

QUESTION BY MEMBER OF THE PUBLIC

Please return your completed question form to Chief Executive's Business Support, Plymouth City Council, Ballard House, West Hoe Road, Plymouth, PL1 3BJ or email ChiefExecutiveBusinessSupportUnit@plymouth.gov.uk

Question to be submitted no later than 5 clear working days before the meeting.

Question submitted by:
Contact details: Dr. Daniel Felmlee
To the Cabinet Member or Chair for: Climate Change and Governance, Councillor James Stoneman
To be asked at the next Full Council Meeting: Monday 30th January
<p>Question (to be no longer than 50 words):</p> <p>Given the Council's commitment to becoming carbon neutral by 2030, how will the revised plans for Armada Way which includes felling 129 trees contribute to achieving that aim?</p>
<p>Will you be attending the meeting in person to ask your question?</p> <p>No</p>
<p>Response: (for completion by City Council officers and Cabinet Members / Chairs)</p> <p>As the question acknowledges, the scheme for Armada Way is more than just felling 129 trees, and as with all of public realm projects, they are about delivering wider environmental benefits as well.</p> <p>The wider benefits of this scheme can be summarised as follows:</p>

1. Creation of sustainable walking and cycling improvements, within the city centre and connecting routes to and from the city centre.
2. Delivery of a Sustainable Urban Drainage System, covering all of the central section of Armada Way, by removing surface water from the combined sewer system into a new surface water drainage system allowing capacity for the city centre to grow in the future, as well as using that water in surface drainage features as surface exceedance routes, achieving irrigation for the new green infrastructure. This new system will connect into the new sustainable urban drainage systems being constructed as part of the wider comprehensive network across the city centre.
3. Creation of a gravity and solar powered electrical pumping system, water storage, and a smart controlled system that creates a sense of wonder, and is naturally filtered by reed beds and UV light and is therefore as sustainable as possible through natural filtration of the water providing further green elements to add interest to the scheme. As a result there will be lower energy and carbon implications arising from reduced water flows, and less energy and chemicals used at water treatment plants.
4. Greening of the city centre using semi-mature advanced stock trees to give instant impact and understorey planting which is floriferous and which provides food and habitat potential for increased biodiversity.
5. The provision of playful and sculptural landscapes for everyone that provides the opportunity for naturalistic, dynamic and imaginative play with natural elements and water.
6. Opportunities for key social infrastructure, providing areas of various shapes and sizes where people feel comfortable for formal or informal interaction and engagement in a civilised space.
7. The provision of new low energy LED lighting with GOBO projectors for ornamental lighting to illuminate the watercourse and projection lighting to animate key spaces.
8. The enhancement of existing historic assets with large scale floor scape patterning using high quality granite paving including the re-use of a large volume of existing materials including granite kerbs and setts.
9. The provision of ducting for future district heating networks, ducts for future 5G systems and other innovations to future proof necessary infrastructure to meet emerging and climate-related standards.
10. Improvements to the city centre CCTV system to respond to issues associated with public safety, especially for women and young girls.

On 18th March 2019 the City Council declared a Climate Emergency and produced a number of Action Plans to move towards Plymouth becoming net zero by 2030. Armada Way is being re-imagined to create new green infrastructure with new trees having excellent in- ground rooting environments within which they can grow and become large, long lived trees for future generations.. They will have an irrigation system to ensure they have sufficient water from the planned Sustainable Urban Drainage System so the chances of them establishing and thriving is very good. The City Council has an excellent track record of establishing semi-mature trees in the city centre. In the past 6 years 60 semi-mature trees of similar scale to those proposed in Armada Way, have been planted

and nurtured on completed projects such as the Plymouth Coach Station, Market Way, and Millbay Boulevard. Only one tree has been lost from those schemes since being planted.

The additional 150 new semi-mature trees coupled with the existing 24 retained specimens will contribute to capturing carbon from the urban atmosphere typically locking between 3.8 and 6.2 metric tonnes of CO₂ per year. These trees will also moderate the urban microclimate by reducing localised temperature, offer usable areas of shade, and take up and store rainwater helping to moderate high rainfall events.

Annually, the transport sector accounts for 35% of the CO₂ in the city, according to the city's decarbonisation report undertaken by Regen SW in November 2022. For Plymouth to achieve its reduction target by 2030 it needs to act three times faster than envisaged by current government policies. Whilst the City Council is committing additional resources to tackle the climate emergency, it also recognises the need to maximise the funding from other sources such as developers and central government. Armada Way is contributing to this by promoting safe walking and cycling routes and bringing in funding from the Transforming Cities Fund – itself a programme of sustainable transport projects that is helping to address climate change.

Metrological Office data shows that the South West England is experiencing almost 10% more rainfall over the year now than it did in 1961. Seasonal rainfall is highly variable, but since 1961 it has decreased by 9% in summer and increased in autumn by 28% and in winter by 16%. The Sustainable Urban Drainage System in the Armada Way scheme creates an entirely new storm water drainage system that removes rainwater from the existing dated combined sewer system then uses that water wisely for the new environment. It uses that rainwater to feed the proposed watercourse, to irrigate the new green infrastructure at times of drought and at times of exceedance, captures volumes and stores it for reuse and release when any potential flooding event is over. Both South West Water and the Environment Agency support the wider sustainability credentials of the project.