FINAL ASSIGNMENT

COMPARISON BETWEEN DENSE GRADE WEARING COURSE, STONE MASTIC ASPHALT, and POROUS ASPHALT

Proposed to fulfill the requirements of bachelor degree in Civil Engineering in the Faculty of Engineering Universitas Islam Sultan Agung (UNISSULA) Semarang



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DEPARTMENT OF CIVIL ENGINEERING, FACULTY OF ENGINEERING UNIVERSITAS ISLAM SULTAN AGUNG (UNISSULA) SEMARANG

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VAYASAN BADAN WAKAF SULTAN AGUNG UNIVERSITAS ISLAM SULTAN AGUNG (UNISSULA)

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APPROVAL PAGE

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Semarang, 4 September 2017



ΜΟΤΤΟ

اللهِ سَبِيْلِ فى فَهُوَ الْعِلْمِ طَلَبِ فِي جَ خَرَ مَنْ

''Barang siapa keluar untuk mencari ilmu maka dia berada di jalan Allah''

(HR.Turmudzi)

Don't lost the faith, keep praying, keep trying.

Kesuksesan hanya dapat diraih dengan segala upaya dan usaha yang disertai dengan doa

(Kurniawan Krisna Afandi)

وَٱلْعَصْرِ ٢ إِنَّ ٱلْإِنسَنَ لَفِي خُسْرٍ إِلَّا ٱلَّذِينَ ءَامَنُوا وَعَمِلُوا ٱلصَّلِحَتِ

"Demi masa". "Sesungguhnya manusia benar-benar dalam kerugian"."Kecuali orang-orang yang beriman dan mengerjakan amal sholeh . . ."

(Q.S. Al-Ashr; 1-3)

Time always moving forward, don't try to avoid, try to manage it and to upgrade your quality.

Waktu tidak akan pernah berjalan mundur, siapa yang tidak bisa mengaturnya maka ia akan tertelan olehnya tanpa manfaat apapun.

(Listiyono Atmajaya)

"We dedicated this final asignment to the knowledge of highway engineering as our worship to Allah Subhana wa Ta'ala"

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Al<u>h</u>amdulillahirabbil'alamiin, Innalhamdalillah na<u>h</u>maduhu wa nasta-'iynuhu. Upon Ridho and Rahmat Allah Subhana wa Ta'ala this research and final assignment report can be completed.

In preparing this report, I was in contact with many people, researchers, academicians, and practitioners. They have contributed towards my understanding and thoughts. In particular, I wish to express my sincere appreciation to my main research and thesis supervisor, Ir. Gatot Rusbintardjo, M.R.Eng.Sc., Ph.D., for his encourages, guidance, criticism, and friendship. I am also very thankful to my co-supervisor Benny Syahputra, ST., M.T for his guidance, advice and motivation. Without their continued support and interest, this final assignment report would not have been the same as presented here.

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I would also like to thank to all technicians in Road Research Laboratory of Faculty of Engineering of UNISSULA for their help and cooperation.

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