

## Lilydale Park: Structure design analysis

### Factors

1. **Scale:** All structure designs were reduced in size. Larger shelter program was adjusted from 8 to 10 tables to a 6 table option. Rest room facility was sized for restroom, mechanical room and storage needs.

#### Steel

Reduced size fits better into the task force recommendation on scale and use as an educational gathering space

#### Stone

Reduced size fits better into the task force recommendation on scale and use as an educational gathering space

2. **Height:** All options pushed a low profile design.

#### Steel

6 Table = 14' 2 Table = 12'

Restroom/Storage facility = 13'

#### Stone

6 Table = 18' 2 Table = 14'

Restroom/Storage facility = 14'- 8"

3. **Integration with Landscape:**

#### Steel

Green Roof creates a direct integration to a naturalized setting. Thin profile and vertical wood poles mimic natural forms of woodland background. Limestone material creates a direct connection to native site materials. Stone is used as a subtle façade for a walled structure.

#### Stone

Limestone material creates a direct connection to native site materials. Material is celebrated as a scenic resource for it's beauty. Stone is used to connect to dramatic bluff outcrops.

4. **Form:**

#### Steel:

Reflects horizontal nature of a floodplain

#### Stone:

Traditional form creates a strong cultural connection to park aesthetics and parkitecture.

## 5. Connection to the Lilydale Cultural Landscape

### Steel

Uses form and materials to reflect a historic industrial landscape and current nature based experience. Structure reference trestle and barge form through the use of corten steel . Thin profile, wood beams, and wood poles blend into a forest environment. Green roof is a symbol of nature's resurrection over the urban/industrial past.

### Stone

Structure & design reflect traditional parkitecture typically associated with park experiences in nature based settings. Tile roof material is a direct connection to historic brickyard shop buildings once operating in Lilydale.

6. **Sustainability:** A systems proposal was provided to incorporate renewable systems into the park restroom/storage facility for year round use. The system would consist of energy production strategies( pv power), highly efficient heating systems (geothermal heat pump), natural ventilation systems(uses buoyant effect instead of mechanical), super insulated facility, and low energy lighting strategies(LED lights and timing systems) make up the key strategy options. The incorporation of low energy strategies and renewable energy systems provides an opportunity for the city of St. Paul to test new technology while providing an important resource for education.

### Steel

Green roof minimizes the impervious footprint of new park development. Structures will consist of locally provided materials and products and recycled content as applicable and economically feasible.

### Stone

Structures will consist of locally provided materials and products and recycled content as applicable and economically feasible.

## 7. Gateway

### Steel

Closely follows the form and materials of the park structures. Represents an iconic approach to a gateway element

### Stone

Dominated by limestone material, park name and branding become secondary to the bluff and natural material connections.

## 8. Open House Summation –

**Sampling of comments tally of comments regarding aesthetic preference (concerns regarding operations and regarding cost were not included in the count)**

| Steel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Stone                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <ul style="list-style-type: none"><li>+ I like the shape.</li><li>+ Option three for two (total) structures my choices</li><li>- I don't like the design.</li><li>+ I like the innovative design. Reminiscent of Norwegian stubble.</li><li>- Too high tech, masculine – not inviting.</li><li>+ Like this design – even without green roof if that's a maintenance issue.</li><li>+ Like this but please consider practical maintenance (e.g. community garden).</li><li>+ What these drawings don't show is how this will blend in with its surroundings – almost camouflaged.</li><li>- Very interesting – not for Lilydale.</li><li>+ Like the materials also the openness. Do green roofs hold up?</li><li>+ Green roof on an open structure is a great addition to park and park imagery.</li><li>+ I like this design a lot but the tiny windows make the building look like a jail.</li></ul> | <ul style="list-style-type: none"><li>+ How about a rusty steel roof?</li><li>- Looks like a fun place to hang on (pointing to the exposed beams).</li><li>+ Love the log bracing for a natural feel/look.</li><li>- Worried about graffiti and kids climbing up the sides.</li><li>+ Favorite building design.</li><li>- Too complicated – too “craftsman”-like.</li><li>+ Love the limestone structure style but feel here is a bit massive.</li><li>- Roof a little overbearing – too massive.</li><li>+ Love the stone – are you concerned about kids climbing these structures?</li><li>+ #1 – beautiful design</li><li>+ Ties into other area projects so well.</li><li>+ Overall, like best! Makes so kids can't climb. Incorporate rain water feature.</li><li>+ Limestone is very attractive – try to use less stone a smaller footprint.</li><li>- Most generic design – doesn't create a unique image for the park. Looks like any MN park design.</li><li>+ I would prefer the limestone and wood.</li><li>- Asking for people climbing on the roof.</li><li>- Looks like every other park structure – not impressed. Call out the history of this unique park by using the brick structure.</li><li>+ Of the three, this blends in best with the spirit of the place.</li><li>+ Love the stone.</li><li>- Why does the roofline seem too massive to me?</li></ul> |
| <b>Positive comments: +17</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Negative Comments: -6</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Positive comments: +12</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Negative Comments -2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## 9. Costs:

### Steel

Less structure and material will lead to less expensive structures.

### Stone

Estimates show the stone option to cost over 20% more than the steel options. Masonry cost is the primary reason.

10. **Maintenance:** The majority of maintenance requirements for both structure styles require typical maintenance procedures for cleaning and up-keep w/minimal differences in costs and time requirements. The typical skill set in place for city maintenance works will cover most maintenance needs. Unique maintenance requirements are as follows.

### Steel

Green roof requires additional care in the first year for proper establishment. Those duties consist of periodic monitoring and weeding. After establishment the green roof will require spring fertilization and 3 weeding efforts yearly. Plant selection and soil profile will greatly effect the maintenance requirements.

### Stone

Tile roof requires periodic cleaning and replacement for broken tiles. Limestone masonry is porous and requires sacrificial coatings for graffiti removal. Applications are every five years or after cleaning for vertical surfaces.

## 11. Task force design directives:

- Low profile. Blend into the landscape.
- Low in Height
- Use materials from Lilydale
- Native materials
- Should be park-like
- Natural setting
- Explore Historic Lilydale. Industrial and natural
- Explore alternative energy resources
- Integrate sustainable measures to all aspects of the park
- Shelter to provide views to Pickerel lake
- Shelter t serve as central gathering area in the park
- Explore reclaimed materials
- Interpretive information and restrooms
- Minimalistic, less is more
- Maintain and support connections
- Deal with storm water