

PHASE 1 - FEASIBILITY ANALYSIS

Walnut Ave.

(Entire Road)

Walnut Ave. apexes at the top of the hill on the back side of Franklin Ave., with Franklin Ave. & Centennial being the bottom of the hill on one side and Winthrop Parkway on the other. The house lots on Walnut Ave. are rather large with large trees and an impressive views during the winter months when the leaves have fallen off the trees.

The dead end side of Walnut Ave. lacks storm water controls while the other parallel side streets in that area have such controls. The reason why drainage was not installed at the end of Walnut is unclear, the obvious assumption is that there was not enough grade to tie the end of Walnut into the drains that serve the end of Arlington and Florence. The lack of storm water control at the end of Walnut has caused erosion issues on the sloped wooded lot between Walnut and Woods Ave. Walnut was the site of a 12" water main break several years ago which increased and accelerated the erosion issue. At a minimum slope stabilization measures should be installed on the slope wooded area to prevent further erosion. such measures include geotextile fabric slope stabilization combined with erosion control plantings. A tiered overflow system aka 'level spreader' system would aid in elimination a concentrated 'point' discharge while dissipating the energy of the water discharge over a larger area. A very rough estimate of the cost of such measures is in the ballpark of 50k, although further investigation is required and that is an 'off the hip' number. Ownership of the land is private, not municipal, which adds to the dilemma. Connecting a drain from the end of Walnut to Arlington may not be possible due to the grade and the existing structures which have been constructed since the street was originally constructed.

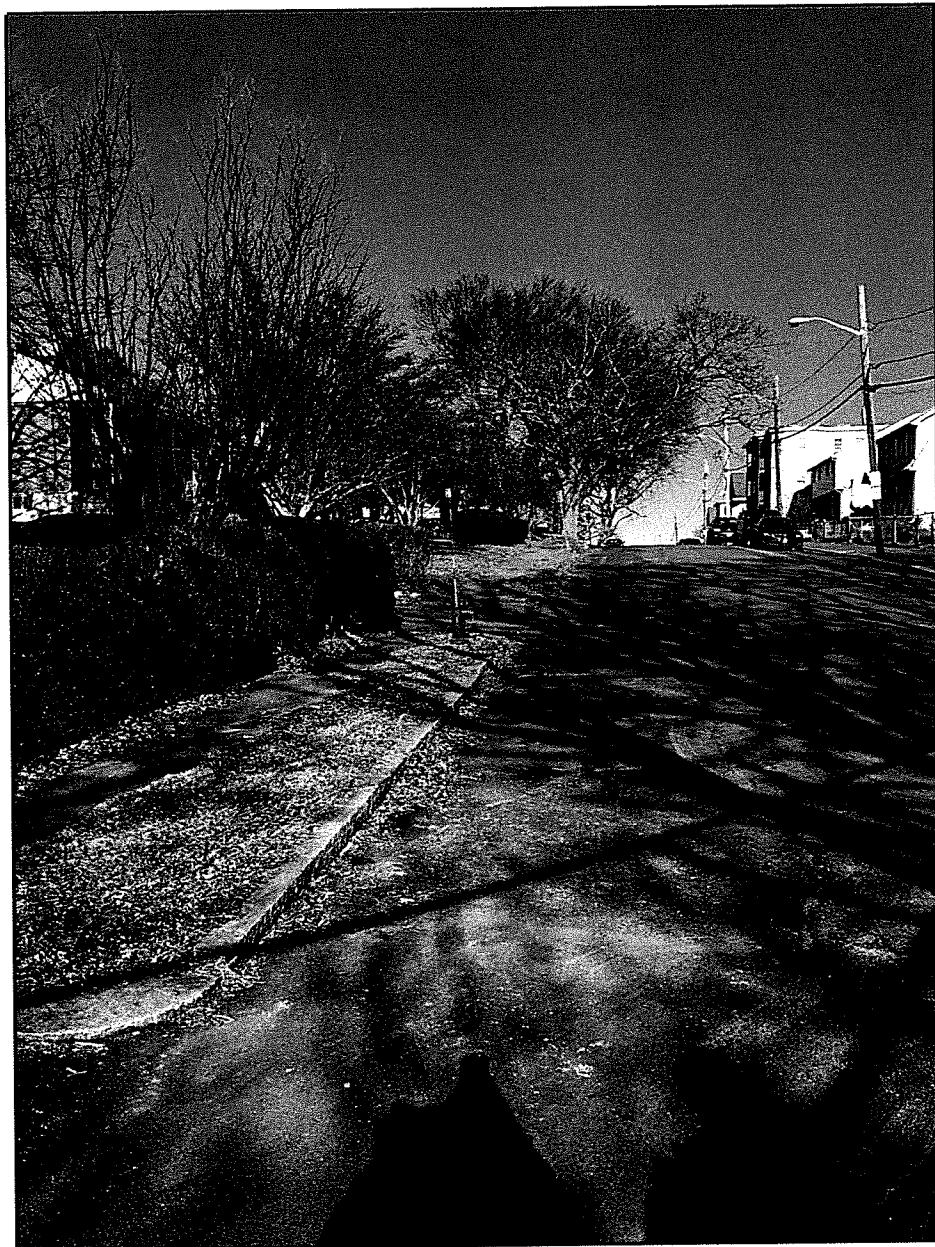
Due to the water main breaks and the water main installation combined with typical road failures, the road can be considered in poor to very poor condition. The street has also had gas main installed in recent history. Curbing reveal is inconsistent and the condition of the majority of the sidewalks is poor.

Considering the history of water main breaks, the overall condition of the street and sidewalks and the residents continued patience through the years and the infrastructure has been improved, we recommend at a minimum removing and resetting the granite curb, reconstructing the sidewalks and milling and paving the street. Similar to Florence Ave., ideally the street should be reclaimed, but the decision will ultimately be budget dependant and consideration of the need of reconstruction of other streets will ultimately effect the decision regarding the scope of work on Walnut Ave.

Walunt Ave.

At dead end looking north

Minimal curb reveal. Sidewalks in poor condition.
Water main trench shown. Gas trench on
opposite side of the street. Longitudinal and
transverse cracking apparent, alligator cracking
beginning to form.

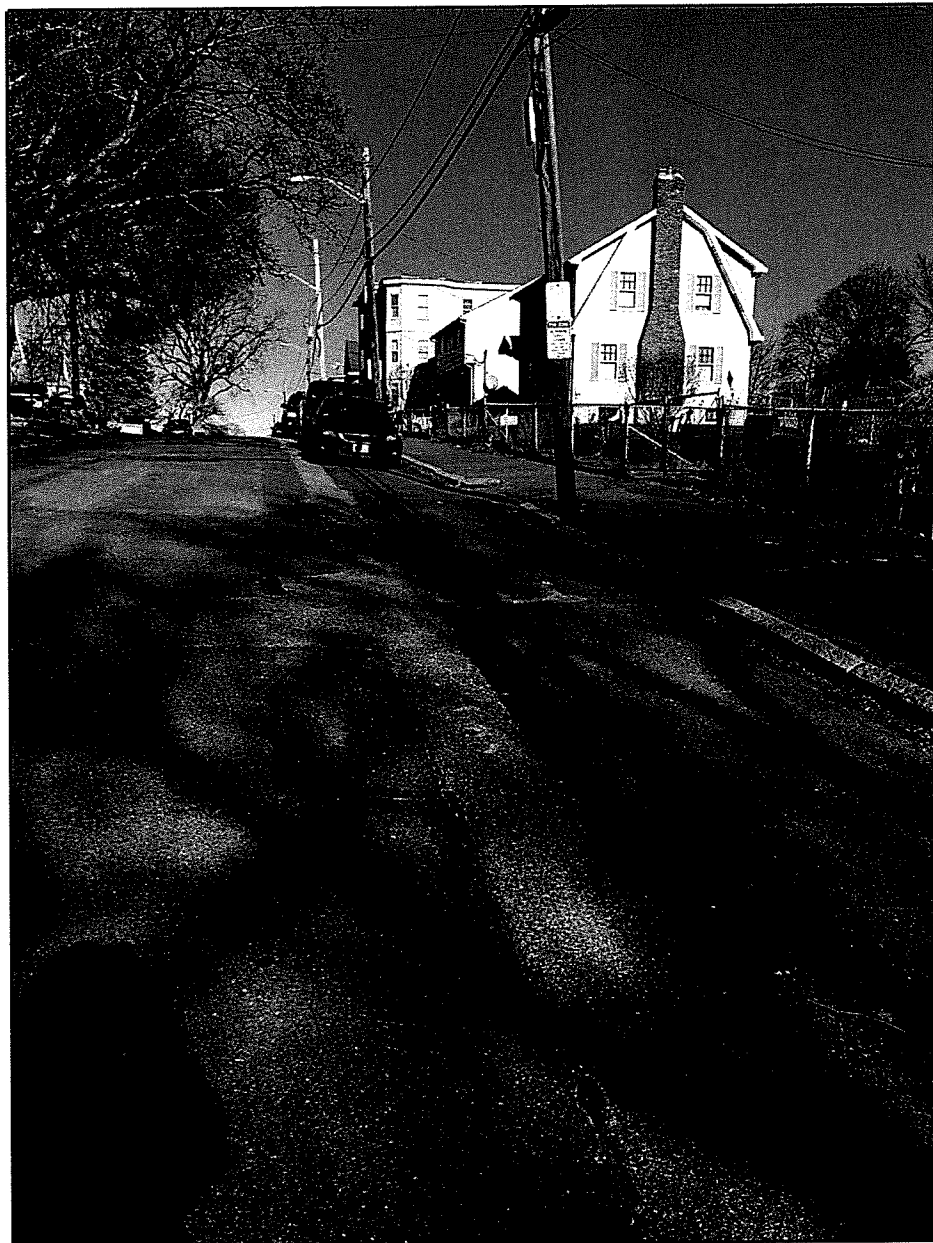


Walunt Ave.

At dead end looking north, east side of road shown.

Curbing failing, rolling over, sidewalks cracking and seperating.

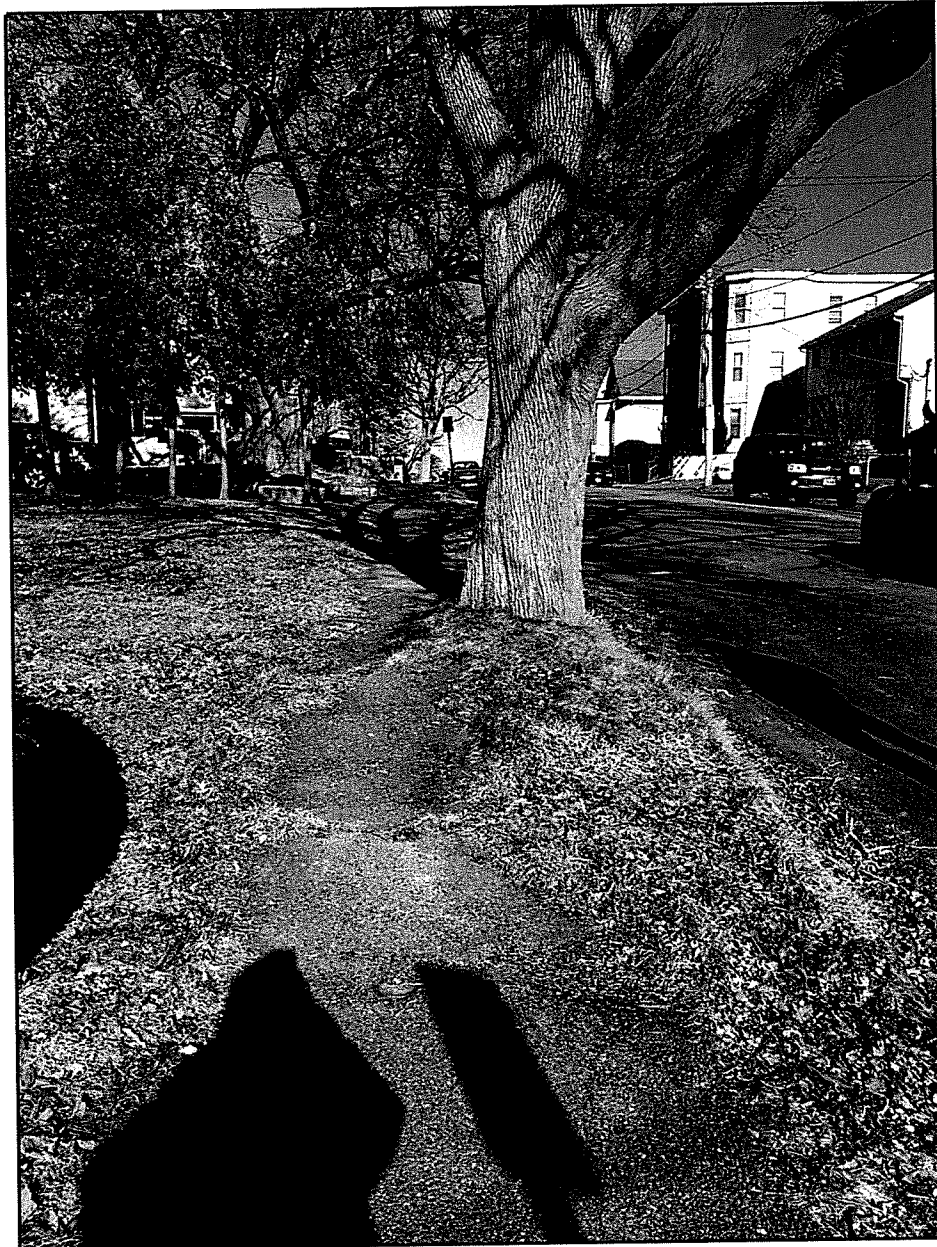
Roadway in poor condition, multiple utility trenches. Trenches not showing settlement. Cracking of roadway continues, alligator cracking in the gutter related to curbing failure.



Walunt Ave.

Heading north towards James Street.

Very poor condition of the sidewalks highlighted.
Tree large and in good condition. Efforts to
save the tree should be made, including not
excavating curbing directly in front of the tree.

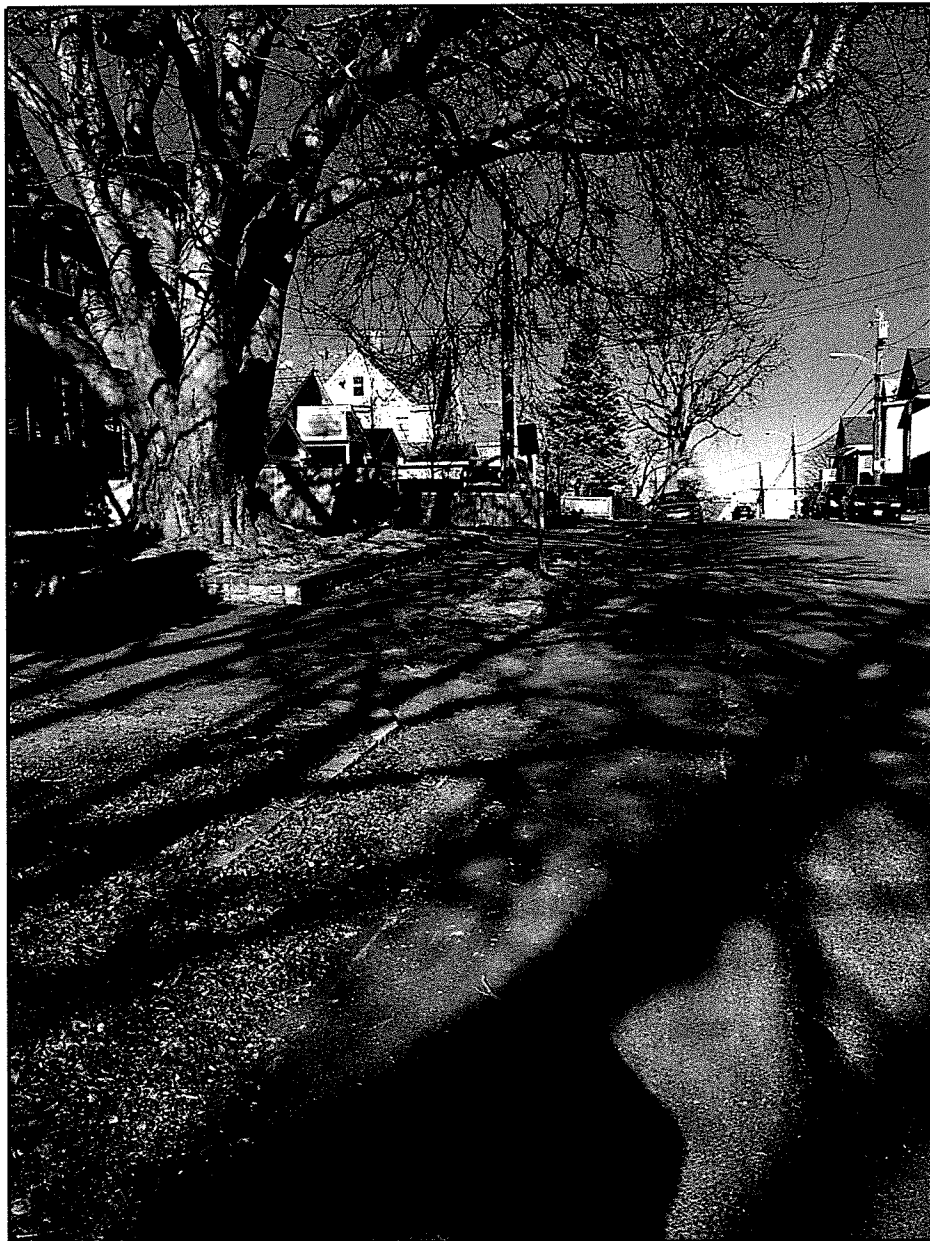


Walunt Ave.

Heading north towards James St.

Area of water main break in 2013 shown. Water main replaced in 2014. Settlement and alligator cracking ahead related to water main break.

Roadway in poor condition

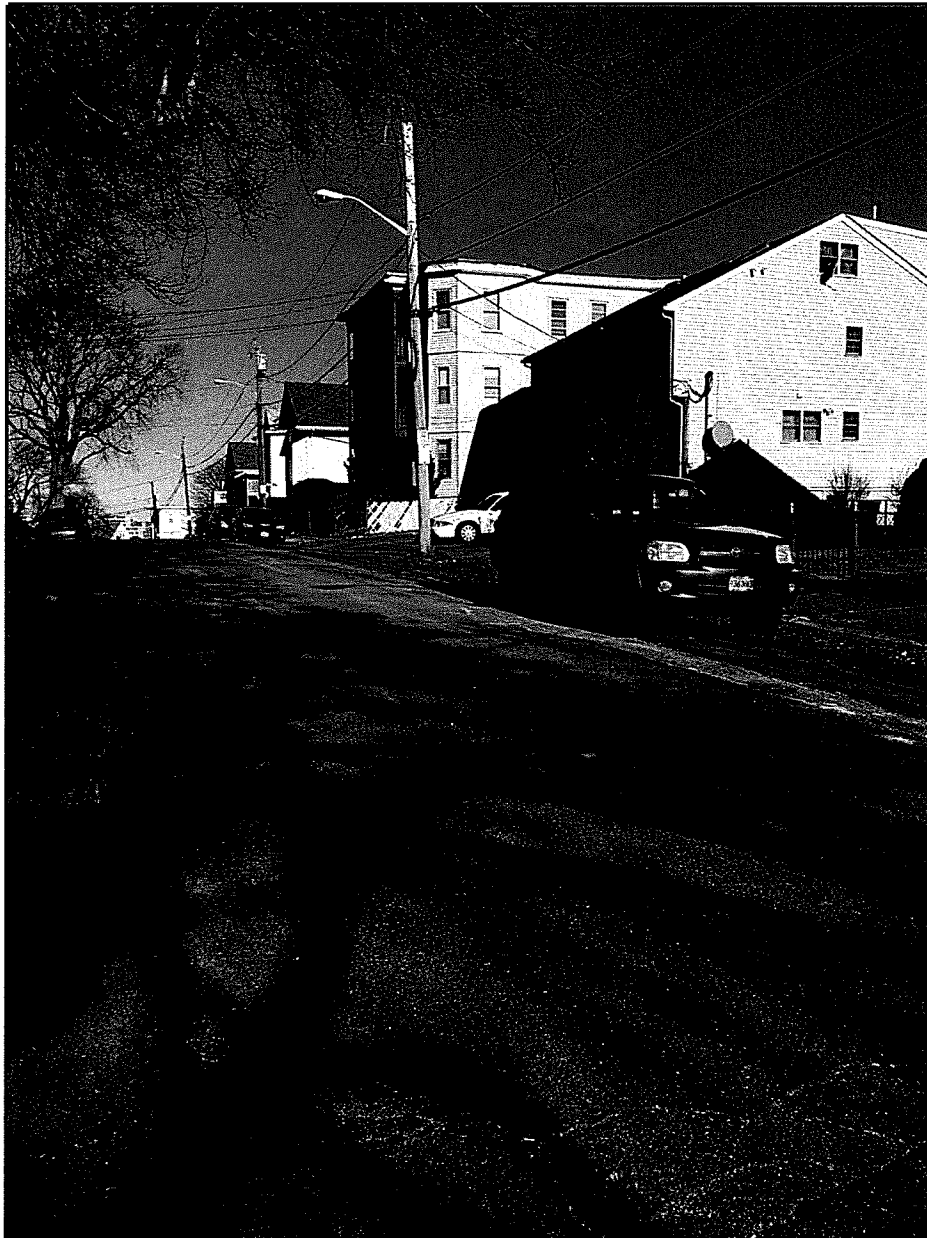


Walunt Ave.

Same location as last photo looking at east side of the road.

Multiple trenches shown, cracking pronounced in the vicinity of the trenches.

Road sustained heavy damage during water main break.



Walunt Ave.

Photo highlighting poor conditon of sidewalk.

Roadway unraveling, cracking spreading, alligator cracks forming.

Roadway in poor condition..

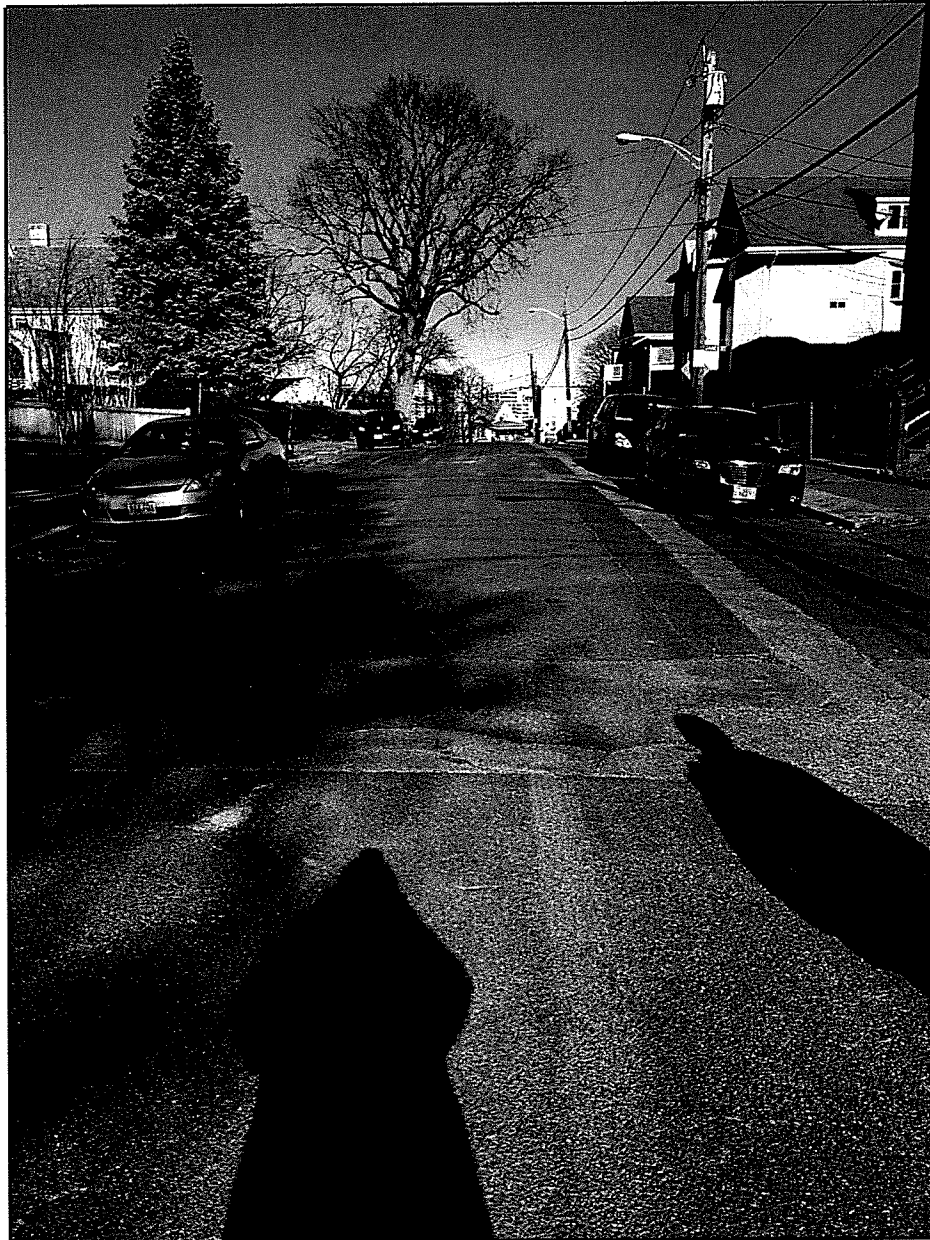


Walunt Ave.

Continuing north towards James Street

We are now north of the water main break.
Roadway in decent condition. Multiple utility
trenches shown. Trenches are beginning to fail,
although extreme settlement of trenches not
seen.

Driveability poor due to trenches



Walunt Ave.

Just south of James street.

Gas and water trenches shown, transverse and
alligator cracking spreading.

Road poor due to multiple trenches.



Walunt Ave.

Beyond James St. heading north.

Failed transverse trench shown. Longitudinal cracking developing.

Curbing and asphalt sidewalk shown in good condition. Mostly sidewalk in poor condition.



Walunt Ave.

Heading north towards Centennial.

Curbing in poor condition. Sidewalk in poor condition. Edge settlement and development of alligator cracking seen.

Poor edge condition turns to very poor ahead.

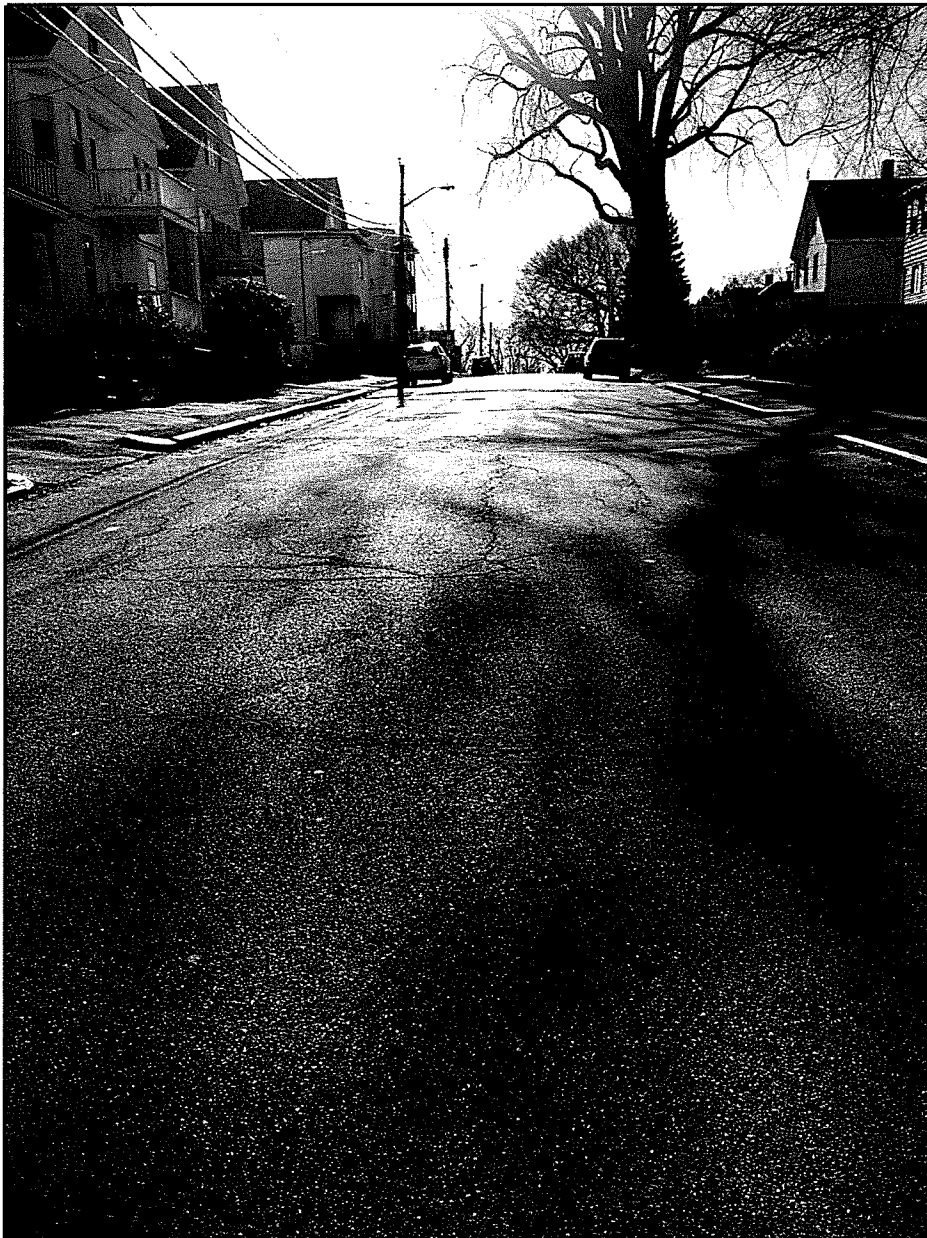


Walunt Ave.

Looking back towards dend end

Longitudinal and transverse crack more visible in this picture. Cracks starting to expand. Area beyond pavement management measures.

Roadway in poor condition overall.
Sidewalks in poor condition overall.
Curbing in poor condition overall.



Walunt Ave.

Looking towards proposed limit near Centennial traffic island.

Roadway in very poor condition south of the line shown.

Cracking very pronounced and spreading.
Roadway beyond pavement management practices.

