



Project No. 2023-302: SW Inpatient Psychiatric Unit

Department of Corrections, Washington State Penitentiary/Monroe
Correctional Complex

KMB architects

February 17th, 2023

KMB
architects

February 17, 2023

Attn: Justin Fiess, Project Manager
Washington Department of Corrections
7345 Linderson Way SW
Tumwater, WA 98501

RE: Predesign Services Required for Project No. 2023-302: Statewide Inpatient Psychiatric Unit for, Department of Corrections

Dear Mr. Fiess and Selection Committee Members;

KMB architects is pleased to present our qualifications for Project No. 2023-302 Statewide Inpatient Psychiatric Unit for the Washington State Department of Corrections (DOC). Since our firm's founding more than thirty-five years ago, the predesign, planning, design, and construction administration for secure facilities has been a core component of our practice. Our team has successfully completed numerous predesigns for DOC facilities across the state, including Monroe Correctional Complex (MCC), and Washington State Penitentiary (WSP). KMB's knowledge of DOC policies and procedures, project delivery, and design practices specific to correctional health care make KMB uniquely qualified to provide the requested services.

Thank you for your consideration of our qualifications. We have been honored to serve the Department of Corrections in the past and look forward to partnering with you again on Project No. 2023-302 Statewide Inpatient Psychiatric Unit. We are committed to providing you with the highest level of professional service and integrity for which KMB is known. We look forward to the opportunity to share our passion, expertise, and project approach in greater detail with you. Please do not hesitate to contact me should you have any questions.

Sincerely;



Tony Lindgren, PE
KMB architects | Principal-in-Charge
TonyLindgren@kmb-architects.com | 360.352.8883

Olympia Address:

906 Columbia St.SW
Suite 400
Olympia, WA 98501

Seattle Address:

811 First Ave.
Suite 220
Seattle, WA 98104



STATE OF WASHINGTON
DEPARTMENT OF ENTERPRISE SERVICES

*1500 Jefferson St. SE, Olympia, WA 98501
 PO Box 41476, Olympia, WA 98504-1476*

Designated Point of Contact for Statement of Qualifications
 For Design Bid Build, Design Build, Progressive Design Build, GC/CM & Job Order
 Contracting (JOC) Selections

Firm Name: KMB architects, inc. p.s.		
Point of Contact Name & Title: Tony Lindgren, PE, Partner		
Email: TonyLindgren@kmb-architects.com	Telephone: 360-352-8883	
Address: 906 Columbia St. Ste. 400		
City: Olympia	State: WA	Zip: 98501



EXECUTIVE SUMMARY

Since KMB's founding over 35 years ago, the majority of our work has been for State agencies including the Washington State Department of Corrections, Department of Social and Health Services, Department of Ecology, Department of Enterprise Services, Department of Labor and Industry, and Department of Children, Youth, and Families. Our projects have included predesign and programming, on-call contracts, to master planning, design and construction administration, with a focus on predesign within secure facilities.

As you review our submittal, please consider the following KMB strengths:

PREDESIGN UNDERSTANDING

The intent of this project is to produce a modified predesign report as the initial step to secure funding for the required project scope. KMB has a proven record of success with State of Washington Office of Financial Management (OFM) predesign projects, and our internal planning and design processes have been developed to provide the highest level of quality and service to our clients. KMB's Bill Ecker has broad experience and in-depth knowledge of OFM predesign requirements and has recently delivered several significant predesign reports for state agencies that have successfully received necessary funding and moved forward with design and construction.

NATIONAL CORRECTIONAL HEALTH CARE DESIGN EXPERTISE

KMB brings national expertise in correctional health care design to this project, including the design of inpatient psychiatric units. KMB partner Greg Cook, with our subconsultant Marcus Hardy, designed and delivered the new Joliet Inpatient Treatment Center for the Illinois Department of Corrections. Opened in 2022, this facility is widely regarded as a model for psychiatric treatment in corrections. KMB's understanding of the unique and critical demands of providing treatment in a secure facility will be essential to the success of this project.

EXTENSIVE EXPERIENCE PARTNERING WITH DOC

Members of the KMB team and key subconsultants selected for this project have successfully delivered complex projects, including predesigns, for DOC across the state. We have committed our firm's most experienced staff to ensure the success of this project.

DEEP INSTITUTIONAL KNOWLEDGE OF THE MCC AND WSP CAMPUSES

KMB and our key subconsultant partners have worked at every DOC facility in the state of Washington and have successfully completed several projects at MCC and WSP in recent years. Our specific understanding of these facilities will allow us to work with you to quickly implement a project approach that is focused on innovation, safety and security, and efficiency.

SUBJECT MATTER EXPERTISE IN SECURE FACILITY DESIGN AND CONSTRUCTION

Successfully designing and building secure facilities demands a comprehensive understanding of DOC operating standards, industry best practices, and the ability to work with a diverse group of stakeholders to develop consensus at every stage of the project. KMB and our consultant partners are uniquely prepared to take on the operational, regulatory and code challenges this project will inevitably present and ensure the project moves forward safely, efficiently and within the allowed budget.

LIFE CYCLE COST ANALYSIS EXPERIENCE

We are able to provide DOC with a proven and current understanding of the latest OFM Life Cycle Cost Model requirements for comparing the life cycle cost of alternatives to bring the best value to the State of Washington. Knowing that operational costs will far outweigh initial capital costs for a correctional facility, we will leverage our historical cost database as well as our understanding of the program and siting requirements to develop clear and realistic cost projections for the project.

ADDITIONAL KMB TEAM DETAILS

- 40+ Employees
- Offices in Seattle and Olympia
- Self Certified Small Business (SSBE)
- Certified Correctional Health Professional on Staff
- Over 150 years of collective DOC team experience



300+

Washington Department of Correction Projects



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QUALIFICATIONS OF KEY PERSONNEL

2 | QUALIFICATIONS OF KEY PERSONNEL

KEY PERSONNEL

KMB has assembled a highly qualified team to perform the key functions of the requested predesign services. KMB's team experience and past performance with secure facilities for the State of Washington and specifically for DOC is unsurpassed. Our assigned project team will be led by KMB principals Tony Lindgren and project manager Greg Cook, AIA, CCHP. Greg will be supported by predesign specialist, Bill Ecker, project architect Ed Schilter, RA, for design and Adam Herrick as correctional designer. Matt Wiggins, cost estimator, will provide cost estimating for the recommended scope of work as well as life cycle cost analysis.

Members of our team have a track record of success working together for DOC for well over a decade making the KMB team an ideal fit for this project. KMB, Coffman, and Roen and Associates possess recent successful project experience at Washington Department of Corrections (DOC) facilities. Steve Helms, MEP manager, along with his team, will contribute the security electronics, electrical, plumbing, and mechanical engineering expertise to this project. This team has worked throughout the state on multiple similar secure facility projects, predesigns, and renovation projects with DOC as well as with other clients throughout the Pacific Northwest. KMB and subconsultants team have partnered on dozens of projects over the years to bring design solutions that fit owners' budgets and needs.



Justin Fiess
Project Manager
DES/DOC

KMB Key Team Members



Tony Lindgren, PE
Principal-in-Charge
KMB architects



Greg Cook, AIA, CCHP
Project Manager
KMB architects



Ed Schilter, RA
Project Architect
KMB architects



Bill Ecker, LEED AP
Predesign Specialist
KMB architects



Adam Herrick
Correctional Designer
KMB architects



Jason Barry
Medical Planner
KMB architects



Marcus Hardy
Correctional Specialist
Hardy and Associates

Key Subconsultants



Steve Helms, PE
MEP Manager
Coffman Engineers, Inc.



MARJORIE LUND, PE, SE
Structural Engineer
Lund Opsahl



Clinton D. Pierpoint
Civil Engineer
KPF Engineers



Michelle Bomback
Sustainability
O'Brien 360



Matt Wiggins
Cost Estimator
Roen Associates

2 | QUALIFICATIONS OF KEY PERSONNEL



TONY LINDGREN, PE | PRINCIPAL-IN-CHARGE

Education: Bachelor of Science, Civil Engineering, Washington State University
Registration: Professional Engineer, State of Washington
Experience: 19 years

Principal-in-Charge, Tony Lindgren will oversee the team as a single point of contact to ensure that your project is completed on time and on budget. Tony is primarily responsible for managing the predesign team and interfacing with the Department of Corrections. He will be responsible for the performance of each project team member, whether in-house or a subconsultant. Tony's proficiency in communications and firm management delivers consistent project success. He promotes a firm culture of teamwork, leadership, and commitment. His focus on listening and affirmation produces meaningful and quality project results. Tony has recent relevant experience, including the predesign experience for WSP Unit 6 predesign Washington State Department of Corrections.



GREG COOK, AIA, CCHP | PROJECT MANAGER

Education: Master of Architecture, Washington University in St. Louis
Bachelor of Science in Civil Engineering, University of Illinois at Urbana-Champaign
Registration: Architect, State of Washington, and States of Missouri, N. Carolina, and S. Carolina
Experience: 25 years

Project Manager, Greg Cook is an Certified Correctional Health Professional that has extensive experience designing secure health care environments, including a new long-term and hospice care unit for the Iowa Department of Corrections and the recently opened 100-bed In-Patient Treatment Center for the Illinois Department of Corrections. Greg led the design of the Washington Department of Corrections' Work Release Expansion Project in Wenatchee, WA, which is based on the AMEND principles for transforming correctional culture. Other work in the PNW includes the King County Children's and Family Justice Center, the Northwestern Joint Regional Correctional Facility at JBLM, and the Nanaimo Correctional Centre in British Columbia. Greg has consulted with the National Commission on Correctional Health Care as a Correctional Health Design Specialist and led their task force to develop design best practices for secure facilities and is a frequent presenter at national conferences.



ED SCHILTER, RA | PROJECT ARCHITECT

Education: Bachelor of Architecture, Washington State University
Registration: Architecture, State of Washington
Experience: 48 years

Project Architect, Ed Schilter has extensive experience in predesign, programming, site evaluation, code compliance, budget compliance, scheduling, design, and production on projects of all types and sizes with a specific focus on correctional facilities, including secure treatment facilities. He has been highly praised for maintaining close communication with clients and providing quality services that meet each client's design, schedule, and budget needs. Ed has made a career specializing in corrections and justice facilities projects, having led more than 50 successful projects in the last 10 years. Ed's list of completed justice facility projects includes predesign studies, close custody conversions, special offender units improvements, roof replacements, and more.



BILL ECKER, LEED AP, DBIA | PREDESIGN SPECIALIST

Education: Bachelor of Arts, Reed College
Registration: USACE Construction Quality Control, AGC Advanced Management Program, USGCB LEED Accredited Professional, DBIA Designated Professional, GC/CM Module, Design/Build Module
Experience: 27 years

Over the course of Bill's career he has managed more than 60 major projects. Bill will help manage the day to day project and subconsultant communications as well as take a lead role in development of the OFM predesign. With 20 years experience as a general contractor executive, Bill will prove invaluable in working to meet project objectives. Bill's recent experience includes predesign studies for Washington State Penitentiary, Unit 6 Roof Replacement, Temple of Justice, HVAC replacement, Labor and Industries, and Employment Security Department. Bill's understanding of the requirements of the OFM projects process will provide the greatest opportunity for full project funding and success.

2 | QUALIFICATIONS OF KEY PERSONNEL



MARCUS HARDY | HARDY AND ASSOCIATES, CORRECTIONAL SPECIALIST

Education: Bachelor of Science in Economics, Illinois State University

Experience: 28+ years

Marcus is a retired corrections administrator with over 28 years of experience in correctional facility operations. Throughout his career he has been focused on improving the quality of treatment provided to those who are incarcerated through program development, planning, design, and successful implementation. His responsibilities have included the review and assessment of inmate programs and the development and application of department policies. As coordinator for agency initiatives and special projects, Marcus served as client lead for the Joliet In-patient Treatment Center, where he worked closely with KMB partner Gregory Cook on the design of the new \$159M correctional mental health facility.



STEVE HELMS, PE | COFFMAN ENGINEERS, INC., MEP/TELLE. COMM.

Education: Bachelor of Science, Electrical Engineer, Washington State University

Registration: Professional Engineer, States of Washington, Oregon, Alaska, Idaho, Montana, and California

Experience: 42 years

Steve will manage the Mechanical, Electrical, Plumbing, security electronics and Telecommunication Team, utilizing his experience managing a variety of systems that serve program spaces. His comprehensive approach focuses on integrated systems that complement uses. Steve's knowledge of plumbing, fire protection and EMS system options correspond to scheduling, budget, and sustainable and operational needs. His video design experience includes analog, digital, and hybrid systems, with matrix or virtual-matrix switching and digital video viewing and archiving. Steve has been responsible for the design of and of security electronics for a variety of correctional facilities and understands the requirements of work within a secure environment.



MARJORIE LUND, PE, SE, DBIA | LUND OPSAHL, STRUCTURAL ENGINEER

Education: Bachelor of Science, Civil Engineering University of California, Berkeley

Registration: Professional Engineer, WA, CA, OR, OK, TX, and WI

Experience: 42 years

Marjorie Lund's structural engineering expertise spans the full project cycle, predesign and assessments to construction engineering support services, for more than 40 years. Her in-depth knowledge and passion to fully integrate building systems and balance construction cost and schedule makes her a valuable team member for predesign projects. Marjorie was appointed by Governor Inslee to the Washington State Board of Registration for Professional Engineers and Land Surveyors. The Board protects public safety through licenser and maintaining high ethics in the industry. Marjorie recently completed the structural design for KMB's new program education building at Washington State Penitentiary.



CLINTON D. PIERPOINT | KPFF ENGINEERS, CIVIL ENGINEER

Education: Engineering Studies, University of Washington

Experience: 27 years

Clint has over 27 years of experience with civil engineering design and management. He has in-depth experience with all elements of civil engineering, planning and feasibility, predesign and final design, and construction of institutional, site development, utilities, and transportation projects. Clint brings specialized experience with water and sewer system design, including work with municipalities, commercial systems, and multi-family developments. He manages low-impact development projects. Clint has developed a reputable relationship with Department of Corrections, PM's and facility staff of their institutional facilities, and is called upon to assist with civil-related issues as they arise. In addition, Clint provides lead construction management and construction administration on most all of his projects.



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**RELEVANT
EXPERIENCE**

PREDESIGN RELEVANT EXPERIENCE

The keys that lead to a successful predesign project include a thorough understanding of the proper elements of a predesign report, knowledge of the OFM process, and the ability to assemble a predesign report that satisfies all the stakeholders along the way. The predesign itself must reflect a rigorous and insightful consideration of the possible options. A team with knowledge based on experience such as ours can assess and measure the critical factors that will positively influence the success of a project as part of the predesign analysis.

KMB has led successful predesign efforts within the OFM process. The following pages provide examples of predesign efforts which resulted in successfully funded projects, or which are now in the process of receiving funding. The KMB team brings a roster of talent to the predesign effort with the experience to deliver a complete, comprehensive, and viable result back to the owner and client agency.

SELECT RELEVANT KMB PREDESIGN PROJECTS

- Monroe Correctional Complex, New Healthcare Facility Predesign – **Funded**
- Monroe Correctional Complex, New Regional Training Center Predesign – **Funded**
- Monroe Correctional Complex, SOU New Maintenance Building Predesign – **Funded**
- WSP Program Building, Predesign – **Funded**
- (CLIP) Child Study & Treatment Center – CLIP Expansion Building, Predesign – **Funded**
- DCYF, Juvenile Facility Predesign Studies, Naselle, Echo Glen, And Green Hill – **Funded**
- Coyote Ridge Corrections Center, New Campus Expansion Planning Predesign – **Funded**
- Stafford Creek Corrections Center, New CI Furniture Factory Predesign – **Funded**
- Washington Corrections Center, New Reception Center Predesign – **Funded**
- Maple Lane School, New Multi-Services Building Predesign – **Funded**
- Washington State Penitentiary, New CI Office/Warehouse Predesign – **Funded**
- Temple of Justice HVAC, Lighting, Plumbing, and Security Improvements, Predesign – **Funded**
- Health and Wellness Facility Expansion, SPSCC, Predesign - **Funded**
- Student Services Building, Grays Harbor College, Predesign – **Funded**
- Washington State Department of Labor and Industries, Headquarters Building – **Funded**
- SPSCC Rowe Six Condition Assessment Predesign – **Funded**
- Chehalis Tribe, New Fire Station Predesign
- City of Kent, New Public Safety Administration Headquarters Predesign – **Funded**
- City of Lynnwood, New Utility Maintenance Facility Predesign – **Funded**
- Franklin County, New Courthouse Complex Predesign – **Funded**
- Grays Harbor PUD, New Administrative and IT Building Predesign – **Funded**
- Olympia Union Gospel Mission of Olympia, New Facility Predesign – **Funded**
- SPIPA, New Intertribal Professional Center Predesign – **Funded**
- Squaxin Island Tribe, New Fine Dining Restaurant Predesign – **Funded**
- Steilacoom Public Works, New Headquarters Predesign – **Funded**
- Thurston County, New 3400 Building Predesign – **Funded**
- Thurston County, New Fueling Station Predesign – **Funded**
- Thurston County, New Operations Building Predesign – **Funded**
- Thurston County, Vehicle Storage Building Predesign – **Funded**

Over the Last 10 Years



117+

Predesign & Planning
Projects

DEPARTMENT OF SOCIAL AND HEALTH SERVICES, SNOHOMISH COUNTY, SITE SELECTION, AND PREDESIGN OF A SECURE COMMUNITY TRANSITION FACILITY



KEY ELEMENTS

- Predesign
- Secure Treatment
- Staff Safety & Efficiency
- Department of Health Compliance
- Site Evaluation and Selection

COMPLETED TBD

PROJECT SIZE NA

REFERENCE

Dean Heglund, DSHS
Senior Capital Project Manager
dean.heglund@dshs.wa.gov
360.480.6069

KMB is currently working with the Department of Social and Health Services (DSHS) on the siting and predesign of a new 16 to 24-bed Secure Community Transition Facility (SCTF) in Snohomish County for the Special Commitment Center (SCC).

DSHS's vision of improving coordinated discharge planning and services for Special Commitment Center residents includes treating them in smaller step-down facilities. Secure community transition facilities offer residents supportive environments that connect them to community treatment, provide life skills training/support, and offer access to transition programs in the community.

Siting the new facility requires the assessment of several potential parcels based on engineering and systems analysis, site security, availability of medically-trained staff, proximity to supportive facilities including law enforcement and hospitals, and life-cycle cost analysis. The secure facility will be designed to meet the therapeutic goals of SCC while maintaining safety and security for staff, visitors, and residents. The completed project is intended to be a model for additional facilities around the state of Washington and for the rest of the country.

ILLINOIS DEPARTMENT OF CORRECTIONS, JOILET IN PATIENT TREATMENT CENTER, PREDESIGN AND DESIGN*



KEY ELEMENTS

- Predesign
- Normative/Restorative Environments
- Occupied Campus
- Mental Health
- Safety and Security
- Energy Efficiency/Carbon Emissions
- Minimize Operational Cost
- Leed Silver Equivalent

COMPLETED 2022

PROJECT SIZE 185,000 SF

REFERENCE

John Baldwin, Director
Illinois Department of Corrections
jrbaldwincg@gmail.com
815.671.7421

Located on the Joliet Treatment Center campus south of Chicago, the new In-Patient Treatment Center is a revolutionary concept for a correctional health facility. With the inclusion of medical and mental health housing, as well as an advanced in-patient clinic, IPTC will serve the northern region of Illinois and establishes a new standard nationwide for the delivery of health services in a secure environment.

The design recognizes the importance of nature in the healing process and biophilic concepts that utilize plants and landscaping as well as natural building materials to enrich the experience of patients, visitors, and staff. By providing a healthy, meaningful connection to nature, the design effectively reduces stress and allows for much needed mental reprieve and respite. Individual treatment units have been designed to accommodate multiple classifications and patient acuity levels in settings that utilize abundant daylight, and therapeutic colors.

KMB partner Greg Cook and team refined the conceptual design to ensure compliance with Illinois Department of Public Health and Facility Guidelines Institute standards for a medical facility and provided detailed flow analysis to allow the client to make informed decisions about the locations of critical components. Daylighting and acoustical analysis of patient spaces confirmed that the design met the expectations of the client relating to stress reduction, health, and overall wellness.

*Greg Cook, AIA, CCHP, experience while employed another firm

DSHS, CHILDREN'S LONG-TERM IN-PATIENT PROGRAM (CLIP), CHILD STUDY AND TREATMENT CENTER (CSTC), PREDESIGN AND DESIGN, LAKEWOOD, WA



KEY ELEMENTS

- Predesign
- OFM Process
- Normative/Restorative Environments
- Occupied Campus
- Mental Health
- Life Safety
- Safety and Security
- Minimize Operational Costs
- Leed Silver Equivalent

COMPLETED 2021

PROJECT SIZE 16,000 SF

REFERENCE

Erik Logan, RN,
Director of Nursing Services, DSHS,
loganeg@dshs.wa.gov,
253.761.7556



KMB provided predesign, design, and construction administration services for DSHS for this building at the Child Study and Treatment Center in Lakewood, WA. This newly constructed 18-bed inpatient psychiatric hospital serves adolescents ranging in ages from 14-25. The facility is designed to provide 24-hour inpatient hospitalization for 8 forensic psychiatric patients charged with a criminal offense and 10 Children's Long-Term Inpatient Program patients with psychiatric disorders. The function of the facility requires these groups to be separated. To accommodate this requirement, the building was designed to include 3 major space groups consisting of a treatment wing, forensic unit and treatment wing, and administration and shared support space wing to allow for the greatest amount of flexibility and maximize use for the agency.

RELEVANT EXPERIENCE SECURE FACILITIES

In-depth understanding of the challenges and opportunities in a major correctional facilities projects comes from experience. The team assembled for this predesign project has been involved in a vast array of successful corrections facility projects of every scale.

A successful project results when the design fulfills the requirements for owner quality and performance, within the assigned budget, and is delivered on schedule. KMB understands the cost, liability, and risks which result from a project going off schedule or budget. The extensive list of projects below reflect our ability to consistently deliver successful projects to our clients.

WASHINGTON DEPARTMENT OF CORRECTIONS

- Replacement, MCC Regional Training Center Classrooms, Offices, Training Rooms, Leed
- Master Plan of Overall Campus with Projected Growth Potential Over The Next 20 Years, MCC
- WSR, Food Service Renovations Incorporating Cook Chill Tray Assembly and Tray Wash Areas To Increase Production And Quality
- WSR, Predesign for New \$45,000,000 Medical Complex and Associated Projects
- WSR Unit Living Units Roof Replacement
- WSRU and IMU SE Upgrades
- New Communication Building Involving New Communications System Upgrade SOU Maintenance Building, MCC
- Adaptive Reuse of Existing Buildings, MCC
- WSR Unit Kitchen Roof Replacement & HVAC Replacement
- Predesign for New Integrated 100-Bed Imu and 100-Bed Segregation Unit, MCC
- Honor Farm Multiple Repair Projects, MCC
- Minimum Security Unit New Visitation Bldg., Expanded Kitchen, Dining, and Housing Units Additions & Modifications, MCC
- WSR, Close Custody Conversion of Cellhouses I & II Involving 640 Beds
- WSR, Hazardous Waste Building
- WSR, Shop Buildings #1, #2 and #3 Remodel and Renovation
- WSR, New Correctional Industries Shop Building #4, 84,000 Sf Mixed Use & Industries Area
- WSR, New Correctional Industries Shop Building #5, 5,000 SF
- WSR Roof Replacement for Dayroom, Visiting Area, and Kitchen
- WSR, Field House and Hobby Shop Building Addition, Roof Replacement and Seismic Upgrade
- SOU, 144-Bed Security Upgrade to Imu Standards
- SOU, Remodel Of Existing Mental Health Unit for Behavior Disorder Unit
- SOU Roof Replacement and Repairs, 82,770 SF
- Predesign for New Integrated 100-Bed Imu and 100-Bed Segregation Unit, MCC
- Health Services Building Planning, Design, and CA, WSP
- Bridging documents, quality control, and guidance with cost estimates, CBCC
- Constructional Industries Warehouse, LEED, WSP
- Vocational-Education Building Planning, Design, and CA, WSP
- Kitchen and Dining Renovation, WSP
- Main Laundry Replacement, WSP
- Housing Units Roof Replacement CBCC
- MSC Campus Roof Replacements, WCCW
- Support Building Roof Replacement, 90,000 SF, CBCC
- Housing Units R4, R5, R6, R7 and Cedar Hall Roofing Replacement, WCC
- Power House Roof Replacement & Fall Protection, WSP
- Main Kitchen Roof Replacement MICC
- Gymnasium Roof Replacement, OCC
- Ozette Housing Unit Building Roof Replacement, OCC
- Roof Replacements/Repairs & Fall Protection, MICC
- Kitchen/Dining Reroof WCCW Roof Replacement, 10,000 SF
- Clearwater Complex Reroof, OCC
- Kitchen / Dining Building Reroof, OCC
- Dormitory Roof Replacement, OCC
- Roof Repairs to 3 buildings, CCCC
- Gymnasium Roof Repairs, Washington Corrections Center New Health Services Building, 50,000 SF. WSP
- Inmate Services Bldg. Roof Replacement, WSP
- BAR Units Close Custody Conversion, WSP
- Kitchen / Dining Renovation Predesign, WSP
- Correctional Industries Laundry Improvements, WSP
- BAR Units Roof Replacement, WSP
- Power House Re-Roof, WSP
- Recreation Building Roof Replacement, WSP

WASHINGTON MILITARY DEPARTMENT

- Olympia Armory, Renovation
- Tacoma Armory, Renovation
- Camp Murray Bldg. 32 Renovation and Addition
- 3106 Hangar Membrane Renovation and Addition Camp Murray
- Montesano Readiness Center Renovation and Addition
- Centralia Readiness Center Renovation and Addition



4

**LIFE CYCLE COST
ANALYSIS
EXPERIENCE**

4 | LIFE CYCLE COST ANALYSIS EXPERIENCE

LIFE CYCLE COST ANALYSIS

A holistic approach to Life-Cycle Cost Analysis (LCCA) typically completed during predesign helps provide the owner with the best information to understand and evaluate design decisions. The ability to compare costs between building systems and materials over a 30 or 50 year span reveals the expected up front vs. long term operational costs and overall return on investment (ROI) to the State. As part of this process KMB and our consultant team will use the OFM energy modeling tools to forecast and analyze the effects of different design and system strategies.

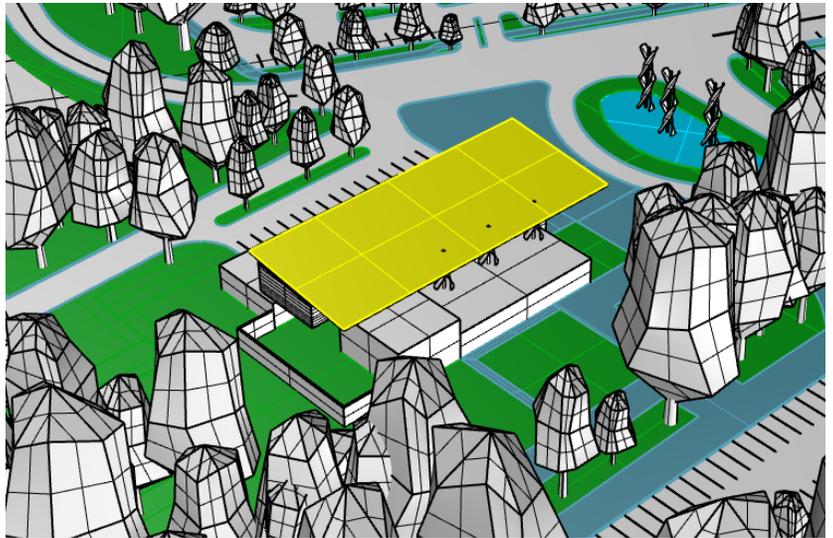
A critical element of every predesign report in Washington State is the application of the Life Cycle Cost Analysis (LCCA) of the options under consideration. The analysis is conducted under State DES guidelines and OFM requirements. Predesign LCCA is performed through use of the Washington State Life Cycle modeling Tool (WA LCCT).

During design, KMB's LCCA analysis creates an energy model of the building by using a program that simulates hourly operation of all building energy consuming items for an entire year. The energy model includes an hourly weather profile (including wind speed, solar gains, outdoor temperature and humidity), indoor conditions, hourly occupancy schedule, and equipment efficiencies. The program then calculates overall energy use by fuel source and determines annual energy costs using local energy rates. This information is combined with construction cost estimates, replacement costs, and maintenance costs, to determine the life cycle cost for each alternative. The result of the tool provides invaluable data to the design team as part of the total analysis of the cost of the different options.

We believe the solution to accomplishing the project goals will flow from a clear focus on energy usage reduction through building systems, user comfort, improving ease of maintenance, and providing durable materials that are long lasting and easy to maintain.

The graphic to the right illustrates the square footage of solar panels required to achieve Zero Net Energy on the WA State Labor and Industries Building predesign. Once that was determine the team was able to calculate up front costs for those panels and what the payoff time would be by reducing energy consumption.

Rooftop and Parking lot PV Examples:



LIFE CYCLE COST ANALYSIS

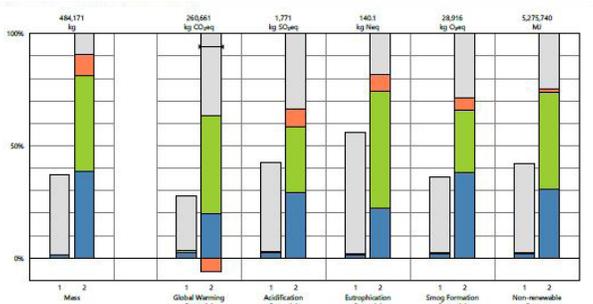
KMB architects recently performed an embodied energy material analysis using the Tally software program to inform material selection on the City of Lacey Museum. This facility has been designed as net-zero ready. This study allowed the owner to make value based decisions on materials and their life-cycle (cradle to grave) environmental impact. The embodied energy analysis considered wall, roof, floor and ceiling construction, structure, and windows and doors. These were evaluated with their potential to increase global warming, acidification, eutrophication, smog formation, and non-renewable energy.



City of Lacey, Museum and Civic Center, Targeted LEED Silver

As we work through life cycle cost assessments we consider upfront costs of upgrades and equipment, long-term potential energy reduction cost savings, replacement costs, and maintenance and operations factors to allow informed decision making by all parties. These studies and discussions include building systems such as lighting and HVAC equipment, fixtures such as showers and toilets, construction assemblies such as insulation and materials such as interior finishes or roofing products. We will consider the alternative options as applicable for the scope of this renovation and addition work.

Results per Building Element

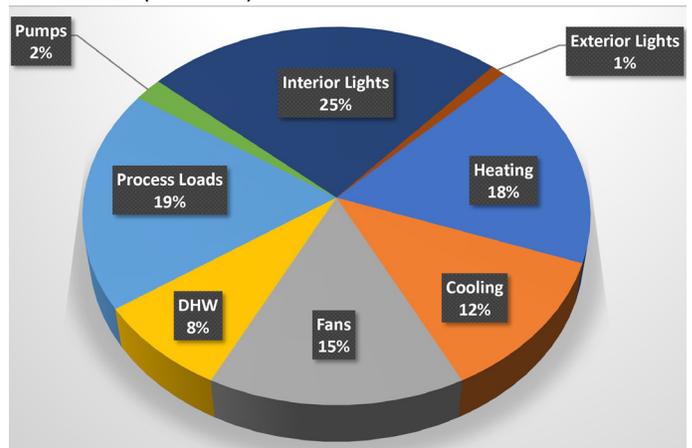


City of Lacey, Museum and Civic Center, Targeted LEED Silver



Effective LCCA is a team coordination effort. We have assembled a group of engineers and high performance building consultants and LEED experts (Hargis and O'Brien 360) to provide analysis for best value design to the State of Washington that meets or exceeds State of Washington sustainability goals.

Washington Code Baseline Energy Model: By End Use (33 EUI)



When we examine overall life cycle costs, we consider which building systems utilize the greatest amount of energy. This will allow the team to target energy reductions on the systems and equipment that will provide the greatest return on investment.



5

**SUSTAINABLE
DESIGN EXPERIENCE**

SUSTAINABLE DESIGN

Our entire team sees sustainable and energy-efficient design as one of our core responsibilities as good stewards within our community and we strive to design buildings to be environmentally conscious and energy efficient. Not only does this preserve our world's resources and reduce operational expenditures, but it creates more healthy living and working environments for building occupants, and raises the quality of life.

Our team approaches every project with the goal to maximize sustainable opportunities for our clients by providing long-lasting, efficient, and healthy buildings that save owners money on energy, materials, and operational expenses. This includes our correctional projects, where proposed solutions have to be weighed against safety and durability concerns related to the operation and use of the facility. We will work within your budget and with your stakeholder group to find the best return on investment to maximize sustainability and reduce energy usage and carbon emissions.

In our experience, the area of greatest impact is to consider where energy consumption can be reduced, reused, and then augmented with renewable sources that align with ROI benchmarks. This often involves the lighting and mechanical systems. Lighting controls and fixtures offer energy savings as well as reductions in maintenance and operational costs over time.



DSHS, Children's Long-Term In-Patient Program (CLIP), Child Study and Treatment Center (CSTC), LEED Silver

In addition, our team can explore viability and eligibility of potential grants. There are grants available that may allow for installation of photovoltaic panels on existing buildings. These grants cover not only the installation of the PV array and associated electrical upgrades, but the structural upgrades of an existing structure if the array is placed on the roof of existing buildings.

We will work collaboratively with your team, and within the scope of the project and design parameters to determine where the biggest impacts can be made. With the goal of reducing energy consumption and operational costs, ensuring durability, safety and security.



South Puget Sound Community College Health And Wellness, LEED Gold



6

PAST PERFORMANCE

SCOPE, SCHEDULE, AND BUDGET

To maintain project schedule, scope, and budget alignment, it is imperative to align the three at the very beginning of the project. This allows the team of owner, users, and stakeholders to have buy in at the very beginning of the project. Through a series of programming and scoping meetings, KMB will work with DOC to establish and prioritize each project need that aligns with the project budget. Our team utilizes the approach of Must Haves (non-negotiables), Should Haves (important items that add value but are not vital), Could Haves (nice to have items but that don't necessarily further the primary initiative) and Will Not Haves (items that aren't a priority in the time frame of this project). This establishes a roadmap for design and construction to progress by ensuring the highest level priorities are met first and adding the 'really want to haves' and 'like to haves' as is feasible. By this methodology, things can be added to the project as the design progresses and costs are established in lieu of being stripped away.

KMB has employed a similar process to this on two projects most recently including the creation of predesigns for Washington State Penitentiary (WSP) and Department of Corrections (DOC), housing unit 6 roof and HVAC replacement, Washington State Department of Social and Health (DSHS), and Snohomish County, Siting, Selection, and Predesign of a Secure Community Transition. While working with the leadership team on the WSP predesign, the team began with establishing primary visions and goals for the project to ensure OFM funding. Then all of the needs and desires were developed by working with multiple user groups across the state. KMB developed a matrix that listed all of the needs and desires that were expressed and that KMB identified through existing conditions assessments and program comparisons to nationally held best practices. These were tagged with which of the primary visions and goals each item satisfied. The full owner-builder-designer team has agreed to a baseline cost model that met the most important non-negotiable needs for the project. As that cost model was refined each week, the team can assess what items from the 'should have' and 'could have' lists were be added with the owner determining the highest priorities on that list.

While establishing a project schedule, it is imperative to begin the schedule with the end in mind. We start first by taking your required occupancy date and backing up from there to determine construction durations, bidding periods pending project delivery, building and conditional use permitting required by the jurisdiction, and design durations. This allows us to establish predesign deliverables, stakeholder meetings, and key owner decision points to maintain the overall schedule.

We use a variety of tools to create project schedules depending on the complexity of the project schedule. For more complex projects, Microsoft Project allows the setting of dependencies and durations that allow for a pull planning scheduling. For small projects or those of less complexity, Excel or calendar formatted schedules can allow for graphic clarity that is easy to understand and track by all involved.

For scheduling meetings with stakeholders, we have found users and clients appreciating the use of FindTime, a Microsoft Outlook add-in tool that allows polling of a large group of people simultaneously to determine days and times for meeting availability.

90 percentage of our jobs are repeat clients, Despite supply chain issues, we have collaborated with owners and contractors to provide innovative or alternative solutions to achieve key milestone dates for clients. Again, I believe we have some data about change order percentages and so forth. They are really veering into the weeds here for a predesign so any answer is making dangerous assumptions about what they think they're asking.



Scheduled Review Checkpoints

Our approach to creating project schedules includes time allotted for quality control reviews. We conduct these reviews at the end of each design phase to ensure that documents do not advance to the next phase with errors. Marking these checkpoints on the project schedule allows for changes to be made without delaying the overall timeline of the project, making the design process more efficient.

Owner Review

As part of our teamwork-oriented approach, after the checklist is complete, a set of documents is provided to the owner and their representative for their review and comment. The documents are updated to incorporate all QC and owner review comments prior to moving to the next phase. Client comments are tracked with the date they were implemented and the resolution of each item to maintain an efficient and organized predesign process.

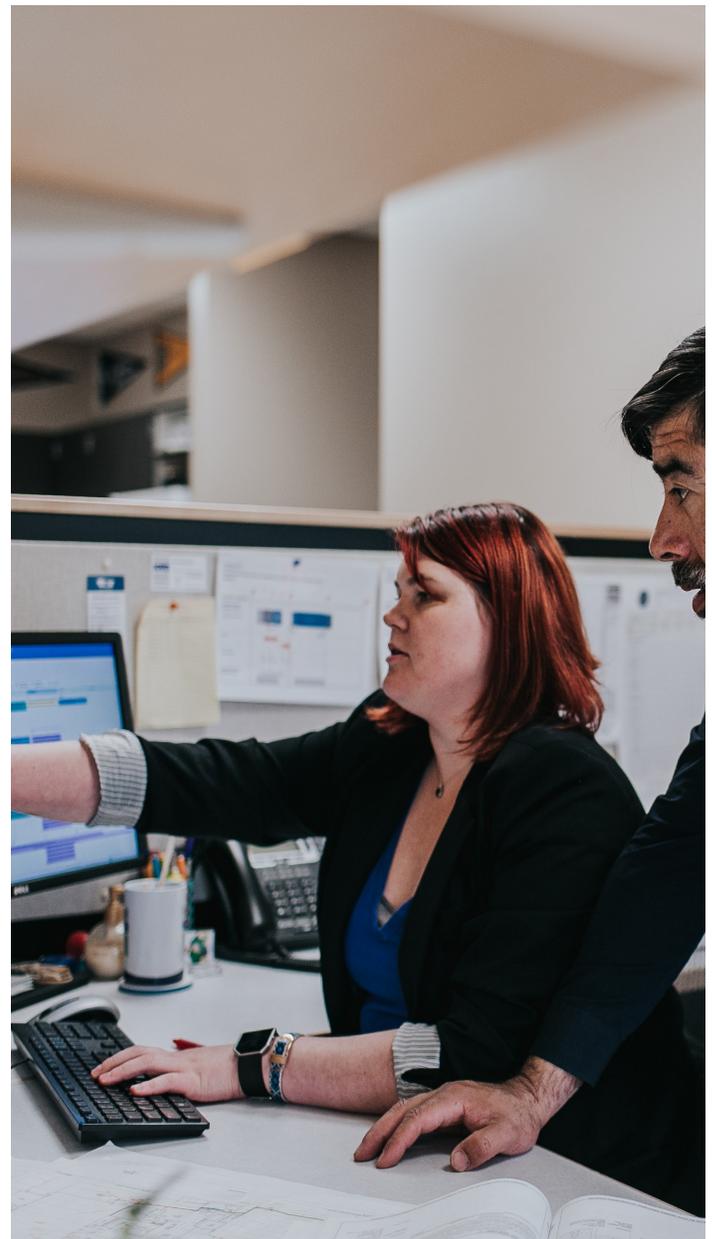
QA/QC Approach

KMB employs a quality assurance (QA) approach that occurs continuously throughout the predesign process to ensure ongoing coordination among all disciplines. Our comprehensive approach ensures timely identification and implementation of owner needs. Our tools are used to plan the work to ensure the predesign is progressing and the project documentation is tracking to completion. This facilitates the ability to maintain the schedule, provide the appropriate level of document completion at each phase, identify and correct inconsistencies, and employ the highest level of quality across all disciplines. Our multi-point checklists are used as a work planning tool and not simply a completion tool by establishing specific tasks, options, documentation, and deadlines. In this way we ensure we are ahead of issues before they become problems. Every team member participates in QA and it is the entire driver behind the predesign process.

Our Quality Control (QC) process is implemented prior to the completion of each phase to bring fresh eyes from a person not directly involved in the project to provide new perspectives and ensure proper standards of quality and care. After the QC review is complete, a set of documents is provided to the owner and their representative for review and comment. The documents are updated to incorporate all QC and owner review comments prior to moving to the next phase. Client comments are tracked with the date they were implemented and the resolution of each item to maintain an efficient and organized design process.

Scheduled Review Checkpoints Our approach to creating project schedules includes time allotted for Quality Control reviews. We conduct reviews throughout predesign development and thorough reviews at the end of each phase to ensure that documents do not advance to the next phase with errors.

Multi-check Approach Our quality control process utilizes our “Multi-Point” checklist as an instrument to thoroughly check and coordinate the documents at each phase and for all disciplines. The checklist is also designed to identify inconsistent items between the drawings and specifications, and between disciplines.





DIVERSE BUSINESS INCLUSION STRATEGIES

REGISTERED SELF-CERTIFIED SMALL BUSINESS

KMB is an Equal Opportunity Employer that utilizes a wide variety of small, minority, women, and veteran owned businesses in our day-to-day projects and pursuits.

KMB's team has been committed to meeting the state's MWBE goals and implementing a Diverse Business Inclusion Strategies. KMB architects is dedicated to facilitating the participation of new business enterprises to the maximum extent possible.

KMB'S BUSINESS INCLUSION STRATEGIES

Our approach includes targeted outreach efforts aimed at increasing opportunities for a diverse range of businesses. Our firm is lead by six partners, each having responsibility within the firm. They are responsible for forming a comprehensive design team including consulting engineers and specialists for each project. Our Partners work diligently to ensure inclusion of MWBE businesses and remain continuously up to date on new businesses registered through the OMWBE and WEBS directory. The team members dedicated to diverse inclusion outreach efforts for this project include:

Tony Lindgren, PE, Principal-in-Charge
Ed Schilter, AIA, Project Architect
Greg Cook, AIA, CCHP, Project Manager

Their Responsibilities Typically Include:

- Recruiting qualified diverse business subconsultants
- B2Gnow - KMB architects is committed to completing the required monthly contract audits in a timely fashion
- Providing one-on-one assistance and mentoring diverse business consultants in understanding the project and our firm's selection process
- Qualifying knowledge, capabilities, and capacities of diverse engineering and specialty subconsultants

KMB'S OUTREACH INVOLVEMENT

Our proactive engagement through conversations connecting us with MWBE businesses. Our team members have attended the annual Alliance NW Opportunities for Small Business Conference, which is hosted by the Washington State Procurement Technical Assistance Center with support of Federal and State agencies including DES .

KMB architects routinely meets with the Small Business Liaison for the US Department of Veteran Affairs to discuss upcoming projects and small business teaming opportunities.

KMB uses the State of Washington OMWBE directory for each project marketing opportunity we pursue. We typically search by commodity code and review the database of available firms.

ONE-ON-ONE ASSISTANCE

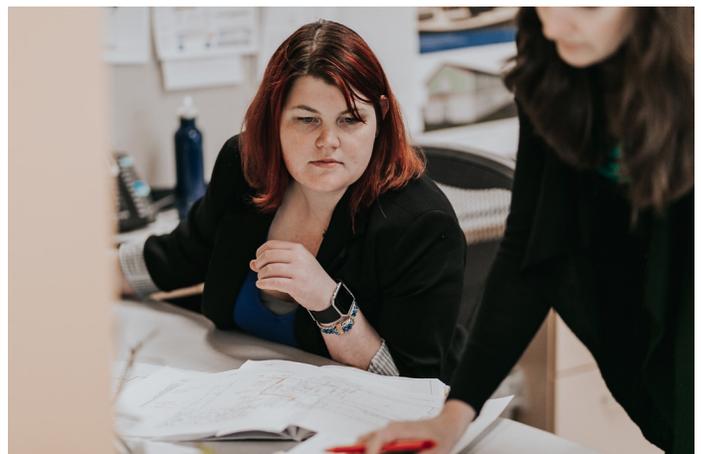
The procedures we use to select our engineering and specialty subconsultant team involves identifying and defining project scope, examining their qualifications and experience, past teaming experience, past experience with public agency contracts, and past experience working with Washington State.

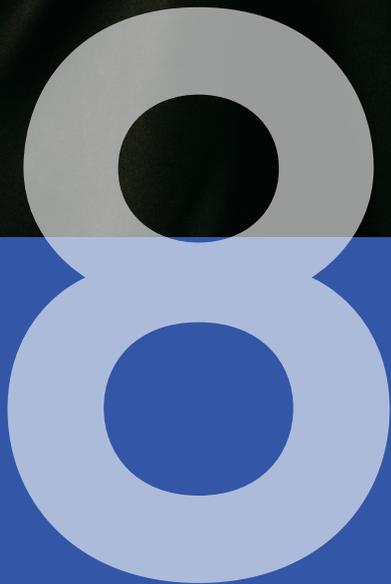
We work with minority-focused and new business groups that support small business inclusion. These groups include the SBA, the NW Minority Business Council, WA State's OMWBE, and WEBS. Opportunities include identification of qualifying firms, obtaining referrals, and posting potential design and engineering consulting opportunities on the agency websites.

HISTORY OF OUTREACH EFFORTS

We always aim to select appropriate sub-consultant firms with expertise aligned with the project specific needs. We strive to meet or exceed the goals of 10% MBE, 6% WBE, 5% WA Small Business, and 5% Veteran-owned participation. Being a self-certified small business ourselves, we understand the importance that outreach, networking, and mentorship can have on success. We regularly meet or exceed meet goals for SBE, MBE, and WBE participation.

We build new business relationships through networking with other AEC firms to find out how similar outreach programs are working and sharing "best practices" and ideas on how to improve the program.





SF330 FORM

