A9 Dualling

ISSUE Spring 2020

Luncarty to Pass of Birnam **Project newsletter**











Covid-19 Update – Temporary site shutdown

The safety of operatives working on our sites is of paramount importance and following the First Minister's announcement on 24 March, Balfour Beatty implemented a managed site shutdown of the A9 Dualling Luncarty to Pass of Birnam project, which was completed on 26th March 2020.

The managed shutdown of the site was undertaken in line with health and safety guidelines including the Government's recommendations on physical distancing. The safe and secure shutdown of the site ensured that partially built structures and operations were made safe, associated equipment and plant was properly stored and security measures were put in place at site compounds for the duration of the closure.

The current traffic management arrangement on the A9 which consists of narrow lanes, safety barriers, the temporary roundabout south of Bankfoot and the 40mph

speed restrictions, enforced by temporary safety cameras, will remain in place during this time.

Our team will continue to undertake essential services such as monitoring the traffic management arrangements in place throughout the project to ensure the ongoing safe operation of the A9 as a key part of the national trunk road network.

The temporary closure of the construction site will be subject to continuous review.

All news items and images contained within this edition of the newsletter are retrospective and occurred prior to the temporary closure of the site.

If you have any questions or concerns throughout this time, you can still contact us on 0800 193 7313 or by email: A9L2B@BalfourBeatty.com

The 'Green Bridge' takes shape at Gelly Wood

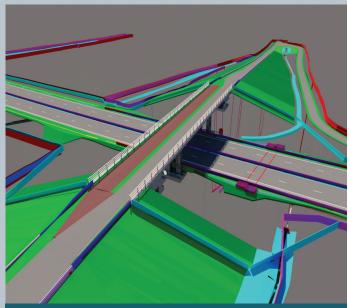
The final set of bridge beams to be installed over the A9 carriageway were successfully lifted into place under a full overnight closure of the A9 on the 18th and 19th February 2020.

The Gelly overbridge, north of Bankfoot, is the northernmost structure on the project and has a special dual purpose. As well as providing access across the A9 to adjacent landowners and residents, the Gelly overbridge is a 'green bridge' that will provide a safe access for wildlife to cross the A9 away from the traffic below.

Approximately half of the deck area will be top soiled and landscaped with grasses and heather to provide a welcoming environment for a variety of wildlife to safely cross over the A9 traffic below. A number of 'green bridges' have been built on projects in Scotland including three on the recently opened Aberdeen Western Peripheral Route.



An example of a green bridge on the Aberdeen Western Peripheral Route at Kirkhill Forest, Aberdeen.



The 3D Building Information Modelling (BIM) model of the 'Green Bridge' shows the landscaped verge on the left of the strucutre

Managing water sustainably

As a nation, Scotland is renowned for its wet and rainy climate and we have seen our fair share of rain and hail while working on site. Not only does the weather affect our working conditions, it also affects the project's design.

This quarter, we look at the methods we have used in our design to safely and sustainably manage excess water on the new A9.

We have designed Sustainable Drainage System (SuDS) basins on this project to treat, store and discharge water run-off from the surface of the new A9 carriageway.

SuDS basins are a method of minimising adverse impacts on people and the environment before water collected through drainage systems is discharged. They are not just in road construction projects, but for many other projects such as wind farms, commercial buildings

and residential developments.
There are numerous different
SuDS designs which can be utilised
depending on functional, ecological
and aesthetic requirements.

All SuDS basins designed for road projects serve two main functions: to allow short term storage of surface water to reduce flooding and to help remove contaminants, such as silt, by natural settlement.

Widening the road creates a greater surface area covered in hard, non-porous material. When rain falls on areas of land that were previously porous (such as grass fields), it prevents some of this water being absorbed into the land. This means that water from the road enters watercourses more quickly which can influence water flows and potentially increase the risk of flooding.

Our design must plan for this and so

we have located SuDs basins at the downstream end of road drainage systems to provide storage for this excess water. The SuDS basins will usually be empty and provide additional temporary water storage capacity in times of heavy rain. The basins are carefully designed to provide controlled release of water back into the watercourses which is more in keeping with the natural environment that existed before the road was constructed. The SuDS basins also allow any solids or contaminants to settle out of the watercourse flow and minimise the risk of these entering the natural watercourse downstream.

New SuDS basins are being created along the length of this project, including at Pitlandie, Stanley/ Tullybelton junction, Bankfoot North and Gelly.



SuDS basin under construction at Pitlandie overbridge

Project Update - in pictures

Construction works ramped up during the first quarter of 2020 and, as the line of the new dual carriageway begins to emerge, there is a distinct change in the surrounding landscape.

We've compared some of the photos taken during our initial photographic survey in early 2019 with images of the works taken more recently in early 2020. These illustrate the scale of the works underway and showcase what has already been achieved on this major infrastructure project.

Luncarty Junction looking north - February 2019



The original single carriageway of the A9 looking north from Luncarty Junction

Luncarty Junction looking north - March 2020



The first 2.4km of new dual carriageway on the A9 looking north from Luncarty Junction with the new Pitlandie overbridge in the distance

Stanley/Tullybelton Junction - February 2019



The site of the new Stanley/Tullybelton junction, prior to work commencing on the A9 looking north, prior to works commencing'

Stanley/Tullybelton Junction - March 2020



The new Stanley/Tullybelton junction shows significant progress including the new overbridge and major earthworks to create the new slip roads

Bankfoot North Junction - February 2019



Hunters Lodge Underpass (bottom left of image) will be extended to accommodate the new A9 southbound carriageway

Bankfoot North Junction - March 2020



The beam lift operation, which included 23 pre-cast concrete beams, was completed during overnight closures in March 2020 following several weeks of backfill operations

A9 carriageway, north of Bankfoot - February 2019



The design of the new dual carriageway required a substantial volume of earth to be removed at this location to accommodate the new A9 southbound

A9 carriageway, north of Bankfoot - March 2020



The new line of A9 southbound carriageway takes shape following completion of the soil nail wall to retain the embankment, protecting the neighbouring property

Gelly Wood - February 2019



A new overbridge, known as 'The Green Bridge' was required at Gelly Wood to provide safe access across the A9 for locals, landowners and wildlife

Gelly Wood - March 2020



Nine pre-cast concrete beams weighing a total of 390 tonnes were installed during overnight closures of the A9 to create 'The Green Bridge'

A9 Dualling: Luncarty to pass of Birnam project – community benefits conference

The project team welcomed partners from its supply chain, charities, employability services, local groups and organisations to Perth Concert Hall on 20th February 2020, to celebrate the Community Benefits delivered through the project in 2019. The conference also served as an opportunity to take a collaborative approach to plan the delivery of our 2020 calendar of events.

The event served as a platform to launch the project's Corporate Social Responsibility (CSR) report and to thank the many delivery partners who helped achieve the project's community benefit targets so far.

Attendees also contributed to a short video which highlights some of the many successful community initiatives achieved during the previous year. The CSR report and video case study can be accessed on the project website by clicking on the following link (https://bit.ly/A9CSR)

The conference focused on developing relationships between our sub-contractors and supply chain, and the wide range of organisations we regularly work with in the local community, to maximise the benefits the project can deliver to Perthshire's local communities.

At the end of the conference, attendees were asked to make a commitment detailing how they may contribute to help build a legacy in 2020 through employment, training, community engagement, educational support or volunteering.

"Some of the ideas and suggestions from our partners showed real innovation and proved that the collaborative approach was successful. We are already seeing exciting developments happening organically between community organisations and our supply chain and we hope that these continue to blossom, leading to positive outcomes for local communities. The Balfour Beatty team will be on hand to support the development of all of these initiatives and we look forward to seeing them come to fruition."

Ken Brown, CSR Manager, Balfour Beatty

We will feature more on the outcomes from the Community Benefits Conference in a future edition of the newsletter and will highlight some successful partnerships that were formed and the benefits that are planned for delivery as a result.

Our Roving Reporters, Katie and Eilidh - S2 media students from Perth Grammar - attended the event to interview our delegates and take photos of the event.



Positive discussions between our project partners resulted in new connections and exciting opportunities to benefit the communities surrounding Perth



Speakers from a wide spectrum of organisations who work closely with the community share their expertise, achievements and hopes for the future



Balfour Beatty Community Liaison Officer, Duncan Gardner, sharing some of the projects successes to date



Our partners show their support of the project and pledge their commitment to help bring positive change

Construction milestone as first 2.4km of new carriageway opens to traffic

Road users will have noticed a change to their journey along the A9 at the south end of the dualling project as traffic was switched onto the first section of new carriageway in mid-February 2020.

During overnight closures of the A9 for the bridge beam installation works at Gelly overbridge, the project team took the opportunity to switch traffic onto the first completed section of new A9 carriageway in the early hours of the morning on 19th February.

This new section of road will eventually become the northbound carriageway between Luncarty and the new Stanley/Tullybelton junction upon the completion of the scheme. Now that traffic is running on this new section of carriageway, works will begin on the old A9 carriageway to create two new southbound lanes, once contruction resumes on site.

Our landscaping teams were out in force in February taking advantage of breaks in the weather to plant the first instalment of some of the 57,000 trees on the roadside verge, which form part of the landscape design for the project.

Together with the successful completion of all bridge beam installations, creating four new overbridges on the A9, this significant milestone demonstrates the progress the team has made over the past 18 months.

Road users will now be able to see the final layout of the new A9 taking shape as we deliver this important infrastructure upgrade to improve safety and make journey times more reliable on the A9.



Precast bridge beams being delivered to site ahead of the nightshift to install them



First 2.4km of new northbound carriageway opens to traffic

In Profile

Graduate Quantity Surveyor, Bethany Cunningham, gives an insight into her career journey.

Managing the commercial aspects of a project of this scale are vitally important in ensuring that businesses can continue to deliver projects sustainably – ensuring value for money and delivering within budget.

Tracking and controlling the cost of materials, labour and sub-contractors is a huge responsibility that falls on our team of highly skilled and qualified Quantity Surveyors led by our Commercial Manager.

Name:

Bethany Cunningham

Where are you from:

I'm originally from Aberdeen but I moved to Glasgow to go to university and have lived there for the last seven years.

Job Title:

Graduate Quantity Surveyor (QS)

Time with Balfour Beatty:

Two and a half years – one year as a part-time trainee while at university and 18 months as a full time graduate.

Qualification:

MSc Quantity Surveying from Glasgow Caledonian University. I also have a BEng (Hons) Chemical & Process Engineering from University of Strathclyde.

What interested you in Quantity Surveying?

Construction has always fascinated me – seeing buildings, roads and other infrastructure develop from nothing and the impact it has to improve lives. However, my route into Quantity Surveying was a little unconventional. During my 4th year of Chemical Engineering I decided I wanted to try something different as many of the opportunities in this field were in the oil and gas industry. I had concerns about the environmental impacts of the oil and gas industry and, with the downturn, job security became an important

I spoke to a family friend who is a Quantity Surveyor about the role and career opportunities. He was so enthusiastic and opened my eyes to the variety and scope for development and progression. I also love working with numbers and problem solving, both essential skills in Quantity Surveying (QS). My research also highlighted the skills shortage within the profession as well as support within companies like Balfour Beatty to encourage more women to consider a career in the construction industry. Once I realised that I could do a one-year postgraduate Master's degree in QS, that sealed it for me.

What types of projects have you worked on?

experienced a couple of projects. Firstly, I worked on the early stages of the Glasgow Queen Street Station upgrade. This involved much of the preparation works for the new station and frontage. I've moved project now, but I still love walking past and seeing the continual progress and



Bethany Cunningham, Quantity Surveyor

huge improvement as it nears completion. In my graduate role, I'm now working on the A9 Dualling: Luncarty to Pass of Birnam project and have been on this job for the past 14 months.

What are the best and worst things about working in the construction industry?

One of the best aspects of the construction industry is the satisfaction of going to a site and seeing the progress. as well as working in a team with a wide variety of people and professions on a daily basis. Given the nature of the work, I know that for many colleagues in the construction industry that a challenging aspect can be having to travel long distances to the project site.

What would you say to anyone thinking about a career in Quantity Surveying?

I'd say go for it! There are so many opportunities and such a wide variety of projects out there to experience - once you experience one, you'll be hooked and never look back.



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