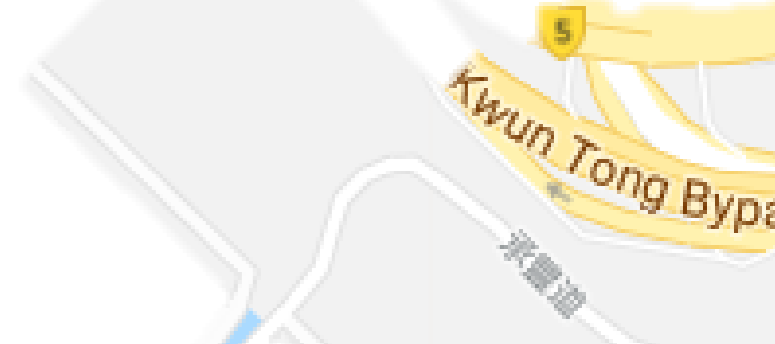
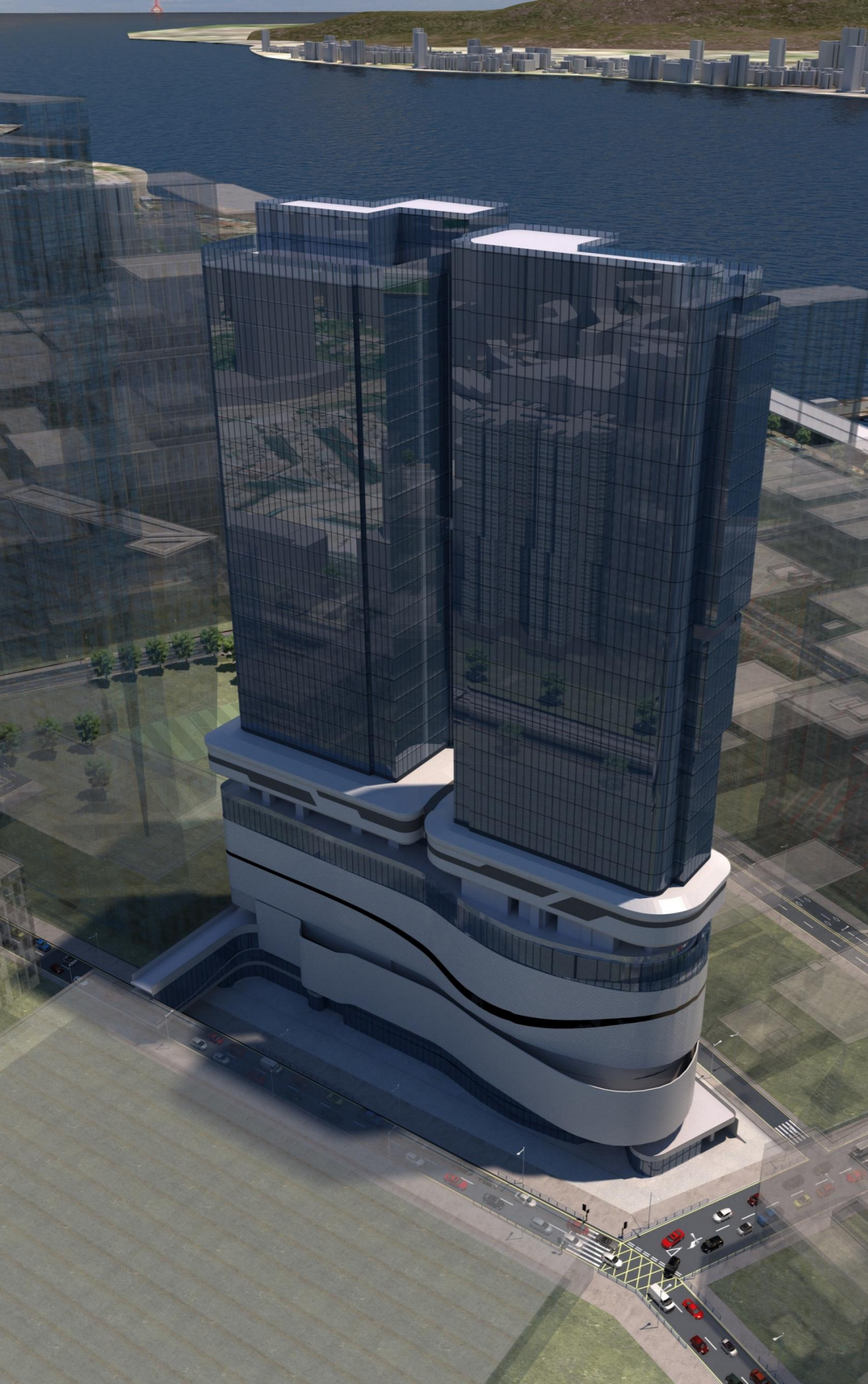


Chapter



Project Overview



1. PROJECT BACKGROUND

This Redevelopment Project – KTIL240 is located at Lots where a Kowloon Motor Bus (KMB) Depot had operated since 1966. In conjunction with other developments at the same district such as Millennium City, APM and Landmark East, KTIL240 is now taking part in the transformation processes to modernize Kwun Tong as one of the oldest urban districts in Hong Kong into an area for Grade A offices, as well as exciting retail and entertainment hubs.

KTIL240 is planned to feature a car park on B4-B1, a shopping arcade on LG-L10, and a commercial hub on L12-L23. The building has a modern and streamline outlook, strongly present an artistic, harmonious and modernized image over that area. Furthermore, the building consists of rich amount of well-designed landscape area, mainly bringing green element into the industrial area to create a harmonious and healthy working and living environment.

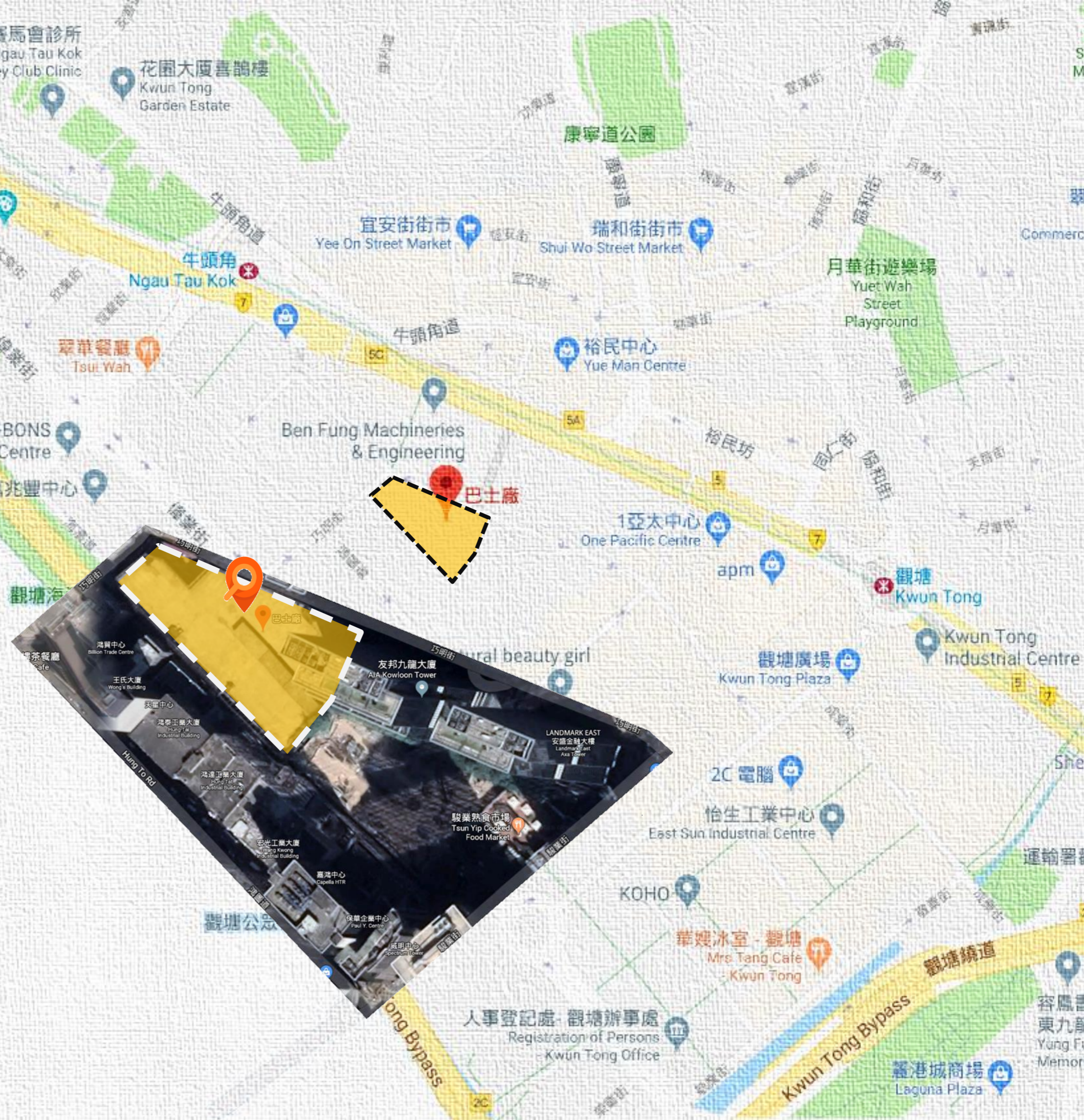
If **Yee Fai** wins this Main Contract, we are committed to devote all our best resources and experience in commercial building construction. With the most advanced construction technology, our talented team shall deliver KTIL240 to its highest standard in a safe and timely manner.

When KTIL240 enters into its construction stages, **Yee Fai** shall refine the construction planning to cope with the changing the Employers' needs on a market-driven basis. We are ready for construction advices to be offered for commercially viable and practicable solutions

1.1. SITE CHARACTERISTICS

The redevelopment Site is located in an old urban district at Kwun Tong with its entrances at How Ming Street where **traffic congestion** seems inescapable. The egresses of excavated soil disposals and ingresses of construction materials, such as reinforcing rebars, concrete, structural steelworks and exterior façades, would constitute one of the largest concerns to the construction planning.

The ground investigation reveals a significant volume of **marine deposit** of approximately 37,000m³ to be disposed from the Site, representing 20% of the total excavation volume. Its contaminant levels remain unknown from the tender documents. Time taken for applying a marine dumping permit and for its disposal or even on-site treatment (if Category H is classified) therefore poses a great deal of uncertainties to KTIL240 programme and progress



1.2. PROJECT SPECIFICS

The Work comprises top-down construction of a 4-storey basement and superstructure of 11-storey shopping arcade together with two 22-storey office towers, standing at approx. 175m height. The structures are primarily made of reinforced concrete with heavy duty structural steelworks for those areas where long-spanned spaces are required such as shopping atriums and cinemas at podium.

The building façade comprise of curtain wall, aluminum features, LED feature screen and vertical greenery;

Gross Floor Area:

1,100,000 ft²

Construction Floor Area:

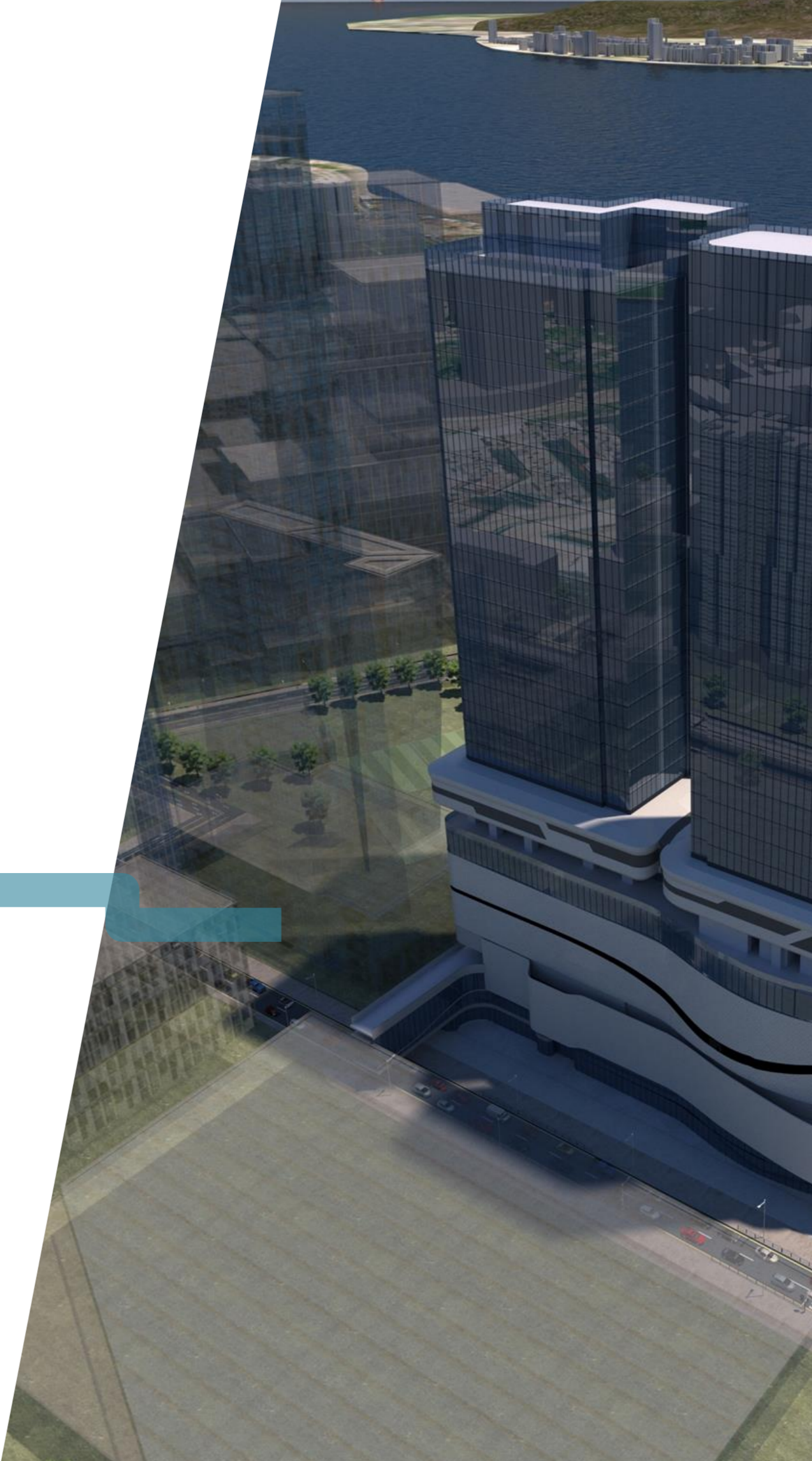
1,500,000 ft²

The Key Project Data are highlighted on the right.

Estimated Volume of Works

Level of basement	4
Level of Podium	11
Level of Tower (Office)	22
Total GFA	1,100,000 ft²
Total CFA	1,500,000 ft²
Excavation Depth	23m
Building Height	175m
Façade Area	62,000m²
Concrete Volume	137,000m³
Formwork Area	540,000m²
Reinforcement	31,000 Tons

Chapter 2 and 3 explains the Works in a more detailed account.



1.3. GEOLOGICAL CHARACTERISTICS

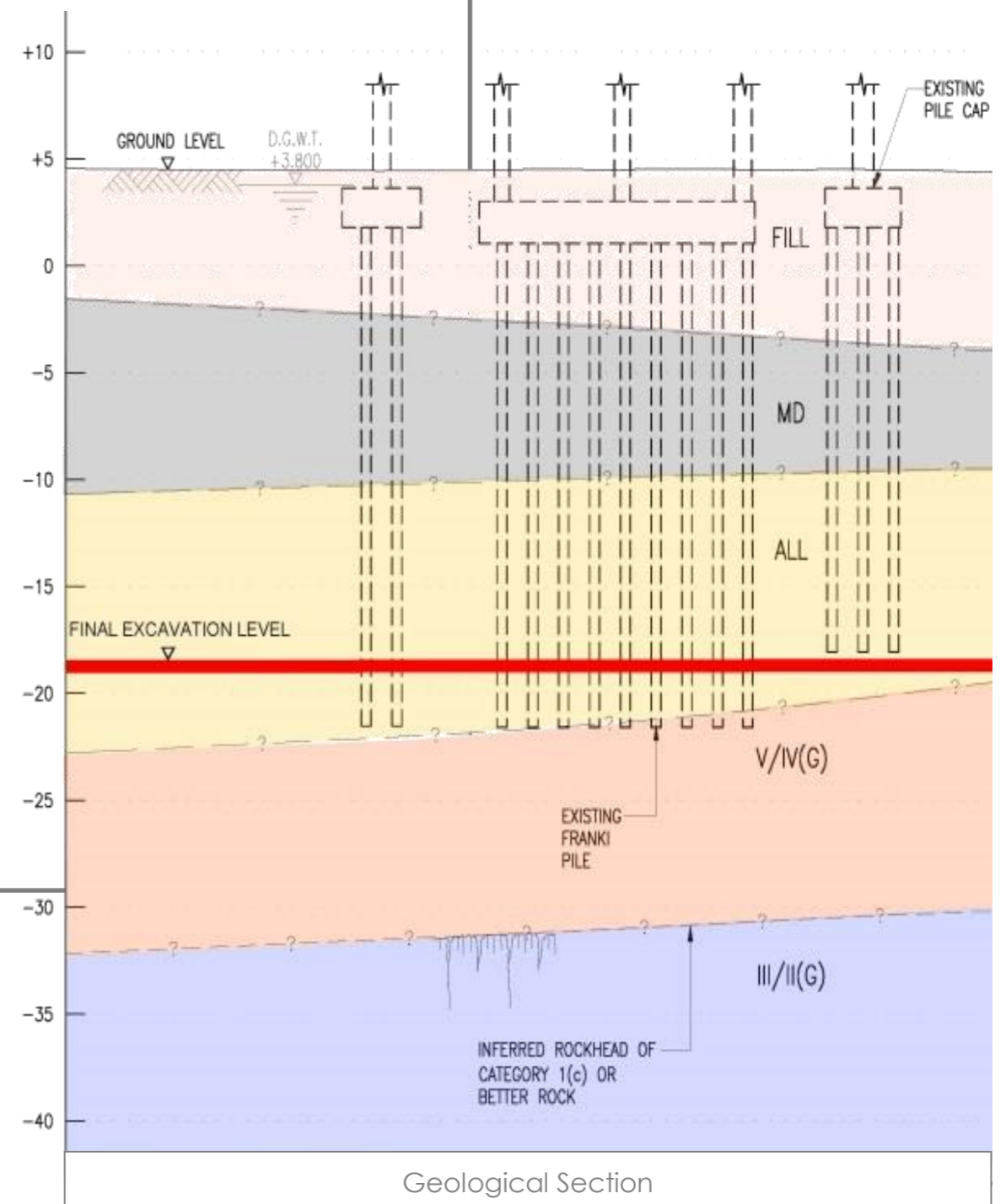
Ground Conditions and Subsoil Characteristics for ELS Works

The ground investigation reveals that loose granular Fill resulting from land reclamation works between 1950s and 1963 covers the whole site. Below the Fill are some sandy/silty marine deposit with thickness ranging between 1m and 10m. Thickest zone is located in middle and southern part of the site. They are loose with an average SPT 'N' values of 25. A very soft fine clayey silt layer forms the upper horizon of the marine deposit. This layer has low strength, high compressibility and very low permeability. An alluvial layer covers the Completely Decomposed Granite (CGD) between the marine deposit and rockhead. The Alluvium has thickness ranges between 1.5m and 1.8m and is generally a loose to medium dense silty sand. The CDG layer varies from only a few meters up to 21m thick. Any materials there below are considered irrelevant to the excavation works at KTIL240.

Past construction of the previous KMB Depot on the Site can be expected to have introduced enormous amount of cast-in-situ (Franki) piles and RC concrete bases in the course of the bulk excavation.

Groundwater and Permeability

The groundwater table is located in the fill at about +3.8mPD. Subject to the future pumping tests, our past experience indicates that the average permeability at the Fill layer is expected to be around 10-3 m/s and the marine deposit layer poses far low permeability down to around 10-8 m/s. There is no information in the tender documents, indicating piezometric head below the marine deposit.



1.4. TIMES OBLIGATIONS

Yee Fai understands that the Employer is seeking for a high quality commercial complex development within a fast-track programme. It is also noted that KTIL240 will demonstrate green credentials both in the construction period and throughout the building life cycle to obtain the BEAM Plus and LEED accreditation. Our proposed construction planning and methodology as elaborated in this Submission are featured with these considerations for delivering our best services in the construction project management aspects.

Despite the contract duration of 1250 calendar days specified, with our various designs, **Yee Fai** offers an ambitious programme to achieve the project completion in 1190 calendar days, 60 days faster than the original contract duration.

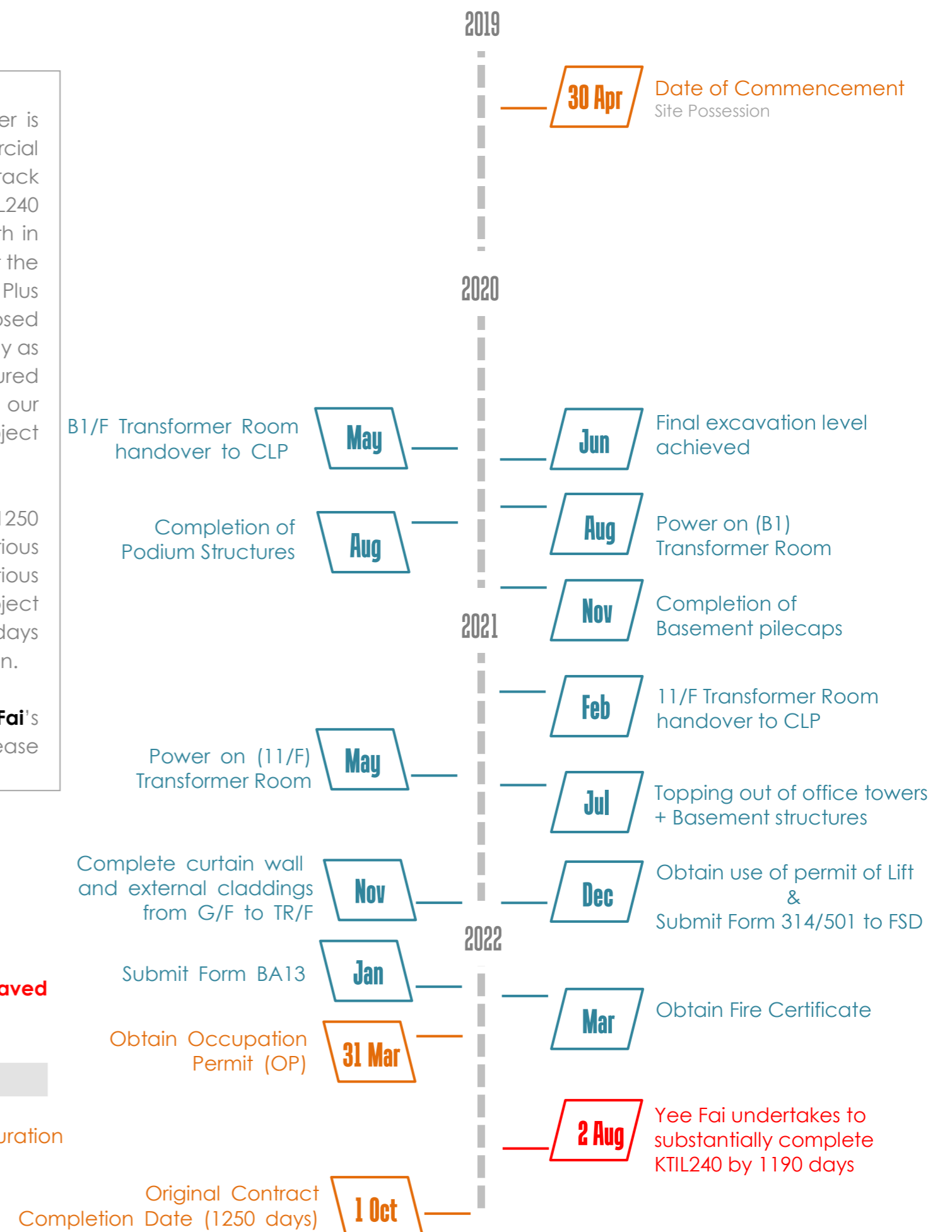
The key milestone dates of **Yee Fai**'s programme are listed on the right for ease of reference.

Proposed Contract Duration
1190 days

60

Days saved

Original Contract Duration
1250 days



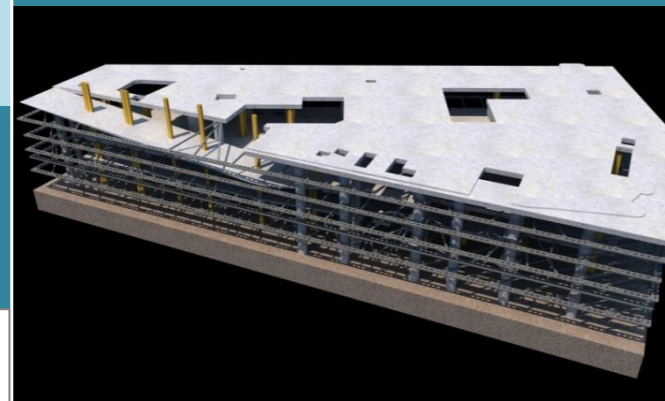
2. CONSTRUCTION STRATEGY AND WORK SCOPES

2.1. STRATEGIC CONSTRUCTION PLANNING

The successful management of this multi-disciplinary construction works and interfaces are dependent on the overall project management. This includes the efficiency and effectiveness of the construction procedures, processes and communication across all stakeholders who should all be working with common goals and cooperative environment in order to achieve a total success for KTIL240.

Yee Fai's proposed construction methodology is tailor-made for KTIL240 as elaborated in [Chapter 2](#) of this Submission. The key features are illustrated on the right:

Alternative Top Down Construction



The alternative design on the top-down construction enables us to complete the B1/F almost at the same time when G/F is complete, approximately 3 months earlier than traditional top-down construction method. All basement construction activities will then be diverted from G/F and B1/F, so that G/F and B/F form two separate workfronts exclusively for superstructures and basement construction respectively i.e. effective shorten construction critical path progress.

Mechanical Muck Hoist System



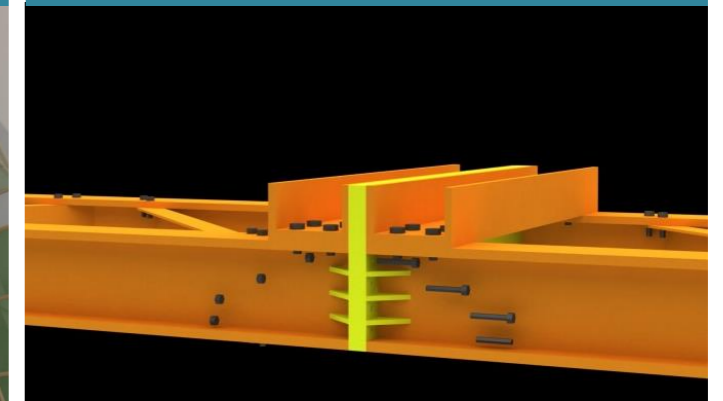
The mechanical muck hoist system generates a max daily excavation output up to 1,800m³/day. It is specifically designed for the disposal of sticky marine deposit.

Table System Formwork for Towers



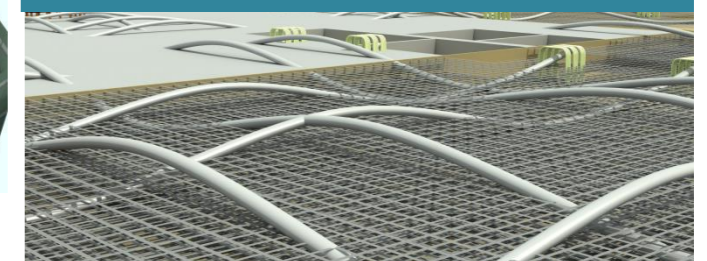
For higher efficiency and green construction, **Yee Fai** adopts Table System Formwork for office towers. This also helps to mitigate the impacts from shortage of the skilled formwork labours in Hong Kong.

Modular Strutting System



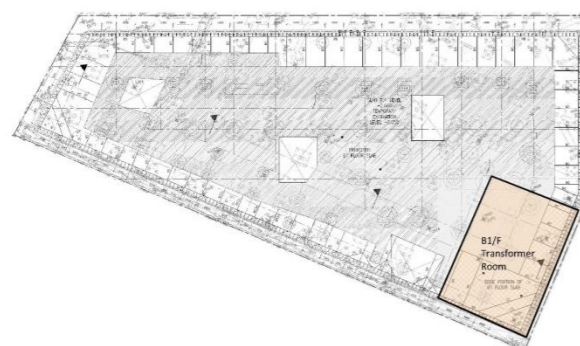
Use of modular struts minimizes on-site welding works and the associated contaminants. Air quality and working environment in top-down construction can be substantially improved. Its bolts-and-nuts connection makes the on-site installed nice and easy. This helps shortening the time and enhances level of safety.

Post-Tensioning Design for Transfer Plates



Volume of concrete and reinforcing rebars would be greatly reduced by using post-tensioning design for transfer plates. This saves time and costs.

Early Completion of B1/F Transformer Room



Early completion of B1/F transformer room is achieved by alternative excavation and strutting sequences. Early energization by permanent power saves the use of diesel generators and improves air quality to the site; particularly the underground environment at top-down construction.

Early Completion of Tower 2 Pilecap at G/F



Alternative excavation sequence allows Tower 2 pilecap to be constructed simultaneously with G/F structures. Tower construction starts at the soonest to shorten the critical path.

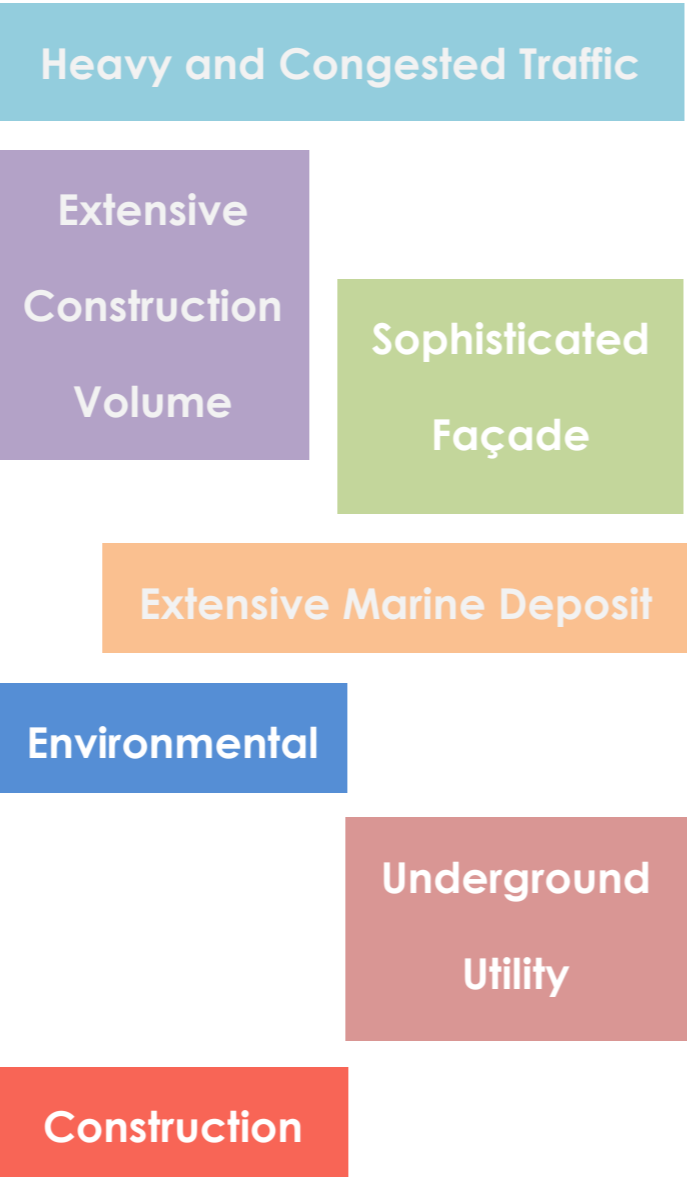
2.2. SITE CONSTRIANTS AND SOLUTIONS

A constraint is a condition, agency or force that impedes progress towards an objective or goal. There are a number of different types of constraint that can affect construction projects.

Constraints are identified, and described in as much detail as possible during the early stages of a project, so that awareness of them and their potential impact can be managed. This includes understanding the dynamics of the project and how different constraints interrelate, as well as being clear about any potential risks and who is responsible for them.

For KTIL 240, there are several site constraints because of the location and surrounding environment.

7 SITE CONSTRIANTS



2.2.1. Heavy and Congested Traffic

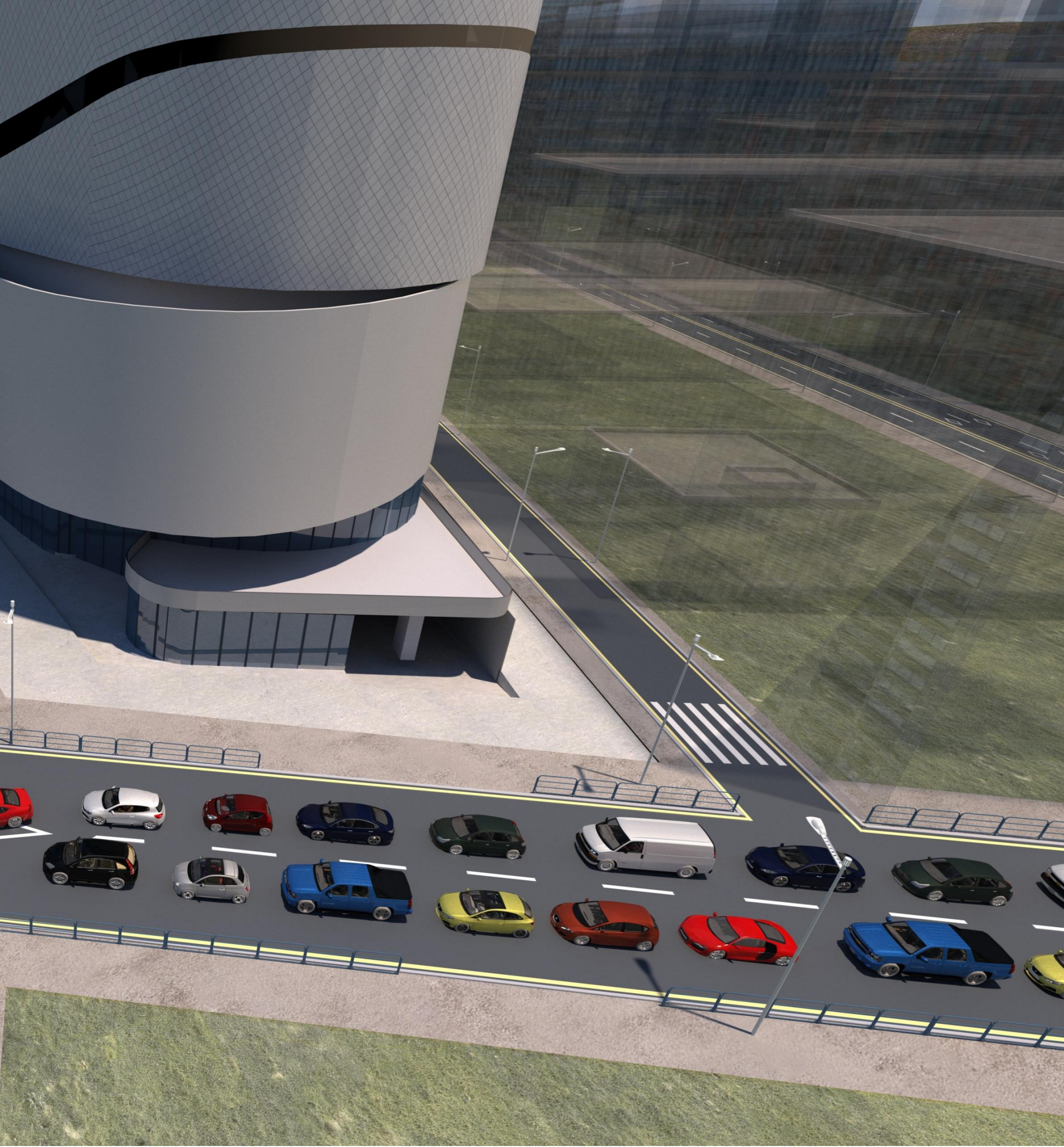
Constraint

KTIL240 is located at busy commercial and industrial area, dense population and rush traffic condition usually appear during office hour. The dense population and heavy traffic cause the street and road suffer big pressure. A vast amount of additional construction vehicles would lead extra burden to the surrounding road networks. Such a traffic condition would furthur the smoothness of material transportation to the site, causing delay on material arrival on site. Normally, the construction vehicles have to pass though the main traffic line (Kwun Tong Road) to access the site.

However, those roads suffer traffic jams during peak hours (7:30~9:30, 17:00~20:00). It imposes unpredictable obstruction to construction works as it would affect planned logistic especially mission critical works such as concrete truck transportation during concrete pouring days.

Over 85% of the site area requires excavation. It means limited spaces for site facilities, site office and material storages.





Solution

To alleviate the pressure on the already-congested traffic conditions, 3 separate workfronts are therefore created at G/F exclusively for Superstructure condition, B1 exclusively for bulk excavation and B2/F exclusively for Basement construction. All construction vehicles would be waiting at their respective locations without having to line up outside the site and causing extra burden to the existing traffic conditions

To alleviate the pressure arising from our construction activities to the already-congested traffic conditions, Yee Fai plans to maximize the site operating areas by creating 3 separate workfronts at:

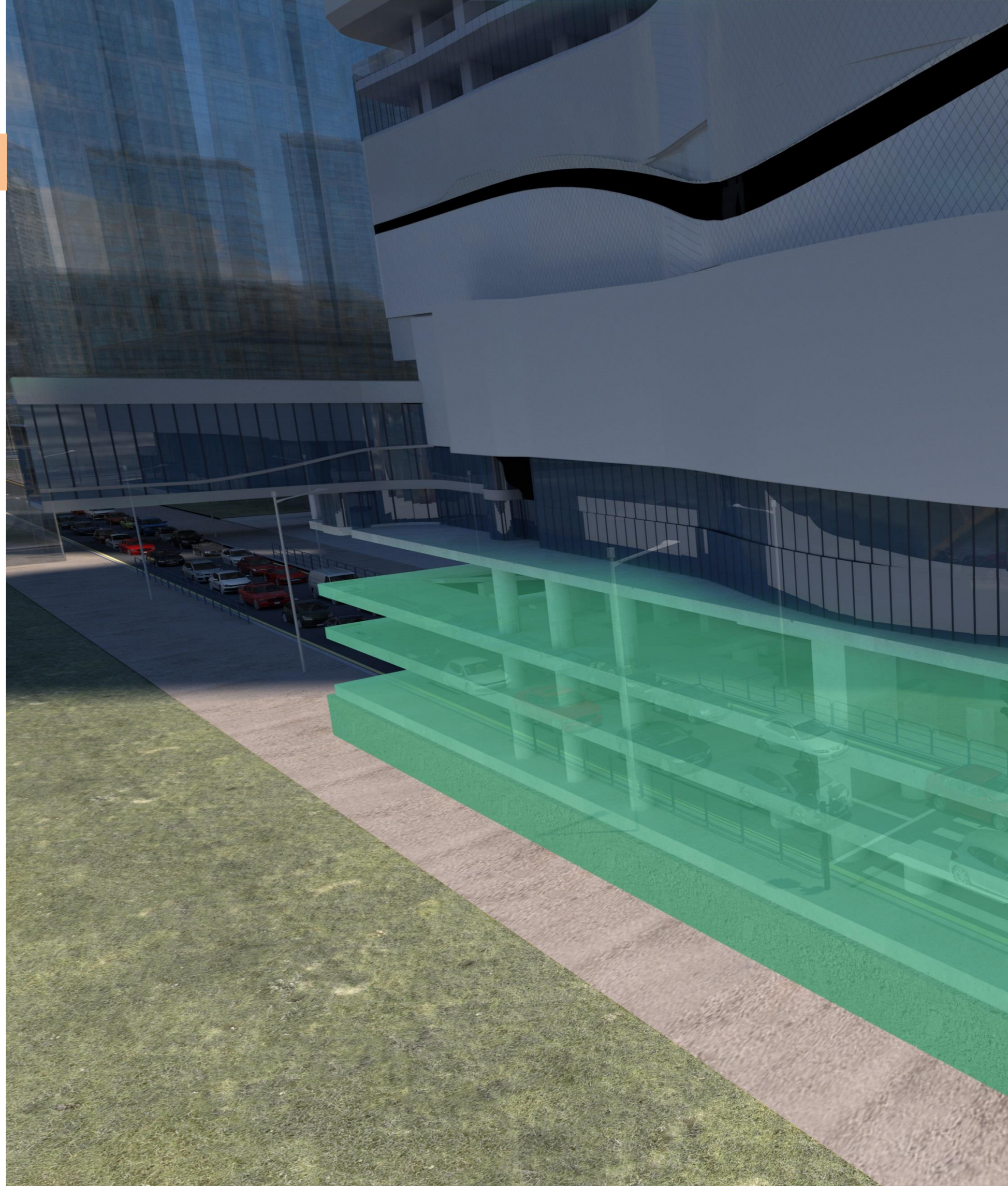
1. G/F exclusively for the superstructure construction;
2. B1/F exclusively for the bulk excavations; and
3. B2/F exclusively for the basement construction.

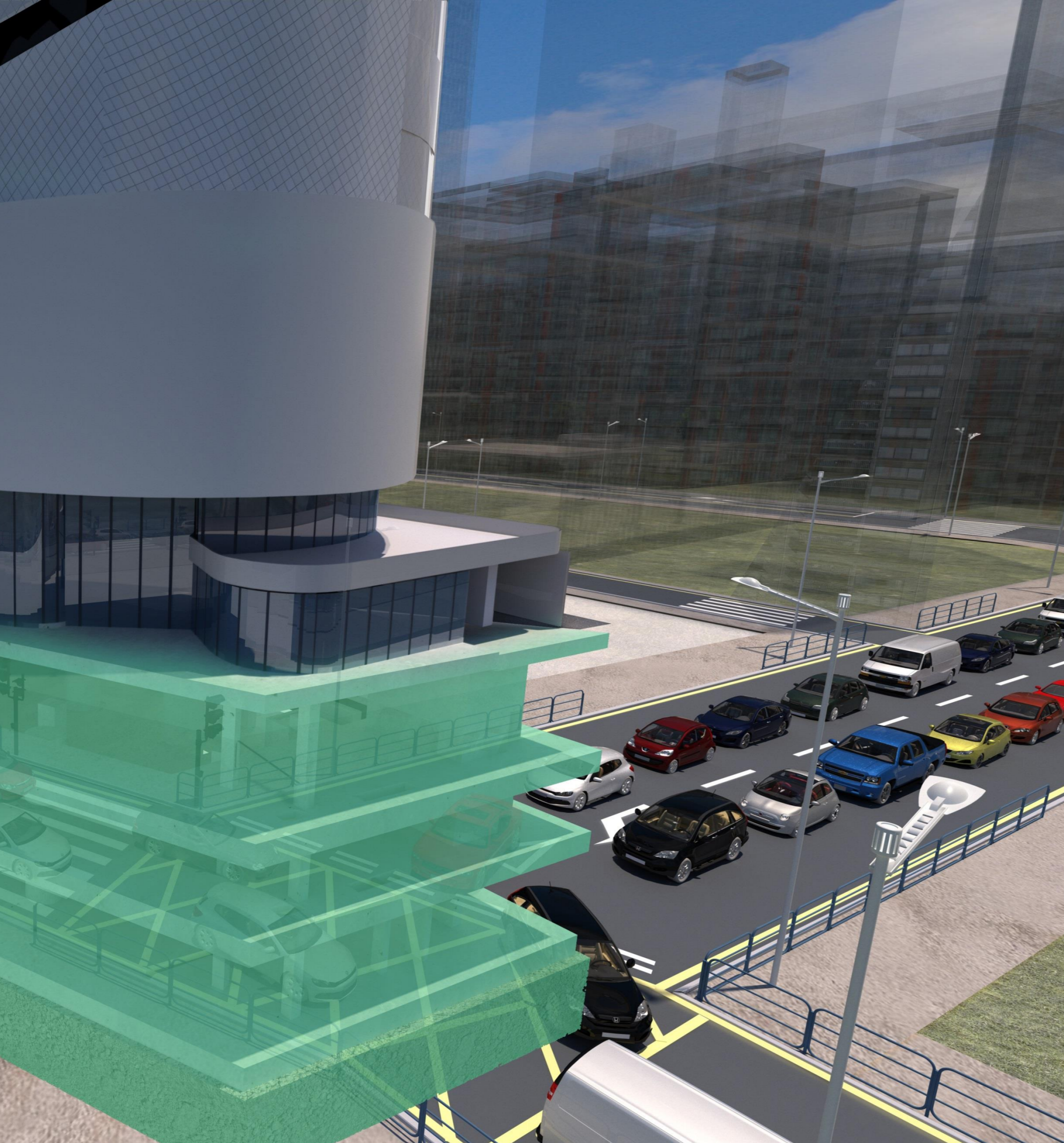
All construction vehicles shall be diverted to their own respective areas without having to wait and line up outside the Site and causing extra burden to the existing traffic. The diverted traffic inside the Site greatly enhances the safety.

2.2.1. Extensive Marine Deposit

Constraint

According to tender specification, there are marine deposit (MD) of approximate 37,000m³. It is scattered all over the entire site. Its muddy nature not only affects dewatering at excavation stage but also induces additional difficulties on handling and discharging the soil into dump trucks. Besides, the effectiveness on transporting MD from basement to dump truck by using conventional excavators is considered inappropriate degraded.





Solution

To maintain a steady and massive excavation rate throughout the whole bulk excavation, inclusive of MD disposal, an integrated transportation system constitutes a basic solution.

Vertical transportation relies on powerful mechanical muck hoists while a vast team of construction dump trucks will cater the horizontal transportation (disposal at from the Site). The whole soil disposal transportation system also provides a greener construction throughout the Top-down processes

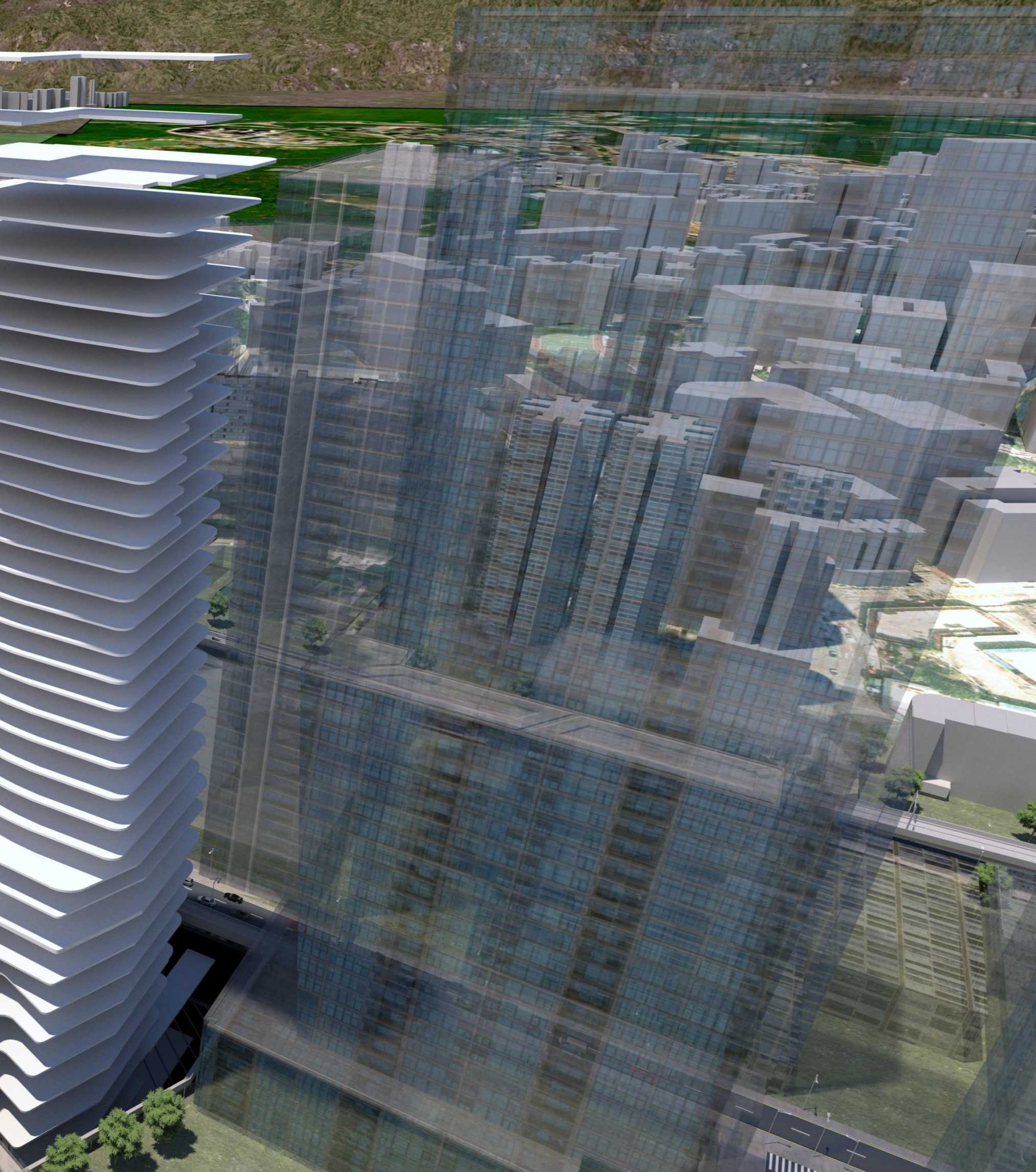
2.2.3. Extensive Construction Volume

Constraint

1,500,000 ft² of CFA or 160 numbers of standard football court present a huge technical challenge for KTIL240 at this congested location at Kwun Tong area.

Together with 540,000m² formwork, 31,000T rebar, 137,000m³ concrete. All these figures formulate our construction strategy.





Solution

As inspired by original Top-down design, **Yee Fai** develops our own alternative Top-down construction method. Not only the time saves, but also saves a large amount of metal struts at the ELS stage.

Our way of Top-down construction is the most viable solution to ensure KTIL240 to be completed by the prescribed time.

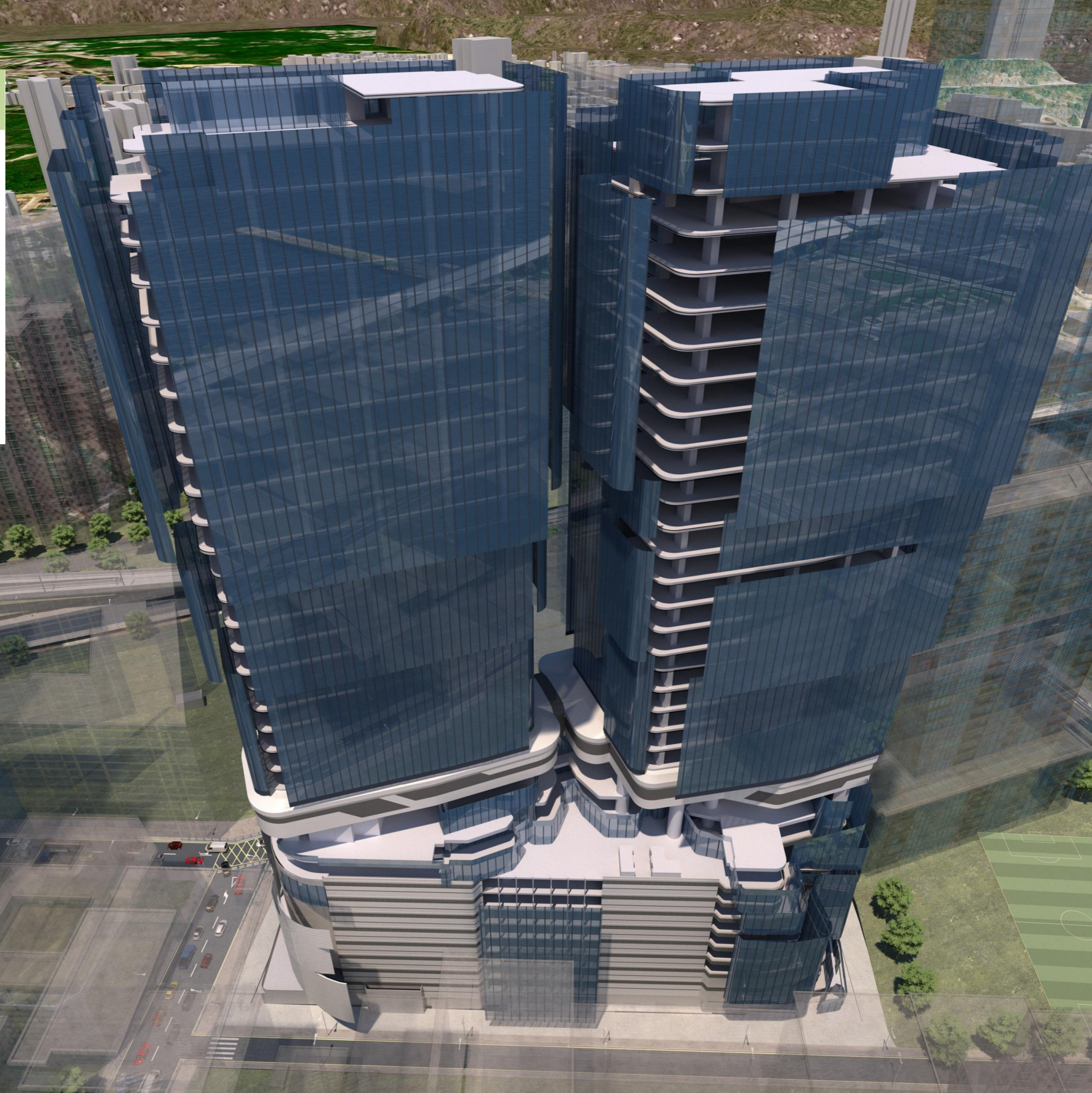
Maximize the use of off-site fabrication can on the other hand maintain a streamlined output during the course of works.

By deploying highly computerized state-of-the-art modern technology, site measurement becomes much accurate and helps to minimize abortive works and materials especially for building with irregular-shaped envelope.

2.2.4. Sophisticated Façade

Constraint

A geometric sophisticated exterior façade is created for KTIL240. It comprises of curtain wall, glass wall, metal canopy, LED screen feature, stone cladding and vertical greenery systems. Construction accuracy of the supporting RC structure becomes increasingly important.





Solution

A dedicated facade team, comprising façade specialist, is established exclusively for KTIL240 to manage and supervise all aspects of façade works starting from procumbent all the way to final handover to the Employer.

With aid of BIM and 3D-Scanning technologies, the interfaces between façade and its supporting RC frames can be better managed in a very accurate manner.

2.2.5. Environmental

Constraint

The construction process produces a number of pollutants from synthetic chemicals as well as greenhouse gasses including carbon dioxide, methane, and nitrous oxide. The construction site is surrounded by high-rise commercial and industrial buildings. Construction not only produces greenhouse gas unavoidably, but also it produces dusts and exhausted air from the machine and some construction procedures. Moreover, the site is surrounded by high-rise building nearby, so air-ventilation would further be weakened

It is also unavoidable to create noise during construction stage.

A large amount of waste is produced during a construction project due to the volume of work. The waste includes tiles, wood, insulation, concrete, plastic, lead pipes, asphalt, ferrous and non-ferrous, glass, metals, paint and roofing materials.

Solution

A comprehensive and well-planned environmental plan on the construction work would be prepared by environmental officer in our company to work against excess greenhouse gas emission. Regular inspection and environmental assessment in different construction stage will also be conducted. Air pollutants monitoring plan is required for this constraint by setting up air pollutants detector to monitor the concentration of different air pollutants which exceed the safety standard or not. If the air pollutant concentration is over the acceptable standard level, environmental officer would commence controlling measures with construction team against the excess pollutant level. For those construction works, construction team would adopt a low sound emission machine as the first priority for noise control. Moreover, communication among all parties before the commencement of construction work would be conducted. The site would set up hotline and opinion box for any query and opinion. Well and comprehensive resource planning is required by the construction management team in order to control and reduce the material wastage by construction work.

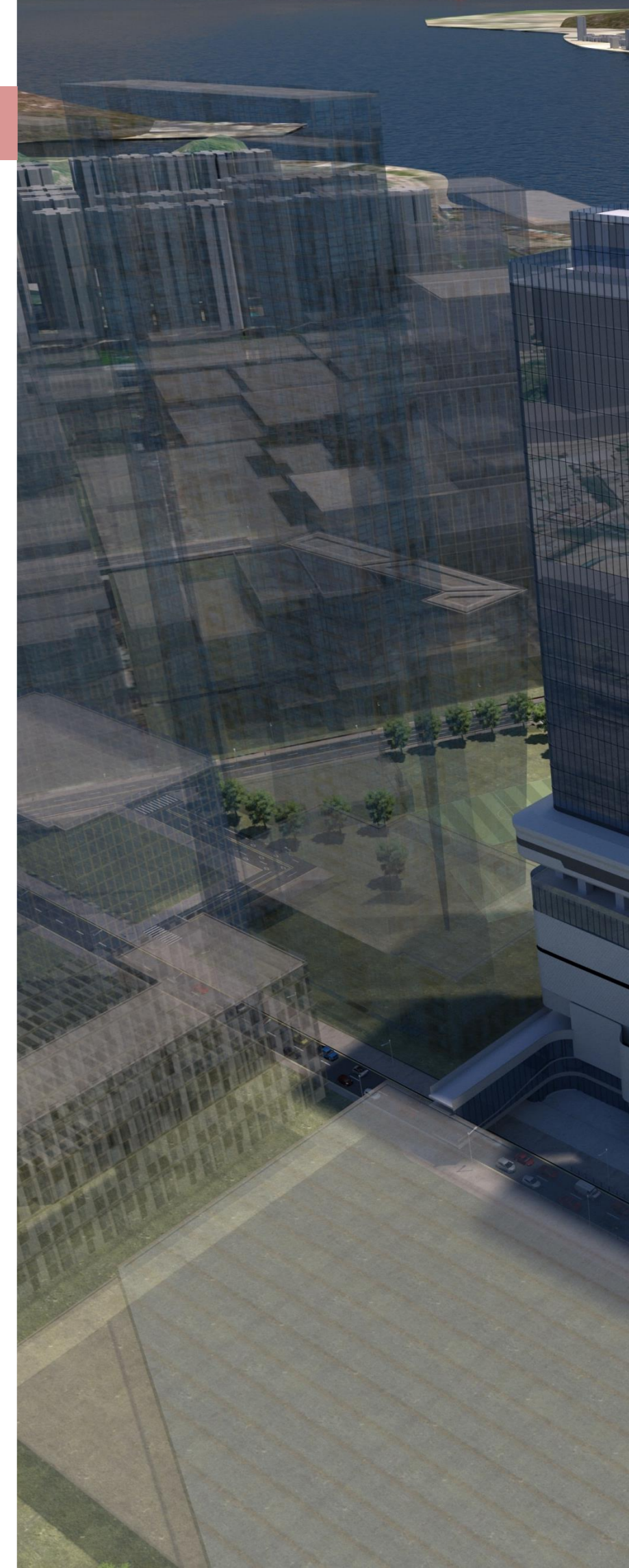
2.2.6. Underground Utility

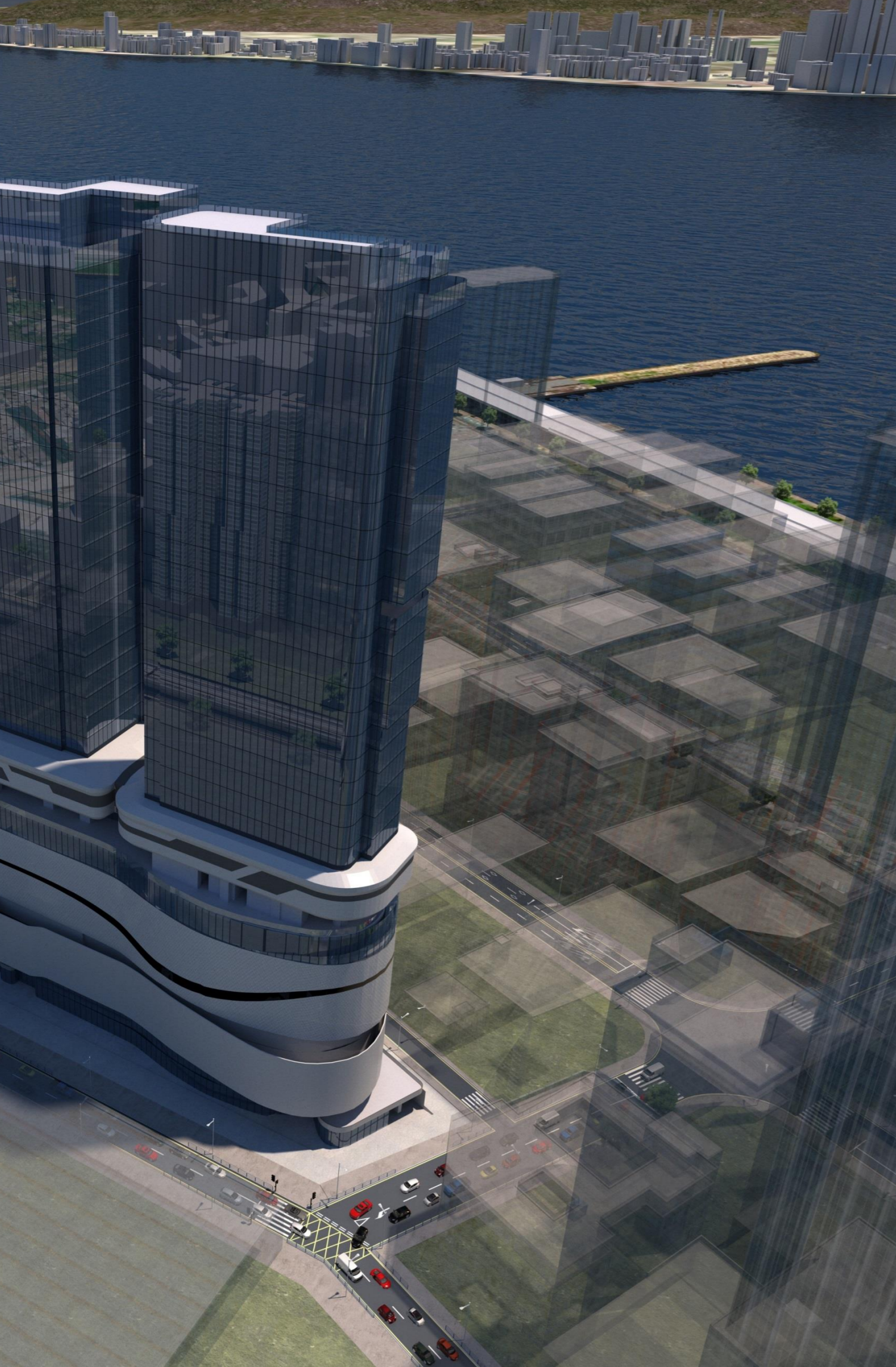
Constraint

Before the construction site is formed, KTIL240 was a bus depot. As a result, some underground utilities and structures still remain which were not removed at our construction stage. Excavation work would be hindered by these massive structures.

Solution

Document review and previous underground survey would be conducted to find out the location of all underground utilities and structures existing within the construction site. Moreover, safety officer would monitor the excavation work to provide adequate and comprehensive advices for the work to ensure work in safety manner.





2.2.7. Construction

Constraint

Since the construction is surrounded by several high rise buildings, it would increase the difficulty for the operation of all large span machineries such as tower crane, mobile crane and concrete pumping. Any operating mistake can cause serious consequence to other existing building and the users inside the building and street in that high density population area.

Top-down construction method would be adopted for this project which includes many advanced techniques and skills in the construction works. Well management is required to carry the work fluently and for the quality of work assurance.

Solution

Against this constraint, the type of tower crane would be chosen carefully considering on the aspect of safety, jib length and lifting weight to ensure that the tower crane operation area is not overlapping to other existing building. Also, machinery team and site structural engineers will monitor the installation and operation of those cranes on site to ensure safety.

Construction team with solid Top-down experience will take in charge for this project.

Besides usual on-site office, off-site office will help to maximize the workfronts for trade works.

ELS monitoring would be strictly executed according to approval plans. According to settlement levels classified corresponding measures to control ground settlement would be adopted.

2.3. SCOPE OF WORKS

2.3.1. CONSTRUCTION WORKS

The Works to be carried out under this contract are for the construction of Grade A office building and shopping arcade including 4 levels basement (mainly for carpark and plant rooms) with the pilecaps and basement excavation work, 10 levels podium shopping arcade (cinemas, restaurants and shops), 11/F mechanical floor, 22 levels office, R/F, UR/F & TR/F with CFA ~ 1,500,000 ft² and site area ~ 8,902 m².

There are 36 nos. of lifts and 46 nos. of escalators and approximate 62,000m² of external curtain wall / glass wall. Sample areas are at 2/F lavatory and 28/F whole floor respectively.

The Main Contract scope of works comprise site clearance, hoarding taking over and maintenance, necessary surveys, instrumentation monitoring, pilecaps and basement works, superstructure construction works,, footbridge construction, external work and utilities connection as required in the Contract documents.

Structural Steelworks are presented in the podium area in particular at 3/F to 9/F

atrium portion with extraordinary-long span (approximately 23m).

The construction of the foundation (bored piles, pre-bored H piles) with the sheet pile wall were done by the previous foundation works construction. There are several steel stanchions to be installed by the Main Contractor extending to 1/F and 2/F for superstructure construction.

The Main Contractor is also responsible for developing BIM Models as per the Technical Specification. The Main Contractor shall employ the use of BIM software for the building of BIM models, illustration of the construction sequence and clash analysis. The BIM model will be constantly kept up to date to facilitate the coordination between various disciplines, resolving conflicts and to enhance the procurement and prefabrication.

It is understood that the following works will be carried out by Nominated Sub-Contractors:-

- ✧ Electrical Installation.
- ✧ MVAC Installation.
- ✧ Fire Services Installation.

- ✧ ELV Installation.
- ✧ Plumbing & Drainage Installation.
- ✧ Lift and Escalators.
- ✧ Stone Works.
- ✧ Podium Fitting Out Works.
- ✧ Office Fitting Out Works.

Named Domestic Sub-Contractors include:-

- ✧ Podium Façade Works
- ✧ Tower Façade Works

The Main Contractor is also to allow for general and special attendance to the NSC, specialist contractors and direct suppliers as required in the Specification for the Preliminaries solely with the Main Contractor. It is also understood that KTIL240 will be subject to environmental and sustainability performance assessment under LEED Green Building Rating System and HKBEAM Plus for New Buildings. Both the targeted standard/assessment grade for this project is "Gold" and "Silver" respectively.

2.3.2. M&E

The efficient M&E co-ordination and interfacing of all aspects of KTIL240, in particular the coordination of M&E works with the structural and architectural works and utilities connections are vital in ensuring the delivery of the Project on time and of high quality. **Yee Fai** will take systematic approach to attain efficient and properly planned co-ordination to resolve the following problems to be encountered in the Project:-

- ✧ Inadequate space for M&E in ceiling voids, pipe ducts, and plant rooms;
- ✧ Clash of services with architectural and structure elements, finishing works;
- ✧ Clash of services themselves causing difficulty in installation and subsequent maintenance; and
- ✧ Failure of interfacing works among different trades, different contractors and utility undertaker

2.3.3. M&E WORKS BY THE MAIN CONTRACTOR

The Main Contractor is responsible for various Works to assist in the M&E related Works, and those various Works as shown on drawings include:

- ✧ supply and installation of cable trench and covers, draw pits, louvers and doors and associated decorative grille, incoming G.I. cable ducts carried with G.I. sleeves with duct plug between transformer rooms, all necessary accessories, sand-filling to the draw pits after cable laying, concrete plinths, labeling, painting, I-beam with electric hoist inside transformer room and completed with an emergency lowering device with hand wheel, hoist beam with movable trolley for laying cable by CLP Holdings Limited ("CLP") provision of hoisting facilities, all in accordance with CLP requirements and statutory requirements.
- ✧ allowing for co-ordination with general attendance, special attendance upon all Nominated Sub-contractor's works, Named Domestic Sub-Contractors' works, Direct / Specialist Contractors, Utilities Companies, relevant Government

Departments, etc. under this Contract, including coordination of the Main Contractors' work drawings and co-ordinated services drawings and "RC opening drawings", responsible for all excavation permit application from authority on public roads together with all related TTA/TTM for preparation as necessary and allow for sufficient time for processing of the application in the programme;

- ✧ liaising with all M&E Installation Nominated Subcontractors and Named Domestic Sub-Contractors and assisting the MVAC Installation Nominated Sub-Contractor to prepare "Co-ordinated Services Drawings" ("CSD") and "Co-ordinated Main Contractor's Works Drawings" ("CBWD") for the Architect's approval prior to any concreting works;
- ✧ organizing, co-ordinating and liaising with all the Nominated Sub-contractors, Named Domestic Sub-Contractors and Direct / Separate Contractors under this Contract for timely and due completion of their works;
- ✧ ensuring that all the Main

Contractor's works for lift Installation are to be completed in fulfilling with all necessary requirements before submission of Form LE5.

- ✧ design, supply and installation of temporary works as stipulated on the Architectural Drawings and structural plans.
- ✧ ensuring that all pipeworks on external walls and exposed pipeworks outside M&E plant rooms and Towngas pipes including those by Nominated Sub-contractors to be painted in accordance with the Specification to match with the wall / ceiling finishing colours or any colours where specified.
- ✧ forming and reserving all openings through external walls for penetration of pipe works and flue aperture.
- ✧ carrying out drainage connection, fresh and flush water supply connections, underground trenches / draw pits / manholes / pipe sleeves / lead-in cable ducts of public utility companies services, road work construction, relocation / reinstatement of run in/out as directed by the Architect and including application of excavation permit from authority on public roads

and/or permit of works from the Building Manager within estate roads together with all related TTA/TTM for preparation and pay for all necessary application fees as required.

- ✧ modification and diversion of existing utility services to suit the construction works as directed by the Architect and/or Engineer and including application of excavation permit from authority on public roads together with all related TTA/TTM for preparation and pay for all necessary application fees as required.
- ✧ providing maintenance and protection of existing surface channels, stepped channels, catch pits and etc., including the cleansing and repair and reinstatement and modification as may be required by the Architect of existing surface channel around the site

2.3.4. OCCUPATION PERMIT

<ul style="list-style-type: none"> ❖ carrying out the CCTV inspection and report for each underground drains inside building before handover and CCTV surveys and reports for sewers/drains outside site boundary before commencement of the works and after completion of the works as stipulated at the Specification, requested by the Architect or requested by Government Authorities. ❖ ensuring the electrical continuity for both vertically and horizontally along the entire surface of the metal frame work for curtain wall and cladding, aluminium window, staircase railing, etc. in compliance with the IEE Regulation. ❖ construction of concrete cable pits, earth pits, lightning pits and the like with lead-in cable duct for the earthing and lightning system. ❖ construction of suitable watertight movement joint at the interface between the site and new structures as specified in Drawings and Specification. ❖ providing all necessary watertight movement joints at all levels for the Development as specified in the drawings and specification. ❖ Carrying out of utility survey, lead in 	<p>and diversion works within and outside site boundary Utility Survey.</p> <ul style="list-style-type: none"> ❖ carrying out of all the Main Contractor's works for Plumbing and Drainage Installation, Water Feature Filtration Systems for M&E installation and complying with the requirement as specified in the Specification. ❖ design and construction of working platforms for the maintenance of M&E and for M&E itself at locations with high level headroom, where the Tender drawings indicate. Also, to prepare BD submission and structural calculation and submit proposal with location plans for Architect's approval. ❖ carrying out of the Main Contractor's works in connection with M&E (i.e. MVAC System, Plumbing and Drainage System, Lifts, Escalators, Electrical Services System, Fire Services System, ELV System etc.) as according to the demarcation table in Annex D 	<p>In order to allow for Occupation Permit inspection including all required rectification works and re-inspections so as to obtain the Occupation Permit (Form BA13) from the Buildings Department, as according to drawings, the Main Contractor shall be responsible for:</p> <ul style="list-style-type: none"> ❖ carrying out all necessary temporary works including all temporary works required to be carried before handover, preparation and providing attendance to facilitate all the inspections by relevant Government Departments / authorities including but not limited to Fire Services Department, Buildings Department, Water Supplies Department, Electrical and Mechanical Services Department, Highways Department, Drainage Services Department, Food and Environmental Hygiene Department, Home Affairs Department, Leisure and Cultural Services Department, District Lands Office, etc., related to relevant license application(s) and submission of Form BA13 for the obtainment of Occupation Permit ("OP") and Form BA14 before handover to the Employer and to facilitate the Employer's application 	<p>for Certificate of Compliance.</p> <ul style="list-style-type: none"> ❖ Supply and installation of signage, sanitary fittings and works to achieve OP requirements. ❖ Removal of all necessary temporary works upon request by the Architect. ❖ Providing attendance on the carrying out of utilities diversion and connection works by Government / relevant utility companies, if any. ❖ Submitting to the Employer all necessary guarantee required for the Works. ❖ Reinstatement of existing pavement and the like to the satisfactory of relevant Government department / authorities. ❖ Making good, replacing, re-constructing the finishes to existing footpath, pavement, etc. adjacent to / around the Site to the satisfaction of the Architect and the relevant Government authority
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2.3.5. BUILDING INFORMATION
MODELING (BIM)

With the application of BIM and utilizing the function of clash analysis, BIM Team will generate technical queries (TQ) through the process of Request for Information. Technical queries will be discussed and resolved in the BIM coordination workshops among Construction Team, Project Coordinator team, BS team and sub-contractors while the remaining difficult problem will seek design consultants' professional decision in TQ workshop. TQ summary table will be kept updated to include the description of clashes and status for easy tracking.

2.3.6. OTHERS

The Main Contractor are aware of the fact that certain works called for under this Contract are located outside the site boundary.

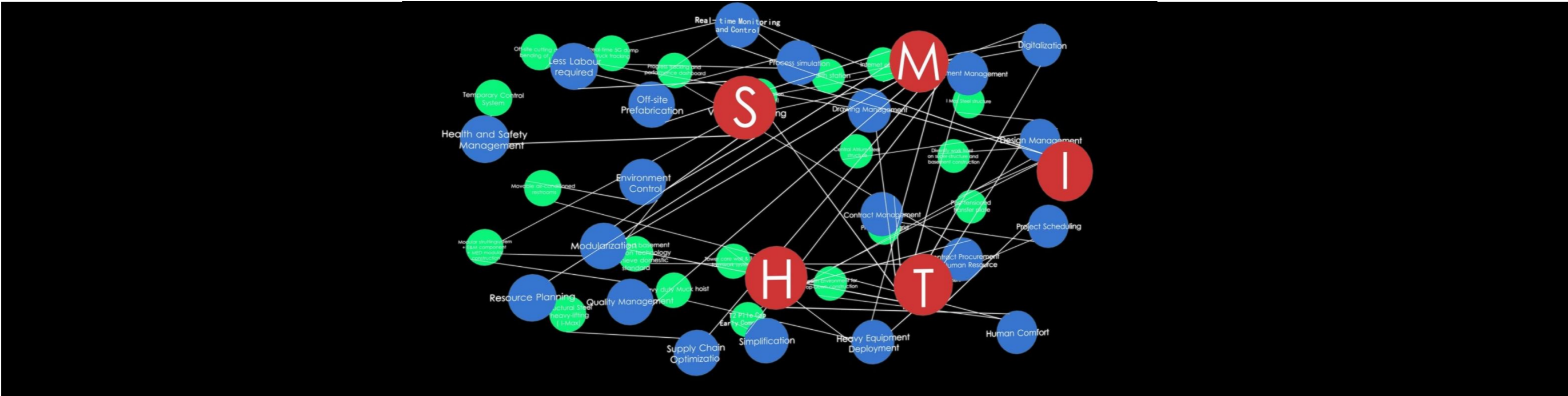
The scope of Works also include any other works not mentioned above but have been described in Section B – Technical Specification and the Drawings, and the detail of demarcation between the Nominated Sub-Contractor and the Main Contractor shall refer to Technical Specifications in Tender Documents.

2.3.7. OPTIONAL WORKS

The Defects Liability Period in this contract shall be 18 months. The Employer may extend the Defects Liability Period 6 months (treated as "Optional Works") on or before the issuance date of Substantial Completion Certificate. All the obligations and liability set out in this Contract shall also be extended.

The Main Contractor shall price this Optional Works in Bills of Quantities and General Summary which the priced amount shall not be carried to Contract Sum. If this Optional Works is executed by an Architect's Instruction, the priced sum shall be added to the Contract Sum. To avoidance of doubt, the lump sum amount for this "Optional Works" shall include all costs of extension of obligations, liability, head office overheads and site office overheads, etc. No adjustment to the unit rates submitted in Bills of Quantities shall be made when the "Optional Works" is executed.

3. MISSION AND VISION



Yee Fai Construction Company Limited puts its long-standing belief in 'Building Homes with Heart' into practice, on the one hand by developing residences of the finest quality and offering first-class service to its customers, and on the other by contributing to the good of the community to make Hong Kong a better home for everyone. Furthermore, we also emphasizing the people-oriented principle to provide the best and safe environment for both back-office and front-lines employees; so as to establish a loyal and strong team – **Yee Fai**.

5 Concepts

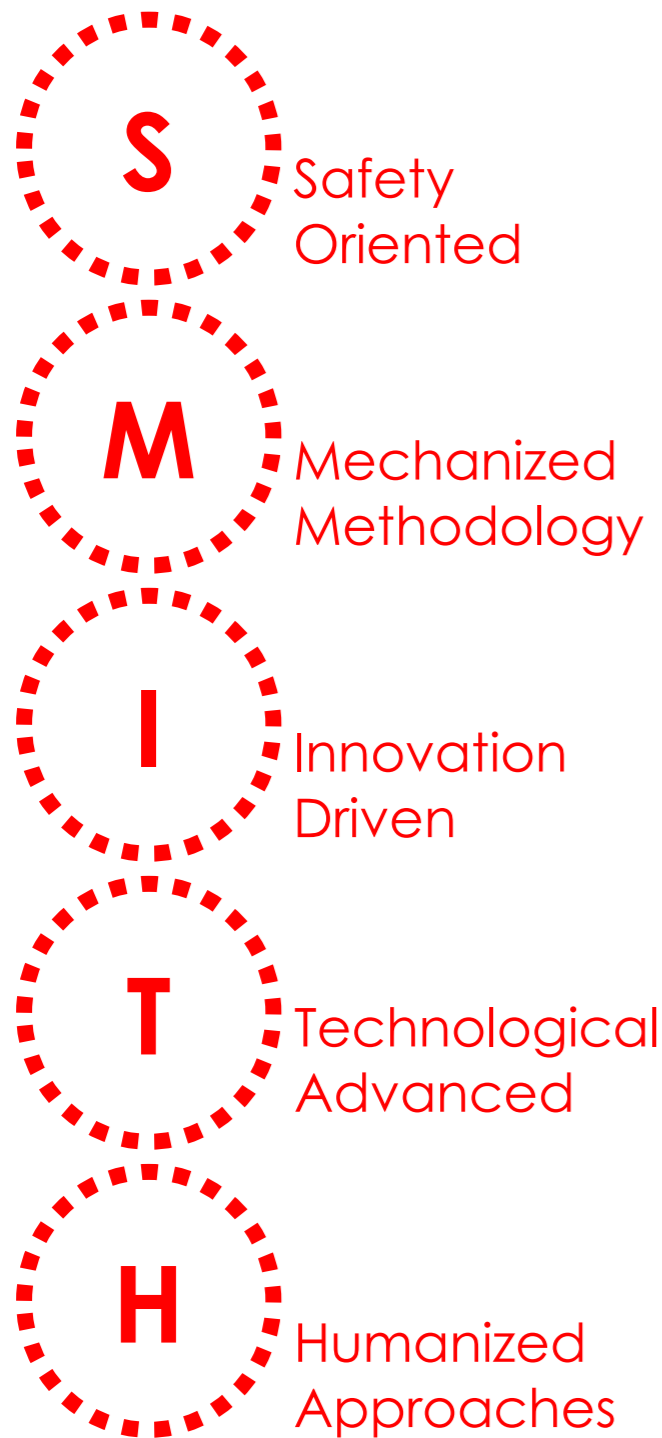
In order to achieve our core values into KTIL240, we have specifically designed a set of **SMITH** based mission and vision; so as to ensure top-quality products and services are produced within the shortest feasible time and with the most efficient use of resources. Good team work among staff of different functions enables them to best grasp the needs of customers, satisfy or even exceed their expectations. Continuous improvement through lifelong learning is called for so that our staff will surpass our past achievements and absorb new knowledge and technology.

21 Objectives

To achieve SMITH in the practice, **Yee Fai** has developed the Concepts in to in 21 objectives, which are feasible to achieve in the future and establish a mutual direction and goals to us and other stakeholders

21 Solutions

To realize the SMITH based objectives, **Yee Fai** has further designed, developed and proposed 21 tailor-made solutions and measures in accordance with the 21 objectives set on project level.



21

Objectives

- Health and Safety Management
- Environment Control
- Less Labour required
- Contract Management
- Resource Planning
- Off-site Prefabrication
- Heavy Equipment Deployment
- Simplification
- Supply Chain Optimization
- Quality Management
- Real-time Monitoring and Control
- Process simulation
- Modularization
- Digitalization
- Design Management
- Value Engineering
- Drawing Management
- Human Comfort
- Project Scheduling
- Contract Procurement for Human Resource
- Document Management

21

Solutions

- Temporary Control System
- Structural steelworks for Cinema 8
- Central Atrium Steel structure
- Advanced basement ventilation technology to achieve domestic standard
- Off-site cutting and bending of steel
- The Muck Hoist
- Table System Formwork
- Health Environment for Top-Down construction
- Tower 2 pilecap arrangement
- Progress tracking and performance dashboard
- Real-time 5G dump truck tracking
- Internet of Thing
- Modular Strutting System + M&E component
- 3D laser scanning
- Building Information Modeling (BIM)
- Transfer plate post-tensioning
- Diverted workfronts on super-structure and basement construction
- health station
- Movable air-conditioned restrooms
- Digital Reinforcement
- Digitalized work flow