

**REDESIGN PLANNING WORK STRUCTURES AND
PLANNING FOR COST AND TIME OF PUBLIC LIBRARY
AND CO-WORKING SPACE IN YOGYAKARTA**

as one of the requirements to receive a Bachelor's Degree from
Universitas Atma Jaya Yogyakarta



By:

BRYAN ROWSON BALOK SUBAGIO 201318009

**INTERNATIONAL OF CIVIL ENGINEERING PROGRAM
FACULTY OF ENGINEERING
UNIVERSITAS ATMA JAYA YOGYAKARTA
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INTISARI

Laporan tugas akhir desain infrastruktur merupakan salah satu syarat untuk memperoleh gelar Sarjana dari Universitas Atma Jaya Yogyakarta untuk program studi Teknik Sipil. Laporan akhir yang diberikan kepada mahasiswa sebagai bentuk akhir pembelajaran yang telah didapat dan dipelajari selama proses perkuliahan, dengan tujuan menciptakan lulusan sarjana yang berkompoten sebagai perencana infrastruktur di bidang teknik sipil yang dituangkan dalam laporan tugas akhir ini.

Laporan tugas akhir ini disusun oleh Bryan Rowson Balok Subagio (201318009). Proses pembelajaran dan penyusunan laporan ini dilakukan secara luring dengan didampingi oleh dosen pembimbing dan dosen pengajar. Isi dari laporan ini merupakan pengaplikasian dari semua pembelajaran wajib yang kami dapatkan selama perkuliahan. Perancangan yang telah dilakukan meliputi tiga bidang, antara lain perancangan struktur atas dan perencanaan struktur bawah, geoteknik dan manajemen konstruksi yang pada setiap proses pengerjaan tersebut memiliki korelasi antara satu dengan yang lainnya.

Pada tugas akhir ini, proyek yang diberikan kepada kelompok kami adalah Perpustakaan Umum dan Co-Working Space yang berlokasi di Jalan Kenari, Kecamatan Umbulharjo, Daerah Istimewa Yogyakarta. Perpustakaan Umum dan Co-Working Space terdiri dari 2 buah gedung utama yaitu gedung perpustakaan dan gedung kantor, co-working space yang terdiri dari 3 tingkat lantai pada bangunannya. Perencanaan bangunan ini mengikuti SNI (Standar Nasional Indonesia) yang berguna untuk membuat suatu perencanaan sesuai standar yang berlaku yang dibuat oleh para ahli di bidang Teknik Sipil agar kualitas dari sebuah perencanaan ini dapat dipertanggungjawabkan dari aspek kualitas dan kekuatan dari sebuah perencanaan bangunan yang kami buat.

Kata kunci: Gedung Co-Working, Perpustakaan, Desain Struktur Gedung, Desain Geoteknik, Manajemen Konstruksi, Gambar Teknik

ABSTRACT

The infrastructure design final project report is one of the requirements for obtaining a bachelor's degree from Universitas Atma Jaya Yogyakarta for the Civil Engineering study program. The final report is given to students as the final form of learning that has been obtained and studied during the lecture process, with the aim of creating competent undergraduate graduates as infrastructure planners in the field of civil engineering as outlined in this final report.

The final project infrastructure design report was prepared Bryan Rowson Balok Subagio (201318009). The content of this report is the application of all the compulsory learning that writers got during lectures. The design that has been carried out covers three areas, including upper-structure design, lower-structure design, and construction management, where each work process has a correlation with another.

In this final project infrastructure design, the project that is designed is a public library and co-working space located on Jalan Kenari, Umbulharjo District, Special Region of Yogyakarta. The Public Library and Co-Working Space consists of two main buildings, namely the library building and office building, and the co-working space, which consists of three floors in the building. This planning includes the planning of the upper structure, the planning of the lower structure, and the planning of costs and time. This building design follows the SNI (Indonesian National Standard), which is useful for planning according to applicable standards made by experts in the field of civil engineering so that the quality of a plan can be accounted for from the aspect of quality and strength of a building plan.

Keyword: Co-Working Space, Library, Building Structural Design, Geotechnical Design, Construction Management, Engineering Drawing

STATEMENT PAGE

We are signed below,

Student Name : **Bryan Rowson Balok Subagio**

NPM : 201318009

Truly declare that the Final Project with the title:

**REDESIGN PLANNING WORK STRUCTURES AND PLANNING FOR
CO ST AND TIME OF PUBLIC LIBRARY AND CO-WORKING SPACE
IN YOGYAKARTA**

is an original work and is not the result of plagiarism of the work from another report.

With the undersigned, we contribute to this Final Project in the same proportion.
Thus, we make this statement as a complement to this Final Project document

Yogyakarta, July 22, 2024

A handwritten signature in black ink is written over a yellow and green 1000 Rupiah Indonesian postage stamp. The stamp features the Garuda Pancasila emblem and the text 'REPUBLIK INDONESIA', '1000', 'POSTAGE', and 'EMPIRE'. The serial number '74ALX259208345' is visible at the bottom of the stamp.

(Bryan Rowson Balok Subagio)

VALIDATION PAGE

Final Project Infrastructure Design Report

REDESIGN PLANNING WORK STRUCTURES AND PLANNING FOR COST
AND TIME OF PUBLIC LIBRARY AND CO-WORKING SPACE IN
YOGYAKARTA


By:


Bryan Rowson Balok Subagio 201318009

Has been checked by:

Third Lecturer Final Project Infrastructure Design 2	Second Lecturer Final Project Infrastructure Design 2	First Lecturer Final Project Infrastructure Design 1
--	---	--

ay


(Prof. Ir. AY. Harijanto
Setiawan, M.Eng., Ph.D.)
NIDN: 0501086402


(Ir. William Wijaya,
S.T., M.Eng.)
NIDN: 0529039402


(Ir. Johan Ardianto, S.T.,
M.Eng.)
NIDN: 0503069301

Approved By:

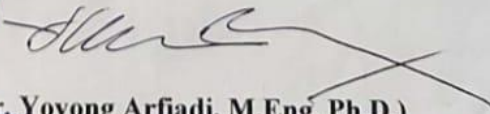
Supervisor of Final Project


(Dr. Ir. Okkie Putriani, S.T., M.T., CIAR.)
NIDN:0515078503

Validated By:

Head of Department of Civil Engineering




(Prof. Ir. Yoyong Arfiadi, M.Eng. Ph.D.)

NIDN: 0515015901

VALIDATION PAGE

Final Project Infrastructure Design Report

REDESIGN PLANNING WORK STRUCTURES AND PLANNING FOR COST
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YOGYAKARTA

By:



BRYAN ROWSON BALOK SUBAGIO

201318009

Tested and Approved by:

Name	Signature	Signature	Date
Leader : Dr. Ir. Okkie Putriani, S.T., M.T., CIAR.			6/2/2024
Secretary : Dr. Ir. Junaedi Utomo, M.Eng			9/2/2024
Member : Didit Gunawan Prasetyo Jati, S.Kom., M.Sc			6/2/2024

PREFACE

All praise and gratitude we present to God Almighty because of His blessing and grace, we were able to finish the Final Project Infrastructure Design without any hitch. Furthermore, we were able to write the Final Project Infrastructure Design.

We realize that we are not able to finish the Final Project Infrastructure Design Report and the preparation of this report without the support from others. Therefore, we would like to thank:

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13. Parents and friends who gave us moral and financial support.

We also realize that the report is far from perfect. Therefore, we can accept any suggestions and criticisms that can improve this report so that it becomes better.

Finally, we hope that the during Final Project Infrastructure Design Report that we write can be useful to us and all who read this report.

Yogyakarta, January 2024

Writer,

Group 3

TABLE OF CONTENT

<i>INTISARI</i>	ii
ABSTRACT	iii
STATEMENT PAGE.....	iv
VALIDATION PAGE.....	vi
PREFACE	v
TABLE OF CONTENT	ix
LIST OF TABLES	xiii
LIST OF FIGURES.....	xv
CHAPTER I: INTRODUCTION	1
1.1 Background	1
1.2 Problems Identification	2
1.3 Objective	3
1.3.1 Upper-Structure Planning	3
1.3.2 Lower-Structure Planning	3
1.3.3 Cost and Time Planning.....	3
1.4 Research Methodology.....	4
CHAPTER II: DESIGN OF THE UPPER STRUCTURE.....	5
2.1 General Description of The Building.....	5
2.2 The Information of Load.....	6
2.2.1 Gravitational Load.....	6
2.2.2 Earthquake Load.....	7
2.2.3 Wind Load.....	8
2.2.4 Rain Load	11
2.2.5 Load Combination.....	11
2.3 Preliminary Design and Structural Modelling	13
2.3.1 Preliminary Design of Beam Element	13
2.3.2 Preliminary Design of Column Element	13

2.3.3	Preliminary Design of Slab Element	15
2.3.4	Structural Modelling	15
2.4	Lateral Restraint System Against Earthquake Loads.....	16
2.4.1	Modal Participation Ratio Control	16
2.4.2	Period of the Structure	19
2.4.3	Seismic Base Shear	20
2.4.4	Scale Factor of Forces	21
2.4.5	Story Drift.....	22
2.4.6	P-Delta Effect	24
2.4.7	Control to the Irregularity of the Building	25
2.5	The Design of Roof	37
2.5.1	Calculation of Purlin	37
2.5.2	Calculation of Sag rod	42
2.5.3	Calculation of Truss Structure.....	43
2.5.4	Design of Over stack.....	52
2.5.5	Design of Roof Connection.....	54
2.6	The Design of Slab.....	58
2.6.1	Provision of Slab Design.....	58
2.6.2	Calculation of Reinforcement of One-Way Slab	60
2.6.3	Calculation of Reinforcement for Two-Way Slab	66
2.7	The Design of Stairs.....	74
2.7.1	Geometrical Design of Stairs	74
2.7.2	Reinforcement Design of Stairs.....	76
2.8	The Design of Beam.....	81
2.8.1	Longitudinal Reinforcement	82
2.8.2	Transversal reinforcement.....	92
2.8.3	Torsional reinforcement	98
2.9	The Design of Column	106
2.9.1	Longitudinal Reinforcement	107
2.9.2	Transversal Reinforcement	110
2.10	Beam-Column Joint	118

CHAPTER III: DESIGN OF THE LOWER STRUCTURE	123
3.1 General Design Information.....	123
3.2 Standard Penetration Test Data.....	123
3.3 Bearing Capacity of Foundation.....	125
3.3.1 Determination of Designed Axial Load for Foundation	126
3.3.2 Shallow Foundation Analysis	127
3.3.3 Deep Foundation	134
3.4 Design of Pile Foundation.....	143
3.4.1 Number of Required Bored Piles	143
3.4.2 Configuration of Pile Foundation.....	145
3.4.3 Design of Pile Cap.....	151
3.4.4 Design of Bored Pile Reinforcement.....	154
3.5 Analysis of Settlement of Foundation.....	156
3.5.1 Empirical Equation for single pile's settlement.....	156
3.5.2 Elastic Settlement Analysis for single pile's settlement	157
3.5.3 Settlement of Pile Group.....	158
3.6 Analysis of Liquefaction Potential.....	160
CHAPTER IV: COST AND TIME PLANNING	163
4.1 Cost and Time Planning	163
4.2 Work Breakdown Structure.....	164
4.3 Work Volume.....	164
4.4 Unit Cost Analysis	167
4.5 Bill of Quantity (BoQ)	170
4.6 Productivity and Work Duration.....	172
4.7 Work Dependency.....	174
4.8 Scheduling.....	177
4.9 S-Curve, and Resource Graph.....	179
4.10 Conclusion.....	180
CHAPTER V: CONCLUSION	181

5.1 Conclusion..... 181

5.2 Suggestion..... 182

REFERENCES 183

ATTACHMENT



LIST OF TABLES

Table 2.1 Structure Data of The Building	5
Table 2.2 The Height of Each Floors	5
Table 2.3 Parameter Response Spectrum	7
Table 2.4 Load Combination Table.....	12
Table 2.5 Calculation of Preliminary Design of Beam	13
Table 2.6 Calculation of Preliminary Design of Column.....	14
Table 2.7 Mass Participation Ratio Result from MIDAS Gen.....	17
Table 2.8 Structure Mass	21
Table 2.9 The Story Drift Calculation.....	23
Table 2.10 The P-Delta Analysis Control	24
Table 2.11 Horizontal Irregularity Type IA and IB	26
Table 2.12 Horizontal Irregularity Type III	28
Table 2.13 Vertical Irregularity Type IA and IB.....	30
Table 2.14 Vertical Irregularity Type II.....	31
Table 2.15 Vertical Irregularity Type III.....	32
Table 2.16 Vertical Irregularity Type VA and VB	34
Table 2.17 Irregularity Consequences.....	35
Table 2.18 Load Calculation for Purlin.....	39
Table 2.19 Moment Calculation of X direction	39
Table 2.20 Moment Calculation of Y direction	40
Table 2.21 Result of Structural Analysis of Truss Structure by MIDAS Gen .	44
Table 2.22 The Forces of Over Stack.....	52
Table 2.23 Minimum Thickness for Non-Prestressed One-Way Solid Plate...	58
Table 2.24 A_{smin} Non-Prestressed One-Way Solid Plate.....	59
Table 2.25 The Ratio of Area of Shrinkage Reinforcement and Temperature to the Gross Concrete Cross-Sectional Area	59
Table 2.26 Maximum Spacing of Bonded Reinforcement in One-Way Slabs and Non-Prestressed and Prestressed Beams Class C	60
Table 2.27 Internal Forces of Beam B1	82
Table 2.28 Load Distribution	93

Table 2.29 Shear Force Distribution	94
Table 2.30 Axial Forces-Bending Moment Resulted for K1 (600X600).....	106
Table 2.31 SP-Column Analysis Result	108
Table 2.32 SP-Column Analysis Result (Reinforced Yeild Strength Factor)	108
Table 2.33 SP-Column Analysis Result (Mnx and Mny)	109
Table 3.1 Total Support Reaction from MIDAS Gen	126
Table 3.2 Meyerhof's Factor Consideration.....	129
Table 3.3 N-SPT Correction Value	132
Table 3.4 Bearing Capacity Calculation Based on N-SPT.....	132
Table 3.5 Bearing Capacity Calculation Based on CPT	133
Table 3.6 Calculation of Skin Friction Based on Touma and Reese.....	136
Table 3.7 Recapitulation of Bearing Capacity of Piles for SPT-1	141
Table 3.8 Recapitulation of Bearing Capacity of Piles for SPT-2	142
Table 3.9 Classification of Bored Pile Types.....	143
Table 3.10 Number of Required Piles in Joint Reactions	143
Table 3.11 Control of Efficiency of Group Pile.....	149
Table 3.12 Maximum Spacing Requirement for Shear Reinforcement	156
Table 3.13 Recapitulation of Pile Group Settlement Analysis.....	159
Table 4.1 Work Breakdown Structure of Library Construction.....	164
Table 4.2 1 m ² of clearing and land levelling.....	168
Table 4.3 Unit Price Analysis Build the 1m ² of workers bunk	168
Table 4.4 Unit Cost Analysis of 1 m ² 1st floor slab formwork with multiflex 12 mm.....	169
Table 4.5 Unit Cost Analysis of 1m ² of wall finishing	170
Table 4.6 Bill of Quantity.....	171
Table 4.8 Total Resources Needed for workers bunk	173
Table 4.9 Total Materials Needed for workers bunk.....	173
Table 4.10 Dependency of Activities of Library Construction	174
Table 4.11 Maximum Resource for Workers	177

LIST OF FIGURES

Figure 1.1 Layout of the Planning of The Library Construction.....	2
Figure 2.1 Wind Load Coefficient	8
Figure 2.2 Structural Modelling on MIDAS Gen.....	15
Figure 2.3 Allowable Moment of Inertia and Sectional-Area for Elastic Analysis for Factored Load Level	16
Figure 2.4 Section Stiffness Scale Factor Menu on MIDAS Gen.....	16
Figure 2.5 Mode Shape 1 (X-Dir)	18
Figure 2.6 Mode Shape 2 (Y-Dir)	18
Figure 2.7 Mode Shape 3 (Rotation).....	18
Figure 2.8 Scale Factor for Response Spectrum	22
Figure 2.9 Story Drift Graph	23
Figure 2.10 P-Delta Analysis	25
Figure 2.11 Horizontal Irregularity Type IA and IB	26
Figure 2.12 Horizontal Irregularity Type II	27
Figure 2.13 Horizontal Irregularity Type III.....	28
Figure 2.14 Horizontal Irregularity Type IV	29
Figure 2.15 Horizontal Irregularity Type V	29
Figure 2.16 Vertical Irregularity Type IA and IB	30
Figure 2.17 Vertical Irregularity Type II.....	31
Figure 2.18 Vertical Irregularity Type III	32
Figure 2.19 Vertical Irregularity Type IV	33
Figure 2.20 Vertical Irregularity Type VA and VB	34
Figure 2. 21 Building Dilatation.....	37
Figure 2.22 Strength Reduction Factor for Moments, Axial Forces, Or a Combination of Moments and Axial Forces	81
Figure 2.23 Space Truss Analogy	98
Figure 2.24 Analogy for shell-thin beam (a) and Bruto area (A_0) that surrounded by shear force path	100
Figure 2.25 Interaction Diagram of a column	108

Figure 2.26 Effective Area for Beam-Column Joint	119
Figure 2.27 Sidesway to Right Diagram Calculation.....	120
Figure 3.1 Load Distribution Mechanism for Shallow Foundation	127
Figure 3.2 Liquefaction Graph	162
Figure 4.1 Resource Graph View for Steel Workers on Microsoft Project ...	178
Figure 4.2 Overallocated Resources Report from Microsoft Project.....	178
Figure 4.3 Project Statistics from Microsoft Project.....	179
Figure 4.4 S-Curve of Library Project per Week	180

