

# LILYDALE MASTER PLAN GOALS AND OBJECTIVES

## PROVIDE CENTRAL GATHERING LOCATION WITHIN PARK

- PICNIC SHELTER TO HAVE WATER, ELECTRICAL AND PUBLIC RESTROOM
- REALIGN LILYDALE ROAD TO ALLOW GATHERING AREA ALONG PICKEREL LAKE
- PROVIDE LANTERN STYLE LIGHTING ON LILYDALE ROAD

## DEVELOP TRAIL SYSTEM HIERARCHY WITHIN PARK

- COMMUTER BIKE LANE: REMOVE GUARDRAIL AND PROVIDE WIDE SHOULDER FOR COMMUTER CYCLIST ALONG ROADWAY
- REGIONAL TRAIL: ALIGN ADJACENT TO MISSISSIPPI RIVER, PAVED, HIGHER TRAFFIC USE, 12' WIDE
- LAKESHORE TRAIL: ALONG PICKEREL LAKE, CONNECTS TO BOARDWALK, PROVIDES WILDLIFE OBSERVATION ALONG LAKESHORE, 10' WIDE, PAVED
- NATURE TRAILS: SOFT TRAILS CONNECTING WILDLIFE VIEWING LOCATIONS, 8' WIDE
- TRAILS USED AS ACCESS FOR PARKS VEHICLES AND AS NATURAL VEGETATION BREAK

## MINIMIZE IMPACT TO RESTORED LANDSCAPE BY PRESERVING LARGE TRACKS OF LAND FOR HABITAT

## REMOVE INVASIVE PLANT MATERIAL AND RESTORE TO NATURAL PLANT COMMUNITIES

## PROVIDE STORM WATER TREATMENT AND ENHANCED WATER QUALITY TO PICKEREL LAKE

- TREAT STORM WATER ENTERING FROM IVY FALLS VIA RESTORED WETLANDS
- PROVIDE DIVERSE EMERGENT AND SUBMERGENT PLANT COMMUNITIES WITHIN LAKE
- MAINTAIN POPULATION OF LARGE PREDATORY FISH
- IMPLEMENT WATER TESTING OF PICKEREL LAKE TO MONITOR WATER QUALITY
- COLLECT AND TREAT ALL STORM WATER ON SITE THROUGH BEST MANAGEMENT PRACTICES (RAIN GARDENS/BIO TREATMENT SWALES/ETC)

## PROVIDE WILDLIFE OBSERVATION AREAS

- CREATE NATURAL HABITAT AREAS FOR BIRDS WITHIN MIGRATORY FLYWAY
- IMPROVE FISHING OPPORTUNITIES WITHIN PICKEREL LAKE

## IMPROVE CONNECTION TO FOSSIL GROUNDS

- DEVELOP BOARDWALK CONNECTION ALONG LAKESHORE
- REDESIGN LILYDALE ROAD AT FOSSIL GROUND ENTRANCE
- DEVELOP TRAIL HEAD AT FOSSIL GROUND ENTRANCE FOR EDUCATIONAL GROUPS

## PROVIDE PARK ENTRANCE GATEWAY

- CREATE GATEWAY SIGNAGE AS ENTER FROM HARRIET ISLAND
- DEVELOP CREEK TO COLLECT BLUFF SEEPAGE AWAY FROM WATER STREET
- ENHANCE SIGNAGE AND PARK ENTRANCE FROM HIGHWAY 13

## IMPROVE SAFETY AND SECURITY WITHIN PARK

- CREATE SITE LINES INTO PARK THROUGH REMOVAL OF DENSE INVASIVE UNDERGROWTH
- INTRODUCE TRAFFIC CALMING MEASURES TO SLOW TRAFFIC ALONG LILYDALE ROAD
- INTRODUCE DOG PARK TO PROVIDE "EYES" ON PARK
- REMOVE EXISTING DEBRIS AND RUBBLE WITHIN PARK AND RESTORE TO NATURALIZED CONDITION

## STRENGTHEN CONNECTION TO MISSISSIPPI RIVER

- CREATE VIEWS OF MISSISSIPPI RIVER ALONG WATER STREET
- PROVIDE REGIONAL TRAIL RESTING AREAS/OVERLOOKS OF MISSISSIPPI RIVER

# GOALS / OBJECTIVES

## LILYDALE REGIONAL PARK

CITY OF SAINT PAUL PARKS AND RECREATION DESIGN SECTION

JULY 1, 2009

**PROPOSED GATEWAY**  
(SEE ENLARGED WATER STREET IMPROVEMENTS FOR DETAILS)

- \* CREATE PARK ENTRANCE INTO LILYDALE REGIONAL PARK
- \* GATEWAY TO REFLECT OVERALL CHARACTER OF LILYDALE REGIONAL PARK
- \* USE OF NATURAL STONE AND HISTORIC BRICKS FROM TWIN CITY BRICK YARDS
- \* VEGETATED ROADWAY MEDIAN PROVIDED TO SLOW TRAFFIC AND MARK ENTRANCE INTO PARK

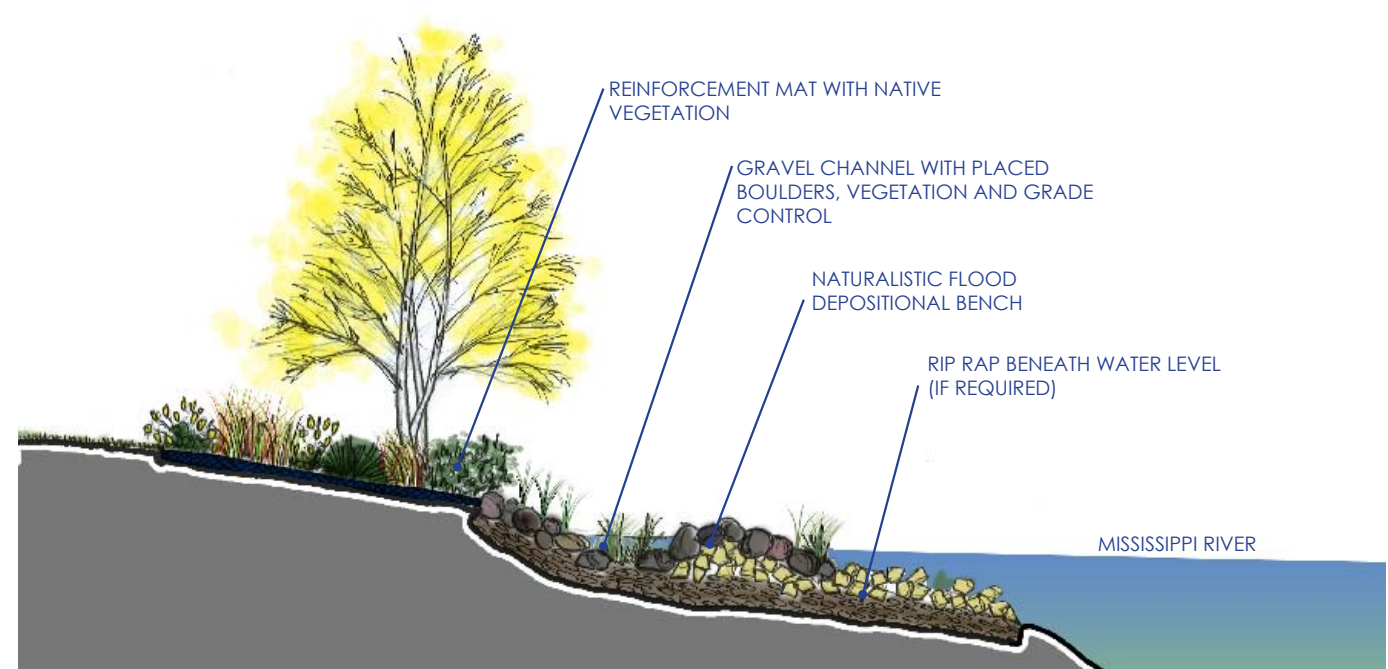
**PROPOSED WILDLIFE VIEWING AREAS**

- \* DEVELOP VIEWING AREAS ALONG PICKEREL LAKE AND THE MISSISSIPPI RIVER
- \* HIGHLIGHT DIVERSE BIRDING OPPORTUNITIES
- \* PROVIDE OPPORTUNITY TO SAFELY OBSERVE WILDLIFE IN NATURAL ENVIRONMENT
- \* REVEGETATE WITH PLANT MATERIAL THAT PROVIDE HABITAT AND FOOD SOURCE
- \* PROVIDE LOG/RECORD FOR PARK VISITORS TO RECORD AND DOCUMENT WILDLIFE OBSERVED



**MISSISSIPPI RIVERBANK RESTORATION**

- \* RESTORE MISSISSIPPI RIVERBANK TO NATURALIZED CONDITION
- \* REMOVE EXISTING BITUMINOUS AND CONCRETE ALONG SHORELINE
- \* RESTORE ENTIRE 2.5 MILES OF SHORELINE WITH EROSION PROTECTION AS NEEDED
- \* PROVIDE REGIONAL TRAIL REST AREA/PULL OFFS WITH RIVER VIEWS



**WATER STREET IMPROVEMENTS**

- \* BURY EXISTING OVERHEAD ELECTRIC LINES
- \* COLLECT BLUFF SEEPAGE IN CREEK
- \* REMOVE INVASIVE PLANT MATERIAL
- \* STRENGTHEN VISUAL CONNECTION TO THE MISSISSIPPI RIVER
- \* PROVIDE TRAIL OVERLOOKS/RESTING SPOTS

**FOSSIL GROUND ENTRANCE**  
(SEE ENLARGED WATER STREET IMPROVEMENTS FOR DETAILS)

- \* REALIGN ROAD TO ELIMINATE REGIONAL TRAIL AND ROADWAY CONFLICT
- \* DEVELOP TRAIL HEAD AT ENTRANCE TO FOSSIL GROUNDS
- \* PARKING LOT REDESIGNED TO ACCOMMODATE SCHOOL BUSES
- \* PROVIDE INTERPRETIVE SIGNAGE AND MAPS AT TRAIL HEAD
- \* SATELLITE REST ROOMS PROVIDED

**RELOCATED REGIONAL TRAIL UNDER RR**

- \* ELIMINATING EXISTING TRAIL AND ROADWAY CONFLICT
- \* REGIONAL TRAIL RELOCATED UNDER RAILROAD SWING BRIDGE
- \* REGIONAL TRAIL TO FOLLOW MISSISSIPPI RIVER

**PROPOSED BOARDWALK**

- \* PROVIDE CONNECTION TO FOSSIL GROUNDS
- \* FOLLOW RAILROAD EMBANKMENT
- \* MAINTAIN ACCESS TO ALL PARTS OF PICKEREL LAKE



**PROPOSED LAKESHORE PICNIC/ GATHERING AREA**  
(SEE ENLARGED LAKESHORE PLAN FOR DETAILS)

- \* REALIGN LILYDALE ROAD TO REMOVE PARKING AWAY FROM LAKESHORE
- \* PROVIDE PICNIC SHELTER WITH WATER AND SANITARY SERVICE
- \* SHELTER TO ACCOMMODATE SMALL GROUPS (APPROXIMATELY 50 PEOPLE)
- \* SHELTER TO REFLECT SUSTAINABLE BUILDING PRACTICES AND ARCHITECTURALLY FIT INTO NATURAL LANDSCAPE

**PICKEREL LAKESHORE TRAIL AND SHORELINE RESTORATION**

- \* TO BE CONSTRUCTED SUMMER 2009
- \* REVEGETATION OF SHORELINE WITH NATIVE PLANT MATERIALS
- \* RESTORATION OF CANOE LAUNCH
- \* CREATE FISHING ACCESS POINTS ALONG PICKEREL LAKESHORE
- \* PICNIC TABLES PROVIDED ALONG SHORELINE
- \* SPLIT RAIL FENCE PROTECTS NEWLY PLANTED SHORELINE
- \* SOFT TRAIL PROVIDED ALONG SECTION OF LAKESHORE



**EXISTING BOAT LAUNCH**

- \* RESTORE BOAT LAUNCH
- \* EXISTING PARKING LOT RE-CONFIGURED TO MORE APPROPRIATE SIZE
- \* REMOVE INVASIVE PLANT MATERIAL TO CREATE VIEWS OF BOAT LANDING FROM PARKING AND ROADWAY

**PROPOSED DOG PARK**

- \* LOCATED IN OLD LILYDALE MARINA DEMOLITION SITE
- \* DESIGNED TO UTILIZE EXISTING BOAT LAUNCH PARKING LOT (60 SPACES)
- \* DOG PARK TO BE ENTIRELY FENCED RESTRICTING ACCESS TO REST OF PARK AND MISSISSIPPI RIVER
- \* PROVIDE CONSTANT EYES ON PARK
- \* APPROXIMATELY 8 1/2 ACRES
- \* EXISTING TREE COVER PROTECTED WHERE POSSIBLE
- \* SOFT TRAILS PROVIDED FOR WALKING

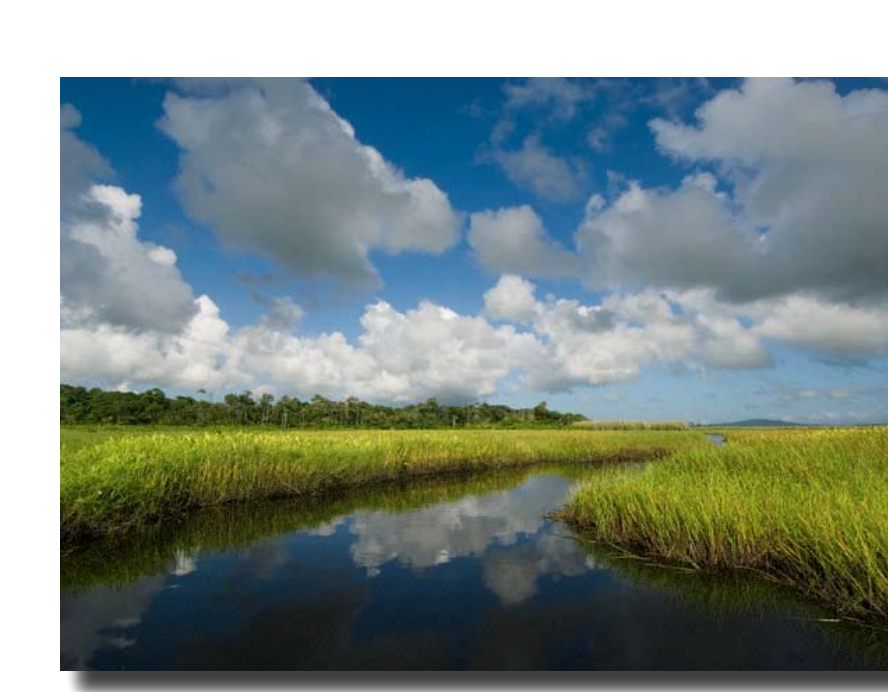


**EXISTING KAMISH DEMOLITION SITE**

- \* REMOVE EXISTING DEMOLITION SITE
- \* RESTORATION TO WETLAND WILL PROVIDE CITY WITH WETLAND BANK CREDIT WHICH CAN BE SOLD \$1-2/SF
- \* REMOVE UNNATURAL LANDFORM WITHIN EXISTING WETLAND

**PROPOSED STORM WATER TREATMENT AREA**

- \* DIVERT STORM WATER FROM IVY FALLS
- \* STORM WATER TREATED IN SERIES OF WETLANDS PRIOR TO ENTERING PICKEREL LAKE
- \* WILL PROTECT EXISTING WATER QUALITY OF PICKEREL LAKE
- \* RISK OF WATER QUALITY DETERIORATING DUE TO LARGE STORM WATER DRAINAGE AREA ENTERING PICKEREL LAKE



**LEGEND**

- EXISTING REGIONAL TRAIL
- PROPOSED REGIONAL TRAIL
- EXISTING SOFT TRAIL
- PROPOSED LAKESHORE TRAIL
- PROPOSED SOFT TRAIL
- EXISTING CONTOURS
- PROPOSED CONTOURS
- ☆ PROPOSED WILDLIFE VIEWING
- PROPOSED GROUP CAMPING

## 1 PICNIC SHELTER

The picnic shelter, located 12' above the floodplain, will provide panoramic views of Pickerel Lake, the Mississippi River and bluffs. The picnic shelter area will serve as the main activity area within the park providing parking and restroom facilities. The shelter design will reflect a sustainable building approach resulting in a structure that merges into the natural landscape of Lilydale Regional Park. Two separate structures providing space for approximately 6 - 8 picnic tables. Additional picnicking opportunities are available within the low grass prairie area.



## 2 LILYDALE ROAD REALIGNMENT AND PARKING

The proposed parking lot (80 space) and canoe access route will utilize permeable pavers reducing storm water run off into Pickerel Lake. Storm water from the parking lot and picnic shelter will be directed to infiltration basins that slowly release and filter storm water prior to it being absorbed into the existing floodplain soil. The vegetated median will help slow traffic and provide additional opportunities for storm water treatment. Trail crossings will occur in correlation with raised intersections, providing a safe crossing for pedestrians and bicyclists.



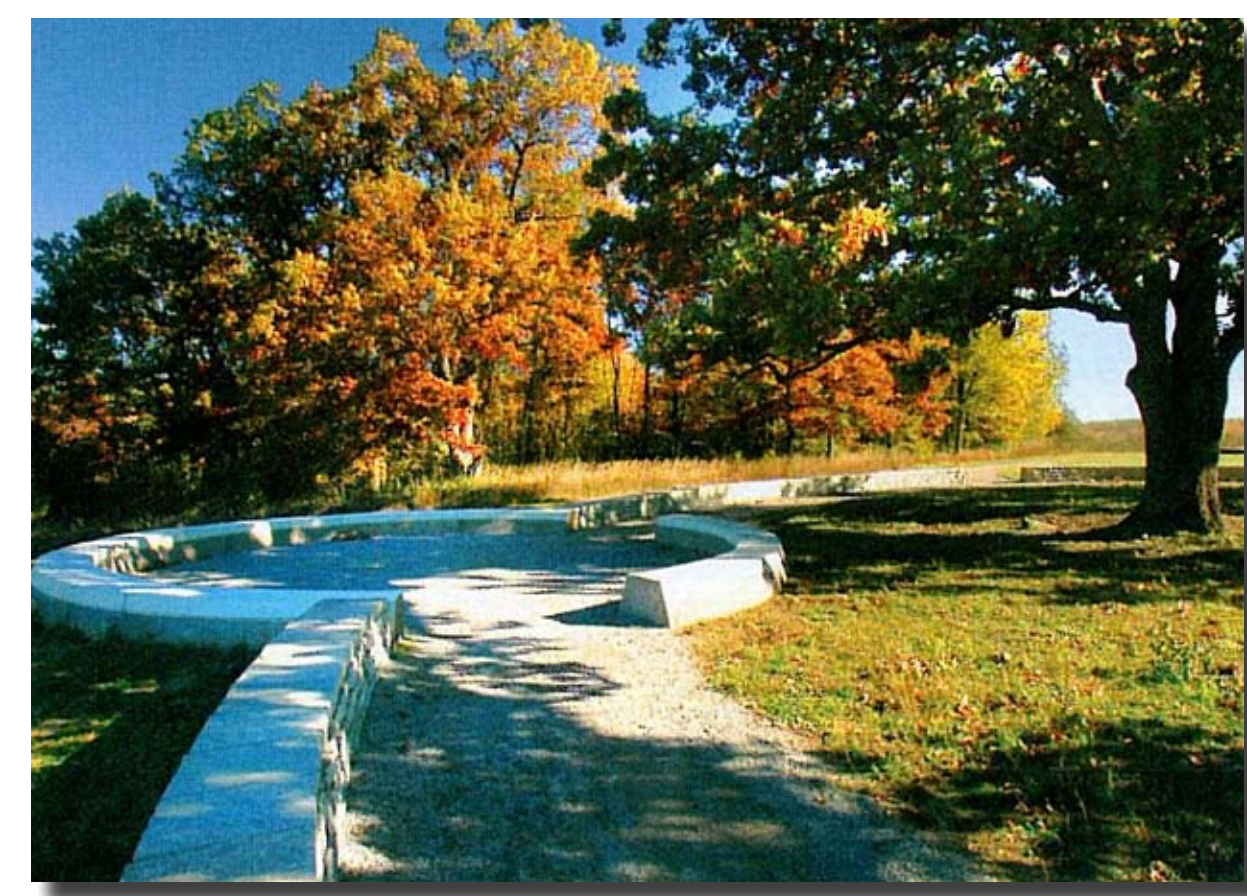
## 3 LAKESHORE GATHERING AREA

Utilizing the landform created for the picnic shelter, the lakeshore gathering area will provide an amphitheater for small groups or individuals to gather along Pickerel Lake. This gathering area will utilize natural stone and native plant materials creating a unique space along Pickerel Lake.



## 4 WILDLIFE VIEWING

Wildlife viewing areas will be constructed for visitors to observe wildlife that call Lilydale Regional Park home or use the park as a stopping ground for migration. Platforms will be constructed in sensitive areas allowing park visitors to observe wildlife in their natural habitat while still protecting the natural environment.



## 5 FISHING PIER

A fishing pier and lakeshore access points will be provided along Pickerel Lake. The fishing pier will extend towards the deeper part of the lake, providing handicap accessible fishing locations and canoe tie-ups. Lakeshore access points will be constructed Summer 2009 as part of the Pickerel Lakeshore Improvements.



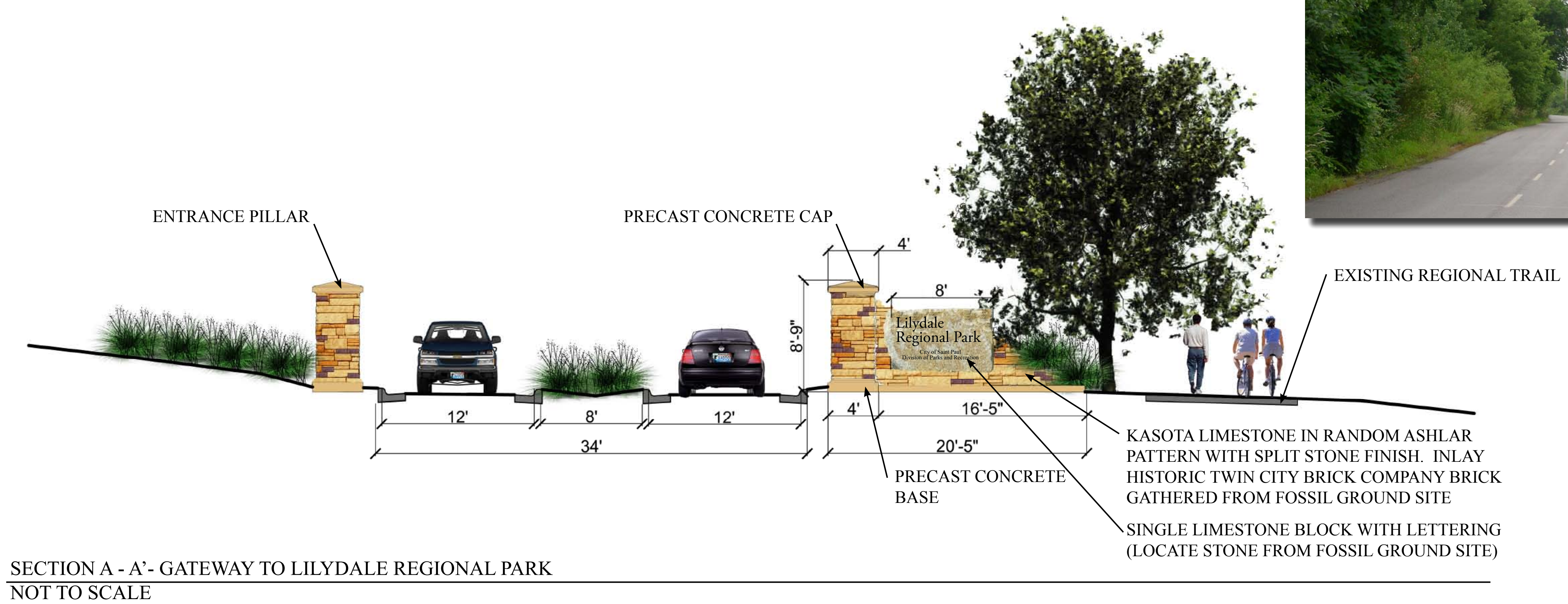
### LEGEND

- 6 RAIN GARDEN
- 7 PERMEABLE PAVERS
- 8 CANOE DROP-OFF
- 9 AMPHITHEATER
- 10 PLAZA AREA
- 11 SHORELINE FISHING ACCESS
- 12 SOFT NATURE TRAIL
- 13 GROUP CAMP SITE
- 14 REGIONAL TRAIL
- 15 LAKESHORE TRAIL

# 1 WATER STREET GATEWAY

The Water Street Gateway will create a dramatic entrance into Lilydale Regional Park. The Gateway will use local limestone and bricks from the Twin Cities Brick Company reflecting the unique character of Lilydale Regional Park as you enter from Harriet Island. Overhead power lines and invasive plant material will be removed allowing viewsheds of the Mississippi River to appear and to strengthen the relationship of the Mississippi River and Lilydale Regional Park as you enter from the existing roadway or regional trail.

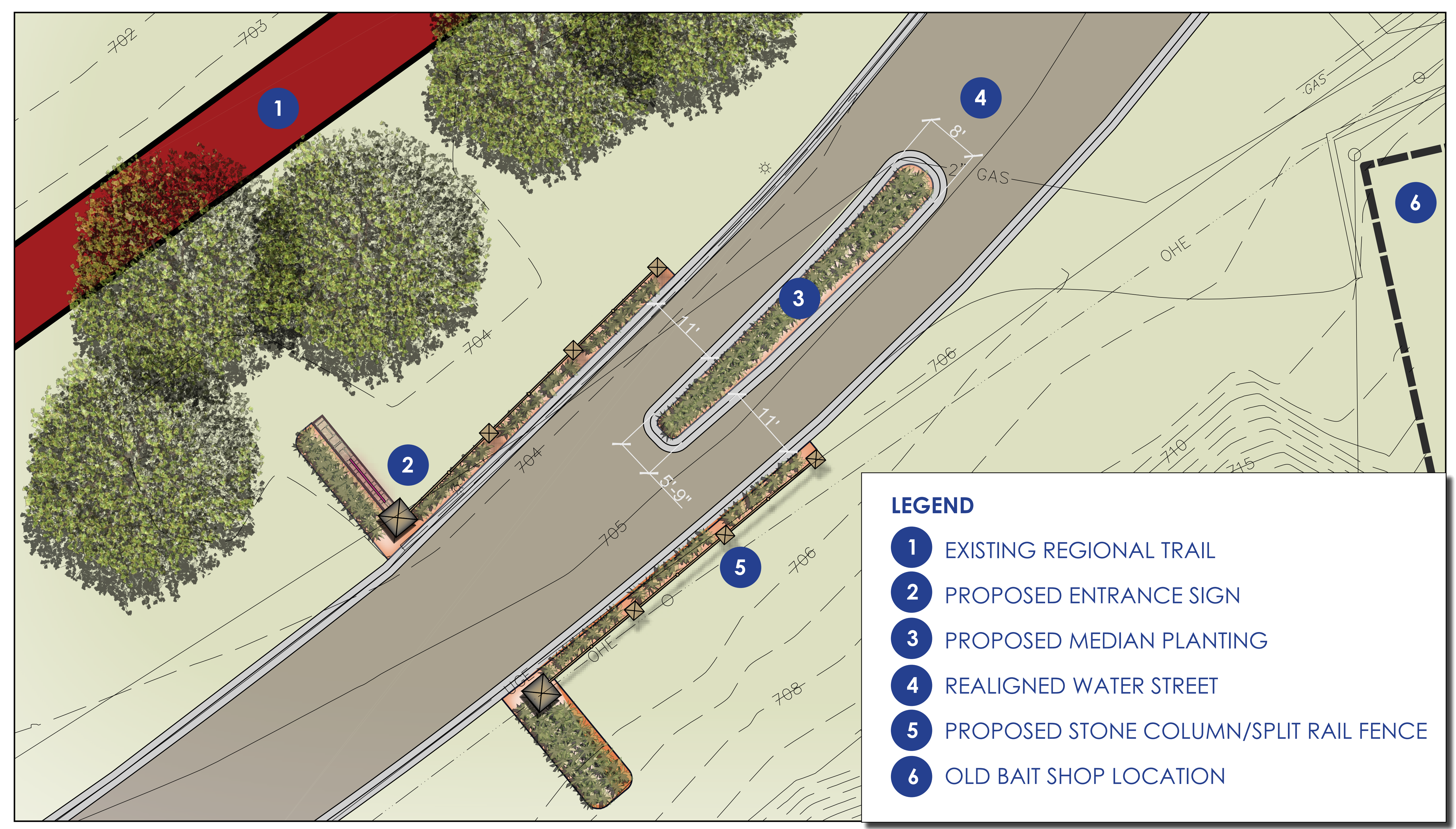
## SECTION - WATER STREET GATEWAY



## EXISTING SITE PHOTOGRAPHS



## PLAN VIEW - WATER STREET GATEWAY

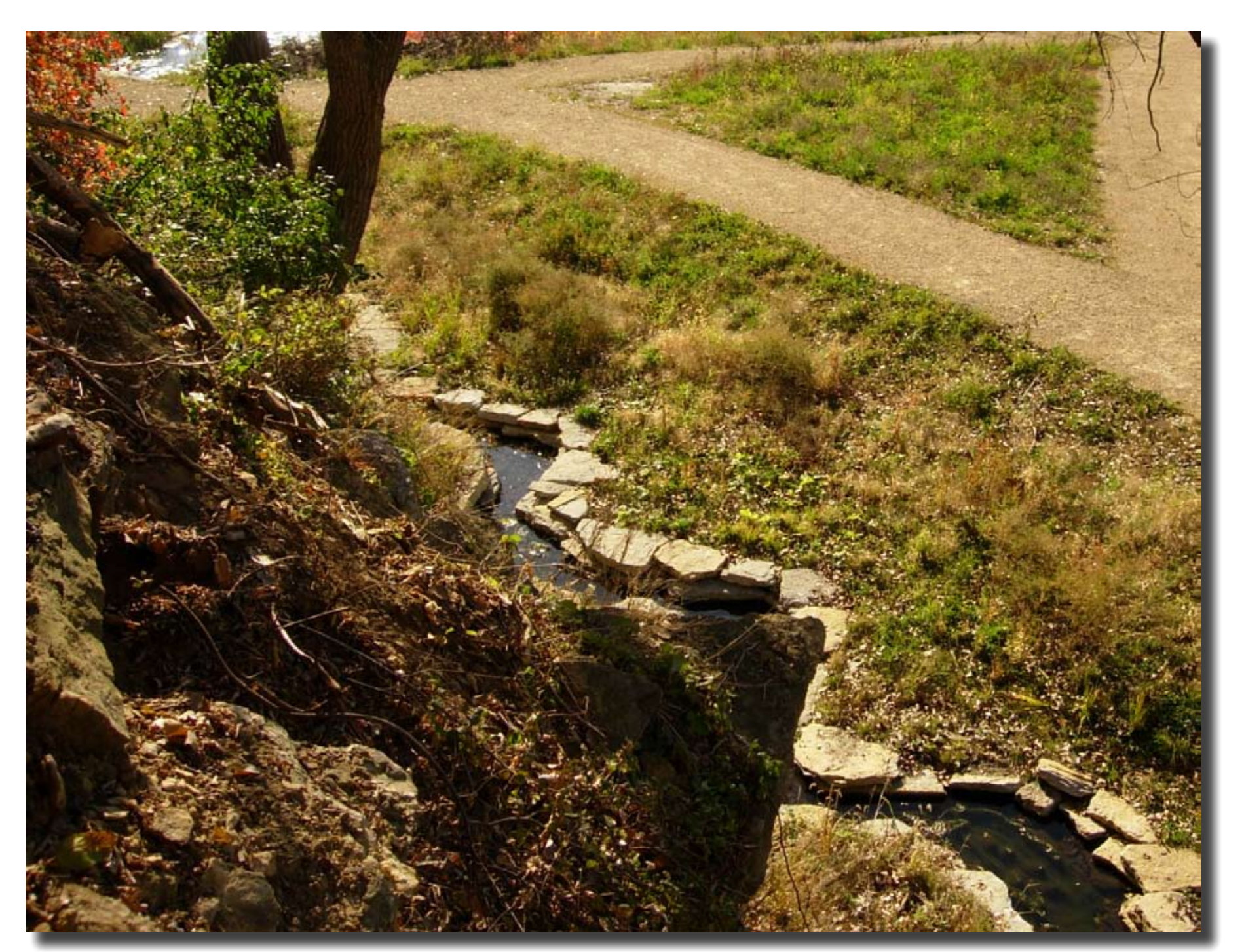


# 2 FOSSIL GROUNDS ENTRANCE AND WATER STREET IMPROVEMENTS

Water Street will be realigned to eliminate the existing regional trail and roadway conflicts that currently exists at the fossil ground entrance. The regional trail will continue along the Mississippi River, while the roadway will swing towards the fossil ground parking lot. The fossil ground parking lot will be redesigned to accommodate school bus parking and a small trail head with interpretive signage, maps and satellite rest rooms. Trail head structure to be located above floodplain elevation or have ability to be deconstructed prior to flooding.

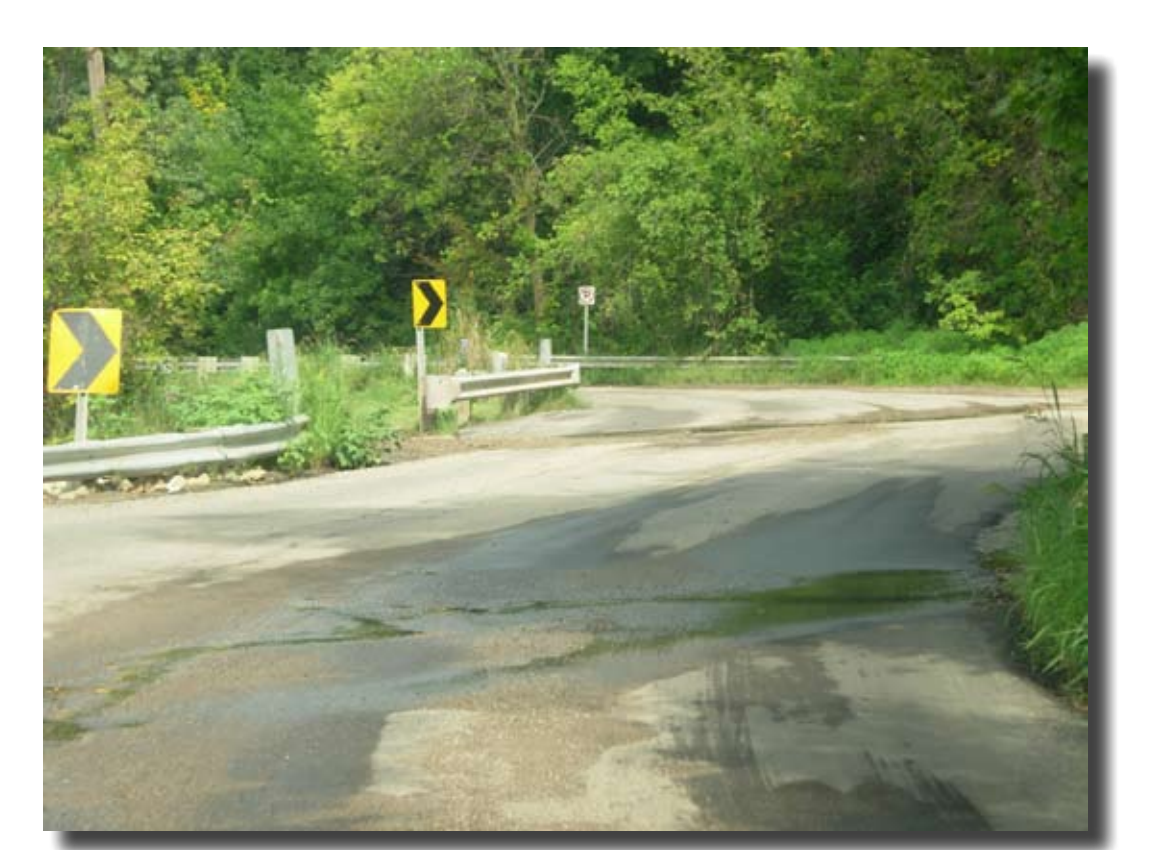
Roadway improvements include the creation of a creek bed installed along the base of the bluff. The creek will collect seepage from the bluffs and channel it to specific outlets

## PROPOSED CREEK BED



Creek bed example from Bruce Vento Nature Sanctuary. Bluff seepage is collected in limestone channel and directed to wetlands.

## EXISTING SITE PHOTOGRAPHS

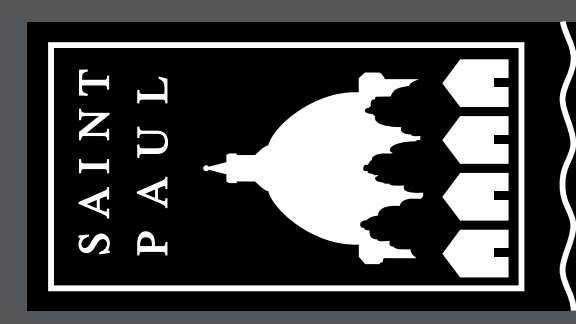


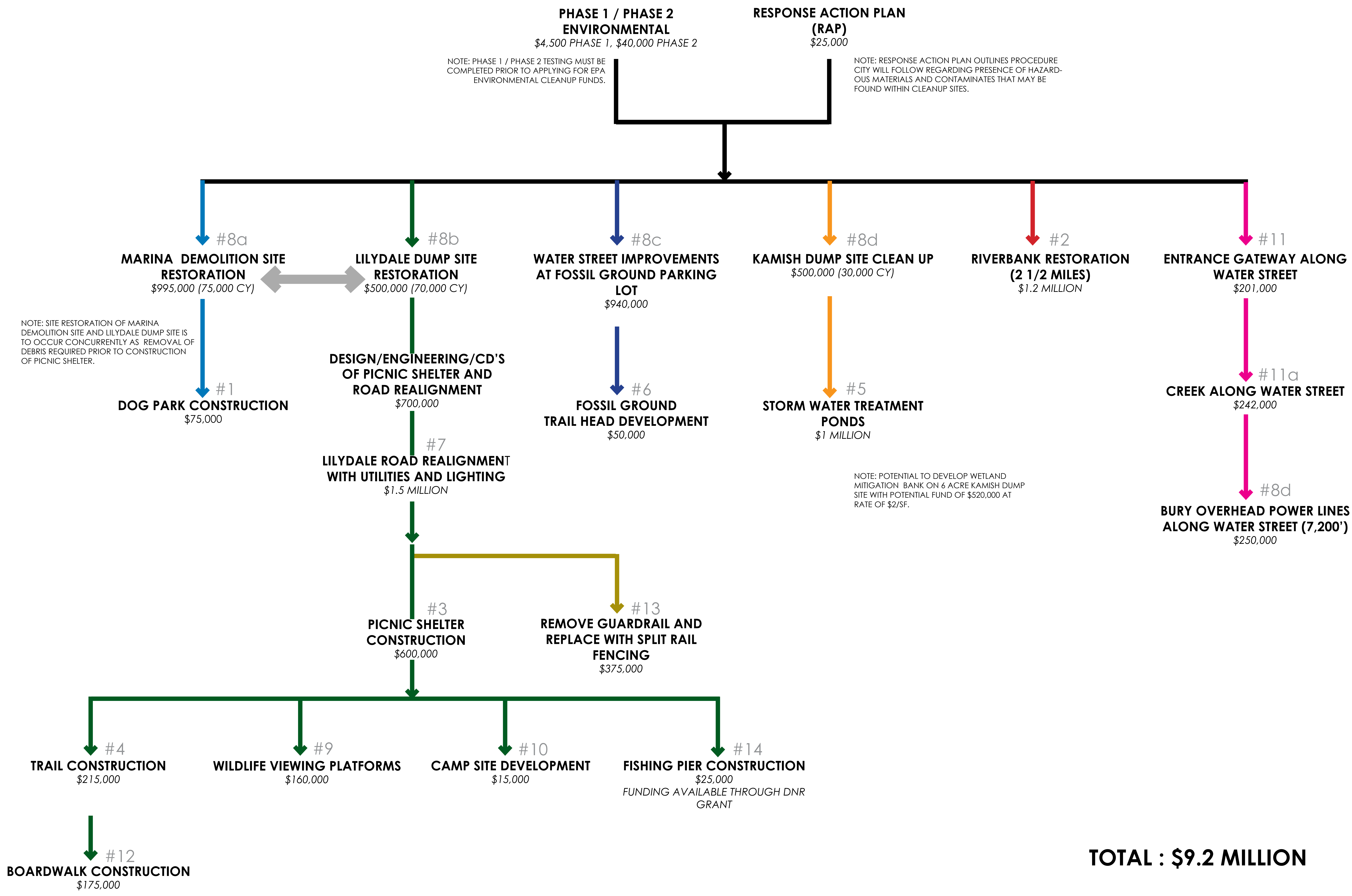
Existing roadway condition with limited site visibility and shared roadway with regional trail.



Seven interpretive signage panels currently existing along Fossil Ground Trail.

## PLAN VIEW - FOSSIL GROUND PARKING





# PHASING PLAN

LILYDALE REGIONAL PARK

CITY OF SAINT PAUL PARKS AND RECREATION DESIGN SECTION

JULY 1, 2009