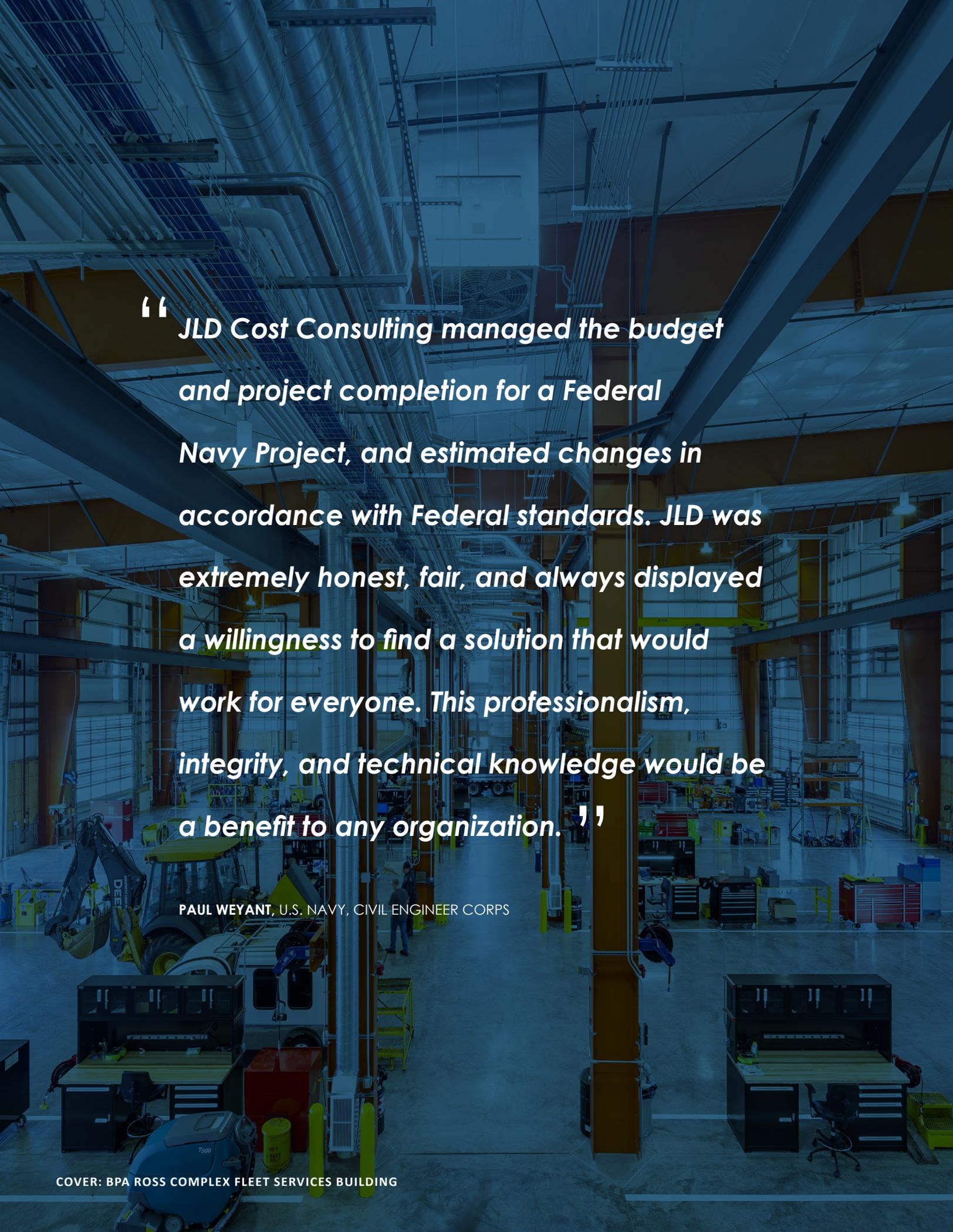


PROFESSIONAL COST ESTIMATING

Statement of Qualifications

Updated January 2022



“ JLD Cost Consulting managed the budget and project completion for a Federal Navy Project, and estimated changes in accordance with Federal standards. JLD was extremely honest, fair, and always displayed a willingness to find a solution that would work for everyone. This professionalism, integrity, and technical knowledge would be a benefit to any organization. ”

PAUL WEYANT, U.S. NAVY, CIVIL ENGINEER CORPS

JLD Cost Consulting

Firm Profile

JLD Cost Consulting is a well-established cost consulting firm serving project owners and design teams in the Pacific Northwest and beyond. With offices in Portland, Seattle, and Bend, JLD's project footprint reaches across the region. Founded in 2011 with the purpose of delivering high quality and accurate estimates to clients, JLD is focused on maximizing value, reducing project risk, and building confidence, value and quality in construction projects. JLD specializes in:

- **Cost Estimating**
- **Cost Control**
- **Value Engineering**
- **Life Cycle Costing**
- **Constructibility**

The firm's professional staff brings a diverse skillset of expertise in construction, engineering, architecture, and landscape architecture. This collective knowledge allows the firm to serve a variety of clients and projects.

JLD serves public agencies and multi-billion-dollar publicly held companies (both domestic and international), as well as some of the top design firms in the U.S. and abroad. JLD's project portfolio is diverse, including public works facilities, fire stations, transportation project, K-12 schools and athletic facilities, higher education facilities, public parks, waterfront developments, mixed-use and affordable housing developments, hospitals, high-tech



PORTLAND BUSINESS JOURNAL
THE LIST
2021
FASTEST GROWING PRIVATE 100 COMPANIES
JLD Cost Consulting

JLD WAS RECENTLY RANKED AS ONE OF THE TOP 100 FASTEST GROWING PRIVATE COMPANIES IN THE REGION FOR 2021 BY THE PORTLAND BUSINESS JOURNAL (#51), ACKNOWLEDGING JLD'S ACCOMPLISHMENTS AS A LEADER IN THE COST CONSULTING INDUSTRY



PORTLAND'S TOP 2021 MANAGEMENT CONSULTING FIRMS
PORTLAND BUSINESS JOURNAL

JLD RANKED AMONG THE TOP 20 MANAGEMENT CONSULTING FIRMS IN THE PORTLAND BUSINESS JOURNAL'S 2021 BOOK OF LISTS.

cleanrooms, recreation and entertainment facilities, and projects requiring historic preservation. This diversified portfolio equips JLD with holistic expertise in cost estimating.

SMALL BUSINESS CERTIFICATIONS

- State of Oregon, **Emerging Small Business** Certified: ESB #9477
- King County, **Small Contractor and Supplier** Certified: SCS #2225

SELECTED EXPERIENCE

JLD has provided cost estimating services throughout the Pacific Northwest and beyond. Our territory of projects and array of experience covers nearly every corner of the country and project type—from the nation's first LEED-Certified tea manufacturing facility in Eugene to the largest capital project in the history of Seattle-Tacoma International airport.

This wide spectrum of experience allows staff to draw on cost-saving solutions and value-added opportunities from a variety of project types, allowing each project to inform another.

- CIVIC/PUBLIC WORKS
- PORTS/WATERFRONT
- TRANSPORTATION
- INDUSTRIAL
- PARKS/RECREATION
- OFFICE/RETAIL
- ENTERTAINMENT
- EDUCATION
- HEALTHCARE
- MIXED-USE/RESIDENTIAL
- INFRASTRUCTURE
- HISTORIC



Deschutes Public Library. JLD was recently awarded the cost-estimating scope of work for this \$195 million bond, which funds new construction and renovation projects for libraries across Deschutes County. JLD is sought-out by owners and design teams for projects that demand responsiveness to multiple client and user groups and withstand exceptional public scrutiny.



Architectural rendering of the 230 Ash Apartments

multifamily/affordable housing

230 Ash Apartments

PORTLAND, OREGON

230 Ash is a six-story multiuse mixed-income housing and retail building in Portland's historic Skidmore/Old Town Historic District. It is the first of 11 new buildings planned for the ambitious Ankeny Blocks project, which represents the City of Portland's ongoing effort to revitalize the district and provide more affordable housing in the downtown core.

JLD developed detailed cost estimates and provided value engineering recommendations. JLD developed and integrated 3D models into these estimates, clearly tying cost to function and demonstrating the impact each element has on cost. JLD was successfully able to identify various discrepancies in the existing project documents, including line item omissions and a misinterpretation of the geotechnical report. Overall, JLD identified

almost \$1 million in savings for the owner, allowing for a reinvestment of that capital into energy efficiency improvements and higher end finishes to be installed in each unit, increasing the overall project value.

The project received a DeMuro Award from Restore Oregon in 2020, as well as 1st Place in the Multifamily/New Construction category at the Daily Journal of Commerce's TopProject Awards in 2021. The project achieved LEED Platinum certification.

SIZE: 123,000 SF / 133 units

SCOPE: Cost estimates; value engineering

CLIENT: Downtown Development Group

COMPLETED: 2020



The new Fleet services Building at Bonneville Power Administration's Ross Complex in Vancouver, WA

public works

Bonneville Power Administration, Ross Complex

VANCOUVER, WASHINGTON

JLD provided cost estimating and related services to Bonneville Power Administration for extensive renovations across several buildings at their Ross Complex facility in Vancouver, Washington. This project had an initial estimated construction cost of \$40 million; JLD identified nearly \$8 million in potential cost savings for this project, reducing the final project cost to \$32.2 million. These savings were achieved without cutting project scope, through recommendations such as a condensed project schedule that reduced labor costs.

The project included a 36,000 SF fleet services building, a secondary 7,500 SF Bronto building, civil site improvements, and mechanical upgrades. The new fleet services building houses BPA's fleet administration division including service bays, wash and work stations, a conference

room, break room, and training facility. JLD's goals were to shorten the project schedule, enhance cost control, improve risk identification and mitigation, and to identify and manage construction project risks. JLD worked closely with the project team to reconcile cost discrepancies and to assist in understanding the project's scope of work. **JLD's estimate came out to be within 0.82% of the final project cost.** This project was completed in 2021, and received LEED Gold certification.

SIZE: 43,500 SF

SCOPE: Cost estimating; consulting

CLIENT: Bonneville Power Administration

COMPLETED: April 2021



Alaska Airlines flight departing from SeaTac airport, with Mt. Rainier in the background

public works / capital improvement project

SeaTac Airport International Arrivals Facility

SEATAC, WASHINGTON

JLD is providing ongoing inspection and construction plan review services for a variety of new construction projects at Seattle-Tacoma International Airport (SeaTac). SeaTac is the largest airport in the Pacific Northwest and serves over 20 million passengers a year.

The most notable component of JLD's scope of work is the new International Arrivals Facility (IAF): a new, 450,000 SF facility scheduled to open in early 2022. The IAF is the most complex capital development in the history of the 70-year old airport, and will more than double international passenger capacity at the airport to over 2,600 per hour. In all, the project is expected to reduce passenger connection time from 90 to 75 minutes. The project is designed to LEED Silver certification standards.

In addition to the IAF project, JLD has provided construction inspections for infrastructure and mechanical upgrades, as well as various retail and restaurant renovations throughout the airport. These upgrades will improve day-to-day operations and elevate passenger experiences at the airport.

JLD has worked closely with the Port of Seattle to ensure that all projects for this development are delivered on-time, up to code, and at maximized value.

SIZE: 450,000 SF

SCOPE: Inspections; constr. plan reviews

CLIENT: Port of Seattle

COMPLETED: Ongoing



Exterior view of Veterans Memorial Coliseum

civic

Veterans Memorial Coliseum

PORTLAND, OREGON

Originally constructed in 1960 and listed on the National Register of Historic Places, the Veterans Memorial Coliseum is one of the most iconic buildings in Portland. The 197,000-square foot arena and events center was the original home of the NBA's Portland Trail Blazers and currently serves as home of the WHL's Portland Winterhawks. The arena hosts several concerts, trade shows, and exhibitions as well.

JLD was awarded the cost estimating scope of the City of Portland's \$80 million reinvestment project at the Coliseum. The project includes a comprehensive renovation of the building's mechanical systems, the installation of new curtain walls, the renovation of food and beverage vendor stations, new bleachers, structural improvements, and more. Due to the historic status of the building, all renovations

must be in accordance with historic preservation guidelines.

JLD's work on this project demonstrates the firm's ability to work on capital projects with large scopes. While this project has a large budget, it is still important to control costs and ensure that money is being spent wisely. JLD is working closely with the City of Portland, the design team, and the general contractor to ensure that the value of the city's investment is maximized without sacrificing function. This project is ongoing.

SIZE: 197,000 SF

SCOPE: Cost estimates; value engineering

CLIENT: Perkins + Will

COMPLETED: Ongoing



Providence Park during a Portland Timbers game

civic

Providence Park ADA Improvements

PORTLAND, OREGON

Originally constructed in 1926, Providence Park is one of the most historic sporting venues in the United States. After decades as a multi-sport venue, the stadium was converted to a soccer-specific facility with the arrival of Major League Soccer's Portland Timbers in 2009. The arrival of the Timbers, and later that of the Portland Thorns in 2012, prompted a series of ongoing renovations and upgrades to the stadium.

JLD was approached by the City of Portland to perform a needs assessment and provide cost estimates for over 120 accessibility improvements throughout the stadium. This project was performed in two phases: in Phase 1, JLD provided an independent review of the upgrades identified by the city. This included an analysis of all relevant design documents and a site visit to inspect present conditions.

Phase 2 built on this work, investigating each item on the City's list. JLD compiled a list of repair options for each item, presenting the cost associated with each option. JLD also made recommendations on what order to carry out these improvements in order to avoid conflicts with team schedules.

Ultimately, JLD provided best-value solutions for all 120+ items on the City's list of necessary improvements. These projects were completed Q1 of 2021.

SIZE: 13,700 SF

SCOPE: Cost estimates

CLIENT: Scott Edwards Architecture

COMPLETED: 2018



Streetside view of Oregon Institute of Technology's Klamath Falls campus

higher education

Oregon Institute of Technology, Boivin Hall

KLAMATH FALLS, OREGON

JLD provided cost estimating services for the renovation and seismic retrofit of Oregon Tech's Boivin Hall, located at their flagship campus in Klamath Falls, OR. This 47,000 SF facility was originally constructed in 1976, and houses learning spaces and offices essential to the institution. These include several classrooms, faculty offices, a student support and retention center, and various student laboratories.

The project includes a complete overhaul of the existing building that will culminate in what is essentially a new building, keeping only sections of the existing roof and structural support columns. The new, high-tech science facility will also receive a seismic retrofit and repairs to the existing foundation. Additionally, this project includes several site improvements designed to enhance the function

and longevity of the building, including landscaping, sidewalks, transportation, and ADA accessibility improvements.

During the schematic/design phase of the project, JLD utilized 3D-modeling technology to gain a robust understanding of the project and to produce a comprehensive cost estimate for the project. The project has a projected completion date of December 2022.

SIZE: 180,000 SF

SCOPE: Cost estimating; project auditing

CLIENT: TriMet

COMPLETED: Ongoing; projected 2022



Interior of the newly renovated Barlow Hall at Clackamas Community College

higher education

Clackamas Community College, Barlow Hall

OREGON CITY, OR

JLD provided cost estimating services to Clackamas Community College for the extensive renovation of Barlow Hall, which houses the college's automotive science department. This 52,000 SF renovation and expansion is part of a \$90 million bond passed by voters in 2014. The \$5.6 million renovation of Barlow Hall added new work stations and equipment for the College's automotive service technician program. The area used by the autobody and collision repair program was expanded, and space used for an automotive program serving a local high school doubled in size.

JLD's cost estimate for this project was comprehensive, covering all costs associated with construction, woodworking, automotive equipment, work stations, classroom spaces, MEP systems, seismic

upgrades, and demolition work. During the SD phase of this project, JLD provided additional cost consulting to the A/E team working on the project. The team had extensive experience in similar private sector projects, but was not aware of the longer lifespans required for public sector work due to the uncertain availability of future capital project funds. JLD provided additional consultation on methods to control costs of the project, resulting in over \$1 million in realized savings without cutting scope. This project was completed in 2014.

SIZE: 52,000 SF

SCOPE: Cost estimating, consulting

OWNER: Clackamas Community College

COMPLETED: 2019



Rendering of TriMet's renovated Powell Garage facility

transportation

TriMet, Powell Garage

PORTLAND, OREGON

Originally built in 1976 as a temporary facility, TriMet's Powell Garage has remained in continuous operation in order to meet sustained public need. Now in need of significant upgrades, TriMet approached JLD to help control costs for this \$133 million renovation. The scope of the renovation included building expansion and renovation, new fueling and washing stations, parking surface re-pavement, various site improvements, and more. Essentially, the facility was to receive a complete overhaul.

JLD estimated the costs for the project, which was already under construction, while the design of the building was still in progress. Throughout the lifespan of the project, JLD produced over 50 individual cost estimate reports for various change orders. JLD's estimates captured all of the

project's minutiae, including pricing for rigid conduit down to the individual fittings. JLD performed extensive market research to ensure that the estimate reflected fair market rates for materials and labor.

JLD secured an average cost savings of 20% overall, and upwards of 60% on some items. This resulted in over \$3.6 million in potential savings for TriMet, helping the agency to better understand the project's scope and requirements and realize the best value for their investment.

SIZE: 180,000 SF

SCOPE: Cost estimating; project auditing

CLIENT: TriMet

COMPLETED: Ongoing; projected 2022



Walking path at Couch Park in Portland, OR

parks and recreation

Portland Parks and Recreation, On-Call Projects

PORTLAND, OREGON

For the past nine years, JLD has provided on-call estimating services to Portland Parks and Recreation, with the contract recently being extended as a result of JLD's exemplary performance record. This agreement has culminated in JLD preparing cost estimates for a variety of parks projects in the City of Portland. These include:

- **Peninsula Park**
Community center and pool renovation
- **Couch Park**
New open space and play area
- **Gilbert Primary Park**
Playground renovation
- **Kenton Park**
Play area improvements
- **Glenhaven Park**
Play area renovation and site accessibility improvements

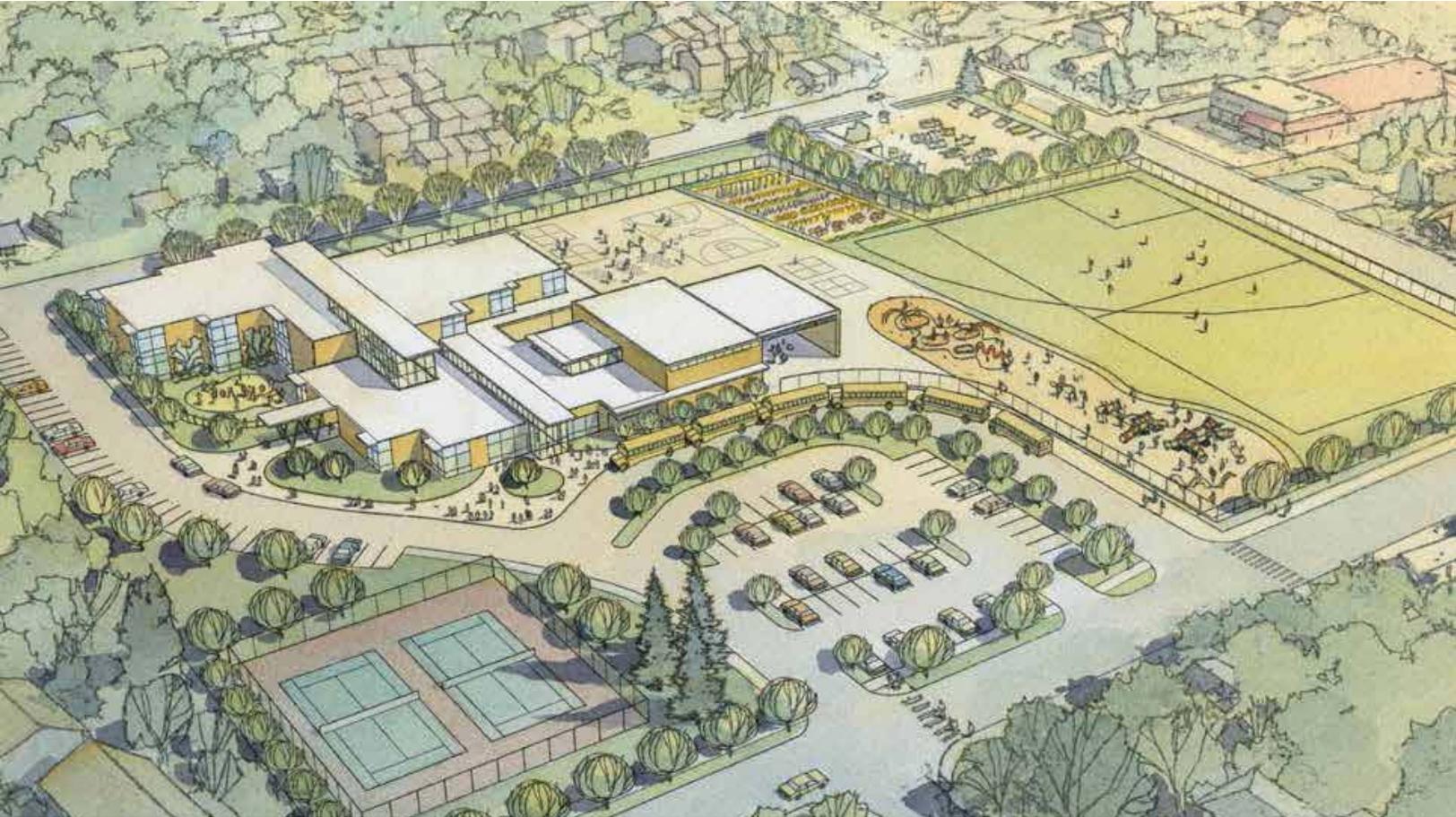
JLD's estimates for these projects covered many aspects of the parks, including play structures, athletic fields, community buildings, pools, ADA improvements, and other necessary upgrades to make these parks a safe and welcoming place for children and families. JLD maintains a strong working relationship with Portland Parks and Recreation, and continues to serve as a trusted advisor on costs and feasibility for their parks projects. This successful partnership has delivered significant cost savings.

SIZE: 5 parks

SCOPE: Cost estimating; consulting

CLIENT: Portland Parks and Recreation

COMPLETED: 2015-Present



Artist's rendering of the new Garfield Elementary School campus in Corvallis

k-12 education

Corvallis School District Bond Projects

CORVALLIS, OREGON

In May of 2018, voters in Corvallis approved a \$200 million school bond to fund the renovation and replacement of K-12 schools across the district. JLD was approached to provide cost consulting services for three projects funded by this bond: renovations to Garfield Elementary School, and replacement school buildings for Hoover (now Husky) and Lincoln Elementary Schools.

The renovation of Garfield Elementary included the addition of six classrooms, expansion of the library and media center, interior renovations, ADA improvements, site improvements, seismic and mechanical upgrades. Husky Elementary received a new, two-story, 67,446 SF school building, while Lincoln Elementary received a new, two-story, 68,000 SF building. JLD also provided estimates for a 5,000 SF student

health center, operated by the school district adjacent to Lincoln Elementary.

JLD utilized 3D models extensively throughout these projects, developing such models to demonstrate the difference in cost between various options for each building. These models clearly tie cost to function and allow for more accurate cost estimates. JLD also made various value adding recommendations, including energy efficiency improvements and other various upgrades. These projects are ongoing.

SIZE: 150,000 SF

SCOPE: Cost estimating; consulting

CLIENT: Corvallis School District

COMPLETED: Ongoing; projected 2022



Architectural rendering of Parkview at Terwilliger Plaza

independent senior living

Parkview at Terwilliger Plaza

PORTLAND, OREGON

JLD provided cost estimating services for Parkview at Terwilliger Plaza, a new 11-story high rise which serves as an addition to an existing three-building senior living campus. The development will provide 127 one- and two-bedroom apartments for independent senior living.

The u-shaped building features stunning views of the nearby Terwilliger Hills, downtown Portland, and the Cascade Mountains. A sky-bridge connects the building to the existing campus and features a collection of fine art, which aims to build community and provide an outlet for a common interest in art.

This energy efficient building was designed for Passive House® Certification, and is projected to use only one-half of the energy of current energy compliant buildings. Green roofs, green living walls and solar

panels further reduce this building's carbon footprint.

JLD provided estimates for the structural components of this project, working closely with the structural engineering team to produce a detailed estimate of concrete and steel costs for the building's structure. This project is currently under construction, with a projected completion date of 2023.

SIZE: 370,000 SF / 127 units

SCOPE: Cost estimates

CLIENT: LRS Architects

COMPLETED: Ongoing; projected 2023



An exterior photo of the new facade at Hillside Manor Apartments

affordable housing

Hillside Manor Apartments

MILWAUKIE, OREGON

Hillside Manor is a nine-story apartment complex operated by the Housing Authority of Clackamas County, providing affordable 1- and 2-bedroom apartment homes for rent. The first floor is dedicated to resident programs, services, and community gathering spaces. The building is home to an active community of over 100 residents, primarily comprised of seniors and people with disabilities. Originally built in 1970 and in need of rehabilitation, an extensive renovation of Hillside Manor broke ground in 2020.

The scope of these renovations were far reaching, including asbestos abatement, seismic upgrades, M/E/P upgrades, energy efficiency upgrades, and various other improvements including a new fitness room, community spaces, a community garden, and other amenities. These improvements will increase the quality of life for residents

at Hillside Manor while also extending the useful lifespan of the building.

JLD researched and developed cost estimates for this project, providing cost certainty to Clackamas County. The renovations were multi-phased, allowing residents to occupy their units while work was performed on other floors. This project was completed in Fall of 2021.

SIZE: 73,000 SF / 100 units

SCOPE: Cost estimates

CLIENT: Scott Edwards Architecture

COMPLETED: 2021



Sign at the entrance to the Veterans Administration's Mann-Grandstaff Hospital

healthcare

Veterans Administration, Mann-Grandstaff Hospital

SPOKANE, WASHINGTON

JLD provided cost estimating to the Veterans Administration for the renovation of the Mann-Grandstaff Hospital in Spokane, WA. The Mann-Grandstaff Hospital is one of the largest in the region, serving veterans and their families across Eastern Washington and Northern Idaho.

This 50,000-square foot project included the renovation of a medical laboratory, the addition of a rooftop mechanical penthouse enclosure, and HVAC upgrades. The HVAC system in the intensive care unit was completely overhauled, and a pair of generators were installed in the mechanical penthouse enclosure.

JLD's estimate for this project included the difference in cost between phased construction with a partial shutdown of the hospital, and implementing the work

using alternate power sources. Ultimately the project team decided on the second option, and the hospital remained fully operational during the renovation. This project was completed in 2018.

SIZE: 50,000 SF

SCOPE: Cost estimate, value engineering

CLIENT: Veterans Administration

COMPLETED: 2018



Exterior of the new Florence Public Works facility

public works

City of Florence Public Works

FLORENCE, OREGON

JLD provided cost estimating services to the City of Florence for the construction of a new public works building, located at a three-acre site on Kingwood Street. The 13,700-square foot facility houses offices and meeting rooms, as well as a four-bay vehicle maintenance facility. The offices located at the facility are responsible for delivering a variety of public services to the citizens of Florence, including clean drinking water, stormwater management, street and park maintenance, pedestrian safety, and more.

The office building's sustainable design features extensive natural daylight, with numerous bay windows and skylights. The building also features natural airflow and ventilation systems which further reduce its energy draw. The roof features a "green" area comprised of native plants to absorb

ambient carbon. A combination of solar panels and wind turbines allows the building to generate a significant amount of its own power.

JLD provided a comprehensive cost estimate for this project. Ultimately, JLD's cost estimate was within 1% of the final project cost. This project was completed in 2018.

SIZE: 13,700 SF

SCOPE: Cost estimates

CLIENT: Scott Edwards Architecture

COMPLETED: 2018



Fire Station #8 (Loon Lake) in Stevens County, Washington

public safety

Stevens County Fire Stations

STEVENS COUNTY, WASHINGTON

JLD contributed cost estimating and construction consulting services to a needs assessment study for three fire stations in a remote part of Eastern Washington. The three stations, serving Loon Lake, Suncrest, and Clayton, required several improvements in order to be brought up to code. Necessary improvements included ADA accessibility, energy code, seismic and structural improvements, among others.

The needs assessment reviewed existing conditions at each station, determining what improvements were necessary and the costs associated with each. The assessment determined that the most cost-effective option would be to replace the Suncrest and Loon Lake stations, while making necessary upgrades to rehabilitate the Clayton station. The replacement stations in Suncrest and Loon Lake are both

single-story facilities, 13,100 SF and 15,000 SF respectively. Each new facility provides adequate space for firefighting apparatus, support rooms for firefighter turnout gear and equipment storage, office and living quarters for staff, and training rooms available for community use.

JLD provided crucial input in determining the most cost effective solution for each station. JLD's study included a comprehensive review of necessary future maintenance costs. This project was completed in 2016.

SIZE: 13,700 SF

SCOPE: Cost estimates

CLIENT: Scott Edwards Architecture

COMPLETED: 2018

Additional Experience

- Lake Oswego Recreation and Aquatic Center, Lake Oswego, OR
- LiveNation Entertainment Venue, Lloyd Center, Portland, OR
- Yogi Tea, Manufacturing Facility, Eugene, OR
- Intel, Manufacturing Complex, Hillsboro, OR
- Oregon State University Graduate Housing, Corvallis, OR
- Portland State University, 4th Avenue Building Generator Project, Portland, OR
- Washington State University, Emergency Call Stations, Vancouver, WA
- City of Tualatin, City Services Center, Tualatin, OR
- Jackson County Fire District, Scenic Avenue Station, Central Point, OR
- Washington County, Public Safety Training Center, Hillsboro, OR
- Port of Portland, Marine Facility Maintenance Facility, Portland, OR
- Portland Police Bureau, Training Complex, Portland, OR



LiveNation. JLD utilizes 3D models in the estimating process, as was done for the proposed LiveNation Venue at the Lloyd Center in Portland. Leveraging 3D modeling results in more accurate cost estimates and a more efficient workflow.



Portland Police Bureau Training Complex. JLD has estimated for numerous police and fire bureaus across the Pacific Northwest and beyond.



Condon Grade School. JLD worked alongside Steele Associates Architects on this new, 17,000 SF elementary school located in Central Oregon.

- **Kennewick School District, On-Call Cost Estimating, Kennewick, WA**
- **Condon Grade School, Condon, OR**
- **Hudson Yards, Mixed-Use Highrise Development, New York, NY**
- **Mid-Columbia Center for Living, The Dalles, OR**
- **Washington State Parks and Recreation, 30+ Buildings and Historic Preservation, Statewide, WA**
- **Raleigh Hills K-12 School, Beaverton, OR**



Kennewick School District, The firm holds an on-call agreement with Kennewick School District in addition to other school districts and public agencies throughout Oregon and Washington.



Hudson Yards. JLD's staff is experienced in working on complex, large-scale projects that face significant public scrutiny. JLD's Principal, John Drentlaw, provided independent cost consulting for the 30 Hudson Yards building: a 102-story skyscraper that hosts TV production studios, corporate offices, and residential units. The building is part of the groundbreaking Hudson Yards project, a new neighborhood built on top of a complex platform that covers a railyard. It is the largest real estate development project in U.S. history.

EXPERTISE

Cost Estimating

The cost of operating and maintaining (O&M cost) a building is as important as the initial cost to build it. This is especially true in public projects, where building lifespans can reach 50 years or more. Whether it is a new office building, a workplace tenant improvement, roadway modifications, or water resources enhancement, JLD always emphasizes the importance of providing a basis for effective cost benefit analysis, and as early in the design process as possible.

JLD's cost estimates establish functional benchmarks for the project team. From room finish standards to high-performance equipment for energy conservation and whole life-cycle costs for equipment operation cost benchmarks, the firm's

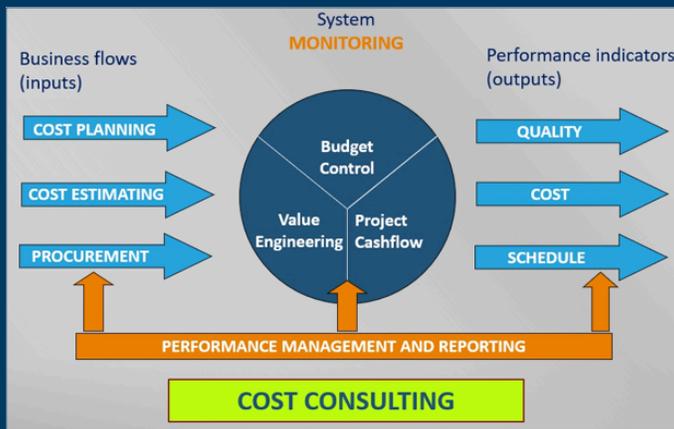
staff work closely with owners, designers, engineers, and contractors to:

- Establish cost targets or benchmarks with clear understanding of the scope;
- Identify key cost drivers that provide direction during the development process;
- Provide constructability review and share value engineering (VE) opportunities; and
- Prepare cost options for material and equipment selection.

Cost is a reality that determines the feasibility of all projects.

COST REPORTS
JLD's cost reports provide clients with correct, sound, and pragmatically based information to enable unbiased decisions from the whole project team.

Cost Estimate Report Summary

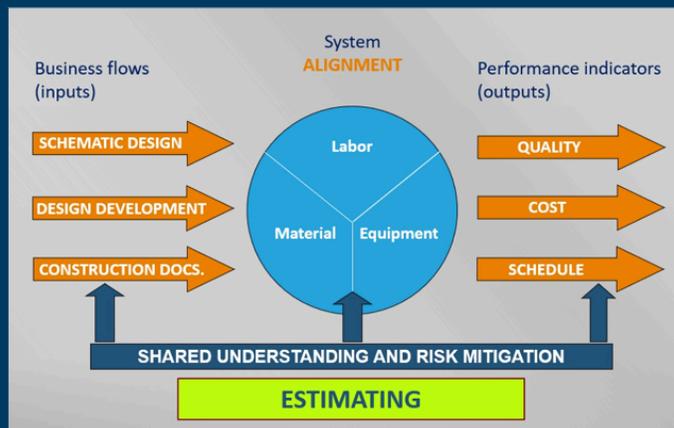


COST CONTROL

JLD's cost control approach is ongoing, throughout the entire design and construction process—not something that occurs only at certain milestones.

From project site visits to cost planning and conceptual cost estimating to bid and contract documents,

JLD's active and meticulous approach to cost estimating leads to significant reduction in overall project risk and the best value for clients.



“ **JLD consistently provides a comprehensive and thorough estimate that is very user-friendly. JLD works collaboratively with us to find creative and cost-effective building solutions.** ”

SID SCOTT. AIA, LEED AP, PRINCIPAL
SCOTT | EDWARDS ARCHITECTURE

VALUE ENGINEERING

JLD was founded with the mission to maximize the worth of its clients' investments, and demonstrate the value they add in tangible and measurable ways. This includes the quantification of:

- **Savings achieved on the project**
- **Value of risk mitigated**
- **Cost analysis of needs vs wants**

The firm's staff consistently uncover opportunities to lower project costs and add value. Cost savings have been realized in environmental remediation methods; geo-technical and foundation design; reduced structure cost from relocated mechanical equipment; building envelopes; finishes; and multiple best value alternates associated with the project delivery methods and contracts. Many of these individual value engineering (VE) items saved clients several million dollars. The firm is committed to efficiency in design, and adds value in helping clients realize current market rates.

ESCALATION

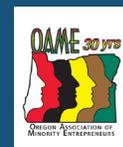
JLD understands the **commodity indexes**, **Bureau of Labor, Producer Price Index** (PPI) and have thorough knowledge of the **regional labor agreements**, and how to assemble true fully burdened labor costs. Some local products are related to currency exchange rates. Project complexity and duration of project are important considerations to bring into cost estimates, as well.

JLD brings escalation into estimates to accurately estimate the **year of expenditure** (YOE) **project cost**. The firm's detailed approach achieves the most efficient capital improvement for their clients' current and future projects.

PROFESSIONAL AFFILIATIONS

As a professional cost estimating firm, JLD is an active and contributing member of numerous professional organizations. This includes institutions directly related to the cost consulting profession as well as the larger AEC industry.

JLD staff also hold certifications with and serve on local and national industry boards, in addition to holding government-appointed positions.



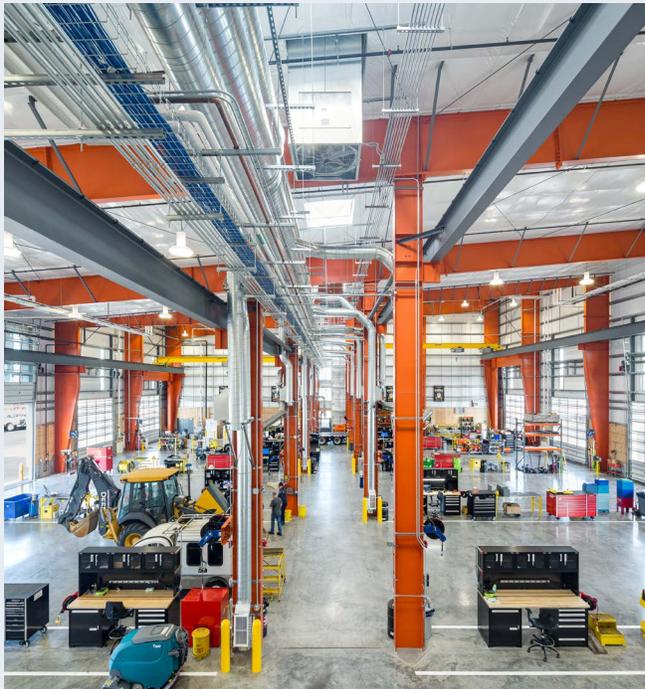
Life Cycle Cost Analysis Studies

As a supplement to our cost estimates and value engineering services, JLD performs life cycle cost analyses (LCCAs) to ensure that projects are designed and executed with value in mind. In accordance with federal regulations, JLD compares the projected future costs of maintenance and operation for all materials and equipment included in a project, including both monetary and environmental costs. These studies reveal the true cost of project decisions, granting project owners the confidence that they are receiving maximum value for their investment.

Life cycle cost analysis is an important aspect of any construction project. While often overlooked, life cycle cost analyses have the potential to create significant long-term savings for a project. This frees up future capital for additional investments.

Left: a sample from one of JLD's LCCA studies.

Comparison of Present-Value Costs				
PV Life-Cycle Cost				
	Base Case	Alternative	Savings from Alternative	
Initial Investment Costs:				
Capital Requirements as of Base Date	\$298,033	\$346,345	-\$48,312	
Future Costs:				
Energy Consumption Costs	\$258,281	\$51,469	\$206,812	
Energy Demand Charges	\$0	\$0	\$0	
Energy Utility Rebates	\$0	\$0	\$0	
Water Costs	\$0	\$0	\$0	
Recurring and Non-Recurring OM&R Costs	\$37,500	\$52,500	-\$15,000	
Capital Replacements	\$0	\$0	\$0	
Residual Value at End of Study Period	\$0	\$0	\$0	
Subtotal (for Future Cost Items)	\$295,781	\$103,969	\$191,812	
Total PV Life-Cycle Cost	\$593,814	\$450,314	\$143,500	
Net Savings from Alternative Compared with Base Case				
PV of Non-Investment Savings	\$191,812			
- Increased Total Investment	\$48,312			
Net Savings	\$143,500			
Savings-to-Investment Ratio (SIR)				
SIR =	3.97			
Adjusted Internal Rate of Return				
ARR =	8.84%			
Payback Period				
Estimated Years to Payback (from beginning of Service Period)				
Simple Payback occurs in year	5			
Discounted Payback occurs in year	6			
Energy Savings Summary (in stated units)				
Energy	—Average	Annual	Consumption—	Life-Cycle
Type	Base Case	Alternative	Savings	Savings
Electricity	0.0 kWh	55,675.0 kWh	-55,675.0 kWh	-1,391,684.5 kWh
Natural Gas	14,600.0 Therm	0.0 Therm	14,600.0 Therm	364,950.0 Therm
Energy Savings Summary (in MBtu)				
Energy	—Average	Annual	Consumption—	Life-Cycle
Type	Base Case	Alternative	Savings	Savings
Electricity	0.0 MBtu	190.0 MBtu	-190.0 MBtu	-4,748.6 MBtu
Natural Gas	1,460.0 MBtu	0.0 MBtu	1,460.0 MBtu	36,495.1 MBtu



BPA Ross Complex

JLD performed a series of life cycle cost analyses on behalf of the Bonneville Power Administration, for the extensive renovations to their Ross Maintenance and Operations Complex located in Vancouver, WA. By comparing the life-cycle costs of materials and equipment used in this project, JLD was able to identify opportunities to implement best-value alternatives and save future maintenance and operation costs by nearly 50%. These studies also discovered opportunities to reduce greenhouse gas emissions by 86%.

Constructibility Reviews

In addition to the typical cost estimates and value engineering delivered to clients, JLD is proud to be able to provide consultation on the constructibility of projects. While reviewing design documents, JLD takes note of any challenges or irregularities that may impact the constructibility of a project.

Issues in constructibility can originate from a number of sources. Equipment size, building clearances, existing construction sites, and other factors can all impact the feasibility and construction of a project. Challenges such as these often go unanticipated during project design, and often can delay a project weeks or months—if not years, or forcing the project to be canceled altogether. That's why JLD reviews design documents carefully for irregularities and unaccounted-for conditions to ensure that project owner investments are protected. When identifying challenges to constructibility, JLD develops potential

solutions. When accounted for, constructibility conflicts can often be avoided through proper equipment selection, schedule evaluation, site studies, and other logistical considerations. If JLD encounters a potential issue on a project, the firm will provide direction towards solutions while identifying potential costs associated therewith. JLD's constructibility reviews inspire confidence for project owners and inform further work on the project.



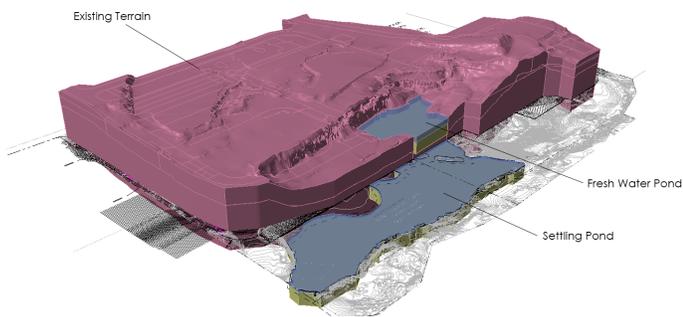
PSU 4th Avenue Building

During a project to upgrade mechanical components of Portland State University's 4th Avenue Building, JLD identified several potential conflicts for constructibility. These primarily consisted of existing construction along 4th Avenue affecting crane placement, and roof clearances constraining the installation of a new medium-voltage generator. JLD identified a preferable location to place a crane with a shorter reach, and modifications to the original construction plan, as solutions to these challenges.

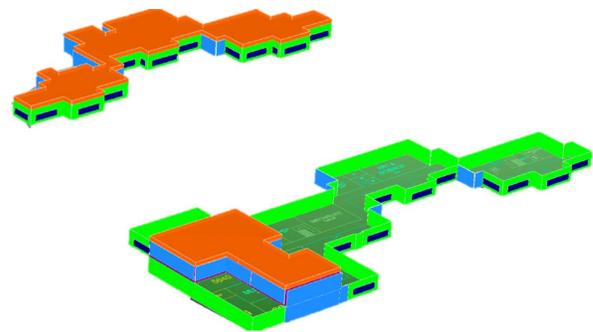
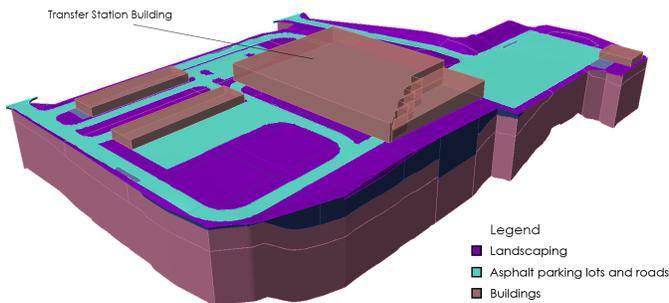
Advanced Technology

JLD is a leader in utilizing advanced estimating tools and methods that have not yet been widely adopted across the industry. While 2D modeling software is in broad use across the industry, it does not take full advantage of technological advancements since the proliferation of computers and 3D imaging. 2D modeling software platforms such as Bluebeam are useful, but do not offer much that cannot be accomplished using paper drawings and a scaled ruler. JLD utilizes the most advanced tools available to develop 3D models based on 2D conceptual drawings. This allows for greater detail when performing estimating take-offs and for a greater familiarity with the project itself. This information is useful not just for estimating, but for the project team at large—the 3D models that JLD develops help project owners and design teams to better understand the project.

Existing Site Jennifer St - Metro South Transfer Station



Proposed Jennifer St Site - Metro South Transfer Station



3D MODELING FOR SITEWORK AND BUILDINGS

Above are examples of 3D models developed by JLD for two recent project. On the left are models of sitework for a proposed solid waste transfer station, located on a 26-acre site in Clackamas County. These models depict the existing site and proposed building. On the right are

models of 1-story and 2-story options for the new Garfield Elementary School in Corvallis. Models such as these capture more information than two-dimensional drawings, incorporating all of the knowledge put into the project by the design team. This results in more detailed and accurate cost estimates.

Team



John Drentlaw, LEED AP

PRINCIPAL-IN-CHARGE

John Drentlaw's experience in owner, designer, and general contractor roles gives him the ability to understand the challenges of each party and enhance team collaboration. He is experienced in project management, estimating, cost consulting, risk management, scheduling, and claims. John has managed cost estimating, design, and construction teams on multiple projects ranging in price from \$200K to \$300M. He is well-versed in project site planning and the importance of project estimates that will identify areas to incorporate added value opportunities.



Curt Kolar, CPE

SENIOR COST ESTIMATOR

Curt Kolar has provided estimates for bids and budgets, as well as vital cost analyses back-up for owners for over 40 years. Curt captures what is shown and advises on what is not. His track record for material, labor, general conditions, and soft cost pricing has put him within 5% of market values over 90% of the time, leading to more effective contract negotiations. He is inquisitive by nature, and once saved a project owner nearly \$1.5 million by asking a single question. His contributions to project teams include identifying contract irregularities and potential risk exposure language.



Eli Mandel

COST ESTIMATOR

Eli has a diverse portfolio of project experience, specializing in mechanical design, heat/fluid systems, landscape architecture, and material estimating. He strives for a deep familiarity with all facets of his projects. He has strong technical and customer service skills, which allow him to develop long-lasting relationships with clients. His precise attention to detail enables him to produce accurate, detailed cost estimates. His combination of education and work experience has prepared him to provide high-quality cost estimates for projects of all types.



Alexei Marin-Cortes, EIT

COST ESTIMATOR

Alexei brings expertise in sitework, civil engineering, and structural engineering to the JLD team. Born in Colombia, Alexei moved to Washington, DC to pursue a career in the A/E/C industry. He later moved to Portland to pursue his Master's degree. Since then he has worked as a construction estimator for a general contractor and as a structural engineer for a nationwide firm. Alexei takes a holistic approach to his work, letting his experience on prior projects inform his work. He is a creative problem solver who takes initiative in searching for solutions.



Sai Ganesh Nagalla, LEED GA

COST ESTIMATOR

Ganesh has worked on projects in a variety of market sectors, ranging from shopping malls and commercial construction to single and multifamily residential projects. Born in India, Ganesh earned a Bachelor's degree in Civil Engineering at GITAM University before pursuing his Master of Science in Construction Management from Arizona State University, where he graduated Summa Cum Laude. His expertise in construction techniques and project management make Ganesh an excellent resource for any project team.



Jacqueline Stewart

SENIOR CONSULTANT

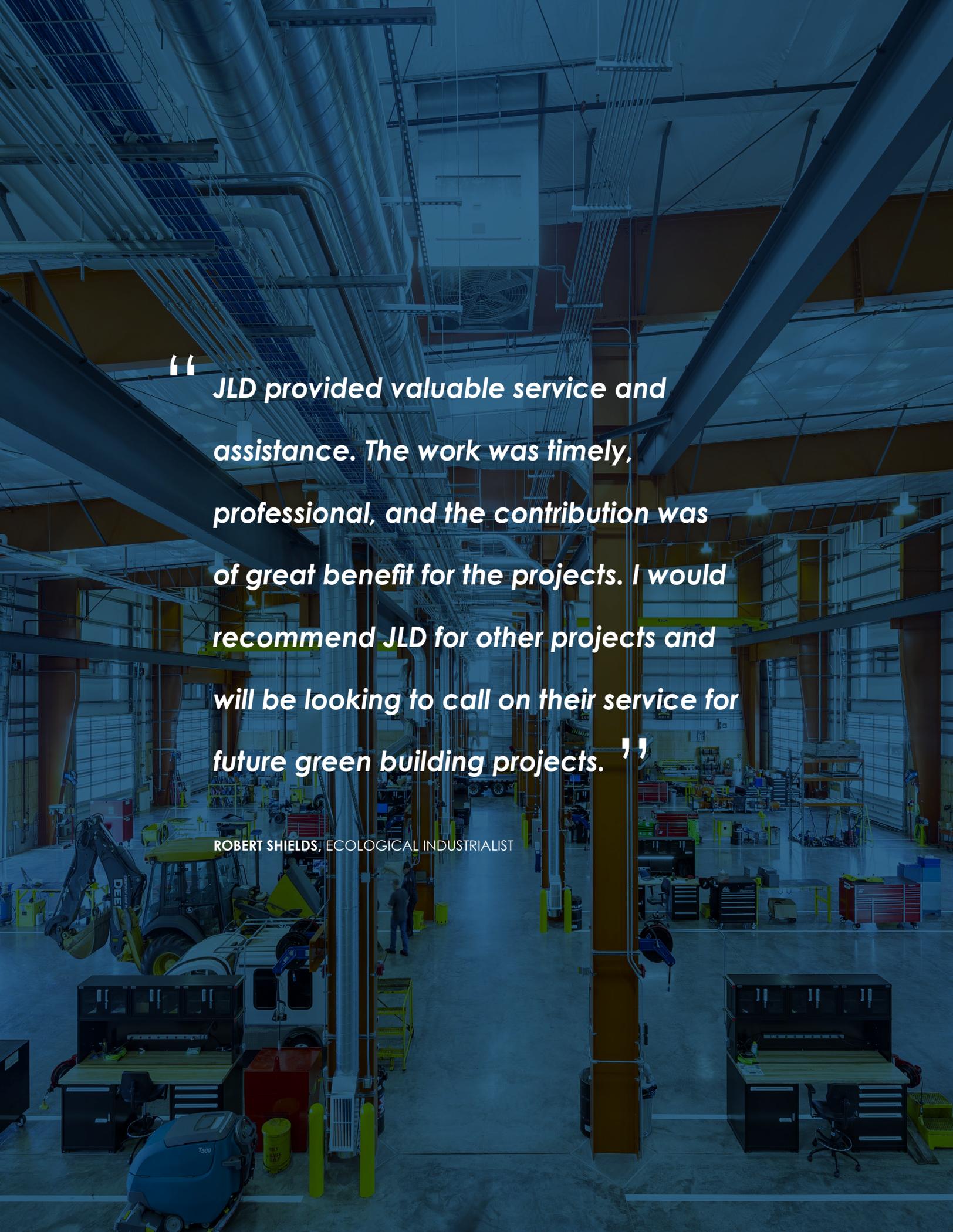
Jacqueline Stewart brings seven years of experience in project coordination of large and complex projects. This includes serving as project coordinator for Puget Sound Energy's new commercial construction projects; operations administrator for General Dynamics' AT&T Turf project at SeaTac; and project coordinator positions for a commercial contractor and concrete manufacturer. Jacqie is currently inspecting construction projects at SeaTac Airport, including the new, expanded International Arrivals Facility.



James Millius

MARKETING PROPOSAL COORDINATOR

James joins JLD's team with over 4 years of B2B and B2C marketing experience, working on behalf of small businesses, non-profits, government agencies, universities, and companies in the A/E/C industry. His liberal arts education endowed him with robust critical thinking and communication skills. He is a master of Adobe Creative Suite and has a keen eye for design. He strives for excellence in everything he creates.



“ JLD provided valuable service and assistance. The work was timely, professional, and the contribution was of great benefit for the projects. I would recommend JLD for other projects and will be looking to call on their service for future green building projects. ”

ROBERT SHIELDS, ECOLOGICAL INDUSTRIALIST



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