

Strategic Policy Committee  
27<sup>th</sup>. November 2019

Climate Change

Adaptation to changed weather patterns

# Climate Change – Here and Now

- Analysis of 3,738 flood measurement stations across Europe taken between 1960 and 2010 (published in “Nature” 28/8/19)
- In Northwestern Europe floods are increasing because “flood generating rainfall” (annual maximum seven-day rainfall totals) is increasing
- “what was the 100-year flood discharge in 1960 has now typically become a 50- to 80-year flood discharge” (Dr. Conor Murphy NUIM)
- Summer of 2019 – increasing rainfall intensities – warmer air can hold more moisture and also lead to more “storminess”

# The Solution? – Adaptation & Resilience

- Urban areas were traditionally “sealed surfaces” leading to quick water runoff and disposal.
- New weather patterns demand new solutions based on Nature
- Urban runoff is also a significant pollutant
- Seeking to restore as much of the sealed surfaces to soft nature based areas that can soak up surface water
- Reduces volume of runoff, delays entry into piped network, and improved quality of runoff water

# Implementation of Green Solutions in the Public Realm

- Cross Departmental Approach
- E&T responsible for the Public Realm – Maintenance Issues
- Identification of sites in line with existing Public Realm Capital Programme
- Individual Design solutions
- Proposed use of nature based solutions as part of Suffolk Street upgrade
- Test Sites in suburban areas to improve river quality





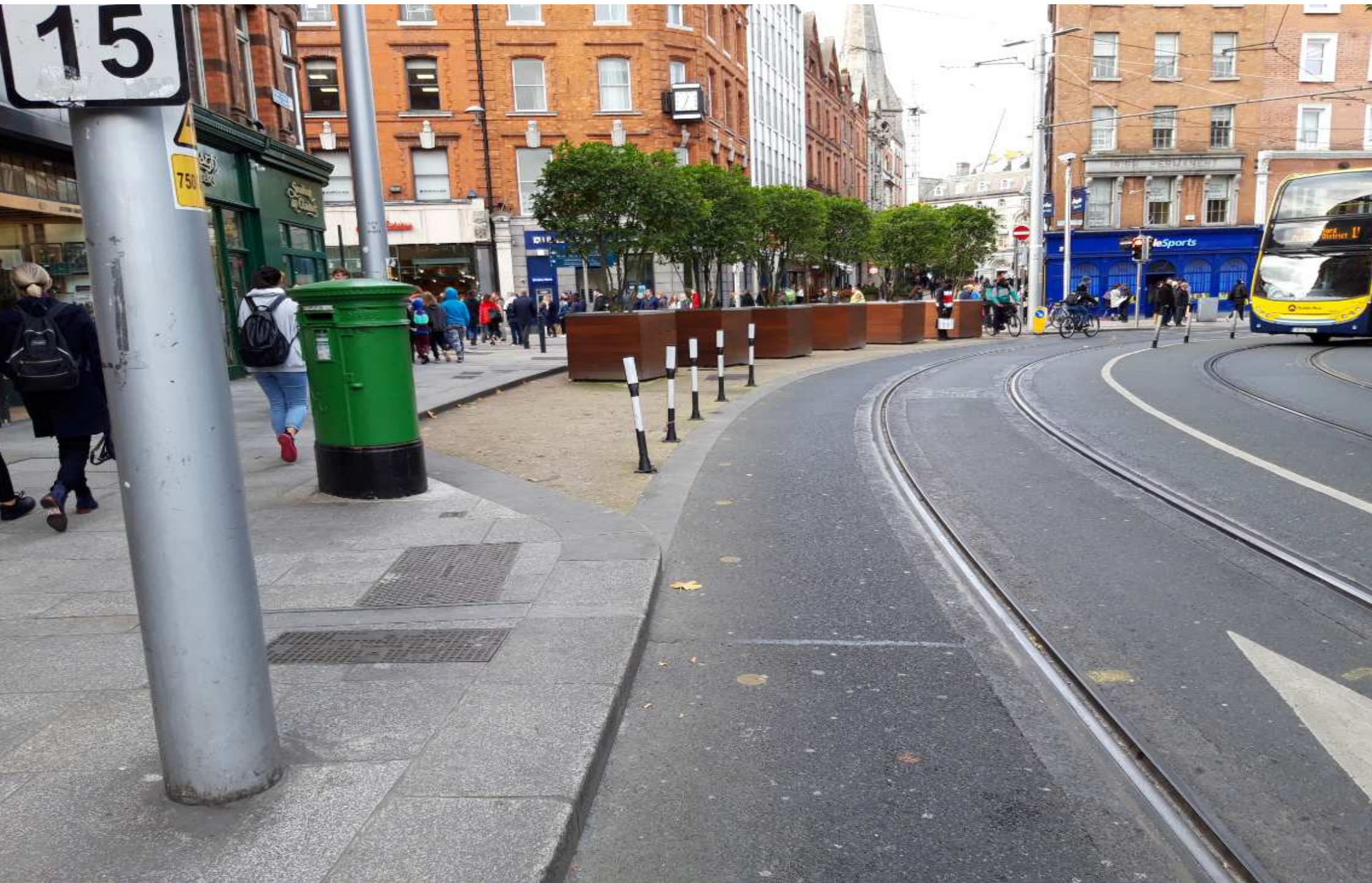
Cycle parking on widened footway

Street tree planting

Loading bay with permeable paving

Rain garden





Grafton Street

Suffolk Street

Street tree planting



Grafton Street

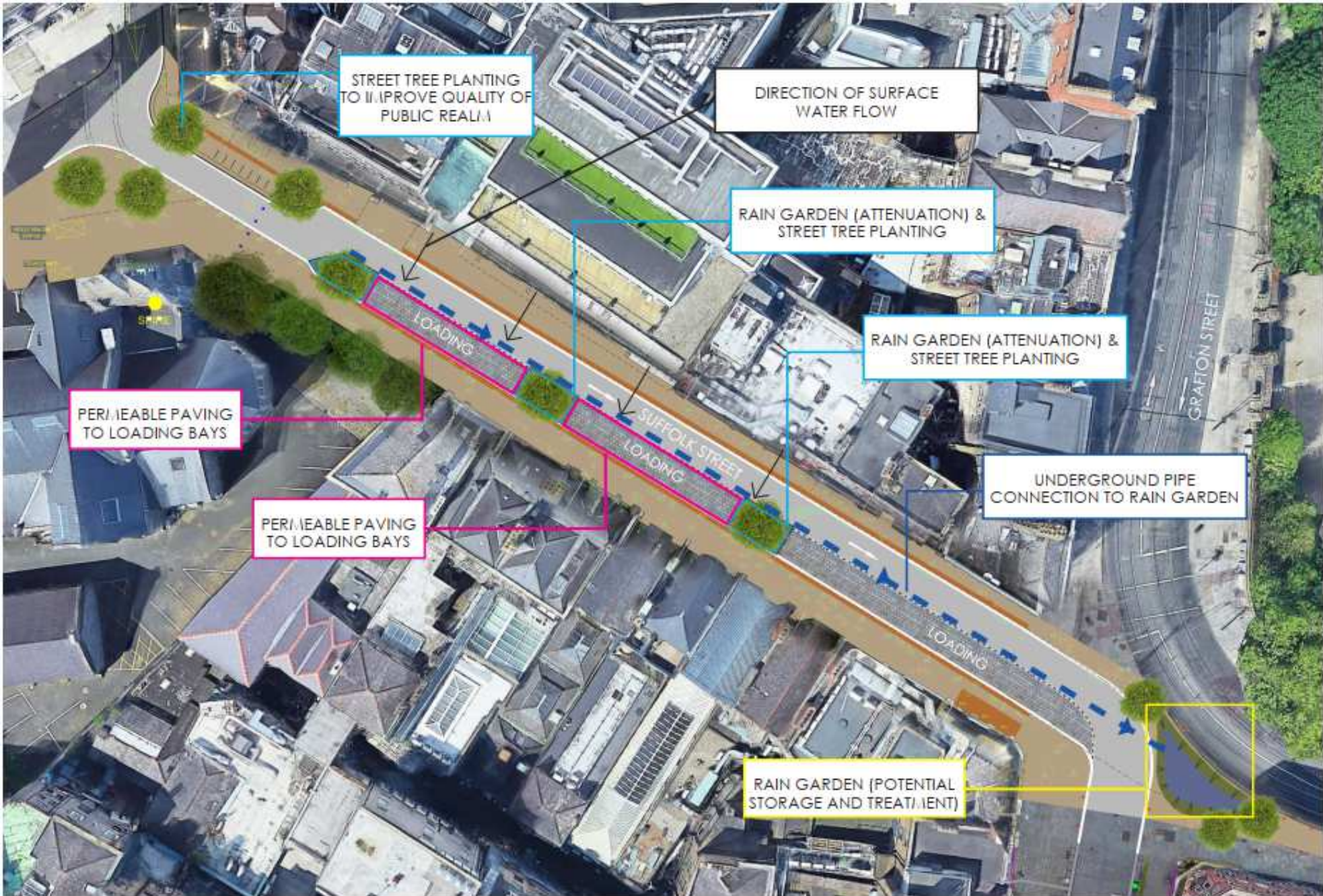
HVM protective bollards



Rain garden







STREET TREE PLANTING TO IMPROVE QUALITY OF PUBLIC REALM

DIRECTION OF SURFACE WATER FLOW

RAIN GARDEN (ATTENUATION) & STREET TREE PLANTING

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PERMEABLE PAVING TO LOADING BAYS

PERMEABLE PAVING TO LOADING BAYS

UNDERGROUND PIPE CONNECTION TO RAIN GARDEN

RAIN GARDEN (POTENTIAL STORAGE AND TREATMENT)



**Environmental Protection**

Michael R. Bloomberg, Mayor  
Carter H. Strickland, Jr. Commissioner

**GREEN INFRASTRUCTURE  
RIGHT OF WAY BIOSWALE**











