



Stillwater County

EVENTS CENTER COMPLEX MASTER PLAN

SEPTEMBER 15, 2020



Charles D. Smith Architecture & Planning, LLC.





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INTRODUCTION

The following Master Plan represents the culmination of several years of planning, public meetings, and decisions to provide the overall direction for the development of the new Stillwater County Events Center Complex (“Events Center Complex”) to be located on approximately 20 acres of greenfield property north and west of Interstate 90 exit 408 at the intersection of Sheep Dip Road and County owned Lehmann Road. The new County owned and operated Events Center Complex will replace the existing fairgrounds currently located within the City of Columbus, freeing up the fairgrounds space for other County facilities.

This finalized Master Plan provides a roadmap for Stillwater County in the planning and development of the new Events Center Complex which will be phased over the next 7 years, depending on availability of funding. The following pages summarize the process, decisions and final conceptual layouts of the sitework and proposed facilities to be constructed on the new greenfield property.

HISTORY / BACKGROUND

In the spring of 2020, Stillwater County hired a team of design professionals, led by Arete Design Group to provide Architectural/Engineering (A/E) services for several major capital construction projects including the new Stillwater County Events Center Complex. The A/E team’s task is to design a new Events Center Complex working with the Owner team comprised of the Stillwater County Commissioners, Community/Economic Development Director, Facilities Capital Improvement Planning Committee (FCIP), and the County’s Project Representative - Hulteng, Inc. in a comprehensive teaming effort to provide forward thinking, multi-use facilities that will meet the needs of the County for the next 50+ years.

As the project began, the A/E team studied previous concepts for the new Complex and suggested several alternative layouts including the possibility of combining several of the proposed buildings into one facility. After several early discussions, the A/E team and the Owner’s team agreed to work through a Master Planning process to explore the suggested concepts and site layouts for the new Events Center Complex. This Master Planning was primarily spearheaded by Charlie Smith, an internationally known fairgrounds planner based in Knoxville, TN, along with support from the rest of the A/E team, including Arete Design Group, Morrison-Maierle, and KL&A. The process began on June 18, 2020, with in-depth meetings in Columbus to complete thorough site-analysis exercises structured to capture a comprehensive understanding about the benefits and issues of the proposed site. In addition to the site analysis work, the initial meetings covered the programmatic needs, goals, and functionality of the new Events Center Complex.

From these working sessions, a vision of the new Events Center Complex began to emerge. Over the next two months, with multiple on-line and in person meetings, the Master Plan continued to take shape. The final result is a comprehensive Master Plan that defines the full build-out and development of the new Events Center Complex, using a phased approach that systematically outlines the construction over the next 7 years (+/-). The initial phase includes a new multi-use Events Center Building that will replace the limited fairground facilities that the County currently owns. After the initial Events Center Building is constructed, additional facilities will be added at appropriate times in later design and construction phases.

EXECUTIVE SUMMARY

Looking out 50 years, this Master Plan encompasses both immediate and future needs for Stillwater County to provide facilities to host various local and regional events that range from the County Fair and other livestock exhibitions and competitions to trade shows, concerts, sporting events and other large gatherings. The conclusion of the work included herein, proposes a multi-use facility that is appropriately planned and sized to fully replace the existing Stillwater County Fairgrounds with new and expanded facilities. Further expansion will be phased over a 7-year period to provide a venue that will enable the County to meet current and future needs, as well as open doors of opportunity to accommodate numerous events that are not feasible in Stillwater County at this time. The new Events Center Complex captured in this Master Plan will enhance the City of Columbus, Stillwater County and the surrounding area with flexible space that is easy to access and enjoyable to use.

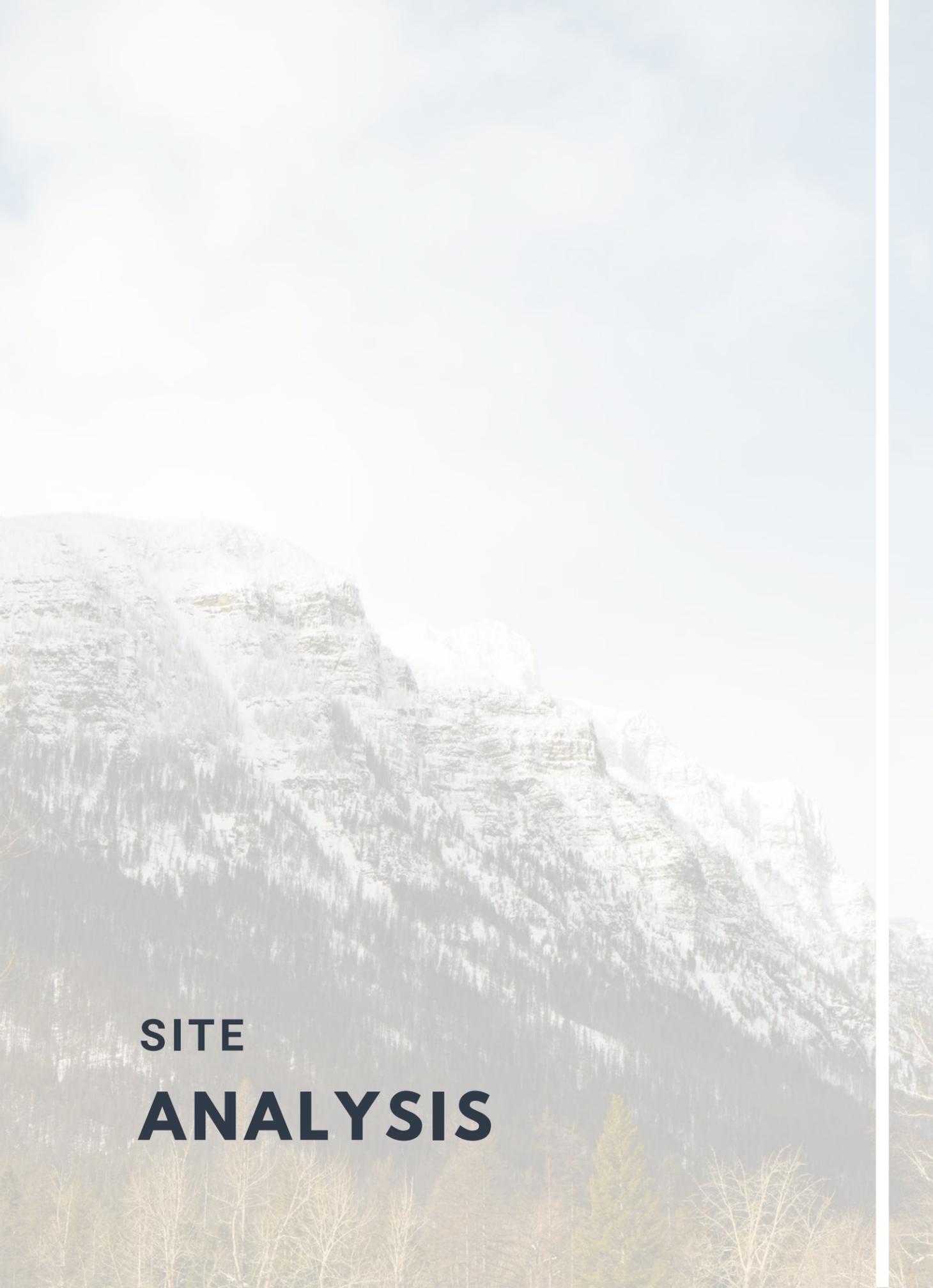
The new Events Center Complex will be located on approximately 20 acres of highly visible, undeveloped greenfield property that is currently an irrigated hay field. The land lies directly north of Interstate 90. The prime greenfield property slopes gently up from south to north to an irrigation ditch that flows west to east across the northern portion of the site. To maximize visibility and the attraction of motorists on I-90, the new buildings, which include a new multi-use Events Center Building (Event Center, meeting rooms, pre-function space, and future Exhibition Hall) and an Outdoor Arena, will be situated toward the northern portion of the property. In addition to great visibility from I-90, this layout provides for separation between the public side of the facilities to the south, and the service and contestant side of the facilities to the north.

Design and development of the new Events Center Complex will be phased. Phase 1 of the Complex will include the new Events Center Building, an Outdoor Arena, and site work including utilities, roadways and parking. The multi-use Events Center Building will be the main hub of activity on the Complex, housing the Event Center, meeting rooms and support space that can be used for all kinds of events and gatherings. As additional facilities are added in subsequent phases, including covering and ultimately enclosing the Outdoor Arena, the Events Center Building will continue to be the central building on the Complex. The Events Center Building itself will be constructed so exhibition space can be added on to the east end of the building.

Site development in the Master Planning process included an analysis of the utilities required for the proposed Events Center Complex. The new Complex is planned to support several thousand patrons at any one time. The sheer number of people who may be on site will require a robust infrastructure for water and sewer. As part of the investigation of this Master Plan, the A/E team reviewed the possibility of providing on-site water wells and septic and drain field systems. Due to the large expanse of drain field required, including redundancy, it is not feasible to provide on-site wastewater facilities. It will be to the County's advantage to be annexed into the City of Columbus and connected to the City water and sewer systems.

In addition to the above-mentioned public facilities, a new Weed/Facilities Building will be constructed in the northeast corner of the site, north of the irrigation ditch. The Weed/Facilities Building can be constructed at any time and will likely be one of the first new facilities built on the Complex property but will be dependent upon the availability of the water/sewer extensions from the City of Columbus to the site. Development of this area of the site may benefit by enclosing (piping) the irrigation channel through that portion of the site to provide additional parking and convenient access from the Weed/Facility Building to the public facilities. In addition, enclosing the ditch in this area resolves a safety issue for patrons using the new Events Center Building. The remainder of the irrigation ditch to the west from the Weed/Facilities Building will remain open but will be fenced to restrict access to the ditch.

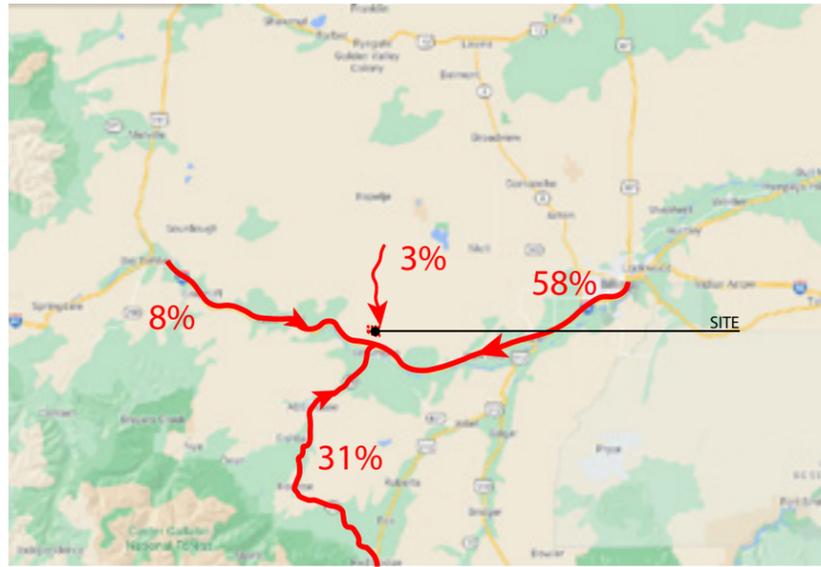




SITE ANALYSIS

INTRODUCTION

In summary, the design team found the site to be well located with great access points, positive approach views, and long-range vistas of the mountains to the south. The site has the potential to separate visitor access to the south and service access to the north, allowing for users to best utilize and maximize the site areas. There are no negative environmental issues. The site is reasonably flat and contains numerous mature trees. The character of the site is furthermore enhanced by views of the bluffs to the north and vast mountain peaks to the south. After the investigation and analysis, the design team concluded that the proposed site is a viable location for the new home of the Stillwater County Events Center Complex and offers the possibility of potential future expansion to the west, if desired. The following are the Site Analysis Diagrams, along with descriptions relative to each of the Site Analysis categories.



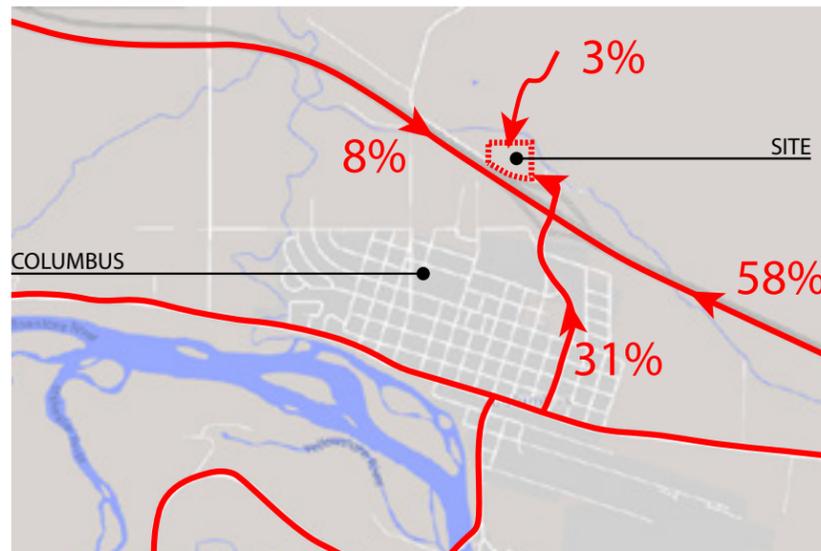
1. Regional Access

It is anticipated that 31% of the attendees to major events at the Events Center Complex would arrive at the site northbound on 9th Street/ Hwy 78, 58% eastbound on I-90, and 8% westbound on I-90, and 3% from the north.



3. Vehicular Circulation:

Attendees to the site will be accommodated from Sheep Dip Road. Service access will occur on Lehmann Road. The design team will evaluate possible additional roadway improvements west of the site. Public parking is anticipated in a single parking area at the front of the site.



2. Local Site Access

Closer to the site, it was determined that 100% of the attendees would arrive at the site westbound on Sheep Dip Road. The design team will evaluate the possibility of future improvements to Sheep Dip Road to accommodate traffic.



4. Pedestrian Circulation

It is anticipated that public pedestrian circulation will occur at the center of the site to minimize pedestrian / vehicle and animal circulation conflicts.



5. Service Access and Circulation

Service access is proposed to occur on Northbound Lehmann Road in order to minimize conflicts with the public traffic along Sheep Dip Road. A service courtyard will be located at the north quadrant of the site at the rear of the Events Center Complex.



7. Adjacent Land Uses and Neighborhood Relations Issues:

The site is surrounded by City of Columbus property to the north, I-90 and the frontage road (Sheep Dip Road) to the south, a MDT service yard with an RV Park to the east, and a single family residence to the west. The RV park is a potential support facility for the Events Center Complex.



6. Animal Movements:

Once unloaded, it is anticipated that all animal movements will occur within a designated area to minimize animal / attendee conflicts.



8. Property Limits and Ownership

The entire contiguous twenty acre site is owned by Stillwater County and is located outside the City Limits of the City of Columbus.



9. Site Topography and Drainage Issues:

The site slopes gently down from north to south with an open drainage ditch alongside Sheep Dip Road. An open irrigation channel exists in the northern quadrant of the site. The design team has been advised that the irrigation channel can be enclosed, covered and possibly be re-routed. Some excavation of undesirable soil may be needed along with additional new fill material.



11. Easements and Restrictions:

Utility easements exist along the southern and western border of the site.



10. Site Expansion Potential:

A single residential parcel exists to the west of the Events Center Complex and would be an appropriate addition to the Events Center Complex property if it should become available.



12. Environmental Conditions and Soil Conditions:

Multi-layered soil conditions exist on the site. A shallow top layer may need to be removed for the building pads and be replaced with soil with a higher load bearing capacity.



13. Zoning / Comprehensive Plan

The site is located in Stillwater County without any zoning ordinances. While no formal comprehensive plan exists, the County Growth Policy shows no appreciable growth north of I-90.



15. Vegetation / Landscaping:

Mature trees are located along the irrigation channel north of the site.



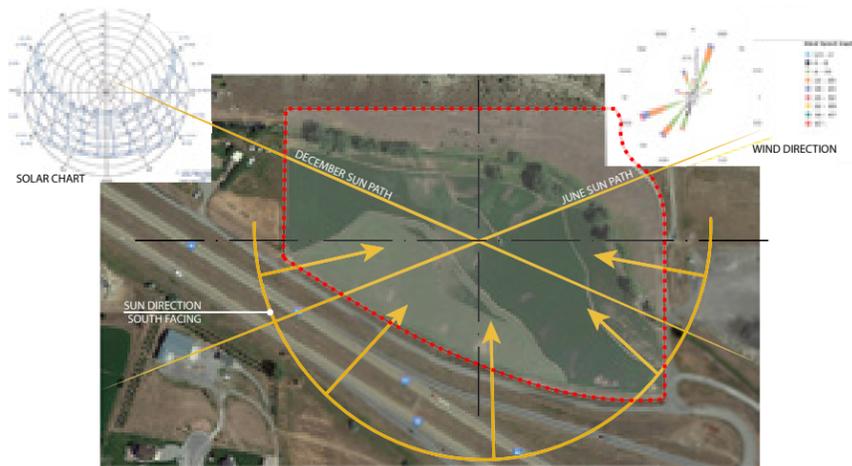
14. Site Layout Axis:

The site configuration and orientation towards the interstate allows for a linear axis which will encourage a building cluster that faces I-90.



16. Views / Vistas:

Excellent approach views exist both from eastbound and westbound I-90. Dramatic long distance views of the mountains exist looking south from the Events Center Complex site.



17. Solar Orientation / Wind:

The solar orientation shows that the front of the buildings facing I-90 will normally have sunlight on them. The prevailing winds are from west to east.



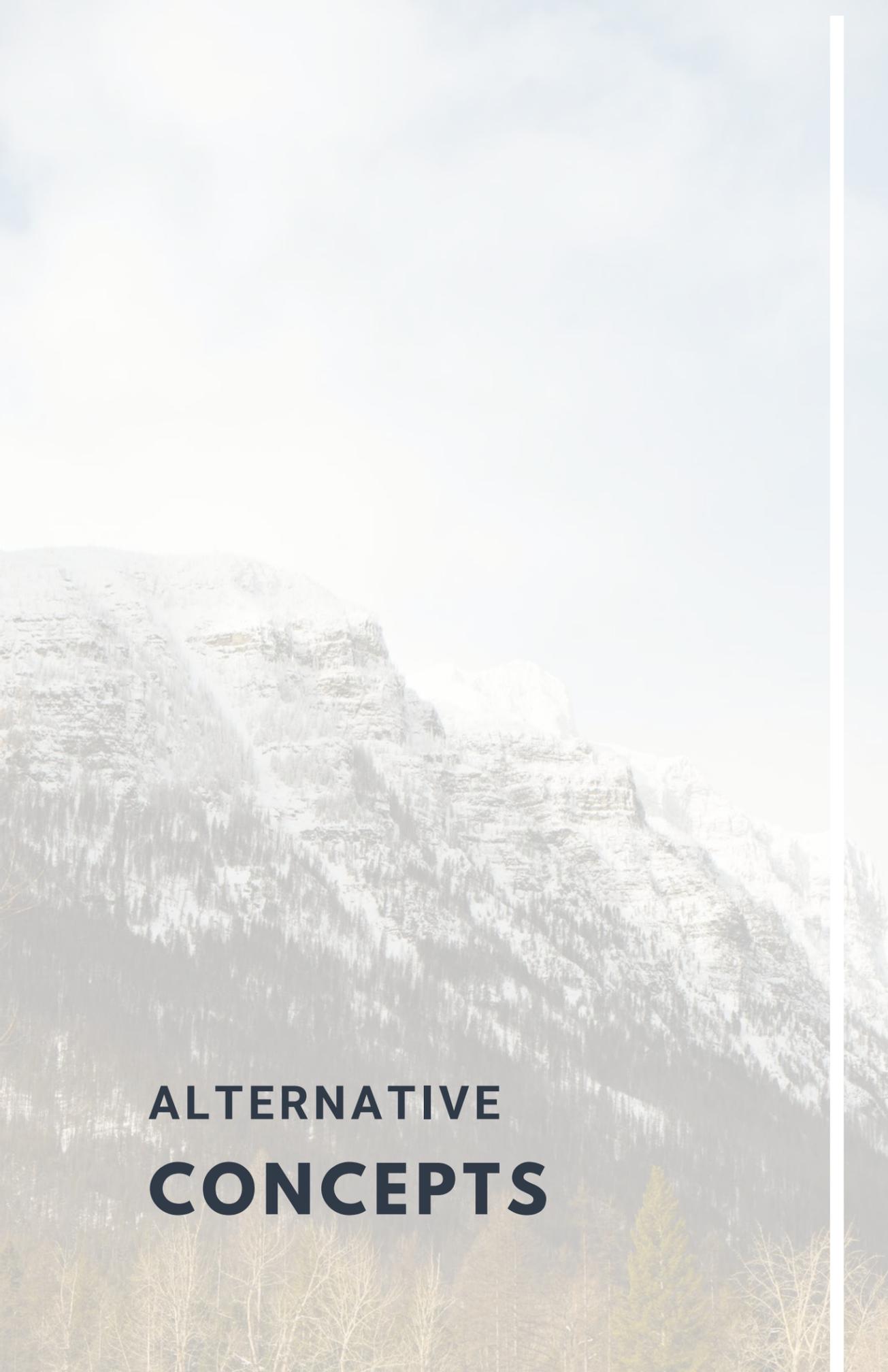
19. Architectural Themes / Image:

The client has expressed interest in an "Exposition Park" architectural theme for the new fairgrounds.



18. Site Utilities Conditions & Capacities:

Natural gas, electrical and telephone service is available to the site along Sheep Dip Road. The design team will evaluate potential designs for sanitary sewer systems and additional water supply capacity if needed.



ALTERNATIVE CONCEPTS

INTRODUCTION

The following are Master Plan Options A, B, B-2, and C. Although the facility components and relationships are the same, the site plans have the following characteristics:

- All the options provide visitor access off of Sheep Dip Road and a separate service access drive off of Lehmann Road.
- All options include public parking in front of the buildings, a service courtyard to the rear of the Complex, and RV parking near the Outdoor Arena.
- All options locate the proposed Weed/Facilities Building northeast of the Events Center Building and irrigation ditch with separate access off Lehmann Road. Visitor parking will be provided to the south in front of the building, a laydown yard to the north at the rear of the building, and a service road connector between this facility and the Events Center Building's service area.

Concept "A" – This concept orients the building axis running perpendicular to Sheep Dip road.

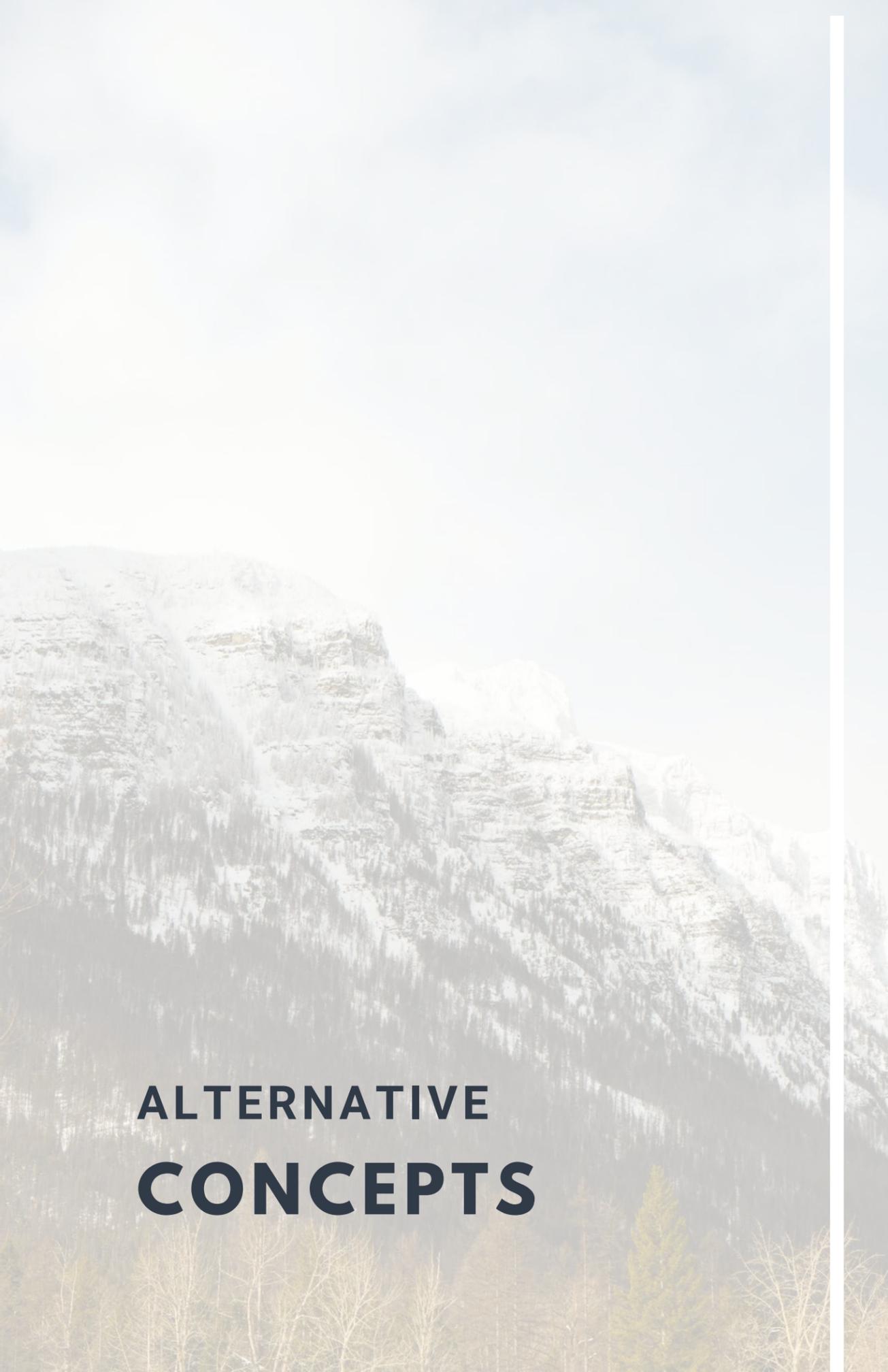
Considerations:

- The concept utilizes a "pedestrian mall" as a visitor circulation pathway.
- This mall connects all the major building components and allows the visitors to move from one area of the complex to the other within a climate-controlled environment.
- The Events Center Building, which includes a future Exhibit Hall, will be most visible at the front of the site. This concept will require significant grading and fill material. The service side of the Exhibit Hall and Livestock Buildings would be the first view attendees will see of the building Complex.
- The Outdoor Arena is at the rear of the building Complex and is not convenient for visitor parking.

Concept "B" – This concept works well with the grade of the site and locates the Events Center Building on the east end with good visibility.

Considerations:

- The Events Center and Exhibit Hall Buildings will work together for multi-faceted events or more than one event at a time.
- The Outdoor Arena can function independently or in conjunction with the rest of the Complex with its own service area and visitor parking.
- A covered or enclosed connector along the front side of the building connects all the various building components.
- The Livestock Building and the Events Center Building are at opposite ends of the Complex and do not complement each other, however they are connected by a central core that includes restrooms, meeting rooms, and concession spaces.



ALTERNATIVE CONCEPTS

Concept "B-2" – This concept also works well with the existing grade and is the first concept to combine the Livestock Building with the Events Center Building.

Considerations:

- A central core that includes restrooms and meeting spaces services both the Events Center and the future Exhibit Hall Buildings.
- An enclosed pre-function space on the front of the building connects all the various visitor spaces.
- The Outdoor Arena can function independently or in conjunction with the rest of the complex with its own service area, RV parking and visitor parking.
- The Weed/Facilities Building is two different buildings in this concept.

Option "C" – This concept is designed to highlight the Events Center Building and connect with the rest of the buildings utilizing a gracious covered or enclosed pre-function space.

Considerations:

- The Exhibit Hall and the Livestock Buildings are separated by a central core of service facilities including concessions spaces, rest rooms, locker rooms, and meeting facilities.
- The Outdoor Arena can function in conjunction with the rest of the complex or independently with its own service area and parking.

The following phasing diagrams depict the sequencing of the construction of the various components. The first diagrams shown below are concept diagrams, followed by phasing diagrams. Phase 1 is shown in blue and Phase 5 is shown in orange. Each of the four options can function on their own after Phase 1, and until the next phase is added.

LEGEND

- 1. LIVESTOCK BUILDING
- 2. EXHIBIT BUILDING
- 3. MEETING ROOMS
- 4. RESTROOM / CONCESSIONS
- 5. PEDESTRIAN MALL
- 6. EVENTS CENTER
- 7. OUTDOOR ARENA
- 8. R.V. PARKING
- 9. PUBLIC PARKING
- 10. SERVICE COURTYARD
- 11. FACILITY SHOP
- 12. WEED SHOP
- 13. STORAGE BUILDING



STILLWATER COUNTY EVENTS CENTER COMPLEX MASTER PLAN OPTION A

LEGEND

- 1. LIVESTOCK BUILDING
- 2. EXHIBIT BUILDING
- 3. MEETING ROOMS
- 4. RESTROOM / CONCESSIONS
- 5. PEDESTRIAN MALL
- 6. EVENTS CENTER
- 7. OUTDOOR ARENA
- 8. R.V. PARKING
- 9. PUBLIC PARKING
- 10. SERVICE COURTYARD
- 11. FACILITY SHOP
- 12. WEED SHOP
- 13. STORAGE BUILDING



STILLWATER COUNTY EVENTS CENTER COMPLEX MASTER PLAN OPTION B

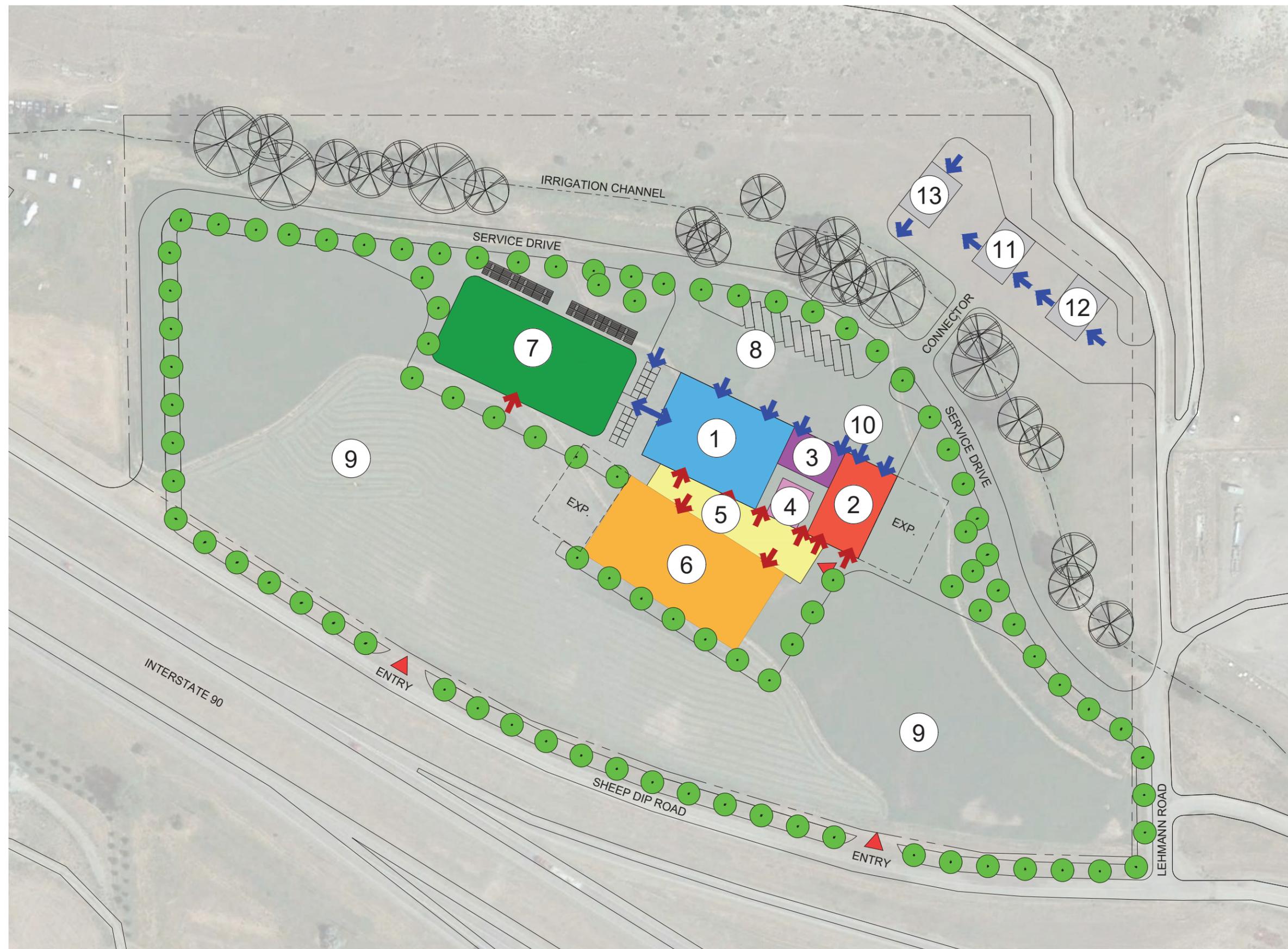
LEGEND

- 1. LIVESTOCK BUILDING
- 2. EXHIBIT BUILDING
- 3. MEETING ROOMS
- 4. RESTROOM / CONCESSIONS
- 5. PEDESTRIAN MALL
- 6. WARM-UP RING
- 7. OUTDOOR ARENA
- 8. R.V. PARKING
- 9. PUBLIC PARKING
- 10. SERVICE COURTYARD
- 11. WEED / FACILITIES BUILDING
- 12. STORAGE BUILDING



LEGEND

- 1. LIVESTOCK BUILDING
- 2. EXHIBIT BUILDING
- 3. MEETING ROOMS
- 4. RESTROOM / CONCESSIONS
- 5. PEDESTRIAN MALL
- 6. EVENTS CENTER
- 7. OUTDOOR ARENA
- 8. R.V. PARKING
- 9. PUBLIC PARKING
- 10. SERVICE COURTYARD
- 11. FACILITY SHOP
- 12. WEED SHOP
- 13. STORAGE BUILDING



LEGEND

- PHASE 1 ■
- PHASE 5 ■



LEGEND

PHASE 1

PHASE 5



STILLWATER COUNTY EVENTS CENTER COMPLEX MASTER PLAN OPTION B PHASING

COLUMBUS, MONTANA

LEGEND

PHASE 1

PHASE 5

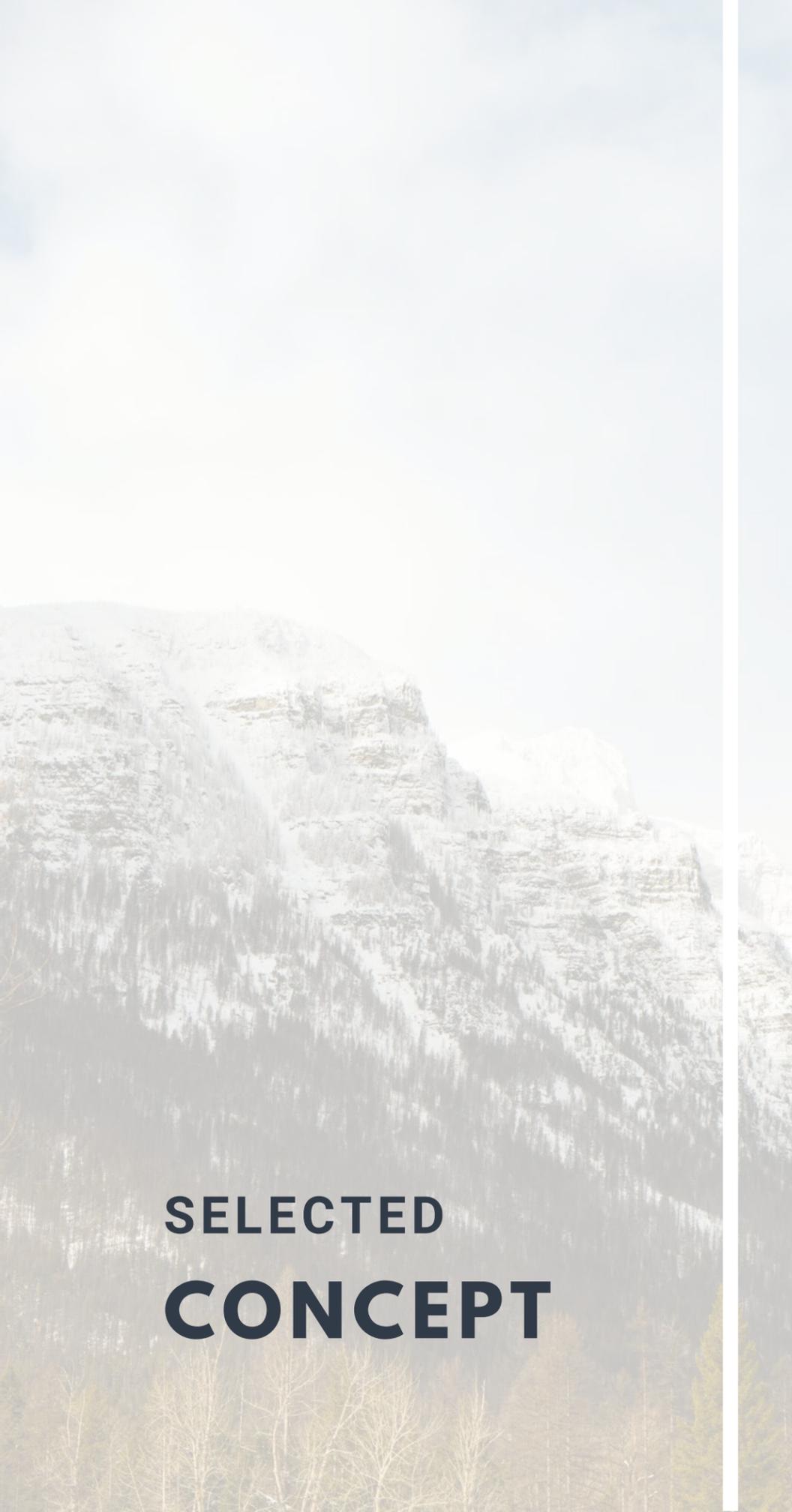


LEGEND

- PHASE 1
- PHASE 5



STILLWATER COUNTY EVENTS CENTER COMPLEX MASTER PLAN OPTION C PHASING



SELECTED CONCEPT

INTRODUCTION

The current selected Master Plan combines the Events Center Building with the Livestock Building to maximize the number of uses that can be accommodated in this multi-use facility. The building is programmed at approximately 61,700 square feet. This concept will be designed to accommodate approximately 3,500-4,000 bleacher seats and floor seats, in a theater type seating layout with a stage, and approximately 2,500–3,000 bleacher seats for sporting and other events. In addition, the facility can also support large livestock or equestrian shows, banquets, trade shows, and RV or farm machinery shows. A multi-use area that includes dressing rooms, a “green room” for performers, restrooms, first aid and other support spaces is located at the west end of the Events Center Building. This facility also includes a two-story core with meeting rooms, group viewing rooms overlooking the Events Center floor and stage, restrooms, concessions, and other support facilities.

The proposed Events Center Building also has a covered “front porch” that connects the facilities and serves as an entrance to a two-story lobby / pre-function space providing a single access point to the main halls, meeting and exhibit spaces of the multi-use building. The architectural design of the Events Center Building is based on an exposition park theme that allows year-round use of the facilities in a park-like setting. This concept utilizes a clear span pre-engineered structure for the basic building box and an enhanced entrance to provide interest on the building façade. The clear ceiling height will be sized to allow for maximum flexibility for the use of the space as described above.

The future Exhibit Hall addition will be located at the east end of the Complex and is designed for future expansion in two phases. Although similar to the Events Center, the Exhibit Hall will be a different space with lighting, AV capabilities and environmental controls for events such as wedding receptions, galas, banquets and seminars.

The Events Center Building is located adjacent to the Outdoor Arena. The two facilities can potentially work together for rodeos, trade shows, and outdoor events. The Outdoor Arena will initially be open to the sky but has the potential to be covered or enclosed to provide a conditioned environment in the future, along with a covered or enclosed connector to the Events Center Building. A warm-up arena, stock pens and chutes are slated for future phases.

As part of the vehicular circulation and parking, recreational vehicle hookups are located in close proximity to the Outdoor Arena. A large service courtyard is located at the rear of the entire complex that is accessed from a service road that enters the site from Lehmann Road and follows the south edge of the irrigation ditch. The service road is sized for two-way traffic and is long enough to provide queuing that is adequate space for contestants and exhibitors checking into the Complex for a show or competition. Public parking includes both grass and paved parking for year-round usage, yet providing turf surfacing in lieu of a large expanse of asphalt.

The Weed/Facilities Buildings are combined into one building with visitor/customer parking in front (south) of the building and a laydown yard north of the building. This facility will be located in the northeast corner of the site north of the irrigation ditch. This location provides separation from the public facilities of the Events Center Complex and allows a more private operation for the Weed and Facilities Maintenance Departments.

The following phasing plan shows the sequence of the design and construction of the proposed facilities:

LEGEND

- 1. EVENTS CENTER BUILDING
- 2. EXHIBIT HALL - FUTURE
- 3. WARM-UP RING - FUTURE
- 4. OUTDOOR ARENA
- 5. R.V. PARKING
- 6A. PAVED PUBLIC PARKING
- 6B. GRASS PUBLIC PARKING
- 7. SERVICE COURTYARD
- 8. WEED / FACILITIES BUILDING
- 9. OUTDOOR ARENA MARSHALLING AREA
- 10. CONNECTOR - FUTURE
- 11. BIORETENTION SWALE
- 12. LAYDOWN YARD



STILLWATER COUNTY EVENTS CENTER COMPLEX MASTER PLAN SELECTED CONCEPT PHASE 1

LEGEND

PHASE 1 

PHASE 5 

PHASES 2-5 

POTENTIAL EXPANSION 



STILLWATER COUNTY EVENTS CENTER COMPLEX MASTER PLAN SELECTED CONCEPT PHASING

LEGEND

- 1. EVENTS CENTER BUILDING
- 2. EXHIBIT HALL - FUTURE
- 3. WARM-UP RING
- 4. ARENA
- 5. R.V. PARKING
- 6A. PAVED PUBLIC PARKING
- 6B. GRASS PUBLIC PARKING
- 7. SERVICE COURTYARD
- 8. WEED / FACILITIES BUILDING
- 9. ARENA MARSHALLING AREA
- 10. CONNECTOR - FUTURE
- 11. BIORETENTION SWALE
- 12. LAYDOWN YARD



STILLWATER COUNTY EVENTS CENTER COMPLEX MASTER PLAN SELECTED CONCEPT FULL BUILD-OUT



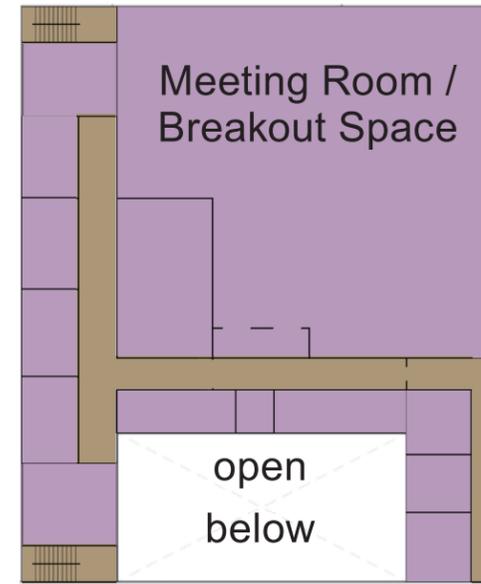


STILLWATER COUNTY EVENTS CENTER COMPLEX MASTER PLAN *FULL BUILD-OUT AERIAL RENDERING*

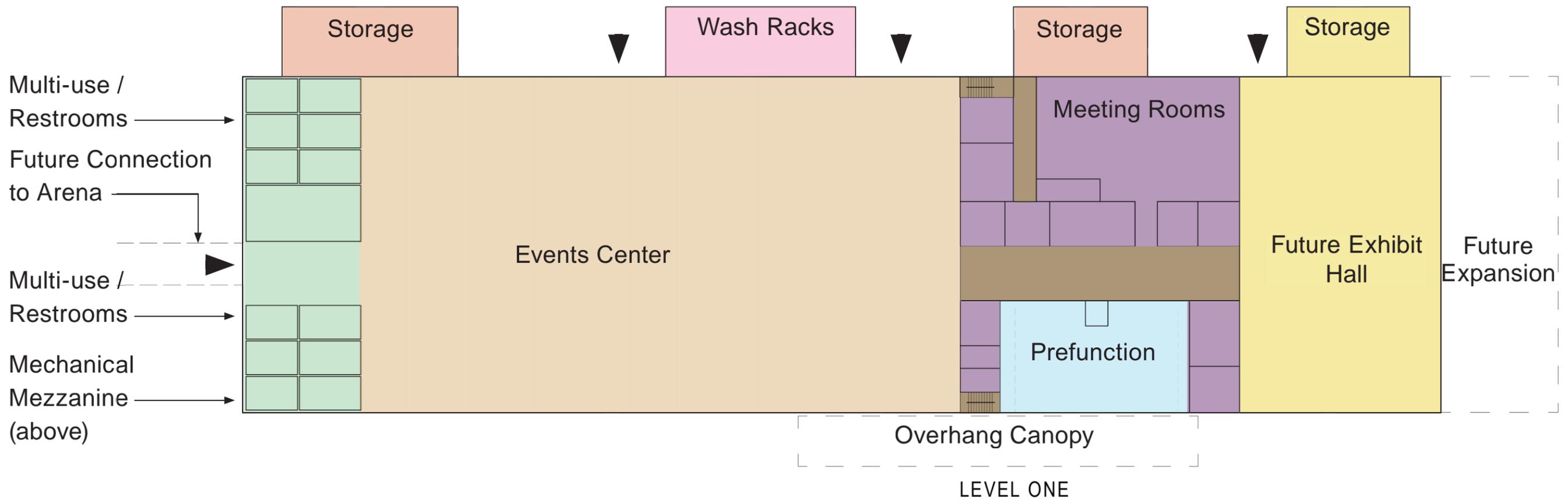
COLUMBUS, MONTANA

Events + Exhibit		
Level	Area Description	SF
1	Restroom / Multi Use	4,800
1	Events center	26,400
1	Prefunction / Meeting Rooms	12,000
1	Wash Racks	1,625
1	Storage	2,875
Total Phase 1 - Level 1		47,700
2	Meeting Rooms / Breakout Space	9,200
2	Mechanical Mezzanine	4,800
1+2	Total Phase 1 - Level 2	14,000
1+2	Total Phase 1 - Level 1+2	61,700

1	Future Exhibit Hall (Phase 5)	9,000
1	Storage (Future Exhibit Hall)	1,800
¹ Phase 5 Exhibit Hall (Not included above)		10,800



LEVEL TWO



STILLWATER COUNTY EVENTS CENTER COMPLEX MASTER PLAN *EVENTS CENTER COMPLEX LEVEL 1 AND 2*

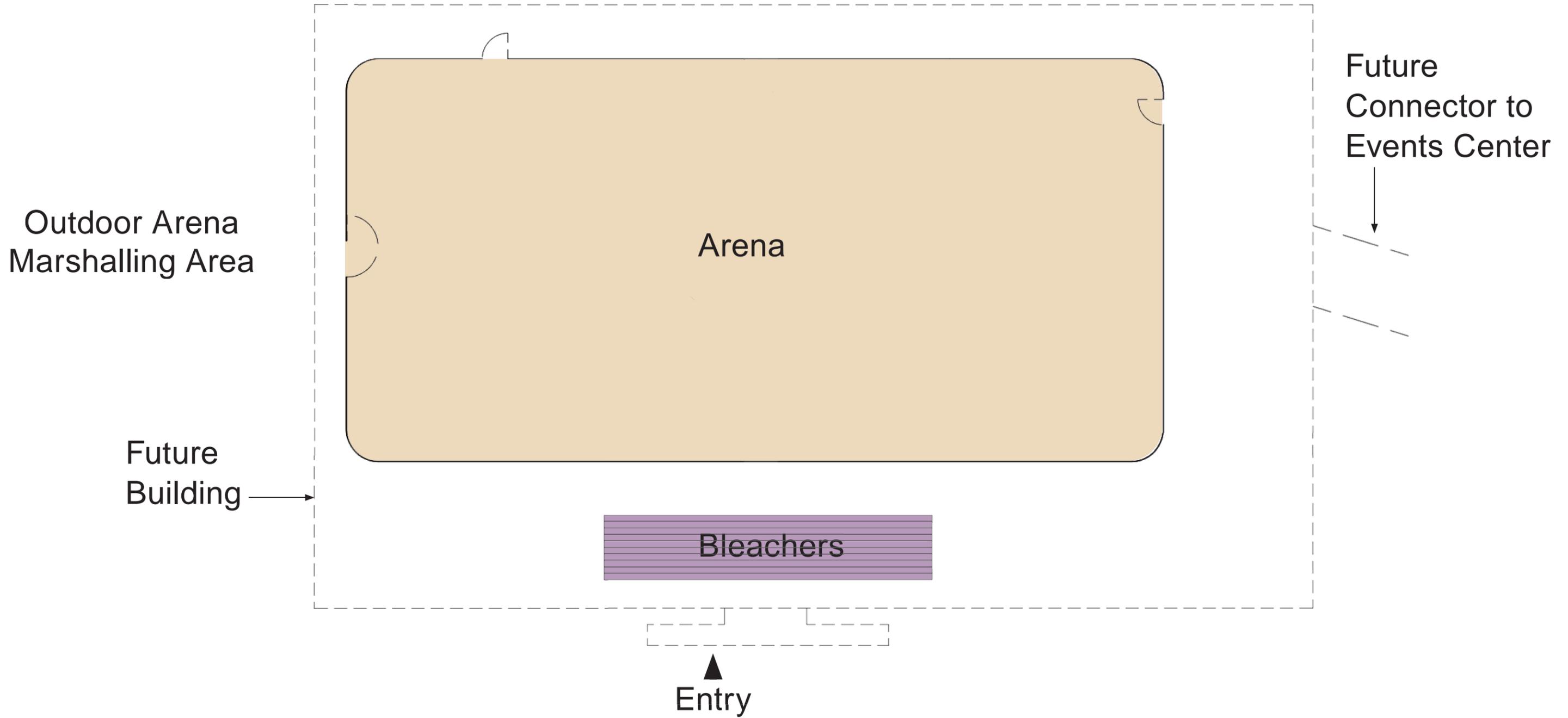


Weed + Facilities		
Level	Area Description	SF
1	Cold Storage	2100
1	Parts Storage	250
1	Chemical Storage	290
Storage Total		2640
1	Weed Shop	2140
1	Facilities Shop	2100
1	Wood Shop	300
Shop Total		4540
1	Office Area	1420
1	Toilet Room	300
Office Total		1720
1	Level 1 Total	8900

STILLWATER COUNTY EVENTS CENTER COMPLEX MASTER PLAN *WEED AND FACILITIES BUILDING*

COLUMBUS, MONTANA

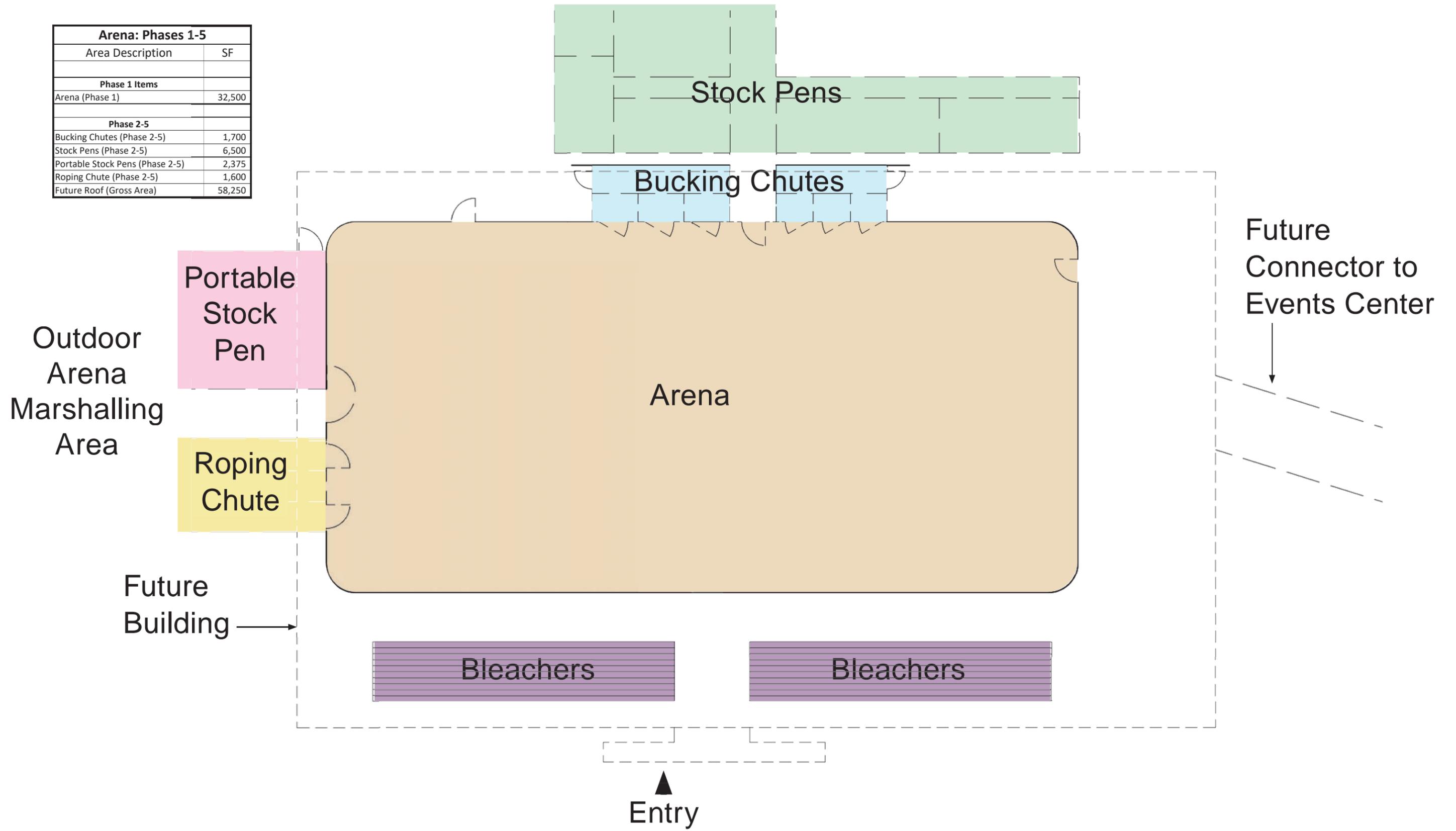
Arena: Phase 1	
Area Description	SF
Phase 1 Items	
Arena (Phase 1)	32,500



STILLWATER COUNTY EVENTS CENTER COMPLEX MASTER PLAN *OUTDOOR ARENA PHASE 1*

COLUMBUS, MONTANA

Arena: Phases 1-5	
Area Description	SF
Phase 1 Items	
Arena (Phase 1)	32,500
Phase 2-5	
Bucking Chutes (Phase 2-5)	1,700
Stock Pens (Phase 2-5)	6,500
Portable Stock Pens (Phase 2-5)	2,375
Roping Chute (Phase 2-5)	1,600
Future Roof (Gross Area)	58,250



STILLWATER COUNTY EVENTS CENTER COMPLEX MASTER PLAN

OUTDOOR ARENA FUTURE PHASES



ARCHITECTURAL CONSIDERATIONS

ARCHITECTURAL CHARACTER

Given the location of the Events Center Complex and its proximity to the Interstate 90, this facility becomes a gateway to Stillwater County and a first impression of Columbus, Montana. Because of this, the character of the facility becomes a central driver in its design. The site and Events Center Complex strategy is driven by three principles that prioritize a strong public presentation:

1. A "front of house" and "back of house" organizational strategy
2. Utilization of an all-weather concept
3. Preservation of site character

Given the visual access to the facility from the interstate, the site has been organized with all public functions at the front of house and all service functions at the back of house. The front of house is arranged architecturally to make way-finding intuitive and easy for patrons to navigate their arrival, while the less visually pleasing functions have been moved to the back of the building. This allows for the building to screen these less seemly functions from view. At the front of the building, the organizational strategy of the all-weather, year-round concept allows for all events to share a single-entry point, which simplifies access for patrons. Once inside the building, a person no longer needs to go outdoors to get to different areas or activities. The primary entry provides access to all events creating a node where all activities intersect, connecting patrons to event spaces, small meeting spaces, administrative offices and amenities at one spot, while keeping visitors under a single roof. Again, this strategy keeps patrons sheltered and promotes year-round use.

Lastly, these design strategies preserve the natural character of the site by balancing the visual impact of buildings and nature. The site is a greenfield lined by mature trees and the architectural design seeks to preserve this character. Buildings are clustered and poised against a backdrop of mature trees and sized in proportion to balance with the height of the trees. Paved parking spots are proposed to be in equilibrium with surrounding grass turf, providing enough paved spots to manage patrons for smaller events, yet designing a parking strategy that utilizes the grass parking as overflow for large events, all the while preserving the balance of nature and the new buildings.

BUILDING CODE / ADA REQUIREMENTS

This project falls under the regulations of the 2018 versions of the International Code Council publications as well as the 2009 Edition of ICC A117.1 Accessible and Usable Buildings and Facilities. The ADA 2010 guidelines, although not listed explicitly on the Montana Department of Labor & Industry's registry of adopted codes, is used on this project as a national standard to govern accessibly design. These codes define the base line for the design team to protect the health, safety and welfare of all patrons/occupants of these facilities.

ARCHITECTURAL REQUIREMENTS

All buildings will likely be constructed by Metal Building Systems (MBS), including the Weed/Facilities Building. Concrete slab-on-grade floor slabs will be in place in all enclosed spaces, except the outdoor arena that may be enclosed in later phases. Natural daylight should be implemented as much as possible with considerations of lighting control for entertainment events requiring darkness and theatrical lighting.

Exterior finishes for each of the facilities will be a mixture of materials, most of which will be metal panels, which are common on MBS. The lower portion of the building side walls will be composed of impact resistant materials as to preserve the life of the buildings, while the upper portions of walls and all roof assemblies will be standard MBS assemblies. Opportunities exist for colors for each of the materials to play off the surrounding color palette of grasslands and mountainous context, anchoring the color scheme in the natural environment.

Finishes in the buildings will vary depending on the use, maintenance and aesthetics of the spaces within each building. The following finishes are anticipated:

WEED/FACILITIES MAINTENANCE BUILDING				
ROOM	FLOOR	WALLS	CEILING	NOTES
Cold Storage	Concrete	Steel Panels	Steel Panels	
Shops	Concrete	Steel Panels	Steel Panels	
Offices	Concrete	Painted Gyp Bd	Acoustic Panels	
Crew Rooms	Concrete	Painted Gyp Bd	Acoustic Panels	
Toilet Rooms	Concrete	Ceramic Tile	Painted Gyp Bd	
Storage Rooms	Concrete	Steel Panels	Exp structure	Mezz Above

EVENTS CENTER				
ROOM	FLOOR	WALLS	CEILING	NOTES
Events Room	Concrete	CMU Steel Panels	Steel Panels	
Meeting Rooms	Carpet/LVT	Painted Gyp Bd	Acoustic Panels	
Lobby	LVT	Painted Gyp Bd	Acoustic Panels	
Meeting Space	Carpet	Woodwork	Painted Gyp Bd	
Toilets/Lockers	Ceramic Tile	Ceramic Tile	Painted Gyp Bd	Mezz Above
Storage Rooms	Concrete	Steel Panels	Exp structure	



CIVIL CONSIDERATIONS

INTRODUCTION

This narrative is based on our research of existing infrastructure near the site, a preliminary topographic and utility survey, and our participation in preliminary design meetings. It addresses general requirements for site development including site utilities, grading and drainage, and environmental considerations. Refer to the attached drawing found in Appendix C, titled "Site Topography and Existing Features."

Connection to the City of Columbus water and sanitary sewer infrastructure will require annexation of the property. The costs and timeline for this process are not known at this time. For this design narrative, it is assumed that there is adequate capacity to accommodate the annexation for both water and sewer. The connection and services provided by the City of Columbus is based upon the 2000 State of Montana Grant Deed that is attached in Appendix B.

WATER SUPPLY AND DISTRIBUTION

Domestic/Fire Water Supply:

The City of Columbus would provide treated water for domestic use and fire suppression; estimates are being developed for expected peak and average water demand. Record drawings show a 16" water distribution main from an existing finished water supply tank north of the site; this line is proposed as the supply line for the site. The existing 16-inch water main is centered in a 30-foot utility easement within the project, along the west project boundary. An existing fire hydrant is connected to this main near the southwest property corner.

This project will require new water mains to service the buildings for domestic use and fire protection. It is proposed to connect to the existing transmission main in two places and run a new water main in a loop around the Outdoor Arena, Events Center Building and Exhibit Hall Building. A second water main terminating in a fire hydrant would extend under the irrigation ditch to serve the Weed/Facilities Building. The looped system will ensure adequate pressure for domestic and fire service throughout the facility, with consistent reliability. Water mains are proposed using 6-inch C-900 PVC pipe with ductile iron fittings, or as otherwise required by the City of Columbus. Approximately 2,600 feet of water main will be needed.

Water service to each building will be provided by individual service lines from the new water mains. It is anticipated that the buildings will be sprinkled as required by the Building Code.

The fire service lines can be individual service lines from the water main to each building, or they can be combined with the domestic service and split inside the building. Fire hydrants will be provided around the site for easy access to each building. Final number and location of fire hydrants will need to be reviewed and approved by the local Fire Department. Fire hydrants are typically located in landscaped areas and can be supplied from anywhere along the looped water system.

Irrigation Water Supply:

Landscape irrigation can be provided by either groundwater or existing irrigation rights off the Columbus Water Association Ditch. Currently the property has approximately 16 acres of irrigation provided by the ditch. The preliminary design plans limit irrigation to 5 acres or less after development. Flow rate for irrigation will be dependent on the irrigation system design and type of landscaping desired by the Owner.

Groundwater development could provide water for irrigation with 6-inch irrigation wells. These wells will not require permitting through the DNRC for water rights as long as flow rate did not exceed 35 gpm. One well is necessary for every 4 acres of irrigation to be exempt from water right permitting. Wells may need to be spaced out on opposite sides of the property to maximize available exemption on the property.

The property is within the place of use for water right (43QJ 119360-00) and currently waters 16 acres by flood irrigation. Discussion with the ditch company identified that the property has 18 shares of water at 11 gallons per minute (gpm) per share, for a total of 198 gpm. They also stated that water usually runs from May 1 to October 1 except in severe drought years where water in the river migrates away from the head gate. Each share has a \$9 annual maintenance fee. Constructing a small pump station on the ditch could be used to provide irrigation for the entire property.

For ease of maintenance, flexibility on watering season length and the reduced demand as compared to existing conditions, it is proposed to use groundwater to irrigate the Events Center Complex, rather than the existing surface water rights.

SANITARY SEWAGE COLLECTION

Pending annexation, the City of Columbus will provide treatment and conveyance of the site's sanitary sewer flows starting at the point of connection to the existing collection system. This connection point is anticipated to be at a manhole south of I-90, in East

8th Ave., just east of North 9th Street. The City will likely accommodate sewage flows from the proposed site through the existing conveyance system and at the treatment plant. Estimates are being developed for expected peak and average flow rates. Upon annexation, the City of Columbus will assume all maintenance responsibilities and functions for the offsite sewer main extension.

The proposed connection point is at the upstream end manhole on an 8-inch sanitary sewer main located in East 8th Avenue, about 200 feet east of North 9th Street and identified as Manhole No. 8-1 in Appendix C, Sheet S-9 of the City of Columbus Sewer Atlas. It is proposed to extend the sewer to the site from this point using 8-inch SDR 35 PVC pipe. An 8" main has more than adequate capacity for flows generated by the new Events Center Complex. From the connection point, the new sanitary sewer main will be routed west to North 9th Street, then north under or alongside East 8th Ave and Sheep Dip Road using standard trench installation, which appears feasible given the slope of the existing road corridors.

There is approximately 43 feet of elevation drop along this alignment with an average grade of 1.1% which should provide adequate flexibility to meet minimum grade for an 8" sewer main. A minimum of 10 new precast concrete manholes will be needed to bring a sewer line to the site based upon minimum length pipe runs and alignment angles. Routing from the southwest corner of the site to the proposed buildings has not been determined, but will take the shortest possible route to the proposed sewer service lines where they exit the buildings. The buildings will be connected to the new sewer main with 4" or 6" PVC sanitary sewer service lines. Approximately 3,800 feet of SDR-35 PVC sanitary sewer main is needed.

PUBLIC SITE ACCESS, TRAFFIC AND PARKING

The Events Center Complex site is accessible by two existing roads: Lehmann Road along the east side of the property, and Sheep Dip Road (State Highway 78) on the south side. Sheep Dip Road runs north from the I-90 interchange, and immediately turns west near its intersection with Lehman Road. Public access to the development is proposed to be entirely from Sheep Dip Road, with Lehmann Road used only for access restricted to County or Events Center Complex employees, and a restricted number of event volunteers and participants. Sheep Dip Road is maintained by the Montana Department of Transportation (MDT) south of the I-90 interchange, and north of the interchange to a cattle guard located about 0.8 miles west and north of the site. Two new approaches on this road with full turning movements are proposed for public access to the site.

The approaches are proposed at 670 feet apart with the east approach being 350 feet from Lehmann Road. Sight distance is good and there are no other existing approaches, farm access or otherwise, in the area. No issues are expected with the proposed public approach locations.

The new approaches will need to be permitted for the final phase, maximum use of the Events Center Complex, including a major event at the Events Center Building and/or the Outdoor Arena.

A traffic study may be required for permitting. Peak traffic for a large event may trigger the need for dedicated turn lanes. Alternatively, a Special Event Management Plan utilizing temporary signage and traffic control staff may be acceptable, given the much smaller traffic loads that are typical for this road most of the time.

Parking is shown south of the main event buildings. A portion of the parking nearest the buildings will be paved and the remainder of the parking will be grass. This will allow for ADA parking and also keep the site looking as natural as possible. The grass parking will also promote infiltration of the runoff across this area which is a benefit.

Consideration has been given to enclose a portion of the existing irrigation channel east of the connector road, to add parking in the area above the ditch. During the next phase of the design, sizing of a box culvert, cost for the box culvert, and grading associated with this area will be evaluated to see if this is feasible.

RESTRICTED SITE ACCESS AND TRAFFIC

Access to the development from Lehmann Road is proposed to be entirely from maintenance and event staff for the facility. All general public traffic will be directed to the two proposed approaches on Sheep Dip Road.

The southern 320 feet of Lehmann Road is maintained by MDT as an asphalt-paved road leading into their maintenance facility. The remainder of this road is gravel-surfaced and continues north and then west, terminating at the County's property line. An access road continues to the city's water tank; this portion is maintained by the City of Columbus. The asphalt portion includes an east side intersection with Mountain Range Road, about 100 feet north of Sheep Dip Road, that leads to Madison River Propane and Mountain Range RV Park. The gravel portion intersects with a residential driveway heading northeast, with the fork in the road about 250 feet north of the end of asphalt.

Two new west-side approaches are proposed: the north one would be off the gravel road, and the south one would be off the paved portion, just south of the irrigation ditch. Both of these approaches would be for service use only, and possibly gated. The north approach would be for a service drive leading to the Weed/Facilities Building, plus service yard and parking lot. The south approach would be for a service drive following along the south side of the existing irrigation ditch. Permitting for the service approaches is expected to be relatively simple due to the limited use.

It may be in the County's interest to widen Lehmann Road from the MDT gate to the Weed/Facilities Building approach (approx. 250 feet), and possibly pave it as well for better winter access and ease of maintenance. This will be evaluated during the next phase of the design.

At the northeast corner of the events center site, Lehmann Road makes an "S"-turn around a residential property. Although most of this road is on the Events Center property, a small portion encroaches on the residential property. In this area, it is proposed to dedicate a 60-foot access easement centered on the existing road, to allow for future maintenance and/or realignment by the City of Columbus, if it becomes necessary.

SITE GRADING AND DRAINAGE

The Montana Department of Environmental Quality (DEQ) requires detention (controlled release) and/or retention (storage and infiltration/evaporation) to limit post-development peak runoff in a 2-year storm event to no more than the pre-development peak rate. It also requires full retention of the first 0.5 inches of rainfall on impervious areas, to be stored for infiltration or evapotranspiration.

Based on these requirements, rough, "order-of-magnitude" estimates of stormwater storage requirements were determined for the areas north and south of the existing irrigation ditch. The area needed for stormwater storage includes the capture requirement and allowances for side slopes and freeboard. This is planned on the site using a bioretention swale. The following is a discussion about site grading and drainage, and storm water treatment and storage requirements.

High groundwater is not anticipated to be an issue during construction, as it was not encountered in the preliminary geotechnical investigation up to depths of 15 feet.

North of Irrigation Ditch (Weed/Facilities Building):

Surface runoff from this area of about 4.2 acres currently sheet flows from northeast to southwest at about 12 percent, draining into the existing irrigation ditch. To create useable space for the facility, the area will be re-graded to a steep slope either at the northeast corner or at the irrigation ditch, with an average slope of about 1.5 percent in between. Using a maximum slope of 4:1 (horizontal to vertical), the available width for improvements would be about 150 feet, or 180 feet using 3:1 as the maximum slope.

The gravel portion of Lehmann Road that accesses the City's water tank cuts across the northeast corner of the site; this creates restrictions on the Weed/Facility Building uses planned for north of the irrigation ditch due to the steep slopes. To fit the proposed improvements in this area may require retaining walls.

The development of this area will require about 0.15 acres (60' x 110') for an above-ground stormwater storage basin. The land area needed for a stormwater basin can be reduced by utilizing infiltration (pervious surfaces), dispersed retention areas, or underground storage. These options will be evaluated and developed later in the design process. It is anticipated that the area south of the facility can be used for a surface detention basin.

South of Irrigation Ditch (Fairgrounds Facility):

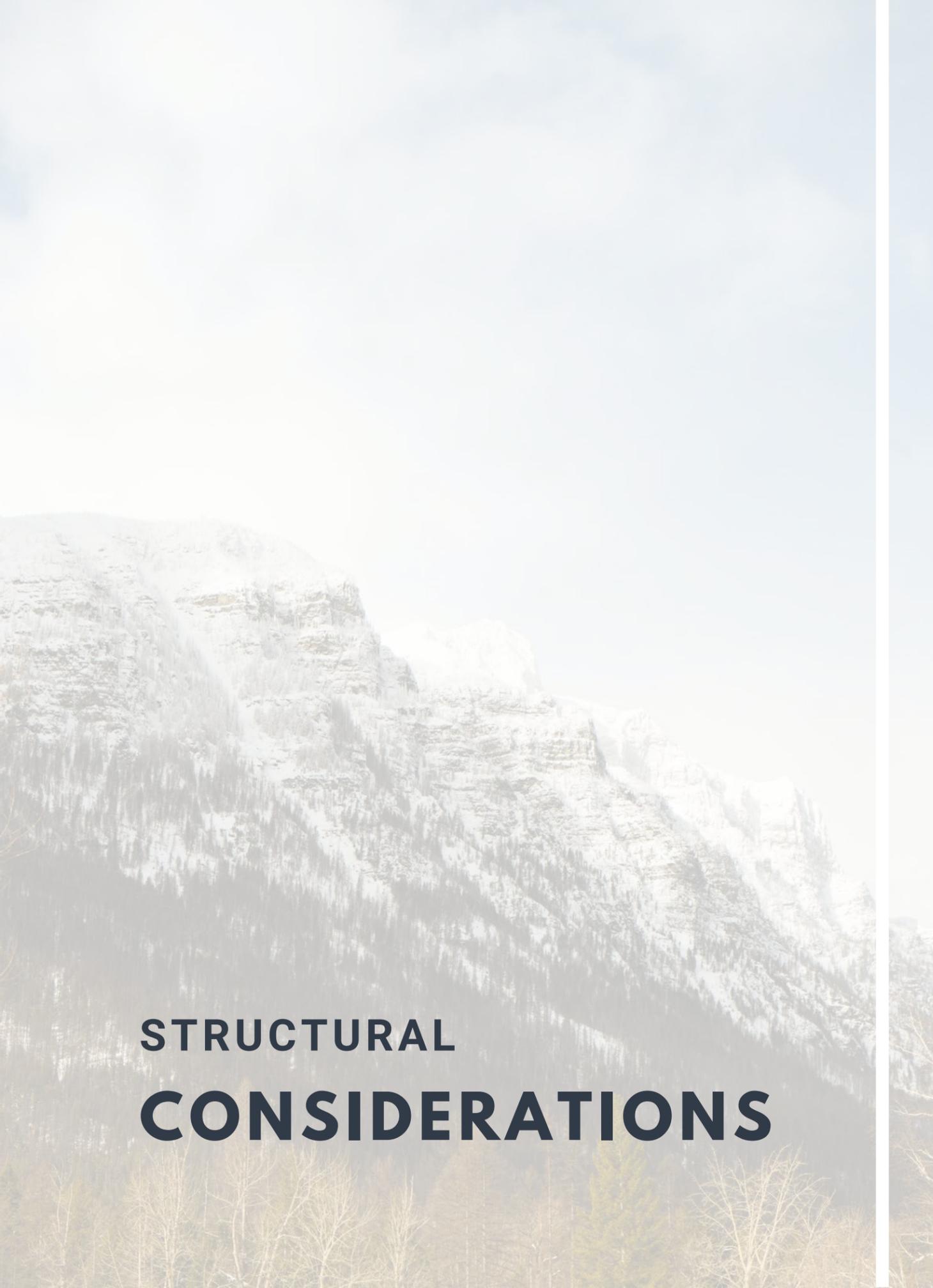
South of existing irrigation ditch is the events center site, consisting of about 18.5 acres. Under existing conditions, surface runoff from this area drops down the ditch bank, or fill slope, varying from 20 feet at 25 percent (4:1) to 60 feet at 10 percent. South of the ditch bank are agricultural fields where storm runoff sheet flows from northeast to southwest at about 1 to 4 percent, draining to the area along the north side of Sheep Dip Road. The runoff then collects by draining along the road to an 18" CMP culvert under Sheep Dip Road, continuing under I-90 through a 24" RCP culvert.

To create more useable space for the proposed improvements, the area will be re-graded to include a steep slope either along the irrigation ditch, the south property line or both, with an average slope of about 1.5 percent in between. As dimensioned across the site roughly perpendicular to the south property line at the existing 18" CMP culvert, the available width for improvements would be about 670 feet at the site's widest point, which is almost all of it. Given the size and overall moderate slope of this area, all but a small slope area around the perimeter will be useable space.

The development of this area will require about 0.50 acres (90' x 250') for an above-ground stormwater storage basin. The land area needed for a stormwater basin can be reduced by utilizing infiltration (pervious surfaces), dispersed retention areas, or underground storage. These options will be evaluated and developed later in the design process. It is anticipated that landscaped areas along Sheep Dip Road and within the parking lot can be used for detention.

ENVIRONMENTAL CONSIDERATIONS

The subject property has been historically kept in agricultural use. An irrigation ditch flows from west to east through the northern portion of the subject property. Early in the design process, the team will perform an onsite evaluation to determine and identify the presence and extent of wetlands and waterways on the subject property. Any impact to these resources could result in the need for permitting through various federal, state, and local regulatory entities. Additionally, the project will need to obtain a Permit for Stormwater Discharges Associated with Construction Activity from the Montana Department of Environmental Quality. A brief overview of the Environmental Protection Agency website does not reveal any hazardous waste sites on or near the subject property. A review of the FEMA Floodplain maps for the subject property indicates that the area is not within a 100-year floodplain.



STRUCTURAL CONSIDERATIONS

PROJECT DESCRIPTION

The Master Planning for the Stillwater County Events Center Complex includes clear span, no interior columns, Metal Building Systems (a.k.a. Pre-Engineered Metal Buildings) building for:

- Events Center Building
- Meeting Rooms
- Exhibit Hall Building – Future Addition
- Weed/Facilities Building

An outdoor arena with bleacher seating will be included in the first phase with future phases to include a potential Metal Building System structure that encloses the arena.

DESIGN CRITERIA

The structural design of structures should include consideration of the following criteria:

- Floor gravity loads due occupancy uses
- Roof
- Gravity loads due to snow (including drifting)
- Wind (including uplift on the cantilevered elements)
- Seismic loads

Movements due to:

- Gravity
- Load Deflections
- Wind
- Seismic
- Thermal Expansion

The following pages include the complete structural design criteria used for the preliminary study.

SITE

The site is relatively flat that should allow the buildings to have no floor steps and eliminate the retainage of soil by the buildings.

BUILDING SUPER STRUCTURE

The primary structural systems for the Events Center Complex and Weed/Facilities Building will be Metal Building Systems that will be designed and detailed by the supplier of this system. The MBS supplier will provide frame/column reactions for use in the design of the foundations and anchor bolts. An MBS system is the most cost effective, if future expansions are addressed in the original design of the MBS system, to allow the structure to be used as part of the future addition.

FOUNDATIONS

Based on the preliminary geotechnical report created by Rawhide Engineering Inc., dated May 11, 2020, the foundations for the buildings can be conventional stem walls with spread footings that extend below frost depth. Over excavation and replacement with compacted fill will be required and may require geo-grid under load bearing foundations. Approximate allowable bearing pressure of 1,500 psf with a frost depth of 3'-6" were provided. Concrete foundation walls and continuous footings will be located around the perimeter of all Metal Building Systems (MBS). Pad footings will be required at each MBS frame column and concrete cross ties will likely be required at each interior frame line to resist thrust of the MBS frames. Foundations for the arena will include foundations to support the grandstands in the first phase. The structure proposed for future phases will need to be considered with the layout of the arena and grandstands to allow foundations to be installed to resist the future building loads. Concrete cross ties at the building frame locations or alternate foundations will be required to resist the thrust of the clear span structure. Perimeter foundation drain may be required if ground water is present.

FLOOR STRUCTURE

The main floor in the buildings will consist of a concrete slab on grade. Slab control joints will be located at each column line and at uniform intervals per recommendations of the geotechnical engineer. The slab on grade will bear on structural fill per the recommendation of the geotechnical engineer.

The upper level floor of the meeting area of the Events Center Building will be included in the scope of the Metal Building Systems supplier. The structure will likely be steel bar joist that supports a concrete slab on non-composite steel deck.

DESIGN CRITERIA SUMMARY

Building Code: 2018 IBC
Occupancy Category: II
Load Combinations: Per ACSE07-110 for all Buildings.
Snow Loads:
Importance Factor: 1.0
Ground Snow Load: 41 psf
Design Flat Roof Snow Load:
30 psf (heated structures)
35 psf (unheated structures)
Temperature Factor, Ct:
1.0 (heated structures)
1.2 (unheated structures)
Exposure Factor, Ce: 1.0
Drifting and Sliding Snow Loads: Per ASCE 07-16, IBC 2018

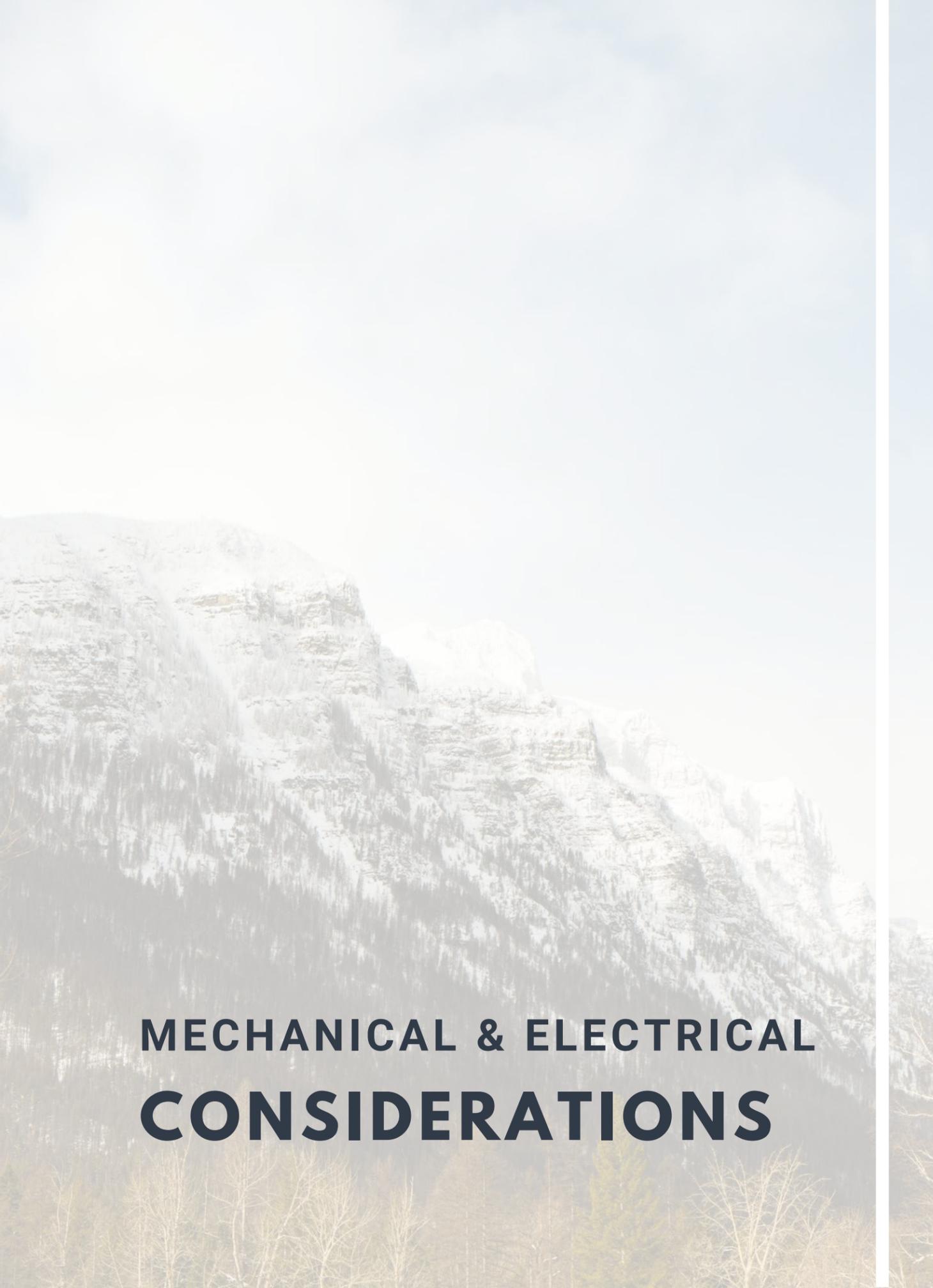
Wind Loads:
Ultimate Wind Speed: 108mph
Exposure: C
Importance Factor: 1.0
Mean Roof Height: To Be Determined
GCpi = +/-0.18

Seismic Loads:
Seismic Site Class: D
Importance Factor: 1.0
Mapped Spectral Response
Acceleration:
Ss = 0.187g
S1 = 0.077g

Site Coefficients:
Fa = 1.6
Fv = 2.4
Response Modification Coefficient:
To Be Determined by MBS
Designer/Supplier

Frost Depth: 42" minimum

MBS Deflection Criteria:
Roof Members: L/180 Total load; L/240 Live load
Floor Members: L/240 Total load; L/360 Live load
Spandrel Members: L/240 Total load; L/360 Live load
Lateral Drift due to Wind:
Wall Height/500



MECHANICAL & ELECTRICAL CONSIDERATIONS

MECHANICAL SYSTEM DESIGN STANDARDS

The mechanical systems for the Stillwater County Events Center Complex will meet current state and local codes and will also be designed to meet the current energy code. At the project design completion, a mechanical compliance certificate will be provided. Below is a brief description of the system types and materials recommended for the project.

HVAC DESIGN CRITERIA

Code Requirements and Standards for the project:

- 2018 International Building Code (IBC)
- 2018 International Mechanical Code (IMC)
- 2018 Uniform Plumbing Code (UPC)
- American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 62.1: Ventilation Calculation Requirements

Project Specific Outdoor Design Temperatures:

- The outdoor design conditions for the Stillwater County Events Center Complex are based on ASHRAE Fundamentals design weather data and are as follows:
 - Location: Columbus, MT
 - Elevation: 3,586'
 - 99% Outside Design Dry Bulb and Coincidental Wet Bulb
 - Summer Design Temperature: 90.5°F Dry Bulb, 62.1°F Wet Bulb
 - Winter Design Temperature: -6.6°F Dry Bulb
 - Cooling Degree Days: 378 degree days
 - Heating Degree Days: 7231 degree days

International Energy Conservation Code Indoor Design Temperature Guidelines:

- The indoor design space temperature set points are as follows:
 - Cooling: 75°F
 - Heating: 72°F

Outdoor Ventilation Rates:

- The outdoor ventilation rates for the project are based on ASHRAE minimum outdoor air ventilation requirements.

Heating Fuel Source:

- Natural gas will be available at the facility and serve as the primary heating source.

HVAC SYSTEM DESCRIPTIONS

HVAC thermal load calculations will be developed for the Stillwater Events Center Complex project. Systems selection will vary depending on building type and occupants. For the Event Center Building and Exhibition Hall Building, based on building sizes, zoning, and load calculations, the proposed HVAC system will be a variable air volume, rooftop air handler with integral DX cooling (where applicable). The air handling unit will have a hot water or natural gas preheat coil, integral DX cooling coil, and MERV 8 filtration. If higher levels of filtration are desired, the design team will discuss during system selection. The new air handlers will have a full economizer to provide free cooling when outdoor air conditions allow. In addition to an economizer, the air handler will also have internal energy recovery wheel to capture exhaust heat and transfer it into the supply air stream. The air handling unit will operate continuously during occupied hours to provide required ventilation to each zone and operate intermittently for temperature control during unoccupied hours. Each zone will have a thermostat and be connected to a centralized control system.

Every zone will have its own variable air volume (VAV) box for individual temperature control. The VAV boxes will modulate the airflow to each zone based on the zone's load. Each VAV box will have a hot water reheat coil to satisfy heating needs. In addition to the VAV boxes, supplemental, hot water heating will be provided in spaces requiring additional occupant comfort and along exterior storefront.

Heating for the new air handler preheat coil, VAV reheat, and supplemental heaters will be provided by a new, condensing natural gas boiler plant. The boiler plant will have full redundancy in the event of a boiler failure or during maintenance/repairs. Hot water from the boiler plant will be distributed throughout the building by variable speed, redundant pumps. The boiler system will operate at low water temperatures to maximize efficiencies.

The Livestock Building and Weed/Facility Building will be conditioned by gas-fired roof top units. Ductwork will be distributed throughout the space to provide heating, cooling (if desired) and ventilation to the spaces. Additionally, hot water unit heaters can be installed for supplemental heating to take advantage of the higher efficiency boilers during the heating months.

EXHAUST SYSTEMS

Exhaust air will be provided to all required spaces. Additionally, exhaust air will be provided for the Event Center Building to adequately ventilate the space. High volumes of exhaust air will be exhausted through an energy recovery units to preheat ventilation air to the space.

TEMPERATURE CONTROL SYSTEM

Temperature controls will be through a DDC (Direct Digital Controls) system. The DDC system will provide the owner with central, digital access to all major pieces of heating and cooling equipment.

Digital thermostats will be provided for each zone and unit heater. The controls design will also implement CO2 sensors in high occupant areas such as the Event Center and Exhibition Hall.

PLUMBING SYSTEM DESIGN STANDARDS

The Plumbing systems for the Stillwater Events Center Complex will meet all state and local codes and be designed to meet ASHRAE Guidelines.

- 2018 International Building Code (IBC)
- 2018 Uniform Plumbing Code (UPC)

PLUMBING SYSTEM DESCRIPTIONS

Domestic Cold Water Systems

Domestic water will serve the new building plumbing fixtures through a new water service. The water service will be provided with all code required accessories including back flow prevention and then distributed throughout the building. Water distribution piping will be Type L copper. All domestic piping will be insulated to meet current energy code.

Domestic Hot Water System

Domestic hot water will be provided through new gas fired, tank style water heaters. A required hot water recirculation system will be installed to help keep the hot water lines warm and provide faster response times. Water will be distributed at 140 degrees Fahrenheit throughout the building to prevent legionella and provide any food services spaces with the needed hot water temperatures. Domestic hot water piping will be the same material as the domestic cold water piping and insulated to meet energy code.

Natural Gas System

Natural gas fuel will be routed from a new gas service and meter and serve all new equipment including the boilers and roof top units. The new piping will be distributed to all new gas fired equipment and will be threaded steel piping for all piping less than 2" and welded steel piping for all piping greater than 2".

Sanitary Drainage System

Storm water drainage will be provided to all new buildings where internal roof drains are required. Roof drains and overflow roof drains will be installed to meet code. Roof drain piping will be cast iron in most cases with PVC as an acceptable value engineering product.

Storm Water Drainage System

Storm water drainage will be provided to all new buildings with internal roof drains. Roof drains and overflow roof drains will be installed to meet code. Roof drain piping will be cast iron in most cases with PVC as an acceptable value engineering product.

FIRE SPRINKLER SYSTEM DESCRIPTIONS

A new fire service for the buildings will be used for the fire suppression systems. The design team will provide the sprinkler design (performance based) and fire service along with flow test data to adequately size the fire service. The fire protection engineer will coordinate with the design team to provide any specialized fire protection systems such as dry sprinkler systems for areas requiring freeze protection.

Fire Alarm System

A new addressable fire alarm system will be installed in each building and according to all current codes and standards. Full notification will be provided throughout the facility with smoke detectors and manual pull stations installed per NFPA 72 only. Flow and Tamper switches will be installed on the Fire Sprinkler system and be monitored by the Fire Alarm Control Panel. Exhibit Hall and Arenas will be full voice evacuation systems.

The following narrative outlines the electrical systems proposed for the Stillwater County Events Center in Columbus, MT. The narratives are preliminary in nature but give an overall description of the systems proposed.

Electrical Utilities

The site is undeveloped and new electrical utility will need to be brought in from the site from Northwestern Energy. All new utilities will need to be brought into each building with a separate service and meter. Each building will be fed with 3-phase power and the voltage and amperage will be determined on the needs of each individual building as the buildings start to develop.

Electrical power Distribution

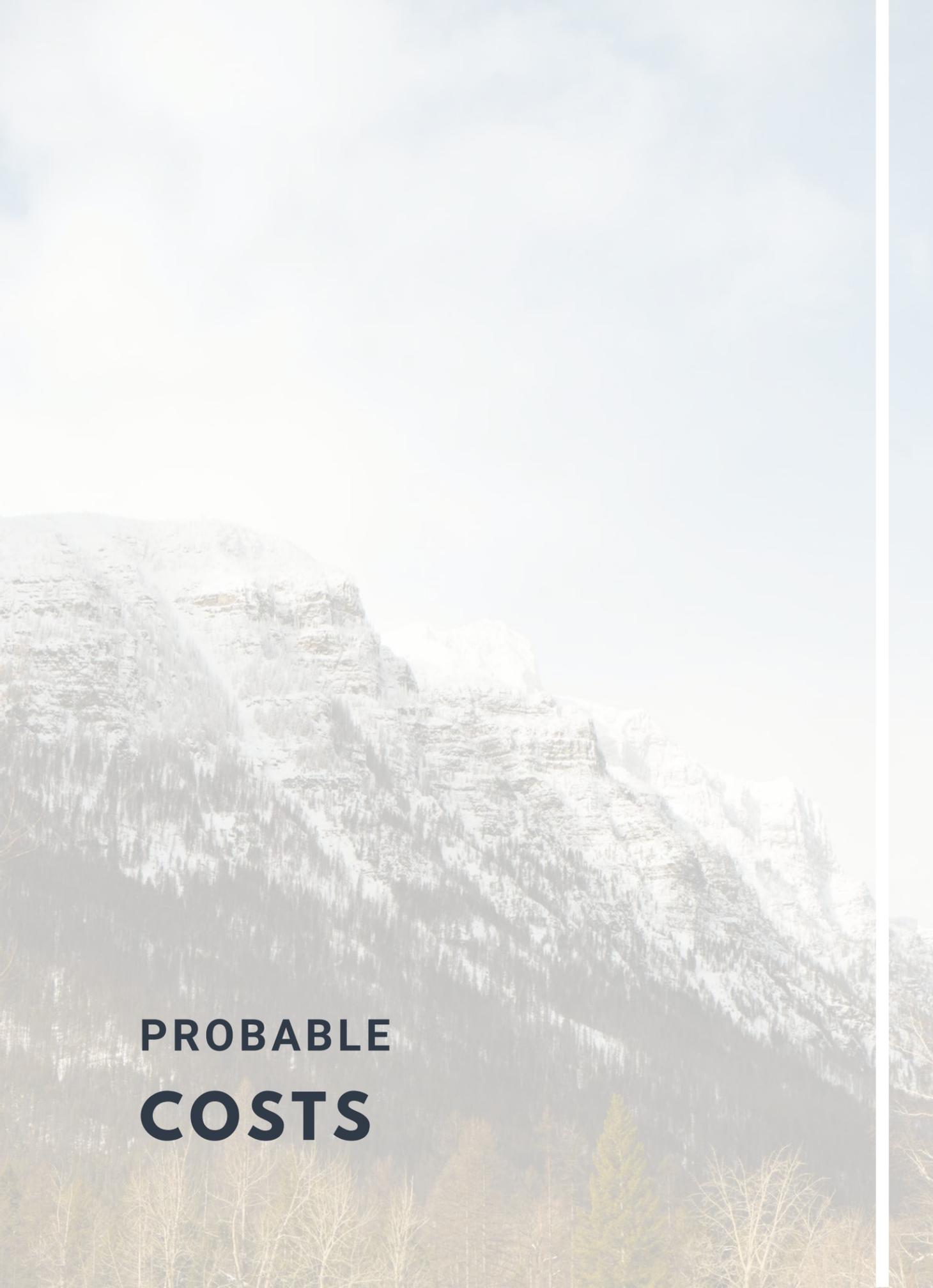
A new electrical service is planned for each building with a new pad mounted utility transformer adjacent to the building, with exterior service disconnect and meter mounted on the exterior wall of each building. Each building will have a dedicated main electrical room where the electrical distribution will be located and installed. The Events Center and open areas will have power receptacles in the ceiling for flexible display power; voltage, amperage and phase will be coordinated with the owner.

Receptacle Layout

The receptacles will follow the furniture and equipment layout and the displays in all areas and 40 feet on center down the corridors. Additional receptacles will be located at the main electrical service and the mechanical equipment. Electrical ceiling supply lines will be provided in the Events Center and open exhibit areas for high voltage receptacles and will be part of the power distribution.

Lighting systems

Lighting systems will be supplied with LED luminaires. The office and conference areas will use recessed volumetric luminaires with automatic controls and dimmer switches. Lobbies will use pendant style decorative luminaires with automatic controls and occupant lighting control for flexible lighting levels. Sports lighting luminaires will be used in the Event Center and the outdoor arena with flexible lighting levels.



PROBABLE COSTS

COSTS

Forecasting the probable costs for a large project is a challenging task because of the variables that impact development of accurate pricing. Construction costs can be affected by inflation, timing of construction, availability of materials and labor, and unanticipated economic and social events, such as the current pandemic. With this in mind, three separate cost estimates are underway to provide a check and balance approach to developing a viable project budget for the new Events Center Complex. The Architectural / Engineering (A/E) Team – Arete Design Group and the Project Representative – Hulteng, Inc. are finalizing their respective construction estimates for the new Events Center Complex facility. A third comprehensive estimate will be compiled by the Construction Manager. Once all three estimates are completed, they will be compared item by item. By providing three separate looks at the costs, the chances of over or under estimating should be greatly reduced, giving the County a solid basis to allocate funding.



MASTER PLAN APPENDICES

APPENDIX A- MEETING MINUTES

1. Initial Scoping Meeting – June 3, 2020
2. Master Planning Kickoff Meeting – June 11, 2020
3. Programming Workshop Notes – June 18, 2020
4. Master Planning Progress Meeting – July 23, 2020
5. Master Planning Progress Meeting – July 30, 2020
6. Master Planning Progress Meeting – August 3, 2020
7. Master Planning Progress Meeting – August 13, 2020
8. Master Planning Progress Meeting – August 20, 2020
9. Master Planning Progress Meeting – August 27, 2020

APPENDIX B - 2000 STATE OF MONTANA GRANT DEED

APPENDIX C - CIVIL CONSIDERATIONS DOCUMENTS

APPENDIX D - 2018 TITLE COMMITMENT

APPENDIX E - WARRANTY DEED

APPENDIX F - ARCHITECTURAL PROGRAMMING DOCUMENT



APPENDIX A- MEETING MINUTES

A1 MEETING MINUTES

PROJECT TITLE: Stillwater County Capital Facility Improvement Projects

PROJECT NUMBER: 2020-34

DATE OF MEETING: June 4, 2020

TIME: 8:30-10:30 AM

LOCATION: Columbus, MT

INVITED ATTENDEES: FCIP Team
 - Mark Crago (Stillwater County)
 - Bill Pelton (Stillwater County)
 - Maurie Petterson (Community Member)
 - Stephanie Ray (Stillwater County)
 - Levi Van Buggenum (Arete Design Group)
 - Tim Jager (Arete Design Group)
 - Shane Swandal (Hulteng CCM)
 - Eric Hulteng (Hulteng CCM)

OBJECTIVE: Define Scope of Preliminary Design + Design

1. Communication Protocols:
 - a. Shane will be the prime contact at Hulteng. Eric Cc'd.
 - b. Stephanie will organize and disseminate correspondence to County Commissioners.
2. Schedule:
 - a. June 10th: Arete to have detailed schedule for preliminary phase.
 - b. June 18th: Conduct a full day master planning workshop to confirm the following stakeholder input.
 - i. FCIP / Commissioner input
 - ii. 4H & Extension office
 - iii. Weed
 - iv. Open slot
 - v. FCIP Closing session
 - vi. Other groups discussed
 1. Stock Growers Association

2. Rodeo Groups
 3. Equestrian Groups
 4. Beartooth Stock Association
 - c. July 13th – 19th: Collect public feedback at Stillwater County Fair for one or two days during this week. Council to advise of specific date(s).
3. Preliminary Design & Master Plan Verification
 - a. Existing Conditions
 - i. Design Survey is to be provided by the design Team
 - ii. Preliminary Geotechnical Investigations have been done and will be forwarded to the design team.
 - iii. Site annexation into City Limits vs. remain in the County (best fit) decision will be made during the Preliminary / Programming and Master Plan confirmation.
 1. Locations for existing City owner utilities will be provided to the design team for evaluation.
 2. A city water easement passes through the west side of the site.
 3. Pipe the irrigation ditch.
 4. If a well and septic system are installed, the civil engineer will have to verify all water rights and coordinate with the demands of the facility.
 - iv. A “word of mouth” hay lease is still in place on the property.
 - v. No level one ESA is needed on the site.
 - b. Opportunities
 - i. Adjacent sites acquisition?
 - c. Master Plan Verification
 - i. The existing Master Plan is not fixed and is expected to be adjusted as required per the Planning Workshop.
 - ii. Planning Workshop June 18th
 - iii. The County will provide ADG with existing programming documents.
 1. 2009 JGA program
 2. 2013 Spectrum program
 3. 20?? Internal coordination / update of the above two, which resulted in the proposed areas for the 2019 Cushing Terrell Stillwater County Facilities Master Plan.
 - iv. Weed / Shop
 1. Simple office
 2. Shop facilities
 3. Cold Storage (can be separate), storage for fairgrounds. Secured access.
 4. Could be as simple as a performance spec.
 - v. Events Center

1. Program legitimacy should be confirmed during the Master Planning phase.
 2. The Event Center in Rapid City has quality
 - vi. Open air arena
 - vii. Miscellaneous attractions. Design team to evaluate opportunities and plan accordingly.
 1. 3 on 3 basketball
 2. Drone racing
 3. Others...
4. Design Review
 - a. Stakeholder review at workshop
 - b. Preliminary public review and feedback will be collected at the County Fair.
 - c. Funding / support presentations would be held at the end of Schematic Level Design at which point floor plans and individual building concepts have been developed.
 - i. Naming right materials will be developed specifically for individual donors.
 - ii. Donner Hierarchy
 1. Building Naming
 2. Street Name
 3. Room Name
 4. Donor wall recognition name plate.
5. Action Items:
 - a. Hulteng
 - i. Programs
 - ii. Plans
 - b. County
 - i. Spectrum Programming document
 - ii. JGA Programming document
 - iii. Preliminary Geotech
 - iv. List of users / stakeholders for workshop
 - v. Utility Map for City of Columbus
 - c. ADG
 - i. Detailed Schedule for workshop
 - ii. Detailed Phase Schedule

END OF MEETING MINUTES

CC:

A2 MEETING MINUTES

PROJECT TITLE:	Stillwater County Capital Facility Improvement Projects
PROJECT NUMBER:	2020-34
DATE OF MEETING:	June 11, 2020
TIME:	8:30-10:30 AM
LOCATION:	Columbus, MT
INVITED ATTENDEES:	<p>ADG -Levi Van Buggenum (Principal in charge) -Dale Buckingham (Project Architect) -Tim Jager (Project Manager)</p> <p>Charlie Smith Architecture & Planning -Charlie Smith (Fairgrounds Consultant)</p> <p>Morrison-Maierle - Randy Bomar (PM Civil) - Jeff Feck (PM, Civil Project Engineer) - Ryan Thompson (Mechanical ,Plumbing Engineer) - Jeffrey Kraft (Electrical Engineer) - Kent Kuehn (Drafting) - Kent Sielbach (Surveyor) - Mike Hickman (Civil , Grading drainage Util)</p> <p>KL&A - Greg Shavlik (Structural)</p>
OBJECTIVE:	<p>Define Scope of Preliminary Design Information Sharing Schedule Budget</p>

1. Introductions:
2. Project overview

3. Schedule:
 - a. June 10th: Arete to have detailed schedule for preliminary phase.
 - b. June 18th: Conduct a full day master planning workshop to confirm the following stakeholder input.
 - i. The owner will advise on additional stakeholder groups to be included.
 - c. July 13th – 19th: Collect public feedback at Stillwater County Fair for one or two days during this week. Council to advise of specific date(s).
 - i. Based on the programming documents submitted to Arete, additional programming work is required. Generally these exercises are 90 days per Charlie.
4. Preliminary Design & Master Plan Verification
 - a. Existing Conditions
 - i. Design Survey is to be provided by Morrison-Maierle.
 - ii. Preliminary Geotechnical Investigations have been done and have been issued to the team. Bearing pressures range from 1,500 – 2,000 psf with installed geogrid.
 - iii. Site annexation into City Limits vs. remain in the County (best fit) decision will be made during the Preliminary / Programming and Master Plan confirmation.
 1. Locations for existing City owner utilities have been provided to the design team for evaluation.
 2. A city water easement passes through the west side of the site.
 3. Pipe the irrigation ditch or relocate. The county wants to pipe.
 4. If a well and septic system are installed, the civil engineer will have to verify all water rights and coordinate with the demands of the facility.
 - iv. A “word of mouth” hay lease is still in place on the property so when surveying is done, notify the owner of any stakes in the field.
 - v. No level one ESA is though to be needed at this time.
 - b. Opportunities
 - i. Adjacent sites acquisition? County will be working on this process in the background.
 - c. Master Plan Verification
 - i. The existing Master Plan is not fixed and is expected to be adjusted as required per the Planning Workshop.
 - ii. Planning Workshop June 18th. Mark Crago will be meeting with Charlie and ADG to discuss preliminary site data.
 - iii. The County has provided ADG with existing programming documents.
 1. 2013 Spectrum program

2. 2019 Internal coordination / update of the above two, which resulted in the proposed areas for the 2019 Cushing Terrell Stillwater County Facilities Master Plan.
 3. These studies don't appear to address the Fairgrounds program as detailed as other programs.
 - iv. Weed / Shop
 1. Simple office
 2. Shop facilities
 3. Cold Storage (can be separate), storage for fairgrounds. Secured access.
 4. Could be as simple as a performance spec.
 - v. Events Center
 1. Program legitimacy should be confirmed during the Master Planning phase.
 2. The Event Center in Rapid City has quality
 - vi. Open air arena
5. Design Review
- a. Stakeholder review at workshop
 - b. Some level of public review and feedback will be collected at the County Fair. Specific deliverables to be determined between Charlie and ADG.
 - c. AHJ for the project
 - i. State of Montana for building Life Safety
 - ii. Montana Department of Transportation (frontage access)
 - iii. County Planning Department
 - iv. DEQ
6. Deliverables for the Preliminary Phase:
- a. Charlie
 - i. Master Plan
 - ii. Programming
 - b. Engineers
 - i. Narratives
 - ii. Decision about site annexation
 - c. Morrison-Maierle
 - i. Survey
 - ii. Site decision
 - iii. Water rights resolution

A3 MEETING MINUTES

PROJECT TITLE: Stillwater County Fairgrounds Planning Workshop – Group 1: CFIP Committee and Stillwater County Commissioners

PROJECT NUMBER: 2020-34

DATE OF MEETING: June 18, 2020

LOCATION: Columbus, MT

ATTENDANCE: Burt Williams – FCIP
 Jim Movius – FCIP
 Maurie Petterson
 Bill Pelton
 Stephanie Ray
 Eric Hulteng
 Shane Swandal
 Charlie Smith – Charles D. Smith Architecture & Planning, LLC
 Levi VanBuggenum - ADG
 Dale Buckingham - ADG

ITEMS DISCUSSED:

Working from the List of Workshop Discussion Points, the following was discussed:

- Billings has a tendency because of the venues available to pull events away from Stillwater County including but not limited to: Youth Sports; Equipment Expos; Monster Truck shows; etc.
- The committee would like a fairly high level of finish (significantly higher than what currently exists) as a draw for future events in the new facilities.
- Some of the activities that will likely take place in these facilities include:
 - Elections
 - Fine Arts Performances
 - Concerts
 - Trade shows
 - Exhibitions
 - Weddings

- Banquets
- Disaster Relief / Shelter
- 4H activities
- Dog Shows
- High School Sports and tournaments
- PeeWee Wrestling
- Motorcycle club
- Swap-Meets
- Graduations
- Stock Shows/Sales (e.g. Midland Bull Test)
- Auctions
- Based on the varied activities festivals (Red Ants Pants Festival) possible, good consideration should be given to Acoustics, Varied Lighting, and adequate storage.
- Don't under-plan. The new facilities should be large enough to facilitate much larger activities than what is currently possible.
- At the very least the function of the existing facilities need to be included in the New Fairgrounds, but in short, the current deficiencies and the lost opportunities in the existing facilities are so numerous that much more is needed.
- The Committee likes the "One-stop Shop" strategy to put all facilities under one roof so that patrons coming to use the fairgrounds have access to all portions of the facility once inside the building.
- The Committee has inventoried the current square footage and can be made available to the AE team.
- The Committee wants to keep/promote the rural values and keep the community warm, and community focused.

END OF MEETING MINUTES

The preceding meeting minutes are not a verbatim transcript of the meeting and are intended to convey the general content of the meeting only. ARETE DESIGN GROUP must receive any corrections, additions, or deletions to these minutes within ten working days of the transmittal date of the minutes, or the contents of these minutes will be deemed reliable and accurate.