Wilshire Grand Lighting References

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Mon, Feb 28, 2011 at 12:50 PM

To: Kevin Keller <kevin.keller@lacity.org>, "Bonstin, Shana" <shana.bonstin@lacity.org> Cc: Michael Espinosa <michael.espinosa@lacity.org>

Hi Kevin,

Please include this e-mail, including the attached Memorandum and information regarding OMB, Brookfield's lighting consultant, as part of the record for the Wilshire Grand project (CF 11-0106). The Memorandum includes lighting standards from IES (Illuminating Engineering Society) and comparative candela levels of various signage in the downtown area, such as the City National Bank and Paul Hastings signage located on the crowns of the buildings between 5th/6th/Flower/Figueroa.

Regards,



Ryan M. Leaderman Associate

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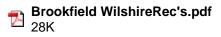
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2 attachments



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Project Memorandum

Date: February 11, 2011
Project: Brookfield Properties – Wilshire Grand Façade Lighting Review
RE: OMB Recommendations for L.E.D. Graphical Display – Maximum Brightness Luminance Levels
Prepared By: Dennis E. McVay, OMB Electrical Engineers, Inc.

Vertical Zone 1:

Nighttime Brightness Level: 700-1000 Candelas / sq.meter

Reference – 700-1000 Candelas / sq.meter represents the IES recommendation for commercial gas station signs. This value is approximately twice the IES recommendation for bright fascia signs in shopping centers.

Daytime Brightness Level: 3,500 Candelas / sq.meter

Reference – Thomas Properties proposed luminance level. IES does not differentiate daytime / nighttime brightness levels. Internet downloads for the State of Illinois and Ohio concluded 5,000 Candelas / sq. meter maximum for daytime brightness levels on video signage displays.

Vertical Zone 2:

Nighttime Brightness Level: 130 Candelas / sq.meter

Reference – 130 Candelas / sq.meter is brightness level of City National Bank Sign. IES recommendation for lighted facades and fascia signs is 70-350 Candelas / sq.meter dependent on brightness level of surroundings. IES recommendation for bright fascia signs in shopping centers is 250-500 Candelas / sq.meter.

Daytime Brightness Level: 1700 Candelas / sq.meter

Reference – The highest signage brightness level from the IES is 1700 Candelas / sq.meter targeted for emergency traffic control signs.

Vertical Zone 3 (Only if Brookfield was to permit lighting in this zone):

Nighttime Brightness Level: 65 Candelas / sq.meter

Reference – 65 Candelas / sq.meter represents the brightness level of the Paul Hastings sign which Mark and Burt of Brookfield found acceptable. The IES suggests 70 Candelas / sq.meter on low end for facades in low brightness areas which it should be at this elevation 150 feet and higher above finished grade.

Daytime Brightness Level: 700-1000 Candelas / sq.meter

Reference – IES recommendation for Gas Station signs which are normally on during daytime periods.

Vertical Zone 4: Nighttime Brightness Level: 130 Candelas / sq.meter

Reference – 130 Candelas / sq.meter represents the brightness level of the City National Bank sign which is very bright and readable from a distance.

Daytime Brightness Level: 1000-1400 Candelas / sq.meter

Reference – 1000-1400 Candelas / sq.meter represents IES recommendation for High Rise Building signs.

- END –

Company Profile

OMB Electrical Engineers, Inc. is a full-service electrical engineering firm with extensive experience on a variety of projects. OMB has provided professional services since incorporating in 1987, and each of our principals has more than 25 years of experience. Our staff of 31 provides us with the resources and versatility required to meet demanding design and construction schedules.

We work closely with the design team to evaluate building designs. We ensure that State of California Title 24 energy regulations are met and we coordinate any available utility company rebates into our design.

OMB provides complete plans, specifications, studies, and cost estimates for power, lighting and life-safety systems. Our designs are completely coordinated with the Architect, Mechanical Engineer, and other specialty consultants.

Services

Code- and Peer- Review Utility Coordination

- Application of Design Criteria
- Conformance with Applicable Federal, State, and Local Building Codes
- Conformance with Agency Regulations
- Professional Certification of Contract Documents
- Utility Coordination

Construction Documents

- Schematic/Design Development
- Construction Drawings
- Technical Specifications
- Cost Estimates

Master Planning and Feasibility Studies

- Design Criteria Development and Application
- Facility Development and Economic Analyses
- Utilities Infrastructure Studies
- Due Diligence Reports
- Sustainable "Green" Facility Integration

Construction Support

- Agency Plan Check Submittal / Permits
- Contractor Pre-Qualification
- Construction Document Interpretation
- · Bid Review and Advisement
- Contract Administration
- Contractor [Shop Drawing] Submittal Review
- Preparation of Change Orders
- Expert Inspection

Inspection and Technical Analysis

- Value Engineering
- Energy-Efficiency Retrofit Audits, Analysis and Design
- Computerized Point-by-Point Lighting Studies
- · System Fault, Voltage, and Power Flow Studies
- Protective Relay and Device Coordination Studies
- On-Site Electrical Measurement and Recording of Power
- Simulation/Mock-Up of Facility Lighting Options
- · Inspection and Preparation of As-Builts
- Computer-Aided Design and Drafting (CADD)
- Operating & Maintenance Programs; Field Testing
- Field Inspection and Testing

Design and Advisement Electrical Systems

- Utilities Infrastructure
- Power Service and Distribution
- Interior Lighting
- Exterior Lighting
- Voice and Data Communication
- Fire Alarm
- Electronic Security
- Sound
- Energy Management and Controls
- Instrumentation and Control

Portfolio



Retail

- Aliso Creek Town Center Aliso Viejo, CA
- Anaheim Arena Plaza Anaheim, CA
- Armani's Clothing Store Cabazon, CA
- Barnes & Noble Bookstore Tustin, CA
- Crown Plaza Los Angeles, CA
- Empire Hair Salon Irvine, CA
- Franciscan Plaza San Juan Capistrano, CA
- Home Depot Western U.S.
- Improv Comedy Club Spectrum Center Irvine, CA
- L.A. Fitness Southern California
- · Lone Tree Plaza Brentwood, CA
- Old Navy Clothing Company Anaheim, CA
- Sears, and Sears Home Life Southern California
- Temecula Power Retail Center Temecula, CA
- Tilly's Spectrum Center Irvine, CA



Healthcare

- Childrens Hospital Los Angeles Los Angeles, CA
- Children's Hospital of Orange County Orange, CA
- · Fountain Valley Regional Hospital & Medical Center Fountain Valley, CA
- · Hi-Desert Medical Center Joshua Tree, CA
- · Hoag Memorial Presbyterian Hospital Newport Beach, CA
- House Ear Institute Los Angeles, CA
- Kaiser Hospital/Fontana Medical Center Fontana, CA
- Mission Hospital Regional Medical Center Mission Viejo, CA
- Queen of Angels-Hollywood Presbyterian Medical Center Los Angeles, CA
- Queen of the Valley Hospital Napa, CA
- St. Jude Medical Center Los Angeles, CA
- St. Joseph Hospital Orange, CA
- University of California Irvine Medical Center Irvine, CA

• VA Medical Center Los Angeles, CA



Restaurants

- Bubba Gump Shrimp Co. Breckinridge, CO
- Chevy's Mexican Restaurant Pleasant Valley, CA
- Chinois Restaurant Las Vegas, Nevada
- Flemings Prime Steakhouse Fashion Island Newport Beach, CA
- Market Broller Restaurant Block at Orange Orange, CA
- McDonalds, Taco Bell, Wienerschnitzel
- Olive Garden & Red Lobster Restaurants
- Ruby's Restaurant Huntington Beach, CA
- Spago's Restaurant Beverly Hills, CA
- Walt Disney Studios Commissary Burbank, CA
- Wolfgang Puck Obachine Beverly Hills, CA
- Wolfgang Puck Cafes



Commercial

- B. Braun Medical Office Complex Irvine, CA
- BKM Office & Warehouse Complex Oceanside, CA
- Boeing Integration Center Anaheim, CA
- Buena Park Commerce Center Buena Park, CA
- Encino Terrace Center Encino, CA
- Evangelical Christian Credit Union Brea, CA
- · Fairway Business Center Rancho Cucamonga, CA
- High Park Office Complex Mission Viejo, CA
- Indian Oasis Resort Office Complex Palm Springs, CA
- Ridge Property Commercial Buildings Riverside, CA
- State Compensation Insurance Fund Monterey Park, CA
- Sycamore Commons Corporate Center San Juan Capistrano, CA
- Toshiba Teleconference Center Irvine, CA
- UC Riverside Research Park Riverside, CA
- Wolfgang Puck Corporate Headquarters Los Angeles, CA



Institutions

- Bethany Lutheran Church Long Beach, CA
- Church of the Latter Day Saints Cypress, CA; Corona, CA
- Lake Hills Community Church Laguna Hills, CA
- Saddleback Valley Community Church Lake Forest, CA



Public Works

- Air National Guard Fresho, CA
- Fullerton Municipal Airport Fullerton, CA
- John Wayne Airport Costa Mesa, CA
- Marine Corps Base Camp Pendleton Camp Pendleton, CA
- Metro Gold Line L.A. to Pasadena Extension Los Angeles, CA
- Miramar Naval Air Station Miramar, CA
- Old Town City of Temecula Temecula, CA
- Orange County Transit Authority Headquarters Orange, CA
- San Jose Civic Center Parking Structure San Jose, CA
- Sheriffs Substation Aliso Viejo, CA
- Sunnyvale Multi-Modal Transit Station Sunnyvale, CA
- United States Postal Service Facilities
- Vandenberg Air Force Base Vandenberg Afb, CA



Hotels

- Aviara Four Seasons Resort Carlsbad, CA
- Balboa Bay Club & Hotel Newport Beach, CA
- Disneyland Hotel Anaheim, CA
- Four Seasons at Hualalai Kona, HI
- Hard Rock Hotel & Casino Biloxi, MS

- · Industry Hills Sheraton City of Industry, CA
- · Laguna Cliff's Marriott Resort & Spa Dana Point, CA
- Marriott Timeshare, Pelican Hill Resort Newport Beach, CA
- MGM Grand Hotel and Casino Las Vegas, NV
- Montage Hotel Resort & Spa Laguna Beach, CA
- Ritz-Carlton Bachelor's Gulch Avon, CO
- Ritz-Carlton Half Moon Bay Hotel Half Moon Bay, CA
- Riviera Country Club Pacific Palisades, CA
- The Salamander Inn Middleburg, VA



Research

- Childrens Hospital Los Angeles Los Angeles, CA
- Children's Hospital of Orange County Orange, CA
- Fountain Valley Regional Hospital & Medical Center Fountain Valley, CA
- Hoag Memorial Presbyterian Hospital Newport Beach, CA
- Hi-Desert Medical Center Joshua Tree, CA
- House Ear Institute Los Angeles, CA
- Kaiser Hospital/Fontana Medical Center Fontana, CA
- Mission Hospital Regional Medical Center Mission Viejo, CA
- Queen of Angels-Hollywood Presbyterian Medical Center Los Angeles, CA
- Queen of the Valley Hospital Napa, CA
- St. Jude Medical Center Los Angeles, CA
- St. Joseph Hospital Orange, CA
- University of California Irvine Medical Center Irvine, CA
- VA Medical Center Los Angeles, CA



Office Buildings

- B. Braun Medical Office Complex Irvine, CA
- BKM Office & Warehouse Complex Oceanside, CA
- Boeing Park Commerce Center Buena Park, CA
- Encino Terrace Center Encino, CA
- Evangelical Christian Credit Union Brea, CA
- · Fairway Business Center Rancho Cucamonga, CA
- High Park Office Complex Mission Viejo, CA

- Indian Oasis Resort Office Complex Palm Springs, CA
- Ridge Property Commercial Buildings Riverside, CA
- State Compensation Insurance Fund Monterey Park, CA
- Sycamore Commons Corporate Center San Juan Capistrano, CA
- Toshiba Teleconference Center Irvine, CA
- UC Riverside Research Park Riverside, CA
- Wolfgang Puck Corporate Headquarters Los Angeles, CA



Civic

- Orange County Public Library Aliso Viejo, CA
- Orange County Public Library Rancho Santa Margarita, CA
- · Costa Mesa City Hall Costa Mesa, CA
- Etnies Skate Park Lake Forest, CA
- Old Town Temecula, CA
- San Jose Civic Center Parking Structure San Jose, CA
- Sheriffs Substation Aliso Viejo, CA
- United States Postal Service Facilities



Residential

- Bonita Village Apartments Irvine, CA
- Colony at Aventíne Apartments La Jolla, CA
- Custom Residences
- · Monarch Beach Hillside Villas Dana Point, CA
- Olson Cherry Orchard Apartments Sunnyvale, CA
- Playa Vista Main Street Condominiums Los Angeles, CA
- Quail Creek Apartments Irvine, CA
- Stonecrest Village Apartments San Diego, CA
- The Irvine Company Apartment Communities Irvine, CA
- Complexes throughout Irvine
- The Tides Condominiums Huntington Beach, CA
- Town Center Senior Apartments Rancho Santa Margarita, CA



Industrial

- Allergan Pharmaceuticals & Manufacturing Irvine, CA
- American Honda Motor Company Torrance, CA
- Boeing Corporation Long Beach, CA
- DiCon Fiberoptics Campus Richmond, CA
- Dominguez Technology Center Los Angeles, CA
- ICU Medical Manufacturing Facility San Clemente, CA
- Medtronic Manifacturing Santa Ana, CA
- Square "D" Company MGE UPS Test Facility Costa Mesa, CA
- Mossimo Workshop Irvine, CA
- Neutrogena Corporation Los Angeles, CA
- Sicor Pharmaceuticals & Manufacturing Irvine, CA
- Raytheon Corporation El Segundo, CA
- Simpson Strong-Tie manufacturing Stockton, CA
- University Research Park Irvine, CA
- Watson Laboratories Pharmaceuticals Irvine, CA



Educational

- Anaheim Higher Education Center Anaheim, CA
- California State University San Marcos San Marcos, CA
- Canyon Rim Elementary School Orange USD, CA
- Clearwater Elementary School Paramount USD, CA
- Coastline Community College Fountain Valley, CA
- Garden Grove Higher Education Center Garden Grove, CA
- Mt. San Antonio College Walnut, CA
- Orange Coast College Costa Mesa, CA
- University of California Irvine, CA
- University of California San Diego, CA

Manufacturing



- Allergan Pharmaceuticals & Manufacturing Irvine, CA
- American Honda Motor Company Torrance, CA
- Boeing Corporation Long Beach, CA
- DiCon Fiberoptics Campus Richmond, CA
- Dominguez Technology Center Los Angeles, CA
- ICU Medical Manufacturing Facility San Clemente, CA
- Medtronic Manufacturing Santa Ana, CA
- Square "D" Company MGE UPS Test Facility Costa Mesa, CA
- Mossimo Workshop Irvine, CA
- Neutrogena Corporation Los Angelés, CA
- Sicor Pharmaceuticals & Manufacturing Irvine, CA
- Raytheon Corporation El Segundo, CA
- Simpson Strong-Tie Manufacturing Stockton, CA
- University Research Park Irvine, CA
- Watson Laboratories Pharmaceuticals Irvine, CA



Parking Structures

- · Cal State Fullerton Student Parking Structure Fullerton, CA
- Chapel Avenue Parking Structure Alhambra, CA
- · City Hall Parking Structure Cerritos, CA
- City of Campbell Downtown Parking Structure Campbell, CA
- City of Lodi Downtown Parking Structure Lodi, CA
- City of Visalia Downtown Parking Structure Visalia, CA
- Garfield Entertainment Center Parking Structure Alhambra, CA
- · Lot C, City Parking Structure Sacramento, CA
- Marsh Street Parking Structure San Luis Obispo, CA
- San Jose Civic Center Parking Structure San Jose, CA
- San Manual Band of Mission Indians Bingo & Casino Parking Structure Highland, CA
- Stanford University Parking Structure Palo Alto, CA
- Sunnyvale Multi-Modal Transit Station Sunnyvale, CA

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Contact

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Arizona

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