

PORTFOLIO 3:
FINAL SCHEMATIC DESIGN

AMONG THE AGES OF ANTIQUITY

SEMESTER 1: IDSN 3600

DANIELLE NETTER

CONCEPT STATEMENT/ SUBSTAINABLE BUILDING STRATEGIES

Concept Statement

When designing this office space for my client, I decided to base the design on Richmond Virginia's rich history:

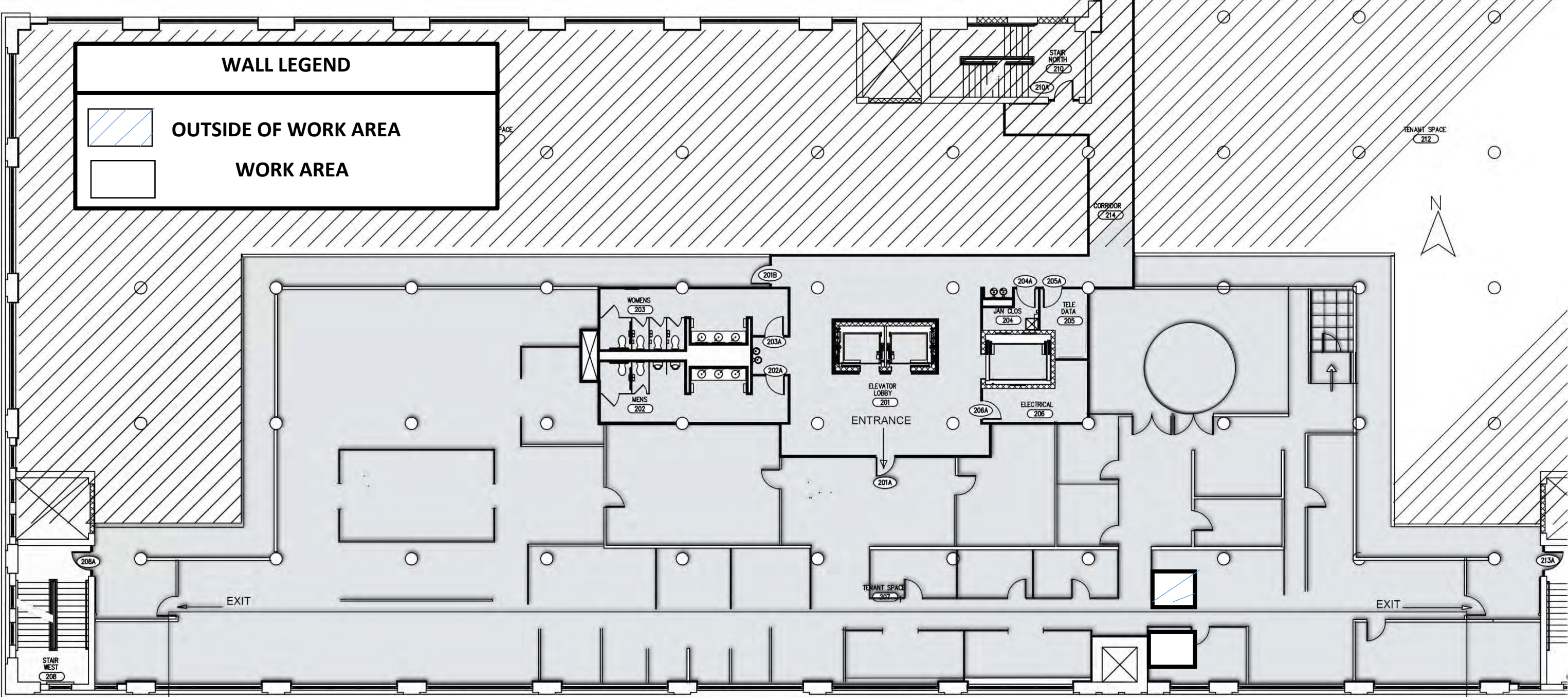
- ❖ including concepts from its parks, museums, and river that can be seen from the Edgeworth building
- ❖ keeping the original columns and building structures

Sustainable building strategies

This office space is a sustainable design due to the elements used in designing the space such as:

- ❖ Energy efficient lights
- ❖ Recycled materials and recyclable materials inside the space such as furniture, and flooring ect.
- ❖ Natural and renewable materials such as certified wood
- ❖ Locally available materials to reduce transportation hassle and cost
- ❖ Using durable products that way money, time, and energy can be saved
- ❖ Low VOC assembly when talking about indoor air quality
- ❖ Adaptive Reuse due to the fact that I am reusing an old building

LIFE SAFTEY PLAN



LUMEN/ ZONAL CAVITY CALCULATION FOR CONFERENCE ROOM

Maintained fc=

$$\frac{(\text{Number of lamps}) \times (\text{Initial lamp lumens}) \times \text{LLF} \times \text{CU}}{\text{Area}}$$

Calculation:

Number of lamps (18) x Lamp lumens (2400lm) x LLF (LLD x LDD)

$$(18 \text{ lamps}) \times (2400\text{lm}) \times \text{LLF} (.20 \times .85) \times \text{CU} \left(\text{RCR} = \frac{5(13\text{H}) (13.10\text{L} + 19.8\text{W})}{13.10\text{L} \times 19.8\text{W}} + \text{Reflectance value} \right)$$

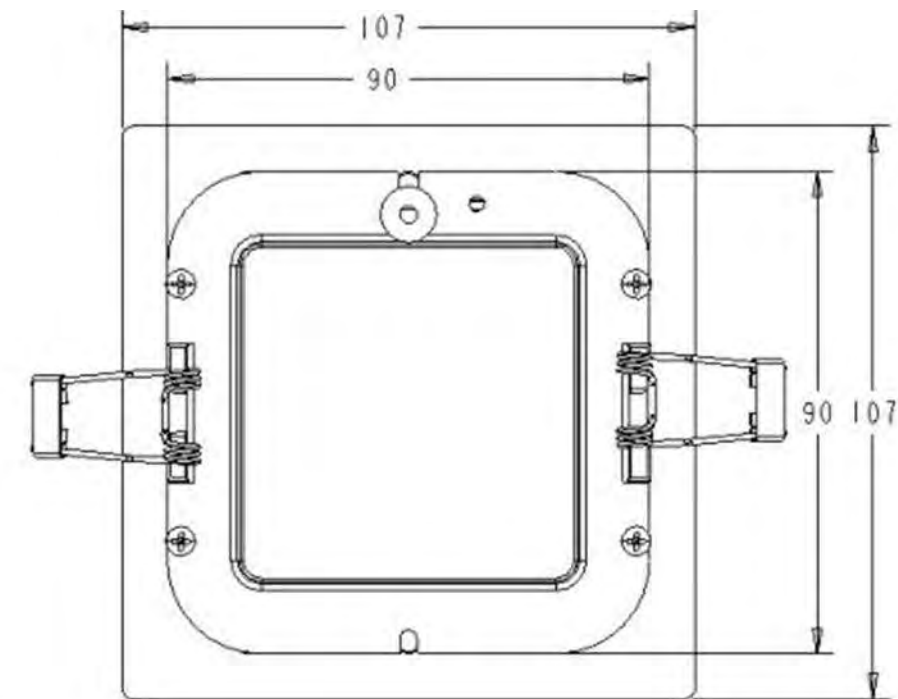
$$\frac{(43200) \times \text{LLF} (.17) \times \text{CU} (.38 + .20)}{247} = 558.144$$

FC= 2.26

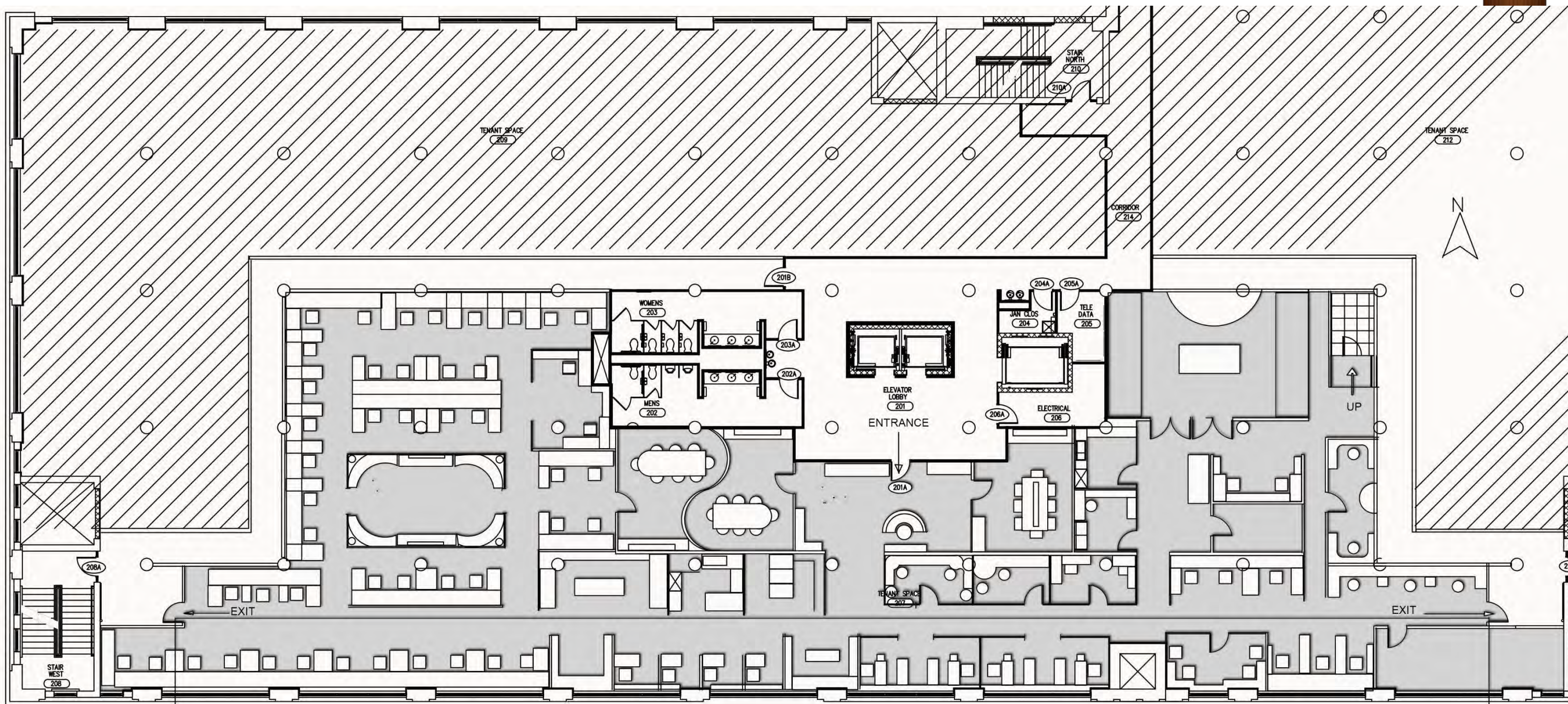
PHOTOMETRIC DATA

LED panel light with 30W power and 100-240V AC voltage

- ❖ Candle Power Distribution Curve: Beam Angle:115
- ❖ Irritation Angle $115^{\circ}\pm 10\%$
- ❖ Power efficiency $\geq 75\%$
- ❖ Efficacy:80 Lm/W



FURNITURE PLAN





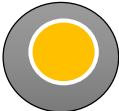



SECTION CUT

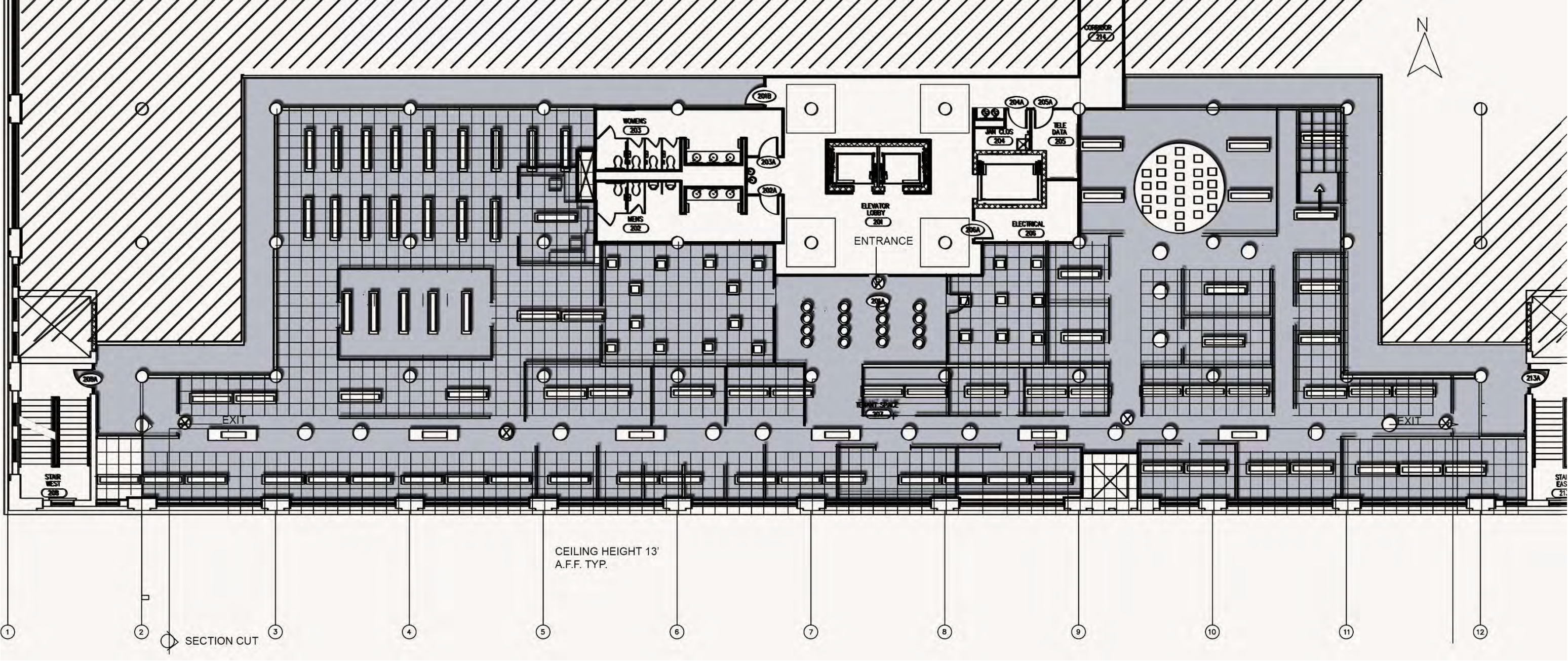
REFLECTED CEILING PLAN SCHEDULE

Lighting Fixture

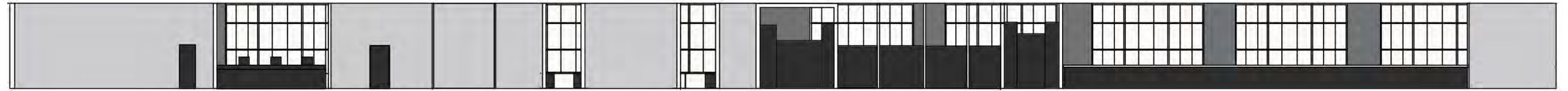
Fixture Name

	Ribbon Fluorescent light
	Miniature Fluorescent light
	Up light
	Square Recessed light
	Circular Recessed light
	Small Pendant light

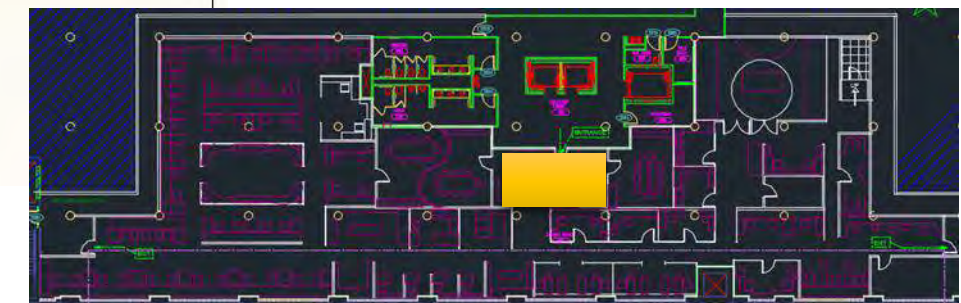
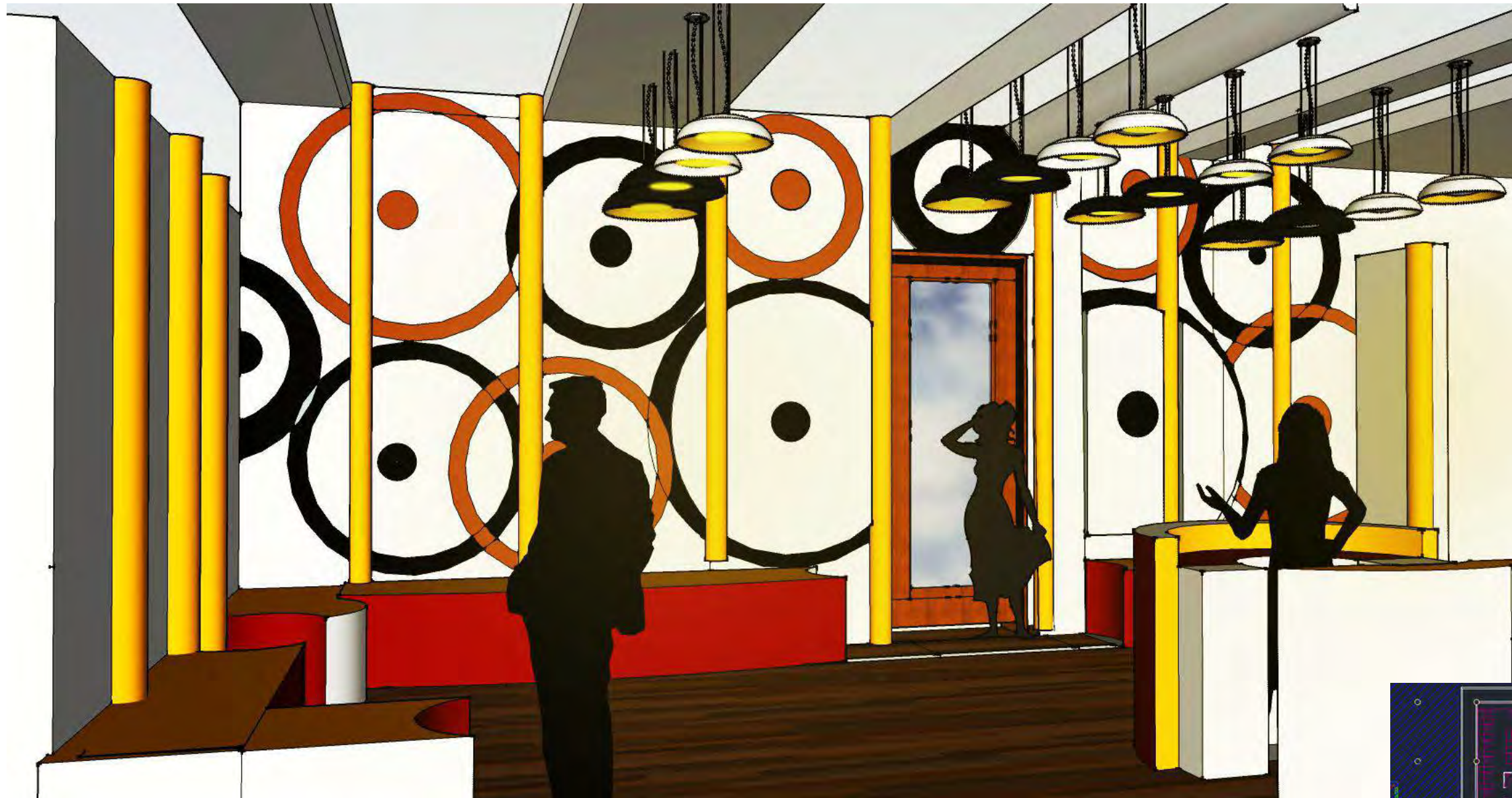
REFLECTED CEILING PLAN



E-W SECTION



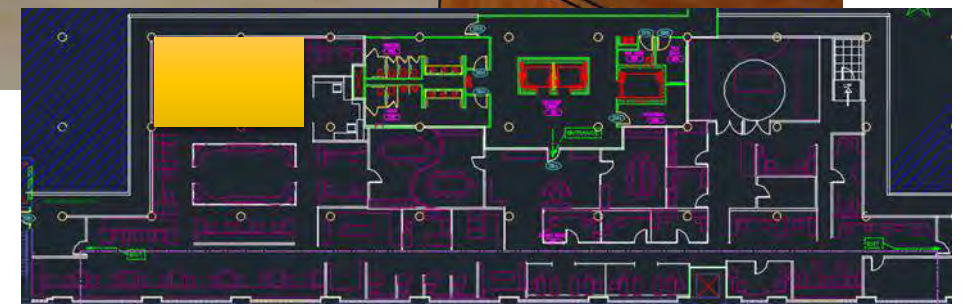
RECEPTION AREA



MAIN CORRIDOR



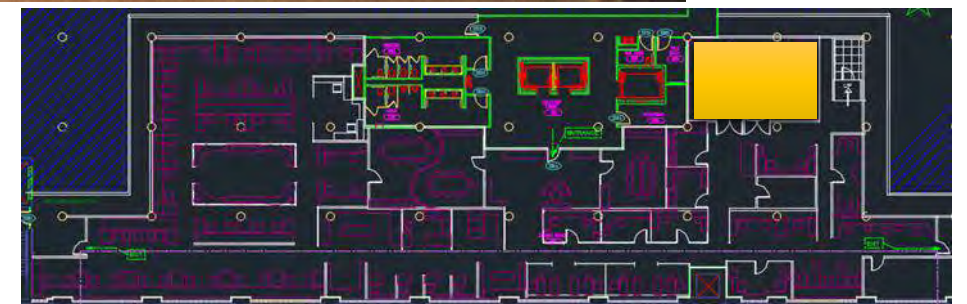
OPEN WORK AREA



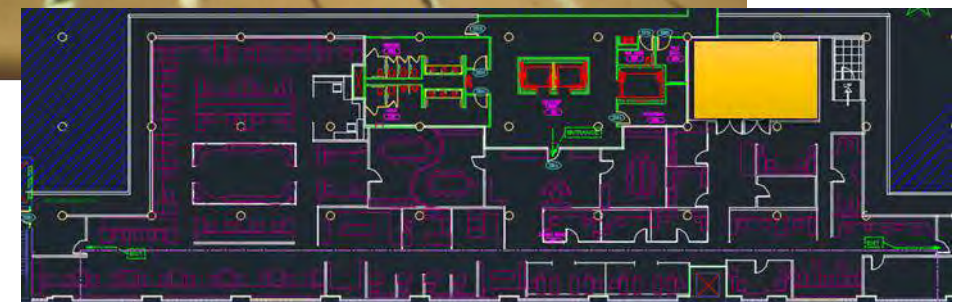
CONCEPT LOUNGE



LIGHTING MODEL



LIGHT MODEL CONTINUED



ARCHITECTURAL FINISHES/FURNITURE

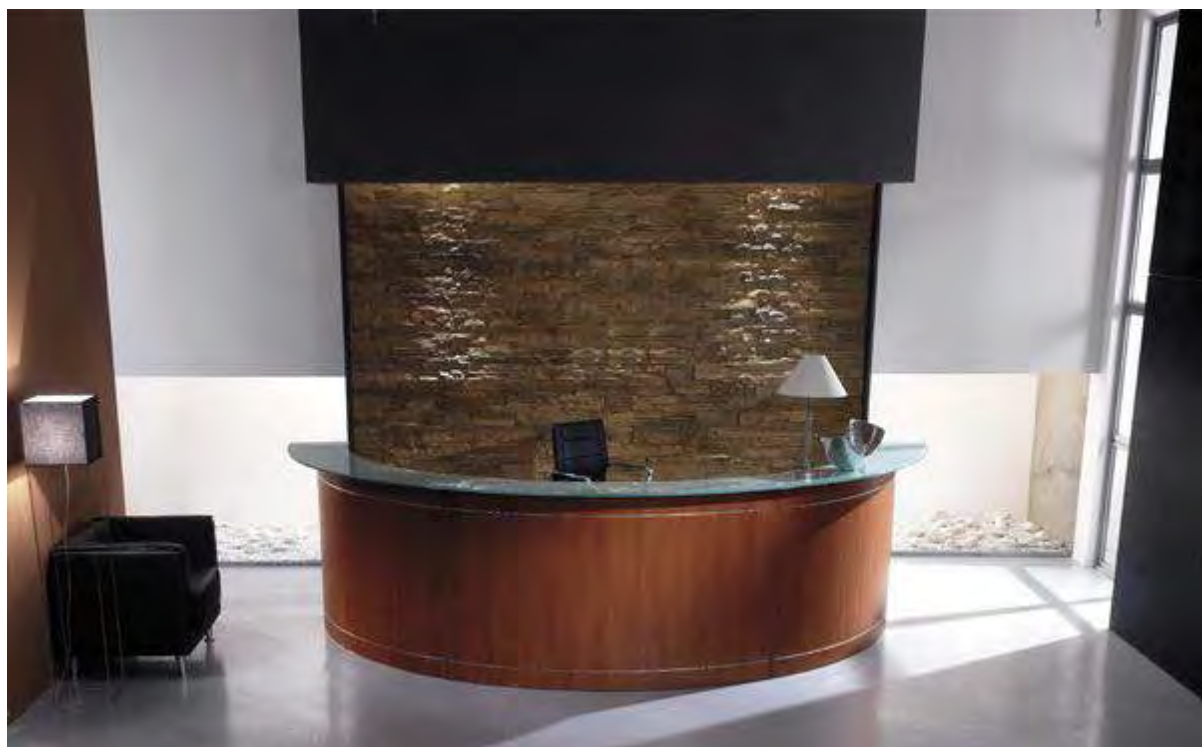


Workstation
Desk





**Wall finishes
throughout the
office space**



Reception

Lunchroom





Conference Room

Conference Rooms

