



Date: January 22, 2008

To: Mayor and Members of the City Council

From: Bonnie Lowenthal, Vice Mayor, Councilmember, 1st District *BL*
Suja Lowenthal, Councilmember, 2nd District *SL*

Subject: **Use Pervious Concrete Pavement To Recharge Groundwater and Prevent Polluted Runoff**

Pervious concrete pavement is an important environmentally sustainable material that allows water to penetrate the pavement, filter through stone beds under the permeable surface layer, and recharge the underground water table instead of ending up as polluted runoff in our rivers and oceans.

The impervious paved surfaces of our urban landscape - such as parking lots, driveways, sidewalks, and streets - have a detrimental impact on water quality and the health of the environment. Rainwater and urban runoff pick up oil, grease, chemicals, and sediment from impervious surfaces and carry the pollution to rivers and coastal waters. Additional environmental benefits of pervious concrete include reducing the heat island effect, minimizing flooding, and channeling more air and water to adjacent tree roots and landscaping.

The initial cost for installing pervious systems may be slightly higher than conventional concrete or asphalt paving, but pervious concrete is often cited as being more economically beneficial due to its lower life-cycle cost. Pervious concrete requires fewer repairs than asphalt, has a longer overall lifespan, and minimizes the need for runoff retainers and other costly stormwater management methods.

As the City of Long Beach considers an infrastructure bond to fix the city's roads, sidewalks, alleys, buildings, storm water systems, and more, we should make our investment wisely to ensure maximum long-term economical, environmental, and structural benefits.

Recommendation: As pervious concrete pavement systems are a demonstrated stormwater management tool, I would like to ask for a feasibility study on using this environmentally beneficial material rather than conventional concrete or asphalt on pilot alley re-paving and city-owned parking lot projects in appropriate locations where the water table allows for the influx. A cost-benefit analysis determining the success of the demonstration projects could then lead to more widespread use of pervious systems on alleys and parking lots throughout the City.