CITY OF BILLINGS
COULSON PARK FINAL MASTER PLAN

PREPARED BY DHM DESIGN | MARCH 2nd, 2020

Aerial view of cliffs from Coulson Park

COULSON PARK: FINAL DRAFT MASTER PLAN

JANUARY 2020

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The City of Billings
Department of Parks, Recreation and Public Lands
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Design team members present to Parks and Recreation Board at August 14, 2019 meeting

COULSON PARK
STEERING COMMITTEE & STAKEHOLDER GROUPS

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STAKEHOLDER GROUPS:

Scott Family Trust
Downtown Billings Alliance
Billings Clinic
Riverstone Health
Billings Chamber of Commerce
Yellowstone Valley Citizens Council
Billings Trail Net
Billings Parks and Recreation Board
Friends of Billings Dog Parks
Our Montana Inc.
Yellowstone River Parks Association
Buchanan Capital Inc.
Yellowstone Historical Society
Western Heritage Center
Yellowstone County Museum
Yellowstone County Commissioners
ExxonMobil
Phillips 66
Montana Sulphur and Chemical
CHS / Cenex
Montana Dakota Utilities
Northwestern Energy
Native American Development Corporation
American Indian Higher Education Consortium
American Indian Coalition Committee
Big Sky Pepsi
Montana Department of Transportation

Main Street of Historic Coulson Townsite (photo courtesy of Western Heritage Museum, Billings, MT)

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1.1 COULSON PARK MASTER PLAN

INTRODUCTION

In the summer of 2011 an ExxonMobil oil pipeline ruptured near Laurel, MT, approximately 10 miles west of Billings, resulting in 85 miles of adversely affected natural resources along the Yellowstone River and adjoining shorelines and floodplain lands. The current site of Coulson Park was impacted by the spill resulting in the need to repair, replace, and rehabilitate natural resources affected by the oil discharged into the Yellowstone River.

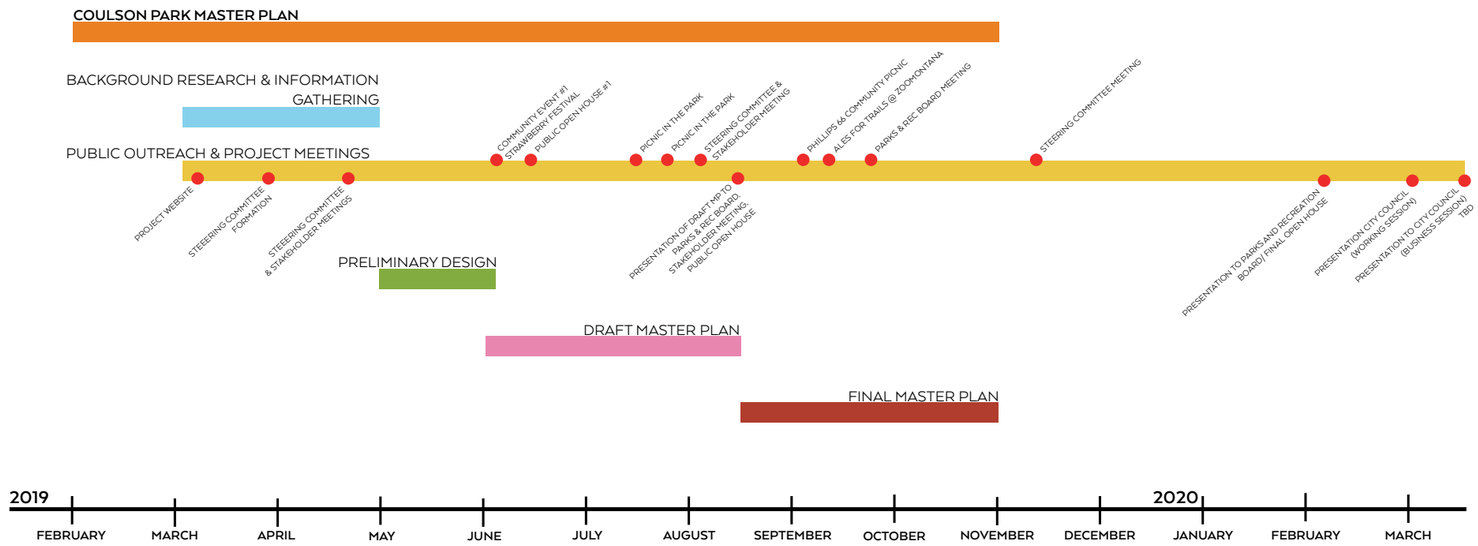
The State of Montana through the Department of Justice Natural Resource Damage Program and the U.S. Department of the Interior worked with ExxonMobil to develop a Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Assessment, issued in January 2017, which led to $9.5 million in restoration projects on the Yellowstone River. In 2017 the State of Montana created a Yellowstone River Recreation Project Advisory Committee to prioritize recreation projects in areas along the river impacted by the oil spill. The advisory committee and the State of Montana Natural Resource Damage Program prepared the Final Yellowstone River Recreation Project Priority Plan issued in May of 2018. The result of the Plan was to identify how $2.3 million in settlement funds would be appropriated to recreation human use services losses identified as general recreation activities, water based recreational activities, and loss of access to the river, river access sites, and parks. The objectives of the selected projects were to identify preferred projects to meet the restoration plan goal of providing additional opportunities to offset existing locations lost due to the spill.

In 2017 the City of Billings, working in conjunction with Big Sky Economic Development Authority, submitted a project abstract application to the Yellowstone River Recreation Project Advisory Committee and were awarded funds for the development of a master plan for Coulson Park. The City of Billings Parks and Recreation Department lead an RFP process for the master planning and community outreach efforts for Coulson Park, from which DHM Design and Stahly Engineering were selected.

The following pages document the culmination of the master planning and public outreach efforts for Coulson Park over the course of 2019 and 2020. The Final Master Plan is the first milestone in the process of re-imagining and projecting a new future for Coulson Park. The following report describes a vision and framework for review, discussion, and decision making. The objectives of the Final Master Plan are to:

- Outline the goals and vision for Coulson Park;
- Provide insight into the community outreach process and how that lead the park design;
- Showcase the Final Master Plan park design and discuss phasing opportunities

PROJECT TIMELINE



Picnic in the Park community meeting August 1st, 2019

2.1 SUMMARY OF THE MASTER PLAN

The final park master plan is a visible statement of current site conditions, future park improvements and supporting information needed to make a successful, realistic transition.

Every master planning process is unique, owing to the fact that each region, city, and park has a different story to tell. This master plan is a flexible framework for breathing life into the Coulson Park site, one rich in historical, cultural and ecological significance. Master plans are most successful when they represent a vision that brings together the concerns of invested interest groups. Together, their participation creates a ground swell of community and political support.

The completion of this master plan was possible through a robust engagement process, where multiple groups of diverse backgrounds, ages and interests came together and let it be known that they care about the future of Coulson Park. Good master plans involve the community and other stakeholders from the outset, giving the plan a legitimate base and a better chance to come to fruition. While circumstances vary from place to place, the decision to develop a master plan is often determined by the need to understand the current conditions of the park, to generate and build community interest and participation, to create a new and common vision for the parks future, and to develop a clear set of recommendations and implementation strategies.

The design committed its efforts to drawing out Billing's dream for Coulson Park, envisioning a healthy, vibrant riverfront experience for generations of community members and visitors to enjoy. From the start of the process of completing this master plan, the design team set goals for themselves, for the master plan and for everyone who was involved in the master planning process to gather behind. These goals: to re-live history; revive riverfront land use; re-connect Billings to the river; re-store riverine ecology and re-envision the gateway to Billings, comprise the ultimate vision of the master plan - a guiding document intended to help the Billings Parks and Recreation Department re-imagine the future of Coulson Park.

Coulson Park present day

Coulson Park future day

Midland Empire Society

Local Feature Stories

The Billings Gazette

SECOND SECTION

VOL. LI.—NO. 31. BILLINGS, MONTANA, SUNDAY, DECEMBER 4, 1938

MAPS YIELD FACTS ABOUT EARLY-DAY

Land Office Has Record Of First Survey Made in This Area 60 Years Ago

Chart Prepared by W. W. de Lacy in 1878 Shows Few Homes That Had Been Established North and West of Yellowstone.

By WAYNE FARLEY.

ONE of the first homesteads granted by the federal government, through the United States general land office, in the area now included as a part of Billings was to Perry W. McAdow in 1879, three years before Billings was founded.

McAdow filed March 8 on all of that portion of section 2, of 1S-26E, which lies west of the Yellowstone river, containing 457.86 acres, and which now is included as a part of the McAdow addition to the city of Billings.

Earlier that year Thomas McGirr had rites on a homestead near the present location of Huntley, which subsequently became known as the Charles O'Donnell place, and later in the same year several other early-day settlers in the region filed on various acreages.

These filings were the first possible because previous to the fall of 1878 the entire area was merely a portion of the vast, unsurveyed regions of the west.

It was not until the late summer and early fall of 1878 that the first surveys were undertaken and completed in the immediate vicinity of where Billings now stands.

The maps drawn by those first early-day surveyors, somewhat the worse for wear during frequent handling in the last 60 years, and records of homestead filings are to be found in the district land office in the federal building in Billings.

These maps and records reveal an interesting story of the settlement of the region to those familiar with them, but are somewhat forbidding to the ordinary layman.

They reveal how, as more and more people moved into eastern and south central Montana, settlements were extended to take in more and more territory, farm and grazing lands were taken up in the then isolated areas, and the white man extended his domination in an ever-widening circle to take in, finally, most of the area formerly occupied by the Indians.

Makes First Survey.

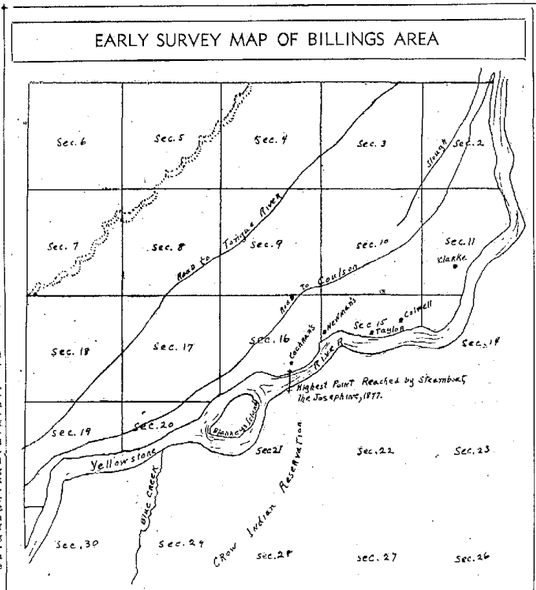
The first survey of the area was made by W. W. de Lacy, under government contract, and included portions of townships 1S-26E and 1N-26E, both of which now are partly occupied by Billings.

At that time, all of the area south of the Yellowstone river was included in the Crow Indian reservation, so de Lacy's survey of 1S-26E included only that portion of the township lying north and west of the river, a total of 8,589.60 acres and Blankley's island in the Yellowstone river, which was located at a point near the present south bridge.

Although Billings was not to be founded until three years later, in 1882, Coulson was a flourishing little settlement at the time of this first survey, and the map shows the old wagon road leading to that community. Another road, running north and almost parallel to the Coulson road, is shown leading to Tongue river.

There were few settlers in the region in 1878, and the homes of those who had settled in the township surveyed were located by small black squares (see accompanying tracing of survey map.)

De Lacy completed the survey in the fall of 1878 and sent it in to the general land office in Washington, D. C., for approval, necessary before homesteads could be filed. Although the map officially was not filed with



The first survey of the area where Billings now is located was made in 1878 by W. W. de Lacy, under government contract. The survey was of 8,589.60 acres of township 1S-26E, lying north and west of the Yellowstone river, upon which a large portion of the city of Billings now is located. The above tracing of that survey shows the locations of the houses of the few settlers then in the area. The top line of the map, the base line, passes through the point where the courthouse now is located. That portion of the township lying south and east of the river, then a part of the Crow reservation, was surveyed first in 1904 by Henry B. Davis.

BATHHOUSE BEING CONSTRUCTED AT SOUTH PARK POOL TO PROVIDE MODERN FACILITIES FOR SWIMMERS

By PAUL J. MALONE.

Billings swimmers are to get a new bathhouse at South park pool to replace the structure which has served as a change house since the pool was constructed 24 years ago.

Work on the new building has already started and it is expected to be completed in time for the opening of the 1939 swimming season. Fifteen thousand dollars will be expended for the new bathhouse and for swimming pool equipment.

This is the first major change that has been made at the pool since it was opened in 1914. In addition to the erection of the bathhouse, a circulating system is to be installed at the pool so that fresh water will fill the pool at all times. Kenneth Chrysler of the city engineer's office, supervisor of the pool work, said.

Two Change Rooms.

The new building is to be 28 feet wide and 168 feet long and will run along the south side of the pool. It will include an office and two change rooms, each being capable of accommodating 300 persons. The facilities for men and boys will be in one large room while the change room for women and girls will have separate dressing booths.

A feature of the new bathhouse is to be the continuous shower and foot bath through which all swimmers must pass before they can enter the pool. Swimmers will enter the house from the south side, receive a basket at the attendant's desk, enter the locker room, change clothes, return the basket containing their clothes to the attendant and then walk through the shower and foot bath en route to the pool. There will be separate entrances and exits for men and women.

Finished in Stucco.

The outside of the house is to be finished in stucco. The building will include rest rooms for both men and women in the east end of the structure. These will be for the use of park patrons during the summer, Chrysler said.

The works progress administration is supplying all labor for the project and a portion of the materials. The $15,000 is to be used entirely for equipment and materials.

Circling the pool and bathhouse will be an open wire fence, much the same as the one now around Athletic park on North Twenty-seventh street. There will be no bleachers installed immediately, but park officials and the city engineer's office are contemplating the erection later of some seats bordering the pool.

Pool Accommodates 500.

The 62-foot-by-170-foot pool, which is capable of accommodating 500 swimmers at one time and during the summer months handles between 500 and 1,500 swimmers a day, is not to be changed other than having the circulating system installed. The pool is nine feet deep at the east end and three feet deep at the west end. Some new diving equipment may be purchased.

Since the pool was constructed, it

(Continued on Page 6, Column 8.)

Friends Plan Rites in Honor Of Petzoldt

Testimonial rites and a dinner t recognition of their distinguish missionary service on the Crow In dian reservation will be given in hon or of Dr. and Mrs. William A. Pe zoldt of Lodge Grass on Sunday, D cember 11.

Dr. and Mrs. Petzoldt complete their thirty-fifth year of missionar work among the Indians of the re ervation last Thursday, December and during that period have rendere a valuable service to the Baptist de nomination, of which they are mem bers, and to the Indians.

The testimonial service will tak place in the Chivers memorial chap at Lodge Grass, starting at 10:30 m., with the Rev. Chester A. Bentle missionary pastor, at Crow Agenc presiding as master of ceremonies the service and at the feast whic will follow.

Studies Indian Life.

During his career with the Indian Dr. Petzoldt has made an exhausti study of Indian life and customs an has become widely known as a le turer on such subjects. He also ha gained prominence as a contributo to religious and other publication and is listed in "Who's Who in Ame ica."

Both Dr. and Mrs. Petzoldt ha spoken at national and state Bapti conventions, and in churches in eve state of the Northern Baptist conve tion. They have made Lodge Grass familiar name to Baptists.

Possessing outstanding speakin ability, they have come to be in de mand outside of denominational ci cles, and frequently speak to college and high schools, commercial organ izations, women's clubs and to pr fessional and service clubs.

Born in New York.

Born at Lowville, N. Y., on Aug. 1872, the son of Mr. and Mrs. Wi liam Frederick Petzoldt, the pastor graduated from the Marion (N. Y Collegiate institute in 1893, from th University of Rochester in 1897, an received the honorary degree of doct of divinity from Linfield college, Mc Minnville, Ore., in 1928.

He was married to Anna F. Kric of Carroll, Iowa, on April 26, 189 and was ordained to the Baptist min istry the same year.

After being ordained, he and Mr Petzoldt moved to Sheridan, Wyo where they served from 1899 to 190 then moving to Lodge Grass aft the Indians had held a council an asked for "this teacher of the Jesu Road."

When they first arrived on the re ervation, there were no Protestan Christians there. Since that time, 3 years ago, they have held more tha 700 baptisms, organized six India churches, and have seen white Bap tist churches established at Hardi Wyola and Lodge Grass as by-pr ducts of the Indian missions.

Adopted by Crow Tribe.

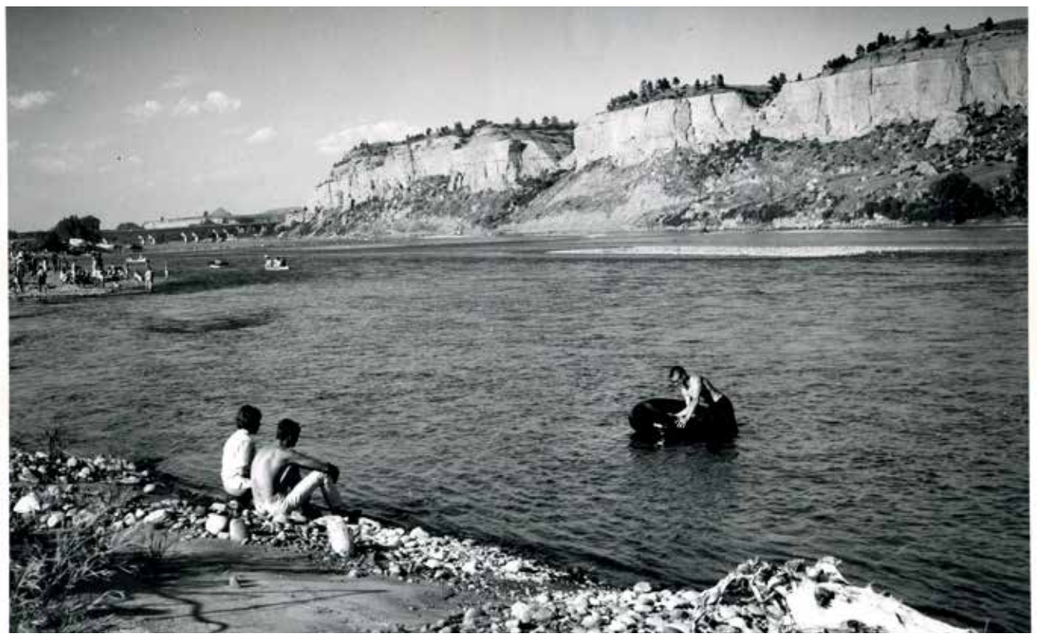
Dr. Petzoldt is the only mission ary ever appointed by the Hom Mission society as a pioneer mission ary to a tribe of Indians and continu ing with that tribe throughout h missionary career. Through the wor that he and his wife have don they have endeared themselves to th Crows and have been adopted in the tribe.

At the testimonial service are e pected representatives of the tw Baptist home societies, the federal gov ernment, the Indian office at Wash ington, D. C., the state of Montan Big Horn county, the Montana Bap tist state convention, the Burlington railroad, church, business and ser vice groups of Billings, Sheridan Wyo., Hardin, Crow Agency, St. Xa vier, Wyola and Lodge Grass, and In dians from the near-by Cheyenne re ervation.

Special music will be furnished b people from Sheridan, the Lodg

Billings Gazette 1938 (photo courtesy Western Heritage Center, Billings, MT)

Yellowstone River - December 1951 (photo courtesy Western Heritage Center, Billings, MT)



Yellowstone River - Summer 1966 (photo courtesy Western Heritage Center, Billings, MT)

2.2 MASTER PLAN GOALS

The transformation of Coulson Park represents an opportunity for Billings to re-imagine the park's future and in turn reflect the values and principles held by the community moving forward.

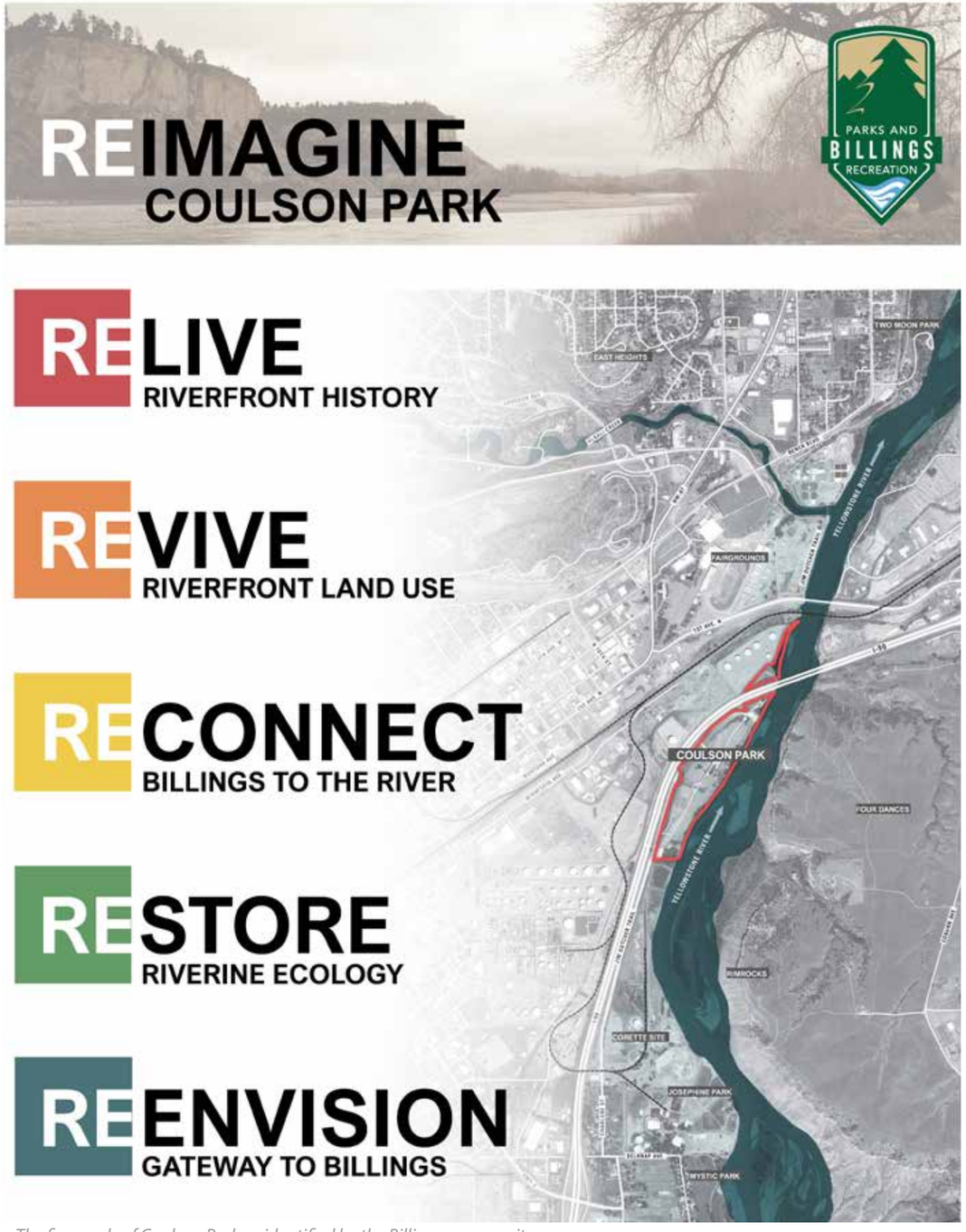
1. HISTORY
Coulson Park occupies a portion of the original town site of Coulson, which existed approximately from 1877- 1882. The park presents an opportunity to tell not just the town's story, but the history of all peoples who called the Clark's Fork Bottom and Yellowstone Valley home. There is significant interest in providing a variety of cultural and educational opportunities in the park on the banks of the infamous Yellowstone River.

2. LAND USE
The land on which the park resides has been subjected to a range of damaging activities and uses since the early 1900's. The annexation of the site into the city parks system allows for an opportunity to demonstrate the value of park space and become a recreational asset to the community at-large. A range of park amenities is presented within the master plan, ranging from passive park experiences to activity based opportunities, the majority of which respond to the river.

3. CONNECTIONS
The location of Coulson Park presents an opportunity to provide a feasible connection between downtown Billings and the Yellowstone River. Efforts are underway to strengthen bicycle and pedestrian connections to the park, leveraging the presence of the heritage trail currently passing through the site. The development of the park also presents an opportunity to consider additional access points to the river and across the river, linking up with the Four Dances Recreation Area.

4. ECOLOGY
Coulson Park provides an opportunity to improve, enhance, and expand the ecological and natural resources found along the Yellowstone River and associated floodplain. Proposed park improvements are opportunities for habitat and riparian connections and restoration efforts. The park will showcase native trees and plants, lending a high degree of natural character and aesthetic to the final park design.

5. GATEWAY
The park location is one which many people, Billings residents and travelers alike, pass by on a daily basis, with unobstructed views of the park, river, and cliffs beyond. Due to the high visibility of the site it presents the opportunity to act as a gateway into Billings and showcase the values held by the community.



The five goals of Coulson Park as identified by the Billings community

2.3 RELIVE YELLOWSTONE RIVER HISTORY

Coulson Park presents an opportunity to showcase the rich history of the site and various peoples throughout time that have called the Yellowstone Valley and Clark's Fork Bottom home.

The Coulson Park site occupies land once a part of the original town site of Coulson. In the late nineteenth century with the railroad progressing westward and economic activity expanding, merchants and traders from the Bozeman area had their sights set on settling the Clark's Fork Bottom area. With an already established river navigation system in place the Yellowstone Valley was viewed as a critical hub for hauling freight north to the Judith and Musselshell Basins, some of the most productive areas within the Montana Territory at the time. The town of Coulson was strategically located to potentially take advantage of both forms of transit and trade.

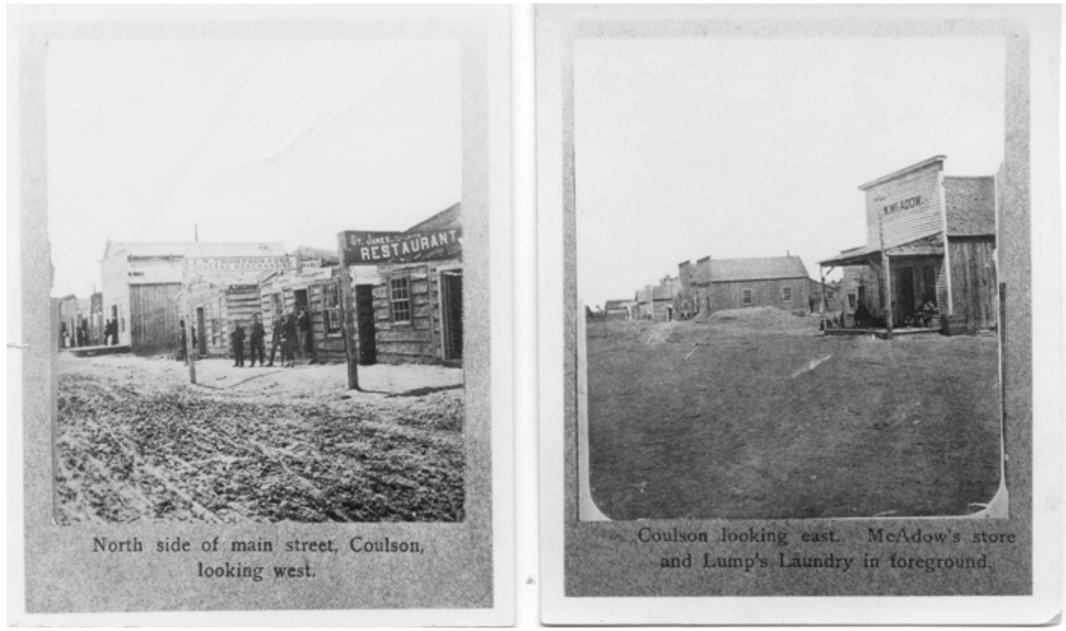
The area had long been at the crossroads of trade, dating to the centuries of barter, subsistence transactions between the region's prehistoric inhabitants. Bands of Mountain and River Crows once traversed the lands, traveling hundreds of miles to established trading centers, where they would exchange goods and materials from far away lands. Soon after these trading patterns expanded to include American and Canadian trappers during the fur trade era. This era of economic dependence and exchange of cultures lasted until more permanent settlements were established in the area, including the park namesake - the town of Coulson.

During the last third of the nineteenth century more permanent settlements started to shape the Yellowstone Valley. In 1870's various settlers were determined to establish a solidified transportation base along the banks of the Yellowstone River. Additionally the beginning of the valley's agriculture cultivation and associated activities were beginning to take root. It was the combination of market access, good quality land, and traffic flow that lead to the establishment of settlements at Canyon Creek, Young's Point, and Coulson. The majority of these communities early settlers came from Bozeman and the Gallatin Valley. These early entrepreneurs utilized existing homesteading laws and the presence of the region's military posts to leverage business ventures and opportunities in the valley.

P.W. "Bud" McAdow of Bozeman, had made money mining for gold, and used those funds to establish a wholesale business in the Gallatin Valley. His early interest in the Yellowstone focused on producing means for transporting goods and provisions to the Crow agency, recognizing that transportation was key to the settlement and development of the valley. After a series of attempts to establish a settlement along the banks of the Yellowstone, in 1877 McAdow went all in and named the location "Coulson" in honor of S.B. Coulson and the Coulson Line steamboat company. Over the next five years Coulson expanded, with historic records reporting that at it's height it had a post office, three general stores, brewery, hotel, five saloons, a saw mill, and up to 30 other buildings by 1882.

Unfortunately for the town of Coulson and its residents, when the railroad did arrive in 1882, an opportunity to claim two side by side sections two miles west lead to the establishment of Billings. For a short time the two towns existed in tandem, connected by a trolley, but over time the economic opportunities of Billings prevailed and in the end Coulson faded away.

Town of Coulson April 1882 (photo courtesy Western Heritage Center, Billings, MT)



Main Street in town of Coulson 1882 (photo courtesy Western Heritage Center, Billings, MT)

COULSON PARK RELIVE
RIVERFRONT HISTORY

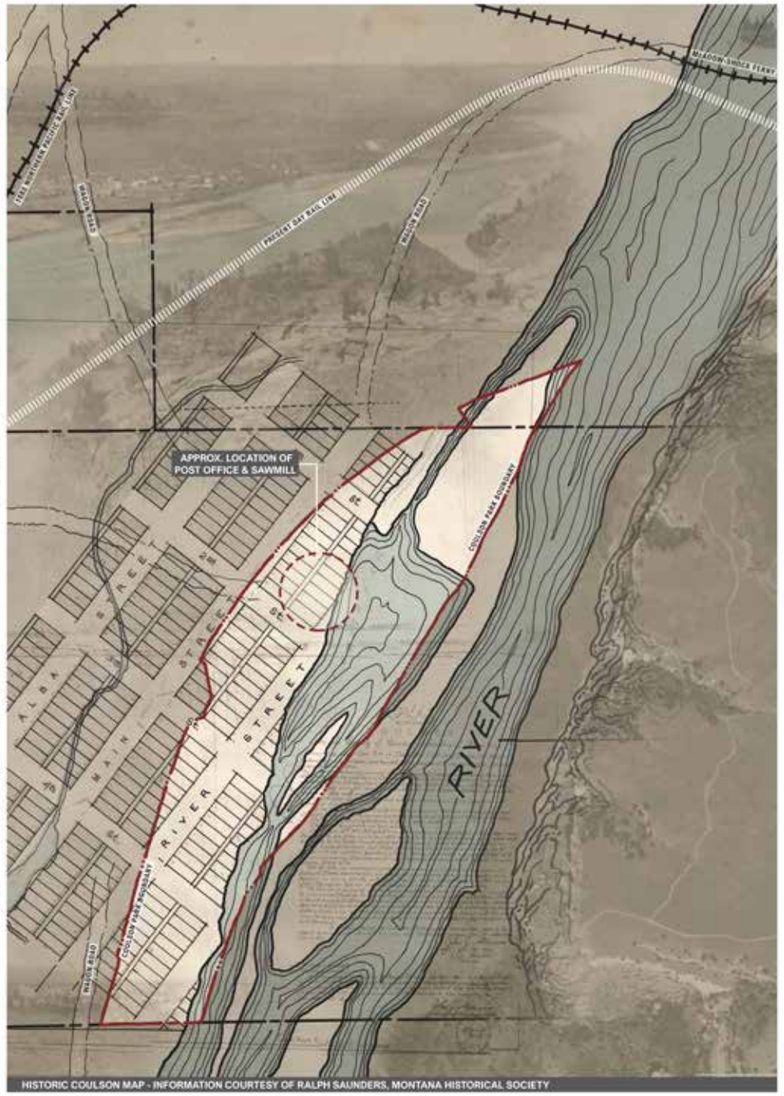
GOALS
- SHOW HISTORIC TOWN SITE WITHIN PARK
- LEVERAGE INFORMATION FROM ALL GROUPS THAT CALLED CLARK'S FORK BOTTOM HOME
- FEATURE INTERPRETIVE SIGNAGE, TIMELINE, STORYBOARDS TO FACILITATE EDUCATION

CRAM'S 1880 MAP

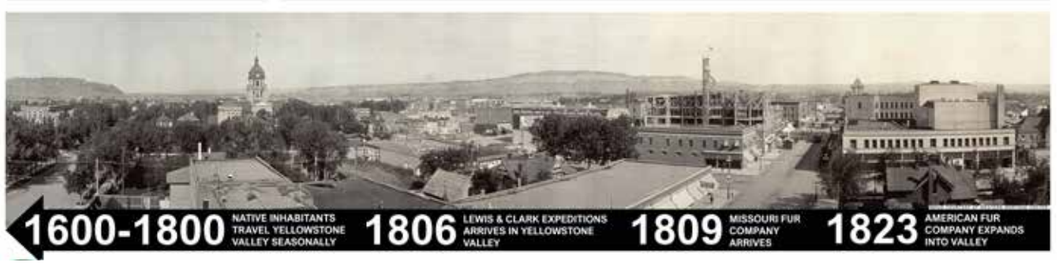

PLAT MAP OF COULSON

1882 CUSTER COUNTY EARLY BILLINGS PLAT


OLD ROAD TO COULSON DeLACY MAP



HISTORIC COULSON MAP - INFORMATION COURTESY OF RALPH SAUNDERS, MONTANA HISTORICAL SOCIETY



COULSON PARK RELIVE
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CROW RESERVATION IN MONTANA


CROW TRIBE CARRYING TIPI


STEAMER JOSEPHINE 1874


WAGON ROADS LEAD TO AND FROM COULSON

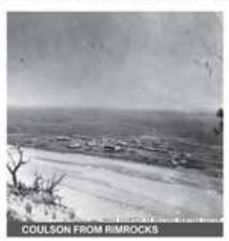

VIEW OF COULSON SETTLEMENT FROM THE NORTH


1882 COULSON STREETSCAPE


1882 COULSON MAINSTREET


1880'S COULSON MAINSTREET


FREIGHTERS OUTFIT COULSON LATE MAY 1882


COULSON FROM RIMROCKS


COULSON FROM RIMROCKS


MRS. BAUMGARTNER STANDING ON TOP OF RIMROCKS 1910


PICNIC IN COULSON


RAILROAD BRIDGE


BRIDGE CROSSING NORTH OF COULSON

Presentation boards highlighting early history of site and town of Coulson

2.4 REVIVE RIVER FRONT LAND USE

The land on which Coulson Park resides has long suffered due to industrial, mining, and other harmful utilizations of the land. Understanding these past and present day activities is critical when considering the future of Coulson Park.

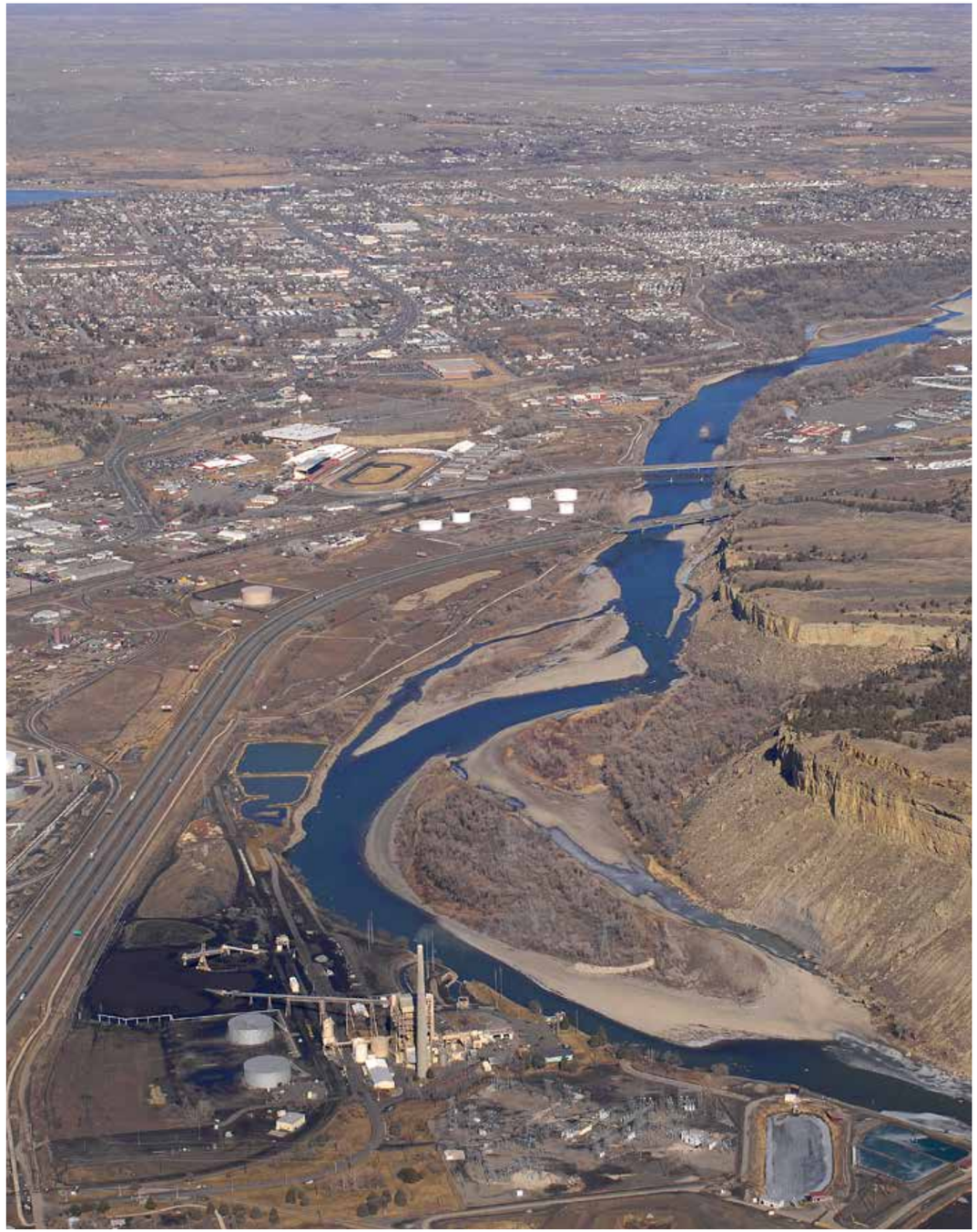
In the early twentieth century, with Billings firmly established as the regional economic and transportation center within the Yellowstone Valley, the town of Coulson and the land it occupied along the river, shifted into a pattern of industrial uses and neglect. Historical records indicate that the Yegen Brothers Power Plant was constructed on site over the course of the years spanning 1902 - 1908. The power plant was shown on the city of Billings maps until 1935, but by 1940 aerial photography shows that only the foundation of the plant remained.

In the year 1940 the Coulson site was officially used as the City of Billings landfill (though it had likely operated as a local dump for the decades leading up to this official designation). Over the course of nearly a twenty year period landfill operations took place on site. Car bodies were used as rip rap to embank the river. Garbage was brought into the site over the course of a work day and then burned at the end of the day and pushed into the river. During this time period it has also been documented that the City of Billings operated a sand and mining operation in the area. In 1959 the landfill officially closed and sometime during the 1960's became a city park.

Around the same period of time some of the surrounding industrial landowners constructed pipelines through the Coulson Park site, many of which are still active today. At present Cenex, Montana Dakota Utilities, and Phillips66 operate active pipelines within the Coulson Park boundaries. These pipelines are largely routed along Charlene Street on the westside of the park. Montana Sulphur and Chemical has a decommissioned line on site, which does at times cut through more of a central portion of the park.

The design team has met with the different pipeline company representatives to gain an understanding of some of their ongoing maintenance and operations needs on the active pipelines. Based upon these conversations and historical landfill data presented above the design team makes the following recommendations as applies to the master planning of Coulson Park:

- Map extents of former landfill; minimize excavation operations within landfill zone
- Maintain minimum 48" earth cover on top of pipelines
- Keep all trees minimum 25' distance away from pipelines
- Keep all structures minimum 50' distance away from pipelines
- Notify companies prior to any construction work



2007 aerial of Coulson Park and surrounding area (photo courtesy Western Heritage Museum, Billings, MT)

COULSON PARK REVIVE

RIVERFRONT LAND USE

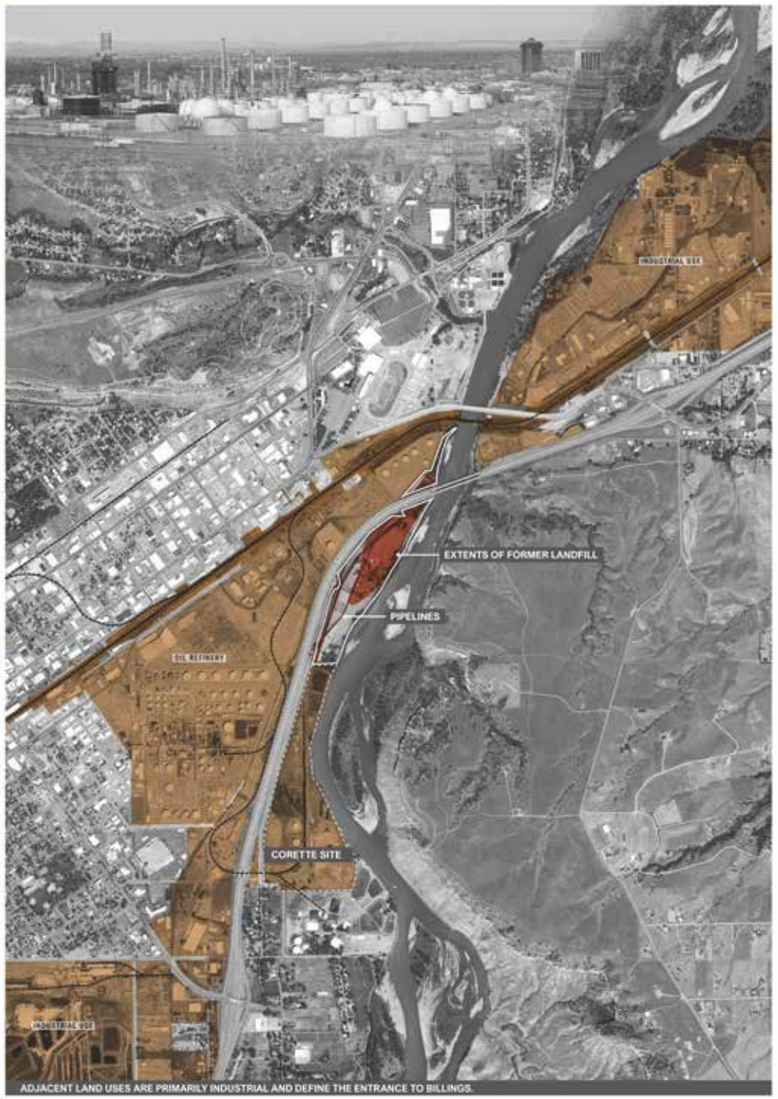
GOALS

- PROVIDE SPACE THAT IS FLEXIBLE AND RESILIENT TO CHANGE
- OFFER PARK AMENITIES FOR YEAR-ROUND USE
- PRESERVE NATURAL QUALITIES OF THE SITE


COULSON PARK SITE USED AS BILLINGS DUMP


COAL FREIGHT MOVING THROUGH BILLINGS


THE CORETTE SITE SOUTH OF COULSON PARK



ADJACENT LAND USES ARE PRIMARILY INDUSTRIAL AND DEFINE THE ENTRANCE TO BILLINGS.

COULSON PARK REVIVE

RIVERFRONT LAND USE

GOALS

- PROVIDE SPACE THAT IS FLEXIBLE AND RESILIENT TO CHANGE
- OFFER PARK AMENITIES FOR YEAR-ROUND USE
- PRESERVE NATURAL QUALITIES OF THE SITE

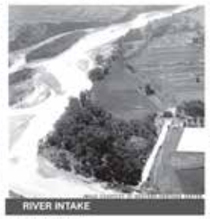

SIGN ON RIMROCKS BEYOND FAIRGROUNDS


VIEW OF FAIRGROUNDS


RIVER RECREATION IN THE 1960'S


VIEW OF FAIRGROUNDS


CORETTE FROM ABOVE


RIVER INTAKE


BILLINGS FROM ABOVE


FAIRGROUNDS FROM ABOVE


VIEW ACROSS RIVER FROM CORETTE SITE


COULSON LANDFILL 1961


AERIAL VIEW 2007

Presentation boards highlighting the past uses of park land throughout the twentieth century

2.5 RECONNECT BILLINGS TO THE RIVER

The proximity to downtown Billings presents an opportunity to establish a meaningful connection between the city and the Yellowstone River. It is also encouraged to examine potential connections across the river to the Four Dances Recreation Area and how Coulson Park can enhance the bike and pedestrian networks.

Coulson Park occupies a wedge of land positioned between the Yellowstone River to the east and I-90 to the west. While the site is highly visible from those traveling on the interstate, vehicle access to the park is challenging. Presently the park is accessed by vehicle from South 27th Street, turning north onto Garden St, west onto Belknap St, and then north onto Charlene St. Visitors continue on Charlene St past the old PPL Corette Power Plant site and eventually arrive at the southern Coulson Park parking lot. Unfortunately because of the park's unique location there are no financially feasible options available to provide an additional vehicle access point to the park. This constraint is a factor which must be considered when thinking about future park programming and activities.

Bike and pedestrian users arriving to the park are most likely to use the Jim Dutcher Heritage Trail which passes through the site. The 10-foot wide concrete paved trail provides access south to Mystic Park and north into backside of MetraPark, with further connections to Two Moon Park and up into the Billings Heights neighborhood. There are a number of additional informal unpaved trails throughout the park, in particular along the bank of the river.

One must also consider the river as a means of transportation and arrival or departure from the park site. Presently there is a boat ramp and launch for boat put-in and take-out related river activities.

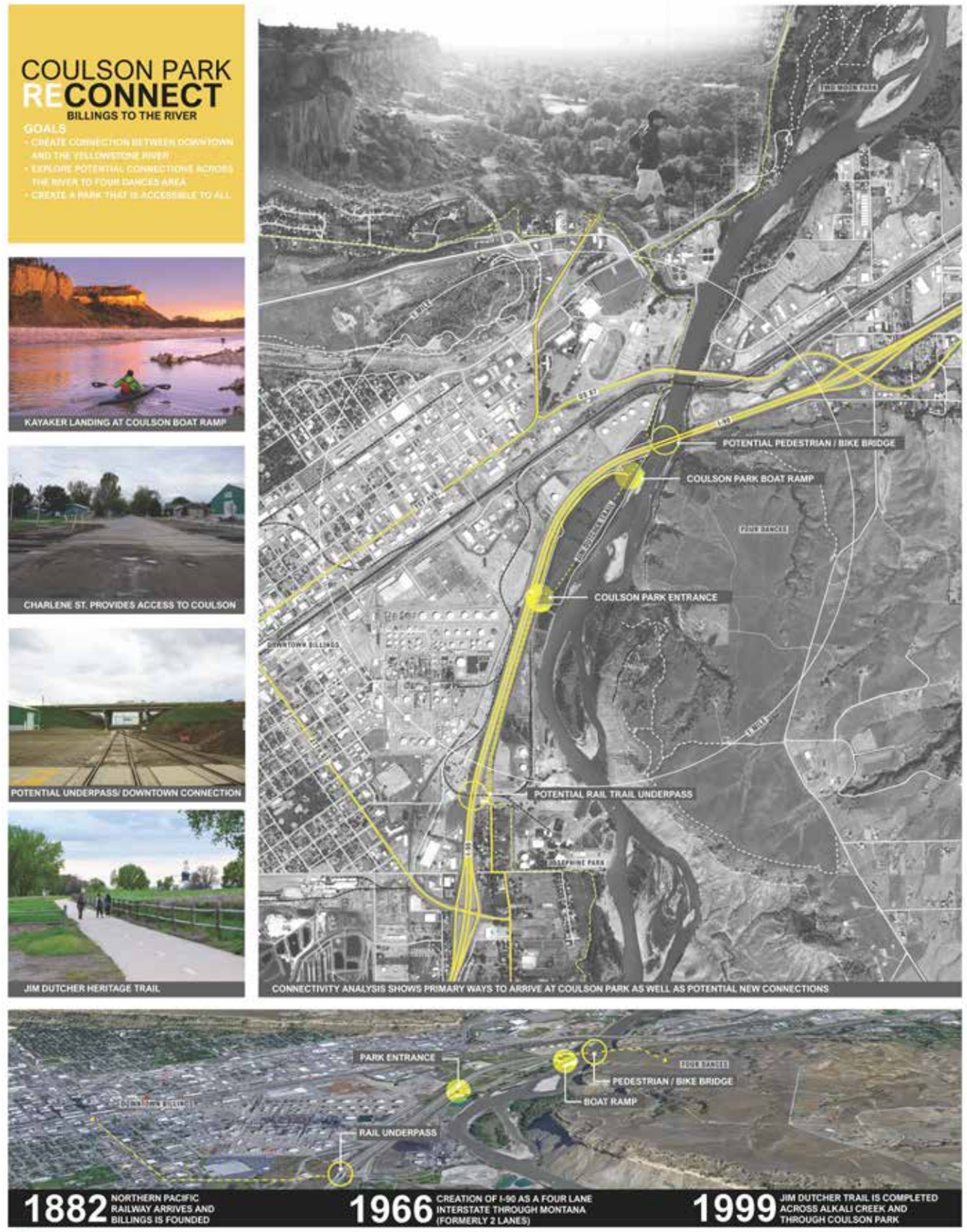
Based on some of the opportunities and constraints mentioned above, the project design team makes the following recommendations as applies to the master planning of Coulson Park:

- Continue conversation with necessary parties re: providing vehicular and/or bicycle and pedestrian access point at Lillian Ave / Erie Dr railroad spur underpass; this would provide means for those visiting Coulson Park to bypass residential neighborhood and is a more direct connection to downtown Billings

- Work with Montana Department of Transportation in design of replacement bridge over Yellowstone River; this is a near-term project for MDT and the project team strongly recommends continued conversations with them obtain a bike / ped separated bridge, linking Coulson Park with the Four Dances Recreation Area and areas east

- Support Marathon Loop trail network efforts to complete gaps of missing trail segments; completion of the loop trail will provide access to a wide range of citizens

- Provide access / connection points to Corette site for future expansion



Presentation board examining local and regional connections to Coulson Park

I-90 Bridge crossing over Yellowstone River - slated for replacement by MDT

Existing Jim Dutcher Heritage Trail supports many user different user types

Existing rail spur underpass below I-90 - new connection potential to downtown Billings

Proximity of Coulson Park and Downtown Billings

2.6 RESTORE RIPARIAN AND RIVERINE ECOLOGY

Coulson Park provides an opportunity to improve, enhance, and expand the ecological and natural resources found along the Yellowstone River and associated floodplain.

The Yellowstone River is the main hydrological feature near Coulson Park. A U.S. Geological Service (USGS) gaging station is located approximately one mile down gradient from the site. The station number is 6214500, and has been used intermittently since 1904. The Yellowstone River at the point of the gaging station (river mile 360.3) drains 11,795 square miles. The Yellowstone River has an average flow of approximately 7,000 cubic feet per second (cfs) and a base flow of 27,500 cfs. The legal description of the gaging station is Southeast ¼, Southeast ¼, Southeast¼, Section 27, Township 1 North, Range 26 East of the Montana Principle Meridian. The station has been surveyed on NAD 27 horizontal datum and NA VD 29 elevation datum.

Regional Geology

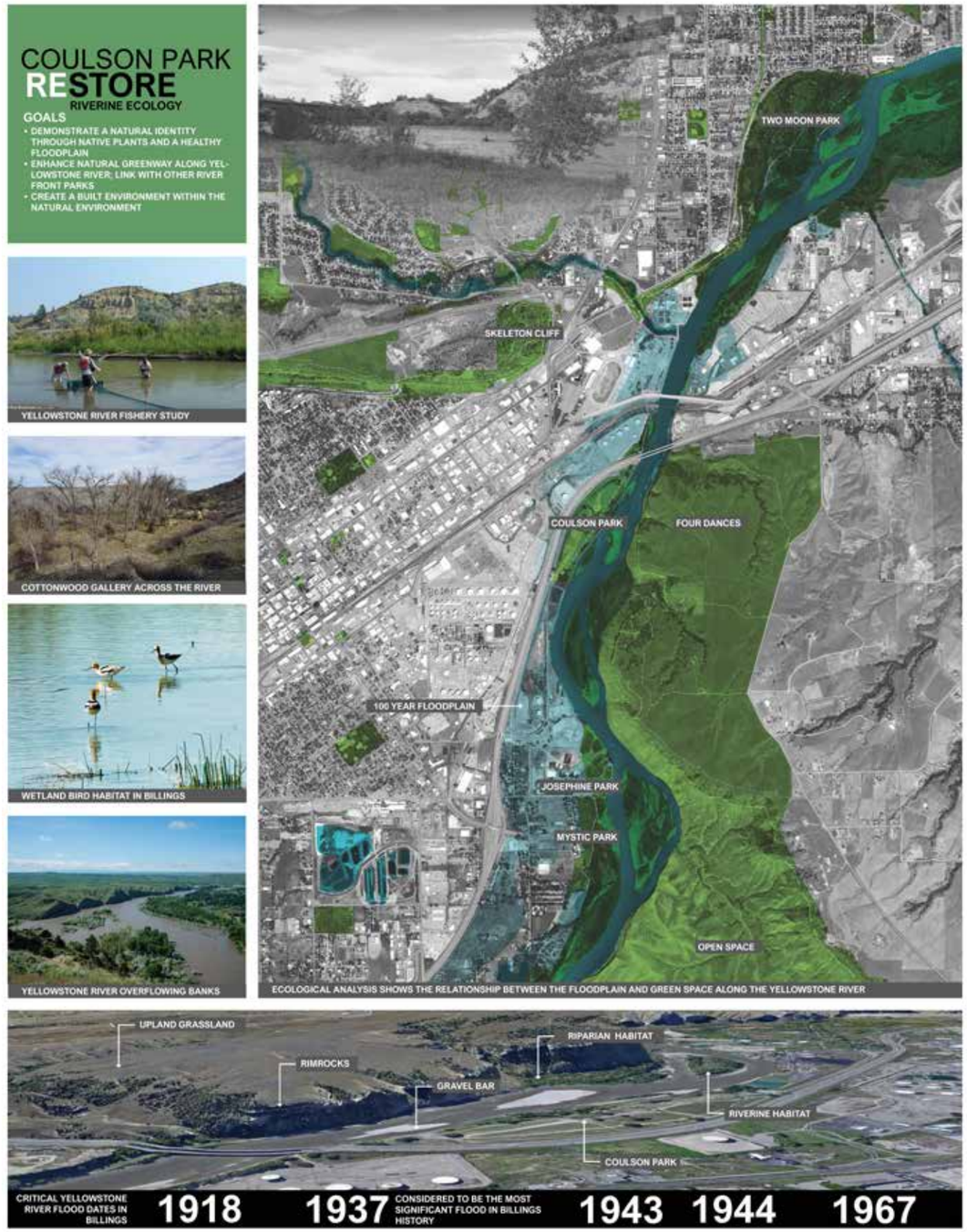
The main geologic formations that are present at Coulson Park are Quaternary Alluvium and Holocene and Pleistocene alluvial terrace gravels. These geologic units have been described on the USGS Geologic Map (Lopez, 2000) as follows:

- Quaternary Alluvium (Holocene): gravel, sand, silt, and clay along active channels of rivers, creeks, and tributaries. Coarse, well-rounded gravel restricted mainly to the Yellowstone River drainage.
- Alluvial Gravel, Terrace Level 1: (Holocene and Pleistocene): gravel underlying terraces about 1 to 20 feet above present altitude of the Yellowstone River. Mostly cobbles and pebbles with minor amounts of sand and silt. Clasts are mainly granitic igneous rocks, granitic gneiss, schist, and quartzite, with much less limestone and sandstone 20 to 40 feet thick (Gosling and Pashley, 1973).

Ecological Communities

Forested Riparian - This vegetative zone includes mature trees over 6 meters (20 feet) tall and is found mostly along the periphery and intermittently throughout the Project Area. The dominant tree species within the Project Area includes: Plains Cottonwood (Populus deltoides) and Narrowleaf Cottonwood (Populus angustifolia).

The Riparian Scrubland / Scrub Shrub Wetland zone within the Project Area is dominated by woody vegetation less than 6 m (20 feet) tall. The species include true shrubs, young trees, and trees or shrubs that are small or stunted because of environmental conditions. The most dominant vegetative class of within the Project Area, this system occurs on both sides of the river and includes the following dominant vegetation types: Sandbar willow (Salix exigua), Mountain willow (Salix monticola), Bebs willow (Salix bebbiana), Geyer willow (Salix geyeriana), Whiplash willow (Salix lucida), Wax current (Ribes cereum), Shrubby cinquefoil (Dasiphora fruticose) and Silver sage (Salvia argenea).



Presentation board highlighting surrounding parks, open spaces, and natural areas adjacent Coulson Park

Wildlife

A review of Montana Fish, Wildlife and Parks GIS database was conducted to understand wildlife usage on the property. There are no mapped habitats, game management units, or access points located within the project area. On site investigations and review of aerial imagery suggest that there is potential raptor habitat located within and adjacent to the project area. Additionally, a review of U.S. Fish and Wildlife's Information, Planning, and Consultation (IPAC System) was conducted to evaluate potential habitat for Threatened and Endangered Species (T&E). There is no mapped critical habitat located within the project area. A list of potential migratory birds that are protected under the Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act are included in Table X below.

Game fish species in the Yellowstone River within the project area include the following species: Rainbow trout (Oncorhynchus mykiss), brown trout (Salmo trutta), channel catfish (Ictalurus punctatus), smallmouth bass (Micropterus dolomieu), Sauger (Sander canadensis), and walleye (Sander vitreus).

Table X - Potential Migratory Bird Occurrence List (USFWS - Coulson Park)

Common Name	Scientific Name	Breeding Timeframe	Notes
Bald Eagle	*Haliaeetus leucocephalus*	12/1 - 08/31	This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Ace or for the potential susceptibilities in onshore areas from certain types of development or activities.
Golden Eagle	*Aquila chrysaetos*	01/01 - 08/31	This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCR) in the continental USA.
Brewer's Sparrow	*Spizella breweri*	05/15 - 08/10	This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCR) in the continental USA.
Clark's Grebe	*Aechmorphus clarkii*	01/01- 12/31	This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska
Lewis's Woodpecker	*Melanerpes lewis*	04/20 - 10/30	This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska
Pinon Jay	*Gymnohinus cyanocephalus*	02/15 - 07/15	This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska

Presentation board highlighting ecological communities and floodplain boundaries on site

Brownsfield Study Review
Phase II Environmental Review – Final
Site Lithology – Dump Site

Soil sampling was conducted as part of a Brownsfield Study on the site in 1998 / 1999. The lithology encountered in the three boreholes was fairly consistent. Lithology generally consisted of silty and clayey sand containing wood, brick, glass and metal fragments (fill) to a depth of 8 to 11 feet below ground surface (bgs) underlain by alluvial sands and gravels to 15 feet bgs. Groundwater was encountered in the alluvial sands and gravels at the depth of 9 to 11 feet bgs.

In a review of field results and analytical data, petroleum hydrocarbons were present in soil and groundwater samples collected from each monitoring well location. Dissolved metal concentrations of iron and manganese, exceeding WQB-7 secondary standards, were also detected in groundwater samples from all three wells. Additionally, upon review of PID readings and observations during drilling, the vadose zone soils appear to have lower hydrocarbon concentrations than the soils below the water table. This would suggest that the soil and dump fill materials encountered in the wells above the water table are not the contributing source to the groundwater hydrocarbon impact. According to the report, the analytical data and the measured groundwater gradient, it appeard that the petroleum hydrocarbons present in the three monitor well locations are being transported by groundwater from a source area located up-gradient of, or very near monitor well MW-3. As expected in this scenario, groundwater concentrations for BTEX/GRO decrease in monitoring wells towards the Yellowstone River. Additionally, review of the chromatogram of the groundwater sample collected from MW-3 indicates that the gasoline constituents appear to be composed of fresh, unweathered gasoline. Potential sources of the hydrocarbon impacts may be from one or more of the underground petroleum pipelines buried up-gradient of MW-3, or some other unidentified source(s).

Phase I Findings 2005

In 2005 Pioneer performed a Phase I Brownfields Site Assessment for the Coulson Park Site located in Billings, Montana. This was completed in conformance with the scope and limitations of ASTM Practice E 1527-00 (ASTM 2000a) and applicable EPA rules and guidance.
The Coulson Park Site is located over a historic city landfill and adjacent to industrial properties. Numerous known and/or potentially contaminated sites are located in close proximity to the Coulson Park Site. The following list summarizes the recognized potential adverse environmental conditions in connection with the Coulson Park Site:

- Residual hydrocarbon contaminated groundwater and soils along the Conoco Phillips pipeline leak site;
- Potential for contaminated groundwater to migrate from the up-gradient sites to and across the Coulson Park Site;
- Potential for unknown pockets of contamination to exist in the historic landfill debris;
- Potential unknown leaks or spills of petroleum hydrocarbons along pipelines, which travel through the Coulson Park Site;
- Potential for landfill debris to surface in areas with inadequate soil cap and pose health and or safety risks;
- Potential for contaminated groundwater seepage to surface along the bank of the Coulson Park Site; and
- Potential for the surface water quality to pose a health risk along the side channel to be degraded from the historic activities at the Coulson Park Site and/or up-gradient properties.

Bank Erosion Potential

Bank erodibility factors and hazard ratings have been identified by Rosgen (1996) (Appendix E). Streambank erodibility factors include:

- Bank Height vs. Backfill Depth
- Bank Angle
- Density of Roots, Bank Surface Protection, Percent of Total Bank Height with Roots
- Soil Stratification
- Particle Size

With the exception of a limited area with a low bank angle and small areas with significant vegetation, the streambank along Coulson Park exhibits high or high/moderate erosion potential in all categories and needs protection.

Aerial of the Yellowstone River

Conclusions

Based on the findings from the Phase I and Phase II study's, and according to the finding opinion from Pioneer, the Coulson Park Site may contain any or all of the potential adverse environmental conditions listed in their Phase I report.

The research that was conducted by Pioneer indicates that known adverse environmental conditions caused by the pipeline leak have been monitored and the data indicates improved groundwater quality in conjunction with the known hydrocarbon leak; however, non-hydrocarbon analytes such as nitrate/nitrite, sulfate, ammonia, phosphorus, and heavy metals may continue to be present at the site and should be evaluated to determine if the concentration level of these analytes pose any risks to the environment and/or public health and safety. In addition, due to presence of nitrate/nitrite, sulfate, and ammonia in previous groundwater seepage samples and the nature of up gradient property uses, Pioneer recommended any future sampling of groundwater seepage along the eastern bank of Coulson Park should include analysis for coliform.

The bank of the Yellowstone River adjacent to Coulson Park has experienced erosion. Changes in the Yellowstone River over time have resulted both from natural flood events and the activities of man. The erosion has resulted in loss of park area and the exposure of fill from the historic Billings landfill. It is recommended that the bank be protected with rip-rap to prevent further erosion.

Restoration Concept

The Project Area restoration concept focuses on two main ecologic communities, riparian and wetland. For the purpose of this report and based on stakeholder goals, upland communities are reserved for future restoration opportunities. The surveyed riparian and wetland communities are recommended for preservation, enhancement or creation.

- Preservation - The protection of intact and functioning wetland or riparian habitat through ecologic and landscape planning and site development.
- Enhancement - The restoration of partially functioning healthy wetlands and riparian areas. This can include noxious weed elimination, planting, seeding, and other restoration techniques.
- Creation - Identifying and re-establishing areas that are heavily degraded but have the opportunity due to location and surrounding vegetation for full restoration activities resulting in the creation of a new wetland or riparian area.

These opportunities are mapped on and shown on page 15. All priorities and decisions about restoration actions should be guided by stakeholder goals and values.

Riparian Restoration Opportunities

As discussed in the existing conditions section, the health and quality of the riparian environment within the Project Area is good.

Riparian Preservation

Riparian preservation includes developing a regular monitoring and maintenance plan to preserve the existing high quality riparian habitat. Monitoring noxious and native vegetation will preserve and sustain current riparian conditions. By limiting access to sensitive areas and minimizing disturbance by directing human traffic through way-finding and the creation of designated, formalized paths can greatly reduce impact to these areas.

Riparian Enhancement

Riparian enhancement will improve exiting conditions to increase habitat value. This is done through the development and implementation of a weed management plan to control noxious vegetation, identifying aboricultural maintenance needs/plans and increasing plant diversity through planting and seeding. The resulting enhancement will provide increased habitat value for wildlife and improve overall ecological conditions.

Riparian Creation

Riparian creation is the most intensive of the three types of restoration. This involves grading the topography to create elevations with the appropriate available water to support native riparian vegetation plantings. Areas identified within the report are immediately adjacent to the river bank and are located in close proximity to the river water table. Areas identified for bank stabilization as part of river improvements are ideal locations for this recommended intervention as bank stabilization and riparian creation are both interventions with overlapping goals.

Recreationalists enjoying the Yellowstone River

2.7 RE-ENVISION THE GATEWAY TO BILLINGS

Coulson Park provides an opportunity to act as an eastern gateway into Billings, and showcase community values and principles as they relate to recreation and natural amenities within the City parks system.

Coulson Park is approximately 56 acres in total size, wedged between the Yellowstone River to the east and northeast and Interstate 90 to the west and northwest. To the south it is bordered by the former Corette Power Plant site. It is designated a community park within the Billings Parks and Recreation Department system. A park of this size is meant to meet community based recreational needs and provide recreational opportunities to a range of user types, while also preserving unique landscapes and open spaces.

The park is undeveloped except for two vault restrooms, located in the central portion of the property, and a billboard sign, located next to the interstate in the northern portion of the site. A boat ramp / launch is also located at the north end of site, just prior to the interstate bridge river crossing. Several underground pipelines transverse the western portion of the site, and a series of unimproved roads criss-cross the park property. The site is fairly level with a gentle slope down to the northeast. The park supports grass cover and scattered tree areas. The banks along the river shore line are moderately to deeply eroded and range in height from a few feet in the northern portion of the park to approximately 8 feet in the southern portion. A large portion of Coulson Park, approximately 44 acres, is within the 100-year floodplain as mapped by the Federal Emergency Management Act (FEMA). The areas outside of the floodplain run up a central spine of land within the park, and as a result can be more fully developed as this land is not subject to floodplain regulations.

Due the high visibility of the site from the interstate there is an excellent opportunity to showcase the community's values as it relates to recreation and natural amenities. It offers the community an opportunity to highlight the many different cultures present in Billings and provide education and learning opportunities on a range of subjects from history to the environment. Based on some of the opportunities and constraints mentioned above, the project design team makes the following recommendations as applies to the master planning of Coulson Park:

- Activate the park with a mix of programming to meet a range of different user types and user groups; reference 2017 Parks and Recreation Comprehensive Master Plan to understand what types of amenities are missing from the parks systems and what the community desires in terms of potential facilities

- Improve river access through additional trails and other bank improvements to facilitate a variety of river based activities or means for enjoying the river

- Develop Coulson Park in manner to act as an entry gateway into Billings

Aerial view of Coulson Park, May 2019

Aerial view of Coulson Park, May 2019

Aerial view of Coulson Park, May 2019

COULSON PARK PRESENT DAY

PRESENT DAY DIAGRAM OF COULSON PARK INDICATED BOTH OPPORTUNITIES AND CONSTRAINTS THAT WILL EFFECT THE DESIGN MOVING FORWARD

Presentation boards highlighting current park site conditions and uses

3.1 COMMUNITY OUTREACH

At the outset of the project the design team, along with the City of Billings Parks and Recreation Department, have embraced an open dialogue with the community and developed a design that is responsive to diverse public needs and desires.

At the outset of the project the design team, along with the City of Billings Parks and Recreation Department, have embraced an open and robust dialogue with the community and developed a design that is responsive to diverse public needs and desires. The team has developed the design of the Master Plan around how the programs can best service the community in order to activate the park for current and future generations. In order to align the community's vision with the final plan, four Draft Master Plan options were presented to the public for transparent and open feedback.

Working with the Parks and Recreation Department team a Coulson Park Steering Committee was formed at the beginning of a project to provide focused guidance and strategic direction throughout the course of the project. Key stakeholder groups and organizations were identified and invited to a series of park design discussions over the course of 2019. It was critical to the project team, and the City, that the stakeholders represent a wide range of community interests so that all visions and needs could be captured and incorporated into the final design.

The project team also engaged with the community directly through five (5) Steering Committee and Stakeholder Group meetings, six (6) public open houses, and three (3) local community events. Additionally a project website was established, and regularly updated, to contain all relevant project design information and exhibits for those that were unable to attend the open houses or be engaged with at a community event. As a result 1,951 people, 65% from Montana cities such as Bozeman, Helena, Red Lodge, Missoula, and Butte, and 50% specifically from Billings viewed the website to learn more about the park. Two on-line surveys were developed to provide additional feedback during the Preliminary Design and Draft Master Plan phases to reach a wider audience and user groups within Billings and beyond. The first survey posted on June 7th, 2019 resulted in 34 responses, and the second survey posted on July 30th, 2019 resulted in 118 responses.

These public outreach efforts made the future of Coulson Park a reality. The following list represents the Coulson Park meetings, events, and surveys the community participated in over the duration of the park master planning process:

2019	MEETING/ EVENT	# OF PEOPLE	# OF COMMENTS
April 18th & 19th	Master Plan Kickoff (Steering Committee @ Stakeholder Group	36	36
June 7th	Steering Committee & Stakeholder Group (Preliminary Design options presented)	30	30
June 7th	Opportunities & Constraints survey posted to website		
June 8th	Downtown Billings Strawberry Festival (Open to General Public, Preliminary Design options presented)	500+	75
June 13th	Public Open House (Preliminary Design options presented)	15	12
July 25th	Picnic in the Park (Draft MP Design options presented)	12	12
July 26th	Picnic in the Park (Draft MP Design options presented)	12	12
July 30th	Design Options survey posted to website		
August 1st	Steering Committee & Stakeholder Groups, Picnic in the Park (Draft MP Design options presented)	45	35
August 14th	Parks & Rec. Board Meeting (Public), Stakeholder Group Meeting, Public Open House	50	25
September 5th	Steering Committee & Stakeholder Group Meeting, Phillips 66 Community Picnic	250+	50
September 6th	Ales for Trails @ ZooMontana	500+	100
September 11th	Parks & Rec. Board (Open to General Public)		
November 13th	Steering Commitee Meeting	12	12
2020			
February 4th	Public Open House	44	27
February 12th	Parks & Rec. Board Meeting (Open to General Public)	20	12
March 2nd	Billings City Council Presentation - Working Session (Open to General Public)	TBD	TBD

Master Planning Kickoff, April 18th, 2019

View of the Sacrifice Cliffs from Coulson Park site

Coulson Park Public Open House, June 13th, 2019

Image boards used to determine desired park programs

Downtown Billings Strawberry Festival, June 8th, 2019

Goals for the future park site, presented at the Public Open House on June 13th, 2019

3.2 PRELIMINARY DESIGN

Early discussions in the design process for Coulson Park focused on the types of programming desired at the site, level of activity, and character of the improvements.

After the April 18th and 19th, 2019 Kickoff meeting with the Billings Parks and Recreation team, Stakeholders, and Steering Committee the design team started the Preliminary Design Process through a survey asking general questions about current uses within the park and future programmatic priorities. The results, based on 34 responses shown in graph form on the right, provided direction in three key areas:

- Pedestrian, bicycle, and river access users
- Improved vehicular circulation and access
- Active and passive recreational uses

With these concepts the design team began to collect character imagery and generate diagrams with preliminary ideas that drove the overall spatial programming and layout of the park site. The programs were layered with known site constraints and opportunities including the existing floodplain, underground pipelines, access limitations, and historic uses of the site.

- Program "A": Active Program

The Active Program space focused on increasing recreational opportunities throughout the middle core sections of the park with vegetative screening along Charlene Street and the river front area. Active uses such as a bike park, dog park, bouldering areas, sports courts, rope course, rock climbing, youth and tot lot playgrounds were introduced as options to activate the spaces. Access throughout the park was increased with the placement of four parking and/or drop off areas connected by an interior trail network. River access points at the north and south ends of the park provide boat, rescue, and swimming entrances. Terraced seating along the river provides visual and passive opportunities at multiple locations. A central event space provided opportunity for larger gatherings, community activities, or historical interpretations.

- Program "B": Passive Program

The Passive program focuses on maintaining a naturalized, passive program developed in three layers. The first layer is a screening and buffer layer running parallel to Charlene Street, moving into vegetated open space, then a riparian forest along the riverfront. An interior trail network connected the River South Node to the River North node and with a larger multi-modal trail that tied into the southern trail head. Focus was made on developing vegetative screening, upland grasslands, and maintaining more natural systems throughout the park for passive uses.

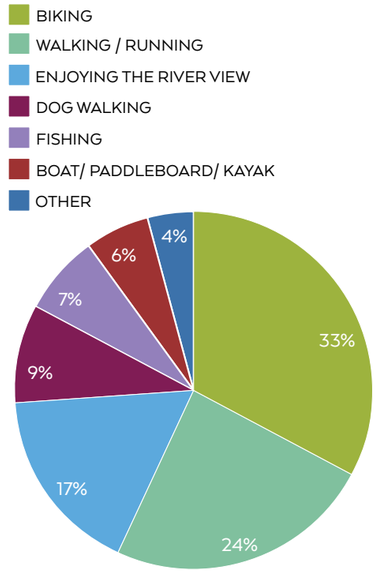
- Program "C": Hybrid Program Active Program

The Hybrid Program, which was the preferred program by the community, was a unique balance between the Active and Passive programs. Large systems of active recreational uses were integrated within the expanses of open and naturalized spaces. This allowed the program to focus on developing a natural buffer between Charlene Street and increase habitat areas along the river front while providing diverse uses throughout the park. Three parking and/or drop off areas were placed at key entry points along Charlene to increase all-age access to nodes such as the River South and North nodes, and the central event space. Pedestrian and bicycle systems were developed through an internal trail system linking the northern and southern areas, with a wider multi-modal path connecting the exiting trail system to the future bike and pedestrian bridge proposed along Interstate 90.

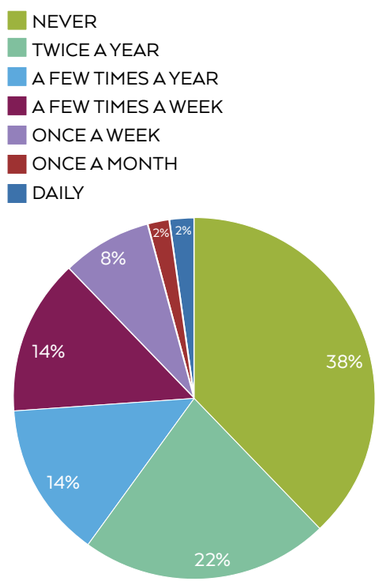
The three diagrams, along with supplementary photo boards and outreach surveys were brought to the annual Strawberry Festival on June 8th, 2019, and the June 13th Public Open House. The results of the outreach discussions resulted in a strong preference for the Hybrid Program. Within each concept there was a resounding need for specific programs such as a dog park, bike park, natural play areas, and larger gathering spaces for arts, history, and culture. Furthermore the design team was able to gain insight on how to address and plan for passive use programming throughout the park that would maintain views to the Yellowstone River and allow better access through the riparian corridor.

Downtown Billings Strawberry Festival, June 8th, 2019

HOW DO YOU CURRENTLY USE THE PARK?



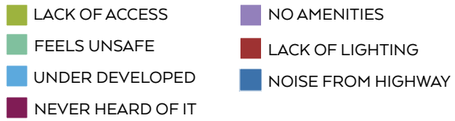
HOW OFTEN DO YOU USE THE PARK?

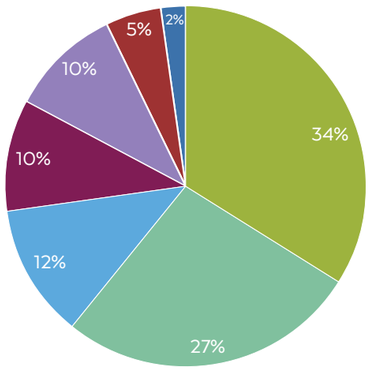


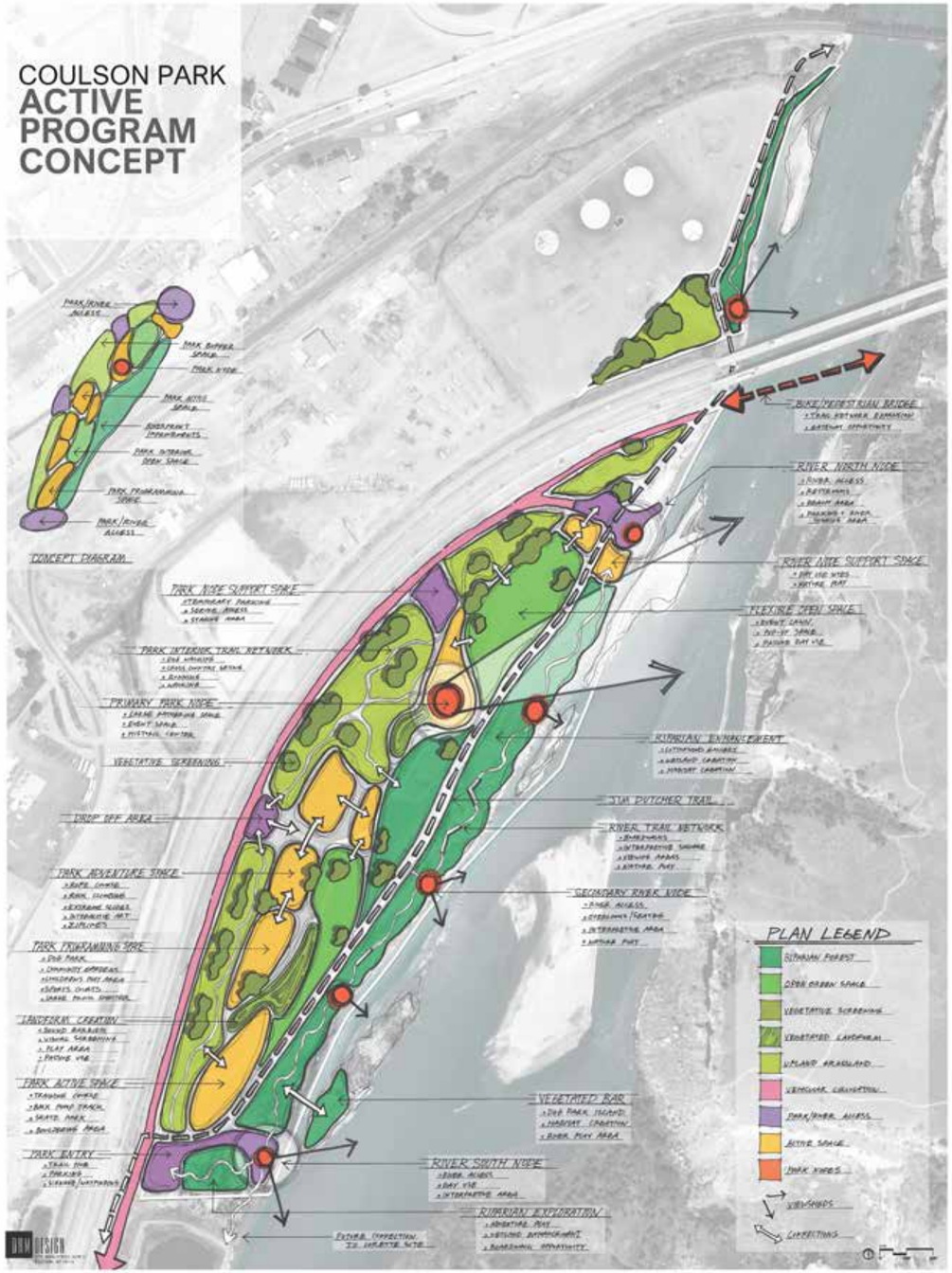
WHAT IS MOST IMPORTANT TO YOU, IN REGARDS TO THE CURRENT OR FUTURE USE OF THE SITE?

Survey results from preliminary design community outreach

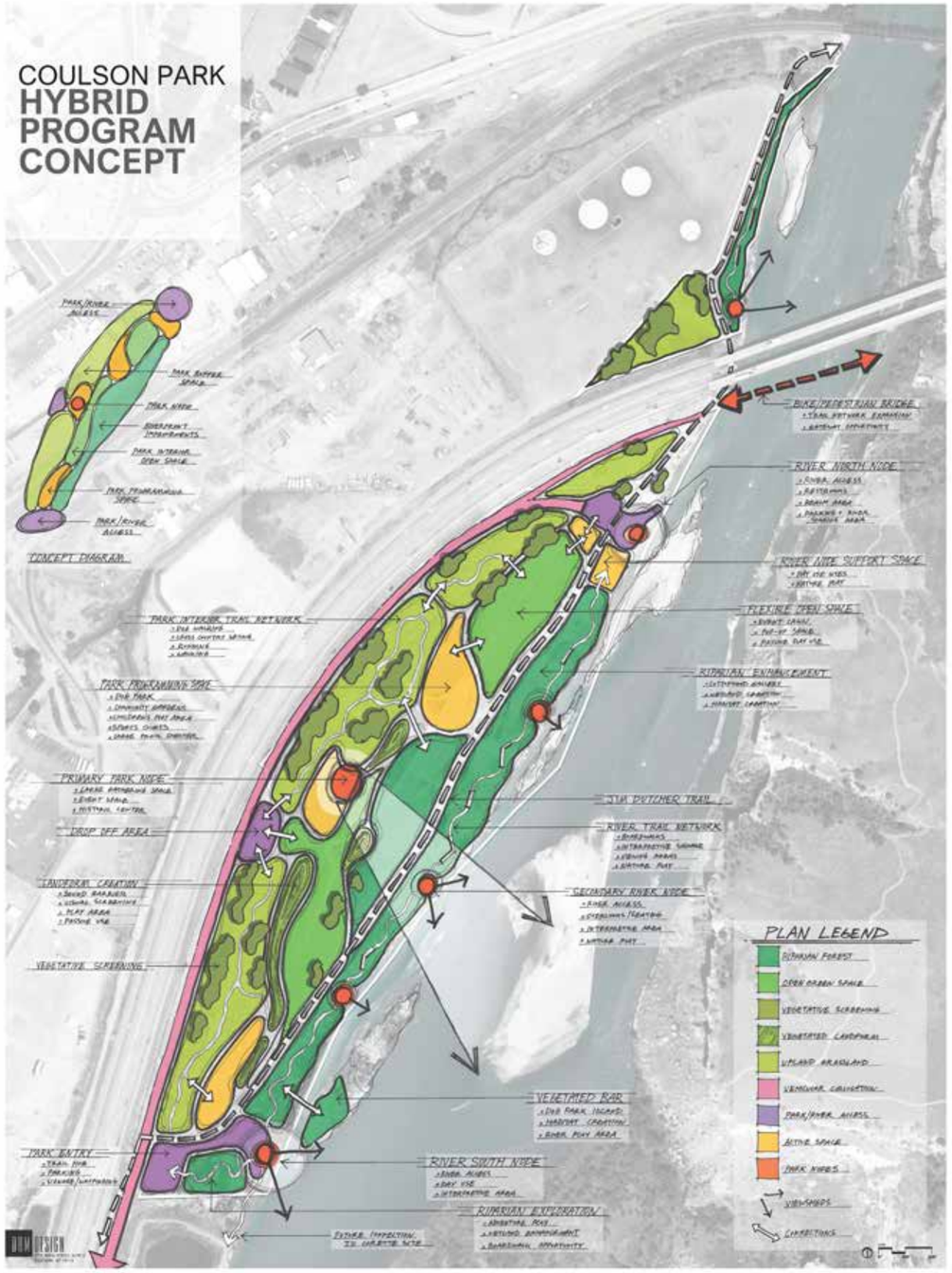
WHAT KEEPS YOU FROM USING THE PARK?







Preliminary park concept design diagram - active scenario



Preliminary park concept design diagram - hybrid scenario

Preliminary park concept design diagram - passive scenario

3.3 DRAFT MASTER PLAN DESIGN

Preliminary design efforts spurred the development of four draft masterplan options to expand upon the spatial hierarchy of the site and arrive at park programming solutions.

Building upon the active and hybrid program concepts selected during the preliminary design phase, the design team worked out programming solutions for the entire park site. Providing a level of spatial hierarchy was necessary to define areas of active use within the context of site circulation and larger passive natural areas. Four different draft masterplan options looked at ways of spatially achieving the overall project goals defined by the community while showcasing the range of design options possible on site.

The design team generated four design solutions at a level of detail necessary to help the public provide further feedback on the teams direction. Each site plan solution contained a unique combination of compatible park programs that told a different story of what an experience in Coulson Park could be like.

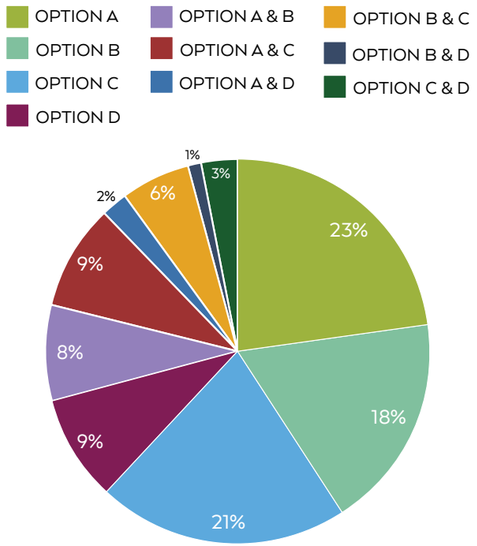
The four draft masterplans, along with supporting vignettes of the park were taken back to Billings for another round of stakeholder meetings and participation in community events. These meetings provided insights and feedback about which draft masterplan, or parts there of, were viewed most favorably. Survey responses showed that people preferred options A, B and C above option D, with option A being the favorite option. There was a particular interest in a bike park and outdoor community gathering space. Along with this, community members were asked how often they would use the programs in Coulson Park. Over 50 percent of survey responders indicated that they would use the park programs shown in their selected draft masterplan multiple times a month.

The creation and public review of four draft masterplans helped ensure the design process was moving in a direction that would be supported and adopted by the public. Moreover, providing multiple masterplan options and going though another round of outreach gave the community more time to come forward and rally together to let the design team know what programs worked best for the Billings community.

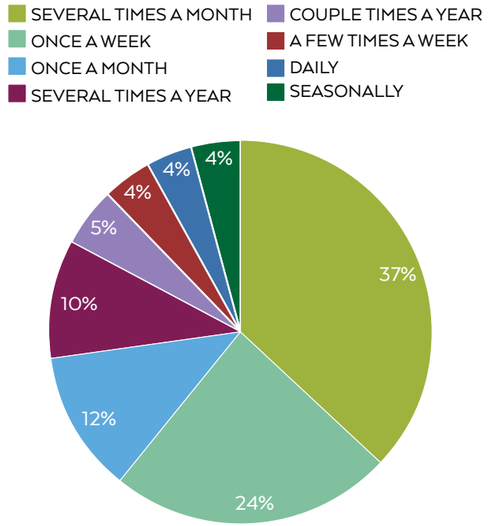
The draft masterplan phase culminated with the preparation and presentation of a singular draft site plan. Along with three perspective renderings, the draft plan was presented to the Steering Committee, stakeholder groups, and at a annual community event (Ales for Trails at ZooMontana). Once again the design team engaged with the community to gain insights and feedback on their views and opinions of the draft park plan.

Four different park design site plans presented to community during draft phase

WHAT IS YOUR PREFERRED DESIGN OPTION?



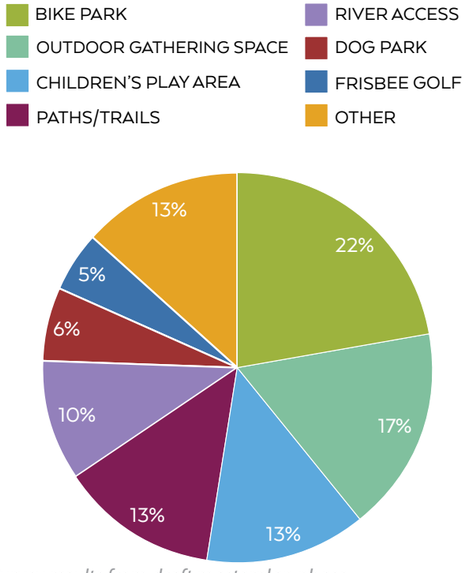
HOW OFTEN WOULD YOU USE YOUR FAVORITE FEATURE OF THE PARK?



Perspective renderings at draft plan phase

Draft park site plan

WHAT IS YOUR FAVORITE ELEMENT OF ALL THE SITE PLANS?



Survey results from draft masterplan phase

Draft site plan presented to the Steering Committee

4.1 FINAL MASTER PLAN: FIVE AREAS OF THE PARK

The park has five main areas: Coulson South, the Central Spine, Coulson Center, River North and the Far North Corridor, each contains unique programs and amenities.

This section outlines the specific features found in each main area of Coulson Park. All five areas contain unique landscape characteristics and programming solutions. Careful analysis of existing site opportunities and constraints has been complimented by robust public outreach initiatives and stakeholder involvement to define the programming objectives for each area. The five areas are linked together by the existing Jim Dutcher Heritage Trail as well as a proposed accessible loop trail. The interconnectivity and compatibility of programs and amenities in all five areas of the park is the result of a robust master planning process.

The master planning process for Coulson Park has resulted in a cohesive and phased approach to development across the site. Compatible program opportunities are widespread throughout the park and are connected by a hierarchy of accessible routes that transport park visitors through a restored riparian corridor. Within the first 5-10 years, visitors will enjoy improved access to the river at the Coulson South park entrance and the River North boat ramp area. Providing access to amenities and programs for all ages and physical abilities will draw people from Billings to the Yellowstone River, which will result in an increased interest in the park. As specific interest groups garner community support and funding, the full spectrum of park programs will come together resulting in a rich community gathering destination at the rivers edge.

⑤ **Far North Corridor: +/-** 6 ACRES

④ **River North: +/-** 16 ACRES

③ **Coulson Center: +/-** 12 ACRES

② **Central Spine: +/-** 16 ACRES

① **Coulson South: +/-** 6 ACRES

Final Coulson Park masterplan

See plan at left

LEGEND

1. **SOUTH PARKING**
   +/- 50 PARKING SPACES
2. **RAMBLE**
   NATURE PLAY AREA IN RIPARIAN FOREST
3. **ARTISTS POINT**
   RIVER ACCESS POINT WITH SEATING AREAS FOR RIMROCK VIEWING
4. **LARGE SHELTER**
   40x60 RENTABLE EVENT SHELTER
5. **NATURE PLAY**
   YOUNGER AGES ADVENTURE PLAY AREA
6. **HARMONY PARK**
   EXPERIENTIAL MUSIC AND SOUND PARK
7. **DOG PARK**
   FENCED AND MULCHED AREA FOR LARGE AND SMALL DOG ACTIVITIES
8. **LOOKOUT POINT**
   SEATING AREA ON BERM WITH VIEWS TO RIVER AND BIKE PARK
9. **SKILLS TRACK**
   SPECIAL FEATURES COURSE DESIGNED FOR ADVANCED RIDERS
10. **PUMP TRACK**
    STANDARD COMPETITION-RATED COURSE
11. **KIDS TRACK**
    SMALL SCALE COURSE DESIGNED FOR YOUNGER AGES
12. **COULSON POND**
    FLOW THROUGH POND WITH ADJACENT LAWN SPACE
13. **COULSON SQUARE**
    HISTORICAL & CULTURAL INTERPRETIVE ELEMENTS; COMMUNITY GATHERING SPACE; POP-UP AND FOOD TRUCK ACCESS
14. **CENTRAL PARKING**
    +/- 50 PARKING SPACES
15. **EVENT OVERFLOW PARKING**
    +/- 300 COMBINED INFORMAL PARKING SPACES
16. **COULSON PAVILION**
    +/- 750 SEAT CAPACITY AMPHITHEATER AND MULTI-USE GATHERING SPACE
17. **NATURE PLAY**
    OLDER AGES ADVENTURE PLAY AREA
18. **SCULPTURE PARK**
    OUTDOOR GALLERY FOR LOCAL/NATIONAL ART INSTALLATIONS AND EXHIBITS
19. **GAMES AREA**
    SAND VOLLEYBALL; HORSESHOES; FIELD GAMES
20. **RIVER DAY USE SITES**
    +/- 4 SITES WITH PICNIC TABLES
21. **NORTH PARKING**
    +/- 5 PULL THROUGH TRAILER PARKING STALLS AND +/- 15 PARKING SPACES
22. **BOAT RAMP**
    YEAR-ROUND BOAT PUT IN AND TAKE OUT; IN STREAM SAFETY IMPROVEMENTS
23. **INSPIRATION POINT**
    RIVERFRONT VIEW TO HISTORIC FERRY RINGS

See plan at right

4.2 COULSON SOUTH

The Coulson South area is a natural entrance to the site defined by a large cotton-wood gallery that opens up to incredible views of the Rim Rocks.

The Coulson South area is the primary gateway and entry experience for Coulson Park. Park visitors driving up Charlene street from the south are greeted with park entry signage, easy access to parking, restrooms, and amenities. Wide accessible paths lead directly from the entrance toward a large shelter with adjacent lawn and nature play area, or down a tree lined walk opening up to Artists Point.

A large picnic shelter points toward the river and will be available for events, parties and celebrations. An open lawn space spills out of the shelter and creates a visual connection to a natural play area where parents can easily supervise their children during an event. Two large landscaped berms planted with native grasses buffer the shelter and playground from the sound and presence of vehicles driving on I-90. The winged shape of the berms are designed to embrace the shelter and natural play area with slides and climbing boulders built into the sides of the landforms.

The Coulson South area is intended to be a gateway for both vehicular and pedestrian use. The parking lot can accommodate approximately 50 vehicles and also serves as a trail head for those arriving to access the Jim Dutcher Heritage Trail. Trail signage and bike amenities will help Coulson Park visitors feel connected to Billings' greater park system. Accessible restrooms located near the parking area compliment the shelter, bike trail-head and day use at the Artists Point.

To reach Artists Point visitors may easily stroll down the wide accessible route toward the river, or wander through the Ramble where paths navigate through dense riparian vegetation underneath large cottonwood trees. Upon reaching the point, visitors will witness a dramatic view of the South Rim Rocks across the river. A protected beach area is ideal for spending a day in the sun while boulders provide access to the rivers edge for kayakers and floaters. Walking north along the river from Artists Point visitors will reach the Harmony Park, where they can express themselves through sound and music.

Six primary areas define Coulson South:

① South Parking (+/- 50 spaces)
② Large Shelter
③ Play Lawn
④ Kids Nature Playground
⑤ Ramble
⑥ Artists Point and Beach
⑦ Harmony Park

Coulson Park Final Site Plan: Coulson South

Coulson Park south entry

South Park berms, turf lawn, play area and large picnic shelter

Artist Point and view of river and cliffs

River get-down access at Artist Point

4.3 CENTRAL SPINE

The Central Spine is characterized by large open settings and active recreational spaces including a dog park and bike park.

The Central Spine area of Coulson Park connects Coulson South to Coulson Center. The area contains a large expanse of flat grassland outside of the floodplain to accommodate large scale recreational opportunities. Lowlands along the Jim Dutcher trail are interwoven with a creek and passive use trails.

Arrival from the south parking area will take visitors past a 1.5 acre fenced in dog park. The dog park is a large open expanse with a trail around the perimeter and two shelters for escaping the heat of summer or a rainy day. The area inside the perimeter trail will be a soft mulched surface to reduce maintenance costs.

North of the dog park a large landscaped berm rises up. At the top, Lookout Point provides park visitors with a place to view the dog park, bike park and creek as it winds its way toward Coulson Pond. The creek is designed to foster wetland creation across the park and provide safe opportunities for park visitors to interact with water. The creek will also act to further buffer the active uses going on at the Bike Park from the more passive riverfront experiences. Functionally the creek is part of the park irrigation system design. Water will be pulled from the nearby river via an in-stream intake structure. From this structure it will be pumped underground in piping and will daylight at a source point at the head of the creek. From here water will meander down the creek channel, eventually arriving at the pond. Visitors crossing over the creek from the bike park will be directed through productive riparian wetlands towards a river overlook.

Overwhelming input from community members during public outreach events helped spur the development of a 4 acre bike park within the Central Spine. The Bike Park is broken into four specific areas in order to accommodate all types of riders with varying levels of experience. A kids pump track at the far north of the site is located directly adjacent to a large shade shelter where parents can supervise their kids as they learn to ride. A larger central pump track is designed to accommodate competitions that will help the bike park generate revenue. A flow track and skills course winds its way from the bike park shelter, around the Central Spine at the toe of the berm and next to the creek. And finally an all ages, all users perimeter trail circumnavigates the entire bike park - providing users opportunities to travel between the pump tracks, skills course or watch the users enjoy the biking amenities.

Five primary areas define the Central Spine:

① Dog Park
② Bike Park
③ Landscape Berm and Lookout Point
④ Creek and wetland creation
⑤ Shade Structure

View east into dog park

View west over creek, wetlands, and bike park

View of bike park pump track

4.4 COULSON CENTER

The Coulson Center area is a dynamic historic and cultural gathering place for visitors to re-imagine and re-envision the Billings riverfront.

Coulson Center is planned as the nucleus of Coulson Park. The Coulson Center site marks the location of the historic Coulson town-site and draws attention to Billings past while becoming a gateway experience for the city. This portion of the site is highly visible from I-90 as it crosses the Yellowstone River and enters Billings. Because of this high visibility and historic significance a large multipurpose performance pavilion is proposed for this area. The pavilion and supporting spaces are planned to accommodate all types of events and will serve as a cultural and education hub for the park.

Visitors arriving to this central area of the park will be able to park in a new +/- 50 vehicle capacity lot. For larger occasions the fields adjacent this lot can be used for overflow parking. Park guests will then proceed through a formal promenade aligned with the former street layout of the town of Coulson. Visitors then emerge into Coulson Square, a flexible open space with amenities that foster education, community and cultural identity. Interpretive exhibits, signage and visual aids will help visitors re-imagine the historic uses of the site, while large flexible spaces and boulder outcrops create places for playing, eating, and enjoying views to the southern rim rocks over Coulson Pond. The square is planned to have restroom facilities and amenities to accommodate pop up events, food trucks, and other temporary uses. Coulson Square also serves as a platform to facilitate large cultural events taking place to the east at the performance pavilion.

While the location of the Pavilion is optimal for iconic, riverfront programs, the process of locating and designing the pavilion structure relied on feedback and involvement from the community. Through stakeholder meetings and conversations with many groups representing the Native American communities in Billings it became apparent that a place to host pow wows and other cultural events was critically needed. The design of the pavilion reflects a traditional pow wow dance arbor while also speaking to a new generation of arts and culture in the city. The Pavilion is built into a large berm that provides amphitheater style seating that faces out to views of the rim rocks. Special spatial consideration has been taking into consideration for locating bleachers and pop up tents inside and around the Pavilion while operating as a dance arbor. The roofs angle allows the pavilion to be lit up at night for music, dance and theater performances, all while capturing spectacular views of the southern rim rocks and cliffs.

Looking out from Coulson square visitors will be greeted with views of the southern rim rocks over Coulson Pond. The pond and adjacent wetlands will help the site be resilient during frequent and widespread flooding that occurs in the Yellowstone River floodplain. Summertime visitors might birdwatch or fish and winter visitors can skate the ice. The pond, designed within the floodplain will further tell the history of the Yellowstone River's ever changing course through the Clark's Fork Bottom. The pond will also serve as the irrigation source for all new park plantings. Fed by the meandering creek, water will be pulled from the pond as needed via an intake line and pump and dispersed to the rest of the site. An exit structure will allow water to return to the river thus creating a flow through system, only using water when needed and helping address water quality. Passive trails meander across bridges and through restored riparian forest toward the river.

Seven primary areas define Coulson Center:

① Central Parking
② Overflow Parking
③ Promenade
④ Coulson Square
⑤ Pavilion
⑥ Berm + Amphitheater Seating
⑦ Coulson Pond

View of Coulson Square

View of Coulson Pond with Coulson Square in foreground

View of performance pavilion during cultural event

View of pavilion during evening concert

4.5 RIVER NORTH

River North revives riverfront land use and provides passive and active recreational opportunities.

River North is envisioned as a revival of the Coulson Park boat ramp and river access location. The site serves as a put-in / take-out for local river recreationalists including fishermen, rafters and kayakers. Improved access and amenities will encourage better, more consistent use of the River North Area. Compatible uses adjacent to the boat ramp and within the floodplain include four day use picnic sites and a large games area (sand volleyball courts on the plan). The interior of this northern portion of the park is almost wholly located within the floodplain and a result more passive use is programmed for this space. Trails provide access through this ecological restoration zone with the potential for a land art themed sculpture walk. At the south end, near the performance pavilion berm, another nature play themed boulder-field area is proposed for kids enjoyment.

The Yellowstone River flows above its banks in the spring and below its banks in the fall. This dynamic riverine system requires the implementation of in-stream improvements to improve safe year round use of the boat ramp. An in-stream structure located upstream of the boat ramp will create an eddy moment that will allow users improved water flow conditions and safer conditions for boat launching or take-out related activities.

Tree plantings at the western edge of the site will provide separation between I-90 and an open restored grassland located within the floodplain. These plantings will serve as a backdrop for the sculpture park containing environmental art installations. Walking south from the sculpture park visitors will find another nature play area embedded into a berm facing the river.

Six primary areas define River North:

① North Parking
② Improved Boat Ramp and In-Stream Structure
③ Day-Use Picnic Sites
④ Games Area (sand volleyball courts shown)
⑤ Sculpture Park
⑥ Nature Play Area

View of River North boat ramp, in-stream structure, and day-use picnic sites

View of sculpture park

4.6 FAR NORTH CORRIDOR

The Far North Corridor is a narrow stretch of parkland north of I-90 bound by an industrial tank farm facility to the west and the Yellowstone River to the East.

In this sense the Far North Corridor is the least developable portion of the park. The site is unique in that it is only accessed via the Jim Dutcher Heritage Trail. The narrow corridor provides excellent views to the river, and a number of smaller river overlooks with bench seating or picnic tables are proposed. A larger river overlook is strategically located - called Inspiration Point. Here visitors will be provided visual cues and interpretive signage to the location of the historic ferry rings embedded in the cliff faces across the river.

Two primary areas define Far North Corridor:

① River Overlook
② Inspiration Point

5.1 SITE PLAN OVERLAY ANALYSIS

This diagram overlays site constrains and opportunities with the final masterplan to show how the design works within Coulson Park's existing conditions and context.

Existing site conditions influenced specific siting of programs and amenities in Coulson Park. Underground pipelines and the Yellowstone River floodplain limit where certain types of improvements, such as grading + cut / fill activities and permanent structures, may be completed within the park boundaries. Furthermore, the site contains large cottonwood stands that are of ecological and aesthetic importance. Throughout the design process, consideration of existing site opportunities and constraints have influenced the design teams efforts and been key talking points with community members and stakeholders.

Routine inspection and access of underground pipelines requires that permanent structures be constructed at least 50' offset of pipeline infrastructure / centerlines. Moreover, trees may not be planted within a 25' offset of pipeline alignments.

Of Coulson Park's 56 acres, roughly 11 of them occur outside of the floodplain. The buildable zone extends north from the South Park area of the park, up a central spine and contains the majority of activity based park improvements. With the exception of the River North area, all significant earthwork, hardscape and built improvements are to be constructed within the buildable zone.

Large existing trees and shrubs are to be preserved to the greatest extent possible. The large existing cottonwood trees within the park provide excellent shade and buffer from I-90. The final master plan of Coulson park will expand the native mixed cottonwood floodplain ecosystem already occurring within the park.

Site Conditions Overlay Analysis Plan

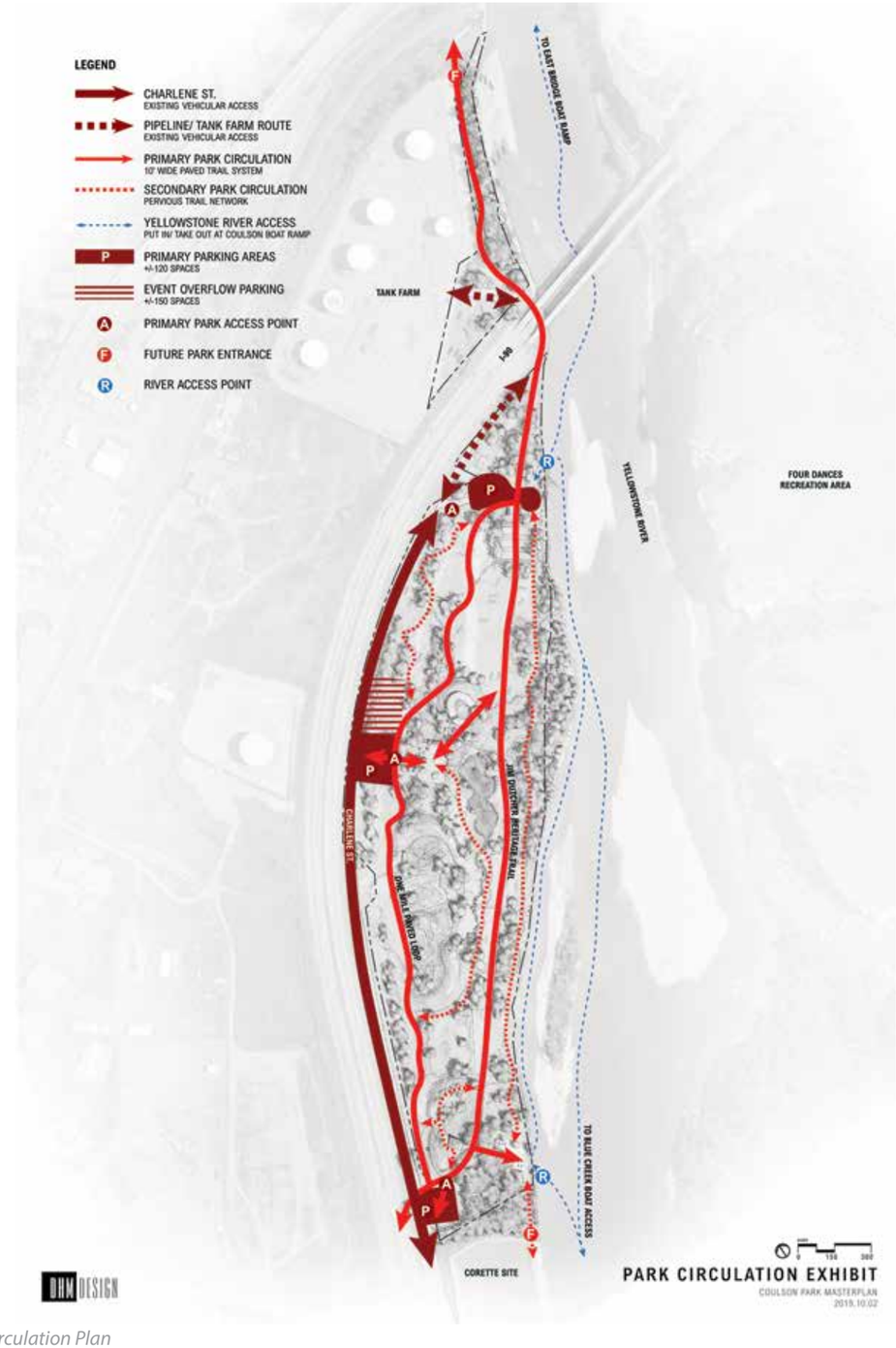
5.2 CIRCULATION ANALYSIS

This diagram shows park circulation and indicates points of access and connection across the site.

Coulson Park is accessible via the Jim Dutcher Heritage Trail, Charlene St. as well as the Yellowstone River. A goal of the master plan is to re-connect Billings with the river. Providing and maintaining safe access to the park is key for the long term success of the master plan. The potential of forming future connections upstream and downstream of the park has been considered as a part of the master plan process. The master plan builds upon all major access points, while considering how to better move visitors throughout the park.

Three parking areas inside the park allow for access to key park amenities including restroom facilities. The three parking areas are linked by a one mile paved loop trail that navigates through all major programmed areas of the park. This primary circulation route utilizes the existing bike trail and establishes a major arterial pathway along the western portion of the park. Primary circulation connections from the loop trail toward the river are critical in the South Park and Coulson Center areas of the park. Secondary circulation provides visitors with opportunities to get deep into the site and navigate through the more natural and ecologically rich areas.

Access to and from the river was taken into consideration throughout the design process. Bank stabilization and in-stream improvements compliment improvements to the boat ramp and river view areas to create a park that is better accessed from the Yellowstone river.



Park Circulation Plan

5.3 ECOLOGICAL ANALYSIS

This diagram classifies ecological intervention within Coulson park.

A large portion Coulson Park is located within the Yellowstone River floodplain. The design team has analyzed existing site ecology in order design the master plan in a way that ties Coulson Park into its greater ecological context. The dynamic seasonal flows of the Yellowstone require that the park be designed to demonstrate resilience when water rises above the rivers banks. The master plan provides improvements to the riparian areas of the site, as well as the creation of new riparian areas. At the rivers edge, riverine improvements will help stabilize banks and improve access to the river.

The master plan calls for roughly 500 trees to be planted throughout the park, the majority of these plantings are to occur west of the Jim Dutcher Heritage Trail. This area of riparian creation will address gaps and re-connect the floodplain across the park. The existing riparian corridor east of the trail will benefit from enhancement of its existing ecological conditions. Removal of noxious vegetation while seeding and planting native vegetation will help Coulson Park to the greater mixed cottonwood floodplain ecosystems found within the Yellowstone River Valley.

Park Ecological Analysis Plan

6.1 SITE PHASING

The parks large scale and complexity of the site's conditions and transformation means that the process of implementing the final design will transpire over a multi-year time frame.

It will be years before the park is complete, and it's build-out and growth is anticipated to be implemented in a phased approach as funding and other priorities dictate. The process will take time as new vegetation and ecological communities establish and as pathways and trails expand to provide access to new park amenities and features over time. Throughout this growth process it is important that design and implementation happen in a dedicated and focused manner, not ad hoc or piecemeal. It is crucial that the early phases of development be compelling and exciting to the Billings community in order to activate the park site and provide clear design qualities and principles to be upheld in future construction phases.

Early investments will need to transform the identity of the site from one of being undeveloped and un-utilized to one primed for use and activity. Critical infrastructure for future park phases are mandatory at these early stages of the park in order to prepare the site for future programming and build out. At Coulson Park this specifically would be execution of the pond, creek, water infrastructure, and electrical infrastructure necessary for future park irrigation and electrical needs. It is anticipated that civic, cultural and recreation groups along with private investors will respond, investing in additional facilities and programs that further help to activate and sustain the park.

The master plan envisions steady, intelligent, and flexible growth over the course of the park development. The site phasing strategy has three main objectives:

- Create a compelling and achievable first phase of development that will initiate broad based use of the park. Capturing a wide range of community user groups will generate enthusiasm and commitment on the part of stakeholders and attract investment.

- Establish a physical landscape framework that is flexible in order to respond to unforeseen change but coherent enough to help shape park development and form. It is important in early stages of park development to define spatial structure that can be further defined and filled in over time. Implementation should to the greatest degree possible be choreographed as a series of harmonious and complimentary projects.

- Plan for steady growth with continued community participation. While the master plan defines specific park programming in designated areas on site there is still design work to be done. There are future choices related to the character and intensity of proposed park uses and it is important that the community stay involved in the decision making process in order to generate sustained interest and success.

Organization of Phases:

The phasing plan suggests a set of initial targets for the growth and development of the park. In each phase particular focus has been paid to program, circulation, and ecological goals in order to suggest meaningful park projects. This proposed framework certainly merits ongoing study and evaluation in order to meet evolving parks system wide needs and community expectations.

Phase 1: River North - first phase
The first phase of park development is linked to specific improvements associated with the funding awarded to the city + project by the Yellowstone River Recreation Project Advisory Committee. The funding stipulations require the money to be spent on restrooms, upgrades to the existing boat ramp, and improvements to river recreation access. As a result of these requirements it is suggested that Phase 1 of the park focus on the master plan improvements proposed in and around the existing boat ramp. Other suggested amenities would include day use picnic sites and the games area.

Phase 2: Site Infrastructure + Pond and Creek
It is critical in the early phase of the park development that necessary infrastructure related to future park projects be installed in order to establish the required framework once those respective improvements are constructed. For Coulson Park this would pertain to all aspects of the irrigation and electrical infrastructure. Specific site elements related to this phase includes: river intake structure, piping, creek, pond, irrigation intake structure and pump, exit structure and piping, and any electrical infrastructure.

Phase 3 - 7: With the required park infrastructure in place Phases 3 - 7 enhance the park program offerings and plantings. The order of these improvements can shift around in response to different funding opportunities or community priorities. It is recommended that the first phases address river access and a diversity of uses to attract a wide variety of the community and generate interest and excitement.

Phase 3 - Coulson South

Phase 4 - River North - second phase

Phase 5 - Coulson Center

Phase 6 - Bike Park

Phase 7 - Dog Park

Phase 8: Far North Corridor
It is recommended this portion of the park come at the end of the park development. The design team recommends continued coordination with the Montana Department of Transportation on the re-design of the bridge crossing over the Yellowstone River and work towards getting a bike + pedestrian specific bridge incorporated into the design. In order to maintain maximum spatial flexibility in the park to accommodate this need all work in this portion of the site should be held off until that design is fully resolved.

⑧ Far North Corridor

river trails
overlooks w site furnishings
interpretive signage

① River North

boat ramp improvements (1)
in-stream structure + bank stabilization (1)
restrooms (1)

④ River North

parking lot (1)
day use sites (1 / 2)
games area (1 / 2)
pathways and trails (1 / 2)
kids play area (2)
trees and plantings (2)

⑤ Coulson Center

restrooms
parking lot
Promenade
Coulson Sqaure
interpretive elements
Performance Pavilion
amphitheater seating
pathways and trails
trees and plantings
landscape berms
site furnishings
site lighting

② Site Infrastructure + Pond & Creek

river intake structure + piping
creek
pond
irrigation intake structure
electrical infrastructure

⑥ Bike Park

kids pump track
regulation pump track
skills course
perimeter trail
landscape berms
site furnishings
shade structure
pathways and trails
trees and plantings

⑦ Dog Park

small park shelter
pathways and trails
fences and gates
site furnishings
trees and plantings

③ Coulson South

restrooms
large park shelter
Artist's Point
turf lawn
kids play area
Harmony Park
pathways and trails
kids play area
trees and plantings
landscape berms
entry signage
site furnishings

Coulson Park - Phasing Plan

Phase 1 + 2

Phases 1 - 3

Phases 1 - 4

Phases 1 - 5

Phases 1 - 6

Phases 1 - 7

Coulson Park - Implementation Plan Series based on proposed phasing

7.1 Appendices

Coulson Park Cost Summary

	SUMMARY
Project Start-up	$3,118,966
Demo	$230,750
Site Infrastructure + Pond & Creek	$1,687,847
Coulson South	$1,759,729
Dog Park	$581,643
Bike Park	$2,171,710
Coulson Center	$2,075,948
River North	$1,053,814
Subtotal	**$12,680,407**

	CONTINGENCIES
Design Range 10%	$1,268,041
20%	$2,536,081
Construction Range 10%	$1,268,041
20%	$2,536,081
Total Project Cost at 10%	**$15,216,488**
Total Project Cost at 20%	**$17,752,570**

	POTENTIAL SAVINGS
Earthwork (On-Site Soil for Berming)	($744,920)

	FUNDING & POTENTIAL FUNDING AVAILABLE	
State (River North- Restroom)	($110,000)	*To be completed prior to Site Infrastructure + Pond & Creek. YRRPPP funding*
State Grant	($250,000)	*YRRPPP funding*
State Grant Fundraising Match	($250,000)	*full amount required to be fund raised in order to to get state grant funds*
Cost Range After Savings/Funding (10%)	**$13,861,568**	
Cost Range After Savings/Funding (20%)	**$16,397,650**	

NOTE:

- The estimate is based on conceptual level of planning and design that is in support of this opinion of probable cost. At the Master Plan level of design, it is difficult to determine the complete scope of the project in detail. Further Design Development and Construction Documentation will be required to develop a specific program with a more defined cost estimate.
- The estimate should be used for preliminary budgeting purposes only.
- The preliminary unit quantities are assumptions based on the Master Plan programming as well as assumptions based in similar project experiences.
- All costs are given in 2019 construction dollars. A yearly inflation factor has not been added.
- Costs/fees for planning, design, environmental studies, site surveying, testing, and other consultant or project overhead fees are not included.
- Estimates given assume all designs and improvements will be made with qualified professionals, and a qualified contractor through a public bid process.
- Yellowstone River Recreation Project Priority Plan (YRRPPP)

Opinion of Probable Cost - Coulson Park - City of Billings, Montana

Opinion of Probable Costs Based Upon Master Plan of Approximate 56 Acre Site
Prepared By: DHM Design
October 7, 2019

Category	Unit	Qnty	Unit Cost	Total Cost	Comments
Project Start-Up					
Project Start Up and Preparation *- Mobilization* *- Permits* *- Vehicle Tracking* *- Dust Control (Water)*	LS	$11,026,440.85	15.00%	$1,653,966.13	
Potholing Utilities (Non-Destructive)	EA	50	$500.00	$25,000.00	*Allowance*
Erosion Control & Stormwater Management	LS	1	$125,000.00	$125,000.00	*Allowance*
Construction Staking / Surveying	LS	1	$45,000.00	$45,000.00	*Allowance*
Traffic Control	LS	1	$20,000.00	$20,000.00	*Allowance*
Environmental Remediation, Extents of Impact Not Yet Known	LS	1	$1,250,000.00	$1,250,000.00	*Allowance*
			Section Subtotal	**$3,118,966.1**	
Demolition					
Vegetation					
Tree Protection	LF	12,500	$1.50	$18,750.00	*Allowance*
Tree / Shrub Removal	EA	10	$1,200.00	$12,000.00	

Category	Unit	Qnty	Unit Cost	Total Cost	Comments
Site Infrastructure + Pond and Creek					
Earthwork					
Topsoil Strip and Stockpile Existing, 6" depth	CY	2,560	$4.25	$10,880.00	
Rough Grading	CY	5,119	$20.00	$102,380.00	
Topsoil Placing	CY	1,111	$4.25	$4,721.75	
Export from excavation of pond and stream	CY	9,600	$20.00	$192,000.00	
Water Infrastructure					
River intake structure	LS	1	$350,000.00	$350,000.00	*Allowance*
Piping to creek source	LF	300	$50.00	$15,000.00	*Allowance*
Wet Well (intake line, structure, labor)	LS	1	$80,000.00	$80,000.00	*Allowance*
Pump Station (includes standard enclosure)	LS	1	$150,000.00	$150,000.00	*Allowance*
Irrigation Controller	LS	1	$45,000.00	$45,000.00	
Pond					
Compacted Clay, 12" depth, fine-graded, as pond subgrade	CY	1,150	$20.00	$23,000.00	
Liner System	LS	1	$25,000.00	$25,000.00	
Pond Overflow Drain Structure	LS	1	$10,000.00	$10,000.00	*Allowance*
Pond Overflow Outfall (Hard Pipe or Surface TBD)	LS	1	$50,000.00	$50,000.00	*Allowance*
Boulders, to match Yellowstone River	EA	40	$530.00	$21,200.00	*Aesthetic Purposes*
Cobble	TON	900	$55.00	$49,500.00	*6" depth*
Creek					
Compacted Clay, 12" depth, fine-graded, as creek subgrade	CY	500	$20.00	$10,000.00	
Liner System	LS	1	$25,000.00	$25,000.00	
Boulders, to match Yellowstone River	EA	70	$530.00	$37,100.00	*Aesthetic Purposes*
Cobble	TON	720	$55.00	$39,600.00	*12" depth*
Structures					
Footbridge, across constructed creek	EA	2	$20,000.00	$40,000.00	
Electrical Infrastructure					
Transformer, Distribution, Meter, etc	LS	1	$250,000.00	$250,000.00	*Allowance*
Planting					
Deciduous Shade Tree, 2" caliper	EA	20	$550.00	$11,000.00	
Wetland Sod	SF	9,248	$1.00	$9,248.00	
Native Seed	SF	87,872	$0.18	$15,816.96	
Irrigation					
irrigated Area	SF	97,120	$1.25	$121,400.00	
			Section Subtotal	$1,687,847	
			20% Design Contingency	$337,569	*Will Reduce w/ drawing advancement*
			20% Construction Contingency	$337,569	*Will Reduce w/ drawing advancement*
			Section Total	**$2,362,985**	

Category	Unit	Qnty	Unit Cost	Total Cost	Comments
Coulson South					
Earthwork					
Topsoil - Strip & Stockpile Existing, 6" depth	CY	1,270	$4.25	$5,397.50	
Rough Grading	CY	1,000	$20.00	$20,000.00	
Topsoil Placing	CY	1,000	$4.25	$4,250.00	
Import for Berming	CY	6,700	$20.00	$134,000.00	*(Potential Savings if by City)*
Parking Lot					
South Lot, Compacted Roadbase	SF	19,325	$5.00	$96,625.00	
South Lot, 6" Depth Concrete @ Accessible Stalls	SF	850	$7.25	$6,162.50	
South Lot, 6ft Concrete Wheel Stops	EA	43	$150.00	$6,450.00	
Surfaces					
Park Loop Trail (10' wide concrete)	SF	4,500	$7.25	$32,625.00	
Concrete at Shade Structure & Restroom Pad	SF	2,400	$7.25	$17,400.00	
Concrete Pathways	SF	9,575	$7.25	$69,418.75	
ADA Accessible Stabilized Pathway	SF	24,246	$5.00	$121,230.00	
Artist Point (Beamstone boulders, get-down / planting pockets, river access)	LS	1	$450,000.00	$450,000.00	*Allowance*
Play Areas					
Concrete Playpit Wall	LF	300	$42.00	$12,600.00	
EWF Surfacing, 18" Min. Depth	CY	450	$36.00	$16,200.00	
Underdrain - Inlets, Piping, Crushed Rock, Outfall	LS	1	$8,500.00	$8,500.00	
Play Features - Installed	LS	1	$300,000.00	$300,000.00	*Allowance*
Harmony Park, Musical Equipment	LS	1	$80,000.00	$80,000.00	*Allowance*
Structures					
Shade Shelter, Large (40x60), @ South End	EA	1	$120,000.00	$120,000.00	*Allowance*
Restroom (includes concrete pad)	LS	1	$55,000.00	$55,000.00	
Signage					
Custom Entry Sign, Wall integrated into berm	LS	1	$30,000.00	$30,000.00	*Allowance*
Planting					
Deciduous Shade Tree, 2" caliper	EA	40	$550.00	$22,000.00	
Shrub	EA	100	$37.00	$3,700.00	
Native Seed	SF	30,154	$0.18	$5,427.72	
Turf Lawn	SF	22,000	$0.85	$18,700.00	
Irrigation					
Irrigated Area	SF	52,154	$1.25	$65,192.50	
Tree (Drip Line)	EA	23	$150.00	$3,450.00	
Site Furnishings					
Picnic Tables	EA	14	$1,600.00	$22,400.00	*Allowance*
Benches	EA	12	$1,500.00	$18,000.00	*Allowance*
Trash Receptacle	EA	12	$1,000.00	$12,000.00	*Allowance*
Bike Rack	EA	6	$500.00	$3,000.00	*Allowance*

Section Subtotal	$1,759,729	
20% Design Contingency	$351,946	*Will Reduce w/ drawing advancement*
20% Construction Contingency	$351,946	*Will Reduce w/ drawing advancement*
Section Total	**$2,463,621**	

Category	Unit	Qnty	Unit Cost	Total Cost	Comments
River North					
Earthwork					
Topsoil Strip and Stockpile Existing, 6" depth	CY	2,109	$4.25	$8,963.25	
Rough Grading	CY	1,894	$20.00	$37,880.00	
Topsoil Placing	CY	740	$4.25	$3,145.00	
Import for Berming	CY	1,275	$20.00	$25,500.00	*(Potential Savings if by City)*
Parking Lot					
North Lot, Compacted Roadbase	SF	26,350	$5.00	$131,750.00	
North Lot, 6ft Concrete Wheel Stops	EA	20	$150.00	$3,000.00	
North Lot, 6" Depth Concrete @ Accessible Stalls	SF	850	$7.25	$6,162.50	
Surfaces					
Park Loop Trail (10' wide concrete)	SF	7,620	$7.25	$55,245.00	
ADA Accessable Stabilized Pathway	SF	8,825	$5.00	$44,125.00	
Crusher Fines Trails	SF	13,595	$4.25	$57,778.75	
Riverbank Stabilization + Boat Ramp Improvements	LS	1	$200,000.00	$200,000.00	*Allowance*
Play Areas					
Concrete Play Pit Wall	LF	400	$42.00	$16,800.00	
EWF Surfacing, 18" Min Depth	CY	322	$36.00	$11,592.00	
Underdrain - Inlets, Piping, Crushed Rock, Outfall	LS	1	$8,000.00	$8,000.00	
Play Equipment - Installed	LS	1	$150,000.00	$150,000.00	*Allowance*
Games Area	LS	1	$30,000.00	$30,000.00	*Allowance*
Fences					
3-Rail Wood Fencing - At Parking Areas & Pedestrian Entry's	LF	345	$43.00	$14,835.00	*Allowance*
Planting					
Deciduous Shade Tree, 2" caliper	EA	130	$550.00	$71,500.00	
Shrub	EA	100	$37.00	$3,700.00	
Native Seed	SF	36,320	$0.18	$6,537.60	
Structures					
Restroom (includes concrete pad, completed in Phase 1 with State grant funding, NRDP)	LS	1	$55,000.00	$55,000.00	*Allowance*
Irrigation					
Irrigated Area	SF	40,000	$1.25	$50,000.00	
Trees (Drip Line)	EA	110	$150.00	$16,500.00	
Site Furnishings					
Picnic Tables	EA	8	$1,600.00	$12,800.00	*Allowance*
Benches	EA	12	$1,500.00	$18,000.00	*Allowance*
Trash Receptacle	EA	12	$1,000.00	$12,000.00	*Allowance*
Bike Rack	EA	6	$500.00	$3,000.00	*Allowance*

Section Subtotal	**$1,053,814**	
20% Design Contingency	$210,763	*Will Reduce w/ drawing advancement*
20% Construction Contingency	$210,763	*Will Reduce w/ drawing advancement*
Section Total	**$1,475,340**	

Category	Unit	Qnty	Unit Cost	Total Cost	Comments
Coulson Central					
Earthwork					
Topsoil Strip and Stockpile Existing, 6" depth	CY	2,127	$4.25	$9,039.75	
Rough Grading	CY	2,453	$20.00	$49,060.00	
Topsoil Placing	CY	979	$4.25	$4,160.75	
Import for Berming	CY	3,471	$20.00	$69,420.00	*(Potential Savings if by City)*
Parking Lot					
Central Lot, Compacted Roadbase	SF	22,500	$5.00	$112,500.00	
Central Lot, 6" Depth Concrete @ Accessible Stalls	SF	850	$7.25	$6,162.50	
Central Lot, 6ft Concrete Wheel Stops	EA	57	$150.00	$8,550.00	
Surfaces					
Park Loop Trail (10' wide concrete)	SF	7,000	$7.25	$50,750.00	
Coulson Square & Promenade Decorative Concrete, 6" Depth	SF	19,000	$12.00	$228,000.00	
Concrete Pathways and Flatwork	SF	8,490	$7.25	$61,552.50	
Amphitheater at Pavilion - Structural Concrete	CY	123	$1,500.00	$184,500.00	
ADA Accessible Stabilized Pathway	SF	3,480	$5.00	$17,400.00	
Crusher Fines Trails	SF	14,720	$4.25	$62,560.00	
Structures					
Coulson Park Performance Pavilion (Includes Lighting)	EA	1	$750,000.00	$750,000.00	*Allowance*
Restroom (includes concrete pad)	LS	1	$55,000.00	$55,000.00	
Interpretive Elements / Signage					
Coulson Square Cultural & Historic Elements	LS	1	$40,000.00	$40,000.00	*Allowance*
Sawmill Feature @ Coulson Square (Interpretive Signage)	LS	1	$2,000.00	$2,000.00	*Allowance*
Post Office Feature @ Coulson Square (Interpretive Signage)	LS	1	$2,000.00	$2,000.00	*Allowance*
Lighting					
Pedestrian Lights, @ Coulson Square, along 10' wide trail	EA	14	$7,000.00	$98,000.00	
Electrical Infrastructure @ Stage/Dance Arbor	LS	1	$25,000.00	$25,000.00	*Allowance*
Parking Lot Lighting	EA	8	$3,000.00	$24,000.00	
Planting					
Deciduous Shade Tree, 2" caliper	EA	105	$550.00	$57,750.00	
Shrub	EA	100	$37.00	$3,700.00	
Native Seed	SF	24,759	$0.18	$4,456.62	
Turf Lawn	SF	28,113	$0.85	$23,896.05	
Irrigation					
Irrigated Area	SF	52,872	$1.25	$66,090.00	
Trees (Drip Line)	EA	40	$150.00	$6,000.00	
Site Furnishings					
Picnic Tables	EA	14	$1,600.00	$22,400.00	*Allowance*
Benches	EA	12	$1,500.00	$18,000.00	*Allowance*
Trash Receptacles	EA	12	$1,000.00	$12,000.00	*Allowance*
Bike Rack	EA	4	$500.00	$2,000.00	*Allowance*
			Section Subtotal	$2,075,948	
			20% Design Contingency	$415,190	*Will Reduce w/ drawing advancement*
			20% Construction Contingency	$415,190	*Will Reduce w/ drawing advancement*
			Section Total	**$2,906,327**	

Category	Unit	Qnty	Unit Cost	Total Cost	Comments
Bike Park					
Earthwork					
Topsoil Strip and Stockpile Existing, 6" depth	CY	3,536	$4.25	$15,028.00	
Rough Grading	CY	7,530	$20.00	$150,600.00	
Topsoil Placing	CY	1,307	$4.25	$5,554.75	
Import for Berming	CY	25,800	$20.00	$516,000.00	*(Potential Savings if by City)*
Surfaces					
Park Loop Trail (10' wide concrete)	SF	7,000	$7.25	$50,750.00	
Concrete Flatwork (under shade structure and misc. pathways)	SF	2,000	$7.25	$14,500.00	
Crusher Fines Trails	SF	14,050	$4.25	$59,712.50	
Structures					
Shade Shelter, Large, @ Bike Park	EA	1	$60,000.00	$60,000.00	
Bike Park					
Pump Track	LS	1	$300,000.00	$300,000.00	*Allowance*
Intermediate Track	LS	1	$350,000.00	$350,000.00	*Allowance*
Advanced Track	LS	1	$350,000.00	$350,000.00	*Allowance*
All Ages Perimeter Trail	LS	1	$100,000.00	$100,000.00	*Allowance*
Planting					
Deciduous Shade Tree, 2" caliper	EA	100	$550.00	$55,000.00	
Shrub				$0.00	
Native Seed	SF	70,605	$0.18	$12,708.90	
Irrigation					
Irrigated Area	SF	70,605	$1.25	$88,256.25	
Trees (Drip Line)	EA	60	$150.00	$9,000.00	
Site Furnishings					
Picnic Tables	EA	6	$1,600.00	$9,600.00	*Allowance*
Benches	EA	10	$1,500.00	$15,000.00	*Allowance*
Trash Receptacles	EA	10	$1,000.00	$10,000.00	*Allowance*
			Section Subtotal	$2,171,710	
			20% Design Contingency	$434,342	*Will Reduce w/ drawing advancement*
			20% Construction Contingency	$434,342	*Will Reduce w/ drawing advancement*
			Section Total	**$3,040,395**	

Category	Unit	Qnty	Unit Cost	Total Cost	Comments
Dog Park					
Earthwork					
Topsoil Strip and Stockpile Existing, 6" depth	CY	1,430	$4.25	$6,077.50	
Rough Grading	CY	2,859	$20.00	$57,180.00	
Surfaces					
Park Loop Trail (10' wide concrete)	SF	2,750	$7.25	$19,937.50	
(4) Entry Points @ Dog Park, 6" Depth, Grey	SF	900	$7.25	$6,525.00	
ADA Accessible Stabilized Pathway	SF	7,422	$5.00	$37,110.00	
Dog Park Surfacing, 12" Depth	CY	2,365	$50.00	$118,250.00	*(Potential Savings if by City)*
Underdrain: Inlets, Perf. Piping, Filter Fabric, Outfall	LS	1	$16,000.00	$16,000.00	
Crusher Fines Trails	SF	14,050	$4.25	$59,712.50	
Fencing and Gates					
Concrete Curb, Perimeter & Fence Mount	LF	1,150	$20.00	$23,000.00	
5'-0" Height Perimeter Chainlink Fence, Black Vinyl-Coated	LF	1,150	$50.00	$57,500.00	
4'-0" Wide Pedestrian Gates	EA	8	$500.00	$4,000.00	
10'-0" Wide Maintenance/Pedestrian Gates	EA	2	$1,200.00	$2,400.00	
Structures					
Shade Shelter, Small, @ Dog Park	EA	2	$40,000.00	$80,000.00	
Planting					
Deciduous Shade Tree, 2" caliper	EA	65	$550.00	$35,750.00	
Shrub	EA	50	$37.00	$1,850.00	
Native Seed	SF	10,000	$0.18	$1,800.00	
Irrigation					
Irrigated Area	SF	20,000	$1.25	$25,000.00	
Tree (Drip Line)	EA	65	$150.00	$9,750.00	
Site Furnishings					
Picnic Tables	EA	3	$1,600.00	$4,800.00	*Allowance*
Benches	EA	8	$1,500.00	$12,000.00	*Allowance*
Dog Waste Station	EA	6	$500.00	$3,000.00	*Allowance*

Section Subtotal	$581,643	
20% Design Contingency	$116,329	*Will Reduce w/ drawing advancement*
20% Construction Contingency	$116,329	*Will Reduce w/ drawing advancement*
Section Total	**$814,300**	

Project Construction Subtotal:	**$12,680,407**
20% Design Contingency	**$2,536,081**
20% Construction Contingency	**$2,536,081**
*does not include design fees	
Project Construction Total:	**$17,752,570**

Note: Opinion of Probable Costs does not account for City regulated costs towards tap fees of any type.

8.1 Credits

Coulson Park Master Plan
Billings, Montana

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