Tamar Crossings

No. 13 Summer 2024

Inside...

Welcome to our 13th edition

Welcome to this August 2024 edition of our newsletter. It introduces our new Joint Chairman Jon Dingle, and covers a wide range of topics including engineering, new staff and the increasing number of visitors to our Visitor and Learning Centre. I hope that you find it interesting.

Spotlight on new Joint Chair Jon Dingle

Jon Dingle was born and grew up in Plymouth where he still lives

With a background in youth and community work in the voluntary, community and social enterprise (VCSE) sector, Jon has worked with a wide range of agencies, including local councils, Barnado's and the police, to support and encourage young people into positive lifestyles across the city.

In 2023 he set up 'Connecting Youth', a Community Interest Company which is now supporting a number of youth projects in the northwest of the city. It was whilst working on a project in St Budeaux involving a group of young people needing support that he met local councillors.

Having never thought about becoming involved in politics, Jon was surprised when one councillor suggested he should join the City Council. Initially apprehensive about the prospect as he felt he had very little knowledge of the election process or campaigning, Jon decided to support them in their campaign for re-election. Following their success Jon took the plunge and was elected to the City Council in May 2023.

"I believe it is vital for the views and needs of young people to be considered when decisions are being made which will affect their futures" said Jon. "I hope that my knowledge and background are helping to ensure that this happens at the City Council."

Having joined the City Council as one of the three councillors representing St Budeaux in May 2023, Jon was keen to secure a seat on the Tamar Bridge and Torpoint Ferry Joint Committee. "The closeness of the Tamar Bridge to St Budeaux means that it has a big impact on the local community" he said.

"Although I had walked, driven or cycled across the bridge since I was a teenager, like many regular users I had just taken it for granted. I actually knew very little about how it operated or was funded and was interested in finding out more and asked if I could join the Committee."

Having spent the past 12 months learning as much as he could about Tamar Crossings, Jon was delighted to be elected as the Joint Chair representing Plymouth City Council on the Joint Committee last month.

"This is a very important time for Tamar Crossings" he said. "The last few months have seen the organisation used as a bit of a political football and we need to ensure that we now focus on securing its future in a sustainable way."

Immediate priorities for Jon are to work with Co-Chair Martin Worth, who represents Cornwall, other members of the Joint Committee and the two parent authorities to make sure that the crossings are recognised as a strategic link by the Peninsula Transport Board, safeguard the Torpoint Ferry and build positive relationships with the new Government, Department of Transport and National Highways to support future discussions on funding.

He is also looking forward to working with partners, local residents and businesses to progress the Tamar 2050 programme which was announced at the end of last year.

We are keen to hear what you would like to see in future editions so please let us know at trisha.hewitt@tamarcrossings.org.uk

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Working at Tamar Crossings

We currently have 28 women working at Tamar Crossings, and their roles include: Bridge Manager, Support Services Manager, Ferry Assistant Operations Manager, HR Manager, HR Adviser, Customer Services Manager, Customer Service Team Leader, Customer Service Finance Team Leader, Visitor Experience Manager, Customer Services Assistant, Support Services Assistant, Ferry Crew Cleaner/Relief, Ferry Collector, Ferry Mechanical Assistant, Bridge Supervisor, Bridge Control Room Assistant, Ferry Storekeeper.

“I joined Tamar Crossings in January as the Tamar Bridge Manager. Every day I work in the control room with CCTV and toll systems which involve a high level of technology. I also work closely with the engineering team to make sure they have a safe place to work whilst they ensure the bridge remains structurally sound. I also need to keep a good eye on the budgets which are significant for a structure the size of the Tamar Bridge.” Coral Jonas – Bridge Manager.

“Undertaking an apprenticeship in Business Administration with Tamar Crossings has been an opportunity which I will always appreciate. One of the best things about the apprenticeship was being able to work alongside professionals within the company whilst learning from them, this helped me to develop skills that could not be taught within a classroom setting.” Megan Pettitt – Acting Customer Service Finance Team Leader.

“Being a woman working in the engine room on the ferry is exciting as I am faced with a variety of challenges, which requires me to think methodically and use my problem-solving skills.” Vanda Bardgett, trained Mechanical Assistant

“The Tamar Bridge was iconic for me growing up. When a position in the Control Room became available, I went for it. With a degree in Computing, the technology in front of me is beyond fulfilling, yet positively challenging; operating CCTV cameras, troubleshooting technical problems within the plaza, whilst using my skills and knowledge to introduce new technological approaches to formally laborious processes. I’ve recently undergone supervisor training, allowing for further development into important decision-making roles and more complex systems.” Jade Marshall, Control Room Assistant.

Joint Committee backs next step in plans to improve convenience for users and reduce crossing times on Tamar Bridge and Torpoint Ferry

Members of the Joint Committee have supported a recommendation to commission a further report on Open Road Tolling (ORT) which includes an outline business case and funding strategy.

The initial report, which was produced by consultants following extensive consultation with key stakeholders, concluded that it would be possible to introduce ORT at both crossings.

However it was noted that in order to maximise journey time and environmental benefits, significant highways works will be required where the Bridge joins the A38 Parkway. With the costs of designing and implementing these changes, together with other measures needed to support the introduction of the new system, estimated at £8.7m and £16.2 million depending largely on the preferred highway configuration option, it suggested that further work was required to develop a detailed business case which could then be used to support bids for external funding for the scheme.

A Phase 2 Open Road Tolling Study will now be commissioned with the costs met from existing budgets.

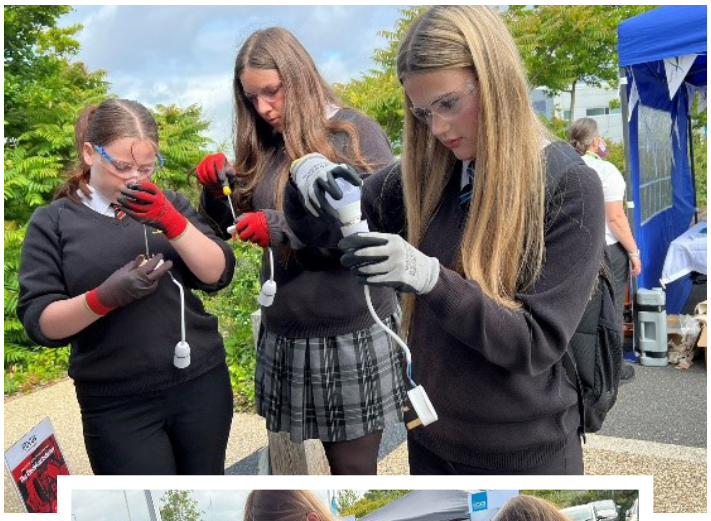
Learning about careers in engineering

We were delighted to host the 'Women in STEM Day' at the Bridging the Tamar Visitor and Learning Centre for the second year running.

Organised by our Learning Centre in partnership with YMCA Plymouth, the event was held on 21 June as part of this year's International Women in Engineering Day activities. Celebrated around the world on 23 June to honour women in the field of engineering, the day focuses on raising the profile of women who are changing the field of engineering one degree at a time.

Around 300 young women from Sir John Hunt, Eggbuckland, All Saints, Tor Bridge, Notre Dame, and Discovery College visited the Bridge to learn about careers in engineering from a range of STEM (Science, Technology, Engineering and Maths) businesses, educational and training providers.

As well as Tamar Crossings, these included the Institution of Civil Engineers (ICE) South West, Hoare Lea, Aecom, Babcock International, Ward Williams Associates, City College Plymouth and Cornwall College.



"A career in engineering is much more than just getting your hands dirty – you can do lots of other stuff said 14-year-old Alusha from Sir John Hunt Community Sports College. "Before today I would never have even thought about a career in engineering but this has really opened my eyes to what you can do."

Fellow Sir John Hunt pupil Bethany was also surprised and impressed by the range of different careers available in STEM subjects. "I came to learn more about the women's side of engineering. This has really opened up a lot more options and pathways for me."

"YMCA Plymouth conducted a survey with over 1,000 young people who said they were unsure about their career aspirations" said Sarah Newberry from YMCA Plymouth. "This included many young women. We wanted to create an event that would inspire and raise their aspirations and encourage them to think about careers in engineering."

As well as visiting the learning centre and walking onto the iconic Tamar Bridge, students had the opportunity to tackle a range of practical activities, including wiring plugs, building towers and model bridges, learning about water pressure and plumbing, wiring remote control cars and discovering how the Torpoint ferries work.

They also heard stories from women already working in engineering and other STEM careers. Guest speakers included Samantha Jackman from Boost Innovations, Leah Jarvis, Principal Public Health Engineer at Hoare Lea

Emily Taylor and Lily Abraham, Higher Level Mechanical Apprentices from Babcock.

"It was great to have the opportunity to host the Women in STEM event in partnership with YMCA for the second year running" said Tamar Bridge Manager Coral Jonas. "Tamar Crossings is responsible for managing the Tamar Bridge and the Torpoint Ferry, both of which feature a number of STEM related careers.

"We know that many young people are not aware of the incredible range of jobs available in engineering and other STEM subjects. I am delighted that Alusha and Bethany are now thinking about careers in engineering and hope that the Day has encouraged other young women to follow their example."

Refitting Torpoint Ferry TAMAR II

TAMAR II returned to Torpoint in June following the successful completion of its five yearly refit at A & P Falmouth.

The Torpoint Ferry is believed to be the world's biggest and busiest chain ferry operation and is the UK's busiest inland waterway ferry crossing – delivering up to 204 crossings each day.

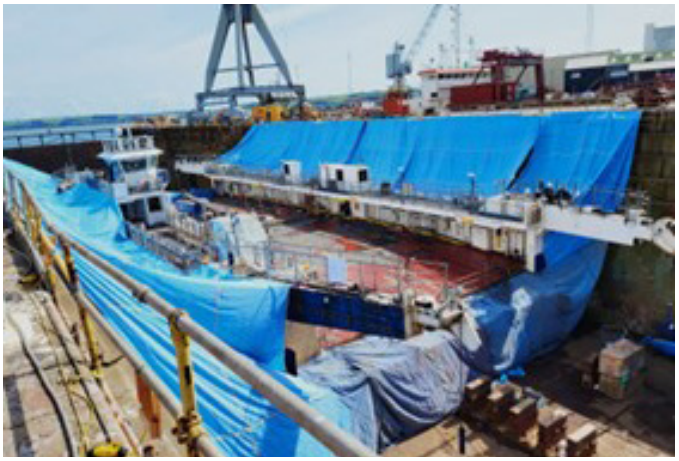
Tamar Crossings operate the ferries 24 hours a day, 365 days a year, in all weathers. This includes severe storms and gale force winds, which have often forced the temporary closure of other ferry services in the past.

Achieving this requires a significant planned maintenance programme. While the majority of maintenance is carried out while the vessels are afloat during off peak periods, some maintenance activities and surveys have to be carried out during refits in dry dock conditions.

TAMAR's refit included a number of key elements, including:

- a mandatory dry docking to allow a survey of the underwater hull to ensure the material state is sufficient to safely last a further five years - this is a statutory requirement and satisfactory completion is required to allow the issue of a Chain Ferry Certificate by the regulatory authority, the Maritime and Coastguard Agency (MCA)
- replacing systems and equipment that are becoming obsolete or have reached end of life, including chainwheel drive couplings and bearings together with propulsion motor electronic drive components
- repainting the vessel both above and below the waterline
- refurbishment of the passenger lounge and upper deck seating area.

Refits are essential to maximise the life of the ferries and ensure that we continue to provide a safe and reliable service. They also provide an opportunity for Lloyds Register to complete the five-yearly dock survey to certify that the ferry is in a satisfactory condition for continued operation.



Once TAMAR returned to Torpoint and the towing gear had been removed, staff from Tamar Crossings and A&P Falmouth prepared the vessel for service.

This included reconnecting the ferry to the chains, restoring the lifesaving & firefighting equipment and seating, and carrying out engineering trials of the upgraded chain drive system. Once this work had been completed, the ferry returned to service on 24 June.

Each of the three ferries undergoes a full refit every five years. PLYM'S refit was completed in June 2023, with LYNHER's refit due to take place in April 2025.

Replacing the ferry chain gantries

Whilst Tamar was away for her refit, our bridge and ferry engineering teams took the opportunity to replace both of the ferry's chain gantries which were just over 100 years old – a testament to decades of good maintenance.

This was a very complex project involving the counterweight system which enables the ferries to operate effectively.

The ferries run on pairs of chains spanning the river. These chains need to have a certain level of tension in them to enable the ferries to cross the river and dock safely and efficiently. To achieve this tension, each chain is secured on each side of the river via steel cables to a system of pulleys and a large weight of about 12 tonnes hanging in a pit and supported by a trapezoidal steel framework – these are the gantries. The weights can travel up and down responding to the effects of varying tidal and wind conditions, but still maintain steady chain tension.

The first phase of the project involved removing the old gantries.

The engineering team were responsible for overseeing the manufacture and installation of the gantries frames which had to be replaced on a like for like basis. The replacement frames were fabricated by Underhill Engineering, a local engineering contractor. They were then trial erected off site before being dismantled, galvanised and then delivered to the site for reconstruction.

Once the frames had been constructed and certified, the ferry team took over responsibility for the gantries, installing the counterweight system wire ropes and the chains ready to receive TAMAR when it returned from refit.

This was the first pair of chain gantries which have been replaced, with the two other pairs scheduled for replacement in 2025 and 2028. Experience gained from this installation will be applied to future replacements.

From gardener to Bridge Supervisor via the Royal Navy!

Meet Mandy Cook who has joined Tamar Crossings as a part-time Bridge Supervisor.

Born in Scotland, but brought up in Norfolk and Suffolk, Mandy initially followed a career in horticulture before working in sales for a surveying company. When this job, which involved visiting highways and new development construction sites, came to an end as a result of the recession, she decided on a complete change and joined the Royal Navy as a Mechanical Engineer (Electrical).

With a role which now included watchkeeping, maintenance and rectification of machinery and control systems, over the next nine years Mandy served on five different Type 22 Frigates and travelled around the world.

“One of my roles was a watchkeeper on the Main HQ switchboard where I also monitored the ships fire and flood alarms” she said. “During shore based periods, I also worked with fleet maintenance teams in the dockyard and in the Falkland Islands, taught advanced firefighting at HMS Raleigh and was a PA for the Public Relations Officer.”

After taking on a new role as a service policewoman at the Royal Naval Service Police Headquarters in HMS Drake, Mandy liaised with Devon and Cornwall Police and other emergency services, both in the dockyard and in Plymouth.

Following 12 years in the Royal Navy, Mandy took a career break to raise her two sons (now aged 21 and 20). Continuing to live in Saltash, she took a job in early years sector to fit around her childcare needs.

“I am very excited to have started my new role as a part-time Bridge Supervisor” she said “The team have been very welcoming and extremely patient as I learn all that is needed to successfully manage the role.”

When not at work, Mandy plays hockey for Devonport Services based at Bullpoint and enjoys walking her dog, ‘Dexter,’ gardening and being a bit of a songbird lover. Having previously been a Scout Leader for nearly 10 years and previously ran two Beaver Colonies in Saltash, she now occasionally volunteers at camps and Jamborees.

Refurbishing toll booths

The six toll booths at the Tamar Bridge are approaching 20 years old, with most of them experiencing significant problems such as leaking roofs, leaking and damaged windows and doors and obsolete mechanical and electrical equipment.

The booths are made from glass reinforced plastic (GRP) and are of a bespoke design and part of the architecturally designed toll plaza.

Water leaking into the booths during wet weather means that on occasions some booths have had to be temporarily closed as they have not been safe to operate.

Following a detailed investigation of potential options and their associated cost and traffic impact, it was decided that refurbishing the existing booths rather than replacing them with new ones would be more efficient and deliver greater value for money. To minimise potential disruption to bridge users it was agreed to order one new unit to replace the booth in the worst condition, with the remaining booths then being refurbished in rotation, one at a time.

The new booth was delivered at the end of July. A temporary workspace has been built in the bridge compound on the Tamar Crossings site that will allow the booths to be refurbished and fitted out with new windows, doors and upgraded mechanical and electrical systems. Each booth is expected to take six to eight weeks to complete, depending on its condition.

The first new booth is expected to be ready for changeover in September, after the peak summer holiday period. The booth changeover will take place over a weekend, with work starting on the Friday evening after rush hour. The booth will be returned to normal operation on the Monday morning.

Update on Rockers project

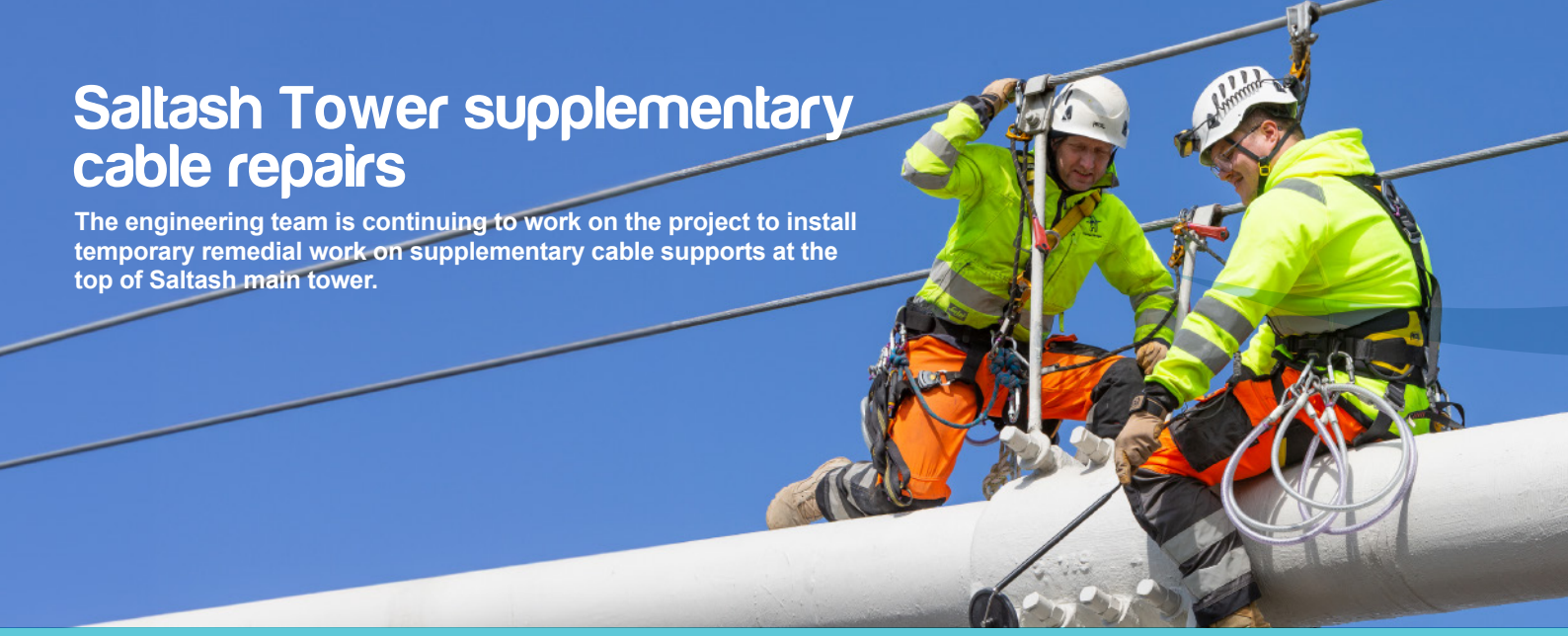
The ongoing bridge rocker repair project is currently being finalised. The successful trials during the last 18 months have culminated in a very cost effective solution that means we are able to safely remove the worn out rocker pin, re-bore the existing rocker housing and install a new, oversize connecting pin and restore this critical connection to a virtually ‘as new’ condition.

The bridge rockers are critical structural elements that connect the bridge truss to the main tower and all risks associated with the works had to mitigated in order for us to complete the work while keeping the bridge open to traffic and minimise lane and weight restrictions.

It has taken significant effort from all involved to reach this stage of the scheme and we look forward to completing the final part of the process in the next few weeks.

Saltash Tower supplementary cable repairs

The engineering team is continuing to work on the project to install temporary remedial work on supplementary cable supports at the top of Saltash main tower.



Despite the project offering only a short-to medium-term solution, the project is complex with significant risks. As a result the supports' design and review process and intricate fabrication of the new steelwork, progress has been challenging. To ensure that the steelwork fits first time, without the need for adjustments on site, a full scale trial has been completed in timber. This has also enabled the team to refine the installation methods and sequencing of the works. This minimises risk and time when working at height at the tower top.

Additionally, complex temporary scaffold access is required at the tower top, with the design for this currently being finalised. Once complete and signed off, scaffold erection can begin on site.

The project will require some short-term single lane closures on the Bridge so that materials and access equipment can be lifted to the tower top. Site work is due to begin in the near future and continue throughout the summer period.

Surveying the Tamar Bridge

Our engineering team have recently completed the overnight annual survey of the bridge.

This is essentially a detailed physical check of the bridge structure to record a significant number of key dimensions and levels. All of the dimensions are compared to historic survey records, going back over 20 years, so that long term changes or trends can be identified that might indicate an issue or defect within the bridge structure.

The survey is carried out every year in July when the bridge is least affected by weather, wind and vehicle loading and ideally when air and steel temperatures are as close to 15 degrees Celsius as possible. As the bridge expands and contracts with temperature variations, corrections are made to the survey measurements dependent on the actual temperature recorded at the time the measurements were taken.

Refurbishing Torpoint Ferry traffic light gantries

Work on the first phase of the project to refurbish the marshalling area traffic light gantries at the Torpoint Ferry has been completed. The project, which is being funded by Tamar Crossings and Cornwall Council, is being carried out in two phases.

The first phase – the Devonport Gantries – took place between 17 June and the end of July. The second phase – Torpoint Gantries – is currently programmed to take place between 4 September and 11 October.

The steel gantries, which span the queuing lanes over the A374 at Torpoint and the traffic marshalling area at Devonport, contain the equipment and traffic lights used to control and monitor traffic into the queuing lanes and then subsequently onto the ferry slipways on both sides of the river.

Following a survey which found that extensive areas of the protective topcoat on each structure were severely weathered, it was decided to recoat the gantries at the first available opportunity to minimise the risk of corrosion and maximise the life of the structures.

The work can only be carried out during fair weather due to the surface preparation and curing requirements of the topcoats. Following consultation with key partners it was agreed to begin work after Tamar II returned from its refit to provide a three-ferry service to minimise disruption.

The first two weeks of the works at Devonport involved the introduction of the traffic management measures and the removal of equipment from each of the gantries. All equipment has to be inspected, serviced or, where applicable, replaced.

After a closer inspection of the brackets holding steel members together it was also decided to take the opportunity to replace all of the bolts, many of which had corroded. This added an additional week of work to the planned schedule.

Work then took place to prepare and recoat the structural surfaces, rehouse cables and return the equipment before the power was reconnected. Following final checks, inspections and testing of systems, the lane restrictions were lifted, with the gantries then returning to full operation.

As traffic signals were not in operation during the works, traffic was managed manually by ferry staff. This involved marshalling staff sited at the front and rear of queuing lanes to direct traffic and co-ordinate call forward for loading to each of the ferries.

A similar process will take place during the second phase at Torpoint although this will be a bespoke traffic management plan that will include both traffic marshalling staff and portable traffic light systems on critical junctions of the through road circuit.

Meet Dominic Burley and James Folly... technical apprentices on the Torpoint Ferry

Both apprentices joined Tamar Crossings last Autumn following a competitive and robust recruitment process and will complete the first year of their three-year apprenticeships in September.

While both are now working towards an Advanced Manufacturing and Engineering qualification as Maintenance and Operations Engineering Technicians, their journeys to joining Tamar Crossings could not be more different.

30 year old Dominic had always wanted to be an engineer and was planning on applying for a mechanical engineering apprenticeship in the dockyard when he left school. Having reached the finals of the Young Engineer of the Year competition while he was just 10 years old, and with a history of tinkering about with engines and cars, he would certainly have been a strong candidate when his family circumstances changed and he was forced to find a job instead.

His original dream remained, however, and after working in a warehouse and as a delivery driver, he decided to apply to Tamar Crossings after spotting an advert for two technical apprentices.

“I did not think I would be successful because of my age and was surprised when I had an email offering me an interview” he said. “I was then out in a delivery van when I had the phone call offering me the job.”

19 year old James’ passion is music. Having completed a music and sound engineering course at college, and spending most of his free time working as a DJ in clubs, you might have expected him to pursue a career in this field. However this was not to be the case as James decided he wanted to keep music as something he enjoyed doing rather than it becoming a chore.

“I decided I needed to do something different as a career “ he said. “I wanted a “hands on “ job where I could get my hands dirty rather than sitting at a desk. I have also travelled on the ferry all my life and loved the idea of working next to the river so this opportunity seemed perfect. I am still doing my DJ ing but as a hobby not a career”.

Dominic and James currently spend one day a week at City College Plymouth learning about engineering theory, electrical and mechanical principles, health and safety law, with the remaining four days of each week working on the ferries. As the role covers both electrical and mechanical engineering, they switch between the two areas every three months.

During their first year the duo have had the opportunity to work on all parts of the ferries, including the chains and gantries, diesel generators ,electrical equipment and even plumbing. They have also successfully completed a welding course and supported the organisation at the Women in Stem event hosted by Tamar Crossings and other apprenticeship outreach events.

Asked if they are enjoying working at the Ferry, both smile and nod.

“No two days are ever the same. Sometimes you will be helping to do routine maintenance on a ferry during its off-peak time, when suddenly there is a problem with one of the other two ferries and everyone needs to work together to develop a solution.”

“There is always something new to learn and we are treated as equal parts of the team.”

Ferry Technical Manager Ralphie Ragguette oversees the apprenticeship programme and is very happy with the progress being made by Dominic and James.

“They have very quickly made themselves part of the ferry engineering team and are working hard to develop new skills” he said.

Processing tags

Our customer services staff are being kept very busy processing tag applications. During the past six months they have processed 2,445 new application.

We are also continuing to run our proactive Tag Exchange Programme in which we are actively contacting account holders whose tags have already failed to be read by scanners at toll booths or on the Ferry, so that replacements can be offered.

Faulty tags not only cause delays for an individual driver, but even a small number of failed tags can lead to disproportionate queuing at toll booths because these tags have to have barcodes manually scanned or identification numbers typed in.

Anyone experiencing problems scanning their tags can visit the receptions at either the Tamar Bridge or the Ferry between 9 am and 5 pm Monday to Friday where the faulty tags will be replaced with a new one.

If unable to get to one of the offices please call customer services on 01752 361577 for an alternative arrangement.

Visiting Tamar Crossings

We have been delighted to welcome some special visitors to Tamar Crossings over the past few weeks.

These included Saltash Mayor Julia Peggs and Deputy Mayor Rachel Bullock who visited the Bridging the Tamar Visitor and Learning Centre, as well as having a tour of the control room and the Bridge.

“The Tamar Bridge Visitor and Learning centre was informative and interesting” said the Mayor. “It was great to learn more about the iconic structures.”

Coffee, cake and an incredible view

Zinns coffee is now available at the Tamar Bridge.

Providing fantastic drinks and a range of delicious cakes (we have already tried them!) from their coffee van, Zinns is parked in the Tamar Crossings car park. Please see the Zinns coffee social media channels for updated times.

Whether you are popping into the Bridge office or visiting the Bridging the Tamar Visitor and Learning Centre, Zinns will be happy to see you.

Crossing the knowledge gap

Did you know that the Tamar Bridge was the longest bridge in the UK when it was opened on 24 October 1961 or that the first chain ferry service linking Torpoint and Devonport began operating in 1834?

Whilst many people use regularly use the bridge and ferry services, we are aware that there are many things about the two crossings that people may not know.

We receive lots of questions from members of the public about the crossings. To help answer these queries and provide details about the background and history of both the bridge and the ferry, together with some hopefully interesting facts and figures, we are publishing a new piece of information about the crossings every Friday.

It is also a fantastic opportunity to publish some amazing photos of the crossings

The weekly “Did You Know” post is being provided on all of our social media channels (Facebook, Twitter (X) and LinkedIn).

So if you want to know how much paint it would take to cover the steel structure on the bridge or the length and weight of one of the two chains which are used by the ferries to pull themselves across the river – make sure you check out our social media channels on a Friday morning.

Bridging the Tamar Visitor and Learning Centre

This summer the team of staff and 30 volunteers have been busy delivering a range of educational workshops to local school groups, talks and guided tours to the public, and hosting a city-wide Women in STEM event.

In the last financial year 2023-24 the Centre welcomed 16,535 visitors and is on track this year to welcome 20,000.

Some more achievements are highlighted in the below.

To get in touch contact visit@tamarcrossings.org.uk **https://www.bridgingthetamar.org.uk**
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