

INTISARI

Bangunan pelengkap dan perlengkapan jalan merupakan kesatuan konstruksi jalan yang harus diperhatikan keberadaannya untuk menunjang keamanan, kenyamanan, dan keselamatan pengguna jalan. Evaluasi kelayakan desain jalan perlu dilakukan sehingga jalan yang dibangun memiliki kualitas dan kinerja yang baik dari segi perkerasan maupun perlengkapan jalan. Penelitian Proyek Akhir ini membahas tentang evaluasi desain jalan dari segi bangunan pelengkap dan perlengkapan jalan. Lokasi yang menjadi objek penelitian yaitu pembangunan Jalan *Field Research Center* Sekolah Vokasi UGM. Jalan FRC UGM dibangun sepanjang 390 m dengan lebar 24 m. Penelitian dilakukan dengan menginventarisasi bangunan pelengkap dan perlengkapan jalan melalui gambar perencanaan, kemudian melakukan analisis pembahasan kelayakan desain jalan dengan membandingkan desain jalan dengan peraturan dan pedoman yang berlaku. Setelah dilakukan inventarisasi dan analisis kelayakan, kemudian ditentukan rekomendasi perbaikan desain. Hasil yang didapat dari pembahasan yaitu kelengkapan bangunan pelengkap dan perlengkapan jalan yang direncanakan sudah tersedia dan lengkap. Hasil evaluasi kelayakan desain antara lain simpang tak bersinyal yang menjadi tinjauan menunjukkan tingkat pelayanan baik dengan menghasilkan nilai LOS yaitu B, dan tingkat pelayanan arus jalan menunjukkan nilai A. Marka jalan yang direncanakan meliputi marka menerus dan marka penyeberangan sesuai dengan peraturan dengan sedikit perbaikan pada marka sepeda. Kelayakan trotoar meliputi lebar trotoar dan kemiringan memanjang trotoar sesuai dengan standar, sedangkan kemiringan melintang trotoar masih terdapat koreksi. Fasilitas untuk penyandang disabilitas dari sisi ruang bebas gerak telah memenuhi kebutuhan pengguna jalan, spesifikasi ubin pengarah dan ubin peringatan sesuai standar, dan penempatan ubin disusun sesuai dengan kebutuhan pengguna jalan. Rekomendasi perbaikan desain jalan meliputi koreksi jarak marka sepeda, penambahan fasilitas tempat sampah, serta koreksi kemiringan melintang trotoar.

Kata Kunci: evaluasi desain, perlengkapan jalan, tingkat pelayanan

ABSTRACT

Complementary buildings and road equipment are an integral part of road construction that must be considered to support the security, comfort and safety of road users. Evaluation of the feasibility of road design needs to be done so that the roads built have good quality and performance in terms of pavement and road equipment. This Final Project Research discusses the evaluation of road design in terms of complementary buildings and road equipment. The location that became the object of research was the construction of the Field Research Center Street, UGM Vocational School. UGM FRC road was built along 390 m with a width of 24 m. The research was conducted by taking an inventory of complementary buildings and road equipment through planning drawings, then analyzing the feasibility of road design discussions by comparing the road design with applicable regulations and guidelines. After an inventory and feasibility analysis have been carried out, recommendations for design improvements are then determined. The results obtained from the discussion are the completeness of complementary buildings and road equipment that is planned to be available and complete. The results of the evaluation of the feasibility of the design include unsignalized intersections which are reviewed showing a good level of service by producing an LOS value of B, and the level of service for road traffic showing a value of A. The planned road markings include continuous markings and crossing markings in accordance with regulations with minor improvements to the bicycle markings. The feasibility of the pavement includes the width of the sidewalk and the longitudinal slope of the pavement according to the standard, while the cross-slope of the pavement is still subject to correction. Facilities for persons with disabilities in terms of free space have met the needs of road users, the specifications for guiding tiles and warning tiles are according to standards, and the placement of tiles is arranged according to the needs of road users. Recommendations for improving road design include correction of bicycle marking distances, addition of trash can facilities, as well as correction of the cross-slope of the sidewalk.

Keywords: design evaluation, road equipment, level of service