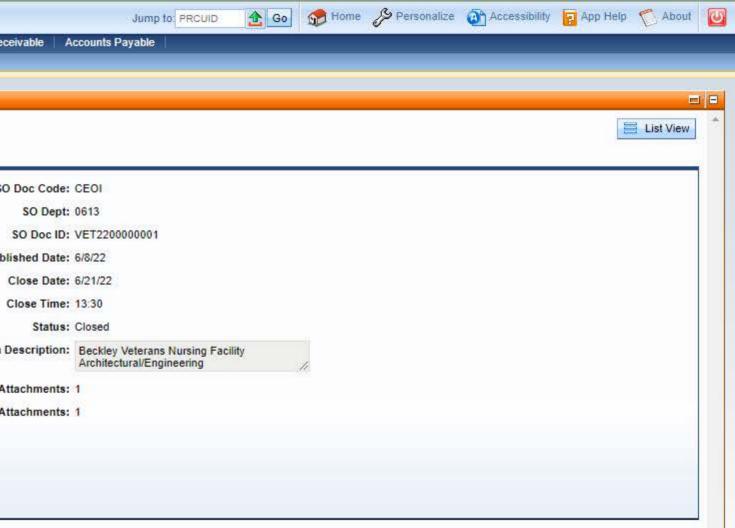


The following documentation is an electronicallysubmitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.



Velcome, Robert M Ross	Procurement	Budgeting	Accounts Rec
Solicitation Response(SR) Dept: 0613 ID: ESR06212200000007933 Ver.: 1 Function: New Phase: Final Modified by batch . 06/21/2022			
Header () 1			
General Information Contact Default Values Discount Document Information Clarification Request			
Procurement Folder: 1053663			SC
Procurement Type: Central Purchase Order			
Vendor ID: 00000204787			
Legal Name: THE THRASHER GROUP INC			Pub
Alias/DBA:			
Total Bid: \$0.00			
Response Date: 06/21/2022			
Response Time: 12:50			Solicitation [
Responded By User ID: Thrasher		Tot	al of Header A
First Name: Caroline			Total of All A
Last Name: Marion			
Email: cmarion@thethrashergroup.c			
Phone: 304-624-4108			





Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

State of West Virginia Solicitation Response

Proc Folder:	1053663			
Solicitation Description:	Beckley Veterans Nursing Facility Architectural/Engineering			
Proc Type:	Central Purchase Order			
Solicitation Closes		Solicitation Response	Version	
2022-06-21 13:30		SR 0613 ESR06212200000007933	1	

VENDOR					
00000204787 THE THRASHER GROUP INC					
Solicitation Number:	CEOI 0613 VET2200000001				
Total Bid:	0	Response Date:	2022-06-21	Response Time:	12:50:29
Comments:	n/a				

FOR INFORMATION CONTACT THE BUYER				
Tara Lyle				
(304) 558-2544				
tara.l.lyle@wv.gov				
Vendor				
Signature X	FEIN#	DATE		
All offers subject to all terms and conditions contained in this solicitation				

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Develop A&E EOI & Other Docum Beckley Facility	nents For 1.00000	EA	0.000000	0.00
Comm	Code Manuf	acturer	Specificat	tion	Model #
811015	508				

Commodity Line Comments: n/a

Extended Description:

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PURCHASING DIVISION



STATE OF WEST VIRGINIA DEPARTMENT OF VETERANS ASSISTANCE

Expression of Interest CEOI VET22*01 BECKLEY VETERANS NURSING FACILITY



THRASHER + SFCS

thethrashergroup.com

sfcs.com

THRASHER + S + CS

June 21, 2022

Ms. Tara Lyle West Virginia Department of Administration Purchasing Division 2019 Washington St. East Charleston, WV 25305-0130

Dear Ms. Lyle:

The Thrasher Group and SFCS are thrilled to present our qualifications to provide professional design services for the new Veterans Nursing Facility in Beckley, West Virginia.

Thrasher has teamed with SFCS, a national leader in Veterans Home and Senior Living design. SFCS has designed award winning State Veterans Homes across the country including California, Nevada, Rhode Island and Michigan and they are actively working on State Veterans Home projects in Kansas and Oklahoma. Closer to home we have successfully completed projects at the West Virginia Veterans Nursing Facility in Clarksburg, West Virginia and at the VA Medical Center in Beckley, West Virginia.

Our team are proponents of a collaborative design approach, which we believe is the most effective way to integrate the stakeholders at the Department of Veterans Assistance into the project delivery process. We will deliver real results, a project that is responsive to the needs of the agency and a finished product that supports a dignified and meaningful quality of life for West Virginia Veterans.

The Thrasher + SFCS team offer The West Virginia Department of Veterans Assistance considerable advantages:

- Veterans Home and Senior Living design specialists: SFCS has successfully completed multiple state Veterans Homes across the country within the framework of the VA State Home Construction Grant Program. We are thought leaders in Veterans Home design and intimately familiar with the VA Small House Design Guide, we fully support its mission of design based on resident centered care. We are experts in creating homes for Veterans with physical frailties and cognitive impairment and we have highlighted some of our recent experience in the attached response to your request for Expression of Interest.
- **Comprehensive services:** The Thrasher + SFCS team offers a complete package of professional services "in-house". From geotechnical site civil engineering and environmental analysis through architectural programming and design, all disciplines of engineering design, interior design, FF&E design and procurement assistance to full service bidding assistance and construction administration. Our team is a single entity with the expertise to deliver your project and exceed your expectations.





- Local experts, responsive and engaged: The Thrasher Group operates from offices throughout West Virginia including Beckley and Charleston. SFCS's home office and staff for your project is located in Roanoke, Virginia a short drive from the project site in Beckley and from the Department of Veterans Assistance office in Charleston. We believe that our team's combination of close proximity to the project location and unmatched expertise and experience in Veterans Home design is a powerful contributor to project success.
- We don't dictate, we explore and find solutions together: Make no mistake, this will be a challenging project which, as committed professionals, we relish. We understand the project and its challenges. We have visited the site and have already begun to develop conceptual solutions. We have included in our Expression of Interest some preliminary thoughts on options for a 120 bed home and how it may be positioned on the property. Our collaborative design process will allow the full depth of our design team's experience and expertise to be engaged with stakeholders as we work to find the solution that successfully addresses all the project requirements.

The Thrasher + SFCS team offers an unmatched combination of expertise, experience and service. Our team is the right choice for the Department of Veterans Services and most importantly for West Virginia Veterans. We thank you for this opportunity and eagerly await next steps in the selection process. If you have any questions or need additional information, please contact Thrasher at 800.273.6541, and SFCS at 800.873.2788.

Craig Baker AIA PRINCIPAL IN CHARGE THE TRASHER GROUP

Melissa Pritchard AIA, NCARB, LEED® AP BD+C MANAGING PRINCIPAL SFCS ARCHITECTS

Architecture Engineering Planning Interiors 305 South Jefferson St Roanoke, VA 24011 T: 540.344.6664 www.sfcs.com 1927 South Tryon St Suite 207 Charlotte, NC 28203 T: 704.372.7327 1777 Sentry Parkway West VEVA 17, Suite 220 Blue Bell, PA 19422 T: 610.825.1288 2115 Lexington Rd Suite 100 Louisville, KY 40206 T: 502.414.4545





TABLE OF CONTENTS

REQUIRED FORMS	5
PROJECT UNDERSTANDING	7
QUALIFICATIONS	11
TEAM	20
RELEVANT EXPERIENCE	39
COMMITMENT TO VETERANS AND LOCAL EXPERIENCE	59
PROJECT EXECUTION	62
LIABILITY INSURANCE CERTIFICATES	72
ENRICHING LIFE BY DESIGN	75
IN CONCLUSION	94

(NOTE: THIS TABLE OF CONTENTS IS INTERACTIVE, AND LINKS TO EACH CORRESPONDING SECTION OR PAGE NUMBER)



FORMS

ALR FORCE

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Name, Title)	l
l	nton Blackwood, Senior Project Manager
Address) _600 White Oaks B	lvd. Bridgeport, WV 26330
Phone Number) / (Fax Numbe	r) <u>304-624-4108</u> 304-624-7831
(email address) kblackwood	@thethrashergroup.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through *wv*OASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

The Thrasher Group, Inc.

(Company)	
(Authorized Signature) (Representative Name, Title)	
Craig Baker, Principal 6/20/22	
(Printed Name and Title of Authorized Representative) (Date)	
304-624-4108 304-624-7831	
(Phone Number) (Fax Number) cbaker@thethrashergroup.com	

(Email Address)

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PROJECT UNDERSTANDING

The West Virginia Department of Veterans Assistance (VA) recognizes the need for a new nursing facility to serve the needs of West Virginia Veterans. Over the past several years the Department has worked diligently to garner interest and support from veterans' groups, the public, and both the Governor's Office and the WV State Legislature. With the funding commitment from the State of West Virginia for 35% of the project's anticipated cost, and agreements for parcels of property from other State agencies, the VA made application for additional funding to the U.S. Department of Veterans Affairs.

The proposed nursing facility will be located on property in Beckley, West Virginia, just east of the existing Jackie Withrow Hospital on South Eisenhower Drive. The design and construction of the new 120 bed facility will comply with the Small House Model Design guidelines established by the U.S. Department of Veterans Affairs, the Americans with Disabilities Act, International Building Code, National Fire Protection Association Life Safety and Electric Codes, West Virginia State Fire Code, and other applicable codes and regulations.

The proposed site is approximately 12 contiguous acres of sloping fields, with

an elevation variation of about thirty feet. Several existing utilities cross the site. We have mapping for many of these existing lines and services, and our team has the experience and resources to help locate others. We are currently working for the local Sanitary Board and have relationships with other area utility service providers, making us very knowledgeable about the subsurface conditions on this site.



There is currently an unused metal building that will be removed. The existing building has an overhead electric service, an asphalt drive, and an old gas pump indicates the presence of an underground storage tank. Two fire hydrants are present within the property. There is evidence that a few other structures were located previously on the site, and it is unknown what, if any foundations and other physical features may remain.

A Phase I Environmental Site Assessment of the entire property is important. This study would conduct basic research into the existing gas pump and underground storage tank and determine if a Phase II ESA with subsurface soil sampling would be recommended to study for potential contaminants are present. The approximate age of the existing building will need to be studied, and that may inform whether an Asbestos Containing Material investigation is required to determine if any abatement is required prior to demolition. This team can perform all these services.

Several different options have been considered for accessing the site. The adjacent properties are owned by the City of Beckley. Access to the east is an option, but the best approach may be to the north as it traverses the newly developed Pinecrest Development, owned by the City of Beckley. As the engineering team that provided professional services on this development, Thrasher is very familiar with the property.

We understand the Department has visited several comparable facilities in other States and has ideas for features and amenities to be included in this new facility. The initial goal is for this new facility to be a single-story structure if possible, however due to site constraints and topography, a combination of single and two stories may be indicated.

We are excited for the opportunity to discuss your ideas, the current trends for this type of care facility, and show examples of our work. Our thoughtful design approach will offer solutions to the many challenges faced by our aging veteran population. While quality-of-life and personal dignity of the veterans are always primary considerations, the functionality, operational efficiency, and ease of maintenance are essential factors in our design philosophy.



SITE ANALYSIS

The Thrasher - SFCS design team has visited the project site in Beckley and performed preliminary fit analysis for the proposed 120 bed Veterans Home.

The site boundary formed by adjacent properties is quite irregularly shaped and features significant topography. Significant fill may be needed to achieve an adequately sized building pad for the required program space.

Our analysis indicates that a 2-story solution for the resident households should be strongly considered. A total of eight 15-bed houses may be arranged in 30 bed neighborhoods. Four neighborhoods are stacked in 2-story configuration for a total of 120 beds. The single-story Community Center connects to the lower floor of the neighborhoods. This arrangement aligns with Small House Design Guidelines and leaves adequate space on the site for staff and visitor parking accessed via a loop drive.



Further study will be needed to fully evaluate critical site considerations including storm water management, available utility connections and subsurface conditions. Our team has experience with site design in Beckley and expertise in managing challenging site conditions.



THRASHER FIRM OVERVIEW

- > Architecture
- > Site Engineering
- > Utility Engineering
- > Environmental
- Survey
- > Transportation
- Construction Services
- > Geospatial

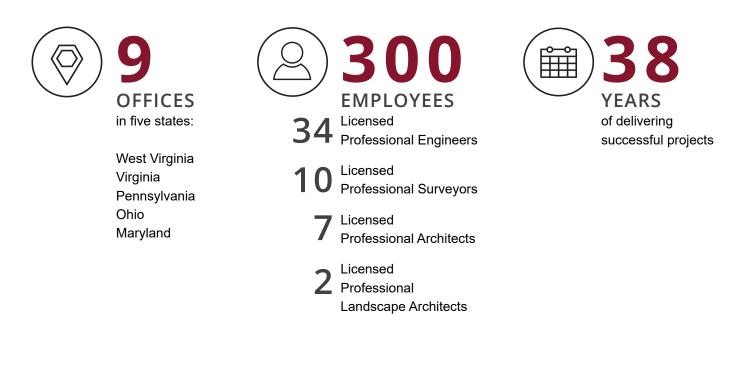
MAIN POINT OF CONTACT:

Kenton Q. Blackwood, Assoc. AIA | LEED® AP

SENIOR DESIGNER/PROJECT MANAGER kqblackwood@thethrashergroup.com Office: 304-205-8818 | 800-273-6541 Mobile: 304-841-6691

With a commitment to building business through *"successful projects and repeat clientele"*, H. Wood Thrasher, PE and the late Henry A. Thrasher, PE, formed Thrasher Engineering, Incorporated in Clarksburg, West Virginia in 1983. Since that time, the company – now known as The Thrasher Group, Inc. – has grown into one of the Mid-Atlantic region's largest full-service privately owned architectural and engineering firms.

Thrasher has grown from its original three employees to a current staff of more than 300 and continues to prosper. With a team of multi-disciplinary professionals in-house, we are able to serve public and private clients of all types. Our five core markets focus on Buildings and Facilities, Water Resources, Land Development, Energy, and Transportation, with a long list of supplementary services falling into each category.



Diverse services that grow communities.

THRASHER'S GOT IT.





SFCS FIRM OVERVIEW



ENRICHING LIFE BY DESIGN

Every innovation, with time, becomes the norm. That's why we push boundaries to improve the places we design ~ from sketches to reality ~ to create the best physical environments for seniors.

We aren't satisfied with the status quo and we don't want our clients to be either!

HISTORY

Founded in 1920, SFCS is a privately-held corporation and has grown to become a leading, nationally recognized full-service architectural, engineering, and interior design firm. Our firm provides comprehensive services including master planning; architectural design; structural, mechanical, electrical and plumbing engineering; fire protection and low voltage design; interior design; and construction administration.

SFCS is committed to providing high quality service plus innovative, meaningful, and thoughtful design. By balancing these key elements, we are able to foster collaboration and create exceptional environments where people can flourish. This has been our motivating force for the last century.

SENIOR LIVING DESIGN EXPERIENCE

SFCS is one of the very few A/E firms that has been continuously working in the senior care industry. For over 75 years, we have planned, designed, and provided services to hundreds of senior living communities throughout the United States. This specialty represents 90+% of our work and takes us to nearly every state in the country.

SFCS is dedicated to outcome-based design, rooted in research and an in-depth understanding of the industry. All of our staff practice in the field of senior living and veterans home design, giving SFCS over 100 years of broad-based experience. Our in-

house professionals are passionate about senior living design, and most have been influenced by their own experiences with aging loved ones. In addition, the top leadership and personnel have published papers and routinely share their expertise at state, national, and international conferences on various topics including senior living trends and innovations.

The values of SFCS are founded in the quality and type of clients we serve and most importantly, in our mission to provide exceptional environments for veterans and all seniors.





VALUE OF OUR DEDICATION TO VETERANS

National Talent, With Local Presence. Our team offers you the talents of a widely recognized veteran and senior living design team, but with commitment and attention to local service.

Our Architects, Engineers, and Interior Designers ALL specialize in designing for veterans and seniors, and we believe that research and collaboration are the keys to innovation and design excellence. Every project is a living laboratory. Our staff leads active and passive research in best practices in design for staffing and operations, care delivery, wellness, and environmentally responsible design.

We bring our experience and our dedication to researchbased design through collaboration with our clients and their residents. Our collective experience is brought to our clients by turning design ideas into smart choices. This is how we define collaboration.

Our dedication to seniors design has led us to become a premiere educational provider in the field of senior living. SFCS has hosted an annual conference called By Design for 37 years. The original purpose of this conference was to educate our staff about senior design issues. Over the years the conference has grown, and now we welcome several hundred CEOs, CFOs, administrators and consultants from around the country as they attend annually to discussing trends, opportunities, and challenges in senior living.

Personalized service is an SFCS trademark. In partnership with you and with other professionals, we draw upon the specialized knowledge and expertise of the team to collectively search for solutions that best meet your project goals.

A SELECTION OF OUR NATIONAL VETERANS PROJECT EXPERIENCE

We are proud to have recently served the following Veterans Communities:

RHODE ISLAND VETERANS' HOME, BRISTOL, RI INTERNATIONAL INTERIOR DESIGN AWARD: "BEST IN RHODE ISLAND", 2018

Construction Management Association of America, New England Chapter: Project Achievement Award, 2018

CALIFORNIA VETERANS' HOME, REDDING, CA CITATION OF MERIT 2011 DESIGN/ENVIRONMENTS FOR AGING ARCHITECTURAL SHOWCASE HEALTHCARE DESIGN 2011 ARCHITECTURAL SHOWCASE, NEW CONSTRUCTION/REMODEL/RENOVATION

ARMED FORCES RETIREMENT HOME, GULFPORT, MS CITATION AWARD RECIPIENT, 2013 AIA DESIGN FOR AGING REVIEW DESIGN/ENVIRONMENTS FOR AGING ARCHITECTURAL SHOWCASE, 2013

LEADINGAGE TRENDS IN DESIGN (CCRC), 2011

MICHIGAN VETERANS' HOME, GRAND RAPIDS AND CHESTERFIELD COUNTY, ML

SENIOR HOUSING NEWS AWARDS, BEST SKILLED NURSING, 2021

Sitter & Barfoot Veterans' Care Center, Richmond, VA

Oklahoma Veterans' Home, Ardmore, OK

HAMPTON VETERANS' CARE CENTER, HAMPTON, VA

NE KANSAS VETERANS' HOME, TOPEKA, KS

BECKLEY VETERANS' ADMINISTRATION MEDICAL CENTER, BECKLEY, WV

SALEM VETERANS' ADMINISTRATION MEDICAL CENTER, SALEM, VA

KNOLLWOOD (ARMY DISTAFF FOUNDATION), WASHINGTON, D.C.

VINSON HALL (NAVY MARINE COAST GUARD FOUNDATION), MCLEAN, VA

NORTHERN NEVADA VETERANS' HOME, RENO, NV

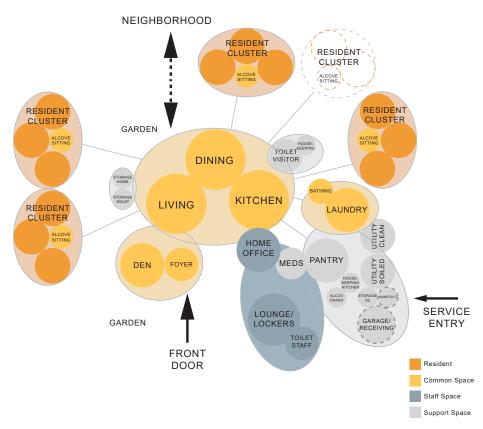
VA STATE HOME CONSTRUCTION PROGRAM, VA GRANT PROGRAM PROCESS

SFCS has experience guiding state Public Works agencies through the U.S. Department of Veterans Affairs State Home Construction Grant process. We will work with you to update and validate previously submitted Space Program analysis, building construction and equipment cost estimates, environmental assessments and other items to ensure a smooth grant approval process. We have decades of experience working with Construction Managers and General Contractors to ensure the project remains within the original funding parameters.

HOUSEHOLD DESIGN

The house is the fundamental building block of the overall Veterans Home design. The Small House Design Guide recommends 10 to 18 private resident rooms with private bathroom in each home. For the 120 bed home proposed at Beckley we recommend 8 houses of 15 resident rooms each. Houses are typically grouped into pairs called neighborhoods thus 4 neighborhoods of two houses each equals 120 beds. Each pair of houses connect to the Community Center.

The center of resident activity in each home is the kitchen. Food is typically prepared in a main kitchen within the Community Center and delivered to each house in bulk for final preparation and serving. The serving and dining room area is completely residential in character and functions as a regular gathering spot that promotes socialization and interaction between residents.





Elsewhere within the house are found the Living Room, Den and other spaces that offer a variety of familiar experiences for residents, whether quiet alone time with a book or a game of cards with friends. Staff work areas within the house are deliberately decentralized, no institutional hospital-style nurse station here! Staff spaces encourage regular interaction with residents which tends to lessen acuity levels for residents and in turn may reduce workload for caregivers.

Resident room design is critical, as this is the space where our veterans may spend much of their day. Our team understands the subtleties that can elevate the standard nursing home bedroom and bathroom to a truly welcoming, comfortable environment. Our architects and interior designers are experts in considering features such as zero threshold showers, fold down grab bars for staff assisted toileting, special lighting to reduce confusion and agitation and more. There are a myriad of special design features that the design team will explore with you to ensure West Virginia veterans have a special place they can call home.



COMMUNITY CENTER DESIGN

The design goal for the Community Center is to provide spaces which encourage social interaction without forcing it upon anyone.

- Provide opportunities and spaces for large and small groups to gather. Provide spaces for quiet time outside the Veteran's bedroom.
- Community Center may offer an alternative dining option so that veterans may choose to eat "at home" or "dine out".
- Post Office/Mailbox location is not an afterthought. We find this space to be one of the most active places for regular social interaction.
- Veteran residents are spectators with an active interest in the day to day activities in their house. Glazed doors and windows at highly visible activity rooms along travel routes creates interest and encourages participation.
- Provide way-finding and rest stops along travel routes. Breaking up travel routes can break a journey into a series of short trips and create opportunities for small group social interaction along the way.



OPERATIONAL CONSIDERATIONS

Maximum operational efficiency is critical to the long-term success of the veterans' home. Our extensive experience working with operations of senior living communities of all types uniquely positions our team to adjust the design within the USDVA small house model guidelines to maximize the efficiency of the staffing model.

- SFCS worked with department leadership at Rhode Island Veterans Home to help them understand the impact of the transition from traditional medical model staffing and operations to the new small house model.
- Design features such as elimination of traditional nurse stations, decentralized laundry and dietary services directly impact the staffing model. Less staff time spent moving between storage or office areas and care giving areas means higher standard of care and positive outcomes.
- Decentralized laundry and housekeeping functions means an environment more like home. This includes utilizing clean linen storage disguised as cabinets instead of institutional carts parked in corridors.
- Small staff "touchdown stations" where a nurse may sit at a simple fold down shelf with a laptop instead of working within a closed office. This makes caregivers more accessible to veterans and increase interaction.
- Stealth services: Food and supplies are brought in and trash removed via dedicated service care isolated from residents view. Laundry and trash collection carts do not circulate on park in resident use areas, preserving, a feeling of home in living areas.

MEMORY CARE ENVIRONMENTS

SFCS is dedicated to Outcome Based Design, rooted in research and an indepth understanding of the industry. A majority of our projects include dedicated Memory Care units. Our design work is informed by our research and practical knowledge of the unique design challenges associated with designing for older adults with varying forms of dementia. Some specialized design features which we may explore with your team include:

- Open household layout designed to minimize corri dor length and provide visual cueing from bedrooms to common spaces, aiding wayfinding and reducing confusion.
- Reducing number of doors and dead end circulation throughout the household while providing large radius turns to promote exploration.
- Household design of resident room layouts to promote identity for each grouping and individual room.
- Room orientation to gain beneficial sunlight and Increased natural light and views to the exterior.
- Resident room layout promotes visual queuing, leading to greater independent and reduction of falls, white less obtrusive observation by staff.
- Tunable circadian lighting systems to reduce disruption to the wake sleep cycle which in turn reduces agitation.
- Safe and secure outdoor spaces providing sensory stimulation and activities.
- Special unobtrusive security technologies to control "wandering", reduce demands on staff and ensure resident's safety.









INTERIOR DESIGN

Residential character of resident spaces is paramount as embraced by the Small House Design Guide. We engage veterans and staff leadership in "visual listening" exercises to arrive at consensus on the overall aesthetics of the space. Results from these exercises guide the designers in selection of finishes and furnishings. Important interior design principles for veterans include:

- Interior environment must enhance the activities of daily living (ADL's), compensate for visual and auditory limitations, address memory loss and accommodate changes in dexterity and mobility.
- Interior designers are integrated with related disciplines on the design team from the beginning . For example, program verification and space planning is most effective as a collaboration between designer and architect. Lighting design and fixture selection is a team effort between interior designer and electrical engineer.
- Indirect lighting, color, pattern acoustic properties of spaces are considered and addressed as part of interior design.
- Items such as grab bars, appliances, cabinetry, decorative lighting and accessories are chosen from residential product lines familiar to veterans and contribute to a feeling of home.
- Expertise in selecting furnishings, equipment and accessories that belong in your home and yet support the requirements of veterans with varying levels of infirmity or mobility challenges. Seat and arm heights, cushion density, moisture barrier fabrics are all important considerations for team review.



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WORKING IN COLLABORATION

Our firm understands and values the development team approach to create successful homes for our nation's veterans. Partnering offers the advantage for the owner to capitalize on the strengths of more than one firm. It can stimulate new approaches to design thus enhancing the quality of the design for a new community. SFCS works regularly with other local architects to meet the needs of clients. Other design firms SFCS has teamed with include the following:

ARMED FORCES RETIREMENT HOME, GULFPORT - GULFPORT, MS - URS CORPORATION MICHIGAN VETERANS HOME - GRAND RAPIDS, ML - TOWER PINKSTER RHODE ISLAND VETERANS HOME - BRISTOL, RI - BREWSTER THORNTON GROUP CALIFORNIA VETERANS HOME - REDDING, CA - JACOBS AND CLARK CONSTRUCTION OKLAHOMA VETERANS HOME - ARDMORE, OK - HEALTHCARE FACILITIES GROUP KANSAS VETERANS HOME - NE KANSAS - HEALTHCARE FACILITIES GROUP MICHIGAN VETERANS HOME - CHESTERFIELD COUNTY, MI - TOWER PINKSTER







STATE OF WEST VIRGINIA DEPARTMENT OF VETERANS ASSISTANCE



STATE OF WEST VIRGINIA PURCHASING DIVISION

THRASHER

PRINCIPAL IN CHARGE Craig Baker, AIA

PROJECT DESIGNER Kenton Blackwood

CIVIL ENGINEER Jeffery Gola, PE

LANDSCAPE ARCHITECT Samuel Rich

ENVIRONMENTAL PROJECT MANAGER Sam Wilkes

> UTILITY COORDINATOR Zachary Wright

CONSTRUCTION COST ANALYST Jim Decker

SFCS

PRINCIPAL IN CHARGE Melissa Pritchard, AIA, NCARB, LEED AP BD + C

> SENIOR PROJECT MANAGER Kerry Buck, AIA, LEED AP

PROJECT DESIGNER Charles Hart, AIA, NCARB

PROJECT ARCHITECT Nick Wade, AIA, NCARB

INTERIOR DESIGNER Justine Sowers, NCIDQ, CID, ASID

> STRUCTURAL ENGINEER Brad Townsend, PE

> MECHANICAL ENGINEER Allen McNutt, pe

ELECTRICAL ENGINEER Steve Kidwell, PE, RCDD

PLUMBING AND FIRE PROTECTION DESIGNER Derek White, CPD

> CONSTRUCTION ADMINISTRATOR Gary Martin, LEED AP

OUTSIDE CONSULTANTS

GEOTECHNICAL ENGINEERING

NGE

OUTSIDE CONSULTANTS

FOOD SERVICE EQUIPMENT DESIGN

FOODESIGN ASSOCIATES



|S + C S|



Melissa C. Pritchard, AIA, NCARB, LEED[®] AP BD+C MANAGING PRINCIPAL

PROFESSIONAL OVERVIEW

Melissa is dedicated to the design of innovative environments for seniors that support independence and provide a high quality of life. She is focused on elevating all levels of care, including independent living, memory care, resident-directed care, and culture change households. Due to her expertise and passion in the senior living industry, Melissa was a recipient of the 2018 Environments for Aging's inaugural Design Champions Award. This award celebrates individuals who work each day to push boundaries and continually improve senior living environments.

CERTIFICATIONS AND AFFILIATIONS





NATIONAL COUNCIL OF

ARCHITECTURAL REGISTRATION BOARDS

JURY MEMBER FOR

THE ENVIRONMENTS

FOR AGING AWARDS

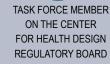




SOCIETY FOR THE ADVANCEMENT OF GERONTOLOGIC ENVIRONMENTS

LEED ACCREDITED PROFESSIONAL





EDUCATION

Bachelor of Architecture University of Tennessee, Knoxville, TN

International Studies: Architecture Kraków Polytechnic University, Kraków, Poland

SFCS

RELEVANT EXPERIENCE

OKLAHOMA VETERANS HOME – ARDMORE Ardmore, OK | New 240 Bed State Veterans Home

KANSAS VETERANS HOME Topeka, KS | New 60 Bed State Veterans Home

CALIFORNIA VETERANS HOME - REDDING

Redding, CA | New 150 Bed State Veterans Home

ARMED FORCES RETIREMENT HOME Gulfport, MS | New 600 Bed Retirement Community/Nursing

THE COTTAGE AT CYPRESS COVE

Ft. Myers, FL | New 44 Bed Memory Care Assisted Living

WESTMINSTER CANTERBURY - RICHMOND

Richmond, VA | Master Plan, New Independent Living, Parking, and New Community Center

SENTARA NURSING HOME

Chesapeake, VA | 120 Bed Replacement Nursing Home

FEATURED PROJECT

CYPRESS COVE

Fort Myers, FL

PROJECT OVERVIEW

The Cottage at Cypress Cove is a Memory Care Assisted Living residence that specifically caters to residents with Alzheimer's disease and other dementia-related conditions. The design marks a new milestone in memory care by combining a ground-breaking program with an innovative environment that actively addresses the symptoms of Alzheimer's / Dementia while creating a familiar, comfortable home.





Kerry Buck, AIA, LEED[®] AP SENIOR PRINCIPAL / PROJECT MANAGER

PROFESSIONAL OVERVIEW

With over 31 years of experience, Kerry has served as project manager on new communities, renovations and expansions. His skills include coordinating with other disciplines and project team members to keep the project on schedule and according to design.

He will oversee the project from design to implementation and ensure the coordination between the design team and owner. Kerry's experience includes all phases of a project from planning and concept development to construction documents and construction administration services.

CERTIFICATIONS AND AFFILIATIONS





AMERICAN INSTITUTE OF ARCHITECTS

LEED ACCREDITED PROFESSIONAL

EDUCATION

Bachelor of Architecture Virginia Tech Blacksburg, VA

SFCS

RELEVANT EXPERIENCE

RHODE ISLAND VETERANS HOME Bristol, RI | New 196 Bed State Veterans Home

OKLAHOMA VETERANS HOME – ARDMORE Ardmore, OK | New 240 Bed State Veterans Home

KANSAS VETERANS HOME Topeka, KS | New 60 Bed State Veterans Home

CHEYENNE VAMC Cheyenne, WY | 30 Bed Nursing/CLC Expansion at VA Medical Center

ARMED FORCES RETIREMENT HOME Gulfport, MS | New 600 Bed Retirement Community/Nursing

BECKLEY, WV VAMC Beckley, WV | New Adult Day Care Building

MICHIGAN VETERANS HOMES Grand Rapids and Chesterfield County, MI | 120 Bed New Veterans Home

ABERNETHY LAURELS

Newton, NC | New 96 Bed Nursing Home Replacement

WESTMINSTER CANTERBURY - RICHMOND

Richmond, VA |Master Plan, New IL, Parking, and New Community Center

FEATURED PROJECT

RHODE ISLAND VETERANS HOME

Bristol, RI

PROJECT OVERVIEW

The Rhode Island Veterans' Home occupies approximately 34 acres of an overall 110 acre site along Mt. Hope Bay in Bristol, Rhode Island. The site once housed the Soldiers Home, built in the 1890's. The design for the new Veterans' Home represents a complete replacement of the existing facility. The iconic existing water tower, built in 1865, was relocated on the site. The Veterans' Home consists of twelve single-story cottages for 16 veterans each, paired into six neighborhoods, resulting in accommodations for 192 veterans.

Each "neighborhood", formed from two attached cottages of sixteen (16) resident rooms, is connected to the Commons through enclosed connectors. Resident Cottages are designed using guidelines for household model, resident centered care. Residents find their new home a safe haven yet one that encourages mobility, activity and socialization. The Veterans Home honors Rhode Island's cherished veterans by giving them a place that they are proud to call home.



SFCS

23



Nick Wade, AIA, NCARB PROJECT ARCHITECT

PROFESSIONAL OVERVIEW

Nick is skilled in the development of new and replacement projects, as well as the renovation and expansion of existing communities. In addition to providing customer-focused solutions at every level, Nick is responsible for guiding projects through the planning and design phases into construction and occupancy.

CERTIFICATIONS AND AFFILIATIONS





AMERICAN INSTITUTE OF ARCHITECTS

NATIONAL COUNCIL OF ARCHITECTURAL REGISTRATION BOARDS

EDUCATION

B.S. Architecture North Carolina State University Raleigh, NC

SFCS

RELEVANT EXPERIENCE

MICHIGAN VETERANS HOMES Grand Rapids and Chesterfield County, MI | 120 Bed New Veterans Home

ABERNETHY LAURELS Newton, NC | New 96 Bed Nursing Home Replacement

CROSS KEYS VILLAGE New Oxford, PA | Assisted Living Memory Care

GARDEN SPOT VILLAGE New Holland, PA | Nursing Home Expansion

THE PINES AT DAVIDSON Davidson, NC | 30 Bed Nursing Home Expansion

WESTMINSTER CANTERBURY – RICHMOND Richmond, VA | Master Plan, New IL, Parking, and New Community Center

PETER BECKER HEALTHCARE

Harleysville, PA | Nursing Home Expansion

FEATURED PROJECT

PINNACLE LIVING: CEDARFIELD RETIREMENT COMMUNITY Richmond, VA

PROJECT OVERVIEW

The Hermitage at Cedarfield engaged SFCS to assist in their response to the ever-changing senior living market and to address the current and future needs of our elders. Exploring all opportunities, the team is in the process of developing a master plan for Cedarfield that includes an expansion of their existing restaurant, a new parking deck, new independent living, a wellness expansion, and a household addition. The plan will expand social opportunities, promote independence, and provide a variety of housing options and services that will support lifestyles, enhance experiences, and offer more choice.







Charles "Bud" Hart, AIA, NCARB MANAGING PRINCIPAL / PROJECT MANAGER

PROFESSIONAL OVERVIEW

Bud has over 20 years of experience designing unique housing solutions for seniors and veterans. He is an expert in applying the VA Small House Guidelines to projects on challenging sites in multiple states. His responsibilities will include developing program and design concepts as well as completing 35% drawings and specifications. He will work closely with you to gain a clear understanding of your project requirements and direction and will remain involved throughout the entire project duration.

CERTIFICATIONS AND AFFILIATIONS





NATIONAL COUNCIL OF ARCHITECTURAL REGISTRATION BOARDS

AMERICAN INSTITUTE OF ARCHITECTS

EDUCATION

Master of Architecture Virginia Tech Blacksburg, VA

Bachelor of Science in Architecture University of Virginia Charlottesville, VA

SFCS

RELEVANT EXPERIENCE

OKLAHOMA VETERANS HOME – ARDMORE Ardmore, OK | 240 Bed State Veterans Home

KANSAS VETERANS HOME Topeka, KS | 60 Bed State Veterans Home

LINDEN PONDS Hingham, MA | Retirement Community Expansion

CHEYENNE VAMC Cheyenne, NY | 30 Bed Nursing / CLC Expansion

LAKEWOOD MANOR Richmond, VA | 80 Bed Nursing, Memory Care Expansion

FEATURED PROJECT

OKLAHOMA VETERANS HOME Ardmore, OK

PROJECTS OVERVIEW

The Veterans Home at Ardmore will be a 231-bed, approximately 245,000 SF Veterans Home on a rolling site north of Ardmore OK. The length of the building is generally sited along a gentle ridgeline with views to open pastures and more distant wood lines. The plan is based on the US Department of Veterans Affairs Small House Design Guide and will include twelve 19 or 20 bed houses around six Neighborhood Centers, all served by a central Community Center. All the neighborhoods are connected to the Community Center Building via enclosed walkways that are fully conditioned so that residents may move freely between Houses and the Community Center regardless of weather. Project goals include constructing a new Veterans Home that will provide quality long-term care options in alignment with industry standards, VA Small House Design Guidelines and requirements for the receipt of federal Medicare and Medicaid reimbursement, improving geographic location of available beds to provide increased access to service for eligible Veterans and their families, and building and operating a facility that that attracts and retains staff in an increasingly competitive industry.



25 SFCS



Brad Townsend, PE STRUCTURAL ENGINEER

PROFESSIONAL OVERVIEW

With over 17 years of experience, Brad has developed the structural design for retirement, medical, and government facilities. He has used a variety of structural systems and computer-aided designs for every type of building structure, from low- to high-rise. As a structural engineer, Brad will design the structural systems for your project and conduct comparisons of structural systems, conduct lateral load analyses, and design major structural components.

CERTIFICATIONS AND AFFILIATIONS





NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

AMERICAN SOCIETY OF CIVIL ENGINEERS

EDUCATION

Master of Civil Engineering Virginia Tech Blacksburg, VA

Bachelor of Civil Engineering Virginia Tech Blacksburg, VA

SFCS

RELEVANT EXPERIENCE

ABERNETHY LAURELS Newton, NC | New 96 Bed Nursing Home Replacement

CROSS KEYS VILLAGE HARMONY RIDGE New Oxford, PA | Independent Living Additions and Renovations

CYPRESS COVE Ft. Myers, FL | New Assisted Living Memory Care

THE HIGHLANDS AT WYOMISSING Wyomissing, PA | New and Renovated Personal Care and Assisted Living

MICHIGAN VETERANS HOMES Grand Rapids and Chesterfield County, MI | 120 Bed New Veterans Home

SEABURY RETIREMENT COMMUNITY Bloomfield, CT | New Multi-Story Assisted Living and Nursing Home Expansion

SENTARA NURSING HOME

Chesapeake, VA | 120 Bed Replacement Nursing Home

FEATURED PROJECT

MICHIGAN VETERANS HOMES

Chesterfield County, MI

PROJECT OVERVIEW

The Michigan Veterans Home at Chesterfield is one of a pair of Veterans Homes projects designed by SFCS and partner firm Tower Pinkster. The Chesterfield County Home was completed in 2017 and features 128 resident nursing units arranged in 16 bed households per the VA Small House Design Guidelines. The Chesterfield site was spacious and relatively flat, allowing an ideal layout for the (4) 32-bed neighborhoods. The Chesterfield site functions as a prototype for future planned Veterans Homes for Michigan. The modular design is easily modified to add or take away 16 bed houses as local needs dictate.







Allen McNutt, pe Mechanical engineer

PROFESSIONAL OVERVIEW

Allen McNutt has over 14 years of experience in mechanical engineering. His background has involved work with a variety of systems, including major new HVAC systems, renovations to existing buildings, and energy conservation studies. Allen will be responsible for the design of all heating, ventilation, and air conditioning systems.

CERTIFICATIONS AND AFFILIATIONS



PROFESSIONAL

ENGINEERS

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING

ENGINEERS

ASHRAE

EDUCATION

Bachelor of Chemical Engineering Iowa State University, Iowa City, IA

SFCS

RELEVANT EXPERIENCE

CEDAR CREST

Janesville, WI | Master Plan, Repositioning, Memory Care, Assisted Living

CHEYENNE VAMC Cheyenne, WY | 30 Bed Nursing/CLC Expansion at VA Medical Center

SENTARA NURSING HOME Chesapeake, VA | 120 Bed Replacement Nursing Home

PINES AT DAVIDSON

Davidson, NC | 30 Bed Nursing Home Expansion

LIBERTY LUTHERAN ARTMAN HOME

Ambler, PA | Skilled Nursing, Memory Care, Rehabilitation Renovations

LIBERTY LUTHERAN HEARTH AT DREXEL

Bala Cynwyd, PA | New Assisted Living Household Addition, Renovation

WESTMINSTER CANTERBURY - RICHMOND

Richmond, VA | Master Plan, New Independent Living, Parking, and New Community Center

FEATURED PROJECT

CLC ADDITION CHEYENNE VAMC

Cheyenne, Wyoming

PROJECT OVERVIEW

This project, located at the Cheyenne Veterans Affairs Medical consists of a 30 bed, approximately 33,000 sf, addition connecting to the existing CLC (Nursing Home) Phase 1 addition which was completed in 2019. Connecting to the east end of the Phase I wing, Phase II is broken down into approximately 18- long-term care private rooms with private bathrooms on the first floor and 12 private hospice rooms with private bathrooms on the upper floor designed to flex between hospice and long term care. The project is two stories to fit within the limited site area and is designed around the VA Small House Model Design Guide. All 12 hospice beds are located on the 2nd level. An outboard corridor along the south face of Phase I will enhance the existing Phase I Entry and will connect the existing Entry to the new proposed addition. The new Phase II footprint has been carefully located to avoid disturbing the existing underground utilities already in place on the campus.

The design team performed an extensive review of the existing architecture on Campus to understand its vocabulary and create a cohesive design concept for the building addition. The proximity to the Historic Main CLC building will allow for exterior architectural detailing that respects and references the original historic structure.





Derek White, CPD PLUMBING DESIGN / FIRE PROTECTION

PROFESSIONAL OVERVIEW

Derek has over 36 years of experience designing plumbing and fire protection systems for clients in senior living, health care, municipal, and educational settings. As an expert, Certified in Plumbing Design (CPD) by the American Society of Plumbing Engineers (ASPE), he will be responsible for designing plumbing and fire protection systems for your project.

CERTIFICATIONS AND AFFILIATIONS



AMERICAN SOCIETY OF PLUMBING ENGINEERS

EDUCATION

Associate of Science Mechanical Engineering Louisville Technical Institute, Louisville, KY

SFCS

RELEVANT EXPERIENCE

CROSS KEYS VILLAGE New Oxford, PA | Assisted Living Memory Care

THE PINES AT DAVIDSON Davidson, NC | 30 Bed Nursing Home Expansion

CLC ADDITION CHEYENNE VAMC Cheyenne, WY | 30 Bed Nursing Addition

HOLY FAMILY HOME

Philadelphia, PA | Master Plan, Independent Living, Skilled Nursing, Assisted Living

WESTMINSTER CANTERBURY, INC.

Lynchburg, VA | 84 Bed Nursing Home Replacement

FEATURED PROJECT

SEABURY - AN ACTIVE LIFE PLAN COMMUNITY Bloomfield, CT

PROJECT OVERVIEW

The Seabury Retirement Community project, completed in 2017 includes a new, multi-story Healthcare Building. The new building includes physical therapy space, 24 Assisted Living Units, 68 Nursing care units organized into household groups. Each household group has a dedicated residential dining space with an attached terrace for residents to enjoy seasonal outdoor dining. The large physical therapy suite located on ground level includes a specialized hydrotherapy pool. The new healthcare building replaces outdated Assisted Living and Nursing accommodations and allows residents of the retirement community to age in place as their care needs change.







J. Steven Kidwell, pe, RCCD ELECTRICAL ENGINEER / LOW VOLTAGE SYSTEMS

PROFESSIONAL OVERVIEW

Steven has over 34 years of experience and will serve as project electrical engineer and low-voltage systems designer. He has been the engineer of record for a wide variety of senior living, healthcare, industrial, and institutional projects, both traditional design / build and design/build.

CERTIFICATIONS AND AFFILIATIONS



NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

NATIONAL FIRE

PROTECTION ASSOCIATION





NATIONAL COUNCIL OF EXAMINERS FOR ENGINEERING AND SURVEYING

EDUCATION

B.S. Electrical Engineering University of Tennessee, Knoxville, TN

SFCS

RELEVANT EXPERIENCE

MICHIGAN VETERANS HOMES – GRAND RAPIDS Grand Rapids, MI | 128 Bed State Veterans Home

MICHIGAN VETERANS HOME – CHESTERFIELD Chesterfield County, MI | New 128 Bed State Veterans Home

THE PINES AT DAVIDSON Davidson, NC | 30 Bed Nursing Home Expansion

CHEYENNE VAMC Cheyenne, WY | 30 Bed Nursing/CLC Expansion at VA Medical Center

CYPRESS COVE Ft. Myers, FL | New Assisted Living Memory Care

OKLAHOMA VETERANS HOME – ARDMORE Ardmore, OK | New 240 Bed State Veterans Home

KANSAS VETERANS HOME Topeka, KS | New 60 Bed State Veterans Home

SEABURY RETIREMENT COMMUNITY Bloomfield, CT | New Multi-Story Assisted Living and Nursing Home Expansion

FEATURED PROJECT

MICHIGAN VETERANS HOMES Grand Rapids, MI

PROJECT OVERVIEW

The Michigan Veterans Home at Chesterfield is one of a pair of Veterans Homes projects designed by SFCS and partner firm Tower Pinkster. The Chesterfield County Home was completed in 2017 and features 128 resident nursing units arranged in 16 bed households per the VA Small House Design Guidelines. The Chesterfield site was spacious and relatively flat, allowing an ideal layout for the (4) 32-bed neighborhoods. The Chesterfield site functions as a prototype for future planned Veterans Homes for Michigan. The modular design is easily modified to add or take away 16 bed houses as local needs dictate.





J. Gary Martin, LEED[®] AP CONSTRUCTION ADMINISTRATOR

PROFESSIONAL OVERVIEW

Gary Martin has over 7 years experience as a construction administrator. On a daily basis, he collaborates with the entire project team and the contractor to ensure that the project is completed on time and meets all construction requirements. Gary has worked on a variety of projects, large and small, new construction, and renovations.

CERTIFICATIONS AND AFFILIATIONS



EDUCATION

M.A. Architecture Virginia Polytechnic Institute and State University Blacksburg, VA

B.A. Architecture Virginia Polytechnic Institute and State University Blacksburg, VA

SFCS

RELEVANT EXPERIENCE

SEABURY RETIREMENT COMMUNITY Bloomfield, CT | New Multi-Story Assisted Living and Nursing Home Expansion

CYPRESS COVE Ft. Myers, FL | New Assisted Living Memory Care

THE ARLINGTON AT NAPLES Naples, FL | New Nursing Home and Assisted Living

THE PINES AT DAVIDSON Davidson, NC | 30 Bed Nursing Home Expansion

THE JAMES H. QUILLEN VAMC Mountain Home, TN | CLC Addition

WESTMINSTER CANTERBURY, INC. Lynchburg, VA | 84 Bed Nursing Home Replacement

FEATURED PROJECT

WESTMINSTER CANTERBURY Lynchburg

PROJECT OVERVIEW

A new six story healthcare center was constructed in 2019 to serve 84 skilled nursing residents. Each of the four residential floors features 21 private suites with shared household spaces and amenities to encourage socialization. Each of the neighborhoods features a large double-sided fireplace and library with resident rooms just a few steps away from one of the many household living areas.

The design maximizes views from the living, dining and activity areas to the surrounding countryside and rolling pastures. The lower floors feature a large community gathering space, physical rehabilitation suite, beauty/ barber salon, underbuilding parking administrative suites and a satellite kitchen.







Justine Sowers, cid, asid SENIOR INTERIOR DESIGNER

PROFESSIONAL OVERVIEW

Justine has over 13 years of experience designing interior environments for hospitality, health care, and senior living clients. She focuses on achieving a timeless interior environment that is responsive to your needs, appropriate for your project, and within your budget and schedule. Justine has extensive expertise with space planning; programming; and selecting interior finishes, decorative lighting, furnishings, artworks, and accessories.

CERTIFICATIONS AND AFFILIATIONS



SFCS

RELEVANT EXPERIENCE

RHODE ISLAND VETERANS HOME Bristol, RI | New Continuing Living Center

OKLAHOMA VETERANS HOME – ARDMORE Ardmore, OK | New 240 Bed State Veterans Home

KANSAS VETERANS HOME Topeka, KS | New 60 Bed State Veterans Home

MICHIGAN VETERANS HOMES – GRAND RAPIDS Grand Rapids, MI | 128 Bed State Veterans Home

MICHIGAN VETERANS HOME – CHESTERFIELD Chesterfield County, MI | New 128 Bed State Veterans Home

SEABURY RETIREMENT COMMUNITY Bloomfield, CT | New Multi-Story Nursing and Assisted Living

FEATURED PROJECT

RHODE ISLAND VETERANS HOME Bristol, RI

PROJECT OVERVIEW

The Rhode Island Veterans Home, completed in 2017 is the single Veterans Home for the State of Rhode Island. The home occupies a 34 acre site along Mt. Hope Bay in Bristol. The project was a complete replacement for the original Soldiers Home built c. 1890. The new Veterans Home is comprised of 12 single – story houses for 16 Veterans each, paired into six neighborhoods plus a second floor household for 16 domiciliary care residents. The project was designed per the VA Small House Design Guidelines. All the resident households are connected to the central Community Center building via enclosed connectors. The Community Center houses the main dining room serving all residents as well as a myriad of amenities from Library to Barber Shop, fitness gym, café Bistro and more.







Craig Baker, ALEP PRINCIPAL IN CHARGE

PROFESSIONAL OVERVIEW

Craig Baker, ALEP leads Thrasher's Buildings and Facilities team. An experienced designer and manager, Craig has an extensive background working with clients to bring their vision to life. He has worked on a wide variety of projects during his long tenure at Thrasher, with particular emphasis in the healthcare, educational, and municipal markets. Craig has a true passion for his craft and a dedication to providing facilities that truly improve the community. In his role as Division Manager, Craig oversees the direction of Thrasher's entire team of architects and designers, working hand-in-hand with them to ensure success of projects and growth of employees. In addition to his strong technical skills, Craig's attention to communication and responsiveness make him an excellent project and personnel manager.

CERTIFICATIONS AND AFFILIATIONS



EDUCATION

B. S. Architectural Engineering Fairmont State University

THRASHER

HEALTHCARE EXPERIENCE

VA BUILDING 7 INTERIOR RENOVATIONS Harrison County, WV

CITY OF PRINCETON VETERANS HEALTH CENTER Mercer County, WV

ACCESS HEALTH WOMEN'S HEALTH CLINIC Raleigh County, WV (Beckley)

CITY OF GRAFTON HOSPITAL RENOVATIONS Taylor County, WV

BOONE MEMORIAL HOSPITAL Boone County, WV

MINNIE HAMILTON HEALTHCARE FACILITY SCHEMATIC DESIGN Preston County, WV

UNITED HOSPITAL CENTER NEW UROLOGY CLINIC Harrison County, WV

CAMDEN-ON-GAULEY MEDICAL CENTER SUMMERSVILLE CLINIC Nicholas County, WV

COMMUNITY CARE OF WEST VIRGINIA BUCKHANNON CLINIC RENOVATIONS Upshur County, WV

VALLEY HEALTHCARE NEW RESIDENTIAL TREATMENT FACILITY Marion County, WV

MVA SHINNSTON CLINIC RENOVATIONS Harrison County, WV

VETERANS EXPERIENCE

MARSHALL COUNTY VETERANS MEMORIAL Marshall County, WV

CLARKSBURG MISSION VETERANS APARTMENT DESIGN Harrison County, WV

BECKLEY EXPERIENCE

CITY OF BECKLEY POLICE DEPARTMENT NEW FACILITY Raleigh County, WV

CITY OF BECKLEY FIRE STATION #3 Raleigh County, WV

CITY OF BECKLEY THE MILL AMPHITHEATER CONCEPTS Raleigh County, WV

RAHALL CENTER AT THE WOODLANDS OFFICE BUILDING Raleigh County, WV

BECKLEY MULTI-PURPOSE BUILDING AND PLAZA Raleigh County, WV





Kenton Blackwood, AIA, LEED[®], AP PROJECT DESIGNER

PROFESSIONAL OVERVIEW

Kenton Blackwood has 40 years of experience in the planning, design, bidding and construction of architectural projects throughout the State of West Virginia, and since 2000 he has designed and managed over \$210 million of construction projects. Mr. Blackwood is well-versed in site evaluation and design, building program evaluation, planning and design, construction document development, bidding and construction administration, on-site construction observation, and is very knowledgeable in Fire/Life-Safety Code requirements and ADA/Accessibility Design Standards. He has extensive experience with Veteran's projects.

Mr. Blackwood has an unsurpassed understanding of technological architectural media with his knowledge of 3D BIM modeling software applications. His proficiency with virtualreality modeling, combined with an experienced, creative approach to design opportunities, provides clients a means to review and understand proposed ideas, move around and through a design, study different forms and arrangements, review lighting, sunlight controls, and help clients make important decisions about finish materials and color schemes.

CERTIFICATIONS AND AFFILIATIONS





AMERICAN INSTITUTE OF ARCHITECTS LEED® ACCREDITED PROFESSIONAL

EDUCATION

Engineering West Virginia University

Architecture Fairmont State University



VETERANS EXPERIENCE

HERSHEL WOODY WILLIAMS MEDAL OF HONOR FOUNDATION GOLD STAR FAMILY MEMORIAL Nationwide

DONEL C. KINNARD MEMORIAL STATE VETERANS CEMETERY Kanawha County, West Virginia

WEST VIRGINIA'S FALLEN HEROES MEMORIAL Institute, West Virginia

MARSHALL COUNTY VETERANS MEMORIAL Moundsville, West Virginia

MARION COUNTY VETERANS SQUARE MEMORIAL PLAZA AND BUILDING Fairmont, West Virginia

CLARKSBURG STATE VETERAN'S NURSING FACILITY Harrison County, West Virginia

BARBOURSVILLE VA NURSING HOME Cabell County, WV

HEALTHCARE EXPERIENCE

LOUIS A. JOHNSON VA MEDICAL CENTER Harrison County, West Virginia

BOY SCOUTS OF AMERICA ARNOLD MEDICAL CENTER Fayette County, WV





Jeff Gola, PE CIVIL ENGINEER

PROFESSIONAL OVERVIEW

Jeff Gola, PE is an integral part of The Thrasher Group's Land Development Market. He has accrued more than 20 years of experience in the design and construction of public works projects. In that time, Jeff has been a part of a variety of project types, including dams, bridges, roadways, stormwater systems, and retaining walls. He has dedicated much of his career to understanding the structural design elements that govern these infrastructure projects and takes a methodical design process to ensure his work takes these elements into account so that his projects remain safe, stable, and secure throughout their use.

In addition to his public works projects, Jeff has worked on many projects for healthcare facilities across the state of West Virginia. Jeff is highly experienced in the transportation design and construction world. He has built a large portfolio of these projects over the years, having been involved in more than \$100 million worth of critical transportation infrastructure. He has worked alongside the West Virginia Division of Highways for 17 years.

CERTIFICATIONS AND AFFILIATIONS



B. S. Civil Engineering

West Virginia University

THRASHER

HEALTHCARE EXPERIENCE

WVU MEDICINE LOT J82 Monongalia County, WV

WVU MEDICINE WOMEN'S AND CHILDREN'S HOSPITAL SITE Monongalia County, WV

WVU MEDICINE HOSPITAL PARKING GARAGE Monongalia County, WV

WVU MEDICAL STUDENT HOUSING Monongalia County, WV

WVU MEDICINE WOMEN'S AND CHILDREN'S HOSPITAL Monongalia County, WV

WVU MEDICINE FAIRMONT MEDICAL CENTER Marion County, WV

WVU MEDICINE PRINCETON HOSPITAL Mercer County, WV

WVU MEDICINE HOSPITAL PARKING GARAGE Monongalia County, WV

VALLEY HEALTH CARE RYAN BROWN RESIDENTIAL TREATMENT FACILITY Monongalia County, WV

RALEIGH COUNTY EXPERIENCE

RALEIGH COUNTY MEMORIAL AIRPORT INDUSTRIAL PARK Raleigh County, WV

RALEIGH COUNTY AIRPORT AUTHORITY RUNWAY 1-19 Raleigh County, WV

RALEIGH COUNTY MEMORIAL AIRPORT INDUSTRIAL PARK Raleigh County, WV

CITY OF BECKLEY MULTI-PURPOSE BUILDING AND PLAZA Raleigh County, WV





Samuel Rich, PLA LANDSCAPE ARCHITECT

PROFESSIONAL OVERVIEW

Samuel Rich, PLA is a Landscape Architect at The Thrasher Group. He also is the divisional manager for the company's Land Development Market. Sam's role includes overseeing the design process for a variety of land development and planning projects in the commercial, residential, municipal and industrial sectors. His team within the land development division works with clients to take projects from the development stages all the way through construction providing site evaluation, master planning, estimating, project marketing and final design services. Visualizing and evaluating design alternatives is one of his specialties enabling him to effectively communicate with clients what their project will look like and how it will function long before the finished product is constructed.

In addition to master planning for specific sites, he has worked on several projects that have a more regional or community-based planning focus. Sam has experience with multiple industrial site selection projects as well as regional recreational trail and water access planning initiatives. In addition to these regional projects Sam has managed several projects with a focus on Downtown or City-wide beautification efforts in communities of various sizes.







B. S. Landscape Architecture West Virginia University



RALEIGH COUNTY EXPERIENCE

CITY OF BECKLEY DOWNTOWN IMPROVEMENTS Raleigh County, WV

CITY OF BECKLEY NEW FIRE STATION #3 RAIN GARDEN Raleigh County, WV

CITY OF BECKLEY POLICE STATION Raleigh County, WV

CITY OF BECKLEY THE MILL AMPHITHEATER CONCEPTS Raleigh County, WV

CITY OF BECKLEY MULTI-PURPOSE BUILDING AND PLAZA Raleigh County, WV

SOUTHERN WV EXPERIENCE

CITY OF SMITHERS RIVERFRONT PARK REDEVELOPMENT Fayette County, WV

BOY SCOUTS OF AMERICA JW AND HAZEL RUBY WELCOME CENTER

Fayette County, WV

BOY SCOUTS OF AMERICA LEADERSHIP RIDGE Fayette County, WV

WV DIVISION OF HIGHWAYS CHARLESTON SLACK PLAZA Kanawha County, WV

CITY OF NITRO LANDSCAPE MASTER PLAN Kanawha County, WV





Samuel P. Wilkes, LRS, PWS ENVIRONMENT PROJECT MANAGER

PROFESSIONAL OVERVIEW

Sam Wilkes, LRS, PWS is an Environmental Project Manager within Thrasher's Land Development Market. Sam is a Professional Wetland Scientist and a WVDEP certified Licensed Remediation Specialist. He brings over 23 years of consulting experience as a project manager and senior environmental scientist, providing technical support to watershed management, restoration, natural resource conservation, and

hazardous materials programs. Sam is experienced at providing project oversight and managing field teams and contractors collecting wetland, stream quality, environmental media data, and general site condition data for site characterization. He regularly interacts with his clients and manages project budgets and staffing plans, while providing quality control review of project deliverables. Sam understands the importance of delivering projects on time and providing a proactive management style to his clients.

CERTIFICATIONS AND AFFILIATIONS



EDUCATION

- M. S. Environmental Science & Policy Johns Hopkins University
- B. S. Earth & Environmental Science Wilkes University

THRASHER

HEALTHCARE EXPERIENCE

CABIN CREEK HEALTHCARE SYSTEM Kanawha County, WV

HAMPSHIRE COUNTY DEVELOPMENT AUTHORITY Hampshire County, WV

RALEIGH COUNTY EXPERIENCE

RALEIGH COUNTY COMMISSION CLEAR FORK Raleigh County, WV

SOUTHERN WV EXPERIENCE

WV STATE UNIVERSITY NEPA Kanawha County, WV

WEST VIRGINIA TOTAL MAXIMUM DAILY LOAD DEVELOPMENT Various Counties, WV

KANAWHA COUNTY SCHOOL BOARD Kanawha County, WV

KANAWHA COUNTY REGIONAL TRANSPORTATION AUTHORITY Kanawha County, WV

WVDOH NEPA STUDY COL. RUBY BRADLEY BRIDGE Roane County, WV

CITY OF BLUEFIELD EXIT 1

Mercer County, WV





Zachary D. Wright UTILITY COORDINATOR

PROFESSIONAL OVERVIEW

Zachary Wright is a veteran Project Manager with 20 years of experience preventing and correcting environmental and water compliance issues. Zachary has vast experience working with regulatory agencies such as WV DEP, EPA, the Army Corps of Engineers and others finding solutions that work for both his clients and the agencies. Additionally, Zachary has helped clients negotiate, comply with, and execute the work required by consent agreements related to NPDES and other violations at numerous locations up and down the Mid-Atlantic.

Zachary exhibits experience in design and construction related to stormwater, wastewater and other projects. His all-around understanding, from planning, design, and funding to bidding and execution, makes Zachary an asset to any project.

EDUCATION

- M. B. A. Project Management West Chester University
- M. S. Information Management Marshall University

B. S. Mathematics Concord University

THRASHER

RALEIGH COUNTY EXPERIENCE

BECKLEY SANITARY BOARD PINECREST Raleigh County, WV

BECKLEY SANITARY BOARD WHITESTICK Raleigh County, WV

BECKLEY SANITARY BOARD - STRATTON Raleigh County, WV

BECKLEY SANITARY BOARD - ROBERT C. BYRD Raleigh County, WV

BECKLEY SANITARY BOARD - 317 INDUSTRIAL PARK DRIVE Raleigh County, WV

BECKLEY SANITARY BOARD - FLOW OPTIMIZATION STUDY Role: Project Manager Raleigh County, WV

BECKLEY SANITARY BOARD - MORGAN HILLS PLANNING Raleigh County, WV

BECKLEY SANITARY BOARD - GENERAL SERVICES Raleigh County, WV

TOWN OF SOPHIA - COAL CITY Raleigh County, WV

BECKLEY WATER COMPANY Raleigh County, WV

SOUTHERN WV EXPERIENCE

TOWN OF FAYETTEVILLE LIVELY STREET Fayette County, WV

CITY OF MOUNT HOPE Fayette County, WV





Jim Decker CONSTRUCTION COST ANALYST

PROFESSIONAL OVERVIEW

Jim Decker, MBA brings nearly 30 years of experience in construction estimating and management for the private and public sectors including many healthcare facilities. In his construction administration capacity Jim has valuable experience in services such as inspection and monitoring, cost control, scheduling, contract administration, payment processing, submittals, shop and coordination drawings, change orders and project reports.

His role as a construction estimator provides realworld cost and construction analysis that proves its value on every project. As a licensed general contractor in the State, his review of proposed designs and contract documents gives an 'eye' from the bidders and contractors perspective. Constructability and work phasing considerations are discussed, providing the opportunity for the team to further refine contract requirements, thus improving the efficiency at the design, bidding and construction phases.

EDUCATION

M. B. A. Project Management Emphasis Fairmont State University

> **B.S. Civil Engineering** Fairmont State University

Associate of Mechanical Engineering Fairmont State University

THRASHER

HEALTHCARE EXPERIENCE

BOONE MEMORIAL HOSPITAL CLINIC Boone County, WV

BOY SCOUTS OF AMERICA ARNOLD MEDICAL CENTER Fayette County, WV

MARION COUNTY HEALTH DEPARTMENT RENOVATIONS Marion County, WV

MOUNTAINTOP MEDICAL CLINIC NEW FACILITY Tucker County, WV

MVA FAIRMONT CLINIC Marion County, WV

GRANT COUNTY NURSING HOME Grant County, WV

MINNIE HAMILTON RURAL HEALTH CLINIC Preston County, WV

PRESTON TAYLOR COMMUNITY HEALTH CENTER Taylor County, WV

VALLEY HEALTH CARE RYAN BROWN RESIDENTIAL CENTER Monongalia County, WV

RALEIGH COUNTY EXPERIENCE

CITY OF BECKLEY POLICE DEPARTMENT HEADQUARTERS Raleigh County, WV

CITY OF BECKLEY FIRE DEPARTMENT STATION #3 Raleigh County, WV

MICHIGAN VETERANS HOME Grand Rapids, MI

SIZE: 180,000 SF (128 beds)

COMPLETION DATE: 2021

SCOPE:

Master Planning and Programming, Design Based on the US Department of Veterans Affairs Small House Design Guide

The new homes at both Grand Rapids and Southeast Michigan embody the principals of resident centered care and mark a clear turn away from the institutional medical models of previous generations. SFCS studied two sites simultaneously to develop a prototypical design based on the design elements from the VA Small House Design Guidelines. The Grand Rapids site is located on a heavily wooded corner of the existing large State Veterans Home property. The existing slope created significant challenges to accommodate all of the desired neighborhoods in a connected community. The SFCS design team resolved this challenge by developing a two-story central Community Center with one-story neighborhoods connected to each level.

The Grand Rapids Home has four neighborhoods each consisting of a pair of sixteen bed houses for a total of 128 resident rooms. A single house of 16 residents or a neighborhood pair of 32 was designed to









be flexible and may be designated as a memory care, hospice, or other special care environment. The prototypical design is such that variations in levels of care may be accommodated with little or no alteration to the basic design. The Michigan Veterans Homes at Grand Rapids and Southeast Michigan began construction in fall 2018, with completion in late summer 2020.

MICHIGAN VETERANS HOME

Chesterfield Township, MI

SIZE: 152,000 SF

COMPLETION DATE: 2021

SCOPE:

Master Planning and Programming, Design Based on the US Department of Veterans Affairs Small House Design Guide

Located on the site of the former Selfridge Air National Guard Base, the new Michigan Veteran Home at Chesterfield Township (MVHCT) is the first State Veterans Home to serve the southeast Michigan / Detroit region.

The state-of-the-art home was designed based on the US Department of Veterans Affairs Small House Design Guide. The Guide is a handbook that facilitates the cultural transformation away from care models that serve the needs of the institution and moves towards a resident centered model focused on the needs and preferences of the resident.

The home consists of four pairs of 16 bed houses, each pair of houses represents a 32 bed neighborhood for a total of 128 resident units. Each pair of the four approximately 29,000 sf neighborhoods connect directly to the 33,000 sf community center, the hub of the community. Each resident unit in the 16 - bed house is a private room with en-suite bath. The resident rooms are generously sized and include bedroom space with built - in writing desk, wardrobe and sink. These private rooms are the gold standard for long term care and provide additional infection control protection by eliminating shared personal space.

Spacious common areas within each house include shared living, dining and activity spaces. Each house features its own residential style kitchen serving only the residents of that house, the dining area has direct access to an adjacent secure outdoor courtyard. The community center is directly connected to all the neighborhoods and features clinic space, physical therapy, pharmacy, multi-faith prayer room, barbershop and salon, café bistro and gift shop.





The new veterans home embodies the principals of resident centered care and marks a clear turn away from the institutional medical models of previous generations. The paired neighborhood design serves as a prototype for future Veterans Homes in Michigan.



41

RHODE ISLAND VETERANS HOME Bristol, RI

SIZE: 256,000 SF

COMPLETION DATE: 2018

SCOPE:

Master Planning and Programming, Design Based on the US Department of Veterans Affairs Small House Design Guide



The Rhode Island Veterans' Home occupies approximately 34 acres of an overall 110 acre site along Mt. Hope Bay in Bristol, Rhode Island. The site once housed the Soldiers Home, built in the 1890's. The design for the new Veterans' Home represents a complete replacement of the existing facility. The iconic existing water tower, built in 1865, was relocated on the site. The Veterans' Home consists of twelve single-story cottages for 16 veterans each, paired into six neighborhoods, resulting in accommodations for 192 veterans.

Each "neighborhood", formed from two attached cottages of sixteen (16) resident rooms, is connected to the Commons through





enclosed connectors. Resident Cottages are designed using guidelines for household model, resident centered care. Residents find their new home a safe haven yet one that encourages mobility, activity and socialization. The Veterans Home honors Rhode Island's cherished veterans by giving them a place that they are proud to call home.



CHEYENNE VAMC Cheyenne, WY

Cheyenne, wr

SIZE: 35,000 SF

COMPLETION DATE: TBD, in Construction Doc phase

SCOPE:

Planning, Programming, Schematic Design through Construction Administration



SFCS teamed with Guidon, a Service Disabled Veteran Owned Small Business in Indianapolis, IN to design a 30 bed expansion to the Community Living Center (nursing home) at the Veteran Administration Medical Center in Cheyenne, WY. The expansion of the CLC is designed using the VA Small House Design Guidelines.

This challenging project is the final planned addition to a the original historically significant VA hospital building and was limited to a very compact available site area. The small site and the requirement to blend the exterior architectural detailing and massing with the

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existing hospital necessitated nursing resident rooms. The second floor is arranger com, living room, activities second floor is arranger com, living room, activities second floor hospical necessitated nursing resident rooms. The second floor features a large fenced courtyard space. Nur courtyard, weather permitting and activities.
Second floor hospice resider support overnight family gues

existing hospital necessitated a 2-story solution. The first floor consists of 18 nursing resident rooms. The second floor contains 12 hospice care resident rooms. Each floor is arranged as a self-contained household with dining room, living room, activities space and therapy spa according to the Small House Guidelines.

The 2-story household addition attaches to a recently completed phase of the CLC via an exterior enclosed connector passage allowing circulation between the two portions of the building.

The first floor features a large outside dining terrace nestled within a secure fenced courtyard space. Nursing residents may access the terrace and courtyard, weather permitting to enjoy regular meals and recreational games and activities.

Second floor hospice resident units feature larger floor space equipped to support overnight family guests and more intensive medical care.



BECKLEY VAMC Beckley, WV

SIZE: 16,000 SQ FT

COMPLETION DATE: 2014

SCOPE:

2-Story New Adult Daycare Building Connected to Existing Hospital Building.



SFCS designed the new Adult Day Care and Office at the Beckley, WV VAMC. It was constructed on a site adjacent to the existing VA Medical Center Hospital building. The Adult Day Care includes a den, country kitchen/activity area, memory garden, and an office suite. This dynamic, flexible space is designed for approximately 24 guests and envisioned to facilitate a variety of functions and activities. The building also provide s additional office space and a lower floor initially dedicated to Compensated Work Therapy and Maintenance and Operations.

While in the care of the staff, the clients participate in activities ranging from read¬ing privately to group games. In the dining/activity space, clients are served pre-prepared meals from the custom country kitchen located in the center of the activity space. For a change of





pace, the den offers seating, television, and private window seating with beautiful views towards the mountains beyond and into the private memory gardens. These secure gardens are quiet and beautifully landscaped and provide a serene environment within which to sit, read, take a walk, or dine on a nice summer day. There is also a private counseling office provided for one-on-one discussions between a client and a staff member.

In addition to the variety of activities offered, participants also have the opportunity to go to scheduled appointments within the primary hospital through the secure, indoor connecting walkway.







OKLAHOMA VETERANS HOME - ADMORE Bristol, RI

SIZE: 245,000

COMPLETION DATE:

Currently in Design Development phase

SCOPE:

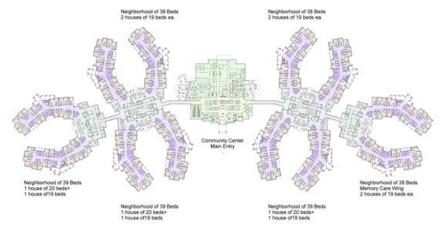
New 242 bed State Veterans Home, Full Design Services, Programming Planning, Construction Administration



The Veterans Home at Ardmore positions four single-story resident neighborhoods around a central one-story Community Center creating five distinct buildings with a total of 242 resident beds. Each neighborhood is comprised of pairs of 20 or 21-bed houses. All the neighborhoods are connected to the Community Center Building via enclosed walkways that are fully conditioned so that residents may move freely between Houses and the Community Center regardless of weather.

The house pairs face one another across enclosed, secure courtyards. Visitors and residents enter each house either at an internal "front door' within the Neighborhood Center or through a traditional exterior front porch from adjacent parking areas. A readily identifiable entrance is presented to residents, visitors and staff approaching the house from both inside and outside the building.

Resident Units are exclusively singleoccupancy and include a small entry vestibule



leading to a living and sleeping area totaling approximately 275 SF. Each unit has a private bathroom. The living / sleeping area includes a built-in desk space combined with a wardrobe for storage. A wall mounted nurse server is located within each resident entry vestibule for charting and daily nursing supplies.

Each resident bathroom features a large roll-in, zero threshold shower, a toilet with dual swing-down grab bars, and a sink with generous counter space for personal grooming. All fixtures and spaces are fully accessible for use by persons with disabilities.



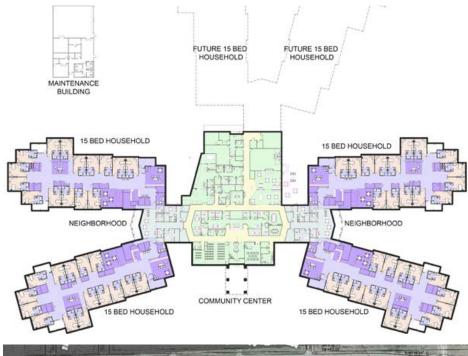
KANSAS VETERANS HOME Tokepa, KS

SIZE: 73,000 SQ FT

COMPLETION DATE: 2018

SCOPE:

Master Planning and Programming, Design Based on the US Department of Veterans Affairs Small House Design Guide



The SFCS design team was retained in May 2021 by the state of Kansas to design a new Veterans Home in the Topeka, KS region. The design team engaged with the state in a detailed site selection exercise culminating in the selection of a site in NE Kansas, near Topeka.

The space program and schematic plan are based on the US Department of Veterans Affairs Small House Design Guide and support the ODVA grant application under the State Home Construction Grant program. The design team participated in a series of design meetings with personnel from the veterans agency in Kansas. The detailed information and feedback received during these meetings is incorporated into the design.





The design team was requested to design a 60 bed home with alternate plans to increase the total capacity up to 90 beds. The design team responded with a plan that arranges pairs of 15 -18 bed houses around a central Community Center. The team worked with caregiver staff to determine the optimum number of resident rooms per house based on the established staffing model. The bed count may be adjusted by adding or removing pairs of houses and is designed so that this may be done years in the future if demand for bed capacity changes. The pairs of houses or neighborhoods are directly connected to the Community Center Building to reduce travel distances and so that residents may move freely between Houses and the Community Center regardless of weather.

NORTHERN NEVADA VETERANS' HOME Sparks, NV

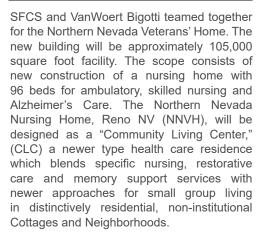
SIZE: 110,000 SF

CONSTRUCTION COST: \$47 million

COMPLETION DATE 2017

SCOPE:

Architecture / Interior Design for Memory Care, Assisted Living Households



- One-story living experience with unusual freedom to move about
- Cottage dining and direct outside access (freedom to move in safe areas).
- Staff is close by and assigned to small groups of 16 and 32.









CALIFORNIA VETERANS' HOME Reading, CA

SIZE: 163,280 SF F

CONSTRUCTION COST: \$43 million

COMPLETION DATE 2012

SCOPE:

Master Planning, Memory Care Assisted Living, Interiors

AWARDS:

Citation of Merit 2011 Design/Environments for Aging Architectural Showcase, Healthcare Design 2011 Architectural Showcase, New Construction/Remodel/Renovation

After an intense four month Design-Build competition, The SFCS team, with Jacobs and Clark Construction was awarded the first "Person Centered Care" Community by the California Department of Veterans' Affairs in October of 2009.

The design is based on creating 15 bed "C" shaped households with immediate access to living dining and activity areas right across from the resident rooms with immediate views and access to secure outdoor courtyards. Each 15 bed household is paired to form a 30 bed neighborhood connected to a larger main street community providing additional activities and services





for the member veterans. The total project consists of a total of four 15 bed RCFE (Assisted Living) Households, two 15 Bed Memory Care households and a total of four 15 bed skilled nursing households.





ARMED FORCES RETIREMENT HOME Gulfport, MS

SIZE: 842,514 SF

CONSTRUCTION COST: \$205 million

COMPLETION DATE: 2010

SCOPE OF SERVICES: Master Planning, Independent Living, Assisted Living, Memory Support Households, Main Street, Hall of Honor, Commons

AWARDS

AIA Design For Aging Review, Citation Award Environments for Aging Architectural Showcase, Featured Project

SFCS worked with the URS Group, and Yates

Construction to restore the Armed Forces

Retirement Home in Gulfport, MS, after the

devastation of Hurricane Katrina. The new

facilities accommodate 580-600 residents with

The new construction includes independent living apartments, two memory support households, two nursing households, an assisted living wing, a Hall of Honor, a commons area, and Main Street. A typical resident floor has 24 apartments; 12 on each side with a larger room in the center for a couple. The rooms are over twice the size of what the residents had in the original facility. Each apartment is designed to have multiple layouts and roughly 450 square feet is provided for each resident. It was the goal

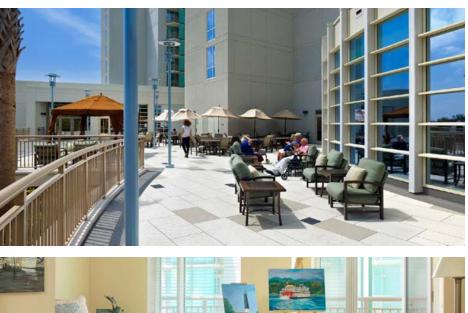
three residential pavilions.





of the design team to make sure everyone could see the ocean from his or her bedroom or living room. This opportunity is further enhanced with the addition of an exterior deck or balcony for each apartment.

The theme for resident units at all levels of care from Independent Living to Long Term Care is, quite simply "Home". Finishes are durable yet not institutional: carpet, painted gypsum board and waterproof resilient bathroom flooring, toilets and showers are wheelchair accessible.





ABERNETHY LAURELS Newton, NC

SIZE: 88,225 SF

CONSTRUCTION COST: \$20.4 million

COMPLETION DATE: 2017

SCOPE: Master Planning, Memory Care Households

AWARDS: Environments for Aging Architectural Showcase Featured Project

The new Health and Rehabilitation Center at Abernethy Laurels is the first phase of a planned two-phase nursing home bed replacement. Abernethy Laurels was originally constructed in the early 1970s as a standalone, medical model nursing home. Periodic additions and renovations in the years since have transformed the original 120-acre campus into a full-service CCRC, complete with a Community Center, Independent Living apartments, cottages, and Assisted Living apartments. Replacement of the original nursing home (Healthcare Center) portion of the community is but the latest and perhaps most complex step in the transformation.

Phase I, which is now complete, includes replacing 96 of the existing 174 primarily semi-private units with a new, two-story health and rehabilitation center arranged into six 16-resident unit households. All new resident units are private, single-occupancy rooms. Two first-floor households are designated for short stay or transitional rehabilitation residents, two second-floor households serve memory care residents, and the remaining two households accommodate long term care nursing residents.

Each household features two clusters of eight resident rooms connected by living, kitchen / dining, and activity areas. Residents' proximity to the common areas within their house



encourages social interaction and fellowship with their neighbors and with staff. Other amenities include screened porches in each house on both floors, a therapy gym, and an outdoor therapy courtyard.

THE COTTAGE AT CYPRESS COVE Fort Myers, FL

SIZE: 39,533 SF

CONSTRUCTION COST: \$9.3 million

COMPLETION DATE: 2016

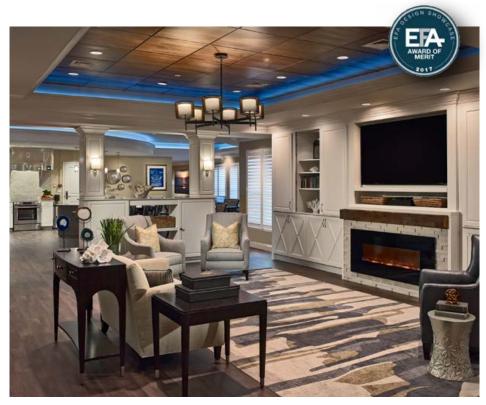
SCOPE: Master Planning, Memory Care Assisted Living Households

AWARDS: Environments for Aging Architectural Showcase, Citation of Merit Design For Aging Review, 14th Edition, Merit Award

The Cottage at Cypress Cove is a Memory Care Assisted Living residence that specifically caters to residents with Alzheimer's disease and other dementiarelated conditions. The design marks a new milestone in memory care by combining a ground-breaking program with an innovative environment that actively addresses the symptoms of Alzheimer's/Dementia while creating a familiar, comfortable home.

The Guiding Principles were established through research, experience, and learning tours to several Memory Care communities to gain insights into the best practices in programming, operations, staffing, training, and environment. These guiding beliefs informed all aspects of design and were keys to success in creating a safe environment, fostering autonomy, and providing purpose that enhances the daily lives of residents.

Often in people with dementia-related disorders, the internal circadian rhythms and wake-sleep cycle become disrupted, which have significant impacts on residents and caregivers. Research indicates that the exposure to a supplemental lighting system can help residents maintain synchronization with the solar day.







Cypress Cove's new memory support household, The Cottage, is the first purpose-built dementia environment in the world to utilize this technology to help with light-related symptoms of dementia. The system is inconspicuously located in the cove lighting in all commons areas. This provides residents exposure to the illumination process 24 hours a day as light therapy.

BROOKSIDE AT CROSS KEYS VILLAGE New Oxford, PA

SIZE: 31,241 SF

CONSTRUCTION COST: \$22 million

COMPLETION DATE: 2016

SCOPE: Master Planning, Memory Care Households

AWARDS: Environments for Aging Architectural Showcase Design For Aging Review Published Project Award



Cross Keys Village is the ninth largest singlesite, non-profit CCRC in the country, serving 900+ residents. Brookside at Cross Keys Village is a state-of-the-art memory cottage with two connected 16 resident households.

Brookside is resident and team-centered, with secure areas that offer freedom and familiarity for residents while providing functionality and resident safety for staff. A fully operational kitchen with an induction countertop is adjacent to the dining areas, allowing aromas and sounds to stimulate pleasant memories. A tunable and auto-dimming lighting system maintains natural sleep cycles, reducing sleep disturbances and sun-downing behaviors.

This open, free flowing plan offers no dead ends and minimizes 90 degree turns by designing in large radius wall arcs and angles throughout the building plan. These gentle wall arcs encourage exploration by leading the resident to discover what life has around the bend. Special way-finding cues used throughout the building help orient the residents to their private space.

The den is located directly off of the dining room, allowing staff to utilize this space to provide flexible eating schedules to residents. The staff can utilize the den as an activity room before, during, and after meals to assist with stimulating the residents' appetite by coordinating activities, smelling freshly cooked meals, and hearing familiar sounds.







CLARKSBURG VA NURSING FACILITY Clarksburg, WV

SIZE: New Construction: 95,300 SF

COMPLETION DATE: 2008

SCOPE:

New Construction & Connection to Existing VA Hospital, Civil/Site, Utilities, FF&E



The team was selected by the State of West Virginia to design the first West Virginia Veterans Nursing Facility. The team utilized the services of an experienced out-of-State firm to assist in project planning and programming. The team was asked to complete construction documents in a compressed time frame resulting from the need to meet VA time constraints. Construction documents on the \$22,000,000.00 building were completed within three months and the State benefited from a \$16.3 million dollar grant from the VA.

One interesting aspect of the 120-Bed facility is the development of a controlled 18-Bed Alzheimer's Unit. These patients are allowed freedom of movement throughout the Unit and all adjacent courtyards. Patient control is maintained by both video and electronic (Wandering Resident System) means.

The team also provided full services for selection and purchasing of interior furnishings and equipment. This portion of work was approximately \$1,750,000.00 - \$2,000,000.00. Ultimately, the Nursing Facility has become a true turnkey project for the State of West Virginia. A similar facility is now planned for Beckley, West Virginia. Building construction was completed in 2008.





PROJECT HIGHLIGHTS:

- Fast-track Design to save the State \$16 million grant from VA
- \$22 million Building
- \$2 million Furnishings/Equipment
- 8 Bed Alzheimer's Unit



DONEL C. KINNARD MEMORIAL STATE VETERANS CEMETERY

Institute, WV

SIZE: 354 acres

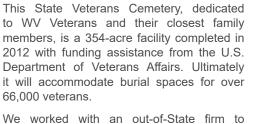
CONSTRUCTION COST: \$12.6 million

COMPLETION DATE: 2013

SCOPE: Master Planning, Phase 1 Design, Bidding and Construction Administration







We worked with an out-of-State firm to develop a comprehensive master plan for the cemetery development, then prepared design and construction documents for the Phase 1 work which included the initial site development, the entry drive, memorial circle, memorial trail, burial plots, and supporting infrastructure.

We were tasked with the design of the cemetery's four structures: a Maintenance/ Staff Building, a Storage Building, the Administration Building, and the very important Committal Service Shelter. This last structure is a solemn space of quiet dignity, family, friends, and comrades pay their final respects to loved ones prior to interment.



PINECREST BUSINESS AND TECHNOLOGY PARK Beckley, WV

SIZE: 100+ Acres

SCOPE:

Utility engineering, land development, access road design, building design, construction administration



Thrasher was retained for all aspects of the development of this park, including access roads, grading, erosion and sediment control, drainage and utilities including water, sewer, storm sewer, electric, cable and telecommunications. Additional services included project development, funding applications, permits for construction, preparation of bidding and contracting documents and evaluation of bids. Also included in this project was materials testing and inspection.

Thrasher also provided the design and construction oversight of the Rahall Technology Building. Thrasher's architects provided services for the 10,000 square foot, single story building.









RALEIGH COUNTY MEMORIAL AIRPORT AUTHORITY INDUSTRIAL PARK

Beckley, WV

SIZE: Industrial Park: 334 acres

MULTI-PHASE PROJECT: COMPLETION DATE: 2013

SCOPE:

Property evaluation, master plan, site layout, access road design, utility engineering, funding assistance





Thrasher was hired by the Raleigh County Memorial Airport Authority to design and construct a 334-acre business and industrial park located next to the airport.

The first task that Thrasher completed involved a planning stage. This process evaluated the overall layout of the property and compiled a master plan for pad development and road layout.

This plan was then used to secure funding for the project through the USEDA. Construction consisted of 6,000 feet of industrial access roads that allowed Thrasher to develop seven industrial pad sites with associated utilities. The project resulted in 800,000 cubic yards of material excavated over the course of two years.







Lastly, Thrasher was able to help the owner obtain Industrial Access Road Funds to continue the industrial access road an additional 6,000 feet. This provides the industrial park with two entrances that loop into the park.

THRASHER 56

WHITE OAKS BUSINESS PARK DEVELOPMENT

Bridgeport, WV

MULTI-PHASE PROJECT: Began in 2008

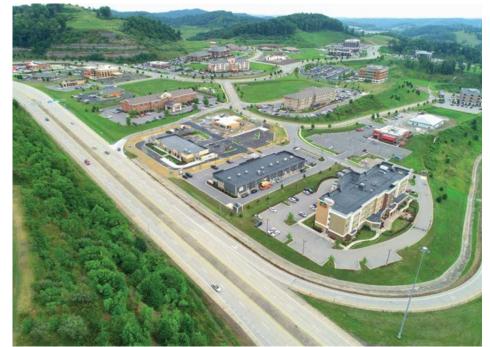
SCOPE:

Master planning, preliminary and final design, bidding services, engineering during construction, construction management, materials testing, full-service engineering, architectural design

Thrasher was retained for turnkey master planning, engineering and construction management services for the preeminent mixed-use business park in northcentral West Virginia. As a first step, Thrasher worked with a partner firm in preparing a detailed market analysis to determine the most economically beneficial mix of land uses. This information was used to develop several conceptual land use plans that explored different usage, transportation, and open space configurations. Next, Thrasher provided all engineering, cost estimating, bidding services, construction management and materials testing services during the construction phase. The Thrasher team also developed the covenant and restriction guidelines for the development. The covenants and restrictions established site and building design specifications including materials, scale, massing and orientation.

A major development like this also required major utility work. Thrasher provided design of all public utilities for this project, including water, sewer, gas, and electric. It required a complicated design that could scale with the growth of the park while providing proper function to its first residents. Thrasher laid dual force mains and expandable pump stations for the sanitary sewer portion of the project. The team also built the water system, ensuring it was capable of fire protection. This system was built using US EDA grant funding, as well as matching TIF funds.









57 | THRASHER

WESTRIDGE DEVELOPMENT

Morgantown, WV

SIZE: 1,000-acre site design

PRIVATE DEVELOPER Ongoing Project

SCOPE:

Survey and aerial mapping, permitting, pad development, permitting, roadway design, materials testing and inspection

The WestRidge Development is a 1,000acre site that has been designed for a variety of land uses, including retail space, office buildings, industrial space, and trails. The Thrasher Group has worked side-by-side with the owner through each step of the project, from planning and permitting to construction administration.

The project started with overall master planning for the site and has evolved to include roadways, utility coordination and design, aerial survey and mapping, materials testing and inspection, overall project management, and construction management.

The most valuable asset Thrasher has brought to the table, though, is construction phasing and cost-benefit analysis. Thrasher has worked with WestRidge to fully understand the project needs and been able to provide dozens of grading plans to help maximize their profits and best accommodate those needs. Additionally, Thrasher's team has worked tirelessly to ensure the right size pads are developed for the right size buildings so WestRidge has a full picture of the cost involved before selling each pad.









An important component of this process has been addressing the remains of old strip and deep mine activities throughout the site. Thrasher has assisted the client in costbenefit analyses to determine the most cost-effective ways to remediate the coal issues on a site-to-site basis. These remediations have ranged from total overexcavation of the seams to mine grout stabilization. Thrasher has also worked with NGE Consultants to determine how to handle pyritic material in the building foundation zones.





THRASHEF

59

COMMITMENT TO VETERANS

Veteran related projects have been a passion for members of the Thrasher team for many years. Since the late 90's we have been privileged to be involved in the design and construction of many memorials, monuments and plazas for State, County, and municipal entities, all dedicated in honor of veterans and their families and the sacrifices they have made.

Woody Williams asked us to help with the design of a monument to honor of the sacrifice made by Gold Star Families. We developed a beautiful design for this monument and managed the construction of the first build at the State Veterans Cemetery in Institute, WV. Subsequently, a non-profit Foundation was created by Woody Williams, and he made the goal of replicating the monument across the country. To date, this Gold Star Families Memorial Monument has been constructed in 102 locations across all 50 States, with another 73 in progress!

During the construction of the new Donel C. Kinnard Memorial State Veterans Cemetery in Kanawha County, West Virginia's first Cabinet Secretary for the Department of

Veterans Assistance asked us to design a memorial for West Virginia's Fallen; State veterans who made the ultimate sacrifice in the Global War on Terror.

More recently this team was commissioned by Marshall County to design and construct a monument on the grounds of the County Courthouse. This monument honored all Marshall County veterans that lost their lives during military service from the Civil War to present. Over 600 names were engraved on this monument.

We have developed a moving design for the Vietnam Veterans Museum proposed to be constructed in the Fairmont area. The design material for the project is being used to generate interest and aid in fund raising drives.

Veterans Square Building and Plaza was designed and constructed for a partnership of the Marion County Veterans Council, the City of Fairmont, and a commercial developer. Completed in 2001, this effort in the heart of downtown Fairmont, created an AIA award winning property on a previously blighted block, revitalizing the downtown area, attracting businesses, and spawning new development.

It has always been our honor to work on veteran related projects. We hope to have the opportunity with this new facility to demonstrate that respect and commitment once again.









LOCAL KNOWLEDGE AND EXPERIENCE

As a West Virginia-based firm, The Thrasher Group takes great pride in our connection to the communities across the state. Beckley is no exception. Our firm has had an office in the Raleigh County Airport Industrial Park since 2014, though we have worked in the area for decades. This office location focuses primarily on land development, public utilities, survey, and environmental compliance. In addition to these professional consulting services, we also operate a certified materials testing laboratory with a number of construction services employees that specialize in project representation and inspection.

This longstanding presences means Thrasher has deep familiarity with the region, bringing knowledge of not only the terrain and its potential challenges, but the people, the organizations, and the immense opportunities in the area. This hands-on experience comes from a portfolio of successful projects that span our service capabilities. Thrasher has provided work in and around Beckley over the years that includes municipal building design, utility engineering, site development, and a wide variety of additional components.

A list of projects completed in recent years or currently underway with public clients includes:

City of Beckley

- New Fire Station #3
- New Police Department
- Rising Cardinals Sculpture Plaza
- Beckley Intermodal Gateway
- General Services for the Beckley Sanitary Board
- · City Avenue Stormwater Improvements

Raleigh County Commission / Raleigh County Airport Authority

- Ghent Broadband Expansion Project
- Raleigh County Airport Broadband Improvement
 Project
- · General Services for Raleigh County Airport
- Airport Circle Road Paving
- Airport Exterior and Interior Lighting Upgrades
- Airport Runway Pavement
- Airport Taxiway Resealing
- Airport New Taxiway

New River Gorge Regional Development Authority

- Raleigh County Airport Industrial Park Shell Building
- · Pinecrest Business Park Master Planning
- Klöckner Pentaplast Building Expansion

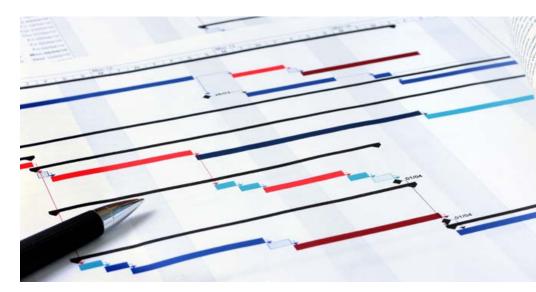






SCHEDULE

Our team has built in redundancy that enables it to handle multiple projects concurrently in a short time frame. Multiple strategies contribute to this redundancy, including comprehensive internal forecasting capabilities. These software tools help senior management understand backlog and forecast when teams will complete ongoing assignments. By monitoring workload in real time, firm leadership is able to react quickly to any changes in project workload. Quality Control: Strict quality assurance procedures are necessary to ensure high quality and consistent documents. To



achieve this, our team implements an aggressive quality review process developed around internationally recognized standards. Our services are reviewed throughout the consulting, design, and construction process. Documents, including drawings, specifications, cost estimates, equipment selections, and reports, receivenumerous quality reviews prior to issuance.



PROJECT QUALITY CONTROL

This team maintains a rigorous quality assurance / quality control policy to ensure our projects move forward efficiently and effectively. The objectives of this manual are to continually improve the quality of the design and technical deliverables that we provide to our clients, to fellow team members and sub-consultants, reviewing agencies, and ultimately to bidders and contractors.

Our QA/QC manual illustrates basic requirements to produce high-quality documents for our projects. It describes the methods for checking and reviewing product elements and client deliverables and includes rigorous comprehensive written checklists for each stage of the design process, document production, agency review, bidding, and construction activities.

The purpose of our QC methodologies is to reduce or eliminate the potential for errors, omissions, ambiguities, and inconsistencies.

The policy outlines three main areas:

- · General Defines the purpose, intent and limitations, definitions, and implementation.
- Project Management Procedures Presents required procedures specific to this practice that allow for the efficient and accurate management of projects.
- Check and Final Review Procedures Presents required procedures specific to this practice that are used to ensure technical accuracy of the work product.







PROJECT COST CONTROL

Construction estimating and project budgeting are critical to the success of this type of venture. We pride ourselves in being a true partner with our client, we keep our eye on the budget through every phase of project development and each design decision.

This team is very experienced with budget development, project estimates, and construction costs. We have a licensed General Contractor on staff who plays an integral role in our design and contract development process. This provides a 'contractors' perspective that considers constructability challenges and work phase scheduling, as these can inform the designer's decisions and help refine contract requirements, thus improving the efficiencies of the design, bid and construction process.

The costs of construction materials are currently subject to unprecedented volatility. You need partners prepared to take rising costs in to a account while maximizing the square footage you get for each dollar. Our team has multiple processes in place to align our design-phase cost estimates with the cost at which the project is ultimately constructed. The firm has robust internal processes for confirming cost estimates. These include utilizing internal databases of past projects, relying on industry knowledge accumulated over many decades, and consulting national databases of square foot cost data.

MAIN PRINCIPLES FOR COST CONTROL:

Thorough Construction Documents

Well-detailed construction documents make the entire project run smoothly. Providing drawings and specifications with clear, unambiguous design intent results in more confident bidders and ultimately tighter, more accurate bids. Construction progress is more efficient and the potential for unwanted change orders is reduced.

Understanding Construction Costs

Our knowledgeable construction administration team understands what it truly costs to build in West Virginia! Rather than relying on general industry standards, our Construction CostAnalyst maintains a data base of construction costs based on many a variety of sources. This data base is ever evolving; always being updated based on new information that considers both current material and labor costs.





COLLABORATIVE PLANNING PROCESS

SFCS has developed an integrated and collaborative process that brings all the team members together, working on all components simultaneously. Our Collaborative Planning Process is person-centered, focusing on the people for whom we are creating, and leads to better designs, services, and operations. Our process is based on your input and consensus-building. This process allows for creative interaction and ensuring that, at the end, the design is consistent with your mission and goals, addresses your key challenges, has buy-in from all involved, and is financially viable.

Behind the Design

THRASHER

PUTTING THE RIGHT PIECES TOGETHER SFCS believes the first step in a successful master plan is listening and understanding our client's vision, mission, goals, and resources. Our broad experience as a team in the areas of senior living master planning and repositioning gives us a strong foundation, but it is only through an interactive planning process involving executive leadership, "frontline staff", and residents, that an innovative and realistic design solution can be created.

Your SFCS team will listen, learn, and then lead the creative process. We begin by researching and gathering data and insights on existing buildings, the new site, the market, and your vision. After understanding your needs, we will collaboratively develop an architectural and operational program that will guide us in generating creative ideas and solutions.

We follow a defined series of steps and workshop charrettes that build on each other, methodically and systematically, building up to the best solution that is aligned with your strategic goals, vision, the market, and financial feasibility.

On the following pages, we identify those steps and how we will apply our Collaborative Planning Process to achieve your planning objectives and requirements.





COLLABORATIVE PLANNING PROCESS



LISTEN aims at getting at your deeper vision and aspirations. We will ask insightful questions that will spur discussion among your team. Through listening carefully, we can uncover ideas, values and goals, some of which you may not have consciously considered or thought possible.

- Meet with stakeholder groups that you want involved, your board, leadership, staff, and residents.
- Consider alternative ideas.
- Confirm Goals and Vision for the Campus. What does success look like?

UNDERSTAND is about gathering information. We want to learn about The Knolls' facilities, business model, organizational structure, competition, identity, and culture.

- · We will conduct a high-level architectural and engineering tour of your campus.
- Gather any existing building drawings, site plans, previous master planning thoughts, etc.
- · We will analyze your existing buildings and land usage and investigate current zoning situation.
- Review any current market studies and gain understanding of your financials and operations.





66

SFCS

THRASHER



ENVISION, informed by your vision and the information gained through **LISTENING** and **UNDERSTANDING**, we develop concrete design ideas for your consideration.

- Imagine possibilities and brainstorm "Big Ideas".
- Develop high-level conceptual plans and diagrams.
- Listen and discuss pros and cons to ideas.
- Listen for better ideas Often the best idea has its roots in a discarded idea.
- Discuss the cost, operational and cultural implications of ideas.



EVALUATE is instrumental in arriving at sound, credible and financially responsible solutions. Evaluating the credibility of ideas is a critical part of master planning as is ensuring that the seedlings of great or innovative ideas are not crushed prematurely.

- Prioritize and analyze options.
- Evaluate operational financial proformas.
- Consider constructability, phasing, and timelines.



IMPLEMENT is the completion of the master plan and beginning of the implementation of your ideas.

- · The master plan document will provide your road map to implementing each phase
- It includes high-level conceptual building and site plans
- It provides a square foot estimate of the construction cost and high-level project costs.
- It will include phasing options for implementation



PLANNING TOOLS



CHARRETTE

A charrette is a meeting in which all project stakeholders strive to resolve issues and map solutions; it is a time of intensive design or planning work. With our clients, this method of rapidly drawing and testing options has been shown to be highly beneficial. The process begins with the SFCS team presenting several preliminary concepts based on early meeting feedback. During the charrette process, these concepts serve as a springboard for new ideas, which are subsequently sketched and evaluated for feasibility and desirability. While we seldom arrive at a final solution on the first charrette, we may often eliminate undesired ideas and clarify the project goals and program. This technique significantly narrows the solution, enabling the remaining master planning process to concentrate on the most viable options.

VISUAL LISTENING

This technique is intended to assist a group in reaching a consensus on the aesthetic vision and preferences for exterior and interior design styles, and it is frequently utilized for large groups as well as to successfully obtain input from residents. The SFCS team prepares inspirational images of diverse architectural styles, features, and/or interior imagery. Participants are instructed to place green dots on images they prefer and red dots on those images they don't. The group is then asked to describe what they like about the green dot visuals and what they dislike about the red ones. This allows for collaborative input from a broad range of stakeholders, as well as large groups to determine where they align on design style preferences. This technique yields an imagery board comprised of the preferred images, which offers a sense of what the participants regard as aspirational. The design team uses this board to steer the design in the most desirable direction and to keep the group focused on a common vision.



USER GROUP INTERVIEWS

We occasionally use this technique to get suggestions from groups of residents and staff. This is more often used when an organization is not entirely sure about their needs or future programs. This technique can be used in a more limited way to explore sub-parts of the project and to allow residents ideas to be considered.



PROJECT EXECUTION

EVERY PROJECT IS UNIQUE AND NECESSITATES A VARIETY OF DESIGN SERVICES. FOLLOWING IS A LIST OF THE PROFESSIONAL SERVICES THAT WE OFFER.



PROJECT PROGRAMMING

SFCS will assist you in the development of an Architectural Program that serves as a guide for the design of your project. This document describes space and functional requirements and will state your intended operational goals and philosophy. It serves as a guide for design decisions and the understanding and interpretation of your concepts and needs.

MASTER PLANNING

A Master Plan can be produced for both developed and undeveloped sites. The process involves an analysis of the site, zoning requirements, environmental issues, utilities, survey findings, and other constraints that affect placement of elements on the site. The program, site, and surroundings dictate the scale, configuration, and character of the buildings. Aland use concept evolves as the site is analyzed and the Master Plan is developed. The result is a site utilization plan, a development schedule, and conceptual level project guidelines.

CONCEPTUAL DESIGN

During this phase, preliminary drawings illustrating the design concept, such as site test fits, space plans, building massing, studies, and exterior design concepts are developed. Initial project cost estimates are also determined at this time.

SCHEMATIC DESIGN

Utilizing our Collaborative Planning Process during the Schematic Design phase, SFCS will continue analysis and development of the preferred master plan concept. Where applicable, design concepts are evaluated for staff work flow for operational efficiencies, as well as conceptual resident movement mapping to ensure ease of movement, accessibility, and engagement.

At the midpoint of schematic design, the project team, including the owner, and consultants reach consensus on how the design is progressing. Based on this feedback, SFCS begins generating preliminary architectural and engineering drawings and narratives to demonstrate the design intent of the project.

Following the review and approval of the entire team, SFCS proceeds to develop the requisite comprehensive drawings and narrative documentation. When appropriate, and with the owner's permission, any special issues that may need potential input from local and state authorities are vetted with the appropriate authorities to obtain preliminary approvals.



PROJECT EXECUTION



DESIGN DEVELOPMENT AND CONSTRUCTION DOCUMENTS

After completion of schematic design and verification that the project is within the established budget, SFCS will proceed with further design development. While overall project scope and design have been set through schematic design, many of the specific details of the plan, materials, colors, structural modifications, and systems are refined during this phase. During the later DD/CD phase of the work, all of the technical aspects of the project will be executed.

ESTABLISHMENT OF COST MODELS

During the conceptual design phase, budgets are established for each element of your development. Realistic budgets are set for your project using our historical construction cost database for similar projects. These budgets are monitored throughout the course of the project.



VIRTUAL REALITY

SFCS can assist you with the development of models, renderings, and floor plans. We are able to create a computer model that can be easily manipulated, changed, and studied in a group setting. This allows our clients and project team members to better understand our studies and it allows us to explore multiple options simultaneously. Three dimensional modeling also allows us to quickly generate renderings or graphics for marketing, zoning, or other development processes.

Another emerging technology tool for supporting marketing is the use of Virtual Reality. Our team can work with you during the design process to provide digital virtual tours with a series of walk-through animations. This enables users to walk through the interior or exterior as if they were there. Some of our clients also use the virtual models of their project with 3-D headsets to preview the design with their residents and staff. This powerful visualization tool gives everyone a better understanding of the space, depth and layout and can create a fascinating experience.

70 SFCS

PROJECT EXECUTION

INTERIOR DESIGN

Our commitment to design state-of-the-art veterans' homes is also demonstrated by our knowledgeable and experienced interior design staff. We understand the sensory changes that take place as we age and the importance of having environments sensitive to the aging process. These environments are best created when the building is programmed and is designed from the inside out. Our interior designers work closely with our architects and engineers to coordinate finishes with furnishings and lighting requirements for various spaces. Using our in-house interior design services greatly improve the coordination and communication of your project.

ENGINEERING

We have full-service engineering services in-house and offer structural, mechanical, electrical, plumbing, fire protection, and low voltage engineering services by professionals experienced with Seniors Design. The advantages of selecting our in-house engineering services give you a single source of contact and responsibility, project team continuity, as well as a team experienced in working together.

LOW VOLTAGE COMMUNICATIONS



SFCS has low voltage systems planning, design, and coordination in-house. Steve Kidwell leads our low voltage design department and has extensive experience designing low voltage technology systems, including sequencing and design of paralleling switchgear and transitioning of existing service into new combined electrical services, complex electrical distribution, emergency generation, lighting and controls, and fire alarm systems. Our approach is to bring to our clients and their projects the benefit of our extensive years of experience to provide systems and solutions that address the project operational requirements by applying tried and true design standards, enhanced by the latest, proven technological advancements appropriate to the project and the budget.

LEED/SUSTAINABLE DESIGN

Our staff has first-hand knowledge of how natural light, spatial configurations, views, control of HVAC systems, building material selection, building orientation, recyclability of materials, and site selection, as well as other factors. We can create a community that will enjoy lower operational costs, enhance the quality of life for residents, and avoid a negative impact on the natural environment.

CONSTRUCTION ADMINISTRATION

Our role at this phase is to be the eyes and ears of the owner to insure that the constructed building is consistent with the design intent.

SFCS

71

LIABILITY INSURANCE CERTIFICATES





CERTIFICATE OF LIABILITY INSURANCE

73 SFCS

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						Patricia H. Clark						
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							© 1988-2015 ACORD CORPORATION. All rights reserved.					

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 4/22/2022

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ENRICHING LIFE BY DESIGN

1

"... Their [SFCS] knowledge of the senior housing market brought new design elements to our second tower that we did not have in the first tower. The project came in on time on budget, and the finished product has aged well. I have worked in the construction industry for over 40 years and SFCS is one of the best A&E firms I have ever worked with."

- Peter M. Meredith, Jr. Resident Family Member

NOTE & CONRE

ENRICHING LIFE BY DESIGN



DESIGNED FOR LIFE, GUIDED BY RESEARCH

Every project is a living laboratory. Our staff leads active and passive research in best practices in design for demographics, staffing and operations, care delivery, socialization, wellness, prevention, holistic healing, and environmentally responsible design.

THOUGHT LEADERS IN SENIOR LIVING DESIGN



SFCS RESEARCH: ENRICHING LIFE BY DESIGN

Our goal is to deeply understand our client's business. We work with all organizations to thoroughly understand their foundation: their goals, vision, mission, operations, processes, and challenges. This broad-based understanding gives us a starting point to address not only their environmental needs but also improve the overall organization and communities. This also allows us to share insights and research findings with the greater senior living industry, helping to contribute to industry-wide improvements that enrich the lives of seniors.

Our staff conducts active and passive research on best practices in demographic design, staffing and operations, care delivery, socialization, wellness, prevention, holistic healing, and environmentally responsible design. Furthermore, our annual By Design conference is one of the ways we stay abreast of and set new trends in operations, marketing, technology, and design. Furthermore, our annual By Design conference is one of the ways we stay abreast of and set new trends in operations, marketing, technology, and design. Furthermore, our annual By Design conference is one of the ways we stay abreast of and set new trends in operations, marketing, technology, and design.

IT'S IN THE DETAILS

When people enter a room, they may take notice of the paint color, the stylish décor, or the accent lighting. If they are in a building designed by SFCS, it is entirely possible they would be scanning over details that have been chosen as a result of endless hours of research. Our firm has a strong belief in deeply studying all aspects of senior living environments to create evidence- based designs. In addition to internal research, SFCS collaborates and partners with other industry experts to gather data and feedback. Each investigation brings forward knowledge that is then incorporated into the firm's architectural planning, design, engineering, and interior design work.

FIRST-HAND EXPERIENTIAL RESEARCH

Some of the most impactful solutions in memory care designs by SFCS have resulted in first-hand experiences of the team. Two first-hand experiential research initiatives were conducted by SFCS. In the "Living a Skilled Life" project, a team from the firm conducted multiple 24-hour overnight stays in skilled nursing homes across the country.

Each team member was admitted with typical admitting diagnoses, strokes, mobility issues, vision challenges, etc. and lived with those challenges during the stays. In the "Dementia Diaries" project, they again conducted multiple overnight stays in memory care environments with virtually applied dementia.

The experiences had a direct impact on some of the firm's most notable memory care designs, including Brookside at Cross eys Village in New Oxford, Pennsylvania and Cypress Cove in Ft. Myers, Florida. The



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projects marked a milestone in memory care as they were designed to specifically improve the lives and to help manage and offset the challenges that residents face who are living with Alzheimer's disease and other dementia-related conditions.

For instance, residents living with these disorders often find their internal circadian rhythms and wake sleep cycle are disrupted. Research indicates that the exposure to a supplemental lighting system can help residents maintain synchronization with the solar day. SFCS worked that concept into the lighting of common areas at Cypress Cove's memory support building, "The Cottage". It's the first purpose-built dementia environment in the world to utilize the technology. The use of circadian lighting schemes are specifically designed to help residents sleep through the night. The results have been astounding. In the first two years, there were no nighttime bathroom falls with cognitively-impaired residents. It's really improved their quality of life and the care provided by the staff.

DESIGN INNOVATION IN MEMORY CARE

As a result, we distinguish ourselves from the competition in memory care design by conducting first-hand experiential research in communities across the United States. Our thought leadership in this field has been recognized through a number of award-winning projects that others are now trying to emulate. SFCS continues to create enhancements to the physical environment that promote well-being through specific resident engagement, with a focus on using design to reduce agitation, depression, incontinence, and falls.

FEEDBACK FOR THE FUTURE

From a research perspective, SFCS believes every project is an opportunity to learn and grow. Even after a building or community is completed, the firm conducts post-occupancy evaluations (POE) to garner feedback from residents and staff. The responses give the team at SFCS new perspectives that could potentially benefit clients moving forward.

As an example, on one project, the client asked SFCS to design designated areas for staff members in the bedroom and living areas. The idea was to decrease travel time between rooms and overlapping care by having one staff member stationed within reach of 8-10 adjacent residents. As a result, SFCS incorporated specialty "staff touchdown stations" designed around the specific workflows of the caregivers. During the POE process, SFCS learned the employees weren't utilizing the spaces. The feedback served as new perspective and a discussion point for future projects.

Every project we do begins with extensive research, and in most cases the project itself becomes a learning experience. We love designing buildings, and for us, creating them is an art. But it's not finite. It's constantly evolving, and we will always seek the opportunity to improve. $77 \mid S \in C S$

OVERCOMING THE STAFFING CHALLENGES

ard.

Staffing challenges may not fall directly under the umbrella of architecture, engineering, and interior design, but SFCS finds a great deal of their senior living clients need help with recruiting and retaining employees. The firm is answering the call by researching what it takes to find and keep adequate staffing. The firm has conducted ongoing research

in the area of employment by collaborating with teams that are known for developing unique approaches to improve the status of staffing, consulting with Donna Cutting, an organizational coach who focuses on recruiting

HEALTHY LIVING ENVIRONMENTS

The physical and social surroundings have the greatest influence on one's health. To begin, we must understand that health goes beyond our physical-being, but it encompasses all aspect of life, especially well-being. Moods, emotions, and life satisfaction are all part of the well-being that makes up the quality of life.

We also know today that our health is based on far more factors than just our genetics. According to the World Health Organization and the Centers for Disease Control and Prevention, genetics account for only about 20% of our health status. The majority of what determines our health is based on:

- The physical and social environments in which we live and work that includes both the built environment as well as people's income levels and living conditions
- Individuals' behaviors (how active we are, whether we smoke, and what we eat each day)



BEYOND SUSTAINABLE PRINCIPLES

From preserving the planet for future generations, to concern for energy savings and life-cycle costs, to simply trying to provide a healthier environment for residents and staff: Life Plan Community leaders are recognizing that building the right facility is not a passive activity.

Our design approach is geared toward evidence-based solutions and good design practices. As just one example, there is now significant research available related to both natural light, light intensity therapy and circadian rhythm that we regularly incorporate into our designs. For example, at Abernethy Laurels, after completing the first phase of the skilled nursing replacement, we are hearing that a resident who was living in their original and dated nursing home was withdrawing from life, no longer communicating and engaging with anyone. After moving into the environment designed with healthy living concepts he is now speaking again and enjoying his new home in a way that his family and the staff thought was no longer possible.

TECHNOLOGY: A NECESSARY COMPETITOR

SFCS also spends a great amount of time exploring the use of technology aimed at seniors living both at home and in a community setting. The senior technology industry is bifurcated with a significant portion of the product development focused on in-home use, and a smaller but growing portion focused on enterprise level options appropriate for incorporation into larger scale senior living communities.

These technologies can either be a differentiator and competitive edge to senior living providers, or it can be perceived as a competitor and a disruptor, with solutions that are rapidly developing and new products which are aimed at supporting seniors staying at home rather than moving to senior living communities.

Things like fall sensors, accessibility apps, social support networks, smart home and other technologies are marketed to seniors constantly. While that's something senior living providers can be apprehensive about incorporating, it's something we try to look at as an opportunity. Technology may be intimidating at times, but it's a part of today's fabric of life and is an expectation of all society, including seniors.

78 SFCS



Best Skilled Nursing/Post-Acute Design of 2021: Clinical Care Meets Small-House Design

Located on the grounds of Sebille Manor, a former military housing complex, Michigan's newest state veterans home is the first to serve the southeast and Detroit region. And, it's doing so with an innovative small-home concept that brings infection control and other benefits in a design-forward manner.

The 152,000-square-foot campus of the Michigan Veterans Home at Chesterfield Township consists of four "neighborhoods," which each offer 32 private rooms and communal space, surrounding a central

community building complete with clinic space, physical therapy space, pharmacy, multi-faith prayer room, barbershop and salon. A cafe bistro and gift shop can be found at the central building too.

Each of the campus's 128 units has an en-suite bathroom, writing desk, wardrobe and sink. Common areas have a "residential-style" kitchen and outdoor courtyard only accessible to residents in that neighborhood.

The project is such a sterling example of the small-home concept that it earned top honors in the "skilled nursing/ post-acute" category of the 2021 Architecture and Design Awards from Senior Housing News. 66 We've done several small house projects in various states and what we're finding is, in terms of response to infection control demands from COVID, this small house model really works well."

KERRY BUCK SENIOR PRINCIPAL SFCS



The concept

In its design, there are no spaces that are just linear, double-loaded corridors with rooms on each side; such elements are typical of traditional institutional settings, said Kerry Buck, senior principal at architecture firm SFCS.

Neighborhoods and individual units are more of a "familiar residential kind of experience," Buck explained, where one enters a home and there's a living and den area, the kitchen can be seen and there's places to congregate with small groups. The further you get into the living space, the more private it becomes, just like a typical single-family home.

"Every house, every neighborhood has their own kitchen. It's a full commercial kitchen. Food is warm and, you know, colorful and appetizing. That's probably one of the benefits that our home is able to provide our members, is the quality of a meal," said Jennifer Manning, administrator of Michigan Veterans Home.

Residents sometimes have a decreased appetite as a result of certain medications or disease, making a good, appetizing meal all the more important, Manning added.

Chesterfield's interior and exterior design are what Buck considers nontraditional for the industry – "visually pleasing, fresh and new" without a "traditional institutional appearance."

Gracyn Robinson, former Sr. Designer with LWDA Design, who is a candidate at Brown University to obtain her Master of Science in Healthcare Leadership and one of the judges involved in the SHN Architecture and Design Awards, said the "modern porte-cochere fenestration" serving as the entrance to the community center provided a noteworthy nod to the historical site; the former housing complex supported the U.S. Army Garrison at Selfridge Air National Guard Base.

The entrance pierces into the air like a "plane between earth and sky," Robinson said.

And the sense of airiness extends throughout the design.

"Natural light was very important. There really aren't any spaces that don't have natural light," Buck said. "The finishes are very residential yet durable because it is a nursing home. It was a very successful blending of all those demands." **66** The design really does matter in terms of improved outcomes for the residents, which is the whole point. That's really the genesis of what started this idea."

KERRY BUCK SENIOR PRINCIPAL SFCS



The construction

SFCS Architects designed Michigan Veterans Home at Chesterfield Township to follow State Veterans Home Construction Grant Program specifications – 65% of project cost was covered though the program, according to Buck.

The firm has offices in Virginia, North Carolina, Pennsylvania and Kentucky and drew on its expertise in developing the small-home concept for this project.

"We've done several small house projects in various states and what we're finding is, in terms of response to infection control demands from COVID, this small house model really works well," said Buck. "Better than the old traditional institutional kind of hospital model."

The Chesterfield location was originally designed to replace Michigan Veterans Homes' Grand Rapids location, a traditional institutional-type model with sometimes as many as four people to a room, said Anne Zerbe, executive director of MVH.

Instead, two small home model campuses were designed, both by SFCS, for MVH residents. The Christman Company was the builder and general contractor for the Chesterfield project; TowerPinkster was listed as architect of record and SFCS as design architect, according to materials submitted to SHN.

"What we effectively did is downsized our census [at Grand Rapids]; so we split it into 128 beds there and 128 beds on the east side of the state, and we'll plan to continue to add beds as we receive support and funding to do that," Zerbe said.

Eventually, MVH hopes to have more than 700 beds across the state.

The modular nature of the Chesterfield design helped the team at SFCS expand or reconfigure to fit the site, Buck said. The Grand Rapids build was going on at the same time as the Chesterfield project, using the same small house model.

"It's not quite as pure of a [small house] model because of the site limitations," said Buck of the Grand Rapids project, noting the site was narrow and the firm had to work around existing buildings.

However, he said the basic small-home design held up well across the two projects.





The completion

The completed project has proven its merits in the incredibly challenging environment of the Covid-19 pandemic.

Chesterfield's four neighborhoods offer the "inherent ability" to isolate residents if needed. Michigan Veterans Home can "carve out" four to eight beds for a small isolation area, Buck said.

"Infection rates are much lower in the small house projects than in the traditional skilled nursing model where you may have a long corridor with 50 beds off of that ... [it's] one of the biggest benefits we've seen from this in this design," he noted.

Manning said the layout allows staff to "gown up" and get personal protective equipment (PPE) properly fitted from a clean environment at each neighborhood.

The layout works for norovirus and the flu as well, Manning said, with staff better able to minimize infection and cross contamination.

"Other buildings are multi-story buildings where we have to deal with elevators, how staff gets up to the unit. We eliminate a lot of those concerns with the design at these new homes because, as Jennifer pointed out, we have entrances and exits that we can kind of quarantine off from the rest of the facility when it's needed," said Zerbe.

So far, MVH hasn't had to hire more staff in order to provide care, or drastically change logistics to fit the campus layout.

"[Neighborhood] storage rooms, clean facility, linen, everything is, for lack of better words, cookie cutter to every household, so they're not having to walk across campus to get an item," Manning said. "There's really no reason for [staff] to actually have to navigate throughout the rest of the campus."

For residents, the design suggests a sense of home rather than a hospital wing. Routine revolves around daily activities and being able to make their own choices, if they want to eat in their house or go to the main cafe, or meet friends at the community center, Buck said.

Data suggest choice is key to better quality of life within a skilled nursing facility and leads to longer lives, Buck said.

"The design really does matter in terms of improved outcomes for the residents, which is the whole point. That's really the genesis of what started this idea," Buck added.

As featured on **SENIOR HOUSING NEWS**

AWARD OF MERIT

Illuminating ideas

The Cottage at Cypress Cove caught jurors' attention—and earned an Award of Merit in the EFA Design Showcase—for its incorporation of a tunable circadian lighting system and holistic design features to support the needs of residents with dementia BY SARA 0. MARBERRY



Living rooms at The Cottage at Cypress Cove are comfortable, casual spaces that include ceiling details where the light therapy system is integrated. An open display of themed accessories provides visual interest and opportunities for interaction. G harged with creating the most advanced, state-of-the-art residence available for memory care, SFCS Architects (Roanoke, Va.) brought several innovative ideas to the table for The Cottage at Cypress Cove in Fort Meyers, Fla., such as a center service core and unique resident room layout. But the one that impressed jurors for the 2017 EFA Design Showcase the most is the use of lighting technology to help with light-related symptoms of dementia. "It's an invisible way to manage and treat the disease

through the design of the environment," says Melissa Pritchard, senior vice president at SFCS Architects, which designed the project along with the interiors division of GMK Associates (Columbia, S.C.).

Pritchard had been following Mariana Figueiro, professor and program director at the Lighting Research Center at Rensselaer Polytechnic Institute (Troy, N.Y.), and her work on light therapy. So when the operator's leaders asked what could be done to make the community's memory care



environment stand apart from other small house communities in the country, she saw an opportunity to share preliminary research findings on how long-term light therapy delivered to people with dementia has been shown to increase sleep efficiency and total sleep time, and reduce agitation and depression. Afterwards, Pritchard says, she had little trouble convincing them to incorporate light therapy as part of the design at The Cottage at Cypress Cove, which opened in fall 2016.

A tunable circadian lighting system, with a satellite real time/place solar connection that reads current weather data, time, and solar patterns and helps adjust the artificial tunable lights to balance for the exterior conditions, was installed in the cove lighting in all common areas. As a result, residents are exposed to a changing illumination process 24 hours a day.

Above: The building is designed around a center service core, which is accessed through a street-facing residential garage to allow discrete service of each household and limit the infiltration of noise, clutter, and institutional artifacts. Corridor lengths were minimized to provide visual queuing to the residential common spaces. **Right**: In the bathrooms, amber night lighting helps reduce sleep disruptions and potential falls by helping residents safely navigate their way to the toilet. Highly visible from the resident sitting and sleeping area, the room is accessible using a sliding barn door and has an exterior window for additional natural light. It was cost-prohibitive to include the system in resident rooms; however, according to Pritchard, it could easily be added later by using retrofit applications such as colored bulbs, applied cove lighting, or can lighting.

Additional design ideas for the project were developed during the planning process, which included visits to six memory care communities across the country as well as 24-hour stays in memory care communities, which gave the design team insight into staffing, operations, and supportive environments for persons living with dementia. From this intensive research period,



the design team developed a set of guiding principles focused on elements that foster aging with integrity; promote resident comfort; create a sense of safety and security; promote independence; and nurture the mental, physical, and emotional health of each resident. For example, to help residents find their way and eliminate confusion, the U-shaped household layout is designed to minimize corridor lengths and provide direct visual cueing from the bedrooms to the common spaces. Additional features that support resident health include daylight and nature elements, such as a memory garden, views to the outdoors, and artwork. Staff spaces in discrete locations allow unobtrusive observation of household common areas.

Designers limited glazing along the southfacing side of the building and relied on the north side of the building to bring in natural light through the dining and living spaces. An outdoor courtyard includes a tropical-themed memory garden with flowers, trees, plants, and relaxing elements, such as a rain chain waterfall, rain gardens, dancing water jets, and fountains.

While jurors appreciated many of the design features within the memory care community, they say the project provides an important opportunity for the industry as a whole. "The design of this project is based upon research findings and expert opinions, but also offers opportunities to gather new evidence about colored lighting as a therapeutic resource for people with dementia," wrote one juror. "More projects should be built to test concepts that can be used to advance the industry."

Pritchard says while The Cottage at Oypress Cove currently has no plans to research the effects of light therapy on its residents, she hopes to continue incorporating it into other projects and measure the results. **GFR**

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Inspired memory care

feel and comfort of home

design gives the look,

information. insight. innovation.

c / lemories of Home

IMPLEMENTING eMOLST
CMS' 5-STAR RATINGS

LIFE HISTORY DOCUMENTATION

Memories of Home

Inspired memory care design gives the look, feel and comfort of home by NICOLE STEMPAK, SENIOR EDITOR

The specific elements needed by residents with memory impairments.

A sense of home is especially important for people with dementia, whose quality of life is often plagued by confusion and agitation. A household model swaps the institutional look for something more familiar.

I Advance Senior Care spoke with two senior care designers to learn more about innovative memory care design and how design elements can contribute to safety and engagement. **Amy T. Carpenter, AIA, LEED AP, senior associate and Melissa Pritchard, AIA, LEED AP BD+C, senior vice president at SFCS Inc.**, shared examples from several of their recent projects.

Though the facilities are all different, the overarching trend is a blend of modern and traditional design to create a cozy, cohesive space. Rooms are filled with furniture and fabrics that offer the look of home but are appropriate for a memory care setting.

The finished look is functional, beautiful and—much like dementia highly personalized, Pritchard says. "The disease is different in everyone. What we're trying to design in here is flexibility for staff, family and residents to create supportive environments."

Everything from lighting and furniture to porches and place settings can improve the quality of life, care delivery and dignity for residents with dementia. "All of those are important components so the space is easily navigable and understood by residents with memory impairment," Pritchard says.

Take a room-by-room tour to see how residents' intimate living needs are balanced with institutional requirements. Combined, these big and small details help make a welcoming home.

"We're trying to make these spaces feel as much like home as possible because it is the residents' home," Carpenter says. "We want to make it feel just like it would outside of the community."



🔿 Umbrella stand

The umbrella stand serves its functional storage purpose and also serves as a transition between the outside and inside. The stand is a signal for guests to remove their coats and visit with residents, reinforcing the idea that this LTC facility is the residents' home.

Entryway

Doorbell

The most important—and homiest aspect of this assisted living facility is also the smallest: the doorbell. "What it signifies is that you are not entering an institution or a traditional nursing home," Pritchard says. "You are entering someone's home." And just like you do when you visit someone, you ask for permission to enter. That subtly reminds visitors how they should behave in this environment, too.

Building material O-

The interior design brings the outdoors in. "It's makes it feel more of a transition between the public space and the private space," Carpenter says. The front door has a doorknob and windows. There's HardiePlank siding, a stone pillar, overhead lantern lights, bead board ceiling and wooden flooring. Those touches can help reinforce this is a destination for visitors and help orient residents that this is home.

Seating

Beyond building materials, the furnishings recreate the look of a front porch, a space where people live and are free to express themselves. "We're treating it just like you would your front porch at home," Pritchard says. "It's a place that you would want to sit and look out the windows and watch the comings and goings of the community." A resin rocker combined with traditional living room chairs and side table create an inviting space to sit for a spell.

Lighting O

The lighting steals the spotlight in this room. The walls of windows offer a flood of natural light that's balanced with artificial lighting. Embedded in the crown molding is tunable, or adjustable, white LED lighting. With a control system tied to an astronomical clock, the light system uses GPS to identify sunrise and sunset and changes light color throughout the day to mimic natural sunlight. It also adjusts according to weather conditions, so if it's a gray and stormy day, the system will give more light inside. "This is one of the most promising environmental components for memory care that we found from our research," Pritchard says, adding that the lighting can help realign residents' circadian rhythms to improve sleep cycles.

Tables and chairs

Dining is one of the most important times of the day, but it also be one of the most challenging for residents with memory impairment to navigate if the space is overwhelming. Pritchard says they've built a subtle solution through flexible seating, which can be banked together for a large family style seating or used as separate tables, as shown. "It allows for a lot of flexibility depending on how the residents of that household want to dine and what works best for them," Pritchard says.

Floor plan

Residents have access to a secured courtyard so they can go for an after–dinner walk. Within the four walls, the layout makes the dining room a secure destination. "No matter where you're sitting at one of these tables, you don't have people constantly walking behind you," Carpenter says. Many dining rooms are adjacent to a hallway, and the constant passing of people can concern residents or make them feel vulnerable. "By having this as its own contained space, it's still open to the rest of the household but feels more comfortable."

Fixtures and finishings

The room itself has visual interest with varied ceiling heights and traditional details that help finish the space, including case work, crown molding and wooden brackets. The dining room is an appropriate place for those extra touches because dining rooms were often the most formal room of the house. "All of those are higher-end trim details that you would find in somebody's home," Carpenter says. "It would not be found in a hospital or an institutional setting, and these are the things that make it feel more like home."

Dining Room

Breakfast bar

The breakfast bar is a bit of a misnomer because it's used at all meals. "Our research and experiences have shown that the breakfast bar is the most popular place," Pritchard says. "It's also a great place to have a small group activity where staff can interact." Beyond the physical transition between kitchen and dining room, the bar serves as a place where residents can watch, smell and even help staff with meal prep.





Resident Corridor

Common space

This area serves eight residents, all of whom can come straight out of their private bedrooms and into a space that's all theirs. There's a seating area where residents and guests can gather to chat or play a game of tic-tac-toe. "The other good thing is that you come out of your resident room and you can immediately see all the common spaces of the household," Carpenter says. That makes navigating and wayfinding easier.

Reminiscence/activity stations

There's a dressing table with jewelry holders that could be filled with playful baubles, scarves and hats as well as a mirror for residents to play dress up and admire their newly adorned accessories. On the opposite wall, there's a secretary desk complete with a telephone, blotter and inkpad for residents to write, stamp or sign papers.

Personalized entryways

Each room has its own mailbox and entryway lamp, and each is a little different. Some are horizontal, others are vertical but all have distinctive decorative patterns, including daisies, sunflowers and ivy. Wall color serves as another visual cue to help residents distinguish room from room.

Local images (

This facility is in Pennsylvania, so the framed wall art features covered red barns and a decorative rooster, too. "We're using images that are familiar to the people who live nearby and grouping them," Carpenter says. "It's all little details that are really good for memory care and wayfinding."

Living Room

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Smooth transition

The transition from living room to porch uses a completely flush threshold—nothing sticking up to cause a visual barrier or pose a trip hazard. Carpenter says the threshold was designed to remove any actual or perceived barriers to make it as easy as possible for residents to go outside.

Porch O

STELLS STATE

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Residents can easily move from a seating area indoors to a seating area outdoors, one that isn't completely walled in. "It's so important to allow memory care residents to have access to the outdoors," Carpenter says. "If you can get it directly off of their living space, it's so much more likely that they'll go out there than if they have to go down an elevator or wait for staff to take them downstairs and go outside to a garden space. Even on raised floors, you need to provide some sort of outdoor space for memory care." Higher-than-normal railings, about four feet tall, and no footholds offer residents protection from injury or harm.

Finishing touches

A raised container gardening center offers the opportunity for horticultural therapy at a height that's safe and reachable for residents. Wooden seating invites residents to come out and have a seat. The ceiling fan offers a breeze to make sitting outside more pleasant. The wall sconce affords extra time to sit outside at night.

Flooring

Carpeting must be chosen carefully to provide some contrast but not too much. The carpeting is a neutral tone–on–tone scalloped leaf pattern that hides dirt but is subtle enough to not cause visual perception problems.

Windows

Seniors typically don't get enough natural light. "If you stay in your room most of the day, you're definitely not going to get enough natural light to stimulate your circadian rhythms," Carpenter says of traditional LTC bedroom design. "Here, even if you stay in your room, you're still going to get that natural light." The bedroom's large, arched windows allow for maximum light. Varied ceiling height adds visual interest and makes the room appear larger. The bay window and light exposure on two different walls are an extension of the floor area that affords a cozy reading nook.

Bed 🔿-

Pritchard says they noticed that children sleep in twin-sized beds until they move out of their parents' house, spend most of their adult life in at least a double, then when they move into long-term care, they go back to a twin-sized bed. They didn't understand the mattress change, so they created a bedroom big enough to suit individual residents' bed preferences. "Our spaces need to allow for that personalization and to allow for some of the habits you've developed your entire adult life to continue forward because that's what's comfortable and is known and familiar," Pritchard says.

Bedroom



Bathroom

Extra storage

This storage area (upper photo, opposite) is in addition to the resident's full closet that can be used by the resident and family. Functional and aesthetically pleasing, the countertop can be furnished with meaningful belongings such as pictures, artwork, statues or flowers. Staff can use the locked cabinets to house extra supplies, such as linens, or for medication storage. There's even a refrigerator. "If we need to store some things away where they're not visually within sight of the resident, you've got that option here," Pritchard says. "We're trying to create an environment that creates success for the resident."

Sink (

The sink is designed to look residential but serve institutional purposes. There's a skirt panel that hides the plumbing but provides knee safety and clearance for residents in wheelchairs. The faucet height and outfall offer space for handwashing because often times the caregiver is holding and washing the residents' hands. "You need the extra height and you need to make sure that the water flow comes out into center of the bowl so while you're washing the resident's hands you're not touching the sides of the sink and double contaminating the hands again," Carpenter says.





Night light

An amber night light is embedded in the chair rail element. The light gives residents enough light to be able to see and navigate to the toilet upon waking in the night but its amber color won't disrupt those circadian melatonin receptors that could create or exacerbate any sleeping issues.

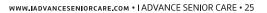




This shower stall is an alcove with a completely flush transition. Unlike a European shower, this shower has a drain trench that slopes toward the back wall so water won't go spill out onto the main floor except what drips off residents upon exiting the shower. There's a vertical grab bar at the entrance to the right of the controls so as residents are leaning in to turn on the shower, they have something to grab. The shower head is also removable for easier washing. Residential towel hooks and curtain rod give the space a subtle reminder of home.

Door C

This is the view a resident has of a bathroom from the bed. The barn door can be left open to allow for a direct visual connection to the toilet, important for cueing and creates independence upon nighttime waking. The sliding door eliminates the potential for wasted space. The door is easy to close even for people in wheelchairs, which helps create a sense of ability.



CONCLUSION

CONCLUSION



The Thrasher Group has assembled an unparalleled team of national and local experts in order to best serve the interests of the State of West Virginia and its veterans. Together with SFCS Architects, The Thrasher Group stands ready to support the State of West Virginia in this exciting endeavor.

Some of our many differentiators include:

- 1. Highly Specialized, Local Partners
- 2. Award-Winning Prior Experience on Large State Veterans' Homes
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WE LOOK FORWARD TO THE OPPORTUNITY TO IMPROVE THE LIVES OF VETERANS IN OUR STATE AND THANK YOU FOR YOUR CONSIDERATION.

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