

# YOUR SUBMISSION

# YOUR DETAILS:

First Name:			
Ryan			
Surname:			
Tesselaar			
Email:			
Date of Birth:			
Daytime Phone:			

Mobile:

# ADDRESS DETAILS:

Street Address:

Suburb:

Town/City:

Apprentice of the Year Region:

Postcode:

## **EMPLOYER INFORMATION**



### **Company Name**

**Foster Construction** 

### **Contact Person**

Graham Boswell

**Postal Address** 

Suburb

Town/City

Postcode

**Daytime Phone Number** 

**Mobile Number** 

**Email Address** 

## **APPRENTICESHIP INFORMATION**

## Training Provider

BCITOOther

Start date of on-site apprenticeship

02/04/2013

**Training coordinator** 

Russell Allison

Training coordinator daytime phone



### Training coordinator mobile

### Training coordinator email

# Other building qualifications - you can include information about other Unit Standards you have achieved here:

Completed National Certificate in Carpentry, May 2016 Elevated Work Platform trained and licensed. Completed Site Safe course. Height and Harness trained and licensed. Trained in Comprehensive First Aid. I have my "Ramset' licence (Power Actuated Tool licence.

## SO APPRENTICE - WHY YOU?

What sets you apart from other apprentices? Write about talents like your leadership skills, your skills on the tools, your self motivation and initiative, your communication skills and how you work with workmates and clients. You might want to talk about what plans you have for your future career and where you hope your apprenticeship will take you (approx 120 words).

# Why do you think you've got what it takes to be the Registered Master Builders Carters 2016 Apprentice of the Year?

I believe I have all the qualities it takes to become the 2016 Registered Master Builders Apprentice of the year. As I have recently completed my Apprenticeship with Foster Construction, Hamilton. I have used the past three and half years gaining experience from a variety of management, and experienced tradesman. As a builder I always finish each job to the highest standard, taking pride in each project. I can easily adapt to different work places and site teams, both socially and professionally, always keeping our strong health, safety and environment policies in place. I have proven this by been selected as the Apprent-ICE this year and working down in Antarctica on Scott Base for three months from February to April 2016. I thrive on working under pressure and are passionate about challenging construction projects, always eager to learn from each day. My long term goal is to always strive to be an asset to the construction industry and to continue my training by enrolling in a Construction Management Course with the vision of becoming a Project Manager for Foster Construction.

# **MY PROJECT DETAILS**

Provide details of a project that you are currently working on or have completed while you were training (try to make it a project that the judges can view for your site visit). You should talk about:

The advanced skills and learning you used on the project.

The initiative you showed following plans and working to code specs.

You can include photos and plans - you will need to have your employer's permission, and you might need to get the permission of your client.

You can choose whether you would like to submit your project online or in hardcopy.

- I would like to submit my Project Details online
- O I would like to submit my Project Details in hardcopy

You can either describe your project in this box or upload it as a document by using the button below (if you use the box, you can still upload photos or plans using the upload button)



Choose File (None)

Ryan Project Apprentice Of The Year 2016..pdf Please send your Project Details to your local AOY coordinator at the address given below:

# EMPLOYER REFERENCE

We also need a letter from your employer telling us the following about you:

- What makes you stand out from the rest, and why do you deserve this kind of recognition?

- What has your employer been impressed by during your training?

- Your employer should also describe the skills you have mastered, any initiative you have shown, your enthusiasm and dedication to their business and the trade.

- What makes you different from your peers and why you are an asset to their company. This should be approximately 120 words.

Your employer must include the following text in the letter with a signature.

I, being the employer of the entrant, hereby declare that the information included on this entry form is correct and I give permission for the entrant to participate in this competition and the judging process. Should my apprentice have a site visit with the judges, I agree to be onsite for this, or will arrange for the apprentice's foreman or supervisor to meet the judges onsite. I further agree to allow, should the entrant receive an award, permission for him/her to receive the benefits of the award without penalty. Please ask your employer to send this letter direct to your local Apprentice of the Year Coordinator. Contact and address details are listed below.

Tick this box when your employer has sent the reference to your local AOY coordinator Employer reference sent

# EDUCATION AND TRAINING COORDINATORS REFERENCE

We also need a letter from your training advisor/coordinator telling us the following about you: What has impressed them during your training?

Here your training coordinator should write about the progress that they have seen as you have worked towards your National Certificate. They can talk about your attitude to learning, uptake of skills and personal motivation to improve your skills.

Your training advisor needs to include a start date for your on-site experience and advise how far you have progressed through your National Certificate so we can verify the application (approx 120 words).

Please ask your training advisor to send this letter direct to your local Apprentice of the Year Coordinator. Contact and address details are listed below.

Tick this box when your training advisor has sent the reference to your local AOY coordinator Training reference sent

# DECLARATION

I hereby declare the information included in this entry form is correct and that I have read and understood the terms and the conditions of entry. In regards to the details supplied on this entry form, I



confirm the project is all my own work and that I have not been assisted in the preparation of these details. I also understand that failure to provide correct information may result in my disqualification. I agree to participate in any media activity surrounding this competition.

### Your Declaration

I agree to the above

Carters are proud to be the principle sponsor of this competition. For statistical purposes please tick the box if your employer is a Carters customer

We suggest you print out a copy of your completed entry submission for when you meet the judges.

# SITE VISIT ADDRESS (IF KNOWN)

If you are selected to proceed in the competition you will receive a site visit from the judged. Please give the physical address of the site for the judges visit. We realise this may change so all addresses will be confirmed with you prior when dates for the visits are set.

Hampton Downs MotorSport Park, Hampton Downs Rd, Te Kauwhata

# Apprentice Of The Year 2016

## NAME: Ryan Tesselaar

COMPANY: Foster Construction PROJECT: Hampton Downs Hospitality and Race Control DATE: September 2015 - January 2016



### **COMPANY PROFILE**

For the past three and half years I have been employed by Foster Construction Ltd. I commenced my BCITO Apprenticeship after completing my three-month trial. I was honored to receive the BCITO Gateway Scholarship to kick-start my building career.

Fosters is a large construction firm based in Te-Rapa, Hamilton. I have been fortunate to have been on several variations of building sites, from office blocks, distribution warehouses to house alterations. Foster's employ over 100 full time staff, including 22 apprentices, working for a firm of this size has given me many opportunities to work and learn from a large number of experienced management personal and tradespeople who are always eager to pass on their expertise to the right people. I have found Fosters extremely supportive and encourage all their staff, helping them to achieve their goals, I appreciated this support last year competing in Apprentice of the Year and again this year also while spending three months at the beginning of 2016 working as the Apprent-ICE on Scott Base in Antarctica.



## **PROJECT BRIEF**

Foster Construction was awarded with the task of building Hampton Downs a new race control tower and pit lane hospitality facilities. The design was created by Edward White Architects and Grays Consultants Engineers. They needed to come up with a concept that would suit the desire of the client by utilizing the location of the existing pit lane structure. The end concept needed to have a very architectly pleasing appearance for both the facility uses as well as the apartment block owners that live on the opposite side of the track. They ended up with the design of building on top of two 80m long existing pit lane buildings also filling in the 30m gap between these buildings creating new office space, ablution blocks as well as a large tunnel so cars can access pit lane from the car park area. This new building includes 20 large corporate hospitality areas with tran-space doors separating them so it's very easy to expand if need be, each area having private access to a 20m<sup>2</sup> balcony overlooking pit lane and the home straight finish line, four ablution blocks, four kitchens, large offices as well as room for both media staff and a large rostrum balcony. At both ends of the building there are large 150m<sup>2</sup> decks covered by structure flex canvas providing all weather viewing pleasure for spectators and sponsors. Access to the first level is gained via a lift in the center of the building or seven external staircases.



Apprentice Of The Year 2016

## **ROLES AND RESPONSIBILITY I HELD**

On this project I played a major part, I was involved from the design stage through to client hand over. For the first 4 weeks of the 17 week build on site was just myself, Adam Findlay (Project Manager) as well as two inmates from Spring Hill Corrections Facility. As we were working near Spring Hill it was a good opportunity for us to use a program that the prison is running called "Released to work" this is where inmates that are nearing the end of their sentence and behaving well are released into their desired field of work. One of the rules that the Corrections Facility stipulate is that a sponsor has to take responsibility for the inmate at all times when they are outside of their housing cell. Myself along with Adam took up the role of sponsors for these two men, which involved working with and around these two at all times and also reporting into the prison on a regular basis regarding how the inmate is reacting to public attention and fitting into the work environment. I found this a invaluable learning experience for me as having close dealings with the department of corrections taught me a lot of new communications skills.

During the peak of construction, we had 11 Foster Construction staff and 20 subcontractors on site at any one time. As Adam is completing his Diploma in Construction Management he was required to leave site to complete some theory units fortnightly, I had a lot of responsibility while he was away which included the day to day running of the site, mentoring and working alongside the Correction workers, reporting progress to Kevin O'Neil (client representative), all while keeping Foster Constructions Strong Health and safety policies in place.

## CHALLENGES FACED

### Existing

As we had an existing pit lane building platform to work with we came across some quality issues that were not anticipated. Some of the measurements that we encountered on the plan were not accurate. As existing structure could not be changed, we fixed this by collecting all the correct measurements and going over the plan to see where it would affect us in the future and also thoroughly checking the shop drawings and making any necessary changes in time before construction began.

### Time frame

With the sale of Hampton Downs to a new owner Tony Quinn he was keen to get in and make major changes as soon as possible also wanting this work complete so he could show off these changes for the NZ Festival of Speed an annual event that Hampton Downs run in January. We optimized our time frame by a lot of pre-construction planning and getting the drawings signed off as soon as possible so manufacturing could get underway with no delays during construction, for example we had every aluminum joinery unit measured and manufacturing underway before construction had even started on site. As we were installing all of the joinery units ourselves as soon as the openings were created and trimmed out to size, the units were installed allowing the glaziers to follow behind.

### Site Access

We needed to work around events and race meetings that were scheduled for Hampton Downs. This caused us issues as we could only access the front facade of the building while there were no events using the pit lane, we managed this well by taking full advantage of the times we could access the face and also planning ahead and having work available for the sub-contractors on others parts of the build while this area was unavailable.

### PROCESS

After finalizing the design, we were on site. Lucky for us we could get straight into it as there was not a lot of site establishment for us to do apart from temporary fencing. Hampton Downs supplied us with the use of two pit garages for facilities and storage. The use of toilet facilities along with power and water close by were a huge bonus as it saved us time and money setting up temporary services. We concentrated on quality assessing and signing off the pre-cast concrete panels, hollow core flooring units, structural steel and aluminum window and door joinery units. This took quite some time and planning as I mentioned before we came across some of the existing measurements that were not quite what we had been supplied. This stage is very important because it is the last stage to catch any potential problems that the designers may have mistaken, and as you all will be aware if you do not catch an issue at this point when it arrives on site and has to be changed or even sent back it can be very costly and time consuming.



Existing pit lane structure



On top of existing pit lane structure

Once we were sure we had all the design issues sorted and the large items getting manufactured, we started on the removal of old tarsal that lay between the two existing buildings so we could start setting out the new site. The land had been stabilized during original development in 2006, so we come across some very hard clay that had been mixed with cement and lime concentrate. I found this ground amazing to come across as you could really see how well the stabilization process worked, the only down fall to this solid ground was, a 6 ton digger we had on site digging the footings was struggling to pierce its way through the clay.

100mm equal angel bolted flush with the top of the pre cast walls providing seating for McDowell strips and hollow core flooring.



The precast panels went in smoothly and before we could land any of our hollow core concrete flooring units we assisted our structural steel contractor Jensen Engineering on bolting 100x100mm steel angle flush with the tops of each pre cast panel this helped strengthen the panels also giving us plenty of seating for the flooring units. With our hollowcore panels coming from Stresscrete we were under way, I was dogging the crane, placing the panels as well as constantly doing QA checks on both the panels and our Health and Safety plan we had set in place.



Hollow core concrete units been lifted in and positioned. Next step adding 100mm topping slab. The rough surface provides a good bonding for the topping slab to adhere to. Undoubtable the best view of the track would have to be from out on the 3-metre cantilever balcony that puts you right amongst the action over pit lane. I enjoyed constructing this balcony as it was the first large commercial form work I have constructed. After the hollow core panels were landed we set up the shore towers on solid ground with LVLs set to height. We landed ply shutters on top of the 400 mm center bearers. As the underside of the balcony is all exposed we had to make sure everything was all lined up well and in good quality condition. After the reinforcing was correctly placed and inspected by Waikato Regional Council we poured the 100mm topping slab and balcony's. *Bottom left hand photo showing near completed formwork.* 



This photo showing the shore towers in place with the LVL bearers providing support for the formwork, this was left supported for 28 days after the concrete was placed to allow for correct curing.

Jensen Engineering were our structural steel contractors. I have worked alongside the team at Jensen's on projects in the past and have found them very professional, in communication, work ethics and Health and Safety. We worked closely as a team doing QA checks after they had completed sections so we could follow behind with our timber framing.



Our timber framing was a mixture between H1.2 100x50mm and 150x50mm the north facing wall was just under 6 metres high so 150x50mm at 400c was necessary to give us the correct strength. We decided to construct our timber frames on site and in-stiu as many had large openings and were fixed to the structural steel.

Left hand photo: Shows the timber framing used for framing out the openings for the Tran-space doors. Center photo: Looking upon the fire wall framing that separates the hospitality units from the main admin building. Right hand photo: Showing the door opening that have been framed out and also showing the aluminum door joinery has been installed.



### EXTERIOR

The exterior is a combination of 9mm Titan façade sheet, corrugated iron, concrete precast panel and a large proportion of glass frontage. This was the first time I had used the James Hardie Titan product and found it a great system. We braded it onto 25mm structural CLD battens that we had put on prior, I found this product produced a sharp looking paintable surface. The northern side facing the carpark is cladded in horizontally fixed corrugated iron, this cladding works well with this site as the existing apartment block is cladded using the same product.



Roofing was done with King Span, I have worked with this product in the past and I believe that it is the way of the future for commercial buildings as it is strong, provides its own insulation and it looks pleasing from both the roof and celling. The only down fall has been this product only comes in lengths up to 11.8m as it gets shipped in a 40ft shipping container. At either end of the building there are 150m<sup>2</sup> decking space covered in a white canvas designed and installed by structure flex, I personally think the exposed steel adds an awesome space to watch the action in any weather.



### **INTERIOR**

The main office is situated on the ground floor to the right hand side of the vehicle tunnel. The office area is 108<sup>2</sup>m, with large double glazed windows facing both the entrance parking and track areas. On the left is an ablution block with Male, Female and Disability facilities.

To sharpen the effect of this area, brightly colored tiles were randomly placed throughout the internal walls. I feel this created a really cool modern touch.



Centered on the first floor is where all the media along with race officials are set up when there is a large event on. Although the interior is quite simple, I believe it is very effective, given the environment it will be used as. In my opinion, it could not have been designed too much better the open plan easy flow area can cater for any group size, with simply opening or closing one of the eleven Tran-space door systems we installed. Access to each of the fourteen 20m<sup>2</sup> balconies with all round glass balustrading are through double stacking sliding doors. With plenty of glass faces to this building it adds plenty of natural sunlight streaming in at all times of the day also allowing complete 360-degree track viewing.



Photo showing the large counters we installed for media/ race officials use.



Photo taken during construction showing floor leveling compound that has been laid and suspended celling grid going in.



Showing the finished product and how effective the Tran-space door system is.



These photos show the finished project. Quality fixtures and furnishings add to the easy flow, user friendly design.







Ryan Tesselaar

## CONCLUSION

Tony Quinn is working very hard at making his dream of having a world class race facility in the North Island. I am proud to say I was heavily involved in helping make his vision come true. After a solid day's work on site each night I was able to stand back and reflect on the good work that we had done. That's why I love the construction industry and I look forward to many other rewarding opportunities and challenges I will get in the future as my knowledge and skills continue to grow.

It has been very satisfying working alongside the Released to Work scheme knowing that we have helped these men migrate back into the community.

I have found my skills have excelled vastly on this build. I have been working alongside knowledgeable project managers and carpenters, Once again myself and the excellent team I work alongside at Foster Construction have produced a highly regarded building.

I believe with my strong building skills and project, material knowledge and managerial involvement I have had during this project you will see what talent I can offer.

I am looking forward to showing the judges around this building and showing off my building knowledge, workmanship and Health and safety principles to them.

## **PROJECT MANAGER REFERENCE (ADAM FINDLAY)**

### 15/5/16

To Whom it may concern.

I have worked with Ryan Tesselaar as his manager on and off since he started with Foster Construction in 2013 in this time, I have seen him mature as a builder and also as a person. He is well respected from his colleagues and our clients.

Ryan is nearing the completion of his apprenticeship, he has an excellent skill set, an eye for detail and is extremely organized, he is able to multi task and is now actively managing staff and subcontractors daily, Ryan is dedicated to furthering his career with advanced management training on the horizon once completion of his apprenticeship. Foster Construction thrives on training staff and growing people within the company, Ryan's enthusiasm has made this easy. I do believe Ryan will prove he is tough competition for this year's apprentice of the year.

Yours sincerely

Adam Findlay Project Manager Foster Construction 027 221 9801

## **OTHER JOBS I HAVE RECENTLY BEEN APART OF**



Torpedo 7 national distribution centre



Dairy goat co-op office renovation



Centre Place Ward street



CAL truck extension



Resco new premises



Whites Power Sports extension



Placemakers frame and truss plant



Colin Wades house alterations



Provider Foods, Palmerston North



APL development, Te-Rapa



Container Dock, Scott Base Antarctica