#### FINAL ASSIGNMENT

# STUDY THE DIFFERENCE BETWEEN FLEXIBLE PAVEMENT AND RIGID PAVEMENT CONSTRUCTION

Submitted to fulfill the requirements of undergraduate education in Civil Engineering Department, Faculty of Engineering Universitas Islam Sultan Agung (UNISSULA) Semarang



Wahyu Wardani 30,2017.00.183

Yusia Nanda Agustanti 30.2017.00.188

DEPARTMENT OF CIVIL ENGINEERING FACULTY OF ENGINEERING UNIVERSITAS ISLAM SULTAN AGUNG SEMARANG 2021

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# YAYASAN BADAN WAKAF SULTAN AGUNG UNIVERSITAS ISLAM SULTAN AGUNG (UNISSULA)

FAKULTAS TEKNIK

Jalan Raya Kaligawe KM, 4 Po. BOX 1054Telp.(024)6583584Ext.507 Semarang 50112

#### APPROVAL PAGE OF FINAL ASSIGNMENT

## STUDY THE DIFFERENCE BETWEEN FLEXIBLE PAVEMENT AND RIGID PAVEMENT CONSTRUCTION

by:



Wahyu Wardani 30.2017.00.183



Yusia Nanda Agustanti 30.2017.00.188

This Final Assignmen has been approved in Semarang on July 2021

Supervisor,

Co-Supervisor,

Ir. Gatot Rusbintardjo, M.R.Eng.Sc., Ph.D

Eko Muliawan Satrio, S.T., M.T.

Approved by:

Head of Department of Civil Engineering, Faculty of Engineering UNIVERSITAS ISLAM SULTAN AGUNG SEMARANG

On July 2021

Rusli Ahyar, S.T., M.Eng



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### BERITA ACARA BIMBINGAN TUGAS AKHIR No. / A.2 / SA-T / VII / 2021

Pada hari ini Senin, 5 Juli 2021 berdasarkan Surat Keputusan Kepala Program Studi Teknik Sipil Fakultas Teknik Universitas Islam Sultan Agung (UNISSULA) Semarang Nomor: 25/A.2/SA-T/III/2021 tanggal 17 Januari 2021 Hal penunjukan Dosen Pembimbing I dan Dosen Pembimbing II.

Nama

: Ir. Gatot Rusbintardjo, M.R.Eng.Sc., Ph.D.

Jabatan Fungsional Akademik

: Lektor

Sebagai

: Dosen Pembimbing 1

Nama

: Eko Muliawan Satrio, S.T., M.T.

Jabatan Fungsional Akademik

: Asisten Ahli

Sebagai

: Dosen Pembimbing 2

menyatakan bahwa mahasiswa yang namanya tersebut di bawah:

Nama / NIM

: Wahyu Wardani / NIM: 30.2017.00.183

2. Nama / NIM

: Yusia Nanda Agustanti / NIM: 30.2017.00.188

telah menyelesaikan Tugas Akhir dengan judul STUDY THE DIFFERENCE BETWEEN FLEXIBLE PAVEMENT AND RIGID PAVEMENT CONSTRUCTION dengan tahapan sebagai berikut:

No.	Tahapan	Tanggal	Keterangan
1	Penunjukan Dosen Pembimbing	17 Januari 2021	// \
2	Proposal	25 Januari 2021	// 1
3	Pengumpulan Data	Januari s.d Maret 2021	/ 1
4	Penyusunan Laporan	April s.d. Juni 2021	1
5	Seminar Tugas Akhir	14 Juli 2021	1

Demikian Berita Acara Bimbingan Tugas Akhir ini dibuat untuk diketahui dan dipergunakan seperlunya oleh pihak-pihak yang berkepentingan.

Ditanda-tangani di Semarang pada tanggal 5 Juli 2021,

Dosen Pembimbing 1

Dosen Pembimbing 2

Ir. Gatot Rushintardjo, M.R.Eng.Sc., Ph.D.

Eko Muliawan Satrio, S.T., M.T.

SLAM Mengetahui,

Ketua Jurusan Teknik Sipil - Fakultas Teknik UNISSULA

M. Rusti Ahyar, S.T., M.Eng

#### PLAGIARISM FREE STATEMENT

The undersigned below

Name : Wahyu Wardani NIM : 30.2017.00.183

Name : Yusia Nanda Agustanti

NIM : 30.2017.00.188

declare that our Final Assignment entitled:

# "STUDY THE DIFFERENCE BETWEEN FLEXIBLE PAVEMENT AND RIGID PAVEMENT CONSTRUCTION".

is free from plagiarism. If our statement turns out to be untrue, then we are willing to accept sanctions in accordance with applicable regulations of Universitas Islam Sultan Agung (UNISSULA) Semarang.

This statement is made in : Semarang
On the date of : 5 July 2021

Signed,

Wahyu Wardani

NIM: 30.2017.00.183

Yusia Nanda Agustanti NIM: 30.2017.00.188

iv

### STATEMENT ORIGINALITY

The undersigned below:

Name / NIM

: Wahyu Wardani / 30.2017.00.183

Name / NIM

: Yusia Nanda Agustanti / 30.2017.00.188

From Department of Civil Engineering, Faculty of Engineering, Universitas Islam Sultan Agung (UNISSULA) Semarang, hereby declare that:

The Final Assignment entitled "STUDY THE DIFFERENCE BETWEEN FLEXIBLE PAVEMENT AND RIGID PAVEMENT CONSTRUCTION" is really the original result of our research, our thoughts that we compiled with the guidance of our supervisor and co-supervisor.

If our statement turns out to be untrue, then we are willing to accept sanctions in accordance with applicable regulations of Universitas Islam Sultan Agung (UNISSULA) Semarang.

This statement is made in : Semarang
On the date of : 5 July 2021

Signed,

Wahyu Wardani NIM: 30,2017,00,183

Yusia Nanda Agustanti NIM: 30.2017.00.188

### **MOTTO**

"Dan janganlah kau berputus asa dari rahmat Allah. Sesungguhnya tidaklah seseorang berputus asa kecuali orang – orang yang kafir"

(QS. Yusuf: 87)

"Behold along with the difficulty there is relief. Therefore when you're done (do

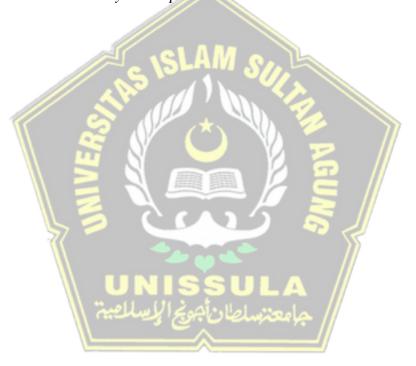
something else). And hope to the Lord.

(QS. Al Insyirah: 6-8)

UNISSULA جامعتنسلطان أجونج الإسلامية

## **DEDICATION**

"I dedicated this Final Assignment to the knowledge of Civil Engineering in general and Highway Engineering in special and as my worship to Allah Subhana Wa Ta'AlaSWT"



#### **ACKNOWLEDGEMENT**

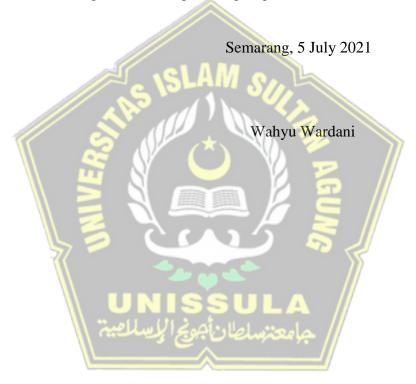
#### Bismillahirrahmanirrahim,

I realize that this Final Assignment can be completed because of the Grace of Allah Subhana wa Ta'ala, the prayers of my Father and Mother, with approval of the Dean of Engineering Faculty of UNISSULA Semarang, the guidance of my supervisors and the help of friends especially Yusia Nanda Agustanti. For that I would like to thank to:

- 1. Dean of the Engineering Faculty of UNISSULA Bapak Ir. H. Rachmat Mudiyono, MT., Ph.D.,
- 2. Head of Civil Engineering Department, Faculty of Engineering of UNISSULA Bapak M. Rusli Ahyar, ST., MT., for his facilities that he gives, so that I can carry out this Final Assignment.
- 3. My supervisor Bapak Ir. Gatot Rusbintardjo, M.R.Eng.Sc.,Ph.D. Thank for his encouragement, guidance, criticism, friendship, advice, and motivation that he gave. Without his continued support and interest, this Final Assignment report would not able to be completed.
- 4. My co-supervisor Bapak Eko Muliawan Satrio, S.T., M.T. Thank for his encouragement, guidance, criticsm, friendship, advice, and motivation. Without his continued support and interest, this Final Assignment reportwould not able to be completed.
- 5. To Bapak Sugiyat and Ibu Ciptowati, my beloved father and Mother, thanks for you who always pray for me so that I can complete my Final Assignment and achieve what I have today.
- 6. Also thank to my love brothers Sigit Bayu Saputra and Yusuf Adhi Putranto for their support and prayer.
- 7. Thanks to Yusia Nanda Agustanti as my love partner for her cooperation in completing this Final Assignment.

- 8. In this ocation I also would like to thanks for my best friends Risqa Prasetiyo Amanda Putri, S.T., Nurwanti Anggraeni, S.T., Trimurti Kumala Dewi, for their support and motivation that always give to me.
- 9. Finally, thank also I give to all Administration Staff of Engineering Faculty of UNISSULA as well as all of my classmate in class of 2017 of Department of Civil Engineering for their support and friendshipness where I have been studying for 4 years.

Thus my gratitude, I hope my Final Assignment is useful, for myself in particular and for the knowledge of Civil Engineering in general.



#### **ACKNOWLEDGEMENT**

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- 6. Also thank to my love brother Bagus Setiawan Pambudi, S.T and my love sister Shafira Salsabila Agustania
- 7. Thanks to Wahyu Wardani as my love partner for her cooperation in completing this Final Assignment.

- 8. In this ocation I also would like to thanks for my best friends Risqa Prasetiyo Amanda Putri, S.T., Nurwanti Anggraeni, S.T., Vina Ajeng Ali Lesmaya, Jauharotun Nisa, for their support and motivation that always give to me.
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