

FINDINGS OF CONSISTENCY WITH CRITERIA FOR REVIEW**(1) Boulder Valley Comprehensive Plan:**

✓ **(A) The proposed site plan is consistent with the land use map and service are map and, on balance, the policies of the Boulder Valley Comprehensive Plan.**

BVCP Land Use Map Consistency: Public Designation

The BVCP map should be interpreted consistent with the BVCP which states that the BVCP map provides a sketch plan of the desired land use pattern in the Boulder Valley. Land use designations are aspirational and indicative of the broad goals of the city as compared to the regulatory aspects of zoning. *"Whereas the BVCP Map provides a generalized picture of desired future uses in the Boulder Valley, the city zoning map assigns every parcel of land in the city a zoning district. This regulates allowable uses, density, and more."* The BVCP Land Use Designation for most of the property is "Public," defined on page 62 of the 2010 BVCP as follows:

"Public/Semi-Public land use designations encompass a wide range of public and private non-profit uses that provide a community service. This category includes municipal and public utility services such as the municipal airport, water reservoirs, and water and wastewater treatment plants. Public/Semi-Public also includes: educational facilities, including public and private schools and the university; government offices such as city and county buildings, libraries, and the jail; government laboratories; and nonprofit facilities such as cemeteries, churches, hospitals, retirement complexes and may include other uses as allowed by zoning."

The Public Land Use designation describes public and institutional-type uses but also envisions other uses as allowed by zoning. The proposed site plan is for a congregate care facility use, a (subacute rehabilitation) hospital use with a warm water therapy pool, and a parking use. Hospitals uses are allowed by-right in the Public zoning district as is the chapel and both would be open to the public. Congregate care and parking uses are allowed in the Public zoning district subject to a Use Review. Consistency of the proposed uses with the Use Review criteria can be found under Key Issue 2 of the Staff Memorandum. The proposed uses would have operating characteristics and impacts similar to those of the nonprofit hospital and retirement complex uses listed as examples of uses anticipated under the land use designation. The proposed use, operating characteristics, and impacts are also similar to those of other institutional uses anticipated in this zoning district. For example, a public or private college or university where they also house, feed, employ and provide entertainment for residents. Staff notes that the impacts on the site would likely be less intensive than those of other uses of this zoning district, as described in Key Issue 2.

BVCP Land Use Map Consistency: OS-O Designation

The BVCP Land Use Designation for the approximately four-acre area encompassing the former Hospital Nurses Dormitory and parking lot area is "Open Space-Other," defined on page 62 of the 2010 BVCP as follows:

"Other public and private land designated prior to 1981 that the city and county would like to preserve through various preservation methods including but not limited to intergovernmental agreements, dedications or acquisitions."

Open Space designations in the BVCP map include three categories of land: land already acquired by the City or County for open space purposes (Open Space-Acquired); privately owned land with conservation easements or other development restrictions (Open Space -Development Restrictions); and Open Space-Other. The BVCP further states that:

"Open Space designations indicate that the long-term use of the land is planned to serve one or more open space functions. However, Open Space designations may not reflect the current use of the land while in private ownership."

Open Space land use designations differ from most other land use designations in that the city's zoning does not have a corresponding zoning district. Here the OS-O area is zoned "Public" where development is permitted under the development standards. This property is in private ownership without restriction from contractual development restrictions for the benefit of the City, and the current use of the land may therefore not necessarily reflect the Open Space designation.

The OS-O designation in this area of the property is unusual in that most of this area of the property has been developed since the 1930s with the Nurses' Dormitory building and an access road and private parking area. In addition, a number of heavily-used social trails have affected the natural vegetation of the areas that are not developed. There are no natural areas on the property that are, or are characterized by, natural terrain, geologic formations, flora or fauna that are unusual, spectacular, scientifically valuable, or unique, or that represent outstanding or rare examples of native species. The Dakota Ridge trail crosses the northwest corner of the OS-O designated area and City Open Space to the north and west of the area have been accessed through three access points in the OS-O area.

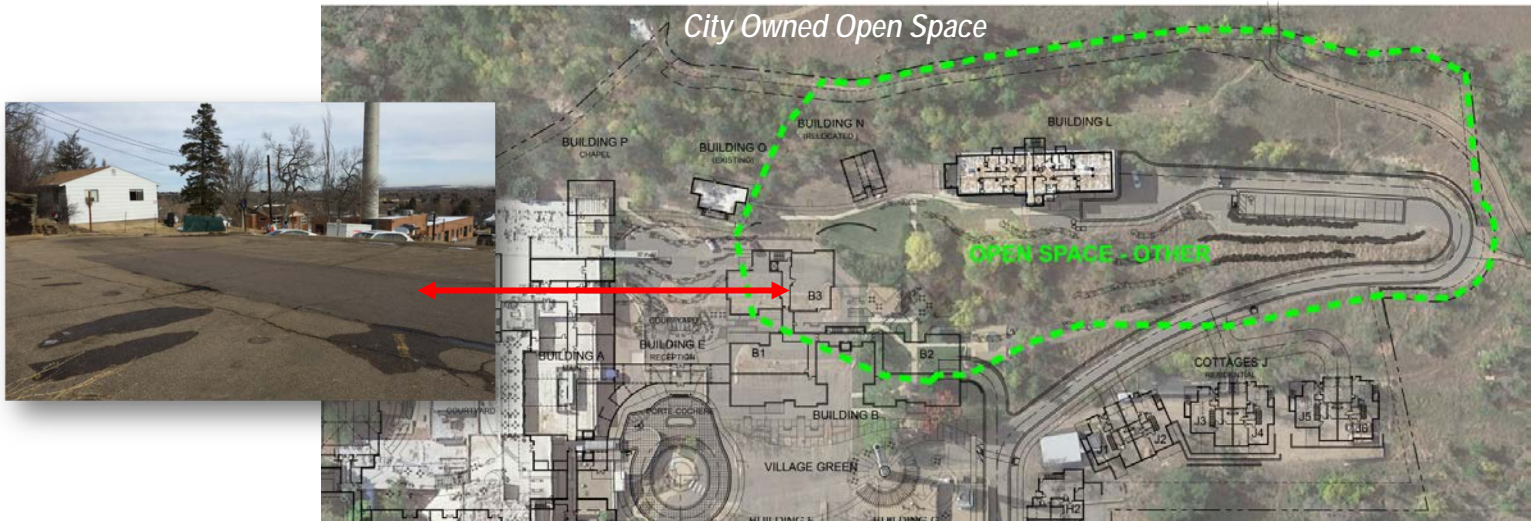
The proposed plans cluster the density of the development in the lower and central area of the property with no additional density on the area nearest the City's Open Space property to the west. As shown below, the applicant is proposing to locate a portion of the "B" building units onto the existing lower surface parking lot, as shown below, that is also included in the OS-O area. However, that existing parking lot does not meet any of

the purposes of Open Space-open land: as can be seen in the photos below, the lower parking lot it is not consistent with the City's Charter for Open Space that is intended to preserve:

"natural area (terrain, geologic formations, flora, or fauna that are unusual, spectacular, historically important, scientifically valuable, or unique, or represent outstanding or rare examples of native species)." The lower parking lot does not "preserve water resources, is not a scenic area or vista, a wildlife habitat or a fragile ecosystem."

Similarly, the parking lot does not preserve land for passive recreation, agricultural use, limiting urban sprawl, prevent floodplains nor does it preserve land for aesthetic value that are also stated purposes for open space.

In addition, on Feb. 3, 2018, the Open Space Board of Trustees considered acquisition of property in the OS-O portion of the 311 Mapleton property including the lower parking lot, and unanimously passed a motion that the city not pursue fee acquisition of the OS-O portion. The OSBT did indicate support of the Site Review process as a means of securing public access and maintenance rights over existing trail corridors located at the far northern and western boundaries of the property but not in acquiring in fee (purchase) other portions of the OS-O.




Consistent with the purposes of Open Space, the proposed plans are consistent with the BVCP map in that the open space values that exist on the site are being preserved as follows:

- preserves undeveloped portions of the OS-O area directly adjacent to the City's Open Space property in their natural state;
- restore areas damaged by heavily used social trails through revegetation;
- conveys an easement to the City for that portion of the Dakota Ridge trail that crosses through the property on the northwest corner subjecting the area to City management and enforcement;
- conveys an easement to the City to preserve and restore the trail on the eastern bank of the Silver Lake Ditch subjecting the area to City management;
- preserves existing access points from the property onto the City's Open Space (to the Dakota Ridge trail and along the Silver Lake Ditch)
- establishes a Conservation Area to restrict development on the slope above the former nurses dormitory to create a buffer from the buildings to the open space;
- preserves the undeveloped mountain backdrop of the City and public views of the scenic Dakota Ridge on the City's Open Space property
- preserves broad views of the city from the City's Open Space trails adjacent to the property

Service Area Map. The entire 15.77 acre site is located within Planning Area I, defined as, *"the area within the City of Boulder that has adequate urban facilities and services and is expected to continue to accommodate urban development."* Development of the site is inconsistent with the service area map.

BVCP Policies. The proposed Congregate Care facility plan, on balance, meets a number of BVCP policies as presented in the following table:

BVCP Policy	Excerpt from 2010 BVCP (and 2015 BVCP as added)	How the Application is <u>Consistent</u> with BVCP Policies
2.03 Compact Development Pattern	<i>"The city and county will, by implementing the comprehensive plan (as guided by the Land Use Designation Map and Planning Areas I, II, III Map) ensure that development will take place in an orderly fashion, take advantage of existing urban services, and avoid, insofar as possible, patterns of leapfrog, noncontiguous, scattered development within the Boulder Valley. The city prefers redevelopment and infill as compared to development in an expanded Service Area to prevent urban sprawl and create a compact community."</i>	<p>The site has been developed for over 100 years. While it is on the western edge of the city it is considered "infill" in that it is located well below the Blue Line (approximately 480 feet above) that established the limit for urban development. As indicated in this policy, the city prefers redevelopment and infill as this application represents.</p> 
2.09 Neighborhoods as Building Blocks	<i>"foster the role of neighborhoods to establish community character, provide services needed on a day-to-day basis, foster community interaction, and plan for urban design and amenities. All neighborhoods...should offer unique physical elements of neighborhood character and identity, such as distinctive development patterns or architecture; historic or cultural resources; amenities such as views, open space, creeks, irrigation ditches, and varied topography; and distinctive community facilities"</i>	<p>The proposed project meets this criteria in that there is an existing historic use of the site for care-giving purposes. In the past 100 years, the site served as a hospital and the proposed project intends to value that tradition of care-giving as a congregate care facility. In addition, the planned community-serving function of the subacute rehab facility and therapy pool, both provide valuable community resources for members of the greater Boulder community. As a planned new neighborhood, the proposed project has distinctive characteristics that include preservation of several historic resources on the site, building elements that reference the surrounding neighborhood, varied topography and views.</p>
2.21 Commitment to a Walkable and Accessible City	<i>"Promote the development of a walkable and accessible city by designing neighborhoods and business areas to provide easy and safe access by foot to places such as neighborhood centers, community facilities, transit stops or centers, and shared public spaces and amenities."</i>	<p>The location of the project site adjacent to an established residential area and within a few blocks of the west Pearl district will allow a high degree of walkability and accessibility, both for residents of the proposed development as well as visitors and people using the public facilities. The design of the project is also highly walkable, with strong connectivity provided by paths and walkways.</p>
2.24 Preservation of Historic and Cultural Resources	<i>"The city and county will identify, evaluate and protect buildings, structures, objects, districts, sites and natural features of historic, architectural, archaeological, or cultural significance with input from the community. The city and county will seek protection of significant resources through local designation when a proposal by the private sector is subject to discretionary development review."</i>	<p>There are four historic resources on the site that are proposed for landmark designation: the former Nurses Dormitory; the smokestack; the stone cottage; and the 1920s duplex cottage. Through the development review application, the city is seeking protection of these identified resources through a condition of approval that requires the applicant apply for landmark designation. An Historic Assessment of the existing buildings on the site was prepared by the applicant, and affirmed by staff, and is found in Attachment D. Staff agreed with the assessment with the exception of the findings about the smoke staff in which the assessment recommended demolition. As noted in the Initial</p>

		<p>Reviewer Comments (Attachment I):</p> <p><i>"The smokestack is arguably, the most important and iconic feature of the property intrinsic to the history of sanatorium/hospital facility. In addition to being eligible for local landmark designation, staff considers that the smokestack is likely eligible listing in the National Register of Historic Places. There are numerous examples of such smokestacks being designated and integrated into redevelopment projects including, the Ohio-Colorado Smelting and refining Company Smokestack in Salida, Colorado, the Lucky Strike Smoke Stack in Richmond, Virginia, the Don Valley Brickworks in Toronto, Ontario and the Inujima Seirenscho Art Museum, Japan."</i></p>
2.32 Physical Design for People	<i>"To ensure that public and private development and redevelopment be designed in a manner that is sensitive to social, health and psychological needs. Broadly defined, this will include factors such as accessibility to those with limited mobility..."</i>	The proposal to construct a congregate care facility with 93 independent living units and 12 memory care units along with a 42-bed sub-acute rehabilitation and skilled nursing facility is consistent with this policy.
2.41 Enhanced Design for Private Sector Projects	<p>(a) <i>The context</i></p> <p>(b) <i>Relationship to the public realm.</i></p> <p>(c) <i>Transportation Connections</i></p> <p>(d) <i>Human Scale</i></p> <p>(e) <i>Permeability.</i></p> <p>(f) <i>On-site open spaces.</i></p> <p>(g) <i>Buildings</i></p>	<p>(a) The proposed project on a 15.77 acre property that has been a medical use since the turn of the last century, bridges the adjacent residential context with this century long context. The primary interface between the subject site and the adjacent Mapleton Hill residential is along 4th Street. In this context, the applicant (taking cues from Planning Board's Concept Plan comments) established seven independent living cottages along 4th Street in the project plans. The cottages reflect the pattern of development on the east side of 4th Street.</p> <p>(b) The interface with the public streets of Mapleton Avenue and 4th Street are well designed by removing parking lots and placing <i>"buildings and landscaped areas – not parking lots"</i> present a well-designed face to the public realm as required in this criterion.</p> <p>(c) The site is constrained from creation of through- roadways on the west and north by adjacent open space land use on the west property line and a steep topographic drop on the north property line. However, taking cues from Planning Board's Concept Plan comments, the applicant established a grid like pattern of streets onto the existing terraced site. There are two public streets that terminate at the site: Maxwell and Concord avenues. While Concord Avenue terminates at the surgery center planned to remain; Maxwell Avenue terminates at the center of the site. In this location, the applicant proposed one of the two primary access points into the site; the other being off of Mapleton Avenue. In both cases, the access points are in keeping with standard block lengths from the intersection of 4th Street and Mapleton Avenue of approximately 300 linear feet. With a modified grid pattern, there are opportunities to walk from both 4th Street and Mapleton Avenue into the site. Further, the applicant has provided a good neighbor policy (as part of the Written Statement in Attachment C). that will permit continued pedestrian access into and through the site an access point at the top of the site onto the Dakota Ridge Trail.</p> <p>(d) Refer to criterion (F)(v) below.</p> <p>(e) The project provides opportunities to walk from the street into the site at both Fourth Street at Maxwell and at Street B from Mapleton Avenue with detached walkways and tree lawns with street tree plantings.</p> <p>(f) As shown in the project plans found in Attachment B, there are a variety of on-site open spaces proposed by the applicant. The primary open space area is the "Village Green" that is enfolded by the four main independent living buildings: A, B, F and G. With well-designed spaces that provide access to</p>

		<p>sunlight.</p> <p>(g) Refer to Site Review criterion (F) below.</p>
3.14 Trails Network	<p><i>"The city and county will coordinate with other trail providers and private landowners in trail system planning, construction, management and maintenance. Where compatible with environmental protection goals and conservation easement agreements, trail connections will be developed to enhance the overall functioning of the trails network."</i></p>	<p>The applicant will dedicate two separate public trail easements to ensure on-going connectivity to the Dakota Ridge Trail along with the Silver Lake Ditch maintenance and social trail.</p>
3.17 Hillside Protection	<p><i>"Hillside and ridge-line development will be carried out in a manner that, to the extent possible, avoids both negative environmental consequences to the immediate and surrounding area and the degrading of views and vistas from and of public areas."</i></p>	<p>The proposed development improves drainage over the existing development as it converts impermeable surfaces such as the broad parking areas to permeable open space. The proposed development stabilizes existing, deteriorating slopes within the existing developed areas. The proposed development preserves the adjacent undeveloped mountain backdrop by limiting development to the existing developed areas that are well below the mountain backdrop and preserves the public view of the ridgeline of the Dakota Ridge. The view from the City's Open Space trails will continue to afford spectacular views of the city.</p>
3.18 Wildfire Protection and Management	<p><i>"The city and county will require on-site and off-site measures to guard against the danger of fire in developments adjacent to natural lands and consistent with forest and grassland ecosystem management principles and practices. Recognizing that fire is a widely accepted mans of managing ecosystems, the city and county will integrate ecosystem management principles with wildfire hazard mitigation planning and urban design."</i></p>	<p>The applicant prepared an Emergency Plan in case of fire or another natural disaster (Attachment C). Staff finds that the plan, along with fire-rated building construction requirements, fire sprinkler and alarm requirements, and the availability of staff on site (seven days per week and 24 hours per day) are strong mitigation measures that would meet this policy. In addition, the applicant is proposing a Conservation Area on the west side of the site that is intended to be a buffer to the city's Open Space.</p>
7.03 Populations with Special Needs	<p><i>"Encourage development of housing for populations with special needs including residences for people with disabilities, populations requiring group homes or other specialized facilities, and other vulnerable populations where appropriate. The location of such housing should be in proximity to shopping, medical services, schools, entertainment and public transportation..."</i></p>	<p>The proposed project is intended specifically to provide residential for seniors with a broad spectrum of abilities and needs. The congregate are use is planned to include specialized facilities including group dining facilities, health and wellness programs, transportation, housekeeping, and organized social activities. Also available on-site and nearby are medical services including on-site skilled nursing, surgery center and the Memory Care facility.</p>
7.09 Housing for a Full Range of Households	<p><i>"Encourage preservation and development of housing attractive to current and future households, persons at all stages of life and to a variety of household configurations. This includes singles, couples, families with children and other dependents, extended families, non-traditional households and seniors."</i></p>	<p>As noted since Concept Plan review, the proposed project would provide additional housing options for seniors and elderly persons with disabilities in a protected living environment. The proposed project would help to address an unmet market demand for senior housing within Boulder and allow for senior members of the community to remain in Boulder. In addition, the applicant is proposing off-site, permanently affordable senior residential with more than double the number of required units to meet the Inclusionary Housing requirements for the project.</p>
8.05 Diversity	<p><i>The community values diversity as a source of strength and opportunity. The city and county will support inclusion of racial, ethnic, socioeconomic and cultural diversity into physical, social, cultural, and economic environments. Furthermore, the city and county will promote opportunities for community engagement and formal and informal representation of diverse community members in civic affairs. The city and county value embrace and promote diversity in all of their hiring and employment practices.</i></p>	<p>The provision of residential opportunities for seniors in the city is a means to support cultural diversity and this emerging social demographic trend by allowing older residents of Boulder to continue to live in Boulder. This addresses a community well-being goal of "Supporting the ability of a growing older population to age well in our community" as noted on page 53 of the BVCP.</p>

√ (B) The proposed development shall not exceed the maximum density associated with the Boulder Valley Comprehensive Plan residential land use designation. Additionally, if the density of existing residential development within a three-hundred-foot area surrounding the site is at or exceeds the density permitted in the Boulder Valley Comprehensive Plan, then the maximum density permitted on the site shall not exceed the lesser of:

n/a (i) The density permitted in the Boulder Valley Comprehensive Plan,

This is not applicable. The BVCP "Public" and "OS-O" land use designations do not have density limitation in the comprehensive plan.

√ (ii) The maximum number of units that could be placed on the site without waiving or varying any of the requirements of [chapter 9-8](#), "Intensity Standards," B.R.C. 1981.

The proposed development is equivalent to 6.02 dwelling units per acres (95 du/15.77 ac = 6.02) with no waivers of intensity standards proposed. The existing residential development within a three hundred-foot area surrounding the site does not exceed the density permitted in the BVCP. Therefore, the following criteria are not relevant. Refer to Exhibit 1 below.

√ (C) The proposed development's success in meeting the broad range of BVCP policies considers the economic feasibility of implementation techniques required to meet other site review criteria.

The application materials illustrate well-designed buildings of varying sizes with durable, authentic, and attractive materials including brick, stone and wood. The design of the buildings is in keeping with the character of the existing large site and surroundings. There are landscape plant materials sized in excess of the code standards as noted below. To implement the plans as shown, economic feasibility can be achieved through the intended market for the residential units.

(2) Site Design: Projects should preserve and enhance the community's unique sense of place through creative design that respects historic character, relationship to the natural environment, multi-modal transportation connectivity and its physical setting. Projects should utilize site design techniques which are consistent with the purpose of site review in subsection (a) of this section and enhance the quality of the project. In determining whether this subsection is met, the approving agency will consider the following factors:

√ (A) Open Space: Open space, including, without limitation, parks, recreation areas, and playgrounds:

√ (i) Useable open space is arranged to be accessible and functional and incorporates quality landscaping, a mixture of sun and shade and places to gather;

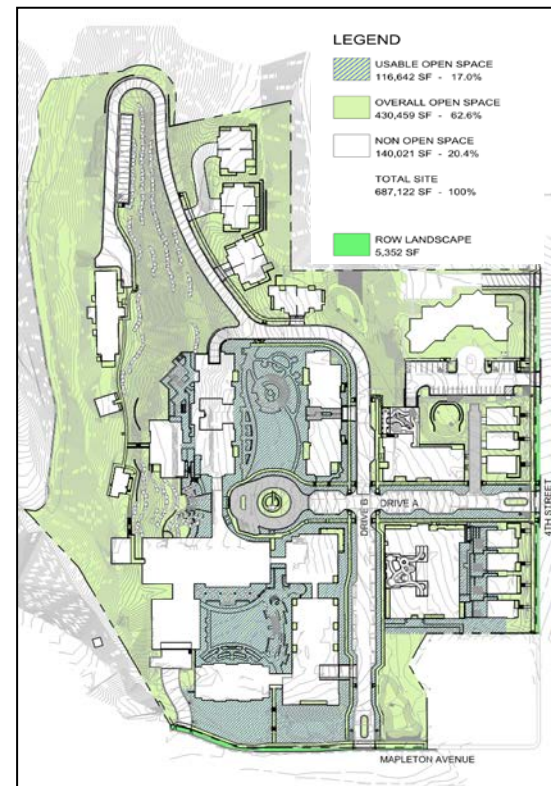
There are a number of open space areas of varying size and functions located throughout the site as shown in the map to the right. While the "P" zoning district does not have a minimum residential Open Space per dwelling unit requirement, there is approximately 1,228 square feet of open space per dwelling unit proposed. The primary area of useable open space is located centrally on the site with buildings that serve to frame and "enclose" the space. Other areas of the site are intended to be left in more of a "natural" state with revegetation of sloped areas and use of native plant species that will naturalize over time.

The central open space area, referred to on the plans as the "Village Green" is shown with curvilinear walking paths surrounded by garden space and is proposed with amenities such as a multi-purpose gathering space with art and outdoor furniture.

As can be seen in the diagram, the areas of greatest built intensity occur central to the site, with buildings planned in the location of the existing large hospital building and within areas of existing parking lots. The level of built intensity transitions to less intensity toward the upper areas of the site, adjacent to the city's open space and is intended to be left in a natural state or revegetated to naturalize where necessary.

√ (ii) Private open space is provided for each detached residential unit;

As a planned congregate care facility, the site open space is provided for use of all of the residents. The exception is the secured area intended to serve as outdoor space for the memory care portion of the site at Building D. Under the "P" zoning district, there is no requirement for open space per dwelling unit, but to place it in context, with 116,642



square feet planned as Useable Open Space, the open space per dwelling unit equivalency is approximately 1,228 square feet.

√(iii) The project provides for the preservation of or mitigation of adverse impacts to natural features, including, without limitation, healthy long-lived trees, significant plant communities, ground and surface water, wetlands, riparian areas, drainage areas and species on the federal Endangered Species List, "Species of Special Concern in Boulder County" designated by Boulder County, or prairie dogs (*Cynomys ludovicianus*), which is a species of local concern, and their habitat;

The majority of the existing 311 Mapleton site has been developed as a hospital and medical offices since the late 1800s. As such, there is little in the way of existing significant plant communities, wetlands, riparian or drainage areas, or special status species. There are existing mature trees on the property. The application materials include a Tree Inventory Plan that surveyed the health of 152 existing trees on site of three-inch caliper or larger (excluding trees on the western edge of the property which are intended to remain). Of the trees surveyed, 43 percent (or 65) of the trees were found to be in "very poor," "poor" or "fair" condition. Many of those in poor condition are Ash tree species that are susceptible to the Emerald Ash Borer Beetle and are recommended to be removed and 39 of the existing trees are Siberian Elm, considered an invasive tree species. The applicant is proposing to keep 25 mature, healthy trees either in place or by relocating the trees on the site. Many of the trees that are intended to remain in place are located on the south side of the property including a number of mature spruce and fir trees as shown below.



There are approximately 53 trees slated for removal that are considered in "good" condition and two trees that are considered in "excellent" condition. Because the criteria requires that "the project provides for the preservation of or mitigation of adverse impacts to healthy long-lived trees" it is important to note that in addition to preserving 25 trees on-site, the planned mitigation for removal of the other existing trees is to plant 309 new trees.

√(iv) The open space provides a relief to the density, both within the project and from surrounding development;

The plan incorporates open space into an existing site where large surface parking lots exist today. By converting impermeable surfaces such as the parking areas to permeable open space, the plan will provide a relief to the planned density.

√(v) Open space designed for active recreational purposes is of a size that it will be functionally useable and located in a safe and convenient proximity to the uses to which it is meant to serve;

The applicant has planned a "network of walkways" throughout the site that connects buildings and the various open space areas, anchored by a large, central "Village Green." That space is enclosed by the 'B' buildings and the 'F' & 'G' buildings as shown in the figure to the right. Planned at slightly larger than ½ acre, the open space area encompasses the historic smoke stack and has walking paths, gathering areas, including a broad open area with a stage, along with areas with groupings of tables and chairs.



There is also an "interior courtyard" space between the pool building 'K' and the 'A' buildings that has a series of raised planter beds for resident gardening along with shade structures, table and chairs and other amenities adjacent to the recreational amenity of the swimming pool.

There are also a number of smaller "niche" courtyard spaces that serve individual buildings, including a secured open space area for the Memory Care building (D).



√ (vi) The open space provides a buffer to protect sensitive environmental features and natural areas; and

Portions of the upper reaches of the site are steeply sloped where the site abuts the City of Boulder Open Space area. With the bulk of the development well below the upper reaches of the site, the plan transitions to less intensity near the upper, western portion of the site. There is a planned open space buffer that ranges in width from 50 to 100 feet in this context and in this area there are several social trails that are planned to be re-seeded to return to natural state and augment the buffer. The nearest building to the buffer area to the city's open space is the existing (former) 1930s nurses' dormitory building that is planned to be landmarked through the city's historic preservation process.

√ (vii) If possible, open space is linked to an area- or city-wide system.

The site interfaces with two existing public rights of way: Mapleton Avenue and 4th Street that both have public detached sidewalks that will be retained and improved. A segment of the Dakota Ridge Trail that crosses through the uppermost, northwest corner of the site for which the applicant is dedicating a public trail easement through a condition of approval. The detached sidewalks throughout the site continue the established urban grid pattern to link pedestrian and bike traffic to the larger City system and the applicant's Good Neighbor Policy statement (Attachment C) provides for continued pedestrian access to and through the site.

√ (B) Open Space in Mixed Use Developments (Developments that contain a mix of residential and non-residential uses)√ (i) The open space provides for a balance of private and shared areas for the residential uses and common open space that is available for use by both the residential and non-residential uses that will meet the needs of the anticipated residents, occupants, tenants, and visitors of the property; and

The subacute rehabilitation building (C) hospital use and the existing surgery center are both considered "non-residential" and as such there is a mix of uses on the site. The open space throughout the site is intended to be shared to meet the needs of the visitors, tenants, occupants and residents, including visitor/patients of the rehab facility.

√ (ii) The open space provides active areas and passive areas that will meet the needs of the anticipated residents, occupants, tenants, and visitors of the property and are compatible with the surrounding area or an adopted plan for the area.

There are active and passive open space areas that meet the needs of the mix of uses on the site and the open space areas are compatible with the surrounding area.

√ (C) Landscaping√ (i) The project provides for aesthetic enhancement and a variety of plant and hard surface materials, and the selection of materials provides for a variety of colors and contrasts and the preservation or use of local native vegetation where appropriate;

With several different types of open space areas planned on the site, the aesthetic enhancements include a wide variety of landscape treatments, varied plantings and hard surface materials. There are 138 different plant species shown on the landscape plant list that will help to establish variety in color and contrast in the landscape, with many of species being utilized in the highly visible Village Green area or in courtyard spaces. The Village Green and Courtyard spaces are illustrated with landscape furnishings such as benches and tables, arbors, and rock walls along with shade structures and water features, all of which would create aesthetic enhancements.

On the upper areas of the site, adjacent to the City's Open Space land and where slopes are steep, the landscape is intended to remain essentially undisturbed and native. Moving east on the site, particularly on the steep slopes below Building L (the former nurses dormitory) the applicant is illustrating low boulder walls with reseeded slopes augmented by pollinator-friendly plantings and native tree species.

Lower on the site, in the interface with the existing residential neighborhoods, the project plans illustrate establishment of a well-defined streetscape with a detached walkway and a tree lawn that is planned with large maturing tree species such as catalpa, oak, and honeylocust to create a tree canopy along 4th Street. Plantings of linden, elm and honeylocust are planned to augment the existing trees and shrubs to remain along Mapleton Avenue.

√ (ii) Landscape design attempts to avoid, minimize, or mitigate impacts to important native species, plant communities of special concern, threatened and endangered species and habitat by integrating the existing natural environment into the project;

Refer to response to criterion (A)(iii) above.

√ (iii) The project provides significant amounts of plant material sized in excess of the landscaping requirements of [sections 9-9.12](#), "Landscaping and Screening Standards" and [9-9.13](#), "Streetscape Design Standards," B.R.C. 1981; and

The project provides for a diverse selection of plant material including many pollinator and native species to transition to the adjacent open spaces. Sizes are increased where appropriate and beneficial to the long-term success of the species.

✓ (iv) The setbacks, yards, and useable open space along public rights-of-way are landscaped to provide attractive streetscapes, to enhance architectural features, and to contribute to the development of an attractive site plan.

The public rights of way along both 4th Street and Mapleton Avenue are proposed with streetscapes that include tree species of large, maturing street trees planted at approximately 25 to 30 feet on-center within eight-foot tree lawns with detached walkways. This configuration is in keeping with the landscape character of other streetscapes within the existing, surrounding neighborhood.

✓ (D) Circulation: Circulation, including, without limitation, the transportation system that serves the property, whether public or private and whether constructed by the developer or not:

✓ (i) High speeds are discouraged or a physical separation between streets and the project is provided;

The proposed transportation system that serves the property includes streets planned with parallel parking and a tree lawn with a detached walkway. This configuration helps to create a physical separation between vehicular traffic and pedestrians. High speeds would be discouraged through the sense of enclosure created by the tree canopy and buildings built close to the street and relatively narrow curb-to-curb widths.

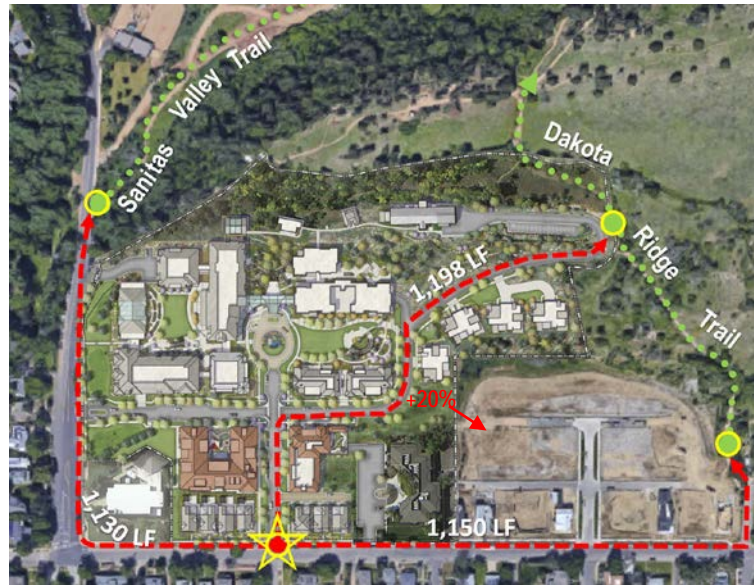
✓ (ii) Potential conflicts with vehicles are minimized;

The applicant is proposing two below grade parking structures that meet Design and Construction Standards for access, circulation and parking. In addition, the use of below grade parking would place less traffic on the two surface streets "A" and "B" that would help to reduce vehicle conflicts. The grid layout of these two streets also helps to organize traffic flow that can also help reduce conflicts.

✓ (iii) Safe and convenient connections are provided that support multi-modal mobility through and between properties, accessible to the public within the project and between the project and the existing and proposed transportation systems, including, without limitation, streets, bikeways, pedestrianways and trails;

The applicant is providing a public access easement over that portion of their property that will be permanently provided as Dakota Ridge Trail. Access to this trail will remain from both 4th Street and Sunshine Canyon Roads. In addition, as part of the applicant's Good Neighbor Policy, the applicant will allow members of the public to access the trail from within the site from dawn to dusk. As shown below, the trail access to the Sanitas Valley Trail is approximately ¼ mile from the intersection of Maxwell and 4th Street and nearly the same distance from 4th and Maxwell to the Dakota Ridge (DR) Trail access at Valley View and 4th streets; though it is slightly further from 4th and Maxwell Street to the DR trail access within the site.

Staff notes that a connection from the site to the Trailhead Subdivision directly north is constrained by steep slopes that are banked from the site down to Trailhead of a roughly 2:1 slope – 20 feet of grade difference in 40 feet. While a series of stairs could be constructed to connect to the westernmost alley access into Trailhead, and such a staircase would serve a limited number of users.



✓ (iv) Alternatives to the automobile are promoted by incorporating site design techniques, land use patterns, and supporting infrastructure that supports and encourages walking, biking, and other alternatives to the single-occupant vehicle;

Detached walkways with tree lawns will encourage walking. The applicant is also providing bike parking for employees as well as a van shuttle service for residents and employees. These all encourage alternatives to single occupant vehicles.

√ (v) Where practical and beneficial, a significant shift away from single-occupant vehicle use to alternate modes is promoted through the use of travel demand management techniques;

There are a number of components of the Transportation Demand Management plan provided by the applicant (found in Attachment F) that are consistent with this criterion including:

- *Provision of a total of 112 bike parking spaces including both short-term and long term bike parking (in excess of required)*
- *Provision of showers and changing facilities for employees*
- *Provision of eco-passes for employees*
- *Provision of electric vehicle car-sharing program for residents and employees, including charging stations on-site*
- *On-site dining services for employees*
- *Provision of a private on-call shuttle bus/van and car service for residents and employees with regularly scheduled trips to various destinations, including nearby bus stops*
- *Pedestrian enhancements including detached walks and tree lawns with street tree plantings*

√ (vi) On-site facilities for external linkage are provided with other modes of transportation, where applicable;

The applicant is providing a dedicated public trail easement for the Dakota Ridge Trail on their property along with bike parking facilities; eco-passes for employees; and shared bus/van, car service for residents and employees

√ (vii) The amount of land devoted to the street system is minimized; and

The below grade parking helps to shift the large land area that is currently devoted to the street system underground. Therefore, the amount of land devoted to the street system is minimized.

√ (viii) The project is designed for the types of traffic expected, including, without limitation, automobiles, bicycles, and pedestrians, and provides safety, separation from living areas, and control of noise and exhaust.

The project is designed for automobiles, bicycles and pedestrians through the grid pattern of the A and B streets and provides for separation and safety of pedestrians on those streets by moving the majority of the vehicles below grade. This can help to control noise and exhaust away from the living areas above.

√ (E) Parking

√ (i) The project incorporates into the design of parking areas measures to provide safety, convenience, and separation of pedestrian movements from vehicular movements;

The below-grade parking areas help to provide greater separation of motor vehicles from pedestrians circulating through the site.

√ (ii) The design of parking areas makes efficient use of the land and uses the minimum amount of land necessary to meet the parking needs of the project;

The below-grade parking areas makes efficient use of the land by removing land devoted to surface parking lots. The below grade parking areas would provide total of 223 parking spaces to accommodate residents, visitors and church parking in an agreement with the Seventh Day Adventist Church. In addition, there are 57 surface parking spaces including the on-street spaces within the site and in the existing surgery center. The below-grade parking is one level each to minimize cut/fill on the site in deference to site review criterion of section 9-2-14(h)(2)(F)(xiii).

√ (iii) Parking areas and lighting are designed to reduce the visual impact on the project, adjacent properties, and adjacent streets; and

With approximately 80 percent of parking below grade, visual impacts of parking areas will be reduced. There is only one surface parking lot that will remain at the existing surgery center building that has both existing and proposed landscape screening. A lighting plan is required as part of the Technical Document review.

√ (iv) Parking areas utilize landscaping materials to provide shade in excess of the requirements in Subsection 9-9-6 (d), "Parking Area Design Standards," and Section 9-9-14, "Parking Lot Landscaping Standards," B.R.C. 1981.

The on-street parking that is proposed is adjacent to detached walkways with tree lawns that are intended to provide shade, generally shown to be planted at 30 feet on-center, that is well in excess of the parking area design standards where the requirement is one tree for ever 200 square feet.

√ (F) *Building Design, Livability, and Relationship to the Existing or Proposed Surrounding Area*

√ (i) The building height, mass, scale, orientation, and configuration are compatible with the existing character of the area or the character established by an adopted plan for the area;

The proposed project includes buildings of varying height, mass, scale, orientation and configuration. The existing character of the area includes the existing hospital context on the site as well as the surrounding neighborhoods of Newlands, Mapleton Hill, Trailhead, and Knollwood. In that regard, there are three primary areas of interface with the existing surrounding neighborhoods: Mapleton Avenue, 4th Street and the north side of the site adjacent to the Trailhead Subdivision.

Building A and the Mapleton Avenue Interface:

As noted under "Background" the existing site has evolved over a period of approximately 115 years. Over the decades, the site has held buildings of various sizes and configurations on the site from the very large sanatorium and hospital buildings on the south side of the site, to smaller cottages and ancillary buildings scattered throughout the site with broad surface parking lots in between. The largest building has been the main four-story hospital building that is sited in a somewhat park-like setting adjacent to Mapleton Avenue, set back approximately 100 feet from the street.

The configuration of proposed Building 'A' is in keeping with the existing context in that it is set back from Mapleton Avenue (albeit by approximately 70 feet versus 100 feet) with the intent in preserving the park-like character, mature trees, and historic wall in this location. The difference in configuration is that the building is configured along the internal streets A and B to form a streetface in a pedestrian orientation.

The proposed Building A configuration also differs from the existing hospital building in that it is "broken up" into four distinct buildings rather than one large building, and the pool building is a single-story structure that would create a more modulated height along Mapleton Avenue. A comparison of the existing to the proposed building(s) is shown below. As also can be noted, the existing building encompasses a broader area along Mapleton Avenue than the proposed building. The height of the proposed building is in keeping with this context as noted in criterion (ii) below.



Existing

Proposed



The Proposed "R" Cottages in the 4th Street Interface:

In keeping with comments by the Planning Board at Concept Plan Review, this area of the site plan takes design cues from the single family residential across 4th Street by placement of seven independent living cottages at the interface with 4th Street. At the Planning Board Concept Plan discussion, the applicant was encouraged to not have parking lots adjacent to the street, but rather create a street face. In that regard, the seven IL cottages are shown in a figure ground map to compare to the urban design pattern along the street: the first image is the figure ground map of the existing setting, and the large gap in the site are surface parking lots. The second image is the site plan for the R cottages superimposed onto the figure ground map and the final image is the resulting figure ground map. This illustrates how the proposed R cottages integrate into the existing urban design pattern. The resultant character is that of a "well-designed face" of buildings and landscaping rather than parking lots aligning the street as is recommended in BVCP policy 2.41(c) noted above.

The Interface with Trailhead Subdivision

The north side of the site has a terrace area that interfaces with the Trailhead Subdivision. As seen in the site photos below, in this location today there is a former garage building and a former furniture storage building associated with the hospital along with broad areas of deteriorated surface parking lots and other outdoor storage.



As can be seen in the photo from the Trailhead Neighborhood, the existing surgery center backs up to the Trailhead on a lower terrace. The photo illustrates the existing four-story Hospital Building in the distance, the smokestack, the former nurses dormitory building (to remain) and the terrace/plinth area where the 'H' and 'J' cottages are planned.



As can be seen in an overlay of the site plan with a recent aerial photo, there are four duplex independent living cottages planned on the "plinth" or terraced area above Trailhead Subdivision, interfacing with three lots specifically. In this location, the existing terrace drops off the site and onto the Trailhead Subdivision. On the terrace/plinth area, the applicant is proposing one and one-half story configurations that are designed to address the existing slope with a "walkout" configuration on the downhill side. This would be in keeping with the residential units approved in the Trailhead Subdivision of up to two stories. In this location there is existing, relatively dense vegetation on both the site and the adjacent slope in Trailhead Subdivision that will be augmented with additional plantings on the site. This existing and proposed setting will help to create compatibility in the context.



√ (ii) The height of buildings is in general proportion to the height of existing buildings and the proposed or projected heights of approved buildings or approved plans for the immediate area;

The height of Building A, at three stories is slightly lower than the existing building: the three-story building is planned with standard floor to ceiling heights, with the ground floor height taller on the north end of the building to accommodate the main communal gathering space labeled as the "Grand Hall." In this case, the location of the Grand Hall in the northeast corner of Building A coincides with the location of a key "intersection" internal to the site where Street A and Street B intersect.

The applicant is requesting a height modification given the topographic change on the property from west to east. In requesting this modification – through Site Review - the applicant must demonstrate that the height modification can address building design criteria. In this case, staff and the Design Advisory Board (minutes found in **Attachment L**) concurred that the building would meet other Site Review building design criteria such as (F-v) if the buildings had



variation in forms including a corner element that is punctuated by a roof. This is also the case for other portions of Building A where there is sloping topography contributes to the overall height measurement of the building. In meeting other criteria for building design, the use of a pitched roof helps to create a residential, less institutional appearance, on the building.

√ (iii) The orientation of buildings minimizes shadows on and blocking of views from adjacent properties;

The city's means for analyzing if solar shadows impact adjacent properties is through solar analysis utilizing a comparison of how a proposed building's shadow compares to a "hypothetical" solar fence located on the property line. In this case, because the adjacent Trailhead Subdivision is located within Solar Access Area I, a 12-foot solar fence is hypothesized. Four proposed duplex buildings on the north side of the site (H1/2; J1/2; J3/4; J5/6) would cast shadows onto that adjacent property during winter months. The applicant demonstrated in a shadow analysis that at the peak depth of shadow on Dec. 21st at 10:00 a.m. and 2:00 p.m., the encroaching shadow would not be longer than a shadow cast by the hypothetical 12-foot fence, and thus, complies with the Solar Access Regulations of Section 9-9-17, B.R.C. 1981.

Views of the mountain backdrop are evident surrounding the site as the mountain backdrop rises to a high point of approximately 6,800 feet or approximately 1,500 feet above the site. Adjacent properties include the Trailhead subdivision to the north and the public rights of way of 4th Street and Mapleton Avenue. Views from adjacent properties to the mountain backdrop are varied depending upon foreground elements such as trees or buildings. Given the significant topographic change from the site rising to Mount Sanitas, (approximately 1,500 feet above the site). Below is an image of the varied viewshed from 4th Street at the terminus of Maxwell Avenue into the existing site. Most of the views today are experienced from along 4th Street toward the Flatirons as shown below and up into the site from the existing access roadway.



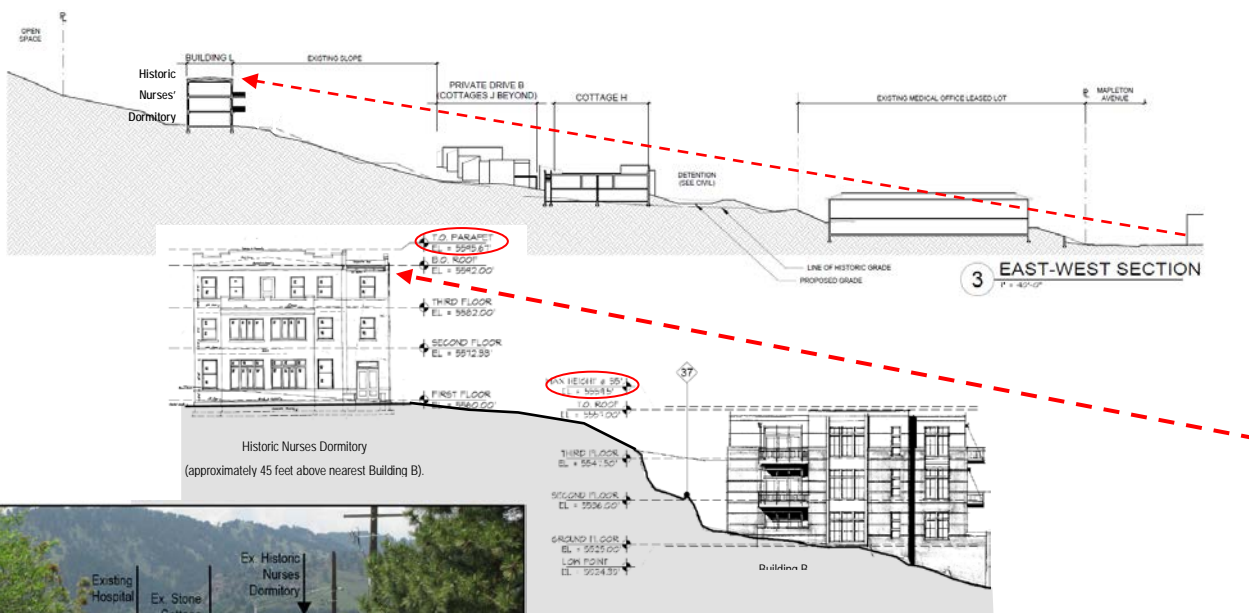
Like most of Boulder along the western side of the city, views toward the foothills move in and out of the field of vision as one moves through a space. This is true along 4th Street adjacent to the project site. Given the existing broad surface parking lot, access to views of the foothills are evident and intermittent due to intervening mature vegetation and buildings that can both block and frame views. Consistent with modern urban design principles, BVCP policy 2.41 (2010) recommends that "buildings and landscape areas- not parking lots should present a well-designed face to the public realm." In this case, a Concept Plan recommendation was establish buildings rather than the surface parking adjacent to 4th Street and in a location where the grade is four to eight feet higher in elevation than the street. The applicant responded with a proposal to place seven independent living cottages of sizes that are in keeping with, or smaller than, the average size of residential homes in the area. The urban design pattern is proposed to mirror those across 4th Street. These cottages would likely block the intermittent views that are evident in moving along 4th Street. In terms of minimizing the blocking of views, the plans illustrate the view at the terminus of Maxwell Avenue at 4th Street to be preserved with both the foreground stone cottage and the high hillside behind, as discussed above under Criterion F(i).



This same relationship of building, to street, with intermittent views of the foothills can be understood with nearby examples albeit with larger overall home sizes than are planned, at 4th and Dewey or 3rd and Dellwood, where homes and landscaping constrain a viewshed but as one moves through the space, or through a street, views open back up.



The views of the mountain backdrop from the surrounding areas have a foreground view of the existing (former) Nurses Dormitory that sits on the upper terrace in the location of the OS-O designation, as can be seen in the images below.



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√ (iv) If the character of the area is identifiable, the project is made compatible by the appropriate use of color, materials, landscaping, signs, and lighting;

The character of the area is varied. The site itself has a variety of materials on buildings that range in age and condition, but include red brick on the existing hospital and historic nurses dormitory building, Lyons sandstone on the small stone building and adjacent church, as well as horizontal lap siding on the small duplex cottage.



The applicant made reference to the surrounding residential areas and in particular, noted the Mapleton Hill neighborhood as a design precedent. In that regard, staff notes that similar materials are present in the neighborhood: stone, brick, wood siding. All of these materials are intended to be utilized in the proposed buildings with variations in style. Given the residential context, the applicant also is proposing rooflines that are in keeping with the residential character of mostly pitched roofs with both gable and hipped forms, shed dormers, metal accents (seen in both roof forms and ornamental rails and lintels).

√ (v) Projects are designed to a human scale and promote a safe and vibrant pedestrian experience through the location of building frontages along public streets, plazas, sidewalks and paths, and through the use of building elements, design details and landscape materials that include, without limitation, the location of entrances and windows, and the creation of transparency and activity at the pedestrian level;

The proposed congregate care project is primarily residential but also includes retaining the existing surgery center located on 4th Street and a proposed subacute rehabilitation facility that is open to the public. In all cases, the buildings are designed to "read" as their intended use: all of the residential buildings from the attached buildings to the detached independently living "cottages" have a residential appearance. Those independent living cottages that interface with 4th Street provide porches that, not only have a residential appearance, but also help to create a safe and vibrant pedestrian experience with "eyes on the street." A classic streetscape is also proposed with a detached sidewalk, with a tree-lawn and street tree plantings for large maturing trees at 30-feet on center. On Mapleton Avenue, the pedestrian experience is planned to emphasize the mature landscaping in the area by maintaining the park-like, broad setbacks to not only retain some of the existing trees, but to also plant a number of new trees. The streetscape in this location also includes a detached walk and preservation of the historic stone wall, one of the remaining remnants from the original sanitarium. The buildings planned along Mapleton Avenue are the elegantly designed natatorium building (K) and the largest building (A). Both have stone as a primary finish material, and the A building has brick along with other details that will provide pedestrian interest. This approach differs than what exists today on the site, which is a building that has institutional appearance with a broad parking lot in the foreground. As designed, the project will create more of a vibrant pedestrian experience as can be seen in the comparison below.



√ (vi) To the extent practical, the project provides public amenities and planned public facilities;

The applicant has committed to a public access easement over that portion of the Dakota Ridge Trail that crosses the northwest corner of the property. In addition, the applicant is providing a warm water therapy pool within the subacute rehab facility that is open to the public. This is an amenity that members of the public have indicated in comments to staff to be of great value to the community as an important therapeutic resource. Similarly, the applicant has prepared a Good Neighbor Policy that ensures long term good will for allowances such as access to and through the site to climb to the top of the site to access the Dakota Ridge Trail; as well as allowances for members of the public to access other services planned on the site from the Subacute Rehab Facility, for anyone to access in a post-surgery need, as space allows; to meals in the dining room; and access to the open space amenity of the Village Green.

√ (vii) For residential projects, the project assists the community in producing a variety of housing types, such as multifamily, townhouses and detached single family units, as well as mixed lot sizes, number of bedrooms and sizes of units;

The congregate care use, has a wide range of unit types and sizes from duplexes and freestanding independent living cottages to attached independent living units in buildings small to large; with sizes ranging from 380 square feet for memory care units to the largest cottages of 3,500 square feet; summarized as follows:

- 7 independent living, free-standing cottages (R) ranging in size from approximately 2,000 to 2,200 sf.
- 8 duplex-style independent living cottages (H & J) ranging in size from approximately 1,800 to 2,500 sf
- 8 independent living attached units in smaller buildings (F & G) ranging in size from approximately 2,000 square feet (sf) to 2,100 sf
- 6 independent living attached units (L) in the historic former nurses dormitory building of 2,500 sf
- 46 independent living attached units in building (A) ranging in size from 1,190 to 2,600 sf
- 18 independent living attached units (B) ranging in size from 1,650 to 2,100 sf
- 10 memory care attached units (D) ranging in size from approximately 380 to 450 sf

√ (viii) For residential projects, noise is minimized between units, between buildings, and from either on-site or off-site external sources through spacing, landscaping, and building materials;

As noted in the application materials, a congregate care facility is in general a relatively quiet use. In this case, the applicant noted that the site design has placed the most noise generators- the larger, common open space areas for social and gathering functions, away from neighboring properties and typically enveloped by building bays. The individual buildings are placed on the plan in a manner that provides reasonable setbacks from other buildings.

√ (ix) A lighting plan is provided which augments security, energy conservation, safety, and aesthetics;

The applicant provided lighting design intent statements with regard to security, conservation and aesthetics that will be utilized to create a more detailed lighting plan required in the Technical Document phase.

√ (x) The project incorporates the natural environment into the design and avoids, minimizes, or mitigates impacts to natural systems;

As can be seen in the aerial photo to the right, dated 2016, the site has been altered for decades, beginning in the late 1890s that included terracing the site over time. In addition, vast surface parking lots cover the site totaling approximately 260,930 square feet or well over 1/3 of the site. In this regard, most of the site has been disturbed and is not natural. There are pockets of areas of the site that have been "naturalized," including the area west of the existing hospital site where the conservation buffer is planned. In that area, the applicant is intending to leave the site as is with the exception of a planned small chapel building. There are several long lived trees that are planned to remain including the tall spruce trees adjacent to the existing church, shown to the right. Note that currently the trees are shown adjacent to a parking lot but are planned to be incorporated into an open space area.



√ (xi) Buildings minimize or mitigate energy use; support on-site renewable energy generation and/or energy management systems; construction wastes are minimized; the project mitigates urban heat island effects; and the project reasonably mitigates or minimizes water use and impacts on water quality.

The city's rigorous energy efficiency standards necessitate on-site renewable energy, and the project plans illustrate use of rooftop photovoltaic and pursue LEED silver certification. The transition of the surface parking lots to broad areas of open space along with approximately 300 tree plantings will help to mitigate heat island effect. The applicant has indicated a desire to utilize water from their Silver Lake Ditch rights for irrigation, in particular, to create an automatic sprinkler system on the buffer area on the west side of the site to

irrigate that area in the event of a wildfire. In addition, regarding water use, the applicant is illustrating a landscape plant list that predominately features plants with low and medium water usage, along with 31 native plant species.

√ (xii) Exteriors or buildings present a sense of permanence through the use of authentic materials such as stone, brick, wood, metal or similar products and building material detailing;

Various types of masonry is proposed throughout the site including stone, brick, and metal. The project plans include building elevations with a materials key and a material sample board that demonstrates the use of these authentic materials. As stated by the applicant in the written statement:

"Masonry is the primary building material and is used on every building in some form to emulate the character of historic buildings that have been built on the site over time. There is a complement of composite siding, in various lap widths, composite panel, and accents of metal, which balance out the project's palette. The project intends to use trim, windowsills, decorative stepped fascia, and a layering of materials to emote richness in architectural detailing. Stucco is not seen on the project, except in an ancillary fashion on elements such as soffits and architectural details."

√ (xiii) Cut and fill are minimized on the site, the design of buildings conforms to the natural contours of the land, and the site design minimizes erosion, slope instability, landslide, mudflow or subsidence, and minimizes the potential threat to property caused by geological hazards;

Inherent in the redevelopment of an urbanized property is the necessity for grading and excavation in the form of cut and fill. Because of the context in the Pendleton-Mapped: "Potential Mass Movement Hazard and Consolidation/ Swell Constraint area" the applicant was required to do soils and structural analysis that would engineer the site to minimize erosion, slope instability, landslide and subsidence. As a result, specific sloping areas of the site will be gently regraded and reseeded, with some areas augmented with the structural support of boulders to create a naturalized and fortified slope. Over the course of the site review process, the applicant has reengineered the grading plan to reduce and minimize the degree of cut and fill on the site. In particular, the upper slope and access roadway that goes to the nurses dormitory was originally designed with much greater impact and grading. The current approach minimized the cut and fill.

n/a (xiv) In the urbanizing areas along the Boulder Valley Comprehensive Plan boundaries between Area II and Area III, the building and site design provide for a well-defined urban edge; and

n/a (xv) In the urbanizing areas located on the major streets shown on the map in Appendix A of this title near the Boulder Valley Comprehensive Plan boundaries between Area II and Area III, the buildings and site design establish a sense of entry and arrival to the City by creating a defined urban edge and a transition between rural and urban areas.

√ (G) **Solar Siting and Construction:** For the purpose of ensuring the maximum potential for utilization of solar energy in the City, all applicants for residential site reviews shall place streets, lots, open spaces, and buildings so as to maximize the potential for the use of solar energy in accordance with the following solar siting criteria:

√ (i) **Placement of Open Space and Streets:** Open space areas are located wherever practical to protect buildings from shading by other buildings within the development or from buildings on adjacent properties. Topography and other natural features and constraints may justify deviations from this criterion.

Given the modified grid pattern of internal streets along with a large internal "village green" there is opportunity for solar capture on all of the buildings given the north-south axis of the broad village green along with the orientation of the "B" Street. In addition, the applicant has illustrated the solar shadows of the deepest part of the winter on Dec. 21st at 10:00 a.m. and 2:00 p.m. and both designed and refined the designs of buildings to ensure there is no encroachment onto adjacent properties that extends beyond the "hypothetical" shadow cast by a 12-foot at the property line, as is required by the Land Use Code section 9-9-17, B.R.C. 1981.

√ (ii) **Lot Layout and Building Siting:** Lots are oriented and buildings are sited in a way which maximizes the solar potential of each principal building. Lots are designed to facilitate siting a structure which is unshaded by other nearby structures. Wherever practical, buildings are sited close to the north lot line to increase yard space to the south for better owner control of shading. While this criterion is related more toward single family lots as the 15.77 acre site is essentially one large lot, it is noted that the buildings are sited around different open space areas or streets. The Village Green is a relatively large (100 lf x 210 lf) space that is oriented in a north/south manner that allows solar access into the full length of the buildings B, F & G that align the space given the wide dimension of the space. Similarly, buildings that align both 4th street and the "B" interior street provide a dimension that allows solar access along the streetfaces of the buildings. Because of this, the buildings have solar potential both passive and that which can be captured by roof mounted solar panels.

√ (iii) **Building Form:** The shapes of buildings are designed to maximize utilization of solar energy. Buildings shall meet the solar access protection and solar siting requirements of [section 9-9-17](#), "Solar Access," B.R.C. 1981.

Refer to responses to criteria 'i' and 'ii' above: the buildings predominately align along streets or open spaces that allow passive solar as well as rooftop solar panels as shown in the overall roof and solar plan below, sheet A-4.15 of the plan set.



✓ (iv) *Landscaping*: The shading effects of proposed landscaping on adjacent buildings are minimized.

Lots within the Trailhead Subdivision may be impacted by shading from landscaping. However, as demonstrated on the landscape plan Sheet LP1.4 and LP1.5, there are a number of existing mature trees along the property lines adjacent to the site on the north that would be retained to maintain the landscape buffer that exists today. The addition of trees in this area is intended to augment the existing buffer and emphasis is placed on specifically sited tree locations to help screen and buffer between neighbors, as well as the use of deciduous trees that provided needed summer shade and denuded branches in winter for solar gain.

n/a (H) *Additional Criteria for Poles Above the Permitted Height:* No site review application for a pole above the permitted height will be approved unless the approving agency finds all of the following:

n/a (I) *Land Use Intensity Modifications:*

n/a (J) Additional Criteria for Floor Area Ratio Increase for Buildings in the BR-1 District:

n/a (K) Additional Criteria for Parking Reductions: The off-street parking requirements of section 9-9-6, "Parking Standards," B.R.C. 1981, may be modified as follows:

n/a (L) *Additional Criteria for Off-Site Parking:* The parking required under section 9-9-6, "Parking Standards," B.R.C. 1981, may be located on a separate lot if the following conditions are met: