

Aquatics Facilities Evaluation

City of Red Lodge

Adopted by City Council: February 27, 2018



PROJECT SUMMARY

This report will summarize the findings of the evaluation of the aquatics facility options for Red Lodge, Montana. The information utilized in this evaluation consisted of onsite reviews, input from user surveys, stakeholder interviews, input from a public meeting, review of information outlined in the City of Red Lodge Capital Improvements Plan, the Comprehensive Park Plan and operational information of the existing swimming pool facility. The goal of the report is to allow the Owner to determine the most feasible option to address the aquatic facility needs for the City of Red Lodge.

EXISTING SWIMMING POOL INFORMATION

The existing swimming pool is a rectangular concrete pool with a stainless steel gutter system, a separate concrete wading pool, a single rapid sand filtration system, a pool heater and chemical feed system. The bathhouse is comprised of a CMU building with changing rooms, office area and an equipment room. The existing pool is experiencing spalling of the concrete walls, water loss in both pools, the current pool heater is oversized and is not efficient, and chemical balance in the pools. The City of Red Lodge performs maintenance on the pool walls each spring to patch any spalled areas and repaint as needed. There has been no major piping repair to address potential leak sources. The existing pool does not have compliant ADA access. The operational history of the swimming pool is outlined in the Comprehensive Parks Plan, adopted in 2015.



PUBLIC INVOLVEMENT

Public involvement included a survey, stakeholder interviews and a public meeting. The survey was distributed to students at Red Lodge Schools as well as being made available at various sites around the community, including at the swimming pool. There were 213 total surveys collected, and the results are summarized in the appendix A. The survey results show wide support for the pool and an interest in funding the pool through a parks and recreation district.

Pool facility stakeholders were identified through consultation with the City. Individual interviews were conducted with eight stakeholders. The stakeholders interviewed included a broad cross section of local users of the pool, from the hospital to the local fitness community. A few of the qualitative comments received from stakeholder interviews were:

Dan Seiffert, Chair of Parks and Recreation Board – “The pool is a great amenity to our community.”

Cindy Hanson, Pool Manager – “There are families that will drive from Cody, WY to use our outdoor pool.”

Last, a public meeting was held on September 12th. Sixteen (16) people attended the meeting. The public meeting included a presentation of initial identified alternatives, and a facilitated discussion refining proposed alternatives. Several key issues were discussed at the public meeting, including an overview of some of the deficiencies with the existing facility, ideas for rehabilitating and/or replacing the existing facility in the same location, the pros and cons of an indoor pool, and co-locating the pool in a new location with other recreational facilities. There was again broad support expressed for the pool and an interest in having the community participate in funding the pool in the future. A preferred alternative was not identified but consensus was gained around refined alternatives as presented in this final report.

In addition to the survey, stakeholder interviews and public meeting, Interstate Engineering staff met with the Public Works Committee on November 14th to provide an overview of the draft report as well as presenting to the Park Board on November 15th with the purpose of gathering additional input.

INITIAL OPTION PHASE PREPARATION

There were five action options initially developed for the upgrading and/or replacement of the existing swimming pool. The five options are summarized below.

OPTION I – REHABILITATE THE EXISTING SWIMMING POOL TANK, WADING POOL, POOL PIPING, BATHHOUSE AND DECK AREA.

- Rehabilitate the existing wading pool with new piping, filter / heating system, and liner.
- Remove and replace all concrete decks, fencing, and pool piping.
- Rehabilitate the stainless steel gutter system and install a new PVC pool liner system.
- Provide new rapid sand filter system, new main pool heater, and new chemical feed system; all located outside in a secured fenced area.
- Remodel existing bathhouse to use area previously used for pool heater and chemical feed storage for family change room and office area.

OPTION II – REHABILITATE THE EXISTING SWIMMING POOL TANK, REMOVE WADING POOL, REHABILITATE THE BATHHOUSE, REMOVE AND REPLACE THE POOL PIPING, DECK AREA, AND FENCING.

- Remove the wading pool and add a zero depth entry area into the existing pool.
- Remove and replace all concrete decks, fencing, and pool piping.
- Rehabilitate the stainless steel gutter system and install a new PVC pool liner system.
- Provide new rapid sand filter system, new pool heater, and new chemical feed system; all located outside in a secured fenced area.
- Remodel existing bathhouse to use area previously used for pool heater and chemical feed storage for family change room and office area.

OPTION III – REMOVE EXISTING SWIMMING POOL TANK AND WADING POOL, CONSTRUCT A NEW L-SHAPED, ZERO ENTRY POOL, REHABILITATE THE BATHHOUSE AND DECK AREA.

- Remove the existing pool tank, wading pool, concrete decks, piping and fence.
- Construct a new L-shaped pool in the same location as the existing pool with a slightly smaller footprint.
- New pool will have a stainless steel gutter system and a concrete painted pool shell.
- Provide new rapid sand filter system, new pool heater, and new chemical feed system; all located outside in a secured fenced area.
- Remodel existing bathhouse to use area previously used for pool heater and chemical feed storage for a family change room and office area.

OPTION IV – FILL IN THE EXISTING SWIMMING POOL TANK AND WADING POOL, CONSTRUCT A NEW L-SHAPED ZERO ENTRY POOL AND NEW BATHHOUSE ON A DIFFERENT LOCATION.

- Fill in the existing pool tank and wading pool for future use as recreational area, parking or park area.
- Construct a new L-shaped pool on another yet undetermined site.
- New pool will have a stainless steel gutter system and a concrete painted pool shell.
- Provide new rapid sand filter system, new pool heater, and new chemical feed system; all located outside in a secured fenced area.
- Construct a new approximately 2000 SF bathhouse.

OPTION V – CONSTRUCT A NEW MULTI-PURPOSE AQUATICS CENTER AND HOCKEY/RECREATION FACILITY.

- Construct a new approximately 55,000 SF building to house a swimming pool, locker rooms, mechanical rooms, and a concrete floor area that will have refrigeration grid installed for future use for an indoor hockey arena.
- Construct a new swimming pool with stainless steel gutters and concrete pool tank in the building.
- New rapid sand filter system, new pool heater, chemical feed system all in an interior mechanical room.
- Construct two locker rooms, office, storage and building mechanical (HVAC) rooms.

The base project cost ranges were estimated and are outlined below:

OPTION I	\$850,000 - \$950,000 Base Project Cost
OPTION II	\$875,000 - \$1,025,000 Base Project Cost
OPTION III	\$1,150,000 - \$1,300,000 Base Project Cost
OPTION IV	\$1,500,000 - \$2,000,000 Base Project Cost
OPTION V	\$12,000,000 - \$15,000,000 Base Project Cost

The above information was presented at a public meeting and the various options were discussed. There was very good input on the pros and cons of each option and ultimately the five options were combined and modified into three alternates. A fourth alternate discussed was for an indoor facility. This report will outline the cost, operational and staffing issues with the indoor facility with no drawing prepared. The reasons to not develop an indoor pool drawing is due to the many variables that need to be determined for an indoor facility. We utilized a square foot analysis for the indoor facility review

FINAL OPTIONS OUTLINE

The following section describes the components of each option modified with input from the public meeting. Option designations have been changed to A, B and C to reduce confusion. The detailed breakdown of each option is found in the Appendix.

Option A: This option is a combination of Options I and II and modified to have a separate splash deck constructed in lieu of a new wading pool. A ramp would be installed into the existing pool to provide for ADA accessibility. This option includes:

- Removal of the wading pool
- Adding an access ramp into existing pool.
- Removal and replacement of all concrete decks, fencing, and pool piping.
- Rehabilitation of the stainless steel gutter system and installation of a new PVC pool liner system.
- Providing a new rapid sand filter system, new pool heater, and new chemical feed system; all located outside in a secured fenced area.
- Remodeling existing bathhouse to use area previously designated for pool heater and chemical feed storage for family change room and office area.

The alternate features for this option will be a 1500 SF splash deck, a stand-alone tower water slide, a climbing wall and a deck mounted slide.

Option A – Rehabilitate Existing Pool				
<i>Item</i>	<i>Capital Cost</i>	<i>Annual Payment*</i>	<i>Annual Estimated O/M Cost</i>	<i>Total Estimated Annual Budget</i>
Base Pool	\$885,000	\$63,500	\$60,000	\$123,500
Splash Deck/Features	235,000	14,000	12,000	26,000
Tower Water Slide	208,500	12,000	10,000	22,000
All Option A Alternates		89,500	82,000	171,500
<i>*20 year term at 4.5%</i>				



Tower Slide



Climbing Wall



Splash Deck

Option B: This option is similar to the original Option III, except there will be a stand-alone splash deck as a future addition. This option includes:

- Removal of the existing pool tank, wading pool, concrete decks, piping and fence.
- Construction of a new irregular shaped pool in the same location as the existing pool with a slightly smaller footprint.
- Construction of a new pool that will have a stainless steel gutter system and a concrete painted pool shell.
- Providing a new rapid sand filter system, new pool heater, and new chemical feed system; all located outside in a secured fenced area.
- Remodeling the existing bathhouse to use area previously designated for pool heater and chemical feed storage for a family change room and office area.

Option B – New Swimming Pool at Existing Site				
<i>Item</i>	<i>Capital Cost</i>	<i>Annual Payment</i>	<i>Annual Estimated O/M Cost</i>	<i>Total Estimated Annual Budget</i>
Base Pool	\$1,512,500	\$112,000	\$55,000	\$167,000
Splash Deck/Features	235,000	14,000	12,000	26,000
Tower Water Slide	208,500	12,000	10,000	22,000
All Option B Alternates		138,000	77,000	215,000



Option C: This option utilizes the concept of building a new aquatics complex similar in size to Option B but in a new location and a variation that will allow for future expansions into a multi-use complex which would include:

- A) A clear span roofed, multi-use pavilion with a concrete floor.
- B) An expanded bathhouse facility to have additional locker rooms, public restrooms, office areas, concession area and expanded equipment room.
- C) Installation of refrigeration tubing within the new concrete floor.

The proposed location for preparation of this option is Coal Miners Park. This area was listed as a potential site in the Comprehensive Park Plan adopted by the City. There is an overview map in the Appendix that shows this location.

Option C-1 – New Aquatics Facility				
<i>Item</i>	<i>Capital Cost</i>	<i>Annual Payment</i>	<i>Annual Estimated O/M Cost</i>	<i>Total Estimated Annual Budget</i>
Base Pool	\$2,357,000	\$176,000	\$55,000	\$231,000
Splash Deck/Features	235,000	14,000	12,000	26,000
Tower Water Slide	208,500	12,000	10,000	22,000
All Option C-1 Alternates		202,000	77,000	279,000

Option C-2 –Multi-Use Complex at Coal Miners Park				
<i>Item</i>	<i>Capital Cost</i>	<i>Annual Payment</i>	<i>Annual Estimated O/M Cost</i>	<i>Total Estimated Annual Budget</i>
Multi-Use Complex	\$2,249,000	\$171,000	\$90,000	\$261,000
All Option C-2 Alternates		171,000	90,000	261,000

OPTION EVALUATIONS

This section will review the estimated capital costs, operational costs, design flexibility and financing costs. There are several grant programs for aquatics projects but they have very limited funds available and are extremely competitive. These programs are outlined in the Capital Improvements Plan and Comprehensive Parks Plan prepared for the City of Red Lodge.

For the purpose of evaluating the annual cost to fund the initial construction costs we will use a 20 year loan period at an interest rate of 4.5%. It will be assumed that all financing will be in the form of a loan; so any grants or donations to the selected options would reduce the annual payment. The debt repayment options are a Park District, Special Improvements District, or a General Obligation Bond. The operation and maintenance budget of the existing pool runs at a deficit therefore is unable to provide funds for any debt service.

Existing Swimming Pool Budget History			
<i>Year</i>	<i>Revenue</i>	<i>Expense</i>	<i>Net</i>
2014-2015	\$26,370	\$58,081	-\$31,711
2015-2016	\$14,167	\$64,620	-\$50,453
2016-2017	\$23,108	\$53,890	-\$30,782

I. Outdoor Aquatics Complex Options

The detailed estimated project costs of Options A, B and C and the potential future amenity additions can be found in the Appendix of this report. The additive option of the splash deck can be either a flow thru system (it is attached to the existing public water supply system and discharges to the sewer) or a recirculating system that would filter, treat and reuse the water. The flow thru has a lower capital cost but has a higher operational cost, with the recirculation system having a higher capital cost with lower operating cost. The flow thru does waste the water to the sewer collection and treatment system. The flow thru splash decks operating in Colstrip and Castle Rock Park in Billings collect the wastewater and uses it for park land irrigation. The reuse operation is dependent on existing irrigation infrastructure.

The estimates for the splash deck in this report will be based on the recirculating option. The costs for the addition of a deck mounted slide and climbing wall are included with the splash deck work but could be installed in the base pool project if funds would be available. The stand-alone tower water slide cost estimate is for a stand-alone project that could also be completed at a later date. The cost estimates are broken into separate projects with the base project to include the stub outs of future piping for a splash deck and tower water slide. The installation of these features does not add significantly to the base project cost, but will save a lot of demolition and costs if the alternate projects are funded and built.

The base project includes the required deck equipment such as ladders, rope anchors and a 2/3 meter diving board. The estimate also includes a line item for the cost of a bond attorney and cost associated with a bond election.

The annual debt retirement cost for the base project in the three options range from \$63,500 to \$176,000. The operational / maintenance costs of the base project for each option are very close, ranging from \$55,000 to \$60,000 per year. The cost summaries found in a previous section are shown below.

Option A – Rehabilitate Existing Pool				
<i>Item</i>	<i>Capital Cost</i>	<i>Annual Payment</i>	<i>Annual Estimated O/M Cost</i>	<i>Total Estimated Annual Budget</i>
Base Pool	\$885,000	\$63,500	\$60,000	\$123,500
Splash Deck/Features	235,000	14,000	12,000	26,000
Tower Water Slide	208,500	12,000	10,000	22,000
All Option A Alternates		89,500	82,000	171,500

Option B – New Swimming Pool at Existing Site				
<i>Item</i>	<i>Capital Cost</i>	<i>Annual Payment</i>	<i>Annual Estimated O/M Cost</i>	<i>Total Estimated Annual Budget</i>
Base Pool	\$1,512,500	\$112,000	\$55,000	\$167,000
Splash Deck/Features	235,000	14,000	12,000	26,000
Tower Water Slide	208,500	12,000	10,000	22,000
All Option B Alternates		138,000	77,000	215,000

Option C-1 – New Aquatics Facility				
<i>Item</i>	<i>Capital Cost</i>	<i>Annual Payment</i>	<i>Annual Estimated O/M Cost - Pool Only</i>	<i>Total Estimated Annual Budget</i>
Base Pool	\$2,357,000	\$176,000	\$55,000	\$231,000
Splash Deck/Features	235,000	14,000	12,000	26,000
Tower Water Slide	208,500	12,000	10,000	22,000
All Option C-1 Alternates		202,000	77,000	279,000

Option C-2 – Multi-Use Complex at Coal Miners Park				
<i>Item</i>	<i>Capital Cost</i>	<i>Annual Payment</i>	<i>Annual Estimated O/M Cost - Multi-Use</i>	<i>Total Estimated Annual Budget</i>
Multi-Use Complex	\$2,249,000	\$171,000	\$90,000	\$261,000
All Option C-2 Alternates		171,000	90,000	261,000



II. Indoor Pool Option

There were several comments in the user surveys that expressed an interest in an indoor facility. These comments were made prior to the public meeting during which the estimated capital costs, operational costs and staffing issues were presented. As mentioned earlier in this report, there are many factors that affect the size, amenities and cost of an indoor facility. For the purpose of this narrative we will use a 3500 SF pool, small space for a splash deck, two locker rooms, an equipment room, office space and a large storage area. The building area would be approximately 14,000 SF in size.

The estimated construction cost of this facility would be \$6,950,000. The annual debt service would be \$425,000. The annual operational estimates for this size facility would be \$450,000. This would equate to an annual debt service and annual operation and maintenance cost of \$875,000. A concern outlined during the public meeting was finding enough staff to provide the required lifeguard workforce. The outdoor pool has experienced a challenge in finding an adequate number of lifeguards to operate the existing outdoor pool for a 75-day season. The new indoor facility will need to have enough staff to operate year-round.

The table below shows the breakdown of the estimated annual cost for an indoor pool option.

Indoor Facility				
Item	Capital Cost	Annual Payment	Annual Estimated O/M Cost	Total Estimated Annual Budget
Base Pool	\$6,950,000	\$425,000	\$450,000	\$875,000
Splash Deck/Features	235,000	14,000	12,000	26,000
Tower Water Slide	208,500	12,000	10,000	22,000
All Indoor Alternates		451,000	472,000	923,000

RECOMMENDATIONS

The information presented in this report is to be reviewed by the City of Red Lodge officials to provide for an opportunity for those officials to select one or two options to present at a second public meeting or develop a funding strategy for a selected option. The City of Red Lodge is to review the various aspects of each option to determine the option that will provide the City with an aquatics project that meets the needs of the community and is financially feasible to construct and operate.

The table below shows a weighted comparison of the various components of a project.

Pool Option Comparison Matrix							
ITEM	Weighting Factor	A	A ¹	B	B ¹	C	C ¹
Construction Cost	5	1	5	2	10	3	15
Operation Cost	5	1	5	1	5	1	5
Design Flexibility	3	3	9	2	6	1	3
Water Volume to Treat and Heat	2	2	4	1	2	1	2
Bathhouse Costs	2	1	2	1	2	2	4
Land Acquisition	2	1	2	1	2	1	2
Site Utility Availability	2	1	2	1	2	2	4
Weighted Score		10	29	9	29	11	35

A, B, C = Raw Score

1 = Most Beneficial

A¹, B¹, C¹ = Weighted Score

5 = Least Beneficial

Once the community decides the aquatics option they prefer based on this feasibility study, the project will advance to the design phase. During the design phase, a more detailed analysis will be done and a set of documents will be prepared. The estimated project cost would be updated and used in the funding package preparation. The time frame needed to develop the financial component of an aquatic project is difficult to determine. Depending on the mechanism to fund the project it could be 10 to 12 months to over 24 months. The important consideration for a community undertaking an aquatics project is to determine the means to finance a project (General Obligation Bond, Park District, or a Special Improvement District) and start the required process. Once a funding source is determined and secured the project can advance to the bidding and construction phase.



Appendix

- A) Pool Survey Summary
- B) Detailed Cost Estimates
- C) Option Layout Sheets

Red Lodge Pool Survey Summary 2017

Survey #	Lap Swimming	Splash Park	Waterslides	Zero Entry Pool	Why do you use the pool?	How many times did you use the pool in 2016?	How was the size of the pool for your needs?	Funding through the creation of a Parks & Recs District		Reasonable Annual Assessment Amount through Parks & Rec Dist	Reasonable Annual Assessment through city-wide bond issue	Do you reside within, outside the City Limits?	
	Rank in Order of Importance: 1-high, 5-low							YES	NO			Within	Outside

What types of features would you use?

ALL SURVEYS	Average				155	Recreation	59	Too Small	Average		118	88
	2.6	2.0	1.7	3.0					\$ 39.69	\$ 47.22		
					10	Fitness	125	Just Right				
					22	Fun	4	Too Big	22	\$20.00		
					6	Instructional			19	\$30.00		
					5	Don't Use			36	\$40.00		
									89	Yes		
									10	No		
					1-3/Season	54			\$40.00	43		
					2-3/Week	80			\$60.00	17		
					4-5/Week	45			\$80.00	7		
					Every Day	9			\$100.00	9		
					Never	11						

Option A

Rehabilitate the Aquatics Facility October (2017) Red Lodge Montana

i.e. #Y170066

A)	Rehabilitation of the Main pool/new fenced equipment area/ minor rehabilitation of bathhouse						
1	Mobilization, bonds, Insurance	1	LS	@	\$ 60,000.00	=	\$ 60,000.00
2	Demolition*	1	LS	@	\$ 40,000.00	=	\$ 40,000.00
3	New concrete walls for ramp	1	LS	@	\$ 15,000.00	=	\$ 15,000.00
4	New concrete floor	1	LS	@	\$ 10,500.00	=	\$ 10,500.00
5	Concrete wall/stainless gutter rehabilitation	1	LS	@	\$ 75,000.00	=	\$ 75,000.00
6	Main drain replacement	1	LS	@	\$ 11,000.00	=	\$ 11,000.00
7	New pool piping	1	LS	@	\$ 15,000.00	=	\$ 15,000.00
8	New filter/pump/controls	1	LS	@	\$ 75,000.00	=	\$ 75,000.00
9	Chemical feed/disinfection systems	1	LS	@	\$ 12,500.00	=	\$ 12,500.00
10	Pool heater (Outdoor)	1	LS	@	\$ 30,000.00	=	\$ 30,000.00
11	Concrete ribbon slab	1	LS	@	\$ 7,500.00	=	\$ 7,500.00
12	Concrete deck/deck drains	1	LS	@	\$ 50,000.00	=	\$ 50,000.00
13	PVC pool liner	1	LS	@	\$ 85,000.00	=	\$ 85,000.00
14	Electrical work	1	LS	@	\$ 17,000.00	=	\$ 17,000.00
15	Fencing allowance	1	LS	@	\$ 25,000.00	=	\$ 25,000.00
16	Site work/utilities	1	LS	@	\$ 9,000.00	=	\$ 9,000.00
17	Minor bathhouse rehabilitation allowance	1	LS	@	\$ 85,000.00	=	\$ 85,000.00
18	Deck equipment allowance	1	LS	@	\$ 28,000.00	=	\$ 28,000.00
19	Testing allowance	1	LS	@	\$ 4,500.00	=	\$ 4,500.00
	TOTAL ESTIMATED COST *					=	\$ 655,000.00
					Contingency	=	\$ 64,000.00
	TOTAL ESTIMATED CONSTRUCTION					=	\$ 719,000.00
					Aquatics design	=	\$ 65,000.00
					Architectural design	=	\$ 10,500.00
					Mechanical/Electrical design	=	\$ 17,500.00
					Site Survey/base Map	=	\$ 6,000.00
					Construction Administration	=	\$ 45,000.00
					Building /DPHHS Fees	=	\$ 9,500.00
					Legal/Administration/bond fees	=	\$ 12,500.00
	TOTAL ESTIMATED PROJECT COSTS OPTION A					=	\$ 885,000.00

* the tipping fee at landfill not included

** The unit prices reflected in this document represent the Engineer's opinion actual construction bid unit pricing may vary from the costs stated herein.

B)	Stand alone 4 feature splash deck,deck slide and climbing wall in main pool						
1	Site work	1	LS	@	\$ 5,000.00	=	\$ 5,000.00
2	New Fencing	1	LS	@	\$ 8,500.00	=	\$ 8,500.00
3	Splash deck water treatment system	1	LS	@	\$ 75,000.00	=	\$ 75,000.00
4	Splash deck piping	1	LS	@	\$ 9,000.00	=	\$ 9,000.00
5	Deck slide	1	LS	@	\$ 12,000.00	=	\$ 12,000.00
6	Climbing wall	1	LS	@	\$ 19,000.00	=	\$ 19,000.00
7	Electrical systems	1	LS	@	\$ 12,000.00	=	\$ 12,000.00
8	Splash deck feature allowance	1	LS	@	\$ 40,000.00	=	\$ 40,000.00
	TOTAL ESTIMATED COST **					=	\$ 180,500.00
					Contingency	=	\$ 18,500.00
	TOTAL ESTIMATED CONSTRUCTION					=	\$ 199,000.00
					Aquatics design	=	\$ 11,000.00
					Mechanical/Electrical design	=	\$ 5,000.00
					Construction Administration	=	\$ 12,000.00
					Building and DPHHS Fees	=	\$ 4,500.00
					Legal/Administration/bond fees	=	\$ 4,000.00
	Splash deck/climbing wall/deck slide estimated project cost					=	\$ 235,500.00

Total Base Project A and B

\$ 1,120,500.00

C)	Stand alone single flume tower water slide						
1	Site work	1	LS	@	\$ 1,500.00	=	\$ 1,500.00
2	New Fencing	1	LS	@	\$ 3,000.00	=	\$ 3,000.00
3	Tower slide unit	1	LS	@	\$115,000.00	=	\$ 115,000.00
4	Slide Piping	1	LS	@	\$ 4,500.00	=	\$ 4,500.00
5	Run off trough concrete/drainage	1	LS	@	\$ 12,000.00	=	\$ 12,000.00
6	Water slide pump	1	LS	@	\$ 7,500.00	=	\$ 7,500.00
7	Electrical work	1	LS	@	\$ 12,000.00	=	\$ 12,000.00
	TOTAL ESTIMATED COST **					=	\$ 155,500.00
					Contingency	=	\$ 15,500.00
	TOTAL ESTIMATED CONSTRUCTION					=	\$ 171,000.00
					Aquatics design	=	\$ 12,000.00
					Mechanical/Electrical design	=	\$ 5,000.00
					Construction Administration	=	\$ 12,000.00
					Building and DPHHS Fees	=	\$ 4,500.00
					Legal/Administration/bond fees	=	\$ 4,000.00
	TOTAL ESTIMATED PROJECT					=	\$ 208,500.00

Total Base Project A, B and C

\$ 1,329,000.00

Option B

Rehabilitate the Aquatics Facility October (2017) Red Lodge Montana

i.e. #Y170066

A)	Demolish the existing Pool, Reconfigure new pool with teaching area and zero entry and minor bathhouse remodel						
1	Mobilization, Bonds, Insurance	1	LS	@	\$ 90,000.00	=	\$ 90,000.00
2	Demolition*	1	LS	@	\$ 85,000.00	=	\$ 85,000.00
3	New concrete pool tank	1	LS	@	\$435,000.00	=	\$ 435,000.00
4	New pool coating	1	LS	@	\$ 25,000.00	=	\$ 25,000.00
5	New stainless steel gutter system	1	LS	@	\$175,000.00	=	\$ 175,000.00
6	Main drains	1	LS	@	\$ 8,500.00	=	\$ 8,500.00
7	New pool piping	1	LS	@	\$ 15,000.00	=	\$ 15,000.00
8	New filter/pump/controls	1	LS	@	\$ 65,000.00	=	\$ 65,000.00
9	Chemical feed/disinfection systems	1	LS	@	\$ 11,500.00	=	\$ 11,500.00
10	Pool heater (Outdoor)	1	LS	@	\$ 28,000.00	=	\$ 28,000.00
11	Concrete ribbon slab	1	LS	@	\$ 10,000.00	=	\$ 10,000.00
12	Concrete deck/deck drains	1	LS	@	\$ 50,000.00	=	\$ 50,000.00
13	Electrical work	1	LS	@	\$ 22,000.00	=	\$ 22,000.00
14	Fencing allowance	1	LS	@	\$ 26,000.00	=	\$ 26,000.00
15	Site work/utilities	1	LS	@	\$ 10,000.00	=	\$ 10,000.00
16	Minor bathhouse rehabilitation allowance	1	LS	@	\$ 85,000.00	=	\$ 85,000.00
17	Deck equipment allowance	1	LS	@	\$ 28,000.00	=	\$ 28,000.00
18	Testing allowance	1	LS	@	\$ 4,500.00	=	\$ 4,500.00
	TOTAL ESTIMATED COST *					=	\$ 1,173,500.00
					Contingency	=	\$ 117,500.00
	TOTAL ESTIMATED CONSTRUCTION					=	\$ 1,291,000.00
					Aquatics design	=	\$ 105,000.00
					Architectural design	=	\$ 10,500.00
					Mechanical/Electrical design	=	\$ 17,500.00
					Site Survey/base Map	=	\$ 6,000.00
					Construction Administration	=	\$ 55,000.00
					Building /DPHHS Fees	=	\$ 12,500.00
					Legal/Administration/bond fees	=	\$ 15,000.00
	TOTAL ESTIMATED PROJECT COSTS OPTION B					=	\$ 1,512,500.00

* the tipping fee at landfill not included

** The unit prices reflected in this document represent the Engineer's opinion actual construction bid unit pricing may vary from the costs stated herein.

B)	Stand alone 4 feature splash deck,deck slide and climbing wall in main pool						
1	Site work	1	LS	@	\$ 5,000.00	=	\$ 5,000.00
2	New fencing	1	LS	@	\$ 8,500.00	=	\$ 8,500.00
3	Splash deck water treatment system	1	LS	@	\$ 75,000.00	=	\$ 75,000.00
4	Splash deck piping	1	LS	@	\$ 9,000.00	=	\$ 9,000.00
5	Deck slide	1	LS	@	\$ 12,000.00	=	\$ 12,000.00
6	Climbing wall	1	LS	@	\$ 19,000.00	=	\$ 19,000.00
7	Electrical systems	1	LS	@	\$ 12,000.00	=	\$ 12,000.00
8	Splash deck feature allowance	1	LS	@	\$ 40,000.00	=	\$ 40,000.00
	TOTAL ESTIMATED COST **					=	\$ 180,500.00
					Contingency	=	\$ 18,500.00
	TOTAL ESTIMATED CONSTRUCTION					=	\$ 199,000.00
					Aquatics design	=	\$ 11,000.00
					Mechanical/Electrical design	=	\$ 5,000.00
					Construction Administration	=	\$ 12,000.00
					Building and DPHHS Fees	=	\$ 4,500.00
					Legal/Administration/bond fees	=	\$ 4,000.00
	Splash deck/climbing wall/deck slide estimated project cost					=	\$ 235,500.00

Total Base Project A and B

\$ 1,748,000.00

C)	Stand alone single flume tower water slide						
1	Site work	1	LS	@	\$ 1,500.00	=	\$ 1,500.00
2	New fencing	1	LS	@	\$ 3,000.00	=	\$ 3,000.00
3	Tower slide unit	1	LS	@	\$115,000.00	=	\$ 115,000.00
4	Slide Piping	1	LS	@	\$ 4,500.00	=	\$ 4,500.00
5	Run off trough concrete/drainage	1	LS	@	\$ 12,000.00	=	\$ 12,000.00
6	Water slide pump	1	LS	@	\$ 7,500.00	=	\$ 7,500.00
7	Electrical work	1	LS	@	\$ 12,000.00	=	\$ 12,000.00
	TOTAL ESTIMATED COST **					=	\$ 155,500.00
					Contingency	=	\$ 15,500.00
	TOTAL ESTIMATED CONSTRUCTION					=	\$ 171,000.00
					Aquatics design	=	\$ 12,000.00
					Mechanical/Electrical design	=	\$ 5,000.00
					Construction Administration	=	\$ 12,000.00
					Building and DPHHS Fees	=	\$ 4,500.00
					Legal/Administration/bond fees	=	\$ 4,000.00
	TOTAL ESTIMATED PROJECT					=	\$ 208,500.00

Total Base Project A, B and C

\$ 1,956,500.00

Option C

New Aquatics Facility with future multi use complex October (2017)

Red Lodge Montana

i.e. #Y170066

A)	Demolish the existing Pool, construct a new swimming pool at Coal Miners Park						
1	Mobilization, bonds, Insurance	1	LS	@	\$ 90,000.00	=	\$ 90,000.00
2	Demolition and filling in old pool*	1	LS	@	\$125,000.00	=	\$ 125,000.00
3	New concrete pool tank	1	LS	@	\$475,000.00	=	\$ 475,000.00
4	New pool coating	1	LS	@	\$ 25,000.00	=	\$ 25,000.00
5	New stainless steel gutter system	1	LS	@	\$175,000.00	=	\$ 175,000.00
6	Main drains	1	LS	@	\$ 8,500.00	=	\$ 8,500.00
7	New pool piping	1	LS	@	\$ 15,000.00	=	\$ 15,000.00
8	New Filter/pump/controls	1	LS	@	\$ 65,000.00	=	\$ 65,000.00
9	Chemical feed/disinfection systems	1	LS	@	\$ 11,500.00	=	\$ 11,500.00
10	Pool heater	1	LS	@	\$ 28,000.00	=	\$ 28,000.00
11	Concrete ribbon slab	1	LS	@	\$ 10,000.00	=	\$ 10,000.00
12	Concrete deck/deck drains	1	LS	@	\$ 50,000.00	=	\$ 50,000.00
13	Electrical work	1	LS	@	\$ 32,000.00	=	\$ 32,000.00
14	Fencing allowance	1	LS	@	\$ 30,000.00	=	\$ 30,000.00
15	Site work/utilities	1	LS	@	\$ 12,500.00	=	\$ 12,500.00
16	New bathhouse allowance	1	LS	@	\$525,000.00	=	\$ 525,000.00
17	New Mechanical Building allowance	1	LS	@	\$115,000.00	=	\$ 115,000.00
17	Deck equipment allowance	1	LS	@	\$ 28,000.00	=	\$ 28,000.00
18	Testing allowance	1	LS	@	\$ 4,500.00	=	\$ 4,500.00
	TOTAL ESTIMATED COST *					=	\$ 1,825,000.00
					Contingency	=	\$ 182,000.00
	TOTAL ESTIMATED CONSTRUCTION					=	\$ 2,007,000.00
					Aquatics design	=	\$ 150,000.00
					Architectural design	=	\$ 35,000.00
					Mechanical/Electrical design	=	\$ 28,000.00
					Site Survey/base Map	=	\$ 10,000.00
					Construction Administration	=	\$ 85,000.00
					Building /DPHHS Fees	=	\$ 17,000.00
					Legal/Administration/bond fees	=	\$ 25,000.00
	TOTAL ESTIMATED PROJECT COSTS OPTION C					=	\$ 2,357,000.00

* the tipping fee at landfill not included

** The unit prices reflected in this document represent the Engineer's opinion actual construction bid unit pricing may vary from the costs stated herein.

B)	Stand alone 4 feature splash deck,deck slide and climbing wall in main pool						
1	Site work	1	LS	@	\$ 5,000.00	=	\$ 5,000.00
2	New fencing	1	LS	@	\$ 8,500.00	=	\$ 8,500.00
3	Splash deck water treatment system	1	LS	@	\$ 75,000.00	=	\$ 75,000.00
4	Splash deck piping	1	LS	@	\$ 9,000.00	=	\$ 9,000.00
5	Deck slide	1	LS	@	\$ 12,000.00	=	\$ 12,000.00
6	Climbing wall	1	LS	@	\$ 19,000.00	=	\$ 19,000.00
7	Electrical systems	1	LS	@	\$ 12,000.00	=	\$ 12,000.00
8	Splash deck feature allowance	1	LS	@	\$ 40,000.00	=	\$ 40,000.00
	TOTAL ESTIMATED COST **					=	\$ 180,500.00
					Contingency	=	\$ 18,500.00
	TOTAL ESTIMATED CONSTRUCTION					=	\$ 199,000.00
					Aquatics design	=	\$ 11,000.00
					Mechanical/Electrical design	=	\$ 5,000.00
					Construction Administration	=	\$ 12,000.00
					Building and DPHHS Fees	=	\$ 4,500.00
					Legal/Administration/bond fees	=	\$ 4,000.00
	Splash deck/climbing wall/deck slide estimated project cost					=	\$ 235,500.00

Total Base Project A and B

\$ 2,592,500.00

C)	Stand alone single flume tower water slide						
1	Site work	1	LS	@	\$ 1,500.00	=	\$ 1,500.00
2	New fencing	1	LS	@	\$ 3,000.00	=	\$ 3,000.00
3	Tower slide unit	1	LS	@	\$115,000.00	=	\$ 115,000.00
4	Slide piping	1	LS	@	\$ 4,500.00	=	\$ 4,500.00
5	Run off trough concrete/drainage	1	LS	@	\$ 12,000.00	=	\$ 12,000.00
6	Water slide pump	1	LS	@	\$ 7,500.00	=	\$ 7,500.00
7	Electrical work	1	LS	@	\$ 12,000.00	=	\$ 12,000.00
	TOTAL ESTIMATED COST **					=	\$ 155,500.00
					Contingency	=	\$ 15,500.00
	TOTAL ESTIMATED CONSTRUCTION					=	\$ 171,000.00
					Aquatics design	=	\$ 12,000.00
					Mechanical/Electrical design	=	\$ 5,000.00
					Construction Administration	=	\$ 12,000.00
					Building and DPHHS Fees	=	\$ 4,500.00
					Legal/Administration/bond fees	=	\$ 4,000.00
	TOTAL ESTIMATED PROJECT					=	\$ 208,500.00

Total Base Project A, B and C

\$ 2,801,000.00

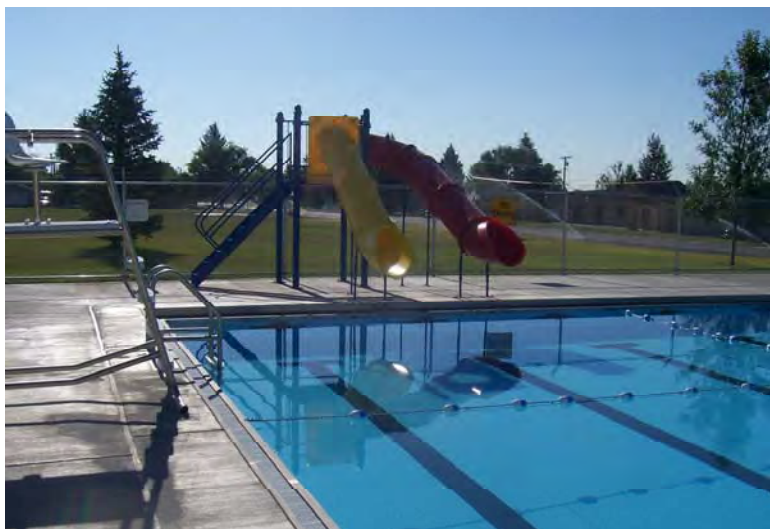
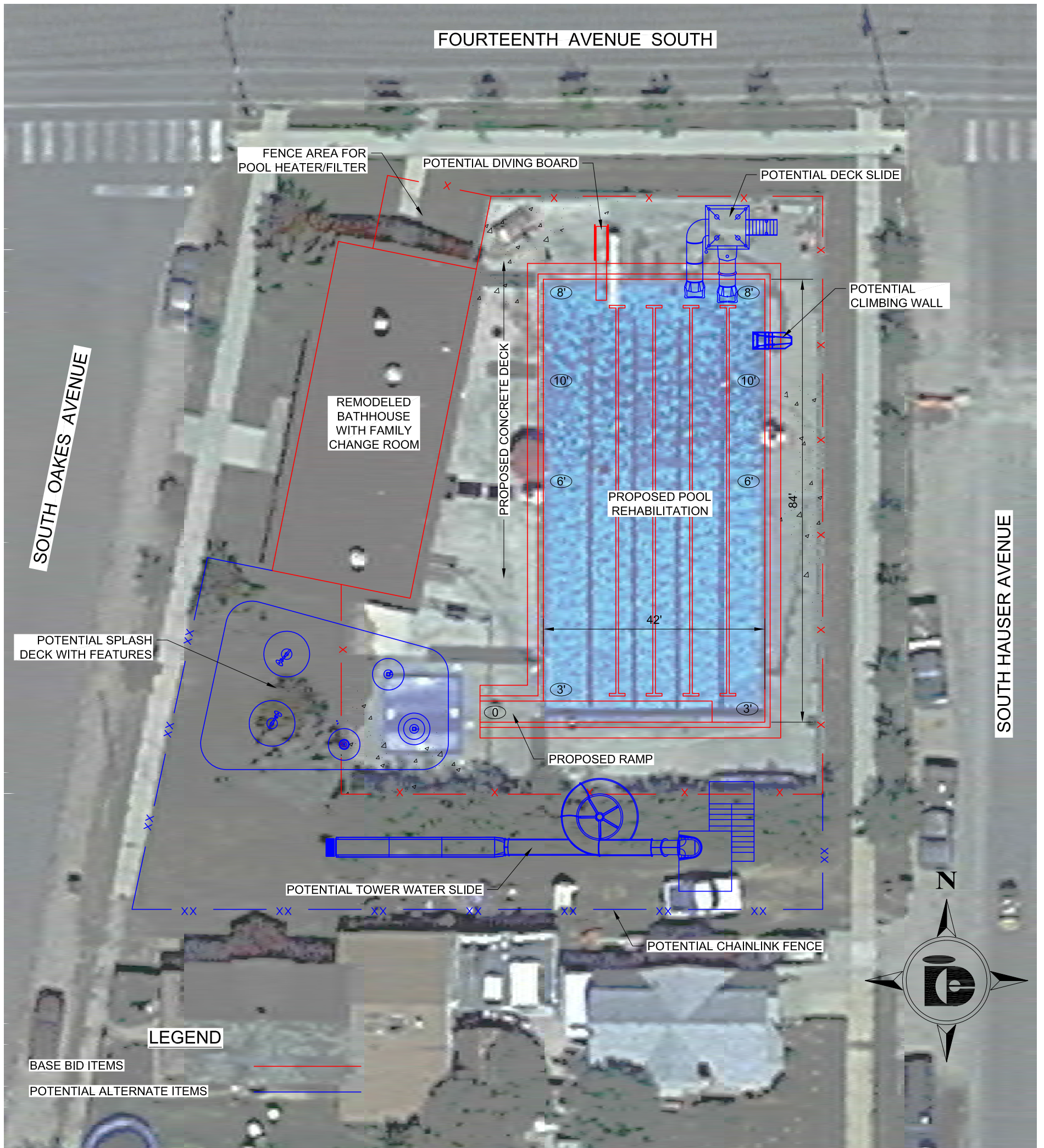
** The unit prices reflected in this document represent the Engineer's opinion actual construction bid unit pricing may vary from the costs stated herein.

D)	Future bathhouse expansion and a 24,000 SF roofed canopy with concrete slab						
1	Site work	1	LS	@	\$ 7,500.00	=	\$ 7,500.00
2	Bathhouse expansion	1	LS	@	\$425,000.00	=	\$ 425,000.00
3	8" concrete floor	1	LS	@	\$375,000.00	=	\$ 375,000.00
4	Pavilion style roof system	1	LS	@	\$720,000.00	=	\$ 720,000.00
5	Lighting system	1	LS	@	\$ 45,000.00	=	\$ 45,000.00
6	Refrigeration tubing	1	LS	@	\$ 85,000.00	=	\$ 85,000.00
7	Electrical service	1	LS	@	\$ 12,000.00	=	\$ 12,000.00
	TOTAL ESTIMATED COST **					=	\$ 1,669,500.00
					Contingency	=	\$ 166,500.00
	TOTAL ESTIMATED CONSTRUCTION					=	\$ 1,836,000.00
					A/E Design	=	\$ 138,000.00
	Mechanical/Electrical design					=	\$ 45,000.00
	Construction Administration					=	\$ 65,000.00
					Building Fees	=	\$ 25,000.00
	Legal/Administration/bond fees					=	\$ 25,000.00
	TOTAL PROJECT B					=	\$ 2,134,000.00

Total Base Project A, B, C and D

\$ 4,735,000.00

OPTION A



POTENTIAL DECK SLIDE OPTION



POTENTIAL CLIMBING WALL OPTION

SHEET NO.

A



Interstate Engineering, Inc.
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Fax (406) 256-9178
www.interstateeng.com

Other offices in Minnesota, North Dakota and South Dakota

CITY OF RED LODGE
POOL REHABILITATION
OPTION A
RED LODGE, MONTANA

Drawn By: A.M.R. Project No.: Y1700066
Checked By: B.R.M. Date: SEPTEMBER 2017

Revision No.	Date	By	Description

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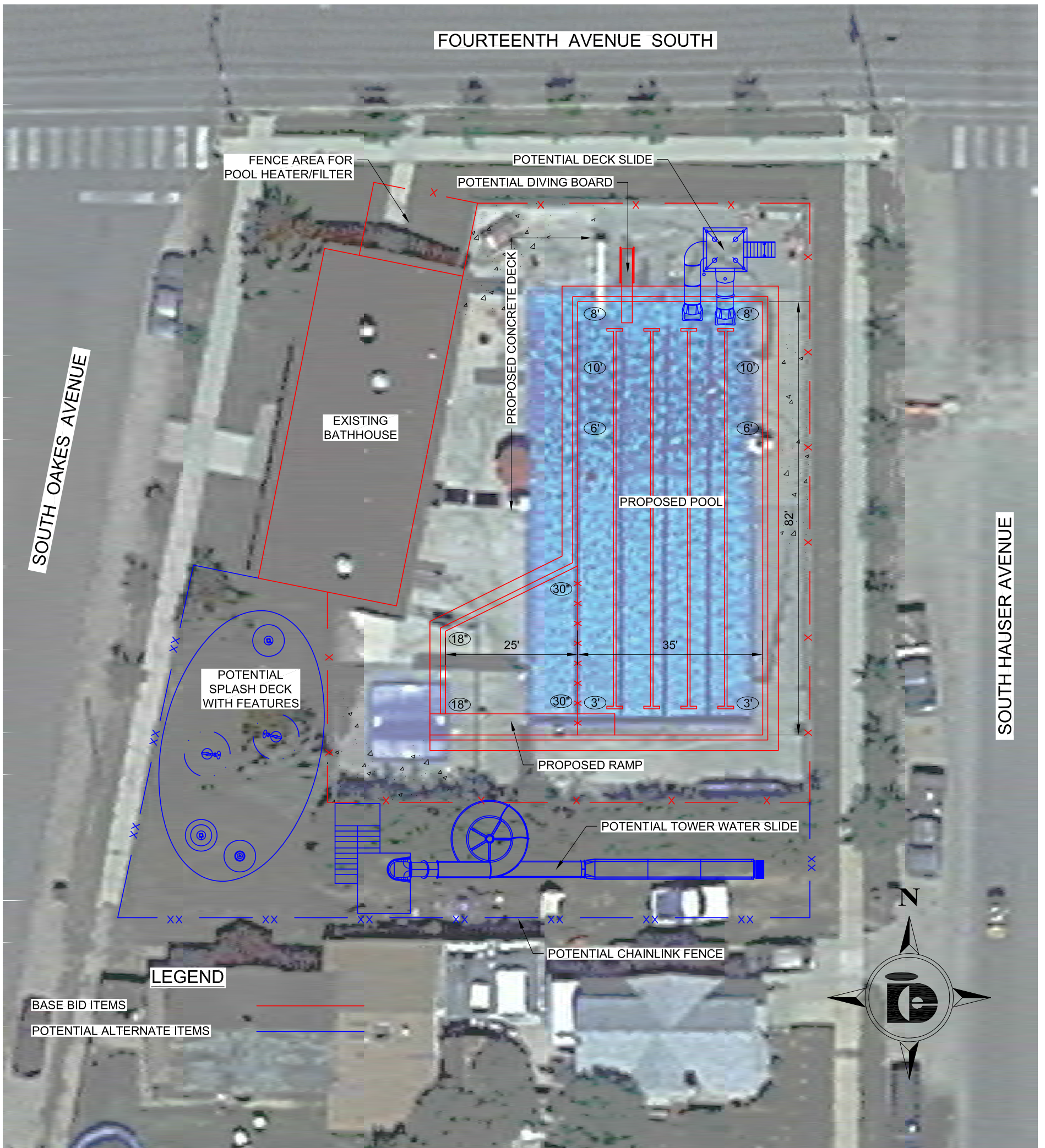
OPTION B



POTENTIAL DECK SLIDE OPTION



POTENTIAL SPLASH PARK OPTIONS



SHEET NO.

B



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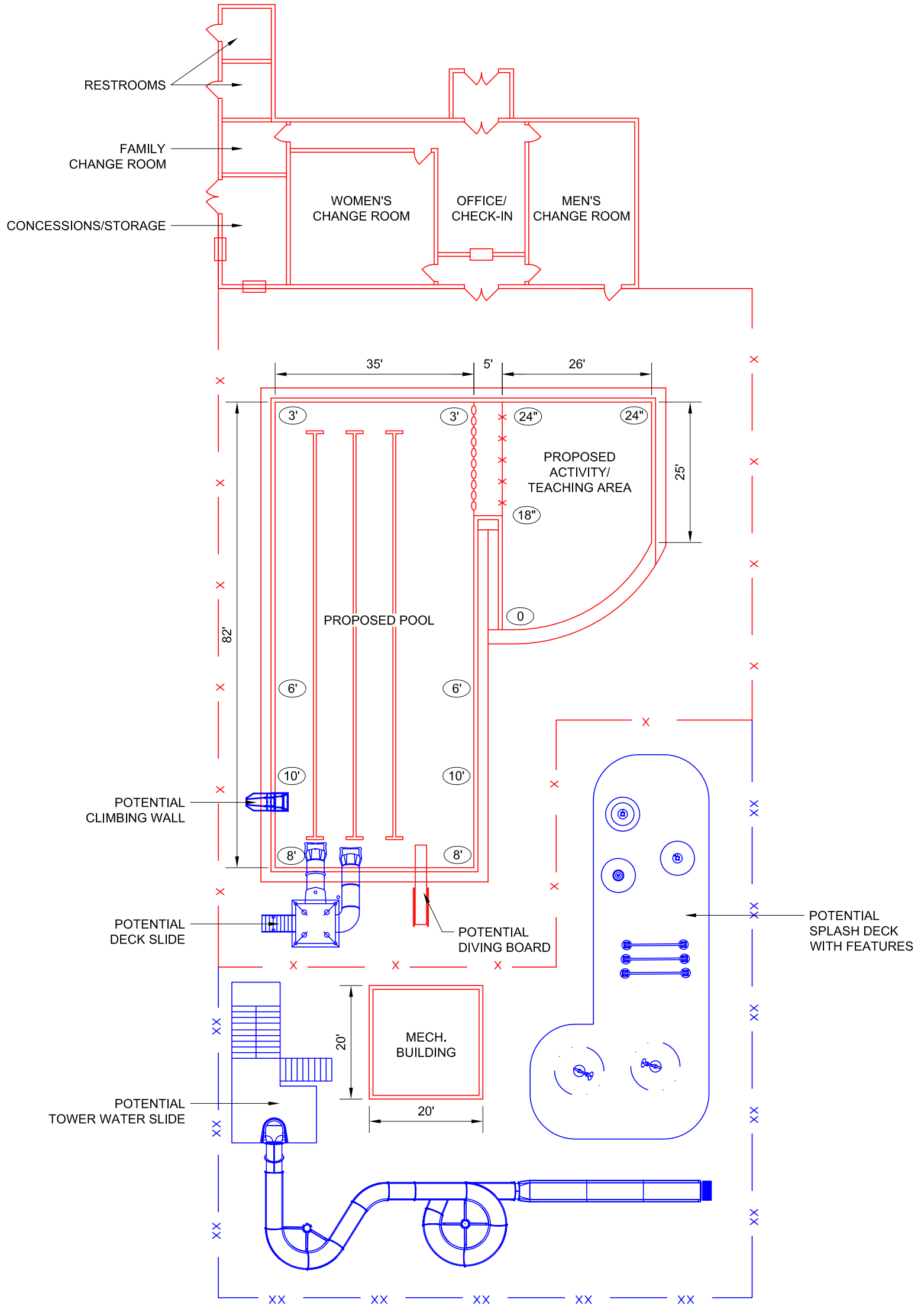
CITY OF RED LODGE
 POOL REHABILITATION
 OPTION B
 RED LODGE, MONTANA

Drawn By: A.M.R. Project No.: Y1700066
 Checked By: B.R.M. Date: JULY 2017

Revision No.	Date	By	Description

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OPTION C-1



LEGEND

BASE BID ITEMS

POTENTIAL ALTERNATE ITEMS



SHEET NO. **C-1**



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CITY OF RED LODGE
 POOL REHABILITATION
 OPTION C-1

RED LODGE, MONTANA

Drawn By: A.M.R. Project No.: Y1700066
 Checked By: B.R.M. Date: SEPTEMBER 2017

Revision No.	Date	By	Description

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OPTION C-2



LEGEND

- BASE BID ITEMS —
- POTENTIAL ALTERNATE ITEMS —
- POTENTIAL MULTI-USE OPTION —

SHEET NO. **C-2**



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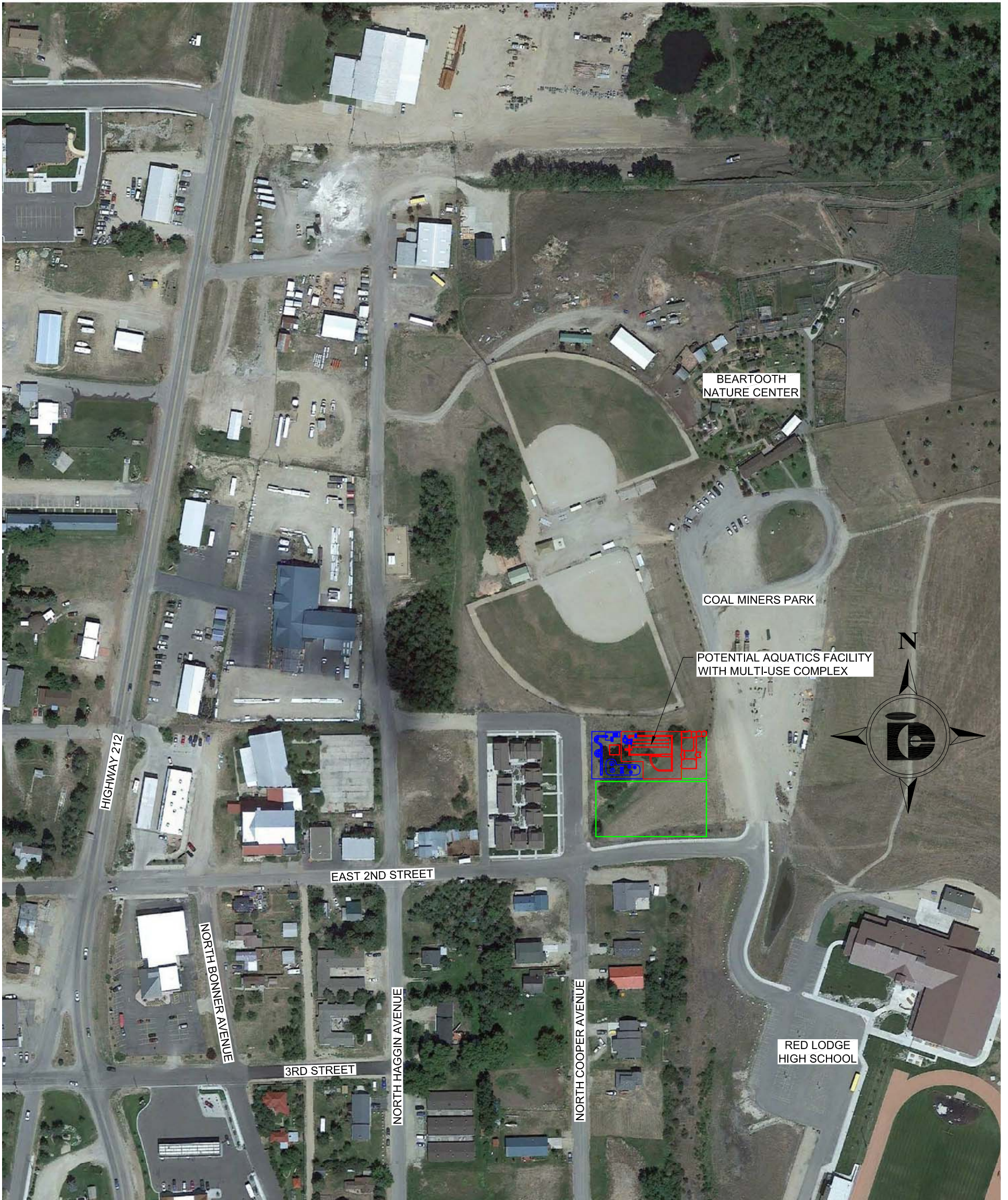
CITY OF RED LODGE
 POOL REHABILITATION
 OPTION C-2
 RED LODGE, MONTANA

Drawn By: A.M.R. Project No.: Y1700066
 Checked By: B.R.M. Date: SEPTEMBER 2017

Revision No.	Date	By	Description

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OPTION C-2 - OVERVIEW



LEGEND

- BASE BID ITEMS
- POTENTIAL ALTERNATE ITEMS
- POTENTIAL MULTI-USE OPTION

SHEET NO. **C-2**



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CITY OF RED LODGE
 POOL REHABILITATION
 OPTION C-2 OVERVIEW
 RED LODGE, MONTANA

Drawn By: A.M.R. Project No.: Y1700066
 Checked By: B.R.M. Date: SEPTEMBER 2017

Revision No.	Date	By	Description

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