BIG MINE PARK

Town of Crested Butte, CO

Master Plan

August 12, 2015

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Acknowledgments

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Introduction

Purpose of the Project

The Town of Crested Butte, Colorado received funding from Great Outdoors Colorado (GOCO) to develop a comprehensive master plan for Big Mine Park. The park is home to the Big Mine Ice Arena, Crested Butte Nordic Center / Warming House, Crested Butte Skate Park, Town sled hill, a disc golf course, Green Lake Trailhead, and provides a venue for large summertime special events.

The intent of the Big Mine Park Master Plan is to provide direction for the Town of Crested Butte to develop both the raw and existing developed park land and improve existing amenities in need of renovation. The plan includes an examination and evaluation of current recreation programs and opportunities, as well as constraints and recommendations for future programs and services.

The two primary objectives of the Big Mine Park Master Plan are to: 1) develop a prioritized / phased list of park improvements as informed by a thorough public process; and 2) provide a conceptual design that can be used in the future as the basis for the creation of construction documents as Master Plan phases are implemented.

Planning Process

The master planning process was led by consultants, Mundus Bishop, in collaboration with the Town of Crested Butte staff and a broad-based steering committee.

The planning process spanned nine months, beginning with a community meeting in December 2014 and concluding with Town Council adoption of the plan in September 2015. The steering committee comprised of representatives from Town Council, special interest groups, Town staff, and key user groups, informed the planning through multiple open house meetings and work sessions.

The public outreach and community engagement process included four community meetings, presentations, and hands on work sessions, each attended by more than forty citizens. The information and input gathered at these interactive sessions assisted in refining preliminary design alternatives and informed the master plan recommendations.

Community Meetings

Community Work Session 1
December 15, 2014

Community Work Session 2
January 15, 2015

Community Work Session 3
March 30, 2015

Community Work Session 4
May 5, 2015

BOZAR Process

The new buildings and building additions proposed for the improvement of the Nordic and hockey programs were developed to a conceptual design level and presented to the Town of Crested Butte's Board of Zoning and Architectural Review (BOZAR). The review process began with an initial consultation with Molly Minneman, Historic Preservation Officer for the Town of Crested Butte. Floor plans and elevations for the Big Mine Park Master Plan were reviewed at two Design Review Committee meetings held on June 22nd and July 20th. The conceptual design was approved by the BOZAR at a public hearing on July 28, 2015.

Regional Context

Big Mine Park is a regional recreational facility in the heart of historic Crested Butte. The park is built upon the historic 'Big Mine' site where coal was mined and cooked in coke ovens. It is home to several unique regional recreational amenities, and played a vital role in the history and establishment of the Town of Crested Butte. Located just south of the Crested Butte National Historic District in the southwest corner of the Town, Big Mine Park was the economic nexus of the community for more than 70 years.

As a regional park, Big Mine Park serves multiple communities and uses. According to the Crested Butte Parks and Recreation Master Plan, regional parks "are generally the epicenter of many recreation programs and community events, and frequently draw visitors / users from a regional service area." Big Mine functions as the trailhead for miles of regional trails, provides connections and activities for summer and winter use, and serves as a recreational and cultural event destination.

Park Context

Big Mine Park is a 5.49 acre site with a range of year-round park and recreational facilities. Buildings and structures include a Warming House for ice hockey and Nordic Center operations; a sheltered Ice Arena; a shed that houses the Zamboni; and a barn (owned by the Nordic Center) that functions as a maintenance facility and houses snow grooming equipment. Recreational facilities include a sledding hill, Skate Park, trailhead for the Green Lake trail, a nine-hole disc golf course, trail signage, unprogrammed spaces, and is a designated dog-friendly park. Interpretive elements include remnants of the historic coke ovens, and interpretive plaques and signage related to the park's history as the Big Mine site.

The park is a relatively flat site, bordered by a steep slope and private property on the south, a residential neighborhood to the north and commercial buildings to the east.

The east side of the park is generally a large hill, with a sledding hill and a Skate Park, that slopes east down to 3rd Street. The center of the park between the Nordic Center and riparian area is gravel. The park generally drains towards the north. On the park's west side, the topography drains towards a wetland / riparian area.

The park's vegetation is generally a cover of native grasses and forbs; there are no open lawn areas. Several cottonwood stands occur throughout the park, particularly in or near the wetland. Native grasses and shrubs occur on the adjacent hillsides, blending the park boundaries with adjacent private lands. Ornamental plantings of low shrubs and cottonwood trees are near the parking area and at the entrances into the Ice Arena.

Big Mine Park includes a small active stream course of approximately 475 linear feet with an associated riparian area, seemingly fed from spring side hill discharges. Portions of the stream course support wetland vegetation; however this area is geographically isolated and functionally isolated, and is not regulated by the United States Army Corps of Engineers (USACE). It is subject to Town of Crested Butte regulations.

Vehicular and pedestrian access into the park from the Town is via 1st, 2nd, and 3rd streets, Beckwith Avenue, and Belleview Avenue. The park site has approximately 74 parking spaces, with 47 car spaces, one accessible space, and two bus spaces within the asphalt paved parking area. The bus stop is located one block north at the corner of 2nd Street and Whiterock Avenue.

Many opportunities for Big Mine Park were identified during the master plan process including the following.

- Enhanced community connections;
- Views and vistas of the surrounding mountains;
- Enhanced Summer and winter use;
- Potential for improved facilities and improved park amenities;
- Potential for improved trail connectivity;
- Potential to express mining history;
- Potential to address a wide variety of recreation uses.

Areas of distinct concern at Big Mine Park include the following.

- Insufficient utility infrastructures: new water and sewer are needed even if new facilities are not added;
- Poor drainage should be addressed;
- Deteriorating conditions of the Skate Park;
- Spatial and liability concerns with the sledding hill, (does not meet standards for runouts);
- Trespassing onto adjacent private property;
- Poor ice conditions and melting at east end of Ice Arena;
- Limited parking and pedestrian circulation;
- Limited green space for summer park use;
- Limited event space;
- Buildings are constrained in size and do not meet needs for current use or planned growth;
- Snow storage needs to be accommodated as the park is a major snow storage area;
- Need for some open lawn space on the south side of Town;
- User conflicts.

Programmatic needs at Big Mine Park include the following.

- Warming House / Nordic Center is too small for the growing Nordic program;
- Warming House cannot accommodate growing needs of the hockey program;
- Uses overlap in the small Warming House, creating user conflicts;
- More space is needed for hockey and Nordic uses;
- Park space is needed for summer activities.

BIG MINE PARK
Town of Crested Butte, CO

Whiterock Avenue
1st Street
2nd Street
3rd Street
Beckwith Avenue
Parking
Nordic
Maintenance
Disc Golf
Warming
House
Trail
Head
Skate Park
Park Boundary
Big Mine
Ice Arena
Sledding Hill
Town Boundary
Journey's End Road
N
0
20
40
80

Legend

- Water Valves
- Hydrants
- Manhole
- Cleanout
- Storm Sewer Drain
- Gas Line
- Electrical Service Line
- Water Lines
- Sanitary Sewer Lines
- Storm Sewer Line
- Buildings
- Parcel Boundaries
- Big Mine Park
- Town Boundary
- Topography
- Excessive Slope/ Avalanche Issues
- Open Space
- Gravel Surface Trail
- Concrete Walks/Drives
- Wetland/Riparian Area
- Vehicle Traffic
- Existing Evergreen Vegetation
- Existing Decidious Vegetation
- 100 Year Coal Creek Flood Plain
- Historic Mine Remnants
- Bus Stop
- Mt Express Bus Route
- Door Entry
- Garage Entry
- High Speed Traffic Issue Identified
- Zamboni Route
- Views
- Wetland Boundary

N
0 20 40 80

History

Historical Narrative

In 1870 William Jackson Palmer and the Denver and Rio Grande Western Railroad (D&RGW), connected Denver by rail to Colorado Springs and Pueblo. The goal was for Pueblo to become the “Pittsburgh of the West” processing Colorado’s numerous coal resources. One such resource was Crested Butte’s Big Mine. In 1875 Dan Jennings found coal in Crested Butte and sold the land (Smith Hill & Cloud City) to Howard F. Smith in 1887 who later sold the land to the Colorado Fuel and Iron Company and connected to Pueblo’s rail lines in 1881.

Big Mine, the third largest coal mine in Colorado with approximately six miles of underground track, operated from 1894 to 1952 and produced high grade bituminous coal. At its peak the mine employed approximately 70 mules and 400 men.

Miners lived in town and would typically walk down 2nd street to and from the mine. Miners were paid $3 to $6 per day and considered less valuable than the mules. At the time mining deaths were common occurrences (10 to 15 per year) and typically caused by falling rocks.

Strikes were common in the mines, however Crested Butte was by all means a company town. Strikes typically involved disagreements over wages, hours, and safety but, most importantly, the right to collective bargaining or unionizing. Big strikes put people out of work for months or longer and created a mass of drastically poor people, especially with decreasing coal demand and increased use of oil and gas.

Timber support structures were used in the mine, built from material harvested from local forests. Local lumber was also used for homes, buildings, mining operations, and structures.

Two hundred wooden mine cars of 3,000 lbs capacity each transported the coal, using mules and the gravity incline, to the tipple cutting across the site north to south. The tipple was located for coal to be loaded into railroad cars, (which accessed the site to the east), and then shipped to Pueblo. Some coal was also processed in the coke ovens on site.

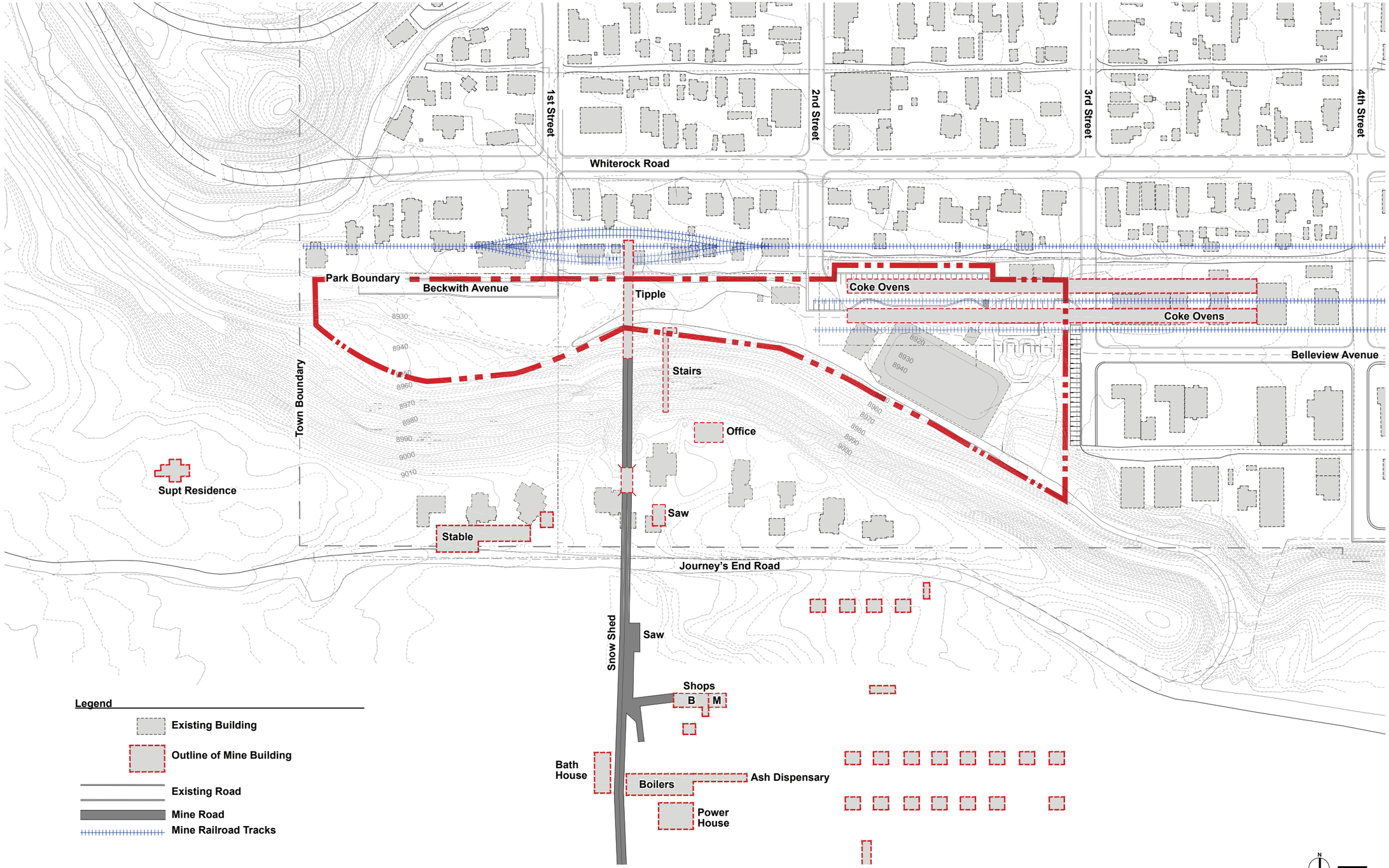
In 1884 coke ovens were built on site for the Jokerville Mine (to the west of Big Mine) in addition to those built on site for Big Mine. These 154 beehive ovens handled screened or slack coal.

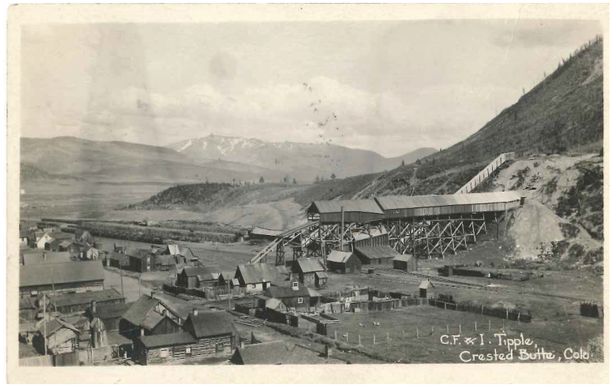
A fire in 1909 burned the engine house and several out buildings at Big Mine and required the mine to close for 30 days. This happened again in 1921. Luckily a fire or explosion never occurred in the mine.

Big Mine closed in 1952 due to national and economic issues, including increased dependence on oil, gas, and electricity. Trinidad coal was also closer and cheaper to transport to processing in Pueblo.

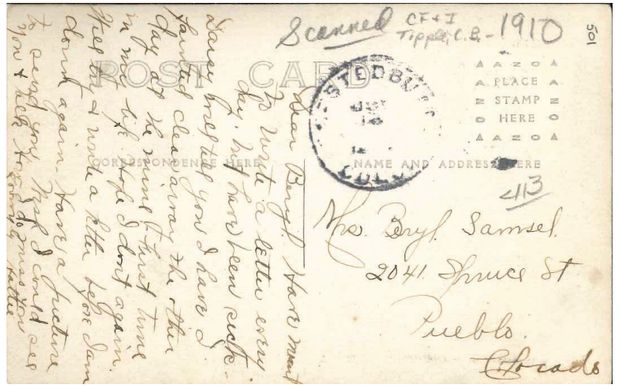
Unfortunately, changes and expansions of Big Mine were not well documented during the time it operated as a mine. Most resources associated with the mine have been removed or damaged. Archives for Big Mine began in 1998.

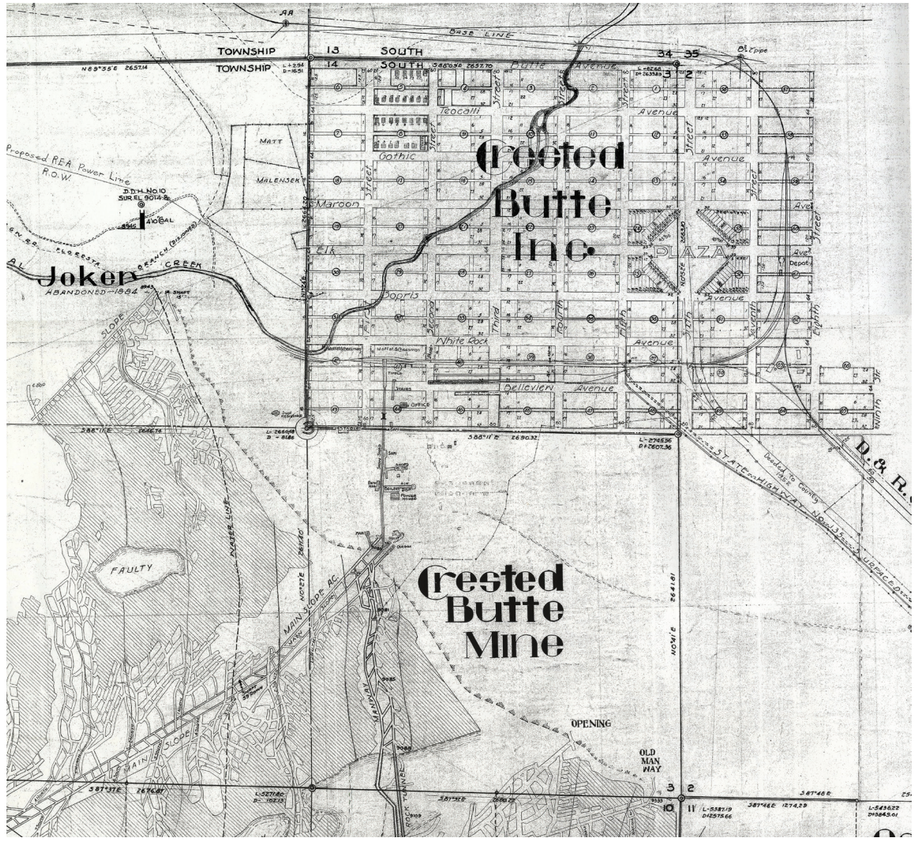
Three coke ovens remain buied near the retaining wall seating area and Skate Park in the northeast corner of Big Mine Park. Some remnants still remain of the tipple and the covered miner’s stairs (156 steps adjacent to the tipple).


1st Street
2nd Street
3rd Street
4th Street
Whiterock Road
Park Boundary
Beckwith Avenue
Tipple
Coke Ovens
Coke Ovens
Belleview Avenue
Town Boundary
Stairs
Office
Supt Residence
Saw
Stable
Journey's End Road
Snow Shed
Saw
Shops
B
M
Bath House
Boilers
Ash Dispensary
Power House
8930
8940
8950
8960
8970
8980
8990
9000
9010
8920
8930
8940
8960
8970
8980
8990
9000
Legend
Existing Building
Outline of Mine Building
Existing Road
Mine Road
Mine Railroad Tracks
N
0
50
100
200



Big Mine Postcard, circa 1910



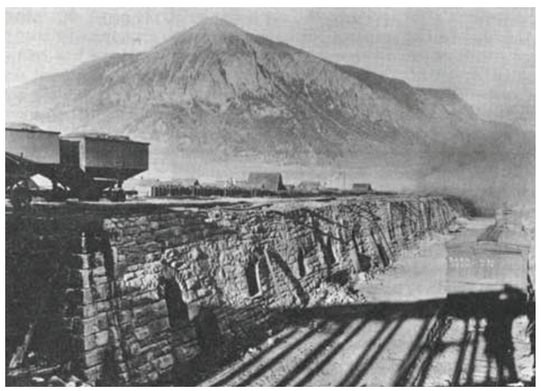


Portion of C.F.& I. map of Crested Butte Mine - Upper Seam, circa 1952

Coal tipple looking east, date unknown

Looking east towards Mt. Crested Butte, date unknown

Big Mine, looking southeast, circa 1909



Coke oven, looking east, date unknown

Coke ovens, looking west, date unknown

Boilers, powerhouse, and tipple looking north, circa 1940s

Vision and Goals

Vision Statement

Big Mine Park will be a premier regional park destination, offering year-round recreational facilities with activities and programming for all seasons. This engaging park destination will evoke the historic mining character of the Big Mine site, and meet the passive and active recreational needs of Crested Butte's growing, dynamic community.

Big Mine Park is important to the community due to its historical significance, its location in an area not well represented with park space, and its unique mix of regional recreational amenities. The park design will merge the natural and historical qualities of the site with new and improved recreational experiences to enhance quality of life, improve economic vitality, and engage all.

Goals

1. Create a year-round regional park that reflects the character and active nature of the community. Create a park hub destination that offers a variety of passive and active recreational activities for all seasons to promote healthy lifestyles and to accommodate youth, adults, families, and users of all abilities and ages.

2. Educate the community and visitors on the coal mining history of the Town and the site by revealing in-situ historic resources and patterns, and interpreting non-extant historic features and connections to other historic mining sites.

3. Connect Big Mine Park to the Town of Crested Butte and the larger community with safe and engaging routes for pedestrians, hikers, bicyclists, families, Nordic skiers, bus riders, and vehicles.

4. Engage park users in a safe environment that meets the recreational needs of youth, adults and the entire community in facilities that meet or exceed risk management standards set forth by the parks and recreation industry, pertinent sports leagues, and known best practices.

5. Upgrade and improve the site's infrastructure and utilities to meet Big Mine Park's recreational and facility needs and demands. Create new additions and modifications to be compatible with the Town's historical mass and scale, and to build upon its rich historical character.

6. Implement proposed improvements with on-going community input at key stages in respect to fiscal realities and in accordance with the prioritized implementation strategy of projects and phasing developed with public input.

7. Engage partners and create new partnerships to sustain and implement the master plan vision.

8. Ensure that all existing recreational amenities are accommodated either on-site or within a complementary park or open space within the Town.

9. Design a park space that highlights the natural qualities of the site and respects its natural features such as wetlands and forests. Identify avalanche mitigation strategies and environmental risks and make recommendations for mitigating those risks. Current and future park space should complement and enhance the existing natural setting.

Town Skate Park and Sledding Hill

Access between Ice Arena and Warming House, and snow storage area

Remnant wall and Ice Arena looking east

Coke oven remnant walls and interpretive sign

Coke oven remnant

Parking area looking southeast

Town Skate Park

Parking area with cat barn beyond

View from south slope above the path, towards northwest

Beckwith Avenue

Warming House

Master Plan

Park Recommendations

The park master plan recommends a series of improvements for Big Mine Park, undertaken in a strategic and thoughtful manner to meet the community's needs and to maximize the park's potential as a regional recreational facility. This master plan activates the park for year-round use with new and improved facilities for a broad range of recreational use and interpretive experiences. These park improvements will improve park uses while integrating sustainable practices, and alleviating liability concerns and conflicts.

The core improvements are new additions, buildings and structures to accommodate the growing Nordic skiing and hockey programs and to improve the Ice Arena. The master plan addresses these needs through the addition of a new Warming House t o accommodate the hockey program, special events, and public uses, changing rooms and restrooms, as well as an enhanced equipment and ice resurfacer shed directly adjacent to the Ice Arena. These additions remove hockey uses from the existing Warming House shared with the Nordic Center.

The new Nordic Center conceptual design includes two building additions to house a team room and apres ski lounge, and improved changing rooms, restrooms, lobby, rental, and office spaces. These architectural enhancements address current and future space needs of the rapidly growing Nordic and hockey programs. Careful consideration has gone into the layout and massing of the proposed buildings and additions. Massing and roof lines are arranged to fit with the surrounding historic building character, while providing enough articulation to minimize the visual impact.

Park improvements include a new premiere sledding hill that will become an open lawn in the summer for daily and special event use. In the center of the park, an open lawn area with a park shelter and trailhead creates a new pedestrian entry. The lawn functions as the Nordic training area in the winter and as a space for relaxing, gathering, and special events in the summer. The west side of the park preserves the wetlands and integrates these with a small amphitheater space and park shelter.

A core element of the park master plan is Tipple Plaza which incorporates a shade structure and interpretive walk. Big Mine Park's long history as a coal mine is celebrated in this space as the plaza and shelter occupy the area that historically housed several mining buildings and structures including the tipple, stairs, coke ovens, and rail lines. The master plan preserves extant site features such as coke ovens and remnants, and pays homage to historic features and patterns. The shade structure and plaza take a portion of the original footprint of the non-extant tipple structure. Tipple Plaza connects the east and west sides of the park to the central park space. The shade structure reflects the same architectural scale and character of the original tipple structure, revealing the site's unique history and culture as well as providing a backdrop or venue for gatherings, events, and for daily park use.

The primary pedestrian circulation through the park is east to west. A portion of the route fronts the new Warming House / hockey building and connects to the expanded Nordic Center. The main pedestrian route incorporates remnants of original coke ovens and preserves large shade trees. Areas for gathering and resting occur near the buildings. From the park shelter, this walk becomes an interpretative route as it extends west, following the general alignment of Big Mine's original rail lines. Along this walk, the main pedestrian connection and focal point for the park are moments and areas for memorials, interpretive signage, and benches.

Vehicular circulation remains very similar to existing routes and access points. Most are maintained or improved in their current configuration. Additional dedicated parking spaces alleviate existing vehicular congestion, and accommodate future needs. Parking is increased by 25 car spaces (including one additional accessible ADA space). The bus route will remain in its current location at 2nd and Whiterock, allowing for repurposing of the on-site bus parking area. This space is redesigned as the new entrance and threshold for the new hockey building. Additional parking spaces are gained by converting a portion of this space to head-in parking, and the reuse of Town property along 3rd Street at the park's edge as day-use parallel parking. This allows for improved pedestrian circulation to 3rd Street and Belleview Avenue. Parking spaces, drive aisles and turn radii shall conform to current Town and accessibility standards and dimensions.

Landscape areas are a big focus of the park master plan. New areas are strategically incorporated to provide trees and plantings to accent buildings, provide open lawn and green space to enhance the park's setting and increase summer use. This provides a useable green in a very underserved area of Town. The wetlands and natural topography, native plantings, and aesthetics of the western half of the park are enhanced as a naturalized park setting. The plan has been designed to known applicable guidelines, park standards, and best management practices.

Utility infrastructure is expanded to meet existing and future needs (re: utility recommendations page 27).

General Park Recommendations

1. Expand current facilities on site through development of new buildings, additions, and structures to meet the recreational programs and growing demands of the primary uses: Big Mine Ice Arena, Nordic Center, Sledding Hill, and Trailhead.

2. Create a strong park identity and aesthetic with new lawn spaces, shelters, walkways, and interpretive elements in a connected and cohesive setting.

3. Improve the Ice Arena for longer seasonal use and longer hours through the addition of refrigeration and screening, and relocating maintenance to a more functional location. Utilize the Ice Arena in shoulder seasons and summer as a venue for special events, roller rink, or for soccer with temporary turf.

4. Accommodate the growing interior needs of the community's ice hockey and Nordic Center programs through development of separate facilities to meet functional needs and address public use.

5. Move the Skate Park and Disc Golf Course to other off-site locations. Create a destination Skate Park in Town Park, eliminating user conflicts. Relocate disc golf to a site with available land area needed for the full course.

6. Upgrade utilities and infrastructure to serve the existing and growing needs of Big Mine Park.

7. Follow site sustainable standards and best management practices.

8. Develop an avalanche mitigation lan to address hazards on the south slope.

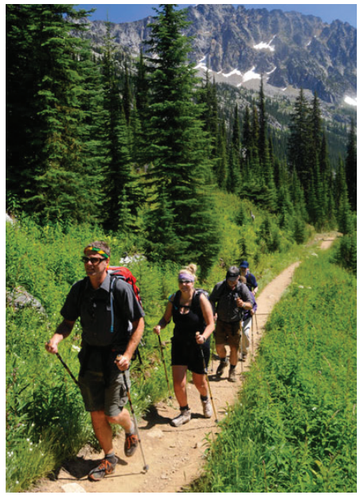
Program Summary

This program summarizes all the uses recommended for Big Mine Park. Core elements are organized by use, and information on size or number of users is provided.

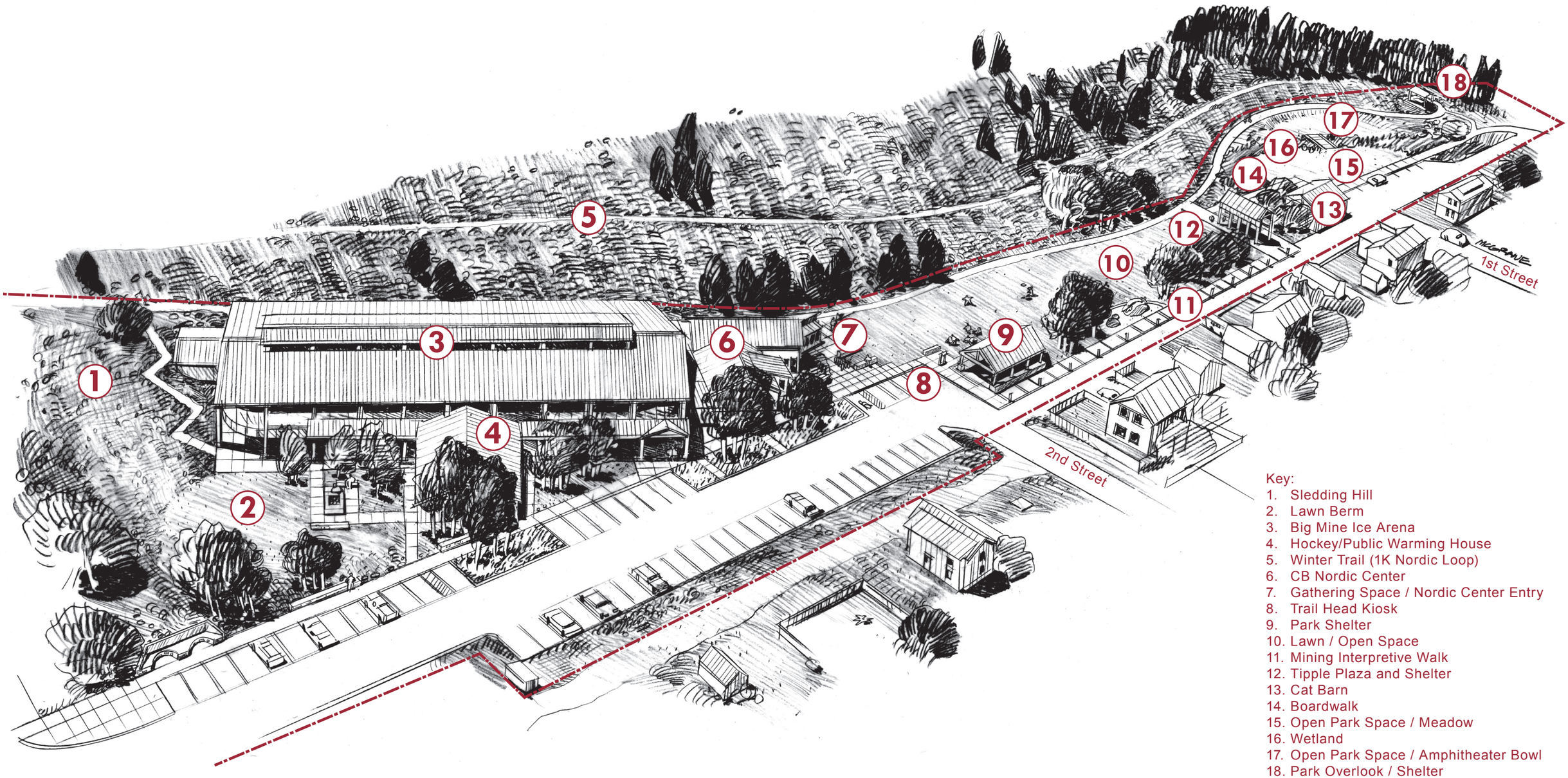
More detailed information is provided for two of the primary programs - Nordic Center (page 19) and Ice Hockey (page 23).

Ice Arena			
Rink, loop, entrance, maintenance, refrigeration, storage		19,329	SF
Spectator seating		200 to 250	seats
Site		2,064	SF
Hockey			
Changing, restrooms, entrance / gathering, concessions / food, meeting / office, ref room/ utilities room		3,602	SF
Site		144	SF
Nordic			
Entrance, lounge, retail, ski rental / storage / wax room, changing rooms, restrooms, multi-use, offices, meeting room, utility, maintenance / CAT		5,821	SF
Site - teaching area / outdoor gathering, 1K loop		59,278	SF
Public Restrooms			
M / W		396	SF
Sled Hill			
Staging area, sled hill, walkway / stairs, run-out, warming house		14,200	SF
Trailhead - Perimeter Trail and Green Lake Trail			
Trailhead, Perimeter & Green Lake trails, bicycle parking		30,504	SF
Park Space			
Lawn - informal play / gathering		20,000	SF
Walkways / connections		23,400	SF
Wetlands		7,400	SF

		QTY	Size		Unit	Total	Adjacency	Notes
Public Restrooms								
Total					**SF**	**396**		
Restrooms		2	9'x22'	198	SF	396		W=3 wc, 2 lavs; M=1 wc, 2 urinals, 1-2 lavs
Trailhead - Perimeter Trail and Green Lake Trail								
Total					**SF**	**30,504**		
Gathering / Info at trailhead		1	12'x12'	144	SF	144		
Perimeter trail within park		1	20' x 1500'	30,000	SF	30,000		length of park
Bicycle parking		20	3'x6'	18	SF	360		72" long by 30" between bikes, 48" wide aisle, 24" clear from other uses
Park Space								
Total					**SF**	**72,400**		
Lawn - informal play / gathering				18,000	SF	20,000		level area at west & center court
Walkways / connections			1300' x 3 x 6'	23,400	SF	23,400		length of park x 3' x 6' width
Wetlands/ riparian			na	29,000	SF	29,000		existing designated area by Town; 11,000 SF wetland and 18,000 SF riparian
Disc Golf - 18-hole course - Moved offsite to location where full course can be accommodated								
Total					**SF**	**108,540**		
Holes range from 125/150' to 200/250'		1	3600x30'	3600	LF	108,000		PDGA disc golf course design guidelines: 3600 to 4300 LF ideal
								no water obstacles over 18" w/o path around
Tee pads (concrete or asphalt) - 5' X 12'		9	5'X12'	60	SF	540		for each level - gold, blue, white, red
Targets		6			EA	6		baskets or poles, PDGA approved
Rules sign			1		EA	1		
Out of boundaries sign		4		4	EA	4		



Park Sketches and Plans



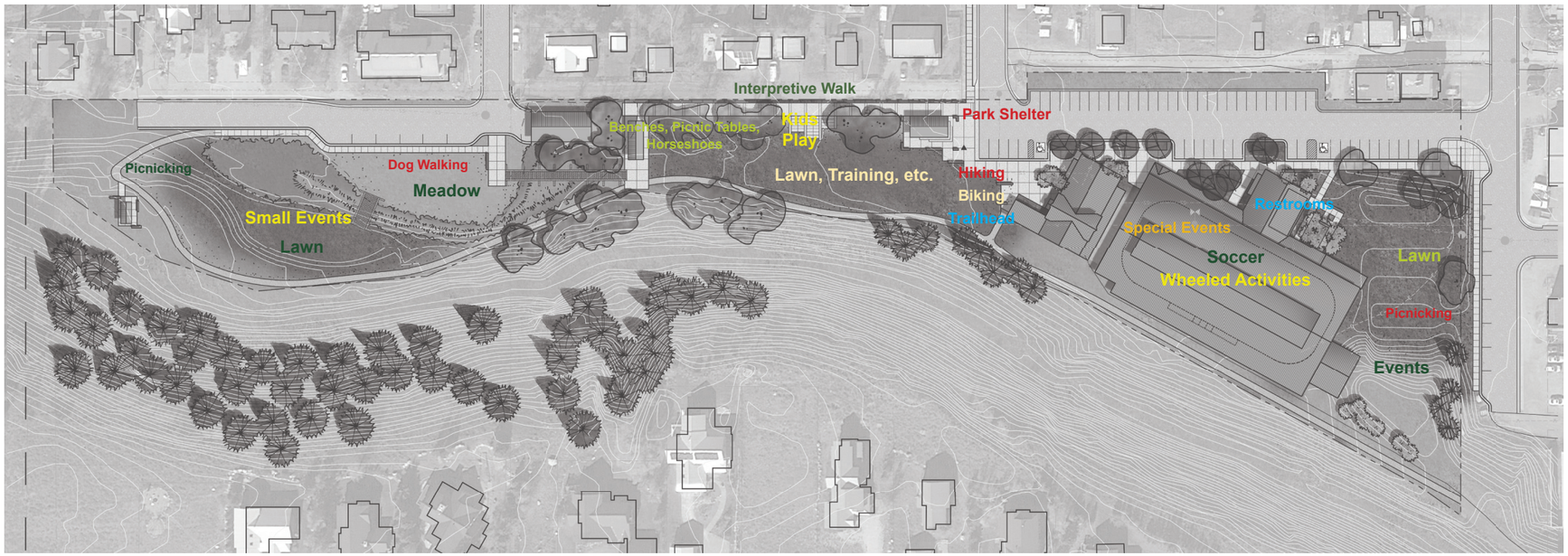
Key:
1. Sledding Hill
2. Lawn Berm
3. Big Mine Ice Arena
4. Hockey/Public Warming House
5. Winter Trail (1K Nordic Loop)
6. CB Nordic Center
7. Gathering Space / Nordic Center Entry
8. Trail Head Kiosk
9. Park Shelter
10. Lawn / Open Space
11. Mining Interpretive Walk
12. Tipple Plaza and Shelter
13. Cat Barn
14. Boardwalk
15. Open Park Space / Meadow
16. Wetland
17. Open Park Space / Amphitheater Bowl
18. Park Overlook / Shelter

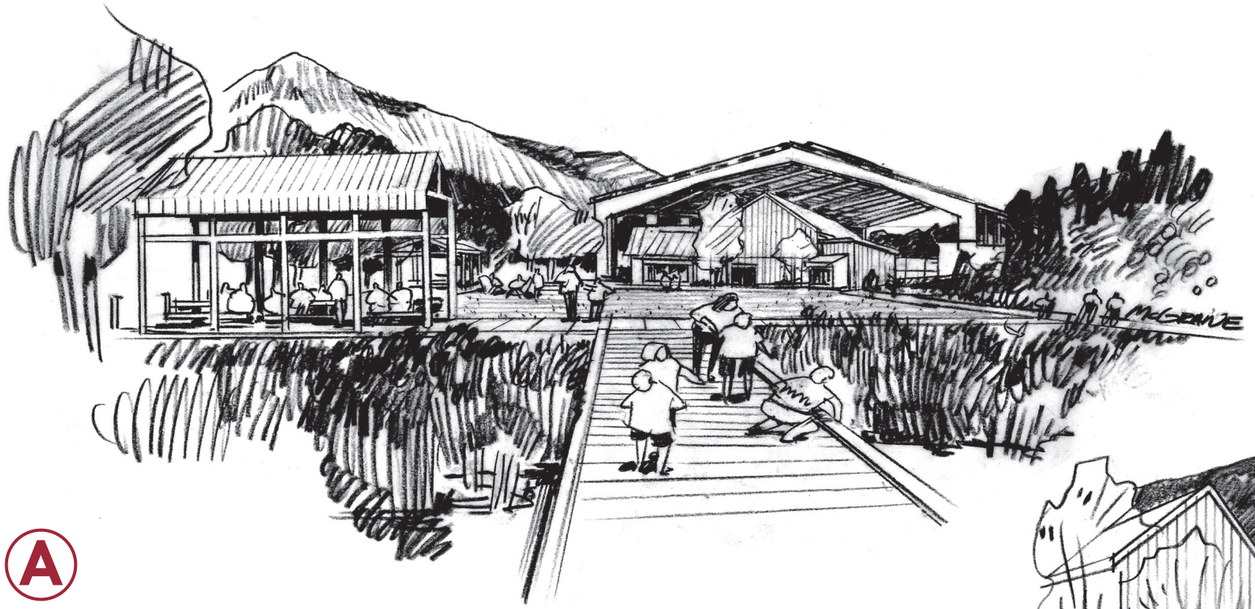
BIG MINE PARK

Town of Crested Butte, CO

Winter Program

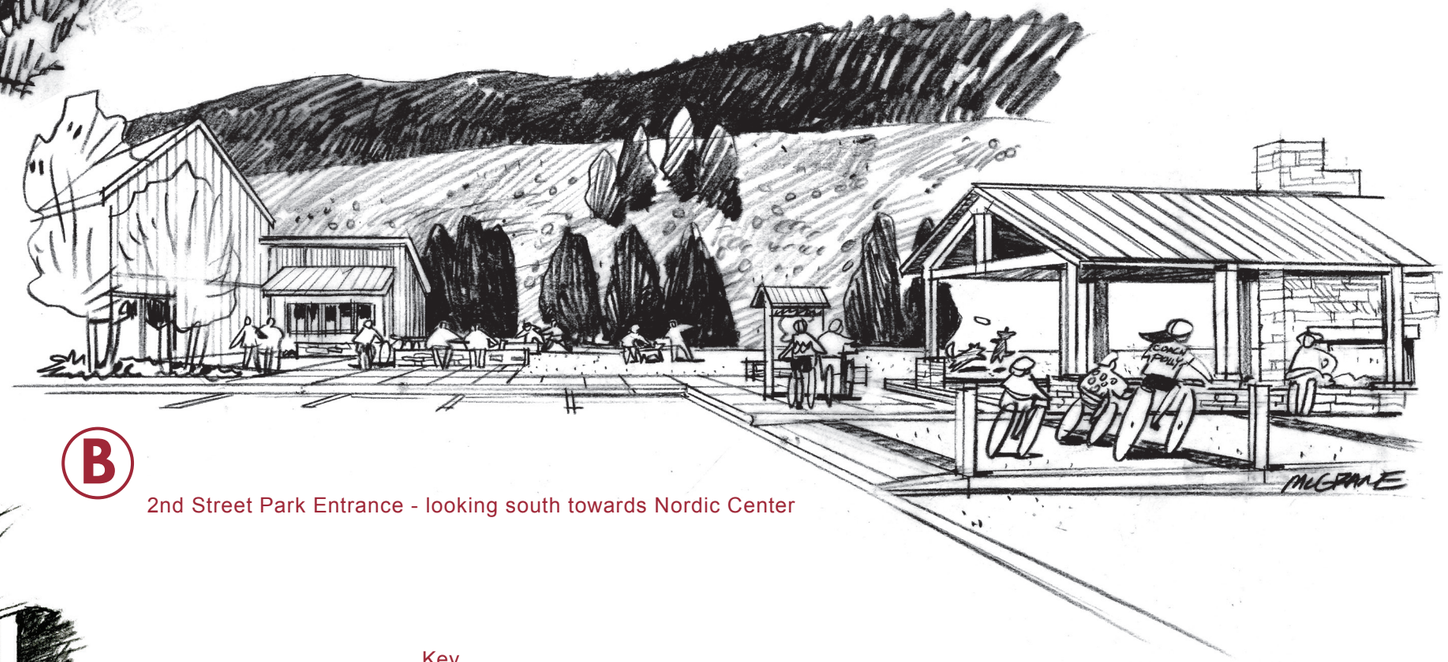
Summer Program





A

Boardwalk - looking east towards Ice Arena and Tipple Plaza



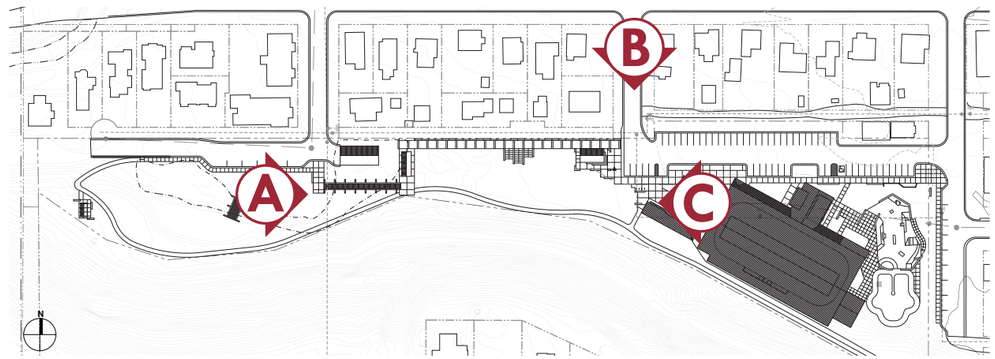
B

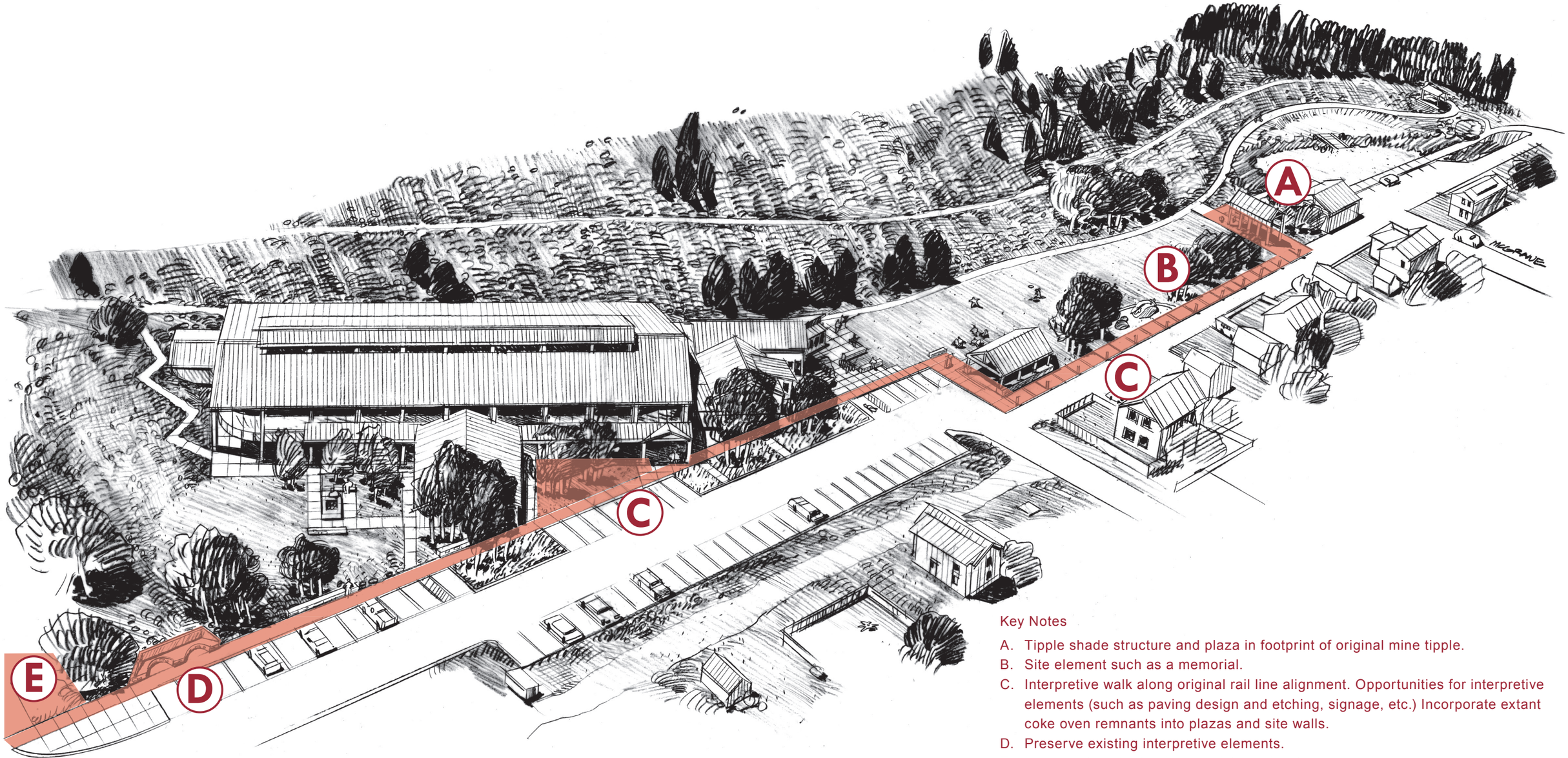
2nd Street Park Entrance - looking south towards Nordic Center

C

Lawn / Open Space - looking west

Key





Aerial Perspective - Sledding Hill

Key Notes

A. Tipple shade structure and plaza in footprint of original mine tipple.
B. Site element such as a memorial.
C. Interpretive walk along original rail line alignment. Opportunities for interpretive elements (such as paving design and etching, signage, etc.) Incorporate extant coke oven remnants into plazas and site walls.
D. Preserve existing interpretive elements.
E. Incorporate extant coke oven into park entry.

Other moments and opportunities occur on site to explore various materials, architectural details, and interpretive details woven into site features and details that may reflect the site's unique character and history.

Nordic Center Recommendations

The original Warming House was built in 1993 in a traditional “barn” style vernacular with a steep pitch gable over the primary structure and lower shed roofs that flank the primary structure to the north and south. In the past several years, the Nordic Center has grown exponentially in popularity among the public (day passes up 59% in 2014 over 2013; guiding services up 110%) as well as an expanding race/team function. The current building is undersized to effectively serve the Nordic Center’s primary functions and to support the organization’s 2014 Master Plan.

To plan for future growth, the design team worked closely with Nordic Center stakeholders to identify space needs and plan a building expansion. From a space needs standpoint, the primary issues / requirements are as follows.

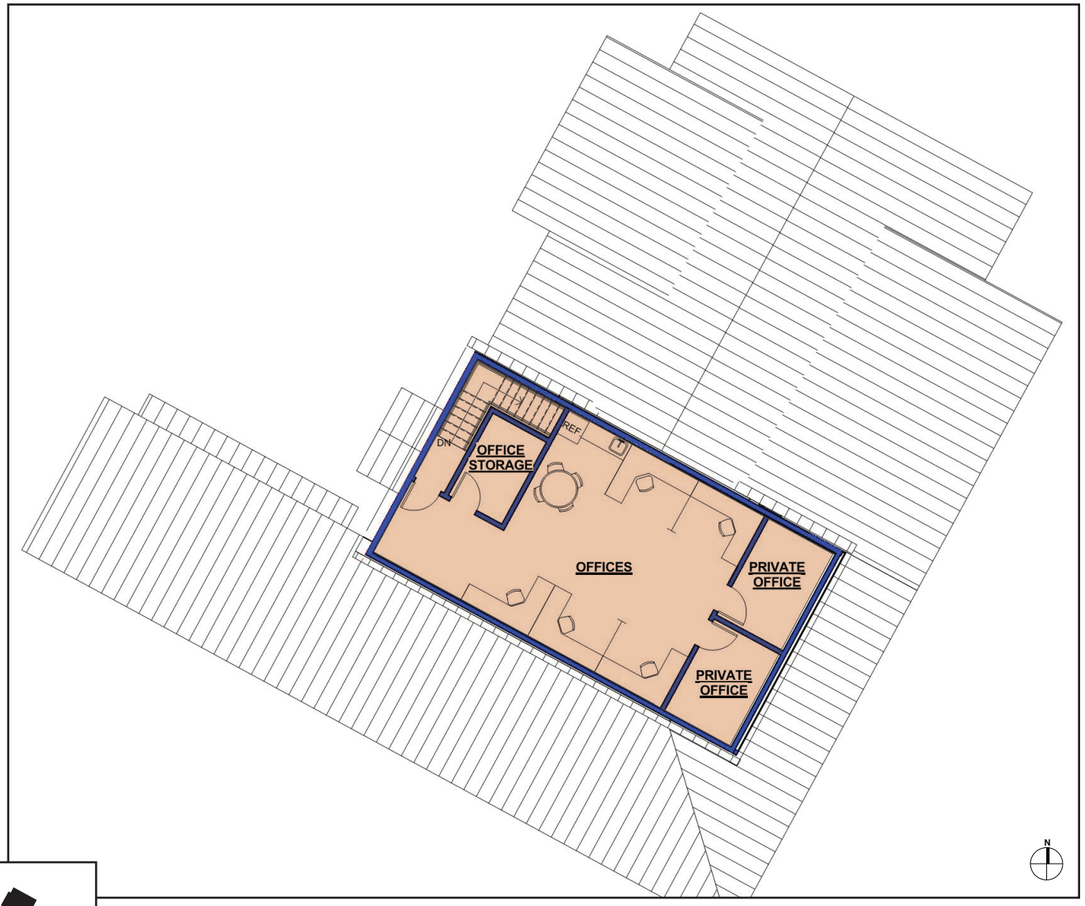
- Larger space for storage of rental equipment and dedicated space for waxing.
- Larger / dedicated space for retail.
- An Apres Ski Lounge for skiers to gather after a day of skiing and enjoy a refreshment from the concessions.
- Larger changing rooms with lockers and the space to hold team meetings.
- A multi-functional meeting space that could also be utilized by the public.
- Well configured office space with a break room at the second floor.

The building massing and form took shape after a floor plan was developed that met all of the goals in the above list. The intent of the expansion / addition is to relate back to the steep pitch gable of the existing structure while still allowing the existing building to remain as the focal point. This requires simple gable roof forms that have lower ridge heights than the original structure and that orient perpendicularly to the original roof. The expansion to the west, for the Apres Ski Lounge, utilizes a shed style roof with larger windows on the north façade to open up the space and allow visitors to take in the breathtaking views of the mountain valley to the north and west. Finally, this expansion to the west helps frame the entry experience for the visitor by creating a courtyard where patrons can practice or mingle outside after a day on the trails.

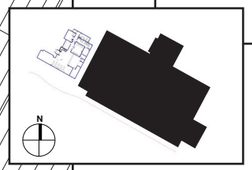
		QTY	Size		Unit	Total	Adjacency	Notes
Nordic								
Building					**SF**	**5,821**		
Entrance		1		450	SF	450		
Lounge / gathering (fireplace)		1	25'x25'	625	SF	625	Entrance	fireplace and comfortable seating
Retail - sales, food, beverages		1	10'x14'	140	SF	140	Rentals	
Ski rental / storage / wax room		1	30'x20'	600	SF	600	Entrance	includes 8'x8' wax room w exhaust/make-up air system
Concession area		1	10'x10'	100	SF	100	Lounge	soup, baked goods, hot chocolate
Changing rooms		2	12'x16'	192	SF	384	Entrance	M & W; accommodate 8-10/ea; lockers and benches
Restrooms		2	9'x22'	198	SF	396	Changing	W=3 wc, 2 lavs; M=1 wc, 2 urinals, 1-2 lavs
Multi-use space		1	25'x30'	750	SF	750	Lounge	training, work out, team gathering
Office space (4 full-time staff)		6	8'x10'	80	SF	480		4 year-round; 2 coaches/mgr
Meeting space (with doors) - could be used by community		1	12'x22'	264	SF	264	Offices	seats 12-14; could be accessed separately from rest of the bldg.
Storage		1	10'x12'	120	SF	120	Multi-use space	workout equipment and program storage
Elec / mech room		1	10'x12'	120	SF	120	Changing	for building heating equipment
Janitor closet		1	6'x8'	48	SF	48	Restrooms	mop sink & cleaning supplies
Maintenance / cat storage		1	28'x48'	1,344	SF	1,344	Trails	current size - grooming / maintenance / equipment storage
Site					**SF**	**59,278**		
Entrance		1	12'x12'	144	SF	144		exterior at building entrance
Teaching area / outdoor gathering		1	60'x220'	13,200	SF	13,200		
1K loop		1	14'x3281	45,934	SF	45,934		6 foot wide x 1K (3281 LF or .62 miles)

MUNDUS BISHOP | MARTIN / MARTIN CONSULTING ENGINEERS | TEAM PAIN SKATE PARKS

FIRST FLOOR
SCALE: 1/16” = 1’-0”



SECOND FLOOR
SCALE: 1/16” = 1’-0”



KEY PLAN

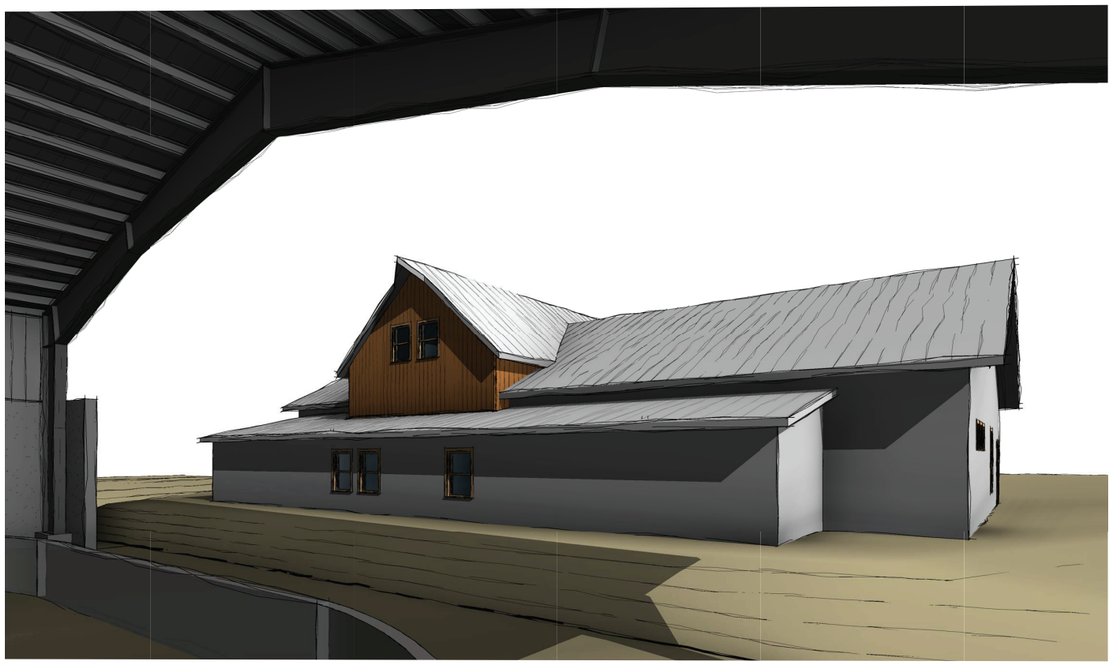
NORDIC CENTER STATISTICS
GROSS SQUARE FOOTAGE = 5,760
MAX BUILDING HEIGHT ABOVE GRADE = 27’-0”

COLOR KEY

- ENTRY/ CIRCULATION
- PUBLIC
- SUPPORT AREAS
- RESTROOMS/ CHANGING ROOMS

West Perspective

Southwest Perspective



East Perspective

North Perspective

Ice Hockey and Ice Arena Recommendations

The Ice Hockey function is currently supported in the existing Warming House, which provides changing rooms, restrooms, and concessions for skaters and viewers. This creates a mixed-use environment (Nordic and Hockey) that reduces each activity's capacity to properly serve their end users and results in user conflicts. Ice Hockey has grown in popularity and now needs its own space to properly support all of the events that take place at the Ice Arena.

The design team held several work sessions with Ice Hockey stakeholders to understand their space needs and to create a plan that accommodates future growth and meets stakeholder goals. Primary needs identified are as follows.

- Provide dedicated changing rooms with showers for skaters, including separate changing rooms for visitor and home teams.
- Provide dedicated space for skate rentals and concessions.
- Provide a multi-use/multi-media space that can function as a team meeting area as well as an opportunity for interpretive elements about the history of ice hockey at the Big Mine site.
- Public restrooms for the arena.
- Future office space for the Town of Crested Butte to be housed on an upper level mezzanine.
- Larger visitor and home team viewing stands.
- Separate referee changing rooms.
- Larger Zamboni and ice refrigeration equipment area (to be housed in a separate building).

As no building currently exists on-site to house the Ice Hockey function, new structures will be built to accommodate the program's goals and to support public uses. The new Ice Hockey Building is sited on the north side of the Ice Arena (west of the existing Zamboni shed). The Zamboni shed is removed and a new structure built on the east side of the Ice Arena for these maintenance uses. The massing was developed to comply with the guidelines for a "Public" zone within Crested Butte and the larger Big Mine Park site while also adding architectural interest. This is accomplished through a gable roof form and by maintaining the roof ridge below the eave of the primary gable over the Ice Arena. On the east side of the new Ice Hockey Building / Warming House, a shed roof dormer is "popped" out to allow for head clearance at the mezzanine office spaces. The dormer is held three feet behind the eave line of the primary gable so as not to break the plane of primary eave. Interest is added via an entry vestibule on the north side of the building to directly engage the parking lot while also providing a strong presence along the street. The entry vestibule design finds precedent in the historic mine tipple that once existed on site to transport coal. Artfully lit, it serves as a beacon to draw people in and to distinguish the Ice Hockey building from the larger arena.

Changing rooms are separate structures, enclosed under the existing lower canopy of the Ice Arena. The location of the changing rooms allow teams to enter directly from the parking area, prepare for the game and skate directly onto the ice. The massing of these small structures is simple so as not to distract from the new Ice Hockey building or Ice Arena.

The new Zamboni and ice refrigeration building are located on the southeast corner of the Ice Arena to allow direct Zamboni access onto the ice. The massing of this structure utilizes a simple gable roof with gable dormers to provide interest.

The existing Ice Arena will remain with minor changes. The lower canopy on the north side will be modified to accommodate the new Ice Hockey building and changing rooms. The future Ice Hockey building's gable roof ties directly into the existing canopy shed roof; they will share the same eave height and thus, a portion of the existing lower canopy will be removed to accommodate the new gable.

The new Ice Hockey building will share a roof with the existing Ice Arena, the structures will be classified as one "building" under the International Building Code (IBC) and must be fully sprinklered to satisfy the requirements of the IBC.

Hockey

		QTY	Size		Unit	Total	Adjacency	Notes
Building					**SF**	**3602**		
Changing rooms		4.5	10'x16'	160	SF	960	Ice rink	4 team, 1 girls and 1 ref; benches, hooks, shelves, no lockers
Showers		2	6'x8'	48	SF	192	Changing rooms	1 shower room per 2 team rooms, girls need their own shower, refs need their own shower
Restrooms		2	9'x15'	135	SF	540	Changing rooms	1 per 2 changing rms if easily accessible; 2 wc, 1 lav, 1 filling
Public restrooms		2	9'x24'	216	SF	432	Stands / entrance	for year-round public use
Entrance foyer		1		400	SF	400		
Concession area		1	9'x10'	90	SF	90	Entry / high traffic	snacks, soup, coffee, hot chocolate, tape
Multi-purpose / media		1	20'x25'	500	SF	500		common offices, team meetings, films, coaches' training, parties
Equipment room		1	12'x12'	144	SF	144		
Referree room		1	8'x12'	96	SF	96	Ice rink	away from public; benches; separate; no restroom
Skate rentals		1	8'x10'	80	SF	80	Ice rink	include skate sharpening
Janitor closet		1	6'x8'	48	SF	48	Restrooms	mop sink & cleaning supplies
Mechanical / equipment room		1	10'x12'	120	SF	120	Changing rooms	for building heating equipment; space configuration may require 2 - another is associated with ice rink
Site					**SF**	**144**		
Entrance		1	12'x12'	144	SF	144		exterior at building entrance

Ice Arena

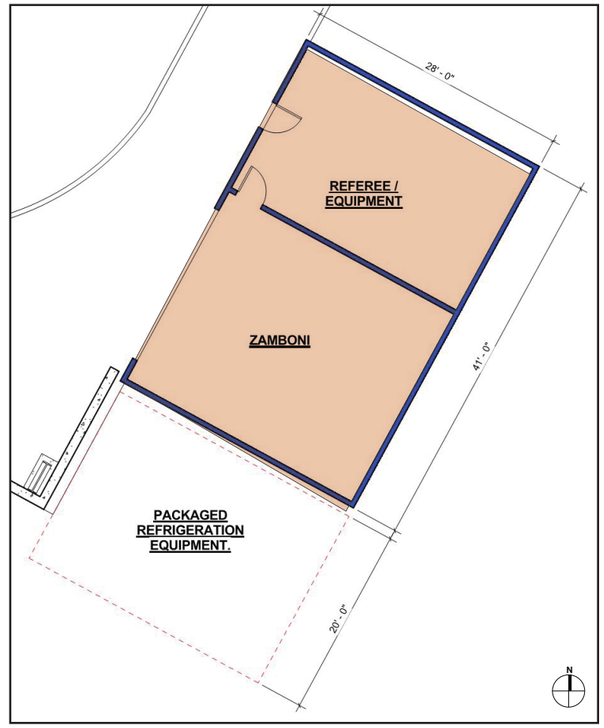
		Qty	Size		Unit	Total	Adjacency	Notes
Building / Structure					**SF**	**19,329**		
Rink		1	16,267		SF	16,267		rink interior
Loop		1	522		LF / SF	522		around the rink
Entrance		1	8'x10'	80	SF	80		
Spectator seating (with heat)		2	16'X27'	432	SF	864	Hockey	accommodate 250 seated
Team benches (2 separate)		2	8'x30'	240	SF	480	Hockey	
Maintenance shed / zamboni shed		1	20'x25'	500	SF	500		
Refrig / compressor / utilities (elec)		1	20'x20'	400	SF	400		also requires outdoor space for the chiller (+/- 8'x8')
Storage		1	8'x12'	96	SF	96		
Mechanical		1	10'x12'	120	SF	120		for rink only
Sun shade / wind screen		1	10'x105'	1050	SF	1050		northwest side - 10' heght
								southwest side - 10' heght - 10' x 224'
Site					**SF**	**2064**		
Entrance		1	12'x12'	144	SF	144		exterior at building entrance
Walkway		1	6'x320'	1920	SF	1920		around 1/2 of rink on exterior

KEY PLAN

ICE HOCKEY BUILDING STATISTICS
GROSS SQUARE FOOTAGE = 2,800 (INCLUDES MEZZANINE)
MAX BUILDING HEIGHT ABOVE GRADE = 24'-0"

CHANGING ROOMS STATISTICS
GROSS SQUARE FOOTAGE = 720 (EACH)
MAX BUILDING HEIGHT ABOVE GRADE = 12'-0"

1. ICE HOCKEY BUILDING AND CHANGING ROOMS
SCALE: 1/16" = 1'-0"

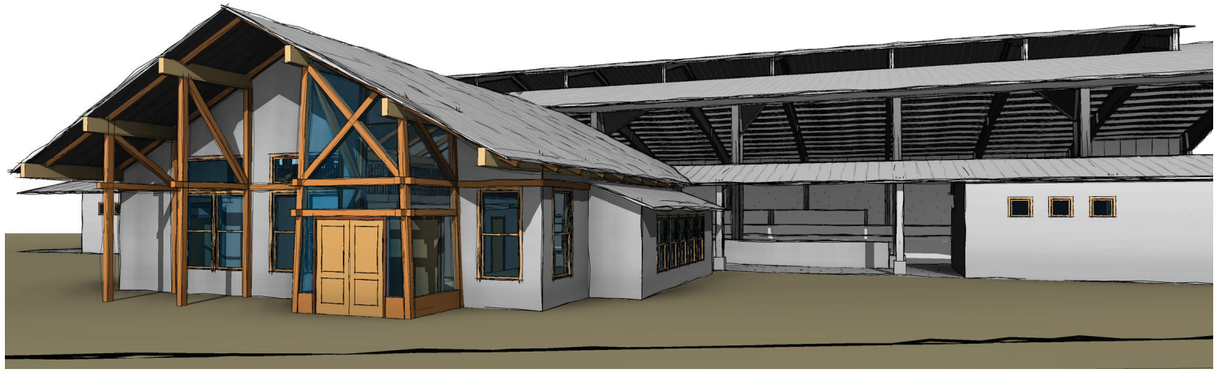


2. ZAMBONI/REFEREE BUILDING
SCALE: 1/16" = 1'-0"

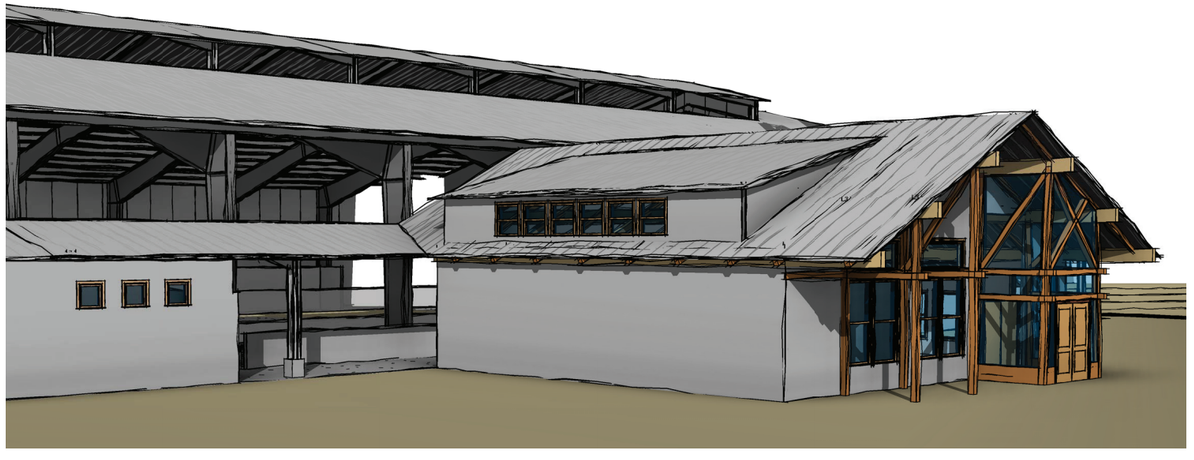
ZAMBONI BUILDING STATISTICS
GROSS SQUARE FOOTAGE = 1,150
MAX BUILDING HEIGHT ABOVE GRADE = 15'-6"

COLOR KEY

- ENTRY/ CIRCULATION
- PUBLIC
- SUPPORT AREAS
- RESTROOMS/ CHANGING ROOMS

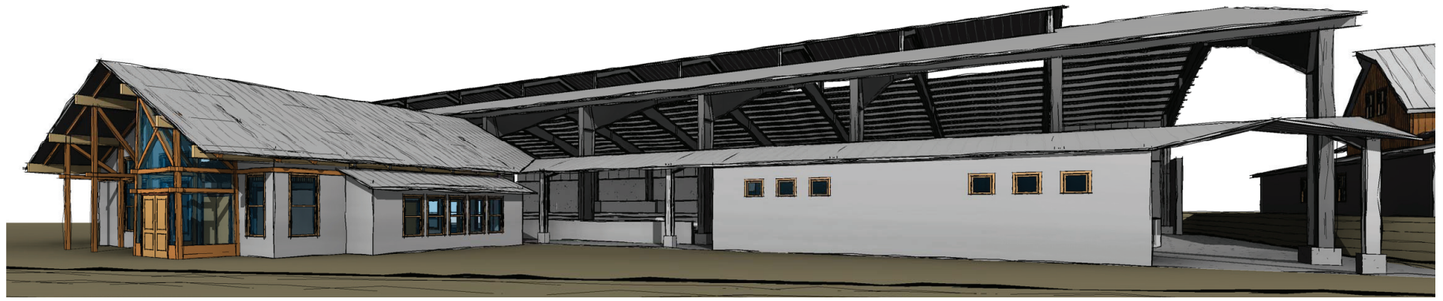


North Perspective



Northeast Perspective

South Perspective



Northwest Perspective

Utility Recommendations

Utilities within the Big Mine Park area include a 4” sanitary sewer line, 6” water line, and storm drain near the sledding hill. An irrigation main line is off site at 1st Street and Beckwith Avenue. In the adjacent city right-of-way are sewer and 6” to 9” water main lines with fire hydrants.

Utility infrastructure upgrades are needed to meet current standards and for proposed improvements. Utility improvements are also needed to support the planned buildings and additions for the Nordic Center and Hockey Building / Warming House.

Recommendations include addressing site drainage through new storm drain inlets and piping; accommodating programmatic expansion through upgrading and relocating the water and sewer lines; providing two new fire hydrants; and rerouting of electrical, phone, cable, and gas lines as needed to meet new programmatic demands.

Existing Condition
Existing utilities are generally undersized, and located in undesirable areas for construction of proposed buildings.

- An existing 4” sanitary line comprised of Asbestos Cement Pipe serves the Warming House and Cat Barn. Located north of the building and extending under the Ice Arena and Skate Park. The existing sewer line is not sized to handle current demand, therefore is inadequate to accommodate any expansion.

- An existing 6” water line of ductile iron pipe, serves the Warming House and Cat Barn, and extends under the Ice Arena and Skate Park. Two 6”water lines are located north and east of the site respectively, that could serve the park facilities. The current water supply is not adequate for domestic or fire flow demands.

- Three fire hydrants are in close proximity to the park, and are assumed to be adequate. Any additions or modifications to increase functionality or capacity to the Ice Arena would most likely require fire suppression.

- An existing storm inlet is located in the sledding hill.

- Minor upgrades or rerouting of electrical, phone, cable and gas may be necessary for new construction or additions.

Recommendations
The utility system will be upgraded and improved to meet current demands and to accommodate new uses. Utilities under existing buildings and structures will be capped and abandoned. New utilities and infrastructure will include storm water improvements for site drainage and new utilities to meet the demands of the Nordic Center, Ice Arena, Hockey Building, and park uses.

- The abandoned sanitary sewer line is to be replaced by a new 8” main located to the north of the buildings and will include two new manholes. One 4” service line will enter the Nordic Center from the north east corner of the building. Two new 4” sanitary lines will be added to service the Hockey Building and Ice Arena. One will come into the north center of the building and provide the internal service lines, and the second tap will enter the east side and provide service to the Zamboni Building and mechanical rooms.

- A new 6” water main line will be located north of the buildings running parallel and ten feet to the south of the new sewer line replacing the abandoned water line. Two new domestic water service lines will be added, one for the Nordic Center and one for the Ice Arena and associated buildings.

- A new refrigeration system will be added to serve the Ice Arena, and will be located adjacent to the new Zamboni Space on the east side of the Ice Arena.

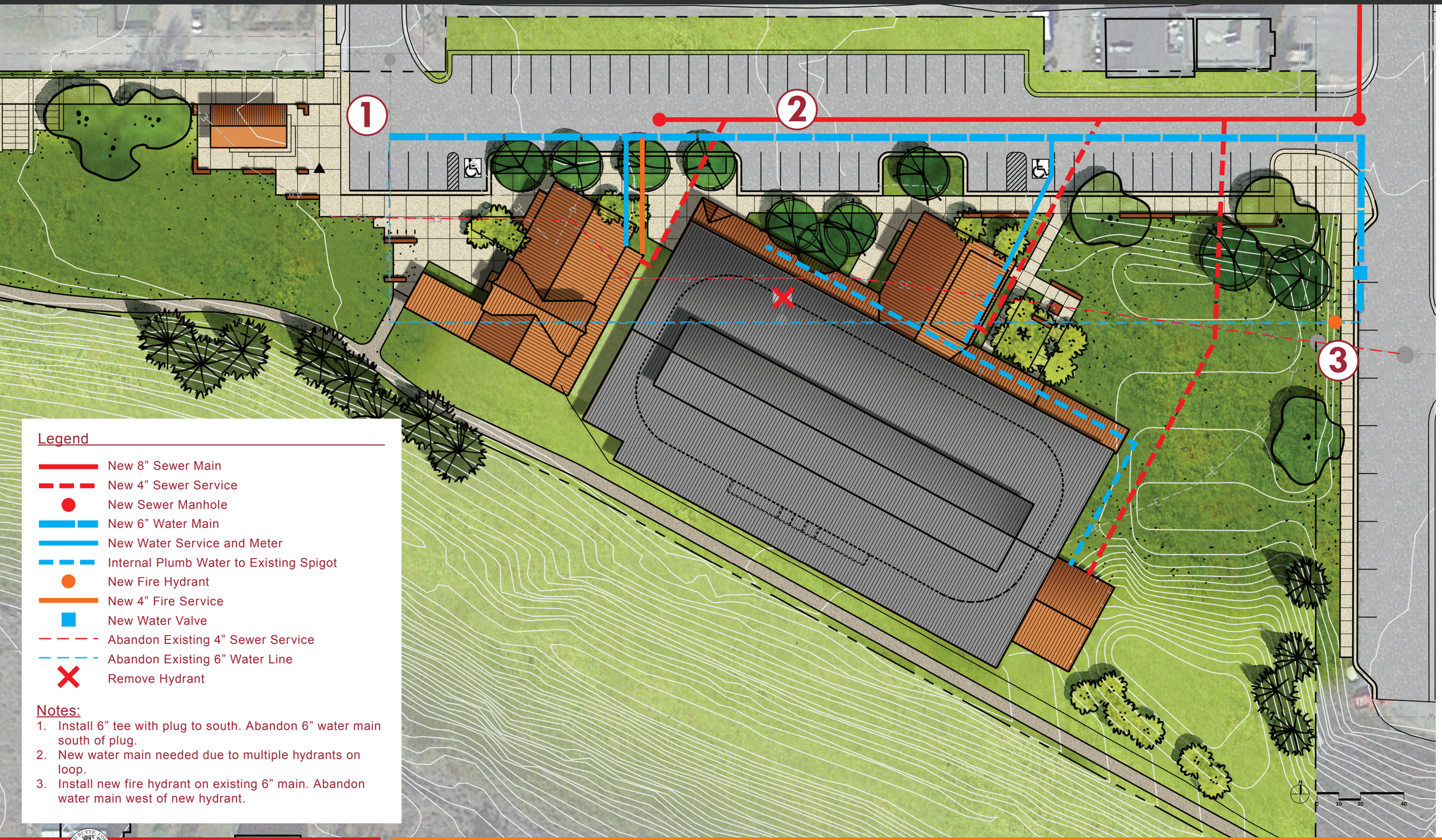
- A new storm drainage system will added to provide drainage for areas that cannot be graded to have positive drainage.

- Two fire hydrants are to be removed and two new hydrants will be installed north and east of the Ice Arena.

- A 6” fire flow service line will be added to the Zamboni Space, entering from the east side of the building and connecting to the existing 6” water main line. It is assumed the Hockey Building and Ice Arena will receive fire service from this connection.

- A 4” fire flow service line will be added to the Nordic Center entering from the North end of the building and tapping into the new 6” water main.

- Minor upgrades and/ rerouting of electrical, phone, and cable systems, and gas line will be made to address the demands of the new buildings and park facilities.



Legend

- New 8” Sewer Main
- New 4” Sewer Service
- New Sewer Manhole
- New 6” Water Main
- New Water Service and Meter
- Internal Plumb Water to Existing Spigot
- New Fire Hydrant
- New 4” Fire Service
- New Water Valve
- Abandon Existing 4” Sewer Service
- Abandon Existing 6” Water Line
- Remove Hydrant

Notes:

1. Install 6” tee with plug to south. Abandon 6” water main south of plug.
2. New water main needed due to multiple hydrants on loop.
3. Install new fire hydrant on existing 6” main. Abandon water main west of new hydrant.

Cost Estimating and Phasing

The following cost summary outlines anticipated costs associated with master plan recommendations and improvements at Big Mine Park.

PHASE 1 — Site Utilities and Infrastructure Improvements

Phase one work shall include improvements and upgrades to wet and dry utilities, connections to mainline systems, & assoc. site repair and improvements.

Site Utilities & Infrastructure
(SEE "Utilities" TAB FOR DETAILS)

Construction Subtotal	$	396,350.00
Fees	$	126,832.00

Park Improvements
(SEE "Park Improvements" TAB FOR DETAILS)

Site Construction Subtotal	$	19,021.70
Fees	$	7,038.03
Phase Total	**$**	**549,241.73**

PHASE 2 — Hockey Changing Rooms & Nordic Center

Phase two work shall include improvements, upgrades, and new construction to the existing Warming House and its Expansion for the proposed Nordic Center. Phase two shall also include the sequential construction of the Hockey changing / locker rooms and assoc. restrooms. Park improvements include site grading, circulation, parking, landscaping, & other associated construction improvements.

Park Improvements
(SEE "Park Improvements" TAB FOR DETAILS)

Site Construction Subtotal	$	214,705.00
Fees	$	79,440.85

Building Improvements & New Construction
(SEE "Building Const." TAB FOR DETAILS)

Nordic Center Construction Subtotal	$	1,207,000.00
Fees	$	482,800.00
Hockey Changing Rooms Subtotal	$	330,000.00
Fees	$	132,000.00
Phase Total	**$**	**2,445,945.85**

PHASE 3 — Sledding Hill & Park Improvements

Phase three work shall include improvements, upgrades, and new construction to the sledding hill and skate park. Park improvements include site grading, circulation, landscaping, & other associated construction improvements. Phase three park improvements also include the installation of irrigation and sodding of the park core. Final numbers to adjusted upon final determination of Skate Park site.

Park Improvements
(SEE "Park Improvements" TAB FOR DETAILS)

Site Construction Subtotal	$	243,425.00
Fees	$	90,067.25
Phase Total	**$**	**333,492.25**

PHASE 4 — Hockey Warming House, Relocate ex Zam Shed, & Park Improvements

Phase four work shall include improvements, upgrades, and new construction of the Hockey Warming House and temporary relocation of the existing Zamboni shed. Park improvements include site grading, circulation, parking, landscaping, & other associated construction improvements.

Park Improvements
(SEE "Park Improvements" TAB FOR DETAILS)

Site Construction Subtotal	$	203,480.00
Fees	$	75,287.60

Building Improvements & New Construction
(SEE "Building Const." TAB FOR DETAILS)

Hockey House & Zam Shed Const. Subtotal	$	805,000.00
Fees	$	322,000.00
Phase Total	**$**	**1,405,767.60**

PHASE 5 — Zamboni Shed, Refrigeration, & Park Improvements

Phase five work shall include improvements, upgrades, and new construction to the Zamboni Shed, referee locker room, and rink upgrades to be sprinkle red and improved refrigeration of the rink. Park improvements include site grading, circulation, landscaping, & other associated construction improvements.

Park Improvements
(SEE "Park Improvements" TAB FOR DETAILS)

Site Construction Subtotal	$	17,000.00
Fees	$	6,290.00

Building Improvements & New Construction
(SEE "Building Const." TAB FOR DETAILS)

Zamboni & Rink New Const. Subtotal	$	980,000.00
Fees	$	392,000.00
Phase Total	**$**	**1,395,290.00**

PHASE 6 — Remaining Park Improvements & Amenities

Phase six work shall include all remaining proposed master plan improvements, upgrades, and new construction to Big Mine Park, including by not limited to the revegetation of the park's west-end, park structures, plazas, and relocation of the CAT Barn. Park improvements may also include site grading, circulation, parking, landscaping, & other associated construction improvements.

Park Improvements - Sledding Hill Option Shown Below
(SEE "Park Improvements" TAB FOR DETAILS)

Site Construction Subtotal	$	455,050.60
Fees	$	168,368.72

Building Improvements & New Construction
(SEE "Building Const." TAB FOR DETAILS)

Nordic Center Construction Subtotal	$	175,000.00
Fees	$	70,000.00
Phase Total	**$**	**868,419.32**

Opinion of Total Cost	**$**	**6,998,156.75**

Park Improvements

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	Work Item	Description	Quantity	Unit		Unit Cost		Subtotal
Phase 1								
	Selective Demolition - Concrete Walk/Curb		1185	SF	$	1.50	$	1,777.50
	Tree Removal		3	EA	$	500.00	$	1,500.00
	Irrigation		5200	SF	$	1.50	$	7,800.00
	Seeding		39721	SF	$	0.20	$	7,944.20
		Subtotal					**$**	**19,021.70**
	Contractor General Conditions (10%)		1	LS	$	1,902.17	$	1,902.17
	Mobilization (5%)		1	LS	$	951.09	$	951.09
	Contingency (10%)		1	LS	$	1,902.17	$	1,902.17
	Design Fee (12%)		1	LS	$	2,282.60	$	2,282.60
		Phase One Total					**$**	**26,059.73**
Phase 2								
	Selective Demolition - Concrete Walk/Curb		6000	SF	$	1.50	$	9,000.00
	Selective Demolition - Asphalt Paving		5200	SF	$	1.50	$	7,800.00
	Tree Removal		4	EA	$	500.00	$	2,000.00
	Earthwork (on site rough grading)		1	LS	$	22,000.00	$	22,000.00
	Irrigation		31350	SF	$	1.50	$	47,025.00
	Parking Lot		5200	SF	$	6.00	$	31,200.00
	Concrete Paving		6300	SF	$	10.00	$	63,000.00
	Concrete Curb and Gutter		480	LF	$	11.00	$	5,280.00
	Walls		55	LF	$	120.00	$	6,600.00
	Deciduous Tree		8	EA	$	500.00	$	4,000.00
	Seeding		6000	SF	$	0.20	$	1,200.00
	Sodding		7800	SF	$	2.00	$	15,600.00
		Subtotal					**$**	**214,705.00**
	Contractor General Conditions (10%)		1	LS	$	21,470.50	$	21,470.50
	Mobilization (5%)		1	LS	$	10,735.25	$	10,735.25
	Contingency (10%)		1	LS	$	21,470.50	$	21,470.50
	Design Fee (12%)		1	LS	$	25,764.60	$	25,764.60
		Phase Two Total					**$**	**294,145.85**
Phase 3								
	Selective Demolition - Concrete Walk/Curb and Skatepark		9600	SF	$	1.50	$	14,400.00
	Tree Removal		3	EA	$	500.00	$	1,500.00
	Earthwork (on site rough grading)		1	LS	$	50,000.00	$	50,000.00
	Irrigation		31350	SF	$	1.50	$	47,025.00
	Concrete Paving		5000	SF	$	10.00	$	50,000.00
	Crusher Fines Paving		1000	SF	$	6.50	$	6,500.00
	Walls		45	LF	$	120.00	$	5,400.00
	Evergreen Tree		4	EA	$	500.00	$	2,000.00
	Seeding		8000	SF	$	0.20	$	1,600.00
	Sodding		32500	SF	$	2.00	$	65,000.00
		Subtotal					**$**	**243,425.00**
	Contractor General Conditions (10%)		1	LS	$	24,342.50	$	24,342.50
	Mobilization (5%)		1	LS	$	12,171.25	$	12,171.25
	Contingency (10%)		1	LS	$	24,342.50	$	24,342.50
	Design Fee (12%)		1	LS	$	29,211.00	$	29,211.00
		Phase Three Total					**$**	**333,492.25**
Phase 4								
	Selective Demolition - Concrete Walk/Curb		3800	SF	$	1.50	$	5,700.00
	Selective Demolition - Asphalt Paving		5200	SF	$	1.50	$	7,800.00
	Tree Removal		4	EA	$	500.00	$	2,000.00
	Earthwork (on site rough grading)		1	LS	$	18,000.00	$	18,000.00
	Irrigation		21000	SF	$	1.50	$	31,500.00
	Parking Lot		5200	SF	$	6.00	$	31,200.00
	Concrete Paving		6300	SF	$	10.00	$	63,000.00
	Concrete Curb and Gutter		480	LF	$	11.00	$	5,280.00
	Walls		55	LF	$	120.00	$	6,600.00
	Deciduous Tree		8	EA	$	500.00	$	4,000.00
	Seeding		12000	SF	$	0.20	$	2,400.00
	Sodding		13000	SF	$	2.00	$	26,000.00
		Subtotal					**$**	**203,480.00**
	Contractor General Conditions (10%)		1	LS	$	20,348.00	$	20,348.00
	Mobilization (5%)		1	LS	$	10,174.00	$	10,174.00
	Contingency (10%)		1	LS	$	20,348.00	$	20,348.00
	Design Fee (12%)		1	LS	$	24,417.60	$	24,417.60
		Phase Four Total					**$**	**278,767.60**
Phase 5								
	Selective Demolition - Concrete Walk/Curb		2400	SF	$	1.50	$	3,600.00
	Earthwork (on site rough grading)		1	LS	$	5,000.00	$	5,000.00
	Irrigation		2000	SF	$	1.50	$	3,000.00
	Concrete Paving		500	SF	$	10.00	$	5,000.00
	Seeding		2000	SF	$	0.20	$	400.00
		Subtotal					**$**	**17,000.00**
	Contractor General Conditions (10%)		1	LS	$	1,700.00	$	1,700.00
	Mobilization (5%)		1	LS	$	850.00	$	850.00
	Contingency (10%)		1	LS	$	1,700.00	$	1,700.00
	Design Fee (12%)		1	LS	$	2,040.00	$	2,040.00
		Phase Five Total					**$**	**23,290.00**
Phase 6								
	Selective Demolition - Concrete Walk/Curb		1200	SF	$	1.50	$	1,800.00
	Selective Demolition - Asphalt Paving		2600	SF	$	1.50	$	3,900.00
	Tree Removal		4	EA	$	500.00	$	2,000.00
	Earthwork (on site rough grading)		1	LS	$	15,000.00	$	15,000.00
	Irrigation		16000	SF	$	1.50	$	24,000.00
	Parking Lot		2600	SF	$	6.00	$	15,600.00
	Concrete Paving		7500	SF	$	10.00	$	75,000.00
	Play Area/Plaza		724	SF	$	12.00	$	8,688.00
	Concrete Curb and Gutter		240	LF	$	11.00	$	2,640.00
	Crusher Fines Paving		4000	SF	$	6.50	$	26,000.00
	Overlook Structure		1	LS	$	15,000.00	$	15,000.00
	Tipple Structure		1	LS	$	85,000.00	$	85,000.00
	Park Lounge Structure		1	LS	$	90,000.00	$	90,000.00
	Boardwalk		338	SF	$	80.00	$	27,040.00
	Signage		1	LS	$	5,500.00	$	5,500.00
	Walls		67	LF	$	120.00	$	8,040.00
	Evergreen Tree		8	EA	$	500.00	$	4,000.00
	Deciduous Tree		14	EA	$	500.00	$	7,000.00
	Wetland		18071	SF	$	0.60	$	10,842.60
	Seeding		10000	SF	$	0.20	$	2,000.00
	Sodding		13000	SF	$	2.00	$	26,000.00
		Subtotal					**$**	**455,050.60**
	Contractor General Conditions (10%)		1	LS	$	45,505.06	$	45,505.06
	Mobilization (5%)		1	LS	$	22,752.53	$	22,752.53
	Contingency (10%)		1	LS	$	45,505.06	$	45,505.06
	Design Fee (12%)		1	LS	$	54,606.07	$	54,606.07
		Phase Six Total					**$**	**623,419.32**

MUNDUS BISHOP | MARTIN / MARTIN CONSULTING ENGINEERS | TEAM PAIN SKATE PARKS

Nordic Center Improvements

	Work Item	Cost/SF	SF	Total
Phase				
Phase 2	Rehabiliation of Nordic Center	$ 250	2,050	$ 512,500.00
Phase 2	Nordic Center New Construction	$ 300	2,315	$ 694,500.00
Phase 6	Cat Barn Relocation	$ 125	1,400	$ 175,000.00
	Subtotal / Construction Cost			**$ 1,382,000.00**
				40%
	Total Project Cost			**$ 1,934,800.00**

Ice Hockey and Ice Arena Improvements

	Work Item	Cost/SF	SF	Total
Phase				
Phase 1	Fire Suppression per IBC	$ 4	27,750	$ 111,000.00
Phase 2	Ice Hockey Changing Rooms	$ 275	1,200	$ 330,000.00
Phase 4	Ice Hockey New Construction	$ 275	2,700	$ 742,500.00
Phase 4	Relocate Ex Zamboni Shed	$ 125	500	$ 62,500.00
Phase 5	Zamboni Shed & Refigeration Building	$ 250	2,000	$ 500,000.00
Phase 5	Refrigeration Equipment	UNIT		$ 460,000.00
Phase 5	New Bleachers	UNIT		$ 20,000.00
	Subtotal / Construction Cost			**$ 2,226,000.00**
				40%
	Total Project Cost			**$ 3,116,400.00**

Utilities

Item Description	Units	Quantity	Unit Cost	Item Cost
Utilities				
Mobilization / Demobilization	LS	1	$ 10,000.00	$ 10,000.00
8" PVC Sanitary Sewer	LF	555	$ 120.00	$ 66,600.00
4' DIA SS manhole	EA	3	$ 5,000.00	$ 15,000.00
4" SS service line nordic ctr & public area	LF	190	$ 60.00	$ 11,400.00
4" SS service line for zamboni service line	LF	220	$ 60.00	$ 13,200.00
Abandon Sewer cap & plug	LS	1	$ 5,000.00	$ 5,000.00
Sewer Tap Fee	LS	1	(Not estimated)	
6" Dip water Main	LF	520	$ 120.00	$ 62,400.00
1" HDPE Water Service Line	LF	110	$ 60.00	$ 6,600.00
New Fire Hydrant	EA	2	$ 5,000.00	$ 10,000.00
6" TEE	EA	3	$ 1,000.00	$ 3,000.00
6" Valves	EA	3	$ 1,000.00	$ 3,000.00
Tap Fee/Water Meters	LF	2	$ 50,000.00	$ 100,000.00
4" Fire Service	LF	50	$ 110.00	$ 5,500.00
6" Fire Service	LF	130	$ 120.00	$ 15,600.00
Abandon water cap & plug	LS	1	$ 5,000.00	$ 5,000.00
Aspalt patch over water and sewer mains	LF	1,080	$ 30.00	$ 32,400.00
Flowfill for all street work	LF	30	$ 50.00	$ 1,500.00
Electrical re-routing estimate	LF	150	$ 50.00	$ 7,500.00
Phone re-routing estimate	LF	150	$ 50.00	$ 7,500.00
Cable/Comm re-routing estimate	LF	150	$ 50.00	$ 7,500.00
Gas re-routing estimate	LF	150	$ 51.00	$ 7,650.00
			Cost of Items:	$ 396,350.00
		20%	Contingencies:	$ 79,270.00
			Subtotal:	$ 475,620.00
		10%	Const. Engineering/Observation:	$ 47,562.00
			Total Utility Cost:	**$ 523,182.00**

This cost estimate is not to be used for establishing the project budget. Project budget should be established by General Contractor.

Big Mine Park Master Plan Funding & Partners

Grant Opportunities
GOCO
Green Spaces, Shade Structures, Skate Park
DOLA (Legacy)
Manufacturers
Skate Park, Hockey, Nordic
State Historical Fund
Historic Preservation

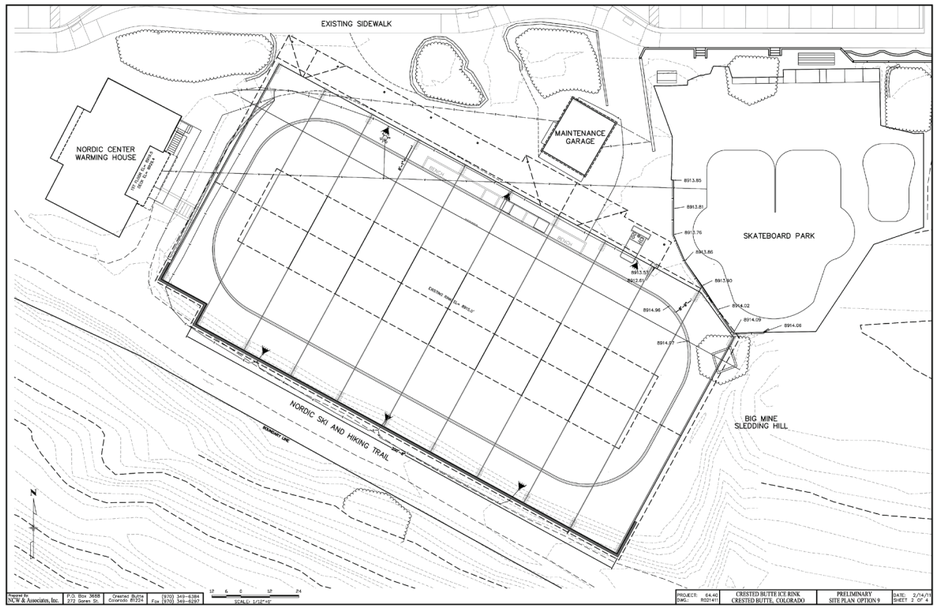
Partnerships
Town of Crested Butte
Matching funds for grants
Town of Mt. Crested Butte
National Park Service
Rivers, Trails and Conservation Assistance Program

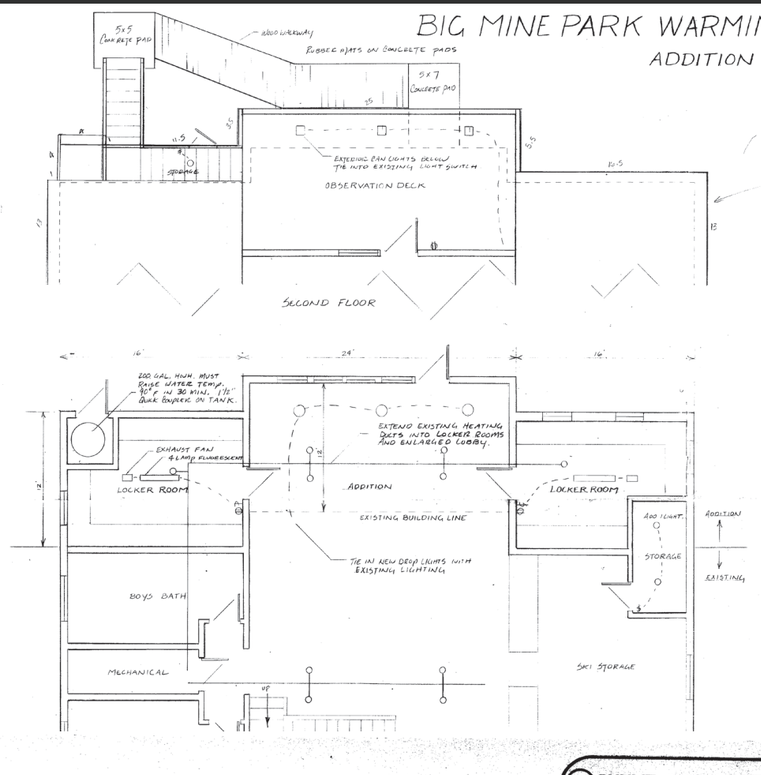
Local Organizations
Crested Butte Nordic
Fundraising for Nordic Center
West Elk Hockey Association
Fundraising for Hockey Amenities
Crested Butte Music Festival
Gravity Groms
Gunnison Valley Skateboard Alliance
Fundraising for Skate Park
Community Foundation of the Gunnison Valley
Local Volunteer Efforts

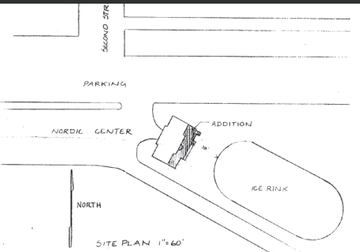
Foundations
Gates Family Foundation
Parks, Conservation, Recreation, Historic Preservation
Boettcher Foundation
Community Enrichment Grant - available to non-profits and does not fund parks and open space
Pam Foundation

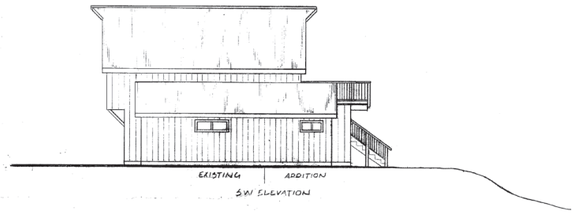
Appendices

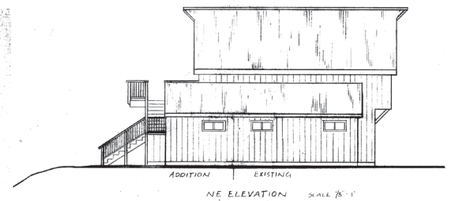
A. Record Floor Plans and Elevations





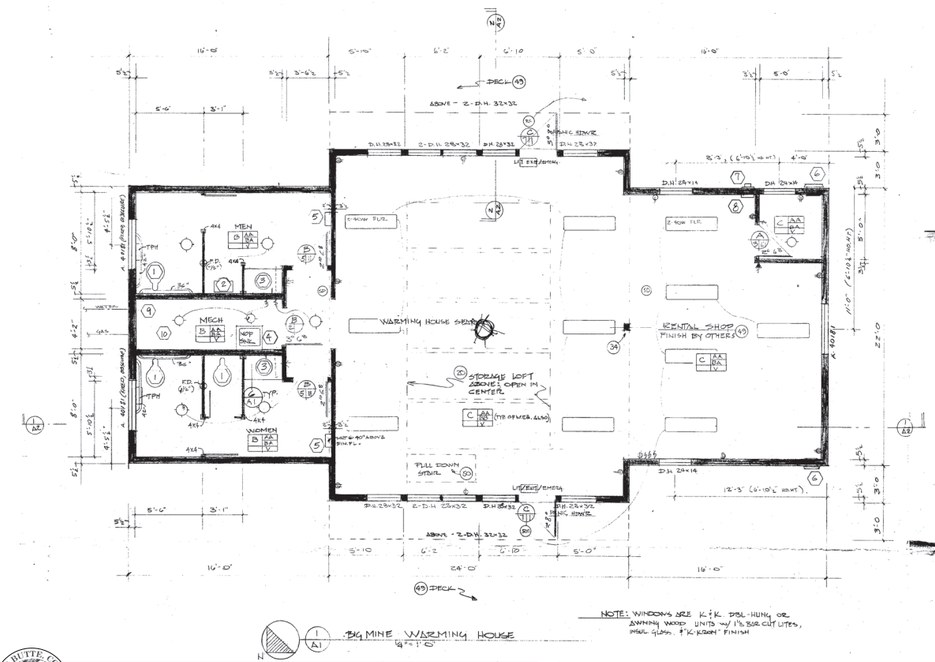


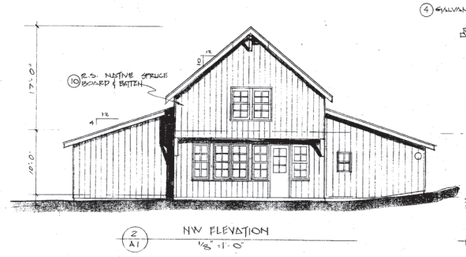


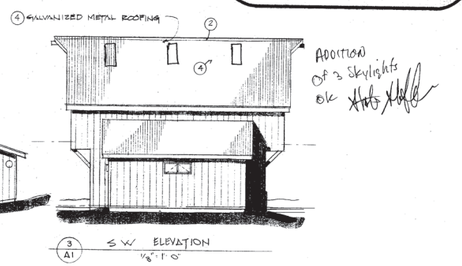


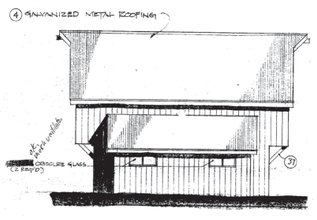
SUNLIT ARCHITECTURE
BILL ROSENBERRY • BOB BROTHERTON
Box 970 Crested Butte, CO 81224 Ph: (303) 349-6311

SDL 2/8/99
Revised 3/25/99









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B. Skate Park Alternative / Relocation to Town Park

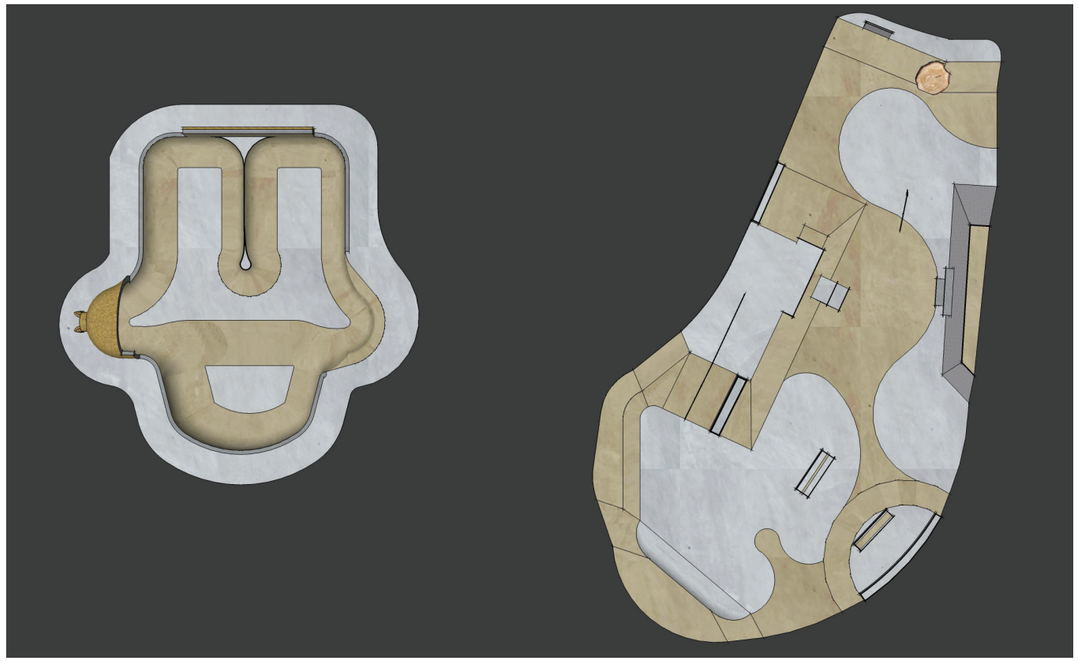
Pros:

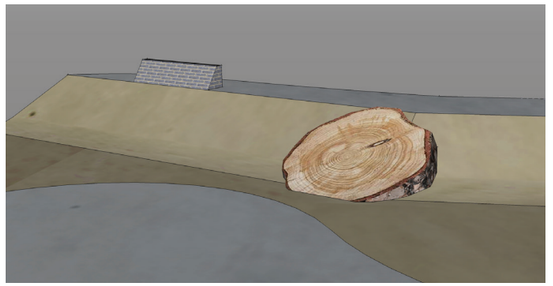
- Would allow for access to existing restroom, water fountain and shade structure amenities
- Sunny open space that would allow for a longer skate season
- Town Park is currently a very active park enjoyed by many different user groups. The Skate Park would add to the existing vibrancy of Town Park.
- The skateboard community likes the visibility and central location of Town Park
- Skate Park would be located across the street from existing housing, with the exception of 625 7th Street which has a natural shrub buffer on the northern boundary of Town Park
- Skate Park would not be used for snow storage which would increase the longevity of the park

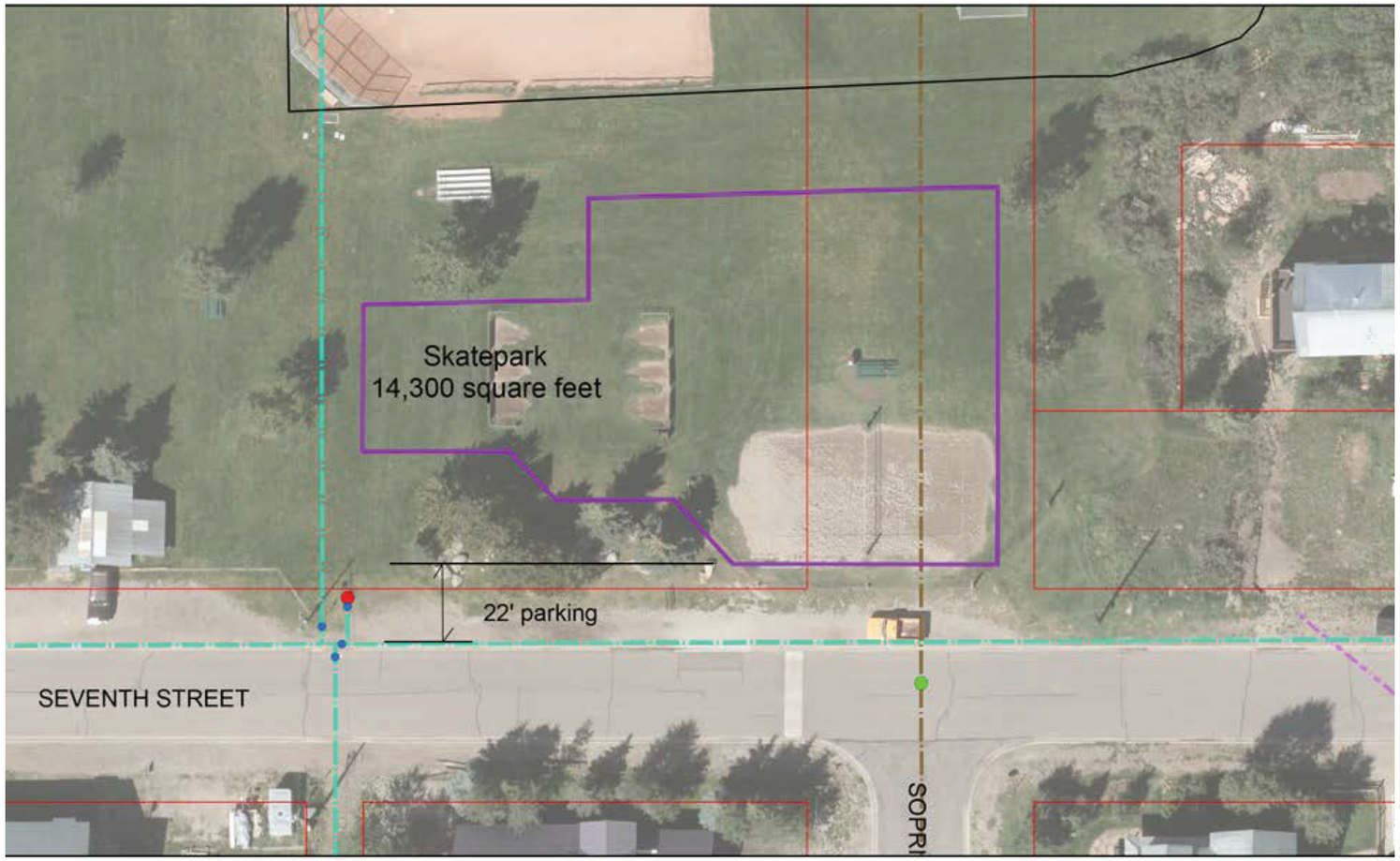
Cons:

- The location of an existing sewer pipe under Sopris Avenue and extending west through the park would limit the design opportunities of the Skate Park
- Limited space would cramp the full skate program and reduce “buffer” zones between park amenities
- The expansion of the Center for the Arts and the addition of the Skate Park to Town Park would result in a significant loss of green space, a greater impact to parking, and more crowded park amenities
- Town Park is a highly utilized park with limited parking and access. The addition of the Skate Park to Town Park might further congest 7th Street
- Proximity to Pitsker Field would require netting to mitigate the risk of foul balls being hit into the Skate Park
- Would necessitate the relocation of the Volleyball Court and Horseshoe Pits
- Neighbors have voiced concerns over the change in use, noise, congestion along 7th Street, loss of green space and relocation of existing amenities.

	QTY	Size		Unit	Total	Adjacency
Skate Park						
Total				**SF**	**10,000**	
Vertical bowl - CB replica	1		5000	SF	5,000	
Skate plaza / street skating	1		2500	SF	2,500	
Gathering space/loop	1			SF		
Other components			2500	SF	2,500	







Skate Park Area at Town Park

Parcel Boundaries
Water Lines
Proposed Skatepark Area = 14,300 square feet
Water Valves
Sanitary Sewer Lines
Hydrants
Storm Sewer Line
Manhole

W
S
N
E

0 40 80 160 Feet

Proposed Skate Park at Town Park

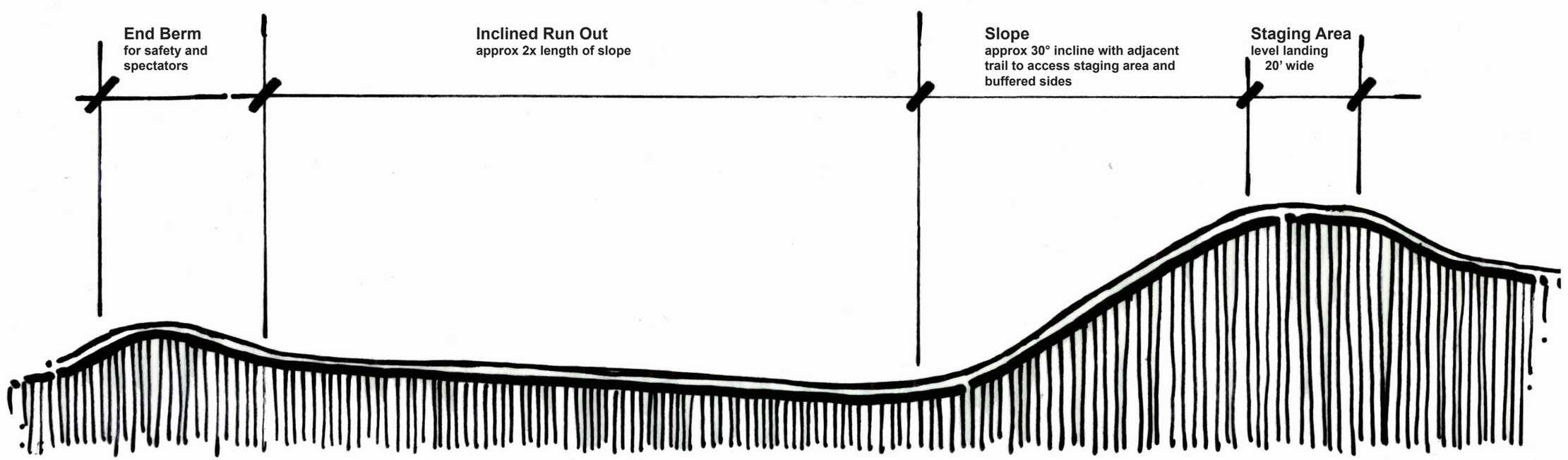
Vertical Bowl / CB Replica	4,928 SF
Skate Plaza / Street Skating	8,691 SF
Total Area	13,619 SF

C. Sledding Hill Design Guidelines / Best Practices

Design Notes:

- Staff or parental supervision is recommended
- If unsupervised, post signage including the following; hours of operation, danger - use at your own risk, user assumes full responsibility for determining if conditions are safe for use, parents are responsible - no supervision is provided, sledding may be a hazard and substantial risk, makeshift ramps or jumps are prohibited
- Proper maintenance should include preseason set-up, inspection and signage
- Remove any and all obstructions, includeing trees, fences, rocks, debris, etc.
- Sledding hill should be oriented north and channel or contain sledders within designated area
- A clear and designated return access path or stairway sould be provided from the run out area back to the staging area

- **STAGING AREA**
- **SLOPE**
- **RUN OUT**
- **BERM**
- **ACCESS STAIRS**
- **SIGNAGE**



D. Master Plan Schedule

Task	2014 October 6	November 3	December 1	2015 January 5	February 2	March 2	April 6	May 4	June 1	July 6	August 3	September 7
Phase 1 Tasks - Inventory and Site Analysis		*										*
'1.A. Kick - off Meeting / Conference call and data list		*										
'1.B Gather and review available background materials												
'1.C. Prepare Project Base Map												
'1.D. Prepare Preliminary Park Program												
'1.E. Preliminary communications and Public Outreach												
'1.F. Site Visit and Work Session - Trip 1 with Comm Meeting			* Dec 15 & 16									
'1.G. Existing condition, Opportunities and onstraints												
'1.H. Community Meeting 1			* Dec 15									
'1.I. Draft Summary Report												
Phase 2 Tasks - Alternatives												
'2.A. Park Program												
Community Work Session with Team Pain				* Jan 15								
'2.B. Conceptual Park Plans					* submit Feb 19							
'2.C. Work session 3				* Jan 15								
'2.D. Refine Conceptual Park Plans												
'2.E. Community Workshop 2							* March 30					
'2.E. Work session 3							*					
'2.F. Present to Town Council							*					
'2.G. Summary Report							*					
Phase 3 Tasks - Preferred Alternative												
'3.A. Preferred Alternative												
'3.B. Work Session							* April 21					
'3C. Refine Conceptual Alternative												
'3.D. Work Session and Community Workshop 3								* May 5				
'3.E. Preferred Plan												
'3.F. Present to Town Council										* July 6		
Work session with Nordic Center									* June 4			
BOZAR - first design review										* June 22		
BOZAR - second design review											* July 20	
Phase 4 Tasks - Big Mine Park Master Plan												
'4.A. Draft Master Plan												
'4.B. Draft Implementation Strategy												
'4.C. Town of Crested Butte review / BOZAR public hearing											* July 28 BOZAR public hearing	
'4.D. Town of Crested Butte public hearing								Sept 8 Town Council public hearing			*	*
'4.D. Revisions and refinements												
'4.E. Final Master Plan Document												*