References Materials A

Acknowledgements

Design Workshop’s assembled team of professionals is assisting the University of Minnesota in the visioning and concept master planning of the UMore Park development. This team, which includes the relevant experience of land planners, landscape architects, urban designers, economists, natural resource planners, transportation planners and engineers provides the UMore Park management team with a unified vision and identity for a new proposed community. In addition, Design Workshop has invited experts in development feasibility, funding, market strategy, entitlements, and governance to advise the design team. The following consultants contributed to this effort:

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Bibliography of Key University of Minnesota Publications on UMore Park


All publications are available at [www.umorepark.umn.edu](http://www.umorepark.umn.edu).
GENERAL GIS DATA SOURCES USED ON MULTIPLE EXHIBITS:

Aerial Imagery from the National Agricultural Imagery Program (NAIP) Digital Orthorectified Images (DOQ), Minnesota, 2003.
Provided by: Minnesota Land Management Information Center (LMIC) http://www.lmic.state.mn.us/chouse/naip03mrsid.html

Road and street data is from the Minnesota Department of Transportation and was updated in spring of 2008.
Provided and interpreted by: Short Elliott Hendrickson Inc. (SEH®) http://www.sehinc.com/

Additional road and street data from the Minnesota Department of Natural Resources (MNDNR) and provided by the MNDNR Data Deli. http://deli.dnr.state.mn.us/data_catalog.html

Additional road and street data from the Metropolitan Council. Adapted, analyzed and presented by SEH®.

UMore Park internal roads and streets were digitized by staff at Center for Rural Design (CRD) using 2002 color DOQ provided by Dakota County, reprojected to UTM, NAD83, as a base.

Municipal Boundaries from the Minnesota Department of Natural Resources.
Note- municipal locations are generalized on some exhibits based on Google Earth municipal locations and aerial development signatures.

Rivers, Lakes and Streams data is from the Minnesota Department of Natural Resources.

UMore Park Boundary was digitized by staff at the CRD using 2002 color DOQ provided by Dakota County, reprojected to UTM, NAD83, as a base.

Vermillion Highlands Boundary was digitized by staff at CRD using 2002 color DOQ provided by Dakota County, reprojected to UTM, NAD83, as a base.

Two Foot contour data (Lidar)- (used for slope analyses and all contour lines)
Derived by staff at CRD using 2004 LIDAR data provided by Dakota County, reprojected to UTM, NAD83.
SPECIFIC GIS DATA SOURCES:

1: Metropolitan Urban Service Area (MUSA)

MUSA data is from the Metropolitan Council. Provided by DataFinder.
http://www.datafinder.org/metadata/comp_plan_composite.htm
Cultural Sites of Iconic or Interpretive Significance from the report “A Historical Interpretation and Preservation Plan for UMore Park,” by John Lauber; April, 2006.
http://www.umorepark.umn.edu/History.html

2. Regionally Significant Parks and Recreation Map

Dakota County Greenways from Dakota County, 2007.
http://www.co.dakota.mn.us/NR/rdonlyres/00001c6c/wonmyctotzheyiekzgdsozrghajqbdh/map.pdf
Provided by the Dakota County Office of Planning.
http://www.co.dakota.mn.us/Departments/Planning/default.htm

Regional Parks from Metropolitan Council, 2002.
Provided by the University of Minnesota.
http://www.metrocouncil.org/parks/index.htm

3: Regionally Significant Biological and Ecological Area Map

Regionally Significant Ecological Area data from Minnesota Department of Natural Resources, 2003.
http://www.dnr.state.mn.us/rsea/metro_methods.html
http://files.dnr.state.mn.us/assistance/nrplanning/bigpicture/rsea/map.pdf

Metropolitan Conservation Corridor from MNDNR, 2007. Provided by the Center for Rural Design as part of the DNR Greenprint package.
http://www.dnrstate.mn.us/metroconservationcorridors/index.html

Mississippi River Critical Area from the Metropolitan Council, 1997.
Provided by the University of Minnesota. ftp://gisftp.metc.state.mn.us/mnrra_a.zip
http://gis.metc.state.mn.us/metadata/bg/mnrra_a.jpg

Wildlife Management Areas were provided by the MNDNR Data Deli.
http://deli.dnrstate.mn.us/metadata.html?id=L390003970202

Metropolitan Council Lands were extracted by staff at CRD from 2006 parcel data provided by Dakota County, re-projected to UTM, NAD83.

Scientific and Natural Areas were provided by the MNDNR Data Deli.
http://deli.dnrstate.mn.us/metadata.html?id=L220000150201
4: Land Cover, Wetlands and Streams Map

http://www.dnr.state.mn.us/mlccs/index.html


FEMA 100 year flood plain provided by The Minnesota DNR Data Deli.
http://deli.dnr.state.mn.us/metadata.html?id=L390004250202

5: Existing Land Use Map

City of Rosemount Land Use, January, 2007 provided the City of Rosemount, 2008.
http://ci.rosemount.mn.us/index.asp?Type=B_BASIC&SEC={(24B6A3D1-1395-450C-92AF-C340317F1A18)}
http://ci.rosemount.mn.us/vertical/Sites%7B9E8E841-C29C-4154-8A28-AC41E049797A%7D/
uploads%7B7E8DCE8C-B2E2-4B01-9192-C80223406775%7D.DOC

Dakota County Land Use from Dakota County, 2005. Provided by Dakota County in 2008.
http://www.co.dakota.mn.us/Departments/Planning/default.htm

6: Regional Transportation Map (SEH)

Proposed transit lines and stops were developed by SEH® in 2008 based on the Robert Street Corridor Study conducted by Dakota County.
http://www.co.dakota.mn.us/EnvironmentRoads/Transit/PublicTransportation/Robert+Street+Corridor.htm

Existing Local Bus Routes and Park and Ride locations are from the Metropolitan Council. http://www.metrocouncil.org/index.htm
7: **Existing Utilities Map**

Existing and Proposed Utilities from RLK Incorporated; June, 2008.  
http://www.rlkinc.com/index.php

8: **Aggregate Resources Map**

Approximate Aggregate Resource locations information created by ProSource Technologies, Inc; May, 2008.  
http://prosourcetech.com/

9: **Built Environment Map**

University Structures were digitized by staff at CRD using 2002 color DOQ provided by Dakota County, reprojected to UTM, NAD83, as a base.

Gopher Ordinance Works Associated Debris/buildings were digitized by staff at CRD using 2002 color DOQ provided by Dakota County, reprojected to UTM, NAD83, as a base.

Refrineries and Mining areas were extracted by staff at CRD from 2006 parcel data provided by Dakota County, reprojected to UTM, NAD83.

10: **Existing Roads Functional Classification Map**

Road data provided by the Metropolitan Council and adapted, analyzed and presented by SEH®.

11: **Existing Roads Jurisdictional Classification**

Road data provided by the MNDOT and adapted, analyzed and presented by SEH®.
LEED NEIGHBORHOOD DEVELOPMENT RATING SYSTEM

The Pilot Version of LEED (Leadership in Energy and Environmental Design) for Neighborhood Development (ND) Rating System (June 2007) was one of the measurement systems used to assess the effectiveness of the development project and the conceptual community design to address principles of smart growth, new urbanism, and green building.

BACKGROUND ON LEED NEIGHBORHOOD DEVELOPMENT

The U.S. Green Building Council (USGBC), the Congress for New Urbanism, and the Natural Resources Defense Council have partnered to develop this initial pilot program. The intent of the program is to establish a national set of standards for neighborhood location and design and assessing and rewarding environmentally superior development practices. LEED certification provides independent, third-party verification that a development’s location and design meets accepted high levels of environmentally responsible, sustainable development. LEED provides rating systems that are voluntary, consensus-based, market-driven, grounded in accepted energy and environmental principles, and that strike a balance between established practices and emerging concepts. For more information visit www.usgbc.org/LEED/ND

THE NEW COMMUNITY AT UMORE PARK INITIAL CONCEPTUAL SCORING

This initial scoring of the Concept Master Plan for the UMore Park property is not intended for submittal to the USGBC for certification at this time, but rather to identify how the project location and design meets, is challenged or falls short of the LEED ND rating system at an early stage of conception. The consultant team found completing this scoring sheet to be a helpful exercise in informing the setting of goals and standards for the Concept Master Plan.

The Project Checklist on the following pages uses three categories for the scoring. A “Yes” scoring indicates that the Concept Master Plan design meets this requirement, and/or the Concept Master Plan Book recommends this action as a “best practice”. Points in the question mark (“?”) category indicates that the achievement of this point is less certain because there are barriers making it challenging to meet the requirement, or the University or other authority is completely responsible for a key decision (such as a transit authority funding construction of a newly conceived route). A “No” score indicates that a point is not possible or is not envisioned to be a promising concept for the plan design.

A total of 41 points were identified as a “Yes” and 40 as possible but less certain to be achievable. This 81 point score places the initial assessment in the top certification category of “Platinum” range (80-106 points). However, it is important to note that the prerequisites for certification of “Smart Location,” “Proximity to Water and Wastewater Infrastructure,” “Imperiled Species and Ecological Communities,” and “Farmland Conservation” are determined to not be certain at this time.

The large size of the nearly 5,000 acre property presents a challenge to achieving the many of the points that require the existing built environment within a radius of the property and/or high density averages across the property. Individual neighborhoods developed in phases within the overall property may discover greater potential for LEED ND certification as community mixed-use centers, for example, will provide the diverse uses, employment and housing, and density that meet the LEED ND requirements.
**LEED for Neighborhood Development Pilot**  
**Project Checklist**  
**Project Name:** UMORE PARK  
**Initial Evaluation September 4, 2008**

**Explanation of the Evaluation**  
**Yes:** The Concept Master Plan design meets this requirement, or the Pattern Book or Concept Master Plan Book recommends this action.  
**?:** Not a certainty because there are barriers making it quite challenging to meet the requirement, or the University or other authority is completely responsible for the decision.  
**No:** Not a Possibility

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Smart Location &amp; Linkage</th>
<th>30 Points Possible</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Option 1:</strong> Not an infill site (adjacent land is only roughly 25% of the development density needed to be classified an infill site) <strong>Option 2:</strong> Transit agency has not committed to providing transit service as specified. <strong>Option 3:</strong> The project boundary is currently within 1/4-1/2 mile of only three (health club, community center, and schools) of the LEED ND defined diverse uses and needs have 4-6 existing “diverse uses”. <strong>Options 4 and 5:</strong> Does not meet the criteria of Option 4 and 5 for MPO and vehicle travel.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Option 1:</strong> Attainable if connection is made to Rosemount/Empire waste water treatment plan, or the Metro Council’s “legally adopted planned” water &amp; waste water service area is extended. <strong>Prereq 1</strong></td>
<td></td>
<td><strong>Required</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Prereq 2</strong></td>
<td></td>
<td><strong>Required</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Prereq 3</strong></td>
<td></td>
<td><strong>Required</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Prereq 4</strong></td>
<td></td>
<td><strong>Required</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Prereq 5</strong></td>
<td></td>
<td><strong>Required</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Prereq 6</strong></td>
<td></td>
<td><strong>Required</strong></td>
</tr>
</tbody>
</table>

**Credit 1** Brownfield Redevelopment  
Site is not on the federal priority lists for FEZ, FEC, FRC, COR, UCS  
**Credit 2** High Priority Brownfields Redevelopment  
**Credit 3** Preferred Location  
**Credit 4** Reduced Automobile Dependence  
**Credit 5** Bicycle Network  
**Credit 6** Housing and Jobs Proximity  
**Credit 7** School Proximity  
**Credit 8** Steep Slope Protection  
**Credit 9** Site Design for Habitat or Wetlands Conservation  
**Credit 10** Restoration of Habitat or Wetlands  
**Credit 11** Conservation Management of Habitat or Wetlands  

**Reference Materials | January, 2009**
<table>
<thead>
<tr>
<th>Credit</th>
<th>Description</th>
<th>Points Possible</th>
<th>Required</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Prereq 1</td>
<td>Open Community</td>
<td>Required</td>
<td>Available by using conservation and low-impact design principles. Must meet density of 7 DU/acre of buildable land for residential; non-residential at 0.5 FAR/acre buildable land.</td>
</tr>
<tr>
<td>1.2</td>
<td>Prereq 2</td>
<td>Compact Development</td>
<td>Required</td>
<td>Must have greater than 10 dwelling units per acre residential and greater than 0.75 FAR non-residential to achieve points. The average does not exceed 10 duper acre but individual neighborhoods may choose to apply separately.</td>
</tr>
<tr>
<td>1.3</td>
<td>Credit 1</td>
<td>Compact Development</td>
<td>1 to 7</td>
<td>Available if 50% of the dwelling units are within 0.5 mile walk distance of the diverse uses and built by the time 50% of occupancy is in place. This is difficult to determine until tenants are in place, but a mix of uses is anticipated in the plan.</td>
</tr>
<tr>
<td>1.4</td>
<td>Credit 2</td>
<td>Diversity of Uses</td>
<td>1 to 4</td>
<td>Available if at least 15% of total rental units are priced for households up to 50% of area median income and units are maintained at affordable levels for a minimum of fifteen years, OR At least 30% of total rental units are priced for households up to 80% of area median income and units are maintained at affordable levels for a minimum of fifteen years.</td>
</tr>
<tr>
<td>1.5</td>
<td>Credit 3</td>
<td>Diversity of Housing Types</td>
<td>1 to 3</td>
<td>Available if at least 15% of total rental units are priced for households up to 80% of area median income and units are maintained at affordable levels for a minimum of fifteen years. OR At least 20% of for-sale housing is priced for households up to 80% of area median income and units are maintained at affordable levels for a minimum of fifteen years. OR At least 15% of total rental units are priced for households up to 80% of area median income and units are maintained at affordable levels for a minimum of fifteen years.</td>
</tr>
<tr>
<td>1.6</td>
<td>Credit 4</td>
<td>Affordable Rental Housing</td>
<td>1 to 2</td>
<td>Available if at least 10% of for-sale housing is priced for households up to 80% of the area median income (1 point); OR At least 20% of for-sale housing is priced for households up to 120% of the area median income (1 point); OR At least 15% of for-sale housing is priced for households up to 80% of the area median income and an additional 15% of total rental units are priced for households up to 80% of the area median income (2 points).</td>
</tr>
<tr>
<td>1.7</td>
<td>Credit 5</td>
<td>Affordable For-Sale Housing</td>
<td>1 to 2</td>
<td>Available if: Parking lot stitting and no more than 20% of the total development footprint used for surface parking facilities and no single parking lot larger than 2 acres and bicycle and carpool spaces provided.</td>
</tr>
<tr>
<td>1.8</td>
<td>Credit 6</td>
<td>Reduced Parking Footprint</td>
<td>2</td>
<td>Available if: Option 1: one point for Street grid density 20-29 centerline miles/sq. mi. OR two points for &gt;30</td>
</tr>
<tr>
<td>1.9</td>
<td>Credit 7</td>
<td>Walkable Streets</td>
<td>4 to 8</td>
<td>The project Pattern Book suggests these specific guidelines for site design.</td>
</tr>
<tr>
<td>1.10</td>
<td>Credit 8</td>
<td>Street Network</td>
<td>1 to 2</td>
<td>Available if: One point for Street grid density 20-29 centerline miles/sq. mi. OR two points for &gt;30</td>
</tr>
<tr>
<td>1.11</td>
<td>Credit 9</td>
<td>Transit Facilities</td>
<td>1</td>
<td>Available if: developer/transit authority agrees to providing transit shelters for all stops.</td>
</tr>
<tr>
<td>1.12</td>
<td>Credit 10</td>
<td>Transportation Demand Management</td>
<td>2</td>
<td>Available if: developer/transit authority agrees to providing transit shelters for all stops.</td>
</tr>
<tr>
<td>1.13</td>
<td>Credit 11</td>
<td>Access to Surrounding Vicinity</td>
<td>1</td>
<td>Requires through streets at the project boundary every 800 feet—unless there are physical constraints. The local jurisdictional requirements for spacing of intersections does not allow for this (requirement of no less than 1/4 mile spacing for right-in/out and 1/2 mile spacing for full intersections).</td>
</tr>
<tr>
<td>1.14</td>
<td>Credit 12</td>
<td>Access to Public Spaces</td>
<td>1</td>
<td>Available if: Option 1: one open recreation facility of at least 1 acre within 0.5 mile walking distance of the dwelling units or Option 2: at least 50% of dwelling units and business entrances are located within 1/4 mile walking distance of a multi-use trail or bikeway.</td>
</tr>
<tr>
<td>1.15</td>
<td>Credit 13</td>
<td>Access to Active Spaces</td>
<td>1</td>
<td>Available if: Option 1: open recreation facility of at least 1 acre within 0.5 mile walking distance of the dwelling units or Option 2: at least 50% of dwelling units and business entrances are located within 1/4 mile walking distance of a multi-use trail or bikeway.</td>
</tr>
<tr>
<td>1.16</td>
<td>Credit 14</td>
<td>Universal Accessibility</td>
<td>1</td>
<td>Available if: for each residential unit type developed - 20% of each type must comply with the accessible design provisions of FHA and the Rehabilitation Act. Apply ADA and FHA provisions for rights-of-way.</td>
</tr>
<tr>
<td>1.17</td>
<td>Credit 15</td>
<td>Community Outreach and Involvement</td>
<td>1</td>
<td>Available if: developer/transit authority agrees to providing transit shelters for all stops.</td>
</tr>
<tr>
<td>1.18</td>
<td>Credit 16</td>
<td>Local Food Production</td>
<td>1</td>
<td>Available if: developer/transit authority agrees to providing transit shelters for all stops.</td>
</tr>
</tbody>
</table>
## Green Construction & Technology

<table>
<thead>
<tr>
<th>No.</th>
<th>prereq</th>
<th>Credit</th>
<th>Credit Title</th>
<th>1 to 3</th>
<th>Requirements</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>Construction Activity Pollution Prevention</td>
<td>Required</td>
<td>Attainable: Create an Erosion and Sedimentation Control Plan.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>1</td>
<td>LEED Certified Green Buildings</td>
<td>1 to 3</td>
<td>Attainable but challenging: 1 point for 20% to 30% of building square footage LEED certified; 2 points for 30%-40%; and 3 points for 40% or more</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>2</td>
<td>Energy Efficiency in Buildings</td>
<td>1 to 3</td>
<td>Attainable: Residential (3 stories or less) must meet Energy Star ratings. Non-Residential and Residential (over 3 stories) must perform in excess of standards.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>3</td>
<td>Reduced Water Use</td>
<td>1 to 3</td>
<td>Attainable: Indoor use achieves 30% of baseline use reduction after meeting Energy Policy Act (non-residential/residential &gt;3 stories) and low flow standards are met for residential; 1 extra point for outdoor irrigation using non-potable water or xeriscaping--implement UMare's water budget and use drought-tolerant perennials in landscaping.</td>
<td></td>
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<tr>
<td>5</td>
<td>0</td>
<td>4</td>
<td>Building Reuse and Adaptive Reuse</td>
<td>1 to 2</td>
<td>Attainable: Recommendation of reuse of one building. Reuse of 20% of the existing building stock is at the University's discretion.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>5</td>
<td>Reuse of Historic Buildings</td>
<td>1</td>
<td>Not likely: Existing buildings need to be designated as historic by local, state, or national regulation authority. Rehabilitate in accordance with local or state standards.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>6</td>
<td>Minimize Site Disturbance through Site Design</td>
<td>1</td>
<td>Attainable after aggregate extraction disturbance: Do not develop or disturb 20% of previously undeveloped site area and protect in perpetuity.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>7</td>
<td>Minimize Site Disturbance during Construction</td>
<td>1</td>
<td>Challenging but potentially attainable following gravel extraction. For portions of the site that are not previously developed: identify limits of construction impactzone--requirements. Option 3: Tree protection may be possible. Interpretation request may be necessary.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>8</td>
<td>Contaminant Reduction in Brownfields Remediation</td>
<td>1</td>
<td>Attainable if cleanup plan reduces (not totally eliminates) contaminant volume/toxicity; no points for only capping/off-siting of contaminants--Cleanup plan is not defined to-date.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>9</td>
<td>Stormwater Management</td>
<td>1 to 5</td>
<td>Attainable if project mimics natural hydrology of site including ground water recharge &amp; employs alternative stormwater mgmt techniques and achieves pre-European settlement criteria (rate, volume &amp; water quality). To achieve 5 points: Option 1 (previously developed site) criterion is 1.125in rain infiltrated/re-used/evapotranspired/permitted (RIP standard is 2.75in rain infiltrated at pre-development level); Option 2 (undeveloped site) criterion is 2.25in rain.</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>10</td>
<td>Heat Island Reduction</td>
<td>1</td>
<td>Attainable if &gt;50% of non-roof impervious surface is shaded or non-reflective (SRI &gt;29) OR roofs are &gt;50% green roofs or &gt;75% of roofs are non-effective (SRI &gt;29 steep roof; SRI &gt;78 low-sloped roof); combination of green/non-reflective roof allowed if total is &gt;75% of roofs.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>11</td>
<td>Solar Orientation</td>
<td>1</td>
<td>Attainable if &gt;75% of projects aligned to use solar effectively.</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>0</td>
<td>12</td>
<td>On-Site Energy Generation</td>
<td>1</td>
<td>Attainable as a minimum of 5% load must be provided for on-site. Estimate 3-5 MW needed to comply. Unsure of crossover between Credits 12 and 13.</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>0</td>
<td>13</td>
<td>On-Site Renewable Energy Sources</td>
<td>1</td>
<td>Should be attainable as a minimum of 5% load must be provided for on-site by renewable sources. Estimate 3-5 MW needed to comply. Options: Ground-based heat pump, solar, wind turbine, biofuel. Unsure of crossover between Credits 12 and 13.</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>0</td>
<td>14</td>
<td>District Heating &amp; Cooling</td>
<td>1</td>
<td>Does not apply to site, but individual neighborhoods might apply. Requires at least 80% of project be connected to district heating/cooling system. This would only work in high density development.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>0</td>
<td>15</td>
<td>Infrastructure Energy Efficiency</td>
<td>1</td>
<td>Possible to attain using current conservation technologies. Guidelines require a 15% reduction of annual energy use. May be costly; ground source heat pumps might qualify.</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>0</td>
<td>16</td>
<td>Wastewater Management</td>
<td>1</td>
<td>Attainable with water budget planning, 50% reuse of waste H2O as potable H2O needs to be further researched.</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>0</td>
<td>17</td>
<td>Recycled Content for Infrastructure</td>
<td>1</td>
<td>Attainable but challenging; Roadways, parking lots, sidewalks must use 90% of the total volume recycled aggregate etc.</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>0</td>
<td>18</td>
<td>Construction Waste Management</td>
<td>1</td>
<td>Attainable: Recycle and/or salvage at least 50% of non-hazardous construction and demolition debris. Develop a construction waste management plan.</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>0</td>
<td>19</td>
<td>Comprehensive Waste Management</td>
<td>1</td>
<td>Attainable: Project is in municipality with HHW and recyclables drop-off site; placing a HHW/recycling and composting site in UMare will increase participation.</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>0</td>
<td>20</td>
<td>Light Pollution Reduction</td>
<td>1</td>
<td>Do not exceed 80% of the lighting power densities for exterior areas and 50% for building facades and landscape as defined in ASHRAE/IESNA. See specific requirements.</td>
<td></td>
</tr>
</tbody>
</table>

## Innovation & Design Process

<table>
<thead>
<tr>
<th>No.</th>
<th>prereq</th>
<th>Credit</th>
<th>Credit Title</th>
<th>1 to 5</th>
<th>Requirements</th>
<th>Comments</th>
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<tbody>
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<td>1.1</td>
<td>Innovation in Design: Provide Specific Title</td>
<td>1 to 5</td>
<td>projects' closed/sustainable water budget.</td>
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<td>new alt. sw mgmt techniques/applications/combinations.</td>
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<td>0</td>
<td>1.4</td>
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<td>Targeted wildlife habitat restoration/recovery program--re-introduction of extinct wildlife, multifunctional greenway system (for sw mgmt, human trails, wildlife corridors); etc.</td>
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<td>LEED® Accredited Professional</td>
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## CertificationTotals (pre-certification estimates)

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<th>prereq</th>
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<th>Credit Title</th>
<th>106 Points Possible</th>
<th>Comments</th>
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<tr>
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<td>40</td>
<td>1</td>
<td>Project Totals (pre-certification estimates)</td>
<td>106 Points Possible</td>
<td>Certification: 40-49 points, Silver: 50-59 points, Gold: 60-79 points, Platinum: 80-106 points</td>
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