Enhancing Pedestrian Access in the Neighborhood Forest

By Brad Lancaster and the Dunbar/Spring Neighborhood Foresters

The Dunbar/Spring Neighborhood Foresters have been meeting over the years with City of Tucson officials and the Living Streets Alliance to work towards finalizing a list of pedestrian-friendly alternative public footpath materials (approved by the City) where sidewalks do not exist in neighborhood public rights-of-ways.

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Many neighborhoods in Tucson, such as Dunbar/Spring, have virtually no sidewalks nor the money for them. And we are losing pedestrian access (especially by the elderly and very young who have difficulty walking, baby carriages, wheelchairs, and leashed dogs when gravel is hot or rough) in the public rights-of-ways as adjoining property owners cover the right-of-way in materials that impede walking and wheeling. (Parking or creating landscape mounds in the footpath make conditions even worse).

Examples can be found in the photos below (along with "after" photos where neighborhood volunteers removed the barrier materials, still more examples can be found in the Dunbar/Spring Neighborhood Walkability Assessment Report facilitated by the Living Streets Alliance.

Before the retirement of Gary Wittwer (past Landscape Architect, Department of Transportation, City of Tucson) the Dunbar/Spring Neighborhood Foresters and the Living Streets Alliance worked with him to generate the following list of BAD/BANNED and GOOD/APPROVED alternative public right-of-way path materials.

BAD/BANNED public right-of-way path materials found to be BARRIERS to public pedestrian access:

- Loose rock or gravel
- Unstabilized decomposed granite *larger* than 3/8-inch in particle size, and thicker than a 2-inch thick application
- Course organic material (woodchip) mulch *larger* than 1/2-inch particle size, and/or application thickness greater than 1-inch.
- Broken concrete sidewalks

These materials are to be removed where needed to maintain a continuous 5-foot wide accessible footpath in the public right-of-way as per <u>City of Tucson Development</u> <u>Standard 3-01.4.0 (p. 278)</u>.

GOOD/APPROVED public right-of-way path materials found to MAINTAIN public access:

- Native soil raked free of rock or gravel that would impede pedestrian access. Free and already on site!
- Screened organic material (woodchip) mulch *no larger* than <u>1/2-inch in particle size</u>. (Do not apply thicker than a 1-inch depth. Thicker depths bog down wheels of carriages and wheelchairs). One supplier is <u>Tank's Green Stuff</u>.
- Compacted and stabilized ¼ to 3/8-inch minus decomposed granite (DG), which is ADA-accessible.

There are <u>natural polymers</u> that can be mixed in with the decomposed granite to better hold it together and stabilize it. DG is available from local landscape material suppliers. (Note that non-compacted and stabilized DG is not approved since it inhibits pedestrian access).

- Pavers/brick, which can be installed within the grade/slope tolerances of the ADA
- Maintained concrete sidewalks (ADA-accessible)

Slope or grade all pathways so the path sheds water, avoiding puddles on the path. Path runoff can be beneficially directed to lower, adjoining planting basins.

Helping remove the bad and replace it with the good

The Dunbar/Spring Neighborhood Foresters have made it *a requirement* to remove BAD/BANNED materials from the public right-of-way in order for folks in adjoining properites to be able to participate in our annual Rain & Tree planting program.

We've also made it a service for a fee.

This can save folks a lot of money in that removal because we can utilize the backhoe contractor when he is digging water-harvesting basins and hauling away the excavated dirt for us. He gives us a great deal when we connect all this work together as it is far more efficient than it would be if the contractor had to come back another time, or could only partially fill one dump truck.

See next pages for before and after photos.

Removing barriers to pedestrian access in public rights-of-ways and its growing forest



BEFORE. Gravel in the public right-of-way gives the pedestrian path the look and use of a driveway impeding pedestrian access. Photo credit: Brad Lancaster



AFTER. Gravel and car removed from the pedestrian path regains pedestrian access. Vegetation within newly installed street-runoff harvesting basin will eventually grow to shade/shelter the path. Photo credit: Brad Lancaster



BEFORE. Wagon, wheelchair, and baby carriage wheels sink into the gravel making movement difficult. Photo credit: Brad Lancaster



AFTER. Gravel removed, wheels no longer sink and movement is easy on this native soil path. Photo credit: Brad Lancaster



BEFORE. Landscape mounds narrow path. Gravel makes walking & wheeling difficult.



AFTER. Gravel removed and replaced with stabilized and compacted ¼-inch minus particle size decomposed granite results in a path now ADA-accessible. Dehydrating mounds replaced with rehydrating stormwater-harvesting basins.



Flood-mitigating basins filled with water in a rainstorm. Photo credit: Brad Lancaster



BEFORE. Landscape mound blocking public right-of-way foot path.



Removing landscape mound. Photo credit: Brad Lancaster



AFTER. Landscape mound removed, and pedestrian access regained. Though 3-inch deep gravel still needs to be removed for those with wheels.



BEFORE. Wheels bogging down in loose decomposed granite applied at depth of 2 to 3 inches. Photo credit: Brad Lancaster



AFTER. Decomposed granite removed, wheels no longer get bogged down on this native soil path. Photo credit: Brad Lancaster



Half-inch minus wood chip mulch on path applied at no more than a 1-inch depth does not bog down wheel or foot traffic. Photo credit: Brad Lancaster



Folks walking on path mulched with half-inch minus wood chip mulch applied at no more than a 1-inch depth. Photo credit: Brad Lancaster



BEFORE removal of raised steel bands that crossed the public path and created and tripping hazard. Photo credit: Brad Lancaster



AFTER removal of the steel band barrier. Photo credit: Brad Lancaster



BEFORE transplanting the saguaro cactus that was blocking the public footpath



AFTER transplanting the saguaro cactus to regain an accessible public pathway

Widening pedestrian paths in the growing public right-of-way forest



BEFORE path widening. We get the permission from the adjoining property owner to widen the path, then we schedule a Work & Learn path widening party.



DURING path widening Work & Learn party



AFTER path widening. Folks can now walk side by side conversing, and it is also much better access for wheelchairs and baby carriages, especially if you're also walking a dog

Regaining views and connection to front porch, public path, and street life



BEFORE removal of solid wall, a wall which made street and property less safe due to lack of view of either. Photo credit: Mike McKisson



AFTER replacing solid wall with visually open fence enhancing community interaction and improving safety of property and neighborhood forest. Photo credit: Brad Lancaster

Pedestrian access improvements by the Dunbar/Spring Neighborhood Foresters since 10-2018:

- 870 Linear feet of loose gravel removed from Dunbar/Spring neighborhood public-right-of-way (ROW) and its footpaths. Note that total area is larger than 870' figure since width of ROW is not included. (Most ROWs in neighborhood are 20' wide, some 10').
- 1,250 linear feet of narrow footpaths in Dunbar/Spring public rights-of-ways widened to minimum 5' width
- 160 linear feet of public Dunbar/Spring rights-of-ways footpaths cleared of landscape mound barriers.
- 140 linear feet of thick barrier-like mulch (2" plus depth) replaced with thin (1" minus depth) along public Dunbar/Spring rights-of-ways footpaths
- 9,600 linear feet of trees and understory plantings pruned in Dunbar/Spring neighborhood public rights-of-ways to regain access for public footpaths; and bicycles and autos, along with sight lines to traffic signs on adjoining streets.

Incentives for the accomplishments above include:

- them being <u>a requirement to participate in the neighborhood's annual Rain & Tree Planting</u> and <u>to become a Neighborhood Forester</u>,
- workshops and Work & Learn stewarding parties to show folks how to do the work
- the support of volunteer crews to help folks do the work.
- the appreciation of a growing number of neighborhood walkers and wheelers on the public foot paths through the growing neighborhood forest.