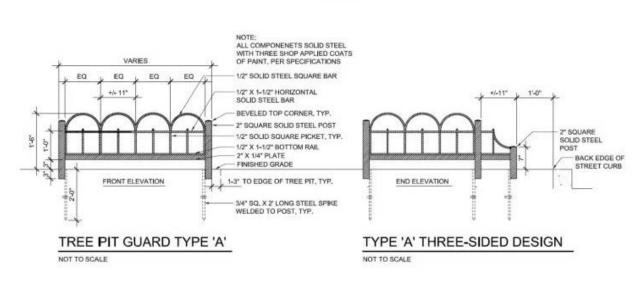
TREE GUARDS

What is a tree guard?

A tree guard is typically an iron fence installed around a tree bed for protection of the tree. The standard measurements of a City tree guard are a 3-sided guard, measured at least 1 foot from the curb on both sides of the bed, with the side railings slopping down to allow for car doors to open over the front post. The front or street side of the guard must be open. Tree guards should measure 18" high from the ground with open bottoms and no solid walls to allow for water to flow into the tree bed. Corner posts of City tree guards shall be solid steel or reinforced aluminum, and they shall not be imbedded into concrete so as to not cause damage to the sidewalk should they be hit by a vehicle. Jersey City Forestry has standardized and approved designs which are encouraged for all tree guard installations, but alternative designs may be approved on a case-by-case basis, so long as they meet the required conditions stipulated above. Anyone who wishes to install a tree guard on a City tree should apply for a permit to 'Install Tree Guard' before installation. [1]



Type A Tree Guard

Tree guard design specs taken from the Jersey City Forestry Standards

What about sidewalk-level tree grates?

In the past, sidewalk level tree grates were added onto tree beds. This however has been shown to restrict tree growth and mitigate entry of water to the tree bed. Trees will also eventually grow into the grate, potentially damaging and uplifting the grate while simultaneously cutting

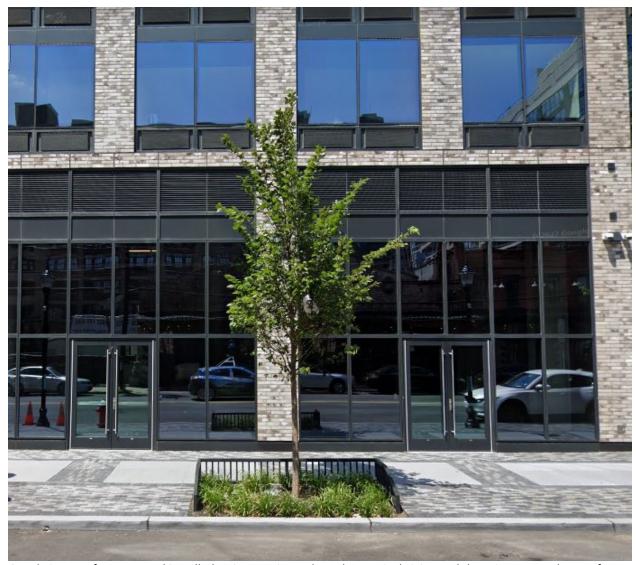
into the root flare of the tree which can lead to decreased vigor and eventually death [1]. It is because of these facts that tree grates are no longer permitted to be placed in trees in Jersey City. In place of grates, tree guards can provide more benefits than the grates had without any of the drawbacks.



Tree growing into tree grate, restricting growth and will almost certainly lead to mortality of the tree (photo taken from Tree Openings | DeepRoot Blog)

Why would you want to install a tree guard?

Tree guards protect the City's tree resource investment and improve storm water management by mitigating compaction of the soil within the tree bed from people, pets, and vehicles. A study by Columbia University found that trees with tree guards increased runoff water absorption by six times compared to trees without guards [2]. Increased water absorption performed by Trees with tree guards reduces the burden off of the City sewer system and can help lessen the impact of flooding associated with storm events [2]. Tree guards also help protect trees from physical damage from vehicles and pet waste, which extends the lifespan of the tree and reduces mortality among newly planted trees [3]. Tree beds with guards can also potentially offer a protected space for flower gardening [3].



Google image of a tree guard installed at 351 Marin Boulevard – tree is thriving and there is protected space for gardening in the bed

Tree guards are recommended for City tree beds whenever possible, especially in commercial areas and areas of high foot and vehicular traffic [1].

Sources:

- 1) Forestry Standards 021518 final.pdf (civiclive.com)
- 2) So Much Depends on a Tree Guard (columbia.edu)
- 3) Tree Guards: NYC Parks (nycgovparks.org)