

Gaia Laidler – Construction College, Norfolk, May 2016

I went to Construction College for a week to build a small scale oil-rig. In the first phase of the construction week, I was the Construction Leader. In the second phase of the construction week, I was a general worker on the Surveying Team.

On site, since I was in charge of the project I was the main point of contact for the subcontractors, the client and the consultants. This required me to spend most my time on site liaising with the relevant people in order to secure plant, hire specialist workers, order materials and create documents to be signed. To complete these tasks, I had to ensure that I had all the relevant permits. I also had to update and create new task sheets where unforeseen circumstances on site required us to change our construction methods. The inspection tasks that I thought would make up most of my day were mostly delegated to the cost, health and safety and quality managers. However, it remained my responsibility to ensure that they were carried out to a high standard and I reviewed all the documents they completed.

I am really pleased with how I performed in this phase. We were praised at the contract reviews for keeping our presentations short and supplying them with all the correct documentation. I felt that my team worked professionally and all the managers were much more relaxed as we went through the week as I was able to give clearer time goals. I was able to hand over to the next Team Leader approximately 4 hours ahead of schedule. Were I to take part in Constructionarium again as a team leader, I would take a more active role in the design phase. As I was working on the safety team in the design phase, I did not have a complete and detailed understanding of the project. This would have allowed me to contribute more on site and assign appropriate time goals to the teams I was leading. I am impressed with my learning curve from Sunday to Tuesday, and I received positive feedback from the team.

In the second phase of the construction week, I was a general worker on the Surveying Team. I worked in a team of three to deliver gravel to the lake bed and prepare the 5 m x 5 m scour bed. We worked well as a team and developed a more efficient method for filling the boat with up to twenty buckets of gravel before shovelling it from the boat into the lake. By the afternoon, we were confident that we had completed the task to a sufficient tolerance. We personalised a rake from the stores so that it could be used to check the depth of the water above the gravel bed. We drew out a grid and took several measurements in each grid square to ascertain the average water depth. The next morning we completed one last check of the gravel bed, in the presence of the quality manager, to ensure that nothing had changed. We then brought an official document to an LOR representative who signed off on it. I then helped set up the scaffold hand rail around the caisson. I spent Thursday morning striking the formwork from the side pour and removing nails from the timber so that it could be used again for the formwork for the top pour. I then spent an hour in the caisson clearing it and removing the internal formwork. I then returned to the dry dock and helped size plywood for the formwork.

In the afternoon, I went to the concrete laboratory to test our concrete cubes from Wednesday's pour. Our cube achieved a compressive strength of 9.73 kN. The specified amount was 20 kN, but it had only been cast 23 hours earlier, and based on age-strengthening curves we anticipated it would reach the required strength in time for delivery. LOR signed off that they were happy with the strength, especially since it was a non-strength-critical structure. At 4 pm I successfully carried out the top concrete pour with five other team members. This had to be done very quickly and levelled to a high precision. We achieved this by using a long piece of timber and lots of water to tamper the concrete. I then cleared up all the equipment from the pour. On Friday, we worked as a whole team to remove all remaining formwork, clear the dry dock and tidy the site area. Then I was assigned one of the ropes to help drag the caisson onto the scour bed. Under direction from the team leader we sunk the caisson onto our levelled scour bed.

I think that I worked well with others on site and helped the team. I did not have an opportunity to make any of the formwork or rebar cages because I was team leader and then on the gravel team, but I worked hard shovelling, clearing up the site and striking formwork. I think that it is easy to fall into gender roles when on a construction site. Given this, I should have tried harder to combat the stereotyping by my team, the client and the subcontractors.