CHAPTER V CONCLUSIONS AND SUGGESTIONS

5.1 Conclusion

- 1. Full application of technical competencies: The internship strengthens multielement quantification capabilities (structure, architecture, MEP) with AutoCAD, CostX, and Glodon (TAS/TRB/TBQ), leading to precise, traceable, and audit-ready cost estimation.
- 2. Consistent technical administrative integration: The results of quantity calculations are effectively connected to TBQ/BOQ, IV, VO, and RFVA, so that contractual values, progress, and variations can be verified and accounted for.
- 3. Tender and documentation process experience: The preparation of Pre Qualification and Appendix D improves understanding of procurement flows, document completeness, and image revision control, which has a direct impact on cost accuracy.
- 4. Key findings of Chapter IV (small final project): The electrical and electronic BQ of Alix Residence Block A of RM 1.382.679,57 is dominated by two work groups Lighting Small Power (64,27%) and Cable Routing (25,85%) so that quality, cost, and schedule control on these two items determine the total efficiency. Conversion to duration weights is sufficient for the compilation of the S-curve.

5.2 Suggestions

1. Strengthening BIM Technology Integration

Optimizing the utilization of CostX and Glodon with the 5D BIM approach needs to be continuously developed, including advanced training to deepen cost analysis based on digital models.

2. Sustainable Academic Industry Collaboration

Similar internship programs are expected to be a sustainable bridge between campuses and industry, including applied research opportunities for cost estimation and project management method innovation.

3. Non-Technical Competency Enrichment

In addition to technical skills, soft skills such as negotiation, conflict resolution, and time management are essential to support the role of the Quantity Surveyor in a real work environment.

Bibliography

- Patimah, S., Simamang, D., Saleh, L. M., Gaspersz, W., Sipil, J. T., & Ambon, P. N. (2023). ANALYSIS OF THE FACTORS CAUSING THE REWORK IN THE ZEST AMBON HOTEL CONSTRUCTION PROJECT. JOURNAL AGGREGATE, 2(2).
- Berhad, T. N. (2022). *TNB Concrete Compact Substation*. Tenaga Nasional Berhad. https://www.tnb.com.my/assets/files/2022_ESAH_3.1.pdf
- Manto, J. (2012). Mengidentifikasi Durasi dan Tenaga Kerja Berdasarkan Analisa Harga Satuan Pekerjaan (Ahsp) pada Perencanaan Pekerjaan Perumahan Villa Idaman Boalemo. *RADIAL- Jurnal Peradaban Sains, Rekayasa Dan Teknologi Sekolah Tinggi Teknik (STITEK) Bina Taruna Gorontalo*, 4(1), 38–52.
- Materials, M. K. H. B. (2025). *2T10 High Tensile Bar*. https://www.mkhbuild.com/product/steel-bars/
- Syaidaturrahmah, N., Zein, Y. A., Wulandari, S. D., & Nurlaily, L. (2025).

 Pengaruh Magang terhadap Peningkatan Soft Skill dan Minat Karir

 Mahasiswa Akuntansi Syariah. *Jurnal Pengabdian Masyarakat Bangsa*, *3*(3), 734–739. https://doi.org/10.59837/jpmba.v3i3.2283
- Unitrade, S. L. (2025). *R6-200 Mild Steel Bar*. https://hub.unitrade.com.my/product/mild-steel-round-bar-per-bundle/
- ZEWDIE WONDATIR. (1967). 済無No Title No Title No Title. *Angewandte Chemie International Edition*, 6(11), 951–952., *April*.