



100% DESIGN DEVELOPMENT PACKAGE
Fashion Institute of Technology
Exhibition and Experience Design
December 8, 2023
Emily Tse

DRAWING INDEX

EX.00.00

EX.00.01
EX.00.02

General

Cover Page
Drawing Index

EX.01.00

EX.01.01
EX.01.02
EX.01.03
EX.01.04
EX.01.05
EX.01.06
EX.01.07
EX.01.08
EX.01.09
EX.01.10
EX.01.11
EX.01.12
EX.01.13
EX.01.14
EX.01.15
EX.01.16
EX.01.17
EX.01.18
EX.01.19
EX.01.20
EX.01.21
EX.01.22
EX.01.23
EX.01.24
EX.01.25
EX.01.26
EX.01.27
EX.01.28
EX.01.29
EX.01.30
EX.01.31
EX.01.32
EX.01.33
EX.01.34
EX.01.35
EX.01.36
EX.01.37
EX.01.38
EX.01.39
EX.01.40

Executive Summary

Thesis Statement
Client
Venue
Audience
Survey
Goals
Key Concepts
Bubble Floor Plan
Overview
Entrance
Introduction
Biases Spotlight
Adopt-A-Persona
Personality Quiz
Read and Reflect
Diaries Storyboard
Question Prompt
Megaphone Wall
Interviews
C.O.M.P.A.S.
Everyday activities
Behind the Scenes
Pro or Con?
Glass Box
Public Trust
NIST and ACLU
Biases in Technology
Personalize Mask
Fitting In
Monopoly of Biases
Implicit Bias Test
110 Skin Tones
Share Thoughts
Join Conversations
Workshop
Ethical AI Workshop
Face ID
Voting Bins
Isometric View
Digital Exhibition

EX.02.00

EX.02.01
EX.02.02
EX.02.03
EX.02.04
EX.02.05
EX.02.06
EX.02.07
EX.02.08
EX.02.09
EX.02.10
EX.02.11
EX.02.12

Schedules and Lists

Graphic Schedule 1/2
Graphic Schedule 2/2
Graphic Specifications
Finish Schedule 1/2
Finish Schedule 2/2
Lighting Schedule 1/2
Lighting Schedule 2/2
Media Schedule 1/3
Media Schedule 2/3
Media Schedule 3/3
Object Schedule 1/2
Object Schedule 2/2

EX.03.00

EX.03.01
EX.03.02
EX.03.03
EX.03.04
EX.03.05
EX.03.06
EX.03.07
EX.03.08
EX.03.09
EX.03.10
EX.03.11

Plans, Sections, and Elevations

Symbols List
Venue Site
Coded Floor Plan
Floor Plan with Dimensions
Graphic Location Plan
Material Plan
Reflected Ceiling Plan
Media Plan
Power Plan
Section 1
Section 2

EX.04.00

EX.04.01
EX.04.02
EX.04.03
EX.04.04
EX.04.05
EX.04.06
EX.04.07
EX.04.08
EX.04.09
EX.04.10
EX.04.11
EX.04.12
EX.04.13
EX.04.14

Graphic System

Mood board
Graphic Look and Feel
Logo Lockup and Type
Patterns
Color Palette
Poster Variations
Posters Mock-up
Exterior Wayfinding 1
Exterior Wayfinding 2
Interior Wayfinding
Wayfinding at Central Park
Collateral 1
Collateral 2
Graphic Family

EX.05.00

EX.05.01
EX.05.02
EX.05.03
EX.05.04
EX.05.05
EX.05.06
EX.05.07
EX.05.08
EX.05.09
EX.05.10
EX.05.11
EX.05.12
EX.05.13
EX.05.14
EX.05.15

Details

Distorted Type
Infographic
C.O.M.P.A.S.
Floor Graphic
Bookcase
Detailed Areas
Adopt-a-Persona
Adopt-a-Persona Section 1
Adopt-a-Persona Section 2
Bias Sculpture
Mask
Kiosk
Public Trust Section 1
Large Panels
Small Panels

EX.06.00

EX.06.01
EX.06.02
EX.06.03
EX.06.04

Appendix

3D Logo Transformation
Model Making
Prototype Testing
Survey and Site Visit

Fashion Institute of Technology

Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer

Emily Tse

Project

Artificial Minority



Site

Smithsonian Cooper Hewitt Museum

Client

National Institute of
Standards and Technology

Content Sponsors

Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer

These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date

December 8, 2023

Drawing Name

Drawing Index

Drawing Number

EX.00.02

Scale

NTS

Key Plan

Not Applicable

EXECUTIVE SUMMARY

THESIS STATEMENT

Our unconscious biases have been a problem in the past, present, and now the upcoming future.

These biases — [racial bias](#), [gender bias](#), and [age bias](#) — perpetuate [discrimination in facial recognition technology](#).

The exhibition “[Artificial Minority](#)” brings public awareness to [AI ethics](#), which encourages responsible research and application.

Exploring [participatory museum techniques](#), such as [role-play and workshop programming](#), provide ways to spark dialogue and foster awareness of these ongoing provocative issues.

 State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Thesis Statement

Drawing Number
EX.01.01

Scale
NTS

Key Plan
Not Applicable

CLIENT



National Institute of Standards and Technology
A US Department of Commerce agency established in 1901

NIST's mission statement is "to promote [U.S. innovation](#) and industrial competitiveness by advancing measurement science, standards, and technology in ways that [enhance economic security and improve our quality of life.](#)"

In 2000, NIST started the [Face Recognition Vendor Testing Program \(FRVT\)](#), which conducts evaluations on facial recognition technology. This research provides recommendations to the government on how this technology should be used.

CONTENT SPONSORS



Algorithmic Justice League

A non-profit organization that started in 2016.

As a poet of code, founder Dr. Buolamwini bridges art and research to convey the social injustice of technology.



American Civil Liberties Union

A non-profit organization that started in 1920.

ACLU defends people's rights in the justice system. They combat facial recognition systems in public surveillance because the technology invade privacy and do not acquire consent from people.



Security Industry Association

A U.S. trade association founded in 1969.

SIA supports facial recognition usage for beneficial purposes such as assisting law enforcement in fighting human trafficking, finding missing children, and fighting identity theft.

 State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Client

Drawing Number
EX.01.02

Scale
NTS

Key Plan
Not Applicable

Cooper Hewitt, Smithsonian Design Museum
Barbara and Morton Mandel Design 3rd Floor Gallery

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

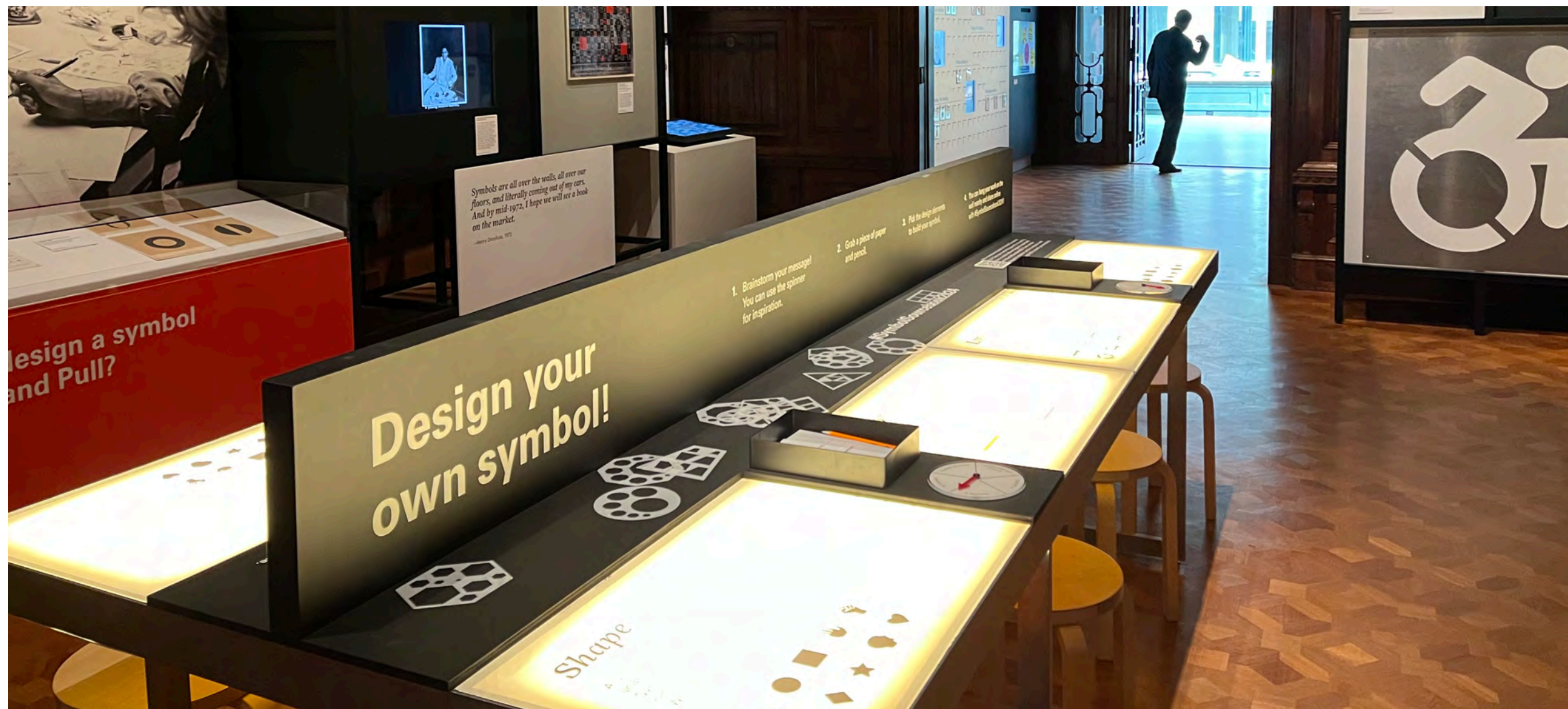
Date
December 8, 2023

Drawing Name
Venue

Drawing Number
EX.01.03

Scale
NTS

Key Plan
Not Applicable



AUDIENCE

Primary

High school students, College students, and Adults

Secondary

Educators, Researchers, and Designers

FIT State University of New York

Fashion Institute of Technology

Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer

Emily Tse

Project

Artificial Minority



Site

Smithsonian Cooper Hewitt Museum

Client

National Institute of
Standards and Technology

Content Sponsors

Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer

These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date

December 8, 2023

Drawing Name

Audience

Drawing Number

EX.01.04

Scale

NTS

Key Plan

Not Applicable



SURVEY



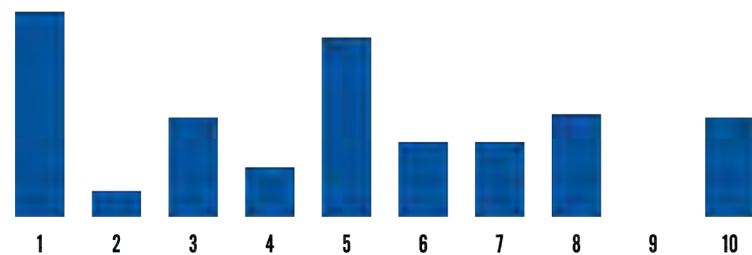
Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
Survey
Drawing Number
EX.01.05
Scale
NTS
Key Plan
Not Applicable

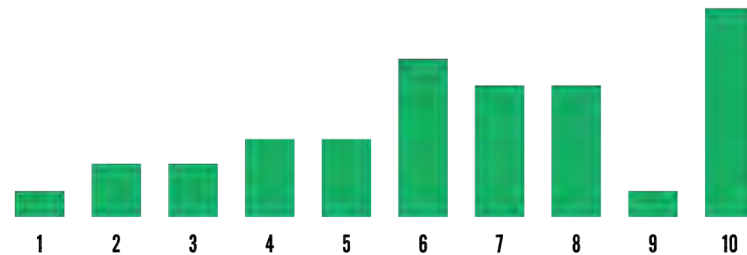
A survey was created to obtain opinions and experiences with facial recognition. It explored [people's perspectives on facial recognition](#) and its usage in various applications including [law enforcement](#), [education](#), [healthcare](#), [transportation](#), [corporations](#), and [retail](#).

[Thirty-six participants](#) completed the surveys. The surveys were distributed on the campus of Fashion Institute of Technology (87%) and in the Moynihan Train Hall (13%) in New York. Participants ranged from [age 19 to age 60](#). 68% identified as female, 26% were male, and 6% were non-binary.

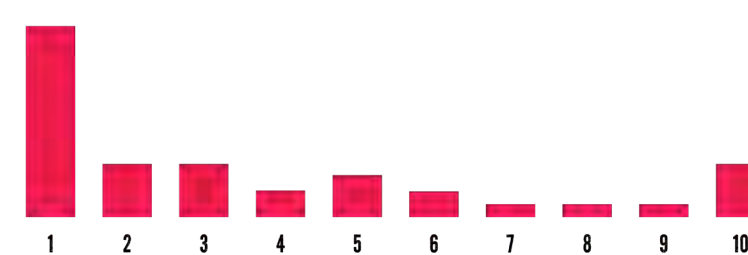
LAW ENFORCEMENT



HEALTHCARE



RETAIL



GOALS

PROJECT GOALS

The exhibition “Artificial Minority” spreads **public awareness of embedded biases** in facial recognition technology such as statistical bias, human bias, and systematic bias.

It increases **understanding of facial recognition** usage in everyday activities.

Additionally, it **encourages transparency in technological advances** that increase **people’s quality of life**.

EDUCATION GOALS

Visitors hear true stories of people whose lives were **impacted by facial recognition, both favorably and unfavorably**.

Visitors learn about the **advocacy for algorithmic justice** and ways NIST is mitigating bias.

They learn about types of **human biases** and how it seeps into technology.

Visitors understand the importance of joining **discussions about technology ethics**.

EXPERIENCE GOALS

At digital stations, visitors **adopt fictional personas** and reflect on diaries from different perspectives. Their reflections are recorded and shared with other visitors.

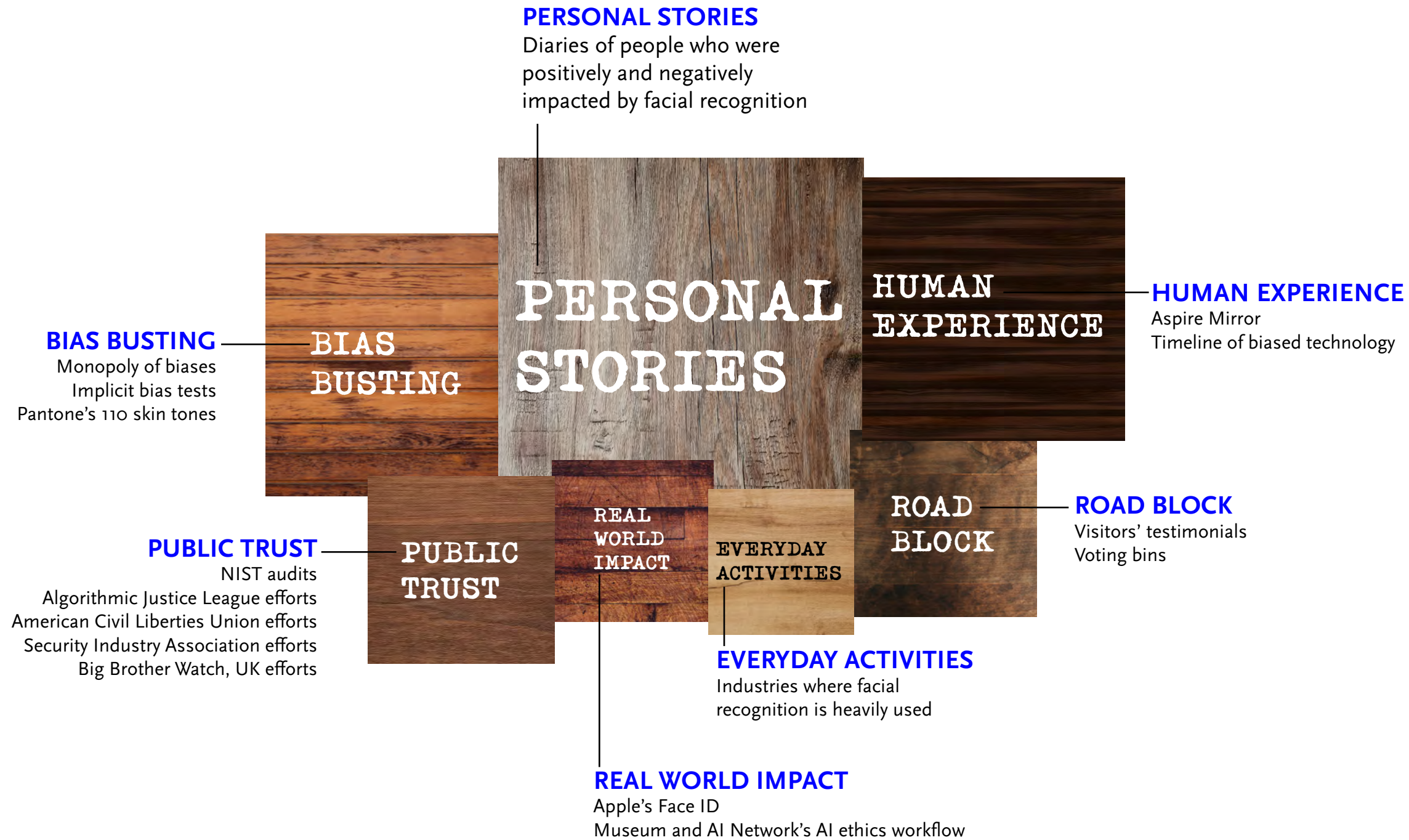
Through motion gestures, they identify environments where **facial recognition systems are used**.

They **unveil the black box** by stepping on trigger pads that activate light boxes that show **advocacy efforts**.

They participate in **AI ethical workflow workshops** to build critical thinking skills.

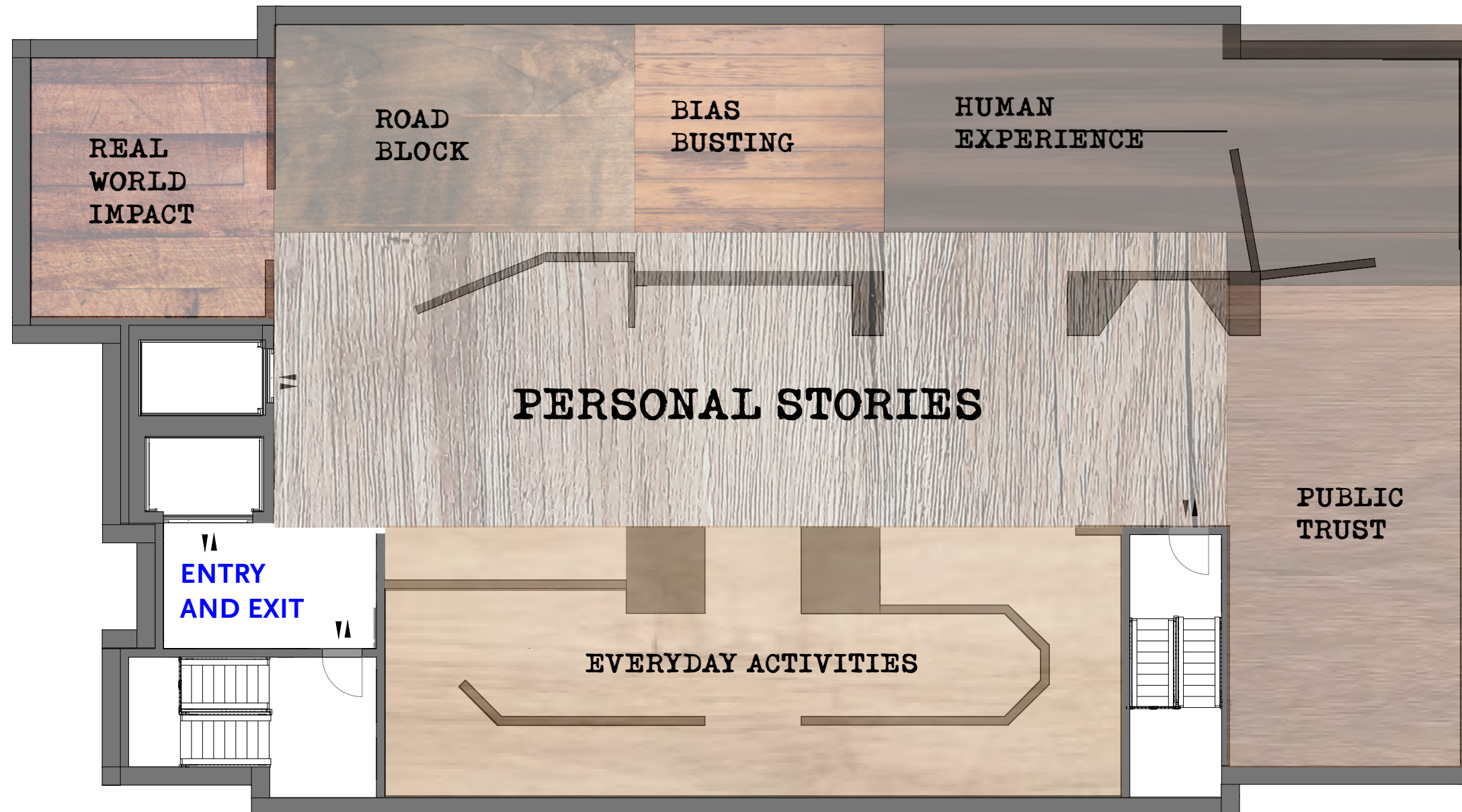


KEY CONCEPTS



BUBBLE FLOOR PLAN

6,000 SQ FT



FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Bubble Floor Plan

Drawing Number
EX.01.08

Scale
3/32" = 1'- 0"

Key Plan
Not Applicable

OVERVIEW

The exhibition “Artificial Minority” is an **eleven-month exhibition** starting from August 12, 2024 through July 16, 2025.

Visitors read **first-person narrative diaries** of true stories of thoughts, feelings, and experiences with the technology.

Then, they are encouraged to **reflect** on the stories and **share their own experiences with facial recognition.**

 State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Overview

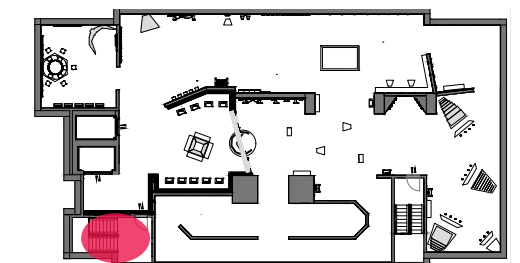
Drawing Number
EX.01.09

Scale
NTS

Key Plan
Not Applicable



Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.



Entrance
[Stairway poster signage](#)

A content warning signage on the poster alerts visitors about sensitive content in the exhibition such as stories of people who were wrongfully arrested or law enforcement using the technology to find suspects of assault.



Introduction
[Interactive timeline of facial recognition technology](#)
 Visitors press red buttons to activate kinetic type animations and learn about technological advances in facial recognition starting from the 1960's through 2020's.

FIT State University of New York

Fashion Institute of Technology
 Exhibition and Experience Design
 Thesis Capstone 2023

Exhibition Designer
 Emily Tse

Project
 Artificial Minority



Site
 Smithsonian Cooper Hewitt Museum

Client
 National Institute of Standards and Technology

Content Sponsors
 Algorithmic Justice League
 American Civil Liberties Union
 Security Industry Association

Disclaimer
 These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
 December 8, 2023

Drawing Name
 Introduction

Drawing Number
 EX.01.11

Scale
 NTS

Key Plan

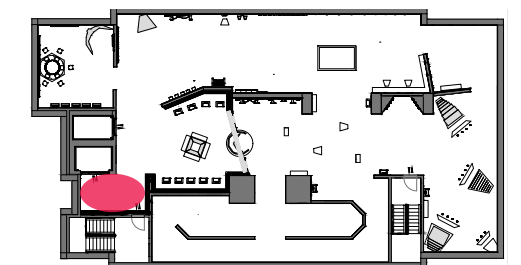




Exhibit 1
Shining light on unconscious biases

The aluminum spotlight sculpture represents the goal of the exhibition, which is to spread public awareness of biases in algorithms. These include not only computational bias, but also human biases such as confirmation bias and age bias.

Fashion Institute of Technology
 Exhibition and Experience Design
 Thesis Capstone 2023

Exhibition Designer
 Emily Tse

Project
 Artificial Minority



Site
 Smithsonian Cooper Hewitt Museum

Client
 National Institute of Standards and Technology

Content Sponsors
 Algorithmic Justice League
 American Civil Liberties Union
 Security Industry Association

Disclaimer
 These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
 December 8, 2023

Drawing Name
 Biases Spotlight

Drawing Number
 EX.01.12

Scale
 NTS

Key Plan

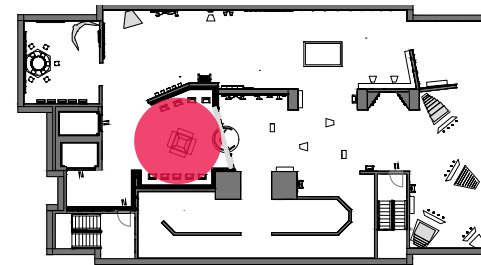




Exhibit 2
Adopt-A-Persona

Visitors take personality quizzes and adopt fictional occupations such as police officers, lawyers, and journalists. These specific careers are chosen based on past incidents of people whose lives have been impacted by facial recognition systems.

FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

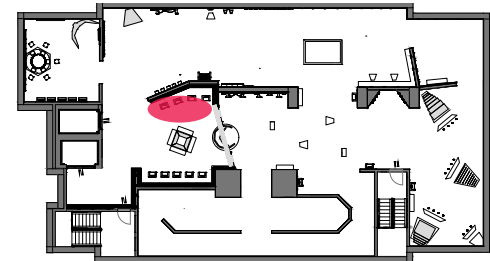
Date
December 8, 2023

Drawing Name
Adopt-A-Persona

Drawing Number
EX.01.13

Scale
NTS

Key Plan



Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

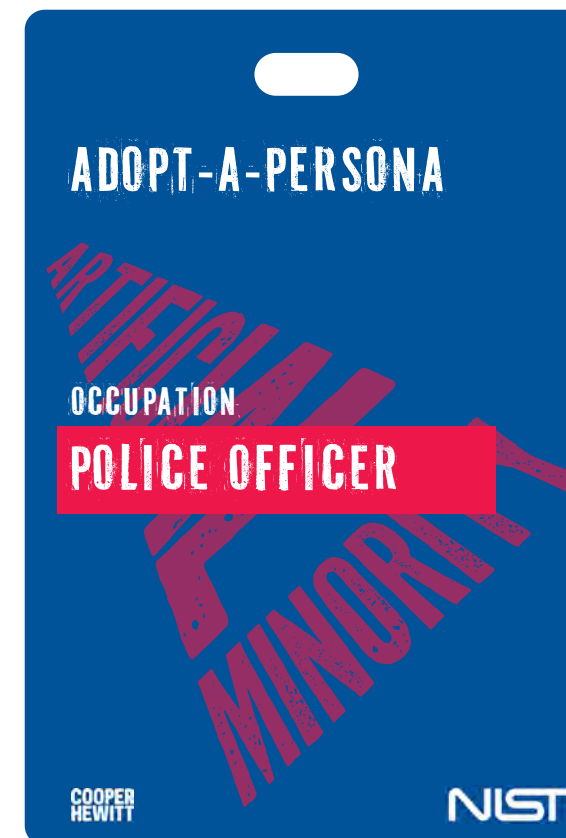
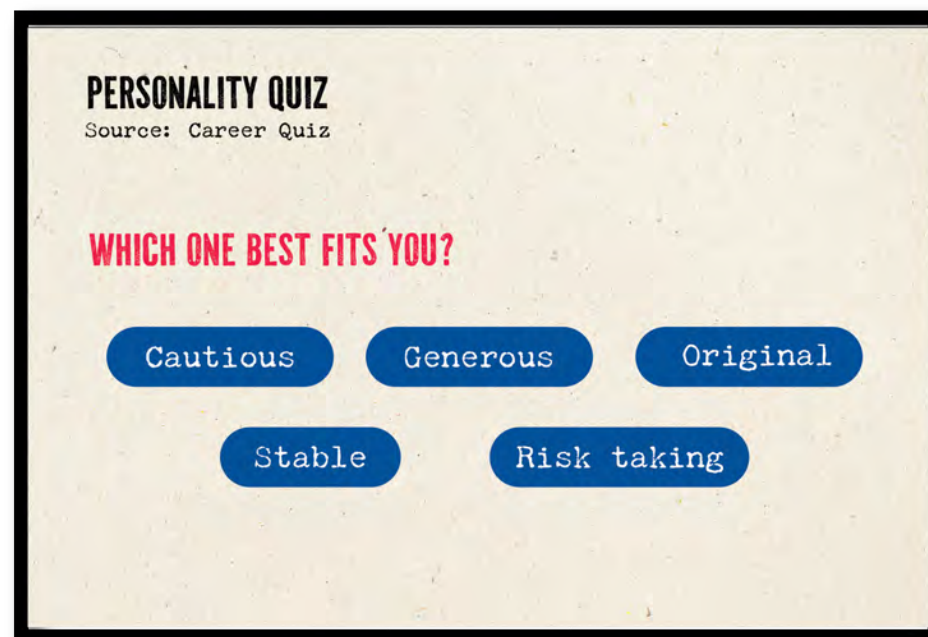
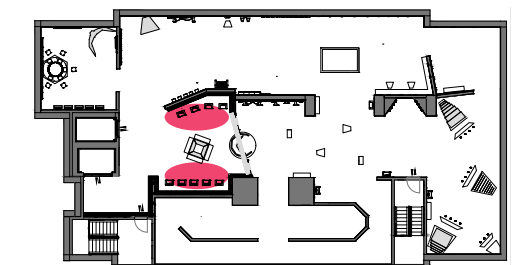
Date
December 8, 2023

Drawing Name
Personality Quiz

Drawing Number
EX.01.14

Scale
NTS

Key Plan





Read and Reflect

Diaries of people impact by the technology positively and negatively

Throughout the exhibition, there are three kiosk stations where people read diaries and write how they feel and how their persona would feel in response to the stories. This would encourage empathy building and thinking from another's perspective.

FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

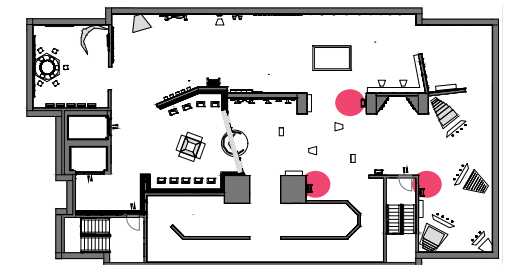
Date
December 8, 2023

Drawing Name
Read and Reflect

Drawing Number
EX.01.15

Scale
NTS

Key Plan





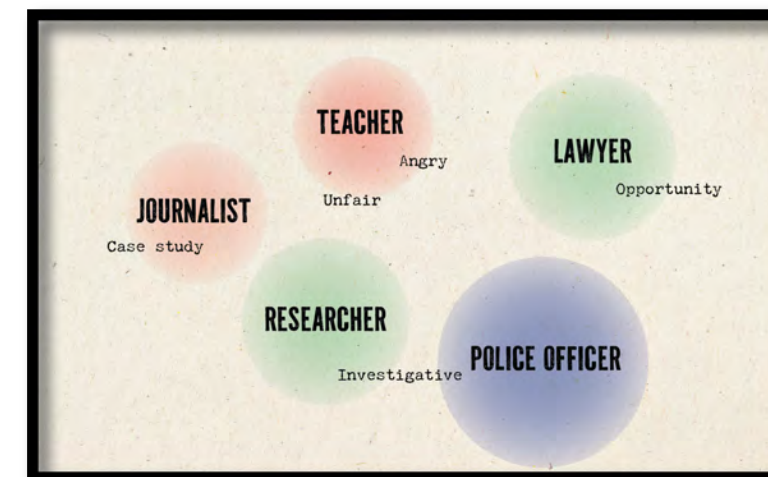
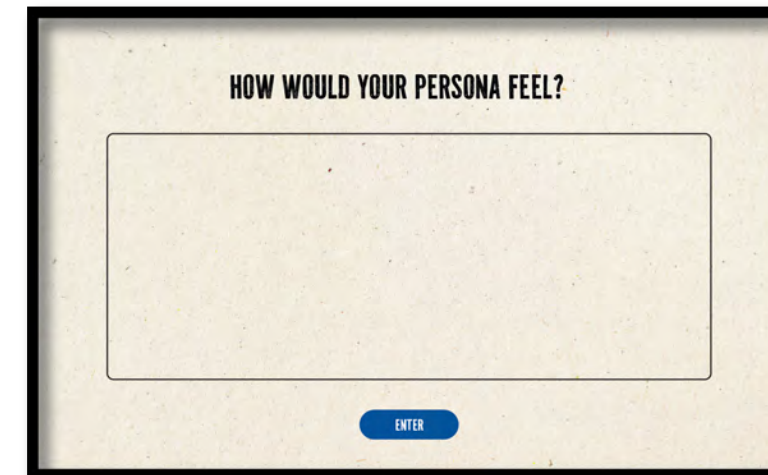
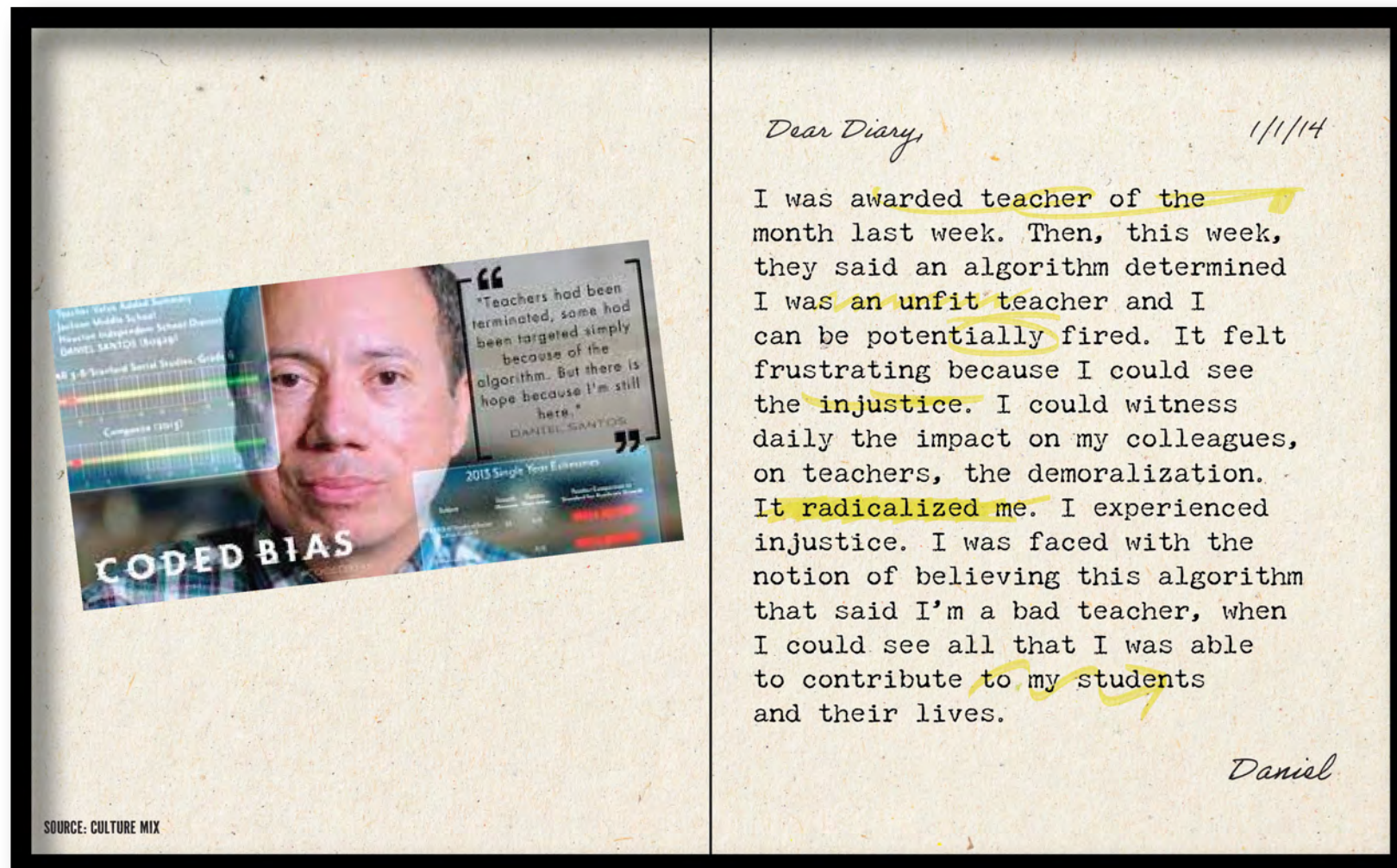
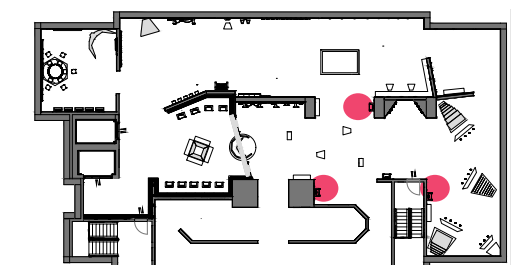
Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
Diaries Storyboard

Drawing Number
EX.01.16

Scale
NTS

Key Plan



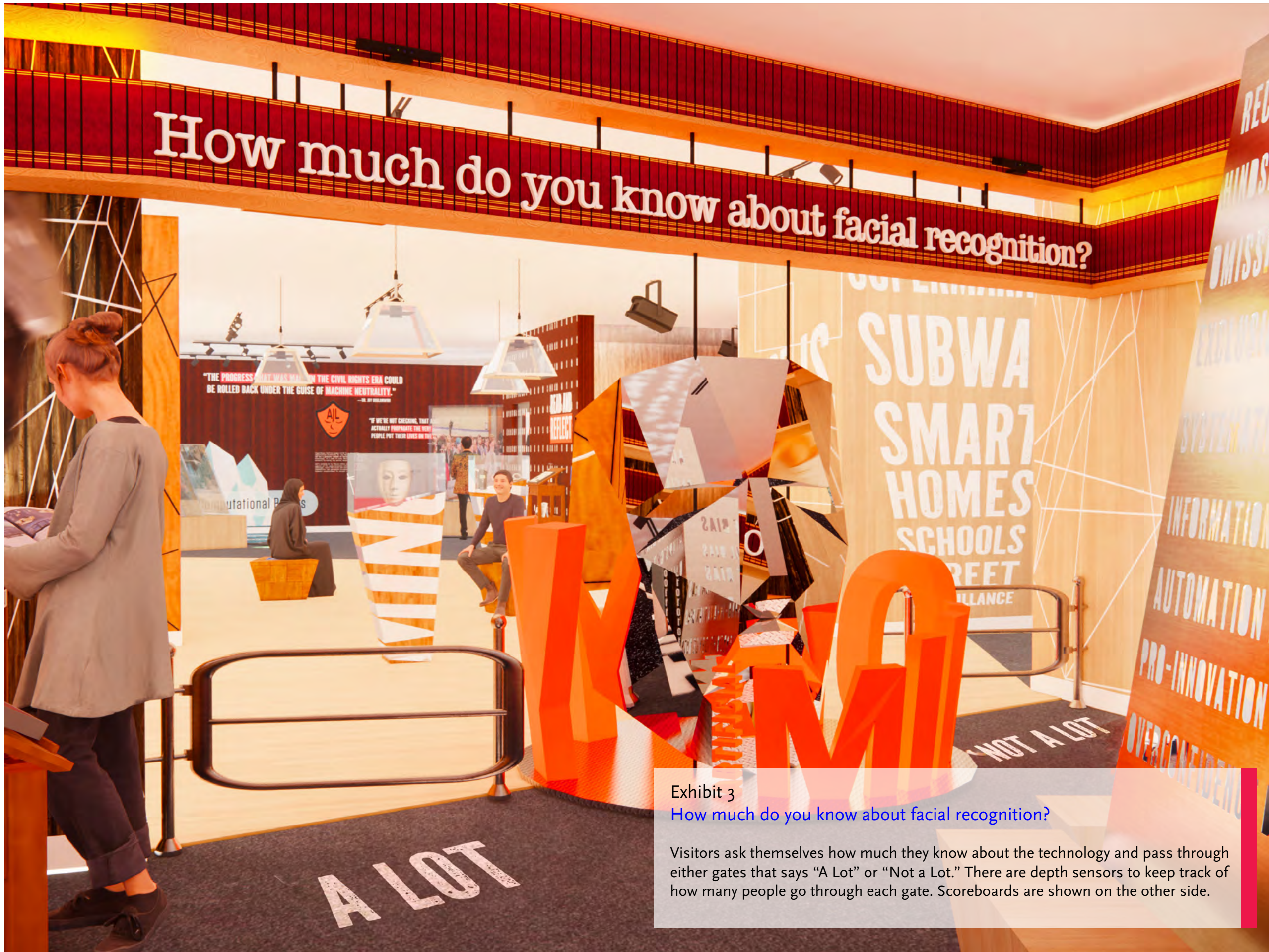


Exhibit 3
How much do you know about facial recognition?

Visitors ask themselves how much they know about the technology and pass through either gates that says "A Lot" or "Not a Lot." There are depth sensors to keep track of how many people go through each gate. Scoreboards are shown on the other side.

FIT State University of New York

Fashion Institute of Technology
 Exhibition and Experience Design
 Thesis Capstone 2023

Exhibition Designer
 Emily Tse

Project
 Artificial Minority



Site
 Smithsonian Cooper Hewitt Museum

Client
 National Institute of
 Standards and Technology

Content Sponsors
 Algorithmic Justice League
 American Civil Liberties Union
 Security Industry Association

Disclaimer
 These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

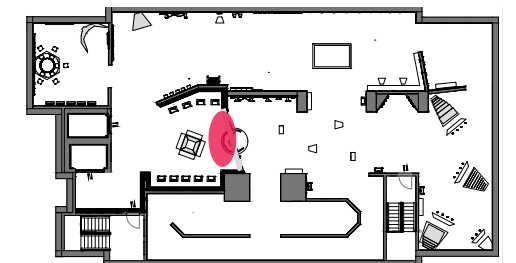
Date
 December 8, 2023

Drawing Name
 Question Prompt

Drawing Number
 EX.01.17

Scale
 NTS

Key Plan





Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Megaphone Wall

Drawing Number
EX.01.18

Scale
NTS

Key Plan

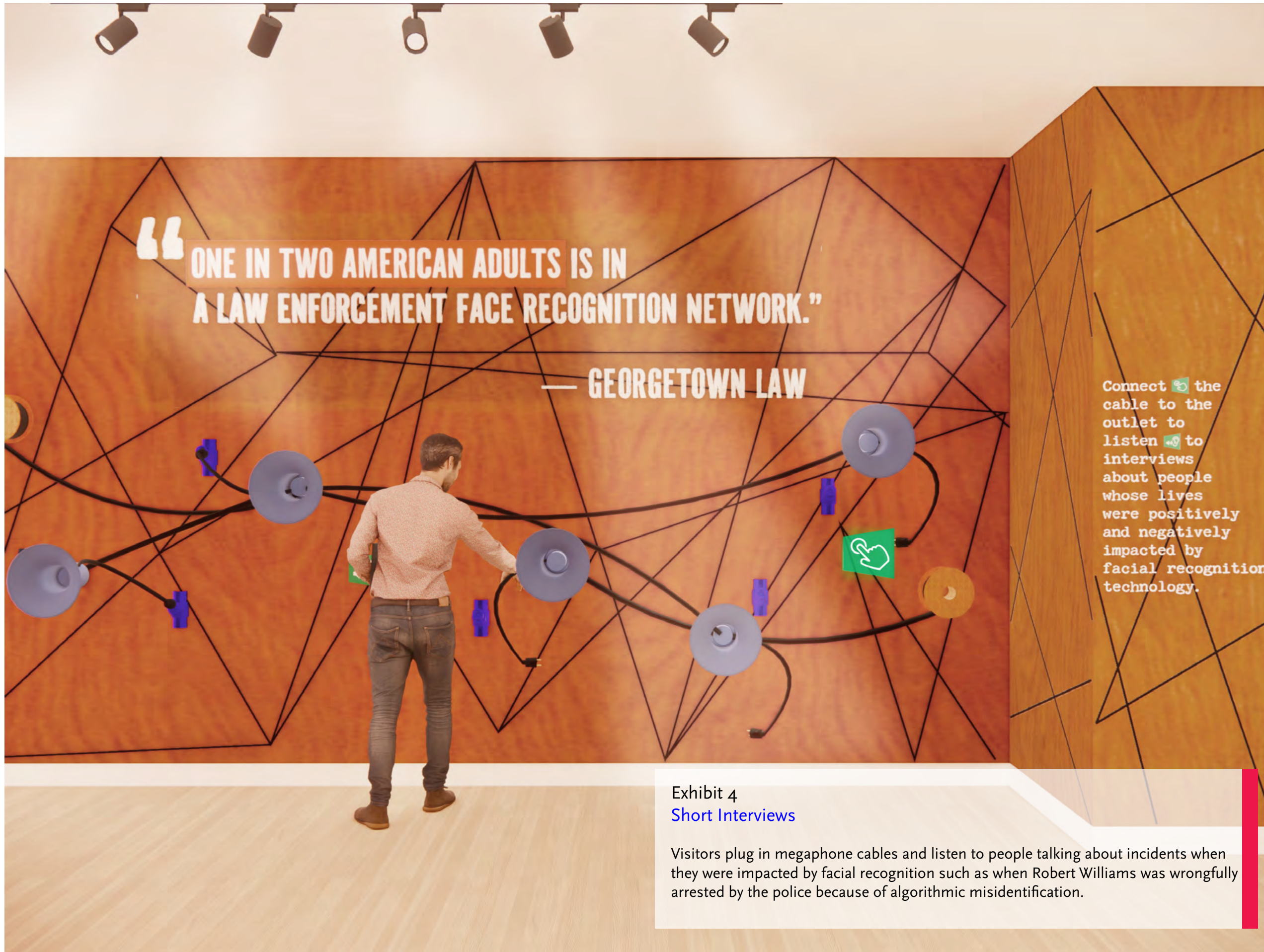
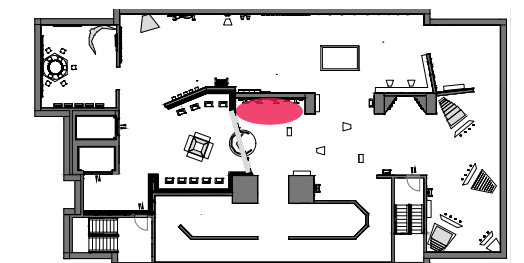


Exhibit 4
Short Interviews

Visitors plug in megaphone cables and listen to people talking about incidents when they were impacted by facial recognition such as when Robert Williams was wrongfully arrested by the police because of algorithmic misidentification.

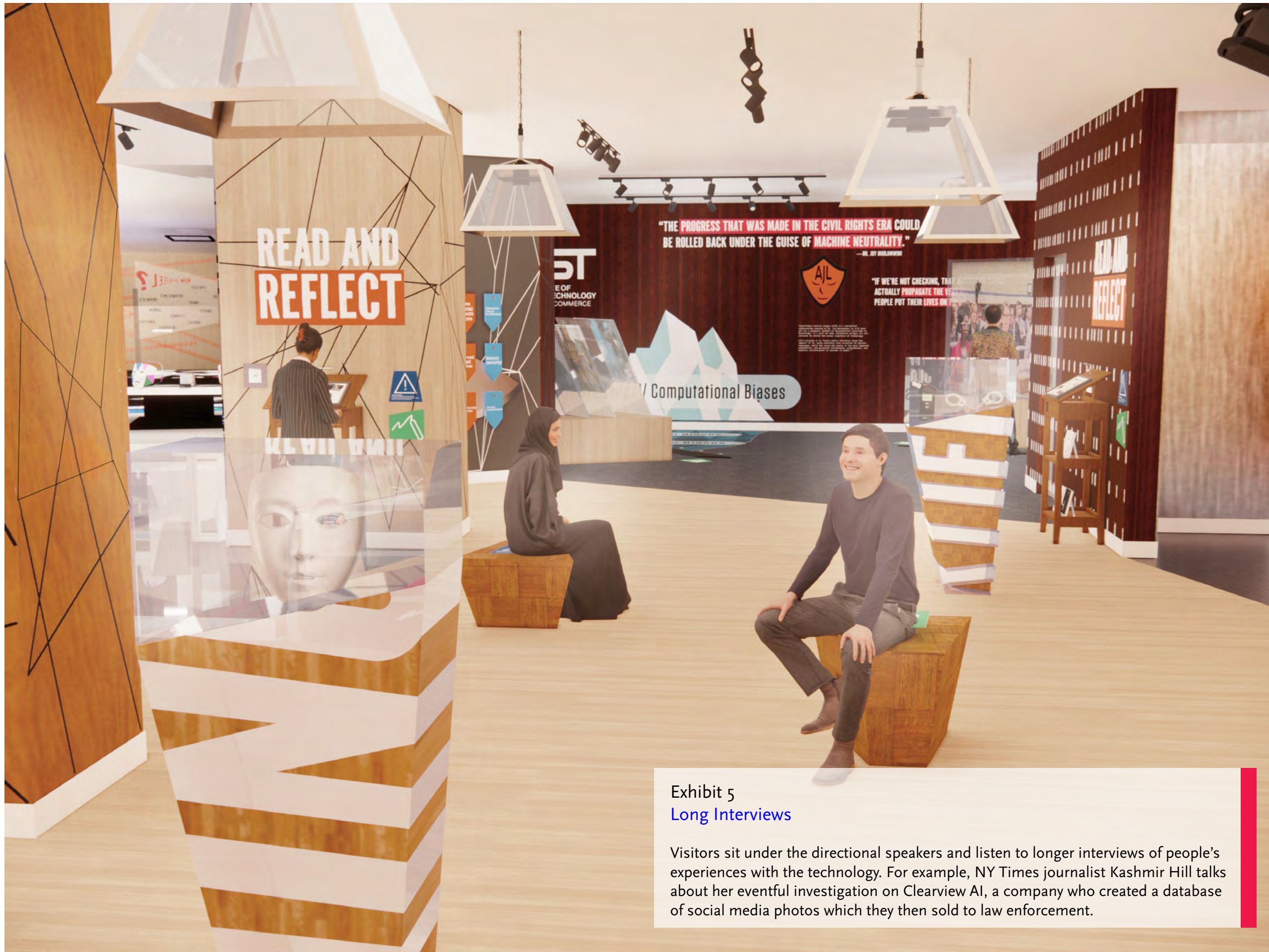


Exhibit 5
Long Interviews

Visitors sit under the directional speakers and listen to longer interviews of people's experiences with the technology. For example, NY Times journalist Kashmir Hill talks about her eventful investigation on Clearview AI, a company who created a database of social media photos which they then sold to law enforcement.

FIT State University of New York

Fashion Institute of Technology
 Exhibition and Experience Design
 Thesis Capstone 2023

Exhibition Designer
 Emily Tse

Project
 Artificial Minority



Site
 Smithsonian Cooper Hewitt Museum

Client
 National Institute of
 Standards and Technology

Content Sponsors
 Algorithmic Justice League
 American Civil Liberties Union
 Security Industry Association

Disclaimer
 These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

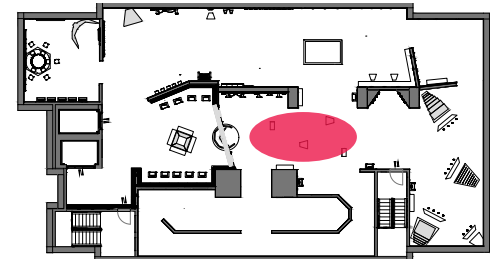
Date
 December 8, 2023

Drawing Name
 Interviews

Drawing Number
 EX.01.19

Scale
 NTS

Key Plan



Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

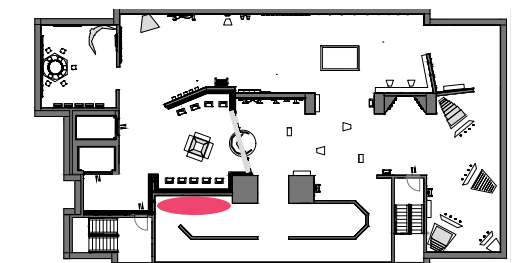
Date
December 8, 2023

Drawing Name
C.O.M.P.A.S.

Drawing Number
EX.01.20

Scale
NTS

Key Plan



COMPAS

Correctional Offender Management Profiling for Alternative Sanctions is a software that courts use to analyze the riskiness of a defendant to re-offend. It is used in New York, California, Florida, and Wisconsin.



Exhibit 6
[C.O.M.P.A.S. software](#)

Visitors learn about C.O.M.P.A.S. which the justice system used to determine how likely a defendant is to reoffend. Gender and race bias was found in this algorithm.





Exhibit 7
Facial recognition in everyday activities

Visitors point to a projected video of streets, concert venues, and supermarkets where facial recognition software is used discretely and prominently. Depth sensors capture th motion gestures and provide feedback when they correctly identify the cameras.

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Everyday Activities

Drawing Number
EX.01.21

Scale
NTS

Key Plan

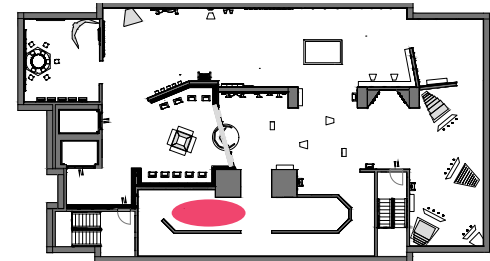




Exhibit 8
[What the computer see](#)

On the other side of the projected everyday environments, visitors see projected videos of the computers detecting and labeling. For example, China deployed a social credit scoring system that tracks public behavior. This score can affect traveling privileges and employment opportunities.

FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

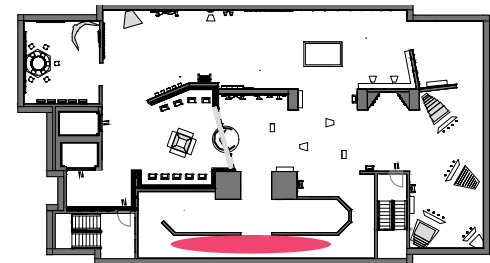
Date
December 8, 2023

Drawing Name
Behind the Scenes

Drawing Number
EX.01.22

Scale
NTS

Key Plan





Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

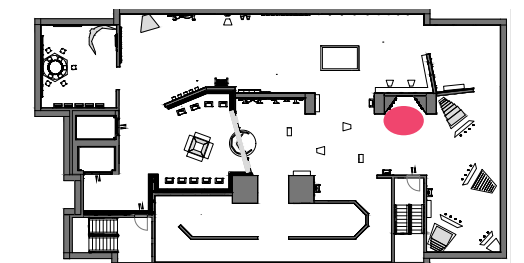
Date
December 8, 2023

Drawing Name
Pro or Con?

Drawing Number
EX.01.23

Scale
NTS

Key Plan



“Every technology is
a double-edge sword.”
—Dr. Fei-Fei Li



Decide each facial
recognition application
as a pro or a con.

PROS

CONS

- Fight identity theft
- Track child sexual predators
- Track protesters
- Surveil event spaces
- Find missing children
- Fight human trafficking
- Find suspects
- Surveil retail stores
- Identify war victims
- Surveil subway stations

- Surveil subway stations
- Surveil event spaces
- Give social credit score
- Determine risk of re-offending
- Airport boarding
- Track protesters
- Surveil retail stores
- School security
- Surveil apartment tenants
- Aid identity theft
- Misidentify suspects
- Surveil supermarkets

Exhibit 9
Pro or Con?

Visitors determine each facial recognition application as a pro or con based on their own perspective and place the panel on the pro or con wall.



"YOU CAN'T EXPERIMENT WITH PEOPLE'S RIGHTS."
 —SILKIE CARLO, DIRECTOR OF BIG BROTHER WATCH

BIG BROTHER WATCH

Big Brother Watch in the UK defends people's rights against the overbearing facial recognition system on the London streets. People are constantly being scanned and when there is a match to the watchlist, then the police will be alerted. When a pedestrian was walking by the surveillance camera, he covered his face. He was then approached by police officers and asked for his ID. He got a fine for hiding his identity from the camera.

"WHAT WORRIES IT'S REALLY ABOUT"

"90% OF THOSE MATCHES ARE INCORRECTLY MATCHING AN INNOCENT PERSON AS A WANTED PERSON. THE POLICE HAVE STARTED USING FACIAL RECOGNITION SYSTEMS IN THE UK IN COMPLETE ABSENCE OF A LEGAL BASIS, A LEGAL FRAMEWORK, OR ANY OVERSIGHT."
 —SILKIE CARLO, DIRECTOR OF BIG BROTHER WATCH

Exhibit 10
 The black box becomes a glass box

Visitors step on the trigger pads to activate backlit graphic films that show efforts of advocacy organizations such as Big Brother Watch in the UK who inform people on London streets about police surveillance vans with facial recognition software.

Fashion Institute of Technology
 Exhibition and Experience Design
 Thesis Capstone 2023

Exhibition Designer
 Emily Tse

Project
 Artificial Minority



Site
 Smithsonian Cooper Hewitt Museum

Client
 National Institute of Standards and Technology

Content Sponsors
 Algorithmic Justice League
 American Civil Liberties Union
 Security Industry Association

Disclaimer
 These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
 December 8, 2023

Drawing Name
 Glass Box

Drawing Number
 EX.01.24

Scale
 NTS

Key Plan

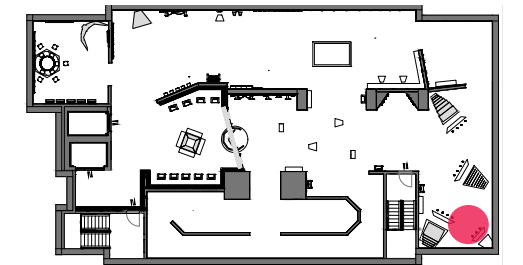


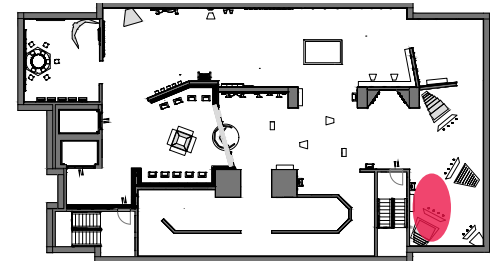


Exhibit 11
Security Industry Association (SIA)

Visitors step on the trigger pad to activate backlit graphic films of SIA who supports the usage of facial recognition to fight human trafficking and find missing children.



Disclaimer
 These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.



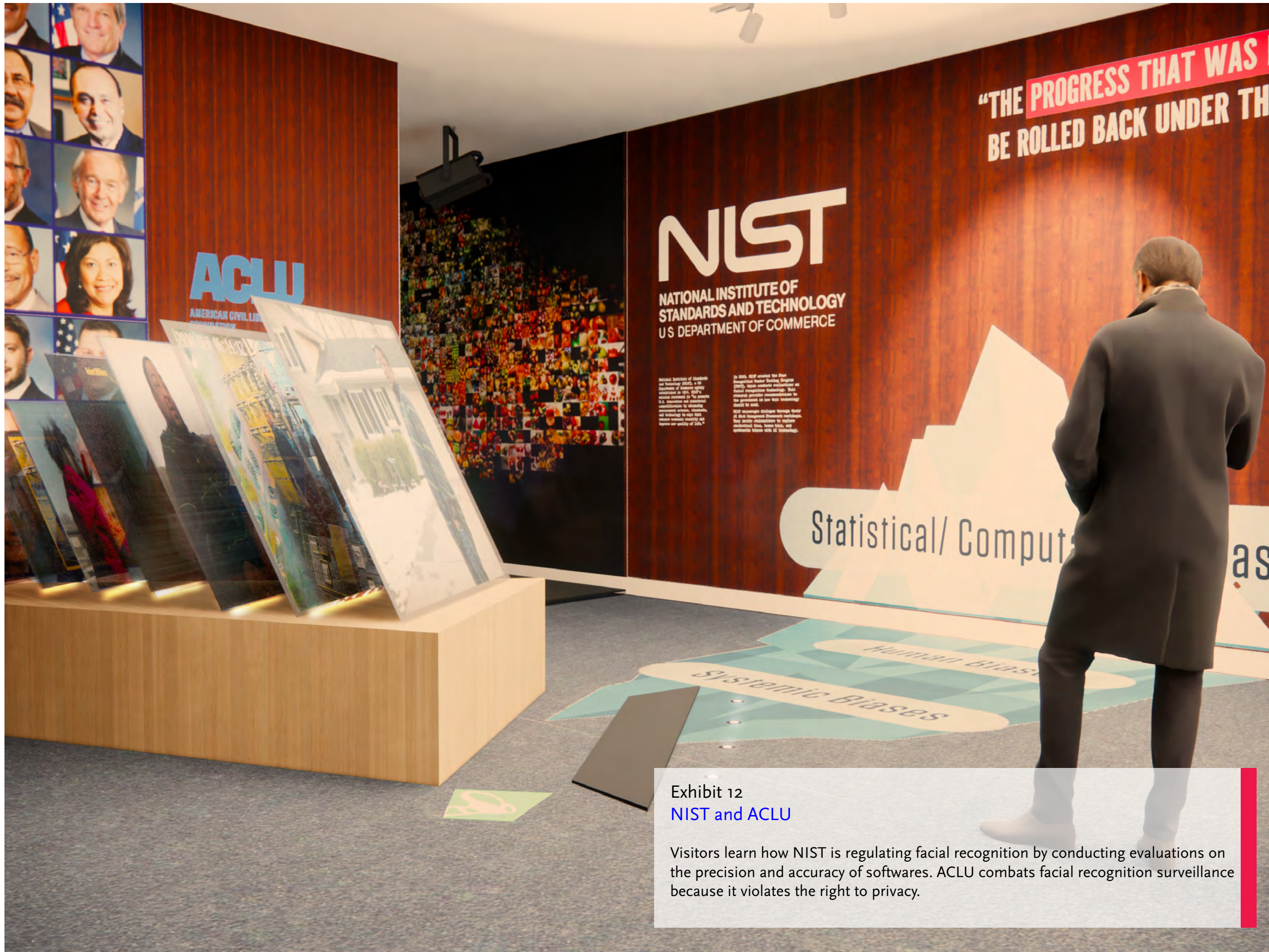


Exhibit 12
NIST and ACLU

Visitors learn how NIST is regulating facial recognition by conducting evaluations on the precision and accuracy of softwares. ACLU combats facial recognition surveillance because it violates the right to privacy.

FIT State University of New York

Fashion Institute of Technology
 Exhibition and Experience Design
 Thesis Capstone 2023

Exhibition Designer
 Emily Tse

Project
 Artificial Minority



Site
 Smithsonian Cooper Hewitt Museum

Client
 National Institute of Standards and Technology

Content Sponsors
 Algorithmic Justice League
 American Civil Liberties Union
 Security Industry Association

Disclaimer
 These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

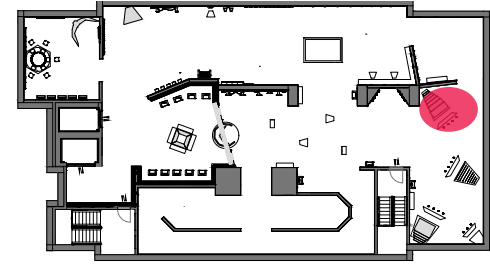
Date
 December 8, 2023

Drawing Name
 NIST and ACLU

Drawing Number
 EX.01.26

Scale
 NTS

Key Plan



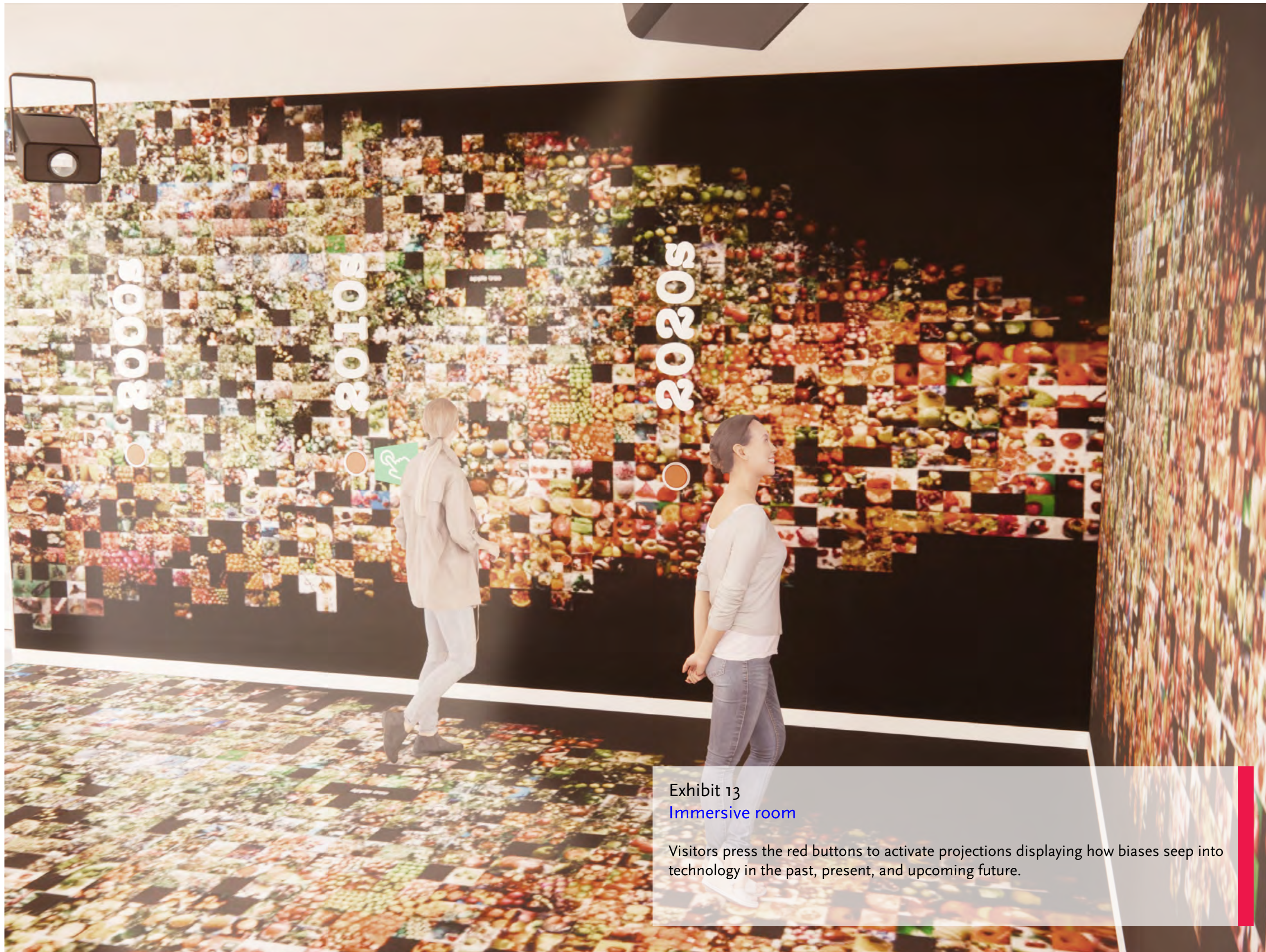


Exhibit 13
[Immersive room](#)

Visitors press the red buttons to activate projections displaying how biases seep into technology in the past, present, and upcoming future.

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Biases in Technology

Drawing Number
EX.01.27

Scale
NTS

Key Plan

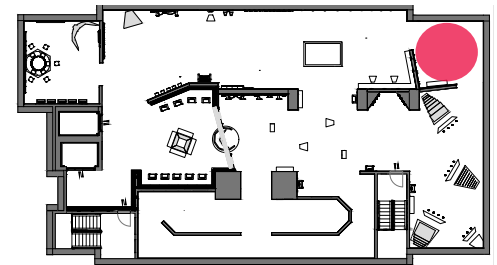




Exhibit 15
 Personalize your mask

Visitors color in paper masks and then go to the interactive tablet to choose a face filter of an animal or someone they aspire to.

FIT State University of New York

Fashion Institute of Technology
 Exhibition and Experience Design
 Thesis Capstone 2023

Exhibition Designer
 Emily Tse

Project
 Artificial Minority



Site
 Smithsonian Cooper Hewitt Museum

Client
 National Institute of
 Standards and Technology

Content Sponsors
 Algorithmic Justice League
 American Civil Liberties Union
 Security Industry Association

Disclaimer
 These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
 December 8, 2023

Drawing Name
 Personalize Mask

Drawing Number
 EX.01.28

Scale
 NTS

Key Plan

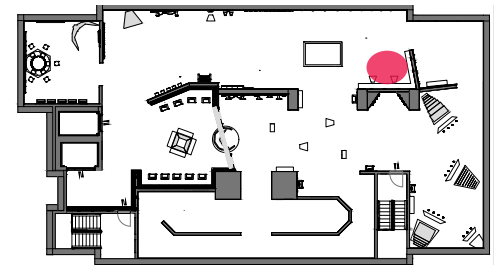




Exhibit 14
 How much do you have to change yourself to fit in?

Visitors scan their RFID cards at the mirrored walls to see themselves with the face filer, but it only works when they wear the mask. They learn to empathize with Dr. Buolamwini who had to wear a white mask when programming this “Aspire Mirror” because the software can not detect her face, being that she has dark skin.

FIT State University of New York

Fashion Institute of Technology
 Exhibition and Experience Design
 Thesis Capstone 2023

Exhibition Designer
 Emily Tse

Project
 Artificial Minority



Site
 Smithsonian Cooper Hewitt Museum

Client
 National Institute of
 Standards and Technology

Content Sponsors
 Algorithmic Justice League
 American Civil Liberties Union
 Security Industry Association

Disclaimer
 These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
 December 8, 2023

Drawing Name
 Fitting In

Drawing Number
 EX.01.29

Scale
 NTS

Key Plan

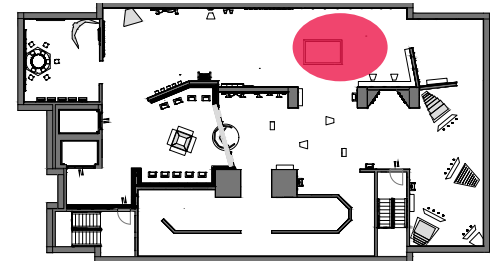




Exhibit 16
Bias Busting

Visitors play Monopoly of Biases to learn about human biases such as similarity bias and conformity bias.

FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

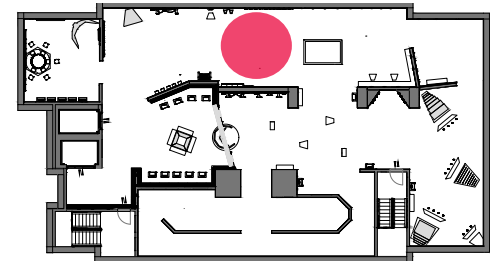
Date
December 8, 2023

Drawing Name
Monopoly of Biases

Drawing Number
EX.01.30

Scale
NTS

Key Plan





FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Implicit Bias Test

Drawing Number
EX.01.31

Scale
NTS

Key Plan

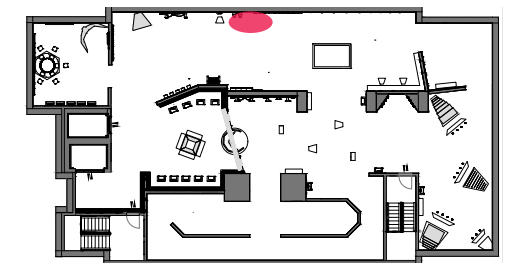




Exhibit 18
Pantones's 110 skin tone shades

Visitors match their skin to one of the 110 shades of push pins and place it on the cork board map. They are able to see that people from the same area can have varying skin tones, hence algorithmic injustice favoring lighter-skin tone is a global issue.

FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
110 Skin Tones

Drawing Number
EX.01.32

Scale
NTS

Key Plan

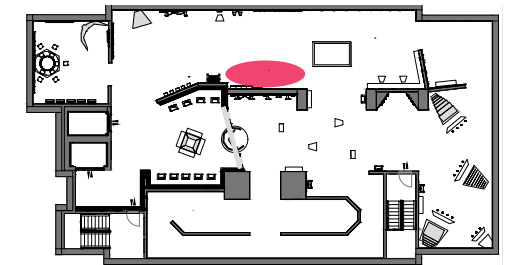




Exhibit 19
Record your own experiences with facial recognition

On the traffic message board, visitors type their experiences with the technology and their responses are projected onto the floor to share with other visitors.

FIT State University of New York

Fashion Institute of Technology
 Exhibition and Experience Design
 Thesis Capstone 2023

Exhibition Designer
 Emily Tse

Project
 Artificial Minority



Site
 Smithsonian Cooper Hewitt Museum

Client
 National Institute of Standards and Technology

Content Sponsors
 Algorithmic Justice League
 American Civil Liberties Union
 Security Industry Association

Disclaimer
 These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
 December 8, 2023

Drawing Name
 Share Thoughts

Drawing Number
 EX.01.33

Scale
 NTS

Key Plan

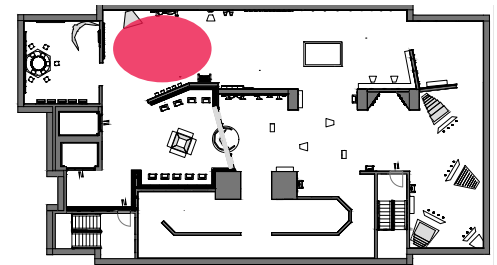




Exhibit 20
Record or listen to other visitors' stories

Visitors plug in the megaphone cables to activate recording devices and share their stories. They can opt to record in the telephone booth for a more private space. They can also choose to share their voices with other visitors by giving consent to let it play on the directional speakers.

FIT State University of New York

Fashion Institute of Technology
 Exhibition and Experience Design
 Thesis Capstone 2023

Exhibition Designer
 Emily Tse

Project
 Artificial Minority



Site
 Smithsonian Cooper Hewitt Museum

Client
 National Institute of
 Standards and Technology

Content Sponsors
 Algorithmic Justice League
 American Civil Liberties Union
 Security Industry Association

Disclaimer
 These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
 December 8, 2023

Drawing Name
 Join Conversations

Drawing Number
 EX.01.34

Scale
 NTS

Key Plan

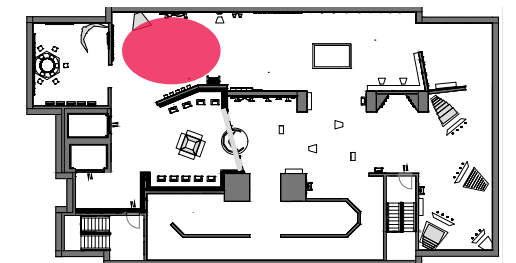




Exhibit 21
[Workshop](#)

Visitors tally where they use facial recognition by placing washers on pegboards of where they use facial recognition such as on the phone, in the airport, subway, or supermarket.



Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

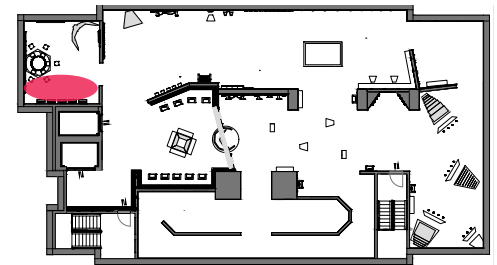




Exhibit 22
[Ethical AI Workflow](#)

Visitors collaborate in a team to brainstorm an idea for an AI startup. They are guided by the projected directions to follow a responsible AI workflow developed by the Museum and AI Network in 2019. They would answer questions such as “Is there potential bias in the dataset?”

FIT State University of New York

Fashion Institute of Technology
 Exhibition and Experience Design
 Thesis Capstone 2023

Exhibition Designer
 Emily Tse

Project
 Artificial Minority



Site
 Smithsonian Cooper Hewitt Museum

Client
 National Institute of
 Standards and Technology

Content Sponsors
 Algorithmic Justice League
 American Civil Liberties Union
 Security Industry Association

Disclaimer
 These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
 December 8, 2023

Drawing Name
 Ethical AI Workshop

Drawing Number
 EX.01.36

Scale
 NTS

Key Plan

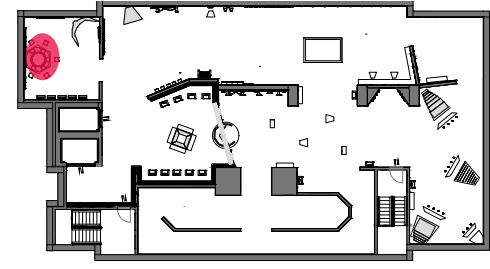




Exhibit 23
Apple's Face ID

Visitors step up to the phone and witness the iPhone projecting 30,000 infrared dots on the face to create a depth map of the face.



Disclaimer
 These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

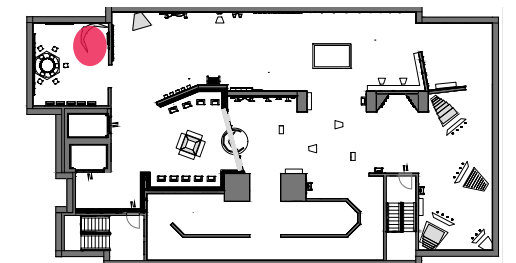


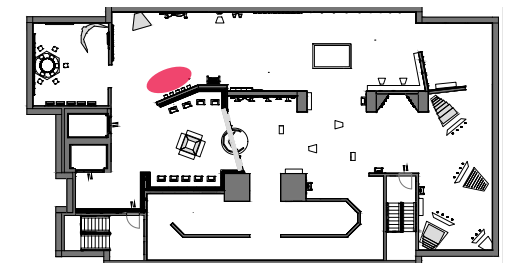


Exhibit 24
 Becoming comfortable in joining conversations about AI ethics

At the exit experience, visitors end with Dr. Buolamwini’s quote “If you have a face you have a place in the conversation about AI.” They vote for how much they support the technology by recycling their RFID card in the voting bins.



Disclaimer
 These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.



Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

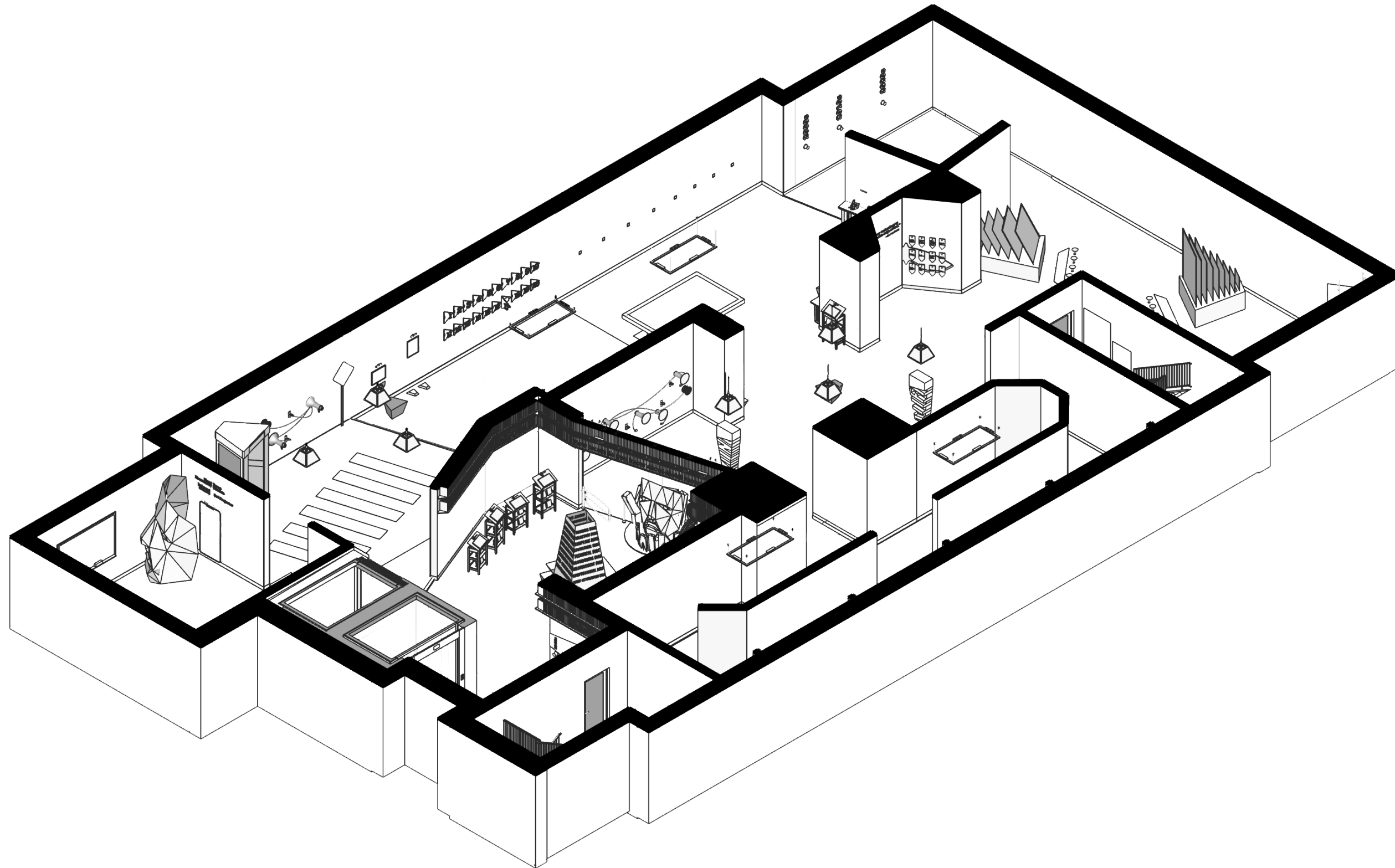
Date
December 8, 2023

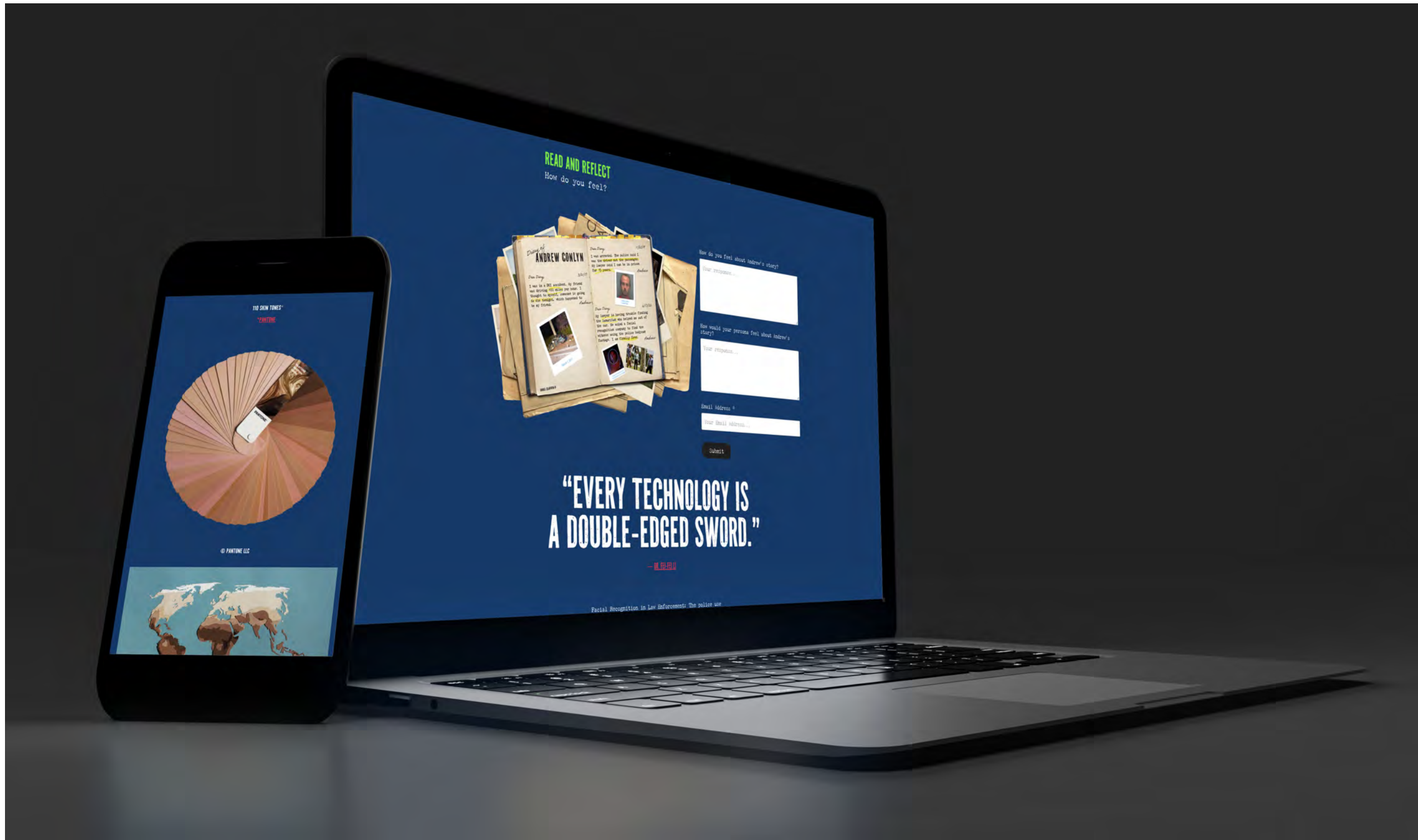
Drawing Name
Isometric View

Drawing Number
EX.01.39

Scale
NTS

Key Plan
Not Applicable





FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Digital Exhibition

Drawing Number
EX.01.40

Scale
NTS

Key Plan
Not Applicable

Digital Experience [Website](#)

Visitors can experience the exhibition digitally. All the exhibits are transformed into [digital experiences](#). Digital visitors also [adopt fictional personas](#) and read about the stories of Dr. Buolamwini, Williams, and Conlyn. Visitors' online contribution are [recorded and incorporated into the exhibition's digital stations](#).

SCHEDULES AND LISTS

GRAPHIC SCHEDULE (1/2)



Wayfinding	Type	Description	Exhibit Content	Type	Description
01A.01.GR001	A	Bookshelf at central park	09A.01.GR073	D	"How much do you have to change yourself to fit in?"
01A.02.GR002	A	Open book outside museum	09A.02.GR074	D	Decorate your mask title
01A.02.GR003	B	Floor graphics outside museum	10A.02.GR077	B	Monopoly of biases graphic
01A.02.GR004	C	Flag banners outside museum	10A.01.GR078	D	Wall of biases title
02A.01.GR005	L	Wayfinding on stairs	10A.01.GR079	M	20-count 5" x 5" panels
02A.01.GR006	B	Floor graphics on stairs	10A.01.GR080	H	20-count dimensional numbers
02A.02.GR007	D	Mural in elevator 1 panel 1	10A.01.GR081	D	Implicit bias test title
02A.02.GR008	D	Mural in elevator 1 panel 2	10A.03.GR082	D	Pantone skin tones title
02A.02.GR009	D	Mural in elevator 1 panel 3	10A.03.GR083	D	110-count Pantone skin tone decals
02A.03.GR010	D	Mural in elevator 2 panel 1	10A.03.GR084	N	World map
02A.03.GR011	D	Mural in elevator 2 panel 2	10A.03.GR085	M	Pantone wheel
02A.03.GR012	D	Mural in elevator 2 panel 3	11A.04.GR088	D	Quote "If you have a face, you have a place in the conversation about AI"
			11A.01.GR090	D	Record your experiences with facial recognition
			11A.01.GR091	H	Telephone
			11A.02.GR092	D	Question: How do you feel?
			11A.04.GR093	D	Question: How much do you support facial recognition?
			11A.04.GR094	D	5-count recycle decal
			12A.04.GR095	D	Question: Where do you use facial recognition?
			12A.01.GR098	D	Question: What are the pros and cons of facial recognition?
			12A.02.GR099	D	Face ID Quote
			12A.02.GR100	H	Dot projector
			12A.02.GR101	H	Front camera
			12A.02.GR102	H	Infrared camera
			12A.02.GR103	H	Flood illuminator
			07A.02.109	K	Iceberg biases
			Directives		
			05A.01.GR029	D	Directive to touch
			05A.02.GR030	D	Directive to listen
			05A.02.GR032	D	Directive to listen
			05A.02.GR034	D	Directive to listen
			05A.02.GR035	D	Directive to listen
			05A.02.GR038	D	Directive to write
Introduction					
03A.02.GR015	H	Timeline dimensional letters			
03A.03.GR016	D	Infographics			
03A.03.GR108	K	Logo			
Exhibit Content					
04A.01.GR017	H	Adopt-a-Persona title			
04A.02.GR020	I	Biases sculpture			
04A.03.GR021	H	Adopt-a-Persona title			
04A.04.GR024	H	Dimensional letters of logo			
04A.04.GR025	H	Dimensional letters asking "How much do you know about facial recognition?"			
05A.01.GR028	D	Quote			
05A.02.GR036	D	Read and reflect			
05A.02.GR039	D	Read and reflect			
05A.02.GR042	D	Read and reflect			
06A.01.GR045	D	Infographic of COMPAS			
07A.01.GR052	D	Quote			
07A.01.GR054	H	Pros title			
07A.01.GR055	H	Cons title			
07A.01.GR056	M	36-count 5" x 5" panels			
07A.03.GR057	D	Read and reflect			
07A.03.GR060	J	Large graphic panels 9-count			
07A.02.GR062	J	Medium graphic panels 7-count			
07A.04.GR064	J	Medium graphic panels 5-count			
07A.04.GR066	J	Small graphic panels 7-count			

GRAPHIC SCHEDULE (2/2)



Directive	Type	Description
05A.02.GRo41	D	Directive to write
05A.02.GRo44	D	Directive to write
07A.01.GRo53	D	Directive to touch
07A.03.GRo59	D	Directive to write
07A.03.GRo61	D	Directive to step
07A.02.GRo63	D	Directive to step
07A.04.GRo65	D	Directive to step
07A.04.GRo67	D	Directive to step
09A.02.GRo75	D	Directive to draw
Label		
05A.02.GRo31	D	Label copy of mask artifact
05A.02.GRo33	D	Label copy of handcuffs and breathalyzer artifact
Mural		
03A.01.GRo13	E	Distorted type mural
04A.01.GRo18	E	People with bullhorn mural
04A.03.GRo22	E	People with bullhorn mural
06A.01.GRo46	E	Distorted type mural
06A.01.GRo47	E	Distorted type mural
06A.01.GRo48	E	Distorted type mural
03A.01.GR110	F	Binary code mural
05A.02.GR111	F	Binary code mural
04A.01.GR112	F	Triangular mesh mural
04A.03.GR113	F	Triangular mesh mural
12A.01.GR114	F	Triangular mesh mural
11A.01.GR115	F	Caution tape mural
11A.04.GR116	F	Caution tape mural
10A.01.GR117	F	Breaking glass mural
10A.02.GR118	B	Breaking glass mural
Digital Media		
03A.02.GRo14	O	Timeline of facial recognition
04A.01.GRo19	O	Personality quiz
04A.03.GRo23	O	Personality quiz
04A.04.GRo26	O	Score board 1
04A.04.GRo27	O	Score board 2
05A.02.GRo37	O	Digital media station

Digital Media	Type	Description
05A.02.GRo40	O	Digital media station
05A.02.GRo43	O	Digital media station
07A.03.GRo58	O	Digital media station
08A.01.GRo68	O	Video wall
08A.02.GRo69	O	Video wall
08A.03.GRo70	O	Video wall
08A.04.GRo71	O	Video wall
08A.05.GRo72	O	Projected video
09A.03.GRo76	O	Aspire mirror digital screen
10A.01.GRo86	O	Implicit bias test horizontal
10A.01.GRo87	O	Implicit bias test vertical
11A.04.GRo89	O	LCD display
12A.03.GRo96	O	Responsible AI projection
12A.03.GRo97	O	5-count digital tablet 13"
12A.02.GR104	O	Phone digital video
06A.01.GRo49	G	Video of street
06A.02.GRo50	G	Video of social credit system
06A.03.GRo51	G	Video of concert surveillance
06A.04.GR105	G	Video of concert
06A.04.GR106	G	Video of supermarket
06A.05.GR107	G	Video of supermarket surveillance

GRAPHIC SPECIFICATIONS

Type	Description
A	Exterior-grade cedar wood with UV over-laminate
B	Grit-coated vinyl floor graphic
C	Dye sublimation on sunbrella fabric
D	Direct inkjet printing on 1/4" vinyl
E	High resolution direct inkjet printing on 1/4" vinyl with end capped wrapped edges
F	Direct inkjet print on clear adhesive vinyl
G	Rose brand premium contrast gray projection screen
H	1" Sintra PVC CNC-cut dimensional letters
I	1/16" Aluminum bended sheet
J	1/4" acrylic with Duraclear backlit graphic film
K	Dye sublimation on low pile carpet
L	Aluminum frame with vinyl film
M	1" MDF wood boards with laminate
N	1/2" cork sheet
O	Digital display

 State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Graphic Specifications

Drawing Number
EX.02.03

Scale
NTS

Key Plan
Not Applicable

FINISH SCHEDULE (1/2)



Code	Type	Details	Location	Image	Code	Type	Details	Location	Image
WDo1	Wood	3/4" birch plywood 4'x8' panels	03A, 04A, 05A, 06A, 07A, 10A, 11A, 12A		WDo7	Wood	1/4"x3"x48" red cedar boards	01A.01, 01A.02	
WDo2	Wood	Gel stain oil-based coffee semi-transparent	03A, 04A		FL01	Carpet	Low-pile blue carpet Pantone P 57-8C	04A.02, 06A.01, 07A.03	
WDo3	Wood	Gel stain oil-based cherrywood semi-transparent	11A		FL02	Steel	Diamond steel sheet	06A.02, 06A.03, 06A.05,	
WDo4	Wood	1/16" self-adhesive mahogany veneer	07A, 10A		FL03	Rubber	1/4" Black rubber with white rubber inlay	11A.03	
WDo5	Wood	1/16" self-adhesive oak veneer	05A, 06A		FL04	Vinyl	Rosebrand vinyl mirror floor with non-slip coating	09A.01, 09A.02, 09A.03	
WDo6	Wood	1/16" self-adhesive walnut veneer	12A		FL05	Vinyl	Vinyl tile flooring	12A.01, 12A.02, 12A.03	

FINISH SCHEDULE (2/2)



Code	Type	Details	Location	Image	Code	Type	Details	Location	Image
ACo1	Acyclic	1/4" acrylic sheet	07A.02, 07A.03, 07A.04		DlO1	Vinyl	Dichroic film	12A.02	
MlO1	Mirror	Half-silvered mirror, one way mirror film with adhesive	09A.01, 09A.02		CHo1	Chrome	Polished chrome pyramid pendant	05A.02, 11A.03	
MlO2	Mirror	Avery chrome mirror vinyl	04A.04		FTo1	Rubber	Floor transition strip	03A.03, 05A.02, 11A.03	
ALo2	Aluminum	Aluminum bendable wire	04A.04, 12A.02		LAo1	Layered Paper	Formica red laminate P 1-1 C	07A.01, 10A.01	
ALo3	Aluminum	1/4" aluminum base plate	04A.04		Lo2	Paper	Formica blue laminate P 57-8 C	07A.01, 10A.01	
ALo4	Aluminum	Embossed aluminum sheet	06A.02, 06A.03, 06A.05		LAo3	Paper	Formica green laminate P 104-16 C	07A.01, 10A.01	




LIGHTING SCHEDULE (1/2)



Code	Type	Manufacturer	Details	Quantity	Location	Image
Lo1	Downlight on track	ETC	Irideon FPZ, 800 lumens, dimmable, 2700K Gallery, 90+CRI	70	04A.02, 05A.02, 06A.01, 09A.03, 10A.02, 11A.03, 12A.02	
Lo2	Laser beam gobo on track	LSI	BPM Series, Gobo slot, 15-30 ft throws	20	06A.02, 06A.05	
Lo3	RGB Mini LED Light	Lumenstar	1.7" diameter, 75 lumens, dimmable, 85 CRI	17	03A.02, 08A.01, 08A.03	
Lo4	Wall washer	ERCO	Grazing light wallwasher, 590lm - 4950lm, 3000K, 82 CRI	6	03A.02, 04A.01, 04A.03, 04A.04	
Lo5	Desk lamp	Reliable	UberLight™ Flex 3100TL, Clamp, 270° rotational head, 4000K, 600 Lumens, 80+CRI	13	04A.01, 04A.03, 05A.02, 07A.03	
Lo6	Tube LED wall sconce	Lumens	936 lumens, 3000K, 92 CRI	7	09A.02, 10A.01	







LIGHTING SCHEDULE (2/2)



Code	Type	Manufacturer	Details	Quantity	Location	Image
Lo7	Recessed uplight	ERCO	Tesis, 4000K with CRI 92, anti-slip safety glass	15	07A.02, 07A.03, 07A.04	
Lo8	Linear LED strip	Luminii	LineLED LL42 VHO, 320 lm/ft, 95+ CRI	27	003A.01, 03A.02, 04A.01, 04A.03, 4A.04, 07A.02, 071.03, 07A.04	
Lo9	LED Moving Head	PSSL	30W white LED, 7 colors, 540° pan, 270° tilt	1	04A.02	

MEDIA SCHEDULE (1/3)



Code	Type	Manufacturer	Details	Quantity	Location	Image
AVo1	Projector	Epson	4K PRO-UHD LS12000, 8.3 million pixels, 4K at 120 Hz, 1080p at 120 Hz, 204 W - 311 W, 22-30 dB	11	06A.01, 08A.05, 10A.02, 11A.03, 12A.03	
AVo2	Digital display	Elo Touch Solutions	Elo 2770L 27" Full HD Touchscreen Monitor, 1920 x 1080 @ 50, 60Hz	2	10A.01	
AVo3	Interactive tabletop	Ideum	Colossus II 84" 4K UHD tables with projected capacitive touch technology	1	09A.03	
AVo4	Directional speaker	Holosonics	AS-168iX, 85 dB SPL @ 1kHz, 25W max power draw, 16"L x 8"W x 1.66"H, 2.8 lbs	7	05A.02	
AVo5	Infrared depth sensor	Intel	RealSense™ Depth Camera D435, 90 fps, 1280 x 720, Depth field of view 87° x 58°	16	06A.01, 06A.04, 09A.03, 10A.02	
AVo6	Recording device	Sony	TX660 Digital Voice Recorder, 16 GB, 4" high	3	11A.01	





MEDIA SCHEDULE (2/3)



Code	Type	Manufacturer	Details	Quantity	Location	Image
AVo7	LCD video wall	LG	Ultra-narrow 3.5 mm bezel-to-bezel	4	o8A.01, o8A.02, o8A.03, o8A.04	
AVo8	Fog machine	Chauvet DJ	Hurricane Haze 2D, water-based haze machine, 18.7 lb	2	o6A.02, o6A.05	
AVo9	RFID reader	Vulcan RFID™	Iron USB Reader, 2.83" x 2.83" x 0.91", 0.18 lbs	16	o5A.02, o9A.01, o9A.03	
AV10	Button	Spark Fun	Dome Push button, 100 mm diameter x 72 mm height, 100grams	2 sets of 7- count	o3A.01, o3A.02, o8A.01, o8A.03, o8A.04	
AV11	Foot trigger pedal	Ddrum	Spring-action, heel grip	4	o7A.02, o7A.03, o7A.04	
AV12	LED sign counter	Electronic Displays	12"L x 4"H x 2.5"D, viewing distance 90 to 100 feet	2	o4A.04	

MEDIA SCHEDULE (3/3)



Code	Type	Manufacturer	Details	Quantity	Location	Image
AV13	Speaker	Aurasound	49mm, 84 dB sensitivity	5	05A.01, 11A.01	
AV14	Digital Kiosk	Elo Touch Solutions	22" full HD touchscreen monitor, 1920 x 1080 @ 50, 60Hz	13	04A.01, 04A.03, 05A.02	
AV15	Tablet	Samsung	2560 x 1600 pixels, 12.4 inches	20	03A.01, 03A.02, 09A.01, 12A.03	
AV16	ID card printer	Kodak	168x179x259mm, Dye- sublimation printing, 6.2 lbs	9	04A.01, 04A.03	













OBJECT SCHEDULE (1/2)



Code	Details	Medium	Location	Image	Code	Details	Medium	Location	Image
Obj01	Unmasking AI Book	Paper	04A.01, 04A.03, 05A.02		Obj07	Automating Inequality book	Paper	04A.01, 04A.03, 05A.02	
Obj02	Weapons of Math Destruction Book	Paper	04A.01, 04A.03, 05A.02		Obj08	Human Compatible Book	Paper	04A.01, 04A.03, 05A.02	
Obj03	AI Ethics Book	Paper	04A.01, 04A.03, 05A.02		Obj09	Hello World: Being Human in the Age of Algorithms Book	Paper	04A.01, 04A.03, 05A.02	
Obj04	Algorithms of Oppression book	Paper	04A.01, 04A.03, 05A.02		Obj10	The Myth of Artificial Intelligence book	Paper	04A.01, 04A.03, 05A.02	
Obj05	Black Skin, White Masks Book	Paper	04A.01, 04A.03, 05A.02		Obj11	Handcuffs	Steel	05A.02	
Obj06	Viral Justice Book	Paper	04A.01, 04A.03, 05A.02		Obj12	Breathalyzer	Plastic	05A.02	

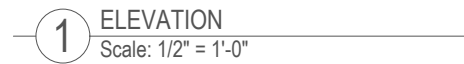
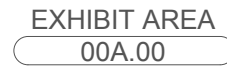
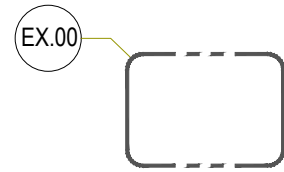
OBJECT SCHEDULE (2/2)



Code	Details	Medium	Location	Image	Code	Details	Medium	Location	Image
OBJ13	Mask	Plastic	05A.02		OBJ19	Double-edged sword	Aluminum	07A.01	
OBJ14	Red megaphone	Plastic	05A.01		OBJ20	Markers	Ink, Plastic	09A.02	
OBJ15	Blue megaphone	Plastic	11A.01		OBJ21	Stop sign	Aluminum	11A.03	
OBJ16	Traffic cone	Plastic	11A.02		OBJ22	Bump sign	Aluminum	11A.01	
OBJ17	Traffic pylon	Plastic	11A.02		OBJ23	Traffic light	Aluminum, Plastic	11A.02	
OBJ18	Security camera	Plastic	06A.02, 06A.05		OBJ24	Wall Mounted Rotary Dial Corded Telephone	Brushed chrome, Plastic	11A.01	

**PLANS, SECTIONS,
AND ELEVATIONS**

SYMBOLS LIST



AREA REFERENCE

AREA IDENTIFIER

DRAWING TAG

ABOVE FINISHED FLOOR

ENTRANCE AND EXIT

SECTION REFERENCE TAG



GRAPHIC

MATERIAL

MEDIA

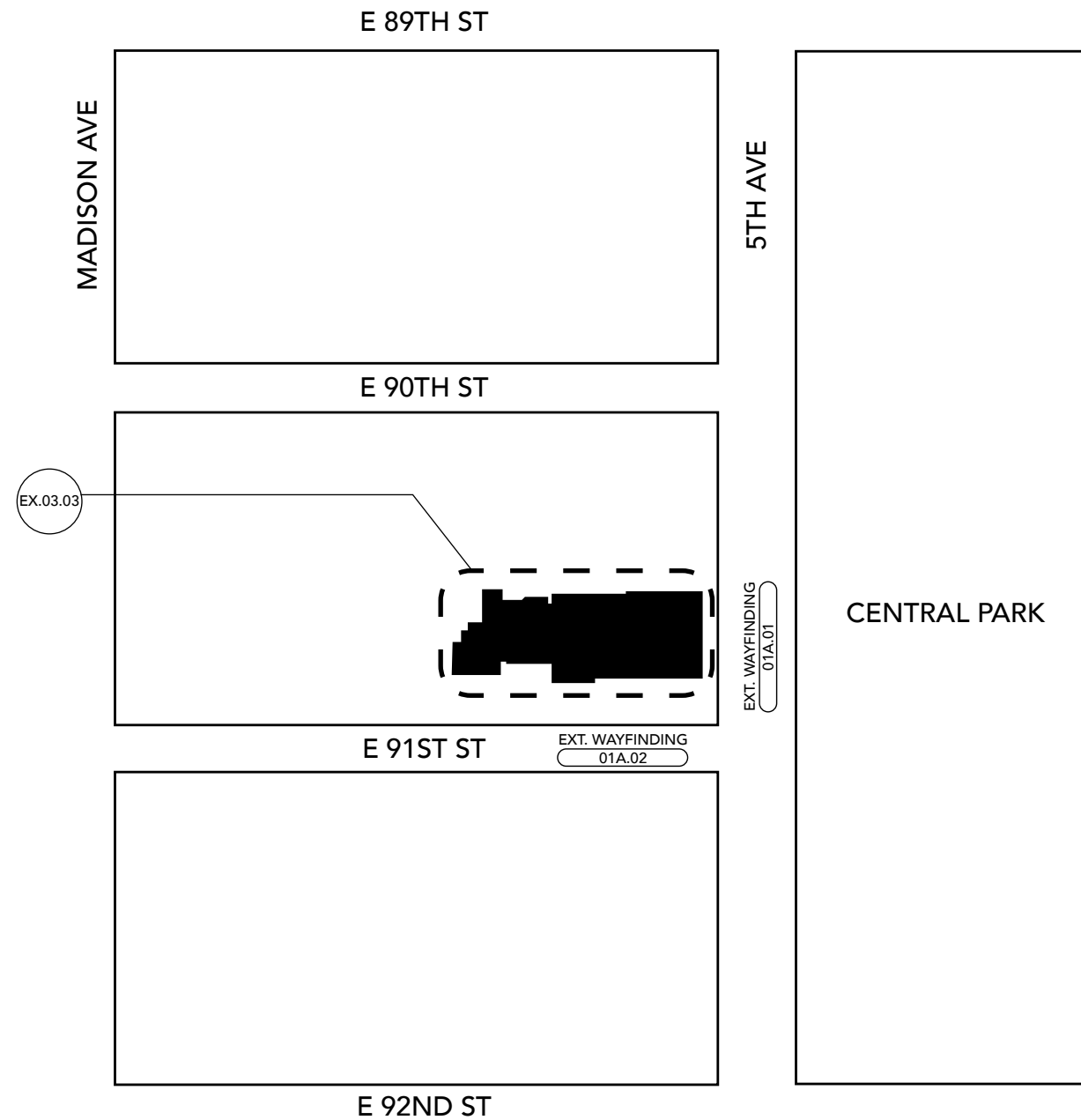
DUPLEX RECEPTACLE OUTLET
DISCUSS CHILD SAFE OPTIONS

DATA RECEPTACLE OUTLET

RECESSED COMBINED DUPLEX
POWER & DATA RECEPTACLE
OUTLET

EXIT SIGN







Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

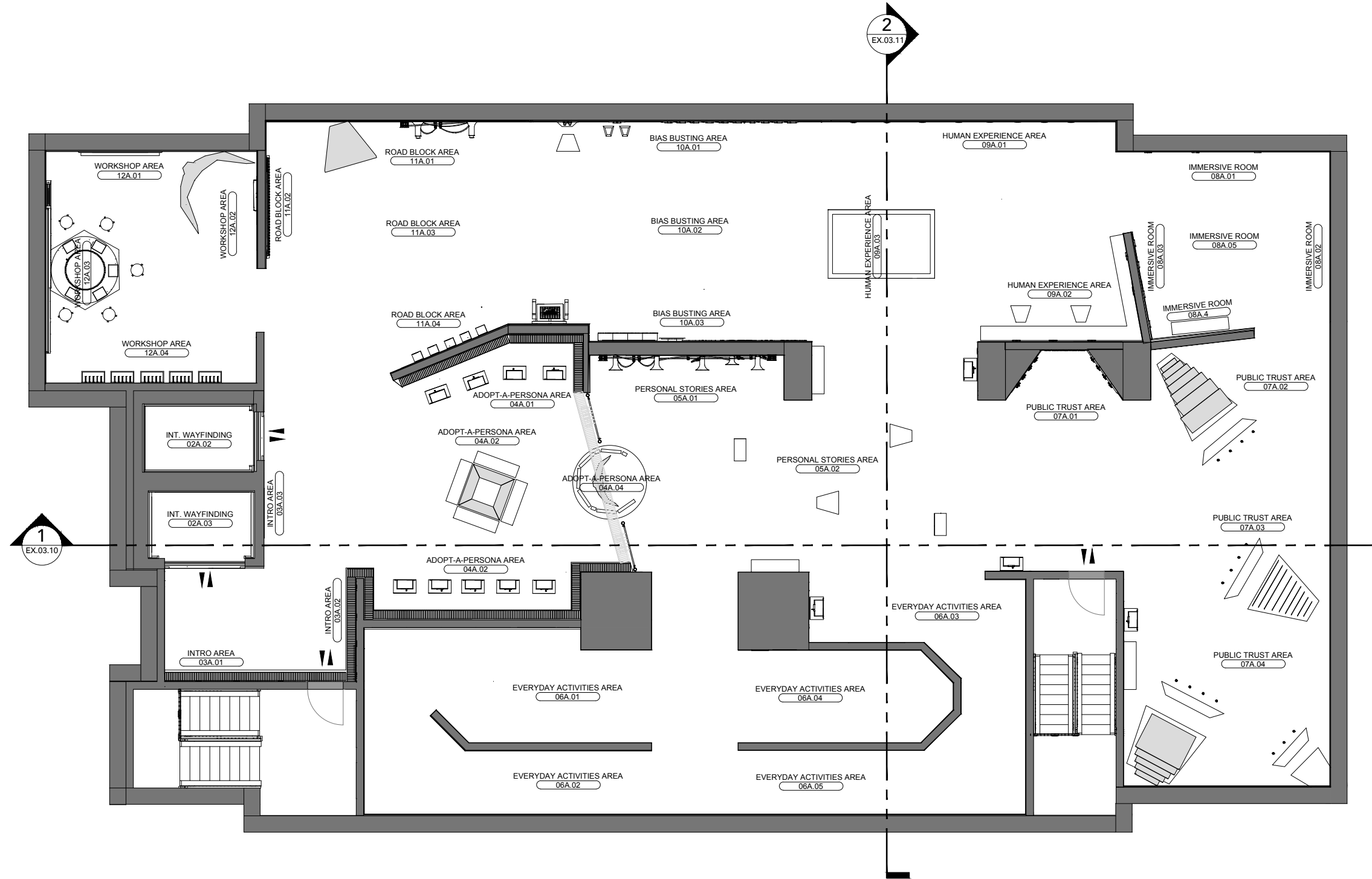
Date
December 8, 2023

Drawing Name
Coded Floor Plan

Drawing Number
EX.03.03

Scale
3/32" = 1' - 0"

Key Plan
Not Applicable



1 CODED FLOOR PLAN
SCALE: 3/32" = 1' - 0"

FLOOR
9'-1" AFF

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

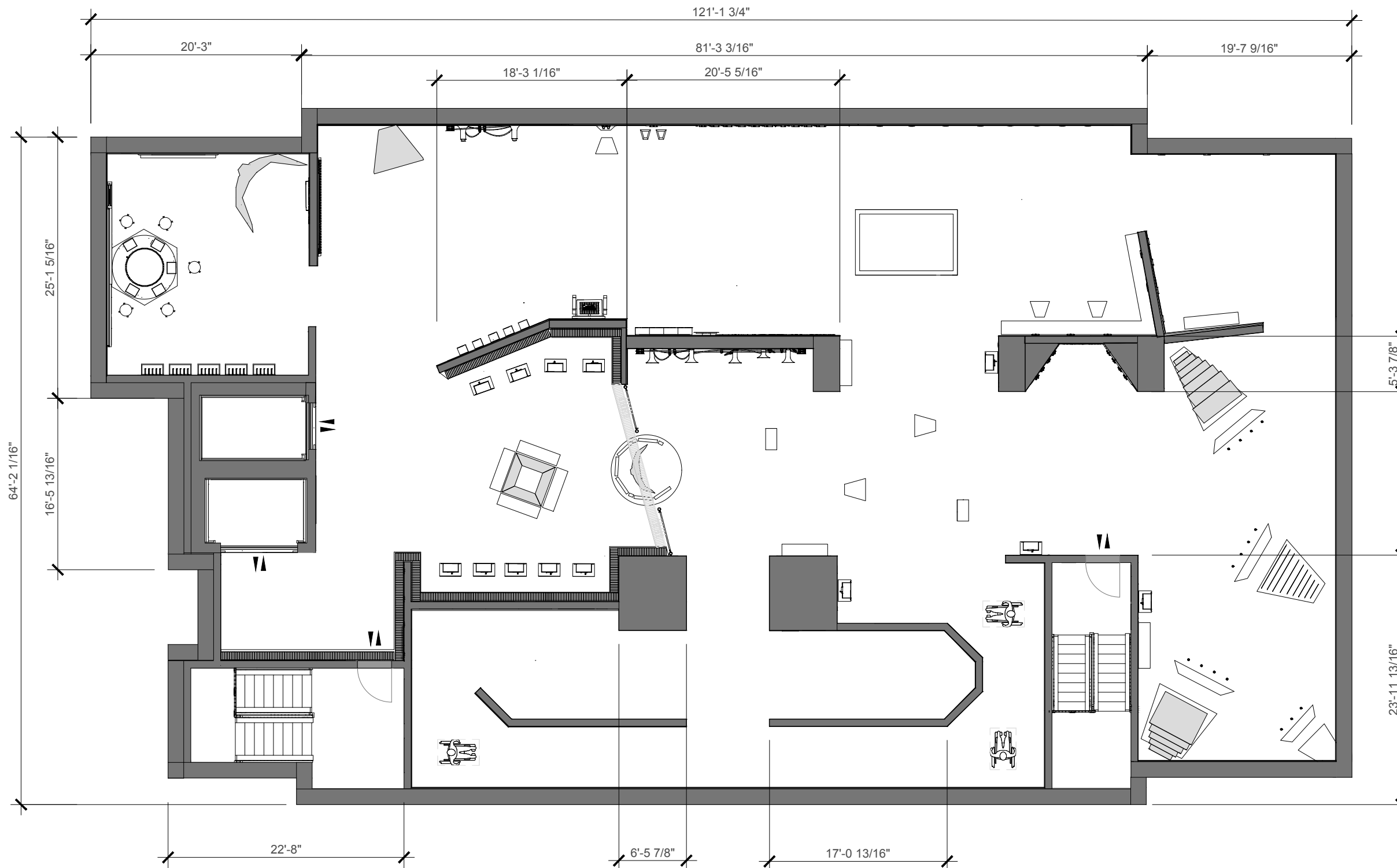
Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
Floor Plan with Dimensions

Drawing Number
EX.03.04

Scale
3/32" = 1' - 0"

Key Plan
Not Applicable



1 FLOOR PLAN WITH DIMENSIONS
SCALE: 3/32" = 1' - 0"

FLOOR
9'-1" AFF



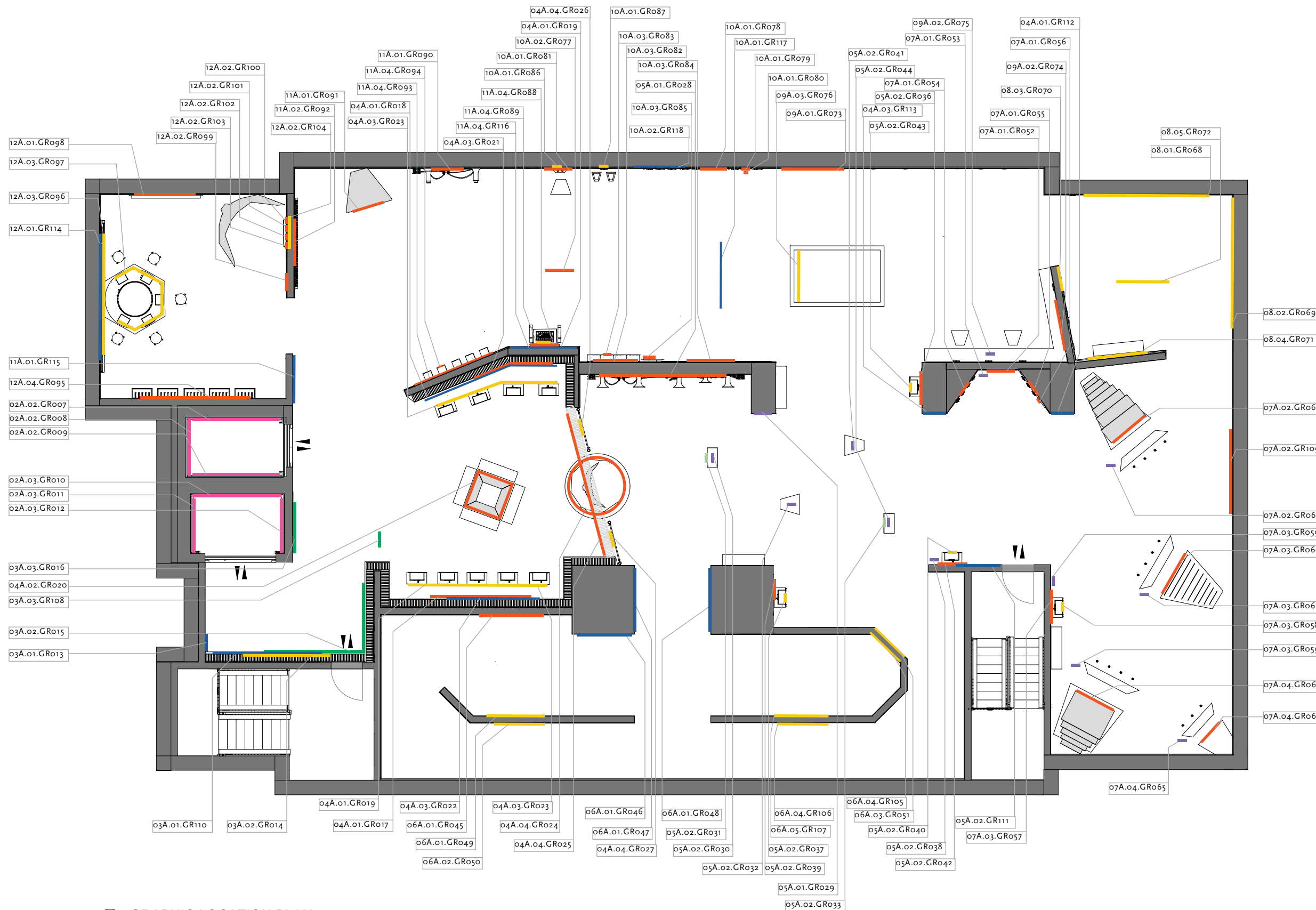
Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
Graphic Location Plan

Drawing Number
EX.03.05

Scale
3/32" = 1' - 0"

Key Plan
Not Applicable



1 GRAPHIC LOCATION PLAN
SCALE: 3/32" = 1' - 0"

FLOOR
9'-1" AFF

- WAYFINDING
- INTRODUCTION
- EXHIBIT CONTENT
- DIRECTIVE
- LABEL
- MURAL
- DIGITAL MEDIA



Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

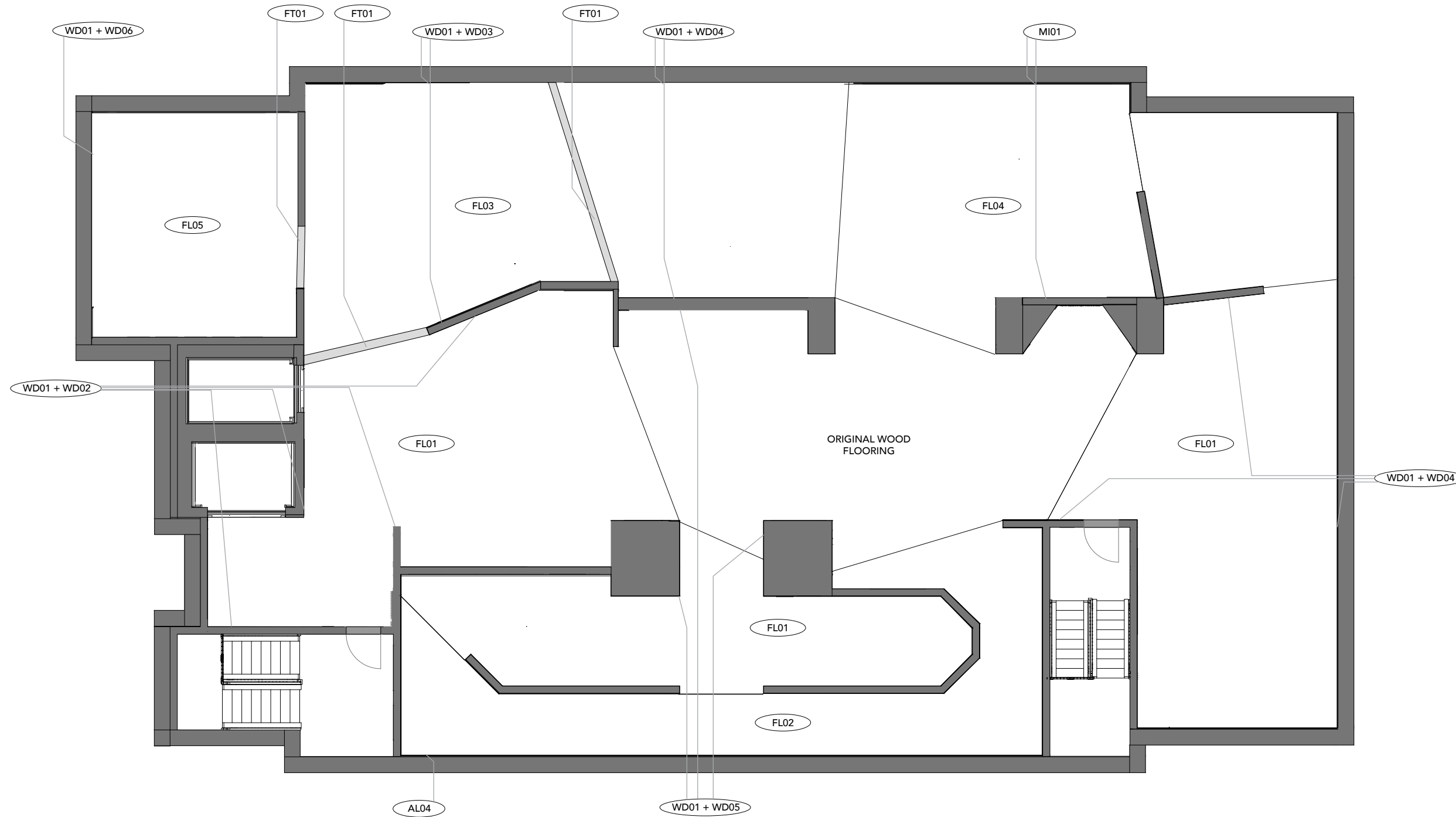
Date
December 8, 2023

Drawing Name
Material Plan

Drawing Number
EX.03.06

Scale
3/32" = 1'-0"

Key Plan
Not Applicable



1 MATERIAL PLAN
SCALE: 3/32" = 1'-0"

FLOOR
0'-1/2" AFF



Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

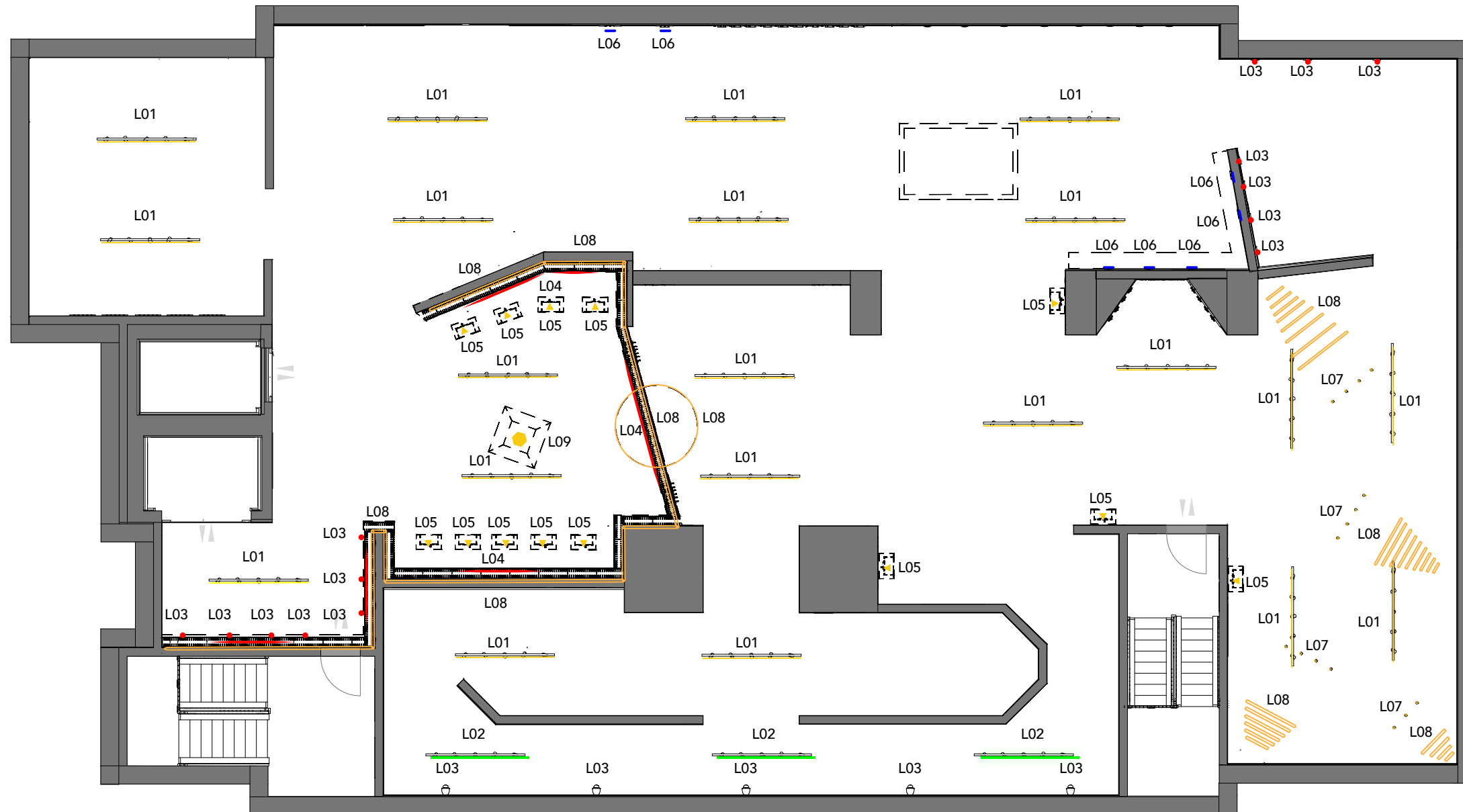
Date
December 8, 2023

Drawing Name
Reflected Ceiling Plan

Drawing Number
EX.03.07

Scale
3/32" = 1' - 0"

Key Plan
Not Applicable



1 REFLECTED CEILING PLAN
SCALE: 3/32" = 1' - 0"

FLOOR
10'-5" AFF

- | | | |
|-------|-------|-------|
| — L01 | ◆ L04 | ○ L07 |
| — L02 | ▲ L05 | — L08 |
| ● L03 | — L06 | ⬡ L09 |



Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

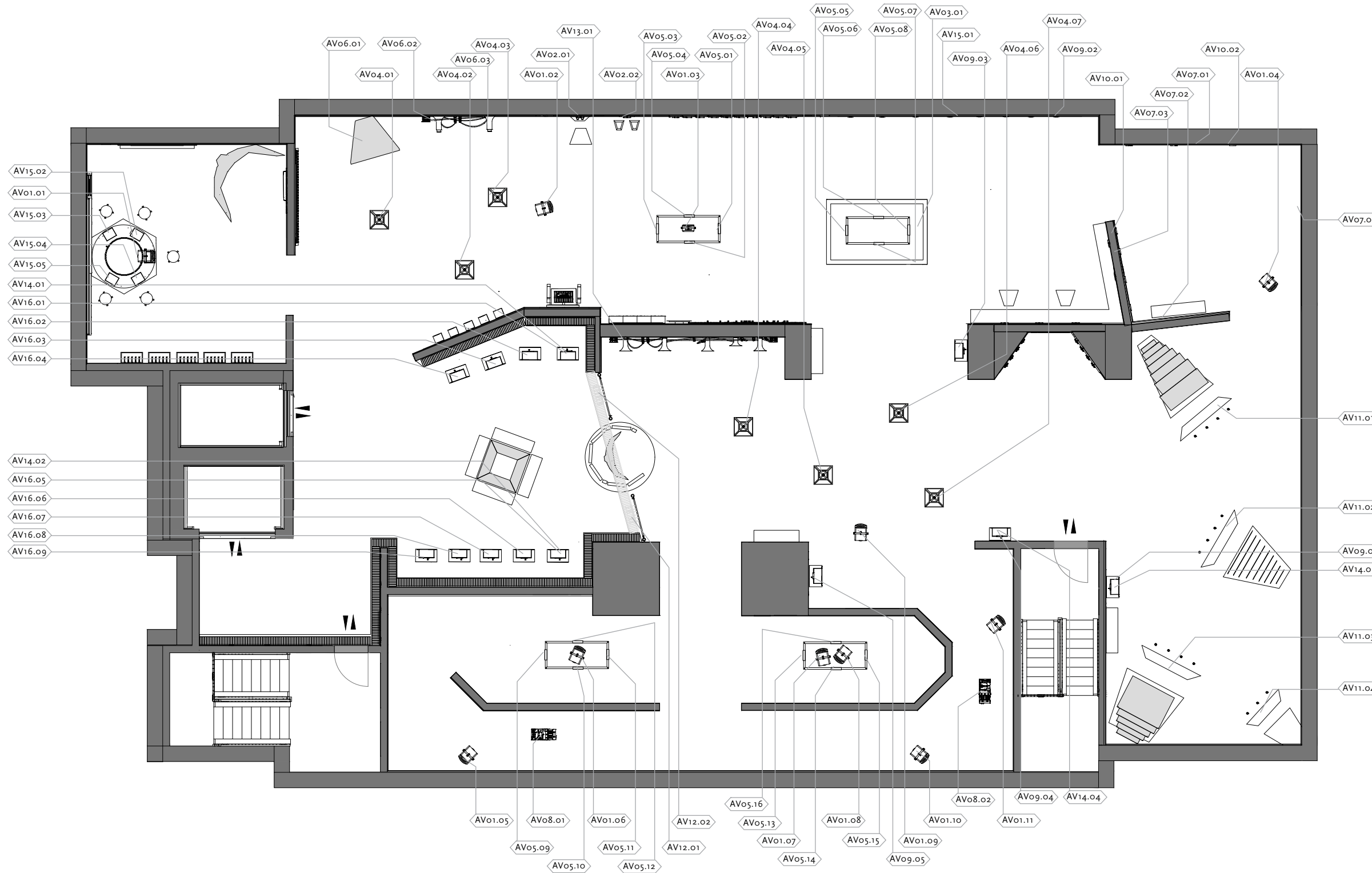
Date
December 8, 2023

Drawing Name
Media Plan

Drawing Number
EX.03.08

Scale
3/32" = 1' - 0"

Key Plan
Not Applicable



1 MEDIA PLAN
SCALE: 3/32" = 1' - 0"

FLOOR
10'-5" AFF



Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

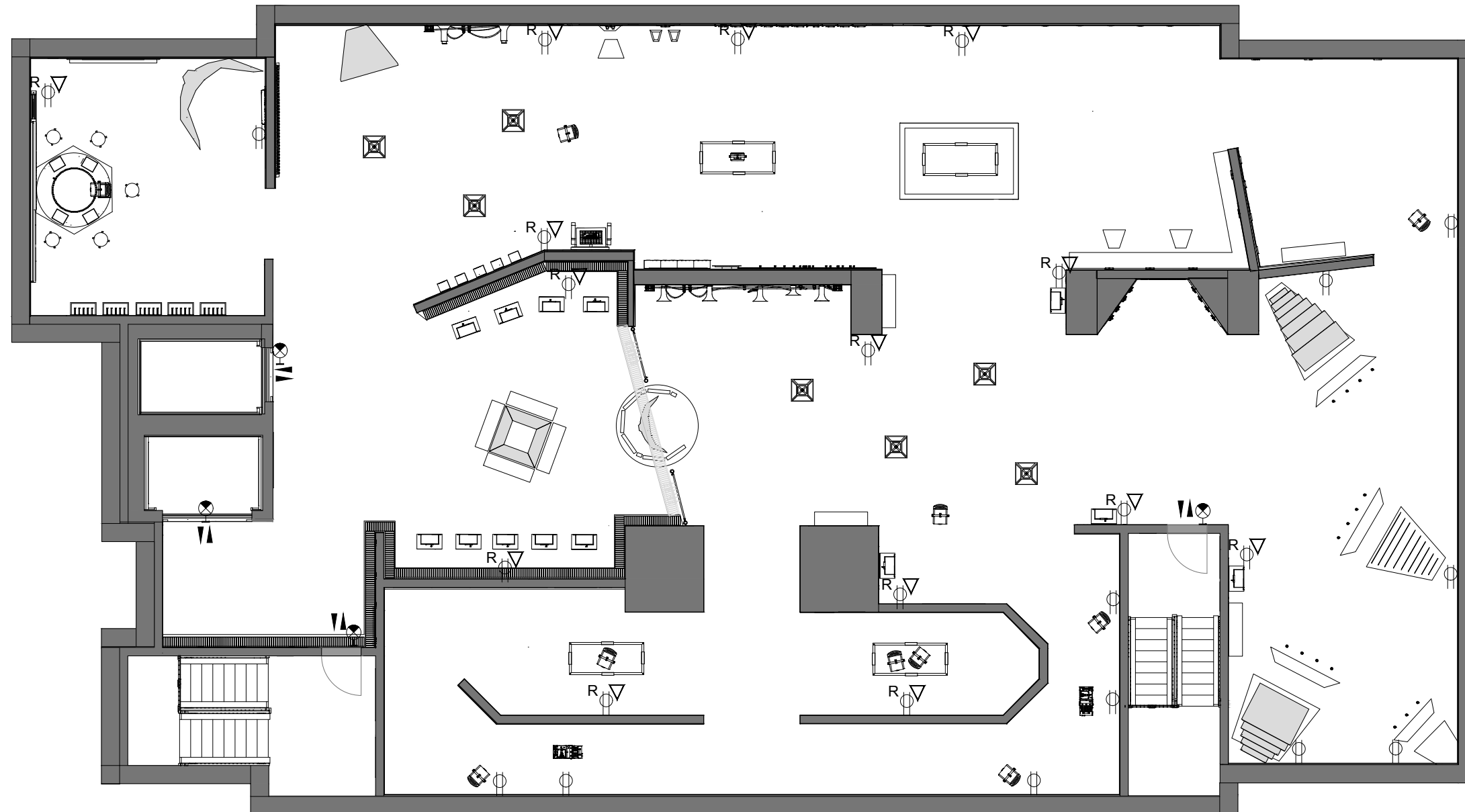
Date
December 8, 2023

Drawing Name
Power Plan

Drawing Number
EX.03.09

Scale
3/32" = 1' - 0"

Key Plan
Not Applicable



1 POWER PLAN
SCALE: 3/32" = 1' - 0"

FLOOR
10'-5" AFF

- | | | | |
|--|--|--|---|
| | DUPLEX RECEPTACLE OUTLET
DISCUSS CHILD SAFE OPTIONS | | RECESSED COMBINED DUPLEX
POWER & DATA RECEPTACLE
OUTLET |
| | DATA RECEPTACLE OUTLET | | EXIT SIGN |



Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

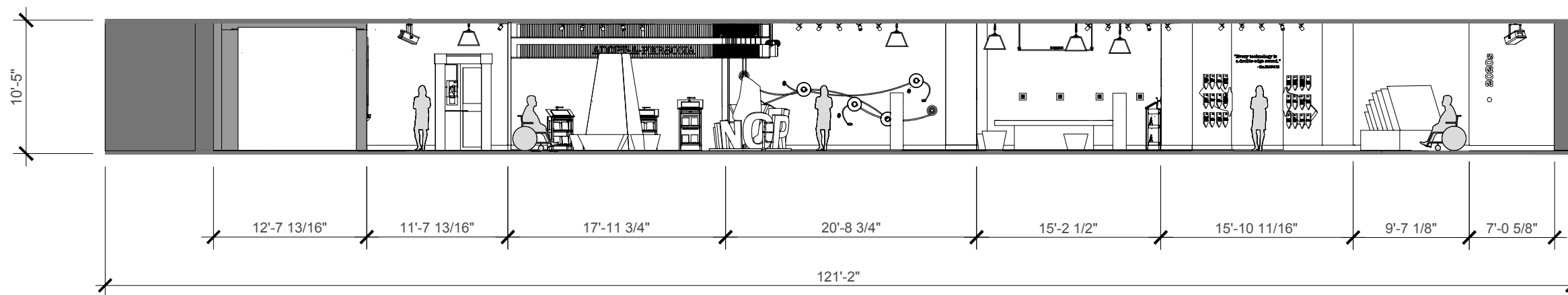
Date
December 8, 2023

Drawing Name
Section 1

Drawing Number
EX.03.10

Scale
3/32" = 1' - 0"

Key Plan
Not Applicable



1 SECTION 1
SCALE: 3/32" = 1' - 0"



Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

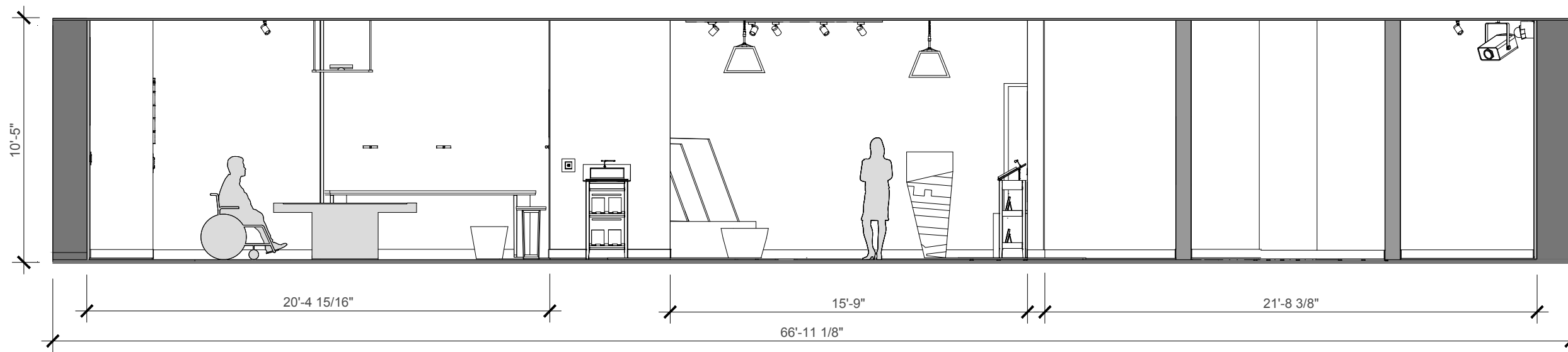
Date
December 8, 2023

Drawing Name
Section 2

Drawing Number
EX.03.11

Scale
3/16" = 1' - 0"

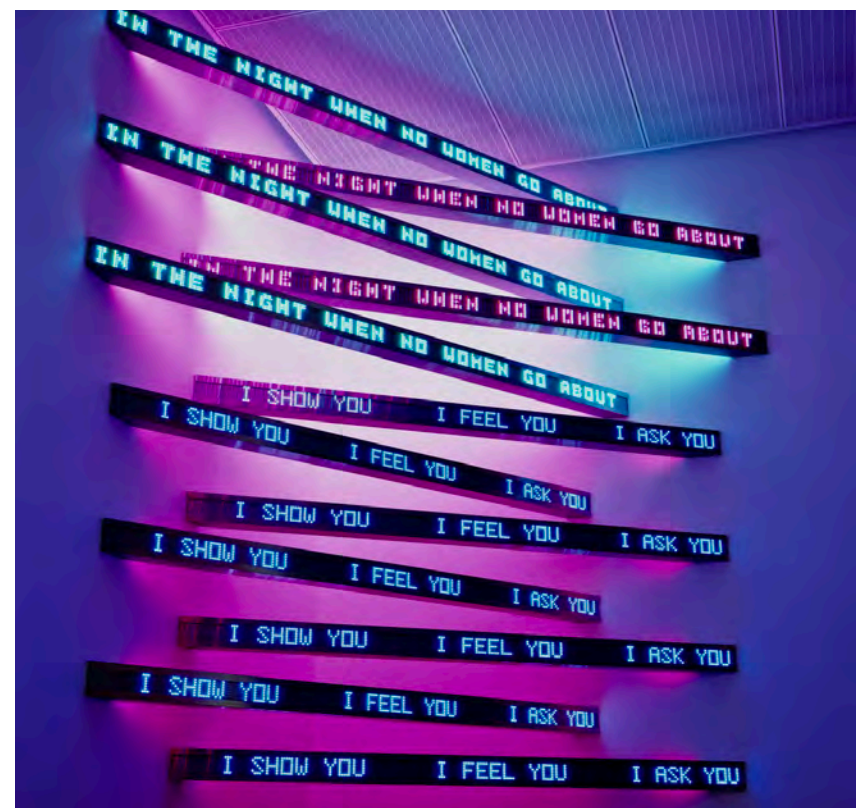
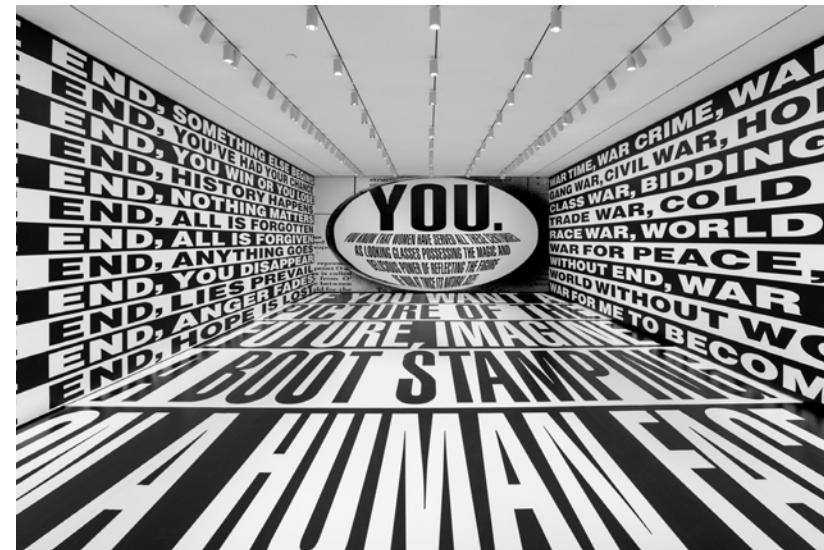
Key Plan
Not Applicable



1 SECTION 2
SCALE: 3/16" = 1' - 0"

GRAPHIC SYSTEMS

MOOD BOARD



FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Mood board

Drawing Number
EX.04.01

Scale
NTS

Key Plan
Not Applicable

Inspiration from Alexandre Rodtchenko, Barbara Kruger and Jenny Holzer

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
Graphic Look and Feel

Drawing Number
EX.04.02

Scale
NTS

Key Plan
Not Applicable

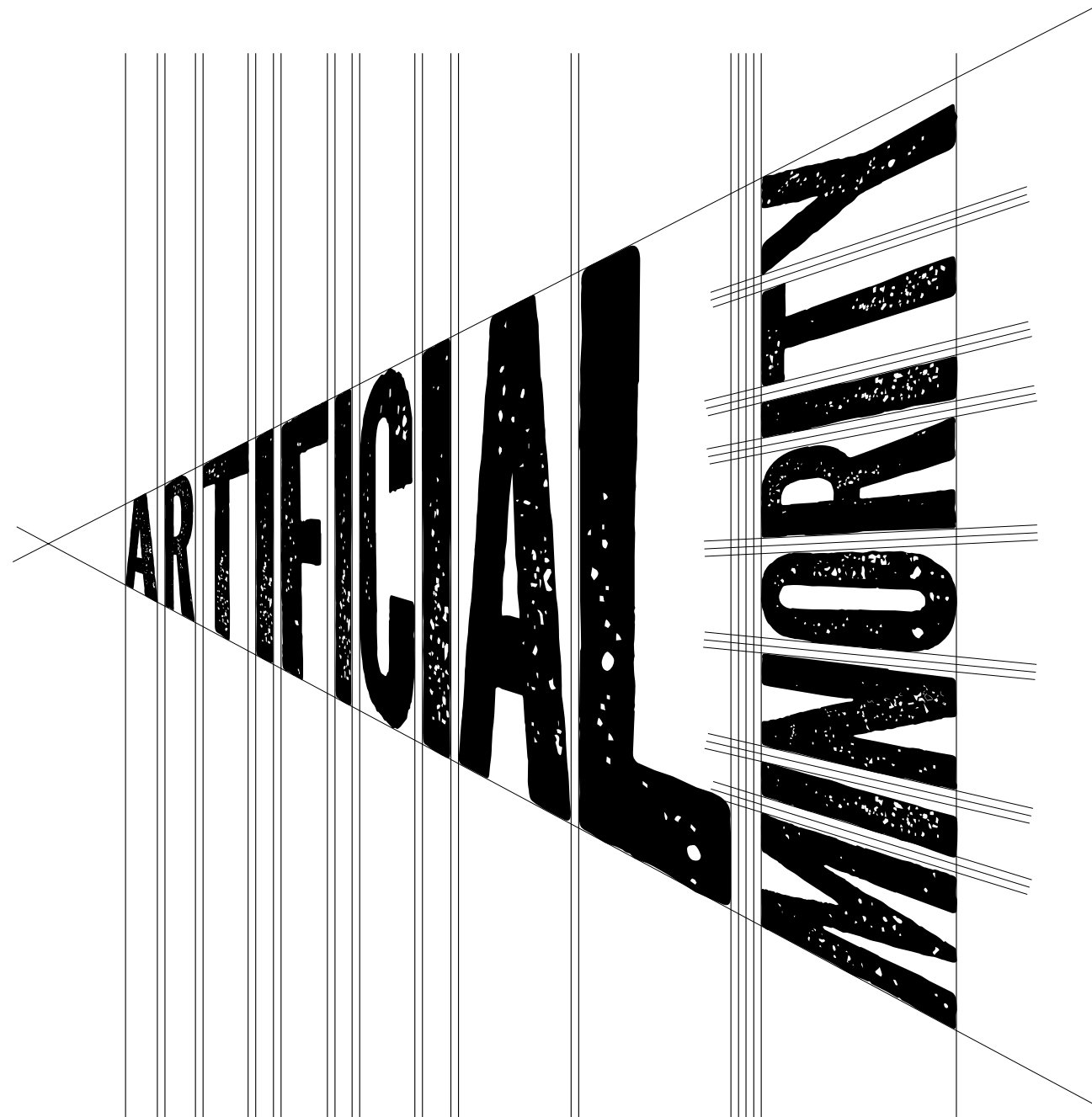


ARTIFICIAL MINORITY

Combating unconscious biases embedded in facial recognition

Our **unconscious biases** have been a problem in the past, present, and now the upcoming future. These biases - racial bias, gender bias, and age bias - **perpetuate discrimination** in **technology**.

LOGO LOCKUP AND TYPE



PF FUEL GRIME
ABCDEFGHIJKLMNOPQRSTUVWXYZ

Typeka Bold
ABCDEFGHIJKLMNOPQRSTUVWXYZ

P22 Typewriter Regular
ABCDEFGHIJKLMNOPQRSTUVWXYZ

FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023

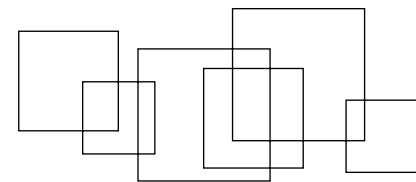
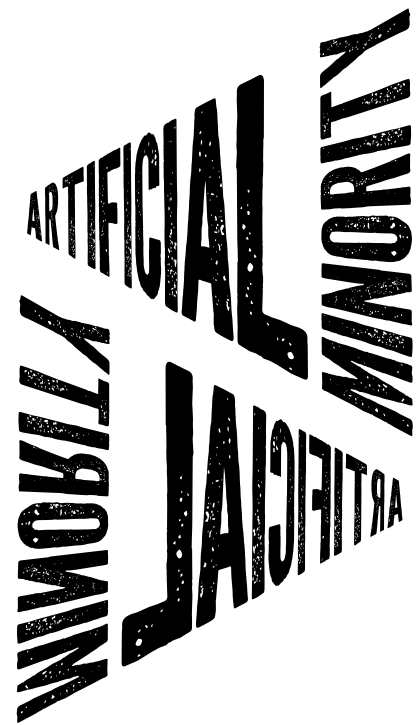
Drawing Name
Logo Lockup and Type

Drawing Number
EX.04.03

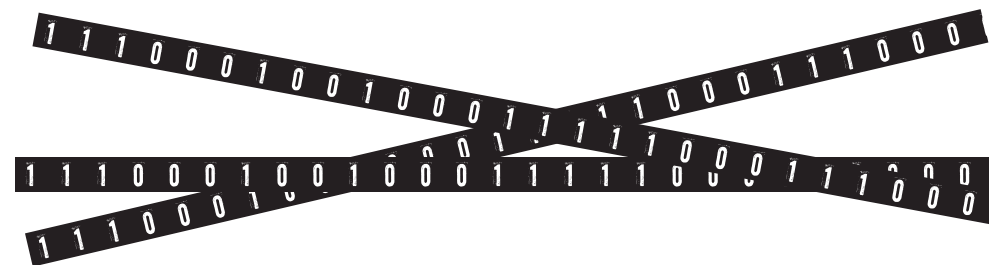
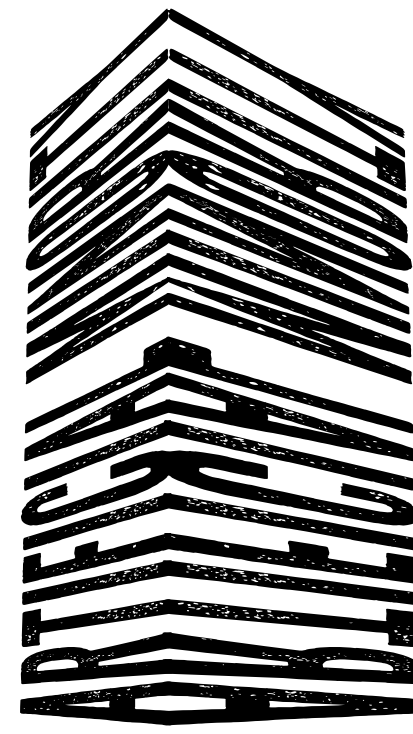
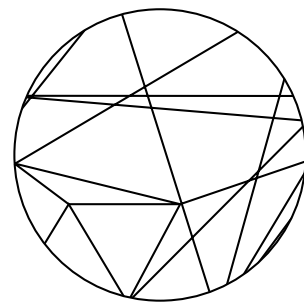
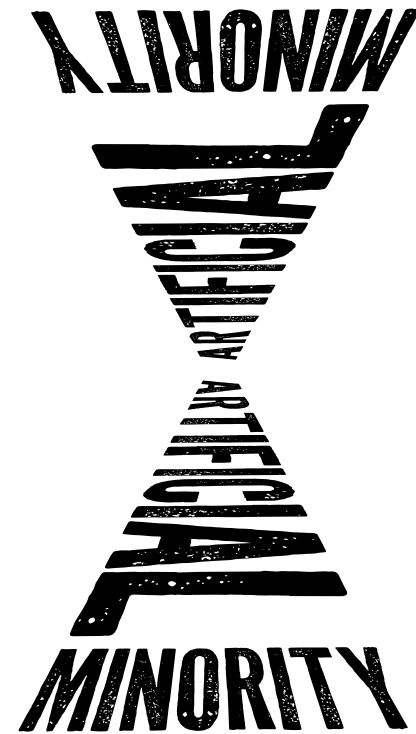
Scale
NTS

Key Plan
Not Applicable

PATTERNS



1	1	0	0	1	0	0	1	1	1	1	0	0
0	0	1	1	0	1	1	0	0	0	0	1	1
1	1	0	0	0	0	1	1	1	1	1	0	0
0	0	1	1	0	1	1	0	0	0	0	1	1
1	1	0	0	0	0	1	1	1	1	1	0	0
0	0	0	1	0	0	1	0	0	0	0	0	1



FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Patterns

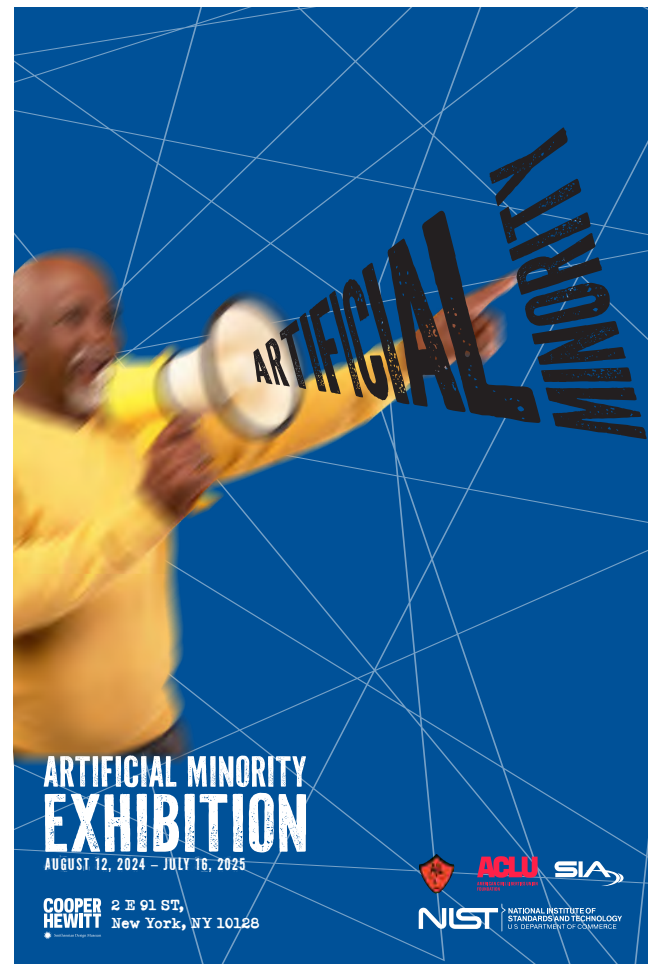
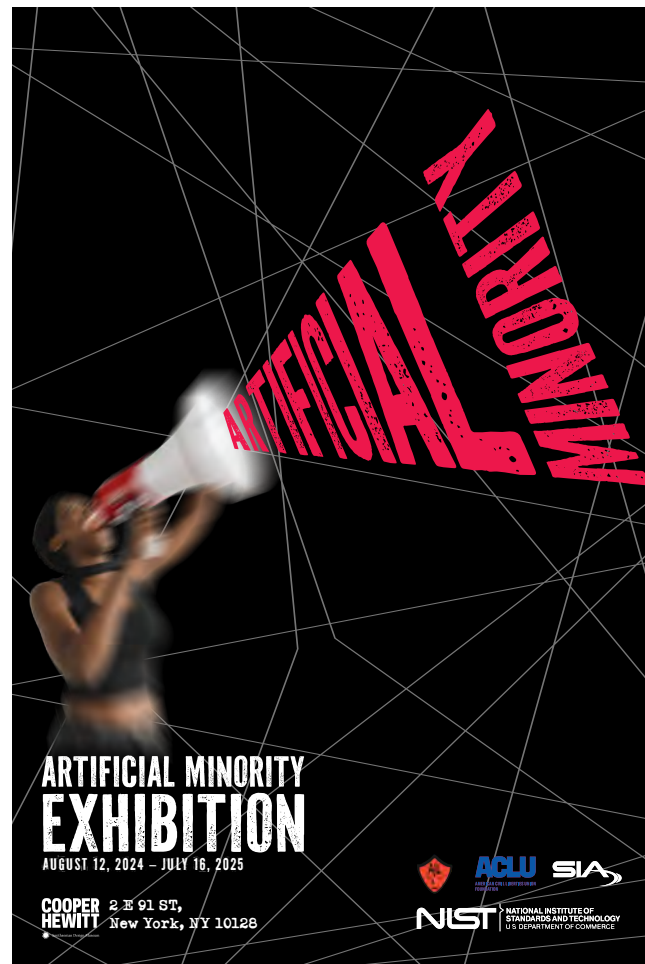
Drawing Number
EX.04.04

Scale
NTS

Key Plan
Not Applicable



POSTER VARIATIONS



FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Poster Variations

Drawing Number
EX.04.06

Scale
NTS

Key Plan
Not Applicable

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023

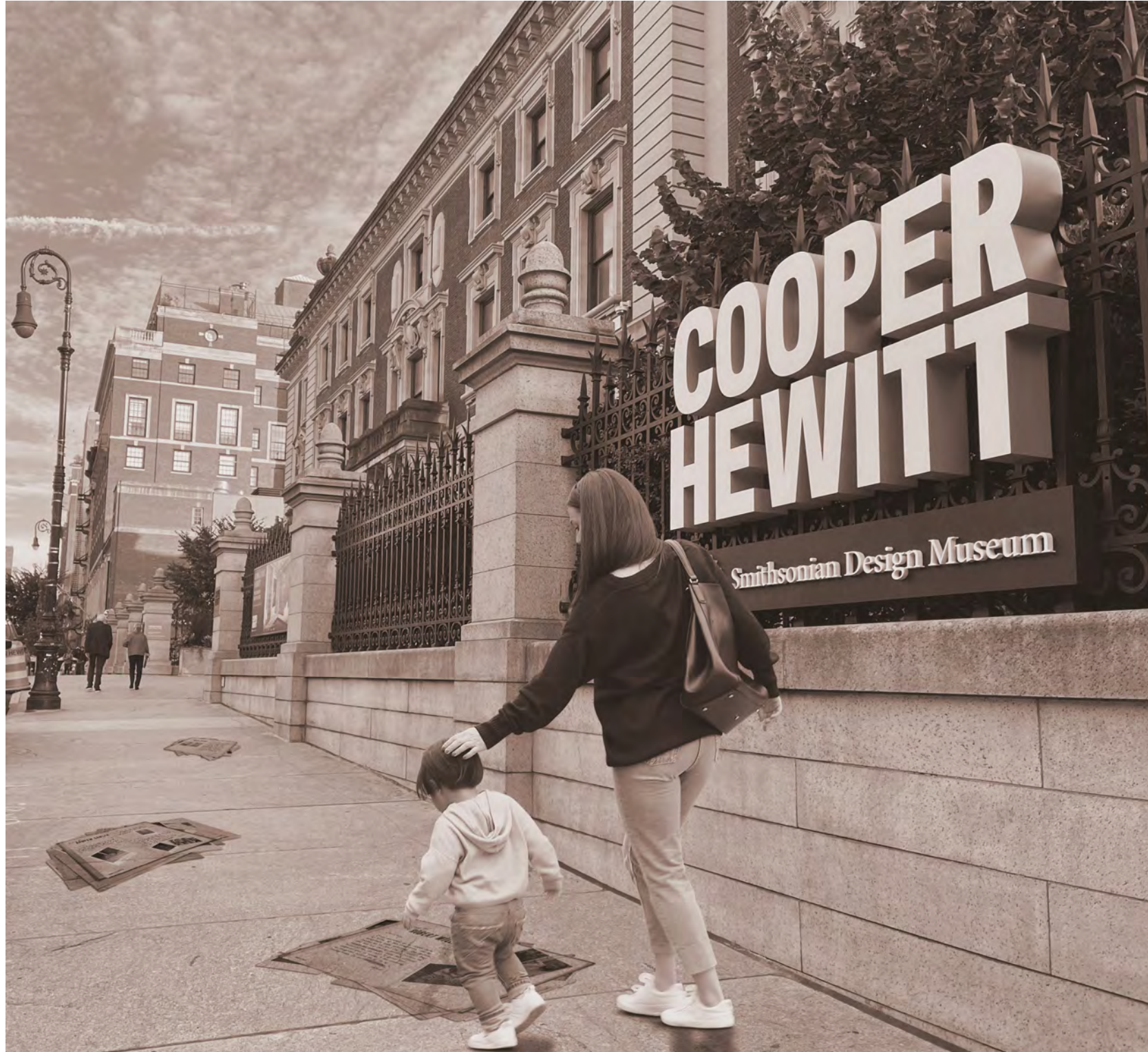
Drawing Name
Posters Mockup

Drawing Number
EX.04.07

Scale
NTS

Key Plan
Not Applicable





Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Exterior Wayfinding 1

Drawing Number
EX.04.08

Scale
NTS

Key Plan
Not Applicable



Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Exterior Wayfinding 2

Drawing Number
EX.04.09

Scale
NTS

Key Plan
Not Applicable



Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Interior Wayfinding

Drawing Number
EX.04.10

Scale
NTS

Key Plan
Not Applicable

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
Wayfinding at Central Park

Drawing Number
EX.04.11

Scale
NTS

Key Plan
Not Applicable



COLLATERAL 1



FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Collateral 1

Drawing Number
EX.04.12

Scale
NTS

Key Plan
Not Applicable

COLLATERAL 2

FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Collateral 2

Drawing Number
EX.04.13

Scale
NTS

Key Plan
Not Applicable



PRACTICE
RESPONSIBLE AI

You have received
funding for an AI startup.



It all starts with an idea.

Learn how to work with an ethical AI workflow
by asking critical questions.

Spin the wheel.
If it landed on 1,
then answer questions
about your data input.

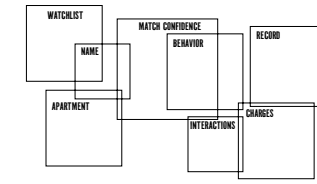
Is there bias already in the dataset?
Has informed consent been gathered for this data?
What is the process to clean up the data?



ARTIFICIAL INTELLIGENCE
MACHINE LEARNING
DEEP LEARNING
COMPUTER VISION
FACIAL RECOGNITION
TECHNOLOGY

RETAIL PHONE
CONCERTS AIRPORTS
SPORT POLICE
VENUES STATION

SUPERMARKET
SUBWAY
SMART HOMES
SCHOOLS
STREET SURVEILLANCE



FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



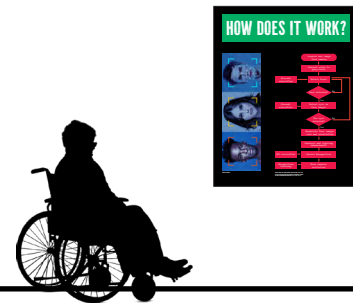
Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

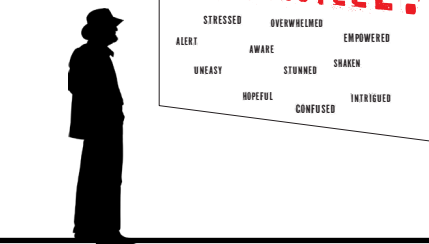
Date
December 8, 2023
Drawing Name
Graphic Family
Drawing Number
EX.04.14
Scale
NTS
Key Plan
Not Applicable



COMPAS

Correctional Offender
Management, Prediction
and Risk Assessment
Software

Connect the cable to the outlet to listen to interviews about people whose lives were positively and negatively impacted by facial recognition technology.



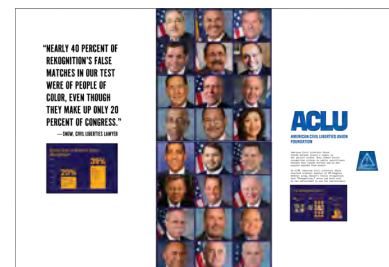
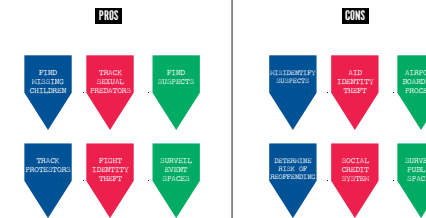
"IF YOU HAVE A FACE, YOU HAVE A PLACE IN THE CONVERSATION ABOUT AI."
— ALGORITHMIC JUSTICE LEAGUE

RECORD YOUR EXPERIENCES WITH FACIAL RECOGNITION

"ONE IN TWO AMERICAN ADULTS IS IN A LAW ENFORCEMENT FACE RECOGNITION NETWORK."
— GEORGETOWN LAW

"HOW MUCH DO YOU HAVE TO CHANGE YOURSELF TO FIT IN?"
— DR. JOY BUOLAMWINI

"EVERY TECHNOLOGY IS A DOUBLE-EDGED SWORD."
— DR. FEI-FEI LI



NIST
NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
U.S. DEPARTMENT OF COMMERCE

"THE PROGRESS THAT WAS MADE IN THE CIVIL RIGHTS ERA COULD BE ROLLED BACK UNDER THE GUISE OF MACHINE NEUTRALITY."
— DR. JOY BUOLAMWINI

"IF WE'RE NOT CHECKING, THAT ALGORITHM COULD ACTUALLY DISCRIMINATE AND EVERY SINGLE ONE OF THOSE PEOPLE PUT THEIR ENTIRE FUTURE ON THE LINE."
— DR. JOY BUOLAMWINI

Statistical/ Computational Biases

"YOU CAN'T EXPERIMENT WITH PEOPLE'S RIGHTS."
— SILKIE CARLO, DIRECTOR OF BIG BROTHER WATCH

BIG BROTHER WATCH

"WHAT WORRIES ME ABOUT AI IS POWER. IT'S REALLY ABOUT WHO OWNS THE CODE."
— DR. CATRY O'NEIL

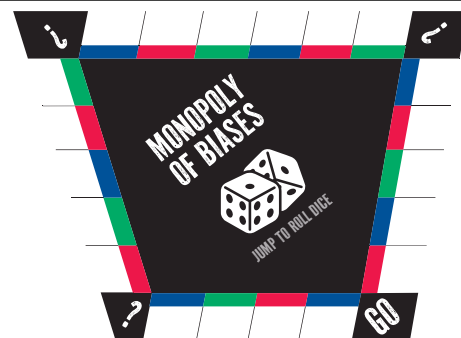


"DATASETS AREN'T SIMPLY RAW MATERIALS TO FEED ALGORITHMS, BUT ARE POLITICAL INTERVENTIONS."
— DR. CATRY O'NEIL

"PEOPLE ARE SUFFERING FROM ALGORITHMIC HARM AND THERE IS NO APPEAL SYSTEM, THERE'S NO ACCOUNTABILITY."
— DR. CATRY O'NEIL, AUTHOR OF WEAPONS OF MATH DESTRUCTION

"THE UNDERLYING STRUCTURE OF THE ALGORITHM ISN'T RACIST OR SEXIST, BUT THE DATA IS."
— DR. CATRY O'NEIL

"BEFORE WE HAD THE ALGORITHM, WE HAD BIAS. AND WE ALL KNOW THAT HUMANS COULD BE BIAS."
— DR. CATRY O'NEIL



DETAILS

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



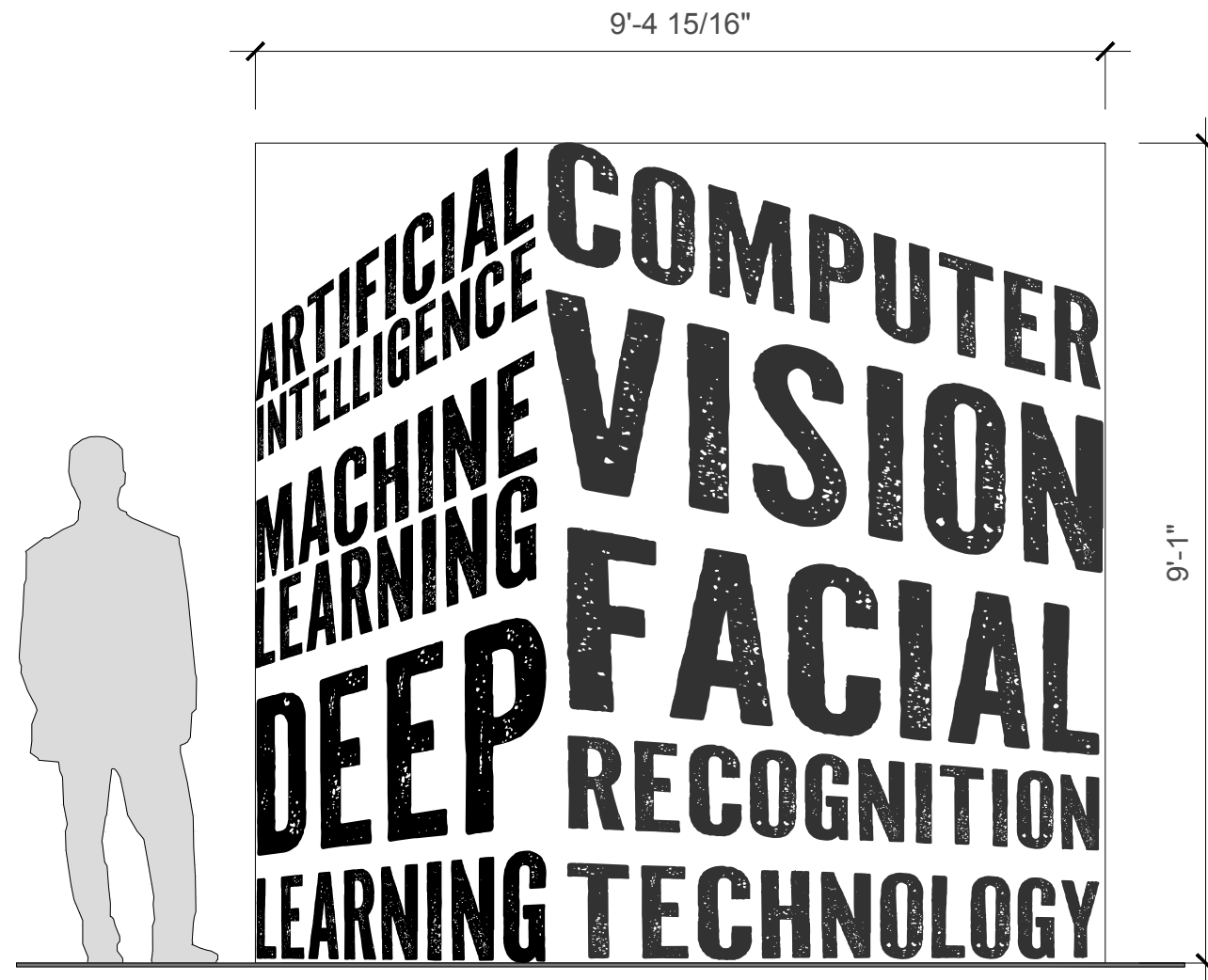
Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

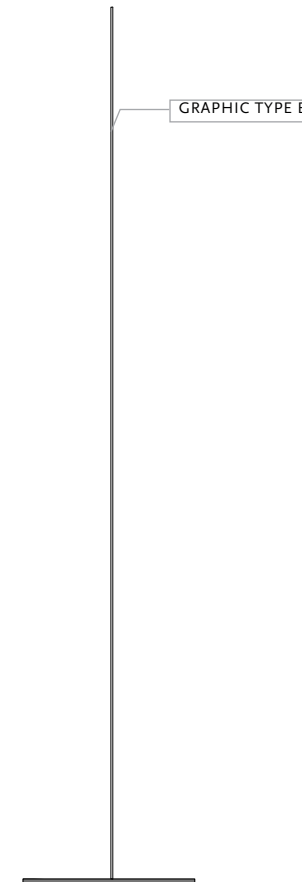
Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
DISTORTED TYPE
Drawing Number
EX.05.01
Scale
1/2" = 1'-0"
Key Plan
Not Applicable



1 03A.01.GR013 DISTORTED TYPE ELEVATION
SCALE: 1/2" = 1'-0"



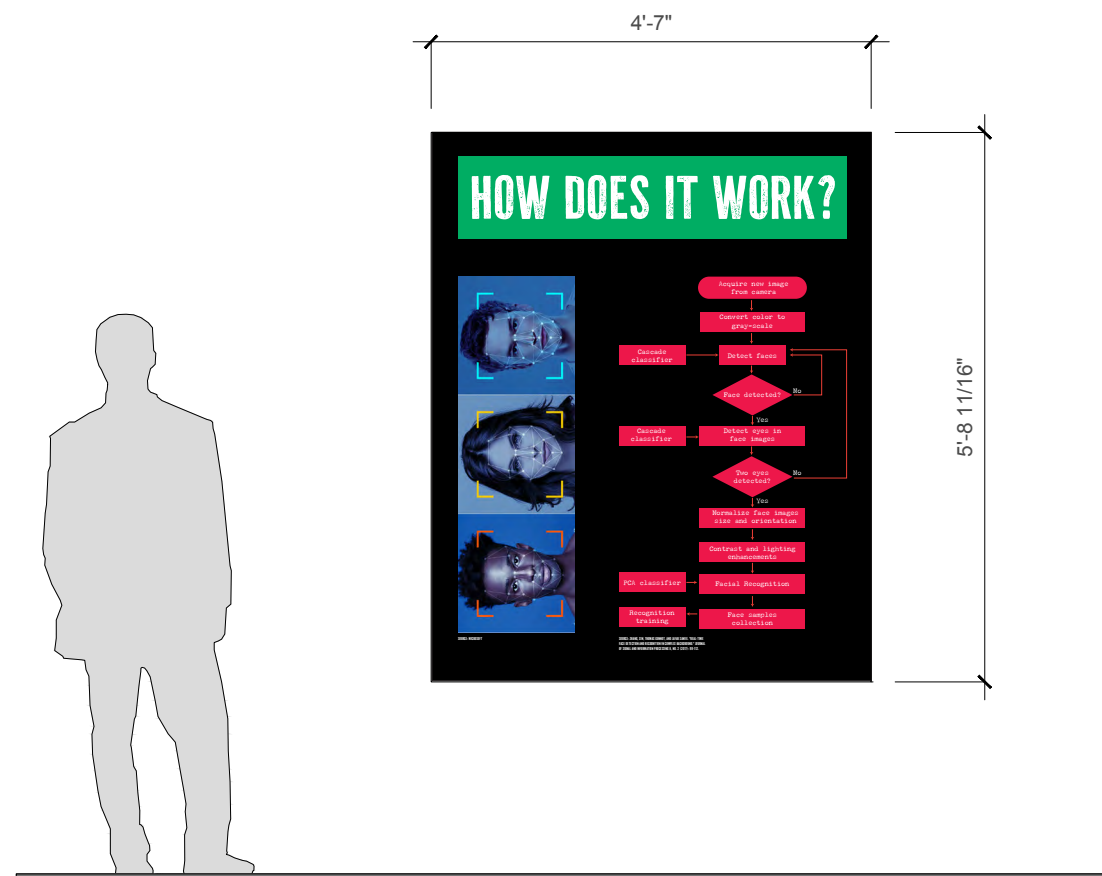
3 03A.01.GR013 DISTORTED TYPE SIDE
SCALE: 1/2" = 1'-0"

2 03A.01.GR013 DISTORTED TYPE TOP
SCALE: 1/2" = 1'-0"

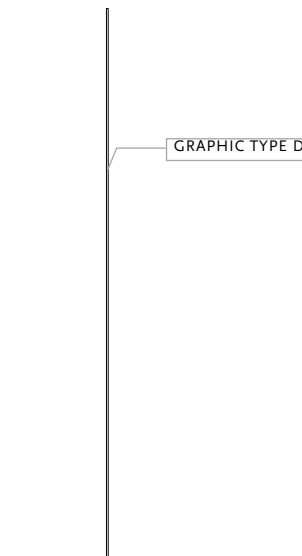


Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
INFOGRAPHIC
Drawing Number
EX.05.02
Scale
1/2" = 1'-0"
Key Plan
Not Applicable



1 03A.03.GR016 INFOGRAPHIC ELEVATION
SCALE: 1/2" = 1'-0"



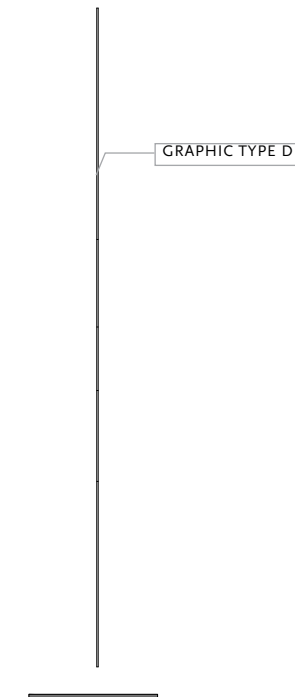
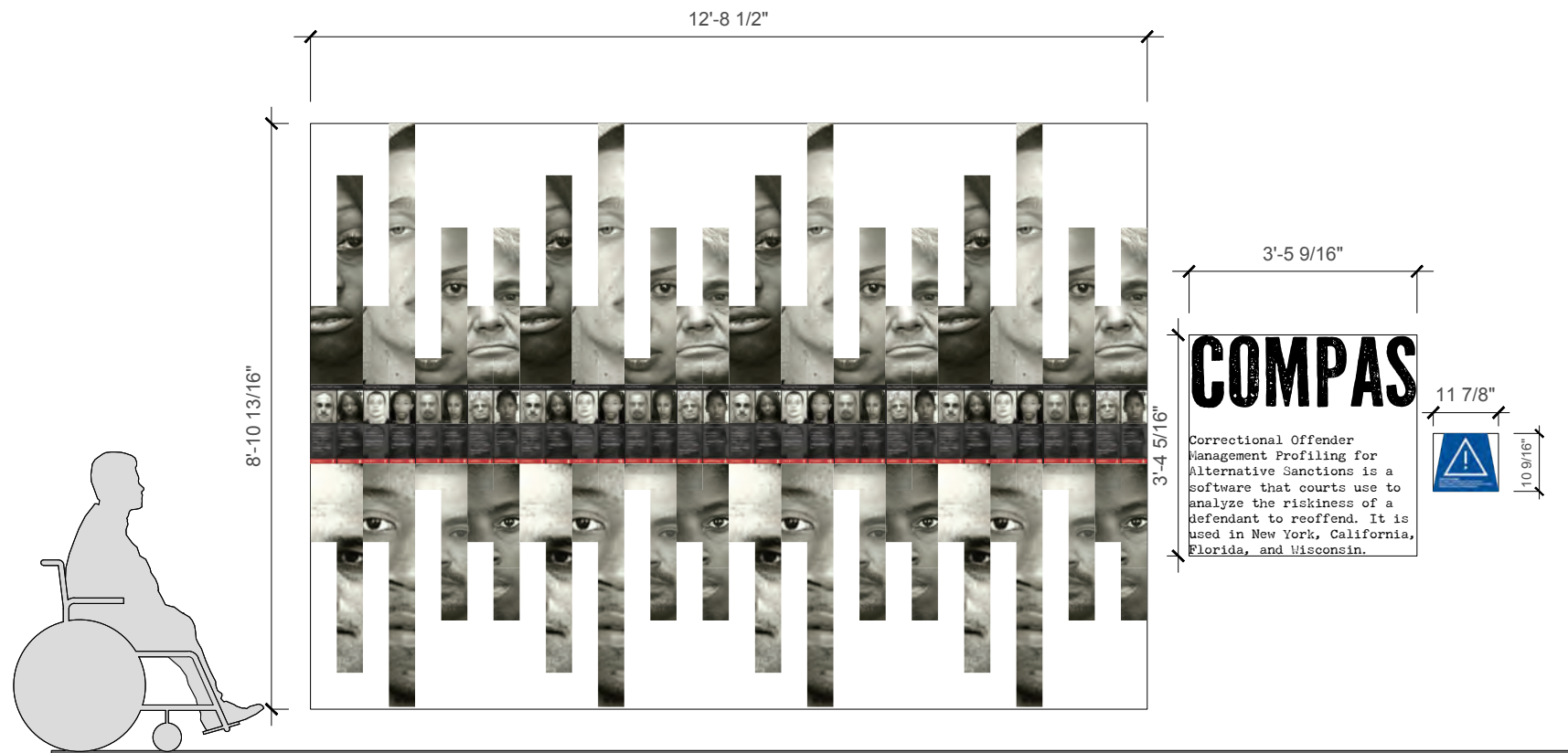
3 03A.03.GR016 INFOGRAPHIC SIDE
SCALE: 1/2" = 1'-0"

2 03A.03.GR016 INFOGRAPHIC TOP
SCALE: 1/2" = 1'-0"



Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
C.O.M.P.A.S.
Drawing Number
EX.05.03
Scale
3/8" = 1'-0"
Key Plan
Not Applicable



1 06A.01.GR045 COMPAS ELEVATION
SCALE: 3/8" = 1'-0"

3 06A.01.GR045 COMPAS SIDE
SCALE: 3/8" = 1'-0"

2 06A.01.GR045 COMPAS TOP
SCALE: 3/8" = 1'-0"

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

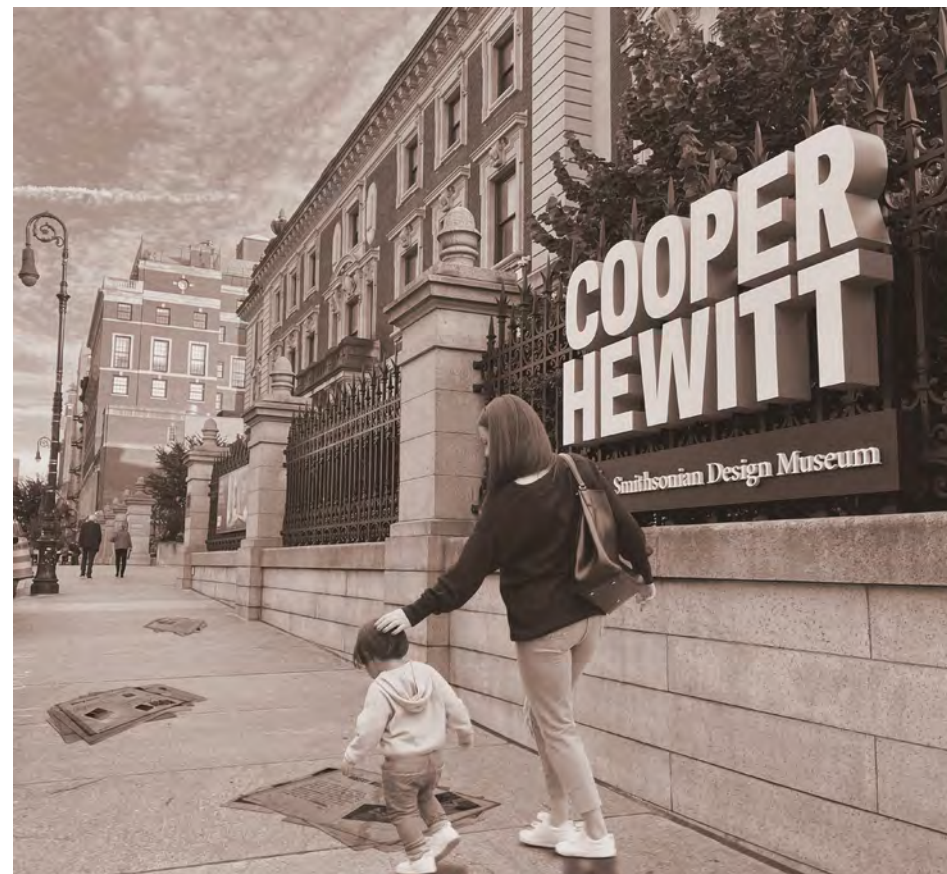
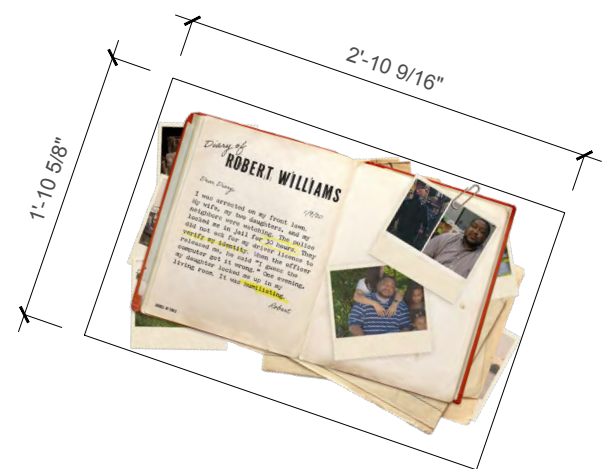
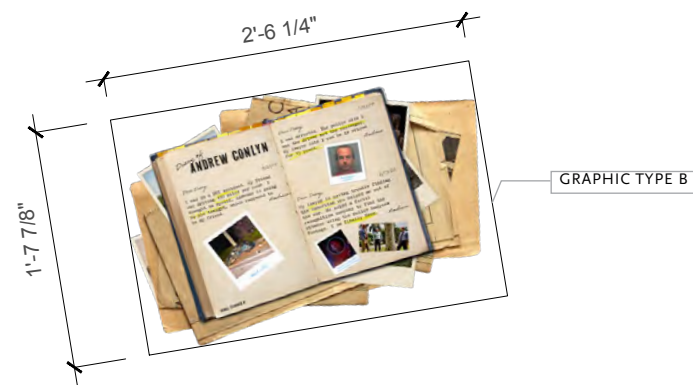
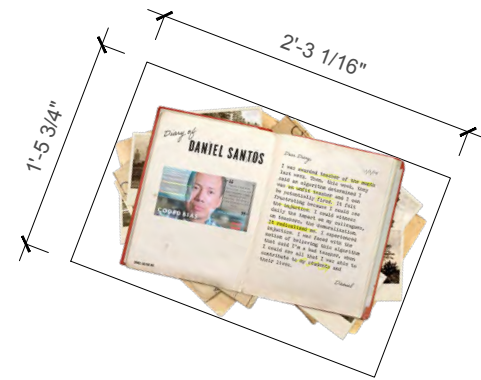
Date
December 8, 2023

Drawing Name
FLOOR GRAPHIC

Drawing Number
EX.05.04

Scale
3/4" = 1'-0"

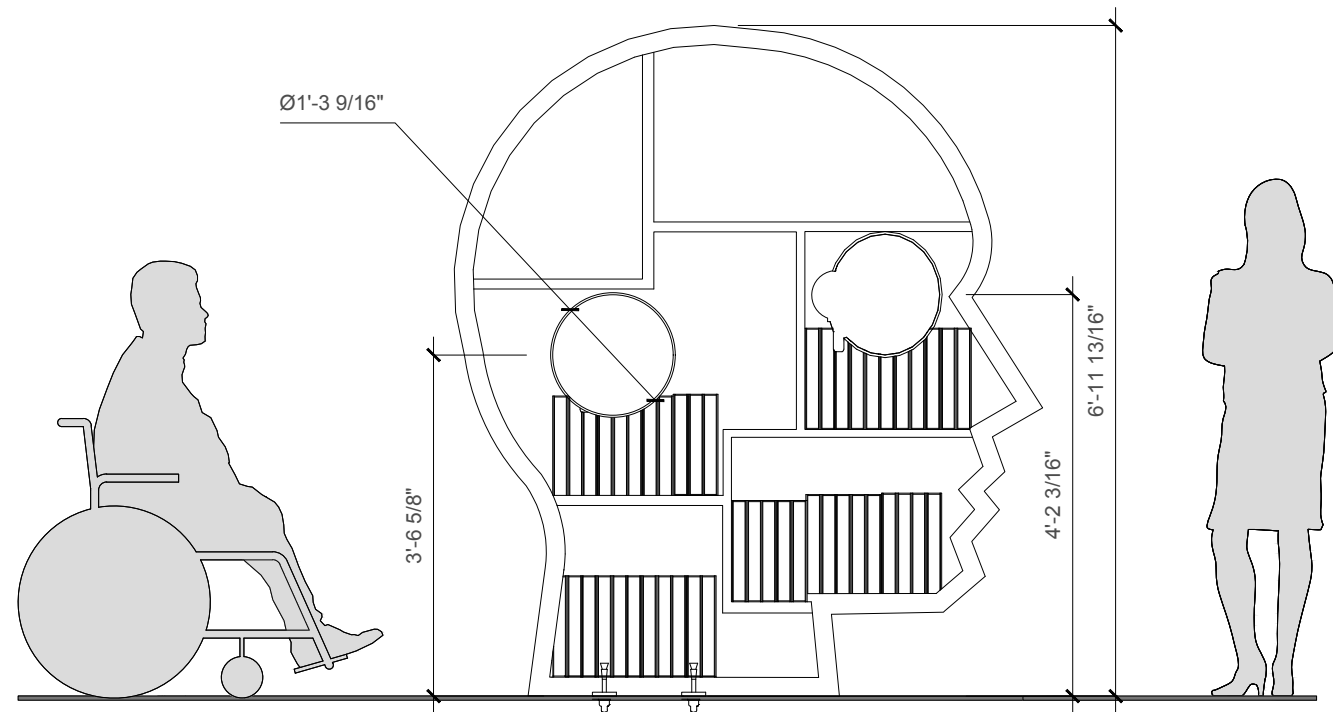
Key Plan
Not Applicable



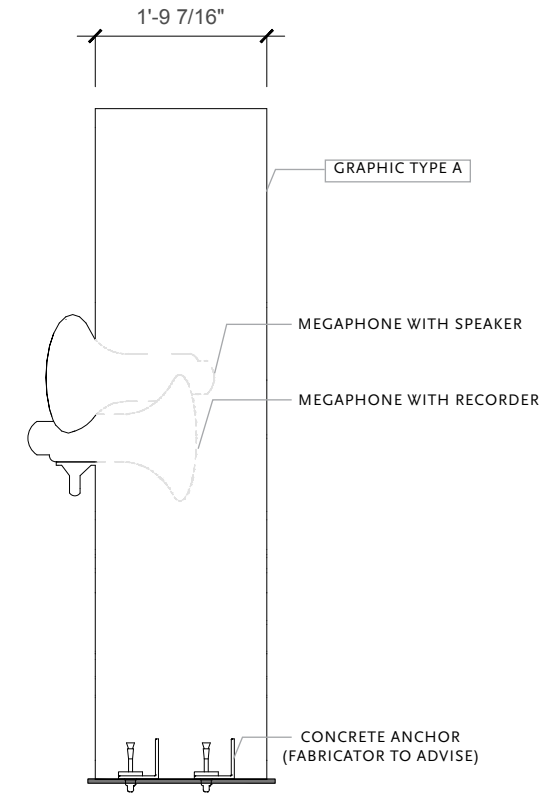


Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

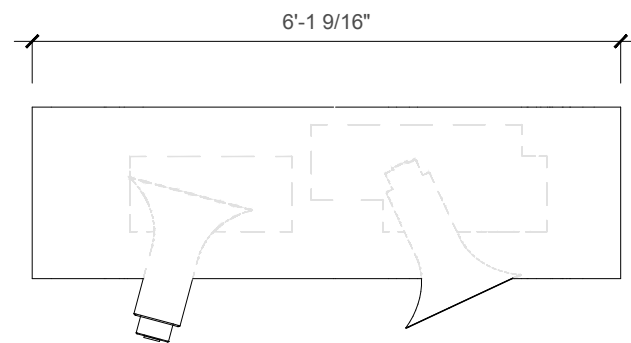
Date
December 8, 2023
Drawing Name
BOOKCASE
Drawing Number
EX.05.05
Scale
1/2" = 1'-0"
Key Plan
Not Applicable



1 01A.01.GR001 BOOKCASE ELEVATION
SCALE: 1/2" = 1'-0"



3 01A.01.GR001 BOOKCASE SIDE
SCALE: 1/2" = 1'-0"



2 01A.01.GR001 BOOKCASE TOP
SCALE: 1/2" = 1'-0"





Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

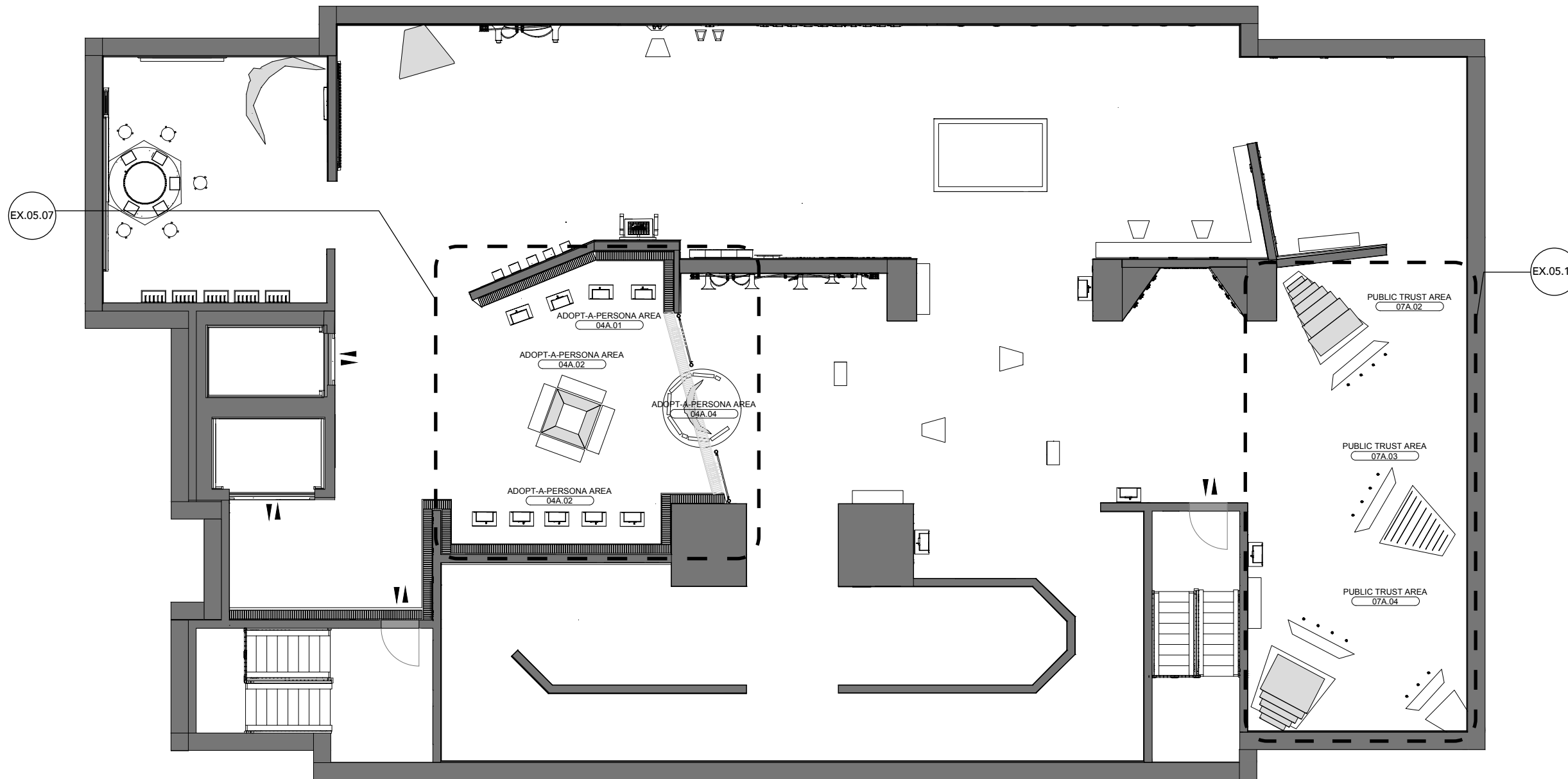
Date
December 8, 2023

Drawing Name
DETAILED AREAS

Drawing Number
EX.05.06

Scale
3/32" = 1' - 0"

Key Plan
Not Applicable



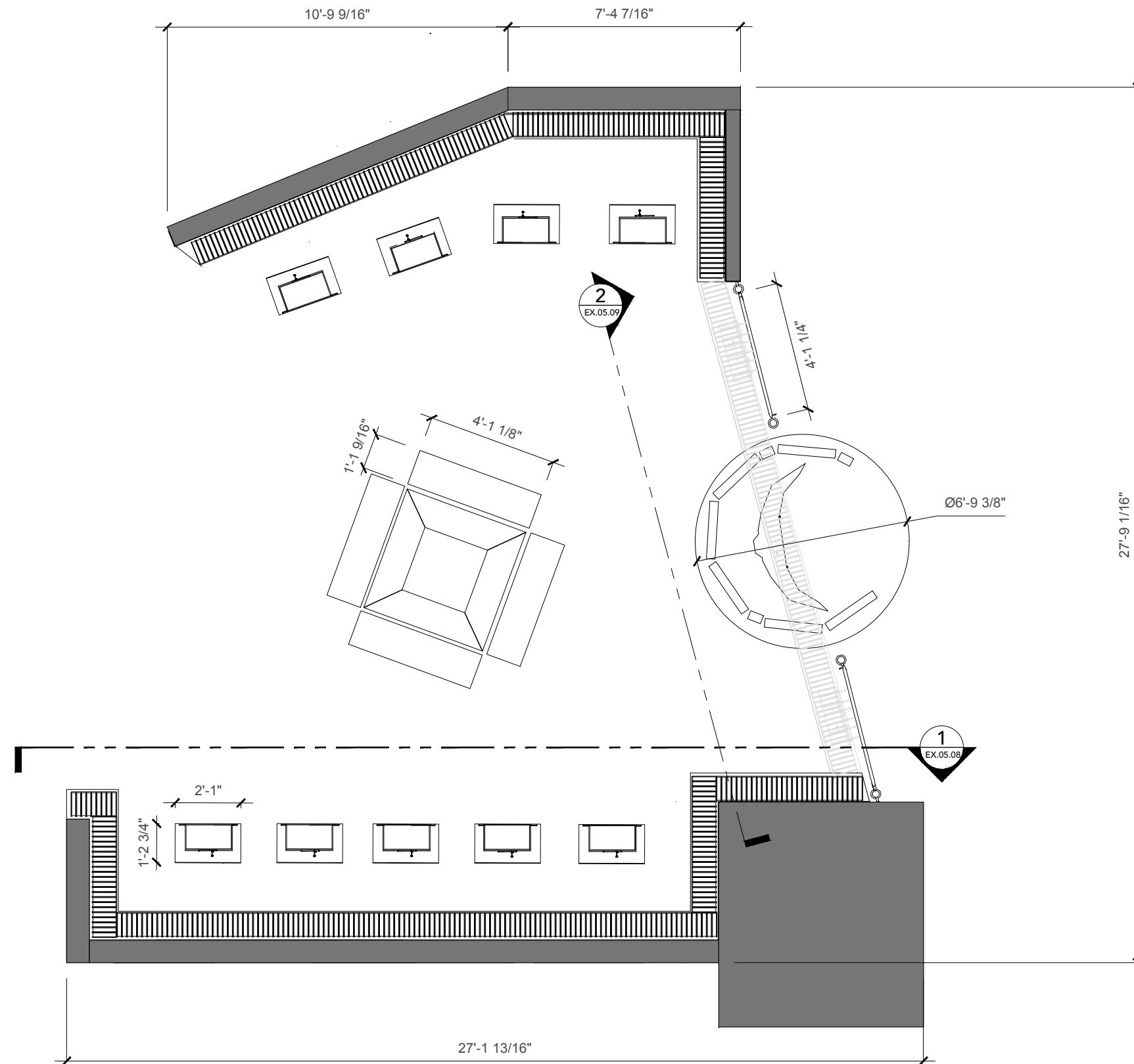
1 DETAILED AREAS
SCALE: 3/32" = 1' - 0"

FLOOR
9'-1" AFF



Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
ADOPT-A-PERSONA
Drawing Number
EX.05.07
Scale
1/4" = 1'-0"
Key Plan
Not Applicable



1 04A ADOPT-A-PERSONA AREA PLAN
SCALE: 1/4" = 1'-0"



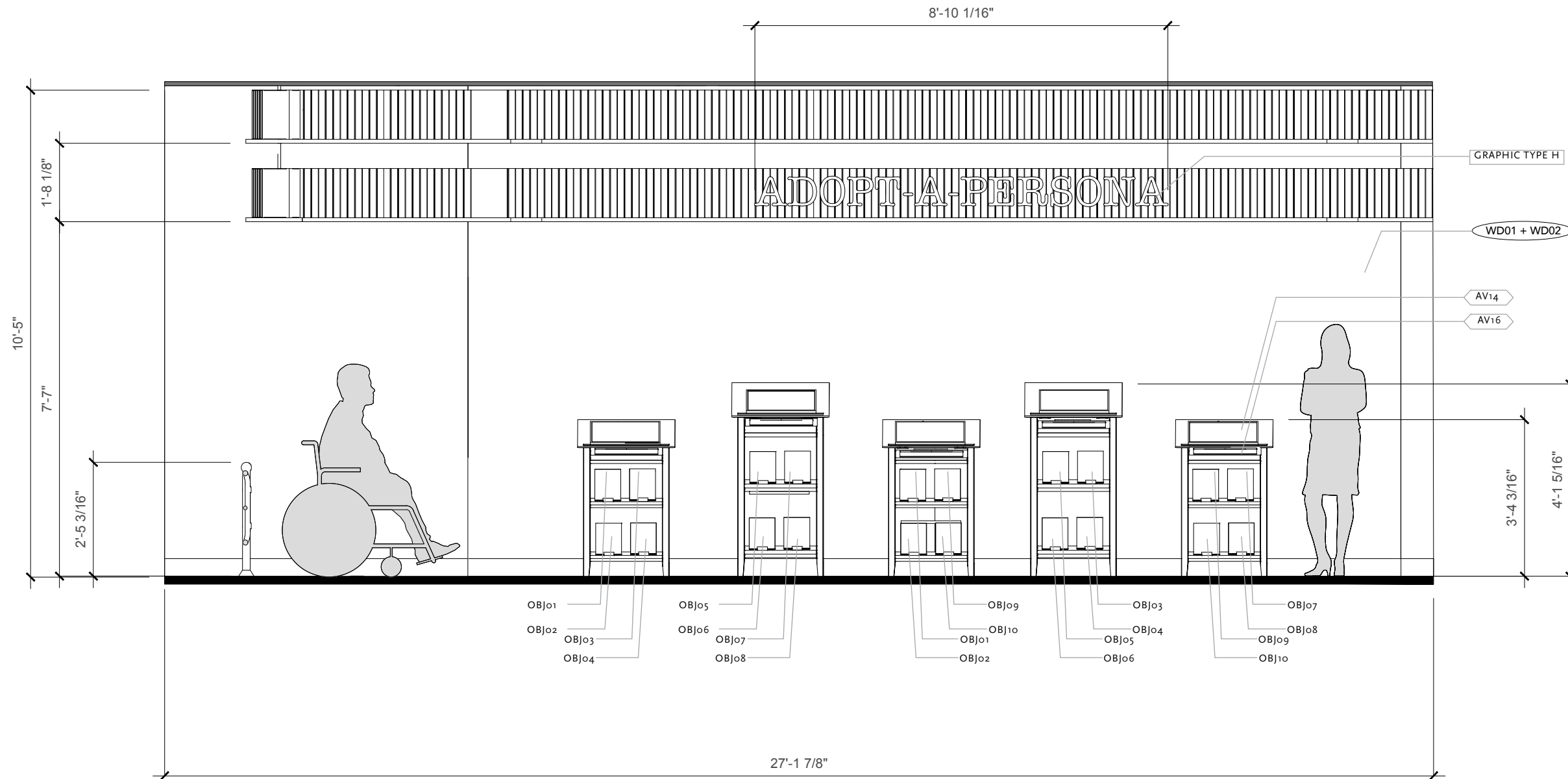
Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
ADOPT-A-PERSONA SECTION 1

Drawing Number
EX.05.08

Scale
3/8" = 1'-0"

Key Plan
Not Applicable



1 04A.02 SECTION
SCALE: 3/8" = 1' - 0"



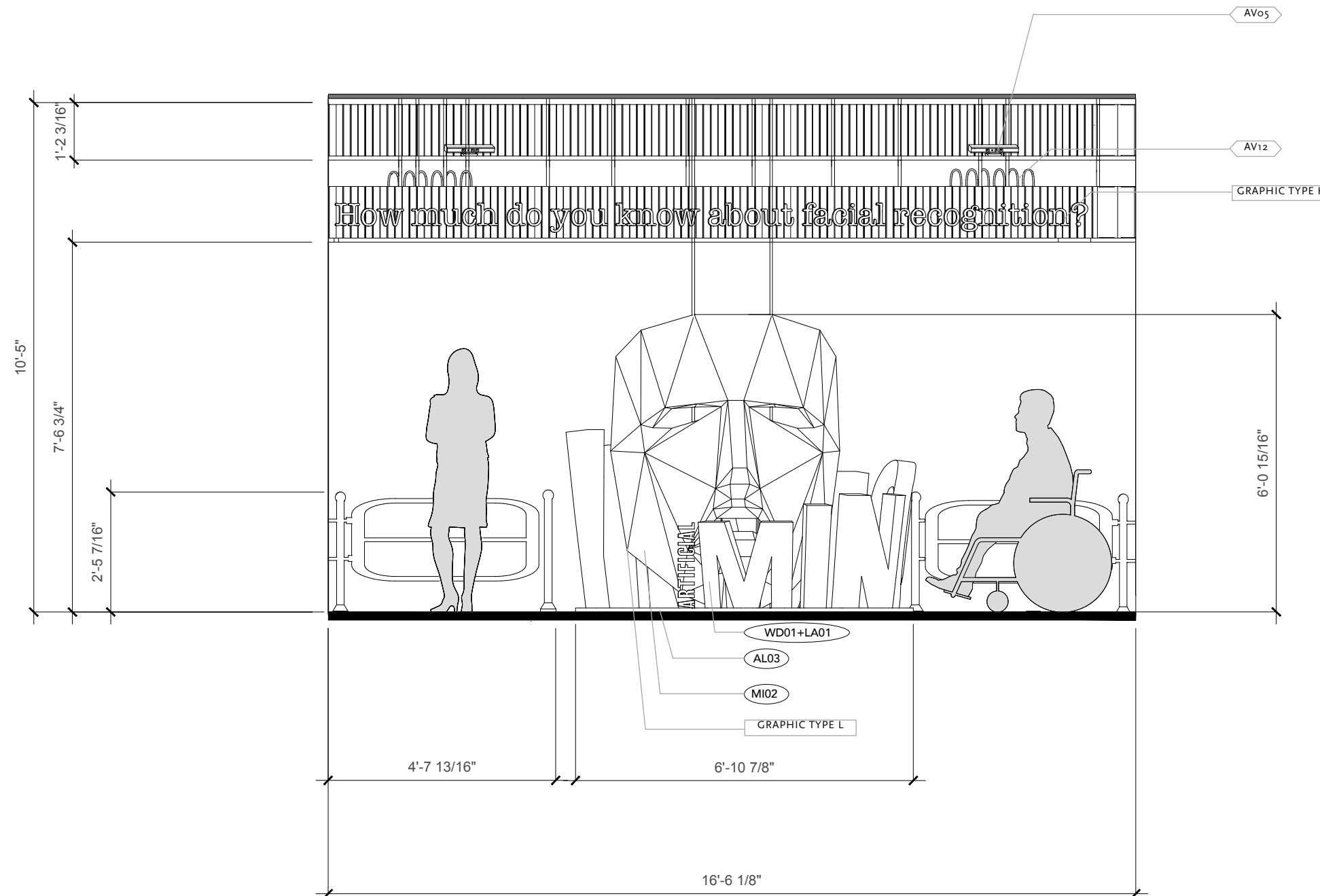
Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
ADOPT-A-PERSONA SECTION 2

Drawing Number
EX.05.09

Scale
3/8" = 1'-0"

Key Plan
Not Applicable

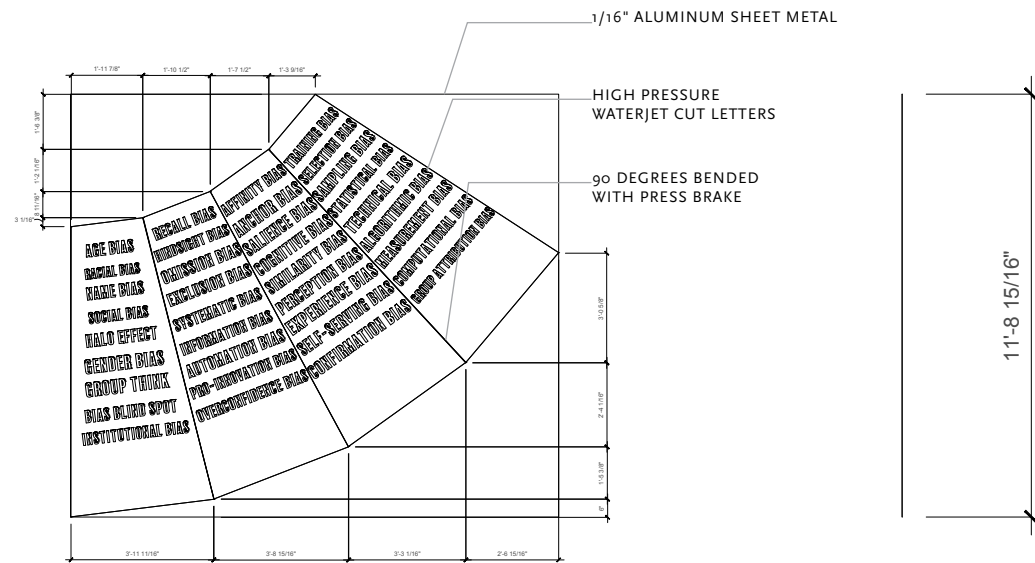


1 04A.04 SECTION
SCALE: 3/8" = 1'-0"



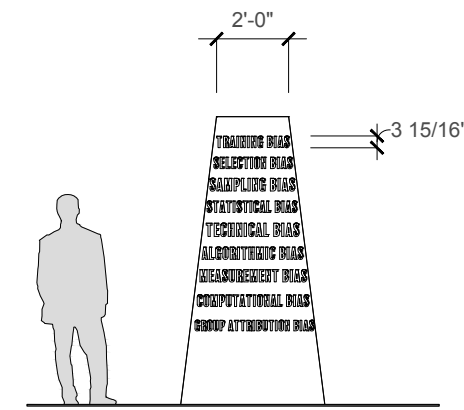
Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
BIAS SCULPTURE
Drawing Number
EX.05.10
Scale
3/16" = 1'-0"
Key Plan
Not Applicable

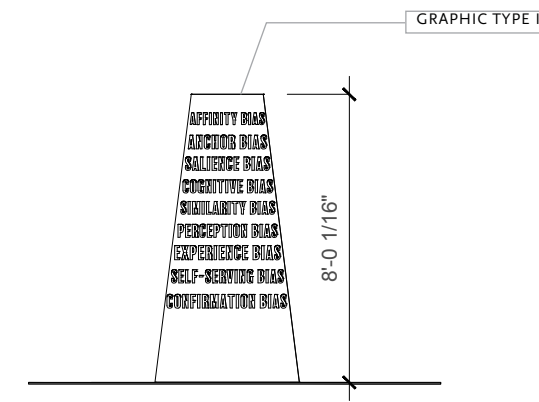


1 04A.02.GR020 SHEET METAL FRONT
SCALE: 3/16" = 1' - 0"

3 04A.02.GR020 SHEET METAL SIDE
SCALE: 3/16" = 1' - 0"



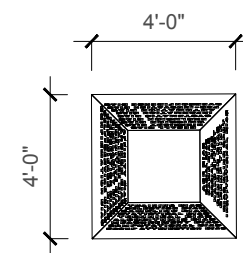
1 04A.02.GR020 BIASES FRONT
SCALE: 3/16" = 1' - 0"



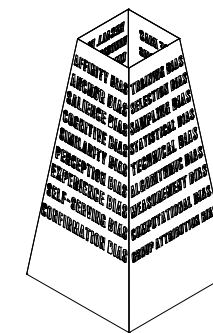
3 04A.02.GR020 BIASES SIDE
SCALE: 3/16" = 1' - 0"



2 04A.02.GR020 SHEET METAL TOP
SCALE: 3/16" = 1' - 0"



2 04A.02.GR020 BIASES TOP
SCALE: 3/16" = 1' - 0"

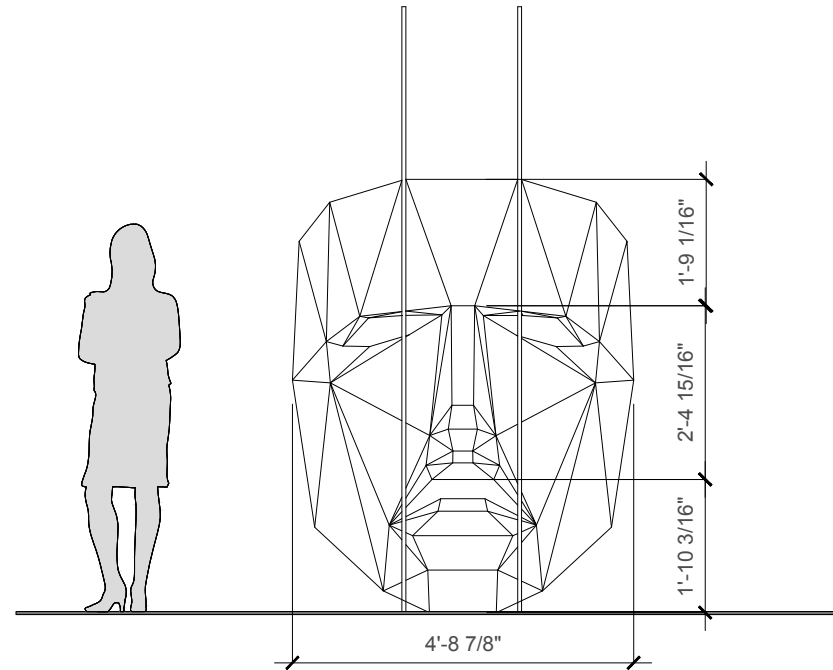


4 04A.02.GR020 BIASES ISO
SCALE: 3/16" = 1' - 0"

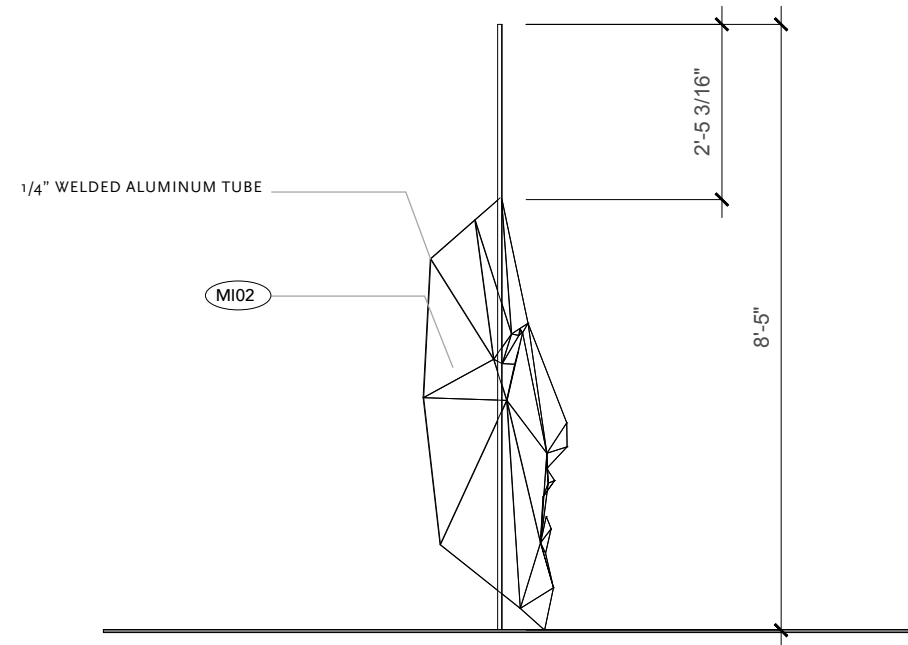


Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

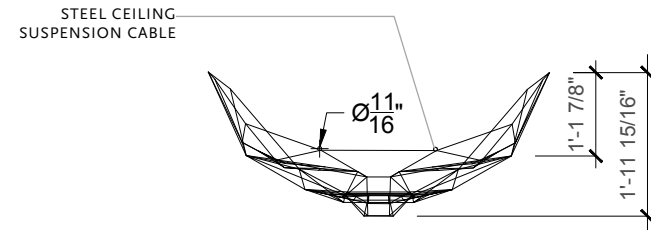
Date
December 8, 2023
Drawing Name
MASK
Drawing Number
EX.05.11
Scale
3/8" = 1'-0"
Key Plan
Not Applicable



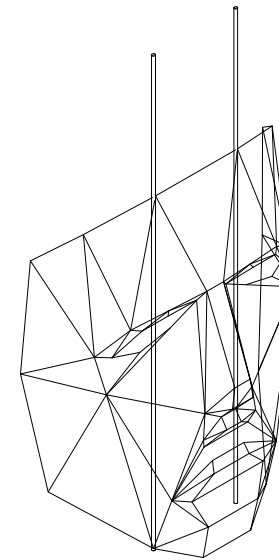
1 04A.04 MASK FRONT
SCALE: 3/8" = 1' - 0"



3 04A.04 MASK SIDE
SCALE: 3/8" = 1' - 0"

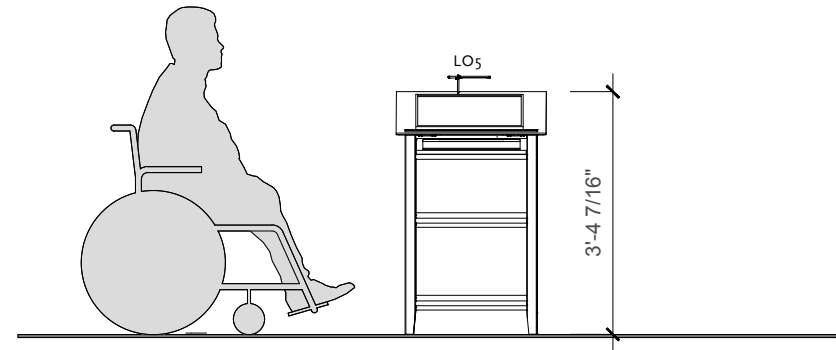


2 04A.04 MASK TOP
SCALE: 3/8" = 1' - 0"

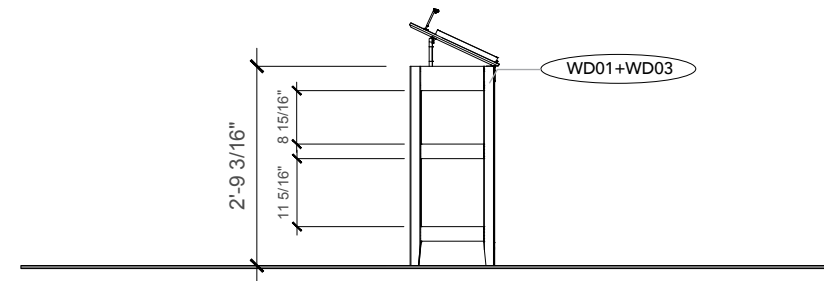




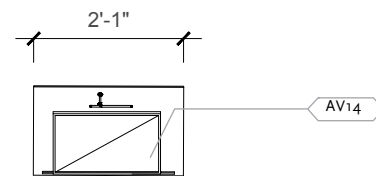
Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.



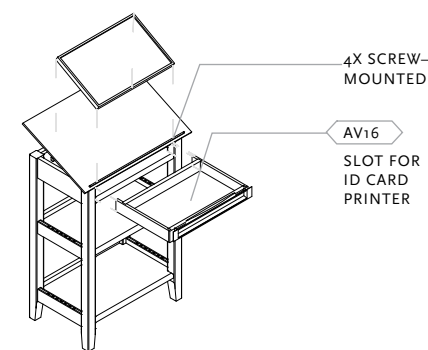
1 04A.01 KIOSK FRONT
SCALE: 3/8" = 1' - 0"



3 04A.01 KIOSK SIDE
SCALE: 3/8" = 1' - 0"



2 04A.01 KIOSK TOP
SCALE: 3/8" = 1' - 0"



4 04A.01 KIOSK EXPLODED VIEW
SCALE: 3/8" = 1' - 0"

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

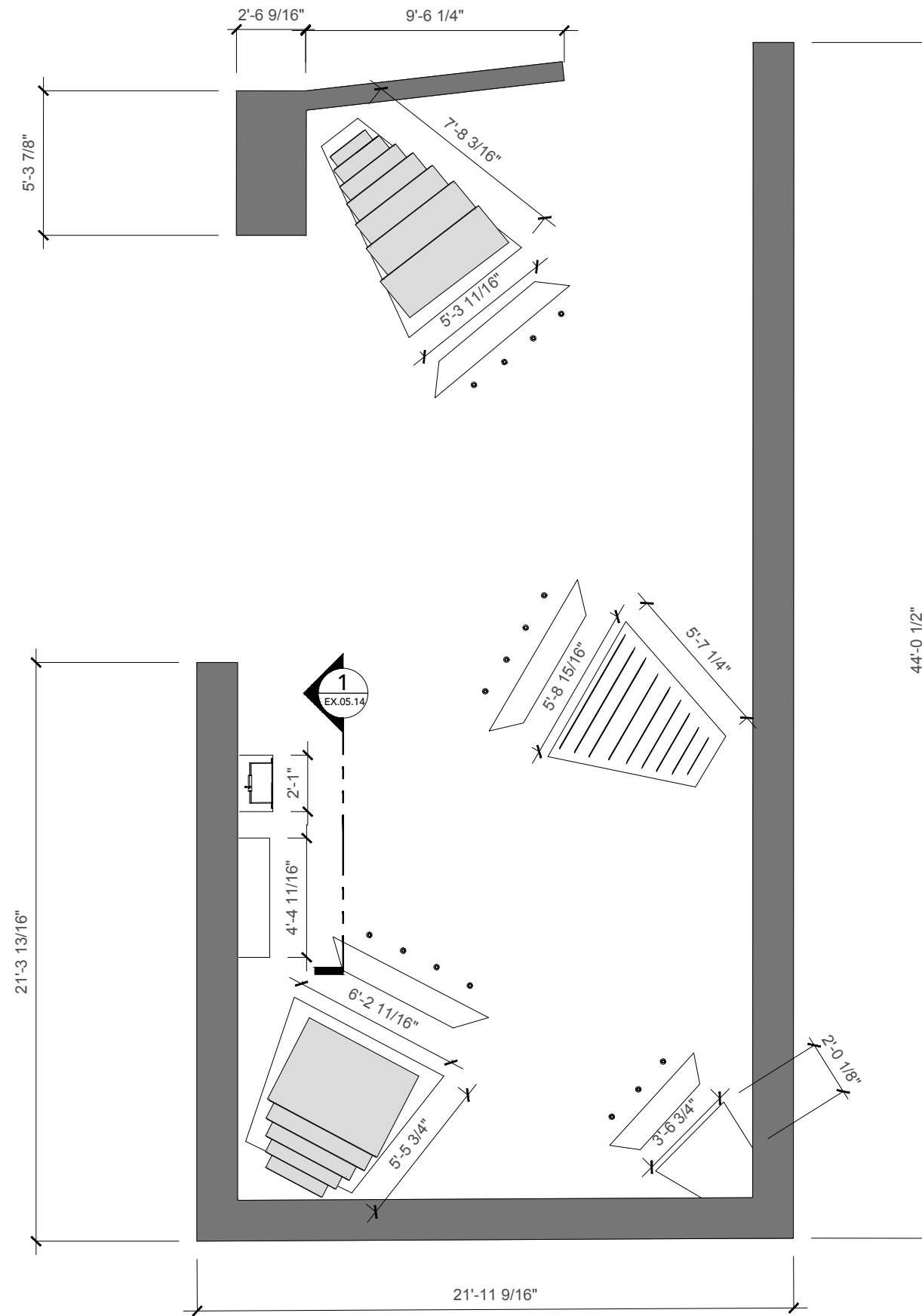
Date
December 8, 2023

Drawing Name
PUBLIC TRUST DETAIL

Drawing Number
EX.05.13

Scale
3/16" = 1' - 0"

Key Plan
Not Applicable

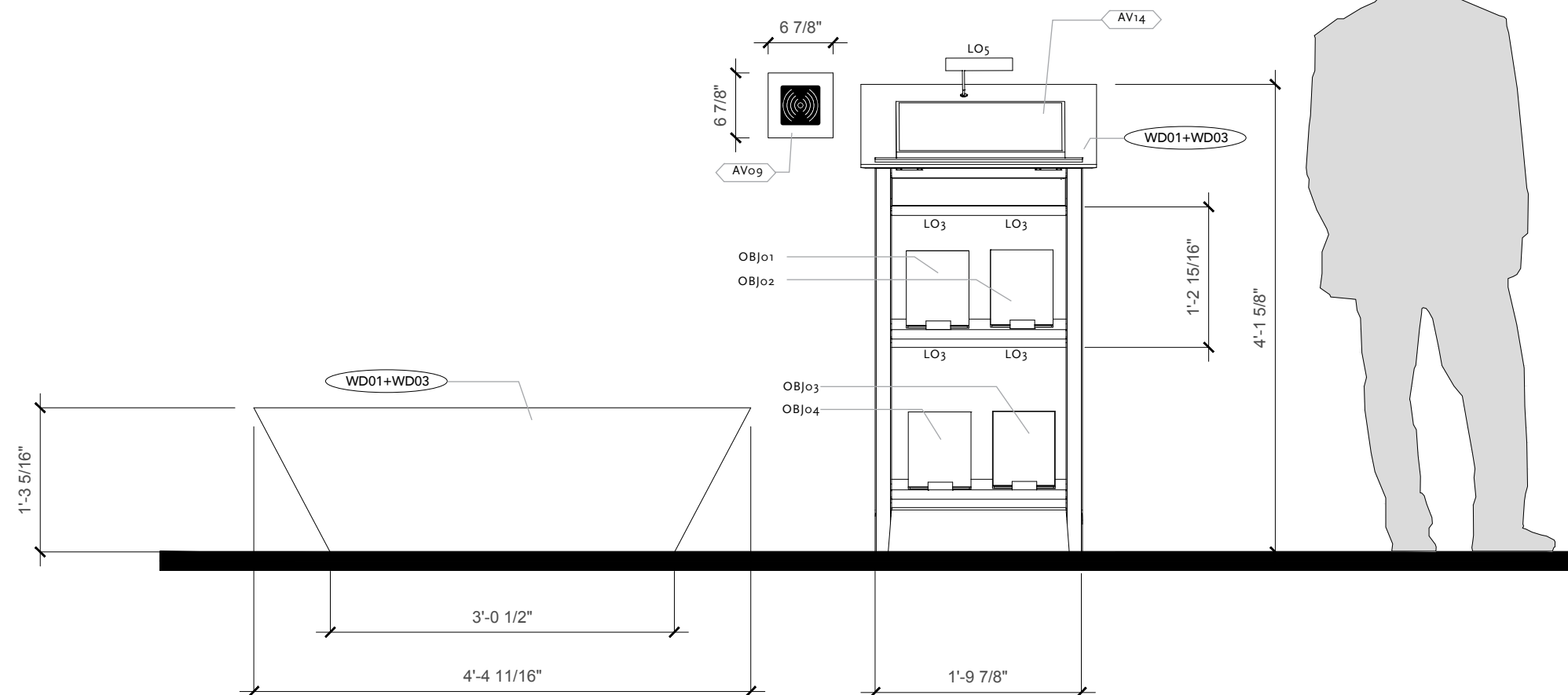


1 07A PUBLIC TRUST AREA PLAN
SCALE: 3/16" = 1' - 0"



Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
PUBLIC TRUST SECTION 1
Drawing Number
EX.05.14
Scale
3/4" = 1'-0"
Key Plan
Not Applicable

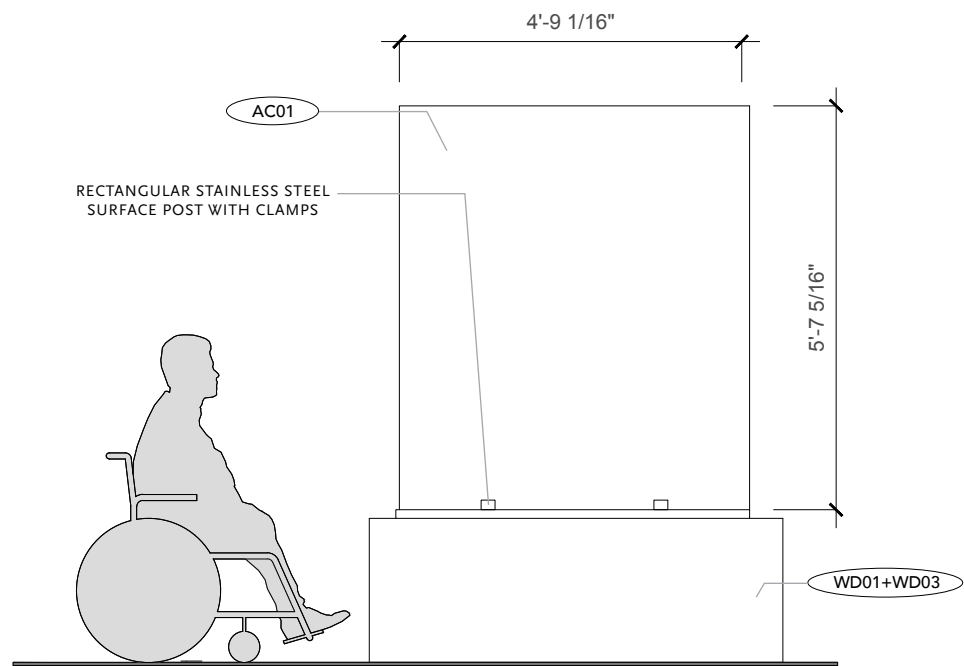


1 07A.04 SECTION
SCALE: 3/4" = 1' - 0"

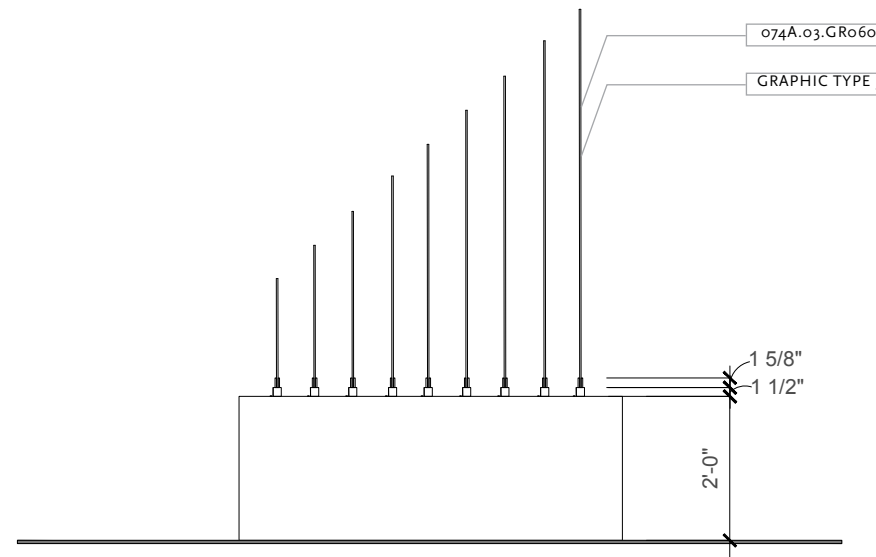


Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

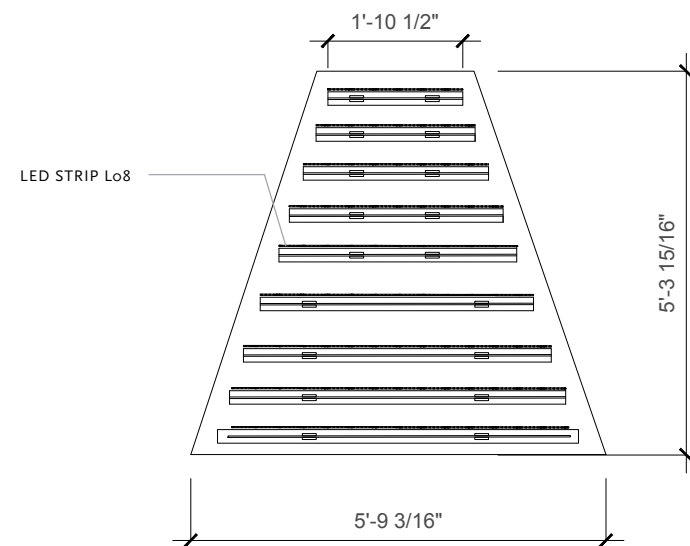
Date
December 8, 2023
Drawing Name
LARGE PANELS
Drawing Number
EX.05.15
Scale
3/8" = 1'-0"
Key Plan
Not Applicable



1 07A.03 BACKLIT GRAPHIC PANELS FRONT
SCALE: 3/8" = 1' - 0"



3 07A.03 BACKLIT GRAPHIC PANELS SIDE
SCALE: 3/8" = 1' - 0"

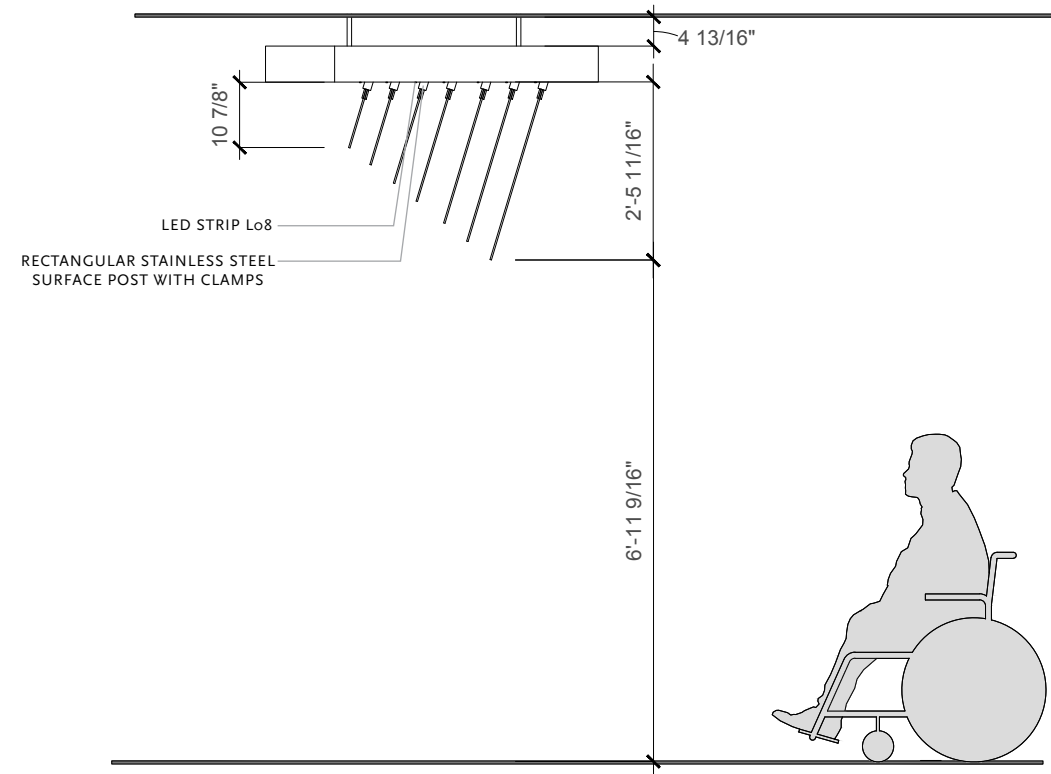
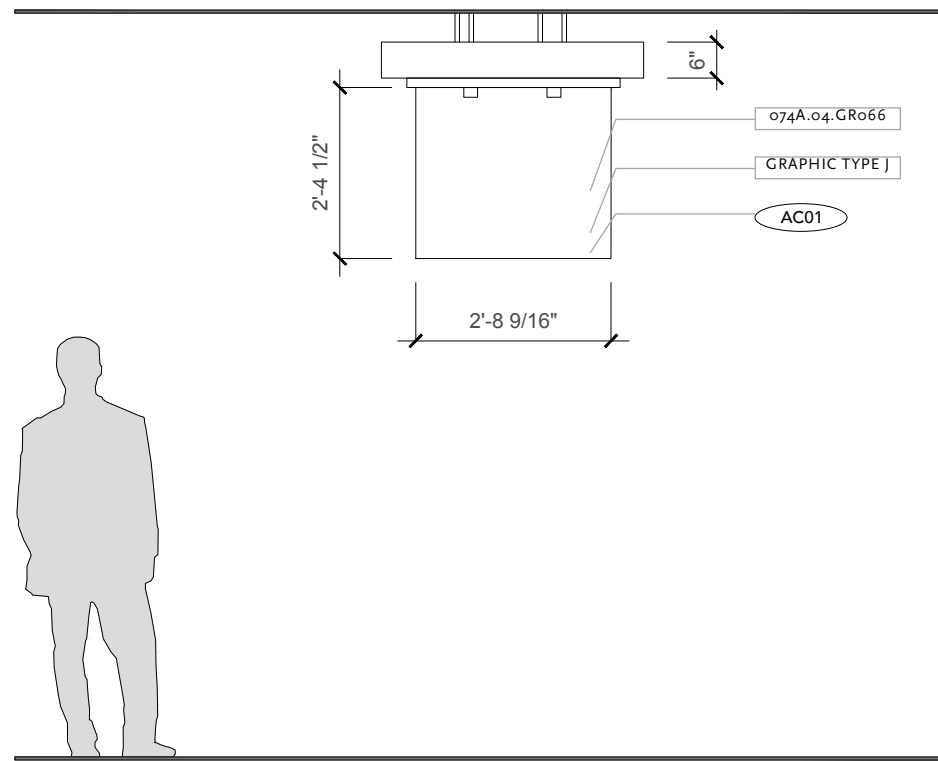


2 07A.03 BACKLIT GRAPHIC PANELS TOP
SCALE: 3/8" = 1' - 0"

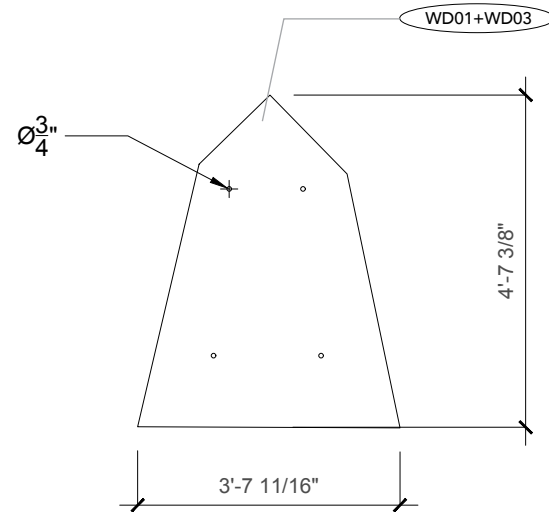


Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
SMALL PANELS
Drawing Number
EX.05.16
Scale
3/8" = 1'-0"
Key Plan
Not Applicable



1 07A.04 SMALL BACKLIT GRAPHIC PANELS FRONT
SCALE: 3/8" = 1' - 0"

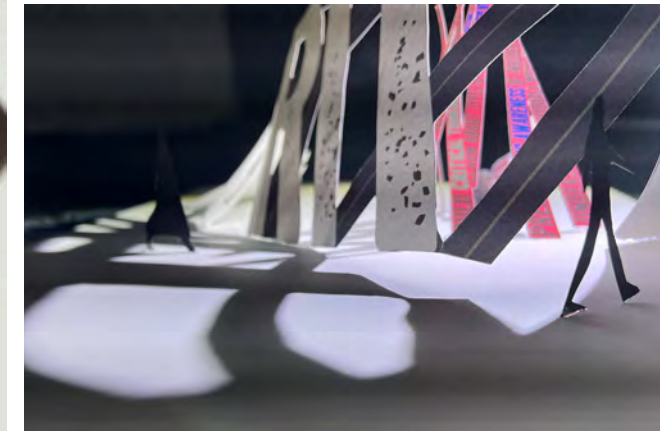
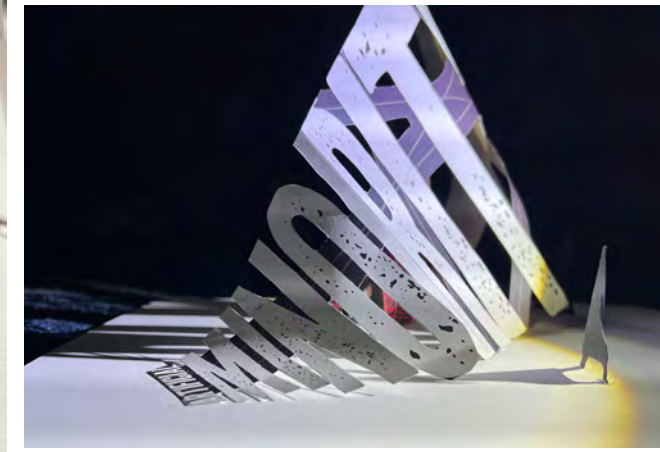


2 07A.04 SMALL BACKLIT GRAPHIC PANELS TOP
SCALE: 3/8" = 1' - 0"

3 07A.04 SMALL BACKLIT GRAPHIC PANELS SIDE
SCALE: 3/8" = 1' - 0"

APPENDIX

3D LOGO TRANSFORMATION



FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
3D Logo Transformation

Drawing Number
EX.06.01

Scale
NTS

Key Plan
Not Applicable

MODEL MAKING

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

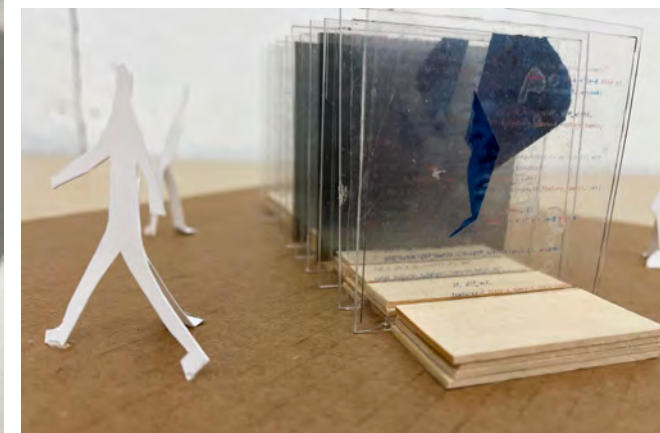
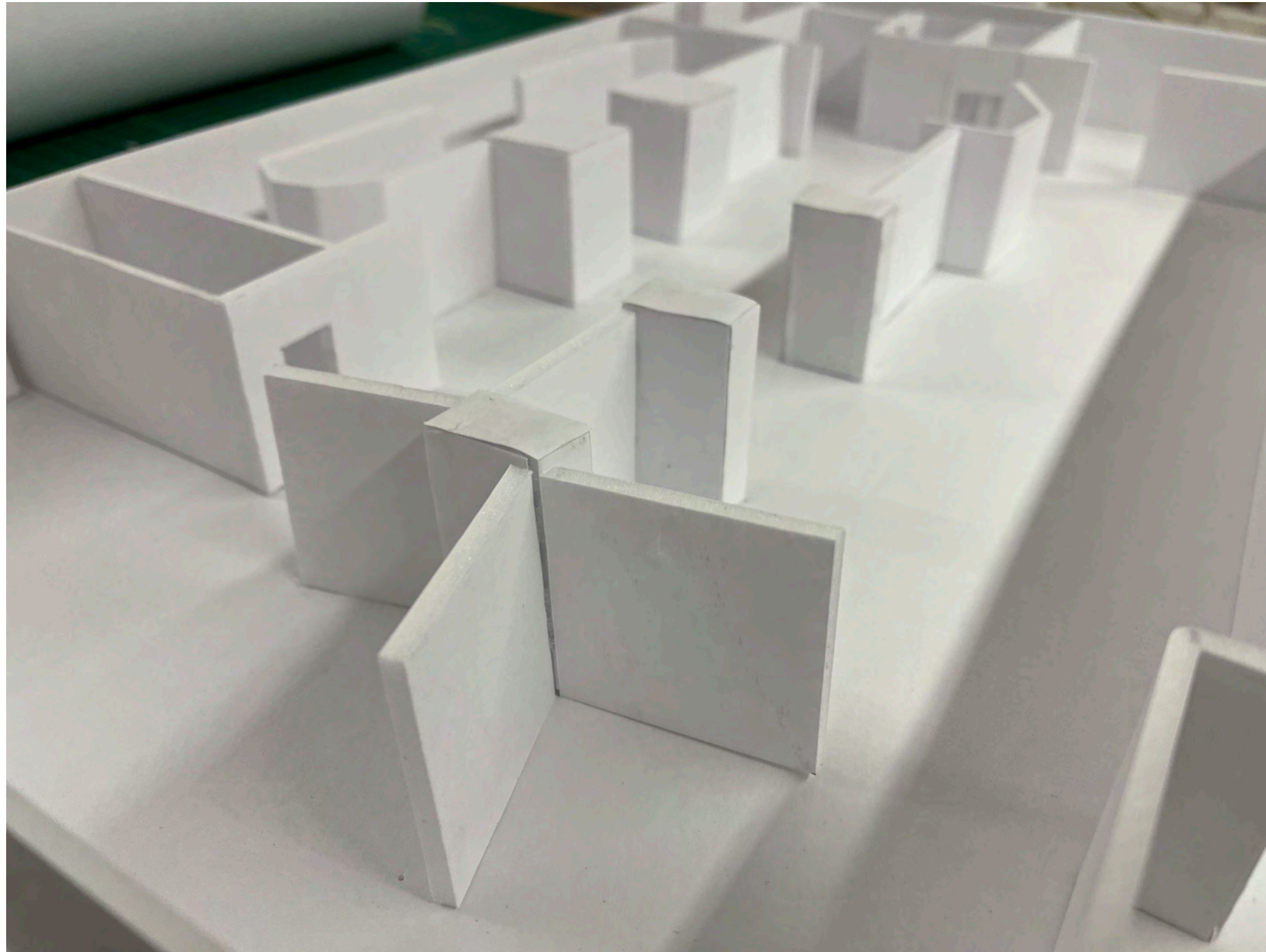
Date
December 8, 2023

Drawing Name
Model Making

Drawing Number
EX.06.02

Scale
NTS

Key Plan
Not Applicable



PROTOTYPE TESTING

FIT State University of New York

Fashion Institute of Technology
Exhibition and Experience Design
Thesis Capstone 2023

Exhibition Designer
Emily Tse

Project
Artificial Minority



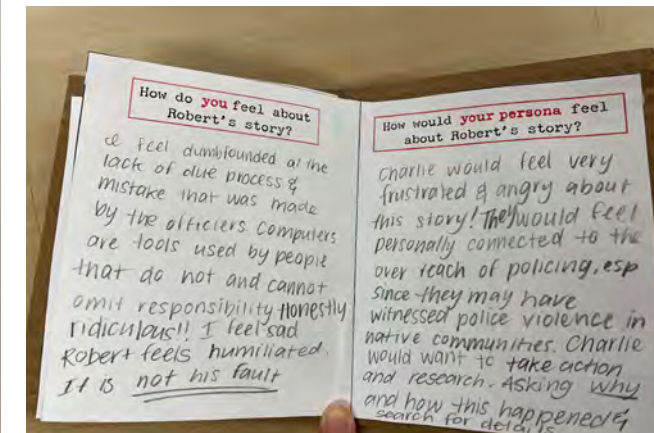
Site
Smithsonian Cooper Hewitt Museum

Client
National Institute of
Standards and Technology

Content Sponsors
Algorithmic Justice League
American Civil Liberties Union
Security Industry Association

Disclaimer
These drawings are not for construction.
Contractors shall always verify and be
responsible for all dimensions and
conditions and inform this office of
any variations prior to performing work.
Mounting details to be modified based
on recommendation from fabricator.

Date
December 8, 2023
Drawing Name
Prototype Testing
Drawing Number
EX.06.03
Scale
NTS
Key Plan
Not Applicable



SURVEY AND SITE VISIT

This survey is for a thesis project about artificial intelligence. Your responses will be **anonymous** and **confidential**. Your short responses may be anonymously cited in the research material. Participation and continuation in the project is entirely **voluntary**. You may skip any questions that may make you feel uncomfortable. Thank you for your time.



Age (optional) _____
Gender (optional) _____
Ethnicity (optional) _____

Please answer the following questions on a scale of 1 (least) – 10 (most).

1. How often do you interact with facial recognition in your daily life?
1 2 3 4 5 6 7 8 9 10

2. How much do you support facial recognition usage in law enforcement,
i.e., finding missing persons and determining if a defendant is at risk of reoffending?
1 2 3 4 5 6 7 8 9 10

3. How much do you support facial recognition usage in education,
i.e., preventing school shootings and detecting students' emotional states in classrooms?
1 2 3 4 5 6 7 8 9 10

4. How much do you support facial recognition usage in healthcare,
i.e., predicting risk of skin cancer and detecting unsafe ICU patients' behaviors?
1 2 3 4 5 6 7 8 9 10

5. How much do you support facial recognition usage in transportation,
i.e., security in transportation hubs and border control efficiency?
1 2 3 4 5 6 7 8 9 10

6. How much do you support facial recognition usage in corporations,
i.e., employee monitoring and recruitment process?
1 2 3 4 5 6 7 8 9 10

7. How much do you support facial recognition usage in retail,
i.e., theft prevention in stores and personalized shopping experience?
1 2 3 4 5 6 7 8 9 10

8. What do you think about facial recognition? (optional)

9. What positive experience(s) did you ever have with facial recognition? (optional)

10. What negative experience(s) did you ever have with facial recognition? (optional)

This survey form will be kept by the researcher for at least three years beyond the end of the study and was approved by the FIT-IRB on 11-9-23.



Mapping out the space on a 1:1 scale



Disclaimer
These drawings are not for construction. Contractors shall always verify and be responsible for all dimensions and conditions and inform this office of any variations prior to performing work. Mounting details to be modified based on recommendation from fabricator.

Date
December 8, 2023

Drawing Name
Survey and Site Visit

Drawing Number
EX.06.04

Scale
NTS

Key Plan
Not Applicable

THANK YOU