

## JALA KAMPUNG LOMBONG ROAD

# Reconstructing roads with MIRAFL



**Industry:** Transportation  
**Sub-industry:** Roadways  
**Location:** Malaysia  
**Product:** MIRAFL® H<sub>2</sub>Rx

## Overview

The Jalan Kampung Lombong road reconstruction project aimed to address the deteriorating condition of a critical road segment in Selangor, Malaysia. The primary purpose was to reconstruct the damaged road to ensure a longer lifespan and enhance its capacity to withstand the heavy loads imposed by frequent truck traffic. This project was pivotal for improving transportation infrastructure, ensuring safety, and fostering economic activities in the region.

The client, represented by the District Engineer for Klang District of the Public Works Department (PWD), requested a comprehensive reconstruction of the road. The goal was to implement a robust solution that would provide durability and accommodate the loading from heavily loaded trucks.

The project was undertaken in 2023, emphasizing the need for timely and effective intervention to restore and upgrade the road infrastructure.

The design process was a collaborative effort involving the District Engineer for Klang District of PWD. The partnership ensured that the design met the specific requirements and challenges associated with the project site.

The specific design was implemented due to the failure of previous repair attempts. The modern design aimed to provide a more durable solution that could withstand the stresses imposed by heavy truck traffic, thus preventing recurring damage and ensuring long-term usability.

**The reconstruction successfully catered to the needs of heavily loaded trucks, which was a critical requirement.**

## CASE STUDY

### Reconstructing roads with **MIRAFI**

The successful completion of this project benefits both the public and the client. Improved road conditions enhance safety and convenience for the community, while the client achieves a more sustainable and reliable infrastructure solution.

## Challenge

The project involved the standard process of laying road materials. However, it was not without its challenges, primarily due to adverse weather conditions. Frequent rain posed significant challenges, complicating the scheduling and execution of the work.

One of the major challenges was the persistent rainfall, which occurred daily. This weather condition disrupted the typical workflow and required adaptive measures to ensure the project's progress.

To mitigate the impact of the adverse weather, the project team strategically planned the material laying process. One notable approach was the decision to conduct the initial laying of materials at night when the weather was stable. This adaptive measure helped maintain the project timeline and ensured the quality of the installation.

While the project did not involve unique or complex innovations in design or installation, it did address a significant issue. The road segment was heavily utilized by trucks, and the original design could not accommodate such heavy loads, necessitating a more resilient reconstruction approach.

The reconstruction successfully catered to the needs of heavily loaded trucks, which was a critical requirement. This achievement underscored the effectiveness of the chosen design and materials in enhancing the road's capacity and durability.

## Solution

Solmax provided **MIRAFI H<sub>2</sub>Rx**, contributing to the road's enhanced performance. **MIRAFI H<sub>2</sub>Rx** was selected for its ability to increase the capacity of the road structure with minimal adjustments to the original design. It also provided superior performance in terms of load distribution and structural reinforcement, making it ideal for this application.

The project demonstrated that a simple, yet efficient solution could effectively address significant infrastructure issues. The use of high-quality geotextiles provided a robust and durable road structure capable of withstanding heavy truck traffic.



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