



Gateway Community College | New Haven, CT

Bradley Sisenwain



Architectural Intent



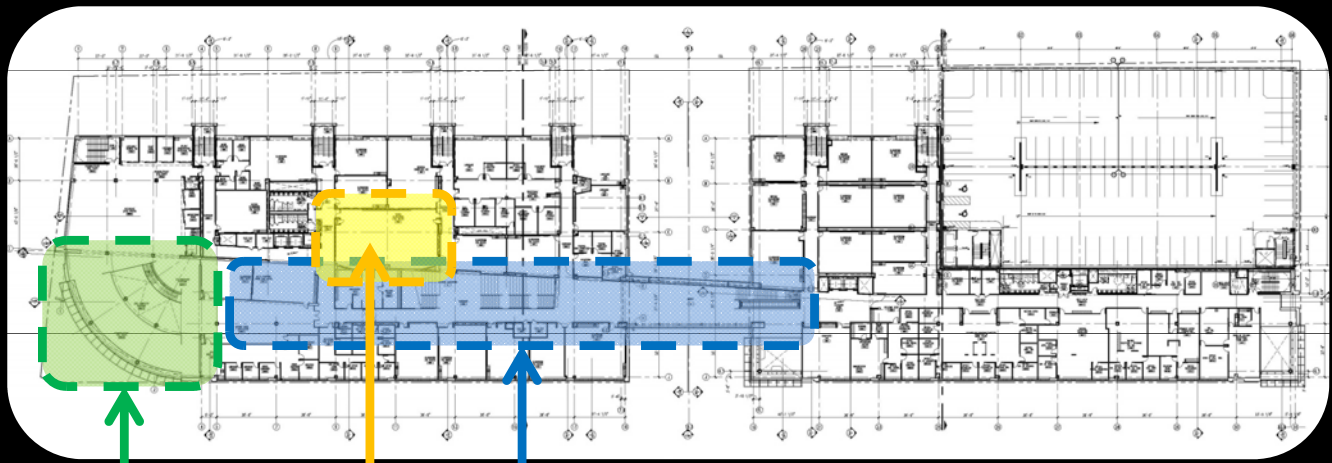
Renderings and Drawings by Perkins + Will (New York Office)



General Building Data

- Occupation and Function Types: Assembly (A-2, A-3), Business (B), Educational (E), Mercantile (M), Storage (S-2)
- Size (total square feet): 369,000 SF
- Architects: Perkins & Will (www.perkinswill.com)
- Lighting Designer: Horton Lees Brogden Lighting Design (www.hblighting.com)
- Dates of construction: 2009 - 2012
- Actual cost information: \$147 Million
- Project delivery method: Design - Bid - Build

Redesigned Space Locations



1. Student Gathering

2. Tiered Classroom

3. Roof Garden *and*
4. Library

Gathering Space



View South



Gathering Space

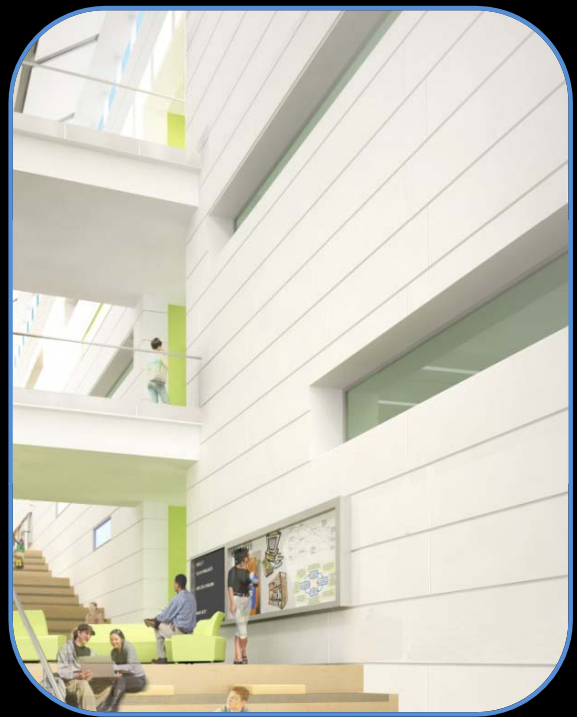
DESIGN CONSIDERATIONS

- Appearance of space and luminaires
- Maintenance
- Direct glare
- Light distribution on surfaces
- Modeling of faces and objects
- Elimination of varying shadows



Gathering Space Inspiration:

BALANCE





Gathering Space Inspiration:

MOTION



<http://flickr.com/photos/mpaulda/445393310/>



<http://flickr.com/photos/malter/2091203833/>

Gathering Space Implementation:

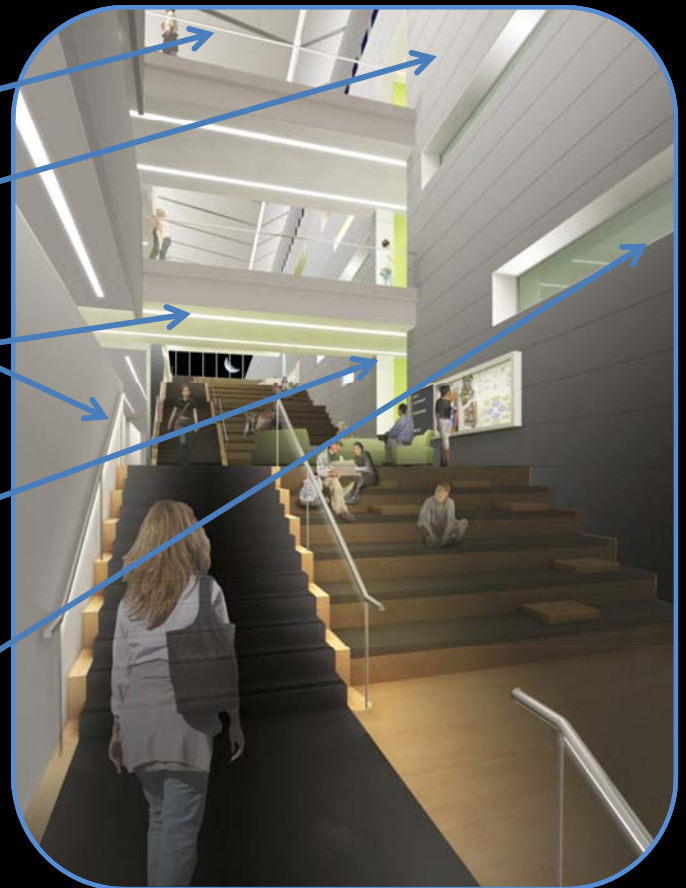
Illuminated ceiling to mimic daylight

Wash on white masonry wall

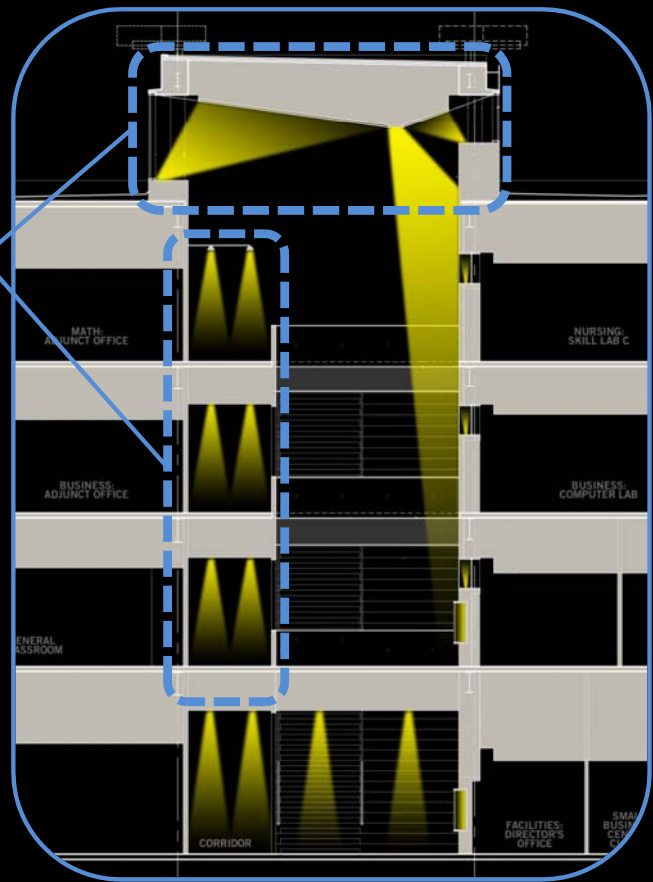
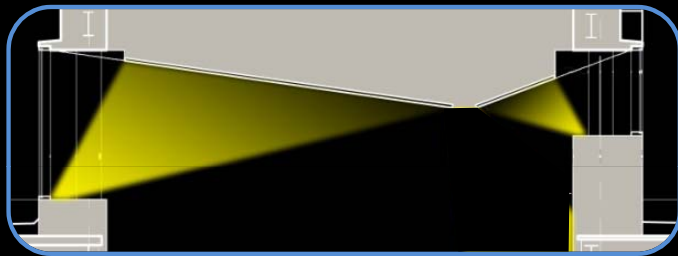
Linear luminaires parallel with heavy traffic directions

Higher luminance/illuminance in openings to lead occupant

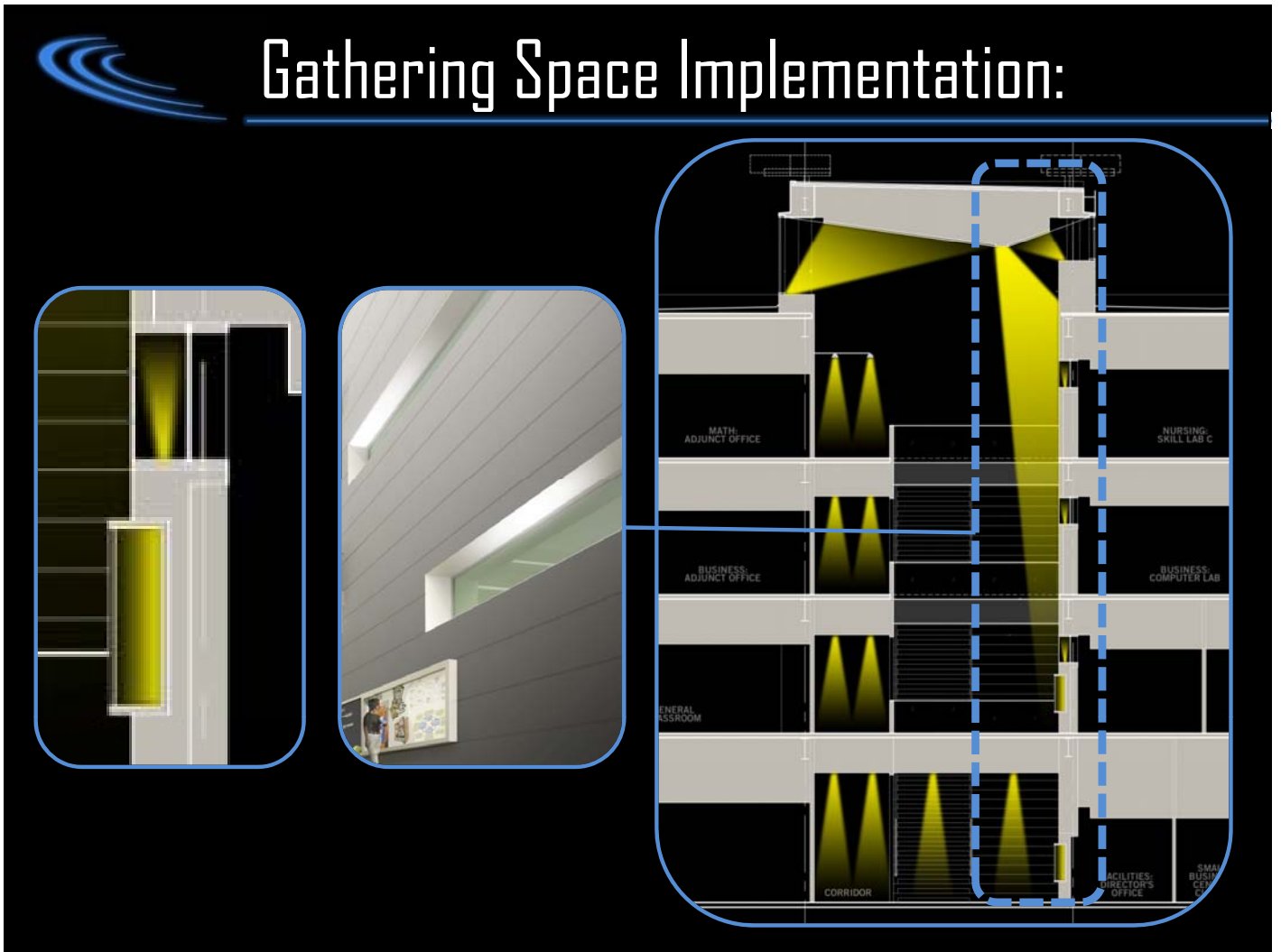
Subtle motion of light in "light boxes" to create visual interest.

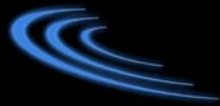


Gathering Space Implementation:

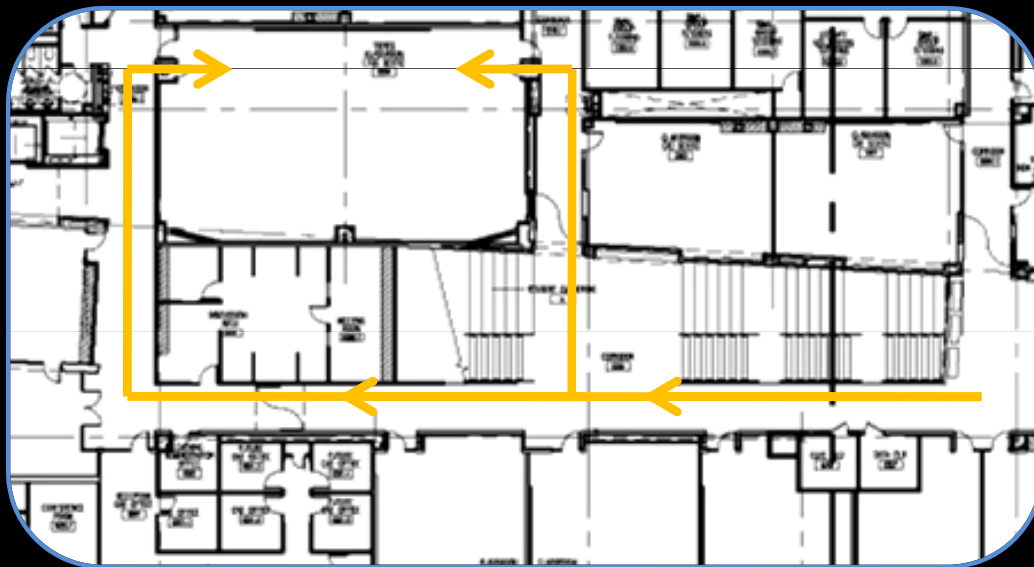
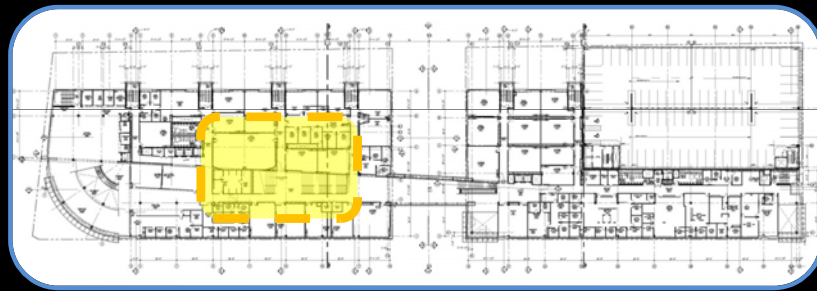


Gathering Space Implementation:

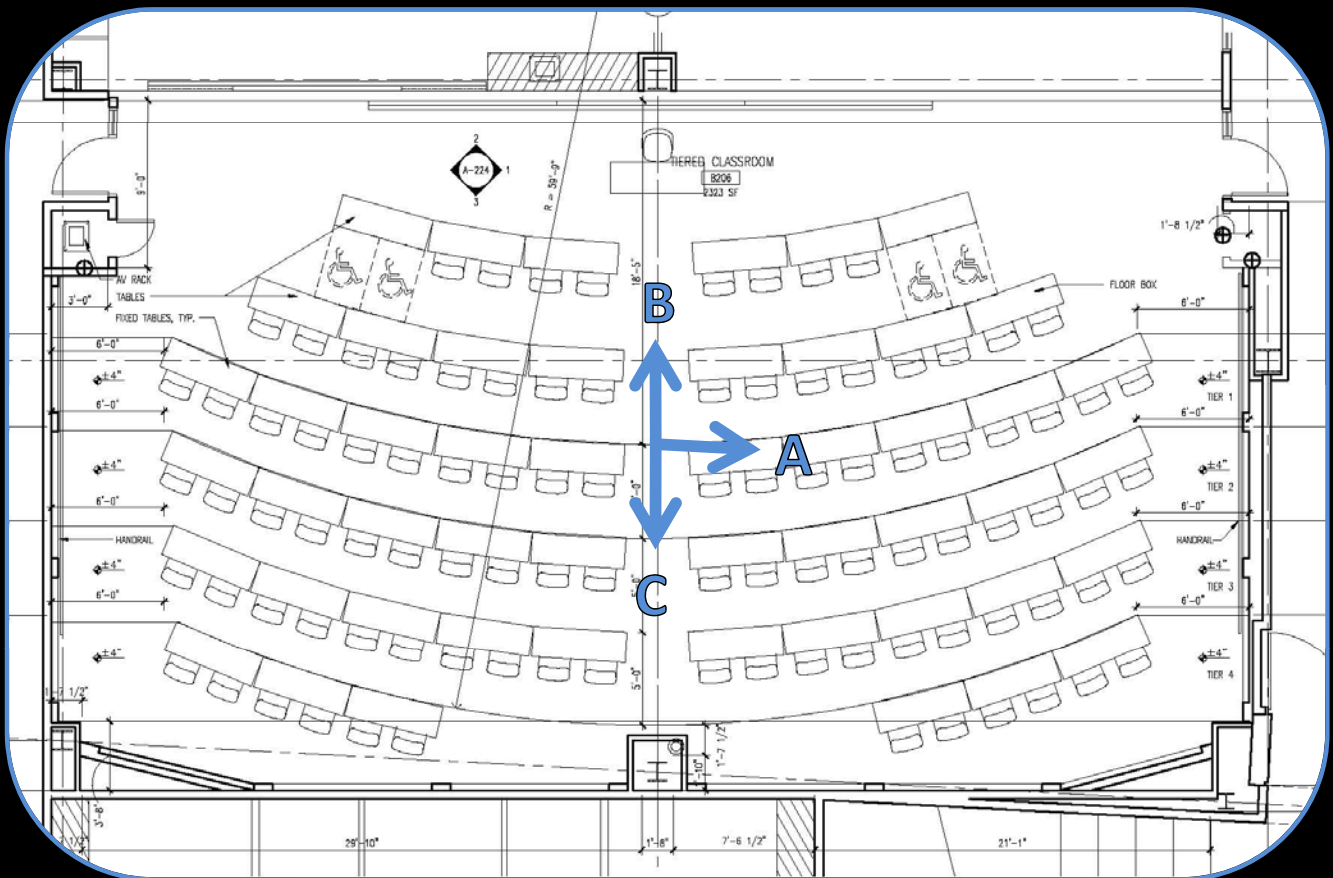




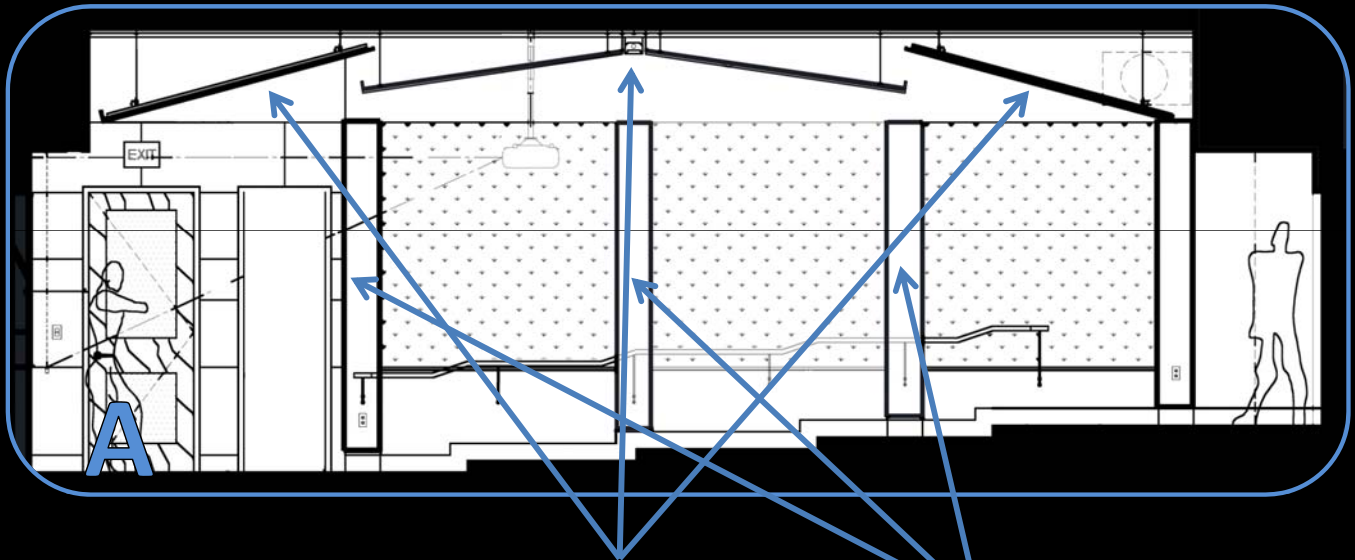
Tiered Classroom



Tiered Classroom



Tiered Classroom



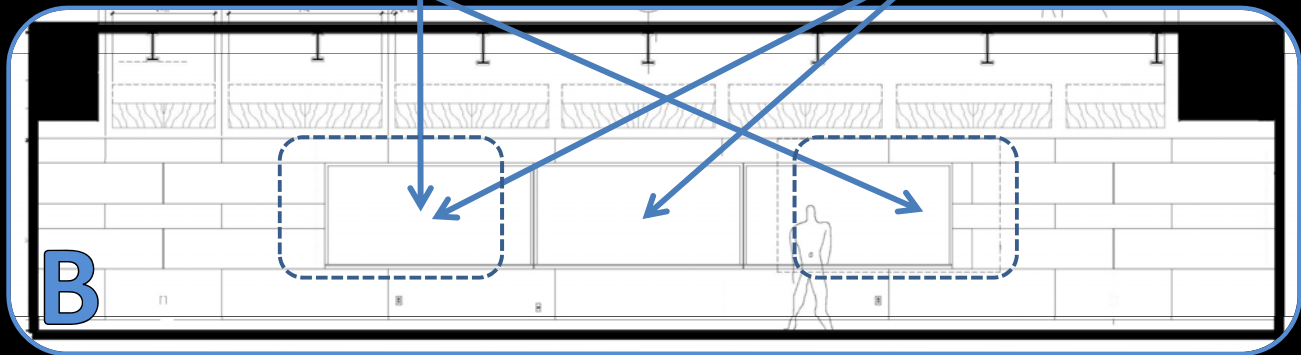
Custom Drop Panel Layout

Pilasters

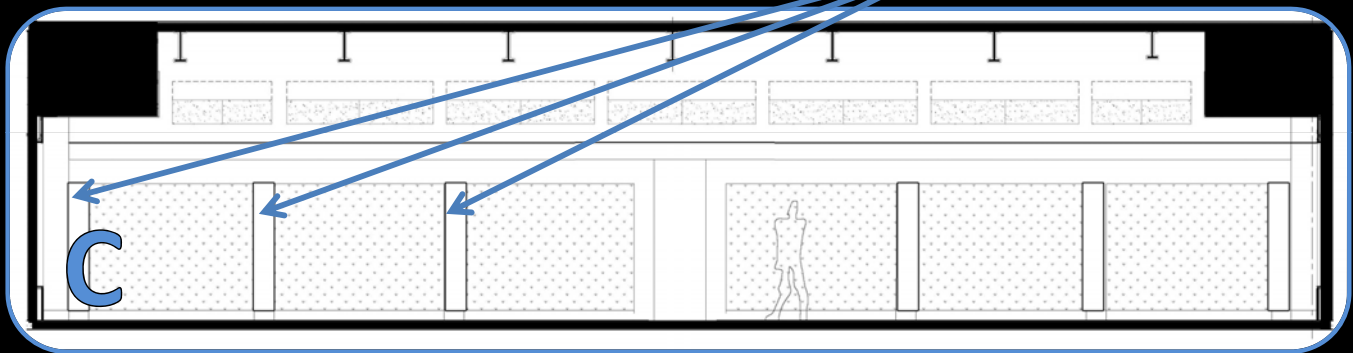
Tiered Classroom

Projection Screens

White Boards



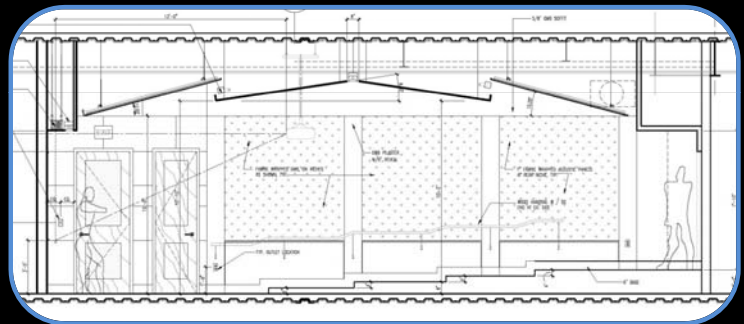
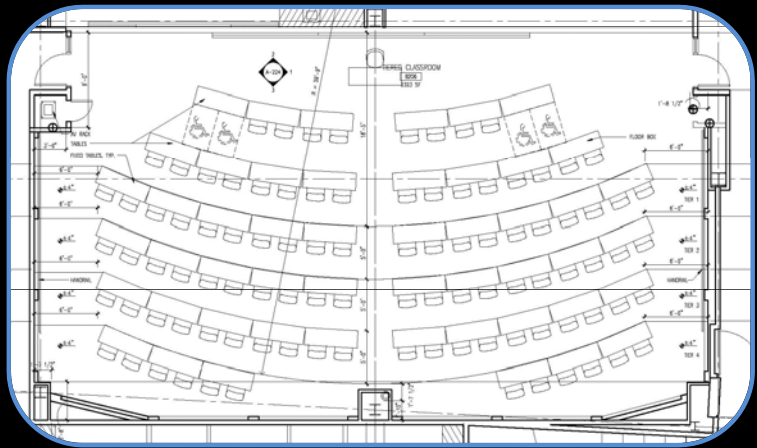
Pilasters



Tiered Classroom

DESIGN CONSIDERATIONS

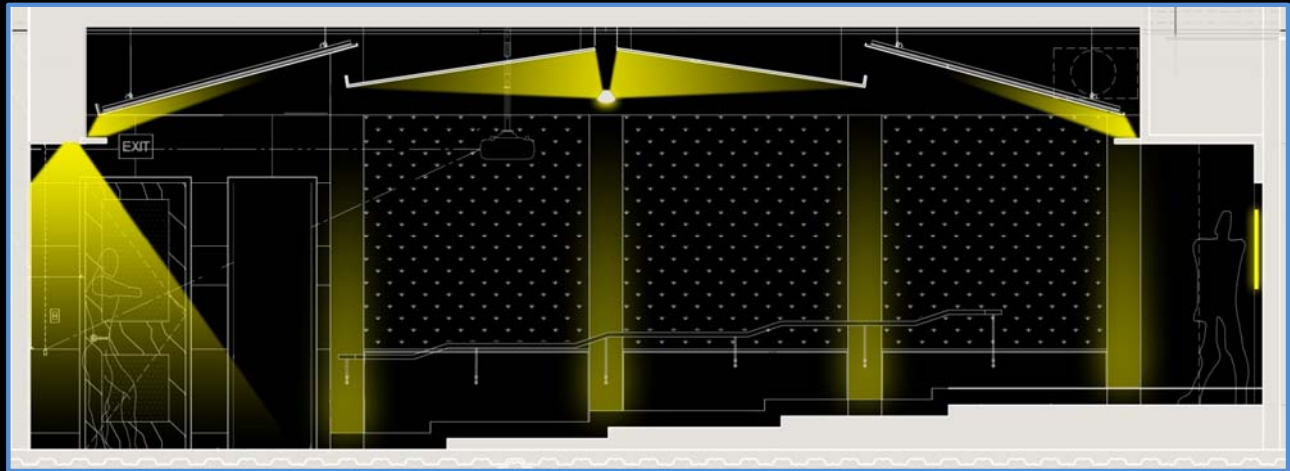
- Direct glare
- Light distribution on surfaces
- Modeling of faces and objects
- Source / task / eye geometry
- System control and flexibility
- Elimination of varying shadows





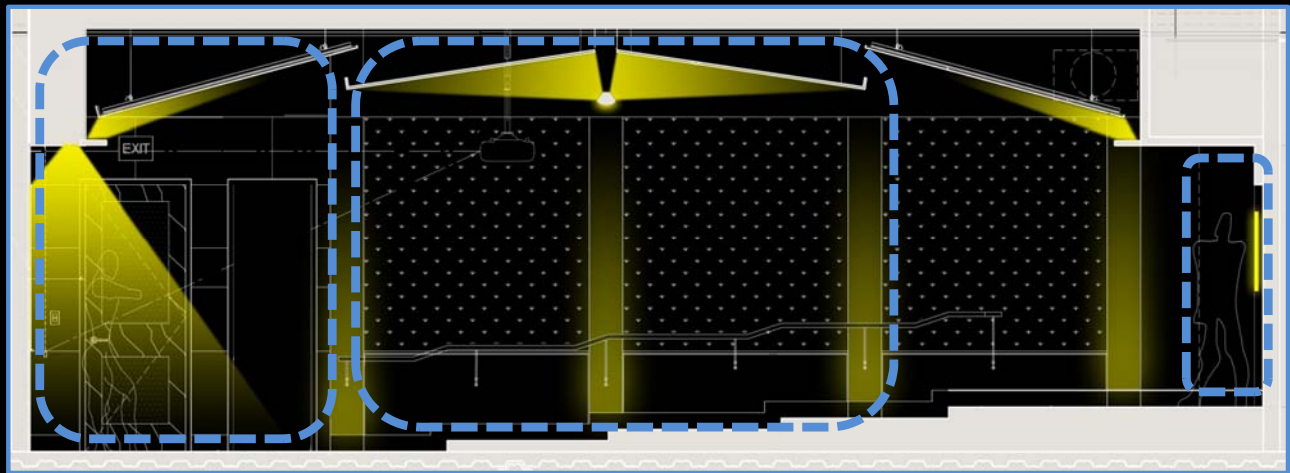
Tiered Classroom Implementation

Section Through Stairs



Tiered Classroom Implementation

Section Through Stairs



Linear Downlighting

Indirect Pendant

Wall Sconce

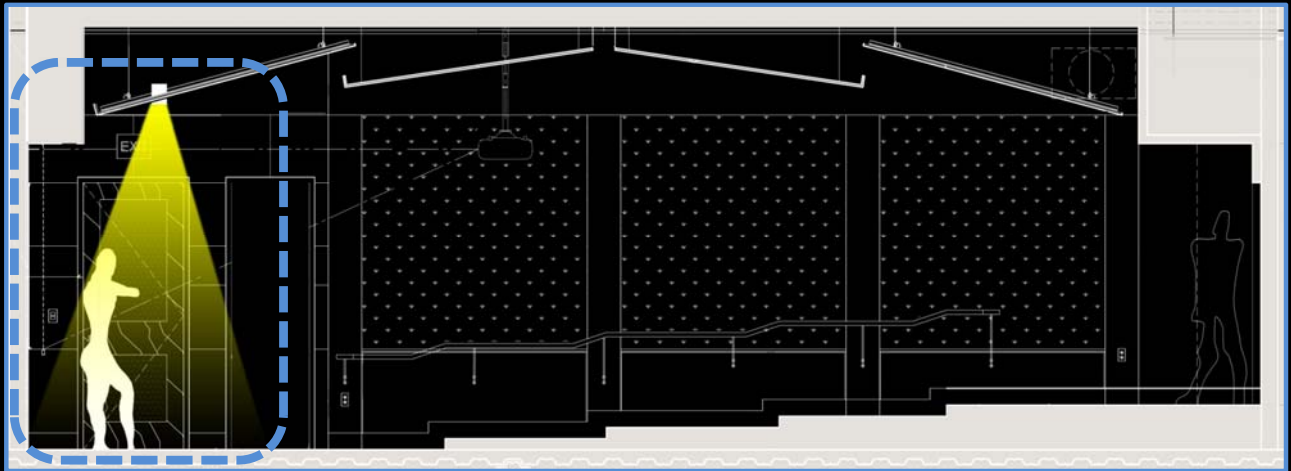
Cove Luminaires

Backlit Acrylic Panels



Tiered Classroom Implementation

Section Through Stairs



Semi-recessed
Downlighting

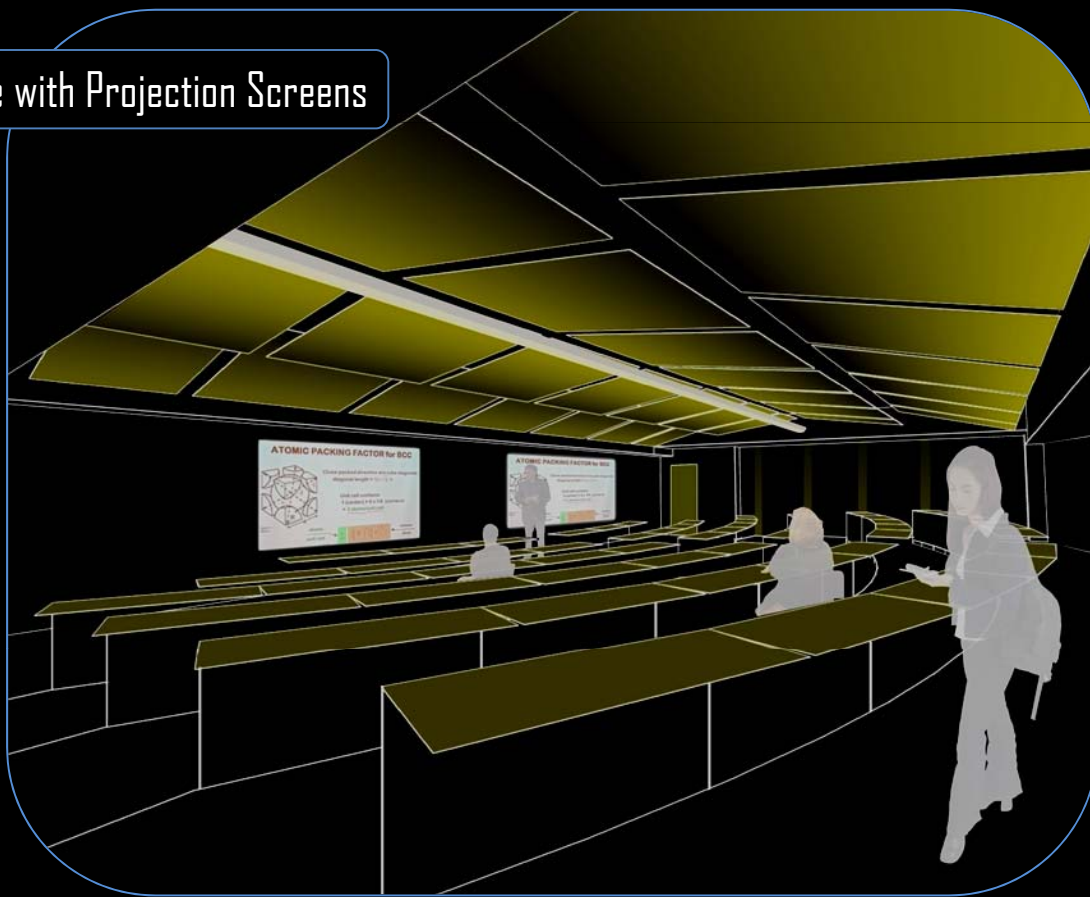
Tiered Classroom Implementation

Lecture with White Boards



Tiered Classroom Implementation

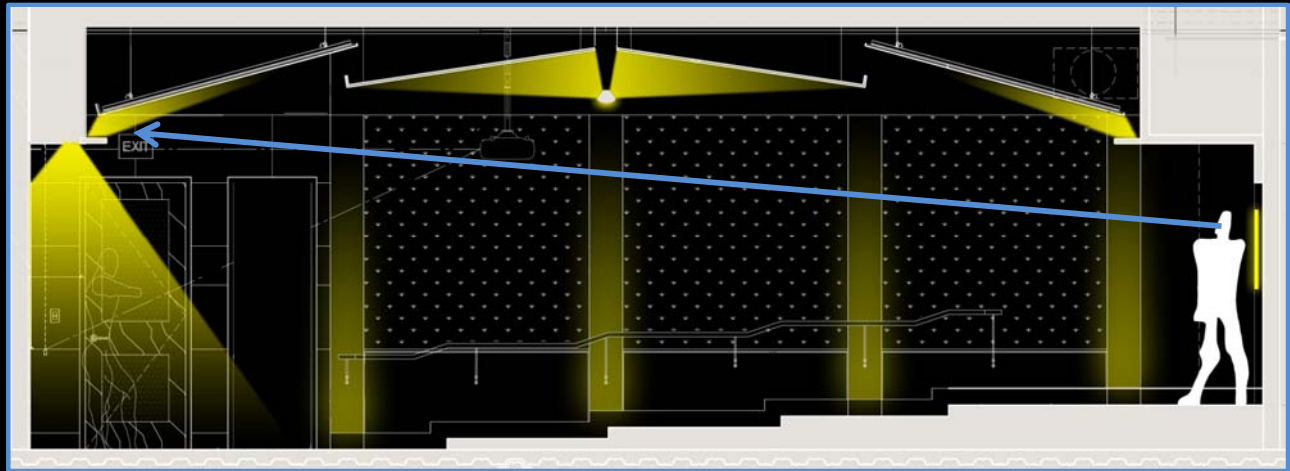
Lecture with Projection Screens





Tiered Classroom Implementation

Section Looking North

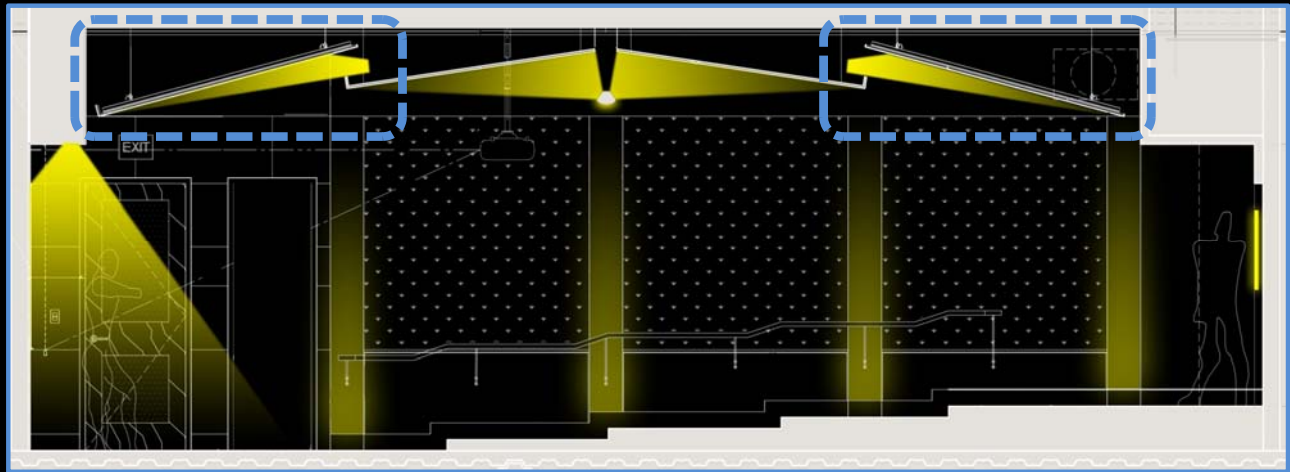


Possible View of lamp and cove luminaire



Tiered Classroom Implementation

Section Looking North



Can eliminate by mounting luminaire behind ceiling panels

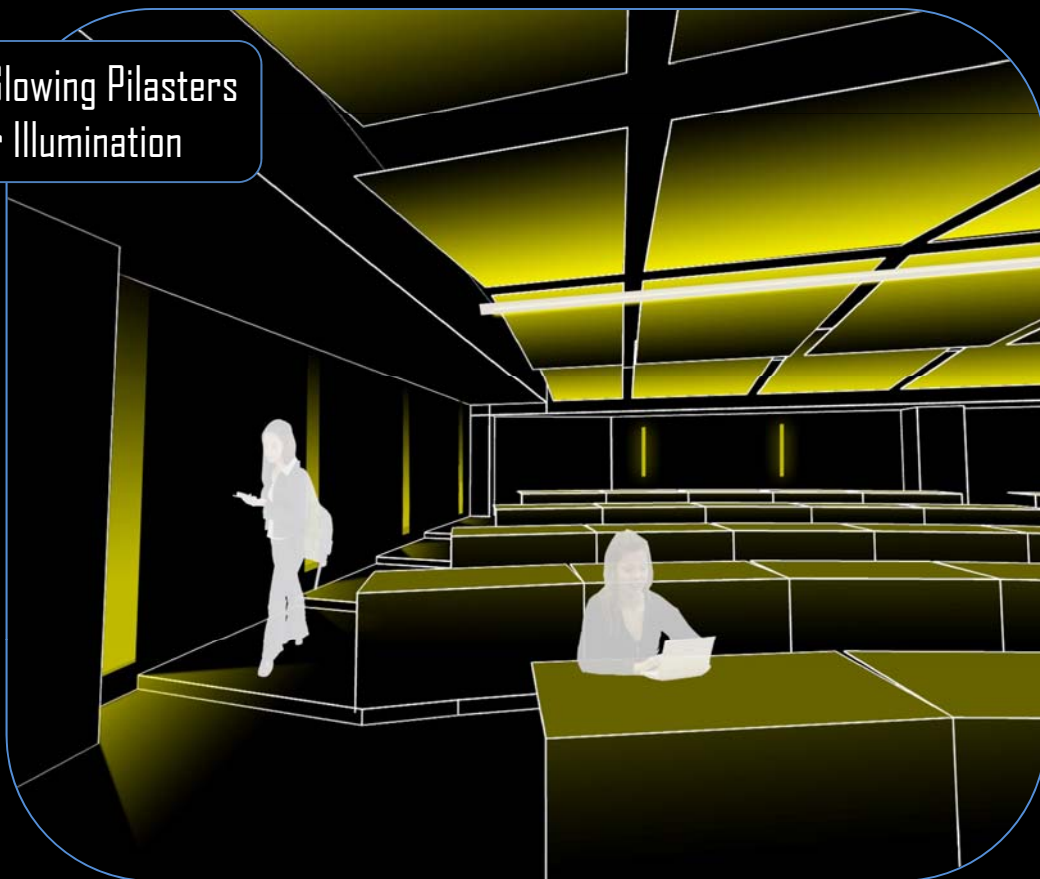
Tiered Classroom Implementation

Lecture with Projection Screens



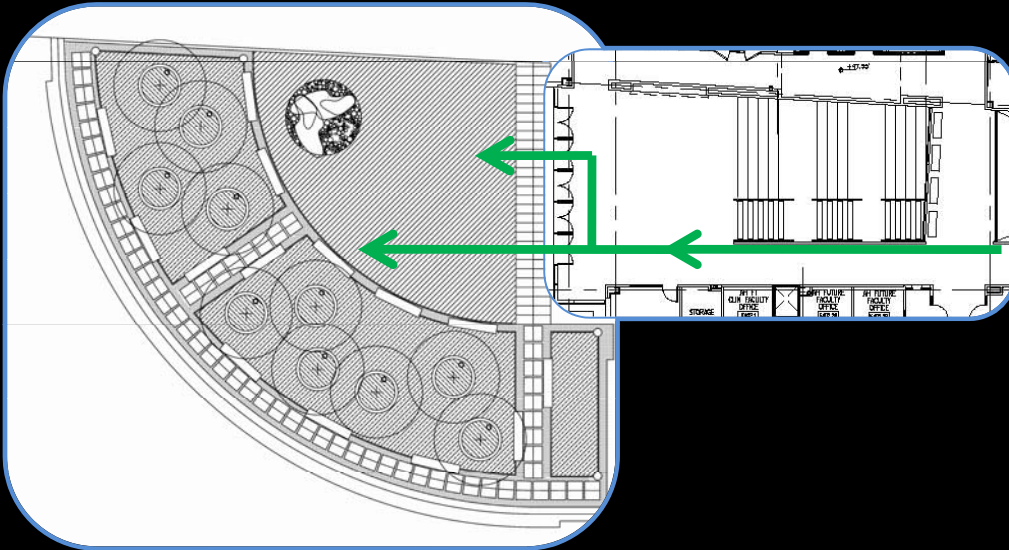
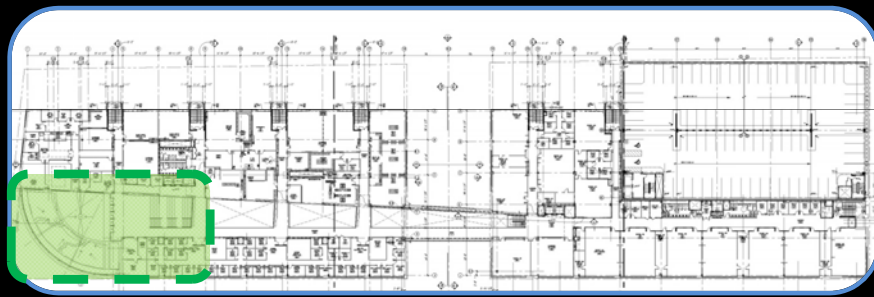
Tiered Classroom Implementation

View of Glowing Pilasters and Stair Illumination

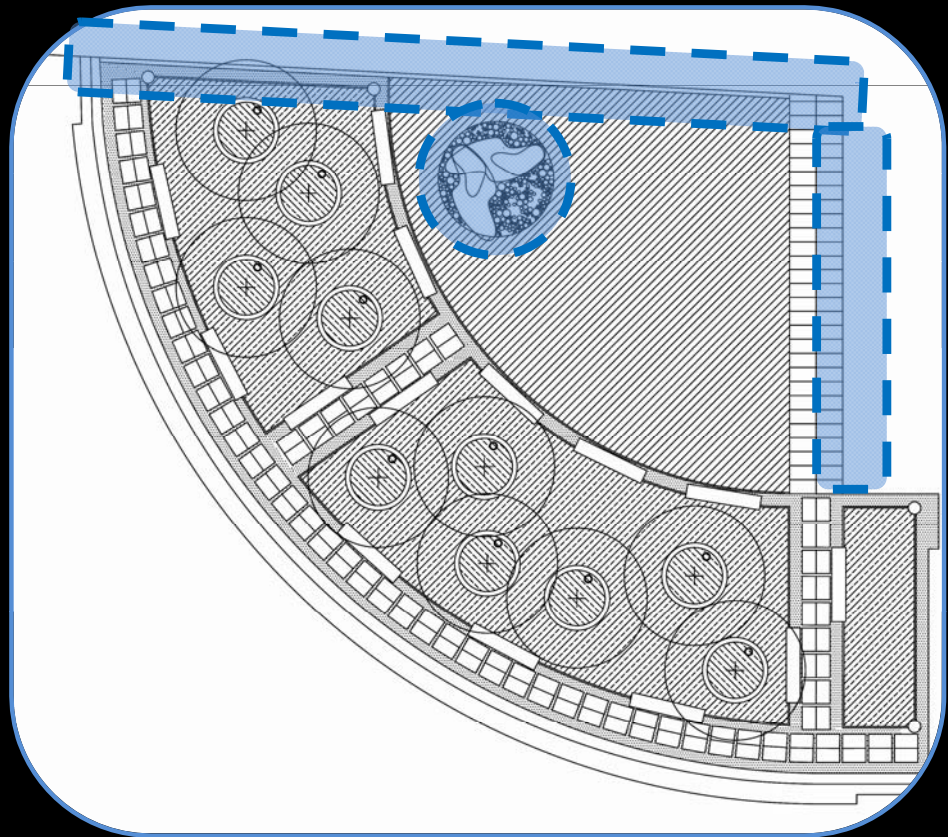




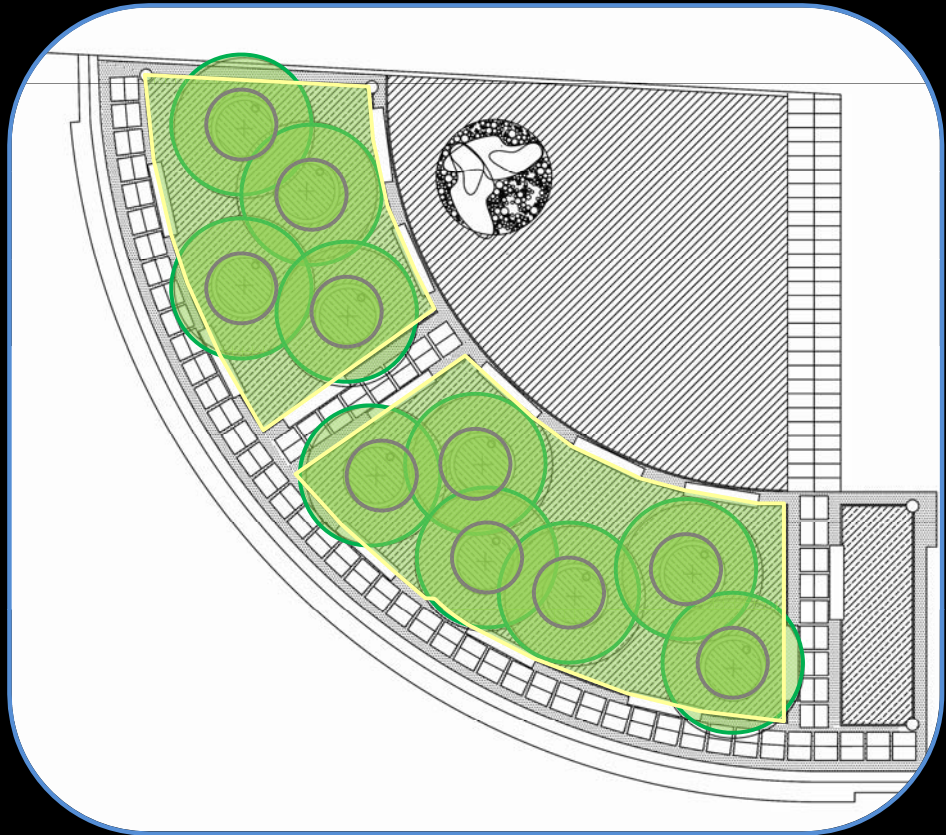
Roof Garden



Roof Garden



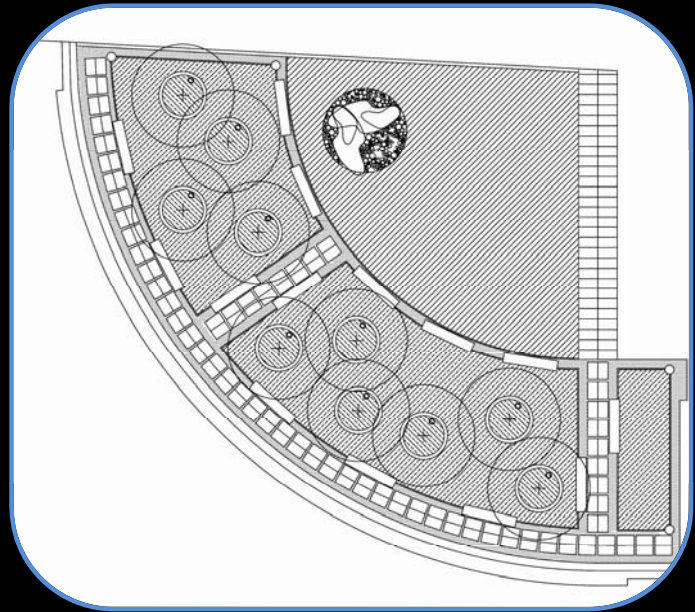
Roof Garden Plantings



Roof Garden Implementation

DESIGN CONSIDERATIONS

- Modeling of objects
- Shadows
- Light Distribution on Task Plane



Roof Garden Option 1

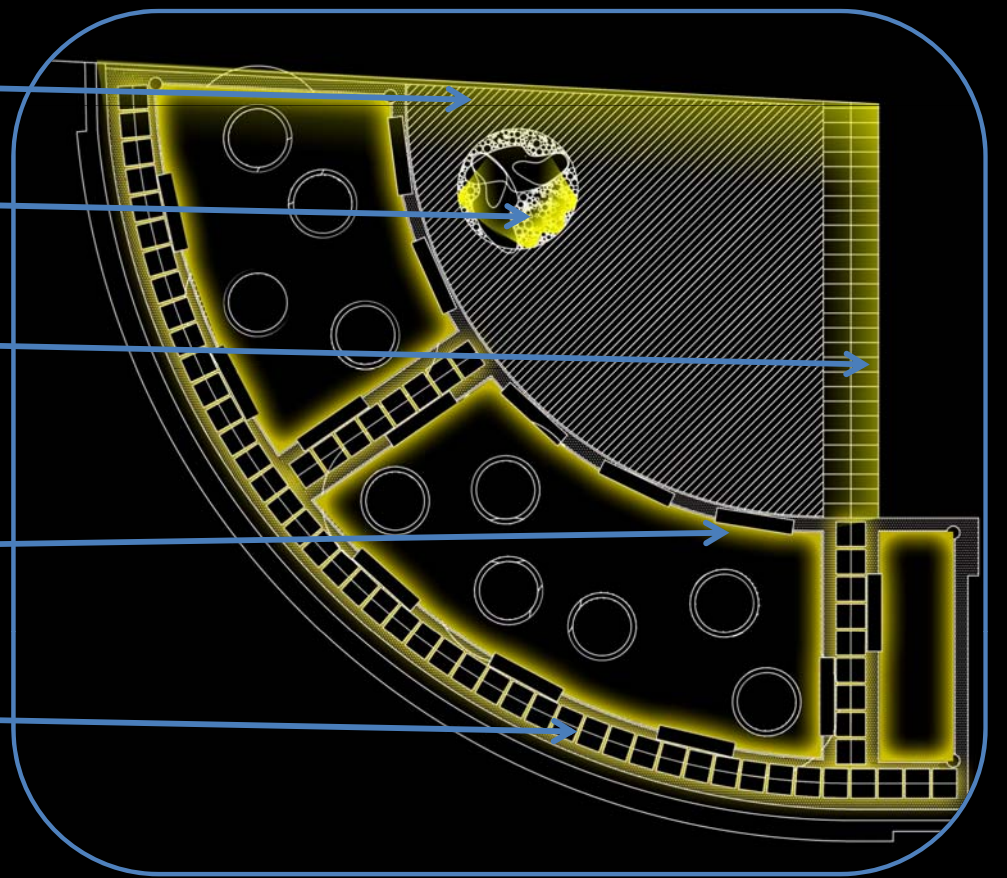
Wash on wall

Statue Lighting

Glow from Gathering Space

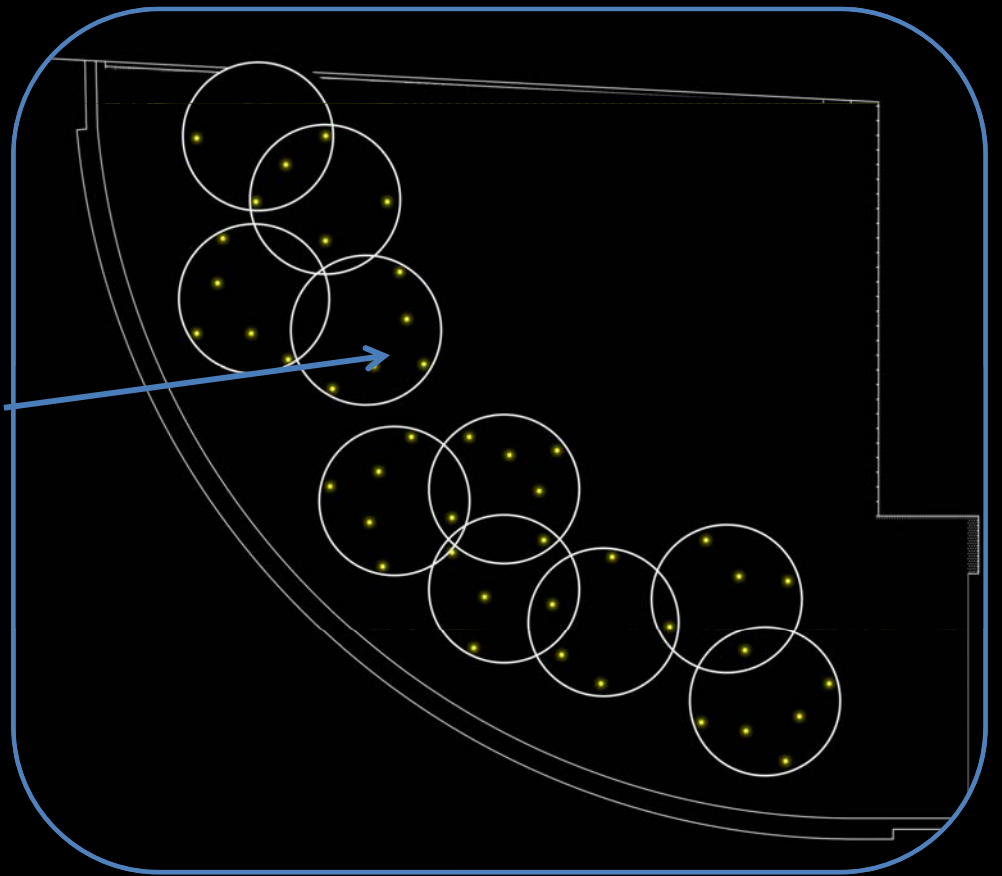
Recessed Linear Luminaires in grass ledge

Glow Behind Pavers



Roof Garden Option 1

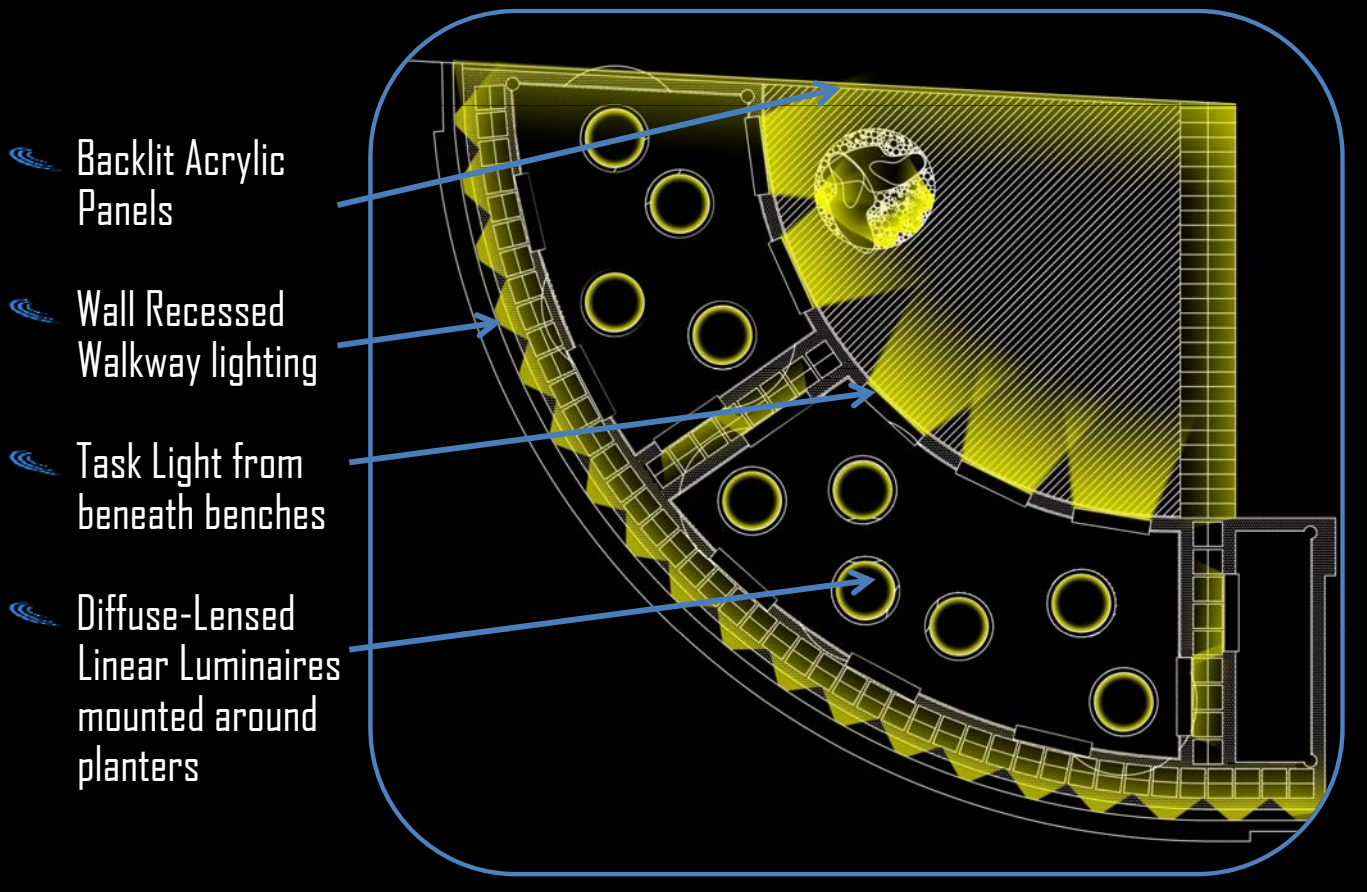
Downlighting
From within Tree
Canopy



Roof Garden Option 1

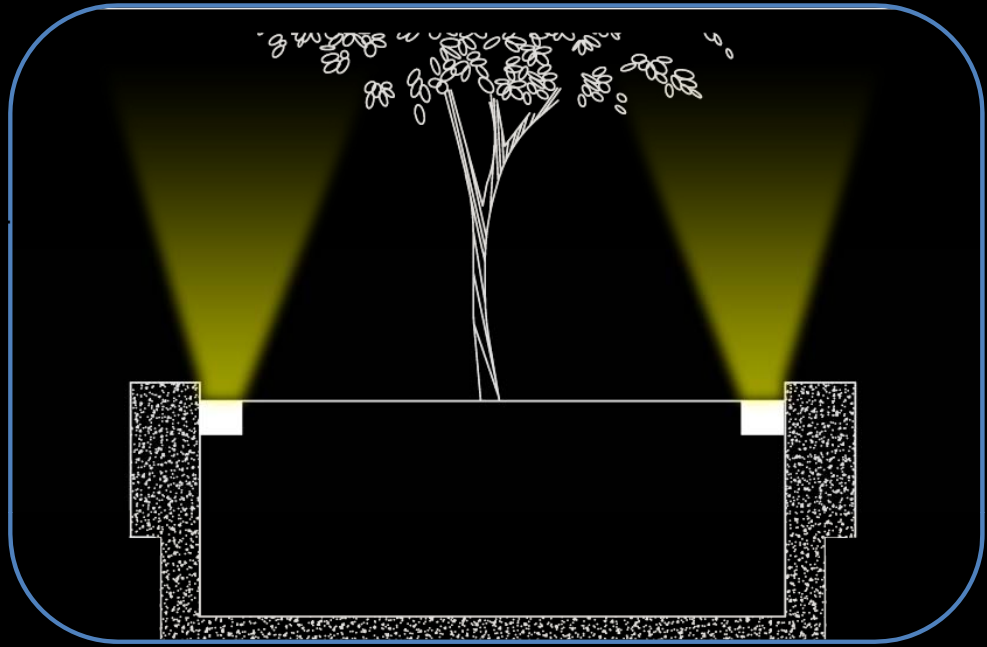


Roof Garden Option 2



Roof Garden Option 2

Diffusing lens
on Linear
Luminaire
mounted in
planters



Roof Garden Option 2



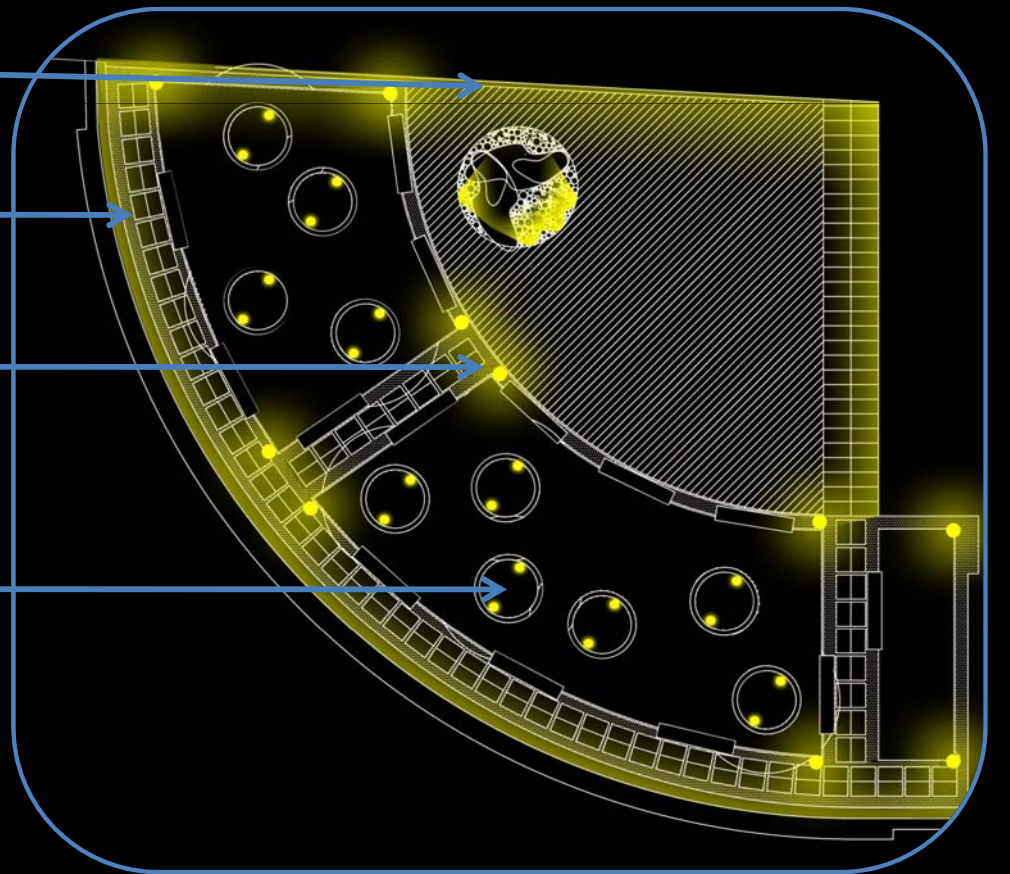
Roof Garden Option 3

LED Wall

Rail Mounted Walkway lighting

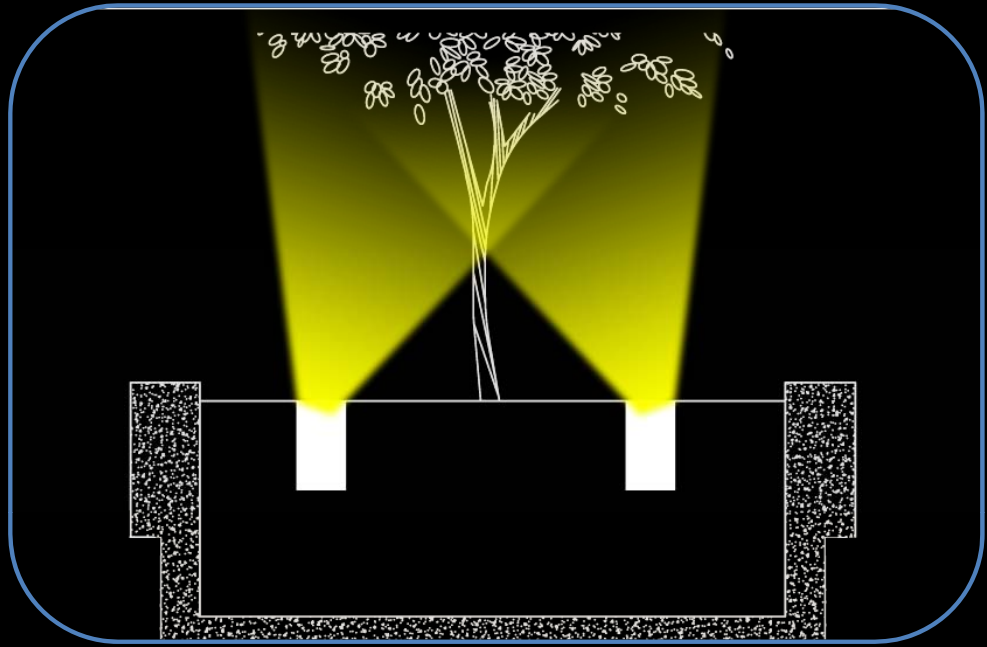
Glowing Luminaire at major intersections of walkway

Wide Dist. Luminaire mounted in planters



Roof Garden Option 3

Wide Dist.
Luminaire
mounted in
planters



Roof Garden Option 3



Roof Garden Option 3



Roof Garden Option 3



Roof Garden Option 3

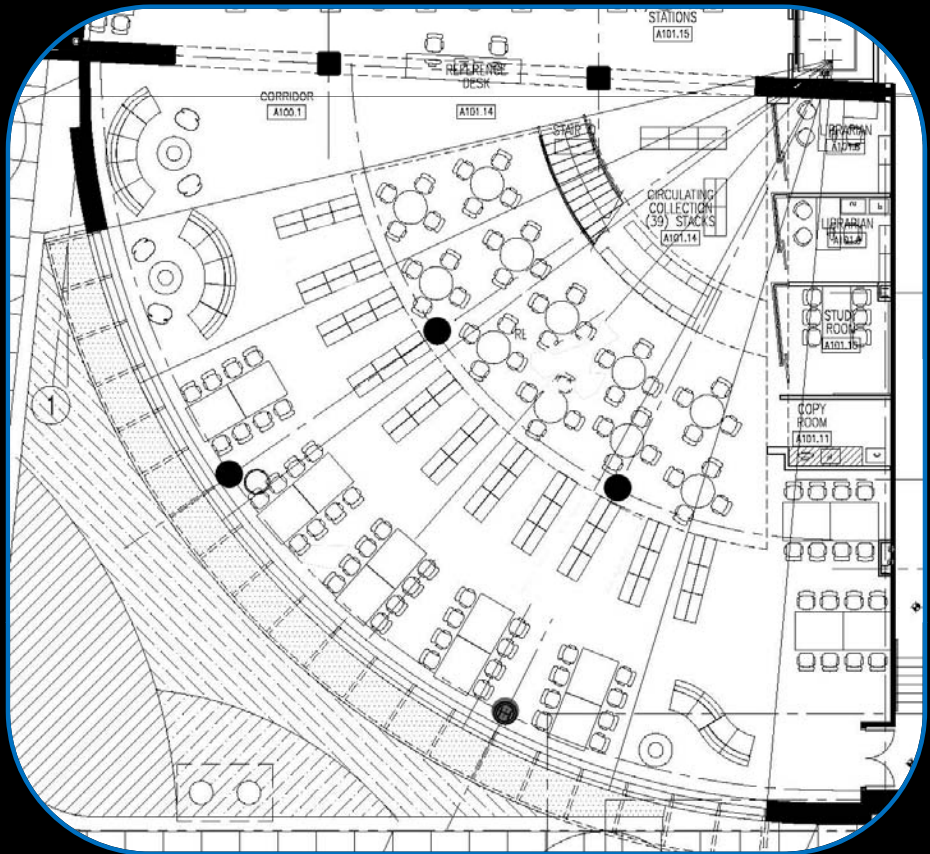


Roof Garden Option 3



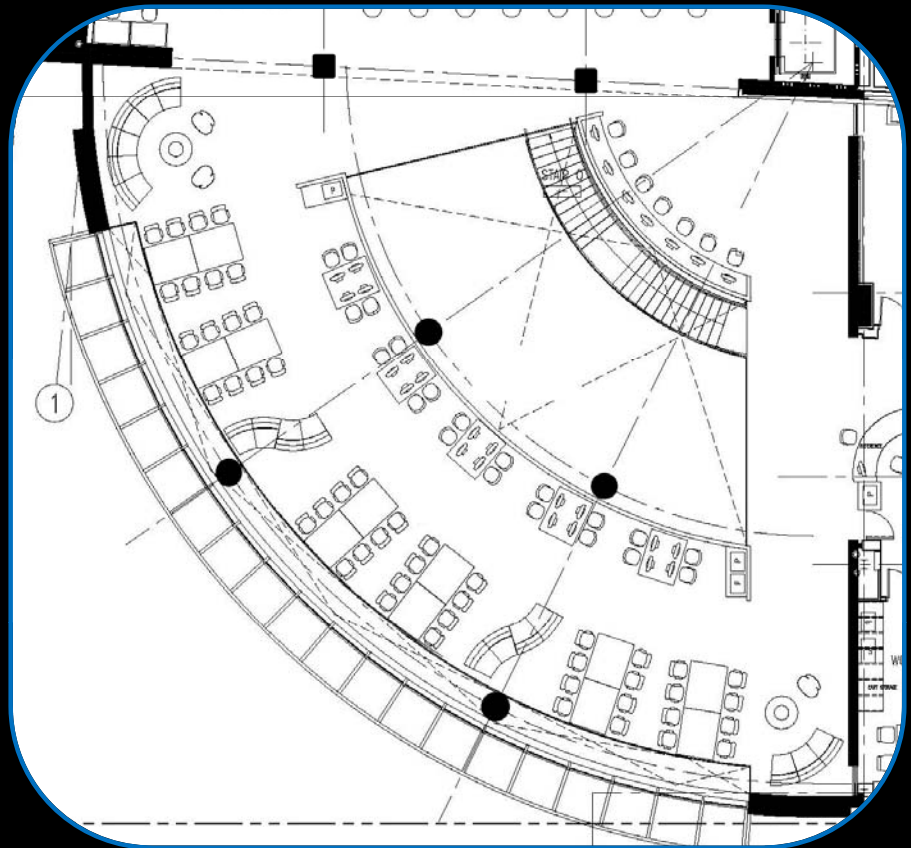
Library Reading Lounge

First Floor Plan



Library Reading Lounge

Second Floor Plan



Library Reading Lounge

DESIGN CONSIDERATIONS

- Appearance of space and luminaires
- Daylight Integration and Control
- Direct glare
- Reflected Glare
- Light Distribution on Task Plane
- Source Task Eye Geometry
- Modeling of faces and objects





Gathering Space Inspiration:

"GATEWAY"



<http://www.pbase.com/image/26646551>

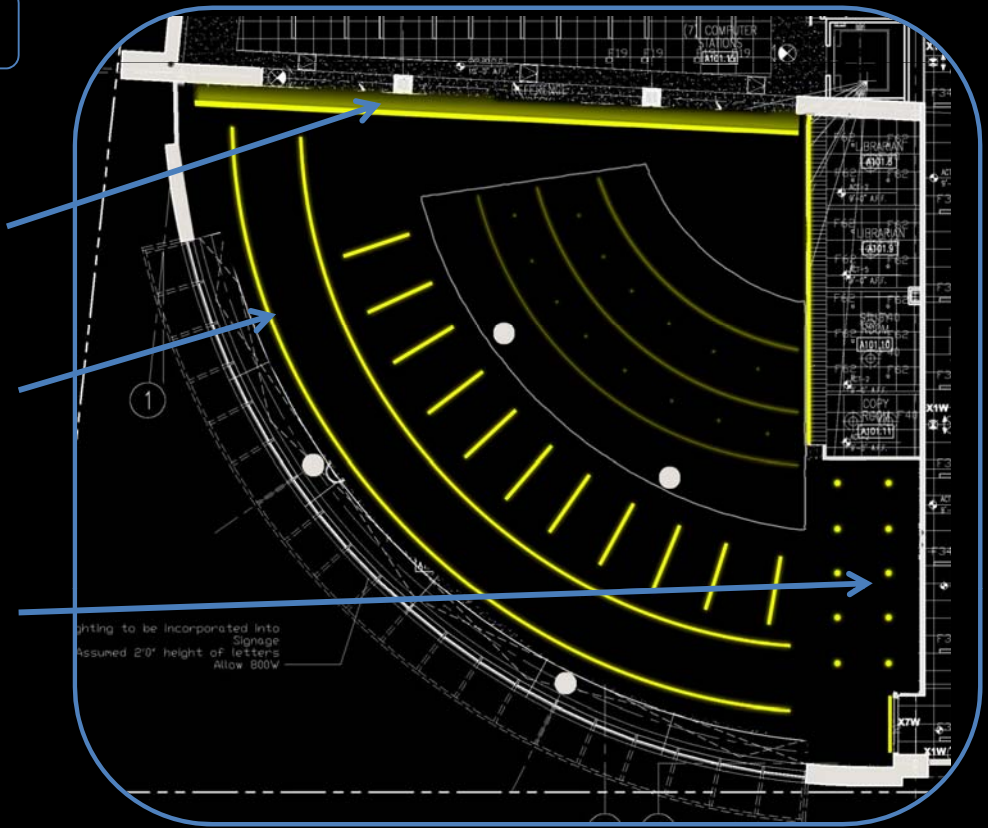
Library Reading Lounge Implementation

First Floor Lighting Plan

Wall Wash

Recessed Linear strips

Downlighting



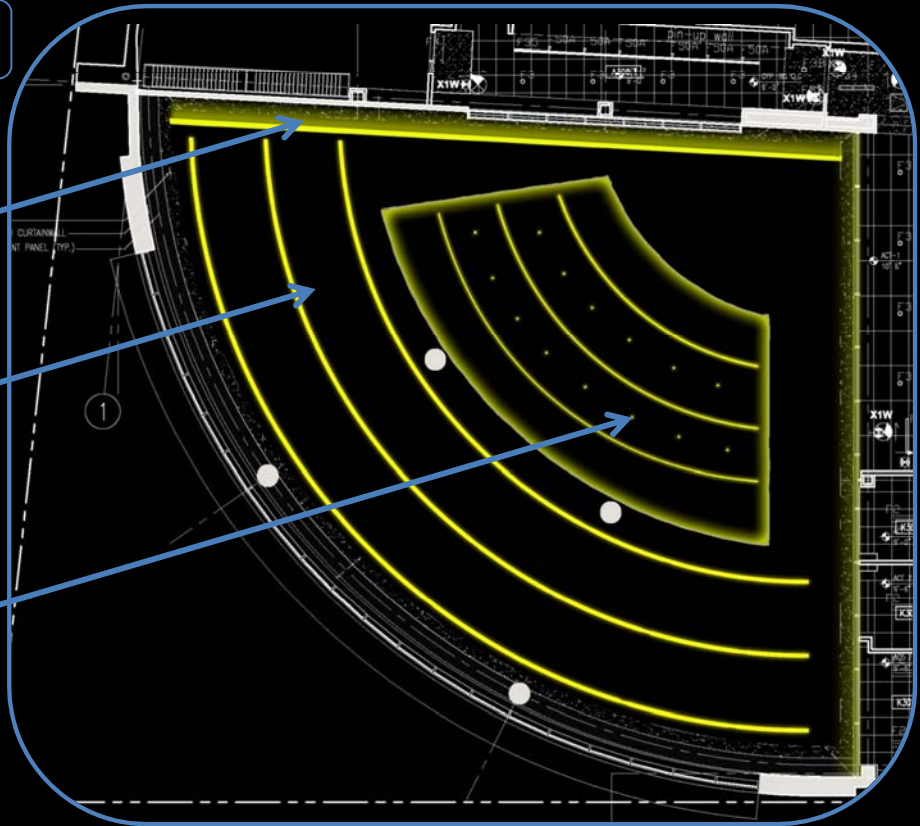
Library Reading Lounge Implementation

Second Floor Lighting Plan

Wall Wash

Recessed Linear strips

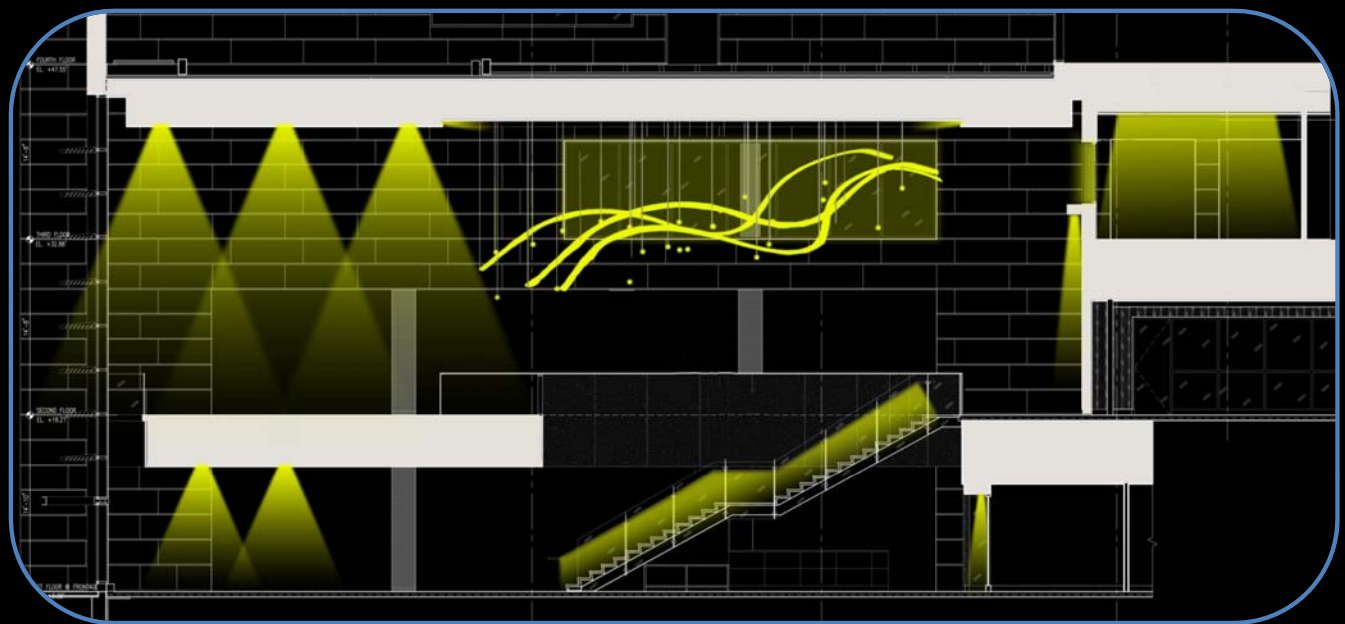
Custom Chandelier and Cove Lighting in Ceiling





Library Reading Lounge Implementation

West Section



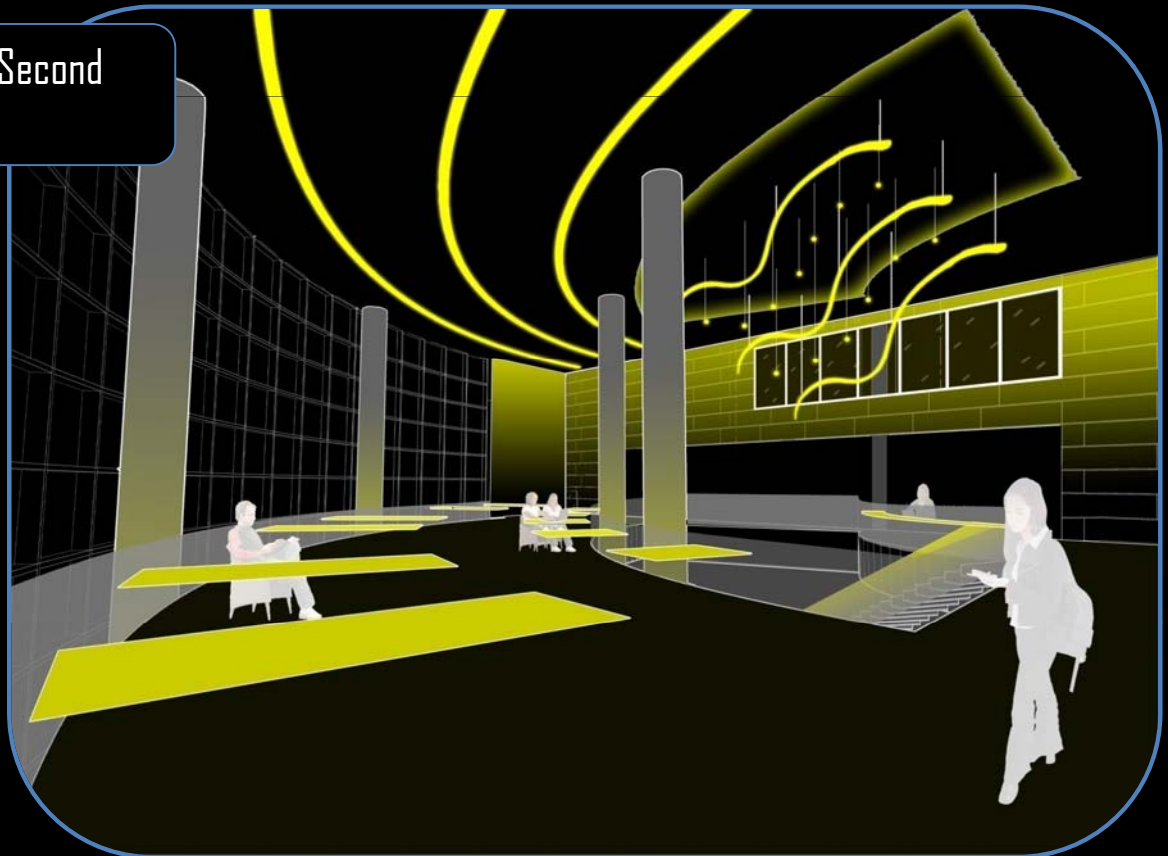
Library Reading Lounge Implementation

View From First Floor



Library Reading Lounge Implementation

View From Second Floor



Library Reading Lounge Implementation

Exter





Thank You!

Questions?