

7C-03

ETIQUETTE MARKER

DESCRIPTION

An outdoor-grade graphic panel on a cast concrete post with a faux wood finish. Mounted on a cast concrete footing, covered by a powder-coated steel cap and embedded into a limestone slab.

PANEL SIZE

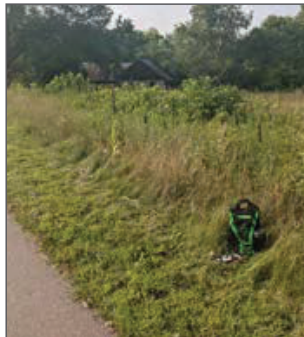
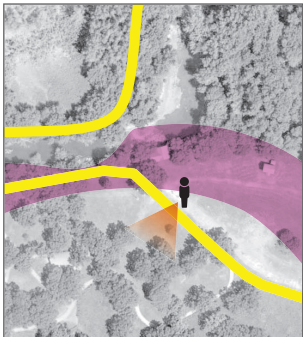
8" w x 12" h

MATERIAL

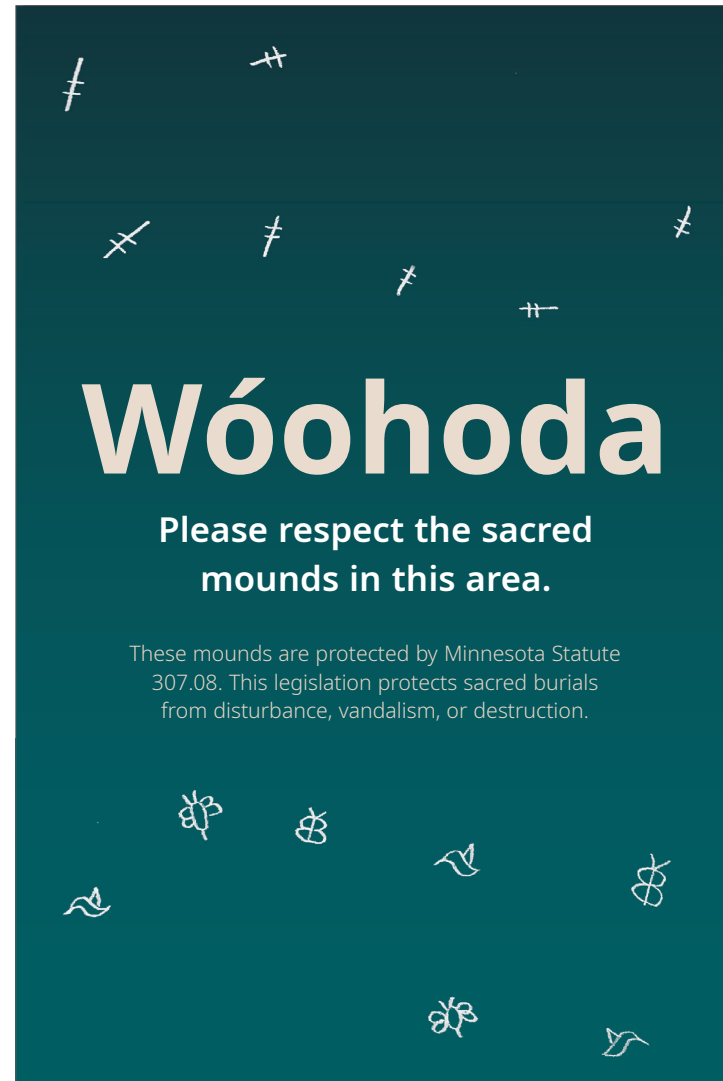
High pressure laminate (HPL)

NOTES & QUESTIONS

- The artwork on the etiquette markers is by an SMSC community member.



106 GROUP



SHAKOPEE RIVERFRONT CULTURAL TRAIL | Design Development 2 | 79

ZONE 8: REFLECTING

PURPOSE

Honors Dakota people's long and abiding relationship to this place and encourages respect for the ancestors who rest here as well as stewardship of the natural world.

DESCRIPTION

Memorial Park is a quiet, peaceful area, reclaimed and restored to its native oak savanna landscape. This green space honors Dakota people's presence and resilience here in their Homeland. There are no interpretive exhibits here, just etiquette markers at key entry and gathering points that remind visitors to respect the burial mounds. In the center of the park, a talking circle structure invites interaction and reflection (out of scope).

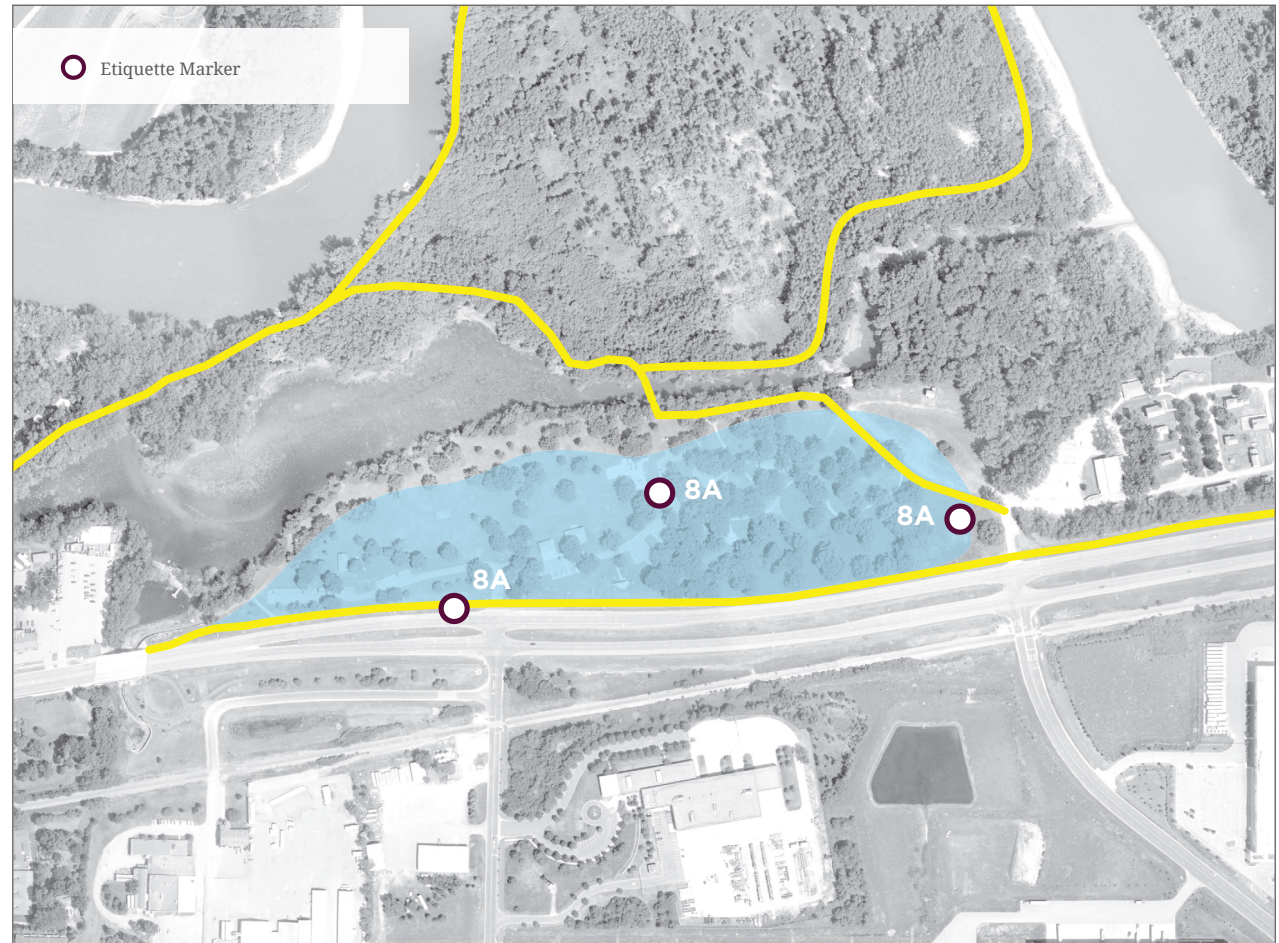
Exhibits

8A: Memorial Park

- 8A-01: Etiquette Marker
- 8A-02: Etiquette Marker
- 8A-03: Etiquette Marker

NOTES & QUESTIONS

- Exact number and placement of etiquette markers will depend on renovation of Memorial Park.



8A-01, 8A-02, & 8A-03

ETIQUETTE MARKERS

DESCRIPTION

Outdoor-grade graphic panels on cast concrete posts with a faux wood finish. Mounted on a cast concrete footing, covered by a powder-coated steel cap and embedded into a limestone slab.

PANEL SIZE

8" w x 12" h

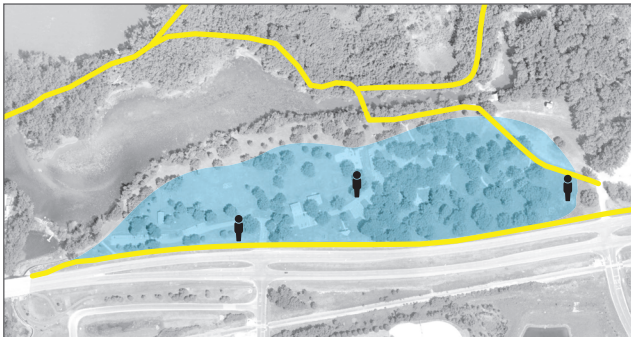
MATERIAL

High pressure laminate (HPL)

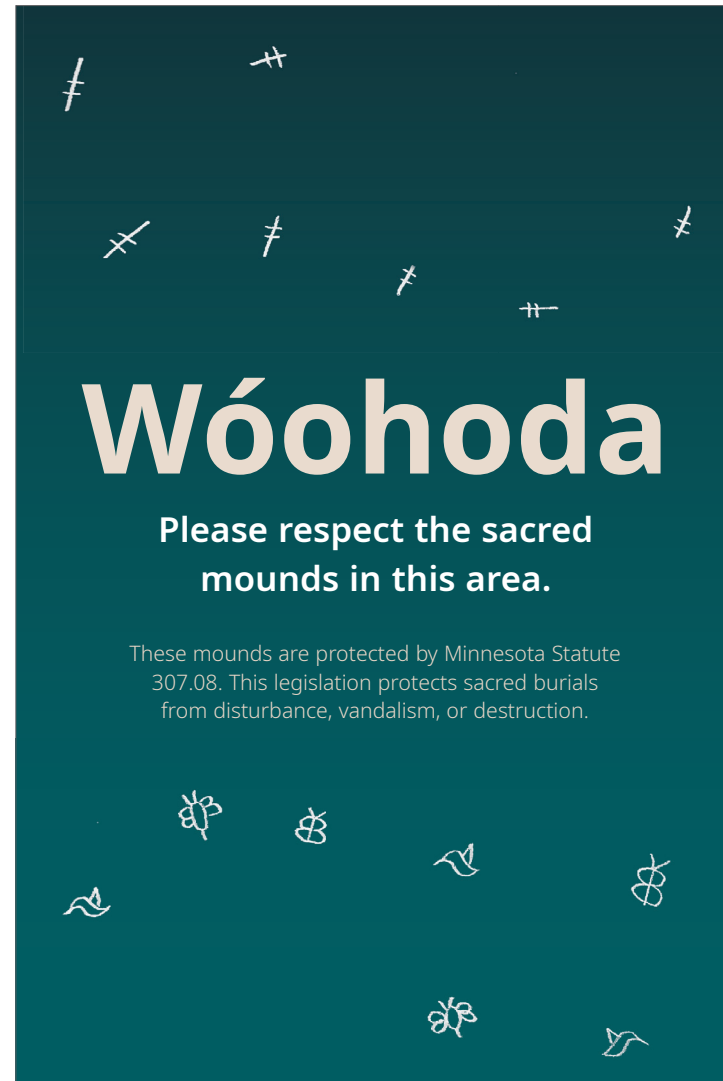
NOTES & QUESTIONS

- The artwork on the etiquette markers is by an SMSC community member.

Exact locations TBD



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SHAKOPEE RIVERFRONT CULTURAL TRAIL | Design Development 2 | 81

ZONE 9: EXPLORING

PURPOSE

Engages visitors with the tangible past and helps them connect the themes and stories encountered along the trail.

DESCRIPTION

The wayfinding and interpretive exhibits in this area help visitors transition and make connections—both physically and conceptually—between The Landing: Minnesota River Heritage Park and the rest of the SRCT. The orientation sign at the west end of the parking lot encourages visitors to continue their experience in the Minnesota River Heritage Park or elsewhere on the Trail. A wayside sign interprets the 10,000 years of history connected to the land that became the Park. Etiquette markers encourage visitors to treat the nearby burial mounds with respect. Visitors also can experience relocated historic buildings and nature trails through self-guided exploration.

EXHIBITS

9A: Parking Lot Node

- 9A-01: Orientation Sign
- 9A-02: Plant & Animal Sign (Oak Savanna)
- 9A-03: Plant & Animal Sign (Winter Birds)

9B: West Entrance

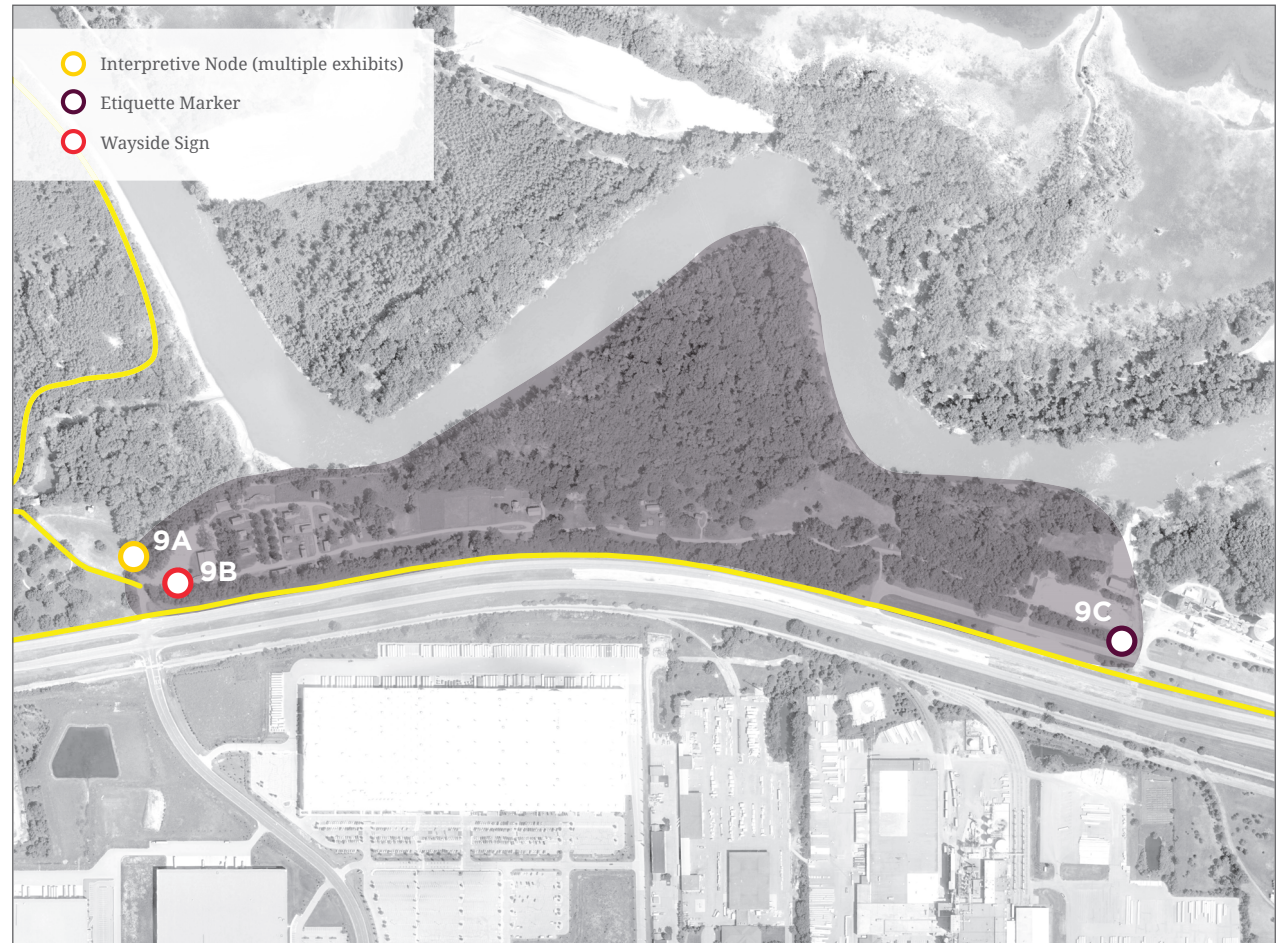
- 9B-01: Wayside Sign (The Landing)

9C: East Entrance

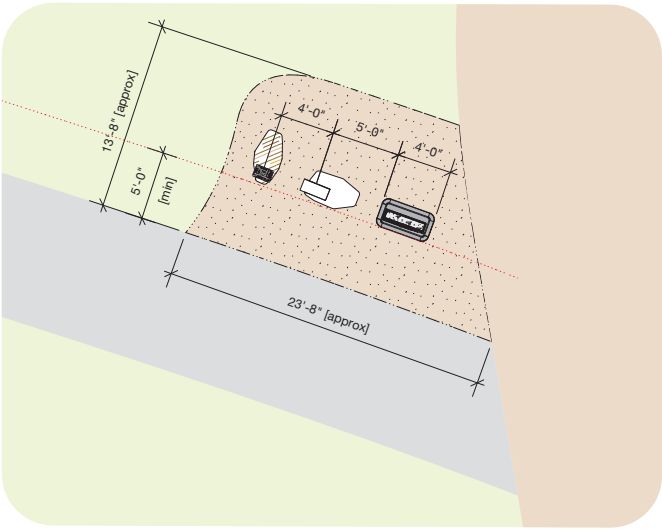
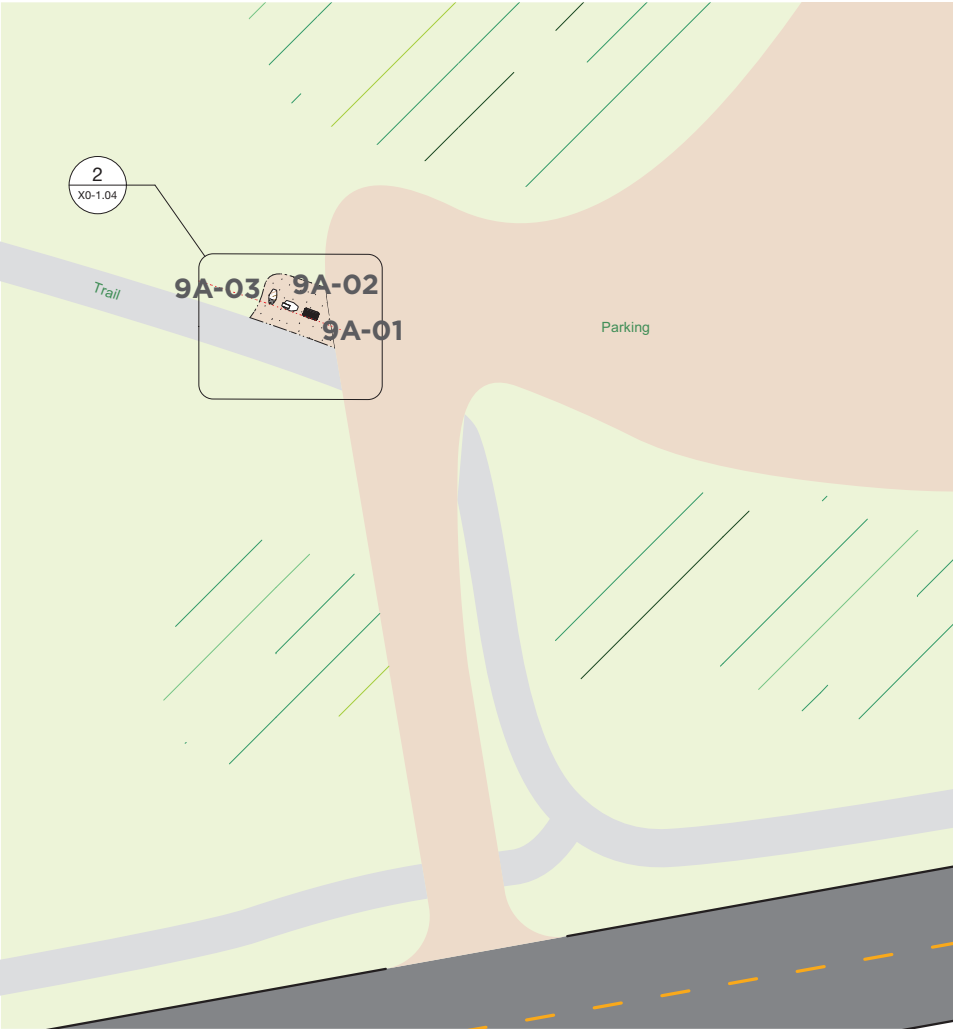
- 9C-01: Etiquette Marker

NOTES & QUESTIONS

- To protect cultural resources and burials in this area, installation of the exhibits will be monitored to ensure appropriate handling of the process. The cost of archaeological monitoring will be included in the estimate of probable costs for fabrication and installation.



9A: PARKING LOT NODE



2 Detail
Scale: 1:100

9A-01

ORIENTATION SIGN

DESCRIPTION

Two outdoor-grade graphic panels, one on the front and one on the side of a cast concrete form with a faux wood finish. Mounted on a cast concrete footing embedded with river rock.

PANEL SIZE

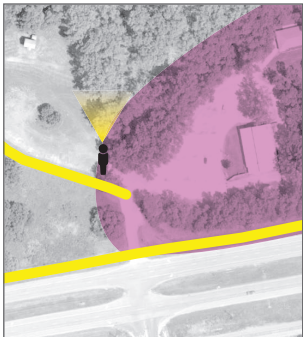
Front: 21.5" w x 54" h
Side: 9" w x 54" h

MATERIAL

High pressure laminate (HPL)

NOTES & QUESTIONS

N/A



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Side



Front



SHAKOPEE RIVERFRONT CULTURAL TRAIL | Design Development 2 | 84

9A-02 PLANT & ANIMAL SIGN (OAK SAVANNA)

DESCRIPTION

An outdoor-grade graphic panel on a cast concrete post with a faux wood finish. Mounted on a cast concrete footing, covered by a powder-coated steel cap and embedded into a limestone slab.

PANEL SIZE

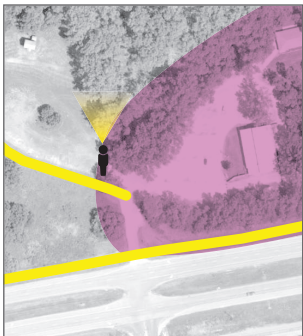
24" w x 12" h

MATERIAL

High pressure laminate (HPL)

NOTES & QUESTIONS

N/A



9A-03

PLANT & ANIMAL SIGN (WINTER BIRDS)

DESCRIPTION

An outdoor-grade graphic panel on a cast concrete post with a faux wood finish. Mounted on a cast concrete footing, covered by a powder-coated steel cap and embedded into a limestone slab.

PANEL SIZE

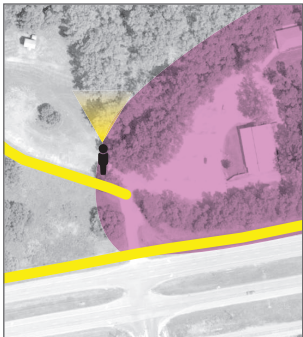
24" w x 12" h

MATERIAL

High pressure laminate (HPL)

NOTES & QUESTIONS

- SMSC reviewers: Please provide the Dakota translation for "red cedar."



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Along the riverfront, you'll find life flourishing in all seasons. Crows stay in Minnesota through the winter. They gather to roost overnight high in the treetops. Their dark shapes stand out against the evening sky as their loud caws ring out through the cold air.

FPO-HR

Wiyuškĩŋskinyan · CHICKADEE
Čaŋsaša · RED OSTER DOGWOOD

FPO-HR&UR

ZITKADAN ŠA · NORTHERN CARDINAL
<DAKOTA WORD> · RED CEDAR

FPO-HR

Seeing and hearing songbirds can cheer us on a gray winter day.

Mitakuyapi · Relatives



9B-01

WAYSIDE PANEL (THE LANDING)

DESCRIPTION

An outdoor-grade graphic panel on a two-legged cast concrete form with a faux wood finish. Cast concrete footings are embedded with river rock.

SIZE

Graphic Panel: 42" w x 24" h
Artwork Panel: 11" w x 11" h

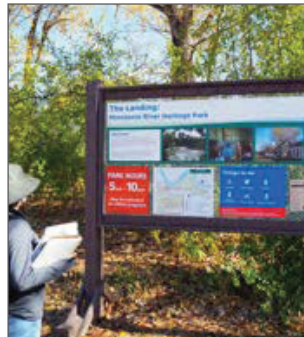
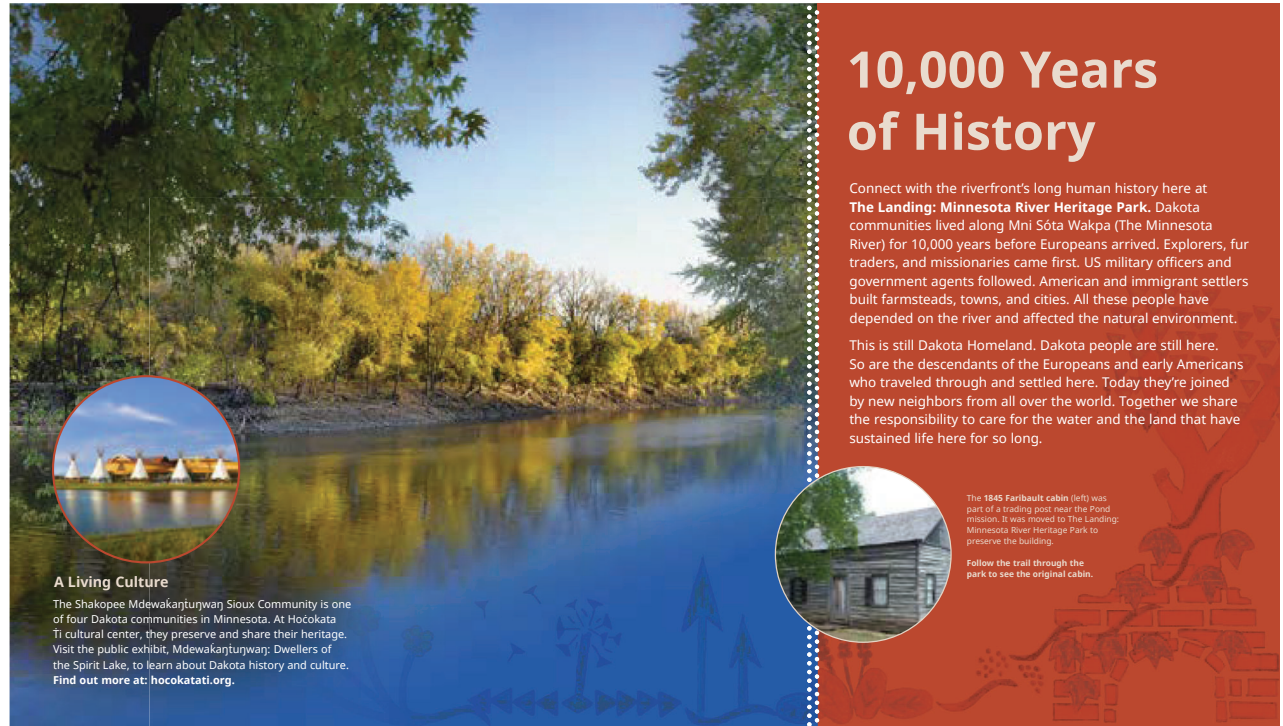
MATERIAL

Graphic Panel: High pressure laminate (HPL)
Artwork Panel: Aluminum

NOTES & QUESTIONS

N/A

Graphic Panel



9C-01

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PANEL SIZE

8" w x 12" h

MATERIAL

High pressure laminate (HPL)

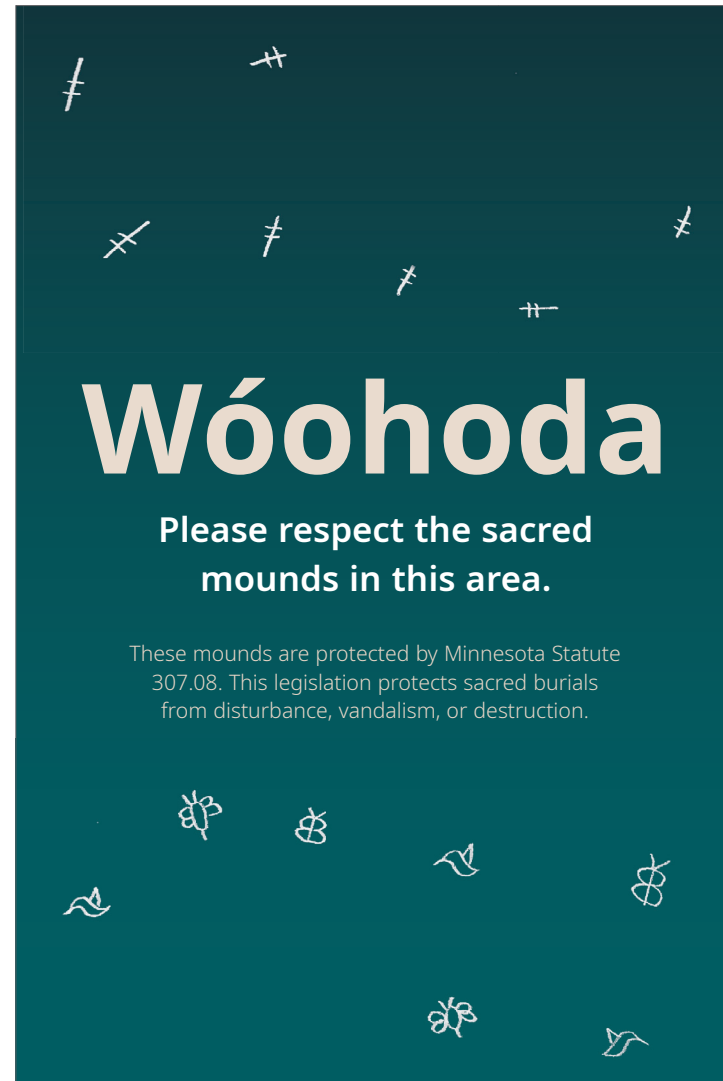
NOTES & QUESTIONS

- The artwork on the etiquette markers is by an SMSC community member.



EXACT
LOCATION TBD

106 GROUP



SHAKOPEE RIVERFRONT CULTURAL TRAIL | Design Development 2 | 88

ACCESSIBILITY

ACCESSIBILITY & UNIVERSAL DESIGN

Many features that make a space accessible for people with disabilities also make life easier and more convenient for everyone else. Large print and good lighting promote easier reading and better viewing by everyone, just as level and wide pathways provide for easier movement. Universal design is about inclusion. It goes beyond accessibility to define an approach that uses multisensory, multimodal experiences as an educational tool and means of communicating an exhibit's message. It is the design of spaces, elements, and systems to make them as usable as possible by as many people as possible. Multisensory and multimodal imply choice—something for everyone—so that visitors with widely ranging ages, abilities, levels of interest and sophistication, learning styles, and cultural identities can access the exhibit's main messages and have fun doing it.

Creating designs that are meaningful and fun for as many people as possible is a mindful balancing act; there is no way to make every design element accessible to every visitor. Addressing a range of issues from a variety of viewpoints, and competing needs among people with different abilities, as well as architects, builders, designers, staff, and maintenance personnel, must be considered at every project stage from concept through installation and evaluation.

Universal design affects the built space as well as how that space communicates to visitors.

WAYFINDING

Getting to and around the space should be easy for all visitors. The use of consistent colors, graphics, or forms can provide clear signals about where to go and what experiences are available. The design elements described in this report have built in such clear wayfinding cues.

VISUAL, TACTILE, AND AUDIO

Visitors learn in different ways. Visual cues determine most visitors' first impression, and the use of color and materials is important for non-verbal communication. Exhibits, graphics, or interactives can communicate a wealth of information without requiring the visitor to read much text. Tactile experiences can be critical to communicating ideas and creating memorable experiences and are therefore designed into this program.

Audio tracks can be an enhancement or a detraction for visitors. People with attention deficits, for example, may find the competition between audio programs and the other exhibits too distracting.

The 106 Group recommends adding audio description whenever possible for the benefit of visually-impaired visitors. Audio description describes the visual content, including posted text, of any program in order to provide individuals who are visually impaired with the information available to

sighted visitors. Audio descriptions are typically produced as separate tracks for each interpretive exhibit. In some cases, a primary audio track is repeated at each exhibit in combination with a shorter, site-specific track. Audio descriptions are not interpretive tours for the visually capable. They are specifically designed for accessibility.

SIGNAGE AND LABELS

Consideration of placement, contrast, color, font style and size, and graphic use all contribute to creating labels that are easy for all visitors to see, read, and understand.

Following are guidelines for type size for probable viewing distances.

Distance	Text Height	Font Size
<3" (75 mm)	3/16" (4.5 mm) high	24 pt
39" (1 m)	3/8" (9 mm) high	48 pt
78" (2 m)	3/4" (19 mm) high	100 pt
118" (3 m)	1-1/8" (28.5 mm) high	148 pt

SAFETY & ACCESS

Wheelchairs and scooters need maneuvering space to approach or leave an interactive space. Scooters are longer and narrower than wheelchairs and have mechanisms in front of the seat, which make a head-on approach impossible. Scooter users need to approach from the side and either turn their upper bodies or swivel their seat. In contrast, wheelchair users need space to approach and use interactive elements head-on. Also, it's important to leave room for family members and others to view alongside the wheelchair or scooter user.

PRINCIPLES OF UNIVERSAL DESIGN

Equitable use

The design is useful and marketable to people with diverse abilities.

Flexibility in use

The design accommodates a wide range of individual preferences and abilities.

Simple and intuitive use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

Compatible and perceptible information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Minimal hazards

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

Minimal physical effort required

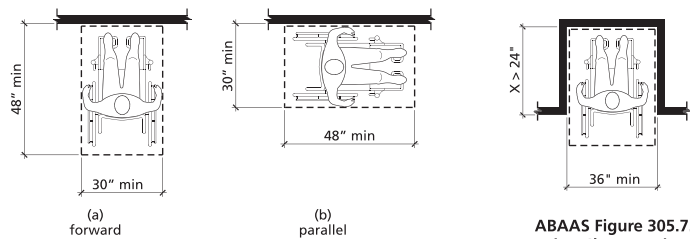
The design can be used efficiently and comfortably and with a minimum of fatigue.

Size and space appropriate for use

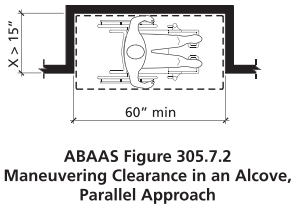
Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

North Carolina State University - The Center for Universal Design

The following diagrams are provided for planning reference.



ABAAS Figure 305.5
Position of Clear Floor or Ground Space



ABAAS Figure 305.7.1
Maneuvering Clearance in an Alcove,
Forward Approach

ABAAS Figure 305.7.2
Maneuvering Clearance in an Alcove,
Parallel Approach

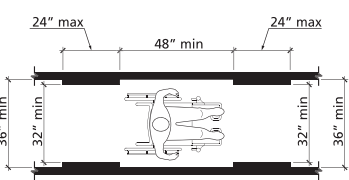
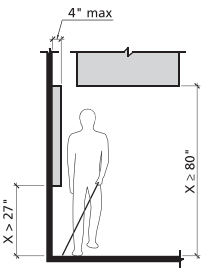
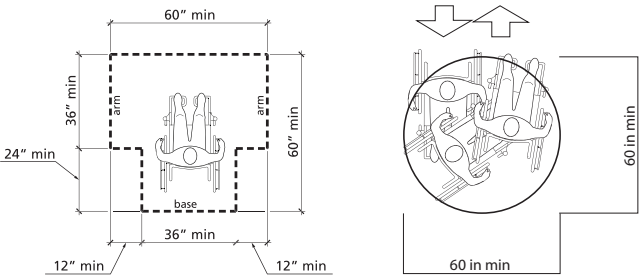


Figure 403.5.1
Clear Width of an Accessible Route

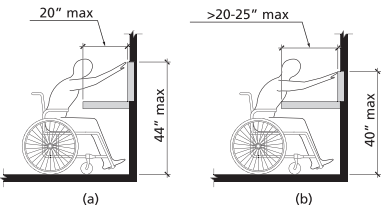


ABAAS Figure 307.2
Limits of Protruding Objects

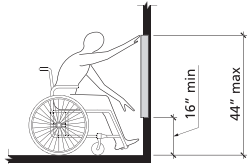


ABAAS Figure 304.3.2
T-Shaped Turning Space

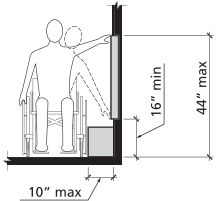
60 in (1525 mm) Diameter Space



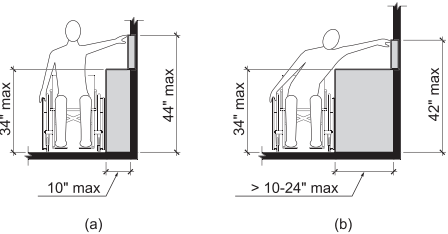
NPS modified Figure 308.2.2
Obstructed High Forward Reach



NPS modified ABAAS Figure 308.2.1
accessible to adults and children ages 9 and above
Unobstructed Forward Reach



NPS modified Figure 308.3.1
accessible to adults and children ages 9 and above
Unobstructed Side Reach



NPS modified Figure 308.3.2
Obstructed High Side Reach

UNIVERSAL DESIGN

The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

Ron Mace, The RL Mace Universal Design Institute

References:

Byways Grant Guidelines: http://www.bywaysonline.org/grants/application/information/category_4

<http://www.fhwa.dot.gov/environment/bikeped/guidance.htm#access>

UDI: The RL Mace Universal Design Institute: <http://www.udinstitute.org/>

Museum of Science, Boston: <http://www.mos.org/exhibitdevelopment/access/>

Smithsonian Institution Guidelines for Universal Design of Exhibits: <http://accessible.si.edu/guide.htm>

2010 ADA Standards for Accessible Design: http://www.ada.gov/2010ADAstandards_index.htm

Salmen, John P.S. (1998) Everyone's Welcome: The Americans with Disabilities Act and Museums.

US Access Board: <http://www.access-board.gov/>

North Carolina State University Center for Universal Design: <http://www.ncsu.edu/project/design-projects/udi/>

Programmatic Accessibility Guidelines for National Park Service Interpretive Media, August 2009: <http://www.nps.gov/hfc/pdf/accessibility/access-guide-aug2009.pdf>

ADA Turning Radius: <http://www.ada.gov/reg3a/fig3.htm>

APPENDIX A: EXHIBIT TEXT

SRCT Exhibits: Design Development

Exhibit Text: DD2

Orientation Signs

- The text below repeats across all orientation signs.

Title (Dakota): Čąŋku Óta Ka Wakpa Wanzi

Title (English): Many Paths, One River

Main Text

Dakota people know it as Mini Sóta Wakpa (land where the water reflects the sky). In English, it's the Minnesota River. For thousands of years, this flowing water has sustained human, plant, and animal life. The river is a transportation corridor and a destination, a resource and a beloved relative.

Along these banks, people from diverse cultures have converged, gathered, and built communities. Discover their stories along the Shakopee Riverfront Cultural Trail. As you travel the trail, spend time connecting with the natural world.

80 words; Grade 8

SRCT Map Caption

The Cultural Trail is a 2.5-mile section of the Minnesota Valley State Trail. It tells stories of the riverfront's history and heritage along this popular recreational corridor.

29 words; Grade 7

Inset Map Caption

The Minnesota Valley State Trail links you to a regional network of trails and parks in Scott County and beyond. You can ride, roll, run, or walk for miles.

29 words; Grade 3

Sidebar Subhead

Using the Trail

Sidebar Rules

SAFETY

Obey traffic signs and use caution at intersections.

Be aware of other trail users.

COURTESY

Keep right.

Pass on the left with an audible warning.

Yield to slower trail users.

Move off trail when stopped.

RESPECT

Keep the trails and parks clean.

Help preserve our natural and cultural resources.

PETS

Clean up after your pets.

Keep pets on a leash and under control at all times.

67 words; Grade 2

➤ **The main image (at the bottom) and map callout images will vary across orientation signs. Below is the caption text that will accompany those images. See the DD1 document for the distribution of the images across the exhibits.**

Callout Caption: Holmes St. Bridge

Cross the river on a beautiful historic bridge free from vehicle traffic. Enjoy the best view of the water that Shakopee has to offer.

24 words; Grade 4

Huber Park

Meet some riverfront trees and animals. Learn how we've lived along the river over time. Enjoy the park's many places to gather and play.

26 words; Grade 1

Schroeder Brickyard & Marina

Discover how people used riverfront resources to feed a community and build a city. Experience Shakopee's historic brick buildings. Take a boat out on the water that connects us all.

31 words; Grade 5

Tiñta Otunwe

Learn about life in a Dakota summer village. Slow down to appreciate this quiet, peaceful stretch of trail.

18 words; Grade 4

The Landing: Minnesota River Heritage Park

Spend time in self-guided exploration of historic buildings. Imagine life in a small town and on the farm in the nineteenth century. Connect with nature on wooded trails.

28 words; Grade 5

Other Exhibit Text

➤ Includes all exhibit text except the orientation signs.

Zone 1: Crossing

1A: Bridge Interpretation

1A-01: Bridge Panel (River Creatures)

Title (Dakota): Mitakuyapi

Title (English): Relatives

Main Text

We humans aren't the only ones who flock to the water to live, work, and play. The river corridor sustains a wide variety of creatures. Fish and amphibians swim and spawn here. Mammals and reptiles eat, find shelter, and raise their young. Trees take root and grow. Birds nest and sing their songs. Insects fly, flutter, and buzz through the air. In all seasons, life abounds along the riverfront.

70 words; Grade 4

Main Image Caption

<Dakota Name> Swift River Cruiser Dragonfly

Secondary Image Captions

<Dakota Name> Mallard Duck

<Dakota Name> Plains Garter Snake

<Dakota Name> Channel Catfish

1A-02: Bridge Panel (People & Glacial Geology)

Title (Dakota): Čaŋku Óta Ka Wakpa Wanzi

Title (English): Many Paths, One River

Main Text

The ancestors of today's Dakota communities have lived along this river for over 10,000 years. They met and traded with other Indigenous people throughout the region's waterways. In the late 1700s and early 1800s, Europeans and then Americans arrived in growing numbers. Today's residents and visitors come from all over the world.

These communities have worked with, learned from, and built relationships with each other. They've also come into conflict and caused each other harm. The river has run through it all.

85 words; Grade 7

Inset Images Caption

Pélagie Eliza Faribault (left), Joseph Godfrey (center), and Samuel Pond (right) all lived along the Shakopee riverfront in the 1840s.

21 words; Grade 10

Sidebar Subhead: Ancient Riverbed

Sidebar Text

The Minnesota River Valley was created by a glacier during the last ice age. As the Laurentian Ice Sheet melted, it formed Lake Agassiz, drained by River Warren. This powerful waterway carved a channel five miles wide and 250 feet deep. The narrower Minnesota River runs through the center of this glacial riverbed.

53 words; Grade 8

Zone 2: Expressing

2A: Arts Plaza Node

2A-02: Wayside Sign (Dakota Homeland)

Title: Mini Sóta Makóce

Main Text

This is Dakota Homeland. For thousands of years, Dakota people have lived in Mini Sota Makoce (Land Where the Water Reflects the Sky). Water flows through the center of Dakota lives. Their village sites,

burial grounds, and sacred places all connect to rivers and lakes. Along this riverfront, generations of Mdewakanguwaj Dakota people lived in the village of Tiyta Otunwe.

Europeans first reached Mini Wakpa (the Minnesota River) in the early 1700s. For the next century, European Americans coexisted with Dakota communities. Then in the mid-1800s, US expansion pushed the Dakota off most of their land onto reservations. Growing conflict led to the US-Dakota War of 1862, followed by exile. Many Dakota people spent decades disconnected from their homeland.

119 words; Grade 8

Secondary Image Caption: Photo of Šákpe II

Šákpe II, also known as Šákpedan (Little Six), led his Mdewakanguwaj band through a difficult transition. In 1853, a treaty forced them to move from their home here to a reservation. Look for Šákpe's statue in downtown Shakopee.

39 words; Grade 7

Sidebar Subhead: We Are Still Here

Sidebar Text

After the US-Dakota War of 1862, the US government removed most Dakota people from Minnesota. Yet some families remained, and others returned to form today's Dakota communities. At cultural centers like Hócokata T'i and Wakaj Típi, Dakota people gather and reconnect. They welcome everyone to visit and learn more about Minnesota's Indigenous history. Find out more at hocokatati.org and wakantipi.org.

63 words; Grade 5

2A-03: Wayside Sign (Namesakes)

Title: From Šákpe to Shakopee

Main Text

Trade and treaties paved the way for European American settlement in the Minnesota River Valley. In the 1700s, fur traders built close relationships with the Dakota. As furs became scarce and Americans wanted more land, those ties weakened. In debt to traders and pressured by federal agents, Dakota leaders signed two treaties in 1851 that ceded their land to the United States.

European Americans came upstream in the mid-1800s, seeking land and profit. In 1851, Thomas Holmes landed a flatboat loaded with logs and trade goods just down the hill from here. He built a trading post, staked a land claim, and began trading with the Dakota. In 1853, he platted “Shakopay Village,” named after the local Dakota leader Šákpe. The same year, the US government moved Šákpe's people to a reservation. Holmes' village became the City of Shakopee in 1857.

142 words; Grade 8

Secondary Image Caption: Holmes trading post

Thomas Holmes built his trading post and store on the riverbank here. They stood just east of the street and bridge (both built later) that now bear his name.

29 words; Grade 6

Sidebar Subhead: Crossing Cultures

Sidebar Text

Before Thomas Holmes settled here, he traveled by canoe to explore the area, accompanied by Bill Quinn. Quinn's wife Angelique Jeffries was Mdewakaniungwan Dakota. Son of a Cree mother and an Irish father, Quinn spoke English, French, and Dakota. As a guide and interpreter, he made Holmes' trading venture, and the founding of Shakopee, possible.

56 words; Grade 7

2A-04: Plant & Animal Sign (Historical Ecology)

Title (Dakota): Mitakuyapi

Title (English): Relatives

Main Text

Herd of bison once roamed here. Together with grasses like big and little bluestem, they thrived on the prairie south of the Mini Sóta Wakpa (Minnesota River). As European American settlement expanded, they disappeared. Agents of the US government killed millions of bison to weaken the Indigenous people who depended on them. Farms and cities replaced the prairie grasses.

60 words; Grade 6

Caption: Bison Herd

Small bison herds are returning to Minnesota. Dakota communities and the state government are working to bring them back home.

20 words; Grade 8

Caption: Elk

Along with bison, elk once lived on the land that became Minnesota. They disappeared by the early 1900s.

18 words; Grade 4

2A-05: Plant & Animal Sign (Dakota Moons)

Title (Dakota): Mitakuyapi

Title (English): Relatives

Main Text

In the Dakota knowledge system, the calendar is a lunar cycle of 13 moons. Each moon's name describes what's happening in nature during that time. Early July is Čaŋpa Sápa Wi (The Moon When the Chokecherries are Ripe). Dakota villages relied on čaŋpa (chokecherries) for food and medicine. The plants also feed many birds and animals.

58 words; Grade 3

Caption: Deer

December is Tahēcapsug Wi (The Moon when Deer Shed Their Horns).

11 words; Grade 6

Caption: Turtle

Did you know that turtles carry calendars on their backs? Count the scutes, or scales, on the top of a turtle shell. 13 scutes = 13 moons in the Dakota lunar calendar.

31 words; Grade 2

Zone 3: Connecting

3A: Amphitheater Node

3A-02: Tactile Map (Flooding)

Title: Living with the River

Main Text

As long as the Minnesota River has flowed, it has flooded. Along the Shakopee riverfront, it often overflows in spring or fall. Depending on snow melt and rainfall, flooding might be minor, moderate, or major. In 2010, a moderate spring flood covered half of Huber Park. The water reached past the amphitheater below you.

How do we respond to a river that floods? The closer we build to it, the more likely the rising water will damage property. As we put more stress on riverfront land, the banks erode, making flooding more severe. We can try to contain or control these powerful waterways. Or we can adapt how we live along them.

110 words; Grade 5

Secondary Image Caption

Dakota families lived along Minnesota waterways for thousands of years before Europeans arrived. On this riverfront, they returned each summer to the village of Triŋta Otiŋwe. Between the spring and fall

floods, they grew corn on land east of here. This photo shows the formerly cultivated area during the 2010 flood.

51 words; Grade 9

3A-03: Plant & Animal Sign (Cottonwood)

Title (Dakota): Mitakuyapi

Title (English): Relatives

Main Text

Where there's a river, you'll find the cottonwood. Young saplings grow on floodplain sandbars. Older trees can reach 120 feet tall and 5 feet in diameter. Look for their thick bark with deep vertical grooves. Dakota children in riverside villages made toys from cottonwood seeds. Their mothers made yellow dye from the leaf buds in spring.

58 words; Grade 4

Caption: Eagle

Bald eagles nest in cottonwoods in spring and summer and rest in them during the fall migration. Those that stay in Minnesota for the winter also roost in cottonwood trees.

30 words; Grade 8

Caption: Star pattern

The pattern inside a cottonwood twig reminds Dakota people that they come from the stars.

15 words; Grade 9

3A-04: Plant & Animal Sign (Basswood)

Title (Dakota): Mitakuyapi

Title (English): Relatives

Main Text

One of the riverfront's most generous trees, the basswood feeds many relatives. Caterpillars eat the leaves while the seeds provide food for chipmunks, squirrels, mice, and songbirds. Bees love the nectar of basswood flowers, and humans love the honey the bees make from it. People also make wahpe (tea) from the flowers and a sweet syrup from the tree's sap.

63 words; Grade 8

Caption: Basswood items

Generations of Dakota people have made useful items from the inner bark of basswood trees. They've used this "bast" to create cords, mats, bags, and baskets.

63 words; Grade 8

3A-05: Plant & Animal Sign (Sugar Maple)

Title (Dakota): Mitakuyapi

Title (English): Relatives

Main Text

When summer turns to fall, we eagerly watch for the first leaves to change color. Often the sugar maples are among the first to turn. Their sunny yellows, bright oranges, and fiery reds make us catch our breath with joy. Living among them makes us grateful for the riverfront's natural beauty.

54 words; Grade 4

Caption: Tapping tree

The Dakota were the first people to collect sap from Minnesota maple trees and transform it into syrup. When European Americans arrived here, Dakota people taught them this useful skill.

30 words; Grade 8

3A-06: Plant & Animal Sign (Bur Oak)

Title (Dakota): Mitakuyapi

Title (English): Relatives

Main Text

Before the 1850s, this stretch of the Minnesota River Valley featured a variety of native plant communities. They included tallgrass prairie, hardwood forest, and oak savanna. Where flatter land turned to the savanna's gently rolling hills, the bur oak made its home. Along today's riverfront, you'll find bur oaks in Memorial Park.

55 words; Grade 6

Caption: Hawk

Red-tailed hawks often nest in bur oak trees. They share habitat with owls and squirrels, who also like to build their nests in bur oak branches.

26 words; Grade 6

3B: Playground Node

3B-02: Plant & Animal Sign (Canine ID)

Title (Dakota): Mitakuyapi

Title (English): Relatives

Main Text

Who left that paw print? It might have been one of several canine relatives. Along today's riverfront, it was most likely a coyote, fox, or domestic dog. Before the early 1900s, you might have seen wolf tracks here. Wolves once lived all across the land that became Minnesota. Now you'll rarely find them in the southern half of the state.

62 words; Grade 3

3B-03: Plant & Animal Sign (Water Mammal ID)

Title (Dakota): Mitakuyapi

Title (English): Relatives

Main Text

What's that furry brown animal in the water? It can be hard to tell the difference between the river's aquatic mammals. One clue is the size. Otter is the largest, muskrat the smallest, and beaver is in between. Also look for the tail! Otter's tail is long and thick, muskrat's is long and thin, while beaver's is wide and flat.

65 words; Grade 2

3D: Primary River Overlook

3D-01: Wayside Sign (Transportation)

Title: River Road

Main Text

All aboard! Until 1870, the fastest route through the Minnesota River Valley was the water itself. Dakota people, European and American fur traders, and missionaries traveled by canoe and keel boat. Then came the steamboats. From the 1840s to the 1860s, dozens of steamboats navigated this stretch of river. They fueled Shakopee's incorporation and powered the city's growth.

In 1854, the steamboat Minnesota Belle landed at Shakopee, loaded with European immigrants. It also carried James and Mary Griffin and their three children, an African American family from Pennsylvania.

James was enslaved before earning his freedom by serving in the US Navy. A skilled carpenter, he helped build the Minnesota Belle before it brought him to Minnesota.

After 1870, railroads replaced steamboats as the fastest way in and out of Shakopee.

132 words; Grade 9

Sidebar Subhead

Sundown Dancing

Sidebar Text

In the 1910s, young adults enjoyed riding excursion boats between St. Paul and Shakopee. Some boats towed a barge where a band played and passengers danced at the end of the day.

32 words; Grade 8

Secondary Image Caption

Lena Strunk (far left) and her sisters often rode the excursion boats on the Minnesota River.

16 words; Grade 9

3E: River Overlook

3E-01: Augmented Reality Sign (River Crossings)

Main Text

In the mid-1800s, Shakopee residents crossed the river on ferry boats. The ferries transported people, animals, wagons, and supplies. They operated from Holmes Landing to the west, Murphy's Landing to the east, and Shakopee Landing just down the bank from here.

As Shakopee grew, bridges helped residents cross the river more easily. This 1879 photo shows the piers of the Lewis Street Swing Bridge under construction. It stood from 1880-1942. The Holmes Street Bridge, built in 1927, is listed in the National Register of Historic Places.

87 words; Grade 8

Zone 4: Making

4A: Schroeder House Node

4A-02: Tactile Map (Brickyard)

Title: Made in Shakopee

Main Text

Early Shakopee industries used riverfront resources to make their products. The Schroeder Brick and Lime Manufacturing Company operated here from 1876 to 1941. From clay, sand, water, and wood, the company made the bricks that built the city. Co-founder Herman Schroeder lived with his family in the two-story house across the trail. It's constructed from Schroeder bricks.

Brickyard workers dug clay from the riverbank with shovels and a horse-drawn scraper. They mixed it with sand and water in tempering pits using a horse-drawn wheel. A machine packed the mixture into molds. The formed bricks were aired in drying sheds, then fired in a huge kiln.

106 words; Grade 8

Secondary Image Caption

The Schroeder Brickyard manufactured millions of bricks here on the riverbank. Workers in this 1900 photograph are loading a wagon with newly fired bricks inside the brick kiln. Down the trail to the east, you'll find the ruins of the brickyard's lime kiln.

44 words; Grade 8

4A-03: Wild Rice Sculpture

Text

Dakota people have gathered psin (wild rice) from Minnesota lakes for thousands of years. In the past, some used dugout canoes, like the sculpture below. They made them from hollowed-out cottonwood, basswood, or maple trees. Others used birchbark canoes, as sketched above by Charles Eastman.

Each year, Dakota families returned to their villages near ricing lakes for the summer harvest. Today members of the Shakopee Mdewakanton Sioux Community still harvest this beloved food. Like their ancestors, they gather the seeds by hand, from a canoe.

86 words; Grade 9

4B: Lime Kiln

4B-01: Wayside Sign (Brickyard Work)

Title: A Hard Day's Work

Main Text

As Minnesota cities grew in the late 1800s, so did the demand for bricks. This riverfront had all the ingredients for making them. In 1876, brothers Herman and Henry Schroeder started a brickyard here. They employed many of the European immigrants who came to Shakopee seeking work. The Schroeder Brickyard became one of the city's most successful businesses, operating until 1941.

Making bricks required hard labor. Workers dug clay from the riverbank, loaded and unloaded kilns, and tended fires. They stacked and moved piles of bricks and operated horse-drawn and steam-powered

machinery. Many brickyard employees, like the Schroeders themselves, were immigrants from Germany. As the men worked, they spoke German, French, Dutch, and English.

115 words; Grade 9

Main Image Caption

Before stricter child labor laws in the 1930s, children worked at the brickyard.

13 words; Grade 6

Secondary Image Caption

Bricks made here at the Schroeder Brickyard had a distinctive red color. Many historic buildings in downtown Shakopee are built from Schroeder bricks.

23 words; Grade 10

Sidebar Subhead: How to Make Lime

Sidebar Text

The structure in front of you was a lime kiln. Lime was used as mortar for brick construction.

1. Workers loaded limestone chunks into the kiln.
2. An iron grate held the stone above the ground.
3. Fires created heat that reduced the stone to powder.
4. A worker shoveled the lime powder into barrels.

55 words; Grade 2

4B-02: Augmented Reality Sign (Resource Use)

Main Text

People have used this riverfront in different ways over time. It's been the home of a Dakota village and a meeting ground for fur traders. In the 1870s, it became an industrial site.

From 1876-1941, the Schroeder Brickyard used river water, clay, and sand to manufacture bricks here. The company also processed limestone into powder for use as building mortar. Local wood fueled the fires that heated the lime and brick kilns. It took about 15 oak trees to produce one ton of lime.

85 words; Grade 5

4B-03: Augmented Reality Sign (Drying Sheds)

Main Text

From 1876 to 1941, the Schroeder Brickyard occupied this riverbank. Workers excavated river clay, then tempered it with water and sand. A steam-powered machine packed the mixture into molds to form bricks.

Workers then stacked the bricks under sheds to dry for 1–2 weeks. The sheds protected the bricks from rain while allowing air to circulate, speeding the drying process. Next, they loaded the dried bricks into a brick kiln. They fired them for 7–10 days at temperatures between 1600–2000° F.

84 words; Grade 6

Zone 5: Dwelling

5A: West Threshold

5A-01: Wayside Sign (Tínta Otunwe)

Title: <Dakota phrase for The Good Life>

Main Text

What does the good life mean to you? The residents of Tínta Otunwe had everything they needed for <Dakota phrase for the good life> right here. Generations of Mdewakantunwan people lived in this village from late spring to early fall. Each year, they returned to access resources and renew community bonds. They also came to reconnect with the ancestors buried here. In the 1830s, some 600 people lived at Tínta Otunwe.

Dakota summer villages existed up and down the river. Extended families lived in lodges framed with cottonwood and elm poles and covered with elm bark. Through the long summer days, they worked, socialized, and held ceremonies. Children reunited with cousins and friends to play and learn together. Their parents, grandparents, aunts, and uncles all looked after them.

128 words; Grade 8

Secondary Image Caption: SMSC dancers

Mdewakantunwan Dakota people are still connected to their ancestral home. At the annual SMSC Wacipi (powwow), they remember their history and celebrate their culture.

24 words; Grade 9

Sidebar Subhead: A River for All Seasons

Sidebar Text

Dakota people used the river all year round. In winter, the ice provided a frozen road for dog sleds. It also made an excellent playing field for a game of [Dakota word] (lacrosse).

33 words; Grade 4

5B: East Threshold

5B-01: Wayside Sign (Interrelationship)

Title: Mitakuye Owasiŋ

Main Text

Over many generations, Dakota people have lived in close relationship with the water, plants, and animals of Mni Sóta Wakpa (the Minnesota River). They've provided resources for food, clothing, tools, and shelter. More than this, they're also respected relatives. They appear in songs, stories, and teachings. They're central to Dakota values and identity. When Dakota people say, "Mitakuye Owasiŋ (All My Relations)," they include all living beings, not just humans.

Dakota artists, past and present, have been inspired by the animals and plants who share their riverfront environment.

108 words; Grade 9

Secondary Image Caption:

Fragrant and healing, white sage is one of the Dakota people's most beloved plant relatives. They've lived along this river together for thousands of years.

27 words; Grade 4

Sidebar Subhead: Summer Living

Sidebar Text

Dakota families moved with the seasons to access food sources. Until the mid-1850s, this was the site of a summer village called Tíŋta Óiŋwe. Residents returned each year to gather wild rice, fish, and hunt.

They grew corn and planted gardens after the spring floods receded.

46 words; Grade 7

Zone 6: Cultivating

6A: Floodplain

6A-01: Augmented Reality Sign (Corn Field)

Main Text

"This land was bounded on the other side by the Minnesota, sweeping in a beautiful curve around its border ... when not covered by water, tadpoles, and fishes, in the months of June and July [it] was rich with waving corn." —Samuel Pond

The area in front of you used to be a corn field. Each summer, after the spring floods receded, Dakota women and children planted seeds. Then they guarded the growing plants from hungry birds. This watercolor by Seth Eastman shows Dakota women on wooden platforms, waving cloth and banging pots to scare birds away from their corn.

99 words; Grade 7

Zone 7: Transforming

7A: Pond Mission Foundation

7A-01: Wayside Sign (Faribaults/Ponds)

Title: Crossing Cultures

Main Text

In the 1840s, two families became neighbors on this hill above the river. Their households experienced a time of rapid change. The Faribaults built a cabin and trading post about 100 yards to the west in 1844. Oliver Faribault had Dakota and French Canadian ancestry. His wife was a Dakota woman named Wakan Yanke Wing (also called Henriette or Harriet). They participated in the fur trade and Oliver worked as a government agent as the US expanded west.

In 1847, Samuel and Cordelia Pond built a mission settlement here. At first, the Ponds and Faribaults lived among the Mdewakantjuywan residents of Tíjta Otjuywe. They likely spoke as much Dakota and French as English. Then in 1853, following two treaties, the US government moved the people of Tíjta Otjuywe to a reservation. This site became part of the new City of Shakopee in 1857.

144 words; Grade 7

Main Image Caption:

Some people of mixed ancestry were allowed to stay in Minnesota when the government exiled other Dakota people after the US-Dakota War of 1862. Many Faribault family descendants remained in the Shakopee area.

42 words; Grade 9

Secondary Image Caption:

Dakota leader Šákpe II (left) invited Samuel Pond (right) to establish a mission school and farm at Tíjta Otjuywe in 1847. He wanted access to the education and resources the Ponds could provide for his people.

36 words; Grade 4

Sidebar Subhead: The Cost of Freedom

Sidebar Text

In the 1840s, the Faribaults enslaved an African American man named Joseph Godfrey. He helped build the family's cabin and worked at the trading post before escaping enslavement. Joseph married a Dakota woman and fought in the US-Dakota War of 1862. He was imprisoned, then exiled. He avoided execution by testifying against Dakota men later hanged at Fort Snelling, including his wife's father.

65 words; Grade 9

7A-02: Augmented Reality Sign (Pond Mission)

Main Text

From 1847 to 1851, this was a mission settlement run by Samuel and Cordelia Pond at the Mdewakantjway village of Itjta Otjwye. The mission school taught Dakota children, while the farm provided training and tools. The Ponds wanted to help the community adapt to the changes brought by US expansion.

Samuel spent years immersing himself in Dakota culture and learned the language. He helped create the first Dakota-English dictionary. Yet the mission also sought to change Dakota people's religion and ways of life.

84 words; Grade 9

7B: Mill Pond & Channel

7B-01: Wayside Sign (Pond Grist Mill)

Title: Family Business

Main Text

After marrying in 1879, Elnathan and Wilhelmine “Minnie” Pond built their life and made a living here along the Shakopee riverfront. Together they ran a 170-acre farm. Elnathan and his brother Samuel Jr. also operated the grist mill that stands in front of you. Local farmers brought their grain to be ground into wheat flour, corn meal, and livestock feed. The river powered the mill, first by a water wheel, later by a turbine.

Elnathan and Samuel Jr. grew up nearby at the mission settlement run by their parents, Samuel and Cordelia Pond. Both brothers spent their early married years at the mission farm with their father and his second wife Rebecca. They raised their own families from that firm foundation.

121 words; Grade 8

Main Image Caption

The Pond Grist Mill (pictured here in 1908) operated from 1875-1908. It's listed in the National Register of Historic Places. Wilhelmine and Elnathan Pond's farmstead lay to the east of the mill.

48 words; Grade 7

Secondary Image Caption

Elnathan and Wilhelmine Pond (left) raised six children together, three girls and three boys. Their daughter Minnie Cordelia (right), born in 1885, was named for her mother and grandmother.

29 words; Grade 9

7C-02: Plant & Animal Sign (Web of Relations)

Title (Dakota): Mitakuyapi

Title (English): Relatives

Main Text

All of the riverfront’s residents—humans, plants, and animals—are interconnected. Each of us lives within a network of relationships. When we care for the water, we take care of all the beings who depend on it, including ourselves. As a central Dakota teaching reminds us, Mitakuye Owasing (we are all related).

53 words; Grade 6

Captions: Connected animals & plants

- Wood ducks swim in the water, nest in trees, and fly through the air. Every part of the riverfront environment affects them.
- Wood ducks and raccoons both nest in the hollow cavities of maple and basswood trees. They also love to eat the trees’ acorns.
- Raccoons will eat turtle and duck eggs when they find them unattended.
- Turtles sit on top of muskrat lodges to catch the sun’s rays. Wood ducklings also perch on top of the lodges to dry their feathers.
- Muskrats, wood ducks, and turtles eat aquatic plants like broadleaf arrowhead and wild rice. Dakota villages along the river depended on wild rice as one of their most essential foods.

113 words; Grade 6

Zone 9: Exploring

9A: Parking Lot Node

9A-02: Plant & Animal Sign (Oak Savanna)

Title (Dakota): Mitakuyapi

Title (English): Relatives

Main Text

Before this land became farms and cities, much of it was oak savanna. The savanna’s defining tree, the bur oak, feeds a wide variety of birds, insects, and mammals. Many caterpillar species eat the leaves. Songbirds eat some of the caterpillars, while others transform into moths and butterflies. Bur oak acorns provide food for wood ducks, turkeys, rabbits, chipmunks, squirrels, and mice.

63 words; Grade 8

Caption: Restoration

To the west, you'll find a restored oak savanna in Memorial Park. City, county, state, and tribal partners have worked together to bring this native landscape back to the riverfront.

30 words; Grade 8

Caption: Prairie flowers

A healthy oak savanna blooms with prairie grasses and wildflowers. The flowers feed bees and other insects. Their colors and shapes have inspired generations of Dakota artists.

27 words; Grade 8

9A-03: Plant & Animal Sign (Winter Birds)

Title (Dakota): Mitakuyapi

Title (English): Relatives

Main Text

Along the riverfront, you'll find life flourishing in all seasons. Crows stay in Minnesota through the winter. They gather to roost overnight high in the treetops. Their dark shapes stand out against the evening sky as their loud caws ring out through the cold air.

46 words; Grade 5

Caption: Songbirds

Seeing and hearing songbirds can cheer us on a gray winter day.

12 words; Grade 5

9B: Landing West Entrance

9B-01: Wayside Sign (The Landing)

Title: 10,000 Years of History

Main Text

Connect with the riverfront's long human history here at The Landing: Minnesota River Heritage Park. Dakota communities lived along Mini Sóta Wakpa (The Minnesota River) for 10,000 years before Europeans arrived. Explorers, fur traders, and missionaries came first. US military officers and government agents followed. American and immigrant settlers built farmsteads, towns, and cities. All these people have depended on the river and affected the natural environment.

This is still Dakota Homeland. Dakota people are still here. So are the descendants of the Europeans and early Americans who traveled through and settled here. Today they're joined by new neighbors from all over the world. Together we share the responsibility to care for the water and the land that have sustained life here for so long.

127 words; Grade 9

Secondary Images Caption:

The 1845 Faribault cabin (left) was part of a trading post near the Pond mission. It was moved to The Landing; Minnesota River Heritage Park to preserve the building.

Follow the trail through the park to see the original cabin.

40 words; Grade 7

Sidebar Subhead: A Living Culture

Sidebar Text

The Shakopee Mdewakanton Sioux Community is one of four Dakota communities in Minnesota. At Hočokata ȩi cultural center, they preserve and share their heritage. Visit the public exhibit,

Mdewakanton: Dwellers of the Spirit Lake, to learn about Dakota history and culture. Find out more at: hocokatati.org.

47 words; Grade 9

APPENDIX B: COST ESTIMATE

ASSUMPTIONS

- All Kasota Stone except Orientation Panels are cloven, not cut.
- Orientation Panels are anchored with one 12-14" x 48" sunken concrete pier.
- Sculpture installation are anchored with three 12-14" x 48 sunken concrete piers.
- All graphic panels are powder-coated metal.

EXCLUSIONS

- Production-Ready Graphic Files (completed by Design Team at end of current Design phase)
- Permits, licensing, authorizations, etc. secured by Owner
- Site protection including fencing, warning signs, and security are providd by Owner
- Trash Hauling is provided by Owner

NOTES

- Contingency prorated on a dollar basis and included in each line item. Total contingency amount included is \$101,800. Separated contingency costs per line item can be found in a detail view of the estimate worksheet (not included here for space).
- Costs are in 2023 dollars. For inflation and escalation from 2023 to 2025 dollars, assume 4% per year (average), for a 2025 Project Total of \$851,400.

Project-Wide Costs	
Project Management	\$18,400
Engineering, Detailing, and Shop Drawings	\$10,400
Samples, Mock-Ups, Prototypes	\$8,200
Custom Illustrations	\$23,300
Archeological Monitoring (up to 100 hour allowance, estimated by 106 Group)	\$10,000
Fabrication and installation Consultation Fee (estimated by 106 Group)	\$14,000
Accessible pathways to waysides	\$69,900
Site Protection - Ground and Path. Etc.	\$3,600
Material Delivery	\$15,500
Installation	\$87,600
Bond	\$12,600
Subtotal	\$273,500

Project Total
\$806,200

Potential Additional Savings and Expenses	
Savings	
Kasota Stone purchased directly by owner (avoids sub-contract mark-up and contingency)	\$10,200
Kasota Stone cut not cloven (if purchased by fabricator)	\$5,100
Kasota Stone cut not cloven (if purchased by owner)	\$3,300
Accessible pathways provided by owner	\$69,900
Expenses	
Tax on sign components @ 7.5% (if required)	\$38,600

COSTS BY ZONE

Zone 1: Crossing		
Holmes Street Bridge		
2	Wayside Sign	\$37,700
Subtotal		\$37,700

Zone 2: Expressing		
Plaza		
1	Orientation Panel	\$14,900
2	Plant and Animal ID Sign	\$12,800
1	Wayside Sign	\$17,300
Subtotal		\$45,000

Zone 3: Connecting		
Amphitheater		
1	Orientation Panel	\$14,900
2	Plant and Animal ID Sign	\$12,800
1	Wayside Sign	\$17,300
1	Tactile Map	\$29,100
Playground		
1	Orientation Panel	\$14,900
2	Plant and Animal ID Signs	\$12,800
River Overlooks		
2	AR Panel	\$23,700
Subtotal		\$125,500

Zone 4: Making		
Schroeder House		
1	Orientation Panel	\$14,900
1	Wayside Sign	\$17,300
1	Tactile Map	\$29,100
Marina Hill		
1	Sculpture	\$39,900
Lime Kiln		
2	AR Panel	\$23,700
Subtotal		\$124,900

Zone 5: Dwelling		
West Side		
1	Wayside Sign	\$17,300
2	Etiquette Marker	\$10,900
East Side		
2	Etiquette Marker	\$10,900
Subtotal		\$39,100

Zone 6: Cultivating		
Floodplain River Flats		
1	AR Panel	\$11,800
Subtotal		\$11,800

Zone 7: Transforming		
Pond Mission		
1	AR Panel	\$11,800
1	Wayside Sign	\$17,300
1	Etiquette Marker	\$5,400
Pond Mill		
2	Plant and Animal ID Sign	\$12,800
1	Wayside Sign	\$17,300
2	Etiquette Marker	\$10,900
Subtotal		\$75,500

Zone 8: Reflecting		
Memorial Park		
2	Etiquette Marker	\$10,900
Subtotal		\$10,900

Zone 9: Exploring		
Interpretive Node: Parking Lot		
1	Orientation Panel	\$14,900
3	Plant and Animal ID Sign	\$19,200
2	Etiquette Marker	\$10,900
The Landing		
1	Wayside Sign	\$17,300
Subtotal		\$62,300