



Vail Valley Medical Center

SITE SPECIFIC REDEVELOPMENT MASTER PLAN

AN ELEMENT OF THE VAIL LAND USE

ADOPTED ON MARCH 17, 2015 BY RESOLUTION 3, SERIES OF 2015

2015 Vail Valley Medical Center Site Specific Redevelopment Master Plan

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This plan reflects all final refinements from Town Council review and approval on March 17, 2015

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Vail Valley Medical Center

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1. INTRODUCTION

Since its establishment in 1965, Vail Valley Medical Center (VVMC) has grown into one of the world’s most advanced mountain hospitals, providing Olympic-quality sports medicine, leading evidence-based research, modern cancer care and extensive cardiology capabilities.

While the medical care and services provided by VVMC are outstanding, the hospital’s infrastructure is due for modernization. VVMC is at an age and condition where it must be modernized to meet the challenges of modern medicine and to ensure the facility provides medical staff with the resources necessary to offer the utmost in quality health care. The Vail Valley Medical Center Site Specific Redevelopment Master Plan (the Master Plan or the Plan) establishes a vision for how VVMC will respond to these challenges and in doing so addresses a multitude of operational, clinical, and technical requirements that are not being met by the existing facility. In addition, an equally important element of the Master Plan is how it addresses important neighborhood and community goals.

The Master Plan provides a general direction and framework for how VVMC will redevelop in the future. It has been prepared with extensive input from physicians and staff, neighbors, the community at large, review boards and Town of Vail staff. Information provided herein is intended to demonstrate how future expansions will integrate with existing VVMC functions and the surrounding neighborhood and how, at a general level expansion plans will conform to applicable Town development standards. Bordered on the west by the Lionshead Master Redevelopment Plan and on the east by the Vail Village Master Plan, the VVMC Site Specific Redevelopment Master Plan will provide direction for a key community-oriented property located mid-way between Vail’s two villages.

The Master Plan has been prepared with a focus on addressing both internal and external goals or “drivers”. Internal goals generally address the viability and sustainability of the campus, VVMC’s goal of providing quality health care to the community

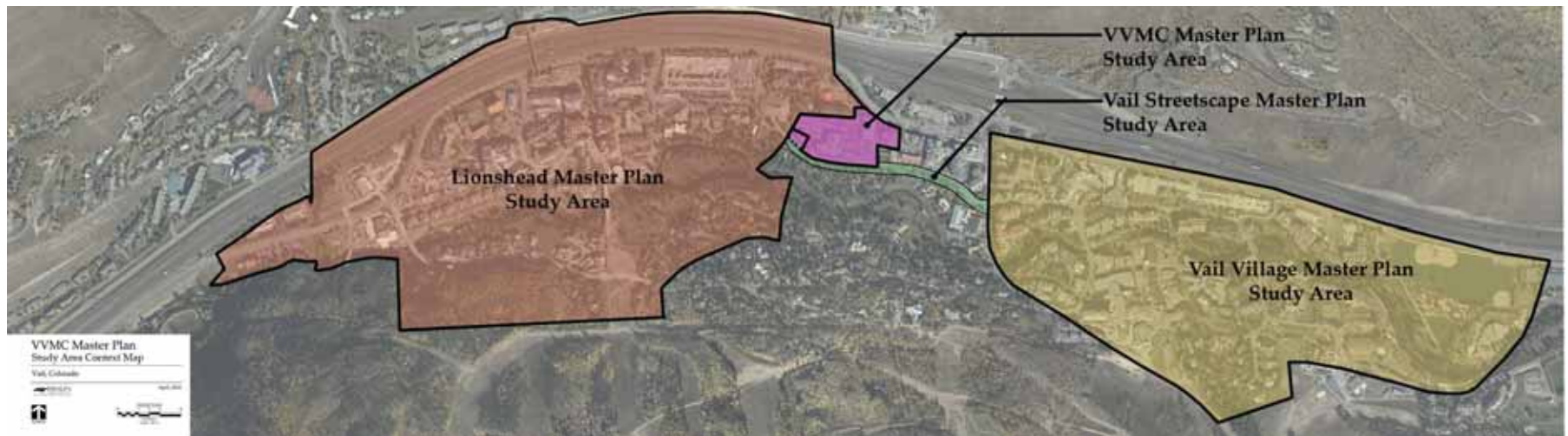


Fig.1 - The VVMC Master Plan area is strategically located between the Lionshead and Vail Village Master Plan areas.

1. INTRODUCTION

and the specific operational and clinical requirements of the campus. External goals generally address how VVMC responds to broader neighborhood and community considerations. It is often the case that internal and external goals overlap. Internal and external goals are discussed in greater detail in Chapter 3 of this plan.

The underlying role of this Master Plan is to establish expectations for the planned redevelopment of VVMC and in doing so provide a basis for the Town's review of future development proposals. While information provided in this Master Plan is fairly general in nature, the Master Plan does establish many specific parameters for the future expansion of VVMC. Far more detailed information on the design, operation and management of future hospital development will be provided during subsequent steps in the Town's development review process. Detailed design and operational plans for hospital expansions that are deemed to conform to applicable elements of this Master Plan will have a greater expectation of project approvals than those that do not.

The Master Plan will be used by the Town's Planning and Environmental Commission (PEC), the Design Review Board and the Town Council when reviewing future VVMC expansion plans. A pivotal step in the Town's review process will be the PEC review of Conditional Use Permit (CUP) applications. This Master Plan establishes parameters on a variety of development related considerations. Foremost among them are project design, parking, delivery and service, traffic, and the emergency helipad. As such, this Master Plan is the primary tool to be used by the Town in evaluating the merits of future expansion plans. In addition to this Master Plan, the Town's development standards, zoning considerations and CUP review criteria will also be considered in the review of expansion plans.

The Vail Valley Medical Center Site Specific Redevelopment Master Plan has been adopted as an element of the Vail Land Use Plan by Resolution No. 3, Series of 2015, following a recommendation from the PEC. The Plan has been prepared to provide guidance specific to the planned expansion of the campus. As such the effective life of this Master Plan is five to seven years. It is likely that after completion of this expansion that medical technologies or practices will evolve, the need for new facilities will be identified or new ideas not addressed by this Plan will arise. Amendments shall be considered in accordance with the Amendment Process as outlined in the Vail Land Use Plan. Factors to consider in any amendment proposal include:

1. How conditions have changed since the Plan was adopted,
2. How the Plan is in error, or
3. How the addition, deletion or change to the Plan is in concert with the Plan in general

The area governed by this Master Plan is depicted on Figure 2 below.



Fig. 2 - VVMC Site Specific Redevelopment Master Plan Study Area.

2. BACKGROUND ON VVMC

EVOLUTION OF VVMC

VVMC began as a clinic in 1965 to support a then fledgling ski resort and since that time has grown at a level commensurate with Vail and surrounding communities. Today, VVMC is comprised of several healthcare campuses located throughout Eagle County and provides healthcare services to both residents and visitors of the Rocky Mountain region of Colorado. VVMC's main hospital campus, located in the Town of Vail, provides an essential service to the Vail community and the surrounding region.

VVMC has grown into a major economic driver in Vail and Eagle County, helping to diversify and balance an otherwise highly seasonal economy. With more than 850 employees, VVMC is the second largest employer in Eagle County. This consideration alone has a very significant economic impact throughout the community. As documented by two studies, VVMC and its partners who practice at the Vail Campus have a direct economic impact to Vail.

A Vail Valley Medical Center Economic Impact Analysis was completed by BBC Research and Consulting in 2009. The direct annual economic impact of VVMC-related spending in Vail was over \$5 million, which included retail and restaurant spending by employees, employee-residents, patients and their families. This report identified other notable benefits of VVMC beyond direct economic stimulation. Foremost among these is the high-quality healthcare being provided in a rural, resort area, giving Vail and Eagle County a competitive marketing advantage over other mountain communities, including real estate sales implications.

In April of 2010, BBC Research and Consulting completed an Economic Impact of The Steadman Clinic and the Steadman Philippon Research Institute on the Town of Vail. Operations

of the Clinic and Institute generate over \$25 million annually to Town of Vail businesses.

VVMC, the Steadman Clinic and Institute have a direct economic impact of more than \$30 million annually. This is in addition to the annual on-site economic activity at VVMC.

The majority of this economic activity throughout Vail is from the large number of "destination patients" drawn to Vail by the Steadman Clinic. In 2009 the Clinic served 10,500 patients. 4,600 of these patients involved surgeries, of which nearly 3,000 were destination patients. On average these patients made three trips to Vail, brought 2.25 people and stayed 4 days, equating to over 80,000 visitor nights in lodging properties. Spending on lodging, meals and retail from these visitors represent a significant portion of the Town of Vail economic activity generated by The Steadman Clinic and Institute.

The building that housed the original Vail Clinic still exists at the southeast corner of the campus and is one of the various wings of the hospital that no longer meet contemporary healthcare requirements. Since the original clinic was constructed the following expansions have occurred:

- A 1971 addition to house support services
- A 1978 addition that houses the current Emergency and Imaging Departments
- The 1987 West Wing, which was subsequently expanded in 1990, and accommodates the Patient Care Unit, Intensive Care Unit, and the main VVMC Surgery Department
- A 2001 two-story addition to the central wing of the hospital, which included a replacement of the Women & Children's Center, and construction of Vail Valley Surgery

2. BACKGROUND ON THE VVMC

Center (VVSC), and The Steadman Philippon Research Institute (SPRI)

- In 2005, VVMC acquired the US Bank Building and since that time has been converting it to a medical office and administrative support facility for VVMC

EXISTING BUILDINGS AND FACILITIES

VVMC is an aging facility. Other than the Women & Children's Center and Vail Valley Surgery Center (13 years old), all other buildings within the campus are at least 24 years old, with some areas nearly 45 years old. There are many implications from the condition of these older buildings:

- The buildings' basic mechanical and electrical systems are nearing the end of their useful life, requiring higher levels of maintenance and uncertainty in service.
- In many areas of the hospital existing spaces no longer support the most efficient and appropriate setting for patient care. This is largely a result of the evolution in healthcare from a traditional inpatient type of delivery, to more outpatient procedures. This evolution has created the need for different types of medical facilities that are difficult to achieve in older buildings.
- Over time, new services and facilities have been added wherever the hospital can find space, sometimes causing disjointed functional relationships between types of services and patient's access to them.
- Higher levels of care require additional staff, medical equipment, and supplies. All of these factors have created extremely cramped conditions throughout the hospital.

Over the past ten years VVMC has undergone a series of studies to determine the best long-term use and configuration of its

Vail campus. Although one of the earlier studies had suggested that VVMC consider relocating most of its acute care functions to a new site in Eagle County, the VVMC Board of Directors has concluded that the main hospital must remain in Vail. The Vail Town Council has also strongly stated their support for VVMC to remain in Vail. This Master Plan was, in part, initiated to address sweeping changes in the healthcare industry, but also to ensure that VVMC remain in Vail, with a sustainable strategy to meet the long-term needs of the community.

EXISTING SITE CONDITIONS AND SURROUNDING USES

VVMC is located on three parcels of land that total 4.57 acres. The site is bordered on the north by South Frontage Road and on the south by West Meadow Drive. VVMC is located in the center of a transitional area between Vail Village and Lionshead. Existing land uses surrounding VVMC are depicted on Figure 3 found on the following page.

Vehicular access to VVMC is provided by South Frontage Road and West Meadow Drive. South Frontage Road provides access to an employee parking structure located at the northeast corner of the campus and to the US Bank building. West Meadow Drive provides access to patient and guest parking at the west end of the campus and to loading/service facilities located at the southeast corner of the campus. Regional bus service is provided along South Frontage Road and Town of Vail bus service is provided along West Meadow Drive. West Meadow Drive also provides an important pedestrian connection between Vail Village and Lionshead.

2. BACKGROUND ON THE VVMC

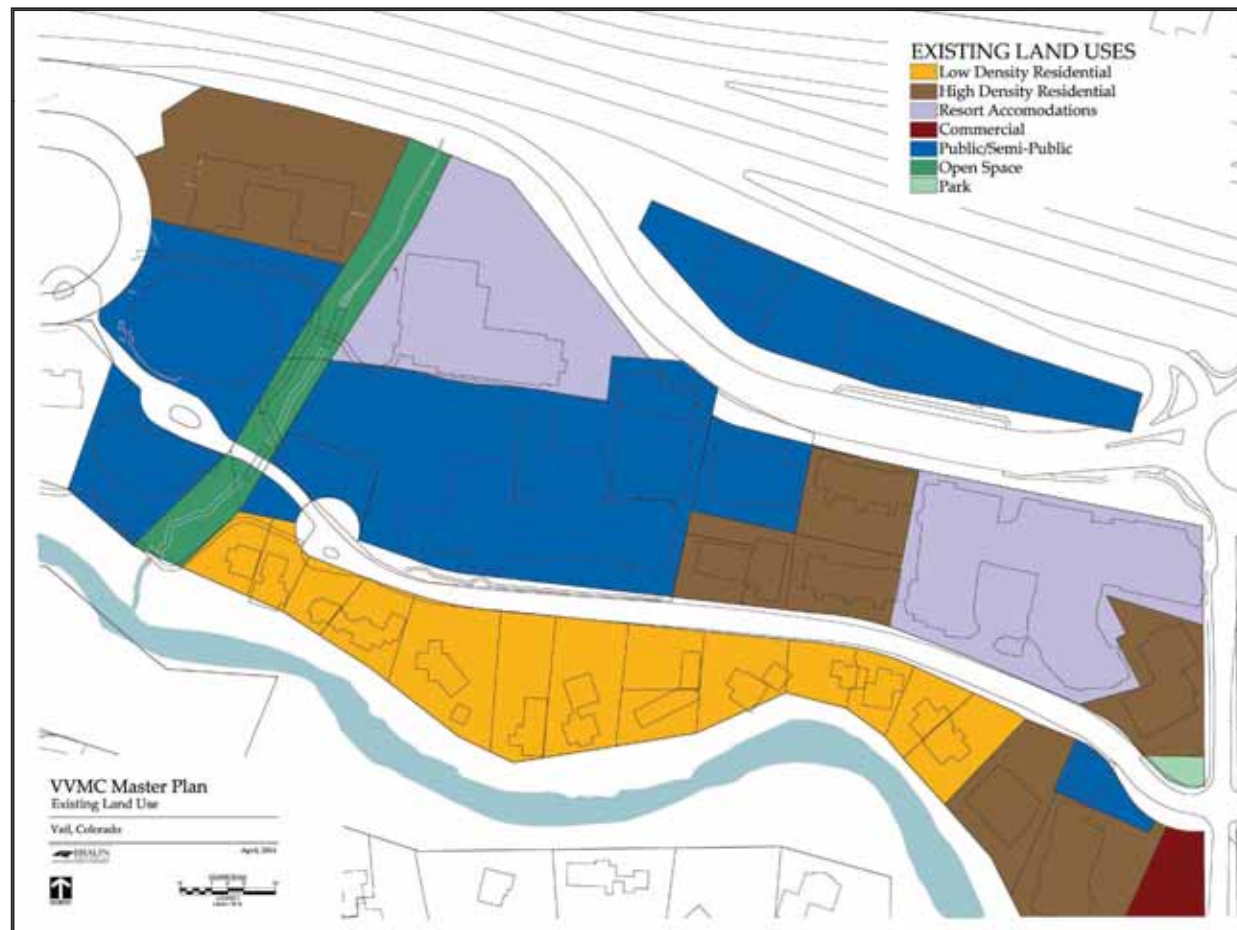


Fig. 3 - Existing land uses surrounding VVMC.

A portion of VVMC's surface parking lot at the southwest corner of the campus is actually located on Lot 10, an adjoining lot which is owned by the Town of Vail. Via separate agreement, the Town utilizes parking spaces on Lot 10 (for use by the Vail Library), which are accessed via the VVMC entry drive.

The property's zoning and covenant restrictions are discussed in Chapter 9 of the Master Plan.

Existing site conditions are depicted on Figure 4 found on the following page.

2. BACKGROUND ON THE VVMC

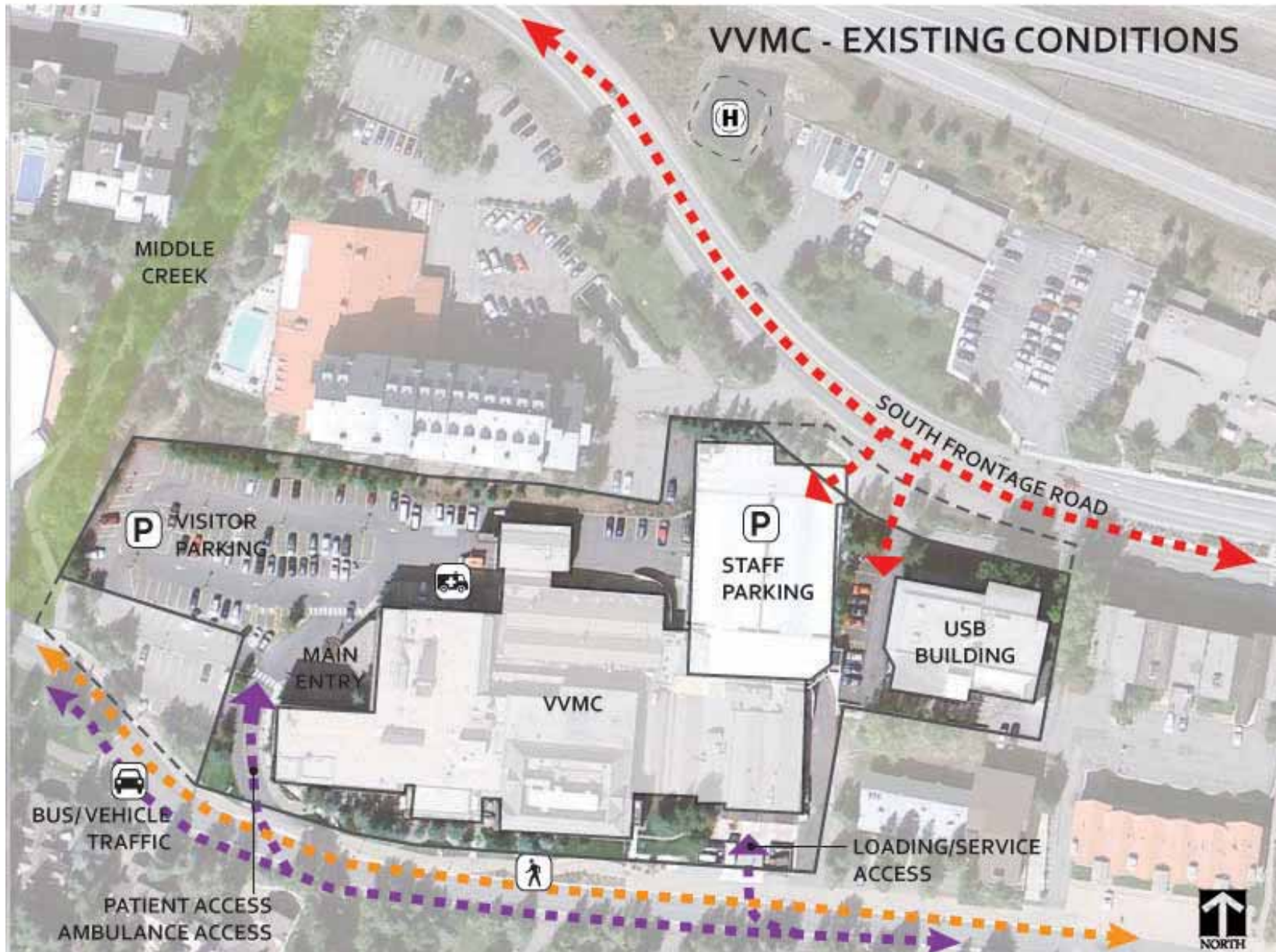


Fig. 4 - Existing Site Conditions.

3. MASTER PLANNING PROCESS AND MASTER PLAN GOALS

THE MASTER PLAN PROCESS

VVMC has spent nearly two years developing a master plan for the Vail campus. This process involved extensive collaboration with their consulting team, staff, the VVMC Advisory Committee, the Executive Team and Board members. The Vail community and Town of Vail staff were also involved in this planning process.

Master planning for a medical center is unique to other land development master planning processes. A master planning effort for a hotel or commercial development may typically involve defining the potential “building envelope” of a site and then working to “fill the envelope” with buildings. Master planning for Vail’s hospital was based on a strategic, “inside-out” approach, rather than “outside-in.” This is defined as a method for determining the real operational needs of the hospital, and then responding to those needs with the physical plan. An underlying theme for the expansion plans envisioned for VVMC is the “decompression” of spaces – to provide larger or more efficient spaces for medical services that are designed specifically to improve healthcare services (as opposed to increasing capacities of such spaces).

Another major influence in the master planning process that is unique to medical centers, and specifically to VVMC, is sequencing of construction. It is essential that construction can be sequenced without disrupting on-going patient care. For example, because the western-most portions of the campus include the most serviceable buildings, these areas will be expanded in initial construction and the older buildings on the east side of the campus will be addressed after west wing improvements are completed.

The Master Plan process was organized and executed in five major stages:

1. Project initiation, confirm goals, drivers, and LEAN Process improvement
2. Analysis of existing facilities, site issues, and operations
3. Develop Master Plan level space requirements/projections
4. Develop conceptual Master Plan alternatives
5. Finalize the Master Plan and define a road map for future implementation.



3. MASTER PLANNING PROCESS AND MASTER PLAN GOALS

MASTER PLAN GOALS AND OBJECTIVES

A key step in Stage 1 was identifying the major goals and objectives for the project. This was accomplished through collaborative work sessions with the entire planning team. The goals and objectives addressed internal, external, operational and economic considerations, and were prioritized and categorized in the following areas:

1. **Site Planning**
Major changes to the layout and design of VVMC, including, but not limited to, a new main entrance and a new Emergency Department, improving loading facilities, expanding parking and consideration of the helipad location were addressed in this category.
2. **Functional/Organizational**
These goals and objectives primarily addressed internal considerations and identified a number of improvements to the organization and overall efficiency of the campus.
3. **Master Planning**
This focus of goals and objectives was to ensure that the Master Plan included flexibility to respond to future conditions and implementation strategies.
4. **Economic**
Sustainability, operational costs, long-term maintenance and energy costs and implementation strategies were some of the internal goals and objectives addressed in this category.

Each of these four categories included five or more statements that articulated specific goals to be addressed in the Master Plan. At the conclusion of this process the following ten goals were identified as the primary goals and objectives to be addressed in the future expansion plan of VVMC:

- Relocate the main entrance to VVMC to South Frontage Road
- Modify service vehicle access to a concealed loading zone
- Relocate Emergency Department and ambulance traffic to South Frontage Road
- Relocate helipad with direct connection to Emergency Department, and with sensitivity to neighbors
- Provide adequate and convenient parking for patients, visitors and staff
- Improve operational efficiencies through proper sizing and adjacencies
- Accommodate patients in the most appropriate setting (and with privacy)
- Optimize access and way-finding for patients and visitors
- Create a flexible framework to accommodate future unforeseen changes
- Accommodate appropriate medical office space on campus

While most of the goals and objectives identified above are internal to how VVMC operates, a number of critical external considerations were also identified during the master planning process. Many of these same external considerations were identified by Town of Vail staff as “issues or considerations” to be addressed during the master planning process.

3. MASTER PLANNING PROCESS AND MASTER PLAN GOALS

Town of Vail identified the following 13 development objectives to be addressed in the VVMC Master Plan:

1. Helipad/emergency air service to the hospital site.
2. On-site loading and delivery facilities
3. Ambulance access to and from the site.
4. Vehicle access that uses South Frontage Road for primary access.
5. Minimize vehicle trips on West Meadow Drive
6. North/south pedestrian circulation through the site.
7. Middle Creek riparian corridor.
8. Provide on-site parking in full compliance with the parking requirements.
9. Define appropriate location for vehicle access off of South Frontage Road.
10. Potential for VVMC use of Lot 10 and/or the Town's municipal center site.
11. Zoning considerations.
12. Identify future growth and expansion opportunities to ensure the community, long-term healthcare needs are met.
13. Screening of mechanical equipment.

VVMC's goals and objectives for the expansion of the campus align directly with the thirteen objectives that have been raised by the Town. The manner in which VVMC expansion plans implement or address master plan goals and the issues raised by the Town are described in subsequent chapters of the Plan. Where appropriate, discussion of specific elements of the Master Plan begins with a statement describing the underlying goal

to be addressed by expansion plans. In some cases the Master Plan includes a variety of potential solutions for how a particular goal may be achieved. In other cases the Plan outlines fairly specific solutions to how a particular goal is achieved. In either case, final decisions on specific improvements to be implemented by expansion plans will be determined during the PEC's review of CUP applications.

It is assumed that specific development plans proposed for VVMC will reflect the solutions outlined in this Plan. However, it is not the intention of this Master Plan to limit flexibility or to otherwise preclude potential solutions (not included in this Plan) for achieving the goals of this Master Plan. Alternative solutions for addressing specific elements of expansion plans may be considered by the PEC during the review of CUP applications provided they appropriately address the goals for specific elements of the plan and the overall goals and objectives of this Master Plan. Proposals deemed to conform to applicable elements of this Master Plan will have a greater expectation of obtaining project approvals than those that do not.

VVMC AND EVERGREEN LODGE POTENTIAL LAND EXCHANGE

The idea of a potential land exchange between VVMC and Evergreen Lodge evolved during the Town's deliberation of this Master Plan. This discussion occurred for a number of reasons - the Lionshead Redevelopment Master Plan includes a section on the Evergreen Lodge which discusses the potential for a land exchange with VVMC, the two properties share a significant common boundary, and the adjacency of these two large parcels all raise the question of how a land exchange and/or coordination between these two properties could benefit the redevelopment of this area of Vail.

3. MASTER PLANNING PROCESS AND MASTER PLAN GOALS

VVMC and Evergreen Lodge have evaluated the potential of a land exchange and concluded that a number of benefits to both properties and to the broader community could be realized by exchanging portions of their properties. Chapter 10 of this plan describes the basic elements of a potential land exchange, summarizes elements of VVMC's expansion plans that would be influenced by an exchange and addresses how decisions on the land exchange relate to the overall time line for expansion of VVMC.

While a land exchange with the Evergreen Lodge is a concept that has potential, final decisions have not been made on whether an exchange will occur. For master planning purposes the land exchange is presented as a "master plan alternative" for VVMC and final decisions on the land exchange will be made in the future. This master plan presents two alternatives for VVMC's future expansion - a "non-land exchange" alternative and a "land exchange" alternative. With the exception of Chapter 10, the balance of this master plan is based on the assumption that there will not be a land exchange. Chapter 10 addresses how VVMC expansion plans could change with a land exchange.

Both alternatives present viable options for the future redevelopment of VVMC and each alternative is equally capable of achieving the Town's development objectives for this area of Town.

4. OVERVIEW OF EXPANSION PLANS AND DESIGN CONSIDERATIONS

This section of the Master Plan provides an overview of:

- Building expansions planned for VVMC
- The main “influences” in the overall site planning of the project
- Architectural/site design and planning considerations relative to VVMC expansion plans

EXPANSION PLANS AND IMPROVEMENTS

VVMC currently has +/-207,000sf of gross floor area (exclusive of parking garages). Expansion plans will increase square footage by just under 50%, with the total square footage of the campus growing to +/-300,000sf. Expansions will occur in three primary areas – additions to the West Wing, construction of an entirely new East Wing and construction of a new helipad building on the north side of the campus along South Frontage Road.

West Wing Expansion

The focal point of the +/-45,000 sf expansion planned for the West Wing is the addition of a new fourth floor. This new floor will provide space for The Steadman Philippon Research Institute and The Steadman Clinic. Smaller multi-level expansions are also planned at the south and west sides of the West Wing. In addition to new square footage, interior spaces throughout the West Wing will be re-organized and provide increased space for surgery suites, Howard Head Sports Medicine, a Cardiac Catheterization Lab and other uses. Refer to figure 8 on page 15 for a graphic representation of the West Wing Expansion.

New East Wing

The existing East Wing of the hospital will be demolished and replaced with a new building of +/-45,000 sf. Located below this new building will be a multi-level parking structure which will be accessible from South Frontage Road and will provide the major-

ity of all on-site parking. The south half of the new East Wing will include three levels. The lowest level (ground level at West Meadow Drive) will include an enclosed loading/delivery facility and a central utility plant. The second level will be devoted to new Emergency and Imaging Departments. The upper level will accommodate the main hospital entry, admissions and other hospital functions.

New Emergency Helipad Building

The Emergency Helipad Building will be located at the northern side of the campus along South Frontage Road. While the primary purpose of this building is to accommodate an on-site helipad (see Chapter 8 for additional discussion of the helipad), the building presents an opportunity to create approximately four levels of useable square footage for VVMC. The useable square footage potential of this building is estimated to be +/- 12,000 sf. Refer to figure 9 on page 15 for a graphic representation of the New East Wing and new Emergency Helipad Building.

MAIN “INFLUENCES” IN SITE PLANNING OF FUTURE EXPANSIONS

A number of factors influenced the overall site planning of future expansions to VVMC. Examples of these are the specific programmatic elements of the expansion plans, the internal relationships of new and expanded uses to other uses within the campus, and how the project can be constructed while maintaining hospital operations. Aside from these considerations, the single most important influence in the overall design of Master Plan improvements is moving VVMC’s “Front Door” to South Frontage Road. Bringing vehicular access to this location became a driver based on the following design rationale:

- The main entrance to the hospital needs to be proximate to where patients and guests arrive at the campus. Vehicle access off of South Frontage Road necessitates relocating the main entrance (and key

4. OVERVIEW OF EXPANSION PLANS AND DESIGN CONSIDERATIONS

- hospital functions such as admissions) to the East Wing.
- Moving ambulance arrival to the new South Frontage Road access is proposed to address a major community goal of removing emergency vehicles from West Meadow Drive. This change necessitates that the new Emergency Department be located within the East Wing.
- A new Emergency Department creates the need for the new Imaging Department to be in the East Wing.
- Given the scope of new hospital functions that will be located within the East Wing, the east end of the campus became the logical location for structured parking.

While other factors were considered in the overall site planning of future expansion plans, the location of the new VVMC entry was a major influence in the design of the new campus.

Construction Sequencing

A major consideration in the design and construction sequence of future expansion plans is to ensure the on-going operation of the hospital during construction. This is the main reason why VVMC expansion will start with construction of the West Wing. Development of the West Wing will create new space to allow for the consolidation of a number of existing uses. This consolidation will free up existing space on the campus that can then accommodate existing uses currently located in the East Wing (uses that will be displaced during the demolition and re-construction of the East Wing).

Covenant Restrictions and other Conditions

The VVMC campus is encumbered by restrictive covenants that address the use of the property and establish limitations on building location, building height and other site development considerations.

In 1989 a number of restrictions on the design and development of VVMC property were established by covenants for the benefit of the Evergreen Lodge. These covenants impose significant limitations on where new buildings can be constructed on the campus and are a major influence on how VVMC can expand in the future. The general building massing of expansion plans conform to the limitations prescribed by these covenants.

Vail Resorts donated the land for the hospital to VVMC with the condition that the land be used for “medical services”. Violation of this condition could, at Vail Resorts discretion, result in this land reverting back to Vail Resorts.

SPECIFIC ARCHITECTURAL DESIGN AND PLANNING CONSIDERATIONS

The following outlines planning and design considerations relative to specific elements of the VVMC expansion plans. On the following page is Figure 5, a conceptual site plan depicting expansion plans contemplated by this Master Plan.

Building Massing

GOAL

The massing (and scale) of hospital expansions to be responsive and sensitive to the surrounding neighborhood.

A number of factors influenced the building massing of expansions to VVMC, including the structural capacity of existing buildings to handle additions, internal spatial relationships of existing and future hospital uses, relationships to surrounding buildings in the neighborhood and conformity with applicable Town standards. As mentioned above, a number of covenant restrictions established by a 1989 land use agreement with the Evergreen Lodge directly influence design options available to VVMC.

4. OVERVIEW OF EXPANSION PLANS AND DESIGN CONSIDERATIONS



Fig. 5 - Conceptual Site Plan of VVMC expansion.

4. OVERVIEW OF EXPANSION PLANS AND DESIGN CONSIDERATIONS

Figure 6 on page 14 provides a general indication of the building footprint and massing of expansions contemplated by the Master Plan. The building height and massing of VVMC should be consistent with existing and potential building heights immediately proximate to VVMC and in the vicinity.

A number of architectural approaches can be incorporated into the design of the new fourth floor of the West Wing to reduce the scale of the building. Foremost among these should be the use of extensive glazing on the fourth floor to create a lighter, more recessed appearance. A mansard roof could also be used to soften the roofline of the building. The West Wing also includes a small expansion along Meadow Drive, this new space is essential to the efficient functioning of this portion of the hospital. This expansion presents an opportunity to create interest along the street by varying the building facade along West Meadow Drive. Building off-sets and the use of varied, but related exterior wall materials and fenestration should be used along the entire facade of West Meadow Drive.

The massing and scale of the new East Wing should be consistent with building heights allowed by the existing zoning of surrounding properties. Fenestration, roof forms, variations in wall planes, use of building materials and building setbacks can be used to achieve compatibility with the neighborhood and to soften the buildings relationship to the street.

The Helipad Building is designed to accommodate an on-site helipad at a height that will not impact the development potential of neighboring properties. At a height of +/-75', the building beneath the helipad can accommodate approximately 4 floor levels that can provide space for VVMC uses. The height of this building should be consistent with that of other buildings along South Frontage Road. In order to reduce the scale of this building and to more sensitively integrate it with the site, consideration should be given to a "stepped building form" of varied building height.

The conceptual massing diagrams (Figures 7, 8 and 9) on page 15 provide a general indication of the massing of the existing campus and the West Wing and East Wing/Helipad Building expansions.



Fig. 6 - Building heights surrounding VVMC and building heights of proposed VVMC expansions.

4. OVERVIEW OF EXPANSION PLANS AND DESIGN CONSIDERATIONS



Fig. 7 - Existing VVMC Campus

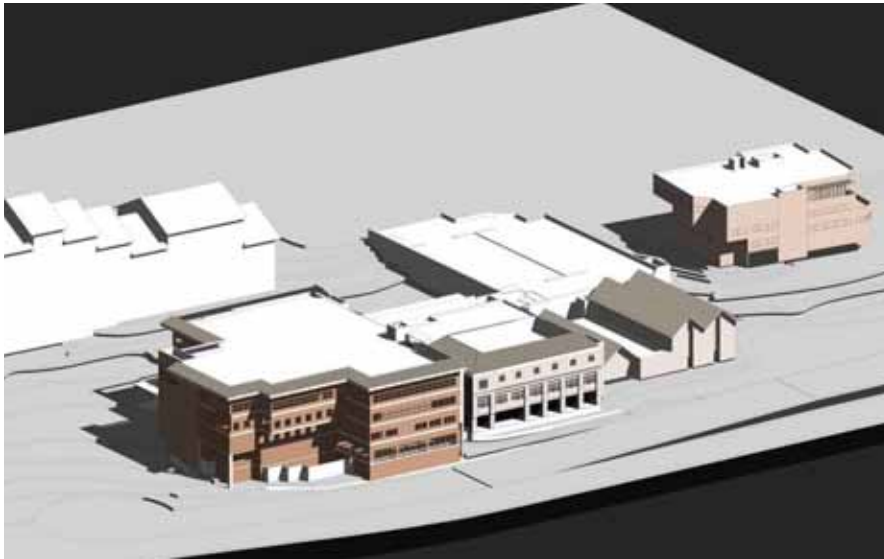


Fig. 8 - West Wing Expansion

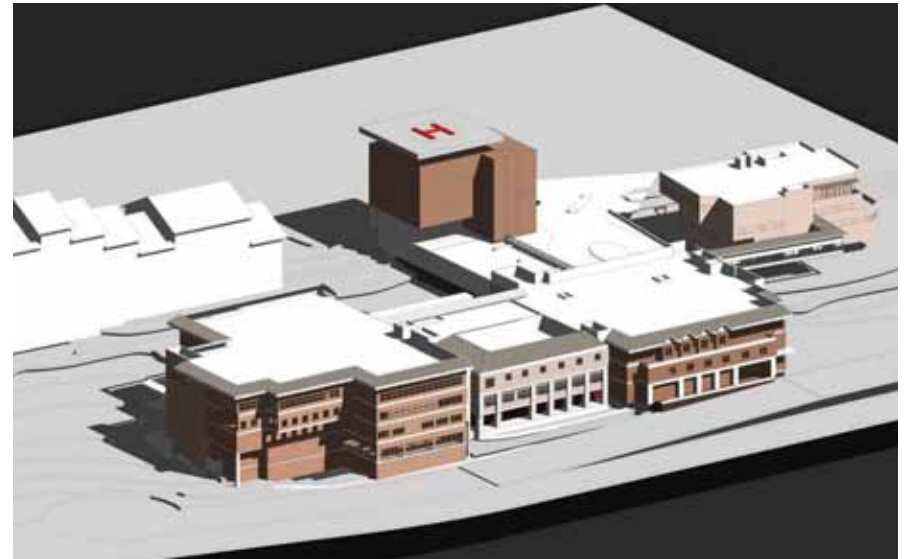


Fig. 9 - East Wing/Helpad Building Expansion

4. OVERVIEW OF EXPANSION PLANS AND DESIGN CONSIDERATIONS

Building Relationship to Meadow Drive

GOAL

To establish an appropriate physical and visual relationship between the hospital and the pedestrian corridor along West Meadow Drive by use of effective building design, architecture and landscape improvements.

VVMC shares an important “public edge” with West Meadow Drive. The relocation of VVMC’s main entry to South Frontage Road will provide a major benefit to West Meadow Drive and the pedestrian/biking experience along this corridor by dramatically reducing the volume of vehicle trips on this street. Other considerations to be addressed in the design of building expansions that will enhance the campus’ relationship to West Meadow Drive include:

- Off-sets in building facades along West Meadow Drive and the East Wing to avoid continuous wall planes
- Variation of building heights
- Maintain and enhance where appropriate, landscaping between VVMC buildings and the street and adjacent properties
- Introducing outdoor spaces (such as seating areas) in order to create interest and activity along the street
- Maintaining the existing West Meadow Drive sidewalk and enhancing this corridor where appropriate
- Public art
- Potential relocation of Town bus stop

These and other detailed design considerations will be addressed during subsequent steps in the review process. Relevant provisions of the Town of Vail Streetscape Master Plan Addendum will be considered in the design of site and landscape improvements along West Meadow Drive.

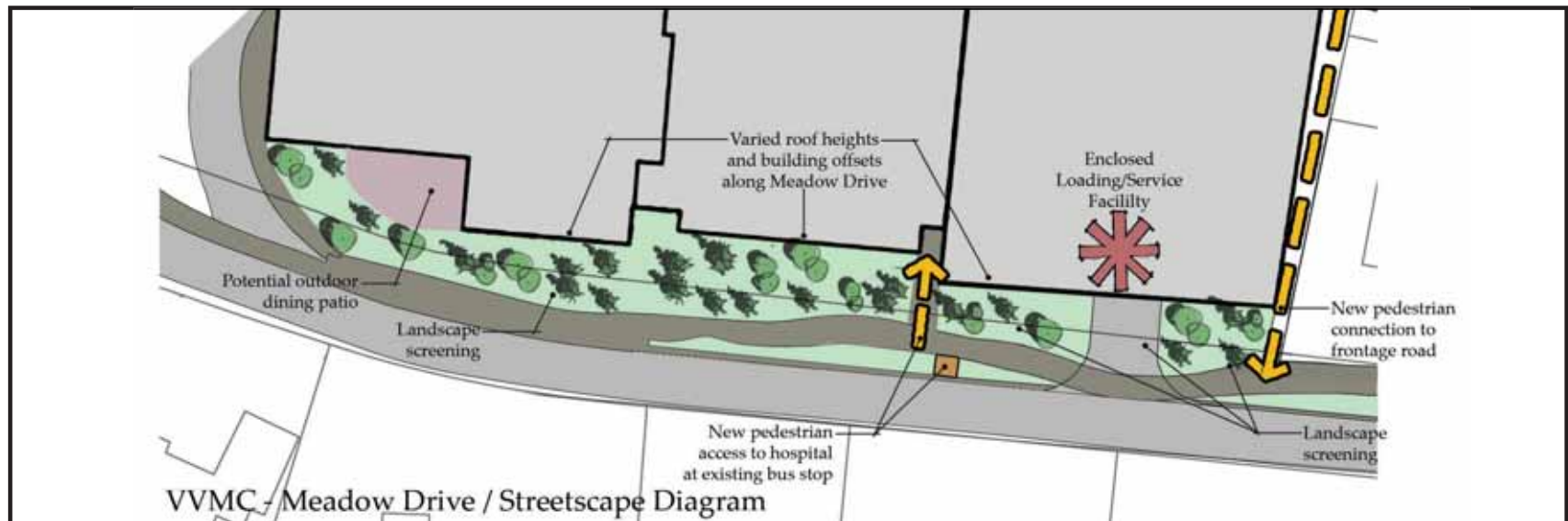


Fig. 10 - Existing land uses surrounding VVMC.

4. OVERVIEW OF EXPANSION PLANS AND DESIGN CONSIDERATIONS

Architecture

GOAL

To integrate the design of new buildings and expansion areas with existing portions of the hospital so as to create a varied but unified architectural expression.

The implementation of the Master Plan provides a significant opportunity for improvement and modernization to the architecture of the campus. The present building is a conglomeration of older buildings on the east and west ends of the campus, with a modern addition in the central portion. Expansion of the West Wing will address the existing 1980 façade. The materials and forms anticipated for this expansion should be consistent with those used in the 2001 Central Wing addition, including natural stone and complimentary metal panel detailing. Window frames should be consistent with these materials and the amount of glazing should be balanced with the need for patient privacy. For example, on the new 4th level the use of more extensive glazing should be explored to take advantage of natural light and views, and to create a lighter, more recessed appearance at the very top of the building. The new East Wing should be articulated in a similar fashion, utilizing a stepped massing, from bottom to top. The use of varying materials can allow for further reduction of the visual massing of the building.

Mechanical Systems

One of the major goals of the VVMC Master Plan is to replace its aging utility components with a new Central Utility Plant. In order to minimize noise, odor and other impacts to the neighborhood, the plant will be enclosed within the East Wing on the ground level, behind the service enclosure and away from West Meadow Drive. This area will house heavy equipment including boilers,

compressors, and emergency generators. Once East Wing construction is complete, existing mechanical equipment located at the southwest corner of the campus along Meadow Drive, shall be removed.

New rooftop air-handling units and air-cooled chillers shall be screened (and painted to match roof materials) in a fashion that is consistent with the mechanical screen located above the 2001 Addition, whereby only the metal roofing form is visible from the sides of the buildings. Mechanical noises generated by this equipment will be largely contained and reflected above these enclosures, as opposed to directly across the roof.

Pedestrian Circulation

GOAL

To provide safe and efficient pedestrian circulation within and through the VVMC campus that meets the needs of hospital users and the broader community.

The primary pedestrian access to and from VVMC is West Meadow Drive. This shared vehicle/bike/pedestrian corridor is heavily used and provides a key link between Vail Village and Lionshead. Relocating the hospital's main entrance to South Frontage Road will greatly improve the safety and aesthetics of the street by significantly reducing traffic volumes. This will provide a substantial benefit to those who use this corridor, to neighboring residential uses and to the entire Vail community.

A dedicated pedestrian entry to the new Emergency Department will be provided along West Meadow Drive. This entry should be located next to the Town's existing west-bound in-town bus stop.

4. OVERVIEW OF EXPANSION PLANS AND DESIGN CONSIDERATIONS

A north/south pedestrian corridor shall be constructed along the east end of the campus, providing a new connection for pedestrians between South Frontage Road and West Meadow Drive. It is a goal that this pedestrian corridor be ADA compliant. Improvements to the Frontage Road associated with VVMC's new Front Door will include sidewalks along the south side of South Frontage Road.

The potential land exchange between VVMC and the Evergreen Lodge may influence VVMC's final design solutions for pedestrian circulation. Refer to Chapter 10 –Potential Land Exchange with Evergreen Lodge for more information.

Middle Creek

GOAL

To address existing site conditions along VVMC's boundary with Middle Creek in order to minimize potential impacts from surface drainage on the water quality and the adjacent riparian habitat along the creek.

The VVMC's existing surface parking lot at the west end of the campus is located adjacent to Middle Creek and the adjoining riparian corridor. The existing relationship between the creek corridor and the parking lot is less than ideal. The existing parking lot extends into the stream tract (owned by Eagle River and Sanitation District) and surface drainage from the lot is not well defined. While no major changes are contemplated to this portion of the site at this time, improvements to the relationship of the parking lot and Middle Creek should be made, specifically with respect to the managing the quality of water that runs from the lot into the creek.

VVMC will evaluate potential improvements to the parking lot's relationship with Middle Creek during the development of detailed improvement plans and implement these improvements prior to the issuance of a Certificate of Occupancy for the West Wing. Potential improvements include the introduction of "best management practices" to improve the quality of water that runs off of the existing surface parking lot. Examples of these types of improvements include:

- Re-grading the parking lot or installing gutters to prevent drainage from flowing directly into the creek
- Installation of oil/sand separators or bio-swales to clean run-off before it flows from the site
- Installation of riparian vegetation along VVMC lands adjacent to the creek
- Implementation of "creek sensitive" snow removal/storage practices
- Better defined and demarcated parking areas

Proposed improvements should comply with any adopted policies or regulations with regard to the preservation and improvement of the Gore Creek and its tributaries.

An opportunity may exist to create a stronger physical and visual connection between VVMC and Middle Creek, with the introduction of trails, seating areas and other passive uses. Any use of the Middle Creek corridor for aesthetic or passive purposes, however, will need to be coordinated with the land owner and should be subordinate to the preservation of the riparian corridor and its inherent natural character.

The potential land exchange between VVMC and the Evergreen Lodge may influence VVMC's final design solutions for Middle Creek. Refer to Chapter 10 –Potential Land Exchange with Evergreen Lodge for more information.

5. VVMC'S NEW "FRONT DOOR", MEADOW DRIVE, DELIVERY/SERVICE

GOAL

Remove the vast majority of VVMC-generated traffic from West Meadow Drive.

Design and manage loading and service facilities and functions to meet the needs of VVMC while at the same time minimizing potentially adverse impacts on the surrounding residential neighborhood and on West Meadow Drive.

One of the key elements of this Master Plan is to establish South Frontage Road as the primary vehicular access to VVMC. Establishing VVMC's "Front Door" at South Frontage Road has been a long-standing goal of the Town of Vail. Through their internal master planning process the VVMC team also defined this as a Master Plan goal. The reason for this is quite simple – Meadow Drive is a heavily used pedestrian corridor and reducing the number of cars on this road will greatly improve the aesthetics and safety of this pedestrian corridor. This section of the Master Plan addresses the impact of this improvement on West Meadow Drive and VVMC delivery and service functions.

THE NEW FRONT DOOR AND WEST MEADOW DRIVE

Re-locating VVMC's main access to South Frontage Road will dramatically improve conditions on West Meadow Drive by shifting VVMC traffic to the South Frontage Road. Currently VVMC-generated traffic on West Meadow Drive includes the following users:

Patients and guests
Ambulances/emergency vehicles
Delivery and service vehicles
VVMC vehicles (employee vans, couriers, etc.)

Of particular significance are the 116 parking spaces in the West Lot, 106 of which have historically been used by patients and

guests. These spaces typically "turnover" 6-8 times per day and on a peak day these spaces can generate from 1,200 to 1,700 trips (one in/one out) on West Meadow Drive. All of these trips will shift to South Frontage Road upon construction of the East Wing and the new Front Door (at which time the existing access drive to the West Lot on West Meadow Drive will be controlled). In addition, ambulance traffic and the majority of VVMC vehicles will access VVMC via the new Front Door. This means that the only VVMC-generated traffic on West Meadow Drive will be delivery and service vehicles.

The October 10, 2014 memorandum by TurnKey Consulting LLC quantified the existing VVMC delivery and service traffic on West Meadow Drive. On a peak day these uses generate 56 total trips on West Meadow Drive. Based on actual traffic counts on October 3, 2014, West Meadow Drive had 394 background trips and an estimated 180 bus trips, or 574 total trips. The 56 delivery/service trips to VVMC represent 9% of the total daily traffic on West Meadow Drive.

Relative to VVMC traffic only and assuming on a typical peak day 1,400 patient and guest trips travel on West Meadow Drive, the new Front Door will shift 96% of all existing VVMC traffic to South Frontage Road.

EXISTING DELIVERY AND SERVICE FUNCTIONS

VVMC's existing delivery and service functions are handled in a small, open-air facility at the southeast corner of the campus immediately adjacent to West Meadow Drive. The loading area is large enough to accommodate two mid-sized trucks and also includes a trash/dumpster area. On occasion the number of loading and service vehicles using the facility at any one time exceeds its capacity. Portions of the loading area are screened by fencing. However, there is currently no delineation between the loading

5. VVMC'S NEW "FRONT DOOR", MEADOW DRIVE, DELIVERY/SERVICE

area and the adjoining sidewalk, nor is there a clear demarcation between the road, the sidewalk and the loading area. These conditions make it difficult to manage where trucks stage while making deliveries. The limited size of the area also requires some trucks to back onto Meadow Drive, creating safety concerns along this heavily travelled pedestrian roadway.

VVMC has a wide variety of delivery and service needs that are essential to the operation of its facility and vital to providing quality patient care. Deliveries to VVMC occur three different ways. Most deliveries are made by vendors who deliver directly to the Vail campus. VVMC also has a down-valley facility in Gypsum where medical and surgical supplies are warehoused and delivered daily to the Vail campus by VVMC vans on an "as needed" basis. Finally, a third party contractor makes daily deliveries of medical and surgical supplies from a warehouse in Denver.

The October 10, 2014 memorandum by TurnKey Consulting LLC summarized loading and service traffic to VVMC. This data was based on actual truck counts over a two week period. On average 24 delivery and service vehicles serve VVMC each day (resulting in 48 total trips on West Meadow Drive). These 24 trips include vendor vehicles, VVMC courier vans and service vehicles (i.e. mechanical or plumbing contractor). On the "peak day" (Mondays) on average 28 service and delivery vehicles serve VVMC. The majority of vendor deliveries are made in mid-sized trucks (SU-30) or smaller. Typically only nine deliveries each week are made by larger trucks (articulated vehicles, WB-40 or larger trucks). On rare occasions larger semi-trucks service VVMC. Examples of these include the delivery of new beds (that may occur once each year or two), a mobile imaging truck, and the periodic need for a temporary generator to service the hospital.

ALTERNATIVES TO DELIVERY AND SERVICE

One of the main goals of the Master Plan for VVMC is to establish a new Front Door at South Frontage Road and in doing so remove as much traffic as possible from West Meadow Drive. VVMC generates a variety of different types of vehicular trips – delivery trucks, service vehicles, patients, guests, employees, vendors and emergency vehicles. Each of these users has its own unique design considerations for how it is accommodated. While expansion plans will establish a new Front Door at South Frontage Road, due to a number of factors, not all types of vehicle trips generated by VVMC can or should be accommodated at this location. This raises the question of which VVMC vehicle trips should be shifted to the new Front Door and which trips should remain on West Meadow Drive.

Providing delivery vehicle access to VVMC from South Frontage Road is problematic for a number of reasons:

- Limited site area along South Frontage Road, coupled with need to accommodate vehicle access, hospital drop-off and helipad in this area
- Spatial requirements of an enclosed loading facility and turning radius requirements of delivery trucks,
- Grade changes between South Frontage Road and the subject site (>20'), and
- Creating an optimal organizational relationship between a loading facility and other existing and future uses within the campus.

For the reasons cited above, delivery vehicles should continue to use West Meadow Drive to access VVMC with all other traffic accessing VVMC via the new Front Door. This reduction in vehicular traffic, coupled with a well-designed and properly managed de-

5. VVMC'S NEW "FRONT DOOR", MEADOW DRIVE, DELIVERY/SERVICE

livery facility will balance the operational needs of VVMC while providing a major community benefit to West Meadow Drive.

VVMC DELIVERY AND SERVICE FACILITY

The following design and management parameters address design, safety, aesthetics, noise, odor, congestion and other considerations relative to service and delivery functions at VVMC. VVMC service and delivery will be accommodated by a new, enclosed delivery facility on the south side of the East Wing and with provisions for larger truck deliveries in the West Parking lot. The standards below are intended to establish expectations for the design and management of delivery functions. Relevant provisions of Chapter 12-10, Off Street Parking and Loading, and Section 12-9C-5, Development Standards, Vail Town Code will also be considered in the review of subsequent development applications.

Each of the parameters below shall be addressed by detailed designs and a management plan to be submitted as a part of the Conditional Use Permit process. As an element of a future CUP approval, all aspects of the management plan will be enforceable by the Town. The design and management of a delivery facility that conforms to these parameters, as determined by the PEC, shall ensure the compatibility of the delivery facility with the surrounding residential neighborhood and with the pedestrian nature of West Meadow Drive.

Enclosed Delivery Facility Design Parameters

- All delivery docks and delivery activity shall be located inside the building
- The number of bays within the facility should be between 3-4 and accommodate turning movements within the facility for SU-30 trucks. 2-3 additional bays should be provided for smaller trucks and service vehicles.

- Trash and recycling facilities shall be enclosed and located inside the building
- Streetscape and landscape adjacent to the loading facility should be designed to define distinct spaces for pedestrians and trucks and should discourage truck parking on West Meadow Drive. The access drive to the loading facility shall be adequately screened with landscaping

Delivery Facility Management Plan

- Outline the role/responsibility of the Delivery Facility Manager
- Establish protocol for how the facility will be managed (hours of operation, coordinating times of deliveries, managing the size of trucks that deliver to VVMC, accommodating periodic deliveries by larger trucks, servicing the US Bank Building, etc.)
- Establish "rules of the facility", i.e. no backing onto West Meadow Drive, no parking on West Meadow Drive, keeping door to facility closed, ensuring the area remains free of trash and debris, etc.

The West Lot Design Parameters

- Provisions to accommodate oxygen deliveries
- Provide dedicated space suitable to accommodate the delivery from WB-40 or larger truck that will not encumber or block parking spaces (this provision is not applicable to liquid oxygen delivery)
- Provide parking for VVMC service vehicles (to be accessed from the South Frontage Road)

The potential land exchange between VVMC and the Evergreen Lodge may influence VVMC's final design solutions for Delivery and Service. Refer to Chapter 10 –Potential Land Exchange with Evergreen Lodge for more information.

6. TRAFFIC/SOUTH FRONTAGE ROAD

GOAL

Collaborate with neighboring properties to define and implement improvements to South Frontage Road that will provide safe and efficient site access to VVMC, the Town Hall site and the Evergreen Lodge.

A Traffic Impact Study has been completed by TurnKey Consulting LLC. This study evaluates the traffic impacts of new development at VVMC and other changes contemplated by this Master Plan, including but not limited to the creation of a new Front Door along South Frontage Road. An executive summary of the study is found in the appendix of this Plan. Figure 11, The Conceptual Circulation Plan on the following page depicts proposed vehicular and pedestrian circulation patterns for VVMC.

Assumptions on potential South Frontage Road improvements (all of which are subject to approval by the Colorado Department of Transportation), VVMC expansion plans and other traffic-related operational changes at VVMC that were considered in the traffic study included the following:

- A two-lane round-about designed to facilitate right-in/right-out site access to VVMC, the Evergreen Lodge and the Town Hall site, on South Frontage Road
- VVMC vehicular access off South Frontage Road will be right-in/right-out only
- Evaluate if emergency vehicle access to VVMC is appropriate and approvable via the new main access off of South Frontage Road, including westbound left turn into VVMC
- Access to the West Lot Surface Parking and the East Wing parking structure will be provided from VVMC's new main access off of South Frontage Road
- Access to the new East Parking Structure and the West Surface Lot will be provided via the new main access off

of South Frontage Road

- During the construction of the East Wing, 69 parking spaces in the US Bank Building will be temporarily accessed via West Meadow Drive (subject to coordination with neighboring property owners)
- Access from the US Bank Building to remain one-way out bound only.
- Maintain roundabout Level of Service (LOS) "C" or better

The performance of the South Frontage Road roundabout, the Frontage Road/VVMC access point and the Vail Road/Meadow Drive intersection were evaluated by the Traffic Impact Study. Based on analysis by TurnKey Consulting Inc. and Felsburg Holt Ullevig (retained by the Town of Vail), each of these intersections performed at a level well above minimum Town standards for both level of service and delay.

An updated traffic study for VVMC will be provided with subsequent stages of the development review process.

FRONTAGE ROAD ACCESS IMPROVEMENT STUDY

The Town of Vail took the lead on a conceptual design study of future road and access improvements to South Frontage Road. The participants in this process include the Town, representatives from the Evergreen Lodge and VVMC. Each of these organizations is contemplating development of their property and the primary goal of this effort is to collaboratively define a plan for access improvements along South Frontage Road that will accommodate access to each property.

It is anticipated that over time each of the three properties will be limited to right-in/right-out access off the South Frontage Road improvements. This is due to future growth in background traffic on South Frontage Road and the proximity of access points for

6. TRAFFIC/SOUTH FRONTAGE ROAD

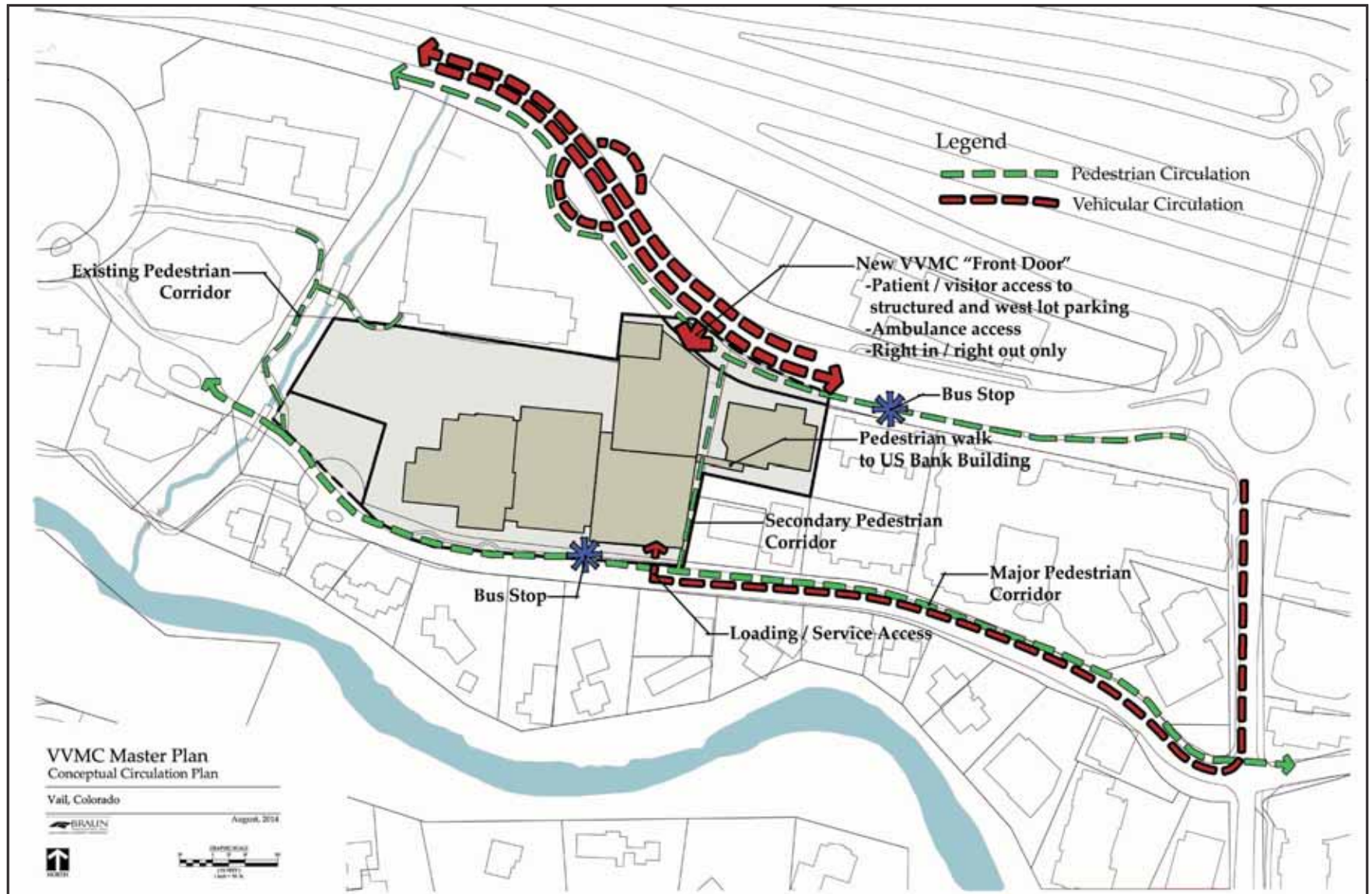


Fig. 11 - Pedestrian and vehicular circulation around VVMC.

6. TRAFFIC/SOUTH FRONTAGE ROAD

each of the three properties. It is assumed that a roundabout will be necessary to allow vehicles to turn around in order to access each of these three properties. The focal point of this study was to evaluate alternative locations and designs for a roundabout. It is assumed that all three parties will benefit from a roundabout and that each property will financially participate in the solution. Topography, limited right-of-way width and site conditions along South Frontage Road present significant design and construction challenges and the sequencing of when the improvement is constructed relative to when each of the three parcels re-develop is also an important consideration.

Over ten alternative designs and locations for a roundabout were evaluated. In addition, non-roundabout solutions that facilitated necessary turning movements were evaluated but these were dropped from consideration. The preferred location of a roundabout is shown on Figure 12 below. This improvement is located predominantly within the South Frontage Road right-of-way, however a portion of the roundabout is located over the "B line" (an internal control boundary of the interstate highway system) on Federal Highway Administration (FHWA) land. This concept is in the process of being presented to the Colorado Department of Transportation and FHWA.

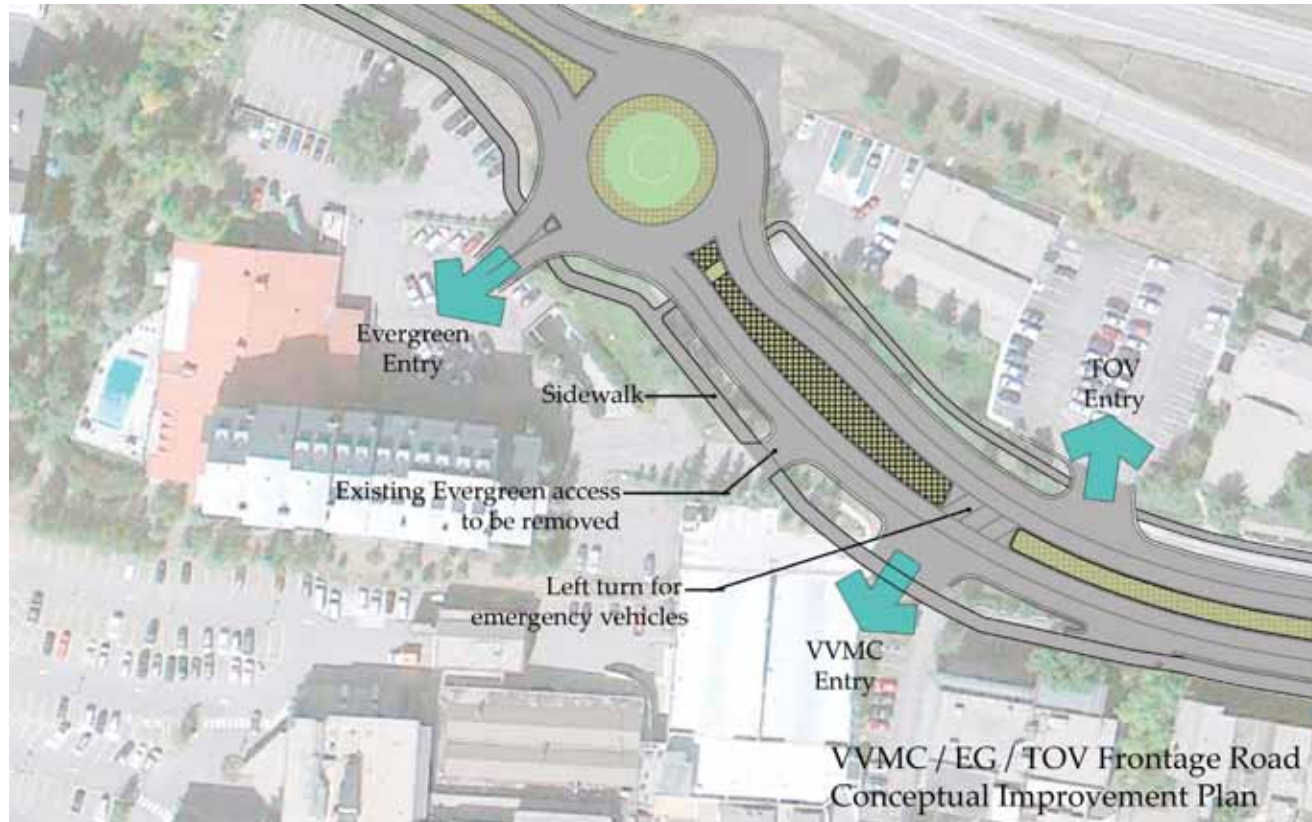


Fig. 12 - Conceptual design of South Frontage Road access improvements.

6. TRAFFIC/SOUTH FRONTAGE ROAD

Subject to CDOT approvals, construction of the roundabout will occur after completion of the East Wing and VVMC's new Front Door at the South Frontage Road. This construction sequencing allows for the existing helipad to remain (it will be displaced by construction of the roundabout) until such time the new heliport building is operational. During this period of time, interim access improvements to the South Frontage Road will be necessary in order to facilitate access to VVMC. A traffic analysis of this interim improvement has been completed to ensure that the intersection will perform at acceptable levels. A copy of this analysis is found in the appendix of this plan. This

interim improvement will provide acceptable turning movements into and out of VVMC. It is considered an "interim improvement" because over time a roundabout will be needed due to growth in background traffic coupled with the anticipated future redevelopment of the Evergreen and Town Hall site.

Figure 13 below is a conceptual design of these improvements. Major features of these interim improvements are a west bound left-turn lane to serve VVMC and a slight re-alignment to the entry to the Town Hall site (that will maintain the left turn movement out of this site).

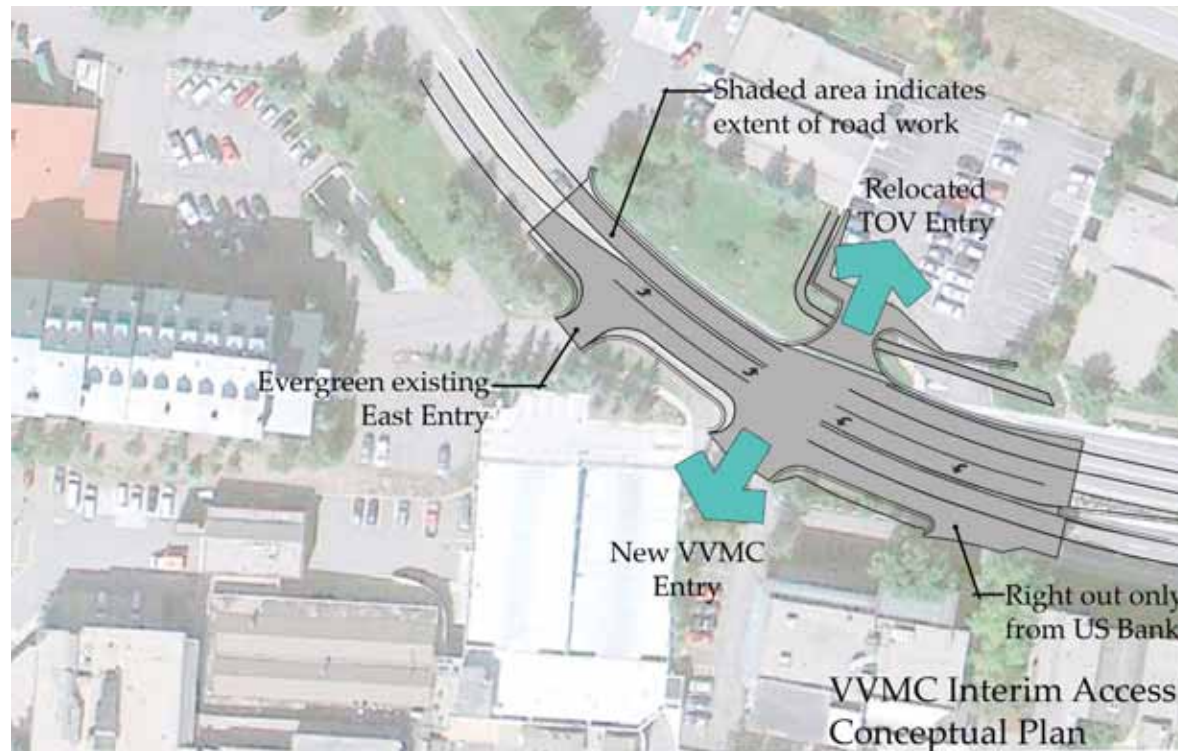


Fig. 13 - Conceptual design of interim access to VVMC.

7. PARKING

GOAL

To increase the supply of on-site parking to an amount that when coupled with managed parking solutions meets the needs of patients, visitors and employees of VVMC.

The number of on-site parking at VVMC has for many years been acknowledged to be inadequate. Providing sufficient on-site parking is one of the primary goals of this master planning effort. The following section addresses three related topics - methodologies for determining parking requirements, existing parking conditions, and the parking demands expected from expansion of VVMC. More detailed information on each of these topics will be provided in subsequent development applications.

METHODOLOGIES FOR DETERMINING PARKING REQUIREMENTS

Zoning code formulas used to determine parking requirements for land uses such as office, retail, etc. are fairly consistent and are almost always based on square footage. Hospitals and medical centers present a unique land use and formulas used to determine parking requirements vary widely. Gross square footage, net square footage, number of employees, number of doctors, number of patient beds and number of patient exam rooms (or some combination of the above), are examples of the different “measures” used to determine parking requirements for medical centers.

The Town’s methodology for determining the medical center’s parking requirement is based primarily on square footage, but involves three related considerations:

Hospitals	1 space per patient bed 1 space/150 sf net floor area
Medical offices	1 space per 200 sf net floor area

While in concept a square footage based formula can provide a relative indication of a facility’s parking demand, the use of square footage is arbitrary in that all square footage within a medical center is treated uniformly (with respect to its intensity of use, hence parking demand). Basing parking requirements on the number of employees may be a more accurate measure for determining a facility’s parking demand. The following formula is suggested as an alternative to the Town’s formula:

- 1 space per patient bed
- 1 space per exam room
- 1 space per day shift employee

Both of these methodologies have their strengths and weaknesses and as demonstrated below, both formulas provide similar parking numbers when applied to the existing campus. More importantly, both formulas provide a parking number that is very close to the total parking needs of VVMC. As further explained below, the employee-based formula is the most appropriate and accurate formula for determining the VVMC parking demand.

EXISTING PARKING CONDITIONS

Applying the Town parking formula to the existing VVMC campus results in 870 spaces and after application of a 20% multi-use credit the parking requirement is 697 spaces.

Applying the employee-based formula to the existing VVMC campus results in 782 spaces and after application of a 17.5% multi-use credit the parking requirement is 645 spaces.

While the parking requirement numbers above are very similar, they are based on formulas and may not reflect actual parking conditions, or VVMC’s existing parking demand. The table below summarizes actual parking needs, or resources at VVMC:

7. PARKING

407	On-site spaces (located in West Lot, East Structure, US Bank Building)
60	Employee-issued ECO bus passes
32	Average number of employees who utilize VVMC shuttles
120	TOV/Lionshead parking and season parking passes purchased (2013/14 ski season)
<u>53</u>	Off-site leased spaces
672	Total spaces

VVMC provides patient, guest and employee parking with a combination of on-site parking, off-site/leased parking and managed parking (employee bus pass and shuttles). These 672 “actual” spaces fall mid-way between two zoning calculations, in essence validating the accuracy of the two parking formulas.

This information can also be used to define the existing parking deficit at VVMC. Assuming 672 is VVMC’s required parking, there are currently 499 “code compliant” parking spaces (407 on-site spaces and 92 “managed” spaces), and as such the existing parking deficit is approximately 173 spaces.

PARKING REQUIREMENTS OF MASTER PLAN AND EXPANSION

The increased parking demand from expansions contemplated by the Master Plan is expected to be relatively low. While there are plans for expansion of medical space and exam rooms that will generate more employees and increased patient activity that will result in increased parking demand, there are many improvements such as the re-designed Emergency Department that will not increase capacity or employees, hence not increasing parking demand. Final determination of new parking demand and plans for addressing this demand will be made by the PEC during the CUP process.

Assuming the use of the employee-based parking formula, the increased parking demand from the Master Plan expansion is anticipated to be approximately 80 additional spaces, for a total estimated parking demand of approximately 750 spaces. Final determination of parking requirements will be made during the review of CUP applications.

Upon completion of the Master Plan expansion all required parking will be provided by on-site parking spaces and other “managed” parking solutions, in accordance with the Town’s adopted parking regulations. On-site parking will be provided in the US Bank Building, the West Parking Lot, new surface spaces (created when the ambulance building is removed), and a new parking structure at the east end of the campus. As has been done in the past, managed programs will be used to satisfy a portion of VVMC’s parking requirement. Parking management will include a variety of programs to include:

- Continuing the use of employee shuttles
- Continuing the use of the Employee ECO bus pass program
- Valet Parking
- Use of compact spaces
- Implementation of parking management strategies to increase the efficiencies of how parking spaces are utilized

During the construction of the new East Wing parking structure, interim off-site parking will be needed for approximately two years. It is anticipated that these spaces will be addressed by leasing off-site spaces and providing expanded employee shuttle and bus pass programs. Details on these programs along with additional information on the number of required parking spaces, the manner in which new parking will be provided, and parking

7. PARKING

management plans will be provided with subsequent development applications.

The potential land exchange between VVMC and the Evergreen Lodge may influence VVMC's final design solutions for parking. Refer to Chapter 10 –Potential Land Exchange with Evergreen Lodge for more information.

8. EMERGENCY HELIPAD

GOAL

Establish an emergency helipad within the VVMC campus that is located to provide a direct internal connection to the new Emergency Department and with sensitivity to the surrounding neighborhood.

EXISTING EMERGENCY HELIPAD

The existing helipad that serves VVMC is located north of South Frontage Road and immediately west of the Vail Town Hall. This helipad has been used by VVMC for the past 30 years. A helipad is an essential element of a medical facility such as VVMC. On average, approximately 70 helicopter transports occur each year. The vast majority of these are scheduled transports of patients from VVMC to other healthcare facilities.

While the existing helipad has served its purpose in supporting emergency air transport, there are shortcomings with the current helipad and it needs to be relocated. The fundamental limitation of the existing helipad is that it requires the transfer of the patients to and from VVMC via an ambulance. The most significant implication of this is increased risk to the patient and the additional time required to transfer the patient (also adding risk). In addition, the transfer monopolizes the use of an ambulance and crew and also necessitates Police Department personnel to temporarily close South Frontage Road. None of these shortcomings would be addressed by an off-site helipad. It is for these reasons that only an on-campus helipad would improve existing conditions and meet the highest standards of patient care.

The evaluation of alternative locations for the emergency helipad and recommendations for the preferred location were completed with the assistance of HeliExperts International LLC and Caycee

Batterson of CLB Enterprises. The Preliminary Heliport Feasibility & Design Study Report, January 15, 2015 by HeliExperts LLC is found in the appendix of this Master Plan.

EMERGENCY HELIPAD SITE ALTERNATIVES

Four potential on-site helipad locations were evaluated. Depicted on Figure 14 below, these alternatives were evaluated based on the following considerations:

- Safety
- Patient transfer requirements to/from the Emergency Department
- FAA and NFPA standards
- Aircraft performance
- Community Impact



Fig. 14 - On-site helipad location alternatives

Each of the four on-site alternatives involves rooftop solutions and each location could accommodate a helipad that conforms to applicable guidelines of the FAA Advisory Circular relative to flight paths and other aeronautical considerations.

8. EMERGENCY HELIPAD

Alternatives B and D each presents challenges with respect to their relationship to the future location of the Emergency Department and each of these locations would have significant impacts on the surrounding neighborhood. For these reasons both B and D were dropped from consideration. While Alternative C has a very convenient relationship to the future location of the Emergency Department, the flight path to this alternative location would follow the Gore Creek corridor to the west and while this flight path would conform to FAA guidelines it would have significant impacts on residential uses located along this corridor. For this reason Alternative C was dropped from consideration.

Alternative A is the preferred location for the emergency helipad due to its proximity to the future location of the Emergency Department, conformance with applicable FAA guidelines, and limited impacts to the surrounding neighborhood.

PROPOSED EMERGENCY HELIPAD LOCATION

The proposed helipad is located adjacent to South Frontage Road on a portion of the campus that is not encumbered by the Evergreen covenant restriction. The helipad will be designed in concert with the design of VVMC's new Front Door to ensure efficient site access and circulation. The proposed location allows for an easterly flight path that would pass over the Town Hall site and then run parallel with the I-70 corridor. The westerly flight path would follow South Frontage Road and gradually align with the I-70 corridor. Refer to Figure 16 on page 31.

At this master plan level, it is assumed that the elevation of the helipad will be approximately 75' above the top level of the existing VVMC parking structure. The helipad is set



Fig. 15 - Proposed helipad location

at this elevation in order to not negatively impact the future development of surrounding properties. Based on conceptual studies, with the helipad at 75' the Evergreen Lodge could develop to the maximum allowable 82.5' building height (for habitable space) anywhere within zoning or town master plan prescribed setbacks and have no impact on the western flight path of the helicopter. The Town Hall site could be developed to just over 60' and have no impact on the eastern flight path of the helicopter.

In addition to a maximum allowable building height of 82.5', town zoning allows up to an additional 15' of building height for "architectural projections" such as towers, spire, cupolas, flagpoles and similar features not usable as habitable floor area. Based on conceptual studies, the majority of the Evergreen site could accommodate the maximum 15' architectural projection with no impact to the westerly flight path of the helicopter. There is, however, a corridor along the northern side of the Evergreen

8. EMERGENCY HELIPAD

Lodge in which a 15' architectural projection could impact the westerly flight path (penetrate the FAA prescribed obstruction surfaces). Solutions to address this potential situation are to elevate the helipad to eliminate the impact or for any architectural projection above 82.5' that may be proposed by the Evergreen be located to not impact the flight path and FAA obstruction surfaces.

FUTURE STEPS IN THE REVIEW OF EMERGENCY HELIPAD

The Town's Master Plan evaluation of the proposed helipad is the first of many steps in the review process. Following Master Plan approval, VVMC will complete additional work on the conceptual design of the helipad, coordinate with helipad users and then submit notice of the proposed helipad to the FAA. The FAA will then conduct an initial review of the proposal. At this same time, more detailed information on the design and operation of the helipad will be submitted to the Town as part of a CUP application. In addition, an Environmental Impact Report will be provided as an element of the CUP application.



Fig. 16 - Proposed helicopter approach and departure flight paths.

The following provisions shall be provided in the detailed design and CUP application for the helipad:

1. Installation and operation of an approved, on-site automated weather observing system (AWOS)
2. Install an aviation approved wind sock, lighting, etc. atop the new helipad building
3. Preparation and use of pilot briefing sheets and an operational training and reference manual for the VVMC emergency helipad to ensure that the emergency helicopter pilots using the emergency helipad are informed in advance of any unique conditions, circumstances, or factor that must be considered when flying in or out of Vail.
4. Preparation of an "Emergency Action Plan" that is prepared in cooperation with the Vail Fire and Police Department.
5. VVMC will establish operating procedures via an Operational Agreement with helicopter providers that will ensure that designated flight paths are used unless weather or other considerations determined by the pilot necessitates the use of alternative flight paths.

Following approval of a CUP application VVMC will coordinate with the FAA on a "favorable determination of air space" for the helipad. Upon issuance of building permits and construction of the helipad, the FAA may, at their discretion, complete a final inspection of the helipad.

The potential land exchange between VVMC and the Evergreen Lodge may influence VVMC's final design solutions for the Helipad. Refer to Chapter 10 –Potential Land Exchange with Evergreen Lodge for more information.

9. OTHER CONSIDERATIONS

The following section addresses zoning/development review considerations and other topics relative to expansion plans envisioned by the Master Plan. Many of these topics will be addressed in greater detail during the review of subsequent development applications.

EMPLOYEE HOUSING

GOAL

To provide employee housing consistent with provisions of Chapter 23 of the Vail Town Code.

Chapter 23 - Commercial Linkage of the Town's zoning regulations stipulates that "commercial development or redevelopment shall mitigate its impact on employee housing by providing Employee Housing Units (EHUs) for twenty percent (20%) of the employees generated." Further, that "employee housing impacts need only be mitigated for a redevelopment that results in a greater number of employees generated from an increase in net floor area." As such VVMC's requirement is to provide housing for 20% of the new employees resulting from the proposed expansion.

Chapter 23 of the Town code provides a table of employee generation rates for a variety of different land uses. Hospitals and medical facilities are not included in this table. In accordance with the ordinance, in such cases it is incumbent on the applicant to provide documentation of employee generation anticipated from the project.

VVMC and other entities that operate within the campus (i.e. Colorado Mountain Medical, The Steadman Clinic, etc.) include approximately 550 employees. It is anticipated that as the

Master Plan expansion is implemented employees will increase to approximately 610, an increase of 60 employees. By way of example, assuming 60 new employees and the Town's 20% housing requirement, housing for 12 employees would be required. This housing may be in the form of dormitory; studio; or 1, 2 or 3 bedroom units. Final determination of new employee generation will be made during the CUP review process.

Chapter 23 stipulates that 50% of required employee housing be located "on-site" with the provision that exceptions can be made to this requirement if any one of four findings are met. For two reasons all required employee housing will be provided off-site – residential is incompatible with the institutional uses at VVMC and the limited land area afforded by the campus is best utilized for addressing medical and related needs of VVMC.

Detailed information on employee generation, the exception to the on-site requirement, and an employee housing plan will be provided in subsequent development applications.

ZONING

Existing zoning of the VVMC campus includes three different zone districts. The majority of the campus is zoned General Use (GU), the US Bank Building site is zoned Special Development District (SSD #23), and a portion of land along South Frontage Road (recently purchased from the Evergreen Lodge) is zoned Lionshead Mixed Use – 1. Figure 17 on the following page depicts the zoning of the VVMC campus. The following summarizes the existing zoning of these three areas relative to the proposed master plan.

General Use Zoning

The majority of the campus is zoned GU. The purpose of the GU district is intended for use on sites with public and quasi-public

9. OTHER CONSIDERATIONS

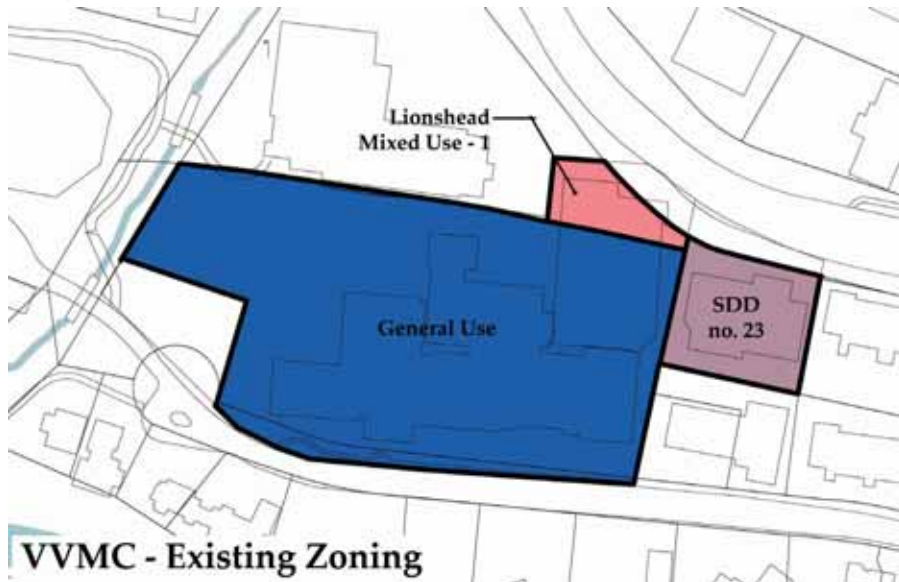


Fig. 17 - VVMC existing zoning.

uses and this zone district has been the primary tool for reviewing the development of VVMC for many decades. “Healthcare facilities” are a Conditional Use in the GU District. There are no changes proposed to this zoning.

The potential land exchange between VVMC and the Evergreen Lodge may influence VVMC’s final design solutions for General Use Zoning. Refer to Chapter 10 –Potential Land Exchange with Evergreen Lodge for more information.

Lionshead Mixed Use-1 Zoning

This small portion of the VVMC campus was zoned LHMU-1 when acquired from the Evergreen Lodge. The LHMU-1 district does not allow for medical facilities, medical offices or clinics. For this reason the re-zoning of this portion of the campus to GU will be proposed as an element of future development applications.

The potential land exchange between VVMC and the Evergreen Lodge may influence VVMC’s final design solutions for Lionshead Mixed Use-1 Zoning. Refer to Chapter 10 –Potential Land Exchange with Evergreen Lodge for more information.

SDD Zoning

VVMC purchased the US Bank Building in 2005. At that time, the property was used as a professional office building and was zoned SDD #23. Since that time, VVMC has converted many office uses within the building to medical uses or office uses directly related to VVMC. These medical uses are permissible by SDD #23.

While the majority of the building has evolved into a medical office building, the bank use is expected to remain for the foreseeable future. VVMC’s ultimate plan is for all uses within the building to be medical-oriented and it is anticipated this will occur once the bank vacates the building. At that time it is expected that the property will be re-zoned to the GU district.

There are two reasons for not re-zoning this portion of VVMC to GU at this time. The existing bank building is physically separate from the rest of the buildings on the VVMC campus and as such there are no real regulatory complications from having two different zone districts in place on the VVMC campus. More importantly, the “banks and financial institutions” are not permitted in the GU district. Re-zoning the property to GU would make the existing bank a non-conforming use and this could create future unintended or unforeseen consequences.

9. OTHER CONSIDERATIONS

VAIL LAND USE PLAN

The Vail Land Use Plan includes references to VVMC. It is intended that this Master Plan supersede all reference to VVMC found in the Vail Land Use plan. The Vail Land Use Plan shall be modified to create a new land use designation specific to VVMC.

TOV LANDS

The adjacency of Lot 10 to the west side of the VVMC campus presents a meaningful opportunity for the long-term growth of the hospital. While small in size, Lot 10 could nonetheless be a key factor in providing future hospital improvements at the west end of the campus.

VVMC remains interested in working with the Town regarding the future acquisition of this parcel. Doing so could facilitate VVMC's ability to pursue expansion plans on the West Lot at some point in the future.

The potential land exchange between VVMC and the Evergreen Lodge may influence VVMC's final design solutions for TOV Lands. Refer to Chapter 10 –Potential Land Exchange with Evergreen Lodge for more information.

FUTURE EXPANSION POTENTIAL AT VVMC

GOAL

To ensure that opportunities remain to accommodate future expansions to VVMC beyond those contemplated by this Master Plan.

Expansions and improvements outlined in this Master Plan are planned to meet the needs of VVMC for many years. In doing so

these improvements will provide facilities that will allow VVMC to serve the community with state-of-the-art, high quality health-care.

It is difficult to speculate on expansions or improvements beyond those envisioned by this Master Plan. That said, as medical services and technology evolve over the next few decades, it is reasonable to assume that over time additional changes to VVMC will be necessary. VVMC would have two options available for future expansion and improvements to the campus:

US Bank Building

Since it was purchased by VVMC in 2005, this building has evolved into a nearly exclusive medical office building. As a part of the changes to the main hospital campus outlined by this Master Plan, the US Bank Building will be used to accommodate some uses that are currently located on the main campus. As such the building plays a key role in the overall master plan for VVMC by providing support/ancillary medical space for the hospital. A significant amount of resources have gone into renovations to this building in order to facilitate these uses. Over time, it may be possible to demolish this building and redevelop it with more direct, physical integration with the main campus. This would represent one alternative for how VVMC could address future long-term needs.

West Lot

The West Lot is a location that could accommodate a new building at some point in the future. This would likely necessitate below-grade structured parking. Access to this building (and parking) would be possible via South Frontage Road and the new main entry to VVMC.

9. OTHER CONSIDERATIONS

No specific work has been done in preparing long term improvement/expansion plans for the West Lot or the US Bank Building. This Master Plan does, however, acknowledge how these two areas provide VVMC with options for how future unforeseen needs could be accommodated on the campus.

The potential land exchange between VVMC and the Evergreen Lodge may influence VVMC's final design solutions for future expansion potential. Refer to Chapter 10 –Potential Land Exchange with Evergreen Lodge for more information.

10. POTENTIAL LAND EXCHANGE WITH EVERGREEN LODGE

The underlying premise of a VVMC/Evergreen land exchange is that modifying the common boundary between the two properties enhances the redevelopment opportunities of both properties, opportunities that would not be possible with existing parcel boundaries. Enhanced redevelopment opportunities include not just the specific development potential of each property, but also how the design and development of each site could be accomplished to create a seamless transition between each property and to better address community-oriented goals and objectives.

VVMC and the Evergreen Lodge have evaluated a potential land exchange and determined that at a conceptual level a land exchange could provide benefits to both parties and also result in redevelopments that further the Town's development objectives. This section summarizes the main elements of a land exchange, elements of the VVMC master plan that would change in the event of a land exchange and next steps on the potential land exchange.

MAIN ELEMENTS OF THE LAND EXCHANGE

The concept of the land exchange involves VVMC conveying a portion of its west parking lot to the Evergreen Lodge in exchange for the easternmost corner of the Evergreen site. Land acquired by the Evergreen Lodge would be used to link the future redevelopment of the Lodge directly to West Meadow Drive. VVMC would utilize the easternmost portion of the Evergreen site to shift the location of the helipad building and in doing so create more room for the main entry to the hospital. Figure 18, a conceptual site plan of VVMC's expansion plans with the land exchange is found on the following page.

In addition to the exchange of land, there are two other significant elements of the potential land exchange. In 1989 VVMC agreed to a number of protective covenants benefitting the Ever-

green Lodge that significantly restricted the future development of the VVMC site. A key element of the land exchange would involve the Evergreen Lodge releasing many of these restrictions and in doing so create future expansion opportunities beyond what is currently possible. A major focus of redevelopment plans for the Evergreen Lodge is to create a strong pedestrian connection to West Meadow Drive. A second aspect of the land exchange would involve VVMC cooperating with the Evergreen Lodge on site and landscape improvements necessary for the Evergreen Lodge to create a new public space that will establish this connection. These two considerations will provide important benefits to each property and also to the broader community.

LAND EXCHANGE INFLUENCE ON VVMC REDEVELOPMENT MASTER PLAN

If the land exchange is implemented the vast majority of the expansion plans outlined in this redevelopment master plan will remain unchanged. For example, there would be no changes to the design of the West Wing (and it will remain the initial step in the construction process regardless of a land exchange), and the major elements of the East Wing will be largely unchanged. Changes to expansion plans that would result from the land exchange are relatively subtle, but none the less important to the future development of VVMC. The following highlights how specific elements of this Master Plan would be influenced by the land exchange:

Pedestrian Circulation

The VVMC redevelopment master plan currently includes a north/south pedestrian connection along the eastern edge of the site. The pedestrian connection planned by the Evergreen Lodge would potentially be a better pedestrian solution and could eliminate the need for the connection at the east end of the VVMC site. This decision could be made during the CUP review of the East Wing.

10. POTENTIAL LAND EXCHANGE WITH EVERGREEN LODGE



Figure 18 - Conceptual site plan with Evergreen land exchange.

10. POTENTIAL LAND EXCHANGE WITH EVERGREEN LODGE

Middle Creek

The VVMC redevelopment master plan outlines options for improving storm water run-off from the west parking lot. The land exchange would convey this portion of the VVMC site to the Evergreen Lodge. Consideration will be given to this potential change of ownership (and future development plans) when making final decisions on specific storm water improvements for the west parking lot.

Delivery and Service

VVMC will re-evaluate the potential for a shared facility with the Evergreen Lodge and the ability to provide delivery and service vehicle access via South Frontage Road.

Parking

Conveyance of a portion of the west lot to the Evergreen Lodge will remove approximately 25 parking spaces from VVMC. The loss of these spaces will need to be incorporated into the overall parking plan for VVMC. This will be addressed during the CUP process for the East Wing.

Helipad Building and Entry to VVMC

Acquiring a portion of the Evergreen site will allow the helipad building to shift to the northwest. This shift will create more room for the new Front Door to VVMC (vehicular circulation, patient drop-off, etc.) and allow for an improved arrival experience for all hospital users. Relief to current covenant restrictions will also allow for greater flexibility in the design of the East Wing and the main entry into the hospital. Based on an initial review by HeliExperts LLC, the shift in the helipad will have no appreciable impact on the planned arrival and departure flight paths.

LH Mixed Use Zoning and other Zoning Considerations

The portion of Evergreen land that may be acquired by VVMC is currently zoned LHMP-2. If acquired, this land should be rezoned

to the General Use District so zoning is consistent with the adjoining VVMC property.

TOV Lands

VVMC remains interested in acquiring Lot 10 from the Town of Vail. Redevelopment plans for the Evergreen Lodge, particularly with respect to the planned pedestrian connection, may influence the future use of Lot 10. As an element of the land exchange discussions, VVMC, the Evergreen Lodge and the Town of Vail will coordinate on what role, if any, Lot 10 may play in final design solutions for VVMC and the Evergreen Lodge.

Future Expansion Potential

If covenant restrictions are released by the Evergreen Lodge there will be a significant and very positive change to the future expansion potential at VVMC. Currently future expansions to VVMC beyond what is contemplated by this Master Plan are limited to the West Lot and the US Bank Building. Existing covenant restrictions limit the height, building footprint and location of any new building in the West Lot. Covenant restrictions do not limit the redevelopment potential of the US Bank Building; however, this site is somewhat detached from the rest of the campus. While the West Lot and the US Bank Building do provide potential for future expansions to VVMC, expansions in these areas would be difficult to integrate with rest of the campus.

The potential land exchange would include a significant degree of relief to existing restrictive covenants. Figure 19, the conceptual massing diagram on the following page depicts where additional building expansion could occur if covenant restrictions are modified. These areas of future building expansion would be more viable to VVMC (than existing expansion potential) given their relationship and proximity to existing facilities. The importance of this covenant relief to the long-term future of VVMC will be realized by the community over time.

10. POTENTIAL LAND EXCHANGE WITH EVERGREEN LODGE

NEXT STEPS WITH LAND EXCHANGE

There are two key steps with regard to making a final decision on the land exchange. The first of these is for VVMC and the Evergreen Lodge to continue their discussions on the more detailed aspects of the land exchange. The second is to coordinate with Vail Resorts. When Vail Resorts conveyed land to VVMC for the hospital the conveyance included the condition that the land be used “for purposes directly relating to medical services”. If this condition is violated, the property could, at VR’s option revert back to them. For the land exchange to occur, Vail Resorts will need to modify this condition such that residential/condominium use is permissible on the portion of the West Lot that would be acquired by the Evergreen Lodge.

In the event the land exchange is realized, both parties would continue to coordinate on the planning and design of their respective projects. It is assumed that the Evergreen Lodge would initiate a planning process for their redevelopment. VVMC would proceed with the obtaining CUP approvals and initiating construction of the West Wing (the West Wing is currently planned as the first sequence of construction and this would not change with or without a land exchange). VVMC would then modify detailed designs of the East Wing to reflect changes made possible by the land exchange (shifting location of helipad building and design of VVMC entry off of South Frontage Road). These detailed designs would then be submitted to the Town for review as part of a CUP application.

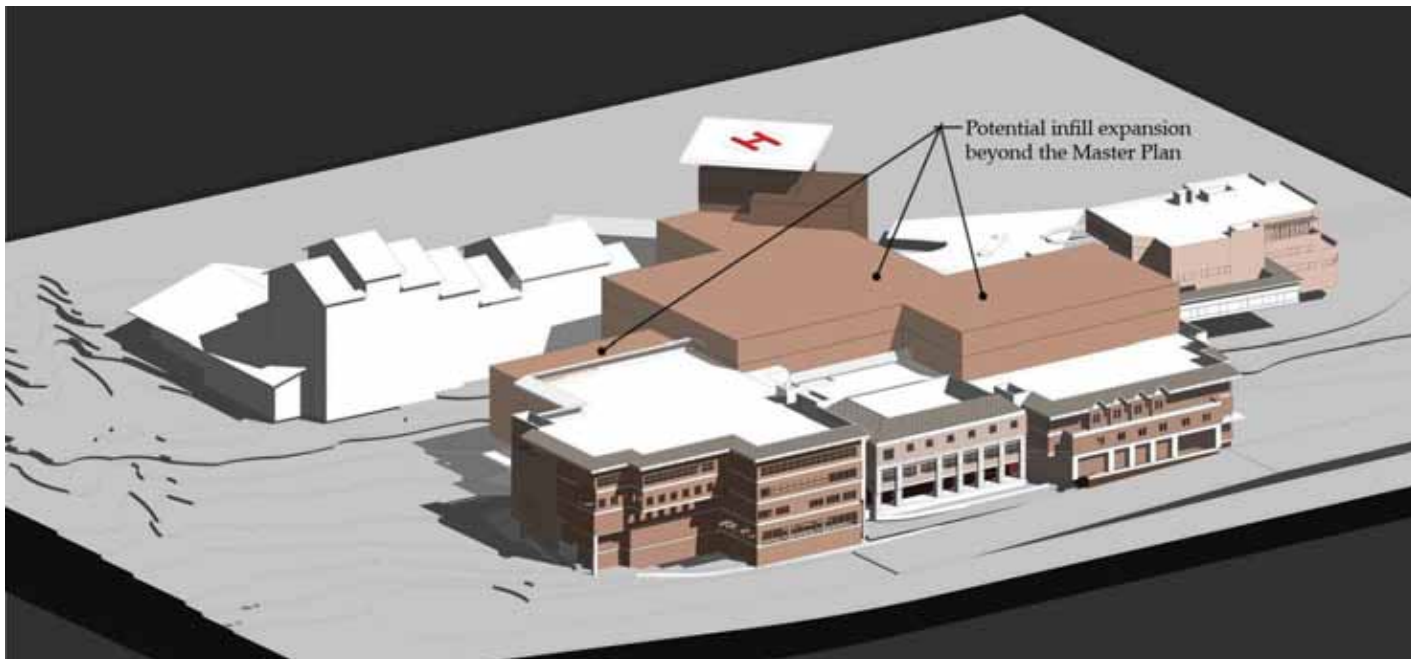


Fig. 19 - Conceptual massing study of future VVMC infill/expansion potential with relief of existing covenant restrictions.