

FINAL PROJECT INFRASTRUCTURE REPORT
STRUCTURAL DESIGN OF CONVENTION AND EXHIBITION CENTRE
BUILDING IN NORTH JAKARTA

Final Exam Report

As one of the requirements to achieve bachelor's degree at Atma Jaya Yogyakarta University



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ABSTRACT

The final project infrastructure report is one of the requirements for achieving bachelor's degree at Atma Jaya Yogyakarta University for Civil Engineering Study Program. The final project infrastructure report is given with intention of producing capable undergraduate graduates who can develop infrastructure in the field of civil engineering and as the culmination of the knowledge acquired and studied during the lecture process.

This final project report is arranged by Maria Shaula Chrisandhani (201317984). Instructional lecturers work with the arranger during the learning process and report preparation. This report's content is an application of all the required knowledge the students were taught in lectures: structural design.

In this project, the arranger used Convention and Exhibition Centre Building located in North Jakarta. The Convention and Exhibition Centre consists of four stories, namely first floor as the parking area, second floor, mezzanine floor, and third floor. This plan includes planning of upper structure uses SNI (*Standar Nasional Indonesia*) as the standard of structural design so that strength and quality of the building plans created can be used to account for a plan's quality.

Keyword: Convention, Structure

ABSTRAK

Laporan tugas akhir perancangan infrastruktur merupakan salah satu syarat untuk mencapai gelar sarjana di Universitas Atma Jaya Yogyakarta untuk Program Studi Teknik Sipil. Laporan tugas akhir perancangan infrastruktur diberikan dengan tujuan untuk menghasilkan lulusan sarjana yang berkemampuan mampu mengembangkan infrastruktur di bidang teknik sipil dan sebagai kulminasi dari ilmu yang diperoleh dan dipelajari selama proses perkuliahan.

Laporan tugas akhir ini disusun oleh Maria Shaula Chrisandhani (201317984). Dosen pembimbing bekerja sama dengan penata selama proses pembelajaran dan penyusunan laporan. Isi laporan ini merupakan penerapan dari semua pengetahuan yang dibutuhkan siswa yang diajarkan dalam perkuliahan: desain struktural.

Dalam proyek ini, penata menggunakan Convention and Exhibition Centre Building yang terletak di Jakarta Utara. Convention and Exhibition Centre Building terdiri dari empat lantai, yaitu lantai satu sebagai basement, lantai dua, lantai mezzanine, dan lantai tiga. Perencanaan ini meliputi perencanaan struktur atas SNI (Standar Nasional Indonesia) sebagai standar perancangan struktur sehingga kekuatan dan mutu denah bangunan yang dibuat dapat digunakan untuk mempertanggungjawabkan mutu suatu denah.

Keywords: *Convention, Struktur*

STATEMENT PAGE

Signed on this below,

Name : Maria Shaula Chrisandhani

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Truly declare that the Final Project with the title:

Structural Design of Convention and Exhibition Centre Building at North Jakarta is an original work and is not the result of plagiarism in the same proportion. We make this statement as a complement to this Final Project document.

Thus, we have made this statement as a complement to this Final Project document.

Yogyakarta, 25 November 2023

ORIGINALITY STATEMENT

PERNYATAAN ORISINALITAS

I, the undersigned, hereby declare truthfully that the Final Project titled:

STRUCTURAL DESIGN OF CONVENTION AND EXHIBITION CENTRE BUILDING IN NORTH JAKARTA

is truly my own work and is not the result of plagiarism from other people's work. The ideas, research data, and quotes, whether directly or indirectly sourced from others' writings or ideas, are fully and correctly cited in this Final Project. If it is later discovered that this Final Project is the result of plagiarism, the diploma I obtained will be declared invalid and will be returned to the Rector of Atma Jaya Yogyakarta University.

Yogyakarta, 16th August 2024

The one making the statement,

A 1000 Rupiah Indonesian banknote is shown with a signature written over it. The signature is in black ink and appears to be 'Maria Shaula Chrisandhani'. The banknote features the Garuda Pancasila emblem and the text 'SERIBU RUPIAH' and 'D6B35ALX264170340'.

Maria Shaula Chrisandhani

VALIDATION PAGE

VALIDATION

Final Project Report

**STRUCTURAL PLANNING OF CONVENTION AND EXHIBITION
CENTER AT NORTH JAKARTA**



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VALIDATION PAGE

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FOREWORD

Praise be to God Almighty because for all His love and grace the author was able to complete this PKKM Internship Activity and Internship Report well and smoothly. This internship activity is an important lecture activity for Civil Engineering students to practice the theories they have learned on campus and to seek new experiences and insights in the world of work, especially in the construction sector. For this reason, it is very important to complete internship activities and reports as well as possible. This Internship Report was prepared to fulfill the requirements of the Strata-1 curriculum for the Civil Engineering Study Program, Faculty of Engineering, Atma Jaya University Yogyakarta. The author realizes that without the help of various parties, the implementation of internship activities and this Internship report cannot be completed. Therefore, the author wants to convey, writer want to thank to :

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The author realizes that the preparation of this report is still far from perfect and has many shortcomings. Therefore, the author accepts constructive criticism and suggestions so that this Internship report can be improved. Finally, the author hopes that with this report, many students

and readers will be helped and gain new insight into the internship activities of this independent campus competition program.

Jakarta, 5 Januari 2024,

Maria Shaula Chrisandhani
Writer

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