

CAPTURING AND TRANSFORMING 3D BUILDING MODEL
TO 2D PLANS FOR JUPEM STRATA SUBMISSION

MOK WAI KHENG

UNIVERSITI TEKNOLOGI MALAYSIA

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CAPTURING AND TRANSFORMING 3D BUILDING MODEL TO 2D PLANS
FOR JUPEM STRATA SUBMISSION

MOK WAI KHENG

A thesis submitted in partial fulfilment of the
requirements for the award of the degree of
Bachelor of Engineering (Geomatics)

Faculty of Built Environment and Surveying
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AUG 2021

DECLARATION

I declare that this proposal entitled “*Capturing and Transforming 3D Building Model to 2D Plans for JUPEM Strata Submission*” is the result of my own research except as cited in the references. The proposal has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

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DEDICATION

Dedicated to all that have provided support and guidance in completing this chapter of my life.

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ABSTRACT

With the advancements in laser scanning technology, terrestrial laser scanner (TLS) has been invented to make as-built strata surveying easier. The point cloud model from the TLS is also able to be transformed into 3D building model easily via 3D modelling software such as Revit, Sketchup, etc.; and the 3D building model can also be sectionalized to form the floor plans of the building model. However, these floor plans do not show the party wall as well as other information required in the certified strata plan, and the exported floor plan is unfit for StrataXML input for JUPEM submission. Hence, this study aims study the methods to obtain a geo-referenced 3D building model with TLS as well as to produce the 2D strata plan and the StrataDXF file from the 3D building model for building plan comparison and StrataXML data input. The entirety of Block C05, FABU, UTM was chosen to perform the study. A closed control traverse was performed around Block C05 and georeferenced using GNSS receivers with MyRTKNet connection. Topcon GLS-2000 was used to perform the as-built strata survey of Block C05, while a distometer is also used to add horizontal values to the building plans. Topcon Magnet Collage and Autodesk Recap were used to prepare the point cloud model, while Autodesk Revit is used to construct the 3D building model from the point cloud as well as perform several data preparations. Script code in Dynamo is used to convert the 3D building model to 2D proposed strata plans. The dimensions from the proposed strata plans are compared with those in the building plans to determine the RMSD between the dimensions. Finally, the 3D building model is also converted into StrataDXF to be further transformed into StrataXML ASCII code. From this study, the obtained RMSD between the dimensions obtained from TLS and distometer is 0.026m. The results for this study are the Dynamo code for the automation process, proposed strata plans of the building, and the StrataXML file for JUPEM submission.

ABSTRAK

Dengan kemajuan teknologi pengimbasan laser, alat pengimbas laser seperti *Terrestrial Laser Scanner* (TLS) telah diciptakan untuk memudahkan pengukuran strata. Model titik awan dari TLS juga dapat diubah menjadi model bangunan 3D dengan mudah melalui perisian pemodelan 3D seperti Revit, Sketchup; dan model bangunan 3D juga dapat dibahagi untuk membentuk pelan lantai model bangunan. Walau bagaimanapun, pelan lantai yang dihasilkan tidak menunjukkan dinding pesta serta maklumat lain yang diperlukan dalam Cadangan Pelan Strata (CPS), dan pelan lantai yang dieksport tidak sesuai untuk dijadikan input StrataXML untuk penyerahan JUPEM. Oleh itu, kajian ini bertujuan untuk mengkaji kaedah untuk mendapatkan model bangunan 3D yang mempunyai nilai kordinat yang betul dengan TLS serta menghasilkan pelan CPS dan fail StrataDXF dari model bangunan 3D untuk perbandingan antara pelan rancangan bangunan dan untuk dijadikan input data StrataXML dalam bentuk StrataDXF. Keseluruhan Blok C05, FABU, UTM dipilih untuk melaksanakan kajian ini. Pengukuran kawalan tertutup dilakukan di sekitar Blok C05 dan dimasukkan kordinat menggunakan penerima GNSS yang disambungkan kepada MyRTKNet. Topcon GLS-2000 digunakan untuk melakukan pengukuran strata di Blok C05, sementara alat distometer juga digunakan untuk menambahkan nilai mendatar pada pelan rancangan bangunan. Topcon Magnet Collage dan Autodesk Recap digunakan untuk menyiapkan model titik awan, sementara Autodesk Revit digunakan untuk membangun model bangunan 3D dari model titik awan. Skrip di Dynamo digunakan untuk menukar model bangunan 3D kepada CPS. Dimensi dari CPS dibandingkan dengan pelan rancangan bangunan untuk menentukan RMSD antara dimensi pelan. Akhirnya, model bangunan 3D juga ditukar menjadi StrataDXF untuk menjanakan StrataXML ASCII. Dari kajian ini, RMSD yang diperolehi antara dimensi yang diperolehi daripada TLS dan distometer adalah 0.026m. Hasil untuk kajian ini adalah kod Dynamo, CPS, dan ASCII StrataXML untuk penyerahan JUPEM.

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LIST OF ABBREVIATIONS

ASCII	-	American Standard Code for Information Interchange
BIM	-	Building Information Modelling
CPS	-	Cadangan Pelan Strata (Proposed Strata Plan)
CPSP	-	Certificate of Proposed Strata Plan
GDM	-	Geocentric Datum Malaysia
GDTS	-	Geomatic Datum Transformation System
GNSS	-	Global Navigation Satellite System
IMU	-	Inertial Measurement Unit
JUPEM	-	Jabatan Ukur dan Pemetaan Malaysia (Department of Survey and Mapping Malaysia)
LIDAR	-	Light Detection and Ranging
LLS	-	Licensed Land Surveyor
MLS	-	Mobile Laser Scanner
MyRTKNet	-	Malaysian Real-Time Kinematic GNSS Network
NLC	-	National Land Code
PTG	-	Pejabat Tanah dan Galian (State Land and Mines Office)
RMSD	-	Root Mean Square Deviation
SLAM	-	Simultaneous Localization And Mapping
STA	-	Strata Titles Act
TLS	-	Terrestrial Laser Scanner
UTM	-	Universiti Teknologi Malaysia
XML	-	Extensible Markup Language
XSD	-	XML Schema Definition

LIST OF SYMBOLS

D	-	Distance
c	-	Speed of Light
t	-	Time travelled
x_e	-	Expected values
X_0	-	Observed values
n	-	Number of Observations

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

Strata title law was introduced in the state of New South Wales, Australia, in the year 1961 to manage legal ownership of parcels within multi-storeyed buildings. The ownership of parcels is then reflected in a legal document that is known as 'strata title', of which the owner of strata title is able to transfer parcel ownership, mortgage the parcel, and perform other dealings relating to the parcel stated in the strata title. In Malaysia, the State Land and Mines Office (PTG) is responsible for keeping the records of the strata title, whereas the cadastral information stored within the strata title are handled by the Department of Surveying and Mapping Malaysia (JUPEM).

One of the cadastral information stored within the strata title is the dimensions of the parcel, accurate to 0.1m. After construction of the parcel has been completed, the measurement of the parcel is done by a licensed land surveyor or a government surveyor to ensure that the parcel is completed according to the building plans of the architect. This survey is known as strata survey, and it is typically done using a distometer and measuring tapes. The surveyor measures the perimeter of the parcel as well as other parcels within the building and records the distances into a strata plan, which is then submitted to JUPEM for counter-checking. After JUPEM approves the strata plans, strata titles can then be issued to each individual parcel so that the development and maintenance of the building is under control with the support of the strata register. Each strata plan contains information such as building layout which contains all parcels, common properties and other utilities, strata plan number, surveyed file number, Land Office file number and other particulars as required.

In order to submit the strata plans to JUPEM, the surveyor performing the submission must submit the plans in a format known as 'StrataXML'. StrataXML is an Extensible Markup Language (XML) used by JUPEM that is used during submission into the JUPEM repository. The 2D contents of the strata plans are converted into 3D data via StrataXML, however the intermediary process is manually done by merging all 2D strata plans together into one single strata plan for the StrataXML engine to convert data from 2D to 3D.

With the invention of Terrestrial Laser Scanners (TLS) such as the Topcon GLS-2000, 3-dimensional point cloud models of buildings can be easily obtained and processed to form 3D building models. This can be used to perform a strata survey at a much more detailed output than the conventional method, since the TLS is able to emit and record thousands of points per second, and the output from the TLS results in a point cloud containing all recorded points that is georeferenced. It is then possible to visualize the building and perform additional tasks to the point cloud, such as making a 3D model of the building via third-party applications such as SketchUp or Autodesk Revit.

1.2 Problem Statement

3D-imaging technology, such as terrestrial laser scanners (TLS) or mobile laser scanners (MLS), are becoming more frequently used to map the buildings to obtain the structural point cloud of the building. The structural point cloud can be transformed into a fully functional 3D model that replicates the exact structural model of the actual building. This is useful for building documentation, planning for renovations such as fixtures and fittings, compute renovation costs, and many more. For land surveyors, this technology can be beneficial in reducing data acquisition time for as-built strata survey work. However, not many people in the surveying field are proficient in processing the 3D model data to produce the 2D strata plans as output. This is the reason why most surveyors utilize the conventional method of using the distometer and measuring tape to perform as-built strata survey, since it is the time-tested method that is proven accurate, and the dimensions can be

immediately obtained on-site to check for accuracy of the completed structure. The drawbacks in using distometers and measuring tapes for as-built strata survey is the data acquisition time, since each individual wall has to be measured, this means that the time taken to complete the as-built strata survey is considerably longer with these instruments as compared to using TLS or MLS for as-built strata survey.

With these, the challenge lies in surveying the building using TLS and producing the accurately georeferenced 3D model of the building, as well as automate the 2D strata plan producing process from the 3D model of the surveyed building. Two types of plans are to be generated from this process to ease the surveyor for data submission, which are the proposed strata plans and the StrataDXF. As a counter-checking measure, the conventional method of using distometer and measuring tape to perform as-built strata survey is also performed to compare the accuracy of the dimensions of the generated 2D plans with the dimensions obtained from conventional survey method. The StrataDXF is used as data input for StrataXML software, and the produced StrataXML ASCII file is validated with an external schema file to ensure that the ASCII file is produced correctly.

1.3 Research Question

There are a few research questions to ponder in order to construct the objective of this study. These are:

- 1) What is the method to geo-reference 3D point clouds to generate geo-referenced 3D building model?
- 2) How accurate is the produced strata plan relative to building plans measured by distometer?
- 3) How much can the strata plan producing process be automated from the 3D building model for both strata plan and StrataDXF?
- 4) Is the generated StrataXML code correct according to JUPEM standards?

1.4 Research Aim and Objectives

This study aims to capture the 3D model of a building using TLS and automate the production of accurate CPS from the 3D building model along with the StrataDXF file for StrataXML input. The aim of the study can be realized by fulfilling these objectives:

- 1) To study the methods to obtain a geo-referenced 3D building model with TLS.
- 2) To produce the 2D CPS and the StrataDXF file from the 3D building model for building plan comparison and StrataXML data input.

1.5 Scope of Study

- 1) Study Area

The study is conducted in Block C05, Faculty of Built Environment and Survey, Universiti Teknologi Malaysia, Johor. The entire block was used to perform data acquisition for strata survey. The location of the study area on the map is shown in Figure 1.1.



Figure 1.1 Image of Block C05
(Google Maps, 2020)

2) Equipment

The equipment used for data acquisition for this study is the Topcon GLS-2000, a geodetic TLS. Additionally, Trimble M3 Total Station and Topcon GR5 with MyRTKNet connection is used to create control points on the ground and transfer to building features via offset survey. Agatec Distometer is used to measure the building to generate the building plans.

3) Software

Topcon MAGNET Collage is used to merge the multiple scan stations together into one single laser file and georeferenced the laser file. Autodesk ReCap is used to clean and remove noise in the 3D point cloud while Autodesk Revit is used to manage the cleaned 3D point cloud data. FARO Asbuilt for Revit is a Revit module that is used to convert 3D point cloud to 3D building model, and Dynamo for Revit is an integrated visual programming tool within Revit that will be used to convert 3D building model into strata plans and StrataDXF for StrataXML generation. StrataXML is used to generate the JUPEM XML file for strata submission as well as validating the XML file with the XML Schema Definition (XSD) provided by JUPEM.

4) Analysis

Root-mean-square deviation (RMSD) is used to determine the accuracy of the generated strata plans with reference to the building plans.

1.6 Research Methodology

This section describes the workflow of the study, which is divided into four phases, as shown in Figure 1.2:

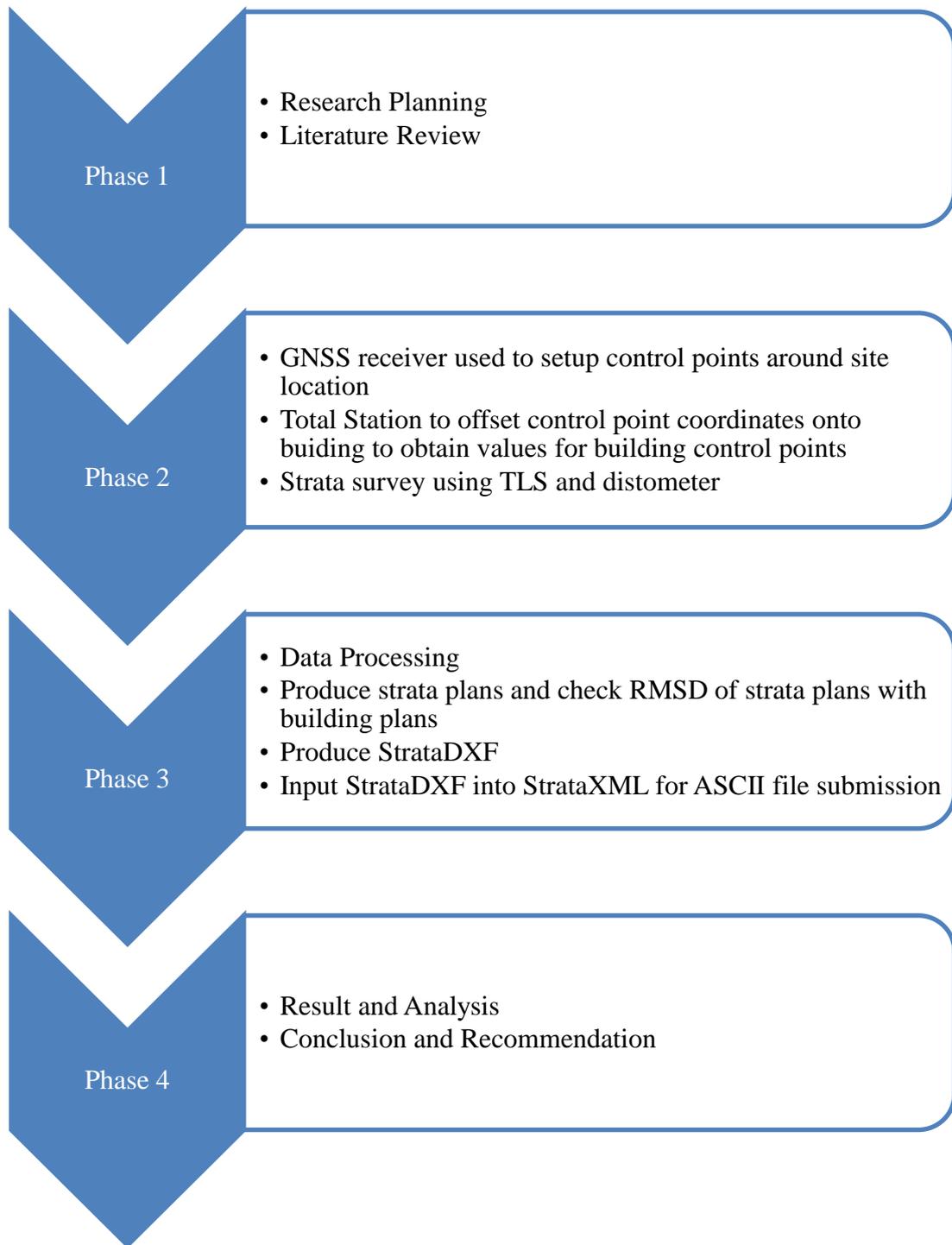


Figure 1.2 Flowchart of the Research Methodology for this study

Phase 1: Research Planning and Literature Review

This phase is used to plan how the study is going to be conducted. It is further supported by reviewing various journals, theses, articles, manuals, and circulars

related to the study to identify current issues and formulate the scope of the study and the aim of the study. Site identification is performed to locate the most suitable site to perform a strata survey with TLS, and the site is analysed to identify the suitable procedure to conduct the strata survey. The control survey planning and initial scan station locations are pre-planned before commencing the survey, and the related equipments are checked in advance to ensure that there are no equipment issues before commencing the survey.

Phase 2: Data Acquisition

The control traverse is performed around Block C05 to first class accuracy. The GNSS receiver is then set up on the two initial traverse points to provide georeferencing to the traverse coordinates for both the horizontal datum (Malaysian Geocentric Cassini-Soldner 2009 Johor State) and the vertical datum (National Geodetic Vertical Datum Malaysia). The vertical coordinates are cross-checked with 2 nearby benchmarks and fitted with the nearest benchmark. The TLS is then set up from 2 traverse points and begin the scanning process. The scan station coordinates are continuously transferred to the next station in the same manner as using a total station: a reflector is placed on the proposed scan station and the coordinates recorded before commencing the scanning on the new scan station. The entire block is surveyed using TLS and afterwards with a distometer to provide the raw data required for this thesis.

Phase 3: Data Processing

The point cloud files obtained from the TLS is merged together to form the complete point cloud model, and the control point coordinates are applied to obtain the georeferenced point cloud model. The point cloud model is then cleaned to remove unnecessary data and transformed into 3D model. From the 3D model, strata plans are generated and compared with building plans to obtain the RMSD. Lastly, the StrataDXF is generated for StrataXML generation and JUPEM submission.

Phase 4: Results and Analysis, Conclusion and Recommendations

This phase concludes the results of the study. The strata plans are checked to see if it meets the accuracy required by JUPEM for submission, while the StrataXML ASCII code is validated with the XML Schema Definition (XSD) provided by JUPEM to check if the generated XML code is according to the XSD structure. The conclusion of the study is made and recommendations are proposed to facilitate new ideas related to the study.

1.7 Significance of Study

This study aims to generate the 3D building model from point clouds, automate the strata plan producing process from 3D model to a 2D plan, as well as automating the process of generating the StrataDXF for StrataXML data input for JUPEM submission. As TLS technology becomes widely available in the market, it will be a matter of time before geomatic engineers begin to utilize the TLS for various survey works. Since TLS is more suited to capturing 3D point cloud models of buildings and structures, therefore it will soon be used as a tool to perform strata survey. This study shows how the method of how point clouds are to be captured using the TLS, and how the georeferenced 3D model can be obtained to automatically process the 2D strata plans and the StrataDXF from the 3D model.

The findings of this study will redound to the benefit of geomatic engineers utilizing TLS to perform strata survey or building survey, especially when it comes to generating the strata plans and the StrataDXF file. Additionally, parties interested in capturing and utilizing 3D building models using the TLS for other construction-based disciplines would benefit from this study too, as well as parties interested in converting 2D plans from 3D models.

1.8 Summary

This chapter mentions the background of the strata survey in Malaysia as well as the usage of TLS to perform data acquisition for the strata survey in this study. The main emphasis of this chapter is to introduce the concept of automating the strata plan and the StrataDXF producing process from the produced 3D building model, and generating the StrataXML code using the produced StrataDXF as data input for JUPEM submission. The scope and significance of this study are proposed in this chapter. A flowchart is also shown to demonstrate the research methodology of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The literature review is the process of researching materials to further understand the fundamentals of the study. Researching, reading materials such as articles, journal papers, or theses related to the study is conducted in this chapter to gather more information and cite what is done by researchers working on the related topic. Comprehensive reading is necessary to gain understanding on previous studies performed and form the basis on which further research is carried out upon past knowledge. This chapter covers the literature review on the core topics related to this study, such as the strata survey and strata titles in Malaysia, details in the strata plan, comparison of methods to perform strata survey, key components in the Terrestrial Laser Scanner, the point cloud model and the 3D model, software to perform the strata plan automation process, and reference to previous research in the similar direction.

2.2 Strata Survey and Strata Titles

Strata survey is categorized under the cadastral surveying discipline which involves measuring the dimensions of a building of at least 2 storeys and subdividing the buildings into individual parcels. Besides buildings, subdivision of land into smaller land parcels is also considered to be within the scope of strata survey. To determine ownership of such parcels or land parcels, a document is issued to the purchaser stating ownership. This document is known as a strata title (Strata Titles Act 1985).

Strata title is a legal document that shows the ownership of individual parcels within a subdivided building or ownership of subdivided land parcels within a subdivided master lot (Jamila, 1994). It is compulsory for the developer of a strata scheme to apply for strata titles if the building is intended to be subdivided into individual parcels to be sold to the public to ensure proof of parcel ownership. The legislation on strata titles is covered in the Strata Titles Act 1985 (STA), which is continuously amended to resolve issues that arise due to deficiencies in the STA. Before the inception of STA, strata title was introduced in the National Land Code 1965 (NLC) as subsidiary title, as the NLC introduced the concept of subdivision of buildings into parcels, thus the ownership of such parcels was evidenced via ownership of a subsidiary title (Tan et al., 2016).

A person in possession of a strata title essentially owns an indefeasible title with the right to perform dealings related to the title such as transfer, charge, or lease the properties in the same way that owners of landed properties can (Oyetayo et al., 2015). Owning a strata title does not equate to owning a percentage of the land lot on which the parcel of the building is situated upon: the strata title belongs to the purchaser of the strata parcel and the name of the purchaser is reflected in the strata title, whereas the name on the land lot title is conferred to the management corporation of the strata scheme as the custodian of the issue document of title of the lot (Strata Titles Act, 1985).

Application of the strata title is mainly done by the project developer, however the developer appoints a licensed land surveyor (LLS) to facilitate certain crucial processes in the strata title application process. One of the main roles of the LLS is to perform the measurement of the building dimensions and report the dimensions in a plan. The act of measuring the building is known as as-built strata survey, while the plans on which the dimensions are recorded in is known as strata plan, or more specifically known as the Proposed Strata Plan (CPS). The measurements on the CPS are compared to the approved building plans drafted by the developer's appointed architect or engineer to ensure that the building is constructed according to the building plans. The CPS is submitted to JUPEM by the LLS for checking, and JUPEM will issue the Certificate of Proposed Strata Plan

(CPSP) when the submitted CPS passes JUPEM inspection (JUPEM, 2015). Although it is only part of the strata title application process, however, only the LLS is qualified to perform the as-built strata survey and certify that the building is constructed according to the approved building plans.

2.2.1 Strata Titles Act 1985 (STA) and Strata Titles (Amendment) Act 2013

STA is the governing Act that was drafted to smoothen the process for subdivision of the building or land into smaller parcels for disposal of strata title. STA covers the procedure for application and registration of strata titles from vacant possession until the formation of management corporation for the strata scheme. Since its inception in 1985, STA has been continuously amended to adapt to the current issues related to strata titles, starting from: Strata Titles (Amendment) Act 1990, Strata Titles (Amendment) Act 1996, Strata Titles (Amendment) Act 2001, Strata Titles (Amendment) Act 2007, Strata Titles (Amendment) Act 2013, and finally the Strata Titles (Amendment) Act 2016 (N. Azwani, 2017).

The Strata Titles (Amendment) Act 2013 splits the application of strata titles from the building superstructure stage into 2 phases, the first of which is the application for the Certificate of Proposed Strata Plan (CPSP), and the application for subdivision of building within one month from the issue date of CPSP (M. Mohamad et al., 2015). The relevance of it to this study is that the as-built strata survey is conducted in this study for the purpose of generating the CPS, which is then submitted to JUPEM for CPSP application.

2.2.2 Licensed Land Surveyors

Licensed Land Surveyors (LLS) are practicing land surveyors registered under the Licensed Land Surveyors Act 1958 (Azmir, 2009). Besides government surveyors, only LLS are given the authority to conduct title survey work and certify the relevant plans (Farah Nadiana, 2020). The role of LLS in strata scheme

development is to assist the developer by giving professional advice and input with matters relating to strata laws to ensure the process for application of strata title is conducted smoothly. Besides that, the LLS is involved in preparing and certifying the Schedule of Parcel, Proposed Strata Plan, and the Certified Strata Plan, as well as conduct the strata survey and resurvey of lot to measure the dimensions of the building and ensuring that the building positions are within the boundaries of the lot and checking if the lot boundaries remain in the correct positions.

2.2.3 Parcels, Accessory Parcels, and Common Property

According to the definitions provided by STA, parcels, in relation to a subdivided building, means one of the individual units comprised therein, which (except in the case of an accessory parcel) is held under separate strata title. Accessory parcel means any parcel shown on a strata plan as an accessory parcel which is used or intended to be used in conjunction with the parcel, while common property means so much of the lot as is not comprised in any parcel (including any accessory parcel), or any provisional block as shown in an approved strata plan (Strata Titles Act, 1985).

In the CPS, parcels are surrounded by a red outline, while accessory parcels are surrounded by a blue outline. Common properties are hatched using yellow fill with a black outline. Figure 2.1 shows the parcels, accessory parcels, and common property in the CPS.

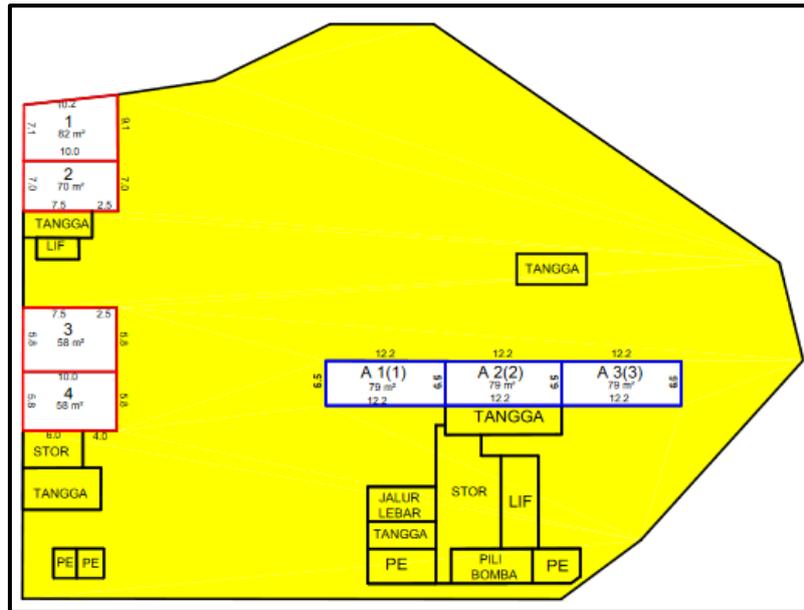


Figure 2.1 Parcels, Accessory Parcels, and Common Property in the CPS

2.2.4 Building Plan and Proposed Strata Plan

During the strata title application process, there are several plans to be prepared and submitted by the developer's appointed LLS or architect to the relevant authorities such as JUPEM or the Land Office (PTG). Among the list of plans to be submitted are the building plans and proposed strata plans (CPS). The building plans show the structure, dimensions, and details of the building, and are prepared and endorsed by the Professional Architect, or Engineer to be submitted for approval to the local authority before the commencement of on-site construction work (Justin Lai, 2019).

For the CPS, it is prepared by the LLS after as-built strata survey has been performed. The measurements of the building are recorded in the CPS to the nearest 0.1m, and the LLS checks for discrepancies between the CPS and the approved building plan. This includes checking for differences in measured lengths, checking whether the common properties are in the correct places, and checking if the accessory parcels are constructed accordingly. If there are no differences between the

approved building plan and the CPS, the LLS certifies that the building is constructed according to the approved building plans, and the CPS, along with the approved building plans, are submitted to JUPEM as part of the required documents for CPSP application (Strata Titles (Amendment) Act, 2013). Figure 2.2 shows the sample CPS obtained from JUPEM circular 1/2015.

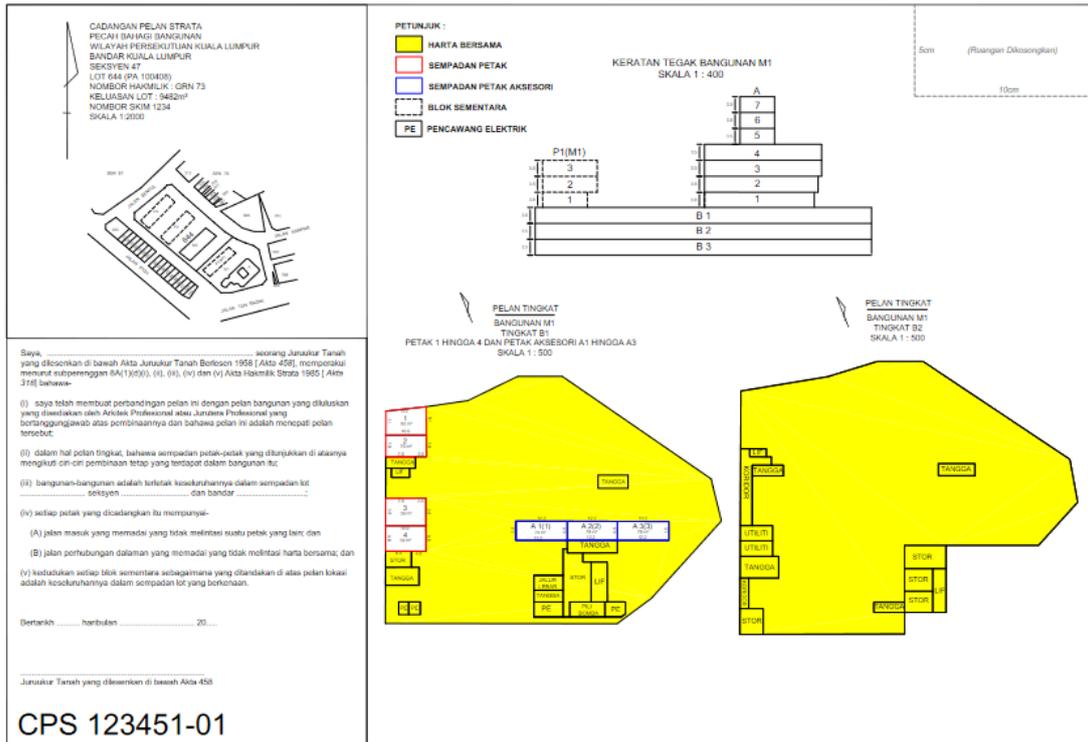


Figure 2.2 Sample CPS

2.2.5 StrataXML

According to JUPEM KPUP 1/2015, it is required for the LLS to submit the StrataXML file to state JUPEM as part of the documents needed for the application of CPSP (JUPEM, 2015). The XML file contains the information of the strata development, the entire strata building dimensions, as well as the relationship between parcels and their accessory parcels. Basically, it is the simplification of the CPS into easily understandable ASCII text for machine and human reading. Figure 2.3 shows the flowchart of the structure of StrataXML.

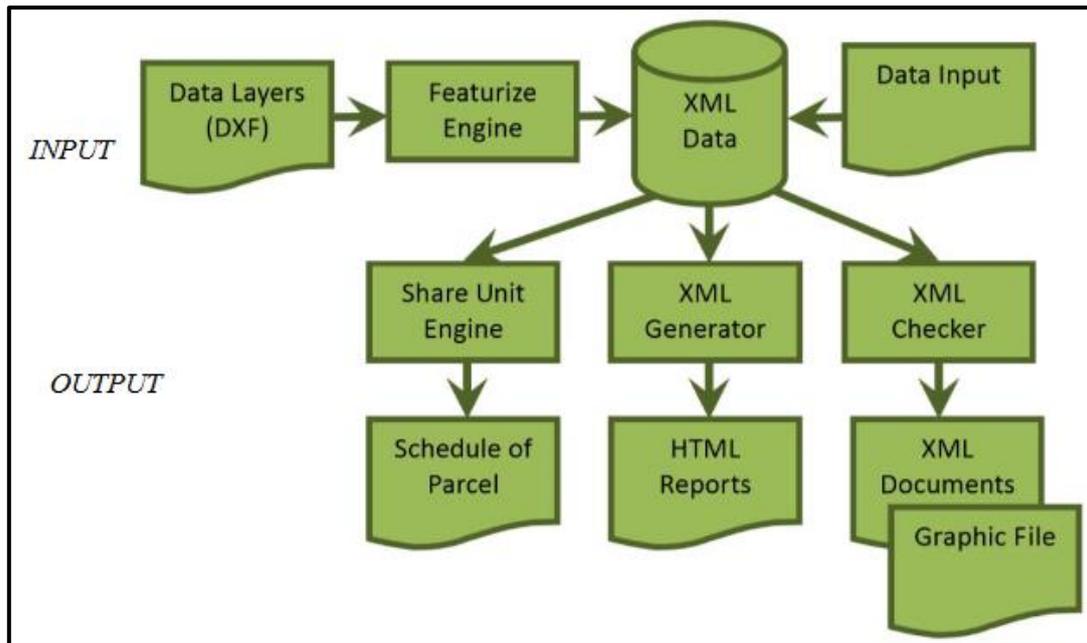


Figure 2.3 Structure of StrataXML (Landsoft)

From Figure 2.3, there are two types of data input that is required for StrataXML to run properly. These are the DXF files and the manual data input. According to StrataXML manual provided by Landsoft, the DXF files are generated manually by overlaying the contents of the CPS on top of each other and layering the data according to StrataXML format. The manual data input is to key in the job information such as the appointed LLS name, location of the project, and so on. Running StrataXML with the provided data inputs generates the XML file for JUPEM submission, and the contents of StrataXML are verified against the XML Schema Definition (XSD) file to ensure that the structure of the XML file is generated according to the XSD standard. The XSD file can be obtained from the JUPEM2U website to be input into any XML validator software for validation purposes.

2.3 Conventional Method for As-built Strata Survey

The conventional method for as-built strata survey is by using a distometer or a measuring tape to measure the dimensions of the building. The distometer is mainly used to measure the distance due to its small and handy size. However, the readings obtained from the distometer cannot be recorded digitally and all the measurements need to be written on the paper or on the map. It is also unable to generate the three-dimensional (3D) model of the building (Russhakim, 2018).

Despite that, many surveyors prefer working with the distometer since the data collection method is simple and straightforward to use and that any untrained personnel can learn how to use it quickly. The drawbacks to using a distometer is that when the distometer is held at a non-horizontal angle to record the distance, then the distance observed is not the true horizontal distance. Therefore, it is important to hold the distometer as horizontally as possible when observing horizontal distances, and vertically when measuring vertical distances.



Figure 2.4 Horizontal distance observation with Agatec distometer

2.4 Strata Survey using Terrestrial Laser Scanner

The Construction Industry Development Board (CIDB) has begun the mandatory use of Building Information Modelling (BIM) for certain private sector projects in 2020 (New Straits Times, 2019). BIM is an intelligent 3D model-based design process used by construction professionals, such as architects, engineers, quantity surveyors, to efficiently coordinate and manage inter-discipline data by merging the data into one single 3D model and identifying potential errors in the construction process through discrepancies of data in the 3D model. It is also a useful tool in computing structure load and projecting project cost via computation of building material pricing, therefore other construction players are beginning to take an interest in BIM, since it is able to reduce the manual computation workload and reduce data clutter from managing multiple sources of data. To be able to keep up with the implementation of BIM by other construction players, a 3D data acquisition approach will be suitable to complement the BIM data. This is where the usage of Terrestrial Laser Scanner (TLS) becomes useful, as TLS can be used to observe a point cloud model of the building. The point cloud can then be transformed into 3D model using Revit or similar BIM software (Russhakim, 2018).

The TLS is able to capture the complete point cloud model of a building, provided that the building features maintain a direct line of sight with the LIDAR scanner. According to Russhakim (2018), the survey time taken to complete data acquisition of a strata building single floor is faster than the conventional method of using the distometer but slower than using the MLS. However, TLS data yielded the least difference when compared to distometer data as compared to MLS data. Russhakim concluded that TLS is suitable to use for strata survey, but notes that the processing time taken to process TLS data is longer than distometer data, of which the dimensions are obtained instantaneously using distometer method.

2.5 Elements of Laser Scanning

Inside the TLS unit is a rotating equipment that works to capture and generate the point cloud model of a building. The elements of the equipment are covered in subsequent sections.

2.5.1 Phase-Shift based Measurement

Phase-shift measurement technique is the measurement of the difference of the wavelength between the initial sine wave of the laser and the final recorded phase-shift of the wavelength of the laser, and adding that value to the count of wavelengths emitted multiplied by the laser wavelength to compute the total travel range of the laser. This method yields distances of an object with high precision for objects in the ranges of 1 to 80m (Soudarissanane et al., 2018). Figure 2.5 shows the diagram of the phase-shift measurement:

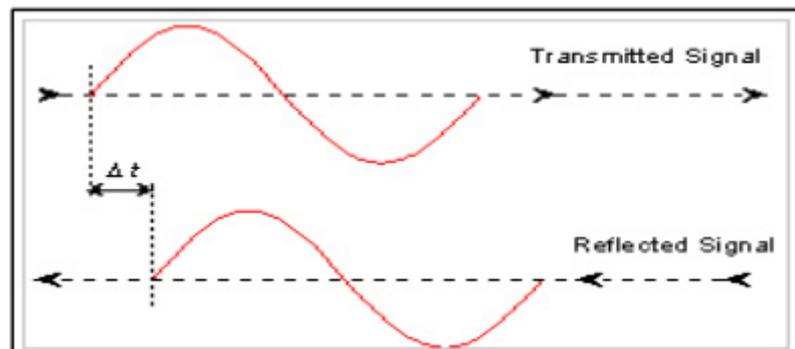


Figure 2.5 Phase-Shift based measurement (Fröhlich et al., 2004)

2.5.2 Time of Flight

The time-of-flight principle in laser scanning requires the diode laser that is able to emit a pulsed laser beam to the scanned object, which is then reflected by object surfaces. Some of the light is reflected back to the receiver while others are scattered off in other random directions. The distance is determined by computing the time travel of the pulsed laser beam from the laser diode emitter to the object and

back to the receiver with the speed of light (Vosselman et al., 2004). Figure 2.6 shows the scattering of the pulsed laser when it reaches the object surface.

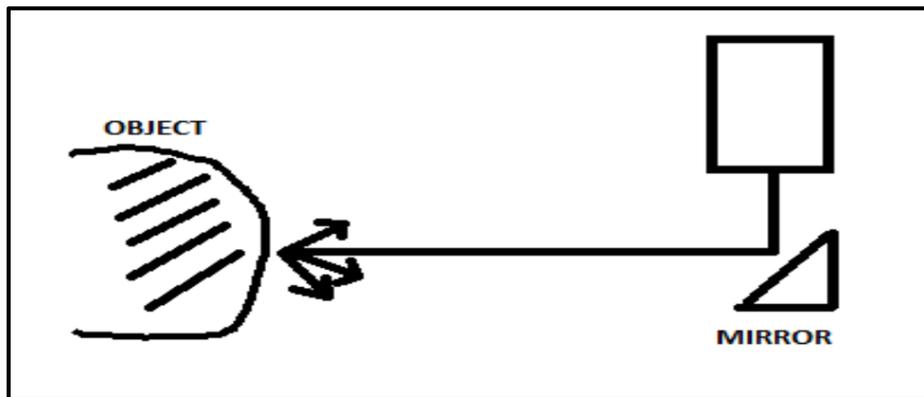


Figure 2.6 Scattering of Laser Beam
(Chai Li Ting, 2012)

The equation to resolve for range using this principle is shown below:

$$D = c \cdot t / 2 \quad (2.1)$$

Where D is distance, t is the time travel of the pulsed laser beam from laser diode to receiver, and c is the speed of light (Russhakim, 2018).

2.5.3 Instrument Coordinate Systems

There are several types of coordinate systems present in the terrestrial laser scanner. The various coordinate systems are shown in the subsections below:

2.5.3.1 Scanners Own Coordinate System (SOCS), Global Coordinate System (GLCS) & Camera Coordinate System (CMCS)

The SOCS is the coordinate system within the laser scanner when the scanner initiates the scanning process. It varies from one scan session to another, and it is not geo-referenced to the real-world coordinate system. Each of the SOCS will be aligned with the true Global Coordinate System (GLCS) during the point cloud registration process to achieve true alignment of the point cloud in the SOCS coordinate system to the actual coordinate system.

The GLCS is the true coordinate system of which the SOCS are supposed to be aligned to during the point cloud matching and registration process. There are two methods to achieve registration of point clouds to GLCS; that is via feature matching or via georeferenced SOCS. In feature matching, identical features and points with known coordinates are identified from adjacent scan stations and picked to match and merge the point clouds to form a single merged point cloud that is aligned to the true coordinate system. Further scans from scan stations are continuously merged and registered onto the point cloud to form a single large point cloud that is georeferenced. For the second method, the georeferenced SOCS is obtained by the laser scanner when the scanner is scanning on a known point with a backsight point. The SOCS is said to be georeferenced with direction, and the registration process can be easily done by providing the occupation station coordinates to the scan station data during point cloud registration.

The CMCS is the coordinate system of the mounted camera on top of the TLS unit. It is relative to the SOCS, and it is important to align the panorama image obtained by the TLS unit to the point cloud via the relative displacement and tilt between the CMCS and the SOCS to obtain the color-coded point cloud by superimposing the image onto the point cloud to obtain the color values. When the PRCS is georeferenced to become the GLCS, the CMCS will automatically follow suit based on the relative displacement and tilt between the SOCS and the CMCS.

After all point clouds has been registered, merged and georeferenced, it is possible to define the Project Coordinate System (PRCS) for the merged point cloud. This can be either user-defined or automatically defined to ease the data viewing. Figure 2.7 shows the combination of PRCS, GLCS, and SOCS in a scanned site.

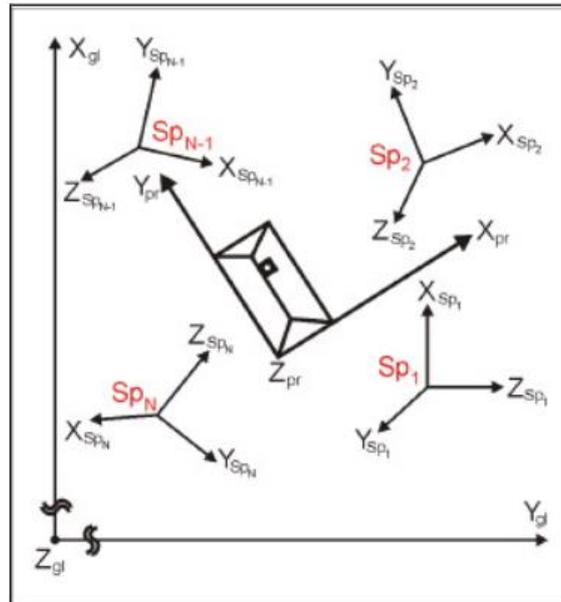


Figure 2.7 PRCS, GLCS & SOCS in a scan site (Riegl et. al., 2003)

2.6 Topcon GLS-2000 Geodetic Laser Scanner

The Topcon GLS-2000 Geodetic Laser Scanner is a mounted terrestrial laser scanning instrument with a laser plummet to align the center of the equipment on top of any point to obtain the georeferenced SOCS provide that the backsight of the instrument is visible and present. However, it can function in both free scanning and in the traverse scanning mode. Figure 2.8 shows the Topcon GLS-2000:



Figure 2.8 Topcon GLS-2000

The specifications of the Topcon GLS-2000 are as follows:

Table 2.1 Specifications of Topcon GLS-2000 (Topcon TotalCare, n.d.)

	System Performance
	Max Range
Detail (90% Reflectivity)	100m (all models)
High Speed (90% Reflectivity)	130m (S model), 210m (M & L models)
Low Power (90% Reflectivity)	130m (S model), 210m (M & L models)
Standard (90% Reflectivity)	n/a (S model), 350m (M model), 500m (L model)
Close Scan (9% Reflectivity)	40m (all models)
	System Features
Single Point Accuracy	Distance 3.5mm (1 – 150m), 1sigma Angle 6” Resolution 1”
Dual Axis Compensator	Accuracy 4” Range +/- 6’
Target Deflection Accuracy	3” at 50m

Type Laser Class	Laser Scanning System Pulsed Precise Scan Technology 3R (High Speed / Standard) 1M (Low Power)
Scan Density (Resolution)	Spot Size < 11.2mm (1 – 150m, FWHM)
Field of View (Per Scan)	Maximum Sample Density 3mm at 10m Horizontal: 360° Vertical: 270°
Color Digital Imaging	5M pixel, Dual (170°/8.9°)
Control System Display Keyboard Data Storage	Scanning Control On-board VGA Color Touch Display 3 key SD card
Operation temperature Storage temperature Dust/Humidity	Environmental -5°C to 45°C -20°C to 60°C IP54
Dimensions Weight Keyboard	Physical Dimensions 152 x 293 x 412mm 11kg 21 keys

2.7 Three-dimensional (3D) Modelling

3D modelling in the field of engineering survey via laser scanners are becoming to be frequently used by engineers (Russhakim, 2018). This is due to the capability to quickly view the as-built 3D environment and make decisions at a glance. Besides that, the shift to BIM requires extensive use of 3D models in the decision-making process, therefore the raw data required for 3D modelling can be provided by laser scanners in the form of dense point clouds. The point cloud models are transformed into 3D models via modelling process, which can be done via 3D modelling software such as Revit.

2.7.1 Point Cloud Model

The point cloud model is the raw data output from laser scanners. The file contains the coordinates of each of the individual points that form the dense point cloud. Additional attributes such as the intensity of the received laser and RGB are included in the point cloud file provided that the attributes are acquired and written to the file. The typical file types of a point cloud model are LAS, PCD (Point Cloud Library), and FLS (FARO), however, several other file types are developed by different software companies to specifically meet the demands of their software suite. An example would be the RCP file type, which is specifically used by Autodesk products to import point clouds.

Due to several limitations in the laser scanner equipment, it is not practical to complete the entire scanning of a building in one session, unless the building in question is small enough to be captured in a single scanning session. Therefore, the data acquisition process is performed in a segmented manner, which results in multiple scanning sessions to cover different areas of a building. The process to merge the point clouds of these sessions to form a single point cloud model of the building is known as the point cloud registration process. This is done in software, and the overlapping accuracy between 3D point clouds is represented by the Root Mean Square Error (RMSD) (Mitra et al., 2014). The registration of point clouds is useful to determine the distance of an object (Belton et al., 2006) when the object is scanned in multiple scanning sessions, and only the partial view of the object is shown in each of the scanning sessions.

2.7.2 Geo-referencing

Geo-referencing is the process of shifting data to fit real-world coordinates. The coordinates can be observed via GNSS or determined during offset survey. Typically, an identifiable feature within the survey area is determined and the coordinates of those features are observed. During processing, the real-world coordinates of the features are fixed to the captured point cloud model, which applies

a translational shift to fit the rest of the data to the geo-referenced coordinate. This results in the coordinates of the individual points in the point cloud model being tied to the real-world coordinates.

The RMSD of the end result is reported to show the accuracy of the geo-referencing process. If the value shown is too high, then there might be an error in the geo-referencing process, either due to incorrect coordinate input, incorrect coordinates data, or wrong selection of the geo-referenced point.

2.8 Software

Software is crucial to process and present the data in a clear and understandable format. It is useful to employ the use of software for batch work and computational processes. These are covered in subsequent sections.

2.8.1 Autodesk Revit

Revit is a BIM software developed by Autodesk to enable for data coordination between multiple disciplines to ensure consistency of data. This is done via 3D modelling process, where contributors across all disciplines work together on a common platform to achieve data consistency and notice errors in the planning process quickly.

The main functionality of Revit is its ability to work seamlessly between 3D model and 2D DWG plans, reducing the needs for pre-processing of the data to ensure that the file is readable by Revit. Additionally, point cloud models can be imported into Revit to enable digitization of the point cloud into 3D models, although this functionality only works with point clouds saved in the RCP file format. Third-party modules can be added to Revit to increase its functionality for certain disciplines.

Revit has a geometrical limitation of a 16km radius work plane. When geometry is located away from the origin of the work plane, the representation of elements becomes less accurate. This issue can be resolved by moving the origin of the work plane closer to the elements to remove this issue.

2.8.2 FARO As-built for Revit

FARO As-built for Revit is a third-party module developed for Revit. Originally known as PointSense, the purpose of this module is to enable quick modelling of point cloud models into 3D models in Revit. The user imports the point cloud model, and runs the FARO module to generate the 3D model within a shorter time than conventional digitizing point clouds method. Besides digitizing structural models, it is also possible to digitize utility pipes in a building using the Revit module (FARO, 2020).

2.8.3 Dynamo for Revit

Dynamo is the in-built visual programming language of Revit. The programming is done by manipulating variables in the visual programming interface to create a functioning flowchart. Therefore, it is up to the creativity of the script designer to design the flowchart and determine how the program interacts with the source model to produce results.

For this study, Dynamo is used as the main engine to automate the 3D model to 2D plan transformation process. Using Dynamo provides greater flexibility to the produced output, such as pre-determination of the 2D data frame, increment of variables, and many more. It is a powerful Revit tool for advanced Revit users with script programming knowledge. The version of Dynamo used for this study is 2.0.4, which supports the majority of Dynamo packages to be used for this study.

2.8.4 StrataXML (Software)

StrataXML is the software developed by Landsoft to facilitate 2D plans to XML ASCII data conversion according to the requirements set by JUPEM for CPS submission. Besides Landsoft, other companies such as MapInfo have developed their own version of StrataXML, but the general functionality of StrataXML from these companies remains the same.

The special functionality of StrataXML lies in its ability to read 2D DXF strata plans and convert it to XML language. The DXF file must be amended to fit the layer requirements for StrataXML to read the DXF file, and the combination of manual data input for the job details results in a XML file that shows the job information as well as the information of the strata building. The produced XML file can be verified with the XSD file provided by JUPEM in the SPAK LS repository to ensure that the output is structurally correct with no errors.

2.9 Previous Research

According to previous research from Russhakim (2018), Terrestrial Laser Scanners (TLS) and Mobile Laser Scanners (MLS) are suitable to be used in as-built strata survey to replace conventional as-built strata survey using distometer. The time taken to perform as-built strata survey is the lowest using MLS, with TLS placing second and distometer taking the longest to complete the as-built survey. However, the processing skill required to interpret and generate the 3D model from MLS point cloud data is harder than TLS point cloud due to the lack of RGB attributes in the MLS point cloud data, which results in longer data processing time. The time taken to register the point clouds and clean point cloud noise offsets the speed to the as-built survey using MLS and TLS. The 3D modelling process used in the study is via manual digitizing method, and the floor plans are generated by cross-sectioning the building in half. This method doesn't show the party wall of the building; instead, it only shows the cross section of the building, which is not acceptable according to the

JUPEM KPUP1/2015 circular that requires only the centerline of the wall to be shown.

Besides that, Muhammad Faizuddin (2016) shown the applications of StrataXML in generating the 3D model from StrataXML via SketchUp software. This shows the capability of StrataXML to re-generate the 3D model of a building from the overlay of 2D strata plans via third-party software, and if StrataXML includes other third-party 3D modelling software for 3D modelling generation, then the application for StrataXML can expand beyond generating the XML file for JUPEM submission.

2.10 Conclusion

In conclusion, this chapter shows the literature review performed on the core topics related to this study. Comprehensive research is performed to ensure that the understanding of the topic is secured as well as fact-checking with other peer reviewed sources for verification of accuracy of research data. The end result is a boost in understanding of the issue at hand.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The planning of research methodology is crucial to have a smooth data acquisition process, which the researcher can rely on for reference when performing the data acquisition. This chapter serves to list down and explain the workflow of the study in more detail as compared to chapter 1.6, and includes identifying suitable building control point locations, ground control point locations, instrumentation, field procedure for data acquisition, post-processing data using software and data analysis.

Figure 3.1 shows the detailed flow chart of the research methodology that will be used in this study. Extra care is taken to ensure that the data acquisition is performed according to the research methodology to avoid errors in the final data output.

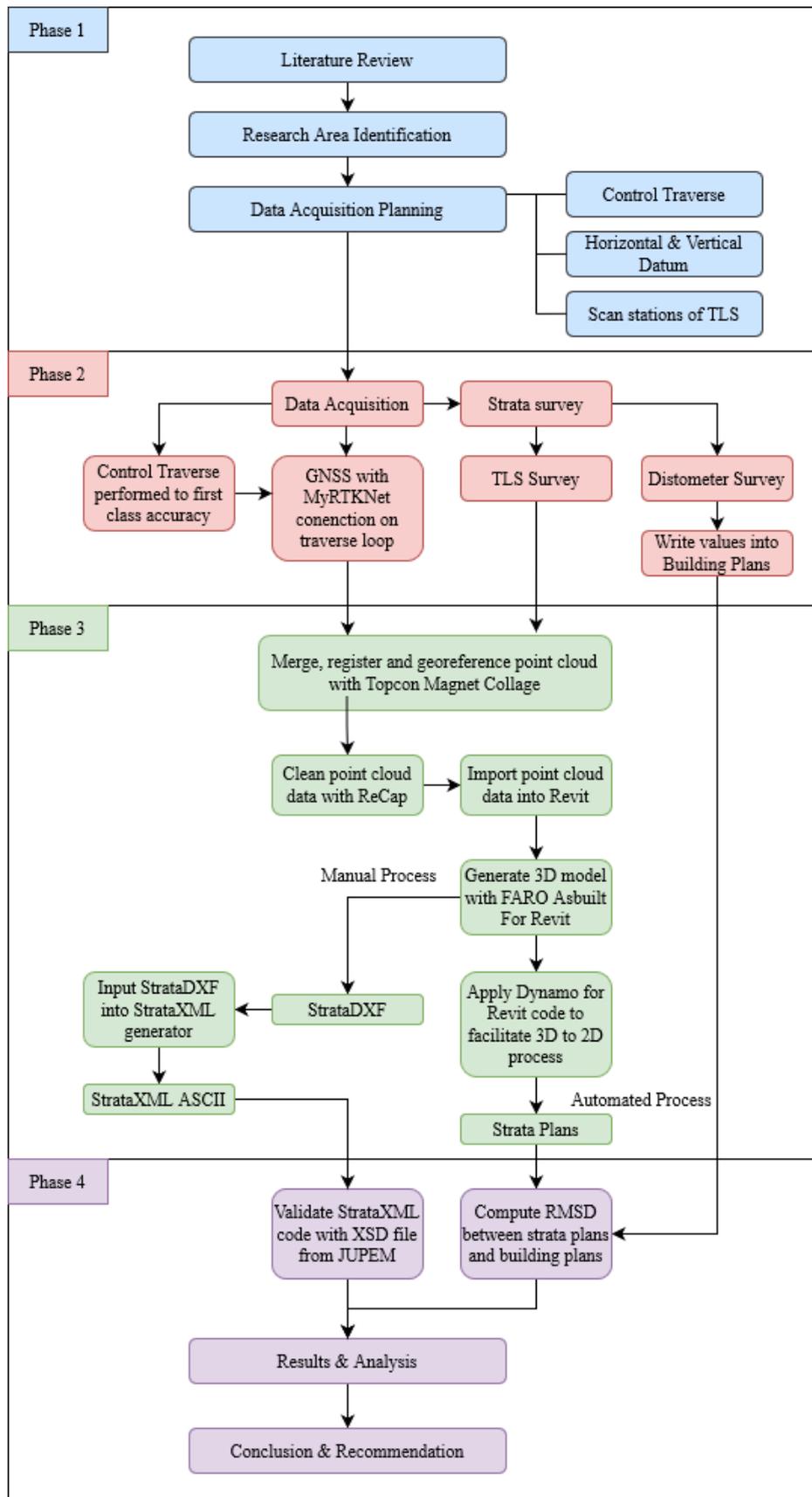


Figure 3.1 Detailed flowchart of Research Methodology

3.2 Phase 1: Research Planning and Literature Review

This phase is used to plan how the study is going to be conducted. It is further supported by reviewing various journals, theses, articles, manuals, and circulars related to the study to identify current issues and formulate the scope of the study and the aim of the study. Site identification is performed to locate the most suitable site to perform a strata survey with TLS, and the site is analysed to identify the suitable procedure to conduct the strata survey. The control traverse is planned before commencing the control survey, along with suitable spots to place the GNSS receiver to georeference the control traverse. Horizontal and vertical datums are determined before starting the GNSS survey, and suitable scan station locations are planned to reduce data acquisition time.

3.2.1 Literature Review

To gain a better understanding on the topic at hand, references from reviewing sources must be looked upon to form the basis of the study. Only by understanding the gaps in the research of others that we could be able to make and form the objectives of our study to touch up or complement previous research.

The literature review for this study is split into 5 sections which combine together to encapsulate the fundamentals of this study. These are: cadastral survey practice in Malaysia, strata titles and the relevant statutes involved, equipment, point cloud and 3D model, and the software used. By researching on these topics, it becomes possible to draft out the objectives of the study and identify ways to solve them.

3.2.2 Research Area Identification

According to the Strata Titles Act 1985 s(6)(1), a building that is eligible for subdivision for strata title requires a minimum of 2 storeys. Therefore, it is then

possible to search for buildings fulfilling this requirement and use the building to perform data acquisition for this study. Due to the ongoing Covid-19 pandemic, UTM in-campus hostel blocks are not advised to be used to perform data acquisition for any sort of study, while class buildings are much more preferred. As such, Block C05 of the Faculty of Built Environment and Survey, UTM, is chosen to perform the strata survey as it consists of 4 storeys.

3.2.3 Control Traverse

To obtain a georeferenced point cloud and the resulting georeferenced 3D model, the points for setting up the TLS scan station positions must first have real-world coordinates. Therefore, a simple loop traverse around Block C05 is sufficient to provide the control points required to set up the TLS scan stations. Figure 3.2 shows the proposed control traverse stations around Block C05.

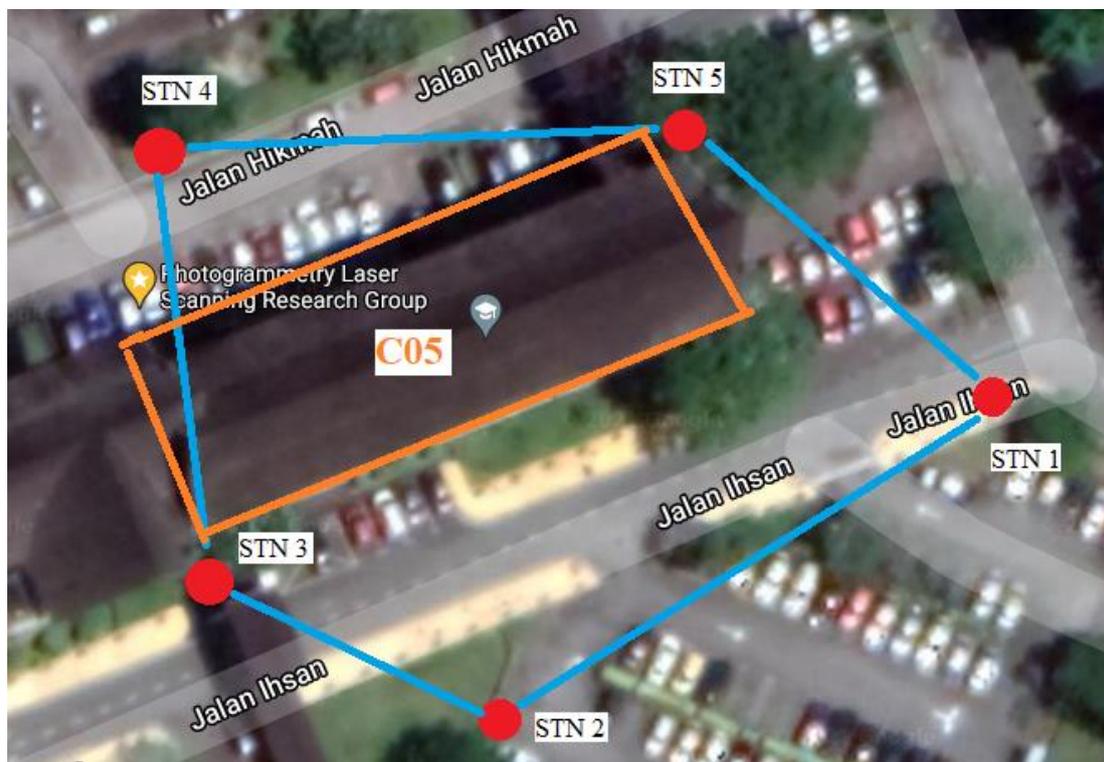


Figure 3.2 Proposed control station points

Out of the few control traverse points, at least 2 points are required to set up GNSS receivers. This is to provide true coordinates to the control traverse which enables the data from the TLS scan station to also be georeferenced. The entire control traverse will then be rotated to fit the GNSS coordinates. Additionally, two vertical benchmarks nearby are chosen to set up the GNSS receiver to obtain and compare the vertical height between GNSS observation and true benchmark value. The vertical heights are then fitted to the nearest benchmark to the site. Figure 3.3 shows the stations which are used to perform GNSS observations to obtain the true coordinates.



Figure 3.3 Optimal points for GNSS survey shown as orange triangles

3.2.4 TLS Scan Stations

Before starting the TLS survey, it is important to identify the starting stations to set up the TLS equipment for scanning. This is to provide the georeferenced coordinates to the scan stations, which will then be used to georeference the point

cloud data. Figure 3.4 shows the scan stations required to cover the exterior of the building, while Figure 3.5 shows the scan stations required to cover the ground floor of Block C05.

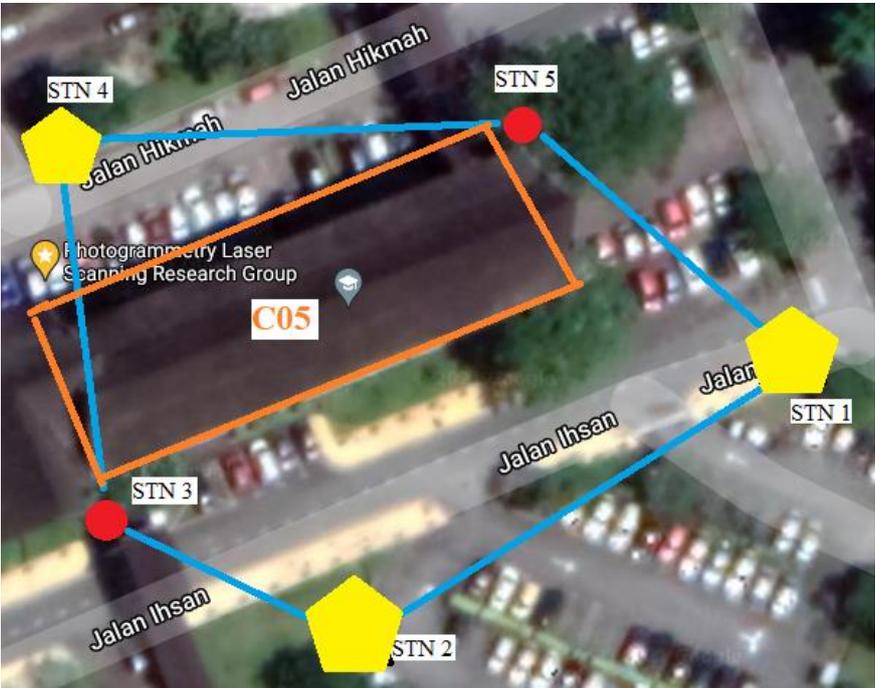


Figure 3.4 Scan Stations required to cover the exterior of Block C05

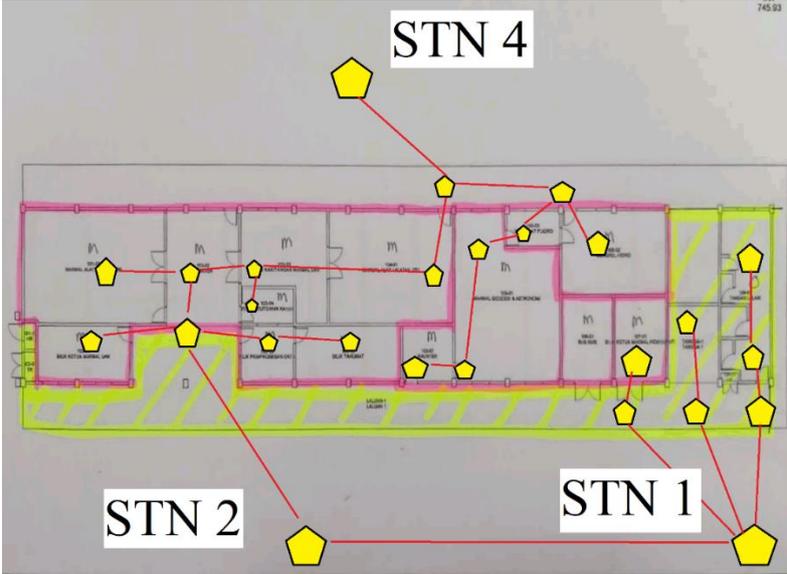


Figure 3.5 Scan Stations required to cover the interior of the ground floor of Block C05

3.2.5 Equipment Used

The main equipment used for this study is the TLS. Distometer is used as the conventional method to check and compare the data with the TLS data. Table 3.1 shows the list of equipment used for this study.

Table 3.1 Equipment used for TLS survey

Figure	Equipment Name
	Topcon GLS-2000 Geodetic Laser Scanner
	Agatec Distometer
	Trimble M3 Reflectorless Total Station
	Topcon GR5 with data logger

	<p>Tripod</p>
	<p>Prism</p>

3.3 Phase 2: Data Acquisition

In this phase, the control traverse is performed around Block C05 to first class accuracy. The GNSS receiver is then set up on the two initial traverse points to provide georeferencing to the traverse coordinates for both the horizontal datum (Malaysian Geocentric Cassini-Soldner 2009 Johor State) and the vertical datum (National Geodetic Vertical Datum Malaysia). The vertical coordinates are cross-checked with 2 nearby benchmarks and fitted with the nearest benchmark. The TLS is then set up from 2 traverse points and begin the scanning process. The scan station coordinates are continuously transferred to the next station in the same manner as using a total station: a reflector is placed on the proposed scan station and the coordinates recorded before commencing the scanning on the new scan station. The entire block is surveyed using TLS and afterwards with a distometer to provide the raw data required for this thesis.

3.3.1 Performing the Control Traverse

The control traverse is executed by locating the suitable spots to setup the traverse and GNSS points, and then marking the location of the traverse points to perform the control traverse survey. The survey is performed in a closed loop with first class accuracy, and the horizontal values are adjusted using Bowditch method. The vertical values are adjusted by averaging the difference in height and distributing the error throughout the entire traverse loop. Later, GNSS survey is performed on the first and second stations of the control traverse to obtain the coordinates of the traverse points and provide the orientation of the traverse. The GNSS survey is performed via connection to JUPEM's MyRTKNet servers, which establishes a Virtual Reference Station (VRS) near to the GNSS. The GNSS receiver then simultaneously receives satellite data and VRS data and performs computations to obtain the corrected coordinates observed by the GNSS receiver.

Marking of the traverse points is performed by hammering nails on the ground and taking photographs of the surroundings for recording purposes. The total station is set up on station 2 with a prism on station 1 as the backsight with assumed bearing of 0° , with the prism at the foresight station observed to station 3. The foresight station bearing & distance is recorded, and the equipment is transferred between station 2 and 3, with the prism at station 1 is carried forward to station 4. This process is repeated forward until the angular loop misclosure is obtained, to be within $1' 15''$. Then, the linear misclosure is computed to ensure that the value is smaller than 1:8000 (misclosure of 1mm per 8m traverse distance).

Next, the observation method of the GNSS survey is done by measuring 2 sets of data in 10-second intervals, with each set having 10 observed coordinates to have a total of 20 observations for 2 data sets. The difference in both sets of data is that the GNSS receiver is flipped upside down once during the observation of the second set to reinitialize the satellite connection Both data sets are averaged and compared between each other to identify the difference in coordinate data between both data sets. The process is repeated until all ground control points have been

observed and found to be within acceptable tolerance. There is a total of 4 observation points, namely STN1 & STN2 of the control traverse, as well as two nearby benchmarks at Helipad UTM as well as at Block P19, UTM. Figure 3.6 shows the observation of the P19 benchmark using GNSS receiver.



Figure 3.6 Observing P19 benchmark with GNSS receiver

The obtained horizontal coordinates of the ground control points are in Malaysian Geocentric Cassini-Soldner 2009 Johor State, while the vertical coordinates are observed in Malaysian NGVD. The map projection parameters as well as the geoid height model are present in the GNSS controller, therefore the coordinates can immediately be output in the correct projection output. The bearing, distance, and the vertical height difference between traverse points is computed from the coordinate data and compared with the values obtained from the total station to determine whether the GNSS survey data is within tolerance.

3.3.2 TLS Survey

The TLS survey is carried out on a floor-by-floor basis to split the files of the data and prevent overloading of equipment memory due to over-capture. The scan stations of the TLS survey are planned out before the survey, and carried out accordingly to capture the point cloud data of the building.

The TLS must be initialized on two points with known coordinates, with the TLS set up on one station and the prism on the other station. Both of the TLS and prism instrument height must be measured and keyed into the TLS. The initialization of the TLS is then performed by keying in the coordinates of the TLS occupation point as well as the prism occupation point to define the coordinate reference system inside the equipment as well as to check the error in distances between the observed measurements from the TLS and the GNSS coordinates. The ideal error value should be less than 0.010m for the measured distance to prove that the GNSS coordinates are within acceptable tolerance. Once that is satisfactory, then the TLS can begin to perform the scanning to capture the features around the scan station.

To transfer the TLS from one occupation point to another, a new scan station point must be defined in the TLS system. In order to do that, a new point has to be marked on the ground, usually with a masking tape and a permanent marker. The point is labelled with the scan station point number and represented with a round dot for the TLS equipment to set the centering of the laser plummet. Once that has been done, the prism can be set up on the new occupation point and the TLS can target the prism to register the new scan station point. The prism is then exchanged with the TLS, the previous occupation point serving as the new backsight for the TLS. The current TLS occupation point then registers the backsight, checking for setup errors (error distance should be less than 0.010m) and performing the scan process. This is repeated until the entire building has been completely captured in the equipment. Figure 3.7 shows the TLS initializing a new scan station point during observation in Block C05.



Figure 3.7 Initializing new TLS scan station point.

3.3.3 Distometer Survey

The distometer is used to perform the conventional method of strata survey by measuring the dimensions of the building, including the thickness of the wall, length between walls, height between floors, and recording it into the building plan. The data from this survey will be then used to compare with the generated strata plans to determine the RMSD of the data between the TLS survey and the distometer survey.

3.4 Phase 3: Data Processing

In this phase, the point cloud files obtained from the TLS is merged together to form the complete point cloud model, and the control point coordinates are applied to obtain the georeferenced point cloud model. The point cloud model is then cleaned to remove unnecessary data and transformed into 3D model. From the 3D model, strata plans are generated and compared with building plans to obtain the RMSD. Lastly, the StrataDXF is generated for StrataXML generation and JUPEM submission.

3.4.1 Point Cloud Processing and Cleaning

The raw point cloud data from the TLS is matched and registered together using Topcon MAGNET Collage to form the complete georeferenced 3D point cloud model of the building. The georeferencing report is checked to determine the quality of the georeferencing process, and if satisfactory, export the point cloud in .las format.

An important thing to note is that if the horizontal coordinates of the building control points exceed 16 kilometres, a translation shift shall be applied to reduce the horizontal coordinates to be within 16000 metres. This is due to limits in the modelling work plane of Revit, and the amount of translational shift must be recorded down to apply the translation correction on the strata plans and the StrataDXF. This is only necessary when the project location exceeds 16km from the start-up origin (0,0,0). For the purposes of this project, the Northing of the point cloud model is moved northwards by 53000m (translation of +53000m) as the Northing coordinates are within the range of -53000m to -54000m. Therefore, a translation is required to fit the point cloud model within the allowable project limits, and this can then be amended in subsequent processes.

The georeferenced point cloud is imported into ReCap to clean and remove irrelevant data in the point cloud. The cleaned point cloud is then exported in *.rcp format as Revit does not accept *.las format as data input. Figure 3.8 shows the 3D point cloud model in ReCap to be exported into Revit.

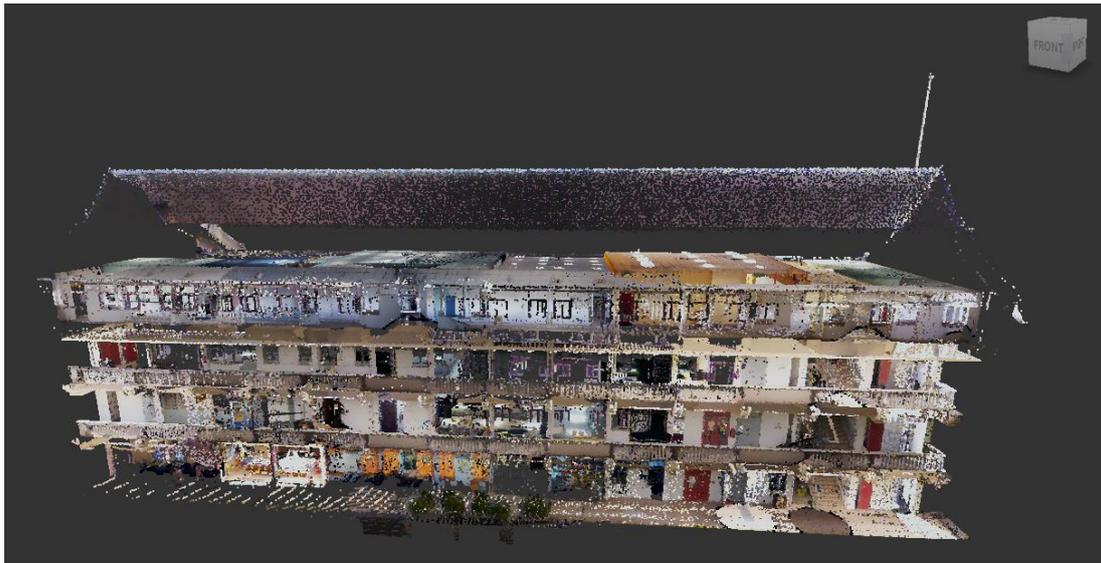


Figure 3.8 3D point cloud model of Block C05 in ReCap

3.4.2 Transforming Point Cloud to 3D Model

Configure the standard units for Revit, and import the *.rcp point cloud data into Revit to display the point cloud data in Revit. In elevation view, define the elevations and top constraints of each floor as shown in Figure 3.9:

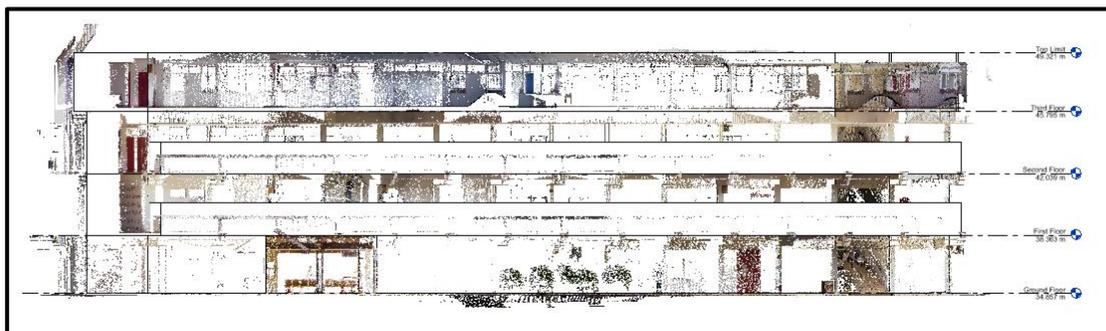


Figure 3.9 Preparing the elevation and top constraint for each floor

Open the ground floor floor plan, and using the Faro As-built for Revit Module, select “Prepare Point Cloud” to produce the raster image of the point cloud model. Once that is done, select “Fit Wall” and click the starting and ending points of

the wall in the rasterized point cloud. The software will then automatically compute the wall that best fits the blank wall space. Continue fitting walls until the whole floor has been completed, then repeat the steps to prepare the raster point clouds and the wall fitting process until the entire building point cloud has been transformed into 3D model with properly defined floor levels. Figure 3.10, 3.11, and 3.12 shows the process of preparing the raster point cloud, fitting the walls, and the complete product for ground floor, while Figure 3.13 shows the completed 3D building model.

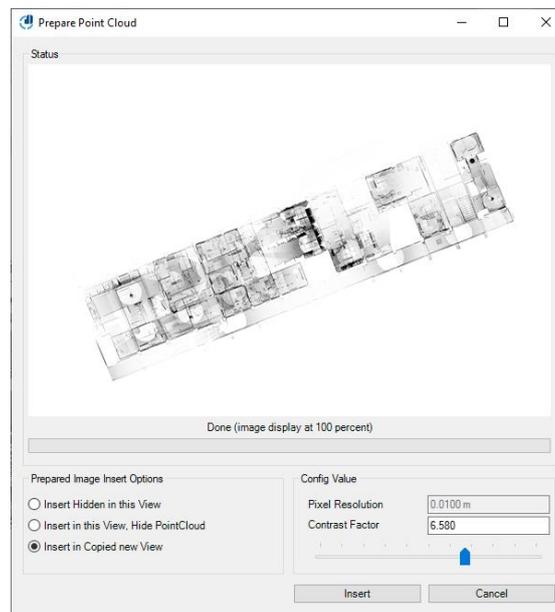


Figure 3.10 Preparing the raster point cloud model

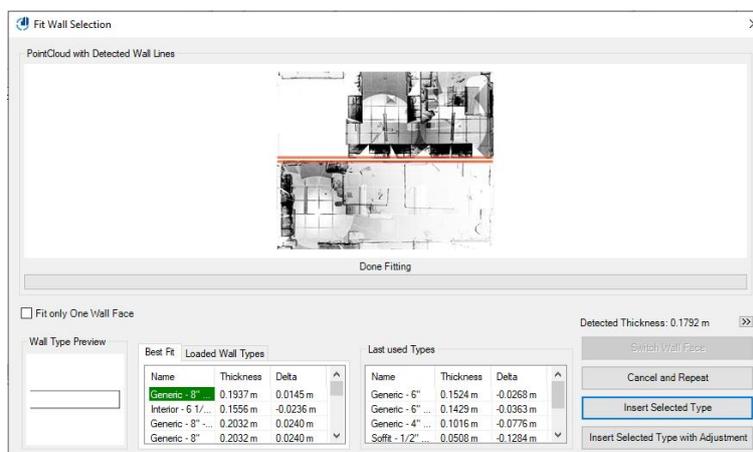


Figure 3.11 Fitting the wall

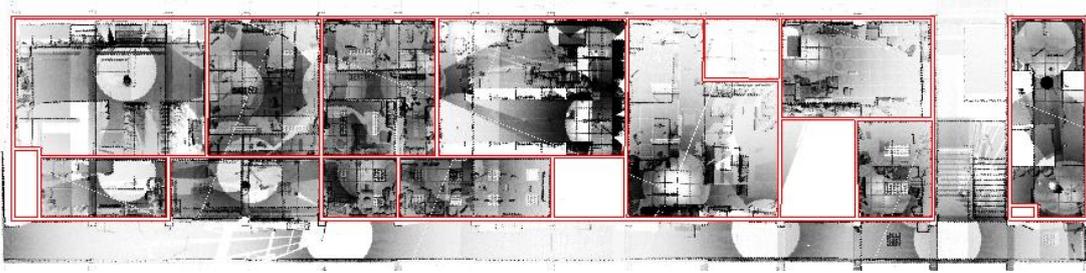


Figure 3.12 Completed wall fitting of ground floor

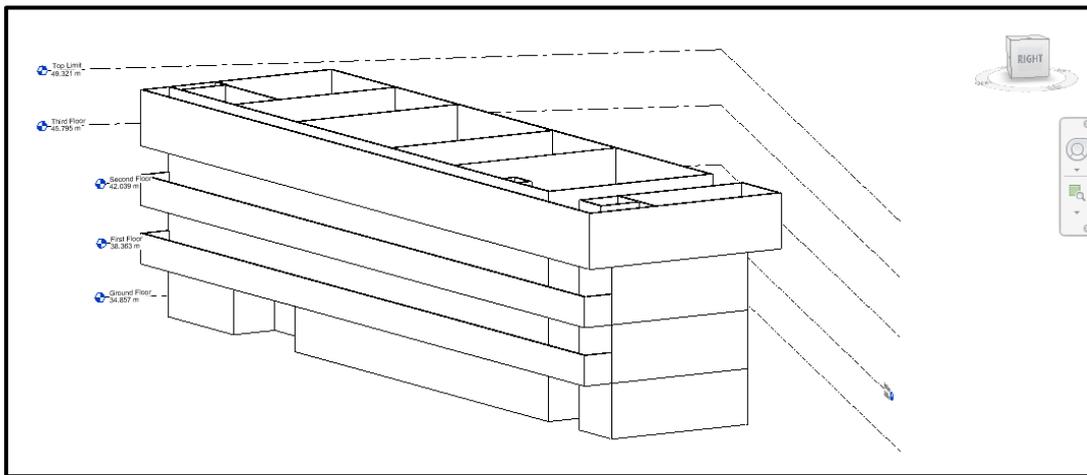


Figure 3.13 Completed 3D building model of Block C05

3.4.3 Generating 2D strata plans and StrataDXF

In this process, script programs in Dynamo for Revit are created to read the 3D model as data input and generate the 2D strata plans with the standard frame and appropriate scale. The script process is split into multiple files for cross-checking of the output, and the flowchart for the script process is shown in Figure 3.14.

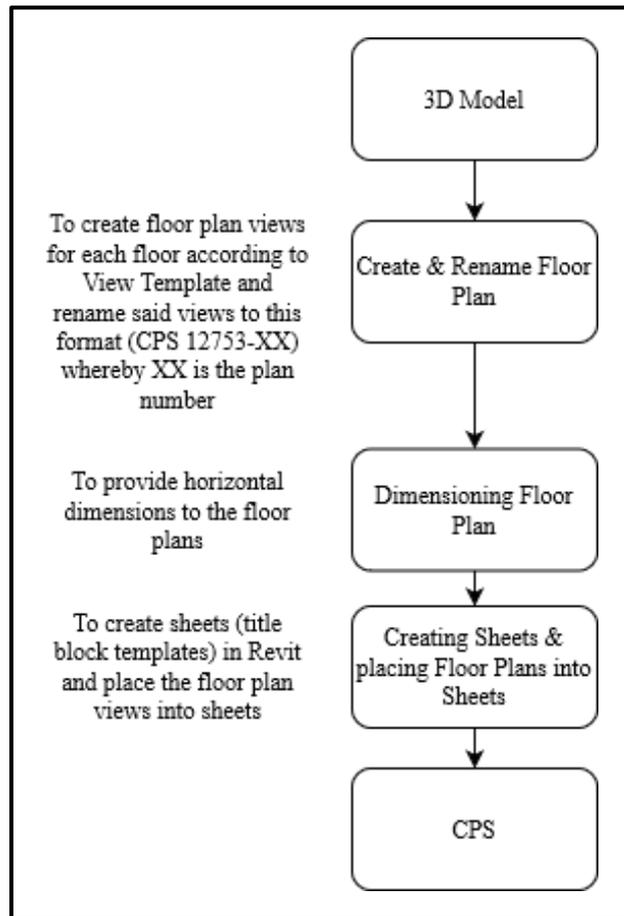


Figure 3.14 Procedure to generate CPS from 3D Model

StrataDXF files are manually generated and amended accordingly to move the building position in the translation value mentioned in 3.4.1. The polyline layers are amended according to StrataXML data input requirements and saved according to the file format specified. The flowchart to generate the StrataDXF is shown in Figure 3.15.

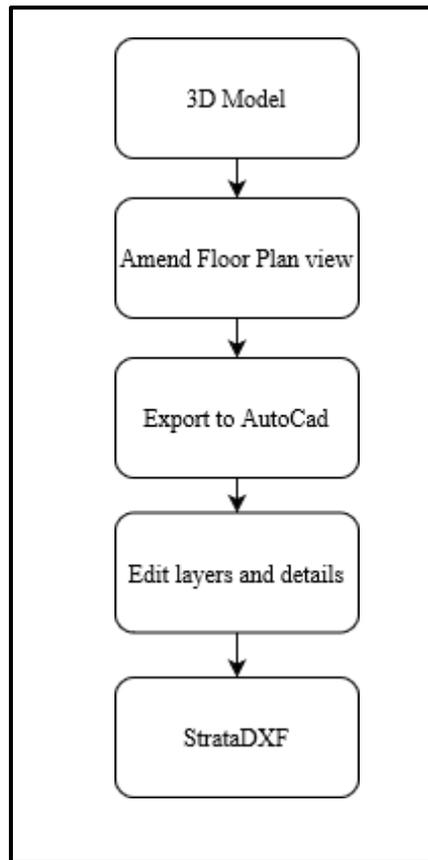


Figure 3.15 Procedure to generate StrataDXF from 3D Model

3.4.4 Generating StrataXML ASCII file

The amended StrataDXF is input into the StrataXML software. Additional details relating to the information of the strata scheme are provided to generate the StrataXML ASCII file.

3.5 Phase 4: Results and Analysis, Conclusion and Recommendation

This phase concludes the results of the study. The strata plans are checked to see if it meets the accuracy required by JUPEM for submission, while the StrataXML ASCII code is validated with the XML Schema Definition (XSD) provided by JUPEM to check if the generated XML code is according to the XSD structure. The

conclusion of the study is made and recommendations are proposed to facilitate new ideas related to the study.

3.5.1 Comparison Between Building Plans and Generated Strata Plans

The values in the strata plan are compared to the building plans to determine the RMSD of the data. The RMSD is computed using the following formula:

$$RMSD = \sqrt{\frac{\sum(x_e - x_0)^2}{n}} \quad (3.1)$$

Where x_e represents the expected value, x_0 for the actual observation value, and n for the total number of values.

3.5.2 Validation of the StrataXML ASCII

The generated StrataXML ASCII data is validated against the XML Schema Definition provided by JUPEM to check whether the generated XML ASCII is fit for JUPEM submission via XML Validator Software.

3.5.3 Conclusion and Recommendation

The findings for this study are summed up and concluded. Recommendations are suggested to provide ideas on how to continue or improve this study.

3.6 Summary

This chapter shows the detailed research methodology that is expected to be carried out for the duration of the study. The phases of the study are explained in

detail in this chapter to provide clarity and demonstrate understanding of the methodology of the study. The research methodology is to be followed throughout to achieve the research aim and objectives of the study.

CHAPTER 4

RESULTS & ANALYSIS

4.1 Introduction

This chapter explains the expected results to be obtained from this study. The point cloud is registered and georeferenced to form the complete 3D building model. Afterwards, 2D proposed strata plans and StrataDXF are generated via Dynamo for Revit. The resulting strata plans are checked with the building plans surveyed using distometer to compute the RMSD value. StrataDXF is used as data input for StrataXML to generate the StrataXML ASCII file, and the produced StrataXML ASCII file is validated with the XSD file provided by JUPEM.

4.2 Preparing the Point Cloud Model

To start the data processing process, the raw point cloud files must be registered, merged and georeferenced to form the complete point cloud model. The point cloud model is then imported in ReCap for data cleaning and exporting to .rcp format (Revit's acceptable format for laser scanning data) before it can be imported into Revit.

4.2.1 Registering and Georeferencing Point Cloud

The point cloud files are loaded and registered using Topcon Magnet Collage. Point cloud files for each floor are registered together to form the complete 3D point cloud of the building. Then, the scanstation coordinates are imported into Topcon Magnet Collage for georeferencing. Since the northing of the project location is located at -53000m, which exceeds the 16000m limits of Revit, therefore a +53000m

translation of coordinates on the northern axis is applied to reduce the northing of the point cloud to ensure that the point cloud is within Revit limits. The translation value is recorded for re-translation in further steps. The point cloud is georeferenced accordingly and a report shows the accuracy of the georeferenced coordinates. Figure 4.1 shows the position of scanstation locations, while Figure 4.2 shows the generated point cloud imported to ReCap.

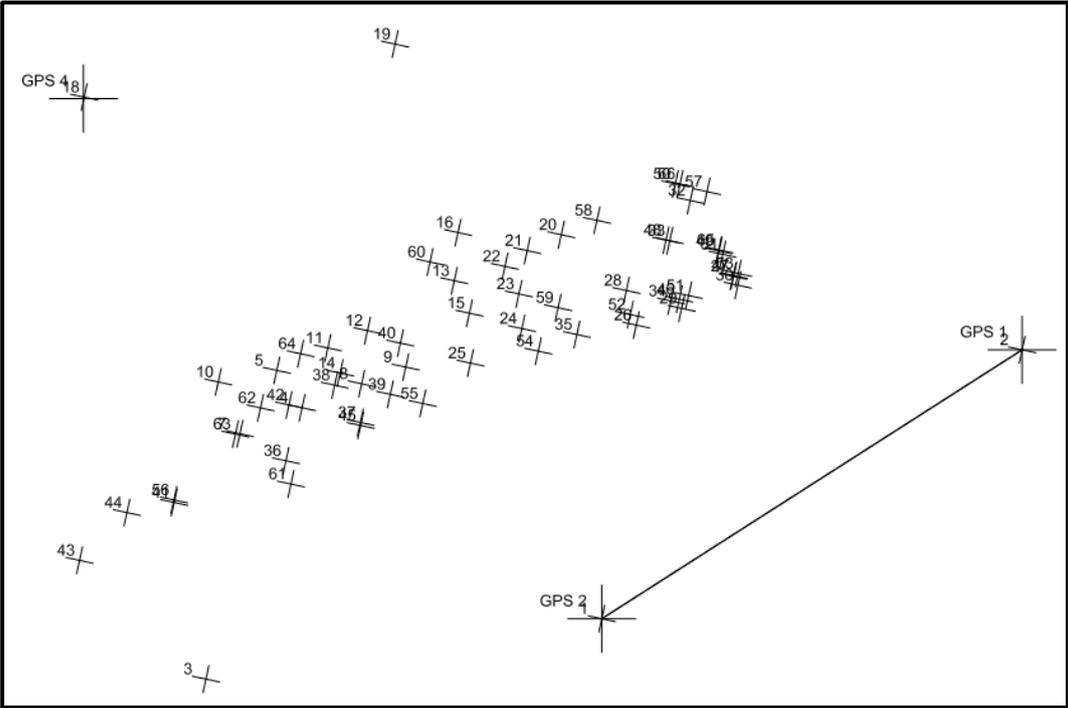


Figure 4.1 Scanstation positions overlaid with control points

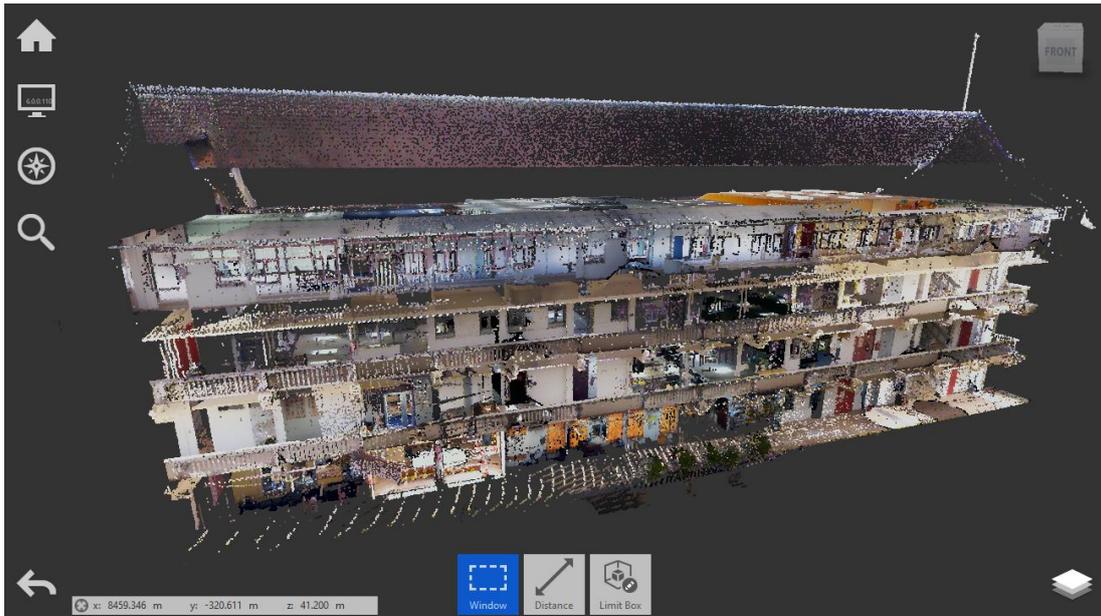


Figure 4.2 Point cloud data in ReCap

4.2.2 Point Cloud Cleaning

The georeferenced point cloud is then cleaned in ReCap to remove unnecessary clutter such as indoor furniture, partitions, and point cloud noise. This is to reduce the point cloud to only show the bare structure of the building. However, in hindsight, there is no need to perform this process, since the shape of the wall can still be determined via cross-sectioning and manipulating the view range of the point cloud. Figure 4.3 shows the cross-section of a point cloud section that has not been cleaned, however the view range values are manipulated to show the cross-section of the walls.

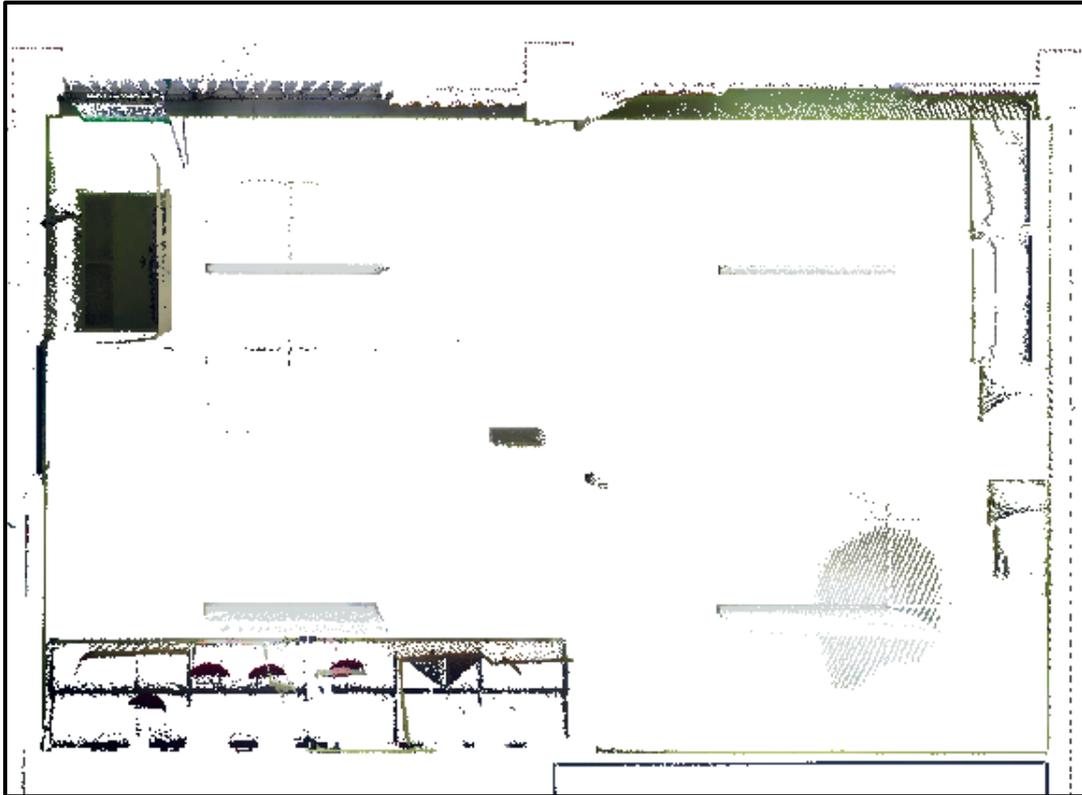


Figure 4.3 Cross-section of uncleaned point cloud

From Figure 4.3, we can see that some furniture remains, however the general outline of the wall is clearly visible. This allows us to digitize the point cloud model and transform it into a 3D building model based on the outline of the walls.

4.3 Preparing Revit Data

There are several processes to be performed before the point cloud data can be used for Dynamo input. These include: modelling the point cloud, generating 2D views from the point cloud, and setting the sheet template (title block template) of which the 2D views is placed in. Figure 4.4 shows the detailed flowchart depicting this process:

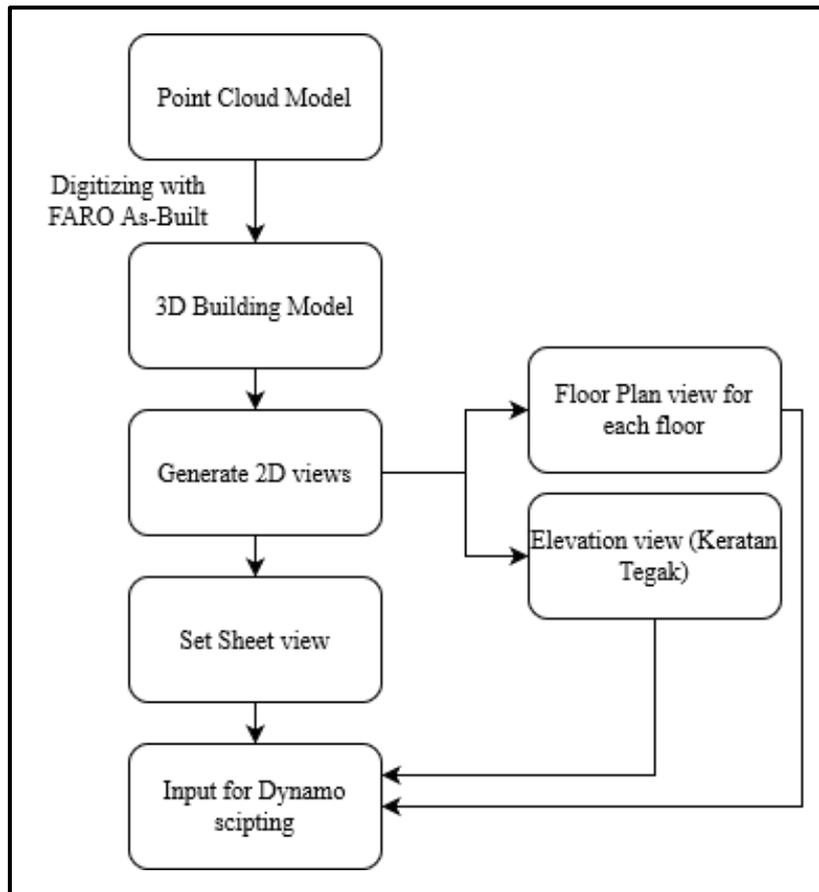


Figure 4.4 Flowchart to prepare data in Revit before commencing Dynamo

4.3.1 Modelling the Point Cloud

The cleaned point cloud is imported into Revit and modelled using FARO As-built for Revit module according to the procedure mentioned in 3.4.2. The wall thickness is automatically determined based on the empty space between the point clouds at the cross-section of the wall. Figure 4.5 shows the 3D model formed in Revit.

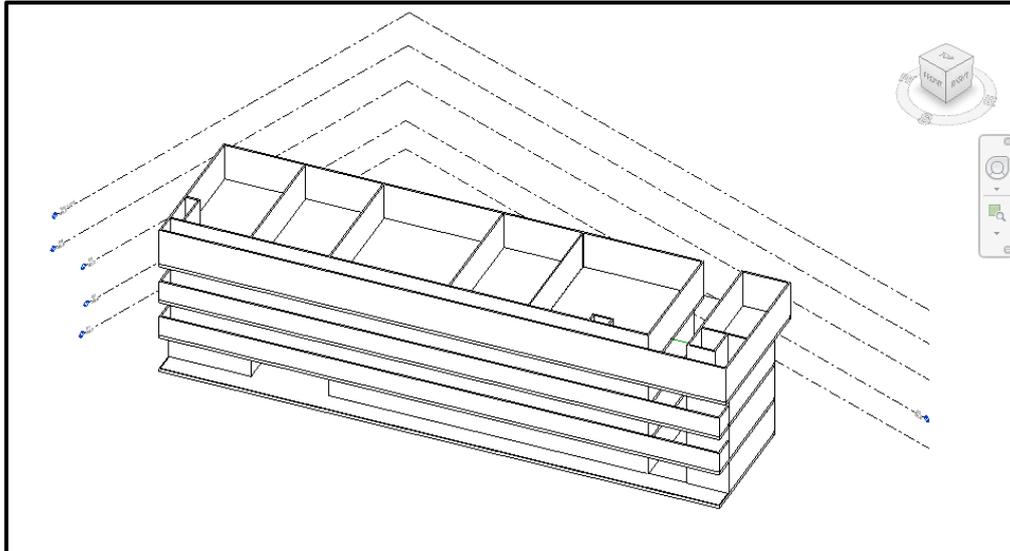


Figure 4.5 3D model of Block C05

4.3.2 Generating 2D views

From the 3D model, the 2D views are generated. There are 2 types of 2D views to be generated: the floor plan view and the elevation view.

4.3.2.1 Floor Plan View

To generate the floor plan view of each floor, the room area of each enclosed parcel and space has to be marked out. Prior to this, certain information must be denoted to a room to provide additional information, such as the building code, parcel type, parcel number, and parcel description. This is performed by adding additional shared parameters to the room area and manually adding them after the room area has been defined. Besides that, the plan view is also rotated to show the building orthogonally, and the angle of rotation is recorded to draw the true north symbol in 4.3.3. Also, according to Figure 2.1, common properties must have a black outline and filled with yellow hatching, whereas parcels have a red outline with white hatching. The floor plan view must match the CPS specification before it can be imported into the sheet view, however the dimensions of the floor plan will be added later.

Figure 4.6 and 4.7 shows the raw floor plan view of the 1st floor with reference to the true north and project north of the project, while Figure 4.8 shows the defined room spaces, and Figure 4.9 shows the completed floor plan view according to the specifications of Figure 2.1, without the horizontal dimensions.

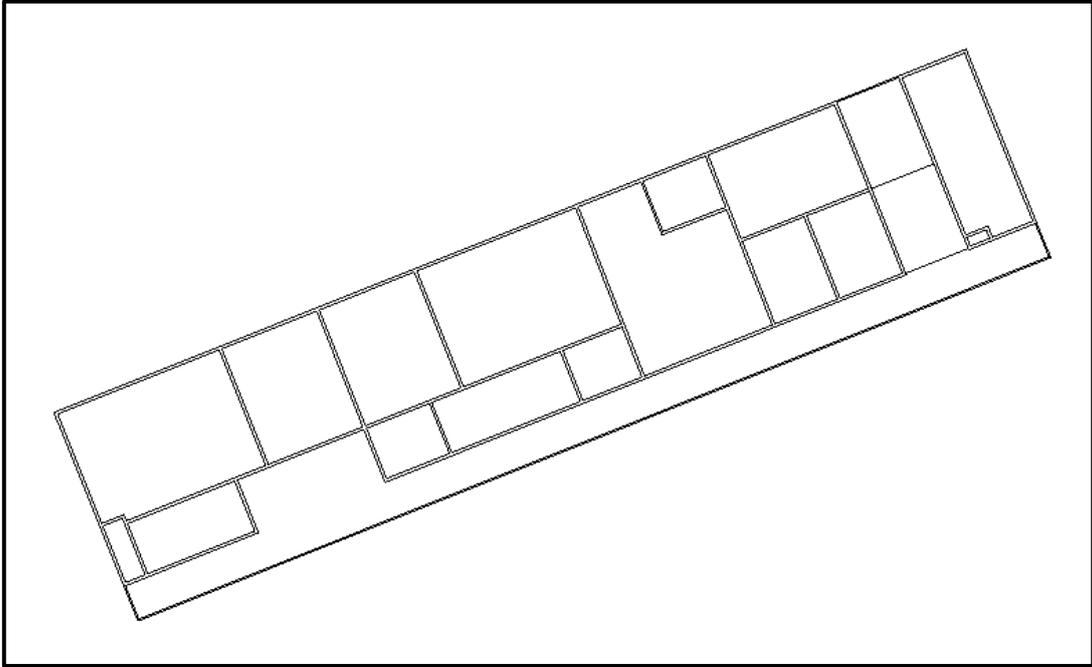


Figure 4.6 Raw Floor Plan view of 1st Floor (True North)

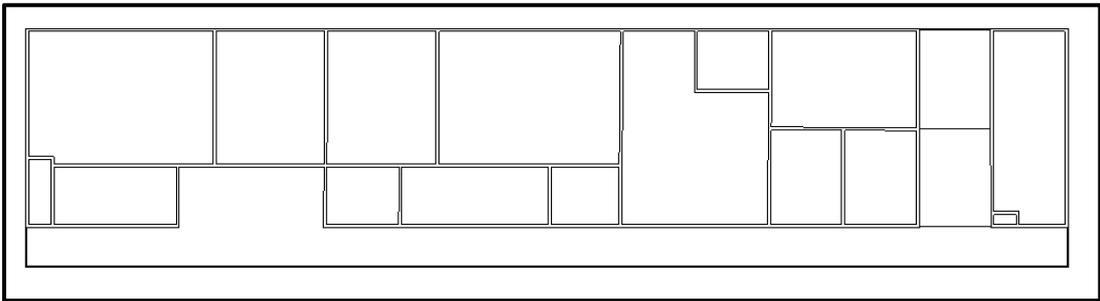


Figure 4.7 Raw Floor Plan view of 1st Floor (Project North)

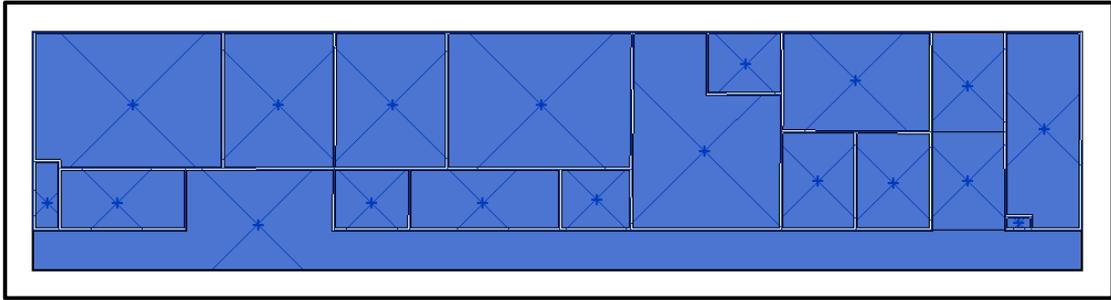


Figure 4.8 Defined Room Space for 1st Floor

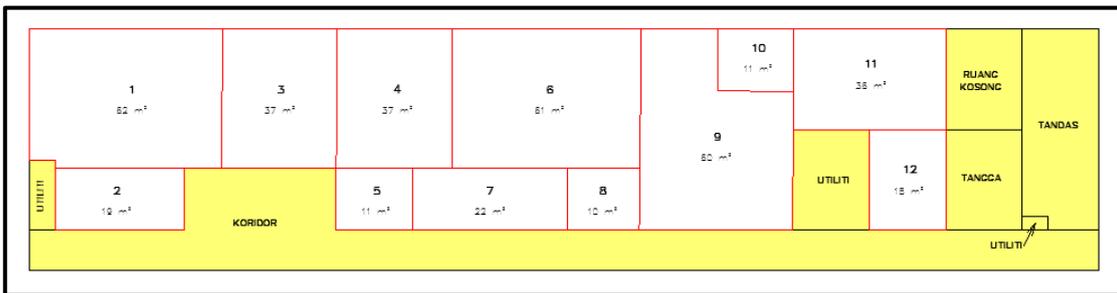


Figure 4.9 Floor Plan view according to CPS specification, without dimensions

To duplicate the formatting of the 1st floor and attach the same formatting to other floors, the view in Figure 4.9 is saved as a view template ‘Strata’. This view template copies the formatting of the view and attaches it to other floors, so there is no need to redefine the hatching and outline of the rooms. However, the process of defining the room space and adding room details have to performed before applying the view template, as the view template is unable to automatically define room space. The saved view template will be used in later parts of the study.

4.3.2.2 Elevation View (Keratan Tegak)

According to the sample CPS provided in Figure 2.2, besides the horizontal floor plan view, the elevation view is also attached within the CPS. To extract the elevation view, the side elevation profile of the building is digitized in the elevation plan view. Figure 4.10 shows the completed elevation view.

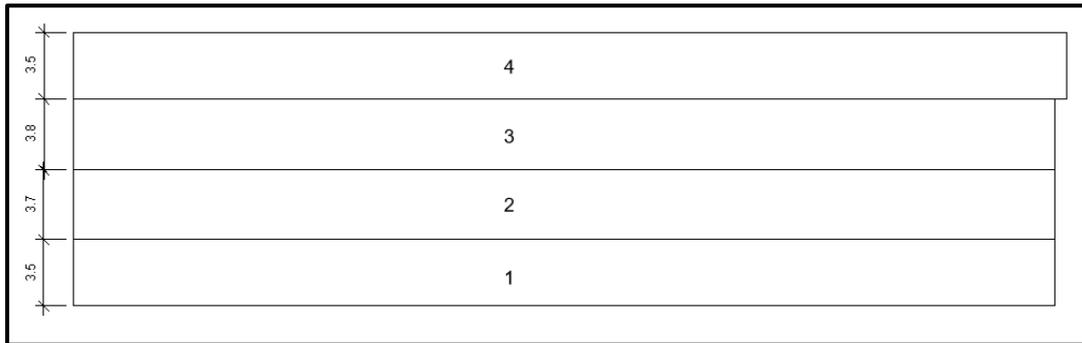


Figure 4.10 Completed elevation view of Block C05

4.3.3 Setting Sheet View

With the completed 2D views, the final process involves designing the sheet view to place the floor plan and the elevation plan within the sheet to form the CPS. This is done manually in AutoCAD in 1:1 A2 scale, and the direction of the true north is obtained from 4.3.2.1 and drawn accordingly.

The sheet is then imported into Revit and saved as a standard sheet. Some elements are intentionally left out to be filled in using Dynamo. Figure 4.11 shows the sheet view within Revit.

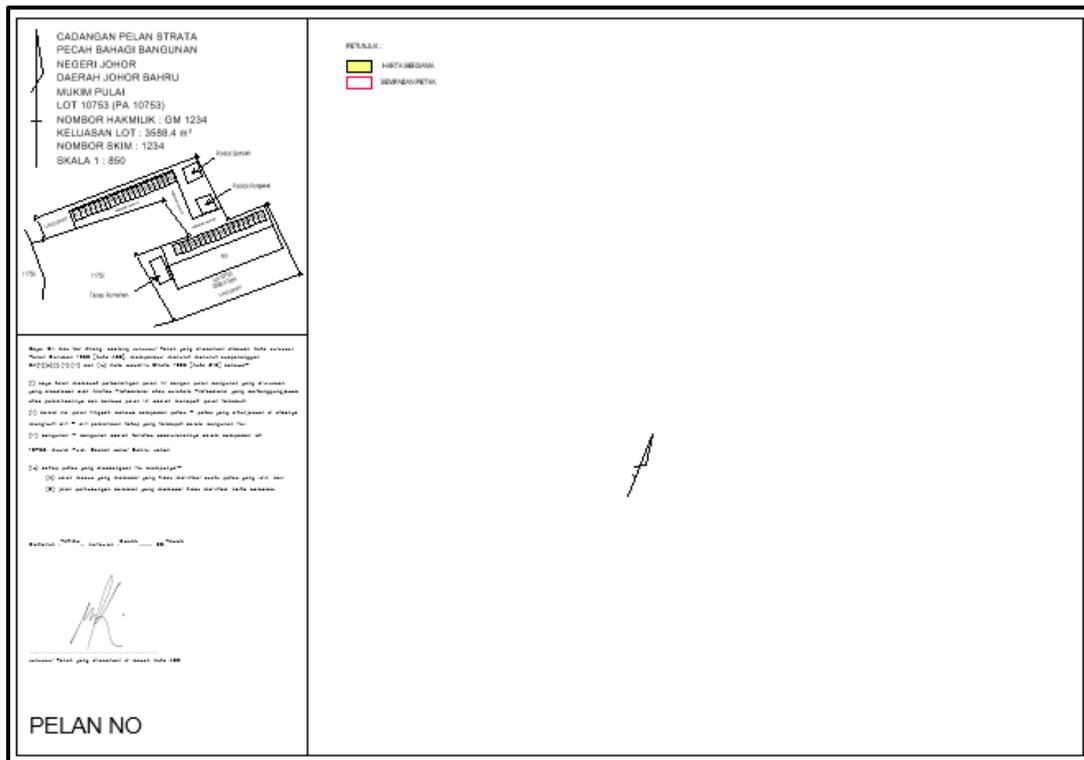


Figure 4.11 CPS title block as A2 sheet view in Revit

4.4 Converting 3D Model to 2D Plans

Using Dynamo, several scripts are written to automate the strata producing process. The script is designed to produce the CPS according to Figure 3.14. The StrataDXF is also manually exported in this step according to Figure 3.15.

4.4.1 Create and Renaming Floor Plans

The Dynamo script created for this process aims to create new floor plan views with the attached view template 'Strata' from the existing floor plans generated in 4.3.2.1. Prior to running the Dynamo script, there are only 4 floor plan views available, from the 1st floor until the 4th floor. The logic of the script is to duplicate the floor plan for all floors, attach the 'Strata' view template, and rename the floor plan to CPS 12753-XX, whereby XX denotes the level number. Therefore,

the floor plans that should be generated from this script are CPS 12753-01, CPS 12753-02, CPS 12753-03, and CPS 12753-04.

Figure 4.12 shows the number of floor plans prior to running the Dynamo script, while Figure 4.13 shows the flowchart of the script logic for 4.4.1, Figure 4.14 shows the detailed script within Dynamo, and Figure 4.15 and 4.16 shows the outcome of the process.

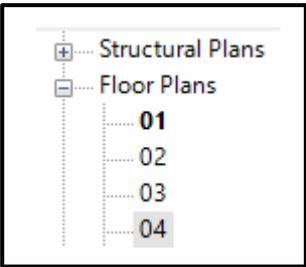


Figure 4.12 The Floor Plans prior to running Dynamo

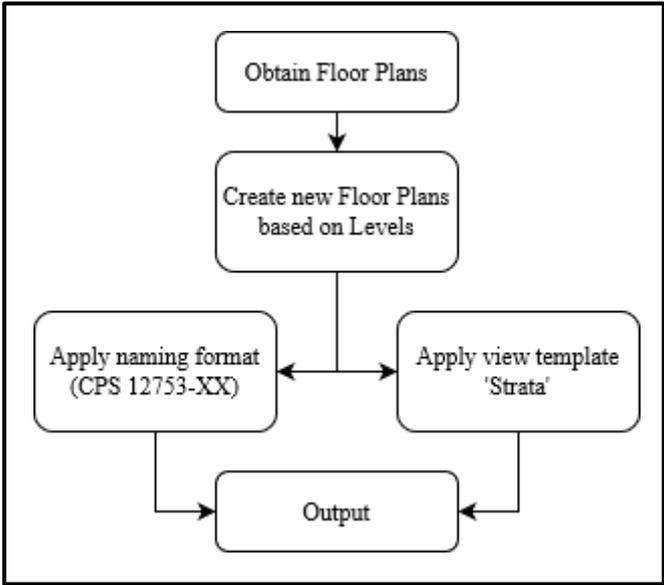


Figure 4.13 Dynamo script logic for 4.4.1

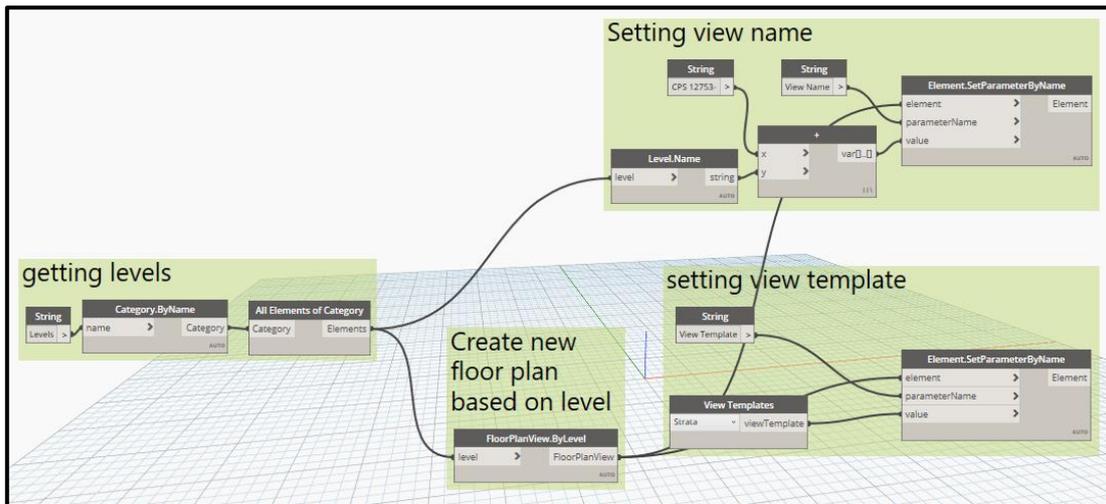


Figure 4.14 The process of Figure 4.13 in script form

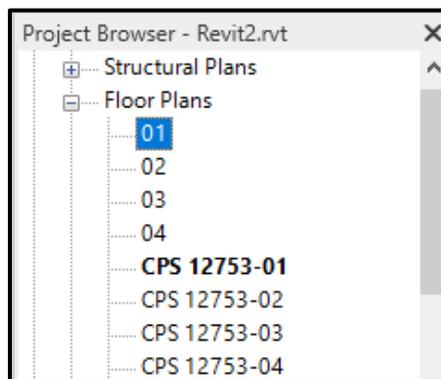


Figure 4.15 The added Floor Plans after running Dynamo

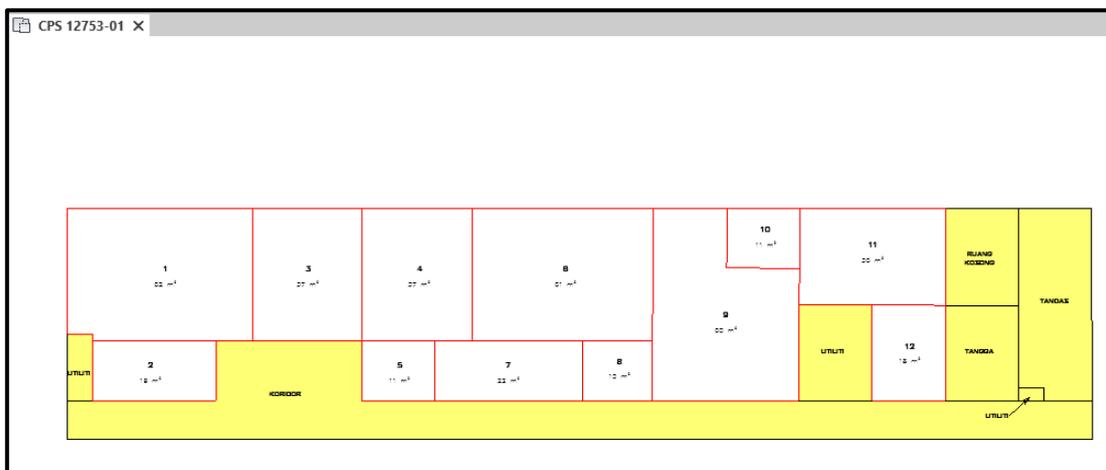


Figure 4.16 View of CPS 12753-01

4.4.2 Dimensioning Floor Plan

The horizontal distances of the floor plans are marked using Dynamo. Figure 4.17 shows the Dynamo script logic for 4.4.2, while Figure 4.18 shows the detailed script within Dynamo, and Figure 4.19 shows CPS 12752-01 with completed dimensions.

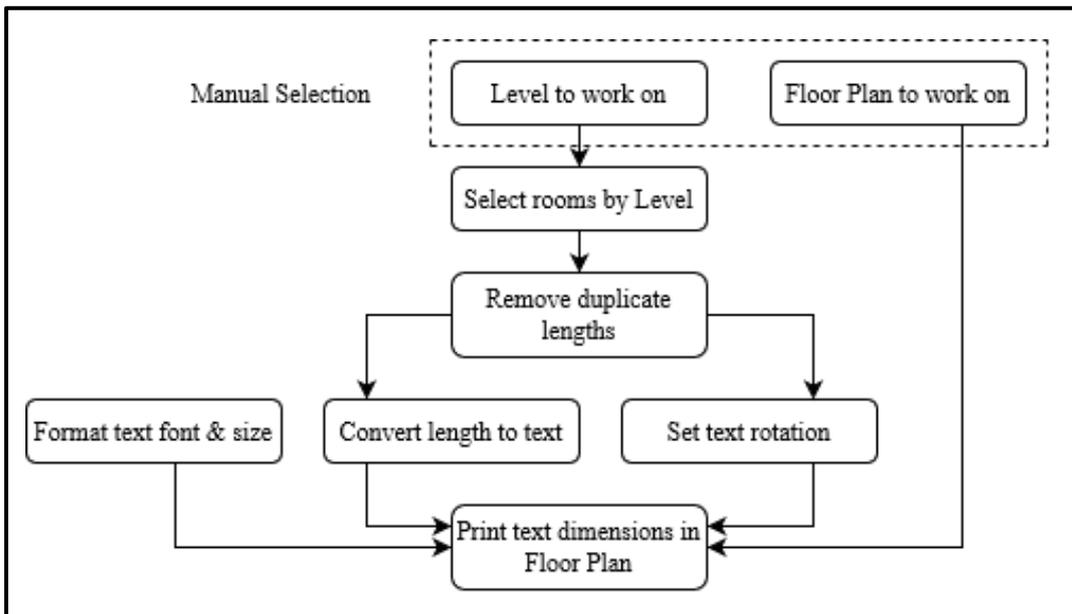


Figure 4.17 Dynamo script logic for 4.4.2

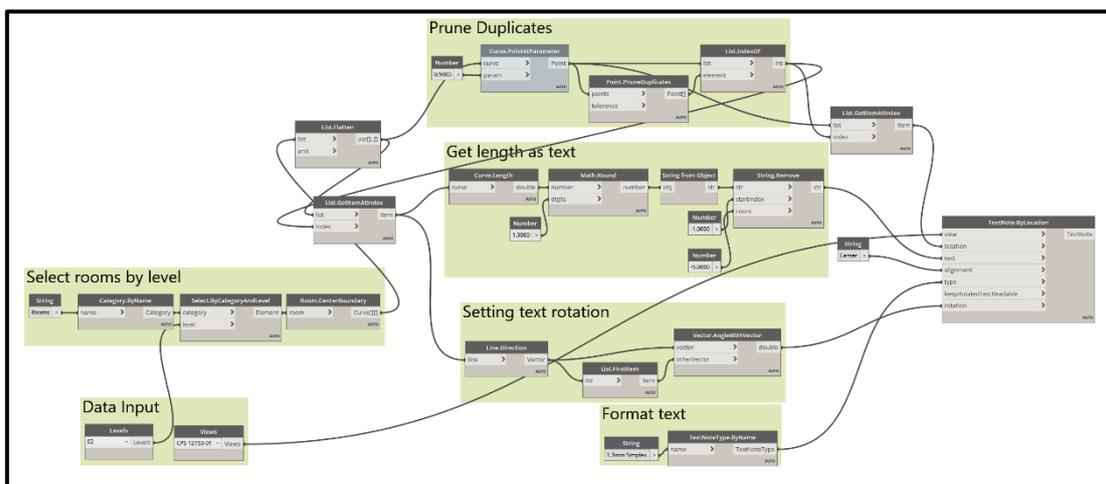


Figure 4.18 The process of Figure 4.17 in script form

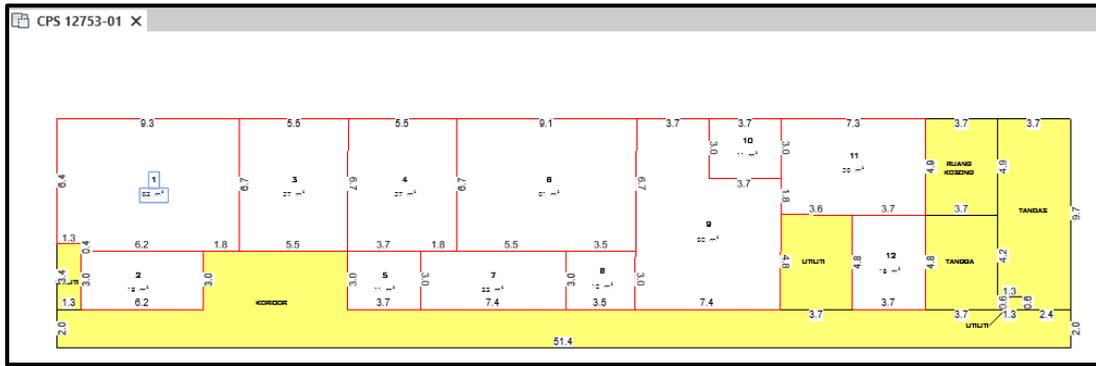


Figure 4.19 CPS 12753-01 with dimensions

The script is run for each floor plan to provide the dimensions. Once this has been done, the floor plan views and the elevation view can be combined with the sheet view to form the CPS, and this is performed in the next section.

4.4.3 Creating Sheets and Placing Floor Plans into Sheets

This process involves the creation of empty sheets from the sheet generated in 4.3.3 and fitting each floor plan and elevation view into these sheets. Seven Dynamo scripts are designed to accomplish this step, which will be covered in further subsections. Figure 4.20 shows the script logic for this process.

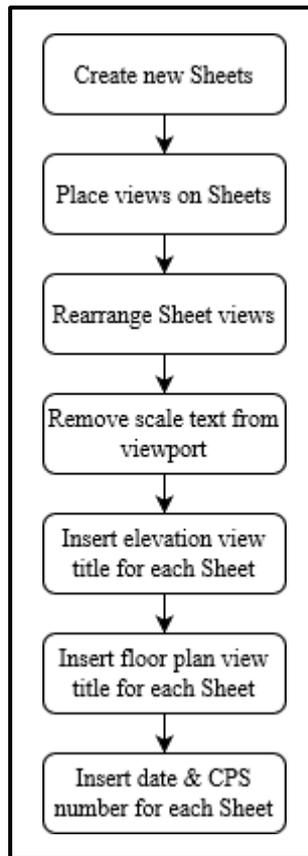


Figure 4.20 Dynamo script logic for 4.4.3

4.4.3.1 Creating New Sheets

The purpose of the script is to create new Sheet views from the original Sheet view generated in 4.3.3. The number of Sheets created is determined from the number of Floor Plans with the ‘CPS’ prefix. Figure 4.21 shows the Dynamo script logic for 4.4.3.1, while Figure 4.22 shows the detailed script within Dynamo, and Figure 4.23 shows the output from running the script.

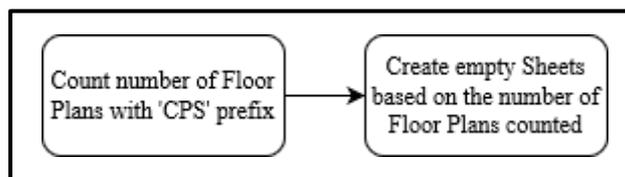


Figure 4.21 Dynamo script logic for 4.4.3.1

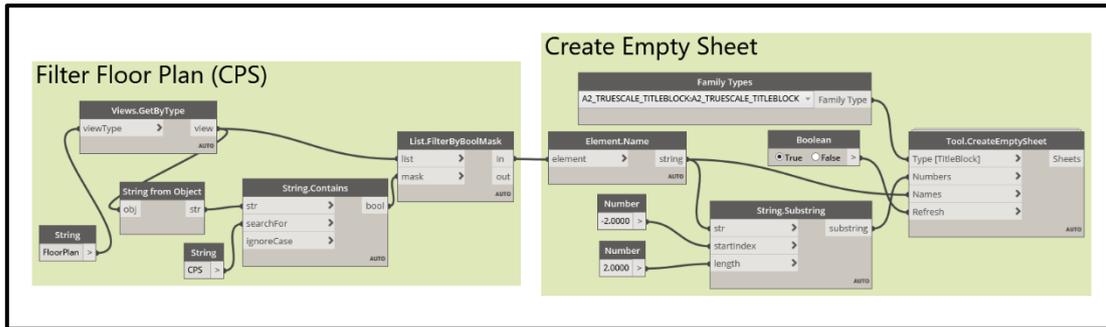


Figure 4.22 The process of Figure 4.21 in script form

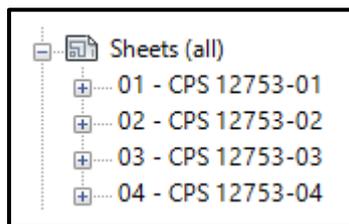


Figure 4.23 The generated empty Sheet views

4.4.3.2 Placing Views on Sheets

The purpose of this script is to index the number of Sheets, duplicate the number of elevation views to match the number of Sheets indexed, and merge the Floor Plan views as well as the Elevation views according to the sheet index. Figure 4.24 shows the Dynamo script logic for 4.4.3.2, while Figure 4.23 shows the detailed script within Dynamo, and Figure 4.24 and Figure 4.25 shows the output from running the script.

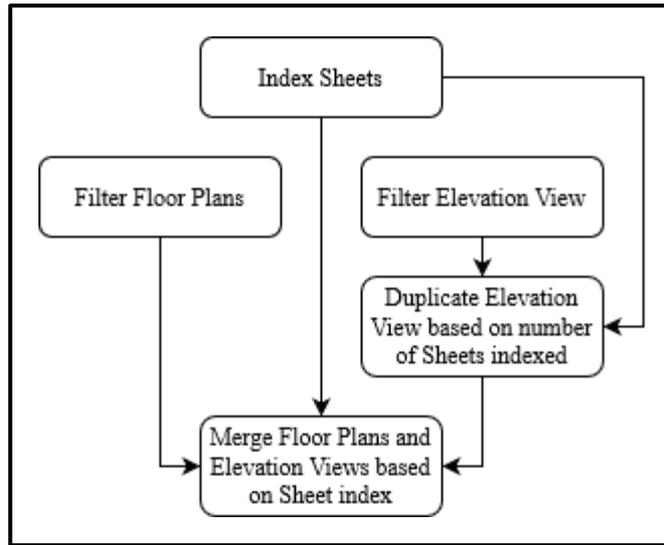


Figure 4.24 Dynamo script logic for 4.4.3.2

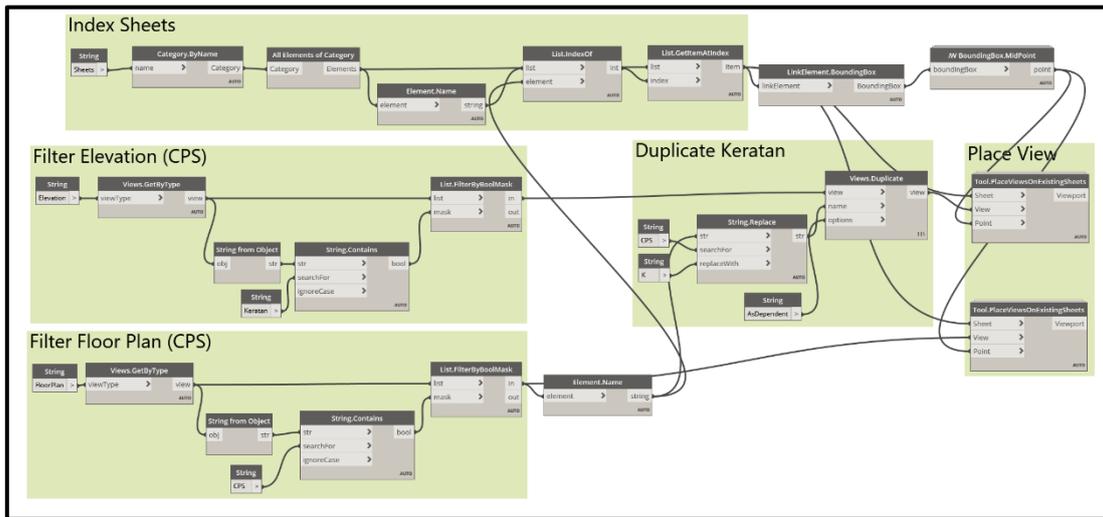


Figure 4.25 The process of Figure 4.24 in script form

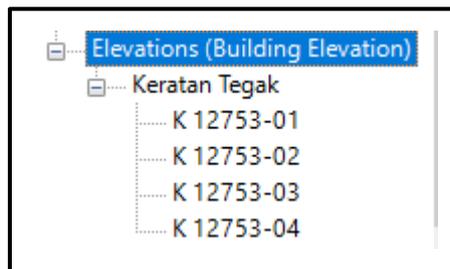


Figure 4.26 Duplicated Elevation view based on Sheet index

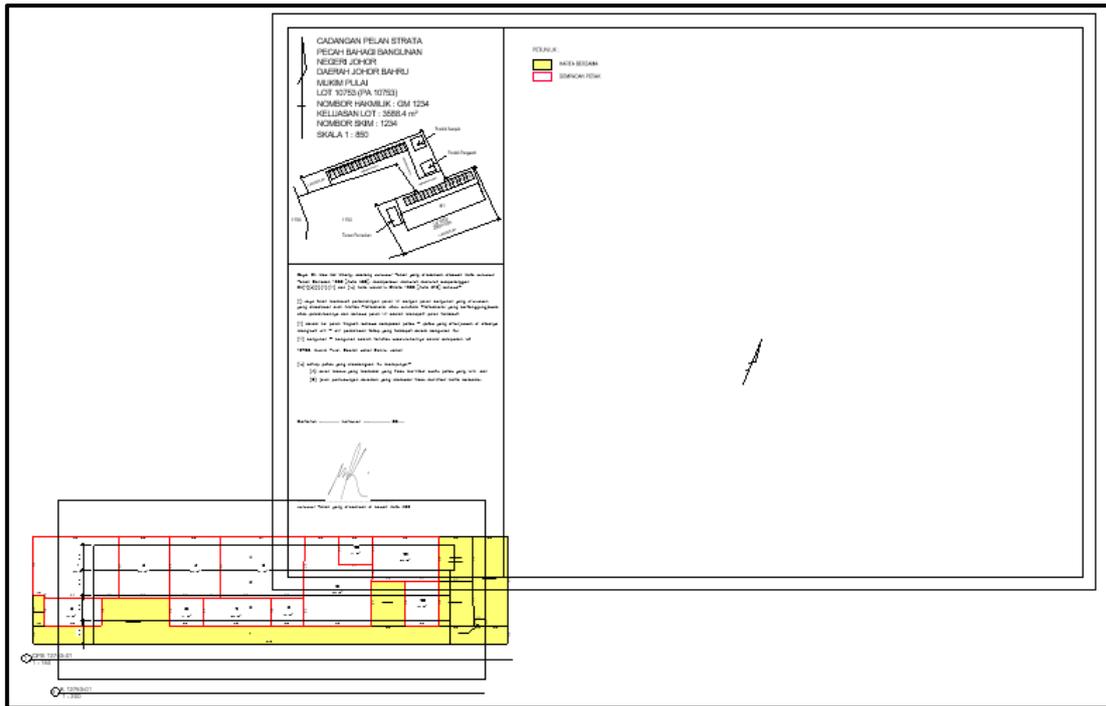


Figure 4.27 The Elevation and Floor Plan viewport at the bottom left of the Sheet

4.4.3.3 Rearrange Sheet Views

The purpose of this script is to rearrange the Elevation and Floor Plan viewports in Figure 4.27 to the correct locations. Prior to rearranging viewports for all CPS Sheets, the viewport for Sheet CPS 12753-01 must first be manually amended and placed in the correct location. Only after this has been done then the script will be able to rearrange the Elevation and Floor Plan views for other CPS Sheets. Figure 4.28 shows the manual placement of the viewports in Sheet CPS 12753-01, Figure 4.29 shows the Dynamo script logic for 4.4.3.3, Figure 4.30 shows the detailed script within Dynamo, and Figure 4.31 shows the Sheet views of the rearranged CPS Sheets.

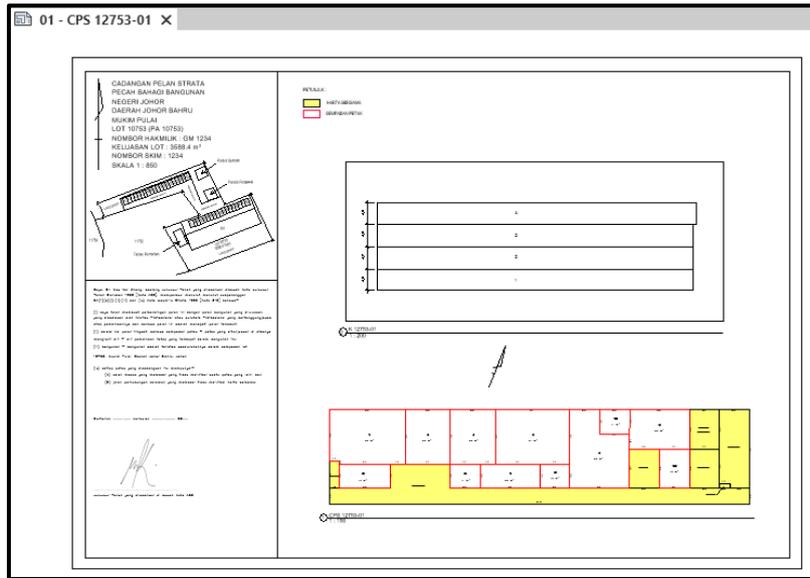


Figure 4.28 Sheet CPS 12753-01 with manually arranged viewports

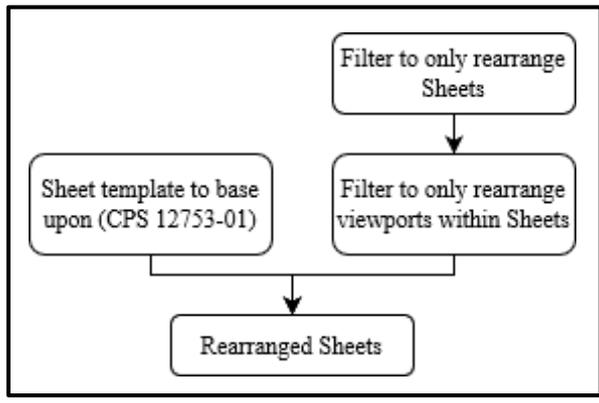


Figure 4.29 Dynamo script logic for 4.4.3.3

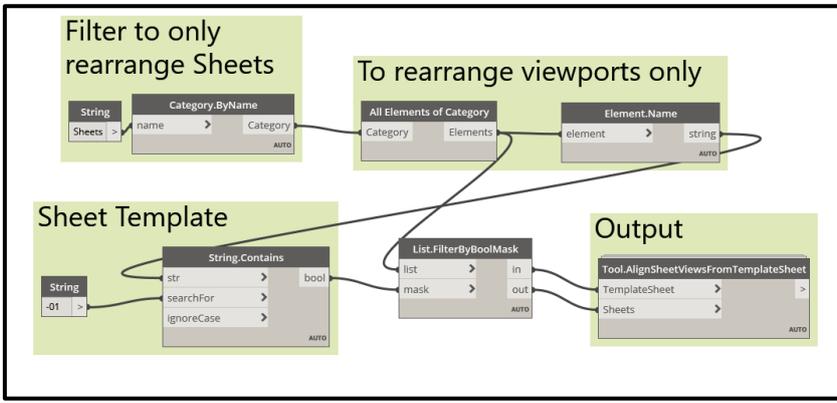


Figure 4.30 The process of Figure 4.29 in script form

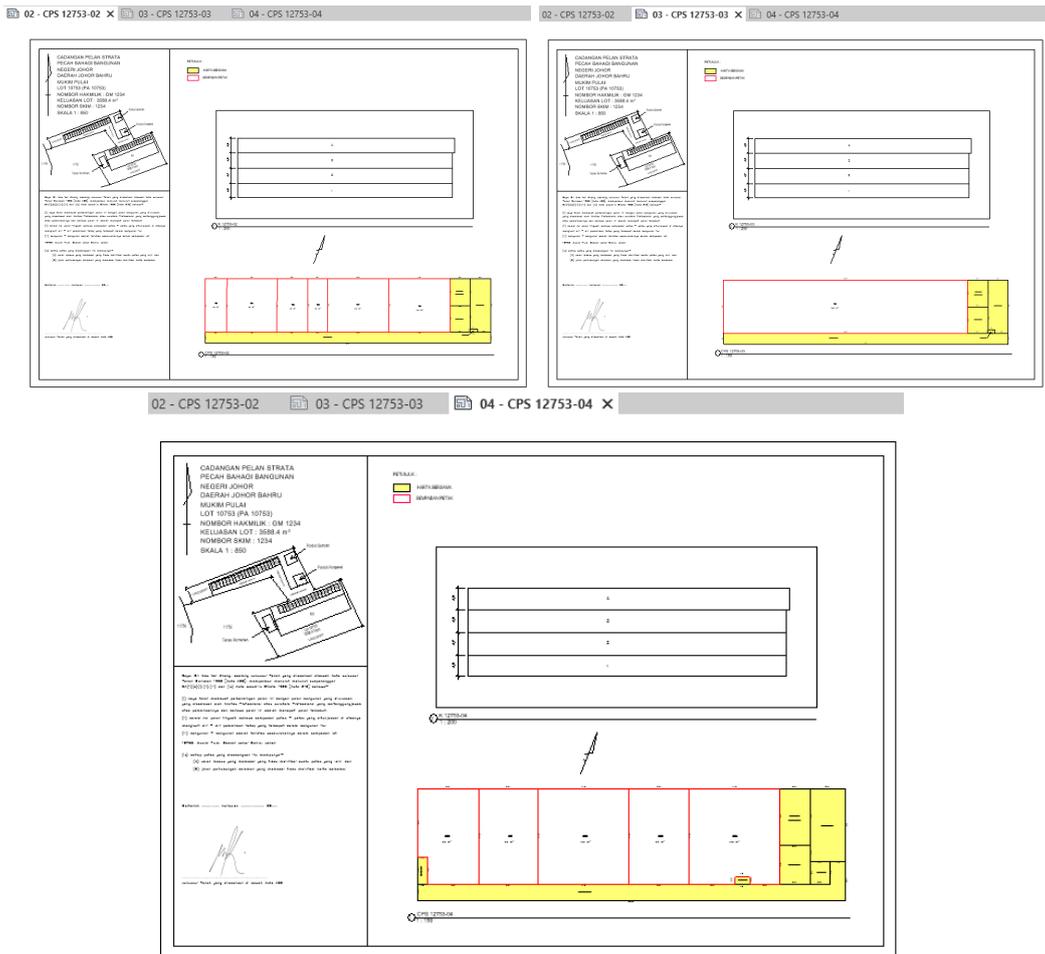


Figure 4.31 The rearranged views for other Sheets

4.4.3.4 Remove Scale Text from Viewport

The purpose of this script is to remove the scale bar text shown in the bottom of the viewports for the elevation views and floor plan views, as shown in Figure 4.28 and Figure 4.31. Figure 4.32 shows the Dynamo script logic for 4.4.3.4, Figure 4.33 shows the detailed script within Dynamo, and Figure 4.34 shows the result from running the Dynamo script.

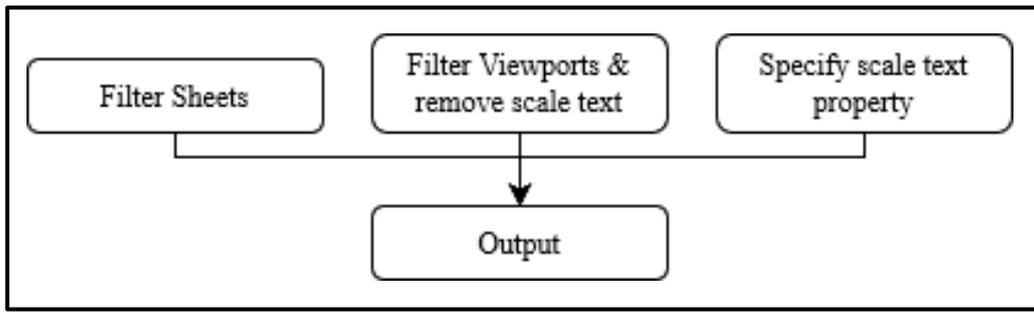


Figure 4.32 Dynamo script logic for 4.4.3.4

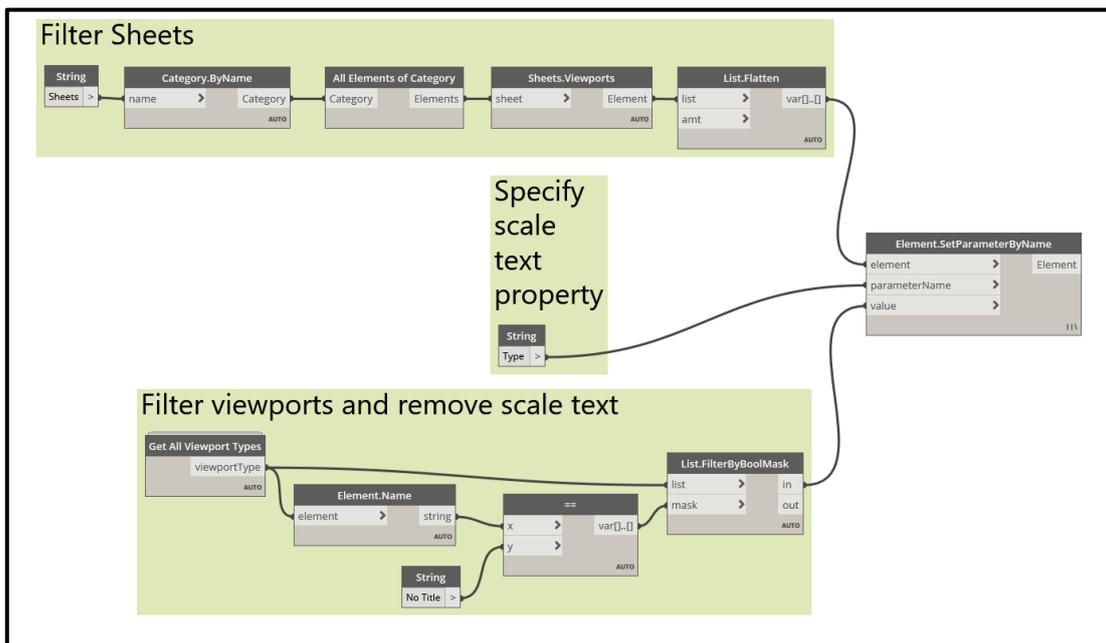


Figure 4.33 The process of Figure 4.32 in script form

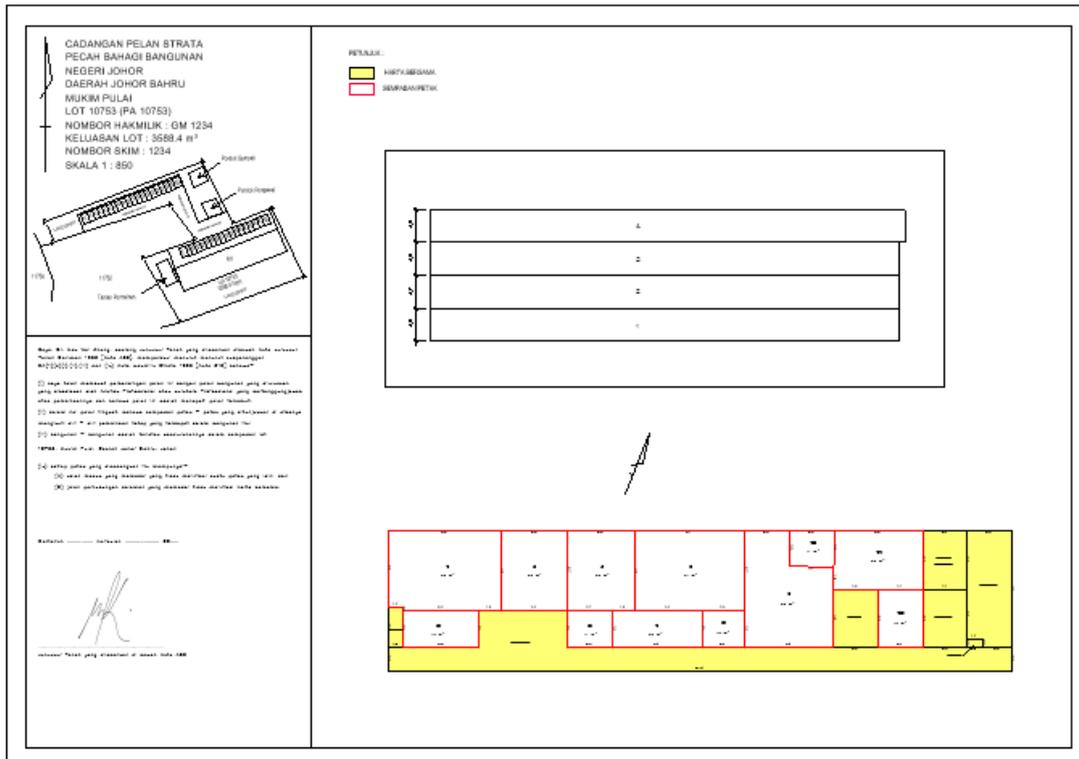


Figure 4.34 Sheet CPS 12753-01 with the scale text removed

4.4.3.5 Insert Elevation View Title for each Sheet

The purpose of this script is to insert the elevation view title for each sheet as well as remove the bounding box surrounding the elevation view within the sheet. Figure 4.35 shows the Dynamo script logic for 4.4.3.5, while Figure 4.36 shows the detailed script within Dynamo, and Figure 4.37 shows the result from running the Dynamo script.

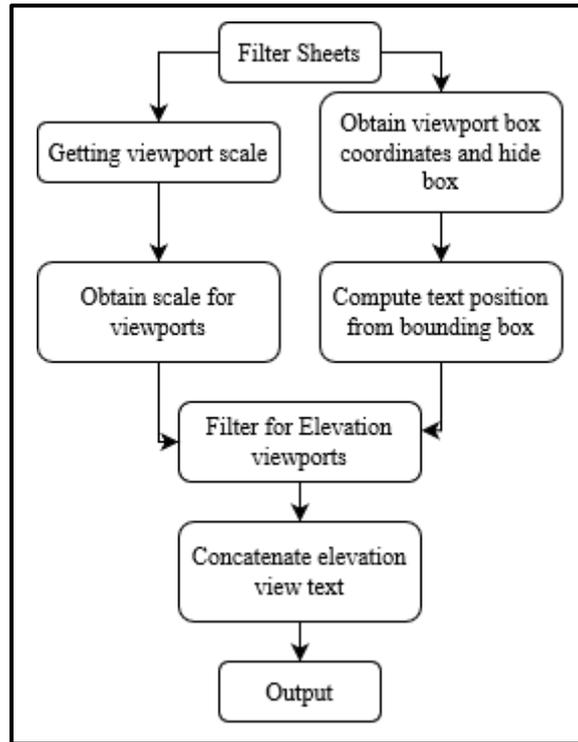


Figure 4.35 Dynamo script logic for 4.4.3.5

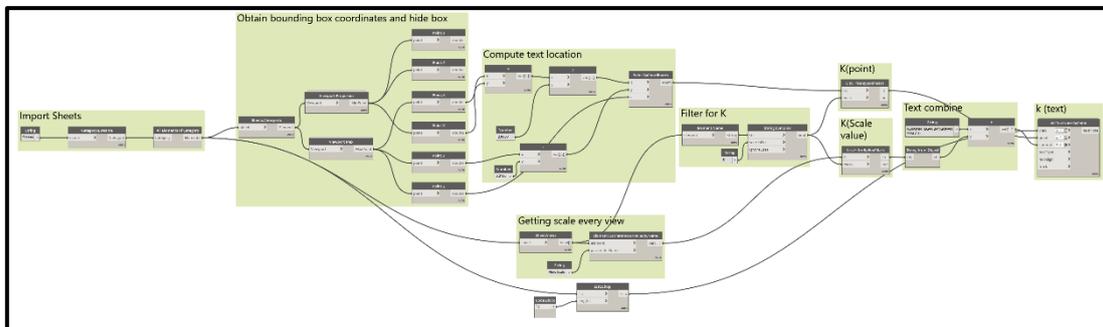


Figure 4.36 The process of Figure 4.35 in script form



Figure 4.37 The elevation view title, with the bounding box removed

4.4.3.6 Insert Floor Plan View Title for each Sheet

The purpose of this script is to insert the floor plan view title for each sheet. This involves getting the information for the minimum & maximum parcel number in the floor plan view as well as the floor plan scale and output it as the floor plan view title. The information is stored as shared parameters in 4.3.2.1. Figure 4.38 shows the Dynamo script logic for 4.4.3.6, while Figure 4.39 shows the detailed script within Dynamo, and Figure 4.40 shows the result from running the Dynamo script.

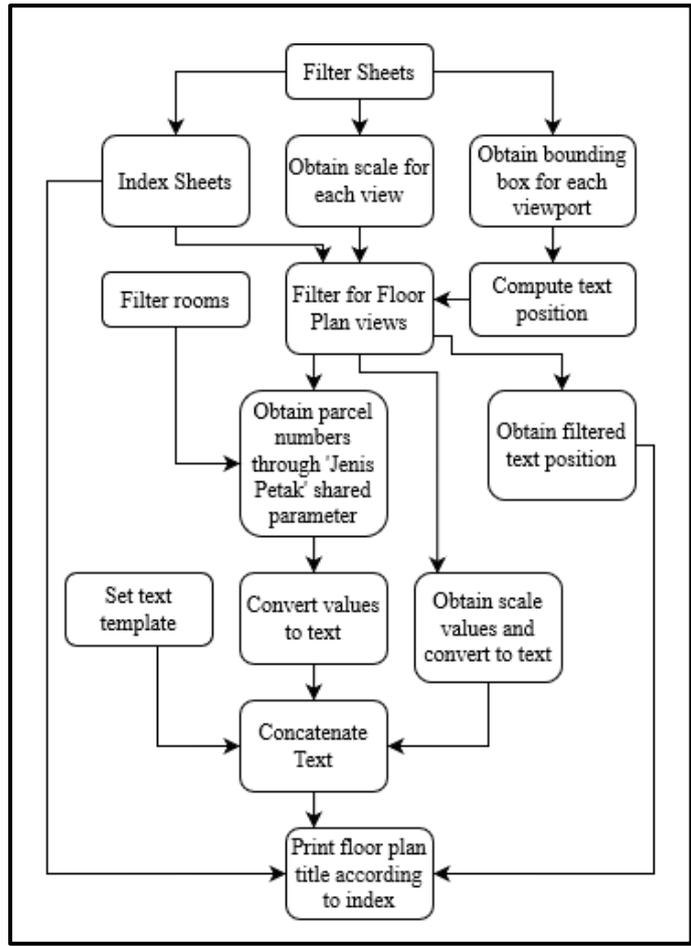


Figure 4.38 Dynamo script logic for 4.4.3.6

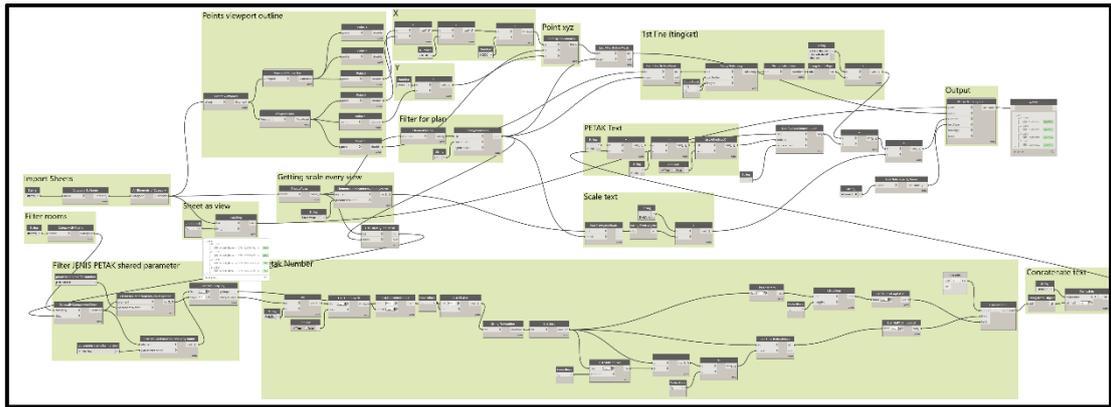


Figure 4.39 The process of Figure 4.38 in script form

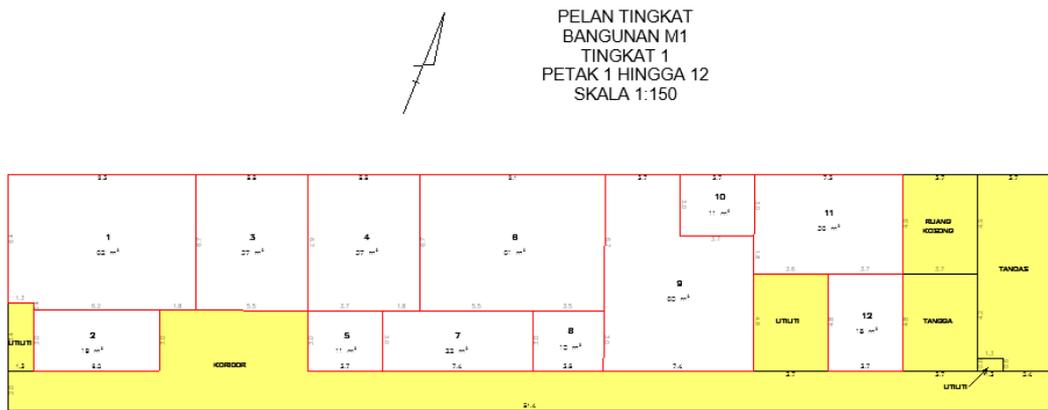


Figure 4.40 The generated Floor Plan title

4.4.3.7 Insert Date and CPS Number for each Sheet

The purpose of this script is to insert the date of plan generated as well as the CPS number for each Sheet. This involves getting the information for the current day as well as the CPS number for each sheet. Again, the information is stored as shared parameters. Figure 4.41 shows the Dynamo script logic for 4.4.3.7, while Figure 4.42 shows the detailed script within Dynamo, and Figure 4.43 shows the result from running the Dynamo script.

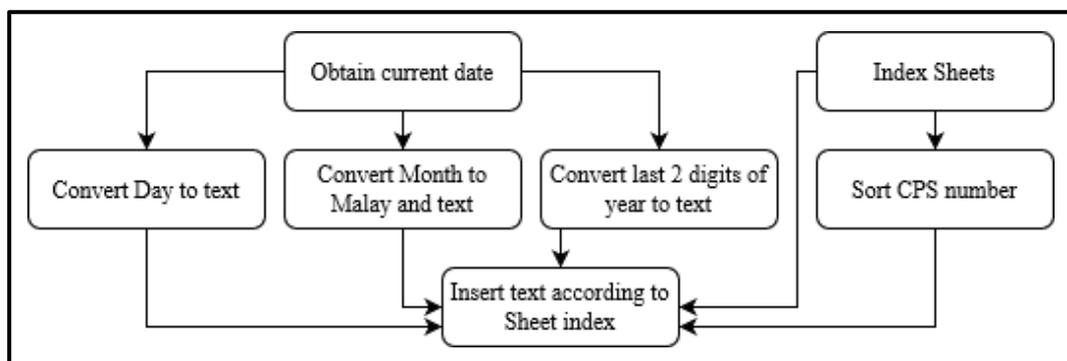


Figure 4.41 Dynamo script logic for 4.4.3.6

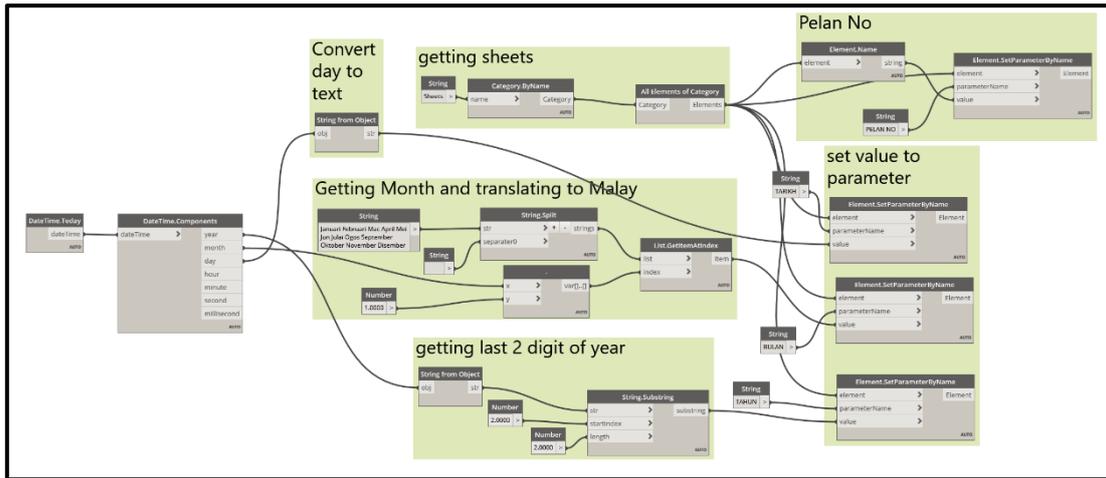


Figure 4.42 The process of Figure 4.41 in script form

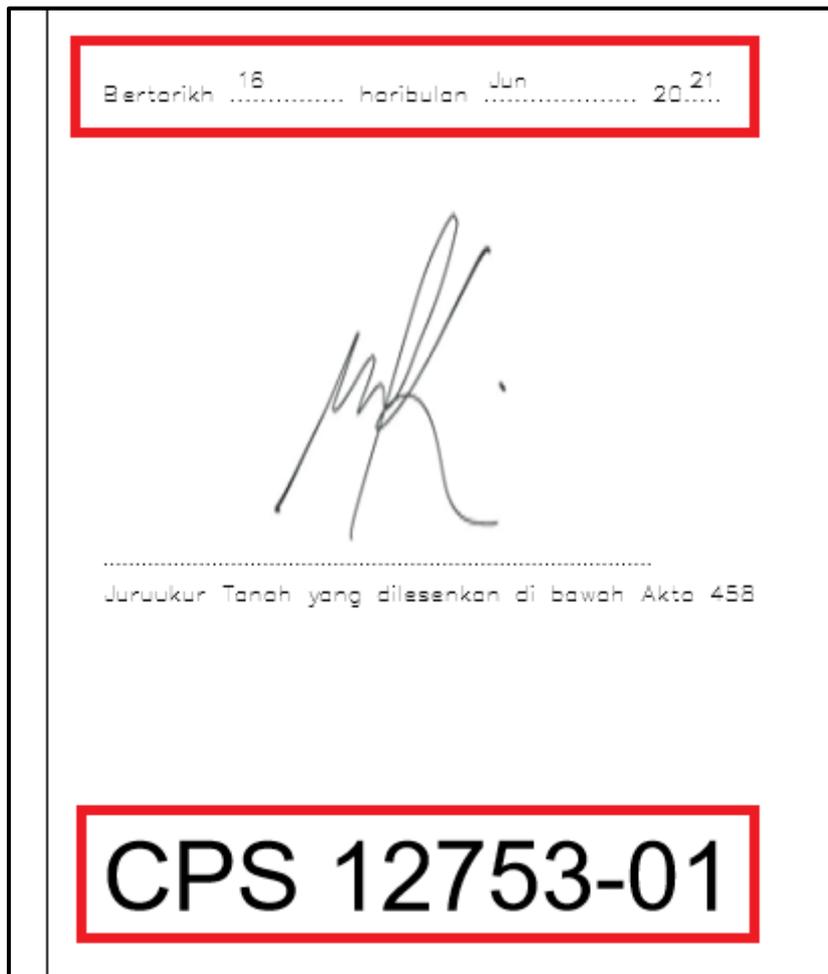


Figure 4.43 The added date and CPS number for CPS 12753-01

4.4.4 Exporting the CPS plans

After producing the CPS Sheets using Dynamo, the Sheets can then be manually exported into DWG files. The printing of the CPS plans to .pdf files is performed in AutoCAD.

4.4.5 Exporting the StrataDXF

To export the StrataDXF, the floor plans generated in 4.3.2 are orientated to True North and exported into DWG files. Coordinates of the StrataDXF are applied a translation of -53000m to shift the StrataDXF data back to its original position. The layers of the room polylines as well as other information within the floor plans are amended according to the StrataDXF format. A total of 5 plans are generated, including 4 floor plans and one elevation plan. Figure 4.44 shows the amended StrataDXF file for the first floor, and Figure 4.45 shows the amended StrataDXF file for the elevation plan.

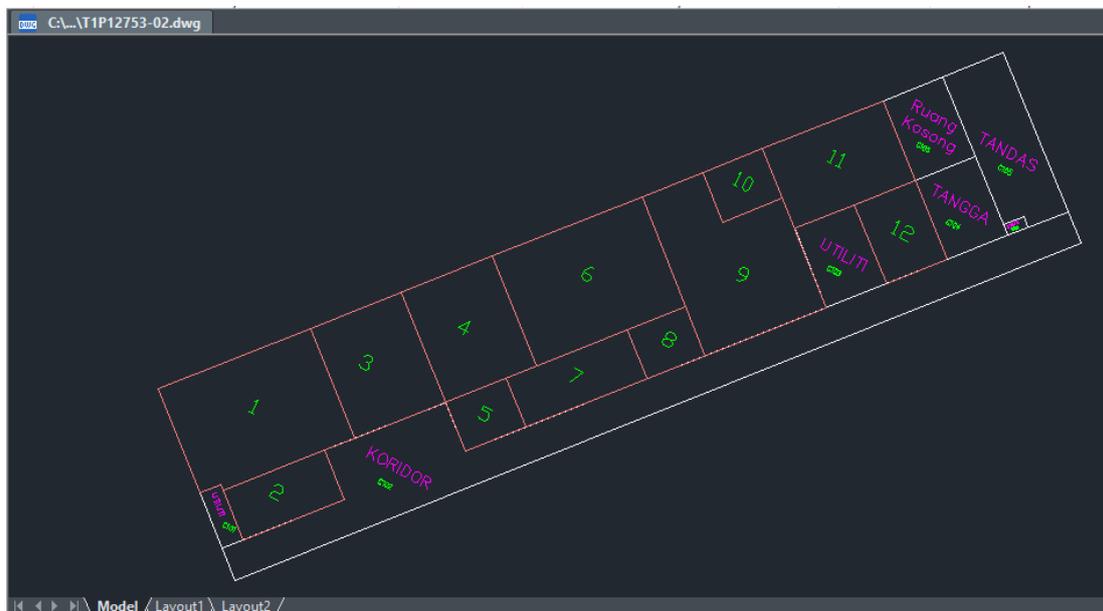


Figure 4.44 Amended floor plan as StrataDXF

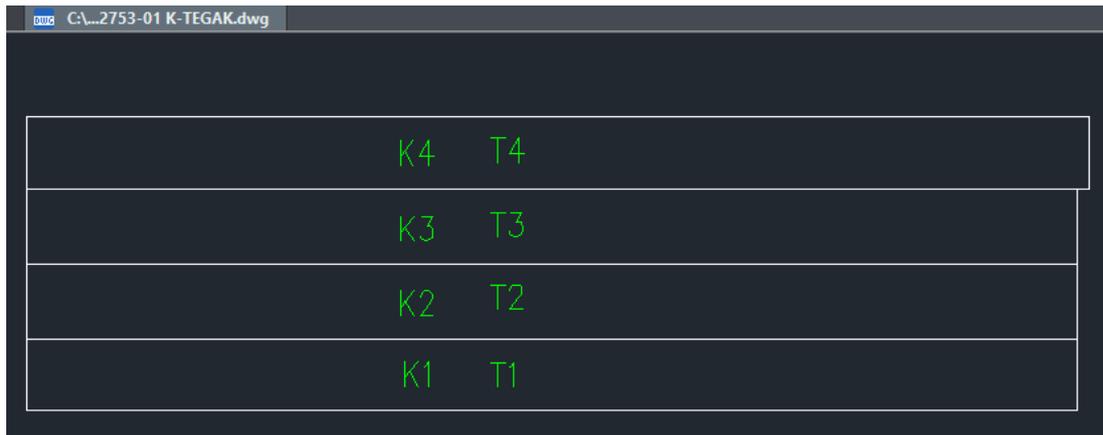


Figure 4.45 Amended elevation plan as StrataDXF

4.5 Accuracy Checking

With the strata plans generated, the dimensions can be compared with the building plans to obtain the RMSD value.

4.5.1 Comparison between Strata Plans & Distometer Values

The generated CPS is compared with the building plans measured using the distometer. A total of 46 distances were measured on the 1st floor of Block C05. These distances are then compared with the CPS of the 1st floor, which was re-generated using the Dynamo script from 4.4.2 with 3 decimal points. Figure 4.46 shows the building plan and the CPS of the 1st floor, while Table 4.1 shows the differences in distances between the 2 plans.

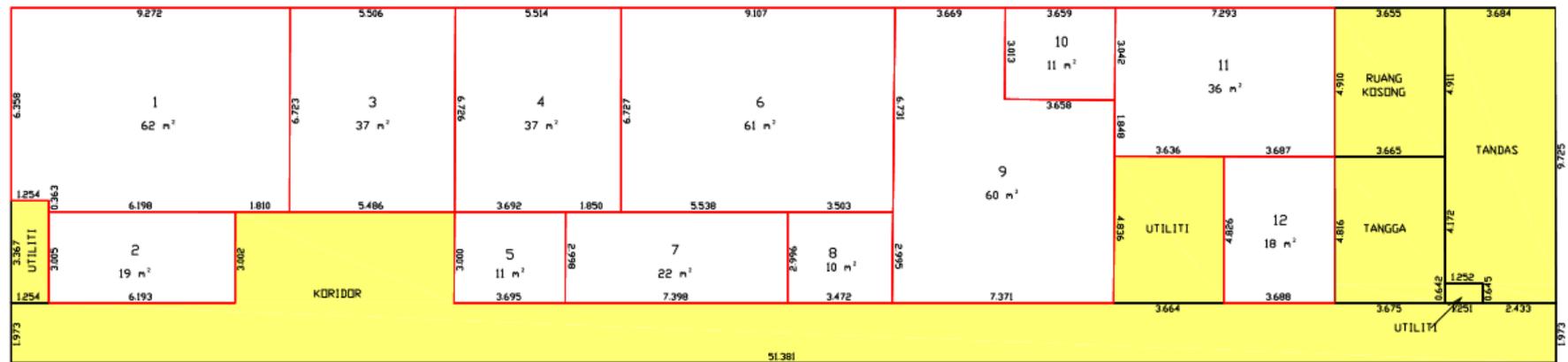
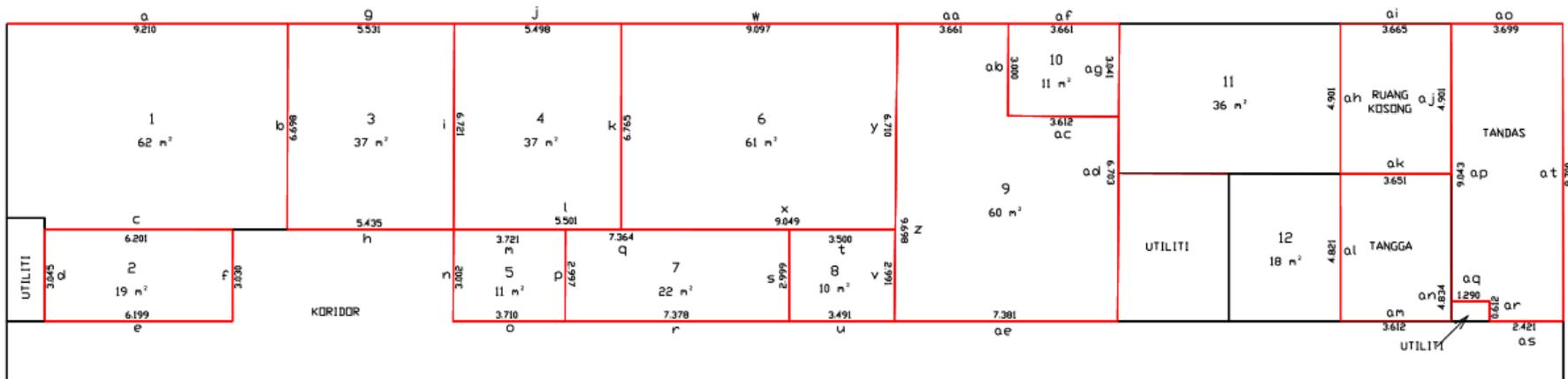


Figure 4.46 Building plan with distometer values (top) and CPS with 3 decimal point dimensions (bottom). Red lines in the building plan denotes walls with measured dimensions,.

Table 4.1 Difference between dimensions from CPS & Building Plans for 1st
 floor

Line	CPS	Building Plans	Difference	Difference Squared
a	9.272	9.210	0.062	0.004
b	6.723	6.698	0.025	0.001
c	6.198	6.201	-0.003	0.000
d	3.005	3.045	-0.040	0.002
e	6.193	6.199	-0.006	0.000
f	3.002	3.030	-0.028	0.001
g	5.506	5.531	-0.025	0.001
h	5.486	5.435	0.051	0.003
i	6.726	6.721	0.005	0.000
j	5.514	5.498	0.016	0.000
k	6.727	6.765	-0.038	0.001
l	5.542	5.501	0.041	0.002
m	3.692	3.721	-0.029	0.001
n	3.000	3.002	-0.002	0.000
o	3.690	3.710	-0.021	0.000
p	2.998	2.997	0.001	0.000
q	7.388	7.364	0.024	0.001
r	7.398	7.378	0.020	0.000
s	2.996	2.999	-0.003	0.000
t	3.503	3.500	0.003	0.000
u	3.472	3.491	-0.019	0.000
v	2.995	2.991	0.004	0.000
w	9.107	9.097	0.010	0.000
x	9.041	9.049	-0.008	0.000
y	6.731	6.710	0.021	0.000
z	9.726	9.698	0.028	0.001
aa	3.669	3.661	0.008	0.000
ab	3.013	3.000	0.013	0.000
ac	3.658	3.612	0.046	0.002
ad	6.684	6.703	-0.019	0.000
ae	7.371	7.381	-0.010	0.000
af	3.659	3.661	-0.002	0.000
ag	3.042	3.041	0.001	0.000
ah	4.910	4.901	0.009	0.000
ai	3.655	3.665	-0.010	0.000
aj	4.911	4.901	0.010	0.000
ak	3.665	3.651	0.014	0.000
al	4.816	4.821	-0.005	0.000
am	3.675	3.612	0.063	0.004

an	4.814	4.834	-0.020	0.000
ao	3.684	3.699	-0.015	0.000
ap	9.083	9.043	0.040	0.002
aq	1.252	1.290	-0.038	0.001
ar	0.645	0.612	0.033	0.001
as	2.433	2.421	0.012	0.000
at	9.725	9.700	0.025	0.001
			SUM	0.030
			Data Count	46.000
			Sum/Data Count	0.001
			RMSD	0.026

From Table 4.1, there was no difference of dimension for the lines which exceeds 0.1m. Therefore, the 3D model and the CPS generated is said to be within acceptable tolerance. The RMSD computed from the data in Table 4.1 using equation 3.1 is 0.026m, which is also within the 0.1m tolerance. Even though the dimensional data is compared on the 1st floor alone, however the low RMSD values indicates that the as-built strata survey performed with the TLS is within acceptable standard, which means that the CPS are fit for submission to JUPEM.

4.6 StrataXML

The StrataDXF files generated from 4.4.5 are imported into StrataXML software. Additional details are provided to the software as shown in Figure 4.47:

The screenshot shows a software window titled "Keterangan Skim" with a form for "Lokasi Ukur Strata Dan Butiran Lain-Lain". The form is divided into several sections:

- Lokasi Ukur Strata Dan Butiran Lain-Lain:** Fields for "Kod dan Nama Negeri" (01 NEGERI JOHOR), "Kod dan Nama Daerah" (02 DAERAH JOHOR BAHRU), "Kod dan Nama Mukim/Bandar" (03 MUKIM PULAI), and "Kod dan Nama Seksyen" (000).
- Pilih Negeri atau W. Persekutuan:** A grid of buttons for various states: Johor, N. Sembilan, Perlis, Kuala Lumpur, Kedah, Pahang, Selangor, Putrajaya, Kelantan, P. Pinang, Terengganu, Melaka, and Perak.
- Lot and Strata Details:** Fields for "Nombor Lot Lama" (11768), "Nombor Skim" (1234), "Nombor PA" (11753), "Nombor Hakmilik" (GM1234), "Luas dalam M.P." (3588.4), "Fail Ukur Strata JUPEM" (PUBLJ105_2021), "Fail PTG" (PTG MWK325-2021), and "Fail Pejabat Tanah".
- Project and Land Details:** Fields for "Nama JUB" (MOK WAI KHENG), "No. K/P JUB" (971125105845), "Format HHBBTTTT" (HHBBTTTT), "Bilangan Petak" (24), "Bilangan Petak_KR" (0), "Bilangan Petak Tanah" (0), "Bilangan Petak Aksesori" (0), "Bilangan Petak Aksesori_KR" (0), "Tarikh Sijil Aduan diterima" (15102020), "Tarikh Pemohonan dilulus" (25102020), and "Format Tarikh HHBBTTTT" (HHBBTTTT).
- Owner and Project Information:** Fields for "Nama Pemaju" (UNIVERSITI TEKNOLOGI MALAYSIA), "Alamat Pemaju" (UNIVERSITI TEKNOLOGI MALAYSIA, 81300 JOHOR BAHRU, JOHOR), "Nama Badan Pengurusan" (FABU UTM), "Alamat Badan Pengurusan" (FAKULTI ALAM BINA DAN UKUR, UNIVERSITI TEKNOLOGI MALAYSIA, 81300 JOHOR BAHRU, JOHOR), "Nama Projek" (FABU BLOK C05), and "Lokasi Projek" (FAKULTI ALAM BINA DAN UKUR, UNIVERSITI TEKNOLOGI MALAYSIA, 81300 JOHOR BAHRU, JOHOR).
- Reference and Unit Details:** Fields for "No Rujukan JUB Jw/ Mw/K01", "No Rujukan LJT 202-MwK", "Fail Ukur Semula JUPEM" (PUBLJ105_2020), "Kod Tujuan Ukur" (18), "18 - Pecah Bahagi Bangunan" (44), "Pecah Bahagi Tanah" (41), "Pecah Bahagi Bangunan dan Tanah", and "Jumlah Unit Syer" (1751).
- Registration and Building Details:** Fields for "No Sijil CPSP" (CPSP01), "Tarikh Sijil CPSP dilulus" (02022021), "Format Tarikh HHBBTTTT" (HHBBTTTT), "No Buku Kerjalar" (1234), "Bilangan No Folio Buku Kerjalar" (1), "1 atau lebih", "No Sijil Aduan" (C123456), "No Jadual Petak" (4), "No CPS/PAB" (12753), "Bilangan No Folio CPS/PAB" (5), "Jenis Pembangunan" (1), and "Nama Pemilik Asal" (UNIVERSITI TEKNOLOGI MALAYSIA).
- Legend:** A legend on the right side of the form lists building types: 1 - Kediaman, 2 - Perniagaan, 3 - Industri, 4 - Bercampur.
- Notes and Buttons:** A yellow note box states: "Nota: Jika data bagi petak berwarna kuning tidak didapati, biarkan petak berkenaan kosong". A "Tutup" button is located at the bottom right.

Figure 4.47 Information requested by the StrataXML software

The software reads the StrataDXF input and converts the StrataDXF into StrataXML code. Figure 4.48 shows the process of the StrataDXF files being read by StrataXML, Figure 4.49 shows the number of parcels and common properties identified by the software, and Figure 4.50 shows part of the completed StrataXML code.

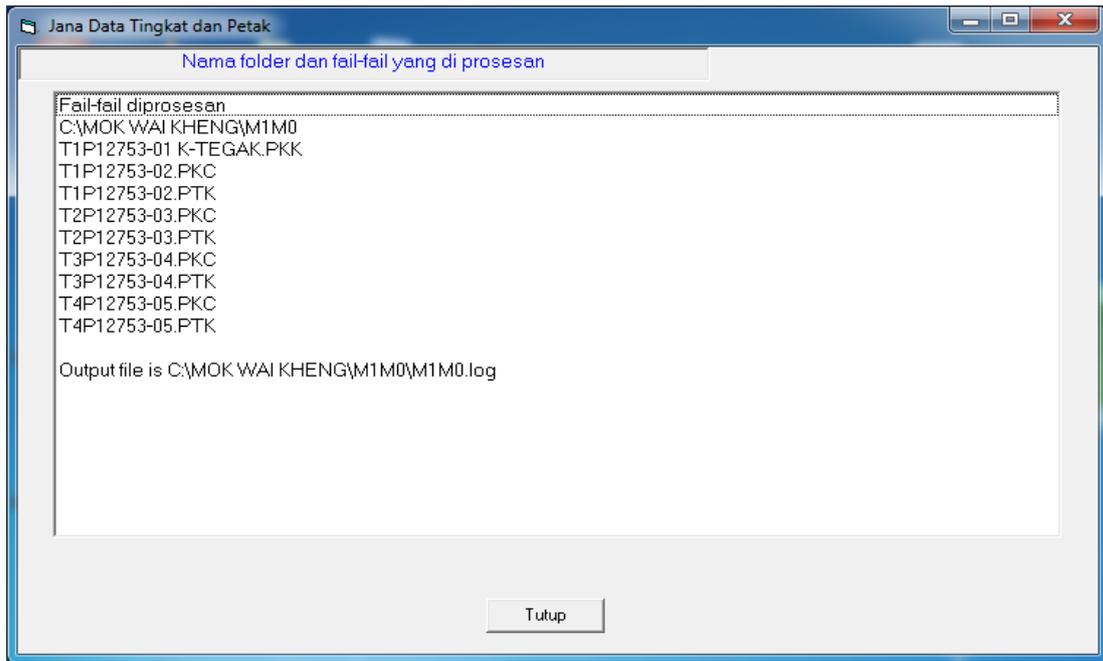


Figure 4.48 StrataDXF files in process

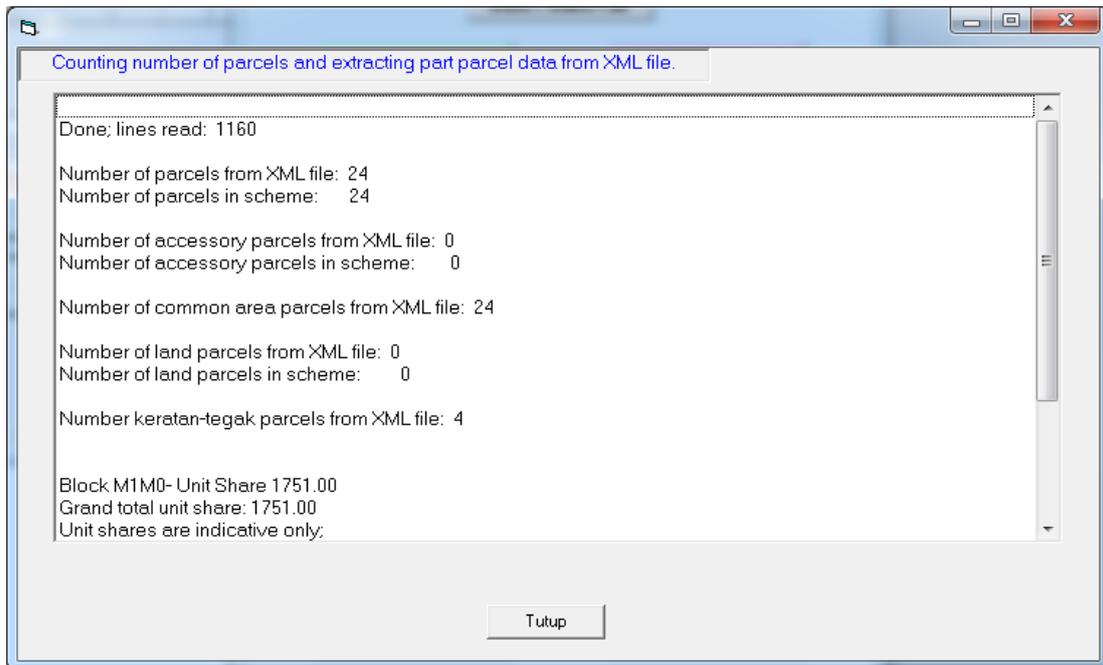


Figure 4.49 Number of parcels and common properties identified

```

File Edit Format View Help
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bilangan_petak_kr="0" bilangan_petaktanah="0" bilangan_aksesori="0" bilangan_aksesori_kr="0"
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TEKNOLOGI MALAYSIA, 81300 JOHOR BAHRU, JOHOR" nama_projek="FABU BLOK C05" lokasi="FAKULTI ALAM BINA DAN UKUR,
UNIVERSITI TEKNOLOGI MALAYSIA, 81300 JOHOR BAHRU, JOHOR" no_ruj_jubl="JW MWK01" no_ruj_ljt="202-MWK"
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nojadualpetak="4" pab="PA(B)12753" pab_folio="5" jenis_pembangunan="1" nama_pemilik_asal="UNIVERSITI TEKNOLOGI
MALAYSIA">
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is_kr="N">
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no_of_petak="12" no_of_petak_kr="0" no_of_aksesori="0" no_of_aksesori_kr="0" area="601.000" unit="M"
height="3.507" altitude="1.000" namalaintingkat="" keratan_groupid="0102030000011753(B)M1(GK)1">
  <Petak petakno="(P)2" upi="0102030000011753(B)M1(M)0(T)1(P)2" g_area="18.607" a_area="19" jp_area="19"
a_unit="M" height="3.507" altitude="1.000" pab="PA(B)12753" folio="02" kodkegunaanpetak="REU3" namapetak=""
rastertable="" unitsyer="19.00" is_kr="N">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)2" bearing="158.1442" g_distance="3.003"
a_distance="3.003" unit="M" guid="6911b53cb0304c62a042e415655d0272" isislandlot="false">
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guid="03c8cf5256c54b1c84f95408fd606d9" isislandlot="false" />

```

Figure 4.50 The generated StrataXML ASCII file

The StrataXML ASCII is then validated with the XSD file provided by JUEPM to check the validity of the XML ASCII. Figure 4.51 shows the results of the validation process.

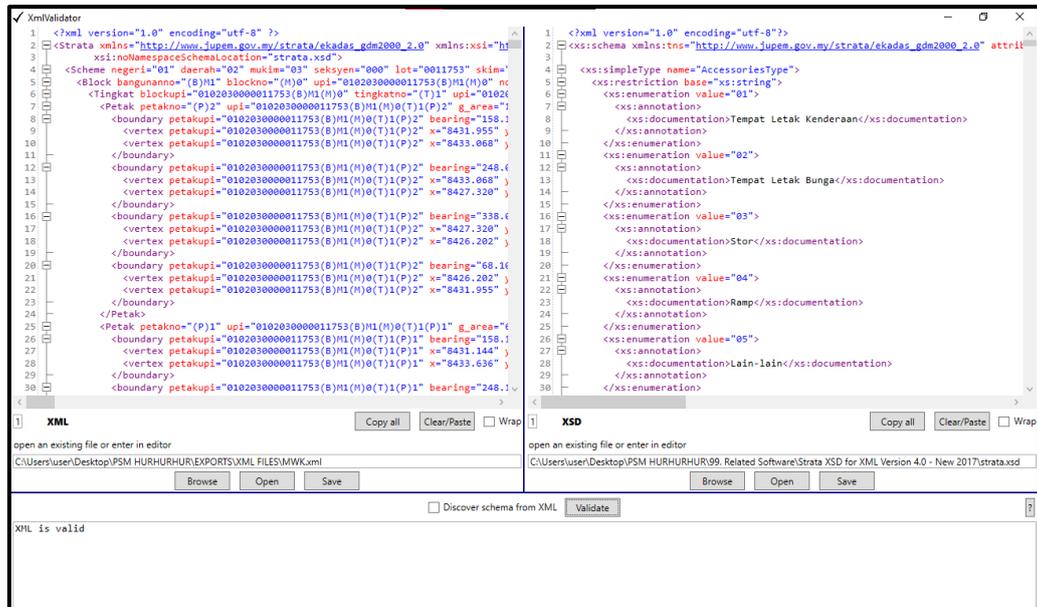


Figure 4.51 Validation result. The StrataXML (left) is compared with the XSD (right)

4.7 Comparison between TLS and Distometer Measurement Method

Through using both equipment to perform the as-built strata survey, it can be said that the accuracy of the measurements is higher using TLS, since it is able to capture and display walls that are not perpendicular to each other. Using the distometer, it is assumed that all walls are perpendicular to each other unless visibly slanted or curved. It is even possible to generate the bearings of the walls via data captured by TLS. Compared to using a distometer to perform the as-built strata survey, the perpendicularity of the walls cannot be measured using a distometer.

However, using a distometer does have its own advantages. It is a fast and convenient tool to obtain direct measurements of the dimension of the walls. This allows for in-situ dimension checking with reference to building plans. In comparison, the TLS data have to be post-processed in order to identify errors in the construction. Table 4.2 shows the comparison between using TLS and distometer for as-built strata survey.

Table 4.2 General comparison between TLS and Distometer

Equipment	TLS	Distometer
Time taken for data acquisition (Per floor)	5 hours	1.5 hours
Time taken for data acquisition (Whole block)	3 days	1 day
Time taken to process dimension data	3 days	On the spot/1 hour after data collection
Data collected	3D point cloud model	2D distance
Minimum manpower required	2 persons	2 persons
Cost of equipment	RM 190 000	RM 1 000

From Table 4.2, it can be seen that the benefits of using a distometer outweighs the benefits of using a TLS for as-built strata survey. However, with regards to the completeness of the data acquired, TLS provides a more in-depth model of the as-built of the building as compared to distometer. Also, the legal traceability of the TLS method is more complete as compared to using the distometer, since the 3D point cloud model can be directly visualized using software to identify errors in the as-built building. Although the current standard of legal traceability with regards to as-built strata survey is by manually recording the distances into a survey fieldbook, however this method is prone to observation and recording errors, which can be eliminated by the TLS method, which automatically generates the distances based on the 3D building model.

4.8 Advantages and Limitations of As-built Strata Survey with TLS

With regards to the data acquisition speed, TLS is a good tool to acquire large spaces in a short amount of time. However, with as-built strata survey, the amount of time taken to perform the as-built strata survey using TLS takes more time as compared to using a distometer. This is due to the small unit space of interior rooms within buildings, which forces the TLS setup to be in direct line of sight of the corners of the buildings in order to be able to extract the dimension data. Thus, the amount of scanstations required to be set up per floor in order to acquire the 3D point cloud model of the data results in the increase of the data acquisition period for the floor. Another laser-based scanning equipment, the mobile laser scanner (MLS), is able to resolve the issue of long data acquisition period faced by TLS, and according to Russhakim (2018), the accuracy of the MLS is within acceptable limits with regards to as-built strata survey.

Besides the time taken to acquire the data, the experience of the on-site TLS handler is crucial to ensure that the results obtained are of good quality. This is due to the TLS handler being able to interpret errors and warnings generated by the TLS in the event of equipment mishandling or improper setup of any related equipment, and rectify accordingly. A well-experienced TLS handler is able to guide and

identify suitable spots to set up the TLS stations to perform data acquisition in a short period of time, which helps to reduce the data acquisition period.

However, TLS excels in providing the legal traceability of the data, whereby the point cloud model is hard to be manipulated. Also, the point cloud model can be consistently re-processed to obtain the same results. This is beneficial to licensed land surveyors in the event whereby if the validity of the as-built survey data is challenged in court, the results can be reproduced to prove that the survey is performed to meet the accuracy of the as-built strata survey.

To be able to take advantage of the TLS' capability to perform large scale measurements for as-built strata survey, the TLS can be used to perform building façade observations, while the interior of the building is surveyed using MLS. The data from both equipment can then be merged together to provide the complete 3D point cloud model of the building. Also, a TLS with a mounted camera can be used to perform survey of the parking lot accessory parcels, as the mounted camera provides colour coding to the point clouds which makes it easier to digitize the centerline of the parking lot boundary during post-processing of the TLS data. Large empty areas, such as the basement of the parking lot, shopping malls, ceremonial halls, and more, would be easily surveyed by the TLS with high accuracy.

4.9 Conclusion

This chapter shows the results obtained from the as-built strata survey with TLS. The generated strata plans are shown to be fit for submission based on the low RMSD values, and the StrataXML ASCII code is proven to be generated according to JUPEM standards via validation. It can be concluded that the TLS is a suitable tool for as-built strata survey, however small spaces within the building increased the number of setups required, which in turn increased the data acquisition period. A more suitable equipment, such as the MLS, would be more beneficial to be used for as-built strata survey, however that shall be determined by further research.

CHAPTER 5

CONCLUSION & RECOMMENDATION

5.1 Conclusion

In conclusion, this research was able to achieve the stated objectives, which are to produce the georeferenced 3D building model, and to produce strata plans and the StrataDXF from the 3D building model for building plan comparison and StrataXML data input. The literature review, methodology, results and analysis, are all shown in the respective sections of the study.

Through this research, the georeferenced 3D building model was able to be generated, and the Dynamo scripts were able to generate the strata plans, however the StrataDXF still needs to be manually generated. This could be resolved in the future with further research. The low RMSD values between the building plan and the generated strata plans show that the methodology proposed is applicable with regards to current as-built strata survey standards. The output from this research are the .DWG strata plans, .DWG StrataDXF, StrataXML ASCII file, as well as the Dynamo scripts (in .DYN format).

5.2 Recommendations

There are several recommendations that can be proposed to further improve the study. These are as follows:

- I. This research did not include accessory parcels such as parking lots, air-conditioning ledges, and other accessory parcels. The inclusion of accessory parcels during the as-built strata survey will further improve this research.

- II. The time taken to perform as-built strata survey using TLS is too long, however the level of detail that the TLS is able to capture, as well as the data capture range of the TLS, is suitable for building façade observation. As-built strata survey would be quicker to complete if the TLS is purely used for building façade observation and observation of large spaces such as parking lots, basements, halls, and other large spaces, while a MLS is used to perform the interior strata survey. The point clouds can be merged together to generate the 3D building model according to the methodology of this research.

- III. Dynamo can be used as a compiler tool to generate SiFUS as well as the complete StrataXML ASCII code. This removes the need for external StrataXML compilers as well as the need to export StrataDXF files from Revit, since Dynamo itself is configured to directly compile and export the StrataXML ASCII file.

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Appendix A Raw Coordinate Data from GNSS

STN1-1	-53328.355	8498.626	34.878
STN1-2	-53328.353	8498.622	34.867
STN1-3	-53328.349	8498.619	34.879
STN1-4	-53328.360	8498.631	34.913
STN1-5	-53328.368	8498.629	34.929
STN1-6	-53328.372	8498.629	34.933
STN1-7	-53328.355	8498.636	34.889
STN1-8	-53328.358	8498.629	34.892
STN1-9	-53328.367	8498.631	34.913
STN1-10	-53328.367	8498.626	34.927
STN1-11	-53328.367	8498.629	34.912
STN1-12	-53328.360	8498.620	34.902
STN1-13	-53328.364	8498.630	34.914
STN1-14	-53328.369	8498.625	34.940
STN1-15	-53328.360	8498.628	34.921
STN1-16	-53328.358	8498.626	34.919
STN1-17	-53328.348	8498.639	34.906
STN1-18	-53328.351	8498.629	34.890
STN1-19	-53328.348	8498.634	34.882
STN1-20	-53328.327	8498.623	34.829
STN1-21	-53328.326	8498.615	34.823
P19-1	-53379.300	8925.136	17.503
P19-2	-53379.296	8925.145	17.531
P19-3	-53379.297	8925.148	17.507
P19-4	-53379.306	8925.139	17.530
P19-5	-53379.295	8925.129	17.540
P19-6	-53379.325	8925.160	17.555
P19-7	-53379.313	8925.144	17.527
P19-8	-53379.306	8925.154	17.531
P19-9	-53379.290	8925.147	17.500
P19-10	-53379.295	8925.144	17.502
P19-11	-53379.307	8925.154	17.514
P19-12	-53379.306	8925.152	17.522
P19-13	-53379.295	8925.151	17.536
P19-14	-53379.306	8925.167	17.542
P19-15	-53379.320	8925.171	17.517
P19-16	-53379.303	8925.164	17.502
P19-17	-53379.318	8925.171	17.467
P19-18	-53379.318	8925.176	17.486
P19-19	-53379.330	8925.168	17.520
P19-20	-53379.330	8925.164	17.537
STN2-1	-53352.014	8461.929	34.794

STN2-2	-53352.012	8461.929	34.794
STN2-3	-53352.013	8461.923	34.787
STN2-4	-53352.015	8461.928	34.782
STN2-5	-53352.004	8461.918	34.795
STN2-6	-53352.009	8461.926	34.752
STN2-7	-53352.010	8461.923	34.756
STN2-8	-53352.012	8461.926	34.738
STN2-9	-53352.017	8461.928	34.736
STN2-10	-53352.019	8461.935	34.741
STN2-11	-53352.019	8461.940	34.741
STN2-12	-53352.020	8461.945	34.738
STN2-13	-53352.008	8461.943	34.707
STN2-14	-53352.009	8461.943	34.716
STN2-15	-53352.006	8461.942	34.693
STN2-16	-53352.007	8461.948	34.678
STN2-17	-53352.009	8461.962	34.654
STN2-18	-53352.004	8461.955	34.651
STN2-19	-53352.001	8461.952	34.646
STN2-20	-53352.003	8461.956	34.652
HELI1	-53555.214	8454.583	34.275
HELI2	-53555.228	8454.598	34.239
HELI3	-53555.224	8454.600	34.252
HELI4	-53555.223	8454.587	34.255
HELI5	-53555.219	8454.586	34.255
HELI6	-53555.224	8454.595	34.270
HELI7	-53555.226	8454.595	34.288
HELI8	-53555.219	8454.601	34.266
HELI9	-53555.226	8454.589	34.264
HELI10	-53555.224	8454.597	34.259
HELI11	-53555.216	8454.584	34.258
HELI12	-53555.212	8454.598	34.268
HELI13	-53555.228	8454.588	34.280
HELI14	-53555.227	8454.596	34.286
HELI15	-53555.224	8454.593	34.289
HELI16	-53555.230	8454.594	34.277
HELI17	-53555.231	8454.592	34.294
HELI18	-53555.226	8454.597	34.279
HELI19	-53555.227	8454.598	34.289
HELI20	-53555.229	8454.593	34.301

Appendix B Horizontal & Vertical Datum Computation

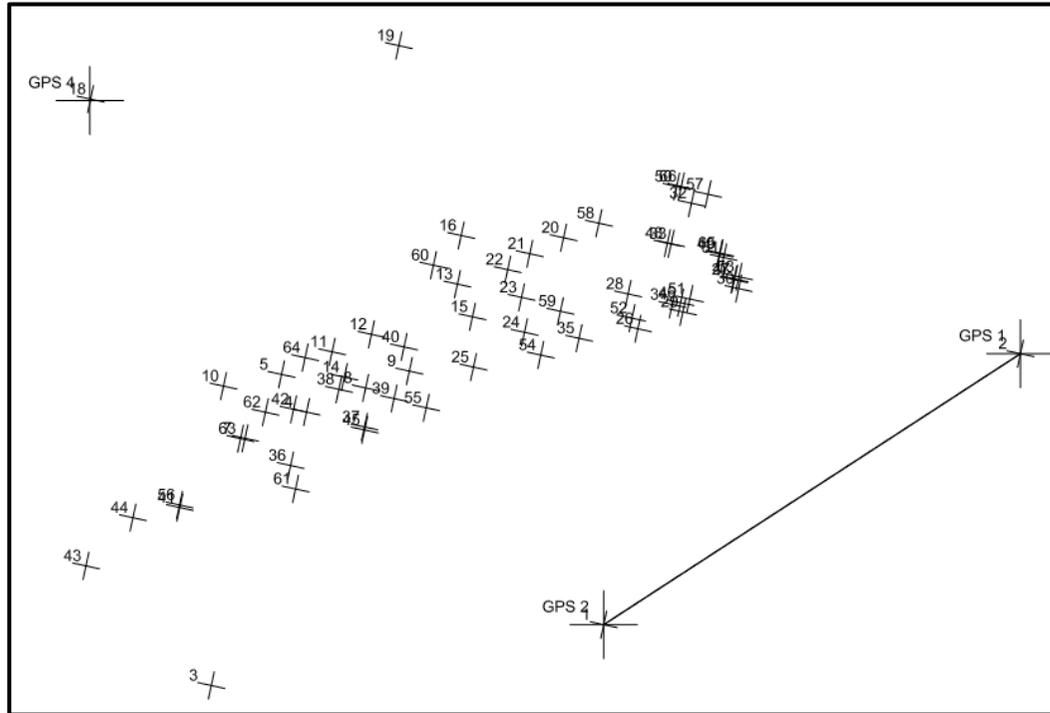
	N	E		
STN 2	-53352.010	8461.938	Distance 2-1 (GPS)	43.654
STN 1	-53328.356	8498.627	Distance 2-1 (TS)	43.636
Brg 2-1	57°11'23"		Difference	0.018

APPLY HORIZONTAL SHIFT N+53000

HELI	-53555.224	8454.593	34.272	-555.224	8454.593	34.272
P19	-53379.308	8925.154	17.518	-379.308	8925.154	17.518
2	-53352.010	8461.938	34.728	-352.010	8461.938	34.728
1	-53328.356	8498.627	34.898	-328.356	8498.627	34.898

		Known height value (UKK)	DIFF	ADJUSTED HEIGHT TO HELI
HELI	34.272	34.198	-0.074	34.198
P19	17.518	17.538	0.020	17.444
2	34.728			34.653
1	34.898			34.824

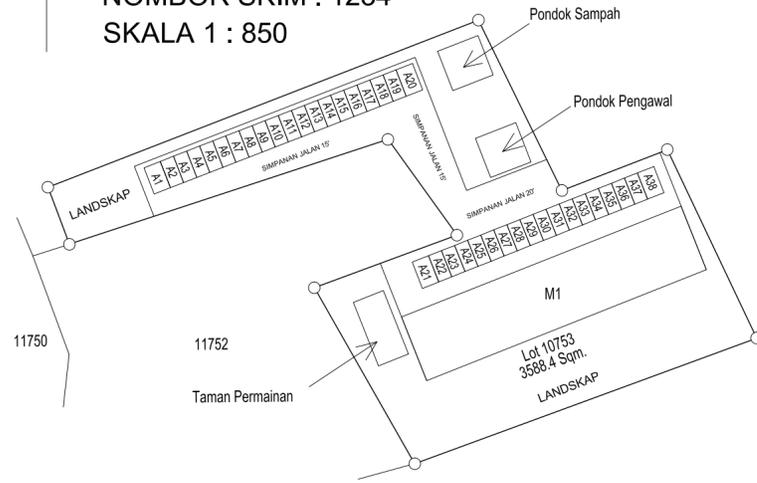
Appendix C Comparing TLS and Control Traverse Coordinates



	Control Traverse			TLS			DIFFERENCE			DISTANCE
	N	E	H	N	E	H	N	E	H	
1	-328.365	8498.615	34.803	-328.363	8498.618	34.803	-0.002	-0.003	0.000	0.004
2	-352.010	8461.938	34.653	-352.010	8461.938	34.653	0.000	0.000	0.000	0.000
4	-306.270	8416.711	34.678	-306.142	8416.774	34.727	-0.128	-0.063	-0.049	0.151

Appendix D CPS Plans

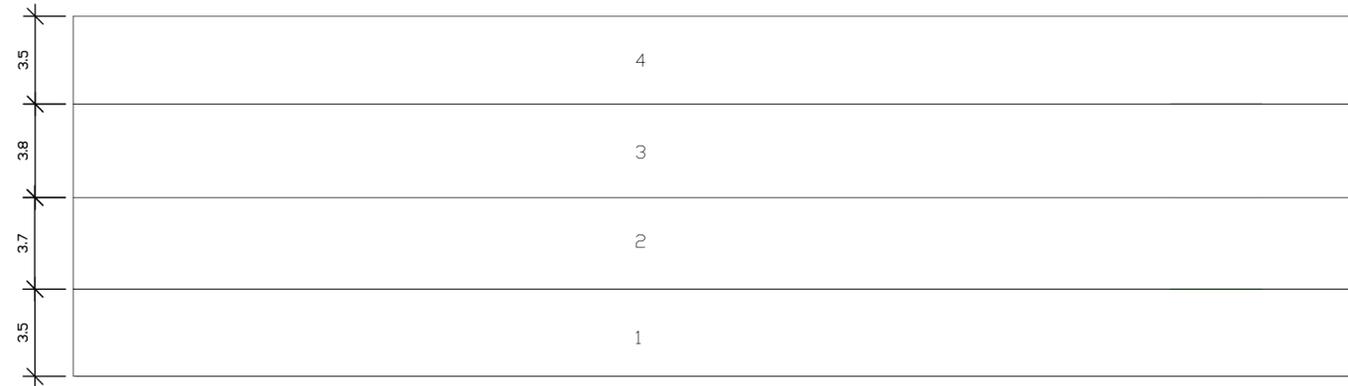
CADANGAN PELAN STRATA
 PECAH BAHAGI BANGUNAN
 NEGERI JOHOR
 DAERAH JOHOR BAHRU
 MUKIM PULAI
 LOT 10753 (PA 10753)
 NOMBOR HAKMILIK : GM 1234
 KELUASAN LOT : 3588.4 m²
 NOMBOR SKIM : 1234
 SKALA 1 : 850



PETUNJUK :



KERATAN TEGAK BANGUNAN
 SKALA 1:200



Saya, Sr. Mok Wai Kheng, seorang Juruukur Tanah yang dilesenkan dibawah Akta Juruukur Tanah Berlesen 1958 [Akta 458], memperakui menurut menurut subperenggan 8A(1)(d)(i),(ii),(iii) dan (iv) Akta Hakmilik Strata 1985 [Akta 318] bahawa-

(i) saya telah membuat perbandingan pelan ini dengan pelan bangunan yang diluluskan yang disediakan oleh Arkitek Professional atau Jurutera Professional yang bertanggungjawab atas pembinaannya dan bahawa pelan ini adalah menepati pelan tersebut;

(ii) dalam hal pelan tingkat, bahawa sempadan petak - petak yang ditunjukkan di atasnya mengikut ciri - ciri pembinaan tetap yang terdapat dalam bangunan itu;

(iii) bangunan - bangunan adalah terletak keseluruhannya dalam sempadan lot

10753, Mukim Pulau, Daerah Johor Bahru, Johor;

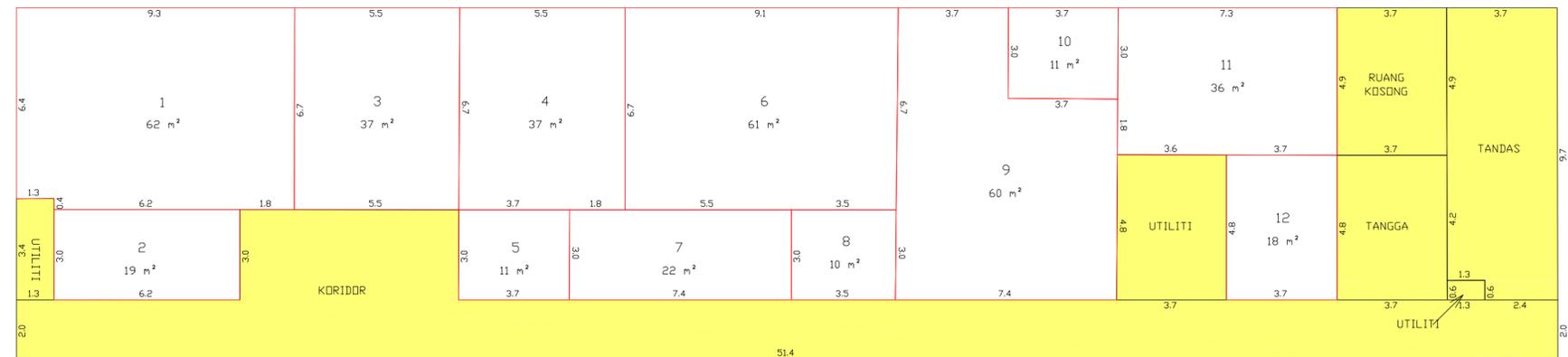
(iv) setiap petak yang dicadangkan itu mempunyai-

- (A) Jalan masuk yang memadai yang tidak melintasi suatu petak yang lain; dan
- (B) jalan perhubungan dalaman yang memadai tidak melintasi harta bersama.

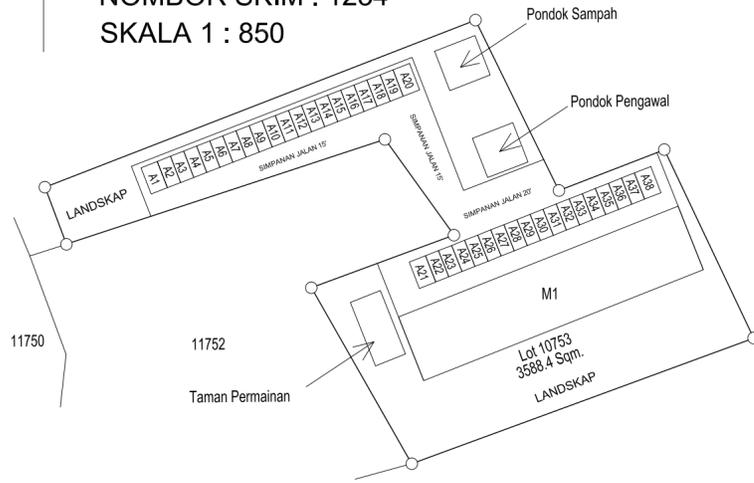
Bertarih 16 Jun 2021
 haribulan 20:21

Juruukur Tanah yang dilesenkan di bawah Akta 458

PELAN TINGKAT
 BANGUNAN M1
 TINGKAT 1
 PETAK 1 HINGGA 12
 SKALA 1:150



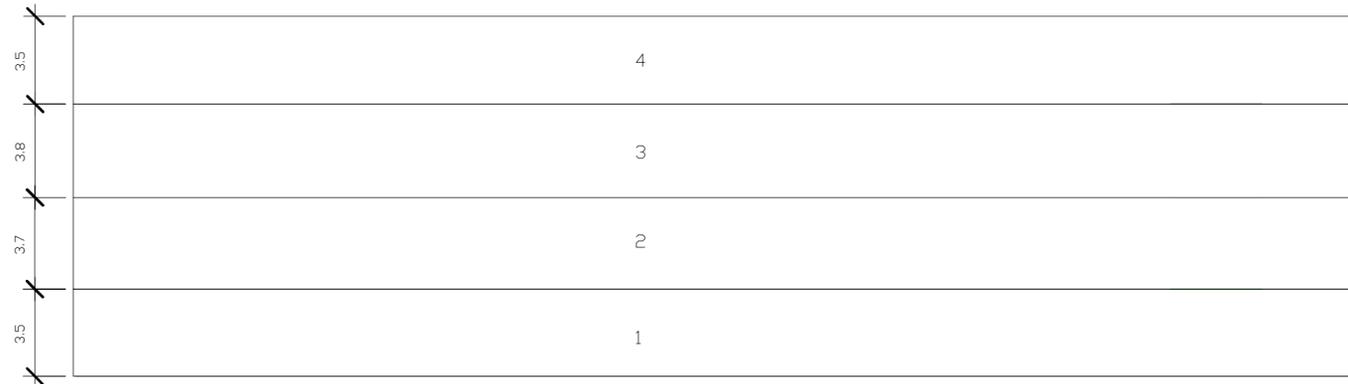
CADANGAN PELAN STRATA
 PECAH BAHAGI BANGUNAN
 NEGERI JOHOR
 DAERAH JOHOR BAHRU
 MUKIM PULAI
 LOT 10753 (PA 10753)
 NOMBOR HAKMILIK : GM 1234
 KELUASAN LOT : 3588.4 m²
 NOMBOR SKIM : 1234
 SKALA 1 : 850



PETUNJUK :



KERATAN TEGAK BANGUNAN
 SKALA 1:200



Saya, Sr. Mok Wai Kheng, seorang Juruukur Tanah yang dilesenkan dibawah Akta Juruukur Tanah Berlesen 1958 [Akta 458], memperakui menurut menurut subperenggan 8A(1)(d)(i),(ii),(iii) dan (iv) Akta Hakmilik Strata 1985 [Akta 318] bahawa-

(i) saya telah membuat perbandingan pelan ini dengan pelan bangunan yang diluluskan yang disediakan oleh Arkitek Professional atau Jurutera Professional yang bertanggungjawab atas pembinaannya dan bahawa pelan ini adalah menepati pelan tersebut;

(ii) dalam hal pelan tingkat, bahawa sempadan petak - petak yang ditunjukkan di atasnya mengikut ciri - ciri pembinaan tetap yang terdapat dalam bangunan itu;

(iii) bangunan - bangunan adalah terletak keseluruhannya dalam sempadan lot

10753, Mukim Pulau, Daerah Johor Bahru, Johor;

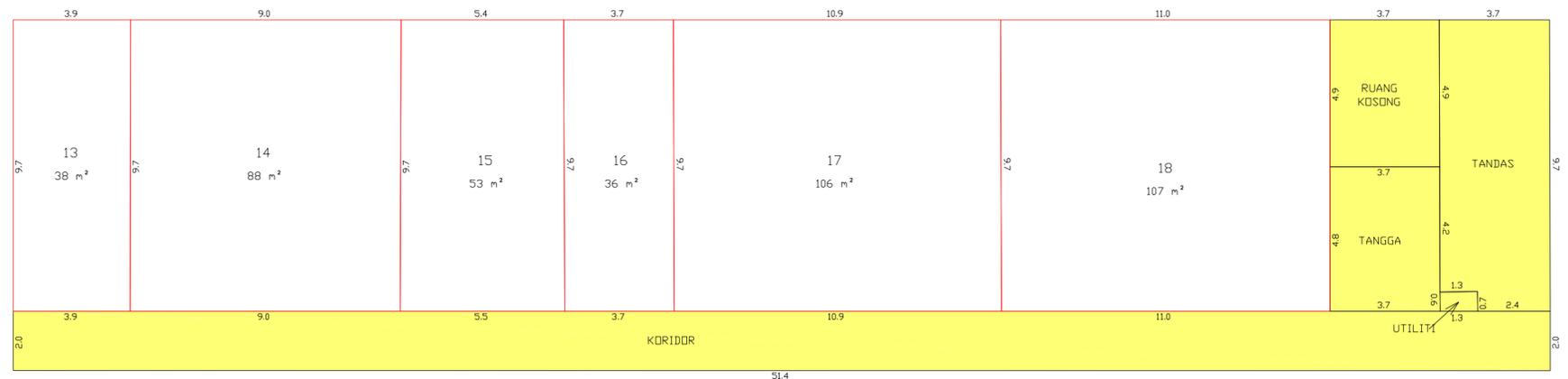
(iv) setiap petak yang dicadangkan itu mempunyai-

- (A) Jalan masuk yang memadai yang tidak melintasi suatu petak yang lain; dan
- (B) jalan perhubungan dalaman yang memadal tidak melintasi harta bersama.

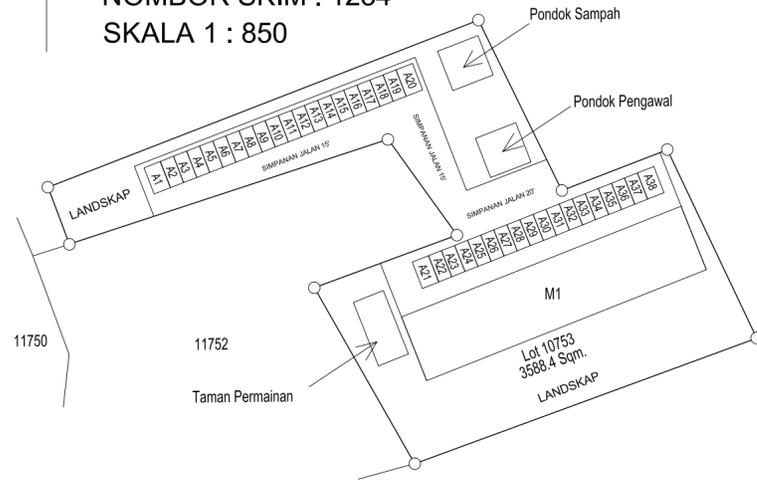
Bertarikh 16 Jun 2021
 haribulan 20.....

Juruukur Tanah yang dilesenkan di bawah Akta 458

PELAN TINGKAT
 BANGUNAN M1
 TINGKAT 2
 PETAK 13 HINGGA 18
 SKALA 1:150



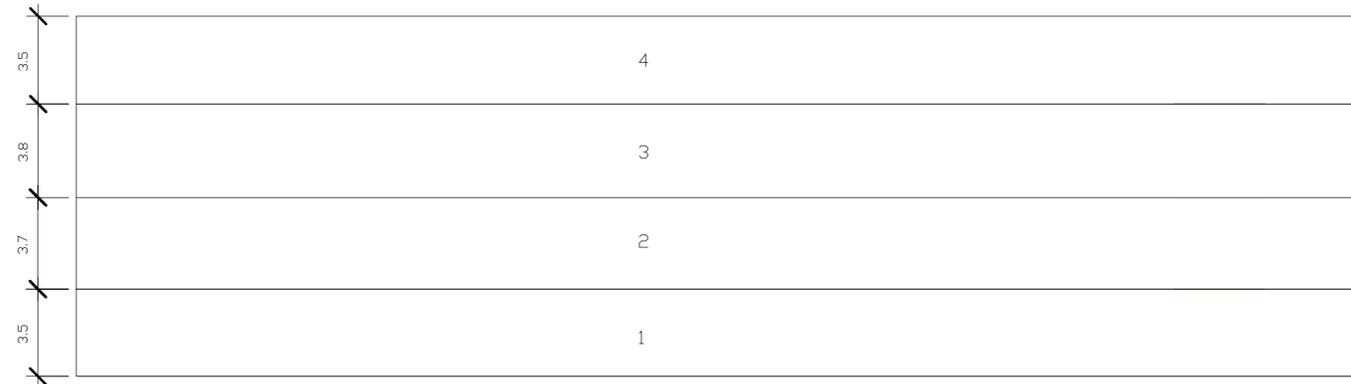
CADANGAN PELAN STRATA
 PECAH BAHAGI BANGUNAN
 NEGERI JOHOR
 DAERAH JOHOR BAHRU
 MUKIM PULAI
 LOT 10753 (PA 10753)
 NOMBOR HAKMILIK : GM 1234
 KELUASAN LOT : 3588.4 m²
 NOMBOR SKIM : 1234
 SKALA 1 : 850



PETUNJUK :



KERATAN TEGAK BANGUNAN
 SKALA 1:200



Saya, Sr. Mok Wai Kheng, seorang Juruukur Tanah yang dilesenkan dibawah Akta Juruukur Tanah Berlesen 1958 [Akta 458], memperakui menurut menurut subperenggan 8A(1)(d)(i),(ii),(iii) dan (iv) Akta Hakmilik Strata 1985 [Akta 318] bahawa-

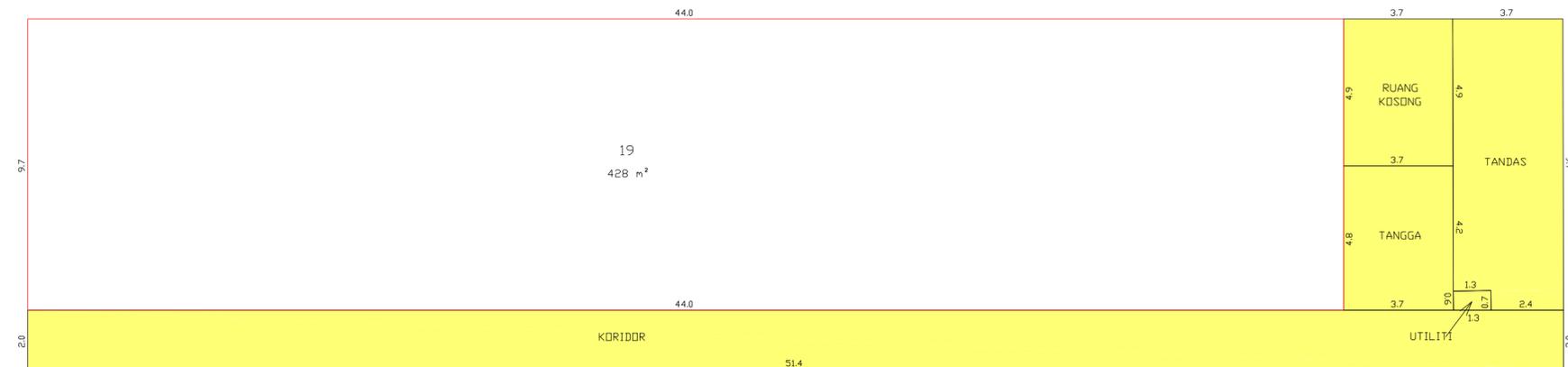
- (i) saya telah membuat perbandingan pelan ini dengan pelan bangunan yang diluluskan yang disediakan oleh Arkitek Professional atau Jurutera Professional yang bertanggungjawab atas pembinaannya dan bahawa pelan ini adalah menepati pelan tersebut;
- (ii) dalam hal pelan tingkat, bahawa sempadan petak - petak yang ditunjukkan di atasnya mengikuti ciri - ciri pembinaan tetap yang terdapat dalam bangunan itu;
- (iii) bangunan - bangunan adalah terletak keseluruhannya dalam sempadan lot 10753, Mukim Pulau, Daerah Johor Bahru, Johor;
- (iv) setiap petak yang dicadangkan itu mempunyai-
 - (A) Jalan masuk yang memadai yang tidak melintasi suatu petak yang lain; dan
 - (B) jalan perhubungan dalaman yang memadai tidak melintasi harta bersama.

Bertarikh 16 Jun 2021 haribulan 20.....

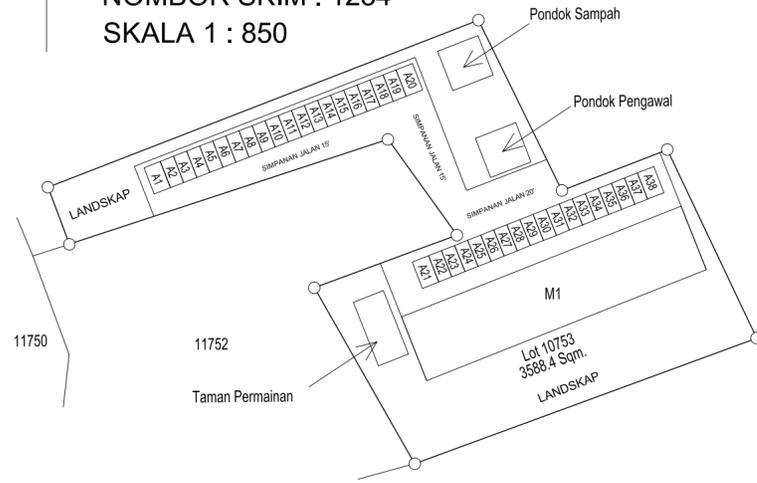
Juruukur Tanah yang dilesenkan di bawah Akta 458



PELAN TINGKAT
 BANGUNAN M1
 TINGKAT 3
 PETAK 19
 SKALA 1:150



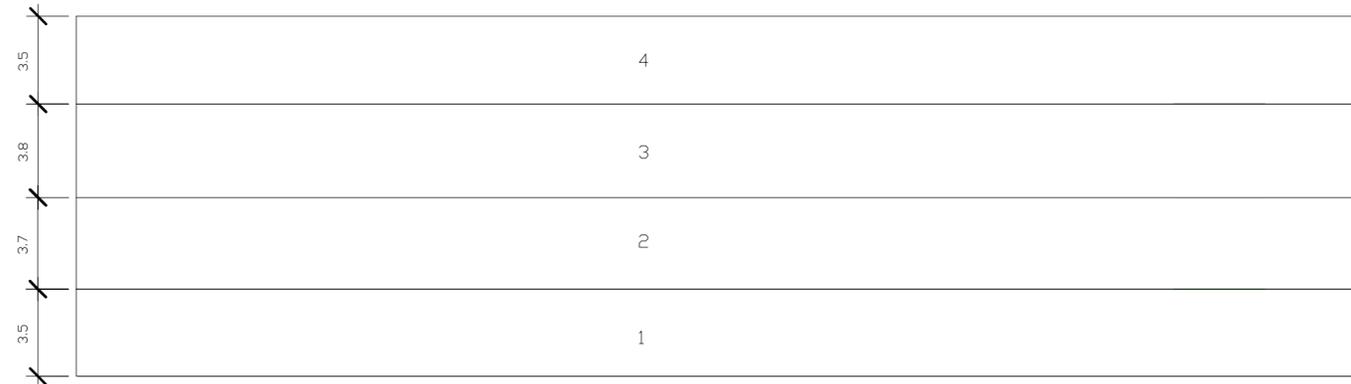
CADANGAN PELAN STRATA
 PECAH BAHAGI BANGUNAN
 NEGERI JOHOR
 DAERAH JOHOR BAHRU
 MUKIM PULAI
 LOT 10753 (PA 10753)
 NOMBOR HAKMILIK : GM 1234
 KELUASAN LOT : 3588.4 m²
 NOMBOR SKIM : 1234
 SKALA 1 : 850



PETUNJUK :



KERATAN TEGAK BANGUNAN
 SKALA 1:200



Saya, Sr. Mok Wai Kheng, seorang Juruukur Tanah yang dilesenkan dibawah Akta Juruukur Tanah Berlesen 1958 [Akta 458], memperakui menurut menurut subperenggan 8A(1)(d)(i),(ii),(iii) dan (iv) Akta Hakmilik Strata 1985 [Akta 318] bahawa-

(i) saya telah membuat perbandingan pelan ini dengan pelan bangunan yang diluluskan yang disediakan oleh Arkitek Professional atau Jurutera Professional yang bertanggungjawab atas pembinaannya dan bahawa pelan ini adalah menepati pelan tersebut;

(ii) dalam hal pelan tingkat, bahawa sempadan petak - petak yang ditunjukkan di atasnya mengikut ciri - ciri pembinaan tetap yang terdapat dalam bangunan itu;

(iii) bangunan - bangunan adalah terletak keseluruhannya dalam sempadan lot

10753, Mukim Pulai, Daerah Johor Bahru, Johor;

(iv) setiap petak yang dicadangkan itu mempunyai-

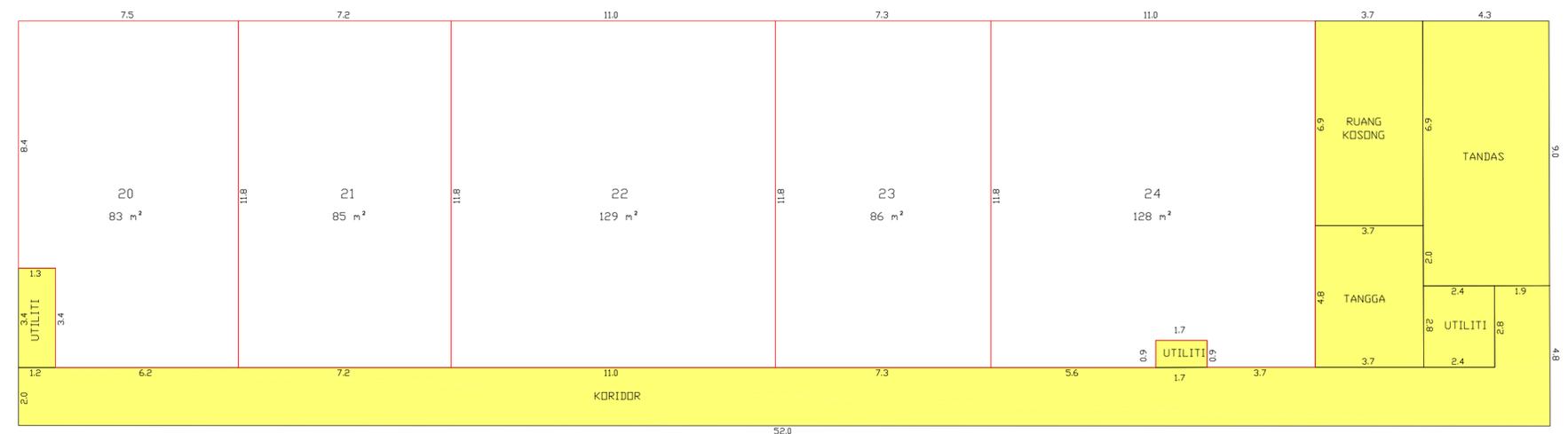
- (A) Jalan masuk yang memadai yang tidak melintasi suatu petak yang lain; dan
- (B) jalan perhubungan dalaman yang memadai tidak melintasi harta bersama.

Bertarikh 16 Jun 2021 haribulan Jun 2021

Juruukur Tanah yang dilesenkan di bawah Akta 458

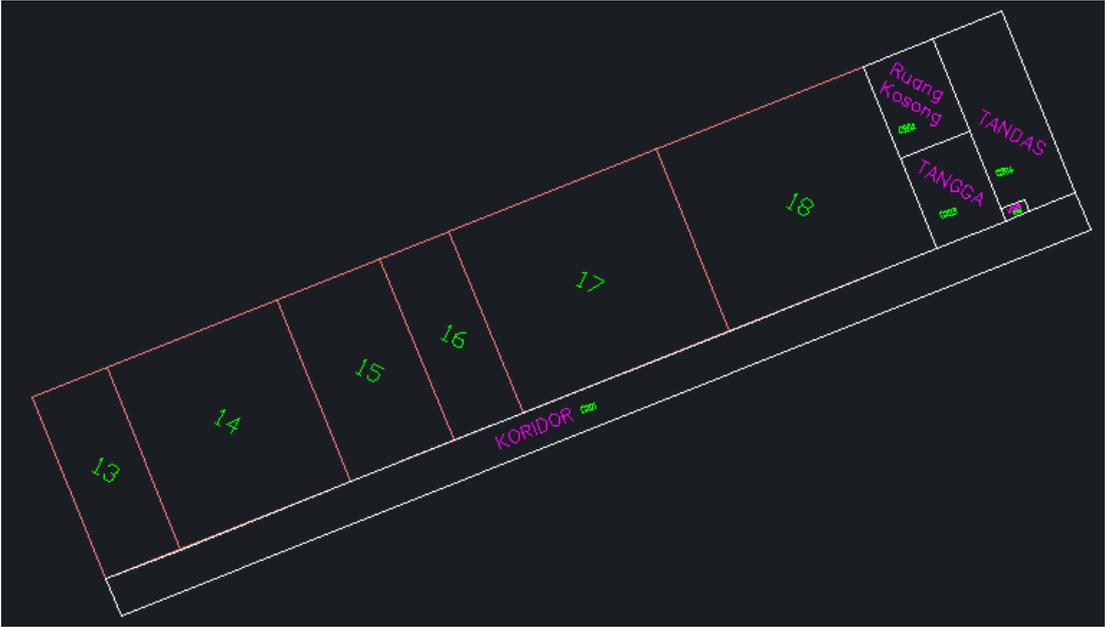
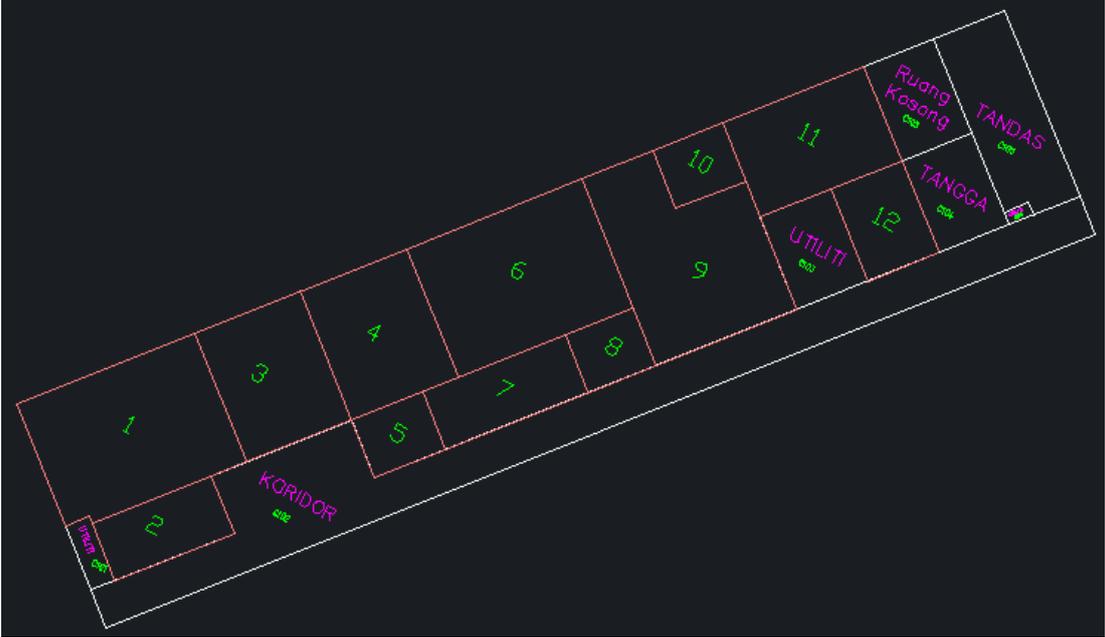
CPS 12753-04

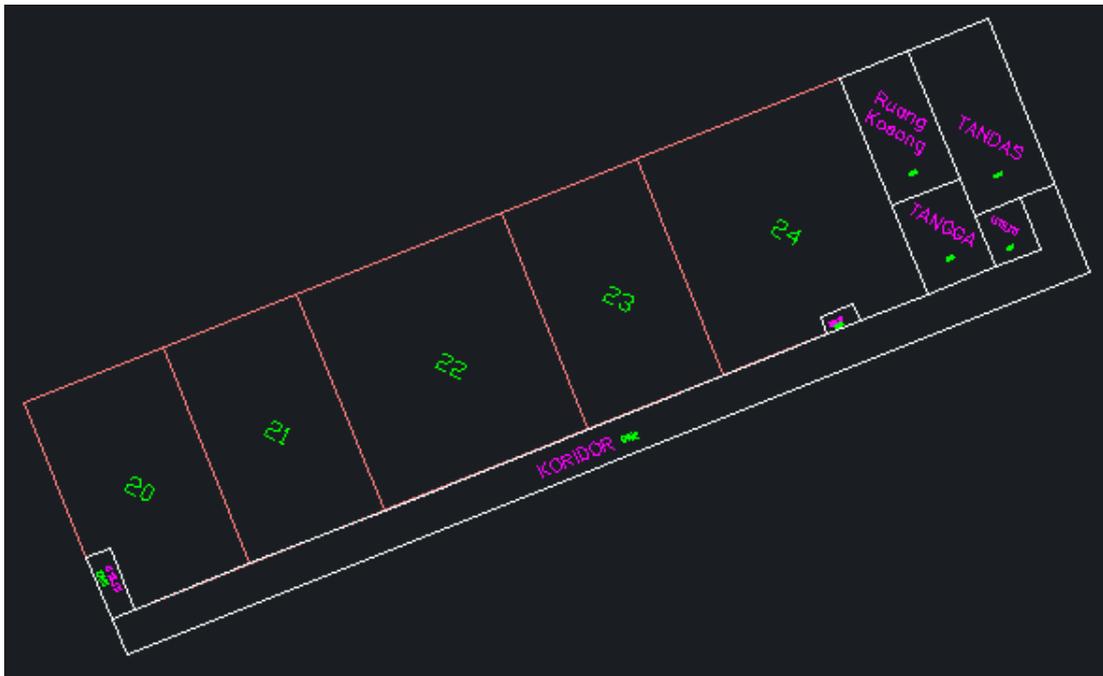
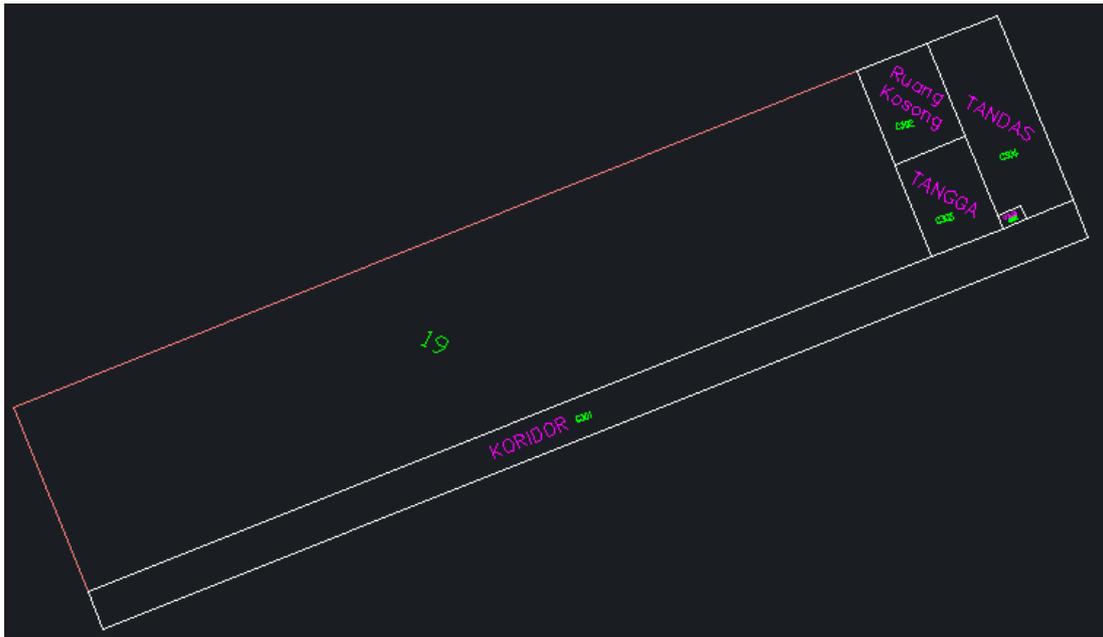
PELAN TINGKAT
 BANGUNAN M1
 TINGKAT 4
 PETAK 20 HINGGA 24
 SKALA 1:150



Appendix E StrataDXF Plans

K4	T4
K3	T3
K2	T2
K1	T1





Appendix F StrataXML ASCII

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xsi:noNamespaceSchemaLocation="strata.xsd">
  <Scheme negeri="01" daerah="02" mukim="03" seksyen="000" lot="0011753"
skim="(S)1234" pa="PA11753" no_hakmilik="GM1234" luas="3588"
no_fail_ukurstrata="PUBLJ105_2021" no_fail_pt="" no_fail_ptg="PTG MWK325-
2021" diukur_oleh="MOK WAI KHENG" pengukur_noic="971125105845"
tarikh_siap="2021-06-16" bilangan_petak="24" bilangan_petak_kr="0"
bilangan_petaktanah="0" bilangan_aksesori="0" bilangan_aksesori_kr="0"
tarikh_terima_sijil_akuan="2020-10-15" tarikh_lulus_permohonan="2020-10-25"
bayaran_ukur="" bayaran_pelan="" nama_pemaju="UNIVERSITI TEKNOLOGI
MALAYSIA" alamat_pemaju="UNIVERSITI TEKNOLOGI MALAYSIA, 81300
JOHOR BAHRU, JOHOR" nama_perbadanan_pengurusan="FABU UTM"
alamat_perbadanan_pengurusan="FAKULTI ALAM BINA DAN UKUR,
UNIVERSITI TEKNOLOGI MALAYSIA, 81300 JOHOR BAHRU, JOHOR"
nama_projek="FABU BLOK C05" lokasi="FAKULTI ALAM BINA DAN UKUR,
UNIVERSITI TEKNOLOGI MALAYSIA, 81300 JOHOR BAHRU, JOHOR"
no_ruj_jubl="JW MWK01" no_ruj_ljt="202-MWK"
no_fail_ukurlot="PUBLJ105_2020" kodtujuanukur="18"
jumlah_unit_syer="1751.00" no_sijil_cpssp="CPSP01" tarikh_lulus_cpssp="2021-02-
02" no_bukukerja_luar="1234" no_bukukerja_luar_folio="1"
nosijilakuan="C123456" nojadualpetak="4" pab="PA(B)12753" pab_folio="5"
jenispembangunan="1" nama_pemilik_asal="UNIVERSITI TEKNOLOGI
MALAYSIA">
  <Block bangunanno="(B)M1" blockno="(M)0"
upi="0102030000011753(B)M1(M)0" no_of_tingkat="4" height="10.938"
sijilno="CPSP01" blocktype="B" kodkegunaanbangunan="BA0010"
namalainbangunan="FABU BLOK C05" unitsyer="1751.00" is_kr="N">
    <Tingkat blockupi="0102030000011753(B)M1(M)0" tingkatno="(T)1"
upi="0102030000011753(B)M1(M)0(T)1" no_of_petak="12" no_of_petak_kr="0"
no_of_aksesori="0" no_of_aksesori_kr="0" area="601.000" unit="M"
height="3.507" altitude="1.000" namalaintingkat=""
keratan_groupid="0102030000011753(B)M1(GK)1">
      <Petak petakno="(P)2" upi="0102030000011753(B)M1(M)0(T)1(P)2"
g_area="18.607" a_area="19" jp_area="19" a_unit="M" height="3.507"
altitude="1.000" pab="PA(B)12753" folio="02" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="19.00" is_kr="N">
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bearing="158.1442" g_distance="3.003" a_distance="3.003" unit="M"
guid="6911b53cb0304c62a042e415655d0272" isislandlot="false">
          <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)2" x="8431.955"
y="-53334.334" guid="03c8cf5256c54b1c8c4f95408fd606d9" isislandlot="false" />
          <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)2" x="8433.068"
y="-53337.123" guid="075ff06fe54e41dba6a70bbbf6e70243" isislandlot="false" />
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    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)2"
bearing="248.0910" g_distance="6.193" a_distance="6.193" unit="M"
guid="9a3f46741a7d40c2b484a74eae766e9f" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)2" x="8433.068"
y="-53337.123" guid="db6d568cf3de4ef59504add85ceafb10" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)2" x="8427.320"
y="-53339.427" guid="61aa0ca126c94a4aa20493d48d75f805" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)2"
bearing="338.0910" g_distance="3.005" a_distance="3.005" unit="M"
guid="572dffabbe9d4450aa0662191f481526" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)2" x="8427.320"
y="-53339.427" guid="6ec4aeb290864356bda485089e83e00f" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)2" x="8426.202"
y="-53336.638" guid="253b9ce1048b494f8262b9bacbc5dd6e" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)2"
bearing="68.1024" g_distance="6.197" a_distance="6.197" unit="M"
guid="1568f03933744087957104b41379e9bc" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)2" x="8426.202"
y="-53336.638" guid="de375af0a3f246c2a4bb9963e07c8fee" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)2" x="8431.955"
y="-53334.334" guid="f3b71a8304e44d0d9836ac2f29cdb13d" isislandlot="false" />
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g_area="61.834" a_area="62" jp_area="62" a_unit="M" height="3.507"
altitude="1.000" pab="PA(B)12753" folio="02" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="62.00" is_kr="N">
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bearing="158.1442" g_distance="6.724" a_distance="6.724" unit="M"
guid="ce7ab6f48aaf4ddea721297d6adede56" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)1" x="8431.144"
y="-53327.416" guid="444ca86e9f744c9791aafaed24aaf532" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)1" x="8433.636"
y="-53333.661" guid="0088db5ae00245f18c1cbb5af84e94af" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)1"
bearing="248.1024" g_distance="1.811" a_distance="1.811" unit="M"
guid="e6957651cb07447b8adf34c20af49877" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)1" x="8433.636"
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    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)1" x="8431.955"
y="-53334.334" guid="8e4106684e95412ca6d1f08627c7659c" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)1"
bearing="248.1024" g_distance="6.197" a_distance="6.197" unit="M"
guid="b258de771bc94aca823d4a6c8811aec0" isislandlot="false">

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)1" x="8431.955"
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/>
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y="-53336.638" guid="f0096931e7264e479d54ba680d74fe13" isislandlot="false" />
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guid="eaf085020f974729990788d5f72c2fd7" isislandlot="false">
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y="-53336.638" guid="45a437f7e43143eab6fee38f65a8467f" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)1" x="8426.067"
y="-53336.301" guid="d4d5cdce6ff940d9b0c85dc560c4eb0a" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)1"
bearing="248.0824" g_distance="1.253" a_distance="1.253" unit="M"
guid="4f2f8c7b42ae4309b7dd3f099820cfd" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)1" x="8426.067"
y="-53336.301" guid="de8538b8c147467398209bc803802f2e" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)1" x="8424.904"
y="-53336.768" guid="19495630bf9c4fb4ac2dfb68cbfe423b" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)1"
bearing="338.0910" g_distance="6.358" a_distance="6.358" unit="M"
guid="ca6c8fa2d4ee4dd1b3b0b502296b8358" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)1" x="8424.904"
y="-53336.768" guid="afd58421169d4c74b1c44849455671a6" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)1" x="8422.538"
y="-53330.867" guid="0bb35367be69464c80f68494ffebffda" isislandlot="false" />
    </boundary>
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guid="6ccfea9f6cb14b20b548506e94fcd305" isislandlot="false">
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y="-53330.867" guid="9e2e4c63a48640d48191ad52b0c9b28c" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)1" x="8431.144"
y="-53327.416" guid="63685b988c934497bd1381023fd6ad07" isislandlot="false"
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altitude="1.000" pab="PA(B)12753" folio="02" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="37.00" is_kr="N">
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guid="62c60634c20b4534a9ed86663cbe0e9b" isislandlot="false">
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```

    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)3" x="8438.729"
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  </boundary>
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guid="2ff124612e474fe69c4cedebf1099925" isislandlot="false">
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y="-53331.621" guid="dda316a4455c473e8d221a90a7eb68c5" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)3" x="8433.636"
y="-53333.661" guid="13ea4eb512894e5695a789ce2464eb9d" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)3"
bearing="338.1442" g_distance="6.724" a_distance="6.724" unit="M"
guid="fffc33b976764e8e8844e73ab2bbe1f0" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)3" x="8433.636"
y="-53333.661" guid="d836ba9bbb0243fc950c8b4469e05d14" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)3" x="8431.144"
y="-53327.416" guid="0800497bf2bf439cb2fcf349d5b4adc8" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)3"
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guid="40b3613a2ff0405ebd950a035bf439be" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)3" x="8431.144"
y="-53327.416" guid="fd9bc8dd5b6a4f4fb361dc872e0620cb" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)3" x="8436.254"
y="-53325.368" guid="da69e30d6f444340b7746d1640af80d3" isislandlot="false" />
  </boundary>
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altitude="1.000" pab="PA(B)12753" folio="02" kodkegunaanpetak="REU3"
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guid="a427bc4726d64bf089aab642fd83c5cc" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)5" x="8442.156"
y="-53330.249" guid="145ceb3a15a64481bc9e62145f8ec868" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)5" x="8443.262"
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guid="7aaffbca72f345c980ae705642540c2a" isislandlot="false">
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y="-53333.035" guid="fdc9b0d9636a45c692369e3a0028776a" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)5" x="8439.833"
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    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)5"
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guid="d721e43fe6044431b941157804fcdd88" isislandlot="false">
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guid="d1e8730ec7ad4abb929861e88fa61a5e" isislandlot="false">
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y="-53331.621" guid="40c8786688cf451b9535ca5864222021" isislandlot="false" />
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y="-53330.249" guid="3d6e952e73734d3d85dd7a81d2ccc1c2" isislandlot="false" />
    </boundary>
</Petak>
    <Petak petakno="(P)4" upi="0102030000011753(B)M1(M)0(T)1(P)4"
g_area="37.180" a_area="37" jp_area="37" a_unit="M" height="3.507"
altitude="1.000" pab="PA(B)12753" folio="02" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="37.00" is_kr="N">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)4"
bearing="158.1024" g_distance="6.727" a_distance="6.727" unit="M"
guid="118445fc2e7a416f958126b479fd7d98" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)4" x="8441.372"
y="-53323.316" guid="63d6518fd9ff4ecab46fd43f92c0e5dd" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)4" x="8443.873"
y="-53329.561" guid="eb1fb5af2cb246cb8ae5bcd7ba480b8a" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)4"
bearing="248.1024" g_distance="5.541" a_distance="5.541" unit="M"
guid="cb2af02f53d6427fb66c6813d65d1f36" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)4" x="8443.873"
y="-53329.561" guid="60e461c2bdab4e23b78b89706815b039" isislandlot="false"
/>
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)4" x="8438.729"
y="-53331.621" guid="d9f561047ab54e95acfd1b41c58486" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)4"
bearing="338.2433" g_distance="6.725" a_distance="6.725" unit="M"
guid="2119897c87c04e1c95dce481e005db78" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)4" x="8438.729"
y="-53331.621" guid="318cc87fb514482b81964c5e5e25d179" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)4" x="8436.254"
y="-53325.368" guid="a1438540b64a482ab17d5cd093ed3952" isislandlot="false"
/>
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)4"
bearing="68.0910" g_distance="5.514" a_distance="5.514" unit="M"
guid="af7150fef06a463fbb981415aa2078e0" isislandlot="false">

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)4" x="8436.254"
y="-53325.368" guid="4b8a813ed4b544489aebc2764ba2b5c5" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)4" x="8441.372"
y="-53323.316" guid="e048547f1f0c410e84f1c9cf12b7f095" isislandlot="false" />
    </boundary>
  </Petak>
  <Petak petakno="(P)7" upi="0102030000011753(B)M1(M)0(T)1(P)7"
g_area="22.156" a_area="22" jp_area="22" a_unit="M" height="3.507"
altitude="1.000" pab="PA(B)12753" folio="02" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="22.00" is_kr="N">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)7"
bearing="248.0910" g_distance="7.398" a_distance="7.398" unit="M"
guid="240b5b0967fa4fc6bb8fa24e73bead9a" isislandlot="false">
      <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)7" x="8450.129"
y="-53330.283" guid="7bccefa91f8644fab1558ccae3ae6717" isislandlot="false" />
      <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)7" x="8443.262"
y="-53333.035" guid="64dd8098b1a64bc1b77acc0142882a75" isislandlot="false"
/>
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)7"
bearing="338.2056" g_distance="2.998" a_distance="2.998" unit="M"
guid="89597fd912654586a46099e7e96e34dd" isislandlot="false">
      <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)7" x="8443.262"
y="-53333.035" guid="09c6f29a281c440188680d28b34ddb72" isislandlot="false"
/>
      <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)7" x="8442.156"
y="-53330.249" guid="28626d4573d74d969d6918e5859dd79b" isislandlot="false"
/>
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)7"
bearing="68.1024" g_distance="7.388" a_distance="7.388" unit="M"
guid="cfc966119b504d0494eaa6d7d89634ca" isislandlot="false">
      <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)7" x="8442.156"
y="-53330.249" guid="5f0bcc7a9c734108ae0980e37c0936e4" isislandlot="false" />
      <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)7" x="8449.014"
y="-53327.502" guid="08f59f7686554342a719892d80d96170" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)7"
bearing="158.0910" g_distance="2.996" a_distance="2.996" unit="M"
guid="405c05554d34443db20f3bf4c6cd2a2f" isislandlot="false">
      <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)7" x="8449.014"
y="-53327.502" guid="b276d2f41f4d40d9b6bbd85e2c9ebbdd" isislandlot="false" />
      <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)7" x="8450.129"
y="-53330.283" guid="4361aa06e3ce4b0ea1e3e465064ccf09" isislandlot="false" />
    </boundary>
  </Petak>
  <Petak petakno="(P)8" upi="0102030000011753(B)M1(M)0(T)1(P)8"
g_area="10.445" a_area="10" jp_area="10" a_unit="M" height="3.507"
altitude="1.000" pab="PA(B)12753" folio="02" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="10.00" is_kr="N">

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    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)8"
bearing="158.4419" g_distance="2.995" a_distance="2.995" unit="M"
guid="b5e20d4f5d7b492d94451c06ba277974" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)8" x="8452.265"
y="-53326.200" guid="c046c29bc37a4bab89185b26ee39ecbe" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)8" x="8453.351"
y="-53328.991" guid="67785f05614d4bf48cdeb26064b0b5cc" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)8"
bearing="248.0910" g_distance="3.471" a_distance="3.471" unit="M"
guid="a79f705dd4aa4c6683892b34078a4b77" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)8" x="8453.351"
y="-53328.991" guid="46ccc5424e1741328afeec930093c0a3" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)8" x="8450.129"
y="-53330.283" guid="f6c5f402208746eb9070bd2cc183dd2d" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)8"
bearing="338.0910" g_distance="2.996" a_distance="2.996" unit="M"
guid="3732a02e9e344a8d83cf38166a3282b6" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)8" x="8450.129"
y="-53330.283" guid="a5b15c7f80b84169b8cf21ef48ba9866" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)8" x="8449.014"
y="-53327.502" guid="23052c524ad34fcc8e4b607a292cb7dd" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)8"
bearing="68.1024" g_distance="3.502" a_distance="3.502" unit="M"
guid="9c6dab38cae9492c8b4ec07ac845387d" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)8" x="8449.014"
y="-53327.502" guid="ff1de77ea80e4b75a19cdb6c9203e6af" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)8" x="8452.265"
y="-53326.200" guid="6d4856e768a84b4eb2123cd323fd51" isislandlot="false" />
    </boundary>
</Petak>
<Petak petakno="(P)6" upi="0102030000011753(B)M1(M)0(T)1(P)6"
g_area="61.057" a_area="61" jp_area="61" a_unit="M" height="3.507"
altitude="1.000" pab="PA(B)12753" folio="02" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="61.00" is_kr="N">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)6"
bearing="158.4419" g_distance="6.731" a_distance="6.731" unit="M"
guid="3f8543de3f344542b8740d911b75ebc4" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)6" x="8449.825"
y="-53319.927" guid="e70d4ad30d9a4f219dfd3caabb1187d1" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)6" x="8452.265"
y="-53326.200" guid="d947726d3f934be3b88ba7f193032ad8" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)6"
bearing="248.1024" g_distance="9.040" a_distance="9.040" unit="M"
guid="64b4a71669e74b58b0f92eb40d816900" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)6" x="8452.265"
y="-53326.200" guid="dbd9fdb08f4d4a3783b09a0ec869ab1c" isislandlot="false" />

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)6" x="8443.873"
y="-53329.561" guid="b01af3b237b34f5697e8cad1add33a4b" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)6"
bearing="338.1024" g_distance="6.727" a_distance="6.727" unit="M"
guid="9cd4ac99d8bb41e7b1adbca67d425919" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)6" x="8443.873"
y="-53329.561" guid="882ae705307e4043927b477d27032ee0" isislandlot="false"
/>
  </boundary>
  <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)6" x="8441.372"
y="-53323.316" guid="4464ea0b7e8d4e7a8addf8d355c715ba" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)6"
bearing="68.0910" g_distance="9.107" a_distance="9.107" unit="M"
guid="f34c6f3c80ad47349e10d95533276492" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)6" x="8441.372"
y="-53323.316" guid="b8742f1480014e0c8c1c0ed946ac2cd3" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)6" x="8449.825"
y="-53319.927" guid="f9b174046530402795be427cc6836137" isislandlot="false"
/>
  </boundary>
</Petak>
<Petak petakno="(P)9" upi="0102030000011753(B)M1(M)0(T)1(P)9"
g_area="60.399" a_area="60" jp_area="60" a_unit="M" height="3.507"
altitude="1.000" pab="PA(B)12753" folio="02" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="60.00" is_kr="N">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)9"
bearing="158.2902" g_distance="6.684" a_distance="6.684" unit="M"
guid="385811e5afa94fbdab8c1edaac93f230" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)9" x="8457.742"
y="-53320.030" guid="6b967d9408324b5fab919bd44af56460" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)9" x="8460.193"
y="-53326.248" guid="b0b24c614d07433a91321f87e7743f19" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)9"
bearing="248.0910" g_distance="7.371" a_distance="7.371" unit="M"
guid="6bb1323ecd9a4adf874d6b4c643db712" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)9" x="8460.193"
y="-53326.248" guid="686b3c954e174dafbfb6d616324c7d71" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)9" x="8453.351"
y="-53328.991" guid="37ee245cc1384dae98303024961a9a1d" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)9"
bearing="338.4419" g_distance="9.726" a_distance="9.726" unit="M"
guid="59beb832b62d41f9abf35e4cd04f5a84" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)9" x="8453.351"
y="-53328.991" guid="dc134b34d7b8421bae0848007a3db82a" isislandlot="false"
/>
  </boundary>

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)9" x="8449.825"
y="-53319.927" guid="137d8bb32a064db8bd73567d1280ac0e" isislandlot="false"
/>
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)9"
bearing="68.0910" g_distance="3.668" a_distance="3.668" unit="M"
guid="a08a6f8307094319a72c98bd2fe9e244" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)9" x="8449.825"
y="-53319.927" guid="0c9e7478c1a74e60a6e4cb056d9cef0b" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)9" x="8453.230"
y="-53318.562" guid="b3eea56894dd4cf99bfff52cb7b07853" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)9"
bearing="158.2802" g_distance="3.012" a_distance="3.012" unit="M"
guid="41f39485be57425199c0f88764fcc225" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)9" x="8453.230"
y="-53318.562" guid="8d9b57ceb16a4048b7391258ec72dd8d" isislandlot="false"
/>
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)9" x="8454.336"
y="-53321.364" guid="f8ed41144cee4ed1a1fbb9c29d428b97" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)9"
bearing="68.3621" g_distance="3.658" a_distance="3.658" unit="M"
guid="72f6b93bb2bf4bd2a330569fdd289d71" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)9" x="8454.336"
y="-53321.364" guid="0f1a5c5f54ce47f1886c3c2ba36c756c" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)9" x="8457.742"
y="-53320.030" guid="24b2df9ef9b74024985d54f16f180c47" isislandlot="false" />
  </boundary>
</Petak>
<Petak petakno="(P)12" upi="0102030000011753(B)M1(M)0(T)1(P)12"
g_area="17.776" a_area="18" jp_area="18" a_unit="M" height="3.507"
altitude="1.000" pab="PA(B)12753" folio="02" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="18.00" is_kr="N">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)12"
bearing="158.0753" g_distance="4.816" a_distance="4.816" unit="M"
guid="c464d8b2619d44cf9639a12e8e22719d" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)12" x="8465.224"
y="-53319.042" guid="c3482ac1684348fdabb00d286b871038" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)12" x="8467.018"
y="-53323.511" guid="0bd6dd21f3a84a769e7ff3546c988e77" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)12"
bearing="248.0910" g_distance="3.689" a_distance="3.689" unit="M"
guid="6033fa61500840f28f60cfea46791f31" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)12" x="8467.018"
y="-53323.511" guid="5556d164a8914d2a902717cbd168072b" isislandlot="false"
/>
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)12" x="8463.594"
y="-53324.884" guid="f57ca22f1ac74501b99b916ce9a12f64" isislandlot="false" />

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</boundary>
<boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)12"
bearing="338.0910" g_distance="4.826" a_distance="4.826" unit="M"
guid="f18671fa2c9b443295c1cc0d9f468712" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)12" x="8463.594"
y="-53324.884" guid="9097ed2b4da84a5091f782f610145338" isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)12" x="8461.798"
y="-53320.405" guid="00e9a9e8abd748a1b53159ff3b9f5c5b" isislandlot="false" />
</boundary>
<boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)12"
bearing="68.1834" g_distance="3.687" a_distance="3.687" unit="M"
guid="65a50555b5db407eb4c32df46c3daef6" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)12" x="8461.798"
y="-53320.405" guid="f19f2d1cbaf04c16b12bfe913490d994" isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)12" x="8465.224"
y="-53319.042" guid="4f50a9a2f8304e7bab5e7aa1bad47124" isislandlot="false" />
</boundary>
</Petak>
<Petak petakno="(P)11" upi="0102030000011753(B)M1(M)0(T)1(P)11"
g_area="35.806" a_area="36" jp_area="36" a_unit="M" height="3.507"
altitude="1.000" pab="PA(B)12753" folio="02" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="36.00" is_kr="N">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)11"
bearing="158.0753" g_distance="4.909" a_distance="4.909" unit="M"
guid="dc473821fb254b35afa978d04608af45" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)11" x="8463.395"
y="-53314.486" guid="cd88aa5f5074468b9b85810bca6533ad" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)11" x="8465.224"
y="-53319.042" guid="945f5699194b45fb8d9ecd01c7cab1c5" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)11"
bearing="248.1834" g_distance="3.687" a_distance="3.687" unit="M"
guid="1df18ccfea444e74b39da82975b0789b" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)11" x="8465.224"
y="-53319.042" guid="1ce43f92fa9444a38ff72df133e94a84" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)11" x="8461.798"
y="-53320.405" guid="189b841e87c04c9b9dcfa16c4e348b29" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)11"
bearing="248.1834" g_distance="3.636" a_distance="3.636" unit="M"
guid="df610def941e4c2d8c02154f019d5873" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)11" x="8461.798"
y="-53320.405" guid="395c112ac1404a16b525c5c4507a9d3d" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)11" x="8458.420"
y="-53321.749" guid="9c7b184fce824f128f1a34800109adeb" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)11"
bearing="338.2902" g_distance="4.890" a_distance="4.890" unit="M"
guid="629a0db0e63a49dc87e27727bb43305a" isislandlot="false">

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)11" x="8458.420"
y="-53321.749" guid="7ba7d7b4cc684ad7887e194d30e4acb4" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)11" x="8456.626"
y="-53317.200" guid="51482398e1a1448699ef0f3c5e2bf582" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)11"
bearing="68.0910" g_distance="7.293" a_distance="7.293" unit="M"
guid="38691037263845a59400e53194cd2ffd" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)11" x="8456.626"
y="-53317.200" guid="1bff50cdf7fb453090f72d1a34a4b06d" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)11" x="8463.395"
y="-53314.486" guid="9c85a836256643beba1274d6e2d30e9f" isislandlot="false" />
  </boundary>
</Petak>
  <Petak petakno="(P)10" upi="0102030000011753(B)M1(M)0(T)1(P)10"
g_area="11.076" a_area="11" jp_area="11" a_unit="M" height="3.507"
altitude="1.000" pab="PA(B)12753" folio="02" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="11.00" is_kr="N">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)10"
bearing="158.2902" g_distance="3.042" a_distance="3.042" unit="M"
guid="e30012a96ace41f79731a0683a8600ed" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)10" x="8456.626"
y="-53317.200" guid="c9f43c55b420433f83d2b9baf6d44760" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)10" x="8457.742"
y="-53320.030" guid="c13819b2cc1b49f98d299a8a66673723" isislandlot="false" />
  </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)10"
bearing="248.3621" g_distance="3.658" a_distance="3.658" unit="M"
guid="2e13b3ddcb504bf19745095d0bdf395c" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)10" x="8457.742"
y="-53320.030" guid="22c93be51da4481080c6885039c3fabd" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)10" x="8454.336"
y="-53321.364" guid="8f2da606e8524e85af596147350fd681" isislandlot="false" />
  </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)10"
bearing="338.2802" g_distance="3.012" a_distance="3.012" unit="M"
guid="c0db694f35884a159677400275439399" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)10" x="8454.336"
y="-53321.364" guid="766b958973834b4fa158a82745a56257" isislandlot="false"
/>
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)10" x="8453.230"
y="-53318.562" guid="6eefff20bf134dcda4c9eaf0f077de02" isislandlot="false" />
  </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(P)10"
bearing="68.0910" g_distance="3.659" a_distance="3.659" unit="M"
guid="4bc4645d17f344e78bb88d020634e557" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)10" x="8453.230"
y="-53318.562" guid="c73d51cfc3454578b36f359ad84b0843" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(P)10" x="8456.626"
y="-53317.200" guid="f177146ecfff476da1f8c47b0e7a1ae0" isislandlot="false" />

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    </boundary>
  </Petak>
</Tingkat>
<Tingkat blockupi="0102030000011753(B)M1(M)0" tingkatno="(T)2"
upi="0102030000011753(B)M1(M)0(T)2" no_of_petak="6" no_of_petak_kr="0"
no_of_aksesori="0" no_of_aksesori_kr="0" area="602.000" unit="M"
height="3.675" altitude="4.507" namalaintingkat=""
keratan_groupid="0102030000011753(B)M1(GK)1">
  <Petak petakno="(P)18" upi="0102030000011753(B)M1(M)0(T)2(P)18"
g_area="106.979" a_area="107" jp_area="107" a_unit="M" height="3.675"
altitude="4.507" pab="PA(B)12753" folio="03" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="107.00" is_kr="N">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)18"
bearing="158.0753" g_distance="9.725" a_distance="9.725" unit="M"
guid="19a142c0253f47f2bd2b71381930095e" isislandlot="false">
      <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)18" x="8463.395"
y="-53314.486" guid="0d272ebab24c485ba6e3e0494de23982" isislandlot="false" />
      <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)18" x="8467.018"
y="-53323.511" guid="2858ede9e9604489a6bb0744dd5cbeee" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)18"
bearing="248.0910" g_distance="10.986" a_distance="10.986" unit="M"
guid="6572c2aacc7d4672b0dcbdb663b00f33b" isislandlot="false">
      <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)18" x="8467.018"
y="-53323.511" guid="c5c88222a2534c809ea81c48a0e4d763" isislandlot="false" />
      <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)18" x="8456.821"
y="-53327.600" guid="06b8000d0dd14c5dae89cc684f022e4b" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)18"
bearing="337.5752" g_distance="9.726" a_distance="9.726" unit="M"
guid="de922f2918dd4d0f8c8e1c7142f5ef21" isislandlot="false">
      <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)18" x="8456.821"
y="-53327.600" guid="f921bfabdaa64fe1b456ebcae1f84538" isislandlot="false" />
      <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)18" x="8453.172"
y="-53318.585" guid="281613d15c03484c97460fe74eeeba7b" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)18"
bearing="68.0910" g_distance="11.014" a_distance="11.014" unit="M"
guid="a9f9e7d565d8409dae865b88e4dae738" isislandlot="false">
      <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)18" x="8453.172"
y="-53318.585" guid="e0d0df4b3cf1421ae66d4960bd6bfbe" isislandlot="false" />
      <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)18" x="8463.395"
y="-53314.486" guid="1c620352b1f347a0835e6250c1bf04bb" isislandlot="false" />
    </boundary>
  </Petak>
  <Petak petakno="(P)17" upi="0102030000011753(B)M1(M)0(T)2(P)17"
g_area="106.373" a_area="106" jp_area="106" a_unit="M" height="3.675"
altitude="4.507" pab="PA(B)12753" folio="03" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="106.00" is_kr="N">

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    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)17"
bearing="157.5752" g_distance="9.726" a_distance="9.726" unit="M"
guid="59f8ed3c8a1742d5a1068b9392c10cfc" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)17" x="8453.172"
y="-53318.585" guid="4c6c17aa979f4c6fa52a339e5c895842" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)17" x="8456.821"
y="-53327.600" guid="d43c62e55c9849b0aae9b8296e7f296d" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)17"
bearing="248.0910" g_distance="10.938" a_distance="10.938" unit="M"
guid="acf3b094119c46cda6373ef3fe0ccc37" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)17" x="8456.821"
y="-53327.600" guid="2d79e4bb945e4c50b860c28cad8132ed" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)17" x="8446.668"
y="-53331.670" guid="20cc5e312c7149c4aa9c2f9cd46a3e0d" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)17"
bearing="337.5744" g_distance="9.726" a_distance="9.726" unit="M"
guid="3445303948f9422eab96521cfbd5196c" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)17" x="8446.668"
y="-53331.670" guid="bc8072c2ea92463bb05711db94e85224" isislandlot="false"
/>
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)17" x="8443.019"
y="-53322.655" guid="983c502ec2c4439293cf8b520ff93b20" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)17"
bearing="68.0910" g_distance="10.938" a_distance="10.938" unit="M"
guid="9b394222b0fb41c9a30a35fa98a47f7d" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)17" x="8443.019"
y="-53322.655" guid="d80bd88ce6ac4af1ad62c17bc360a786" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)17" x="8453.172"
y="-53318.585" guid="5822670fdc0146c9883a01b306d6df3d" isislandlot="false" />
    </boundary>
</Petak>
<Petak petakno="(P)16" upi="0102030000011753(B)M1(M)0(T)2(P)16"
g_area="35.630" a_area="36" jp_area="36" a_unit="M" height="3.675"
altitude="4.507" pab="PA(B)12753" folio="03" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="36.00" is_kr="N">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)16"
bearing="157.5744" g_distance="9.726" a_distance="9.726" unit="M"
guid="06feb68b771442ecbd5b79301858af35" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)16" x="8443.019"
y="-53322.655" guid="3dbbcb34aaf44535a1744cc11aeca73d" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)16" x="8446.668"
y="-53331.670" guid="b929b85ea89641009465c15c228d88e8" isislandlot="false"
/>
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)16"
bearing="248.0910" g_distance="3.664" a_distance="3.664" unit="M"
guid="4d55741c73c546ef9fab6793fe7a0173" isislandlot="false">

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)16" x="8446.668"
y="-53331.670" guid="cab31a5e71554d7fb6c95563817d6bbc" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)16" x="8443.267"
y="-53333.034" guid="56d6f4c09d4146f4afc64a2a2fda4be0" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)16"
bearing="337.5830" g_distance="9.726" a_distance="9.726" unit="M"
guid="b620e2153e8b4614abf3b3f0e5a159b8" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)16" x="8443.267"
y="-53333.034" guid="f3cbe08c9e1243fc9b5f810890453c5b" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)16" x="8439.620"
y="-53324.018" guid="88038a0204334f84ba28e8eb1f2d9c53" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)16"
bearing="68.0910" g_distance="3.662" a_distance="3.662" unit="M"
guid="cfa181b6aa1441388261b56f844e5034" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)16" x="8439.620"
y="-53324.018" guid="7ec5f12b9bef40c1b2133ef48c8dfc49" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)16" x="8443.019"
y="-53322.655" guid="7cbf4d64b2c94f4ebc699f943878cc37" isislandlot="false" />
  </boundary>
</Petak>
<Petak petakno="(P)15" upi="0102030000011753(B)M1(M)0(T)2(P)15"
g_area="53.221" a_area="53" jp_area="53" a_unit="M" height="3.675"
altitude="4.507" pab="PA(B)12753" folio="03" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="53.00" is_kr="N">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)15"
bearing="157.5830" g_distance="9.726" a_distance="9.726" unit="M"
guid="15e14891c8864091915412f9e2fc098d" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)15" x="8439.620"
y="-53324.018" guid="c4758ccb4e9a4b8d996d02e9ec83b334" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)15" x="8443.267"
y="-53333.034" guid="ba941d2f8fa042f0aebfc2789c6b118d" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)15"
bearing="248.0910" g_distance="5.501" a_distance="5.501" unit="M"
guid="e882a5f1925e425787847a00c3dcfc84" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)15" x="8443.267"
y="-53333.034" guid="d65d14e25cc64c919d7a2e6ee312dcb7" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)15" x="8438.161"
y="-53335.081" guid="76be232c2c7e44b7a3fea7a1ec614477" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)15"
bearing="338.1900" g_distance="9.725" a_distance="9.725" unit="M"
guid="0fbfafab1fbc41bcbadbae46ab5a5255" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)15" x="8438.161"
y="-53335.081" guid="9352d3ef1aa140c0bd20650e6f824229" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)15" x="8434.567"
y="-53326.044" guid="583a352ca5b44b30b92ab612a88c379a" isislandlot="false" />
  </boundary>

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    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)15"
bearing="68.0910" g_distance="5.444" a_distance="5.444" unit="M"
guid="9b19039c37c34c6cab406a9eb62473a6" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)15" x="8434.567"
y="-53326.044" guid="c6be5908d85f4e0cacd59b5ef0bf72cb" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)15" x="8439.620"
y="-53324.018" guid="9416e631e4174365ab230c14584c74b8" isislandlot="false"
/>
    </boundary>
</Petak>
<Petak petakno="(P)14" upi="0102030000011753(B)M1(M)0(T)2(P)14"
g_area="87.842" a_area="88" jp_area="88" a_unit="M" height="3.675"
altitude="4.507" pab="PA(B)12753" folio="03" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="88.00" is_kr="N">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)14"
bearing="158.1900" g_distance="9.725" a_distance="9.725" unit="M"
guid="4c85fee6dc7e473cb2b87395f82c6dc1" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)14" x="8434.567"
y="-53326.044" guid="d5e3af55ce5c4a49a602baf319be6716" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)14" x="8438.161"
y="-53335.081" guid="db64e9004d5f4979a61b76e5e314bd1c" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)14"
bearing="248.0910" g_distance="9.029" a_distance="9.029" unit="M"
guid="dbf9bbd2c80f452899e6c6eafb8e18b4" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)14" x="8438.161"
y="-53335.081" guid="e5de29f1be2a42f09c9f982cd9c51d5f" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)14" x="8429.781"
y="-53338.441" guid="d36268464f6249a6aafecac8f2d2aa97" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)14"
bearing="338.1600" g_distance="9.725" a_distance="9.725" unit="M"
guid="8376c6b01dc1417aa8c8b97f4a05805b" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)14" x="8429.781"
y="-53338.441" guid="7dfe2ef7ed3545eda3a6b96a015aeb8a" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)14" x="8426.180"
y="-53329.407" guid="bbf81a99f4c747fa9d9ecac38e5f6394" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)14"
bearing="68.0910" g_distance="9.036" a_distance="9.036" unit="M"
guid="0cd25ab3c1924b8c90f32ad9b2f72e4d" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)14" x="8426.180"
y="-53329.407" guid="1624711919964c1b889df7dd2b914bdb" isislandlot="false"
/>
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)14" x="8434.567"
y="-53326.044" guid="9ecd056dca124ab79db195f546d2199c" isislandlot="false" />
    </boundary>
</Petak>
<Petak petakno="(P)13" upi="0102030000011753(B)M1(M)0(T)2(P)13"
g_area="38.065" a_area="38" jp_area="38" a_unit="M" height="3.675"

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altitude="4.507" pab="PA(B)12753" folio="03" kodkegunaanpetak="REU3" namapetak="" rastertable="" unitsyer="38.00" is_kr="N">

<boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)13" bearing="158.1600" g_distance="9.725" a_distance="9.725" unit="M" guid="8096e37f0cad479db37ca5e3ba4d3d9e" isislandlot="false">

<vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)13" x="8426.180" y="-53329.407" guid="11013329c7f141afa431b21a880884bd" isislandlot="false" />

<vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)13" x="8429.781" y="-53338.441" guid="e62c97c9a8be4d959c6c8707bc279a2e" isislandlot="false" />

</boundary>

<boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)13" bearing="248.0910" g_distance="3.904" a_distance="3.904" unit="M" guid="4abb1352c67942778fe033ff59880574" isislandlot="false">

<vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)13" x="8429.781" y="-53338.441" guid="27da97b69afa48de996e787c34a8ea32" isislandlot="false" />

<vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)13" x="8426.157" y="-53339.893" guid="98f23d04d0d64ca88874927bcae96063" isislandlot="false" />

</boundary>

<boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)13" bearing="338.0910" g_distance="9.724" a_distance="9.724" unit="M" guid="9340c7a41b9141858dd1389273250516" isislandlot="false">

<vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)13" x="8426.157" y="-53339.893" guid="073eab5a498c4c9db53c694030a6a0fb" isislandlot="false" />

<vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)13" x="8422.538" y="-53330.867" guid="11829c64f71c478c866e83937c11e753" isislandlot="false" />

</boundary>

<boundary petakupi="0102030000011753(B)M1(M)0(T)2(P)13" bearing="68.0910" g_distance="3.924" a_distance="3.924" unit="M" guid="d4708d5189714682acb597bb7fe83240" isislandlot="false">

<vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)13" x="8422.538" y="-53330.867" guid="bb3d518dcd2d4cd9ad463903cf789cf8" isislandlot="false" />

<vertex petakupi="0102030000011753(B)M1(M)0(T)2(P)13" x="8426.180" y="-53329.407" guid="053465f46036462390199e0e173da020" isislandlot="false" />

</boundary>

</Petak>

</Tingkat>

<Tingkat blockupi="0102030000011753(B)M1(M)0" tingkatno="(T)3" upi="0102030000011753(B)M1(M)0(T)3" no_of_petak="1" no_of_petak_kr="0" no_of_aksesori="0" no_of_aksesori_kr="0" area="602.000" unit="M" height="3.756" altitude="8.182" namalaintingkat="" keratan_groupid="0102030000011753(B)M1(GK)1">

<Petak petakno="(P)19" upi="0102030000011753(B)M1(M)0(T)3(P)19" g_area="428.110" a_area="428" jp_area="428" a_unit="M" height="3.756" altitude="8.182" pab="PA(B)12753" folio="04" kodkegunaanpetak="REU3" namapetak="" rastertable="" unitsyer="428.00" is_kr="N">

<boundary petakupi="0102030000011753(B)M1(M)0(T)3(P)19" bearing="248.0910" g_distance="44.023" a_distance="44.023" unit="M" guid="6b9590748cfa4f55b670bfbe91896f3b" isislandlot="false">

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(P)19" x="8467.018"
y="-53323.511" guid="665818579fb54716a888c957dbb81328" isislandlot="false"
/>
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(P)19" x="8426.157"
y="-53339.893" guid="117c50f778084c5ea01218e3f7778c7d" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(P)19"
bearing="338.0910" g_distance="9.724" a_distance="9.724" unit="M"
guid="3859463c6d844c3b88994f6d3812d298" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(P)19" x="8426.157"
y="-53339.893" guid="41018cb0a32f4b2d86835cb8117d53f7" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(P)19" x="8422.538"
y="-53330.867" guid="261f4781457c4684adaf982e99de7b8e" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(P)19"
bearing="68.0910" g_distance="44.019" a_distance="44.019" unit="M"
guid="56bd13cf1e10403088f285e777a1d6d3" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(P)19" x="8422.538"
y="-53330.867" guid="d79484710b1543bdad5f46bc649672ef" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(P)19" x="8463.395"
y="-53314.486" guid="b903906314e24165aced64ae44fa1863" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(P)19"
bearing="158.0753" g_distance="9.725" a_distance="9.725" unit="M"
guid="aba024500d5d497ca840f685c5cf1b1b" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(P)19" x="8463.395"
y="-53314.486" guid="8929d9f3d7f94377a4398ef74d5e626c" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(P)19" x="8467.018"
y="-53323.511" guid="b12bd21f97af4ce5b1908e483008afac" isislandlot="false" />
    </boundary>
</Petak>
</Tingkat>
<Tingkat blockupi="0102030000011753(B)M1(M)0" tingkatno="(T)4"
upi="0102030000011753(B)M1(M)0(T)4" no_of_petak="5" no_of_petak_kr="0"
no_of_aksesori="0" no_of_aksesori_kr="0" area="713.000" unit="M"
height="3.526" altitude="11.938" namalaintingkat=""
keratan_groupid="0102030000011753(B)M1(GK)1">
    <Petak petakno="(P)24" upi="0102030000011753(B)M1(M)0(T)4(P)24"
g_area="127.878" a_area="128" jp_area="128" a_unit="M" height="3.526"
altitude="11.938" pab="PA(B)12753" folio="05" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="128.00" is_kr="N">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)24"
bearing="158.0753" g_distance="11.753" a_distance="11.753" unit="M"
guid="f19b379828bb429bbe52b34e1d267e4b" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8462.640"
y="-53312.604" guid="2837d1f117104f23a660839c8dc713" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8467.018"
y="-53323.511" guid="e3623c57532b4c1298e305c40d9dc755" isislandlot="false"
/>
    </boundary>

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    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)24"
bearing="248.0910" g_distance="3.672" a_distance="3.672" unit="M"
guid="938977ba507343c08ddea4a171ed042e" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8467.018"
y="-53323.511" guid="b56c7e97b3ba462d9d8cb57fa57565e6" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8463.610"
y="-53324.878" guid="fde5504c240640e5aeffa2a4be40ed6" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)24"
bearing="338.0910" g_distance="0.918" a_distance="0.918" unit="M"
guid="79d95f727d3e41fa97bcbdb49bfba0c1" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8463.610"
y="-53324.878" guid="334e2453a61c4b0988608ca3de6c4c90" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8463.268"
y="-53324.026" guid="f6c05f91470b47e7a3c0970596902cea" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)24"
bearing="248.0910" g_distance="1.749" a_distance="1.749" unit="M"
guid="c76a4ac22ac24fceb31fe460bb109815" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8463.268"
y="-53324.026" guid="425e272aaf42444e9fc389f9878d7a48" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8461.645"
y="-53324.677" guid="c49a8af1f4fd441fa158197bc497d36f" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)24"
bearing="158.0910" g_distance="0.918" a_distance="0.918" unit="M"
guid="684dcc996ca44872b51205f6d7384ba4" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8461.645"
y="-53324.677" guid="5d80013988a1461a9cca51b7dbc4bdc5" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8461.986"
y="-53325.529" guid="16eff126085d423a834f3f03aeda3945" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)24"
bearing="248.0910" g_distance="5.598" a_distance="5.598" unit="M"
guid="60cdb68a22fa4a8890d1811da523f002" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8461.986"
y="-53325.529" guid="f008b08a125e400c98c8497a39f82c52" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8456.790"
y="-53327.612" guid="daa571a406bf4a2d90e58711c975b228" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)24"
bearing="338.0910" g_distance="11.753" a_distance="11.753" unit="M"
guid="f6ce832567f64402b9f53cd447626538" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8456.790"
y="-53327.612" guid="e1b37b0d3b99420cb0d938a01d098893" isislandlot="false"
/>
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8452.416"
y="-53316.703" guid="e344603ce3a045ce8bda559a772ba8b8" isislandlot="false" />
    </boundary>

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    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)24"
bearing="68.0910" g_distance="11.015" a_distance="11.015" unit="M"
guid="dcd9deb83244832b9606df9867811b0" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8452.416"
y="-53316.703" guid="28708aee340f4cab99e5576fef8d6005" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)24" x="8462.640"
y="-53312.604" guid="a4789fd2829c465eb91ef576b258ceb6" isislandlot="false" />
    </boundary>
</Petak>
    <Petak petakno="(P)23" upi="0102030000011753(B)M1(M)0(T)4(P)23"
g_area="85.898" a_area="86" jp_area="86" a_unit="M" height="3.526"
altitude="11.938" pab="PA(B)12753" folio="05" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="86.00" is_kr="N">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)23"
bearing="158.0910" g_distance="11.753" a_distance="11.753" unit="M"
guid="69012ab8f82947b28d9375b8a77b1925" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)23" x="8452.416"
y="-53316.703" guid="d8ee539529d3410ab5a5d0f87834c794" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)23" x="8456.790"
y="-53327.612" guid="7f2afd3cb9bd40b9a29fc1c9a9869baa" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)23"
bearing="248.0910" g_distance="7.309" a_distance="7.309" unit="M"
guid="95508cb0f8e745628def2e43bc94bdb3" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)23" x="8456.790"
y="-53327.612" guid="395572f231ef42afa94190e7ca8bda3a" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)23" x="8450.006"
y="-53330.332" guid="f183177dca4d42cb8bbdb48c2538f71c" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)23"
bearing="338.0910" g_distance="11.753" a_distance="11.753" unit="M"
guid="10c5221ae7cd4e288f5c4c4554e41248" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)23" x="8450.006"
y="-53330.332" guid="c7055fc229a04b2fbc57a93083276266" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)23" x="8445.632"
y="-53319.423" guid="a69d3d842f4e4b2eaedbaa5a34e049f3" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)23"
bearing="68.0910" g_distance="7.309" a_distance="7.309" unit="M"
guid="c529cff6b3514680aaabf3169b92a6fa" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)23" x="8445.632"
y="-53319.423" guid="ae22009896554c7cafa71c15d86bd09a" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)23" x="8452.416"
y="-53316.703" guid="d0a58cbfbabc40e6a7cf5321b7c32e98" isislandlot="false" />
    </boundary>
</Petak>
    <Petak petakno="(P)22" upi="0102030000011753(B)M1(M)0(T)4(P)22"
g_area="129.381" a_area="129" jp_area="129" a_unit="M" height="3.526"
altitude="11.938" pab="PA(B)12753" folio="05" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="129.00" is_kr="N">

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<boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)22"
bearing="158.0910" g_distance="11.753" a_distance="11.753" unit="M"
guid="e90b299dfa924fb2b437978a461d030b" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)22" x="8445.632"
y="-53319.423" guid="31e878a438544f8ab5a25acf22ee3bf0" isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)22" x="8450.006"
y="-53330.332" guid="67ef8ffd59784a8d9689d2d561c57da2" isislandlot="false" />
</boundary>
<boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)22"
bearing="248.0910" g_distance="11.008" a_distance="11.008" unit="M"
guid="8236ed54bcd645748733d4f8399e8e25" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)22" x="8450.006"
y="-53330.332" guid="76675a5ca7a545199a3e2feccaa5706f" isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)22" x="8439.788"
y="-53334.428" guid="5fee8b21b55f4f96820da183f5d8a490" isislandlot="false" />
</boundary>
<boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)22"
bearing="338.0910" g_distance="11.752" a_distance="11.752" unit="M"
guid="961bd8d4096644698a283a474c8b5003" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)22" x="8439.788"
y="-53334.428" guid="2dd3fcb9987240aa82c8962c09dc8f7f" isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)22" x="8435.415"
y="-53323.520" guid="34a78c7a45734020bc76a84e5d7ca789" isislandlot="false" />
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<boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)22"
bearing="68.0910" g_distance="11.008" a_distance="11.008" unit="M"
guid="2cf0ed21b5d64a23be83740fa41f7924" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)22" x="8435.415"
y="-53323.520" guid="8c196d0791e140eba7012cacf2d8933c" isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)22" x="8445.632"
y="-53319.423" guid="7885d7a8af91430a82f0e9f5ea1238a7" isislandlot="false" />
</boundary>
</Petak>
<Petak petakno="(P)21" upi="0102030000011753(B)M1(M)0(T)4(P)21"
g_area="85.019" a_area="85" jp_area="85" a_unit="M" height="3.526"
altitude="11.938" pab="PA(B)12753" folio="05" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="85.00" is_kr="N">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)21"
bearing="158.0910" g_distance="11.752" a_distance="11.752" unit="M"
guid="d9dd165754b247be99c0d41939c59316" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)21" x="8435.415"
y="-53323.520" guid="631d14899f4241729c4084cf7bebe217" isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)21" x="8439.788"
y="-53334.428" guid="29f1c730878142a49a2b293a1a4e1514" isislandlot="false" />
</boundary>
<boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)21"
bearing="248.0910" g_distance="7.234" a_distance="7.234" unit="M"
guid="187687d788c54db3a918c08ecd358f7d" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)21" x="8439.788"
y="-53334.428" guid="99c8b315d36b4e9fa3264aa3d2f38f4c" isislandlot="false" />

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)21" x="8433.074"
y="-53337.120" guid="16bbb29209814296aba8024bffaf8927" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)21"
bearing="338.0910" g_distance="11.752" a_distance="11.752" unit="M"
guid="4ee661c6cf0740dfad946d938e39132b" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)21" x="8433.074"
y="-53337.120" guid="b2cd99f0a58d4abc87ff8f8c153c0fce" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)21" x="8428.700"
y="-53326.212" guid="ced21607bb24476c981172ab630beea7" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)21"
bearing="68.0910" g_distance="7.235" a_distance="7.235" unit="M"
guid="cbc43c21bc834039a6908a3057cf578b" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)21" x="8428.700"
y="-53326.212" guid="b4b47d3188ae40faafa27c1f4bb67fc6" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)21" x="8435.415"
y="-53323.520" guid="a81a23aa83ec468ab0cd9d9e72f81fc3" isislandlot="false" />
  </boundary>
</Petak>
<Petak petakno="(P)20" upi="0102030000011753(B)M1(M)0(T)4(P)20"
g_area="83.372" a_area="83" jp_area="83" a_unit="M" height="3.526"
altitude="11.938" pab="PA(B)12753" folio="05" kodkegunaanpetak="REU3"
namapetak="" rastertable="" unitsyer="83.00" is_kr="N">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)20"
bearing="158.0910" g_distance="11.752" a_distance="11.752" unit="M"
guid="396791f3dc2b4cb1bae6bc909c6c8b68" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)20" x="8428.700"
y="-53326.212" guid="2999b7fe635747978bc724a7dbec50e5" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)20" x="8433.074"
y="-53337.120" guid="993e3095ad2a403cb13093ceecf142fd" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)20"
bearing="248.0910" g_distance="6.205" a_distance="6.205" unit="M"
guid="6a3e22034ae84878a948e0091f85be05" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)20" x="8433.074"
y="-53337.120" guid="701258675b644ea7b604428250d08c75" isislandlot="false"
/>
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)20" x="8427.315"
y="-53339.429" guid="9f77cf4c4b7c46be8deb65c780cd2f02" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)20"
bearing="338.1442" g_distance="3.368" a_distance="3.368" unit="M"
guid="d027c10e9d99491c8082ff537839cb7d" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)20" x="8427.315"
y="-53339.429" guid="3b2b81202e064f25a43fe8216e0dbe71" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)20" x="8426.067"
y="-53336.301" guid="5017fbc6a49c498f8f4338b1c5293eb0" isislandlot="false" />
  </boundary>

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    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)20"
bearing="248.0824" g_distance="1.253" a_distance="1.253" unit="M"
guid="faf78d4553424575825d77ee12c27bc8" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)20" x="8426.067"
y="-53336.301" guid="940d578fbb5342e9b2d08647d76bdb72" isislandlot="false"
/>
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)20" x="8424.904"
y="-53336.768" guid="94bd29aa03e64043852b2ec83c33418d" isislandlot="false"
/>
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)20"
bearing="338.0910" g_distance="8.385" a_distance="8.385" unit="M"
guid="3cb213f13f8e44a5871ed95380008ba7" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)20" x="8424.904"
y="-53336.768" guid="dc95ffda534741eaa9405277c91340ac" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)20" x="8421.783"
y="-53328.985" guid="233fa60ba9354b13ad15f7ae6676deba" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(P)20"
bearing="68.0910" g_distance="7.452" a_distance="7.452" unit="M"
guid="431454825d7f403dbbbdd1f83dbf763d" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)20" x="8421.783"
y="-53328.985" guid="e48f82d6c35f493999129a3ccd22c7ba" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(P)20" x="8428.700"
y="-53326.212" guid="13a02ebaa75e4e199d8f6ba40bf19416" isislandlot="false" />
  </boundary>
</Petak>
</Tingkat>
</Block>
<CommonAreas>
  <CommonArea commonareano="(C)106"
upi="0102030000011753(B)M1(M)0(T)1(C)106" g_area="0.806" height="3.507"
altitude="1.000" petaktype="BILIK UTILITI" namapetak="">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)106"
bearing="248.0910" g_distance="1.251" a_distance="1.251" unit="M"
guid="a130184769054129b07853b9add440ed" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)106"
x="8471.589" y="-53321.678" guid="c0701030941543a4bda9bad958d3149a"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)106"
x="8470.428" y="-53322.144" guid="1b35e5a1144b4419960310164d3f61d4"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)106"
bearing="338.0052" g_distance="0.643" a_distance="0.643" unit="M"
guid="c5251f6cb2e24530940c8e8d18e6fc6e" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)106"
x="8470.428" y="-53322.144" guid="4782bbb014e7458db3b083b91e33db37"
isislandlot="false" />
  </CommonArea>

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)106"
x="8470.188" y="-53321.548" guid="d513916c318b40e1a99779c030c307b6"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)106"
bearing="68.0052" g_distance="1.252" a_distance="1.252" unit="M"
guid="31c88d6c3a474e3b8e8da6ce06f4f64b" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)106"
x="8470.188" y="-53321.548" guid="272cc4f7fbf040b0ada712c49fd76545"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)106"
x="8471.349" y="-53321.079" guid="b31ca101f4db42f4a98269a213ad2daf"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)106"
bearing="158.0910" g_distance="0.645" a_distance="0.645" unit="M"
guid="7c1ca496433b4d2d81cf9f46103774d2" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)106"
x="8471.349" y="-53321.079" guid="0e815da82d574c02847c46fe89f38b34"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)106"
x="8471.589" y="-53321.678" guid="84f6ec00da48443a873eaa4bfaf62c7b"
isislandlot="false" />
  </boundary>
</CommonArea>
<CommonArea commonareano="(C)105"
upi="0102030000011753(B)M1(M)0(T)1(C)105" g_area="35.018" height="3.507"
altitude="1.000" petaktype="TANDAS" namapetak="">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
bearing="158.0052" g_distance="9.725" a_distance="9.725" unit="M"
guid="a6fb5c5586444608bf6ac260d778061d" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8470.207" y="-53311.755" guid="01afb33ac5a44daf99b7c0a4f008a02c"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8473.848" y="-53320.773" guid="f6dfc4fd1bf947698434eb751c114352"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
bearing="248.0910" g_distance="2.434" a_distance="2.434" unit="M"
guid="d56f4c307fd84d4d96dcca8f8c1b243b" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8473.848" y="-53320.773" guid="798859a5032e419a989db22b2d5efee9"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8471.589" y="-53321.678" guid="94d91d2960974f8aadf8b8482e7c79e0"
isislandlot="false" />
  </boundary>

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    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
bearing="338.0910" g_distance="0.645" a_distance="0.645" unit="M"
guid="af7c497ac14448188498efa18267fd79" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8471.589" y="-53321.678" guid="fb90c9efa609435e8667e2611335c651"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8471.349" y="-53321.079" guid="e33f9be8666445a79117d305fc09d52c"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
bearing="248.0052" g_distance="1.252" a_distance="1.252" unit="M"
guid="f0fddc68e6b94b0f803348f00240c611" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8471.349" y="-53321.079" guid="01006d54ca7340528e51617e49cf8c6b"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8470.188" y="-53321.548" guid="763aca63efa149f8bd8d5ccf8952d2db"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
bearing="338.0052" g_distance="9.082" a_distance="9.082" unit="M"
guid="18d871ec07bb40faaf499f2adefcab3" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8470.188" y="-53321.548" guid="568a0645d77b4cf69cd185e1d693d3e5"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8466.788" y="-53313.126" guid="6210f940d13f4e30a1aea1d880c5ebff"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
bearing="68.0910" g_distance="3.684" a_distance="3.684" unit="M"
guid="46f1363317f74beab3ced769db3d66d0" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8466.788" y="-53313.126" guid="baea448dd2b34964a0976cc79be8db93"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8470.207" y="-53311.755" guid="5e92b619a139424e83d08a2eceacb25e"
isislandlot="false" />
    </boundary>
    </CommonArea>
    <CommonArea commonareano="(C)105"
upi="0102030000011753(B)M1(M)0(T)1(C)105" g_area="17.970" height="3.507"
altitude="1.000" petaktype="TANDAS" namapetak="">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
bearing="158.0052" g_distance="4.910" a_distance="4.910" unit="M"
guid="66c557b4ee774a788697b3e7ac223de4" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8466.788" y="-53313.126" guid="169bdd117a754fc6aaf728ef312c0ee2"
isislandlot="false" />

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8468.626" y="-53317.679" guid="7b8bda81ab114184ac3e1377909e92fe"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
bearing="248.1001" g_distance="3.665" a_distance="3.665" unit="M"
guid="dc2bb7a604d342548ad424fd4d67116b" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8468.626" y="-53317.679" guid="becbc46238fd4932b020d4cbb1a2174d"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8465.224" y="-53319.042" guid="8e1b81f958d249b0ad395aa3c569f5b6"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
bearing="338.0753" g_distance="4.909" a_distance="4.909" unit="M"
guid="2ff9cfbf59e74476861151790f4f6921" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8465.224" y="-53319.042" guid="850dfce5016144f5bdcf435f1fc6a336"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8463.395" y="-53314.486" guid="b82f1ae68b86450b9676f9f7386b0795"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
bearing="68.0910" g_distance="3.655" a_distance="3.655" unit="M"
guid="a8282c9e961144ea8a2e213d50b07390" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8463.395" y="-53314.486" guid="e004ea9e75c84709a3bac47080fb9f51"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)105"
x="8466.788" y="-53313.126" guid="3368ebccce57450bb75c4f2ad3013c80"
isislandlot="false" />
  </boundary>
</CommonArea>
<CommonArea commonareano="(C)104"
upi="0102030000011753(B)M1(M)0(T)1(C)104" g_area="17.670" height="3.507"
altitude="1.000" petaktype="TANGGA" namapetak="">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)104"
bearing="158.0052" g_distance="4.815" a_distance="4.815" unit="M"
guid="b01a6c575bab466cb4b68772712b67dd" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)104"
x="8468.626" y="-53317.679" guid="7aef23b86442468cbbb30774668420c6"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)104"
x="8470.428" y="-53322.144" guid="3ae45d6238c7401e875d84c4d7c936b0"
isislandlot="false" />
  </boundary>

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    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)104"
bearing="248.0910" g_distance="3.674" a_distance="3.674" unit="M"
guid="5a8ec49897f04c219a23027bf22954fa" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)104"
x="8470.428" y="-53322.144" guid="db8d32f618cb49d5b04cd632ee161d93"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)104"
x="8467.018" y="-53323.511" guid="706f882faf53425b9261df00b87603f3"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)104"
bearing="338.0753" g_distance="4.816" a_distance="4.816" unit="M"
guid="c254ecd1e471417d88f668604ec23b3d" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)104"
x="8467.018" y="-53323.511" guid="bad207449c324864b7269e738010047f"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)104"
x="8465.224" y="-53319.042" guid="f98d076ba5f54c2cb9a90594bdf0cbc2"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)104"
bearing="68.1001" g_distance="3.665" a_distance="3.665" unit="M"
guid="7186b22f0ba24dd1ad8c2c1e3e0cd707" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)104"
x="8465.224" y="-53319.042" guid="4a1d02d64e5f4b1caee60445c98a4aa"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)104"
x="8468.626" y="-53317.679" guid="57e7615e35114355981bbe04d043d7b1"
isislandlot="false" />
    </boundary>
    </CommonArea>
    <CommonArea commonareano="(C)103"
upi="0102030000011753(B)M1(M)0(T)1(C)103" g_area="17.633" height="3.507"
altitude="1.000" petaktype="BILIK UTILITI" namapetak="">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)103"
bearing="158.0910" g_distance="4.826" a_distance="4.826" unit="M"
guid="203e3ef4310c43159a07c02ccc1adb47" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)103"
x="8461.798" y="-53320.405" guid="5e7fefebd6c64bcc27ea8eea7056ee7"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)103"
x="8463.594" y="-53324.884" guid="ff833821c27e41948dc5168e6b15b976"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)103"
bearing="248.0910" g_distance="3.664" a_distance="3.664" unit="M"
guid="d805228ddfa9402e836a6b2092c49971" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)103"
x="8463.594" y="-53324.884" guid="776ba14fe0ee4897a2216ad8ad04709b"
isislandlot="false" />

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)103"
x="8460.193" y="-53326.248" guid="aa5a1a17f03a4b109cba09652a41c2da"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)103"
bearing="338.2902" g_distance="4.836" a_distance="4.836" unit="M"
guid="165e478fd724417ba04a63cd4fb307ac" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)103"
x="8460.193" y="-53326.248" guid="31efcaf9ae934a0aad048074e17cc7ec"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)103"
x="8458.420" y="-53321.749" guid="92c22431b8e44864af7fc3b4eeef7400"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)103"
bearing="68.1834" g_distance="3.636" a_distance="3.636" unit="M"
guid="f7a9d280e71541d4b09798f2dd23031c" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)103"
x="8458.420" y="-53321.749" guid="4ec727453eed4d7ba6854293b62bd20b"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)103"
x="8461.798" y="-53320.405" guid="c0597353c2064d00acc6326d7109036f"
isislandlot="false" />
  </boundary>
</CommonArea>
<CommonArea commonareano="(C)102"
upi="0102030000011753(B)M1(M)0(T)1(C)102" g_area="123.262" height="3.507"
altitude="1.000" petaktype="KORIDOR" namapetak="">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
bearing="248.0911" g_distance="51.381" a_distance="51.381" unit="M"
guid="d8db67dc69fb4fdd90838a5a9a539033" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8474.582" y="-53322.605" guid="2e43bcf161d6483fb61d18cbe689c030"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8426.891" y="-53341.725" guid="7bbec06d7b184dde90b84d3871c7e261"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
bearing="338.0911" g_distance="1.974" a_distance="1.974" unit="M"
guid="020826bcd67246f08b2c2706e1710a27" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8426.891" y="-53341.725" guid="4f80b9705c7b4f95a1b68d840be7132d"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8426.157" y="-53339.893" guid="1c8c32971e3f42118830923b115e3fe6"
isislandlot="false" />
  </boundary>

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    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
bearing="68.0910" g_distance="1.253" a_distance="1.253" unit="M"
guid="e13f623476284bb5837be2a7eb1bf27d" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8426.157" y="-53339.893" guid="675346c5433d4eebbc3e4dd780c1b23f"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8427.320" y="-53339.427" guid="d37991308bf5481ead031dce2b13ae57"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
bearing="68.0910" g_distance="6.193" a_distance="6.193" unit="M"
guid="a9bd29128b004e2093b198745e4657c2" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8427.320" y="-53339.427" guid="77d3fb70fe044e888292c4e5084e6108"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8433.068" y="-53337.123" guid="ee48af9d8bc64f4a8552ec2c0133f8ef"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
bearing="338.1442" g_distance="3.003" a_distance="3.003" unit="M"
guid="f369d0c74af2494c87252080c81d372f" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8433.068" y="-53337.123" guid="2d6d260db0864482ab24bdd628a29580"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8431.955" y="-53334.334" guid="d80fa86d4dd2464e97ea902b6936bd85"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
bearing="68.1024" g_distance="1.811" a_distance="1.811" unit="M"
guid="6d33a2fca60a4526bce89143c2c56c8b" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8431.955" y="-53334.334" guid="1bfad77692a84458832d682ef9c303c3"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8433.636" y="-53333.661" guid="30285e7f69434cdca43100795e3d46cd"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
bearing="68.1024" g_distance="5.486" a_distance="5.486" unit="M"
guid="ff0b7a72cb1b4544b4188f84a6fd7f54" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8433.636" y="-53333.661" guid="3a54ad8bad4c4488b40d563565a1ece4"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8438.729" y="-53331.621" guid="b8f2028311dc47779ccf29df6e03e897"
isislandlot="false" />
    </boundary>

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    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
bearing="158.2433" g_distance="3.000" a_distance="3.000" unit="M"
guid="0b7c1751c42c4931913377d509ab6e9f" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8438.729" y="-53331.621" guid="79f82a89038841bbacb291727ea85e47"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8439.833" y="-53334.410" guid="bb22572ec35a4dea9a7769ae70b1e4d5"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
bearing="68.0910" g_distance="25.599" a_distance="25.599" unit="M"
guid="6ae22cb5ccce413b87c096a93e224c49" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8439.833" y="-53334.410" guid="91d208d63c1445a2b86217d588d08781"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8463.594" y="-53324.884" guid="a3adb108b4c848a6b42fd4844c105c37"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
bearing="68.0910" g_distance="3.689" a_distance="3.689" unit="M"
guid="58c021402bed4e13aa1ba6ed0f1cc9de" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8463.594" y="-53324.884" guid="91ead09d631048b3acffec213d2204c3"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8467.018" y="-53323.511" guid="13307702393c43b4abf059d48b270b46"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
bearing="68.0910" g_distance="3.674" a_distance="3.674" unit="M"
guid="5c103bbcd0094c7eb38fceb04a9b0c56" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8467.018" y="-53323.511" guid="ca13c927b4a1404db7dd873e1b083732"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8470.428" y="-53322.144" guid="20883006106540adaa77fd9ea03d04c3"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
bearing="68.0910" g_distance="3.685" a_distance="3.685" unit="M"
guid="9d3d49ef5437487c9a50827eb6216801" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8470.428" y="-53322.144" guid="2453d596f330427da837022e87a56242"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8473.848" y="-53320.773" guid="43b632c4d3da473283689e2c69d8d012"
isislandlot="false" />
  </boundary>

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    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
bearing="158.0911" g_distance="1.974" a_distance="1.974" unit="M"
guid="c563e453aa5b4e9f9a24b6932f9b8d26" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8473.848" y="-53320.773" guid="b88d69075cce4d329c93d3068df1ce85"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)102"
x="8474.582" y="-53322.605" guid="a1a5eef4391249269474d1626b420b62"
isislandlot="false" />
    </boundary>
</CommonArea>
<CommonArea commonareano="(C)101"
upi="0102030000011753(B)M1(M)0(T)1(C)101" g_area="4.221" height="3.507"
altitude="1.000" petaktype="BILIK UTILITI" namapetak="">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)101"
bearing="158.0910" g_distance="3.005" a_distance="3.005" unit="M"
guid="2ff7f736f9d242298e89369ea8dec089" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)101"
x="8426.202" y="-53336.638" guid="32050154e7e94c6c91262942c3d0fc8c"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)101"
x="8427.320" y="-53339.427" guid="e3a098037da54452906318db8d13820e"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)101"
bearing="248.0910" g_distance="1.253" a_distance="1.253" unit="M"
guid="c3e6b84bc3c341fbafec265f37d0345e" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)101"
x="8427.320" y="-53339.427" guid="76834a0fbb6b4f0c8d34dd8b168fa8a1"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)101"
x="8426.157" y="-53339.893" guid="e273713d880f4de5ae04c1c6db2a98d8"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)101"
bearing="338.0910" g_distance="3.367" a_distance="3.367" unit="M"
guid="fa1debe964cd4baa98ac6fdac5bc74ec" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)101"
x="8426.157" y="-53339.893" guid="fa2be758417644408f772455e784833a"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)101"
x="8424.904" y="-53336.768" guid="d9f69993173246c7899b3ef84efd7ccd"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)101"
bearing="68.0824" g_distance="1.253" a_distance="1.253" unit="M"
guid="90e322d0260a41bea18ceb7734335e1a" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)101"
x="8424.904" y="-53336.768" guid="e44f4c00c5ac401ca601039ebd1b52e2"
isislandlot="false" />

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)101"
x="8426.067" y="-53336.301" guid="5b5f79eb934c4217836466b76a413448"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)1(C)101"
bearing="158.0910" g_distance="0.363" a_distance="0.363" unit="M"
guid="c9fcc0e600f440679c65236a22cbd102" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)101"
x="8426.067" y="-53336.301" guid="a3d30c217ea74d0bbb8685b0efe2b85f"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)1(C)101"
x="8426.202" y="-53336.638" guid="182db1630c37430eabb7efe1eaadf413"
isislandlot="false" />
  </boundary>
</CommonArea>
<CommonArea commonareano="(C)204"
upi="0102030000011753(B)M1(M)0(T)2(C)204" g_area="35.013" height="3.675"
altitude="4.507" petaktype="TANDAS" namapetak="">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
bearing="158.0052" g_distance="9.725" a_distance="9.725" unit="M"
guid="92e1753f4b4d4aa18c2663e2637bbd1" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
x="8470.207" y="-53311.755" guid="5a8ef8bdb9da491ea8e18dadb16f1ad1"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
x="8473.848" y="-53320.773" guid="0e011ed967f443af9632724c34e6bfa8"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
bearing="248.0910" g_distance="2.429" a_distance="2.429" unit="M"
guid="80bf9eb04e8742a2a7d495d242eb5c73" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
x="8473.848" y="-53320.773" guid="23c59eddc37f4e078340bc40ba63f96c"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
x="8471.594" y="-53321.677" guid="0801e0453aaa44d9b8087d1716e8c977"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
bearing="337.4456" g_distance="0.658" a_distance="0.658" unit="M"
guid="7964b5eee675462cb26bbf6c83b58162" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
x="8471.594" y="-53321.677" guid="39f2455e7d0c457c863044b812265930"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
x="8471.345" y="-53321.068" guid="981b7555a3444aa4ae2d9c00e4e9fb8f"
isislandlot="false" />
  </boundary>

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    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
bearing="247.1146" g_distance="1.253" a_distance="1.253" unit="M"
guid="aa2e2ad048924febbfa80b3ac2fe9451" isilandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
x="8471.345" y="-53321.068" guid="6fa3d2dd14f34f178ba5ee0f39d20532"
isilandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
x="8470.190" y="-53321.554" guid="c06597a3590640a89f42c48b16702612"
isilandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
bearing="338.0052" g_distance="9.089" a_distance="9.089" unit="M"
guid="96a0e76e1a2c4faa8dbcc1d959e4c62d" isilandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
x="8470.190" y="-53321.554" guid="f3f609488e7443c287906d5f168253a5"
isilandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
x="8466.788" y="-53313.126" guid="f504c2f7ddab4ed1bb06ad6ec4fd1ac4"
isilandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
bearing="68.0910" g_distance="3.684" a_distance="3.684" unit="M"
guid="c5d9de61c0ae468b9e1bed13e29bee1d" isilandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
x="8466.788" y="-53313.126" guid="406f6213731b4178a7342abecb6df603"
isilandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)204"
x="8470.207" y="-53311.755" guid="73233df000cc4946a87f9b6745ee56ae"
isilandlot="false" />
    </boundary>
    </CommonArea>
    <CommonArea commonareano="(C)203"
upi="0102030000011753(B)M1(M)0(T)2(C)203" g_area="17.668" height="3.675"
altitude="4.507" petaktype="TANGGA" namapetak="">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)203"
bearing="158.0052" g_distance="4.815" a_distance="4.815" unit="M"
guid="007f8781d23e4e97a28ab71211a9dcdc" isilandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)203"
x="8468.626" y="-53317.679" guid="9e4470b895954fdda40c93cbee1c06b3"
isilandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)203"
x="8470.428" y="-53322.144" guid="0e9d66421fc2470eb80809a73af7995b"
isilandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)203"
bearing="248.0910" g_distance="3.674" a_distance="3.674" unit="M"
guid="633ad805c75b45c1902804ec3d954686" isilandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)203"
x="8470.428" y="-53322.144" guid="342788087da14fb091973e470ea176ea"
isilandlot="false" />

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)203"
x="8467.018" y="-53323.511" guid="d9e306118e16471ea1bf16bbc84dcfb5"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)203"
bearing="338.0753" g_distance="4.815" a_distance="4.815" unit="M"
guid="61fec978b890483284d628b9ecad4360" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)203"
x="8467.018" y="-53323.511" guid="9db356eec4ed4edf900d337e4987314e"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)203"
x="8465.224" y="-53319.043" guid="3e71f41aaa874850b2e9a769454145db"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)203"
bearing="68.0911" g_distance="3.665" a_distance="3.665" unit="M"
guid="d783722df17944988f0a1e54031890aa" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)203"
x="8465.224" y="-53319.043" guid="aab799a3b11436b951a605584be30e1"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)203"
x="8468.626" y="-53317.679" guid="50687f03ea29457bbcc54a68bf5bc5b1"
isislandlot="false" />
  </boundary>
</CommonArea>
<CommonArea commonareano="(C)202"
upi="0102030000011753(B)M1(M)0(T)2(C)202" g_area="17.972" height="3.675"
altitude="4.507" petaktype="RUANG KOSONG" namapetak="">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)202"
bearing="248.0910" g_distance="3.665" a_distance="3.665" unit="M"
guid="7d6d45a44bae46ad8a4a8e21e54ba4b6" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)202"
x="8468.626" y="-53317.679" guid="c93982d214bd419fae6cda727df973ea"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)202"
x="8465.224" y="-53319.043" guid="d1b5098d143847a4bf5a6a464881781b"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)202"
bearing="338.0753" g_distance="4.910" a_distance="4.910" unit="M"
guid="aa331c32b0b64ceb9f3e5a6999c7b2b0" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)202"
x="8465.224" y="-53319.043" guid="9d300900d9734a0da57c187fd4f89c8a"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)202"
x="8463.395" y="-53314.486" guid="5832b87c10b849fab74aed764ee6cc97"
isislandlot="false" />
  </boundary>

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    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)202"
bearing="68.0910" g_distance="3.655" a_distance="3.655" unit="M"
guid="66597ec40837472ba9836a19fae4b65a" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)202"
x="8463.395" y="-53314.486" guid="39b436d71d6944a68b952bdc6c609b11"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)202"
x="8466.788" y="-53313.126" guid="b3c629dbd4734caab83d8920f1d8c8cb"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)202"
bearing="158.0052" g_distance="4.910" a_distance="4.910" unit="M"
guid="ced5235f88a8403fb952e4a61bbcf991" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)202"
x="8466.788" y="-53313.126" guid="accc189136bb49ecb3a4783bdc7b654a"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)202"
x="8468.626" y="-53317.679" guid="f39798e07c314d27b0e35193c16b3b0e"
isislandlot="false" />
    </boundary>
    </CommonArea>
    <CommonArea commonareano="(C)201"
upi="0102030000011753(B)M1(M)0(T)2(C)201" g_area="101.521" height="3.675"
altitude="4.507" petaktype="KORIDOR" namapetak="">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
bearing="248.0943" g_distance="51.380" a_distance="51.380" unit="M"
guid="b22574c6108d46cbb68916eb88edcaef" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8474.584" y="-53322.611" guid="c6a1e3449cef43ec92aaf5261f80cb53"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8426.891" y="-53341.724" guid="13ed8d38b09e4775ab05a84297bdc4d3"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
bearing="338.0910" g_distance="1.973" a_distance="1.973" unit="M"
guid="f749c0e8c35047eaa5c4addbd87aa8c2" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8426.891" y="-53341.724" guid="9ebc96ef89294b7eba747be56736e77c"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8426.157" y="-53339.893" guid="e71f3f95f60c464ca269d6aef205188a"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
bearing="68.0910" g_distance="3.904" a_distance="3.904" unit="M"
guid="42f26808a0804f908a55643595a662d7" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8426.157" y="-53339.893" guid="648f2e591d54495594cbd85977beb239"
isislandlot="false" />

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8429.781" y="-53338.441" guid="ed72582ff0c4444b97086413052c67b5"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
bearing="68.0910" g_distance="9.029" a_distance="9.029" unit="M"
guid="42daadb591d94b5887f5f9cacd83ed4a" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8429.781" y="-53338.441" guid="9a72f43b49704cacadc10ff786db3c8e"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8438.161" y="-53335.081" guid="c4b7a16e918d49eab6135a4fc506f90b"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
bearing="68.0910" g_distance="5.501" a_distance="5.501" unit="M"
guid="156d10fc971a48449f73bca912adae28" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8438.161" y="-53335.081" guid="07fd3cf88a0d48608049b138a51c25ba"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8443.267" y="-53333.034" guid="5599fbe49a8441798b9706abde8fc663"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
bearing="68.0910" g_distance="3.664" a_distance="3.664" unit="M"
guid="0c9de831e07c471abd367ff0e0d78afd" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8443.267" y="-53333.034" guid="d1364b6521f64ac781d2b3097733b183"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8446.668" y="-53331.670" guid="7c71a9d673f44dfd8d32b0b9c2fa6e3b"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
bearing="68.0910" g_distance="10.938" a_distance="10.938" unit="M"
guid="28e210ad352f42b5af8bd3605465c5c8" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8446.668" y="-53331.670" guid="de77bd86767a4bff8281cc9d2a33a082"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8456.821" y="-53327.600" guid="ad25a6ce86064b4d819d14ddaeb3754e"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
bearing="68.0910" g_distance="10.986" a_distance="10.986" unit="M"
guid="b21e40ee044347759de77638a64b68d4" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8456.821" y="-53327.600" guid="1d51516bed97403c97395bae25b3c984"
isislandlot="false" />

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8467.018" y="-53323.511" guid="a6981798abfd40189cbc4212a8aa9c5c"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
bearing="68.0910" g_distance="3.674" a_distance="3.674" unit="M"
guid="469c58fb59b84cc1a085148041b06e53" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8467.018" y="-53323.511" guid="dc181c26635548fd856c53dd9336549e"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8470.428" y="-53322.144" guid="747deede708245d5ac2741e738dd8929"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
bearing="68.0910" g_distance="1.256" a_distance="1.256" unit="M"
guid="397f8f3cca50488eae006d7fbd272f4" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8470.428" y="-53322.144" guid="95d1a022e32d40d18977d1ae54f48b2c"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8471.594" y="-53321.677" guid="9b41b1e135dc4149af659fac6195d3e7"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
bearing="68.0910" g_distance="2.429" a_distance="2.429" unit="M"
guid="5cb8fecf72d44ccf808d7f2f474f3a03" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8471.594" y="-53321.677" guid="a1debafd208d450cb691230fb78621d6"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8473.848" y="-53320.773" guid="163256ac89084ffbbaa35f4943e0bcf4"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
bearing="158.0910" g_distance="1.980" a_distance="1.980" unit="M"
guid="39e4109adf1048f8af55694e25b04f0d" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8473.848" y="-53320.773" guid="6bed770487044e24b99662c461916058"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)201"
x="8474.584" y="-53322.611" guid="9e65102057ae41c8b89d62bb5dd6389b"
isislandlot="false" />
  </boundary>
</CommonArea>
<CommonArea commonareano="(C)205"
upi="0102030000011753(B)M1(M)0(T)2(C)205" g_area="0.811" height="3.675"
altitude="4.507" petaktype="BILIK UTILITI" namapetak="">

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    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)205"
bearing="248.0910" g_distance="1.256" a_distance="1.256" unit="M"
guid="6747fdfd8db84b2880ca18aaabacd5d3" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)205"
x="8471.594" y="-53321.677" guid="51f17a479ee4405f9c0289f074073a83"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)205"
x="8470.428" y="-53322.144" guid="6c6106ff8d4a4acaa0178665d39f0a3e"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)205"
bearing="338.0052" g_distance="0.636" a_distance="0.636" unit="M"
guid="b5a2f44962d74152a7d6bedb1cd399e3" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)205"
x="8470.428" y="-53322.144" guid="347eef65fc3d4ef5b4676eba8d6fd75b"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)205"
x="8470.190" y="-53321.554" guid="9d73caa082a74576b92afa6542f01304"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)205"
bearing="67.1146" g_distance="1.253" a_distance="1.253" unit="M"
guid="e5dcc24a415a48f3830596a8d4726e50" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)205"
x="8470.190" y="-53321.554" guid="d3fd7111e33b48bc956b0e6c74c30c46"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)205"
x="8471.345" y="-53321.068" guid="e4c080404dfa4ec6bf60c48c87d2e78b"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)2(C)205"
bearing="157.4456" g_distance="0.658" a_distance="0.658" unit="M"
guid="3fbdb7b853194c7095ad92498bed787f" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)205"
x="8471.345" y="-53321.068" guid="4aada571d6214770950e915f99bae3f7"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)2(C)205"
x="8471.594" y="-53321.677" guid="14d1744bfc854f2f8db78fa4df7f66ed"
isislandlot="false" />
    </boundary>
    </CommonArea>
    <CommonArea commonareano="(C)304"
upi="0102030000011753(B)M1(M)0(T)3(C)304" g_area="35.013" height="3.756"
altitude="8.182" petaktype="TANDAS" namapetak="">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
bearing="158.0052" g_distance="9.725" a_distance="9.725" unit="M"
guid="c0687dd9f4f342eab9ead5d614a16421" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
x="8470.207" y="-53311.755" guid="43457d3c16de47878ef539d9712a3314"
isislandlot="false" />

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
x="8473.848" y="-53320.773" guid="9c626ae119704aefb64cd0b48c861027"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
bearing="248.0910" g_distance="2.429" a_distance="2.429" unit="M"
guid="d819d95b9f654a62b5e1340ec4deeb98" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
x="8473.848" y="-53320.773" guid="0026403cca534143a25eb7cf3802eab6"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
x="8471.594" y="-53321.677" guid="95f36339bf3c455bbe852f21da7020b0"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
bearing="337.4456" g_distance="0.658" a_distance="0.658" unit="M"
guid="5c553a4ede15402b868178a732c7f7b9" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
x="8471.594" y="-53321.677" guid="886eaff341dd4cd7a4d55adcb32009e0"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
x="8471.345" y="-53321.068" guid="8abf92a987c7452ca76f6dc2079d6a38"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
bearing="247.1146" g_distance="1.253" a_distance="1.253" unit="M"
guid="93480d6bd61745a19049a476b82b6116" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
x="8471.345" y="-53321.068" guid="bab47dc5959641248de946eeec67d620"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
x="8470.190" y="-53321.554" guid="826ad5054b684aaca671fdc8fb3ada63"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
bearing="338.0052" g_distance="9.089" a_distance="9.089" unit="M"
guid="81ee56c1e66a4823a90a382acfec7007" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
x="8470.190" y="-53321.554" guid="85158d116ee04d9e9a607f1196f59146"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
x="8466.788" y="-53313.126" guid="cd248e29a9b54610b44047437888382d"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
bearing="68.0910" g_distance="3.684" a_distance="3.684" unit="M"
guid="2ee425c33b0f4b44ab21ef2cab70866" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
x="8466.788" y="-53313.126" guid="88a6150421214b88bea5a063cbb3f01d"
isislandlot="false" />

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)304"
x="8470.207" y="-53311.755" guid="2facbe71633f492498a5b2b040748bd7"
isislandlot="false" />
  </boundary>
</CommonArea>
<CommonArea commonareano="(C)303"
upi="0102030000011753(B)M1(M)0(T)3(C)303" g_area="17.668" height="3.756"
altitude="8.182" petaktype="TANGGA" namapetak="">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)303"
bearing="158.0052" g_distance="4.815" a_distance="4.815" unit="M"
guid="59d71fad27f842afbae3c493ddfc8931" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)303"
x="8468.626" y="-53317.679" guid="29b8d9abb6a34cc6a51f813bfa2992f3"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)303"
x="8470.428" y="-53322.144" guid="a196954962784768a6a86c5344995320"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)303"
bearing="248.0910" g_distance="3.674" a_distance="3.674" unit="M"
guid="93d91d0c776e443092d703a1a61adabcd" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)303"
x="8470.428" y="-53322.144" guid="01757c7744534ff1847230f0dc87c98f"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)303"
x="8467.018" y="-53323.511" guid="2b855eb7db90420b8667bf38d93879c4"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)303"
bearing="338.0753" g_distance="4.815" a_distance="4.815" unit="M"
guid="0dbcdc2fb18d456ca40c9c02099b8416" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)303"
x="8467.018" y="-53323.511" guid="2768580b26e5447781e07caf7ffe01df"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)303"
x="8465.224" y="-53319.043" guid="2d30a4f2bc244c5ba61a3de831e4e668"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)303"
bearing="68.0911" g_distance="3.665" a_distance="3.665" unit="M"
guid="f12a570b50104004b3421377169aaacc" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)303"
x="8465.224" y="-53319.043" guid="6868a0f875d74db0823409a5713d77e3"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)303"
x="8468.626" y="-53317.679" guid="c866cf554fc749fe98a9fe4530f20cc3"
isislandlot="false" />
    </boundary>
  </CommonArea>

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    <CommonArea commonareano="(C)302"
upi="0102030000011753(B)M1(M)0(T)3(C)302" g_area="17.972" height="3.756"
altitude="8.182" petaktype="RUANG KOSONG" namapetak="">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)302"
bearing="158.0052" g_distance="4.910" a_distance="4.910" unit="M"
guid="0aaa05f942a54584a7d5346ed87a37b2" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)302"
x="8466.788" y="-53313.126" guid="b511f889ff2a424bb30b9189377141a3"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)302"
x="8468.626" y="-53317.679" guid="0c23939520484553928b40146312f91a"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)302"
bearing="248.0910" g_distance="3.665" a_distance="3.665" unit="M"
guid="0c2da695131044198467793e49848141" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)302"
x="8468.626" y="-53317.679" guid="cf21f9253c0c4637943422afd4656a70"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)302"
x="8465.224" y="-53319.043" guid="c4bfe68b1d1d4893bc2953b093119cbf"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)302"
bearing="338.0753" g_distance="4.910" a_distance="4.910" unit="M"
guid="c31796a0e590404490f11a4ea56384e1" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)302"
x="8465.224" y="-53319.043" guid="b2b11408dc8f405eb43cd73573754097"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)302"
x="8463.395" y="-53314.486" guid="afb66e9bb33c4720bd31a56950948c6b"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)302"
bearing="68.0910" g_distance="3.655" a_distance="3.655" unit="M"
guid="68ee773836444f85b83baf46dfa38e3f" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)302"
x="8463.395" y="-53314.486" guid="c28cf0cd94eb48d0ac670bcbb624b941"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)302"
x="8466.788" y="-53313.126" guid="78194a1064bd48a6bd773a4243f77f7f"
isislandlot="false" />
    </boundary>
</CommonArea>
<CommonArea commonareano="(C)301"
upi="0102030000011753(B)M1(M)0(T)3(C)301" g_area="101.521" height="3.756"
altitude="8.182" petaktype="KORIDOR" namapetak="">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
bearing="248.0943" g_distance="51.380" a_distance="51.380" unit="M"
guid="3a7d079abc4441a295325318018cb719" isislandlot="false">

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
x="8474.584" y="-53322.611" guid="4c6b4427f8ea477eb0781faf7fd15995"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
x="8426.891" y="-53341.724" guid="a7d0c5fc6377413b80d878f46432681d"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
bearing="338.0910" g_distance="1.973" a_distance="1.973" unit="M"
guid="c6c6baf0fc5e49a18495b58ec9ba6d2d" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
x="8426.891" y="-53341.724" guid="78e1a9e0c5c045579b0a59c50f5be6d5"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
x="8426.157" y="-53339.893" guid="605ea9bf852241b3aaefebe705fe34ef"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
bearing="68.0910" g_distance="44.023" a_distance="44.023" unit="M"
guid="c2a4862524744c8abd06ae1ea6bd7b8d" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
x="8426.157" y="-53339.893" guid="9d3472f2bca346cc9140b6a343806f7b"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
x="8467.018" y="-53323.511" guid="1a52219b328049bea945c08439061d5d"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
bearing="68.0910" g_distance="3.674" a_distance="3.674" unit="M"
guid="f541345a3cd74cb89292455e49c6a142" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
x="8467.018" y="-53323.511" guid="3a5316474a354ce3b872475e468c3425"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
x="8470.428" y="-53322.144" guid="f8da6613f0684ebb8cca546d09ae9005"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
bearing="68.0910" g_distance="1.256" a_distance="1.256" unit="M"
guid="c4671890b3f545d1acfb9cf893604dfe" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
x="8470.428" y="-53322.144" guid="2ccc181553094e91863af8de074ab146"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
x="8471.594" y="-53321.677" guid="58094d57490c4133ae93b04e8691f347"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
bearing="68.0910" g_distance="2.429" a_distance="2.429" unit="M"
guid="3cd21c6b14154955b7ccf719093caeed" isislandlot="false">

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
x="8471.594" y="-53321.677" guid="a8e2564af0ac4f5ca71ebd01a0ad7737"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
x="8473.848" y="-53320.773" guid="3a4f834c00d24a45a0ce0b78a0a05a09"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
bearing="158.0910" g_distance="1.980" a_distance="1.980" unit="M"
guid="5da06d0dc620440bb30e76571622a35a" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
x="8473.848" y="-53320.773" guid="8e3eb06f0e524663a1c42302b1132fd8"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)301"
x="8474.584" y="-53322.611" guid="6888a4652d88484eabfc9cbe59693f50"
isislandlot="false" />
    </boundary>
</CommonArea>
<CommonArea commonareano="(C)305"
upi="0102030000011753(B)M1(M)0(T)3(C)305" g_area="0.811" height="3.756"
altitude="8.182" petaktype="BILIK UTILITI" namapetak="">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)305"
bearing="248.0910" g_distance="1.256" a_distance="1.256" unit="M"
guid="4fe155a361034e7089c2be6a3716d852" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)305"
x="8471.594" y="-53321.677" guid="cbcd46fac9f14157bd6e312dd49e1201"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)305"
x="8470.428" y="-53322.144" guid="382c2bb81ca54cbfb956f01e464ed4a9"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)305"
bearing="338.0052" g_distance="0.636" a_distance="0.636" unit="M"
guid="80e359d424794a48914756b9821ae37c" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)305"
x="8470.428" y="-53322.144" guid="1dc464de3d99491b96b879be92a270a9"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)305"
x="8470.190" y="-53321.554" guid="a83c69f76d89448087ce7e94ae982d5c"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)305"
bearing="67.1146" g_distance="1.253" a_distance="1.253" unit="M"
guid="054683f754434b8c90a3d9994dbab6bb" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)305"
x="8470.190" y="-53321.554" guid="2516e82798c6427e8690945a42d29bb5"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)305"
x="8471.345" y="-53321.068" guid="f91b3b7483e5451bba163b4a7154ce18"
isislandlot="false" />

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</boundary>
<boundary petakupi="0102030000011753(B)M1(M)0(T)3(C)305"
bearing="157.4456" g_distance="0.658" a_distance="0.658" unit="M"
guid="31f35a15be4d4ada99f154d043d924e5" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)305"
x="8471.345" y="-53321.068" guid="6cc5b4758fe04fd1b498de9e58a833b6"
isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(M)0(T)3(C)305"
x="8471.594" y="-53321.677" guid="81c1570bd15c4d08be2a04911f962b7c"
isislandlot="false" />
</boundary>
</CommonArea>
<CommonArea commonareano="(C)407"
upi="0102030000011753(B)M1(M)0(T)4(C)407" g_area="6.703" height="3.526"
altitude="11.938" petaktype="BILIK UTILITI" namapetak="">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)407"
bearing="248.0910" g_distance="2.421" a_distance="2.421" unit="M"
guid="55d06b254aa943bf9d6b1afac43aa151" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)407"
x="8472.675" y="-53321.243" guid="d1e5395a16864742bbcf0fae595a14b9"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)407"
x="8470.428" y="-53322.144" guid="d67abe6db19c467a89dd1e6731479771"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)407"
bearing="338.0052" g_distance="2.766" a_distance="2.766" unit="M"
guid="0fa5ca27ac064777a25749ee7d2b2068" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)407"
x="8470.428" y="-53322.144" guid="3d62c5f18af54f318f00caa00db7f6a3"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)407"
x="8469.393" y="-53319.579" guid="a8188b64815f40138cc3e6461ae0468b"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)407"
bearing="68.0052" g_distance="2.421" a_distance="2.421" unit="M"
guid="02bf69cdebcc41caa3358825e4f0d6af" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)407"
x="8469.393" y="-53319.579" guid="e97586e887134a71b51ab198cf23b8b5"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)407"
x="8471.638" y="-53318.673" guid="1e626d90c99143b2a8567e4b0ccf85c1"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)407"
bearing="158.0052" g_distance="2.771" a_distance="2.771" unit="M"
guid="4271be5b31a149a0954fe86651ec5698" isislandlot="false">

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)407"
x="8471.638" y="-53318.673" guid="a81ba6ccbcfb456b8d841f47e2ca747c"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)407"
x="8472.675" y="-53321.243" guid="78edf07f85f244018d01d1ca95d02cd5"
isislandlot="false" />
    </boundary>
  </CommonArea>
  <CommonArea commonareano="(C)406"
upi="0102030000011753(B)M1(M)0(T)4(C)406" g_area="38.488" height="3.526"
altitude="11.938" petaktype="TANDAS" namapetak="">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
bearing="158.0052" g_distance="8.977" a_distance="8.977" unit="M"
guid="a59d9ac86fb34e9ea1fc3736040eed5b" isislandlot="false">
      <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
x="8470.006" y="-53309.651" guid="4f2a259a54244debbd06e314273c1f87"
isislandlot="false" />
      <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
x="8473.366" y="-53317.975" guid="f54caca1ea1046f1b53b130bffdff8"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
bearing="248.0052" g_distance="1.864" a_distance="1.864" unit="M"
guid="da9c6cb7e3134d7d8340d026e0e8b15f" isislandlot="false">
      <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
x="8473.366" y="-53317.975" guid="f00189cc7447409bb7ed4d01265d9a12"
isislandlot="false" />
      <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
x="8471.638" y="-53318.673" guid="51172364be404ad7a94f6c763762e3ed"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
bearing="248.0052" g_distance="2.421" a_distance="2.421" unit="M"
guid="7d29afbc3cb54cfca3b9b3032ba70cdd" isislandlot="false">
      <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
x="8471.638" y="-53318.673" guid="4fec927027f14dbfa4c704aa87351461"
isislandlot="false" />
      <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
x="8469.393" y="-53319.579" guid="b6313319b3bc433095fd9c068e9587f3"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
bearing="338.0052" g_distance="2.049" a_distance="2.049" unit="M"
guid="450220b518104e7d9602ccbc2dc3a799" isislandlot="false">
      <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
x="8469.393" y="-53319.579" guid="5e31a235e412459d88b6a9dfcdc1ca28"
isislandlot="false" />
      <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
x="8468.626" y="-53317.679" guid="f16eec9b2eaa48dfbb51e6f8e8df38f5"
isislandlot="false" />

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</boundary>
<boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
bearing="338.0052" g_distance="6.938" a_distance="6.938" unit="M"
guid="b03f896e23c54a69a552500d9e0dcd76" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
x="8468.626" y="-53317.679" guid="2234f791bb4a44dfbb5c6ccf000028d9"
isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
x="8466.028" y="-53311.246" guid="e2cecb396667407cad7282ccf8e8196f"
isislandlot="false" />
</boundary>
<boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
bearing="68.0910" g_distance="4.286" a_distance="4.286" unit="M"
guid="062aa3d95001457892256984eeb5d78f" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
x="8466.028" y="-53311.246" guid="97ad1d00ba8440899d29d410d1fb237d"
isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)406"
x="8470.006" y="-53309.651" guid="50ab95587a4648b9bdeb9f80f67c2ad4"
isislandlot="false" />
</boundary>
</CommonArea>
<CommonArea commonareano="(C)405"
upi="0102030000011753(B)M1(M)0(T)4(C)405" g_area="17.668" height="3.526"
altitude="11.938" petaktype="TANGGA" namapetak="">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)405"
bearing="158.0052" g_distance="2.766" a_distance="2.766" unit="M"
guid="cb79057c00e74ac88f4b06b58de6db4f" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)405"
x="8469.393" y="-53319.579" guid="172a30b91b6e446c9fa68e5e20bba235"
isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)405"
x="8470.428" y="-53322.144" guid="fef6eba9900445e289d9534d313c8c03"
isislandlot="false" />
</boundary>
<boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)405"
bearing="248.0910" g_distance="3.674" a_distance="3.674" unit="M"
guid="0d1b2187dda4442881cfb4d239e0552c" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)405"
x="8470.428" y="-53322.144" guid="52f12409ef2d4f5faee0e36ec970a0be"
isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)405"
x="8467.018" y="-53323.511" guid="af91c375045f40338b90cdf20f65d44e"
isislandlot="false" />
</boundary>
<boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)405"
bearing="338.0753" g_distance="4.815" a_distance="4.815" unit="M"
guid="7696fac717b94699ab2d332598d3f7a1" isislandlot="false">

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)405"
x="8467.018" y="-53323.511" guid="d69e4e4ce69348dfb05ec6f34a852e20"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)405"
x="8465.224" y="-53319.043" guid="decc41e490d44888ad85478221ab237a"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)405"
bearing="68.0910" g_distance="3.665" a_distance="3.665" unit="M"
guid="edd85b11afdd40c1999e16e7353d301b" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)405"
x="8465.224" y="-53319.043" guid="0e2bc57a6e5b4842aa8ff6a13da3eefb"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)405"
x="8468.626" y="-53317.679" guid="157a992121334306ac674b8d1a07291c"
isislandlot="false" />
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    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)405"
bearing="158.0052" g_distance="2.049" a_distance="2.049" unit="M"
guid="021df00c53324c75a5ff465c2263ff56" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)405"
x="8468.626" y="-53317.679" guid="a0f4f95516b94e8bab08b06685255abf"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)405"
x="8469.393" y="-53319.579" guid="b6fe3bb488b74a838f2a44902090ebe0"
isislandlot="false" />
    </boundary>
    </CommonArea>
    <CommonArea commonareano="(C)404"
upi="0102030000011753(B)M1(M)0(T)4(C)404" g_area="25.378" height="3.526"
altitude="11.938" petaktype="RUANG KOSONG" namapetak="">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)404"
bearing="158.0052" g_distance="6.938" a_distance="6.938" unit="M"
guid="58bcafd884244359bf7e5c94cc89ecba" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)404"
x="8466.028" y="-53311.246" guid="62f071cd159f4f488c603237e0d6f121"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)404"
x="8468.626" y="-53317.679" guid="554827d311814bfb878fb0ac69c75cf6"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)404"
bearing="248.0910" g_distance="3.665" a_distance="3.665" unit="M"
guid="dcca952952834354adf1761e65c5a15b" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)404"
x="8468.626" y="-53317.679" guid="688605a972d64b3d9e63ed23b04db4ff"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)404"
x="8465.224" y="-53319.043" guid="a6a4164fc8a84817951ee27929896a39"
isislandlot="false" />

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</boundary>
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bearing="338.0753" g_distance="6.938" a_distance="6.938" unit="M"
guid="2c939cb91813409eba124264e1128b1c" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)404"
x="8465.224" y="-53319.043" guid="ea4d9147b7384c1faad6869a4b182a50"
isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)404"
x="8462.640" y="-53312.604" guid="a4e6911d8db04a1e99eb1f0d7fc82566"
isislandlot="false" />
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<boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)404"
bearing="68.0910" g_distance="3.650" a_distance="3.650" unit="M"
guid="65616c626c5042f7acca713cc4681725" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)404"
x="8462.640" y="-53312.604" guid="b9989ebe83444175abd397c3de8803ac"
isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)404"
x="8466.028" y="-53311.246" guid="655482e589fc4f288a5a00739a7f7e41"
isislandlot="false" />
</boundary>
</CommonArea>
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upi="0102030000011753(B)M1(M)0(T)4(C)401" g_area="4.212" height="3.526"
altitude="11.938" petaktype="BILIK UTILITI" namapetak="">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)401"
bearing="158.1442" g_distance="3.368" a_distance="3.368" unit="M"
guid="9a3e2a6c17b6460787cafed1a3020630" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)401"
x="8426.067" y="-53336.301" guid="9457967e65f14c8eb82ccba12d9860ee"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)401"
x="8427.315" y="-53339.429" guid="1b7420306eb0424a866e59fb2ca273fa"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)401"
bearing="248.0910" g_distance="1.248" a_distance="1.248" unit="M"
guid="68400dd1f9554c9aa28e5e54b87b29a5" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)401"
x="8427.315" y="-53339.429" guid="3b5d97cc35f146a6bedfa1df97be64db"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)401"
x="8426.157" y="-53339.893" guid="6d7975b577b348d991c4d09464ebfa94"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)401"
bearing="338.0910" g_distance="3.367" a_distance="3.367" unit="M"
guid="387db47b28f94c3d8129f2659d763cad" isislandlot="false">

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)401"
x="8426.157" y="-53339.893" guid="be3324809c914b4cbd68cd3ed8712e7a"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)401"
x="8424.904" y="-53336.768" guid="05eb8fb7ef774076a08770d5ee048337"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)401"
bearing="68.0824" g_distance="1.253" a_distance="1.253" unit="M"
guid="6d72d636c3974615a557ae943d880455" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)401"
x="8424.904" y="-53336.768" guid="31d4e55101a147c3a60e3fc1b3ee7f05"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)401"
x="8426.067" y="-53336.301" guid="e96cf2cd814b49dda86eb024b92533e0"
isislandlot="false" />
    </boundary>
</CommonArea>
<CommonArea commonareano="(C)403"
upi="0102030000011753(B)M1(M)0(T)4(C)403" g_area="1.606" height="3.526"
altitude="11.938" petaktype="BILIK UTILITI" namapetak="">
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)403"
bearing="248.0910" g_distance="1.750" a_distance="1.750" unit="M"
guid="69dcbe676cce47df9ef3a802b4437b02" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)403"
x="8463.610" y="-53324.878" guid="555f111b21ad4ff2988b5d382baf0fb5"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)403"
x="8461.986" y="-53325.529" guid="f2c74b72e81841bea22b500cf34fbd8c"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)403"
bearing="338.0910" g_distance="0.918" a_distance="0.918" unit="M"
guid="99e2bea7a0cf4c248eac85dec79a371e" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)403"
x="8461.986" y="-53325.529" guid="ecf7430eaf0d46bea05988b61d728a37"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)403"
x="8461.645" y="-53324.677" guid="db2db271ae114ce882ff66018eccc250"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)403"
bearing="68.0910" g_distance="1.749" a_distance="1.749" unit="M"
guid="667868d035624d638bbef832959bfad" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)403"
x="8461.645" y="-53324.677" guid="4ef5b3663834416b855f57c4a140cae0"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)403"
x="8463.268" y="-53324.026" guid="bd1671ac406242248b8b58b02e059a50"
isislandlot="false" />

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</boundary>
<boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)403"
bearing="158.0910" g_distance="0.918" a_distance="0.918" unit="M"
guid="0444732644cf46fb961a54b5c3be9ad5" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)403"
x="8463.268" y="-53324.026" guid="8310b498f17a407b9f4b22a107db4b28"
isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)403"
x="8463.610" y="-53324.878" guid="abbc784e2d3946fc81b0e89d8d6f90cb"
isislandlot="false" />
</boundary>
</CommonArea>
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upi="0102030000011753(B)M1(M)0(T)4(C)402" g_area="107.887" height="3.526"
altitude="11.938" petaktype="KORIDOR" namapetak="">
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
bearing="248.0943" g_distance="51.987" a_distance="51.987" unit="M"
guid="5126f93648c244818f940aca82a4d5c2" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8475.147" y="-53322.385" guid="ea008b39cf774ad0824dec6295de19d6"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8426.891" y="-53341.724" guid="1745934240254e7a98cdb741701f1716"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
bearing="338.0910" g_distance="1.973" a_distance="1.973" unit="M"
guid="b8e64414063240d6a530acad8bc47414" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8426.891" y="-53341.724" guid="a11ae1096c7946aab042337f2953f3c6"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8426.157" y="-53339.893" guid="75f7e383b75f4df9b92278596e8a4a56"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
bearing="68.0910" g_distance="1.248" a_distance="1.248" unit="M"
guid="f19d0b6a01bd45ebb7385280281577fa" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8426.157" y="-53339.893" guid="23ce018166974500abd08de497e74e22"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8427.315" y="-53339.429" guid="e70d39353ff145b38c7616eee9d2cf09"
isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
bearing="68.0910" g_distance="6.205" a_distance="6.205" unit="M"
guid="78039ef18b574f7f9214a30a8122f772" isislandlot="false">

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8427.315" y="-53339.429" guid="e7441ce8eeb4414f821427900ebe2ecb"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8433.074" y="-53337.120" guid="1868fcd6c7e54c548371183f21689a09"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
bearing="68.0910" g_distance="7.234" a_distance="7.234" unit="M"
guid="a30db8f7bea845978fc4c9d4d7714308" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8433.074" y="-53337.120" guid="6fc67b81b4b040d5817eb004b38973a0"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8439.788" y="-53334.428" guid="9c8e8d5668a94532920beac4128dad6b"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
bearing="68.0910" g_distance="25.665" a_distance="25.665" unit="M"
guid="1e33ccad9a094a5f85f4565fa03c94bf" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8439.788" y="-53334.428" guid="6c4a995e13a744369bbd6625988d731d"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8463.610" y="-53324.878" guid="add80b90ab974a6286ff5a079a9fd39d"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
bearing="68.0910" g_distance="3.672" a_distance="3.672" unit="M"
guid="326e3c4294e7454facff01f1e97fc062" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8463.610" y="-53324.878" guid="b9f9222f3cae47339d727f2a2aad38e0"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8467.018" y="-53323.511" guid="4c9a1f9eae974e68a581f541a18c65b9"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
bearing="68.0910" g_distance="3.674" a_distance="3.674" unit="M"
guid="78dd57cf1ed14344aef851c4d4c179f8" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8467.018" y="-53323.511" guid="73658b7e64bc4ea8b7dedb7e81bbf50f"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8470.428" y="-53322.144" guid="d8ba62174d62423994f7e73c3fce904a"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
bearing="68.0910" g_distance="2.421" a_distance="2.421" unit="M"
guid="88a869a351e6459da9e31f35c72e59da" isislandlot="false">

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    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8470.428" y="-53322.144" guid="e296d9f21db341839ee819b2c88b1c3a"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8472.675" y="-53321.243" guid="a2969fdf3a234d1f8e2e4f65e23dae0f"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
bearing="338.0052" g_distance="2.771" a_distance="2.771" unit="M"
guid="244a2d4887e043cc847402cc58eed080" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8472.675" y="-53321.243" guid="21c3422658ab4f0e86811f3de3578b5f"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8471.638" y="-53318.673" guid="352712123e9f44aea7319154c705616d"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
bearing="68.0052" g_distance="1.864" a_distance="1.864" unit="M"
guid="f2a25866f8594fea9701a2fb54e32838" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8471.638" y="-53318.673" guid="0dd59819fef44d33ac7e503d587c6d81"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8473.366" y="-53317.975" guid="fb7c184ea5124f14befa5ee999b4311c"
isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
bearing="158.0052" g_distance="4.756" a_distance="4.756" unit="M"
guid="9f36667df47e4566882fbbce69581713" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8473.366" y="-53317.975" guid="dcd3d939c1542f0bfe316ef4af9fa86"
isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(M)0(T)4(C)402"
x="8475.147" y="-53322.385" guid="ac6b8ea8c74b471bbbe1bd8bb5ec3a78"
isislandlot="false" />
    </boundary>
</CommonArea>
</CommonAreas>
<KeratanTegaks>
    <keratantegak keratanno="(K)4"
tingkatupi="0102030000011753(B)M1(M)0(T)4"
keratan_groupid="0102030000011753(B)M1(GK)1"
parentupi="0102030000011753(B)M1" upi="0102030000011753(B)M1(GK)1(K)4"
height="3.526" altitude="11.938" guid="a4b58e281adc4e3787ec7c1c10aeac88">
    <boundary petakupi="0102030000011753(B)M1(GK)1(K)4"
bearing="180.0000" g_distance="3.525" a_distance="3.525" unit="M"
guid="7743ebe1affd4d23864a439c6cbe2602" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)4" x="8473.297"
y="-53314.247" guid="7fc17c849d974b46aac35ce43589ebd4" isislandlot="false" />

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    <vertex petakupi="0102030000011753(B)M1(GK)1(K)4" x="8473.297"
y="-53317.772" guid="003be3b1e75f4554b00605e399a4ce93" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(GK)1(K)4"
bearing="269.5959" g_distance="0.606" a_distance="0.606" unit="M"
guid="c3cddb0df981485495031d08f6701343" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)4" x="8473.297"
y="-53317.772" guid="328a0e017029472cbe3b8c4801272587" isislandlot="false"
/>
  </boundary>
  <vertex petakupi="0102030000011753(B)M1(GK)1(K)4" x="8472.691"
y="-53317.772" guid="4fb63baa87684809adb8a0787b7bfe48" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(GK)1(K)4"
bearing="270.0000" g_distance="51.535" a_distance="51.535" unit="M"
guid="fc5c888f21d94e918ce4e9b14bb455e1" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)4" x="8472.691"
y="-53317.772" guid="4158ad36fdcf4a1d8f159484deb7a80e" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)4" x="8421.156"
y="-53317.772" guid="8ad3449b195d4b1ba3c3b8e4fa0377" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(GK)1(K)4"
bearing="0.0149" g_distance="3.525" a_distance="3.525" unit="M"
guid="8524b647f8ff480db8a921c2c511dbf7" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)4" x="8421.156"
y="-53317.772" guid="af45495744bb494abd8f4bd8476e586c" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)4" x="8421.158"
y="-53314.247" guid="ee59acb072a94519b34fa58199228667" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(GK)1(K)4"
bearing="90.0000" g_distance="52.139" a_distance="52.139" unit="M"
guid="ca82e99a9851454c9a9b12e37e721ce4" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)4" x="8421.158"
y="-53314.247" guid="ecbc8806ff7a40aba5a9ea8d66d1b3da" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)4" x="8473.297"
y="-53314.247" guid="44245627a1c6476cb3d5fd843e944e42" isislandlot="false" />
  </boundary>
</keratantegak>
<keratantegak keratanno="(K)3"
tingkatupi="0102030000011753(B)M1(M)0(T)3"
keratan_groupid="0102030000011753(B)M1(GK)1"
parentupi="0102030000011753(B)M1" upi="0102030000011753(B)M1(GK)1(K)3"
height="3.756" altitude="8.182" guid="b117f0b3515842ecb3f4a35171450259">
  <boundary petakupi="0102030000011753(B)M1(GK)1(K)3"
bearing="180.0000" g_distance="3.757" a_distance="3.757" unit="M"
guid="6acac022278f4eec9585fa633d2daf4e" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)3" x="8472.691"
y="-53317.772" guid="062f44fbdef0418c9ef30e19f49b8069" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)3" x="8472.691"
y="-53321.529" guid="ca6fca8501924fc697e75c5f8570b4ea" isislandlot="false" />
  </boundary>

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    <boundary petakupi="0102030000011753(B)M1(GK)1(K)3"
bearing="270.0000" g_distance="51.535" a_distance="51.535" unit="M"
guid="e7aa97b7db0a4e6d8c87b133436e8b13" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)3" x="8472.691"
y="-53321.529" guid="3344b90152f94bafa9354db4fcddd17" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)3" x="8421.156"
y="-53321.529" guid="0e0b6f6a7a4e4fb289ec4e9a9a42c38d" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(GK)1(K)3"
bearing="359.5959" g_distance="3.757" a_distance="3.757" unit="M"
guid="4b6e0ede84134177a0e2345aa555750b" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)3" x="8421.156"
y="-53321.529" guid="be49804b5e1b40658af189edd8bdacac" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)3" x="8421.156"
y="-53317.772" guid="4be701e12e5b4a1cb88bc40528b02d15" isislandlot="false"
/>
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(GK)1(K)3"
bearing="90.0000" g_distance="51.535" a_distance="51.535" unit="M"
guid="a373c4bb07cc4d63a1cb9a6e0cac938c" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)3" x="8421.156"
y="-53317.772" guid="03a6d4fd6b824bf7aaca902784b99fd9" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)3" x="8472.691"
y="-53317.772" guid="160414a4d99d45eabd0ed6511a6b0e16" isislandlot="false"
/>
    </boundary>
    </keratantegak>
    <keratantegak keratanno="(K)2"
tingkatupi="0102030000011753(B)M1(M)0(T)2"
keratan_groupid="0102030000011753(B)M1(GK)1"
parentupi="0102030000011753(B)M1" upi="0102030000011753(B)M1(GK)1(K)2"
height="3.675" altitude="4.507" guid="20f8b40b07954196bae37bd2a6cb393">
    <boundary petakupi="0102030000011753(B)M1(GK)1(K)2"
bearing="180.0000" g_distance="3.675" a_distance="3.675" unit="M"
guid="faed53e3d31e44da94a4856780b67840" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)2" x="8472.691"
y="-53321.529" guid="af68a614cece48adabba06fea1311f3a" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)2" x="8472.691"
y="-53325.204" guid="0dda6bc3fc384f3db3e5c7a66229710c" isislandlot="false" />
    </boundary>
    <boundary petakupi="0102030000011753(B)M1(GK)1(K)2"
bearing="270.0000" g_distance="51.535" a_distance="51.535" unit="M"
guid="a56e364c0d7f40fbb9ad96f297324908" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)2" x="8472.691"
y="-53325.204" guid="16da98f030b742a48943dacf3a0e309b" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)2" x="8421.156"
y="-53325.204" guid="ddf854e5bed54b14b1cce63577733f72" isislandlot="false" />
    </boundary>

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<boundary petakupi="0102030000011753(B)M1(GK)1(K)2"
bearing="0.0000" g_distance="3.675" a_distance="3.675" unit="M"
guid="8806d21ec4304208a825b060d0f36ac9" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(GK)1(K)2" x="8421.156"
y="-53325.204" guid="b289cdaeea9e482d8cabb66bde1f5396" isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(GK)1(K)2" x="8421.156"
y="-53321.529" guid="fe337c7ee14d4989853c0345a24fc2a5" isislandlot="false" />
</boundary>
<boundary petakupi="0102030000011753(B)M1(GK)1(K)2"
bearing="90.0000" g_distance="51.535" a_distance="51.535" unit="M"
guid="42b49082002946f6a8a0d4eec11bc8a3" isislandlot="false">
  <vertex petakupi="0102030000011753(B)M1(GK)1(K)2" x="8421.156"
y="-53321.529" guid="827dba2669ed41f1b893b76fd6444154" isislandlot="false" />
  <vertex petakupi="0102030000011753(B)M1(GK)1(K)2" x="8472.691"
y="-53321.529" guid="c2099072308c424da170e7be1c15df68" isislandlot="false" />
</boundary>
</keratantegak>
<keratantegak keratanno="(K)1"
tingkatupi="0102030000011753(B)M1(M)0(T)1"
keratan_groupid="0102030000011753(B)M1(GK)1"
parentupi="0102030000011753(B)M1" upi="0102030000011753(B)M1(GK)1(K)1"
height="3.507" altitude="1.000" guid="1450312112fb4a1f97f5d0d8f0bbbedab">
  <boundary petakupi="0102030000011753(B)M1(GK)1(K)1"
bearing="180.0000" g_distance="3.507" a_distance="3.507" unit="M"
guid="ae69d738bf1b4f9f870380a77e14f70f" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)1" x="8472.691"
y="-53325.204" guid="89615b6396c44a40b03e57e584c7fdc9" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)1" x="8472.691"
y="-53328.711" guid="8784d08404534657af6d57d2fa0135b6" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(GK)1(K)1"
bearing="270.0000" g_distance="51.535" a_distance="51.535" unit="M"
guid="3e0ede57b1ed4aeb81e782955541ea29" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)1" x="8472.691"
y="-53328.711" guid="431a31edc4e54d56baca5e5a1527ccae" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)1" x="8421.156"
y="-53328.711" guid="b959c4d35d034f8ebf37feb8844d914b" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(GK)1(K)1"
bearing="359.5940" g_distance="3.507" a_distance="3.507" unit="M"
guid="2ddb2cf921a443abafdb4c3b7ccb9aeb" isislandlot="false">
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)1" x="8421.156"
y="-53328.711" guid="055a726ff2e44e7da6b097d5654328e1" isislandlot="false" />
    <vertex petakupi="0102030000011753(B)M1(GK)1(K)1" x="8421.156"
y="-53325.204" guid="f9bcd3b07e514b109717c28a413887d2" isislandlot="false" />
  </boundary>
  <boundary petakupi="0102030000011753(B)M1(GK)1(K)1"
bearing="90.0000" g_distance="51.535" a_distance="51.535" unit="M"
guid="b9c06f4efb454ac3bfdc0c71001fe284" isislandlot="false">

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<vertex petakupi="0102030000011753(B)M1(GK)1(K)1" x="8421.156"  
y="-53325.204" guid="9755a8b487ad4ed28b9d03af4cb32c4b" isislandlot="false" />  
<vertex petakupi="0102030000011753(B)M1(GK)1(K)1" x="8472.691"  
y="-53325.204" guid="7f10b6d3ecfa4a3dbc4fff0d34aa4fde" isislandlot="false" />  
</boundary>  
</keratantegak>  
</KeratanTegaks>  
</Scheme>  
</Strata>
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