



AUERBACH·GLASOW·FRENCH

Architectural Lighting Design and Consulting

Light Affair 2015

Subtle Lighting, Dramatic Effect

***Lighting 18th to 21st Century
Art and Architecture***

Note: Certain proprietary images have been deleted from this presentation.

Subtle

'sədl/

adjective

- (especially of a change or distinction) so delicate or precise as to be difficult to analyze or describe.
- (of a mixture or effect) delicately complex and understated.
- making use of clever and indirect methods to achieve something.

synonyms: astute, keen, quick, fine, acute, sharp, shrewd, perceptive, discerning, discriminating, penetrating, sagacious, wise, clever, intelligent

Dramatic

drə 'madik/

adjective

- **(of an event or circumstance) sudden and striking, vivid, moving, highly effective**

Synonyms: considerable, marked, noticeable, measurable, perceptible, obvious, appreciable; significant, notable, remarkable, extraordinary, exceptional, phenomenal , sensational

subtlety warning

if you successfully apply subtle lighting techniques to your project, it may appear as if you haven't done anything

California Palace of the Legion of Honor
Salon Doré Restoration
2012 - 2014

Owner: Fine Arts Museums of San
Francisco

Curator: Martin Chapman

Architect: Andrew Skurman Architects

Lighting Design: Patricia Glasow, Marlene
Lieu

Before the Restoration



**The Metropolitan Museum of Art
Wrightsman Galleries
2002 - 2004**

Owner: Metropolitan Museum of Art

Lighting Designers: Larry French,
E. Sara McBarnette, Marlene Lieu







back to the Salon...

Design Brief

- No visible contemporary light sources
- Nothing in the ceiling except the chandelier
- The appearance that only candles and daylight light the room
- Light the exhibit without interfering with architectural purity
- Evoke the feeling of the 18th century

Before the Restoration



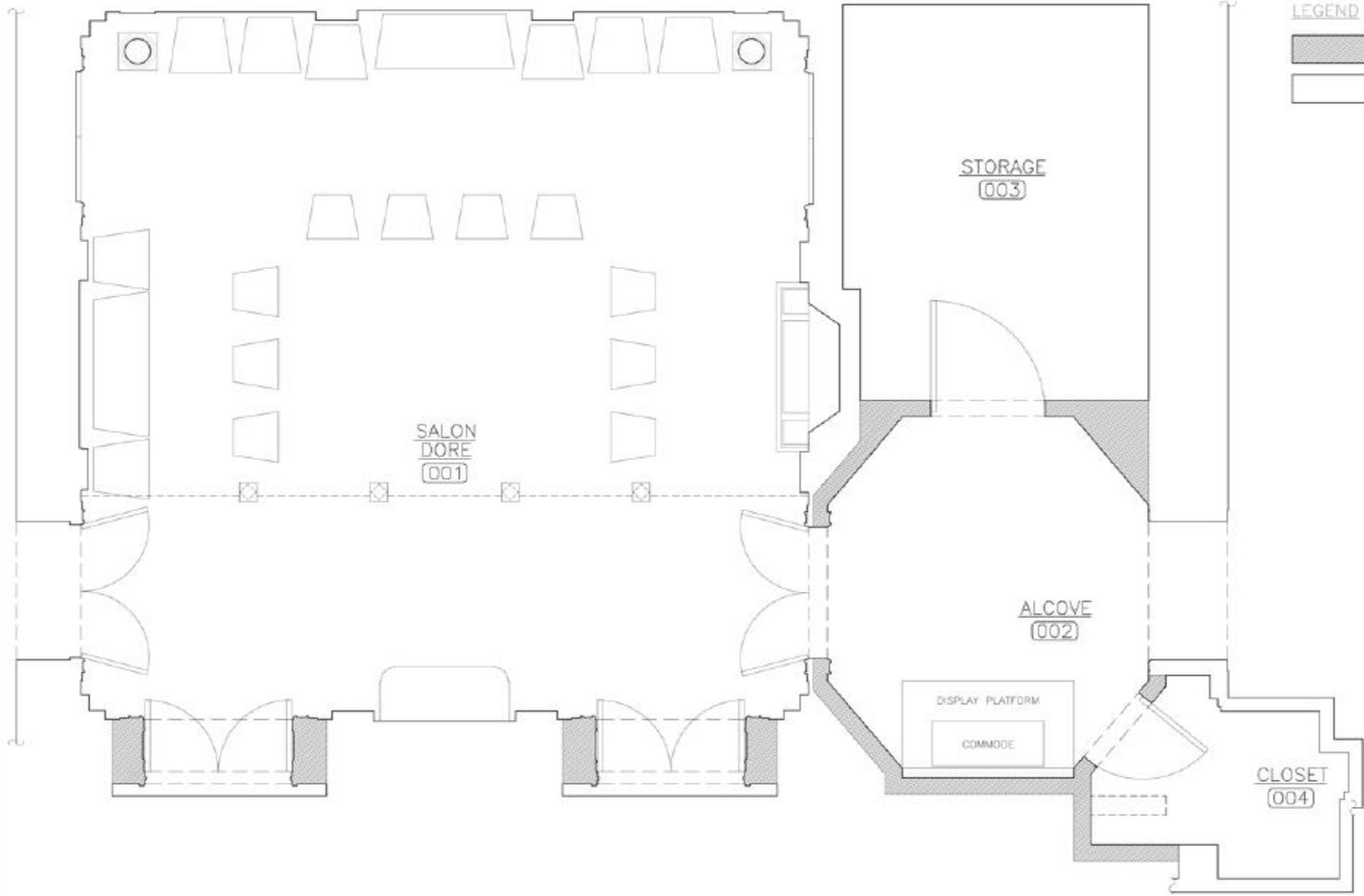
Before the Restoration





Deconstruction





1 GALLERY 11 PROPOSED FURNITURE PLAN
A1.2 SCALE: 1/2" = 1'-0"







Glow Light Location



Ornamentation Conceals Shrouds
and Shrouds Conceal Glow Lights





Glow Lights



Glow Lights

Fiber Optic Spotlights







Light Sources

- Incandescent 7W candelabra
- Low voltage 1W incandescent automotive lamp
- Metal halide illuminator with fiber optic bundle
- LED grazing striplight
- Tungsten halogen MR16
- Linear T5HO fluorescent



Subtle: Delicately complex, so precise as to be difficult to describe

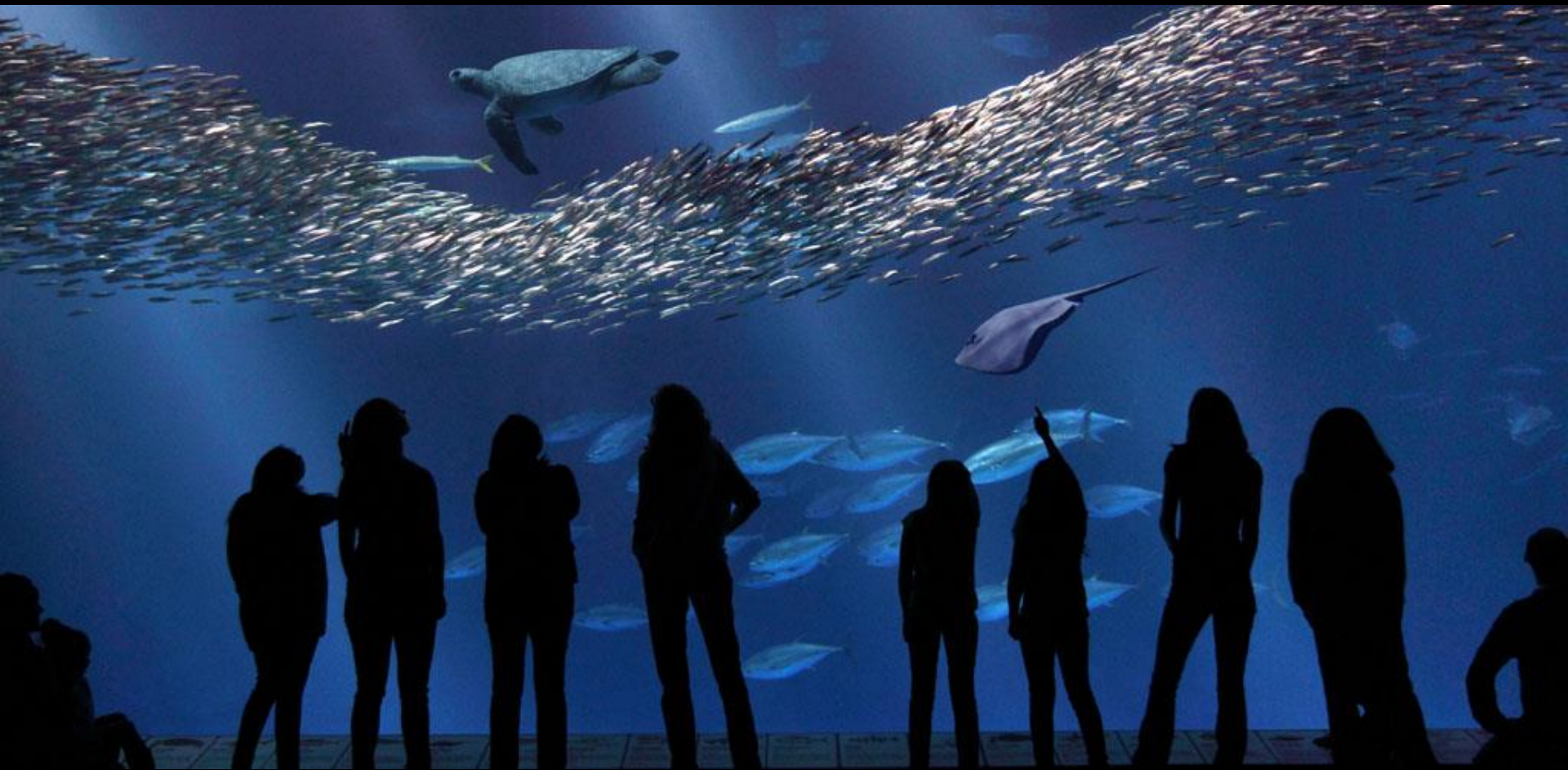
Dramatic Effect: Evocative of the era and place – 18th century Paris



Monterey Bay Aquarium
Open Sea Tank
2010 - 2012

Owner: Monterey Bay Aquarium

Lighting Designers: Larry French, Yukiko
Yoshida

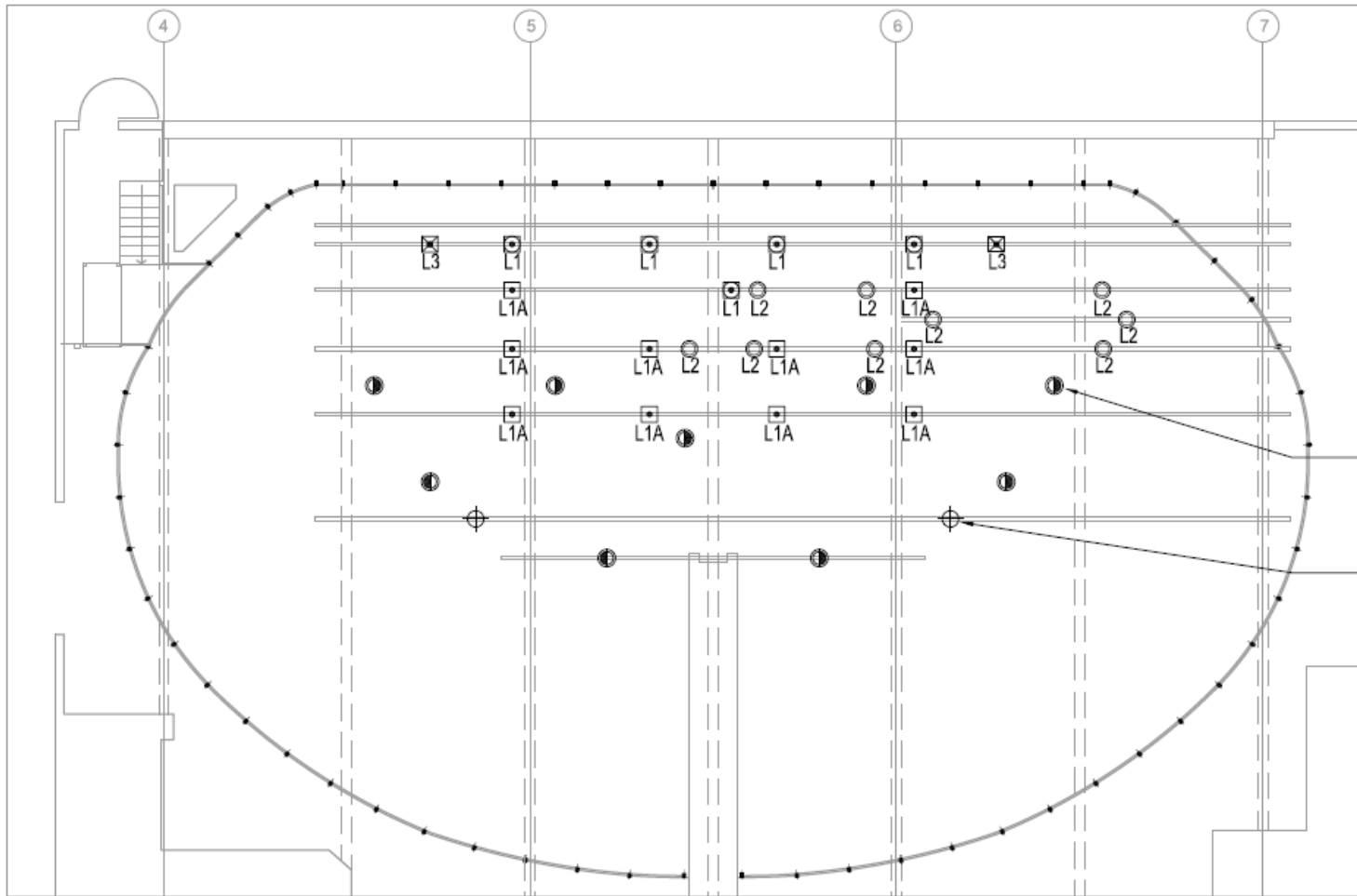


Design Brief

- Emulate the lighting in the open sea
- Provide an environment suitable for the marine life
- Disguise the side and back walls of the tank
- Provide fixtures that will hold up in a salt water environment
- Instill the wonder of the sea and the animals that live there







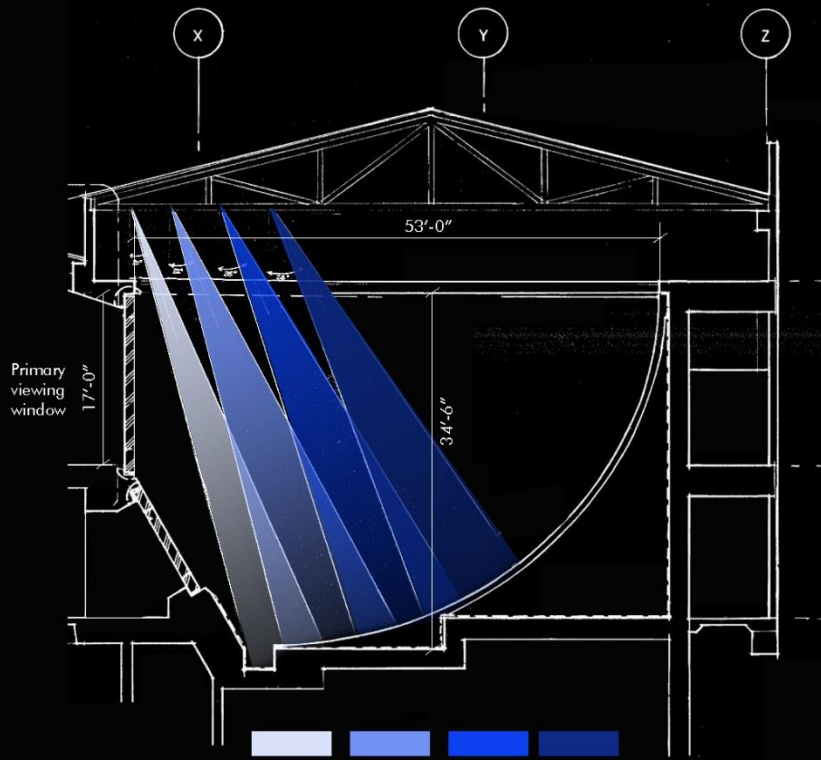
METAL HALIDE WORK LIGHT (TYP.)

PLASMA LIGHT (TYP.)

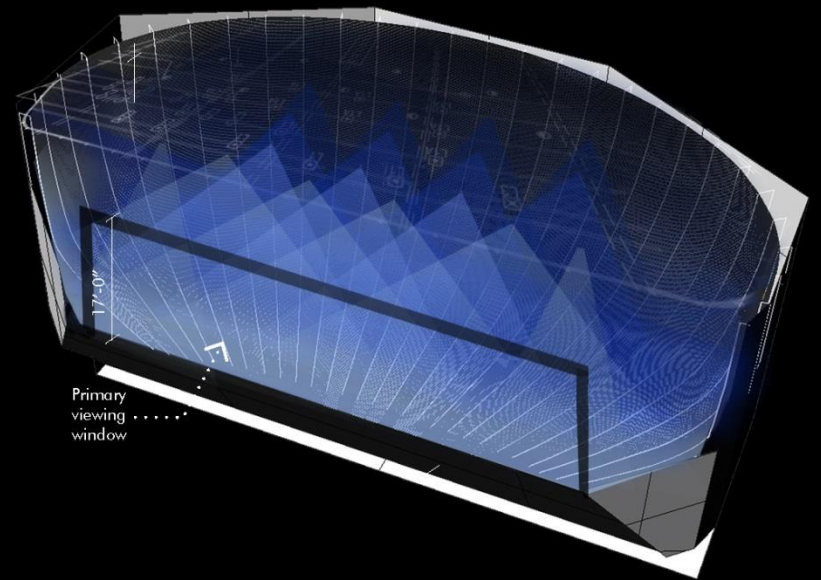
LIGHTING LAYOUT

 AUERBACH · GLASOW · FRENCH Architectural Lighting Design and Consulting	PROJECT: MONTEREY BAY AQUARIUM		SCALE: 1/8" = 1'-0"
	DATE: Nov 15, 2010	REV. NO: DATE: 1 Nov 23, '10	LSK 10 rev1
DRAWN BY: LT/ML			

225 Green Street, San Francisco, CA 94111
 Tel 415 392 7528 Fax 415 392 7530



OPEN SEA SECTION N.T.S.
NOTE: SUN LIGHT SHAFTS NOT SHOWN



OPEN SEA 3D VIEW N.T.S.
NOTE: SUN LIGHT SHAFTS NOT SHOWN



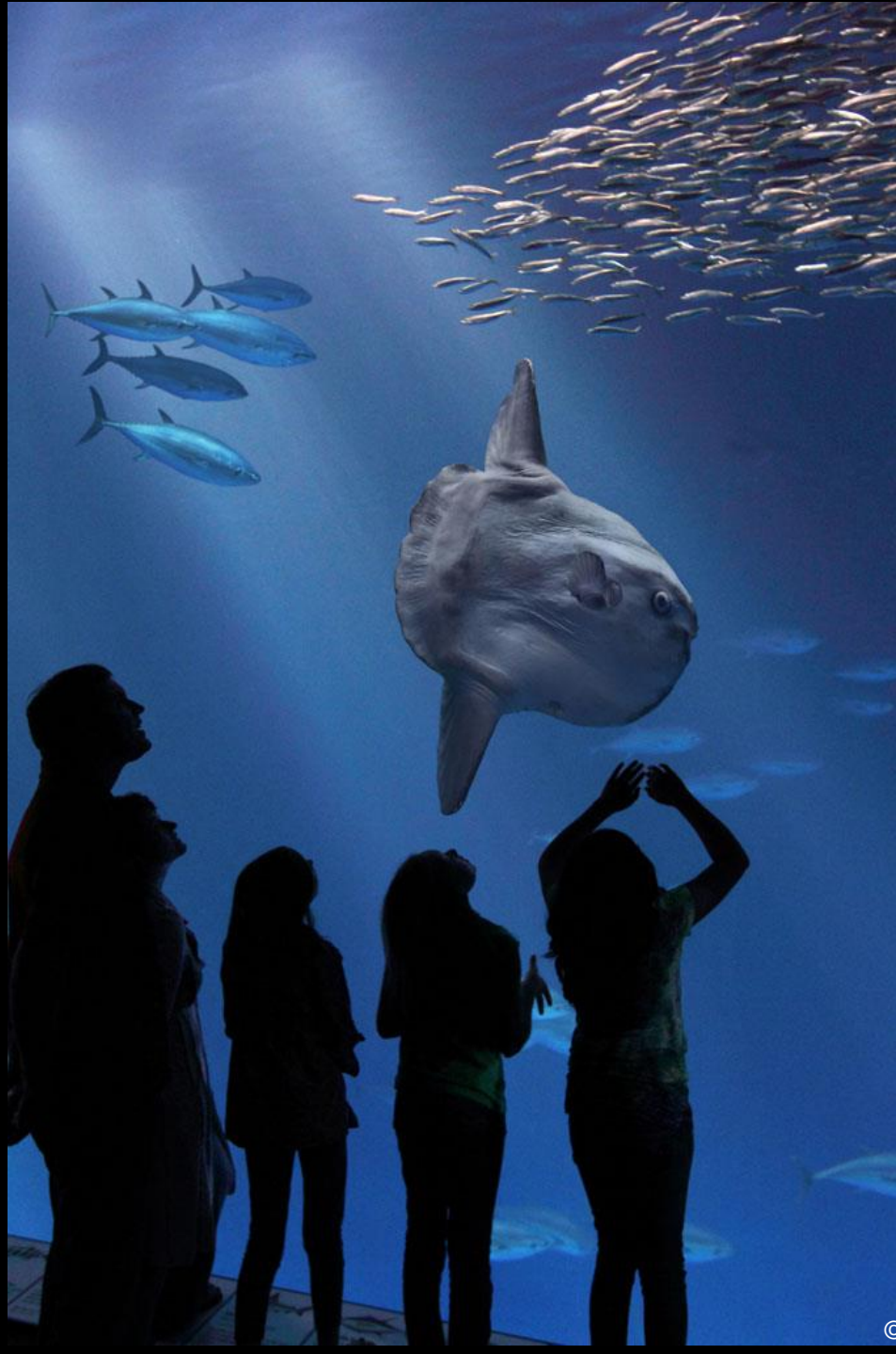


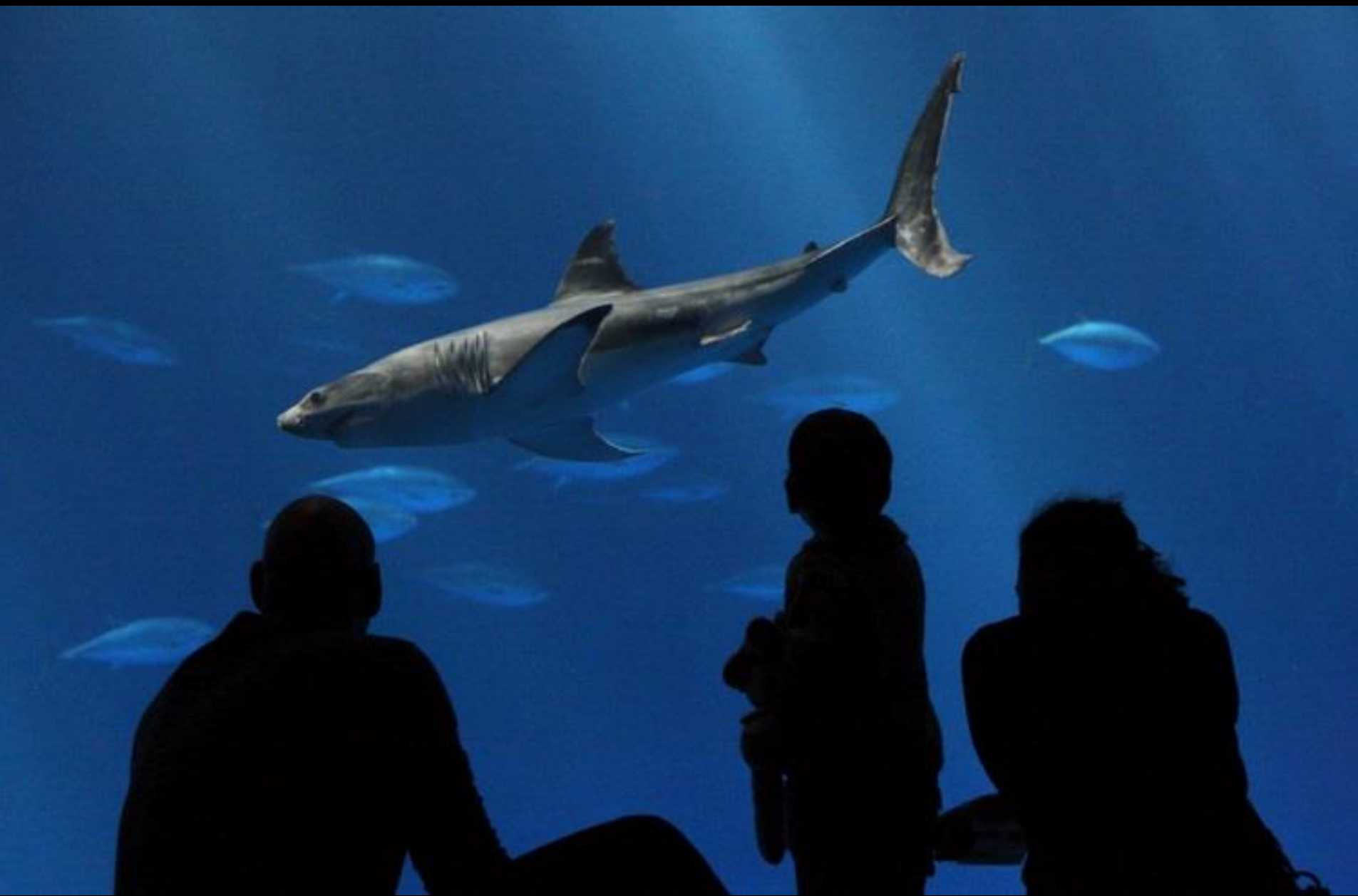


Light Sources and Distribution

- Pulse start metal halide BT37, 775 Watt and 575 Watt, 5000K , $9^\circ \times 70^\circ$ and $14^\circ \times 70^\circ$
- Pulse start metal halide ED28, 400 Watt, 5100K , 4°







Subtle: Making use of clever and indirect methods

Dramatic Effect: Striking



Stanford University
Windhover Contemplative Center

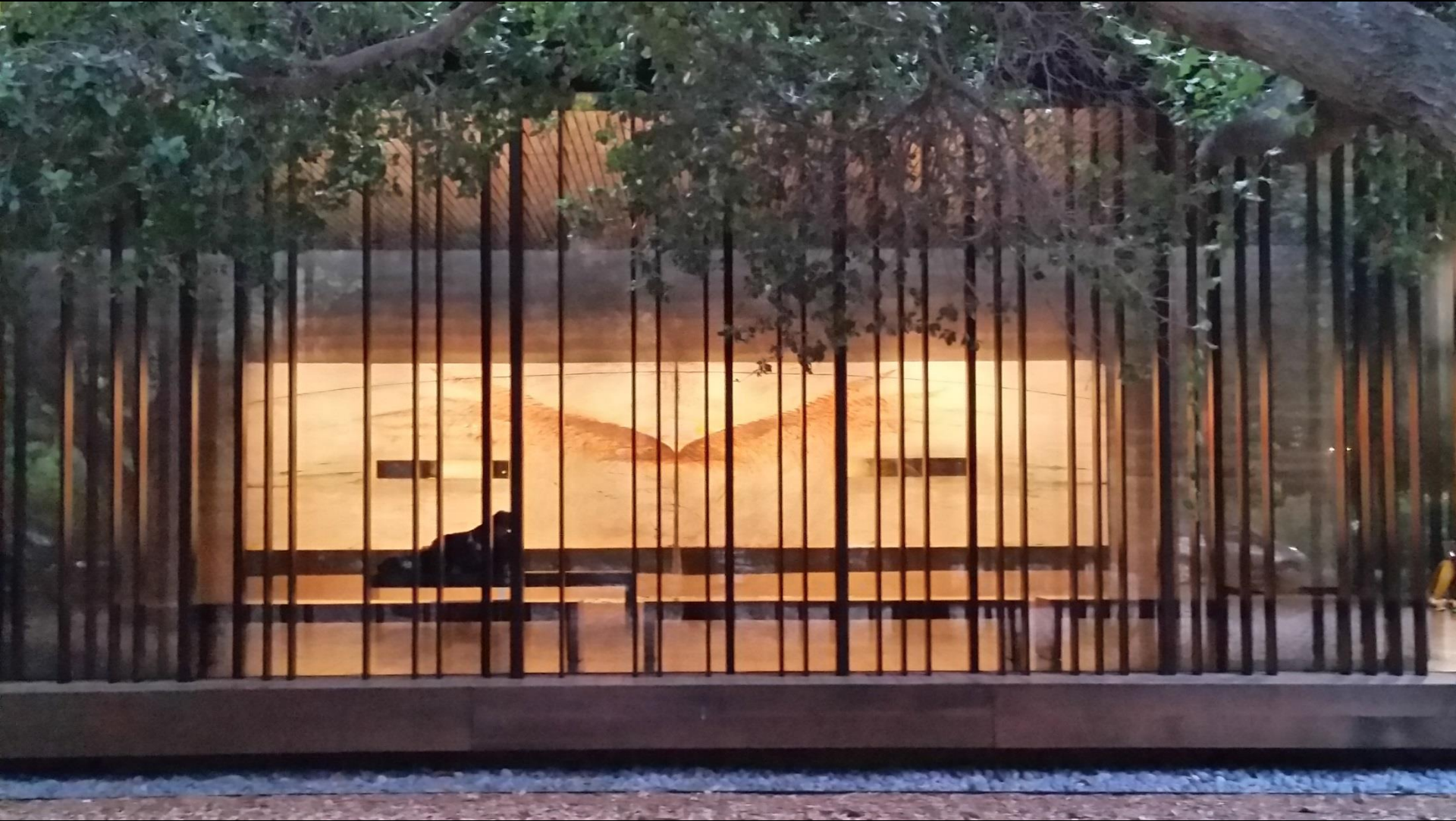
Owner: Stanford University

Architect: Aidlin Darling Design

Landscape Architect: Andrea Cochran
Landscape Architecture

Lighting Designers: Patricia Glasow, E. Sara
McBarnette









Design Brief

- Light the art – interior and exterior views
 - Supplement the daylight
 - Conservation
- Provide lighting for various functions
 - Contemplation
 - Events
 - Lectures
- Minimize equipment
- Integrate with the architecture







Light Sources

- Linear T5 fluorescent
- Tungsten halogen MR16
- Compact fluorescent
- Metal halide T6, 39W
- LED pool uplight













Subtle: Restrained and minimal

Dramatic Effect: Moving

Anderson Collection at Stanford University
Exhibition Lighting
February – September 2014

Owner: Stanford University

Donor: Harry W. and Mary Margaret Anderson

Architect: Ennead Architects

Architectural Lighting Designer: Brandston
Partnership

Exhibition Lighting Designers: Patricia
Glasow, Sabra Zacharias, Yvonne Fan

Anderson Collection Model



Anderson Collection Model



OPEN TO
BELOW

Anderson Collection Model



Anderson Collection Model







Design Brief

- Wash each wall with light
- Highlight each art piece
- Comply with strict light level conservation requirements
- Supplement the daylight
- Compensate for ceiling height and slope, artwork size and color so lighting effect does not appear to change



ANDERSON COLLECTION
TRACK HEAD AND ACCESSORY QUANTITIES
April 9 2014

Low ceiling with Minimax object lighting

Type ¹	Fixture Type & Accessory Description	Part number	Fixture Quantity
YY-1	track head, halogen, prismatic lens	MM-MR16-O	30
	UV filter	UVF2.375	30

High ceiling with Maximax object lighting

Type ¹	Fixture Type & Accessory Description	Part number	Fixture Quantity
YY-2	track head, halogen	MAX-AR111	60
	beam smoother	CLR/4.75	60
	UV filter	UVF/4.75	60

Low ceiling with Minimax wallwashers

Type ¹	Fixture Type & Accessory Description	Part number	Fixture Quantity
YY-3	wallwash, 60° reflector, 40"x70" lens, standard LED 3000K	MM-XSM2-WL158-30K	168

Low ceiling with Minimax accent wash for lower walls

Type ¹	Fixture Type & Accessory Description	Part number	Fixture Quantity
YY-4	track head, 60° reflector, 40"x70" lens, standard LED 3000K ²	MM-XSM2-O-XB-L158-30K-60D - 2.75-4070	12
	prismatic (for stock)	PLS/2.75	12

Low ceiling art with Minimax accent lighting

Type ¹	Fixture Type & Accessory Description	Part number	Fixture Quantity
YY-5	track head, 40° reflector, prismatic lens ¹ , standard LED 3000K ²	MM-XSM2-O-XB-L158-30K-40D- PLS/2.75	87
	20° reflector (for stock)	XSM-REF20	40

High ceiling with Midimax wallwashers

Type ¹	Fixture Type & Accessory Description	Part number	Fixture Quantity
YY-6	wallwash, 60° reflector, 40"x70" lens, standard LED 3000K	LX-XSM2-WL228-30K	134

High ceiling with Midimax accent wash for lower walls

Type ¹	Fixture Type & Accessory Description	Part number	Fixture Quantity
YY-7	track head, 60° reflector, 40"x70" lens, standard LED 3000K ²	LX-XSM2-O-L228-30K-60D - 3.75-4070	84
	prismatic (for stock)	PLS/3.75	30

High ceiling art with Midimax accent lighting

Type ¹	Fixture Type & Accessory Description	Part number	Fixture Quantity
YY-8	track head, 20° reflector, beam smoother, standard LED 3000K	LX-XSM2-O-L228-30K-20D	132

High ceiling art with Midimax accent lighting

Type ¹	Fixture Type & Accessory Description	Part number	Fixture Quantity
YY-8a	track head, 20° reflector, prismatic lens, standard LED 3000K ²	LX-XSM2-O-L228-30K-20D - PLS/3.75	16

Lamps

Type ¹	Manufacturer & Lamp Description	Part number	Lamp Quantity
YY-1	Philips Halogen 10" MR16 Long Life 35watts	35MRC16/SP10	38
YY-2	Osram-Sylvania Halogen 8" AR111 75watts	75AR111/SP8	70

Notes for Edison Price:

- For shipping, label all boxes with fixture type as noted above.
- Edison Price factory to replace standard beam smoother lens in fixture with prismatic lens or 40"x70" lens as specified under fixture type.

Anderson Collection Track Fixture Staging

TYPE	QUANTITIES												
	YY-1	YY-2	YY-3	YY-4	YY-4	YY-5	YY-5	YY-6	YY-7	YY-7	YY-8	YY-8a	
ACCESSORIES	UV, lamp MR16	UV, Smoother, lamp AR111			prismatic lens for stock		20° reflector for stock			prismatic lens for stock			
FUNCTION	Low, object	high, object	low, ww 3' o.c.	low, low wall accent ww		low, accent		high, ww 4' o.c.	high, low wall accent ww		high, accent	high, accent w/ prismatic lens	
AREA													
1F													
Lobby		12	6										16
First Floor Gallery			17			17							
2F													
Gallery 1													
	low-north		24			14							
	low-south		21			8							
	high	5						24	14		18		
Elevator vestibule, N									4		1		
Elevator vestibule, S									6		3		
Galley 1, 2, 10 Lobby Wall								19			8		
Galley 8, 9, 10, Stair3 Lobby Wall									12		6		
Galley 2, 3, 4, 5 Lobby Wall		2							12				
Gallery 2-5, low	16		39	10		21							
Gallery 7-10, low	6		46			19							
Gallery 2, high								10	4		7		
Gallery 3, high								10	8		8		
Gallery 4, high								10	4		8		
Gallery 5, high								10	6		10		
Gallery 6, high											3		
Gallery 7, high											7		
Gallery 8, high									4		9		
Gallery 9, high									10	4	8		
Gallery 10, high									10	4	8		
Total fixtures	22	50	153	10	0	79	0	124	82	0	104	16	
Extras (Storage, do not stage)	8	10	13	2	12	8	40	10	2	30	28	0	
Fixture Qty Ordered	30	60	166	12	12	87	40	134	84	30	132	16	721





			8:00am	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM		
11-Aug-14	Monday														
	Patty G	Principal	1.0	1.0	1.0	1.0	1.0	1.0							6.0
	Sabra Z.	Supervising	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0		10.0
	Chris M	Staging		0.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0		7.0
	Staff 1	Staging		0.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0		7.0
	Trevor S.	Staging		0.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0		7.0
Subtotal for the Day															37.0
12-Aug-14	Tuesday														
	Patty G	Principal													0.0
	Sabra Z.	Supervising	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0		15.0
	Chris M	Staging		0.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0	0.0		6.0
	Staff 1	Staging		0.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0		8.0
	Trevor S.	Staging		0.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0		8.0
Subtotal for the Day															37.0
19-Aug-14	Tuesday			Training											
	Patty G	Principal	0.0	1.0	1.0	1.0	1.0	1.0							5.0
	Sabra Z.	Supervising	0.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0		14.0
	Chris M	Training, Hang & Focus		0.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0	0.0		6.0
	Staff 1	Training, Hang & Focus		0.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0		8.0
	Staff 2	Training, Hang & Focus		0.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0		8.0
Subtotal for the Day															41.0
20-Aug-14	Wednesday														
	Patty G	Principal													3.0
	Sabra Z.	Supervising	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0		8.0
	Chris M	Hang & Focus							1.0	1.0	1.0	1.0	1.0		8.0
	Staff 1	Hang & Focus							1.0	1.0	1.0	1.0	1.0		8.0
	Staff 2	Hang & Focus							1.0	1.0	1.0	1.0	1.0		8.0
Subtotal for the Day															35.0
TOTAL Hours															293.5



galleries are not dimmed, full output.

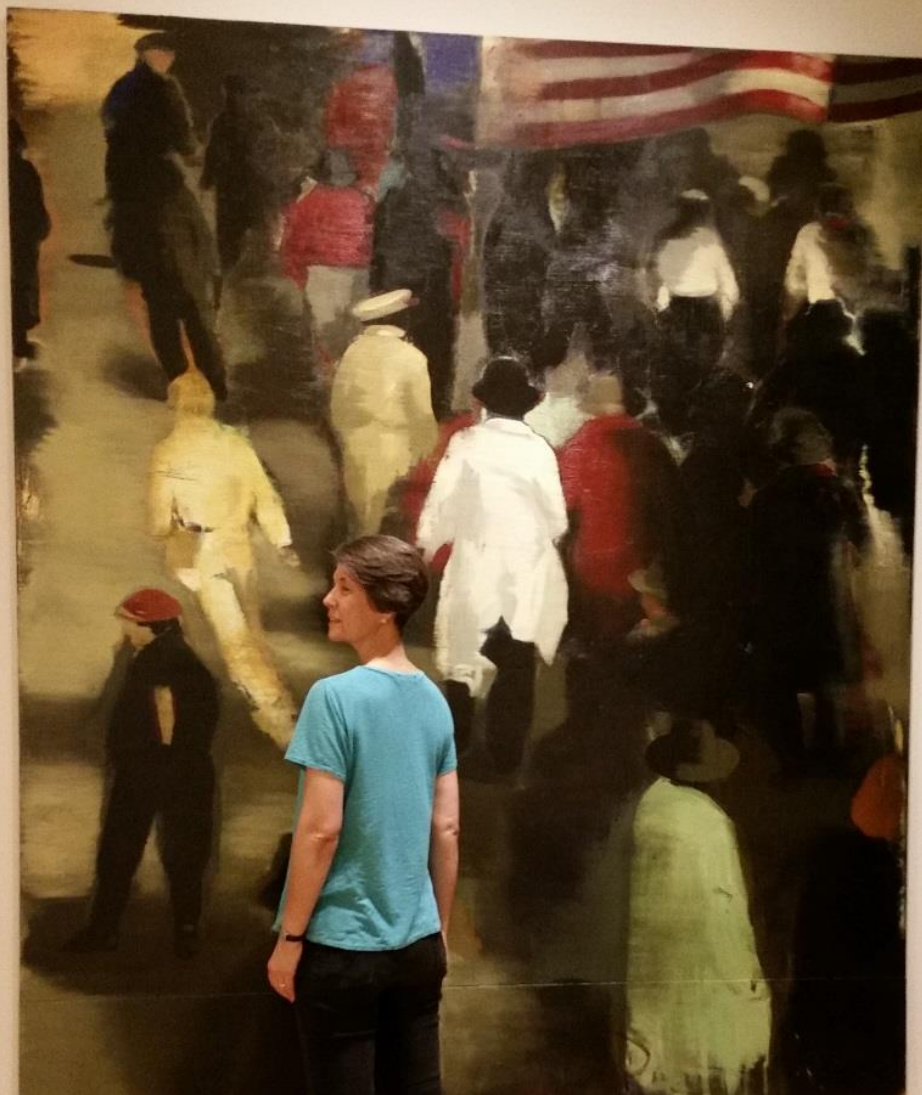
9/3/2014





Subtle: Nuanced enhancement

Dramatic Effect: Revealing exceptional art



the end