CHAPTER V
CONCLUSION

5.1 Conclusion

1. Based on test results, the grain size along the Padang beach is classified as the same type. However, at point 3, the grain size is finer sand due to its location close to the estuary, which is influenced by sediment deposition. Using AASHTO standards, all samples tested were classified as A-3 (fine sand). Using USCS standards, all samples tested are included in poorly graded sand (SP).
2. Tsuchida analysis shows that the gradation of the samples tested, including into the range, has the potential to liquefy because the soil type is sand with high uniformity.
3. Based on the relative density value (Dr) of sand soil along Padang Beach, it can be said to be sandy soil with loose density because there are 3 of 5 samples that have a DR value between 0-15% when 0,3g vibration occurs and all have a DR value between 0-50% when 0,6g vibration occurs. This analysis shows the relative density of samples tested, including the range that has the potential of both 0.6g and 0.3g liquefy because this indicates that the density of the soil is still relatively low.

5.2 Recommendation

1. This research can become a reference for subsequent research to be able to repair soil improvements in the sand along the Padang beach to improve the gradation of the land before building a construction.
2. It is hoped that future researchers can carry out the influence of other indexes on liquefaction potential in the same location using The liquefaction potential index (LPI), cyclic stress ratio (CSR), Cyclic Resistance Ratio (CRR), and investigate further relationship between soil grain gradation, relati lensity, ground acceleration, and duration of vibration.

3. It is hoped that the government can carry out mitigation against the liquefaction that will occur.