Pole Light: Globe

SU-1

This campus-wide area light is for gathering and event spaces and their entry corridors. It provides soft, area light and illuminates facades and tree canopies. Height of light is generally ten feet; twelve feet tall lights are used only in selected special corridors such as the main quad east/west axis. Lamps are not to exceed 100 watts to minimize night sky illumination.

Specifications:

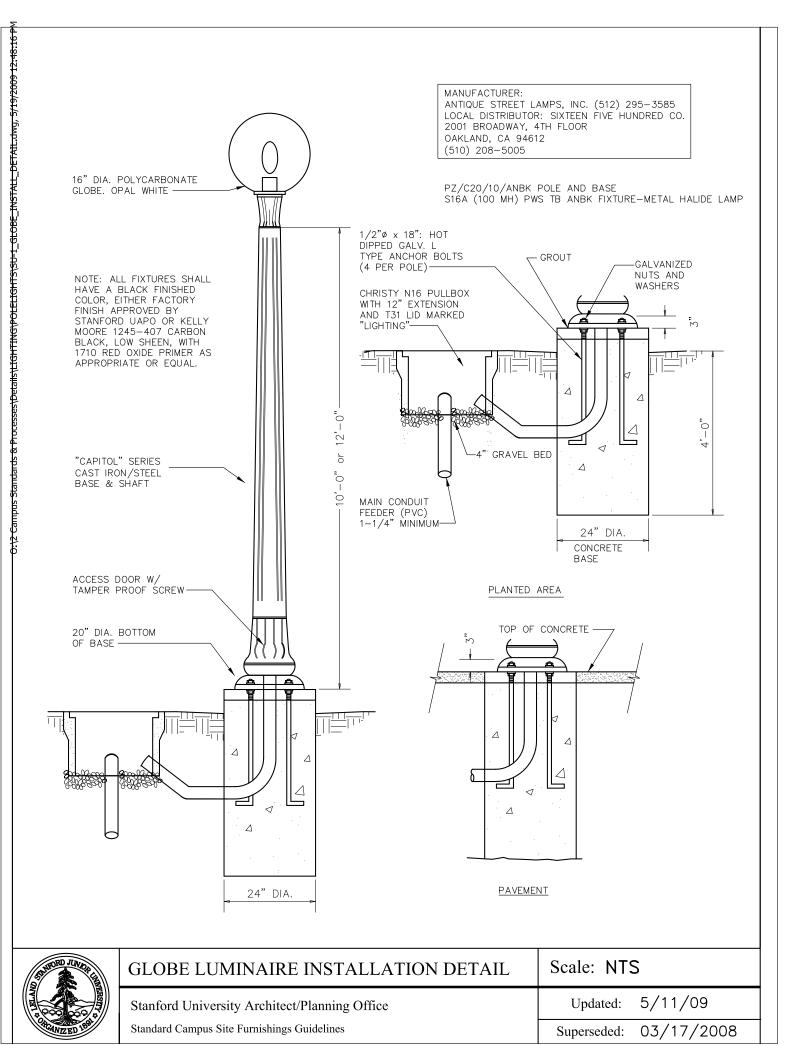
- Material: Cast iron and steel.
- Size: 10' or 12' height, 19" diameter base, 16" diameter globe.
- Color: Campus standard black pole: Kelly Moore Carbon Black, Low Sheen.
- 100 watt High Pressure Sodium (HPS) lamp.
- Common campus spacing of each is at 70 feet apart.

Model/Manufacturer:

Antique Street Lamps, Inc., Capitol series pole, available through Sixteen Five Hundred Co., Oakland, CA, 1 (510) 208-5005 (Lucia Starinska: lstarinska@16500.com).



Stanford Campus



Pole Light: Holophane RSL 350

This pole light is used for linear path lighting for pedestrian and bike paths. Refractors are specified to direct light downward and toward one side for a pathway application, and the horizontal direction of light can be controlled with metal shields when lights are located near windows.

Specifications:

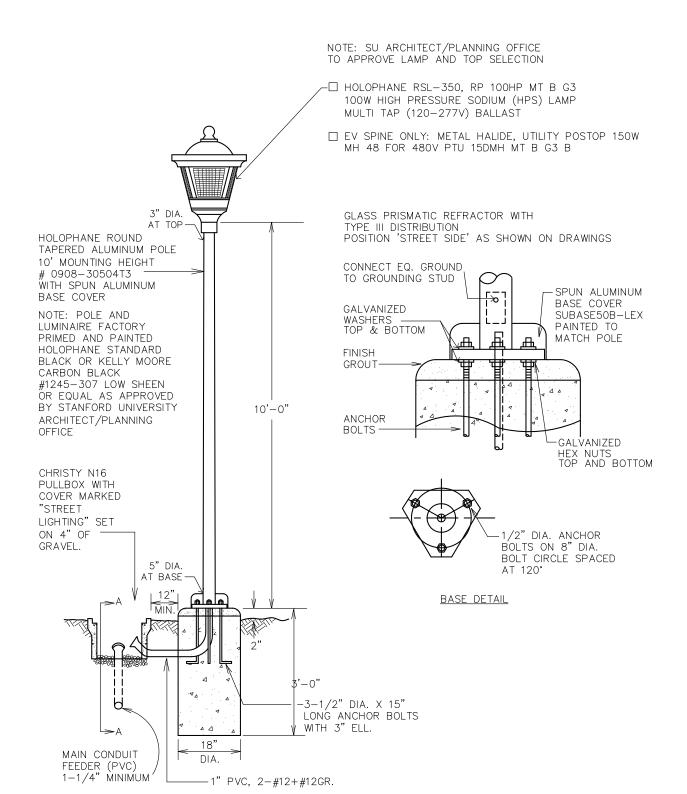
- Material: aluminum pole, RSL-350 fixture top.
- Size: 10' height pole, 16.5" diameter top fixture. 10' pole has a 4" diameter base, tapers to 3" at top.
- Color: Stanford standard black pole, manufacturer's low sheen black acceptable.
- Lamp: 100 watt HPS (high pressure sodium)
- Pole spacing at 70′ to 80′ apart is consistent with most of existing campus lighting.
- Round, spun aluminum or retrofit base cover to be specified and installed on all light poles, existing and new, within project boundary.

Model/Manufacturer:

Holophane, Model RSL-350, available through Holophane Lighting, www.holophane,com, rep Mido Yee, 925-275-0272



Montag Hall, Stanford Campus



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RSL 350 INSTALLATION DETAIL	Scale: NTS
Stanford University Architect/Planning Office	Updated: 04/2009
Standard Campus Site Furnishings Guidelines	Superseded: 8/2007

Pole Light: Acorn

Antique Street lamps SU-II

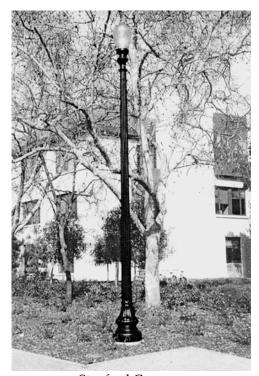
This pole light is topped with an acorn-shaped globe and is the tallest of the standard pole lights. It is a "special" fixture, currently found on Serra Mall, to be used as linear path lighting for major pedestrian malls and select parking corridors.

Specifications:

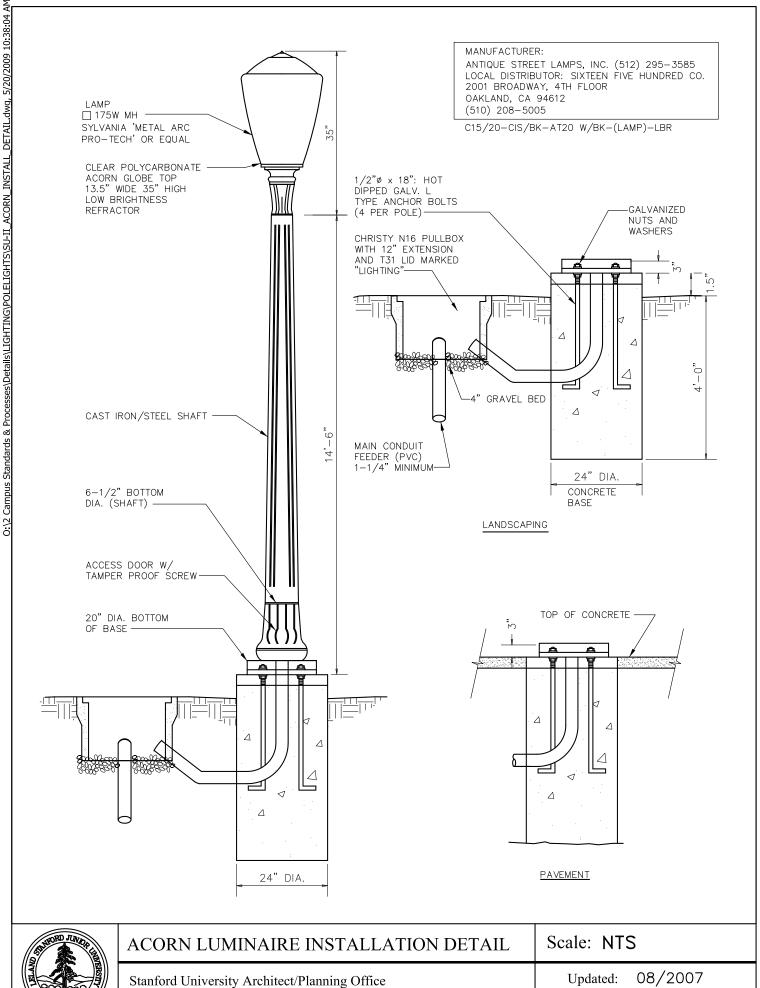
- Material: Cast iron and steel.
- Size: Pole height 14'-6", base diameter 19", acorn-shaped globe 13.5" diameter.
- Color: Standard black pole.
- 150 watt MH lamp.

Model/Manufacturer:

Antique Street Lamps, Inc., Model Series SU-II, available through Sixteen Five Hundred Co., Oakland, CA, 1 (510) 208-5005 (Lucia: lstarinska@16500.com).



Stanford Campus



06/2004

Superseded:

Standard Campus Site Furnishings Guidelines

Pole Light: 'Historic'

Original Cast Iron Light

The cast iron light is the oldest style pole light on campus, installed by relocating from one area to another. It requires special care to relocate since it must retain most of its original parts and concrete base to remain operable. It is appropriate only in special or historic campus locations, generally around the Main Quad and White Plaza. Details for installation are available through the Campus Planning and Design Office.

Specifications:

- Material: As existing, cast iron, painted black and primed, some with lead based paint.
- Size: Unavailable.
- Color: Refurbish with standard black paint and primer.

Model/Manufacturer:

No known vendor. Installed when relocated from other areas.



Near Main Quad, Stanford Campus

Pole Light: 'Intersection'

New Yorkshire series, Acorn and globe top

These taller, older, existing pole lights are used mainly at special intersections on campus. This example is on Galvez Mall at the Crothers intersection, and has an acorn top. Others may be found surrounding Meyer Library, and at select intersections along Santa Teresa Street.

Specifications:

• Size: 20" diameter base, 18' height, 4,5" at top.

• Material: Cast iron and steel.

Color: Black



Crothers way at Galvez Mall



Detail of pole / base

Pole Light: Framed Globe

This light is a contemporary version of Stanford's traditional standard globe topped courtyard light. It can be used in gathering spaces where site surroundings support more modern, less ornate outdoor furnishings.

Specifications:

- Material: 6063 aluminum alloy pole, 8135MH die cast aluminum caged, polycarbonate sphere.
- Size: 11'8" height pole, 22-7/8" diameter top fixture (aluminum plate). 11'8" pole has a 3" tall, 12-5/8" diameter base, is 5" in diameter and is topped by a 3-1/2", 3" in diameter tube. Whole pole light stands at 13'10".
- Color: Stanford standard black pole, manufacturer's low sheen black may be acceptable upon review by UA/CPD.
- Lamp: maximum 100 watt metal halide
- Pole spacing will vary based on location

Model/Manufacturer:

BEGA, 1000 Bega Way, Carpinteria, CA 93013. Model: 8135MH, <u>www.bega-us.com</u>, (805) 684-0533, supplier: ALR Lighting, rep: John Benson (510) 638-0158





Not yet implemented on Stanford Campus

Pole Light: 'Area'

This simple and minimal light style can be used for more intimate spaces in courtyards, (sometimes referred to as Stanford's "Living Room" light). Its flat, highly reflective top effectively directs light downwards, making it energy efficient and sensitive to night sky lighting concerns.

Specifications:

- Material: aluminum pole, 8309MH aluminum fixture top with indirect cutoff optics.
- Size: 11'8" height pole, 39-3/8" diameter top fixture (aluminum plate). 11'8" pole has a 3" tall, 12-5/8" diameter base. The pole tapers from 5" at the bottom to 3" at top. Overall height including pole and fixture top is 14'.
- Color: Stanford standard black pole, manufacturer's low sheen black may be acceptable upon review by UA/CPD.
- Lamp: 150 watt G12T6 MH lamp
- Pole spacing will vary based on location

Model/Manufacturer:

BEGA, 1000 Bega Way, Carpinteria, CA 93013. Model: 8309MH, <u>www.bega-us.com</u>, (805) 684-0533, supplier: ALR Lighting, rep: John Benson (510) 638-0158



Pole Light: 'Event' with Optional Banner Arms

Pole: Sitelink T2 with H710 Luminaire Mounting Arms & Callisto-12 Light Fixtures

This pole-light is to be used in highly populated gathering and event spaces. It features multiple light fixtures that can be aimed strategically and optional banner arms for displays. The UA / CPD must approve locations where optional banner arms are used.

Specifications:

- Materials: Extruded Pole, Aluminum shaft and welded base.
- Aluminum light fixture housings with optional eggcrate, low glare shields
- H710 Aluminum mounting arms
- Size: 18' pole height, 4 ct. 12" height luminaires.
- Color: Powder-coated Holophane Black Paint.
- 70 watt Metal Halide lamp.

Model/Manufacturer:

Holophane Sitelink T2 pole and H710 Banner Arms, Sterner Callisto-12 light fixtures, Representative: John Ferguson, Holophane Inc. Phone: jferguson@holophane.com



Stanford Campus

Pole Light: Escondido Village Holophane Utility Postop

This pole light is used for linear path lighting along the "Village Spine" collector path in Escondido Village. The Utility Postop allows the use of medium base metal halide lamps that provide clean, white light in contrast to the softer, warmer light in surrounding areas. Refractors are used to direct light downward and toward one side for a pathway application, and the horizontal direction of light can be controlled with metal shields when lights are located near windows.

Specifications:

- Material: round tapered aluminum pole, Utility Postop fixture top with ball finial.
- Size: 10' height pole, 16.5" diameter top fixture. 10' pole has a 4" diameter base, tapers to 3' at top.
- Color: Stanford standard black pole, manufacturer's low sheen black acceptable.
- Lamp: 150 watt MH (metal halide)
- Pole spacing at 70′ to 80′ apart is consistent with most of existing campus lighting.
- Round, spun aluminum or retrofit base cover to be specified and installed on all light poles, existing and new, within project boundary.

Model/Manufacturer: Holophane, Model Utility Postop, available through Holophane Lighting, www.holophane.com, rep Mido Yee, 925-275-0272



Escondido Village Spine, Stanford Campus

EXTERIOR LIGHTING STANDARDS FOR STANFORD UNIVERSITY

Lighting Plan Concept

Campus lighting standards have been developed to assure the safety of those on campus, while respecting established Stanford aesthetics and addressing economical concerns.

Distinctive lighting can strengthen the unity in parts of the campus where architecture, landscape, circulation and use patterns are consistent. Uniformity in the light level, color, and fixture type can also aid in orienting evening travelers by clearly indicating transitions between different types of areas. Circulation routes, campus core, and gathering spaces will be identified by evenly dispersed, color accurate illumination, to enhance pedestrian circulation, nighttime activities, and viewing of historically and architecturally significant buildings and landscapes.

We are currently working towards unifying the lamp types used on campus, to simplify night "color" areas. The objective is to provide uniform light color across similar use areas, identify major corridors, and provide appropriate warm or cool colors to enhance sense of place and highlight architecture. Highly efficient lamps and fixtures are also being investigated.

As the campus evolves, additional outdoor lighting needs will develop. These current standards establish a framework for selecting campus lighting fixtures and lamps at present, and may be used as a guide to maintaining existing systems and selecting new components for future needs.

LIGHTING TYPE G	ORDERING SPECIFICATIONS							
LIGHT DESCRIPTION	AREAS AND USES	ON-SITE EXAMPLES	SPACING	LAMP TYPE	CATALOGUE ORDER NUMBER	BASE SIZE	FIXTURE	MANUFACTURER

NOTE: ACCESS THE UNIVERSITY ARCHITECT/CAMPUS PLANNING AND DESIGN WEBSITE, http://lbre.stanford.edu/architect/ for the most current Lighting Information

ALL FIXTURES SHALL HAVE A BLACK FINISHED COLOR, EITHER APPROVED FACTORY FINISH OR KELLY MOORE 1245-407 CARBON BLACK, LOW SHEEN, WITH 1710 RED OXIDE PRIMER AS APPROPRIATE, OR EQUAL.

LAMP TYPE IS REVIEWED AND APPROVED BY THE UNIVERSITY ARCHITECT AND CAMPUS PLANNING AND DESIGN OFFICE TO MATCH OR CONTRAST WITH ADJACENT LIGHTING COLORS, DEPENDING ON FUNCTION AND CHARACTER OF THE SPACE. WATTAGE LISTED IS A GENERAL GUIDE. PROPOSED WATTAGE FOR EACH PROJECT SHOULD BE CHOSEN TO FIT SPECIFIC SITE CONDITIONS TO ASSURE THAT DESIRED LIGHTING LEVELS ARE PRODUCED.

FOR 150 WATT METAL HALIDE APPLICATIONS, USE METALARC PRO-TECH METAL HALIDE LAMPS BY OSRAM-SYLVANIA RATED AT 15,000 HOURS LIFE, OR PROPOSE LONGER LIFE LAMP

PATHS/PEDESTRIAN AREAS

10' "Capitol" series cast iron/steel pole with white polycarbonate globe top	Campus wide area light for gathering/event spaces and their entry corridors.	WHITE PLAZA	approx 70' on center @ .5 footcandle	100 watt metal halide	10' : PZ C20 10 ANBK; S16A 100M MED PWS TB ANBK	19"	Globe: capitol series	Antique Street Lamps Inc. (512) 295-3585
12' "Capitol" series cast iron/steel pole with white polycarbonate globe top	Pathway and area light in designated corridors, on the east/west axis into the SEQ, and along the north/south axis.	SEQ EAST/WEST AXIS	approx 70' on center @ .5 footcandle average	100 watt metal halide	12' : PZ C20 12 ANBK; S16A 100M MED PWS TB ANBK	19"	Globe: capitol series	Antique Street Lamps Inc. (512) 295-3585
15' "Capitol" series cast iron/steel pole with clear glass acorn top	Linear path lighting for major pedestrian malls and select parking corridors.	SERRA MALL MUSEUM WAY	approx 70' on center @ .5 footcandle average	150 watt metal halide	C15/20-CIS/BK-WAT20C/BK-M175QV- LBR	19"	Acorn: capitol series	Antique Street Lamps Inc. (512) 295-3585

LIGHT DESCRIPTION	AREAS AND USES	ON-SITE EXAMPLES	SPACING	LAMP TYPE	CATALOGUE ORDER NUMBER	BASE SIZE	FIXTURE	MANUFACTURER
10' tubular aluminum pole with lantern top and glass asymmetric refractor, easy maintenance top	Linear path lighting, only for Escondido Village along central spine pedestrian/bike connector path.	ESCONDIDO VILLAGE HOUSING ALONG "VILLAGE WAY" PED/BIKE PATH	approx. 70' to100' o.c. @ .5 - 1 footcandle average	150 watt metal halide	ALUM POLE:0908-30504-T-3; UTILITY POSTOP: metal halide-PTU-15DMH-MT-B-G3-B; high pressure sodium-PTU-100HP-MT-B-G3-B	8" -inlcude base cover	Utility Postop	Holophane, (740) 345-9631
10' tubular aluminum pole with lantern top and glass assymetric refractor	Linear path lighting throughout the academic campus along pedestrian and shared bike/pedestrian pathways.	CAMPUS DRIVE, SERRA STREET PEDESTRIAN PATHS	approx. 70'- 100' o.c.@ .5 footcandle average	100 watt high pressure sodium: 175 watt metal halide Palm Dr only	ALUM POLE: 0908-30504-T-3; RSL- 350 fixture, ball finial, 100 watt HPS; 175 watt MH. Incandescent lamp needed for egress lighting.	8" - include base cover	RSL-350	Holophane, (740) 345-9631
12' tubular slightly tapered aluminum pole with domed disk to and flush clear tempered glass lens	In select courtyards, p currently in the SEQ 2 as intimate seating and gathering space lighting	SEQ 2 QUAD, ENVIRONMENT AND ENERGY COURTYARD	as needed for area lighting	metal halide	Bega 8309MH, black, on 11'-8" aluminum pole	circular base cover	BEGA 8309	Bega (805) 684-0533
12' tubular aluminum pole with caged polycarbonate globe fixture top	A walkway light in select areas, currently planned for use in the Medical Center on the major pedestrian walkway.	LI KA SHING CENTER FOR LEARNING AND KNOWLEDGE, summer 2009	as needed for approx 1 footcandle average max	metal halide	Bega 8135MH, black, on 11'-8" aluminum pole		BEGA 8135	Bega (805) 684-0533
VEHICULAR AND ROADWAY LIC	GHTING							
25' round tapered steel w/6' single member arm	Currently on streets & Intersections. To be phased out and replaced with Gardco form 10-EH style per Campus Drive Guidelines	CAMPUS DRIVE	as needed, 2- 5FC average	150 W HPS	M2AR 15 S*A#GMN3 2 (verify w/ FO- Utilities)		SU III Cobrahead	General Electric & Valmont
18-25' high square cruciform aluminum pole with horizontal mount luminaire and base covers	Parking lots	PALM DRIVE INTERSECTIONS AND SERRA COMPLEX PARKING LOT		HPS 150W/250W MH 175W/250W	A -14-2- 3 -150HPS-120-BLA-HF (verify pole w/ FO-Utilities)		Gardco Form 10 - A Style	Gardco lighting (800) 227-0758
25' high square cruciform aluminum pole with horizontal mount luminaire	Campus Drive, at intersections and major pedestrian crossings, and to replace SU III cobraheads.	CLARK/CHEM BIO AREA	as needed for 1 footcandle average max	250W MH	EH-19-1-3-250MH-277-BLA (top); CA5- 25H-D1-BLA (pole)		Gardco Form 10 - EH Style	Antique Street Lamps Inc. (512) 295-3585

LIGHT DESCRIPTION AREAS AND USES ON-SITE EXAMPLES SPACING LAMP TYPE CATALOGUE ORDER NUMBER BASE SIZE FIXTURE MANUFACTURER

SPECIAL LIGHTING CONDITIONS

For the following applications, special condition lighting may be desirable:

Campuswide

Landscape/Entryway lighting

Lighting Arcades

Service Yards

Event and Accent lighting

Campuswide

Campuswide

Event/art areas

The special condition fixtures listed below are accepted standards for the above applications and may be used on approval from the University Artchitect/Planning Office

Special Condition Fixtures

Building mounted, facades

Aluminum or concrete bollard lights, 42" high	Select pedestrian areas	SEQ, CLARK CENTER AT MED CENTER CENTRAL PATH	approx 18' o.c.@ 1footcandle average max	100 watt metal halide coated lamp	KIM: VRB1 series, black metal. ALT:GARDCO: ALUM: BRM822-42- 100MH-120-BLP (black) as approved		VRB Bollard o School Bollard	Kim Lighting r (818)369-2695 Gardco lighting (800) 227-0758
Wall or step louvered recessed lighting	Stair or pathway lighting along buildings, landscape walls, or in custom bollards	BLACK HOUSE	as needed for 1 footcandle average max	70 watt metal halide or fluorescent	BEGA 2855MH 70W ED -17MH or 3126P 27W CF twin		recessed luminaire	Bega (805) 684-0533
Wall mounted full or half moon shape lighting	Building facades, entries, or area lighting near buildings	COWELL CLUSTER	as needed	MH or HPS lamps	KENALL "Millenium" MR series, black		wall mounted fixture	Kenall (847) 360-8200
Wall mounted wedge shape downlight	Building facades, entries, or area lighting near buildings	BRANNER DINING HALL	as needed	HPS, fluorescent, or MH lamps	SHAPER #682, wedge downlight bronze, patina to be dark: or aluminum, dark bronze color		wall mounted fixture	Shaper Lighting (510) 234-2370
Copper and bronze landscape bollard lights	Low level landscape or path lighting	ENCINA HALL SOUTH	as needed for 1 footcandle average max	HPS, fluorescent, lamps	SHAPER 902-DB-INC-120-NC-14H-32"OA		bollard	Shaper Lighting (510) 234-2370
Flush with grade, low temperature uplight	Pathways, Building lighting, or for design effect	LUCAS PED/VEHICLE ENTRY	as needed	MH at 81 CRI	BEGA 8850MH, 8750MH, 8851MH, 8751MH, 670		at grade uplight	Bega (805) 684-0533
18' Pole mounted flood lights with banner arms	Event and gathering areas	CAMPUS CENTER STAGE AREA	as needed		HOLOPHANE: Sitelink TracPole SLT21800D1PO-SPCL(3) bannerSLBA24H1.00T2D1-AB-27-4, "Callisto" luminaire	square, "no base" condition	pole mounted compact round flood	Holophane, (740) 345-9631

SOURCES:

Antique Street Lamps, Austin, TX or Sixteen Five Hundred, 287 17th St, Suite 301, Oakland, CA 94612, rep Lucia Starinska, (510) 208-5005

Bega/US, Carpinteria, CA or Associated Lighting Representatives, 7305-D Edgewater Dr., PO Box 2265, Oakland, CA 94621, rep John Benson, (510) 638-0158, cell 510-385-4426

Holophane Lighting, through Acuity Lighting Group, 214 Oakwood Ave, Newark, OH 43055, 740-345-9631, rep Phil Heinz, (925) 968-9151, Mido Yee, (925) 275-0272

Shaper Lighting, Richmond, CA or California Architectural Lighting, 100 1st Street, San Francisco, CA 94105, rep Melinda Lavalle, (415) 777-5111

Kenall, 1020 Lakeside Drive, Gurnee, IL, 60031, or Sixteen Five Hundred (Co.), 287 17th Street, Suite 301, Oakland, CA 94612, rep Lucia Starinska, (510) 208-5005

General Electric Company, Hendersonville, NC or Associated Lighting Representatives, 7305-D Edgewater Dr., PO Box 2265, Oakland, CA 94621, rep John Benson, (510) 638-0158

Gardco, San Leandro, CA or Associated Lighting Representatives, 7305-D Edgewater Dr., PO Box 2265, Oakland, CA 94621, rep John Benson, (510) 638-0158

Valmont, or Associated Lighting Representatives, 7305-D Edgewater Dr., PO Box 2265, Oakland, CA 94621, rep John Benson, (510) 638-0158

KIM Lighting, www.kimlighting.com, or Lighting Systems Inc., Berkeley, CA, (510) 982-3900