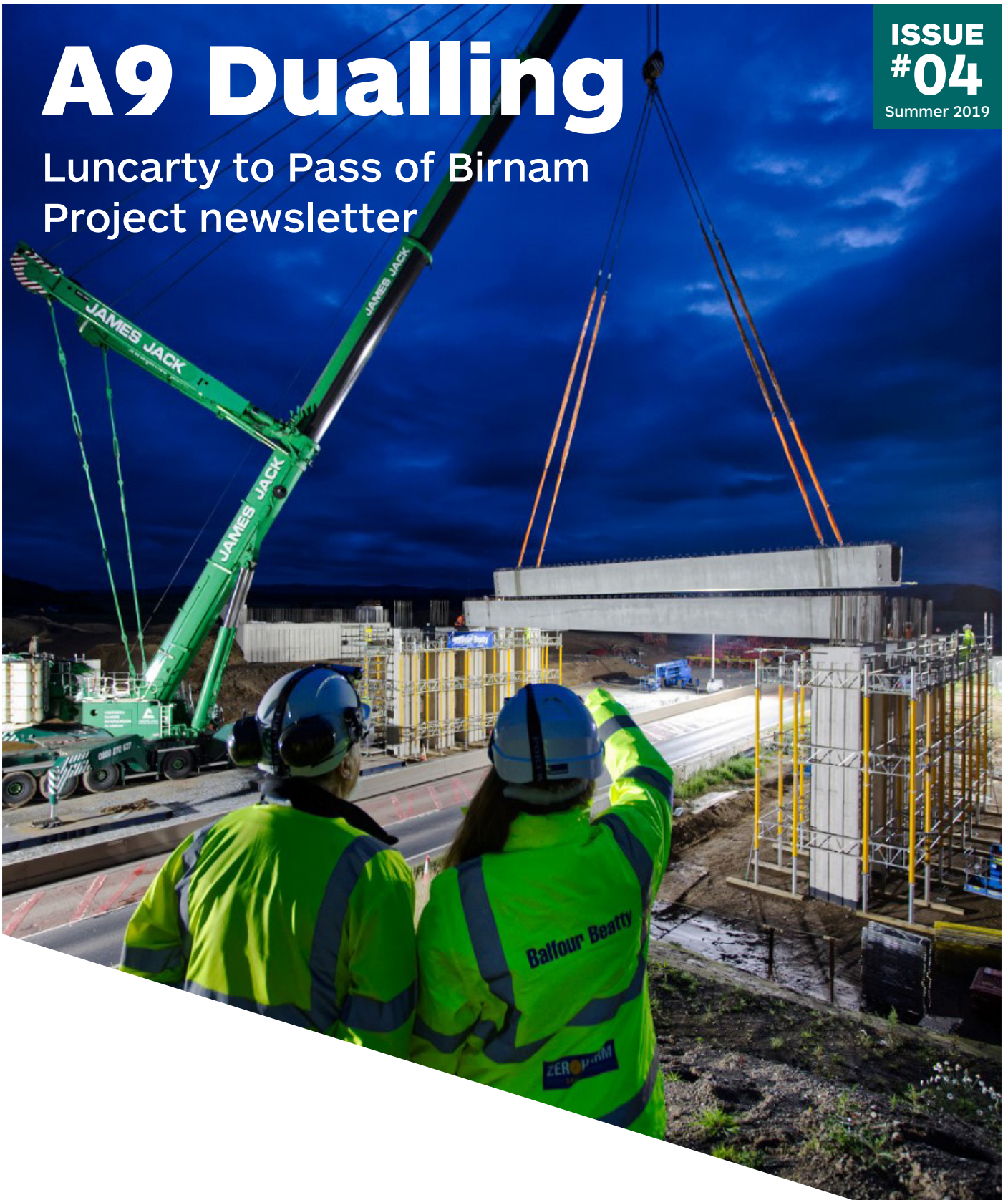


ISSUE
#04
Summer 2019

A9 Dualling

Luncarty to Pass of Birnam
Project newsletter



Balfour Beatty

JACOBS



Major project milestone achieved

The A9 Dualling: Luncarty to Pass of Birnam project achieved a significant milestone this summer as the first set of precast concrete beams were successfully installed on the overbridge for the new Stanley / Tullybelton Junction.

Fifteen concrete beams, ranging from 22m to 25m in length, were lifted into place over the A9 carriageway during a series of nightshifts on the 29th, 30th and 31st of July, as part of the bridge deck construction for the biggest structure of this project.

Full closures of the A9 were required to safely install the first ten beams over the existing carriageway. A 750-tonne crane was used to lift and secure the beams in place before the process of installing the formwork to create the deck of the overbridge could begin.

Following the three overnight closures, the remaining five beams were installed offline to the east side of the structure under temporary traffic signals which stopped the traffic for up to 15 minutes at a time as the beams were lifted in to place.

The use of precast concrete beams for the bridge structures on the A9 Dualling project, as opposed to traditional in-situ

construction, has minimised disruption to road users and improved safety as this reduced the time spent working at height and above the A9 carriageway. Production of the precast concrete beams, which is done off-site, also improves programme certainty as the impact of weather on construction is reduced and fabrication in a controlled environment gives more certainty to the quality of the finish.

During the overnight closures of the A9, we used this opportunity to complete a variety of other works including drainage crossings, maintenance of verges and the existing traffic management. We also extended the traffic management at the north end of the scheme. Southbound A9 traffic is now being guided to crossover the central reservation on to the northbound carriageway where a contraflow arrangement is in operation over a short section of the dual carriageway. Stanley Road Junction was also realigned to allow the earthworks to progress around the structure.

We understand that road closures are inconvenient for both road users and local residents. We would, once again, like to thank you for your patience while we progress this important upgrade to the A9 that will deliver safer and more reliable journeys once complete.



Balfour Beatty's team worked for three nights to install the beams



Precast beams being lifted into place



A long exposure captures the 750-tonne crane lifting the 15 concrete beams over the existing carriageway

Bankfoot Gala Day 2019



Our wheeled excavator was named Scoop by local school pupil Finlay

Engaging with local communities is an important part of this major investment to upgrade the A9 and allows Balfour Beatty to deliver added social value through our works. We contacted Paul Neilson, Treasurer of the Bankfoot Gala Day Committee, to discuss how we could support the annual event and developed a ‘construction themed’ package for the event.

This enabled us to capitalise on the unique skills of our project team members providing a platform to meet members of the local community and share information about upcoming works on the project. We were also able to answer any questions from residents about the works.

Balfour Beatty donated the main prize for the silent auction on the day. In partnership with our local supply chain partner, Laird Plant Hire, we offered a mini-digger, driver and banksman for eight hours. Local residents bid on the prize through the silent auction and the winner put it to good use, upgrading their driveway and completing some landscaping works in their garden.

Our team also donated a bottle of whisky to the raffle, ran a ‘name the digger competition’ where local children

suggested names for a wheeled excavator, which was on display, and offered free fly fishing tutorials. The tutorials were delivered by Alec Oliver, Project Manager and David Keable, Environmental Manager who together have over 50 years’ fly fishing experience. Our mobile exhibition centre was also present on the day, showing the latest aerial footage of construction progress on site.

This was our second year attending the event and, although the weather was not as favourable as in 2018, the event was well attended. Balfour Beatty donated more than £1,000 in benefit in kind donations to Bankfoot Gala Day.

Our wheeled excavator was named “Scoop” by local school pupil, Finlay.

Construction Viewing Platform Open to Public

The first of two project viewing platforms was recently completed and is now open to the public. Situated adjacent to the new Pitlandie overbridge, the first viewing platform provides a safe way for local people to watch construction works progress on the new structure at this location. The platform can be accessed beneath the viaduct at the north exit of Luncarty, and follow the road past the properties to the top of the hill.



Viewing platform adjacent to the Pitlandie overbridge

Progress to



17.5km
of fence built



160k hrs
worked on the project

£2.3M
spent within
Scotland



14
jobs
created



2,271
pupils and
students
engaged with

£4,500

in donations and bene
in kind to charity and
local organisations

date

960m
of drainage
installed

775T

of structural concrete

£1.58M
spent with local
businesses within
30 miles

4

apprentices
employed

5

graduates
employed

fit



Culvert extension at the Shochie Burn

Project Update

Since March, the project has moved into its main earthworks phase with approximately 700,00m³ of earth to be moved during the first summer season. That's enough to fill 280 Olympic-size swimming pools. Once complete, these earthworks will create the platform to construct the new widened A9 dual carriageway.

The final design has continued to progress and is now substantially complete with more than 100 individual design packages delivered, including associated drawings and specifications, covering everything from bridge structures to road signs. This has involved many consultations with key stakeholders to ensure all aspects are considered during design development such as future maintenance requirements. With much of this work now complete, we are well underway with the main construction activities.

The only grade-separated junction on the project, Stanley/ Tullybelton, is starting to take shape to both east and west sides of the A9. The columns have been under construction since the Spring and the bridge beams were delivered and installed during the three overnight closures of the A9 at the end of July. (Full story on page 1)

Site clearance works have been completed and boundary fencing is established in all key areas of the site. Culverts that are located under the existing A9 carriageway have been extended to facilitate the widening of the A9 carriageway. Public utility diversion work has progressed to programme with 25 diversions completed to date including water, broadband and electricity.

The temporary bridges installed earlier in the year crossing the Shochie and Ordie Burns are now operational, carrying dump trucks each hauling around 17 tonnes of

earth cut from the south of the project to form the new Stanley/Tullybelton Junction. This has avoided the need for our construction vehicles to use the existing A9 to move materials and minimised the impact on road users. Construction of culvert extensions at the Shochie and Ordie Burns has commenced following consultation with the Tay Fisheries board. These culverts will carry the new northbound carriageway of the A9 over the watercourses upon completion.

A temporary mini-roundabout was installed on the A9 between Tullybelton and Bankfoot earlier in the year. The roundabout has reduced the volume of HGV construction traffic on the local road network and, in particular, through Bankfoot village. The roundabout is performing well with very little disruption for road users and provides a safer interface between quarry traffic and road users.

At Bankfoot North Junction, works to extend Hunters Lodge underpass are progressing well with the southern abutment cast and traffic locally diverted to allow works to commence on the north abutment which will be formed in the coming months.

To the north of Bankfoot, works are underway to complete soil nailing to the east slope, creating the footprint for the new southbound carriageway. The soil nailing will retain the embankment on which an adjacent property sits.

As we progress with the main construction, we would ask all road users to drive with care when approaching the area, particularly during the holiday season when traffic volumes increase. Please be aware of changes to traffic management and adhere to the speed restrictions to ensure the safety of our workforce and other road users.



Soil nailing works

Safety first for Academy9



The Balfour Beatty project team joined forces with Transport Scotland's Academy9 Education Programme to develop and deliver a series of Health and Safety workshops to local primary schools prior to the start of the school summer holidays.

The workshops provided the opportunity to highlight the dangers of trespassing on construction sites and to learn about assessing risk. The pupils at Luncarty, Stanley and Auchtergaven Primary Schools were encouraged to consider the risks in a variety of everyday situations and assess the level of each risk to understand how a simple risk assessment would be carried out. Each team then considered what mitigation could be put in place to reduce the risk in everyday situations such as shopping in a city, playing football at the beach or walking in the park on a sunny day.

Pupils were then shown a variety of photographs of different scenarios on a construction site to put their learning to the test. Balfour Beatty team members were on hand to lend an expert eye to the risks and mitigation methods that could be used and provide depth to the young people's learning.

Collaborative meetings have been underway over the last few months between Balfour Beatty, Transport Scotland, Jacobs and the Academy9 team to plan an exciting site-based programme of engagement for local primary schools over the 2019/20 school term. Corporate Social Responsibility Manager, Ken Brown, said "We are excited to be offering this opportunity to inspire the next generation of young engineers through Science, Technology, Engineering and Maths (STEM) subjects."

Academy9 – Pitlochry Nursery Visit

Inspired by the major infrastructure project on their doorstep, Pitlochry Nursery pupils decided to build their own A9 Dualling project in the playground. Amazed by their initiative and enthusiasm for construction and engineering, the project team and Academy9 paid them a visit ahead of the summer holidays.

Child-led learning is an important part of early years education and the children came up with this idea on their own. Staff at the nursery contacted Transport Scotland's Academy9 team to ask if there was anything they could do to encourage the youngsters and help develop their knowledge of construction.

Project staff from Balfour Beatty and Jacobs collected a variety of site materials including road signs, pipe offcuts, pallets and other items and delivered them to the nursery in a site pickup truck. G.S. Brown Construction, a housing contractor working on a project opposite the nursery, also brought a forklift for the visit. The team spent the morning with the children aged between three and five building in the playground with the new materials, speaking to them about the A9 Dualling project and answering any questions they had about the A9 and road construction.

"We hope that when they are older, they will remember this day and will look back on this exciting time building their own A9."

Jan Hay, Nursery Teacher at Pitlochry Nursery, said: "On behalf of all the children, the staff and the parents, I would like to thank you so much for your visit and for all of the equipment you brought. The children have been so excited about their A9 project ever since. We hope that when they are older, they will remember this day and look back on this exciting time building their own A9."

The most important measure of the visit was of course the views of the children. One parent commented on the photographs: "The photos are great, my son said it was the best nursery day ever! He said: "I liked the big pipes and the ropes to pull things up the hill best, and the signs for our A9. I loved the hard hats and safety vests and everything." Who knows, perhaps we will meet this young man again, on one of our sites, in the not too distant future.



Child-led learning is an important part of early years education



Inspiring the next generation of engineers at Pitlochry Nursery

Managing the challenge of supply of materials to our site



An aerial view of the site compound and Breedon Quarry

Upgrading the A9 to dual carriageway between Perth and Inverness is one of the largest and most ambitious infrastructure projects in Scotland and comes with its own unique challenges. One of the ways we have been able to mitigate the challenge of ensuring supply of materials to allow construction to progress to programme is with the provision of a quarry located on site.

Breedon has set up its quarry next to our site offices at Loak Farm near Bankfoot, having successfully supplied the first section of the A9 Dualling Programme between Kincaig and Dalraddy from its Meadowside Quarry, near Kingussie. Breedon has worked closely with Balfour Beatty on countless projects across the UK. Breedon successfully won the contract to supply our works with aggregates, concrete and asphalt for the A9 Dualling: Luncarty to Pass of Birnam project.

Gavin Mennie, Director of Estates, Planning and Geology at Breedon explained; "With no nearby extraction sites, the supply of construction material to the second section of the dualling programme, from Luncarty to Pass of Birnam, was given early consideration. Following an exhaustive land search, Breedon identified Loak Farm south of Bankfoot as a potential source of sand and gravel for the road upgrade. Engagement with the landowners and subsequent exploration soon followed and the viability of the site was confirmed."

In 2017, Breedon began discussions with Perth and Kinross Council regarding the formation of a borrow pit at Loak Farm. An extended period of public consultation followed, with the local community providing feedback on the proposals. The planning application, which was submitted in March 2018, included extensive environmental studies.

The application was able to demonstrate that extraction at Loak Farm, rather than the closest existing quarry locations would save 1.3 million HGV kilometres on the local network throughout the two-year life of the project. Other environmental considerations for the Loak Farm site included noise impact, ecology and archaeology, with two Scheduled Monuments in close proximity.

With planning approval secured, development of the site began in early 2019, with soil stripping under archaeological supervision. The plant site was established with perimeter soil bunds formed to reduce noise and visual impact and access to the extraction area was built, where up to 400,000 tonnes of sand and gravel will be recovered.

The quarry is now fully operational, and will supply aggregates, pavement and structural ready-mixed concrete as well as asphalt to the project. This will help to minimise our carbon footprint through reducing vehicle movements. Once the A9 Dualling: Luncarty to Pass of Birnam project has been completed, the quarry will be closed and the land re-instated to agricultural.

In Profile

Working with Barnardos Works to provide opportunities to local young people



Working closely with third sector employability organisations is key to delivering on the ambitious community benefits targets that have been set as part of A9 Dualling: Luncarty to Pass of Birnam project.

An important factor in delivering these benefits is providing employment opportunities for young people and those in priority groups. Balfour Beatty has continued to work with Barnardos to develop a strong relationship and is able to provide several opportunities for local young people on this project.

Barnardos' Kerry Nicholls and Sheelagh Scott identified two local young people they felt were strong candidates for a work placement

at the project. Patrick Stewart and David McPhee, who both live in Perth, were assisted by Barnardos in gaining their Construction Skills Certification Scheme (CSCS) cards in advance of meeting the A9 project team.


Patrick and David attended the site office to complete an interview with the management team.


Following their interview, Cairney - General Foreman took both candidates out for a tour of the site to let them appreciate the scale


of the works and understand what would be expected of them. When they returned, it was agreed that both would undertake a two-week placement on site. If the placement went well, there was the potential for both candidates to be taken on in full-time roles on the project.

Following a successful two-week placement, the team were delighted to offer both Patrick and David full-time roles as general operatives with Balfour Beatty.

David said: "Working for Balfour Beatty has changed my life. It has helped me support my family and look after my daughter. I have received great support and a warm welcome from the site team. Being employed by Balfour Beatty has given me a sense of security I didn't have previously and I am keen to keep doing my best and working hard."

 /transcotland
/trafficscotland
/BalfourBeatty

 @transcotland
@trafficscotland
@balfourbeatty

 /TransportScotland/
BalfourBeatty

 flickr.com/photos/
transportscotland

For regular, live traffic updates please visit:
trafficscotland.org

Plan your journey at:
trafficscotland.org