

Professional Illumination Engineering Commentary

to the

Proposed Mitigated Negative Declaration for the Monterey High School Athletic Field Improvements

Comments by James R. Benya, PE, FIES, FIALD
BENYA BURNETT CONSULTANCY
Davis, CA

August 26, 2019

Introduction

This is a report concerning lighting that has been prepared in response to the proposed Mitigated Negative Declaration (MND) for the Monterey High School Athletic Field improvements (the **Project**), published July 24, 2019 by the Monterey Peninsula Unified School District. Among the proposed improvements are new light lights for the football field, attached to three new eighty-foot (80') tall poles and one new seventy-foot (70') tall pole.

Background

The California Environmental Quality Act (CEQA) requires that potential environmental impacts of any project be evaluated and, if potential impacts might occur, that they must be thoroughly studied. A mitigated negative declaration (MND) is a negative declaration that incorporates revisions (mitigation measures) in the proposed project that will avoid or mitigate impacts to a point where clearly no significant impacts on the environment would occur¹. If there are potential impacts, the project must prepare a complete environmental impact report (EIR) and undergo the requisite public reviews and approvals before proceeding.

For this Project, the MND was prepared² in which the author claims, “ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A mitigated negative declaration will be prepared³.” Presumably, the revisions that support this claim with respect to lighting should be apparent in the MND.

In recent years, many high school football fields throughout California have installed – or considered installing – new football field lights. Athletic field lights typically “create a new source of substantial light or glare which would adversely affect day or nighttime views in the area⁴”. It is simply not possible to illuminate an area of 3 to 4 acres to a light level of 30-50 times typical street lighting without having a measurable and potentially significant impact on surrounding properties, especially if the light poles will be visible from throughout the area. While they are unlikely to cause glare by day, sports lights often cause excessive glare for surrounding properties at night without proper design and effective mitigation. Under the best of outcomes, lighting when operated will cause a modest but measurable impact on surrounding properties; **under the worst outcomes, the nighttime aesthetics will be severely impacted by glare and nearby residents will suffer including the complete loss of natural darkness during evening hours, potentially affecting sleep whenever the lights are used.**

¹ <https://www.calrecycle.ca.gov/swfacilities/permitting/ceqa/documents/mitnegdec>

² Mitigated Negative Declaration for the Monterey High School Athletic Field, EMC Planning Group Inc., 301 Lighthouse Avenue, Suite C ,Monterey, CA 93940, July 24, 2019

³ Ibid, “Determination”, Page 3.

⁴ Association of Environmental Professionals 2018 CEQA Guidelines Appendices, page 284, I. Aesthetics

Critique of Lighting Comments in the MND

The proposed new lighting is reviewed in the MND under the heading “Initial Study” (pp 21-28) and it is supported by Appendix B, 8 pages of information presented by Musco Sports Lighting, LLC. The Initial Study admits to the following potential impacts, **with my comments in bold**:

1. *“Because the high school is located at a slightly higher elevation from the downtown area of Monterey...the proposed 80-ft. and 70-ft. high field lights... would likely be visible from some vantage points in the vicinity. However, given that the lights will only be illuminated temporarily and only during certain events (i.e., football games and other athletic events) that occur infrequently, the impact to scenic vistas would be temporary and would not rise to a level of significance to require mitigation...”* **Elevation makes sports lighting much more visible and impactful because it can be seen from a larger area than if sunken, as in a bowl, or level relative to the surrounding area. Also, the “infrequent” occurrences are not defined, and could be nightly. In CEQA, temporary but significant impacts are still impacts requiring mitigation.**
2. *“...the proposed project includes new, permanent sports lighting at the existing stadium elevated up to 80 feet above the field... these new lights and poles would be visible from various vantage points... during the day and during the evening.”* **This reinforces the potentially large area of impact.**
3. *“Compared to the portable sports lighting currently used at the football stadium, the proposed new stadium lighting would create substantially less glare and spill light onto the surrounding residential properties.”* **No calculations, measurements or field studies of the existing baseline were conducted which makes this claim baseless.**
4. *“The resulting spill light during nighttime events (at a 150-ft. circumference around the stadium site) is shown in Figure 7, Football Stadium Spill Light Levels (150-ft.). In addition, the school district’s lighting contractor has prepared a lighting equipment layout plan, as reflected on Figure 8, Football Stadium Lighting Plan, which illustrates luminaire levels and lighting direction at various points across the football stadium. ...For these reasons and those stated above, the proposed project would create a less-than-significant impact on daytime or nighttime views in the project area.”* **According to Table 26.5 of the IES Lighting Handbook, 10th Edition, the maximum vertical plane light trespass will exceed the recommended pre-curfew light trespass illuminance limits in the vertical plane for LZ3, and due to the horizontal illumination at that point, the perpendicular plane illumination will be about 1.4 times the maximum recommended trespass. Moreover, it is unclear whether the lighting calculations took site topography into account and without topographic lines being clearly expressed, it is reasonable to question whether Musco used topographic data. Because there is no evidence of topography on the plans in Appendix B, all calculations of trespass are questionable.**
5. *“The lighting impacts from cumulative lighting in the vicinity were also evaluated. ...Although the businesses include nighttime lighting every night, the sports facilities are only lit when in use. Cumulative nighttime lighting can result in reducing the clarity of the night*

*sky... Although the proposed project would add to the cumulative nighttime lighting in the vicinity, the increase would not create substantial light that would adversely affect nighttime views in the area.*⁵” **This is an unsubstantiated subjective claim. No evaluation was presented in the MND.**

From a professional engineering standpoint, there is not enough data or analysis upon which to base or draw the MND’s concerning the lighting impact, for the following reasons:

- A. 24CCR Article 1 §10.114, establishes 5 lighting zones for the purposes of determining environmental impacts under “CALGreen”. Lighting zones (LZs) consider the location of the site and its proposed lighting relative to population density, ambient light, and other factors. Also, lighting zones may be established by the community⁶. **There is no mention of application of CALGreen, its lighting zones, nor their use in the analysis in the MND.**
- B. Light trespass occurs when an unwanted amount of light from one property affects another. Recommended standards are published in the Illuminating Engineering Society (IES) 10th Edition Lighting Handbook and in the Model Lighting Ordinance (MLO) published jointly by the IES and the International Dark-Sky Association (IDA). Values are published for the Lighting Zones described above. **No reference is made in the MND as to how much light is acceptable according to these national standards.**
- C. The IDA has published a sports lighting certification program that ensures a sports lighting design is “community friendly”. **In the MND, the IDA program is not mentioned, and its principles not followed.**
- D. The light trespass calculations (Figure 7) as noted above do not appear to address topography and relative viewing angles and heights of potential impact locations. In fact, there are potentially affected properties elevated above and below the football field. **These calculations are therefore incomplete. In addition, Musco is known to use uplights mounted lower on their poles to illuminate aerial balls. These lights are mounted very low on the poles while conventional lights are mounted above. This has potentially significant impacts for properties at other elevations than the football field. These potentially significant impacts are not revealed by the calculations. Without complete and accurate calculations, it is not possible to evaluate lighting impacts nor to compare them to national standards.**
- E. The MND claims that the new lighting would produce less glare and light trespass than the existing temporary lighting. **Measurements of existing lighting and analysis of glare comparing the new lighting with existing have not been presented.**

⁵ (MND) Ibid, pp 21-28

⁶ The City of Malibu has designated the entire City as LZ1 except for environmentally sensitive habitat, which is LZ0. It makes a specific exception for the Malibu High School football field, which is limited to operation during football season only to only 2 nights’ operation per week. The rest of the year, as a mitigation measure the lighting is required to be removed to prevent use.

- F. Additional concern is raised by the statement *...only during certain events (i.e., football games and other athletic events) that occur infrequently...*. Given the site of the field near a residential area, the frequency of events, their duration, and seasons of operation will play a significant role in the impact. **The potentially substantial impacts of lighting are significant because there are no limits to the number of events or the hours of operation.**
- G. Additional concern is raised by the statement, *“The new permanent sports lighting at the existing stadium would be elevated up to 80 feet above the field and, as a result, these new lights and poles would be visible from various vantage points (when viewed from a distance) during the day and during the evening.”* It is unlikely that any other lighting poles in Monterey (other than sports facilities) are 80’ tall, as most commercial parking lots, including large malls and industrial facilities, employ poles 40’ tall or less. **To admit that “...they would be visible...during the evening...” is to say that the new light poles would have an impact on the vistas throughout the downtown and surrounding area.**
- H. Musco plans to use 5700K (correlated color temperature) sports lights. These are the same, bluish white light that were a major issue for the Monterey community several years ago. These lights would stand out and cause substantially more glare per lumen than lower color temperature lights. **I strongly recommend consideration of 3000K lights instead as a mitigation measure.**

Comparable Case – San Marin High School, Novato, CA

The recently completed San Marin High School (SMHS) project has many similarities to the proposed Monterey High School project. Both have existing football stadiums seating less than 5,000. Both are surrounded by a mixture of school, residential and light commercial properties. Both are in an urban area with both local and distant vistas. Both planned to install 80’ tall light towers and athletic field lights that can be viewed from adjacent and nearby properties. Both utilize the same lighting vendor, Musco Lighting. The primary difference is that SMHS employed 8 poles and this Project only plans to use 4 poles.

The SMHS project was initiated in 2016. Unlike this Project, their initial study⁷ determined that the new lighting installation might cause significant environmental impacts, and that an Environmental Impact Report (EIR) was required. The EIR⁸ identified lighting zones, appropriate metrics for light trespass and measurements, and set limits on the number of hours of use of the lighting systems including seasonal restrictions, i.e. no use of lights during the summer and limited nights’ use during the remainder of the year. To achieve the light trespass limitations and other limits that reduce the impact of the lighting, an LED lighting system was installed and carefully aimed to comply with the agreed-upon restrictions proposed by the EIR. This included

⁷ Novato Unified School District and Rincon Associates, San Marin High School Stadium Lights Project – Initial Study, August 2016

⁸ Novato Unified School District and Rincon Associates, San Marin High School Stadium Lights Project – Final Environmental Impact Report, May 2017

reducing the power of the lights and the amount of light to be consistent with IES RP-6-15 “Sports and Recreational Area Lighting” for a stadium seating less than 2500.

I was retained to take field measurements to determine whether the installed lighting met the required mitigation with respect to glare and light trespass. I had no other role in the project.

Summary

In California, K-12 school properties tend to be in or immediately adjacent to residential and mixed-use neighborhoods. The amount of light needed for football is **30-50 times** the amount of light used for streets and parking lots. It is very difficult to mitigate the impact of a sports lighting system in a community setting; in all cases, the lighting must be designed very carefully, and, in some cases, the location of the field and the area’s topography may still render mitigation impossible. The San Marin High School case demonstrates a process of properly applying CEQA to the challenge of installing modern lighting systems to previously unlighted or poorly lighted high school football fields. Its EIR determined the appropriate lighting zones, set light trespass limits, restricted the hours of operation, and most importantly, required a professional engineering study of the completed project ensuring compliance with the proposed mitigation requirements set forth in the EIR. This Project has the same issues and significant impacts on potentially hundreds of adjacent off-campus properties as does San Marin High School, including residences, and therefore should be required to prepare a complete EIR and undergo the review process called for by CEQA.

Based on my review of this Project, in my opinion the lighting of the Project may cause significant impact(s) and substantial adverse changes to the environment.



Submitted August 26, 2019



Curriculum Vitae

JAMES ROBERT BENYA, PE, FIES, FIALD

Principal, the Benya Burnett Consultancy

Winner of the 2018 International Illumination Design Award of Excellence

"At the leading edge of light" Metropolis

"One of the top lighting designers in the US", Departures by American Express

"Top 25 Retail Lighting Designers in US", Display and Design Ideas

"Hot designer", SNAP Magazine

"Jim has been at the forefront from the start, specializing in integrated daylighting strategies and sustainable lighting approaches long before most designers knew what that was," Architectural Lighting

Inaugural member of the Michigan Lighting Hall of Fame

Jim Benya is a professional illuminating engineer, lighting designer, educator and consultant with 46 years of experience. He is a Registered Professional Electrical Engineer, Fellow of the Illuminating Engineering Society of North America (FIES), and Fellow of the International Association of Lighting Designers (IALD). Benya established and led California's first independent lighting design firm Luminæ Souter Lighting Design as Senior Principal and CEO before starting Benya Lighting Design in 1994 in Portland, Oregon. His design work has been published in every major lighting design and architectural journal, including Architecture, Architectural Record, Architectural Lighting, Progressive Architecture, LD&A, Lighting Dimensions, Interiors, Interior Design, Designers West, Northern California Home and Garden, Architectural Digest, and Building Design and Construction. He has won numerous lighting design awards, including the Edison Award, the Edison Award of Excellence (7 times), the Edison Award for Environmental Design (thrice), the International Illumination Design Award of Excellence (twice), and the Source Awards First Place Award. He is the author of **Lighting Design Basics** (Wiley) and **Lighting Retrofits and Relighting** (Wiley) and his work is featured in nine books, including the Best of Lighting Design. In addition to design work, Benya Burnett offers codes and standards development, forensic and expert services in lighting, environmental impact assessments and studies, technical research and reports, educational classes and related materials, and product design consulting and assistance to manufacturers. Benya is currently based in Davis, California as Principal of the Benya Burnett Consultancy with partner Deborah Burnett.

PROFESSIONAL DESIGN AND ENGINEERING HISTORY

Principal, the Benya Burnett Consultancy	2012-present
Principal, Benya Lighting Design, West Linn, OR	1994-2013
Principal, Pacific Lightworks, Portland, OR	1996-1998
Principal, Luminæ Souter Lighting Design, San Francisco	1983-1994
Associate and Chief Electrical Engineer, the Smith Group, Detroit	1980-1983
Electrical Engineer and Project Manager, the Smith Group, Detroit	1973-1980

EDUCATIONAL HISTORY

BSE, University of Michigan, Electrical Engineering	1973
BS, University of Michigan. Computer Science	1973
Graduate work in Computer Science, University of Michigan	1973
Professional Development Work in Building Energy Systems, Iowa State	1978
Professional Development Work in Daylighting, Harvard Graduate School	2009

ACADEMIC TEACHING HISTORY

Adjunct Professor of Architecture, Lawrence Technological University	1974-1978
Adjunct Professor of Architecture, Wayne State University	1979
Adjunct Professor of Design, University of Michigan	1980-1983
Adjunct Professor of Architecture, University of California at Berkeley	1984-1985
Adjunct Professor of Architecture, California College of Art	1986-1995
Artist in Residence, University of Nebraska School of Architecture	1998
Adjunct Professor of Interior Design, Marylhurst University	2002
Guest Lecturer, Oregon State University Interior Design Lighting Class	1999-2010
Instructor in Lighting Design, UC Davis	2008
Special studio in Daylighting, Daylectric Lighting, Ball State University	2007-2009
Director of the Advanced Lighting Design Program, UC Davis	2012-2013

PROFESSIONAL DEVELOPMENT TEACHING/LECTURE HISTORY

National and International Venues

LightFair International (58 presentations)	1990-2019
Prof. Lighting Design Conference (Berlin, Madrid, Copenhagen, Rome, Paris)	2009, 2011, 2013, 2015, 2017 and 2019
Professional Lighting Design (Alingsås, Copenhagen, Wismar, Venice)	2011
Pan Pacific Lighting Conference, (San Francisco)	1984, 1986, 1989
Intl. Daylighting Conference (Bilbao, Rotterdam, Lausanne, Copenhagen, London)	2007, 2009, 2011, 2013 and 2015
IALD Annual Conference	2000, 2002, 2010
IES Annual Conference	1985, 1988, 1990, 2000, 2005, 2017
International Dark Sky Association Annual Meeting	2002, 2003, 2008
AIA Annual Conference	2001, 2005, 2007
ASID Annual Conference	1985, 1986, 1989, 1990, 1994, 1998
Green Build	2002, 2003, 2007, 2008, 2009
Neocon Chicago	1998, 2002, 2009
Strategies in Light (LED and OLED conferences)	2009, 2011, 2012, 2015, 2017, 2018
LED Show	2013, 2015
LightShow West	2013, 2014, 2015
LED Specifier Summit	2013, 2014
US DOE LED/OLED Manufacturer Summit	2014

Local and Regional Venues

Flagstaff Regional Dark Sky Conference	2014
Designers Saturday, New York	1992
LEducation, New York	2011, 2015
Lighting Academy, Southern California Edison (5 classes, multiple times)	2007-2011
AIA Professional Development Classes Presented 20 programs local level)	2001-2011
ASID Professional Development Classes presented (82 programs local level)	1983-2009
APEM Professional Development Classes presented (local level)	1985-1995
IES Regional and Sectional Meetings -75 programs	1975-2011
Professional Development Classes for Commercial Clients	1983-2011
Commercial presentation and program clients include Acuity Brands Lighting, Cooper Lighting, GE Lighting, Sylvania Lighting, Lutron Electronics, ELP Lighting, Efficiency Vermont, Southern California Edison, Pacific Gas & Electric, Sacramento Municipal Power and Light, LA DWP, Southern California Gas Co, San Diego Gas & Electric, California Lighting Technology Center, Oklahoma Gas & Electric, Edison Electric Institute, American Lighting Association, Oregon Energy Trust, Pacific Power Company, BC Hydro, Connecticut Power and Light, Con Edison, Com Edison, Atlantic Electric, Georgia Power, Lucifer Lighting, NEEA, NEEP, CHPS, ASHRAE, Energy Center of Wisconsin, ACEEE, NRDC, Professional Lighting Design magazine, Architectural Lighting magazine, Architect magazine, AMC Trade Shows, the Atlanta Mart, the Merchandise Mart, LA Design Center, SF Mart, the Miami Merchandise Mart, Dallas Mart, Specs Retail Conference, the Electric Show, Electric West, EWEB, IIDA	
College Lectures	1983-2019
Programs include University of Oregon, Oregon State University, Mt. Hood Community College, University of Washington, University of California Davis, University of California Berkeley, Cal Poly Pomona, Cal Poly San Luis Obispo, University of California Santa Barbara, University of California San Diego, Cal State Chico, Cal State Sacramento, California Art Institute, La Canada College, UCLA, University of Nevada, Las Vegas, University of Texas, UT San Antonio, Venice School of Architecture, Hochschule Wismar, University of Montana, University of Idaho, Arizona State University, Oklahoma State University, University of Nebraska, Lawrence Technological Institute, University of Alabama, Memphis State University, Rhode Island School of Design, Louisiana Tech, University of Colorado, University of Virginia, University of Hawaii, Fashion Institute of Design, University of Vermont, University of Wisconsin, University of Minnesota, Parsons School of Design, University of Rochester, Chaminade College, Ball State University	
Papers Presentations	
IES, IALD, ASHRAE, USGBC, ACEEE, AIA, various programs.	
Internet Classes and Webinars	
Federal Energy Management Program (FEMP) Lighting Class	1997-2002
Bonneville Power ETC Program	2013
Focus on Energy Webinars (Wisconsin)	2013, 2014
IES Light Up Philadelphia Conference	2012
NECA Annual Conference, Las Vegas	2012
IES Conference Australia New Zealand, Auckland	2011
IES Conference Australia New Zealand, Queenstown, Keynote Address	2008
International Daylighting Conference, Bilbao	2007
Trade Commission of Spain, Barcelona	2005
IES Annual Conference, Keynote Address	1997

MEMBERSHIPS

Illuminating Engineering Society (IES)	1975-2017
Fellow Emeritus	2016-present
Board of Fellows (Chair 2007)	2003-2007
	1994-1998
Airport Lighting Committee	2014
ASHRAE AEDG Schools	2005-2007
Technical review committee	2007
Spectral effects committee	1998-2002
ASHRAE/IES90.1 representative	1992-1997
Elected Fellow	1991
Energy Management committee	1983-2008
Health Care Committee	1979-1983
Chair, annual meeting program committee	1985
Annual conference papers	1975,1983,2010
Elected member	1975
International Association of Lighting Designers (IALD)	1987-2017
Fellows Selection Committee	2010-2012
Elected Fellow	2005
Special presidential citation	2003
LightFair Management Board	2002-2004
NCQLP Board	2002-2003
Member of Board, Director of External Affairs	2002-2003
Member of Board, Director of Education	2001
LightFair Program Committee	1998-2001
Elected Professional Member	1987
International Dark Sky Association (IDA)	2001-2017
Chair, Model Lighting Ordinance Task Force	2001-2017
Chair, Technical Committee	2013-2015
Board of Directors	2001-2015
Treasurer	2008-2009
Technical Committee	2001-2012
American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)	
Member, SPC 189.1	2009-2010
Member SPC 90.1	1992-1997
AEDG Schools	2005-2007
High Efficiency Buildings Conference Paper presenter	2010, 2012
US Green Buildings Council (USGBC)	2002-2012
Institute of Electrical and Electronic Engineers (IEEE)	2005-2009
National Council on Qualifications for the Lighting Professions (NCLQP)	
Chairman, Examination Committee	2000
Chairman, Test Committee	1997-1999
Member, organizing committee	1995-1996
Lighting Certified	1998-2010
General Electric Consumer Advisory Council (GE CAC)	2001-2012
California Energy Commission (CEC)	
Advanced Lighting Professional Advisory Committee	1987-1994
Advanced Lighting Advisory Committee	1995-1998

PUBLICATIONS

Books (Author and Co-Author)

Lighting Design Basics Second Edition, Wiley	2012
Lighting Retrofits and Relighting, Wiley	2011
Lighting Design Basics Wiley	2004
Lighting Fundamentals, EPRI	1997
Lighting Retrofit Handbook, EPRI	1997
Daylighting Fundamentals, EPRI	1998
Lighting Controls: Patterns for Design, EPRI	1996

Contributing Editor and Author

Advanced Lighting Guidelines, California Energy Commission	1990,1993
Advanced Lighting Guidelines, New Buildings Institute	2001,2003,2009
Lighting Controls Patterns for Design, EPRI	1997

Author and Columnist

Architectural Lighting Magazine	1988-1992
Architectural Record Magazine	1992-1997
Architectural Lighting Magazine	2001-2015
Blog, Architectural Lighting	2008-2009
Lighting Design and Application	Centennial Edition Guest Columnist
Metropolis Magazine	Guest Columnist

Articles and papers

Architectural Lighting	62 articles and columns
Architectural Record	16 articles and columns
Progressive Architecture	1 article
Building Operating Management	3 articles
Better Bricks Website	4 articles
EC&M (McGraw Hill)	2 articles
Building Design and Construction	2 articles

Published White Papers

Lighting Calculations Using LED, Cree Website	2011
GaN on GaN LED Technology, SORAA Website	2012

REGISTRATIONS AND CERTIFICATIONS

Professional Engineer, California 12078	1984-present
Professional Engineer, Michigan 24679	1977-1984
Class A Energy Auditor, Iowa	1978
Certified Lighting Efficiency Professional (CLEP)	1992-1995
Lighting Certified (NCQLP)	1998-2010

LIGHTING DESIGN AND OTHER AWARDS

- 2018 International Illumination Design Award of Excellence, ASID HEADQUARTERS
- 2013 Edison Award for Environmental Design, REDDING SCHOOL FOR THE ARTS
- 2011 Edison Award for Environmental Design, UNIVERSITY OF ARIZONA SIXTH STREET HOUSING
- 2008 The Edison Award, SACRAMENTO MEMORIAL AUDITORIUM
- 2008 Edison Award for Environmental Design, SACRAMENTO MEMORIAL AUDITORIUM
- 2002 Edison Award for Environmental Design, LEWIS AND CLARK LAW LIBRARY
- 1996 Award of Merit, IL FORNAIO PORTLAND
- 1992 Award of Merit, ESPRIT DE CORP
- 1989 Award of Excellence, RUSS BUILDING
- 1989 Award of Excellence, BANK OF THE WEST
- 1989 Award of Merit, BROWN AND BAIN
- 1984 The Edison Award, FRANCO FERINI
- 2008 Guth Award of Merit and Lumen Award, SIDWELL FRIENDS SCHOOL
- 2003 Guth Award of Merit, WEST LINN LIBRARY
- 2003 Guth Award of Merit, SYMANTEC SPRINGFIELD
- 2003 Guth Award of Merit, LEWIS AND CLARK LAW LIBRARY
- 2000 Guth Award of Merit, THE HOTEL PATTEE
- 2000 Guth Award of Merit, THE STREET OF DREAMS
- 1997 Guth Award of Merit, HARRAH'S MARDI GRAS CASINO
- 1996 Guth Award of Merit, CITY OF PHOENIX STREET LIGHTING
- 1995 Guth Award of Merit, PALACE CASINO
- 1994 Guth Award of Merit, CITY OF MEMPHIS TROLLEY AND MAIN STREET
- 1993 Guth Award of Merit, ESPRIT DE CORP
- 1993 Guth Award of Merit and EPRI Efficiency Award, BEECH RESIDENCE
- 1992 Guth Award of Merit, STANFORD CHILDREN'S HOSPITAL
- 1991 Guth Award of Merit, WOLF RESIDENCE/MARIN DESIGNERS SHOWCASE
- 1991 Guth Award of Merit, THE RESORT AT SQUAW CREEK
- 1991 Guth Award of Merit, THE MARIN CIVIC CENTER
- 1990 Guth Award of Merit, HILLSBOROUGH RESIDENCE
- 1989 Guth Award of Merit, EMBASSY SUITES KAAHAPALI, MAUI
- 1988 International Illumination Design Award of Excellence, ST. MARY'S CATHEDRAL
- 1987 Guth Award of Merit, PAN PACIFIC LIGHTING EXPOSITION
- 1987 Guth Award of Merit, FRANCO FERINI
- 1986 Guth Award of Merit, RESIDENCE IN MARIN
- 1984 Guth Award of Merit, COMPREHENSIVE HEALTH SERVICES OF DETROIT
- 1984 Guth Award of Merit, AYLAR FOR MEN
- 1981 Guth Award of Merit, ATLANTA INTERNATIONAL AIRPORT
- 2012 Beyond Green Honor Award - First Place for a New Academic Complex, REDDING SCHOOL FOR THE ARTS
- 2012 Design Excellence Award, AIA Educational Facility Design Awards, REDDING SCHOOL FOR THE ARTS
- 2011 Beyond Green Advanced Building Citation, PORTLAND COMMUNITY COLLEGE
- 2011 Design Excellence Award, Community Facilities, HAVEN FOR HOPE
- 2009 AIA COTE Top Ten, THE CHARTWELL SCHOOL
- 2006 AIA COTE Top Ten, THE SIDWELL FRIENDS SCHOOL
- 2004 IALD Presidential Special Service Citation
- 2003 Better Bricks Professional Services First Runner Up

- 2003 IALD International Lighting Design Awards Special Citation, SYMANTEC
 - 1998 AIA Award, Architecture+Energy Program
 - 1995 US Department of Transportation and Endowment for the Arts
Design for Transportation Award of Merit
 - 1994 IESNA Presidential Citation
 - 1990 IESNA South Pacific Coast Vice-President's Award
 - 1990 Halo/ASID First Place Commercial, BANK OF THE WEST
 - 1980 Michigan Governor's Award
 - 1976 Electrical Consultant Energy Efficiency Design Award
-

HIGH PERFORMANCE AND EFFICIENT BUILDINGS INCLUDING LEED

Double Platinum LEED and WELL, ASID Headquarters, Washington DC

(3) Zero Net Energy Buildings (Fort Huachuca Colonel Smith Middle School, Redding School for the Arts, the Chartwell School)

(15) LEED Platinum Buildings

(1) WELL Platinum Building

(20) LEED Gold Buildings

(15) LEED Silver and Qualified Buildings

PATENTS

8502480 (2013) for a complex lighting control system that choreographs the lighting of environments and apparel, with emphasis on LED's.

20080005044 (2008) for an electronic signaling system to reduce power demand in buildings.

CONTACT INFORMATION

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James Benya, PE, FIES, FIALD

Lighting Expert Services Experience

June 2019

Mr. Benya is an experienced expert in the field of illumination with over 130 cases in more than 45 years of professional practice. Mr. Benya has served both sides of a variety of disputes and public process activities and follows the basic principle of providing clear and honest counsel to his client and the process. Benya's recent expert work includes forensic illuminating engineering, environmental impact assessments, zoning and planning matters, and assisting communities in developing lighting ordinances. Services include field research, codes and standards studies, expert reports, and sworn testimony.

Representative Applicable Experience and Outcomes

- Patent case, DMF v. Elco (current). Benya's work included a declaration, supplemental declarations, and rebuttals, resulting in a favorable injunction against the defendant. Reference David Long longdw@ergoniq.com and Ben Davidson ben@dlgla.com.
- Wrongful death case, Mendiola v Reading International (current). Benya's work includes determining the failure of a lighting system in a movie theater that prevented first responders from providing critical and immediate case. Reference Tim Osborn tosborn@osborn-law.com.
- Environmental case, San Diego Symphony. Assisted the Symphony and Port of San Diego in obtaining a Coastal Development Permit for the new Symphony bandshell on San Diego Bay. Permit granted by the California Coastal Commission on 11-9-18 citing Benya's work. Reference Katy McDonald, Symphony General Manager kmcdonald@sandiegosymphony.org
- Construction defects, outdoor lighting, Diocese of Oakland versus many parties (current). Benya's work is in the defense of the lighting designer. Current case involving the Oakland Cathedral of Light (Catholic).
- Product defects, City of Glendale versus ASP Holdings (c 2018). Benya's work for the City determined the cause of failure of over 500 LED flat panel luminaires that were not properly tested or certified and aided the City in obtaining appropriate replacements.
- Construction defects, lighting and controls, Torrance USD v. FEI et al (c. 2017). Benya's work includes discovering and documenting contractor's failure to meet

contract requirements and determination of damages. Reference Joseph M. Rossini JRossini@aalrr.com plaintiff team lead. Current case of Hull Middle School involving construction defects and the failure of the lighting control system. Case recently settled.

- Workplace injury to a longshoreman at the Oakland (CA) Marine Terminal involving OSHA lighting standards (c. 2014). Reference: Severson and Wershon, counsel for the defense. Benya's work included field measurements of light levels, investigation of lighting conditions at the accident scene, and an expert report. Benya's report found complete compliance with OSHA requirements at and around the accident scene. Confidentiality prevented our learning of the settlement terms reached after the delivery of our expert report, but counsel indicated that the report was critical in reaching a reasonable settlement.
- Workplace injury in the Spokane yards of BNSF (c. 2016) involving a worker driving a Kubota RTV service vehicle, Short v BNSF and BNSF v. Kubota USA. Retained by Kutak Rock, counsel for Kubota. Benya's work included review of the accident data, field measurements of current conditions of lighting systems and vehicle lighting, recreation of the conditions at the time of the accident, and a preliminary expert report. Our report determined that current conditions fail to meet federal guidelines for railyard lighting and BNSF's own standards, and the existing conditions at the time of the accident were worse. We were recently advised that Kubota was dismissed from the matter by summary judgement. Counsel indicated that the report was critical in their being dismissed in this matter. Reference: J.R. Carroll, jr.carroll@kutakrock.com counsel for Kubota.
- Patent Case involving prior art, Verilux v. Ott Lite (c 2010). Benya's prior art research allowed attorneys Fowler White (cmcgarvie@fowlerwhite.com) to successfully challenge US patent 7,484,867. Retained through Ruben Anders (rrubin@rascientific.com)
- Patent Case c. 2004 involving principles of physics and prior art (client Finelite, Mark Benguerel (mbenguerel@finelite.com)). Benya's work helped Finelite avoid litigation and achieved a settlement involving a patent belonging to another company.
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- San Francisco building code. Immediately after deposition, a favorable settlement was reached for the plaintiff. Confidentiality prevents sharing additional information.
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- Pedestrian struck by car injury accident, Lafayette, CA. Reference: James Armstrong jamesa@bjglawyers.com, counsel for the plaintiff.
- Light reflection issues interfering with major league baseball, San Diego Petco Field (Padres). Reference Paul Thometz PTHometz@cisterra.com, client/defendant. Current case.

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Curriculum Vitae

JAMES ROBERT BENYA, PE, FIES, FIALD

Principal, the Benya Burnett Consultancy

Winner of the 2018 International Illumination Design Award of Excellence

"At the leading edge of light" Metropolis

"One of the top lighting designers in the US", Departures by American Express

"Top 25 Retail Lighting Designers in US", Display and Design Ideas

"Hot designer", SNAP Magazine

"Jim has been at the forefront from the start, specializing in integrated daylighting strategies and sustainable lighting approaches long before most designers knew what that was," Architectural Lighting

Inaugural member of the Michigan Lighting Hall of Fame

Jim Benya is a professional illuminating engineer, lighting designer, educator and consultant with 46 years of experience. He is a Registered Professional Electrical Engineer, Fellow of the Illuminating Engineering Society of North America (FIES), and Fellow of the International Association of Lighting Designers (IALD). Benya established and led California's first independent lighting design firm Luminæ Souter Lighting Design as Senior Principal and CEO before starting Benya Lighting Design in 1994 in Portland, Oregon. His design work has been published in every major lighting design and architectural journal, including Architecture, Architectural Record, Architectural Lighting, Progressive Architecture, LD&A, Lighting Dimensions, Interiors, Interior Design, Designers West, Northern California Home and Garden, Architectural Digest, and Building Design and Construction. He has won numerous lighting design awards, including the Edison Award, the Edison Award of Excellence (7 times), the Edison Award for Environmental Design (thrice), the International Illumination Design Award of Excellence (twice), and the Source Awards First Place Award. He is the author of **Lighting Design Basics** (Wiley) and **Lighting Retrofits and Relighting** (Wiley) and his work is featured in nine books, including the Best of Lighting Design. In addition to design work, Benya Burnett offers codes and standards development, forensic and expert services in lighting, environmental impact assessments and studies, technical research and reports, educational classes and related materials, and product design consulting and assistance to manufacturers. Benya is currently based in Davis, California as Principal of the Benya Burnett Consultancy with partner Deborah Burnett.

PROFESSIONAL DESIGN AND ENGINEERING HISTORY

Principal, the Benya Burnett Consultancy	2012-present
Principal, Benya Lighting Design, West Linn, OR	1994-2013
Principal, Pacific Lightworks, Portland, OR	1996-1998
Principal, Luminæ Souter Lighting Design, San Francisco	1983-1994
Associate and Chief Electrical Engineer, the Smith Group, Detroit	1980-1983
Electrical Engineer and Project Manager, the Smith Group, Detroit	1973-1980

EDUCATIONAL HISTORY

BSE, University of Michigan, Electrical Engineering	1973
BS, University of Michigan. Computer Science	1973
Graduate work in Computer Science, University of Michigan	1973
Professional Development Work in Building Energy Systems, Iowa State	1978
Professional Development Work in Daylighting, Harvard Graduate School	2009

ACADEMIC TEACHING HISTORY

Adjunct Professor of Architecture, Lawrence Technological University	1974-1978
Adjunct Professor of Architecture, Wayne State University	1979
Adjunct Professor of Design, University of Michigan	1980-1983
Adjunct Professor of Architecture, University of California at Berkeley	1984-1985
Adjunct Professor of Architecture, California College of Art	1986-1995
Artist in Residence, University of Nebraska School of Architecture	1998
Adjunct Professor of Interior Design, Marylhurst University	2002
Guest Lecturer, Oregon State University Interior Design Lighting Class	1999-2010
Instructor in Lighting Design, UC Davis	2008
Special studio in Daylighting, Daylectric Lighting, Ball State University	2007-2009
Director of the Advanced Lighting Design Program, UC Davis	2012-2013

PROFESSIONAL DEVELOPMENT TEACHING/LECTURE HISTORY

National and International Venues

LightFair International (58 presentations)	1990-2019
Prof. Lighting Design Conference (Berlin, Madrid, Copenhagen, Rome, Paris)	2009, 2011, 2013, 2015, 2017 and 2019
Professional Lighting Design (Alingsås, Copenhagen, Wismar, Venice)	2011
Pan Pacific Lighting Conference, (San Francisco)	1984, 1986, 1989
Intl. Daylighting Conference (Bilbao, Rotterdam, Lausanne, Copenhagen, London)	2007, 2009, 2011, 2013 and 2015
IALD Annual Conference	2000, 2002, 2010
IES Annual Conference	1985, 1988, 1990, 2000, 2005, 2017
International Dark Sky Association Annual Meeting	2002, 2003, 2008
AIA Annual Conference	2001, 2005, 2007
ASID Annual Conference	1985, 1986, 1989, 1990, 1994, 1998
Green Build	2002, 2003, 2007, 2008, 2009
Neocon Chicago	1998, 2002, 2009
Strategies in Light (LED and OLED conferences)	2009, 2011, 2012, 2015, 2017, 2018
LED Show	2013, 2015
LightShow West	2013, 2014, 2015
LED Specifier Summit	2013, 2014
US DOE LED/OLED Manufacturer Summit	2014

Local and Regional Venues

Flagstaff Regional Dark Sky Conference	2014
Designers Saturday, New York	1992
LEducation, New York	2011, 2015
Lighting Academy, Southern California Edison (5 classes, multiple times)	2007-2011
AIA Professional Development Classes Presented 20 programs local level)	2001-2011
ASID Professional Development Classes presented (82 programs local level)	1983-2009
APEM Professional Development Classes presented (local level)	1985-1995
IES Regional and Sectional Meetings -75 programs	1975-2011
Professional Development Classes for Commercial Clients	1983-2011
Commercial presentation and program clients include Acuity Brands Lighting, Cooper Lighting, GE Lighting, Sylvania Lighting, Lutron Electronics, ELP Lighting, Efficiency Vermont, Southern California Edison, Pacific Gas & Electric, Sacramento Municipal Power and Light, LA DWP, Southern California Gas Co, San Diego Gas & Electric, California Lighting Technology Center, Oklahoma Gas & Electric, Edison Electric Institute, American Lighting Association, Oregon Energy Trust, Pacific Power Company, BC Hydro, Connecticut Power and Light, Con Edison, Com Edison, Atlantic Electric, Georgia Power, Lucifer Lighting, NEEA, NEEP, CHPS, ASHRAE, Energy Center of Wisconsin, ACEEE, NRDC, Professional Lighting Design magazine, Architectural Lighting magazine, Architect magazine, AMC Trade Shows, the Atlanta Mart, the Merchandise Mart, LA Design Center, SF Mart, the Miami Merchandise Mart, Dallas Mart, Specs Retail Conference, the Electric Show, Electric West, EWEB, IIDA	
College Lectures	1983-2019
Programs include University of Oregon, Oregon State University, Mt. Hood Community College, University of Washington, University of California Davis, University of California Berkeley, Cal Poly Pomona, Cal Poly San Luis Obispo, University of California Santa Barbara, University of California San Diego, Cal State Chico, Cal State Sacramento, California Art Institute, La Canada College, UCLA, University of Nevada, Las Vegas, University of Texas, UT San Antonio, Venice School of Architecture, Hochschule Wismar, University of Montana, University of Idaho, Arizona State University, Oklahoma State University, University of Nebraska, Lawrence Technological Institute, University of Alabama, Memphis State University, Rhode Island School of Design, Louisiana Tech, University of Colorado, University of Virginia, University of Hawaii, Fashion Institute of Design, University of Vermont, University of Wisconsin, University of Minnesota, Parsons School of Design, University of Rochester, Chaminade College, Ball State University	
Papers Presentations	
IES, IALD, ASHRAE, USGBC, ACEEE, AIA, various programs.	
Internet Classes and Webinars	
Federal Energy Management Program (FEMP) Lighting Class	1997-2002
Bonneville Power ETC Program	2013
Focus on Energy Webinars (Wisconsin)	2013, 2014
IES Light Up Philadelphia Conference	2012
NECA Annual Conference, Las Vegas	2012
IES Conference Australia New Zealand, Auckland	2011
IES Conference Australia New Zealand, Queenstown, Keynote Address	2008
International Daylighting Conference, Bilbao	2007
Trade Commission of Spain, Barcelona	2005
IES Annual Conference, Keynote Address	1997

MEMBERSHIPS

Illuminating Engineering Society (IES)	1975-2017
Fellow Emeritus	2016-present
Board of Fellows (Chair 2007)	2003-2007
	1994-1998
Airport Lighting Committee	2014
ASHRAE AEDG Schools	2005-2007
Technical review committee	2007
Spectral effects committee	1998-2002
ASHRAE/IES90.1 representative	1992-1997
Elected Fellow	1991
Energy Management committee	1983-2008
Health Care Committee	1979-1983
Chair, annual meeting program committee	1985
Annual conference papers	1975,1983,2010
Elected member	1975
International Association of Lighting Designers (IALD)	1987-2017
Fellows Selection Committee	2010-2012
Elected Fellow	2005
Special presidential citation	2003
LightFair Management Board	2002-2004
NCQLP Board	2002-2003
Member of Board, Director of External Affairs	2002-2003
Member of Board, Director of Education	2001
LightFair Program Committee	1998-2001
Elected Professional Member	1987
International Dark Sky Association (IDA)	2001-2017
Chair, Model Lighting Ordinance Task Force	2001-2017
Chair, Technical Committee	2013-2015
Board of Directors	2001-2015
Treasurer	2008-2009
Technical Committee	2001-2012
American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)	
Member, SPC 189.1	2009-2010
Member SPC 90.1	1992-1997
AEDG Schools	2005-2007
High Efficiency Buildings Conference Paper presenter	2010, 2012
US Green Buildings Council (USGBC)	2002-2012
Institute of Electrical and Electronic Engineers (IEEE)	2005-2009
National Council on Qualifications for the Lighting Professions (NCLQP)	
Chairman, Examination Committee	2000
Chairman, Test Committee	1997-1999
Member, organizing committee	1995-1996
Lighting Certified	1998-2010
General Electric Consumer Advisory Council (GE CAC)	2001-2012
California Energy Commission (CEC)	
Advanced Lighting Professional Advisory Committee	1987-1994
Advanced Lighting Advisory Committee	1995-1998

PUBLICATIONS

Books (Author and Co-Author)

Lighting Design Basics Second Edition, Wiley	2012
Lighting Retrofits and Relighting, Wiley	2011
Lighting Design Basics Wiley	2004
Lighting Fundamentals, EPRI	1997
Lighting Retrofit Handbook, EPRI	1997
Daylighting Fundamentals, EPRI	1998
Lighting Controls: Patterns for Design, EPRI	1996

Contributing Editor and Author

Advanced Lighting Guidelines, California Energy Commission	1990,1993
Advanced Lighting Guidelines, New Buildings Institute	2001,2003,2009
Lighting Controls Patterns for Design, EPRI	1997

Author and Columnist

Architectural Lighting Magazine	1988-1992
Architectural Record Magazine	1992-1997
Architectural Lighting Magazine	2001-2015
Blog, Architectural Lighting	2008-2009
Lighting Design and Application	Centennial Edition Guest Columnist
Metropolis Magazine	Guest Columnist

Articles and papers

Architectural Lighting	62 articles and columns
Architectural Record	16 articles and columns
Progressive Architecture	1 article
Building Operating Management	3 articles
Better Bricks Website	4 articles
EC&M (McGraw Hill)	2 articles
Building Design and Construction	2 articles

Published White Papers

Lighting Calculations Using LED, Cree Website	2011
GaN on GaN LED Technology, SORAA Website	2012

REGISTRATIONS AND CERTIFICATIONS

Professional Engineer, California 12078	1984-present
Professional Engineer, Michigan 24679	1977-1984
Class A Energy Auditor, Iowa	1978
Certified Lighting Efficiency Professional (CLEP)	1992-1995
Lighting Certified (NCQLP)	1998-2010

LIGHTING DESIGN AND OTHER AWARDS

- 2018 International Illumination Design Award of Excellence, ASID HEADQUARTERS
- 2013 Edison Award for Environmental Design, REDDING SCHOOL FOR THE ARTS
- 2011 Edison Award for Environmental Design, UNIVERSITY OF ARIZONA SIXTH STREET HOUSING
- 2008 The Edison Award, SACRAMENTO MEMORIAL AUDITORIUM
- 2008 Edison Award for Environmental Design, SACRAMENTO MEMORIAL AUDITORIUM
- 2002 Edison Award for Environmental Design, LEWIS AND CLARK LAW LIBRARY
- 1996 Award of Merit, IL FORNAIO PORTLAND
- 1992 Award of Merit, ESPRIT DE CORP
- 1989 Award of Excellence, RUSS BUILDING
- 1989 Award of Excellence, BANK OF THE WEST
- 1989 Award of Merit, BROWN AND BAIN
- 1984 The Edison Award, FRANCO FERINI
- 2008 Guth Award of Merit and Lumen Award, SIDWELL FRIENDS SCHOOL
- 2003 Guth Award of Merit, WEST LINN LIBRARY
- 2003 Guth Award of Merit, SYMANTEC SPRINGFIELD
- 2003 Guth Award of Merit, LEWIS AND CLARK LAW LIBRARY
- 2000 Guth Award of Merit, THE HOTEL PATTEE
- 2000 Guth Award of Merit, THE STREET OF DREAMS
- 1997 Guth Award of Merit, HARRAH'S MARDI GRAS CASINO
- 1996 Guth Award of Merit, CITY OF PHOENIX STREET LIGHTING
- 1995 Guth Award of Merit, PALACE CASINO
- 1994 Guth Award of Merit, CITY OF MEMPHIS TROLLEY AND MAIN STREET
- 1993 Guth Award of Merit, ESPRIT DE CORP
- 1993 Guth Award of Merit and EPRI Efficiency Award, BEECH RESIDENCE
- 1992 Guth Award of Merit, STANFORD CHILDREN'S HOSPITAL
- 1991 Guth Award of Merit, WOLF RESIDENCE/MARIN DESIGNERS SHOWCASE
- 1991 Guth Award of Merit, THE RESORT AT SQUAW CREEK
- 1991 Guth Award of Merit, THE MARIN CIVIC CENTER
- 1990 Guth Award of Merit, HILLSBOROUGH RESIDENCE
- 1989 Guth Award of Merit, EMBASSY SUITES KAA NAPALI, MAUI
- 1988 International Illumination Design Award of Excellence, ST. MARY'S CATHEDRAL
- 1987 Guth Award of Merit, PAN PACIFIC LIGHTING EXPOSITION
- 1987 Guth Award of Merit, FRANCO FERINI
- 1986 Guth Award of Merit, RESIDENCE IN MARIN
- 1984 Guth Award of Merit, COMPREHENSIVE HEALTH SERVICES OF DETROIT
- 1984 Guth Award of Merit, AYL A FOR MEN
- 1981 Guth Award of Merit, ATLANTA INTERNATIONAL AIRPORT
- 2012 Beyond Green Honor Award - First Place for a New Academic Complex, REDDING SCHOOL FOR THE ARTS
- 2012 Design Excellence Award, AIA Educational Facility Design Awards, REDDING SCHOOL FOR THE ARTS
- 2011 Beyond Green Advanced Building Citation, PORTLAND COMMUNITY COLLEGE
- 2011 Design Excellence Award, Community Facilities, HAVEN FOR HOPE
- 2009 AIA COTE Top Ten, THE CHARTWELL SCHOOL
- 2006 AIA COTE Top Ten, THE SIDWELL FRIENDS SCHOOL
- 2004 IALD Presidential Special Service Citation
- 2003 Better Bricks Professional Services First Runner Up

- 2003 IALD International Lighting Design Awards Special Citation, SYMANTEC
 - 1998 AIA Award, Architecture+Energy Program
 - 1995 US Department of Transportation and Endowment for the Arts
Design for Transportation Award of Merit
 - 1994 IESNA Presidential Citation
 - 1990 IESNA South Pacific Coast Vice-President's Award
 - 1990 Halo/ASID First Place Commercial, BANK OF THE WEST
 - 1980 Michigan Governor's Award
 - 1976 Electrical Consultant Energy Efficiency Design Award
-

HIGH PERFORMANCE AND EFFICIENT BUILDINGS INCLUDING LEED

Double Platinum LEED and WELL, ASID Headquarters, Washington DC

(3) Zero Net Energy Buildings (Fort Huachuca Colonel Smith Middle School, Redding School for the Arts, the Chartwell School)

(15) LEED Platinum Buildings

(1) WELL Platinum Building

(20) LEED Gold Buildings

(15) LEED Silver and Qualified Buildings

PATENTS

8502480 (2013) for a complex lighting control system that choreographs the lighting of environments and apparel, with emphasis on LED's.

20080005044 (2008) for an electronic signaling system to reduce power demand in buildings.

CONTACT INFORMATION

James R Benya

Design Services, Inc.

DbA BENYA BURNETT CONSULTANCY

501 Fillmore Court

Davis, CA 95616

Cell/SMS +1 (503) 519-9631

jbenya@benyaburnett.com

www.benyaburnett.com

James Benya, PE, FIES, FIALD

Lighting Expert Services Experience

June 2019

Mr. Benya is an experienced expert in the field of illumination with over 130 cases in more than 45 years of professional practice. Mr. Benya has served both sides of a variety of disputes and public process activities and follows the basic principle of providing clear and honest counsel to his client and the process. Benya's recent expert work includes forensic illuminating engineering, environmental impact assessments, zoning and planning matters, and assisting communities in developing lighting ordinances. Services include field research, codes and standards studies, expert reports, and sworn testimony.

Representative Applicable Experience and Outcomes

- Patent case, DMF v. Elco (current). Benya's work included a declaration, supplemental declarations, and rebuttals, resulting in a favorable injunction against the defendant. Reference David Long longdw@ergoniq.com and Ben Davidson ben@dlgla.com.
- Wrongful death case, Mendiola v Reading International (current). Benya's work includes determining the failure of a lighting system in a movie theater that prevented first responders from providing critical and immediate case. Reference Tim Osborn tosborn@osborn-law.com.
- Environmental case, San Diego Symphony. Assisted the Symphony and Port of San Diego in obtaining a Coastal Development Permit for the new Symphony bandshell on San Diego Bay. Permit granted by the California Coastal Commission on 11-9-18 citing Benya's work. Reference Katy McDonald, Symphony General Manager kmcDonald@sandiegosymphony.org
- Construction defects, outdoor lighting, Diocese of Oakland versus many parties (current). Benya's work is in the defense of the lighting designer. Current case involving the Oakland Cathedral of Light (Catholic).
- Product defects, City of Glendale versus ASP Holdings (c 2018). Benya's work for the City determined the cause of failure of over 500 LED flat panel luminaires that were not properly tested or certified and aided the City in obtaining appropriate replacements.
- Construction defects, lighting and controls, Torrance USD v. FEI et al (c. 2017). Benya's work includes discovering and documenting contractor's failure to meet

contract requirements and determination of damages. Reference Joseph M. Rossini JRossini@aalrr.com plaintiff team lead. Current case of Hull Middle School involving construction defects and the failure of the lighting control system. Case recently settled.

- Workplace injury to a longshoreman at the Oakland (CA) Marine Terminal involving OSHA lighting standards (c. 2014). Reference: Severson and Wershon, counsel for the defense. Benya's work included field measurements of light levels, investigation of lighting conditions at the accident scene, and an expert report. Benya's report found complete compliance with OSHA requirements at and around the accident scene. Confidentiality prevented our learning of the settlement terms reached after the delivery of our expert report, but counsel indicated that the report was critical in reaching a reasonable settlement.
- Workplace injury in the Spokane yards of BNSF (c. 2016) involving a worker driving a Kubota RTV service vehicle, Short v BNSF and BNSF v. Kubota USA. Retained by Kutak Rock, counsel for Kubota. Benya's work included review of the accident data, field measurements of current conditions of lighting systems and vehicle lighting, recreation of the conditions at the time of the accident, and a preliminary expert report. Our report determined that current conditions fail to meet federal guidelines for railyard lighting and BNSF's own standards, and the existing conditions at the time of the accident were worse. We were recently advised that Kubota was dismissed from the matter by summary judgement. Counsel indicated that the report was critical in their being dismissed in this matter. Reference: J.R. Carroll, jr.carroll@kutakrock.com counsel for Kubota.
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- Environment Alberta EIR evaluation of a proposed Sundance 7 power plant near Edmonton, light pollution evaluation. Reference: Yuk-Sing Cheng YCheng@ackroydlaw.com , Acroyd LLP, counsel for local residents.
- Electrical contractor v. general contractor, contract dispute, Honolulu. Reference: Erik D. Eike eike@ikelaw.com counsel for plaintiff. Mr. Benya's expert report and deposition were instrumental in achieving a favorable settlement. Confidentiality prevents sharing additional information.
- Product Liability, metal halide lighting caused fire, near Sarnia, Ontario. Reference: Alan S. Cofman alan@fernandeshearn.com, counsel for the Plaintiff. Current case.
- Pedestrian struck by car injury accident, Lafayette, CA. Reference: James Armstrong jamesa@bjglawyers.com, counsel for the plaintiff.
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