# BREMIK



REYNOLDS SCHOOL DISTRICT #7 New Troutdale Replacement Elementary School

**REQUEST FOR PROPOSAL** 

AUGUST 19, 2016

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#### 4. PROPOSAL FORM

#### CONSTRUCTION MANAGER/GENERAL CONTRACTOR (CM/GC) SERVICES

#### **REYNOLDS SCHOOL DISTRICT – THE NEW TROUTDALE REPLACEMENT ELEMENTARY SCHOOL**

The undersigned proposer submits this proposal in response to the Reynolds School District's Request for Proposals (RFP) dated July 19, 2016, for the contract named above. The proposer warrants that proposer has carefully reviewed the RFP and that this proposal represents proposer's full response to the requirements described in the RFP. The proposer further warrants that if this proposal is accepted, the proposer will contract with the Reynolds School District, agrees to all terms and conditions found in the attached contract, and will provide all necessary labor, materials, equipment, and other means required to complete the work in accordance with the requirements of the RFP and contract documents.

No proposal will be considered unless the proposer is licensed with the State of Oregon Construction Contractors Board, pursuant to ORS 701.055 (1), prior to submitting a proposal. The proposer hereby acknowledges the requirement to carry or indicates the ability to obtain the insurance required by the contract documents. Indicate in the affirmative by initialing here:

The proposer hereby acknowledges receipt of Addendum Nos. 1 , , , to this RFP. Name of

Proposer: Business Address: Telephone Number: Fax Number: Email Address:

Bremik Construction, Inc.

1026 SE Stark Street Portland, OR 97214

Phone: 503.688.1000 | Fax: 503.688.1005 | Email: mg@bremik.com

Authorized Signature:

Printed/Typed Name: Mike Greenslade

Title: Vice President

Date: August 19, 2016

State of Oregon Construction Contractors Board License No: 160383

Note: Complete and execute this form and include as the first page of the proposal.

Reynolds School District - THE NEW TROUTDALE REPLACEMENT ELEMENTARY SCHOOL Construction Manager/General Contractor (CM/GC) Services RFP

# BREMIK

Bob Collins, Senior Project Manager DAY CPM SERVICES 12745 SW Beaverdam Rd. Suite #120 Beaverton, OR 97005

RE: RFP CM/GC Services – Reynolds School District – New Troutdale Replacement Elementary School

Reynolds School District deserves a CM/GC with school experience, an open communication style, and comprehensive schedule and budget procedures who will work tirelessly to ensure Troutdale Elementary is completed on budget and on time. You need a contractor with big ideas and a long history, sense of pride, and responsibility to the community to build the best elementary school possible. Bremik Construction proudly possesses all of these qualities and is the best choice to build Troutdale Elementary.

**Big Ideas.** We can save you \$500,000 by using a wood framed structure rather than steel and metal framing. We can self-perform the work too, eliminating the risk of competing with other bond projects for limited local labor.

**Reynolds School District Local Knowledge and Commitment.** Founded in Troutdale, Bremik has completed 15 projects in the Gresham/Troutdale/Fairview area. We know the building officials, community leaders, and local subcontractors well. Half of our proposed team and their families live and work in the area. The growth and local engagement of the surrounding community is important to Bremik. While working with the District, Bremik plans to do the following activities to improve the surrounding community:

- Rebuild Imagination Station
- Build "Buddy Benches" to promote inclusion
- Host a meet-and-greet barbecue for project tours and education
- Engage with local subcontractors and encourage their participation on the project

**Budget Confidence.** Our comprehensive estimating process will provide you with the confidence you need to make decisions at every phase of design and construction. We drive value with innovative ideas, consistent results, and a commitment to craftsmanship.

A Partner in Your Community. It is our community too. Bremik will bring the students, staff, subcontractors, suppliers, community leaders, and community partners together to support not only the construction of Troutdale Elementary but its ongoing operation. Bremik and its partners secured over \$60,000 in in-kind donations to our last K-12 project, together we can do even better.

**Never Missed Education Project Schedule.** Unquestionably, school schedules must be met for students to successfully continue their educational journey. Bremik has completed all our school projects on time. The Troutdale Elementary School will be ready for students to start class in September 2018.

**Bremik Owners Involved in Every Project.** Quality and consistency are two of Bremik's core values and our owners ensure these are practiced through involvement in every project. Your Troutdale Elementary School project will have the attention from the very people who founded Bremik Construction.

Bremik Construction is mission driven to be the best contractor in Oregon and we look forward to proving to Reynolds School District and Day CPM we are deserving of the title.

Sincerely,

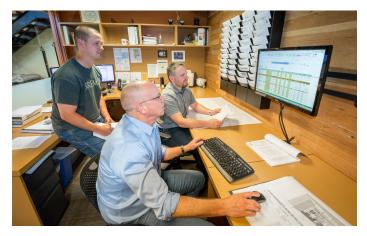
Mike Greenslade, Vice President

#### a. Preconstruction Service Plan

Preconstruction is the most important part of the Troutdale Elementary replacement project. As a contractor it is odd to say the actual building of a school is not the most important element. However, if we do not help the team overcome the challenges of building a new school, immediately adjacent to an existing school, during the school year, on a tight budget, in an extremely busy market, and with little time to spare, our construction efforts will be futile. Bremik Construction brings solutions to these challenges and is prepared to help your team succeed.

Critical elements of the preconstruction process include:

- **Safety** is our priority; we expect everyone to go home safe and free of injury every day. We will work with Reynolds School District's project team to identify efficient construction methods that are safe for students, staff, and our crews.
- Documenting Existing Conditions and cross-checking site conditions against surveys, environmental reports, and design documentation. We will assure you the new school fits the site and can be built adjacent to the existing school.
- Construction Document Coordination that resolves items before they become problems. The goal of coordination efforts is to streamline the construction process by recommending revisions during design. We recommend Bluebeam Studio sessions be implemented to collect all owner, architect, general contractor, and subcontractor markups in one easy to access location. We provide clear, effective, and timely communication of all coordination items.
- Accurate **Budgets** using recent pricing from other projects and subcontractor input specific to Troutdale Elementary. Budgets will be timely and frequent, allowing the team to make sound decisions as design progresses.



- Pricing Volatility must be managed by reaching out to multiple quality subcontractors who will provide 90% of the labor and material for the school. By involving subcontractors early in the process, we are able to provide you with the assurance that local subcontractors are available when needed at a competitive price. Detailed explanations of our cost estimating, cost control, and cost tracking approaches are in the following sections.
- Focusing on **Constructability** early with detailed document review, architect and engineer meetings, and subcontractor involvement. We catalog all constructability comments and track progress through resolution. We will propose efficient and innovative solutions to every item, not just catalog problems for others to resolve.
- True Value Engineering does not come from cutting scope. We promise to do the hard work of cost effective alternates and substitutions that look at short-term costs and long-term operating costs. A detailed explanation of our value engineering ideas and successful case studies follow.
- Providing you with a clear, concise, and realistic **Schedules** detailing the tasks and durations necessary to complete your project on time. If we see problems with schedule goals, we will identify them early and propose solutions because bad news never gets better with time.
- Developing **Phasing, Sequencing, and Site Logistics** plans that ensure the safety of your students and staff and the efficiency of our construction efforts. We know drop-off and pick-up are demanding times on campus, and our plans will clearly indicate how construction efforts will not negatively impact the operation of your school.
- Producing a detailed **Subcontracting Plan** to solicit quality subcontractors from the metro area with an emphasis on reaching local (Reynolds District) and MWESB firms, keeping bond dollars in the local community. Our plan will account for the fact that four other bond projects will be going on at the same time, creating even more demand on local vendors.
- Open book Accounting, Cost Estimating, and Cost Tracking. The team will know the financial status of your project during the entire preconstruction and construction process. Estimates and detailed logs are updated regularly and shared with the entire team, allowing Reynolds to make quick, informed decisions.

#### **Responsible Party**

Ben Carlson will be your principal contact and ultimately responsible for all deliverables. He will be dedicated to your project from preconstruction through project closeout. A detailed deliverables matrix is below.

Service	Responsibility	Deliverables	Team Action		
Existing Conditions	Ben Carlson &	Catalog of annotated photos keyed to	Review and incorporate into		
	Jeremy Symolon	plans	construction documents		
Construction Documentation Coordination	Ben Carlson &	Catalog coordination comments at end	Review and incorporate revisions into		
	Matthew Dalla Corte	of SD, DD, and 50% CD	construction documents		
	Ben Carlson,	Comprehensive SD, DD, and GMP	Review, make decisions based on		
Budget/Estimating	Matthew Dalla Corte,	estimates	budget, incorporate revisions to		
	& Bob Trapa	estimates	construction documents		
Constructability Reviews	Jeremy Symolon &	Catalog comments at end of SD, DD,	Review and incorporate revisions into		
	Mike Greenslade	and 50% CD	construction documents		
Safety	Jeremy Symolon &	Weekly meeting notes	Review and comment		
Juncty	Mike Greenslade	weekly meeting notes			
	Ben Carlson &		Review, make decisions based on		
Value Engineering/Cost Control	Bob Trapa	Catalog, track, and asses options	budget, incorporate revisions to		
	505 11494		construction documents		
	Jeremy Symolon &	Critical path schedule updated			
Schedule	Ben Carlson	monthly, three-week look-ahead	Review and comment		
	Den canson	schedule with weekly meeting minutes			
Phasing, Sequencing, and Site Logistics	Jeremy Symolon &	Comprehensive plans at DD and 50%	Review and comment		
inding, sequencing, and site togistics	Ben Carlson	CD			
Subcontracting Plan/Manage Pricing Volatility	Ben Carlson &	Plan outlining MWESB and local	Review, comment, and assist with		
Subcontracting Flan, Manage Friding Volatility	Mike Greenslade	contractor outreach and selection	outreach		
Accounting	Ben Carlson	RFI, submittal, and change logs	Review, comment, and make decisions		
Accounting		submitted with meeting minutes	based on deliverables		

#### **Successful Preconstruction Experiences**

#### Riverdale Grade School | Portland, OR

The greatest value Bremik brought to the Riverdale Grade School project in preconstruction was cost value analysis. The District was debating whether to keep the existing school and upgrade its functions, or build an entirely new building. By selecting a CM/GC early in the process, the District benefited from Bremik's ability to analyze the existing building, complete a cost value analysis, and determine it was more cost effective to build a new building.



#### Fire Station 76 | Gresham, OR

Bremik joined the Fire Station 76 team early in order to help the client price a wide range of architectural elements they wanted incorporated into their tight budget. Specifically, the client wanted an exposed architectural ceiling in the apparatus bay of the fire station, but initially dismissed the idea because the team thought it wouldn't fit in the budget. Bremik was able to help the design team adjust the ceiling design, as well as reduce costs elsewhere in the project, in order to give the client what they wanted.



#### **b.** Key Issues and Potential Risks

Key issues on the Troutdale Elementary project include:

- **Proximity** of the new building to the old requires special consideration to assure student safety, uninterrupted access, adequate area to efficiently construct the new building, and demolish the old. We recommend erecting an enclosed, scaffold covered walkway along the entire length of the egress path to resolve proximity issues. The plywood enclosure serves as a great canvas for student artwork as well.
- Deliveries can impede school operations if not adequately planned in advance. Student drop-off/ pick-up times are off-limits to vendor deliveries! Our superintendent will coordinate deliveries and major work with school staff weekly to assure field trip buses, half days, and special events are coordinated just as well as everyday activities. We provide professional flagging for all operations that interrupt traffic.
- Storage and Parking area limits are resolved with justin-time deliveries, use of the Harlow and 8th site for miscellaneous storage and parking, and the use of Bremik's warehouse in Troutdale. We don't recommend heavy storage on the Harlow and 8th site as it would increase construction traffic in front of the school.
- Labor Shortages are an unfortunate side effect of a good economy and tight construction market. Further complicating matters, five bond projects will be built with local subcontractors on nearly the same schedule. Bremik's deep, long-term connection with Troutdale give us a distinct advantage is recruiting quality, local vendors to work on the school.
- The importance of **Student Safety** cannot be overstated. Bremik maintains a zero-tolerance policy written into every subcontract that covers everything from inappropriate language, clothing, and behavior, to lack of visible badging and identification, to barrier removal. No one is allowed on site that does not share in the responsibility of keeping your students and staff safe.
- Little time is available for Summer 2018 work. The new school will be ready to move into before the end of the 2017/2018 school year! Further, we will lead planning sessions to coordinate move out prior to demolition.
- **Permitting** can take significant time and resources. Over the years we have built several projects in Troutdale and are currently developing/building 10 townhomes in downtown Troutdale. We have an excellent relationship with Steve Winstead, Troutdale's building official and his staff. We will make the permit process smooth and succinct.





#### c. Sequencing, Phasing, and Site Logistics

Please find a detailed phasing and site logistics plan on the following page.

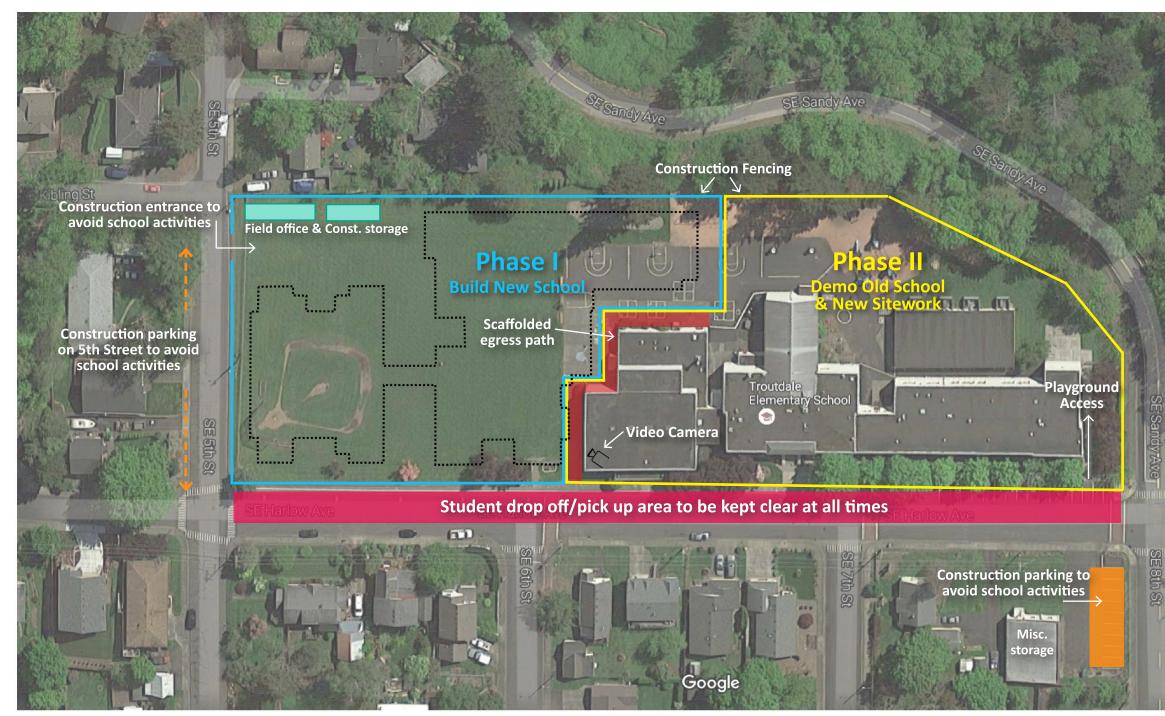
#### d. Managing Fast and Tight Timelines

## Bremik has completed every K-12 project we have undertaken on time, or early.

There is ample time allotted for the construction of the new school. In fact, we recommend not starting the new school until May 1st, **saving costs associated with winter earthwork and general conditions** while allowing the bond projects to have more distinct schedules. With more emphasis on preconstruction, Bremik will develop a comprehensive master project schedule, from CM/ GC selection through final completion. Key milestones, approvals, design iterations, deliverables, and estimates will be identified, tracked, and resolved based on importance.

The additional preconstruction time will give the team additional time to secure subcontractors and materials for the project further assuring a smooth construction period.

## 3.2.2.1 Management of the Work





#### Sequencing, Phasing, and Site Logistics

Utilizing Bluebeam studio sessions, we will collaborate with you and your team to refine plans for construction efficiency and optimizing ongoing operations.

Our preliminary plan includes:

- Single entry point
- Limits interference with school operations
- Increases security
- Controls site entry
- Increases safety
- Construction fencing around the entire site

   Secures the site and prevents theft
  - Clearly delineates between the site and school
- Increases safety
- Video camera
- Located to provide live coverage of construction progress
- Deters theft
- Creates time-lapse archive of construction
- Scaffolded egress path
  - Enclosed for ultimate student safety
- Enclosure serves as canvas for student art
- Provides protection during Phase II demolition
- Field offices and storage
- Away from the school entry
- Reduces conflict between operations and construction
- Sufficient area when combined with justin-time delivery method
- Construction parking in the Harlow and 8th lot. We will not store large amounts of material here as it would cause unnecessary traffic in front of the school
- Harlow will be kept clear to allow for safe student drop off/pick up
- Clear, unimpeded access to the play areas

#### e. Team Communications/Relationships

Bremik has established a good relationship on the Secure Entrances project with the District, Day CPM, building officials, and the design team and will continue to foster open and productive communication on the Troutdale Elementary project. We treat all stakeholders with respect and believe every team member has a voice in the successful completion of the school.

Monthly newsletters are an important part of our communication with the school community and general public. A typical newsletter will summarize the work completed in the past month, outline the next month's

work, highlight important milestones, and acknowledge the hard work of our team members through employee spotlights. A sample of a recent newsletter completed by Jeremy Symolon on Fire Station 76 is shown below. We anticipate producing something similar for Troutdale Elementary.

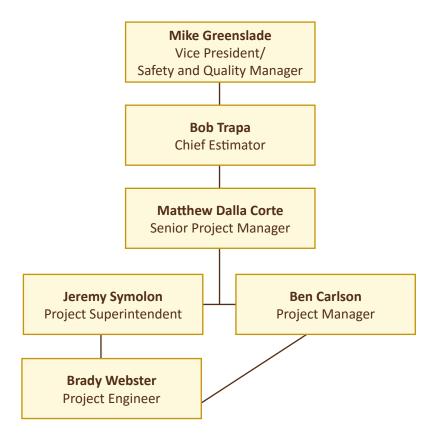
Please see the Local Conditions/MWESB section for detailed information on communication in support of the Local and Diverse Community Engagement Program.



#### BREMIK CONSTRUCTION, INC. Fire Station #76 - Newsletter Gresham fire fighters showing the students of East Orient Elementary School the fire engine used at station 76. East Orient Ele The new Fire Station 76 is made up of two halves; the living quarters and the apparatus bay. The living quarters is the house for the fire fighters and has four bedrooms, a kitchen, bathrooms and a living room The apparatus bay is the garage where the fire fighters keep their fire trucks, fire engines, turnouts and other equipment. Turnouts are the coats, pants, boots, helmets and other safety equipment that the fire fighters wear to keep themselves safe while they are fighting fires Above is a photo of a boom truck taking the trusses off of the trailer and setting them on . vails of the living qu Bremik CONSTRUCTION 1026 SE Stark Street | Portland, Oregon 97214 | P: 503.688.1000 F: 503.688.1005

"Working with Bremik Construction on our award winning Fire Station 76 project was the finest building experience in my 42 years of construction and development. Their professionalism and expertise are unmatched. The keys to Bremik's success are their people, the company's high standards and their commitment to excellence. This company, in my opinion, has no equal in the industry." - Mike McKeel, Owners Rep

#### a. Project Organizational Chart



#### b. Staff Utilization

	Preconstruction % per week	Construction % per week
Mike Greenslade	5% Office	10% Office
Bob Trapa	10% Office	10% Office
Matthew Dalla Corte	10% Office	10% Office
Ben Carlson	40% Office	40% 40% Office Field
Jeremy Symolon	0%	100% Field
Brady Webster	5% Office	100% Field

Mike Greenslade, Vice President/Safety and Quality Manager - Safety and quality are top priorities on every Bremik project. Mike will work with the team to provide smart and efficient scheduling, site logistics, and quality control, as well as ensuring our crew runs a clean, safe, and well-organized jobsite. He will also be involved in the overall project execution strategy, client satisfaction, risk management, and will serve as the project executive.

Bob Trapa, Chief Estimator - Bob will be involved during preconstruction to make sure this project is within budget. During construction, he will work with Matthew and Ben to continue the search for efficient, cost effective construction solutions.

#### Matthew Dalla Corte, Senior Project Manager

- Matthew will serve as an advisor to all parties, attend all weekly meetings, assist with community outreach and stay with the project throughout its duration.

Ben Carlson, Project Manager - Ben will team with Bob to successfully fulfill Bremik's planning, estimating, and cost control responsibilities during preconstruction. During construction, Ben will lead our project management efforts including ongoing cost control, client and design consultant satisfaction, and weekly meetings.

Jeremy Symolon, Project Superintendent -As the onsite team leader, Jeremy will supervise the day-to-day construction of Troutdale Elementary. Jeremy will work with subcontractors and suppliers to create and refine the project schedule, create detailed site logistic plans, and conduct comprehensive existing conditions and constructability reviews.

Brady Webster, Project Engineer - Brady will be the onsite lead for document control, writing RFI's, processing submittals and assisting Jeremy with all daily activities.



MIKE GREENSLADE Vice President/ Safety & Quality Control Manager

#### **Education**

Associates, Construction Technology Mt. Hood Community College

#### Years in the industry

35 years

#### Years at Bremik

12 (Co-founder)

#### Additional Projects > \$15 Million

- Canopy Hotel: \$30 M
- White Stag Block: \$22 M
- 14th & Raleigh Apts.: \$21 M
- Quimby Apartments: \$16 M
- RH Gallery: \$15 M

Mike is known for rolling up his sleeves and showing you how it's done. His 35 plus years of experience in building commercial construction projects makes him uniquely qualified to manage the field operations of Bremik Construction, the company he proudly co-founded with Brent Parry. He brings a down-to-earth, honest attitude to all of his projects. Mike is actively involved in the early stages of all Bremik projects, providing valuable constructability and schedule review, and stays thoroughly engaged until project completion.

"As a community member I am very excited for the opportunity to be involved in building a new elementary School for our kids. Our schools are the fabric of our community. I see this as a way to give back to something that will stand for the next 100 years."

#### **Relevant Experience**

#### Reynolds School District Secure Vestibules | Fairview, OR

Security upgrades to entry vestibules at 13 schools in Reynolds School District. The phased projects will be completed between 2016-2018.

**Cost (estimated):** \$5,800,000 | **Duration:** July 2016 - August 2017 **Client Contact:** DAY CPM, Bob Collins, Owner's Rep 503.641.4100

#### Riverdale Grade School | Portland, OR

The project replaced the existing school with a new LEED Gold 51,000 sf twostory steel structure with 24 classrooms, media center, and administrative offices, and a new 4,000 sf multi-purpose facility.

Cost: \$16,600,000 | Duration: June 2009 - August 2010 Client Contact: Riverdale School District, Nancy Hubbard, Owner's Rep 503.819.7505

#### Floyd Light Middle School | Portland, OR

A 10,000 sf addition and 40,000 sf renovation project completed in five months, providing much needed classroom and administrative space for the occupied school.

**Cost:** \$3,900,000 | **Duration:** March 2009 - August 2009 **Client Contact:** David Douglas School District, Janice Essenberg, 503.614.1428 (currently with NW Regional ESD)

#### Ron Russell Middle School | Portland, OR

A two-story classroom addition and remodel project was completed in just six months on the occupied school campus.

Cost: \$2,400,000 | Duration: February 2009 - August 2009

**Client Contact:** David Douglas School District, Janice Essenberg, 503.614.1428 (currently with NW Regional ESD)

#### Gresham High School Addition | Gresham, OR

A two-story addition to the occupied school including classrooms, a library, gymnasium, multi-purpose space, and renovations to the existing campus. A new turf field, practice fields, and football stadium renovation were incorporated into the project without extension to the schedule.

#### Cost: \$8,500,000 | Duration: July 2001- August 2002

Client Contact: Gresham Barlow School District, Terry Taylor, 503.667.6497



BOB TRAPA Chief Estimator

#### **Education**

Bachelor of Science, Construction Engineering Technology Montana State University

**OSHA 10 Certified** 

#### Years in the industry

31 years

#### Years at Bremik

8 years

#### Additional Projects > \$15 Million

- The Strand Condominiums: \$94 M
- Riva on the Park Apartments: \$61 M
- Green Valley High School: \$52 M
- New Holly Park Apartments: \$48 M
- Canopy Hotel: \$30 M
- Walter Johnson Middle School: \$27 M
- Rolling Hills Community Church: \$23 M
- 14th & Raleigh Apts.: \$21 M
- Sun Microsystems Facility: \$16 M
- Quimby Apartments: \$16 M
- RH Gallery: \$15 M

Bob joined Bremik in 2008 and brings over 30 years of experience in the construction industry including 17 years as an estimator. He has managed and estimated some of the Northwest's most challenging projects. His acute knowledge of production, building systems, costs, and constructability analysis stem from his experience as a carpenter, layout foreman and field engineer on large public projects throughout the Western United States. His diehard work ethic and sharp, photographic mind produce extremely accurate and detailed estimates.

"Good schools are the strength of a community. As a resident of East County and the spouse of an elementary school teacher, I'm delighted to see this school project is moving forward."

#### **Relevant Experience**

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MATTHEW DALLA CORTE Senior Project Manager

#### **Education**

Masters in Architecture, Architecture University of Oregon

Bachelor of Science, Arts University of Oregon

#### Years in the industry

17 years

#### Years at Bremik

7 years

#### Additional Projects > \$15 Million

- Eddyline Bridgeport: \$53 M
- Modera Pearl: \$50 M
- Modera Belmont: \$28 M
- Modera Goose Hollow: \$25 M
- Specht 306: \$24 M
- The Cordelia: \$24 M
- Savier Street Flats: \$23 M
- White Stag Block: \$22 M
- RH Gallery: \$15 M

Having worked as an architect, developer, and contractor, Matthew brings 17 years of industry knowledge and insight to Bremik. His ability to analyze projects from different perspectives enables him to provide solutions to problems others may not have thought of. His background makes him uniquely suited to lead preconstruction teams and provide mentorship throughout the project, setting up projects for success from the start. His passion for quality construction shows in his projects and the many professional relationships he has forged over the years.

"My wife, a 5th grade teacher, and my school-age children are always envious of the beautiful schools I am lucky enough to build for a living."

#### **RELEVANT EXPERIENCE**

#### Riverdale Grade School | Portland, OR

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#### Tigard High School, Multiple Projects | Tigard, OR

Multiple projects completed at the occupied high school, including exterior facade replacements to the foreign language wing, art center and performing arts auditorium, as well as interior upgrades. During construction, a concurrent remodel of the aquatic center was added to the scope.

**Total Cost:** \$1,470,000 | **Duration:** 2006 - 2007

Client Contact: Tigard Tualatin School District, Philip Wentz, 503.431.4017

#### Silverton High School | Silverton, OR

A replacement of the exterior facade to remedy chronic water infiltration problems at the rural high school. The District chose to include a concurrent renovation of the courtyard commons.

Cost: \$980,000 | Duration: June 2010 - August 2010 Client Contact: Silver Falls School District, Doug Wiser, 503.351.5778



BEN CARLSON LEED AP Project Manager

#### **Education**

Bachelor of Architecture, Minor in Historic Preservation University of Oregon

**OSHA 10** Certified

Years in the industry

12 years

Years at Bremik 9 years Ben has been with Bremik since 2007 and brings a knowledgeable and honest approach to every project he works on. His breadth of CM/GC project experience has made him a leader of Bremik's project teams. Clients appreciate his strong attention to detail and efficient work ethic. Ben is a LEED Accredited Professional with a strong commitment to incorporating smart sustainability into every project.

"With two young children of my own, I treat every project as if it were for them – taking pride in the construction and the utmost attention to safety."

#### **Relevant Experience**

#### Lewis & Clark College, Multiple Projects | Portland, OR

Bremik continually works with the college to add and update multiple campus buildings. Projects include residence hall renovations, a new 1,300 sf career center, and remodels to multiple labs on campus.

**Cost:** \$1,700,000 | **Duration:** May 2015 - Present

Client Contact: Lewis and Clark College, Michel George, 503.768.7979

#### Washington High School | Portland, OR

A renovation to the iconic 116,000 sf historic high school, transforming the space into creative office and retail, with a world class 800-seat entertainment venue.

**Cost:** \$12,200,000 | **Duration:** October 2013 - January 2015 **Client Contact:** Venerable Properties, Craig Kelly, 503.224.2446

#### Lyon Court | Portland, OR

A new 7,500 sf one-story office building with a brick façade and historic features to resemble an older Portland building.

**Cost:** \$1,500,000 | **Duration:** July 2014 - April 2015 **Client Contact:** H. Wagner LLC, Joe Squires, 503.252.1609

#### Boones Landing Medical Office Building | Wilsonville, OR

A new two-story medical office building with two contrasting Cascadian Architecture facades was constructed to complement the City of Wilsonville's downtown redevelopment design standard.

Cost: \$2,500,000 | Duration: April 2012 - September 2012 Client Contact: BF2H Properties, LLC, Pat Hanlin, 503.407.8957

#### Smith Block | Portland, OR

A Green Rated historic renovation combining three unreinforced masonry heavy timber buildings into one corporate office and café.

Cost: \$7,400,000 | Duration: September 2007 - September 2008 Client Contact: RV Kuhns & Associates, Scott Gratsinger, 503.221.4200



JEREMY SYMOLON LEED GREEN ASSOC. Project Superintendent

#### Education

Oregon Carpentry Apprenticeship Program

**OSHA 30 Certified** 

Years in the industry 20 years

Years at Bremik 3 years Jeremy has been in the construction industry for over 15 years and has worked his way up from a carpenter to project superintendent. After working for two well-known general contractors in Oregon, he joined the Bremik team with a breadth of experience ranging from historic renovations to K-12 education facilities. Jeremy takes a hands-on approach with his projects, double checking the quality at the end each work day. With his keen organizational skills and strong attention to detail, projects run smoothly under his supervision.

"Having the chance to build a fantastic school for the community I live in would be such an honor to me. I find tremendous joy in being able to create something that I know will benefit our youth for generations to come."

#### **RELEVANT EXPERIENCE**

#### Otto Petersen Elementary School | Scappoose, OR

A 69,000 sf new LEED Gold elementary school located on a four-acre, fully developed site. Sustainable features include half of the interior finishes utilizing recycled materials, rain gardens on the site, and a green roof.

Cost: \$15,000,000 | Duration: June 2009 - July 2010

**Client Contact:** Cornerstone Management Group, Rick Yeo, Owner's Rep, 503.487.7445

#### Neah-Kah-Nie Middle and High School | Rockaway Beach, OR

A 37,000 sf new middle school and concurrent remodel of the existing occupied high school during one of Oregon's stormiest winters on record.

Cost: \$13,000,000 | Duration: June 2005 - September 2006 Client Contact: Neah-Kah-Nie School District, 503.355.3501

#### Evergreen Middle School | Hillsboro, OR

A new concrete tilt-up addition to house the school's administration offices and four new classrooms. A major HVAC system upgrade was completed in less than three months over the summer.

Cost: \$6,000,000 | Duration: July 2007 - March 2008 Client Contact: Hillsboro School District, John Abel, Owner's Rep, 503.694.8657

#### Poynter Middle School | Hillsboro, OR

A 14,000 sf addition and remodel for the growing school. Work included an eight classroom concrete tilt-up addition, a complete upgrade of the existing occupied school, and two new parking lots.

Cost: \$8,000,000 | Duration: June 2008- March 2009 Client Contact: Hillsboro School District, John Abel, Owner's Rep, 503.694.8657

#### Fire Station 76 | Gresham, OR

A new Multnomah County fire station including a 5,000 sf apparatus bay and 5,000 sf of office, dayroom, bunk, and fitness area.

**Cost:** \$3,900,000 | **Duration:** August 2014 - June 2015 **Client Contact:** Multnomah Rural Fire Protection District #10, Mike McKeel, Owner's Rep, 503.665.1887



BRADY WEBSTER LEED GREEN ASSOCIATE Project Engineer

#### **Education**

Bachelor of Science, Construction Engineering Management, Minor in Business & Entrepreneurship Oregon State University

**OSHA 30 Certified** 

#### Years in the industry

2 years

Years at Bremik

1 year

After interning with Bremik during the 2014 summer months, Bremik quickly offered Brady the opportunity to join our growing team. He is a fast-learner with a can-do attitude and stays very organized throughout every project. Brady has strong interpersonal skills and ensures quality control and safety to be a top priority for all who enter his jobsites.

"A new school that is built to last fosters educational opportunities for generations to come. I want to be a part of the team that gives this opportunity to my future kids, their kids, and their kid's kids. That is what Troutdale Elementary is all about."

#### **RELEVANT EXPERIENCE**

#### 11 Marché Apartments | Portland, OR

A new 53,000 sf sustainably designed apartment complex adjacent to Portland State University and located along the Portland Streetcar. The French inspired six-story building features 62 units and a ground floor parking garage.

Cost: \$10,200,000 | Duration: February 2015 - April 2016

Client Contact: Willamette Valley Company, Paul Rudinsky, 541.484.9621

#### The Cameron Apartments | Portland, OR

An eight-story steel and concrete structure centrally located in the cultural/ university district on the street car line, with 83 market-rate apartment units.

Cost: \$12,700,000 | Duration: October 2014 - January 2016 Client Contact: Summit Real Estate Management, Mike McKenna, 503.223.7666

#### Burnside 26 Apartments | Portland, OR

A four-story, 135 unit wood frame mixed-use market-rate apartment complex over underground parking.

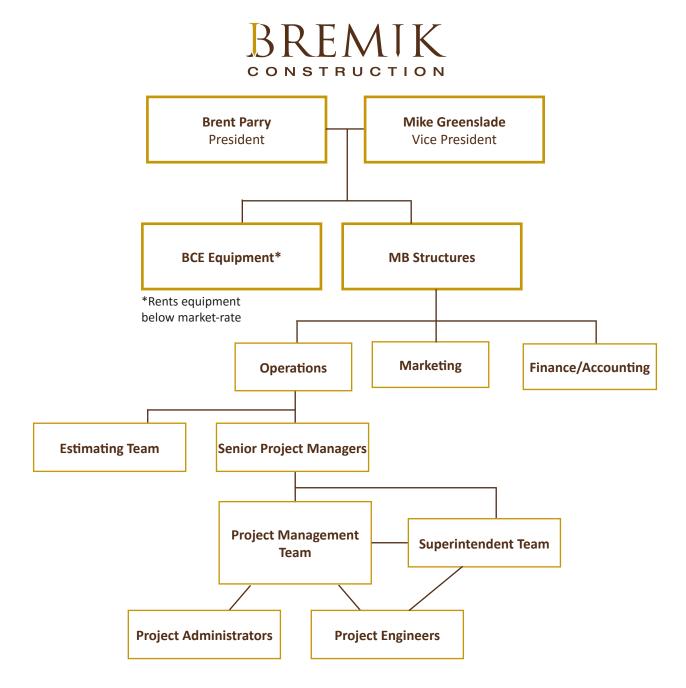
**Cost:** \$14,370,000 | **Duration:** June 2013 - August 2014 **Client Contact:** Capstone Partners, Chris Nelson, 503.226.1972

#### PGE Sullivan Powerhouse Upgrade | West Linn, OR

A seismic upgrade of the historic T.W. Sullivan Powerhouse building, located directly along the Willamette River. Construction is expected to finish in early 2017.

**Cost:** \$2,900,000 | **Duration:** April 2016 - December 2016 **Client Contact:** Portland General Electric, Mark Dion, 503.464.7469

#### d. Company Organizational Chart



#### Benefits to selecting the Bremik team:

- A majority of our team, carpenters, and crew have already completed background checks and received their required security badges.
- Several of our office personnel are trained on the District's file sharing service, SKYSITE, and can easily train Ben and Jeremy on how to use the site.
- Bremik knows and is currently working with Troutdale's building department on other projects.
- Bremik has a reputation for being very transparent, and will be open and honest with you throughout the life of the project.

#### a. Cost Estimating & Value Engineering

#### Estimates

Bremik estimates are clear, open book, reliable, and accurate. We take great pride in our ability to produce early conceptual and schematic estimates that are used to inform the design process, design development estimates that confirm good design and planning decisions, and solid final estimates that cover any holes or gaps to avoid change orders during construction. A general flow of Bremik's estimating process includes:

Conceptual Budget	Bremik develops timely conceptual budgets, allowing you to evaluate the feasibility of a project before committing significant resources. Our conceptual budgets are accurate and provide a list of options to help you balance costs with desires and requirements. Often based on napkin sketches, our team is skilled at converting scribbles and aspirations into informative, detail-rich conceptual budgets.
Schematic Design Estimate	Bremik will develop a detailed and comprehensive in-house estimate based upon our knowledge and historical cost data from similar housing projects. Assumptions will be clearly defined and a list of cost saving, value adds, and value engineering recommendations will be included.
Design Development	A detailed and comparative (to SD estimate) estimate utilizing both in-house estimating for all categories and at least one subcontractor in each major trade will be presented and reviewed along with a refined assumptions, cost saving, value engineering, and alternates decision matrix.
Estimate 50% CD Estimate	A detailed and comparative (to DD estimate) estimate utilizing both in-house estimating for all categories and multiple subcontractors in each trade will be presented and reviewed along with further refined assumptions, cost saving, value engineering, and alternates decision matrix.
Final Construction Document Estimate	Prior to issuance, Bremik will develop strong subcontractor and supplier interest. All direct work, including those categories Bremik may self- perform, will be competitively bid, analyzed, and vetted by our project team before presenting and reviewing the bids with the project team where we will make recommendations, strategize on alternates, and determine final cost control measures.

"All Saints School was indeed fortunate to have Bremik Construction do our classroom addition. We have received many compliments on the fine workmanship and the outstanding quality of the construction. Our classroom addition is a testament to Bremik's attention to detail and caring about customer satisfaction."

-Rose Rosinski, Principal, All Saints School

#### **Value Engineering**

Small, incremental changes are important, and we will offer tons of ideas throughout the design process to save \$5,000 here or \$20,000 there. But sometimes it takes a big swing for the fences to make a project really special. For Troutdale Elementary Bremik proposes:

• A wood framed structure that will save ±\$500,000 over a comparable steel/light gauge metal framed building. Wood is a renewable resource, it is beautiful when exposed, long-lasting, supports our regional economy, it's code compliant, compatible with Tremco built-up roofing systems, and energy efficient. Additionally, Troutdale Elementary will not be competing with other bond projects for steel fabricators and erectors. Bremik can self-perform the framing with our own forces further limiting the project's exposure to labor shortages. It will not lengthen the schedule or limit design options for large areas like the gym and commons. See Appendix C for an independent Case Study on the benefits of wood framing in schools.

Additional cost saving options include:

- Start construction May 1st: This will save the district ±\$100,000 associated with winter earthwork and general conditions, allow ample time to complete the new school, and reduce the possibility of competing for local labor sources with other bond projects.
- Reusing soft play equipment: We saved the Riverdale School District over \$50,000 by carefully removing and reinstalling their soft play equipment.
- Fill over the existing basement structure to reduce risk associated with unknown conditions and reduce demolition costs.

Regardless of the costs saving options ultimately chosen, Bremik promises never to cut program, compromise the integrity of the building design, or the quality of the exterior envelope as a cost saving option.

## Bremik has saved our clients over \$18 Million in the past 5 years



#### Riverdale Grade School - \$1.3 Million Savings

Riverdale School District's bond was passed without a multi-purpose room included in the programming. During preconstruction, the steering committee identified a desire to include this vital community space. We incorporated the 4,000 sf multi-purpose room in the project without a reduction in program or space by value engineering \$1.3 million out of the scope through simple steps like using only one brand of plumbing fixtures to improve buying power and changing the roof trusses from steel to wood.



**Virginia Garcia Wellness Center - \$2.5 Million Savings** Through the CM/GC process, Bremik was able to come onto the project early and provide exceptional value for Virginia Garcia Memorial Health. Working with a tight budget, the Bremik team helped prioritize the project requirements, objectives and milestones enabling the project to move forward toward a fixed completion date imposed by the federal grant. Over \$2.5 million was valued engineered from the cost of the project.

"Bremik was an outstanding partner in this project. I couldn't have selected a better contractor!"

- Gil Muñoz, CEO, Virginia Garcia Memorial Health

#### b. Managing and Tracking Cost of Work

Quite simply, we treat your money as if it were our own; we spend it wisely and always look for the best value. Our interim cost estimates and value engineering log are key to aiding the project team in meeting the budget the first time. The detailed and open book estimates allow the team to understand where costs originate and make informed adjustments. We never cut scope or recommend cheap, inferior materials. We understand durable systems and finishes produce long-term savings that far outweigh the initial cost savings of cheaper products.

Bremik will keep you and the entire project team appraised of the project costs through the following tracking tools:

- **RFI Log** (request for information log) reviewed and updated weekly
- Change Request/Owner's Budget Log reviewed weekly
- Project Schedule reviewed weekly
- Job Cost Projections reviewed monthly you will know the exact status of the budget every month

Any potential budget issues are immediately discussed and communicated with the project team. We work together to solve the problem that will have the least amount of impact on the project.

#### c. Contingency Funds

Bremik will carry an estimating contingency during preconstruction, we recommend Reynolds carry a contingency outside of the GMP during construction. We will recommend a contingency percentage based on the completeness of the GMP Construction Documents at the time of bidding. Typically 5% - 10% is sufficient contingency for new construction projects.

#### d. GMP

Bremik documents line items included in the GMP in a detailed summary estimate. We determine whether a project change is inside the scope of the GMP based on the contract documents, contract allowances, and our clarifications and exclusions. Every effort is made to fill holes in the Scope of Work; however, if a Scope of Work is not included in the documents or added via an allowance or clarification we consider the item outside the GMP.

"In the spring of 2007, the district discovered the need for emergency repairs at a middle school totaling nearly \$1 million. Bremik did an outstanding job of helping the district determine a prioritized list of needs, providing a schedule that would cause minimal disruption to the educational process in the fall. Brent Parry and Mike Greenslade took special care and attention in maintaining an extremely tight timeline to open school as scheduled in September, as well as ensuring a safe environment for staff during the summer. In the end, Bremik delivered the project on time and under budget. I found their "common sense" approach to the construction process refreshing. I would not hesitate to recommend Bremik for your construction needs."

> -Michael D. Schofield, Chief Financial Officer, Gresham-Barlow School District



#### Riverdale Grade School | Portland, OR

The CM/GC project replaced the existing school with a new LEED Gold 51,000 sf twostory steel structure with 24 classrooms, media center, and administrative offices, and new 4,000 sf multi-purpose facility. The design honors the original school with a masonry and precast exterior while providing state of the art efficiency and sustainable building elements with which to educate the children on green building practices. After value engineering \$1.3 million in savings, Bremik issued three separate bid packages to allow site work to commence in July on the sensitive site to ensure an early completion in August.

Client/Owner's Rep Riverdale School District Nancy Hubbard, Owners Rep 503.819.7505 **Completion Date** 2010

Change Order Amount \$600,000

**Contract GMP** \$16,600,000 \*\$500,000 owner added scope "We do not believe we could have found a better team of contractors to work with through this volatile preconstruction phase. The Bremik team has been outstanding throughout and has definitely made a valuable contribution to all."

> - Terry Hoagland Riverdale Grade School



#### Floyd Light & Ron Russell Middle Schools | Portland, OR

Bremik Construction was selected by David Douglas School District as the CM/ GC for both schools under one contract. **Floyd Light:** The 10,000 sf addition and 40,000 sf renovation project was completed in five months while incorporating over \$1,500,000 of added renovation scope to the project. The addition provided much needed classroom and administrative space for the school and upgraded the entire existing sprinkler, lighting and ceiling systems in the existing occupied school.

**Ron Russell:** The 12,000 sf two-story addition and remodel project was completed in six months on the occupied school campus. The addition is a steel framed structure with brick, metal panels and storefront facade. Bremik saved the District \$80,000 with early value engineering.

"Bremik agreed to a very challenging construction schedule for the Floyd Light and Ron Russell projects and they exceeded our expectations."

- Janice Essenberg & Paul Arzt David Douglas School District

#### **Client/Owner's Rep**

David Douglas School District Janice Essenberg (currently with NW Regional ESD) 503.614.1428 Completion Date 2009

**Total Contract GMP** \$6,330,000 Change Order Amount

Floyd Light: \$200,000 due to owner added scope Ron Russell: (\$80,000)



#### Dufur School | Dufur, OR

Bremik teamed with Rommel Architectural to add five classrooms, a vocational education facility, and new cafeteria and kitchen for the rural K-12 school district. The new wood frame addition is 12,000 sf and showcases sustainable features. The bonds developed have resulted in Bremik's project team announcing athletic football games, sponsoring benefits, and some cherished annual reunions.

Client/Owner's Rep Dufur School District Jack Henderson 541.467.2509 Completion Date 2009 Contract GMP

\$3,500,000

Change Order Amount \$200,000 due to owner added scope



#### **Reynolds Middle School Gymnasium | Fairview, OR**

Reynolds Middle School north gymnasium is currently undergoing a seismic upgrade to structurally prepare for major earthquakes. Funded by Oregon's Seismic Rehabilitation Grant Program, the rehabilitation includes upgrades to the existing wood roof structure and adding a new roof.

Client/Owner's Rep Reynolds School District DAY CPM, Owner's Rep Bob Collins 503.641.4100 **Completion Date** 2016

Contract GMP \$325,000





#### **Reynolds School District Secure Vestibules | Fairview, OR**

Security upgrades to entry vestibules at 13 schools in Reynolds School District. The phased projects will be completed between 2016-2018.

#### Client/Owner's Rep

Reynolds School District DAY CPM, Owner's Rep Bob Collins 503.641.4100 Completion Date 2017 or 2018 (TBD)

**Contract GMP** \$5,800,000





#### **Additional Education Projects**

- All Saints School
- Clear Creek Middle School
- Gresham High School PE Facility
- Gresham High School Turf Field
- Lewis & Clark Career Center
- Lewis & Clark Chem Lab Remodel
- Lewis & Clark Photography Lab Remodel
- Lewis and Clark Residence Halls Remodel
- Ron Russell Middle School
- Sam Barlow High School Turf Field
- Silverton High School
- Tigard High School
- Tigard Tualatin School District Online Academy
- University of Portland Pilot
   House

#### Recent Ground Up Projects

- 11 Marché Apartments
- Cameron Apartments
- Burnside 26 Apartments
- Central Eastside Lofts
- SEKO Logistics
- Division Street Development
- Lower Burnside Lofts
- Lyon Court Office Building
- Boones Landing Medical Office Building
- Brooklyn Yard Professional Center
- Multnomah Village Apartments (Under Construction)
- Canopy Hotel (Under Construction)

#### a. Schedule Management

The project schedule will be refined throughout construction based on in-depth three-week look ahead schedules developed during weekly subcontractor meetings. We continually update and refine the project schedule and promptly communicate any changes to the entire project team.

We have attached a preliminary schedule in Appendix A. We recommend starting construction May 1, rather than March 16, to receive the following benefits:

- Earthwork occurs outside of wet weather season. •
- It allows us more time to procure materials and • labor, and gives the design team another month to finish documents and procure permits.
- Completing the new school in June gives faculty ٠ and staff ample time to move in prior to students arriving.
- Completing the new school in June provides a place • to put items from the old school prior to demolition.
- A later start is a more efficient use of resources and ٠ does not impact final completion.

We will use pull planning to minimize downtime, increase efficiency, and reduce cost. Pull planning is a collaborative scheduling approach where materials are delivered when needed and work is ready when materials are delivered. When initiated early, and with design team input, pull planning can significantly increase construction efficiency, reduce costs, and increase quality. It shows where each trade will be each day for better communication and planning.

#### **b.** Labor and Materials

We foresee no significant shortages of labor and materials for your project. While the subcontractor market is becoming more competitive as a whole, with proper planning and good communication, subcontractors will want to bid on Reynolds work.

Bremik will reach out to quality subcontractors during preconstruction to generate interest in Troutdale Elementary. We will solicit proposals from local subcontractors and suppliers and will add local carpenters and laborers to our crews for self-performed work. Prebid job walks for subcontractors and suppliers will be held early in the subcontractor bid process to allow MWESB and local, perhaps smaller firms ample time to prepare bids. Our comprehensive instructions to bidders will assist smaller local contractors in understanding how to bid the project and ensure complete scopes of work.



**Reynolds Middle School Gym Outreach Event** 



Pull planning for Reynolds Middle School Gym Upgrade

"I am pleased to recommend Bremik Construction for any school project. Throughout our construction project, I found the staff at Bremik to be trustworthy, capable, responsive and personable, keeping me apprised of each stage of the project, answered my questions, and made necessary accommodations. I valued their integrity, high standards and partnership. I recommend their work, and work ethic, without reservation."

-Pam Henslee, Principal, Tigard High School

#### c. Opportunities and Challenges for Efficiency

Bremik self-preforms concrete, wood framing, siding, window installation, and doors and hardware installation. This allows us control of the process, increases quality, and decreases inefficiencies associated with elaborate third-party coordination and planning. Your project will be completed faster and with more certainty.

Starting earthwork in the summer months eliminates the challenge of wet weather work and cost associated with temporary roads and dewatering.

Bremik's warehouse is conveniently located in Troutdale, just a six minute drive from Troutdale Elementary, giving us the option to store or prefabricate materials locally.

#### d. Quality Control

Bremik Construction is proud of the reputation we have earned as a quality contractor. Our vice president, Mike Greenslade, will work closely with superintendent, Jeremy Symolon, and the crews to ensure quality.

The following quality initiatives will be applied to the Reynolds School District Troutdale Elementary project:

- Open communication during preconstruction to understand the project team's expectations and standards
- Thorough audits of interim and final construction documents
- Comprehensive instructions to bidders to clearly communicate our standards of quality
- Detailed and binding subcontracts
- Preinstallation meetings with subcontractor foremen to review scopes of work and quality standards
- Weekly quality assurance/quality control (QA/QC) walks





QA/QC walk through Washington High School



"Bremik Construction has proved to be a real solution provider to us at Gresham-Barlow School District. They bring vast experience in working on educational construction projects. It was a very positive start for the customer/contractor relationship and led to the successful completion of key projects in my first year with GBSD."

> - Terry Taylor, Director of Facilities Gresham-Barlow School District Gresham High School PE Facility

#### e. Bremik's Safety Program

Bremik has a robust safety program with multiple training opportunities, activities, and protocol in place to promote safety and wellness at work.

- All Bremik superintendents and project engineers have successfully completed OSHA 30 training and CPR/First Aid/AED training.
- Bremik requires Personal Protective Equipment (PPE) hard hats, eye protection, high visibility clothing, and work boots for all personnel and subcontractors on all jobsites.
- All superintendents meet bi-weekly with operations to collaborate on safety standards and lessons learned. The constant communication ensures a culture of safety is consistently maintained across all jobsites.
- Superintendent, project manager and safety director develop a site specific safety plan for each project to control and mitigate hazards before commencement.
- All superintendents lead a weekly onsite safety meeting with all trades whereby job conditions, hazards, and safety concerns are discussed. Each subcontractor's weekly JHA (Job Hazard Analysis form) is reviewed and implemented.
- All field personnel (superintendents, project engineers, carpenters, laborers) are trained in safe driving, ergonomics, fall protection, fire prevention, forklift/ scissor/boom lift use, hazardous communication, lead and asbestos awareness, personal protective equipment, power actuated tools, respirator use, and silica awareness according to their relevant project conditions and risk assessment.
- Safety protocols and training curriculum are centrally managed on our server providing access to all personnel.
- A "near miss" tracking system records and reports accident potentials to all superintendents through a monthly report from our safety committee.
- Over half of the superintendents have been ICRA (Infection Control Risk Assessment) certified/trained.
- Safety Director, Jake Bishop, completes weekly informal safety inspections to ensure field crew are following all safety policies and procedures. Jake also completes formal jobsite audits on a monthly basis which are documented as well.

We are very proud of the culture of safety Bremik has developed in the past five years and are pleased to be honored by our industry's highest safety awards.

- 2015 AGC ROSE Safety Award
- 2011, 2012, 2013, 2014, and 2015 AGC Pride Safety Award
- 2013 Oregon Governor's Safety and Health (GOSH) Award
- SAIF Corporation has placed Bremik Construction in their elite Ultra-Preferred rate classification due to our outstanding safety program



#### **Disciplinary Program**

Bremik works with the carpenters' union and adheres to the employment disciplinary agreements they have established.

EMR		
2015-2016	.82	
2014-2015:	.83	
2013-2014:	.93	

SAIF projects an EMR rate of 0.68 for Bremik Construction in 2016



CPR/First Aid/AED Training

#### a. Local Market

**Bremik was founded in Troutdale in 2004.** While our office is now in Portland, our founders still reside in and have strong connections to the area. We complete several projects annually within Reynolds School District boundaries, currently we are building 10 townhomes in downtown Troutdale. With over 35 years of experience and knowledge in the local market, Bremik will rely heavily on longstanding relationships with area officials, business leaders, community members, and subcontractors to put your bond dollars back into the community you serve.

Our current District project employs the following local subcontractors:

- Eagle Striping Fairview
- Pioneer Sheetmetal Fairview
- H2 Wall Systems Fairview
- JW Underground Gresham
- Gunderson NE Portland
- Rose City Rebar NE Portland
- Northstar Industries NE Portland
- Superior Interiors NE Portland

#### b. MWESB

Bremik Construction regularly works with qualified MWESB subcontractors and suppliers. We also maintain a diverse workforce comprised of minorities and women. In an ongoing effort to be a good corporate citizen, we employ a diversity outreach coordinator, maintain a diversity policy, and support matching our workforce's diversity to the diversity of our community.

For a complete list of MWESB firms Bremik has worked with in the last two years, please see Appendix B.

Successful strategies to engaging MWESB businesses are:

- Utilizing proven resources including OAME, MCIP, AGC, Minority Trade Publications and Bremik Construction's extensive list of vendor contacts.
- Hosting outreach meetings to recruit MWESB firms.
- Maintaining interest, providing mentoring, and answering questions regarding projects.
- Involving MWESB firms early in the development of interim estimates which provides familiarity of the project within the MWESB community.
- Hosting documents at plan centers like the DJC, Salem Contractor's Exchange, Contractor's Plan Center, and ARC/OAME Plan Center.
- Host open pre-bid meetings specifically targeting MWESB firms.

#### Local Subcontractor & Supplier Selection Approach

Priority will be given to identifying, recruiting, and contracting with qualified, cost effective local subcontractors, suppliers, and vendors.

- Identify Bremik will approach our network of vendors to determine who has a significant and lasting presence within District boundaries. We will work with the District's consultant Ron White to coordinate our efforts with the other bond work contractors to identify the largest possible number of local vendors.
- Recruit Bremik will utilize proven outreach tactics to solidify vendors' interest in District work. We will coach smaller vendors in bidding public work which has requirements many are not used to.
- Contracting We will mentor contractors and help guide them through the public work process including, certified payroll, MWESB certification, background checks, and workforce training.

#### Reynolds Middle School Gymnasium Seismic Upgrade Outreach Event Flier



#### C. Optimizing Local and Diverse Partnership Program

Bremik was founded in Troutdale and we continue to take a personal interest in the vitality of the community. The following methods will be taken to optimize the effect of your bond dollars on the community.

**Student/Technical Education** - Bremik currently has a Reynolds Learning Academy student working for us through Pacific Northwest Carpenters Institute. Bremik partners PNCI to engage high school students in the construction industry. The program introduces students to the construction industry with a mix of in-class training and field carpentry for a hands-on learning experience.

We will continue to engage Reynolds students in this proven program to directly engage Reynolds students in the construction of Troutdale Elementary.



**Workforce** - Bremik Construction employs a diverse workforce, with 26% of our office and labor team consisting of women and minorities. We participate in the annual Women in Trades career fair which offers dozens of hands-on activities designed to introduce women and girls to the possibility of a future career in the trades.

The Carpenter's and Laborer's unions provides us with a consistent and professional training program to ensure our diverse apprentices get the education they need to succeed in the industry for their entire career.

**Faculty/Staff** - The construction of Troutdale Elementary is a great opportunity to engage faculty, staff, and their students. We will provide faculty and staff tours with the specific intention of providing insight into construction means and methods. We assist faculty in the creation of lesson plans based on the construction of their new school. Faculty and staff will be engaged in the process with our monthly newsletter and "open door" construction management style which encourages questions and comments. To strengthen existing networks in the community, Bremik will host summer meet-and-greet barbecues. Faculty/staff, local government, and local businesses will be invited and encouraged to network with the project team. In addition to great food Bremik will provide project updates, give tours, answer questions, and network with the local community.

**Mentoring** - Bremik will work with our local and diverse vendors to improve their ability to understand, bid, and execute not only on Troutdale but on future projects as well. Mentoring small, young companies on the practices associated with public commercial construction benefits the long-term success of the community and Bremik.

Working with your outreach consultant, Ron White, Bremik will coordinate our mentoring program with the other bond project contractors to ensure a deliberate and equitable group of vendors are mentored. Further, we will work with the other contractors to bring all mentored vendors together to network and share lessons learned.



Bremik teaching a project management workshop through MCIP

**Partnership** - Over \$60,000 of in-kind donations were secured by Bremik and its partners on the recent Gresham High School Field Turf Replacement - that's 35% of the projects total budget! Bremik will continue our history of helping our community projects by engaging local community members to partner and support not only the construction of Troutdale Elementary, but the continued operation of the school.

## 3.2.2.5 LOCAL CONDITIONS/MWESB

**Social Responsibility** - As a company we strongly believe in giving back to our community. Every year we volunteer hundreds of hours and thousands of dollars in support of the people and organizations that make our community stronger.

- REACH CDC New ramp for Mr. Adams
- REACH Paint & Repair-A-Thon
- Canstruction/Oregon Food Bank (2014-2016)
- New Avenues for Youth
- Portland Youth Builders
- School House Supplies
- Gresham Barlow School District
- Community Energy Project (CEP)
- Providence Child Center
- The Dougy Center
- Portland Mercado
- Virginia Garcia Memorial Health Center
- Restore Oregon
- Architectural Heritage Center
- Reynolds High School Materials for shop class
- Reynolds Learning Academy
- Northwest Academy
- Franciscan Montessori Earth School
- All Saints School
- Mt. Hood Ski Academy
- Oregon State University



We are currently working with Kelley Graham at the City of Troutdale to rebuild Imagination Station. This playground, described by many locals as a "community icon," promotes comradery, play, and exercise with both kids and parents alike.

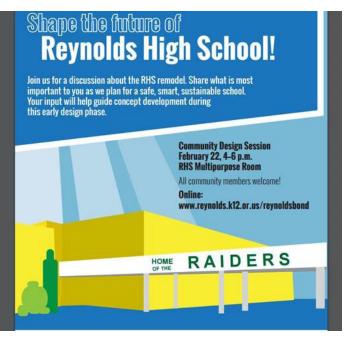
"On behalf of the City of Troutdale, I can't tell you how much we appreciate the offer by Bremik Construction to help in rebuilding Imagination Station - we hope to have the play structure back in commission as soon as possible."

- Kelley Graham, Executive Department, City of Troutdale

In direct support of Troutdale Elementary, Bremik will work with the District to find a suitable location for and construct a "Buddy Bench" in the play area. The brainchild of a Pennsylvania second-grader, the buddy bench is a simple idea to eliminate loneliness and foster friendship on the playground. When a child needs a friend to play with he or she sits on the bench, prompting other children to come over and invite that child to play.



Making a social impact on a community is a collaborative effort. Bremik encourages an open discussion with the District and community to discover and identify additional opportunities in which we can help.



Bremik attended three RSD community workshops; two for Reynolds High School and one for Troutdale Elementary. We enjoyed collaborating with your team and providing input on the design of the bond projects.

## 3.2.2.5 Local Conditions/MWESB



Dulce Weston, Diversity Outreach Coordinator

Dulce will lead our program in optimizing local and diverse partnership throughout the life of the Troutdale Elementary project. She is our in-house Diversity Outreach Coordinator and works hard to ensure we meet the outreach and utilization goals of our clients. Dulce is also fluent in Spanish.



Dulce and Bremik foreman, JoAnn, building cornhole boards at the 2016 Women in Trades career fair

#### **Bremik's History of Giving Back Locally**

Mike Greenslade, Vice President, who is proposed on our team, started the Lifeguard Program Committee for Glen Otto Park to help save children and adults from drowning in the Sandy River.



In 2010, Bremik built the Troutdale Centennial Arch to celebrate the City's 100th anniversary with 100% donated Bremik labor hours and coordinated in-kind donations from local artisans and craftsman.



### 3.2.2.6 Contract Formats

We acknowledge the contract formats.

## 3.2.2.7 Deviations From the RFP

We do not deviate from the RFP.

#### 3.2.3.1 a. Preconstruction Services

September 2016 - April 2017

Project Team	Hours		Rate	Total
Chief Estimator	136	\$	130	\$ 17,680
Senior Project Manager	136	\$	120	\$ 16,320
Project Manager	544	\$	87	\$ 47,328
Superintendent/Schedule Manager	238	\$	88	\$ 20,944
Project Administrator	68	\$	52	\$ 3,536
Total Personnel Costs		-		\$ 105,808
Reimbursables				\$ 1,000
Preconstruction Services Not-To-Exceed Fee				\$ 106,808

August 17, 2016

To: Linda Florence, Superintendent, Reynolds School District

#### Dear Linda,

I have had the pleasure to work with Mike Greenslade and his team at Bremik Construction on several projects over the years: The Centennial Arch, Discovery Block, and Troutdale City Hall. I have always been impressed with their commitment to our community; Mike co-founded our lifeguard program, Bremik made significant donations to The Centennial Arch, and they pay Troutdale property tax. Bremik is currently building the condominiums in downtown Troutdale and they are a wonderful, quality addition to our City. Mike and his team have a proven ability to solve complex construction issues, and the quality of their work is outstanding. They are great people and great builders and I enthusiastically recommend them."

Feel free to contact me with any other questions.

Thank you for your consideration,

Doug Daoust Mayor of Troutdale 971-221-7846

#### **b.** Construction Services

#### **Fixed Fee**

Bremik's proposed CM/GC fee of **3.97%** would be applied to the direct cost of the work.

#### **General Conditions**

General Conditions			\$	866,000
Item	Quantity	Units	Esti	mated Total
Project Manager	74	wks	\$	233,100
Project Engineer	70	wks	\$	168,000
Superintendent	70	wks	\$	246,400
Field Supervision	See B.3		Ŧ	2.0,.00
Field Coordination	See B.3			
General Foreman	See B.3			
Quality Control	See B.2			
Safety Coordinator/Supervisor	74	wks	\$	8,200
Trade Coordination	See B.2	VVICS	Ļ	0,200
Office Equipment	1	ls	\$	3,500
	74	wks	\$	
Printing/Reproduction				2,800
Phones/Phone lines, (Cell or Landline)	74	wks	\$	4,800
Fuel/Maintenance	74	wks	\$	3,150
Substance Abuse Testing	1	ls	\$	1,000
Construction Signage	1	ls	\$	1,734
Progress Photo (Monthly)	1	ls	\$	500
Temporary Office	74	wks	\$	8,500
Postage/Delivery	74	wks	\$	2,100
Internet Service	See B.12			
Vehicles	74	wks	\$	9,600
Submittal Review & Approval	74	wks	\$	29,120
Courier Delivery Service	See B.18			
Drop Boxes & Disposal Fees	74	wks	\$	16,000
Office Furniture	1	ls	\$	500
Site Security	74	wks	\$	16,416
All Background Checks , & fingerprinting	1	ls	\$	1,000
Office Security	74	wks	\$	2,350
Sustainability Coordinator/Supervisor	See B.2			
Clerical/Secretarial	See B.21			
Project Coordination	See B.1			
Field Engineer	See B.2			
Delivery Services	See B.18			
Project Foreman	74	wks	\$	37,520
Fork Lift for Loading/Unloading of misc. materials	10	wks	\$	8,000
Loading & Unloading of miscellaneous materials	See B.37		Ŷ	0,000
Jobsite Clean-up (Excludes Final Cleanup)	74	wks	\$	27,160
Office Supplies	74	wks	\$	3,500
Office Clean-up	74	wks	\$	500
Temporary Toilets/Sinks	74	wks	\$	3,200
First Aid Supplies	74	wks	\$	3,500
IT Equipment	74	wks	\$	5,250
Material Handling	See B.37	-		-,
Staging Area Maintenance	See B.39			
Safety barrier/Safety Warnings/Safety Handrails	74	wks	\$	7,000
Temp. water include distribution & utility charges	74	wks	\$	500
Drinking Water	74	wks	\$	2,800
Small Tools	74	wks	\$	3,500
Site Webcam and services @ beginning to completion	74	wks	\$	4,800

#### Self-Performed Work

Bremik Construction is a true general contractor maintaining a stable team of journeymen craftsmen who self-perform an average of 25% of the work on our projects. While we will competitively bid all portions of the project, we anticipate self-performing the following categories of work providing the project with enhanced schedule and quality control:

- Concrete
- Wood Framing
- Siding
- Window Installation
- Doors and hardware



"I had not previously worked with Bremik prior to the Riverdale Grade School project, but could not be more pleased with their professionalism related not only to the tasks directly related to design input, schedule and budget, but also their willingness to put in the extra effort to be part of the community. Bremik offers communication, approachability and an open and transparent process of a smaller boutique firm, but with the systems, procedure and experience level that can compete with large local and regional contractors. They continue to receive high praise from the involved community members as well as the district staff and school board. I would not hesitate to recommend them for any other grade school or high school construction project, and I would look forward to working with them on future projects."

> -Nancy Hubbard, Owner's Rep Hubbard and Associates Development Consulting

## APPENDIX A: PRELIMINARY SCHEDULE

## BREMIK

#### Troutdale ES Replacement Preliminary Schedule Summary

ID	Task Name	Duration	Start	Finish	Qtr 3, 2016         Qtr 4, 2016         Qtr 1, 2017         Qtr 2, 2017         Qtr 3, 2017         Qtr 4, 2017         Qtr 1, 2018         Qtr 2, 2018           Jul         Aug         Sep         Oct         Nov         Dec         Jan         Feb         Mar         Apr         May         Jul         Aug         Sep         Oct         Nov         Dec         Jan         Feb         Mar         Apr         May         Jul         Aug         Sep         Oct         Nov         Dec         Jan         Feb         Mar         Apr         May
1	Troutdale ES Replacement Project	541 days	Wed 9/14/16	Thu 10/25/18	
2	Preconstruction	122 days	Wed 9/14/16	Wed 3/8/17	Preconstruction
3	Owner Notice To Proceed	0 days	Wed 9/14/16	Wed 9/14/16	9/14 🔶 Owner Notice To Proceed
4	EWA - Reconfigure North Exits Over Winter Break	9 days	Mon 12/19/16	5 Fri 12/30/16	12/19 💼 EWA - Reconfigure North Exits Over Winter Break
5	Procure Permits	40 days	Thu 1/12/17	Wed 3/8/17	1/12 Procure Permits
6	Procurement	40 days	Thu 3/9/17	Wed 5/3/17	Procurement
7	Long Lead Items	40 days	Thu 3/9/17	Wed 5/3/17	3/9 Long Lead Items
8	Construction	343 days	Mon 5/1/17	Fri 8/31/18	
9	Phase 1 (New Construction)	288 days	Mon 5/1/17	Fri 6/15/18	
10	Mobilization / Safety Measures	10 days	Mon 5/1/17	Fri 5/12/17	5/1 👝 Mobilization / Safety Measures
11	Mass Excavation / Earthwork	20 days	Mon 5/15/17	Mon 6/12/17	5/15 📥 Mass Excavation / Earthwork
12	Foundations	25 days	Tue 6/13/17	Tue 7/18/17	6/13 Foundations
13	Utilities	25 days	Tue 6/27/17	Tue 8/1/17	6/27 Utilities
14	Slab On Grade	10 days	Wed 8/2/17	Tue 8/15/17	8/2 🎽 Slab On Grade
15	1st Flr Wall Framing	20 days	Wed 8/16/17	Wed 9/13/17	8/16 📥 1st Flr Wall Framing
16	2nd Flr Deck Framing	20 days	Wed 8/23/17	Wed 9/20/17	8/23 2nd Flr Deck Framing
17	Slab On Deck	10 days	Thu 9/21/17	Wed 10/4/17	9/21 🎽 Slab On Deck
18	2nd Flr Wall Framing	20 days	Thu 10/5/17	Wed 11/1/17	10/5 🎽 2nd Flr Wall Framing
19	Roof Framing	20 days	Thu 10/19/17	Wed 11/15/17	10/19 Roof Framing
20	Roofing	10 days	Thu 11/16/17	Fri 12/1/17	11/16 🎽 Roofing
21	Building Envelope	40 days	Mon 12/4/17	Tue 1/30/18	12/4 Building Envelo
22	MEP Rough In	30 days	Mon 12/18/17	7 Tue 1/30/18	12/18 MEP Rough In
23	Interior Finishes	40 days	Wed 1/10/18	Tue 3/6/18	1/10
24	Sitework / Site Development	30 days	Wed 3/7/18	Tue 4/17/18	3/7 <b>Site</b>
25	Landscaping	23 days	Wed 4/18/18	Fri 5/18/18	4/18 🎽 I
26	Building Completion	0 days	Fri 5/18/18	Fri 5/18/18	5/18 🧩
27	Final Inspections / Occupancy	5 days	Mon 5/21/18	Fri 5/25/18	5/21 🏅
28	FFE Install	15 days	Mon 5/28/18	Fri 6/15/18	5/28
29	Testing / Commissioning	15 days	Mon 5/28/18	Fri 6/15/18	5/28
30	Final Completion	0 days	Fri 6/15/18	Fri 6/15/18	6/15
31	Phase 2 (Demo And Site Re-work)	55 days	Mon 6/18/18	Fri 8/31/18	
32	District Move Out	5 days	Mon 6/18/18	Fri 6/22/18	6/1
33	Hazardous Material Remediation / Demo / Basement Infill	20 days	Thu 6/21/18	Wed 7/18/18	6/2
34	Sitework / Site Development	19 days	Thu 7/19/18	Tue 8/14/18	
35	Play Structures	13 days	Wed 8/15/18	Fri 8/31/18	
36	Substantial Completion	0 days	Fri 8/31/18	Fri 8/31/18	
37	Project Completion	40 days	Fri 8/31/18	Thu 10/25/18	
38	1st Day Of School!	0 days	Wed 9/5/18	Wed 9/5/18	
39	Phase 2 Final Completion	40 days	Fri 8/31/18	Thu 10/25/18	



Task

•

Milestone

₽

Critical



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MWESB firms Bremik has worked with in the last two years:

Firm	Certifi	cation					
A Cut Above Concrete Cutting	ESB			Klein & Associates Inc.	ESB		
Hillsboro, OR				Hood River, OR			
Academy Specialties LLC	ESB	WBE		KO Construction LLC	ESB	MBE	
Portland, OR				Clackamas, OR			
Advanced Locking Solutions Inc	ESB			Kodiak Pacific Construction	WBE		
Beaverton, OR	LOD			Tualatin. OR			
	ESB			Konell Construction & Demolition	ESB		
Alpine Glass Company Inc.	ESD			Sandy, OR	200		
Bend, OR	FOR			Lauzon Contracting LLC	ESB	WBE	
Anderson Sandblasting LLC	ESB			Clackamas, OR	LOD	VVDL	
Damascus, OR					DBE	ESB	MBE
Atlas Supply Inc.	WBE			Liberty Steel Erectors Inc.	DDE	EOD	IVIDE
Seattle, WA				Gresham, OR	500		
B.C. Installation Inc.	WBE			Life Rax LLC	ESB	WBE	
Cheshire, OR				Oregon City, OR			
Bay View Building Maint. Inc.	WBE			Mark Adams Electric	ESB		
Tualatin, OR				Clackamas, OR			
Beaverton Plumbing Inc.	ESB			Merit Contractor of Oregon Inc.	ESB	MBE	WBE
Beaverton, OR				Portland, OR			
Bedrock Concrete Cutting Inc	ESB			Milne Masonry Inc.	ESB		
Portland, OR				Clackamas, OR			
Brothers Concrete Cutting Inc.	DBE	MBE		Minority Abatement Cont. Inc.	DBE		
	DDL	IIIDC		Vancouver, WA			
Albany, OR Brown's Arch Sheetmetal Inc	ESB			Northwest Fire Suppression Inc	WBE		
	ESD			Beaverton, OR			
North Plains, OR				Northwest Infrastructure LLC	DBE	ESB	MBE
Buffalo Welding Inc.	DBE	MBE			DDL	LOD	
Portland, OR				Portland, OR	ESB		
Cash's Drapery Inc.	ESB			Northwest Scaffold Service Inc	ESD		
Milwaukie, OR				Portland, OR	FOR		
Center Pointe Signs Inc.	ESB			Pacific Fire Systems LLC	ESB		
Beaverton, OR				West Linn, OR			
Craftwork Plumbing Inc.	ESB			Pacific Window Tinting Inc.	ESB	WBE	
Beaverton, OR				Portland, OR			
Crown Fire Systems Inc.	WBE			Pagh Custom Woodworking Inc.	ESB		
Portland, OR				Sandy, OR			
Custom Designed Skylights Inc.	WBE			Power Plumbing Co. Inc.	ESB		
Gladstone, OR				Portland, OR	200		
D & H Flagging Inc.	DBE	WBE		Premier Striping LLC	ESB		
Portland, OR				Portland, OR	LOD		
DeBenedetto's Commercial Flooring LLC	ESB			Prestige Stone & Tile Inc.	DBE	ESB	WBE
Portland, OR	LOD			-	DDE	ESD	VVDE
Duke Construction & Excavation	ESB			Beaverton, OR			
	ESD			Ramsay Signs Inc.	WBE		
Damascus, OR	FOR			Portland, OR	505		
Eagle Striping Services Inc.	ESB			Rayborn's Plumbing Inc.	ESB		
Fairview, OR				Tualatin, OR			
Ferguson Painting Services In	ESB			RC Building Specialties LLC	ESB	MBE	
Portland, OR				Portland, OR			
Fox Architectural Signs Inc.	WBE			Reliable Fence & Const. Inc.	ESB		
Gresham, OR				Gresham, OR			
GR Morgan	ESB			Reliant Plumbing & Mech. Inc.	ESB	MBE	
Portland, OR	200			Tigard, OR			
Gregory Law Landscape	ESB			River City Glass & Windows Inc	ESB		
Tigard, OR	LOD			Clackamas, OR			
Grey Wolf HVAC Inc.	MBE			River City Rebar LLC	ESB		
•	IVIDE			Tualatin, OR	LOD		
Vancouver, WA	FOD			Santana Crane Inc.	DBE	ESB	WBE
Grummel Engineering LLC	ESB			Saltana Grane Inc. Salem, OR	DBE	LOD	VVDE
Portland, OR					FOD		
Hal's Construction Inc.	WBE			Scaffold Erectors Inc	ESB		
Oregon City, OR		_		Portland, OR			
Happy Valley Air Conditioning	DBE	ESB	MBE	SI Contracting Inc.	ESB		
Happy Valley, OR				Mulino, OR			
Interstate Roofing Inc.	WBE			Sieckmann Metal Fab Inc.	ESB		
Portland, OR				Eagle Creek, OR			
KC Development LLC	DBE	WBE		Sign Wizards Inc	DBE	WBE	
Camas, WA				Portland, OR			
				. Strangert			

## APPENDIX B: LIST OF MWESB FIRMS

Skyline Building Maint. Inc.	MBE		
Lake Oswego, OR			
Stryker Construction Inc.	ESB		
Gladstone, OR			
Sundown Electric Company	DBE	MBE	
Forest Grove, OR			
Superior Interiors Inc.	ESB	WBE	
Portland, OR			
T.A. Onchi LLC	MBE	WBE	
Portland, OR			
The Harver Company Inc.	DBE	MBE	
Lake Oswego, OR			
Timberline Electrical Contractors Inc.	ESB		
Lake Oswego, OR			
Vince Building Maintenance LLC	DBE	ESB	MBE
Portland, OR	DDE		
WB Painting Inc.	DBE	WBE	
Gresham, OR			
W.E. Given Contracting Inc.	MBE	WBE	
Clackamas, OR	505		
Weddle Surveying Inc.	ESB		
Tigard, OR			
Western Rebar Inc.	WBE		
Portland, OR WEJ Janitorial Services Inc.	WBE		
	VVBE		
Portland, OR Wishart Welding & Fab. Inc.	MBE	WBE	
Clackamas, OR	IVIDE	VVDE	
Zavala Corp.	DBE	ESB	MBE
Portland, OR	DDL	LOD	IVIDL
Zeeland Company LLC	DBE	MBE	
Portland, OR	DDL	IVIDE	
Zochert Fence Company Inc.	ESB		
Portland, OR			
i oradila, ora			

## Appendix C: Wood Frame Case Study

#### CASE STUDY **BETHEL SCHOOL DISTRICT**

Spanaway Middle Sch

## Cost-Efficient Wood Framing Leads to Energy-Efficient Schools

Practical decision to use wood leaves more money for education







ethel School District (BSD) is proving they can save construction costs and build energy-efficient schools at the same time, leaving more money for educating students.

The District reports an 81 percent ENERGY STAR rating overall; several of their 17 elementary and six middle schools have ratings ranging from 95 to 98 percent. And, while size, configuration and age of the 23 facilities vary, one thing remains constant: each is wood-frame.

Wood-frame schools can be easily designed to meet or exceed the demanding energy-efficiency requirements of school districts—and they can do so cost effectively. BSD's Clover Creek Elementary, completed in 2012, was built at a cost of \$197.70 per square foot—a savings of more than \$50 per square foot over the average construction cost of an elementary school in Western Washington.

#### **Bethel School District** by the Numbers

- 215 square miles in unincorporated Pierce County, near Tacoma, Washington
- 17,500 students
- 17 elementary schools
- Six middle schools
- Three high schools
- One alternative school
- Pierce County Skills Center
- Bethel Learning Center

Source: Bethel School District, 2012

#### **Energy Efficiency Funds Better Education**

Cost efficiency is a key goal for Bethel School District Superintendent Tom Seigel, a former Navy commander. He challenges his operations team to run facilities as efficiently as possible, so they can put the savings in the classroom. "Half of our schools are new or completely modernized," said Seigel. "Our buildings are recognized as being energy efficient with excellent technology to support student learning. Exceptional staff, design innovation, accountability and conservation efforts have kept our construction and operations costs down."

Like school districts across America, BSD has a limited amount of money to spend on facilities. "If I can save money by using wood framing in our new building projects, I can then use that money to buy more expensive but more efficient mechanical or lighting systems," said James Hansen, BSD's Director of Construction and Planning. "And that, in the long term, helps us save money in the general fund. Our decision to improve energy efficiency in our schools wasn't driven by a commitment to the environment, although that's an added benefit. It was a very practical decision. We want to save money on the operation side so we can have more money for education."

#### Wood Costs Less and Reduces Construction Time

Bethel School District reports construction costs per square foot that are much lower than the average for other schools in the region. Hansen is quick to credit the fact that they consistently use wood framing, which saves them both in cost of materials and erection time.

"In Western Washington, wood studs cost almost half as much as metal," he said. "In 2012, our costs averaged \$0.53 per lineal foot for wood versus \$0.98 for metal studs. Plus, on a two-year project, I probably cut three to four months off construction time because wood framing goes up so much quicker." Babbit Neuman Construction Company builds both wood-frame and metal schools throughout the Pacific Northwest; they have built several of BSD's schools. "Scott Babbit told me we save about 20 percent in materials and installation by using wood framing for a school," said Hansen. "So, if it's a \$10 million project, this can be a \$2 million savings, which is significant."

#### Wood Framing Improves Envelope Efficiency

BSD's construction philosophy is to reduce costs for framing, which allows them to invest in (among other things) better, more efficient lighting and HVAC systems. They also maximize their use of inexpensive batt insulation, which helps improve energy efficiency over time.

"Why put just six inches of insulation into a 12-inch cavity?" asked Wayne Lerch, principal with Erickson McGovern Architects, a Tacoma, Washington-based firm that has designed a number of BSD facilities. "Batt insulation is a cost-effective way to increase energy efficiency just by filling the spaces, and we take advantage of that with wood framing."

Wood studs do not transfer heat and cold in the same way metal studs do, so wood also helps improve the energy efficiency of the exterior envelope. "You can seal a wood-frame building tighter than you can a metal or a concrete building," said Hansen. "Plus, because woodframe walls, floors and roofs easily accommodate batt insulation, it's simple and cost effective to over-insulate."

For example, Hansen said they typically use 12- to 14-inch-wide laminated strand lumber (LSL) studs in gymnasium walls. "We fill those cavities up to get an R-38 or an R-40 rating, whereas code requires only R-21," he said. "A lot of districts use concrete in the gym because they think they need it for durability, but concrete is hard to insulate. We can easily control temperature because we super insulate that space. And durability is no problem because we use medium density fiberboard (MDF) to protect the walls."

COMPARING THE COST OF NEW CONSTRUCTION								
	Completion Date	Average Cost*						
BSD Elementary Schools								
Nelson Elementary	2009	63,495	\$241.73					
• Frederickson Elementary	2009	64,569	\$218.05	\$248.12				
Clover Creek Elementary	2012	63,121	\$197.70					
BSD Junior High/Middle Schoo								
Liberty Middle School	2009	98,431	\$222.99	¢200.22				
<ul> <li>Spanaway Middle School</li> </ul>	2008	100,899	\$187.26	\$269.32				

Source: Office of Superintendent of Public Instruction, Washington State \*Average Construction Cost for New Schools in Western WA; 2008 - 2012

#### **Nelson Elementary**



COMPLETED: September 2009 ARCHITECT: Erickson McGovern STRUCTURAL ENGINEER: PCS Structural Solutions GENERAL CONTRACTOR: Babbit Neuman Construction Company AREA: 63,495 square feet PROJECT COST: \$241.73 per square foot GRADES: K-6 NUMBER OF STUDENTS: 600 CONSTRUCTION TYPE: Type VB construction

Nelson is located on a 100-acre site with a middle school and high school, designed to provide a campuslike setting. "It was a tight site though," recalled Lerch. "More than half the site is comprised of wetlands, so it had to be a compact structure."

The school is oriented to take advantage of direct north and south exposures; clerestory windows, exterior sun shades, and interior light shelves collect and control daylight to minimize additional lighting needs and maximize views of Mount Rainier. Lerch and his team conducted daylighting studies for the classrooms. They even built a model of the proposed classroom configuration options and tested the configurations at the Seattle Lighting Lab in order to meet their sustainability goals.

According to the Northwest Energy Efficiency Council, thermal bridging through framing components reduces envelope insulation

performance by 15 to 20 percent in wood-frame construction, but by as much as 45 to 60 percent in metalframe construction.



#### Thermal Breaks and Continuous Insulation

Wood framing offers a number of other thermal benefits. "Steel and concrete need separation between the structure and exterior envelope," said Lerch. "This separation is not required with wood because of its inherent thermal properties."

"In years past, the building code did not distinguish between wood and metal or concrete when it came to exterior walls and thermal breaks," explained Hansen. "However, we all know heat doesn't transfer through wood like it does through metal and concrete. In Washington State, the new energy code requires a thermal break between the exterior and interior walls if you use metal and concrete, which means a thicker wall, which therefore adds cost. Wood doesn't have this requirement, so the exterior skin can be directly attached to the wood stud."

Table 13-1 of the 2009 Washington State Energy Code, Building Envelope Requirements details the fact that metal and steel-framed buildings need a minimum R-value of R-13 + R-7.5 with continuous insulation on the abovegrade walls. The minimum R-value for insulating a woodframed non-residential building is R-21, and continuous insulation is not required.

Cost to provide that extra layer of continuous insulation is significant. Lerch estimates that it doubles the amount of time required to insulate an average school, which would add about 30 percent to the cost of insulation versus a single layer of standard R-21.

#### Savings from the Roof Down

When it comes to saving money on school design and construction, Hansen said they start with the roof and work their way down.

"We typically look at a 40- to 50-year life cycle for our schools, so we use sloped roofs with shingles," said Hansen. "That allows us to get a 40-year shingle that is, in my opinion, the best value. A metal roof will last 50 years, but if I replace or remodel a school in 40 years, it means I paid five times more than I needed to for a roof that I just tore off."

Hansen said they also super-insulate their wood roof structures with batt insulation to a rating of R-40 or R-50, depending on the size of the rafters. "If I tried to do that with a concrete or steel building, it would cost quite a bit more. Batt just costs less than rigid insulation. That's why we can save so much energy; it's the little things we do during construction."

> Lerch cited lighting as another area where they're able to save on infrastructure costs. By continuously searching for improved lighting systems that diffuse light better and provide more uniform illumination, he said they've been able to reduce the overall height of the building by 6 inches per floor. "Older indirect light fixtures required that the fixture be hung 18 inches below the ceiling to achieve a uniform illumination," said Lerch.

Source: Northwest Energy Efficiency Council

#### **Energy Savings Specific to Bethel School District**

While researching the comparative efficiencies of various school districts, energy consultant Fritz Feiten with Ameresco Quantum, Inc. stumbled upon some interesting facts. "When you compare Western Washington school districts with 15,000 to 20,000 full-time students each, the Bethel School District operates at the lowest total utility cost per student," he said.

"Bethel spends 34 percent less per student than the average for all peer districts, and 52 percent less than the highest cost peer," Feiten added. "Interestingly, both Bethel and the highest cost school district peer use mechanical cooling in most if not all their schools. While this is admittedly a rough measure of efficiency, I think it speaks volumes about the great job Bethel School District is doing to minimize energy costs in their District."

DISTRICT	Issaquah	Bethel	Everett	Highline	Bellevue	Northshore	Edmonds	Puyallup	AVERAGE*
FTEs**	16,557	17,016	17,744	17,852	18,156	18,444	19,802	20,623	19,380
Utility Cost	\$4,694,760	\$2,743,345	\$4,200,651	\$5,478,627	\$6,067,571	\$4,070,702	\$4,004,658	\$5,437,839	\$4,718,712
Utility Cost/FTE	\$284	\$161	\$237	\$307	\$334	\$221	\$202	\$264	\$244
High Schools	4	4	4	4	4	3	5	4	
Middle Schools	5	5	5	5	5	6	4	7	
Elementary Schools	15	17	18	18	15	21	21	21	
Total Schools	24	26	27	27	24	30	30	32	

Source: 2011/2012 budgets, Office of Superintendent of Public Instruction, Washington State \*Average includes data for three school districts not shown

\*\*Full-time equivalent

"New technology, using T5 lamps, allows us to achieve the same results with fixtures hung just 12 inches from the ceiling. So we can cut costs by adjusting the overall height of the building."

#### **Design Versatility**

Ninety-five percent of the work Erickson McGovern Architects does is school design, and Lerch says wood is wellaccepted by all the districts they work with. "Because it is a versatile framing material, wood allows us to be as creative as we want in terms of design," he said.

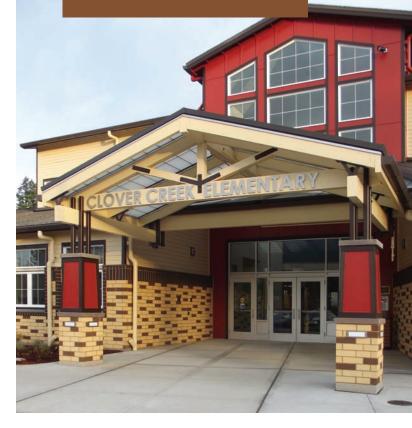
At the same time, simplicity and functionality are priorities. "This is a blue-collar community," said Hansen, "so we work to give families a good solid building that is not overbuilt. We want our schools to fit into the surroundings. Most of our schools are in single-family residential zones, so we use sloped roofs and natural but durable materials on the exterior."

Wood lends itself well to surface treatments. "Kids like color, and a good bucket of paint costs \$30 or \$35 a gallon," said Hansen. "If it's applied correctly, that paint will last 12 to 15 years or longer. If you want to change it or update to a more current color scheme, it's relatively inexpensive to do. If you paint on metal or concrete, it becomes a long-term maintenance issue, since neither holds paint as well as wood. Plus, both metal and concrete surfaces feel cold. Wood is a product people like because it has warmth."

## Bethel School District is an ENERGY STAR



Of BSD's 25 eligible buildings, 19 have earned the ENERGY STAR label. The District has received national recognition from the U.S. Environmental Protection Agency as an ENERGY STAR Leader.





#### **Bethel Learning Center**

COMPLETED: November 2012 ARCHITECT: Erickson McGovern STRUCTURAL ENGINEER: PCS Structural Solutions GENERAL CONTRACTOR: Jones & Roberts AREA: 5,567 square feet PROJECT COST: \$349.66 per square foot CONSTRUCTION TYPE: Type VB construction, blast-resistant design

At slightly more than 5,500 square feet, the Bethel Learning Center is a small structure that had big requirements. Built for the Bethel School District, this multi-functional facility is also used as a neighborhood community center. "We wanted to feature the warmth of wood, so we left wood beams and trusses exposed throughout," said Lerch.

The facility's location was selected because of its proximity to the center of the District. The project is near an elementary school, middle school and high school. However, it is also located adjacent to a natural gas pipeline, so the structure needed to be designed to withstand a natural gas blast. "We had specific structural minimums for blast protection, including 8-inch stud spacing and laminated glazing requirements," added Lerch. "In all, we have a lot of variety in a small building, which drove the cost per square foot up. But it's a facility that will serve the District well now and in the future."

#### \$4.3 Million in Utility Savings

In 2011, the Bethel School District was recognized by the U.S. Environmental Protection Agency (EPA) as an ENERGY STAR Leader. Between 2004 and 2011, BSD reduced kilowatt usage by more than 7.6 million kilowatts and saved \$4.3

million in utility costs—equivalent to the cost of electricity for 15 of the District's elementary schools for one year. Through the EPA's Portfolio Manager, BSD has shown a nearly 15 percent increase in energy efficiency, with an average overall portfolio rating of 82 for 25 buildings. In 2008, 10 of the District's schools received the ENERGY STAR for superior energy efficiency.

Source: ENERGY STAR, U.S. Environmental Protection Agency

#### Speed of Construction

When BSD assesses the advantages that wood-frame construction provides in terms of construction timing, they first consider two factors: availability of the raw material and how the product goes together.

"Wood is a relatively easy product to get; we don't have long lead times like we would with other materials," said Hansen. "Plus, we tend to use products that help the local community because it helps provide jobs. Wood does that here in Washington. The people who live in our District pay taxes in our District, and like to see their products stay in their District. Plus, they're also parents whose children attend school here."

Regardless of whether it's a structural member or a trim product, Hansen said they can normally get wood products within a week or two, where steel and masonry products often require more time. "And time on the job is money," he added. "It costs a general contractor about \$80,000 to \$100,000 per month to be on site. The faster you can get the job done, the more money you can save."

Carpenters can work with simple tools in all types of weather. The contractor usually requires less heavy-duty equipment because wood members are lighter and easier to erect. "It's just a simpler process to erect a wood building," said Hansen, "and simpler usually means less expensive."

#### Looking Ahead

Through its financial assistance program, Washington State provides funding toward school construction or remodeling every 30 years. Therefore, schools are remodeled in the Bethel School District every 30 to 40 years. By using wood, they've made the process easier for years to come.

"It's simpler and more cost effective to go back and modify a wood structure than a concrete or steel building," noted Hansen. "I don't think many people look ahead 30 or 40 years, but I look at what people are going to be left with when I'm gone. From the time you start planning a bond issue until you get a school built, it's a long process with a public agency. A wood building will be easier to modify and maintain years from now."

Durability and maintenance are both key considerations for school districts. "I encourage my colleagues to pay attention to the details," Hansen said. "For example, if I use brick on a facility, I have to apply moisture sealant and anti-graffiti coatings, which run over \$180 a gallon. We need to reapply that every 12 to 15 years, just like paint.



So, if you're tracking your maintenance costs, a bucket of paint costs \$30 and sealant and anti-graffiti costs \$180. Over time, I believe you can save money with wood versus concrete or masonry as long as you're doing proper maintenance and paying attention to the details."

#### Using Wood to Manage Money

Lerch said that his firm looks at all aspects of a school design project. "We work to balance cost, energy efficiency, maintainability, functionality and many other factors. Schedules are also a consideration; everyone needs their school built as soon as possible, and it has to be done on time. We know wood is less expensive; it's a natural material and people are naturally drawn to it. We think wood is just a better product for schools."

Hansen encourages other districts to have the conversation with their architects about using wood in schools. "Districts can save up front in construction costs over the long term by super-insulating to save utility costs.

And, by saving money with the framing, you can install more energy-efficient mechanical and lighting systems, which provide long-term operational savings."

The fact that they can use wood to build good quality school buildings without overspending is important, emphasized Hansen. "We need people to believe we do a good job, not only educating their children but managing their money. Our decision to use wood has a very practical basis. We're focused on becoming more energy efficient, which is good for the environment. Going green is the right thing to do, but our decision was really about saving energy, which saves money. Constructing our schools with wood allows us to do both."



#### **Thompson Elementary**

COMPLETED: December 2006 ARCHITECT: Erickson McGovern STRUCTURAL ENGINEER: PCS Structural Solutions GENERAL CONTRACTOR: Babbit Neuman Construction Company AREA: 64,926 square feet PROJECT COST: \$169.42 per square foot GRADES: K-6 NUMBER OF STUDENTS: 550 CONSTRUCTION TYPE: Type VB construction

Selected to be one of the pilot schools for the Washington Sustainable Schools Protocol (WSSP), the design for Thompson Elementary focuses on sustainability and efficiency. What began as a remodel to a 40,000-square-foot building ended up becoming a 64,000-square-foot new building.

"When we developed the systems for this project," recalls Lerch, "we looked at everything from wainscoting on the walls to framing systems, light fixtures and HVAC options. Everything was planned around our goal of finding a better way to do things. For example, we developed a mezzanine system for mechanicals that was built into the sloped roof attic space. The system gave us easy access and the sloped wood roof helped us better blend the school into the surrounding neighborhood."



Spanaway Middle School

COMPLETED: September 2008 ARCHITECT: Erickson McGovern STRUCTURAL ENGINEER: PCS Structural Solutions GENERAL CONTRACTOR: Babbit Neuman Construction Company AREA: 100,899 square feet PROJECT COST: \$187.26 per square foot GRADES: 7-9 NUMBER OF STUDENTS: 1,000 CONSTRUCTION TYPE: Type VB construction

Spanaway Middle School shares its site with Thompson Elementary, and since Thompson served as a pilot school for the WSSP, Spanaway includes a number of similar sustainable features. "This was one of the earlier projects, where we really studied the different wood systems and then applied the most cost-effective design options," said Lerch. "The fact that this school has three grades dictated the design, so we have three separate wings with a shared hub."

Classroom wings are organized around a central commons with a stage that also serves as a music classroom. The commons also opens out to the front entry plaza, creating well-utilized indoor and outdoor student gathering spaces. Rain gardens, located in the courtyards between classroom wings, integrate the school's science curriculum and the natural environment. Gym walls were designed with 12-inchthick LSL, which allowed them to increase the R-value of the insulation from R-21 to R-38.



COMPLETED: September, 2012 ARCHITECT: Erickson McGovern STRUCTURAL ENGINEER: PCS Structural Solutions GENERAL CONTRACTOR: Jody Miller Construction, Inc. AREA: 63,121 square feet TOTAL PROJECT COST: \$197.70 per square foot GRADES: K-6 NUMBER OF STUDENTS: 645 CONSTRUCTION TYPE: Type VB construction



Built to replace an existing school, history played an important role in Clover Creek's design as architects worked to blend modern technologies with historical features, including a cupola from the old school. The two-story wood-frame structure features two classroom wings and a third common area with performance/assembly space. To meet sustainability goals, architects used strategic window placement and other daylighting techniques to reduce electrical usage. They also used modern heat recovery technologies to improve efficiency of the heating and ventilation systems.

Outside, they incorporated a rain garden to collect stormwater runoff from downspouts and other hard surface areas at the school, while also providing a natural learning environment. An elevated wooden boardwalk leads students through the rain garden to the historic cupola, salvaged from one of the original school buildings from 1938.



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