

Qualifications Package

Saxelby Acoustics LLC

Consultants in Acoustics, Noise, and Vibration

January 2022

Saxelby Acoustics LLC
915 Highland Pointe Drive, Suite 250
Roseville, California 95678
Phone: (916) 760-8821
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Statement of Qualifications

Saxelby Acoustics was formed in 2017 by Luke Saxelby. Luke is a board-certified member of the Institute of Noise Control Engineering (INCE) and has been providing these services to clients for over 22 years. Prior to establishing Saxelby Acoustics, Luke worked in the positions of Senior Consultant and Vice President at j.c. brennan & associates, Inc. based in Auburn, California from 2006 to 2017.

Saxelby Acoustics provides consulting services in acoustical design, noise control engineering, and vibration isolation to clients throughout the United States. Based in Roseville, California we provide these services to architects, engineers, environmental consulting firms, developers, public agencies, land-owners, etc. Many projects involve assessing potential noise impacts associated with proposed development projects or public works infrastructure. In this role Saxelby Acoustics evaluates the need for noise reduction measures, such as sound walls or acoustical windows, to ensure that the local noise standards are met. Work product is often a noise study report or environmental noise analysis documenting findings for the local jurisdiction. Often these studies are used in Environmental Impact Reports/Statements (EIR/EIS) or Mitigated Negative Declarations (MND) as a part of the environmental review process.

In addition to providing noise studies, we often consultant on issues relating to architectural acoustics, noise control engineering, and vibration monitoring. Some typical projects include review of architectural building plans to ensure proper acoustical isolation in multi-family residential projects, outdoor or indoor noise control for industrial clients, and construction noise/vibration monitoring.

Saxelby Acoustics staff experience includes the following:

- Airstrip/Helipad Noise Assessment
- Architectural Acoustics Design and Testing
- Community Noise Ordinance Development
- Compliance Monitoring
- Construction Noise/Vibration Analysis
- EIR / MND / EIS / HUD Noise Assessments
- Expert Witness
- General Plan Noise Element Development
- Green Building Code Analysis
- Industrial Noise Control
- Low Noise HVAC Design
- Master Plan / Community Plan Noise
- Mining Noise Assessment
- Noise Contour Mapping
- Peer Review
- Renewable Energy (Wind, Solar, Geothermal)
- Transportation Noise Assessment
- Wildlife Noise Assessment







Qualifications and Experience

Key Staff



LUKE SAXELBY, INCE Bd. Cert.Principal Consultant at Saxelby Acoustics LLC

Mr. Saxelby has been practicing acoustic and noise control engineering for the past 22 years and is a Board-Certified member of the Institute of Noise Control Engineering (INCE). He is an expert in the requirements of the California Environmental Quality Act (CEQA) relating to noise impacts

and has been involved in the preparation of hundreds of noise studies, including CEQA Environmental Impact Reports (EIR) and Mitigated Negative Declarations (MND). He is also a recognized expert witness in issues relating to building acoustics and noise control and has given testimony on various legal projects including construction defect claims and CEQA litigation.

Mr. Saxelby has extensive experience in the use of complex noise modeling programs including the Federal Highway Administration (FHWA) Traffic Noise Model (TNM), the CadnaA (Computer Aided Noise Abatement) sound prediction model, the SoundPLAN acoustic model, the Federal Aviation Administration's (FAA) Integrated Noise Model (INM), and the Enhanced Acoustic Simulator for Engineers (EASE) model. He has also developed many custom computer models used in his practice. Special interests and areas of practice include the application of noise control techniques for mechanical systems, building noise control design, low noise HVAC systems, and architectural acoustics.



Acoustic and Vibration Engineer at Saxelby Acoustics LLC

Mr. Crayne has been practicing acoustic and noise control engineering since graduating with his BS in Mechanical Engineering in 2019. He is an associate member of the Institute of Noise Control Engineering (INCE). He has experience in the use of complex noise modeling programs

including the Federal Highway Administration (FHWA) Traffic Noise Model, the SoundPLAN sound prediction model, and VBA script writing for complex data processing techniques





LUKE SAXELBY, INCE Bd. Cert.

Principal Consultant at Saxelby Acoustics

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KEY EXPERIENCE

- Airstrip/Helipad Noise Assessment
- Architectural Acoustics Design and Testing
- Compliance Monitoring
- Construction Noise/Vibration Analysis
- EIR / MND / EIS / HUD Noise Assessments
- Expert Witness
- General Plan Noise Element Development
- Green Building Code Analysis

- Highway/Roadway Projects
- Industrial Noise Control
- Low Noise HVAC Design
- Master Plan / Community Plan Noise
- Mining Noise Assessment
- Peer Review
- Renewable Energy (Wind, Solar, Geothermal)
- Transportation Noise Assessment
- Wildlife Noise Assessment
- Wind Turbine Noise/Shadow Analyses

PROFESSIONAL EXPERIENCE

- Principal Consultant | Saxelby Acoustics LLC | 2017-Present
- Vice President & Senior Consultant | j.c. brennan & associates, Inc. | 2006-2017
- Consultant | Bollard Acoustical Consulting | 2005
- Consultant & Technician | Bollard & Brennan, Inc. | 2002-2005

EDUCATION/TRAINING/PROFESSIONAL AFFILIATIONS

- Institute of Noise Control Engineering (INCE) | Board Certified (2011)
- FHWA Traffic Noise Model (TNM) Training Course | Burlington, MA (2005)
- B.S. Mechanical Engineering | California State University | Sacramento, California (1999-2004)
- Board for Professional Engineers and Land Surveyors: Engineer-In-Training (EIT) #116045 (2003)

PUBLICATIONS

 Noise Control for a Metal Shredder and Recycling System | Sound & Vibration Magazine | August 2012





PROJECT EXPERIENCE – ACOUSTICAL DESIGN AND NOISE CONTROL ENGINEERING

- 4045 Broadway Multi-Family Development. Oakland, California. Consulted with the project architect during design of the project. Provided review and recommendations for sound isolation at common party walls, floor/ceiling assemblies, stairwells, rooftop patios, garbage chutes, rooftop HVAC equipment, and mechanical shafts.
- California School for the Deaf Acoustical Design. Riverside, California. Designed acoustic and noise control measures to limit the potential for noise intrusion in classrooms designed for deaf and hearing-impaired students. Gave recommendations for specific acoustical wall treatments and noise control measures for HVAC systems.
- Jackson Street Multi-Family Housing. Seattle, Washington. Conducted an analysis of interior noise levels from the adjacent Interstate 5 highway on the proposed high rise residential development. Specific wall and window design recommendations were given to minimize noise infiltration into the proposed residential units.

KEY PROJECT EXPERIENCE – ENVIRONMENTAL NOISE ASSESSMENT

- City of Rohnert Park Walmart Expansion EIR. City of Rohnert Park, California. Under contract with the City of Rohnert Park, provided peer review assistance during revisions to the DEIR which occurred after litigation relating to CEQA issues. Reviewed the noise chapter of the revised DEIR and made recommendations to the EIR consultant team to ensure that the noise analysis methodology was consistent with the requirements of the court ruling.
- Sonoma Mountain Village Event Center Noise Assessment. City of Rohnert Park, California. Prepared a noise study for a proposed 3,000 seat outdoor music venue. The study included assessment of live music noise relative to existing ambient noise levels and the City's exterior noise level standards. Testimony was given to the City of Rohnert Park Planning Commission during the project hearing.
- Bethel Church Collyer Drive Campus. City of Redding, California. Responsible for preparing the Noise and Vibration study for the project EIR. Conducted measurement of existing ambient noise levels and analyzed potential noise and vibration impacts at the nearest residential receptors. Analysis included assessment of off-site traffic, parking lot noise, use of amplified sound, HVAC mechanical equipment, and outdoor congregation of people.
- Isabella Dam Safety Modification EIS. Lake Isabella, California. Responsible for preparing the Noise and Vibration study for the Army Corps of Engineers proposed modifications and/or replacement of the Lake Isabella Main and Auxiliary dam structures. Prepared a technical noise study report for the project EIS addressing potential noise and vibration impacts associated with the proposed project at sensitive receptors located around the project. Recommended noise control measures where necessary to reduce the potential impacts.
- Central Trunk Sewer Rehabilitation Construction Project. Sacramento, California. Responsible for conducting noise and vibration monitoring and development of Noise/Vibration Reduction Plan prior to, and during, construction. Worked with the Sacramento Area Sewer District and the project contractor to develop noise reduction measures for construction equipment during the project stages and to respond to various noise complaints.
- State Route 70 / Feather River Boulevard Interchange. Yuba County, California. Responsible for preparing the Caltrans Noise and Vibration Study for the proposed project. Conducted field noise measurements relative to Caltrans guidelines and prepared a project Noise Study Report (NSR) for delivery to the local agency and Caltrans.





KEY PROJECT EXPERIENCE – MINING/POWER

- Phase III McGinness Hills Geothermal Development Project. Lander County, Nevada. Saxelby Acoustics prepared a technical noise assessment of potential project noise levels at eleven sagegrouse leks. Noise levels were compared to measured baseline noise levels and applicable BLM/NDOW noise criteria.
- Coeur Rochester POA 11. Pershing County, Nevada. Saxelby Acoustics prepared a baseline noise survey and technical noise assessment of potential project noise levels at one sage-grouse lek and several residential receptors in the project vicinity. Noise levels were compared to measured baseline noise levels and applicable BLM/NDOW noise criteria.
- Pine Grove Mine. Pershing County, Nevada. Saxelby Acoustics prepared a baseline noise survey and technical noise assessment of potential project noise levels at one sage-grouse lek. Noise levels were compared to measured baseline noise levels and applicable BLM/NDOW noise criteria.
- Phase II Long Canyon Mine. Elko County, Nevada. Saxelby Acoustics prepared a baseline noise survey and technical noise assessment of potential project noise levels at two sage-grouse leks and one residential receptor in the project vicinity. Noise levels were compared to measured baseline noise levels and applicable BLM/NDOW noise criteria.
- Latigo Wind Energy. San Juan County, Utah. Saxelby Acoustics staff prepared a wind turbine noise impact analysis at various noise-sensitive receptors located around the 62 MW wind energy project. Noise levels were compared to local noise standard and industry-recommended thresholds.

KEY PROJECT EXPERIENCE – EXPERT WITNESS

- Davis v. AOAO Ko'olina Kai Golf Estates and Villas. Ko'olina, Hawaii. Conducted acoustic testing for plaintiff and provided expert witness at arbitration. Litigation pending.
- Blue Lake Rancheria v. Wright Development-California, Inc. et al. Green & Hall LLP, Roseville, CA.
 Provided expert witness review of plaintiff's acoustical testing of wall and floor/ceiling sound transmission. Settled out of court.
- Dani Garrett, et al. v. K. Hovnanian, Inc. et al. Green & Hall LLP, Roseville, CA. Provided expert witness review of plaintiff's acoustical testing of wall and floor/ceiling sound transmission. Settled out of court.
- La Paloma HOA v. IREC/Buffalo, Inc., et al. Springel & Fink LLP, Henderson, NV. Conducted visual inspections, provided expert witness review of plaintiff's acoustical testing of wall and floor/ceiling sound transmission, HVAC noise, and plumbing noise. Gave expert testimony at arbitration hearing. Settled out of court.
- Tanamera Resort Condominiums v. Fleur De Lis HOA, et al. Springel & Fink LLP, Henderson, NV. Conducted visual inspections, provided expert witness review of plaintiff's acoustical testing of wall and floor/ceiling sound transmission, HVAC noise, and plumbing noise. Settled out of court.
- Mantova Community Association v. LLV-IRC, LLC. Springel & Fink LLP, Henderson, NV. Conducted visual inspections, provided expert witness review of plaintiff's acoustical testing of wall and floor/ceiling sound transmission, HVAC noise, and plumbing noise. Settled out of court.





- Galt Citizens for Sensible Planning, et al. v. City of Galt, et al. Kronick, Moskovitz, Tiedemann, & Girard, Sacramento, CA. 2010-2011. Responded to comments on noise studies. Provided expert testimony to City Council. Settled out of court.
- Riva/Del Rio v. Nevada Pacific West Builders. Bullivant Houser Bailey PC, Sacramento, CA and Springel & Fink LLP, Henderson, NV. Conducted visual inspections, provided expert witness review of plaintiff's acoustical testing of wall and floor/ceiling sound transmission, HVAC noise, and plumbing noise. Settled out of court.



Rex Crayne

Acoustic and Vibration Engineer at Saxelby Acoustics

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KEY EXPERIENCE

- Architectural Acoustics Testing
- Compliance Monitoring
- Construction Noise/Vibration Analysis
- EIR / MND / EIS / HUD Noise Assessments
- General Plan Noise Element Development
- Green Building Code Analysis
- Industrial Noise Control
- Low Noise HVAC Design
- Mining Noise Assessment
- Transportation Noise Studies

PROFESSIONAL EXPERIENCE

- Student Research Assistant | CSUS Mechanical Engineering Department | 2019
- Materials Laboratory Assistant | CSUS Mechanical Engineering Department | 2018-2019

EDUCATION/TRAINING/PROFESSIONAL AFFILIATIONS

- Environmental Noise Analysis Training Course | Fullerton, CA (2019)
- B.S. Mechanical Engineering | California State University | Sacramento, California (2015-2019)

