

Geotechnical Services Proposal

Woodland School District
Woodland, Washington

May 4, 2012



May 4, 2012

Michael Green, Superintendent
Woodland School District
800 Third Street
Woodland, Washington 98674

**Re: Geotechnical Services Proposal
Woodland School District; Woodland High School
Woodland, Washington**

Mr. Green,

Columbia West Engineering, Inc. (Columbia West) is pleased to submit this proposal to provide geotechnical services for the Woodland School District for the new High School site on Dike Road.

Founded in 1999, **Columbia West** is a locally owned and operated professional multi-disciplinary geotechnical, environmental, material testing laboratory, and special inspection services provider. We specialize in providing cost-effective, quality professional services and innovative and resourceful engineering solutions. We have extensive geotechnical experience with several local school districts and are the only Clark County, Washington-based, A2LA-accredited, WABO-certified geotechnical firm.

Columbia West appreciates the opportunity to provide geotechnical services. Please call me at 360-823-2900 if you have any questions or need additional information.

Sincerely,

COLUMBIA WEST ENGINEERING, Inc.



Lance V. Lehto, PE, GE
President

Section 1.0 Consultant Expertise and Qualifications

WHY SELECT Columbia West ?

- **Columbia West** has significant experience providing geotechnical services for numerous local school districts, including Ridgefield, Battle Ground, Vancouver, Evergreen, and Camas. Several examples are provided in *Section 4—Representative Project Experience*.
- **Columbia West** has provided past geotechnical services for the Woodland School District and has direct previous knowledge of the high school site.
- **Columbia West** has significant experience with numerous local sites and projects, including the subject site and several directly adjacent properties. The map and project list below indicate the locations of sites for which we have provided geotechnical services. Services included site investigations, subsurface borings, liquefaction analysis, pile foundation design, aggregate pier ground improvements, settlement and surcharge analysis and construction materials inspection and testing services.



Project List

- | | |
|---|--|
| <ul style="list-style-type: none"> • Woodland High School – Preliminary Geotechnical Investigation • Old Apostolic Lutheran Church – Geotechnical Site Investigation and Special Inspections • Walmart Parking Lot – Laboratory Testing • Walmart Future Retail Parcel – Geotechnical Site Investigation • Chumbley Parcels, Lots 1,2, and 4 – Geotechnical Site Investigation | <ul style="list-style-type: none"> • Dike Road Roundabout – Construction Monitoring, Cement Treated Base Consulting • Schurman Way Road Improvements – Construction Materials Testing • I-5 Commercial 3 Project (Proposed) – Geotechnical Site Investigation • Les Schwab, Woodland – Geotechnical Site Investigation, Construction Monitoring, Special Inspections |
|---|--|
- **Columbia West** is a local Clark County, Washington firm. Our employees are active members of local community organizations and are vested in local success.
 - **Columbia West** is a full-service provider of geotechnical engineering and design, construction monitoring, and structural special inspections. This allows us to service projects from initial feasibility to final occupancy.

GEOTECHNICAL SERVICES PROPOSAL

- **Columbia West** routinely conducts initial soil investigations and geotechnical design, performs construction testing during site grading, and provides building special inspection services for structural components. Our multi-disciplined capabilities reduce project costs through enhanced coordination and efficient communication.
- **Columbia West** has extensive collaborative experience with the District's architect (McGranahan Architects) and civil engineer (HDJ, Inc.). **Columbia West** has developed close relationships and worked interactively with these firms on many past and current projects.
- **Columbia West** is respected and trusted by local regulatory agencies, including the City of Woodland, Port of Woodland, and Cowlitz County with whom we have developed relationships while providing professional services. We utilize our relationships to benefit our clients and provide superior quality services.

***DID YOU KNOW?
Columbia West is very familiar with the new high school site and prepared a site geotechnical report in 2008.***

FIRM PROFILE AND DESCRIPTION OF SERVICES

Columbia West has direct experience providing geotechnical services for numerous local school districts, ports, utilities, regulatory agencies, and industries. Typical services are listed below. *Section 2—Representative Project Experience* provides project-specific examples. Additional project experience profiles can be provided upon request. References are provided in *Section 3—References*.

- Geotechnical investigation and subsurface exploration
- Geotechnical engineering and design
- Infiltration testing
- Foundation design
- Liquefaction and settlement analysis
- Lateral earth pressure and retaining wall design
- Geotechnical construction testing and inspection
- Aggregate, soil, and asphalt compaction testing
- Foundation construction observations
- Underground utility backfill compaction testing
- Concrete strength testing and in-place strength evaluations
- Testing of LID components, including bio-swale soil mixtures and pervious concrete
- Accredited laboratory testing of soil, aggregate, concrete, asphalt and other construction materials
- Laboratory constant head permeability testing per ASTM 2434

Geotechnical services are provided by our licensed engineers, geologists, engineering technicians. Samples requiring laboratory analysis are secured and transported to our accredited construction materials testing laboratory. Inspection and testing reports are distributed to all relevant entities promptly after results are complete. Distribution may include electronic and physical delivery.

FIRM QUALIFICATIONS

Experienced and Qualified Technical Staff

Our experienced and qualified technical staff consists of licensed professional engineers, geologists, special inspectors and engineering technicians. Company organization includes assignment of project responsibilities and tasks to an individual

engineer or geologist with oversight by a principal engineer. **Columbia West** personnel are cross-trained and able to provide services for multiple projects. Several units of active and reserve field equipment are available to facilitate testing requirements. The Firm Organization Chart—Key Personnel section of this proposal provides brief biosketches of key company personnel.

A2LA-Accredited Laboratory and Quality Control System

Geotechnical investigation and materials testing services are conducted in accordance with quality assurance guidelines set forth by ISO/IEC, A2LA, ASTM, AASHTO, ICC, WSDOT, and Army Corp of Engineers standards. **Columbia West** maintains and follows an internal quality manual approved by A2LA. In accordance with the quality manual, **Columbia West** carefully evaluates clients and projects, reviews contracts, testing protocol, and job standards, and conducts internal training and equipment calibration in accordance with A2LA standards.

***DID YOU KNOW?
Columbia West was
recently awarded the
geotechnical contract for
the Ridgefield School
District. Columbia West
was selected as the most
experienced and highest
qualified firm out of five
competing companies.***

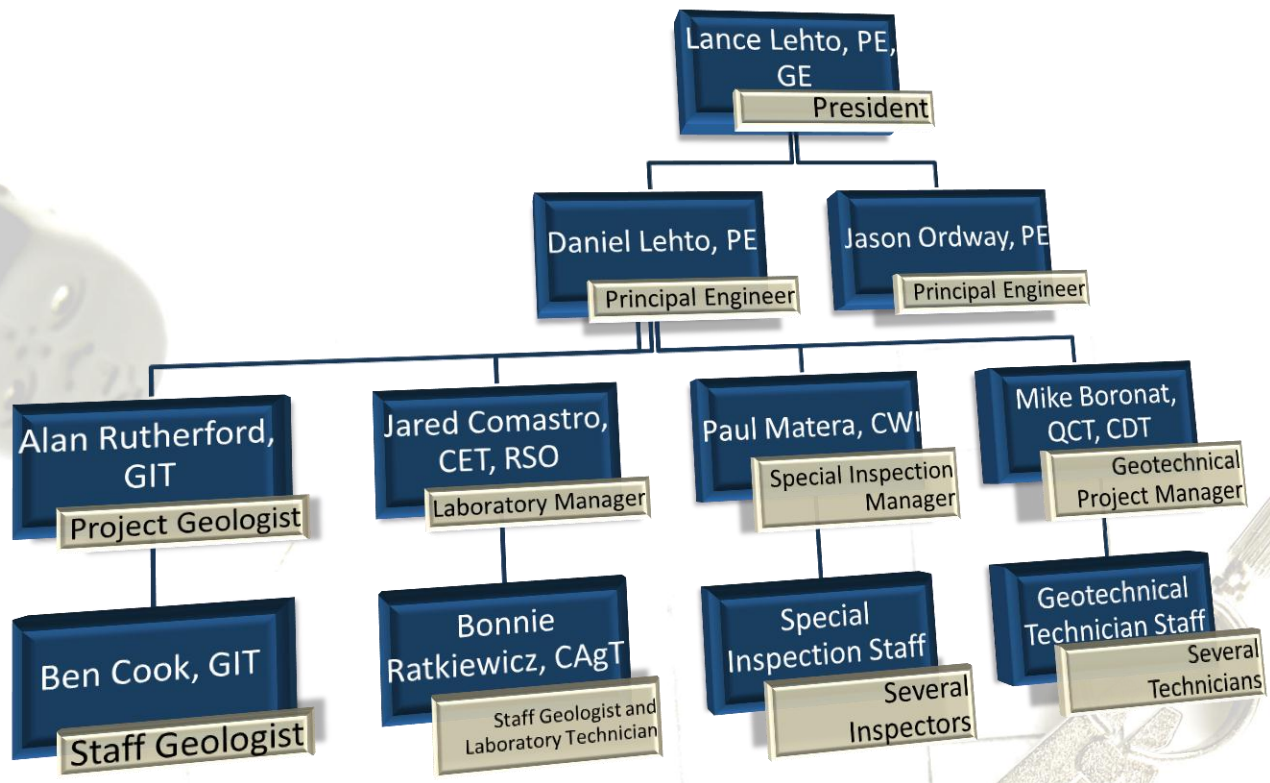
Nuclear Gauge License

Columbia West maintains a radioactive materials license in accordance with US Nuclear Energy and Radiation Control Act (RCW 70.98) and WAC Chapters 246-220 through 246-255, and our personnel are trained and certified for operation and transportation of density gauges in accordance with 49 CFR 172.

WABO and ICC-Certified Inspectors and Technicians

Columbia West's special inspections division and inspectors are certified by ICC, WABO, and OBOA. Our materials laboratory is routinely calibrated in accordance with ISO/IEC international standards and is accredited by A2LA, WABO, OBOA and ODOT. We maintain accreditation by participating in AMRL and CCRL proficiency programs. Laboratory and field personnel are certified by NICET, ACI, WAQCT, ODOT, and WFLHD to perform field and laboratory tests for soils, aggregate, concrete, and asphalt.

FIRM ORGANIZATION CHART – Key Personnel



Columbia West's skilled and experienced key personnel are identified in the organizational chart above. Brief descriptions of personnel responsibilities and experience are provided below. More detailed personnel qualifications can be found in *Section 4—Resumes*.

Lance V. Lehto, PE, GE

Lance Lehto is **Columbia West's** owner, founder and managing principal. Mr. Lehto has more than 17 years of experience in the geotechnical engineering, geotechnical construction monitoring, quality control testing, and special inspections field. Mr. Lehto holds a Master of Science degree in Civil Engineering and professional engineering licenses in Washington and Oregon. He also serves as the firm's special inspection technical director and client manager. His duties and responsibilities include client management, comprehensive project and company leadership, client correspondence, project planning, bidding, scheduling, and report review.

Daniel Lehto, PE

Daniel Lehto is a geotechnical principal engineer and **Columbia West's** operations manager. He holds a Bachelor of Science degree in Civil Engineering and professional engineering licenses in Washington and Oregon. He has more than 12 years of professional experience. Mr. Lehto's expertise lies in geotechnical engineering calculations, specialized geotechnical design, company operations, and client management.

Jason Ordway, PE

Jason Ordway is a geotechnical principal engineer. He has nearly 10 years of professional experience, holds a Bachelor of Science degree in Civil Engineering, and is a licensed professional engineer in Washington. He will be responsible for directing field investigations, developing sampling programs, performing engineering calculations, preparing

Alan Rutherford, GIT

design recommendations, preparing geotechnical site investigation reports and overseeing field investigation and subsurface exploration.

Alan Rutherford is a project geologist. Mr. Rutherford holds a Bachelor of Science degree in Geology. He has more than 5 years of experience conducting geotechnical site investigations, infiltration testing, slope stability analysis, construction monitoring, quality control testing and laboratory testing. Mr. Rutherford also has several years of experience managing civil infrastructure and transportation projects. Mr. Rutherford will provide site reconnaissance, subsurface exploration, geomorphic interpretations, and geotechnical report preparation.

Ben Cook, GIT

Ben Cook is a staff geologist. He holds a Bachelor of Science degree in Geology. Mr. Cook has more than 8 years of experience conducting geotechnical testing, construction monitoring, subsurface investigations, slope stability analysis, geotechnical instrument monitoring, quality control oversight, and laboratory testing. Mr. Cook also holds ICC certifications in rebar and concrete inspection. Mr. Cook will provide field exploration, in situ sample collection, report preparation.

**Jared Comastro, CET,
RSO**

Jared Comastro is **Columbia West's** laboratory manager. Mr. Comastro has more than 10 years of experience in construction materials laboratory testing, laboratory management, and quality control process implementation. Mr. Comastro holds numerous ACI, NICET, WAQCT, and ODOT laboratory testing certifications, and is the firm's radiation safety officer. Mr. Comastro will oversee and manage geotechnical laboratory testing and construction materials testing for work performed. He will be responsible for verifying individual tests for soils and aggregates are conducted in accordance with appropriate specifications.

Paul Matera, CWI

Paul Matera leads **Columbia West's** structural special inspection division. A former vice president at a nation-wide special inspection firm, Mr. Matera has over 25 years of experience managing and inspecting a full range of transportation, civil infrastructure, industrial, port, and public utility projects. Mr. Matera holds several ICC and WABO certifications in various inspection disciplines and is the firm's quality manager. He is responsible for coordinating and directing special inspection services. He is **Columbia West's** lead project manager and point of contact for special inspection projects.

Mike Boronat, QCT, CDT

Mike Boronat has over 15 years of experience with geotechnical construction monitoring, special inspections, quality control testing, and project management. His primary areas of expertise lie in civil infrastructure, transportation, highway, port, and bridge projects. Mr. Boronat has managed more than 100 construction and testing projects in the Vancouver-Portland metropolitan area during the past 15 years. Mr. Boronat will serve as project manager and primary point of contact for geotechnical testing and construction monitoring projects.

***DID YOU KNOW?
Columbia West conducted
geotechnical
investigations and was
the geotechnical
engineer of record for the
Les Schwab and OALC
Church projects located
adjacent to the high
school site.***

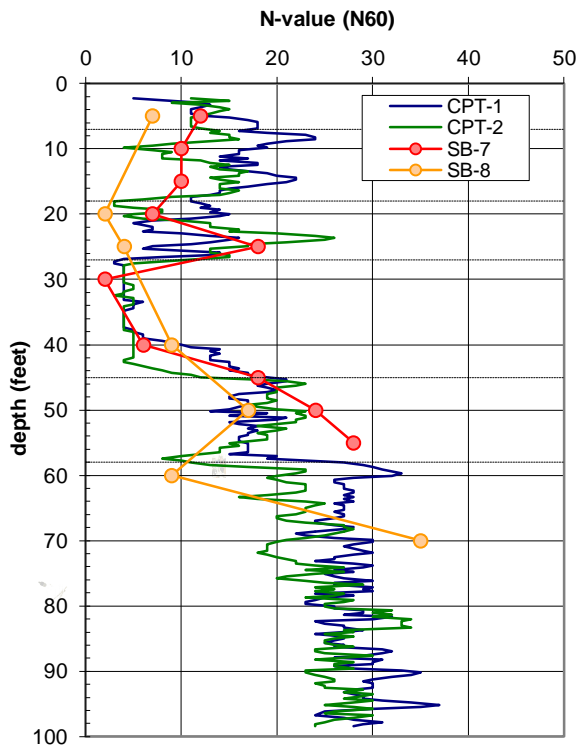
Section 2.0 Representative Project Experience

**Camas High School
Camas School District
Camas, Washington
2007-2010**

Columbia West conducted several geotechnical site investigations for the Camas School District at the Camas High School in Camas, Washington. Investigations consisted of site reconnaissance, test pit excavation and subsurface exploration, laboratory soil sample analysis and testing, foundation recommendations, bearing capacity calculations, and liquefaction evaluation. Investigations were conducted for ball fields and proposed additions and renovations.



Columbia West conducted a geotechnical investigation at Camas High School.



Columbia West's analysis of soil liquefaction in response to a seismic design event at the Woodland High School site on Dike Road.

**Woodland High School
Woodland School District
Woodland, Washington
2009-2011**

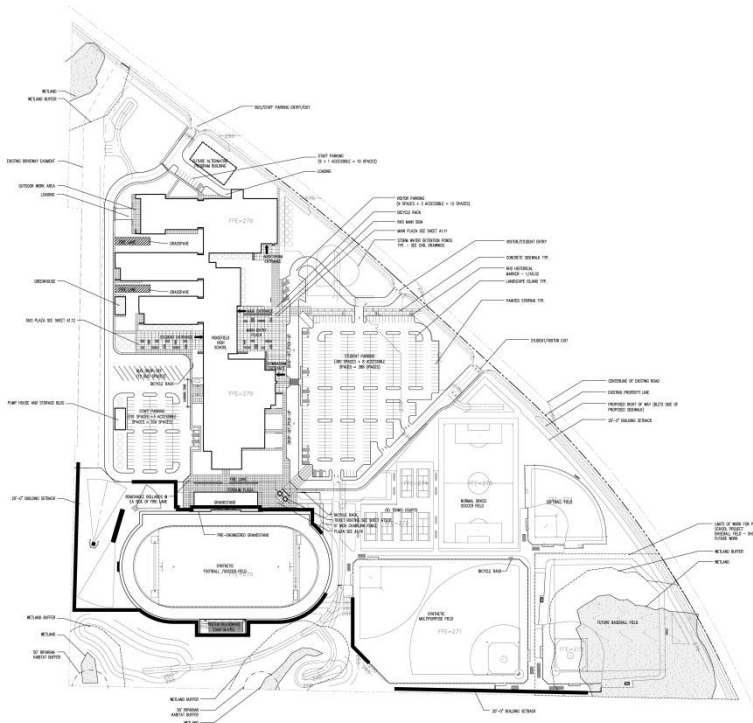
Columbia West conducted a geotechnical site investigation for the Woodland School District for the proposed Woodland High School located on Dike Access Road in Woodland, Washington. Geotechnical services included soil borings, test pit excavation, in situ testing, sample collection, laboratory analysis, foundation design, preparation of grading specifications, analysis of soil erosion potential and shrink-swell potential. Significant geotechnical challenges were associated with the site, including shallow, saturated, soft loose soils subject to liquefaction settlement during a seismic event and thick deposits of clay subject to static settlement under the anticipated weight of the finished structures.

**Grass Valley Elementary School
Camas School District
Camas, Washington
2007-2009**

Columbia West provided geotechnical services for the Camas School District for the Grass Valley Elementary School located in Camas, Washington. **Columbia West's** services included test pit excavation and subsurface exploration, laboratory soil sample analysis and testing, foundation recommendations, and bearing capacity calculations. **Columbia West** also provided geotechnical construction monitoring and testing.



Columbia West conducting pavement testing and evaluation at Grass Valley Elementary School.



**Ridgefield High School
Ridgefield School District
Ridgefield, Washington
2007-2012**

Columbia West conducted geotechnical site investigations for the Ridgefield School District at the proposed new high school site on Hillhurst Road and at the existing campus in Ridgefield, Washington. The investigations consisted of site reconnaissance, test pit excavation, subsurface drilling and boring, in situ soil testing, laboratory soil sample analysis and testing, foundation recommendations, bearing capacity calculations, liquefaction evaluation, retaining wall design, ball field recommendations, parking lot modulus value determinations, settlement analysis, slope stability calculations, slab base recommendations, and grading and earthwork compaction specifications.

Columbia West conducted geotechnical investigations for the proposed new Ridgefield High School site and the existing campus.

**Prairie High School
Battle Ground School District
Brush Prairie, Washington
2010-2011**

Columbia West provided geotechnical site investigation services for the Battle Ground School District at Prairie High School located in Brush Prairie, Washington. Geotechnical services consisted of pavement evaluation and design, ball field design, bearing capacity and foundation design, and preparation of construction specifications. **Columbia West** also provided laboratory testing and geotechnical construction monitoring and testing during the construction phase of the project.



Columbia West testing base aggregate for ball field construction at Prairie High School.



Columbia West conducting concrete testing at Woodburn Elementary School.

**Woodburn Elementary School
Camas School District
Camas, Washington
2011-2012**

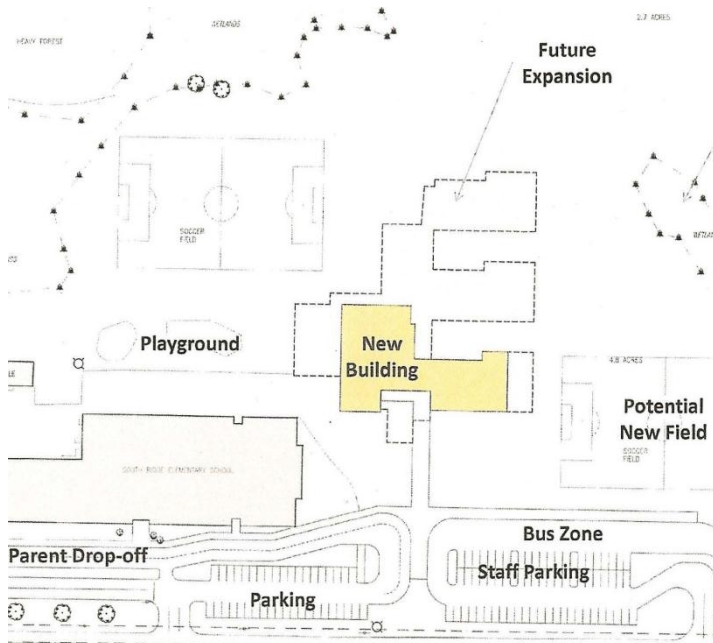
Columbia West conducted a geotechnical investigation for the Camas School District for the Woodburn Elementary School located in Camas, Washington. Geotechnical services included test pit excavation, in situ testing, sample collection, laboratory analysis, foundation design, preparation of grading specifications, slope stability evaluation, settlement calculations, and analysis of soil erosion and swell potential. **Columbia West** also provided geotechnical quality control testing and observation during construction, including compaction testing and laboratory analysis of embankment fills, aggregate road base, and concrete slab base. **Columbia West** also provided structural special inspections, including steel, welding, bolting, rebar, concrete, and epoxy anchors.

**View Ridge Middle School
Ridgefield School District
Ridgefield, Washington
2012**

Columbia West conducted a geotechnical site investigation for View Ridge Middle School for the Ridgefield School District. **Columbia West's** services included solid-stem auger subsurface exploration and sample collection, laboratory analysis and testing, in situ infiltration testing, foundation recommendations, bearing capacity calculations, pavement design, grading and compaction specifications, wet-weather construction specifications, lateral earth pressure analysis, soil erosion and swell potential quantification, and slab-on-grade recommendations.



Columbia West conducted a geotechnical site investigation for View Ridge Middle School in Ridgefield, Washington.



Columbia West's used a combination of solid-stem augers and hand-augers to explore and evaluate subsurface conditions at South Ridge Elementary School.

**South Ridge Elementary School
Ridgefield School District
Ridgefield, Washington
2012**

Columbia West was recently retained by the Ridgefield School District to conduct a geotechnical site investigation for South Ridge Elementary School, located on NE 199th Street, in Ridgefield, Washington. Geotechnical services include soil borings, test pit excavation, in situ infiltration testing, sample collection, laboratory analysis, foundation design, preparation of grading and compaction specifications, study of proposed ball field subgrade conditions, analysis of soil erosion potential and shrink-swell potential. Significant geotechnical challenges are associated with the site, including soft compressible soils and poor drainage conditions.

**Helen Baller Elementary
School
Camas School District
Camas, Washington
2007-2009**

Columbia West provided geotechnical services for the Camas School District for the Helen Baller Elementary School located in Camas, Washington. **Columbia West's** services included test pit excavation and subsurface exploration, laboratory soil sample analysis and testing, grading and compaction recommendations, foundation recommendations, and bearing capacity calculations. **Columbia West** also provided geotechnical construction monitoring and testing and concrete testing.



Columbia West overseeing grading and compaction activities at Helen Baller Elementary School.



Columbia West conducted a geotechnical investigation at the Hayes Freedom High School.

**Hayes Freedom High School
Ridgefield School District
Ridgefield, Washington
2009-2010**

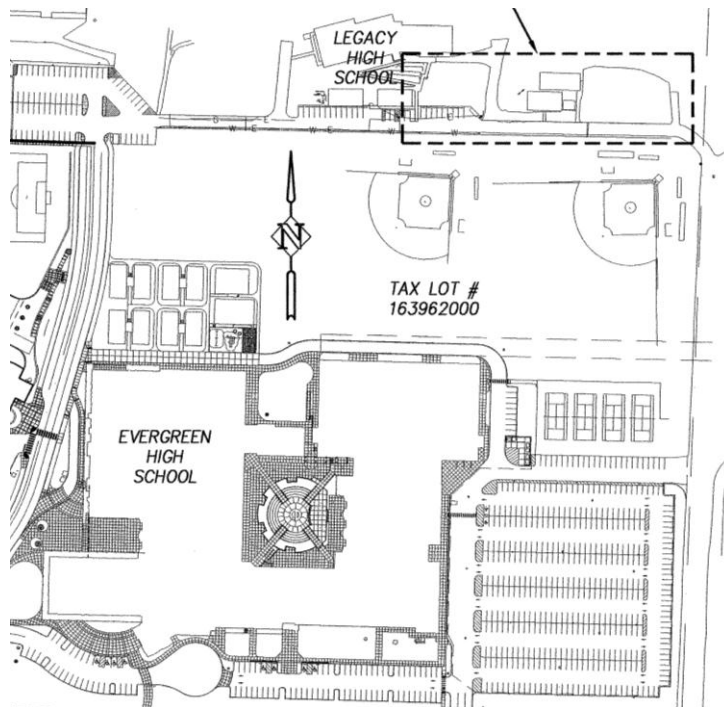
Columbia West provided geotechnical services for the Camas School District for the Hayes Freedom High School located in Camas, Washington. **Columbia West's** services included test pit excavation and subsurface exploration, laboratory soil sample analysis and testing, grading and compaction recommendations, foundation recommendations, bearing capacity calculations, liquefaction evaluation, parking lot modulus value determinations, settlement analysis, slab base recommendations, and grading and earthwork compaction specifications. Services also included geotechnical construction monitoring, nuclear gauge compaction testing, and construction materials laboratory testing.

**Vancouver School District
Facility
Vancouver, Washington
2012**

Columbia West provided geotechnical testing and observation services for the Vancouver School District for a district facility located on Fruit Valley Road in Vancouver, Washington. Services included geotechnical construction monitoring, sample collection, laboratory analysis, and quality control compaction testing of soil, asphalt, aggregate, and concrete. **Columbia West** also provided structural special inspections, including rebar, concrete, structural steel, welding, and epoxy anchors.



Columbia West testing parking lot subgrade for the Vancouver School District.



**Legacy High School
Evergreen School District
Vancouver, Washington
2011**

Columbia West conducted a geotechnical site investigation for the Evergreen School District at the Legacy High School in Vancouver, Washington. The investigation consisted of site reconnaissance, test pit excavation, subsurface exploration, in situ soil testing, laboratory soil sample analysis and testing, infiltration testing, evaluation of existing fill, pavement design recommendations, grading and earth work compaction specifications, and wet-weather construction recommendations. Services also included geotechnical construction monitoring, compaction testing for soil, aggregate and asphalt, and laboratory testing.

Columbia West conducted a geotechnical investigation at Legacy High School.

Section 3.0 References

Columbia West has established excellent long-term relationships with several local school districts, architects and engineers. A list of references is provided below.

Heidi Rosenberg, Capital Improvements Manager

Camas School District
841 NE 22nd Avenue
Camas, Washington 98607
(360) 335-3000 x78223

Projects: Camas High School, Hayes Freedom High School, Skyridge Middle School, Grass Valley Elementary School, Helen Baller Elementary School, Doc Harris Stadium, Lacamas Heights Elementary School

Art Edgerly, Superintendent

Ridgefield School District
2724 S. Hillhurst Road
Ridgefield, Washington 98642
(360) 619-1301

Projects: Ridgefield High School, View Ridge Middle School, Union Ridge Elementary School, South Ridge Elementary School

Kevin Jolma, Capital Improvements Manager

Battle Ground School District
PO Box 200
Battle Ground, Washington 98604
(360) 885-5300

Projects: Prairie High School, Lewisville Elementary School, Chief Umtuch Ball Fields, BG K-8 Campus

Pat O'Day, Evergreen School District

Evergreen School District
13501 NE 28th Street
Vancouver, Washington 98668
(360) 604-4000

Projects: Legacy High School

George Bryant, Vancouver School District

Vancouver School District
PO Box 8937
Vancouver, Washington 98668
(360) 313-1000

Projects: Vancouver School District Maintenance Facility

Section 4.0 Resumes

LANCE V. LEHTO, PE, GE PRESIDENT

BIOSKETCH

Mr. Lance V. Lehto is the owner, founder and managing principal of Columbia West Engineering, Inc. (Columbia West). Mr. Lehto has more than 17 years of experience in the geotechnical engineering and environmental consulting field. After obtaining his Master of Science degree in Civil Engineering from Montana State University in 1995, Mr. Lehto worked in the private geotechnical consulting field as a field engineer, project engineer, and project manager. Since initial opening of operations in 1999, Mr. Lehto has guided Columbia West to consistent sustained growth while developing the company's reputation for providing quality reliable professional services. Under Mr. Lehto's direction, Columbia West has successfully provided geotechnical engineering, environmental consulting, and construction materials testing services for more than 1,200 projects in the Portland-Vancouver area.

REGISTRATION AND CERTIFICATION

Registered Professional Engineer, Washington and Oregon
Registered Geotechnical Engineer, Oregon
Technical Director, Special Inspections, WABO, Washington
40-Hour OSHA Training (29 CFR 1910.120)
40-Hour Surface, Underground, Metal and Nonmetal MSHA Training (30 CFR)
Nuclear Moisture-Density Gauge License, Washington and Oregon
Chi Epsilon, Civil Engineering National Honor Society

EDUCATION

Master of Science, Civil Engineering, Montana State University, 1995
Bachelor of Science, Civil Engineering, Montana State University, 1993

REPRESENTATIVE PROJECT EXPERIENCE

Mr. Lehto's project experience includes public agency and utility projects, multi-phased commercial projects, and challenging industrial sites. His specific duties and responsibilities include comprehensive project and company leadership and management, client correspondence, project planning, bidding, scheduling, engineering and design calculations, and report preparation. Mr. Lehto's multi-faceted 17-year career experience includes geotechnical engineering, materials testing, and special inspections. Specific areas of expertise include geotechnical site investigations, slope stability analysis, bearing capacity evaluations, foundation and retaining wall design, soil infiltration testing, construction materials laboratory testing and special inspections for concrete, steel, welding, rebar and epoxy anchors. Mr. Lehto leads Columbia West's engineering personnel development, mentoring, and educational training program. He is responsible for public hearing presentations and client and agency correspondence. His visionary skills are utilized for company planning, strategy development, and corporate leadership. He is an active member of the engineering design community, serving as a member of various public and private strategy and planning committees and design professional groups. He routinely attends professional engineering and planning seminars and continuing education presentations. Columbia West's rapid growth, client loyalty, and superb professional reputation are a testament to Mr. Lehto's style of leadership by example.

DANIEL E. LEHTO, PE**PRINCIPAL ENGINEER****OPERATIONS MANAGER/GEOTECHNICAL SERVICES PROJECT MANAGER****BIOSKETCH**

Mr. Daniel Lehto is the Operations Manager for Columbia West Engineering, Inc. (Columbia West). Mr. Lehto has helped develop recent company growth utilizing innovative plans, solutions and management practices. Employee training, scheduling, organization, staff meetings and oversight are a few of Daniel's responsibilities. Mr. Lehto is also the Geotechnical Services Project Manager for Columbia West. As the Geotechnical Services Project Manager, Mr. Lehto is responsible for bidding and cost estimating, business development, client care, project delegation and coordination and report preparation and review. Daniel's extensive knowledge of local soil conditions has resulted in the successful management of more than three hundred geotechnical projects since becoming head of the department in November 2003.

EDUCATION AND REGISTRATION

Registered Professional Engineer, Washington

Registered Professional Engineer, Oregon

ACI – Concrete Field Testing Technician – Grade 1

Troxler – Nuclear Gauge Training Certification

Bachelor of Science, Civil Engineering, 2004

American Society of Civil Engineers

American Society of Foundation Engineers – Geotechnical Committee Member

REPRESENTATIVE PROJECT EXPERIENCE

Mr. Lehto's project experience ranges from large single and multi-family residential developments to multi-phased commercial and industrial projects. His specific duties and responsibilities include comprehensive project organization and management, oversight and training of personnel, bidding and cost estimating, engineering and design calculations, and document preparation. Mr. Lehto has developed his career in the local area and has more than 11 years of direct relevant geotechnical project experience. He has conducted and been involved with numerous site investigation and drilling and subsurface explorations for diverse project types. Mr. Lehto also has extensive experience with bearing capacity and settlement evaluations and foundation design. In addition to geotechnical design, Mr. Lehto also leads Columbia West's construction oversight, testing, and observation division. Within the division, he is responsible for employee training, management, scheduling, billing, and overall project coordination. He is an active member of the engineering design community and routinely attends professional engineering seminars, engineering design presentations, and continuing education presentations. Mr. Lehto's continued graduate studies at Portland State University include advanced shallow foundation design, advanced soil mechanics, detailed soil settlement behavior, and deep foundation design.

JASON L. ORDWAY, PE

PRINCIPAL ENGINEER / PROJECT ENGINEER

BIOSKETCH

Mr. Jason L. Ordway is a Project Engineer at Columbia West Engineering, Inc. (Columbia West). Mr. Ordway has more than eight years of experience in the geotechnical engineering field. After obtaining his Bachelor of Science degree in Civil Engineering from Portland State University in 2004, Mr. Ordway began work in the private geotechnical consulting field as a staff and project engineer. Mr. Ordway interned at Columbia West during portions of his undergraduate work performing laboratory testing and some construction monitoring. Mr. Ordway continues work on graduate studies at Portland State University.

REGISTRATION AND CERTIFICATION

Registered Professional Engineer, Washington
Nuclear Moisture-Density Gauge License, WA and OR
ACI level 1, field grade 1 concrete field testing
American Society of Civil Engineers

EDUCATION

Bachelor of Science, Civil Engineering, Portland State University, 2004

REPRESENTATIVE PROJECT EXPERIENCE

Mr. Ordway's project experience ranges from large single and multi-family residential developments to commercial, industrial, and municipal projects. His specific duties and responsibilities include project organization and management, engineering and design calculations, document preparation and review, and construction quality control. Mr. Ordway has developed his career in the local area and has more than eight years of relevant geotechnical project experience. He has conducted and been involved with numerous site investigation and subsurface explorations for diverse project types. Mr. Ordway has design experience with bearing capacity, settlement evaluation, pavements, foundations, slope stability, and site-specific seismic response. As a part of Columbia West's construction oversight team, Mr. Ordway has conducted and controlled topsoil stripping and undocumented fill removal verification, grading observations and testing, drainage recommendations, utility trench backfill, roadway subgrade, asphalt, concrete curb and gutter, soil bearing assessments and construction materials laboratory testing. Grading observations and testing include control of critical fill slopes, lift thickness, moisture-conditioning, compaction, cement-amended grading, reinforced steepened slope construction, earthen dam construction, and recommendations for drainage, benching, and keying of fills constructed on slopes. He is an active member of the engineering design community and routinely attends professional engineering seminars, engineering design presentations, and continuing education presentations. Mr. Ordway's continued graduate studies at Portland State University include advanced shallow foundation design, LRFD, and deep foundation design.

ALAN S. RUTHERFORD, GIT

STAFF GEOLOGIST

BIOSKETCH

Mr. Rutherford has more than five years of experience in the geotechnical and environmental engineering industry. Mr. Rutherford obtained his B.S. in Environmental and Engineering Geology from James Madison University in Harrisonburg, Virginia, and continues to pursue advanced coursework in engineering geology and hydrogeology at Portland State University. Mr. Rutherford assists the company with report writing, site investigations, infiltration testing, soil boring, laboratory testing, foundation subgrade assessments, commercial grade concrete testing, and general construction monitoring.

REGISTRATION AND CERTIFICATION

Geologist-In-Training (GIT), Oregon
ACI level 1, field grade 1 Concrete Field Testing
WAQTC/ODOT – Certified Density Technician (CDT)
WAQTC/ODOT – Quality Control Technician (QCT)
Troxler – Nuclear Gauge Training Certification
Excavation and Confined Space Safety (Competent Person Training)

EDUCATION

Bachelor of Science, Geology, James Madison University, 1995

REPRESENTATIVE PROJECT EXPERIENCE

Mr. Rutherford's experience ranges from large single and multi-family residential developments to multi-phased commercial and urban development projects. His specific duties and responsibilities for Columbia West include geologic field reconnaissance, geotechnical site investigations, infiltration testing, laboratory testing, client correspondence, and construction monitoring project testing and oversight. Mr. Rutherford's career experience includes sub-surface site investigations, soil boring and test pit logging, slope stability analysis, cement-amended grading, soil infiltration testing, concrete compressive strength testing, foundation and road subgrade assessments, stormwater sampling, Phase II ESA sample collection, and report writing.

BENJAMIN L COOK, GIT

STAFF GEOLOGIST

BIOSKETCH

Mr. Cook has more than eight years of experience in the geotechnical engineering consulting industry. Mr. Cook obtained his B.S. in Geology from the University of Oregon in 2002 with an emphasis in structural geology and tectonics, and shortly after graduation, moved to the Portland Metro area to pursue a career as an engineering geologist. Mr. Cook has been with Columbia West Engineering, Inc. since 2009 where he has assisted the company with report writing, site investigations, drafting, infiltration testing, subsurface investigation, laboratory testing, foundation subgrade assessments, structural and commercial grade concrete inspection, soils compaction, and general construction monitoring.

REGISTRATION AND CERTIFICATION

- Geologist-In-Training (GIT), State of Oregon
- ACI level 1, field grade 1 Concrete Field Testing
- WAQTC/ODOT – Certified Density Technician (CDT)
- WAQTC/ODOT – Quality Control Technician (QCT)
- Troxler – Nuclear Gauge Training Certification
- OSHA 40 Hour Hazwoper
- ICC Reinforced Concrete Inspector
- ICC Proprietary Anchors Inspector

EDUCATION

Bachelor of Science, Geology, University of Oregon, 2002

REPRESENTATIVE PROJECT EXPERIENCE

Mr. Cook's experience includes residential, commercial, transportation, and school district projects. His specific duties and responsibilities for Columbia West include geologic field reconnaissance, geotechnical site investigations, infiltration testing, laboratory testing, client correspondence, and construction monitoring project testing and oversight. Mr. Cook's career experience includes report writing, sub-surface site investigations, soil boring and test pit logging, slope stability analysis, slope stabilization construction monitoring, cement-amended grading, soil infiltration testing, concrete reinforcement inspection, concrete compressive strength testing, foundation and road subgrade assessments, environmental sampling, site dewatering oversight, and soils compaction testing.

JARED J. COMASTRO, CET

LABORATORY MANAGER, RADIATION SAFETY OFFICER

BIOSKETCH

Mr. Comastro has more than 10 years of relevant laboratory and field testing experience and has been instrumental in the growth of the materials laboratory for Columbia West. His responsibilities include training and oversight of laboratory and field technicians, review of test data, AMRL and CCRL proficiency testing, equipment maintenance and calibration, equipment purchases, and quality assurance. Mr. Comastro is also responsible for development and compliance of the Columbia West Quality Manual which adheres to the guidelines set forth by ISO/IEC 17025, ASTM E 329, ASTM C 1077, ASTM D 3666, and ASTM D 3740.

REGISTRATION AND CERTIFICATION

ACI – Concrete Field Testing Technician – Grade 1
ACI – Concrete Laboratory Testing Technician – Level 1
ACI – Concrete Strength Testing Technician
ACI – Aggregate Testing Technician – Level 1
WAQTC/ODOT – Certified Aggregate Technician (CAgT)
WAQTC/ODOT – Certified Asphalt Technician (CAT1)
WAQTC/ODOT – Certified Density Technician (CDT)
WAQTC/ODOT – Certified Embankment and Base Technician (CEBT)
NICET – Level II Construction Materials Testing, Soils
NICET – Level II Construction Materials Testing, Concrete
NICET – Level I Construction Materials Testing, Asphalt
NICET – Level II Geotechnical Engineering Technology, Laboratory
NICET – Level II Geotechnical Engineering Technology, Generalist
NICET – Level I Geotechnical Engineering Technology, Construction
Troxler – Nuclear Gauge Training Certification
Troxler – Radiation Safety Officer Training Certification
Materials Testing Training in WFLHD Field Test Methods, 2008
Excavation and Confined Space Safety (Competent Person Training)

EDUCATION

Drexel University – Philadelphia, Pennsylvania, Materials 1996 to 1998

REPRESENTATIVE EXPERIENCE

Mr. Comastro's experience ranges from large single and multi-family residential developments to multi-phased commercial projects providing both construction monitoring and laboratory analyses on various construction materials. His specific duties and responsibilities include leadership and management of laboratory and field technicians, maintaining equipment and instrument calibration and verification requirements, client correspondence, processing test information, document review, and report preparation. Mr. Comastro also leads, organizes, and performs personnel audits and conducts company procedure and document reviews in compliance with Columbia West's Quality Manual. Mr. Comastro developed the company Radiation Safety Program which includes maintaining calibration, licenses, staff awareness and training, dose exposure monitoring, operating, transportation, and emergency procedures.

BONNIE J. RATKIEWICZ

LABORATORY TECHNICIAN

BIOSKETCH

Ms. Bonnie J. Ratkiewicz joined Columbia West Engineering, Inc. as a Laboratory Technician in August, 2011. She obtained previous experience working for three years as a Field and Laboratory Teaching Assistant while completing her Bachelor of Science degree in Geology. Her responsibilities include laboratory testing of aggregate, soil, concrete and asphalt materials, report preparation, AMRL and CCRL proficiency testing, and routine calibration and maintenance of lab and field equipment.

REGISTRATION AND CERTIFICATION

WAQTC/ODOT – Certified Aggregate Technician
Nuclear Gauge Training Certification

EDUCATION

Bachelor of Science, Geology, James Madison University, 2010

REPRESENTATIVE PROJECT EXPERIENCE

Ms. Ratkiewicz's experience ranges from large-scale highway and transportation projects to multi-phased commercial, multifamily and residential developments. She conducts laboratory analyses on various construction materials, including soil, aggregate, asphalt, and concrete. She conducts testing in Columbia West's main laboratory and has provided quality control testing during production of aggregates in a mobile laboratory setting. She is also actively cross-training with Columbia West's field technicians and engineers in geotechnical site investigations and construction monitoring activities.

PAUL A. MATERA, SR.
CORPORATE QUALITY MANAGER
SPECIAL INSPECTIONS DIVISION MANAGER

BIOSKETCH

Mr. Matera is responsible for leading Columbia West Engineering's Special Inspection Division and serves as its Corporate Quality Manager. He brings over 24 years of inspection experience in the construction field; 24 years as a construction inspector and 20 years in project and business management. Mr. Matera is a WABO/OBOA certified Special Inspector who serves on the City of Portland - Special Inspection Advisory Committee, the WABO SIRP board, the OBOA Special Inspection Board, is past president of the Oregon Council of Engineering Laboratories (OCEL), and is active in many other industry organizations such as SMPS, AGC, etc. Mr. Matera is also responsible for development and compliance of the Columbia West Quality Manual which adheres to the guidelines set forth by ISO/IEC 17025, ASTM E 329, ASTM C 1077, ASTM D 3666, and ASTM D 3740.

REGISTRATION AND CERTIFICATION

AWS-QC1 Certified Welding Inspector
ICC Certified -Reinforced Concrete, Structural Masonry, Structural Steel & Welding, and Structural Bolting
WABO Certified – Proprietary Anchors, Reinforced Concrete, and Structural Masonry.
Construction Quality Management for Contractors (USACE)
National Nuclear Safety Commission Certified RSO
Nuclear Gauge Operator
American Concrete Institute Certified Technician Grade I

REPRESENTATIVE EXPERIENCE

Mr. Matera's experience is a result of his 24 years of experience performing or managing special inspections on a wide variety of projects. He has successfully managed over 400 projects since 1992 -- from small commercial developments to large complex federal projects. His project types include roads, bridges, waste water treatment plants, fish passageways and hydroelectric facilities, military commissaries and barracks, hospital campuses, high-rise structures, parking garages, industrial facilities, port facilities, airports, big box retail developments, mixed use developments, strip malls, cinema's, long term care facilities, schools and universities, sports complexes and residential projects. He is a certified special inspector with experience in many types of quality controls systems on earthwork and heavy civil projects, reinforced concrete and reinforcing steel inspections, concrete forensics, structural masonry, anchor systems, shear walls and diaphragms, large structural steel projects, welding inspections both in the fabricators facility and on the project site and structural bolting inspections.

MIKE BORONAT, QCT, CDT

GEOTECHNICAL SERVICES PROJECT MANAGER

BIOSKETCH

Mr. Boronat is a Geotechnical Services Project Manager at Columbia West Engineering, Inc. (Columbia West). Mr. Boronat has over 15 years of inspection experience in the construction field. He is a certified inspector with experience in many types of civil infrastructure projects, geotechnical field and laboratory work, quality control, soil testing, and special inspections. He has been involved in hundreds of projects ranging from rural street improvements to multi-million dollar hospital builds. Mr. Boronat has performed testing and inspection of hundreds of jobs throughout southwest Washington and Oregon with an emphasis on state and county road, highway, and bridge projects. He has experience in managing large and complex projects with significant annual fees. He also has experience directly supervising up to 11 subordinates including inspectors, technicians, and administrative staff.

REGISTRATION AND CERTIFICATION

Certified Quality Control Technician (ODOT)
Certified CDT (ODOT)
CAgT (ODOT)
CAT-1 (ODOT)
Level I Concrete Technician (ACI)
Project Manager Certification Program (PSI)

EDUCATION

Clackamas High School, Milwaukie, Oregon

REPRESENTATIVE PROJECT EXPERIENCE

Mr. Boronat's project experience includes large civil engineering and transportation infrastructure projects. He has managed or provided testing and inspection services for hundreds of road and bridge projects, ranging from rural street improvements to multi-million dollar highway and bridge projects. He has several years of geotechnical laboratory testing and field inspection experience. Mr. Boronat has specific experience with transportation projects, particularly with Oregon Department of Transportation. His career experience also includes special inspection projects for ports, public utilities, school districts, and public agencies. His management experience includes client communication, project set-up, planning and scheduling, invoicing and budgeting, bidding, report preparation and document review.