



2026 Supplemental Capital Budget



STATE OF WASHINGTON
DEPARTMENT OF VETERANS AFFAIRS

1102 Quince St. SE, PO Box 41150 • Olympia, Washington 98504-1150 • 360-725-2155

September 5, 2025

K.D. Chapman-See, Director
Office of Financial Management
P.O. Box 43113
Olympia, WA 98504-3113

RE: WDVA FY2026 Supplemental Capital Budget Submittal

Dear Ms. Chapman-See:

It is my pleasure to submit the Washington State Department of Veterans Affairs' (WDVA) 2026 supplemental Capital budget request. This proposal reflects our agency's vision, mission, and strategic plan to improve the quality of care and service to veterans and their families. It also supports the Governor's commitment to serving veterans, advancing inclusive government, and positioning WDVA as an employer of choice.

The request highlights priorities that include the replacement of the Spokane Veterans Home and the establishment of a new State Veterans Cemetery in the Tri-Cities area.

Our capital budget request is designed to advance agency goals of making Washington a leader in veteran service delivery and outcomes while continuing our mission of saving and transforming lives. These projects will ensure that veterans and their family members receive exceptional quality care, services, and honors befitting their service and sacrifice.

The 2026 Supplemental Capital Budget request includes the following projects:

- **Spokane Veterans Home – Design** – We are requesting \$10.9 million in funding for architectural and engineering services to advance the design of a new 120-bed Skilled Nursing Facility (SNF) to replace the existing Spokane Veterans Home. This request complements the simultaneous submission for the construction phase of the same project but focuses specifically on the design and pre-construction work.
- **Spokane Veterans Home – Construction** – We are requesting \$146,410,000 to support the construction phase of a new Skilled Nursing Facility (SNF) to replace the outdated Spokane Veterans Home (SVH). Built in the 1970s, the current facility's hospital-like design no longer meets the needs of our veteran population. Its predominantly two-person rooms, separated only by curtains, provide minimal privacy and pose significant challenges for infection control. The replacement home will also provide memory care and increase beds to help meet the significant growth in the need of veterans for long-term care.

- **Tri-Cities Area Veterans Cemetery – Land Purchase and Improvements** – We are requesting \$8,475,000 in state funding to acquire land for the development of a new state veterans cemetery in southeastern Washington. This investment addresses the critical lack of burial and committal options for veterans in south-central and southeastern regions of the state.
- **Washington State Veterans Cemetery – Phase V Expansion Medical Lake** - We are requesting \$6,755,000 in funding for Phase V of the expansion at the Washington State Veterans Cemetery in Medical Lake (WSVC). This phase is critical to meeting the growing demand of veteran burials while enhancing the cemetery's safety, security, and overall functionality.
- **Reappropriate WVH HVAC Retrofit Fund** - We are requesting \$870,000 state funding reappropriation to ensure the successful completion of the HVAC retrofit project at the Washington Veterans Home (WVH). In the 2025 Supplemental Budget, the legislature appropriated \$3.8 million in additional funding to support the timely completion of this project. Of this amount, \$2.93 million was expended during the 2023–25 biennium to cover project invoices through June 30, 2025. However, due to unexpected delays, a portion of project invoices were not received before June 30, 2025, and will be processed by October 2025.
- **Washington Veterans Home – HVAC Reappropriation Retrofit Fund Transfer** – We are requesting a transfer of \$10,735,570.56 in spending authority from federal to state funds. The HVAC project at WVH was initially completed with state funds, but the Federal VA has since approved the project and will cover 35% of the total cost. This transfer realigns resources by shifting the expenditure from state to federal authority.

Each of these projects is structured to leverage federal VA construction funding, covering between 65% and 100% of qualifying construction costs. WDVA remains committed to maximizing federal resources while ensuring that the State of Washington continues to meet the vital capital construction needs required to sustain and improve facilities and infrastructure for our veterans.

We are confident this capital budget will allow Washington Department of Veterans Affairs (WDVA) to continue “**Serving Those Who Served**”.

Yours in service,



David Puente
Director

Department of Veterans Affairs

2026 Supplemental Capital Budget Request

TAB A	Ten-Year Capital Program Summary FTE Summary
TAB B	Capital Projects Requests Related to Preservation Capital Project Cost Estimates over \$2 Million
TAB C	Capital Projects Requests Related to New or Expanded Programs Capital Project Cost Estimates over \$2 Million
TAB D	Capital Projects Requests Related to Grants & Loan Projects Project List for Each Grant & Loan Program that is not Submitted as a Subproject

TAB A

Ten-Year Plan Summary

Department of Veterans Affairs
2026 Supplemental Capital Budget

305 - Department of Veterans Affairs Ten Year Capital Plan by Project Class

2025-27 Biennium

*

Version: C1 Agency Request

Report Number: CBS001

Date Run: 9/22/2025 8:21AM

Project Class: Program Improvement (State-Owned)

Agency Priority	Project by Account-EA Type	Estimated Total	Prior Expenditures	Current Expenditures	Reapprop 2025-27	New Approp 2025-27	Estimated 2027-29	Estimated 2029-31	Estimated 2031-33	Estimated 2033-35
2	40000119 SE Washington Veterans Cemetery pre-design									
	057-1 State Bldg	8,475,000				8,475,000				
	Constr-State									
4	40000006 WVH HVAC Retrofit									
	057-1 State Bldg	4,670,000		3,800,000		870,000				
	Constr-State									
Total: Program Improvement (St		13,145,000		3,800,000		9,345,000				

Project Class: Grant/Loan

Agency Priority	Project by Account-EA Type	Estimated Total	Prior Expenditures	Current Expenditures	Reapprop 2025-27	New Approp 2025-27	Estimated 2027-29	Estimated 2029-31	Estimated 2031-33	Estimated 2033-35
1	40000109 SVH - Skilled Nursing Facility Replacement									
	001-2 General	(5,381,000)					(5,381,000)			
	Fund-Federal									
	057-1 State Bldg	17,735,000				10,900,000	6,835,000			
	Constr-State									
	Project Total:	12,354,000				10,900,000	1,454,000			
3	40000118 WSVC - Phase V Expansion in Medical Lake									
	001-2 General	6,080,000				6,080,000				
	Fund-Federal									
	057-1 State Bldg	675,000				675,000				
	Constr-State									
	Project Total:	6,755,000				6,755,000				
4	91000013 DVA ARPA Federal Funds & State Match									
	001-2 General	(10,736,000)				(10,736,000)				
	Fund-Federal									
	057-1 State Bldg	10,736,000				10,736,000				
	Constr-State									
	Project Total:									

305 - Department of Veterans Affairs
Ten Year Capital Plan by Project Class
 2025-27 Biennium
 *

Version: C1 Agency Request

Report Number: CBS001

Date Run: 9/22/2025 8:21AM

Total: Grant/Loan	19,109,000	17,655,000	1,454,000
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Total Account Summary

<u>Account-Expenditure Authority Type</u>	<u>Estimated Total</u>	<u>Prior Expenditures</u>	<u>Current Expenditures</u>	<u>Reapprop 2025-27</u>	<u>New Approp 2025-27</u>	<u>Estimated 2027-29</u>	<u>Estimated 2029-31</u>	<u>Estimated 2031-33</u>	<u>Estimated 2033-35</u>
001-2 General Fund-Federal	(10,037,000)				(4,656,000)	(5,381,000)			
057-1 State Bldg Constr-State	42,291,000		3,800,000		31,656,000	6,835,000			
Total	32,254,000		3,800,000		27,000,000	1,454,000			

Ten Year Capital Plan by Project Class

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Report Number: CBS001

Date Run: 9/22/2025 8:21AM

<u>Parameter</u>	<u>Entered As</u>	<u>Interpreted As</u>
Biennium	2025-27	2025-27
Functional Area	*	All Functional Areas
Agency	305	305
Version	C1-A	C1-A
Project Classification	*	All Project Classifications
Include Enacted	No	No
Sort Order	Project Class	Project Class
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

FTE Summary

Department of Veterans Affairs
2026 Supplemental Capital Budget

No
Information

Backlog Reduction Plan

Department of Veterans Affairs
2026 Supplemental Capital Budget

No
Information

TAB B

No
Information

TAB C

Capital Project Requests Related to
New or Expanded Programs

Department of Veterans Affairs
2026 Supplemental Capital Budget

Capital Project Request

2025-27 Biennium

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Version: C1 Agency Request

Report Number: CBS002

Date Run: 9/18/2025 2:25PM

Project Number: 40000119

Project Title: SE Washington Veterans Cemetery pre-design

Description

Starting Fiscal Year: 2026

Project Class: Program Improvement (State-Owned)

Agency Priority: 2

Project Summary

The Washington State Department of Veterans Affairs (WDVA) is seeking \$8,475,000 in state funding to acquire land in Benton County for the development of a new state veterans cemetery in southeastern Washington. This investment addresses the critical lack of burial and committal options for veterans in south-central and southeastern regions of the state. The new cemetery will ensure that tens of thousands of veterans, along with their spouses and other eligible family members, have access to a final resting place that honors their service and sacrifice. Once the land is acquired and off-site improvements are completed, the federal VA will provide up to 100% of the funding for the design and construction phases, maximizing the state's investment and ensuring timely progress on this much-needed project.

Project Description

In 2017, WDVA conducted a feasibility study to evaluate the need for a state veterans cemetery in south-central and southeastern Washington. The study identified a significant underserved veteran population, with approximately 65,000 veterans residing within a 75-mile radius of the Tri-Cities area. Long-term projections indicate that the veteran population will remain between 50,000 and 60,000 over at least the next two decades, primarily due to aging veterans, underscoring the need for a dedicated state veterans cemetery.

These findings were further supported by the U.S. Department of Veterans Affairs (VA) in its March 2022 Asset and Infrastructure Review (AIR) Commission report, which highlighted an increasing demand for aging services in southeastern Washington.

WDVA has submitted funding requests for this project in prior biennia (2017–2019, 2019–2021, 2021–2023, 2023–2025, and 2025–2027). To qualify for Federal VA Construction Grant funding, which covers up to 90% of allowable construction costs, the state must first acquire full ownership of the land and complete necessary off-site improvements at its own expense.

The feasibility study determined that a mid-size cemetery is needed to accommodate at least 400 burials per year for a minimum of 50 years, allowing for initial development, future expansion, and appropriate separation from neighboring properties. The proposed property requires land acquisition and off-site infrastructure improvements, including utilities, road access, water, sewer, power, and data connections. WDVA collaborated with local officials and the Washington Department of Transportation to develop reasonable cost estimates.

The total estimated cost for land acquisition and off-site improvements is \$8,475,000, including \$760,000 for land acquisition, \$3,500,000 for road improvements and up to \$3.9 million for utilities to the property.

These investments are critical to make the site viable for cemetery development and serve as the foundation to leverage federal funding. Funding has already been secured for the Pre-Design phase, expected to be completed by January 2026. Once the land is acquired, WDVA will begin the design phase and apply for the Federal VA Construction Grant, with the state providing a 10% match for design and construction costs. The construction phase will be up to 100% federally funded, allowing the state to potentially recoup some or all of its match.

In conclusion, WDVA is requesting \$8,475,000 in state funding to acquire up to 100 acres in Benton County and prepare the site for design and development of a new state veterans cemetery. This land acquisition is a critical step to secure federal construction funding and ensure that our veterans receive the dignified final resting place they deserve.

Location

City: West Richland

County: Benton

Legislative District: 008

Project Type

Minor Works Program List

Capital Project Request

2025-27 Biennium

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Version: C1 Agency Request

Report Number: CBS002

Date Run: 9/18/2025 2:25PM

Project Number: 40000119

Project Title: SE Washington Veterans Cemetery pre-design

Description**Growth Management impacts**

The growth management impact of the "SE Washington Veterans Cemetery Pre-design" project involves several important considerations related to land use, regional development, infrastructure, and community planning: Establishing a veterans cemetery in this area could stimulate regional growth, particularly in rural or underserved regions. The presence of a cemetery might attract related services and businesses, thereby contributing to local economic development. The pre-design and subsequent construction phases will create jobs and stimulate the local economy. In the long term, the operation of the cemetery will continue to provide employment opportunities, contributing to the economic stability of the region. Overall, the pre-design phase of the SE Washington Veterans Cemetery project is a critical step in managing the growth and development of Southeastern Central Washington. It will provide the necessary foundation for informed decision-making, ensuring that the cemetery is developed in a way that honors veterans while contributing positively to the region's growth and sustainability.

New Facility: No

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2025-27 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriates	New Appropriates
057-1	State Bldg Constr-State	8,475,000				8,475,000
	Total	8,475,000	0	0	0	8,475,000
Future Fiscal Periods						
		2027-29	2029-31	2031-33	2033-35	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Capital Project Request

2025-27 Biennium

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<u>Parameter</u>	<u>Entered As</u>	<u>Interpreted As</u>
Biennium	2025-27	2025-27
Agency	305	305
Version	C1-A	C1-A
Project Classification	*	All Project Classifications
Capital Project Number	40000119	40000119
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids



Tri-Cities Washington Area Veteran's Cemetery

Feasibility Study

Prepared for:

Washington Department of Veterans Affairs

Prepared by:

RGU Architecture and Planning

FLO Analytics

JGM Landscape Architects, Inc.

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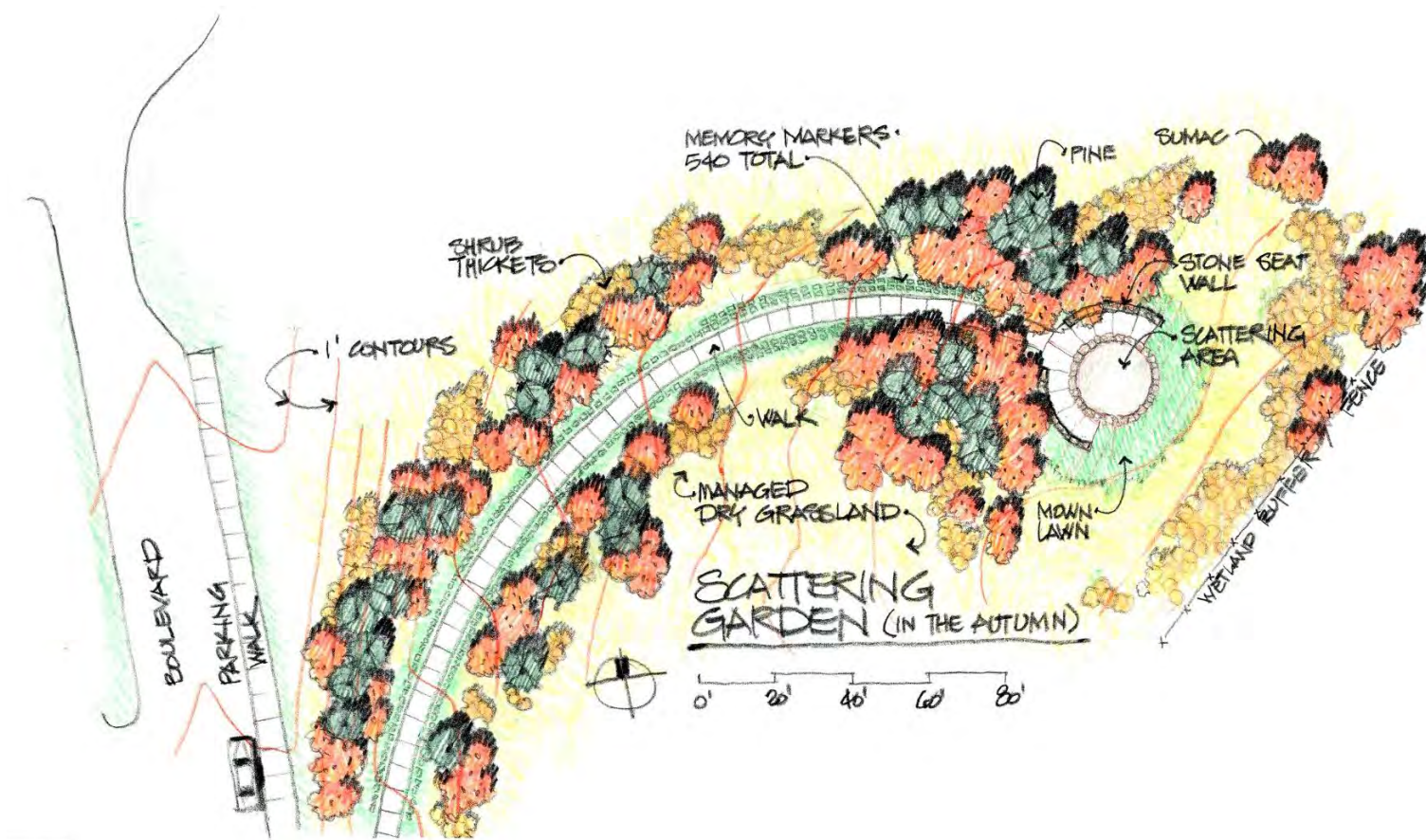
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1.0 INTRODUCTION

The two purposes of this document are to indicate the necessity of a State Veterans Cemetery in South Central Washington, and to show the feasibility of locating such a facility.

Demographic studies are included that determine the need, and projected size of the cemetery. To serve the veterans and their families a new state cemetery in this region is justified, which is confirmed by the data in this document. Outlined within the report are descriptions of the standard facilities and features required for a state veterans' cemetery. Sections are included that relate to site selection criteria, and the probable costs of construction and operations.

Following the demographic analysis and needs assessment, alternative potential sites are described. Each was initially considered suitable for cemetery development. The sites met the site evaluation guidelines created by the Veterans Administration. Three preferred available sites are designated, with an analysis of each.



2.0 EXECUTIVE SUMMARY

With service to veterans and their families in mind, the Veteran Administration's National Cemetery Administration (NCA) and the US Department of Veteran Affairs (VA) Veterans Cemetery Grants Program were created. The National Cemetery Administration oversees the Veterans Cemetery Grants Program. This grant program was established in 1978 to aid states, territories and federally recognized tribal governments in furnishing gravesites for veterans in areas where VA's national cemeteries cannot completely fulfill the burial needs of veterans.¹ The Veterans Cemetery Grant Program is designed to complement the VA's 135 national cemeteries across the country. The NCA and the Veterans Cemetery Grant Program assist veterans and their families with finding suitable final resting places that commemorate their sacrifice and service to our Nation.

This document indicates the need for a state veterans' cemetery in South Central Washington, and provides preferred suitable probable locations for the cemetery. As our veterans' population continues to age, the placement of national and state veterans' cemeteries becomes increasingly important.² To establish feasibility, existing services were analyzed. Data on veteran demographics within the area and burial projections were researched. Once feasibility was established, suitable sites for a Veteran's cemetery within a 75-mile radius of the Tri-Cities, Washington were investigated. Considerations regarding cemetery facilities and site selection were based on guidelines set forth by the State Cemetery Grants Program.³

Evidence suggests a gap in service for veterans in South Central Washington and North Central Oregon. The two closest National Cemeteries, Tahoma (King County, Washington), and Willamette (Multnomah County, Oregon) are each beyond 200 miles. Both cemeteries were in the top 20 busiest national cemeteries in 2016. As of September 30, 2016, Willamette National Cemetery contained more than 100,000 gravesites.⁴ The state veteran's cemetery in Medical Lake (Spokane) is nearest to the Tri-Cities location, yet it is over a two-hour drive time.

Potential sites for the cemetery were investigated, the selection of which was determined from detailed Geographic Information Systems (GIS) data. Following the analysis of potential sites, three preferred "sites of interest" were chosen. The sites met established criteria, and were found to be available for purchase or to be acquired through some alternative means of transfer.

Support for the project is another significant aspect of the feasibility process. Input from agency representatives and veterans regarding support of the cemetery was requested. To encourage support in the community, interactions with local veterans' organizations and local government authorities were initiated. Information regarding contacted organizations, letters of support and other communications are included in Section 7.0 Appendix.

3.0 NEEDS ASSESSMENT

3.1 Demographic Analysis Purpose and Approach

A demographic analysis examines, in detail, the need for a state veterans' cemetery in the Tri-Cities region. Currently, the State of Washington has major veteran's cemeteries in the western and northeastern parts of the state serving the Seattle and Spokane metropolitan areas (Figure 1). A Tri-Cities veterans' cemetery would bridge the gap between these two areas, serving an area that is projected to consistently grow in population over the next twenty years. Using general population numbers, as well as veteran population forecasts and burial statistics, a thorough analysis was conducted to gauge the projected use of a veterans' cemetery and to define a Tri-Cities service territory.



Figure 1. Regional Overview

3.2 Geographic Area Assessed

Demographic information was compiled from 13 counties in Oregon and Washington: Gilliam, Morrow, Sherman, and Umatilla Counties in Oregon and, Benton, Chelan, Douglas, Franklin, Grant, Kittitas, Klickitat, Walla Walla and Yakima Counties in Washington (Figures 2 and 3). The development of a trade area, consisting of a 75-mile radius and comparative 75-mile drive time analysis (i.e., Trade Area), determined the extent of the overall service territory while excluding areas that had market overlap with the existing Medical Lake veterans' cemetery (i.e., Adams County). The service territory includes areas east of the Cascade mountain range, as this gives significantly easier access to those in eastern and central Washington and north-central Oregon. Oregon counties were included as Washington State does not have a residency requirement for veterans utilizing the benefit.

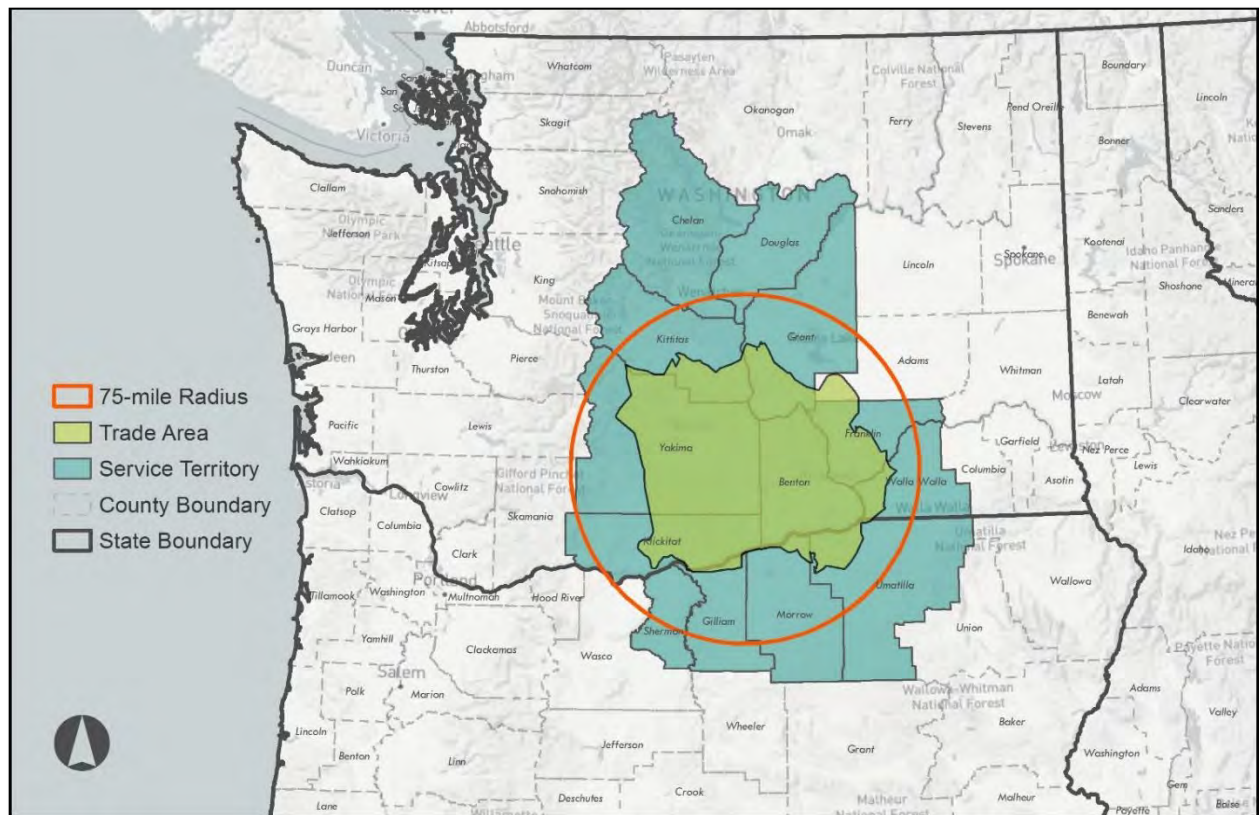


Figure 2. Demographic Assessment Service Territory

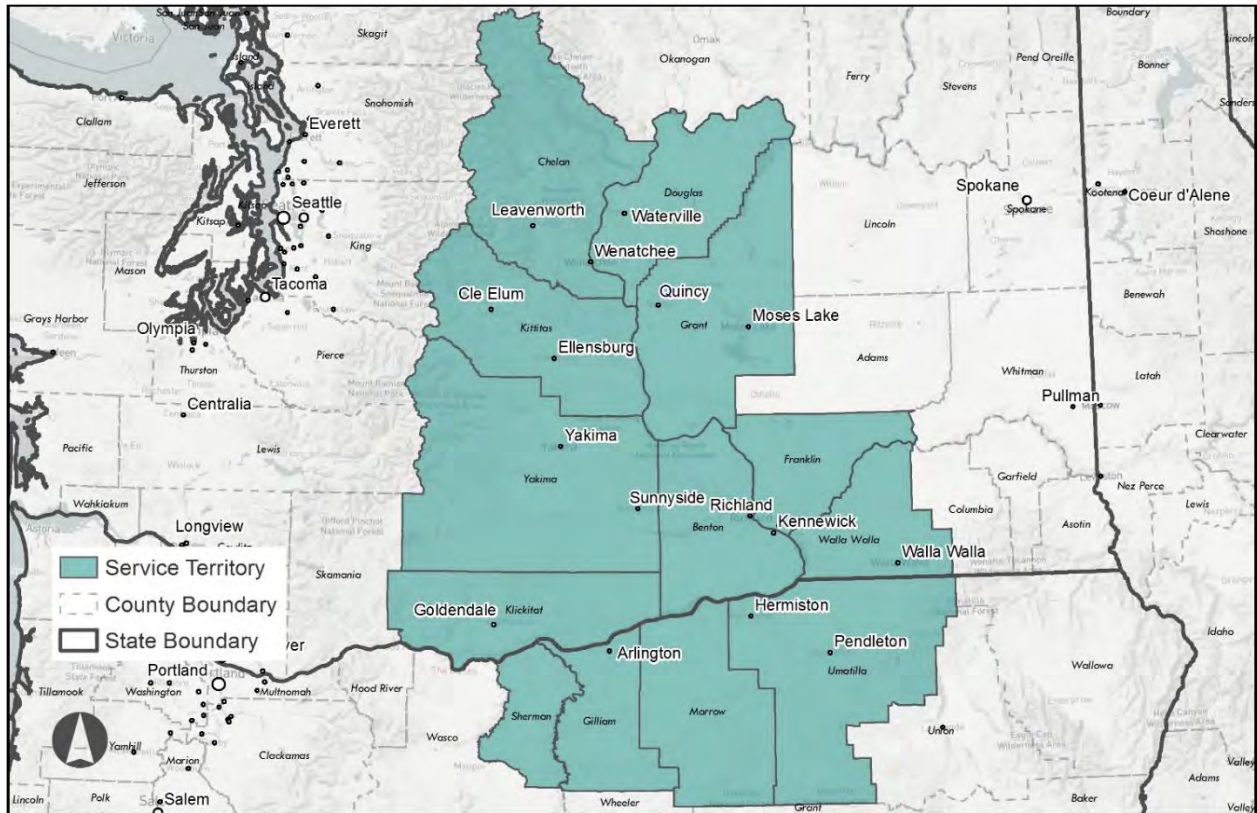


Figure 3. Demographic Assessment Service Territory Detail

3.3 County Population Characteristics

County wide analysis supports standardized analysis of demographic, mortality and veterans' data in a consistent and comparable way. To understand future trends and projections, veterans' data can be analyzed as a percentage of the total population within the Tri-Cities service territory. The following sections describe general population and veteran specific trends.

3.3.1 Population by County 2010-2015

Apart from Sherman County, Oregon, the general population is growing in the Tri-Cities service territory. Benton and Franklin Counties are experiencing the highest rates of growth. The growth rate of 1.13% across all Counties resulted in the service territory growing by roughly 50,000 people, or a 5.8% increase in population, between 2010 and 2015 (Table 1).

County	State	Total Population 2010	Total Population 2015	2010-2015 Growth Rate	2010-2015 Percent Change
Gilliam	OR	1,870	1,958	0.92%	4.73%
Morrow	OR	11,175	11,668	0.86%	4.42%
Sherman	OR	1,765	1,735	-0.34%	-1.68%
Umatilla	OR	76,000	78,887	0.75%	3.80%
Benton	WA	175,177	184,882	1.08%	5.54%
Chelan	WA	72,453	75,180	0.74%	3.76%
Douglas	WA	38,431	40,603	1.10%	5.65%
Franklin	WA	78,163	87,755	2.32%	12.27%
Grant	WA	89,120	95,822	1.45%	7.52%
Kittitas	WA	40,915	42,592	0.80%	4.10%
Klickitat	WA	20,318	20,606	0.28%	1.42%
Walla Walla	WA	58,781	60,015	0.42%	2.10%
Yakima	WA	243,231	256,341	1.05%	5.39%
Total		907,399	960,060	1.13%	5.80%

Table 1. 2015 Population and Growth Rates⁵

3.3.2 Population by County Projected to 2035

The Tri-Cities service territory population is projected to increase by about 250,000 people by 2035 (Table 2). Franklin County, WA has the highest projected growth rate in the next 20 years at 2.55%. Sherman County, OR has the lowest growth rate over the next 20 years at 0.03%.

County	State	2015 Total Population	2035 Projected Population	2015 – 2035 Growth Rate
Gilliam	OR	1,958	2,378	0.97%
Morrow	OR	11,668	14,373	1.04%
Sherman	OR	1,735	1,745	0.03%
Umatilla	OR	78,887	98,820	1.13%
Benton	WA	184,882	236,007	1.22%
Chelan	WA	75,180	87,168	0.74%
Douglas	WA	40,603	52,256	1.26%
Franklin	WA	87,755	146,103	2.55%
Grant	WA	95,822	129,779	1.52%
Kittitas	WA	42,592	53,032	1.10%
Klickitat	WA	20,606	21,492	0.21%
Walla Walla	WA	60,015	66,378	0.50%
Yakima	WA	256,341	306,636	0.90%
Total		958,044	1,216,167	

Table 2. 2035 Projected Population and Growth Rates⁶

3.3.3 Net Migration by County

Between 2010 and 2015, the service area experienced a net migration gain of roughly 11,000 people (Figure 4). Table 3 shows the net in- and out-migrations for individual counties in the service territory. The combination of in-migration and growth rates within the service territory (Section 3.3.1) will lead to an increase the population of the area over the next 20 years (Section 3.3.2).

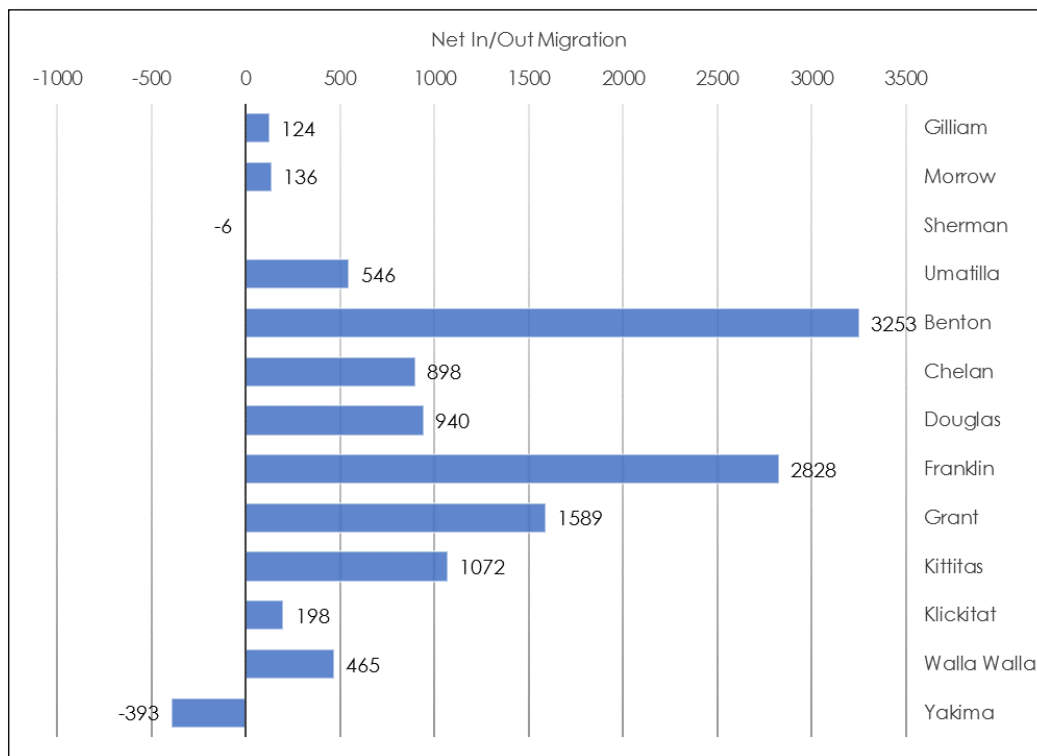


Figure 4. 2010- 2015 Net Migration⁷

County	State	Net In/Out Migration
Gilliam	OR	124
Morrow	OR	136
Sherman	OR	-6
Umatilla	OR	546
Benton	WA	3,253
Chelan	WA	898
Douglas	WA	940
Franklin	WA	2,828
Grant	WA	1,589
Kittitas	WA	1,072
Klickitat	WA	198
Walla Walla	WA	465
Yakima	WA	-393
Total		11,650

Table 3. 2010-2015 Net Migration⁸

Benton and Franklin counties (the Tri Cities area) clearly have the greatest in migration, followed by Grant county (Moses Lake). The current population of the Tri Cities region is over 260,000 people, and has been one of the fastest growing metropolitan areas in the country since 2010. There are several reasons for the population growth. The legacy of the Hanford Nuclear Reservation clean-up continues, and the project receives significant federal funds annually to continue the work. The combined contractors are the largest employers in the area, with over 9,000 employees. Many of the workers are recruited from other parts of the country.

Another engine of growth is Battelle/Pacific Northwest National Laboratory, with several thousand employees. The laboratory is also the recipient of significant federal funding. There are a large number of research scientists at the laboratory, and as with Hanford, many are recruited from other areas of the country. The agricultural base, especially the burgeoning wine and viticulture industry, provides another reason for a strong economy, including the tourism aspect. The area's arid desert climate is found appealing to many, and there have been an increasing number of people from the west side of the state retiring in the area, primarily due to the dryer weather and a lower cost of living than the Seattle metro area. Figure 5 indicates regions where people come from who move to the Tri Cities. Primarily from the west side of the Cascade Mountains, but also from southern California, Nevada, and Arizona

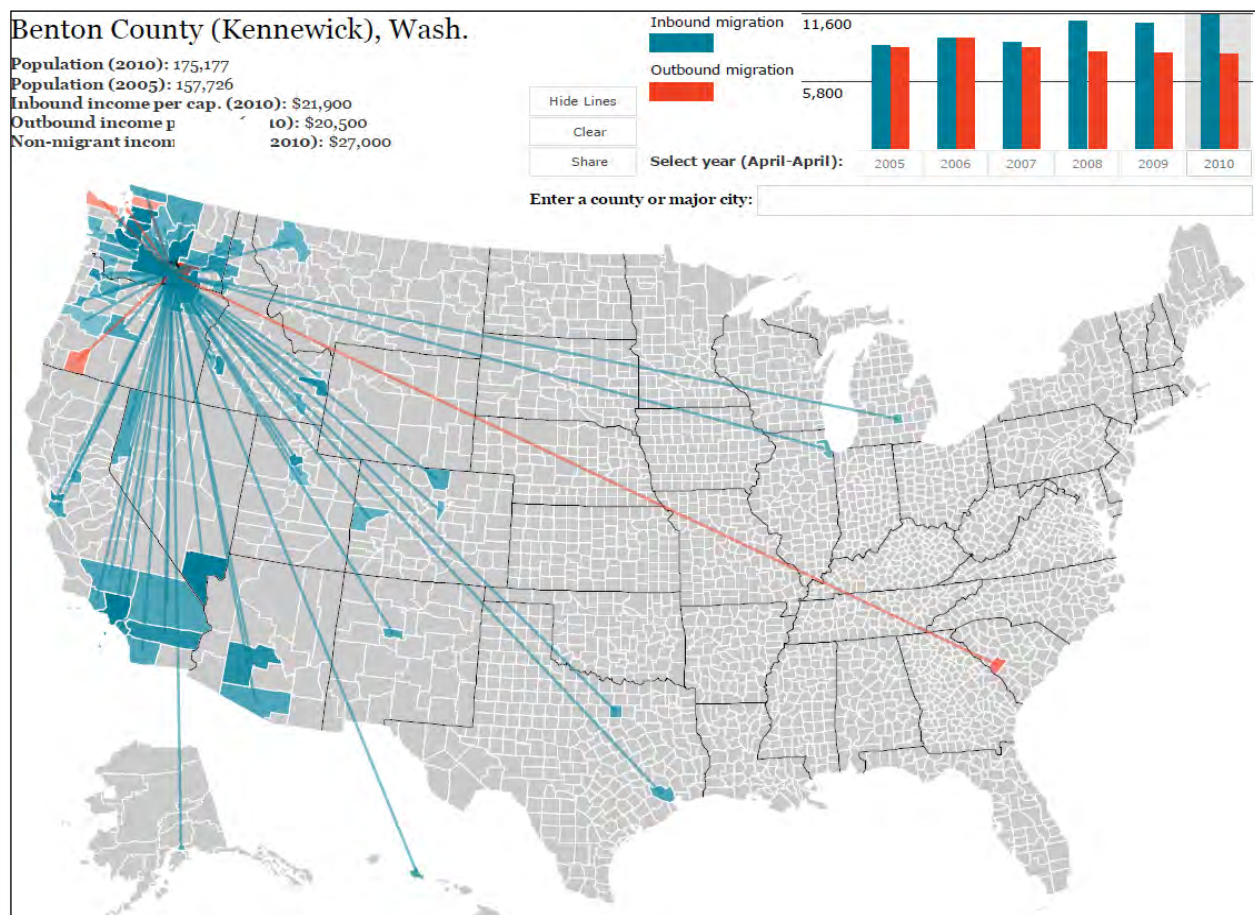


Figure 5. Benton County Migration Map

3.3.4 Racial Characteristics

The service territory's racial distribution is predominately white, followed by a large Hispanic population, which, in general, is due to the areas large agricultural-based economy. Figure 6 illustrates the proportional population in terms of race, while Table 4 details the racial makeup across the Tri-Cities service territory.

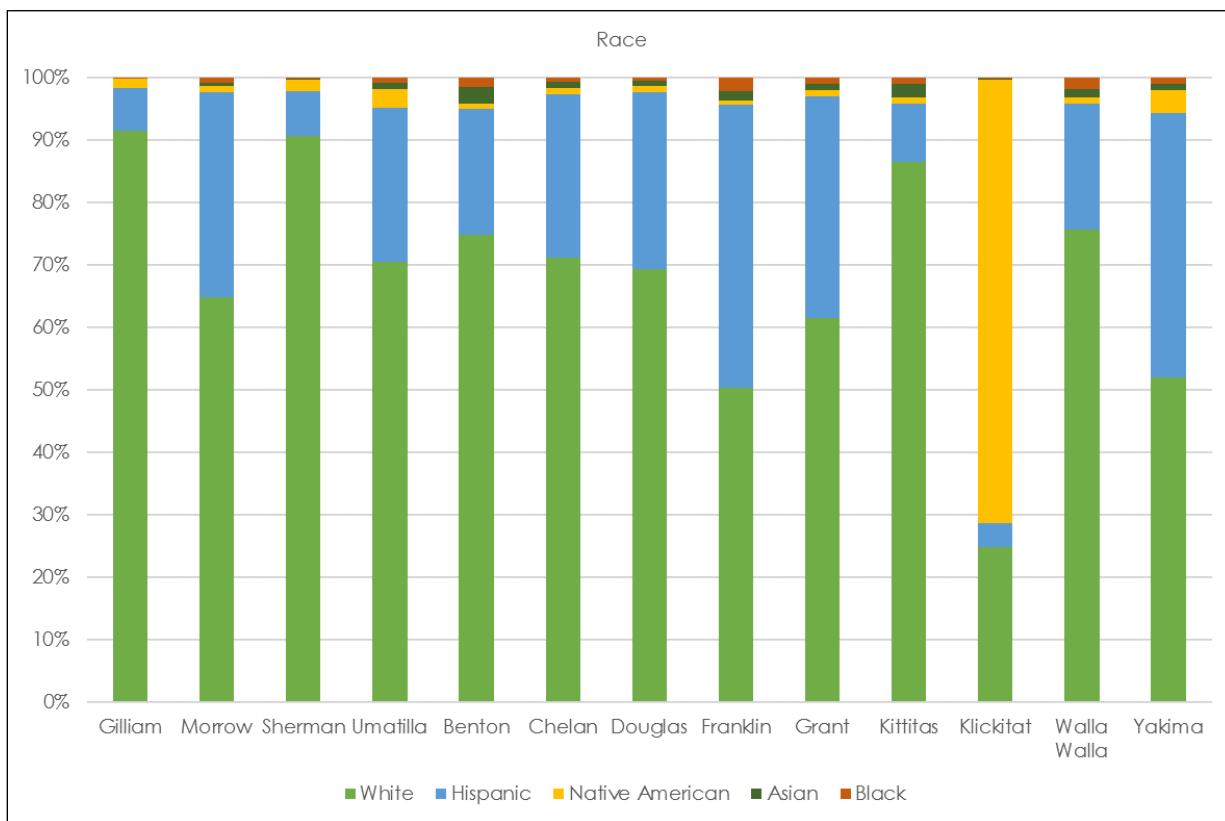


Figure 6. 2015 Graph of Proportion of Race⁹

County	State	White	Hispanic	Native American	Asian	Black
Gilliam	OR	1,809	137	31	3	3
Morrow	OR	8,811	4,453	154	63	108
Sherman	OR	1,594	125	34	3	4
Umatilla	OR	59,952	20,907	2,687	818	768
Benton	WA	154,316	41,686	1,844	5,624	2,978
Chelan	WA	58,008	21,493	797	849	578
Douglas	WA	31,440	12,817	470	398	243
Franklin	WA	52,334	47,206	646	1,761	2,159
Grant	WA	66,578	38,448	1,250	972	1,137
Kittitas	WA	37,962	4,097	498	926	472
Klickitat	WA	17,948	2,783	515	170	104
Walla Walla	WA	50,714	13,593	652	957	1,213
Yakima	WA	151,580	123,052	10,877	3,039	2,754
Total		693,046	330,797	20,455	15,583	12,521

Table 4. 2015 Numerical Proportion of Race¹⁰

3.3.5 Historical Deaths by County

Deaths increased from 6,000 to 7,200 from 2005 to 2015, respectively. Table 5 reflects the annual deaths in the general population per county.

County	State	2005 Deaths	2010 Deaths	2015 Deaths
Gilliam	OR	22	18	21
Morrow	OR	67	63	97
Sherman	OR	14	16	22
Umatilla	OR	580	661	653
Benton	WA	1,131	1,408	1680
Chelan	WA	718	785	917
Douglas	WA	165	201	201
Franklin	WA	187	219	236
Grant	WA	460	523	548
Kittitas	WA	207	235	254
Klickitat	WA	138	242	107
Walla Walla	WA	584	571	601
Yakima	WA	1,824	1,748	1884
Total		6,097	6,690	7,221

Table 5. 2015 Historical Deaths ¹¹

3.3.6 Deaths by County Projected to 2035

Between the period of 2015 and 2035, death rates are projected to steadily increase throughout the service area. Table 6 shows projected deaths for the general population within the service territory increasing by nearly 20,000 by 2035.

County	State	2010-2015	2015-2020	2020-2025	2025-2030	2030-2035	2015-2035 Death Rate (per 1,000 individuals per year)
Gilliam & Sherman	OR	213	216	226	240	263	242
Morrow	OR	428	473	523	580	657	173
Umatilla	OR	3,137	3,245	3,456	3,747	4,155	165
Benton	WA	6,251	7,283	8,219	9,276	10,493	169
Chelan	WA	3,357	3,600	3,802	4,190	4,677	201
Douglas	WA	1,558	1,786	1,980	2,267	2,574	187
Franklin	WA	1,863	2,245	2,600	3,070	3,656	103
Grant	WA	3,090	3,581	3,988	4,511	5,110	154
Kittitas	WA	1,509	1,686	1,868	2,109	2,358	169
Klickitat	WA	969	1,177	1,363	1,554	1,723	276
Walla Walla	WA	2,727	2,916	3,007	3,159	3,379	197
Yakima	WA	8,506	9,273	9,718	10,690	11,806	148
Total		35,525	39,403	42,678	47,325	52,785	202

Table 6. 2035 Projected Deaths by County¹²

3.4 Veterans Population Characteristics

Evaluating veterans' data in relation to the general population allows for a comparative analysis to assess the need for a veterans' specific cemetery in the Tri-Cities area. There are currently over 67,000 veterans in the Tri-Cities service territory (Section 3.4.4). By 2035, that number is expected to decrease by 22%.

3.4.1 Active Duty Population

Active duty statistics could be a predictor of future veteran trends. There is a substantial population of active duty personnel in Washington State primarily due to major military installations in the Seattle/Tacoma/Bremerton area, Spokane, and Yakima. Oregon has far fewer active duty personnel, due to the lack of a major military installation in the state. (Table 7).

State	Army	Navy	Marines	Air Force	Coast Guard	Total
Oregon	114	162	107	124	995	1,502
Washington	25,789	10,148	637	5,812	2,011	44,397

Table 7. Active Duty Population, Washington and Oregon ¹³

3.4.2 Veterans Population by Period of Service

Vietnam era veterans make up the largest population within the service area, followed by Gulf War and Post 9/11 veterans respectively. (Table 8).

State	WWII	Korea	Vietnam	Gulf War	Post 9/11
Oregon	21,689	31,459	125,255	83,308	26,769
Washington	29,382	47,499	212,419	199,508	67,903
Total	51,071	78,958	337,674	282,816	94,672

Table 8. Veterans Population by Period of Service ¹⁴

3.4.3 Veterans Population by Age Group

Veteran ages in Oregon and Washington span from less than 20 to over 85 years old. The age range of 65-69 accounts for the largest populations in both states (Table 9, Figure 7).

State	< 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54
Oregon	58	3,151	9,071	13,181	13,958	17,355	21,660	25,534
Washington	183	6,909	21,304	31,069	32,010	37,337	45,903	52,552

State	55-59	60-64	65-69	70-74	75-79	80-84	85+
Oregon	28,868	34,266	54,133	36,951	26,589	21,557	25,300
Washington	58,075	61,533	87,167	58,829	42,318	34,350	34,084

Table 9. Veterans Population by Age Group ¹⁵

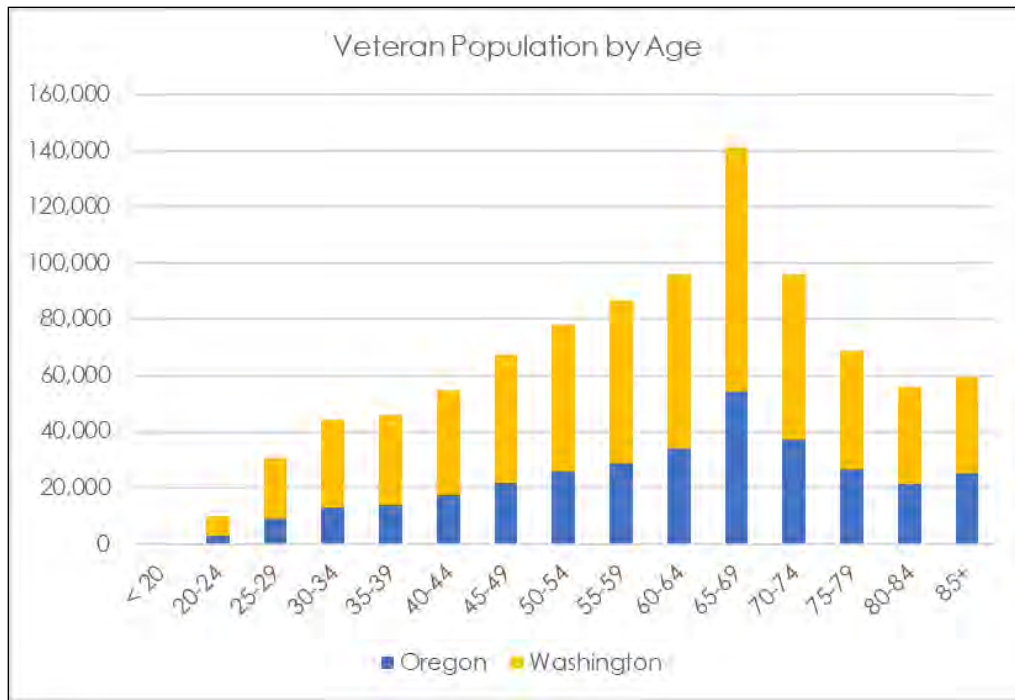


Figure 7. Veterans Population by Age

3.4.4 Veterans Population by County Projected to 2035

In all but two of the counties studied, veterans' populations are expected to drop through 2035 (Table 10). This appears to be consistent with major conflicts throughout time, and the aging veteran populations associated with those time periods. In 2015, the service territory veteran population represented 7% of the total population. In contrast, it is projected that the veteran population will only make up 4% of the total population by 2035. The veterans' population in Franklin and Klickitat Counties, WA are expected to grow by 16% and 3% respectively. Sherman County, OR is expected to experience the largest decline in its veterans' population, by over 46%. All other Counties will see veteran populations decline by double digits between 2015 and 2035.

County	State	2015	2020	2025	2030	2035
Gilliam	OR	237	232	225	217	206
Morrow	OR	1,070	1,041	1,012	972	923
Sherman	OR	282	256	224	189	151
Umatilla	OR	6,008	5,681	5,275	4,857	4,423
Benton	WA	15,444	15,044	14,388	13,537	12,549
Chelan	WA	5,880	5,331	4,728	4,101	3,477
Douglas	WA	3,242	3,125	3,003	2,841	2,662
Franklin	WA	4,048	4,223	4,428	4,589	4,705
Grant	WA	5,981	5,767	5,480	5,155	4,800
Kittitas	WA	3,125	2,903	2,666	2,415	2,149
Klickitat	WA	2,475	2,579	2,634	2,627	2,558
Walla Walla	WA	4,382	3,976	3,599	3,224	2,865
Yakima	WA	15,635	14,757	13,572	12,355	11,107
Total		67,807	64,916	61,233	57,078	52,575

Table 10. Projected Veterans Population to 2035 ¹⁶

3.4.5 Veterans Deaths by County Projected to 2035

As Veteran populations will generally fall over time within the service area, veteran deaths will slightly increase. By 2035, there will be an estimated 8,950 veteran deaths (Table 11). Benton and Yakima County will account for almost half of the veterans' deaths over the next 20 years.

County	State	2015	2020	2025	2030	2035
Gilliam & Sherman	OR	20	20	20	20	20
Morrow	OR	30	30	30	30	30
Umatilla	OR	140	140	140	140	150
Benton	WA	360	380	400	410	420
Chelan	WA	190	180	180	170	160
Douglas	WA	90	90	90	100	90
Franklin	WA	80	80	90	100	110
Grant	WA	160	150	160	160	160
Kittitas	WA	90	80	80	90	80
Klickitat	WA	50	60	80	90	90
Walla Walla	WA	140	130	120	120	110
Yakima	WA	420	410	400	400	390
Total		1,770	1,750	1,790	1,830	1,810

Table 11. Projected Veterans Deaths through 2035 ¹⁷

3.5 Cremation in Washington State and Oregon

The rate of cremation nationally, and in both Oregon and Washington, is increasing (Table 12). In 2015, both states have the highest cremation rates in the country (compared to the national rate of 48.6%), and have been exceeding the projected national rate of 54.3% for many years. This upward trend is expected to continue.

Year	WA Total Deaths	WA Total Cremations	% WA Cremations	OR Total Deaths	OR Total Cremations	% OR Cremations
2000	43,934	25,042	57%	29,541	16,543	56%
2005	46,273	29,615	64%	30,854	19,438	63%
2010	48,249	34,257	71%	31,899	22,010	69%
2015	54,640	42,073	77%	35,709	26,782	75%

Table 12. Historical Cremation Rates by State ¹⁸

3.6 Demographics Summary

With a growing base population, as well as a large population of Vietnam and Gulf War era veterans that continue to age, a Tri-Cities area veteran's cemetery could serve a steady veterans' population to 2035 and beyond with close to 9,000 deaths over the next 20 years (Table 10) in the Tri-Cities service territory.

3.6.1 Population of Area Served

In general, it is expected that the Tri-Cities Area State Veterans Cemetery would serve a territory consisting of nearly 1,218,202 civilians by 2035, of which 52,575 would be veterans (Table 9). Furthermore, the service territory is expected to experience at least 8,950 veteran deaths over the next 20 years.

3.6.2 Minimum Area Required for Tri-Cities Area State Veterans Cemetery

Using veteran's projected death data, in conjunction with projected burial and cremation rates, a minimum acreage requirement for the Tri-Cities VA Cemetery was established by applying industry-standard burial space acreage requirements to the projected veteran's deaths. As a result of this analysis, a minimum of 18.6 acres will be required to sustain the facility for the next 50 years. The methodology and process are shown below (Figure 8).

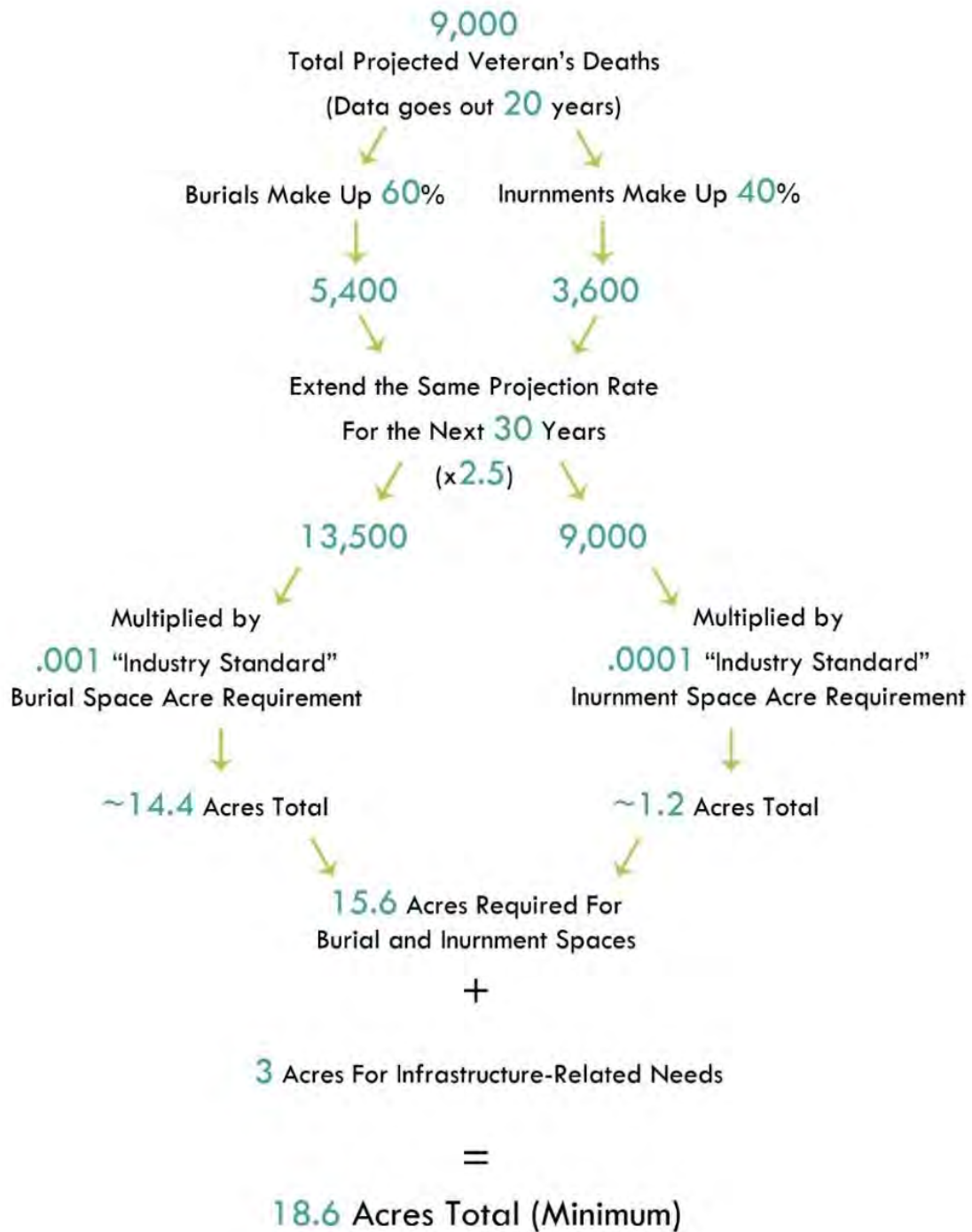


Figure 8. Tri-Cities Minimum Sizing Requirements Calculation ¹⁹

3.7 Requirements for Veterans Cemeteries

The primary requirement for a state veterans Cemetery is that all cemeteries established under the grant program must conform to VA-prescribed standards and guidelines for site selection, planning and construction. Prior to site selection, some general parameters can be addressed concerning typical facilities found on State Veterans Cemeteries.

Other considerations are the items that may be added to the cemetery in subsequent phases. These must be intentional, and space allocated for them from the beginning of the design. This list includes a Carillon tower, additional committal service shelters and columbaria. An important item, that is not provided in Federal Funding, is the Avenue of Flags. The Avenue of Flags follows the curb line of the main entry road. Also known as the “Avenue of Remembrance” it consists of approximately 40 flagpoles, 10-12 feet high, which are usually donated to the cemetery.

3.7.1 Components of the Cemetery²⁰

Administration Building and Public Information Center

The required administration building facilities include a lobby reception area, separate office for the manager, conference room, several multi-work station areas, public restrooms, an employee lounge area, honor guard lockers, an office work area and a record storage area. Incorporated into the administration building is the Public Information Center, or PIC. The PIC also offers access to an automated visitors’ grave finder kiosk to locate interments. This kiosk forms part of the signage system that informs visitors of cemetery rules, directions, site locations and schedules.

The PIC may be a separate building from administration that would include the reception area, public restrooms and kiosk. The administration building is likely to be a minimum of 2,000 square feet.

Maintenance and Shop Area

The maintenance and shop area should be separated from the general cemetery grounds and surrounded by a tall fence, visual buffer plantings or earthen berms. Along with fencing, a security system should be integrated. There should be a separate maintenance entrance to the shop yard area to avoid truck and machinery delivery conflicts with interment ceremonies. The paved concrete yard area should allow for adequate employee parking, above ground fuel storage tanks, covered sheds for loose aggregate materials, memorial base and vault storage. Storage space for other items required for maintenance of the facility may also be located here. A waste and recycling area, or “spoils” area should be located at a remote area of the site, out of view.

This facility includes a three-bay garage plus one taller bay sized for a backhoe. A vehicle wash bay, and equipment wash room are included. A portion of the building should contain a locker and lunch area for the employees if not already provided within the administration building. An employee shower in this area is desirable; maintenance can involve working with various chemicals. The maintenance building is likely to be a minimum of 2,000 square feet, with the open yard area approximately 30,000 square feet.

Committal Service Shelters

Committal service shelters are provided close to short term accessible parking for those attending the ceremony. The shelters offer protection from adverse weather and are generally 400 square feet in size with an additional separate casket storage area at the back. The shelters will likely have fixed seating benches and appropriate funeral equipment. Additional sheltered space for the honor guard members should also be considered. Alternative locations for future committal shelters should be considered during the initial cemetery design. Committal shelters should be oriented to views toward the main flag assembly area.

Public Restrooms

Accessible public restrooms should be provided for those attending the ceremony and are most often associated with the Public Information Center or PIC. Access to the restrooms for the cortege assembly area is desirable.

Entrances and Roadways

The internal roads should not be less than 24.0 feet in width for two-way traffic. One-way traffic lanes along the sections of main entry road can be separated by a planted island with curbs. The main entry road may be widened and needs to have some length to permit vehicle queuing prior to the procession or cortege to the committal shelter parking.

Main Flag Assembly Area

Central to the design layout for the cemetery is the location for the main flag and the surrounding assembly area that is heavily used for ceremonial events such as Memorial Day and Veterans Day. The flag location is often at a high point and offers an axial vista of the cemetery. The flag must be visible from most parts of the cemetery. The internal roadway uses the flag circle area as a terminal or return point. The flag assembly area includes mounted bronze plaques for each branch of the armed services and accessible concrete paving for temporary event seating. The area must accommodate enough portable seating for 20 dignitaries.

The Assembly Area should accommodate approximately 200-250 persons.

P.O.W./M.I.A. Flag Area

A smaller area with a shorter flag pole denotes the P.O.W./M.I.A. flag area. This area is also used during ceremonial events such as Memorial Day and Veterans Day. The flag location is often in line with an axial vista of the cemetery.

Columbaria

Precast columbaria units with stone niche covers, designed to accept individual VA standard niche cover should be included in the cemetery design, along with locations for expansion of the columbarium structures during future phases of work. The numbers of veterans preferring cremation over burials has been increasing in the state and additional columbarium installations have occurred at both the state and national cemeteries. Columbarium structures require a mostly flat or gently sloping location and have a formalized stepped layout pattern for the units.

Memorial Walk, Memorial Section, Memorial Walls

The Memorial Walk is a path to a dedicated section of the cemetery reserved for monuments to organizations, groups, campaigns, or other military events. The monuments are either on a wall, or consisting of granite or stone bases with bronze plaques.

The Memorial Section can also consist of headstones for those whose remains are unavailable for burial. This is also a possible location for the secondary flagpole for display of the P.O.W./M.I.A. flag.

Scattering Garden Area

Scattering gardens should be in a separate area of the cemetery from other burials and be accessible along a memorial walk leading from roadside parking access. The more remote location allows for the scattering of cremains without conflicting with in-ground burials or graveside visitors.

Cortege Assembly Area

The main entrance road may be widened to allow roadside queuing for vehicles prior to the procession up to the committal shelter area parking. A separate cortege assembly area adjacent to the entrance road may be added for sites without adequate entrance road length for vehicle queuing. The cortege assembly may have several lanes available for stacking of vehicles.

Entry Signage, Gates, and Perimeter Fencing

Ornamental entry gates and an entry feature are the gateway to the facility, and should set the tone and provide a sense of arrival at the facility. They can be traditional, contemporary, or another design depending on the architecture of the rest of the facility. The gates are intended also to control access to the cemetery. Perimeter fencing is not mandatory, and is provided depending on the location and setting of the cemetery. The landscape design at the entry should also reinforce the sense of arrival.

Signage is an essential element of the entry, and should be compatible with the overall design of the facility. The seal of the WDVA will also be an identifying element at the entry.

3.8 Construction

The design should use construction practices that minimize adverse effects on the natural habitat.

Construction of the cemetery is anticipated to be completed in several phases. All major site work will occur during the initial phase including clearing, grading, utilities, entrance road, administration /PIC building, maintenance /shop building, committal service shelter, restrooms, flag assembly areas, limited areas of concrete burial crypt placement, columbarium and short term parking.

Additional expansion phases of work would be funded and scheduled as interment rates dictate. Expansion of burial crypt areas, columbaria, memorial walls, committal service shelters and the internal roadway system to allow access to these areas is anticipated in later phases of work. The irrigation system and planting areas will require adjustments to allow for construction of these future improvements. A careful initial site design for the cemetery anticipating the future expansion plans will help to avoid costly changes and major disruption of cemetery operations during future phases.

A probable cost of construction in 2017 dollars, is included on the following pages.

June 2017									
Tri-cities State Veterans Cemetery									
Preliminary Opinion of Probable Construction Cost									
Summary - Feasibility Study for 30 Acre Site									
				UNIT					
ITEM				UNIT	PRICE	QUANTITY	AMOUNT		
Basic Sitework Grading									
Demolition/Haul/Disposal				L.S.			60,000.00		
Temporary Erosion Control				L.S.			80,000.00		
Stripping Organic Layer - Top 3"/Place Site				C.Y.	6.00	12000.0	72,000.00		
Topsoil Stripping/Screen/Stockpiling				C.Y.	15.00	24000.0	360,000.00		
Earthwork/Haul - Rough Grading				C.Y.	10.00	50000.0	500,000.00		
Rough Grading				AC	3,500.00	30.0	105,000.00		
							SUBTOTAL	1,177,000.00	
Roads and Paving Sitework									
Access Road Improvements				L.S.			48,000.00		
Paving and Surfacing									
Road Network				L.S.			574,440.00		
Small Traffic Circle				L.S.			42,600.00		
Flag Assembly Area - Paving				L.S.			111,300.00		
Asphalt Concrete Paving (3"/6")				L.S.			243,600.00		
Concrete Paving (6"/6")				L.S.			453,000.00		
Pavement Marking				L.S.			8,000.00		
							SUBTOTAL	1,480,940.00	
Utilities									
Domestic Water System				L.S.			210,000.00		
Irrigation - Water Source									
Pump Station				L.S.			175,000.00		
Pump Electrical/Comm				L.S.			12,000.00		
Water Transmission Line				L.F.	35.00	1950.0	68,250.00		
Irrigation System				L.S.			1,506,000.00		
Gas - 2" Service				L.S.			20,000.00		
Storm Drainage System				L.S.			566,000.00		
Septic Systems - Admin/PIC				L.S.			119,000.00		
Primary Electrical				L.S.			70,000.00		
Site Electrical Distribution				L.S.			65,000.00		
Site Telephone/Comm Costs				L.S.			45,000.00		
							SUBTOTAL	2,856,250.00	
Site Improvements									
Fences									
6' Steel Picket Fence				L.S.			300,000.00		
6' Ch Link Perimeter Fence				L.S.			120,000.00		
8' Ch Link Maint Yard Fence				L.S.			25,000.00		
Gates									
Steel Picket Entry Gates				S.F.F.	75.00	240.0	18,000.00		
Steel Picket Service Gates				Ea.	7,500.00	3.0	22,500.00		
Chain Link Cantiliver Gate				Ea.	8,000.00	2.0	16,000.00		

	Entry Wall Feature	L.S.			68,600.00		
	Bollards	L.S.			48,000.00		
	Flagpoles	L.S.			48,500.00		
	Site Furnishings	L.S.			151,650.00		
	Signage System	L.S.			48,000.00		
	Entry Sign	L.S.			13,000.00		
					SUBTOTAL	879,250.00	
	Landscaping						
	Soil Prep., Topsoil, Finish Grading	L.S.			390,000.00		
	Seeding	L.S.			236,000.00		
	Plantings	L.S.			209,000.00		
					SUBTOTAL	835,000.00	
	Concrete Structures						
	Columbarium	L.S.			3,300,000.00		
	Double Depth Precast Crypts	Ea.	725.00	6120.0	4,437,000.00		
	Memorial Walls	Ea.	95,000.00	4.0	380,000.00		
	Scattering Garden	L.S.			31,000.00		
					SUBTOTAL	8,148,000.00	
	Buildings						
	Committal Shelter	Ea.	120,000.00	2.0	240,000.00		
	PIC/Admin. Building	L.S.			650,000.00		
	Vehicle Storage Building	L.S.			250,000.00		
	Maintenance Building	L.S.			400,000.00		
	Maint. Yard - Site Improvements	L.S.			90,000.00		
					SUBTOTAL	1,630,000.00	
					TOTAL DIRECT COSTS	17,006,440.00	
					10% Contingency	1,700,640.00	
					SUBTOTAL	1,700,640.00	
					10% Mobilization/General Conditions	170,060.00	
					SUBTOTAL	1,870,700.00	
					8.7% State Sales Tax*	162,750.00	
					Construction Contingency (5%)	850,320.00	
					Operating Equipment	515,000.00	
					Basic Design Fee	1,265,300.00	
					Additional Services / Reimbursables	110,000.00	
					Master Plan	250,000.00	
					TOTAL ANTICIPATED 2017 CONSTRUCTION COST	22,030,510.00	
	NOTES: COST ESTIMATE DOES NOT INCLUDE UTILITY CHARGES, FEES,						
	IMPROVEMENTS TO COUNTY ROADS.						
	UNIT COSTS INCLUDE CONTRACTOR'S OVERHEAD AND PROFIT						
	* SALES TAX FOR UNINCORPORATED COUNTY						

3.9 Operations

The main purpose of a state cemetery is to provide a dignified and peaceful final resting place for veterans from all branches of the military and their eligible family members. Provisions are made for actual in-ground burials in concrete crypts, burial of cremains in garden niches and the interment of cremated remains within the columbarium niches.

A state cemetery is responsible for gravesite preparation and the installation, and continued maintenance of a headstone or grave marker. The cemetery also maintains all buildings, roadways, pathways, systems and grounds.

At initial operation, in addition to the director, the cemetery will employ approximately six permanent employees, or FTE's. This will include an administrative assistant, an office assistant, a plant manager, and three groundskeepers. There will also be a need for two seasonal workers during certain times. Additional staff will be added as future burial areas are added or as the maintenance responsibilities of the cemetery change over time

Typical cemetery office hours are from 8:00 AM to 4:30 PM, Monday to Friday. Typical cemetery hours are from 8:00 AM to sunset, 7 days a week. Different hours may be in effect on holidays and during special events. Burials generally take place on non-holiday weekdays between the hours of 8:00 a.m. and 4:30 p.m. The cemetery is open to visitors year-round.

Local police assistance may be utilized to control traffic at the cemetery during certain peak-use periods such as Memorial Day and Veterans Day, or other times when special ceremonies are held. WDVA staff can control traffic at the cemetery, even for large funeral corteges. The average funeral cortege consists of about 10 vehicles, although the number may be substantially higher at times.

Probable costs of required initial operating equipment are indicated on figure 9.

Office Furniture	Allow \$70,000
Office Equipment (computers, printers, copiers, phones)	Allow \$50,000
Backhoe	Allow \$60,000
Dump Truck	Allow \$60,000
Large Mowers (2)	Allow \$40,000
Van or Car	Allow \$35,000
Weed Eaters, Small Tools	Allow \$30,000
Lowering Devices, Other Funeral Equipment, Planks, Plywood	Allow \$60,000
Herbicide, Pesticide Application Equipment and Supplies	Allow \$25,000
Employee Lockers	Allow \$25,000
Other Items to be determined (snow blower, sweeper)	<u>Allow \$60,000</u>
Total Operating Equipment	\$515,000

Figure 9. – Preliminary Operating Equipment Estimate

4.0 SITING ANALYSIS

4.1 Siting Analysis Purpose and Approach

Understanding both the need (based on veterans' populations and deaths) and the geographic service territory for which a veterans' cemetery will serve, provides the context for identifying specific locations for establishing a veterans' cemetery. Using the trade area developed in the demographic assessment (Figure 2), select Washington counties were identified for a siting analysis (see Figure 10 below). With over 250,000 properties within Benton, Franklin, Klickitat, Walla Walla, and Yakima Counties, a Geographic Information System (GIS) based siting analysis efficiently isolates properties that meet a set of specific criteria.

The Northern portion of Benton County and areas of Yakima County pertaining to the Hanford Nuclear Area and Yakima Reservation respectively were not included in the analysis, as not all siting analysis data was available within the areas.

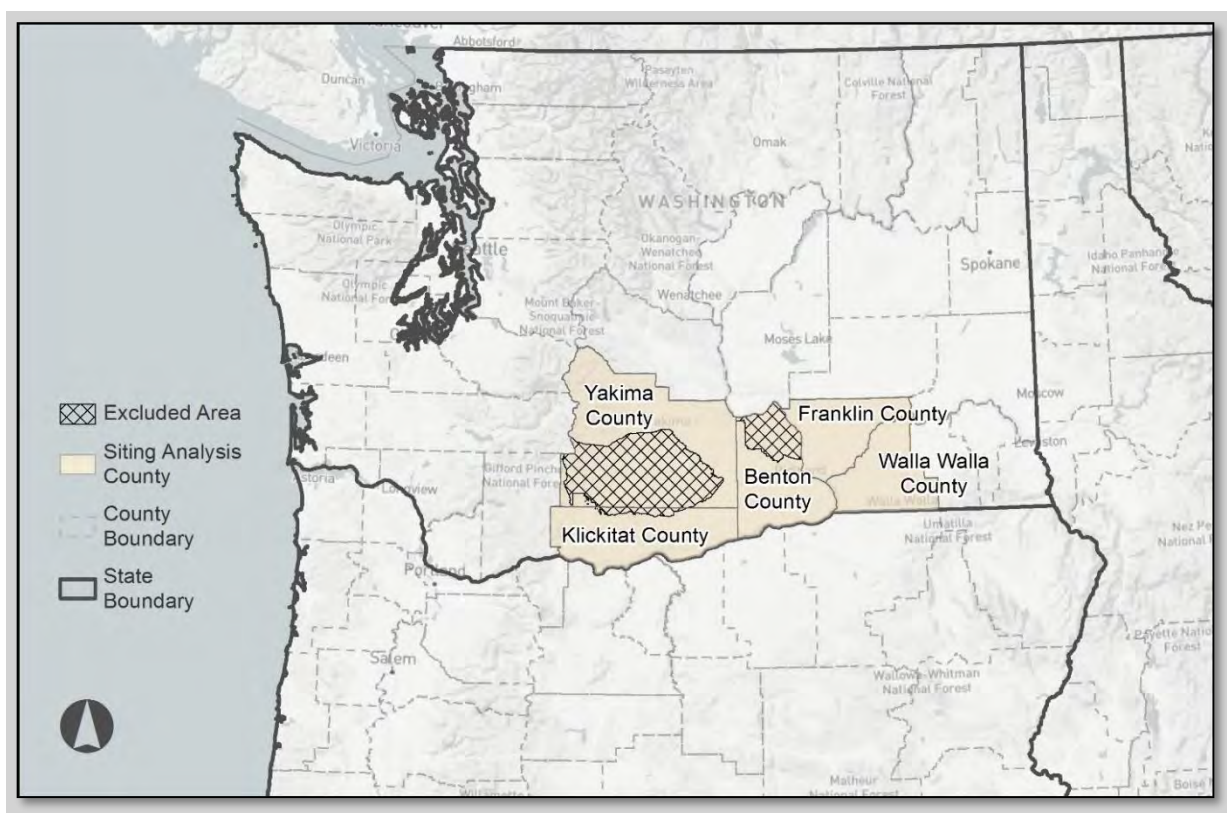


Figure 10. Siting Analysis Extent

The NCA has a policy goal to provide the service of a Veterans cemetery within 75 miles of 90 percent of the Veterans across the country. A 75-mile radius can generally define “service area” of a Veterans cemetery.²¹

4.2 Landscape Scale Criteria

As a first step, an analysis was performed to identify land areas meeting landscape based criteria focusing on soils, geology and topography. A large portion of Benton, Franklin and Walla Walla Counties have substantial areas meeting these criteria (Figure 11). Specific aspects of the landscape criteria are discussed below.

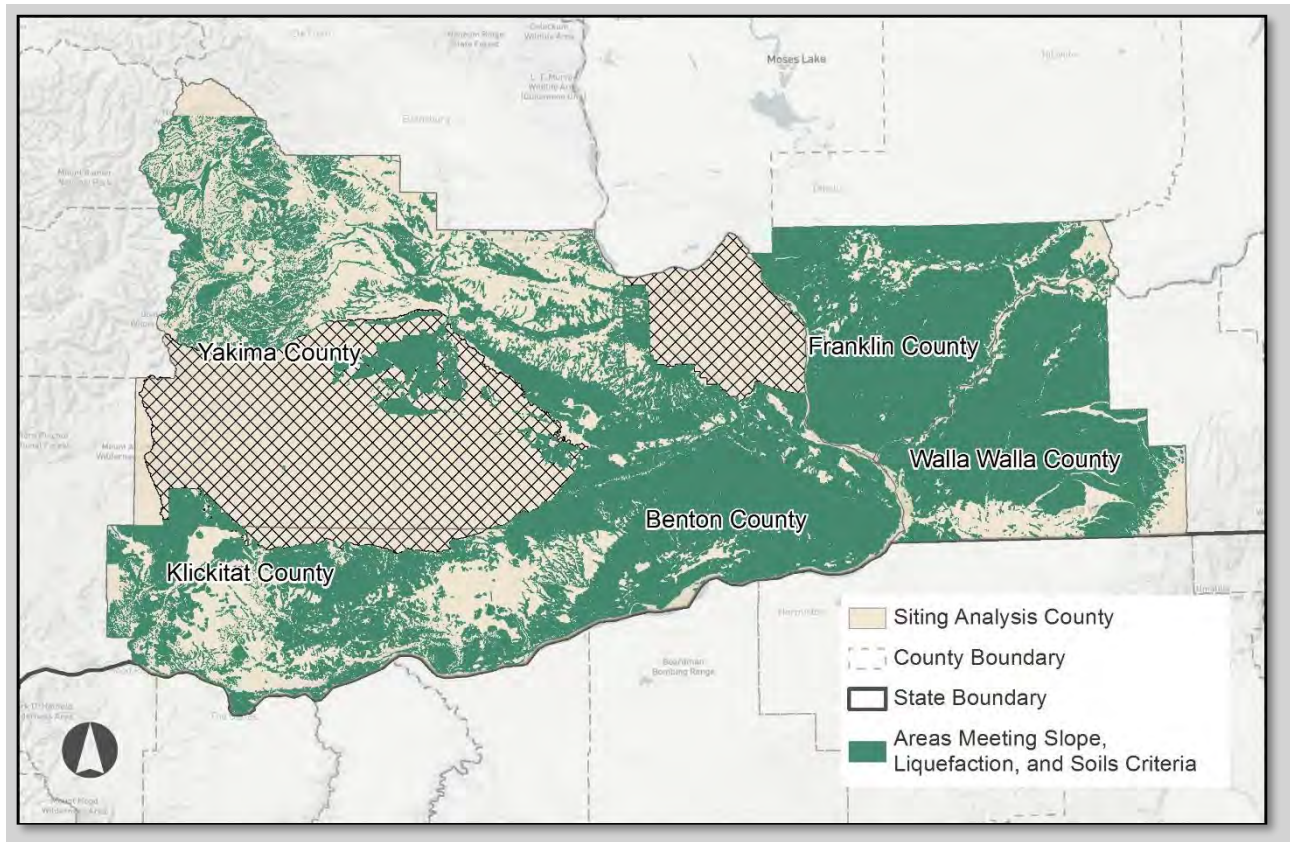


Figure 11. Areas Meeting Landscape Scale Criteria

4.2.1 Soils

Suitable soils include those with high or moderate infiltration rates that are excessively or well drained. These areas are defined in the Natural Resource Conservation Service ²² soils data as:

- Hydrologic Group Class A – High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.
- Hydrologic Group Class B – Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils that have moderately coarse textures.
- Drainage Class –Excessively drained and somewhat excessively drained soils. These are very porous and rapidly permeable. They have a low available water capacity.
- Drainage Class - Well Drained: Well drained and moderately well drained soils.

4.2.2 Geology

The liquefaction susceptibility must be very low, very low to low, low, or low to moderate.²³ Areas of high, moderate to high, and moderate liquefaction susceptibility were excluded from consideration.

4.2.3 Topography

Preferred slope profiles include areas with 1-10% slope²⁴. As with other criteria, slopes were evaluated on a case by case basis to determine suitability.

4.3 Site Specific Criteria

Parcels within the areas identified during the landscape analysis were then analyzed for site specific criteria.

4.3.1 Size

Properties must meet a minimum acreage of 18.6 useable acres, as determined by the results of the demographic analysis (Section 3.6.2). These useable acres must also meet all the site-specific criteria described below.

4.3.2 Site Access

Site access includes several considerations. Properties should be close to populated areas²⁵ and be accessible within a 20-mile drive time from a major road (e.g., interstates, US highways, state routes²⁶). The site should also be accessible from an airport²⁷. Figure 12 illustrates accessibility factors. The Goldendale region in Klickitat County was eliminated from consideration due the lack of an airport within reasonable proximity.

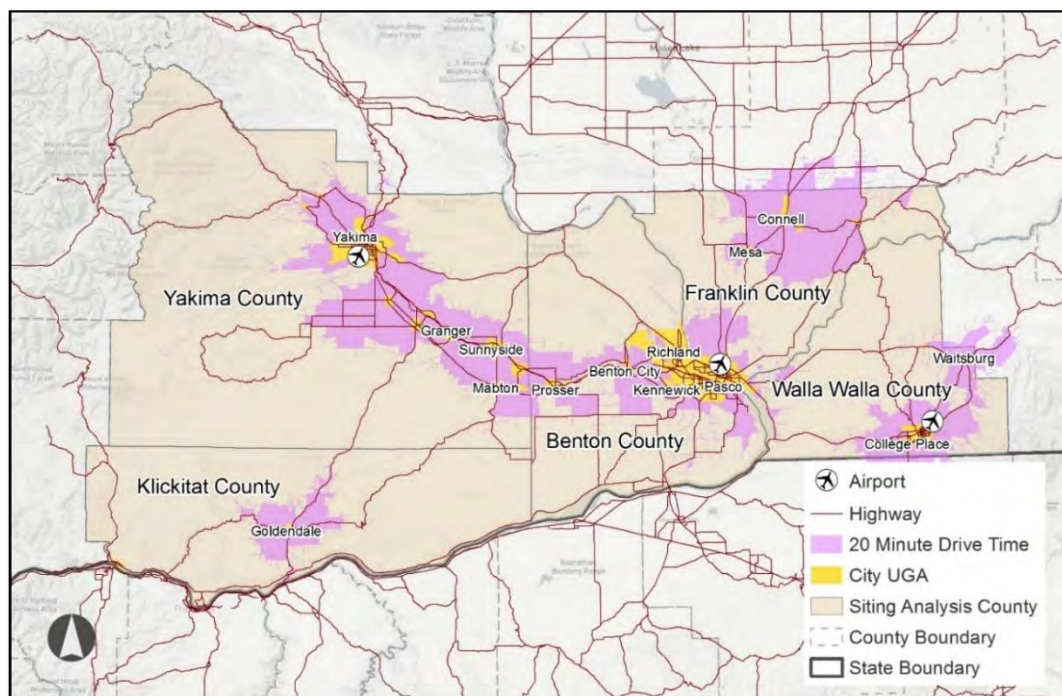


Figure 12. Site Accessibility Factors

4.3.3 Land Use and Zoning

Zoning and land use regulation are essential elements required to be examined in any type of development. Properties with industrial or manufacturing land uses or zoning were excluded from consideration. Sites near freeways, rail lines, or other objectionable uses were removed from consideration.

4.3.4 Ownership

Properties with ownership other than a government entity (Federal, state, county, city) were excluded from consideration²⁸. This does not preclude the possibility that a private landowner could be considered in any future actions regarding property acquisition.

4.3.5 Environmental Considerations

Areas within 100-feet of a perennial or intermittent waterway (streams, rivers, ditches/canals, lakes²⁹ or wetland areas³⁰ were excluded from consideration as useable land.

4.3.6 Historic Considerations

Eligible historic properties listed on the Washington Heritage Register or National Register and heritage barns³¹ were excluded from consideration.

4.3.8 Critical Species

Properties with evidence of Critical Species habitats were excluded from consideration.

4.3.9 Siting Analysis Outcomes

Based upon the siting criteria used above, 291 properties were initially identified as potential candidates for the Tri-Cities area cemetery. Further review of the proportion of useable land (minimum of 18 acres) to the overall property size, evaluation of the configuration of the useable acres across the property, and examination of the properties shape (i.e., undivided or irregular shaped sites are not ideal) further eliminated 125 properties. The remaining 174 properties (Figure 13) were then reviewed on a case by case basis to determine the on-site fitness using the criteria below.

- Soils suitability
- Access to utilities
 - Public utilities
 - Gas
 - Sewer or septic
 - Water
 - Powerlines
 - Communication Infrastructure
 - Irrigation for landscaping
- Surrounding Land Use
 - Noise, potential nuisances such as a major rail line
- Aesthetics
 - Favorable views and amenities

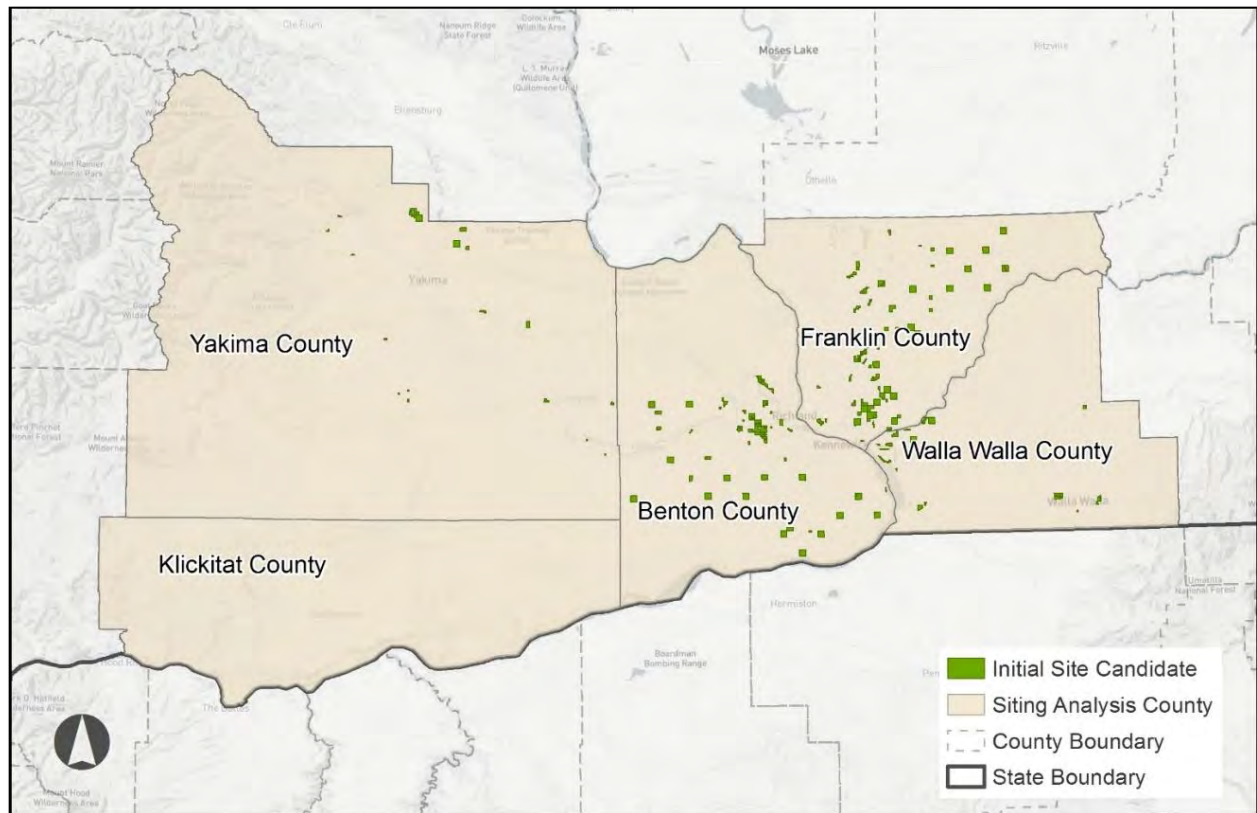


Figure 13. Initial Candidate Sites

5.0 SITES OF INTEREST

5.1 Approach to Site Selection

Using the criteria from 4.3.9, a portion of the initial 174 sites were removed from consideration in a first pass examination. Although GIS analysis suggested road access and transportation for the initial sites, many were hindered by unpaved roads, or access only through private rural roads.

Various sites were comprised of full land survey “sections”, or one square mile. These large tracts seen in south Benton County and Franklin County are leased long term for agriculture. Another considerable number of parcels were removed in Benton and Franklin County after research revealed they were also leased by government entities for viticulture. Over 50% of the 174 sites had leases for growing grapes for the booming local wine industry. Further sites were eliminated due to objectionable surrounding uses, proximity to rail, lack of available utilities, and lack of general appeal for the use of a veterans’ cemetery.

Following the process of elimination, a list of approximately 25 “Properties of Interest” was developed. It was determined that these areas were desirable, and warranted further investigation. The areas of concentration were in the regions of Benton City the Badger Canyon area west of Kennewick, Horn Rapids in Richland, and the lands neighboring the Snake River in both Walla Walla and Franklin counties.

Figures 14, 15, and 16 indicate the properties of interest with green boundaries. Properties eliminated have a purple hatch through them.

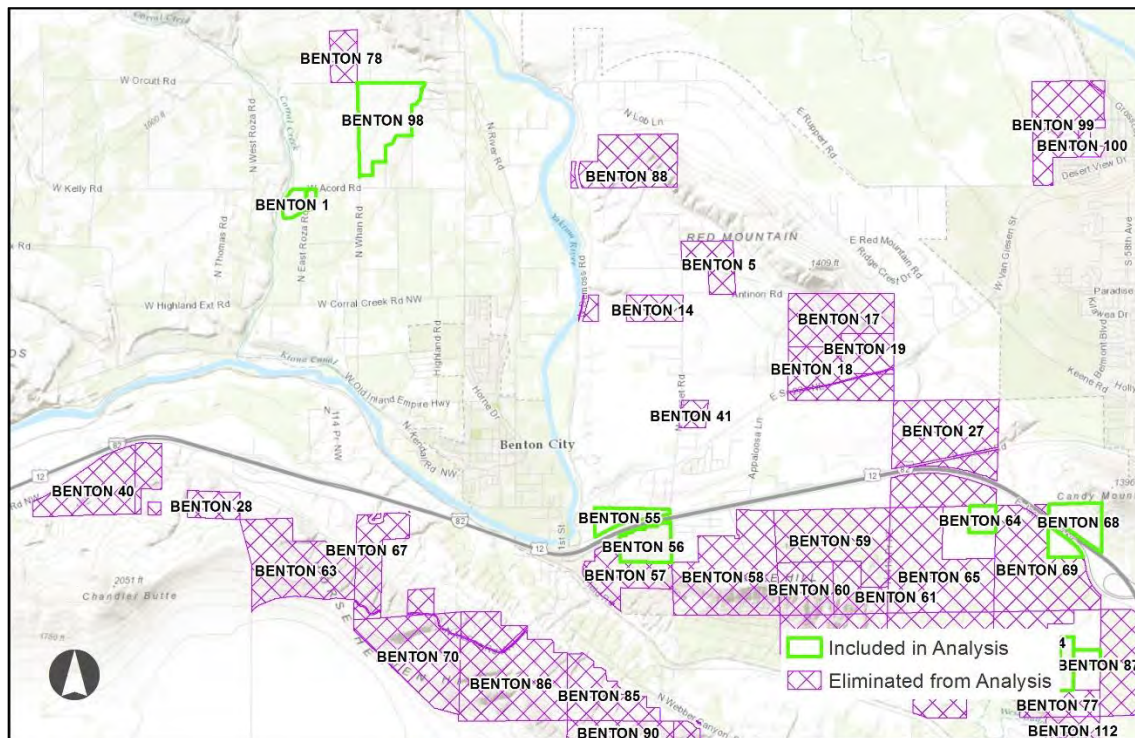


Figure 14. Benton City and Badger Canyon Sites

5.1.1 Benton City and Badger Canyon

The sites in the Benton City area provide some topography and views that are attractive. The large agricultural sites were eliminated, as most have long-term leasing rights. Some of the sites were eliminated for noise and proximity reasons, as they are very near Highway I-82.

The locations Benton 1, Benton 98 and Benton 78, are located on a hill overlooking the Yakima River. All three of these sites provide views and vistas that are desirable. Two of the three have irrigation in place already. Access is via paved roads, and water and electricity are all convenient to these sites.

Benton 112, 72, and 78 are in the Badger Canyon area. Several of these locations do not have access, and some are located near a BNSF main rail line. Neighboring homes are also a concern because of the adjacency to these properties. Most have irrigation rights, although a handful did not.

5.1.2 Snake River Confluence with Columbia

The region in proximity to the Snake River is another scenic location with views overlooking the river, across to the Blue Mountains, and back to the Tri Cities. This produced an attractive area to pursue a possible location. While much of Franklin County is flat agricultural land, the region near this river has positive views.

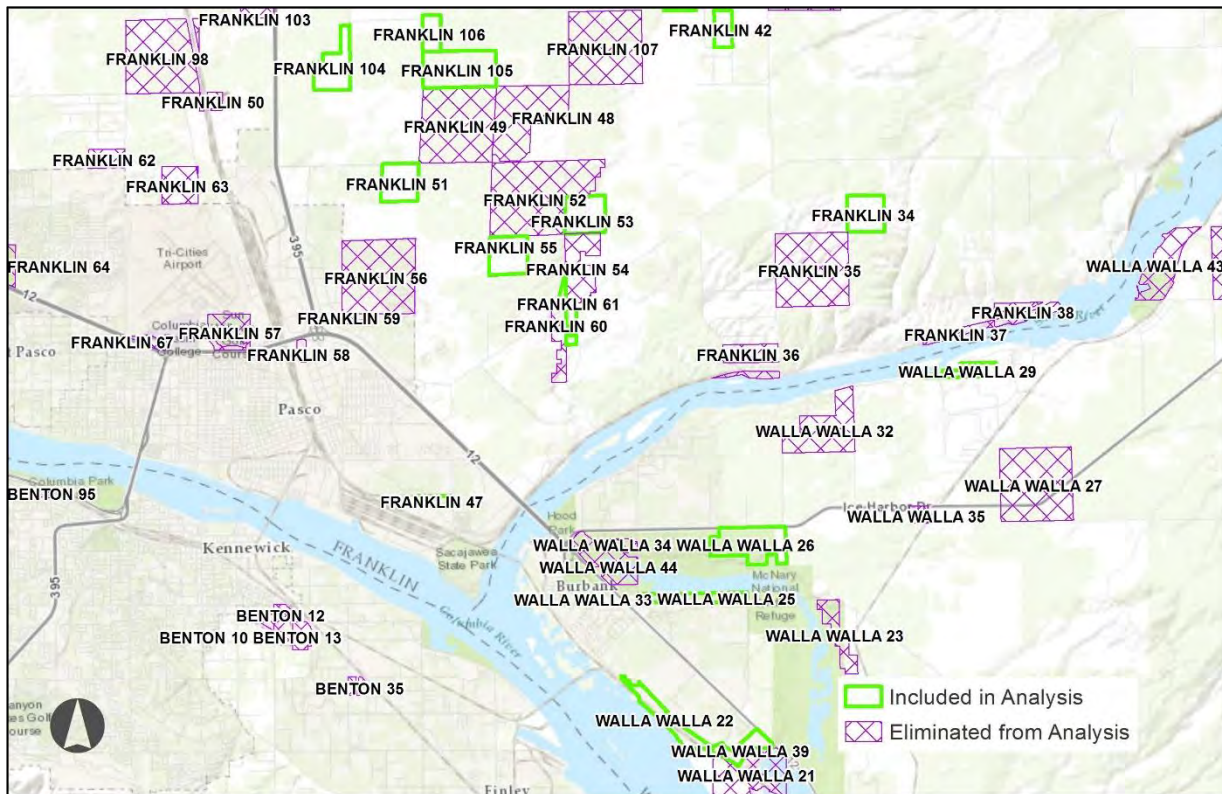


Figure 15. Franklin County and Walla Walla County Sites

The Snake River is the boundary line between Franklin County and Walla Walla County. The land surrounding the river has steep banks that drop to the flowing water below. Besides the view, these sites all have proximity to Pasco and the Tri Cities airport. Irrigation and utilities are convenient, which made these sites possibilities to consider.

Due to the proximity to the McNary Wildlife Preserve, and to McNary Dam, the government entities owning property near the Snake river were generally not in a position to discuss any form of an exchange or possible sale of the lands, at least for several years. The sites in Franklin County were either being leased for agriculture, or surrounded by agricultural uses and had no paved road access.

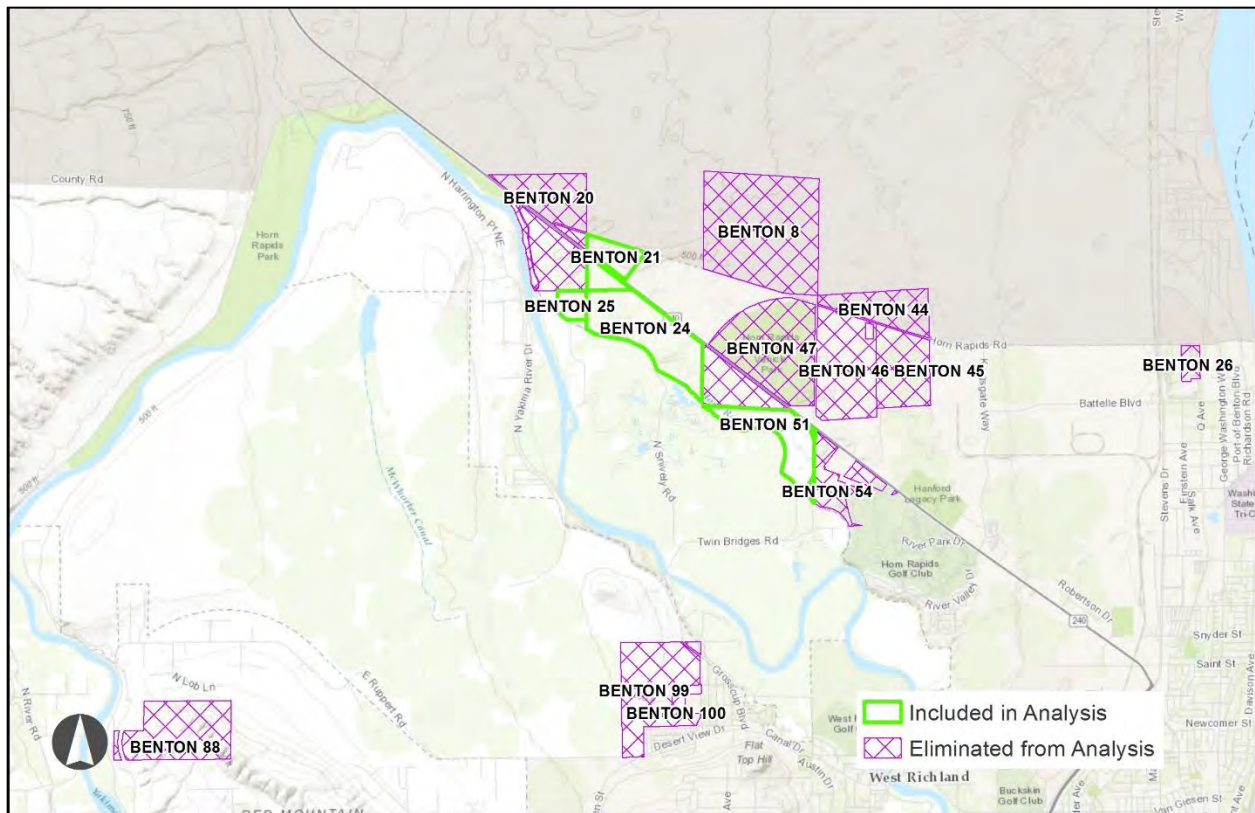


Figure 16. Horn Rapids Area Sites

5.1.3 Horn Rapids Area

Horn Rapids is along the Yakima River, in the north part of the City of Richland. The sites of consideration are all near the Yakima River. This location has potential views of the river, and nearby Rattlesnake Mountain. The sites are near the Tri-Cities, but also have easy access from the north via SR 240. The available properties in this area are all in the urban growth area, and are owned by the City of Richland, yet are rural in character.

5.1.4 Three Sites of Interest

Landowners were contacted to continue discussions of availability, and to discern further details not available from assessor's maps, GIS, or other means.

Landowners contacted regarding the shortened list of properties of interest included:

- Bonneville Power Administration (BPA)
- Bureau of Land Management (BLM)
- Washington State Department of Natural Resources (DNR)
- The City of Richland
- United States Army Corps of Engineers (USACE)
- US Bureau of Reclamation (BOR)

Following several rounds of communication with the agencies, another series of eliminations ensued. In some cases, the properties were desired to be retained because of high potential value, and others were not designated by the agency to be in a category of “ability to transfer”. Others were held in long term leases.

Several properties were visited in person to perform a visual analysis of suitability.

Although there are still a handful of prospective properties that could be worthy of further research, the following three Sites of Interest were determined to be highest on the list, and had the greatest level of suitability for locating the State Veterans’ Cemetery. The three sites of interest are all located in Benton County and accessible from the Tri-Cities airport (Figure 17). Sites A and C are situated northwest of Benton City while Site B is within the north-west corner of the incorporated urban growth area of Richland.

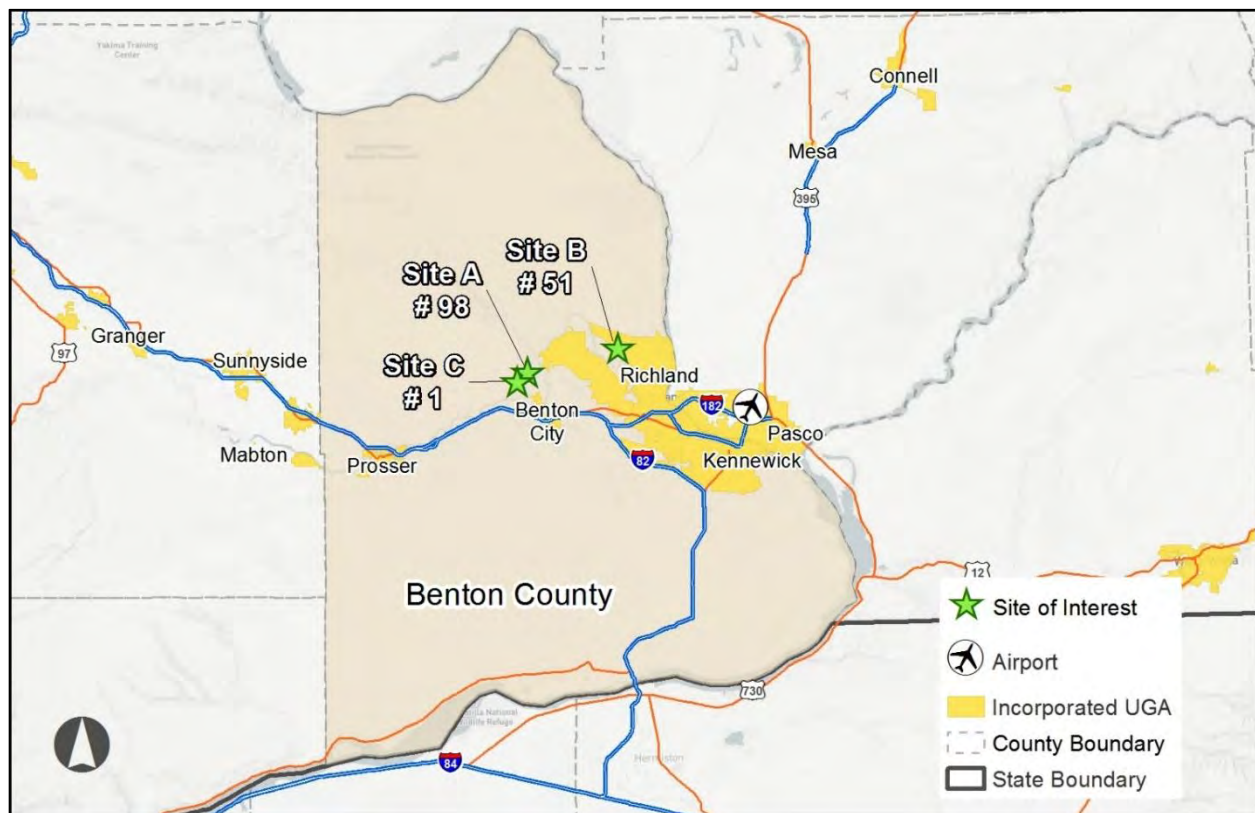
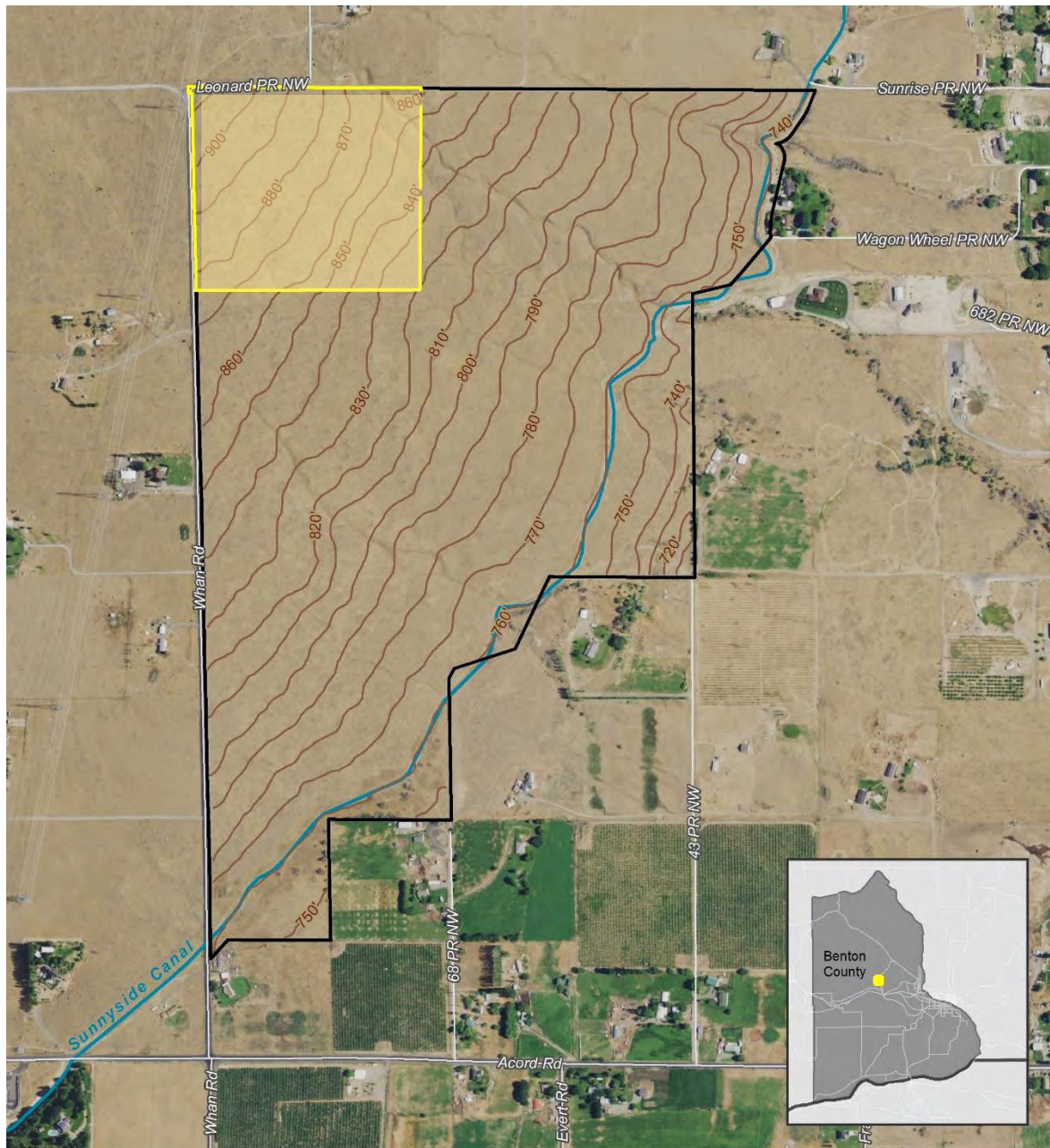


Figure 17. Sites of Interest

5.2 Site of Interest A – Benton County #98



Site of Interest A - Benton County #98

Size (acres): Parcel 229, Site 30
 Location: S 36, T 10, R 26
 Owner: Department of Natural Resources
 Parcel ID: 136062000000000

Parcel
 Site of Interest A
~ 10-Foot Contours

Aerial Imagery (2015) provided by
 ESRI ArcGIS Online.



Figure 18. Site of Interest A, Benton County #98

5.2.1 Site Access

Site A is approximately 4 miles north of Benton City and 0.4 miles west of State Route 225. It is accessible via several roads including; W. Accord Road, N. Whan Road and W. Sunrise Private Road Northwest.

5.2.2 Geology, Liquefaction and Soils

The liquefaction susceptibility for Site A is low to moderate with a small portion of the north-west corner of the property classified as bedrock (bedrock is not liquefiable). The geology is Pleistocene outburst flood deposits, sand and silt, more specifically deposits of Glacial Lake Missoula. Pleistocene outburst flood deposits are a result of suspended materials from deltas, streams, and varved sediments. The Sunnyside Canal flows through the east side of Site A. The soils on the site are well drained. In the north-east corner, the soils are in the Kiona soil series and part of Hydrologic Group B. Soils in the Kiona series are very deep and well drained. They are formed in mixed colluvium from basalt and loess and are typically found on hillslopes and canyon side slopes. Soils in Hydrologic Group B have moderate infiltration rates, are deep to moderately deep, moderately well drained to well drained, and have moderately coarse textures. The remainder of the site is part of the Starbuck soil series. Soils in the Starbuck soil series are shallow, well drained and formed over basalt in loess, colluvium, residuum and alluvium. They are typically found on benches, hillsides, and ridgetops.

5.2.3 Topography

The elevation of Site A ranges from approximately 698 feet to 915 feet with a majority of the site containing slopes ranging from 0 to 10 percent. This site has an average elevation of 802 feet and an average slope of 6 percent. It slopes in the south-east direction toward the Sunnyside canal.

5.2.4 Zoning, Land Use, and Ownership

The zoning for Site A is Rural Lands 5 and the site is currently owned by the State of Washington Department of Natural Resources (DNR). Cemeteries are permitted in this zone; however, a Conditional Use Permit is required. The surrounding properties are primarily single-family residences zoned as Rural Lands 5.

5.2.5 Utilities, Surroundings, Aesthetics

The parent parcel is 229 acres in size, and DNR would consider apportioning and segregating approximately 30 acres in the northwest corner. The property is served by power from Benton PUD. There is currently no domestic water available, irrigation could be supplied from the Sunnyside Valley Irrigation Canal, located at the southwestern boundary of the property. The site is surrounded by single family homes on large lots and other vacant properties. It has been historically used for grazing. On the lower west slope of Rattlesnake Mountain, there are territorial views east to West Richland, west to Red Mountain (seen below), and southwest to Horse Heaven Hills.





Site of Interest A - Benton County #98

Schematic Layout

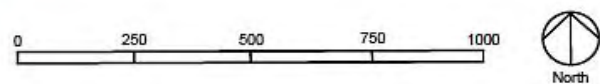
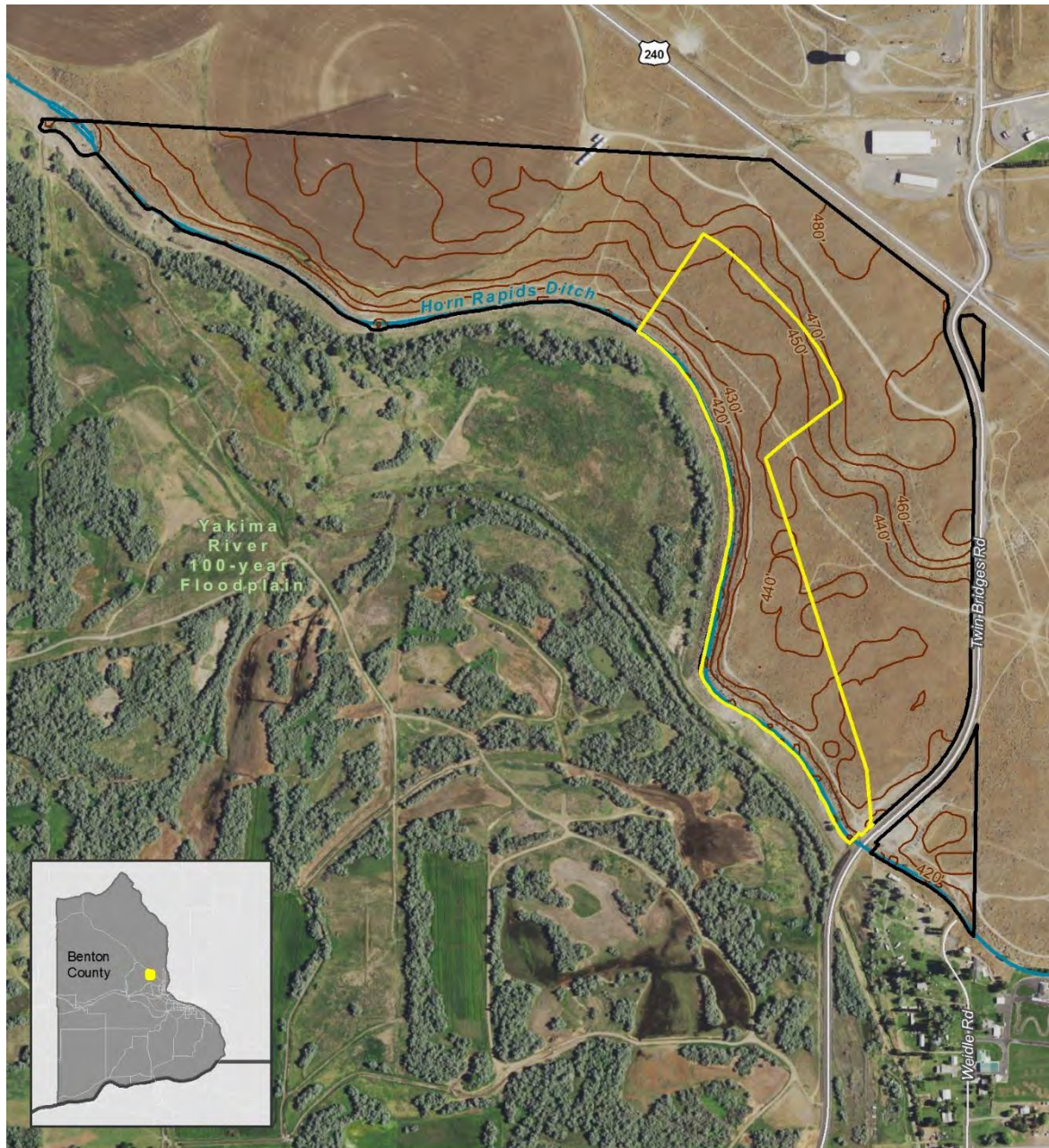


Figure 19. Schematic Layout of Site of Interest A, Benton County #98

Figure 19 illustrates one possible schematic concept of how a State Veterans cemetery could be laid out on this site, showing 33 acres of developed area.

5.3 Site of Interest B – Benton County #51



Site of Interest B - Benton County #51

Aerial Imagery (2015) provided by
ESRI ArcGIS Online.

Size (acres): Parcel 189, Site 32
Location: S 19, T 10, R 28
Address: 3395 SR 240 Richland, WA 99352
Owner: City of Richland
Parcel ID: 119081000001004

Site of Interest B
 Parcel
~ 10-Foot Contours

0 500 1,000 Feet 

Figure 20. Site of Interest B, Benton County #51

5.3.1 Site Access

Site B is approximately 4 miles north of West Richland and adjacent to State Route 240. It is accessible via Twin Bridges Road or SR 240.

5.3.2 Geology, Liquefaction and Soils

The liquefaction susceptibility for Site B is low to moderate. The geology is Holocene dune sand, stabilized dunes and Pleistocene outburst flood deposits, sand and silt, more specifically deposits of Glacial Lake Missoula (14). Dune sand is composed of feldspar, quartz, and pumice. Pleistocene outburst flood deposits are a result of suspended materials from deltas, streams, and varved sediments. Horn Rapids ditch and the 100-year floodplain of the Yakima River are adjacent to the site. The soils on the site are in the Quincy soil series, excessively drained, and part of Hydrologic Group A. Soils in the Quincy series are very deep and excessively drained. They are typically formed in sands on dunes and terraces. Soils in Hydrologic Group A have high infiltration rates, deep soils, and are well drained to excessively drained sands and gravels.

5.3.3 Topography

The elevation of Site B ranges from approximately 403 feet to 469 feet, with a majority of the site containing slopes ranging from 0 to 10 percent. The site has an average elevation of 435 feet and an average slope of 9%. The site slopes to the west towards the Horn Rapids Ditch, with the Yakima River beyond.

5.3.4 Zoning, Land Use, and Ownership

Site B is currently zoned by the City of Richland as Agricultural. Cemeteries are permitted outright in this zoning district. The site is located near the Horn Rapids Community neighborhood and golf course, and is owned by the City of Richland. The surrounding properties are zoned as Rural Lands 5, agriculture, and heavy manufacturing.

5.3.5 Utilities, Surroundings, Aesthetics

All utilities required are available to this site, including irrigation. It is surrounded by vacant land, with the north end of Horn Rapids Golf Course approximately ¼ mile to the south. Eventually the land to the east will become residential, according to the City. There are no objectionable uses nearby. There is a territorial view of Rattlesnake Mountain (seen right), of which the eastern slopes are within the Hanford Reach National Monument. Figure 21 illustrates one possible schematic plan for the layout of a state veterans' cemetery for this location. The irregular shape of the property line is a result of the boundary of the agricultural zoning.





Site of Interest B - Benton County #51

Schematic Layout

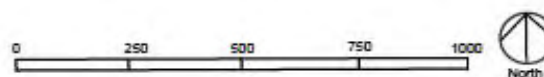
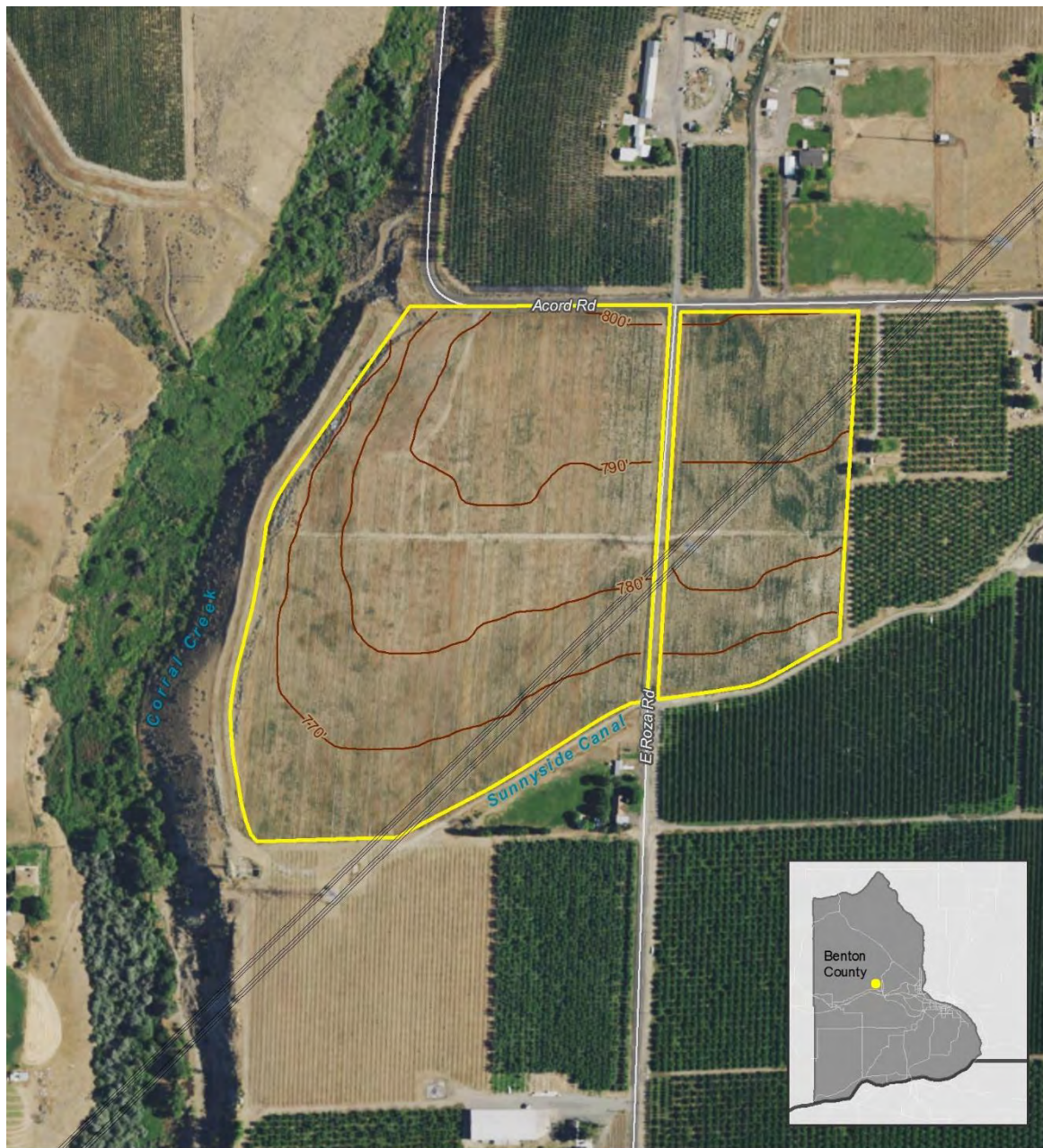


Figure 21. Schematic Layout, Site of Interest B, Benton County #51

5.4 Site of Interest C – Benton County #1



Site of Interest C - Benton County #1

Size (acres): 46
 Location: S 2, T 9, R 26
 Owner: Government
 Parcel ID: 102961000003000

Site of Interest C
~ 10-Foot Contours
= High Voltage Power Line

Aerial Imagery (2015) provided by
 ESRI ArcGIS Online.

0 250 500 Feet 

Figure 22. Site of Interest C, Benton County #1

5.4.1 Site Access

Site C is approximately 4 miles north of Benton City and 1.5 miles west of State Route 225. It is accessible via W. Acord Road and E. Roza Road.

5.4.2 Geology, Liquefaction and Soils

The liquefaction susceptibility for Site C is low to moderate with a small section of the property classified as bedrock (bedrock is not liquefiable). The geology is Miocene Saddle Mountains Basalt, more specifically Elephant Mountain Member and Pleistocene outburst flood deposits, sand and silt, deposits of Glacial Lake Missoula (14). Basalt is volcanic bedrock and Pleistocene outburst flood deposits are a result of suspended materials from deltas, streams, and varved sediments. Corral Creek, a perennial stream, is adjacent to the western side of the site. The Sunnyside Canal follows the southern and western sides of the site and flows into Corral Creek. The soils on the site are in the Scooteney soil series, well drained and part of Hydrologic Group B. Soils in the Scooteney soil series are very deep and well drained. They are formed in alluvium and are found on alluvial fans and terraces. Soils in Hydrologic Group B have moderate infiltration rates, are deep to moderately deep, moderately well drained to well drained, and have moderately coarse textures.

5.4.3 Topography

Site C gently slopes in the direction of Corral Creek. The elevation ranges from approximately 764 feet to 800 feet, with a majority of the site containing slopes ranging from 0 to 10 percent. The site has an average elevation of 781 feet and an average slope of 4 percent.

5.4.4 Zoning, Land Use, and Ownership

Site C is zoned by Benton County as rural lands 5 and the site is currently owned by the Bonneville Power Administration. Cemeteries are permitted in this zone; however, a Conditional Use Permit is required. The surrounding properties are agricultural, and single-family residences zoned as growth management agricultural and rural lands 5.

5.4.5 Utilities, Surroundings, Aesthetics

The site is currently served by Benton PUD for power, and has available water rights for irrigation. The surroundings are agricultural, with vineyards to the north and south, and miscellaneous agricultural to the east and west. There are 5 acre residential lots mixed in the vicinity. The site is bisected by Roza Road, with 70% of the 42 acres on the western portion. The views in the area are very similar to Site of Interest A, which is two miles away.

6.0 CONCLUSION

Utilizing demographics research and data obtained from the Veterans Administration, it has been determined that there will be approximately 1,700 to 1,800 veteran deaths in the south-central region of Washington State, annually until 2035. The nearest State veterans' cemetery is over two hours away, the two nearest National Cemeteries are over three hours away, which indicates a need to locate a veterans' cemetery in the region. Letters and emails of support from local veterans' service organizations echo the findings in the feasibility study.

Again, utilizing the demographics information, a minimum site size of 18.6 acres was determined. Potential sites have been identified for the location. Sites were selected based on NCA requirements, and several criteria that showed suitability for the cemetery. Government agencies owning the sites were contacted regarding availability, and to obtain further information regarding the properties.

The three most favored sites are presented, along with descriptions of the suitability factors. Schematic site layouts of two of the sites have been created, to indicate how the cemetery could potentially be designed.

7.0 APPENDIX

Tri Cities Area Veterans Service organizations and interested individuals contacted, who supplied information and support for this feasibility study:

- Columbia Basin Veterans Opportunity Center
Joetta Rupert: Executive Director, Thomas Mattis: Board Member
- Greater Tri Cities Veterans Coordination Group
Eugene Paul Lamm Jr, Co-Chair.
- American Legion, Washington District 12
Joe Winters, Commander (elect)

Letters of Support

From: FRANCIS WINTERS [mailto:joewinters8@msn.com]
Sent: Sunday, June 18, 2017 10:24 PM
To: rick@rguarchitecture.net
Cc: Joetta Rupert <joetta@veterancoaliton-cb.org>
Subject: Fw: Reminder for letter of support for VA cemetery

It is my experience that Mrs. Rupert's letter is accurate, in that the number of burials have increased over the years. This is mainly due to the population growth in the Tri-Cities as more people move into the area seeking better retirement housing. As an American Legion Post Commander, Honor Guard Captain and now 12th District Commander Elect, the requests for burial details to the American Legion alone has increased for the VFW and American Legion. It certainly would benefit the veterans families to have a designated veteran cemetery in our area. Just last month a long time resident of Pasco, WA and WWII veteran was taken to the Portland area for internment. The two closest being in Portland and Spokane, Wa. As my Vietnam era veterans are increasing in death rate, so will the internment transfer expenses for the families increase. It is only right that we look into a better option for these families.

Sincerely

Joe Winters, American Legion, Washington District 12, Commander (Elect)

Joe Winters
Res: 509 582-6847
Mobile: 509 948-2414

COLUMBIA BASIN VETERANS OPPORTUNITY CENTER



"Putting Veterans First"

PO BOX 2606, Pasco, WA 99302
1600 N. 20th, Pasco, WA 99301

509.545.6558 | Fax: 509.545.5722 | www.veteransopportunitycenter.org

June 13, 2017

Washington Department of Veterans Affairs
1102 Quince St S.E.
Olympia WA 98504

To Those Involved:

On behalf of the board of directors of CBVOC, Inc., dba Columbia Veterans Opportunity Center, (CBVOC), we are proud and honored to submit this letter of support regarding the efforts of the Washington Department of Veterans Affairs (WDVA) to secure funding for a State Veterans Cemetery for veterans in the Mid- Columbia area. The addition of a new veteran cemetery is warranted on the increased volume of veterans relocating to the region.

CBVOC's mission is to assist veterans with identifying and accessing the benefits they've earned through their service to our country. We're a resource center that provides free services to advise and refer all veterans and their families with the services they or their surviving spouse may need. This can be from obtaining a copy of their DD214 to getting them in touch with a specially trained VA service officer for a service connected disability and to advise them of their death benefits when that time comes.

Through the combined efforts of the agencies and programs housed here at CBVOC, we were able to serve veterans through over 2,500 visits and appointments in 2016. We serve approximately 40+ vets every week. Each year since 2012, we've seen these numbers rise by about 18% each year and we expect the number of vets that need the services we provide will continue to rise annually.

We're very pleased to be able to provide these services and take pride in the number of local vets served. However, the primary concern we have at this time is the fact that the veteran population is aging rapidly and their families must travel outside the Tri-Cities area be honored by a final resting place in a VA accredited cemetery. Mid-Columbia veteran families must bear the burden to travel at least 2-4 hours in either direction to

CBVOC is a 501(c)3 Non-Profit Corporation

COLUMBIA BASIN VETERANS OPPORTUNITY CENTER



"Putting Veterans First"

PO BOX 2606, Pasco, WA 99302

1600 N. 20th, Pasco, WA 99301

509.545.6558 | Fax: 509.545.5722 | www.veteransopportunitycenter.org

either bury a veteran in a VA cemetery or to visit their loved ones final resting place to pay their respects.

Washington State is home to approximately 600,000 veterans and we are seeing that number rise. Our office is seeing more veterans moving to Central Washington State from other states for several reasons; mainly the climate, cost and standard of living and access to jobs. Many homeless veterans are moving here because of the increased number of employment opportunities, climate and access to benefits.

Please consider the positive impact and ease of burden, that having a veteran cemetery available here in the Mid-Columbia will have on these veterans, their families, caretakers and those who wish to respect and honor these heroes personally.

Central Washington deserves to have a final resting place for those veterans who have earned the benefit to be laid to rest in an honorable VA recognized cemetery.

Respectfully,

Thomas Mattis
Public Relations & Information Chair
Board of Directors
CBVC, Inc. dba Columbia Basin Veterans Opportunity Center

CBVOC is a 501(c)3 Non-Profit Corporation



Greater Tri-Cities Veterans Coordination Group

June 13, 2017

Washington Department of Veterans Affairs
1102 Quince St S.E.
Olympia WA 98504

To Whom it May Concern:

It is our understanding that a feasibility study is underway to show the need, and investigate possible locations for a State Veterans Cemetery in the Tri Cities region.

As the co-chair of the Greater Tri Cities Veterans Coordination Group, I am in contact with many veterans' service organizations in the area. Everyone I have spoken to about this, is in full support of this endeavor, and in fact, many have stated that they have actually been discussing this idea for some time. The Tri Cities is growing steadily, and there is a significant veteran population in the area. Further, I know of several veterans who have relocated here, and I believe this trend will continue.

I also am a member of a veteran's motorcycle club, and have organized rides to honor fallen veterans to Medical Lake, and even as far as Tahoma, in King County. These are lengthy rides, and take an immense amount of time to organize. The families of deceased veterans should also be thought of. Many I know have selected interment in a local cemetery, partially because of the distance.

Our organization offers our full support for this undertaking, and can speak for many local veterans who believe this facility is needed.

We also offer to assist with this effort, in any way that we can.

Sincerely,

Eugene Paul Lamm, Jr
Co-Chair
Greater Tri Cities Veterans Coordination Group

To Whom it May Concern:

6-28-17

re: Veteran Cemetery - TriCities

I am a 100% disabled American Vietnam^{Over} Veteran. I recently learned about the possibility of establishing a Military Veterans Cemetery in the TriCities.

I moved to Pasco^{with my wife} when I was honorably discharged from the US Army and enjoy this area. There are thousands of Veterans in this area. I fully support a Veteran Cemetery in the Tricities that would be available for Central and Southeast Washington as well as eastern Oregon. As you may know, Veterans ~~remains~~ ^{those of} and their spouses who want to be buried in a Veteran Cemetery must be taken to Tacoma or Medical Lake (Spokane) which are the nearest Veteran Cemeteries.

Thank you for your efforts and having a Veteran Cemetery in the TriCities

Sincerely, Ruben Lemos

Ruben Lemos (509) 412-1776
8203 Bayberry Drive
Pasco, WA 99301

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¹⁰ 2016 Environmental Systems Research Institute Business Analyst.

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Glossary of Terms

Cenotaph- a tomb-like monument to someone buried elsewhere, especially one commemorating people who died in a war.

Columbarium- an arrangement of niches that may include an entire building, a room, a series of special indoor alcoves, a bank along a corridor or part of an outdoor garden setting. (Plural of columbarium, -- columbaria)

Crypt- a casket space in a mausoleum used for or intended to be used for the entombment of human remains.

Funeral Cortege- a ceremonial procession. b) a funeral procession.

Garden is a section of the Cemetery containing Interment Spaces that may be identified by a particular name or number and/or by the type of memorial authorized.

Interment- the burial or entombment of human remains or the inurnment of cremated human remains.

Interment Space- a grave, crypt, niche or plot.

Inurnment- to put into an urn, especially after cremation.

Mausoleum- a structure, aboveground, for interment of human remains; it may contain a combination of crypts, niches or columbaria.

Niche- a space in a mausoleum or columbarium used or intended to be used for the inurnment of cremated human remains.

Memorialization (Cremation) is the placement of cremated remains in an Interment Space or scattering in a Scattering Garden within the cemetery with a marker or cenotaph for nameplates.

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in data utilized from third parties for the analyses, or that result in modified conclusions drawn subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

Capital Project Cost
Estimates Over \$2 Million

Department of Veterans Affairs
2026 Supplemental Capital Budget

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2025

Agency	Washington State Department of Veterans Affairs	
Project Name	SE Washington Veterans Cemetery Land Acquisition and Improvements	
OFM Project Number	40000119	

Contact Information		
Name	Mirach Sebhat	
Phone Number	360 451 2296	
Email	mirach.sebhat@dva.wa.gov	

Statistics			
Gross Square Feet	4,312,440	MACC per Gross Square Foot	\$1
Usable Square Feet		Escalated MACC per Gross Square Foot	\$1
Alt Gross Unit of Measure			
Space Efficiency	0.0%	A/E Fee Class	C
Construction Type	Other Sch. C Projects	A/E Fee Percentage	7.65%
Remodel	No	Projected Life of Asset (Years)	
Additional Project Details			
Procurement Approach	DBB	Art Requirement Applies	No
Inflation Rate	3.16%	Higher Ed Institution	No
Sales Tax Rate %	8.70%	Location Used for Tax Rate	West Richland
Contingency Rate	5%		
Base Month (Estimate Date)	September-24	OFM UFI# (from FPMT, if available)	
Project Administered By	DES		

Schedule			
Predesign Start	July-25	Predesign End	March-27
Design Start	July-26	Design End	June-27
Construction Start	September-27	Construction End	September-30
Construction Duration	36 Months		

Green cells must be filled in by user

Project Cost Summary			
Total Project	\$8,256,033	Total Project Escalated	\$8,975,056
		Rounded Escalated Total	\$8,975,000
Amount funded in Prior Biennia			\$0
Amount in current Biennium			\$8,975,000
Next Biennium			\$0
Out Years			\$0

Acquisition			
Acquisition Subtotal	\$760,000	Acquisition Subtotal Escalated	\$760,000

Consultant Services			
Predesign Services	\$500,000		
Design Phase Services	\$315,222		
Extra Services	\$0		
Other Services	\$141,621		
Design Services Contingency	\$47,842		
Consultant Services Subtotal	\$1,004,685	Consultant Services Subtotal Escalated	\$1,084,339

Construction			
Maximum Allowable Construction Cost (MACC)	\$5,687,430	Maximum Allowable Construction Cost (MACC) Escalated	\$6,233,424
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$284,372		\$326,573
Non-Taxable Items	\$0		\$0
Sales Tax	\$519,547	Sales Tax Escalated	\$570,720
Construction Subtotal	\$6,491,348	Construction Subtotal Escalated	\$7,130,717

Equipment			
Equipment	\$0		
Sales Tax	\$0		
Non-Taxable Items	\$0		
Equipment Subtotal	\$0	Equipment Subtotal Escalated	\$0

Artwork			
Artwork Subtotal	\$0	Artwork Subtotal Escalated	\$0

Agency Project Administration			
Agency Project Administration Subtotal	\$0		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$0	Project Administration Subtotal Escalated	\$0

Other Costs			
Other Costs Subtotal	\$0	Other Costs Subtotal Escalated	\$0

Project Cost Estimate			
Total Project	\$8,256,033	Total Project Escalated	\$8,975,056
		Rounded Escalated Total	\$8,975,000

TAB D

Capital Project Requests Related to
Grant & Loan Programs

Department of Veterans Affairs
2026 Supplemental Capital Budget

Capital Project Request

2025-27 Biennium

*

Version: C1 Agency Request

Report Number: CBS002

Date Run: 9/18/2025 2:56PM

Project Number: 40000109

Project Title: SVH - Skilled Nursing Facility Replacement

Description

Starting Fiscal Year: 2026

Project Class: Grant/Loan

Agency Priority: 1

Project Summary

The Washington State Department of Veterans Affairs (WDVA) is requesting \$157.3 million in total funding for the Spokane Veterans Home replacement project. The request is divided into two components: \$10.9 million for design and site investigation and \$146.4 million for construction of a new 120-bed Skilled Nursing Facility (SNF) to replace the outdated Spokane Veterans Home. The design phase will ensure site readiness, reduce risks, and strengthen eligibility for substantial federal VA grant funding, of which 65% of design costs are expected to be reimbursed. The new facility, built around a small-house model with private rooms, memory care, and expanded outdoor space, will address urgent privacy, infection control, and capacity challenges while providing veterans with a modern, safe, and dignified environment. The design phase will deliver critical site and regulatory due diligence, including site surveying, utility and infrastructure analysis, environmental and geotechnical assessments, and coordination with state and local permitting authorities. These services will validate the selected 40-acre site, ensure design readiness, and strengthen the Spokane Veterans Home replacement project's competitiveness for federal VA construction grant funding. With other states actively planning new veterans' homes, timely progress on this project is vital, especially given the anticipated one-time funding increase in the federal VA's State Veterans Homes Construction Grant Program within the next 1–2 years. Investing in design now will accelerate construction readiness, helping to avoid tens of millions in inflationary costs that accumulate with each year of delay. Of the \$10.9 million budget \$7,085,000 (65%) will be reimbursed to Washington State once Federal VA makes the grant award decision. This strategic investment reduces state costs, minimizes project risks, and positions Washington to secure substantial federal support. Ultimately, it lays the foundation for a modern, safe, and dignified facility that meets the evolving long-term care needs of Washington's veterans. In addition, WDVA is requesting \$146,410,000 in funding to support the construction phase of a new Skilled Nursing Facility (SNF). The legislature has already invested \$8 million in the current biennium to secure land for the project. With the state's ownership of the land and its commitment to fund 35% of the design phase, WDVA will be well positioned under the Federal VA's grant scoring criteria, which prioritize projects demonstrating strong state investment and site control. The need for replacement is urgent. During COVID-19, SVH was severely impacted, experiencing 190 resident cases and 26 deaths. In contrast, our Walla Walla Veterans Home, designed under the small-house model with private rooms, reported far fewer cases and deaths. The lack of private rooms at SVH continues to complicate infection control and resident isolation during outbreaks, often forcing the facility to halt admissions or transfer residents. The current facility also lacks adequate outdoor space, offering only a small courtyard in a dense urban setting, limiting opportunities for recreation and social engagement. Furthermore, its layout does not accommodate memory care, preventing veterans with dementia or Alzheimer's from receiving care at SVH. WDVA proposes replacing the SVH with a modern 120-bed skilled nursing facility designed around the small-house concept. This new facility will provide private rooms, communal living spaces, a dedicated memory care unit, and expanded outdoor areas. Together, these improvements will provide a safer, more dignified, and home-like environment for Washington's veterans. With the existing facility frequently at full occupancy and demand for long-term care services continuing to grow, this replacement is essential to meeting current and future needs.

Project Description

WDVA seeks to replace the outdated Spokane Veterans Home with a new 120-bed Skilled Nursing Facility (SNF) on a recently acquired 40-acre site. The facility will follow the Federal VA's Small-House Design model, providing private rooms, communal living spaces, expanded outdoor areas, and a dedicated memory care unit. These features are essential to enhancing resident safety, strengthening infection control, and improving overall quality of life, while also enabling the facility to serve veterans with behavioral health or memory care needs capabilities the current facility cannot provide.

Washington State currently operates four veterans' homes, providing a total of 517 beds, which is insufficient given the state's veteran population. According to Federal VAdat, Washington is one of the five states with a significant need for additional long-term care beds for veterans. The unmet need is identified as 1,687 beds, as per US Code 38 C.F.R. 59.40.

The proposed replacement of the Spokane Veterans Home will result in a modern facility designed to meet the evolving needs of our veterans. The project includes the following key components:

- **Small-House Design:** The new facility will be constructed in accordance with Federal VA's Small-House Design requirement. This approach will create a home-like environment with private rooms and communal spaces, significantly enhancing the quality of life, safety, and health for residents.
- **Dedicated Memory Care Unit:** A specialized memory care unit will be included to provide specialized care for

Capital Project Request

2025-27 Biennium

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Version: C1 Agency Request

Report Number: CBS002

Date Run: 9/18/2025 2:56PM

Project Number: 40000109

Project Title: SVH - Skilled Nursing Facility Replacement

Description

veterans with memory-related conditions. This unit will fully meet both federal and state care requirements.

- **Expand Outdoor Areas:** The facility will include enhanced outdoor spaces, enabling residents to engage in recreational activities and social engagement in a dignified and comfortable setting. In addition, the current home lacks sufficient break rooms and respite areas for staff. This became very evident during the COVID pandemic, where staff did not have space to recharge from the intensity of caring for residents during breakouts and increased the stress and burnout, which exacerbated the staff turnover issues. The new home will have adequate break rooms and respite areas that will be built with modern safety and infection control features to keep residents, staff, and visitors safe. The proposed increase from the current 100-bed facility to 120 beds not only allows us to meet the unmet memory-care needs for veterans but also addresses the growing need for long-term care services among Washington State veterans. This demand is well documented, the federal VA's recent Asset & Infrastructure Review (AIR) Commission projects that the need for long-term care services in the Inland North market, served by our Spokane facility, will rise by 61.3% over the next 15 years. Nationally, the federal VA expects an increase of more than 80% in the demand for long-term care services over the next 25 years.

This budget request funds for the design and pre-construction services needed to evaluate and prepare the site for development. It includes design and architectural planning, technical consulting, environmental and traffic assessments, and the required permitting and coordination with city and state agencies. These tasks ensure full compliance with zoning, infrastructure, and health regulations, reducing risk and improving readiness before major construction begins.

Architectural and engineering services will include schematic design, program validation, construction documentation, and integration of Net Zero Ready and LEED standards. Specialized consultants will support critical systems such as voice/data, kitchen and laundry design, security, fire/life safety, HVAC balancing, and energy modeling. Together, these services will ensure a technically sound, sustainable, and fully compliant design. Site readiness tasks will include surveys, geotechnical investigations, utility coordination, traffic studies, and environmental mitigation. Pre-construction work also covers agency permitting and regulatory compliance, including SEPA, NPDES, and Executive Order 13-03 requirements. Coordination with the City of Spokane, Washington Department of Health, and other state and federal agencies will ensure the project aligns with all health, infrastructure, and zoning regulations. Archaeological reviews, relocation planning, and early bid/construction coordination are also incorporated. A design services contingency is included to manage unforeseen complexities and preserve project flexibility. Collectively, these pre-construction activities will reduce project risk, strengthen federal grant competitiveness, and position WDVA to move directly into construction once funding is secured.

Washington State is one of only five states identified by the Federal VA as having a substantial unmet need for State Veterans Home (SVH) beds, with demand exceeding 1,000 additional beds. This high level of need places Washington in an excellent position to secure federal approval for the Spokane Veterans Home replacement project. The completion of this design work will further elevate the project's prioritization within the Federal VA's Construction Grant Program, increasing WDVA's ability to expedite federal funding.

The Federal VA currently faces a backlog of unfunded projects in its SVH Construction Grant Program. Historically, it has issued a "catch-up" appropriation about every five years to address these backlogs, and discussions with State Veterans Homes indicate that the next appropriation is anticipated within the next 1–2 years. Missing this window could significantly delay federal funding and, by extension, the construction of the new Spokane facility. Compounding the urgency, WDVA's pre-design estimates indicate escalation costs of up to 10% annually equating to tens of millions of dollars each year when the project is delayed.

This \$10.9 million investment represents a vital first step toward replacing the outdated Spokane Veterans Home with a modern 120-bed facility that meets today's long-term care standards. By funding this broad and strategic site investigation and design effort, WDVA ensures the project is fully scoped, technically sound, and positioned to leverage substantial federal construction dollars. Most importantly, it brings Washington State closer to providing veterans with the safe, modern, and dignified home they deserve.

In addition, in order to support the construction initiative, WDVA is requesting \$48,938,000 in state funding, which will be matched by \$88,840,000 in federal contributions. The Federal VA will cover 65% of the costs, excluding expenses related to off-site roadway and utilities work. The off-site roadway and utilities are estimated at \$9.87 million. This funding is essential to ensure that the new Spokane Veterans Home meets the highest standards of care, providing a dignified and comfortable living environment for our veterans.

Replacing the Spokane Veterans Home is not just a necessity – it is critical investment in the future of Washington State's veterans. By developing a modern facility with a small-house design, dedicated memory care, and expanded outdoor spaces, the WDVA will fulfill its promise to honor the service and sacrifice of our veterans by providing them with the dignity and quality of life they deserve and continue our work to make Washington the leading state for veterans and their family members to live

Capital Project Request

2025-27 Biennium

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Version: C1 Agency Request

Report Number: CBS002

Date Run: 9/18/2025 2:56PM

Project Number: 40000109

Project Title: SVH - Skilled Nursing Facility Replacement

Description

and thrive.

Fund

**Phase
Budget Request**

State – 057-1

Design and Site Investigation

\$10,900,000

State – 057-1

Construction

\$57,570,000

Federal – 001-2

Construction

\$88,840,000

Total

\$157,310,000

Location

City: Spokane

County: Spokane

Legislative District: 006

Project Type

Grant/Loan - Unidentified

Grant Recipient Organization: Washington Department of Veterans Affairs**RCW that establishes grant:** 64.005**Application process used**

VA-Grants 112508-002 CDA 64-005 - Grants To states for Construction of State Veterans Homes Facilities

Growth Management impacts

The Spokane Veterans Home (SVH) replacement project is a vital investment in our veterans and the Spokane community, with the following key impacts: 1. Enhanced Healthcare Services: The new facility will optimize land use by concentrating on healthcare services, meeting the rising demand for long-term care, especially for veterans with memory-related conditions. This will attract more veterans and their families to Spokane. 2. Economic Growth and Job Creation: The construction of the facility will generate jobs and provide ongoing employment opportunities once operational, significantly boosting the local economy. 3. Sustainability and Community Well-Being: Designed to meet modern safety and environmental standards, the new facility will promote urban sustainability through expanded green spaces, enhancing the overall quality of life in the community.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2025-27 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriates	New Appropriates
001-2	General Fund-Federal	(5,381,000)				
057-1	State Bldg Constr-State	17,735,000				10,900,000
	Total	12,354,000	0	0	0	10,900,000

Future Fiscal Periods

305 - Department of Veterans Affairs Capital Project Request

2025-27 Biennium

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Version: C1 Agency Request

Report Number: CBS002

Date Run: 9/18/2025 2:56PM

Project Number: 40000109

Project Title: SVH - Skilled Nursing Facility Replacement

Funding				
	2027-29	2029-31	2031-33	2033-35
001-2 General Fund-Federal	(5,381,000)			
057-1 State Bldg Constr-State	6,835,000			
Total	1,454,000	0	0	0

Operating Impacts

No Operating Impact

Capital Project Request

2025-27 Biennium

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<u>Parameter</u>	<u>Entered As</u>	<u>Interpreted As</u>
Biennium	2025-27	2025-27
Agency	305	305
Version	C1-A	C1-A
Project Classification	*	All Project Classifications
Capital Project Number	40000109	40000109
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

Capital Project Request

2025-27 Biennium

*

Version: C1 Agency Request

Report Number: CBS002

Date Run: 9/18/2025 2:22PM

Project Number: 40000118

Project Title: WSVC - Phase V Expansion in Medical Lake

Description

Starting Fiscal Year: 2027

Project Class: Grant/Loan

Agency Priority: 3

Project Summary

The Washington State Department of Veterans Affairs (WDVA) seeks \$6,755,000 in funding for Phase V of the expansion at the Washington State Veterans Cemetery in Medical Lake (WSVC). This phase is critical to meeting the growing demand of veteran burials while enhancing the cemetery's safety, security, and overall functionality. The project scope includes the addition of casket vault crypts, ensuring the cemetery can continue to serve veterans and their families with the dignity and respect they have earned. The total project cost will be supported through a combination of a Federal VA grant and a state match. The Federal VA grant will provide \$6,080,000 (90% of project costs), while the State of Washington will contribute \$675,000 (10% match), covering burial expansion as well as safety and security enhancements. Securing this funding is essential to maintaining the burial capacity and upholding the high standards of care, honor, and reverence that define the Washington State Veterans cemetery.

Project Description

The Washington State Veterans Cemetery (WSVC) in Medical Lake is experiencing a significant increase in demand for burial spaces due to the steady rise in veteran interments. With the current crypt capacity projected to be depleted within the next four years, expanding burial facilities has become essential to ensure uninterrupted service and to uphold the dignity and respect owed to our veterans and their families.

WDVA is seeking funding to implement Phase V of the cemetery's expansion and improvements. WSVC is one of 122 state and tribal cemeteries nationwide competing for limited federal competing for cemetery grant funds. This request is strategically limited to competing for funding at the start of FY27, when existing vault capacity is expected to be nearly exhausted, elevating the project from its current Priority III status to Priority I, Federal VA's highest priority.

Phase V development will expand burial capacity through the addition of 1,010 standard double-depth casket crypts and 20 oversized crypts. These additions are critical to accommodate future interments, avoid disruption of burial services, and remain in compliance with the terms of previous federal grants.

The project requires over-excavation to a depth of 11–12 feet around the vaults, creating significant operational challenges. Excavation extends into easements between existing and new vaults, leaving limited space for staff to safely operate heavy equipment such as backhoes, excavators, dump trucks, and snow removal vehicles during interments. As existing capacity declines, the risk of safety hazards—such as sloughing soil into open excavation pits—increases substantially. The attached photos illustrate the minimal space between active burial sections and new development areas, underscoring the urgency of this expansion.

The total cost of Phase V is estimated at \$6,755,000, with \$6,080,000 (90%) funded by the Federal VA through the National Cemetery Administration Grant Program and \$675,000 (10%) provided as the required state match.

This expansion is vital to preserving WSVC's ability to serve veterans and their families with the highest standards of care, honor, and respect. By securing this funding, WDVA will ensure the cemetery can continue its mission as a dignified final resting place for those who serve our nation.

Location

City: Medical Lake

County: Spokane

Legislative District: 006

Project Type

Grant/Loan - Unidentified

305 - Department of Veterans Affairs Capital Project Request

2025-27 Biennium

*

Version: C1 Agency Request

Report Number: CBS002

Date Run: 9/18/2025 2:22PM

Project Number: 40000118

Project Title: WSV - Phase V Expansion in Medical Lake

Description

Grant Recipient Organization: Washington Department of Veterans Affairs

RCW that establishes grant: CFDA 64.203

Application process used

VA-GRANTS-122308-001 CFDA 64.203 - State Cemetery Grants

Growth Management impacts

N/A

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2025-27 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriates	New Appropriates
001-2	General Fund-Federal	6,080,000				6,080,000
057-1	State Bldg Constr-State	675,000				675,000
	Total	6,755,000	0	0	0	6,755,000
Future Fiscal Periods						
		<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	<u>2033-35</u>	
001-2	General Fund-Federal					
057-1	State Bldg Constr-State					
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Capital Project Request

2025-27 Biennium

*

<u>Parameter</u>	<u>Entered As</u>	<u>Interpreted As</u>
Biennium	2025-27	2025-27
Agency	305	305
Version	C1-A	C1-A
Project Classification	*	All Project Classifications
Capital Project Number	40000118	40000118
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

Photos to show the safety concerns:





Capital Project Request

2025-27 Biennium

*

Version: C1 Agency Request

Report Number: CBS002

Date Run: 9/19/2025 10:51AM

Project Number: 40000006

Project Title: WVH HVAC Retrofit

Description

Starting Fiscal Year: 2022

Project Class: Program Improvement (State-Owned)

Agency Priority: 4

Project Summary

The Washington State Department of Veterans Affairs (WDVA) is seeking \$870,000 state funding reappropriation to ensure the successful completion of the HVAC retrofit project at the Washington Veterans Home (WVH). In the 2025 Supplemental Budget, the legislature appropriated \$3.8 million in additional funding to support timely completion of this project. Of this amount, \$2.93 million was expended during the 2023–25 biennium to cover project invoices through June 30, 2025. However, due to unexpected delays, a portion of project invoices were not received before June 30, 2025, and will be processed by October 2025. To meet these valid contractual obligations and complete the HVAC retrofit. This request ensures the full funding previously appropriated by the legislature remains available to finish the project without interruption.

Project Description

The State has invested more than \$21.4 million over the past biennium to complete the HVAC retrofit at the Washington Veterans Home (WVH), which is now in the commissioning stage. This request seeks \$870,000 in reappropriated funding to pay the project's final bills, with completion now anticipated in October 2025 rather than the end of the 2023–25 biennium.

The WVH skilled nursing facility, a 160,000-square-foot building constructed in 2004, was originally designed without a mechanical cooling system. Instead, it relied on a passive air-cooling design using operable windows to promote natural airflow. This approach has become inadequate in the face of rising summer temperatures and increasingly stringent regulatory requirements.

Since the building's construction, average summer temperatures in the region have steadily increased, often exceeding 85°F. Federal regulations require skilled nursing facilities to maintain indoor temperatures below 81°F. When temperatures surpass that threshold, residents must be evacuated, and the home faces potential life-safety citations and penalties from the federal VA or DSHS. In recent summers, interior temperatures at WVH have routinely reached the mid-80s, peaking at 92°F on July 31, 2022. Extreme heat events in the Puget Sound region now regularly reach the mid- to high-90s, with occasional spikes above 100°F.

This challenge has been compounded by worsening air quality from wildfire smoke, which requires windows to remain closed and further undermines the building's passive cooling system. While WDVA considered individual air conditioning units, the facility's size makes this option impractical. It would likely create compliance issues with regulatory and fire safety standards, overburden the electrical system, and result in excessive costs and inefficiencies.

A modern HVAC system is essential to protecting the health, safety, and comfort of residents and staff. This retrofit resolves longstanding cooling deficiencies, addresses climate-related risks, and ensures compliance with regulatory standards. By enhancing temperature regulation and air quality, the system creates a safer, more comfortable environment for WVH's vulnerable residents, many of whom are particularly sensitive to extreme heat. Completion of this project represents a critical investment in the well-being of everyone in the facility.

Funding:

	Fund Request Amount
State – 2025 Supplemental Budget	\$3,800,000
May/June 2025 Expenditure	\$2,930,000
State – 2026 Supplemental Budget Request	\$870,000

Location

City: Port Orchard

County: Kitsap

Legislative District: 026

305 - Department of Veterans Affairs Capital Project Request

2025-27 Biennium

*

Version: C1 Agency Request

Report Number: CBS002

Date Run: 9/19/2025 10:51AM

Project Number: 40000006

Project Title: WVH HVAC Retrofit

Description

Project Type

Major Projects-Remodel/Renovation

Growth Management impacts

none

New Facility: No

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2025-27 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	4,670,355	355	3,800,000		870,000
	Total	4,670,355	355	3,800,000	0	870,000

Future Fiscal Periods

	2027-29	2029-31	2031-33	2033-35
057-1 State Bldg Constr-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

No operating impacts as this will not add FTE's

Capital Project Request

2025-27 Biennium

*

<u>Parameter</u>	<u>Entered As</u>	<u>Interpreted As</u>
Biennium	2025-27	2025-27
Agency	305	305
Version	C1-A	C1-A
Project Classification	*	All Project Classifications
Capital Project Number	40000006	40000006
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

Capital Project Request

2025-27 Biennium

*

Version: C1 Agency Request

Report Number: CBS002

Date Run: 9/19/2025 11:13AM

Project Number: 91000013

Project Title: DVA ARPA Federal Funds & State Match

Description

Starting Fiscal Year: 2022

Project Class: Grant/Loan

Agency Priority: 4

Project Summary

The Washington State Department of Veterans Affairs (WDVA) requests a transfer of \$10,735,570.56 in spending authority from federal to state funds. This amount represents the Federal VA construction grant awarded for the Washington Veterans Home (WVH) HVAC Retrofit project in Port Orchard. Due to delays in federal approval, WDVA advanced the project using state funds originally appropriated as matching contributions for other federally supported projects. With the federal grant now awarded, the state is eligible for reimbursement. Realigning these funds will allow WDVA to apply the federal award retroactively to the HVAC project and restore state resources to their intended use as matching funds for other projects.

Project Description

The HVAC retrofit at WVH was initiated to address critical health and safety concerns for residents, many of whom are highly vulnerable to extreme temperatures. To avoid delaying construction while awaiting federal approval, WDVA advanced the project using approximately \$21 million in state funds that had been appropriated as matching contributions for other federally supported projects.

The U.S. Department of Veterans Affairs has since approved the WVH HVAC project under its Construction Grant Program, awarding \$10,735,570.56 under the FY2025 Priority List. This federal award now reimburses the state for a portion of the project costs. With the project in commissioning and nearing completion, WDVA seeks to realign the funding, so the federal grant is applied retroactively to the HVAC retrofit, restoring the state funds to their original purpose as matching dollars for additional infrastructure and safety projects across Washington's four veterans homes.

Location

City: Port Orchard

County: Kitsap

Legislative District: 026

Project Type

Grants - Direct Appropriation

Loans - Competitive

Grant Recipient Organization: Washington Department of Veterans Affairs

RCW that establishes grant: 64.005

Application process used

CDA 64-005 - Grants To states for Construction of State Veterans Homes Facilities

Growth Management impacts

None

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2025-27 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
001-2	General Fund-Federal	(10,736,000)				(10,736,000)
057-1	State Bldg Constr-State	10,735,801	(199)			10,736,000
Total		(199)	(199)	0	0	0

**305 - Department of Veterans Affairs
Capital Project Request**

2025-27 Biennium

*

Version: C1 Agency Request

Report Number: CBS002

Date Run: 9/19/2025 11:13AM

Project Number: 91000013

Project Title: DVA ARPA Federal Funds & State Match

Funding

		Future Fiscal Periods			
		2027-29	2029-31	2031-33	2033-35
001-2	General Fund-Federal				
057-1	State Bldg Constr-State				
Total		0	0	0	0

Operating Impacts

No Operating Impact

Capital Project Request

2025-27 Biennium

*

<u>Parameter</u>	<u>Entered As</u>	<u>Interpreted As</u>
Biennium	2025-27	2025-27
Agency	305	305
Version	C1-A	C1-A
Project Classification	*	All Project Classifications
Capital Project Number	91000013	91000013
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids



DEPARTMENT OF VETERANS AFFAIRS
Veterans Health Administration
Washington, DC 20420

August 11, 2025

David Puente, Jr
Director
Washington Department of Veterans Affairs
1102 Quince Street, Southeast
Olympia, WA 98504-1150

Dear Mr. Puente:

The Department of Veterans Affairs (VA) is pleased to advise you that full grant funds are available from the fiscal year (FY) 2025 Priority List to replace the HVAC system with FAI number 53-049 in Port Orchard, Washington.

The VA Funding offer expires September 30, 2026, or upon VA issuing the Priority List for FY 2026, if a grant (final or conditional) is not awarded. All grant application requirements must be completed and submitted to VHA12GECSVHConstructionInquiries@va.gov by September 12, 2025.

Please note that compliance with all Federal regulations including, but not limited to the Build America, Buy America Act is required for Federal grant funds to be reserved or applied on behalf of this application.

If the state is unable to complete the grant application by the deadline, the state may request a conditional grant award or may submit a letter to defer to the FY 2026 Priority List by September 12, 2025

Thank you for your continued service to the nation's Veterans.

Sincerely,

**RHONDA
TOMS**

Digitally signed by
RHONDA TOMS
Date: 2025.08.11
15:46:32 -04'00'

Rhonda L. Toms DNP, RN, CMGT-BC, GERO-BC
National Director, Facility Based Care Programs
Office of Geriatrics & Extended Care

Capital Project Cost
Estimates Over \$2 Million

Department of Veterans Affairs
2026 Supplemental Capital Budget

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2025

Agency	Washington State Department of Veterans Affairs	
Project Name	WSVC - Phase V Expansion in Medical Lake	
OFM Project Number	40000118	

Contact Information		
Name	Mirach Sebhat	
Phone Number	360 451 2296	
Email	mirach.sebhat@dva.wa.gov	

Statistics			
Gross Square Feet	635,976	MACC per Gross Square Foot	\$7
Usable Square Feet	148,720	Escalated MACC per Gross Square Foot	\$7
Alt Gross Unit of Measure			
Space Efficiency	23.4%	A/E Fee Class	C
Construction Type	Other Sch. C Projects	A/E Fee Percentage	7.94%
Remodel	No	Projected Life of Asset (Years)	
Additional Project Details			
Procurement Approach	DBB	Art Requirement Applies	No
Inflation Rate	3.16%	Higher Ed Institution	No
Sales Tax Rate %	9.00%	Location Used for Tax Rate	Medical Lake
Contingency Rate	5%		
Base Month (Estimate Date)	September-25	OFM UFI# (from FPMT, if available)	
Project Administered By	DES		

Schedule			
Predesign Start	July-25	Predesign End	March-27
Design Start	July-27	Design End	June-28
Construction Start	September-28	Construction End	September-31
Construction Duration	36 Months		

Green cells must be filled in by user

Project Cost Summary			
Total Project	\$5,969,838	Total Project Escalated	\$6,755,035
		Rounded Escalated Total	\$6,755,000
Amount funded in Prior Biennia			\$0
Amount in current Biennium			\$6,755,000
Next Biennium			\$0
Out Years			\$0

Acquisition			
Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0

Consultant Services			
Predesign Services	\$150,000		
Design Phase Services	\$699,155		
Extra Services	\$0		
Other Services	\$106,989		
Design Services Contingency	\$47,807		
Consultant Services Subtotal	\$1,003,951	Consultant Services Subtotal Escalated	\$1,086,793

Construction			
Maximum Allowable Construction Cost (MACC)	\$4,139,700	Maximum Allowable Construction Cost (MACC) Escalated	\$4,722,262
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$206,985		\$237,723
Non-Taxable Items	\$0		\$0
Sales Tax	\$391,202	Sales Tax Escalated	\$446,399
Construction Subtotal	\$4,737,887	Construction Subtotal Escalated	\$5,406,384

Equipment			
Equipment	\$0		
Sales Tax	\$0		
Non-Taxable Items	\$0		
Equipment Subtotal	\$0	Equipment Subtotal Escalated	\$0

Artwork			
Artwork Subtotal	\$0	Artwork Subtotal Escalated	\$0

Agency Project Administration			
Agency Project Administration Subtotal	\$0		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$228,000		
Project Administration Subtotal	\$228,000	Project Administration Subtotal Escalated	\$261,858

Other Costs			
Other Costs Subtotal	\$0	Other Costs Subtotal Escalated	\$0

Project Cost Estimate			
Total Project	\$5,969,838	Total Project Escalated	\$6,755,035
		Rounded Escalated Total	\$6,755,000

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2025

Agency	Department of Veterans Affairs	
Project Name	Spokane Replacement Facility - 120-bed nursing home - Site Investigation	
OFM Project Number	40000109	

Contact Information		
Name	Mirach Sebhat	
Phone Number	360 451 2296	
Email	mirach.sebhat@dva.wa.gov	

Statistics			
Gross Square Feet	132,004	MACC per Gross Square Foot	\$817
Usable Square Feet	119,915	Escalated MACC per Gross Square Foot	\$898
Alt Gross Unit of Measure			
Space Efficiency	90.8%	A/E Fee Class	B
Construction Type	Nursing homes	A/E Fee Percentage	5.75%
Remodel	No	Projected Life of Asset (Years)	
Additional Project Details			
Procurement Approach	DBB	Art Requirement Applies	Yes
Inflation Rate	3.16%	Higher Ed Institution	No
Sales Tax Rate %	9.00%	Location Used for Tax Rate	Spokane
Contingency Rate	5%		
Base Month (Estimate Date)	September-25	OFM UFI# (from FPMT, if available)	
Project Administered By	DES		

Schedule			
Predesign Start	July-25	Predesign End	March-27
Design Start	July-26	Design End	June-27
Construction Start	September-27	Construction End	September-30
Construction Duration	36 Months		

Green cells must be filled in by user

Project Cost Summary

Total Project	\$151,182,862	Total Project Escalated	\$165,309,839
		Rounded Escalated Total	\$165,310,000
Amount funded in Prior Biennia			\$0
Amount in current Biennium			\$18,900,000
Next Biennium			\$146,410,000
Out Years			\$0

Acquisition			
Acquisition Subtotal	\$8,000,000	Acquisition Subtotal Escalated	\$8,000,000

Consultant Services			
Predesign Services	\$0		
Design Phase Services	\$4,490,983		
Extra Services	\$1,847,777		
Other Services	\$2,833,288		
Design Services Contingency	\$458,602		
Consultant Services Subtotal	\$9,630,651	Consultant Services Subtotal Escalated	\$10,260,344

Construction			
Maximum Allowable Construction Cost (MACC)	\$107,804,084	Maximum Allowable Construction Cost (MACC) Escalated	\$118,604,524
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$5,390,204		\$6,000,915
Non-Taxable Items	\$0		\$0
Sales Tax	\$10,187,486	Sales Tax Escalated	\$11,214,490
Construction Subtotal	\$123,381,774	Construction Subtotal Escalated	\$135,819,929

Equipment			
Equipment	\$7,200,000		
Sales Tax	\$648,000		
Non-Taxable Items	\$0		
Equipment Subtotal	\$7,848,000	Equipment Subtotal Escalated	\$8,737,179

Artwork			
Artwork Subtotal	\$822,437	Artwork Subtotal Escalated	\$822,437

Agency Project Administration			
Agency Project Administration Subtotal	\$0		
DES Additional Services Subtotal	\$1,500,000		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$1,500,000	Project Administration Subtotal Escalated	\$1,669,950

Other Costs			
Other Costs Subtotal	\$0	Other Costs Subtotal Escalated	\$0

Project Cost Estimate			
Total Project	\$151,182,862	Total Project Escalated	\$165,309,839
		Rounded Escalated Total	\$165,310,000

DAHP Review Letter
and Exempt Project List

Department of Veterans Affairs
2026 Supplemental Capital Budget



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

September 6, 2024

Mirach Sebhat
DVA Capital Program
Washington State Department of Veterans Affairs

In future correspondence please refer to:

Project Tracking Code: 2024-09-06399

Property: Washington State Department of Veterans Affairs Preliminary Project Review 2025-2027 Capital Budget Request

Re: Biennium Review

Dear Mirach:

Thank you for contacting the Washington State Department of Archaeology and Historic Preservation (DAHP). The DSHS 2025-27 Capital Budget Request has been reviewed on behalf of the State Historic Preservation Officer (SHPO) under provisions of Governor's Executive Order 21-02 (GEO 21-02), based on the Excel sheet provided in your email.

Should projects become obligated with Washington State Capital Funding and include ground-disturbing activities and/or alterations to the interior or exterior of buildings or structures 45 years of age or older, we will request consultation with DAHP under GEO 21-02. Consultation may be initiated using the EZ/Project Review form found on our website but may require additional information/consultation after the submittal of the form. We recommend consulting with DAHP early and often regarding projects, especially on known historic resources to ensure proper and efficient reviews.


If neither ground-disturbing activities nor alterations to a building or structure over 45 years old are related to a project, consultation with DAHP is not required. Any projects with a federal nexus and determined to be an undertaking subject to Section 106 of the National Historic Preservation Act of 1966 and its implementing regulations 36 CFR 800 will not require 21-02 consultation.

These comments are based on the information available at the time of this review and on behalf of the SHPO in conformance with GEO 21-02. Should additional information become available, our assessment may be revised.



Thank you for the opportunity to review and comment. If you have any questions, please feel free to contact me.

Sincerely,



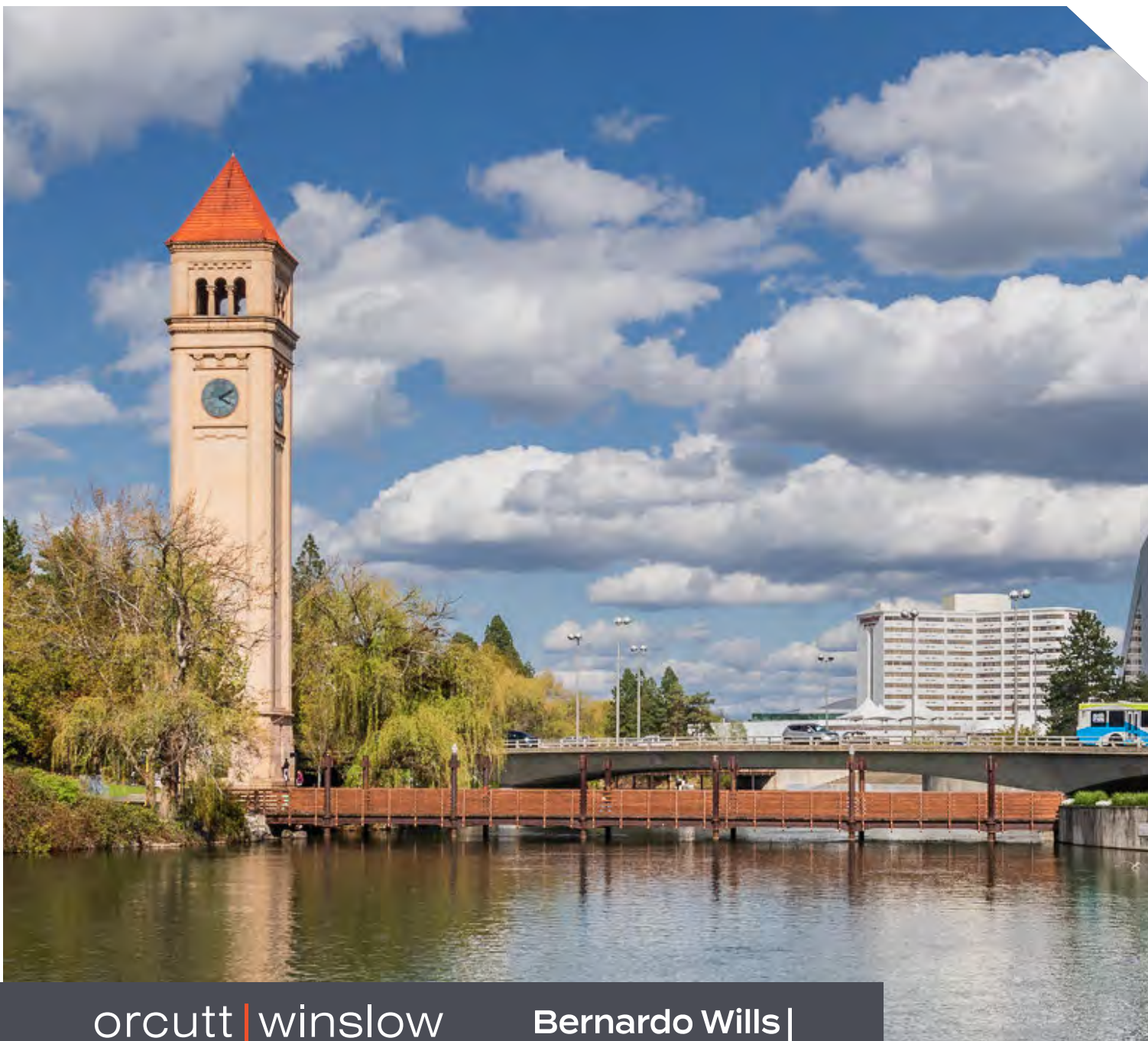
Maddie Levesque, M.A
Architectural Historian
(360) 819-7203
Maddie.Levesque@dahp.wa.gov



Expected use of Bond Funds
or Certificate of Participation

Department of Veterans Affairs
2026 Supplemental Capital Budget

No
Information



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Bernardo Wills

Washington State Veterans Home Spokane

Pre-Design Report

October 11, 2024

Agency Code: 3056

Project Identifier Number: 2024-729 (DES)

Project Tracking Code: 2024-10-07091-NRCS (DAHP)



Washington State Veterans Home Spokane

Pre-Design Report

Project Team

Department of Veterans Affairs

David Puente Jr.
Director

Solomon Gilbert
Deputy Director

Abuoh Neufville
Assistant Director of Veteran Services Counseling & Wellness

Terry Westhoff
Chief Financial Officer

Yacob Zekarias
Director of Budget and Business Operations

Dan Murray
State Homes Operations Director

Mark Michaels
Spokane Veterans Administrator

Department of Enterprise Services

Barbie Downing
Project Manager

Consultant Team

Mike Kolejka, NCARB, AIA
Orcutt | Winslow
Partner in charge

Tom Payton, RA, NCARB
Orcutt | Winslow
Project Manager

Julia Collura, RA
Orcutt | Winslow
Project Architect

Mike Stanicar, AIA
Bernardo Wills
Principal | Managing Director of Architecture

J. Ryan Zane, AIA, LEED AP BD + C
Bernardo Wills
Principal | Design Director

Noah Johnson, PE
GLUMAC
Mechanical Engineer

Christie Johnson, PE
Coffman Engineers, Inc.
Civil Engineering

Anne Hanenburg
SPVV Landscape Architects
Principal - Landscape Architecture

Land Acknowledgement

Washington State acknowledges the people who have been on this land since time immemorial. The Indigenous people remain committed stewards of this land, cherishing it and protecting it, as instructed by elders through generations. We are honored and grateful to be here today on their traditional lands, and give thanks to the legacy of the original people, their lives, and their descendants.

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A photograph of a dirt road winding through a dense forest of tall evergreen trees. The road is in the foreground, leading into the distance. The trees are tall and thin, with green needles. The sky is visible through the canopy. The overall tone is natural and serene.

SECTION

1

Problem Statement

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Bernardo Wills

EXECUTIVE SUMMARY

1.0 Problem Statement

Introduction

The current Spokane Veterans Home (SVH) is outdated, unable to meet the full spectrum of long-term care needs of the veterans, spouses, and gold star parents that reside in the home, and has significant infection control concerns as experienced during the recent COVID-19 pandemic.

The current facility's older hospital-like design, reminiscent of 1960's and 70's, nursing home design. This includes predominantly two-person rooms, separated only by curtains, which offers minimal privacy and poses significant challenges for infection control during viral or bacterial outbreaks.

The SVH was severely impacted by COVID-19, experiencing 190 resident cases and 26 deaths. In contrast, our Walla Walla Veterans Home, designed under the small-house model with private rooms and more outdoor space, reported far fewer cases and deaths. The lack of private rooms at SVH complicates the isolation of residents with infections or behavioral issues, forcing the facility to halt admissions or transport residents during outbreaks. In addition, the current home is a two-story building which is not ideal for a skilled-nursing facility in cases of emergencies requiring evacuation.

The SVH lacks adequate outdoor space, which further complicates infection control, behavioral issues, and quality of life. The current home is located in downtown Spokane on less than two acres, so it can only offer a small courtyard for a few residents to enjoy at a time. The downtown location also does not offer opportunities for the residents to have adjacent spots that are safe to travel. This limits residents' opportunities for outdoor activities and social engagement, detracting from the dignified and respectful environment our veterans, spouses, and gold star parents deserve.

The SVH current layout also does not allow for a separate area to provide memory care for those residents that have dementia, Alzheimer's, traumatic brain injury (TBI), or other cognitive conditions. This results in WDVA having to deny admission to veterans with these conditions. Additionally, the current layout does not support memory care services, preventing veterans with dementia or Alzheimer's from being admitted. According to the Alzheimer's Impact Movement it was estimated the nearly 500,000 veterans were living with Alzheimer's dementia in 2022. The federal Department of Veterans Affairs projects the number of VA patients with dementia will increase by 28.9% by 2033. In addition, instances of even mild TBI increase the risk of dementia by 70%, and it is estimated one in every five combat veterans suffer from a form of TBI.

The goals of the Spokane Veterans Home replacement are:

- Provide a living space that honors the sacrifice of our veterans and gold star parents to our nation and provides a quality of life they deserve.
- Increases safety, health, and quality of care by addressing infection control issues and providing modernized care for our vulnerable long-term care population.
- Provide memory care services to meet this significant need in the veteran population; and
- Provides greater flexibility to meet the long-term care needs of veterans in the future.

Proposed Solution

WDVA proposes replacing the SVH with a modern 128-bed skilled nursing facility designed around the small-house concept. This facility will provide private rooms, communal spaces, and a dedicated memory care unit, meeting both federal and state requirements. The new design will also include expanded outdoor areas, enhancing residents' quality of life. With the current facility often at full occupancy and a growing demand for long-term care services in the region, this replacement is essential to meet the needs of our veterans now and in the future. The proposed replacement of the Spokane Veterans Home will result in a modern facility designed to meet the evolving needs of our veterans. The project includes the following key components:

- **Small-House Design:** The new facility will be constructed in accordance with Federal VA's Small-Home Design requirements. This approach will create a home-like environment with private rooms and communal spaces, significantly enhancing the quality of life, safety, and health for residents.
- **Dedicated Memory Care Unit:** A specialized memory care unit will be included to provide specialized care for veterans with memory-related conditions. This unit will fully meet both federal and state care requirements.
- **Expand Outdoor Areas:** The facility will include enhanced outdoor spaces, enabling residents to engage in recreational activities and social engagement in a dignified and comfortable

Problem Statement

The Spokane Veterans Home needs to be replaced in order to have a location that meets the quality of life and the health and safety needs of the vulnerable veterans, gold star parents, and family members who reside there. Our Veterans homes should be place that honor the service and sacrifice of our veterans and gold star parents. The need for long-term care services is expected to increase 76 percent and having a modern location that has private rooms, memory care, and space for resident activities will make Spokane Veterans Home a location that can continue to meet the long-term care needs in the future.

Safety and Health

The current Spokane Veterans Home are mostly double occupancy rooms with beds separated by a curtain. There are no private bathrooms, and there is a bathing suite on each floor with a shower and tub that is shared by around 50 residents on each floor. Spokane Veterans Home always had higher rates of spread of viral and bacterial infections, such as the flu, even before the COVID-19 pandemic. However, during the pandemic, it was discovered how the double occupancy rooms would impact illnesses and deaths. Spokane Veterans Home had 190 resident cases of COVID during the pandemic and 26 deaths. Comparatively, the Walla Walla Veterans Home, which is a small home model with all private rooms, had only 49 cases and three deaths.

In addition, the new home will allow us to have both a layout and systems that address the latest in infection control. This includes ensuring we have established intake areas for residents, staff, and visitors, isolation areas, and latest in HVAC technologies using negative pressure and ultraviolet light features.

Need for Veteran Long-Term Care Beds

The federal VA determines need for long-term care beds based on the Veteran population of each state and expected need for long-term care services. Based on this formula, Washington State is allotted 1,687 state veterans homes beds but currently only has a combined 517 beds in its four homes. This gap of 1,170 puts Washington State as one of only five states that are categorized as "Substantial Need". In addition, Spokane Veterans Home is one of two of our homes that does not have a memory care unit, as the layout of the facility does not allow for the additional security and services need for memory care. There is a significant need for memory care amongst the aging population, but particularly with Veterans, due to how instances of TBI, PTSD, and other service-connected ailments can increase the risk of Alzheimer's, dementia, and similar cognitive disorders. We know the 40 memory care beds we currently have in our Walla Walla and Port Orchard homes are almost always at full capacity. The plan for Spokane Veterans Home is to increase it from 100 beds to 128 beds, with the capability of having up to 32 memory care beds at the facility. Although, there is more we can do in addressing the substantial need for long-term care beds for our veterans, this will close the gap not only in number of beds but in caring for those with memory disorders.

Increase Quality of Life

The current State Veterans Home does not support a dignified, high quality of life we should be providing our veterans in their final years. The Spokane Veterans Home sits on less than two acres near downtown Spokane; comparatively, our second smallest land area for our other three veterans' homes is about 13 acres for the Walla Walla Veterans Home. This allows for a two-story building and parking areas. In addition, being in a more urban setting with significant traffic, it does not allow our veterans to as readily travel off the property as they do in our other homes. This leads to greater isolation of our veterans. Our activities staff do a great job of organizing events both on and off the campus, but the degree to which our other three homes can offer independent movement and variety activities is significant compared to the limitations of the Spokane Veterans Home. Placing the home on acreage that allows for our veterans to more readily enjoy the outdoors will increase their physical and mental health and, thereby, increase their quality of life.

Current Home Ability to Meet Other Veterans Needs

As previously mentioned, the Spokane Veterans Home is near downtown and has an ability to address other needs of our veteran community. For instance, WDVA has successfully established two Transitional Housing Programs (THP's) on our Orting and Port Orchard campuses. The THP's provide temporary living space for homeless veterans and provide them the support they need to obtain and maintain permanent housing. This includes health care, job training, substance abuse treatment, financial assistance, and other services to help stop the cycle of homelessness. This is only one example where the current building could meet a substantial need for veterans in the Spokane area, and we would look forward to discussing these options if funding is received for a replacement veterans home.



SECTION

2

Analysis of Alternatives

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Bernardo Wills

2.0 Analysis of Alternatives

No Action Alternative

A no action alternative cannot be considered because of the overwhelming need to replace the existing veteran home in Spokane. As previously identified in section 1.0, there are numerous deficiencies and safety features that affect the primary mission and objectives outlined by the Washington State Veterans Affairs (WDVA) for the operations and care of residents at the Spokane Veterans Home. Furthermore, WDVA's strategic plan specifically addresses the needs of the community and Veterans it serves with the following objectives:

- Respect, empower, and inspire everyone.
- Be the leading state in Veteran service delivery and outcomes.
- Operate effectively and efficiently

To respect, empower, and inspire everyone, a Veteran home needs to provide appropriate facilities to provide dignity, health, and wellness to the Veteran and their care providers and Veterans' families. The current Spokane Veterans Home is located on an urban site that does not have the capacity to provide outdoor living spaces, or access to outdoor spaces that are critical to the health and wellbeing of Residents and Caregivers. The current home has double occupancy rooms and is based on an outdated skilled nursing home model that does not meet the current standard of care, from both a dignity and health perspective. The recent COVID pandemic, and natural outbreaks of flu and other infections are a constant threat to the health and safety of this fragile population. Single occupancy rooms are needed to provide this most basic premise in skilled nursing care.

Being the leading state in Veteran service delivery and outcomes requires a state-of-the-art nursing home that provides indoor and outdoor activity spaces, excellent dietary and dining facilities, personal care, safety and security for residents. Providing break areas and respite for caregivers is also essential to improving outcomes.

Operating effectively and efficiently means providing a modern, efficiently designed home and workplace that is designed and constructed with a highly efficient building envelope, plumbing, mechanical, electrical, and information technology infrastructure. Advanced safety and security features built into the access control systems for memory care and general safety and security for the entire facility are needed to fulfill this objective.

The current Spokane Veterans Home is outdated and in need of major updating. The building site is unable to accommodate the required space needed to fulfill these objectives.

Alternatives Summary

ALTERNATIVES	ADVANTAGES	DISADVANTAGES	COST SUMMARY
Option 1 Fairmont Park	<ul style="list-style-type: none"> Proximity to Spokane, Largest regional population access. Community outreach potential. Park amenities. Flat developable site (ideal for skilled nursing. Proximity to VA Medical Center. Partnership with Spokane Parks Dept. Provides for investment strategy opportunity utilizing onsite improvements which allows for 65% match VA Grant funding. 	<ul style="list-style-type: none"> Site & utility access. Market rate site acquisition costs. 	Construction Cost: \$119,405,342
Option 2 Fairmont Park	<ul style="list-style-type: none"> Proximity to Spokane, Largest regional population access. Community outreach potential. Park amenities. Flat developable site (ideal for skilled nursing. Proximity to VA Medical Center. Partnership with Spokane Parks Dept. 	<ul style="list-style-type: none"> Site & utility access. Market rate site acquisition costs. Additional offsite development cost that would not be eligible for 65% match VA Grant funding. 	Construction Cost: \$119,405,342 Additional offsite Costs: \$2,600,000
Option 3 Medical Lake	<ul style="list-style-type: none"> Large site with views of Lake and countryside. Little to no site acquisition costs (State land). 	<ul style="list-style-type: none"> Distant location for regional population access. Site & utility access. Extensive grading and difficult soils. Additional offsite development cost that is not allowed for VA Grant funding. Medical services are remote to site (increased emergency response times). Remote location requiring extensive offsite utility extension. 	Construction Cost: \$119,405,342 Additional Utility & Roadway Offsite Costs: \$3,000,000 Additional Grading & Earthwork Costs: \$2,500,000

Alternatives

*Preferred Alternative

Fairmont Park - Option 1

Advantages

The Fairmont Park site has numerous advantages for the proposed Spokane Veterans replacement home. First, the site is located within the city of Spokane and therefore is accessible to the largest regional population with the least travel distance for residents, visitors and caregivers. The site is also located in close proximity to the VA Medical center which provides for most resident medical care and reduces emergence response times for medical emergencies.

Located near and surrounded by the Dwight Merkel Sports Complex (DMSC) the Fairmont Park site provides natural community outreach potential with opportunity for entertainment and activity outside of the home. The park allows for family friendly activities for visiting relatives and the veteran residents. In addition to ball fields, a skate park, and BMX bicycle track, the park has walking trails that connect through the park and to the community. Access to the Fairmont Memorial park can be made from this site to provide more opportunities for solitude and reflection in a natural environment.

The site is wooded with conifer trees and has views of the Spokane river valley to the north. The site is mostly flat with approximately ten feet of fall across the entire site which reduces grading costs associated with cut and fill.

Using an investment strategy to provide shared access improvements that benefit both WDVA and DMSC park that are located onsite will allow the state to take advantage of the 65% VA grant funding instead of having to bear 100% of the offsite improvements that are not allowed in the VA grant program. The proposed investment strategy for Fairmont Park – Option 1 is to provide parking along the east side of the site along with some amenity space that WDVA desires to provide for the home.

- A pond with a dock and shaded pavilion for reflection and fishing activities.
- A small amphitheater and band shell for special events.
- Shared parking along the east property line that can be used by the park for sporting events. The parking area can also be used for special events like Veterans Day, classic car shows, and other events hosted by WDVA.
- Provide a restroom/concession building for use by WDVA and DMSC park.

All these will provide opportunity for community outreach and intergenerational engagement.

Disadvantages

Access to the site through the DMSC park requires close coordination and intergovernmental agreements. Once developed, the entry road will be dedicated to the City of Spokane, which does have the benefit of transferring maintenance of the road out of WDVA's operational costs.

Utility easements will need to be established for water and sewer along the west side of DMSC park and Pauline Flett Middle School to tie into Wellesley Ave.

As previously mentioned, because these improvements are offsite, the improvements will need to be funded by the state without matching VA grant funds.

Fairmont Park - Option 2

Advantages

Fairmont Park – Option 2 site has all the advantages of the preferred alternative [Option 1] but does not have the benefit of the investment strategy proposed in option 1. All the offsite costs for road, utility improvements, and relocation of two ball fields would be borne by the state without the 65% VA grant funding. The VA grant program specifically excludes all offsite improvements and land acquisition costs.

Disadvantages

In addition to the disadvantages outlined for the preferred Fairmont Park Option 1, additional investment strategy costs would need to be incurred to relocate and add a soccer field that will be disrupted by the access drive at the southeast corner of the site. Timing for construction would be critical as the soccer fields would need to be constructed approximately two years prior to building the access road. Once the soccer fields are constructed a year of turf establishment would need to take place before they are usable.

Relocation of the fields and the other offsite improvements again, would be paid by the state without matching VA grant funding.

***Least Preferred**

Medical Lake - Option 3

Advantages

The greatest advantage of the Medical Lake site is substantial – it is already owned by the State of Washington and could be allocated for the VA's use. The rural property has scenic territorial views all around with potential for lake views in certain areas. The property is near the Washington State Veterans Cemetery and approximately 2 miles Southwest of the Fairchild Airforce Base. The following disadvantages seem to outweigh the current ownership benefit of a site, lowering it to a lesser preferred option.

Disadvantages

Site disadvantages fall into four categories: land use & zoning, utilities, environmental conditions, and access. The following issues add significant costs and potential elongated schedule additions to the delivery of the new Spokane Veterans home.

Land Use & Zoning

The site is located within the Spokane County jurisdiction adjacent to the city of Medical Lake. The VA Medical Hospital in Spokane is located approximately 20 miles northeast of the site.

- The site is zoned as Rural Conservation. As a higher density residential development, the use is inconsistent with the county's zoning.
- The site is located outside of the Spokane County Urban Growth Area (UGA) boundary as mandated by the State of Washington's Growth Management Act. Working through jurisdictional requirements and timelines for incorporating the area into the UGA or being allowed outside the UGA extends a considerable risk to the use of the site and success of the project.

Utilities

Domestic Water

Based on the Spokane County GIS Map, the water district is private and operated by Consolidated Support Services. Existing domestic and fire protection infrastructure maps are not publicly provided for the area.

- Medical Lake has had water supply issues in the past. Potable water in the West Plains has been compromised due to PFAS contamination from Fairchild Airforce Base and Spokane International Airport.

Sewer

- There are no public wastewater collection services in this area. Therefore, it is anticipated that a septic system would be required to provide service to this facility. The Department of Health would determine if a septic system can be placed on the site.
- Proposed stormwater management improvements associated with the site will need to comply with Spokane County and the Spokane Regional Stormwater Manual. The on-site existing soils may have limiting layers for infiltration based on the Web Soil Survey. Bedrock at a depth of approximately 40 inches may be encountered at certain locations on-site based on the Web Soil Survey.

Environmental Conditions

The West Plains and Medical Lake area is known for its difficult geology that diminishes development due to the added expense and uncertainty. Significant areas of surface and subsurface rock limits infiltration of surface water creating a plethora of wetlands and ponding areas that do not naturally drain.

- Slope would require major grading and make a single-story ADA accessible design very difficult
- Subsurface conditions are unknown with several visible rock outcroppings.
- Stormwater drainage challenges due to shallow rock would require major civil engineering remediation adding design and construction expense

Access

- Examination of the broader access to the site leaves a potential Veterans Home in Medical Lake very isolated from existing VA services, specialty medical care in Spokane's medical district, and other social and community engagement activities.
- Access to Mann-Grandstaff VA Medical Center is a 40-minute drive, or a 2-hour ride via public transit.
- Access to Spokane Medical District including Sacred Heart, Deaconess, other specialist provider is a 24-minute drive, or a 1-hour 45-minute ride via public transit.
- While the residents would face potential geographic isolation, the Veterans Home may also have trouble with recruitment and retention of employees. Travel would be a challenge for staff, especially during inclement weather due to narrow state highway access to the site from the great metropolitan area of the City of Spokane.

The background of the entire page is a photograph of a river or stream. In the foreground, there are dark, jagged rocks and some green, leafy plants growing from the bank. The water is calm, reflecting the sky and the trees in the distance. The sky is a pale, hazy blue with some wispy clouds. The trees in the background are mostly evergreens, some with yellowing leaves, suggesting an autumn setting. The overall tone is muted and naturalistic.

SECTION

3

Detailed Analysis of **Preferred Alternative**

orcutt | winslow

Bernardo Wills



3.0 Detailed Analysis of Preferred Alternative

Preferred Alternative Design Narrative

Building Design Approach

Materials selected for this home consider first impressions and aesthetic compatibility, durability and long-term functionality, and the impact on residents, staff and visitors. They will be selected to represent the mission of the home, and the quality of services provided. Materials are to be attractive, cost effective, and sustainable. The new home will utilize materials that complement the existing architecture of the greater Spokane area in order to present itself as an inviting environment for Veterans, their families and the overall community.

In Northwestern Washington, exterior stone veneer, wood tone High Pressure Laminate (HPL) siding, stucco and standing-seam metal roofing will create a sense of permanence, strength and purpose while expressing modern western mountain architectural design. Interior wood veneer doors and appropriate use of finishes add warmth to the space while maintaining durability and functionality. Washington State architectural details of the exterior will be expressed on the interior as well. Refer to interior design narrative for additional discussion of this stylistic utilization.

Walls will be designed for sound transmission control from external sources from nearby highways and general exterior noises with a minimum 45 STC. The building thermal envelope will be energy efficient to minimize the heat gain and loss due to conduction and solar radiation. The building envelope will minimize the air leakage to and from the occupied spaces and shall also ensure condensation control with vapor barriers at the appropriate side of wall construction.

***For a detailed analysis of the building program, see the attached program summary in the appendix.**

Windows will be thermally broken aluminum and aluminum clad wood windows. Glazing for the windows, window walls, and storefront will be Low-E, insulated, and tinted. The interior light of the insulated glass units will be a minimum of 1/4-inch annealed glass or tempered when required. Entry doors will be Low-E, insulated, and tinted. Window systems will be triple glazed and provided with a continuous thermal break between inner and outer sash; also between inner and outer frame components including window sill. Window sills/stools will be a minimum of 18 inches above the finished floor in resident rooms and common areas. Staff offices will have sill heights at 36 inches above the finished floor to accommodate work desks and affiliated electrical outlets. Window screens will be provided on all operable windows.

To emphasize the connection with the surrounding vernacular and minimize the potential of water penetration, the roofs are designed utilizing standing seam metal with a minimum 2:12 slope. The design of the mechanical well roofs will be a low slope PVC or EPDM membrane roof bordered by parapets. Most mechanical areas (except for condensers and kitchen exhaust fans) are enclosed within a roofed penthouse to minimize maintenance issues related to inclement weather. Those areas that are required to be open to the sky, will have membrane roofs that pitch at a minimum 1/2" per foot slope to drain water. Low slope roof systems will be designed in accordance with the recommendations of the National Roofing Contractors Association (NRCA) Roofing and Waterproofing

Manual. The system shall also be designed in accordance with Washington State Department of Enterprise Services (WDES) design requirements. The roof assemblies need to provide multiple layers of weather protection, in case one membrane fails. Roofing assemblies will have a subsurface membrane water shield. Low-slope roof systems will be designed to the local environmental conditions utilizing tapered insulation, sloped structural systems, or level structural system with sloped fill to achieve the required slope.

Where required, roof access will be provided to roof areas via interior service stairs. Roof walkways will be reinforced with non-slip walkway pads compatible with PVC and EPDM roof membranes on all access routes over roofs to mechanical equipment requiring recurrent maintenance.

All interior and exterior doors will be a minimum width of 3 feet. Interior doors will be wood with painted hollow metal frames. Exterior entrance doors will be anodized aluminum construction with safety glazing and complying with energy requirements as stated in the window systems. At main entrances, "Air locks" consisting of vestibules formed by automatic swing doors. Swinging exterior doors and frames, except entrance doors, will be heavy duty, insulated, full flush, hollow steel construction. Exterior doors shall be weather-stripped, shall be self-closing, and shall open outward. Provide latch guards and hinges with non-removable pins to deter tampering or unauthorized entry.



Fire and Life Safety Code Analysis

The design will comply with all applicable Federal regulations, State Building Codes, local zoning ordinances, and applicable utility company requirements as approved and administered by Authorities Having Jurisdiction at the project location at the time of construction. Where there is a conflict between the various codes or standards, the most stringent shall apply. The following code summary is a preliminary analysis of the building design.

The design will comply with all applicable Federal and State regulations and applicable utility company requirements as approved and administered by Authorities Having Jurisdiction (AHJ) at the project location at the time of construction. Where there is a conflict between the various codes or standards, the most stringent shall apply.

Applicable Codes & Standards

2021 Washington State Building Code

2021 NFPA Life Safety Code

2021 Washington State Commercial Energy Code

2021 Washington State Plumbing Code

2021 Washington State Mechanical Code

2021 Washington State Fire Wall Code

FGI 2022 Residential Health Facilities Code

VA Small House Design Guidelines (rev. March 2019)

VA Barrier Free Design Guide, PG-18-13

- Joint Commission on the Accreditation of Health Facilities (JCAHO), Manual of Hospital Accreditation Environment of Care Guidelines and Standards

2017 Accessibility Code

2010 ADA Design Guidelines for Accessible Design

This facility will be licensed by the Washington State Department of Health (WDH) and accredited by an outside healthcare accreditation organization, The Joint Commission. These authorities require that the facility must also comply with the requirements for a new healthcare facility found in the 2021 NFPA 101 Life Safety and associated NFPA codes. Where conflicts exist between different applicable codes the most stringent requirements shall apply.

Occupancy Classification

Community Center: Group I-2 occupancy (with accessory uses B, A-2, S-2, and F-1)

Neighborhood Buildings: Group I-2 occupancy (with accessory uses B, A-2, S-2, and F-1)

Construction Type

Type IIB [per 2021 Washington State Building Code (WSBC)] / Type II, 0, 0; 0 construction [per NFPA 101 Life Safety Code] construction, fully sprinklered per NFPA 13.

For individual building components refer to Fire Resistance requirements of ICC section 407.

Exterior Bearing Walls:	0 hr.
Interior Bearing Walls:	0 hr.
Columns:	0 hr.
Beams, Girders, Trusses:	0 hr.
Roof- Ceiling Assemblies:	0 hr.
Interior Nonbearing Walls:	0 hr.
Exterior Nonbearing Walls:	0 hr.

Each building shall be treated as an independent neighborhood building by providing a 2-hour fire wall at the end of each connector. Utilizing Chapter 5 of the 2021 WSBC the allowable area per building shall be as follows:

Tabulated Allowable Area (Table 506.2) [Sprinklered 1 Story]: 44,000 SF

Frontage Increase:

Frontage Increase Factor (IF) Per Table 506.3.3

$IF = (44,000 \times 0.50) = 22,000 \text{ SF}$

Area Increase = $(44,000 + 22,000) = 66,000 \text{ SF}$

The actual gross building areas per building are as follows:

Community Center:	33,000 Gross SF (includes circulation)
Neighborhood A: [4 Households]	54,121 Gross SF (includes circulation)
Neighborhood A: [4 Households]	54,121 Gross SF (includes circulation)
Warehouse Building:	1,800 Gross SF
Central Plant:	1,915 Gross SF

As shown, the buildings are divided into three buildings from a life safety perspective. The community center identified on the Life Safety Site Plan as Community Center is below the maximum allowable for sprinklered 1 story buildings of 44,000 GSF per table 506.2 of chapter 5.

In addition, the Community Center building will be subdivided into two smoke compartments not exceeding 22,500 SF. Smoke barriers will have a fire resistance rating of 1 hr.

Each Neighborhood consists of one building each and identified on the Life Safety Site Plan as Neighborhood A and Neighborhood B. Neighborhoods A and B are separated by a fire wall and are 54,121 sf each which is below the maximum allowable for sprinklered 1 story buildings of 66,000 GSF, per table 506.2 of chapter 5 and frontage increase per table 506.3.3.

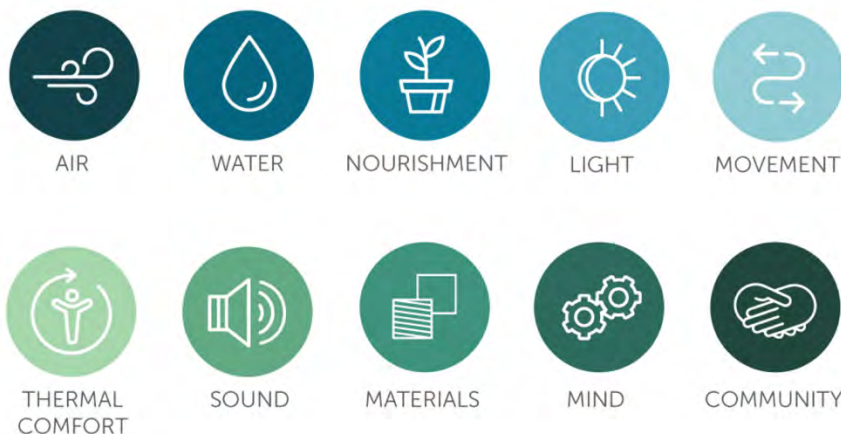
In addition, each neighborhood building will be subdivided into smoke compartments not exceeding 22,500 SF. Smoke barriers will have a fire resistance rating of 1 hr.

Site Plan Considerations for Building Life Safety

As a campus of three separate buildings, imaginary or internal property lines will be created on the site plan to establish the distance of each building from this line to determine the required fire resistance rating of the exterior wall. Exterior non-bearing walls that are less than 30' from any property line will have a fire resistance of 1 hr. and openings will be limited per IBC table 705.8. If the distance is greater than 30', no rating is required on exterior nonbearing walls.

High-Performance Public Buildings

The design team proposes a hybrid approach to compliance with the High-Performance Public Building requirements. In terms of certification, the team proposes WELL certification as an alternative that will result in an even more positive experience for residents. The WELL Building Standard includes more than 30 overlaps with LEED. In addition, the team intends to comply with the energy and water prerequisites of LEED. The design team is also pursuing the use of mass-timber products locally sourced from the Spokane region, which should meet the requirements by the State of Washington to use local wood products. The design intent is to go above and beyond the requirements of LEED Silver Certification, while adding the most value to the residents and staff.



State Efficiency and Environmental Performance

The design team will design each building to be net-zero energy capable with the understanding that an on-site photovoltaic system will be installed at a compliant capacity for day one operations but may need to be phased to achieve the net-zero goal. The team will also track embodied carbon along with operational carbon to optimize the selection of building materials for the lowest carbon footprint.

State Energy Standards Compliance

The design team will complete in-depth energy modeling with an integrated team to ensure the building envelope and systems are achieving project goals and energy targets. The target Energy Use Intensity (EUI) for this project is 23 for an 80% reduction in energy use to meet the AIA 2030 Commitment and based on the Zero Tool results for a senior care community. *See Right »*

On Site Parking and Vehicle Charging

The site plan will comply with the LEED requirements for Green Vehicles and EV charging stations, locating charging stations where practical for staff and visitors, and to accommodate electric fleet vehicles. EV charging stations shall also comply with RCW 19.27.540 and the 2021 Washington State Building Code section 429, requiring 10% of parking spaces to be EV charging stations, 10% to be EV ready, and 10% to be EV capable as defined by the building code.

Building Commissioning

All building systems (Mechanical, Electrical, Plumbing, Low Voltage) shall be commissioned, and a commissioning report provided to the owner as required by 2021 Washington State Energy Code section C408. Reference Mechanical appendix for additional requirements.

National Historic Preservation Act

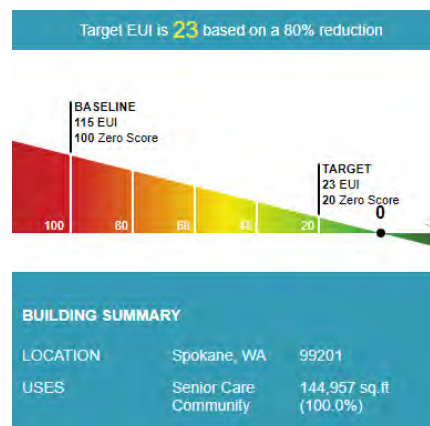
Per Exec. Order 21-02, WDVA sent a letter on 10/03/2024 to the Spokane Tribe describing the intent of the project requesting comments. We anticipate a response after their review of the final report. In a follow up call from the Tribe, they indicated a need for additional information, i.e. completed study/project plan. WDVA will provide the completed study and project plan to the Tribe for further evaluation and comments. See letter from WDVA to Honorable Carole Evans, Chair of the Spokane Tribe attached in the appendix.

Americans with Disabilities Act (ADA)

The design of a skilled nursing home for veterans necessitates careful attention to the needs of elder populations and the specific needs of veterans. Not only does this population require many of the ADA standards for a safe environment and one that provides the maximum mobility for people with mobility impairments, but many veterans also suffer from varying degrees of Post Traumatic Stress Disorder (PTSD). The design of this new veteran's home will implement the latest requirements of the ADA, plus the VA Small House Design Guidelines and include best practices to increase mobility to residents and reduce risk to residents and caregivers. Special design considerations for material, finish, daylighting, circadian lighting, and others will be implemented to reduce the effects of PTSD and Traumatic Brain Injury (TBI) affects for the veteran population residing in the new home.

In patient rehab, occupational therapy, speech therapy, and outdoor therapy gardens will be provided to improve mobility, and accessibility for residents which will result in increased health outcomes. Therapy tubs will be provided for assisted bathing with state-of-the art bathing tubs that provide 360° access around the tub for better and safer caregiver access to the resident. Music, aroma and chroma therapy is also a part of the resident bathing experience. The bathing suite also provides a shower and toilet facilities.

Each private resident room is equipped with an accessible roll in shower with no curbs and accessible grab bars for increased independence and mobility. Patient lifts are provided in each neighborhood and household to provide safe movement of residents preventing caregiver and resident injuries.



In the outdoor therapy garden consideration will be given to designing real world challenges encountered every day in the built environment. Purposely designed features like stairs, ramps, handrails, and varied hardscape surfaces afford therapists another avenue to implement treatment protocols that help veterans learn to navigate the built environment. For residents challenged with cognitive impairment, fully accessible raised bed or vertical gardens offer an opportunity participate in horticulture therapy activities to enhance sequencing of actions, fine motor skills, and building manual dexterity.



Site Plan and Landscape Considerations

There is a direct correlation to improved health outcomes, emotional wellbeing, and reductions in stress when people have direct access to nature. Provisions for secure therapeutic gardens should be considered in the site plan. These specialized gardens provide opportunities for expanded delivery of occupational and physical therapy activities in the outdoor environment. Similarly, neighborhood courtyards and outdoor patios adjacent to the canteen and dining areas should be considered early in the planning stages of the project. A fan favorite in many Veteran's homes is the outdoor Sports Bar Courtyards. Again, early planning is key to providing enough space on site for ADA accessible putting greens, bocce ball, horseshoe, and other activities to occur spontaneously – or as part of a recreational therapy program. *insert image < IDVS Sports Bar Courtyard.jpg >*

Neighborhood and Therapy Gardens

Neighborhood courtyards provide opportunities for residents to engage with each other, their families, staff, and nature. Having access to sunshine, fresh air, and the natural environment reduces stress, blood pressure, heart rate, and Cortisol levels. Each neighborhood benefits from access to an enclosed, outdoor courtyard where active and passive spaces offer residents choice in their level of engagement. Programmatic features to consider include wide circuitous ADA accessible walkways comprised of broom finish concrete that offer a safe surface for ambulation. Raised bed gardens provide opportunities to connect directly with nature while caring for plants lends a sense of accomplishment, personal value and purpose. Passive spaces are equally important. Whether it's a solitary bench tucked on the perimeter of the garden beneath a shade tree, or an intimate outdoor living room where friends gather to chat beneath a pergola shade structure.



Therapy gardens are a vital part of the rehabilitative program. Elements that assist ambulation, strengthening, the vestibular sense, and cognitive sequencing include purposely designed ramps, stairs, and handrails. Additionally, multi-textured walking surfaces consisting of crushed gravel, pavers, mortared stone, level and sloped lawn areas can aid in programmatic therapeutic activities. Built-in benches and seat walls can be utilized for teaching safe methods of transferring from wheelchairs and walkers. While raised bed and vertical gardens afford opportunities for horticulture therapy activities that increase manual dexterity and fine motor skills, in addition to cognitive sequencing. Horticulture therapy activities may include deadheading, weeding, planting, and utilizing varied weights of watering cans for strengthening exercises.



Interior Finishes

1. Interior Finish and Floor Flame Spread and Smoke Development Requirements.
 - a. The requirements stipulated by NFPA 101 are more stringent and more detailed than those outlined in the
 - b. NCBC.
 - c. NFPA 101 stipulates three classes of interior ceiling and wall finishes and two classes of interior floor finishes. The specific properties of each class are outlined at the end of this section.
2. Interior Wall and Ceiling Finish
 - a. Interior wall and ceiling finishes are allowed to be Class A throughout except as noted below.
3. Walls and ceilings shall be permitted to have Class A or Class B interior finish in individual rooms having a capacity not exceeding four persons.
4. Corridor wall finish not exceeding 48 inches in height that is restricted to the lower half of the wall shall be permitted to be Class A or Class B.
5. Class C interior wall or ceiling finishes are not permitted
6. Interior Floor Finish
 - a. Class I and Class II interior floor finishes shall be allowed throughout.
7. Textile Wall Coverings
 - a. If used, textile wall coverings, including materials having woven or non-woven, napped, tufted, looped, or similar surface, will have a flame spread of 25 maximum.
8. Decorations and Trim
 - a. The amount of noncombustible decorative material is not limited.
 - b. The permissible amount of flame-resistant decorative materials will not exceed 10 percent of the aggregate area of walls and ceilings (where required to be flame resistant, decorative materials shall be tested by an approved agency and pass Test 1 or Test 2, as appropriate, described in NFPA 701 or such materials shall be non-combustible).
 - c. Material used as interior trim will have a minimum flame spread of 200 and smoke-developed index of 450. Combustible trim, excluding handrails and guardrails, will not exceed 10 percent of the aggregate wall or ceiling area in which it is located.

9. NFPA 101 Interior Finish Classification Specifications

- a. Class A interior wall and ceiling finish is characterized by the following:
 - i. Flame spread, 0-25
 - ii. Smoke development, 0-450
 - iii. No continued propagation of fire in any element thereof when so tested per NFPA 255, Standard Method of Test of Surface Burning Characteristics of Building Materials.
- b. Class B interior wall and ceiling finish is characterized by the following:
 - i. Flame spread, 26-75
 - ii. Smoke development, 0-450
- c. Class C interior wall and ceiling finish is characterized by the following:
 - i. Flame spread, 76-200
 - ii. Smoke development, 0-450
 - iii. Class I interior floor finish is characterized by a critical radiant heat flux not less than 0.45 W/cm²
 - iv. Class II interior floor finish is characterized by a critical radiant heat flux not less than 0.22 W/cm² but less than 0.45 W/cm².

Interior Design

The Interior Design for the Veteran Home should include a thoughtful blending of planning strategies involving the use of form, light, color, texture, sound and scent, as well as bringing balance and character into a given space. Carefully organized and designed interior spaces can provide thoughtful and comfortable spaces that enhance the interior environments in which to live and for staff to work. Specific interior architectural finishes should be selected keeping long term use, clear way finding, safety, comfort, aesthetics, health, sustainability, context, style and maintenance in mind.

Manufacturers of the interior materials should be chosen based on not only the design quality, but their responsibility to our environment. Specifying products that are low in VOC's such as adhesives, sealants, carpet systems, paints, wall coverings and specifying composite wood products without formaldehyde will enhance the interior environment and contribute to higher indoor air quality and comfort. Furthermore, life cycle costs should be one of the main considerations behind the selections of any finish materials, furniture pieces or equipment. Likewise, federal law requires all commercial and public accommodations be accessible to people with disabilities and the designers will make certain to design interior spaces that conform to ADA requirements. In addition, design for the Community Care Home should address the particular concerns of the Resident that will be living in the home.

These considerations may include additional concern for safety and wellbeing with specific regard for rounded corners on millwork to support resident safety, appropriate floors to support more slip resistance and levels of contrast in color and finishes to address additional levels of Resident vulnerability.

Specific references guiding the development of these recommendations

Department of Veterans Affairs, Office of Construction and Facilities Management, VA Small House Design Guidelines rev. March 2019.

Maintenance and Product Performance VA Best Practice for Materiality.

Design Concept

The design intent is to create a home like feeling that is both comfortable and inviting and encourages well-being. The philosophy of the interior design emphasizes strong connections to nature and a simplicity of form to create tranquil settings for meaningful life. The style is characterized as elegantly understated with clean lines and simple ornamentation. The color palette and finish materials will reflect the natural environment through earth tones and rich accents.

Feature Areas

- The interior design palette for feature areas will build upon the foundation of a neutral palette. Areas of opportunity for accent colors, texture, and design articulation could include the following:
- Integrated feature areas in flooring and ceilings to support wayfinding.
- Accent walls highlighting artwork, destinations, areas of community gathering and feature spaces.

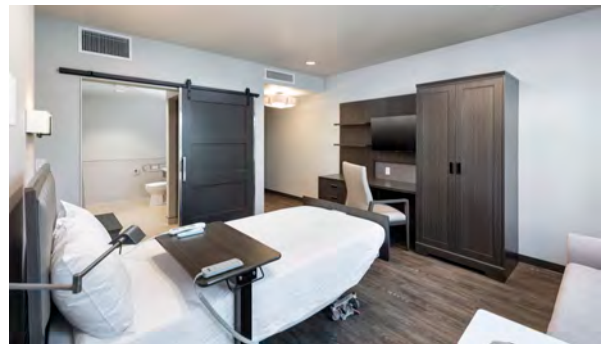
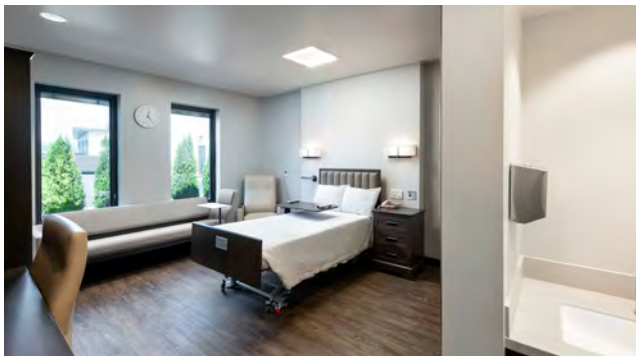
- Flooring to be luxury vinyl plank with premium carpet tile inset in seating areas with 12" contoured resilient base.
- Walls to be smooth texture and finished in a vinyl wallcovering.
- The accent wall behind the reception will be a custom design with branding signage.
- The Ceilings will be custom designed with beams, neutral color paint, feature lighting fixture, gypsum soffits complete with wall scone picture lights highlighting artwork. The ceiling is to be raised in these areas.
- Millwork is to be a combination of materials including high pressure laminate, glass, and premium quartz countertop and transaction top, all ADA compliant.
- Lighting to be premium suspended fixtures with supplemental recessed downlights and wall sconces.

Main Street

- Flooring to be luxury vinyl plank with 12" contoured resilient base.
- Walls to be a combination of low VOC painted in an eggshell finish and type II vinyl wallcovering.
- Wall protection to include wood handrails with decorative type III wall protection below.
- Window treatments are to be roller shade style on all windows.
- Indoor trough style planters with plumbing to be integrated into architectural niches.
- Interior doors to be Acrovyn panel design doors.
- The Ceilings will be custom designed with beams, neutral color paint, feature lighting fixture, gypsum soffits complete with wall scone picture lights highlighting artwork. The ceiling is to be raised in these areas. Hard lid ceilings and soffits will occur at corridor intersections to support wayfinding.
- Lighting fixtures to be a combination of wall mounted sconces, wall mounted picture lights for artwork, and decorative ceiling mounted fixtures.
- Custom flag style signage will indicate resident amenities.

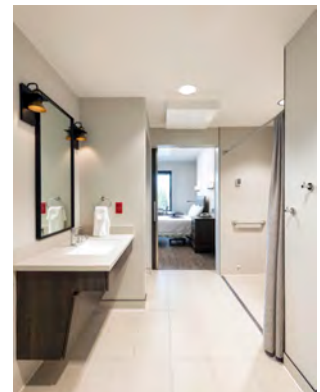
Residential Rooms

- Floors to be luxury vinyl tile product with 12" contoured base.
- Walls to be low VOC eggshell paint with type III wallcovering at the headwall of the bed.
- Millwork is made of woodgrain high-pressure plastic laminate with solid surface or quartz countertops.
- Window treatments to be integral blinds within the window system.
- Interior doors to be solid wood panel design doors.
- Lighting fixtures to be a combination of wall mounted sconces, recessed fixtures, and decorative ceiling mounted fixtures.



Residential Rooms - Toilets

- Flooring to be 2" x 2" porcelain tile for sloping to drain and slip resistance.
- Sliding doors will be solid wood panel design doors with exposed barn door hardware.
- Walls to be large format porcelain tile with decorative inset.
- Decorative lighted mirror and accessories to be included.
- Ceiling to be painted gypsum board.
- Lighting will be recessed lighting and decorative wall sconces.

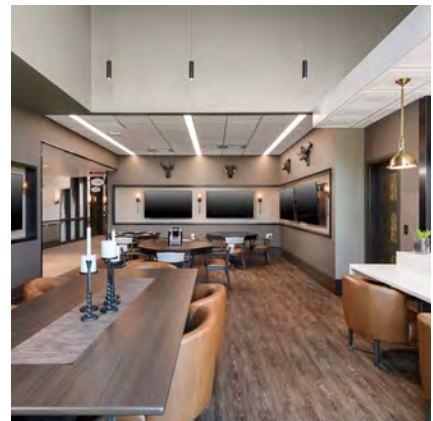


Dining and Community Support Spaces

- Flooring to be vinyl backed carpet tile in the Living Rooms and Great Room with 12" contoured base. Memory Support Units flooring will be a premium luxury vinyl plank product with 12" contoured base.
- Flooring in Dining and Activity Areas to be luxury vinyl plank with 12" contoured base.
- Flooring in Servery Kitchens to be quarry tile with coordinating sanitary cove base.
- Walls to be a combination of type II vinyl wallcovering and low VOC eggshell paint.
- Wall protection includes wood handrails with decorative type III wall protection below.
- Millwork is made of high-pressure woodgrain plastic laminate with quartz countertops.
- Interior doors to be solid wood panel design doors.
- The ceiling will be a combination of custom designed ceiling, 2x2 tegular acoustical ceiling tile, wood style plank and suspended grid system, with gypsum soffits with accent suspended lighting fixtures. Ceiling height to be raised in these areas.

The resident amenity areas listed below will be elevated with a refined level of design and exquisite attention to detail.

- Barber Shop
- Coffee Shop
- Chapel/Activity
- Conservatory
- Multipurpose



Offices & Administrative Area

- Flooring will be premium carpet tile with rubber cove base.
- Interior doors to be solid wood panel design doors.
- Walls to be low VOC eggshell paint.
- The ceiling will be 2x2 tegular acoustical ceiling tile and suspended grid system, with recessed direct/indirect lighting.

Rehabilitation

- Flooring to be premium luxury vinyl plank with 12" contoured base.
- Interior doors to be solid wood panel design panel doors.
- Walls to be low VOC eggshell paint and type II wallcovering.
- Millwork made of high-pressure woodgrain plastic laminate with solid surface or quartz countertops.
- The ceiling will be 2x2 tegular acoustical ceiling tile and suspended grid system, with recessed direct/indirect lighting.

Resident Support Spaces

- Flooring in Clean and Soiled rooms to be seamless and chemical welded with rubber cove base.
- Flooring in ancillary areas to be luxury vinyl plank with 4" rubber cove base.
- Flooring in Offices to be carpet tile with 4" rubber cove base.
- Walls to be low VOC eggshell paint.
- Millwork made of high-pressure woodgrain plastic laminate with solid surface or quartz countertops.
- Interior doors to be solid wood panel design doors.
- Ceiling to be 2x2 square acoustical ceiling tile in a suspended grid system.



Building Support Spaces

Restrooms

- Flooring to be large format porcelain tile.
- Walls to be a combination of large format porcelain tile, decorative tile accents, and vinyl wall covering.
- The toilet partitions to be solid core plastic laminate.
- Decorative mirrors and accessories to be included.
- Millwork made of high-pressure woodgrain plastic laminate with quartz countertops.
- Doors to be solid wood panel design doors.
- Ceiling to be painted gypsum board with recessed lighting and decorative wall sconces.

Housekeeping Closets

- Flooring to be seamless and chemical welded with integral cove base.
- The walls will be painted moisture resistant gypsum board with smooth Fiber Reinforced Plastic (FRP) adjacent to wet locations.
- Door and frame will be solid wood panel design doors in hollow metal frame with kickplate protection.
- Ceiling to be painted gypsum board.

Electrical rooms

- Flooring to be sealed concrete with 4" rubber cove base.
- Walls will be painted gypsum board with fire resistant plywood.
- Door and frame will be painted metal doors in hollow metal frame.
- Ceilings to be exposed and painted.

Kitchen

- Flooring to be quarry tile with 6" sanitary cove base.
- Walls to be painted moisture resistant gypsum board with Fiber Reinforced Plastic (FRP) adjacent to wet locations.
- Door and frame will be painted metal doors in hollow metal frame.
- Ceiling to be 2x4 square vinyl faced gypsum panel in a suspended grid system

Information Technology (IT) Infrastructure Investments

IT investments will include all infrastructure items like HVAC, smart building technologies for building automations, internet of things used on system technologies for building sensors and monitoring. This entails providing a data hub (specialized server equipment "built-in" to the building") to support these functions:

Telehealth

- Monitors and equipment to support

Digital health (EHR)

- Cloud based EHR system and tech to support throughout the facility
- AI and Machine Vision technologies for in-room falls management

Energy Management

- Building energy management
- Asset level energy monitoring
- Energy usage monitoring

Building automation

- HVAC system and thermostat
- Lighting controllers and switches
- API connections for BMS/BAS/EMS

Indoor Air Quality (IAQ) Monitoring

- Tracking
- Air and surface protection monitoring

Security and Access Control Management

- Cameras, access control equipment
- Dashboards and mobile apps for monitoring/alerting
- Electronic check-in for visitors/guests
- IoT devices (sensors, smart meters, asset tracking)

Primary and secondary Network (wired/wireless)

- Wireless communications
- Mobile computing
- Primary/secondary communication platforms across the entire campus

Telecommunications

The telecommunications design consists of Outside Plant (OSP), horizontal distribution systems, backbone distribution systems, telecommunications spaces (Telecommunications Rooms (TRs), Telecommunications Enclosures (TEs), Equipment Rooms (ERs) and Telecommunications Entrance Facilities (TEF)). The telecommunications design will provide activity requirements including voice, data, intercom, nurse call system and television.

The telecommunication system will be designed to provide complete end-to-end telecommunications Information Transport Systems (ITS), including, information transport media (copper and fiber optic cabling), patch panels, cabinets, racks, jacks, cross-connects, connectors, fiber optic distribution panels, etc., for the Washington Department of Veterans Services (WWDVS) to install their equipment, connect, and then “plug and play/operate.” WWDVS Furnished WWDVS Installed (DFDI) equipment including items such as encrypting/ decrypting equipment, encoding/decoding equipment, servers, computers, core level end edge switching, routers and firewalls.

References:

The telecommunications system will be provided in accordance with the most recent version of the following documents. In the event of a specification conflict, the most stringent will apply.

- VA Department of Veterans Affairs – Community Living Centers Design Guide.
- Commonwealth of Washington Construction and Professional Services Manual.
- ANSI/TIA/EIA-568-D Commercial Building Standard for Generic Telecommunications Cabling for Customer Premises. (and all addenda)
- ANSI/TIA/EIA-569-D Commercial Building Standard for Telecommunications Pathways and Spaces. (and all addenda)
- ANSI/TIA/EIA-606-B Administration Standard for Commercial Telecommunications Infrastructure.

- ANSI/J-STD-607-C Commercial Building Standard for Generic Telecommunications Bonding and Grounding for Customer Premises.
- ANSI/TIA/EIA 758B Customer Owned Outside Plant Telecommunications Infrastructure Standard (and all addenda).
- ISO/IEC 11801 Information Technology - Generic Cabling for Customer Premises.
- BICSI Telecommunications Distribution Methods Manual - Latest Edition.
- ANSI/NECA/BICSI 568-2006 Installing Commercial Building Telecommunications Cabling.

Telecommunications Entrance Facility (TEF) Main Telecom Room (MTR)

The main telecom room will serve as both the MTR and TEF for the Outside Plant (OSP) fiber and copper. Fiber will be terminated in the new 19" rack. Copper cables will be terminated on primary protector blocks. This room will also be used for horizontal distribution and the fiber and copper backbone to the telecom room at each wing. The OSP fiber will be terminated on a rack-mounted fiber patch panel ensuring adequate maintenance loop. The OSP copper cables will be terminated on primary protector blocks with solid state modules. TEF/MTR will be supplied with a dedicated environmental air quality system to maintain proper temperature and where necessary, control relative humidity levels (24 hours per day, 365 days per year) for the safe and effective operation of the equipment to be housed therein without deterioration of that equipment and as required by TIA/EIA-569-D standard.

The TEF/MTR will be provided with ¾ inch thick, 8 feet high AC grade, void free fire-resistant plywood backboard on all walls. The backboard will be painted with two coats of fire-retardant paint. Plywood backboard bottoms shall be mounted to permit access to outlets.

The room will be provided with bonding and grounding in accordance with ANSI-J-STD-607-C, NFPA 70 and "Bonding and Grounding System" section elsewhere in this document. All equipment and cables entering the TEF will conform to the bonding and grounding requirements described in the above technical guide and standards. The ground will consist of copper-clad ground rods, Main Telecommunications Ground Busbar (MTGB), Telecommunications Bonding Backbone (TBB), minimum #6 AWG bare and insulated copper cabling, and connectors.

Telecommunications Rooms (TRs)

Telecommunications rooms serve as spaces that provide a connection point between backbone and horizontal distribution pathways and are considered to be floor-serving spaces. One TR per wing, sized in accordance with EIA/TIA 569-D standards will be provided. All TRs will be dedicated to telecommunications functions. Adequate number of racks/ cabinets will be provided for system(s) terminations, equipment and patching in each TR. Each rack will be provided with one (1) 20-amp electrical circuit fed from the building generator emergency circuit. Space will be allocated in each rack for WDVS furnished WDVS Installed (DFDI) rack-mounted UPS. TR room walls will be covered with ¾" thick, A/C grade, void free fire-resistant plywood. Bonding and grounding will be in accordance with ANSI-J-STD-607-C. All equipment and cables entering the TR will conform to the bonding and grounding requirements described in the above standards. The ground will consist of copper-clad grounding rods; Telecommunications Ground Busbar (TGB), Telecommunications Bonding Backbone (TBB).

Telecommunications Outside Plant (OSP)

The location of available telecommunication points of connection and the proposed building location are indicated on the Utilities Plan. The design will provide two (2) 4" underground conduits for telecom from the building point of connection to the TEF/ MTR. 12 strands of single mode fiber will be provided. The OSP fiber will terminate on rack-mounted fiber enclosures with SC connectors. The OSP copper cables will be terminated on primary protector blocks with solid state modules.

Backbone Cabling

12 strands of single mode and 36 strands 50/125-micron multimode fiber will be routed from the TEF/MTR to all wing serving TRs. The backbone will be routed via conduit sleeves and cable trays.

Cable Television System (CATV) - 75-ohm RG-11/U quad-shielded, cellular-polyethylene dielectric, bare-copper braid shield with 95 percent minimum shielding factor, 1.0 mm² solid copper-clad-steel conductor will be terminated in a signal splitter in each TR. A signal splitter/tap will be used to pass the signal to other telecommunication rooms and service at each resident bed area and other designated rooms. If necessary 2G signal amplifiers will provide signal boost to sustain appropriate signal level.

Horizontal Cabling

Horizontal cabling is the portion of telecommunication cabling which extends from Work Area (WA) outlet to the TR. All horizontal cabling will be installed in a star topology. Horizontal cable runs will not exceed 90 meters (295 feet) from WA connector to the TR patch panel. Horizontal cabling for voice and data will be 4-pair 100-ohm plenum rated Cat-6, 8 position, 8-wire, terminated in an eight-position modular jack (RJ45), wired as pin/pair assignment T568B. Patch cords for both WA and TR will be provided in accordance with ANSI/TIA/EIA 568 D.

Telecommunications Outlet Requirements

Offices - The design will provide 4-inch square by 2-1/4" deep outlet boxes with a 4-port outlet faceplate that includes three (3) RJ-45 connectors and one (1) blank cover. Each outlet will consist of two (2) data, and one (1) voice, routed via cable tray or conduit to the appropriate rack/cabinet in each telecom room.

Private Rooms - The design will provide 4-inch square by 2-1/4 deep outlet boxes with a 2-port outlet faceplate that includes one (1) RJ-45 connector and one (1) RG-6 connector. Each outlet will consist of one (1) data, and one (1) CATV, routed via cable tray or conduit to the appropriate rack/cabinet in each telecom room. The design will also provide a staff call system for all private rooms and other spaces used by residents. Specific needs for call system locations will be coordinated with the functional design of resident spaces.

An emergency call system will be provided at each private room toilet, bath and shower room, accessible to a resident lying on the floor. Emergency calls activated by a resident will initiate a signal distinct from the regular staff call system at the staff work area, with a visual signal at the resident's door and will be turned off only at the resident's location.

Cable Tray

The design will provide cable tray layout as needed. Electrical Metallic Tubing (EMT) conduit will provide the pathway from the cable tray to each outlet. Conduit will be one (1) 1" per standard outlet. Conduit sizes will be designed for an optimal fill ratio of 40% (maximum 60%).

Technical Security System (TSS)

References

The security system will be provided in accordance with the most recent version of the following documents. In the event of a specification conflict, the most stringent will apply.

- U.S. Department of Veterans Affairs – Physical Security Design Manual
- VA Department of Veterans Affairs – Community Living Centers Design Guide.
- Commonwealth of Washington Construction and Professional Services Manual.
- VA Electrical Design Manual
- All Authorities Having Jurisdiction (AHJ).

Electronic Security System (ESS)

Electronic Access Control System (ACS)

Rough-ins and raceways with pull ropes will be provided for system based on allowing one point of entry into the facility via card reader. Rough-in for an Access Control System (ACS) will be designed to control access into the facility and into designated areas within the facility. Location of all ACS devices and design for supporting infrastructure will be coordinated with WDVS.

ACS equipment, including but not limited to, card readers, door monitoring switches, request to exit sensors, manual door release devices, manual override devices, and wiring will be owner furnished.

The following infrastructure shall be provided to support the ACS/IDS system:

- Rough-ins and EMT conduit with compression fittings with pull wires and back boxes will be provided between ACS devices and the nearest Telecommunication Room/security closet. Raceways will be routed to all doorframes with electronic access control or door position monitoring.

Wander Guard System (WGS)

A wander guard system for the memory care area will be provided to link wandering residents to staff 24/7. The door to the memory care area will be controlled and set to send an alarm if the resident is present and the door is open. A central receiver will be located at each caregiver work area for the wireless notification of the alarm. A keypad installed at the door will allow staff members to pass through the door by entering their code.

Electronic Closed Circuit Television Systems (CCTV)

Rough-ins and raceways with pull ropes will be provided for a CCTV system consisting of a monitoring station at the reception desk, fixed cameras, and PTZ cameras. A conduit with pull rope will be routed to the designated Security closet from each camera where a wire-way mounted above the ceiling will manage cabling from cameras. Location of all CCTV devices and design for supporting infrastructure will be coordinated with WDVS.

CCTV equipment including but not limited to, cameras, video recorders, wiring etc., will be provided by WDVA/WDES.

The following infrastructure shall be provided to support the CCTV system:

- Rough-ins and EMT conduit with compression fittings with pull wires and back boxes will be provided between CCTV devices and the nearest Telecommunication Room/security closet.

Security Monitoring and Control Locations

Rough-in for security control and monitoring capabilities will be provided at each caregiver work area and at the lobby reception desk.

Audio Visual System (AV)

References:

The audiovisual system will be provided in accordance with the most recent version of the following documents.

- NFPA 72 - (2013) National Fire Alarm and Signaling Code.
- Occupational Safety and Health Act of 1970 and all amendments thereto.
- National Electrical Code, ANSI C1, as amended by all state and local codes.
- Uniform Building Code.
- All Authorities Having Jurisdiction (AHJ).

System Description

The Audio-Visual (AV) system consists of multiple conference rooms, huddle room and classroom/training room. The conference rooms will be used primarily for meetings, presentations and audio conferencing.

Large Conference Room

This conference room will be configured for local presentations, audio conferencing and infrastructure only for integrated video conferencing. The room system will feature a fully integrated audio, and infrastructure for videoconferencing system in addition to the presentation/training system. Program audio and video will be routed to in-room visual display devices. Multiple wall-mounted flat panel displays will be used to provide in-room visual displays. The audio system will be comprised of an amplifier, ceiling mount speakers. The system control will be accomplished via two table mounted flip-tops with touch screens at each side of the conference table. The room will have a combination of general lighting over/behind the people in the room, light from the front towards the conference table and the faces of the participants, and light towards the walls. General lighting over/behind people will provide even coverage for the entire room. All three lighting zones in the room will be individually adjusted via wall dimming switches. An RS-232 interface to the AV system will be used to enable selection lighting presets from the AV system touch panel.

Presentation sources and equipment will be located in the AV equipment credenza and lectern. The new credenza will accommodate all required switching and routing equipment. The infrastructure at the conference table will provide BYOT (Bring Your Own Technology e.g. laptop) capabilities allowing the meeting leader at the table to connect to A/V equipment housed in the credenza. Meeting participants will be provided convenient connectivity throughout the room.

Equipment Within Credenza:

- Blu-Ray/DVD player, Matrix Switcher, control processor, Audio Mixer/Echo Canceller, Amplifier, Receiver and TV Tuner.

Room:

- Video - The video sources for the conference room will consist of Wall Mounted flat panel displays.
- Audio - Distributed ceiling loudspeakers for program audio. Program audio will be controlled at lectern touch control.
- Lighting - Three lighting zones individually adjustable via wall dimming switches and AV system touch panels.
- Noise Control - Refer to architectural and mechanical for target noise criteria and maximum room criteria ratings.
- Sound Transmission - Target sound transmission ratings for each boundary surface will be established based upon expected exterior noise and the target noise criteria (see above).
- Interior Treatment
 - Ceiling Drop ceiling tiles - Refer to architectural drawings for STC rating.
 - Side Walls - Refer to architectural drawings.
 - Rear Wall - refer to architectural drawings

Control at the Lectern:

- Touch panel control will be provided at the lectern for the meeting leader. Owner furnished PC and Switcher/transmitters will be installed in the credenza to transmit HDMI, VGA, analog audio, USB and Ethernet.

Connectivity at the Lectern:

- Connectivity will be provided at the lectern for the meeting leader via a Flip-top enclosure including cable storage compartment with integrated retractable HDMI, VGA, audio, USB and network cables/connectors as well as AC power outlet. Meeting participant connectivity will also be provided via floor and wall boxes for network outlets and AC power.

System Furniture:

- Credenza to house the AV equipment.

Mid-Size Conference Rooms

These conference rooms will be configured for local presentations and audio conferencing. A wall-mounted flat panel display will be used to provide in-room visual display. The audio system will be comprised of ceiling mount speakers and two channel stereo amplifier. The system control will be accomplished via local touchscreen at the conference table.

The receiver, control processor, amplifier and TV tuner will be located in a ceiling equipment box/small credenza. The infrastructure at the conference table will provide capabilities allowing the meeting leader at the table to connect to and control A/V equipment (flat panel display and volume control).

Equipment within Credenza:

- Receiver, control processor, amplifier and TV Tuner.

Connectivity at the Credenza:

- Connectivity will be provided for the AV equipment in the credenza via a wall plate

Room:

- Video - One (1) flat panel display to be located in the front of the room.
- Audio - Distributed ceiling loudspeakers for program audio and two (2) channels stereo amplifier. Volume control will be via conference table flip-top touch control.
- Lighting - Via wall dimming switches.

Connectivity at the Conference Table:

- Controls - Flip-top style touch controls will be integrated into the conference room table. An input switcher/transmitter will be installed under the conference table and transmit HDMI, VGA, analog audio, USB and Ethernet.
- Connectivity will be provided at the conference table for the meeting leader via a Flip-top enclosure with integrated touch screen and connectivity including cable storage compartment with integrated retractable HDMI, VGA, audio, USB and network cables/connectors as well as AC power outlet.

Huddle Rooms

Huddle rooms will be configured for local presentations and sharing desktops via voice and video. A wall-mounted flat panel display will be used to provide in-room and remote visual display.

The infrastructure at the conference table will provide capabilities allowing the meeting leader at the table to connect to and control A/V equipment (flat panel display, volume control and video control for zoom/PIP).

Connectivity at the Flat Panel Display:

- Connectivity will be provided for the flat panel display via a wall plate

Room:

- Video - One Wall Mounted flat panel display located in the front of the room.
- Audio - Via display speakers. Volume control will be via touch screen at the conference table.
- Lighting - Via wall dimming switches.

Connectivity at the Conference Table:

- Controls - Flip-top style touch controls will be integrated into the conference room table. An input switcher/transmitter will be installed under the conference table and transmit HDMI, VGA, analog audio, USB and Ethernet.
- Connectivity will be provided at the conference table for the meeting leader via a Flip-top enclosure with integrated touch screen and connectivity including cable storage compartment with integrated retractable HDMI, VGA, audio, USB and network cables/connectors as well as AC power outlet.

Classroom/Training

The classroom/training room will be configured for local presentations and infrastructure only for integrated video conferencing. A wall-mounted flat panel display will be used to provide in-room visual display. The audio system will be comprised of ceiling mount speakers and stereo amplifier. The system control will be accomplished via a desktop touch panel located on the instructor desk.

Equipment Located in the instructor desk:

- Controller with integrated amplifier.

Connectivity at the Instructor Desk:

- Connectivity will be provided for the AV equipment in the instructor desk via a wall plate including displayport, HDMI, VGA and analog stereo audio.

Room:

- Video - One Wall Mounted flat panel display located in the front of the room.
- Audio - Distributed ceiling loudspeakers for program audio and stereo amplifier. Volume control will be via wall-mount controller.
- Lighting - Via wall dimming switches and RS-232 interface to the audio-visual system will be used to enable selection of lighting presets from the audio visual system controller.
- Noise Control - Refer to architectural and mechanical for target noise criteria and maximum room criteria ratings.
- Sound Transmission - Target sound transmission ratings for each boundary surface will be established based upon expected exterior noise and the target noise criteria (see above).
- Interior Treatment
 - Ceiling Drop ceiling tiles - Refer to architectural drawings for STC rating.
 - Side Walls - Refer to architectural drawings.
 - Rear Wall - refer to architectural drawings

Site Analysis

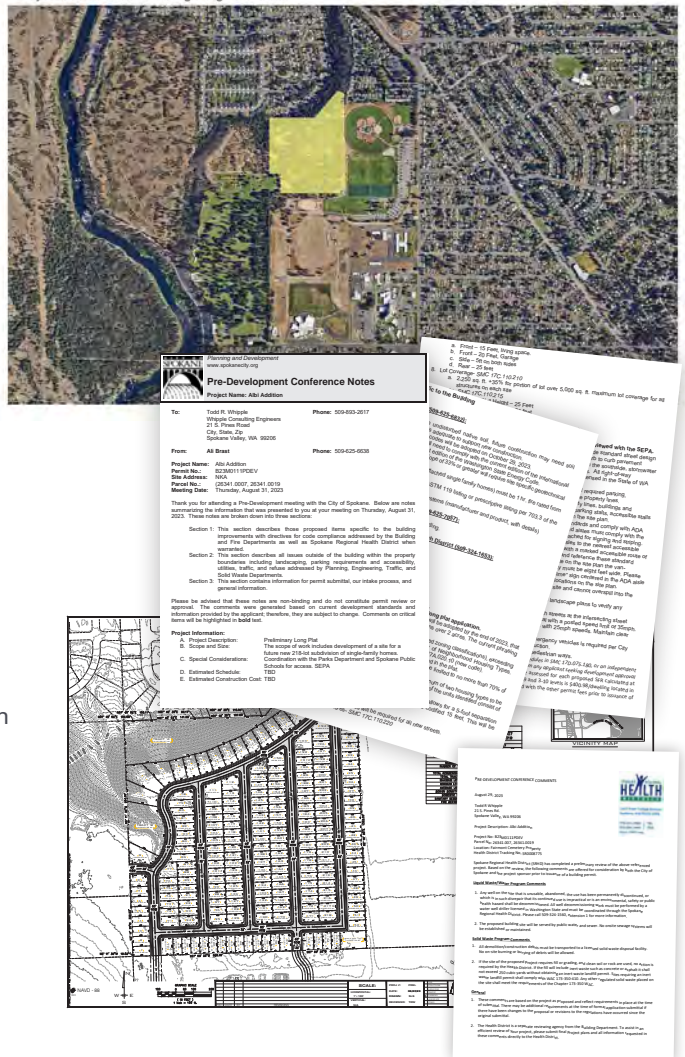
Site Studies

On August 31, 2023, a party interested in acquiring the subject property conducted a predevelopment meeting with representatives from the City of Spokane to obtain preliminary, non-binding feedback regarding a proposed long-plat of the subject property for up to 218 single-family homes. The comments received from various departments and agencies were generally standard; however, specific attention was drawn to the necessity for coordination with the Spokane Parks Department and Spokane Public Schools/District #81. Please refer to the attached agency comments for Albi Addition B2M001116PDEV for further details:

- PreDev Application
- PreDev Site Plan
- PreDev notes
- Urban Forestry Notes
- Letter from Health Department

The City of Spokane Parks Department is currently studying expansion of the Dwight Merkel Sports Complex on the former Joe Albi site. The study proposes 4 multi-use fields and 8 soccer / lacrosse pitch fields. Field lighting, an RV park supporting 26 stalls, restroom / concession buildings, walking paths, and new parking are provided in the study. Three separate parking areas, supporting 229 stalls, are proposed for the north boundary of the Albi site which lies in close proximity to the preferred alternative WDVA site.

Subject Site and Surrounding Neighborhoods



Location

Located in northwest Spokane, the 23.7-acre parcel with an adjacent 19.1-acre parcel is a half mile from the Mann Grandstaff VA Medical Center, US Marine Corps Reserve Center, and US Naval Reserve Center. Nearby amenities include shopping, restaurants, golf, and Riverside State Park with its hiking and equestrian trails, camping, fishing and kayaking.

The subject parcels are specifically located at:

Assessor's Legal Description(s)

Parcel #26341.0007: 34-26-42 SW1/4 OF NE1/4

Parcel #26341.0019: 34-26-42: PTN OF NW1/4 OF NE1/4
LYG SELY OF PLATTED PTN; EXC PTN
NW1/4 OF NE1/4 SD SEC 34 DAF: BEG AT SW COR OF SD LOT 1 BLK 11 KINGSPONTE 2ND AMEND;
TH N89°27'40"W, 64.00 FT; TH N24°48'46"E, 77.60FT; TH S88°33'10"E, 32.00 FT TO NW COR SD LOT 1
BLK 11; TH S00°27'01"W, 70.23 FT ALG WLY LN OF SD LOT 1 TO POB.

Site Access

Access Overview. The subject property is landlocked and establishing vehicular access and extending utilities to the site are critical considerations. The adjacent properties are owned by Spokane Parks Department and Spokane Public Schools/District #81 and are working in collaboration with the seller to develop a license & development agreement facilitating access and utility extensions through and over the public properties (see figure at right and the example draft license & development agreement).

Several alternative access configurations were evaluated; however, the option depicted in the figure at the right emerged as the most cost-effective solution and aligns closely with the ongoing discussions between the seller and the Parks Department regarding the license & development agreement. This configuration also integrates seamlessly with the existing and planned future improvements from both public entities.

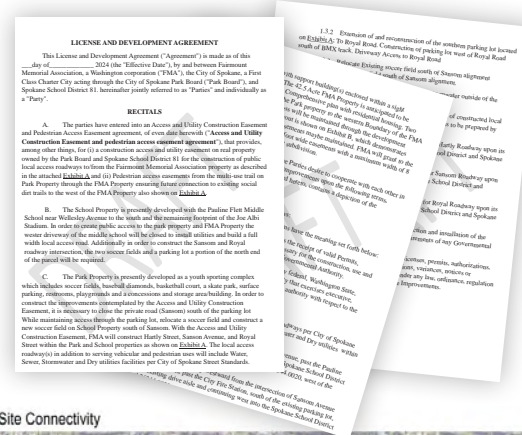
As illustrated in Site study at the right, the preferred access configuration involves entering Spokane Parks property from Assembly St. at one of two potential access points:

- Access Point #A: The existing driveway/semi-controlled intersection aligned with Rowan Ave., a minor arterial road.
- Access Point #B: A proposed new driveway aligned with Sanson Ave., a local collector street.

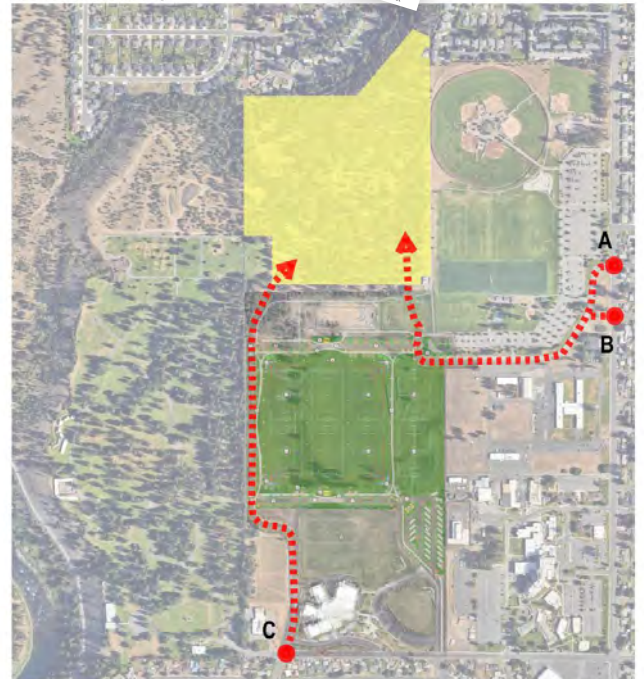
In both scenarios, vehicular access to the proposed WDAV facility would utilize an existing access road traversing Park property, leading to the eastern boundary of the subject property, just west of the existing wireless communication facility. At this point, a new access road would turn north across an existing athletic field to reach the subject property.

The connection to existing utilities and their extension into the subject property is anticipated to occur at a location approximately in line with the northern spur of the access road. A more detailed discussion regarding utility extensions is provided in a separate section of this report.

Subject Site and Surrounding Neighborhoods



Planned Site Connectivity



Building Footprint

Adjacent Facilities and Site Features

The site is bordered to the north by a single-family residential neighborhood. To the east lies the Dwight Merkel Sports Complex which includes baseball, soccer, football, and skate park. Carson Park, with its playground, splash pad, basketball, and restroom facility are tucked against the southeast corner of the Merkel Sports Complex. Along the south boundary of the site, is a BMX track and the former Joe Albi Stadium. The southwest side of the site is buffered by the 160-acre Fairmount Memorial Park.

The site itself is vegetated with healthy stands of native ponderosa, understory shrubs and groundcover. Unobstructed and commanding views to the west / northwest capture bold sunsets and basalt bluffs that rise above the Spokane River.

Ownership, Easements, and Property Acquisitions

Legal Owner: Fairmount Cemetery

Po Box 9797, Spokane, Wa, 99209

Legal Taxpayer: Fairmount Memorial Association

822 N Government Way, Spokane, Wa, 99224

An easement for the wireless communications facility located in the extreme southeast corner of the subject property was found in publicly available records and includes the following information recorded to the subject property:

Easement Granted: TPA, LLC (+/- \$1.2m)

Lease, Record No.: 6080826 Fairmont, Memorial Ass. To Julex, Llc

Assignment: Fairmount, Memorial Ass. To TPA, VII Llc

Assignment: 6951055 Tristar, Investors LLC To American, Towers LLC

Assignment:

Currently, the subject property is comprised of the two parcels listed below. It is understood from the Seller's representative, the property will only be sold as an assemblage of the subject parcels.

Assessed Parcel Areas

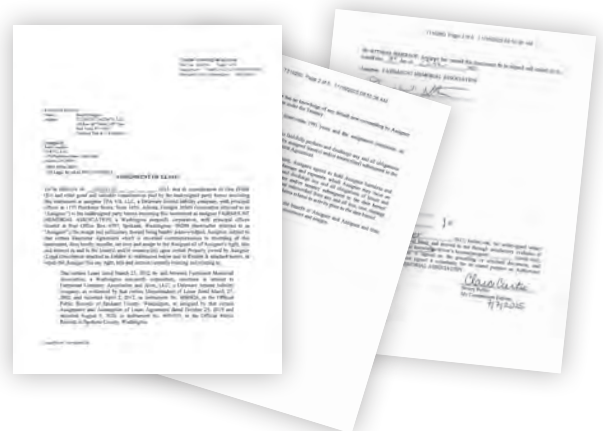
PARCEL NO.	EXISTING PARCEL AREA (SF)	EXISTING PARCEL AREA (AC)
Parcel #26341.0007:	+/- 1,709,481	+/- 39.2 Acres
Parcel #26341.0019:	+/- 143,312	+/- 3.29 Acres
Total Existing Sale Area:	+/- 1,852,793	+/- 42.49 Acres

Addresses for both parcels have not been assigned by the City of Spokane.

License & Development Agreement

As noted in other areas of the report, it is anticipated that WDVA will enter into negotiations with the Parks Department and School District #81. The license & development agreement will set forth terms and conditions agreeable to all parties for perpetual rights of access and utility extension over Parks Department and/or School District #81 owned lands to the subject property. In granting these rights to WDVA, appropriate and agreeable consideration will be negotiated for the loss of use of Park's land. The exact nature and extent of the consideration is not yet determined, but could include replacement of disturbed facilities, in-kind mitigation

(Clean Site)



improvements, monetary compensation, or a combination. One specific proposed consideration is a public use and access easement connecting the existing multi-modal trail on Park's property to existing trails on public lands west of the subject property. The draft structure of the license & development agreement is attached and is similar to license & development agreements used by the Parks Department in the past for similar access and utility improvements over Park's land.

Latecomers Agreement

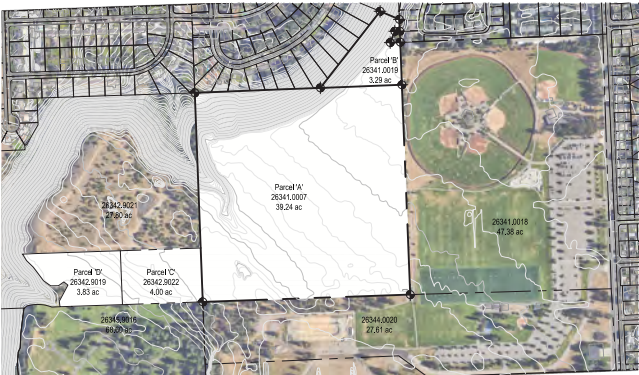
As mentioned above, the Parks Department, in collaboration with School District #81, is exploring the expansion of athletic fields and other recreational improvements such as parking, concessions, and an RV park, including utility extensions. However, the timing of these enhancements will likely depend on each of these organizations securing public funding. To meet the needs of Washington State veterans in a timely manner suggests that WDVA will need to make supporting infrastructure improvements prior to planned work by School District #81 or the Parks Department.

The synergies between WDVA, School District #81, and the Parks Department's facilities are undeniable. To prevent undue financial burden on WDVA from serving third-party interests, it's advisable to explore a latecomer's agreement. This would allow WDVA to recapture equitable portions of development costs for improvements from the access point on Assembly Street to the subject property, which will also benefit the Parks Department and School District #81. This agreement may intersect with the license & development agreement, where cost-sharing for joint-use improvements or infrastructure could influence negotiations regarding consideration for the loss of use of Parks land or facilities. If infrastructure costs allocated to third parties outweigh the value of disrupted Parks facilities, it may result in an inequitable situation regarding loss of use and further shape negotiation of the license & development agreement.

Parcel Configuration & Surplus Property

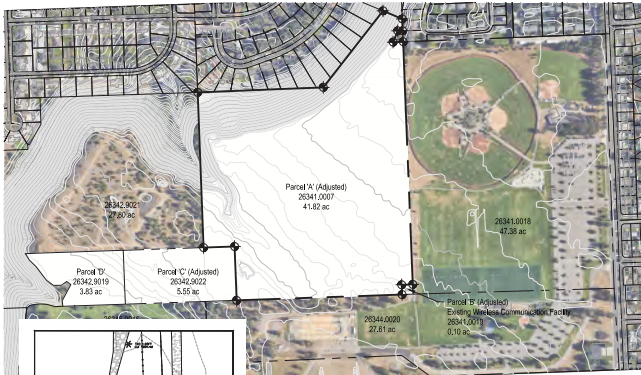
As stated above, the existing configuration of the two parcels comprising the subject property is approximately 42.49 acres. The existing property configuration is shown

An existing burial site part of the Fairmont Memorial Association was identity encroaching into the subject property near the southwest corner. In addition, an existing wireless communications facility is located at the southeast corner. According to the Seller's representative, these two areas are intended to be removed from the purchase area through boundary line adjustment, reducing the area of the subject property to +/-42.82 acres as shown below



Existing Parcel Configuration

1



Parcel Configuration Proposed by Seller

2

Since +/-42.82 acres is significantly larger than is needed to site the WSDVA facility, a significant portion of the subject property is anticipated to be sold at value to an interested party. Ideally, this could be another state agency, care provider complimentary to WDVA, or private developer for development in accordance with the implementing R1 (low intensity) zoning.

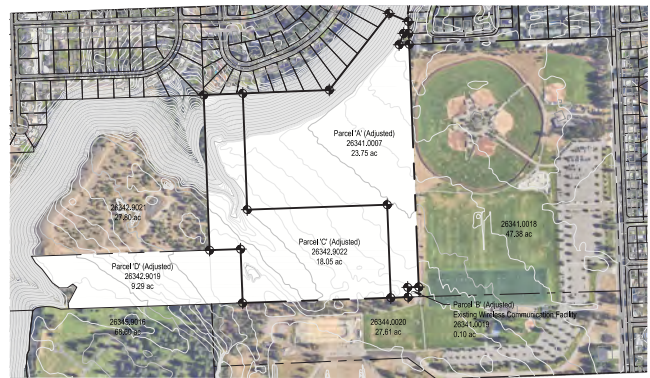
To maximize flexibility and value of the surplus property, and streamline its sale, it is recommended that a least two salable parcels are conveyed to WDVA, labeled Parcel A and C, to simplify fine tuning of the final area of the parcel retained by WDVA. Additionally, since it's likely that the market value of the land will increase after the site access and wet utility infrastructure are established to the subject property, prioritizing the area of the surplus property will maximize recovery of initial land acquisition costs, which could then be used towards the new facility and/or operations.

Alternatively, if consistent with its charter, WDVA could lease the surplus parcel to a compatible State agency, or other complimentary user, using lease revenue to offset operations, maintenance, or other costs

Property Setbacks, Zoning, and Land Use

The site is currently located within the City of Spokane municipal boundary and is not located in an Urban Growth area or joint planning area. The Preferred Site is designated as R1, a low-intensity single family residential zone that allows for a range of general scale and height of detached houses, under section 17C.111.020 and 17C.111.030 of the Spokane Municipal Code. R1 residential zones can allow group living or residential household living with limited uses (L) or conditional uses (CU) that follow development standards and other standards listed in SMC 17C.320.080. Permitted residential zone primary uses can be found listed in Table 17C.111.100-1.

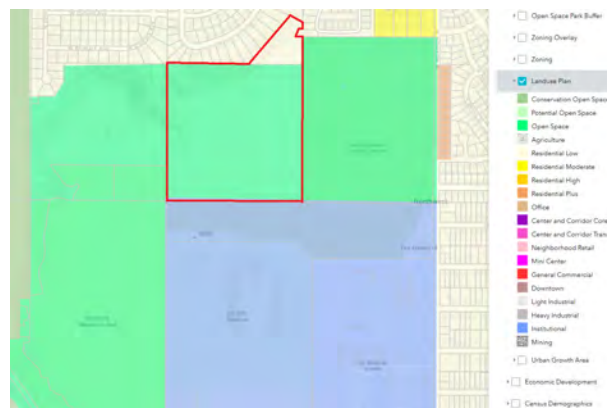
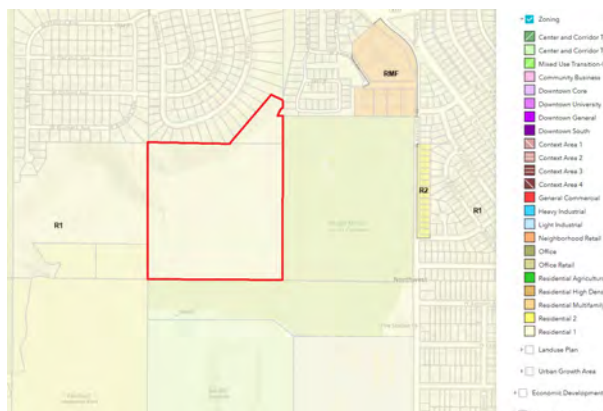
The preferred project site is located within an area designated as open space. This is defined in the City of Spokane Comprehensive Plan under Chapter 3 Land Use, section LU6.2 Open Space and can be viewed on Map Spokane Public GIS under the Planning and Land Use tabs. LU6.2 Open Space states that are publicly or privately owned such as parks, golf courses, and cemeteries. The R1 and Open Space designation are provided by the City of Spokane Map Spokane Public GIS System and can be found under the Planning Zoning and Planning Land Use Plan tabs.



Recommended Parcel Configuration

3

TABLE 17C.111.100-1 RESIDENTIAL ZONE PRIMARY USES (Click here to view PDF)					
Use is:	RA	R1	R2	RMF	RHD
P - Permitted					
N - Not Permitted					
L - Allowed, but special limitations					
CU - Conditional Use review required					
RESIDENTIAL CATEGORIES					
Group Living [1]	L/CU	L/CU	L/CU	L/CU	L/CU
Residential Household Living	P	P	P	P	P
COMMERCIAL CATEGORIES					
Adult Business	N	N	N	N	N
Commercial Outdoor Recreation	N	CU	CU	CU	CU
Commercial Parking	N	N	N	N	N
Drive-through Facility	N	N	N	N	N
Major Event Entertainment	N	N	CU	CU	CU
Office	N	N	N	CU[2]	CU[2]
Quick Vehicle Servicing	N	N	N	N	N
Retail Sales and Service	N	N	N	N	N
Mini-storage Facilities	N	N	N	N	N
Vehicle Repair	N	N	N	N	N



The property setbacks are required for all primary and accessory structures to maintain light, air, separation for fire protection, and access for firefighting. Residential property setbacks need to reflect the general building scale and placement based on existing houses in the City's neighborhoods. Setback requirements for R1 and R2 zones are based on lot width and building height. The preferred site will have lot widths greater than 40 feet, so the minimum setback will be a minimum of 5 feet based on SMC table 17C.111.235-1. Angled setbacks apply in R1 and R2 zones for structures starting at 25 feet or higher and require a sloped setback plane of 2 vertical feet for every foot horizontally from the corner of the building roofline shown in figure 17C.111.235-A of the Spokane Municipal Code. Setbacks, land use, and zoning requirements may be subject to a Comprehensive Plan Amendment under SMC 17G.020 and would require public notification under the planning review process.

TABLE 17C.111.235-1 ROOF SETBACK FROM SIDE LOT LINE ON LOTS IN R1 and R2 ZONES	
LOT WIDTHS 40 FT. OR LESS	
Height	Setback
25 ft.	3 ft.
27 ft.	4 ft.
29 ft.	5 ft.
31 ft.	6 ft.
33 ft.	7 ft.
35 ft.	8 ft.
40 ft.	10.5 ft.
LOT WIDTHS MORE THAN 40 FT.	
Height	Setback
25 ft.	5 ft.
27 ft.	6 ft.
29 ft.	7 ft.
31 ft.	8 ft.
33 ft.	9 ft.
35 ft.	10 ft.
40 ft.	12.5 ft.



Using Washington State's Wildland Urban Interface portal, the preferred site is located within two wildland urban interface areas. The first area is considered an Intermix area and the second is defined as Vegetated Uninhabited area. The developed neighborhood around and including Dwight Merkle sports complex and the VA Hospital are in the Wildland Urban Interface area. Per Spokane Municipal Code 17F.110.010 an International Wildland-Urban Interface code has been adopted for building code and enforcement

Subject Property Land Use & Zoning Designations

PARCEL NO.	COMPREHENSIVE PLAN DESIGNATION	IMPLEMENTING ZONING
Parcel #26341.0007:	Open Space	R1 (low-intensity residential)
Parcel #26341.0019:	Residential Low	R1 (low-intensity residential)

Development Density and Project Site Area

Preliminary discussions with the Authority Having Jurisdiction (AHJ) indicate that each resident suite/bed will be classified as a "unit" for the purposes of calculating land use density. Within the R1 (Residential Low) zoning designation, a maximum of 8 units per acre is permitted, with the potential for an additional 2 units per acre as "bonus" density. The Spokane Municipal Code (SMC) does not specify the criteria that would allow for the increased density; therefore, it is commonly enforced at a threshold of 10 units per acre within the R1 zone. Based on the projected facility size of ~120- beds, the required minimum site area is estimated to range between 12 and 13 acres.

Land Use Compatibility

Introduction

This report outlines the findings from a preliminary review of the City of Spokane Municipal Code, Comprehensive Plan, and the surrounding land use pattern regarding the proposed use of the subject property. The objective was to assess the feasibility of the proposed use and the necessary approval processes. The summary below considers the proposed veterans housing facility in relation to select sections of the City of Spokane's Land Use Plan and relevant sections of the implementing Zoning Code. In addition, information obtained directly from City staff through calls and emails also informs the findings and conclusions below.

Findings

Current Status and Procedural Considerations

As of the date of this report, a procedural question regarding the classification of the proposed use remains unresolved by the City of Spokane planning staff. Given this uncertainty, it is conservatively concluded that the proposed use will likely require a Conditional Use Permit (CUP) and subsequent approval from the Hearings Examiner.

Compliance with SMC Criteria

An examination of the Spokane Municipal Code (SMC) criteria relevant to Group Living uses appears to demonstrate compliance with all standards necessary for approval. The CUP process typically takes approximately 3-4 months from the submission of the application and fee to the hearing and decision by the Hearings Examiner.

Potential for Exemption from CUP Process

Should the planning staff determine that the proposed use qualifies as a Residential Household Living use, it may be exempt from the CUP process. In this scenario, the use would be permitted outright, contingent upon compliance with the applicable development standards of the implementing zone.

Comprehensive Plan Consistency

The subject property is located within the Residential One (R1) zone, where both Group Living and Residential Household Living uses are permitted. This designation aligns with the Comprehensive Plan's goals and policies for residential use, confirming that the proposed use is consistent with the plan.

Recommended Actions

- **Pre-Development Meeting:** It is advisable to hold a pre-development meeting with the City to gather input from all relevant departments regarding the potential impacts of the proposed use on municipal services. This meeting will facilitate a better understanding of the project's implications and garner city support.
- **Engagement with Northwest Neighborhood Council:** Although the Northwest Neighborhood Council (NWNC) is not required to be involved in the approval process, informing them of the proposed change in land use is a positive step. This proactive engagement can foster goodwill and potentially ease the municipal approval process.
- **Access Improvements:** The subject site is currently landlocked, necessitating the development of access improvements from the nearby arterials of Assembly Street and Wellesley Avenue. Negotiations are ongoing with the underlying property owners, and an agreement has been reached to dedicate the necessary land for the construction of these access routes. It is important to note that this may require modifications to existing sports field facilities and parking areas.
- **Coordination with City Departments:** The purchaser must coordinate with the City of Spokane, including the Park and Recreation Department and Public Works, regarding the ingress and egress from the arterials and any proposed alterations to the sports fields and parking.
- **Schedule Consensus:** Achieving consensus with the city on the timeline for access improvements and any necessary modifications to the sports facilities is crucial to minimize disruption during the high-demand sports seasons.

Conclusion

In conclusion, the proposed use of the subject property aligns with the Comprehensive Plan and the SMC. However, the potential requirement for a Conditional Use Permit and the need for access improvements necessitate careful planning and coordination with city officials and community stakeholders. Once the CUP is secured, and access improvements are agreed upon, project plans can be submitted for review and approval.

Wetlands, Critical Areas, and Floodways

The site is not located within or adjacent to a wetland boundary based on the City of Spokane Public GIS System. The site is not located within a FEMA flood zone per City of Spokane Public GIS System.

The nearest water body is the Spokane River, located approximately 0.5 mile from the southwest corner of the site.

The site is located within the Spokane-Valley Rathdrum-Prairie Aquifer Protection Area, which was designated as a sole source aquifer by the EPA in 1978. There are no natural springs, groundwater monitoring wells, or group A community wells located within 3 miles of the site. The depth of the aquifer is estimated to range between 26 and 50 feet at this location. As this area is located within the municipal boundary of the City of Spokane, this area is designated as a Critical Aquifer Recharge Area (CARA). Activities requiring regulation within CARAs are defined under Spokane Municipal Code Chapter 17E.010, and include spill prevention and monitoring, installation of above-ground storage tanks (ASTs), and installation of underground storage tanks (USTs).



Domestic Water and Fire Protection

The City of Spokane is a municipal water purveyor and operates a Class A public water system through the City Water & Hydroelectric Department. The water system is wholly owned and operated by the City of Spokane, and the project site is located within the City's boundary and can be connected to the water system. There are no current waterlines onsite, but based on City of Spokane GIS data, there is an 8-inch public water main located in North Assembly Street to the east of the project site. This waterline has the ability to serve the proposed site with no known capacity issues. A waterline extension and easement will be required for the proposed water main. Proposed water services shall be ductile iron per City of Spokane standards.

Based on a site walk on October 1, 2024, there is a fire hydrant located south of the site near the parking lot of the Spokane BMX facility. There are no City of Spokane or Parks Department records of this waterline or fire hydrant. The Spokane School District 81 Maintenance staff confirmed the fire hydrant is active but could not confirm ownership. It is assumed this is a private waterline.

Fire hydrants are currently located along the east side of North Assembly Street spaced every 400 to 450 feet at each intersecting road. Additional fire hydrants and a looped fire water line will be required on site by the fire department, installed 250 feet on center per fire code. According to City of Spokane Open GIS Data the current fire hydrants located in North Assembly Street have pressure ranging from 86 psi to 90 psi. The pressure in the private fire hydrant is unknown. With the current site layout, all corners of the building are within 200 feet of a planned fire apparatus access route. The proposed facility will be fully sprinkled. Water demands for domestic and fire sprinkler water will be determined by the project plumbing and fire protection engineers, though it is assumed the City of Spokane water supply is sufficient to provide water to the preferred alternative site.

Irrigation for the site is to be served off of the proposed water main extension and water service to this site with a sub-meter for irrigation water. There will not be a separate irrigation district serving this site.

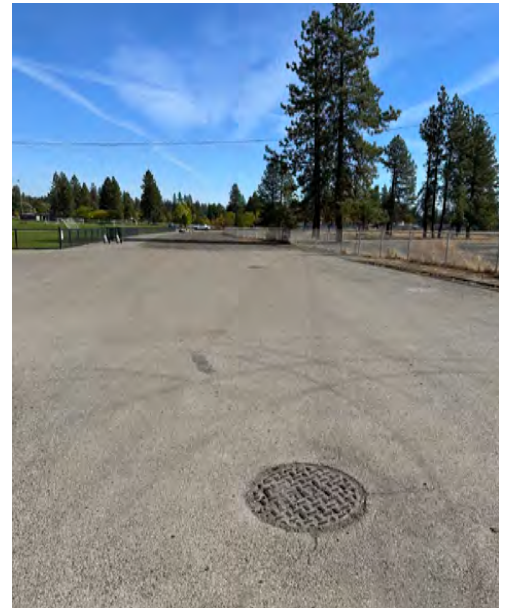
Utility Extension or Relocation

The preferred site is undeveloped and has no current utility services. A fire hydrant and other instances of a potable water system have been observed on the City owned property to the south of the site, but no public water line has been recorded. Easement access through the city parcel 26344.0020 would be required for water, sewer, and transportation access. Road improvement on this parcel is likely with the installation of new underground utilities.

Public wastewater collection services are provided and managed by the City of Spokane Wastewater Department. There are currently no sewer lines onsite. The City of Spokane GIS Data indicates there is a public 10-inch vitrified clay gravity sewer main located on the city owned parcel just south of the site. The 10-inch sewer main has no known capacity issues, and therefore is assumed to be able to serve the proposed facility although the condition of this pipe is unknown. It is possible this pipe is no longer fit for connection and will need to be replaced. Along the 10-inch sewer main there are two sanitary sewer manholes approximately 12-feet deep that are accessible for connection. Access to these manholes would require permission and easements from the City of Spokane to connect through City owned property.

Sewer connection could also be made through the mainline in North Assembly Street to the east of the project. The sewer gravity line in North Assembly Street varies from 12 feet to over 14 feet in depth. The sewer mains in the area are gravity and the site is fairly flat so connection from the property to the street is assumed to be feasible. The sewer connection would require easements to be granted by the City of Spokane to cross city owned land. Depth of the current sanitary systems will need to be investigated and confirmed to verify public GIS data and to confirm connection options.

Based on the anticipated demand of a veteran's home facility, it is anticipated a 6-inch or 8-inch sanitary sewer service will be needed to serve the facility. The proposed sewer service is assumed to be polyvinyl chloride plastic (PVC) per City of Spokane standards.



Offsite connection lengths for both sanitary sewer and water services would be approximately 1,800 feet from North Assembly Street to the proposed Veterans home driveway at the property boundary, assuming the utilities will follow the existing driveway alignment. Services from the property line to the building will be approximately 1,600 feet long and located within or adjacent to the new drive lane into the facility.

Power is supplied to the City of Spokane by Avista. According to the Avista geospatial map, there is a 1,500 max kilowatt distribution overhead power line running from North Assembly Street through the Dwight Merkel Sports Complex, through the north side of the Spokane School District lot, and into Fairmont Memorial Park. It is assumed that these powerlines are in easements owned by Avista. These power poles appear to be over 20-feet from the edge of pavement of the current road accessway but before any construction is done to the access road the location and size of these easements will need to be determined. Coordination with Avista will be required if construction within these easements is necessary. Service to the Spokane BMX facility, located just south of the site, is provided by these overhead powerlines. It is assumed power to the new facility could be provided from these overhead powerlines and would require an easement from the City of Spokane.

The only natural gas purveyor in the City of Spokane is Avista. Avista determined they have no gas lines within 500 feet of the preferred alternative site and cannot tell where the closest existing gas line is. It is anticipated natural gas will not be needed for this facility.

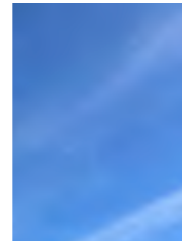
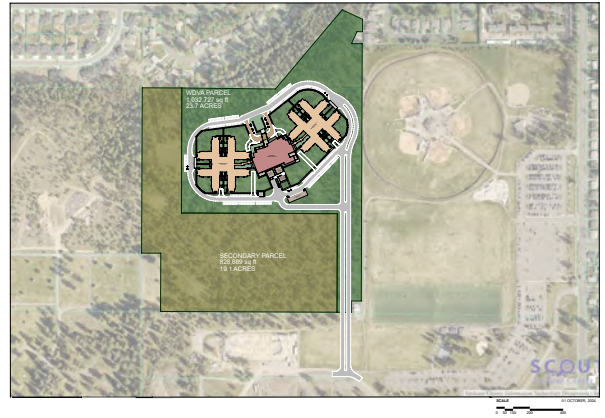
There are no telecommunication services currently on the site. Xfinity is available to provide cable internet access to the site according to the Xfinity availability map. Both CenturyLink and Quantum Fiber appear to be in the area and are serving properties along North Assembly Street. It is assumed that access to CenturyLink and Quantum Fiber could be taken from North Assembly Street.

A cell tower is located on the southeast corner of the site. It is assumed this is located within an easement that will remain and need to be protected during all phases of construction.

Potential Parking and Access Issues

Parking Overview. In September of 2024, the City of Spokane enacted legislation to abolish minimum parking requirements for all uses within the City limits. The intent of the ordinance is to promote sustainable development and reduce reliance on cars. The change is designed to address housing shortages, promote economic growth, and support environmental goals by allowing developers greater flexibility in design. Additionally, the ordinance seeks to alleviate the negative impacts of excessive parking, such as increased impervious surfaces and urban sprawl, ultimately contributing to a more vibrant and accessible urban environment. No negative parking issues are anticipated as a result of the proposal.

Traffic Mitigation. Physical project mitigation improvements are not anticipated due to collection of traffic impact fees. Impact fees are designed to help fund necessary infrastructure improvements related to new development, ensuring that the growing population does not overburden existing transportation systems. These fees are assessed on new construction projects based on their anticipated impact on traffic and are used to support enhancements such as road expansions, intersection upgrades, and public transit services. The ordinance aims to create a fairer system where developers contribute to the infrastructure that supports their projects, ultimately improving overall mobility and reducing congestion in the city. By implementing these fees, Spokane seeks to balance development with the preservation and enhancement of its transportation networks.



Spokane Transit Authority (STA) provides public transportation for the greater Spokane area, connecting cities of Airway Heights, Cheney, Liberty Lake, Medical Lake, Millwood, Spokane, and Spokane Valley. STA has two active routes, routes 22 and 35, along North Assembly Street to the east of the site. Route 35 travels along West Rowan Avenue and North Assembly Street from the New Tech Skill Center to the VA Medical Center. Route 22 travels along North Assembly Street from the VA Medical Center to Developmental Disabilities Services. The closest STA bus stop would be approximately three quarters of a mile east of the site at the intersection of West Sanson Avenue and North Assembly Street.

See Site Access above for discussion on site access challenges and potential solutions.

Earthwork, Grading, and Paving

Data taken from the USDA Web Soils Survey database shows soils in the areas primarily consisting of Springdale gravelly ashy coarse sandy loam, 0-8% slopes; Marblespring fine gravelly loamy coarse sand, 0-8% slopes; and Spens very gravelly loamy coarse sand, at various slopes (up to 65%). Soil types present are all classified under Hydrologic Soil Group A, which is defined by USDA as soils having high infiltration rates even when thoroughly wetted, consisting chiefly of deep, well- to excessively-drained sand and/or gravel with a high rate of water transmission and a low runoff potential. Soils generally contain low organic content, moderate ashy volcanic content, and high concentrations of poorly graded gravels or coarse sands. Depth to a restrictive layer (bedrock, groundwater) is assumed to be greater than 125 feet based on hydrogeologic features present in the vicinity, including nearby surface water at an elevation of 1630 feet, while the site is located at approximately 1890 feet. Slopes are generally flat across the majority of the south and central portions of the parcel. A significant slope is present at the northern portion of the parcel as the site dramatically drops off at slopes up to 65% from south to north. The proposed site plan utilizes view from this slope while siting the building on gentler slopes.

Soil Types Encountered

MAP UNIT SYMBOL	NAME	PERCENTAGE OF AREA
3127	Marblespring fine gravelly loamy coarse sand, 0-8% slopes	20.4%
3140	Springdale gravelly ashy coarse sandy loam, 0-8% slopes	57.5%
3142	Spens very gravelly loamy coarse sand, 15-30% slopes	9.2%
3143	Spens very gravelly loamy coarse sand, 30-65% slopes	1.4%
3148	Spens very gravelly coarse sand, cool, 30-65% slopes	11.4%

Soil types encountered at the Preferred Project location, according to USDA Web Soil Survey database

The preferred site has manageable slopes that should not require stepping the building foundations nor requiring internal stair and ramp systems. A single finished floor elevation for the entire facility is feasible. It will be critical to locate the building away from the steep slopes at the north edge of the property. The onsite soils are likely viable as structural fill, possibly with onsite soil amending required. Given the size of the proposed parcel, it is likely cut and fill operations can be kept onsite with minimal importing and exporting of soil materials to rough-grade the site. Imported materials for utility bedding and backfill, foundation and pavement base course, and pavement surfacing will be required. Imported material for landscaping and bio-infiltration facilities (i.e. swales) will also be required. If the building footprint encroaches on the steep slopes at the north edge of the property, retaining wall systems will be required to support those portions of the building or access roads. Recommendations for slope stabilization and retaining walls will be provided by the site geotechnical engineer.

It is assumed asphalt paving will be used at drive lanes and parking lots. A lighter-duty asphalt pavement section may be used at parking stalls. Accessible parking spaces, trash enclosures, delivery and service drives, and truck ramps may be paved with reinforced concrete to control pavement slopes and to accommodate higher traffic loads. Onsite pathways are to be paved with concrete. Concrete joint patterns and pathway routing are to be coordinated with the architect and landscape architect.

Stormwater Management

The existing site is undeveloped and stormwater runoff surface flows across the site and infiltrates into the natural landscape. The existing site is covered with several mature coniferous trees, low brush and weeds, and forest cover.

The proposed stormwater management improvements associated with the site will be required to comply with the Spokane Regional Stormwater Manual (SRSW), as published jointly by Spokane County, City of Spokane, and City of Spokane Valley, April 2008. In overview, stormwater runoff from the proposed project will need to comply with the runoff treatment, storage volume, and flow control requirements outlined in the SRSW— each with a 10-year return frequency. The Rational Method is used to find the peak flow and the Bowstring Method for determining storage volume. The Soil Conservation Service (SCS) Method may also be utilized to determine the total volume of the 10-year design storm event based on a given precipitation from the SRSW.

Stormwater runoff from all pollutant-generating impervious surface (PGIS) areas and hydraulically connected non-pollutant generating impervious surface (NPGIS) areas will be required to be treated per water quality treatment requirements outlined in the SRSM. Examples of stormwater runoff treatment facilities include grassy swales, rain gardens, or natural dispersion. Other treatment systems given General Use Level Designation (GULD) for providing Pre-Treatment and Basic Treatment under the Department of Ecology's TAPE Guidance Document or their Functionally Equivalent Technologies list may also be explored.

There are no existing county or city storm systems located near the project site. Discharging stormwater runoff to public storm drains is not viable, nor allowed by the SRSM. Stormwater runoff from the proposed project will need to be stored, treated, and disposed of on-site. The proposed stormwater management improvements will follow recommendations provided by the geotechnical engineering evaluation and soil investigation reports. Stormwater management will be reviewed by the City of Spokane for compliance with the SRSM.

The Washington State Department of Ecology defines underground injection control (UIC) wells as structures built to allow fluids to flow into the ground (usually) under the force of gravity. Examples of UIC wells include but are not limited to sump pumps, drywells, drain fields, infiltration trenches containing perforated pipes, stormwater chambers, and temporary injection points. If underground injection wells are utilized as storm water management facilities for the project, then all proposed UIC wells will be required to be registered with the Washington State Department of Ecology prior to construction.

Potential Issues with Surrounding Neighborhood

The comprehensive plan designation of the subject parcel is currently Open Space with an implementing zoning designation of R1 (low intensity Residential) which are common designations in Spokane for cemeteries and memorial gardens. Due to the undeveloped nature of location of the subject property and being located between the athletic complex and Riverside State Park, the subject property often sees unauthorized crossings and several organic dirt pathways. Walkers, joggers, hikers and other outdoor enthusiasts may raise objections to perceived loss of trails and neighborhood connectivity. The license & development agreement suggests a public use and access easement connecting the existing multi-modal trail on Park's property across the subject property to facilitate the eventual connect with the existing trails on public lands west of the subject property.

Potential Environmental Impacts

The State's Environmental Policy Act (SEPA) process evaluates and mitigates potential environmental impacts through a structured approach. When a project is proposed, the lead agency assesses whether it falls under SEPA, requiring the project proponent to complete an environmental checklist that identifies potential impacts in areas like air quality and water resources. The agency then determines if a more detailed Environmental Impact Statement (EIS) is necessary or if a Determination of Nonsignificance (DNS) is sufficient, indicating the project is unlikely to significantly affect the environment. Public involvement is encouraged, allowing community members to express concerns and suggest improvements. If an EIS is required, it analyzes significant impacts, explores alternatives, and proposes specific mitigation measures to minimize negative effects. The lead agency uses findings from the EIS and public input to make informed decisions about project approval and conditions. Ongoing monitoring ensures that mitigation measures are effectively implemented, and environmental standards are maintained, integrating environmental considerations into project planning and development. No negative environmental impacts are anticipated as a result of the proposal.

Construction Impact on Surroundings

Due to the large available site area and compatibility of surrounding uses, no impact from construction related activities is anticipated. Each site has adequate area for construction activities and lay down areas.

Planning Compliance

Chapter 43.88.0301 RCW. As part of the predesign process, questions in RCW 43.88.0301 must be responded to with yes or no answers. For proposed capital projects identified in this subsection that are located in or serving city or county planning under RCW 36.70A.040:

- Is proposed capital project identified in the host city or county comprehensive plan, including the capitol facility plan, and implementing rules adopted under chapter 36.70A RCW: **No**
- Is the project located within the adopted urban growth area? **Yes**
- If so, does the project facilitate, accommodate, or attract planned population and employment growth? **Yes**

For proposed capital projects identified in this subsection that are requesting state funding:

- Was there regional coordination during project development? **No**
- Were local and additional funds leveraged? **Yes**
- Were environmental outcomes and reduction of adverse environmental impacts examined? **Yes**

Long-Term Plans & Campus Master Plans

This project is consistent with requirements of RCW 43.88.110 to include applicable long-term plans. The subject parcel is not within a state campus master plan. However, the proposed parcel and its development will be developed to work within the City of Spokane's general plan and in cooperation with the Parks Department furthering the community outreach for WDVA and improving access to the Dwight Merkel Sports Complex.

Project Delivery Methods Considered

Construction Manager at Risk (CMAR)

Construction Manager at Risk (CMAR) is a project delivery method where a construction manager (CM) is hired to oversee a project and is responsible for any costs that exceed a guaranteed maximum price (GMP). The CM is brought in early in the project to provide input on costs, schedules, and constructability. They also act as a consultant to the owner and advise the design firm during the design and planning phases. The key aspects of CMAR are:

GMP

The CM and the owner negotiate a GMP during the design phase. The GMP includes a contingency line item to cover bid overages, reasonably inferred items, and other project-related items.

RESPONSIBILITY

The CM is responsible for any costs that exceed the GMP, unless they are change orders. This gives the owner more financial predictability.

PROJECT MANAGEMENT

The CM manages and controls construction costs, oversees subcontractors, and ensures the project aligns with the budget and schedule.

SINGLE POINT OF CONTACT

The CM acts as a single point of contact for everyone involved in the project, which can speed up the payment process.

The Construction Manager/General Contractor (CM/GC)

The CM/GC delivery method is a project delivery method that involves hiring a construction manager early in the design phase of a project:

DESIGN PHASE

The construction manager provides input on cost, risk, schedule, and constructability. The owner, designer, and construction manager work together to identify risks, develop cost projections, and refine the project schedule.

CONSTRUCTION PHASE

The construction manager bids on the project based on the completed design and schedule. If the owner, designer, and independent cost estimator agree on the price, the construction manager becomes the general contractor and the construction phase begins.

The CM/GC delivery method is also known as the Construction Manager at-Risk (CMAR) method in some states. It's well suited to complex or unique projects with significant risk. The CM/GC method utilizes many of the same risk mitigation factors as the CMAR method but allows for bidding of all the major trades and can require a minimum of three bidding subcontractors for each trade. Some benefits of the CM/GC delivery method include:

COLLABORATION

The CM/GC delivery method allows for collaboration between the owner, designer, and construction manager.

INNOVATION

The CM/GC delivery method allows for innovation and constructability recommendations during the design phase.

COST CONTROL

The CM/GC delivery method allows the owner to review a GMP at different stages of the design.

QUALITY CONTROL

The CM/GC delivery method allows the owner to obtain references and ask questions to learn more about each team.

Design Bid Build (DBB)

Design-bid-build (DBB) is a traditional project delivery method for construction projects that involves three distinct phases:

DESIGN

The owner contracts with a design firm to create the design documents.

BID: The owner solicits bids from contractors to perform the work.

BUILD: The owner awards the project to a contractor, who then completes the construction.

In DBB, the design and construction phases are separate and happen in a specific order. The owner has a direct contract with the design firm, but the design firm and the contractor have no contractual obligation to each other.

Here are some advantages of DBB:

- Clear role expectations: The responsibilities of the designer and the contractor are clearly defined.
- Low-cost bids: DBB is appealing to those looking for low-cost bids.
- Market competition: General contractors bid on the job based on their labor and construction costs, which opens the project up to market competition.

Preferred Method of Project Delivery

Recent experiences with CMAR and CM/GC have had mixed results. The anticipated benefits were not realized, as the success of a CMAR project depends on the performance of the construction manager (CM). An inexperienced CM can lead to issues in the design and construction phases, which can cause disputes, payment delays, and an inferior product. The CM is financially responsible for cost overruns, which can lead to them cutting corners on quality to keep costs down. In addition, The CMAR method can reduce competition between contractors, which can limit the value of the project.

Therefore, Design Bid Build (DBB) is the preferred method of delivery for this project. It is WDVA and WDES' opinion that a traditional approach to project delivery will enhance competition and provide the state with the best value proposition for a new replacement Veterans' home.

Project Schedule

The proposed project schedule identifies all the major milestones, and timelines from Predesign through Construction. Some factors that could pose delay in the project schedule are:

- Site acquisition and intergovernmental agreements for land use.
- Zoning and land use authorizations (if they apply to state land use)
 - A Conditional Use Permit (CUP) may be required for land use authorization within underlying zone.
- VA Grant priority list funding availability is dependent on federal fund availability and number and size of projects seeking funding from competing states, tribal nations, and territories.

Project - Agency Project Management

The delivery of this project will be led by the Department of Enterprise Services' (DES) Engineering & Architectural Services through their designated project managers. Given the scale and complexity of the project, the Washington State Department of Veterans Affairs (WDVA) will assign an on-site project liaison to maintain seamless communication between DES, the General Contractor, and WDVA. This liaison will help ensure continued alignment across all parties and foster communication within WDVA and with other key stakeholders.

Internally, WDVA will establish executive-level project sponsorship and form a project steering committee. This committee will include managers and subject matter experts from key areas such as Finance, Information Technology, Communications, Organizational Change Management, and State Veterans Homes. The steering committee will meet regularly to maintain alignment with agency strategies, foster timely decision making, and ensure effective communication throughout the design and construction phases.

Local Jurisdiction and Project Stakeholder Involvement

WDVA has initiated stakeholder engagement in the Spokane area. This has included discussions with local state legislators and legislators on the Joint Committee on Veterans' & Military Affairs about the need for new Spokane Veterans Homes. In addition, as we have searched for land in the area, we have communicated with Spokane County officials within their Veterans Services Office and Building & Planning about potential land as well as the Spokane School District. WDVA has also been in communication with local state agency representatives from the Department of Social & Health Services and Department of Natural Resources as well about land.

As the process continues, WDVA will continue to perform outreach with local officials and stakeholders in the Spokane community to solicit their feedback, develop partnerships, and keep them informed of our progress.



SECTION

4

Project Budget Analysis for Preferred Alternate

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4.0 Project Budget Analysis for Preferred Alternative

Cost Estimate

Major Assumptions

- Design, Bid, Build (DBB) delivery method is assumed.
- Assumes a Q2,2026 start and a 36-month schedule
- Escalation is predicted to be 4% in 2024 and 4% in 2025
- Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

*See Independent Cost Estimate in A: Appendix

Summary Table

SUMMARY TABLE OF UNIFORMAT LEVEL II COST ESTIMATES													Date: 14 October, 2024																	
	Neighborhoods		Community Center		Storage		Warehouse		Central Plant		TOTAL BUILDING		SITE																	
Foundation	\$	33.28	\$	3,032,939.52	\$	31.80	\$	1,030,065.60	\$	27.28	\$	102,654.64	\$	37.21	\$	66,978.00	\$	43.00	\$	82,345.00	\$	4,314,982.76		Site Preparation	\$	1.41	\$	1,079,608.80		
Basement Construction	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		Site Improvements	\$	8.82	\$	6,753,297.60		
Superstructure	\$	18.35	\$	1,672,308.90	\$	30.79	\$	997,349.68	\$	0.99	\$	3,725.37	\$	1.52	\$	2,736.00	\$	41.78	\$	80,008.70	\$	2,756,128.65		Site Civil/Mech Util.	\$	2.97	\$	2,274,069.60		
Exterior Enclosure	\$	78.16	\$	7,123,033.44	\$	49.23	\$	1,594,658.16	\$	16.97	\$	63,858.11	\$	32.59	\$	58,662.00	\$	146.63	\$	280,796.45	\$	9,121,008.16		Site Electrical	\$	2.66	\$	2,036,708.80		
Roofing	\$	26.94	\$	2,455,149.96	\$	27.72	\$	897,906.24	\$	4.70	\$	17,686.10	\$	5.53	\$	9,954.00	\$	38.46	\$	73,650.90	\$	3,454,347.20		Other Site Const.	\$	0.39	\$	298,615.20		
Interior Construction	\$	48.10	\$	4,383,545.40	\$	49.17	\$	1,592,714.64	\$	0.79	\$	2,972.77	\$	2.76	\$	4,968.00	\$	19.45	\$	37,246.75	\$	6,021,447.56								
Stairs	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-								
Interior Finishes	\$	43.20	\$	3,936,988.80	\$	45.81	\$	1,483,877.52	\$	5.25	\$	19,755.75	\$	9.50	\$	17,100.00	\$	14.77	\$	28,284.55	\$	5,486,006.62								
Conveying Systems	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-								
Plumbing	\$	51.26	\$	4,671,528.84	\$	23.80	\$	770,929.60	\$	-	\$	-	\$	7.84	\$	14,112.00	\$	31.88	\$	61,050.20	\$	5,517,620.64								
HVAC	\$	86.73	\$	7,904,051.82	\$	69.35	\$	2,246,385.20	\$	9.83	\$	36,990.29	\$	33.98	\$	61,164.00	\$	911.04	\$	1,744,641.60	\$	11,993,232.91								
Fire Protection	\$	5.00	\$	455,670.00	\$	5.00	\$	161,960.00	\$	5.75	\$	21,637.25	\$	5.75	\$	10,350.00	\$	5.75	\$	11,011.25	\$	660,628.50								
Electrical	\$	101.68	\$	9,266,505.12	\$	103.71	\$	3,359,374.32	\$	28.73	\$	108,110.99	\$	65.54	\$	117,972.00	\$	88.57	\$	169,611.55	\$	13,021,573.98								
Equipment	\$	0.77	\$	70,173.18	\$	17.69	\$	573,014.48	\$	-	\$	-	\$	-	\$	-	\$	2.35	\$	4,500.25	\$	647,687.91								
Casework & Furnishing	\$	9.18	\$	836,610.12	\$	7.82	\$	253,305.44	\$	0.92	\$	3,461.96	\$	17.94	\$	32,292.00	\$	1.49	\$	2,853.35	\$	1,128,522.87								
Special Construction	\$	-	\$	-	\$	-	\$	-	\$	100.00	\$	376,300.00	\$	100.00	\$	180,000.00	\$	-	\$	-	\$	556,300.00								
Selective Demolition	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-								
SUBTOTAL				45,808,505.10				14,961,540.88				757,153.23				576,288.00				2,576,000.55		64,679,487.76		SUBTOTAL			\$	12,442,300.00		
Design Contingency	15%			6,871,275.77	15%			2,244,231.13	15%			113,572.98	15%			86,443.20	15%			386,400.08	15%	9,701,923.16		Design Contingency	15%			1,866,345.00		
Contractor Markup	6%			2,748,510.31	6%			897,692.45	6%			45,429.19	6%			34,577.28	6%			154,560.03	6%	3,880,769.27		Contractor Markup	6%			746,538.00		
TOTAL		\$		55,428,291.17		\$		18,103,464.46			\$	916,155.41			\$	697,308.48			\$	3,116,960.67		78,262,180.19		SITE TOTAL			\$	15,055,183.00		
General Conditions																				\$	125,000.00	24					\$	3,000,000.00		
Escalation																						13%				\$	10,174,083.42		\$	1,957,173.79
																					\$	91,436,263.61								
																							\$	108,448,620.40	GRAND TOTAL			\$	17,012,356.79	

* See Agency / Institution Project Cost Summary in A: Appendix

Proposed Funding

Fund Sources

Funding for the Spokane Veterans Home will be provided through the Federal VA Veterans Home Grant program. The program provides a per diem for each resident bed for ongoing operations, and 65% of the building and site construction costs with matching 35% funds from the State of Washington. The construction costs also allow for the purchase of Fixtures, Furniture, and Equipment (FF&E) with the VA grant funding 65% of these costs with a shared 35% state funding.

These budget costs are outlined on the VA grant funding worksheet 424C below.

PROJECT BUDGET - 120-Bed Skilled Nursing Facility (20-Bed Household Option)			
NOTE: Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation. If such is the case, you will be notified			
COST CLASSIFICATION	a. Total Cost	b. Costs Not Allowable for Participation	c. Total Allowable Costs (Columns a-b)
1. Administrative and legal expenses	\$ 2,000,000.00	\$ -	\$ 2,000,000.00
2. Land, structures, rights-of-way, appraisals, etc.	\$ 8,000,000.00	\$ 8,000,000.00	\$ -
3. Relocation expenses and payments (Included in FF&E Budget)	\$ -	\$ -	\$ -
4. Architectural and engineering fees	\$ 9,619,485.00	\$ -	\$ 9,619,485.00
5. Other architectural and engineering fees (total per C-100)	\$ 1,278,576.00	\$ -	\$ 1,278,576.00
6. Project inspection fees (included in administrative fees)	\$ -	\$ -	\$ -
7. Site work	\$ 18,677,707.62	\$ 1,100,752.00	\$ 17,576,955.62
8. Demolition and removal		\$ -	\$ -
9. Construction	\$ 100,727,634.38	\$ -	\$ 100,727,634.38
10. Equipment (includes artwork from C-100)	\$ 9,715,131.00	\$ -	\$ 9,715,131.00
11. Miscellaneous	\$ -	\$ -	\$ -
12. SUBTOTAL (sum of lines 1 - 11)	\$ 150,018,534.00	\$ 9,100,752.00	\$ 140,917,782.00
13. Contingencies	\$ 5,432,877.00	\$ -	\$ 5,432,877.00
14. SUBTOTAL	\$ 155,451,411.00	\$ 9,100,752.00	\$ 146,350,659.00
15. Project (program) income	\$ -	\$ -	\$ -
16. TOTAL PROJECT COSTS (subtract #15 from #14)	\$ 155,451,411.00	\$ 9,100,752.00	\$ 146,350,659.00
17. Federal assistance requested, calculate as follows: (Consult Federal agency for Federal percentage share.) Enter the resulting Federal share.			Federal VA Grant Contribution Total \$ 95,127,928.35
Enter eligible costs from line 16c. Multiply X		65%	
State of Washington Share of Total Project		\$ 60,323,482.65	

Facility Operations & Maintenance Requirements.

Responsible Agency

Washington Department of Veterans Affairs (WDVA) is the agency responsible for ongoing maintenance and operations of the proposed Spokane replacement Veterans home.

Furniture Fixtures and Equipment (FF&E)

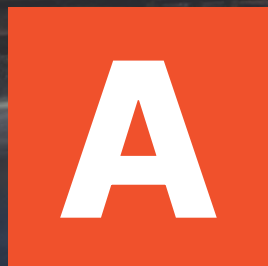
The project budget includes complete FF&E to provide a fully turnkey building ready for operations at the completion of constructions and FF&E installation. Examples include the following items:

- Durable equipment (refrigerators, washers/dryers, patient lifts, etc.)
- Rehab/Therapy equipment
- Office furniture/systems furniture
- Resident furniture (chairs, beds, wardrobes, desks, etc.)
- Outdoor furniture (chairs, tables, benches, umbrellas/umbrella stands)
- Kitchen ware/utensils
- Linens (towels, sheets, table linens, etc.)
- Games, puzzles, etc.
- Art & Accessories (decorative items to make a homelike atmosphere)

All these items are included in the project budget, which will be paid for with 65% Federal VA matching grant funding

Title Report

Land acquisition is currently pending. A title report will be provided when it is available.



Appendix

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Spokane Veterans Home

PREDESIGN NARRATIVE AND LIFE CYCLE COST ANALYSIS

ENERGY | LOCA | MECHANICAL | ELECTRICAL | PLUMBING

Prepared For

Washington Department of
Enterprise Services
Washington State Department
of Veteran Affairs

Prepared By

GLUMAC
1809 7th Ave Suite 1700
Seattle, WA 98101
206.262.1010

Date Issued

10.11.2024

Glumac Project Number

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Executive Summary

PROJECT DESCRIPTION

The purpose of this narrative submission is to provide a lifecycle cost analysis and an outline of baseline systems and alternates for mechanical, electrical, and plumbing systems.

Spokane Veterans Home is a new construction approximately ~143,000 sqft single story skilled nursing facility located in Spokane, Washington. The facility will be approximately 120 beds, with two separate residential neighborhoods wings connected to a central community center by enclosed walkways. Some skilled nursing residences may serve memory care patients. The central community center includes a commercial kitchen, office space, nurse room, barber shop, central dining area, sports bar, central laundry, physical therapy space, classroom area and other amenities. On-grade parking will be provided with EV charging as required by 2021 Washington State Building Code.

Project Vision Statement, Developed at WA DVA/DES and Consultant Kickoff:

A place of pride for our veterans to live with honor, our team to thrive, and the community to serve.

SUSTAINABILITY GOALS

A. Net Zero Energy Assessment

1. In alignment with Washington State's Greenhouse Gas Emissions Policy (70A.45 RCW) and the Federal VA's Sustainable Design Manual – this project is pursuing methods to reduce greenhouse gas emissions, maximize energy efficiency and utilize renewable energy. In line with this intent, this project is considering a Net Zero Energy Goal. Additional validation, study and analysis is required in subsequent design phases to determine the feasibility of Net Zero Energy for this project.

Codes and Standards

VA DESIGN MANUALS

1. VA Sustainable Design Manual – 2017
2. VA Electrical Design Manual - 2019
3. VA HVAC Design Manual - 2024
4. VA Plumbing Design Manual - 2024

CODES

A. Washington Building Codes enforced by the Authority Having Jurisdiction (AHJ):

1. 2021 Washington State Building Code
2. 2021 Washington State Mechanical Code
 - a. Includes 2021 International Mechanical Code (IMC)
 - b. Includes 2021 International Fuel Gas Code
3. 2021 Washington State Plumbing Code
4. 2021 Washington State Fire Code
5. 2021 Washington Fuel Gas Code.
6. 2020 Washington State Electrical Code
7. 2021 Washington State Energy Code

B. Local, city, county and state codes and ordinances.

STANDARDS

- A. Americans with Disabilities Act, (ADA)
- B. Underwriters Laboratory (UL).
- C. American National Standards Institute (ANSI).
- D. American Society for Testing and Materials (ASTM).
- E. Air Conditioning and Refrigeration Institute (ARI) Standards
- F. Air Moving and Conditioning Association (AMCA) Standards
- G. Sheet Metal and Air Conditioning Contractors National Association (SMACNA) Standards
- H. American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE)
1. ASHRAE 15 Safety Code for Mechanical Refrigeration
 2. ASHRAE 55 Thermal Environmental Conditions for Human Occupancy

3. ASHRAE 62 Ventilation for Acceptable Indoor Air Quality
4. ASHRAE 90.1 Energy Efficient Design of New Buildings except Low Rise Residential
5. ASHRAE 114 Energy Management Control Systems Instrumentation
6. ASHRAE 135 BACnet a Data Communication Protocol for Building Automation and Control Networks
7. **ASHRAE 170 Standard for the Ventilation of Healthcare Facilities**

I. American Society of Plumbing Engineers (ASPE)

J. Institute of Electrical and Electronics Engineers (IEEE).

K. National Electrical Safety Code (NESC)

L. National Fire Protection Association (NFPA).

1. NFPA 1 Fire Code
2. NFPA 70 National Electrical Code.
3. NFPA 70E, Standard for Electrical Safety in the Workplace
4. NFPA 72 National Fire Alarm and Signaling code.
5. NFPA 75: Standard for the Protection of Information Technology Equipment: 2009 Edition
6. NFPA 90A: Standard for the Installation of Air-Conditioning and Ventilating Systems
7. NFPA 90B: Standard for the Installation of Warm Air Heating and Air-Conditioning Systems
8. NFPA 96: Ventilation and Fire Protection of Commercial Cooking Operations
9. NFPA 92A: Smoke-Control Systems
10. **NFPA 99: Health Care Facilities Code**
11. NFPA 101: Life Safety Code: Most Recent Edition
12. NFPA 110: Standard for Emergency and Standby Power Systems: Most Recent Edition
13. NFPA 90A: Standard for the Installation of Air-Conditioning and Ventilating Systems, 2012 Edition.

M. FGI - Guidelines for Design and Construction of Hospitals and Outpatient Facilities AND Guidelines for Design and Construction of Residential Health, Care, and Support Facilities - 2014

N. **Build America Buy America Act (BABAA)**

O. ASHRAE – HVAC Applications (Including Ch. 7.11 referenced by WAC 388-97-4040)

Energy

SUSTAINABILITY GOALS

The Spokane Veterans Home project is designed to be an efficient building meeting or exceeding code where possible with an interest in exploring Net Zero Energy design and operation. The building will be designed with fully electrified building systems to the extent possible.

As a public project, the building will be subject to the High Performance Public Buildings requirements per 39.35D RCW, targeting LEED Silver certification level at a minimum. Additionally, per Executive Order 20-01, the building shall be designed to be zero energy or zero energy-capable.

As a residential building housing a critical population, it is recommended that the team explore resilience goals, such as passive survivability and microgrid opportunities as applicable.

Finally, this building will be subject to Washington's Clean Building Performance Standards (CBPS) which will require compliance with operating Energy Use Intensity (EUI) targets with reporting timeline dependent upon final building size.

WASHINGTON STATE ENERGY CODE (WSEC) COMPLIANCE

The Spokane Veterans Home project will be subject to the 2021 Washington State Energy Code (WSEC) which went into effect on March 15th, 2024. The project is assumed to follow the Prescriptive path for code compliance purposes; as an alternate, the Total Building Performance (TBP) approach per C407 can be explored for additional flexibility in exchange for increased holistic system performance.

C402 ENVELOPE

The project is anticipated to comply with 2021 WSEC envelope requirements either prescriptively or via the Component Performance Alternative per C402.1.5, which allows for tradeoffs between envelope assemblies so long as the overall building envelope heat loss is equal to or better than a code compliant baseline building.

The building shall be designed for 30% or lower vision glazing to vertical area ratio, or 40% when following any exceptions per C402.4.1.1.

Suggested envelope performance targets are as follows, to be coordinated with the architectural team during design.

- Roof: R-38 ci
- Exterior Walls: R-13 + R-10 ci
- Exterior Floors and Soffits: R-30 ci
- Vision glazing, fixed metal-framed: U-0.34, SHGC-0.38; recommended SHGC-0.30 or lower
- Vision glazing, operable metal-framed: U-0.36, SHGC-0.38; recommended SHGC-0.30 or lower

C406 ADDITIONAL EFFICIENCY MEASURES

The 2021 WSEC requires each project to select from a defined list of Energy Efficiency Measures (EEMs) of varying point values to achieve a minimum number of credits as determined by occupancy and construction type.

For this building, assumed to be Group I occupancy type, the following credits will be required:

- 49 new building energy efficiency credits, All Other
- 26 new building load management credits, All Other

Appropriate credit strategies should be explored further during design, weighing energy efficiency against occupant experience and cost. The following options are recommended as a starting point for energy efficiency credits:

- C406.2.3.2 Reduced lighting power: 20% reduction from code allowances (29 credits)
- C406.2.5 Renewable energy: 96 kW PV array (20 credits)

Alternate energy efficiency credit strategies could include but are not limited to:

- C406.2.3.1 Reduced lighting power: 10% reduction from code allowances (15 credits)
- C406.2.5 Renewable energy minimum: 85 kW PV array (11 credits)
- C406.2.5 Renewable energy maximum: 102 kW PV array (24 credits)
- C406.2.2.6 High performance DOAS (21 credits)
- C406.2.13.2 Base reduced air leakage (11 credits)

The following option is recommended as a starting point for load management credits:

- C406.3.2 HVAC load management (26 credits)

Alternate load management credit strategies could include but are not limited to:

- C406.3.4 Electric energy storage (65 credits)

While the basis of design denotes all-electric primary heating equipment, should the team desire to explore fossil fuel-based or electric resistance space heating or service water heating systems, the fossil fuel path per C401.3 would apply. The project would need to achieve additional C406 credits based on the degree of fossil fuel heating installed in accordance with Table C401.3.3. Fossil fuel or electric resistance heating systems provided for supplemental heat are not subject to the fossil fuel path. Some or all of the alternate strategies described above may be appropriate to pursue in this scenario, such as:

- C406.2.2.6 High performance DOAS (23 credits)
- C406.2.5 Renewable energy maximum: 102 kW PV array (24 credits)
- C406.2.13.2 Base reduced air leakage (11 credits)
- C406.2.13.3 Enhanced reduced air leakage (20 credits)

C411 RENEWABLE ENERGY

The 2021 WSEC has two major renewable energy requirements: solar readiness and on- or off-site installed renewable energy systems.

Solar readiness per C411.3 requires that 40% of the gross roof area (minus area covered by skylights, occupied or planted roof decks, and mechanical equipment) be set aside for future PV array use, should any additional PV or other renewable energy systems be added to the building site after initial construction. Solar readiness includes both roof area allocations as well as electrical and structural infrastructure requirements.

Additionally, per C411.1, a minimum of 0.5 W/sf array sized per conditioned floor area is required to be provided at the time of building construction. The requirement can be met using an on-site solar array or off-site solar array at a discounted (increased) array size, depending on the physical array location and ownership model.

The estimated solar array size required per C411 is:

- 71 kW, on-site

PATH TO NET ZERO

As a building serving vulnerable populations, a high degree of building energy performance is desired, up to and including net zero energy. Achieving net zero energy requires an “efficiency first” mentality where the building’s passive systems are first optimized to minimize building loads, then efficient and responsive active systems are designed to reduce building utility consumption while balancing cost considerations, and finally on-site renewable energy systems are sized to generate enough energy on a yearly basis to balance the building energy use. Fully electrified building systems allow for grid emissions to reduce as the electrical grid in Washington decarbonizes.

Per initial building energy modelling performed for ELCCA requirements as described in the following section, the estimated building EUI is 51.8 kBtu/sf-yr. To achieve net zero energy on an annual basis, an estimated solar PV size of approximately 1,787 kW would be required to be installed on-site. Note that the estimated EUI appears high compared to typical multifamily residential style buildings; the skilled nursing component and associated higher ventilation rates contribute to greater heating and fan energy use, increasing the total building EUI.

REBATES AND INCENTIVES

During design, opportunities for federal, state, local, and utility incentives should be explored. At a minimum, these could include, but are not limited to:

- Inflation Reduction Act (IRA) tax credits and/or direct payment for renewable energy technologies, such as solar PV arrays or ground-source heat pumps
- Local utility incentives through Avista

Life Cycle Cost Analysis

ENERGY LIFE CYCLE COST ANALYSIS (ELCCA)

All public projects in Washington receiving state funding are required to submit Energy Lifecycle Cost Analysis (ELCCA) studies to the Department of Enterprise Services (DES). The ELCCA combines 50-year costs for energy, maintenance, and replacement to generate the anticipated total lifetime cost for the HVAC systems.

An ELCCA workplan was submitted to DES. The HVAC system options studied are as follows:

- M1: Baseline Code Compliant System
 - Central plant: Air-Source Heat Pumps (ASHP) with electric backup
 - Airside: Dedicated Outside Air System (DOAS) with 4-Pipe Fan Coil Units for resident rooms and community hub
- M2: Renewable Alternative
 - Central plant: Ground-Source Heat Pumps (GSHP) with electric backup
 - Airside: Dedicated Outside Air System (DOAS) with 4-Pipe Fan Coil Units for resident rooms and community hub
- M3: All Electric Alternative
 - Central plant: Air-Source Heat Pumps (ASHP) with electric backup
 - Airside: Single-Zone Water-Source Heat Pumps (WSHP) for resident rooms and community hub

Using the Washington State-provided Life Cycle Cost Tool and preliminary cost data provided to the team, as well as comparisons to other projects and maintenance cost assumptions, the life cycle cost analysis results for the three options presented above is shown below.

ELCCA Results				
Option	Annual Energy Use (kWh/yr)	EUI (kBtu/sf-yr)	Life Cycle Cost (\$ NPV)	Net Present Savings (\$)
M1	2,143,931	51.8	\$131,195,303	-
M2	1,940,300	46.9	\$120,263,360	\$10,997,611
M3	2,392,830	57.8	\$137,099,222	(\$5,984,184)

The results indicate that M2, the renewable alternative with ground-source heat pumps employed at the central plant, is the lowest total life cycle cost option. This is driven by higher equipment useful life spans, lower operational energy costs from higher efficiency heating and cooling plant operation, and lower maintenance costs, which outweigh the higher initial first cost of this system. M3, the water-source heat pump option, features slightly higher operational costs and higher maintenance costs which lead to the highest life cycle cost of the options studied. Note that these costs do not reflect any incentives or rebates, such as IRA opportunities for ground-source heat pump systems.

The team recommends further exploring opportunities for ground-source heat pumps should the budget allow. Ground-source systems typically entail higher initial installation costs, but offer better operational performance with lower maintenance than air-source systems and provide opportunities for significant incentives, of up to 30-50% of system costs through the Investment Tax Credit as part of the IRA. However, should ground-source systems not be pursued, the basis of design four-pipe system with air-source heat pumps is also an efficient and fully electrified system meeting energy code and sustainability goals.

Note that this initial analysis used a simplified zoning methodology (“shoebox modeling”) which does not fully capture the granularity of the building architecture and heat sharing between HVAC zones. This particularly impact the M3 option which uses a condenser water loop to share heat between zones, whereas the M1 & M2 options with 4-pipe hydronic systems capture heat recovery between zones at the central plant via a heat recovery chiller, which has been modeled explicitly. It is recommended to perform a more developed schematic design energy analysis to confirm the heat recovery assumptions and performance in the M1 and M2 as well as M3 options.

LCCA tool spreadsheet inputs and outputs are shown below.

M1 - DOAS + 4PFCs + ASHP				
Weighted Average and Totals	25.2	\$17,386,864	\$85,500	Narrative
Component Description	Useful Life	Installed Cost	Annual Maintenance	REF #
Non Re-Occurring Upfront Costs	50	\$2,370,743.61		
Air to Water Heat Pumps	15	\$1,532,836.74	\$15,000.00	
Electric Boiler	15	\$39,231.82	\$2,000.00	
Pumps & Piping	20	\$2,243,896.00	\$5,000.00	
DOAS	15	\$4,334,354.75	\$25,000.00	
Ductwork & Distribution	30	\$5,084,900.13	\$2,000.00	
FCUs	20	\$1,115,505.37	\$35,000.00	
DX Systems	20	\$160,642.08	\$500.00	
Kitchen MAU	15	\$ 369,928.07	\$ 500.00	
Exhaust Fans, Unit Heaters, Other	20	\$ 134,825.21	\$ 500.00	
Annual Elec Consumption (KWH)	2,143,931	Annual Electric Costs	\$214,393	
Annual N.G. Consumption (Therms)	0	Annual N.G. Costs	\$0	

M2 - DOAS + 4PFCs + GSHP				
Weighted Average and Totals	27.6	\$18,266,894	\$75,500	Narrative
Component Description	Useful Life	Installed Cost	Annual Maintenance	REF #
Non Re-Occurring Upfront Costs	50	\$3,526,477.39		
Ground Source Heat Pump	24	\$1,257,132.75	\$5,000.00	
Electric Boiler	15	\$39,231.82	\$2,000.00	
Pumps & Piping	20	\$2,243,896.00	\$5,000.00	
DOAS	15	\$4,334,354.75	\$25,000.00	
Ductwork & Distribution	30	\$5,084,900.13	\$2,000.00	
FCUs	20	\$1,115,505.37	\$35,000.00	
DX Systems	20	\$160,642.08	\$500.00	
Kitchen MAU	15	\$ 369,928.07	\$ 500.00	
Exhaust Fans, Unit Heaters, Other	20	\$ 134,825.21	\$ 500.00	
Annual Elec Consumption (KWH)	1,940,300	Annual Electric Costs	\$194,030	
Annual N.G. Consumption (Therms)	0	Annual N.G. Costs	\$0	

M3 - DOAS + WSHPs + ASHP				
Weighted Average and Totals	25.3	\$17,196,651	\$100,500	Narrative
Component Description	Useful Life	Installed Cost	Annual Maintenance	REF #
Non Re-Occurring Upfront Costs	50	\$2,370,743.61		
Air to Water Heat Pumps	15	\$1,532,836.74	\$15,000.00	
Electric Boiler	15	\$39,231.82	\$2,000.00	
Pumps & Piping	20	\$1,495,930.66	\$2,500.00	
DOAS	15	\$4,334,354.75	\$25,000.00	
Ductwork & Distribution	30	\$5,084,900.13	\$2,000.00	
WSHPs	20	\$1,673,258.06	\$52,500.00	
DX Systems	20	\$160,642.08	\$500.00	
Kitchen MAU	15	\$ 369,928.07	\$ 500.00	
Exhaust Fans, Unit Heaters, Other	20	\$ 134,825.21	\$ 500.00	
Annual Elec Consumption (KWH)	2,392,830	Annual Electric Costs	\$239,283	
Annual N.G. Consumption (Therms)	0	Annual N.G. Costs	\$0	

ELCCA Results Table	PV of Capital Cost	PV of Maint. Costs	PV of Utility Costs	Total Life Cycle Cost	Net Present Savings	NPS w/SCC	EUI	SIR
Baseline: M1 - DOAS + 4PFCs + ASHP	\$80,821,444	\$16,280,599	\$34,093,260	\$131,195,303	N/A	N/A	51.8	N/A
M2 - DOAS + 4PFCs + GSHP	\$74,954,045	\$14,454,240	\$30,855,075	\$120,263,360	\$10,931,943	\$10,997,611	46.9	No Cost
M3 - DOAS + WSHPs + ASHP	\$79,885,597	\$19,162,318	\$38,051,307	\$137,099,222	(\$5,903,919)	(\$5,984,184)	57.8	No Cost
Alt 4	\$0	\$0	\$0	\$0	\$131,195,303	\$131,886,685	0.0	No Cost
Alt 5	\$0	\$0	\$0	\$0	\$131,195,303	\$131,886,685	0.0	No Cost
Alt 6	\$0	\$0	\$0	\$0	\$131,195,303	\$131,886,685	0.0	No Cost
Alt 7	\$0	\$0	\$0	\$0	\$131,195,303	\$131,886,685	0.0	No Cost
Alt 9	\$0	\$0	\$0	\$0	\$131,195,303	\$131,886,685	0.0	No Cost
Alt 8	\$0	\$0	\$0	\$0	\$131,195,303	\$131,886,685	0.0	No Cost
Alt 10	\$0	\$0	\$0	\$0	\$131,195,303	\$131,886,685	0.0	No Cost

Mechanical

The following narrative describes the mechanical systems intended for the new Spokane Veterans Home

PROJECT GOALS

- A. Occupant Health and Well Being
1. Provide both MERV 15 & carbon filtration to ensure high indoor air quality, even during forest fire seasons.

2. Negative pressurization control for occupant rooms shall be explored as a mitigation measure for future facility resiliency.
- B. Energy Efficiency
1. Net Zero Energy is being considered for this project. Additional validation, study and analysis is required in subsequent design phases by design team to determine the feasibility of Net Zero Energy for this project.

2. 2021 WSEC Compliance shall be implemented for the project.

DESIGN CRITERIA

A narrative description of the mechanical design criteria is provided below.

Design Conditions

OUTDOOR DESIGN CONDITIONS	
Location	Spokane, WA ASHRAE WMO 727850 – (2021)
Climate Zone	5B
Elevation	2353 Feet
Summer	93.2°F DB, 62.6°F MCWB (0.4% Condition)
Winter	6.1°F DB (99.6% Condition)
Dehumidification	57.7°F DP, 68.4°F MCDB (0.4% Condition)

Indoor space conditions for HVAC load calculations are tabulated below.

INDOOR DESIGN CONDITIONS	
SPACE TYPE	COOLING / HEATING (°F)
All conditioned areas except for space types listed below	75 / 70
Resident Rooms	75 / 75
Electrical Rooms	85 (Cooling Only)
Data / IDF / MDF / Telecom	85 (Cooling Only)
Notes:	
<ol style="list-style-type: none"> 1. Based on +/-2°F control accuracy from setpoints. 2. Humidity Control (all areas): Not Required. <ol style="list-style-type: none"> a. Data/IT/Telecom rooms: Maximum 80% RH with no active humidification system 	

Building Envelope

The building envelope performance will meet the requirements of the Washington Energy Efficiency Code. U-Values and SHGC are to be coordinated with architecture in subsequent phases.

Ventilation Systems Criteria

Minimum filtration of ventilation air will be provided to all occupied areas as follows:

- a. Outside air pre-filters: MERV-8
- b. Outside air final filters: MERV-15
- c. Exhaust air upstream of Heat Exchanger: MERV-8

Ventilation air will be provided to each ventilation zone as follows:

- d. Washington Ventilation Criteria
 - 1) Comply with Chapter 4 of IMC OR ASHRAE 62.1.

Exhaust Systems Criteria

MINIMUM EXHAUST RATES	
OCCUPANCY CATEGORY	EXHAUST RATE
Toilet rooms	10 ACH or 75cfm/fixture (whichever is greater)
Break room	100cfm, minimum
Shower rooms	10 ACH, One exhaust grille per shower stall
Main Trash room	10 ACH
Copy/print rooms	2 ACH
Janitor closet	10 ACH
Soiled laundry storage rooms	10 ACH
Kitchen	Per Kitchen Consultant, Estimate 10,000 CFM

Notes:

- Exhaust for skilled nursing facilities per ASHRAE

Internal Heat Gains

INTERNAL LOAD DENSITIES Estimates			
SPACE TYPE	LIGHTING	EQUIPMENT	PEOPLE (#/1000SF)
Office	0.75 w/sf	1.25 W/sf	5
Conference	1.0 w/sf	1.75 W/sf	50
Lobby	1.0 w/sf	0.5 W/sf	30 (Prefuction/lobby) 10 (Main entry Lobby)
Corridor	0.5 w/sf	N/A	N/A
Fitness	0.9 w/sf	1 w/sf	10 (Weight room) 40 (Aerobics)
Restroom	0.5 w/sf	N/A	N/A
IDF rooms	24,000 Btuh		N/A
MDF rooms	60,000 Btuh		N/A
Data/server rooms	40 w/sf		N/A
Notes:			
1. Default occupant heat gain is 250 Btu/h sensible and 200 Btu/h unless noted otherwise.			

Temperature Control Zoning Criteria

THERMAL CONTROL ZONE CRITERIA	
Private Offices	1 thermostat per four (maximum) private offices 1 thermostat per each corner/executive office
Open Offices	1 thermostat per 1,000 sf
Resident Rooms	1 thermostat per room
Conference	1 thermostat per room
Lobby	1 thermostat
Data/telecom	1 thermostat per room
Classroom	1 thermostat per room
Note:	
1. Provide demand control ventilation (DCV) as required by mechanical code and ASHRAE 62.1	

Hydronic systems will be designed assuming the control temperatures tabulated below.

HYDRONIC EQUIPMENT WATER TEMPERATURES		
EQUIPMENT	ENTERING (°F)	LEAVING (°F)
CENTRAL PLANT		
Chiller / Heat Pump (chilled water)	60°F	44°F
Chiller / Heat Pump (heating water)	105°F	115°F
TERMINAL DEVICES		
Cooling Coils	44°F	60°F
Heating Coils	115°F	105°F

Diversity HVAC Equipment

The system capacities, equipment sizes, and configurations will be designed so that upon the failure of a primary system component, the remaining equipment will have the capacity to meet some portion of the peak load according to the following criteria:

1. Air to Water Heat Pumps to be size 3 at 33% (N) for total heating and cooling load with a 90% diversity factor. Multiple Air to Water Heat Pump modules shall be provided for partial capacity in case of individual module failure.
2. Primary Pumps: Sized 1 at 100% per Air to Water Heat Pump (N)
3. Cooling water pumps: Sized 3 at 50% (N+1)
4. Heating water pumps: Sized 3 at 50% (N+1)

Piping Design Criteria

1. Maximum water pressure drop: 4 ft. w.g./100 ft.
2. Maximum water velocity for mains, risers and branch piping: 6 fps up to 5" pipe, 7 fps for 6" to 12" pipe, 8 fps for 14" and larger pipe sizes.
3. Maximum water velocity in mechanical rooms: 10 fps
4. Provide shut off valve for isolation of major areas, branch take-offs at individual floors, at each piece of equipment, and each air handling system.

Seismic

1. Anchorage and restraints must be coordinated with structural engineer and authority having jurisdiction.

Sustainable HVAC Design Features

1. Select refrigerants and HVAC equipment that minimize and eliminate the emission of compounds that contribute to ozone depletion.
2. Provide indoor air quantities to meet minimum requirements of sections 4 through 7 of ASHRAE standard 62.1-2022.
3. Install permanent carbon dioxide monitoring systems where required by code to ensure that ventilation systems maintain design minimum requirements.
4. Use variable frequency drives to operate fans and pumps.
5. Increased chilled water temperature differential of 16°F across cooling coils.
6. All ductwork is sealed per SMACNA seal class a with maximum 5% leakage rate at 1.5x the operating pressure of the supply fans.

Fire and Life/Safety

1. Life safety Pressurization and Exhaust Systems are not anticipated on this project.
2. Fire Smoke Dampers shall be provided at all locations of penetrations through rated walls or corridors.

HYDRONIC SYSTEMS

A narrative description of the hydronic water system is provided below.

HEATING WATER

A. System Description

1. Heating for the building will be provided an electrified Air to Water Heat Pump Plant with (3) 1500 MBH Air to Water Heat Pumps.
2. Heating loads are estimated at 4500 MBH

B. The heating water system will include the following additional components:

1. Air to Water Heat Pump Heat Pumps (Heating and Cooling)
 - a. (3) Air to Water Heat Pumps , (4) circuits per unit minimum.
 - b. R-454B Refrigerant
 - c. Manufacturer: Trane MAS or approved equal
 - d. Located on site in yard or on roof.
2. Heat Recovery Chiller (Simultaneous Heating and Cooling)
 - a. (1) Water to water heat recovery chiller located in mechanical room. Estimate 1500 MBH.
 - b. Sized for ~33% of peak heating load or calculated simultaneous load.
 - c. R-454B Refrigerant
 - d. Manufacturer: Trane MWS or approved equal
 - e. 4 Pipe Air-Source Heat Pumps may also be considered for heat recovery.
3. Pumping configuration – primary/secondary
 - a. (3) primary inline pumps, one per each heat pump & integral to equipment if possible.
 - b. (3) Heating secondary base mount pumps operating variable volume will serve building coils.
4. Buffer tanks
 - a. Provide (1) per heating loop
 - b. Size buffer tanks for a minimum of 8-12 gallons/ton of connected load, or per manufacturer requirements. Locate in mechanical room.
5. Electric backup boiler
 - a. This is sized to support the air-source hydronic heat pumps during their defrost cycles, build in system resiliency and support during cold weather. Size for 2 at 33% of building load.
 - b. Provide dedicated pump per boiler.
 - c. Manufacturer: Lochinvar
 - d. Located in the mechanical room

6. Other hydronic components include but are not limited to
 - a. Coalescing air separator sized for nominal main pipe size
 - b. Expansion tank
 - c. Makeup water assembly
 - d. Glycol or Heat Trace as required for freeze protection.
7. System Sizing & Resiliency
 - a. All equipment associated with the heating water system will be connected to backup power. Generator backup power will be provided for all equipment.
 - b. A 90% diversity will be applied when sizing the heating water plant equipment and piping mains.
 - c. Variable frequency drives will be provided with a bypass.

CHILLED WATER

A. System Description

1. Chilled water for the building will be provided by (3) 1500 MBH Air to Water Heat Pumps as noted above.
2. Cooling loads are estimated at 400 Tons

B. The chilled water system will include the following additional components:

1. Air to Water Heat Pump Heat Pumps (Heating and Cooling)
 - a. As noted above
2. Heat Recovery Chiller (Simultaneous Heating and Cooling)
 - a. As noted above.
3. Pumping configuration – primary/secondary
 - a. (3) primary inline pumps as noted above.
 - b. (3) Cooling secondary base mount pumps operating variable volume will serve building coils.
4. Buffer tanks
 - a. Provide (1) per cooling loop.
 - b. Size buffer tanks for a minimum of 8-12 gallons/ton of connected load, or per manufacturer requirements. Locate in mechanical room.
5. Other hydronic components include but are not limited to
 - a. Coalescing air separator sized for nominal main pipe size
 - b. Expansion tank
 - c. Makeup water assembly
 - d. Glycol or Heat Trace as required for freeze protection.
6. System Sizing & Resiliency
 - a. Per heating water section above.

RADIANT WATER

A. Hydronic Snow Melt

1. Hydronic Snow Melt Systems will be compared to electrical snowmelt system for implementation.
2. Dedicated pumps and manifolds shall serve the snowmelt system as needed.
3. Glycol shall be provided for freeze protection to any snowmelt system.

DISTRIBUTION

A. Chilled and Heating Water Distribution

1. Water will be circulated between the plant and terminal devices in a primary-secondary loop pumping arrangement. One Loop for Heating and One Loop for Cooling.
2. For primary secondary water pumping systems, the primary water heating water system loop will be constant volume flow. The secondary distribution loop will be variable volume flow based on maintaining a minimum system pressure.
3. The chilled water supply water temperature setpoint will be 44°F. All piping and equipment will be sized based on a 60°F return water temperature.
4. The heating water supply water temperature setpoint will be 115°F. All piping and equipment will be sized based on a 105°F return water temperature.
5. Isolation valves will be provided in hydronic branch lines throughout the system to allow maintenance of piping & equipment without a complete system shutdown.
6. Pressure independent control valves (PICV) will be used for piping with equipment flow rates greater than 5 gpm.
7. End of line balance valves will be provided to maintain the loop water temperature.

B. Piping & Valves

1. Material:
 - a. Heating & chilled water piping shall be schedule 40 black steel or copper, with welded connection and/or threaded connection. Mechanical couplings are acceptable pending heating water system is design for under 120 degrees F. Provide grooved coupling manufacturer's 10-year extended warranty including manufacturer/vendor inspection. Use of mechanical fitting requires campus final approval. Chilled water piping insulation shall be closed cell foam with service jacket.

ALTERNATES DESCRIPTION

Options are presented for examination in Energy Life Cycle Cost Analysis Study. Reference ELCCA Section of narrative.

A. Alternate M1 – Baseline Code Compliant System as described above

1. Central plant: Air-Source Heat Pumps (ASHP) with electric backup
2. Airside: Dedicated Outside Air System (DOAS) with 4-Pipe Fan Coil Units for resident rooms and community hub

B. Alternate M2 – Renewable Alternative

1. Central plant: Ground-Source Heat Pumps (GSHP) with electric backup
 - a. Provide Modular Water to Water Heat Pumps capable of providing 4400 MBH of heating capacity and 400 tons of cooling capacity. Manufacturer: Trane
 - b. Additional hydronic specialties and components required as coordinated with well or bore field designer. Provide vertical closed loop or open loop bore field for ground sourced heating source loop. Additional geotechnical report, analysis and verification needed to determine feasibility of ground source heat pump option.
2. Airside: Dedicated Outside Air System (DOAS) with 4-Pipe Fan Coil Units for resident rooms and community hub

C. Alternate M3 - All Electric Alternative (See Air Distribution Systems below)

1. Central plant: Air-Source Heat Pumps (ASHP) with electric backup
2. Airside: Single-Zone Water-Source Heat Pumps (WSHP) for resident rooms and community hub

D. M4: Gas Backup Boilers

1. Provide Gas Backup Boilers in lieu of Electric Heating Boilers noted in Heating Water section above.
2. Provide dedicated pump per boiler.

E. Note - Fossil Fuel Pathway

1. If complying via the fossil fuel path, the project shall comply with the additional energy efficiency credits required per Table C401.3.3 in addition to the minimum new building energy efficiency credits per Table C406.1.
2. Provide Condensing Boilers in lieu of Air Source Heat Pumps described above.
 - a. Other hydronic components include but not limited to: Dedicated boiler pumps, Air separator, Expansion tank, Make up water assembly, Buffer tanks, etc.
3. Due to the sustainability goals of the project, the fossil fuel pathway is not being considered.

AIR DISTRIBUTION SYSTEMS

DEDICATED OUTDOOR AIR SYSTEM (DOAS)

1. Sizing
 - a. Total Ventilation: 48,000 CFM Sized at 2 ACH for the sqft of the building
 - b. Airflow Capacity: (6) DOAS Units at 8000 CFM Each
2. Semi-custom solutions required with minimum features noted below
3. Direct drive fans w/ VFDs or EC motors
4. DOAS shall have enthalpy heat exchange method greater than 60% effectiveness in winter conditions
5. Double wall construction
6. All service access, coil pulls, etc shall be on single side of unit to minimize footprint in mechanical room
7. There shall be individual heating and cooling coils as applicable in the units. Controls valves shall not be provided by the manufacturer but by the div 23 controls contractor.
8. Manufacturer controls shall be provided as terminal strips w/ all control by the BAS
9. DOAS and/or ERVs to serve restroom exhaust, custodian exhaust, etc.
10. Manufacturers include: York, Energy Labs, BASX, Temtrol or approved equal

FOUR PIPE FAN COIL UNITS

1. Heating water coil
2. Total enthalpy chilled water coil
3. EC fan motors
4. Perforated interior metal assembly to improve acoustics
5. Filter racks with clear access and ease of filter pull
6. Manufacturer: IEC, Price or approved equal
7. Note: System selected for applicability for skilled nursing application and compliance with 2021 Washington State Energy Code. Documentation required to note departure from VA HVAC Design Manual.

WATER SOURCE HEAT PUMPS (ALTERNATE M3)

1. Provide Single Condenser Water Loop in lieu of chilled water and heating water loop.
2. Water Source Heat Pump Terminal Units with acoustical mitigation.
3. Perforated interior metal assembly to improve acoustics
4. Filter racks with clear access and ease of filter pull
5. Manufacturer: ClimateCraft, Trane, Whalen or approved equal.

AIR DISTRIBUTION

A. Ductwork

1. Materials:
 - a. Air distribution (supply/return): galvanized sheet metal of SMACNA required gauge
 - b. Return air pathway shall be full ducted. All insulation shall be exterior to ductwork.
 - c. Ductwork on rooftop shall be provided with exterior insulation and crickets to prevent buildup of snow or rain.

GENERAL EXHAUST

- A. Dedicated exhaust fans shall be provided to any space storing oxygen, nurse rooms, narcotics storage and dentist rooms, barber shops and all required areas per ASHRAE 2007 HVAC Applications Table 7.11.
- B. Pressure relationships or resident rooms to corridor to be verified with building ownership.

TYPE 1 KITCHEN EXHAUST AND MAKEUP AIR

A. System Description

1. A kitchen exhaust and makeup air system will be provided to serve the Type 1 grease hoods located in the kitchen. The system will include a makeup air unit, grease exhaust fan, pollution control unit, makeup air ductwork, grease exhaust ductwork and kitchen exhaust hoods.

B. Equipment

1. Kitchen Exhaust Fan
 - a. The exhaust fan will be a utility set type fan located on the roof.
 - b. The exhaust fan will be UL-762 listed for grease exhaust and high temperature applications.
 - c. Upblast type exhaust fans will be installed on a factory ventilated roof curb. Utility set exhaust fans will be located on a contractor provided roof curb.
 - d. Fans will be direct drive type provided with variable frequency drives.
2. Makeup Air Unit
 - a. The makeup air unit will be a custom air handling unit located on the roof. The unit will include the following internal components:
 - i. Outside air louver with damper and air flow monitoring station.
 - ii. MERV 8 prefilter.
 - iii. MERV 13 final filter.
 - iv. Heating water coil.
 - v. Chilled water coil.
 - vi. Supply fans
 - vii. Variable frequency drive for each fan.

C. Distribution

1. The system will operate as a variable volume airflow. For variable volume airflow systems, the exhaust fans and makeup air unit airflow will be sequenced by a Demand Control Ventilation (DCV) panel provided by the kitchen hood manufacturer. The DCV panel shall modulate the fan airflows in response to either heat sensor or locate activation of the hood via a switch.
2. Type 1 kitchen exhaust ductwork will be 316 stainless steel designed for medium pressure rated to -4 inwc with all welded construction. All grease exhaust ductwork will be wrapped in a 1-hr rated shaft enclosure rated for grease ducts. Access doors will be provided in the grease exhaust ductwork as required by code.
3. Makeup air ductwork will be galvanized steel design for low pressure rated at +2"wc.

TYPE 2 KITCHEN EXHAUST

A. System Description

1. A kitchen exhaust system will be provided to serve the Type 2 vapor hoods located in the kitchen. The system will include an exhaust fan, exhaust distribution ductwork and kitchen exhaust vapor hoods.

B. Equipment

1. The exhaust fan will be a utility set type fan located on the roof. Upblast type exhaust fans will include a factory roof curb. Utility set exhaust fans will be located on a contractor provided roof curb.

C. Distribution

1. The system will operate as a constant volume airflow.
2. Type 2 kitchen exhaust ductwork will be 304 stainless steel designed for low pressure rated to -2 inwc. All grease exhaust ductwork will be wrapped in a 1-hr rated shaft enclosure rated for grease ducts. Access doors will be provided in the grease exhaust ductwork as required by code.
3. Makeup air for the Type 2 kitchen exhaust will be provided by the HVAC system providing ventilation air and temperature control for the kitchen.

CONTROLS

A. Building Automation System (BAS) Controls:

1. Provide a new building control system to control and monitor all HVAC equipment on the project.
2. Provide new front end for building
3. Metering to include all end-uses & source energy per Washington Energy Code requirements. Include also metering to achieve the LEED advanced metering credit.

COMMISSIONING

- A. All building systems (Mechanical, Electrical, Plumbing, Low Voltage) shall be commissioned, and a commissioning report provided to the owner as required by 2021 WSEC section C408 and as required by specifications.
- B. Record drawings shall be provided to the owner within 90 days of system acceptance as required by 2021 WSEC section C103.6 and as required by specifications. At a minimum, record drawings shall indicate the

location and performance data of equipment, general configuration of ductwork and piping distribution systems including flow rates.

- C. Operation and maintenance manuals shall be provided to the owner as required by 2021 WSEC section C103.6.2 and as required by specifications. At a minimum, the manuals shall include:
1. Submittal data
 2. Operation and maintenance data for equipment.
 3. Names and addresses of service agencies.
 4. HVAC controls system maintenance and calibration information.
 5. Narrative of how system is intended to operate.

Electrical

SYSTEM OVERVIEW

The green field site proposed for this facility will require an extension of existing utility infrastructure. Refer to civil predesign narrative for extent of electrical utility scope anticipated. From this extension, three (3) utility services are proposed to serve the building and WSEC required electric vehicle charging stations. The building is anticipated to be fully electrified with minimal exceptions as described in this narrative for resiliency. A central utility transformer yard will be located on the building exterior and feed into a central main electrical room. Satellite electrical rooms will be distributed throughout the facility to serve each household wing and common areas. Two (2) diesel generators will provide 96 hours of backup power for life safety, critical, and equipment branches of power. Generators will be located in an exterior generator yard and feed into a dedicated central emergency electrical room. Provisions for a future third generator will be provided. A rooftop mounted solar array will be provided to meet minimum WSEC requirements. Additional solar and energy storage is proposed as an add alternate to target Net Zero Energy, enhance resiliency, and maximize available ITC and IRA incentives.

ELECTRICAL UTILITY SERVICE

A. Utility Service

1. The site lies within the coverage area of Avista Utilities and will be provided with three (3) new electric services. All service transformers will share a common utility yard and be located in an exterior back of house area near the main electrical room. Separation between utility transformers and generators will be provided.
2. Primary voltage distribution is routed underground from Avista Utilities service vaults to each new service transformer. All service transformers will be pad mounted above grade with vault access as required for the quantity of terminations necessary.
3. Coordination with Avista Utility standards are required prior to construction.
4. Utility metering is provided at each service switchboard for all house loads.

BUILDING DISTRIBUTION

A. This pre-design narrative anticipates:

1. (2)3000A, 480V, 3phase services dedicated to supporting facility operations, and
2. (1)800A, 208V, 3phase service dedicated to WSEC required electric vehicle charging.

NORMAL BUILDING POWER DISTRIBUTION

A. Main Electrical Room:

1. Two (2) new 3000A, 480/277V, 3Ø, 4W main switchboards will be located in the main electrical room. The main switchboards will serve the following loads:
 - a. Common house loads

- b. Central kitchen loads
 - c. Resident spaces
 - d. Nurse station areas
2. One (1) new 800A, 208V, 3Ø, 4W main switchboards is intended to be exterior pad mounted and dedicated to electric vehicle charging infrastructure.
 3. Common house loads are to be fed from distribution panels provided in electrical rooms and fed from the main switchboards. The distribution boards will feed the following house panels:
 - a. Normal load panels provided in the main electrical room and subsequent satellite electrical rooms within each household wing and neighborhood. Normal house panels are to serve all house equipment including lighting, HVAC, plug loads, and other miscellaneous requirements.

Normal Power Load Assumptions	
Type	Load
Receptacle	1.6 VA/SF
Lighting	1.5 VA/SF
Motor	11.0 VA/SF
Continuous	11 KVA
Non-Continuous	1.2 VA/SF
Kitchen	200 KVA
Residential	1.6 VA/SF
HVAC	18.5 VA/SF

4. All loads with the exception of Air Curtains and electric vehicles are to be generator backed up, as described below under the alternate power systems section.
5. A fire pump may be required pending available pressure and fire protection design requirements.
6. All conductors, transformer windings, and bushings in electrical power distribution system components shall be copper per VA electrical design standards.
7. All electrical switchgear, switchboards and panelboards shall be fully rated. Series rated is not allowed.

B. Energy Metering

1. The utility company will provide utility revenue meters on the house service. Service switchboards and distribution are required to adhere to UTILITY Company standards.
2. WSEC ENERGY CODE Digital metering will also be installed to monitor the electrical energy use for each of the following separately:
 - a. Total Electrical Energy
 - b. Photovoltaic Energy Production
 - c. HVAC Systems
 - d. Water Heating
 - e. Interior Lighting
 - f. Exterior Lighting
 - g. Electric Vehicle Charging
 - h. Plug Loads
 - i. Process Loads

3. All loads except for lighting loads will be powered from dedicated panels which are to be separately metered. Exterior and Interior lighting are to be powered from common panels, with exterior lighting circuits metered on the branch circuit level and subtracted from the total lighting load. The metering data shall be transmitted to the DDC system and graphically displayed. Each metering point will be networked and capable of being monitored by a laptop, plugged into any point on the buildings Ethernet network.

ALTERNATE POWER SYSTEMS

GENERATOR BUILDING POWER DISTRIBUTION

A. Generator Power Supply

1. Two (2) 480/277volt, 3-phase, 2000 KW diesel generators with weatherproof sound attenuated enclosures will be located at an exterior generator yard with provisions for a future third generator of the same size.
2. Each will be provided with a UL 2085 diesel subbase fuel tank.
3. A 30,000-gallon primary fuel tank installed below grade will also be provided for a 96 hr. runtime at 100% load.
4. A remote annunciator and generator remote on/off controls will be located in the building lobby.
5. The generator shall meet the latest requirements for emissions and have an active or passive emission filter. DPF requirements to be confirm with the AHJ during design.
6. The building shall be provided with a docking station and Manual Transfer Switch (MTS) to connect a temporary mobile emergency generator to its Life Safety branch. The connections shall be configured such that a temporary generator can support emergency power when the permanent generator is undergoing maintenance.
7. The building shall be provided with a temporary load bank docking station for annual generator maintenance.

B. Main Emergency Electrical Room:

1. The emergency electrical room is centrally located near the generator utility yard.
2. The room has dedicated automatic transfer switches for life safety, critical and equipment branches of distribution.
3. The emergency distribution board will be provided with surge protection and have separate sections with barriers between each of the following load types:
 - a. Life Safety
 - b. Critical
 - c. Equipment
 - d. Fire Pump
4. Each breaker will serve a 4-pole Bypass Isolation Automatic Transfer Switch (ATS) and associated distribution system as noted below.

C. Life Safety Power Distribution:

1. The Life Safety ATS will be 225A rated and feed one 480/277-volt, 3-phase distribution panel.
2. Provide a 480 to 120/208 volt transformer with a 120/208-volt panel on ground level at each neighborhood for 120-volt loads.
3. All feeders associated with this distribution system will need to meet one of the following criteria:
 - a. Installed in spaces or areas that are fully protected by an approved automatic fire suppression system (including above suspended ceilings)
 - b. Be a listed electrical circuit protective system with a minimum 2-hour fire rating.

- c. Protected by a listed thermal barrier system for electrical system components with a minimum 2-hour fire rating.
 - d. Be protected by a listed fire-rated assembly that has a minimum fire rating of 2 hours and contains only emergency wiring circuits.
 - e. Encased in not less than 2 inches of concrete
4. All feeders and equipment associated with the smoke control system shall meet the 2-hour protection requirement by following methods:
- a. Located exterior to the building.
 - b. Located within the smokeproof enclosure.
 - c. Located within a 2-hour rated enclosure.
 - d. Be 2-hour rated cable or cable system.
 - e. Encased in not less than 2 inches of concrete.
 - f. Protected by a listed 2-hour rated electrical circuit protective system

Life Safety Power Loads	
Type	Load
Emergency Lighting	0.25 VA/SF
Dining and Rec Area Lighting	1.00 VA/SF
Alarm, Alerting & Comm Systems	10 KVA
Fire Alarm and Smoke Control	10 KVA
Emergency Generator Auxiliaries	15 KVA
Fire Pump	30 HP
Jockey Pump	5 HP

D. Critical Power Distribution

1. The Critical power ATS will be 400A rated and serve a 480-volt, 3-phase, 4-wire main distribution board located in the same room as the emergency power distribution on ground level.
2. 480-208/120-volt transformers and associated 208/120-volt, 3-phase panels will be provided at each household and neighborhood to serve resident room receptacles, refrigeration, care giver receptacles, nurse station receptacles, printers, nurse call equipment and access control equipment.

E. Equipment Power Distribution

1. Two (2) Equipment Power ATSs will be provided with provisions for a future third. Each are anticipated to be 2000A rated and serve 480-volt, 3-phase, 4-wire main distribution boards located in the same room as the emergency power distribution on ground level.
2. Ground level panel boards will serve the balance of all mechanical and lighting loads not served by the Life Safety or Critical branches, unless noted otherwise. Additional, 480-208/120-volt transformers and associated 208/120-volt, 3-phase panels will be provided to serve miscellaneous 120-volt plug and process loads at each household and neighborhood. Including but not limited to systems identified in NEC 517.44:
 - a. Task illumination and select receptacles in
 - 1) Patient care spaces
 - 2) Medication preparation spaces
 - 3) Pharmacy dispensing areas
 - 4) Nurses stations
 - b. Supply, return and exhaust ventilation systems for airborne infectious isolation rooms

- c. Sump pumps and other equipment required to operate for the safety of major apparatus and associated control systems
- d. Smoke control and pressurization systems
- e. Kitchen hood supply/ exhaust systems
- f. Nurse call systems
- g. Heating equipment to provide heating for patient rooms.

F. Selective Coordination

- 1. All life safety, critical and equipment branch overcurrent protection devices shall be selectively coordinated.

ENERGY STORAGE AND GENERATION

A. Solar Photovoltaic Array

- 1. A 70kW solar array will be provided to satisfy 2021 WSEC C411.1 requirements for 0.5 W/SF for onsite renewable energy generation.
- 2. As add alternate 1E, a 2.3MW solar array will be provided to target Net Zero Energy in accordance with WA Governor's mandate for Net Zero – Executive Order 20-01.

B. Battery Energy Storage System

- 1. As add alternate 2E, a 250kW/250kWH battery energy storage system will be provided for enhanced resiliency to enable the rooftop solar array to provide power to the facility both when the utility is available and during a utility power outage.

BRANCH CIRCUIT DESIGN

WIRING METHODS AND RACEWAYS

- A. Convenience power outlets will be provided to meet all applicable codes and standards. Convenience outlets will be provided in all common areas, such as lobbies, restrooms. In addition, outlets will be provided in all utility spaces such as mechanical, electrical, IDF rooms, janitor closets and elevator equipment rooms.
- B. The maximum number of convenience outlets on one circuit will be eight. Maximum loading of lighting branch circuits will be 60% (i.e., 12 amps).
- C. All branch circuit and feeder wiring are to be copper and provided with separate, green equipment conductors.
- D. All branch circuit and feeders larger than #10 will utilize stranded conductors.
- E. Feeders for panelboards are generally sized for the panel rating, allowing for connected loads plus 25% spare capacity.
- F. Feeders for HVAC equipment shall be sized per NEC (as a minimum), or as recommended by the manufacturer.
- G. Dedicated neutrals for each circuit will be provided to comply with NEC 210.4(B).

- H. Dedicated circuits will be provided for telecom loads, appliances, and specialty areas.
- I. Conductors will be upsized for voltage drop (3% VD per branch circuit maximum).
- J. The lighting, power, and fire alarm systems will be in conduit. Steel metal clad (MC) for branch power wiring will be allowed in walls if concealed. Electrical raceways below grade or in concrete slab on grade will be PVC schedule 40.

WIRING DEVICES:

- A. Miscellaneous receptacles and switches in the core, lobby, common areas (such as restrooms or amenities spaces, mechanical areas, and other utility areas will be installed as required.
- B. Receptacles shall be commercial grade, rated at 20A. Cover plates throughout the facility will be nylon in public areas and stainless steel in mechanical and non-public spaces.
- C. Receptacles will be provided within 25 feet of all electrical and mechanical equipment.
- D. Controlled receptacles will be provided in at least 50 percent of receptacles in the following locations: private offices, open office areas, conference rooms, copy/printing rooms, break rooms and classrooms. In these locations, load control modules will be provided for control by the lighting control system (timeclock or occupancy sensor). These receptacles will allow for the top outlet to be controlled (and clearly labeled) separately by the load control module, with the bottom outlet being uncontrolled. [WESC]
- E. Special purpose receptacles will be provided as required by the equipment served.
- F. Ground fault circuit interrupters (GFCI) duplex receptacles shall be provided as required per the NEC, including at locations within six feet of a water source, such as sinks and restrooms, and provided for all outdoor locations. GFCI receptacles shall not serve other receptacles from their load-side terminals.
 - 1. Exterior weatherproof GFCI receptacles mounted in NEMA 3R weatherproof enclosures with no greater than 50' spacing around the perimeter of the building.
- G. Arc fault circuit interrupting (AFCI) devices will be provided as required by the NEC.
- H. Tamper proof receptacles to be provided per NEC 406.12.
- I. All switches and receptacles except those within dwelling units will be labeled with panel and circuit number via Kroy or Brothers stick-on labels.
- J. Special purpose receptacles will be provided as required by the equipment served.

EQUIPMENT CONNECTIONS:

- A. Mechanical Equipment:
 - 1. Connections will be made for all mechanical equipment. All motors rated 5hp and larger will be wired for 480V, 3Ø power. All motors rated 1/2 hp and larger will be wired for 208V, 3Ø power. Motors rated less than 1/2 hp will be wired for 120V, 1Ø power.
 - 2. Electrical contractor is responsible for electrically powered or controlled mechanical equipment, specified in the mechanical specifications, or as scheduled on the mechanical drawings. The specific divisions of

responsibilities between mechanical and electrical contractors, for providing, furnishing, and/or wiring this equipment is as follows:

- a. Motors: Division 26 to provide the circuit and power wiring for the motors.
 - b. Magnetic starters: Except where magnetic starters are factory-installed or are Division 23 factory-assembled equipment, Division 26 will install magnetic starters, furnished by Division 23 and install the necessary power circuit(s) and wiring to the starters and from the starter to the motor. In the case of factory-installed starters, Division 26 will install the necessary power wiring to the starter.
 - c. Variable frequency drives (VFDs): Physically mount all VFDs, which are not specified to be installed by Division 23 factory assembled equipment. Provide the necessary power wiring to the VFDs and from the VFD to the motor except in the case of factory installed VFDs where wiring between the motor is to be by Division 23. Where disconnects are installed between a VFD and a motor, provide the interlocking wiring between the disconnect switch and VFD to ensure that the drive is shutdown simultaneously with the motor.
 - d. Disconnect switches: Provide all disconnect switches necessary for Division 23 mechanical equipment, not provided as part of factory-wired, Division 23 equipment. Provide power circuit and wiring to all disconnect switches. In addition, provide power circuit wiring between motor and disconnect switch when the disconnect switch is not factory-installed. See also Variable Frequency Drive (VFD) for special wiring requirements.
 - e. Mechanical controls: Division 26 contractor will provide power to Division 23 furnished control panels and power circuits for dedicated control circuit power receptacles.
3. Electrical contractor is to verify and coordinate with the mechanical contractor for power requirements for all mechanical equipment, and to provide power to all mechanical equipment including but not limited to air handling units, condensing units, cooling tower fans, fan coil units, exhaust fans, HVAC control panels, fire smoke dampers, and pumps.
 4. Refer to mechanical and plumbing sections of this narrative for equipment and locations.

B. Electric Vehicle Chargers

1. Parking will be required to meet current Electric Vehicle Charging requirements:
 - a. EV Chargers: Ten (10) percent of the total number of parking spaces shall be equipped with Level 2 Electric Vehicle Supply Equipment (chargers), estimated 22 spaces.
 - b. EV Ready: Ten (10) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles (ready for EVSE to be installed and connected), estimated 21 spaces.
 - c. EV Capable: Ten (10) percent of the total number of parking spaces shall be capable of supporting future level 2 EVSE, estimated 21 spaces.
2. Service shall be sized to support all future EVSE with the use of a load management systems to limit each future electric vehicle charging station to a maximum of 16 amps, 208V, 1phase.

C. Miscellaneous Requirements: In addition to Division 23 mechanical equipment, elevator equipment, convenience outlets, and lighting, power connection will be provided for miscellaneous equipment including, but not limited to:

1. ADA access doors with powered doors
2. Hand dryers
3. Telecommunications systems
4. BMS monitors, and fire alarm system
5. Irrigation controllers

D. Fire and Life Safety Equipment

1. FSDs: Division 26 is responsible for power wiring to the damper actuator motor to open FSDs. FSD closure is actuated by loss of actuator motor power, by Fire Alarm System control module

2. Fire Pump: Division 26 is responsible for providing power wiring to the fire pump's combination ATS-Controller. The combination ATS-Controller and Fire Pump is by Division 22.
 3. Fire Sprinkler System: Division 26 is responsible for providing power wiring to Fire Protection Control Panel, including Fire Riser water flow alarm bell(s).
- E. Site Electrical – Power and fire alarm for civil vaults, security equipment, landscape irrigation controls, site lighting and electric vehicles.

MISCELLANEOUS SYSTEMS

GROUNDING

- A. Grounding will be installed to conform to the National Electrical Code and applicable recommendations in the IEEE Standard.
- B. Separately derived systems will be grounded per NEC requirements.
- C. The electrical system neutral will be bonded to ground via Main Building Ground Bus Bar in the main electrical room.
- D. All new ground bus bars shall have a connection to building steel.
- E. All connections to grounding electrode system will be made utilizing exothermic welding method.
- F. A separate equipment insulated ground wire will be run in each feeder conduit and each branch circuit conduit.
- G. A copper building main reference ground bus will be installed in the main electrical room. It will connect to the main switchboard, to the main incoming water line, to the UFER grounding electrode, to building steel and to the neutral point of all local transformers. A 3/0 kcmil copper grounding riser will be run the full height of the building to inter tie copper ground bars in electric and telecom rooms on each floor and transformers on each floor.
- H. Green ground conductors shall be provided in all feeder conduits.
- I. The telecom system shall be fully grounded, including cable tray, cabinets, etc.

SURGE PROTECTION:

- A. Each switchboard will have a surge protection device (SPD).
- B. Surge protection devices will be provided in all emergency panels as required by NEC 700.8.
- C. Surge protection devices will be provided in all 208/120 V branch circuit panels serving telecom equipment.

IDENTIFICATIONS:

- A. All electrical equipment will be provided with color-coded labelling that identifies the equipment name, voltage, power source, arc fault information, etc.

- B. Branch panels will be provided with type-written panel directories.
- C. All receptacles will be labelled with the panel and circuit number on Kroy or Brothers stick-on labels.
- D. All junction boxes will be provided with panel name and circuits.
- E. A single line diagram will be provided in electrical room.

TESTING

- A. All electrical systems will be tested.
- B. Manufacturer testing and start-up reports will be provided on generator and UPS systems.

SEISMIC BRACING

- A. Electrical equipment must be installed and braced for the appropriate seismic zone location. Electrical equipment includes: exit signs, egress lighting fixtures, distribution equipment, the emergency generator, automatic transfer switches, transformers, busway, etc.

LIGHTNING PROTECTION

- A. A lightning protection system will not be provided.

Plumbing

GENERAL

The focus of the plumbing system design will be to reduce domestic water consumption and maximize occupant health. Low-flow fixtures will be used in all of the domestic water spaces and will reduce the domestic water demand. All plumbing equipment selections and system designs are to comply with the US Department of Veterans Affairs design standards.

PLUMBING ALTERNATES

Provide alternate pricing for the items listed below:

1. Greywater collection:

Provide a greywater collection system. Treated greywater to be reused for irrigation only. Grey water can only be collected from tubs, showers, lavatories, clothes washers, and laundry sinks. Provide a reduced pressure backflow preventer to supply makeup water to the system. System components to include, but are not limited to:

- a. Greywater collection piping
- b. Greywater storage/processing tank
- c. Greywater filtration and sanitization equipment
- d. Processed water day tank
- e. Processed water booster pump

2. Solar water heating

Replace the heat pump water heating system with a solar water heating system. The solar thermal system shall be designed to provide 100% of the building's domestic water heating demands with electric resistance backup. Each building will be equipped with a dedicated system including the following components:

- a. Rooftop or site solar panel array
- b. Double-walled heat exchanger with integral circulation pumps located within the mechanical room
Primary distribution loop between heat exchanger and solar panels with glycol freeze protection.
- c. Secondary distribution loop between domestic hot water storage tanks on roof and the heat exchanger.
- d. System controls per manufacturer

3. Natural Gas for emergency generators:

Natural gas is being considered as an alternate emergency generator fuel source. If implemented, extend a branch of the medium pressure (2 psi) natural gas system to the generators with a regulator and meter. Regulator to reduce gas pressure to 11" W.C. Natural gas to connect to generators with metal flexible hose, a shutoff valve, and dirt leg.

FIXTURES

Plumbing fixtures and drains will be chosen for long service and water savings. Fixtures in common areas should be wall hung, flush valve, commercial type. ADA compliant fixtures will be required at all public lavatories, water coolers, and sinks. Select water closets, urinals, and showers shall be ADA compliant as required by the building code. Fixtures shall be WaterSense labeled where allocable. Refer to the VA Program Guide PG-18-5 and PG-18-12.

Hose bibs (recessed keyed type) will be installed a maximum of 200-feet apart around the perimeter of the building with a minimum of hydrant on each exterior wall, one in each mechanical room, and one on each terrace area. Freeze-proof wall hydrants should be installed where exposed to freezing ambient temperatures. Where a wall hydrant is not feasible, a freezeproof roof hydrant shall be located within 50-feet of each piece of rooftop mechanical equipment.

Emergency eyewash and showers shall be provided where occupants are at risk of exposure to hazardous chemicals such as pharmacy spaces, mechanical rooms, and kitchens per VHA Directive 7704. Showers and eyewashes to provide tempered water at 90 deg F via an ASSE 1071 mixing valve located as close to the fixture as possible.

Fixture	Max Flow (GPM/GPF)	Key Features
Water Closets	1.28	Wall mounted vitreous china, electronic flush valve
Water Closets (bariatric)	1.28	Floor mounted vitreous china, electronic flush valve, rated for 1,000-pound loading.
Urinals	0.125	Wall mounted vitreous china, electronic flush valve
Lavatories (public)	0.35	Wall mount vitreous china, electronic sensor faucet, laminar flow, hard-wired on emergency power
Lavatories (private)	0.35	Drop in vitreous china, manual faucet, laminar flow, hard-wired on emergency power
Showers	1.5	Tiled with Symmons Trim
Breakroom Sinks	1.0	Stainless steel, single basin, undermount sink w/ gooseneck pullout sprayer faucet
Pharmacy Sinks	1.0	Stainless steel, single basin, undermount sink w/ gooseneck, electronic sensor faucet, laminar flow, hard-wired on emergency power
Hydration Stations	N/A	Filtered, refrigerated, barrier free, hi-lo, with bottler filler
Janitor Sinks	2.0	24"x24"x12" floor mounted with wall mounted faucet and stainless-steel wall guards
Emergency Eye/Facewash	3	Wall mounted, hard piped drain
Emergency Shower	20	Wall mounted, hard piped drain

WATER SERVICES AND DISTRIBUTION

WATER ENTRY ROOM

A single domestic water connection from the municipal system is expected for the entire building. The water service entrance will contain the domestic reduced pressure backflow preventer, fire service backflow preventor, water softening skid, and irrigation backflow and meter.

DOMESTIC COLD WATER

The incoming water service will require a reduced pressure backflow preventer as required by the AHJ. The backflow will be located immediately upon entry to the building between 1-ft and 5-ft above the finished floor. Provide a residual oxidant monitoring device, monitored by the BAS, at the building service. Incoming water pressure is unknown. Obtain a pressure report from the Civil Consultant prior to domestic water system design. Provide a triplex booster pump system if incoming pressure is too low to guarantee a minimum of 35 psi at the most remote plumbing fixture. Each pump shall be sized for 50% of the total demand. The booster pump shall be a skid-packaged unit including an integral VFD, controls, and monitored by the building BAS. The booster shall be on emergency power. Provide a pressure reducing assembly if incoming pressure exceeds 80 psi at any plumbing fixture.

To improve water quality, a hot water supply water softening system shall be provided if total water hardness exceeds 50 mg/L. A whole building water softening system shall be provided if total water hardness exceeds 170 mg/L. The water softening system shall be sized based on the domestic water system peak flow and shall include a brine tank, duty and standby resin tanks, and all controls and accessories required for a standalone system.

DOMESTIC HOT WATER

Domestic hot water shall be supplied to plumbing fixtures, emergency fixtures, kitchens, laundry, and janitor's closets. Water temperatures shall not exceed the temperatures in the table below and shall be tempered using mixing valves listed for their application. Users will not be able to change the maximum temperature of the water at the lavatories or showers. Mixing valves installed at fixtures shall be located as close to the fixture as possible.

Domestic Hot Water Temperatures		
Application	Temperature	Notes
Generation/storage temperature	140°F	
Distribution temperature (non-kitchen)	120°F	Provide ASSE 1070 tempering valve at each fixture.
Distribution temperature (commercial kitchens)	140°F	Untempered, approximate temperature. Hand washing sinks require local mixing set to 105°F
Return Water Temperature	115°F	
Public Lavatories	105°F	Banks of multiple public lavatories may be combined into a single ASSE 1070 mixing valve.
Showers	110°F	Requires combination pressure balancing/temperature valve.

Domestic Hot Water Temperatures		
Application	Temperature	Notes
Janitor Closet	120°F	Untempered, approximate temperature
Emergency Fixtures	90°F	ASSE 1071 mixing valve

Per C404 of the Washington State Energy Code (WSEC), domestic hot water will be generated with air source heat pumps located on the roof and large hot water storage tanks located within a mechanical room. The system will be sized to meet 100% of the peak building load during normal operation, is capable of 50% capacity at 40°F and 25% capacity at 24°F. Heat pumps shall be selected to provide 100% of building demand should one water heater be out of operation. Supplemental electric backup is provided via a swing tank to cover reheat loads and low ambient temperature conditions.

Provide a hot water plant for each building wing. Each hot water plant shall have water heating equipment, an electronic master mixing valve, expansion tank, and recirculation pumps. All electronic components are to be monitored by the building BAS system. Provide a BAS temperature sensor port at each balancing valve. Domestic hot water recirculation piping shall be sized to minimize wait times at fixtures and shall not exceed a 15-sec wait time, refer to table below. Provide redundant re-circulating pumps with sequence of operations where one pump is operational at a given time.

Piping Volume And Maximum Piping Lengths (WECC)			
Nominal Pipe Size (Inches)	Volume (Liquid Ounces/Foot)	Maximum Piping Length (Feet)	
		Public Lavatory Faucets	Other Fixtures And Appliances
3/8	0.75	3	50
1/2	1.5	2	43
3/4	3	0.5	21
1	5	0.5	13
1 1/4	8	0.5	8
1 1/2	11	0.5	6
2 or larger	18	0.5	4

WATER DISINFECTION

VA Coordinate building water disinfection strategies with VA project manager to prevent Legionella. If necessary, emergency water disinfection systems may be required per VA plumbing design standards. This could include but may not be limited to:

1. Thermal Eradication
 - a. Design the water heating system to provide 160-170 degree water to circulate through the building hot water distribution system for up to 30 minutes. This would require a bypass of the master mixing valve with a normally-closed shutoff valve.
 - b. Provide taps for the connection of temporary booster heaters.
2. Hyper-Chlorination
 - a. Provide taps for the connection of temporary equipment.

IRRIGATION

Landscape is provided with a dedicated irrigation meter and backflow device. Coordinate points of connection with the landscape or irrigation designer. Each point of connection shall be provided with a shutoff valve, a backflow prevention device, a meter, and signage; any control device or solenoid valve, including power and wiring, shall be the responsibility of the landscape or irrigation designer.

BACKFLOW PROTECTION

Approved backflow devices shall be installed at the locations outlined below. Backflow devices with a discharge require an air gap and shall be routed to an indirect receptor.

Backflow Protection		
Hazard	Type	Notes
Domestic Water Entry	Reduced Pressure Zone Assembly	ASSE 1013, AWWA C511, CSA B64.4, CSA B64.4.1, route discharge to nearest floor sink or indirect receptor
Fire Water Entry	Double Check Valve	ASSE 1048
Soda Machine	Double Check Valve	
Coffee Maker	[check with AHJ]	
Mechanical System Makeup	Reduced Pressure Zone Assembly	
Hose Bibbs/Hydrants	Vacuum Breaker	ASME A112.21.3, ASSE 1019, CSA B64.2.2

WATER METERING

Submeters are required on the following systems. All meters not used for billing shall be capable of reporting to the BAS. Unit meters used for billing purposes shall be provided with all necessary data collectors, repeaters, and transmitters necessary for a complete system. Coordinate metering with the VA project manager.

1. Meters required:
 - a. Irrigation
 - b. Each water heating plant on cold water inlet to water heating system
 - c. Mechanical makeup
 - d. Laundry facilities

SANITARY WASTE AND VENT

A complete sanitary waste and vent system shall be provided throughout the building. Avoid burying waste piping under electrical rooms.

Where possible to drain by gravity, piping shall be sloped at 1/4 in/ft (2%); pipes 4-inches and larger, if allowed by the AHJ, may be sloped at 1/8 in/ft (1%).

When not possible to drain by gravity, a sump and pumping system shall be provided. Sumps shall be sized based on peak anticipated incoming flow and a minimum pump runtime of 2-min. Sumps shall be vented to atmosphere. Pumps shall be of the duplex variety providing N+1 redundancy (e.g. 2 @ 100%, 3 @ 50%, 4 @ 33%) and provided with emergency/standby power. Pumps shall be able to pass 2-inch solids and pumps receiving water closet discharge shall be of the grinder/macerator variety. Sump and pump systems shall include basin, pumps, pump stand, pump removal system, combination valve, floats, gas tight lid, and control panel.

Floors shall be sloped to floor drains; refer to architectural drawings for sloping requirements. All drains and fixtures shall be trapped. Trap primers shall be provided for all for drains, floor sinks, and indirect drain receptors. Trap primers adjacent to water lines experiencing pressure drop (e.g. lines serving flush valves, washing machines, showers, etc.) shall be of the pressure activated variety. Trap primers tapped off of lines not experiencing pressure drop (e.g. lavatory, kitchen sink, rarely used hose bibb, etc.) shall be of the inwall flush mount electronic type. Trap primer splitters may be utilized to serve up to (4) drains.

FOUNDATION DRAINAGE

Foundation drainage design is by the Civil or Geotech Engineers. If the foundation drainage system designed by others is unable to connect to the civil storm water collection system, plumbing will pick up the discharge of the foundation system, providing a sump & pump, and routing it to the civil storm connection. Pumps shall be redundant, duplex configuration and on emergency power.

GREASE WASTE

A grease waste collection and treatment system shall be provided for commercial kitchens and similar areas susceptible to contamination. A floor drain connected to the grease waste system shall be provided at any trash area receiving organic waste. Grease waste piping shall be sloped at 1/4 in/ft (2%). Grease waste shall pass through a grease interceptor and be provided with an inspection port prior to connecting to the sanitary sewer system. Grease runs longer than 200-ft shall be provided with heat maintenance tape and maintain a line temperature of 110°F.

STORM DRAINAGE

A complete storm drainage system shall be provided and shall be independent of the sanitary sewer system. The storm system shall be sized based on the 100-yr/60-min rainfall data or as dictated by the AHJ.

- Rainfall Rate: 1-inch/hr

The building shall be provided with an internally plumbed primary and secondary storm drainage system. Roof drains and storm piping shall be sized based on collection area and rainfall rate. Primary roof drain shall be located at low points on the roof. Secondary drains shall be located adjacent to primary drains and be provided with a minimum inlet elevation difference of 2-inches. Piping shall have a minimum slope of 1/8-in/ft and be insulated from the roof body to the shaft to provide protection against condensation and to address acoustical concerns. Primary piping shall connect the civil site storm water collection system. Secondary piping shall terminate above grade with a downspout nozzle located in a conspicuous location so that clogs in the primary piping system can be identified. Heat tracing shall be provided at the roof surrounding the drain bodies and within the secondary system downspout nozzles to prevent ice from building up within the drainage system.

FUEL-GAS: NATURAL GAS

A natural gas system shall be provided to serve the mechanical backup boilers and commercial kitchen. The local gas utility shall be responsible for routing gas to the site; including any site piping; and for placing the gas meter train including meter, pressure reducing valve, isolation valves, and other utility required accessories. Plumbing shall be responsible for providing a seismic actuated shutoff valve and all piping and devices downstream of the meter train. Piping shall enter the building above grade and not be routed under slab. System sizing shall utilize the longest length method.

To reduce pipe size and provide additional system flexibility, medium pressure gas shall be delivered to the building at 2-psig and routed to the boiler room and commercial kitchen. A PRV will be provided to each location to reduce gas pressure to 11-inch WC with downstream piping routed to each appliance or piece of equipment. Each appliance or piece of equipment shall be provided with a shutoff valve, a drip leg, and a flexible connector.

EMERGENCY SHUTOFF

Rooms containing 400-MBH of gas equipment or more require an emergency shutoff button at each exit. The button shall be wired to a solenoid that will shut gas off to the room in case of emergency. Coordinate with electrical for power and disconnect.

Commercial kitchens with Class 1 hoods require an emergency shutoff button at each exit. The button shall be wired to a solenoid that will shut gas off to the room in case of emergency. The shutoff button shall also be tied into the hood's Ansul system.

GAS METERING

Submeters are required on the following systems. All meters not used for billing shall be capable of reporting to the BAS.

Meters required:

- a. Each boiler or group of boilers
- b. Each commercial kitchen

FUEL OIL

Provide fuel-fill and storage system to serve emergency generators. Coordinate fuel fill stations with building openings. System and components to comply with IFC, IMC and NFPA standards.

Systems components shall include, but are not limited to:

1. Fuel day tanks
2. Fuel storage tanks
3. Fuel fill stations
4. Fuel polisher
5. Fuel pumps

MISCELLANEOUS MEDICAL GAS

Provide an Oxygen distribution system to designated occupant rooms. Coordinate the location and quantity of oxygen outlets with architect and VA project manager. The Oxygen distribution system shall provide 50 psig of pressure at the most remote outlet with a system pressure drop no less than 5 psig. Oxygen systems to be designed per VA plumbing design standards, NFPA standards, and ASPE design manuals for load calculations.

Systems components shall include, but are not limited to:

6. Bulk storage tank
7. Distribution piping
8. Zone control valves
9. Wall outlets
10. Monitoring and alarm systems

PIPING

PIPING ISOLATION

Neoprene riser pads and cush clamps are required to isolate waste, storm and water piping from the building structure for acoustical attenuation. Waste and storm piping over occupied areas to utilize SoundSeal B10QFA-3 pipe lagging material.

PIPING MATERIAL

Plumbing Piping Materials		
System	Material	
	Primary	Alternate
Domestic Water	Copper - Type L	Stainless Steel – ASTM 312
Trap Primers	Copper – Type K	N/A
Sanitary Waste	No Hub Cast Iron	Schedule 40 PVC
Sanitary Vent	No Hub Cast Iron	Schedule 40 PVC
Irrigation	Copper - Type L	Stainless Steel – ASTM 312
Storm	Cast Iron – No Hub	Schedule 40 PVC
Fuel Oil	Schedule 40 Black Steel	N/A
Medical Gas - Oxygen	Copper – Type L	N/A

INSULATION

Insulations Materials And Minimum Thickness		
System	Material	Thickness
Domestic Cold Water	Mineral Wool or Closed-Cell Elastomeric	1"
Domestic Hot and Hot Return Water	Mineral Wool or Closed-Cell Elastomeric	piping $\leq 1 \frac{1}{4}"$ - 2" insulation
		piping $\geq 1 \frac{1}{2}"$ - 2 $\frac{1}{2}"$ insulation
Trap Primers	Mineral Wool or Closed-Cell Elastomeric	1"
Irrigation	Mineral Wool or Closed-Cell Elastomeric	1"
Storm	Mineral Wool or Closed-Cell Elastomeric	1"

Note: Exterior insulated piping shall be provided with an aluminium jacket.

Fire Protection

A fire protection system shall be provided for the building. Fire protection and suppression systems are a deferred design but must meet the following basic performance requirements. Refer to specifications for detailed requirements.

All systems shall be designed to meet the requirements of the following codes and standards:

1. International Fire Code
2. International Building Code
3. NFPA Standards
4. Factory Mutual Global Insurance
5. Local, city, county and state codes and ordinances
6. National Electrical Code
7. Uniform Plumbing Code
8. International Mechanical Code

The fire water service shall be provided by to the civil engineer. The backflow devices shall be a dual-check type device. Fire water backflow preventers shall be lockable and provided with flow alarms interlocked with the fire alarm system. Downstream of the backflow preventer and fire pump (if allocable), fire department connections shall be provided on exterior of the building, fully visible from the street within 100-ft of the nearest fire hydrant along with a water gong alarm. Provide an automatic sprinkler system that fully covers the entire building per the IFC, NFPA 13, and local fire codes.

1. Water Supply
 - a. Main Size (minimum): 4"

The fire protection system shall be hydraulically designed based on available water supply flow and pressure determined from a fire-hydrant-flow-test taken within six months of permit application. If incoming water flow and pressure is determined to be inadequate, a fire pump, located in a dedicated pump room, shall be provided. Fire pumps shall either be electrically driven and connected to an emergency power system or be diesel powered with sufficient fuel supplies and tanks. Fire pumps shall be designed per the IFC, NFPA 22, and local fire codes. Fire pump rooms shall be constructed per the IBC and accessed directly from the building exterior or via an enclosed passageway from an interior exit stairway or exterior exit per the IBC.

For areas that are kept 40°F or above and are not subject to freezing, a wet pipe system shall be provided. For areas that experience temperatures below 40°F, a dry pipe system shall be provided; dry pipe systems shall be provided with an air compressor for pressure maintenance and shall have piping sloped a minimum of 1%.

For areas sensitive to water leaks during day-to-day operation but not concerned with damage after an emergency, a pre-action system shall be provided. The pre-action system shall be a dry pipe system with supply valves connected to the fire alarm system or early warning system. Upon detection of an emerging fire, the pre-action valve shall open and charge the system with water. Upon rising temperature, sprinkler heads shall open and extinguish the fire.

Piping Materials:

System	Primary Material		Fittings
	Above Grade	Below Grade	Above and Below Grade
Wet Pipe, ≤4"	Schedule 40 Black Steel	304 Stainless Steel	Grooved-End Couplings
Wet Pipe, >4"	Schedule 10 Black Steel	304 Stainless Steel	Grooved-End Couplings
Dry/Pre-action Systems	Black Enamel or Corrosion-Resistant Coated Schedule 40 Black Steel	304 Stainless Steel	Grooved-End Couplings

Community Center		
Program	Area	Remarks
Resident Amenities		
Vestibule	211 N.S.F.	
Lobby/Waiting	876 N.S.F.	
Chapel/Activity	1,088 N.S.F.	
Multi-purpose	1,243 N.S.F.	
Physical Therapy	1,222 N.S.F.	Provide Ceiling Mounted Lift System
Occupational Therapy	120 N.S.F.	
Therapy Waiting	216 N.S.F.	
Therapy Reception	71 N.S.F.	
Therapy Change Room	91 N.S.F.	
Barber Shop	292 N.S.F.	
Conservatory	510 N.S.F.	
Sports Bar	609 N.S.F.	
Sports Bar Servery	170 N.S.F.	
Coffee Shop	476 N.S.F.	
Central Dining	2,424 N.S.F.	
Therapy Toilet	93 N.S.F.	Provide Ceiling Mounted Lift System
Men tit	197 N.S.F.	
Women tit	197 N.S.F.	
Total Resident Program	10,106 N.S.F.	
Admin/Office Space		
Reception	152 N.S.F.	currently one receptionist, should plan for one additional position
Work Room	120 N.S.F.	
Administrator	201 N.S.F.	sized with small conference table
Administrative Assistant	129 N.S.F.	
DoN	129 N.S.F.	
HR	129 N.S.F.	
HR	129 N.S.F.	
Compliance	120 N.S.F.	
Scheduler	120 N.S.F.	
Payroll	120 N.S.F.	
Information Technology	120 N.S.F.	
Medical Records	138 N.S.F.	
Admissions	120 N.S.F.	Provide small conference room between two admissions offices
Admissions	120 N.S.F.	Provide small conference room between two admissions offices
Admissions Conference Room	247 N.S.F.	
Veterans Benefit Specialist	114 N.S.F.	
Visiting Staff Office	187 N.S.F.	sized with small conference table
Visiting Staff Office	180 N.S.F.	sized with small conference table
Therapy Director	150 N.S.F.	
Speech Therapy Office	185 N.S.F.	
Therapy Shared Office	214 N.S.F.	5 workstations
Chaplain Office	151 N.S.F.	adjacent to chapel
MD Office	114 N.S.F.	
Dentist Office	114 N.S.F.	
Safety Officer	129 N.S.F.	
Activity Office	217 N.S.F.	Director + 4 support staff workstations
Volunteer Office	212 N.S.F.	Touchdown / landing area
Conference Room	581 N.S.F.	
Therapy Storage	248 N.S.F.	
Multipurpose Storage	548 N.S.F.	
Promenade Janitor	38 N.S.F.	
Admin Office Storage	61 N.S.F.	
Admin Office Small Storage	17 N.S.F.	
Admin Office IDF	17 N.S.F.	
Total Admin/Office Program	5,574 N.S.F.	
Back of House		
Central Kitchen	983 N.S.F.	
Central Kitchen - Freezer	117 N.S.F.	
Central Kitchen - Meat Freezer	117 N.S.F.	
Central Kitchen - Cooler	279 N.S.F.	
Central Kitchen - Dry Storage	323 N.S.F.	
Central Kitchen - Emergency Food Storage	231 N.S.F.	
Central Kitchen - Dish Wash	319 N.S.F.	
Central Kitchen - Jan./Vestibule	40 N.S.F.	
Central Kitchen - Kitchen Toilet	47 N.S.F.	
Women Lockers	242 N.S.F.	
Men Lockers	242 N.S.F.	
Shower/tit	86 N.S.F.	
Staff Toilet	54 N.S.F.	
Staff Toilet	68 N.S.F.	
Staff Toilet	69 N.S.F.	
Classroom Storage	187 N.S.F.	
Classroom Storage	54 N.S.F.	
Pharmacy Narcotics Storage	51 N.S.F.	
Facility Manager	113 N.S.F.	
Procurement Supervisor	120 N.S.F.	
Procurement Office	120 N.S.F.	
Technology Office	120 N.S.F.	
Plant / Housekeeping Office	120 N.S.F.	
Warehouse / Plant Supervisor Office	120 N.S.F.	
Lactation	70 N.S.F.	
Classroom	654 N.S.F.	
Pharmacy	371 N.S.F.	
Pharmacy Office	143 N.S.F.	
Staff Break Room	562 N.S.F.	
Central Laundry - Clean Utility	181 N.S.F.	
Central Laundry - Dryers	307 N.S.F.	
Central Laundry - Washers	307 N.S.F.	
Central Laundry - Soiled Utility	234 N.S.F.	
Resident Item Storage	261 N.S.F.	
Janitor	50 N.S.F.	
Bio. Hazard Hold	42 N.S.F.	
Housekeeping Storage	152 N.S.F.	
Total Back of House	7,556 N.S.F.	
Circulation		
Promenade	3,445 N.S.F.	
Administration Suite Corridor	941 N.S.F.	
Service Corridor	2,514 N.S.F.	
Total Circulation	6,900 N.S.F.	
Total Community Center Program Area	30,133 N.S.F.	

Legend	
	Circulation
	Resident Room
	Resident Amenities
	Staff / Administrative Offices
	Dining / Food Service
	Laundry
	Storage / Support
	Toilets / Bathing

Building Efficiency (program net * vs. gross)**

69.6%

* net area = program areas (inc circulation)

** gross area = circulation + walls/chases

30,133 N.S.F.
41,307 N.S.F.
41,307 N.S.F.
1,788 N.S.F.
1,780 N.S.F.
3,600 N.S.F.
119,915 N.S.F.

Neighborhood 'A'				
Program	Multiplier	Net Area	Cumulative	Remarks
Resident Rooms/Bathrooms				
Special Needs Resident Room	6	278 N.S.F.	1,668 N.S.F.	Provide piped medical gases + Ceiling Mounted Lift System
Private Room	54	247 N.S.F.	13,338 N.S.F.	Provide Ceiling Mounted Lift System
Special Needs Toilet	6	93 N.S.F.	558 N.S.F.	Provide piped medical gases + Ceiling Mounted Lift System
Private Toilet	54	69 N.S.F.	3,726 N.S.F.	Provide Ceiling Mounted Lift System
Total Resident rooms			19,290 N.S.F.	
Common Areas				
Dining	2	733 N.S.F.	1,466 N.S.F.	
Dining	1	651 N.S.F.	651 N.S.F.	
Private / Restorative Dining	1	172 N.S.F.	172 N.S.F.	
Servery	1	243 N.S.F.	243 N.S.F.	
Servery	1	219 N.S.F.	219 N.S.F.	
Pantry	1	178 N.S.F.	178 N.S.F.	
Quiet Room/Den	3	217 N.S.F.	651 N.S.F.	
Library/Computer	3	217 N.S.F.	651 N.S.F.	
Living Room	3	479 N.S.F.	1,437 N.S.F.	
Conservatory	1	399 N.S.F.	399 N.S.F.	
Conservatory	1	200 N.S.F.	200 N.S.F.	
Snoezelen	1	226 N.S.F.	226 N.S.F.	
Resident Laundry	1	100 N.S.F.	100 N.S.F.	
Bathing Suite	1	208 N.S.F.	208 N.S.F.	Provide Ceiling Mounted Lift System
Public Toilet	3	60 N.S.F.	180 N.S.F.	
Total Resident Amenities			6,981 N.S.F.	
Staff/Support Areas				
Nourishment	3	12 N.S.F.	36 N.S.F.	
Caregiver Workstation	3	131 N.S.F.	393 N.S.F.	
Staff Break Room	1	208 N.S.F.	208 N.S.F.	
Housekeeping	3	45 N.S.F.	135 N.S.F.	
Care Planning / Conference	1	317 N.S.F.	317 N.S.F.	
Medication Room	1	149 N.S.F.	149 N.S.F.	
RCM (Nurse Manager)	1	110 N.S.F.	110 N.S.F.	
Infection Control Office	1	114 N.S.F.	114 N.S.F.	
Social Services Office	1	114 N.S.F.	114 N.S.F.	
Staff Developer	1	114 N.S.F.	114 N.S.F.	
MDS Office	1	114 N.S.F.	114 N.S.F.	
Exam Room	1	111 N.S.F.	111 N.S.F.	
Staff Toilet	1	67 N.S.F.	67 N.S.F.	
Clean Supply	1	100 N.S.F.	100 N.S.F.	
Central Storage	1	186 N.S.F.	186 N.S.F.	
IDF	1	80 N.S.F.	80 N.S.F.	
Electrical	1	80 N.S.F.	80 N.S.F.	
Oxygen Storage	1	59 N.S.F.	59 N.S.F.	
Lift Storage	3	151 N.S.F.	453 N.S.F.	
General Storage	3	160 N.S.F.	480 N.S.F.	
Medical Equipment	3	156 N.S.F.	468 N.S.F.	
Equipment Storage	1	226 N.S.F.	226 N.S.F.	
Soiled Utility	6	90 N.S.F.	540 N.S.F.	
Clean Utility	6	90 N.S.F.	540 N.S.F.	
Total Staff / Support			5,194 N.S.F.	
Circulation				
Household Corridor	3	1,048 N.S.F.	3,144 N.S.F.	
Household Corridor	3	1,005 N.S.F.	3,015 N.S.F.	
Household Corridor	3	699 N.S.F.	2,097 N.S.F.	
Central Corridor / Connector	1	1,586 N.S.F.	1,586 N.S.F.	
Total Circulation			9,842 N.S.F.	
Total Neighborhood 'A' Program Area			41,307 N.S.F.	

Legend	
	Circulation
	Resident Room
	Resident Amenities
	Staff / Administrative Offices
	Dining / Food Service
	Laundry
	Storage / Support

Building Efficiency (program net * vs. gross **)

69.1%

* net area = program areas (inc circulation)

** gross area = circulation + walls/chases

Neighborhood 'B'				
Program	Multiplier	Net Area	Cumulative	Remarks
Resident Rooms/Bathrooms				
Specials Needs Resident Room	6	278 N.S.F.	1,668 N.S.F.	Provide piped medical gases + Ceiling Mounted Lift System
Private Room	54	247 N.S.F.	13,338 N.S.F.	Provide Ceiling Mounted Lift System
Special Needs Toilet	6	93 N.S.F.	558 N.S.F.	Provide piped medical gases + Ceiling Mounted Lift System
Private Toilet	54	69 N.S.F.	3,726 N.S.F.	Provide Ceiling Mounted Lift System
Total Resident rooms			19,290 N.S.F.	
Common Areas				
Dining	2	733 N.S.F.	1,466 N.S.F.	
Dining	1	651 N.S.F.	651 N.S.F.	
Private / Restorative Dining	1	172 N.S.F.	172 N.S.F.	
Servery	1	243 N.S.F.	243 N.S.F.	
Servery	1	219 N.S.F.	219 N.S.F.	
Pantry	1	178 N.S.F.	178 N.S.F.	
Quiet Room/Den	3	217 N.S.F.	651 N.S.F.	
Library/Computer	3	217 N.S.F.	651 N.S.F.	
Living Room	3	479 N.S.F.	1,437 N.S.F.	
Conservatory	1	399 N.S.F.	399 N.S.F.	
Conservatory	1	200 N.S.F.	200 N.S.F.	
Snoezelen	1	226 N.S.F.	226 N.S.F.	
Resident Laundry	1	100 N.S.F.	100 N.S.F.	
Bathing Suite	1	208 N.S.F.	208 N.S.F.	Provide Ceiling Mounted Lift System
Public Toilet	3	60 N.S.F.	180 N.S.F.	
Total Resident Amenities			6,981 N.S.F.	
Staff/Support Areas				
Nourishment	3	12 N.S.F.	36 N.S.F.	
Caregiver Workstation	3	131 N.S.F.	393 N.S.F.	
Staff Break Room	1	208 N.S.F.	208 N.S.F.	
Housekeeping	3	45 N.S.F.	135 N.S.F.	
Care Planning / Conference	1	317 N.S.F.	317 N.S.F.	
Medication Room	1	149 N.S.F.	149 N.S.F.	
RCM (Nurse Manager)	1	110 N.S.F.	110 N.S.F.	
RCM (Nurse Manager) - Memory Care	1	114 N.S.F.	114 N.S.F.	
Social Services Office	1	114 N.S.F.	114 N.S.F.	
Staff Developer	1	114 N.S.F.	114 N.S.F.	
MDS Office	1	114 N.S.F.	114 N.S.F.	
Exam Room	1	111 N.S.F.	111 N.S.F.	
Staff Toilet	1	67 N.S.F.	67 N.S.F.	
Clean Supply	1	100 N.S.F.	100 N.S.F.	
Central Storage	1	186 N.S.F.	186 N.S.F.	
IDF	1	80 N.S.F.	80 N.S.F.	
Electrical	1	80 N.S.F.	80 N.S.F.	
Oxygen Storage	1	59 N.S.F.	59 N.S.F.	
Lift Storage	3	151 N.S.F.	453 N.S.F.	
General Storage	3	160 N.S.F.	480 N.S.F.	
Medical Equipment	3	156 N.S.F.	468 N.S.F.	
Equipment Storage	1	226 N.S.F.	226 N.S.F.	
Soiled Utility	6	90 N.S.F.	540 N.S.F.	
Clean Utility	6	90 N.S.F.	540 N.S.F.	
Total Staff / Support			5,194 N.S.F.	
Circulation				
Household Corridor	3	1,048 N.S.F.	3,144 N.S.F.	
Household Corridor	3	1,005 N.S.F.	3,015 N.S.F.	
Household Corridor	3	699 N.S.F.	2,097 N.S.F.	
Central Corridor / Connector	1	1,586 N.S.F.	1,586 N.S.F.	
Total Circulation			9,842 N.S.F.	
Total Neighborhood 'A' Program Area			41,307 N.S.F.	

Legend	
	Circulation
	Resident Room
	Resident Amenities
	Staff / Administrative Offices
	Dining / Food Service
	Laundry
	Storage / Support

Building Efficiency (program net * vs. gross **)

69.1%

* net area = program areas (nic circulation)

** gross area = circulation + walls/chases

Washington State Veterans Home - Spokane Replacement

Revised: 10 October, 2024

Warehouse Building	
Program	Area
Warehouse/Maint. Storage	1,497 N.S.F.
Shop Keeper / Receiving	80 N.S.F.
Maintenance / Workshop	211 N.S.F.
Total Warehouse Building	1,788 N.S.F.

Building Efficiency (program net * vs. gross **) 99.3%

* net area = program areas (nic circulation)

** gross area = circulation + walls/chases

Legend	
	Circulation
	Resident Room
	Resident Amenities
	Staff / Administrative Offices
	Dining / Food Service
	Laundry
	Storage / Support
	Toilets / Bathing

Warehouse Building	
Program	Area
General Storage	3,600 N.S.F.
Total Warehouse Building	3,600 N.S.F.

Legend	
	Storage / Support

Building Efficiency (program net * vs. gross **) 95.7%

* net area = program areas (nic circulation)

** gross area = circulation + walls/chases

Support Building / Central Plant	
Program	Area
Central Plant	1,294 N.S.F.
Emergency Electrical	206 N.S.F.
Normal Electrical	156 N.S.F.
MDF	124 N.S.F.
Total Support / Central Plant Building	1,780 N.S.F.

Building Efficiency (program net * vs. gross **) 93.0%

* net area = program areas (nic circulation)

** gross area = circulation + walls/chases

Legend	
	Circulation
	Resident Room
	Resident Amenities
	Staff / Administrative Offices
	Dining / Food Service
	Laundry
	Storage / Support
	Toilets / Bathing

Site Amenities	
Community Center Outdoor Areas	Area
Covered Entry Plaza	2,141 S.F.
Multipurpose Covered Porch	846 S.F.
Therapy Covered Porch	505 S.F.
Sports Bar Covered Porch	671 S.F.
Staff Break Room Covered Porch	274 S.F.
Central Dining Covered Porch	949 S.F.
Covered Service / Loading Dock	2,476 S.F.
Total Covered Outdoor Area	7,862 S.F.
Therapy Garden (uncovered)	863 S.F.
Event Plaza (uncovered)	3,457 S.F.
Flag Plaza (uncovered)	5,736 S.F.
Total Uncovered Outdoor Area	10,056 S.F.

Legend	
	Covered Areas / Roof Overhang
	Garden / Courtyards

Neighborhood 'A' Outdoor Areas	Area
Covered Dining / Living Room Porch	208 S.F.
Covered Dining / Living Room Porch	208 S.F.
Covered Dining / Living Room Porch	208 S.F.
Gazebo	378 S.F.
Gazebo	245 S.F.
Covered Staff Porch	337 S.F.
Total Covered Outdoor Area	1,584 S.F.
Secure Resident Garden (uncovered)	3,038 S.F.
Secure Resident Garden (uncovered)	3,038 S.F.
Staff Garden 'A' (uncovered)	1,639 S.F.
Total Uncovered Outdoor Area	7,715 S.F.

Neighborhood 'B' Outdoor Areas	Area
Covered Dining / Living Room Porch	208 S.F.
Covered Dining / Living Room Porch	208 S.F.
Covered Dining / Living Room Porch	208 S.F.
Gazebo	378 S.F.
Gazebo	245 S.F.
Covered Staff Porch	337 S.F.
Total Covered Outdoor Area	1,584 S.F.
Secure Resident Garden (uncovered)	3,038 S.F.
Secure Resident Garden (uncovered)	3,038 S.F.
Staff Garden 'B' (uncovered)	1,639 S.F.
Total Uncovered Outdoor Area	7,715 S.F.

BUILDING SUMMARY	
Program	Area
Community Center Gross SF	33,392 S.F.
Community Center Net SF	30,133 S.F.
Walls/Chases	3,259 S.F.

Legend	
	Community Center
	Neighborhoods
	Support Buildings
	Adult Day Healthcare

Program	Area
Neighborhood 'A' Gross SF	45,567 S.F.
South Neighborhood Net SF	41,307 S.F.
Walls/Chases	4,260 S.F.

Program	Area
Neighborhood 'B' Gross SF	45,567 S.F.
North Neighborhood Net SF	41,307 S.F.
Walls/Chases	4,260 S.F.

Program	Area
Warehouse Building Gross SF	1,800 S.F.
Warehouse Building Net SF	1,788 S.F.
Walls/Chases	12 S.F.

Program	Area
Central Plant Gross SF	1,915 S.F.
Central Plant Net SF	1,780 S.F.
Walls/Chases	135 S.F.

Program	Area
Storage Building Gross SF	3,763 S.F.
General Storage	3,600 S.F.
Walls/Chases	163 S.F.



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

October 3, 2024

Mirach Sebhat
WA Department of Veterans Affairs
1102 Quince St SE
Olympia, WA 98501

RE: WDVA Spokane Veterans Home Replacement Project
Log No: 2024-10-07091-NRCS

Dear Mirach Sebhat:

Thank you for contacting our department as the delegated federal representative for purpose of Section 106 NHPA consultation. We have reviewed the information you provided for the proposed *WDVA Spokane Veterans Home Replacement Project*, Spokane County, Washington.

Thank you for your description of the Area of Potential Effect (APE). We concur with your determination of the Area of Potential Effect as illustrated in the attached figures.

We look forward to receiving the results of your review, consultations with the concerned tribes, the on-site professional archaeological survey, and the Determination of Effect.

We would also appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4).

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer in compliance with the Section 106 of the National Historic Preservation Act, as amended, and the implementing regulations 36CFR800.4. Should additional information become available, our assessment may be revised, including information regarding historic properties that have not yet been identified. Thank you for the opportunity to comment and we look forward to receiving the reports on the results of your investigations.

Sincerely,

Robert G. Whitlam, Ph.D.
State Archaeologist
(360) 890-2615
email: rob.whitlam@dahp.wa.gov





STATE OF WASHINGTON
DEPARTMENT OF VETERANS AFFAIRS

1102 Quince Street, Box 41150 • Olympia, Washington 98504-1150 • (360) 753-5586

10/3/2024

Subject: Request for Comments on WDVA Spokane Veterans Home Replacement Project

The Honorable Carole Evans, Chair
The Spokane Tribe
PO Box 100
Wellpinit, WA 99040

Dear The Honorable Carole Evans, Chair

In alignment with our obligations under Executive Order 21-02, we are reaching out to request your input and comments regarding any potential impacts of the WDVA Spokane Veterans Home Replacement Project on cultural resources.

The proposed project involves constructing a new 120-128 bed skilled nursing facility on a currently vacant parcel adjacent to Fairmount Memorial Park (Parcel Number: 26341.0007), located at 5200 W Wellesley Ave, Spokane, WA 99205. This property is owned by the Fairmount Memorial Association. The project will replace the outdated Spokane Veterans Home (SVH), originally built in the 1970s. The current SVH design, with hospital-like features and two-person rooms separated by curtains, presents challenges to privacy and infection control.

The new facility will be based on the small-house model, providing private rooms, communal living areas, and a dedicated memory care unit to meet both state and federal standards. Expanded outdoor areas will be incorporated to enhance the quality of life for residents. This project is essential to address the increasing demand for long-term care services for veterans in the region.

We have attached documentation that outlines the project's location and scope for your review. We kindly ask for your comments and insights, particularly regarding any potential effects on cultural resources. We value the perspectives of tribal communities and are committed to preserving and protecting these important resources.

Thank you for your attention to this matter. If you have any questions or require further information, please do not hesitate to contact Mirach Sebhat at (360) 451-2296 or via email at mirach.sebhat@dva.wa.gov.

Best Regards,

Yacob Zekarias
Director, DVA Budget and Capital Program
Phone – 253-545-1942

Enclosures:

DAHP Review Letter and Map of the site
Property Information from Spokane County Records -
<https://cp.spokanecounty.org/SCOUT/Map/?PID=26341.0007>



**Spokane Tribe of Indians
Tribal Historic Preservation Officer**

P.P. Box 100 Wellpinit WA 99040

October 14, 2024

To: Mirach Sebhat, DVA Capital Program

RE: SVH Replacement project

Mr. Sebhat,

Thank you for contacting the Tribe's Historic Preservation Office. We appreciate the opportunity to provide a cultural consult for your project. The intent of this process is to preserve and protect all cultural resources whenever protection is feasible.

After archive research this area has a high probability for cultural resources, however; due to extensive previous disturbance the Spokane Tribe will not ask for a cultural survey at this time.

RE: This project will require an **inadvertent discovery plan of action** implemented into the scope of work.

This letter is your notification that your project has been cleared, and your project may move forward. As always, if any artifacts or human remains are found upon excavation, this office should be immediately notified and the work in the immediate area **cease**.

Should additional information become available, or the scope of work changes, our assessment may be revised. Again, thank you for this opportunity to comment and consider this a positive action that will assist in protecting our shared heritage.

If questions arise, please contact me at (509) 258 – 4222.

Sincerely,

Randy Abrahamson
Tribal Historic Preservation Officer - THPO

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2024

Agency	Department of Veterans Affairs	
Project Name	Spokane Replacement Facility - 120-bed nursing home	
OFM Project Number		

Contact Information

Name	Michael Kolejka - General Partner - Orcutt Winslow Architects	
Phone Number	602-214-6609	
Email	kolejka.m@owp.com	

Statistics

Gross Square Feet	132,004	MACC per Gross Square Foot	\$729
Usable Square Feet	119,915	Escalated MACC per Gross Square Foot	\$819
Alt Gross Unit of Measure	N/A		
Space Efficiency	90.8%	A/E Fee Class	B
Construction Type	Nursing homes	A/E Fee Percentage	5.88%
Remodel	No	Projected Life of Asset (Years)	50

Additional Project Details

Procurement Approach	DBB	Art Requirement Applies	Yes
Inflation Rate	3.33%	Higher Ed Institution	No
Sales Tax Rate %	10.00%	Location Used for Tax Rate	Spokane
Contingency Rate	5%		
Base Month (Estimate Date)	October-24	OFM UFI# (from FPMT, if available)	
Project Administered By	DES		

Schedule

Predesign Start	September-24	Predesign End	December-25
Design Start	September-25	Design End	November-26
Construction Start	July-27	Construction End	June-29
Construction Duration	24 Months		

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Project Cost Summary

Total Project	\$139,432,171	Total Project Escalated	\$155,145,211
		Rounded Escalated Total	\$155,145,000
Amount funded in Prior Biennia			\$0
Amount in current Biennium			\$0
Next Biennium			\$0
Out Years			\$155,145,000

Acquisition

Acquisition Subtotal	\$8,000,000	Acquisition Subtotal Escalated	\$8,000,000
----------------------	-------------	--------------------------------	-------------

Consultant Services			
Predesign Services	\$0		
Design Phase Services	\$4,099,252		
Extra Services	\$1,847,777		
Other Services	\$2,557,893		
Design Services Contingency	\$425,246		
Consultant Services Subtotal	\$8,930,168	Consultant Services Subtotal Escalated	\$9,619,485

Construction			
Maximum Allowable Construction Cost (MACC)	\$96,225,226	Maximum Allowable Construction Cost (MACC) Escalated	\$108,056,339
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$4,811,261		\$5,432,877
Non-Taxable Items	\$0		\$0
Sales Tax	\$10,103,649	Sales Tax Escalated	\$11,349,003
Construction Subtotal	\$111,140,136	Construction Subtotal Escalated	\$124,838,219

Equipment			
Equipment	\$7,200,000		
Sales Tax	\$720,000		
Non-Taxable Items	\$0		
Equipment Subtotal	\$7,920,000	Equipment Subtotal Escalated	\$8,943,264

Artwork			
Artwork Subtotal	\$771,867	Artwork Subtotal Escalated	\$771,867

Agency Project Administration			
Agency Project Administration Subtotal	\$0		
DES Additional Services Subtotal	\$1,500,000		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$1,500,000	Project Administration Subtotal Escalated	\$1,693,800

Other Costs			
Other Costs Subtotal	\$1,170,000	Other Costs Subtotal Escalated	\$1,278,576

Project Cost Estimate			
Total Project	\$139,432,171	Total Project Escalated	\$155,145,211
		Rounded Escalated Total	\$155,145,000

Funding Summary

Project Cost (Escalated)			Funded in Prior Biennia	Current Biennium		Out Years	
				2025-2027	2027-2029		
Acquisition							
Acquisition Subtotal	\$8,000,000						\$8,000,000
Consultant Services							
Consultant Services Subtotal	\$9,619,485						\$9,619,485
Construction							
Construction Subtotal	\$124,838,219						\$124,838,219
Equipment							
Equipment Subtotal	\$8,943,264						\$8,943,264
Artwork							
Artwork Subtotal	\$771,867						\$771,867
Agency Project Administration							
Project Administration Subtotal	\$1,693,800						\$1,693,800
Other Costs							
Other Costs Subtotal	\$1,278,576						\$1,278,576
Project Cost Estimate							
Total Project	\$155,145,211	\$0		\$0		\$0	\$155,145,211
	\$155,145,000	\$0		\$0		\$0	\$155,145,000
Percentage requested as a new appropriation				0%			

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)

Insert Row Here

What has been completed or is underway with a previous appropriation?

Insert Row Here

What is planned with a future appropriation?

Insert Row Here

Cost Estimate Details

Acquisition Costs					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Purchase/Lease	\$8,000,000				
Appraisal and Closing	\$0				
Right of Way	\$0				
Demolition	\$0				
Pre-Site Development	\$0				
Soil remediation	\$0				
Insert Row Here					
ACQUISITION TOTAL	\$8,000,000		NA	\$8,000,000	

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Cost Estimate Details

Consultant Services				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
1) Pre-Schematic Design Services				
Programming/Site Analysis	\$0			
Environmental Analysis	\$0			
Predesign Study	\$0			
Other	\$0			Work already appropriated
Insert Row Here				
Sub TOTAL	\$0	1.0305	\$0	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	\$4,099,252			69% of A/E Basic Services
Other				
Insert Row Here	\$0			
Sub TOTAL	\$4,099,252	1.0511	\$4,308,725	Escalated to Mid-Design
3) Extra Services				
Civil Design (Above Basic Svcs)	\$0			**Confirm if in Basic Services
Geotechnical Investigation	\$60,000			On call consultant
Commissioning	\$95,000			On call consultant
Site Survey	\$20,000			
Testing	\$10,000			
LEED Services	\$30,000			O/W optional services
Voice/Data Consultant	\$90,555			
Value Engineering	\$25,000			3rd party review for bldg > \$5M
Constructability Review	\$40,000			3rd party review for bldg > \$5M
Environmental Mitigation (EIS)	\$30,000			
Landscape Consultant	\$200,000			Increased to cover pond design
Supplmental Interior Design	\$200,000			Part of this is basic services
Program Revisit	\$20,000			
Security and Access Consultant	\$25,000			
Energy Conservation Report (ELCCA)	\$38,000			
Document Reproduction	\$5,000			
Kitchen / Food Service	\$36,222			
Laundry	\$15,000			
Art Work Design Coordination	\$17,500			Coordinate with artist
SEPA Services	\$20,000			Environmental Impact Permit
Energy Modeling for Code	\$38,500			
Executive Order 13-03 (LCCT)	\$46,300			
NPDES Design Services	\$14,200			
Fire and Lifesafety Consultant	\$28,400			
Life Cycle Cost Assessment Tool	\$32,400			
Models and Animations	\$50,000			

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Cost Estimate Details

Construction Contracts				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
1) Site Work				
G10 - Site Preparation	\$1,079,608			
G20 - Site Improvements	\$6,753,297			
G30 - Site Mechanical Utilities	\$2,649,253			
G40 - Site Electrical Utilities	\$2,036,709			
G60 - Other Site Construction	\$298,615			
Design contingency (15%)	\$1,922,622			
Contractor Markup (6%)	\$769,048.91			
Contractor Markup	\$0			included in building total
Sub TOTAL	\$15,509,153	1.0928	\$16,948,403	
2) Related Project Costs				
Offsite Improvements	\$1,007,000			
City Utilities Relocation				
Parking Mitigation				
Stormwater Retention/Detention				
Sub TOTAL	\$1,007,000	1.0928	\$1,100,450	
3) Facility Construction				
A10 - Foundations	\$4,428,366			
A20 - Basement Construction	\$0			
B10 - Superstructure	\$2,872,674			
B20 - Exterior Closure	\$9,397,062			
B30 - Roofing	\$3,622,454			
C10 - Interior Construction	\$6,191,414			
C20 - Stairs	\$0			
C30 - Interior Finishes	\$5,565,197			
D10 - Conveying	\$0			
D20 - Plumbing Systems	\$4,937,802			
D30 - HVAC Systems	\$11,053,178			
D40 - Fire Protection Systems	\$665,629			
D50 - Electrical Systems	\$13,020,949			
F10 - Special Construction	\$0			
F20 - Selective Demolition	\$0			
General Conditions	\$3,000,000			
Casework and Furnishings	\$1,105,170			
Estimating / Design Contingency	\$9,523,699			
Photovoltaic Arrays	\$480,000			
Building Mockup (on-site)	\$36,000			
Contractor Markup	\$3,809,480			
Sub TOTAL	\$79,709,073	1.1292	\$90,007,486	
4) Maximum Allowable Construction Cost				

MACC Sub TOTAL	\$96,225,226	\$108,056,339
	\$729	\$819 per GSF

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7) Owner Construction Contingency		
Allowance for Change Orders	\$4,811,261	
Other		
Insert Row Here		
Sub TOTAL	\$4,811,261	1.1292 \$5,432,877

8) Non-Taxable Items		
Other		
Insert Row Here		
Sub TOTAL	\$0	1.1292 \$0

9) Sales Tax		
Sub TOTAL	\$10,103,649	\$11,349,003

CONSTRUCTION CONTRACTS TOTAL	\$111,140,136	\$124,838,219
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Cost Estimate Details

Equipment				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
1) Equipment				
E10 - Equipment	\$3,400,000			
E20 - Furnishings	\$3,800,000			
F10 - Special Construction				
Other				
Insert Row Here				
Sub TOTAL	\$7,200,000	1.1292	\$8,130,240	
2) Non Taxable Items				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.1292	\$0	
3) Sales Tax				
Sub TOTAL	\$720,000		\$813,024	
EQUIPMENT TOTAL	\$7,920,000		\$8,943,264	

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Cost Estimate Details

Artwork					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Artwork					
Project Artwork	\$771,867				0.5% of total project cost for new construction
Higher Ed Artwork	\$0				0.5% of total project cost for new and renewal construction
Other					
Insert Row Here					
ARTWORK TOTAL	\$771,867		NA	\$771,867	

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Cost Estimate Details

Project Management					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Agency Project Management					
Agency Project Management	\$0				
Additional Services	\$1,500,000				WDVA Agency Expenses
Finance Recovery Fee	\$0				
Alternatively Funded PM Fee	\$0				
Subtotal of Other	\$0				
PROJECT MANAGEMENT TOTAL	\$1,500,000		1.1292	\$1,693,800	

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Cost Estimate Details

Other Costs					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Mitigation Costs					
Hazardous Material Remediation/Removal					
Historic and Archeological Mitigation	\$50,000				
Building Permit Fees	\$650,000				
Permit Technology Fee	\$50,000				
Land Use & Planning Application	\$10,000				
City - Engineering/General Facilities Fees	\$200,000				
City - MEPF Plan Review Fees	\$20,000				
Furniture Rental	\$0				
Off-site Funiture Storage	\$0				
Moving Costs	\$90,000				
Bldg. & Grounds Trades Support	\$50,000				
Traffic Impact Fee	\$50,000				
Insert Row Here					
OTHER COSTS TOTAL	\$1,170,000	1.0928	\$1,278,576		

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C-100(2024)
Additional Notes

Tab A. Acquisition

Insert Row Here

Tab B. Consultant Services

Insert Row Here

Tab C. Construction Contracts

Insert Row Here

Tab D. Equipment

Insert Row Here

Tab E. Artwork

Insert Row Here

Tab F. Project Management

Insert Row Here

Tab G. Other Costs

Insert Row Here

PROJECT BUDGET - 120-Bed Skilled Nursing Facility (20-Bed Household Option)

NOTE: Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation. If such is the case, you will be notified

COST CLASSIFICATION	a. Total Cost	b. Costs Not Allowable for Participation	c. Total Allowable Costs (Columns a-b)
1. Administrative and legal expenses	\$ 2,000,000.00	\$ -	\$ 2,000,000.00
2. Land, structures, rights-of-way, appraisals, etc.	\$ 8,000,000.00	\$ 8,000,000.00	\$ -
3. Relocation expenses and payments <i>(Included in FF&E Budget)</i>	\$ -	\$ -	\$ -
4. Architectural and engineering fees	\$ 9,619,485.00	\$ -	\$ 9,619,485.00
5. Other architectural and engineering fees <i>(total per C-100)</i>	\$ 1,278,576.00	\$ -	\$ 1,278,576.00
6. Project inspection fees <i>(included in administrative fees)</i>	\$ -	\$ -	\$ -
7. Site work	\$ 18,677,707.62	\$ 1,100,752.00	\$ 17,576,955.62
8. Demolition and removal		\$ -	\$ -
9. Construction	\$ 100,727,634.38	\$ -	\$ 100,727,634.38
10. Equipment <i>(includes artwork from C-100)</i>	\$ 9,715,131.00	\$ -	\$ 9,715,131.00
11. Miscellaneous	\$ -	\$ -	\$ -
12. SUBTOTAL (sum of lines 1 - 11)	\$ 150,018,534.00	\$ 9,100,752.00	\$ 140,917,782.00
13. Contingencies	\$ 5,432,877.00	\$ -	\$ 5,432,877.00
14. SUBTOTAL	\$ 155,451,411.00	\$ 9,100,752.00	\$ 146,350,659.00
15. Project (program) income	\$ -	\$ -	\$ -
16. TOTAL PROJECT COSTS (subtract #15 from #14)	\$ 155,451,411.00	\$ 9,100,752.00	\$ 146,350,659.00
17. Federal assistance requested, calculate as follows: (Consult Federal agency for Federal percentage share.) Enter the resulting Federal share.			
Enter eligible costs from line 16c. Multiply X		65%	Federal VA Grant Contribution Total \$ 95,127,928.35
State of Washington Share of Total Pr		\$ 60,323,482.65	

SUMMARY TABLE OF UNIFORMAT LEVEL II COST ESTIMATES																	Daet: 14 October, 2024					
	Neighborhoods			Community Center			Storage			Warehouse			Central Plant			TOTAL BUILDING	SITE					
Foundation	\$	33.28	\$ 3,032,939.52	\$	31.80	\$ 1,030,065.60	\$	27.28	\$ 102,654.64	\$	37.21	\$ 66,978.00	\$	43.00	\$ 82,345.00	\$ 4,314,982.76	Site Preparation	\$	1.41	\$ 1,079,608.80		
Basement Construction	\$	-	\$ -	\$	-	\$ -	\$	-	\$ -	\$	-	\$ -	\$	-	\$ -	\$ -	Site Improvements	\$	8.82	\$ 6,753,297.60		
Superstructure	\$	18.35	\$ 1,672,308.90	\$	30.79	\$ 997,349.68	\$	0.99	\$ 3,725.37	\$	1.52	\$ 2,736.00	\$	41.78	\$ 80,008.70	\$ 2,756,128.65	Site Civil/Mech Util.	\$	2.97	\$ 2,274,069.60		
Exterior Enclosure	\$	78.16	\$ 7,123,033.44	\$	49.23	\$ 1,594,658.16	\$	16.97	\$ 63,858.11	\$	32.59	\$ 58,662.00	\$	146.63	\$ 280,796.45	\$ 9,121,008.16	Site Electrical	\$	2.66	\$ 2,036,708.80		
Roofing	\$	26.94	\$ 2,455,149.96	\$	27.72	\$ 897,906.24	\$	4.70	\$ 17,686.10	\$	5.53	\$ 9,954.00	\$	38.46	\$ 73,650.90	\$ 3,454,347.20	Other Site Const.	\$	0.39	\$ 298,615.20		
Interior Construction	\$	48.10	\$ 4,383,545.40	\$	49.17	\$ 1,592,714.64	\$	0.79	\$ 2,972.77	\$	2.76	\$ 4,968.00	\$	19.45	\$ 37,246.75	\$ 6,021,447.56						
Stairs	\$	-	\$ -	\$	-	\$ -	\$	-	\$ -	\$	-	\$ -	\$	-	\$ -	\$ -						
Interior Finishes	\$	43.20	\$ 3,936,988.80	\$	45.81	\$ 1,483,877.52	\$	5.25	\$ 19,755.75	\$	9.50	\$ 17,100.00	\$	14.77	\$ 28,284.55	\$ 5,486,006.62						
Conveying Systems	\$	-	\$ -	\$	-	\$ -	\$	-	\$ -	\$	-	\$ -	\$	-	\$ -	\$ -						
Plumbing	\$	51.26	\$ 4,671,528.84	\$	23.80	\$ 770,929.60	\$	-	\$ -	\$	7.84	\$ 14,112.00	\$	31.88	\$ 61,050.20	\$ 5,517,620.64						
HVAC	\$	86.73	\$ 7,904,051.82	\$	69.35	\$ 2,246,385.20	\$	9.83	\$ 36,990.29	\$	33.98	\$ 61,164.00	\$	911.04	\$ 1,744,641.60	\$ 11,993,232.91						
Fire Protection	\$	5.00	\$ 455,670.00	\$	5.00	\$ 161,960.00	\$	5.75	\$ 21,637.25	\$	5.75	\$ 10,350.00	\$	5.75	\$ 11,011.25	\$ 660,628.50						
Electical	\$	101.68	\$ 9,266,505.12	\$	103.71	\$ 3,359,374.32	\$	28.73	\$ 108,110.99	\$	65.54	\$ 117,972.00	\$	88.57	\$ 169,611.55	\$ 13,021,573.98						
Equipment	\$	0.77	\$ 70,173.18	\$	17.69	\$ 573,014.48	\$	-	\$ -	\$	-	\$ -	\$	2.35	\$ 4,500.25	\$ 647,687.91						
Casework & Furnishing	\$	9.18	\$ 836,610.12	\$	7.82	\$ 253,305.44	\$	0.92	\$ 3,461.96	\$	17.94	\$ 32,292.00	\$	1.49	\$ 2,853.35	\$ 1,128,522.87						
Special Construction	\$	-	\$ -	\$	-	\$ -	\$	100.00	\$ 376,300.00	\$	100.00	\$ 180,000.00	\$	-	\$ -	\$ 556,300.00						
Selective Demolition	\$	-	\$ -	\$	-	\$ -	\$	-	\$ -	\$	-	\$ -	\$	-	\$ -	\$ -						
SUBTOTAL			\$ 45,808,505.10			\$ 14,961,540.88			\$ 757,153.23			\$ 576,288.00			\$ 2,576,000.55	\$ 64,679,487.76	SUBTOTAL		\$	12,442,300.00		
Design Contingency	15%	\$	6,871,275.77	15%	\$	2,244,231.13	15%	\$	113,572.98	15%	\$	86,443.20	15%	\$	386,400.08	15%	\$	9,701,923.16	Design Contingency	15%	\$	1,866,345.00
Contractor Markup	6%	\$	2,748,510.31	6%	\$	897,692.45	6%	\$	45,429.19	6%	\$	34,577.28	6%	\$	154,560.03	6%	\$	3,880,769.27	Contractor Markup	6%	\$	746,538.00
TOTAL	\$		\$ 55,428,291.17	\$		\$ 18,103,464.46	\$		\$ 916,155.41	\$		\$ 697,308.48	\$		\$ 3,116,960.67	\$ 78,262,180.19	SITE TOTAL		\$	15,055,183.00		
General Conditions															\$ 125,000.00	24	\$	3,000,000.00				
Escalation																13%	\$	10,174,083.42				
																	\$ 91,436,263.61					
																	\$ 108,448,620.40	GRAND TOTAL		\$	17,012,356.79	



PROJECT INFORMATION

Washington State Veterans Home -Spokane

October 10, 2024

EXECUTIVE SUMMARY

<u>Owner:</u>	Department of Enterprise Services	<u>Estimate Date:</u>	October 10, 2024
<u>Name:</u>	Washington State Veterans Home -Spokane	<u>Building Area:</u>	147,123
<u>Location:</u>	Spokane, WA	<u>Site Area:</u>	765,680
 <u>Seattle Office:</u>	 Roen Associates 500 Union Street, Suite 927 Seattle, WA 98101	 <u>Contact Name:</u>	 Dan Deymonaz
		<u>Telephone:</u>	(206) 343-1003
		<u>E-mail:</u>	dan@roenassociates.com
 <u>Spokane Office:</u>	 Roen Associates 121 South Wall Spokane, WA 99201	 <u>Contact Name:</u>	
		<u>Telephone:</u>	
		<u>E-mail:</u>	
 <u>Project Type:</u>	 Veteran Housing		
<u>Estimate Level:</u>	SD Estimate		
<u>Project Start:</u>	Q2,2026	<u>Project Duration:</u>	24 months

DOCUMENTS REVIEWED

	<u>Document</u>	<u>A / E / C Firm</u>	<u>Date</u>
<u>Drawings:</u>	Conceptual Floor Plan / Programming	orcutt winslow	8/13/2024
<u>Reports:</u>			

Construction Cost Summary



Owner: Department of Enterprise Services

Project: Washington State Veterans Home -Spokane

ESTIMATED COSTS SUMMARY

October 10, 2024

Item	Description	QTY	UOM	\$ / UOM	Cost
1	Neighbord A &B	91,134	BGSF	\$ 612.71	\$ 55,838,880
2	Community Center	32,392	BGSF	\$ 563.03	\$ 18,237,732
3	Warehouse	1,800	BGSF	\$ 390.26	\$ 702,471
4	Storage Bldg.	3,763	BGSF	\$ 245.28	\$ 922,993
5	Central Plant (Chillers / Boilers / Water Softners)	1,915	BGSF	\$ 1,639.75	\$ 3,140,124
6	Sitework	765,680	SGA	\$ 19.82	\$ 15,172,981
7	General Conditions & Support Services	24	MO	\$ 125,000.00	\$ 3,000,000
Total Estimated Construction Cost (Today's Dollars)					\$ 97,015,181
8	Escalation to Midpoint (Q2, 2028)	10.00%	on	\$ 97,015,181	\$ 9,701,518
Total Construction Cost (Escalated)					\$ 106,716,699

Item	Description	QTY	UOM	\$ / UOM	Cost
1	Sitework - Off Site	30,000	SGA	\$ 26.85	\$ 805,454
2	General Conditions & Support Services	2	MO	\$ 55,000.00	\$ 110,000
Total Estimated Construction Cost (Today's Dollars)					\$ 915,454
3	Escalation to Midpoint (Q2, 2028)	10.00%	on	\$ 915,454	\$ 91,545
Total Construction Cost (Escalated)					\$ 1,007,000

ALTERNATES

01 Geothermal Well Field System \$ 3,862,709

COMMENTS:

Design, Bid, Build delivery method is assumed

Assumes a Q2,2026 start and a 24 month schedule

Escalation is predicted to be 4% in 2024 and 4% in 2025

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

Owner

Washington State Veterans Home - Spokane
SD Estimate



Project Owner: Department of Enterprise Services
Project Name: Washington State Veterans Home -Spokane
Project Location: Spokane, WA
Project Start Date: Q2,2026
Estimate Date: October 10, 2024

Architect: orcutt | winslow
Project Duration: 24 MO
Building GSF: 91,134
Site GSF: 765,680

<i>ESTIMATE SUMMARY - Neighborhoods A&B</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
A10	Foundations	91,134	BGSF	\$ 33.28	\$ 3,032,686
A20	Basement Construction	91,134	BGSF	\$ -	\$ -
B10	Superstructure	91,134	BGSF	\$ 18.35	\$ 1,672,237
B20	Exterior Enclosure	91,134	BGSF	\$ 78.16	\$ 7,122,929
B30	Roofing	91,134	BGSF	\$ 26.94	\$ 2,454,868
C10	Interior Construction	91,134	BGSF	\$ 48.10	\$ 4,383,959
C20	Stairs	91,134	BGSF	\$ -	\$ -
C30	Interior Finishes	91,134	BGSF	\$ 43.20	\$ 3,936,538
D10	Conveying Systems	91,134	BGSF	\$ -	\$ -
D20	Plumbing	91,134	BGSF	\$ 51.26	\$ 4,671,156
D30	HVAC	91,134	BGSF	\$ 86.73	\$ 7,903,915
D40	Fire Protection	91,134	BGSF	\$ 5.00	\$ 455,670
D50	Electrical	91,134	BGSF	\$ 101.68	\$ 9,266,790
E10	Equipment	91,134	BGSF	\$ 0.77	\$ 70,000
E20	Casework & Furnishings	91,134	BGSF	\$ 9.18	\$ 836,375
F10	Special Construction	91,134	BGSF	\$ -	\$ -
F20	Selective Demolition	91,134	BGSF	\$ -	\$ -
BUILDING CONSTRUCTION SUBTOTAL					\$ 45,807,121
Design Contingency				15.00%	\$ 6,871,068
Subtotal					\$ 52,678,189
Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)				6.00%	\$ 3,160,691
Subtotal					\$ 55,838,880
Escalation to Mid-Point (See Summary)					\$ -
BUILDING GRAND TOTAL		91,134	BGSF	\$ 612.71	\$ 55,838,880

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
A10	FOUNDATIONS				
	Foundation Earthwork				
	Footing Excavation and Backfill (Native Soil)	6,292	cy	\$ 30.00	\$ 188,764
	Footing Drains with Gravel	5,368	lf	\$ 25.00	\$ 134,200
	Foundations				
	Spread Footings (includes reinforcing)	12	cy	\$ 1,670.00	\$ 20,782
	Continuous Footings (includes reinforcing)	611	cy	\$ 870.00	\$ 531,667
	Perimeter Stem Wall (includes reinforcing)	163	cy	\$ 3,510.00	\$ 572,000
	Slab-on-Grade				
	Slab on Grade (includes reinforcing, base course and vapor barrier)	91,134	sf	\$ 14.30	\$ 1,303,216
			cy		
	Misc. Concrete				
	Housekeeping Pads - Allowance	2,000	sf	\$ 20.00	\$ 40,000
	Locker Room Bases - Allowance	150	sf	\$ 20.00	\$ 3,000
	Set Column Anchor Bolts	32	set	\$ 350.00	\$ 11,200
	Grout Baseplates	32	ea	\$ 75.00	\$ 2,400
	Perimeter Insulation / Waterproofing				
	2" Rigid Polystyrene	21,472	sf	\$ 4.00	\$ 85,888
	Stem Wall Dampproofing	21,472	sf	\$ 6.50	\$ 139,568
	SUBTOTAL FOUNDATIONS	91,134	BGSF	\$ 33.28	\$ 3,032,686
A20	BASEMENT CONSTRUCTION				
	Basement Construction				
	NIC				
	SUBTOTAL BASEMENT CONSTRUCTION	91,134	BGSF	\$ -	\$ -
B10	SUPERSTRUCTURE				
	Structural Steel				
	Floor & Roof Structure, Beams & Columns (includes 15% for connections)				
	HSS Tube Steel Beams & Columns - Allowance	9,878	lbs	\$ 4.00	\$ 39,512
	Wide Flange Beams & Columns - Allowance	7,728	lbs	\$ 3.50	\$ 27,048
	Open Web Steel Joist w Metal Roof Deck - 1.5"	410,103	lbs	\$ 3.25	\$ 1,332,835

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	Miscellaneous Metals				
	Allowance	91,134	gsf	\$ 0.50	\$ 45,567
	Plates and Measured Miscellaneous Steel Items	2,000	lbs	\$ 3.50	\$ 7,000
	Building Canopies / Covered Porches - Allowance	2,400	sf	\$ 75.00	\$ 180,000
	Connectors, Rough Hardware and Miscellaneous Blocking				
	Hold Downs - Allowance	336	ea	\$ 120.00	\$ 40,275
	Fireproofing				
	Firestopping - See Interior Partitions				
	SUBTOTAL SUPERSTRUCTURE	91,134	BGSF	\$ 18.35	\$ 1,672,237
B20 EXTERIOR ENCLOSURE					
	Exterior Wall Construction				
	Exterior Wall Assembly Allowance (GWB - Finish 1 Side, vapor barrier, metal studs 6", R-13 batt insulation, sheathing, 2 1/2" rigid insulation, WRB)	61,600	sf	\$ 37.50	\$ 2,310,000
	Loadbearing CMU or Concrete Walls - In B10 Superstructure Above				
	Exterior Wall Finish				
	Miscellaneous				
	Sill Flashing - Allowance	1	ls	\$ 30,000.00	\$ 30,000
	Metal Panels - Allowance				
	Standing Seam Metal Panel, Concealed Fastener	35,852	sf	\$ 40.00	\$ 1,434,080
	HPL Siding Panels - Allowance	8,624	sf	\$ 35.00	\$ 301,840
	Stucco - Allowance	8,624	sf	\$ 18.00	\$ 155,232
	Exterior Soffits				
	HPL Finish to Soffits (includes Framing, Sheathing & WRB)	6,600	sf	\$ 45.00	\$ 297,000
	Exterior Windows				
	Storefront / Windows, Standard Clear Anodized with Flashing	17,353	sf	105.00	\$ 1,822,065
	Curtain Wall, Standard Clear Anodized with Flashing	1,127	sf	135.00	\$ 152,145
	Exterior Doors				
	Storefront Entry Doors, Hardware, per leaf	32	ea	6,500.00	\$ 208,000
	Ext. HM Dr, HM Frame, Hardware, per leaf	32	ea	4,200.00	\$ 134,400
	Push Button ADA Auto Operators (per entrance) - Allowance	18	ea	10,000.00	\$ 180,000
	Premium for Electronic Hardware at Card Readers (Reader Devices included with Electrical) - Allowance	32	ea	1,000.00	\$ 32,000
	Exterior Paint & Sealants				
	Paint to HM Doors and Frames	32	ea	\$ 175.00	\$ 5,600
	Exterior - Control Joints, Caulking and Joint Sealants	91,134	gsf	\$ 0.50	\$ 45,567
	Building Graphics				
	Allowance for Building Signage	1	ls	\$ 15,000.00	\$ 15,000
	SUBTOTAL EXTERIOR ENCLOSURE	91,134	BGSF	\$ 78.16	\$ 7,122,929

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated
No.	Description		Measure	Cost	Cost
B30	ROOFING				
	Roof Coverings				
	Asphalt Shingle Roofing - Architectural Grade	97,908	sf	\$ 15.00	\$ 1,468,620
	Sheathing / Coverboard	97,908	sf	\$ 4.50	\$ 440,586
	Insulation				
	Attic R-38 Batt Insulation System	91,134	sf	\$ 3.00	\$ 273,402
	Flashing and Sheet Metal				
	Miscellaneous Roof Flashing and Rough Carpentry	5%	on	\$ 1,909,206	\$ 95,460
	Gutters	4,400	lf	\$ 25.00	\$ 110,000
	Downspouts	16	ea	\$ 300.00	\$ 4,800
	Roof Accessories				
	Fall Protection Anchors	40	ea	\$ 750.00	\$ 30,000
	Access Ladders	2	ea	\$ 3,500.00	\$ 7,000
	Roof Hatches	2	ea	\$ 2,500.00	\$ 5,000
	Smoke Hatch	2	ea	\$ 10,000.00	\$ 20,000
SUBTOTAL ROOFING		91,134	BGSF	\$ 26.94	\$ 2,454,868

C10 INTERIOR CONSTRUCTION					
Partitions					
	GWB Partition (GWB - Finish 2 Sides, metal studs 6", 3 1/2" sound batts)	84,134	sf	\$ 18.00	\$ 1,514,412
	GWB Partition (GWB - Finish 2 Sides, metal studs 3 5/8", 3 1/2" sound batts)	8,840	sf	\$ 17.00	\$ 150,280
	GWB Partition (GWB - Premium (1 Hr. Fire Rated))	12,620	sf	\$ 4.00	\$ 50,480
	Fire Caulking at Penetrations	91,134	gsf	\$ 0.35	\$ 31,897
	Interior - Caulking and Joint Sealants	91,134	gsf	\$ 0.30	\$ 27,340
	Miscellaneous Carpentry - Allowance	91,134	gsf	\$ 1.00	\$ 91,134
	Concrete & CMU Walls - See B10 Superstructure Above				
Interior Glazing - Target Value					
	Interior Storefront with 1/4" tempered glazing	1,823	sf	\$ 65.00	\$ 118,474
	HM Sidelights/Relites with 1/4" tempered glazing				Incl.
	HM Door Lite Glazing				Incl.
Interior Doors, Frames, Hardware					
	HM / SCW Dr, HM Frame, Hardware, Complete - per leaf	260	ea	\$ 4,200.00	\$ 1,092,000
	Pocket Door HM / SCW Dr, HM Frame, Hardware, Complete - p	126	ea	\$ 2,750.00	\$ 346,500
	Premium for Hardware at Card Readers (Reader Devices included with Electrical) - Allowance	18	ea	\$ 750.00	\$ 13,500
	Premium for 45 - 90 Minute Door	16	ea	\$ 750.00	\$ 12,000
	Aluminum Storefront Doors, HW, Complete - per leaf	38	ea	\$ 7,500.00	\$ 285,000
	Access Doors and Panels	91,134	gsf	\$ 0.10	\$ 9,113

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated
No.	Description		Measure	Cost	Cost
Fittings / Specialties					
	Visual Display Specialties				
	Marker Boards (6' x 4') - Allowance	24	ea	\$ 900.00	\$ 21,600
	Signage (Code and Wayfinding)	91,134	gsf	\$ 0.75	\$ 68,351
101400	Toilet Accessories				
102800	Baby Changing Station	2	ea	\$ 750.00	\$ 1,500
	Towel / Coat Hook	130	ea	\$ 45.00	\$ 5,850
	Folding Shower Seat	130	ea	\$ 500.00	\$ 65,000
	Framed Mirror	130	ea	\$ 150.00	\$ 19,500
	Grab Bars - Large ADA Stall (3 Total: 1 - Vertical, 2- Horizontal)	130	set	\$ 450.00	\$ 58,500
	Grab Bars - Shower Stall (3 Total: 1 - Vertical, 2- Horizontal)	130	set	\$ 400.00	\$ 52,000
	Mop and Broom Holder	4	ea	\$ 50.00	\$ 200
	Paper Towel Dispenser	130	ea	\$ 175.00	\$ 22,750
	Sanitary Napkin Dispenser	130	ea	\$ 75.00	\$ 9,750
	Sanitary Napkin Disposal	130	ea	\$ 85.00	\$ 11,050
	Shower Curtain	130	ea	\$ 100.00	\$ 13,000
	Shower Curtain Rod	130	ea	\$ 50.00	\$ 6,500
	Soap Dispenser	130	ea	\$ 85.00	\$ 11,050
	Toilet Paper Dispenser	130	ea	\$ 60.00	\$ 7,800
	Toilet Seat Cover Dispenser	130	ea	\$ 120.00	\$ 15,600
	Trash Receptacle (Recessed)	130	ea	\$ 350.00	\$ 45,500
	Wall and Door Protection				
	Crash / Hand Rails in Cooridors	4,400	lf	\$ 30.00	\$ 132,000
	Fire Protection Equipment				
	Fire Extinguishers	24	ea	\$ 65.00	\$ 1,560
	Fire Extinguisher Cabinets	24	ea	\$ 175.00	\$ 4,200
	Knox Box	4	ea	\$ 850.00	\$ 3,400
	Lockers (Metal) (Phenolic)				
	Double Tier	56	ea	\$ 350.00	\$ 19,600
	Misc. Specialties Allowance (FECs, Corner Guards, etc...)	91,134	gsf	\$ 0.50	\$ 45,567
SUBTOTAL INTERIOR CONSTRUCTION		91,134	BGSF	\$ 48.10	\$ 4,383,959
C20 STAIRS					
Stairs					NIC
SUBTOTAL STAIRS		91,134	BGSF	\$ -	\$ -

Owner

Washington State Veterans Home - Spokane
SD Estimate



<i>ESTIMATE SUMMARY</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
C30	INTERIOR FINISHES				
	Wall Finishes				
	Paint to Walls, Doors, Frames and Miscellaneous	91,134	gsf	\$ 5.00	\$ 455,670
	Restroom Wall Tile, Wainscot, Wood Trim and Chair Rail	91,134	sf	\$ 9.00	\$ 820,206
	Miscellaneous Finish Carpentry Allowance	91,134	gsf	\$ 2.00	\$ 182,268
	Bases				
	Rubber Base, Resilient Base, and Tile Base	15,022	lf	\$ 7.25	\$ 108,910
	Floor Finishes				
	Carpet, Ceramic Tile, Luxury Vinyl Tile, and Resilient Flooring	91,134	sf	\$ 14.75	\$ 1,344,227
	Floor Prep & Protection	91,134	sf	\$ 1.00	\$ 91,134
	Ceiling Finishes				
	ACT Ceiling (2x4), ACT Ceiling (2x2), and GWB Ceiling Painted	91,134	sf	\$ 10.25	\$ 934,124
	SUBTOTAL INTERIOR FINISHES	91,134	BGSF	\$ 43.20	\$ 3,936,538
D10	CONVEYING SYSTEMS				
	Conveying Systems				NIC
	SUBTOTAL CONVEYING SYSTEMS	91,134	BGSF	\$ -	\$ -
D20	PLUMBING				
	D20 Plumbing				
	D2010 Plumbing Fixtures				
	Bottle Fill/Drinking Fountain	8	ea	\$ 4,285.83	\$34,287
	Lav: CT	256	ea	\$ 760.65	\$194,727
	Lav: WH	2	ea	\$ 1,311.27	\$2,623
	Lav/DF Carrier	10	ea	\$ 388.01	\$3,880
	TMV-2 under counter	270	ea	\$ 332.07	\$89,659
	Sinks - Break & Servery	6	ea	\$ 1,440.50	\$8,643
	Sinks - Caregiver	8	ea	\$ 1,577.90	\$12,623
	Sink - Med, Exam	4	ea	\$ 1,715.31	\$6,861
	Sink - Laundry	4	ea	\$ 1,694.70	\$6,779
	Sink - Kitchen	2	ea	\$ 3,756.81	\$7,514
	Garbage Disp.	14	ea	\$ 416.48	\$5,831
	Ice Maker Connection:	14	ea	\$ 285.61	\$3,999
	Dishwasher Connection: (at sink)	6	ea	\$ 324.87	\$1,949
	Insta Hot at Sink	6	ea	\$ 732.84	\$4,397
	Service Sinks, Moded Stone: Custodial-2 ea., Decon-1 ea.	8	ea	\$ 2,051.31	\$16,410
	Water Closet	124	ea	\$ 2,431.71	\$301,532
	WC Carrier Single	124	ea	\$ 814.03	\$100,940

Owner

Washington State Veterans Home - Spokane
SD Estimate



<i>ESTIMATE SUMMARY</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	Shower	122	ea	\$ 6,084.62	\$742,323
	Coffee Maker Connection	6	ea	\$ 135.77	\$815
	Clothes Washer Box	8	ea	\$ 534.91	\$4,279
	Bathtub	2	ea	\$ 6,575.96	\$13,152
	Kitchen Fixtures: Standard	4	ea	\$ 309.50	\$1,238
	Kitchen Fixtures: Large (incl. equip.)	4	ea	\$ 984.10	\$3,936
	10" Hub Drain	8	ea	\$ 467.84	\$3,743
	Service Valves	16	ea	\$ 624.23	\$9,988
D2020 Domestic Water Distribution					
	Electric HWH	2	ea	\$ 14,185.76	\$28,372
	DHWHP	4	ea	\$ 33,540.68	\$134,163
	Domestic Water Storage Tank	2	ea	\$ 50,723.25	\$101,447
	Expansion Tank	4	ea	\$ 2,512.61	\$10,050
	Domestic Hot Water Circ Pump	10	ea	\$ 1,400.25	\$14,003
	Master Mixing Valve	2	ea	\$ 6,988.19	\$13,976
	Domestic Water Manifold & PRV	2	ea	\$ 4,370.89	\$8,742
	Reduced Pressure Backflow Assembly (RPBA)	2	ea	\$ 6,765.72	\$13,531
	RPBA: Non Potable Water Systems	8	ea	\$ 777.34	\$6,219
	Water Meter	2	ea	\$ 5,129.91	\$10,260
	Water Hammer Arrestors	140	ea	\$ 211.02	\$29,543
	Hose Bib - Interior & Exterior	20	ea	\$ 683.11	\$13,662
	HB: Interior	12	ea	\$ 450.83	\$5,410
	Domestic water piping and fittings	22,772	lf	\$ 37.55	\$855,089
	Piping Insulation	1	ls	\$ 235,036.57	\$235,037
D2030 Sanitary Waste					
	Sanitary waste and vent piping	15,230	lf	\$ 52.31	\$796,681
	Vent Through Roof	20	ea	\$ 232.29	\$4,646
	FD-1 - Shower Drain	138	ea	\$ 449.19	\$61,989
	Floor Drain	138	ea	\$ 514.63	\$71,018
	TPV-1 (trap primer)	40	ea	\$ 762.62	\$30,505
	Floor Clean Out	48	ea	\$ 462.93	\$22,221
	Wall Clean Out	160	ea	\$ 232.29	\$37,166
D2040 Rain Water Drainage					
	Downspout Transitions to Civil	68	ea	\$ 801.55	\$54,505
D2090 Other Plumbing					
	Excavation and Native Fill	2,576	lf	\$ 26.78	\$68,994
	Medical Oxygen System	1	ls	\$ 148,607.04	\$148,607
	Access Panels	182	ea	\$ 363.15	\$66,093
	Commissioning Assistance	1	ls	\$ 7,368.98	\$7,369
	Trucking & Deliveries	1	ls	\$ 3,684.49	\$3,684

Owner

Washington State Veterans Home - Spokane
SD Estimate



<i>ESTIMATE SUMMARY</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	Rentals	1	ls	\$ 5,526.73	\$5,527
	Water Testing and Treatment	1	ls	\$ 8,395.21	\$8,395
	Sleeving	1	ls	\$ 10,087.31	\$10,087
	Cleanup	1	ls	\$ 19,399.30	\$19,399
	Labeling	1	ls	\$ 10,829.70	\$10,830
	Material Distribution	1	ls	\$ 21,870.32	\$21,870
	Plumbing System Testing	1	ls	\$ 15,689.58	\$15,690
	Trade Supervision	1	ls	\$ 52,224.70	\$52,225
	General Conditions	1	ls	\$ 92,025.63	\$92,026
SUBTOTAL PLUMBING		91,134	BGSF	\$ 51.26	\$ 4,671,156

D30 HVAC**D30 HVAC****D3020 Heat and Cooling Generating Systems**

Heating Water Piping and Valves	1	ls	\$ 266,917.24	\$ 266,917
Heating Water Piping Insulation	1	ls	\$ 80,924.51	\$ 80,925
CHS/CHR Piping	1	ls	\$ 266,917.24	\$ 266,917
CHS/CHR Piping Insulation	1	ls	\$ 96,005.46	\$ 96,005

D3032 Direct Expansion Systems

Ductless Split System Heat Pump	4	ea	\$ 8,866.10	\$ 35,464
Refrigeration Piping	400	ea	\$ 77.39	\$ 30,956
Refrigeration Piping Insulation	600	ea	\$ 16.36	\$ 9,814

D3041 Air Distribution Systems

DOAS	4	ea	\$ 652,361.73	\$ 2,609,447
Kitchen MAU	2	ea	\$ 42,302.09	\$ 84,604
Ductwork and fittings, OSA/SA/RA/HREA	115,692	lb	\$ 11.78	\$ 1,362,852
Cabinet Unit Heaters	4	ea	\$ 3,729.65	\$ 14,919
Wall Heater - Electric	4	ea	\$ 1,832.11	\$ 7,328
HVLS Destratification Ceiling Fans	8	ea	\$ 7,851.90	\$ 62,815
Flexible ductwork	3,760	lf	\$ 17.50	\$ 65,807
Fire/smoke dampers	20	ea	\$ 1,374.08	\$ 27,482
Volume Control Dampers	752	ea	\$ 57.25	\$ 43,059
Duct insulation	95,000	sf	\$ 4.70	\$ 446,781
Sound lining	20,115	sf	\$ 9.86	\$ 198,417
Air Devices (GRD's)	752	ea	\$ 257.53	\$ 193,683
Louvers	8	ea	\$ 1,668.53	\$ 13,348

D3042 Exhaust Ventilation Systems

EF-1 Exhaust Fan	4	ea	\$ 8,277.21	\$ 33,109
Type 1/11 Kitchen Hoods	2	ls	\$ 38,286.90	\$ 76,574
Ductwork and fittings	23,430	lb	\$ 11.71	\$ 274,350
Volume control dampers	12	ea	\$ 119.41	\$ 1,433
Grilles, registers and diffusers	12	ea	\$ 160.31	\$ 1,924

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated
No.	Description		Measure	Cost	Cost
D3050 Terminal and Package Units					
	Four Pipe Fan Coil Unit	184	ea	\$3,304.34	\$607,706
D3060 Controls and Instrumentation					
	Controls/EMCS	1	LS	\$747,412.64	\$629,282
D3070 Systems Testing and Balancing					
	Test and Balance (TAB)	1	LS	\$62,759.84	\$52,840
	Commissioning Assistance	1	LS	\$14,069.45	\$11,846
D3090 Other HVAC					
	Condensate Pumps	4	ea	\$253.42	\$1,014
	Condensate piping	277	lf	\$20.35	\$5,630
	Duct Pressure Testing	1	ls	\$14,807.16	\$14,807
	Seismic	1	ls	\$20,175.44	\$20,175
	Trucking & Deliveries	1	ls	\$5,922.86	\$5,923
	Rentals	1	ls	\$8,884.30	\$8,884
	Rigging and Hoisting Allowance	1	ls	\$6,304.50	\$6,304
	Water Testing and Treatment	1	ls	\$13,495.41	\$13,495
	Supervision, Labeling, Cleanup	1	ls	\$82,374.00	\$82,374
	General Conditions	1	ls	\$138,703.15	\$138,703
SUBTOTAL HVAC		91,134	BGSF	\$ 86.73	\$ 7,903,915
D40 FIRE PROTECTION					
Fire Protection					
	Sprinkler System	91,134	gsf	\$ 5.00	\$455,670
	Booster Pump(s)		ea	\$ -	\$ -
SUBTOTAL FIRE PROTECTION		91,134	BGSF	\$ 5.00	\$ 455,670
D50 ELECTRICAL					
Electrical					
	Distribution	91,134	gsf	\$ 8.97	\$ 817,449
	Feeders	91,134	gsf	\$ 6.93	\$ 631,173
	Generator & Transfer Equipment	91,134	gsf	\$ 19.26	\$ 1,755,443
	Grounding System	91,134	gsf	\$ 0.96	\$ 87,680
	Mechanical Equipment and Branch	91,134	gsf	\$ 5.76	\$ 525,239
	Power Devices and Branch, EMT concealed	91,134	gsf	\$ 8.31	\$ 757,772
	Lighting Fixture Cost LED	91,134	gsf	\$ 10.27	\$ 935,713
	Lighting and Branch, EMT installation concealed	91,134	gsf	\$ 5.90	\$ 538,035
	Lighting Control	91,134	gsf	\$ 3.26	\$ 297,214
	Fire Alarm, EMT concealed	91,134	gsf	\$ 4.59	\$ 418,472

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	LV System Rough-in (Tele/Data)	91,134	gsf	\$ 1.80	\$ 164,400
	LV System Install	91,134	gsf	\$ 3.57	\$ 325,735
	Cable Tray	91,134	gsf	\$ 1.03	\$ 94,185
	CCTV System Rough-In	91,134	gsf	\$ 0.66	\$ 59,782
	CCTV System Install	91,134	gsf	\$ 1.68	\$ 153,440
	Access Control Rough-In	91,134	gsf	\$ 0.74	\$ 67,576
	Access Control System	91,134	gsf	\$ 2.01	\$ 183,322
	Intrusion Detection System	91,134	gsf	\$ -	\$ -
	800 MHz system	91,134	gsf	\$ 1.92	\$ 175,360
	A/V System	91,134	gsf	\$ 7.39	\$ 673,186
	A/V Rough-in	91,134	gsf	\$ 0.87	\$ 79,709
	Paging System	91,134	gsf	\$ 1.30	\$ 118,061
	Nurse Call	91,134	gsf	\$ 3.10	\$ 282,580
	Solar Base	91,134	gsf	\$ 1.37	\$ 125,266
SUBTOTAL ELECTRICAL		91,134	BGSF	\$ 101.68	\$ 9,266,790
E10 EQUIPMENT					
Storage Equipment					
	Adjustable Metal Shelving - Allowance	1	ls	\$ 20,000.00	\$ 20,000
113000	Residential Equipment				
	Refrigerator, Microwave, Range, Range Hood, Dishwasher, Washer / Dryer - Allowance	1	ls	\$ 50,000.00	\$ 50,000
SUBTOTAL EQUIPMENT		91,134	BGSF	\$ 0.77	\$ 70,000
E20 CASEWORK & FURNISHINGS					
Fixed Casework					
Manufactured P-Lam Casework					
	P-Lam Base w/ P-Lam, Quartz Countertops, P-Lam Uppers, Full Ht. Cabinets w Doors, and Misc. Casework	91,134	sf	\$ 5.75	\$ 524,021
Window Treatment					
	Roller Shades	17,353	sf	\$ 18.00	\$ 312,354
Moveable Furnishings					
EXCLUDED					
SUBTOTAL FURNISHINGS		91,134	BGSF	\$ 9.18	\$ 836,375
F10 SPECIAL CONSTRUCTION					
Special Construction					
SUBTOTAL SPECIAL CONSTRUCTION		91,134	BGSF	\$ -	\$ -

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
F20	SELECTIVE BUILDING DEMOLITION				
	Selective Building Demolition				NIC
	Hazardous Components Abatement				
	None				NIC
	SUBTOTAL SELECTIVE BUILDING DEMOLITION	91,134	BGSF	\$ -	\$ -
Z10	GENERAL REQUIREMENTS				
	General Conditions				
	See Summary				
	SUBTOTAL GENERAL REQUIREMENTS	91,134	BGSF	\$ -	\$ -

Owner

Washington State Veterans Home - Spokane
SD Estimate



Project Owner: Department of Enterprise Services
Project Name: Washington State Veterans Home -Spokane
Project Location: Spokane, WA
Project Start Date: Q2,2026
Estimate Date: October 10, 2024

Architect: orcutt | winslow
Project Duration: 24 MO
Building GSF: 32,392
Site GSF: 765,680

<i>ESTIMATE SUMMARY - Community Center</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
A10	Foundations	32,392	BGSF	\$ 31.80	\$ 1,030,016
A20	Basement Construction	32,392	BGSF	\$ -	\$ -
B10	Superstructure	32,392	BGSF	\$ 30.79	\$ 997,386
B20	Exterior Enclosure	32,392	BGSF	\$ 49.23	\$ 1,594,497
B30	Roofing	32,392	BGSF	\$ 27.72	\$ 897,770
C10	Interior Construction	32,392	BGSF	\$ 49.17	\$ 1,592,809
C20	Stairs	32,392	BGSF	\$ -	\$ -
C30	Interior Finishes	32,392	BGSF	\$ 45.81	\$ 1,483,801
D10	Conveying Systems	32,392	BGSF	\$ -	\$ -
D20	Plumbing	32,392	BGSF	\$ 23.80	\$ 771,038
D30	HVAC	32,392	BGSF	\$ 69.35	\$ 2,246,400
D40	Fire Protection	32,392	BGSF	\$ 5.00	\$ 161,960
D50	Electrical	32,392	BGSF	\$ 103.71	\$ 3,359,386
E10	Equipment	32,392	BGSF	\$ 17.69	\$ 573,000
E20	Casework & Furnishings	32,392	BGSF	\$ 7.82	\$ 253,160
F10	Special Construction	32,392	BGSF	\$ -	\$ -
F20	Selective Demolition	32,392	BGSF	\$ -	\$ -
BUILDING CONSTRUCTION SUBTOTAL					\$ 14,961,224
Design Contingency				15.00%	\$ 2,244,184
Subtotal					\$ 17,205,407
Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)				6.00%	\$ 1,032,324
Subtotal					\$ 18,237,732
Escalation to Mid-Point (See Summary)					\$ -
BUILDING GRAND TOTAL		32,392	BGSF	\$ 563.03	\$ 18,237,732

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
A10 FOUNDATIONS					
Foundation Earthwork					
	Footing Excavation and Backfill (Native Soil)	2,300	cy	\$ 30.00	\$ 68,996
	Footing Drains with Gravel	886	lf	\$ 25.00	\$ 22,150
Foundations					
	Spread Footings (includes reinforcing)	6	cy	\$ 1,670.00	\$ 10,020
	Continuous Footings (includes reinforcing)	222	cy	\$ 870.00	\$ 193,333
	Perimeter Stem Wall (includes reinforcing)	59	cy	\$ 3,510.00	\$ 208,000
Slab-on-Grade					
	Slab on Grade (includes reinforcing, base course and vapor barrier)	32,392	sf	\$ 14.30	\$ 463,206
			cy		
Misc. Concrete					
	Housekeeping Pads - Allowance	1,000	sf	\$ 20.00	\$ 20,000
	Locker Room Bases - Allowance	100	sf	\$ 20.00	\$ 2,000
	Set Column Anchor Bolts	12	set	\$ 350.00	\$ 4,200
	Grout Baseplates	12	ea	\$ 75.00	\$ 900
Perimeter Insulation / Waterproofing					
	2" Rigid Polystyrene	3,544	sf	\$ 4.00	\$ 14,176
	Stem Wall Dampproofing	3,544	sf	\$ 6.50	\$ 23,036
SUBTOTAL FOUNDATIONS		32,392	BGSF	\$ 31.80	\$ 1,030,016
A20 BASEMENT CONSTRUCTION					
Basement Construction					NIC
SUBTOTAL BASEMENT CONSTRUCTION		32,392	BGSF	\$ -	\$ -
B10 SUPERSTRUCTURE					
Structural Steel					
	Floor & Roof Structure, Beams & Columns (includes 15% for connections)				
	HSS Tube Steel Beams & Columns - Allowance	3,293	lbs	\$ 4.00	\$ 13,171
	Wide Flange Beams & Columns - Allowance	2,576	lbs	\$ 3.50	\$ 9,016
	Open Web Steel Joist w Metal Roof Deck - 1.5"	145,764	lbs	\$ 3.25	\$ 473,733
Miscellaneous Metals					
	Allowance	32,392	gsf	\$ 0.50	\$ 16,196
	Plates and Measured Miscellaneous Steel Items	1,000	lbs	\$ 3.50	\$ 3,500
	Building Canopies / Covered Porches - Allowance	6,335	sf	\$ 75.00	\$ 475,125
Connectors, Rough Hardware and Miscellaneous Blocking					
	Hold Downs - Allowance	55	ea	\$ 120.00	\$ 6,645
SUBTOTAL SUPERSTRUCTURE		32,392	BGSF	\$ 30.79	\$ 997,386

Owner

Washington State Veterans Home - Spokane
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<i>ESTIMATE SUMMARY</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
B20	EXTERIOR ENCLOSURE				
	Exterior Wall Construction				
	Exterior Wall Assembly (GWB - Finish 1 Side, vapor barrier, metal studs 6", R-13 batt insulation, sheathing, 2 1/2" rigid insulation, WRB)	12,390	sf	\$ 37.50	\$ 464,625
	Loadbearing CMU or Concrete Walls - In B10 Superstructure Above				
	Exterior Wall Finish				
	Miscellaneous				
	Sill Flashing	1	ls	\$ 25,000.00	\$ 25,000
	Metal Panels - Allowance				
	Standing Seam Metal Panel, Concealed Fastener	5,204	sf	\$ 40.00	\$ 208,152
	HPL Siding Panels - Allowance	1,735	sf	\$ 35.00	\$ 60,711
	Stucco - Allowance	1,735	sf	\$ 18.00	\$ 31,223
	Exterior Soffits				
	HPL Finish to Soffits (includes Framing, Sheathing & WRB)	1,329	sf	\$ 45.00	\$ 59,805
	Exterior Windows				
	Storefront / Windows, Standard Clear Anodized with Flashing	3,067	sf	105.00	\$ 322,035
	Curtain Wall, Standard Clear Anodized with Flashing	650	sf	135.00	\$ 87,750
	Exterior Doors				
	Storefront Entry Doors, Hardware, per leaf	12	ea	6,500.00	\$ 78,000
	Ext. HM Dr, HM Frame, Hardware, per leaf	12	ea	4,200.00	\$ 50,400
	Push Button ADA Auto Operators (per entrance) - Allowance	16	ea	10,000.00	\$ 160,000
	Premium for Electronic Hardware at Card Readers (Reader Devices included with Electrical) - Allowance	16	ea	1,000.00	\$ 16,000
	Exterior Paint & Sealants				
	Paint to HM Doors and Frames	12	ea	\$ 175.00	\$ 2,100
	Exterior - Control Joints, Caulking and Joint Sealants	32,392	gsf	\$ 0.50	\$ 16,196
	Building Graphics				
	Allowance for Building Signage	1	ls	\$ 12,500.00	\$ 12,500
	SUBTOTAL EXTERIOR ENCLOSURE	32,392	BGSF	\$ 49.23	\$ 1,594,497

B30	ROOFING				
	Roof Coverings				
	Asphalt Shingle Roofing - Architectural Grade	35,460	sf	\$ 15.00	\$ 531,900
	Sheathing / Coverboard	35,460	sf	\$ 4.50	\$ 159,570
	Insulation				
	Attic R-38 Batt Insulation System	32,392	sf	\$ 3.00	\$ 97,176
	Flashing and Sheet Metal				
	Miscellaneous Roof Flashing and Rough Carpentry	5%	on	\$ 691,470	\$ 34,574
	Gutters	886	lf	\$ 25.00	\$ 22,150
	Downspouts	8	ea	\$ 300.00	\$ 2,400

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated
No.	Description		Measure	Cost	Cost
Roof Accessories					
	Fall Protection Anchors	24	ea	\$ 750.00	\$ 18,000
	Access Ladders	2	ea	\$ 3,500.00	\$ 7,000
	Roof Hatches	2	ea	\$ 2,500.00	\$ 5,000
	Smoke Hatch	2	ea	\$ 10,000.00	\$ 20,000
SUBTOTAL ROOFING		32,392	BGSF	\$ 27.72	\$ 897,770

C10 INTERIOR CONSTRUCTION

Partitions					
	GWB Partition (GWB - Finish 2 Sides, metal studs 6", 3 1/2" sound batts)	30,126	sf	\$ 18.00	\$ 542,268
	GWB Partition (GWB - Finish 2 Sides, metal studs 3 5/8", 3 1/2" sound batts)	2,947	sf	\$ 17.00	\$ 50,093
	GWB Partition (GWB - Premium (1 Hr. Fire Rated))	6,025	sf	\$ 4.00	\$ 24,101
	Fire Caulking at Penetrations	32,392	gsf	\$ 0.35	\$ 11,337
	Interior - Caulking and Joint Sealants	32,392	gsf	\$ 0.30	\$ 9,718
	Miscellaneous Carpentry - Allowance	32,392	gsf	\$ 1.00	\$ 32,392
	Concrete & CMU Walls - See B10 Superstructure Above				
Interior Glazing - Target Value					
	Interior Storefront with 1/4" tempered glazing	2,734	sf	\$ 65.00	\$ 177,711
	HM Sidelights/Relites with 1/4" tempered glazing				Incl.
	HM Door Lite Glazing				Incl.
Interior Doors, Frames, Hardware					
	HM / SCW Dr, HM Frame, Hardware, Complete - per leaf	86	ea	\$ 4,200.00	\$ 361,200
	Sliding Door HM / SCW Dr, HM Frame, Hardware, Complete - per leaf	4	ea	\$ 2,750.00	\$ 11,000
	Premium for Hardware at Card Readers (Reader Devices included with Electrical) - Allowance	24	ea	\$ 750.00	\$ 18,000
	Premium for 45 - 90 Minute Door	12	ea	\$ 750.00	\$ 9,000
	Aluminum Storefront Doors, HW, Complete - per leaf	22	ea	\$ 7,500.00	\$ 165,000
	Folding Room Partition w Structural Support	450	sf	\$ 55.00	\$ 24,750
	Access Doors and Panels	32,392	gsf	\$ 0.10	\$ 3,239
Fittings / Specialties					
	Visual Display Specialties				
	Marker Boards (6' x 4') - Allowance	24	ea	\$ 900.00	\$ 21,600
	Signage (Code and Wayfinding)	32,392	gsf	\$ 0.75	\$ 24,294
101400	Toilet Accessories				
	Baby Changing Station	2	ea	\$ 750.00	\$ 1,500
	Towel / Coat Hook	18	ea	\$ 45.00	\$ 810
	Folding Shower Seat	4	ea	\$ 500.00	\$ 2,000
	Framed Mirror	18	ea	\$ 150.00	\$ 2,700

Owner

Washington State Veterans Home - Spokane
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ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	Grab Bars - Large ADA Stall (3 Total: 1 - Vertical, 2- Horizontal)	18	set	\$ 450.00	\$ 8,100
	Grab Bars - Shower Stall (3 Total: 1 - Vertical, 2- Horizontal)	4	set	\$ 400.00	\$ 1,600
	Mop and Broom Holder	2	ea	\$ 50.00	\$ 100
	Paper Towel Dispenser	18	ea	\$ 175.00	\$ 3,150
	Sanitary Napkin Dispenser	12	ea	\$ 75.00	\$ 900
	Sanitary Napkin Disposal	12	ea	\$ 85.00	\$ 1,020
	Shower Curtain	4	ea	\$ 100.00	\$ 400
	Shower Curtain Rod	4	ea	\$ 50.00	\$ 200
	Soap Dispenser	18	ea	\$ 85.00	\$ 1,530
	Toilet Paper Dispenser	8	ea	\$ 60.00	\$ 480
	Toilet Seat Cover Dispenser	18	ea	\$ 120.00	\$ 2,160
	Trash Receptacle (Recessed)	18	ea	\$ 350.00	\$ 6,300
	Wall and Door Protection				
	Crash / Hand Rails in Corridors	1,266	lf	\$ 30.00	\$ 37,980
	Fire Protection Equipment				
	Fire Extinguishers	12	ea	\$ 65.00	\$ 780
	Fire Extinguisher Cabinets	12	ea	\$ 175.00	\$ 2,100
	Knox Box	2	ea	\$ 850.00	\$ 1,700
	Lockers (Metal) (Phenolic)				
	Double Tier	44	ea	\$ 350.00	\$ 15,400
	Misc. Specialties Allowance (FECs, Corner Guards, etc...)	32,392	gsf	\$ 0.50	\$ 16,196
SUBTOTAL INTERIOR CONSTRUCTION		32,392	BGSF	\$ 49.17	\$ 1,592,809
C20 STAIRS					
Stairs					NIC
SUBTOTAL STAIRS		32,392	BGSF	\$ -	\$ -
C30 INTERIOR FINISHES					
Wall Finishes					
	Paint to Walls, Doors, Frames and Miscellaneous	32,392	gsf	\$ 5.00	\$ 161,960
	Restroom Wall Tile, Wainscot, Wood Trim and Chair Rail	32,392	sf	\$ 9.00	\$ 291,528
	Miscellaneous Finish Carpentry Allowance	32,392	gsf	\$ 2.00	\$ 64,784
Bases					
	Rubber Base, Resilient Base, and Tile Base	17,012	lf	\$ 7.25	\$ 123,337
Floor Finishes					
	Carpet, Ceramic Tile, Luxury Vinyl Tile, and Resilient Flooring	32,392	sf	\$ 14.75	\$ 477,782
	Floor Prep & Protection	32,392	sf	\$ 1.00	\$ 32,392

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ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
Ceiling Finishes					
	ACT Ceiling (2x4), ACT Ceiling (2x2), and GWB Ceiling Painted	32,392	sf	\$ 10.25	\$ 332,018
SUBTOTAL INTERIOR FINISHES		32,392	BGSF	\$ 45.81	\$ 1,483,801
D10 CONVEYING SYSTEMS					
Conveying Systems					NIC
	Hydraulic Elevator () Stops		ea		\$0
	Electric Traction Elevator () Stops		ea	\$	-
SUBTOTAL CONVEYING SYSTEMS		32,392	BGSF	\$ -	\$ -
D20 PLUMBING					
D20 Plumbing					
D2010 Plumbing Fixtures					
	Bottle Fill/Drinking Fountain	2	ea	\$4,284.13	\$8,568
	Lav: CT	18	ea	\$760.35	\$13,686
	Lav/DF Carrier	2	ea	\$387.86	\$776
	TMV-2 under counter	18	ea	\$331.94	\$5,975
	Sinks - Break & Servery	4	ea	\$1,439.93	\$5,760
	Sinks - Hair	2	ea	\$1,577.28	\$3,155
	Sink - Med, Exam	1	ea	\$1,714.63	\$1,715
	Sink - Laundry/Utility	4	ea	\$1,694.03	\$6,776
	Sink - Kitchen	2	ea	\$3,755.32	\$7,511
	Garbage Disp.	6	ea	\$416.31	\$2,498
	Ice Maker Connection:	6	ea	\$285.50	\$1,713
	Dishwasher Connection: (at sink)	4	ea	\$324.74	\$1,299
	Insta Hot at Sink	4	ea	\$732.55	\$2,930
	Service Sinks, Moded Stone: Custodial-2 ea., Decon-1 ea.	3	ea	\$2,050.50	\$6,151
	P-2A: Urinal	3	ea	\$820.20	\$2,461
	Urinal Carrier	3	ea	\$387.86	\$1,164
	Water Closet	15	ea	\$2,291.85	\$34,378
	Clinic Sink	1	ea	\$3,577.74	\$3,578
	WC Carrier Single	16	ea	\$767.22	\$12,276
	Shower	3	ea	\$5,729.62	\$17,189
	Coffee Maker Connection	4	ea	\$135.72	\$543
	Clothes Washer Box	4	ea	\$534.70	\$2,139
	Bathtub	1	ea	\$6,573.37	\$6,573
	Kitchen Fixtures: Standard	7	ea	\$309.37	\$2,166
	Kitchen Fixtures: Large (incl. equip.)	6	ea	\$983.72	\$5,902
	10" Hub Drain	2	ea	\$467.66	\$935
	Service Valves	8	ea	\$623.98	\$4,992
D2020 Domestic Water Distribution					
	Electric HWH	1	ea	\$14,182.03	\$14,182

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<i>ESTIMATE SUMMARY</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	DHWHP	1	ea	\$33,531.87	\$33,532
	Domestic Water Storage Tank	1	ea	\$32,498.31	\$32,498
	Expansion Tank	1	ea	\$2,511.95	\$2,512
	Domestic Hot Water Circ Pump	1	ea	\$1,399.89	\$1,400
	Master Mixing Valve	1	ea	\$6,986.35	\$6,986
	Domestic Water Manifold & PRV	1	ea	\$4,369.16	\$4,369
	Reduced Pressure Backflow Assembly (RPBA)	1	ea	\$6,763.04	\$6,763
	RPBA: Non Potable Water Systems	4	ea	\$777.03	\$3,108
	Water Meter	1	ea	\$5,127.88	\$5,128
	Water Hammer Arrestors	25	ea	\$210.94	\$5,273
	Hose Bib - Interior & Exterior	8	ea	\$682.85	\$5,463
	HB: Interior	6	ea	\$450.65	\$2,704
	Domestic water piping and fittings	3,909	lf	\$37.55	\$146,783
	Piping Insulation	1	ls	\$46,686.59	\$46,687
	D2030 Sanitary Waste				
	Sanitary waste and vent piping	2,568	lf	\$52.31	\$134,332
	Vent Through Roof	6	ea	\$232.22	\$1,393
	FD-1 - Shower Drain	3	ea	\$449.02	\$1,347
	Floor Drain	30	ea	\$514.42	\$15,433
	Floor Sink	6	ea	\$891.17	\$5,347
	TPV-1 (trap primer)	15	ea	\$762.31	\$11,435
	Floor Clean Out	16	ea	\$462.75	\$7,404
	Wall Clean Out	24	ea	\$232.19	\$5,573
	Downspout Transitions to Civil	24	ea	\$801.23	\$19,230
	D2090 Other Plumbing				
	Excavation and Native Fill	1,009	lf	\$26.77	\$27,003
	Access Panels	33	ea	\$363.01	\$11,798
	Commissioning Assistance	1	ls	\$1,436.56	\$1,437
	Trucking & Deliveries	1	ls	\$718.28	\$718
	Rentals	1	ls	\$1,077.42	\$1,077
	Water Testing and Treatment	1	ls	\$2,669.00	\$2,669
	Sleeving	1	ls	\$2,005.60	\$2,006
	Cleanup	1	ls	\$3,969.03	\$3,969
	Labeling	1	ls	\$2,215.72	\$2,216
	Material Distribution	1	ls	\$4,473.38	\$4,473
	Plumbing System Testing	1	ls	\$3,209.16	\$3,209
	Trade Supervision	1	ls	\$10,246.97	\$10,247
	General Conditions	1	ls	\$18,528.83	\$18,529
SUBTOTAL PLUMBING		32,392	BGSF	\$ 23.80	\$ 771,038

Owner

Washington State Veterans Home - Spokane
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ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
D30	HVAC				
	D30 HVAC				
	D3020 Heat and Cooling Generating Systems				
	Heating Water Piping and Valves	1	ls	\$ 93,495.76	\$ 93,496
	Heating Water Piping Insulation	1	ls	\$ 27,687.52	\$ 27,688
	CHS/CHR Piping	1	ls	\$ 93,495.76	\$ 93,496
	CHS/CHR Piping Insulation	1	ls	\$ 32,352.82	\$ 32,353
	D3032 Direct Expansion Systems				
	Ductless Split System Heat Pump	2	ea	\$ 8,862.60	\$ 17,725
	Refrigeration Piping	200	lf	\$ 77.36	\$ 15,472
	Refrigeration Piping Insulation	300	lf	\$ 16.35	\$ 4,905
	D3041 Air Distribution Systems				
	DOAS	2	ea	\$ 223,036.58	\$ 446,073
	Kitchen MAU	1	ea	\$ 42,285.38	\$ 42,285
	Ductwork and fittings, OSA/SA/RA/HREA	37,004	lb	\$ 11.77	\$ 435,655
	Cabinet Unit Heaters	2	ea	\$ 3,728.18	\$ 7,456
	Wall Heater - Electric	2	ea	\$ 1,831.39	\$ 3,663
	HVLS Destratification Ceiling Fans	4	ea	\$ 7,848.79	\$ 31,395
	Fire/smoke dampers	10	lf	\$ 1,373.54	\$ 13,735
	Volume Control Dampers	154	ea	\$ 57.23	\$ 8,801
	Duct insulation	30,837	ea	\$ 4.70	\$ 144,966
	Sound lining	6,167	sf	\$ 9.86	\$ 60,810
	Air Devices (GRD's)	154	sf	\$ 240.87	\$ 37,042
	Louvers	4	ea	\$ 1,667.87	\$ 6,671
	D3042 Exhaust Ventilation Systems				
	EF-1 Exhaust Fan	2	ea	\$ 8,273.94	\$ 16,548
	Type 1/11 Kitchen Hoods	1	ls	\$ 45,456.29	\$ 45,456
	Ductwork and fittings	8,410	lb	\$ 10.00	\$ 84,082
	Volume control dampers	6	ea	\$ 119.37	\$ 716
	Grilles, registers and diffusers	6	ea	\$ 160.25	\$ 961
	D3050 Terminal and Package Units				
	Four Pipe Fan Coil Unit	56	ea	\$3,303.03	\$186,248
	D3060 Controls and Instrumentation				
	Controls/EMCS	1	ls	\$224,957.41	\$224,957
	D3070 Systems Testing and Balancing				
	Test and Balance (TAB)	1	ls	\$19,242.08	\$19,242
	Commissioning Assistance	1	ls	\$5,560.56	\$5,561
	D3090 Other HVAC				
	Condensate Pumps	2	ea	\$300.87	\$602
	Condensate piping	138	lf	\$24.17	\$3,342
	Duct Pressure Testing	1	ls	\$6,950.70	\$6,951

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Washington State Veterans Home - Spokane
SD Estimate



<i>ESTIMATE SUMMARY</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	Seismic	1	ls	\$7,346.98	\$7,347
	Trucking & Deliveries	1	ls	\$2,780.28	\$2,780
	Rentals	1	ls	\$4,170.42	\$4,170
	Rigging and Hoisting Allowance	1	ls	\$3,744.00	\$3,744
	Water Testing and Treatment	1	ls	\$10,331.00	\$10,331
	Supervision, Labeling, Cleanup	1	ls	\$31,422.12	\$31,422
	General Conditions	1	ls	\$68,249.13	\$68,249
SUBTOTAL HVAC		32,392	BGSF	\$ 69.35	\$ 2,246,400
D40 FIRE PROTECTION					
Fire Protection					
	Sprinkler System	32,392	gsf	\$ 5.00	\$161,960
SUBTOTAL FIRE PROTECTION		32,392	BGSF	\$ 5.00	\$ 161,960
D50 ELECTRICAL					
Electrical					
	Distribution	32,392	gsf	\$ 9.19	\$ 297,678
	Feeders	32,392	gsf	\$ 7.10	\$ 229,844
	Generator & Transfer Equipment	32,392	gsf	\$ 19.41	\$ 628,794
	Grounding System	32,392	gsf	\$ 0.99	\$ 31,929
	Mechanical Equipment and Branch	32,392	gsf	\$ 5.90	\$ 191,268
	Power Devices and Branch, EMT concealed	32,392	gsf	\$ 8.52	\$ 275,946
	Lighting Fixture Cost LED	32,392	gsf	\$ 10.52	\$ 340,744
	Lighting and Branch, EMT installation concealed	32,392	gsf	\$ 6.05	\$ 195,928
	Lighting Control	32,392	gsf	\$ 3.34	\$ 108,232
	Fire Alarm, EMT concealed	32,392	gsf	\$ 4.70	\$ 152,388
	LV System Rough-in (Tele/Data)	32,392	gsf	\$ 1.85	\$ 59,867
	LV System Install	32,392	gsf	\$ 3.66	\$ 118,618
	Cable Tray	32,392	gsf	\$ 1.06	\$ 34,298
	CCTV System Rough-In	32,392	gsf	\$ 0.67	\$ 21,770
	CCTV System Install	32,392	gsf	\$ 1.72	\$ 55,876
	Access Control Rough-In	32,392	gsf	\$ 0.76	\$ 24,608
	Access Control System	32,392	gsf	\$ 2.06	\$ 66,758

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	Intrusion Detection System	32,392	gsf	\$ -	\$ -
	800 MHz system	32,392	gsf	\$ 1.97	\$ 63,858
	A/V System	32,392	gsf	\$ 7.57	\$ 245,144
	A/V Rough-in	32,392	gsf	\$ 0.90	\$ 29,026
	Paging System	32,392	gsf	\$ 1.28	\$ 41,608
	Nurse Call	32,392	gsf	\$ 3.07	\$ 99,589
	Solar Base	32,392	gsf	\$ 1.41	\$ 45,616
SUBTOTAL ELECTRICAL		32,392	BGSF	\$ 103.71	\$ 3,359,386
E10 EQUIPMENT					
Storage Equipment					
	Adjustable Metal Shelving - Allowance	1	ls	\$ 10,000.00	\$ 10,000
112300	Commercial Laundry Equipment				
	Washer	6	ea	\$ 4,500.00	\$ 27,000
	Dryer	6	ea	\$ 6,000.00	\$ 36,000
113000	Residential Equipment				
	Refrigerator, Microwave, Range, Range Hood, Dishwasher, Washer / Dryer - Allowance	1	ls	\$ 25,000.00	\$ 25,000
Commercial Kitchen Equipment					
	Kitchen Equipment, Walk-In Freezer / Coolers - Allowance	1	ls	\$ 475,000.00	\$ 475,000
SUBTOTAL EQUIPMENT		32,392	BGSF	\$ 17.69	\$ 573,000
E20 CASEWORK & FURNISHINGS					
Fixed Casework					
Manufactured P-Lam Casework					
	P-Lam Base w/ P-Lam, Quartz Countertops, P-Lam Uppers, Full Ht. Cabinets w Doors, and Misc. Casework	32,392	sf	\$ 5.75	\$ 186,254
Window Treatment					
	Roller Shades	3,717	sf	\$ 18.00	\$ 66,906
Moveable Furnishings					
EXCLUDED					
SUBTOTAL FURNISHINGS		32,392	BGSF	\$ 7.82	\$ 253,160
F10 SPECIAL CONSTRUCTION					
Special Construction					NIC
SUBTOTAL SPECIAL CONSTRUCTION		32,392	BGSF	\$ -	\$ -

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
F20	SELECTIVE BUILDING DEMOLITION				
	Selective Building Demolition				NIC
	Hazardous Components Abatement				
	None				NIC
	SUBTOTAL SELECTIVE BUILDING DEMOLITION	32,392	BGSF	\$ -	\$ -
Z10	GENERAL REQUIREMENTS				
	General Conditions				
	See Summary				
	SUBTOTAL GENERAL REQUIREMENTS	32,392	BGSF	\$ -	\$ -

Owner

Washington State Veterans Home - Spokane
SD Estimate



Project Owner: Department of Enterprise Services
Project Name: Washington State Veterans Home -Spokane
Project Location: Spokane, WA
Project Start Date: Q2,2026
Estimate Date: October 10, 2024

Architect: orcutt | winslow
Project Duration: 24 MO
Building GSF: 1,800
Site GSF: 765,680

<i>ESTIMATE SUMMARY - Warehouse</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
A10	Foundations	1,800	BGSF	\$ 37.21	\$ 66,980
A20	Basement Construction	1,800	BGSF	\$ -	\$ -
B10	Superstructure	1,800	BGSF	\$ 1.52	\$ 2,735
B20	Exterior Enclosure	1,800	BGSF	\$ 32.59	\$ 58,660
B30	Roofing	1,800	BGSF	\$ 5.53	\$ 9,950
C10	Interior Construction	1,800	BGSF	\$ 2.76	\$ 4,960
C20	Stairs	1,800	BGSF	\$ -	\$ -
C30	Interior Finishes	1,800	BGSF	\$ 9.50	\$ 17,100
D10	Conveying Systems	1,800	BGSF	\$ -	\$ -
D20	Plumbing	1,800	BGSF	\$ 7.84	\$ 14,103
D30	HVAC	1,800	BGSF	\$ 33.98	\$ 61,158
D40	Fire Protection	1,800	BGSF	\$ 5.75	\$ 10,350
D50	Electrical	1,800	BGSF	\$ 65.54	\$ 117,974
E10	Equipment	1,800	BGSF	\$ -	\$ -
E20	Casework & Furnishings	1,800	BGSF	\$ 17.94	\$ 32,298
F10	Special Construction	1,800	BGSF	\$ 100.00	\$ 180,000
F20	Selective Demolition	1,800	BGSF	\$ -	\$ -
BUILDING CONSTRUCTION SUBTOTAL					\$ 576,268
Design Contingency				15.00%	\$ 86,440
Subtotal					\$ 662,708
Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)				6.00%	\$ 39,763
Subtotal					\$ 702,471
Escalation to Mid-Point (See Summary)					\$ -
BUILDING GRAND TOTAL		1,800	BGSF	\$ 390.26	\$ 702,471

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

Owner

Washington State Veterans Home - Spokane
SD Estimate1



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
A10 FOUNDATIONS					
Foundation Earthwork					
	Footing Excavation and Backfill (Native Soil)	120	cy	\$ 30.00	\$ 3,600
	Footing Drains with Gravel	170	lf	\$ 25.00	\$ 4,250
Foundations					
	Continuous Footings (includes reinforcing)	10	cy	\$ 870.00	\$ 8,700
	Perimeter Stem Wall (includes reinforcing)	5	cy	\$ 3,510.00	\$ 17,550
Slab-on-Grade					
	Slab on Grade (includes reinforcing, base course and vapor barrier)	1,800	sf	\$ 14.30	\$ 25,740
			cy		
Perimeter Insulation / Waterproofing					
	2" Rigid Polystyrene	680	sf	\$ 4.00	\$ 2,720
	Stem Wall Dampproofing	680	sf	\$ 6.50	\$ 4,420
SUBTOTAL FOUNDATIONS		1,800	BGSF	\$ 37.21	\$ 66,980
A20 BASEMENT CONSTRUCTION					
Basement Construction					NIC
SUBTOTAL BASEMENT CONSTRUCTION		1,800	BGSF	\$ -	\$ -
B10 SUPERSTRUCTURE					
Structural Steel					
	Roof Structure, Beams & Columns (includes 15% for connections)				
	Open Web Steel Joist w Metal Roof Deck - 1.5"				Incl. w PEMB
Miscellaneous Metals					
	Allowance	1,800	gsf	\$ 0.50	\$ 900
	Plates and Measured Miscellaneous Steel Items	250	lbs	\$ 3.50	\$ 875
Connectors, Rough Hardware and Miscellaneous Blocking					
	Hold Downs - Allowance	8	ea	\$ 120.00	\$ 960
SUBTOTAL SUPERSTRUCTURE		1,800	BGSF	\$ 1.52	\$ 2,735
B20 EXTERIOR ENCLOSURE					
Exterior Wall Construction					
	Exterior Wall Assembly (GWB - Finish 1 Side, vapor barrier, metal studs 6", sheathing, 2 1/2" rigid insulation)				Incl. w PEMB
Loadbearing CMU or Concrete Walls - In B10 Superstructure Above					

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated
No.	Description		Measure	Cost	Cost
Exterior Wall Finish					
	Metal Panels - Allowance				
	Standing Seam Metal Panel, Concealed Fastener				Incl. w PEMB
	Split Face CMU Veneer	595	sf	\$ 34.00	\$ 20,230
Exterior Windows					
	Storefront / Windows, Standard Clear Anodized with Flashing	136	sf	105.00	\$ 14,280
Exterior Doors					
	Ext. HM Dr, HM Frame, Hardware, per leaf	2	ea	4,200.00	\$ 8,400
	Push Button ADA Auto Operators (per entrance) - Allowance	1	ea	10,000.00	\$ 10,000
	Premium for Electronic Hardware at Card Readers (Reader Devices included with Electrical) - Allowance	2	ea	1,000.00	\$ 2,000
Exterior Paint & Sealants					
	Paint to HM Doors and Frames	2	ea	\$ 175.00	\$ 350
	Exterior - Control Joints, Caulking and Joint Sealants	1,800	gsf	\$ 0.50	\$ 900
Building Graphics					
	Allowance for Building Signage	1	ls	\$ 2,500.00	\$ 2,500
SUBTOTAL EXTERIOR ENCLOSURE		1,800	BGSF	\$ 32.59	\$ 58,660

B30 ROOFING

Roof Coverings					
	Steel Roofing - Architectural Grade				Incl. w PEMB
Insulation					
	Roofing Insulation System				Incl. w PEMB
Flashing and Sheet Metal					
	Miscellaneous Roof Flashings				Incl. w PEMB
	Gutters	170	lf	\$ 25.00	\$ 4,250
	Downspouts	4	ea	\$ 300.00	\$ 1,200
Roof Accessories					
	Fall Protection Anchors	6	ea	\$ 750.00	\$ 4,500
SUBTOTAL ROOFING		1,800	BGSF	\$ 5.53	\$ 9,950

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
C10 INTERIOR CONSTRUCTION					
Partitions					
	Fire Caulking at Penetrations	1,800	gsf	\$ 0.35	\$ 630
	Interior - Caulking and Joint Sealants	1,800	gsf	\$ 0.30	\$ 540
	Miscellaneous Carpentry - Allowance	1,800	gsf	\$ 1.00	\$ 1,800
	Concrete & CMU Walls - See B10 Superstructure Above				
Fittings / Specialties					
	Fire Protection Equipment				
	Fire Extinguishers	1	ea	\$ 65.00	\$ 65
	Fire Extinguisher Cabinets	1	ea	\$ 175.00	\$ 175
	Knox Box	1	ea	\$ 850.00	\$ 850
	Misc. Specialties Allowance (FECs, Corner Guards, etc...)	1,800	gsf	\$ 0.50	\$ 900
SUBTOTAL INTERIOR CONSTRUCTION		1,800	BGSF	\$ 2.76	\$ 4,960
C20 STAIRS					
Stairs					NIC
SUBTOTAL STAIRS		1,800	BGSF	\$ -	\$ -
C30 INTERIOR FINISHES					
Wall Finishes					
	Miscellaneous Finish Carpentry Allowance	1,800	gsf	\$ 2.00	\$ 3,600
Floor Finishes					
	Sealed Concrete	1,800	sf	\$ 4.00	\$ 7,200
	Exposed Ceiling, Painted	1,800	sf	\$ 3.50	\$ 6,300
SUBTOTAL INTERIOR FINISHES		1,800	BGSF	\$ 9.50	\$ 17,100
D10 CONVEYING SYSTEMS					
Conveying Systems					NIC
SUBTOTAL CONVEYING SYSTEMS		1,800	BGSF	\$ -	\$ -
D20 PLUMBING					
D20 Plumbing					
D2010 Plumbing Fixtures					
	Sink with under counter instantaneous electric domestic hot water heater.	1	ls	\$6,800.00	\$6,800

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
D2090 Other Plumbing					
	Excavation and Native Fill	150	lf	\$26.77	\$4,015
	Access Panels	1	ea	\$363.01	\$363
	Cleanup	1	ls	\$175.00	\$175
	Plumbing System Testing	1	ls	\$250.00	\$250
	General Conditions	1	ls	\$2,500.00	\$2,500
SUBTOTAL PLUMBING		1,800	BGSF	\$ 7.84	\$ 14,103
D30 HVAC					
D30 HVAC					
D3020 Heat and Cooling Generating Systems					
	Oxygen 8 DOAS ERV in ceiling are with minimal ducting	1	ls	\$ 29,430.00	\$ 29,430
D3041 Air Distribution Systems					
	Unit heater.	1	ea	\$ 3,728.00	\$ 3,728
D3060 Controls and Instrumentation					
	DDC Controls	1	ls	\$9,000.00	\$9,000
D3070 Systems Testing and Balancing					
	Test and Balance (TAB)	1	ls	\$4,000.00	\$4,000
	Commissioning Assistance	1	ls	\$3,000.00	\$3,000
D3090 Other HVAC					
	Supervision, Labeling, Cleanup	1	ls	\$4,500.00	\$4,500
	General Conditions	1	ls	\$7,500.00	\$7,500
SUBTOTAL HVAC		1,800	BGSF	\$ 33.98	\$ 61,158
D40 FIRE PROTECTION					
Fire Protection					
	Sprinkler System	1,800	gsf	\$ 5.75	\$10,350
SUBTOTAL FIRE PROTECTION		1,800	BGSF	\$ 5.75	\$ 10,350
D50 ELECTRICAL					
Electrical					
	Distribution	1,800	gsf	\$ 8.97	\$ 16,149
	Feeders	1,800	gsf	\$ 6.93	\$ 12,469
	Grounding System	1,800	gsf	\$ 0.96	\$ 1,732
	Mechanical Equipment and Branch	1,800	gsf	\$ 2.56	\$ 4,608
	Power Devices and Branch, EMT concealed	1,800	gsf	\$ 8.32	\$ 14,970
	Lighting Fixture Cost LED	1,800	gsf	\$ 10.27	\$ 18,486
	Lighting and Branch, EMT installation concealed	1,800	gsf	\$ 5.91	\$ 10,629
	Lighting Control	1,800	gsf	\$ 3.26	\$ 5,872

Owner

Washington State Veterans Home - Spokane
SD Estimate1



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	Fire Alarm, EMT concealed	1,800	gsf	\$ 4.59	\$ 8,267
	LV System Rough-in (Tele/Data)	1,800	gsf	\$ 1.80	\$ 3,248
	LV System Install	1,800	gsf	\$ 3.58	\$ 6,435
	CCTV System Rough-In	1,800	gsf	\$ 0.66	\$ 1,181
	CCTV System Install	1,800	gsf	\$ 1.68	\$ 3,031
	Access Control Rough-In	1,800	gsf	\$ 0.74	\$ 1,335
	Access Control System	1,800	gsf	\$ 2.01	\$ 3,622
	800 MHz system	1,800	gsf	\$ 1.92	\$ 3,464
	Solar Base	1,800	gsf	\$ 1.37	\$ 2,475
SUBTOTAL ELECTRICAL		1,800	BGSF	\$ 65.54	\$ 117,974
E10 EQUIPMENT					
Equipment - OFOI					
SUBTOTAL EQUIPMENT		1,800	BGSF	\$ -	\$ -
E20 CASEWORK & FURNISHINGS					
Fixed Casework					
Manufactured P-Lam Casework					
	P-Lam Base w/ P-Lam Countertops	53	lf	\$ 450.00	\$ 23,850
	P-Lam Uppers	20	lf	\$ 300.00	\$ 6,000
Window Treatment					
	Roller Shades	136	sf	\$ 18.00	\$ 2,448
Moveable Furnishings					
EXCLUDED					
SUBTOTAL FURNISHINGS		1,800	BGSF	\$ 17.94	\$ 32,298
F10 SPECIAL CONSTRUCTION					
PEMB Structue					
	PEMB Structure	1,800	sf	\$ 100.00	\$ 180,000
SUBTOTAL SPECIAL CONSTRUCTION		1,800	BGSF	\$ 100.00	\$ 180,000
F20 SELECTIVE BUILDING DEMOLITION					
Selective Building Demolition					
Hazardous Components Abatement					
None					
SUBTOTAL SELECTIVE BUILDING DEMOLITION		1,800	BGSF	\$ -	\$ -
Z10 GENERAL REQUIREMENTS					
General Conditions					
See Summary					
SUBTOTAL GENERAL REQUIREMENTS		1,800	BGSF	\$ -	\$ -

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				

Owner

Washington State Veterans Home - Spokane
SD Estimate



Project Owner: Department of Enterprise Services
Project Name: Washington State Veterans Home -Spokane
Project Location: Spokane, WA
Project Start Date: Q2,2026
Estimate Date: October 10, 2024

Architect: orcutt | winslow
Project Duration: 24 MO
Building GSF: 3,763
Site GSF: 765,680

<i>ESTIMATE SUMMARY - Warehouse</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
A10	Foundations	3,763	BGSF	\$ 27.28	\$ 102,663
A20	Basement Construction	3,763	BGSF	\$ -	\$ -
B10	Superstructure	3,763	BGSF	\$ 0.99	\$ 3,717
B20	Exterior Enclosure	3,763	BGSF	\$ 16.97	\$ 63,852
B30	Roofing	3,763	BGSF	\$ 4.70	\$ 17,700
C10	Interior Construction	3,763	BGSF	\$ 0.79	\$ 2,972
C20	Stairs	3,763	BGSF	\$ -	\$ -
C30	Interior Finishes	3,763	BGSF	\$ 5.25	\$ 19,756
D10	Conveying Systems	3,763	BGSF	\$ -	\$ -
D20	Plumbing	3,763	BGSF	\$ -	\$ -
D30	HVAC	3,763	BGSF	\$ 9.83	\$ 37,000
D40	Fire Protection	3,763	BGSF	\$ 5.75	\$ 21,637
D50	Electrical	3,763	BGSF	\$ 28.73	\$ 108,120
E10	Equipment	3,763	BGSF	\$ -	\$ -
E20	Casework & Furnishings	3,763	BGSF	\$ 0.92	\$ 3,456
F10	Special Construction	3,763	BGSF	\$ 100.00	\$ 376,300
F20	Selective Demolition	3,763	BGSF	\$ -	\$ -
BUILDING CONSTRUCTION SUBTOTAL					\$ 757,172
Design Contingency				15.00%	\$ 113,576
Subtotal					\$ 870,748
Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)				6.00%	\$ 52,245
Subtotal					\$ 922,993
Escalation to Mid-Point (See Summary)					\$ -
BUILDING GRAND TOTAL		3,763	BGSF	\$ 245.28	\$ 922,993

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

Owner

Washington State Veterans Home - Spokane
SD Estimate1



ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated
No.	Description		Measure	Cost	Cost
A10 FOUNDATIONS					
Foundation Earthwork					
	Footing Excavation and Backfill (Native Soil)	150	cy	\$ 30.00	\$ 4,510
	Footing Drains with Gravel	170	lf	\$ 25.00	\$ 4,250
Foundations					
	Continuous Footings (includes reinforcing)	13	cy	\$ 870.00	\$ 10,875
	Perimeter Stem Wall (includes reinforcing)	6	cy	\$ 3,510.00	\$ 22,078
Slab-on-Grade					
	Slab on Grade (includes reinforcing, base course and vapor barrier)	3,763	sf	\$ 14.30	\$ 53,811
			cy		
Perimeter Insulation / Waterproofing					
	2" Rigid Polystyrene	680	sf	\$ 4.00	\$ 2,720
	Stem Wall Dampproofing	680	sf	\$ 6.50	\$ 4,420
SUBTOTAL FOUNDATIONS		3,763	BGSF	\$ 27.28	\$ 102,663
A20 BASEMENT CONSTRUCTION					
Basement Construction					NIC
SUBTOTAL BASEMENT CONSTRUCTION		3,763	BGSF	\$ -	\$ -
B10 SUPERSTRUCTURE					
Structural Steel					
	Roof Structure, Beams & Columns (includes 15% for connections)				
	Open Web Steel Joist w Metal Roof Deck - 1.5"				Incl. w PEMB
Miscellaneous Metals					
	Allowance	3,763	gsf	\$ 0.50	\$ 1,882
	Plates and Measured Miscellaneous Steel Items	250	lbs	\$ 3.50	\$ 875
Connectors, Rough Hardware and Miscellaneous Blocking					
	Hold Downs - Allowance	8	ea	\$ 120.00	\$ 960
SUBTOTAL SUPERSTRUCTURE		3,763	BGSF	\$ 0.99	\$ 3,717
B20 EXTERIOR ENCLOSURE					
Exterior Wall Construction					
	Exterior Wall Assembly (GWB - Finish 1 Side, vapor barrier, metal studs 6", sheathing, 2 1/2" rigid insulation)				Incl. w PEMB
Loadbearing CMU or Concrete Walls - In B10 Superstructure Above					

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated
No.	Description		Measure	Cost	Cost
Exterior Wall Finish					
	Metal Panels - Allowance				
	Standing Seam Metal Panel, Concealed Fastener				Incl. w PEMB
	Split Face CMU Veneer	840	sf	\$ 34.00	\$ 28,560
Exterior Windows					
	Storefront / Windows, Standard Clear Anodized with Flashing	192	sf	105.00	\$ 20,160
Exterior Doors					
	Ext. HM Dr, HM Frame, Hardware, per leaf	2	ea	4,200.00	\$ 8,400
	Premium for Electronic Hardware at Card Readers (Reader Devices included with Electrical) - Allowance	2	ea	1,000.00	\$ 2,000
Exterior Paint & Sealants					
	Paint to HM Doors and Frames	2	ea	\$ 175.00	\$ 350
	Exterior - Control Joints, Caulking and Joint Sealants	3,763	gsf	\$ 0.50	\$ 1,882
Building Graphics					
	Allowance for Building Signage	1	ls	\$ 2,500.00	\$ 2,500
SUBTOTAL EXTERIOR ENCLOSURE		3,763	BGSF	\$ 16.97	\$ 63,852
B30 ROOFING					
Roof Coverings					
	Standing Seam Metal Roofing - Architectural Grade				Incl. w PEMB
Insulation					
	Roofing Insulation System				Incl. w PEMB
Flashing and Sheet Metal					
	Gutters	240	lf	\$ 25.00	\$ 6,000
	Downspouts	4	ea	\$ 300.00	\$ 1,200
Roof Accessories					
	Fall Protection Anchors	6	ea	\$ 750.00	\$ 4,500
	Access Ladders	1	ea	\$ 3,500.00	\$ 3,500
	Roof Hatches	1	ea	\$ 2,500.00	\$ 2,500
SUBTOTAL ROOFING		3,763	BGSF	\$ 4.70	\$ 17,700

Owner

Washington State Veterans Home - Spokane
SD Estimate1



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
C10	INTERIOR CONSTRUCTION				
	Fittings / Specialties				
	Fire Protection Equipment				
	Fire Extinguishers	1	ea	\$ 65.00	\$ 65
	Fire Extinguisher Cabinets	1	ea	\$ 175.00	\$ 175
	Knox Box	1	ea	\$ 850.00	\$ 850
	Misc. Specialties Allowance (FECs, Corner Guards, etc...)	3,763	gsf	\$ 0.50	\$ 1,882
	SUBTOTAL INTERIOR CONSTRUCTION	3,763	BGSF	\$ 0.79	\$ 2,972
C20	STAIRS				
	Stairs				NIC
	SUBTOTAL STAIRS	3,763	BGSF	\$ -	\$ -
C30	INTERIOR FINISHES				
	Wall Finishes				
	Miscellaneous Finish Carpentry Allowance	3,763	gsf	\$ 1.25	\$ 4,704
	Floor Finishes				
	Sealed Concrete	3,763	sf	\$ 4.00	\$ 15,052
	SUBTOTAL INTERIOR FINISHES	3,763	BGSF	\$ 5.25	\$ 19,756
D10	CONVEYING SYSTEMS				
	Conveying Systems				NIC
	SUBTOTAL CONVEYING SYSTEMS	3,763	BGSF	\$ -	\$ -
D20	PLUMBING				
	D20 Plumbing				NIC
	SUBTOTAL PLUMBING	3,763	BGSF	\$ -	\$ -
D30	HVAC				
	D30 HVAC				
	D3041 Air Distribution Systems				
	Unit / Space Heaters	1	ls	\$ 25,000.00	\$ 25,000
	D3090 Other HVAC				
	Supervision, Labeling, Cleanup	1	ls	\$ 2,500.00	\$ 4,500
	General Conditions	1	ls	\$ 5,000.00	\$ 7,500
	SUBTOTAL HVAC	3,763	BGSF	\$ 9.83	\$ 37,000
D40	FIRE PROTECTION				
	Fire Protection				
	Sprinkler System	3,763	gsf	\$ 5.75	\$ 21,637

Owner

Washington State Veterans Home - Spokane
SD Estimate



<i>ESTIMATE SUMMARY</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	SUBTOTAL FIRE PROTECTION	3,763	BGSF	\$ 5.75	\$ 21,637

D50 ELECTRICAL**Electrical**

Distribution	3,763	gsf	\$ 4.29	\$ 16,149
Feeders	3,763	gsf	\$ 3.31	\$ 12,469
Grounding System	3,763	gsf	\$ 0.46	\$ 1,732
Mechanical Equipment and Branch	3,763	gsf	\$ 2.76	\$ 10,376
Power Devices and Branch, EMT concealed	3,763	gsf	\$ 3.98	\$ 14,970
Lighting Fixture Cost LED	3,763	gsf	\$ 4.91	\$ 18,486
Lighting and Branch, EMT installation concealed	3,763	gsf	\$ 2.82	\$ 10,629
Lighting Control	3,763	gsf	\$ 1.56	\$ 5,872

Owner

Washington State Veterans Home - Spokane
SD Estimate



<i>ESTIMATE SUMMARY</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	Fire Alarm, EMT concealed	3,763	gsf	\$ 2.20	\$ 8,267
	CCTV System Rough-In	3,763	gsf	\$ 0.31	\$ 1,181
	CCTV System Install	3,763	gsf	\$ 0.81	\$ 3,031
	Access Control Rough-In	3,763	gsf	\$ 0.35	\$ 1,335
	Access Control System	3,763	gsf	\$ 0.96	\$ 3,622
	SUBTOTAL ELECTRICAL	3,763	BGSF	\$ 28.73	\$ 108,120
E10 EQUIPMENT					
	Equipment - OFOI				
	SUBTOTAL EQUIPMENT	3,763	BGSF	\$ -	\$ -
E20 CASEWORK & FURNISHINGS					
	Casework & Furnishings				NIC
	Window Treatment				
	Roller Shades	192	sf	\$ 18.00	\$ 3,456
	Moveable Furnishings				
	EXCLUDED				
	SUBTOTAL FURNISHINGS	3,763	BGSF	\$ 0.92	\$ 3,456
F10 SPECIAL CONSTRUCTION					
	PEMB Structure				
	PEMB Structure	3,763	sf	\$ 100.00	\$ 376,300
	SUBTOTAL SPECIAL CONSTRUCTION	3,763	BGSF	\$ 100.00	\$ 376,300
F20 SELECTIVE BUILDING DEMOLITION					
	Selective Building Demolition				
	Hazardous Components Abatement				
	None				
	SUBTOTAL SELECTIVE BUILDING DEMOLITION	3,763	BGSF	\$ -	\$ -
Z10 GENERAL REQUIREMENTS					
	General Conditions				
	See Summary				
	SUBTOTAL GENERAL REQUIREMENTS	3,763	BGSF	\$ -	\$ -

Owner

Washington State Veterans Home - Spokane
SD Estimate



Project Owner: Department of Enterprise Services
Project Name: Washington State Veterans Home -Spokane
Project Location: Spokane, WA
Project Start Date: Q2,2026
Estimate Date: October 10, 2024

Architect: orcutt | winslow
Project Duration: 24 MO
Building GSF: 1,915
Site GSF: 765,680

<i>ESTIMATE SUMMARY - Central Plant</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
A10	Foundations	1,915	BGSF	\$ 43.00	\$ 82,343
A20	Basement Construction	1,915	BGSF	\$ -	\$ -
B10	Superstructure	1,915	BGSF	\$ 41.78	\$ 80,015
B20	Exterior Enclosure	1,915	BGSF	\$ 146.63	\$ 280,791
B30	Roofing	1,915	BGSF	\$ 38.46	\$ 73,655
C10	Interior Construction	1,915	BGSF	\$ 19.45	\$ 37,239
C20	Stairs	1,915	BGSF	\$ -	\$ -
C30	Interior Finishes	1,915	BGSF	\$ 14.77	\$ 28,278
D10	Conveying Systems	1,915	BGSF	\$ -	\$ -
D20	Plumbing	1,915	BGSF	\$ 31.88	\$ 61,051
D30	HVAC	1,915	BGSF	\$ 911.04	\$ 1,744,644
D40	Fire Protection	1,915	BGSF	\$ 5.75	\$ 11,011
D50	Electrical	1,915	BGSF	\$ 88.57	\$ 169,605
E10	Equipment	1,915	BGSF	\$ 2.35	\$ 4,500
E20	Casework & Furnishings	1,915	BGSF	\$ 1.49	\$ 2,853
F10	Special Construction	1,915	BGSF	\$ -	\$ -
F20	Selective Demolition	1,915	BGSF	\$ -	\$ -
BUILDING CONSTRUCTION SUBTOTAL					\$ 2,575,984
Design Contingency				15.00%	\$ 386,398
Subtotal					\$ 2,962,381
Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)				6.00%	\$ 177,743
Subtotal					\$ 3,140,124
Escalation to Mid-Point (See Summary)					\$ -
BUILDING GRAND TOTAL		1,915	BGSF	\$ 1,639.75	\$ 3,140,124

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
A10 FOUNDATIONS					
Foundation Earthwork					
	Footing Excavation and Backfill (Native Soil)	172	cy	\$ 30.00	\$ 5,172
	Footing Drains with Gravel	176	lf	\$ 25.00	\$ 4,400
Foundations					
	Continuous Footings (includes reinforcing)	14	cy	\$ 870.00	\$ 12,406
	Perimeter Stem Wall (includes reinforcing)	7	cy	\$ 3,510.00	\$ 25,588
Slab-on-Grade					
	Slab on Grade (includes reinforcing, base course and vapor barrier)	1,915	sf	\$ 14.30	\$ 27,385
			cy		
Perimeter Insulation / Waterproofing					
	2" Rigid Polystyrene	704	sf	\$ 4.00	\$ 2,816
	Stem Wall Dampproofing	704	sf	\$ 6.50	\$ 4,576
SUBTOTAL FOUNDATIONS		1,915	BGSF	\$ 43.00	\$ 82,343
A20 BASEMENT CONSTRUCTION					
Basement Construction					NIC
SUBTOTAL BASEMENT CONSTRUCTION		1,915	BGSF	\$ -	\$ -
B10 SUPERSTRUCTURE					
Structural Steel					
	Mechanical Mezzanine & Roof Structure, Beams & Columns (includes 15% for connections)				
	Mezzanine Wide Flange Beams & Columns - Allowance	13,788	lbs	\$ 3.50	\$ 48,258
	Open Web Steel Joist w Metal Roof Deck - 1.5"	8,618	lbs	\$ 3.25	\$ 28,007
Miscellaneous Metals					
	Allowance	1,915	gsf	\$ 1.00	\$ 1,915
	Plates and Measured Miscellaneous Steel Items	250	lbs	\$ 3.50	\$ 875
Connectors, Rough Hardware and Miscellaneous Blocking					
	Hold Downs - Allowance	8	ea	\$ 120.00	\$ 960
SUBTOTAL SUPERSTRUCTURE		1,915	BGSF	\$ 41.78	\$ 80,015
B20 EXTERIOR ENCLOSURE					
Exterior Wall Construction					
	Exterior Wall Assembly (Plywood - Finish 1 Side, vapor barrier, metal studs 6", sheathing, 2 1/2" rigid insulation)	3,170	sf	\$ 37.50	\$ 118,875
	Loadbearing CMU or Concrete Walls - In B10 Superstructure Above				

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated
No.	Description		Measure	Cost	Cost
Exterior Wall Finish					
	Miscellaneous				
	Sill Flashing	1	ls	\$ 5,000.00	\$ 5,000
	Metal Panels - Allowance				
	Standing Seam Metal Panel, Concealed Fastener	1,807	sf	\$ 40.00	\$ 72,280
	HPL Siding Panels - Allowance	602	sf	\$ 35.00	\$ 21,070
	Stucco - Allowance	602	sf	\$ 18.00	\$ 10,836
Exterior Soffits					
	HPL Finish to Soffits (includes Framing, Sheathing & WRB)	264	sf	\$ 45.00	\$ 11,880
Exterior Windows					
	Storefront / Windows, Standard Clear Anodized with Flashing	159	sf	105.00	\$ 16,643
Exterior Doors					
	Ext. HM Dr, HM Frame, Hardware, per leaf	2	ea	4,200.00	\$ 8,400
	Push Button ADA Auto Operators (per entrance) - Allowance	1	ea	10,000.00	\$ 10,000
	Premium for Electronic Hardware at Card Readers (Reader Devices included with Electrical) - Allowance	2	ea	1,000.00	\$ 2,000
Exterior Paint & Sealants					
	Paint to HM Doors and Frames	2	ea	\$ 175.00	\$ 350
	Exterior - Control Joints, Caulking and Joint Sealants	1,915	gsf	\$ 0.50	\$ 958
Building Graphics					
	Allowance for Building Signage	1	ls	\$ 2,500.00	\$ 2,500
SUBTOTAL EXTERIOR ENCLOSURE		1,915	BGSF	\$ 146.63	\$ 280,791
B30 ROOFING					
Roof Coverings					
	Asphalt Shingle Roofing - Architectural Grade	2,042	sf	\$ 15.00	\$ 30,630
	Sheathing / Coverboard	2,042	sf	\$ 4.50	\$ 9,189
Insulation					
	Attic R-38 Batt Insulation System	1,915	sf	\$ 3.00	\$ 5,745
Flashing and Sheet Metal					
	Miscellaneous Roof Flashing and Rough Carpentry	5%	on	\$ 39,819	\$ 1,991
	Gutters	176	lf	\$ 25.00	\$ 4,400
	Downspouts	4	ea	\$ 300.00	\$ 1,200
Roof Accessories					
	Fall Protection Anchors	6	ea	\$ 750.00	\$ 4,500
	Access Ladders	1	ea	\$ 3,500.00	\$ 3,500
	Roof Hatches	1	ea	\$ 2,500.00	\$ 2,500
	Smoke Hatch	1	ea	\$ 10,000.00	\$ 10,000
SUBTOTAL ROOFING		1,915	BGSF	\$ 38.46	\$ 73,655

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
C10 INTERIOR CONSTRUCTION					
Partitions					
	GWB Partition (GWB - Finish 2 Sides, metal studs 6", 3 1/2" sound batts)	670	sf	\$ 18.00	\$ 12,060
	GWB Partition (GWB - Premium (1 Hr. Fire Rated))	670	sf	\$ 4.00	\$ 2,680
	Fire Caulking at Penetrations	1,915	gsf	\$ 0.35	\$ 670
	Interior - Caulking and Joint Sealants	1,915	gsf	\$ 0.30	\$ 575
	Miscellaneous Carpentry - Allowance	1,915	gsf	\$ 1.00	\$ 1,915
	Concrete & CMU Walls - See B10 Superstructure Above				
Interior Doors, Frames, Hardware					
	HM / SCW Dr, HM Frame, Hardware, Complete - per leaf	3	ea	\$ 4,200.00	\$ 12,600
	Premium for Hardware at Card Readers (Reader Devices included with Electrical) - Allowance	3	ea	\$ 750.00	\$ 2,250
	Premium for 45 - 90 Minute Door	3	ea	750.00	\$ 2,250
	Access Doors and Panels	1,915	gsf	\$ 0.10	\$ 192
Fittings / Specialties					
	Fire Protection Equipment				
	Fire Extinguishers	1	ea	\$ 65.00	\$ 65
	Fire Extinguisher Cabinets	1	ea	\$ 175.00	\$ 175
	Knox Box	1	ea	\$ 850.00	\$ 850
	Misc. Specialties Allowance (FECs, Corner Guards, etc...)	1,915	gsf	\$ 0.50	\$ 958
SUBTOTAL INTERIOR CONSTRUCTION		1,915	BGSF	\$ 19.45	\$ 37,239
C20 STAIRS					
Stairs					NIC
SUBTOTAL STAIRS		1,915	BGSF	\$ -	\$ -
C30 INTERIOR FINISHES					
Wall Finishes					
	Paint to Walls, Doors, Frames and Miscellaneous	1,915	gsf	\$ 5.00	\$ 9,575
	Miscellaneous Finish Carpentry Allowance	1,915	gsf	\$ 2.00	\$ 3,830
Bases					
	Rubber Base	170	lf	\$ 3.00	\$ 510
Floor Finishes					
	Sealed Concrete	1,915	sf	\$ 4.00	\$ 7,660
	Exposed Ceiling, Painted	1,915	sf	\$ 3.50	\$ 6,703
SUBTOTAL INTERIOR FINISHES		1,915	BGSF	\$ 14.77	\$ 28,278
D10 CONVEYING SYSTEMS					
Conveying Systems					NIC
SUBTOTAL CONVEYING SYSTEMS		1,915	BGSF	\$ -	\$ -

Owner

Washington State Veterans Home - Spokane
SD Estimate



<i>ESTIMATE SUMMARY</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
D20	PLUMBING				
	D20 Plumbing				
	D2020 Domestic Water Distribution				
	RPBA: Non Potable Water Systems	2	ea	\$773.32	\$1,547
	Water Meter	2	ea	\$5,103.42	\$10,207
	Hose Bib - Interior & Exterior	2	ea	\$679.59	\$1,359
	Domestic water piping and fittings	260	lf	\$37.55	\$9,763
	Piping Insulation	1	ls	\$2,665.63	\$2,666
	Non-potable connections	2	ea	\$1,818.75	\$3,638
	D2030 Sanitary Waste				
	Sanitary waste and vent piping	198	lf	\$52.31	\$10,357
	Vent Through Roof	1	ea	\$231.09	\$231
	Floor Drain	4	ea	\$674.71	\$2,699
	Floor Sink	4	ea	\$886.92	\$3,548
	TPV-1 (trap primer)	1	ea	\$758.68	\$759
	Floor Clean Out	2	ea	\$460.54	\$921
	D2040 - Rain Water Drainage				
	Downspout Transitions to Civil	6	EA	\$797.41	\$4,784
	D2090 Other Plumbing				
	Excavation and Native Fill	152	lf	\$26.64	\$4,049
	Commissioning Assistance	1	ls	\$275.03	\$275
	Trucking & Deliveries	1	ls	\$46.54	\$47
	Rentals	1	ls	\$71.93	\$72
	Cleanup	1	ls	\$323.15	\$323
	Labeling	1	ls	\$180.40	\$180
	Material Distribution	1	ls	\$451.00	\$451
	Plumbing System Testing	1	ls	\$345.11	\$345
	Trade Supervision	1	ls	\$1,130.36	\$1,130
	General Conditions	1	ls	\$1,700.25	\$1,700
	SUBTOTAL PLUMBING	1,915	BGSF	\$ 31.88	\$ 61,051

D30	HVAC				
	D30 HVAC				
	D3020 Heat and Cooling Generating Systems				
	EB-01: Electric Boiler	1	ea	\$ 27,922.62	\$ 27,923
	Hydronic Heating Water Pumps and Equipment	1	ls	\$ 186,340.05	\$ 186,340
	Modular Water-to-Water Heat Pump	1	ls	\$ 1,090,986.97	\$ 1,090,987
	Chilled Water Pumps	6	ea	\$ 15,720.37	\$ 94,322
	VFD's	6	ea	\$ 4,817.01	\$ 28,902
	Inertia Bases	6	ea	\$ 2,733.98	\$ 16,404

Owner

Washington State Veterans Home - Spokane
SD Estimate



<i>ESTIMATE SUMMARY</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
	Suction Diffusers	6	ea	\$ 2,733.98	\$ 16,404
	300 Gallon Buffer Tank	1	ls	\$ 36,648.31	\$ 36,648
	Air Separator	1	ls	\$ 5,233.61	\$ 5,234
	Expansion Tank	1	ls	\$ 10,428.17	\$ 10,428
	Pot Feeders	1	ls	\$ 3,580.21	\$ 3,580
	Glycol Feeder	1	ls	\$ 25,777.50	\$ 25,777
	NPW Makeup	1	ls	\$ 2,213.22	\$ 2,213
	Radiant Floor Heat	2,141	sf	\$ 5.76	\$ 12,336
	Radiant Floor Heat R-10 Under Slab Insulation	2,141	sf	\$ 4.43	\$ 9,476
	Radiant Floor Heat Over Excavation and Select Fill	2,141	sf	\$ 3.68	\$ 7,873
	Heating Water Piping System	1	ls	\$ 15,601.89	\$ 15,602
	Heating Water Piping Insulation	1	ls	\$ 5,067.54	\$ 5,068
	CHS/CHR Piping System	400	lf	\$ 55.88	\$ 22,352
	CHS/CHR Piping Insulation	400	lf	\$ 17.24	\$ 6,895
	D3041 Air Distribution Systems				
	Ductwork and fittings, OSA/SA/RA/HREA	383	lb	\$ 9.10	\$ 3,487
	Unit Heaters - Electric	2	ea	\$ 2,733.66	\$ 5,467
	Duct insulation	319	sf	\$ 4.68	\$ 1,493
	Sound lining	64	sf	\$ 9.81	\$ 626
	Louvers	4	ea	\$ 2,226.24	\$ 8,905
	D3042 Exhaust Ventilation Systems				
	EF-1 Exhaust Fan	1	ea	\$ 3,742.94	\$ 3,743
	Ductwork and fittings	192	lb	\$ 9.76	\$ 1,870
	Volume control dampers	4	ea	\$ 118.80	\$ 475
	Grilles, registers and diffusers	4	ea	\$ 159.48	\$ 638
	D3060 Controls and Instrumentation				
	Controls/EMCS	1	ls	\$15,932.80	\$15,933
	D3070 Systems Testing and Balancing				
	Test and Balance (TAB)	1	ls	\$4,979.00	\$4,979
	Commissioning Assistance	1	ls	\$6,217.94	\$6,218
	D3090 Other HVAC				
	Seismic	1	ls	\$5,377.32	\$5,377
	Trucking & Deliveries	1	ls	\$1,052.27	\$1,052
	Rentals	1	ls	\$1,626.23	\$1,626
	Rigging and Hoisting Allowance	1	ls	\$5,850.00	\$5,850
	Water Testing and Treatment	1	ls	\$5,200.00	\$5,200
	Supervision, Labeling, Cleanup	1	ls	\$8,376.50	\$8,376
	General Conditions	1	ls	\$38,562.10	\$38,562
	SUBTOTAL HVAC	1,915	BGSF	\$ 911.04	\$ 1,744,644

Owner

Washington State Veterans Home - Spokane
SD Estimate



<i>ESTIMATE SUMMARY</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
D40	FIRE PROTECTION				
	Fire Protection				
	Sprinkler System	1,915	gsf	\$ 5.75	\$11,011
	SUBTOTAL FIRE PROTECTION	1,915	BGSF	\$ 5.75	\$ 11,011
D50	ELECTRICAL				
	Electrical				
	Distribution	1,915	gsf	\$ 8.96	\$ 17,149
	Feeders	1,915	gsf	\$ 6.91	\$ 13,241
	Generator & Transfer Equipment	1,915	gsf	\$ 18.92	\$ 36,225
	Grounding System	1,915	gsf	\$ 0.96	\$ 1,839
	Mechanical Equipment and Branch	1,915	gsf	\$ 5.75	\$ 11,019
	Power Devices and Branch, EMT concealed	1,915	gsf	\$ 8.30	\$ 15,897
	Lighting Fixture Cost LED	1,915	gsf	\$ 10.25	\$ 19,630
	Lighting and Branch, EMT installation concealed	1,915	gsf	\$ 5.89	\$ 11,287
	Lighting Control	1,915	gsf	\$ 3.26	\$ 6,235
	Fire Alarm, EMT concealed	1,915	gsf	\$ 4.58	\$ 8,779
	LV System Rough-in (Tele/Data)	1,915	gsf	\$ 1.80	\$ 3,449
	LV System Install	1,915	gsf	\$ 3.57	\$ 6,834
	Cable Tray	1,915	gsf	\$ 1.03	\$ 1,976
	CCTV System Rough-In	1,915	gsf	\$ 0.65	\$ 1,254
	CCTV System Install	1,915	gsf	\$ 1.68	\$ 3,219
	Access Control Rough-In	1,915	gsf	\$ 0.74	\$ 1,418
	Access Control System	1,915	gsf	\$ 2.01	\$ 3,846
	Intrusion Detection System	1,915	gsf	\$ -	\$ -
	800 MHz system	1,915	gsf	\$ 1.92	\$ 3,679
	Solar Base	1,915	gsf	\$ 1.37	\$ 2,628
	SUBTOTAL ELECTRICAL	1,915	BGSF	\$ 88.57	\$ 169,605
E10	EQUIPMENT				
	Storage Equipment				
	Adjustable Metal Shelving - Allowance	1	ls	\$ 4,500.00	\$ 4,500
	SUBTOTAL EQUIPMENT	1,915	BGSF	\$ 2.35	\$ 4,500
E20	CASEWORK & FURNISHINGS				
	Casework & Furnishings				NIC
	Window Treatment				
	Roller Shades	159	sf	\$ 18.00	\$ 2,853
	Moveable Furnishings				
	EXCLUDED				
	SUBTOTAL FURNISHINGS	1,915	BGSF	\$ 1.49	\$ 2,853

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
F10	SPECIAL CONSTRUCTION				
	Special Construction				
	SUBTOTAL SPECIAL CONSTRUCTION	1,915	BGSF	\$ -	\$ -
F20	SELECTIVE BUILDING DEMOLITION				
	Selective Building Demolition				NIC
	Hazardous Components Abatement				
	None				
	SUBTOTAL SELECTIVE BUILDING DEMOLITION	1,915	BGSF	\$ -	\$ -
Z10	GENERAL REQUIREMENTS				
	General Conditions				
	See Summary				
	SUBTOTAL GENERAL REQUIREMENTS	1,915	BGSF	\$ -	\$ -

Owner

Washington State Veterans Home - Spokane
SD Estimate



Project Owner: Department of Enterprise Services
Project Name: Washington State Veterans Home -Spokane
Project Location: Spokane, WA
Project Start Date: Q2,2026
Estimate Date: October 10, 2024

Architect: orcutt | winslow
Project Duration: 24 MO
Building GSF: 147,123
Site GSF: 765,680

<i>ESTIMATE SUMMARY - Sitework</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
G10	Site Preparation	765,680	SGA	\$ 1.41	\$ 1,077,742
G20	Site Improvements	765,680	SGA	\$ 8.82	\$ 6,756,930
G30	Site Civil / Mech Utilities	765,680	SGA	\$ 2.97	\$ 2,275,000
G40	Site Electrical Utilities	765,680	SGA	\$ 2.66	\$ 2,035,000
G50	Other Site Construction	765,680	SGA	\$ 0.39	\$ 302,400
SITWORK SUBTOTAL					\$ 12,447,072
Design Contingency				15.00%	\$ 1,867,061
Subtotal					\$ 14,314,133
Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)				6.00%	\$ 858,848
Subtotal					\$ 15,172,981
Escalation to Mid-Point (See Summary)					\$ -
SITE GRAND TOTAL		765,680	SGA	\$ 19.82	#####

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of	Unit	Total Estimated
No.	Description		Measure	Cost	Cost
G10	SITE PREPARATION				
General Sitework Requirements - Target Value Allowance					
	Mobilization	1	ls	\$ 100,000.00	\$ 100,000
	Site Layout & Potholing	1	ls	\$ 25,000.00	\$ 25,000
	Traffic Control (for entire project)	48	weeks	\$ 6,500.00	\$ 312,000
Site Improvements Demolition & Relocation - Target Value Allowance					
	Demo Landscaping, trees, and native plant areas - Allowance	1	ls	\$ 25,000.00	\$ 25,000
	Misc. Site Clearing	1	ls	\$ 5,000.00	\$ 5,000
Site Earthwork - Targe Value Allowance					
	Temporary Construction Fencing	3,000	lf	\$ 10.00	\$ 30,000
	TESC Erosion Control - Filter Fabric Fence, Catch Basin Inlet Protection, and Stabilized Construction Entry	1	ls	\$ 25,000.00	\$ 25,000
	Tree Protection Fencing	1	ls	\$ 10,000.00	\$ 10,000
	Contractor Access and Laydown Area	5,000	sf	\$ 2.00	\$ 10,000
	Clear and Grub	150,000	sf	\$ 0.25	\$ 37,500
Excavation - Allowances					
	Native Cut / Fill - Allowance	3,000	cy	\$ 20.00	\$ 60,000
	Export Unsuitable - Allowance	2,500	cy	\$ 35.00	\$ 87,500
	Imported Fill - Allowance	2,500	cy	\$ 41.00	\$ 102,500
	Building Pad	147,123	sf	\$ 0.75	\$ 110,342
	Finish Grading	166,000	sf	\$ 0.65	\$ 107,900
	Dewatering - Allowance	1	ls	\$ 30,000.00	\$ 30,000
Foundation Earthwork					
	Footing Excavation and Backfill	In Building Section A10			
	Footing Drains with Gravel	In Building Section A10			
Hazardous Waste Remediation					
	None Included				
SUBTOTAL SITE PREPARATON		765,680	SGA	\$ 1.41	\$ 1,077,742

G20 SITE IMPROVEMENTS					
Asphalt Paving (Base Courses Included) - Target Value Allowance					
	212 Parking Stalls w Striping / Curbs / Landscaping	212	stalls	\$ 21,000.00	\$ 4,452,000
	Light Duty (Parking Stalls / Access Road) (2" HMA over 6" Crushed Rock)				Incl.
	Heavy Duty (Parking Lot Drive / Fire Apparatus) (4" HMA over 6" Crushed Rock)				Incl.
Concrete Site Work (Base Courses Included) - Target Value Allowance					
	Curbs - Standard				Incl.
	Concrete Sidewalk - 4" over 4" crushed rock	48,270	sf	\$ 9.00	\$ 434,430
	Concrete Driveway Entries over 6" crushed rock	3	ea	\$ 3,500.00	\$ 10,500
	Site Walls @ Court Yards	2,500	sf	\$ 65.00	\$ 162,500

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
Pavement Markings/Site Signage					
	Pavement Markings and Signage				Incl.
Landscaping/Irrigation - Target Value Allowance					
	General Landscaping - Allowance	166,000	sf	\$ 3.50	\$ 581,000
	Planter Shrubs and Ground Cover - Allowance	166,000	sf	\$ 6.50	\$ 1,079,000
	Trees	75	ea	\$ 500.00	\$ 37,500
SUBTOTAL SITE IMPROVEMENTS		765,680	SGA	\$ 8.82	\$ 6,756,930
G30 SITE CIVIL / MECHANICAL UTILITIES					
Water Service - Target Value Allowance					
	Tie-in at Existing (includes gate valve), Water / Fire Lines , Water Meter, Double Check Valve, Irrigation Lines, Domestic Water, FDC Fire Department Connection, Hydrant Assembly and Existing Street Surface Repair / Traffic Control	1	ls	\$ 1,125,000	\$ 1,125,000
Sanitary Sewer Systems - Target Value Allowance					
	Tie-in at Existing, Main Sewer, Manholes, Existing Street Surface Repair / Traffic Control	1	ls	\$ 650,000.00	\$ 650,000
Storm Drainage - Target Value Allowance					
	Drain Line PVC, Roof Drain Lines, Clean Outs, Catch Basins, Drywells, Manholes, and Existing Street Surface Repair / Traffic Control	1	ls	\$ 500,000.00	\$ 500,000
SUBTOTAL SITE CIVIL / MECHANICAL UTILITIES		765,680	SGA	\$ 2.97	\$ 2,275,000
G40 SITE ELECTRICAL UTILITIES					
Electrical and Telecom Utilities					
	Electrical Utility - Primary	1	ls	\$ 450,000	\$ 450,000
	Tele/Data Utility	1	ls	\$ 160,000	\$ 160,000
	Site Lighting LED (Branch and Pole Bases)	1	ls	\$ 850,000	\$ 850,000
	Site Power	1	ls	\$ 125,000	\$ 125,000
	Car Chargers	1	ls	\$ 450,000	\$ 450,000
SUBTOTAL SITE ELECTRICAL UTILITIES		765,680	SGA	\$ 2.66	\$ 2,035,000
G50 OTHER SITE CONSTRUCTION					
Other Site Construction					
	Gazebo / Barbecue Areas	4	ea	\$ 75,600.00	\$ 302,400
SUBTOTAL OTHER SITE CONSTRUCTION		765,680	SGA	\$ 0.39	\$ 302,400
Z10 GENERAL REQUIREMENTS					
General Conditions					
	See Summary				
SUBTOTAL GENERAL REQUIREMENTS		765,680	SGA	\$ -	\$ -

Owner

Washington State Veterans Home - Spokane
SD Estimate



Project Owner: Department of Enterprise Services
Project Name: Washington State Veterans Home -Spokane
Project Location: Spokane, WA
Project Start Date: Q2,2026
Estimate Date: October 10, 2024

Architect: orcutt | winslow
Project Duration: 24 MO
Building GSF: See Summary
Site GSF: 30,000

<i>ESTIMATE SUMMARY - Sitework: Off Site</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
G10	Site Preparation	30,000	SGA	\$ 5.42	\$ 162,500
G20	Site Improvements	30,000	SGA	\$ 4.94	\$ 148,250
G30	Site Civil / Mech Utilities	30,000	SGA	\$ 7.50	\$ 225,000
G40	Site Electrical Utilities	30,000	SGA	\$ 4.17	\$ 125,000
G50	Other Site Construction	30,000	SGA	\$ -	\$ -
SITWORK SUBTOTAL					\$ 660,750
Design Contingency				15.00%	\$ 99,113
Subtotal					\$ 759,863
Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)				6.00%	\$ 45,592
Subtotal					\$ 805,454
Escalation to Mid-Point (See Summary)					\$ -
SITE GRAND TOTAL		30,000	SGA	\$ 26.85	\$ 805,454

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

Owner

Washington State Veterans Home - Spokane
SD Estimate



<i>ESTIMATE SUMMARY</i>		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
G10	SITE PREPARATION				
	General Sitework Requirements - Target Value Allowance				
	Mobilization	1	ls	\$ 35,000.00	\$ 35,000
	Site Layout & Potholing	1	ls	\$ 2,500.00	\$ 2,500
	Traffic Control (for entire project)	4	weeks	\$ 6,500.00	\$ 26,000
	Site Improvements Demolition & Relocation - Target Value Allowance				
	Demo Landscaping, trees, and native plant areas - Allowance	1	ls	\$ 5,000.00	\$ 5,000
	Misc. Site Clearing	1	ls	\$ 1,500.00	\$ 1,500
	Site Earthwork - Targe Value Allowance				
	Temporary Construction Fencing - Allowance	1	ls	\$ 5,000.00	\$ 5,000
	TESC Erosion Control - Filter Fabric Fence, Catch Basin Inlet Protection, and Stabilized Construction Entry	1	ls	\$ 5,000.00	\$ 5,000
	Tree Protection Fencing	1	ls	\$ 2,500.00	\$ 2,500
	Contractor Access and Laydown Area	2,500	sf	\$ 2.00	\$ 5,000
	Clear and Grub	30,000	sf	\$ 0.25	\$ 7,500
	Excavation - Allowances				
	Native Cut / Fill - Allowance	500	cy	\$ 20.00	\$ 10,000
	Export Unsuitable - Allowance	500	cy	\$ 35.00	\$ 17,500
	Imported Fill - Allowance	500	cy	\$ 41.00	\$ 20,500
	Finish Grading	30,000	sf	\$ 0.65	\$ 19,500
	Foundation Earthwork				
	Footing Excavation and Backfill	In Building Section A10			
	Footing Drains with Gravel	In Building Section A10			
	Hazardous Waste Remediation				
	None Included				
	SUBTOTAL SITE PREPARATON	30,000	SGA	\$ 5.42	\$ 162,500

Owner

Washington State Veterans Home - Spokane
SD Estimate



ESTIMATE SUMMARY		Quantity	Unit of Measure	Unit Cost	Total Estimated Cost
No.	Description				
G20	SITE IMPROVEMENTS				
	Asphalt Paving (Base Courses Included) - Target Value Allowance				
	Heavy Duty (Drive / Fire Apparatus) (4" HMA over 6" Crushed Rock)	27,000	\$	4.75	\$ 128,250
	Pavement Markings/Site Signage				
	Pavement Markings and Signage				Incl.
	Landscaping/Irrigation - Target Value Allowance				
	General Native Landscaping - Allowance	1	ls	\$ 20,000.00	\$ 20,000
	SUBTOTAL SITE IMPROVEMENTS	30,000	SGA	\$ 4.94	\$ 148,250
G30	SITE CIVIL / MECHANICAL UTILITIES				
	Water Service - Target Value Allowance				
	Tie-in at Existing (includes gate valve), Water / Fire Lines , Water Meter, Double Check Valve, Irrigation Lines, Domestic Water, FDC Fire Department Connection, Hydrant Assembly and Existing Street Surface Repair / Traffic Control	1	ls	\$ 125,000	\$ 125,000
	Sanitary Sewer Systems - Target Value Allowance				
	Tie-in at Existing, Main Sewer, Manholes, Existing Street Surface Repair / Traffic Control	1	ls	\$ 100,000	\$ 100,000
	SUBTOTAL SITE CIVIL / MECHANICAL UTILITIES	30,000	SGA	\$ 7.50	\$ 225,000
G40	SITE ELECTRICAL UTILITIES				
	Electrical and Telecom Utilities				
	Electrical / Fiber Optics - Primary (Incl. Connection at Street)	1	ls	\$ 125,000	\$ 125,000
	SUBTOTAL SITE ELECTRICAL UTILITIES	30,000	SGA	\$ 4.17	\$ 125,000
G50	OTHER SITE CONSTRUCTION				
	Other Site Construction				NIC
	SUBTOTAL OTHER SITE CONSTRUCTION	30,000	SGA	\$ -	\$ -
Z10	GENERAL REQUIREMENTS				
	General Conditions				
	See Summary				
	SUBTOTAL GENERAL REQUIREMENTS	30,000	SGA	\$ -	\$ -

Spokane Veterans Home Replacement - Operational cost

FTE		Operating Cost					
**Current - FY24	New Facility	Current			New Facittly		
		Staffing Cost (A,B &CZ) FY24	Other	Total	Staffing Cost (A,B &CZ) FY24	Other	Total
119.56	174.00	\$ 13,598,235	\$ 1,650,301	\$ 15,248,535	\$ 16,912,343	\$ 3,135,806	\$ 20,048,149

* Shared Services or agency cost allocation participation - SVH contributes xx% of it s FTE and expenditures

** Current FTE, FY24 includes Agency Staffing resources hired

Ten Year Projection

Est. Revenue rate increase	4.5%
Est. Inflation Assumption:	2%
Est. Staff cost of living adjust. Est.	2%

Expenditures	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Staffing	\$ 17,588,837	\$ 18,292,391	\$ 19,024,086	\$ 19,785,050	\$ 20,576,452	\$ 21,399,510	\$ 22,255,490	\$ 23,145,710	\$ 24,071,538	\$ 25,034,400	\$ 211,173,462
Building - Facility maint.	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 1,250,000
Interior - Facility maint.	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 1,250,000
Utilities	\$ 159,000	\$ 159,000	\$ 159,000	\$ 159,000	\$ 159,000	\$ 159,000	\$ 159,000	\$ 159,000	\$ 159,000	\$ 159,000	\$ 1,590,000
Other	\$ 2,789,522	\$ 2,853,493	\$ 2,918,742	\$ 2,985,297	\$ 3,053,183	\$ 3,122,427	\$ 3,193,055	\$ 3,265,097	\$ 3,338,578	\$ 3,413,530	\$ 30,932,925
Total	\$ 20,787,359	\$ 21,554,883	\$ 22,351,829	\$ 23,179,347	\$ 24,038,635	\$ 24,930,937	\$ 25,857,545	\$ 26,819,806	\$ 27,819,116	\$ 28,856,930	\$ 246,196,386
Revenue	\$ 21,495,526	\$ 22,462,825	\$ 23,473,652	\$ 24,529,966	\$ 25,633,815	\$ 26,787,336	\$ 27,992,766	\$ 29,252,441	\$ 30,568,801	\$ 31,944,397	\$ 264,141,524

Washington State Veterans Home - Spokane Replacement

Site Amenities	
Community Center Outdoor Areas	Area
Covered Entry Plaza	2,125 S.F.
Multipurpose Covered Porch	798 S.F.
Therapy Covered Porch	496 S.F.
Staff Break Room Covered Porch	490 S.F.
Staff Classroom Covered Porch	701 S.F.
Coffee Shop Covered Porch	425 S.F.
Sports Bar Covered Porch	251 S.F.
Covered Service / Loading Dock	2,374 S.F.
Total Covered Outdoor Area	7,660 S.F.
Therapy Garden (uncovered)	1,281 S.F.
Event Plaza (uncovered)	4,181 S.F.
Flag Plaza (uncovered)	6,204 S.F.
Total Uncovered Outdoor Area	11,666 S.F.

Legend	
	Covered Areas / Roof Overhang
	Garden / Courtyards

Adult Day Healthcare Outdoor Areas	Area
Covered Entry / Dropoff	1,567 S.F.
Covered Activity Porch	810 S.F.
Covered Dining Porch	326 S.F.
Total Covered Outdoor Area	2,703 S.F.
ADHC Activity Garden (uncovered)	1,896 S.F.
ADHC Dining Garden (uncovered)	1,354 S.F.
ADHC Flag Plaza (uncovered)	3,019 S.F.
Total Uncovered Outdoor Area	6,269 S.F.

North Neighborhood Outdoor Areas	Area
Covered Dining / Living Room Porch	899 S.F.
Covered Dining / Living Room Porch	449 S.F.
Gazebo	378 S.F.
Gazebo	189 S.F.
Covered Staff Porch	337 S.F.
Total Covered Outdoor Area	2,252 S.F.
Secure Resident Garden (uncovered)	2,705 S.F.
Secure Resident Garden (uncovered)	1,922 S.F.
Total Uncovered Outdoor Area	4,627 S.F.

South Neighborhood Outdoor Areas	Area
Covered Dining / Living Room Porch	899 S.F.
Covered Dining / Living Room Porch	449 S.F.
Gazebo	378 S.F.
Gazebo	189 S.F.
Covered Staff Porch	337 S.F.
Total Covered Outdoor Area	2,252 S.F.
Secure Resident Garden (uncovered)	2,705 S.F.
Secure Resident Garden (uncovered)	1,922 S.F.
Total Uncovered Outdoor Area	4,627 S.F.

Washington State Veterans Home - Spokane Replacement

Revised: 16 May, 2024

BUILDING SUMMARY	
Program	Area
Community Center Gross SF	27,246 S.F.
Community Center Net SF	25,290 S.F.
Walls/Chases	1,956 S.F.

Legend	
	Community Center
	Neighborhoods
	Support Buildings
	Adult Day Healthcare

Program	Area
Neighborhood 'A' Gross SF	39,147 S.F.
South Neighborhood Net SF	38,596 S.F.
Walls/Chases	551 S.F.


Program	Area
Neighborhood 'B' Gross SF	39,147 S.F.
North Neighborhood Net SF	35,436 S.F.
Walls/Chases	3,711 S.F.

Program	Area
Adult Day Gross SF	10,588 S.F.
Adult Day Net SF	#REF!
Walls/Chases	#REF!

Program	Area
Warehouse Building Gross SF	1,800 S.F.
Warehouse Building Net SF	1,788 S.F.
Walls/Chases	12 S.F.

Program	Area
Central Plant Gross SF	1,915 S.F.
Central Plant Net SF	1,780 S.F.
Walls/Chases	135 S.F.

Washington State Veterans Home - Spokane Replacement (V2)

 Send reminder to all of your recipients.







[Remind them](#)

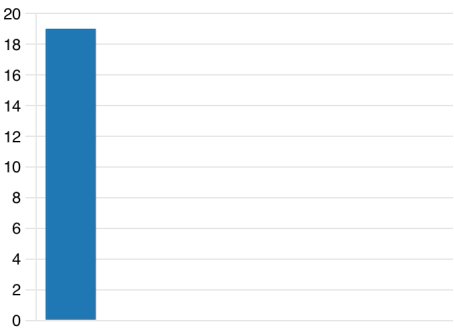
21 Responses

27:26 Average time to complete






Active Status

1. I am evaluating...

	Skilled Nursing	19
	Memory Care	0
	Assisted Living	0
	Independent Living	0
	Adult Day Care	0
	Other	0



2. How long have you been working / living at this Community?

	< 3 years	5
	3 - 5 years	4
	5 - 10 years	5
	10 - 20 years	3
	> 20 years	1



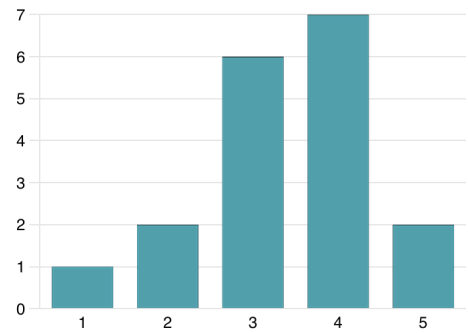
3. Were you involved in the design / move-in phase?

	Yes	1
	No	17



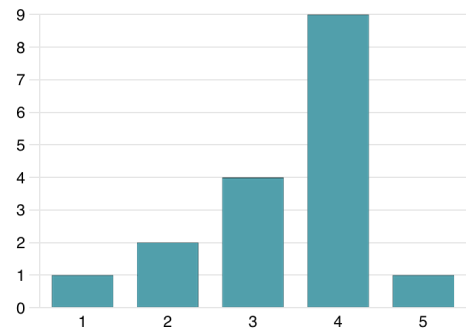
4. What is your overall impression of the Community?

3.39
Average Rating



5. How would you rate the overall Staff satisfaction with this Community?

3.41
Average Rating



6. What could be done to improve Staff satisfaction?

12
Responses

Latest Responses
"Better coffee and staff bathrooms used by staff only"

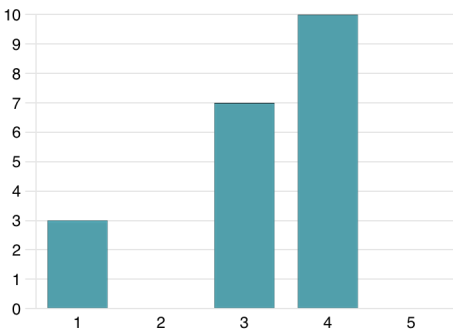
7 respondents (58%) answered **rooms** for this question.

Word cloud showing responses for improving staff satisfaction:

- rooms
- staff
- rooms with their own shower
- supply rooms
- conference rooms
- rooms for Residents
- Single rooms
- shower room
- family rooms
- Bathrooms for staff
- therapy rooms
- staff to take their breaks
- therapy staff
- rooms with more windows
- Better
- machine in the room
- O2 in the rooms
- areas
- lockers for all the staff
- furniture for staff

7. How would you rate the overall Resident satisfaction with this Community?

3.20
Average Rating



8. What could be done to improve Resident satisfaction?

19
Responses

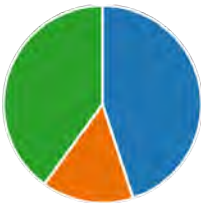
Latest Responses
"Better food"
"More activities outdoors, more space."

8 respondents (42%) answered **rooms** for this question.



9. Do you feel this Community is more...

Resident-centric	9
Staff-centric	3
neither	8



10. What is the most common positive feedback you hear from the user groups?

17

Responses

Latest Responses

"Staff is incredibly nice"

"Friendly staff"

9 respondents (53%) answered **staff** for this question.



11. What is the most common negative feedback you hear from the user groups?

15

Responses

Latest Responses

"Aides take too long to answer call lights"

"Bad food"

"outdate design."

3 respondents (**20%**) answered **space** for this question.



12. What is your favorite element / room / component of the Community?

14

Responses

Latest Responses

"Patios"

"Have out own kitchen, new A/C units, update outdoor walkway."

6 respondents (43%) answered **Outdoor** for this question.



13. What is your least favorite element / room / component of the Community?

15
Responses

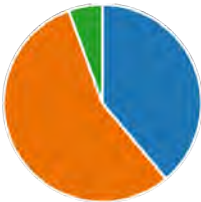
Latest Responses
"Small break rooms and not enough bathrooms"
"Dining halls"
"Not enough space for work relate equipment. Small rooms."

9 respondents (60%) answered **rooms** for this question.



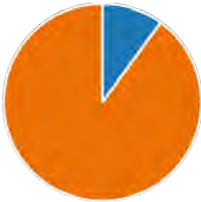
14. I am a...

Administrative	7
Caregiver	10
Maintenance	1
Resident	0



15. Do you feel the facility has sufficient area for you and your Administrative Staff to conduct their business effectively?

Yes	2
No	18



16. Please explain

19
Responses

Latest Responses
"1st floor nurses' station is too small. Break rooms are too small. Parking lot is too small. "
"We don't always have what we need when we need it. For example if a sling gets dirty ..."
"Rooms are small."

11 respondents (58%) answered **rooms** for this question.



17. How many staff comprise your Administrative / Executive Staff at this facility?

15
Responses

Latest Responses
"25"
"4"

2 respondents (13%) answered 4 for this question.



18. What Administrative areas are too large?

10
Responses

Latest Responses
"N/A"

19. What Administrative areas are too small?

14
Responses

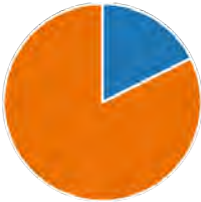
Latest Responses
"1st floor nurses' station "
"N/A"

2 respondents (14%) answered break room for this question.



20. Are there areas that are un / under utilized?

Yes 3
No 14



21. If so, which ones and why?

5
Responses

Latest Responses
"N/A"

1 respondents (20%) answered **office spaces** for this question.

employees
office spaces areas
Marine room poorly utilized

22. What Administrative program areas are missing that you would like to see included in the next generation of this Community?

9
Responses

Latest Responses
"N/A"

2 respondents (22%) answered **offices** for this question.

areas for our veterans Admin Community areas HRC
actual offices
Transportation director
game rooms supervisor office offices areas Asst
break area
outdoor access meeting spaces private area training spaces nurse floor
executive leadership Dietary supervisor training requirements

23. How many meeting areas (conference room, staff meeting spaces, etc) do you have a this Community? Is that enough? Or do you need more?

15
Responses

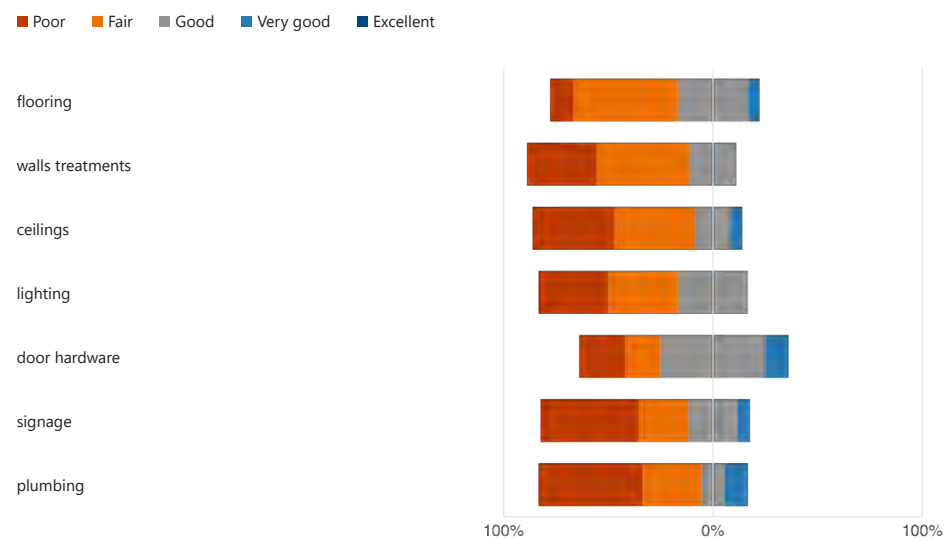
Latest Responses
" "

"Not enough. Nuring staff have to use resident areas such as the library or dining halls t...
"One. Often utilize the dining rooms."

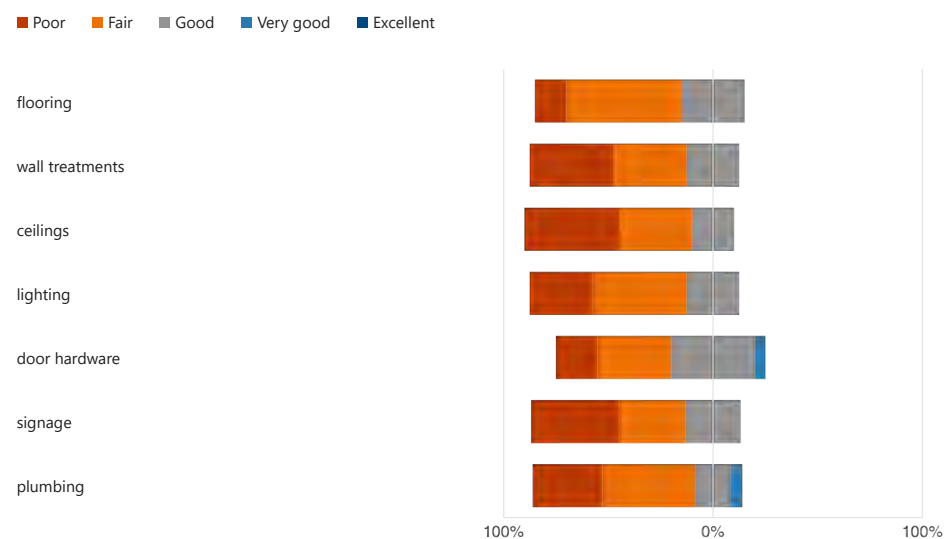
3 respondents (20%) answered **dining rooms** for this question.

Nuring staff resident areas set aside space for meetings
meetings/veterans rooms and areas break room
staff meetings
actives had their own room dining rooms space dining halls
marine room residents staff nice meetings
areas such as the library veterans and their families families and therapy

24. How would you rate the quality of these items in the ADMINISTRATIVE AREA:

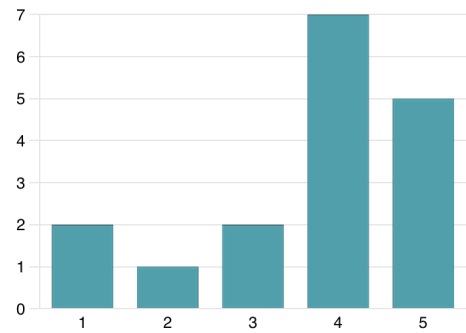


25. How would you rate the quality of these items in the RESIDENT AREAS:



26. How would you rate the outdoor garden areas?

3.71
Average Rating



27. What areas (outside of the Administrative program) would you like to see included, deleted or adjusted in the next generation of this Community?

9
Responses

Latest Responses

"Bigger and more engaging outdoor areas for residents. Better spot for staff that smoke"

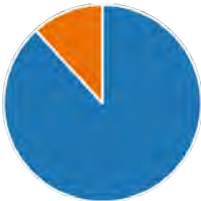
5 respondents (56%) answered **Spaces** for this question.

activity rooms
outdoor space

Spaces Residents
storage areas

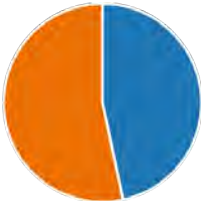
28. Is the Administrative area located conveniently relative to the rest of the Community?

Yes 15
No 2



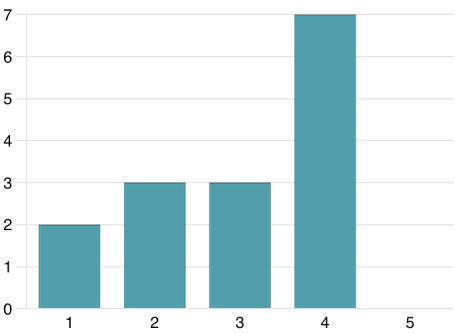
29. Do you feel there is good staff connectivity between the Administration and the other departments? (ie: Dietary, Maintenance, Caregivers, Activities, etc...)

Yes 7
No 8



30. How would you rate the overall staff morale at this Community?

3.00
Average Rating



31. What tools/spaces/equipment would you like to help you do your job better/more efficiently?

15
Responses

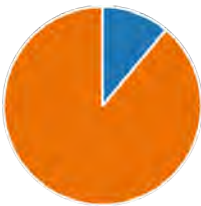
Latest Responses
"A meeting room next to the nurse's station for meetings/huddles"

7 respondents (47%) answered **Space** for this question.



32. Do you feel the facility has sufficient area for you and your Caregiver Staff to conduct their business effectively?

Yes 2
No 16



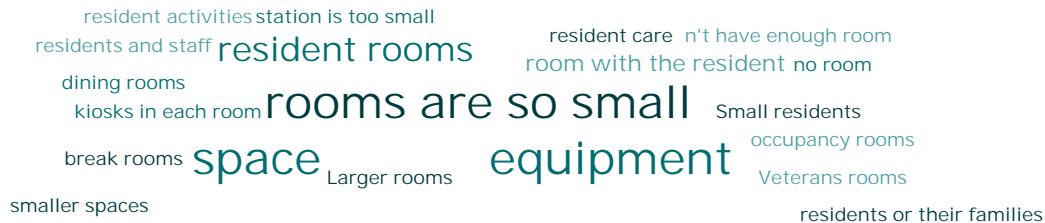
33. Please explain

15
Responses

Latest Responses

"The assisted dining rooms are too small and we have to often use them for huddles. "
"Building is outdated, as stated previously. No neat way to store equipment to prevent p...

4 respondents (27%) answered **rooms are so small** for this question.



34. How many staff comprise your Caregiver Staff at this facility?

11
Responses

Latest Responses

"50"

3 respondents (27%) answered **100** for this question.



35. What spaces within the Caregiver / Support areas are too large?

12
Responses

Latest Responses

"None"

8 respondents (67%) answered **None** for this question.



36. What spaces within the Caregiver / Support areas are too small?

13
Responses

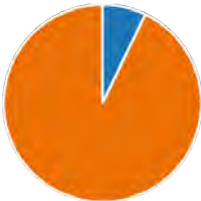
Latest Responses
"Assisted dining rooms"
"storage, dining areas."

3 respondents (23%) answered **resident rooms** for this question.

storage Everywhere
break areas dining areas Hoyer especially when one needs assistance
Bedrooms are too small **resident rooms** bed rooms
nursing station Med Rooms rooms too small dining rooms staff lounge
Breakrooms modern wheelchairs Gym
Kitchenettes

37. Are there areas that are un / under utilized?

● Yes 1
● No 13



38. If so, which ones and why?

4
Responses

Latest Responses
"N/A"

39. What program areas are missing that you would like to see included in the next generation of this Community?

9
Responses

Latest Responses
"N/A"

4 respondents (44%) answered **spaces** for this question.

home for our Veterans shop for residents conference rooms
center for residents dementia residents dentist space
barber/beauty area for residents **spaces** residents breakroom spaces
outdoor areas spaces for employees living residents spaces for residents common spaces
separate unit bigger area therapy space communal spaces

40. How many meeting areas (conference room, staff meeting spaces, etc) do you have a this Community? Is that enough? Or do you need more?

9
Responses

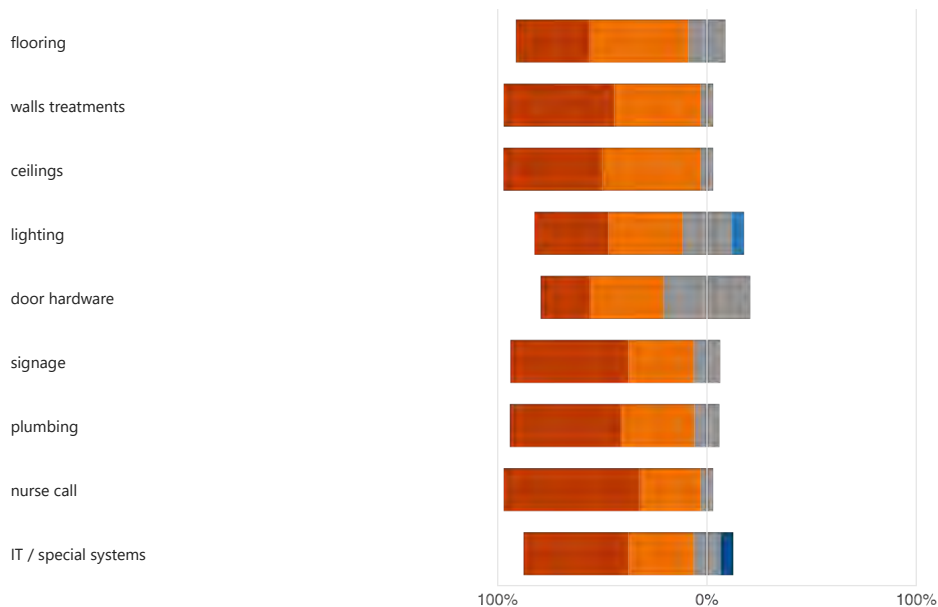
Latest Responses
"There's no good meeting areas."

3 respondents (33%) answered **meeting** for this question.

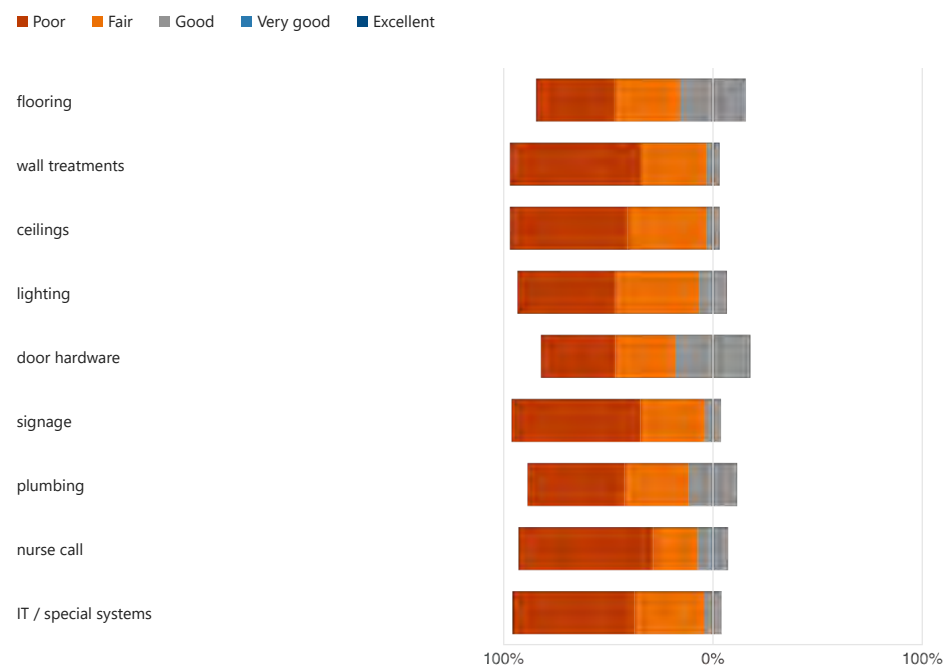
not enough space none Zero
TRAINING ROOMS meeting rooms
meeting areas
veterans MEETING/TRAINING meeting spaces

41. How would you rate the quality of these items in the CAREGIVER AREA?

Poor Fair Good Very good Excellent

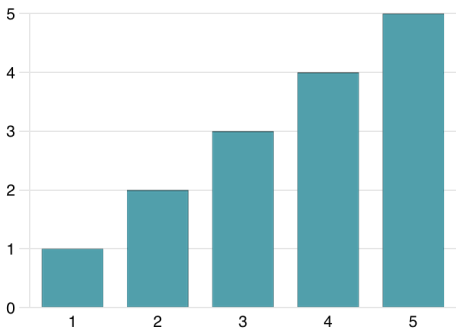


42. How would you rate the quality of these items in the RESIDENT AREAS?



43. How would you rate the outdoor garden areas?

3.67
Average Rating



44. What areas (outside of the Caregiver program) would you like to see included, deleted or adjusted in the next generation of this Community?

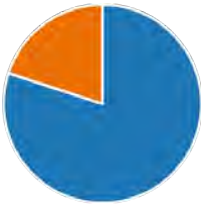
8
Responses

Latest Responses
"None"

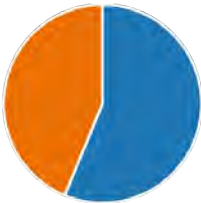
4 respondents (50%) answered **area** for this question.



45. Is the Caregiver Staff / Support area located conveniently relative to the rest of the Community?

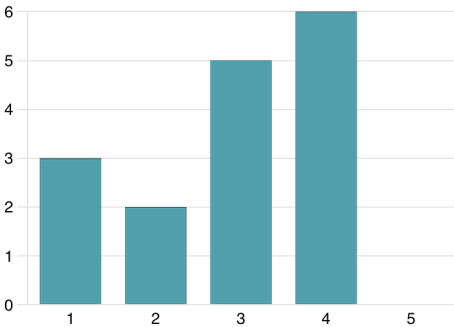


46. Do you feel there is good staff connectivity between the Caregiver and the other departments? (ie: Dietary, Maintenance, Administration, Activities, etc...)



47. How would you rate the overall staff morale at this Community?

2.88
Average Rating



48. What tools/spaces/equipment would you like to help you do your job better/more efficiently?

10
Responses

Latest Responses

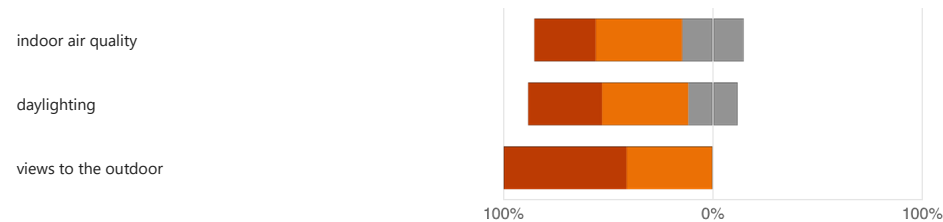
"Extra/back up slings for emergencies. Meeting room for huddles. Clean utility rooms th...

5 respondents (50%) answered **room** for this question.

conference room room for huddles
nursing staff meeting room **room space** rooms with showers
private rooms resident room

49. How would you rate..

Poor Fair Good Very good Excellent



50. What is the biggest challenge that you face with the Residents on a regular basis?

10
Responses

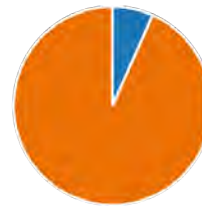
Latest Responses

"They don't like the food and don't get enough time outside of the facility."

4 respondents (40%) answered **space** for this question.

light system common areas small rooms rooms being too small residents
reidents and staff space and lack areas that are comfortable facility **space** **rooms** nurse's stations
lack of inspiration quiet space n't have their own space inspiration and joy
not enough room rooms and bathrooms comfortable for reidents unsafe

51. Do you feel that you have an area(s) in the neighborhoods to do charting that are isolated enough for you to concentrate on your charting tasks?

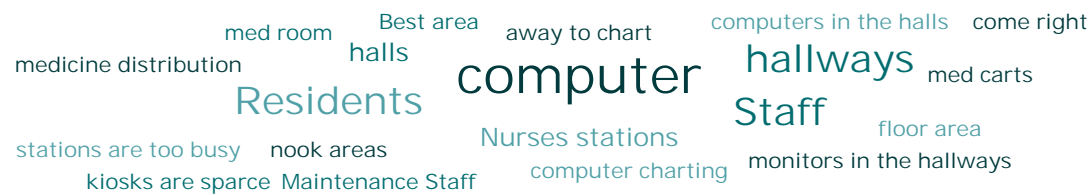


52. If not, why?

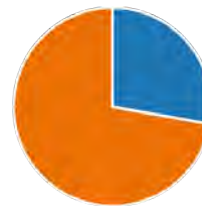
14
Responses

Latest Responses
"We don't go out into the neighborhood to do charting."

4 respondents (29%) answered **computer** for this question.



53. Do you feel the facility has sufficient area for you and your Maintenance / Facility staff to conduct their business effectively?



54. Please explain

13
Responses

Latest Responses
"N/A"

4 respondents (31%) answered **storage** for this question.



55. How many staff comprise the Maintenance / Facility staff at this facility?

14
Responses

Latest Responses
"50"

2 respondents (14%) answered 5 for this question.



56. What spaces within the Maintenance / Facility areas are too large?

8
Responses

Latest Responses
"N/A"

4 respondents (50%) answered None for this question.



57. What spaces within the Maintenance / Facility areas are too small?

10
Responses

Latest Responses
"N/A"

2 respondents (20%) answered office for this question.



58. Are there areas that are un / under utilized?



59. If so, which ones and why?

3 Responses

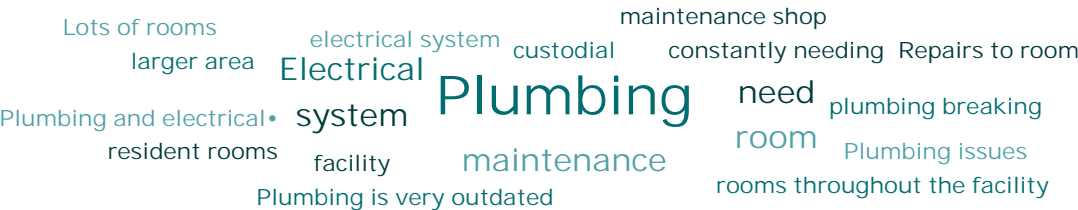
Latest Responses
"N/A"

60. What are the biggest maintenance issues that you have to deal with at this Community? Rank them from biggest to least urgent?

12 Responses

Latest Responses
"It's difficult to get things fixed over the weekends."
"Plumbing is very outdated. I would say that electrical system/backup generator needs t..."

5 respondents (42%) answered **Plumbing** for this question.



61. How would you compare the overall maintenance demand of this facility with similar projects that you have worked at in the past? (if applicable)

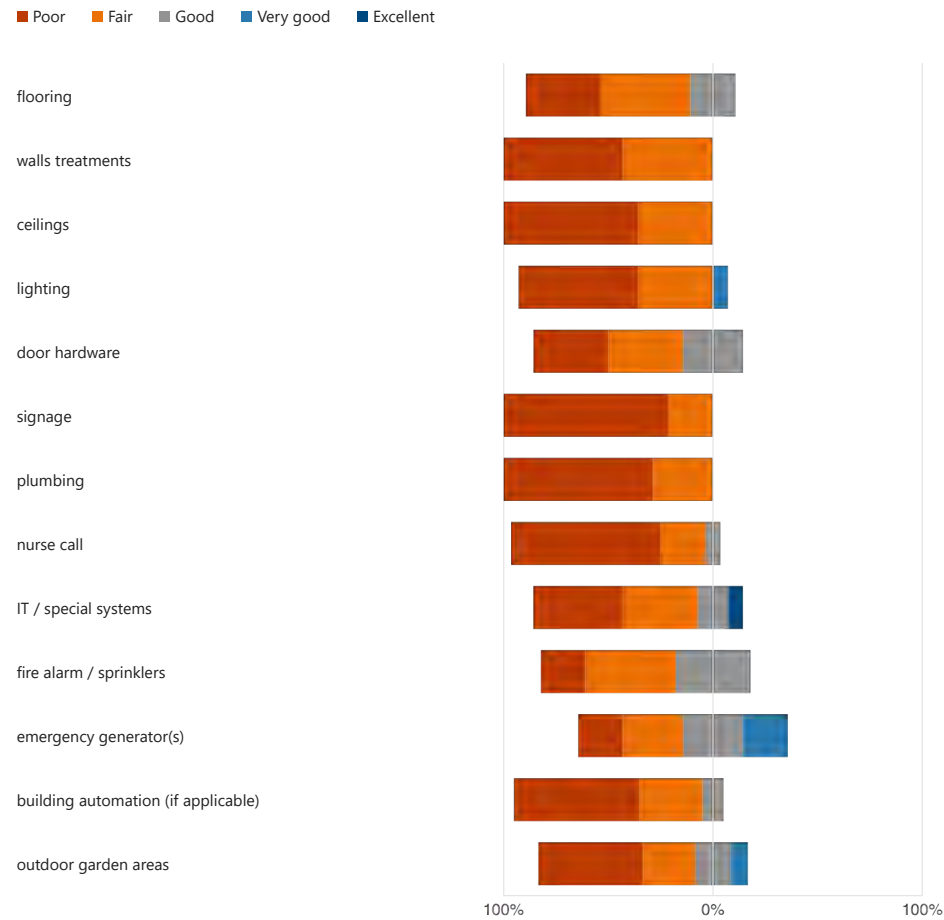
7 Responses

Latest Responses
"There are a lot of small projects around the building."

2 respondents (29%) answered **lots** for this question.



62. How would you rate the quality of these items?



63. What areas (outside of the Maintenance / Facility program) would you like to see included, deleted or adjusted in the next generation of this Community?

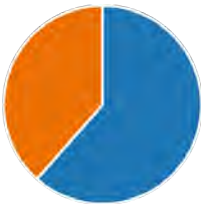
7
Responses

Latest Responses
"N/A"

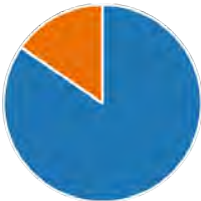
2 respondents (29%) answered **maintenance** for this question.

single for our veterans grounds
maintenance shop nice gazebo storage facility central
work benches maintenance work area
garden area facility programs
Outdoor maintenance/facility onsite larger facility things
game rooms custodial services auditorium community center

64. Is the Maintenance / Facility area located conveniently relative to the rest of the Community?

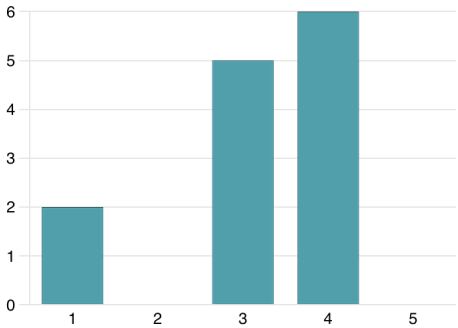


65. Do you feel there is good staff connectivity between the Maintenance / Facility and the other departments? (ie: Dietary, Maintenance, Administration, Activities, etc...)



66. How would you rate the overall staff morale at this Community?

3.15
Average Rating



67. What tools/spaces/equipment would you like to help you do your job better/more efficiently?

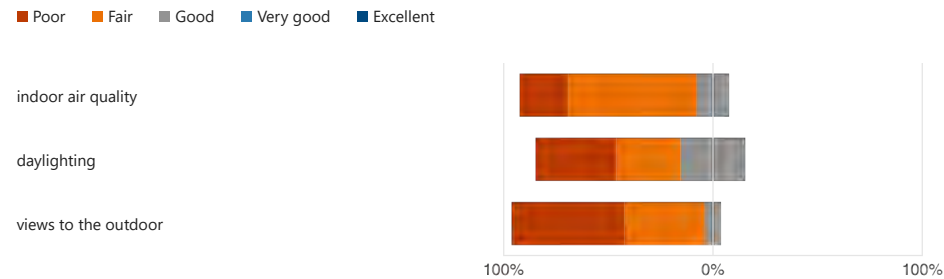
7
Responses

Latest Responses
"Easier way of getting in work orders."

4 respondents (57%) answered **space** for this question.



68. How would you rate..



69. What is the biggest challenge that you face with the Residents on a regular basis?

9
Responses

Latest Responses
"They can't talk to maintenance over the weekend as easy."

4 respondents (44%) answered **rooms** for this question.

outlets in rooms HVAC control elevator access
Trying to elope **space** **rooms** **repairs** work area
space in rooms space for any repairs repairs to rooms
maintenance over the weekend

70. What systems/components of the Community require the most upkeep?

10
Responses

Latest Responses
"The call light system"

4 respondents (40%) answered **system** for this question.

kitchen hoyer's traffic areas dishwasher elevators
plumbing ice machines **system** rooms electrical
high phone system resident rooms light system heat
Poor C and heating work spaces Plumbing
stands

71. What systems/components of the Community seem to work the best?

5
Responses

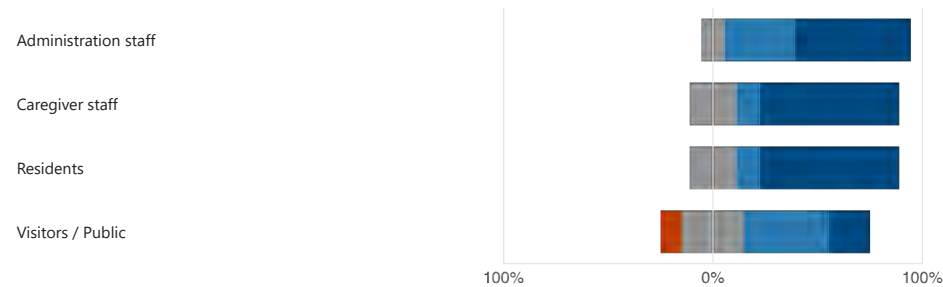
Latest Responses
"Lighting"

1 respondents (20%) answered **kitchen equipment** for this question.

Lighting alarm system HVAC elevators
staff kitchen equipment newer
Fire alarm need improvement

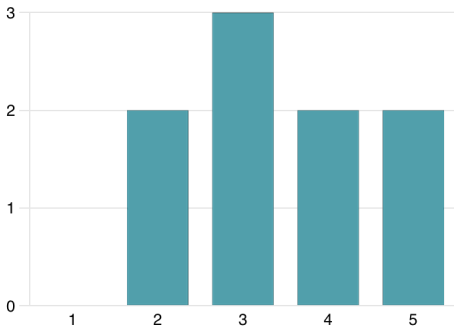
72. How much interaction do you have with:

■ none ■ very little ■ moderate ■ quite a bit ■ a lot



73. How well does the Community perform from an energy consumption standpoint?

3.44
Average Rating



74. Are there items that could be improved to enhance energy efficiency?

6
Responses

Latest Responses
"N/A"

1 respondents (17%) answered **new Technology** for this question.

resources windows
building that can be accessible individual offices
new system new Technology star efficiencies
meeting energy star carbon reduction residential areas
light heat controls non

75. What was your first impression of the Community when you visited for the first time?

15
Responses

Latest Responses
"Positive"
"Positive. "

4 respondents (27%) answered **Old** for this question.

excited veterans vet in the door drunk vet room and library
game room clean Old staff Old facility spark and energy
new person urine Dated and cluttered chaotic Old building
unwelcoming looking needs upgrades busy

76. How has that impression changed over time?

12
Responses

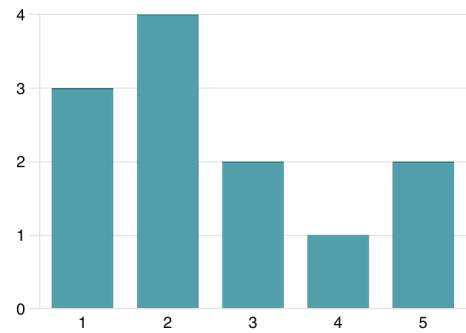
Latest Responses
"Positive"

3 respondents (25%) answered **staff** for this question.

Positive years old administrative offices
staff are always cold staff No improved exponentially
place and more staff Staff and actives literally fall leadership in place
nope new leadership phot

77. How would you rate your room?

2.58
Average Rating



78. What do you like most about your room?

10
Responses

Latest Responses
"N/A"

2 respondents (20%) answered **office** for this question.

Word cloud for "What do you like most about your room?". The most prominent word is "office". Other words include "bed", "rooms", "natural light", "people", "close", "lucky", "Large windows", "office space", "small fridge", "Comfortable", "bath", "large closets", "Private", "people do not", and "administrator's office".

79. What do you like least about your room?

10
Responses

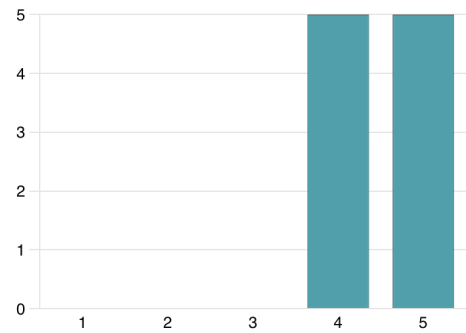
Latest Responses
"N/A"

3 respondents (30%) answered **space** for this question.

Word cloud for "What do you like least about your room?". The most prominent words are "space" and "small". Other words include "Not enough room", "fishbowl", "bathrooms", "storage", "carpet", "room", "personal belongings", "No shower", "not have a meeting", "space for files", "meeting private r", and "private r".

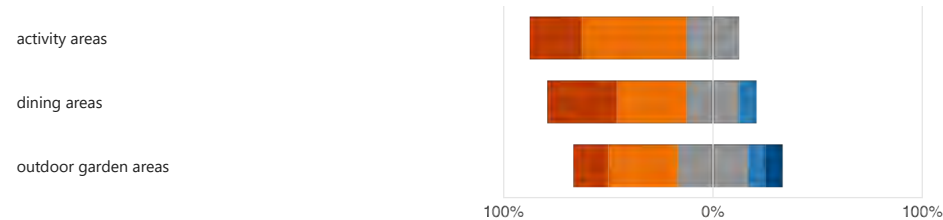
80. How would you rate your interactions with your fellow Residents?

4.50
Average Rating



81. How would you rate:

Poor Fair Good Very good Excellent



82. What program spaces are missing that you would like to see included in the next generation of the Community?

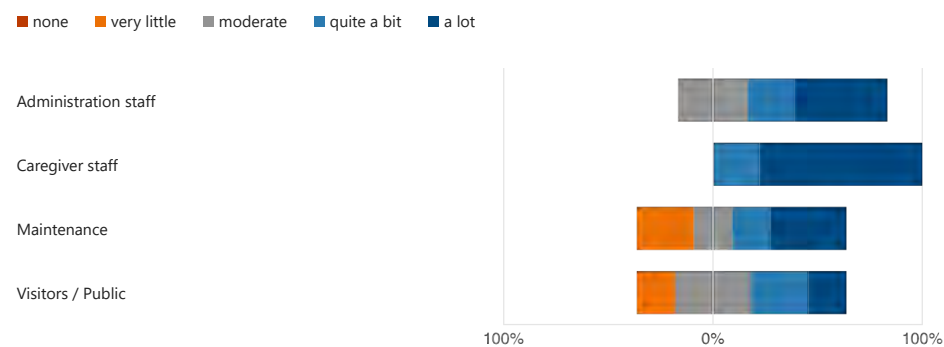
10
Responses

Latest Responses
"N/A"

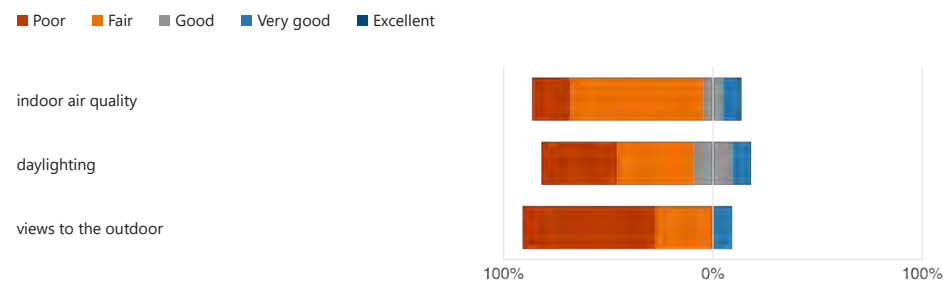
4 respondents (40%) answered **Space** for this question.



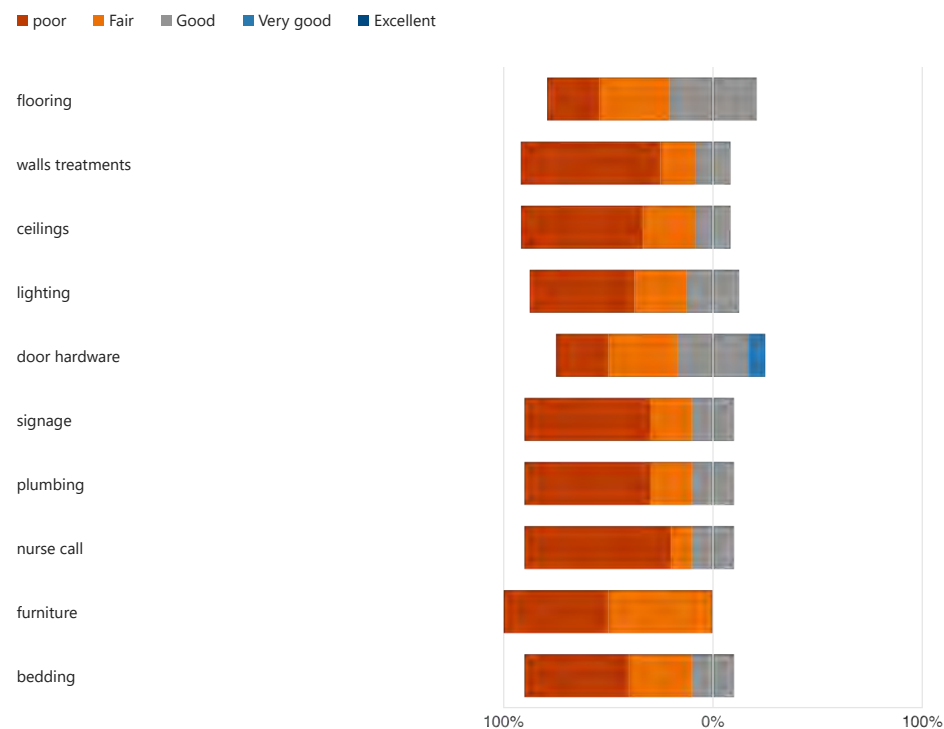
83. How much interaction do you have with:



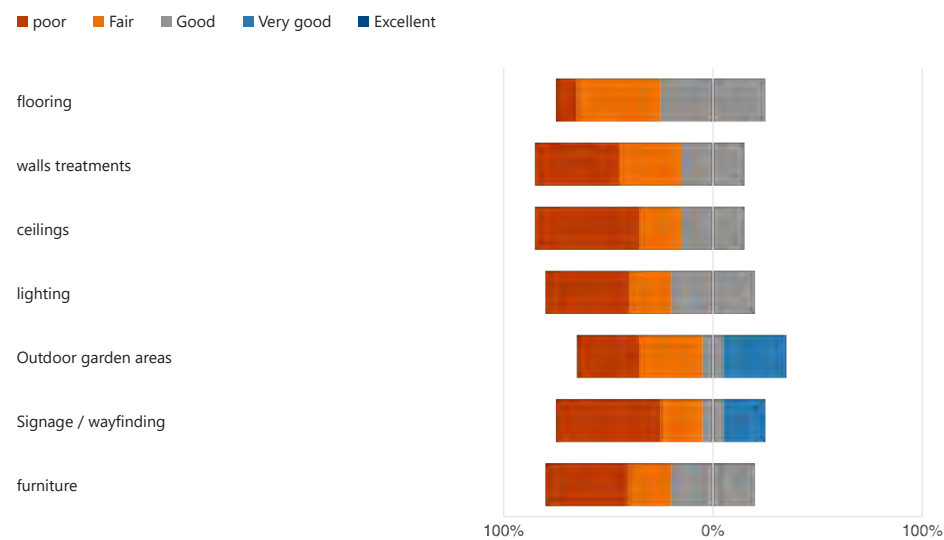
84. How would you rate..



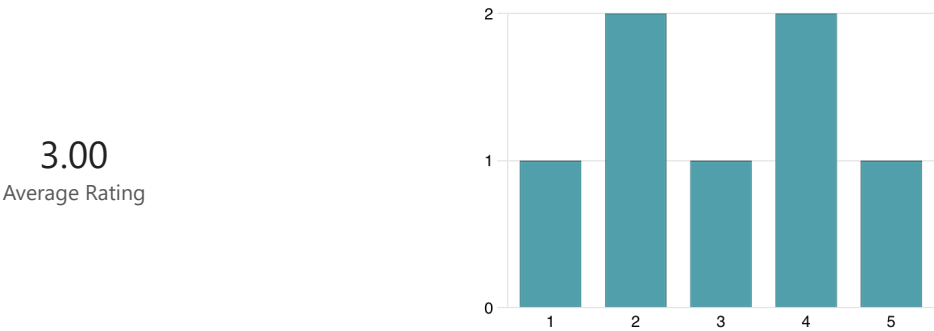
85. How would you rate the quality of these items in your RESIDENT ROOM:



86. How would you rate the quality of these items in the COMMON AREAS:



87. Is your room conveniently located relative to the rest of the Community?

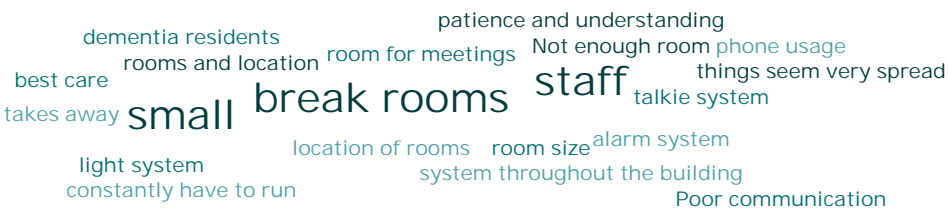


88. What the biggest issue/challenge that you face with the Staff on a regular basis?

9 Responses

Latest Responses
"Poor communication"

2 respondents (22%) answered **break rooms** for this question.



89. What tools/spaces/equipment would you like to help you enjoy your residency here at this Community?

6
Responses

Latest Responses
"N/A"

3 respondents (50%) answered **space** for this question.

longer beds large wheelchairs larger bathrooms large TVs big residents
resident's room rooms space larger houses with larger
space around sinks Larger space larger tubs larger residents space within the rooms counter space
space for residents activity areas moving space outdoor space



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