

## **City Arts Initiative** Applicant guidance notes

## Weight capacities within the City of London boundary

This document outlines planning considerations and principles relating to the weight and location of public art installations on land within the City of London boundary.

Some loading guidelines have been outlined to ensure that applications can meet with highway design standards. However due to multiple inter-related factors, and a reliance on third-party records, there are limited contexts when the City Corporation can offer precise and definitive guidance.

However, there is an overarching expectation across all contexts for the applicant to ensure that no damage will be caused; that these considerations are included in the planning of any installation; and that the City is sufficiently informed throughout the process.

**Please note:** this document is guidance only and site visits with the City Corporation's Highways Team will still be required to assess suitability of structure and ensure that it will not restrict other activities (e.g. special events) that may be taking place at the desired location.

Applicants will also need to consult with the City Corporation's District Surveyor's who have the last ruling on what public art is permitted or not.

Applicants should ensure there is at least 12 weeks to go through this process in order to receive preliminary approval from both the District Surveyors and Highways Team before any formal application is submitted to the City Arts Initiative.

# Factors to consider when siting public art in the City of London boundary:

When applying to install public art within the City of London, please note there are multiple inter-related factors that will impact on the loading capacities of the area.

These include:

1. **The presence of highway structures** (i.e. those owned by the City of London Corporation as the highway authority).

NB: These structures <u>are</u> known to the City of London Corporation and there are records of their capacity.

2. **The presence of third-party structures** (i.e. those owned by London Underground, TFL, Network Rail, utility companies and any basements of private properties which intrude under the public highway or areas of City/public walkway).

NB: The City of London Corporation <u>does not hold records</u> on the location of third-party structures below public areas of the City. Where records do exist, information of their capacity is limited.

- 3. The span length of structures in comparison with applied loaded areas
- 4. How the proposed load is applied (i.e. as concentrated/point loads or as large-area loads)
- 5. The duration of loading (i.e. short/long length of time).
- 6. Varying ground conditions
- 7. The presence and depth of buried services
- 8. The depth/strength of the highway sub-base construction
- 9. The susceptibility of the pavement finishes and services to accommodate settlement under loading

NB: Records and data pertaining to points 3 – 9 are inconsistent and therefore the City of London cannot provide definitive guidelines.

Considering all of the above factors, the City Corporation can only give precise guidance on item 1 (i.e. the presence of highway structures).

In all cases, the applicant must provide evidence to ensure that their installation will cause no damage to third-party structures, buried services or highway infrastructure – and to indemnify the City accordingly.

### There are two different contexts for all areas in the City of London:

A. Where it can be shown with confidence that there are no buried structures (highway or third-party):

The City Corporation does not officially endorse any blanket guidelines because of the multitude of factors listed and the number of potential unknowns that this entails. The onus is therefore on the applicant to provide evidence that their art installation will cause no damage to third-party structures, buried services or highway infrastructure- and to indemnify the City accordingly.

- B. Where buried structures are present in public areas (including third-party structures) or in areas of doubt and in the absence of rigorous ground investigation or other site-specific information the general assumption is that the following loads can be sustained in order to meet with highway design standards:
  - In carriageways: traditionally "HA" and "HB"<sup>1</sup> loading has been used for the design of highway structures, in accordance with the Design Manual for Roads and Bridges (although this has been modified in recent years by Eurocodes). The value of HA loading depends on the span of individual structural elements, but a safe lower bound recommendation would be either:
    - a. A blanket load of 10 to 12 kN/m<sup>2</sup>, or 1.0 to 1.2 Tonnes/m<sup>2</sup>,

#### OR

- b. Individual point loads of values/spacings that do not exceed those expected for normal vehicles, as stated under the *Road Vehicles* (Construction & Use) Regulations.
- 2. In footways all areas (including City Walkways) should be designed for crowd loading of 5kN/m<sup>2</sup> or 0.5kN/m<sup>2</sup>

As the City of London Corporation does not hold complete records of all third-party structures, the principles of B.1 and B.2 should be applied for preliminary design purposes as the default, subject to further review and approval on a case-by-case basis.

<sup>&</sup>lt;sup>1</sup> Please consult the Design Manual for Roads and Bridges for a full definition and further information: <u>http://www.standardsforhighways.co.uk/ha/standards/dmrb/</u>