

PHASE 1 - FEASIBILITY ANALYSIS

McKinley Street

(Revere Street to Dead End)

McKinley Street suffers from extensive longitudinal and transverse cracking, differential settlement of the road itself, settlement of the curbing and the existing asphalt sidewalks. Drainage issues are evident and sump pump discharges are accelerating the deterioration of the roadway and the sidewalks. The roadway system requires full reconstruction of the street, curb and sidewalks. Attention must be paid to the drainage issues on the street or the condition will likely continue. Drainage issues are more problematic on the dead end portion of the street south of Washington Street where inadequate drainage exists and grading issues cause large areas of standing water.

Similarly to Thorndike Street, it is recommended that the full soil profile of the street be determined prior to commencing with any work. Such information will provide much needed insight as to why the road has failed and what measures are necessary to correct the conditions.

McKinley Street

Just south of Revere St. looking north

Photo shows minimal curb reveal and very poor condition of sidewalk, continues to Revere St..

Note, new concrete driveway apron installed to old curb reveal. Curb should be raised before concrete sidewalks are installed.



McKinley Street

Near Revere St. looking south

Photo fairly extensive cracking of roadway.
Some settle apparent.

Curb reveal is minimal, curb settling and
rolling over towards the street.

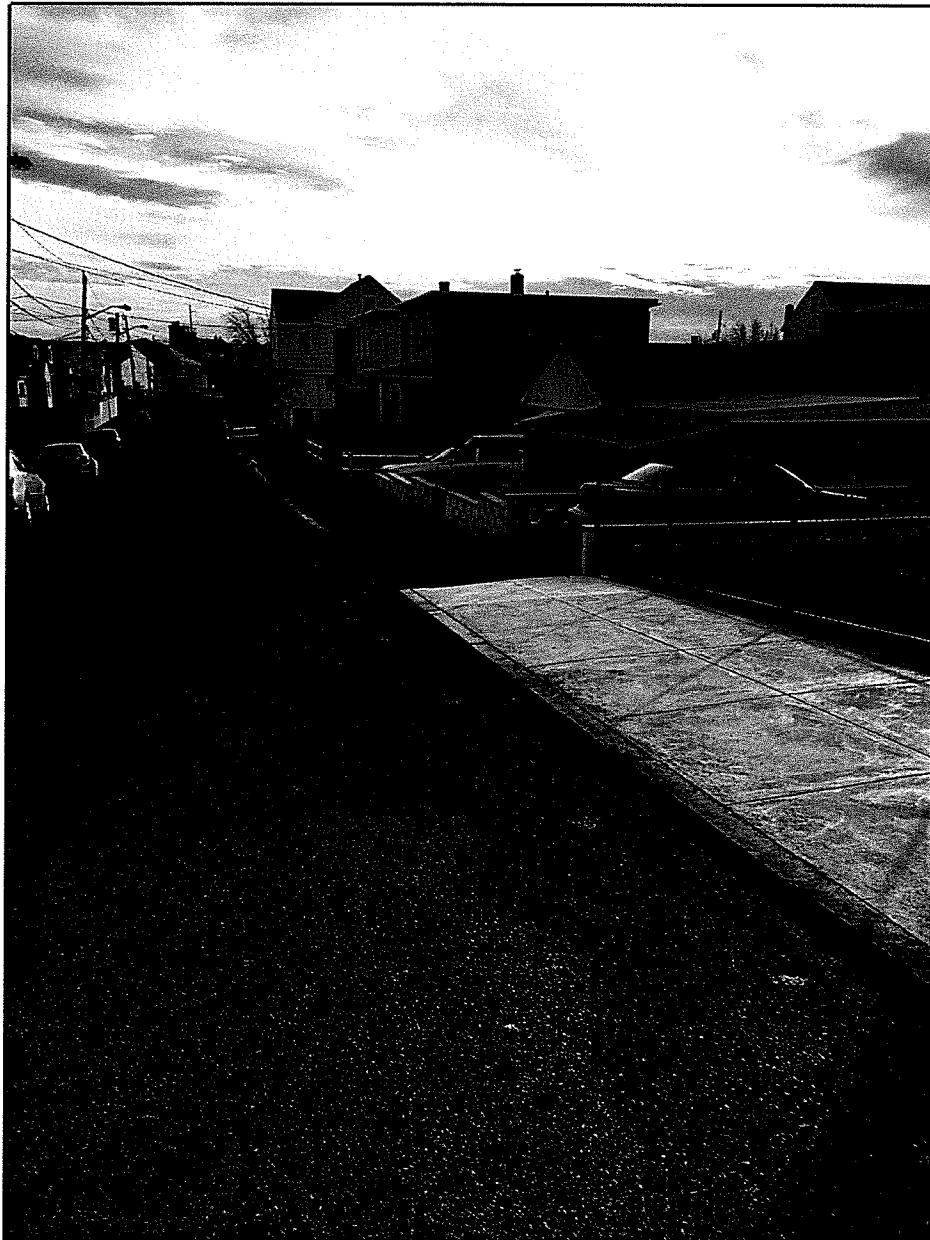


McKinley Street

Continuing south on McKinley St.

fairly extensive cracking and settling of roadway continues. Typical for the street.

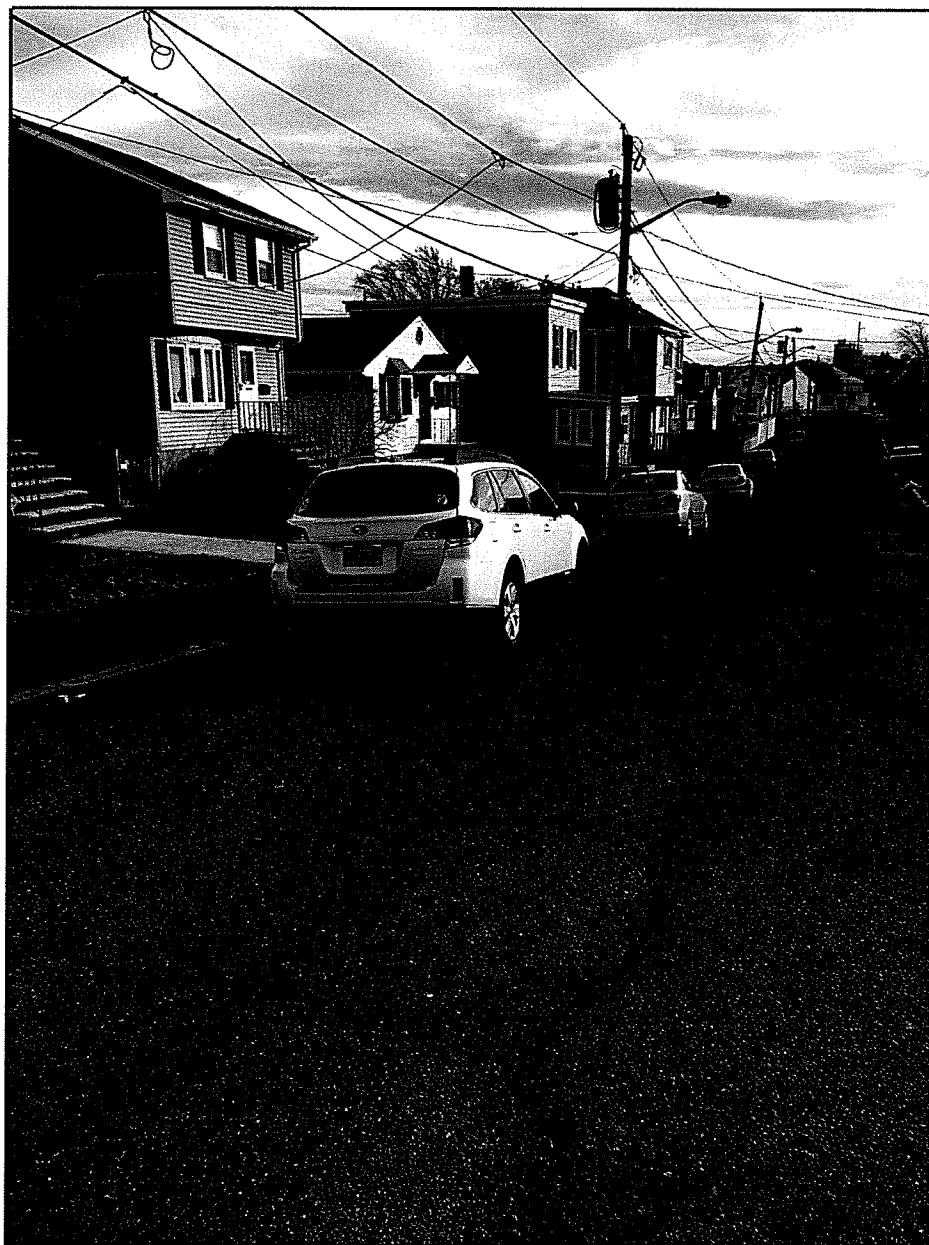
Note, new concrete sidewalk installed without resetting curb. Curb should be reset before concrete sidewalks are installed.



McKinley Street

Continuing south on McKinley

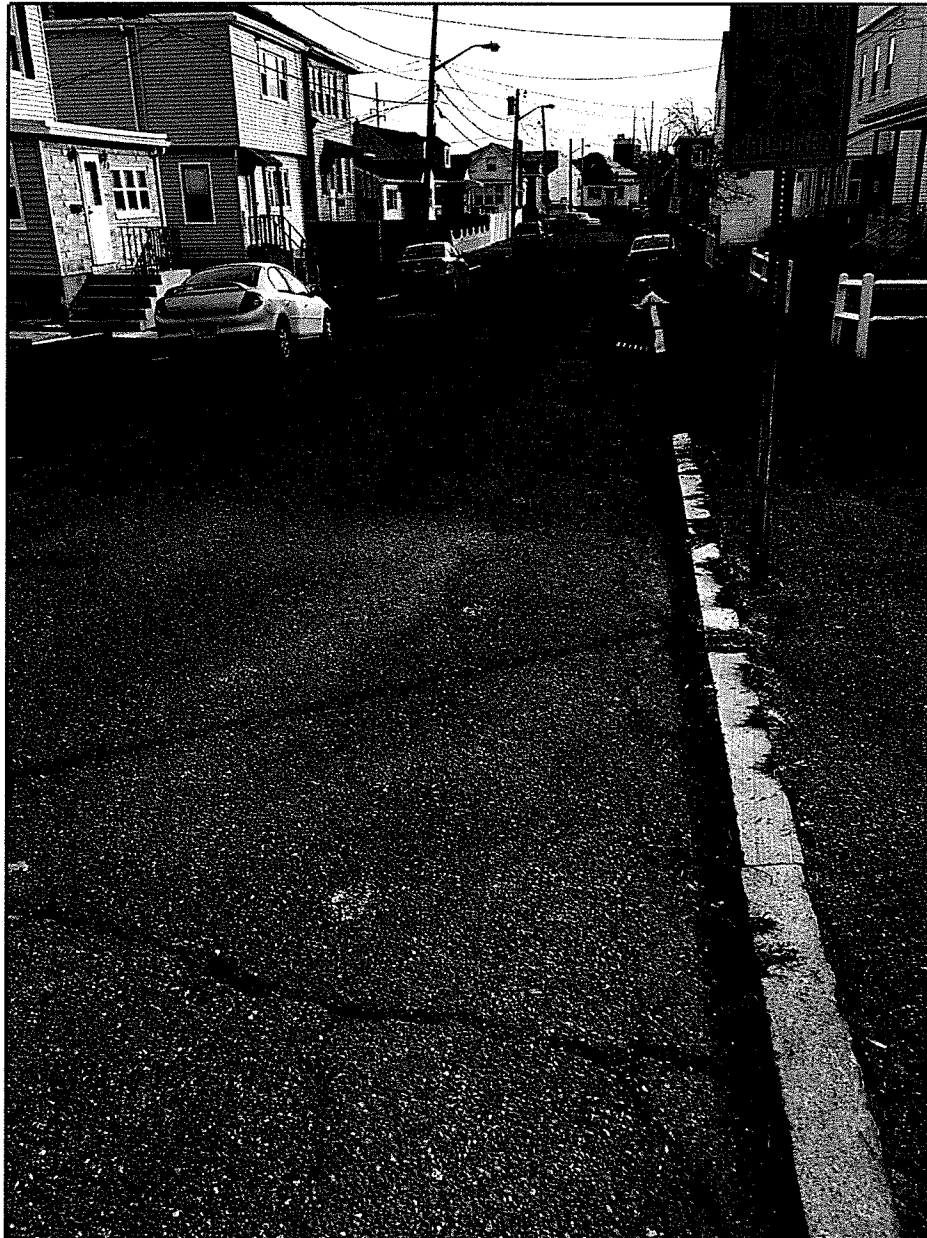
Typical condition of roadway continues



McKinley Street

Continuing south on McKinley

Typical condition of McKinley continues. Cracking is consistent as you travel south, alligator cracking in the gutters is likely due to poor compaction around the curbing.



McKinley Street

Continuing south on McKinley

Typical condition continues.

Catch basin tipped back, may require rebuilding prior to paving the road.

Asphalt sidewalks beginning to break up.



McKinley Street

Continuing south on McKinley

Asphalt sidewalks uneven and breaking up.
Water source shown on next picture.

More extensive cracking of roadway shown.
Pothole repairs shown.

Minimal curb reveal and curb is rolling over
towards the street.



McKinley Street

Sump Pump discharge

Water shown originating from sump pump discharge
at the base of the wall.

Discharged water has most likely amplified the
damage to the sidewalk and adjacent roadway
shown.



McKinley Street

looking south at Washington St.

Extensive failure of sidewalks and roadway shown.
Damage may be accelerated due to standing storm
water.

Intersection lacks accessible ramps.



McKinley Street

At Washington St. looking south.

Extensive damage to roadway and sidewalk shown. Damage due to standing water evident by puddle shown. Water not traveling overland to catch basin just beyond damaged area.

Source of water is a sump pump discharged from adjacent house shown in next photo.



McKinley Street

Same location looking north
towards Washington St.

Water discharging from residence. Discharged water does not travel overland to downstream catch basin. Standing water has caused extensive damage to asphalt sidewalk and roadway.

re-grading of gutter to catch basin required at a minimum. Possibly connect sump directly to drain system to eliminate overland flow.



McKinley Street

Looking south towards dead end.

Opposite side of road from last photo shown.

Observed standing water, water not flowing to catch basin by grade. Standing water has caused extensive damage in this location as well.

Drainage issues must be addressed prior to paving or condition will continue.



McKinley Street

Looking north to Washington St.

View of same condition as previous photo from the south. No catch basin exists on east side of the street. Closest basin on east side at Washington Street. Grade of road prevents water from reaching closest basin.

If drainage issue can not be solved by re-grading the road, a new catch basin needs to be installed at the low spot.



McKinley Street

Looking south to dead end.

Extensive cracking / alligator cracking of the roadway observed. Road has settled around the catch basin, water does not appear to be draining into basin.

Pronounced low point at catch basin would direct water into the drain.

Further investigation of grades required, could observe during rain event to better understand flow of storm water.



McKinley Street

At Washington St. looking north

Very poor condition of sidewalk shown.

Curb settling and rolling over towards road.

Note lip between the sidewalk and the curb,
water likely sits in this location.



McKinley Street

Continuing north towards Revere St.

Poor condition of sidewalk / driveway apron shown.

Typical condition of roadway shown and becoming worse towards the edge of the road.

