City of Cincinnati

Interdepartmental
Correspondence Sheet

April 15, 2009

To: Finance Committee

From: Milton Dohoney, Jr., City Manager

200900534

Subject: SIDEWALK ASSESSMENTS

The City Council at its session on March 4, 2009, referred the following item for review and report:

> RESOLUTION submitted by Milton Dohoney, Jr., City Manager, on 3/4/2009, declaring the necessity of assessing for the unpaid cost and expense of necessary sidewalk, sidewalk area, curb and gutter construction, reconstruction and repairs estimated to be $100,205.63, made in accordance with Cincinnati Municipal Code Sections 721-149 to 721-169 for numerous sidewalk improvements projects.

Sidewalk repair has been a source of controversy and complaint for many years. Part of the problem stems from the fact that citizens are not aware that they are responsible for the sidewalks at the front of their property. It is often a shock when property owners self report problems or are otherwise notified by Department of Transportation and Engineering (DOTE) that they need to perform expensive repairs. Secondly, sidewalks have a finite useful lifespan similar to streets, curbs and bridges. DOTE typically needs to perform major repairs to streets every 15 to 30 years, while sidewalks may be expected to last 20 to 25 years. Furthering the controversy is the association of tree roots with damaged sidewalks.

This report will first review the efforts by Council and the Administration to develop effective sidewalk policies and funding strategies and then discuss the findings of more recent studies of the interaction of tree roots and sidewalks.

Sidewalk Policies

In May 1997, the Department of Public Works, Division of Engineering, submitted to the Public Works & Utilities Commission a comprehensive sidewalk policy paper titled "Safe Sidewalks" (Document199700915). This report discussed the details and problems with the City's Sidewalk Safety Program. The administration concluded that the best strategy to fund sidewalk repairs would be to create an Annual Sidewalk Repair Assessment program.

The Public Works and Utilities Committee reviewed the report and requested additional information from the Department of Public Works. The response to that request, Document #199700915, dated June 6, 1997, addressed four issues including the

possible use of Forestry Assessment funds to repair sidewalks damaged by tree roots. (See Attachment 1) In this report the administration recommended against using tree assessment funds for sidewalk repairs for the following reasons:

1. Conflicting legal reports on the use of the shade tree assessment to repair sidewalks.
2. The forestry program could not maintain its mission to respond to storm emergencies like Ike, inspect and prune all trees in 1/6 of the city (6 year maintenance cycle), remove hazardous trees, remove stumps, and replace every tree that is removed if its mission becomes sidewalk repairs.
3. Most of the very large trees that contribute to sidewalk damage predate the urban forestry program.
4. A better strategy to minimize tree damage is the responsible selection of planting areas and tree species.

On September 15, 1997 the Public Works and Utilities Commission requested additional information on eleven issues related to the report and the Sidewalk Safety Program. Issue #6 was "Using Tree Assessment Funds for Damage to walk caused by City Trees." On October 20, 1997, John Hamner, Director of Public Works submitted the requested additional information to the Public Works and Utilities Committee. (See Attachment 2) In response to Issue #6, the Law Department advised that Urban Forestry's budget may be used to replace sidewalks. They also stated there may be legal issues related to the amount of funding provided by Urban Forestry. "Law further advises that there is no case law on the subject and is, therefore, difficult to state what percentage of the Forestry assessment funds may be safely spent on sidewalk maintenance."

In January, 1998, City Council adopted a motion directing the administration to make changes to the Sidewalk Safety Program (See Attachment 3). There were nine changes recommended, including Item # 4, "Shall perform at City expense sidewalk repair necessitated due to City action (i.e., major street improvement) or City utilities (i.e., MSD, Water Works improvements, damage by City operations, etc) including sidewalks needing repair necessitated due to tree roots from trees planted or maintained under the City's Urban Forestry Program. Funding should come from the Public Works budget not from Tree Assessment Funds."

In response to this motion, the Department of Public Works provided a report dated August 5, 1998, on implementation strategies and budget requirements. (See Attachment 4) Item #4 included an estimated cost associated with Public Works assuming responsibility for "sidewalks damaged by tree roots" and a plan to make the repairs as funding permitted. The report stated that it would cost approximately $426,667 per year to repair tree root damage. However, on January 21, 1999, City Council approved and filed the report except for Item #4, which they disapproved and filed. (See attached Cincinnati City Council Items summary for Item # 199801997). The budget passed on that date did not include funding for Public Works to make repairs to sidewalks damaged by tree roots. Since then the Department of Public Works, (now DOTE) has never received funding for repairing sidewalks due to tree root damage.

Since Item #4 was not approved and a budget for the repair of sidewalks damaged by tree roots has not been approved, the responsibility of repairing sidewalks damaged by tree roots remains with the property owner. Chapter 721 of The Cincinnati Municipal Code specifies that the abutting property owner is responsible for maintenance of sidewalks unless the property abuts more than one frontage, then the City funds repairs on one frontage.

The attached "Guide to Sidewalk Safety" brochure prepared by the Department of Transportation & Engineering, Division of Engineering, summarizes our current sidewalk safety policies based on the approved portions of the August 5, 1998 report to council. This guide states "Sidewalks that are damaged by tree roots are the responsibility of the property owner." If an Urban Forester determines that "cutting the root will damage the tree or make the tree unstable, Urban Forestry may remove the tree as soon as possible and the contractor can continue with replacement of the sidewalk block." This brochure is included with every notice to repair sidewalks. (See Attachment 5)

The "Guide to Sidewalk Safety" brochure also includes information on the steps a property owner can take if they do not agree with our inspector's evaluation of the sidewalk. The first step is to meet with the inspector. If the citizen is still not satisfied they can request a hearing before the Sidewalk Board of Appeals. The board includes the Director of Transportation and Engineering, the City Engineer, a representative of the Law Department and two Citizen Members. The "Sidewalk Improvement Program Process" is also attached to give a sense of all the steps in the process. (See Attachment 6)

Park Board's Urban Forestry Sidewalk Related Studies and Policies

Since the adoption of the current sidewalk polices, two relevant studies concerning the interaction of tree roots and sidewalks have been published. In the January 2000 *Journal of Arboriculture*, the article titled "Trees Are Not the Root of Sidewalk Problems" compared incidents of defective sidewalks to soil types in Cincinnati, Ohio. This study found no difference between the failure rate of sidewalk blocks next to trees and sidewalk blocks not next to trees. However, this study did show a strong correlation between age of the sidewalk and the rate of sidewalk defects. The data from this study suggests that trees have a relatively small impact on sidewalks less than 20 years old.

The second study published in the November 2002 edition of *Journal of Arboriculture* titled "Which Came First, the Root or the Crack" looked at the interaction of roots and sidewalk cracks. Although the study did not definitively answer the question posed in the title of the paper, it did show where open cracks allow higher oxygen levels in the soil, tree roots are more likely to occur. The cracks appear in walks near the end 25 year sidewalk design and allow roots to grow beneath the walk. When the roots expand in diameter it causes the walk to become offset.

Urban Forestry distributes a guide paper (attached) that supplements the DOTE Guide to Sidewalk Safety titled "Resolving Tree-Sidewalk Conflicts." This guide offers further information about steps owners can take to maximize the life of their new sidewalk by

recognizing the impact of the soil type and designing the sidewalk to withstand the limitations of the soil. It also suggests methods to protect high value trees. (See Attachment 7)

Where sidewalks are damaged as a result of storms, Urban Forestry will fund the repairs. This is done because of the very dangerous nature of uprooted trees, driveway aprons, and sidewalks to public safety. Under this program Urban Forestry usually spends about $5,000 annually in funds provided through a special damage and compensation fund, not through the special urban forestry assessment. In addition, Urban Forestry holds its contractors responsible for any damage to walks, curbs, or driveway aprons that occur during tree removal work. This is usually also about $5,000 annually.

Urban Forestry installs new trees generally at the request of the community council or the homeowner. Everyone is notified in writing when a work order is written and assigned to a contractor to plant. Owners have veto power (a tree is not planted if the property owner objects) unless it is part of a streetscape project in a business district.

The City has the legal responsibility to maintain safe rights-of-way. This not only includes the maintenance of streets and sidewalks but also the maintenance of public street trees. If it is determined that the use of street tree assessment funds to fund sidewalk repairs is legal and a proper expenditure then the funding would most likely be diverted from the planting budget.

It is important to the City aesthetically and environmentally to continue to plant street trees. The Cincinnati urban forest canopy provides a direct value to taxpayers by providing over 20 million dollars in annual benefits through reduction of pollution, stormwater, and energy costs. For example, the average street tree provides a savings of $56.00 annually to the abutting household through energy savings by avoiding air conditioning costs. In spite of these benefits, 20 of the city's 52 communities do not meet tree canopy goals. The Park Board has plans in place to meet these standards if the planting budget remains intact.

Attachment 1: Document#199700915 Safe Sidewalks – Information Supplement

Attachment 2: Document#199701987 Safe Sidewalks – Information Supplement

Attachment 3: Document#199800107 Sidewalks Motion

Attachment 4: Document#199801997 Sidewalk Safety Program Changes

Attachment 5: The Guide to Sidewalk Safety

Attachment 6: Sidewalk Improvement Program Process

Attachment 7: Resolving Tree-Sidewalk Conflicts