

5. Re-use stormwater by on-site strategies such as infiltration strips, bio-retention swales, curb-less green strips and green parking.
6. Develop basic guidelines for water conservation and water pollution prevention strategies to support residential household and builder education such as incorporating efficient plumbing fixtures, and downspout disconnection in new and existing buildings.
7. Utilize native planting, trees and shrubs to soften hard surfaces or pavement and to link new development to existing green spaces and greenway network.
8. Incorporate stormwater harvesting technologies such as cisterns, stormwater retention, or green roofs and gardens.
9. Enclose and cover service areas such as loading/unloading dock areas, trash areas, vehicle fueling and vehicle wash or equipment storage to avoid contact with and polluting stormwater runoff.
10. Prevent sedimentation, soil erosion and waste from construction activities and parking areas from entering the stormwater systems by implementing a soil erosion and sedimentation control plan for all construction sites to comply with the Construction General Permit of the 2003 EPA's requirements for erosion and sedimentation.
11. Implement urban stormwater runoff management strategies that would result in a 25% reduction in the volume of stormwater runoff from the two-year, 24-hour design storm.<sup>27</sup>
12. Incorporate design elements which reduce runoff volume and contamination of urban runoff from existing residential and redevelopment projects.<sup>28</sup>



*Open space - Detroit, MI  
Photo: Urban Design Unit, City of Detroit, P&DD*



*Cistern - Rainwater  
harvesting for  
landscape use  
Source: LID Urban  
Design Tools, [www.lid-  
stormwater.net](http://www.lid-<br/>stormwater.net)*



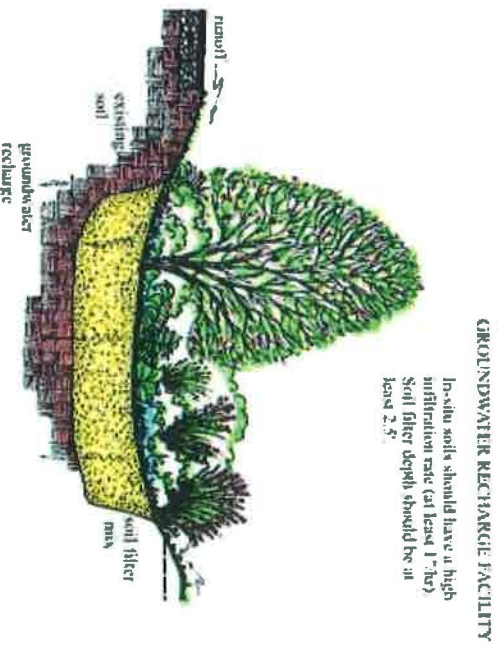
*Green roof garden -  
Chicago City Hall Urban  
Heat Island Initiative  
Source:  
[www.roofmeadow.com](http://www.roofmeadow.com)*

<sup>27,28</sup> U.S. Green Building Council, LEED® Standards

13. Incorporate design elements which reduce volume and contamination of urban runoff from existing residential and non-residential land uses and from future development and redevelopment projects.
14. Maximize green open space for onsite percolation of runoff.
15. Incorporate site design elements to ensure that stormwater is contained or conveyed so as not to become contaminated by pollutants in the process of drainage or containment.
16. Adopt the following best management practices for projects under construction:
  - Contain all sediment, runoff and construction debris and waste until a proper handling is implemented.
  - Install temporary sediment control where needed in order to prevent or contain sediment or other construction debris or waste from being tracked off the site.
  - Remove any remnants of dragged sediments or other construction materials immediately.
  - Cover soil piles until used or removed.
  - Refrain from washing construction equipment or vehicles adjacent to construction sites.
  - Use drainage controls: detention ponds, infiltration pits, or sediment ponds, dikes, ditches, and vegetated filter berms.



Silt fence installed at construction site  
 Source: U.S. EPA, 2008, NPDES, Construction Site Stormwater Runoff Control



Bioswale section showing subsurface layers  
 Source: LID Urban Design Tools (<http://www.lid-stormwater.net>)



Parking lot bioswale, Hubble Middle School, Warrenville, IL  
 Source: City of Warrenville, IL (<http://www.warrenville.il.us>)

## Green Initiatives for Stormwater Management & Water Pollution Prevention

### Detroit Watershed

Develop a watershed plan covering boundaries of Detroit not currently covered by existing regional watershed plans (e.g. the Rouge River and Clinton River Watersheds).

### Green Building Program

Establish a green building program for the City based on the Leadership in Energy and Environmental Design-LEED® rating system of the U. S. Green Building Council. Encourage the development community to adopt the rating system for green building practices and sustainable development strategies for new building construction, maintenance and operation of existing buildings and for sustainable neighborhoods (LEED for Neighborhood Development, LEED-ND).

### Detroit Green Roof Initiative

Support the creation of a Detroit Green Roof Initiative. Currently, there is a proposed project ready to be implemented. This is a public-private sponsored demonstration project that illustrates the benefits of green roofs in stormwater management (absorbing 60-80% of the stormwater that falls on the roof). The subject of the project is greening a two-acre Old Hudson's site over the current Premier Parking Garage in Downtown Detroit (proposed and designed by the Urban Design Unit of the City of Detroit Planning & Development Department in 2009).

### Zoning Ordinance Overlay District

Establish zoning ordinance designation for special purpose district such as green zone and green overlay areas to accommodate urban agriculture, local farming, and new technologies such as on-site water use and recycling or food production.



Proposed Detroit Watershed  
Source: Alliance of Rouge Communities



Greening the Old Hudson's Site, Woodward Avenue, Detroit  
Source: Urban Design, P&DD, City of Detroit; Google Earth

## Rain Garden Planting Initiative

Initiate a rain garden program (e.g., Rain Garden Initiative). This program would include both private properties and municipal-owned lands, including rights-of-way and parking lots. Rain gardens, which are full of native plant species, collect water through shallow depressions in the front, rear or side yard. In addition to improved aesthetics, polluted runoff is reduced as the rainwater instead filters through the ground.

## Downspout Disconnection Program

Support the Downspout Disconnection Program. State law requires property owners in all cities in Michigan to disconnect downspouts leading to the storm sewer system by June 30, 2012. Currently, the DWSD is partnering with the Greening of Detroit to provide workshops and free materials on how to disconnect downspouts. This program should also encourage property owners to use rain barrels and rain gardens to capture and use stormwater. This will reduce the amount of water going to the sewage treatment plants during heavy rains and will help prevent sewage overflows.

## Community Initiated Green Infrastructure Projects

Support community-based green infrastructure projects such as the Lower Eastside Action Plan project (LEAP).



Rain barrel  
Source: [bnrkeeper.org](http://bnrkeeper.org)



Rain garden  
Source: [www.raingardennetwork.com](http://www.raingardennetwork.com)



Vegetated roof surface, green roof Courtesy of LiveRoof®



Downspout disconnect modification  
Source: <http://www.granbuilding.ca>

*"A healthy ecology  
is the basis for a healthy economy."*

*~Claudine Schneider,  
The Green Lifestyle Handbook*



*Detroit River*  
Source: <http://www.water-technology.net>

## 06

### Water Innovation, New Technologies, Systems & Wastewater Management

The Detroit Water and Sewerage Department (DWSD) owns and operates a vast water and wastewater treatment and distribution network. DWSD directly serves residents and businesses within Detroit and numerous municipalities throughout the Southeast Michigan region. Detroit Waste Water Treatment Plant (DWWWTP) treats wastewater of 77 communities, including Detroit – that is one-third of Michigan's population. The DWSD sewer system has the capacity to provide full secondary treatment as mandated by the Federal Clean Water for up to 930 million gallons per day ("mgd"), with additional capacity to provide primary treatment of peak wet weather flows up to 1.7 billion gallons per day ("bgd"). This capacity far exceeds the typical dry weather flow rates observed at the wastewater plant which are on the order of 650 mgd. Since the Service Area for the System is not projected to grow substantially over the near future, this means that there is more than enough treatment capacity to fully serve the needs of Southeast Michigan. However, there is a real need to optimize the system so that the ongoing costs meet the region's ability and willingness to pay for the critical commodity of water and adequate treatment of wastewater. In addition, with awareness of water

sustainability, there is a possibility that water use and need for wastewater treatment could decline. This is due to end users (e.g., households, businesses, industries) focusing on minimizing water use and pursuing innovative approaches for water reuse and alternative storm water management practices and strategies that do not require treatment through costly infrastructure and waste water treatment facilities. Consequently, there is an urgent need for Detroit to take a hard look at the current system and technologies in use and consider alternative system approaches with technologies and innovations that will deliver long term availability of water and wastewater treatment that are economically and environmentally sustainable, and ensure equity in terms of access, pricing, and quality of service.

#### **PRINCIPLES TO APPLY**

Rationalizing the water and wastewater system for long-term sustainability may be accomplished by starting with the following three simple principles:

- ➔ **Minimize**
- ➔ **Optimize**
- ➔ **Apply Best Technologies**

#### **System Elements to Consider:**

In order to fully address system challenges and opportunities, each element of the system should be reviewed, and, to the degree possible, the system as a whole should be reviewed to identify possible “competing” impacts of optimizing single system elements. For the purposes of this document, recommendations are provided for the following elements of the system:

- A. Water Intake and Treatment for Potable Water**
- B. Water Distribution and Pumping**
- C. Wastewater Collection, Treatment and Disposal**

#### **RECOMMENDATIONS**

##### **A. Water Intake and Treatment for Potable Water**

- ➔ **Minimize:** Adopt water conservation policies and guidelines for new construction, and in maintenance and operation of existing facilities.
- ➔ **Optimize:** Institute best practices for intake assessment to characterize incoming water and treatment requirements based on current water quality versus average or worst case water quality.
- ➔ **Best technologies:** Use ultra-violet (UV) and other energy-based disinfection technologies to minimize the use of chemicals for disinfection.



*Leib Screening and Disinfection Facility, Detroit, MI  
Source: Detroit Water & Sewerage Department*

##### **B. Water Distribution and Pumping**

- ➔ **Minimize:** Use of leak detection technologies and metering systems to find and minimize losses through leaks.

➔ **Optimize:** Use advanced pumping system and hydrology or hydraulics models to:

- Identify appropriate points for leak improvement.
- Develop real time pumping operation configurations to minimize pumping requirements and energy used.
- Reduce operating costs, capital investment and debt by phasing out plants that have a high cost per gallon, are inefficient or need significant revamp. Focus capital investment on strategic facilities needed for the base load to meet demand expected in the region.
- Develop alternative scenarios that create separate pumping regions and/or local pumping districts.

#### Alternative Scenario Examples

**High Ground Storage:** Regional topography is relatively flat so that all the water has to be pumped using electrical energy from the low lands to the furthest reaches of the system. With the current system configuration, water is pumped when there is demand. An alternative approach is to use high ground storage. The uphill pumping to storage basins at the far reaches of the system would occur during the off peak hours (at lower electrical rates) and then the system could use gravity based pressure feed from the higher elevations to the customer communities. This would not help the low-lying communities (e.g., Grosse Pointe and Downriver) but could reduce energy use for the system as a whole.

**Local Water Districts:** For neighborhoods where demand is low and too costly to maintain their antiquated infrastructure, consider alternative decentralized water and wastewater treatment systems that are essentially "off grid". For example, where new system construction is the only other option for ensuring reliability, the cost and effectiveness of small packaged units for water treatment

(e.g., mobile reverse osmosis technologies) may be more competitive in these areas.

#### ➔ **Best technologies:**

- Use metering, leak detection and pumping system modeling to support the ideas described in the Minimize and Optimize sections above.
- Use energy efficient pumping technologies, appropriate preventive maintenance and energy management operating techniques to minimize energy used for pumping.
- Explore using waste heat from existing pumping stations and water plant pumping systems as a useable commodity for economic development (manufacturing or agricultural processing that requires heat) and/ or local district heating.



*Detroit Water & Sewerage Department - Capital Improvement Program  
Source: <http://www.pmaconsultants.com>*

### C. Wastewater Collection, Treatment and Disposal

Wastewater treatment uses a significant amount of energy and has the potential for effluents (liquid waste) to negatively impact the environment if not treated properly. In addition, treatment and ultimate disposal of biosolids use a significant amount of energy (for pumping, de-watering, heating, incineration) and require solid waste disposal. Systematic review of wastewater and biosolids treatment provides an opportunity for innovation and reducing costs, a significant concern for the City of Detroit.

- ➔ **Minimize:** Alternative approaches to stormwater management and end user incentives, as described above, are the best ways to minimize wastewater collection and treatment requirements.
- ➔ **Optimize:** The overall opportunity is to optimize the energy requirements for moving (e.g., pumping and transport), treating and disposing of wastewater and the biosolids associated with wastewater treatment, with the potential energy and organic content recovery benefits if alternative approaches and technologies were to be utilized.
- ➔ **Best technologies:** There are many examples of converting biosolids to biogas using the methane in a cogeneration plant for electricity and district heating using hot water (much more efficient than steam). The plants in Europe are highly efficient and eliminate most of the landfill and odor issues. Biosolids conversion to biochar through pyrolysis is another method of using wastewater for agricultural soil enhancement and/or replacement for coal in power plants with a reduction in carbon footprint.



Detroit's Wastewater Treatment Plant (WWTP)

Source: [http://www.water-technology.net/projects/detroit\\_waste2/](http://www.water-technology.net/projects/detroit_waste2/)



Source: Wikipedia, The Free Encyclopedia (<http://en.wikipedia.org/>)  
Accessed 26 March 2012



*"To halt the decline of an ecosystem, it is necessary to think like an ecosystem."*

~Douglas P. Wheeler, EPA Journal, September-October 1990

07

## Commercial Agriculture & Food Processing

Detroit is taking a hard look at commercial farming and food processing as viable urban land uses. Recognizing that agriculture is a huge consumer of water, representing 80% of U.S. freshwater resources and 70% worldwide,<sup>29</sup> the City is taking the lead in developing policies that will promote conservation, use/re-use strategies and sound growing practices centered on our most precious resource – water.

Along with the increasing interest in community gardens and local food production, there are great opportunities for business establishment and expansion into this burgeoning sector. However, taking community gardens to a commercial scale for substantial job creation requires rules that address proper water conservation, use and reuse. And as more opportunities arise to establish enterprises such as small aquaculture industry—including the possibility of converting unused buildings to fisheries--the City of Detroit can adopt cutting edge policies to control water in an environmentally friendly manner.



Urban Farming - City Farm, Chicago  
Photo: Linda, 2008, Urban Agriculture. Wikipedia  
[http://en.wikipedia.org/wiki/Urban\\_agriculture](http://en.wikipedia.org/wiki/Urban_agriculture)

<sup>29</sup> Pimentel, D., B. Berger, et al. (2004-10). "Water Resources: Agricultural and Environmental Issues". *BioScience* 54 (10): 909-918. doi:10.1641/10006-3588(2004)054[0909:WRAAEIJ]2.0.CO;2. (Retrieved 7 March 2012) [http://ecommons.cornell.edu/bitstream/1813/3521/pimentel\\_report\\_04-1.pdf](http://ecommons.cornell.edu/bitstream/1813/3521/pimentel_report_04-1.pdf)

## Background Information and Challenges

Since Detroit has a combined sewer system and the desire is there to promote sewer separation, the City of Detroit should consider the opportunity that commercial agriculture and food processing provides to work with DWSD to transform large areas of open space into a platform for food system induction and growth. While the technical side of this separation is engineering based, other considerations require thought as the process moves forward:

- ➔ Use of pesticides and herbicides
- ➔ Use of petroleum based and other man made fertilizers
- ➔ Food processing byproducts including waste
- ➔ Livestock byproducts including waste
- ➔ Water run-off from any type of commercial farming venture that could potentially add strain to the current sewer system

As the City of Detroit moves to permit commercial agriculture uses, caution should be taken and deference given to projects that utilize sound environmental practices.<sup>30</sup> The regulatory mechanism should require all commercial agriculture projects to address:

- ➔ How they meet guidelines set for water conservation
- ➔ How project plans promote storm sewer separation
- ➔ How their practices translate into educational and economic opportunities for citizens to grow and prosper, including the potential for exporting Detroit-based commercial farming and food processing manufacturing systems to other cities in the US and overseas



*Urban agriculture  
Photo: The Greening of Detroit  
<http://detroitagculture.net/>*

<sup>30</sup>Alex Wilson, "Growing Food Locally: Integrating Agriculture into the Built Environment", *Environmental Building News*, Vol.18, No.2, Feb. 2009

## RECOMMENDATIONS

1. Encourage locally adapted small-scale irrigation and plant production methods and schemes to conserve water. Examples include:
  - Use low cost water-saving technologies such as underground and drip irrigation that increase water efficiency and allow safe use of low quality water resources.
  - Encourage drip irrigation infrastructure that can be manufactured from existing local products, such as using porous ceramic containers or pipes with holes in which water is dripped onto the soil above the root zone only. Drip irrigation practices offer the opportunity of spot irrigating and fertilizing when using wastewater, often utilizing a third of the water used in conventional irrigation practices. Drip irrigation also offers the added benefit of minimizing the contact of the wastewater and the crop, decreasing the likelihood of contamination.
  - Salt-tolerant crops: brackish water can be used in localized irrigation schemes.
  - Use rainwater harvesting methods that hold great potential for urban agriculture, but remain underused practices. Harvesting methods include rain barrels, retention ponds, rain gardening techniques and swales.
2. Encourage sustainable landscape practices. For example, good agriculture and forestry practices can contribute to sound watershed management, safeguarding water catchments and reducing runoff and flooding. Forestry also provides a source of natural soil remediation and a source for creating jobs.
3. Promote non-till strategies to protect against erosion and water runoff.

4. Make use of closed loop systems (i.e. aquaponics) that connect aquaculture with hydroponics. For example, reusing the nutrient-rich water that plants need to thrive on, and returning it back to the fish totally re-oxygenated.
5. Utilize treatment systems that remove water from organic matter as part of the waste treatment process which its byproducts include heat and energy. The water is pure enough to be reused on farming operations or returned to the existing sewer system for treatment.
6. Make use of urban horticulture and micro-gardens such as simple hydroponics (SH) to add economic and nutritional benefits by securing year-round supply of fresh produce to Detroit's populations.
7. SH promotes water savings in recycling and decontamination of water and will facilitate plant growth in areas with marginal conditions for crop production, such as adverse climate, unproductive soil, space limitations, water scarcity and pest occurrences.
8. SH generates local markets in supply food chains. SH can be considered an effective alternative to be integrated with programs for food security and nutrition for poor populations living under poverty conditions.
9. Promote organic and natural farming techniques that protect the natural watershed.
10. Implement restrictions in the size of the agriculture sites – this is one method to limit the run-off most associated with farms that are larger than 100 acres.

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ADDITIONAL REFERENCES

Nina Mukherji, Alfonso Morales, "Zoning for Urban Agriculture", American Planning Association, *Zoning Practice*, (March 2010)  
<http://www.planning.org/zoningpractice/2010/pdf/mar.pdf>



Drip irrigation  
 Source: <http://ga.water.usgs.gov/edu/frdrip.html>



Urban farming in Detroit, SEED Wayne  
 Source: <http://www.ceisias.com/article/urban-agriculture-career-path/>

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Joel Thibert, "Making Local Planning Work for Urban Agriculture in the North American Context: A View from the Ground", *Journal of Planning Education and Research*, (19 Jan. 2012) doi: 10.1177/0739456X11431692

## Education Programs & Community Outreach

### RECOMMENDATIONS

1. Provide direct education to communities on water issues such as conservation, efficiency, pollution prevention and the hydrologic cycle.
2. Establish a website link on the City home page that is user friendly and educational, with an interesting and engaging video presentation link.
3. Establish a manual or brochure with City water guidelines readily available in City offices, online and with partner organizations.
4. Offer free or low cost household water efficiency audits to senior citizens and others to advise on improving household water efficiency.
5. Partner with schools to provide project workshops that could be coordinated with Earth Day events.

Community outreach is an integral component of the Detroit Water Agenda 2012. Educational programs that increase public awareness and encourage conservation empower citizens to become active environmental stewards.

There are numerous web-based programs and valuable information about water-related issues online. This document offers some of these resources as a starting point to educate and engage citizens, and increase the community's overall awareness of water conservation and water pollution prevention.



Children's "A Watershed"  
Illustration  
Source: Zoom School  
([www.enchantedelearning.com](http://www.enchantedelearning.com))

6. Partner with non-profit organizations to provide educational outreach and design/technical assistance to communities such as workshops on how to build a rain garden, roof garden, native species planting and sustainable landscaping.
7. Provide educational presentation events at public libraries; provide water resource conservation informational flyers and tabletop displays and exhibits.
8. Make available rain barrels at a reduced cost to residents to purchase and install as part of the Downspout Disconnection Program.
9. Organize a broad and aggressive media campaign to increase public awareness of water conservation using public service announcements (PSA), print advertising, transit advertising (DOT/SMART buses and People Mover), billboards and radio and television media spots.



*Transit advertising for water conservation, Sacramento, CA  
Source: CA Water Awareness Campaign*



*Valerie and Bruce Burns stand next to their newly planted rain garden designed by Friends of the Rouge  
Photo: Sierra Club*



*Rain Barrel Workshop: Residents from the Northend Christian Community Development Corp. make a rain barrel from an old pepper barrel  
Photo: Sierra Club*



*Urban farming in Detroit  
Photo: Greening of Detroit (<http://mhabitat.com/wp-content/blogs.dir/1/files/2012/01/greening-detroit-22.jpg>)*

## Resources

- Alliance for the Great Lakes  
<http://www.greatlakes.org/home>
- Alliance of Rouge Communities  
<http://www.allianceofrougecommunities.com/>
- American Water Works Association  
<http://www.awwa.org/index.cfm>  
<http://drinktap.org/consumerdnn/Home/tabid/53/Default.aspx>
- California Coastal Commission  
General Nonpoint Source/Urban Runoff Information  
<http://www.coastal.ca.gov/ra/docs/bmp.pdf>
- Chicago Water Agenda 2003  
<http://cis.uchicago.edu/outreach/summerinstitute/2008/documents/wateragenda.pdf>
- City of Chicago  
[http://www.cityofchicago.org/city/en/depts/water/supp\\_info/conservation.html](http://www.cityofchicago.org/city/en/depts/water/supp_info/conservation.html)
- Detroit Black Community Food Security Network and D-Town Farm  
<http://detroitblackfoodsecurity.org/index.html>
- Detroit Water & Sewerage Department (DWSD)  
<http://www.dwsd.org/>
- Downriver Linked Green Initiative  
<http://www.downrivergreenways.org/home>  
<http://www.downrivergreenways.org/home/reports-and-products>
- Earthworks Urban Farm  
<http://cskdetroit.org>
- ECO-Adapt  
<http://www.ecoadapt.org/about>
- Encyclopedia of Earth  
[http://www.eoearth.org/article/Surface\\_runoff](http://www.eoearth.org/article/Surface_runoff)
- Environmental Protection Agency – Water/Great Lakes  
<http://water.epa.gov/>  
<http://www.epa.gov/dlnpo/>  
<http://www.epa.gov/watersense/>
- Friends of the Detroit River  
<http://www.detroitriver.org/>
- Friends of the Rouge River  
<http://www.therouge.org/>
- Great Lakes Commission  
<http://www.glc.org/>  
<http://www.glc.org/about/glbc.html>
- Great Lakes Echo  
<http://greaillakesecho.org/>
- Great Lakes Information Network  
<http://www.great-lakes.net/lakes/ref/lakefact.html>
- International Biochar Initiative  
<http://www.biochar-international.org/biochar>
- Lower Eastside Action Plan (LEAP)  
<https://sites.google.com/site/leapdetroit/>

## Resources

- Metropolitan Affairs Coalition – Heritage Water Trail  
Greater Detroit American Heritage River Initiative  
<http://www.mac-web.org/Projects/HeritageWaterTrail.htm>  
<http://www.mac-web.org/Projects/GDAH/R/>
- Michigan Citizens for Water Conservation  
<http://www.savemewater.org/>
- Michigan Green School Initiative  
<http://michiangreenschools.us/>
- Michigan Sea Grant  
<http://www.miseagrant.umich.edu/about/index.html>
- Michigan Water Environment Association  
<http://www.mi-wea.org/>
- National Association of Clean Water Agencies  
<http://www.nacwa.org/>
- National Association of Conservation Districts  
<http://nacdn.net.org/about/index.phtml>  
<http://nacdn.net.org/education/resources/water/>
- Natural Resources Defense Council  
[www.nrdc.org/](http://www.nrdc.org/)  
<http://www.nrdc.org/water/default.asp>
- People's Water Board Coalition  
<http://peopleswaterboard.blogspot.com/>
- Prince George's County, Maryland, LID Design Strategies  
[http://www.lowimpactdevelopment.org/pubs/LID\\_National\\_Manual.pdf](http://www.lowimpactdevelopment.org/pubs/LID_National_Manual.pdf)
- SEED Wayne  
<http://www.clas.wayne.edu/seedwayne/>
- Sierra Club  
[www.sierraclub.org](http://www.sierraclub.org)
- Southeast Michigan Council of Governments (SEMCOG)  
<http://www.semcoq.org/>
- Southwest Detroit Environmental Vision  
<http://sdevweb.org/>
- State of Michigan – Department of Environmental Quality  
<http://www.michigan.gov/deq/0,4561,7-135-3313---00,html>
- The Culver Company  
<http://www.iea.com/community/education/efficiency/wisely/index.html>
- The Greening of Detroit  
<http://detroitagriculture.net/>
- United Nations Development Programme – Human Development Report Office  
<http://hdr.undp.org/en/reports/global/hdr/2011/download/>
- Urban Farming  
<http://www.urbanfarming.org/welcome.html>
- U.S. Geological Survey  
<http://www.usgs.gov/>
- West Michigan Environmental Action Council  
<http://www.raingardens.org/>

Topic Number		Water Agenda Topic	
4		<b>Water Resource Conservation</b>	
Recommendations		Possible Actions	
4.1	Continue the work of the WSC as a task force made up of Detroit citizens, government agencies, environmental community and businesses to formulate policies and guidelines for a water resource conservation program, water efficiency, stormwater management and water pollution prevention program.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>	
4.2	Develop policies and guidelines for existing parcels and newly developed sites that promote an increased capacity for the land to absorb stormwater events, reduce urban runoff rate and volume and to prevent water pollution.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>	
4.3	Develop guidebooks and brochures highlighting the savings from basic 'housekeeping' strategies for water conservations.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>	
4.4	Support the Great Lakes Compact.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>	
4.5	Develop water conservation guides for residential, institutional, commercial, and residential users. Include information about the connection between water and energy (e.g., energy is required to pump, treat and convey water).	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>	



4.6	Advance sustainable development strategies and green building design in the city by using standards similar to those by the U.S. Green Building Council (i.e., LEED and Sustainable Sites Initiatives- Sites).	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
4.7	Link water conservation programs with incentives and/or with permitting process (e.g., mandating water use reductions).	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
4.8	Use water efficient plumbing fixtures and fixture sensors for toilets, urinals, showers and faucets to control water flow.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
4.9	Promote the use of captured rainwater harvesting for irrigation and non-potable uses.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
4.10	Promote the use of efficient landscaping practices in irrigation.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
4.11	Encourage wastewater recycling for reuse.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
4.12	Promote the use of drought resistant and native plants that do not require regular irrigation.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
4.13	Establish a program for municipality treated wastewater for non-potable uses such as landscaping.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
4.14	Provide financial incentives to the development community to promote water efficient systems and technologies in new and existing buildings.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
4.15	Promote an integrated approach to development that conserves water,	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> </ul>

	manages stormwater and prevents water pollution.	o Implementation/other practices
<b>Topic Number</b>	<b>Water Agenda Topic</b>	
<b>5</b>	<b>Stormwater Management &amp; Water Pollution Prevention Alternatives</b>	
<b>Recommendations</b>		<b>Possible Actions</b>
5.1	Promote and encourage the adoption of best practices in stormwater management (BMP's), including low impact development (LID) strategies and green infrastructure alternatives.	<ul style="list-style-type: none"> <li>o Resolution</li> <li>o City policy/codes/ordinances</li> <li>o Implementation/other practices</li> </ul>
5.2	Reduce the area of impervious pavement surfaces by incorporating rain gardens and water retention areas to slow down stormwater runoff and filter stormwater before entering the city sewer system.	<ul style="list-style-type: none"> <li>o Resolution</li> <li>o City policy/codes/ordinances</li> <li>o Implementation/other practices</li> </ul>
5.3	Facilitate and maximize stormwater runoff to pervious areas from parking lots and other impervious pavement for treatment before it enters the sewer system.	<ul style="list-style-type: none"> <li>o Resolution</li> <li>o City policy/codes/ordinances</li> <li>o Implementation/other practices</li> </ul>
5.4	Maximize green open space and porous surfaces on existing and new development sites using 'green' strategies such as permeable pavement, green infiltration strips, gravel beds, berms and green roofs.	<ul style="list-style-type: none"> <li>o Resolution</li> <li>o City policy/codes/ordinances</li> <li>o Implementation/other practices</li> </ul>
5.5	Develop basic guidelines for water conservation and water pollution prevention strategies to support residential household and builder education such as incorporating efficient plumbing fixtures, and downspout	<ul style="list-style-type: none"> <li>o Resolution</li> <li>o City policy/codes/ordinances</li> <li>o Implementation/other practices</li> </ul>

	disconnection in new and existing buildings.	
5.6	Develop basic guidelines for water conservation and water pollution prevention strategies to support residential household and builder education such as incorporating efficient plumbing fixtures, and downspout disconnection in new and existing buildings.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
5.7	Utilize native planting, trees and shrubs to soften hard surfaces or pavement and to link new development to existing green spaces and greenway network.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
5.8	Incorporate stormwater harvesting technologies such as cisterns, stormwater retention, or green roofs and gardens.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
5.9	Enclose and cover services areas such as loading/unloading dock areas, trash areas, vehicle fueling and vehicle wash or equipment storage to avoid contact with and polluting stormwater runoff.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> </ul>
5.10	Prevent sedimentation, soil erosion and waste from construction activities and parking areas from entering the stormwater systems by implementing a soil erosion and sedimentation control plan for all construction sites to comply with the Construction General Permit of the 2003 EPA's requirements for erosion and sedimentation.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
5.11	Implement urban stormwater runoff management strategies that would result in a 25% reduction of stormwater runoff from the two-year, 24-hour design storm.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>

5.12	Incorporate design elements which reduce runoff volume and contamination of urban runoff from existing residential and non-residential land uses and from future development and redevelopment projects.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
5.13	Maximize green open space for onsite percolation of runoff.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
5.14	Incorporate site design elements to ensure that stormwater is contained or conveyed so as not to become contaminated by pollutants in the process of drainage or containment.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
5.15	Adopt the following best management practices for projects under construction:	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
5.15.a	Contain all sediment, runoff and construction debris and waste until a proper handling is implemented.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
5.15.b	Install temporary sediment control where needed in order to prevent or contain sediment or other construction debris or waste from being tracked off the site.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
5.15.c	Remove any remnants of dragger sediments or other construction materials immediately.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
5.15.d	Cover soil piles until used or removed.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
5.15.d	Refrain from washing construction equipment or vehicles adjacent to construction sites.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>
5.15.e	Refrain from washing construction equipment or vehicles adjacent to construction sites.	<ul style="list-style-type: none"> <li>○ Resolution</li> <li>○ City policy/codes/ordinances</li> <li>○ Implementation/other practices</li> </ul>

**Detroit Zoning Ordinances - Audit**

**Articles and Sections that may incorporate stormwater standards or guidelines:**

**Detroit Zoning Ordinance relevant Articles and Sections include:**

**ARTICLE XI. SPECIAL PURPOSE ZONING DISTRICTS AND OVERLAY AREAS:**

**DIVISION 3. P1 OPEN PARKING DISTRICT**

Sec. 61-11-41 – Description

**DIVISION 12. SD4-SPECIAL DEVELOPMENT DISTRICT, RIVERFRONT MIXED USE**

Sec. 61-11-211– Description; purpose

Sec. 61-13-81. P1 District Setback requirements.

**ARTICLE XIV. GENERAL DEVELOPMENT STANDARDS:**

**DIVISION 1. OFF-STREET PARKING, LOADING AND ACCESS; Subdivision A, B, C, F, I**

Sec. 61-14-1– Purpose

Sec. 61-14-7 - Off-street parking exemptions

Sec. 61-14-21 - Off-Street Parking Schedule A, B and C

Sec. 61-14-104 – Alternative parking plan review and approval procedure and criteria

Sec. 61-14-108 – Eligible alternatives

Sec. 61-14-141 – Off-Street Parking Area Design: General design principles

Sec. 61-14-143 – Layout and setback

Sec. 61-14-145 – Appearance

Sec. 61-14-146 – Drainage

Sec. 61-14-148 – Maintenance

Sec. 61-14-149 – Traditional Main Street overlay areas

Sec. 61-14-150 – Surfacing

Sec. 61-14-153 – Wheel stops and curbs

Sec. 61-14-154 – Pedestrian walkway

Sec. 61-14-155 – Landscaping and screening

## Detroit Zoning Ordinances - Audit

### Articles and Sections that may incorporate stormwater standards or guidelines:

#### DIVISION 2. LANDSCAPING, SCREENING AND FENCING; Subdivision A, B, C, D

##### Sec. 61-14-191 – Purpose

*“The landscaping and screening standards of this division are intended to do the following:*

*Encourage the planting of appropriate new vegetation and the preservation of existing vegetation to enhance the built environment and to protect and sustain the natural environment;*

*Reduce potential nuisances by requiring a visual screen between uses to mitigate the adverse effects of wind and air turbulence, heat, noise, motor vehicle headlight glare and other artificial light intrusion, and other adverse impacts associated with adjoining or nearby uses; and*

*Improve the appearance of on-premises parking, vehicular-use areas, and property abutting public rights-of-way.”* Source: Detroit Zoning Ordinance.

##### Sec. 61-14-192 – Applicability

##### Sec. 61-14-206 – Ground treatment

##### Sec. 61-14-207 – Installation, maintenance, and replacement

##### Sec. 61-14-208 – Irrigation

##### Sec. 61-14-221 – Right-of-way screening

##### Sec. 61-14-223 – Interior landscaping

##### Sec. 61-14-225 – Parking structures

##### Sec. 61-14-231 – Open space landscaping

##### Sec. 61-14-232 – Landscaping of required setbacks

##### Sec. 61-14-247 – Incentives to preserving existing trees

##### Sec. 61-14-248 – Alternative compliance

##### Sec. 61-14-249 – Alternative compliance; procedure

##### Sec. 61-14-250 – Alternative compliance; review criteria

*“In reviewing proposed Alternative Compliance Landscape Plans, favorable consideration shall be given to exceptional landscape designs that attempt to preserve and incorporate existing vegetation and to plans that demonstrate innovative design and use of plant materials.*

## Detroit Zoning Ordinances - Audit

### Articles and Sections that may incorporate stormwater standards or guidelines:

*Alternative Compliance Landscape Plans may be approved upon a finding that any of the following circumstances exist on the proposed building site or surrounding properties:*

- 1. Natural land characteristics or existing vegetation on the proposed development site would achieve the intent of this division; or*
- 2. Innovative landscaping or architectural design is employed on the proposed development site to achieve a screening effect that is equivalent to the screening standards of this division; or*
- 3. The required landscaping or screening would be ineffective at maturity due to topography or the location of improvements on the site; or*
- 4. The proposed alternative represents a plan that is as good as or better than a plan prepared in strict compliance with the other requirements of this division.” Source: Detroit Zoning Ordinance.*

### DIVISION 3. ARCHITECTURAL AND SITE DESIGN STANDARDS; Subdivision A,B,D,E,F

**DETROIT REGIONAL CONVENTION FACILITY AUTHORITY**



**COBO SQUARE & WASHINGTON BOULEVARD**  
**MODIFICATIONS**

**6 DECEMBER 2013**



## COBO SQUARE MODIFICATIONS

The City Planning Commission originally approved the creation of a "Cobo Square" plaza north of Cobo Arena. The public open space will serve as a front door to Cobo Center, as an open space related to the new Food Court being completed in Cobo Arena, as an activity space that could relate to the new animated display being constructed in 2014 as a main canopy on the east side of Cobo Center (directly over the Lodge Freeway as it passes under Cobo Center), as an activity space that may relate to activities on Hart Plaza, and as an activity space contiguous with the east terrace opening off the new Cobo Center Grand Riverview Ballroom.

In the design submitted to the City Planning Commission, Civic Center Drive was shown relocated from its current location being a disruptive ramp directly north of Cobo Arena to a revised location connecting directly due north to Jefferson Avenue Lodge Service Drive. That reconfiguration had been approved in writing by the City of Detroit Department of Public Works, and the Traffic Engineering Department. As a result of that approval the Michigan Department of Transportation had agreed to provide an approximately \$2.5 million grant for the street work. Construction documents were developed and the work was successfully bid. However at the time of commencing construction work the City of Detroit Department of Public Works withdrew its approval.

The Detroit Regional Convention Facility Authority (DRCFA) felt that the Cobo Square Plaza was a vital element in the overall improvements at Cobo Center and in potential user perception of the quality of the Cobo Center environment. Retaining the Civic Center Drive ramp in front of Cobo Arena would destroy that concept, and in turn the image of the renovated Cobo Center. Therefore DRCFA looked at alternatives. The preferably alternative is to create Civic Center Drive as a cul-de-sac. DRCFA agreed to dedicate a corner of the DRCFA property in Atwater Garage to the right-of-way necessary to accomplish a turn suitable for trucks, buses and automobiles. DRCFA also agreed to make the necessary structural changes that include column removal to create the required clear space. Discussions with MDOT have indicated MDOT in principle will consider continuing to fund the street changes as originally agreed and in the amount originally agreed.

From an urban design consideration, DRCFA believes the proposed modification is an improvement. It creates a more pedestrian-friendly link between Hart Plaza and the new Cobo Square by elimination of the necessity to cross a street.

Also since the original approval and responding to comments in the original review (and in the Council resolution), DRCFA has extended the improved surface treatment along Washington Boulevard.

TRUE COPY CERTIFICATE

Form C of P-16-08

STATE OF MICHIGAN

City of Detroit

CITY CLERK'S OFFICE, DETROIT

JANICE M. WINFREY, City Clerk of the City of Detroit, in said

STATUS, do hereby certify that the annexed paper is a TRUE COPY OF A RESOLUTION

Approved by the Emergency Manager for the City of Detroit on

August 14, 2013

in accordance with EM Order No. 3 dated April 11, 2013.

as appears from the Journal of said City Council in the office of the City Clerk of Detroit, aforesaid; that I have compared the same with the original, and the same is a correct transcript therefrom, and of the whole of each original.

In Witness Whereof, I have hereunto set my hand and affixed the corporate seal of said City, at

Detroit, this 27th

day of September, A.D. 2013

[Signature] CITY CLERK

City Planning Commission

Honorable City Council, June 28, 2013
The City Planning Commission (CPC) has reviewed the request of SDC, Inc. on behalf of the Detroit Regional Center (CPC) to modify the plans approved for Cobo Center for the modification and expansion of the plaza on the south side of West Jefferson Avenue and the intersection of West Johnson Avenue and West 14th Avenue. (RECOMMEND APPROVAL)

The City Planning Commission (CPC) is in receipt of a request from SDC, Inc. on behalf of the Detroit Regional Center (CPC) to modify the plans approved previously by City Council on July 19, 2011, for Cobo Center. The requested change is for the modification and expansion of the plaza on the south side of West Jefferson Avenue and in the former Washington Boulevard right-of-way.

As you know, the PC (Public Center District) zoning classification in which Cobo Center Drive is located, with City Council approval of the location and design of any exterior changes following the review and recommendation of CPC and the Planning and Development Department, requires that the PC (Public Center District) zoning classification be modified to PC-2 (Public Center District - Medium Density Office) as shown in the attached map.

Related to this request is the August 24, 2012 (Petition 22-09), also from SDC, Inc. on behalf of the DRCPA, to rezone Cobo Center Drive to commercial use without parking and passing through Cobo Center's Alameda Parking Garage. City Council may wish to request from the Department of Public Works the status of this petition.

PROPOSED DEVELOPMENT

As part of the modification of the Alameda Parking Garage, the DRCPA seeks to relocate Cobo Center Drive to a point further east, where it would connect directly to West Jefferson Avenue at a right angle. This would allow the east end of the plaza to be wider and larger than what was originally approved. The modified plaza would also include a circular drive surrounded with a sculpture in the center. The Department of Public Works has been involved in these discussions.

The proposal calls for a decorative paving and artificial turf for the plaza east of Washington Boulevard, with plantings along the perimeter. The proposed edge, where the relocated Cobo Center Drive would connect to West Jefferson Avenue, decorative light pylons are shown in the plan. The proposed east end of the former arena, now a conference center, would also be a landscaped terrace, with artificial turf along the east edge. Previously, this area was shown as a paved open grass lawn.

In accordance with the PC provisions of the Zoning Ordinance (Sections 91-11-17), reviews of proposed changes should include a review of the proposed changes to the street, with the analysis following in the plan.

(1) The proposed development should reflect applicable policies stated in the Detroit Regional Center Master Plan. The City Council may wish to request from the Emergency Manager for the City of Detroit a list of convention attractions in one of the great

(2) Scale, form, massing and density should be appropriate to the return of the project and relate well to surrounding development. The study, massing and density of outdoor spaces will hopefully draw convention attendees outside and create a gathering space.

(3) The proposed development should be in terms of land use, general appearance and function and should not adversely affect the value of adjacent properties. The proposed plaza and right-of-way modifications should improve access to the adjacent UAW-Ford Programs Center building.

(4) Vehicular and pedestrian circulation facilities should be adequately provided for the proposed development. The proposed plaza and right-of-way modifications should be carefully planned and controlled. The City Center redesign team is currently reviewing the proposed plaza and right-of-way modifications and will be providing a final report to the City Council.

(5) Adequate public and private open spaces should be provided for the proposed development. The proposed plaza and right-of-way modifications should be carefully planned and controlled. The City Center redesign team is currently reviewing the proposed plaza and right-of-way modifications and will be providing a final report to the City Council.

(6) Adequate public and private open spaces should be provided for the proposed development. The proposed plaza and right-of-way modifications should be carefully planned and controlled. The City Center redesign team is currently reviewing the proposed plaza and right-of-way modifications and will be providing a final report to the City Council.

(7) Adequate public and private open spaces should be provided for the proposed development. The proposed plaza and right-of-way modifications should be carefully planned and controlled. The City Center redesign team is currently reviewing the proposed plaza and right-of-way modifications and will be providing a final report to the City Council.

The proposed modifications appear to be in compliance with the PC-2 zoning classification. The Department of Public Works is currently reviewing the proposed modifications and will be providing a final report to the City Council.

The CPC has completed its review of the proposed modifications and has recommended approval of them. The proposed modifications appear to be in compliance with the PC-2 zoning classification. The Department of Public Works is currently reviewing the proposed modifications and will be providing a final report to the City Council.

RECOMMENDATION

At its June 20, 2013 meeting, the CPC recommended approval of the proposed modifications. The City Council is requested to approve the proposed modifications and to request from the Emergency Manager for the City of Detroit a list of convention attractions in one of the great

1. That, to ensure that the radial elements shown in the vehicle drop-off area are fully expressed, the PC-2 zoning classification be modified to PC-2 (Public Center District - Medium Density Office) as shown in the attached map.

2. That the traffic pattern caused by the proposed modifications be reviewed and approved by the City Council's Department prior to City Council's approval.

Attached hereto is the resolution for City Council's consideration. Staff also recommends the City Council request the Department of Public Works to review the proposed modifications and to request from the Emergency Manager for the City of Detroit a list of convention attractions in one of the great

By Council Member:
Whereas, SDC, Inc. (SDC) of the Detroit Regional Convention Facility Authority, seeks approval of the proposed modifications to the PC-2 zoning classification of the Detroit Regional Center (CPC) to modify the plans approved for Cobo Center for the modification and expansion of the plaza on the south side of West Jefferson Avenue and in the former Washington Boulevard right-of-way.

Whereas, The building is subject to provisions of Sections 91-11-16, the PC (Public Center District) zoning classification of the Detroit Regional Center (CPC) to modify the plans approved for Cobo Center for the modification and expansion of the plaza on the south side of West Jefferson Avenue and in the former Washington Boulevard right-of-way.

Whereas, Both the Planning and Development Department and the City Planning Commission have reviewed the proposed modifications and have recommended approval of them.

Resolved, That the Detroit City Council approve the proposed modifications to the PC-2 zoning classification of the Detroit Regional Center (CPC) to modify the plans approved for Cobo Center for the modification and expansion of the plaza on the south side of West Jefferson Avenue and in the former Washington Boulevard right-of-way.

Be it further resolved, That the Department of Public Works, the Planning and Development Department, and the City Planning Commission be requested to review the proposed modifications and to request from the Emergency Manager for the City of Detroit a list of convention attractions in one of the great

Adopted as follows:
Council Members:
Mayor:
City Clerk:
Approved:

Center's Atwater Parking Garage. City Council may wish to request from the Department of Public Works the status of this petition.

#### PROPOSED DEVELOPMENT

As part of the reconstruction of the Atwater Garage, the DRCFA seeks to relocate Civic Center Drive to a point further east, where it would connect directly to West Jefferson Avenue at a right angle. This would allow the creation of a plaza north of the former arena and larger than what was originally approved. The modified plaza would also include a circular drive turnaround with A sculpture in the center. The Department of Public Works has been involved in these discussions.

The proposal calls for a decorative paving and artificial turf for the plaza east of Washington Boulevard, with planters along the sidewalk and along the eastern edge, where the relocated Civic Center Drive would connect to West Jefferson Avenue. Decorative light "pylons" are shown in the planters. The approved plans show this as hardscaped. To the east of the former arena, now a conference center, would also be a hardscaped terrace, with artificial turf along the eastern edge. Previously, this area was shown as primarily open grass lawn.

#### REVIEW

In accordance with the PC provisions of the Zoning Ordinance (Sections 61-11-77), reviews of proposed changes should be conducted in light of the following relevant criteria, with the analysis following in italics:

(1) The proposed development should reflect applicable policies stated in the Detroit Master Plan; Reinforcing Downtown Detroit as the primary location for convention attractions is one of the goals.

*vacating of the current easement and the dedication of new land for right-of-way.*

(15) Urban design elements of form and character should be carefully considered; such elements include, but are not limited to; richness/interest of public areas through the provision of storefronts, window displays, landscaping, and artwork; color, texture and quality of structural materials; enclosure of public spaces; variations in scale; squares, plazas and/or "vest pocket parks" where appropriate; continuity of experience, visual activity and interest; articulation and highlighting of important visual features; preservation/enhancement of important views and vistas; *The turn around with its paving and sculptural element add quality to the vehicular area, and the expanded plaza and terrace with the decorative light pylons show care in creating this urban space.*

The proposed modifications appear to meet these criteria. The Planning and Development Department has also reviewed the plans and recommends approval of them.

The CPC has completed its review of the proposed modification to the plaza and terrace areas, as well as the shifting of Civic Center Drive. The new right-of-way alignment would of course not be zoned land, but the vacated easement would gain zoning. We find that the proposed exterior changes would be in keeping with the spirit and intent of the PC zoning district.

#### RECOMMENDATION

At its June 20, 2013 meeting, the CPC took action to recommend approval of the proposed changes excluding the specifics of the sculptural element which is recommended to be reviewed by the convened Public Art Siting Committee, with the following conditions.

tion of the Detroit Zoning Ordinance; and Whereas, The PC Zoning district classification requires that any exterior building alteration or expansion within a PC district be approved by resolution of the City Council following the receipt of a written report and recommendation from the City Planning Commission and the Planning and Development Department; and

Whereas, Both the Planning and Development Department and the City Planning Commission have reviewed the proposal in order to ensure that the proposed construction is in keeping with the spirit, purpose and intent of the PC zoning district classifications; and

Whereas, At its June 20, 2013 meeting, the CPC took action to recommend support of the requested modification and expansion of said plaza.

Now, Therefore, Be It

Resolved, That the Detroit City Council approves the modification and expansion of the plaza on the south side of West Jefferson Avenue and West side of Washington Boulevard, described in the foregoing communication from the City Planning Commission staff dated June 21, 2013 and as depicted in the drawings in the package prepared by SDG dated "12 June 2013", with the condition that, to ensure that the radial elements shown in the vehicle drop-off circle are fully expressed, the final site plan be reviewed and approved by CPC staff prior to issuance of building permits; and

Be It Further

Resolved, That the Department of Public Works or the Planning and Development Department empanel the Public Art Siting Committee for the review of the artworks proposed to be relocated from the interior of Cobo Hall to the exterior plaza.

Adopted as follows:  
Yeas - Council Members Cokrel, Jr., Jones, Spivey, Tate, Watson, and President Jenkins - 6,  
Nays - None

# **ORIGINAL APPROVED SUBMISSION**

**DETROIT REGIONAL CONVENTION FACILITY AUTHORITY**



**CREATION OF PLAZA AT COBO CENTER**

**12 JUNE 2013**