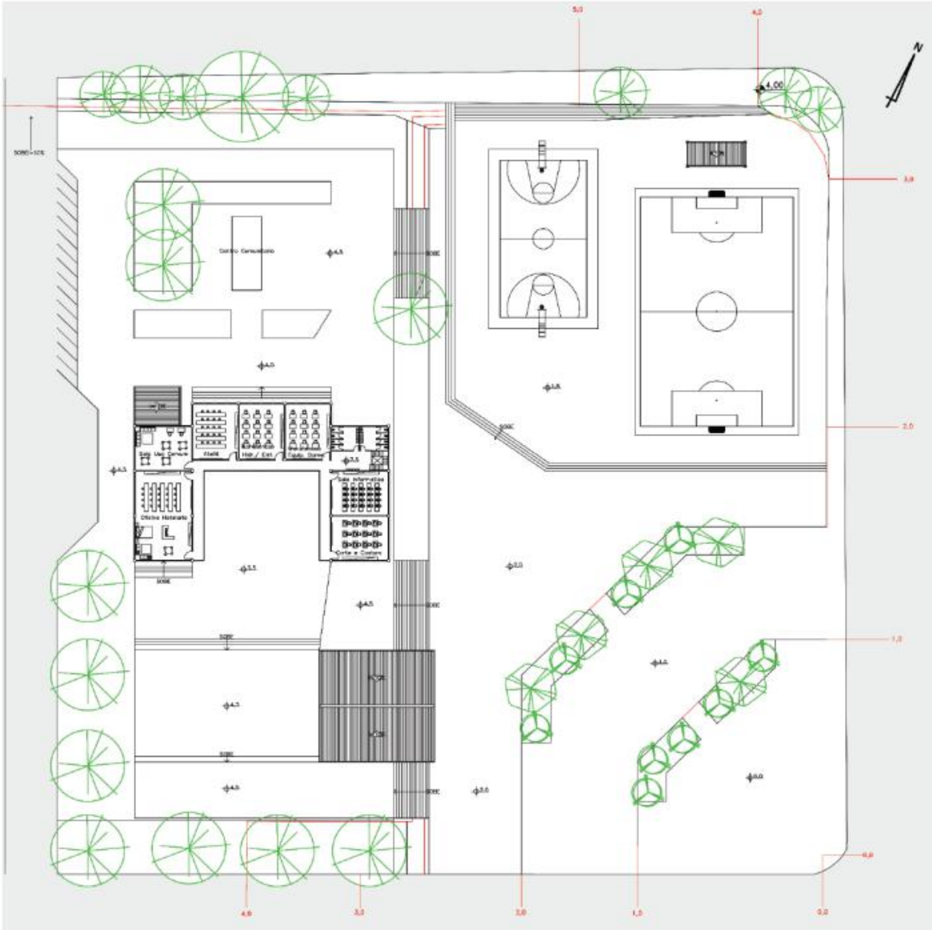
Description
Institutional project developed in the university. Starting reading a urban scale and all the potentials that the lot could improve for the neighborhood. In the floor plan, all the services for the users, in the second floor, all the classes, giving more privacy.

Software Used
AutoCAD, Sketchup, Photoshop, Illustrator, Lumion.

Involvement
Urban research, bus lines, necessity of the neighborhood, massing studies.



First Floor Plan
1:1000



Second Floor Plan
1:1000

05| toronto waterfront nature interpreta centre

architecture + urban

Toronto Waterfront Nature Interpretative Centre

Type
Architecture + Urban Design

Location
Toronto, Ontario

Phase
Conceptual Design +
Architecture Drawing
Master Planning

Description
Urban qualification in Guadalquivir river. The idea is to expand and increase the market value in the west side of the river, this portion of land it was before a water park, which currently is disabled.

Software Used
AutoCAD, Revit, Photoshop, Illustrator, Twinmotion.

Involvement
Site research, zoning by law, zoning map, technical drawings.

Description

The building is located in **Tommy Thompson Park,** Toronto, Canada. Known for its proximity to the city center and its large number of bird species and wet areas. The interpretative centre's objective is to provide a sustainable and accessible space where visitors can learn, connect to nature, observe the natural environment even being such close to the city.
The Interpretative Centre is divided in three different buildings: The main building, the cafeteria and the hostel. Every single building was created to provide a different experience to the visitors.

Site Plan

Legend

Site Analysis

The site analyzed in this
Tommy Thompson Par
preserve the fauna and
Total area: 254, 649 m2

Topography

Features of the Land

Climate

Sun Path

Wild life

The site is mainly composed of meadows, open areas with a mix of grass and flowers. During the summer, winds are soft coming from the East and during the winter, winds are stronger coming from West.

Human-made elements

Humans have created the site itself and, after that, a parking lot for cars. In addition to that, there is a small visitor center near the parking. There are nature trails on the site that are maintained by the city. A general pole, a few telephone poles, an electrical pole are present on the site limits and will not impact the future project location.

Fig.16. Parking Lot Rendering

Wind

During summer, winds are soft. There are mostly coming from the East and the East North East.
During winter, winds are stronger and mostly coming from the West, the South-West and North-West.
Regarding this information and the previous one, it will be important to protect the building(s) from the wind, particularly during winter.

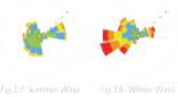


Fig.17. Summer Wind Fig.18. Winter Wind

Views

The view from the park is unique, the lake as well as the city skyline. People should be able to look at the city's view from the park.

Fig.19. 3D City's view

Surroundings

There are roads all around the site. Some roads are exclusively for cyclists and pedestrians, others are also opened to vehicles.
There is not much noise on site due to the vegetation and low traffic in this area.
However, the city of Toronto has an ongoing project on the port lands whose objective is "transform from a predominantly industrial district into a resident and vibrant extension of the urban metropolis". This may generate more traffic such as cars and inhabitants near the park and affect the amount of noise.

Fig.20. Port Lands Project Rendering

Vegetation

The site is mainly composed of meadows, open areas with a mix of grass and flowers. The flowers are Canada thistle, common tansy, chicory, viper's bugloss, Canada goldenrod, boneset or scouring rush flowers. These flowers' colours are violet and yellow.
There also are thickets and forested wetlands. The trees that can be seen are eastern cottonwood (maple), trembling aspen, balsam poplar, sandbar willow, red-osier dogwood and swamp.
All the trees are deciduous which means they do not protect from cold winds during the winter. This will have to be taken into consideration during the design process.

Fig.21. Eastern Cottonwood

Fig.22. Swamp

Fig.23. Trembling Aspen

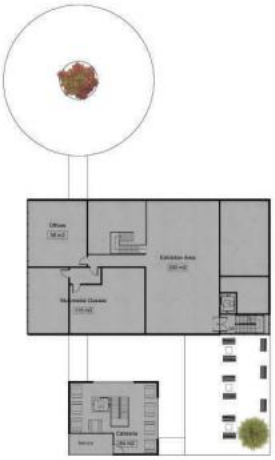
Fig.24. Sandbar Willow

Fig.25. Viper's Bugloss

Fig.26. Common Tansy

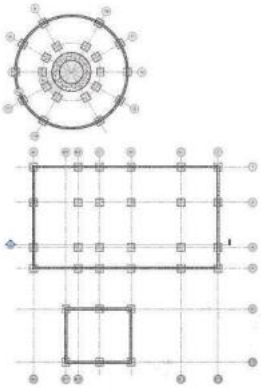
Fig.27. Canada Thistle

First Floor Plan

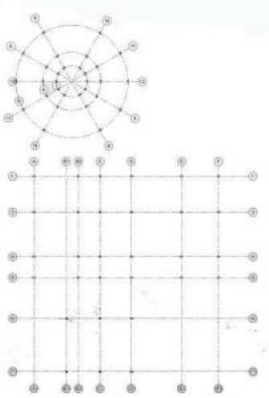


Second Floor Plan

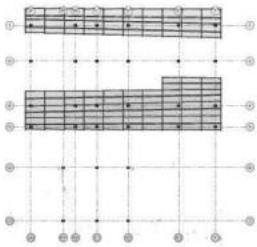
Third Floo



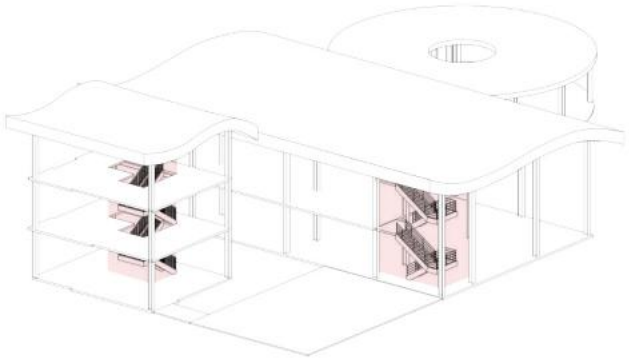
Foundation Plan



First Framing Plan



Second Framing Plan



Structural 3D showing the vertical circulation

1. Metal Roof System by Morin Corp. (USA)
Single-skin metal roof system for roof finishes. Use of the MorZip profile, providing seamless transitions from wall to roof and back again.

2. Rolled Zinc by MetalTech Global (USA)
Material used for the roof and exterior walls of the hostel. Chosen for its high malleability which allow to create the illusion of a nest, its refinement requires less energy than aluminum, steel or cooper.

3. Reclaimed wood by Urban Timber (Ontario)
Reclaimed Hemlock wood used for the exterior siding of the building. The wood is found locally and fits perfectly with its environment and the trees already on site.

4. Reclaimed wood by Urban Timber (Ontario)
Charred Cedar wood used for the exterior deck. Material found locally.

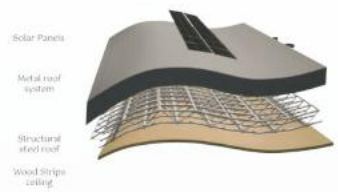
5. Reclaimed Wood Flooring by Old Woo
Salvage (Ontario)
Wood used for floors & panels on wall. Found

6. Concrete by Carboclave (Ontario)
Concrete used for floors in order to obtain th
massing. Local producer using carbon dioxide
of steam or mist in order to create a more sus
able product.

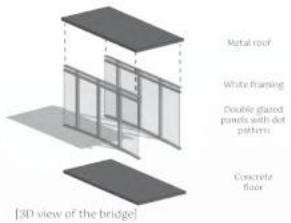
7. Hempcrete by Hempteckbuilder (Onta
Material found locally using cannabis plant wi
high R-value. Used to reemplace batt's of insu
Drywall, Plywood, Vapour Barriers, Glues, Tap
Sealants

8. Feather Friendly® by Convenience Gro
(Toronto)
Dot pattern used on windows with 4"x2" spac
placed in order to protect bird.

The objective of the roof's shape is to create a movement, similar to the wings of birds flying, in order to put the spotlight on tommy thompson environment and its great amount of bird species.
The solar panels, oriented south, allow the building to use his own energy for lighting, using only LED to reduce the energy needed.
The ceiling is made up of wood stripes that follows the shape of the roof, which gives a nice visual illusion to visitors.



[Detail of roof finishing]



[3D view of the bridge]

The building contains two bridges which connect th
to the cafeteria and the bedrooms. These bridges cr
transition from the main building to the cafeteria and
Under every bridge, a dry stream was created by c
ground and using rocks. This system catch and slow
prevent the creation of wet areas in non-desirable ar
Walls are entirely glazed in order to provide a nice
(trees, meadows, stream, deck area). Triple glazed
to preserve indoor temperature and give the fe
inside while seeing everything outside. White do
installed on the glazed panels to avoid bird win

In order to create a accessible and inclusive building, the design follows the Americans with Disabilities Act Standards. For example, all hallways are 2 meters large to allow a double circulation accessible to all. In addition to that, the texture of the concrete floor is slightly different from one room to another. This system warn blind persons that they are leaving one room. Moreover, wood panels at 80 cm to 1 meter 20 from the floor are used on walls to indicate the path by touching them. These design details allow everybody to enjoy the full experience, regardless their disabilities.

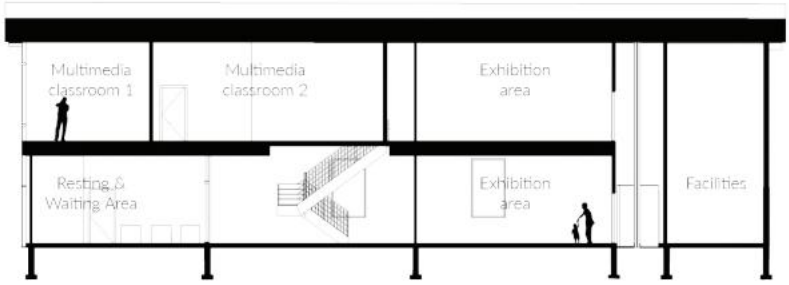
[Accessibility design ADA compliant]

[3D view of courtyard and drainage system]

The courtyard is located in the middle of the ho
the nest appearance of the building and providing
to the hallway and entrance. The objective is als
unique area connected to the nature and reserv
persons staying in the hostel.
The slope of the roof allows to funnel the rain
the pipe and the wood box, where the water will
for different purposes. Green spaces like this in
improve the overall standard of living one experien

[West Elevation]
[1:200]

Cross Section 1



Cross Section 2

[East Elevation]
[1:200]

Exterior 3D view of the interpretative center and view of Toronto skyline

Exterior 3D view of the cafeteria and deck

06| Urban connection in Seville, Spain.

urban planning +

Urban Qualification Guadalquivir River.

Type
Urban Design

Location
Seville, Spain

Phase
Conceptual Design + Master Planning

Description
Urban qualification in Guadalquivir river. The idea is to expand and increase the market value in the west side of the river, this portion of land it was before a water park, which currently is disabled.

Software Used
AutoCAD, Sketchup, Photoshop

Involvement
Site research, zoning by law, zoning map.

SITE ANALYSIS

01 80% of Seville's population lives in the East Side of the Guadalquivir River, the river back then was used to connect the city to the Ocean in South. The old downtown Seville was developed in the main circle and developed for pedestrian in the 8th century BC.

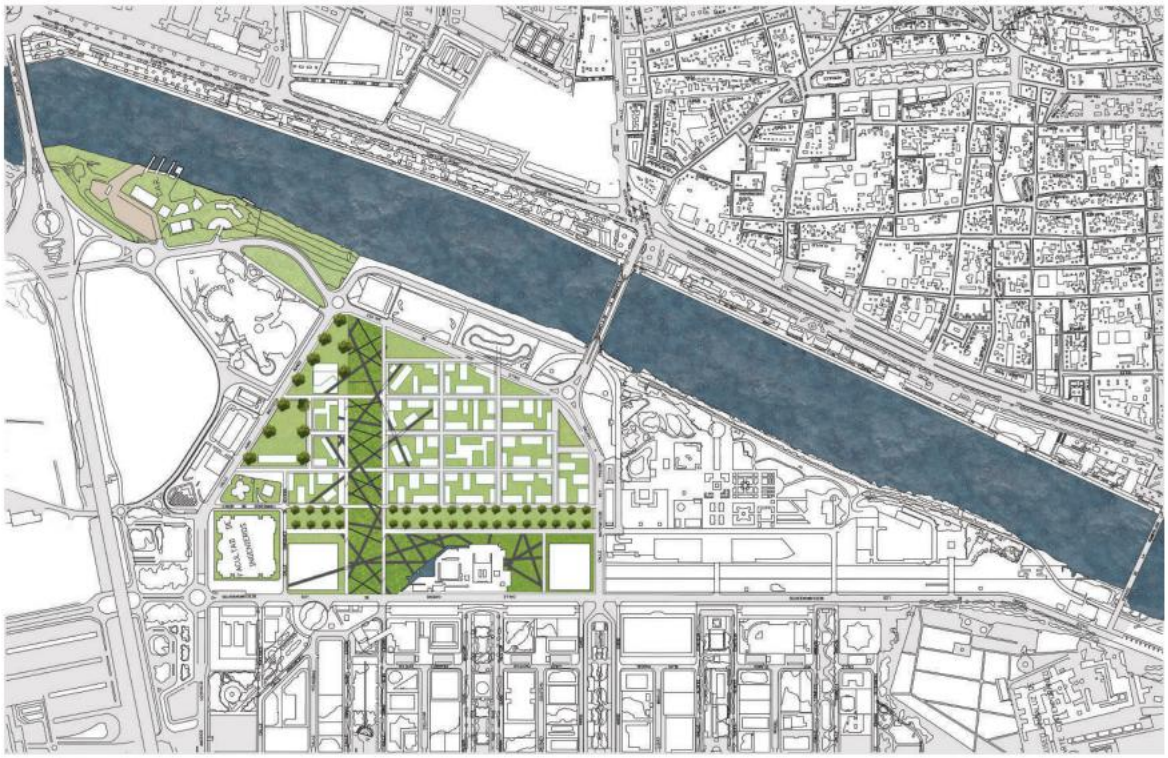
02 Spain remains far from a paradise for bikes - yet cycling has increased 11-fold in Seville in the space of a few years. In 2007, Seville's city hall created **180 km** of bycicle path and nowadays is the biggest Southern European city for **cycling.**

03 The new Seville is increasing towards East, so in consequence of that situation, the West part of Seville, is abandoned and there is just a few neighbourhoods over there such as Triana, Isla de la Cartuja (which a lot of industries are located there). So the idea is expand the West part, increasing the market value and giving a better distribution for all around the city area.

Seville's bicycle path

History and current situation

The **1992 Universal Exhibition of Seville** was a turning point for the city of Seville, above all for its international image. The event left behind a new and enormous urban space and a variety of pavilions and infrastructures that were partly transformed into **Isla Mágica**. In the other side of the river lives more than 80% of Seville's population. And downtown Seville is right beside Isla Magica. The idea is expand downtown and create a connection around the river equaly and increase the property values (which today is low). This new area will have green space that connects all the squares, bicycle path, residential and commercial building.



Master plan
1:10000

Bycicle Path Renovatio

Currently in the **Isla de La Car** rounded by industries and in s it is lacking quality of life. The n new **residential** and **commerc** the bycicle paths being transfe more space for pedestrians to sidewalks. Having these bycicl European charm and lifestyle but moving them more into th sidewalks gives the area more updated commercially and res **boulevards** in vertical and hori the circulation of people throu nect the main existing buildin

portfolio

07| final graduation project

architecture + urban

Final Graduation Project

Type
Urban Planning + Institutional

Location
Campinas, Brazil

Phase
Urban Analysis + Infrastructure + Conceptual Design + Permit Set

Description
This urban study is divided in two studies: The first one is a Urban Analysis of the city of Campinas and the cities around and the second part is the institutional project. A small Cancer Hospital in Guanabara's neighborhood.

Software Used
AutoCAD, Sketchup, Illustrator, Photoshop, Lumion, InDesign.

Involvement
Site research, drafting of initial site linework, urban analysis, technical drawings, building code

Guanabara Cancer Hospital

This project it was divided in two parts:
1 - Once it's done the Urban Analysis, we had chosen an empty lot in Guanabara Neighborhood. The group developed: Road analysis (Campinas and Grant Campinas Area), Building Permit Regulation, Zoning-by-law study.

2 - After finished the Urban Planning analysis, each member of the group took the responsability to develop different buildings, focusing in the currently potential that the area offers.

"Architecture as a way of healing"

Education and health, the base for any
This two segments that make up our so
In Brazil, both are under a medium con
most of the society

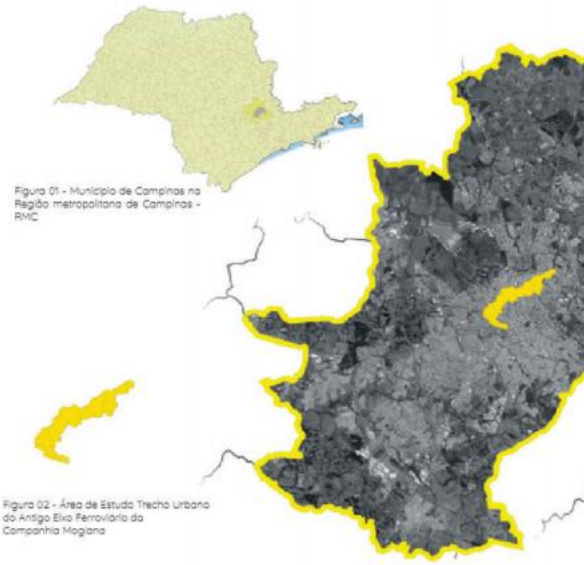


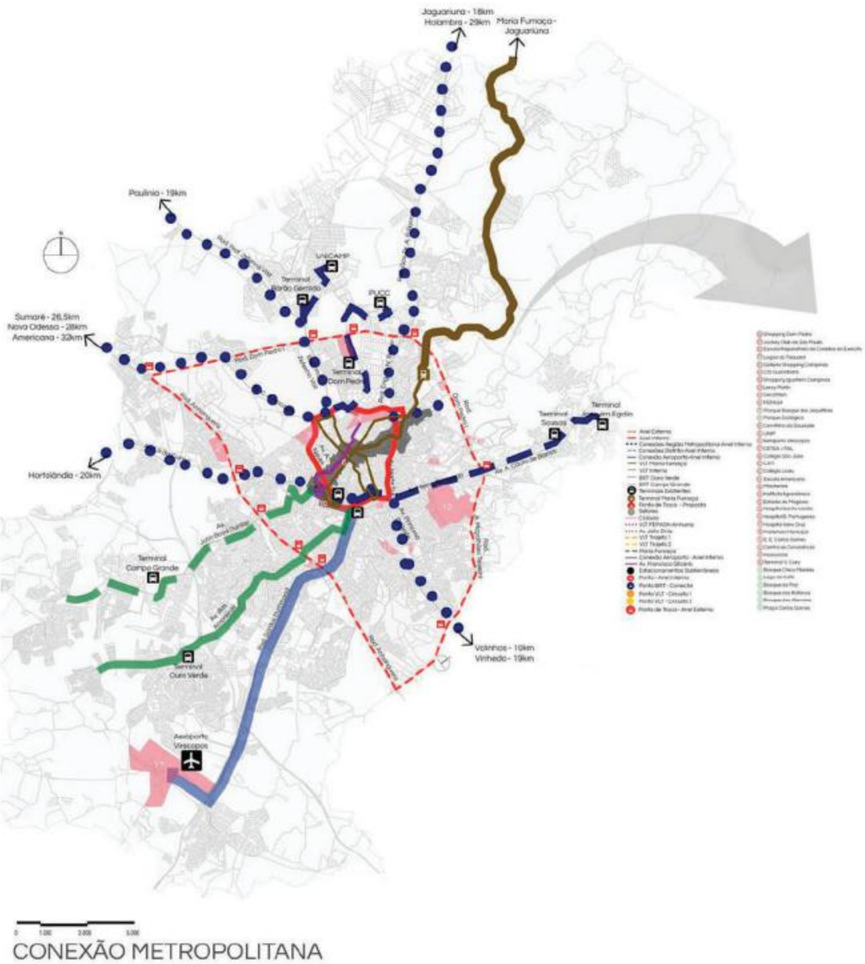
Figura 01 - Município de Campinas na Região metropolitana de Campinas - RMC

Figura 02 - Área de Estudo Trecho Urbano do Antigo Eixo Ferroviário da Companhia Mogiana

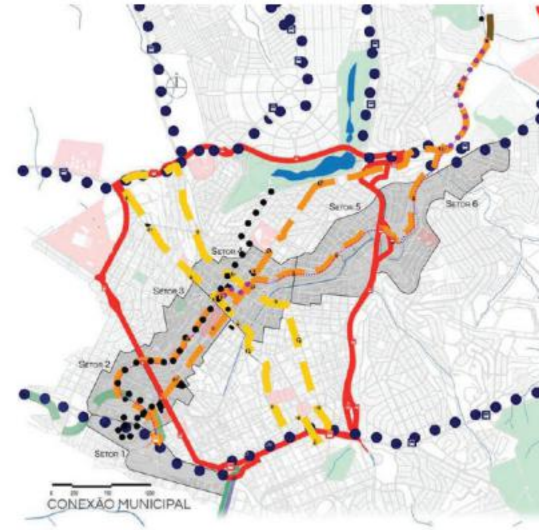
Area of intervention

EXPANSION AND IMPROVEMENT OF THE ROAD SYSTEM

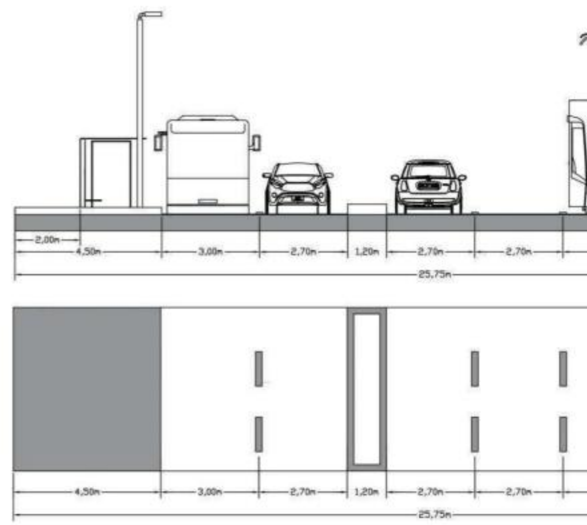
We had developed a detail study of all the roads that connects the Main city of Campinas with the cities that surround it the city. We took all the current main roads and avenues that goes toward downtown, installed bus stops, expanded the avenues with more lanes and also reactivated the old street car to try to give it back the classic stytle to the city.



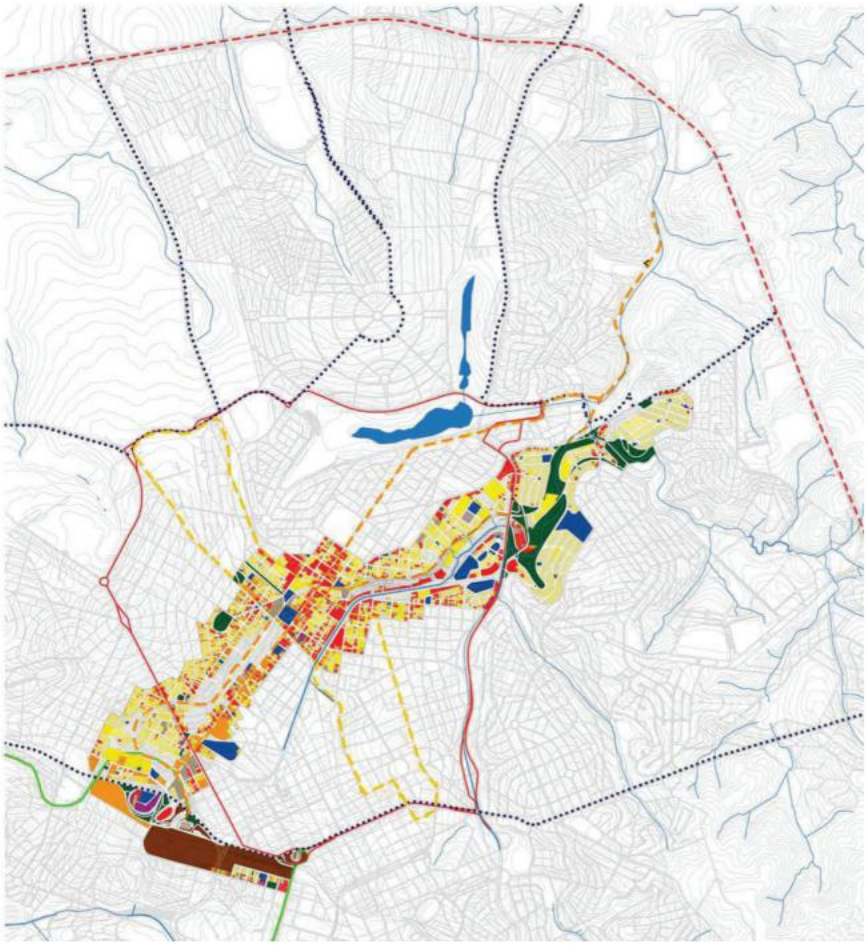
Campinas metropolitan Area



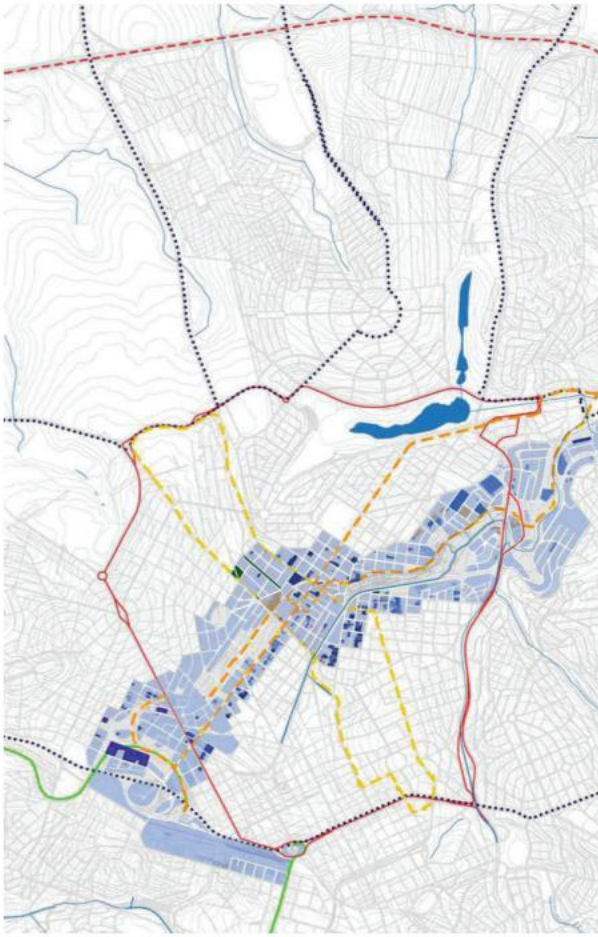
Downtown Campinas Expansion Road System



Expansion of the lanes - Guanabara Avenue.



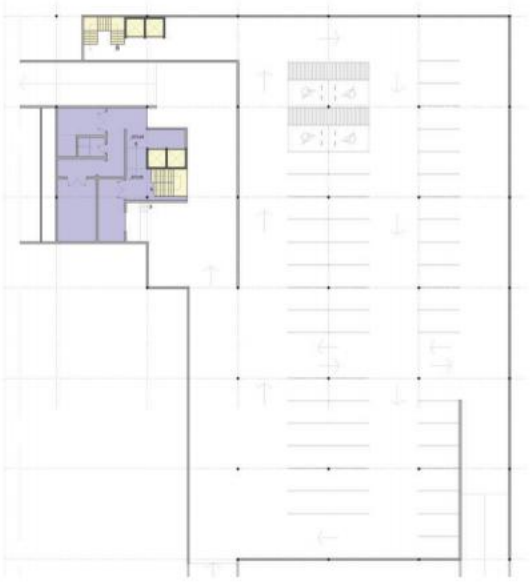
Zoning Map



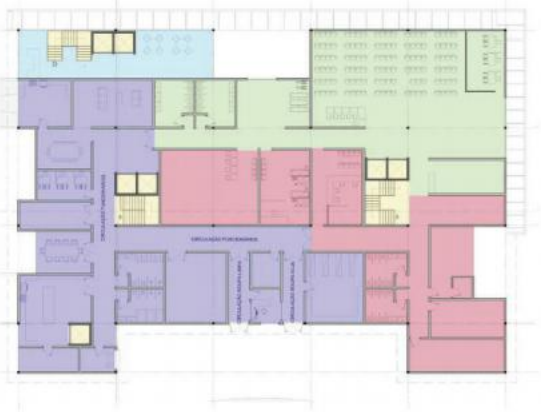
Building Height Map

URBAN RENEWAL PROJECT

After the urban analysis we had developed some important projects to improve the area and increase the economy of region. Each m
responsible for one project. Hotel, museum, social housing, hospital and a community centre. I was responsible for the development o
We also expanded the bicycle path crossing all the region, giving a more possibilities



Underground Level

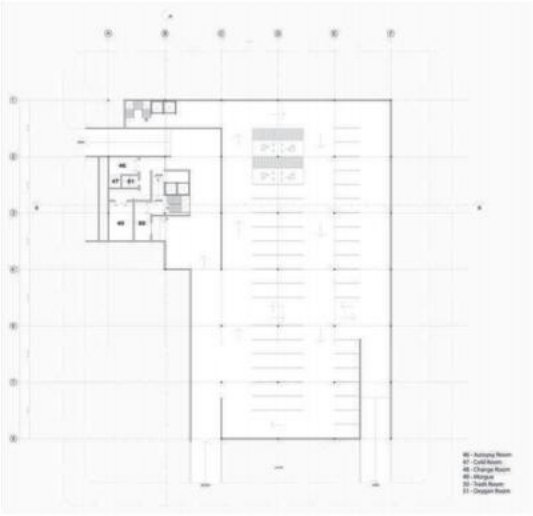


Main Level

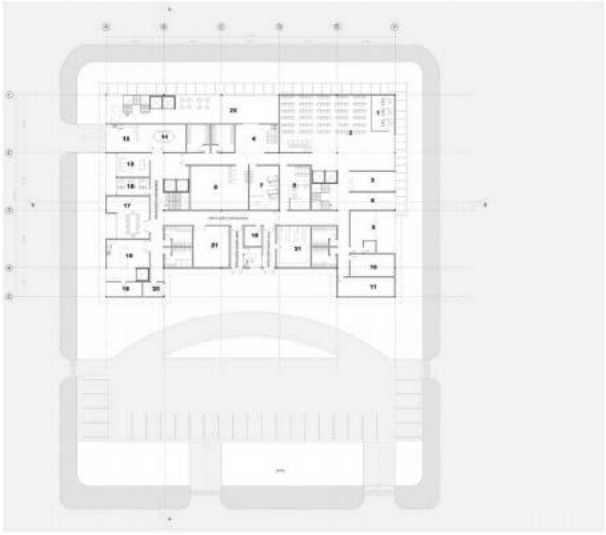
Second Floor

Third Floor

Fourth Floor



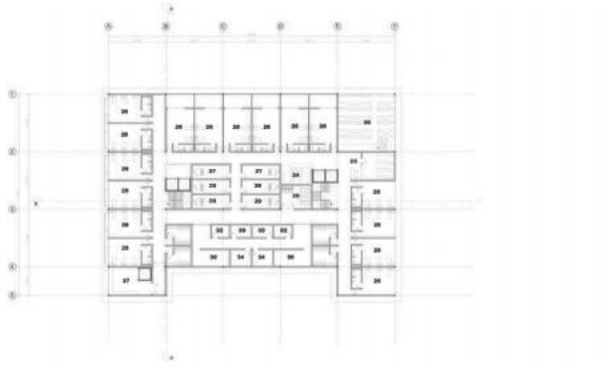
Underground Floor Plan



Main Floor Plan

1 - Administration Room
2 - Reception
3 - Pharmacy
4 - Emergency Entry
5 - Insurance Room
6 - Emergency Cases
7 - Blood Collection
8 - Report Room
9 - Tomography
10 - Endoscopy
11 - Colonoscopy
12 - Eating Room
13 - Staff Room
14 - Food Court
15 - Manager Room
16 - Warehouse
17 - Meeting Room
18 - Kitchen
19 - Warehouse
20 - Control Room
21 - Clothes
22 - Coffee/ Food Court

Second Floor Plan



Third Floor Plan

Fourth Floor Plan

thank you,

manoe