

Practical Training Report for

Con4035X

Prepared for:

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Prepared by:

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Date of submission: 29 September 2024

TERMS OF REFERENCE

Construction Management and Quantity Surveying postgraduate students are required to submit a written report in accordance with the guidelines set out by the Department of Construction Economics and Management, which is endorsed by their employer/s, on the nature and duration of the experience obtained in the workplace . This must be submitted either on 31 March or 30 September each year.

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1. INTRODUCTION

1.1. Subject of and Motivation for Report

The purpose of this report is to reflect upon my practical training experience in the construction industry. This report serves as a record for my practical experience during the year of 2024. It must entail descriptions, diaries and essays on how I did my work.

1.2. Background to Investigation

This report came because of the request sent by Karen Le Jeune, who is the course convenor, stating that she requires construction studies to produce a report relative to their practical training.

1.3. Objectives of Report

- State and discuss duration of practical training done.
- State activities done during practical training.
- Reflect on what was done during the practical experience and draw conclusions on what was learnt and also challenges faced.

1.4. Limitations and Scope of Investigation

This report is only based on the experience gained during the year 2024 for the completion of Con4035X.

1.5. Plan of Development

The report will describe activities that took place at Bitprop.

2. Submission Declaration



Faculty of Engineering and the Built Environment
Department of Construction Economics and Management
Practical Training
CON4035X

ANNEXURE C

CON4035X SUBMISSION DECLARATION 2024

Summary of Submission

1. I hereby declare that I have checked on PeopleSoft that I am correctly registered for the appropriate practical training courses for 2024
2. Herewith the summary of the hours worked as part of my 2024 practical training submission:
(Indicate whether hours/days/weeks)

CON4035X 176 hours

3. I further declare that I have read the 2024 course handout for the practical training requirements for the Department of Construction Economics and Management, understand the contents and acknowledge what my obligations are. By ticking the checklist, I confirm that I have adhered to the minimum submission requirements applicable.

<input checked="" type="checkbox"/>	Detailed Report	<input checked="" type="checkbox"/>	Employer letter(s)	<input checked="" type="checkbox"/>	e-portfolio
<input checked="" type="checkbox"/>	URL submission	<input checked="" type="checkbox"/>	Submission declaration		

Plagiarism Declaration

1. I know that plagiarism is wrong. Plagiarism is to use another's work and pretend that it is one's own.
2. Where I have made use of referencing, I have used the prescribed UCT convention for citation and referencing. Each contribution to, and quotation in, this report from the work(s) of other people has been attributed, and has been cited and referenced.
3. The e-portfolio content, practical training reports are my own work and is in my own words (except where I have attributed it to others).
4. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.
5. I acknowledge that copying someone else's report or part of it, is wrong and declare that this submission comprises my own work.
6. I acknowledge the use of insert AI system(s) name(s), version number and link to generate materials, that were either used:

For background research, styling, proof reading, etc.; and/or
 In materials that were included within my document in modified format OR
 AI was not used at all.

Grammarly and Quillbot

L Shezi
Signature
SHZLUT001
Student number

Luthando Shezi
Student Name
29 September 2024
Date

3. BITPROP

3.1. Daily Diary

I did my honors-year training with Bitprop from the 18 June 2024 to 19 July 2024 completing a total of 176 hrs. Below is my daily diary of my time with Bitprop.

Daily Diary: Bitprop

Total Hours Completed		176 hrs
Date	Hours of work	Activities
WEEK 1		
Tuesday (18/06/2024)	9am-4pm 7hrs	<ul style="list-style-type: none">• I met with Dylan the COO in the morning who then welcomed me alongside the entire team.• After that, Ziyanda (Construction Manager) and I went to various sites which were spread between Khayelitsha and Eersterivier. On site, I got welcomed by the workers and contractors.• We basically spent the whole day going to site by site to check on progress on the buildings in construction.• In the afternoon, we came back to the office.
Wednesday (19/06/2024)	9am-4pm 7hrs	<ul style="list-style-type: none">• I spent the whole day at the office today• Ziyanda spent the day explaining and showing me their BOQ's and how they get their prices for their quantities.• Then after she showed me their construction programme and told me that they needed a few issues fixed and that was my task for the day.• Attended the weekly construction meeting.
Thursday (20/06/2024)	9am-4pm 7hrs	<ul style="list-style-type: none">• Today we went back to site again, but now we just had to do snags on a build in Khayelitsha. Then we went to Eersterivier to build that had a bit of issues, so we went to check that out too.• We then came back from site, and I continued with the construction programme fixes and finished them.

Friday (21/06/2024)	9am-4pm 7hrs	<ul style="list-style-type: none"> Dylan then introduced me to a coding class that helped me to get the knowledge he needed to develop the software that Bitprop uses for its various components such as rental management, construction management and more. He then introduced me to iBuild which is a dashboard where all the activities of Bitprop are managed and controlled. Ziyanda then gave me an assignment that I would start next week which was to compare costs of the original BOQ to the costs of material I was finding on different material stores across Cape Town such as Buildit, Builders and etc.
WEEK 2		
Monday (24/06/2024)	9am – 4pm 7hrs	<ul style="list-style-type: none"> Started with the assignment and was able to finish it later in the day after lunch. Compared material prices to the likes of Buildit, Builders, Plumblink, Plumbit and many more. At the end of the day, I was given another task to work alongside the rental manager. She introduced me to how they send their homeowners their statements by utilizing websites like iBuild Home Loans to acquire their statements and Bulk SMS to send them to the homeowners. Now my task was to send these statements to approximately 180 homeowners.
Tuesday (25/06/2024)	9am – 4pm 7hrs	<ul style="list-style-type: none"> It was site day again today and we went to the various sites we went to last week with an addition of a few in Eersterivier. Spent the whole day on site and came back to the office at approximately 15h00. After we came back to the office, I continued to work with the assignment given to me but was only able to send the statements to a few homeowners.
Wednesday (26/06/2024)	9am-4pm 7hrs	<ul style="list-style-type: none"> The whole day was dedicated to the rental management assignment, and I was able to do quite a bunch. In the afternoon, the whole team had a meeting which I also attended, then an hour later we also had to attend a construction meeting where the architect and construction manager provided the team with weekly updates of the builds.
Thursday (27/06/2024)	9am – 4pm 7hrs	<ul style="list-style-type: none"> Finished off the rental management assignment and was now given the task to research how can the business incorporate washing machines as a laundry mean for the tenants renting without significantly increasing the price of water and electricity for the homeowner/ landowner.

Friday (28/06/2024)	9am-4pm 7hrs	<ul style="list-style-type: none"> Continued with the research for the day. Then in the afternoon, I went to site with Annika (architect) to Eersterivier where she met with the homeowners to speak about some construction issues arising with a build, then we went to another site also in Eersterivier where we met with the contractor and workers to discuss about how construction was going and what are the plans moving forward with the continuation as this build had a new design incorporated in comparison with the other builds that had been built before.
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WEEK 3

Monday (01/07/2024)	9am- 4:30pm 7.5hrs	<ul style="list-style-type: none"> • I was further given a task dealing with Citiq water and electricity meters relating each rental unit flat. My job was to take the raw data and transform it in a way where all water and electricity meter payments for the month were easily identifiable for each and every apartment including the respective rooms. • Spent the rest of the day with Dylan helping me with the Citiq task.
Tuesday (02/07/2024)	9am- 4:30pm 7.5hrs	<ul style="list-style-type: none"> • Today was site day meaning the entire day was spent going to the different sites. • All sites are progressing very well. The workers are really hard at work. • Most buildings are above ground floor slab now.
Wednesday (03/07/2024)	9am- 4:30pm 7.5hrs	<ul style="list-style-type: none"> • Today we had a construction meeting again where the architects and the construction manager meet to discuss all related issues and progresses on construction with Dylan. • Later during the day, I was able to finish off the Citiq task.
Thursday (04/07/2024)	9am- 4:30pm 7.5hrs	<ul style="list-style-type: none"> • I spent the first half of the day in the office doing work by either helping Dylan with something or Ziyanda who is the CM. • We later went to site again in EersteRivier to inspect works done and make sure the construction checklist is met and completed before the builders can go to another stage of construction.
Friday (05/07/2024)	9am- 4:30pm 7.5hrs	<ul style="list-style-type: none"> • Spent the day helping the CFO and Project Manager with some data management issues. • Also did work with Dylan later in the day.

WEEK 4

Monday (08/07/2024)	9am- 4:30pm 7.5hrs	<ul style="list-style-type: none"> • Today, it was raining heavily so I was based in the office. During the course of the day, we started noticing an increase in maintenance tickets due to the heavy rainfall and I was tasked to identify the common issues stated and look for alternatives in which these issues can be solved by.
Tuesday (09/07/2024)	9am- 4:30pm 7.5hrs	<ul style="list-style-type: none"> • We went to site today and it was really raining. Most sites had no workers, but some did especially the ones where there were working in the interior doing painting, tiling or just general finishes.
Wednesday (10/07/2024)	9am- 4:30pm 7.5hrs	<ul style="list-style-type: none"> • I was at the office today, Jon and Ziyanda were discussing about the increase of maintenance tickets due to the heavy rains and then told me to research on ways the company can reduce water seeping through the walls and paint. • We also had a construction meeting today.
Thursday (11/07/2024)	9am- 4:30pm 7.5hrs	<ul style="list-style-type: none"> • Today I didn't go to the office as we were all advised to work from home, but I continued with the work given to me. Jon later during the day told me that I should further

		edit my rental management system by adding more maintenance tickets and adding more categories to the related issues.
Friday (12/07/2024)	9am-4:30pm 7.5hrs	<ul style="list-style-type: none"> Came to the office today, spent the whole day on the rental management spreadsheet trying to put all maintenance tickets on Excel for the year 2024.
WEEK 5		
Monday (15/07/2024)	9am-4:30pm 7.5hrs	<ul style="list-style-type: none"> Continued with the rental management sheet on Excel and today, I was able to reach 400 maintenance tickets. Bitprop also had a meeting where they explained to the company the whole process of how homeowners apply for the apartments, how Bitprop approves/ rejects and all the processes that lead up to construction of the building.
Tuesday (16/07/2024)	9am-4:30pm 7.5hrs	<ul style="list-style-type: none"> Continued with the rental management sheet, today I reached 650 maintenance tickets logged into my Excel sheet. There was no site work today because the construction manager said we'll go on Thursday. I then stopped adding more maintenance tickets and started editing my document properly removing and adding a lot more elements.
Wednesday (17/07/2024)	9am-4:30pm 7.5hrs	<ul style="list-style-type: none"> Today we had a whole team meeting where all of the departments of Bitprop were discussing the progress of their works in terms of the year 2024. After the meeting I continued with the rental management system and reached 900 maintenance tickets which was the total of 2024. We then had a construction meeting later in the day.
Thursday (18/07/2024)	9am-5pm 8hrs	<ul style="list-style-type: none"> We went to site today, not much progress had been made on some builds due to the heavy rains the previous week. I then met up with the CFO and Rental Manager to go to Khayelitsha to check on the rental units that are functioning in terms doing a maintenance run and discussing issues with tenants.
Friday (19/07/2024)	9am-4:30pm 7.5hrs	<ul style="list-style-type: none"> Today was my last day with Bitprop, even though it was five weeks long, it finished fast. Spent the day finalizing the rental management document I was preparing and then at the end of the day, I said my farewells to the company.

3.2. Reflective Essay

My vacation work at Bitprop was truly an enriching experience that provided me with invaluable insights into the property development industry. Having gained three years of academic knowledge and practical skills since my first internship, I was able to participate more actively in the company's operations and contribute meaningfully to various projects.

During my time at Bitprop, my most fulfilling aspects were working directly with the construction manager on a variety of on-site projects in Khayelitsha and EersteRivier. Being exposed to the different phases of construction starting from foundations to handover, I now have in-depth understanding of the property development process and how affordable backyarding rental units can be built. The thing that really caught my attention during the time was the building team's collaborative style and the on-site workers' dedication, furthermore their conversation and problem-solving abilities made me appreciate the difficulties they encounter and the knowledge and expertise they bring to their profession on a deeper level.

In addition to the technical components of construction, I learnt a lot about the social and economic effects of property development. This encompasses a realisation of the significance of affordable housing and the constructive role that property development can play in enhancing people's lives. This fact was firstly highlighted by an elective I completed earlier this year called Housing Markets, Practices and Policies and then was later reemphasised by actually visiting sites in neighbourhoods like Khayelitsha and EersteRivier. Concerning construction in these kind of communities where the acquisition of good affordable housing is very limited for the low-middle ranged income region of the areas, I began to appreciate and value Bitprop's utilization of strategies of development that lead to significant levels of growth in sustainable development in rural communities.

The tactics/ approaches that Bitprop used on their projects to reduce environmental effect were as follows:

- The use of energy-efficient materials such as Resin8, which is a plastic recycled aggregate formed from mixed plastic waste that is used to make bricks and concrete for foundations.
- The use of Envirolite Blocks, which is recycled polystyrene that has been shredded and mixed with concrete
- The flat's energy-efficient design and window placement to eliminate the need for artificial ventilation, heating or cooling systems.
- Lastly, the use of energy saving water heaters, LED lighting in the interior, external solar security lights.

These methods improve the long-term worth and desirability of the properties being created in addition to making the world greener.

Along with working on-site, I also worked in the office and received valuable knowledge with regards to the Indlu Portal and the Ibuild Home Loans website. By using these two software tools, I was able to learn more about the company's management and financial processes, which includes house loans, rental management, construction management and many more. Utilizing this two software also made me understand the importance of technology to the property sector, as these software allowed Bitprop to effectively manage their business operations, running from financial transactions to rental administration.

My most eye-opening experience was effect that the intense rain that occurred between the third and fourth week had on the rental units. Tenant maintenance tickets increased as a result, mostly concerning water seepage. As a result, I was tasked to analyse and assess these maintenance problems by creating a rental management

spreadsheet. This task taught me useful data analysis techniques and made clear the significance of quality control in building as well as the influence of weather on property maintenance. Through data analysis of the maintenance tickets, I was able to pinpoint the reoccurring problems and suggested possible fixes to the construction manager.

Upon finishing my vacation work, I had time to reflect on my experience and understood that establishing connections with coworkers from other departments was crucial to deepening my grasp of the property development process. Furthermore, I saw that as the economy is constantly changing meaning that even the property development sector experiences constant change in both trends and technology, it's critical for one to keep up to date with the newest developments. This means that even when I start my working career next year, I must still be able and be willing to learn as I continue in life different technologies, methods and ways of doing stuff. Lastly, I saw the importance of interacting with stakeholders such as local communities is necessary for property development and also can guarantee that the projects being done fulfil community requirement while minimizing adverse effects, and I strongly believe that this is one of the reasons why Bitprop's approach to affordable housing has been so successful.

Now, I can say that as a result of this internship, I have developed a new interest in the property development sector, and I think it presents a fruitful and satisfying career path. I am especially interested in the chance to help develop solutions for affordable and sustainable housing. This internship has not only made me learn useful technical skills and knowledge but now I have also acquired important soft skills like problem-solving, flexibility and time management.

All in all, my time at Bitprop was very enlightening and an interesting experience. This one was very different from the one experience. I am appreciative of the chance I had to work for the organization, and I strongly believe that this experience will be very helpful for my future academic and professional endeavours.