



**RETAINING WALL REPORT
PREPARED
OCTOBER 29, 2010**

Historical Observations

File Photo illustrates deteriorating block on retaining wall. This prompted evaluation of block composition for given application and related exposures (salt, water run-off, wind load from railing etc.)

Deterioration was accelerated at locations where railing was installed in block.

Placement of salt laden snow in proximity to blocks contributed to the problem.

Reconstruction remedies will be discussed later in this package.



This photo illustrates salt laden snow in proximity to retaining wall.

Melting snow together with corrosive salt residues would actually drain into the retaining wall through holes drilled for railing.

This influenced deterioration from the interior of blocks as well.



Observe salt laden snow pushed against retaining wall.

Imagine the block absorbing corrosive moisture from the salty snow.

Imagine the moisture in the block re-freezing over night and then expanding like a bottle of frozen water in your freezer. This natural freeze/thaw process, made worse under corrosive influence of salt, literally blew off the front face of the retaining wall blocks.



Photos showing more deterioration.



AND NOW

The happy ending to this story - the removal of deteriorated block and the reconstruction of the retaining walls in affected areas.



The re-assembly of the wall continues.



KUDOS to Danny Piscione and his team at Rocky River Construction.

Neat. Professional. Dedicated. Patient. Committed.

Words cannot describe how lucky we were as a parish community to find a contractor with the integrity and ability of the team at Rocky River.

The months of consultation alone would have driven away most other contractors.

Observe that in all newly reconstructed areas, railings have been separated from retaining walls.

No longer will they exert the negative stresses on our retaining walls in the most susceptible areas.

Note that all blocks used in the reconstruction of the retaining walls were donated by Atlas Block.

Atlas Block was very helpful with a technical assessment of the issues and even re-formulated the composition of the block in consideration of our specific application and site circumstances.



Observe the geotextiles used by Rocky River during the reconstruction of the walls.

These were used in all areas.

These fabrics are designed and placed in layers specifically to tie the wall into the land being retained. These fabrics enhance the structural integrity of the wall.

