

**PERANCANGAN GEOMETRIK DAN TEBAL PERKERASAN KAKU
JALAN ALTERNATIF PT MELANIA INDONESIA – PT BANYUASIN
AGRO LESTARI STA 0+000 – STA 8+195 KABUPATEN BANYUASIN
PROVINSI SUMATERA SELATAN**

ABSTRAK

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Kabupaten Banyuasin di Provinsi Sumatera Selatan memiliki potensi signifikan dalam sektor agribisnis, khususnya pada subsektor perkebunan kelapa sawit dan karet. Namun demikian, keterbatasan aksesibilitas infrastruktur jalan menuju kawasan industri, seperti PT Melania Indonesia dan PT Banyuasin Agro Lestari, masih menjadi kendala utama. Permasalahan ini berdampak pada inefisiensi distribusi hasil produksi, peningkatan biaya logistik, waktu tempuh yang lebih lama, serta munculnya konflik sosial antara masyarakat Desa Talang Kemang dan pihak perusahaan terkait isu akses serta penggunaan lahan.

Skripsi ini bertujuan untuk merancang jalan alternatif yang menghubungkan PT Melania Indonesia dan PT Banyuasin Agro Lestari dengan Jalan Lintas Palembang–Betung. Perencanaan meliputi desain geometrik jalan, analisis tebal perkerasan kaku (*rigid pavement*), serta perancangan bangunan pelengkap jalan dengan mengacu pada Pedoman Desain Geometrik Jalan 2021 dan regulasi terkait lainnya. Selain itu, penelitian ini juga mencakup penyusunan manajemen proyek yang terdiri dari rencana kerja, estimasi anggaran biaya (RAB), penjadwalan proyek, dan pembuatan kurva S.

Hasil perencanaan menunjukkan bahwa desain jalan alternatif yang diusulkan telah memenuhi standar keamanan dan kenyamanan, serta perkerasan kaku yang dirancang mampu menahan beban kendaraan berat. Diharapkan, pembangunan jalan ini dapat memperlancar distribusi hasil perkebunan, meminimalisasi konflik sosial, serta meningkatkan efisiensi transportasi dan perekonomian di wilayah sekitar PT Melania Indonesia dan PT Banyuasin Agro Lestari.

Kata kunci: Jalan alternatif, Geometrik jalan, Perkerasan kaku, Manajemen proyek.

**GEOMETRIC PLANNING AND RIGID PAVEMENT OF ALTERNATIVE
ROADS PT. MELANIA INDONESIA – PT. BANYUASIN AGRO LESTARI
STA 0+000 – STA 8+195 BANYUASIN REGENCY
SOUTH SUMATRA PROVINCE**

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Banyuasin Regency in South Sumatra Province has significant potential in the agribusiness sector, especially in the oil palm and rubber plantation subsector. However, the limited accessibility of road infrastructure to industrial estates, such as PT Melania Indonesia and PT Banyuasin Agro Lestari, is still the main obstacle. This problem has an impact on the inefficiency of production distribution, increased logistics costs, longer travel times, and the emergence of social conflicts between the people of Talang Kemang Village and the company regarding the issue of access and land use.

This research aims to design an alternative road that connects PT Melania Indonesia and PT Banyuasin Agro Lestari with the Palembang-Betung Cross Road. Planning includes road geometric design, rigid pavement thickness analysis, and road complementary building design with reference to the 2021 Road Geometric Design Guidelines and other related regulations. In addition, this research also includes the preparation of project management consisting of work plans, cost budget estimation (RAB), project scheduling, and the creation of an S curve.

The planning results show that the proposed alternative road design meets safety and comfort standards, as well as the rigid pavement designed to withstand the weight of heavy vehicles. It is hoped that the construction of this road can facilitate the distribution of plantation products, minimize social conflicts, and improve transportation and economic efficiency in the area around PT Melania Indonesia and PT Banyuasin Agro Lestari.

Keywords: *Alternative roads, Road geometry, Rigid pavement, Project management.*