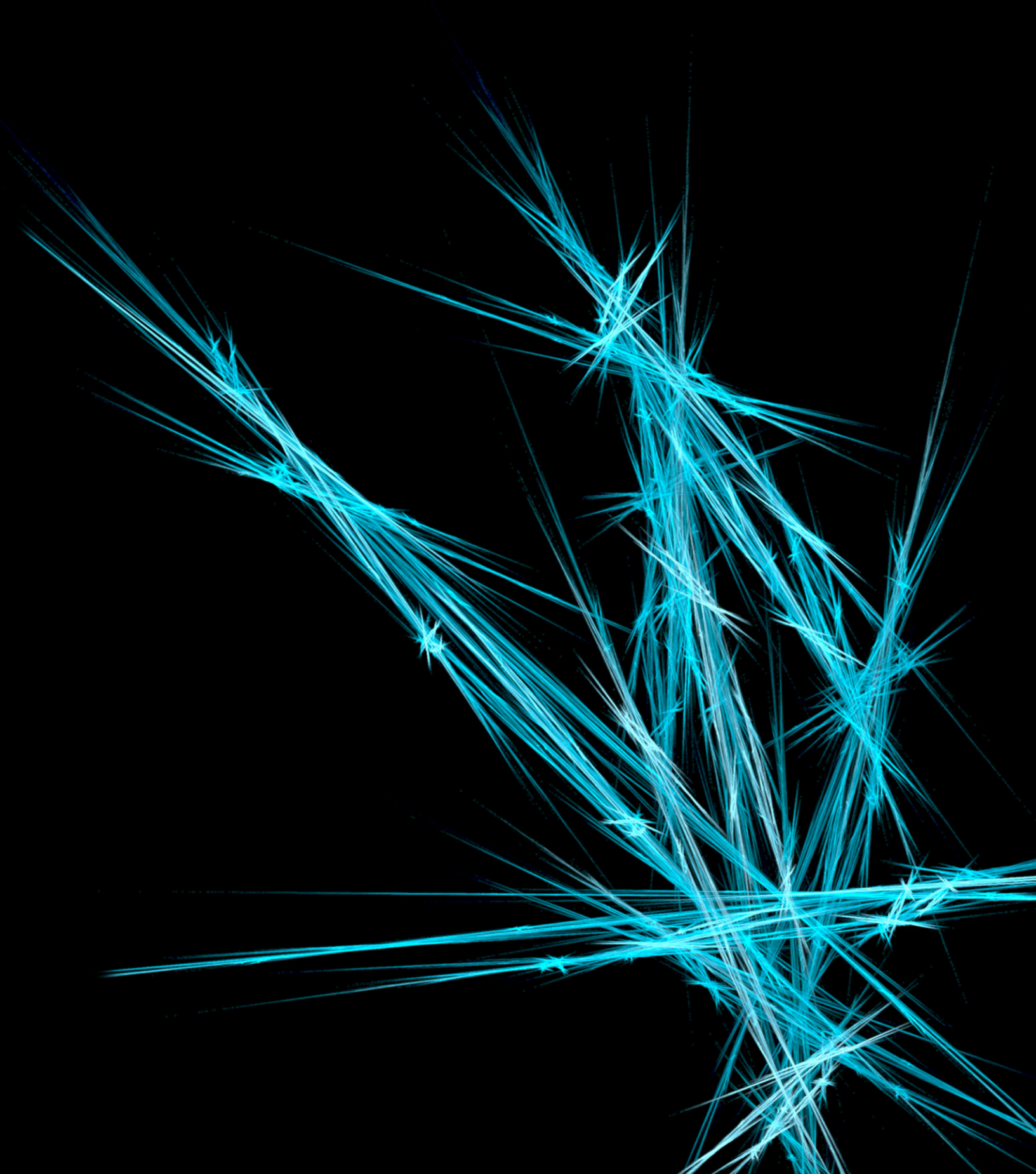


ADAM KROLL

ARCHITECTURAL LIGHTING PORTFOLIO



SENIOR THESIS PROJECT



NEW YORK LAW SCHOOL NEW COMMUNITY FACILITY

architecture

The New Community Facility, located in lower Manhattan, consolidates the functions of various aging New York Law School structures.

Spaces include a library, a 284-seat auditorium, dining areas, a roof terrace, administrative offices, classrooms, and a large multi-purpose room.

Glass facade displays the high level of activity that will take place in the facility.



Exterior rendering by SmithGroup

construction

Address:
185 W. Broadway

Size: 200,000 SF
6 levels above grade
4 levels below grade

Total cost: \$80 million

Construction dates:
May 2006 to 2010

Delivery method:
CM Agent

project team

Owner: New York Law School

Architect: SmithGroup

MEP: Jaros, Baum & Bolles

Structural: Thornton-Tomasetti

Acoustics / AV: Cerami

Landscape Architect: JJR

Geotechnical: Meuser Rutledge

Management: Studley

Project Management: WA



Main entry lobby

lighting

Color-changing LEDs on exterior canopy and behind etched glass panels in main lobby
Significant amounts of daylight above grade
Appearance of glowing glass facade at night
Heavy use of fluorescent sources and dimming

structural

Foundation: Two-way slab on grade 8" thick with wire mesh reinforcement
Floor and Roof: Composite metal decking ranging from 6" to 12" thick
Main Support System: Steel beams and columns ranging from W24 to W40 10' O.C.

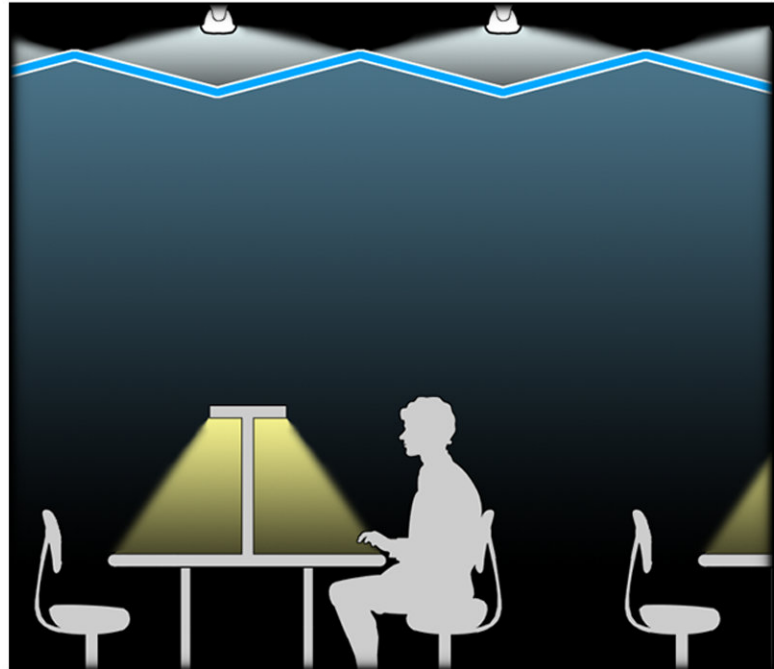
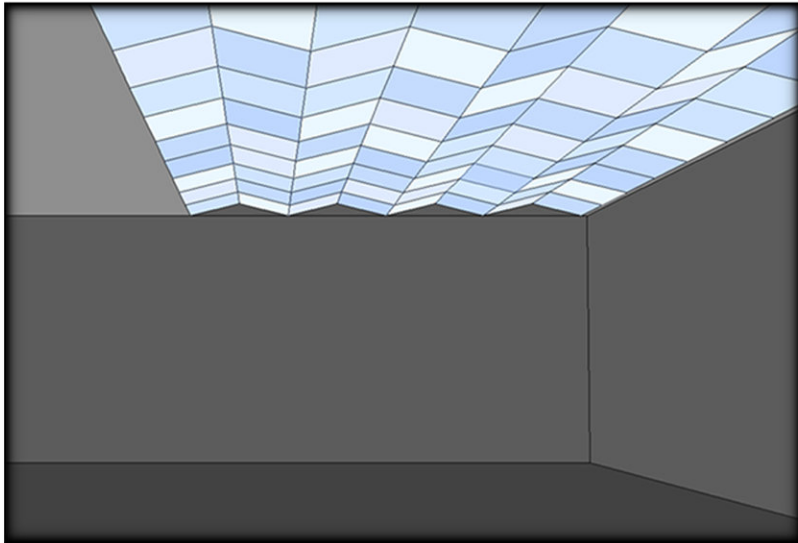
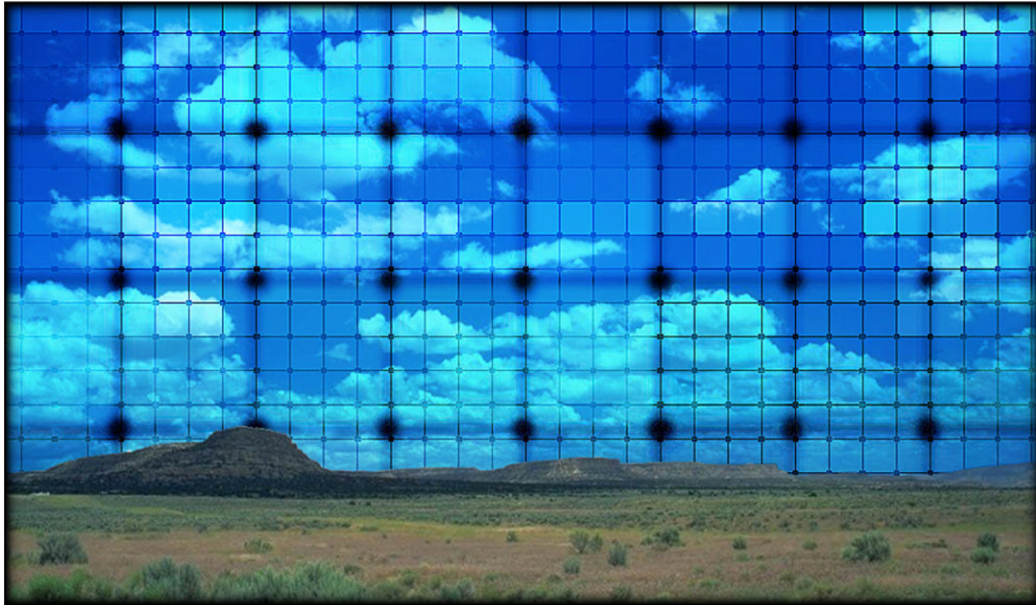
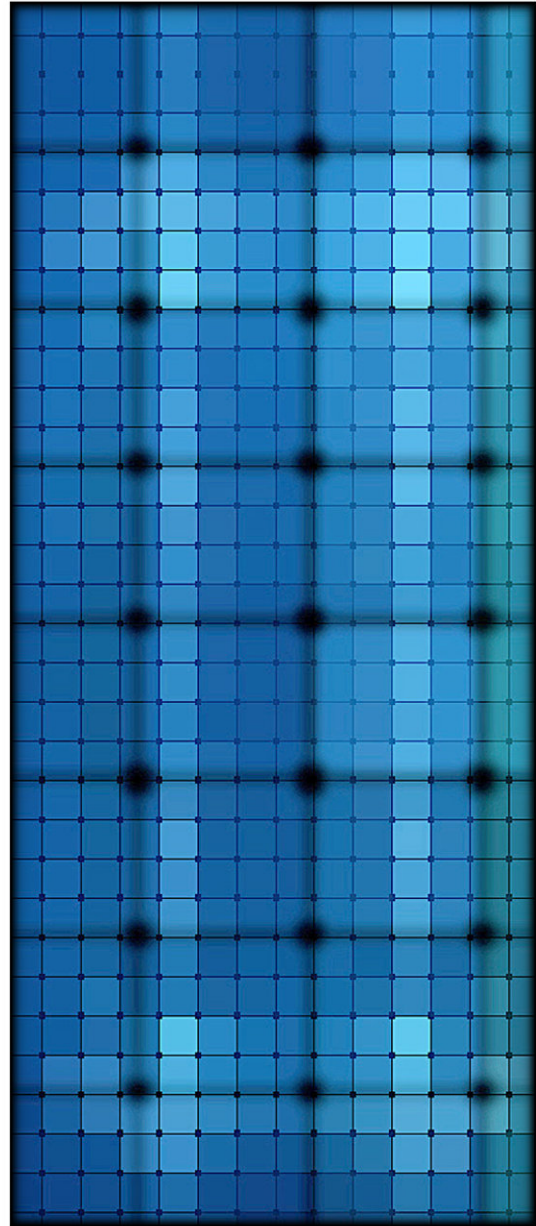
electrical

Primary: Two feeders from Con Edison transformer vault supply 208Y/120V 3P 4W 4000A switchgears
Emergency: 700KW 208Y/120V oil-fueled generator
UPS for information technology systems
Above-grade floors serviced by two bus ducts: 2500A and 3000A, below-grade by one 3000A

mechanical

Heating: Steam heating, supplied by Con Edison
Cooling: Water-cooled packed air conditioning systems, two cooling towers on roof
550 gallon fuel oil tank for emergency generator

SENIOR THESIS PROJECT



CONCEPT: SIMULATE DAYLIGHT IN A BASEMENT LIBRARY USING A LUMINOUS CEILING

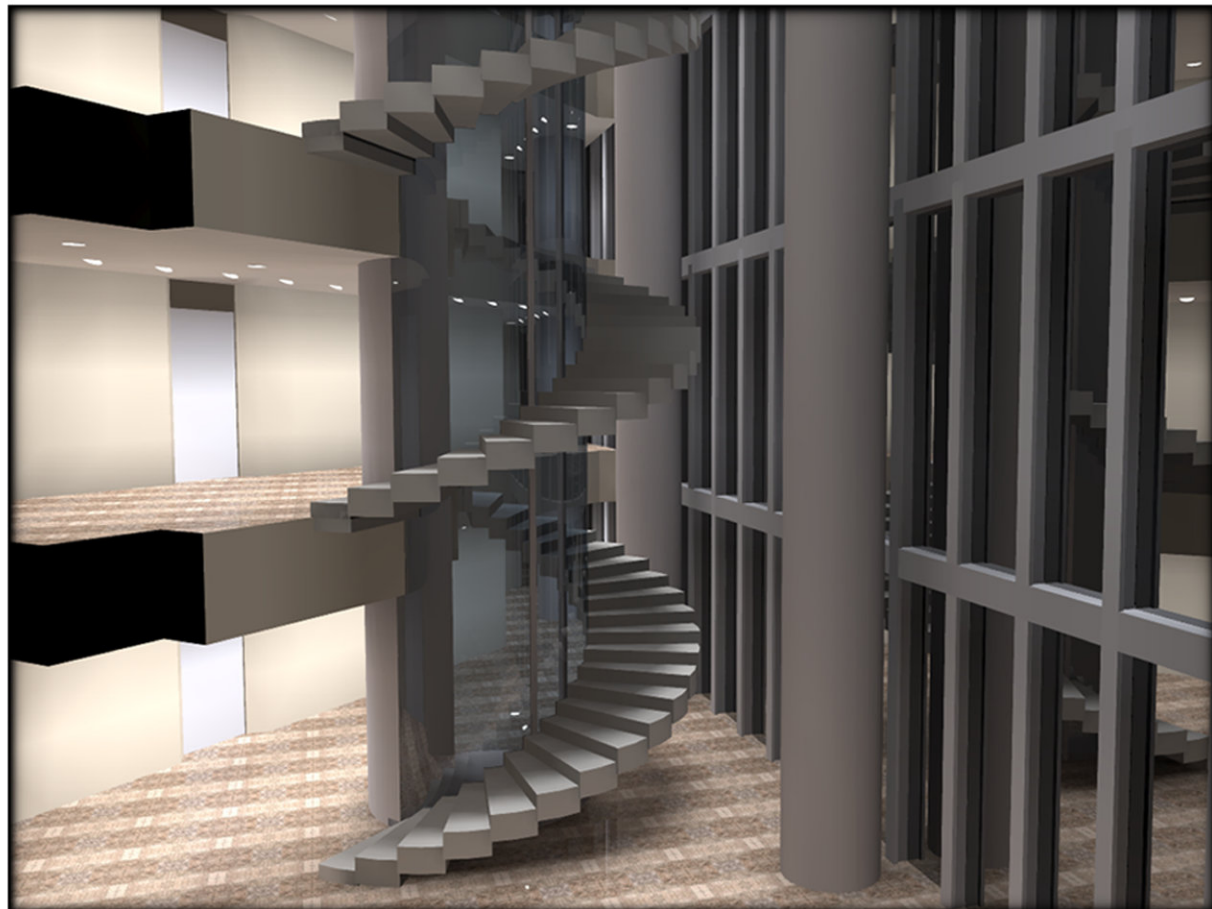
EXTERIOR LIGHTING



RENDERING & ANIMATION



TORRE ESPACIO, MADRID



FLUSHING TOWN CENTER, NY



ABOVE: RESIDENTIAL LOBBY - BELOW: MALL CONCOURSE



DESIGN WITH LIGHT COMPETITION

FIRST PLACE PRIZE

IES PHILADELPHIA

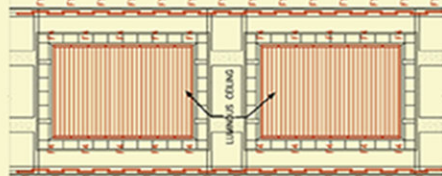
DESIGN WITH LIGHT



Delay Cylinder
Downlight:
Hidden in
Main Court
Skylight Wells,
Mimics Daylight
at Night



NewMat Luminous Ceiling
(Photo: Synovate Barabara, Copenhagen)



Goal: Provide backdrop that allows the excitement of the retail concourse to take focus



F1:
Corelite
F3278
Coves

F2:
Delay
3x1178, 1x35W MH
Center Court Sky Wells

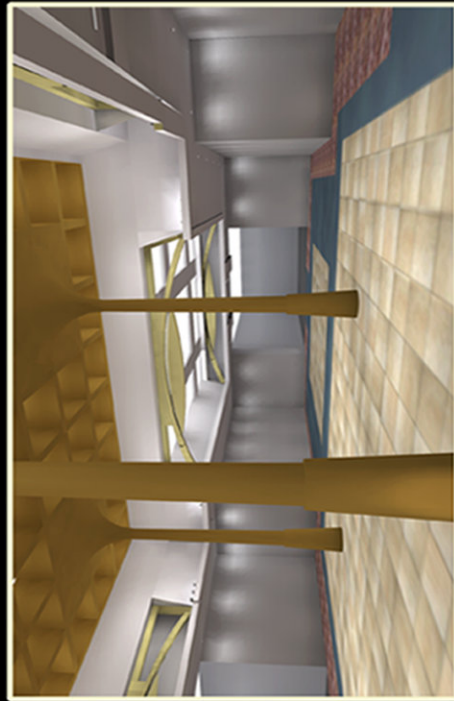
F3:
Lumiere
39W PAR20 MH
Center Court

F4:
Eliptopar
54W TSHO
Luminous Ceilings

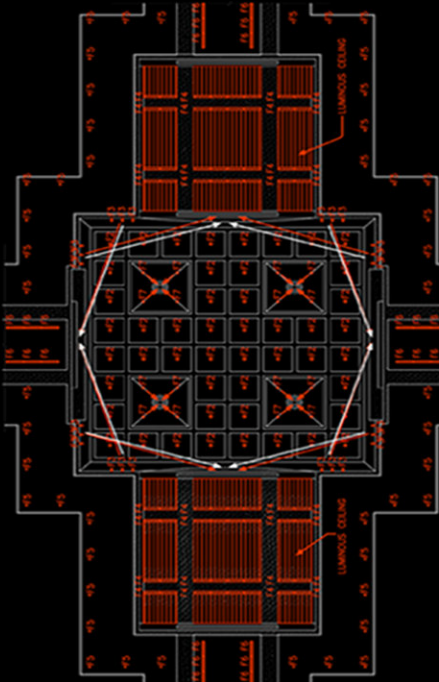
F5:
Kurt Versen
42W CFL
Center Court

F6:
SeLux
F3278
Center Court

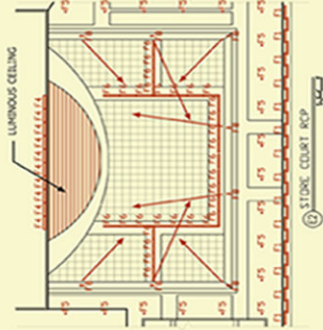
F7:
Kurt Versen
39W T6 MH HID
Center Court



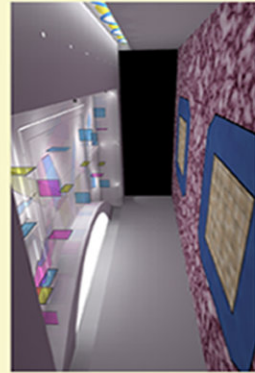
Goal: Highlight and draw attention to architecture; provide visual interest



Goal: Draw people towards department store entrance with color and movement



Spotlights shine through colored glass suspended from the ceiling, casting shadows on the ceiling
The glass, free to move, creates changing patterns of color and shadow



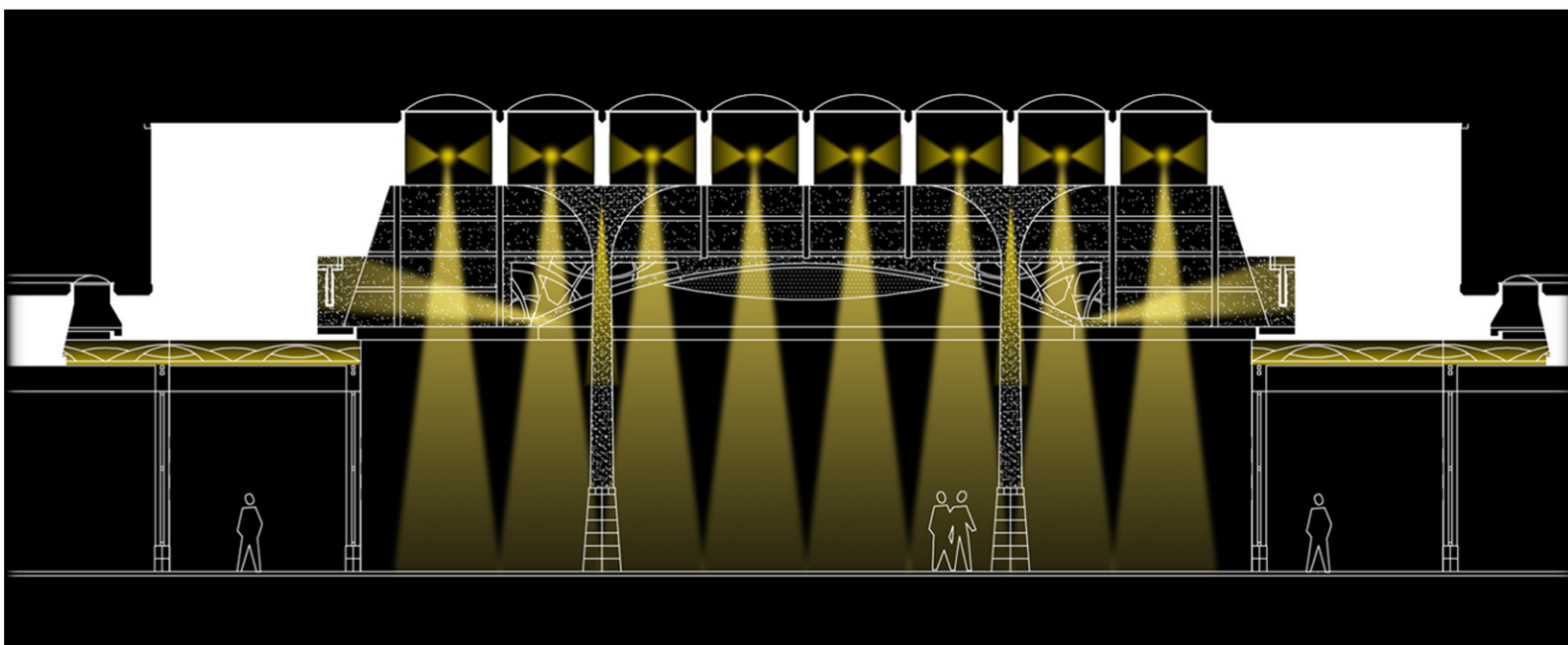
F6:
SeLux
F3278
Center Court

F7:
Kurt Versen
39W T6 MH HID
Center Court

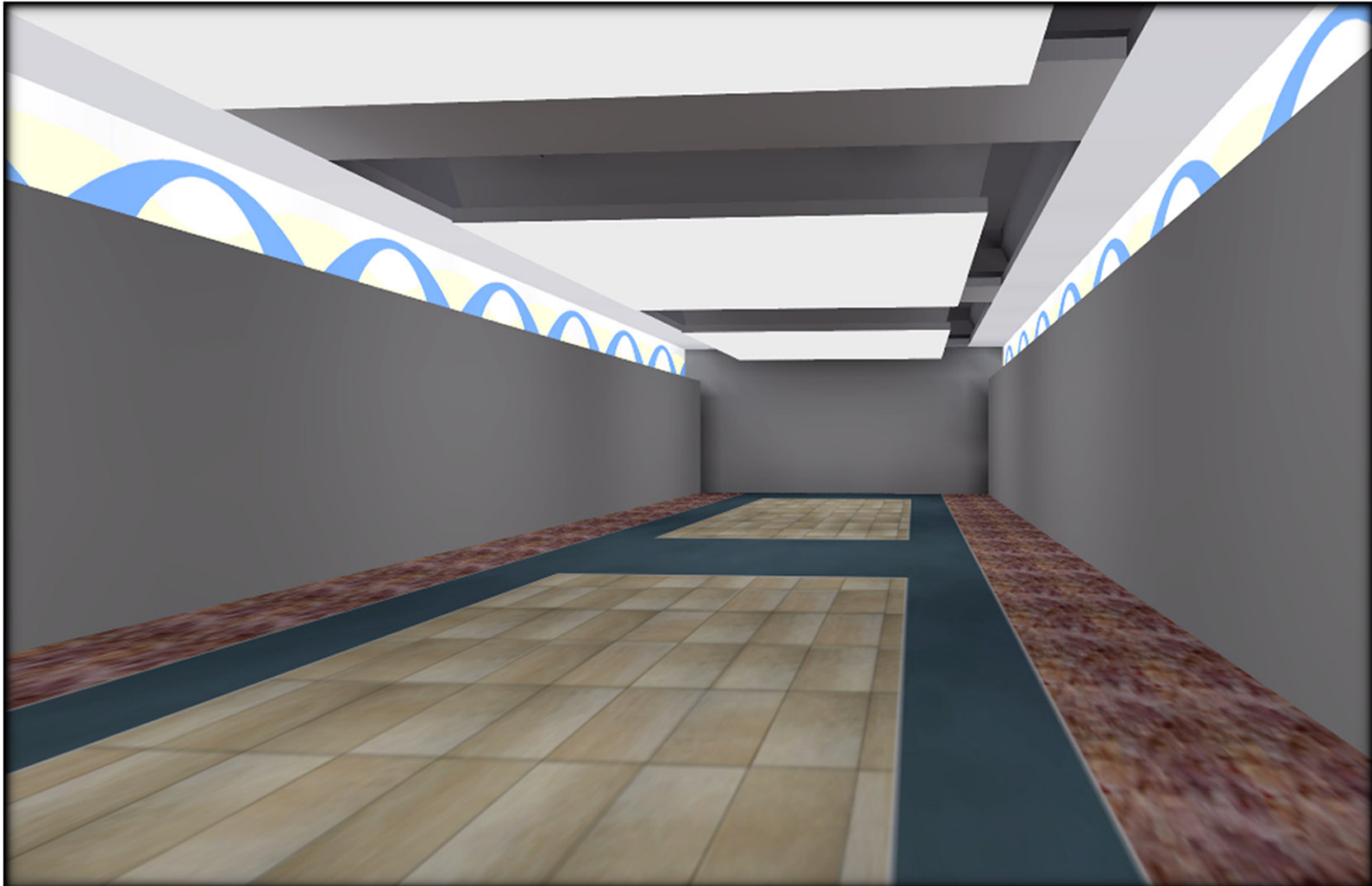
DESIGN WITH LIGHT COMPETITION



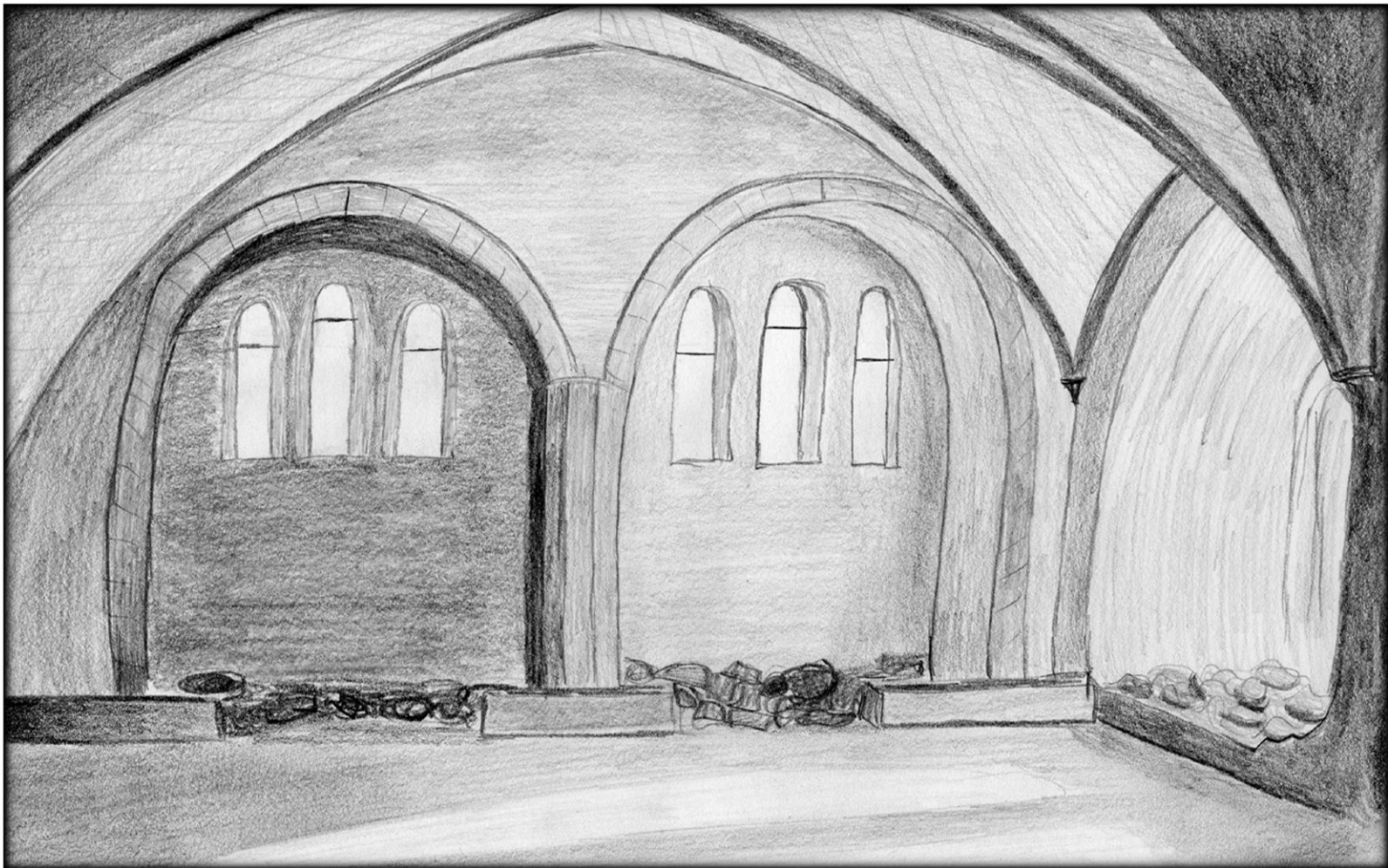
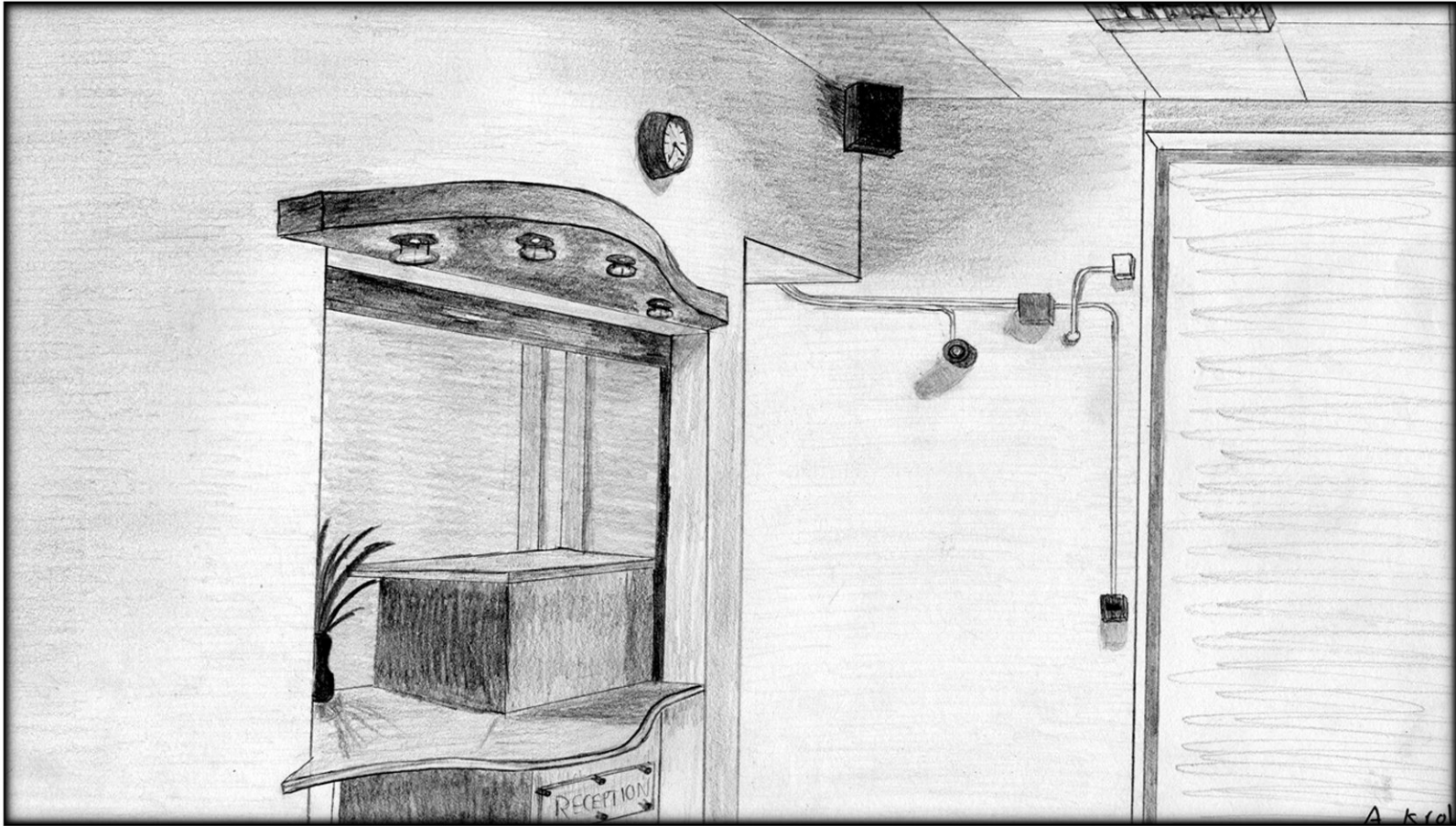
DESIGN THE LIGHTING FOR A RENOVATED SHOPPING MALL



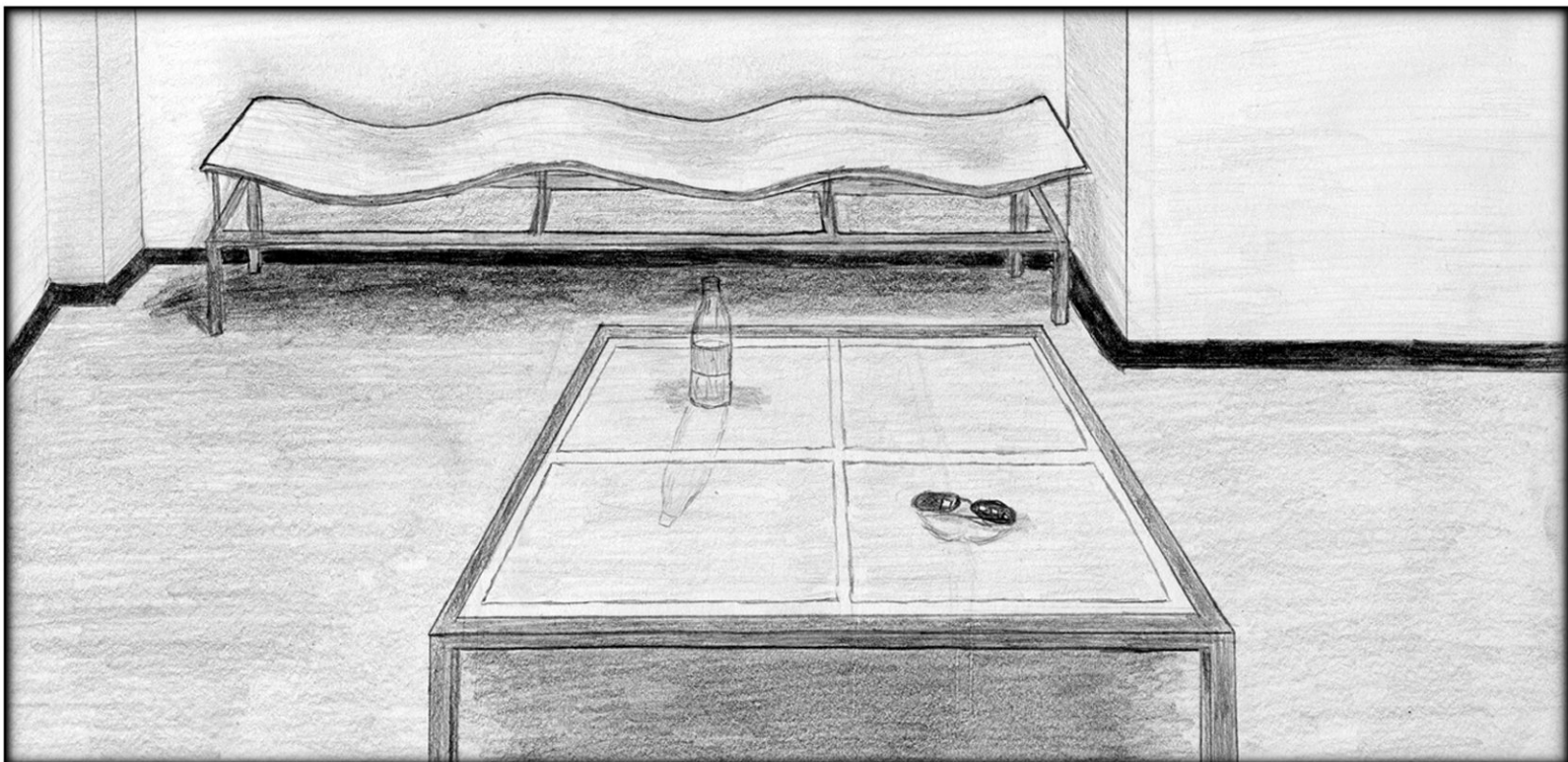
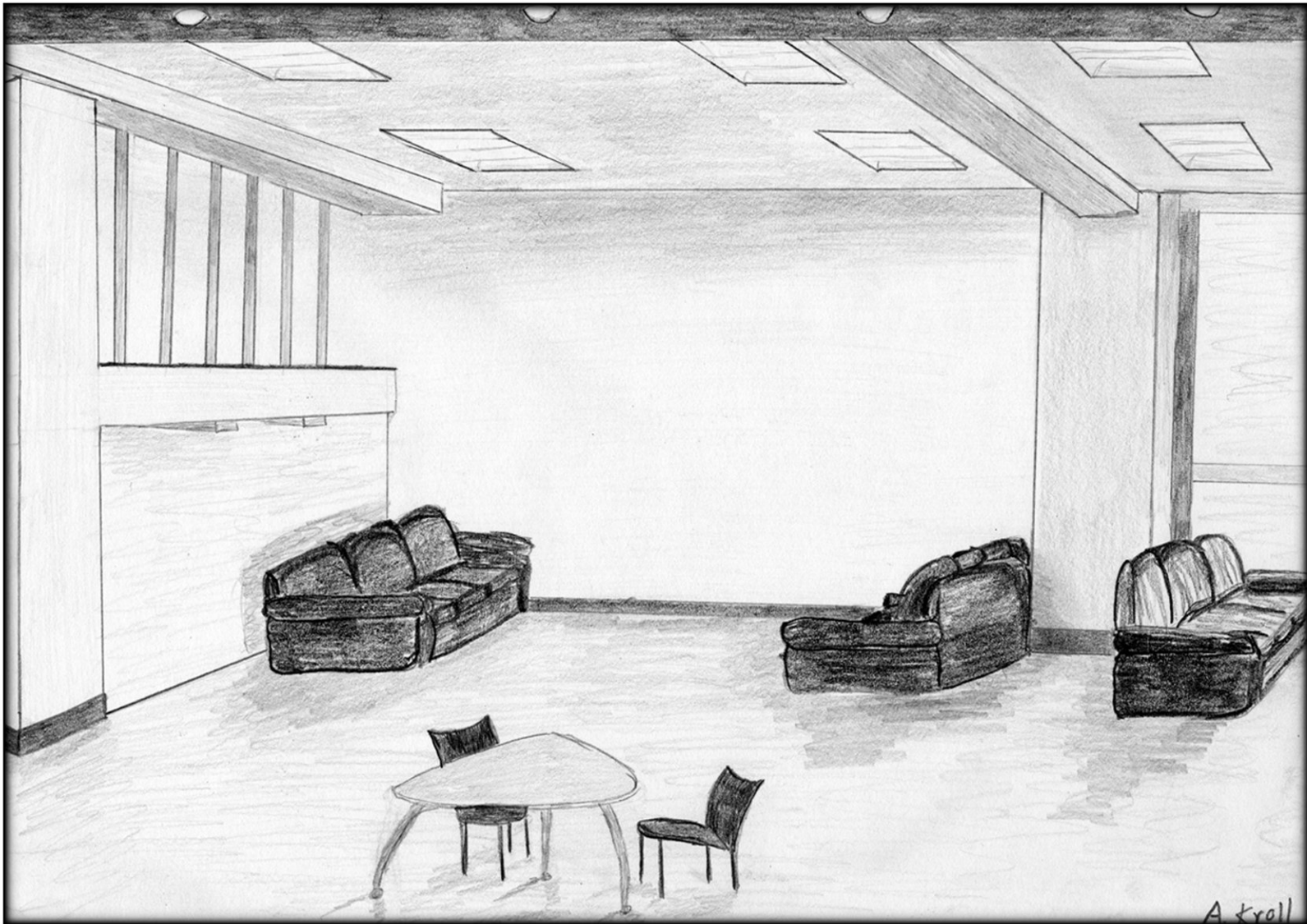
DESIGN WITH LIGHT COMPETITION



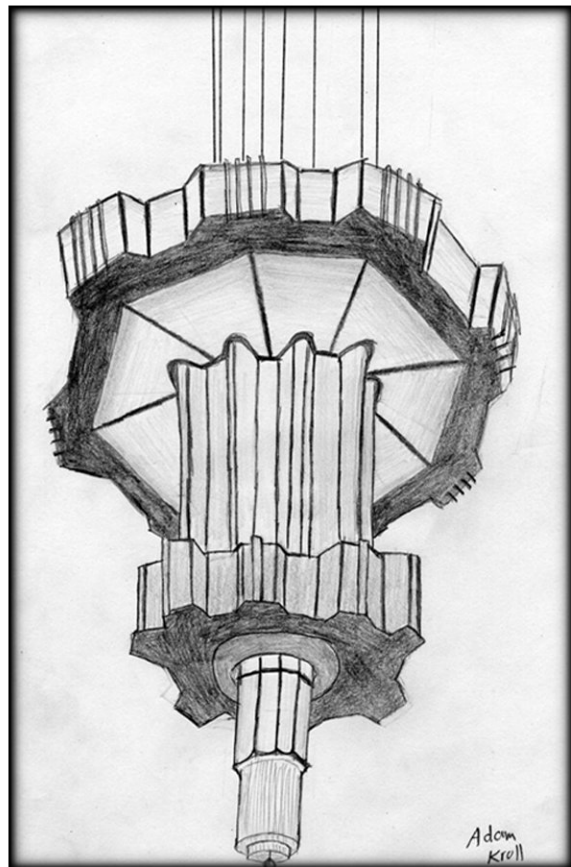
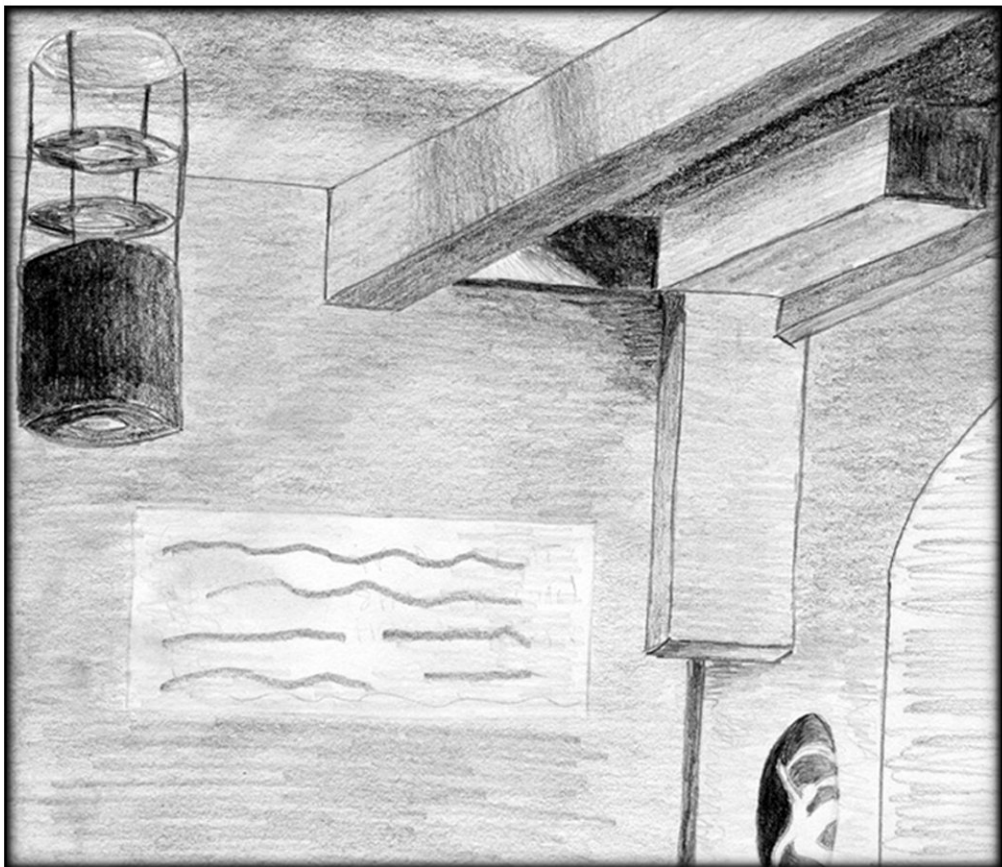
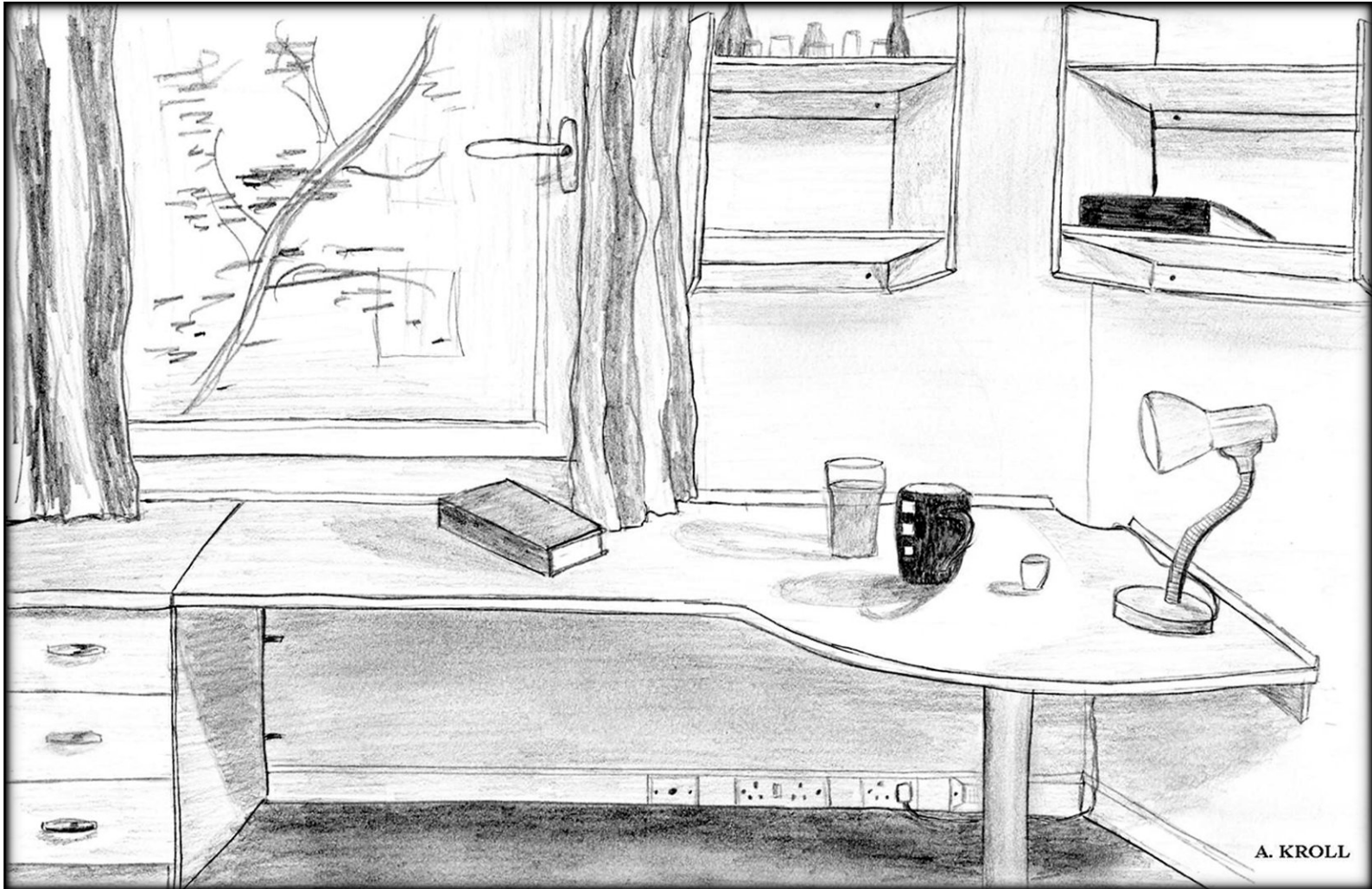
HAND SKETCHES



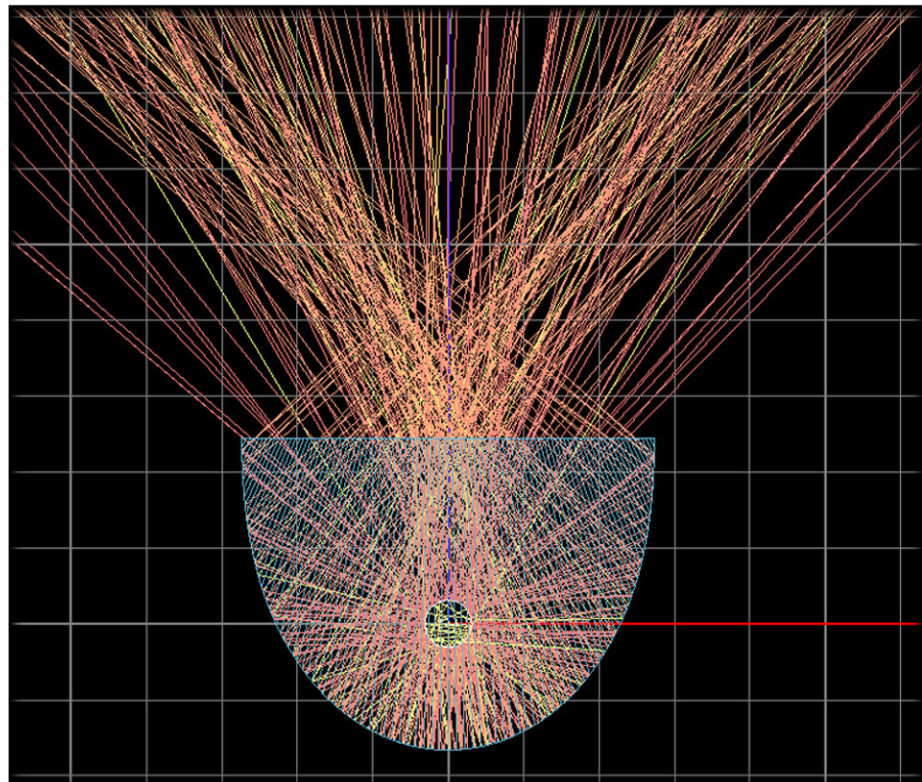
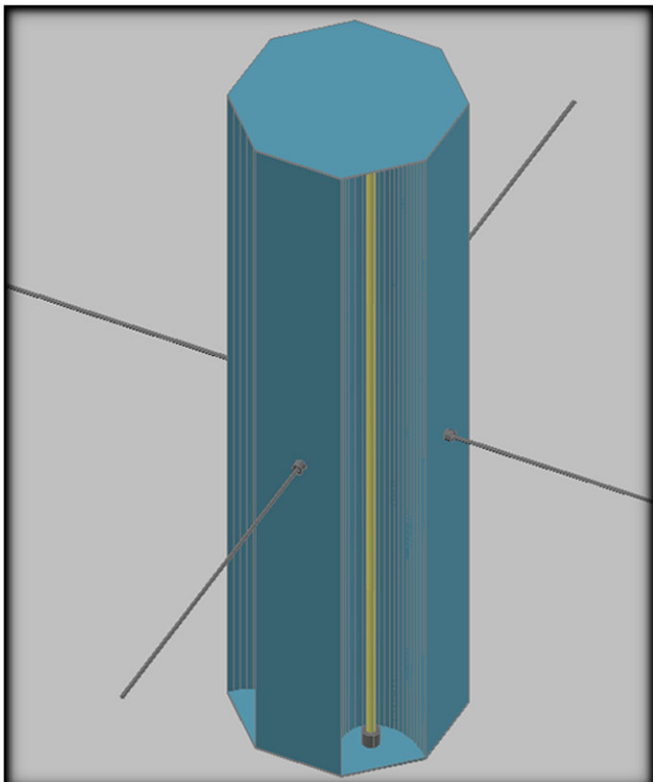
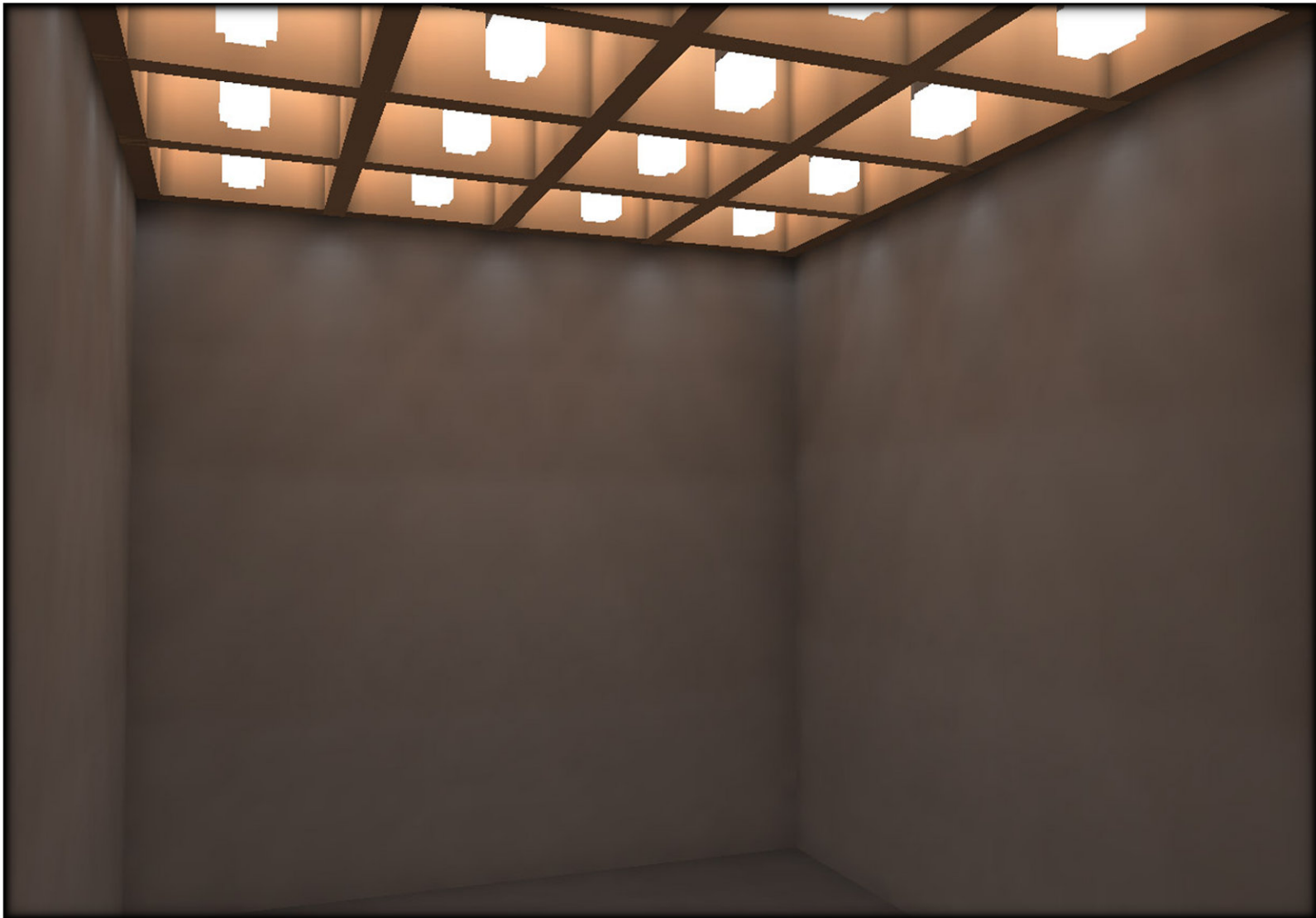
HAND SKETCHES



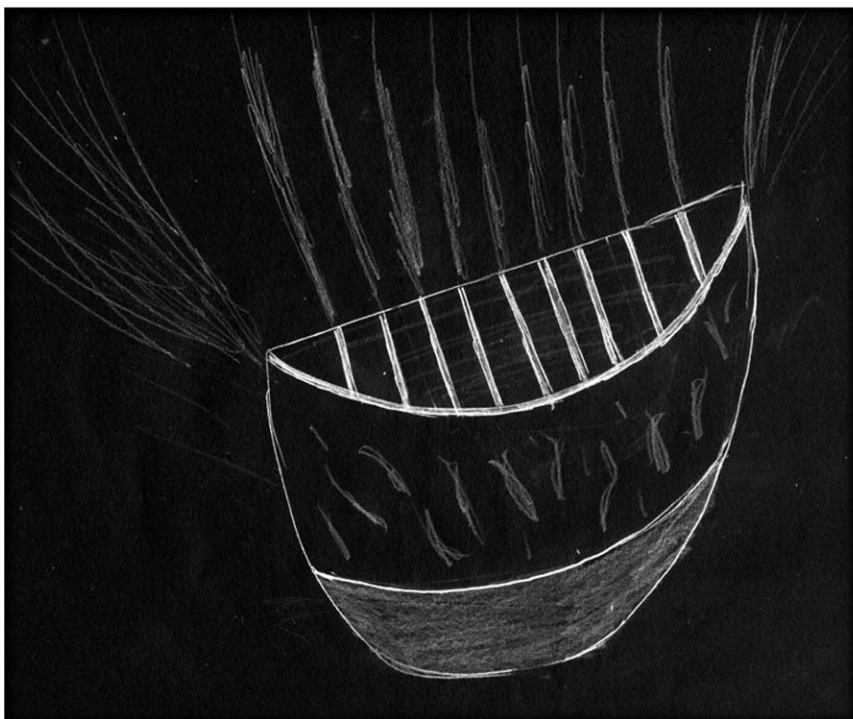
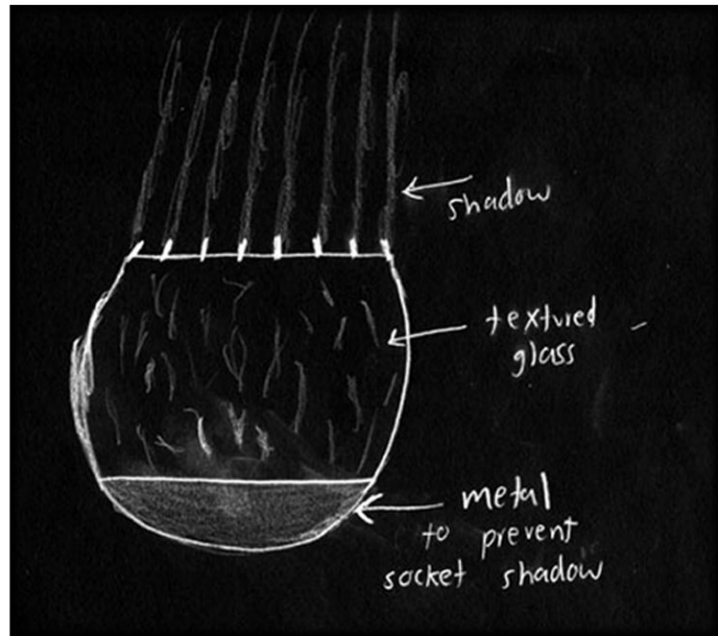
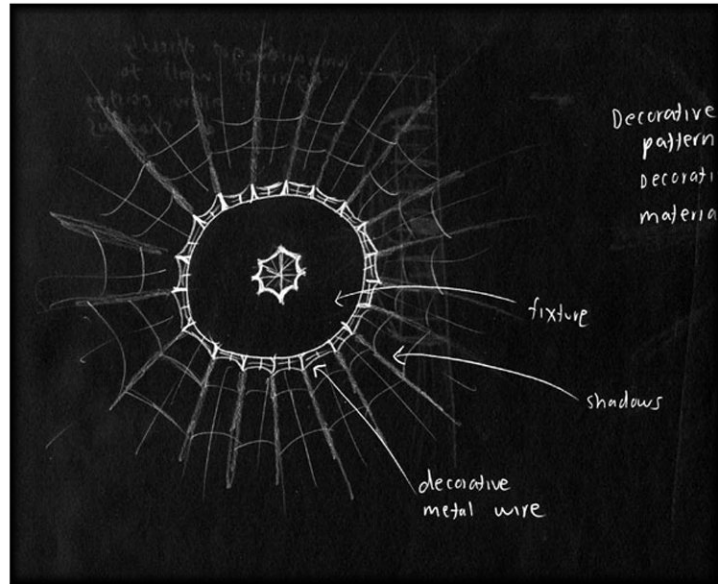
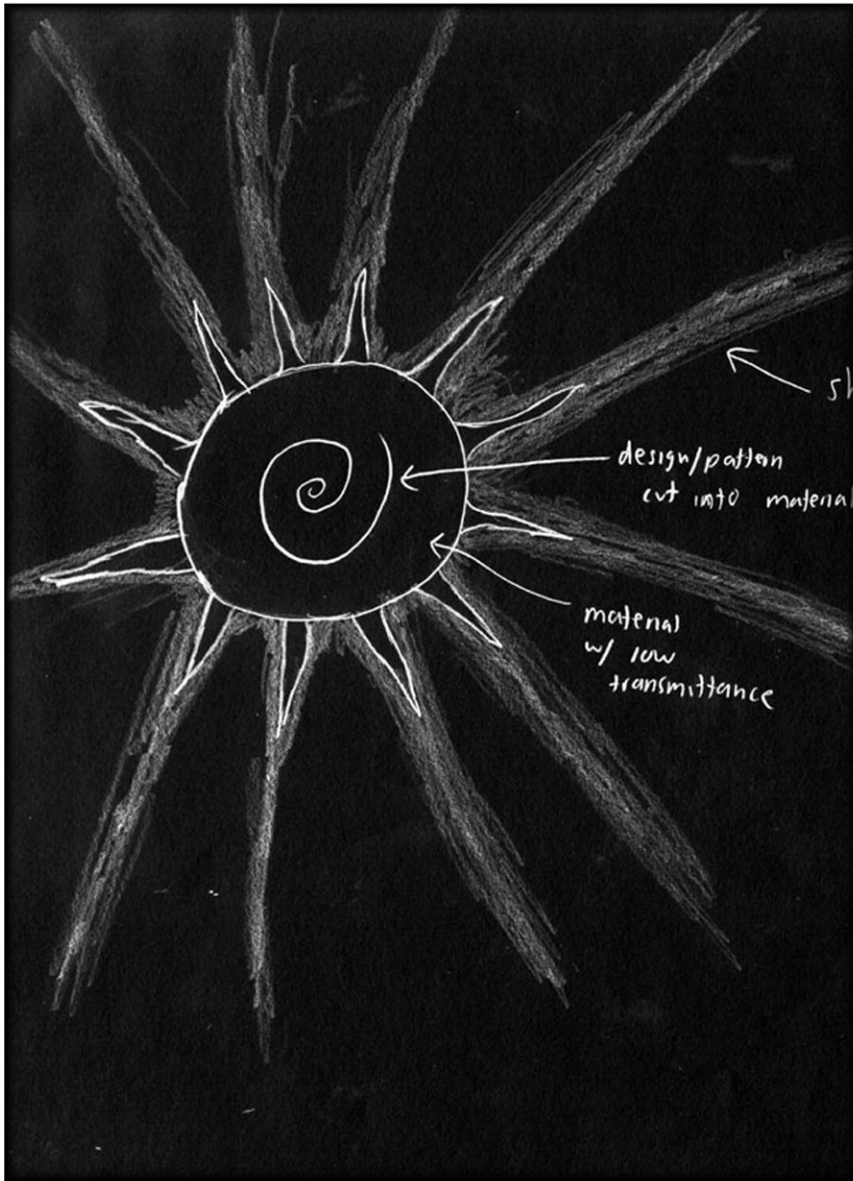
HAND SKETCHES



CUSTOM FIXTURE OPTICS



CUSTOM FIXTURE DESIGN



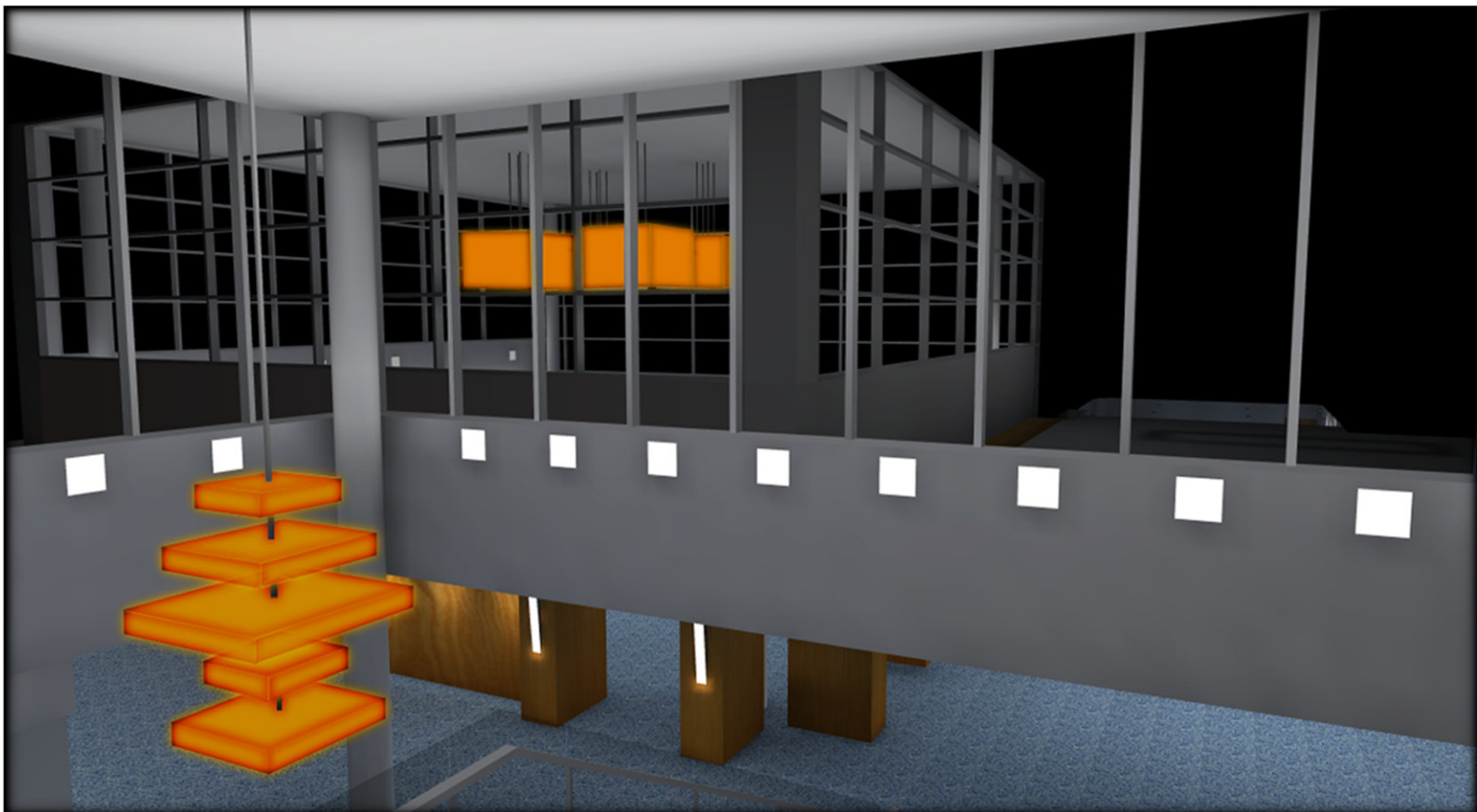
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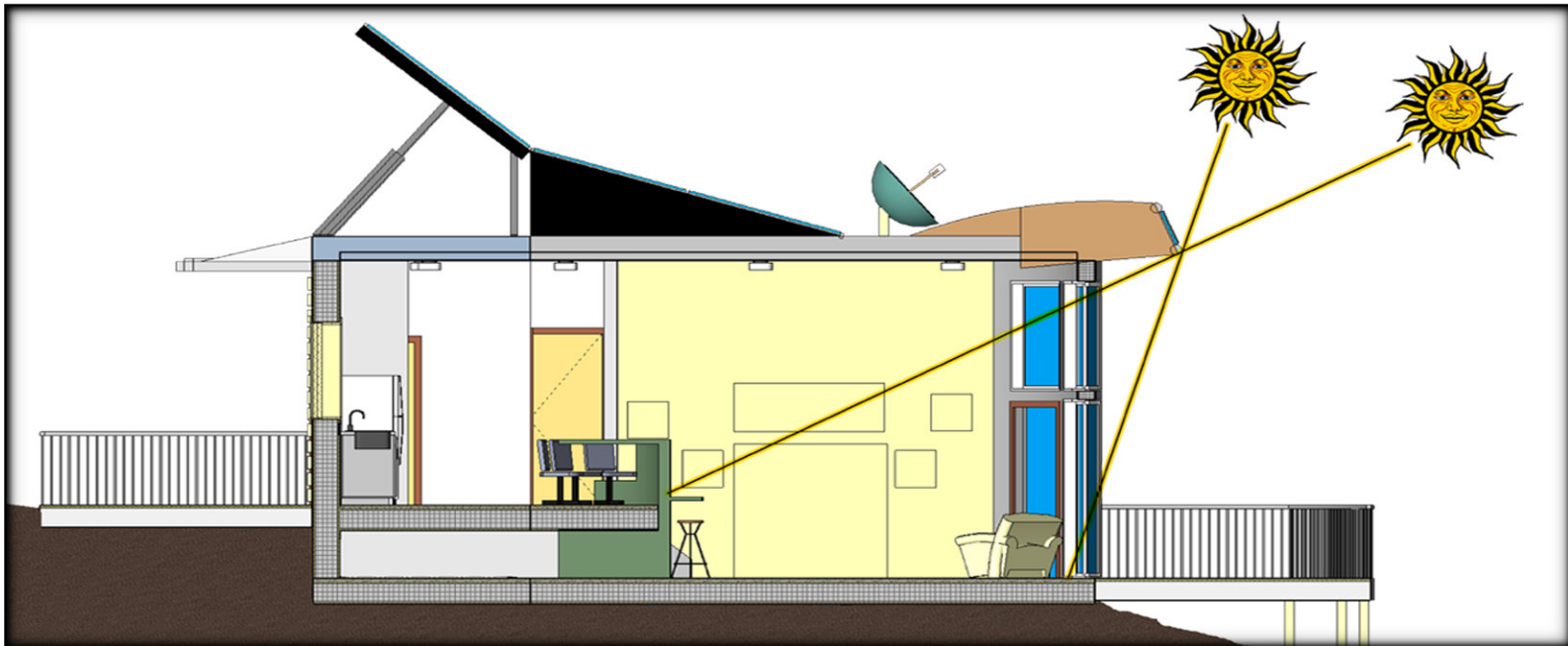
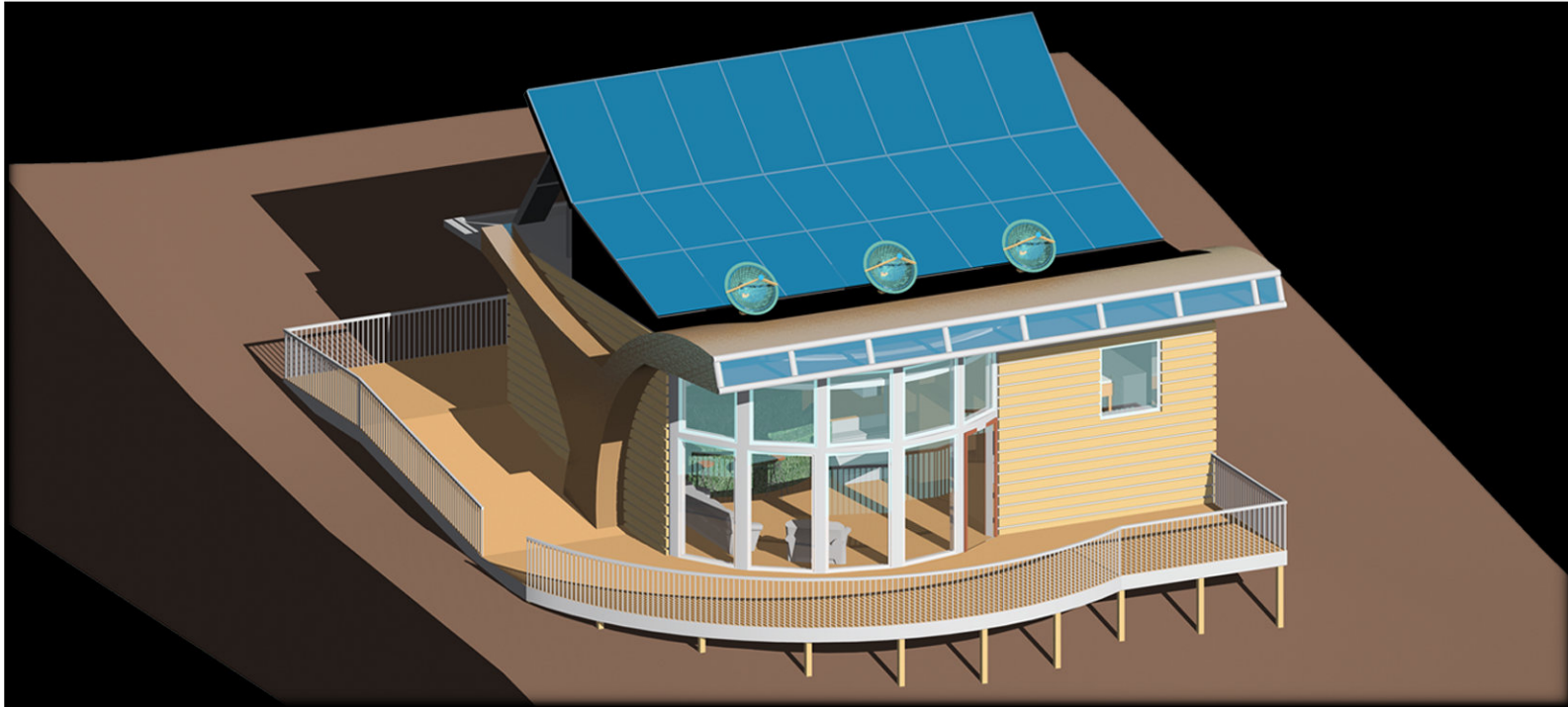
FLYNN IMPRESSION: PUBLIC



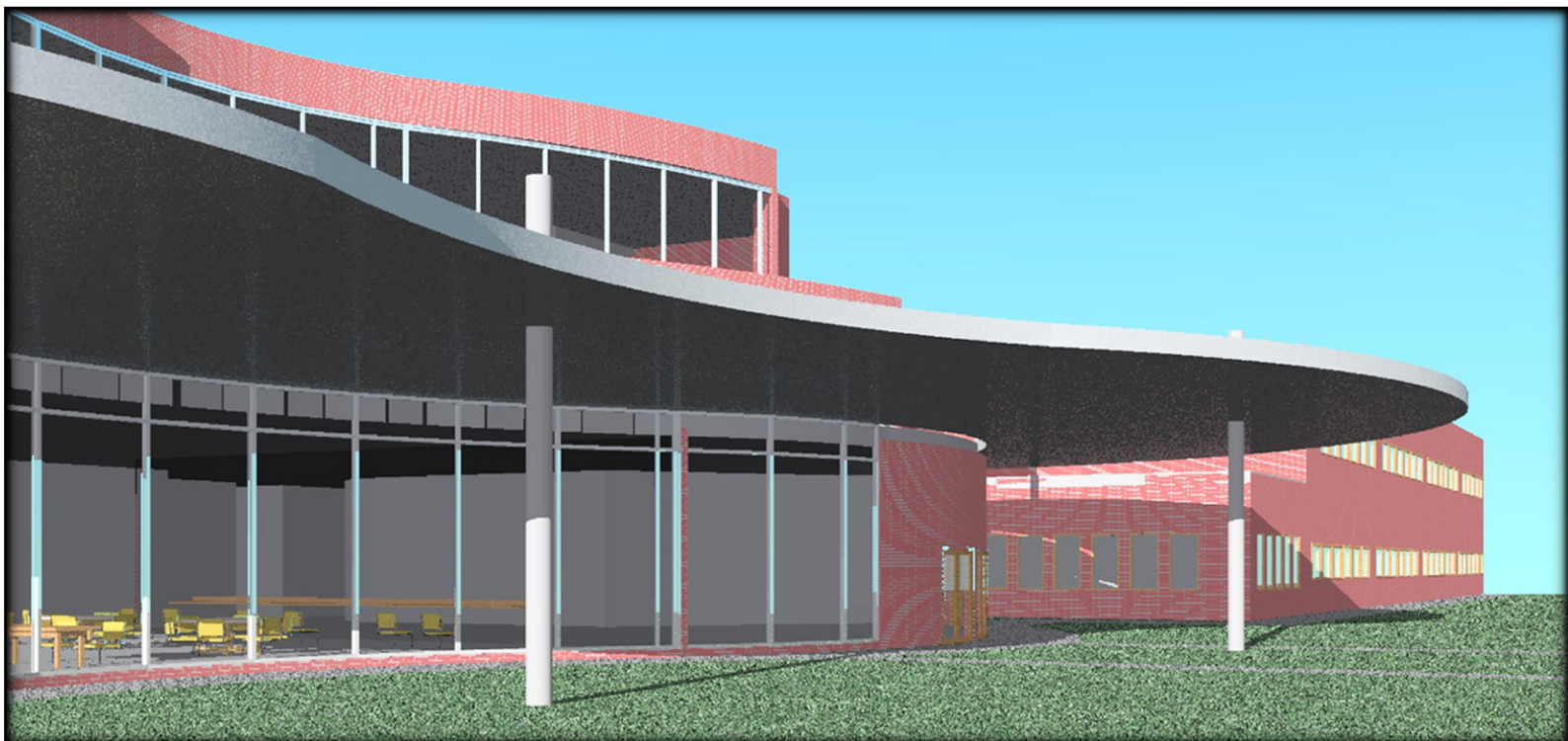
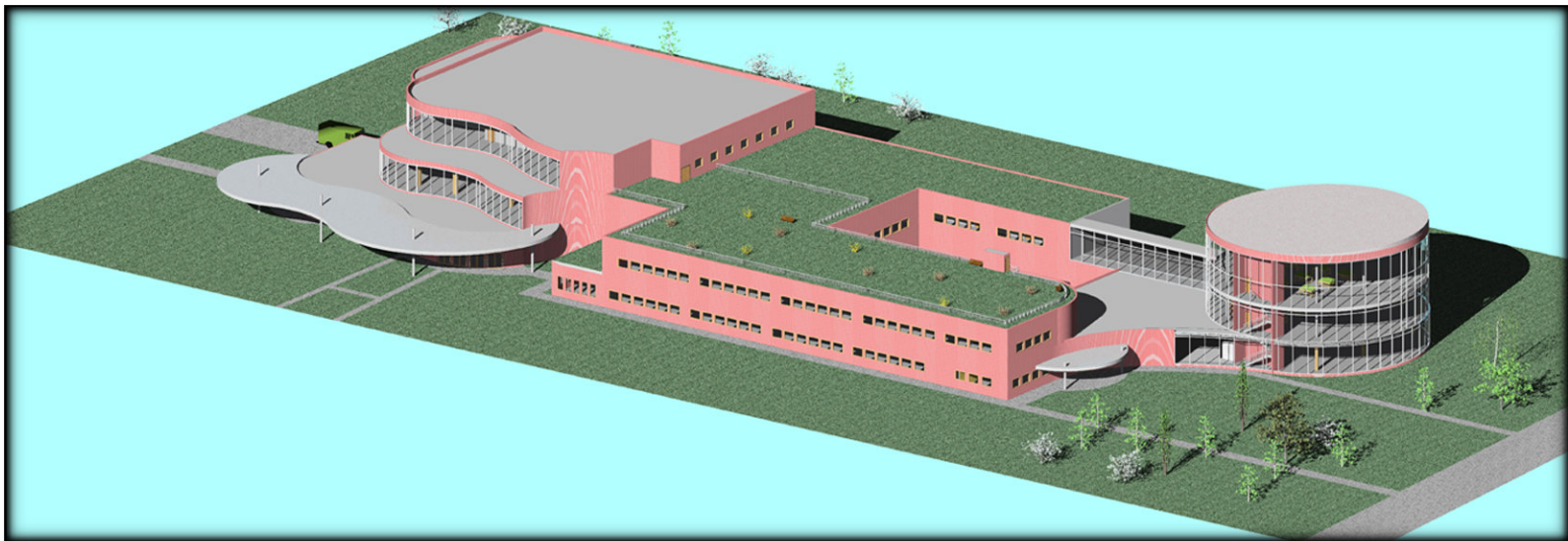
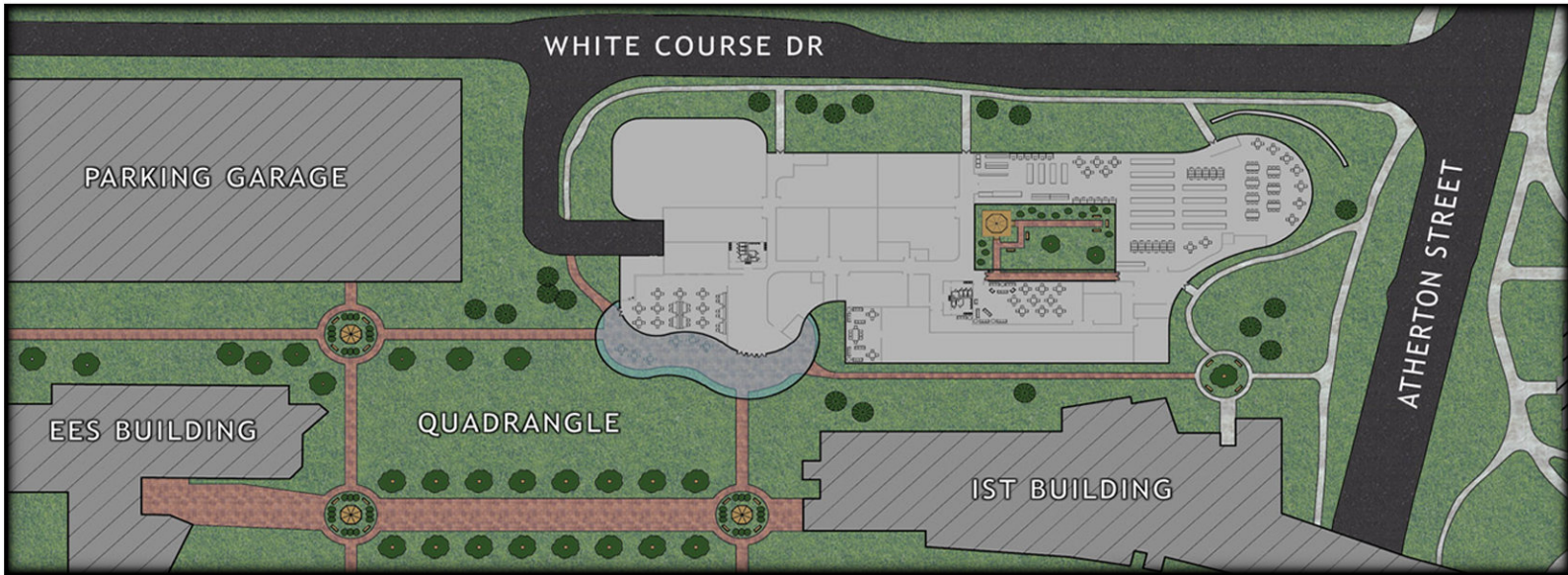
HOWARD BRANDSTON COMPETITION



SOLAR HOUSE COMPETITION



NEW AE BUILDING



NEW AE BUILDING

