THE 203

Design Approval

4/6/2021

Perkins&Will

RECENT UPDATES &PLAN FOR TONIGHT

November 10, 2020
Approval of schematic design
Receipt of pricing

January 12, 2021
Town Council review of principal design elements

March 2021
Advisory board review in early March (EAB, PB, AC, Arts Committee, RPC, TAB, SWAC, ESC)

March 16 - 203 Project construction manager, Victor Stephenson (Barnhill Contracting) met with Carrboro Business Alliance (CBA) Leadership Council to discuss plan to reduce negative impacts on local business during the construction process and provide opportunity to express concerns and pose questions/suggestions.

Tonight –April 6, 2021
Public hearing and design update

What's Next?
Additional Public Hearing – May 11, 2021

Recent Outreach Strategies

- Neighborhood signs
- Digital message boards
- Flyers
- Mailed notices
- Social media
- Survey completed and renderings displayed at site

SEEKING DESIGN APPROVAL:

~~PROGRAM~~
~~CONCEPT~~
~~PLAN~~
~~MASSING~~
~~INTERIOR PUBLIC SPACES~~
EXTERIOR FINISHES
INTERIOR FINISHES
SITE PLAN
(BUILDING SYSTEMS)

PUBLIC ENGAGEMENT

September 15th:	Town Council Update
September 24th:	Public Engagement (virtual)
September 26th:	Public Engagement (virtual)
October 8th:	Rec + Parks Drop-In Meeting
October 13th:	Town Council Public Hearing
October 16th:	OC Skills Development Stakeholder Info Presentation
October 30th:	Rec + Parks Drop-In Meeting
November 10th:	Town Council Update - Schematic Design
November 19th:	Drop-In With Designers (virtual)
November 21st:	Drop-In With Designers (physical)
January 12th:	Town Council Update
March 4th:	Joint Review Board
March 8th:	Rec + Parks Commission
March 10th:	Arts Committee
March 11th:	Stormwater Advisory
April 6th:	Design Development Approval

BUILDING EXTERIOR








THE
203

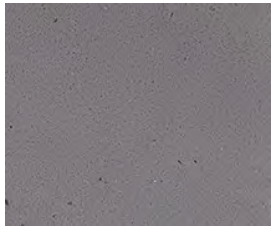
INTERIOR FINISH & MATERIALS

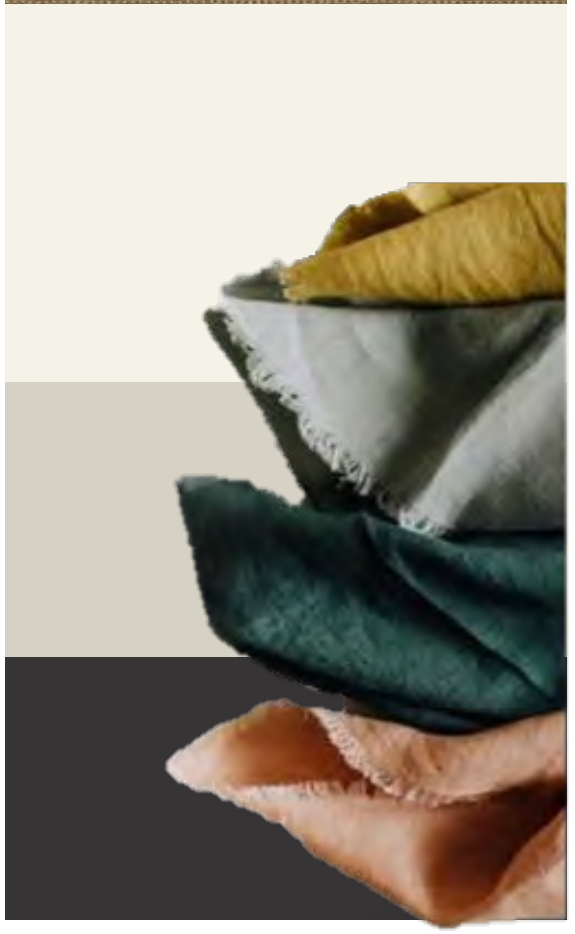
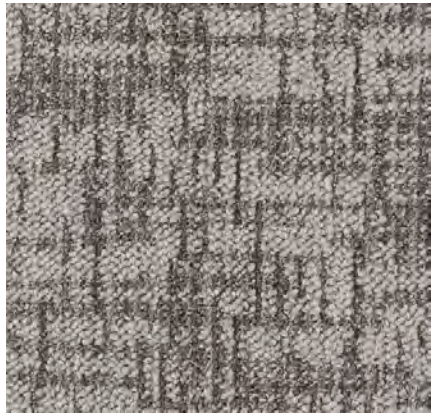
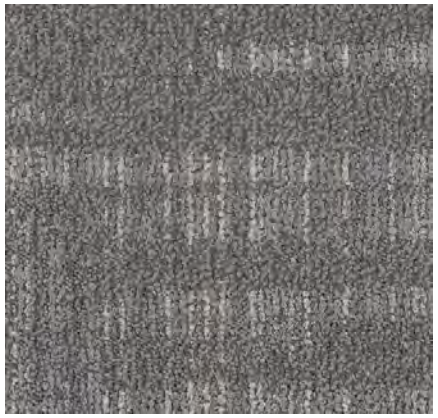


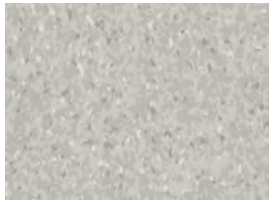
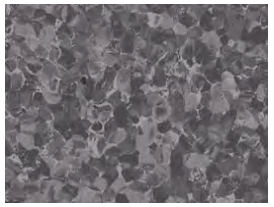


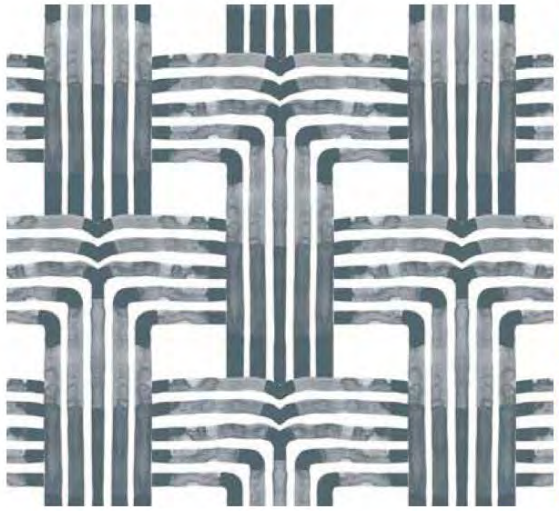


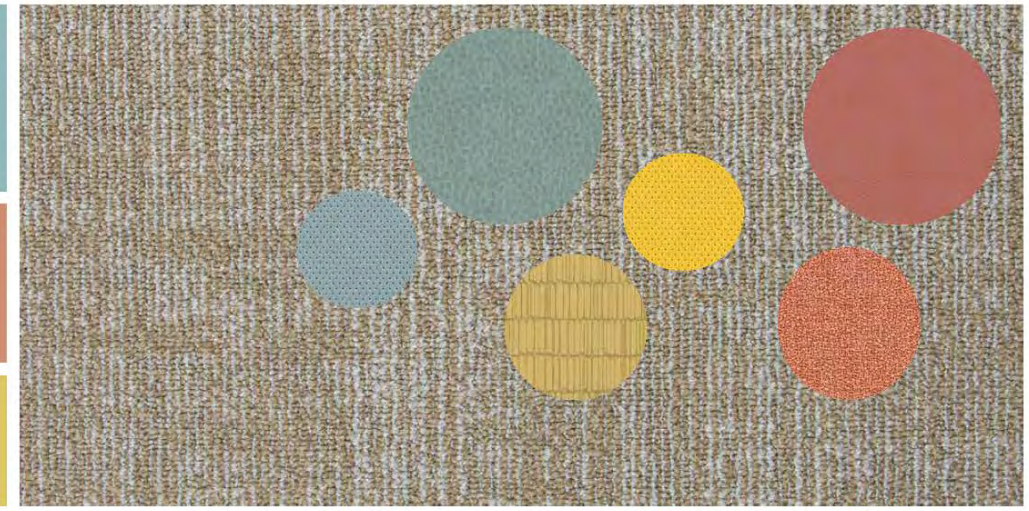


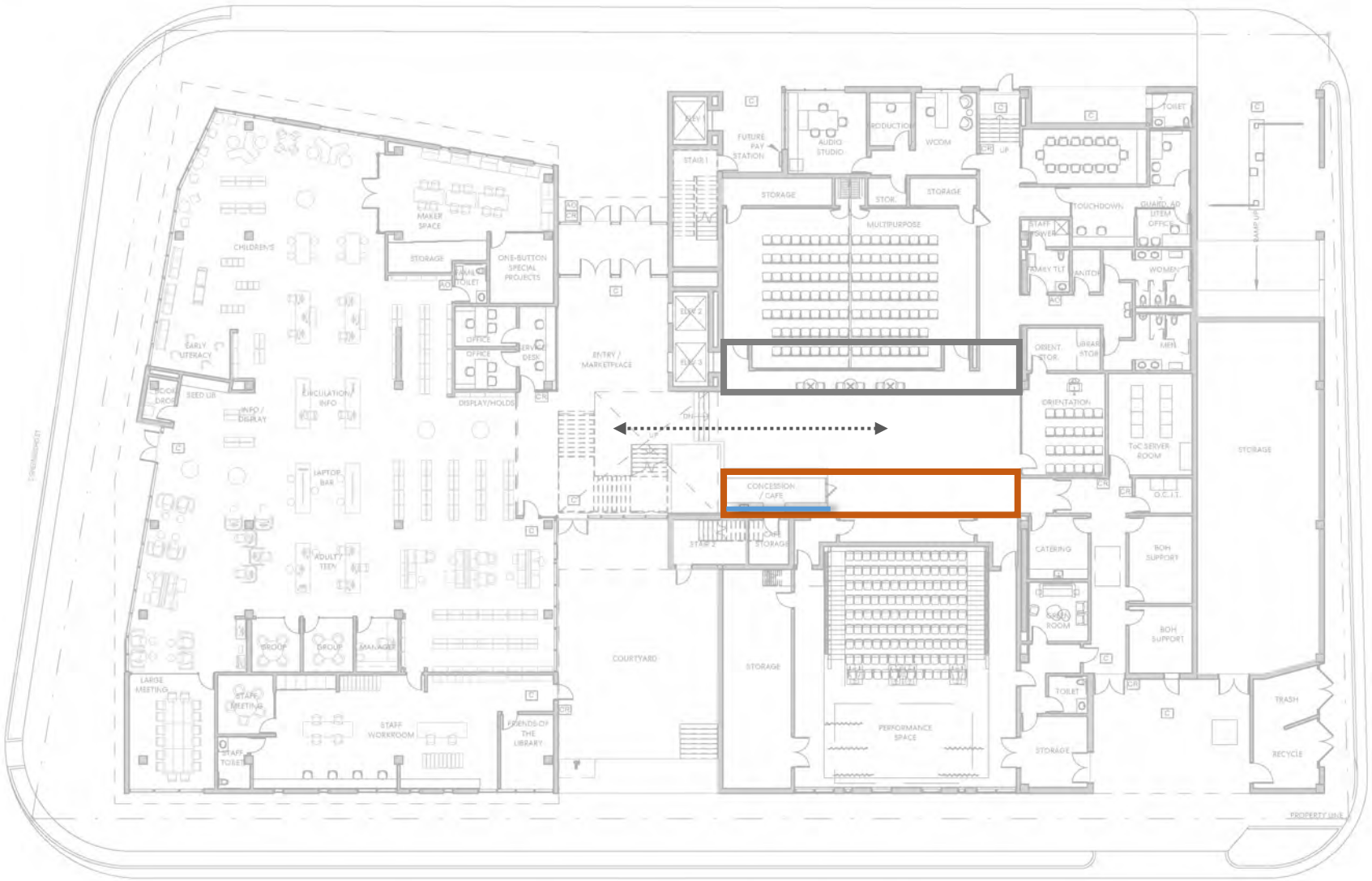








MAKER SPACE
STORAGE
ONE-BUTTON SPECIAL PROJECTS
CHILDREN'S
EARLY LITERACY
SEED LIB
INFO / DISPLAY
CIRCULATION / INFO
LAPTOP BAR
ADULT / TEEN
DROP
DROP
MANAGER
LARGE MEETING
STAFF MEETING
STAFF TOILET
STAFF WORKROOM
FRIENDS OF THE LIBRARY
COURTYARD
OFFICE
OFFICE
DISPLAY/HOLDS
ENTRY / MARKETPLACE
FUTURE PAY STATION
AUDIO STUDIO
PRODUCTION
WORK
STORAGE
STOR.
STORAGE
MULTIPURPOSE
TOILET
TOUCHDOWN
STAFF LOUNGE
FAMILY TLT
JANITOR
WOMEN
MEN
ORIENT. STOR.
LIBRARY STOR.
ORIENTATION
ToC SERVER ROOM
STORAGE
CONCESSION / CAFE
STAIR 2
STORAGE
CATERING
SERVERY ROOM
BOH SUPPORT
BOH SUPPORT
STORAGE
PERFORMANCE SPACE
STORAGE
TOILET
TRASH
RECYCLE
PROPERTY LINE

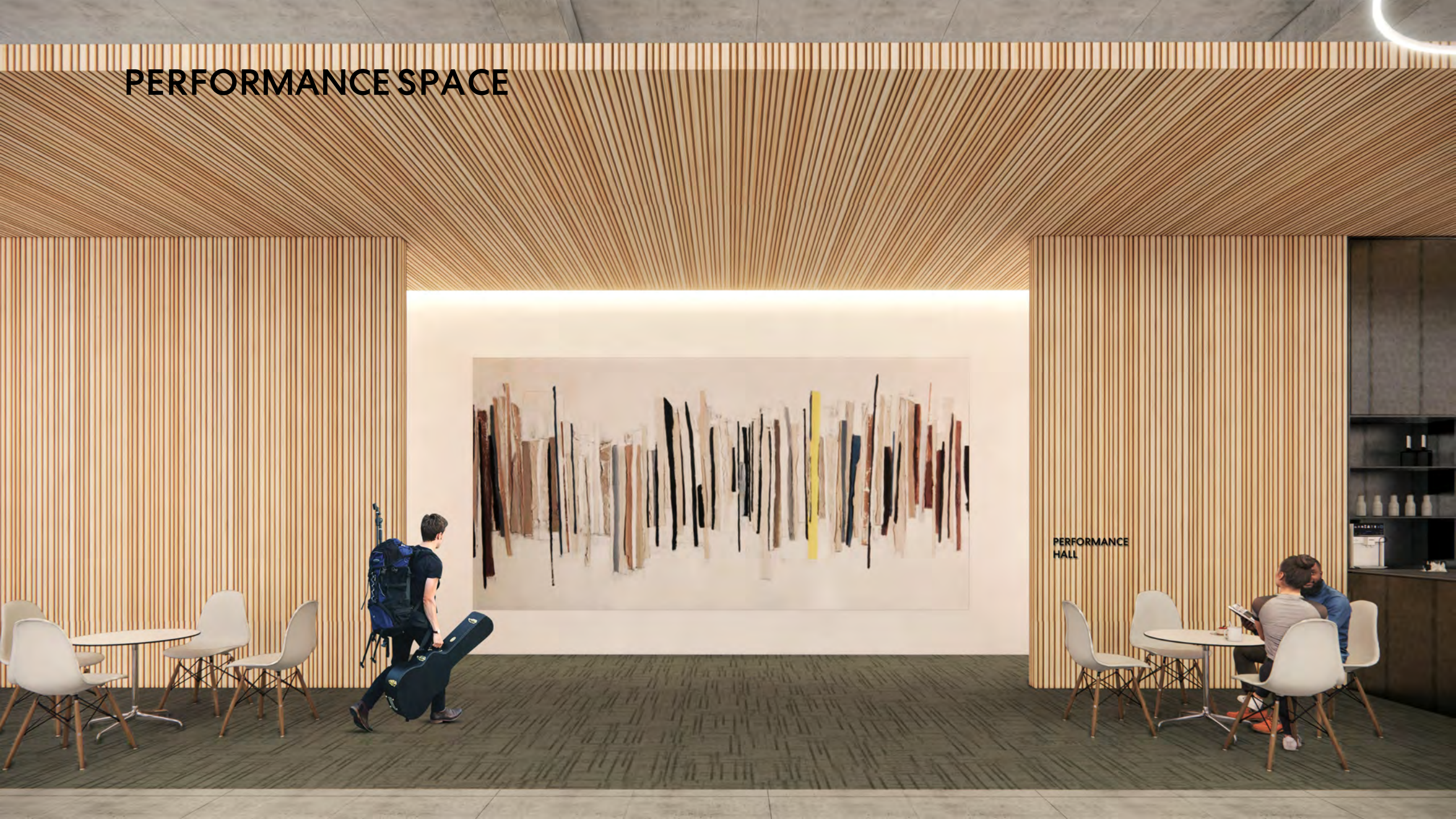
MULTI-PURPOSE ROOM


EXIT


EXIT


"Good, Unique Content" Needs to Die
(and what should replace it)

PERFORMANCE SPACE

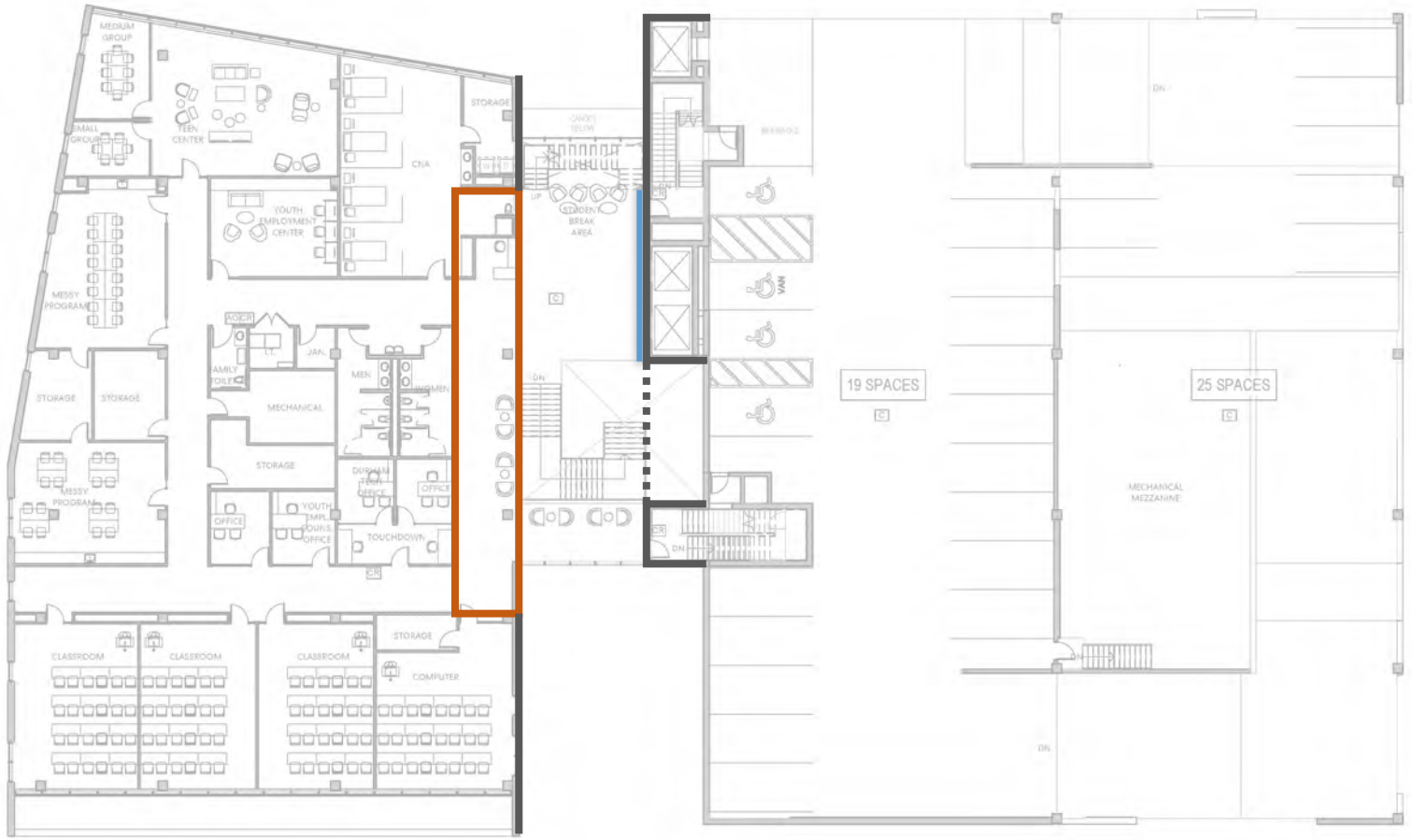



EXIT
EXIT


EXIT
EXIT


EXIT

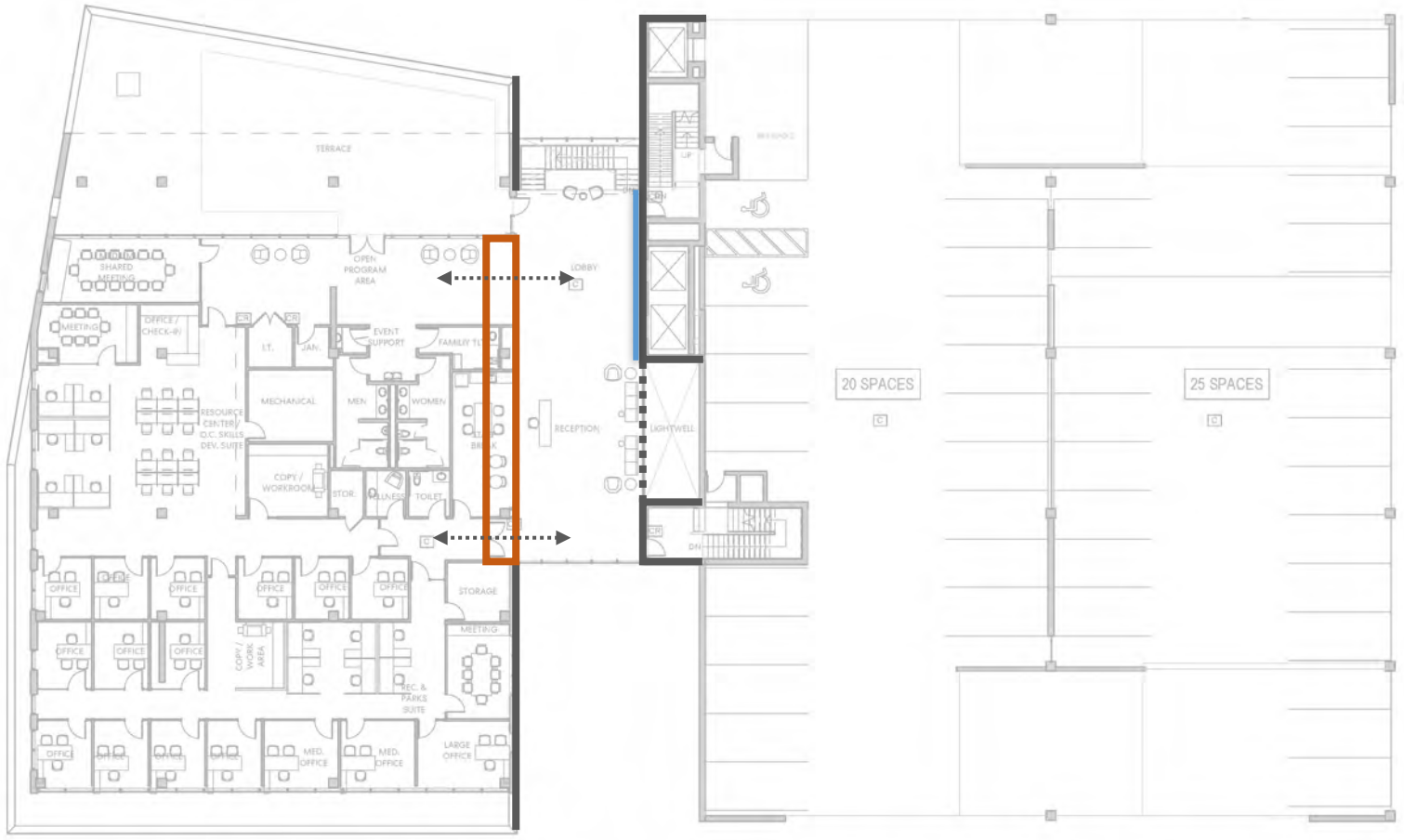

SEED LIBRARY
The first contemporary seed library was created in 1999 at the Berkeley Ecology Center. It was called the Bay Area Seed Interchange Library (BASIL). The first seed library to be established in a public library was at the Gardiner Public Library in Gardiner, New York and was developed by Keri Greene in 2004. Since then, the number of seed libraries has grown to over 450 across the globe, with most being established in the United States.


MEDIUM GROUP
SMALL GROUP
TEEN CENTER
STORAGE
CNA
YOUTH EMPLOYMENT CENTER
MESSY PROGRAMS
STORAGE
STORAGE
MESSY PROGRAMS
FAMILY TOILET
JAN.
MEN
WOMEN
MECHANICAL
STORAGE
DURHAM TECH OFFICE
OFFICE
OFFICE
YOUTH EMPL. WORKS OFFICE
TOUCHDOWN
CLASSROOM
CLASSROOM
CLASSROOM
STORAGE
COMPUTER
BELOW
UP
STUDENT BREAK AREA
DN
VAN
19 SPACES
25 SPACES
MECHANICAL MEZZANINE
DN
DN


ASK ME!

OC SKILLS DEVELOPMENT CLASSROOMS


Why "Good, Unique Content" Needs to Die
(and what should replace it)
The content quality scale
10X
As good as the best in the SERP
Minimum bar for modern SEO
Good, unique content
4/5 searchers click "back"
Panda Invasion
Quality
Effort
Fiverr!
Make the interns write it
This is gonna take the weekend
There's no way to scale!
What Changed?
User experience became a much bigger part of ranking elements
Earning links overtook link building, and is more impossible w/ merely "good, unique" content
The rise of content marketing created much more competition
User expectations have risen as content creators bent over backwards to delight audiences
How do we create "10X" Content?
Run an analysis of the content in the top 10 (not possibly the most socially-shared/etc)
Questions Answered
U.X.
Detail and Thoroughness


TERRACE
OPEN PROGRAM AREA
LOBBY
SHARED MEETING
MEETING
OFFICE / CHECK-IN
I.T.
JAN.
EVENT SUPPORT
FAMILY TL
MECHANICAL
MEN
WOMEN
RESOURCE CENTER/ O.C. SKILLS DEV. SUITE
RECEPTION
LIGHTWELL
COPY / WORKROOM
STOR.
TOILET
OFFICE
STORAGE
MEETING
COPY / WORK AREA
REC. & PARKS SUITE
MED. OFFICE
LARGE OFFICE
20 SPACES
25 SPACES


1 2 3

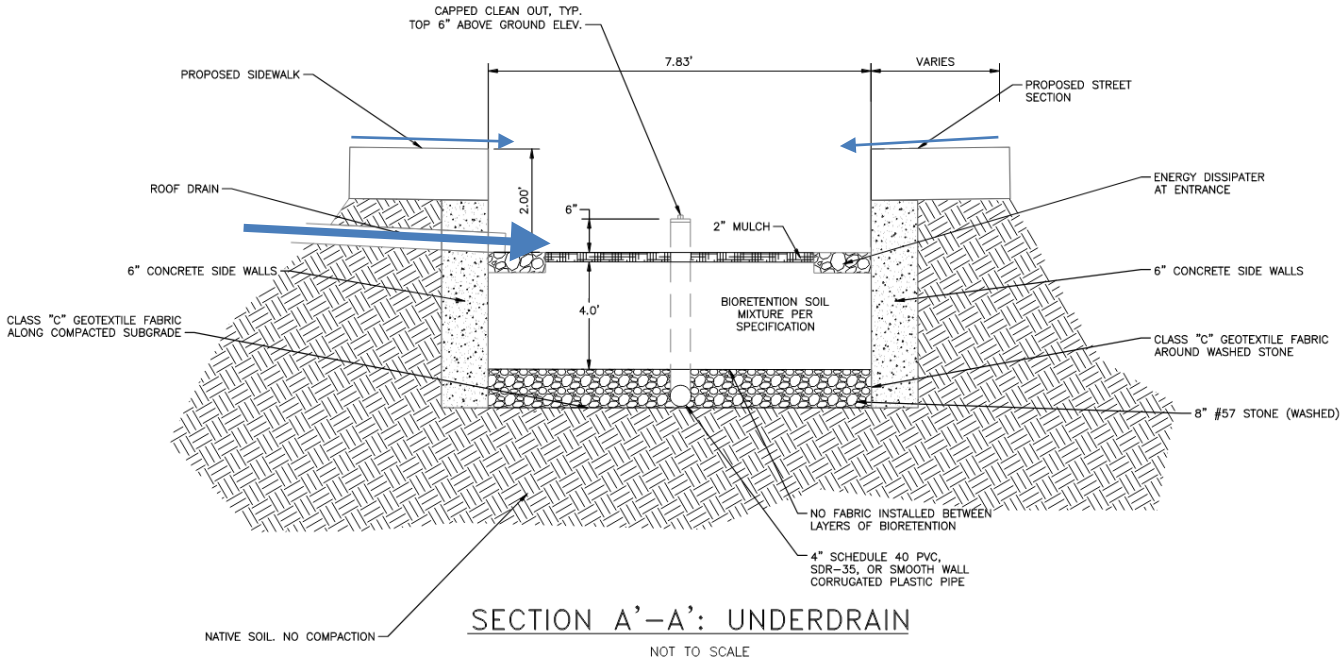
SITE PLAN

BIORETENTION CELLS

BIORETENTION CELLS


THE
203

BIORETENTION CELLS



Cross Section at Inlet – The 203 Project

- *Roof drainage piped in*
- *Street and plaza runoff captured*
- *Stormwater is contained, and infiltrates*
- *System is a visible, performative landscape*

Illustrative Cross Section Example

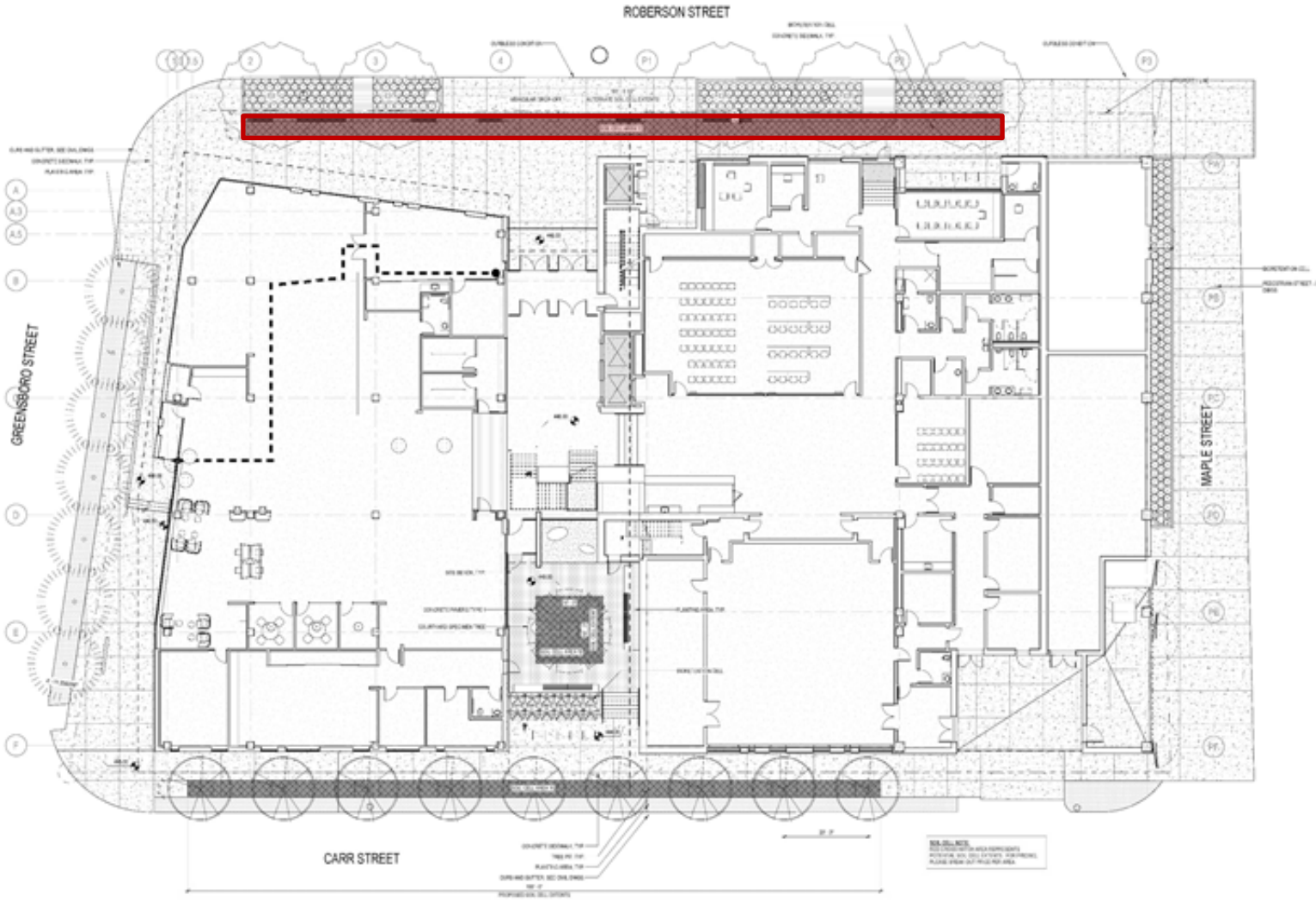
Source: Philadelphia Green Streets Design Manual, 2014

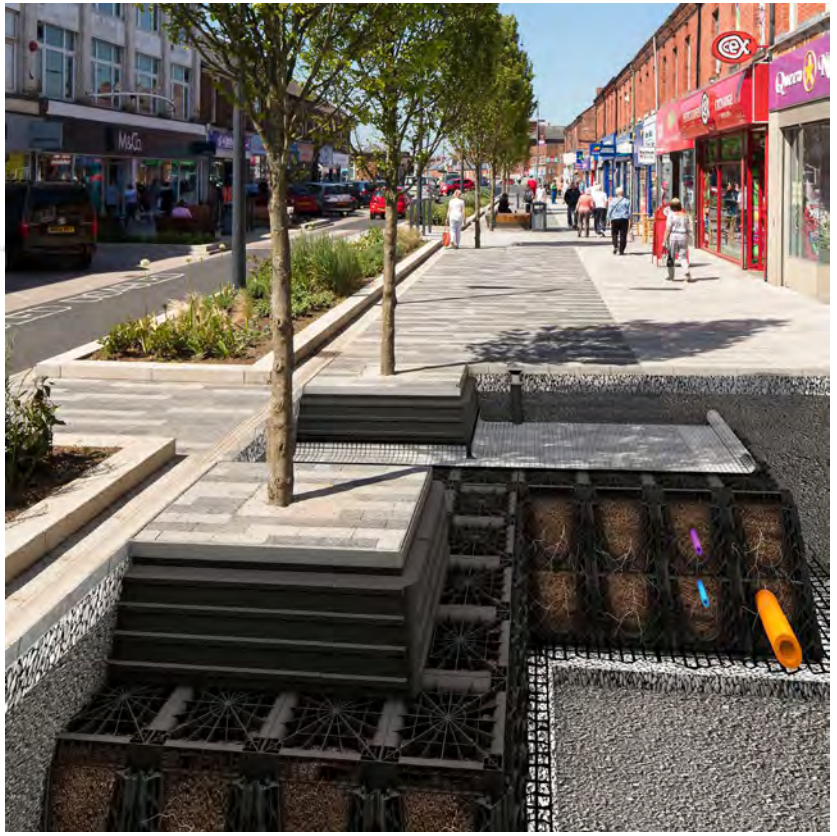
STORMWATER PLANTERS

Precedent Imagery

- *Expand urban beautification*
- *Promote sustainability story and educational opportunities*
- *Develop urban habitat and ecological diversity*
- *Enhance landscape performance*

SOIL CELLS STORMWATER DETENTION

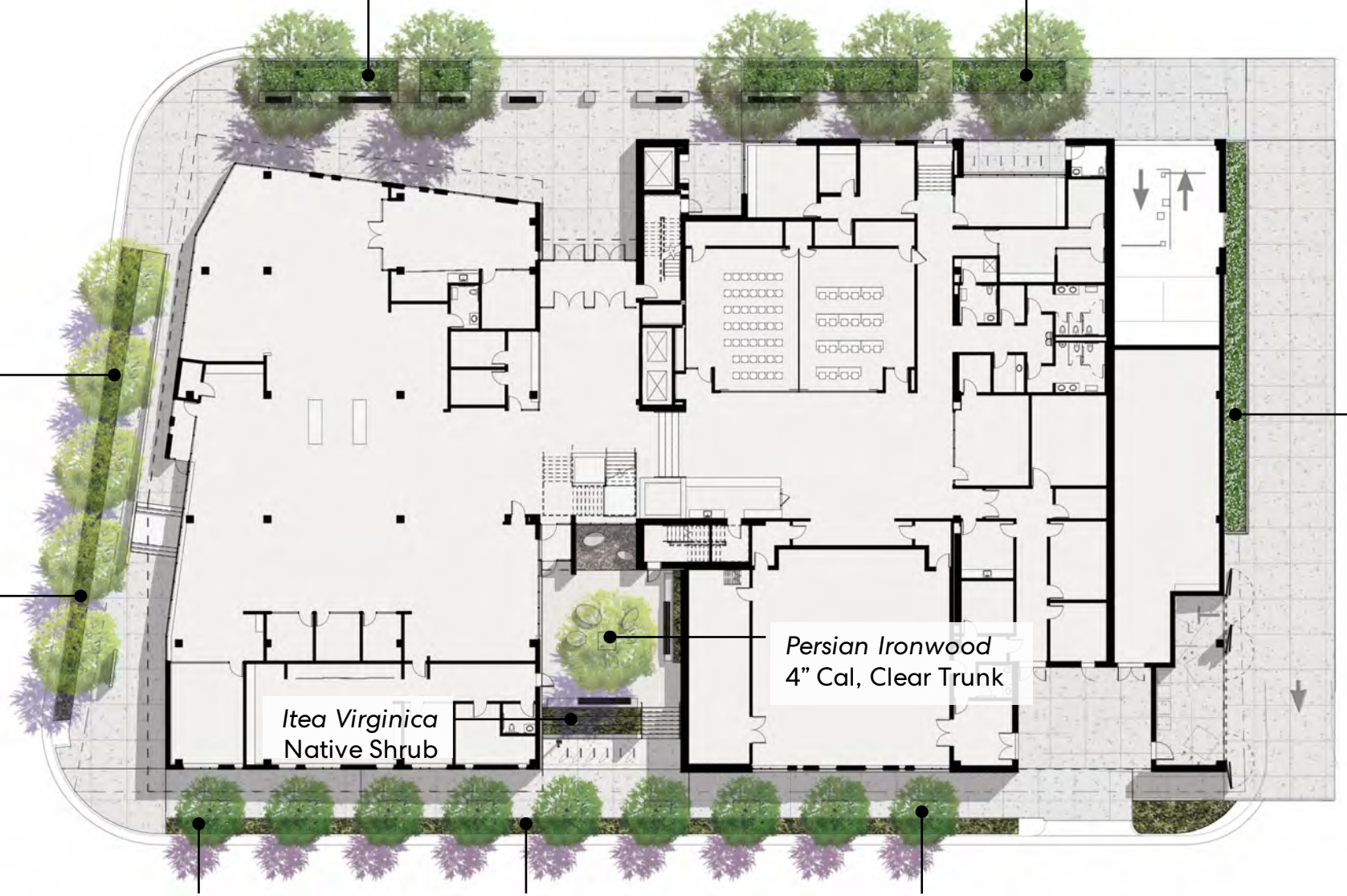




Green Blue Urban / Deep Root System: $49,000

LANDSCAPE

SITE PLAN



Native Mix Bioswale Planter:
Gem Box Ilex Glabra; Juncus; Iris Virginica; Carex Lurida; Itea Virginica

Bald Cypress
Deciduous Tree
4” Cal, Clear Trunk

Beacon Swamp White Oak
Deciduous Tree
4” Cal, Clear Trunk

Pennsylvania Sedge
At-grade planting area

Horsetail
Groundcover
Bioswale Planter

Persian Ironwood
4” Cal, Clear Trunk

Itea Virginica
Native Shrub

Pennsylvania Sedge
Groundcover
At-grade tree pits

Creeping Plum Yew
Evergreen Groundcover
At-grade planting area

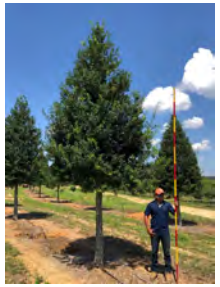
Fosters Holly
Evergreen Tree
6” Cal, Clear Trunk

PLANT PALETTE

Beacon Swamp White Oak
Deciduous Tree

Contemplation Persian Ironwood
Deciduous Tree

Bald Cypress
Deciduous Tree



Fosters Holly
Evergreen Tree

Gem Box Ilex Glabra
Evergreen Shrub

Itea Virginica
Native Shrub

Creeping Plum Yew
Evergreen Groundcover

Pennsylvania Sedge
Groundcover

Horsetail
Groundcover

Juncus Grass
Groundcover

Carex Lurida
Groundcover

Iris Virginica
Groundcover

SYSTEMS ANALYSIS

STRUCTURAL SYSTEM

Cast-In-Place Concrete: (Base)
Cost Premium: $ 0
Embodied Carbon: **104 Tons Carbon Emissions**

Steel + Composite Deck:
Cost Premium: $ 651,119
Embodied Carbon: **31.5 Tons Carbon Emissions**
$ 8,968/ton of carbon saved

Mass Timber:
Cost Premium: $ 1,189,540
Embodied Carbon: **-469 Tons Carbon Sequestered**
$ 2,075/ton of carbon saved

= to planting 700 Silver Maples and sequester **140** tons of carbon ($70,000)

STRUCTURAL SYSTEM

Cast-In-Place Concrete: (Base)
Cost Premium: $ 0
Embodied Carbon: **104 Tons Carbon Emissions**

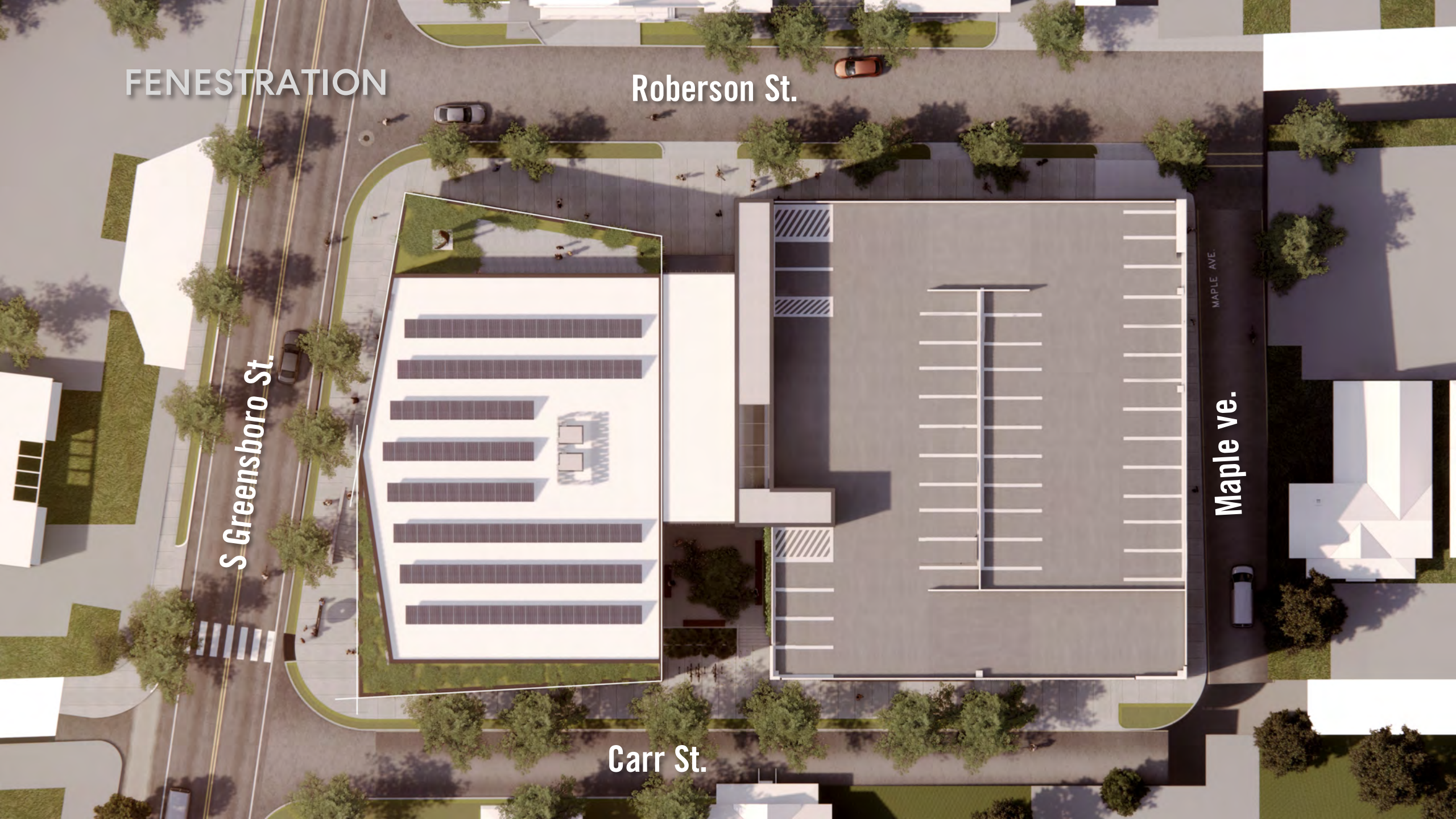
= to planting 700 Silver Maples and sequester **140** tons of carbon ($70,000)

Steel + Composite Deck:
Cost Premium: $ 651,119
Embodied Carbon: **31.5 Tons Carbon Emissions**
$ 8,968/ton of carbon saved

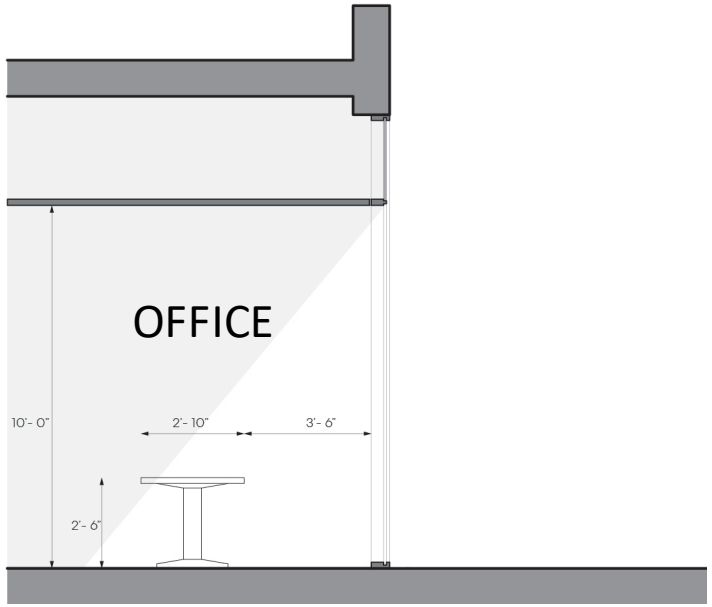
= to planting 6,500 Silver Maples and sequester **1,300** tons of carbon (**19X**)

Mass Timber:
Cost Premium: $ 1,189,540
Embodied Carbon: **-469 Tons Carbon Sequestered**
$ 2,075/ton of carbon saved

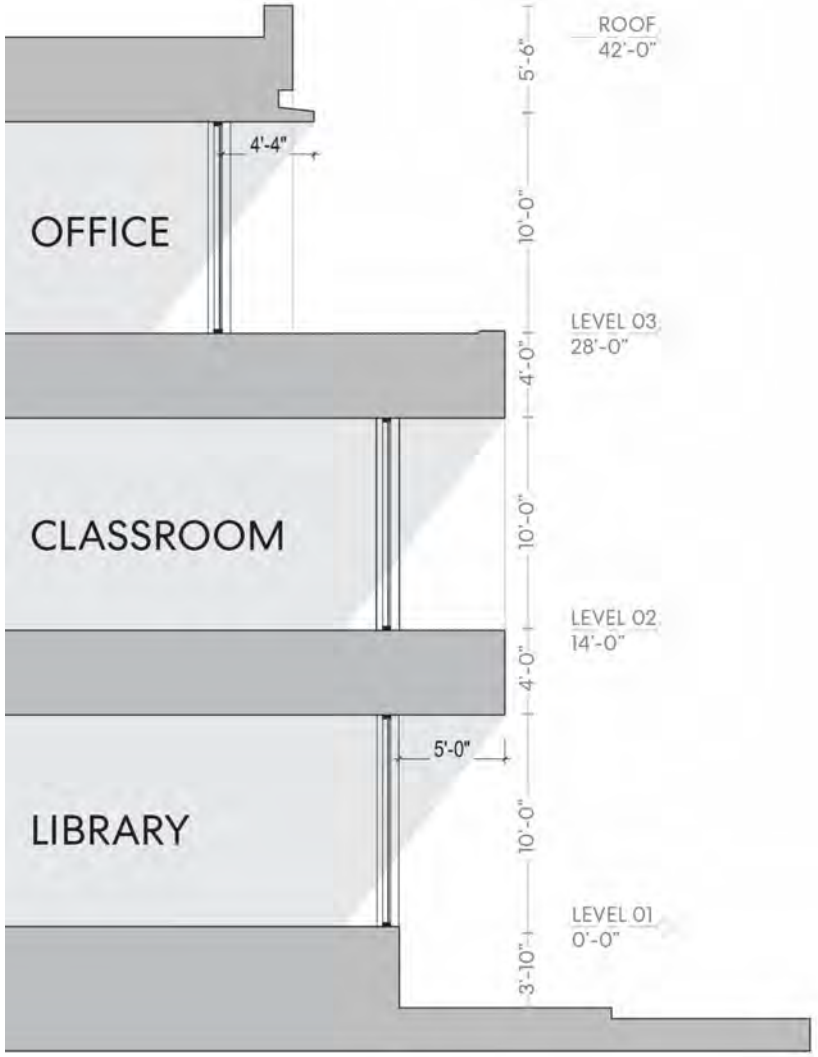
= to planting 11,900 Silver Maples and sequester **2,380** tons of carbon (**4X**)


FENESTRATION
Roberson St.
S Greensboro St.
MAPLE AVE.
Maple ve.
Carr St.

Previous design with no Canopy



Updated design with 4’-4” Canopy



FENESTRATION

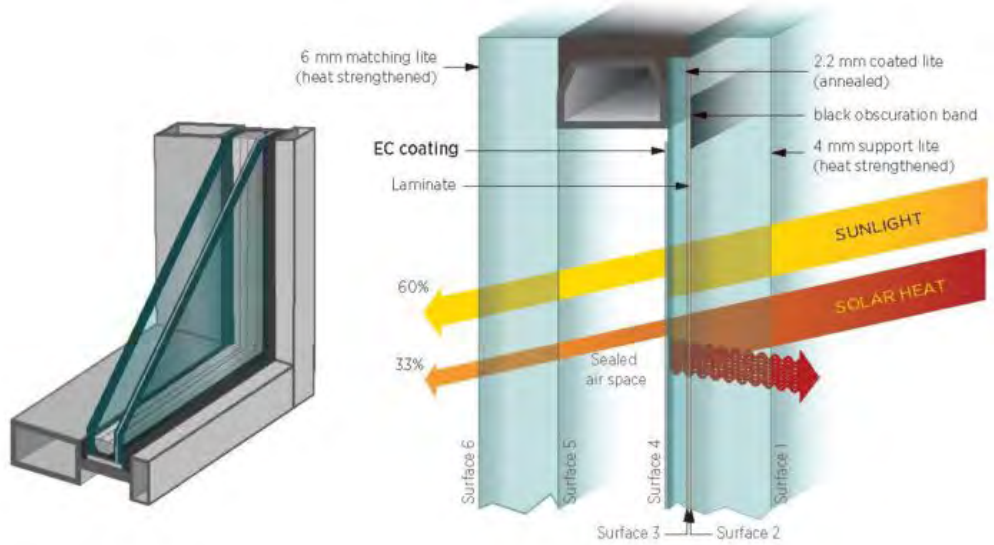
SIR ANALYSIS
FOR STATE FACILITIES

STATE CONSTRUCTION OFFICE
N.C. DEPT. OF ADMINISTRATION
RALEIGH, NORTH CAROLINA

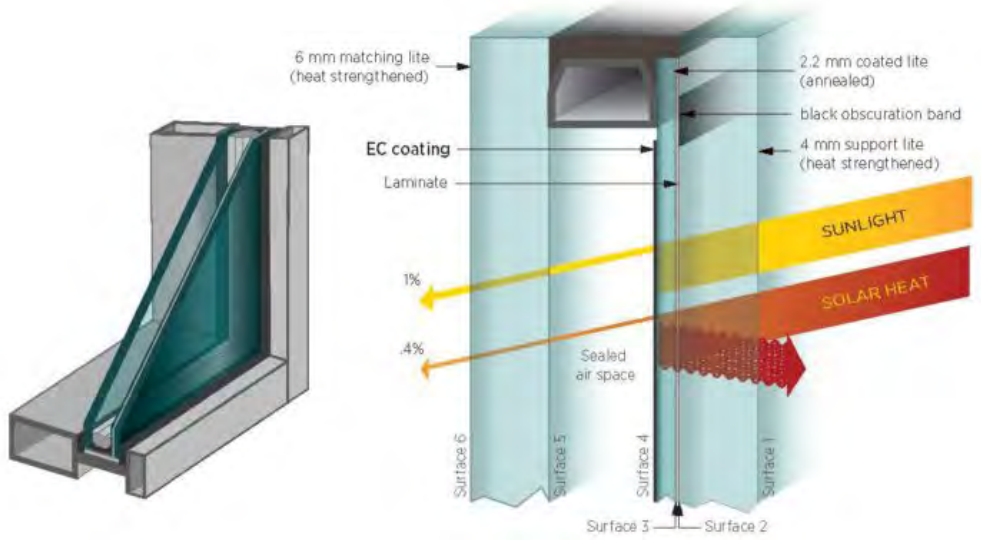
PROJECT NAME	The 203 Project, Carrboro
PROJECT ID NUMBER	
PROJECT DESCRIPTION	

	(A) Alternative ID	(B) Life Cycle Investment Cost	(C) Life Cycle Operating Cost	(D) Increased Investment Cost	(E) Operating Cost Savings	(F) SIR	(G) Rank
1	A-1-0	$40,845	$1,253,217	N/A	N/A	N/A	Base Case
2	A-1-1	$97,657	$1,253,217	$56,812	$0	0.00	2
3	A-1-2	$49,055	$1,243,806	$8,210	$9,411	1.15	1
4				$0	$0	0.00	2
5				$0	$0	0.00	2
6				$0	$0	0.00	2
7				$0	$0	0.00	2
8				$0	$0	0.00	2
9				$0	$0	0.00	2
10				$0	$0	0.00	2

$ 35,055 First Cost Premium



Cutaway view of EC IGU (tinted state)



MECHANICAL SYSTEM

Saving to Investment Ratio ANALYSIS

PROJECT NAME	The 203 Project
PROJECT DESCRIPTION	VRF LCCA

	(A) Alternative ID	(B) Life Cycle Investment Cost	(C) Life Cycle Operating Cost	(D) Increased Investment Cost	(E) Operating Cost Savings	(F) SIR	(G) Rank
1	Base	$1,581,421	$1,533,365	N/A	N/A	N/A	Base Case
2	VRF System	$1,659,931	$1,226,034	$78,510	$307,331	3.91	1
3				$0	$0	0.00	2
4				$0	$0	0.00	2
5				$0	$0	0.00	2
6				$0	$0	0.00	2
7				$0	$0	0.00	2
8				$0	$0	0.00	2
9				$0	$0	0.00	2
10				$0	$0	0.00	2

$ 78,510 First Cost Premium

SOLAR HOT WATER

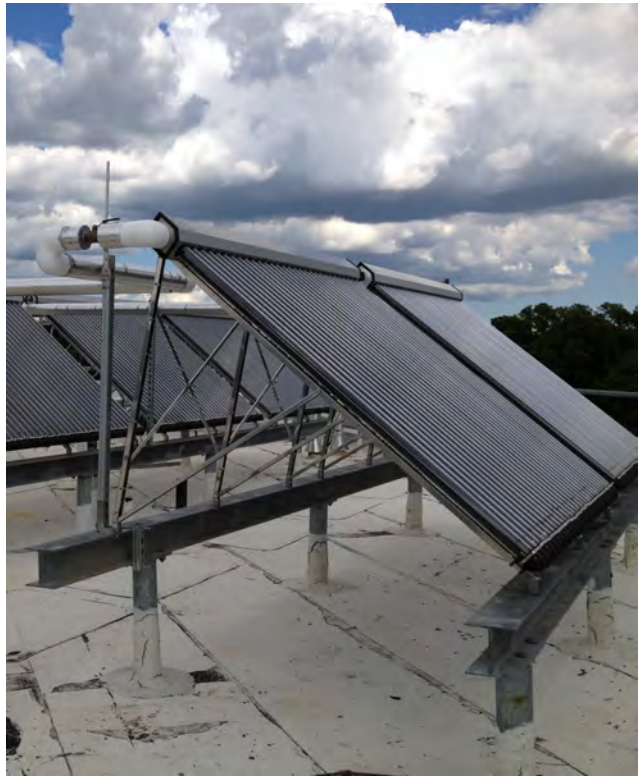
SIR ANALYSIS
FOR STATE FACILITIES

STATE CONSTRUCTION OFFICE
N.C. DEPT. OF ADMINISTRATION
RALEIGH, NORTH CAROLINA

PROJECT NAME	The 203 Project
PROJECT ID NUMBER	
PROJECT DESCRIPTION	Solar Water Heating

	(A) Alternative ID	(B) Life Cycle Investment Cost	(C) Life Cycle Operating Cost	(D) Increased Investment Cost	(E) Operating Cost Savings	(F) SIR	(G) Rank
1	Base	$21,200	$272,912	N/A	N/A	N/A	Base Case
2	Solar	$31,200	$311,636	$10,000	-$38,724	-3.87	9
3				$0	$0	0.00	1
4				$0	$0	0.00	1
5				$0	$0	0.00	1
6				$0	$0	0.00	1
7				$0	$0	0.00	1
8				$0	$0	0.00	1
9				$0	$0	0.00	1
10				$0	$0	0.00	1

$ 10,000 First Cost Premium



PRELIMINARY ENERGY MODEL

BASELINE ENERGY MODEL:

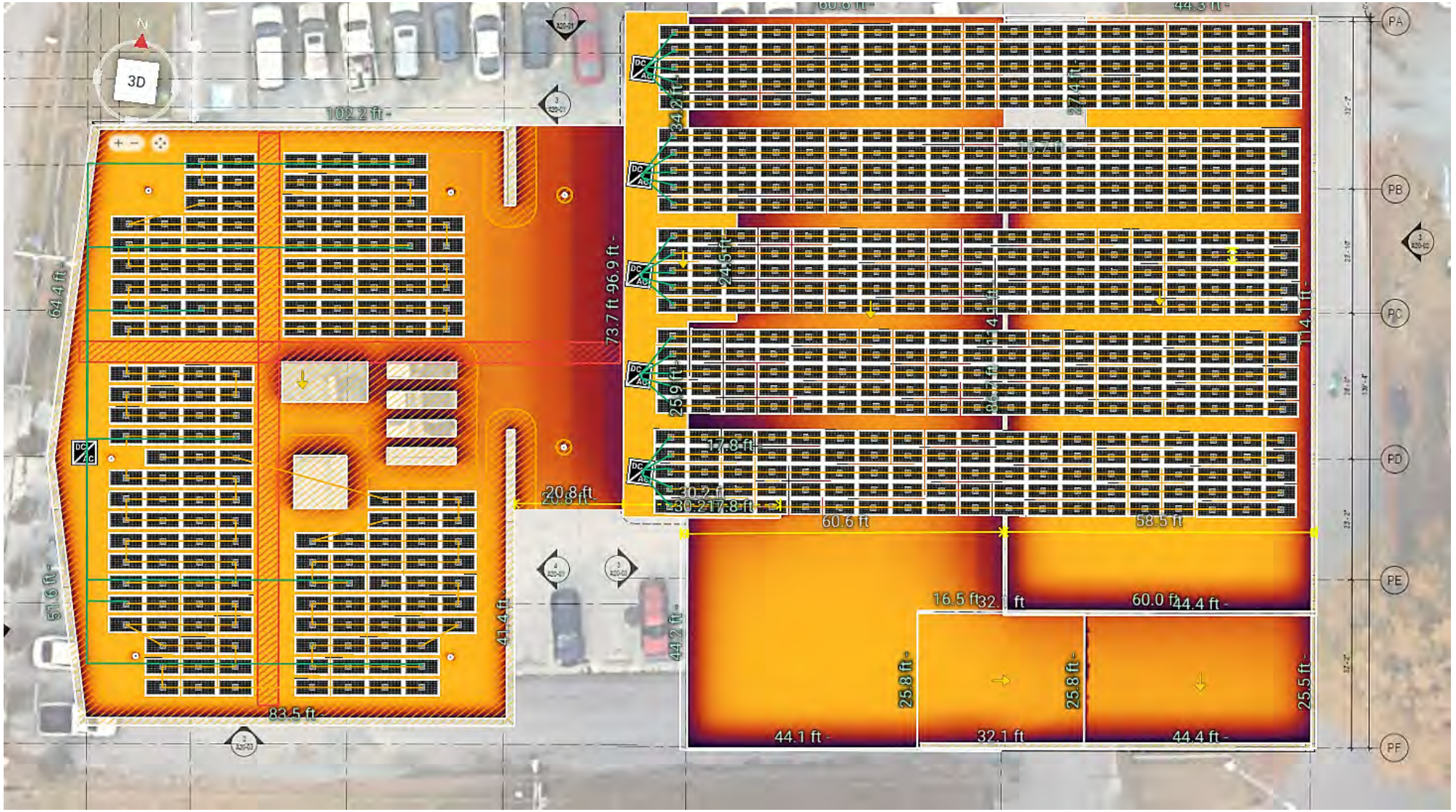
Energy Profile: 1,068,966 kWh/yr

PRELIMINARY ENERGY MODEL:

Energy Profile: 652,688 kWh/yr

40% below baseline

PHOTOVOLTAIC ARRAY



+/- 102,700 kWh; $70,659

+/- 245,100 kWh; $630,417

PHOTOVOLTAIC ARRAY – West Roof

SIR ANALYSIS
FOR STATE FACILITIES

STATE CONSTRUCTION OFFICE
N.C. DEPT. OF ADMINISTRATION
RALEIGH, NORTH CAROLINA

PROJECT NAME	The 203 Project - Solar Photovoltaic System
PROJECT ID NUMBER	059-20
PROJECT DESCRIPTION	PV Array for West Roof of Building

	(A) Alternative ID	(B) Life Cycle Investment Cost	(C) Life Cycle Operating Cost	(D) Increased Investment Cost	(E) Operating Cost Savings	(F) SIR	(G) Rank
1	BASE	$1,800,000	$1,064,531	N/A	N/A	N/A	Base Case
2	PV System	$1,883,561	$965,635	$83,561	$98,896	1.18	1
3				$0	$0	0.00	2
4				$0	$0	0.00	2
5				$0	$0	0.00	2
6				$0	$0	0.00	2
7				$0	$0	0.00	2
8				$0	$0	0.00	2
9				$0	$0	0.00	2
10				$0	$0	0.00	2

$ 70,659 First Cost Premium

PHOTOVOLTAIC ARRAY – West & East Roofs Combined

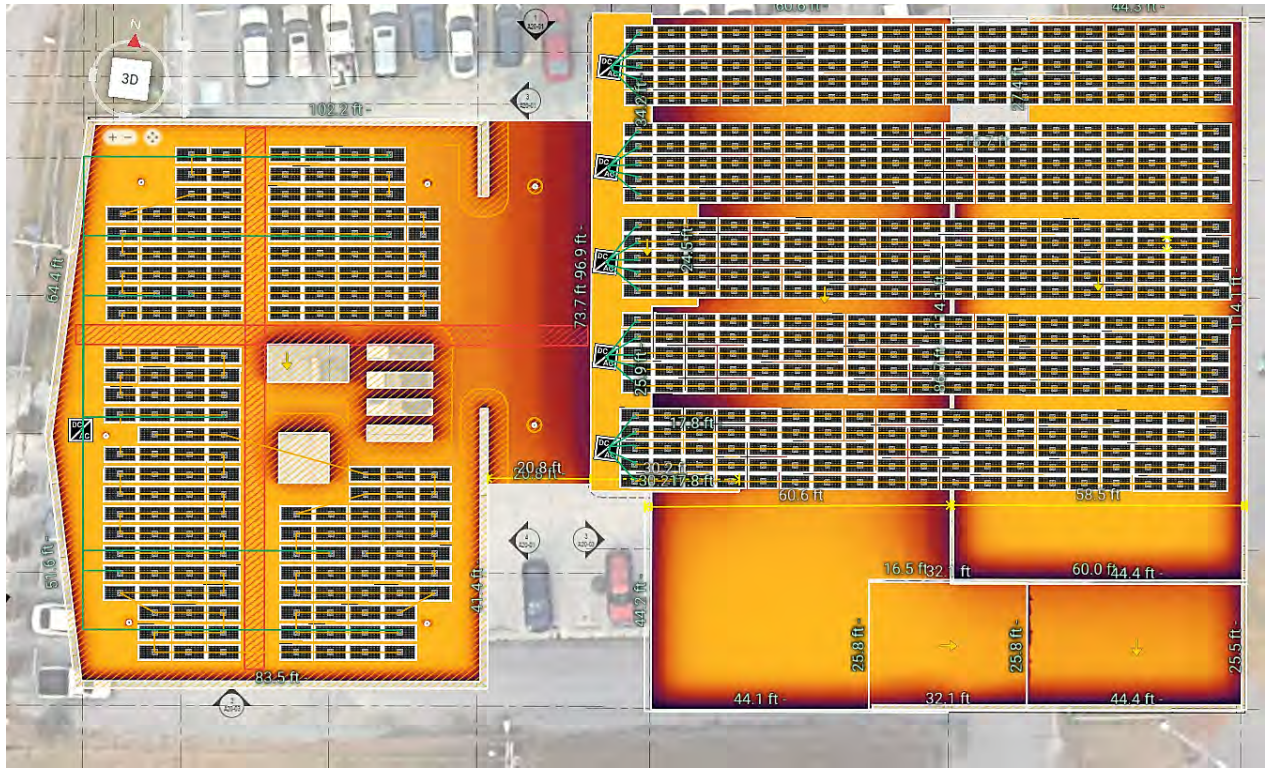
SIR ANALYSIS
FOR STATE FACILITIES

STATE CONSTRUCTION OFFICE
N.C. DEPT. OF ADMINISTRATION
RALEIGH, NORTH CAROLINA

PROJECT NAME	The 203 Project - Solar Photovoltaic System
PROJECT ID NUMBER	059-20
PROJECT DESCRIPTION	PV Array for West+East Roofs of Building

	(A) Alternative ID	(B) Life Cycle Investment Cost	(C) Life Cycle Operating Cost	(D) Increased Investment Cost	(E) Operating Cost Savings	(F) SIR	(G) Rank
1	BASE	$1,800,000	$1,064,531	N/A	N/A	N/A	Base Case
2	PV System	$2,533,197	$430,230	$733,197	$634,301	0.87	1
3				$0	$0	0.00	2
4				$0	$0	0.00	2
5				$0	$0	0.00	2
6				$0	$0	0.00	2
7				$0	$0	0.00	2
8				$0	$0	0.00	2
9				$0	$0	0.00	2
10				$0	$0	0.00	2

$ 701,076 First Cost Premium



Q+A