



Robinson Park

Master Plan Amendment

City of Sandstone
119 - 4th Street
Sandstone, MN 55072



March, 2016

Prepared By:

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INTRODUCTION

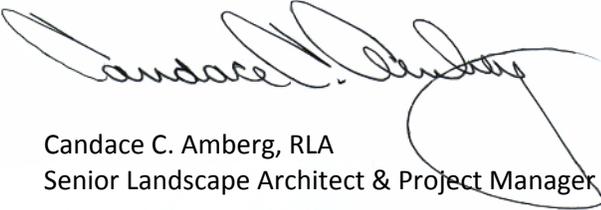
In early 2015, the City of Sandstone, Minnesota retained WSB & Associates, Inc. to collaborate with city staff, local citizens and park users to prepare an update to the existing 1992 Robinson Park Master Plan. This new document represents the results of the public involved planning and design process, which was completed in 2016.

ACKNOWLEDGEMENT

The consultant team would like to extend a heartfelt thank you to the City of Sandstone staff, especially Sam Griffith, City Administrator, along with the members of the Parks Commission for undertaking an open and constructive public participation process for this project. Their positive attitude during the process, as well completing all of the previous work that was involved in their effort to obtain a regionally significant status for Robinson Park, was instrumental in creating a vision for the park that will enhance the existing historical, natural and recreational site attributes.

The consultant team would also like to thank all of the various residents and stakeholder groups who offered invaluable information throughout the process and took the time to not only attend public meetings, but additional in-between meetings as well. Their individual and collective insights highlighted all of the historically significant elements of the park to demonstrate, the ecological areas to preserve, and the recreational areas to enhance in order to create a plan that is balanced, reasonable and responsible.

Sincerely,



Candace C. Amberg, RLA
Senior Landscape Architect & Project Manager

CITY OF SANDSTONE

PARK & RECREATION COMMISSION

Sam Griffith, City Administrator
Mary Franklin, Commissioner
Dave Barsness, Commissioner
Dorothy Dybvig, Commissioner
Kary White, Commissioner
Tesla Apple, Commissioner
Jill Baum, Commissioner
Tim Franklin, Council Liaison

PLANNING COMMISSION

Sam Griffith, City Administrator
Lenny Bonander, Council Liaison
Randy Riley, Commissioner
Andrew Spartz, Commissioner
Nick Eberhardt, Commissioner
Reese Frederickson, Commissioner
Rene Stadin, Commissioner

CITY COUNCIL

Carl Steffen, Mayor
Philip Kester, Deputy Mayor
Brandon Devlin, Councilor
Tim Franklin, Councilor
Pete Spartz, Councilor

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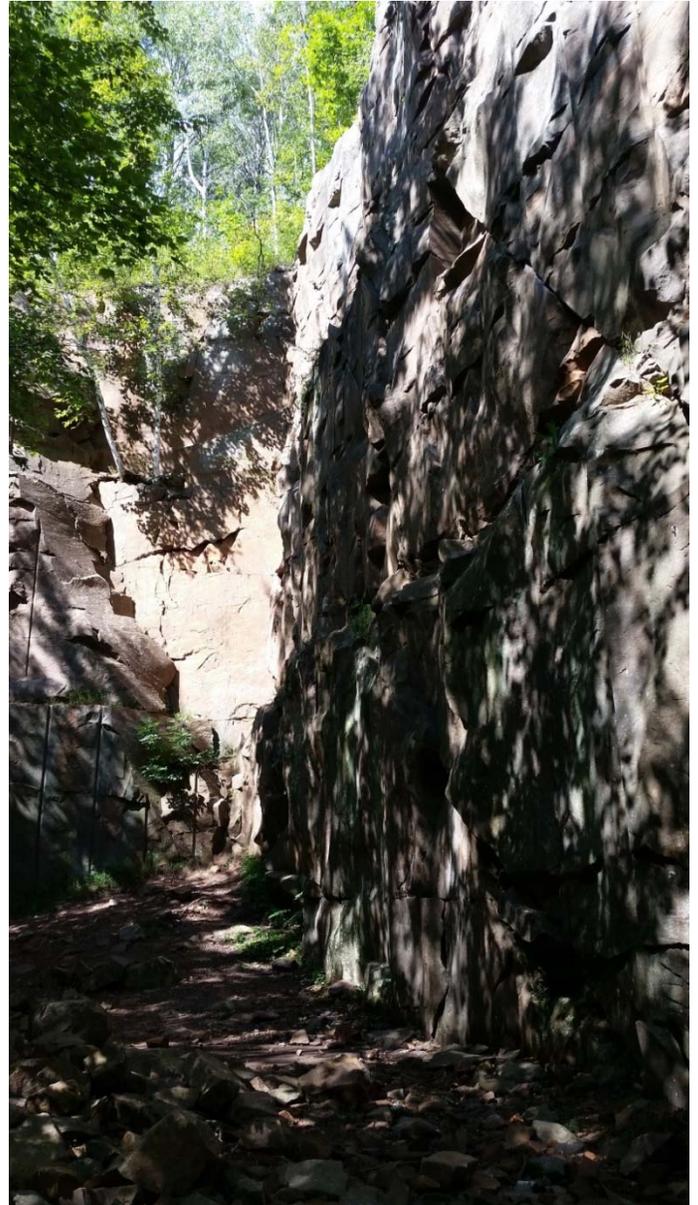


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PROJECT DESCRIPTION & OVERVIEW

INTRODUCTION

PROJECT OVERVIEW

The master plan amendment process focused on utilizing the prior 1992 Robinson Park Master Plan as a starting point for the planning and design process with updated information, plans, and goals highlighted in the amendment in order to avoid over-duplication of items from the original master plan.

The master plan amendment reflects the vision of the City of Sandstone, project stakeholders and local residents regarding how the park should ultimately be developed to meet local and regional needs while protecting and enhancing the historical component for future generations. It takes into consideration existing park uses and issues, new park uses and recreational trends since the 1992 master plan was created, historical components of the park site, natural resources and sensitive environments, educational opportunities, sustainability, and its regional significance. The updated master plan provides guidelines for its ongoing development and management to accommodate public use and is also a tool to be used for public presentations, marketing, and preparing funding applications.

Notably, it should be recognized that the master plan remains dynamic and will continue to evolve as it moves through implementation steps and as opportunities present themselves in the years to come.

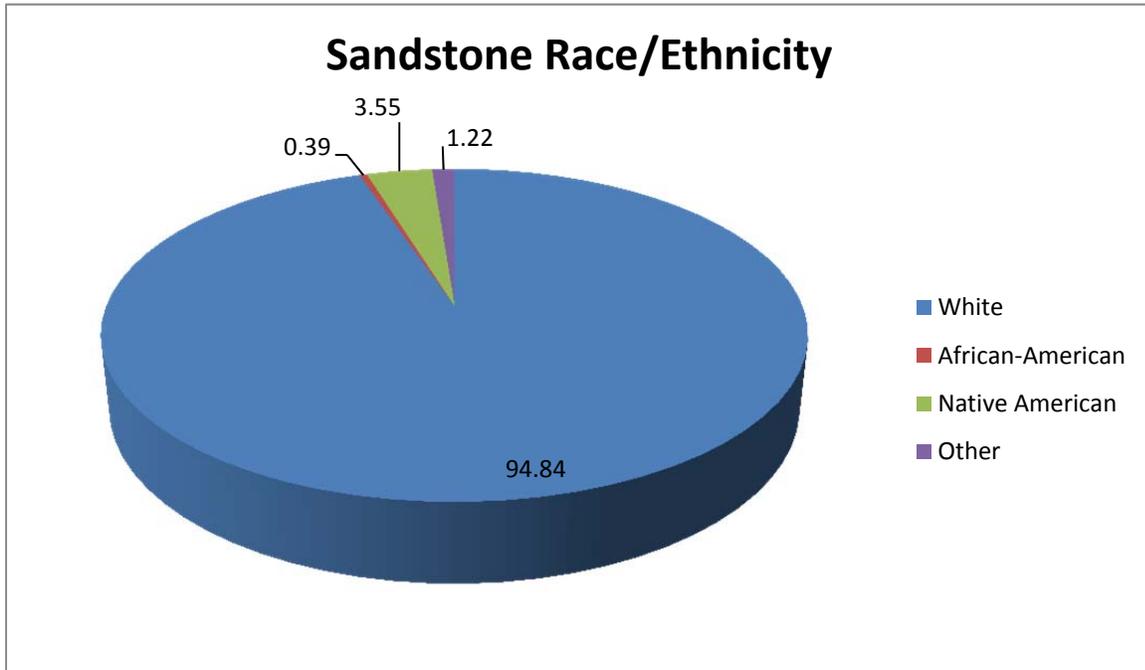
COMMUNITY SETTING & POPULATION TRENDS

Robinson Park is a 65 acre site located along the Wild and Scenic Kettle River in the City of Sandstone, in Pine County, Minnesota which is located directly off of Interstate 35. The City of Sandstone is named after the stone that was quarried out of this region. It is located about 65 miles south of Duluth and about 75 miles north of the edge of the Minneapolis metro area, setting it approximately halfway between two major cities. Sandstone is also home to the Audubon Center of the North Woods, providing many educational opportunities, and is the location of a low security federal correctional institution.

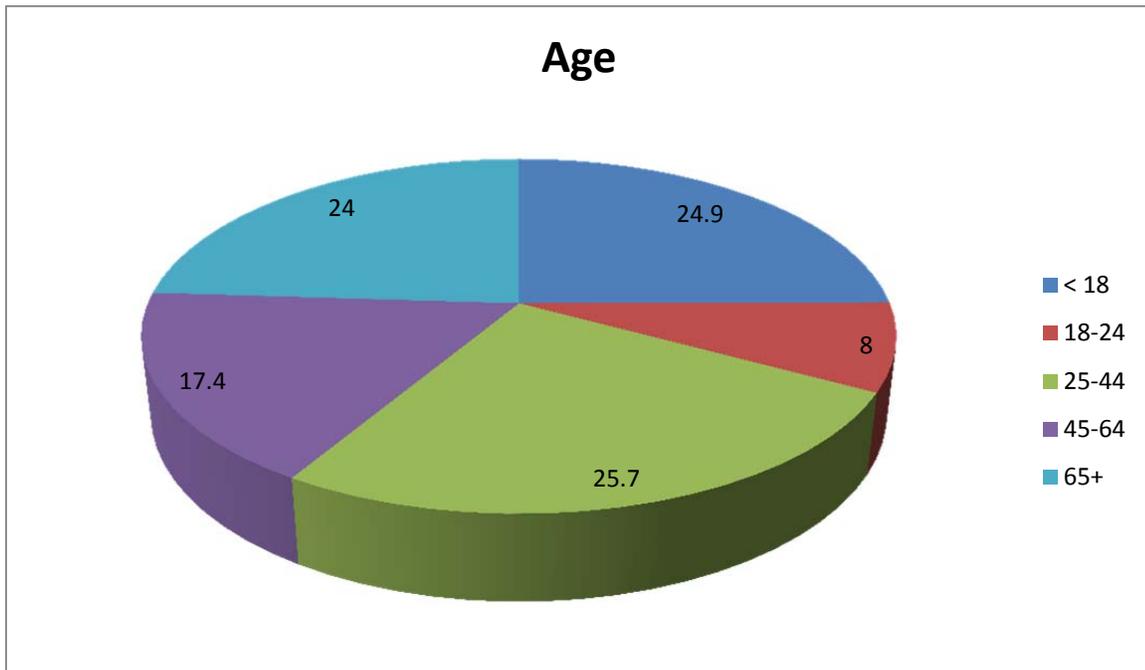
According to the 2000 United States Census Bureau for 2000, Sandstone had a population of 1,549. The median income for a household in the city was \$40,265 and the median income for a family was \$43,684 with approximately 16.7% of the population falling below the poverty line.

Providing access to natural resources and recreational amenities without added costs is an important consideration in improving the health and livability of the community in an equitable fashion, which will be important as the region continues to evolve in terms of population and diversity.

The following graphs illustrate Sandstone demographics based on the 2000 census.



The following chart shows the breakdown of the age population with the median age for Sandstone at 38 years of age. It is important to note that a quarter of the community falls in the 65 and older category, as this is the group most likely to seek out park and recreational areas for leisure, as well as for increased health opportunities, such as walking.



There is a national trend showing birth rates declining and an overall aging population. The largest population group in history - the baby boom generation - is now in their late 40s to mid-60s. These results indicate that we will have to place a greater emphasis on meeting the needs of an aging population as they will have a substantial increase in the next 20 years.

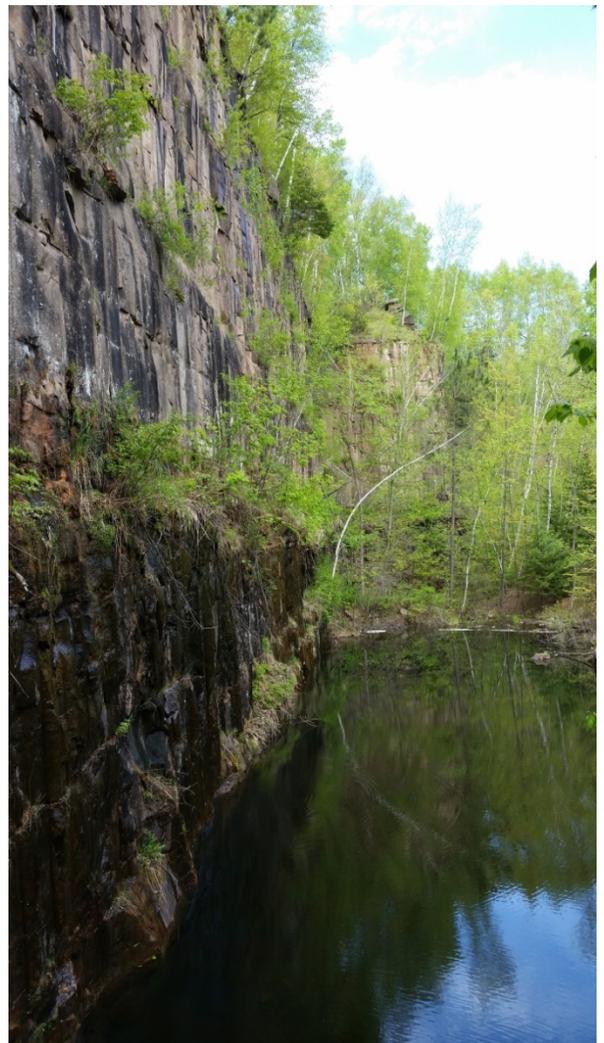
In order to meet the existing and future needs of an aging population, facilities will need to be accessible and should meet the Americans with Disabilities Act (ADA) standards. According to the Pine County census data from 2013, approximately 15% of the total population had a disability which is broken down further to show that approximately 41% of the population aged 65 and older had a disability.

Aging of the population along with competition for recreational time is changing the demand for, and type of recreation desired by, the public. Facilities will need to be kept up to Americans with Disabilities Act (ADA) standards, and more opportunities for low impact and educational opportunities should be provided to meet the needs of this growing user base.

PARK SETTING & CHARACTERISTICS

Robinson Park is located directly adjacent to Banning State Park on three sides and was once the location of a sandstone quarry that was in operation until the late 1930's. Many of the building structures located in Sandstone were built by James J. Hill, a well-known railroad conglomerate, out of the sandstone rock quarried from this region and the park site.

The quarry site included a dam in the Kettle River, various railroad lines, roads, buildings, and other support facilities located throughout. When the quarry operations closed it left in its place an approximate 100 foot high rock cliff wall that separates the park into an upper and lower area that has attracted climbers to the park for many years. There are scattered remnants of the previous quarry operations and equipment still located throughout the site. Due to the significance of some of the artifacts and the previous historic land use, the park was added to The National Register of Historic Places in 1991.



The upper portion of Robinson consists of approximately one third of the park property and is located directly adjacent to the city of Sandstone. This parcel of land is mainly undeveloped except for the city of Sandstone water tower adjoining a large open area where a previous city building once stood, and a shed that a climbing group has set up and maintained to provide water service from a local hydrant to irrigate the cliff walls for farmed winter ice. There are a couple of wetland areas in upper Robinson and most of the site contains dense, mature deciduous vegetation with the exception of a cleared utility corridor that extends down into lower Robinson. Foot trails are scattered throughout upper Robinson and direct access from upper to lower Robinson does not exist, other than through some of the foot paths that lead down steep and rocky hillsides in a couple of areas, one which is not located on park property.

Lower Robinson consists of the remaining two-thirds of the park property and is accessed off of Hwy 123 along Old Wagon Road, which was once the road that connected to the old Wagon Bridge that crossed the Kettle River.

Photo of the Old Wagon Bridge & Quarry (Sandstone History & Art Center)



Old Wagon Road is fairly steep in some sections, is bordered by steep, rocky embankments on both sides in many areas, and has one very narrow corner with limited sight lines due to the fact it was built around the remnants of the Old Wagon Bridge abutment, causing safety concerns. The rock support foundations from the original Old Wagon Bridge are still standing in and along the river.

Old Wagon Road enters into lower Robinson at the main parking lot and contains a boat ramp into the Kettle River. The City water treatment facility and a well house are also located here. The Wild and Scenic Kettle River runs the entire 3500 foot length of the park separating Robinson Park from Banning State Park on the east side of the river.

The southern portion of lower Robinson contains a large wetland area fed by natural springs and has numerous rubble rock piles surrounding most of it. A fairly heavy cover of deciduous vegetation has taken over this area. There are three primitive camp sites located along an old raised railroad bed line that parallels the Kettle River with the remains of two previous powder storage buildings located along the wetland in close proximity to the Old Wagon Bridge abutments.

The central and north sections of lower Robinson is where the majority of the park activity can be found. There are recreational improvements that were incorporated utilizing LAWCON funds back in the 1970's, such as the restroom building and picnic shelters. Two picnic shelters are available, one adjacent to the main entrance parking lot by the boat launch and a smaller shelter close to the restroom building. The restroom building does not have water or sanitary services, so odor issues can sometimes be a deterrent to users. LAWCON funds were also used for the boat ramp and the main park entrance sign.

During the quarry operations the site was completely void of vegetation but has evolved over time to contain some large areas of dense vegetative cover transitioning to more sparsely covered areas, depending on soil cover. There are many pioneer species present, such as birch and aspen. Maples, oaks and evergreen trees are also developing a presence in the park. Some of the exposed bedrock contains a lichen cover and rare pieces of the sandstone exhibiting the rippled water pattern can be found in a few locations, as seen in the following photo.



Due to the existence of invasive and undesirable species in the park, the city was able to secure several small DNR invasive species grants and a larger DNR Conservation Partners Legacy Grant in order to conduct professional invasive species removal operations and to install educational signs with boot brushes on them to try and control further distribution of the invasive species by park users. Some particular nuisance species include honeysuckle, poison ivy and garlic mustard. Additional information regarding the natural resources can be found in the Appendix section of this report.

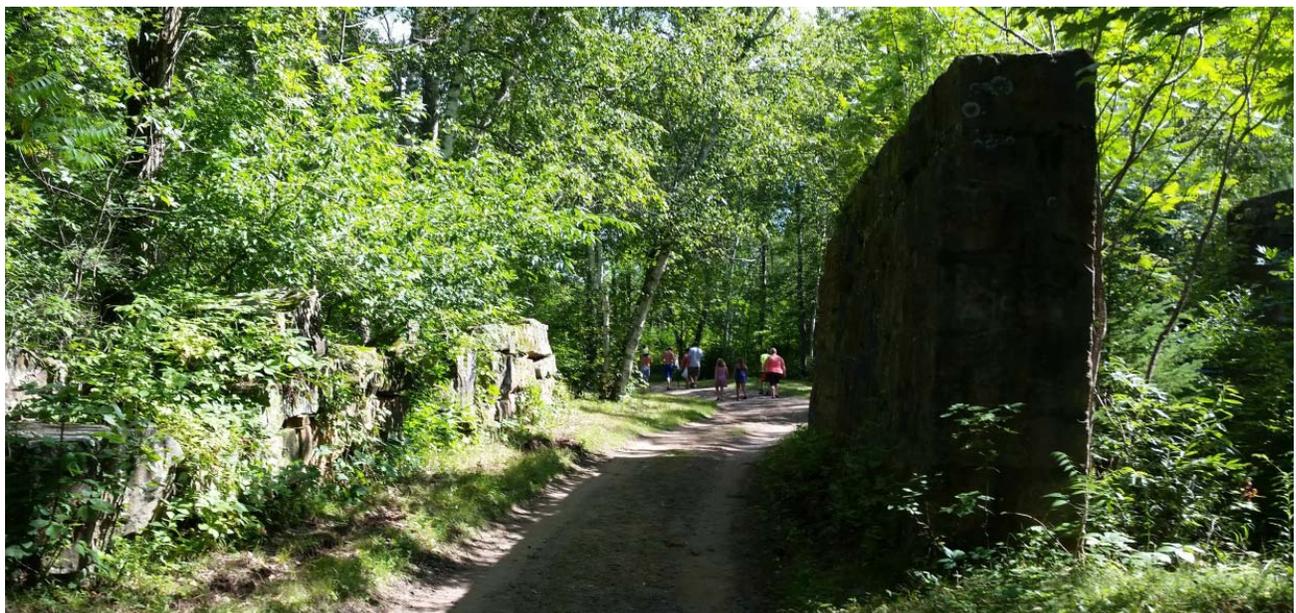
There are two small boat portages, one to the north and south of the previous dam location. The portages allow for pedestrian access to the Kettle River with the ability to avoid travel across the previous dam location where strong water currents and debris in the water can pose hazards. Adjacent to the dam location, the City of Sandstone has created an interpretive memorial containing signage to display the historical significance of the site.

Photos of Memorial Area



The majority of the quarry remnants can be found in the central and north section of lower Robinson. There are larger items, such as a guy derrick, building foundations, and rubble piles, to various smaller pieces that are hidden the majority of the time due to dense vegetative cover.

Informal dirt paths meander throughout the park and are currently being used by both pedestrians, as well as vehicles, causing some conflicts and safety concerns. Allowing vehicles among all of the quarry remnants also causes concern for the ultimate destruction of the historical artifacts of the park that need to be protected.



There is an informal 3,500+ foot long path that parallels the Kettle River from the north to south end of lower Robinson, offering dramatic views of both the natural and man-made elements, which consistently draws users to the park and river.

Photo Looking North towards the Railroad Bridge from Previous Dam Location



Photo Looking South towards the Historic Old Wagon Bridge Foundations



REGIONAL SIGNIFICANCE

PARK CONNECTIVITY

Sandstone is located directly off of Interstate 35 where it intersects Hwy 23, and Hwy 123 also connects into Sandstone from the East. Hwy 23 along Sandstone is noted as a St. Croix Scenic Byway route.

The location of Robinson Park approximately midpoint between Duluth and the Minneapolis metro makes it an attraction from both areas, as well as Wisconsin, and is appealing as a meeting point for many recreational enthusiasts. Those traveling from Duluth to the Metro and vice-versa will make it a point to stop at Robinson along the way due to its desirable recreational amenities and easy access off of a major vehicular route.

There is an existing designated bike lane known as the Sandstone Junction Trail along Hwy 23 that connects to the Willard Munger State Trail west of Interstate 35 and into Hwy 123 east of the interstate by Sandstone that provides pedestrian access. It should be noted that Hwy 23 has wide paved shoulders, suitable for biking, that extends north directly into Jay Cooke State Park, the Magney-Snively Natural Area, and Spirit Mountain, just to name a few. Robinson Park can technically be accessed by pedestrians from Hwy 123, though this needs some improvement in select areas for increased safety. Improvements to the shoulders along portions of Hwy 123 between Robinson Park and Hwy 23 will make for a more successful and safe pedestrian connection.

Robinson Park is located directly adjacent to Banning State Park on both the north and south sides, and Banning State Park is also located on the opposite side of the Kettle River. Development of a continuous multi-use trail along the Kettle River will strengthen the connection between Robinson Park and Banning State Park and may ultimately lead to securing additional land corridors along the Kettle River for more regionally significant connections. Four miles to the south of Robinson is the Rice Lake National Wildlife Refuge. Eleven miles south of Robinson is the Kettle River Scientific & Natural Area, and 23 miles south of Robinson is the St. Croix State Park where the Kettle River and St. Croix River meet, which would be the ultimate goal for a trail connection. It is also the intent to provide a trail that will eventually provide a pedestrian connection from Robinson Park to the future Kettle River Environmental Education Center (KREEC) located to the southwest of the park site.

The Wild and Scenic Kettle River that runs along the length of the park has long been a draw for many kayakers and canoeists and is a state designated water trail. Robinson Park provides direct access to the Kettle River and has two portages in the park to allow for access past the dam location.

The following graphic illustrates the overall context of Robinson Park in relation to its surroundings and the existing and future potential connections that would enhance its regional connectivity.



RECREATIONAL DRAW

Robinson Park offers a variety of recreational experiences that draws people locally, regionally and even internationally.

Water Activities

As noted previously, the Wild and Scenic Kettle River is one of the best white water rivers in the region with a range of Class I to Class IV rapids depending on water levels. The Kettle River continually attracts kayakers and canoeists to Robinson Park. Many canoeists will paddle up to Wolf Creek Falls from the park to enjoy the view of the waterfall or past the Robinson Ice Cave known to be a popular bat habitat or use Robinson Park as a stopping point once the upstream rapids have been conquered. Because of this, Robinson Park is currently being promoted and utilized by some groups and outfitters for commercial purposes, such as one outfitting company based in St. Paul that offers guided rafting and kayaking tours and instruction. The City is currently working with these groups regarding their ongoing use of the park.

A more recent sport that may become more prominent in upcoming years is stand-up paddle boarding along rapids, as shown below.

Image: <https://imaginesurf.wordpress.com/2011/07/12/class-3-4-rapid-on-a-standup-paddle-board/>



During the spring the park is the location for the annual Kettle River PaddleFest. This event offers a weekend of activities such as a river kayak, canoe and raft race, a whitewater rodeo, gear swap, demo's, and ends with a park clean-up. Here is a list of some prior sponsors of Paddle Fest.

- Hard Water Sports
- St. Cloud State University Outdoor Endeavors
- Arc'teryx
- MTI
- American Canoe Association
- Broken Paddle Guiding company
- Star Inflatables
- Mohawk Canoes
- Surly Brewing Company

Another popular water related activity is fishing. It is common to spot someone along the shores of the river with a pole in the water. Below the previous dam and beneath the Hwy 123 bridge are popular fishing spots for those looking for bass or walleye, and the Kettle River has also been known to produce record sized Sturgeon, which is a species of special concern for protection. Some of the ongoing human use along the water's edge has caused some erosion along the banks of the river.

Photo – Fishing Along the Dam Ruins



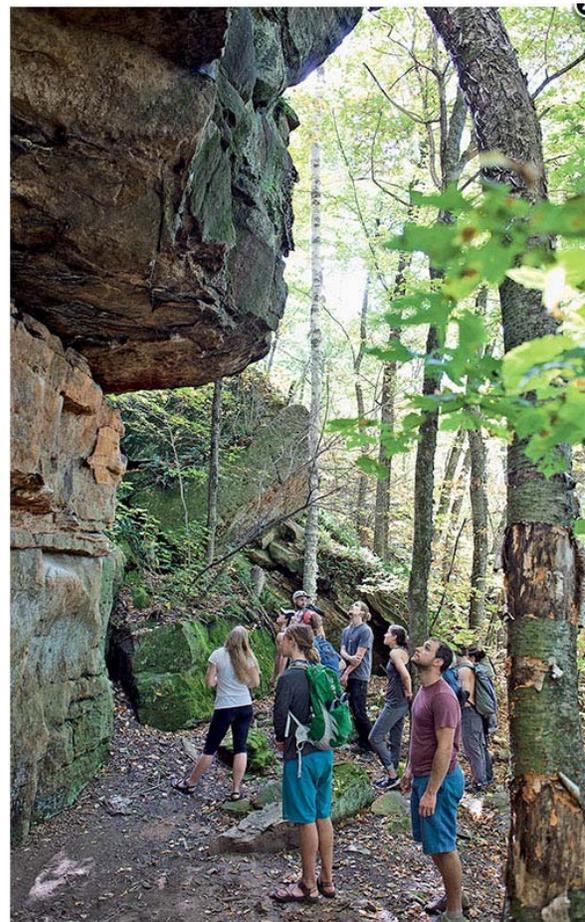
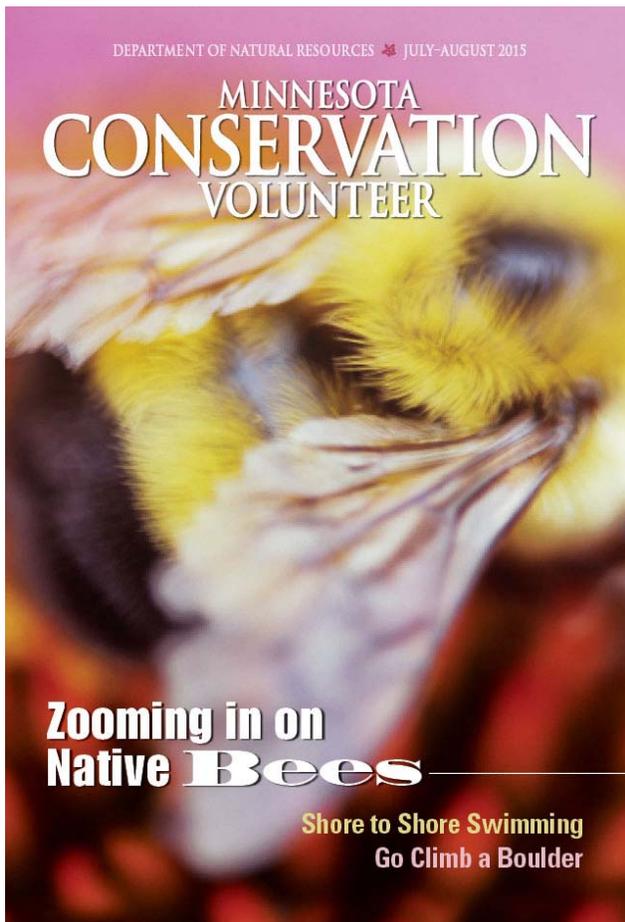
Though there is a motorized boat launch, during the several site visits taken during 2015, there were no boats or boat trailers evident in the park. Discussions with local residents suggested that very few utilized the motorized boat ramp, but could still be found occasionally, and that the existing motorized boat ramp was difficult to use due to the steepness of the ramp into the river.

Climbing Activities

Robinson Park has been used by climbers for many years, though it started out as a more quiet sport with the park considered a hidden gem for the climbers. Popularity continued to increase and the time came when the climbers and the City of Sandstone set up a more formal agreement in order to generate more responsible use of the park, as well as to preserve the asset while educating and encouraging an interest in the sport.

Climbing in Robinson Park is unique in that it offers varying types of climbing including traditional, sport, bouldering, ice, and mixed climbing, with varying skill levels all located within a historic setting. Across the Kettle River is an area that has recently become part of Banning Park and is highly rated for its bouldering activities. It was recently highlighted in the Minnesota Conservation Volunteer publication distributed by the Minnesota Department of Natural Resources in July-August of 2015.

Photo source: MNDNR Minnesota Conservation Volunteer with photo by Mike Dvorak



Vistors to the Banning State Park's new climbing area learn about outcrops known as the Warmup Boulders because they present less challenging problems. Photo by Mike Dvorak.

While climbing in Robinson Park offers a variety of routes and levels suitable from the beginner to the more experienced, it is most highly acclaimed for its ice climbing, which is a winter highlight of the park. Ice climbing in general is rare to find in the United States. The Chicago Rock & Ice Guides praised Robinson Park for its ice climbing saying, “A real gem for the Midwest!” and “the most reliable ice climbing destination in all of Wisconsin, Illinois, and Minnesota.”

The annual Sandstone Ice Festival celebrated their 11th season in December of 2015. The Ice Festival provides demonstrations, climbing clinics to encourage an interest in the sport, and for those who prefer to just watch, dazzling lighted night climbing, with a final park clean-up held at the end of the event.

Photo source: Sandstone Ice Park Facebook page



Comments from ice climbers

“Thank you for setting this up! The ice park is an amazing place and I am super pumped we have it here in MN!!! Cheers.” – Philip Lewis

“Gudday! My buddy Justin and I wandered down yesterday and had a blast on your farmed flows, thanks for setting up such an amazing ice experience in a most unexpected place! We’ll be back!” – Nick Thain

In order to enhance and protect the climbing activities in Robinson Park, there were some specific climbing and outdoor advocacy groups who have continually worked with the community to improve Robinson Park through volunteering, fund-raising activities, youth climbing clinics, and sponsoring festivals. Some examples include the following:

- The Minnesota Climbers Association (MCA)
- The Access Fund (a national climbing advocacy group)
- The Parks & Trails Council of Minnesota

The climbing opportunities in the park have also gained more interest with educational institutions and guiding services. Some examples of educational institutions and private guiding services that have been known to conduct classes at Robinson Park include the following:

- Vertical Endeavors Guided Adventures (VEGA)
- Positive Energy Outdoors
- Winona State
- University of MN – Twin Cities
- University of MN – Duluth
- Iowa State
- University of Wisconsin – River Falls
- University of Wisconsin – Eau Claire
- St. Cloud State

The climbing in Robinson Park has been the focus of many articles, blogs, magazines, and television news stories throughout the country and even Canada.

The cliff walls used for climbing are also used for non-climbing activities. During the summer months the face of the wall can be used as a screen for movies in the park, as shown in the following photo.

Photo of park movies on the rock wall



Passive Recreation & Nature Viewing

While many visit Robinson Park for the active recreational amenities available, just as many users visit the park daily in order to enjoy the passive and peaceful atmosphere of the park. The park contains a wide variety of highly scenic views from one end of the park to the other with opportunities to view differing ecological communities, natural resources displaying seasonal interest, the river, and wildlife.

The park is known to be located along a bird migratory flyway so some visitors come down to listen to the birds or to try and catch a glimpse of them. The Audubon Center of the North Woods is located out of Sandstone and has been established there since 1971. They provide many educational and naturalist programs that could interact with park in numerous ways during various seasons of the year.

Several trips to Robinson Park were taken during various seasons in 2015 and random park users were questioned on what brought them to the park. A majority were there just to look at the park or to take a quick walk through the park and enjoy its beauty.

*Comments taken from two local residents during the summer of 2015
(paraphrased):*

*“We come down here all the time just to watch the water
flow by. It’s so peaceful. We can’t get enough.”*



During each of the four 2015 park visits, the parking lot was almost full with vehicles, though at first glance it was difficult to find any of the park users due to the heavy vegetation that masked the majority of the park from view. While the vegetation provides an appropriate scenic quality to the park, there were concerns from park users regarding the perception of safety within more secluded and remote areas of the park.

HISTORIC SETTING

The previous quarry operations that existed in Robinson Park create a very distinct park setting. The artifacts that are scattered everywhere provide a rustic, historic feel and blend the past uses with the present, but are becoming increasingly threatened by negligence and vandalism. Some of the bolts located on the rock walls were put there by workers in the quarry and some of them even signed their names on the wall itself, which can only be seen by those traversing the cliff walls. These hidden pieces of history provide a very intimate connection to the users who are able to find them. Ongoing preservation and enhancement of these unique pieces of history need to be undertaken in order to keep the history alive for future generations so the elements that currently make the park feel unique and special won't be forever lost.



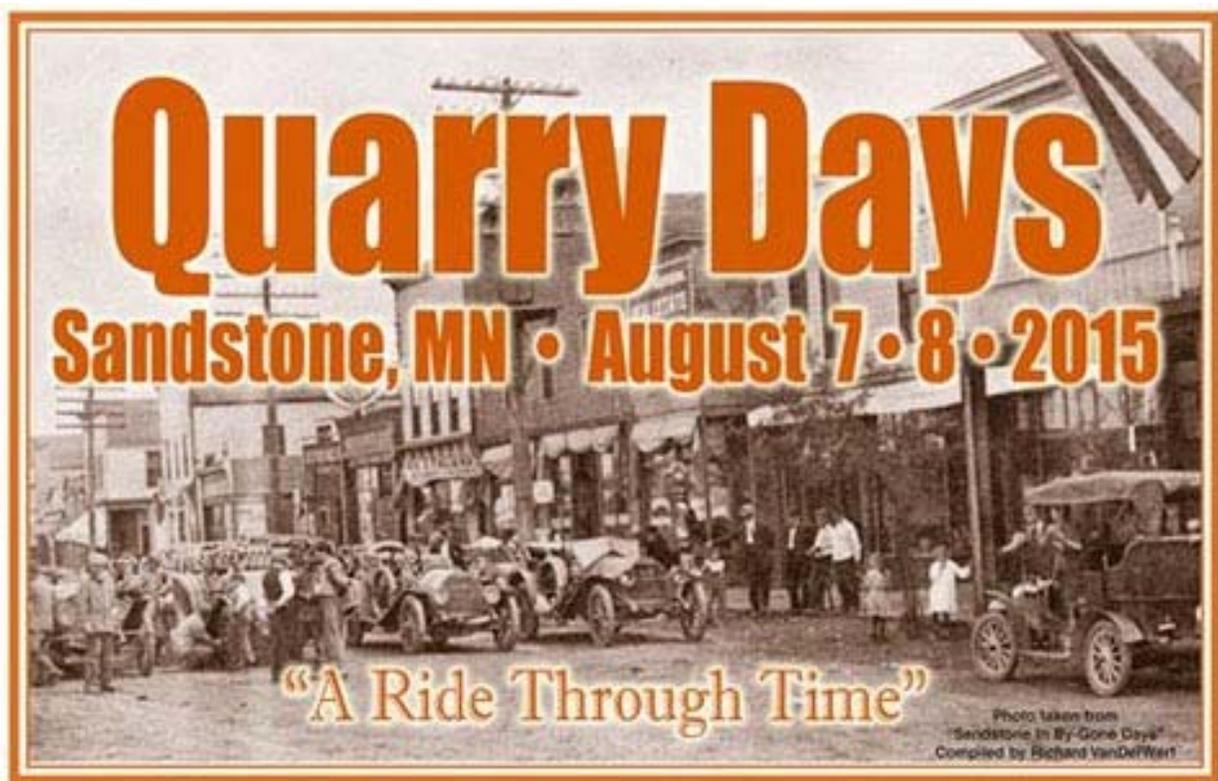
The large quarry artifacts, such as the powder storage buildings, rock crusher foundations, and even the towering guy derrick, can sometimes be difficult to see through the dense vegetation until you stumble upon them, and many are becoming increasingly degraded and unsafe as their stability continues to be diminished from ongoing decay and deterioration.

Photos of stone crusher foundations and guy derrick



The improvements that have been made to the park by so many valued park stakeholders, from climbers, to kayakers, to local concerned citizens, have all helped to deter some of the prior undesirable park uses, improved the safety of the park, and in turn, rekindled the connection between the park and local community. This renewed spirit in Robinson Park has also increased the historical interest in the park. Many of the local residents who once thought the park was too dangerous to use now want to highlight its historical significance.

The Sandstone Chamber of Commerce holds an annual Quarry Days event to help highlight the historical aspect of its existence. The event includes everything from kids activities, car show, pageant, musical events, parade, climbing events, and of course, guided tours of the historical elements of the park.



ESTABLISHING SIGNIFICANCE

The City of Sandstone understood that even though the park contains only 65 acres of land, the types of recreational amenities it offers were drawing in people from more than their own local community.

In order to understand the park draw a little better, the City of Sandstone set out to undertake some park survey studies to establish who was using the park and why. In 2013 they did one winter and one summer park survey. The results indicated that even on just one day they were able to identify park users from other communities, other states, and even other countries. One user came from Norway and they have since talked with repeat park users from England who come back time and again while traveling through the area. The results of the park surveys are included in the report Appendix.

Now that the City of Sandstone knew the park was regionally significant, they went through the process to gain the status of a Special Feature / Natural Resource Regional Park Designation. This designation is approved once a site meets the following criteria:

- Provides a special high quality outdoor recreation experience
- Provides a natural and scenic setting offering a compelling sense of place
- Well located to serve a regional need and/or tourist destination
- Fills a gap in recreational opportunity within the region

The application is included in the Appendix.

PLANNING FRAMEWORK & OUTCOMES

PLANNING FRAMEWORK

PREVIOUS PLANNING EFFORTS

The City of Sandstone worked with students from the University of Minnesota to create the original master plan, which was completed in 1992.

This master plan amendment process used the original master plan as a starting point with new project perspectives and dynamics brought into the design process to create an updated master plan meant to serve the updated recreational needs of the regional population. The master plan amendment remains consistent with original project goals.

STAKEHOLDER & CITY INVOLVEMENT IN PLANNING PROCESS

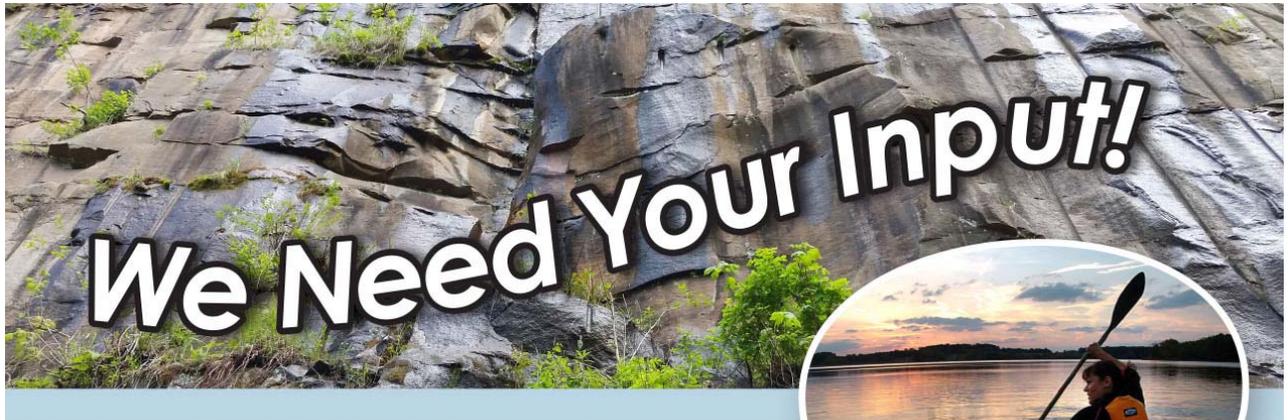
Given the notable interest in the ongoing use and future development and protection of Robinson Park, the local community and special interest groups were invited to participate in the planning process for the master plan update. Through formal and informal meetings, phone, and email discussions, the public and stakeholders had direct access to the City of Sandstone staff and the consultant team at all times. The input gathered throughout the planning and design process proved to be very detailed and strengthened the outcome of the master plan process on many levels.

The City of Sandstone staff and Parks Commission members provided oversight of the planning process at critical points. Being familiar with the park, local community perspectives, and recreational demands for various types of facilities, city staff and Parks Commission members inherently played an instrumental role in the master planning process. Under the planning framework, there were three meetings held with the City of Sandstone staff and the Parks Commission members, who focused on the following key roles:

- Community outreach & promote project process
- Provide background and site specific information
- Review and comment on all planning and design outcomes
- Consensus and approval of the final master plan

Two public open house meetings were held in the City of Sandstone in order to gather input from the public, as well as to provide them the opportunity to review and comment on the development plans. The public meeting notices were distributed throughout the community and publicized in the Pine County Courier paper with additional write-ups in the paper following some of the meetings.

The following is one flyer example that was distributed for notice of a public meeting.



Robinson Park Master Plan Update

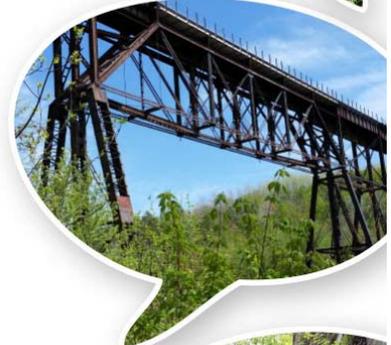
Meeting Date: **Thursday, June 25th, 2015**

Meeting Time: **6:30 – 8:00 pm**

Location: **Sandstone Senior Center**

206 Main Street, Sandstone, MN

Whether you are a member of the community, a current park user, or a concerned citizen - we need your valuable input on the planning and design for Robinson Park. Please stop by to check out the site analysis information, review some ongoing park design considerations, and help us brainstorm ideas in order to make Robinson Park a destination gem for you!



City of Sandstone, Minnesota

The project stakeholders, from local residents to special interest groups, contributed a wide range of perspectives, which proved to be crucial to finding a balanced approach to the future of Robinson Park.

Several informal meetings with specific stakeholder groups were also held due to the fact they were located outside of the Sandstone region, along with phone or email conversations with others. Some select groups and individuals who provided input and who are considered project stakeholders included the following:

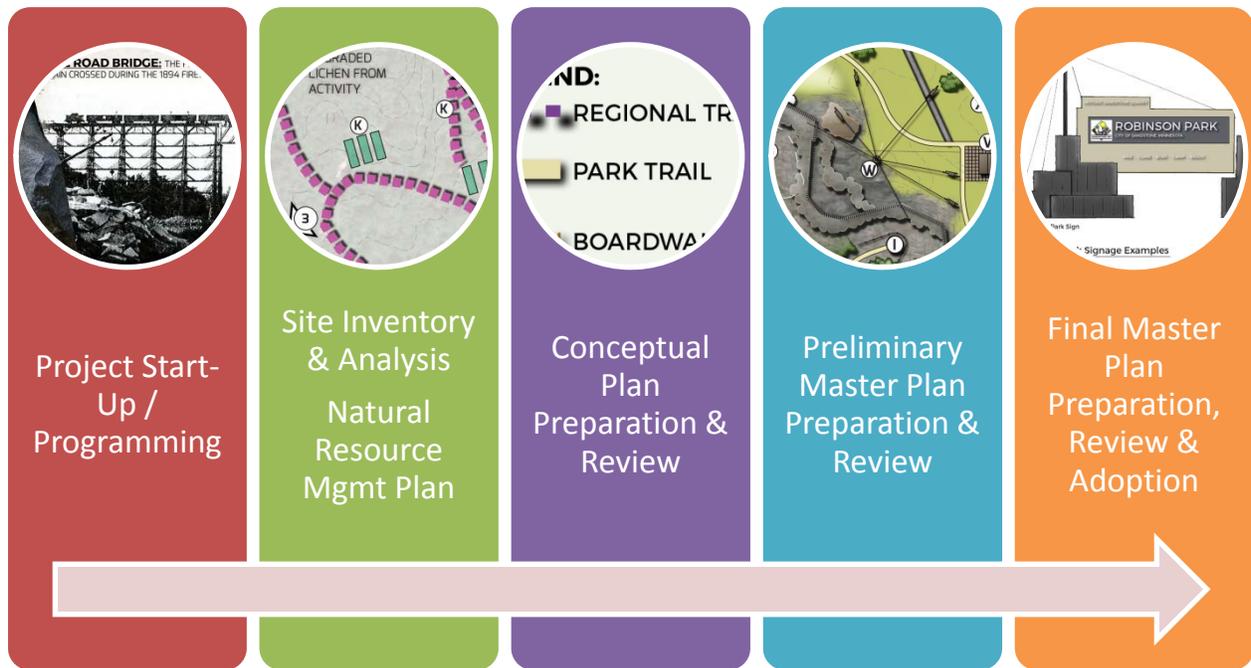
- City of Sandstone staff
- Sandstone Parks Commission
- Minnesota Climbers Association
- Vertical Endeavors Guided Adventures (VEGA)
- Kayakers / Canoeists
- Local Residents
- Current and previous park users
- Minnesota Department of Natural Resources
- Banning State Park
- State Historic Preservation Office
- Community Service Groups
- Quality of Life Committee
- Sandstone Chamber of Commerce
- Children, Youth and Future Work Force Committee
- Rapid Riders Group
- Audubon Society
- Photographers
- Educational Institutions

The following summarizes the formal meetings for input and review during the design process.

| | |
|-------------------------|---|
| April 15, 2015..... | Parks Commission – Project Kick-off |
| June 25, 2015..... | Public Open House #1 – Programming |
| August 11, 2015..... | Parks Commission – Concept Review |
| September 10, 2015..... | Public Open House #2 – Preliminary Master Plan Review |
| October 1, 2015..... | Parks Commission – Master Plan Review & Approval |
| December 2, 2015..... | City Council – Review and Adoption |

PLANNING PROCESS

The planning process followed a step-by-step procedure in which public participation was an integral part. The process ensured that pertinent issues were considered and addressed in the proper sequence and with due diligence. It also ensured that historical and ecological issues were at the core of all discussions and land use decisions. The following figure illustrates the basic framework that was undertaken for the planning and design process.



Development Criteria & Balanced Development

As a park of regional significance, there is *no* specific requirement that the overall extent of development be limited to a maximum percentage of land area, leaving the remainder as natural open space, however, the City of Sandstone and the project stakeholders wanted to ensure there was a proper balance between developed and natural spaces within the park setting in order to maintain the scenic qualities the site has to offer.

It was clearly established during the public process by the city staff and project stakeholders that the master plan should accommodate a balanced development approach as a high priority for ongoing sustainability and increased safety for park users. The historical components and natural character are what give Robinson Park its unique appeal. The active recreational amenities offered in Robinson Park continually draw users to the region and, in turn, has increased the safety within the park. Finding the appropriate balance between human use of the park, historical interpretation and preservation, and ecological protection was an important and consistent concern from almost all park users and local residents. The master plan reflects this by clearly defining the active and passive spaces within the park setting.

PLANNING OUTCOMES

In general, the findings from the public process validated the previous recreational desires during the initial master plan process, as well as identifying current recreational needs and trends. The initial public meetings were helpful in defining how the park has changed over the past decade, how it functions, and how new recreational improvements and uses can best be incorporated into the site.

PROJECT VISION STATEMENT

The following is the vision statement that was created for the Robinson Park Master Plan Amendment:

“The vision for Robinson Park, located along the Wild & Scenic Kettle River, is to provide the region with a unique blend of active and passive recreational experiences integrated with the historically significant quarry artifacts. The park shall be easily accessible, suitable for a wide range of interests and abilities, offer short and longer-term park uses, and encourage ongoing stewardship through the park experience.”

FINDINGS FROM THE PUBLIC PROCESS

The following is a list of high priority goals that were of importance to local and regional park users based on the community input received during the design process.

- Accommodate a variety of recreational activities for both local as well as regional park users
- Provide recreational amenities during all seasons of the year
- Improve the overall park experience and safety of the park
- Provide a balance between preserving and enhancing the natural resources and scenic qualities while accommodating active recreational park development
- Provide a better connection between the local community and the park
- Portray the historical significance of the site that is currently being missed and protect artifacts
- Encourage ongoing stewards – start with the youth to get them more involved
- Provide proper accessibility to the park and recreational amenities
- Delineate vehicular vs. pedestrian routes through the park
- Promote future business opportunities in Sandstone by highlighting the parks’ significance

In consideration of the findings of the public process, it is clear that Robinson Park is an essential component of the city of Sandstone, as well as Pine County. It will be vital to servicing the recreational needs of the residents and visitors in the years to come and may encourage community growth as the city of Sandstone continues to evolve in its development opportunities.

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DEVELOPMENT MASTER PLAN

OVERVIEW

The development master plan amendment provides a cross-section of features and amenities to meet current and anticipated recreational demands for the local, as well as regional, population. The mix of facilities included in the master plan is in response to the updated program for development with a focus on preserving and enhancing the historical and natural resources of the site. The plan strives to create a balanced approach to further development of the park that will improve the recreational uses of the park and allow for better sustainability of the site as park uses continue to increase.

The development plan provides a platform for the park visitor’s recreation and education within a natural and historic setting. Providing activities during all seasons for youth, adults, seniors, individuals, and groups for short, day-long, or overnight visits, the park strives to provide something for all potential users and abilities.

DEVELOPMENT ZONES

Robinson Park consists of two distinct development zones, an upper Robinson and a lower Robinson. Upper Robinsons consists of approximately one-third of the park and lower Robinson consists of the remaining two-thirds of the park which is further broken down into sub-zones. Each development zone contains interest points with specific special-use areas identified on the plan, all of which are connected by an extensive trail system, as the following defines and highlights in more detail.

WAYFINDING & PARK SIGNAGE PROGRAM

Upper Robinson provides the optimal opportunity to connect more intimately to the local community and increase local use of the park. The downside is that the entrance is not located along a major vehicular route; so therefore, a wayfinding signage program should be implemented in order to direct users to the two distinct entrance locations of Robinson Park.

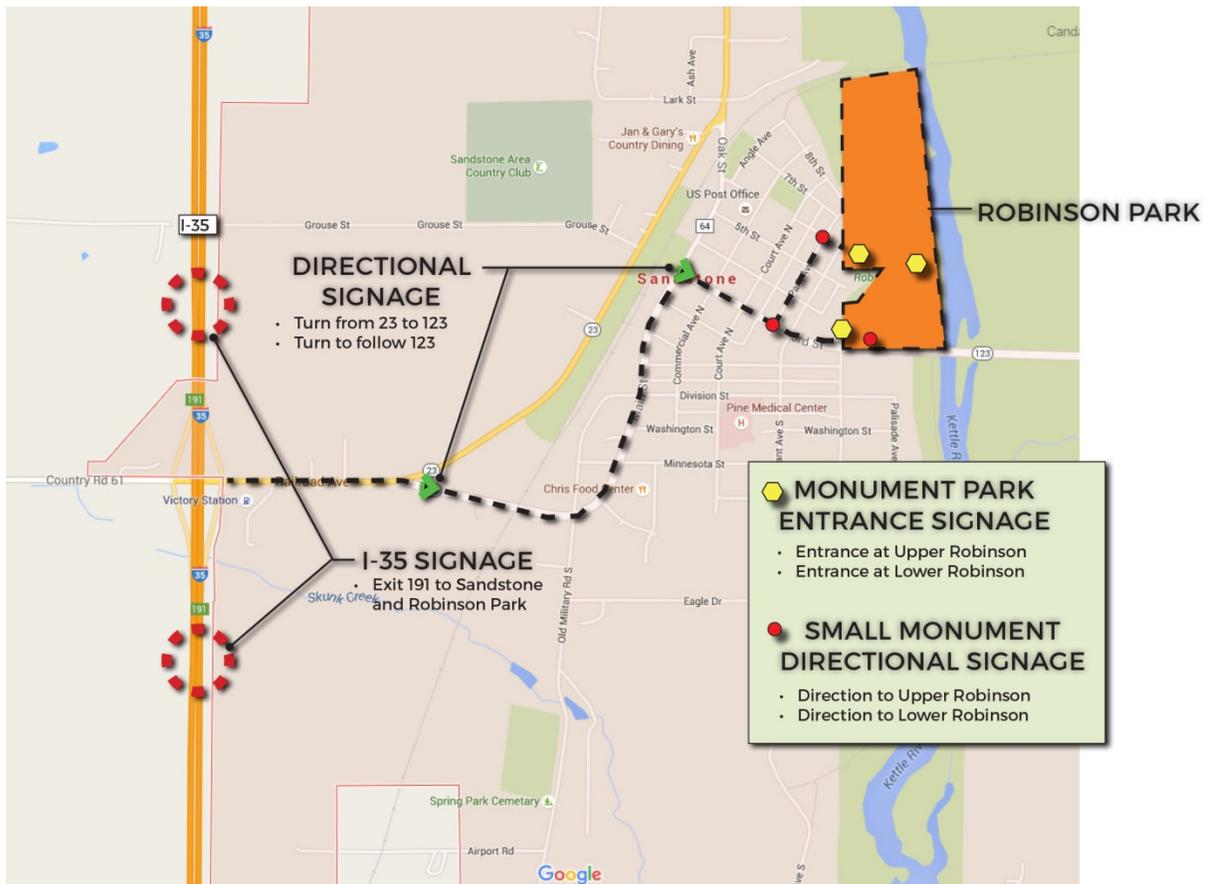
The wayfinding program would be integral to the park signage program and contain a hierarchy of signs that would provide information in an unobtrusive manner. From a design standpoint, a strong overall theme to reflect the characteristics of the community and Robinson Park would be highlighted in the design to carry a strong branding style throughout the community. The signs would consist of a similar style, character, materials, logo, etc. to enhance the sense of place within Sandstone and highlight the historic quarry.

The key components of the wayfinding & park signage program would include the following:

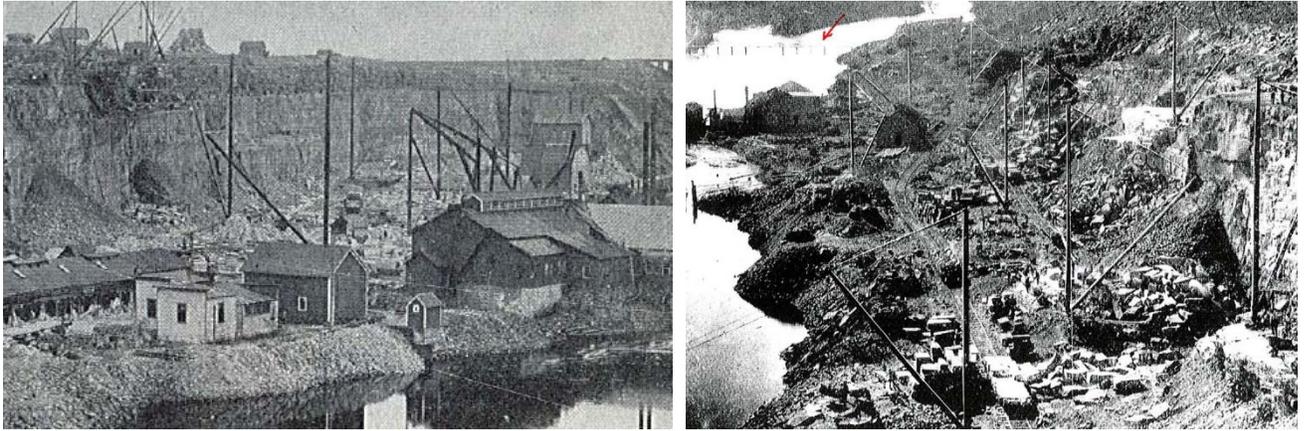
- **Tourism / marketing wayfinding signage** – located along Interstate 35 with signage provided in both directions to identify the exit that leads to the city of Sandstone and Robinson. This could range from a billboard sign to a larger display exhibiting quarry cliffs or some of the natural resources and recreational amenities available at Robinson Park.

- **Directional signage** – located along key intersections to direct travelers to Sandstone and Robinson Park. Key locations would include the intersection of Hwy 23 and Hwy 123 and the corner where Hwy 123 turns to the east to direct traffic towards Robinson Park.
- **Small monument directional signage** – these would be a little more substantial than simple directional signage in order to catch the attention of vehicles and would provide the users advance notice of key intersections that would lead to either the upper or lower Robinson entrance points from both directions along Hwy 123, as well as the corner intersections to upper Robinson within the residential area.
- **Park monument identification sign** – located at the main points of entry of upper and lower Robinson and at the bottom of Old Wagon Road to signify entrance into the park. These will be substantial park features that reflect the historic significance of the park quarry operations.
- **Park informational signs** – located at specific points in the park to provide information such as park rules, safety information, and park trail maps for proper orientation.
- **Park historical and interpretive signs** – located along trails, overlooks and display areas throughout the park to highlight educational and historical information. These can include historical information, plant and animal information, and park recreational use areas.

The following graphic illustrates the main points for the wayfinding signage to be considered.



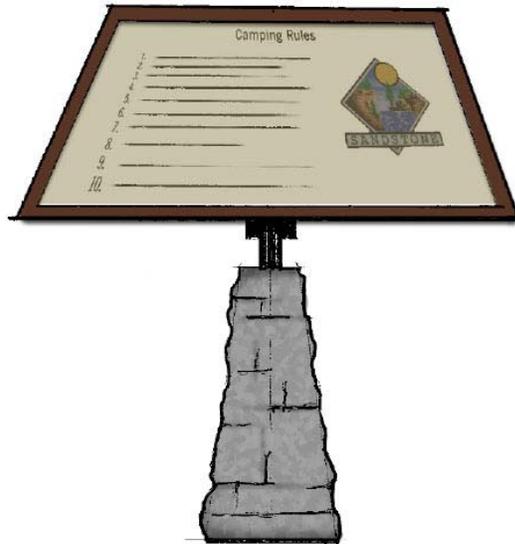
The use of existing quarry stones, or cultured rock to replicate actual stone, can be incorporated into the sign styles to create a cohesive character that reflects the quarry operations. Some of the preliminary sign designs pull their shapes from previous quarry elements, including the guy derrick and various angular shaped quarry equipment operations, as the following graphics and photos illustrate.



Monument Park Sign



Directional Monument Signage



Park Informational Signage

MASTER PLANNING PROCESS

As noted previously in the planning framework, the planning process took a step-by-step approach. The process began with establishing the park programming elements and determining the site’s physical and natural resource/ecological conditions. A vision statement was created to guide the planning and design for the master plan amendment. Preliminary conceptual designs were prepared and the most desirable elements were then combined into one preliminary master plan which was then refined further into the final master plan amendment.

Just as master planning is built of logical steps it is not the end of the design process, nor should a master plan be considered a static plan. Today most public parks are developed over many years. The plan should be reconfirmed periodically and development adjusted as required to meet the recreational needs of the users, changes in recreational trends, and public desires. The basic premise of this being a natural resource based historical park is unlikely to change in the future as the public’s sentiment regarding saving the historical environment for future generations will continue to be a high priority.

The following final master plan graphic is the result of the planning process and is described in more detail in the following sections.

ROBINSON PARK

Sandstone Minnesota



OVERALL MASTER PLAN



WSB PROJECT NUMBER: 03005-000
 DATE: 09-30-2015

UPPER ROBINSON

Upper Robinson is directly connected to the residential area of Sandstone and will be more easily accessible to the local community. Currently there is no development within upper Robinson other than the existing water tower which is surrounded by a large clearing, and some foot paths through the dense vegetation. The local community expressed they are in need of easily accessible park amenities, such as a children’s playground. Upper Robinson provides the perfect location for developing park amenities that would provide the more day-to-day recreational needs of the community in an easily accessible location.

Upper Robinson:

- A – Parking
- B – Children’s Playground
- C – Trails
- D – Tent Camp Sites
- E – Restrooms
- F – Group Tent Camp Sites
- G – Camper Cabins
- H – Upper Cliff Area
- I – Overlooks
- K – Historical Element
- M – Picnic Shelter

Park Access



PARK ACCESS

The park entrance for upper Robinson is located off of 6th Street which leads directly into the water tower location. The existing cleared opening is utilized to create the main development area in order to minimize impacts to the site. The parking lot can be developed in stages to account for actual parking needs with 10 stalls created initially and an additional 10 stalls that can be added if needs dictate. The parking lot extends into a loop that can be implemented only if the camp site areas are developed, as this is meant to provide better access to the camp sites. The parking lot can initially be constructed as a gravel lot with the possibility to have it paved in the future if dust or erosion becomes problematic.

PARK DEVELOPMENT

A children's playground with an adjacent open air picnic shelter is shown tucked to the edge of the site with the existing mature vegetation bordering it along the main park access location where the existing open area is located. The playground equipment would be themed to fit with the natural character of the site and can contain items related to rocks, trees, and climbing as part of some more traditional elements. The equipment should allow for pieces that fit both pre-school as well as elementary aged use to accommodate a wider range of users and age-appropriate play. The playground should ensure paths / trails are constructed within ADA guidelines for access to the playground equipment.

TRAILS & OVERLOOKS

General Overview & Description: The trail and overlook system in upper Robinson is meant to provide access to the various recreational elements, allow for exploration of upper Robinson, provide opportunities for scenic views, highlight a historical element, and provide a pedestrian connection to lower Robinson. The trails on the master plan graphic indicate the overall intent of the trail system but the actual location of the trail routes will need to be field verified for optimal location based on actual site conditions.

Trails in upper Robinson shall be a minimum of 5' in width with a width of 8' preferred. Natural surfaced trails constructed with decomposed granite, a more expensive but more accessible option, to crushed aggregate can be used in most of upper Robinson to blend with the natural surroundings. Natural surfaced trails can also be used for winter uses such as winter hiking or snow shoeing. Trails and access routes to shelters and playgrounds are recommended to be constructed with bituminous or concrete paving to meet accessibility requirements. In certain loops and locations, exercise equipment shall be located along the upper Robinson trail to create a circuit training route, which was desired by the community and would increase the health and livability of the community.

Overlooks will range in design. Some may be simple stopping points to enjoy a scenic view, others may include interpretive signage displaying photographs and historical information, and it was even desired by some to include a cantilevered deck to allow observation of the climbers from the upper cliff location.

Challenges: One challenge for the trails in upper Robinson is the relationship between the trail and the cliff wall. The trail purposefully meanders out to the cliff face in select areas in order to make use of the views which will require implementation of safety measures such as cable and rail fencing and signs along the trails that instruct trail users to stay on the trail at all times. The intent of any safety fencing is to blend appropriately with the site characteristics through colors and materials so it does not detract from the overall park atmosphere. It is not the intent to fence off the entire cliff wall, only where the trail and overlooks are within a specific distance to the cliff edge, otherwise the overall natural park appeal will be inherently compromised. The costs associated with the safety rails will be an obstacle for implementation and phasing in trails that require these safety measures should be considered.

Another challenge is creating the pedestrian connection to lower Robinson. The master plan indicates a potential location for a staircase to be implemented that would provide the pedestrian connection between upper and lower Robinson along a steep hillside covered in rock rubble. The staircase leads to the Old Wagon Road at the location of the existing bridge abutment, which already has safety concerns due to limited visibility. The implementation of the staircase will have increased costs due to the construction in a difficult environment and should only be undertaken once improvements to Old Wagon Road and the abutment have been finished to ensure proper visibility for a safe pedestrian crossing at this location.

INFRASTRUCTURE IMPROVEMENTS

The climbers currently have a shed along Park Avenue where they have access to water to irrigate their farmed ice cliffs. Further development in upper Robinson with trails would increase conflicts with the above-ground water and irrigation system, and likely incur ongoing damage. The master plan suggests bringing the underground water service line further into the site as close as possible to the cliffs to reduce the length of the above ground water irrigation lines, with measures taken to protect or hide the lines to reduce the possibility of damage. Locations should be coordinated with the climbers for best locations and according to site conditions. Bringing in electricity to the walls will also improve the winter use to support the rope lights used beneath the ice flows. As part of the park signage program, the climbers would like to help design the signs that relay climbing rules and information to park users.

CAMP SITES

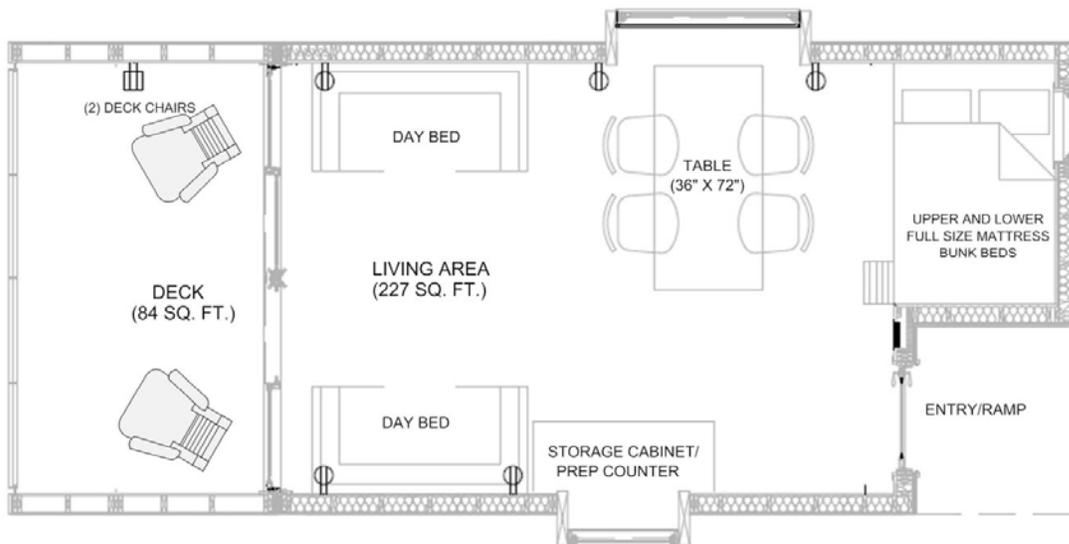
General Overview & Description: Camping opportunities currently exist in lower Robinson and keeping camping activities in Robinson Park was a high priority. The existing camp site locations in lower Robinson receive a lot of traffic noise from Hwy 123 and remain as primitive sites due to the difficulty and expense of bringing in utilities to this location. Upper Robinson, on the other hand, provides a perfect opportunity to provide a broader range of camping opportunities in a more peaceful setting with scenic views. It also allows utilities to be brought in for shower and restroom facilities. The shower and restroom facilities should be located to be within 400 feet of all camp site locations.

The master plan indicates a range of camp settings that include single to group tent camp areas. As with all master plan elements, the actual locations would be field verified for the most appropriate locations that have the best views and are still far enough from adjacent residential areas to reduce any potential conflicts. Single tent sites should have enough room in between and make use of existing vegetation to ensure each site has its privacy. The group camp site would be suitable for scout troops, families, or small groups and could include 4-5 tent pads constructed of compacted aggregate surfacing. The tent pads would surround a central area containing a pad for a ‘mess’ tent, a camp fire ring and picnic tables. Access to the tent camp sites would be by trail from the parking lot and turn-around loop in the developed area of upper Robinson and parking would not be provided or allowed within the actual camp site location.

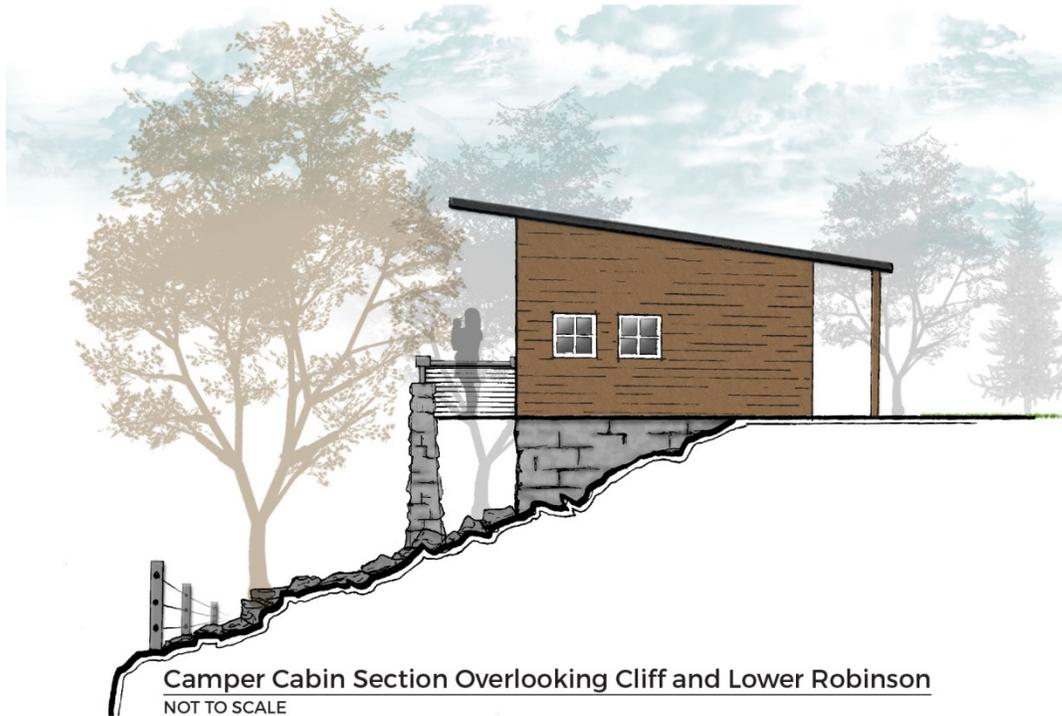
New to the park would be the possibility of introducing camper cabins along a cliff side location that has stunning views towards the Kettle River in lower Robinson. They can range from a very simple design with no utilities, to a more 4-seasonal approach that would have electrical lighting and heat. It would be the intent that each cabin would not have restrooms or running water and would have a maximum 6-person capacity with a limited footprint. For comparison, the camper cabins at Whitetail Woods in Dakota County have a 6-person capacity and contain less than 230 square feet of living space as illustrated in their floor plan.

Source: <https://www.co.dakota.mn.us/parks/parksTrails/WhitetailWoods/Documents/CamperCabinFloorPlan.pdf>

CABIN LAYOUT PLAN



There has already been significant interest from the local and regional community regarding the camper cabins so it is our speculation that these would be a popular amenity to the park. The following master plan graphic is an illustration of a camper cabin along an upper cliff.



Challenges: Challenges to the camper cabin concept include the cost of implementation as well as the ongoing costs for operations and maintenance. The camper cabins can be implemented using a phased in approach to fully understand how well they are received before investing in their complete development. Potential revenue from reserving the camper cabins can be used to help offset any costs associated with operations and maintenance.

LOWER ROBINSON

Lower Robinson has three distinct development zones that provide a variety of recreational experiences from active to passive recreation.

The south end of lower Robinson is kept in a more natural state with a focus on passive recreation surrounding the wetland and the historical and natural resources of the site. The central portion of the site is where the more historical and active recreational amenities are located and the northern section transitions back to a mixture of historical and natural resource based passive recreation.

Lower Robinson – North

Lower Robinson – Central

Lower Robinson - South



LOWER ROBINSON - South

The southern area contains the main entrance road into lower Robinson along Old Wagon Road and a focus on more passive recreational amenities with the preservation and interpretation of some historical aspects. The main elements of this zone include the following:

- E – Vault Restroom
- I – Trail Overlooks
- J – Park Trail System
- K – Historical Piece / Interpretation
- L – Tent Camp Sites (existing)
- M – Picnic Shelter
- N – Parking
- O – Abutment/Pedestrian Bridge
- Q – Main Park Entrance Sign
- R – Bank Stabilization



PARK ENTRANCE ROAD & PEDESTRIAN BRIDGE

General Overview & Description: The existing Old Wagon Road offers a fairly scenic entrance into lower Robinson and is mainly aligned with the previous location of the road that led to the Old Wagon Bridge that crossed the Kettle River. The existing remains of the bridge abutment and landing for the Old Wagon Bridge partially extends into Old Wagon Road, causing a narrow and unsafe road section with limited sightlines around this corner. This piece of the abutment has been previously altered by the improvement of the entrance road and the base of the abutment is coming apart and is in need of stabilization. It is the intent of the master plan to modify the abutment further through some reconstruction and stabilization techniques in order to preserve it for its historical significance, while cutting it back further in order to widen the road and improve the sightlines.

Photo of the Bridge Abutment Remains



The abutment location along Old Wagon Road has an existing level area that can be enhanced to develop a handicap parking stall in order to provide proper access to this historic piece of the site. This is also the recommended location of the pedestrian crossing between the upper and lower Robinson by the staircases once the road and abutment have been modified for increased safety. The proposed pedestrian crossing should have signage and other site improvements to call attention to the pedestrian crossing and use in this area.

To recall part of the original history, the master plan illustrates the potential construction of a pedestrian bridge across the Kettle River along the previous Old Wagon Bridge alignment using the remaining abutment and foundations. The pedestrian bridge would provide a connection from Robinson Park to Banning State Park across the river and access to the bouldering activities that occur on that parcel.

The Old Wagon Road entrance drive enters lower Robinson next to the existing water treatment facility. The water treatment facility should have aesthetic treatments to allow it to blend with the park setting, rather than being a distraction. A large monument park sign is proposed as the entrance focal point with the river as the backdrop behind it. This provides a grand sense of entrance for the park user and also provides general guidance.

The parking lot has been realigned and pulled further away from the river with the larger parking areas to the north and a smaller parking lot to the south, mainly for the camp sites, and the existing motorized boat launch has been removed. The parking lot realignment and removal of the boat launch allows the ability to capture some of the water runoff that is currently flowing down Old Wagon Road and directly into the river through the boat launch.

Challenges: One challenge will be the feasibility and construction costs related to the implementation of a pedestrian bridge across the Kettle River. Actual costs will be relatively unknown until a thorough structural analysis can be undertaken on the existing foundations and abutment. The structural review will determine if the foundations can support a pedestrian bridge and will also determine the extent of work that will be involved in stabilizing the existing abutment. Due to the difference in height of the abutment landing from the existing foundations, the pedestrian bridge would need to include a series of ramps to make up some of the grade difference. Even if the existing foundations are structurally sound, the costs for a pedestrian bridge may prove to be too prohibitive in the near term, and this item will likely become a lower priority for implementation.

The costs related to the stabilization of the existing abutment may also be fairly extensive, but this item is a higher priority in order to increase the safety of Old Wagon Road, the main park entrance road, and to allow for a safe pedestrian crossing from upper into lower Robinson.

TRAILS & OVERLOOKS

General Overview & Description: The trail and overlook system in lower Robinson is meant to provide access to the various recreational elements, allow for exploration of lower Robinson, provide opportunities for scenic views, highlight a historical element, connect to upper Robinson, and provide a better pedestrian connection to the Kettle River. The trails on the master plan graphic indicate the overall intent of the trail system but the actual location of the trail routes will need to be field verified for optimal location based on actual site conditions.

A high priority goal for lower Robinson is the development of a multi-purpose Kettle River Trail that will run from the north to the south end of the park along the Kettle River and connect into Banning State Park at both ends. The eventual continuation of this trail system will provide regional access on a pedestrian level to other park and natural areas along the Kettle River. As noted previously, this trail system could eventually lead all the way to St. Croix State Park if additional corridors are secured. The Kettle River trail would be 10'-12' in width meant to accommodate walkers, as well as bicyclists, and is recommended to be constructed with decomposed granite or paved with bituminous material to allow for a suitable regional trail surface meeting accessibility standards.

Standard park trails in lower Robinson shall be a minimum of 5' in width with a width of 8' preferred. Areas of the site with rough terrain and sensitive environments would require the use of boardwalk sections as part of the trail route. Standard park trails may be constructed with decomposed granite, a more expensive but more accessible option, or crushed aggregate to blend with the natural surroundings. Natural surfaced trails can also be used for winter uses such as winter hiking or snow shoeing. Trails and access routes to shelters and other high use area are recommended to be constructed with bituminous or concrete paving to meet accessibility requirements.

It was highly desirable by the community to have numerous opportunities along the Kettle River to stop and enjoy the view and the overlooks will range in design. Some may be simple stopping points to enjoy a scenic view, others may include interpretive signage displaying photographs, historical information, and ecological information. The recreational, historical and ecological components of the park provide an opportune tool to be used with the park interpretive signage along trails and overlooks. The signs can display information on native plant species, pollinator plants, and even invasive plant species, to birds and mammals that can be found during certain seasons, and of course the historical quarry elements. These trails and educational signs can be utilized by many programs by the local Audubon Society, educational institutions, and local tours.

Challenges: Pedestrian access into the park is a key challenge. It is not recommended to encourage walking pedestrians to enter along Old Wagon Road due to the limited sightlines and a narrow road width. Bicyclists may enter the park along Old Wagon Road and even with the potential for bikes and possibly pedestrians, incorporating “Share The Road” signage to highlight multimodal use of the road would be highly recommended.



The master plan indicates two pedestrian access points into lower Robinson. One is the trail connection along the stairs between upper and lower Robinson with a pedestrian crossing placed at the bridge abutment location. The second is a pedestrian access point at the main park entrance along the intersection of Highway 123. It has been noted by local residents that the workers in the quarry would enter the site at this same approximate location. This trail system would tie directly into the Kettle River Trail and also wind around the existing wetland with a mixture of natural trail and boardwalk sections as needed in order to cross rough terrain and wet areas, leading up to the location of the stairs that connect to upper Robinson and the powder storage buildings that would be part of the historical interpretation displays.

Another challenge is the terrain of the park site. Much of lower Robinson contains exposed bedrock along with scattered piles of rubble, making safe and accessible routes difficult. Trail routes shall take advantage of existing opportunities and routes of least resistance. Use of decomposed granite will allow for a surface that can help fill in voids to create a more level walking surface and boardwalk sections can create a level platform to traverse across rough terrain. Costs related to boardwalk construction can be restrictive to project budgets so looking for opportunities, such as labor services from the local federal correctional institution, may help offset some of these costs.

CAMP SITES

General Overview & Description: The intent of the master plan is to retain the existing tent sites located along the old elevated railroad bed with some minimal investments made in their general improvements. Even though these sites can be fairly noisy from the highway traffic, they are in close relation to the river and it was desired by many to keep this camping activity here. The one main difference is that the tent sites at this location will no longer be accessible by vehicle. A small parking lot is developed under the proposed pedestrian bridge for campers and from here they will have to walk to the tent sites. This will eliminate conflicts between pedestrians and vehicles within a narrow corridor between the railroad bed and the river and will also allow for adequate room for the construction of the Kettle River Trail and vegetated buffer space along the river.

Between the parking lot and camp sites is an open area with a proposed picnic shelter to service the random trail or park user, as well as the campers. It is located along the main walkway leading up to the powder storage building historical display.

Challenges: The key challenge to the camp sites in lower Robinson is the lack of utilities, which means camp sites at this location will need to remain as primitive sites. A vault or portable restroom can be added adjacent to the parking lot if needs dictate.

LOWER ROBINSON - Central

The central area of lower Robinson is the heart of the park and contains the majority of the historical and active recreational components of the site. It begins where the main entrance road enters into lower Robinson and extends north to the approximate location of the stone cutter building foundations.

This central zone will be where the majority of the park enhancements and developments will need to be made in order to preserve and highlight the historical significance of the park experience while adequately accommodating the active recreational needs, which are likely to continue increasing.

The main elements of this zone include the following:

C – Park Trails

E – Restroom

I – Trail Overlooks

K – Historical Piece / Interpretation

M – Picnic Shelter

P – Main Parking

Q – Main Park Entrance Sign

R – Bank Stabilization

S – Youth Play & Instruction

T – Pedestrian River Access / Portage

U – Reconstructed Dam Overlook

V – Large Picnic Shelter & Plaza

W – Guy Derrick Display

X – Open Green Space / Overflow Parking

Y – Basecamp Gathering Area

AA – Existing Water Treatment Facility

BB – Temporary Drop-Off Location



PARKING

General Overview & Description: As mentioned before, the existing 20 stall parking lot is shown to be reconfigured and pulled away from the river. This allows for adequate space along the river for the development of the Kettle River Trail, overlooks and a vegetated buffer shoreline to protect the river's edge and enhance its scenic qualities. Some additional river bank stabilization techniques will need to be implemented in more erosion prone areas.

The proposed reconfigured parking contains a series of parking bays, including some longer bays to accommodate vehicles with trailers for canoes, kayaks and paddleboards. The parking is shown with approximately 25 standard stalls and 5-6 trailer stalls in addition to the 10 parking stalls in the southern zone by the tent camp sites. There are also several drop-off locations created along the parking drive in strategic locations. One drop-off along the parking drive is located next to the main picnic pavilion building and plaza area. This will allow for temporary parking to drop off people and supplies, as well for park maintenance purposes. There are two drop-off locations along the river to provide space for visitors or outfitters to be able to park temporarily while dropping off groups and their equipment, one by the south portage, and one closer to the north portage in the turnaround portion of the drive, which will also be utilized by climbers. The equipment drop-off areas have ample space for equipment storage and allow room for the users to gather together as a group before and after activities. Equipment racks can also be incorporated into these spaces as needs dictate.

Some of the locations between drop-offs in the turnaround loop can be striped for parallel parking for an increase of approximately 10 parking stalls if demands increase. The grand total of parking that could be implemented in lower Robinson could range from 35 to 45 standard stalls. It is the intent of the master plan to accommodate approximately the same number of existing stalls in order to handle the day-to-day uses, with some minimal room for expansion if needed, in order to minimize the amount of park land dedicated to parking and vehicular use.

There are also dedicated open green space areas to allow for overflow parking during larger or special use events and it was noted that some events may include a shuttle service to bring in park users from off-site parking locations. The turnaround location of the drive has extensive space for loading and unloading and is surrounded by bollards and simple fencing to prohibit vehicles into pedestrian areas of the site, allowing for clear delineation between pedestrian and vehicular use areas. Two gates in the fencing will allow vehicular access to the rock cliffs and the overflow parking area during special events and for emergency vehicle access. The park trail that connects the turnaround drive to the base camp area of the cliffs shall be built to a heavy duty road standard to allow for the temporary access of vehicles to the cliffs during special events.

Challenges: The main challenge will be changing the existing habit of being able to drive throughout the park. Implementing permanent and temporary measures to prohibit vehicular movement when the parking is reconfigured may be needed until park users have learned to stay within the dedicated spaces.

The existing bedrock will be another challenge in dealing with construction of all proposed amenities and dealing with stormwater runoff from impervious surfaces. Infiltration will likely not be feasible, so non-infiltration BMP methods will need to be considered.

TRAILS, OVERLOOKS & PEDESTRIAN RIVER CONNECTION

General Overview & Description: The previous general trail descriptions remain consistent throughout lower Robinson with a focus on enhancing the pedestrian connection to the Kettle River. As described earlier, the main amenity is the 10'-12' wide Kettle River Trail running the entire length of the park with a series of overlooks ranging from simple bench seating locations, to small boat portages north and south of the dam, and developed overlooks that can accommodate small groups. Standard park trails in lower Robinson shall be a minimum of 5' in width with a width of 8' preferred with sections of boardwalk utilized as needed. The following describes a few of these areas in more detail.

Portages: The portages north and south of the dam are both improved features. The north portage has been relocated to a more accessible location in close relation to the parking lot drop-off that has adjacent open space for small group gatherings and equipment storage. The south portage remains in the same existing location but proposed to be completely rebuilt. They shall both have adequate space for easily accessing the water with small non-motorized boats and equipment. Use of double sided stairs with a rail or sluice in the center may be a beneficial design feature to make this more user friendly, along with equipment storage space, as the following photos illustrate.

Photo examples of small boat portages/launches



Historic Dam Overlook: The dam overlook was another amenity highly desired by those attending public meetings during the planning process. People have a natural draw to the river and this location not only provides exceptional views along the river, it can be an ideal location to watch the water related activities on the river, the bouldering activities directly across the river, and allow the users to learn more about the historical elements that were once located here through educational and interpretive displays.

There are numerous remnants of building foundations and pieces of the dam scattered in this general location. The current rustic appearance should be retained as much as possible while creating a safe and meaningful pedestrian gathering area, allowing the users to view both up and down the river.

Photo of the Dam Area



Illustration of potential dam overlook



Dam Bridge Overlook Section
NOT TO SCALE

The use of random pieces of dam remnants and quarry stones can be used to create stepping stones to traverse down to the water's edge and stabilize erosion prone areas. The linear lines of building foundations should become highlighted in the landscape to enhance their historical significance.

Fishing: Maintaining fishing opportunities has long been a high priority for the community and using some random pieces of quarry rock can not only be used to stabilize the river bank, but they can also be used to create informal fishing platforms, which in turn reduces the propensity for erosion from human use along the edge of the river, which is a current issue.

Challenges: The largest challenge will be centered around the proposed dam overlook. While this would be a key attraction of the park, costs related to the construction will be virtually unknown until a more thorough analysis of the area can be conducted to determine the extent of design and engineering that would be needed according to actual site conditions. There will also be numerous governing agencies and permits that will be needed in order to be able to construct an overlook in a Wild and Scenic River in an area of historical significance. Cleaning up dangerous debris in the river is also of key concern as there are areas of deep water depths, times of dangerous river flows, and the extent of the buried debris may require the use of specialized companies with the expertise and equipment needed to complete the removal, which may have considerable costs associated with it.

PARK SHELTERS & AMENITIES

General Overview & Description: The park shelters and site amenities are proposed to be intertwined with the historical pieces of the site, spread out to allow users a variety of experiences, and should accommodate different sized groups. The park shelters and site amenities should all have a common character to tie them together and enhance the sense of place within the park. The following are design considerations to increase the safety and use of the proposed shelters in a site with year-round use:

- Provide proper handicap accessible routes to the shelters from the parking areas
- Consider large, airy spaces to allow natural light in
- Utilize materials that will blend with the site
- Consider outdoor fireplace or fire pit in select locations
- Consider closeable “garage” style doors for inclement weather in select locations
- Thin dense vegetation adjacent to the shelters
- Provide electrical service in select locations

There are two smaller shelters proposed that will each accommodate approximately 16 to 20 people, and one larger group shelter that could be sized to accommodate up to 80 people with additional room available on the connected plaza.

One of the smaller shelters is proposed along the parking area with the sheer cliff wall as its backdrop. There is an existing stacked rubble rock pile on one side that currently attracts youth as a fun play piece to climb on. Playing off this feature, the master plan shows incorporating more play elements tied into the rubble piles with a rocks and ropes type of play experience by the shelter. The lawn on the opposite

side of the shelter could also be used as a location for setting up a temporary display and instructional area to promote and encourage outdoor recreational enthusiasts.

The other smaller shelter is proposed next to the base camp of the wall currently used by climbers, though the size of this shelter may be increased due to the amount of use this space receives. This is an existing gathering area for numerous park events during all seasons of the year from park festivals to movies in the park and is the main viewing location for the winter ice climbing activities. This location may be an appropriate location to introduce an outdoor fire pit, as this activity already occurs here, and potentially design the shelter to have closeable doors for extra protection during winter. A new stage along the cliff wall is shown to replace the existing one that is deteriorated, making sure the location is far enough from the wall to account for falling ice in order to prevent ongoing damage.

The larger shelter and plaza space is proposed to be located in the more historical portion of the park site with the existing park memorial and river on one side, and the existing quarry guy derrick and cliff walls on the other side for optimal views. To the north of the shelter is a large open space that will serve as a multi-functional gathering and park use space and also provide space for overflow parking during special events in the park.

The shelters would provide for the day-to-day use of the park with reservations likely for larger and special use events. Associated amenities would include trash and recycling receptacles, tables, and potentially grills by the large shelter. The following are a few examples of picnic shelters that have a natural character to them and allow ample natural light in, and as well as examples of outdoor fireplace and fire pit areas.



Challenges: Bringing in utilities, such as water, sanitary, and electrical services for the picnic areas is a challenge to adequately meeting the needs and demands of the park users. The use of solar power could be implemented to supply electrical service to the shelters, or an above-ground service would also work, though it would be more unsightly and subject to damage. An above ground water service could be extended into the site to provide seasonal water, but an above ground service would also be subject to potential damage. One option to consider is exploring the feasibility of tapping into a natural spring to provide drinking water. Sanitary service is also a very costly option to bring into the site due to the bedrock and the 100 foot vertical separation to existing services, which is discussed more under the following restroom facility description.

RESTROOM FACILITY

General Overview & Description: The proposed location of the main restroom facility is shown between the large shelter and plaza space and the smaller shelter along the parking area so it can be easily accessed by many park users, including river recreationalists, offering them a place to change clothing. This also places it in an area of high visibility for security reasons and would be more easily accessed for maintenance purposes. An optional secondary location for a small restroom or a portable system is shown by the smaller southern parking lot to service the camp sites. The restrooms should have an accessible route from the parking area and facilities for separated genders should be included.

Challenges: The geology of lower Robinson directly located on bedrock, and the 90 to 100 foot vertical difference from upper Robinson where utilities are located, make water and sanitary services unlikely or very costly. A proposed sanitary system would not only require drilling through bedrock for long distances, but would also likely require a grinder pump and lift station. In the near term, a vault or vault evaporator style restroom facility would be the most reasonable approach to consider. Compost systems may also be considered though they have a tendency to be higher maintenance and may also require a basement for the compost area. There are a variety of prefabricated vault restroom buildings available that can be customized to match a specific architectural style as shown below.

Photo examples of vault restroom facilities



HISTORICAL INTERPRETATION

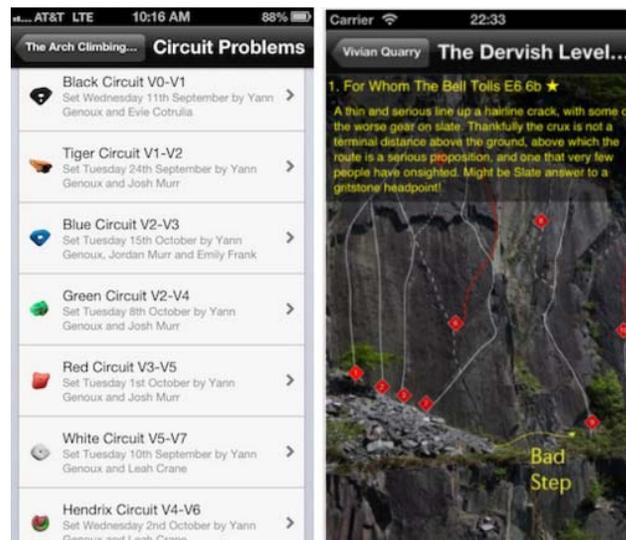
There are numerous historical components throughout lower Robinson, though the central zone contains the highest amount of historical artifacts and it is the intent of the master plan to make them very prominent features of the park. The level of interpretation carried into the design will vary, depending on the item and its significance. The historical components will be described in more detail in a following section.

CLIMBING ACTIVITIES

Climbing occurs mainly in the central area of lower Robinson, extending north to the cliff walls that separate Robinson Park from the railroad parcel.

The goal of current climbing groups is to keep working with the City of Sandstone to encourage ongoing proper use and care of the climbing opportunities available at Robinson Park. Through the cooperation between the city and user groups, there have been many improvements made to the park over the past decade which has allowed a renewed sense of pride in the park and better climbing experiences. The climbing groups would like to continue to be an integral part of any ongoing park development and decision making and would like to keep introducing youth and non-climbers to the sport through educational programs and demonstrations at the park in order to create ongoing future stewards.

As part of the park educational program through historical and interpretive signs, the climbing groups would like to have some park educational signs specific to climbing. The signs can contain some overall maps for the climbing walls located in Robinson with related photos and information explaining the Robinson cliffs and routes. The signage can also be expanded to display park rules, such as “NO DRYTOOLING” and instructions to be sure that climbers don’t use crampons on items subject to damage, such as boardwalks and certain trails. To enhance the sport of climbing, the signage could also contain links that would allow the visitor to scan a code with a smart device and link to a website that would provide supplemental educational information or the opportunity to check an upcoming event calendar or even join a climbing group or program. The following is an image of an example of this application.



There are many routes on the rock walls that offer four-season climbing. The following graphic provides a quick overview of the summer and winter climbing that currently takes place.



LOWER ROBINSON – North

The north zone of lower Robinson is mainly covered with exposed bedrock and contains some very unique pieces of sandstone with a water pattern visible on them. There are lichen communities on the bedrock within specific locations and the vegetation is sparser. With the special natural and historic features present in this zone, the master plan focuses on this to be a more passive recreational area and transitional buffer space before the park meets up to the railroad property and Banning State Park to the north.

The main elements of this zone include the following:

C – Park Trails

K – Historical Piece / Interpretation

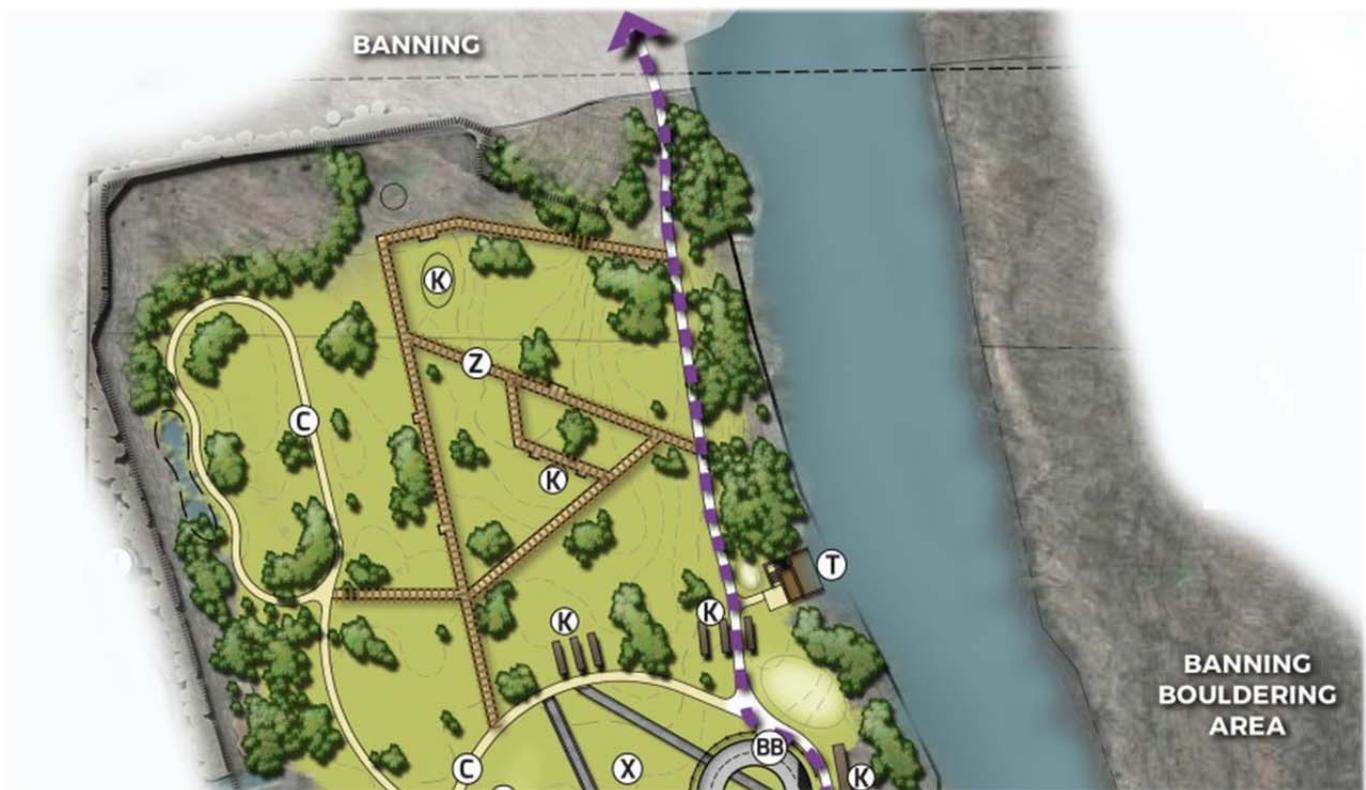
T – Pedestrian River Access / Portage

M – Picnic Shelter

X – Open Green Space / Overflow Parking

Z – Boardwalk

BB – Temporary Drop-off Location



TRAILS & OVERLOOKS

General Overview & Description: The previous general trail descriptions remain consistent throughout lower Robinson with a focus on enhancing the pedestrian connection to the Kettle River. The main difference in the trails as they enter in the northern section of lower Robinson is that the bedrock is more exposed. It is the intention of the master plan to work with the existing terrain to find the most logical routes for the trail system in order to make some internal loops with eventual connection to the main Kettle River Trail. The trails shall be field fit and shall make use of the exposed bedrock as the primary route in some select locations where an aggregate or granite trail will not be feasible with the incorporation of trail markers on the rock to identify the route.

The use of a boardwalk system would also be included in numerous areas to maneuver over the bedrock and rough terrain. This will make the trails more accessible for the users by providing a level and stable surface for walking while protecting the sensitive ecological areas and natural resources. It will clearly identify the pedestrian route with signage to encourage staying off of the sensitive environments. The boardwalk should be a minimum 5 feet in open width with some expanded overlook areas to rest, watch the wildlife, and learn about the natural and historical elements located in the park. The boardwalk should be fairly simple in design, with just a toe rail needed instead of fencing as long as the drop does not exceed 30 inches. The following is an example used in the badlands of South Dakota.



Challenges: Educating the park users to follow the identified trail route and to stay on the boardwalk may be a challenge. The use of this type of system has been used in state and national parks with great results but sometimes new users are better at following rules than a repeat user who tends to follow old habits. Education and enforcing the rules will be key until people become more accustomed to the changes. The city will also need to work with the recreational users, specifically climbing groups, to be sure the trail routes are adequately allowing them access to the climbing areas.

HISTORICAL INTERPRETATION

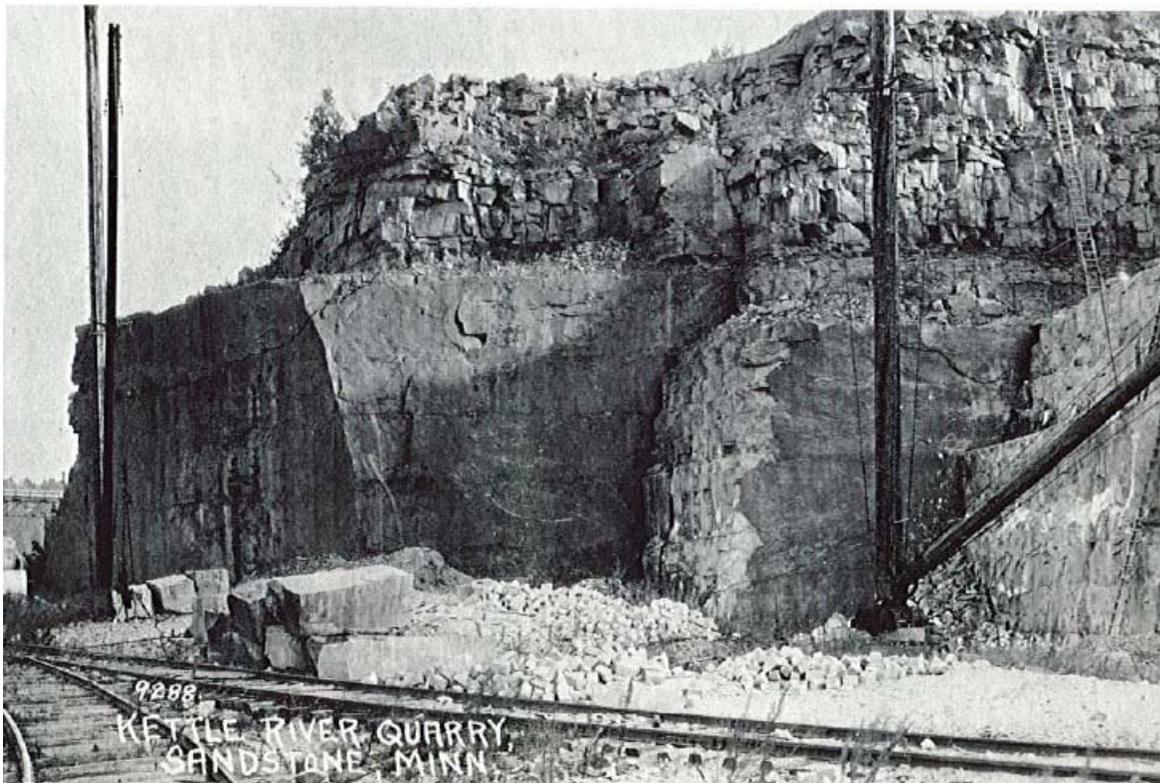
The historical interpretation will vary greatly throughout the site but the main intent of the master plan amendment is to preserve and enhance the historical aspect of the park for all to enjoy.

There are numerous quarry related items throughout the site of varying size and quality. Many, if not all, are currently at a high risk for deterioration, ongoing vandalism and accidental destruction.

Measures must be undertaken to be able to preserve the artifacts before they reach a point where preservation and enhancement will be too costly or unfeasible.

The residents of Sandstone take great pride in the previous quarry operations. Some residents have the full knowledge of what every item in the park site was, what it was used for, and who was responsible for building it. In order to save the historical elements, they need to be more prominent in the site with their importance highlighted. The knowledge that some of the residents of Sandstone currently have needs to be quickly documented for incorporation into the park before that knowledge is gone forever.

A historical context map was created as part of the master plan process to help start the process for a historical program for the park, as shown on the following page. The graphic indicates general items and locations, but the actual locations will need to be verified with a full park investigation being conducted with local historians. There are numerous small items on the site currently hidden that should be identified, uncovered and made note of.



ROBINSON PARK

Sandstone Minnesota

- LEGEND:**
THE LOCATIONS OF THE QUARRY RELATED COMPONENTS ARE INDICATED ON THE PLAN AT A GENERAL MASTER PLAN LEVEL ONLY. ACTUAL LOCATIONS OF THE COMPONENTS WILL NEED TO BE VERIFIED AND INCORPORATED INTO A SITE SURVEY AT THE TIME OF FINAL DESIGN.
- 1 HISTORICAL/INTERPRETIVE SIGN PLACED AT LOCATION OF CLIFF/ROCKS THAT CONTAIN MARKINGS FROM 'INNOVATIVE' EQUIPMENT TESTED AT THE QUARRY.
 - 2 BOARDWALK PLACED AROUND SIGNIFICANT AND SENSITIVE AREAS SUCH AS CUTTING AREAS, HOLES, BOLTS IN CONCRETE, AND AROUND REMNANT SANDSTONE PIECES WITH MARKINGS TO PROTECT THEM. HISTORICAL/INTERPRETIVE PHOTO SIGNS TO IDENTIFY PRIOR USES AND SIGNIFICANCE AT SELECT LOCATIONS.
 - 3 HISTORICAL/INTERPRETIVE SIGN WITH PHOTOS PLACED AT LOCATIONS OF STONE CRUSHER BUILDING REMAINS.
 - 4 HISTORICAL/INTERPRETIVE SIGN WITH PHOTOS PLACED AT LOCATION OF BLACKSMITH SHOP REMAINS.
 - 5 GROUND PLANE HARDSCAPE DESIGN INCORPORATED INTO THE SITE TO SIGNIFY THE PRIOR LOCATIONS OF RAILROAD LINES AND ROADS ON THE QUARRY SITE WITH HISTORICAL/INTERPRETIVE SIGNS WITH PHOTOS PLACED AT SELECT LOCATIONS.
 - 6 DAM LOCATION, INCLUDING ALL RELATED AND ADJACENT BUILDING FOUNDATIONS, TO BE STABILIZED AS NECESSARY TO MINIMIZE ONGOING EROSION AND TO ALLOW CONSTRUCTION OF A PEDESTRIAN OVERLOOK OF THE KETTLE RIVER AT THE DAM WITH HISTORICAL/INTERPRETIVE PHOTOS AND INFORMATION. MISCELLANEOUS ITEMS IN THE RIVER THAT ARE FOUND TO BE HAZARDOUS TO BE REMOVED AS NECESSARY, BUT MANY REMNANT PIECES SHALL REMAIN IN PLACE TO RETAIN THE HISTORIC 'RUIN' APPEAL.
 - 7 HISTORICAL/INTERPRETIVE SIGNS PLACED AT BASE OF CLIFFS AND AT THE TOP AT THE OVERLOOK WITH PHOTOS AND INFORMATION ON 'GRAFFITI' LEFT FROM QUARRY WORKERS AND REMNANT BOLTS THAT CAN BE FOUND ALONG THE CLIFF FACE.
 - 8 DERRICK TO BE STABILIZED AND IMPROVED FOR SAFETY AND TO DISCOURAGE CLIMBING. USE OF REMNANT QUARRY ROCKS TO BE USED AT THE BASE OF CABLE LINES IN A LINEAR FASHION WHERE THE LINES FALL UNDER 10 FOOT CLEARANCE FOR SAFETY AND CAN CREATE INFORMAL SEATING AREAS AND DRAW ATTENTION TO THE DERRICK.
 - 9 HISTORICAL/INTERPRETIVE SIGN WITH PHOTOS PLACED AT LOCATION OF HOOTCHY KOOTCHY FOUNDATION REMAINS.
 - 10 HISTORICAL/INTERPRETIVE SIGN WITH QUARRY PHOTOS PLACED AT UPPER OVERLOOK LOCATION.
 - 11 HISTORICAL/INTERPRETIVE SIGN WITH PHOTOS PLACED AT LOCATION OF OLD SAW MILL LOCATION.
 - 12 HISTORICAL/INTERPRETIVE SIGN WITH PHOTOS PLACED AT LOCATION OF WELL CONTROL BUILDING AND ADJACENT CIRCULAR SANDSTONE STRUCTURE REMAINS.
 - 13 RESERVOIR, PUMPING STATION AND WELL HOUSE BUILDINGS SHALL HAVE EXTERIOR TREATMENT IMPROVEMENTS TO BLEND WITH THE SITE HISTORICAL MATERIAL CHARACTERISTICS.
 - 14 POWDER STORAGE BUILDINGS SHALL BE RECONSTRUCTED FOR INTERACTIVE HISTORIC DISPLAY AREA WITH PHOTOS AND INFORMATION ON PRIOR USES.
 - 15 HISTORICAL/INTERPRETIVE SIGN WITH PHOTOS PLACED AT LOCATION OF RAISED RAILROAD LINE ADJACENT TO THE PATH TO THE POWDER STORAGE BUILDINGS.
 - 16 OLD WAGON BRIDGE TO BE MODIFIED FURTHER TO STABILIZE THE ABUTMENT AND CUT BACK THE EDGE AWAY FROM THE ENTRANCE ROAD TO ALLOW FOR ADEQUATE ROAD WIDTH AND BETTER SIGHTLINES FOR VEHICLES. A PEDESTRIAN BRIDGE TO BE BUILT FROM THE ABUTMENT ACROSS THE KETTLE RIVER UTILIZING THE REMAINING BRIDGE SUPPORTS WITH HISTORICAL CHARACTERISTICS. BRIDGE PROVIDES VIEWS OF ROBINSON PARK, BANNING PARK, THE KETTLE RIVER, AND THE RAILROAD BRIDGE.



HISTORICAL SITE ELEMENTS



WSB PROJECT NUMBER: 2025-003
DATE: 09-30-2015

HISTORICAL INTERPRETATION PROGRAM

The following is a partial list of the historical components of the site and how they may be improved upon to become a significant piece of the park historical program.

1 – Tunnel experiment drill markings. This is the site where some “innovative” equipment was tested at the quarry for drilling through granite for tunnels. The test failed. Historical / interpretive sign can be placed at the location of the cliff that contains the markings from the equipment that was tested here.

2 – Location for various cutting areas, holes, bolts in concrete, and a sandstone shelf with water flow markings. A boardwalk would be placed around significant and sensitive areas with historical/interpretive photo signs to identify prior uses and significance at select locations.



3 – Stone crusher building walls. These are currently highly visible along paths and already have vandalism taking place. They are located along major pedestrian routes and will need a more significant approach to reflect their importance.



4 – Blacksmith Forges. A series of small block remnants in a rectangular area where the blacksmith forges were located. Signage should show the process of the blacksmithing operations and the tools that were made for the quarry, along with any historical photos.

5 – Previous roads and access routes. The previous alignments for items such as railroad lines and conveyor systems should be highlighted in the ground plane of the landscape. This can include hardscape designs in linear patterns with corresponding signage illustrating what the lines represent and historical layout maps of the quarry.

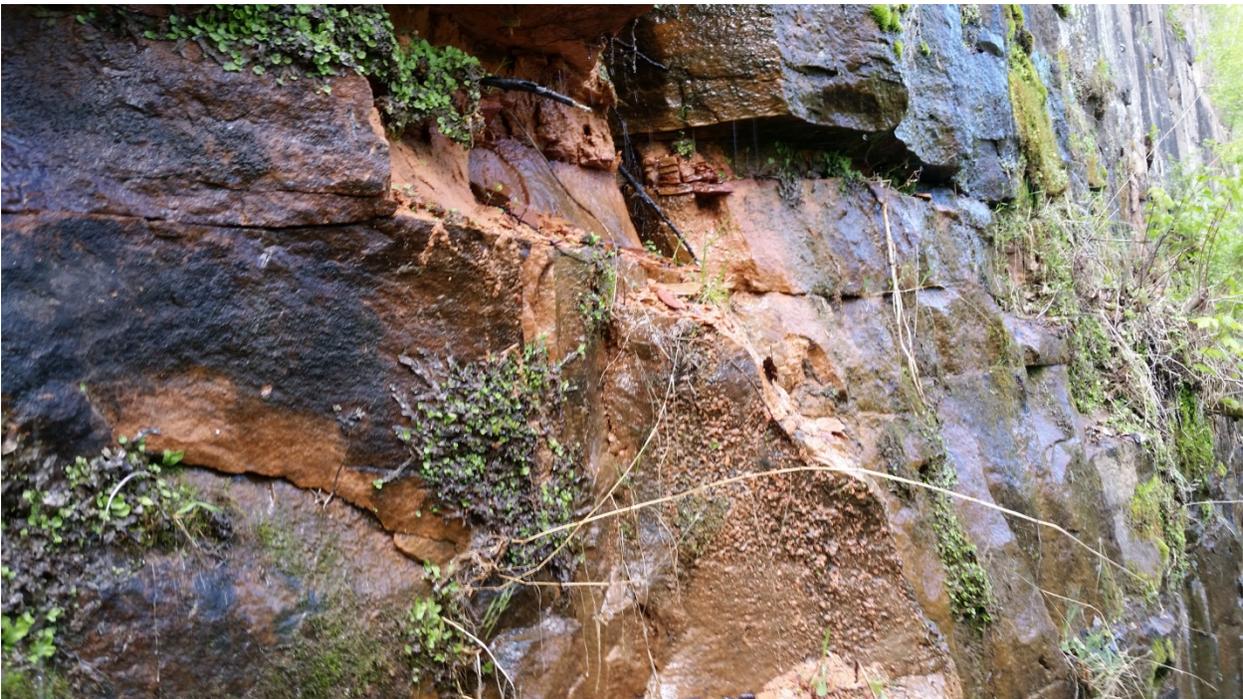
6 – Dam overlook. This will be a considerable investment and will involve multiple government agencies overseeing the extent of the design in order to satisfy permit requirements but could add a dramatic and almost essential display piece to the park.

This location also entails many surrounding historic pieces such as a compressor wall, turbine, building foundations, and nearby stone mill. The dam overlook should historically reflect the dam itself along with the previous water wheel in its details and construction to correctly reflect the same materials and characteristics. Some of the random pieces of stone and concrete that currently surround the dam location can be left in place for their rustic appeal and can also be used to stabilize the river edge and used as stepping stones to gain pedestrian access down to the edge of the water. There are some elements of the dam that are creating water hazards in the river. Removal of these items as needed should be undertaken to improve the safety of the river.

Photo of Dam Remains



7 – Rock Cliff Walls. This item entails providing information in select areas along the rock walls from the base camp gathering area all the way to the north end of the site and in both the upper and lower areas of Robinson Park. Not only are there many drill marks present along the wall, but there are also many hidden gems that many park users are not aware of. This includes “graffiti” where previous workers signed their name on the wall face, to bolts and hardware from the quarry operations that are still left in place. Interpretive signs with photos of these items will allow the average non-climbing park user the ability to see these items, learn of their importance and see how the drill marks were created.



8 – Guy derrick. This is a very tall structure and yet, during summer months, can still be difficult to find. The derrick needs some reconstruction to stabilize it and methods used to deter park users from climbing up it. Clearing out the vegetation in the area around the derrick will visually strengthen its prominence in the landscape. Where the guy wires extend from the ground, quarry blocks can be laid out in linear patterns following the wire until a 10 foot clearance beneath the wire is achieved. This not only increases the safety of park users so they don't get clipped by the wire, but it also creates informal seating areas and reinforces the visual connection to the derrick structure.



9 – Hootchy Kootchy. The foundations of the previous structure named the Hootchy Kootchy are located along the upper cliff walls of Robinson Park. This was once an 80' tower that stood along the upper cliff until about 1947. The interpretive sign around its foundation can contain photos of the original structure.



10 – Overlook view of lower Robinson from upper Robinson. The view of the park, river and adjacent Banning Park across the river are breathtaking. Photo images of the quarry taken from the upper edge can be placed on signs for contrast and comparison.

11 – Old saw mill location. This is in close proximity to the old dam location but just far enough away that it necessitates having its own historic representation.

12 – Well control building and sandstone block ring. This is the location of a 700 foot pipe that was once driven down to a spring for water. Interpretive signs with the natural spring company that took water from the quarry spring can be used in this location.

13 – Reservoir, pumping station and well house along with the existing water treatment facility. Though not all historic in nature, these items should have aesthetic improvements to them to keep them in consistent character with other park materials and colors.

14 – Powder storage buildings. These once held the black powder used for blasting and dynamite used to break up rock for the stone crushers. The larger structure is mainly intact, other than its roof, but the smaller building will require more intense rehabilitation. These buildings can be improved and the interior and exterior can be used as educational space. A trail is shown extending from the main Kettle River trail to the powder storage buildings.



15 – Elevated railroad line. The master plan leaves this space for primitive camp sites. On the north end of the elevated line, a historic marker and display can be created in close proximity to the picnic shelter and trail that leads to the powder storage buildings.

16 – Old Wagon Bridge. As described previously, this would involve the construction of a new pedestrian bridge potentially utilizing the existing bridge supports that remain in the Kettle River to provide a pedestrian connection from Robinson Park to the eastern side of the Kettle River where Banning State Park has bouldering activities. This would be a significant investment, but would also highly raise the regional importance of the park site with the connection across the Kettle River to access additional natural and recreational amenities. It also highlights one of the more prominent historical items of the quarry and local community.

The existing bridge supports would need structural review to ensure they are structurally sound. The pedestrian bridge would offer panoramic views up and down the Wild and Scenic Kettle River and all of the activities that take place on the river which would be a huge attraction, especially during the park festivals.

The City of Sandstone would also need to work with Banning State Park and likely the Corp of Engineers and DNR, as this will cross over the river and into Banning State Park with a new abutment constructed on the east side.

Photo of Existing Bridge Foundations



UNIVERSAL & EQUITABLE DESIGN

Universal design combines the basic principles of barrier-free design with a more comprehensive view of human capabilities. Universal design attempts to consider all degrees of sensory awareness, all types of locomotion, and all levels of physical and intellectual function.

Equitable design combines the basic principles of providing recreational opportunities and access to all potential users regardless of income, ability, or ethnicity. The overall design should provide a variety of opportunities and experiences in order to encourage a broad range of users, as practical for a given site, and should allow everyone the same basic opportunity for a specific experience when possible. The experiences should not segregate, discriminate or stigmatize users. By taking these objectives into consideration through design, the needs of individuals with varying desires, abilities, and expectations can be reasonably accommodated.

Universal and equitable design is still an evolving approach to design and is often simpler in concept than in practice. Anticipating the needs of people with varying degrees of abilities and desires is a formidable task since it is often very difficult to understand the specific needs of individuals when one does not share those limitations or varying perspectives. Therefore, it is imperative that the design process include individuals that represent a cross-section of people with varying abilities and perspectives. As the project moves into design implementation phases, efforts should be made to involve representatives of diverse populations in the detail design of specific facilities. This approach helps to ensure that the design for any given facility will actually serve the intended populations. As the population continues to evolve and park users continue to change, these objectives may need to be reviewed with updates made to the park amenities in order to meet the needs of the users.

Some items to take into consideration for universal and equitable design may include, but not be limited to, the following:

- Flexible park space to allow for a variety of activities and uses by varying groups and individuals.
- Physical disabilities – this is more often related to vision, hearing, and mobility disabilities that need accommodations for proper access and use, though other items come into play as well.
- Mental or medical conditions – this can range from someone who has a condition that requires quiet reflective spaces away from highly active and noisy areas, to someone with a medical condition that may be affected by light patterns that could potentially trigger a seizure.
- Language barriers – there are more and more populations that do not use English as the main language. Park maps, rules or educational signs will not portray the necessary information if they do not in some manner account for potential language options or more illustrative information that does not need text to accompany it. Use of universal symbols is one approach to overcoming some of these barriers.
- Cultural and social influences – considering even similar groups within a given population have varying degrees of perspectives, mixed with the greater cultural influences that are now becoming more prominent, this item will be more difficult to discern. Considerations will need to be taken to ensure those utilizing the park feel comfortable and safe doing so. For instance, those who are new to the area or are unfamiliar with natural settings may feel unsafe in

enclosed or heavily vegetated environment. This will be important in accommodating new users or occasional visitors to the park in order to entice them to return.

- Access and Awareness – it is important to be sure that a park of regional significance is providing methods to reach out to a region-wide community to increase awareness of Robinson Park through various methods and languages. Information on park events and programs should be accessible to the regional community with opportunities provided to access and visit the park. Some citizens may not have a vehicle readily available to them, others may not be able to walk or ride bike to the park, so other means of accessing the site should be available.

NATURAL RESOURCES

The ecological stewardship plan can be found in the Appendix section of this report. The following are general guidelines related to ongoing management related to the natural resources within each park zone.

UPPER ROBINSON

Upper Robinson mainly consists of a mature hardwood plant community with intermixed birch and aspen, with some small pockets of evergreens, and two noted wetland areas. One wetland spills over into a small waterfall that cascades down the rock wall for natural winter ice flows. The cover in upper Robinson is fairly dense. There are some invasive species present, which need to be controlled in order for younger native trees to take over when the older plants reach the end of their life cycle, and for the understory plants, such as the ferns and sedges, to be able to survive. Buckthorn will take over the entire understory if not controlled properly.

The hardwood plant community in upper Robinson provides a buffer to the adjacent residential community, as well as a very scenic setting for the cliffs that separate upper and lower Robinson. The ongoing management for upper Robinson shall include efforts to control invasive species and supplement the native plant communities.

Some select removals or thinning of the existing plants may be necessary to implement the master plan elements, create open sightlines where needed for park safety, highlight a historic element, and to offer more open views of lower Robinson and the Kettle River. These would be reasonably limited as there are many pedestrian foot paths that could be followed for trail implementation and it is expected this would not affect the overall character of upper Robinson.

LOWER ROBINSON – South

The southern section of lower Robinson mainly consists of a large wetland that is fed by natural springs, with a more open corridor adjacent to the Kettle River that pedestrians and vehicles use.

The wetland has a heavy canopy intermixed with a lot of scattered rock and rubble piles. As noted previously, the trail around the wetland would require the use of boardwalk in some sections to provide access across the wet areas and the rough terrain. There were some high quality native plants found

around the wetland, including Wild Ginger and Marsh Marigold, so controlling invasive species will be key to their ongoing survival since Garlic Mustard was also found in this general location.



Ongoing management around the wetland may involve opening up the canopy cover slightly in some areas to allow for adequate conditions for the plant communities, and to prevent the vegetative cover from becoming too dense and affecting the safety of park users. As will be case throughout Robinson, vegetative cover should be selectively thinned or removed around historic elements.

Poison ivy was found along the more open areas adjacent to the river where people tend to walk in order to view the river. This inherently also leads to erosion issues from excessive foot traffic along steep embankments, contributing to a degraded riverbank and effecting water quality. It will be important to control the spread of the poison ivy and the implementation of a more defined pedestrian trail with designated overlooks will help deter ongoing river bank erosion problems. The embankments should be improved with a strong understory vegetative cover with deep root systems that will help naturally stabilize the banks.

LOWER ROBINSON – Central

The central portion of lower Robinson contains some large cleared areas where park development has been implemented, surrounded by very dense wooded areas.

Many felt that the densely vegetated areas in the central portion of lower Robinson should have some more substantial clearing take place in order to provide a safer park environment for the park users, as well as to portray a more historically accurate landscape since this area of the site was completely void of vegetation during the quarry operations. It is not the intent of the master plan to completely clear

out the entire vegetation, but to simply undertake selective clearing, thinning, and limbing up some of the vegetation to increase safety and sightlines.

The entrance points and destination areas should have mainly open views for safety. Areas along the trails shall vary with some dense wooded sections surrounding the trail in some locations, to create a remote experience, before opening up at key locations to provide a “visual window” to a specific point of interest or scenic view for the user. This will heighten the natural resource experience for the park user and call attention to the historical or natural feature on display. Selective placement of vegetative groupings will also delineate park use areas, create a scenic backdrop, and provide shade.

LOWER ROBINSON – North

The northern section of lower Robinson contains more exposed bedrock so the existing vegetation in this area is already more consistent with a younger, open canopy compared to other areas of Robinson Park. It contains more understory plants with lichen and ferns growing on and around the rock.

The management plan for the northern section of lower Robinson should focus on selective clearing along key intersections and around historical artifacts while maintaining a more lightly filtered tree canopy.



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IMPLEMENTATION PLAN

Implementing the master plan for Robinson Park will require significant initial and long-term capital investments for development, ecological stewardship, operations, and maintenance. Realistically, implementation will occur over a number of years as funding and other resources are made available. This section considers an overall strategy for implementing the plan that takes these factors into consideration.

IMPLEMENTATION COST PROJECTIONS

The following cost analysis defines the potential costs associated with each development component of the master plan. It is based on a combination of site-specific development requirements and projects of similar size and complexity. The costs are based on having the work completed by private contractors and specialists. It does not take into consideration work that could be performed by staff, volunteer groups, or by other means.

The cost figures are based on a master plan level evaluation only, which brings with it inherent limitations as they are not based on final design and site conditions that will require further investigation. The cost figures are meant for general budgeting purposes, project phasing, and comparing the relative cost of one item to that of another. The costs are in 2016 dollars. Although intended to be conservative, actual costs will vary depending on the year that each aspect of the master plan is implemented, final design details, implementation parameters, economic conditions affecting bidding, and the actual site conditions affecting construction. Other factors that would affect overall costs will be any stipulated requirements that may be tied to funding mechanisms, such as permits or federal grant dollars, which may require environmental and cultural reviews, specific bidding requirements, and the extent of construction oversight necessary.

The estimates include a 15% construction contingency which is generally reduced down to 5% to 10% once final design has been completed. The estimates also include a 20% design, testing and engineering fee to account for work necessary to complete final construction plans, though this is a variable figure that will be based on the extent of work that would be necessary to complete the final plans.

The initial investments would focus on relatively feasible items that would have the most significant positive impacts on the parks function and accessibility in order to continue to generate public interest and support for further development of the park. The table below defines these items and the potential associated costs. They are broken out into categories for upper and lower Robinson, but are not necessarily listed in order of priority.

Robinson Park Master Plan Update

Estimate of Probable Costs (March, 2016)

| Upper Robinson | Low Range | High Range |
|---|---------------------|-----------------------|
| BASE PARK DEVELOPMENT | | |
| Earthwork, Removals & Erosion Control: | \$50,000.00 | \$80,000.00 |
| Parking Lot & Drive (gravel to paved): | \$20,000.00 | \$70,000.00 |
| Stormwater Treatment: | \$30,000.00 | \$50,000.00 |
| Trails (width and material variations): | \$20,000.00 | \$80,000.00 |
| Safety Rail / Fence Sections: | \$150,000.00 | \$250,000.00 |
| Trail Seating Overlooks with Bench (3) | \$10,000.00 | \$20,000.00 |
| Staircase to Entrance Drive: | \$100,000.00 | \$150,000.00 |
| Picnic Shelter: | \$30,000.00 | \$50,000.00 |
| Children's Playground: | \$75,000.00 | \$100,000.00 |
| Park Monument Sign (budget): | \$20,000.00 | \$30,000.00 |
| Landscape & Natural Resource Enhancements: | \$20,000.00 | \$40,000.00 |
| Subtotal: | \$525,000.00 | \$920,000.00 |
| Contingency (15%): | \$78,750.00 | \$138,000.00 |
| Design, Testing & Engineering (20%) | \$105,000.00 | \$184,000.00 |
| Base Park Development Total: | \$708,750.00 | \$1,104,000.00 |
| CAMP SITE DEVELOPMENT | | |
| Earthwork, Removals & Erosion Control: | \$30,000.00 | \$50,000.00 |
| Gravel Loop Drive: | \$15,000.00 | \$20,000.00 |
| Tent Campsites (7): | \$14,000.00 | \$24,000.00 |
| Restroom Facility with Utilities: | \$125,000.00 | \$175,000.00 |
| Camper Cabins (3): | \$150,000.00 | \$300,000.00 |
| Subtotal: | \$334,000.00 | \$569,000.00 |
| Contingency (15%): | \$50,100.00 | \$85,350.00 |
| Design, Testing & Engineering (20%) | \$66,800.00 | \$113,800.00 |
| Camp Site Development Total: | \$450,900.00 | \$682,800.00 |
| ALTERNATE DEVELOPMENT ITEMS | | |
| Cantilevered Deck Overlook (1): | \$50,000.00 | \$75,000.00 |
| Utility Extension for Wall Irrigation & Electrical: | \$40,000.00 | \$80,000.00 |
| Subtotal: | \$90,000.00 | \$155,000.00 |
| Contingency (15%): | \$13,500.00 | \$23,250.00 |
| Design, Testing & Engineering (20%) | \$18,000.00 | \$31,000.00 |
| Enhanced Development Total: | \$121,500.00 | \$186,000.00 |
| Lower Robinson: | | |
| BASE PARK DEVELOPMENT | | |
| Earthwork, Removals & Erosion Control: | \$200,000.00 | \$300,000.00 |
| Paved Parking Lots & Drive: | \$200,000.00 | \$250,000.00 |
| Stormwater Filtration (budget): | \$50,000.00 | \$75,000.00 |
| 12' Wide Kettle River Trail (aggregate or paved/granite): | \$40,000.00 | \$135,000.00 |
| Kettle River Standard Trail Overlooks - 6 (budget): | \$20,000.00 | \$40,000.00 |
| Central & North Trails (width and material variations): | \$20,000.00 | \$75,000.00 |
| South Wetland Trails (width and material variations): | \$20,000.00 | \$75,000.00 |
| North Boardwalk Trail & Overlooks (budget): | \$120,000.00 | \$240,000.00 |
| South Boardwalk Trail & Overlooks (budget): | \$100,000.00 | \$225,000.00 |

| | | |
|---|-----------------------|-----------------------|
| Staircase from Entrance Drive: | \$50,000.00 | \$70,000.00 |
| Main Park Large Picnic Shelter & Plaza: | \$150,000.00 | \$200,000.00 |
| Secondary Picnic Shelters (2): | \$80,000.00 | \$120,000.00 |
| Main Restroom Facility (vault to full w/utilities): | \$150,000.00 | \$600,000.00 |
| Youth Natural Climbing Features: | \$75,000.00 | \$100,000.00 |
| South Portage Development: | \$20,000.00 | \$30,000.00 |
| North Portage Development: | \$20,000.00 | \$30,000.00 |
| New Stage: | \$25,000.00 | \$40,000.00 |
| Park Monument Signs (2) (budget): | \$40,000.00 | \$60,000.00 |
| Misc. Park Signage (kiosks, maps, rules, etc.): | \$40,000.00 | \$60,000.00 |
| Select Riverbank Stabilization (budget): | \$30,000.00 | \$50,000.00 |
| Landscape & Natural Resource Enhancements: | \$30,000.00 | \$50,000.00 |
| Subtotal: | \$1,480,000.00 | \$2,825,000.00 |
| Contingency (15%): | \$222,000.00 | \$423,750.00 |
| Design, Testing & Engineering (20%) | \$296,000.00 | \$565,000.00 |
| Base Park Development Total: | \$1,998,000.00 | \$3,390,000.00 |

ALTERNATE DEVELOPMENT ITEMS

| | | |
|--|---------------------|---------------------|
| Plaza Kettle River Overlook (budget): | \$30,000.00 | \$40,000.00 |
| Railroad Campsite Improvements (budget): | \$15,000.00 | \$20,000.00 |
| Tent Campsite Restroom Facility (vault or vault evaporator): | \$100,000.00 | \$150,000.00 |
| Riverbank Fishing Platforms (budget): | \$20,000.00 | \$30,000.00 |
| Subtotal: | \$165,000.00 | \$240,000.00 |
| Contingency (15%): | \$24,750.00 | \$36,000.00 |
| Design, Testing & Engineering (20%) | \$33,000.00 | \$48,000.00 |
| Enhanced Development Total: | \$222,750.00 | \$288,000.00 |

| Wayfinding & Historical Elements: | Low Range | High Range |
|-----------------------------------|-----------|------------|
|-----------------------------------|-----------|------------|

Note: these items are all budgetary and will require more investigation and design detail in order to determine more accurate cost estimates based on existing conditions and extent of repair needed.

| | | |
|--|-----------------------|-----------------------|
| Community Wayfinding Signage Program: | \$75,000.00 | \$100,000.00 |
| Guy Derrick Improvements: | \$50,000.00 | \$100,000.00 |
| Guy Derrick Structural Review | \$4,500.00 | \$8,500.00 |
| Pedestrian Bridge Crossing: | \$2,000,000.00 | \$2,500,000.00 |
| Abutment and Foundations Structural Review | \$30,000.00 | \$35,000.00 |
| Dam Overlook: | \$500,000.00 | \$750,000.00 |
| Dam Investigations & Structural Review | \$20,000.00 | \$25,000.00 |
| Powder House Building Display (stabilize/signs to partial reconstruction): | \$30,000.00 | \$150,000.00 |
| Landscape Forms (interpretive): | \$75,000.00 | \$150,000.00 |
| Interpretive Signage - 20: | \$60,000.00 | \$100,000.00 |
| Miscellaneous Repairs / Stabilization (budget): | \$50,000.00 | \$100,000.00 |
| Subtotal: | \$2,894,500.00 | \$4,018,500.00 |
| Contingency (15%): | \$434,175.00 | \$602,775.00 |
| Design, Testing & Engineering (20%) | \$578,900.00 | \$803,700.00 |
| Wayfinding & Historical Elements Total: | \$3,907,575.00 | \$4,822,200.00 |

| | | |
|-----------------------------------|-----------------------|------------------------|
| Upper Robinson Total: | \$1,281,150.00 | \$1,972,800.00 |
| Lower Robinson Total: | \$2,220,750.00 | \$3,678,000.00 |
| Wayfinding & Historical Total: | \$3,907,575.00 | \$4,822,200.00 |
| Robinson Park Grand Total: | \$7,409,475.00 | \$10,473,000.00 |

IMPLEMENTATION PRIORITIES

Implementing the development plan is of equal priority to that of the historical preservation and natural resource stewardship program. By taking a balanced approach to implementation, goals can be simultaneously pursued to take advantage of funding opportunities that may arise from various sources. This approach also provides greater flexibility in developing effective implementation sequences that link physical development and ecological restoration objectives together whenever it is advantageous to do so and does not place a greater emphasis on one group or activity over another.

STRATEGIC DEVELOPMENT PROGRAM

Future capital improvements will be funded through a combination of regional park grants, capital improvements, and other sources of revenue, such as continued fund raising efforts and potential cost sharing opportunities. The city of Sandstone will follow established protocol on the securing and use of each funding source.

There is not a defined list of priority items as it relates to implementation and a number of phasing options would be available. Adoption of the Master Plan Amendment is the first essential task in taking the proper steps toward implementation. As the city of Sandstone begins to develop a priority list, grants can be applied for and annual budgets can be addressed. Note that these priorities are subject to change in future years as demands continue to evolve and other funding opportunities may present themselves. In addition, each priority may require more than one phase to complete.

The underlying strategy for implementation is to undertake initiatives that best respond to the priorities of the community and park users, as well as the City of Sandstone. By making strategic investments in the park, the improved park development will continue to improve the park users experience, improve the quality of life for the community, and in turn, improve the overall park perception.

There are a common mistakes that can take place during implementation that can inadvertently result in a decrease in the perceived value of the park experience and actually create an increase in ongoing operations and maintenance costs to the City. The following provides examples.

- Lumping the investment into only one type of user experience. By working with the community and user groups to establish and confirm a set of priorities for implementation, a more balanced approach to the ongoing development will be achieved and no particular user group will feel left out in the process.
- Going the “cheap” route to get more out of investment dollars. This refers to the construction methods and materials used as implementation occurs. While it seems like the city would be better positioned by using construction materials and methods that are less costly in order to get a higher amount of recreational value out of their initial investment, the opposite may actually occur. The quality and lifespan may become much shorter and ongoing costs for operations and maintenance may actually increase. Use of the best materials and methods of construction may cost more initially, but they will become more sustainable for a longer period of time. Some examples may include the use of concrete or metal materials over plastic, the use

of recycled lumber over real lumber, the cost related to bringing in utilities or implementing a solar system rather than relying on portable or non-serviced amenities, or use of donated amenities over purchasing amenities with a better longevity and within a similar style.

- Inconsistent style or character. Maintaining an appealing and appropriate character throughout the park by using similar materials and styles will be critical to a successful site. Nothing can detract more from a park experience than a site that looks like it has been thrown together with no forethought on how the spaces blend together. This can make the park users less likely to support any future developments. All of the construction materials should follow a set character or style and remain consistent throughout the site in order to keep the sense of place at the forefront of all design initiatives.

OPERATIONS AND MAINTENANCE

Operations and maintenance is essential to protect public investment, enhance natural resource qualities, and achieve the City’s goals of providing users clean, safe, and enjoyable year round park experiences. The City of Sandstone is charged with the management and operation of the local park and trail systems, which includes Robinson Park. The City Council establishes and approves of an annual budgeting process that includes capital and operating funds for parks.

A sustainable system is the point to which the community is willing to support implementing the system plan to receive desired public benefits. Benefits relate to cultural (personal and social), ecological, and economic values that individual residents and the larger community find important and are willing to support by making investments in the system. To be sustainable, implementation of the plan must take into account the long-term commitments required to develop, operate, maintain, and ultimately replace each aspect of the system as it moves through its lifecycle.

The total investment required to sustain a given component of the system is the *cumulative* cost for initial development, routine operations and maintenance costs, and redevelopment or replacement once a given item reaches the end of its useful lifecycle. Given the major implications to long-term funding, the City should define the level of service it can indefinitely sustain at the point of each phase of implementation. Limitation of duplicate facilities will increase sustainability, as will best approaches to construction methods and materials used during implementation.

Accomplishing the maintenance needs of the park will be challenging. As trails and other park land and facilities are further developed, new or expanded maintenance services will need to be provided. The City of Sandstone recognizes the need to remain committed to the maintenance needs of their parks and trails. It is unlikely that existing staff and budget resources will be sufficient. Although increased funding is critical, perhaps even more important is increasing the number of staff dedicated to the ongoing operations and maintenance. For example, park development, historical preservation and natural resource management will have an initial cash intensive need, but ultimate success requires hands-on stewardship for many years to achieve desired results. This takes staff with the knowledge and time to commit to this stewardship. Traditional and non-traditional funding and staffing sources will have to be pursued to meet the maintenance needs of the park and the master plan objectives.

The positive side of Robinson Park is that it is fairly compact and the highly developed areas are grouped together, allowing for easier access for the maintenance staff. The downside may be any specialty care related to the historical artifacts, natural resource management, and an ongoing increased maintenance for the camper cabins. The camper cabins may actually require a full time park staff or caretaker depending on how they are developed and operated so it is suggested they be phased in to determine actual O&M costs related to their implementation before fully developing.

PARK REVENUE OPPORTUNITIES

The increase in park use will result in an increase in the amount of O&M necessary to keep the park up to the standards of the park users. In order for the park to remain sustainable for the city, a number of measures will need to be thoroughly investigated and implemented in order to keep the park functioning at capacity, while not exceeding the financial capabilities of the city. Some of the higher maintenance items will likely need to be phased in before additional investments can be made and actual O&M costs are determined. As the park is ultimately developed to a higher standard, the use of dedicated staff to the park may be justified. Though Robinson Park has a regional status, it is still a city owned park and does not, nor should it, include a park access fee.

Though not meant to be a complete funding tool, there are a variety of measures the City of Sandstone can use to at least partially offset some of the costs for ongoing operations and maintenance as implementation of the master plan progresses, as the following describes.

- **Park Stewards.** One tool is creating an operating and maintenance plan with each of the user groups. The climbing group has already begun this process by working with the city to create their climbing management and use plan. The various groups that currently use Robinson Park routinely raise funds and bring in volunteers to remove undesirable vegetation, clean up the park, and undertake park improvement projects for a much less cost than would be the case for hiring contractors for the same type of work. The use of formal agreements with these groups will allow each of them to follow a strategic plan to avoid overlap in services, allow the city to determine their own O&M responsibilities more clearly, and may also include some yearly park fees to help offset some additional costs.
- **Rental Fees.** Revenue producing measures, though not enough to cover all O&M costs, can help offset them. This includes shelter rental fees for reserving space for large or special use events, while still allowing the shelters free for the day-to-day uses, the continuation of tent use fees, and future rental fees from the camper cabins which would generate much more than standard tent camp sites.
- **Contributions.** The City of Sandstone also has the opportunity to have some of the park and recreational items provided by the local correctional institute, such as park benches and tables. They could potentially build the monument signs and boardwalk as well. While these avenues would help offset costs, great care should be taken to ensure any donated item or service would still fit within the overall style and character of the site and remain consistent.

OUTREACH AND MARKETING

Robinson Park is already well known by the local community and special user groups, but in order to expand the public awareness to differing audience and user groups, the outreach and marketing effort to improve public awareness of the park and trail facilities, programs, and services should be enhanced even further to reach the regional population. This outreach effort has various components, including the following:

- Electronic Communication:** The City of Sandstone should continue to display information on their city web page links to inform citizens about Robinson Park and the city’s functions and services (e.g., Park Commission meetings, park maps, trails, facilities, and programs). Distribution of information on special park events, programs or links can also be sent out electronically through Twitter, Facebook and other online social media to reach a greater audience.
- Park Programming:** Special events and park programs should be in line with the needs of the community. Ideally, park programs and events would be unique from other park sites to encourage use. Information on park programs and special events should be distributed through local and regional newsletters, programming periodicals, and even through groups or associations, such as the local Audubon Society or special interest groups. It is encouraged to think of innovative ways to change the park programming and events to encourage repeat park use without a repeat park experience.
- Printed Materials & Marketing:** The City of Sandstone should continue to develop and distribute park brochures and maps related to Robinson Park from the historical quarry artifacts to the natural resources and recreational amenities, and consider alternate languages. These should be graphic intensive and eye-catching. They should be distributed at a region-wide level to include placement at senior housing, the federal correctional institute, through newsletters, home associations, apartment complexes, grocery stores, churches, etc.

Brochure & Marketing Examples



PUBLIC INVOLVEMENT IN IMPLEMENTATION

Commitment to continued public involvement through the implementation of the master plan is highly encouraged to ensure the implementation is aligned with the community priorities and to maintain ongoing involvement and support for the park.

The degree to which this will occur will vary depending on what aspect of the plan is being implemented. For larger scale items, such as the camper cabins, dam overlook and pedestrian bridge, the public involvement in the actual design process may be fairly extensive and involve representation from key stakeholders. In addition, forums for broader public input (e.g., open houses and presentations) would also be used as needed to communicate and exchange ideas with interested citizens. For smaller scale projects, notifications to interested parties would be a more appropriate approach. The objectives associated with involving citizens in the implementation process include:

- Determine who the stakeholders are and their interest in a particular development initiative
- Understand their needs and unique perspectives
- Identify and understand concerns and problems
- Develop alternatives and find appropriate solutions with input from stakeholders

In addition to formalized processes for particular projects, the City of Sandstone has an established process with the Parks Commission and City Council on further development initiatives within the park. The public is welcome to attend their regularly scheduled meetings.

APPENDIX

Appendix A - Robinson Park Ecological Stewardship Plan

Appendix B – Robinson Park Regional Status Application

Appendix C - Robinson Park Survey Results

APPENDIX "A"

Prepared for :

City of Sandstone
119 4th Street
Sandstone, MN 55072



ECOLOGICAL STEWARDSHIP PLAN



October 2015

Robinson Park Ecological Stewardship Plan

*Robinson Park
Old Wagon Road
Sandstone, MN 55072*

WSB Project No. 3006-000



701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416

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Robinson Park Ecological Stewardship Plan

For:

City of Sandstone

October 2015

Prepared By:

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Appendix A – Minnesota Department of Agriculture *2015 Noxious Weed List*

EXECUTIVE SUMMARY

As part of the City of Sandstone *Robinson Park Master Plan* update, the City requested a review of the park's landcover classifications and general ecological condition. The City's intent was to identify opportunities to improve the park's ecological health as well as park visitor experience. Accordingly, WSB completed a site review of the park in May 2015 to document vegetative cover types in accordance with the Minnesota Department of Natural Resources (MnDNR) Minnesota Land Cover Classification System (MLCCS) program. Fifteen MLCCS cover types were identified for the park, including wetlands, cliffs, forests, open water, lichen/bedrock, and floodplain forests among others. This report discusses the desktop data sources reviewed prior to the May 2015 site visits, site conditions observed, MLCCS classifications and rankings designated for the site, habitat enhancement opportunities, and vegetative invasive species management opportunities. Removal and prevention of invasive species undergrowth, such as Japanese honeysuckle and common buckthorn, is the primary action that would greatly enhance the ecological health and visitor experience at Robinson Park.

1.0 INTRODUCTION

The City of Sandstone is preparing an update of its Master Plan for Robinson Park. In conjunction with this planning process, WSB & Associates, Inc. (WSB) was selected to prepare an Ecological Stewardship Plan. This plan documents the existing natural resource features within the park, provides an updated environmental basis for future planning and land use, and incorporates suggestions for vegetation management and invasive species control that would benefit the park ecologically as well as improve visitor experiences.

The project area for this review was confined to within the park boundary. Robinson Park is located west of the Kettle River, north of Minnesota Highway 123, south of BNSF railroad, and approximately ¼ mile east of downtown Sandstone (**Figure 1**).

The purpose of conducting the onsite natural resources review and this ecological stewardship plan is to help the City of Sandstone understand, prioritize, protect, and restore the park's natural resources, primarily the vegetative cover and wildlife habitat features. Using desktop data and field investigations, WSB conducted an on-site review throughout the project area identifying native and invasive vegetation. Per the scope of the review, a comprehensive botanical species list was not compiled as this review was more generalized and focuses on cover types.

The data and identification of management strategies and opportunities provided in this report will facilitate the City's master plan and vision for the park by:

- Informing land use planning and development
- Clarifying the park's value with regard to natural resources and wildlife habitat
- Identifying degraded areas and management problems
- Identifying opportunities for natural resources protection and enhancement
- Identifying opportunities for recreation and interaction with the natural environment
- Providing information that can be used to develop management priorities

Options for management goals and strategies are presented in **Section 4**, along with selected specific management opportunities. Using the information and data provided in **Section 3**, the City of Sandstone can follow the recommendations to develop and implement management strategies for the park.



Photo 1: Northern parking and picnic pavilion area, Kettle River, facing northeast.

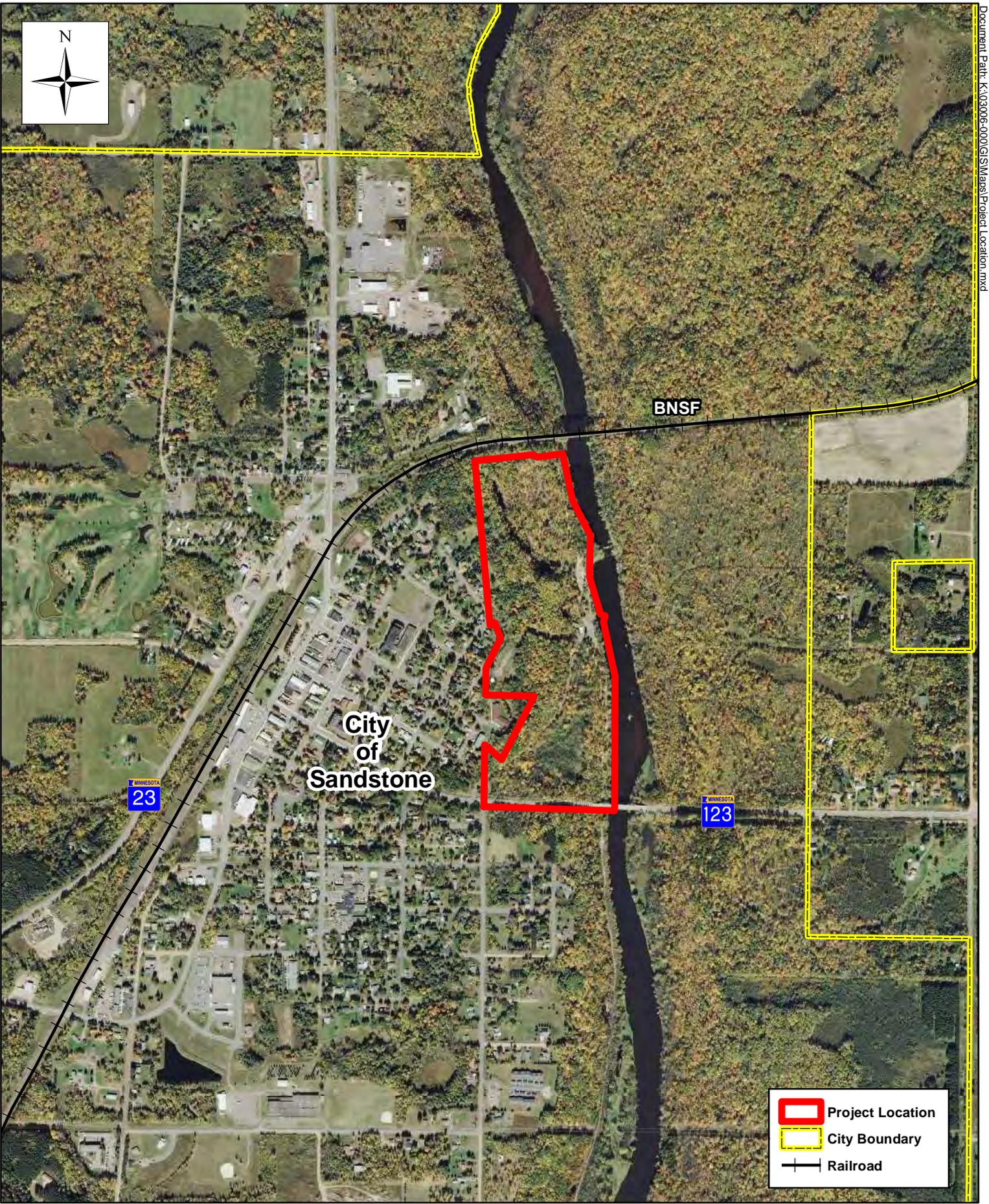


Figure 1

ROBINSON PARK

Sandstone, Pine County, MN
Project Location Map



0 1,000 Feet

2.0 METHODS

2.1 Site Understanding and Description

Robinson Park is an important historical and cultural resource for the City of Sandstone. The park is relatively secluded, nestled along the west bank of the Kettle River. Once a sandstone quarry, the site experienced significant land disturbance in the past. As a result, Robinson Park was subjected to an increase in non-native and invasive plant species since quarry operations ceased. Many of the historic attributes of the former quarry can be observed yet today among the vegetation overgrowth. The site contains steep topographic features, sandstone cliff walls, wetlands, boulders, quarry ponds, and is primarily covered by mixed coniferous-deciduous northern hardwood forest. Park features and amenities including parking, a picnic area, grass lawn, and a boat launch located generally along the Kettle River. **Figure 2** depicts a site inventory and analysis of existing features of the park based on WSB's site review, records review, and discussion with City of Sandstone staff in spring 2015.

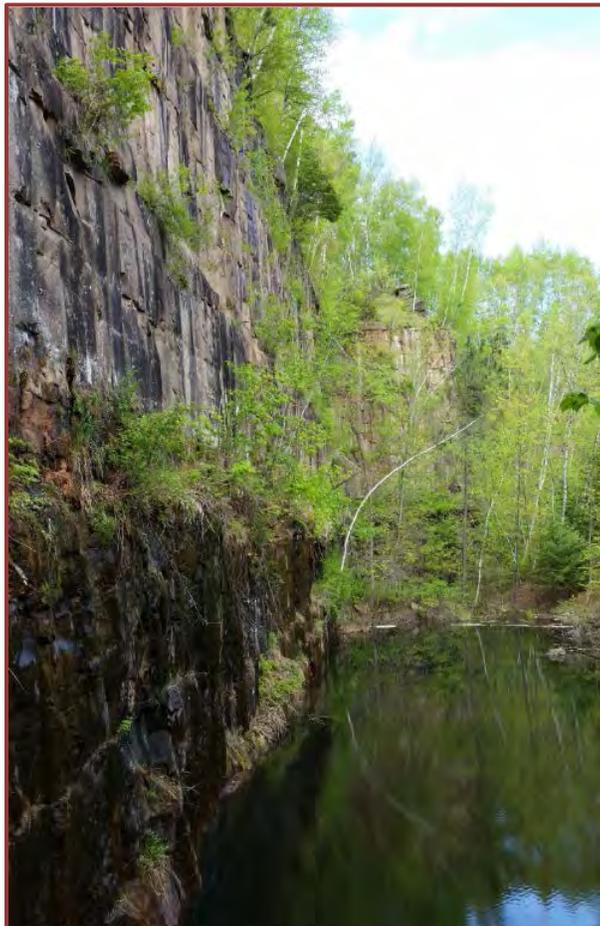


Photo 2: Sandstone cliffs with a quarry pond, at the northwest portion of the park.

ROBINSON PARK

Sandstone Minnesota

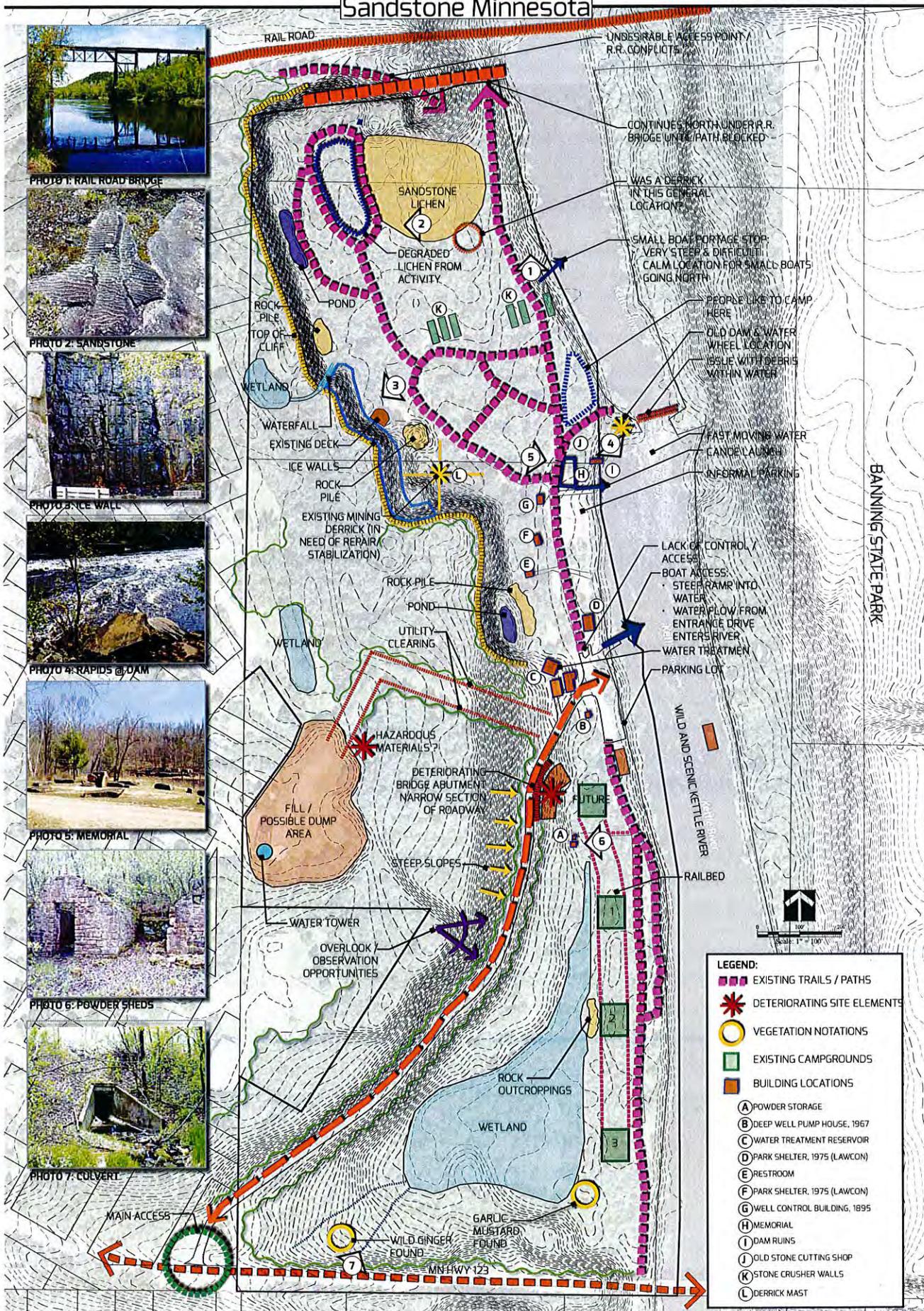


Figure 2

SITE INVENTORY & ANALYSIS

WSB PROJECT NUMBER:
03006-000
DATE:
06-25-2015

2.2 Desktop Analysis

WSB reviewed the following available online data sources prior to completing the onsite ecological review. Review of these sources was important to obtain a more clear understanding of the park setting and conditions that would potentially be encountered.

2.2.1 *USFWS National Wetlands Inventory Map & MnDNR Public Waters Map*

WSB reviewed the U.S. Fish and Wildlife Service (USFWS) *National Wetlands Inventory* (NWI) map as well as the Minnesota Department of Natural Resources (MnDNR) *Public Waters & Wetlands Inventory* (PWI) (**Figure 3**) to determine where wetlands and watercourses occur. One palustrine shrub scrub broad-leaved deciduous seasonally flooded (PSS1C) wetland is mapped at the southeast portion of the park. One riverine lower perennial unconsolidated bottom permanently flooded (R2UBH) wetland is mapped within the Kettle River. The Kettle River is also mapped as a public watercourse, which comprises the park's eastern boundary.



Figure 3

ROBINSON PARK

Sandstone, Pine County, MN
Surface Water Resources Map

2.2.2 USGS Topographic Map

The US Geological Survey (USGS) *Topographic Map* was reviewed to locate special topographic features as well as any nearby surface features of interest (**Figure 4**). The USGS map depicts a quarry at the northern portion of the park, representing the historic sandstone quarry and a picnic area at the central portion of the park, representing the current picnic/shelter area.

2.2.3 MN Geological Survey Surficial Geology Map

The Minnesota Geological Survey *Surficial Geology Map* was referenced to determine the geologic setting, as the park has a substantial history related to sandstone extraction for national and international commercial export (**Figure 5**). The Minnesota Geological Survey map indicates the following two units of surficial geology occur within the park:

- Steep-slope and slope deposits – Steep slopes mainly along incised streams where older glacial sediment and bedrock may be exposed but typically are partially covered with debris shed from slopes (Qhc).
- Stream-eroded surface deposits – Coarse sand and gravel stream deposits from the Kettle and St. Croix Rivers and erosional (strath) terraces exposing older glacial sediment or bedrock. Related to drainage of glacial lakes Duluth and Nemadji. Thickness of sand and gravel varies and is thickest in bar forms. In areas of thin to no sand and gravel, the underlying unit exposed by erosion is commonly glacial sediment but may also be glacial-lake sediment and bedrock (Qhe).

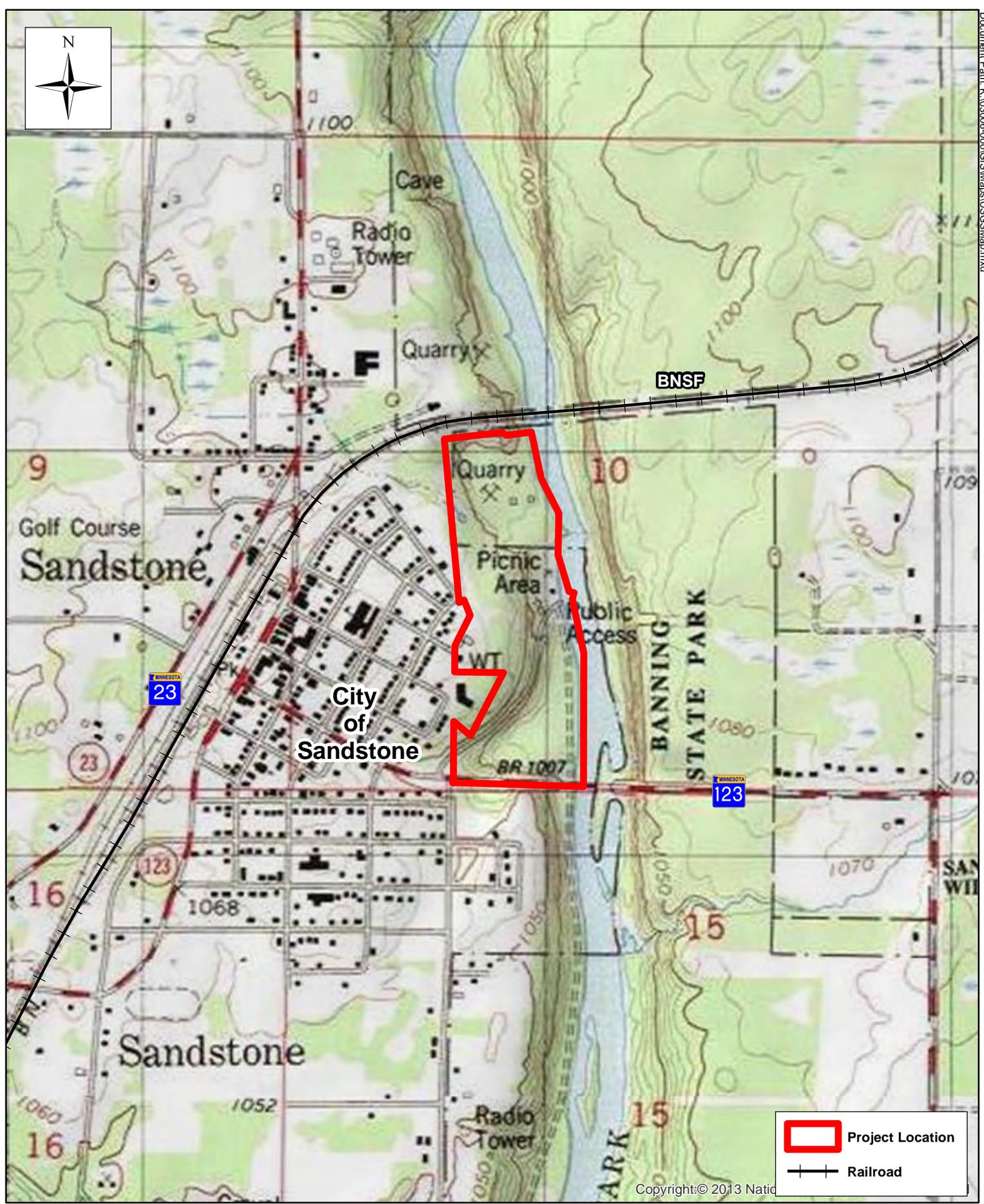


Figure 4

ROBINSON PARK
 Sandstone, Pine County, MN
 USGS Topographic Map



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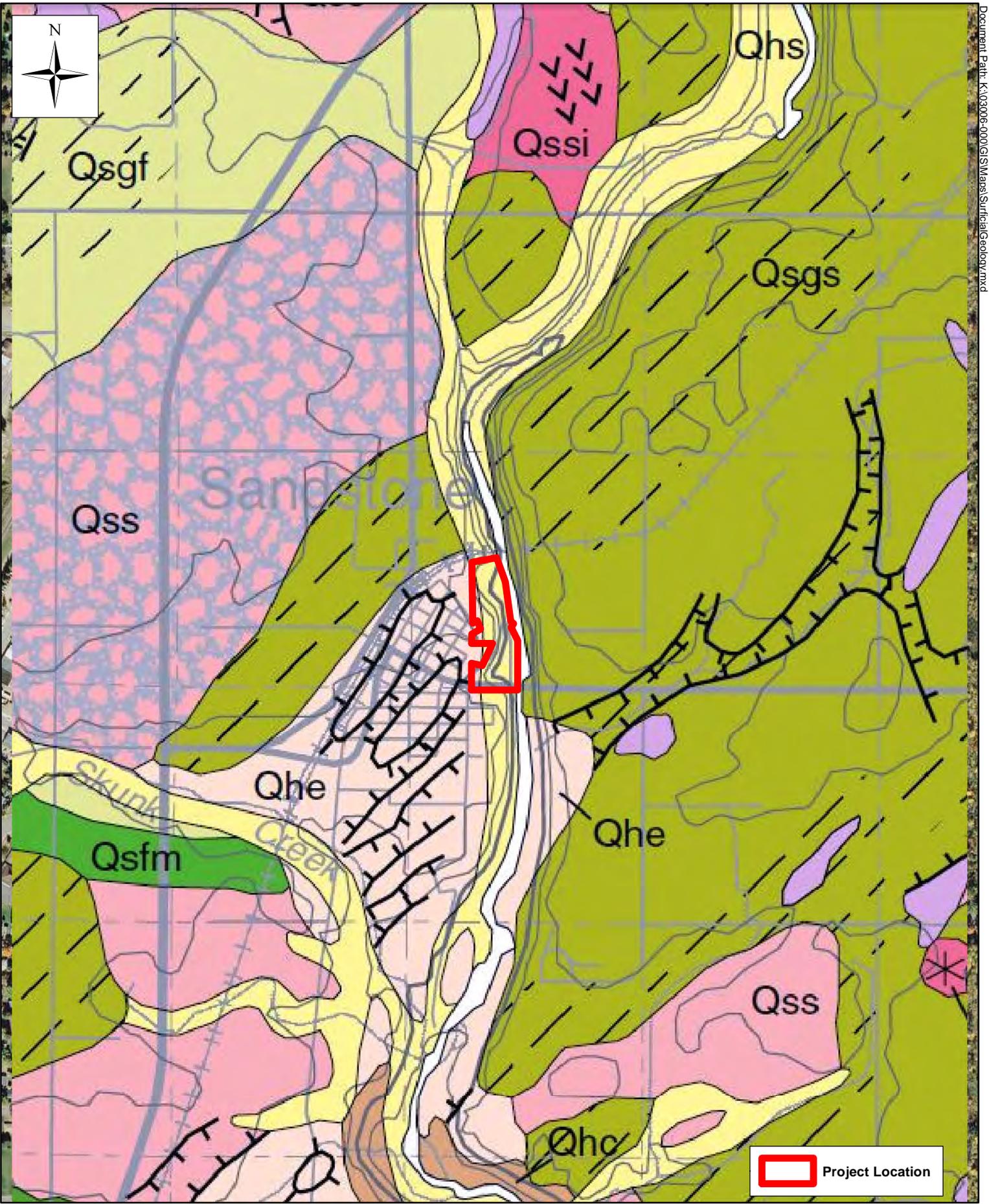


Figure 5

0 500 Feet

ROBINSON PARK Sandstone, Pine County, MN Surficial Geology Map



2.2.4 *USDA Web Soil Survey*

The US Department of Agriculture (USDA) *Web Soil Survey* was reviewed to determine the mapped soil types within the park. However, soil type mapping is not available for the park location via the Web Soil Survey. There is an electronic data gap resulting from the site consisting primarily of the sandstone geologic feature, rather than soil; apparently the USDA did not map the site.

2.2.5 *Marschner's Map of Original Vegetation*

According to Francis J. Marschner's *Map of Original Vegetation* (Presettlement vegetation of Minnesota based on Marschner's original analysis of Public Land Survey notes and landscape patterns), the location where Robinson Park is located was historically a "mixed hardwood and pine" forest. Marschner compiled his results in map format, which was subsequently captured in digital format (**Figure 6**).

2.2.6 *USGS GAP Analysis Map*

WSB reviewed the USGS GAP Analysis map, which shows general land use/cover types. The dataset was created for use in the Geological Survey's Gap Analysis Program (GAP), a national project aimed at prioritizing lands for conservation action. Other uses include stratification of inventories, land use planning, and spatial analysis of landscape patterns (**Figure 7**). The mapped cover-type overlay at the site primarily includes "aspen/white birch" and "upland shrub".

2.2.7 *Minnesota County Biological Survey (MCBS)*

WSB visited the MnDNR Minnesota Biological Survey Native Plant Community and Rare Species County Maps website. However, the MnDNR has not published the map for Pine County, as the creation of these maps is a work-in-progress. Therefore, the MCBS data for Pine County are not available at this time.

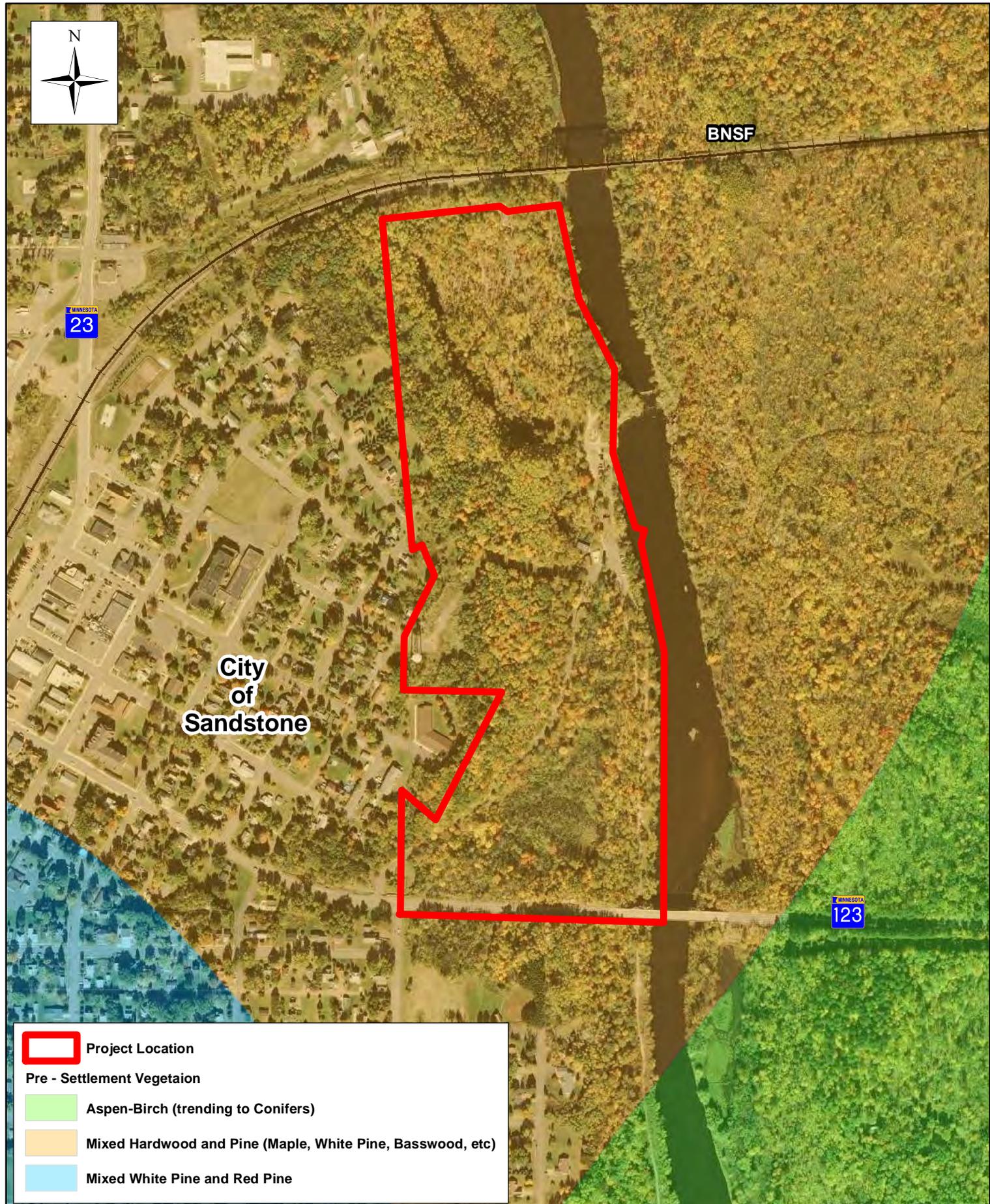


Figure 6

ROBINSON PARK
 Sandstone, Pine County, MN
 Pre - Settlement Vegetation Map

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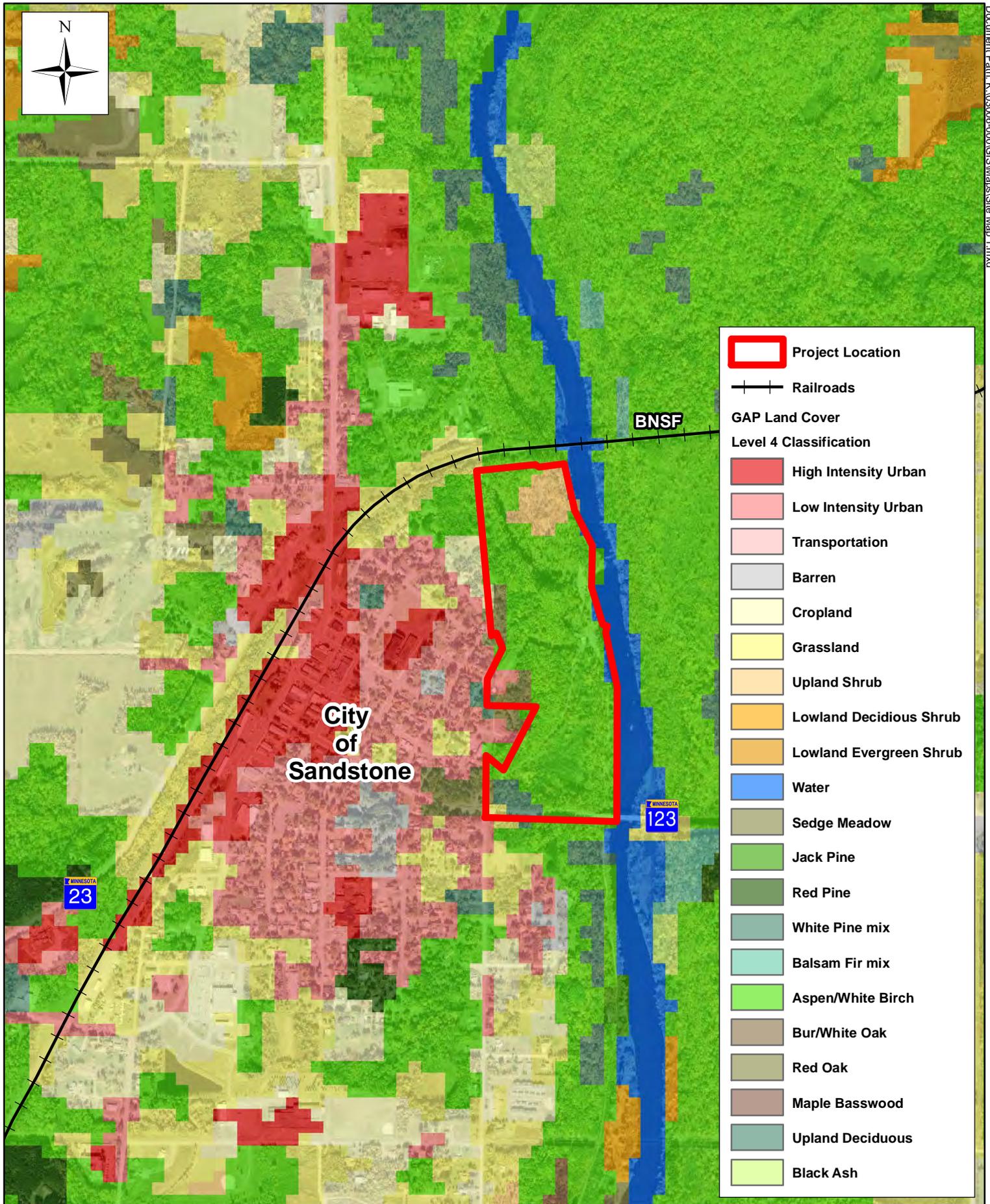


Figure 7

ROBINSON PARK

Sandstone, Pine County, MN
GAP Analysis Program Land Cover Map

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2.2.8 MnDNR Minnesota Land Cover Classification System

In addition, WSB reviewed the MnDNR *Minnesota Land Cover Classification System (MLCCS) User Manual* and other associated reference materials.

MLCCS identifies observed physical land cover such as vegetation, buildings, pavement, and water. MLCCS describes an area such as the project site with land cover terminology as opposed to more traditional land use descriptions. Using MLCCS for an initial evaluation of natural resources in the project area provides a snapshot of the types and distribution of vegetated and non-vegetated areas. The desktop analysis of the MLCCS methods provided means for the onsite field assessment.

Because MLCCS data are not available for Robinson Park, WSB classified areas within the project boundary using the methods specified within the MnDNR MLCCS User Manual. Discussion of the MLCCS review is included in **Section 3.2**.

2.3 Field Methods

WSB environmental staff visited the park to document existing cover types, review the ecological setting, and gather information for preparation of this report. WSB visited the site on May 15 and May 20, 2015. WSB completed a meander survey throughout the park. The southern half was reviewed on May 15, 2015 and the northern half was reviewed on May 20, 2015. As different vantage points and features of the park were observed, notes were kept which contributed to the overall master plan update.

Because MLCCS cover type mapping was absent for Robinson Park, WSB followed the MLCCS program methods to characterize and assign vegetation community types.

WSB staff also looked for previously unmapped wetlands, or wet areas that probably meet the three US Army Corps of Engineers (USACE) technical criteria for wetlands (wetland hydrology, hydric soil, and hydrophytic vegetation). However, an official wetland delineation in accordance with the USACE Wetlands Delineation Manual (1987) and Regional Supplement was not completed.

Concentrations of invasive and noxious or specially regulated weeds and other invasive non-native species were identified.

Finally, WSB staff took numerous photos of the park area to document typical vegetation community types and habitats.

3.0 RESULTS

3.1 General Observations

Robinson Park is comprised of many different types of topographic settings, plant species, and cover types. **Section 3.4** discusses the various vegetation community types found within the park. Most of the park is forested and there are areas of wetland, some of which are forested. There are some areas of open grass (lawn) and areas of un-mowed grasses as well. The sandstone cliffs and other associated geologic features are prominent attributes of the park. The sandstone cliffs somewhat divide the park by a substantial elevation difference, with higher elevations at the west and south, and lower elevations at the east, closer to the Kettle River. Un-paved road and trails wind through the park, and provide limited access throughout the park. Un-paved roads and trails are more frequent at the northern portion of the park than the southern half.



Photo 3: Mountain maple (*Acer spicatum*), Sphagnum moss (*Sphagnum* spp.), and Common polypody (*Polypodium virginianum*).



Photo 4: Sandstone boulders near southern park boundary.

3.2 MLCCS Evaluation

Because MLCCS data were not available (were not yet assigned), WSB followed the MnDNR MLCCS guidance to interpret and assign cover type classifications. The MnDNR guidance can be found at:

http://files.dnr.state.mn.us/assistance/nrplanning/community/nrig/fullguide/pdf/mlccs_presentation.pdf

3.2.1 Desktop

As discussed, MLCCS data were not available for Robinson Park.

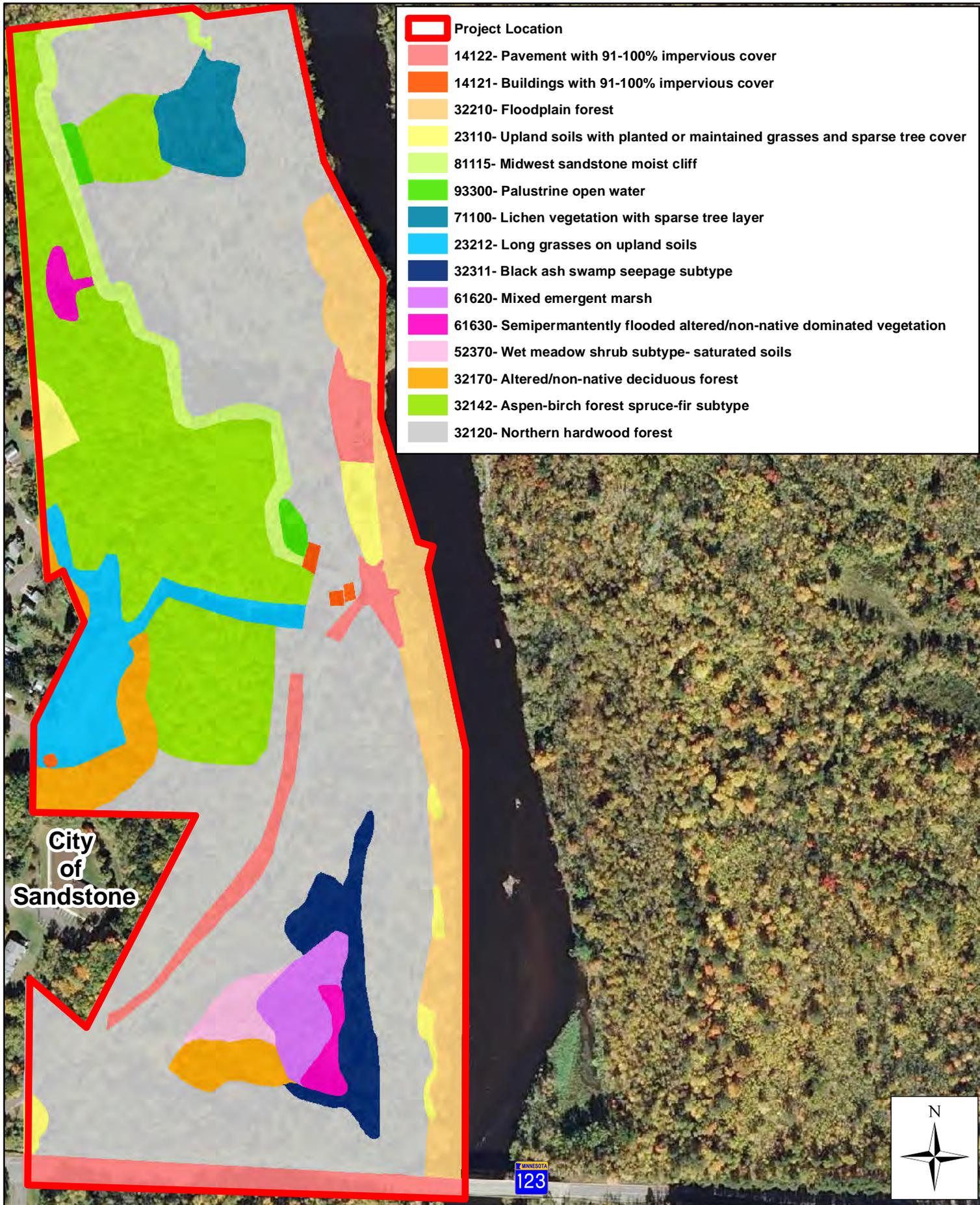
3.2.2 Field Investigation Results

Because published MLCCS data were not available for the site prior to this year, WSB assigned MLCCS cover types in accordance with the approved methodology outlined in the manual, as previously described. **Figure 8** shows the MLCCS classification for the park, as designated by WSB.

Based on the field review results, in conjunction with the MLCCS guidance, WSB identified and assigned fifteen (15) cover types (MLCCS Level 5). Descriptions of these cover types (classifications) can be found in pages 75 through 206 of the MLCCS guidance manual, for further detail. **Table 1** summarizes the MLCCS evaluation of the project area.

MLCCS rankings for natural community quality were also assigned based on the field investigations. **Figure 9** shows the natural community quality rankings. These correspond to the following MnDNR descriptions (MnDNR 2004):

- A Highest quality natural community, no disturbances and natural processes intact. Site must be visited entirely or partially to accurately assess its natural quality at this level.
- B Good quality natural community. Has its natural processes intact, but shows signs of past human impacts. Low levels of exotics. Site must be visited entirely or partially to accurately assess its natural quality at this level.
- C Moderate condition natural community with obvious past disturbance but is still clearly recognizable as a native community. Not dominated by weedy species in any layer. Minimally, the site must be visited from the edge to accurately assess its natural quality at this level.
- D Poor condition of a natural community. Includes some natives, but is dominated by nonnatives and/or is widely disturbed and altered. Herbaceous communities may be assessed with this ranking from a distance if large masses of invasive species are present and the entire community is visible.
- NA Native species present in an altered / non-native plant community. This NA ranking can only be used if the site is field checked from the edge or to a greater degree, thus confirming the presence of native species within a non-native community.
- NN Altered / non-native plant community. These semi-natural communities do not qualify for natural quality ranking. Using NN signifies the site has been field checked and confirms it is a semi-natural community.



- Project Location
- 14122- Pavement with 91-100% impervious cover
- 14121- Buildings with 91-100% impervious cover
- 32210- Floodplain forest
- 23110- Upland soils with planted or maintained grasses and sparse tree cover
- 81115- Midwest sandstone moist cliff
- 93300- Palustrine open water
- 71100- Lichen vegetation with sparse tree layer
- 23212- Long grasses on upland soils
- 32311- Black ash swamp seepage subtype
- 61620- Mixed emergent marsh
- 61630- Semipermanently flooded altered/non-native dominated vegetation
- 52370- Wet meadow shrub subtype- saturated soils
- 32170- Altered/non-native deciduous forest
- 32142- Aspen-birch forest spruce-fir subtype
- 32120- Northern hardwood forest

City of Sandstone

123



Figure 8

ROBINSON PARK
 Sandstone, Pine County, MN
 MLCCS Classification Map

0 300
 Feet



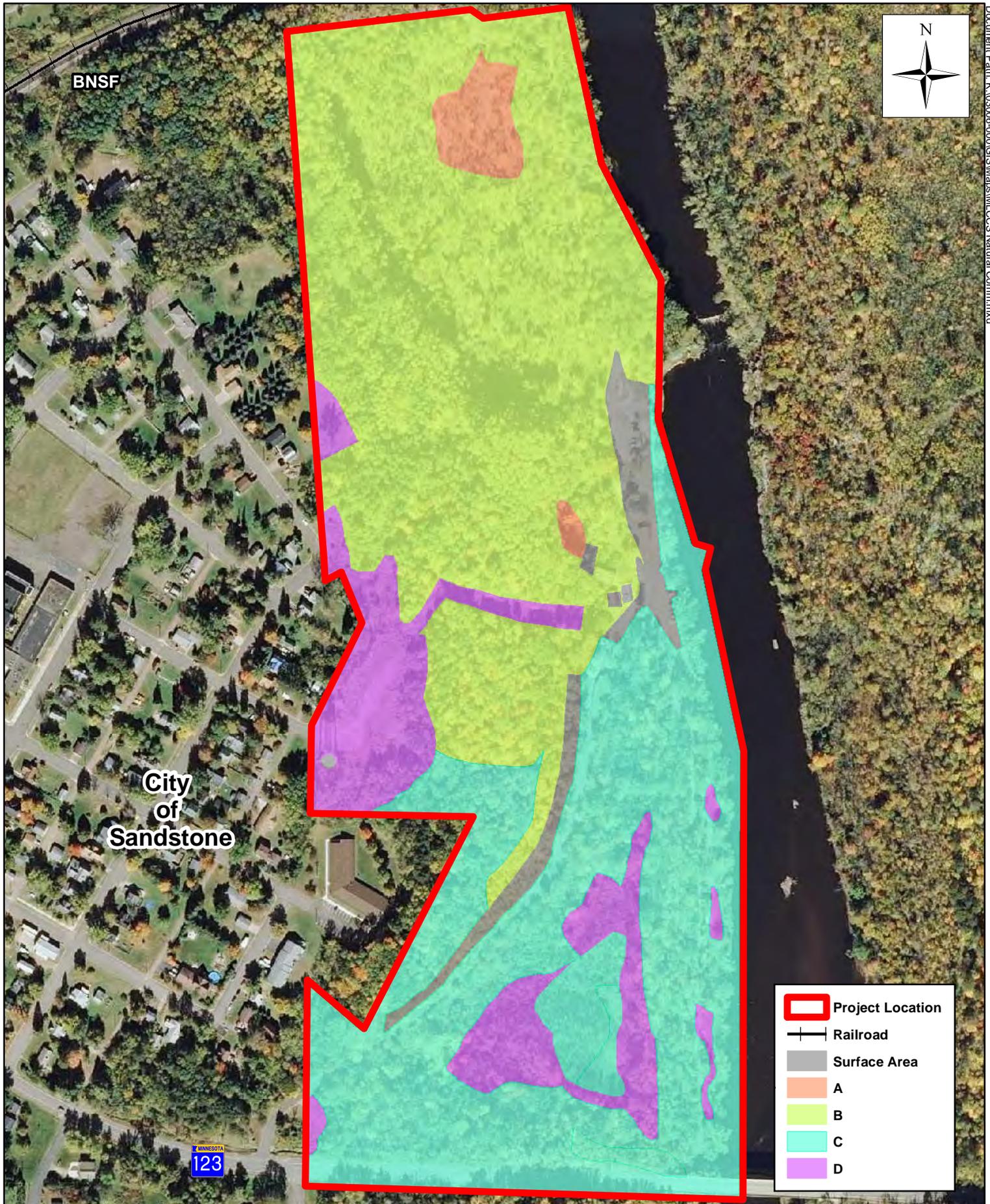


Figure 9

ROBINSON PARK
Sandstone, Pine County, MN
MLCCS Natural Community Quality Ranking Map



Table 1 – MLCCS Designation Summary

| MLCCS Level 5 Type | Acres | Percent of total project area |
|---|---------------|--------------------------------------|
| 10000s - Artificial Surfaces and Associated Areas | | |
| 14121 - Buildings with 91-100% impervious cover | 0.14 | |
| 14122 - Pavement with 91-100% impervious cover | 3.21 | |
| Total Artificial Surfaces and Associated Areas | 3.35 | 6 |
| 20000s - Planted or Cultivated Vegetation | | |
| 23110 - Upland soils with planted or maintained grasses and sparse tree cover | 1.17 | |
| 23212 - Long grasses on upland soils | 2.34 | |
| Total Planted or Cultivated Vegetation | 3.51 | 6 |
| 30000s - Forested Areas | | |
| 32120 - Northern hardwood forest | 25.93 | |
| 32142 - Aspen-birch forest spruce-fir subtype | 11.38 | |
| 32170 - Altered/non-native deciduous forest | 1.98 | |
| 32210 - Floodplain forest | 4.34 | |
| 32311 - Black ash swamp seepage subtype | 1.55 | |
| Total Forested Areas | 45.18 | 79 |
| 40000s - Woodlands | | |
| None | 0 | N/A |
| 50000s - Shrubland | | |
| 52370 - Wet meadow shrub subtype - saturated soils | 0.50 | 1 |
| 60000s - Herbaceous Vegetation | | |
| 61620 - Mixed emergent marsh | 0.98 | |
| 61630 - Semipermanently flooded altered/non-native dominated vegetation | 0.60 | |
| Total Herbaceous Vegetation | 1.58 | 3 |
| 70000s – Nonvascular Vegetation | | |
| 71100 - Lichen vegetation with sparse tree layer | 1.09 | 2 |
| 80000s – Sparse Vegetation | | |
| 81115 - Midwest sandstone moist cliff | 1.57 | 3 |
| 90000s – Water | | |
| 93300 - Palustrine open water | 0.29 | <1 |
| TOTAL PROJECT AREA* | 57.07* | 100.0% |

* Project Area is approximate, not official survey boundary.

3.3 Forest Canopy Cover

Forest canopy cover in the project area is approximately 45 acres, or 79 percent of the site. The park contains many desirable hardwood native tree species. Near the river edge, there are softwood-hardwood species that are located in the floodplain, most of which are native as well.

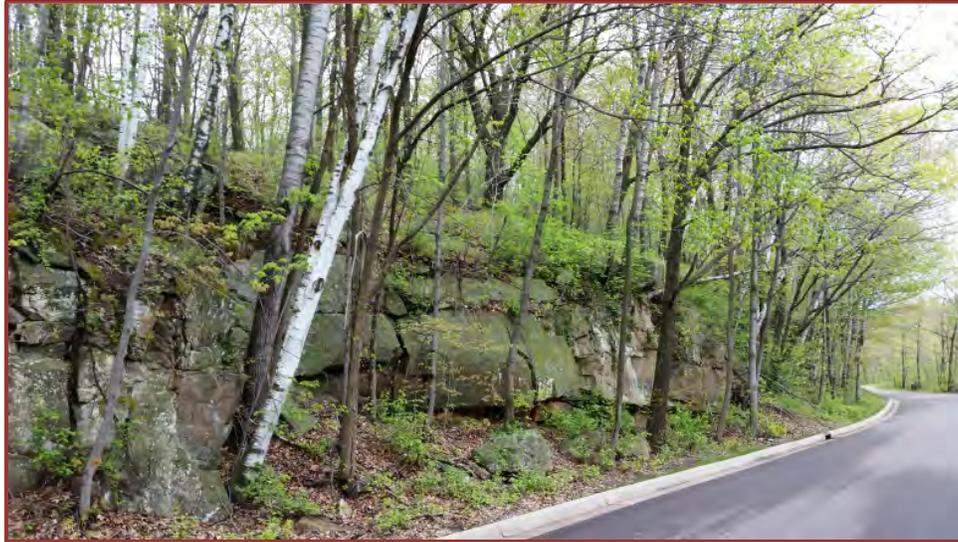


Photo 5: Mixed forest west of Old Wagon Road, near park entrance

Mixed forest (northern hardwood) is present along Old Wagon Road, including Paper birch (*Betula papyrifera*), Mountain maple (*Acer spicatum*) Bigtooth aspen (*Populus grandidentata*), Northern pin oak (*Quercus ellipsoidalis*), American basswood (*Tilia americana*), White spruce (*Picea glauca*), and American elm (*Ulmus americana*) among other species.

3.4 General Vegetation Community Types

The field investigations allowed WSB staff to identify seven general vegetation community types present in the project area. The general description, along with a representative photo (from within the park), are included. These are:

1. **Mixed Forest** – Vegetation dominated primarily by hardwood deciduous trees, with scattered conifers.



Photo 6: Mixed forest above Old Wagon Road.

- 2. Manicured lawn and open grass** – Grass-dominated areas vary widely in species composition, ranging from maintained turfgrass to concentrations of native woodland species. In most occurrences of natural, unmaintained upland grassland, there is a mix of non-native species such as Smooth brome (*Bromus inermis*) and Kentucky bluegrass (*Poa pratensis*).



Photo 7: Parking area, manicured lawn, and picnic pavilion.

- 3. Hardwood swamp/scrub-shrub wetland** – Forested wetland including black ash (*Fraxinus nigra*), speckled alder (*Alnus incana*), quaking aspen (*Populus tremuloides*), red maple (*Acer rubrum*), reed canary grass (*Phalaris arundinacea*), sedges (*Carex* sp.), and other species.



Photo 8: Outlet flow of wetland at southern portion of the site.

- 4. Shallow marsh wetland** – Wetland including herbaceous species such as reed canary grass, jewelweed (*Impatiens capensis*), and sedges.



Photo 9: Southern wetland, as viewed from the south.

- 5. Floodplain forest** – Floodplain areas along the east side of the park, near the Kettle River, that include hardwood tree species such as silver maple (*Acer sacharrinum*), green ash (*Fraxinus pennsylvanica*), box elder (*Acer negundo*), American elm, and eastern cottonwood (*Populus deltoides*).



Photo 10: Floodplain forest along west bank of Kettle River.

- 6. Sandstone cliff/rock edges ferns and mosses** – Sphagnum moss (*Sphagnum* spp.), and Common polypody (*Polypodium virginianum*) are the two most frequented plants observed along the sandstone cliffs. The cliffs contain areas of water trickling/falling to the base.

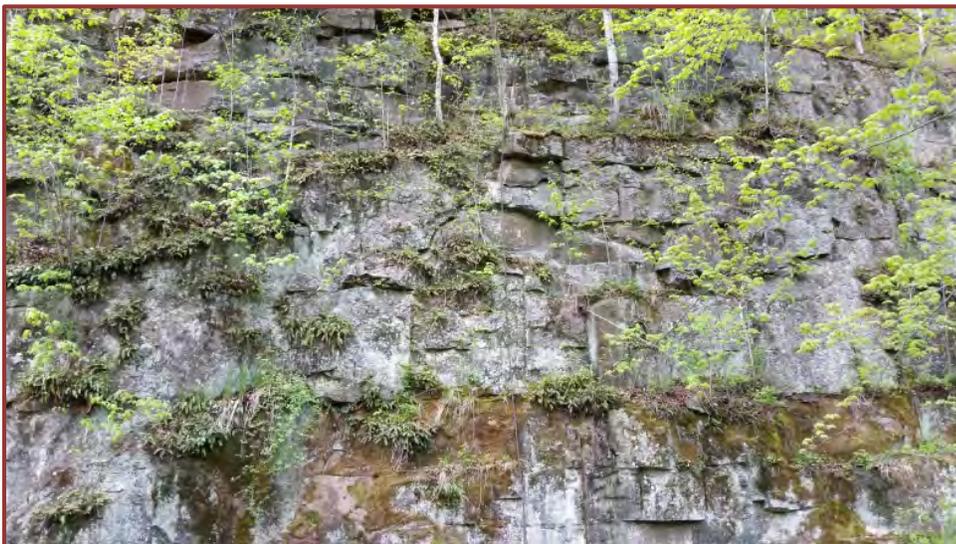


Photo 11: Ferns and mosses growing on sandstone cliff

- 7. Lichen/bedrock** – This community contains mosses and lichens over bedrock. This area receives abundant sunshine. At times throughout the year, the mosses and lichens become dry and crusty, and are susceptible to destruction from foot traffic.



Photo 12: Lichen/bedrock

Table 2 Summary of Natural Areas

| Vegetation Community Type | Vegetation Classification | Quality | Dominant Non-native plant species | Suggested Management |
|----------------------------------|---|--|---|---|
| Forest | 32120 - Northern hardwood forest | 32120- B (North), C (South) | Honeysuckle, Common buckthorn, Garlic mustard | Remove honeysuckle and buckthorn, apply herbicide to stumps. Apply herbicide to garlic mustard. |
| | 32142 - Aspen-birch forest spruce-fir subtype | 32142- B 32170-D | | |
| | 32170 - Altered/non-native deciduous forest | 32210- B (North), C (South) 32311-D | | |
| | 32210 - Floodplain forest | | | |
| | 32311 - Black ash swamp seepage subtype | | | |

| Vegetation Community Type | Vegetation Classification | Quality | Dominant Non-native plant species | Suggested Management |
|---|---|---------------------------|--|---|
| Manicured lawn/open grass | 23110 - Upland soils with planted or maintained grasses and sparse tree cover | D | Poison ivy | Apply herbicide to poison ivy observed along woodland edge. |
| Hardwood swamp/scrub shrub wetland | 52370 - Wet meadow shrub subtype - saturated soils, 61630 – Semi-permanently flooded altered/non-native dominated vegetation | 52370- C/D 61630-C | Reed canary grass, honeysuckle, common buckthorn | Apply herbicide to reed canary grass. Remove honeysuckle and buckthorn, apply herbicide to stumps. |
| Shallow marsh wetland | 61620 - Mixed emergent marsh | B/C | Reed canary grass | Apply herbicide to reed canary grass. |
| Floodplain forest | 32210 - Floodplain forest | B (North) C (South) | Poison ivy | Remove honeysuckle and buckthorn, apply herbicide to stumps. Apply herbicide to poison ivy observed along woodland edge. |
| Sandstone cliff/rock edges ferns & mosses | 81115 - Midwest sandstone moist cliff | B | Honeysuckle, Common buckthorn | Remove honeysuckle and buckthorn, apply herbicide to stumps, where observed (occurrences limited). |
| Lichen / bedrock | 71100 - Lichen vegetation with sparse tree layer | A | None | Monitor for honeysuckle and buckthorn. Remove and apply herbicide to stumps, if encountered. |
| Quarry Pond | 93300 - Palustrine open water | A (South) B (North) | None | Monitor for honeysuckle, buckthorn, and reed canary grass on surrounding edges. Remove and apply herbicide to stumps, if encountered. |

3.5 Ecologically Sensitive Areas

Figure 10 shows the ecologically sensitive areas within Robinson Park, based on the MLCCS cover type, rarity of the feature, and general sensitivity to disturbance.

Surface water resources, including wetlands and potentially quarry ponds, are protected resources. Because the park contains these resources, WSB suggests that the City of Sandstone complete an official wetland delineation. Having the legal boundaries of these aquatic resources defined (surveyed), will allow for the City of Sandstone to make better land-use decisions near these areas, and would protect the City from accidental fill/destruction of wetland.

The lichen/bedrock community is sensitive to pedestrian traffic, which may result in compaction and destruction of the sensitive lichens. Limiting foot-traffic in this area would help prevent degradation of these plants.

The sandstone cliffs are sensitive because they are rare geological features that support mosses, lichens and ferns that are adapted to shaded, cool, moist environments. The cliffs have water and seeps that flow down the sides. These cliffs could contain rare mosses, lichens, and ferns. However, a botanical survey would be needed to document the species that are present at the site. In addition to water resources delineation, the City may consider a comprehensive botanical survey of the park to document the various plant species present. Because the ice climbing activities occur at the cliff locations during the winter months, no adverse effects to these plants is anticipated.

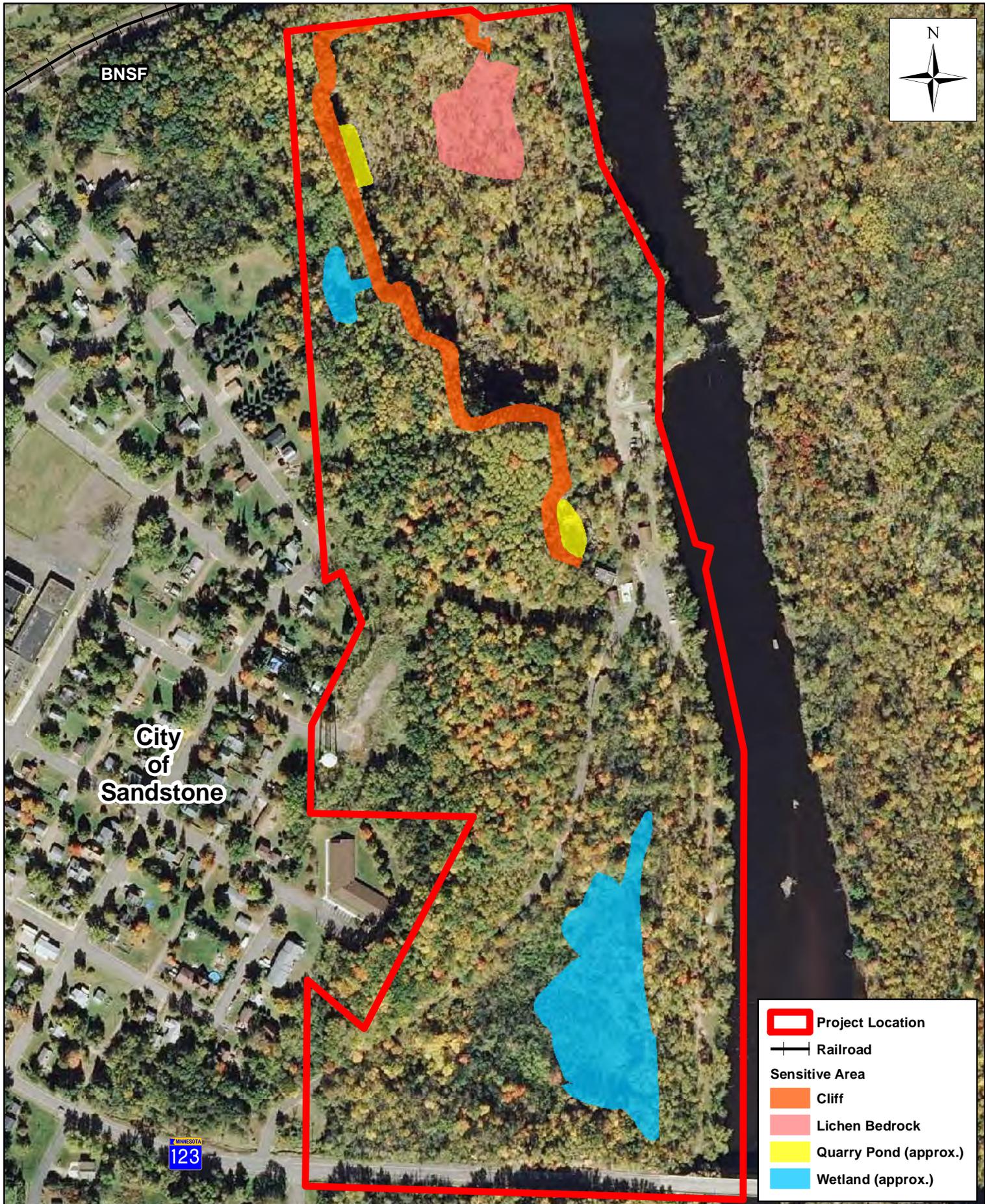


Figure 10

ROBINSON PARK
 Sandstone, Pine County, MN
 Ecologically Sensitive Areas Map

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3.6 Invasive/Exotic species

The terms "exotic species" and "invasive species" are often used interchangeably; however, invasive species are exotic species that cause damage to established ecosystems and should be managed. While there are a number of areas dominated by non-native invasives (Japanese honeysuckle (*Lonicera japonica*), Reed canary grass (*Phalaris arundinacea*), Common buckthorn (*Rhamnus cathartica*), etc.), none of the Minnesota Department of Agriculture (MDA) Prohibited Noxious Weeds (MDA 2014) were observed (**Appendix A**).

No species on the State Prohibited – Eradicate List were observed during the field investigations. Two species on the State Prohibited – Control List, Canada thistle (*Cirsium arvense*) and Wild parsnip (*Pastinaca sativa*), were found occasionally scattered in small amounts in the project area.

Prohibited – Controlled weeds must be controlled, meaning efforts must be made to prevent the spread, maturation, and dispersal of any propagating parts thereby reducing established populations and preventing reproduction and spread as required by Minnesota Statutes, Section 18.78 (MDA, 2015).

Three species of restricted noxious weeds (those which may not be sold, transported without a permit, or intentionally planted in Minnesota) were observed within the park during the site review. The three species are Common buckthorn, Glossy buckthorn (*Rhamnus frangula*), and Garlic mustard (*Alliaria petiolata*).

According to the MDA, these species are detrimental to human or animal health, the environment, public roads, crops, livestock or other property, but whose only feasible means of control is to prevent their spread by prohibiting the importation, sale, and transportation of their propagating parts in the state except as allowed by Minnesota Statutes, Section 18.82 (MDA 2015).

Poison ivy (*Toxicodendron radicans*) was the only MDA Specially Regulated species seen in the project area. Poison ivy is known to cause blistering itchy skin when contacted. Although Poison ivy is a species native to Minnesota, it should be destroyed if observed along trails or public access areas. Poison ivy was observed along the trail at the southeast portion of the site, near the river.

Resources regarding exotic and invasive species identification and control can be found at the Pine County website:

- http://www.co.pine.mn.us/index.asp?Type=B_BASIC&SEC={35F3971E-DC67-4BA7-A692-7527281F0165}

The MnDNR also provides information regarding the management of Common buckthorn and Honeysuckle:

- <http://www.dnr.state.mn.us/invasives/terrestrialplants/woody/buckthorn/control.html>
- <http://www.dnr.state.mn.us/invasives/terrestrialplants/woody/exotichoneysuckles.html>

Table 3 Summary of Exotic/Invasive Species

| Common Name | Scientific Name | MDA Listing | Typical Habitat | Prominence | Suggested Management |
|----------------------|-------------------------------|---------------------|---|-------------------|---|
| Common buckthorn | <i>Rhamnus cathartica</i> | Restricted | Forested upland | Very common | Cut, remove, spray stump with herbicide |
| Glossy buckthorn | <i>Rhamnus frangula</i> | Restricted | Wetland edge | Not very common | Cut, remove, spray stump with herbicide |
| Japanese honeysuckle | <i>Lonicera japonica</i> | Not listed | Forested upland, wetland edge | Very common | Cut, remove, spray stump with herbicide |
| Garlic mustard | <i>Alliaria petiolata</i> | Restricted | Forested upland | Common | Spray with herbicide |
| Reed canary grass | <i>Phalaris arundinacea</i> | Not listed | Wetland edge | Common | Spray with herbicide |
| Poison ivy | <i>Toxicodendron radicans</i> | Specially regulated | Edges of tree lines, forested areas, along river bank | Not very common | Leave alone unless along trails or access areas |
| Wild parsnip | <i>Pastinaca sativa</i> | Control list | Roadsides, ditches | Not very common | Spray with herbicide |
| Canada thistle | <i>Cirsium arvense</i> | Control list | Areas of past soil disturbance | Not very common | Spray with herbicide |

4.0 MANAGEMENT GOALS, STRATEGIES AND OPPORTUNITIES

This section of the Ecological Stewardship Plan considers the following questions regarding potential actions that could be implemented to address natural resource management in the project area:

- Why does the City want to manage natural resources in the area? What does the City hope to achieve?
- How, in general terms, could the City go about achieving its goals for natural resources in the project area?
- What is the budget for annual ecological stewardship within the park?
- What specifically could be done? Where within the park limits could the City accomplish the goals, or achieve the most impact per resources allocated?
- What permits or approvals will be required (such as work within a wetland, removal of trees or invasive vegetation along river edge)?
- How will these projects be managed?

These questions should be re-visited and considered as opportunities/resources for management at the park become available.

4.1 Management Goals

There are numerous potential opportunities for managing natural resources within the project area. Management activities can be selected along a gradient from specific localized actions to broader area-wide policies to recognize and preserve natural resources in the project area. A necessary first step in the selection of management activities is to consider and identify the goals of natural resource management. Listed below, in no particular order, are several possible goals that may be considered prior to enacting management activities.

Preservation and protection of existing resources: A goal of management may be to simply limit further degradation of the project area's remaining natural features and protect park resources such as trees and wetlands from development or conversion.

Connectivity – establish corridors of natural vegetation: Greenways, or corridors of open vegetated space, provide ecological, aesthetic, and recreational benefits. Moreover, there is an established synergistic effect to connecting green spaces, such as nearby Banning State Park. Establishment of connections between natural resource elements within the project area would also allow the continuation of the corridor into natural areas to the north and south of the site.

Wildlife habitat enhancement: It is important to identify, preserve, and enhance opportunities for wildlife to move, forage, nest, and thrive. Specific management activities can be implemented to meet the goal of sharing a park experience in conjunction with wildlife preservation.

Improve pollinator habitat: This goal is a subset of the wildlife enhancement goal, but it is sufficiently important in the current context to identify it as a separate goal. According to the USDA the populations of bees, butterflies, and other important pollinators has been in general decline throughout the nation. The preservation of these pollinators is important to many of our own food sources, as they function as the source of pollination for many types of crops. Although agricultural land use in the immediate area is limited, the overall ecological benefits to preserving and enhancing pollinator habitat are numerous and pertinent. Enhancement of pollinator habitat is an achievable goal in the project area, with a high potential for engaging local residents via volunteer native wildflower planting events, potentially honey production and bee keeping, and educational opportunities pertaining to their importance.

Enhancement of native/natural plant communities: In a number of locations around the project area, the remnants of native plant communities and/or good-quality mixed native/nonnative communities are present. These are areas that could return to a healthier, self-sustaining condition with an assist in the form of specific management actions, such as supplemental native seeding and invasive species control.

Control of invasive species: Many invasive species not only degrade native plant communities and decrease species diversity, but they also have significant economic effects at both local and regional scales. Management of invasive species is an important goal for any natural resource management plan. The park visitor experience will be enhanced by better visibility and wildlife health and frequency would generally improve.

Engineered structures that may benefit and/or improve wetland ecological function: The natural hydrology of the remnant wetlands has been altered. If wetland creation/enhancement would be considered for the park, the study and consideration for using engineered structures such as outlets and water level control structures could allow more management of the wetland hydrologic regime.



Photo 12: Yellow marsh-marigold (*Caltha palustris*), a native aquatic plant, within the southern wetland.

4.2 Management Strategies

Once a particular management goal has been set, consideration should be given to which management strategies are best suited to attain the goal. Listed here are several strategies that can be employed for meeting the natural resource management goals of the project area:

Development of plant palettes for specific community types: The City can have on hand an overall plan for developing and enhancing native plant communities in specific habitats and conditions. Rather than re-creating a planting list for every enhancement opportunity, the City can have a set of plant palettes for various desired community types such as upland grassland, wetland fringe, or open woodland available for use as needed.

Creation of wildlife habitat structures: To support the goal of wildlife enhancement, it may be necessary to research and learn techniques for creating appealing habitats for a range of wildlife uses. In many instances, materials are readily available and/or already in place, and simply need some adjustments or augmentations to be suitable habitat for birds, small mammals, reptiles, or amphibians. Useable habitats can be created inexpensively and should be part of the management toolkit.

Policy development: Long-term preservation of natural resources may require re-visiting and potentially revising park policy and regulations regarding natural resources. Identifying and securing funding (such as Lessard Outdoor Heritage Fund grants) is important to expand the potential and scope of future park projects.

4.3 Specific Management Opportunities

Listed below is a set of specific management options and opportunities to improve the ecological functions, wildlife habitat, and visitor experience.

4.3.1 *Invasive Removal and Clean-ups*

Clearing invasive understory vegetation and preventing re-growth is (with much certainty) the single most ecologically important and aesthetically effective measure the City can take to improve the park's wildlife habitat and visitor experience. Due to the large size of the park and the cost and logistics of mobilizing vegetation management crews, the City of Sandstone may consider planning this work by designated areas and scheduling over years, implementing as budget allows.



Photo 13: The viewshed and visibility of the park could be great enhanced if invasive understory vegetation were removed and prevented from re-growing. In this photo, honeysuckle and common buckthorn surround the southern wetland. From the south edge of park, facing north.

During the field visit, WSB observed a small area of forest had recently been cleared of the invasive understory, near the lower portion of Old Wagon Road. The two photos below show the general difference of an area congested with invasive understory, and an area without. The difference is substantial.



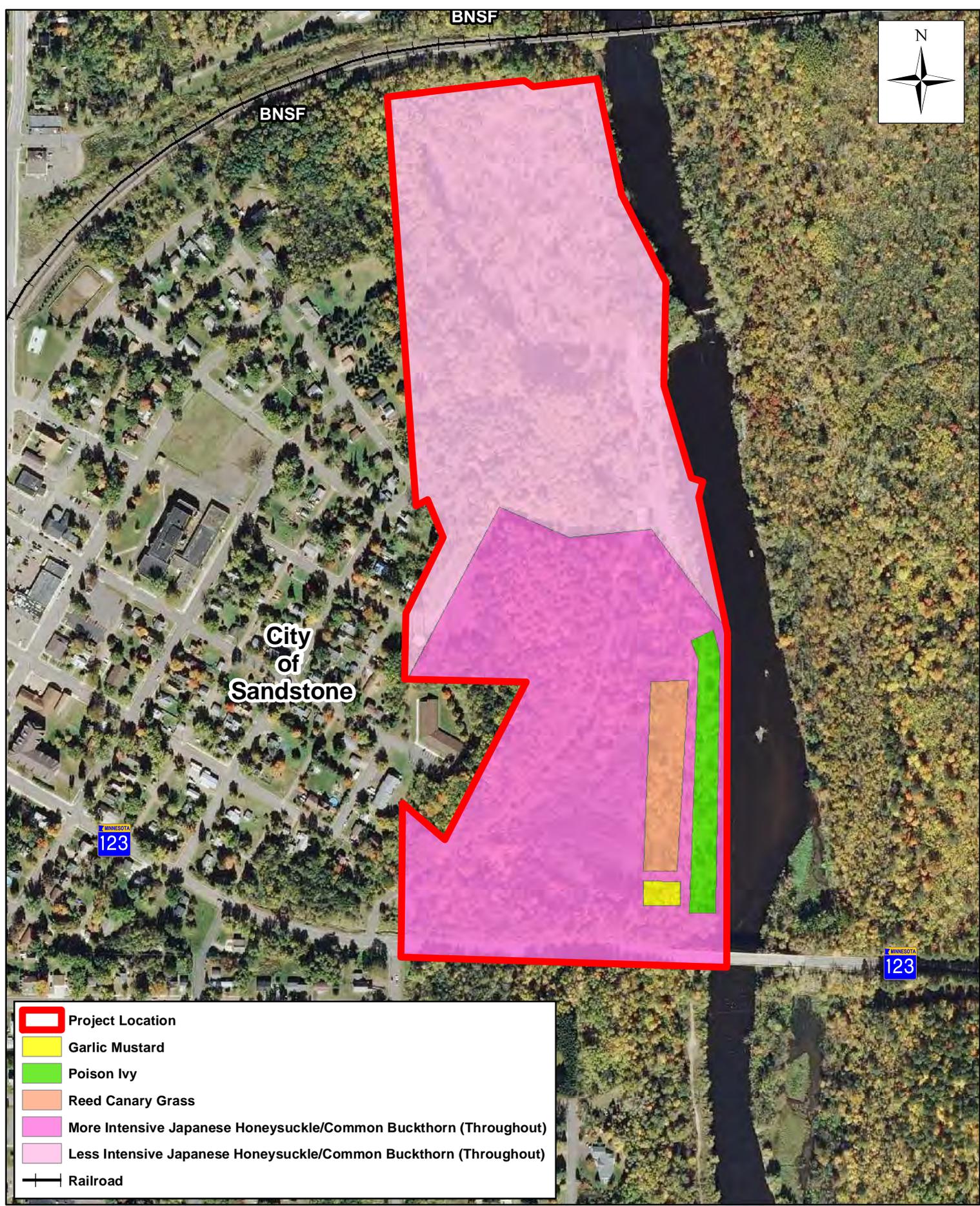
Photo 14: Invasive Japanese honeysuckle crowding the understory.



Photo 15: Location recently cleared of understory invasive species, open sightlines.

WSB recommends the City of Sandstone consider consulting with a native landscape management company to determine the feasibility and scope of invasive species removal within the park. Although WSB does not specifically any specific company, there are several experienced Minnesota companies that offer vegetation management and seeding contracting services, as discussed in **Section 4.3.2** below.

Figure 11 depicts, in general, the locations of vegetation management opportunities within the park, based on the observations made by WSB in May 2015.



- Project Location
- Garlic Mustard
- Poison Ivy
- Reed Canary Grass
- More Intensive Japanese Honeysuckle/Common Buckthorn (Throughout)
- Less Intensive Japanese Honeysuckle/Common Buckthorn (Throughout)
- Railroad

Figure 11

ROBINSON PARK
 Sandstone, Pine County, MN
 Vegetation Management Opportunities Map

0 400
 Feet



4.3.2 *Native Plant Community Enhancements*

There are many opportunities within Robinson Park for enhancement of native plant communities, as discussed in **Section 4.3**. There are several companies in Minnesota that are in the native landscape management and seeding contracting business. The companies listed below could be considered for services at this site.

- Prairie Restorations, Inc. <http://www.prairieresto.com/CategoryList.php?cID=13>
- Minnesota Native Landscapes
<http://mnnativelandscapes.com/pages/MNLNativeSeedMixes/>
- Prairie Moon Nursery <http://www.prairiemoon.com/seed-mixes/>
- Shooting Star Native Seed <http://www.shootingstarnativeseed.com/seed-mixes-introduction.htm>

The services of companies like these would be oriented toward invasive species removal (cutting and herbiciding), and native seeding (introduction of applicable native seed to enhance the abundance and diversity of native species). Typically, there is a desired ecological goal or type of habitat setting that the management would result in.



Photo 16: Hardwood swamp

4.3.3 *Wildlife Habitat Enhancement*

Although not specifically documented for this report, Robinson Park is home to many species of insects, amphibians, reptiles, birds, mammals, and perhaps fish in the quarry ponds. Habitat enhancements can be simple low-cost solutions that provide great benefit with relatively little effort and planning. The City of Sandstone could engage the community with fun events and calls for volunteers for preparing and/or implementing habitat enhancement features, such as these following items:

- Bird feeders

- Bird houses
- Waterfowl nesting platforms
- Bat boxes
- Food plots (corn/seed)
- Strategic placement of logs/snags
- Native wildflower garden planting areas (near high-visibility areas for aesthetics)

Community events regarding habitat enhancement would allow for citizens to learn about the importance of habitat and may provide a sense of accomplishment and appreciation for this valuable and unique park.

5.0 REFERENCES

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APPENDIX A

Minnesota Department of Agriculture

2015 Noxious Weed List

The Minnesota Noxious Weed Law (MN Statutes 18.75-18.91) defines a noxious weed as an annual, biennial, or perennial plant that the Commissioner of Agriculture designates to be injurious to public health, the environment, public roads, crops, livestock, or other property. The purpose of the law is to protect residents of the state from the injurious effects of noxious weeds.

There are twenty-nine plant species regulated as noxious weeds in Minnesota. Twenty plants are listed as [prohibited noxious weeds](#) which consist of two regulatory lists— twelve plants listed on the [prohibited eradicate list](#) and eight on the [prohibited control list](#). Prohibited noxious weeds must be eradicated or controlled in accordance with the Minnesota Noxious Weed Law. Five species are listed as [restricted noxious weeds](#) and are prohibited from importation, sale, and unlawful transportation in Minnesota. Four species are listed as a [specially regulated plants](#) that can be enforced under specific conditions.

Prohibited Noxious Weeds – Attempts must be made by all landowners to control or eradicate species on these lists. These species cannot be transported without a permit or sold in Minnesota

Eradicate List –must be eradicated by killing the above and belowground parts of the plant.

1. [Yellow Starthistle](#) *Centaurea solstitialis* L.
2. [Grecian Foxglove](#) *Digitalis lanata* Ehrh.
3. [Oriental Bittersweet](#) *Celastrus orbiculatus* Thunb.
4. [Japanese Hops](#) *Humulus japonicus* Siebold & Zucc.
5. [Dalmatian Toadflax](#) *Linaria dalmatica* (L.) Mill.
6. [Common Teasel](#) *Dipsacus fullonum* L.
7. [Cutleaf Teasel](#) *Dipsacus laciniatus* L.
8. [Giant Hogweed](#) *Heracleum mantegazzianum* Sommier & Levier
9. [Brown Knapweed](#) *Centaurea jacea* L.
10. [Meadow Knapweed](#) *Centaurea x moncktonii* C.E. Britton
11. [Black Swallow-wort](#) *Cynanchum louiseae* Kartesz & Gandhi
12. [Palmer Amaranth](#) *Amaranthus palmeri* S.Watson

Control List –must be controlled preventing the maturation and spread of propagating parts.

1. [Leafy Spurge](#) *Euphorbia esula* L.
2. [Canada Thistle](#) *Cirsium arvense* (L.) Scop.
3. [Plumeless Thistle](#) *Carduus acanthoides* L.
4. [Purple Loosestrife](#) *Lythrum salicaria* L., *L. virgatum* L.,
5. [Wild Parsnip](#) *Pastinaca sativa* L. **(Except for non-wild cultivated varieties)**
6. [Common Tansy](#) *Tanacetum vulgare* L.
7. [Spotted Knapweed](#) *Centaurea stoebe* L. ssp. *micranthos* (Gugler) Hayek
8. [Narrowleaf Bittercress](#) *Cardamine impatiens* L.

Restricted Noxious Weeds - may not be sold, transported without a permit, or intentionally planted in Minnesota.

1. [Common or European Buckthorn](#) *Rhamnus cathartica* L.
2. [Glossy Buckthorn](#) (and all cultivars) *Fragula alnus* Mill.
3. [Multiflora Rose](#) *Rosa multiflora* Thunb.
4. [Common Reed](#) (non-native subspecies) *Phragmites australis* (Cav.) Trin. ex Steud. ssp. *Australis*
5. [Garlic Mustard](#) *Alliaria petiolata* (M. Bieb.) Cavara & Grande

Specially Regulated Plants –shall be handled, controlled or eradicated according to specified regulations.

1. [Poison Ivy](#) *Toxicodendron radicans* (L.) Kuntze & *T. rydbergii* (Small) Green *Must be eradicated or controlled for public safety along rights-of-ways, trails, public accesses, business properties open to the public or on parts of lands where public access for business or commerce is granted. Must also be eradicated or controlled along property borders when requested by adjoining landowners.*
2. [Japanese Knotweed](#) *Polygonum cuspidatum* Seib. & Zucc.
3. [Giant Knotweed](#) *Polygonum sachalinense* F. Schmidt ex Maxim.
Any person, corporation, business or other retail entity distributing Japanese and/or giant knotweeds for sale within the state, must have information directly affixed to the plant or container packaging that it is being sold with, indicating that it is unadvisable to plant this species within 100 feet of a water body or its designated flood plain as defined by Minnesota Statute 103F.111, Subdivision 4.

Specially Regulated Plants Continued

4. **Japanese Barberry Cultivars** *Berberis thunbergii* DC.

These cultivars average greater than 600 seeds per plant and will begin a three-year phase-out period in Minnesota beginning January 1, 2015:

• 'Angel Wings' • 'Antares' • var. *atropurpurea* • 'Bailtwo' (Burgundy Carousel®) • 'Monomb' (Cherry Bomb™) • 'Crimson Velvet' • 'Erecta' • 'Gold Ring' • 'Bailsel' (Golden Carousel®; *B. koreana* × *B. thunbergii* hybrid) • 'Inermis' • 'Bailgreen' (Jade Carousel®) • 'JN Redleaf' (Ruby Jewel™) • 'JN Variegated' (Stardust™) • 'Kelleris' • 'Kobold' • 'Anderson' (Lustre Green™) • 'Marshall Upright' • 'Painter's Palette' • 'Pow Wow' • 'Red Rocket' • 'Rose Glow' • 'Bailone' (Ruby Carousel®) • 'Silver Mile' • 'Sparkle' • 'Tara' (Emerald Carousel®; *B. koreana* × *B. thunbergii* hybrid) • Wild Type (parent species – green barberry)

****At the end of the phase-out period (December 31, 2017), these cultivars will become Restricted Noxious Weeds in Minnesota and will be illegal to sell and propagate.***

County Noxious Weeds – County Noxious Weeds are plants that are designated by individual county boards to be enforced as prohibited noxious weeds within the county's jurisdiction and must be approved by the Commissioner of Agriculture, in consultation with the Noxious Weed Advisory Committee. Each county board must submit newly proposed County Noxious Weeds to the Minnesota Department of Agriculture for review. Approved County Noxious Weeds shall also be posted with the county's general weed notice prior to May 15th each year. Counties are solely responsible for developing County Noxious Weed lists and their enforcement. **Contact your local County Agricultural Inspector or Designated Employee for more information on County Noxious Weeds**

<http://www.mda.state.mn.us/en/plants/pestmanagement/weedcontrol/cailist.aspx>

Adding species to County Noxious Weed Lists

It is up to an individual county to determine if they will have a designated county noxious weed list and the process for selection of species to be added to the list. If the county board of commissioners establishes a county noxious weed list, townships wanting to add species should pass a resolution with the county's Township Association showing that the representative of townships for that county are in favor of adding a particular species and enforcing it. This resolution can then be submitted to the County Agricultural Inspector or Designated Employee for that jurisdiction. It is still up to the county board of commissioners to decide if they want to list and enforce any species submitted to them via the township association or other entities. Minnesota Department of Agriculture approved County Noxious Weed Lists can be enforced by authorized agents of the commissioner under the MN Noxious Weed Law as outlined in *Minnesota Statutes 18.80 – 18.81*.

Townships can also use their local ordinance process to regulate plant species that are not listed by the county or state. Enforcement of species listed via a municipal ordinance is the responsibility of municipal authorities and cannot be regulated under or associated with the MN Noxious Weed Law - *MS 18.75 – 18.91*.

Failure to comply with the Minnesota Noxious Weed Law may result in an enforcement action by a county or local municipality.

Additional resources for regulated noxious weeds and non-regulated invasive plants in Minnesota

MDA Website - <http://www.mda.state.mn.us/weedcontrol>

MN DOT Website - <http://www.dot.state.mn.us/roadsides/vegetation/pdf/noxiousweeds.pdf>

MN DNR Website - <http://www.dnr.state.mn.us/invasives/terrestrialplants/index.html>

MN Board of Water and Soil Resources Cooperative Weed Management Areas -

<http://www.bwsr.state.mn.us/grantscostshare/cwma/CWMA.html>

APPENDIX "B"

Application Summary Information

Park or Trail Name:

| |
|---------------|
| Robinson Park |
|---------------|

Lead Applicant Contact Information (must be a city, township, or county in Greater Minnesota):

| | |
|----------------------|---|
| Lead Applicant Name: | Sam Griffith |
| Lead contact person: | Sam Griffith |
| Title: | City Administrator |
| Mailing address: | City of Sandstone P.O. Box 641 119 Fourth Street Sandstone, MN 55072 |
| Phone: | 320-245-5241 |
| Email: | samg@sandstonemn.com |

Joint Applicants (listing of project partners, all must be a city, township, or county in Greater Minnesota):

| | |
|--------------------------|---|
| Joint Applicant #1 Name: | <u>This is not for a specific project at this time</u> but for designation as a Special Feature/Natural Resource Regional Park Designation. Attachment 1 includes letters from partners that have participated in a November project application. It is anticipated that the same participants would support additional projects on a case by case basis. |
| Joint Applicant #2 Name: | |
| Joint Applicant #3 Name: | |
| Joint Applicant #3 Name: | |

Is this a Step 1 or Step 2 Application?

| |
|---|
| <input checked="" type="checkbox"/> Step 1 Application – seeking initial screening/baseline evaluation for regional significance <input type="checkbox"/> Step 2 Application – seeking detailed evaluation/formal recognition as regional park/trail |
|---|

Project Narrative:

Provide a brief overview of the project – including a general description, proposed acres of land or length of trail, type of facilities to be provided, and statement of regional significance. Also include any cost estimates available for acquisition, development, operations, maintenance, and programming. *Step 2 applicants must include an adopted unit master plan as part of the project narrative.*

This is not a request for project this is a request for a regional park designation. However, existing information may be sufficiently detailed at this time for a Step 2 Application.

Description of the park:

Robinson Park is, a 65 acre long and narrow park nestled between the Kettle River and the old sandstone quarry bluffs. It is connected to Banning State Park both at the southern end and at the northern by a primitive trail the runs the 3500+foot length of the park.

Within the Park are elements of The Kettle River Sandstone Company Historic District which is listed on the National Register of Historic Places #91000877. See attachment 2.

In addition to the historic district this park contains a number of different plant communities: floodplain, northern hardwood forest, fern/moss community, rock plant community, open grass area, wetland, shallow marsh and moss lichen community. See attached Robinson Park Master Plan Sandstone Minnesota, Attachment 3 for a complete description and map of those features.

The park provides an accessible recreation and education experience for a variety of users in a primitive setting natural setting with minimal development. Its compact nature makes most of the features easily visible to users of all ages make it a great place for children and older people who feel safer in this more confined environment.

It provides some unique recreation opportunities drawing people from outside the region with both the shear bluff walls that provide unique opportunities for ice climbing in the winter, wall climbing and bouldering in the summer and white water rapids in the spring. It also provides scenic and easy access to a variety of mini environments in the summer. This is a park ideally suited to introduce children the variety in nature and keep older people connected to nature in an easily accessed environment. It is also used to introduce bouldering to students.

It also provides a critical link connecting the north and the south halves of Banning State Park on the west side of the Kettle River a state designated water trail. Through Robinson Park the Kettle River is designated a wild river.

See. http://www.dnr.state.mn.us/waters/watermgmt_section/wild_scenic/wsivers/kettle.html

General Location Information:

Describe the location of the property or trail corridor (city/township/county). Include a location map in PDF form as an attachment.

The park is located in the City of Sandstone, Pine County Minnesota. Attachment 4 shows the general location of the park and its adjacency to the Kettle River and Banning State Park.

Step 2: Determine park or trail classification, and complete the associated section describing alignment with first tier evaluation criteria

Section 3 of the *Greater Minnesota Regional Parks and Trails Strategic Plan (legacy.leg.mn/gmrptc)* provides a complete description of the classifications and evaluation criteria that are used to assess the regional significance of proposed parks, trails, and recreational facilities. *In filling out this application, the Commission presumes that applicants are familiar with these provisions and have filled out this application accordingly.*

An overview of the three available regional classifications is as follows:

Regional Trail Classification (Non-Motorized) – focus is on providing a high quality recreational trail experience that is readily accessible from an already populated or rapidly growing regional center or tourist destination. Trail must serve a regional population. Priority will be given to “destination trails,” which are typically located within a greenway, open space, park, parkway, or designated trail corridor separated from vehicular traffic. In addition, trails that enhance connectivity/continuity within and between regional centers and regional or state-level parks and trails will be of higher priority. Local trail connections to the regional trail will also be emphasized to expand its value to local communities.

Natural Resource-Based Regional Park Classification – emphasis is providing high quality outdoor recreational opportunities in a natural and scenic setting. Preserving a unique natural resource not otherwise available in the region is also an important consideration. Recreational features must be in keeping with the natural setting and includes, but not limited to, those as listed in the *Strategic Plan*.

The land area must be large enough to accommodate the proposed facilities/amenities without diminishing the natural character and sense of place of the park setting. Typically, this means a land area of 100 acres is needed. Optimally, parks should be over 200 acres to provide enough space for facilities.

Although providing a common set of offerings remains important, introducing new, unique, or innovative facilities/amenities is also emphasized to explore new ways to expand participation in outdoor recreation.

Special Recreational Feature Regional Park Classification – relates to new, unique, or innovative “special feature” outdoor recreational facilities of regional significance. A natural and scenic setting remains important to qualifying as a regional park, but serving a regional recreational need is more of a factor in determining merit. In general, the recreational features defined under *Natural Resource-Based Regional Park* classification remain valid. However, this classification purposefully offers more flexibility to explore unique ideas and find new ways to expand participation in outdoor recreation.

As part of the evaluation process, applicant must select one of the above classifications that best fits your project, and then complete the forthcoming sections pertaining to first and second tier evaluation criteria for that classification.

First tier criteria are unique to the selected classification and focus on establishing the overall merit of a project relative to key criteria and value indicators. A weighted scoring approach will be used by the Commission to determine overall scores and, ultimately, ranking of projects. *Contact the Commission if you have any questions regarding which category your project fits into.*

Special Recreational Feature Regional Park Classification – First Tier Criteria

Complete this section only if your project falls into this classification. Select only one classification!

The following lists and describes first tier criteria for this classification. *In the accompanying box, describe how your project aligns with the criteria.*

Criteria #1: Provides a Special High-Quality Outdoor Recreation Experience – places a priority on providing facilities/amenities that are relevant to existing/common user groups and also serve to broaden the appeal of outdoor recreation to new or expanded populations. Park serves as a destination unto itself, attracting regional users and (potentially) drawing tourists from outside the regional area. Premium is placed on quality of experience to encourage visitors to return time and again. Although facilities/amenities must be of regional significance, this classification purposefully emphasizes innovation and new ways of engaging residents and tourists to participate in outdoor activities.

Robinson Park provides some of the more unique recreational components in the State of Minnesota and is home to three festivals that either headquarter at the park or use Robinson Park as a critical part of the festivities.

Rock climbing: Robinson has long been a destination for climbers, and climbing classes. The Minnesota Climbers Association has taken a stewardship role in maintaining the park. They describe the park this way on their website:

“It was mostly known(sic) for its Ice and Mixed climbing, but there were also a handful of top-rope and lead rock routes.” It is also described as : “There are now a few dozen bolted sport routes in Sandstone that include the classics of Nexus and Sigma. A management plan and route application were put in place.” Source: <http://www.mnclimbers.org/access/>

A Save Sandstone event was held in 2013 and the success of this event is described like this on their face book web site. “The Minnesota climbing community rallied during 2013 and raised over \$30,000 to contribute to saving the private bouldering land in Sandstone, MN. Parks & Trails Council of Minnesota purchased the land and is holding it to eventually sell to DNR, who will incorporate it into Banning State Park. The Saved Sandstone Festival will be a party to celebrate that accomplishment!” Source: <https://www.facebook.com/events/539216802842938/> There is another event planned for this September. Because of the success of climbing in Robinson Park the

Banning State Park Plan was amended in July of 2014 to allow climbing and bouldering in the state park. Source: <http://www.mnclimbers.org/tag/banning-state-park/>

Ice climbing: Another side of rock climbing is ice climbing and for the last ten years the Park has been the site of the Sandstone Ice Fest. In addition to climbing and clinics it also includes the great chili cook off and plenty of winter camping. Information about the festival can be found here: <http://www.sandstoneicefest.com/>

The number of routes for ice climbing and rock climbing are identified here on the mountain climbing web site: <http://www.mountainproject.com/v/robinson-park/105812719>

White Water Canoeing and Rafting: While the Kettle River is a very placid canoe/kayak route most of the year however in the spring it turns into one of the four white water rapids in the state. Source: Minnesota DNR <http://www.dnr.state.mn.us/watertrails/trips.html> Every year the park river permitting hosts the Kettle River Paddle Fest: <http://www.kettleriverpaddlefest.com/index.htm> featuring a number of activities.

There is also the interpretation of the historic site that includes both active volunteer led and passive interpretation on self guided tours.

A map shown in attachment 5 shows the summer and winter origins of visitors to the park.

Criteria #2: Provides a Natural and Scenic Setting Offering a Compelling Sense of Place – although at a smaller scale than *Natural-Resource-Based Regional Parks*, priority is still placed on providing a natural and scenic setting offering a compelling sense of place and uniqueness. Access to water (lakes, rivers, and streams) and/or historically/culturally-significant features is also emphasized. Lands must be suitable for and large enough to accommodate desired recreational uses without undue impacts to the land resource.

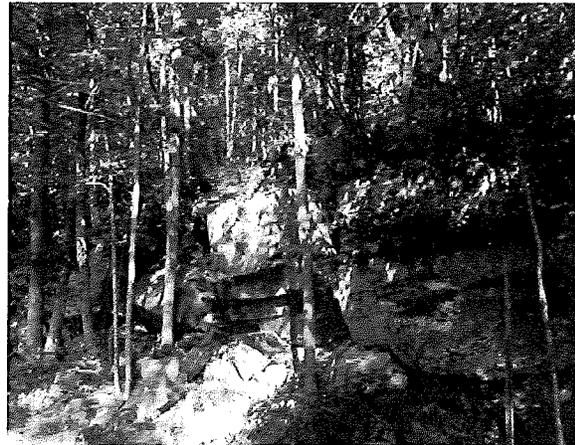
At 65 acres in size Robinson Park would appear small. However the park's footprint and topography creates many separate areas nature exploration. There are a sufficient number of areas separated by the parks physical features that allow users to have a quality experience in an uncrowded environment. The variety of the habitats as identified in the master plan, Attachment 3, keep visitors exploring different parts of the park. This not a hiking park unless you continue onto the Banning State Park using unofficial trails this is a walking park. In less than mile you can explore many scenic and historic features. It is perfect for what the state DNR has identified as an underserved population – the elderly and children in addition to the enthusiastic climbers and water trail users.

While the stated purpose of the park is to provide a natural resource setting for enhancement and interpretation of the historic setting and environmental education. Recreation has been mostly passive and past investments have been made to enhance or improve the historic or environmental setting while keeping development to the minimum for visitor comfort and community uses: dirt walking paths along the river and near the historic features, comfort facilities, a boat ramp for canoes, kayaks and rafts, small fishing clearings, a picnic shelter often used for family and class reunions, historic signage, and invasive weed control (and educational signage) and restoration of native plantings, and three primitive camp sites.

Below are some of the pictures of the natural and historic setting of the park.



View of Robinson Park from Highway 123 showing typical trail location and with respect to woods and Kettle River



Entrance road into the park showing a combination of natural and manmade impacts.



Kettle River view from one of the park



Inviting path to explore ravine area



Quiet part of the Kettle River near the boat access ramp



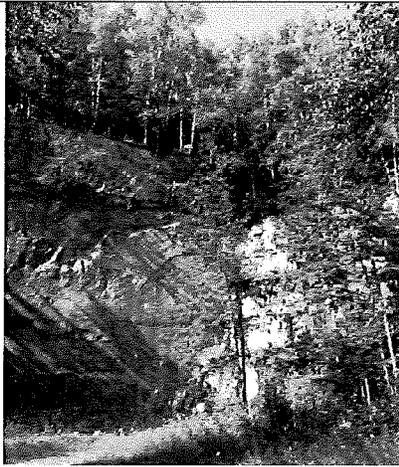
Beginning of cliff face use for one of the climbing routes



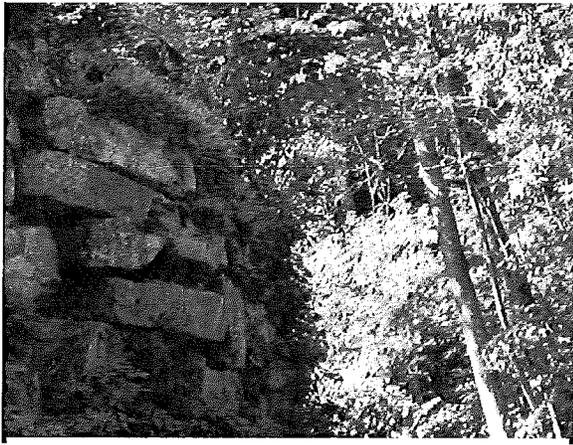
Wooded ravine between the access road and the south path shown in the first photos



Beginning of major climb area



Climb routes in the central climb area.



Stacked stone platform near entrance also part of the historic features



Stacked stone walls along the west side of the entrance

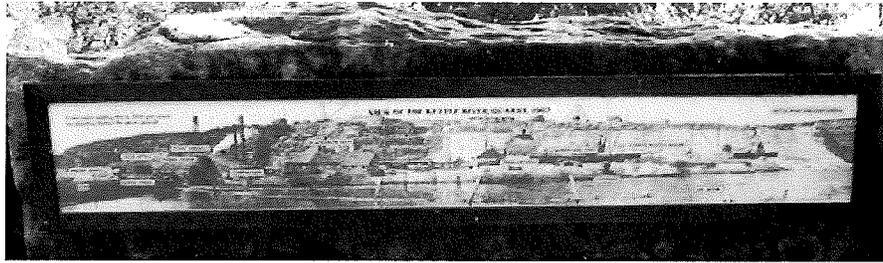


Winter ice climbing on a typical weekend.

For more pictures see the see the ICEFEST web site at: <http://www.sandstoneicefest.com/>

And at:

https://www.facebook.com/pages/Sandstone-Ice-Park/318485004840616?sk=photos_stream



Historical map of the Sandstone quarry



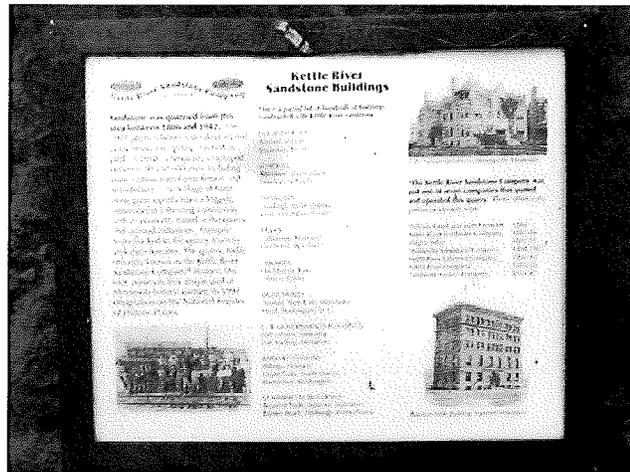
Photo of the interpretive display.



One of the historic structures still remaining in the park



Another of the features that are remaining from historic use as a quarry



The uses of the Sandstone from the quarry

Criteria #3: Well-located to Serve a Regional Need and/or Tourist Destination – places priority on special recreational features being located in or close to a densely settled, rapidly growing, and/or an established regional center or well-established tourist destination. Connectivity to the park via local, regional, or state-level trails also factors into the rating under this criteria.

Robinson Park is located just approximately 1.8 miles north east of I 35 exit 191. Interstate 35 northbound out of the Twin Cities is one of the most well traveled tourist corridors in the state with Sandstone being approximately half way or approximately one hour away from both the Twin Cities Metropolitan area and Duluth.

- It is connected to Banning State Park by the Kettle River State Water Trail and an unofficial hiking trail that runs along the river.
- It is within 6 miles of the Audubon Center of the North Woods <http://audubon-center.org/>
- It is within 13 miles of Grand Casino Hinckley – which includes in their 271 full RV sites and 50 chalets rated one of the two best RV parks in Minnesota and the only RV park in Minnesota to get rated as a best family park in 2014 Good Sam Travel Guide. <http://blog.goodsamcamping.com/2014/07/top-family-rv-parks/>
- It is within a thirty minute drive of St. Croix State Park and State Forest and the Willard Munger trail for those more interested in traditional large park activities.
- The Sandstone Junction Trail which connects Banning State Park and the City of Sandstone to the Willard Munger Trail

Using standard statistical methodology on data collected during the summer of 2013 using the data collection developed by the Metropolitan Council but not their analysis methodology it is estimated that Robinson Park has an annual visitation of 47,500. Summary information on Summer and Winter visitors is shown in Attachment 5. Based on that estimates from the survey it has more visitors than 17 state parks.

Criteria #4: Fills a Gap in Recreational Opportunity within the Region – places a priority on areas in which a high quality outdoor recreational opportunity of a similar nature is not otherwise available within the region and/or within a reasonable distance. Fills a discernible and critical gap in an area with a recreation opportunity shortage. Complements (and does not duplicate) recreational opportunities otherwise available in the region.

Robinson Park fills two significant gaps in the parks experience in Minnesota. It offers a more manageable park for both young people and older adults with limited mobility; one can drive the road paths past several historic and interesting physical features. It also offers a venue that is unique enough that nonprofit organizations are willing to invest volunteer time and money in the park on a relatively long term ongoing basis.

Because the City has been flexible in making arrangements with the climbing community and its key

location near the freeway has resulted in the park has become popular destination for climbers and climbing classes. Winter climbing with farmed ice has further enhanced it as a destination. The organizations representing climbing have raised money and donated time to maintain not only their facility within the park but the whole park. In 2013 they raised money and partnered with the Minnesota Parks and Trails Council to purchase land adjacent to Robinson Park and add to Banning State Park. After the land was acquired the climbing groups successfully lobbied to amend the Banning master plan to allow changes in use to allow climbing. The flexibility shown by the City at Robinson Park has stimulated additional investment and development of other public resources in the area.

Also as stated in Criteria 1 there are limited opportunities for white water experiences in Minnesota. The Kettle River is one of the 4 white water resources in the state and Robinson Park provides a key access and exit point for the experience.

In the winter of 2014 Checkpoint Minnesota selected Sandstone as one of the ten locations for the state scavenger hunt.

Step 3: Complete the following describing alignment with *second tier* evaluation criteria

Second tier criteria relate to commitment of partners, local support, local funding potential, etc. that the Commission takes into consideration in determining the feasibility or viability of a project. This information is especially important to the Commission in determining funding priorities. *Importantly, second tier criteria factor into deciding the funding viability of a project, but first tier criteria are the primary means by which its merit as a viable regional park or trail is determined.* The following information is required for all proposed projects, irrespective of which classification it falls under.

Criteria #1: Feasibility of assembling the land – describe the following:

- Extent to which land is publicly owned (acres and/or percentage of property)
- Extent to which land is privately owned, (acres and/or percentage of property), and describe the extent to which land owners are willing sellers

All land is public owned within the park and it is surrounded by Banning State Park on three sides. The west side of the park is a vertical cliff with some wooded area on the west side of the cliff abuts the developed part of town.

Criteria #2: Regional-level support – describe which groups would benefit, how each supports the project, and the grassroots efforts that may be helpful moving the project forward and ensuring its success. Include a description of the process/outreach program used to involve the public in the planning process.

There is no specific project planned however past projects such as the removal of invasive species and replanting native plants (the 2013 project) have always garnered support, an example of the traditional type of support past projects have had is shown in Attachment 1.

The upcoming Saved Sandstone event was initiated and sponsored by the climbing groups is an example of the support the Park receives.

Criteria #3: Commitment from project partners at agency level – describe the extent to which the lead agency and its partner agency(s) can fulfill the role of working with the Commission to move the project forward (i.e., commitment of staff time, willingness to commit via formal agreement/letter of interest, etc.) and fulfill its obligations in terms of operations, maintenance, and programming.

Attachment 6 is the commitment letter submitted for the invasive species removal grant. Any project proposed in the future would be expected to have a similar commitment letter adapted to a similar project from each of the partner agencies and organizations.

Criteria #4: Local funding match – describe the level to which project partners will provide matching funds to support acquisition and/or development, and the level of funding for ongoing operations, maintenance, and programming.

No specific project is proposed at this time but in the past the City has had provided partial funding and worked with public and private partners to accomplish work. A council resolution that supports the designation and commitment to be a local sponsor is attached.

Other?

Sandstone is a small community with a fiduciary duty to a special Minnesota resource that has a lot of meaning not only locally but also at the regional but also at a state wide level. It takes this duty very seriously and will fulfill its obligation to both the historic and environmental character of the resource. The goal is to enhance both the historic and environmental diversity of the Park so that it may be interpreted and enjoyed for generations to come.

Step 4: Complete general information section and provide required attachments

The following pertains to providing additional general information about the project that will aid the Commission in its evaluation. Applicant should complete the forthcoming section to the extent possible.

Basic information:

1. Has the property information and site inventory been completed and inputted into the Commission's GoMN system? (This is required of all submittals.) There are no identified paths at this time to submit this information.
Yes No
2. Is there an existing unit master plan for the park, trail, or recreational facilities that meets the unit master plan requirements defined in Section 4 of the *Strategic Plan*? Yes No If yes, attach a PDF of the plan. **Attachment 2**

3. Does the proposed use of the property for a park or trail conform to current zoning and all other local codes and ordinances? Yes No If no, please explain:

4. Are there any land use restrictions, land contamination issues, or issues affecting land development and future uses/site safety? Yes No If yes, please explain:

5. Are there any known archeological artifacts, human remains, burials or cemeteries located on the property? Yes No If yes, please explain:

6. Are there any other issues or concerns that may materially and adversely affect the property? Yes No If yes, please explain:

Attachments:

Provide a listing of attachments that further describe or illustrate the park or trail. This includes aerial imagery, graphic plans, and written descriptions. (Note: formal recognition of a park or trail by the Commission as being part of the regional system only occurs after all of the defined steps and conditions are fully met.)

The attachments list is the first page after the completed application.

Step 5: Submit the completed application to The Commission

Completed applications should be submitted electronically to: *gmrptcommission@gmail.com*. Subject line should include: *Request for Designation as a Regional Park or Trail in Greater Minnesota*. Submittals should be in both Word and PDF format.

Resolution Supporting Application Required!

The application must be accompanied by either a copy of a resolution, council minutes or some other official documentation that demonstrates that the local unit of government and any listed project partners support the proposed project and the consequent application. *For Step 1* applicants, the resolution does not need to have a specific form or specific language, as long as it is consistent with the statements in the application, and any related support material. *For Step 2* applicants, all resolutions must use the Commission's *Resolution Form* that officially obligates the local unit(s) of government to any commitments made.

Since no specific resolution is available A City Council resolution supporting the designation as a regional park and a willingness to commit to project support once there is a project. Attachment 6

Letters of Support!

Letters of support are also encouraged. There should be an effort to solicit letters from specific groups that will derive a direct benefit from the project. The applicant is also welcome to provide letters of

support from all other sources as well.

Since there are no specific projects are this time Attachment 1 show the document the support that can be generated for specific projects.

Signatures:

Lead applicant must sign the application (must be an authorized representative from a city, township, or county in Greater Minnesota). In doing so, the applicant states that all of the information provided in this application is true and accurate to the best of their knowledge.

Name: Sam Griffith

Title: City Administrator

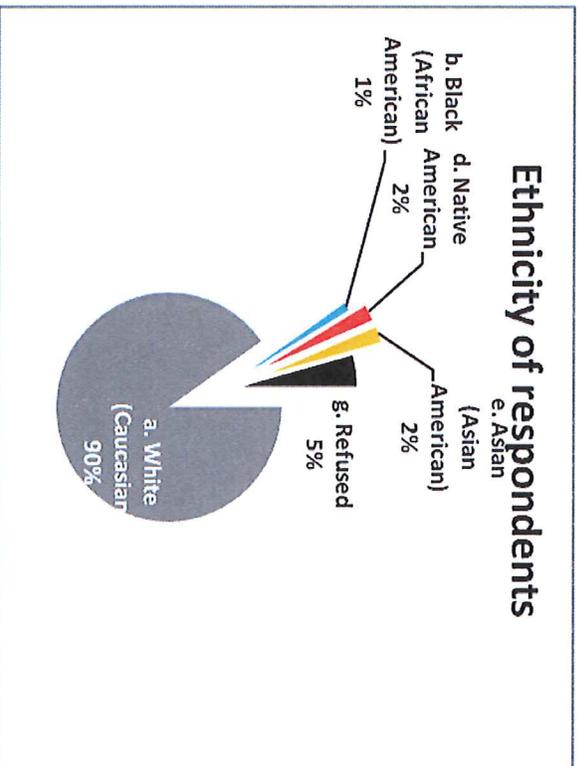
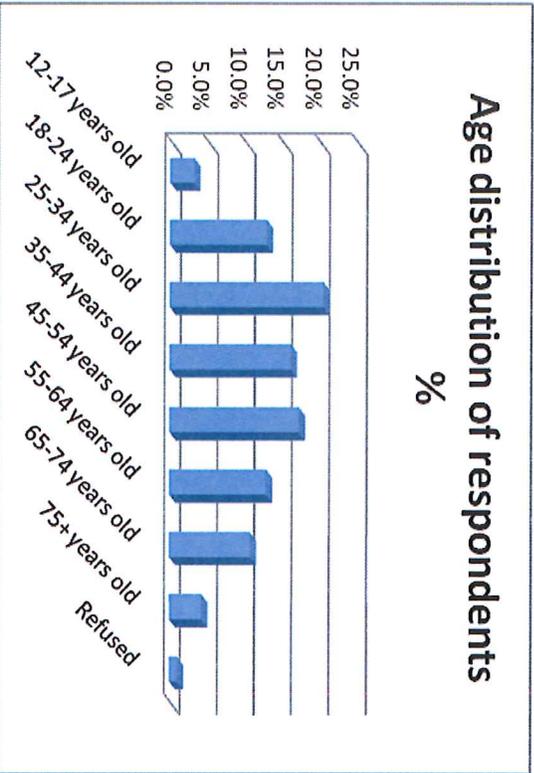
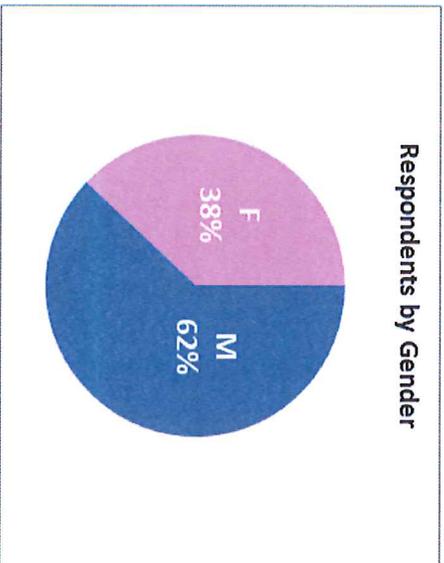
Unit of Government: City of Sandstone

Signature:

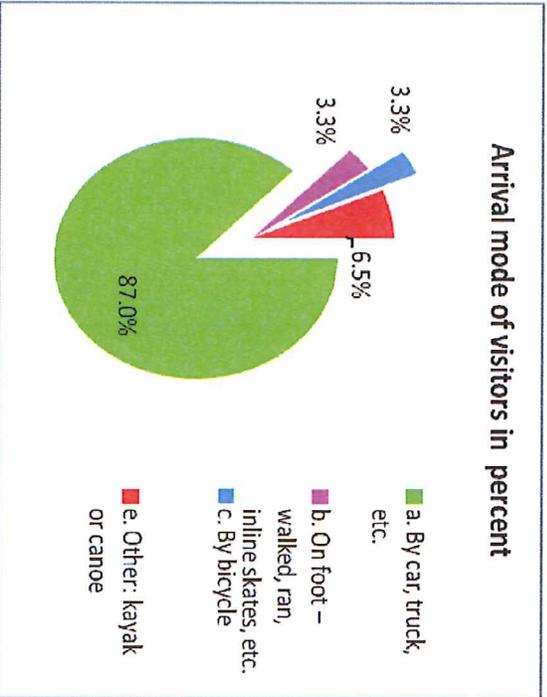
Date: September 3, 2014

APPENDIX "C"

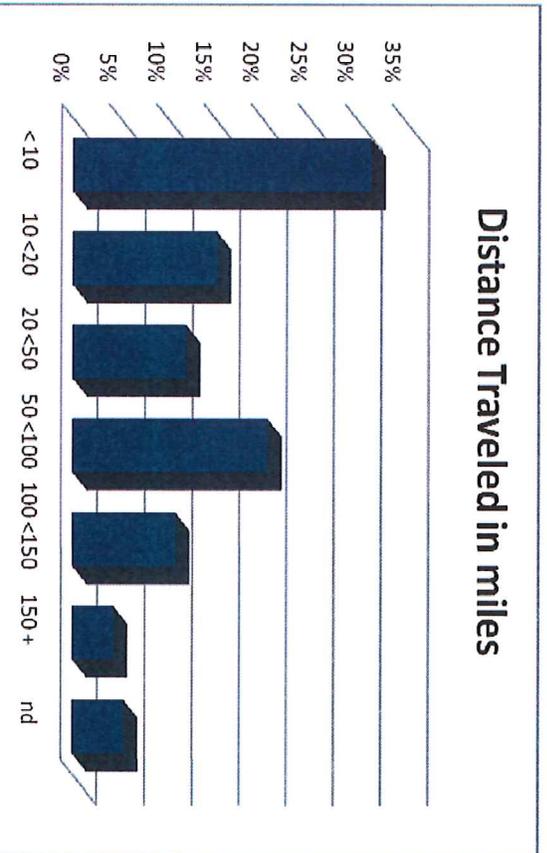
Summary of Use Data for Robinson Park Summer Survey 2013 Who responded?



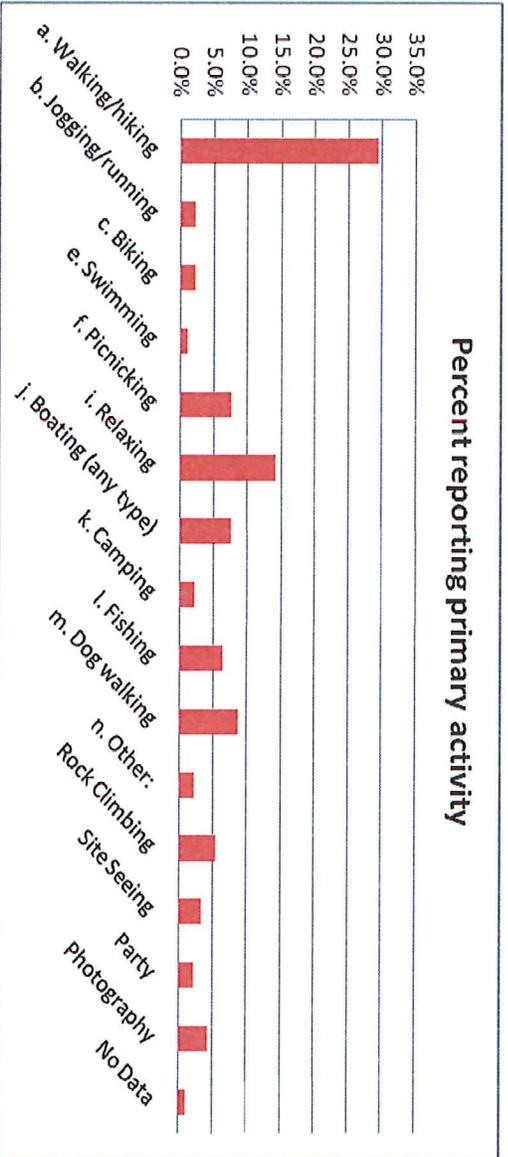
How did they get to Robinson Park?



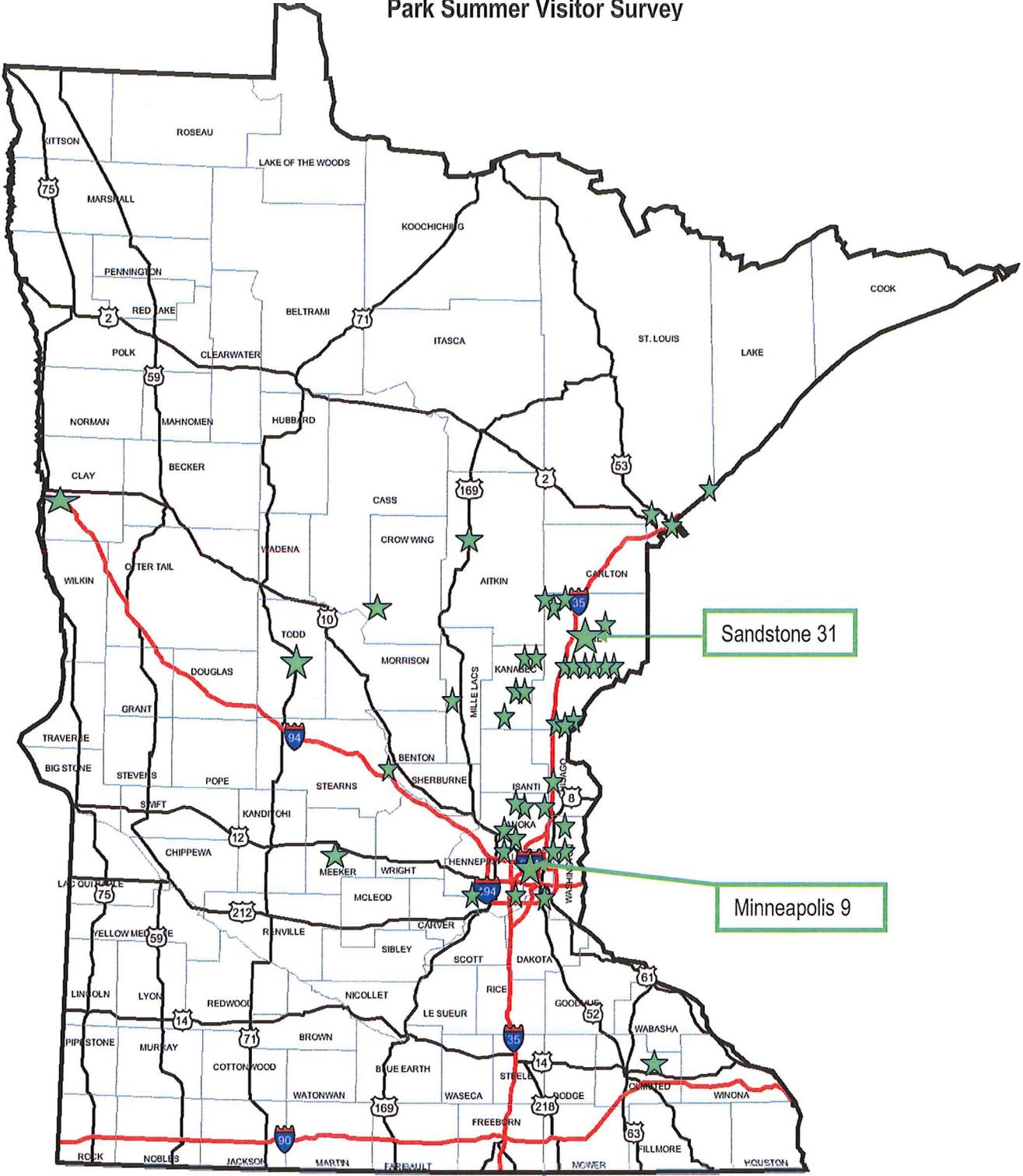
How far Did they travel?



What was the primary activity?



Origin of Visitors to Robinson Park Summer Visitor Survey



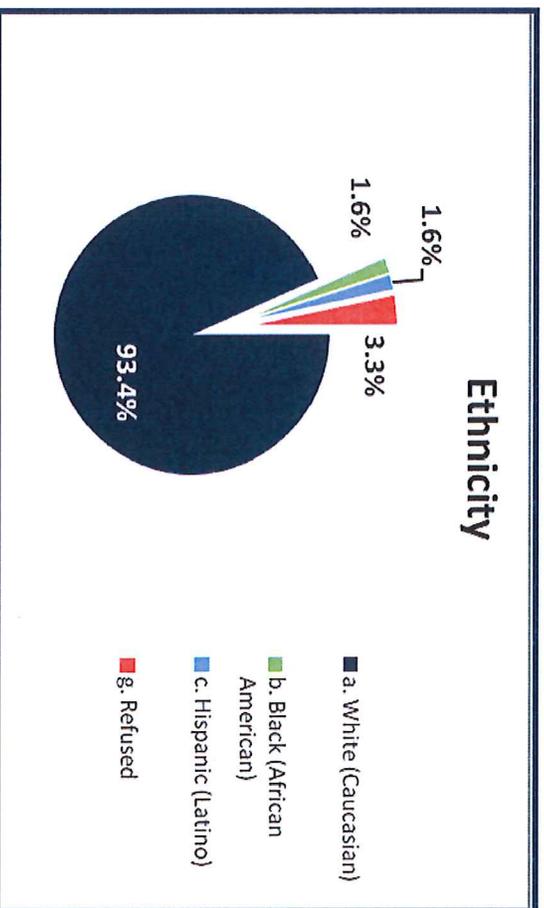
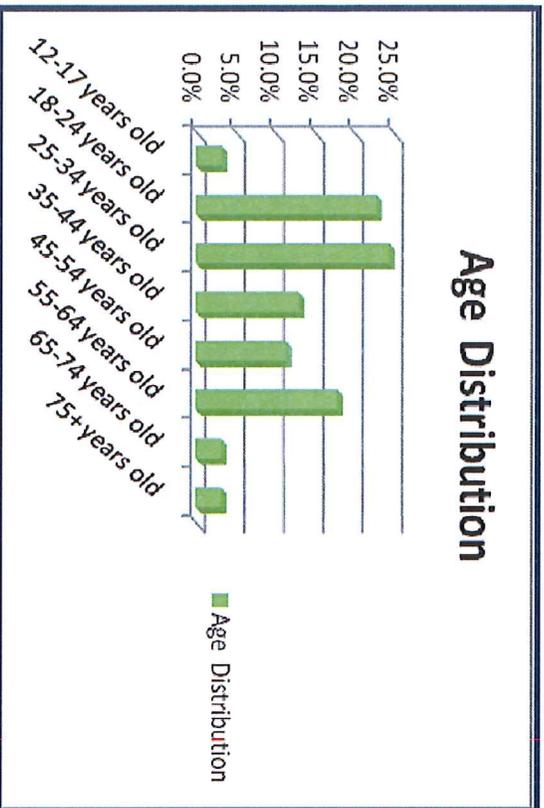
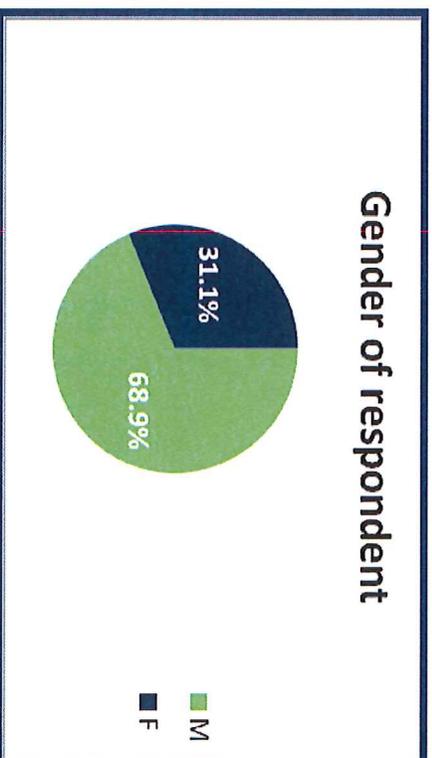
Sandstone 31

Minneapolis 9

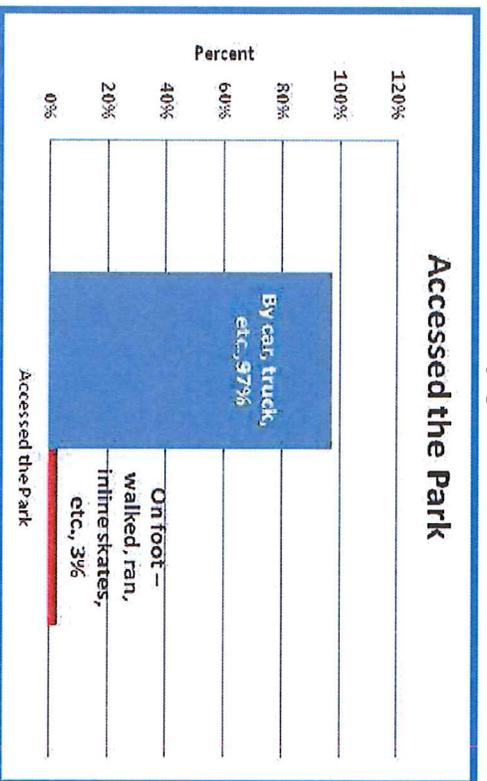
- ★★ Iowa
- ★ Oslo Norway
- ★ Scapoose OR

Summary of Use Data for Robinson Park
 Winter Survey 2013 -2014

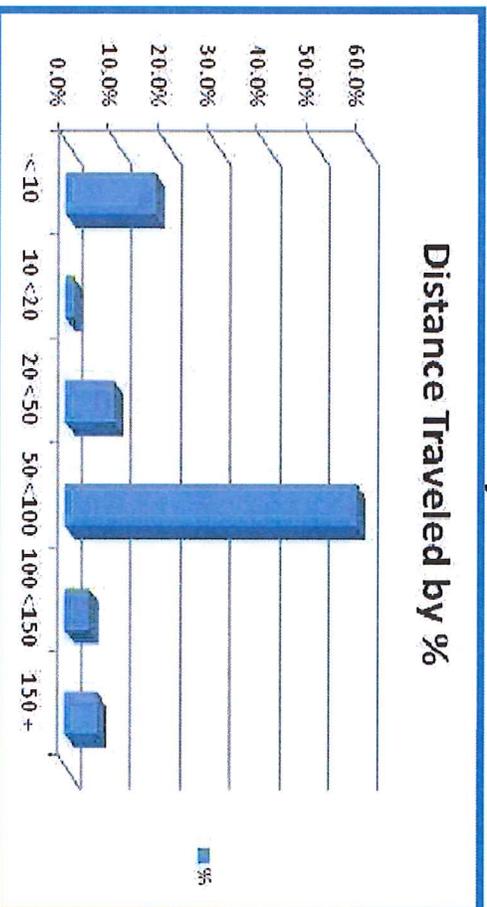
Who Responded?



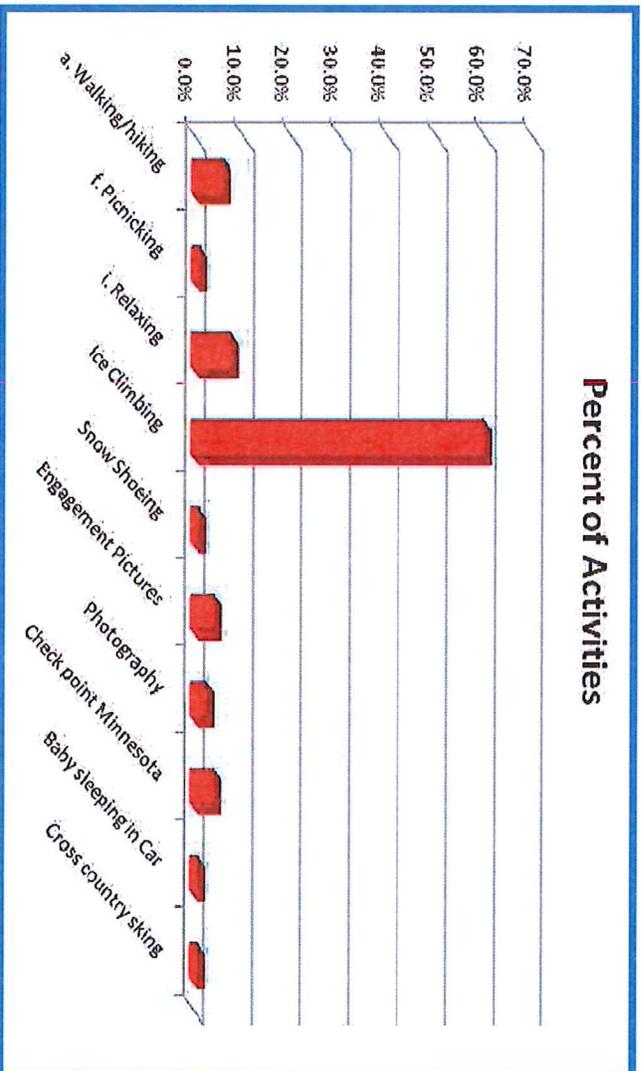
How did they get there?



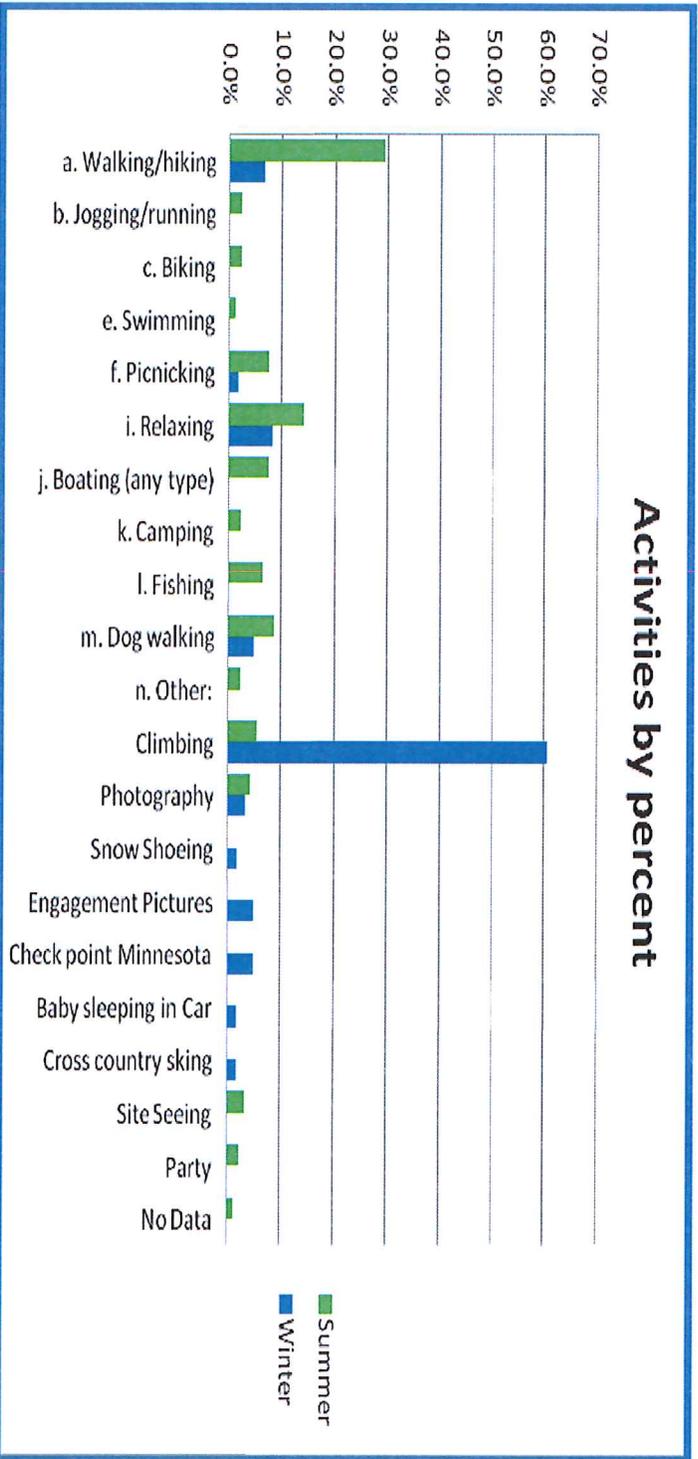
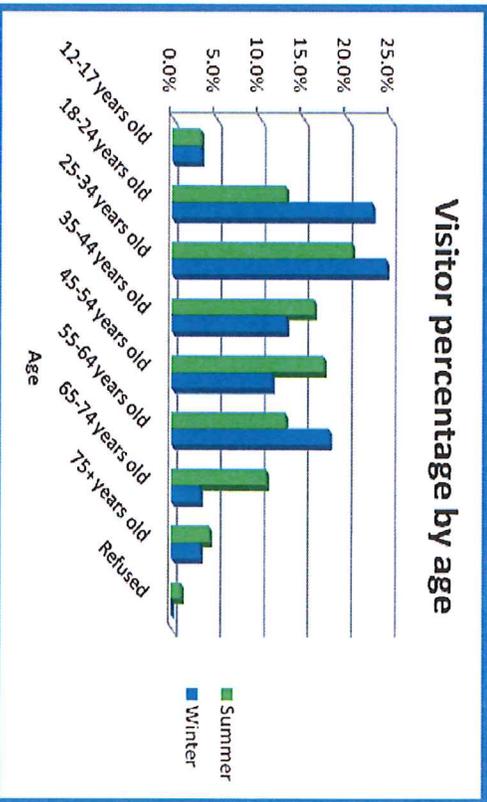
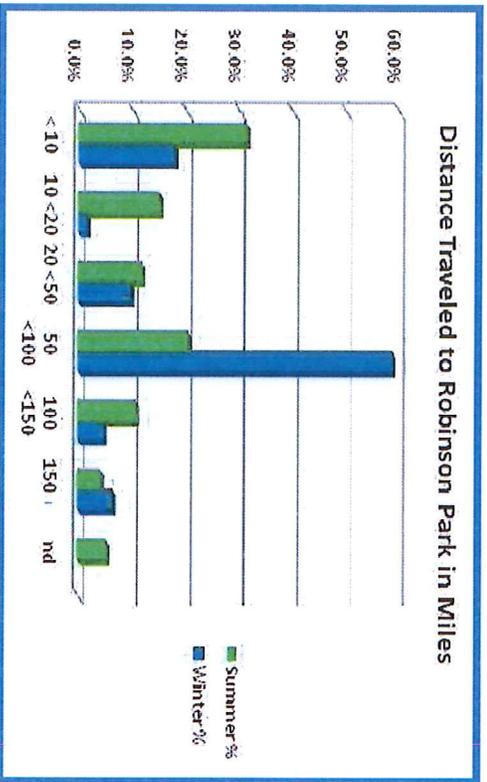
How far did they travel ?



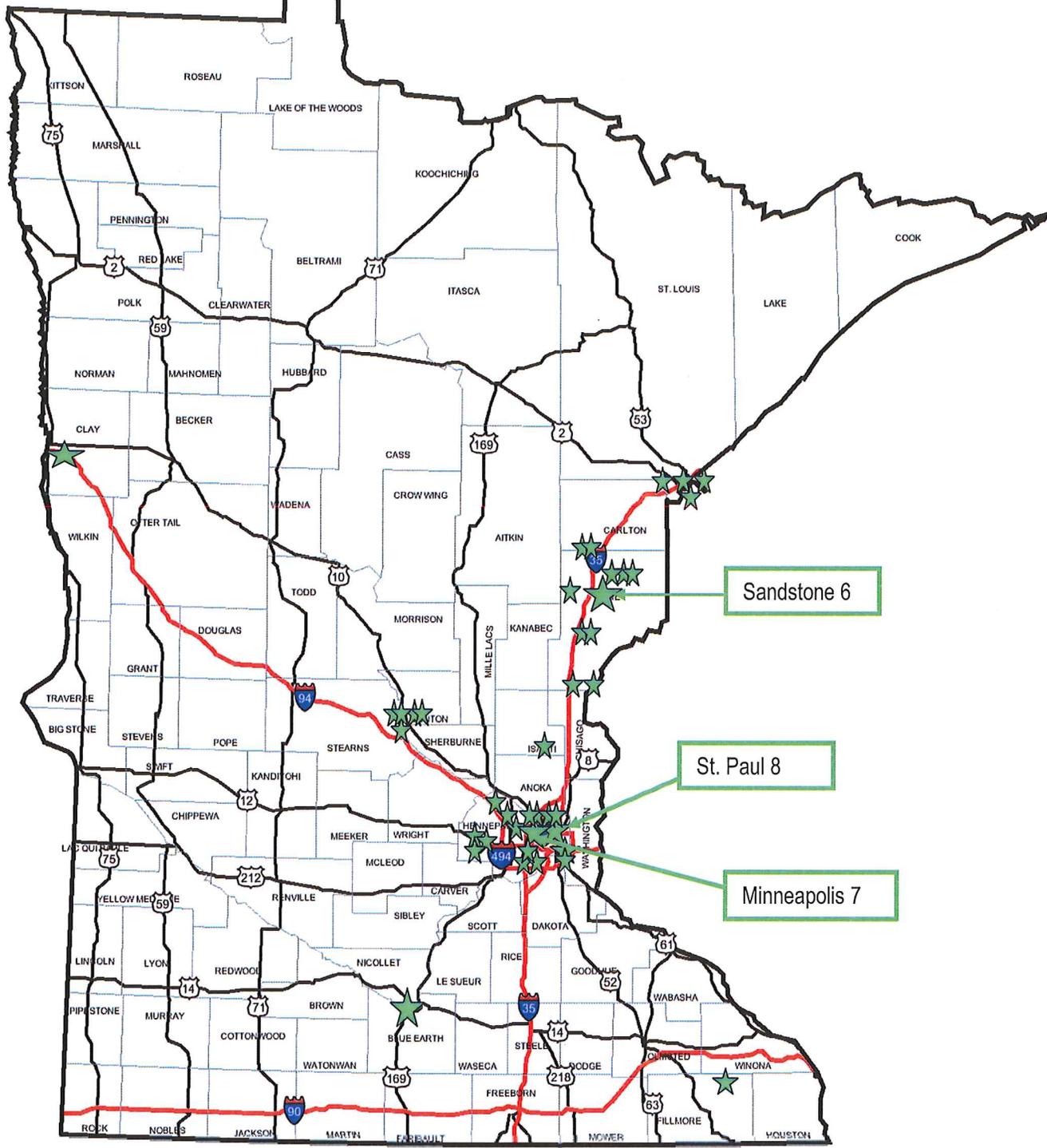
What was the primary activity?



Are there differences between the summer and winter users?



Origin of Visitors to Robinson Park Winter Visitor Survey 2013 -2014



★★ Iowa. ★★ Kirkland Wa.