Appendix E
Design Charrette Summary Report

By
Lynn A. Mandarano, Ph.D., P.E., Assistant Professor, Department of Community and Regional Planning

On November 14 and 15, 2006, the Temple University Center for Sustainable Communities Project Team (Project Team) conducted a Design Charrette for the Fort Washington Flooding and Transportation Improvement Study. The purpose of the Design Charrette was to introduce local stakeholders to the study and to solicit feedback on potential flooding and transportation improvements. Information collected from the Design Charrette also was used to create design principles that will guide the remainder of the Project Team’s efforts.

November 15, 2006
Part I – Summary of Visual Preference Survey

A – Stormwater Management Alternatives

SW1A – Grassy Swale

Preferred by 0 participants and 3 undecided

Comments:
- Grass swale results in less standing water
- Less attractive
- Easier to maintain but requires more routing maintenance
- Less expensive to maintain
- Less efficient

SW1B – Vegetated Swale

Preferred by 10 and 3 undecided

Comments:
- Conceals stormwater management
- Less visual impact
- Plants absorb nutrients
- Gravel over sand is more permeable
- System is more expensive to build?
- Low maintenance
- Can let it go wild – this is not a manicured office park
- Locating this type of BMP is an issue due to road salt
- Need and education program for maintenance
- Do leaves get stuck?
- More efficient
SW2A - Detention Basin

 Preferred by 5 participants and 4 undecided

 Comments:
 – Less attractive
 – More feasible

 SW2B – Naturalized Detention Basin

 Preferred by 5 participants and 4 undecided

 Comments:
 – Natural aesthetic is more pleasing
 – Cannot see concrete
 – Looks like it should be on a farm or in a park
 – Looks unkempt
 – Need educational signage

 SW3A – Natural Retention Basin

 Preferred by 4 and 4 undecided

 Comments:
 None

 SW3B – “Urbanized” Retention Basin

 Preferred by 6 and 4 undecided

 Comments:
 – Retention basins do not have to be naturalized
 – Can be a water feature that office park users ‘use’
SW4A – Porous Paved Parking Lot

Preferred by 0 and 2 undecided

Comments:
- What are maintenance requirements?
- Cannot have small leaves around may clog pores
- Cannot use sand to manage snow and ice as it may clog pores
- What about weigh of trucks?
- Does this require a change in the ordinance?

SW4B – Porous Paved Parking Bays

Preferred by 12 and 2 undecided

Comments:
- Same as for SW4A

SW5A – Underground/Parking Detention Gallery

Preferred by 1, 1 preferred both and 2 undecided

Comments:
- Too expensive

SW5B – Porous Pavement with Porous Pavers

Preferred by 10, 1 preferred both and 2 undecided

Comments:
- Bioretention area serves parking only, would need bigger bioretention for building and parking
SW6A – Cisterns

Preferred by 4 participants, 1 preferred both and 2 undecided

Comments:
- What would be the water quality of runoff from roof
- We could not reuse runoff from roof – too many geese

SW6B – Green Roof

Preferred by 5, 1 preferred both and 2 undecided

Comments:
- None

SW7A – Bio-retention Roof Runoff

Preferred by 5, 3 preferred both and 1 undecided

Comments:
- None

SW7B – Green Roof with Public Areas

Preferred by 3, 3 preferred both and 1 undecided

Comments:
- None
B – Transportation Improvements

T1A – Tree-lined Boulevard with Raised Bike Lane

Preferred by 0, 5 undecided

Comments:
– There are many turns in the Office Park and the island would interfere

T1A – Tree-line Boulevard with Designated Bike Lane

Preferred by 6 and 5 undecided.

Comments:
– There are many turns in the Office Park and the island would interfere
– Do not like bike lane in roadway

T2A – Internal Street/Parking Layout

Preferred by 1

Comments:
– None

T2B – Internal Street/Parking Layout

Preferred by 12

Comments:
– More applicable to Dresher and not Office Park
– Does not fit in Office Park
– Might fit along perimeter of Office Park
T3A – Multi-storied Parking

Preferred by none

Comments:
– None

T3B – Multi-storied Parking

Preferred by 14

Comments
– Cannot tell that it is a parking garage

T4A – Pedestrian Walkway

Preferred by 9 and 3 preferred both

Comments:
– Both alternatives would work in different areas of the Office Park

T4B – Pedestrian Walkway/Plaza

Preferred by 1 and 3 preferred both

Comments:
– Too much impervious surface
  Opportunities for both
T5A – Raised Crosswalk

Preferred by none

Comments:
– None

T5B – Raised Crosswalk

Preferred by 13

Comments:
– Raised crosswalk should go in high traffic areas
– Island should have bio-infiltration
– Do not need many crosswalks
– Should be places strategically near restaurants and other amenities
– Raised concern about impact on emergency vehicles

T6A – Traffic Calming with Signage

Preferred by 2, 2 preferred by and 1 undecided

Comments:
– Visual, gets the message across, but hits driver over the head

T6B – Traffic Calming with Roundabout

Preferred by 7, 2 preferred both and 1 undecided

Comments:
– Not fond of roundabouts they are all over NJ
– Visually more pleasing that sign
T7A – Street Stormwater Management/With Curb

Preferred by 0 and 2 preferred both

Comments:
  – Raised concerns that pedestrians might fall into basin

T7B – Street Stormwater Management/Curbless

Preferred by 12 and 2 preferred both

Comments:
  – Road salt would be an issue with deciding where to locate and with plant selection

T8A – Riverside Path – Designed

Preferred by 0

Comments:
  – None

T8B – Riverside Path – Nature Trail

Preferred by 13

Comments:
  – None
C – Built Environment

BE1A – Surface Parking

Preferred by 5

Comments:
- Raised concerns that high grasses would create a safety issues especially at night

BE1B – Surface Parking

Preferred by 9

Comments:
- Preferred low vegetation due to safety issue

BE2A – Structured Parking

Preferred by 6 and 3 undecided

Comments:
- Preferred more enclosed look

BE2B – Structured Parking

Preferred by 5 and 3 undecided

Comments:
- None
BE3A – Building Types

Preferred by 6 and 4 both

Comments:
- None

BE3B – Building Types

Preferred by 4 and 4 both

Comments
- None

BE4A – Building Height 5 Story

Preferred by all

Comments:
- Like mixed use on first floor
- Mix of building heights is appropriate

BE4B – Building Height 3 Story

Preferred by none

Comments:
- Same
BE5A – Building – Single Use

Preferred by None

Comments:
– None

BE5B – Building – Mixed Use

Preferred by all

Comments:
– Appropriate along perimeter of Office park
– Set back from street with sidewalk for first floor retail

BE6A – Building Architecture

Preferred by 14

Comments:
– Visually appealing but probably more expensive

BE6B – Architecture

Preferred by none

Comments:
– None
BE7A – Landscape

Preferred by 14

Comments:
– Raised concern about mosquitoes

BE7B – Landscape

Preferred by none

Comments:
– None

BE8B – Public Areas

No preference

Comments
– Both are applicable but would need to be appropriately sited. For example, more active gathering spaces should be located along perimeter.
Part II - Ranking of Priority Concerns

During the first session of the Charrette, participants were asked to brainstorm regarding the types of improvements they would like to see incorporated into Office Park’s future assuming development occurring over a 20 year time. After brainstorming, participants broke out into groups to identify, as a team, the most important initiatives.

On the following night, teams were provided a list of initiatives, which were grouped into three categories, and asked to score each item’s priority and feasibility using a scale of 10-0 (10 for highest and 0).

The table on the following page highlights the final ranking of each of these initiatives.
<table>
<thead>
<tr>
<th>Table of Priority Concerns, Feasibility and Average Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transportation Improvements</strong></td>
</tr>
<tr>
<td>Infrastructure: roads, lighting, signage, trees, bridges</td>
</tr>
<tr>
<td>Encourage Public Transportation</td>
</tr>
<tr>
<td>Redesign, Repair and Upgrade Quality of Roads</td>
</tr>
<tr>
<td>Better Public Transportation: connectivity</td>
</tr>
<tr>
<td>Susquehanna Road Bridge</td>
</tr>
<tr>
<td>Better Transportation Connectivity: w/in Office Park and w/surrounding area, grid network, additional transportation options (i.e., monorail)</td>
</tr>
<tr>
<td><strong>Stormwater Management</strong></td>
</tr>
<tr>
<td>Appropriate Use of BMPs</td>
</tr>
<tr>
<td>Add Vegetation (i.e, trees) as a stormwater tool and amenity</td>
</tr>
<tr>
<td>Sewage Treatment Plant: relocate and upgrade</td>
</tr>
<tr>
<td>Flood Warning System: signage, gates, alternate routes</td>
</tr>
<tr>
<td>Regional Approach to Stormwater Management: back flow prevention</td>
</tr>
<tr>
<td>Greenway Along Pine Run w/ regional stormwater detention</td>
</tr>
<tr>
<td>Widen Creeks, Dredge, Improve Flood Management</td>
</tr>
<tr>
<td>Create Ponds</td>
</tr>
<tr>
<td>Automated Pumping of Floodwaters</td>
</tr>
<tr>
<td>Small Hydroelectric Dam</td>
</tr>
<tr>
<td><strong>Built Environment/Other</strong></td>
</tr>
<tr>
<td>Jogging/Walking Paths</td>
</tr>
<tr>
<td>Better Signage, Gateway, Identity</td>
</tr>
<tr>
<td>Taller Buildings</td>
</tr>
<tr>
<td>Mixed Use Development</td>
</tr>
<tr>
<td>Structured Parking: reduce footprint of parking</td>
</tr>
<tr>
<td>Make Office Park a Destination</td>
</tr>
</tbody>
</table>
Part III – Design Principles

The following design principles were derived from the results documented in this summary report as well as discussions during the two-day charrette.

Make Connections
– Improve quality of current road system
– Create better connections within the Office Park and to the surrounding community resources (i.e., neighborhoods, infrastructure, train station etc.)
– Increase accessibility, mobility and diversity of transportation uses

Improve Flood Water Management and Public Safety
– Improve flood water management and enhance flood warning and evacuation system
– Reduce development in floodplain
– Apply a variety of stormwater best management practices
– Restore ecological function of waterways and floodplains while providing for public amenities

Enrich the Sense of Place
– Use infrastructure (i.e., lighting, signage, walking paths…) to improve Office Park visibility and way finding
– Improve visibility and extended usage of Office Park by other users by incorporating more amenities/mixed uses, along Office Park perimeter, that meet the needs of Office Park users and residents
– Use natural features (i.e., trees, landscaping, water features) to enhance aesthetics and natural environment as well as to provide public amenities for exercise, recreation and nature-based activities.