

## Pekerjaan Rehabilitasi dan Rekonstruksi Infrastruktur Transportasi Pasca Bencana Gempa dan Liquefaksi di Palu = Project of Rehabilitation and Reconstruction of Post-Earthquake and Liquefaction Transportation Infrastructure in Palu

Andri Irfan Rifai, examiner

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### Abstrak

Pada 28 September 2018, gempa berkekuatan 7,4 melanda pulau Sulawesi dengan episentrumnya terletak sekitar 80 km dari Kota Palu. Gempa tersebut diikuti dengan tsunamii, tanah longsor dan liiquefaksi yang menyebabkan kerusakan besar pada berbagai jenis infrastruktur. Saat melaksanakan penyelesaian rehabilitasi dan rekonstruksi dalam berbagai bidang, terjadi tantangan lainnya yaitu pandemic covid-19 yang menurunkan produktivitas kinerja pelaksanaan. Kondisi tersebut menuntut para pihak terkait segera melakukan pengendalian proyek, agar tujuan dari pelaksanaan rehabiltasi dan rekonstruksi dapat tercapai dengan baik. Pelaksanaan praktik keinsinyuran ini merinci proses perencanaan, pelaksanaan dan pengendalian pekerjaan Rehabilitasi dan Rekonstruksi Jalan Palupi-Simoro, Kalukubula-Kalawara, Biromaru-Palolo, Akses Huntap Pombewe (RR-02) terdampak gempa bumi dan liquefaksi. Pelaksanaan praktik difokuskan pada perencanaan dan pelaksanaan penanganan area liquefaksi serta pengendalian terhadap dampak pandemic covid-19. Praktik keinsinyuran dilaksanakan dalam rentang waktu 4 bulan yaitu dari Bulan Februari sampai dengan Mei 2021. Dalam praktik keinsinyuran ini didapatkan proses perencanaan rehabilitasi dan rekonstruksi dilakukan secara lengkap dengan memperhatikan proses mitigasi bencana dan <em>trauma healing</em>. Perbaikan kondisi tanah di area liquefaksi dilaksanakan dengan cara <em>vibrator coulomb stone</em>. Sedangkan pengendalian kinerja dilakukan dengan melakukan optimasi produktivitas menggunakan data mining dengan tetap memperhatikan protokol kesehatan yang ketat.

.....On 28 September 2018, an earthquake measuring 7.4 struck the island of Sulawesi, with its epicenter located about 80 km from Palu City. The earthquake was followed by tsunamis, landslides, and liquefaction causing massive damage to various types of infrastructure. When carrying out the completion of rehabilitation and reconstruction in various fields, another challenge occurred, namely the COVID-19 pandemic, which reduced the productivity of implementation performance. This condition requires the relevant parties to immediately take control of the project so that the rehabilitation and reconstruction objectives can be adequately achieved. The implementation of this engineering practice details planning, implementing, and controlling the Rehabilitation and Reconstruction work of Palupi-Simoro, Kalukubula-Kalawara, Biromaru-Palolo, Huntap Access Pombewe (RR-02) roads affected by the earthquake and liquefaction. Thus, implementing the practice of planning and implementing the handling of the liquefaction area and controlling the impact of the COVID-19 pandemic. The engineering practice is carried out in a span of 4 months, from February to May 2021. In this engineering practice, it is found that the rehabilitation and reconstruction planning process is carried out in full by taking into account the process of disaster mitigation and trauma healing. Improvement of soil conditions in the liquefaction area was carried out utilizing a coulomb stone vibrator. Meanwhile, performance control is carried out by optimizing productivity using data mining while still paying attention to strict health protocols.