



FINAL PROJECT - DA 184801

GENDER SENSITIVE OFFICE: PREVENTING FEMALE OPPRESSION ON WORKPLACE

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Dosen Pembimbing
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Departemen Arsitektur
Fakultas Teknik Sipil, Perencanaan, dan Kebumihan
Institut Teknologi Sepuluh Nopember
2020



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LEMBAR PENGESAHAN

**GENDER SENSITIVE OFFICE:
PREVENTING FEMALE OPPRESSION ON WORKPLACE**



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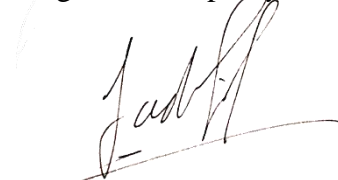
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Yang membuat pernyataan,



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AFOREWORD

Utmost praise and gratitude to Allah SWT for without His blessings this final project titled “Gender Sensitive Office: Preventing Female Oppression on Workplace” would not be completed in such condition. This final project is made for the completion of Final Project Course, Department of Architecture of ITS Academic Year 2019/2020.

This project is made as an architectural response to an issue that people are not unfamiliar with, that we have seen almost daily yet ignored by most, it is the case of female oppression especially the sexual harassment and/or assault that comes with it. Women suffered almost on daily basis because of that and yet even if they report the case, it is still happening. The proposed design is a rental office that is hopefully able to be a safe space for women to work with the others and help preventing sexual harassment from happening.

This report would not be finished if not through the never-ending support and help from surrounding people, and so the author wants to give their biggest gratitude to:

1. Ir. I Gusti Ngurah Antaryama as author’s supervisor on the Final Project Course for patiently helping and supporting and keep giving new knowledge without stopping. Without him, this report would not even be close to finish, word cannot express how thankful the author are for his help.
2. Author’s mother who patiently and endlessly support the author through ups and downs while working on this final project. Without her presence, author would not even be here right now.
3. Author’s ever-loving friends: Datin Intan B, Zuhrotul M Ula, Nouvend Setiawan, Oktavian F S Dimara who have supported author in times of doubt, who have gone through hard times and fun times together, whose

always keep author's mind in peace knowing there are people who still support them.

4. All of author's other best friends which can't be mentioned one by one, who helped through various methods, whose help are always appreciated.
5. The only friend with the same supervisor, Alya, who helped in the time of need and always encourage each other to keep on working on the final project

The author firstly wants to apologize for any misleading and/or false information regarding various topics that are present on this final project. The author is open to any feedbacks and advice given by readers. Hopefully, this final project could have a good impact on reader.

Surakarta, 29th June 2020

Author

KANTOR SENSITIF GENDER: MENCEGAH PEMERASAN WANITA DI TEMPAT KERJA

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ABSTRAK

Ketidaksetaraan gender berarti terdapat perbedaan dalam hak orang untuk berkontribusi dan mendapatkan manfaat dari pembangunan di berbagai departemen. Meskipun disebut ketidaksetaraan gender, perempuanlah yang cenderung dirugikan jika dibandingkan dengan laki-laki. Terdapat berbagai jenis ketidaksetaraan gender dan itu menciptakan suatu bentuk penindasan terhadap perempuan. Semua permasalahan ini juga terdapat di Indonesia, terutama karena budaya patriarki yang masih ada di zaman modern ini. Salah satu dari banyak contoh penindasan wanita adalah pelecehan seksual yang dialami banyak wanita di tempat kerja mereka sendiri dimana mereka seharusnya merasa nyaman.

Untuk menciptakan tempat kerja yang aman bagi perempuan dan laki-laki untuk bekerja bersama tanpa adanya pelecehan dan penindasan, kantor sewa dipilih sebagai objek desain. Karena sifat pelecehan seksual yang dikendalikan oleh perilaku seseorang, Desain Perilaku dipilih sebagai pendekatan utama untuk menciptakan desain yang diharapkan dapat mengendalikan perilaku pengguna untuk menghindari penindasan agar tidak terjadi. Pendekatan Rasionalis digunakan sebagai metode untuk menghasilkan bentuk dengan menggunakan logika dan penelitian untuk membuat desain yang akan membantu memecahkan masalah yang telah disebutkan di atas.

Untuk memastikan bahwa tidak ada pelecehan dan penindasan terjadi dalam desain, kantor sewa dengan visibilitas sebagai konsep utama dipilih sebagai desain akhir. Desain akhir terdiri dari blok-blok kantor yang terpisah, yang dihubungkan oleh koridor, yang ditempatkan saling berhadapan untuk memastikan visibilitas maksimum dalam desain, baik secara horisontal di lantai yang sama atau secara vertikal di lantai yang berbeda. Pengguna kemudian akan dapat melihat dan dilihat oleh orang lain di mana pun mereka berada, hal ini dimaksudkan agar calon pelaku dapat merasakan mata yang mengawasi di sekitar mereka dan mencegah mereka dari melakukan sesuatu yang buruk.

Kata Kunci: Ketidaksetaraan, Perempuan, Pelecehan, Kantor Sewa, Visibilitas

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GENDER SENSITIVE OFFICE: PREVENTING FEMALE OPPRESSION ON WORKPLACE

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ABSTRACT

Gender inequality means there is a different in people's rights to contributing to and benefitting from development in various departments. Even though it is called gender inequality, women are the one that tend to have disadvantage when opposed to their counterparts. Different types of gender inequality exist and it create a form of oppression on women. Indonesia also suffer from all this problem mainly because the patriarchal culture that still exist in this modern time. One of the many examples of female oppression is the sexual harassment that many women experienced in their own workplace where they are supposed to be comfortable in there.

In order to create a safe workplace for women and men to work together without the existence of harassment and oppression, a rental office is chosen as the design object. Due to the nature of sexual harassment that is controlled by one's behavior, Behavioral Design is chosen as the main approach in order to create a design which hopefully be able to control the behavior of the user to avoid any oppression from happening in the first place. Rationalist Approach is used as the method on form making by using logics and extensive research to create a design that would help solving the problems mentioned above.

To ensure that no harassment and oppression are happening in the design, a rental office with visibility as the main concept is then selected as the final design. The final design consists of separated office blocks, which are connected by corridors, which are placed to face each other to ensure the maximum visibility in the design, whether it is horizontally on the same floor or vertically on different floors. User would then be able to see and be seen by others wherever they are, this is intended so that to-be-perpetrators would feel the watching eyes surrounding them and preventing from doing anything bad.

Keywords: Inequality, Female, Harassment, Rental Office, Visibility

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CHAPTER 1

INTRODUCTION

1.1. Background

In this day and age, where technology and other knowledge have already gone beyond from what it was ages ago, there are still humans that will treat others differently just because they are “different”. This happens mostly to those of the minority and oppressed, whether it is race, social standing or gender. All of this could be easily spotted in news, social media, and real life events.

In the gender retrospective, women are the one that is more oppressed rather than their male counterpart due to the deeply embedded patriarchal culture that are taught to almost everyone from their early days. This cause a phenomenon in which men are seen as the better and stronger one and also cause women to automatically comply to men because they are seen as the weaker counterpart.

All of this are not rarely seen even in Indonesia where the patriarchy is still strong. Sexual harassment cases are not a rare occurrence and yet people still turn a blind eye on them. This cause more and more people to just let it go rather than report the case and be seen badly by the society even though it is not supposed to be like that.

1.2. Architectural Issue and Design Context

1.2.1. Gender Inequality

Gender refers to the roles and responsibilities of men and women that are created in our families, our societies and our cultures. The concept of gender also includes the expectations held about the characteristics, aptitudes and likely behaviours of both women and men (femininity and masculinity). (UNESCO)

Gender refers to the socially constructed characteristics of women and men – such as norms, roles and relationships of and between groups of women and men. It varies from society to society and can be changed. (World Health Organization)

Gender Equality means that women and men have equal conditions for realizing their full human rights and for contributing to, and benefiting from, economic, social, cultural and political development.

Gender equality is therefore the equal valuing by society of the similarities and the differences of men and women, and the roles they play. It is based on women and men being full partners in their home, their community and their society. (UNESCO)

By the definition mentioned above, we can conclude that gender inequality refers to the opposite of the things mentioned above. That means that there is a difference between the genders on how they are valued by society, how they are contributing to and benefitting from various department.

1.2.2. Gender Inequality in Architecture

The only point I want to make is that space and place, spaces and places, and our senses of them (and such related things as our degrees of mobility) are gendered through and through. Moreover they are gendered in a myriad different ways, which vary between cultures and over time. And this gendering of space and place both reflects and has effects back on the ways in which gender is constructed and understood in the societies in which we live. (Massey, 1994)

One of the gender problems in architecture context is the existence of gendered space, a space that is considered feminine or masculine based on type of activities done in mentioned space and/or the user of the space. This is mainly caused by the presence of gender role on some activities that humans do, as in cooking is identical to women and sport to men. One of many examples on gendered space and female oppression is the case on most housing where the kitchen, where women is assumed to work in, is put on the back to keep them from being seen by the public, to keep them from the gaze of other men beside their husband, by their husband. Meanwhile, the kitchen in restaurants are seen as a male-dominated space. Another example is that on the secretary space on offices, again, a space where women is expected to work in, have less privacy than those of the regular workers.

Two spatial aspects of secretarial work operate to reduce women's status. One is the concentration of many women together in one place (the secretarial 'pool') that removes them from observation of and/or input into the decision-making processes of the organization. Those decisions occur behind the 'closed doors' of the managers' offices. Second, paradoxically, is the very public nature of the space in which secretaries work. The lack of privacy, repeated interruptions, and potential for surveillance contribute to an inability to turn valuable knowledge into human capital that might advance careers or improve women's salaries relative to men's. (Spain, 1985)

in the workspaces with equivalent enclosure—private offices—[respondents] showed different ratings of privacy, with lowest ratings by secretaries. This could reflect social norms. Secretaries have low ranks, and co-workers or visitors may feel free to walk unannounced into their work-spaces. However, they may knock respectfully at the entrance of the work-spaces of managers.... Perhaps a private office is more private when occupied by a manager than when occupied by a secretary. (Sundstrom 1986:191)

Another problem that happens in architectural context is the existence of gender insensitive space that happens as a result of the lack of female that play a part on the designing process.

Gender insensitive space can cause a form of female oppression in which they feel vulnerable for the fact that they risk getting assaulted by men just by putting themselves in a public space, where everyone should be able to use the space simultaneously. This assault range from catcalling, unwanted touching, even rape. In a research by Gill Valentine in the 80s, women tend to avoid places with particular physical characteristics, such as dark, isolated, remote, unpopulated, or spots with obstructed visibility, because of the reasons mentioned above.

There are few ways to create a public space that is female-friendly, by accommodating feature to increasing their security, which is provided by UNIFEM. Those features includes:

- Proper lighting
- Landscaping
- Visibility
- Clean toilets

- Motorized and Pedestrian traffic
- Signage
- Security personnel
- Proximity to other public spaces and emergency services
- Access to public transportation
- Mixed-land use
- Women's participation in decision making

(UNIFEM, 2010)

1.2.3. Female Oppression

Even though it is called gender inequality, it is usually women who are disadvantaged on a similar situation rather than their counterpart. One of the main causes of the gender inequality is the concept of patriarchy that has been set to almost everyone since they were born where men has a higher position than women. Most kids see their mom doing the house chores when their father just sitting there getting served by his wife, they watched in various form of entertainment that the purpose of women is to look pretty and served men for their whole life, physically and emotionally. This also create a notion where men need to be stronger than women, where they can't show any emotions or they will be called weak, a notion where men has power over women, and more which just emphasize the concept of patriarchy.

The whole trope of men over women creates a form of oppression for women throughout the century and throughout the globe. This affects some women to the point that they won't challenge the oppression just because it is embedded deeply in their culture. These women would just stay silent, unable to empower themselves to take something for the sake of herself, even if they are treated badly, even when they are harmed. The oppression comes in different form that ranges from discrimination to sexual assault. Examples of female oppression in the modern day that is not rarely seen on news and social media is the 'victim blaming' culture surrounding sexual harassment cases, even the rape cases. People would blame the victim because they 'seduce' the perpetrator(s) with revealing clothing regardless of what article of clothing that the victim actually wear.

1.2.4. Female Oppression in Indonesia

As mentioned before, female oppression is spread throughout the globe even in Indonesia. There are few cases on female oppression in Indonesia, from lack of representation to violence against women. Based on “Catatan Tahunan Kekerasan Terhadap Perempuan 2019”, there is an increase of cases of violence against women reported as much as 14% from last year. Female oppression in Indonesia also happens in the political world where there is only 8.8% of women in the political position as of 2002. Plenty of female oppression cases happens in form of sexual harassment that happens a lot in public space and also workspace. 94% of women, from 1240 respondents, claimed that they have faced sexual harassment in their workplace, taken from Never Okay Survey.

One of the main cause that sexual harassment happens a lot in the office, the “traditional” office, is because it is still seen as a male-dominated workplace where some of them still see that men have higher position than women as an effect of the aforementioned patriarchal culture that also exist in Indonesia.

All of the cases above show that female oppression still exists firmly in Indonesia that is mainly caused by the deeply embedded patriarchal culture even after all the modernization and globalization that happened.

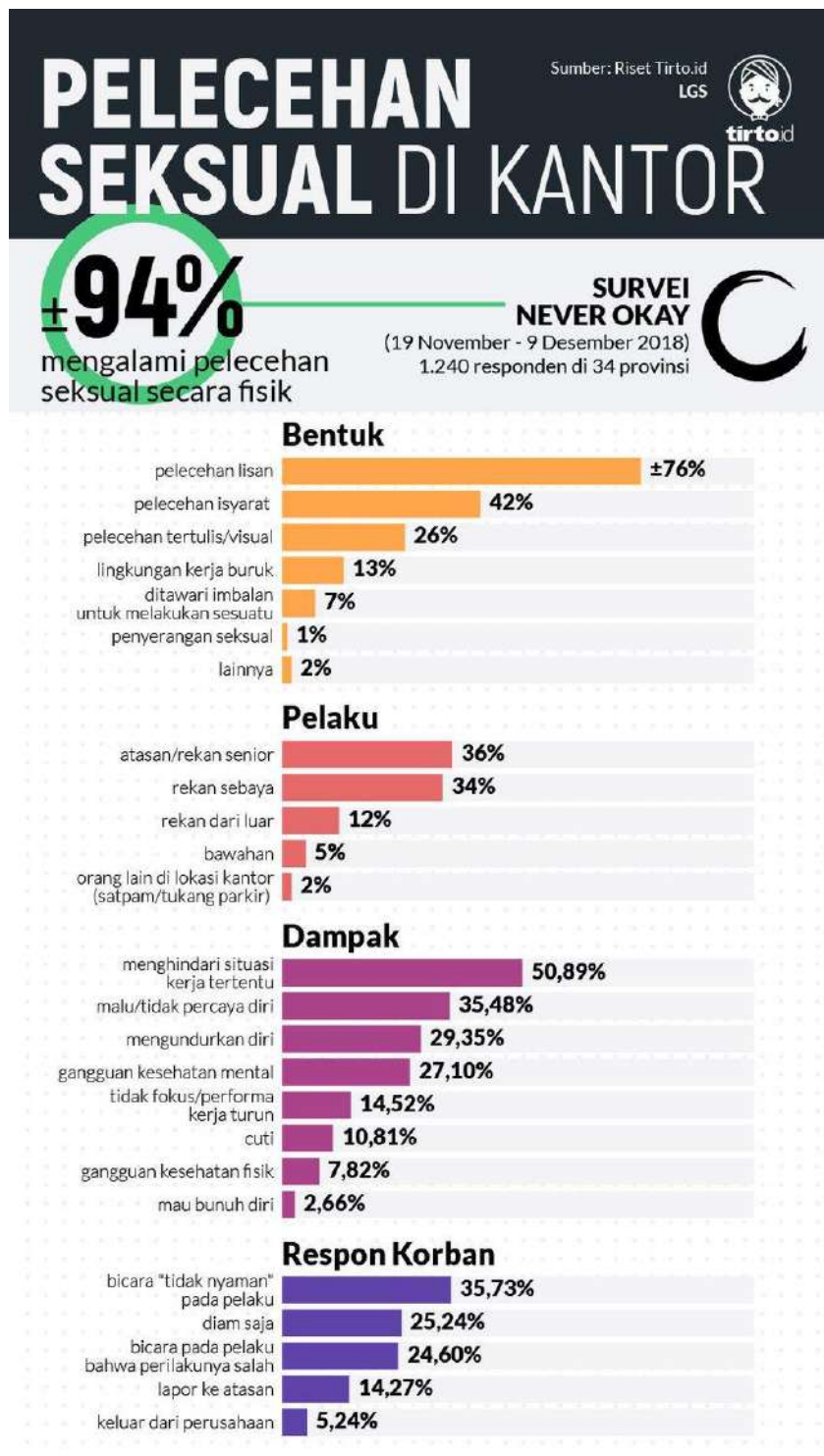


Figure 1.1 *Survei Never Okay: Pelecehan Seksual di Kantor*
(Source: Riset Tirto.id)

1.2.5. Building Type

The typology of the building that will be designed is Office Building. This type of building is chosen because of the facts that are already mentioned above where women has been harassed, not just once or twice, in their workplace. Office Building is also relevant based on the fact that there is significant amount of women in the workforce in Indonesia that reach 49.39% from the total of women aged 15 and over.

1.2.6. Design Context

A. User Context

The intended user on the design are user of both genders, male and female, because the problem that need to be solved is to create a space where both can interact and work together without sexual harassment happening.

B. Site Context

The site chosen is in Indonesia, in which most of the people here still see gender as a binary (male and female). Even though some traditional culture acknowledge more than two genders, such as in Bugis tribe where they acknowledge 5 genders based on a tendency that they feel from childhood and also from the influence of their surrounding environment (Nurohim, 2018), but this culture are only a local culture in a specific area and tribe and not national culture that everyone accepts. Most people still see and only accept the “ideal” construct of gender roles in which masculine roles belong to men and feminine roles belong to women and there is no in-between whatsoever, hence the gender context of the design is still only related to male and female in general.

1.3. Design Problem and Criteria

1.3.1. Design Problem

The problem that comes up in the design proposal is how to create a safe space for women to work and interact with others without the existence of the harassment and oppression. This means designing a workspace where both men and

women can work together without the latter having to fear getting harassed by their co-workers.

1.3.2. Design Criteria

A. General Criteria

General criteria in here are described as design criteria related to the building function, which is rental office, such as:

1. Building should provide different type of offices for different tenants.
2. There should be different type of workspace according to user needs
3. Additional amenities should be provided alongside the working area and offices
4. Parking area should suffice for enough users
5. Green area should also be provided alongside the main building

B. Specific Criteria

Specific criteria are criteria that are related to the design concept such as:

1. Office blocks should be able to see and be seen by others
2. No hidden corners should appear inside the building
3. Interior spaces should be able to be seen from outside and vice versa
4. Materials used in the building should further improve the concept

CHAPTER 2

DESIGN PROGRAM

2.1. Spatial Programming

2.1.1. Building Program

Related to the main function of the building, which is rental office, the main programs that exist in the building would be working and associated activities, such as meeting and taking a break. The working activities is again broken down into several others, based on the user, to executives, employee/workers, part-time workers, and clients which will have an impact onto the space required in the building.

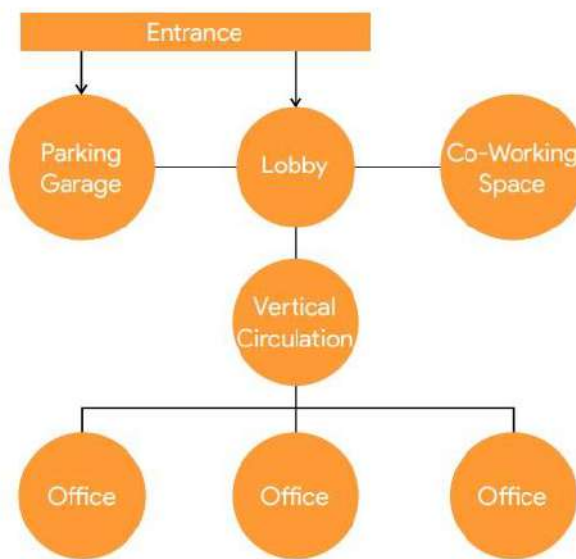


Figure 2.1. Adjacency Diagram (Source: Personal Illustration)

2.1.2. Required Space

The most essential space that is required is the working space that is made by fixed units which is about 5m² for each workers. The working space would include the executive office, the staff working space, meeting rooms, quiet room, reception and flexible space that can be changed according to the user's needs.

Additional amenities that will be incorporated in the building includes the main lobby, co-working space for visitors, cafeteria and lounge for the staff and visitors, parking garage for staff and visitor, prayer rooms and also the management office.

2.1.3. Space Dimensions

The minimum required space for each rooms is taken from Time-Saver Standard for Building Types (Chiara, 1983), Office Space Standards and Guidelines (Government of the Northwest Territories, 2012), and by calculating the size of the furniture which exist in the space added by the space needed for circulation.

| Small Office | | | | |
|--------------|------------------|---------------------|----------|-----------------|
| No | Workstation Type | Required Space (m2) | Quantity | Total Area (m2) |
| 1 | Executive Office | 20 | 0 | 0 |
| 2 | Resident Staff | 5 | 20 | 100 |
| 3 | Meeting Room | 26 | 1 | 26 |
| 4 | Quiet Room | 7.8 | 1 | 7.8 |
| 5 | Storage Space | 1.35 | 1 | 1.35 |
| 6 | Lobby | 18 | 1 | 18 |
| 7 | Toilet | 2.4 | 2 | 4.8 |
| 8 | Pantry | 3.75 | 1 | 3.75 |
| 9 | Flexible Space | - | - | 80.85 |
| 10 | Circulation Area | - | - | 48.51 |
| Total | | | | 291.06 |

Table 2.1. Required space for small office (Source: Building Standard)

| Medium Office | | | | |
|---------------|------------------|---------------------|----------|-----------------|
| No | Workstation Type | Required Space (m2) | Quantity | Total Area (m2) |
| 1 | Executive Office | 18.5 | 1 | 18.5 |
| 2 | Resident Staff | 5 | 30 | 150 |
| 3 | Meeting Room | 26 | 2 | 52 |
| 4 | Quiet Room | 7.8 | 2 | 15.6 |
| 5 | Storage Room | 1.35 | 2 | 2.7 |
| 6 | Reception | 19 | 1 | 19 |
| 7 | Toilet | 8.1 | 4 | 32.4 |
| 8 | Pantry | 27 | 1 | 27 |
| 9 | Flexible Space | - | - | 158.6 |
| 10 | Circulation Area | - | - | 95.16 |
| Total | | | | 475.8 |

Table 2.2. Required space for medium office (Source: Building Standard)

| Large Office | | | | |
|--------------|------------------|---------------------|----------|-----------------|
| No | Workstation Type | Required Space (m2) | Quantity | Total Area (m2) |
| 1 | Executive Office | 18.5 | 2 | 37 |
| 2 | Resident Staff | 5 | 44 | 220 |
| 3 | Meeting Room | 26 | 2 | 52 |
| 4 | Quiet Room | 7.8 | 2 | 15.6 |
| 5 | Storage Room | 1.35 | 2 | 2.7 |
| 6 | Reception | 19 | 1 | 19 |
| 7 | Toilet | 8.1 | 4 | 32.4 |
| 8 | Pantry | 27 | 1 | 27 |
| 9 | Flexible Space | - | - | 202.85 |
| 10 | Circulation Area | - | - | 121.71 |
| Total | | | | 730.26 |

Table 2.3. Required space for large office (Source: Building Standard)

| Offices | | | | |
|---------|-------------|---------------------|----------|-----------------|
| No | Office Type | Required Space (m2) | Quantity | Total Area (m2) |
| 1 | Small | 291.06 | 8 | 2328.48 |
| 2 | Medium | 475.8 | 5 | 2379 |
| 3 | Large | 730.26 | 4 | 2921.04 |
| Total | | | | 7628.52 |

Table 2.4. Total space for offices (Source: Building Standard)

| Lobby | | | | |
|-------|---------------------|---------------------|----------|-----------------|
| No | Furniture | Required Space (m2) | Quantity | Total Area (m2) |
| 1 | Receptionists' Desk | 8.6 | 3 | 25.8 |
| 2 | Waiting Area | 5.5 | 5 | 27.5 |
| 3 | Toilet | 8.1 | 4 | 32.4 |
| Total | | | | 85.7 |

Table 3.5. Required space for main lobby (Source: Building Standard)

| Total Area | | | | |
|------------|------------------|---------------------|------------------|-----------------|
| No | Room Type | Required Space (m2) | Circulation (m2) | Total Area (m2) |
| 1 | Office Area | 7628.52 | 1525.704 | 9154.224 |
| 2 | Co-Working Space | 2000 | 600 | 2600 |
| 3 | Lobby | 85.7 | 25.71 | 111.41 |
| 4 | Canteen & Lounge | 300 | 90 | 390 |
| 6 | Parking Lot | 5000 | 1500 | 6500 |
| Total | | | | 18755.634 |

Table 3.7. Total required area for the building (Source: Building Standard)

2.2. Site Description

2.2.1. Functional Characteristics and Regulations

The current site are chosen based on a set of criteria determined beforehand to ensure the chosen location are the best possible outcome. The criteria determined are as mentioned

- a. A known location for author

In order to shorten the time needed for conducting site analysis, a known area is needed. This will also help creating a thorough analysis.

- b. Located on or near downtown area

As the function of the building is an office, a downtown area is more suitable rather than other areas in the city.

- c. Have an easy access for various type of transportation

This is to ensure that user will be able to come to and go from the building without needing to make an effort about their mode of transportation (e.g. cars, motorcycle, bicycle, walking).

d. Not located on secluded area

As mentioned on the previous chapter, women tend to avoid some places that have bad physical aspect, being on a secluded and poor lit area might make them feel unsafe, hence the criteria.

e. Located in Indonesia

The design context is female oppression in Indonesia so the site itself need to be in Indonesia.

Based on all of the criteria mentioned above, the chosen site is located on Unnamed Road on Madegondo, Kec. Grogol, Kabupaten Sukoharjo, Jawa.



Figure 2.2. Location of site (Source: Google Earth)

Based on *PERATURAN DAERAH KABUPATEN SUKOHARJO NOMOR 14 TAHUN 2011 TENTANG RENCANA TATA RUANG WILAYAH KABUPATEN SUKOHARJO TAHUN 2011-2031*, Grogol sub-district is mentioned as *Kawasan Strategis Kabupaten* which means that it is a location in which the space arrangement is prioritized because of the influence it carries for the economy, socio-

cultural, environmental, and the utilization of natural resources and technology in the district.

The regulation revolving around the site and the function of the building is taken from *PERATURAN DAERAH KABUPATEN SUKOHARJO NOMOR: 3 TAHUN 2005 TENTANG RENCANA UMUM TATA RUANG KOTA KECAMATAN SUKOHARJO KABUPATEN SUKOHARJO*. For clarification purpose, due to the regulation about Grogol sub-district is unable to be used, regulation about Sukoharjo sub-district is hence used in its place. It is chosen because of the adjoined location of the sub-districts.

- a. Bagian Wilayah Kota (BWK) I meliputi Kelurahan Sukoharjo, Gayam, Jetis, dan Joho dengan luas wilayah 1.108 Ha (Pasal 22 ayat 2)
- b. Bagian Wilayah Kota I (BWK I) diperuntukkan sebagai pusat pelayanan umum, perkantoran tingkat kabupaten, perdagangan, jasa, permukiman, fasilitas sosial dan umum, campuran, pertanian, industri, dan transportasi, dengan dominasi fungsi kawasan sebagai pelayanan umum dan perkantoran tingkat kabupaten (Pasal 24 ayat 1)
- c. Lokasi perkantoran swasta yang mendukung kegiatan perdagangan, jasa dan industri berada di setiap Bagian Wilayah Kota (BWK). (Pasal 27 ayat 2)
- d. Garis Sempadan Bangunan (GSB) pada jalan arteri di kawasan yang akan dikembangkan minimal 2 m, sedang GSB pada jalan kolektor minimal 2 m. (Pasal 40 ayat 1)
- e. Kawasan perdagangan memiliki kepadatan tinggi yaitu Koefisien Dasar Bangunan (KDB) 80%, Koefisien Lantai Bangunan (KLB) 2. (Pasal 41)
- f. kawasan komersial dengan ketinggian maksimal 8 lantai atau 40 meter. (Pasal 42)

2.2.2. Neighborhood Context

There are a few commercial buildings around the site due to the fact that the site is located on the downtown area.



Figure 2.3. Surrounding building around the site

2.2.3. Size and Zoning



Figure 2.5. The perimeter and area size of the site (Source: Personal Illustration)

According to the regulations found, the area of the site is supposed to be developed various type of building to support the development of the city as a whole with office building being included in it. This means that the site is suitable for the intended building function.

2.2.4. Circulation



Figure 2.6. Vehicular and pedestrian circulation around the site (Source: Personal Illustration)

The two-way road on the south side is the accessible road for most vehicle due to the rather large size of the road, unlike the one on the north side where a small road is used as a two-way road. The pedestrian came to life because the building on the east side give enough space for pedestrian to move around on the front side of it.

[Architectural Response] Using the south side of the side as the gateway into and out from the site, and placing the entryway on the eastern area to avoid the roundabout, while also maintaining the pedestrian road that exist from the building in the east.

2.2.5. Utilities

When observed on the site, there are only a few streetlights around the site as seen on the image below. This could be a bad thing for pedestrian walking around the site as the area would be less secure at night without proper lighting.

[Architectural Response] Creating a safe sidewalk with proper lighting inside the building and near the main road on the south side of the site.



Figure 2.7. Location of streetlight around the site (Source: Personal Illustration)

2.2.6. Sensory

The site are placed between housing area on the northern side and shop houses on the southern side.

[Architectural Response] Optimizing view from the site into the southern areas where the main road is located rather than to the housing area in the north of the site.





Figure 2.8. Views of building on the southern area of the site (Source: Personal Illustration)



Figure 2.9. View of the street on the northern area of the site (Source: Personal Illustration)

2.2.7. Climate

Like other part of Indonesia, the site has tropical climate which means that the sun is shining brightly for most of the year. The average temperature throughout the year is 26.3°C. The average precipitation is 178mm with February being the wettest month with 320mm precipitation. Wind is blowing mostly to the north-east and opposite direction throughout the year.

[Architectural Response] Applying tropical architecture on the building to withstand the tropical climate. Implement the usage of sun shading in the building to prevent glare and heat from the sun.

2.2.8. Site Asset and Constraint

A. Asset

One of the main asset of the site is that it is located on downtown area that is suitable for an office building and is a moderately crowded area considering the area surrounding it is still currently underdeveloped. Another main asset is the existence of vehicular circulation on the south part of the side.

B. Constraint

The main constraint of the site is the lack of activities seen around the site especially on the housing part north of the site. Another one is the lack of streetlight on the area surrounding the site which makes the road becomes dangerous at night, especially for pedestrian.

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CHAPTER 3

DESIGN APPROACH AND METHOD

3.1. Design Approach

The approach that will be used on designing is *Behavioral Design* which can be simply stated as how design can shape or influence the user's behavior.

3.1.1. Behavioral Design

Behavioral approach emphasizes the dialectical relationship between humans and space, particularly with those people using or occupying the space which is diverse and specific in each location. Therefore, the aspect of norms, culture and psychology of different people will produce the concept and form a different room (Nuraini C., Antara, W. 2010 P.64)

Behavioral architecture can be described as architecture that is able to handle human needs and feelings that adjust to the lifestyle of humans in it. The main principles are being able to communicate with humans and the environment and also accommodate the activities of the occupants with a comfortable design.

The reason why behavioral design was chosen is because the design problem mentioned in the previous chapter requires the design to change the behavior of the use in it to create a better work environment for women.

3.1.2. Important Factors on Behavioral Design

On designing based on human behavior, obviously there are several human factors that will influence on how they perceive the design itself. This includes personality traits, perception and cognition, and Gestalt psychology (Kopec, 2006)

Personality traits is defined as unique attributes that generally define who we are. Various environmental factors influence personality by shaping skills, values, attitudes, and identities (Kopec, 2006). Different type of personality feels prefers particular design, for an example someone who is introverted prefer closed arrangements in furniture that will give them distance from other people.

Perception involves the interpretation of sense while Cognition is the way that information come to be known through actions of perception, reasoning, or information. This two will creates different behaviors on people in the same environment due to the information and experience that they already had.

Gestalt psychology study the ways in which people organize and select from the vast array of stimuli presented on them, focusing on visual stimuli (Kopec, 2006). This explains that human by intuitive are driven to experience the world in a regular, orderly, simplified, and symmetrical manner.

3.1.3. How Genders Affect Behavioral Design

Both men and women perceives their environment differently from one another. This may be because even if humans have evolved this far, they still, to some extent, relies on their primal instinct in some cases (Kopec, 2006). As mentioned in the previous chapter, gender roles have been embedded in our nature since the existence of humans itself. In the primal times, men were the one hunting while the women stays and take care of various domestic stuffs in their settlement. Some studies shows that even after the evolution, their behavior patterns manage to be similar to their primal behavior. For example, men consistently claim larger territories than women, another example is that women tend to more helpful in a complex situation while men are more helpful in a simpler one.

3.2. Design Method

3.2.1. Frameworks

The used framework on this design process is the Force Based Framework (Plowright, 2014) with help of Behavioral Design Process (Heimsath, 1977).

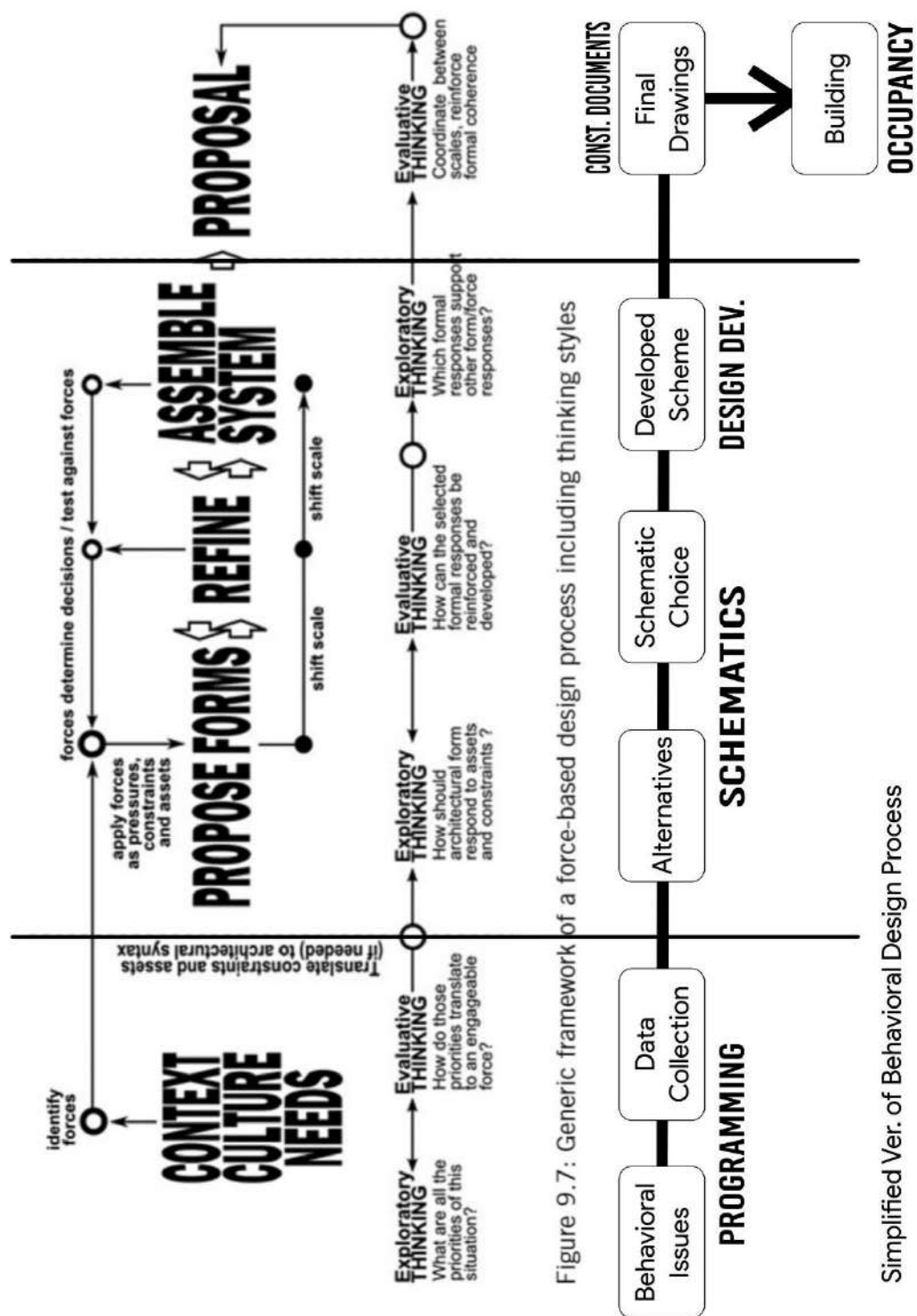


Figure 3.1. Design process used on the design (Source: Personal Illustration)

The forces that would be used in the whole design process are the one that is related with the design issue, female oppression in workplace. This includes the avoided behavior in the workplace and issues about the privacy.

FORCES

The forces that would be used in the design process are as mentioned below:

- > Human Behavior
- > Privacy
- > Gender

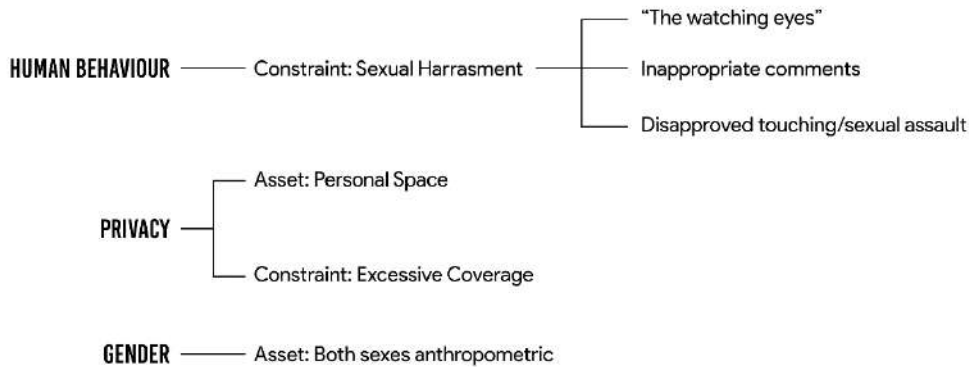


Figure 3.2. Forces that is used in the design process (Source: Personal Illustration)

The forces used are taken from the main issue about female oppression in workplace and related items. The mentioned forces are as mentioned below:

1) Human Behavior

The one thing that need to be avoided to be happened in the workspace are the sexual harasment that range from “the watching eyes”, which men set upon their counterparts, to sexual assault. The design should help to prevent this behavior from happening in the first place.

2) Privacy

Privacy and personal space are one of many things that can make the user feel comfortable in the designed space hence making it an asset. While privacy has its positive side, it can also give excessive coverage that can lead to sexual harasment from happening. The design should give the user intended personal space but not making it a closed space to avoid the excessive coverage.

3) Gender

Being one of the main thing talked about in the design, gender become an asset that should help the designed space to cater all gender by providing a space that can be used by both sexes, male and female, comfortably.

3.2.2. Methods

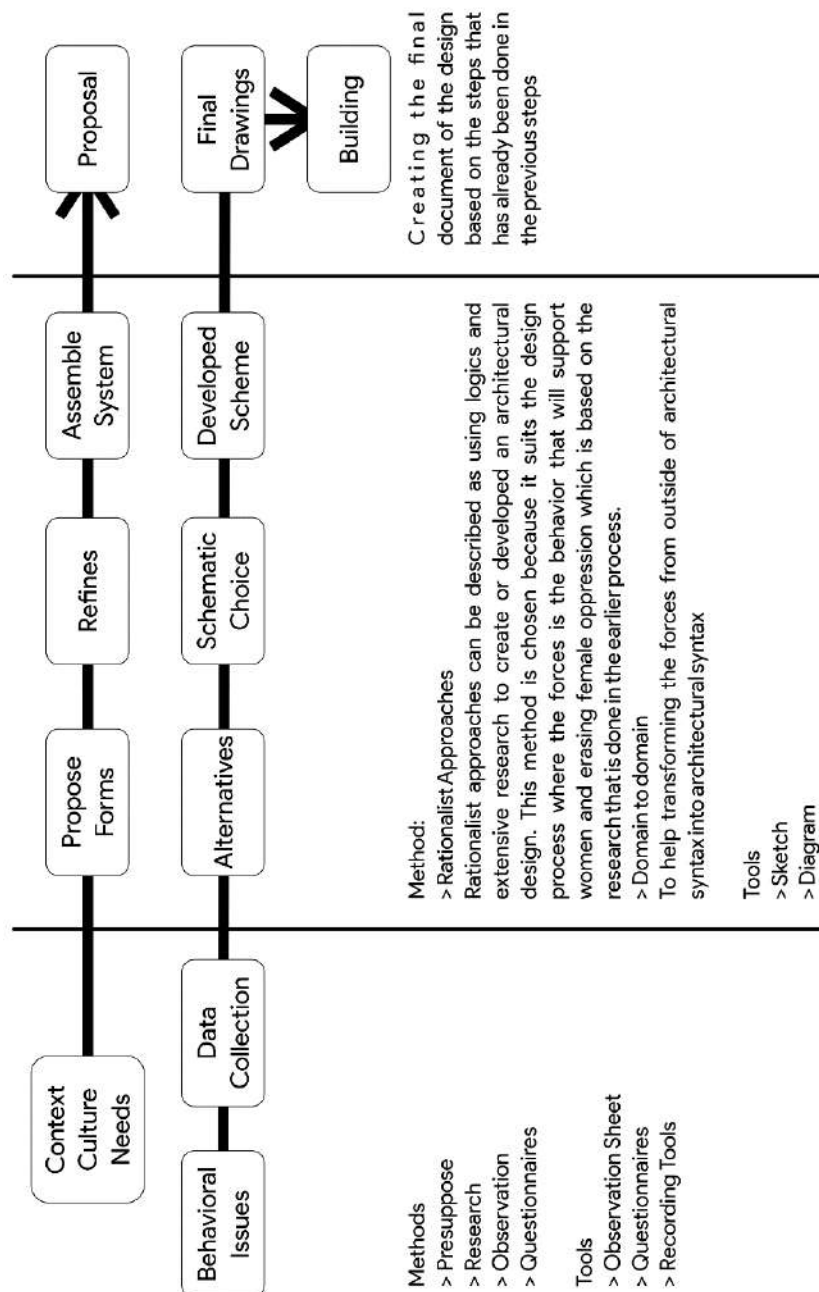


Figure 3.3. Design Methods (Source: Personal Illustration)

3.2.3. Supporting Theory

A. Behavior Setting Theory

“These behavior settings are small scale social systems composed of people and physical objects arranged in a way to carry out routine actions within a specified time and place. Examples include public places, such as school, theaters, nightclubs, and places of worship, as well as occasions that shape behaviors, such as graduations, weddings, and funerals.” (Kopec, 2006)

This theory claims that some places or occasions can create a particular set of behaviors. Creating a notion that at some place and/or occasions, people expected the others to act accordingly based on where they are at the moment and not doing anything out of the expected behaviors.

B. Types of Offices

(Retrieved and edited from <https://foundersguide.com>)

1) Home Office

As its name implies, home office is an office type that is located at the owner’s home. This type of office is perfect for new business or startups that is run by a single person or a few employee only

2) Virtual Office

This type of office is an alternate for business that want to have their business in a well-known district but did not have much expense to actually rent or lease an office there. Virtual office provides the business with the address and phone number to the district or company that they want without actually having an office space.

3) Co-working Space

A co-working space is a shared workspace between individuals or business. This space usually already has the needed amenities that a business would need. There are some free ones, where individuals just need to come to the co-working space and choose their spot, and the one with a monthly rates, meaning that business or individuals need to pay monthly rent for a space in the co-working space.

4) Rental Office

Rental office is an office type with a basis of monthly payment to the landlord or building management. This type of office means that the tenants would have their own office within a building complex

5) Leased Office

Similar to rental office, the difference is that leased office comes with a fixed term. Usually reached 6 months, 1 year or 5 years.

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CHAPTER 4

DESIGN CONCEPT

The main concept that comes up regarding the issue of female oppression on workplace, especially the sexual harassment that comes with it, is the introduction of “extreme” visibility where user can see and be seen by others simultaneously. This concept is chosen from the strategy on how to create a female-friendly public space by UNIFEM, which has already explained above, in hope that perpetrator would be conscious about their surrounding when they are about to harass other user in the building.

The visibility concept is accompanied by user privacy, because if not then the user would feel uncomfortable when they are in the building. The privacy are applied on the office’s working space by having a separator between each worker’s desks and also on some space that need more privacy, such as the toilet and quiet room.

4.1. Formal Exploration

The visibility concept is applied throughout different aspect of the design, including masses configuration, landscape area, building forms, circulation and space configuration, and building façade.

4.1.1. Masses Configuration

When applied on masses configuration, the visibility concept translates into a configuration in which the offices are able to be seen from outside and vice versa and also be seen and see each other.

From outside of the site, the visibility are taken from the road on north and south side of the site considering that on the east of the site are a row of shop houses which only have one orientation, to the south, and on the west are empty lot that is presumed to be built into shop houses too.

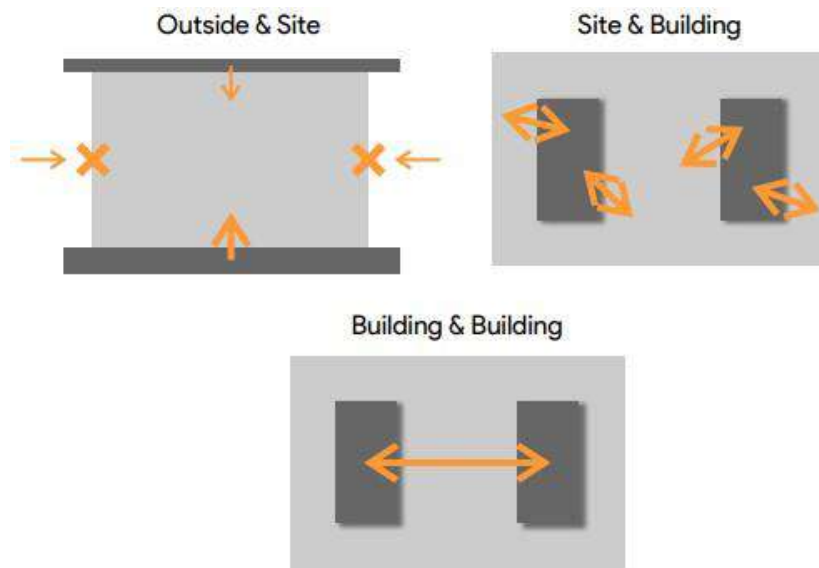


Figure 4.1. Visibility concept applied on several aspect on building and site (Source: Personal Illustration)

The visibility concept also apply on how the masses are placed vertically, so each floor would be able to see and be seen form the other floor whether it is above or below. The configuration also consider on how each floor has visibility access to the main road south of the site and into the public landscape area inside the site.

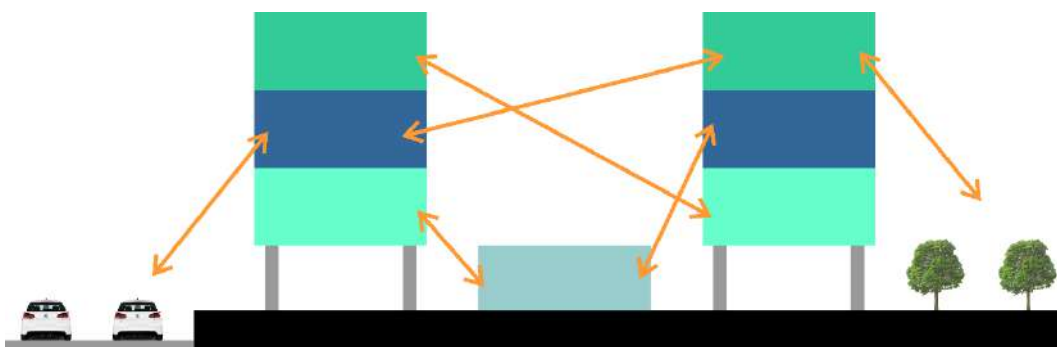


Figure 4.2. Visibility concept applied on vertical mass configuration (Source: Personal Illustration)

4.1.2. Landscape

As mentioned, the concept are taken from a strategy by UNIFEM which includes:

- Proper lighting

- Landscaping
- Visibility
- Motorized and Pedestrian traffic
- Proximity to other public spaces and emergency services
- Access to public transportation

These things are taken into consideration for the concept of the overall landscape of the building, mainly the pedestrian circulation (sidewalk) because the lacking of safe sidewalk in the area surrounding the site.

The sidewalk would be lit by enough street lamp to make the pedestrian feels safe when traveling through. Vegetation surrounding the building and sidewalk are mostly shrubs and small tree to maintain the visibility on both areas.



Figure 4.3. Visibility concept applied on pedestrian circulation (Source: Personal Illustration)

Another thing to consider when designing the landscape is to only use vegetation with moderate height, around a similar height of one level of the building, to avoid blocking the view of user from upper floor or below. This would include the usage of small trees and shrubs as the main vegetation that appear on the design.

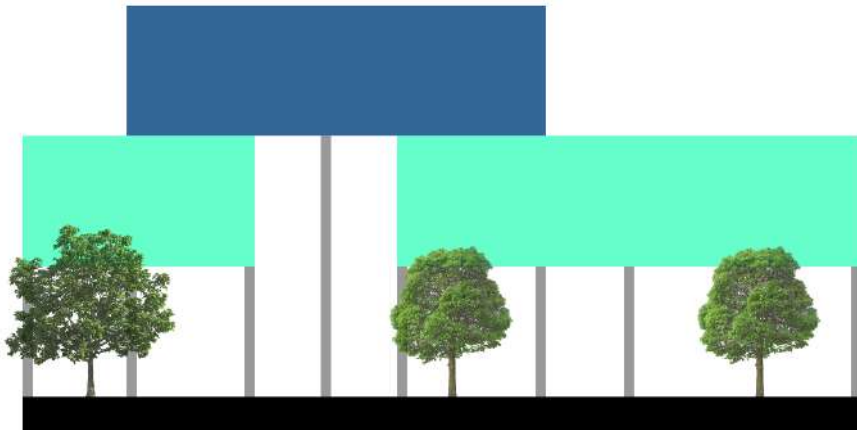


Figure 4.4. Landscape concept in the design (Source: Personal Illustration)

4.1.3. Building Forms

The form of the office blocks are morphed into an angular form rather than just a simple cube form to increase the visibility of the user inside the office block and from outside. The reason why is because the optimum angle of human sight is only around 50° without moving their head and a maximum of 120° total. The angular form is meant to help the user other part of the building more clearly, especially vertically.

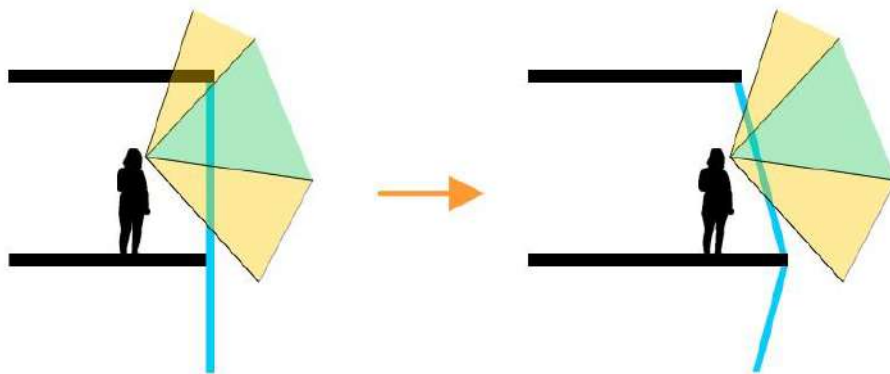


Figure 4.5. Angular form to enhance user's visibility (Source: Personal Illustration)

Meanwhile, the maximum viewing distance of human while standing on a flat surface is about 4.5 km away and this increase with increase in height. So the higher they are, the farther they can see.

4.1.4. Circulation and Space Configuration

The circulation concept of the design revolves heavily around the placement of the office blocks. The office blocks are located from 2nd floor onward to give its more privacy by having user go into the vertical transport before going into the office entrance. The office blocks are then connected by corridors surrounding each block in its respective floor.

The space inside the office block is separated into two main areas, namely the main workspace and supporting rooms. The main workspace are located in the center part of the office to ensure that it is visible from other office blocks located in different elevation and angle. Meanwhile, the supporting spaces are then placed on the sides to, again, improve the visibility of the office blocks. The supporting spaces include spaces that need a higher degree of privacy such as, meeting room, executive rooms, quiet room, and toilet.

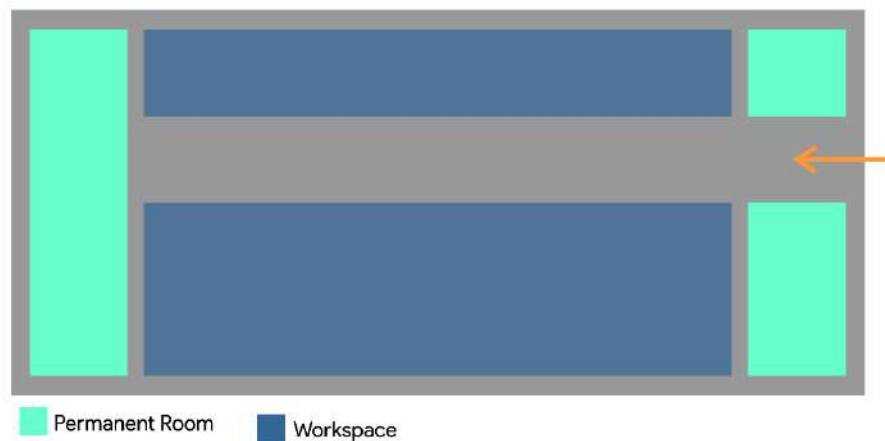


Figure 4.6. Office space configuration

4.1.5. Façade

The building façade are made by considering both the tropical climate of Indonesia and the visibility concept of the design. While it brings the visibility concept that is desired, the usage of glass wall as the main facade brings too much glare and heat from the sun. To counter the unwanted glare and heat, sun shading are used alongside the glass wall with different sizes to avoid a monotone rhythm.

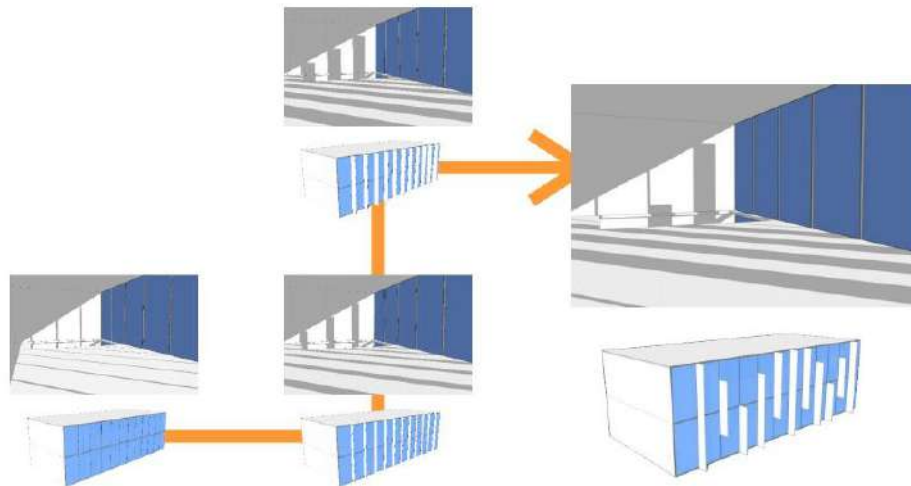


Figure 4.7. Building façade considering visibility concept and tropical climate (Source: Personal Illustration)

The glass façade is then accompanied by white brick wall and concrete roof, the white walls are used so that tenants can easily modify it the way they desire their office to be while the concrete roof is used so that it fits whatever style the office directly below it. Meanwhile, the sunshades are to be made by light grey ACP (Aluminum Composite Panel) to keep the material light and the color simple.

4.2. Technical Exploration

The visibility concept is also applied on several technical aspect of the design, including structural system, building material, lighting and air conditioning system, and vertical transport.

4.2.1. Structural System

A basic rigid frame structure with concrete column and beam are used as the main structure of the building. The distance between each column are based on the width of the office blocks, which is around 11m, to avoid having free column in the center part of the office as that would reduce the visibility inside the office itself.

Supporting cantilever structure also appears on the building to help on creating the angular form of the office blocks.

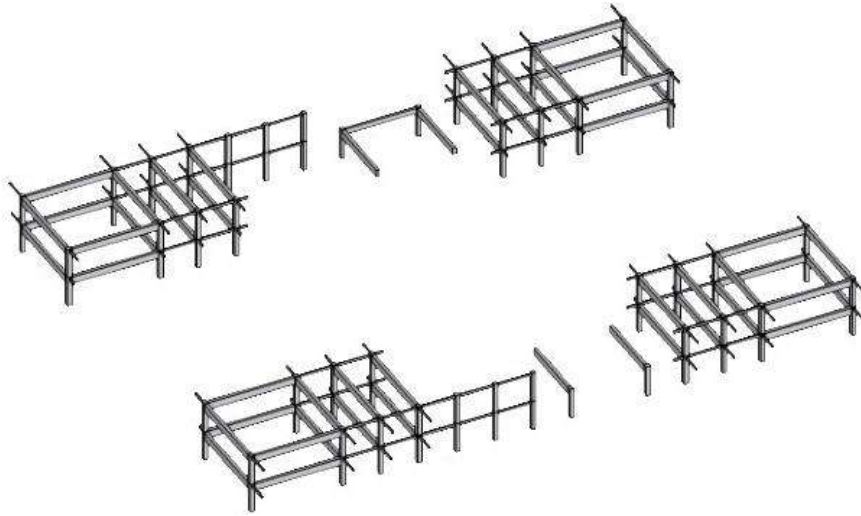


Figure 4.8. Rigid frame structure on the building (Source: Personal Documentation)

4.2.2. Building Material

As mentioned above, the main material of the office blocks are glass that is to be used on the glass wall. Glass are used because of its transparency that would enhance the overall visibility of the building even further.

4.2.3. Lighting System

The lighting system inside the office blocks would be using an all-encompassing lighting system that would help lit the entire office while preventing glare on users. Some spaces like the meeting room and executive offices would have their own lighting system separated from the main workspace area. This would also be supported by the daylight that comes from the usage of glass wall to reduce the usage of artificial lighting.

Meanwhile, as explained on the visibility concept on pedestrian circulation, there should be enough lighting on the pedestrian area to avoid any attack especially at night. This means there will be more focus on the sidewalk area in front and inside the site area and also on the public area inside the site.

4.2.4. Air Conditioning System

The air conditioning system that will be used in the building is a multi-split air-water system. The reason why multi-split is chosen rather than central system is because the nature of rental office in which the office have different occupants with

different needs, by using multi-split system each office will have their own AC system that is not connected to the other office. Air-water system is chosen because this hybrid type combine the advantage of all-air and all-water system.

4.2.5. Vertical Transport

The design would use mechanical lift as its main vertical transport while supported by fire stairs located near the lift. The lift is separated into user lift and cargo lift for different purposes. The vertical transport are to be located near the entrance of each office block for ease of access for user working in said office blocks. Additional fire stairs are placed near an office entrance when necessary, when the entrance is located too far from any of the main vertical transport.

4.2.6. Plumbing System

In order not to obstruct the view of user inside the building, the plumbing components such as pipes and rain gutters would need to be hidden from their view or at least make it indistinguishable from the surroundings. This would be achieved by putting the water pipes into shaft to cover it, covering the upper water tank located on rooftop, and planting the rain gutters in an attempt to hide it from user view.

CHAPTER 5

DESIGN

5.1. Formal Exploration

5.1.1. Site Plan

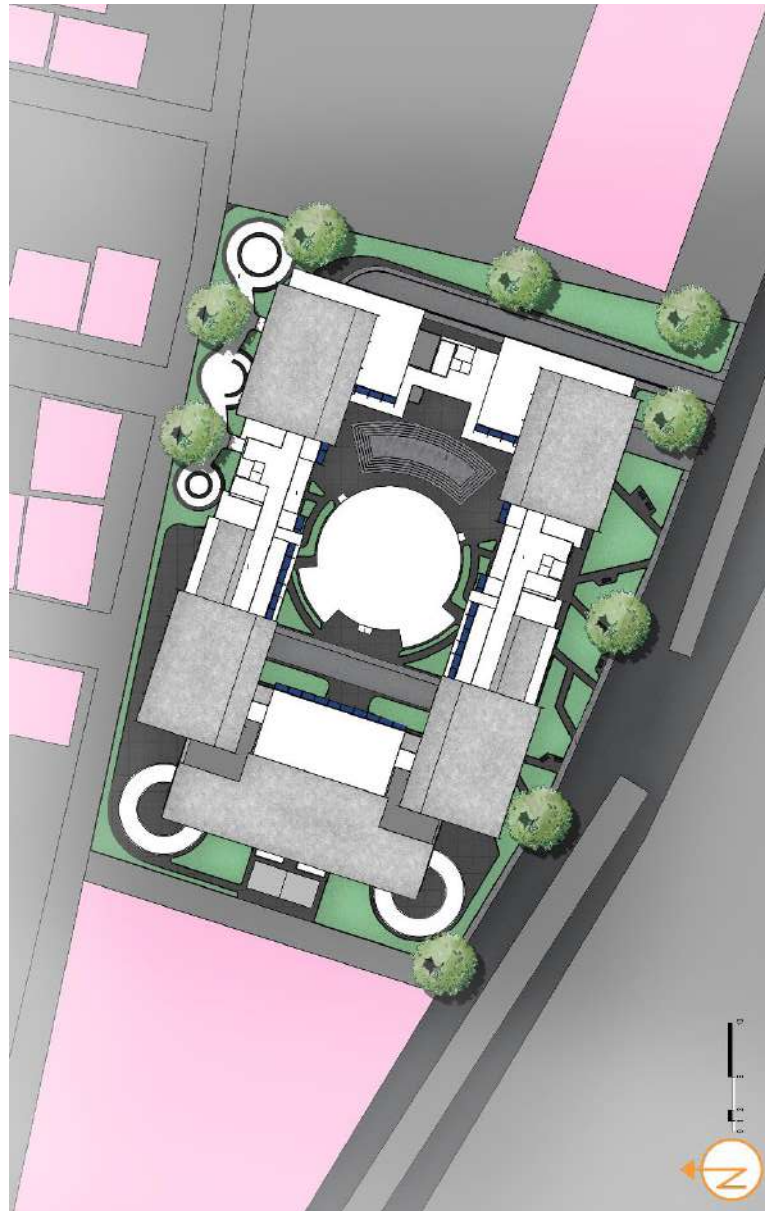


Figure 5.1. Site Plan (Source: Personal Illustration)

From the site plan it can be seen that the masses are placed so that each office blocks are facing the center part of the site and facing each other. Most of the

office blocks are also placed so that it faced the main road on the northern and southern part of the site rather than the east and west side.

A small public area is placed on the northern side of the building to further enhance visibility that comes from the northern part due to the low activity that is happening on the residential area there.

An amphitheater is located on the center part alongside the main lobby to be used as a public space and a place for the office workers to rest. The reason why it is placed there is to increase the visibility that comes from the ground floor of the building to the office blocks located on the top floor. The different elevation in the amphitheater helps on increasing views from the ground floor, the further down the user is on the amphitheater, the more they can see the top floor of the building.

5.1.2. Layout

The vehicular circulation that is present on the site is pretty straightforward. Vehicle can go into the parking area located on the western side or do a drop-off in front of the main lobby. The entrance and the exit for vehicular circulation are located on the eastern side to avoid the U-turn location on the main road.

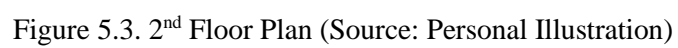
Meanwhile for pedestrian circulation, user need to go from the main lobby first before they can go anywhere else. User can then either choose to go to the co-working space behind the main lobby or go up into the office blocks. User can also choose to go into the two public areas and the canteen.



Figure 5.2. Layout Plan (Source: Personal Illustration)

5.1.3. Floor Plan

The office blocks are separated into 3 tiers, the large office, medium office, and small office, in which every office type are located on different floor with the large office located on the bottom part. All the office are connected by the vehicular transport and also adjoining corridor in each floor. The office blocks are placed so that each office blocks faced each other.



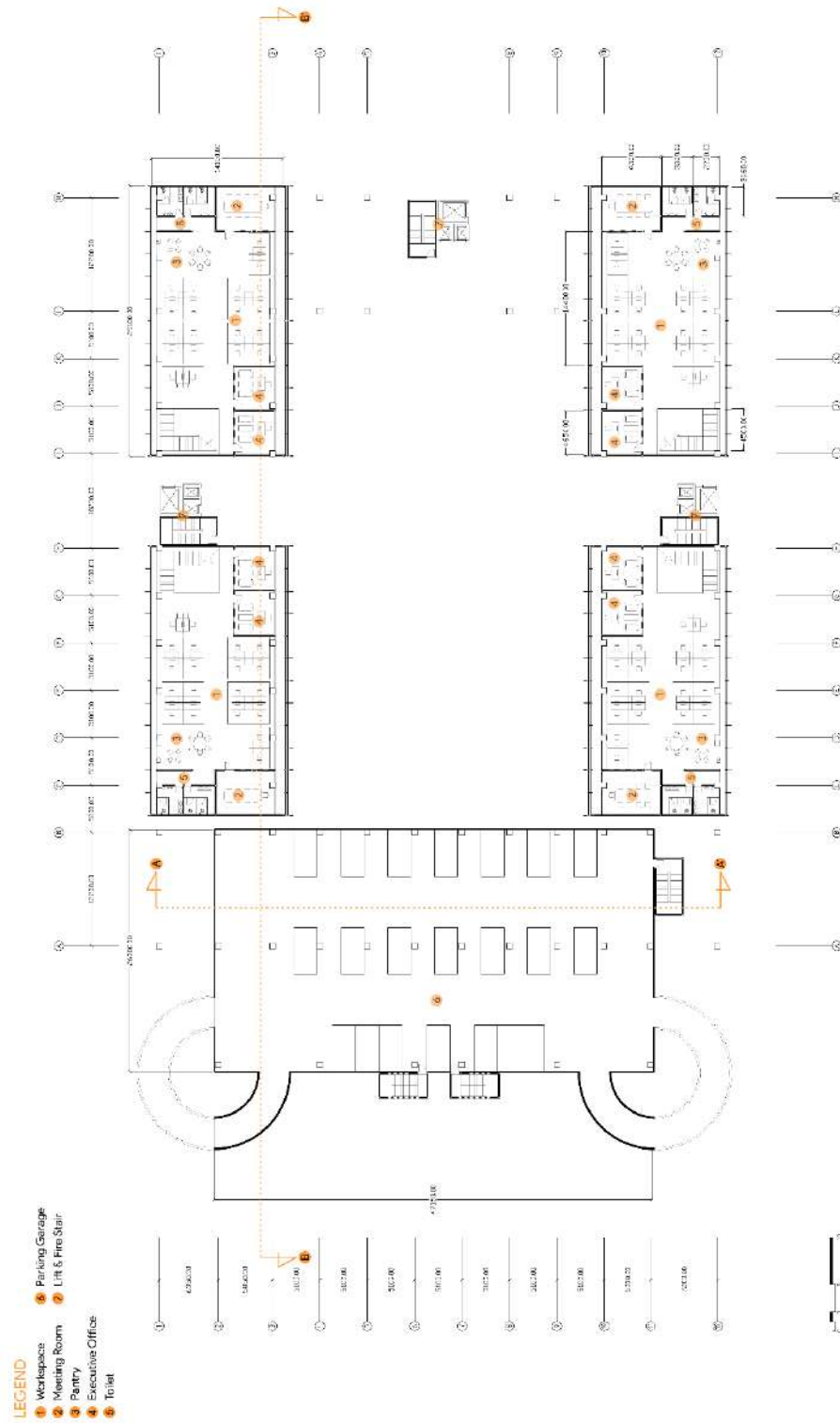
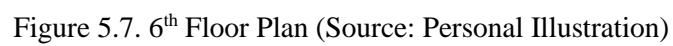


Figure 5.4. 3rd Floor Plan (Source: Personal Illustration)



Figure 5.6. 5th Floor Plan (Source: Personal Illustration)



5.1.4. Elevation

From the elevation, it can be seen further on how the office blocks are placed facing each other and placed vertically based on their size with the small offices being on the top floor.

The different type of angular forms are made based on the blocks location to apply the visibility concept. The small office is angled towards the bottom while the medium and large office are angled toward the top and bottom. The medium office also has several different forms based on where it is located, the one located on the east emphasizes on visibility towards the other medium office and vehicular circulation on site while the other focuses on the same thing as other blocks.

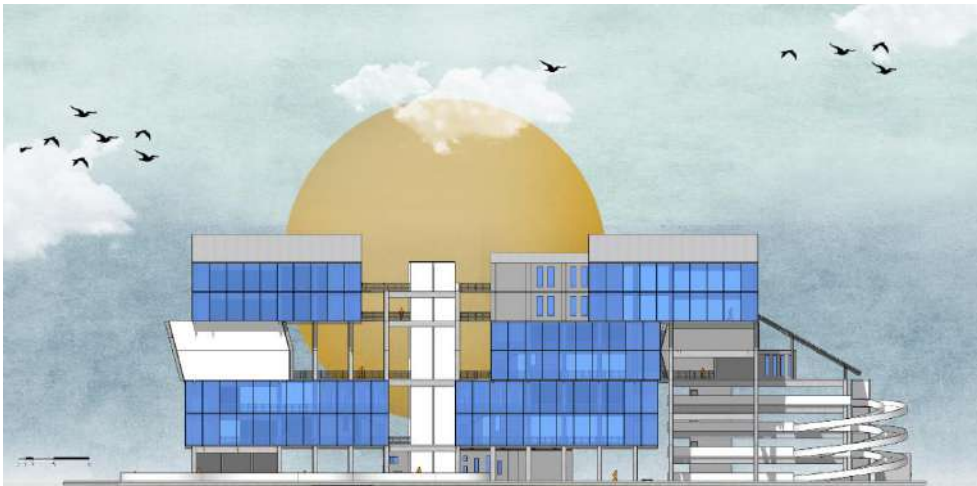


Figure 5.9. North Elevation (Source: Personal Illustration)



Figure 5.10. East Elevation (Source: Personal Illustration)



Figure 5.11. South Elevation (Source: Personal Illustration)

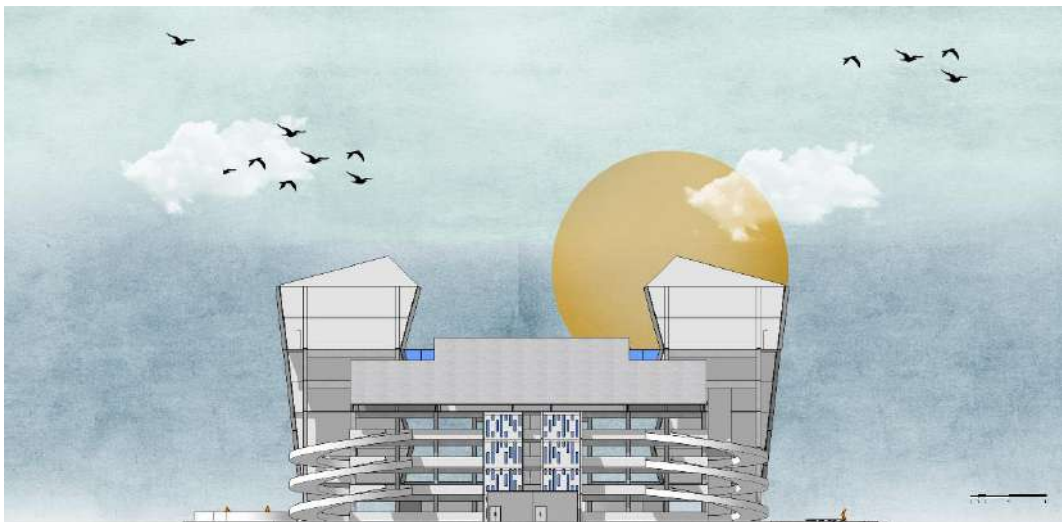


Figure 5.12. West Elevation (Source: Personal Illustration)

5.1.5. Section View

From the section view, it can be seen that there are a difference in floor height between the office blocks and parking garage. This happened so that the medium office can be placed on top of parking garage to increase the number of the offices.

The structure used, as mentioned before, is rigid frame with concrete column and block with no free column in the middle of the office area

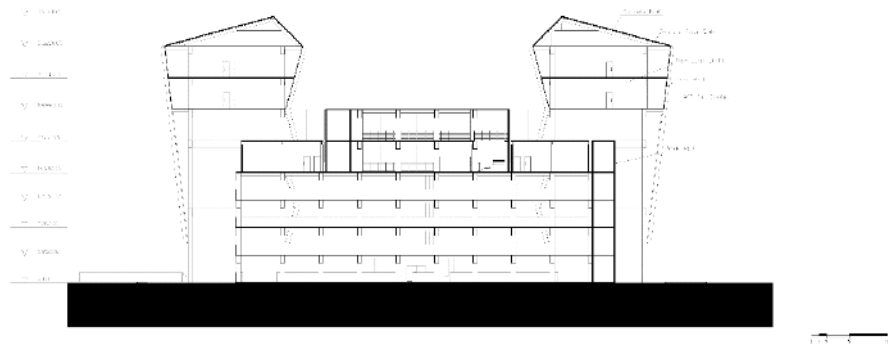


Figure 5.13. Section A-A' (Source: Personal Illustration)

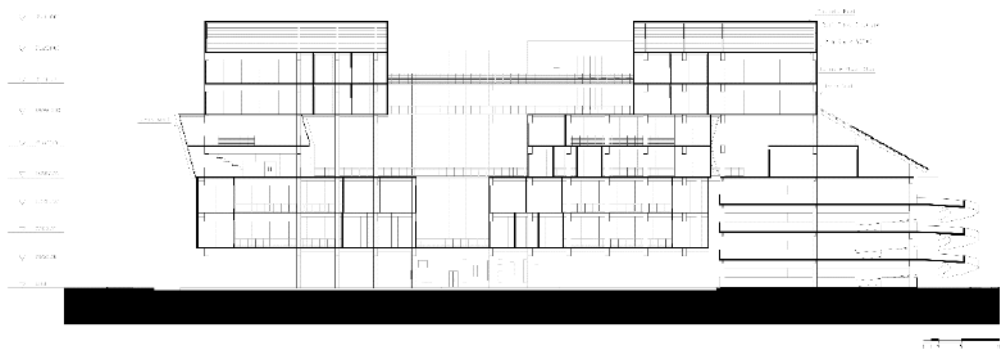


Figure 5.14. Section B-B' (Source: Personal Illustration)

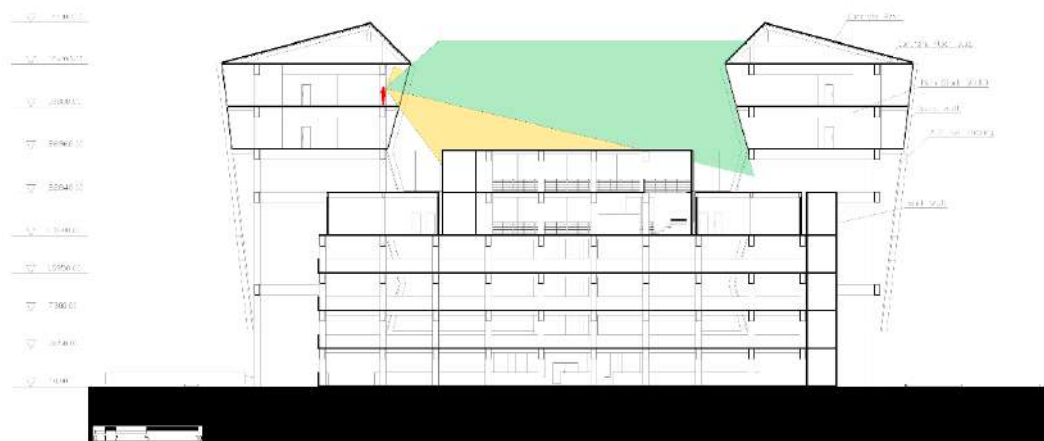


Figure 5.15. User Viewing Angle and Distance inside building blocks (Source: Personal Illustration)

5.1.6. Perspective View

Below are some perspective view of the exterior and interior of the building to help visualize the entirety of the design.



Figure 5.16. Perspective View 1 (Source: Personal Illustration)



Figure 5.17. Perspective View 2 (Source: Personal Illustration)



Figure 5.18. Perspective View 3 (Source: Personal Illustration)



Figure 5.19. Perspective View - Lobby (Source: Personal Illustration)



Figure 5.20. Perspective View - Amphitheater (Source: Personal Illustration)

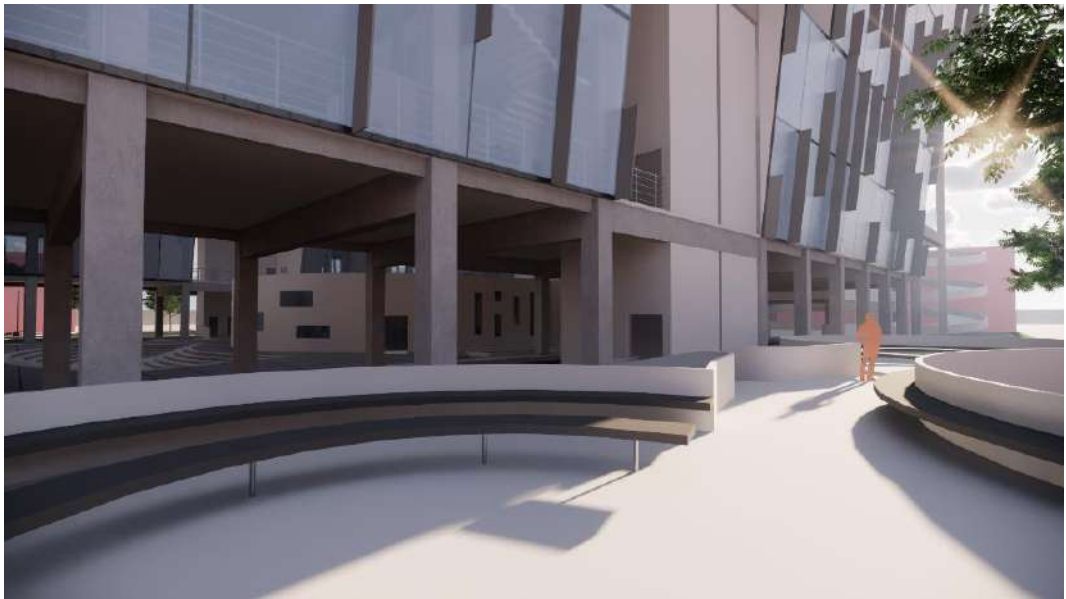


Figure 5.21. Perspective View - Park (Source: Personal Illustration)



Figure 5.22. Perspective View 4 (Source: Personal Illustration)



Figure 5.23. Perspective View - Corridor (Source: Personal Illustration)



Figure 5.24. Perspective View – Lobby Interior (Source: Personal Illustration)



Figure 5.25. Perspective View – Office Interior 1 (Source: Personal Illustration)



Figure 5.26. Perspective View – Office Interior 2 (Source: Personal Illustration)



Figure 5.27. Perspective View – Office Interior 3 (Source: Personal Illustration)

5.2. Technical Exploration

5.2.1. Structural System

As mentioned before, the main structure of the building is the rigid frame with concrete column and block. The concrete roof located on the top of small office and parking garage are supported by additional steel structure.

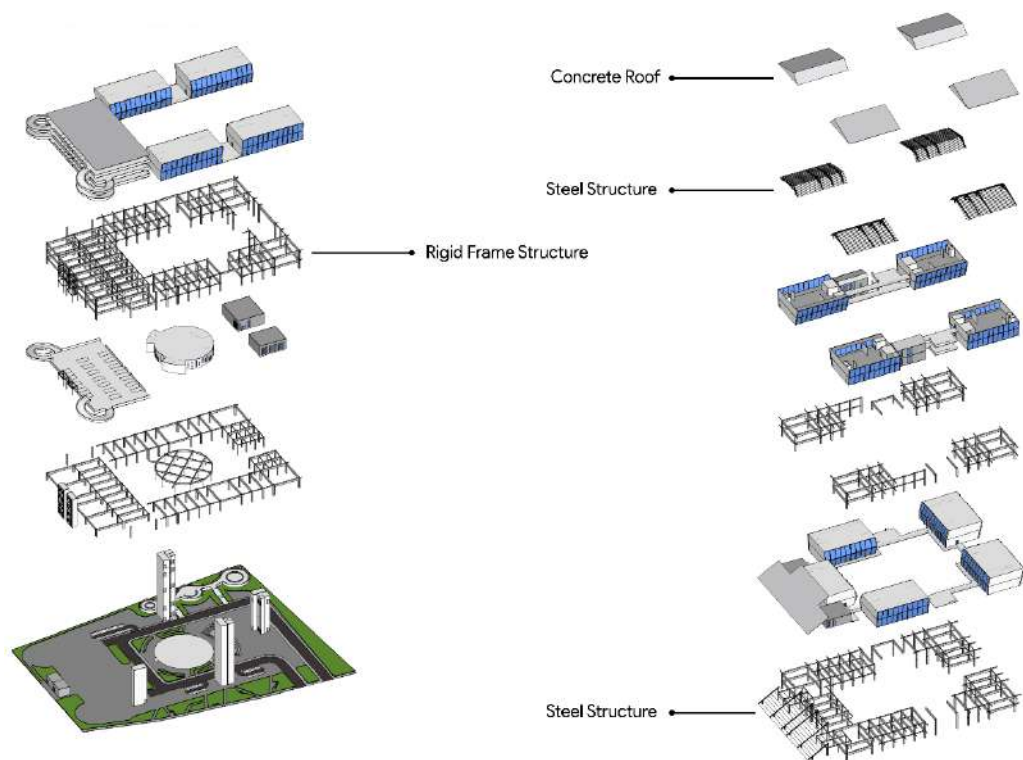


Figure 5.28. Building Structural System (Source: Personal Illustration)

5.2.2. Clean Water Utility System

The schematic about the clean water system in the building are as follow:

Plumbing Schematic Diagram



Figure 5.29. Clean Water System Schematic Diagram (Source: Personal Illustration)

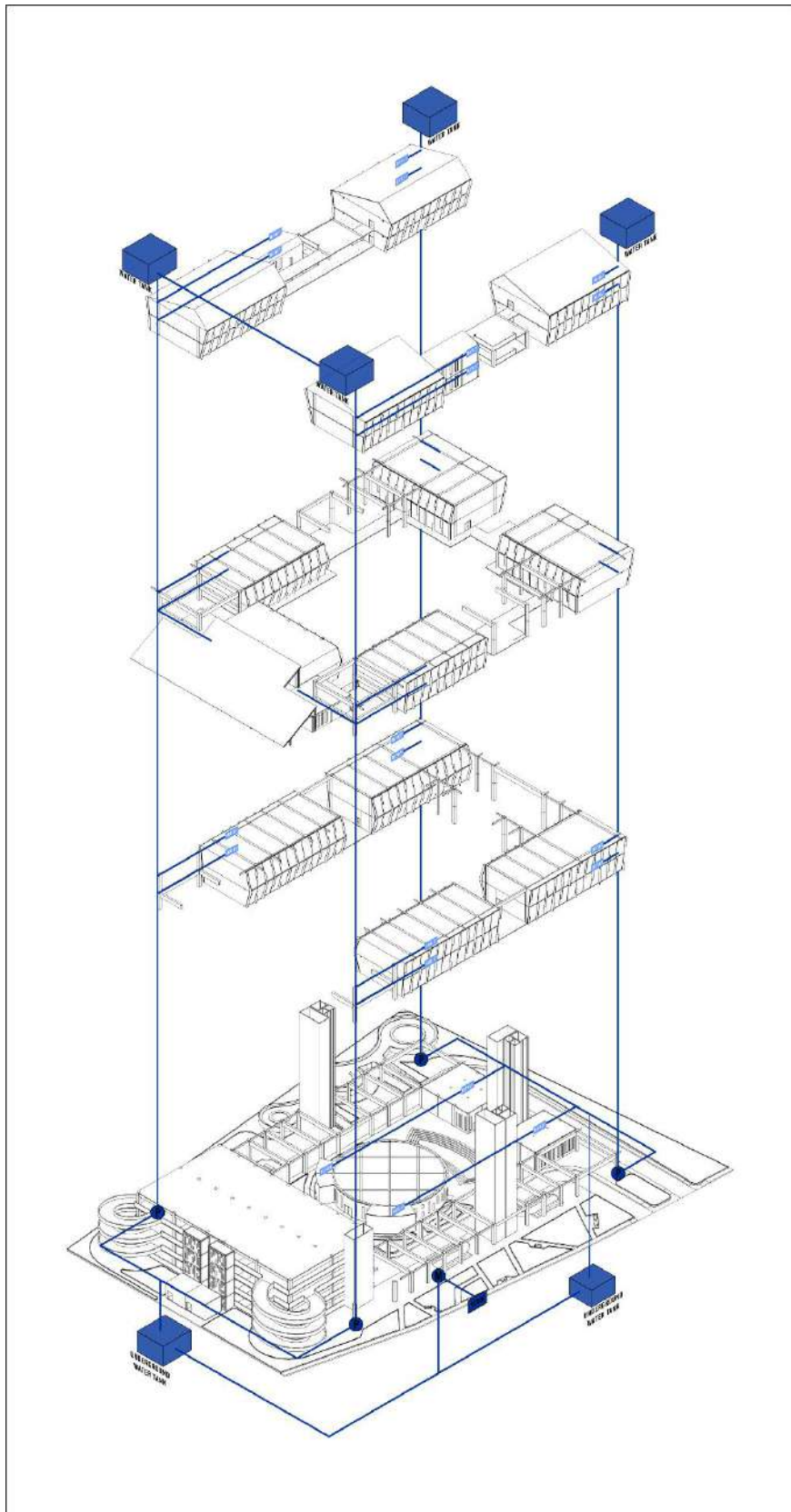


Figure 5.30. Clean Water Utility System (Source: Personal Illustration)

5.2.3. Black Water Utility System

The schematic on black water and grey water system are as follow:

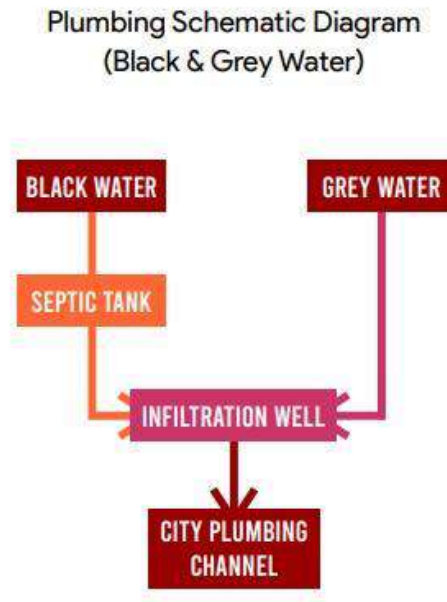


Figure 5.31. Black and Grey Water System Schematic Diagram (Source: Personal Illustration)

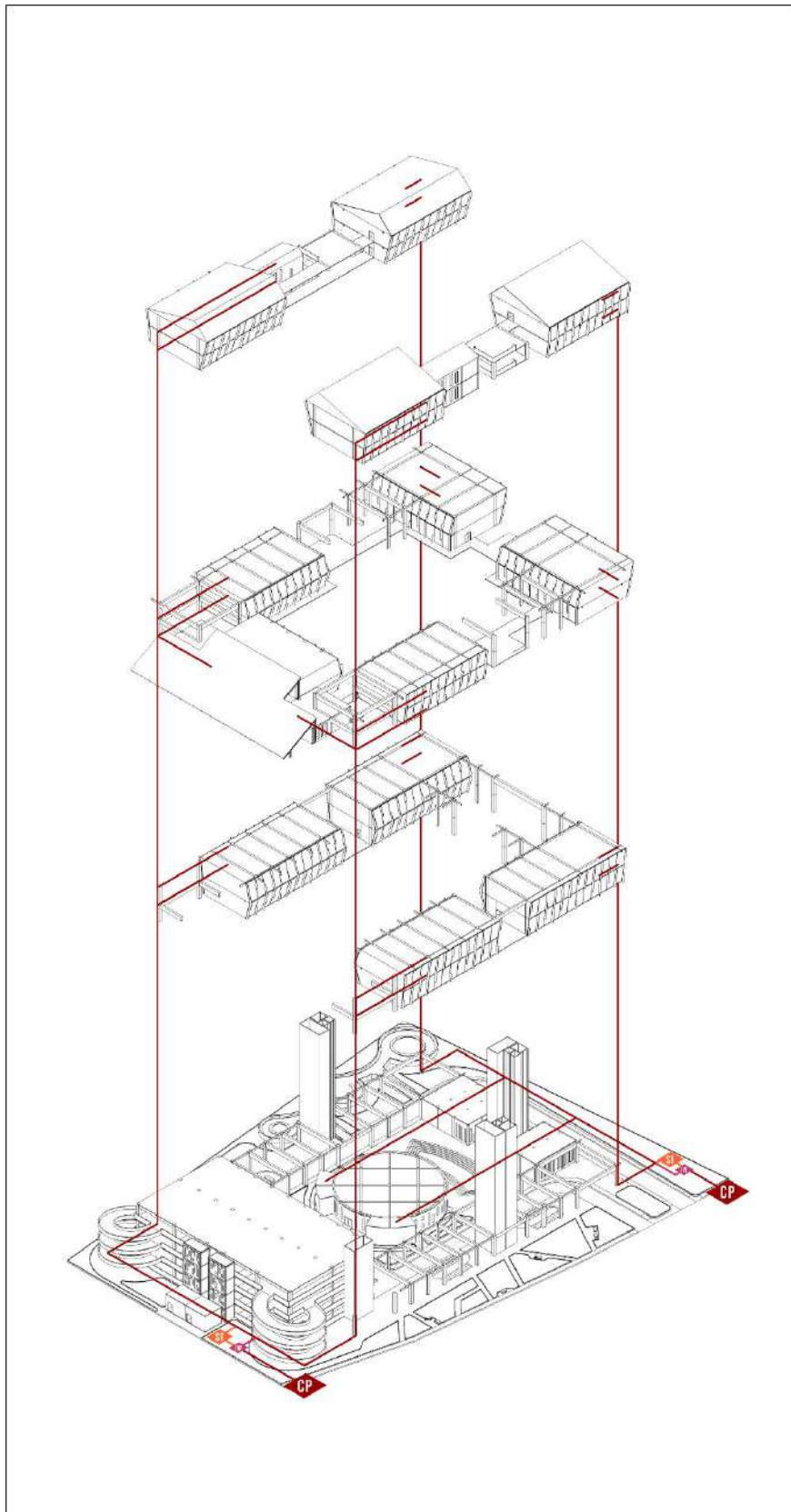


Figure 5.32. Black and Grey Water Utility System (Source: Personal Illustration)

5.2.4. Electrical Utility System

The schematic about electrical system in the building are as follow:

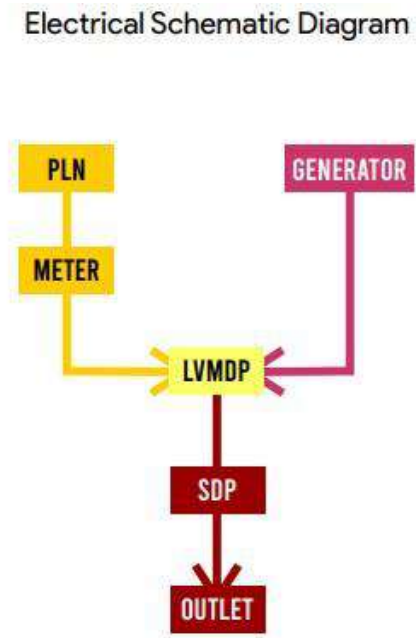


Figure 5.33. Electrical System Schematic Diagram (Source: Personal Illustration)

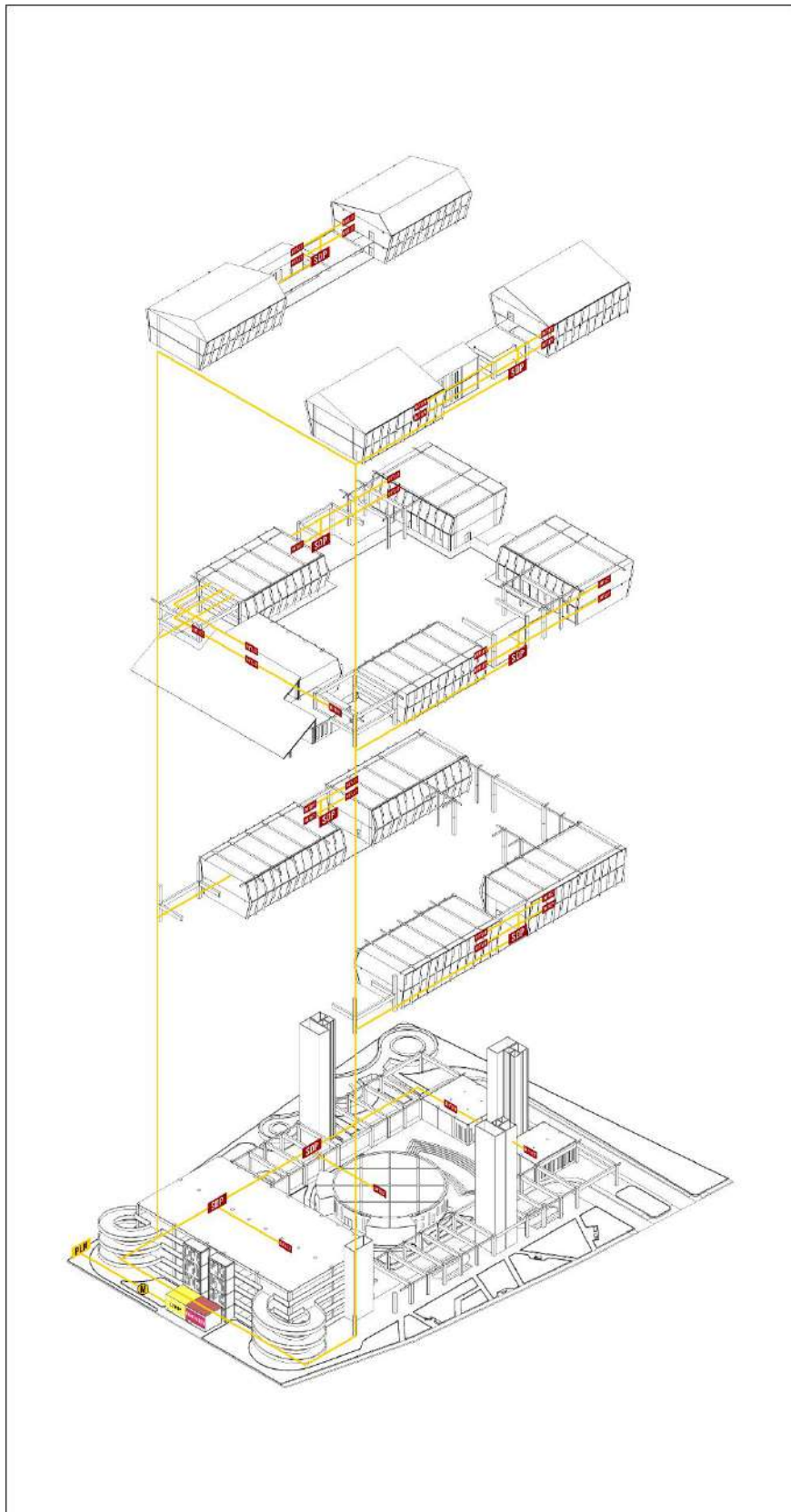


Figure 5.34. Electrical Utility System (Source: Personal Illustration)

CHAPTER 6

CONCLUSION

Female oppression was and still an occurrence that happens all the time just because people did not or could not remove the patriarchal culture that is already deeply embedded into most culture. One of the dangerous aspect of the oppression are the sexual harassment and/or assault that comes with it which endanger most women for their life. This could happen anywhere from public place, a bustling road, their own house, the internet, and their workplace.

This design was created with an objective to prevent similar cases from happening to other women in their own workplace. It achieved through the introduction of “extreme” visibility in the design in hope that perpetrator would feel conscious about their surroundings, that they are continuously watched by many pair of eyes, before doing anything bad. This would hopefully able to prevent sexual harassment from happening in the first place

The visibility concept appears on several aspect of the design from formal to technical aspect, including:

- Building masses are arranged so that user from one mass can see user in the other masses and vice versa. It is also arranged with the consideration so that it can see and be seen by the vehicular traffic inside and outside of the site.
- Vehicular and pedestrian circulation are placed surrounding the whole site to ensure that each building masses can see and be seen from the circulation area.
- Public areas are placed in the northern and center part of the site to increase visibility from both sides respectively.
- Short and slightly leafless vegetation are used to avoid blocking the view of the user inside the building.
- Glass wall accompanied by sun shades is used as the main façade in office blocks to give more visibility from and to the office blocks. This is also

supported by angular form that increases visibility to upper and lower levels based on the elevation of each office blocks.

- Concrete rigid frame without a free column in the center is used to avoid blocking the view of the user inside the office and to increase the amount of space usable as workspace.
- The office blocks used an open plan as the standard plan to avoid having cubicle that will block the view of the user in the office. Several rooms are given a higher degree of privacy based on the activities done inside it.

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LEMBAR REVISI TUGAS AKHIR

NAMA MAHASISWA : FADHIL FARIED PUTRA
NOMOR POKOK : 08111640000007
**JUDUL TUGAS AKHIR : GENDER SENSITIVE OFFICE: PREVENTING
FEMALE OPPRESSION ON WORKPLACE**
DOSEN PEMBIMBING : IR. I GUSTI NGURAH ANTARYAMA, PH. D.

| No. | REVISI |
|-----|---|
| 1 | Explain more about the context of the design. This includes the gender context of users, cultural and climate context of the site, and what kind of offices would appear in this rental office. (p.8) |
| 2 | The building design is still too universal, not according to the cultural context of Indonesian culture. |
| 3 | Consider the viewing distance of the user inside each office block to prove whether or not the user can see the others in the other office blocks. (p.34) |
| 4 | Emergency stairs are closed spaces in which sexual harassment can happen. Think more about the placing and the distance of emergency stairs to the office blocks to reduce the chance of sexual harassment inside it. |
| 5 | Design should have different types of glass material based on the type of working activities that happen behind the glass. |

Surabaya, 27 Juli 2020
Dosen Penguji,

Dr. Arina Hayati, S.T., M.T.

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| No. | REVISI |
|-----|--|
| 1 | A difference can hardly be seen between the designed office and other offices outside of the gender bias context. |
| 2 | Each user (office worker) needs different level of privacy, some may require more privacy than what is already designed. User need more control of their space so that they can make necessary changes on their own workspace. |
| | |

Surabaya, 27 Juli 2020
Dosen Penguji,

Ir. Purwanita Setijanti, M. Sc., Ph.D.

LEMBAR REVISI TUGAS AKHIR

NAMA MAHASISWA : FADHIL FARIED PUTRA
NOMOR POKOK : 08111640000007
**JUDUL TUGAS AKHIR : GENDER SENSITIVE OFFICE: PREVENTING
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DOSEN PEMBIMBING : IR. I GUSTI NGURAH ANTARYAMA, PH. D.

| No. | REVISI |
|-----|--|
| 1 | Climate context needs to be considered more in the overall design, such as the effect of rain on the glass wall in acoustic manner and on the parking ramp and also the glass wall with little sun shading that might turns out to be not effective on countering the heat and glare from the sun. |
| 2 | Some technical aspect do not have a detailed drawing. This includes the AC system used in the building and the lighting concept. (p.37-38) |
| 3 | Consider using a panoramic lift to increase the visibility inside the lift to reduce the chance of sexual harassment happening inside a closed lift. |
| 4 | Think more holistically about the design. |

Surabaya, 27 Juli 2020
Dosen Penguji,

Dr. Ima Defiana, S.T., M.T.

