



The Cherokee Avenue sites are currently on hold due to appeals and challenges to the approval of the tree removals by the BPW. The appeals were denied by City Council on October 31, 2108 and per Council File No. 18-0707, the Public Works and Gang Reduction Committee instructed "the BSS to report to the Public Works and Gang Reduction Committee with an alternative solution for sidewalk design, with the intent of preserving as many trees on Cherokee Avenue as possible".

BOE has evaluated the following alternatives for Cherokee Avenue:

1. Rerouting Pedestrians from the Sidewalk to the Roadway as the path of travel
2. Reducing Roadway Width to Increase Parkway Space for Tree and Constructing New Sidewalk Adjacent to Curb (Remove Existing Sidewalk)
3. Ramping / Meandering Sidewalk
4. BSS Re-Evaluate Tree Disposition

A number of critical considerations were weighed, including:

- ADA Compliance
- Street Reconfiguration
 - One-way Traffic
 - Parking Lane Removal
- Pedestrian & Vehicular Safety
- Property Acquisition / Easement
- Property Access / Reconfiguration

The key findings of the analysis are as follows:

Alternative 1: Rerouting Pedestrians using the Roadway

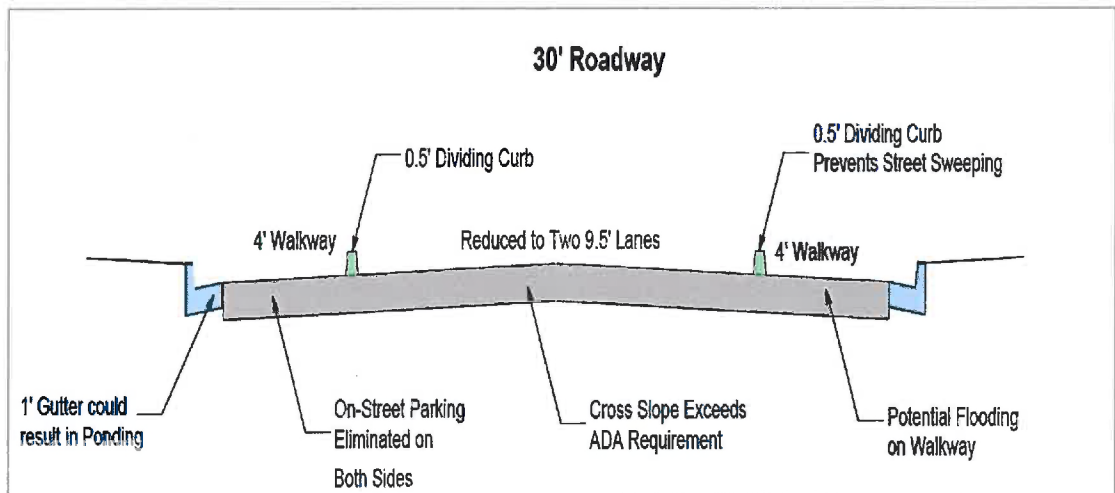
In this concept, the pedestrian path of travel has been rerouted from the existing sidewalk in the parkway to delineated walkway within the existing roadway section; the existing sidewalk would be removed. Pedestrian and vehicular traffic would be separated by the installation of a dividing curb for safety. The existing roadway section would be reconfigured to allow for two 9.5-foot traffic lanes and a 4-foot delineated walkway in each direction. All on street parking would be eliminated on both sides of Cherokee Ave for the entire length of the roadway. The following factors were considered for this alternative:

- The roadway cross slope exceeds ADA standards. The existing roadway cross slope in the area of the walkway varies from 0% to 8.4%, which exceeds the 2.0% maximum cross slope per ADA requirements. The entire roadway would require reconstruction / repaving to achieve the 2.0% cross slope.
- The already substandard roadway would be narrowed to 19-feet to accommodate two 9.5-foot lanes.
- On-Street parking would be eliminated on both sides.



- The proximity of pedestrians to the traffic lanes is a safety concern, especially with the narrowed lanes.
- The delineated walkway limits the drainage path which could result in potential flooding of the walkway. The one-foot gutter pan would have very limited carrying capacity for storm water runoff. Storm flows could exceed the gutter capacity and encroach in the pedestrian path of travel.
- The installation of the dividing curb would eliminate conventional street sweeping along the curb, further reducing gutter capacity, and increasing the flood risks.
- A new path of travel will be needed from the new walkway to each property; existing access between individual homes and the proposed delineated walkway would exceed the maximum ADA ramp grades of 8.33%.

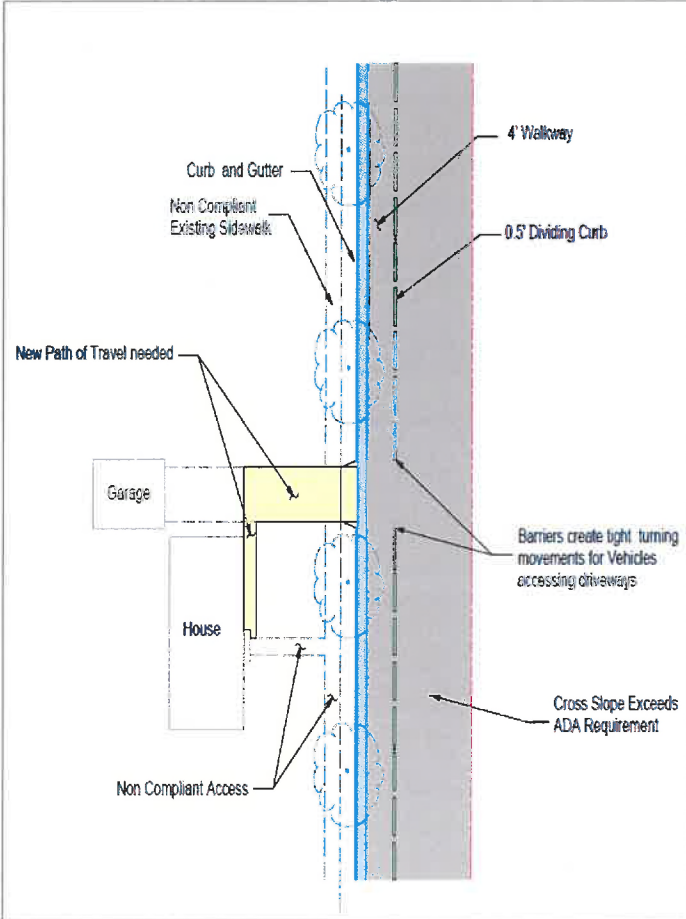
The cross section, street view and plan view of Alternative 1 are found below:



Alternative 1 Cross Section



Alternative 1 Street View





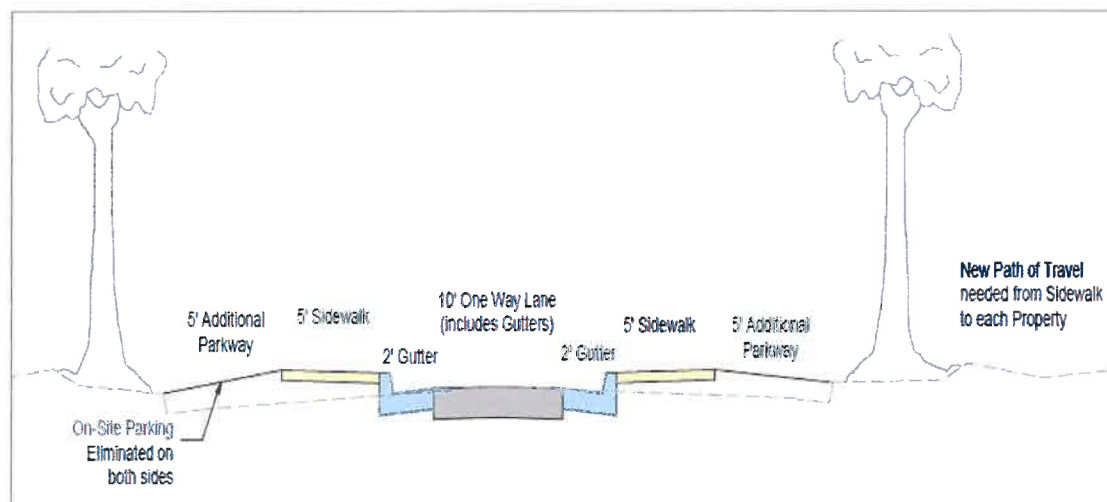
Alternative 1 Plan View

Alternative 2: Removing Sidewalk and Constructing New Sidewalk in the Roadway

A new sidewalk is constructed adjacent to a narrowed roadway and the existing sidewalk has been removed in this concept. The existing roadway section would be reconfigured to allow for a 10-foot traffic lane in one direction, which includes two 2-foot gutters. Adjacent to the curb would be a new 5-foot sidewalk in each direction. All on street parking would be eliminated for the entire length of the roadway on both sides of Cherokee. The following were considered for this alternative:

- The already substandard roadway would be narrowed to 10-feet.
- Traffic and property access would be restricted to one direction.
- On-Street parking would be eliminated on both sides.
- A new path of travel will be needed from the new sidewalk to each property. Path of travel slopes between individual homes and the new sidewalk would exceed the maximum ADA ramp grades of 8.33%.

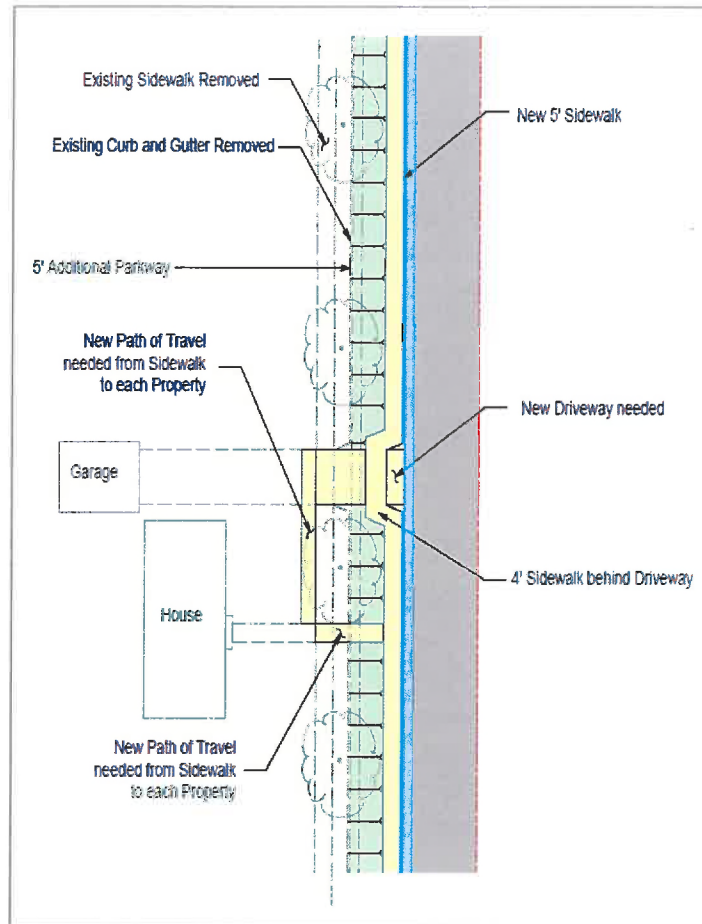
The cross section, street view and plan view of Alternative 2 are found below:



Alternative 2 Cross Section



Alternative 2 Street View



Alternative 2 Plan View

Alternative 3: Ramping / Meandering Sidewalk

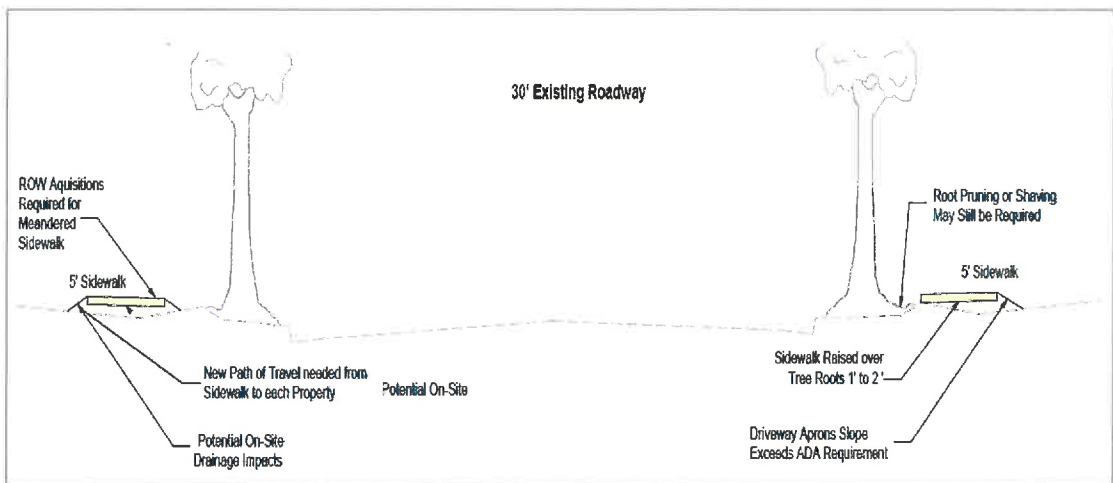
In this concept, the existing non-compliant sidewalk has been removed and a new sidewalk is raised or meandered to meet ADA requirements while avoiding the trees. The existing 30-foot roadway section would remain. The following were considered for this alternative:

- Significant ROW acquisitions would be required for meandering. The process for voluntary easement dedication is approximately 6 months. The property owner is responsible for submitting a payment of \$3,416.51. It is not known if property owners are willing to volunteer their property.
- Proposed sidewalk will be elevated by more than one foot above the existing curb line.
- Extensive onsite private property modifications would be required to connect the proposed elevated sidewalk to the entryways for properties.



- Onsite driveway reconstruction would be required for all properties. Driveway apron slopes are greater than City standards. Some driveway aprons will exceed the maximum 10% slope and even go as steep as 20.4%. This could result in vehicles bottoming out / scaping the driveway aprons.
- Potential drainage issues could result in flooding on properties.
- Root pruning or shaving would still be required.

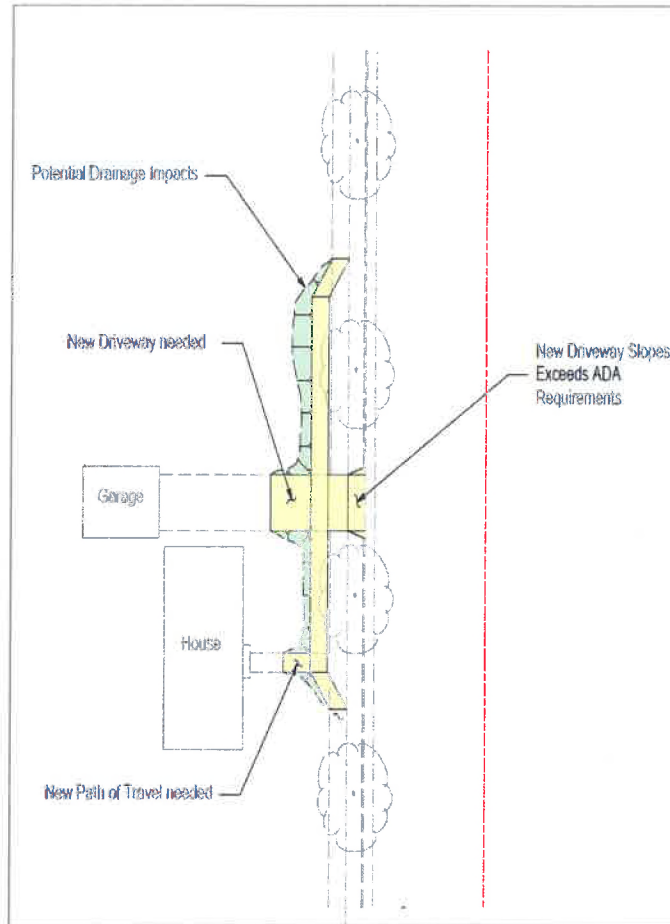
The cross section, street view and plan view of Alternative 3 are found below:



Alternative 3 Ramping Cross Section



Alternative 3 Ramping Street View



Alternative 3 Meandering Plan View

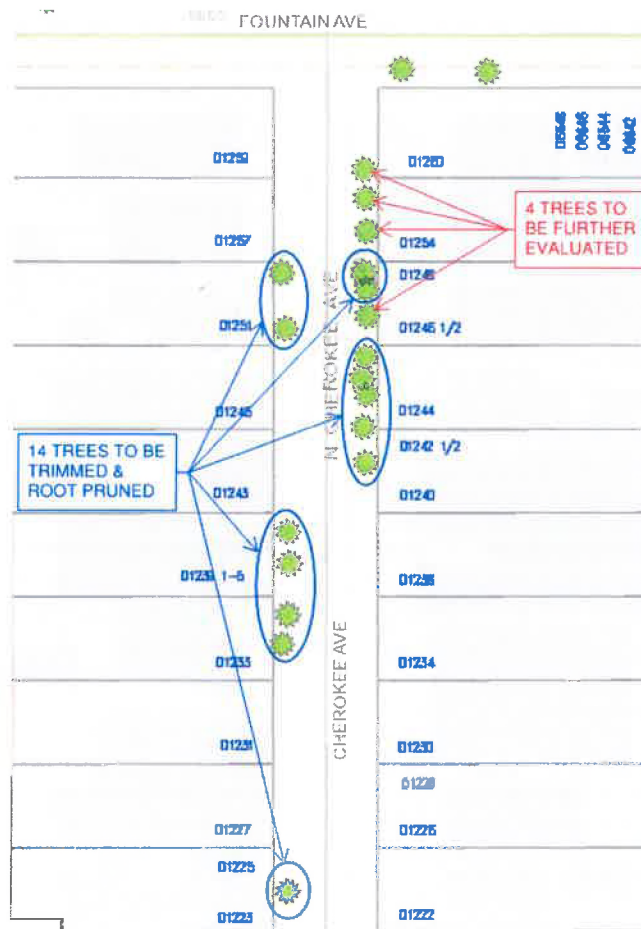
Alternative 4: BSS Re-Evaluate Tree Disposition

BSS (incl. BSS-UFD) and BOE revisited Cherokee Avenue on November 16, 2018 to re-evaluate the disposition of trees and explore options to save trees. UFD recommended substantial trimming to reduce the existing canopy, which could potentially prevent the removal of the trees. After a process of 8 to 12 months of tree stabilization and monitoring, UFD recommended proceeding with root pruning and sidewalk construction. Sidewalk widths would vary from 4-ft to 3-ft based on root evaluation during construction. This site would need to be monitored by UFD to ensure safety as the tree continues its growth. It is likely that trimming and pruning would be needed every 3 years to maintain the trees and prevent recurring sidewalk damage. UFD also noted that 4 trees in the vicinity of 1248 & 1254 Cherokee Avenue require further evaluation. Once the sidewalk is removed at those 4 tree



locations, UFD would be able to evaluate the root system and determine if these trees can be preserved as well.

The site plan of Alternative 4 is found below:



Alternative 4 Site Plan

Recommended Alternative

After weighing all alternatives, potential fatal flaws, concerns, and benefits, the policy committee concluded that Alternative 4, the re-evaluation of tree disposition, is the recommended alternative for Cherokee Avenue. This option allows for ADA compliant sidewalk while preserving most and potentially all of the existing trees.