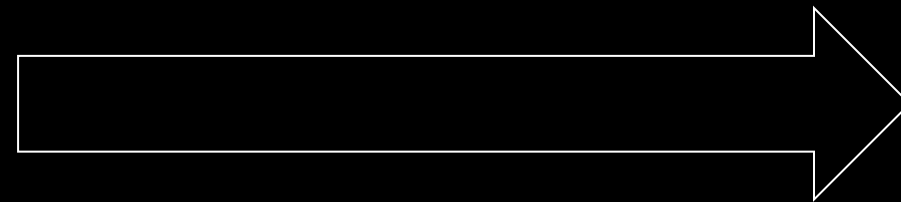
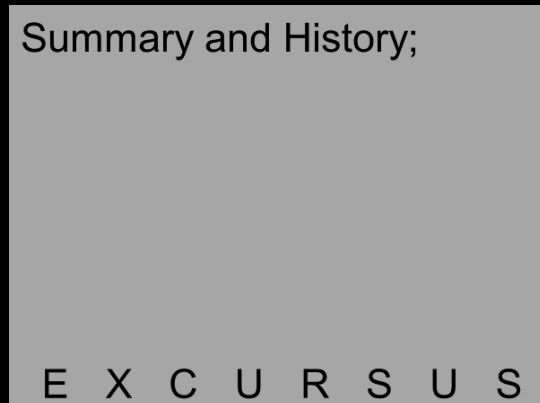


The future of Industrial,
Distribution and E-commerce related building types
Is....
The past of the Shopping Mall

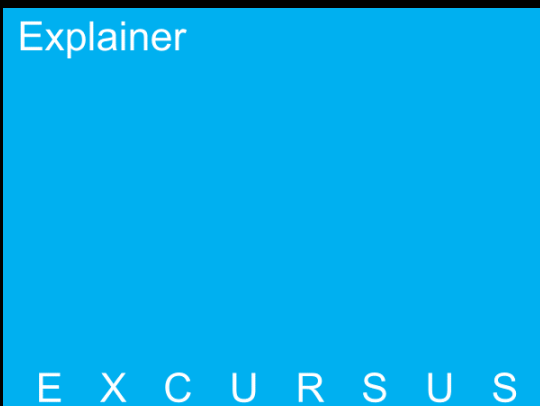
Lecture Keynotes



At the beginning of each deck, as brief overview or abstract along with a brief history of its origin date, first presentation or generation



Mid deck summaries of the main points for clarity & flow



Mid deck enhanced explanation of the details behind the main points for clarity and flow

E X C U R S U S

Summary and History;

Several circumstances converged on influencing us to create a story line about warehouses and malls which we could consolidate and share with our clients.

The first circumstance was , well our clients. Namely the brokers who transact in the industrial market. Brokers always need an edge and some of the most competitive brokers we work with were mentioning the same phenomenon in different ways: Amazon was buying malls, Amazon was “renovating malls, Malls were the next big Amazon play.

Of course the demise of the mall was, at least in terms of the speed of the market and the times, old news.

But what Amazon was doing with malls was a rumor based upon perhaps one project in the very early days of these musings. We wanted to understand the “*phenomenon*” better and define it relative to industrial- why is it important that Amazon who was warping warehousing typologies via e-commerce needs was interested in malls?

And frankly we were tired of all of the prognostications that the future of industrial was vertical. That story line had been out for over seven years and had lost its purchase on the term *future*- let alone its false premise that it would be something new to have vertical warehouses. Many making this “prediction” have not been to Chicago as best we could tell. We wanted to define a more interesting speculation about how to imagine the future of industrial.

E X C U R S U S

The big idea here is;

Adaptive re-use is a better option for malls being converted to last mile. Malls in the right demographic spots were too expensive to buy and demolish. And the building types that accommodate last mile needs don't need excessive land bays in most cases, as well as having some positive vitality potential for what would be left of the mall- the employees of Amazon....

E X C U R S U S

What is the deal with Amazon and MALLS????

“Amazon is planning to build a 700,000-square-foot facility on the site of the shuttered Rolling Acres Mall in Akron, Ohio.”

“Retail-to-Warehouse Conversions Gain Momentum
Fall 2019 Issue

By:
Ron Derven, Jennifer LeFurgy, Ph.D.”

“As communities across the country struggle to find new uses for shuttered shopping malls, real estate professionals are starting to convert them into industrial facilities. Getty Images”

“Amazon confirms plans for Euclid fulfillment center, replacing another dead mall”

Retail-to-Industrial Conversions: Revolution or Niche Trend?”

“Is Retail-To-Industrial The Next Big Thing, Or Just A Pipe Dream For Last-Mile Logistics?”

“Shopping malls turned warehouse? CRE might be onto something”

“Amazon Re-Purposing Malls It Helped Vacate And Widening Tax Deficits In The Process”

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“Conversions” ,Demolitions or Adaptive re-use?????

Most mall “conversions” related to E-Commerce or Industrial typologies are *called* “renovations” leading to the myth that malls are being *converted*. In reality, they are being demolished to fit
‘ perfect prototypes’

Land play

But....

We discovered a few things while studying nearly 20 malls in the last 30 days . In all cases we are looking at modifying them strategically demolishing only small parts of them. Some are thriving with dead anchors (think Sears) some are struggling as a whole....

And....August 12, 2020

'The Nature Of The Mall Is Changing' As Simon, Brookfield Eye **Converting Anchors** To Industrial

A CBRE report released last month found **59** retail-to-industrial **conversion projects** that have been completed, begun construction or been proposed since 2017. That is up significantly from January 2019, when there were 24 such projects.

Many of the conversion projects CBRE found are full-scale redevelopments of completely vacant malls, but CBRE Associate Director of Industrial and Logistics Research Matthew Walaszek said he is **increasingly seeing owners look to convert vacant space in malls that continue to operate.**

"That's something we have seen and we would point to as the next phase for the **blending of retail and industrial**," Walaszek said of the conversion projects in existing malls. "We will absolutely see more and more of that."

The purpose of this research is to explore the preservation of parts of, or integration of parts of existing mall structure where we are probing

Adaptive reuse

The conclusions thus far are a possible **25-40%** savings on construction cost including a time savings of **4 months** in some cases.

Explainer

Understanding the original of the mall- its DNA- why its wide and fat and empty at the middle-helps to understand where it intersects the contemporary industrial typologies.

Understanding why it is a dying building type points out what to get rid of to save the patient and what, with some intervention, could still thrive.

E X C U R S U S

A brief history of the rise and fall of the mall.



Rise



It All Started with Victor Gruen

- the Austrian architect Victor Gruen (1903—1980).
- first enclosed shopping center project was Southdale Mall in Edina, Minnesota, in 1954.
- it was an entirely enclosed system of shops with no exterior windows and a climate-controlled interior.
- two levels, had a department store at each end, and escalators
- Gruen was inspired by centrally planned urban re-development in his hometown of Vienna, Austria

Why the Origin Story of the Enclosed Mall Matters*

- \$5 trillion U.S. retail industry
- shopping mall industry controls our current and possible future situation.

Conclusion

- Gruen's original vision for malls – a greater integration into communities – means these properties are usually well placed

Fall



Cultural*

- Experiential retail is about the store not the mall
- E-Commerce-80% of all Americans shop on Amazon at some point

Financial

- In 1954, Congress allowed for an accelerated depreciation process for new construction projects, effectively tax-free money.
- Money poured into real estate investments.
- Investors chose not to improve existing malls & began bloating the American landscape with new, huge malls.
- Needed stores to fill them & drove venture capital investment for huge stores and mega retailers.

Economics / Recession

- 2008 Global Financial Crisis. In 2007 to 2009 alone, 400 of America's 2000 largest malls were shuttered
- Green Street Advisors, predicted in 2014 that 15 percent of malls in the U.S. would be closed and/or converted into non-retail property
- 2017- In the first three quarters alone, chains reported that 6,800 stores closed, with only 3,000 new stores replacing them.
- 2018- the decline of retail, which is oft referred to as America's "retail apocalypse," continued.
- Record levels of store closures spite of high domestic consumer confidence, historically low unemployment, and positive growth forecasts
- It's not predicted that malls will ever bounce-back to their pre-recession earnings.

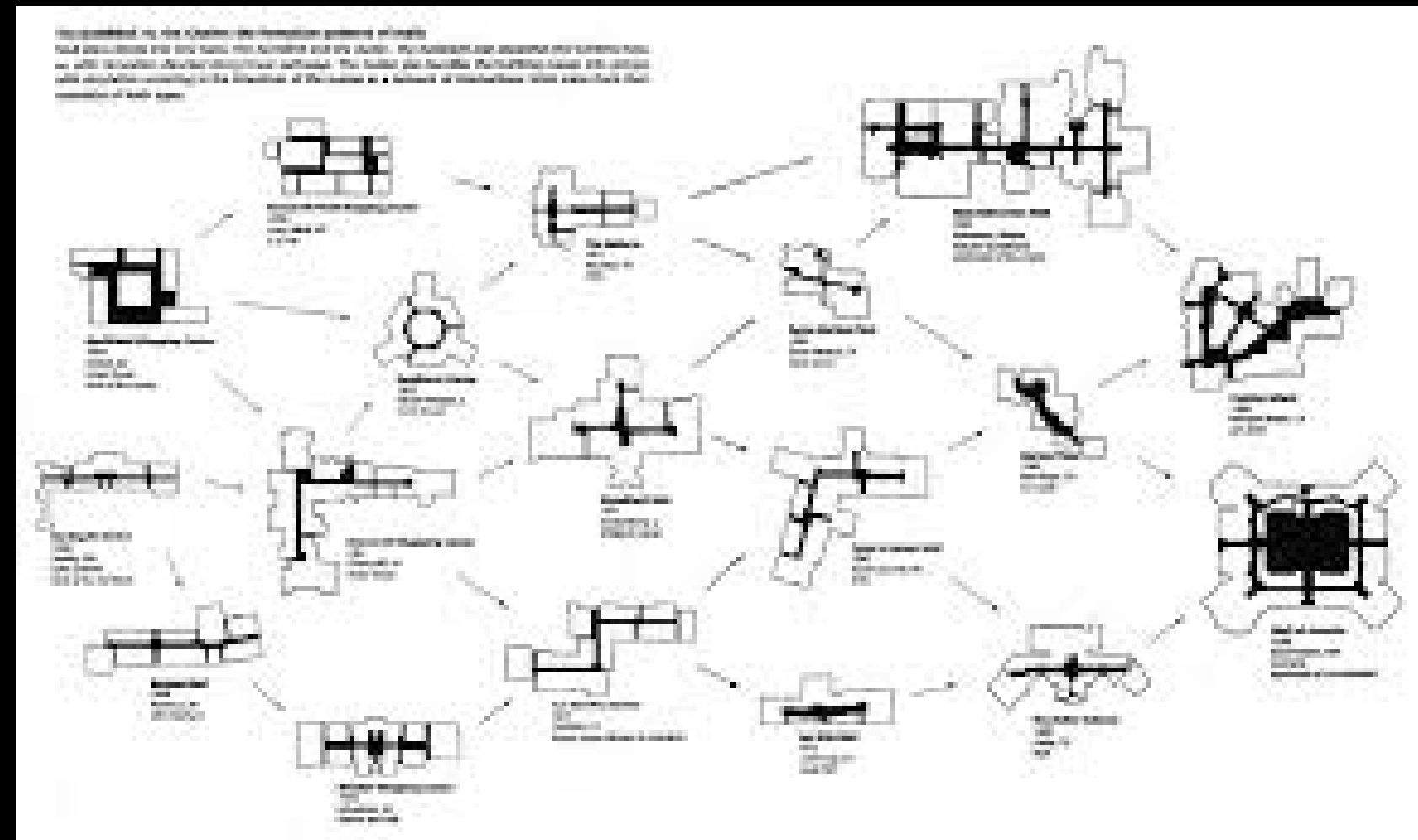
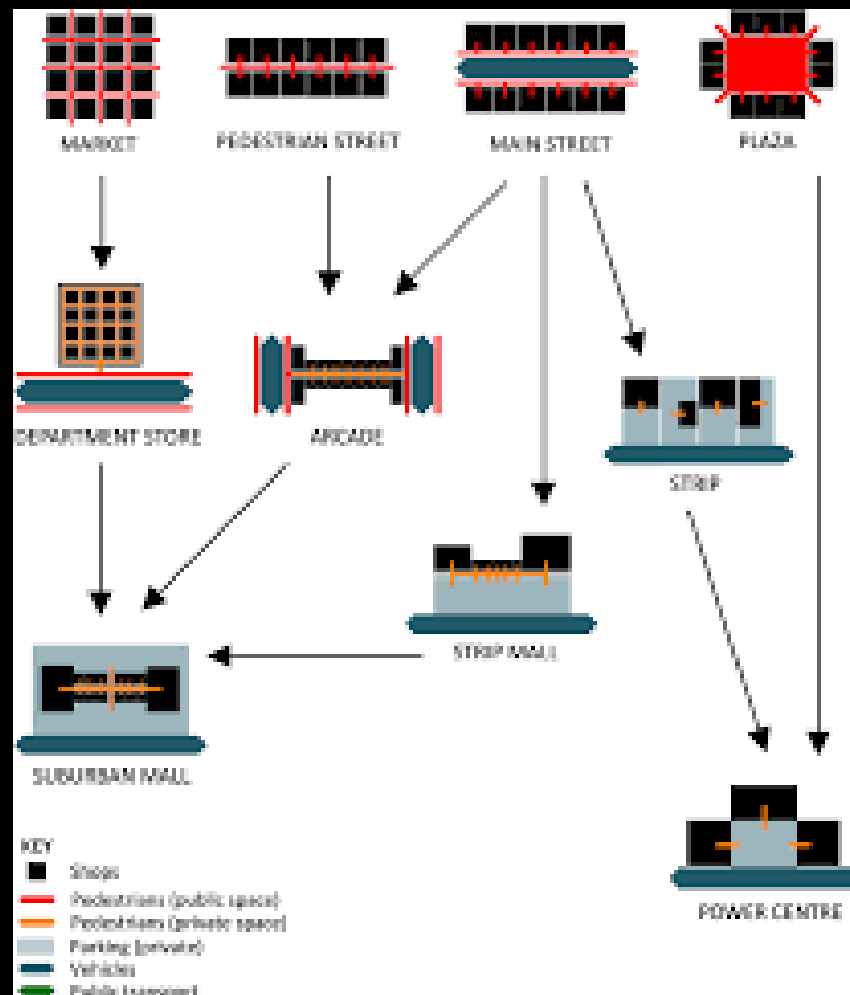
Mall morphology- typical set up of older malls



This study looks at “Older” malls rather than “modern” malls focusing on Pre- 90’s malls over 30 years old....

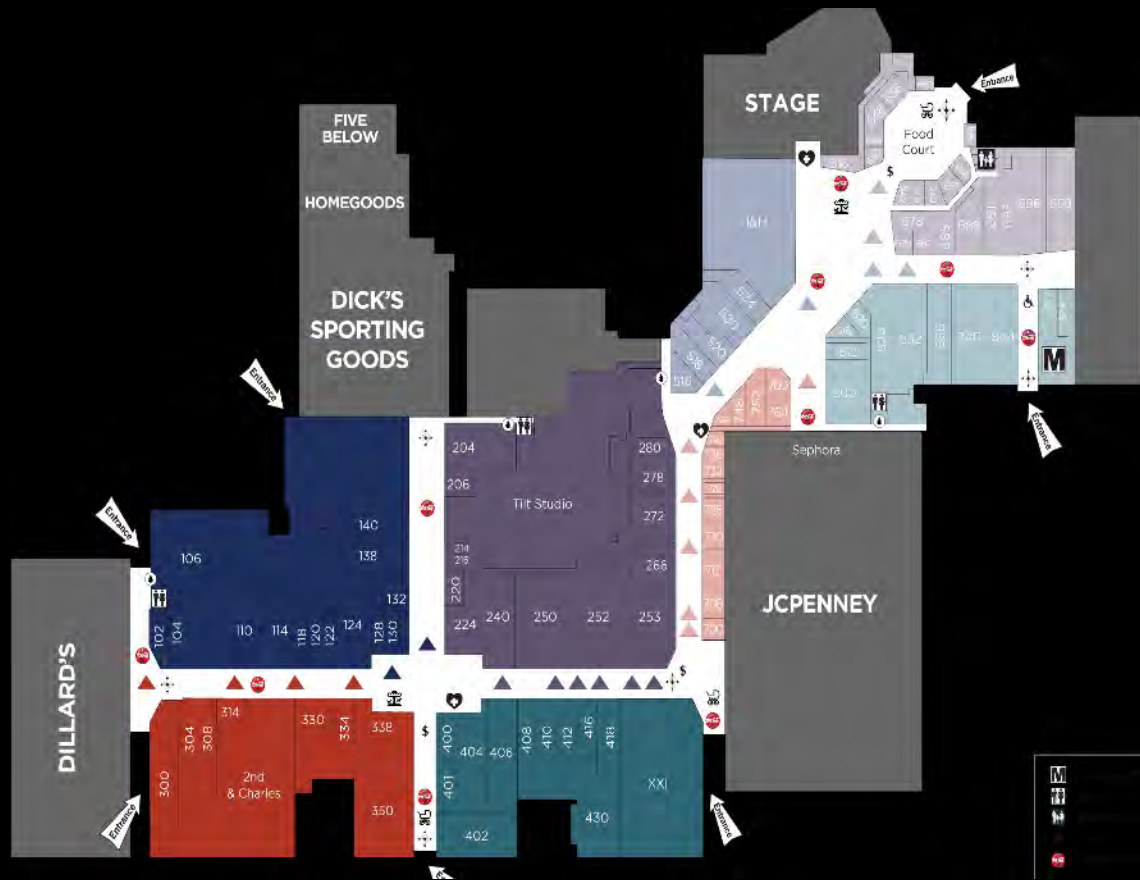
U.S. Shopping-Center Classification and Characteristics

Type of Shopping Center	Concept	Center Count	Aggregate GLA (Sq. Ft.)	% Share of Industry GLA	Average Size (Sq. Ft.)	Typical GLA Range (Sq. Ft.)	Acres	# of Anchors	% Anchor GLA	Typical Number of Tenants	Typical Type of Anchors	Trade Area Size
General-Purpose Centers		112,520										
Super-Regional Mall	Similar in concept to regional malls, but offering more variety and assortment.	620	778,336,548	10.2%	1,255,382	800,000+	60-120	3+	50-70%	NA	Full-line or junior department store, mass merchant, discount department store and/or fashion apparel store.	5-25 miles
Regional Mall	General merchandise or fashion-oriented offerings. Typically, enclosed with inward-facing stores connected by a common walkway. Parking surrounds the outside perimeter.	600	353,795,548	4.7%	589,659	400,000-800,000	40-100	2+	50-70%	40-80 stores	Full-line or junior department store, mass merchant, discount department store and/or fashion apparel store.	5-15 miles
Community Center ("Large Neighborhood Center")	General merchandise or convenience-oriented offerings. Wider range of apparel and other soft goods offerings than neighborhood centers. The center is usually configured in a straight line as a strip, or may be laid out in an L or U shape, depending on the site and design.	9,776	1,930,849,736	25.4%	197,509	125,000-400,000	10-40	2+	40-60%	15-40 stores	Discount store, supermarket, drug, large-specialty discount (toys, books, electronics, home improvement/furnishings or sporting goods, etc.)	3-6 miles
Neighborhood Center	Convenience oriented.	32,588	2,340,711,371	30.8%	71,827	30,000-125,000	3-5	1+	30-50%	5-20 stores	Supermarket	3 miles
Strip/Convenience	Attached row of stores or service outlets managed as a coherent retail entity, with on-site parking usually located in front of the stores. Open canopies may connect the store fronts, but a strip center does not have enclosed walkways linking the stores. A strip center may be configured in a straight line, or have an "L" or "U" shape. A	68,936	911,202,922	12.0%	13,218	< 30,000	<3	Anchor-less or a small convenience-store anchor.	NA	NA	Convenience store, such as a mini-mart.	<1 mile



Malls Have evolved along a common spatial arc since the 50's. This held true up until the post 1990's when new forms began to evolve

Pre- 1990

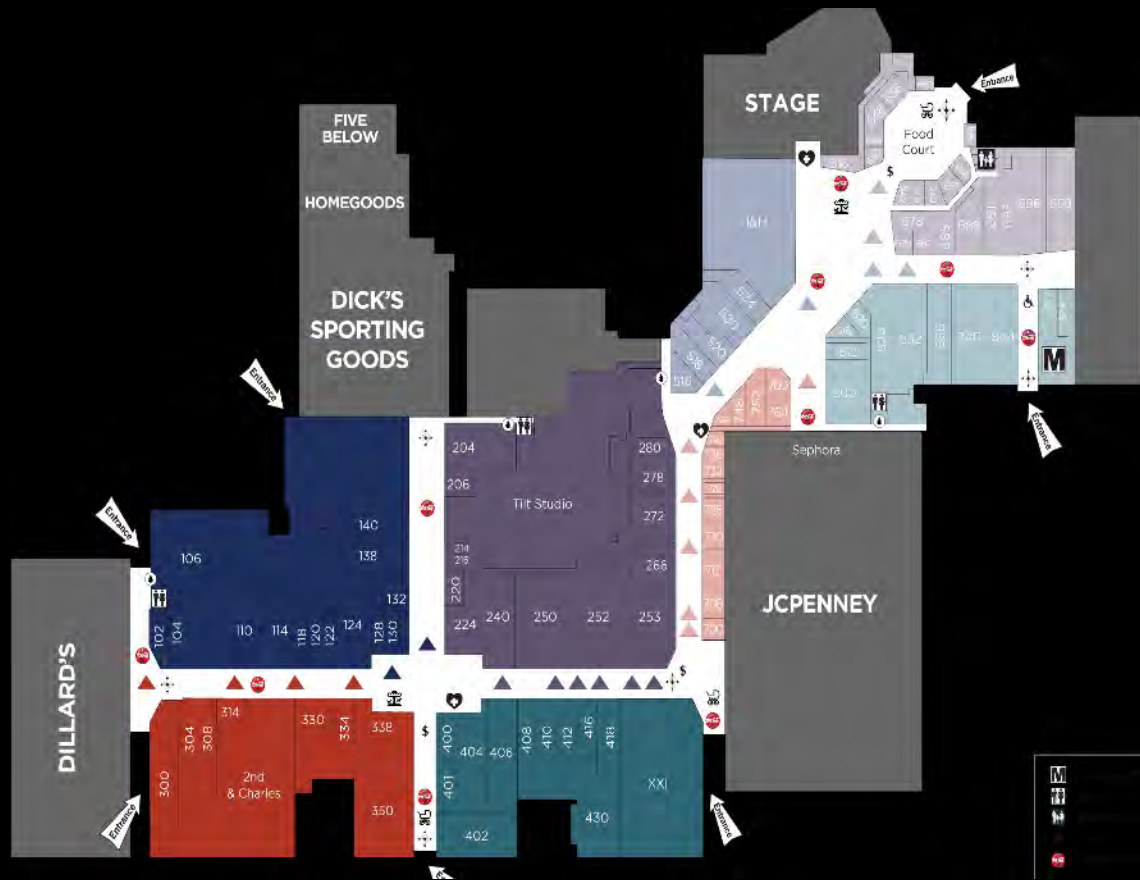


Post- 1990

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Pre- 1990



Post- 1990

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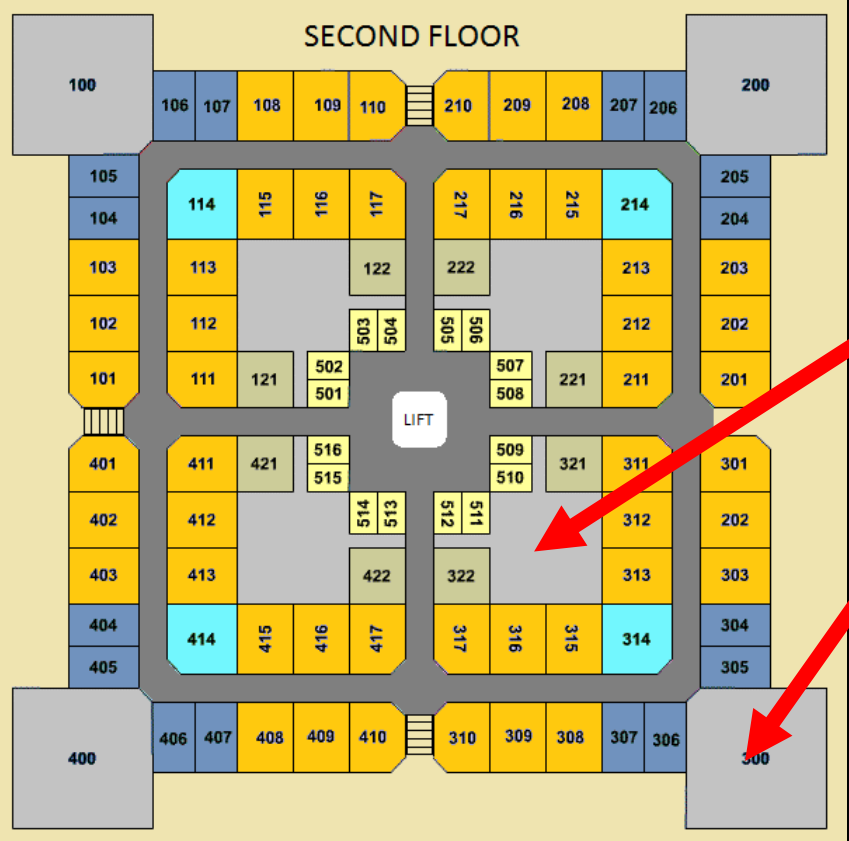
General Geometry & Configuration is based upon
two fundamental and simple diagrams driven by
retail needs / metrics of the era.

Single and two story with empty center

or “triple loaded” center lease space....

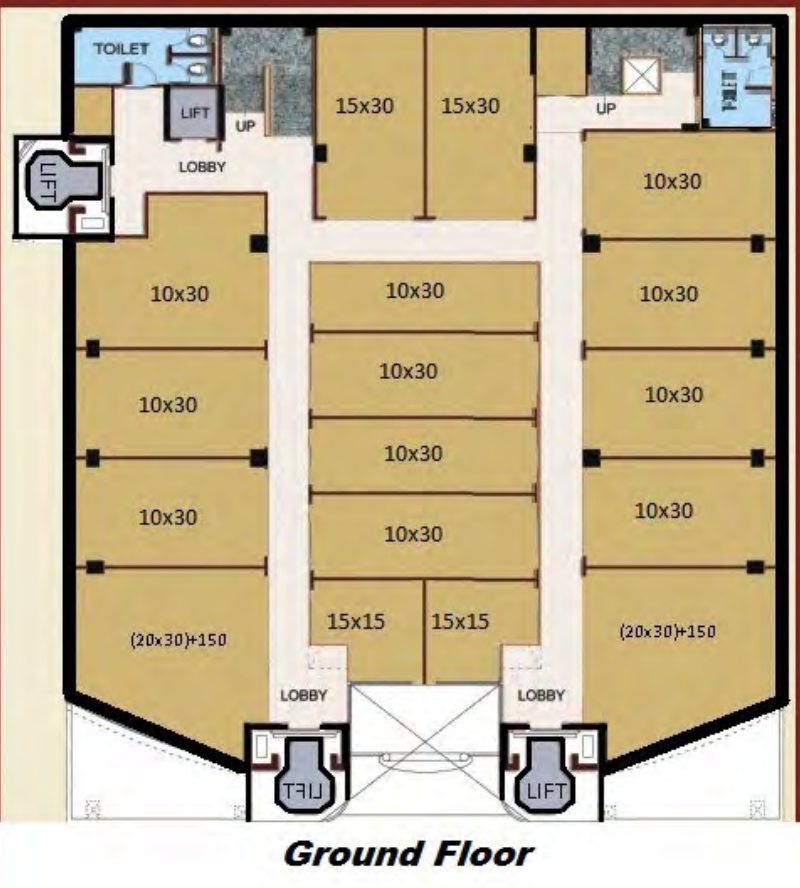
This is the basic DNA of a mall

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Empty Center
(atrium)

Anchor



Triple loaded

Possible open walkways

Mall prototypes & General Geometry using those diagrams result in two simple forms;

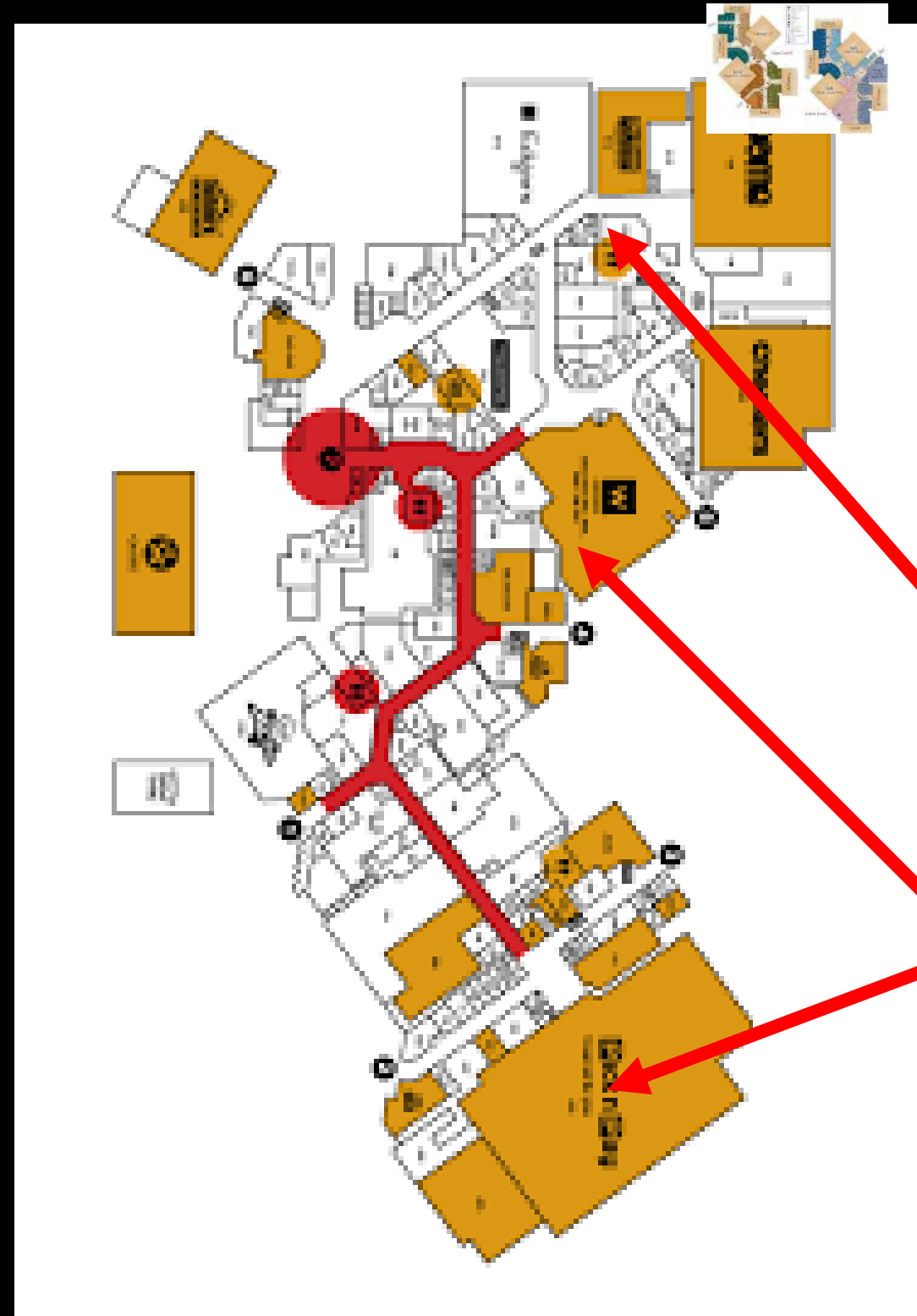
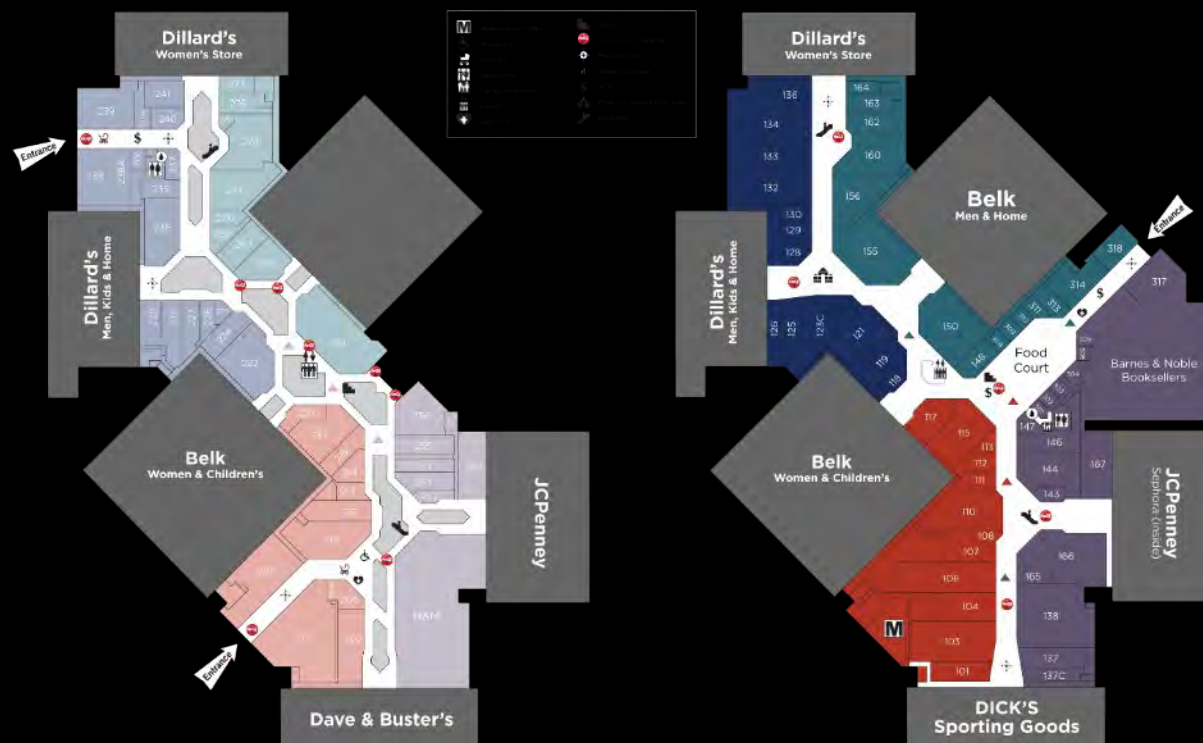
Composite

Aggregated building type due to architectural response to market forces over time

Linear

organic growth – just add another link

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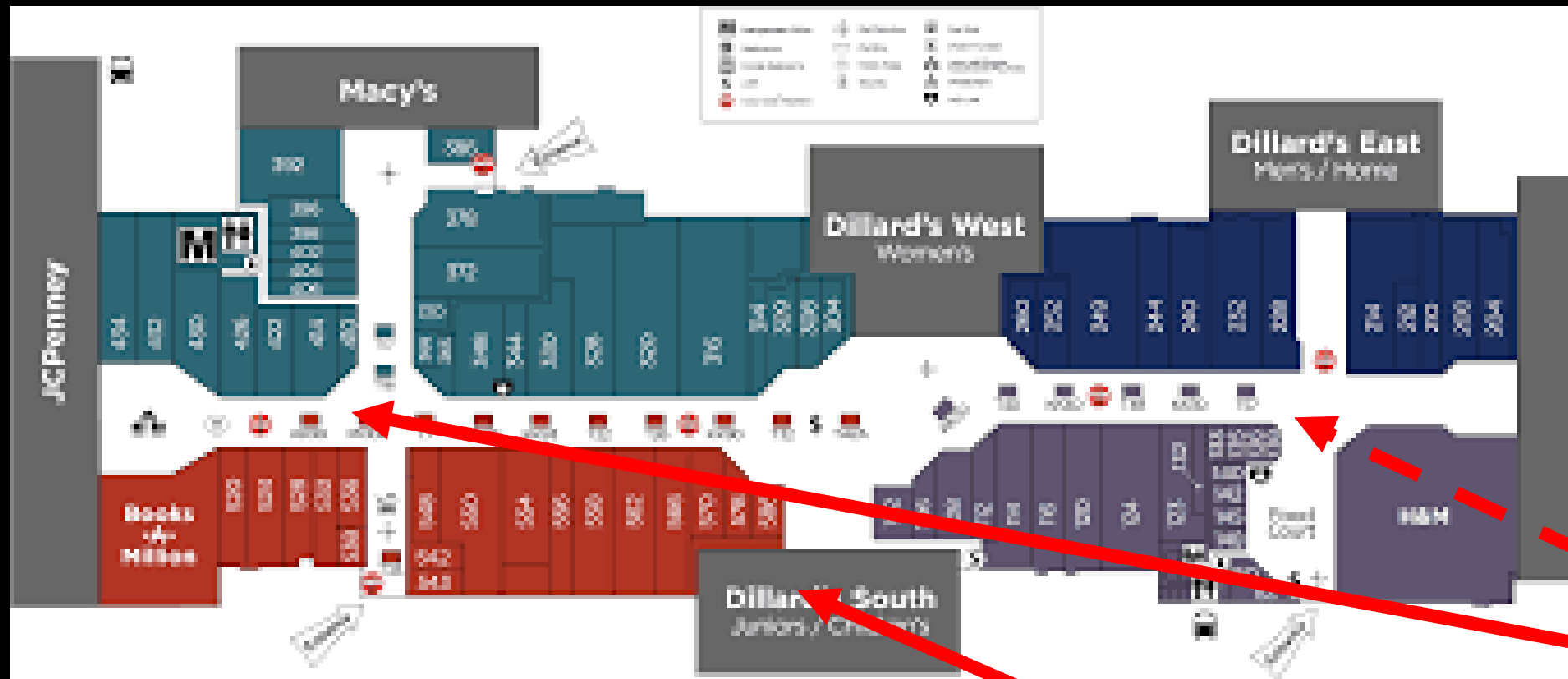
Composite type

Aggregated

Core structure

Market driven
additions

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Linear type

Add a link
expansions

Market driven
Additions

Width? 500' +/-
Same as 800k
Cross dock

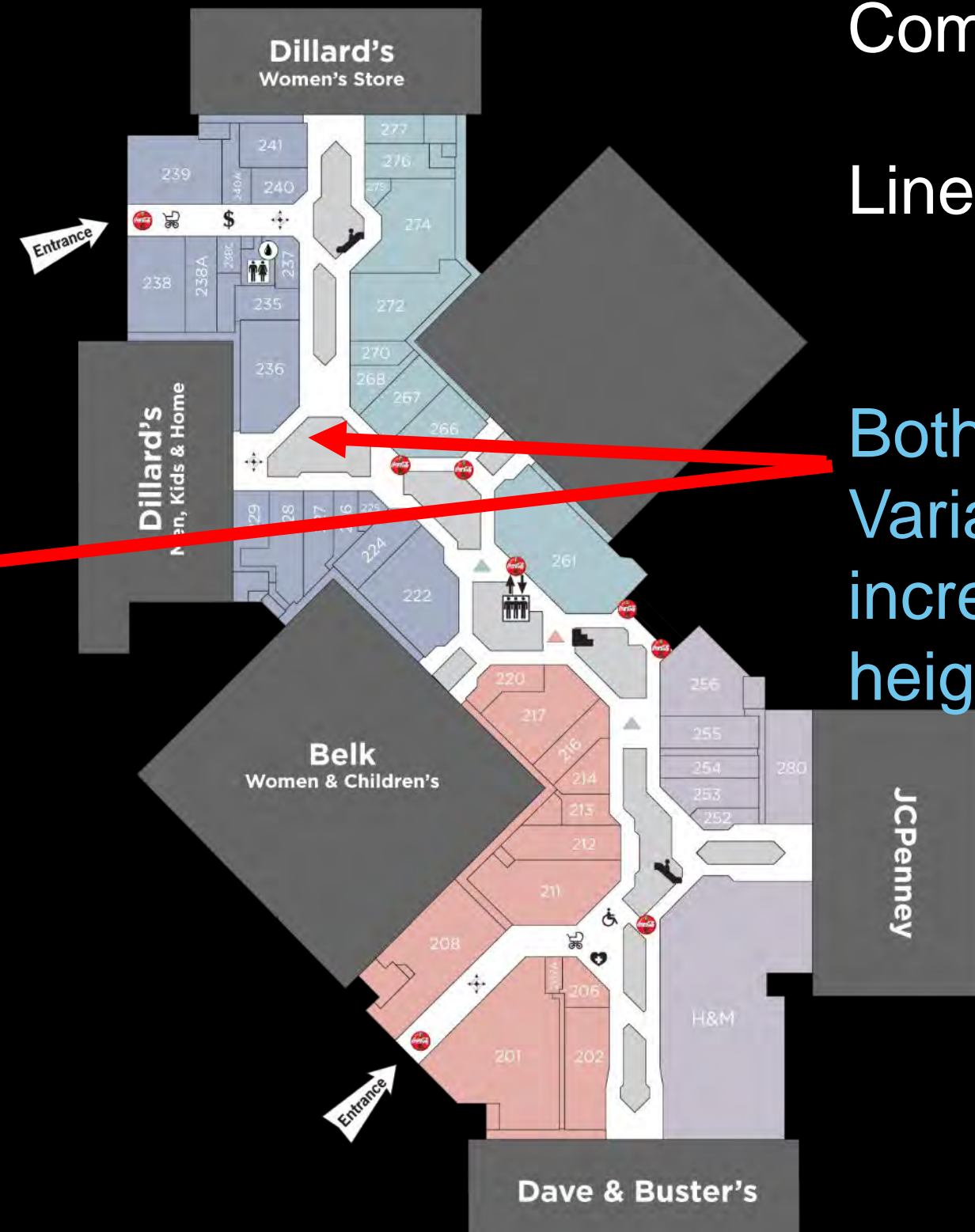
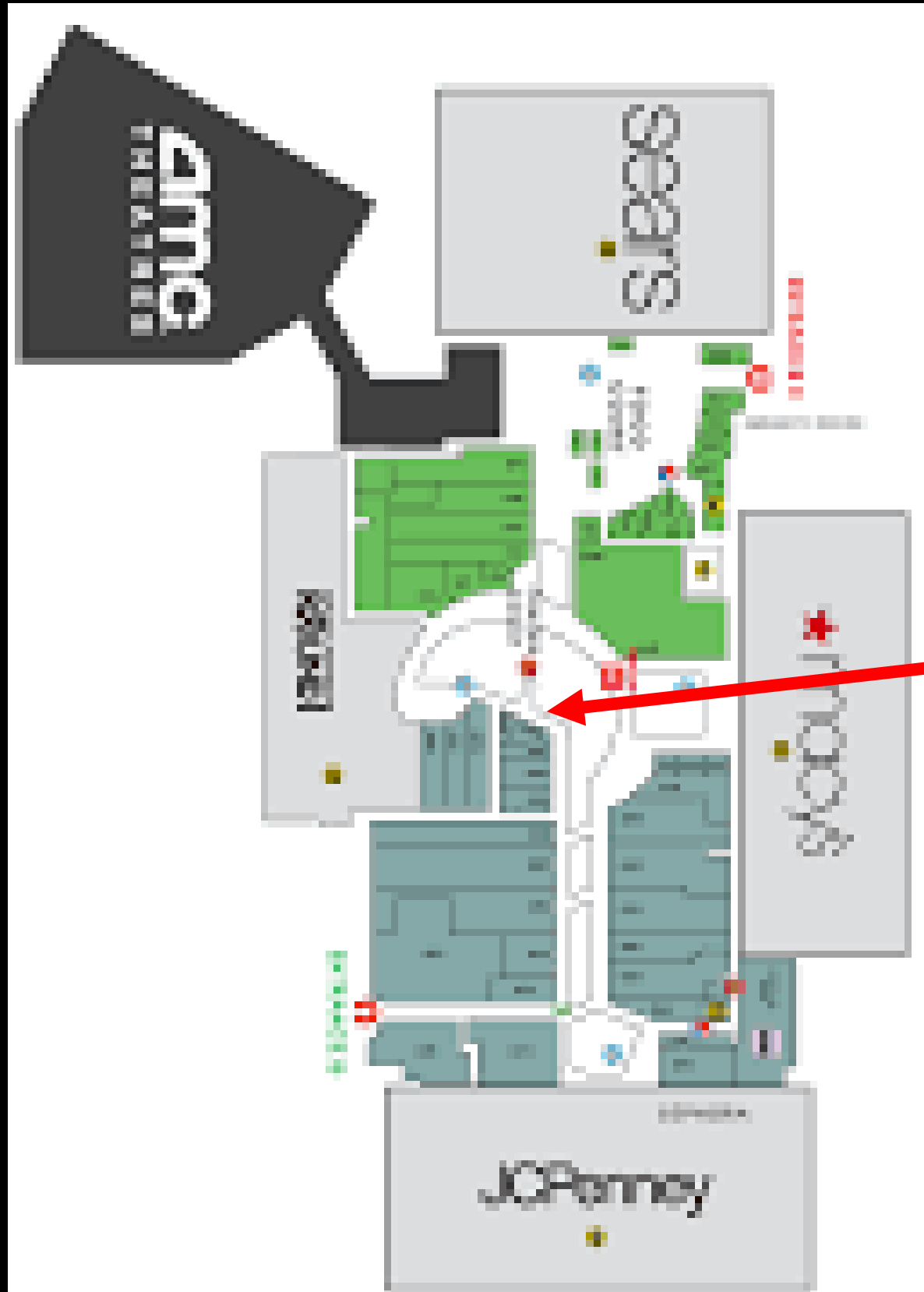


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Composite type

Linear type

Both have atrium
Variations-
increasing clear
height



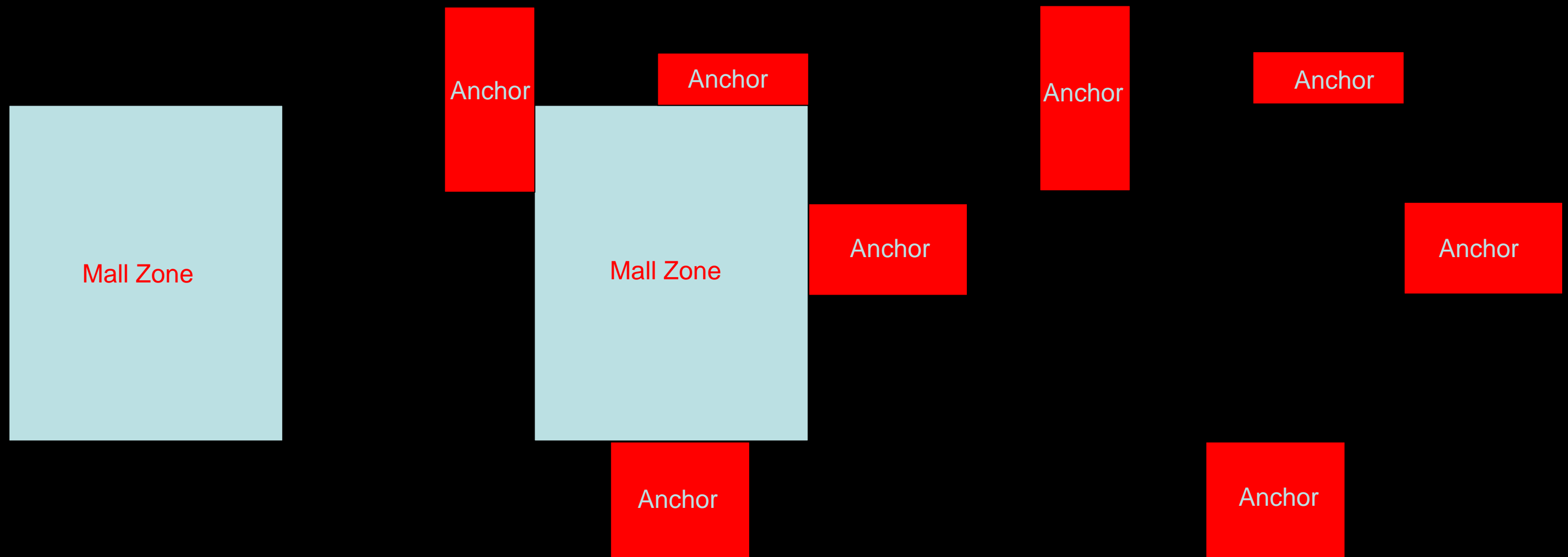
Explainer

Here we pivot to the reasons why adaptive re-use has more potential than demolition of the entire existing building.

E X C U R S U S

Adaptive reuse – How to start strategizing what to use and what to demolish...

In all pre 90's malls there is the Mall space itself
and there are the Anchors attached to it in any
number of various strategies and combinations.
Like the DNA- it has a **two part structure**



90's malls general properties

MALL ZONE

Often have 30' x 30' bay spacing

Single story

Low clear heights of 18'- 22'

Oldest part of complex

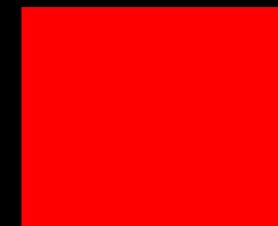
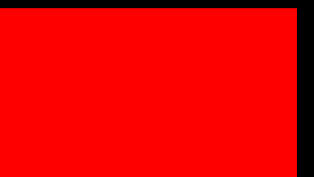
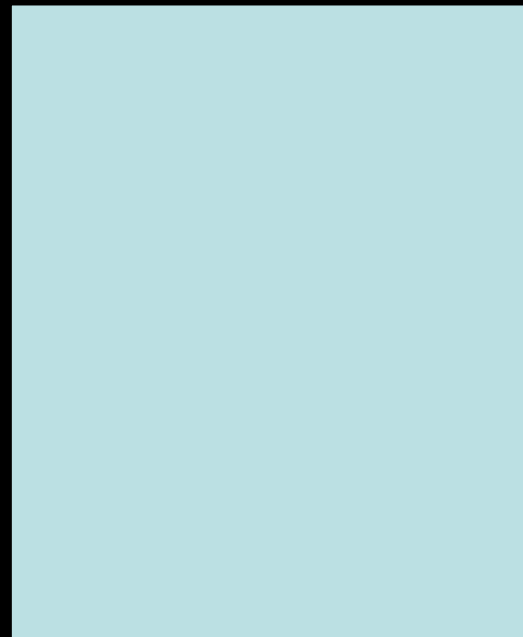
Anchor ZONE

Bay Spacing varies greatly

When single story often higher clear height

Often multiple stories

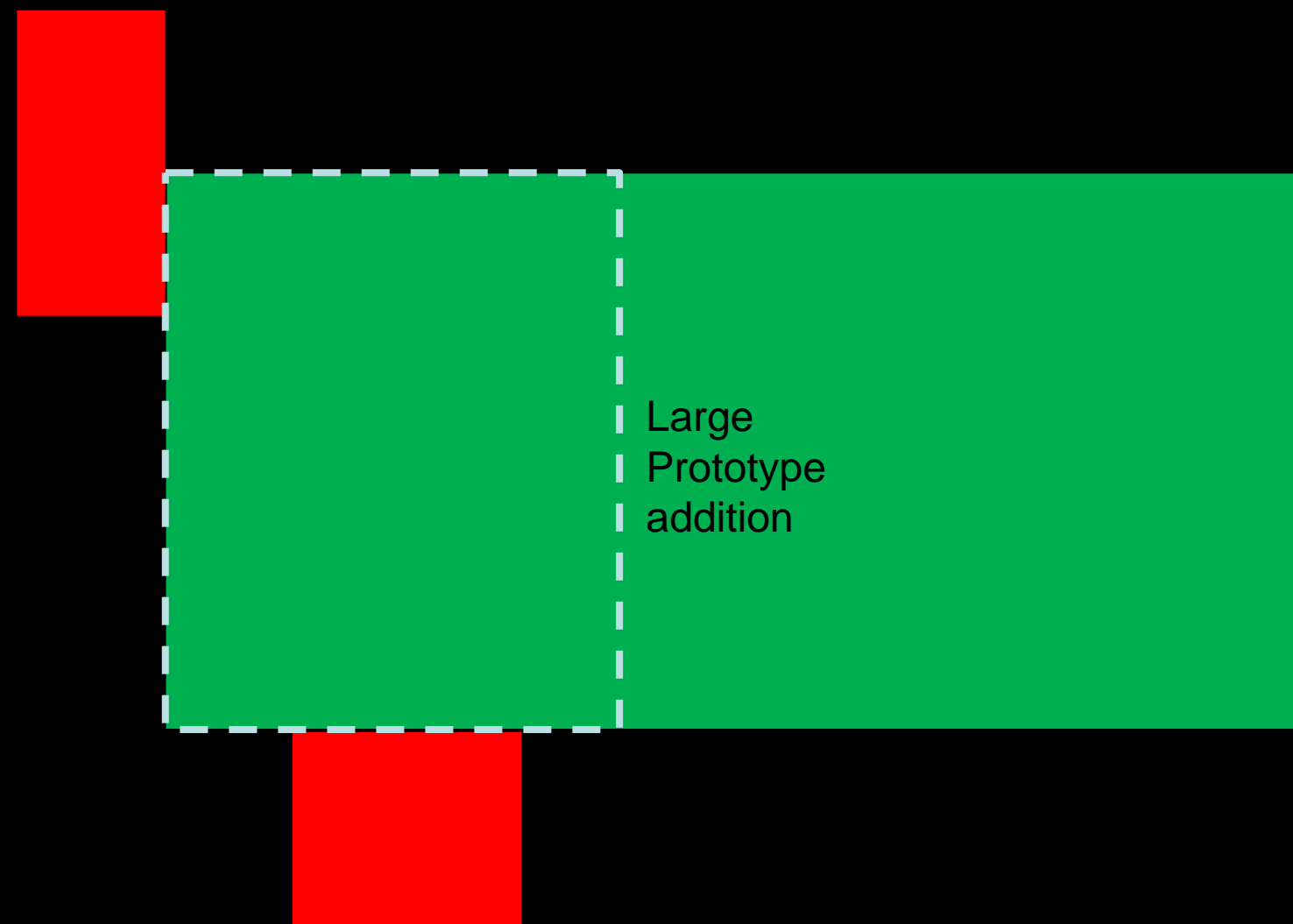
Often added after Mall Zone



Adding E-Commerce or market based
Commercial Industrial building types to these
pre- 90's malls is a game of what can be used
regarding the relationship of the parts expressed
in;

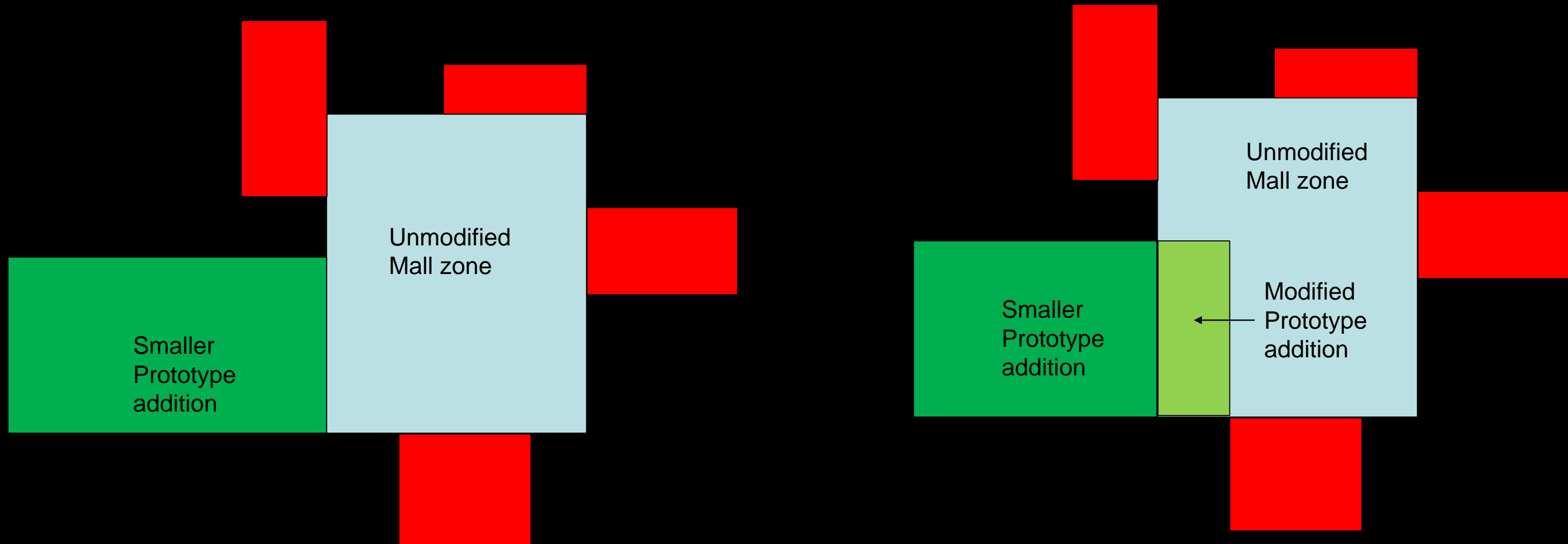
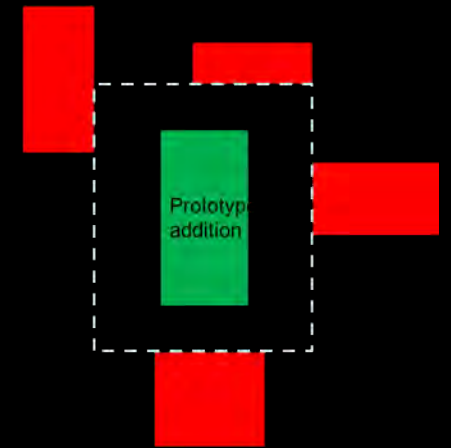
- geometry and adjacencies of the components, anchors dead or alive
- weird shaped Mall zones
- parking configuration
- Clear height
- structural bay spacing

There is what is being done-
Demolishing the Mall (and some anchor space)
to accommodate market defined warehouse
prototypes



Adaptive reuse attempts to
preserve the Mall by modifying it to
accommodate warehouse needs while saving
investment dollars and increasing mall synergy

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Beyond physical constraints, there are also regulatory and, jurisdictional and perception challenges

- great connection and catchment area. The latter being critical in “last mile” being closer to **population centers**
- -understanding the **fire aspect / Code** is important, as that has been the biggest drawback
- support from public **oppositions from municipalities** - industrial was/is the last thing jurisdictions want.
- evaluation if the mall could handle the **truck traffic** as its based on vehicular traffic counts. Are the roadways equipped to handle it?
- **TIA** is critical
- getting rid of the **existing tenants** can be very difficult
- what happens to the **out parcel tenants**?
- review covenants and **ground leases**

And.....

There are also some side bar issues.....

Explainer

Understanding the original of the mall- its DNA- why its wide and fat and empty at a couple of quick asides that some folks have already speculated about malls and e-commerce in different ways and some folks seem to have a different opinion as to why and how this could work. .

E X C U R S U S

Fact or fantasy #1

ShopFulfill's first iteration will be as a backfill of **vacant mall anchors**. It will be geared to digital companies seeking physical locations along with reduced costs of fulfillment. There would be showrooms in the front, where retailers could display their merchandise, and integrated warehousing and fulfillment in the back. With an app built on technology that blurs the lines between shopping at home and in-store, customers could shop for products from either location. The goods could then be delivered, picked up or walked out from the ShopFulfill space, according to Chopp.

ShopFulfill is a plug and play, brick + click hybrid, retail, tech, and fulfillment infrastructure upon which brands can flourish without sacrificing their identity or undertaking a significant investment

www.shopfulfill.com



Fact or fantasy #2

“Malls are typically sitting on Class A real estate — in many cases defining and anchoring the retail around them,” he said. “If all of that retail has closed or moved elsewhere, then conversion [to a warehouse] might make the most sense, especially if it’s situated right off major national highways.”



“A mall for conversion to a warehouse needs to be located in a land-constrained market like suburban Philadelphia,” said Curtis D. Spencer, president of IMS Worldwide, Inc., in Webster, Texas, who is an expert in logistics and industrial development. “If my local mall in suburban Houston were to become obsolete, developers would never be interested in converting it to warehouse space. They would simply walk across the street and buy vacant land for \$5 a foot and start fresh. An obsolete mall in suburban Philadelphia, however, would likely have all of the infrastructure in place for a last-mile delivery facility — adequate parking for trucks, a ceiling probably 25 feet high and perhaps air conditioning.”

Really?????

Explainer

The following set out the kit of parts we have defined that will fit most often with minimal demolition and minimum distortion of key market based dimensions and parking / truck court needs.

E X C U R S U S

Building types and Functions to be applied to mall transformations

This will be our **kit of parts** in assessing the
viability of mall conversions....

Speculative distribution prototypes compatible with common mall building and site sizes

Cross dock

Front Load

Rear Load

These are the **market based general** building types that come in all sizes. For Mall applications we are using small footprints...

E- Commerce requires small warehouses that deliver items within two hours

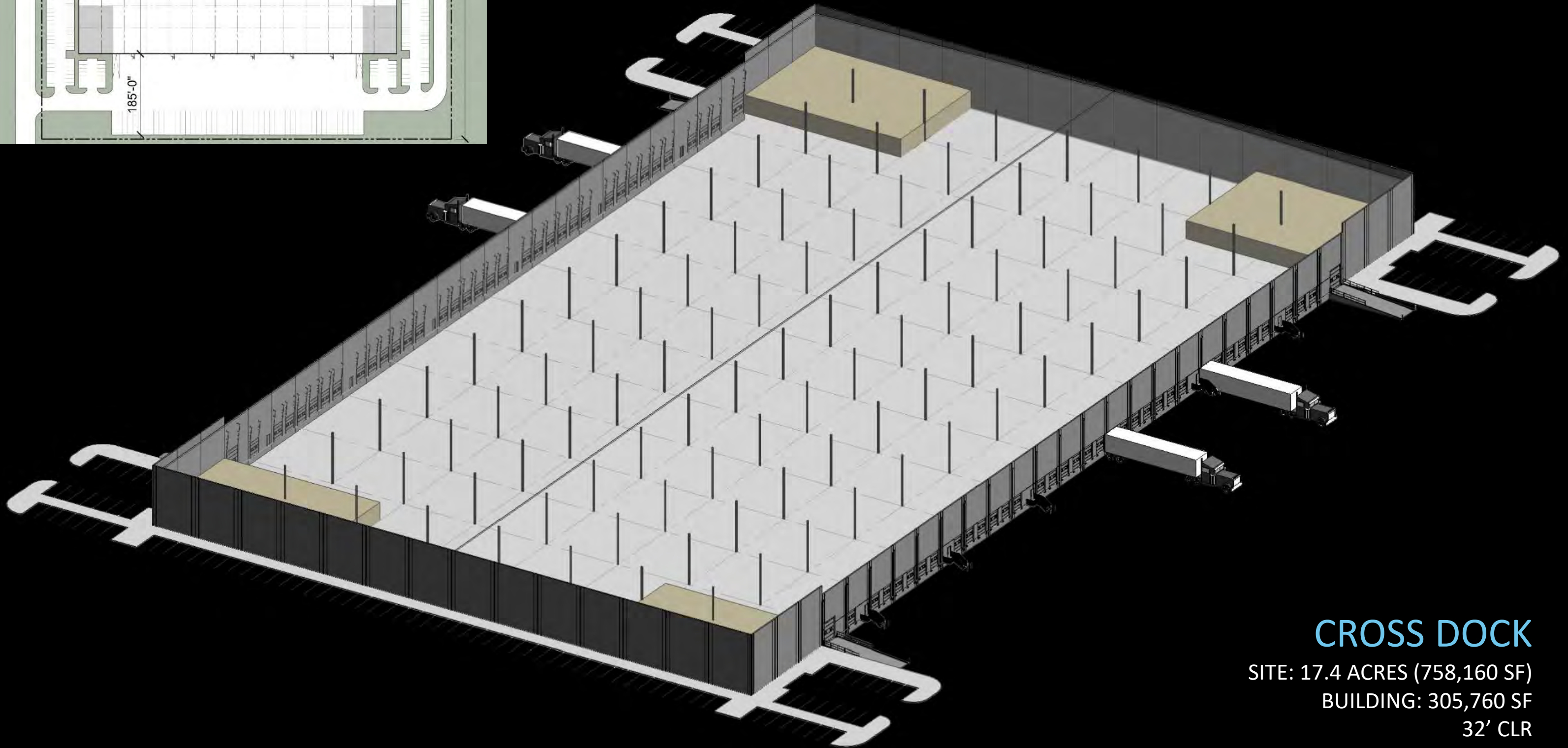
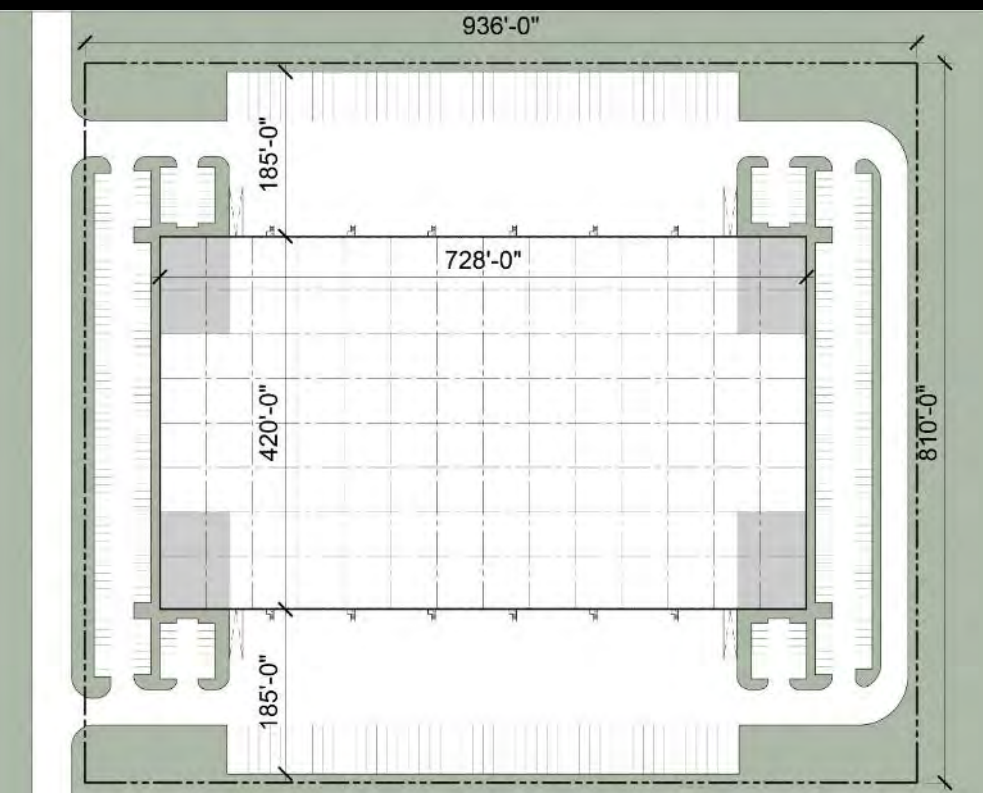
They average just **UNDER 100K sf**

OR

There are also small facilities where outside individuals pick up and deliver the packages

They average just **OVER 100K sf**

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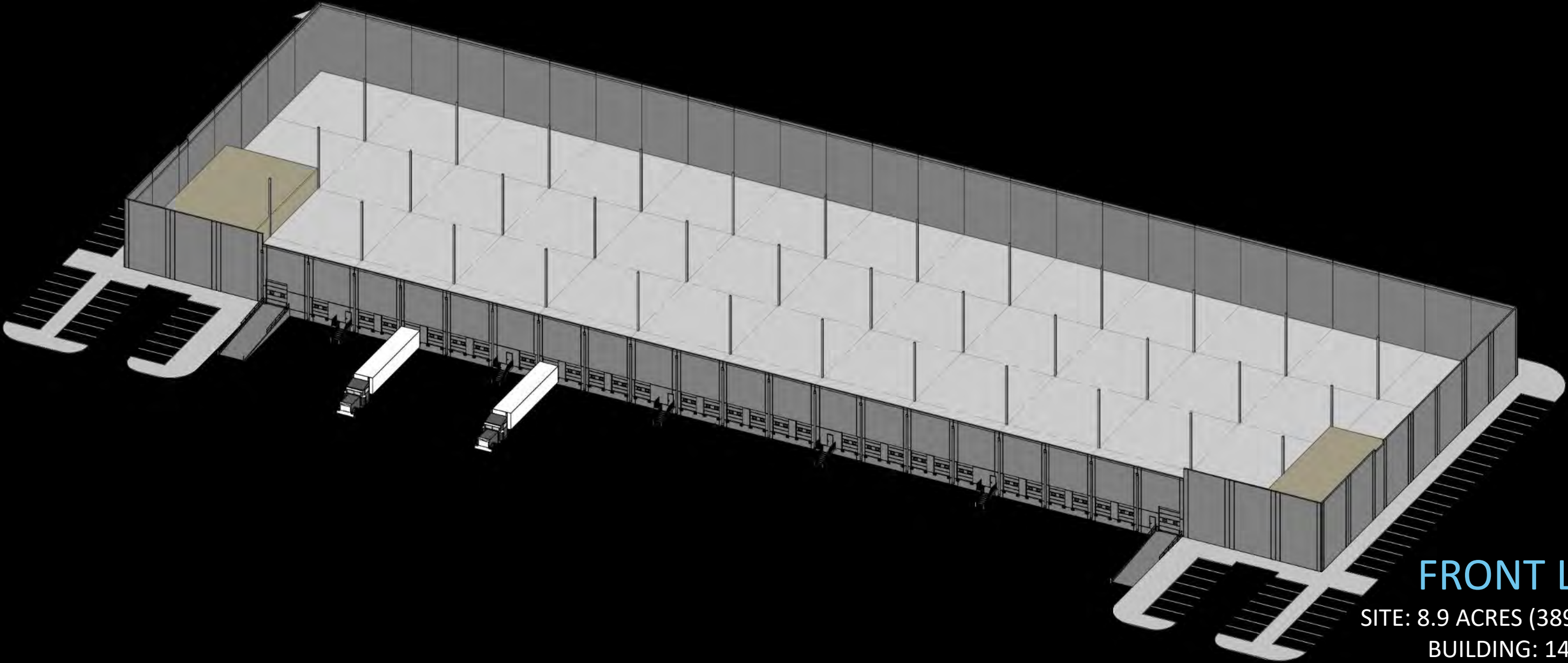
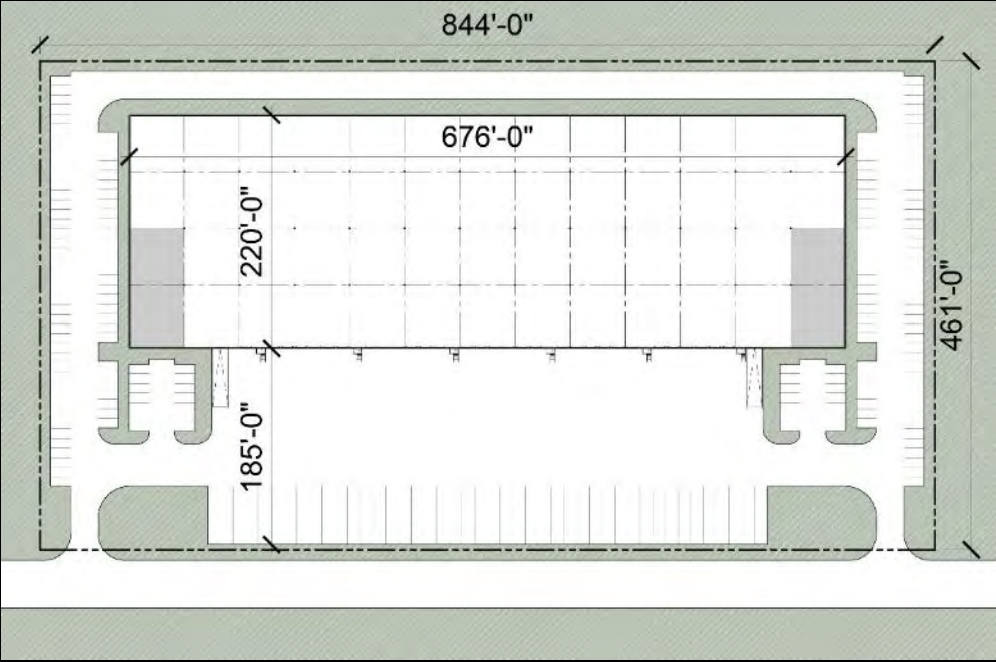
CROSS DOCK

SITE: 17.4 ACRES (758,160 SF)

BUILDING: 305,760 SF

32' CLR

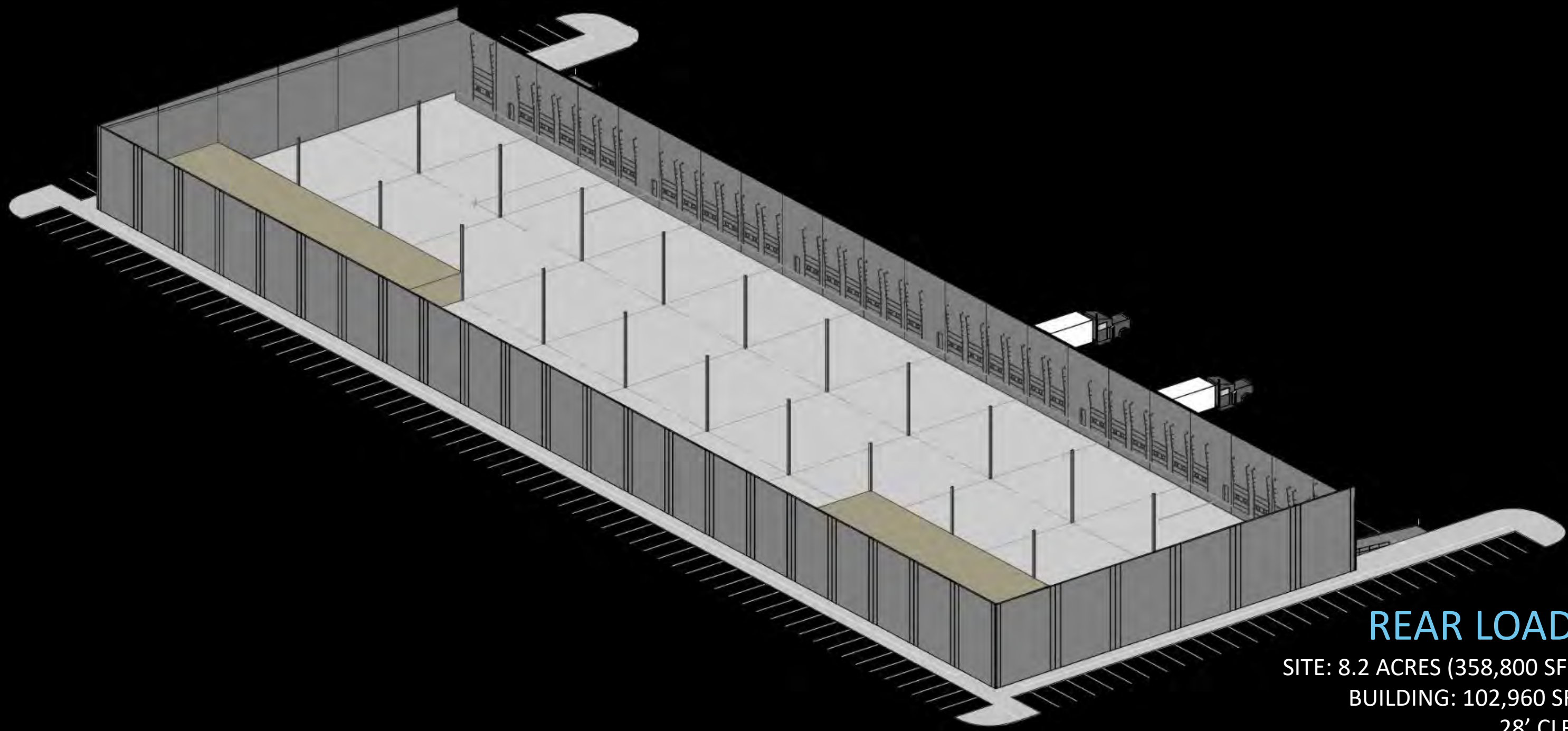
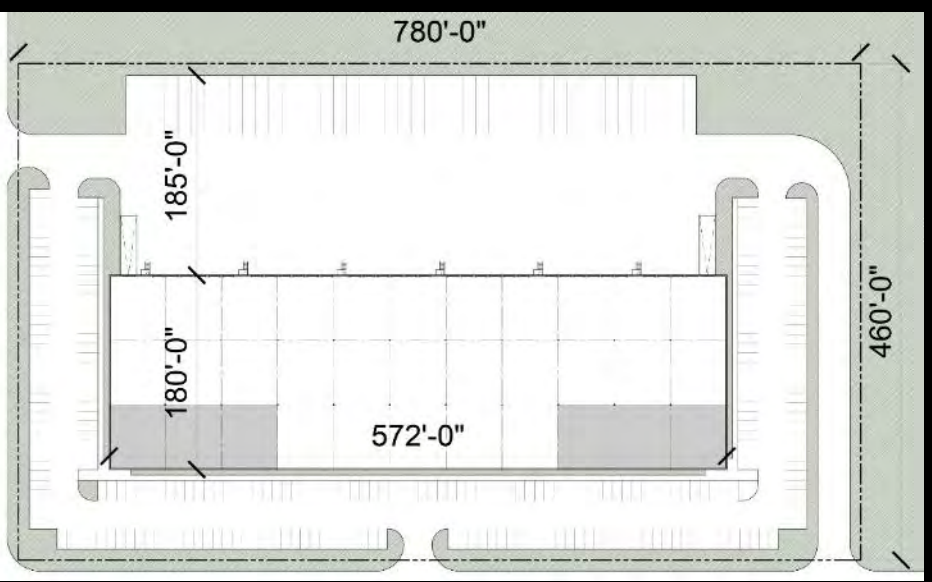
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FRONT LOAD

SITE: 8.9 ACRES (389,084 SF)
BUILDING: 148,720 SF
32' CLR

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REAR LOAD

SITE: 8.2 ACRES (358,800 SF)
BUILDING: 102,960 SF
28' CLR

E- Commerce prototypes compatible with common mall building and site sizes

100k 1 story

150K 1 story

200K 1 story

800k 1 story

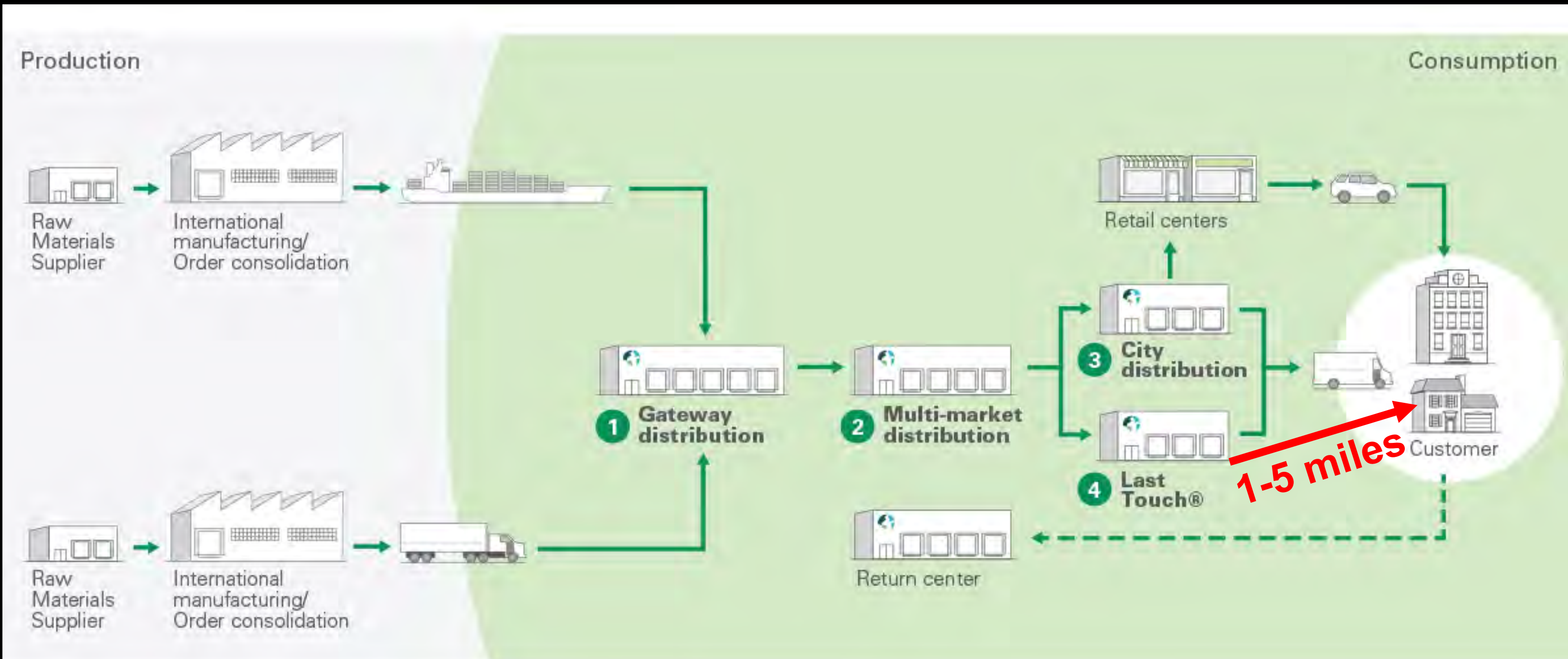
850k footprint 4 story

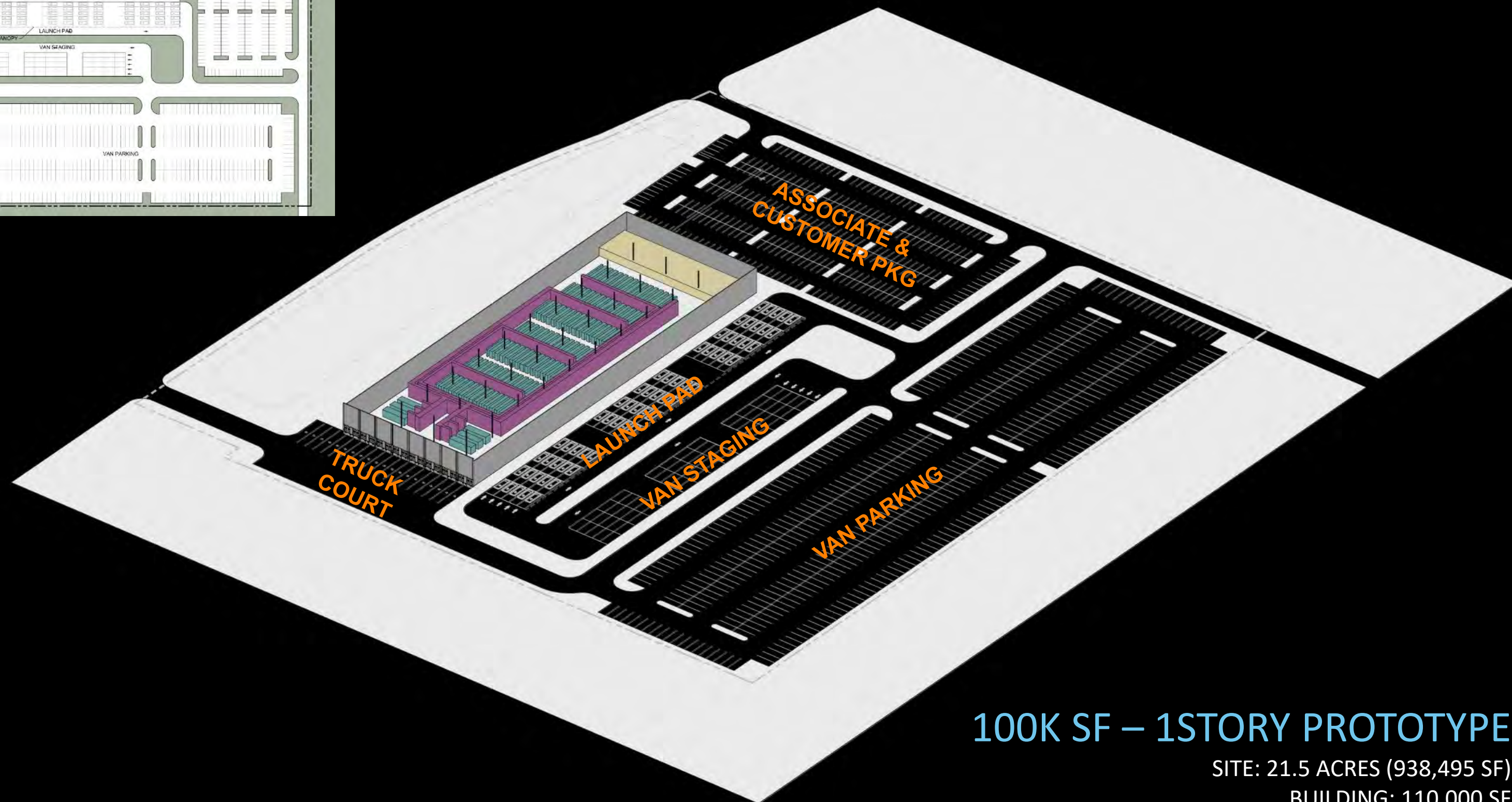
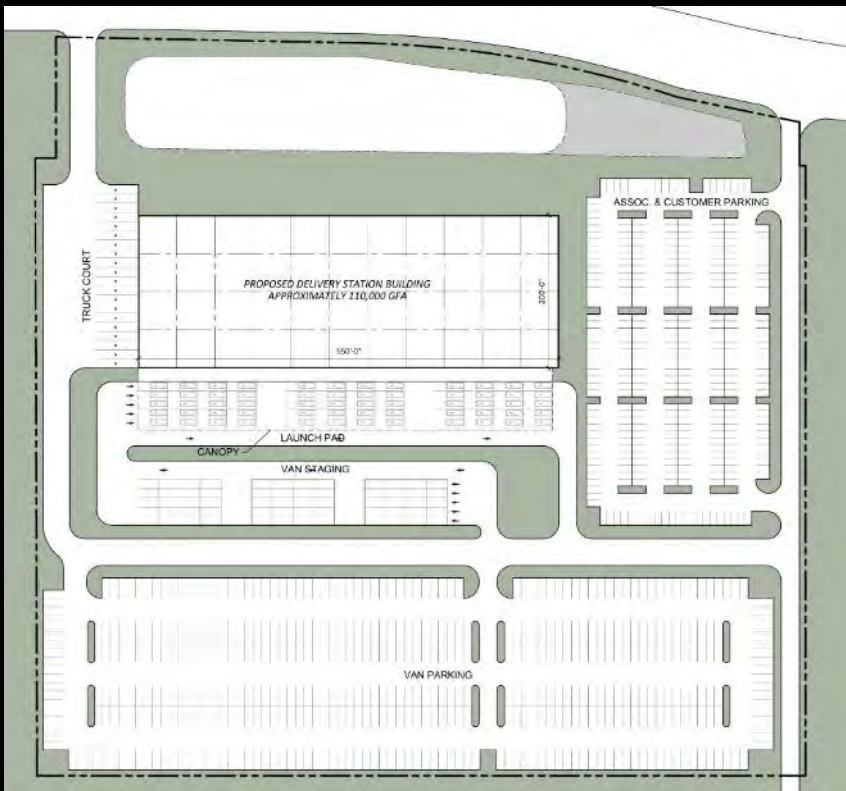
These are the specialized building types that support **Last Mile Distribution**.

- “The movement of goods from a transportation hub to the final delivery destination”
- Driven by omni-retailing
- Small warehousing located in the center of densely populated areas that deliver goods directly to the customer.
- Better delivery speeds
- One day shipping

Last Mile Distribution

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100K SF – 1STORY PROTOTYPE

SITE: 21.5 ACRES (938,495 SF)

BUILDING: 110,000 SF

32' CLR

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OFFICE

SORTING

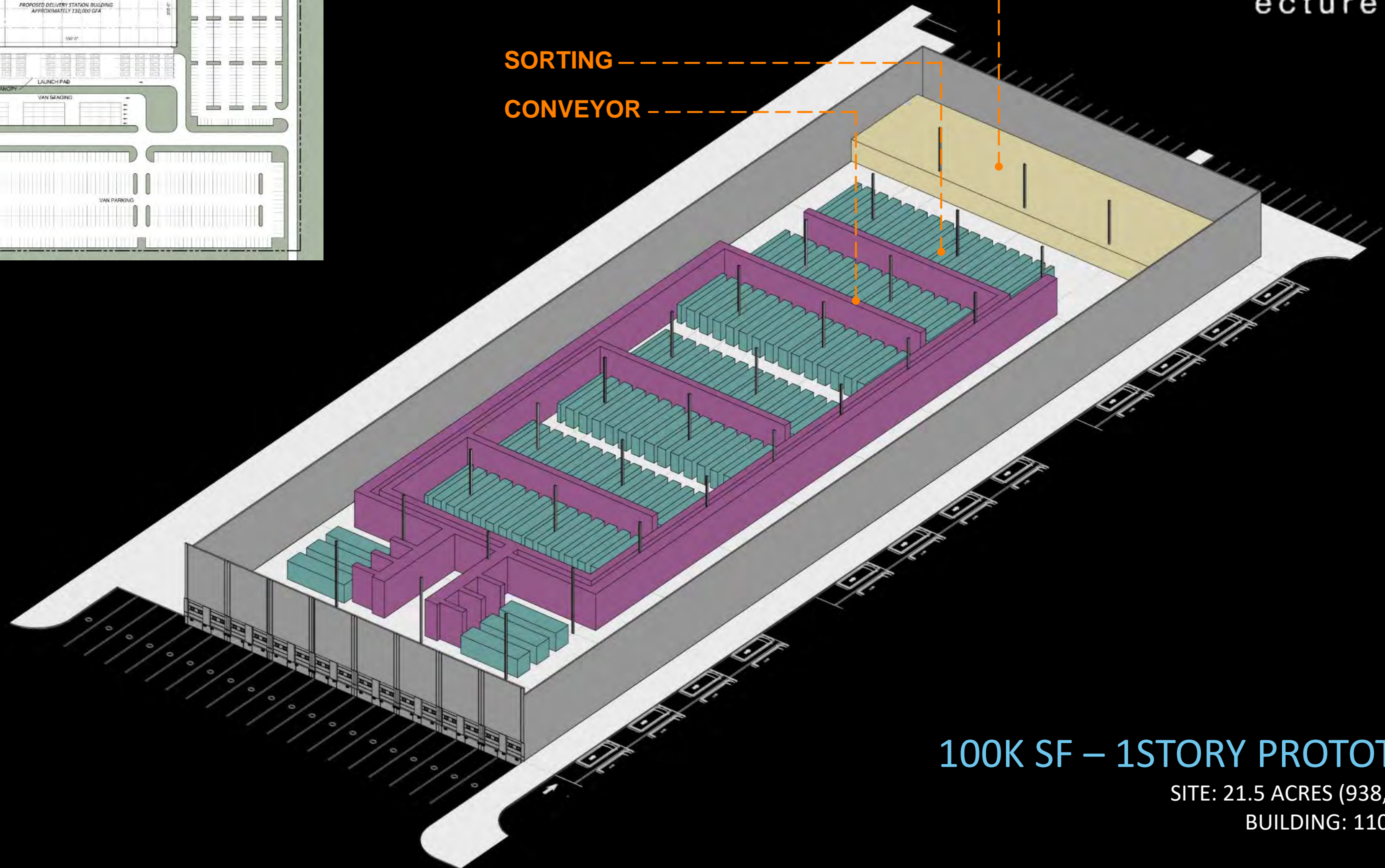
CONVEYOR

100K SF – 1STORY PROTOTYPE

SITE: 21.5 ACRES (938,495 SF)

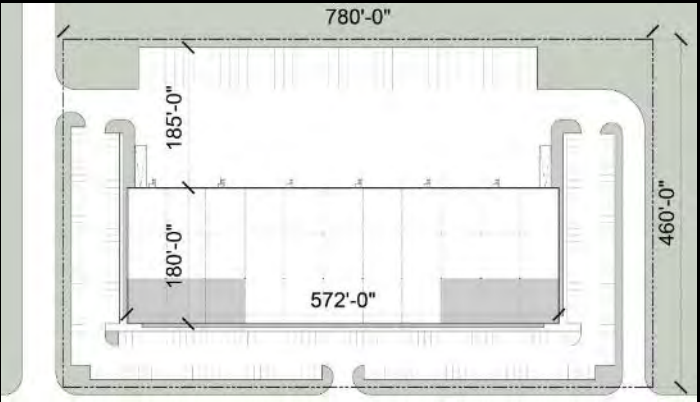
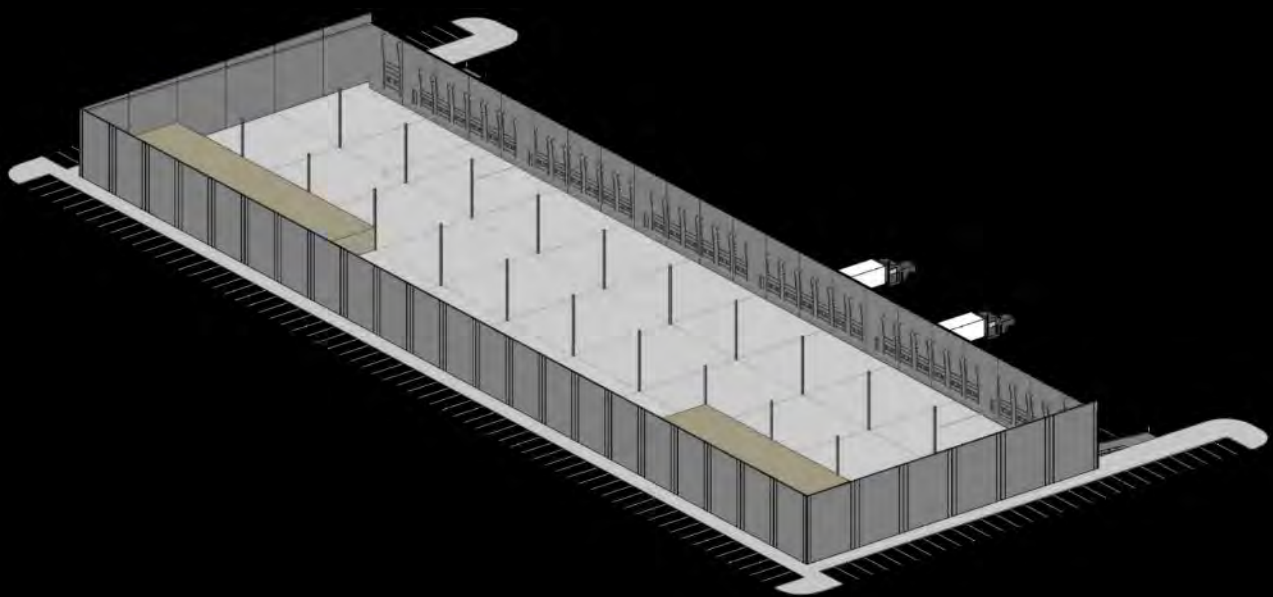
BUILDING: 110,000 SF

32' CLR

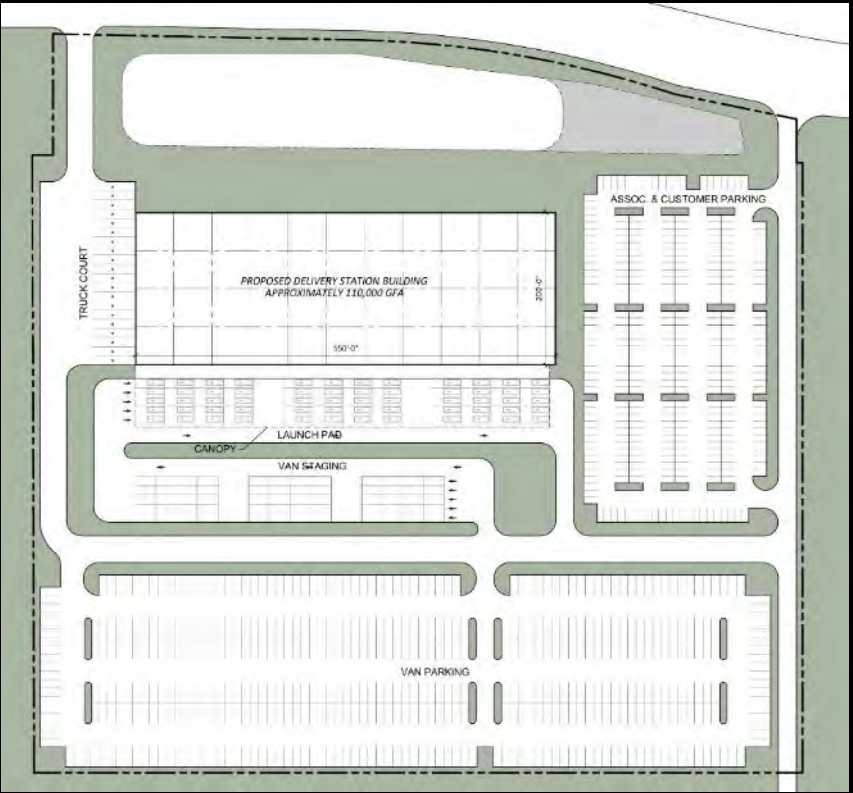
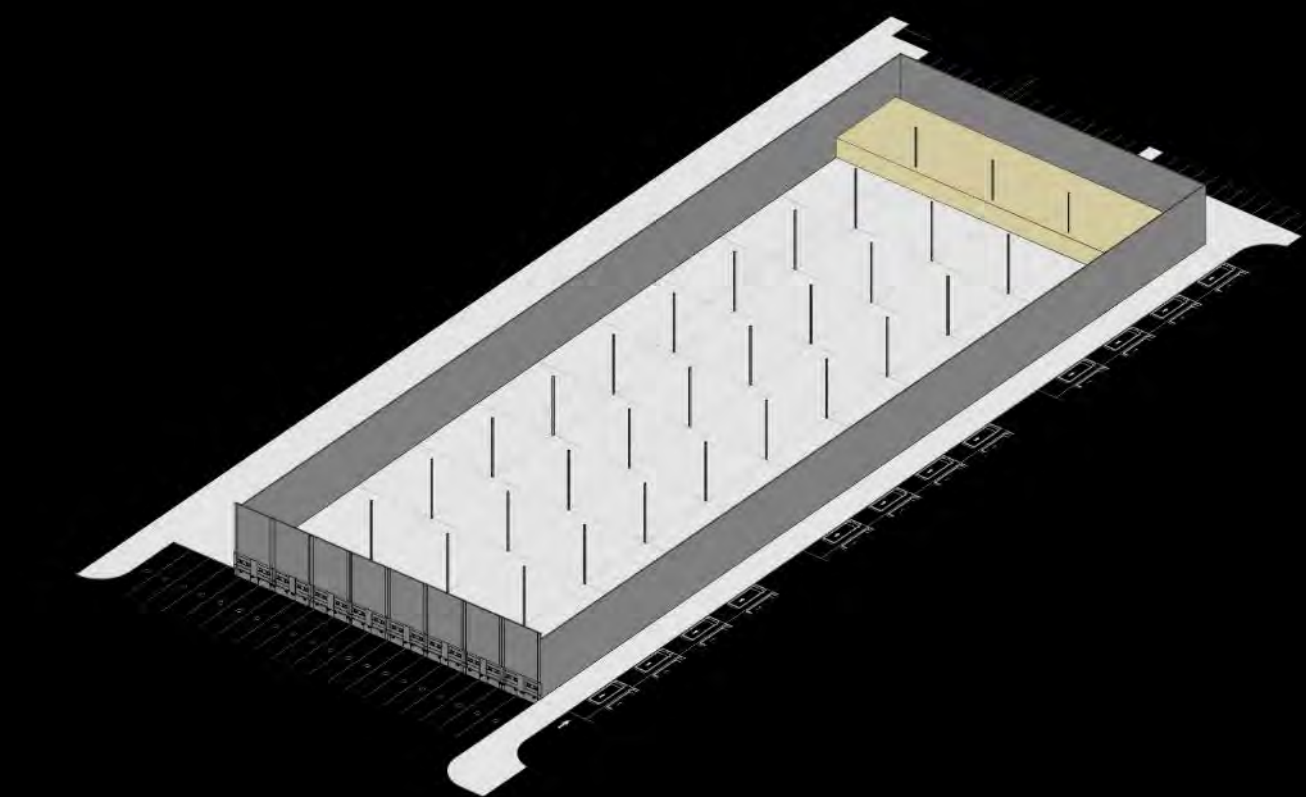


WAIT.... Let's do a quick comparison...

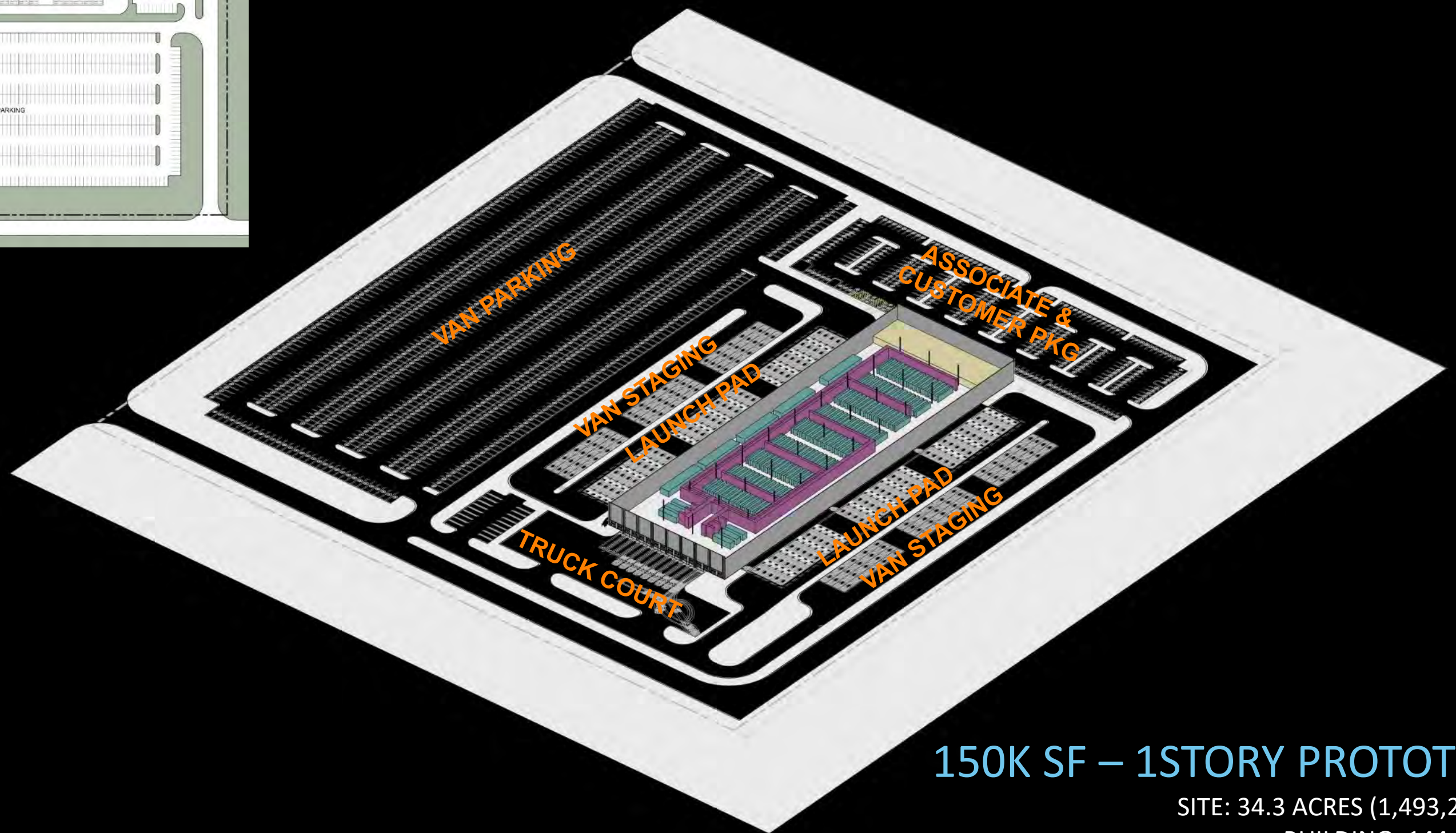
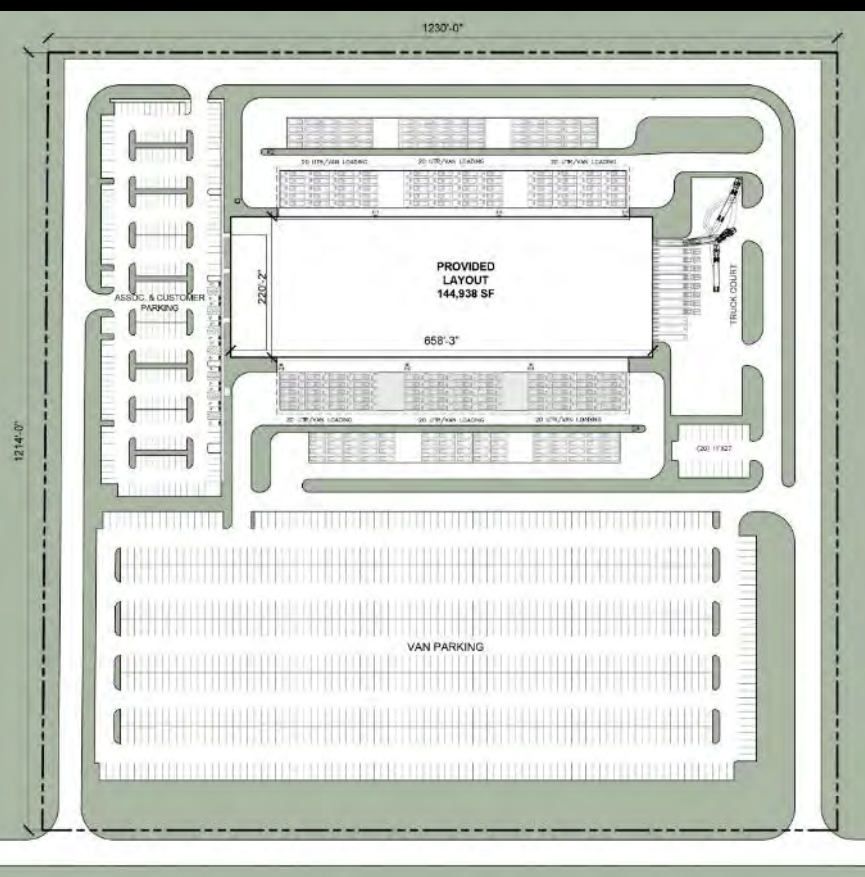
powers
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100K REAR LOAD
SITE: 8.2 ACRES (358,800 SF)



100K SF –
1 STORY PROTOTYPE
SITE: 21.5 ACRES (938,495 SF)



150K SF – 1STORY PROTOTYPE

SITE: 34.3 ACRES (1,493,220 SF)

BUILDING: 144,938 SF

32' CLR

powers
brown
archit
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OFFICE

SORTING

CONVEYOR

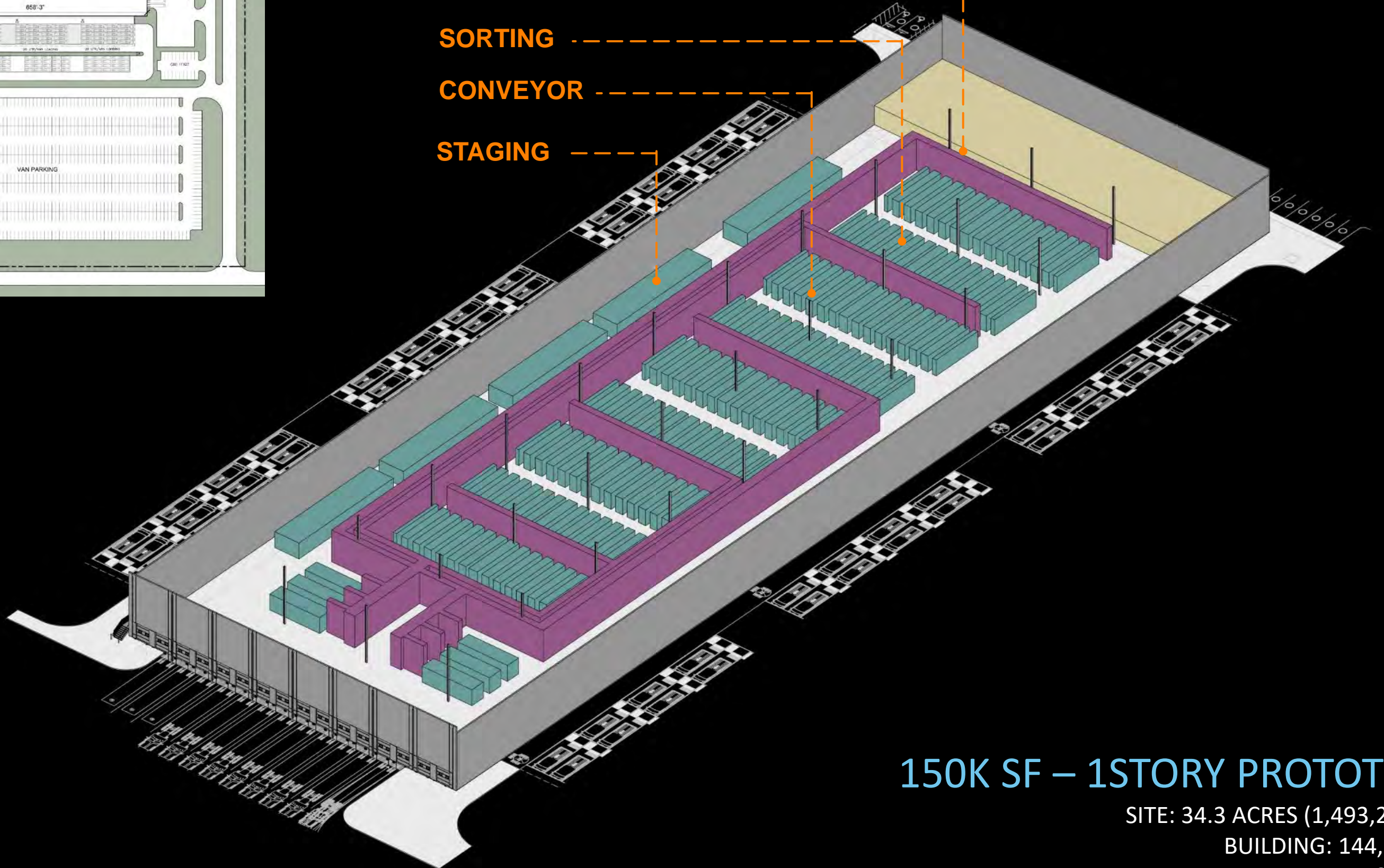
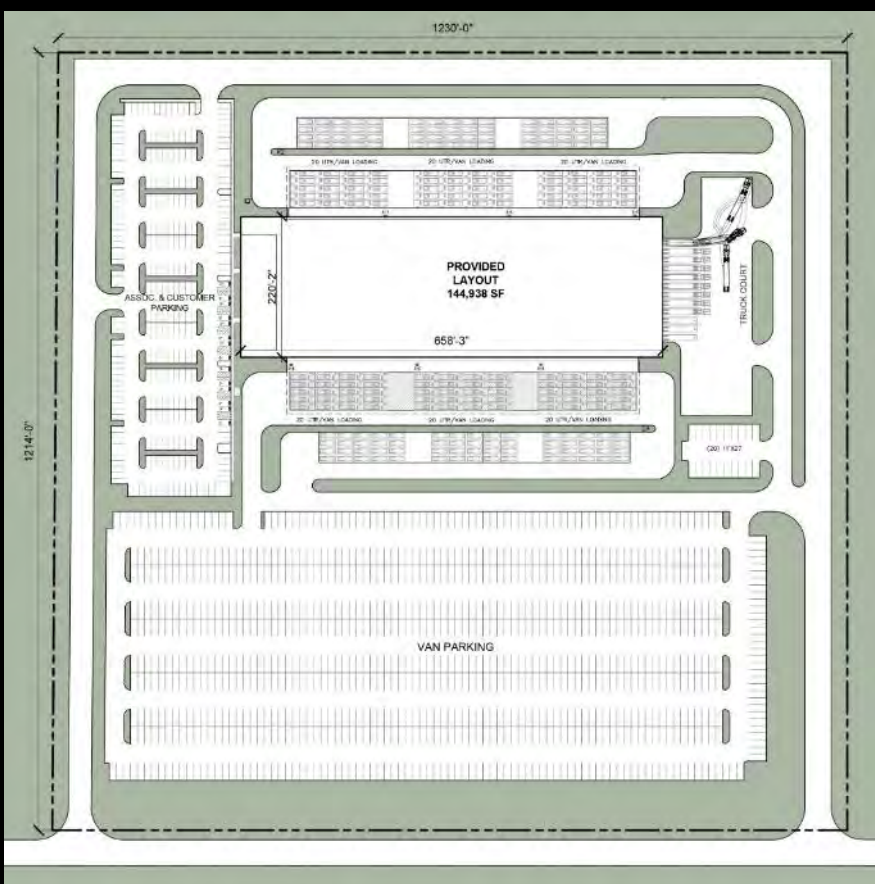
STAGING

150K SF – 1STORY PROTOTYPE

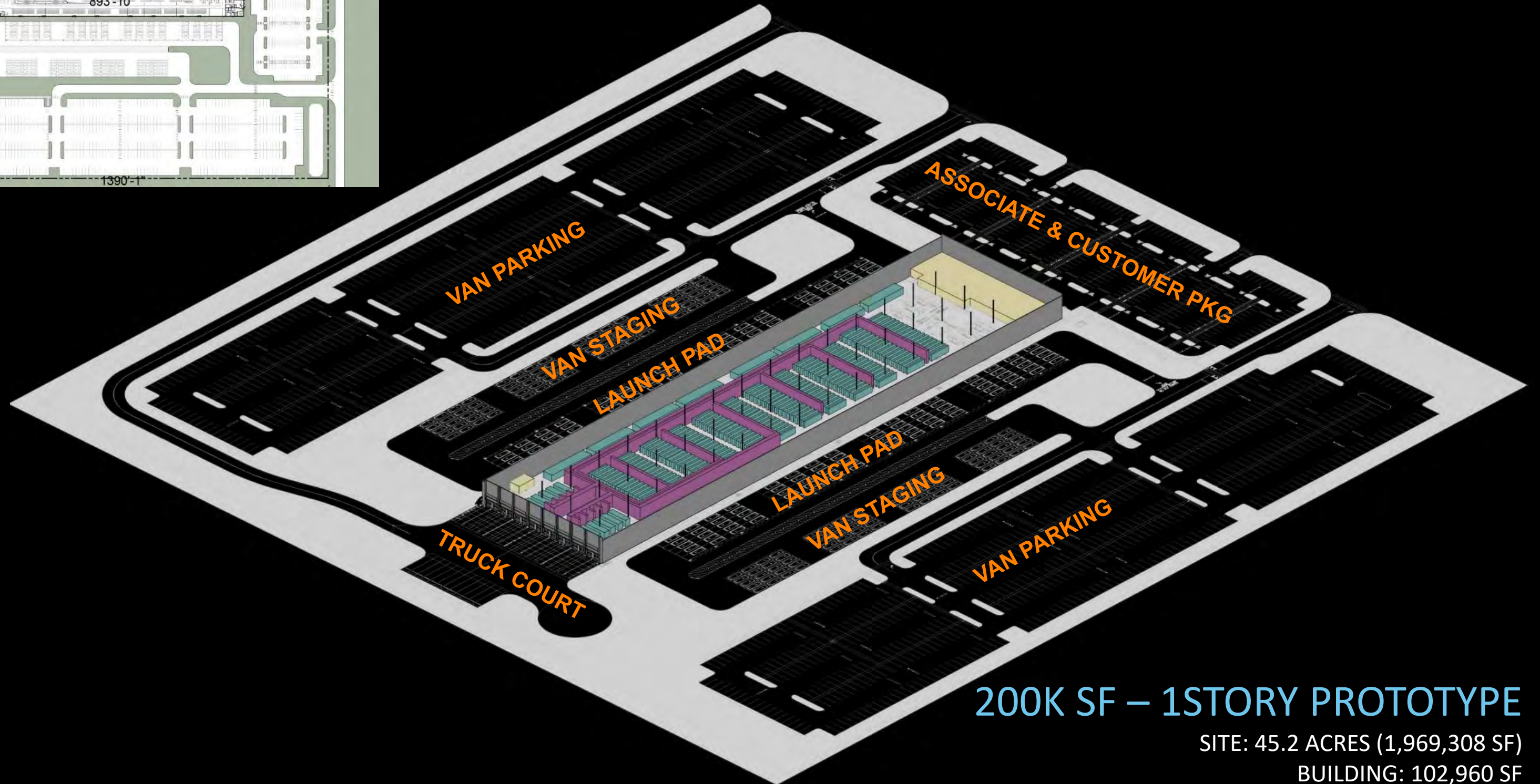
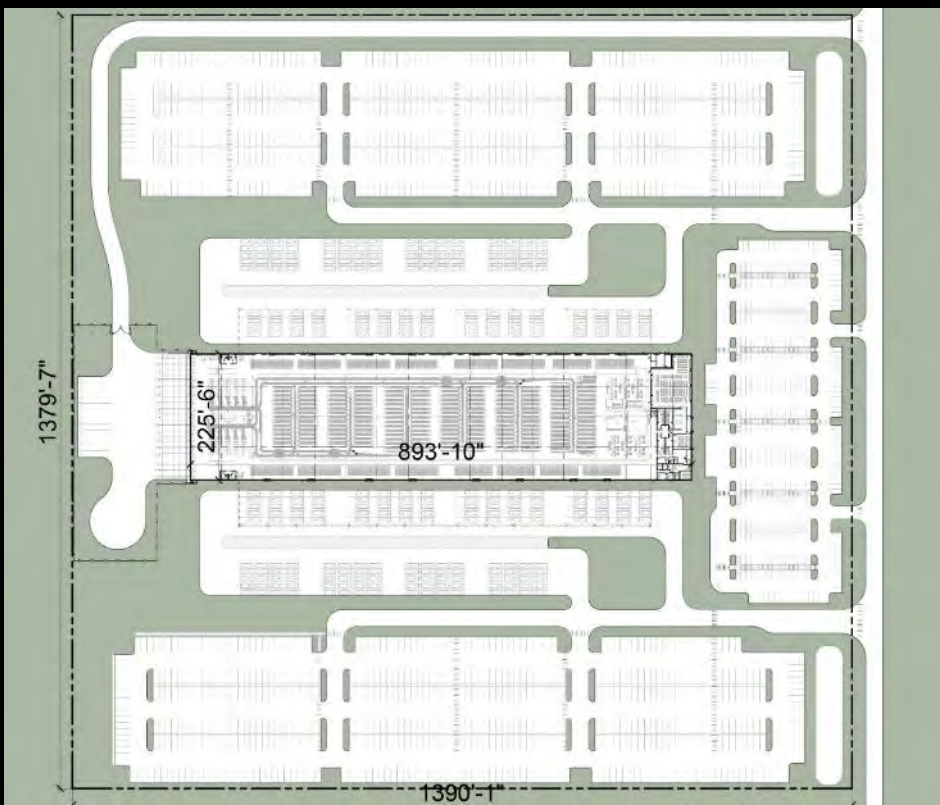
SITE: 34.3 ACRES (1,493,220 SF)

BUILDING: 144,938 SF

32' CLR



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200K SF – 1STORY PROTOTYPE

SITE: 45.2 ACRES (1,969,308 SF)

BUILDING: 102,960 SF

28' CLR

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archit
ecture

OFFICE

STAGING

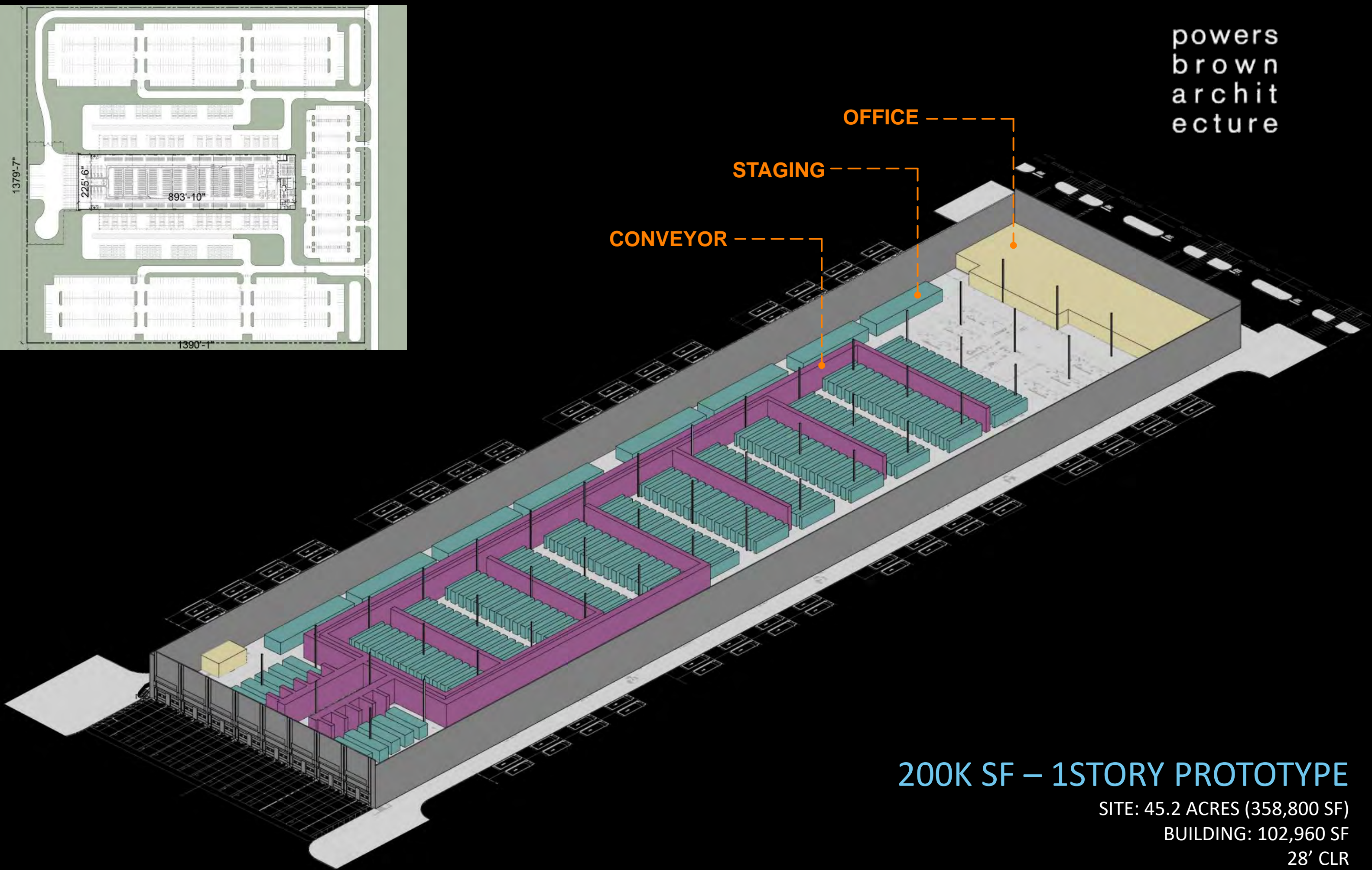
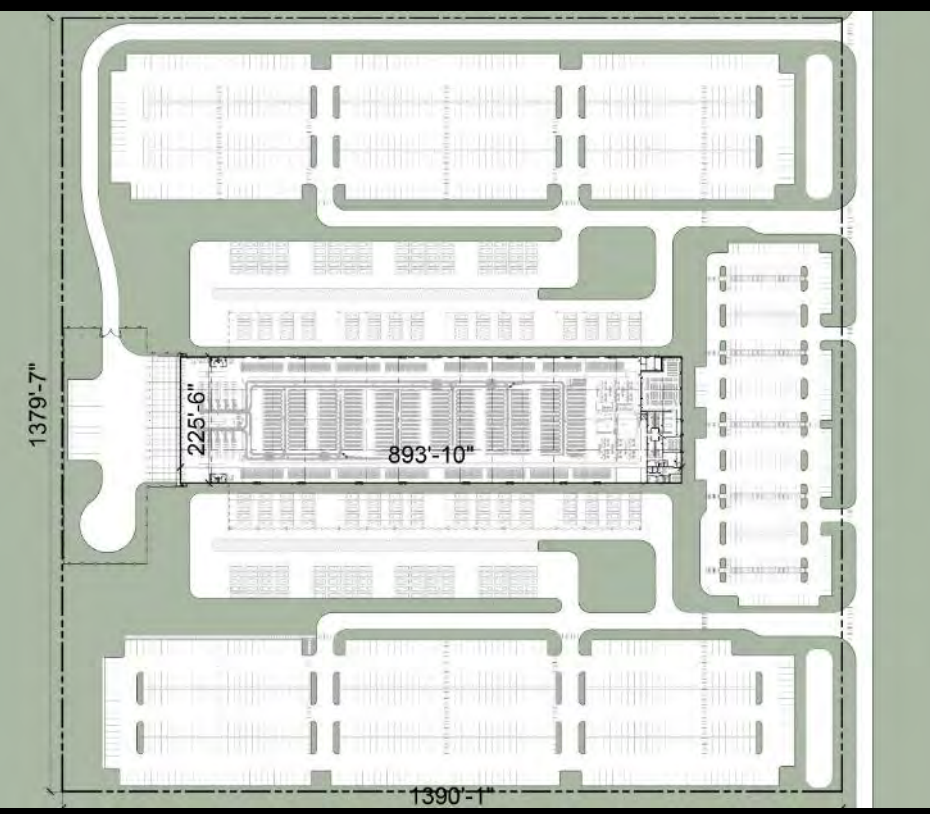
CONVEYOR

200K SF – 1STORY PROTOTYPE

SITE: 45.2 ACRES (358,800 SF)

BUILDING: 102,960 SF

28' CLR



powers
brown
archit
ecture

OFFICE

QUEUEING LANE
TRUCK COURT

TRUCK COURT
VAN/TRAILER PARKING

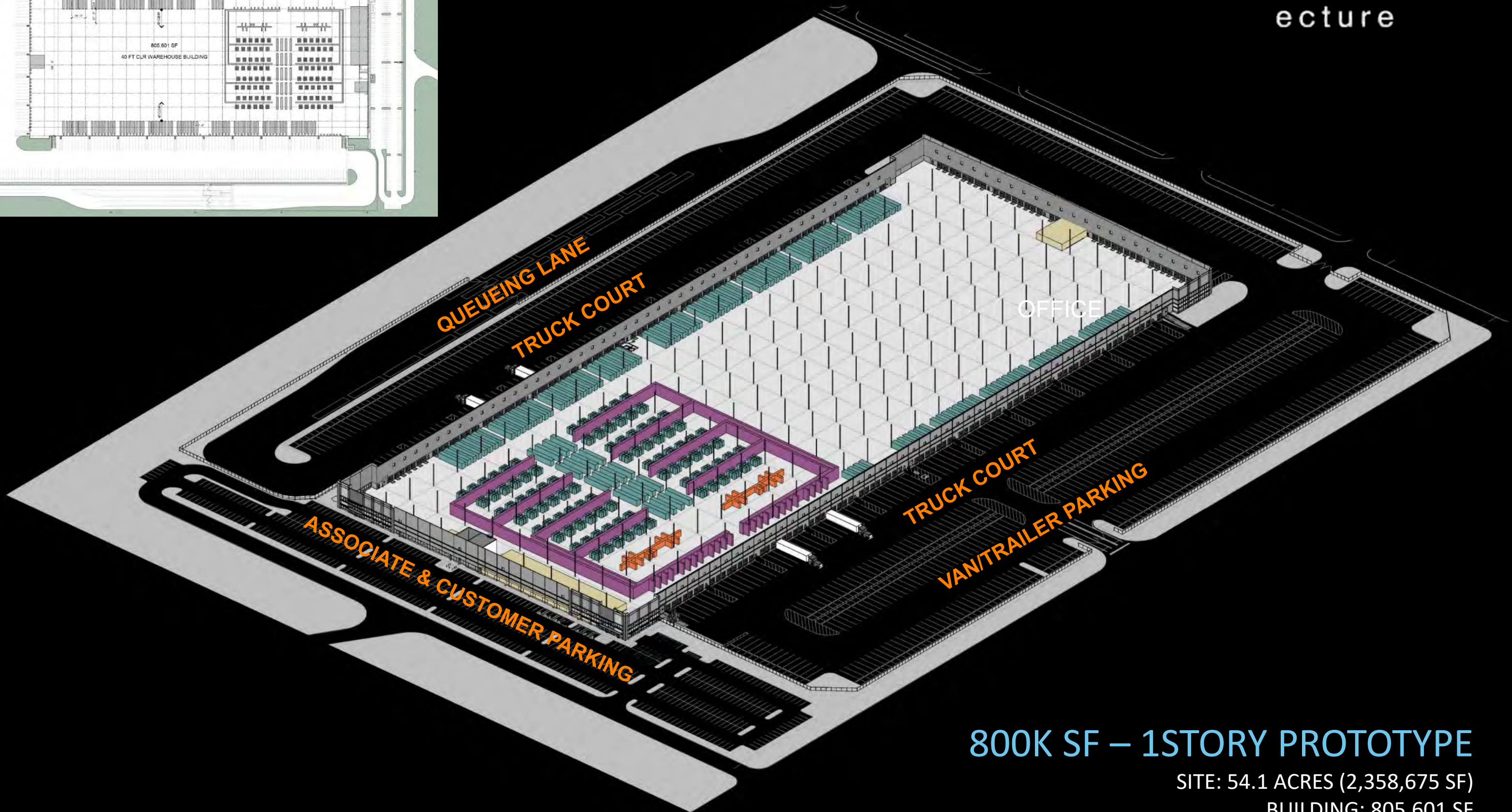
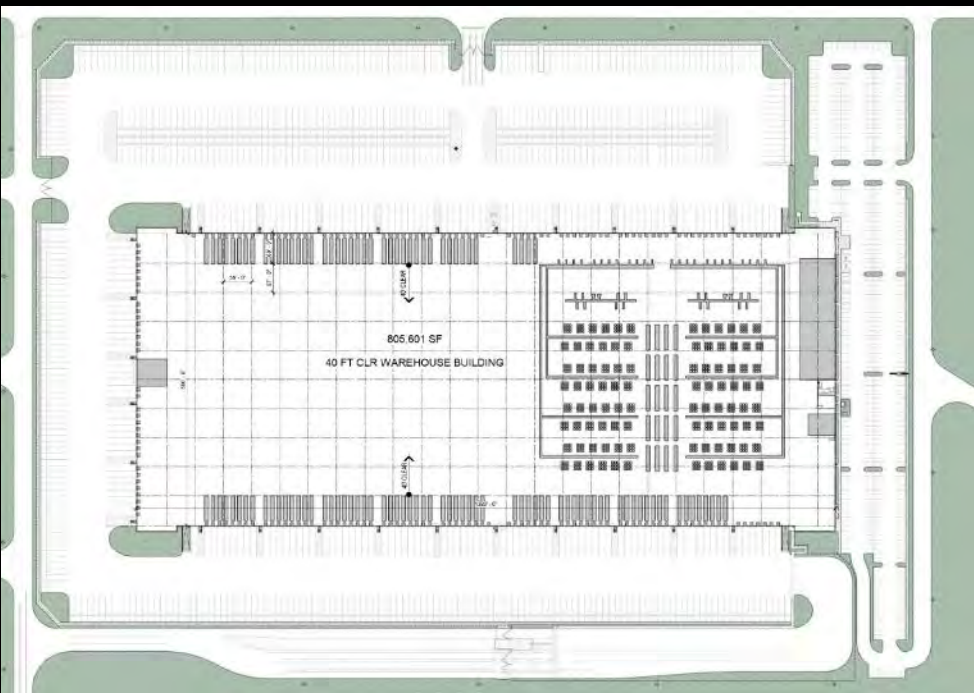
ASSOCIATE & CUSTOMER PARKING

800K SF – 1STORY PROTOTYPE

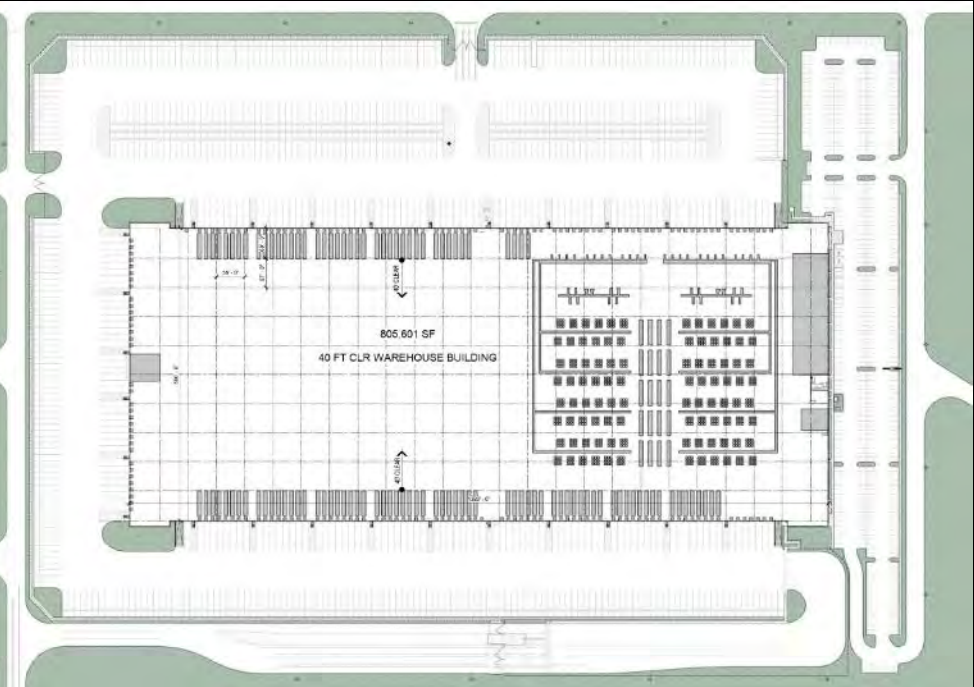
SITE: 54.1 ACRES (2,358,675 SF)

BUILDING: 805,601 SF

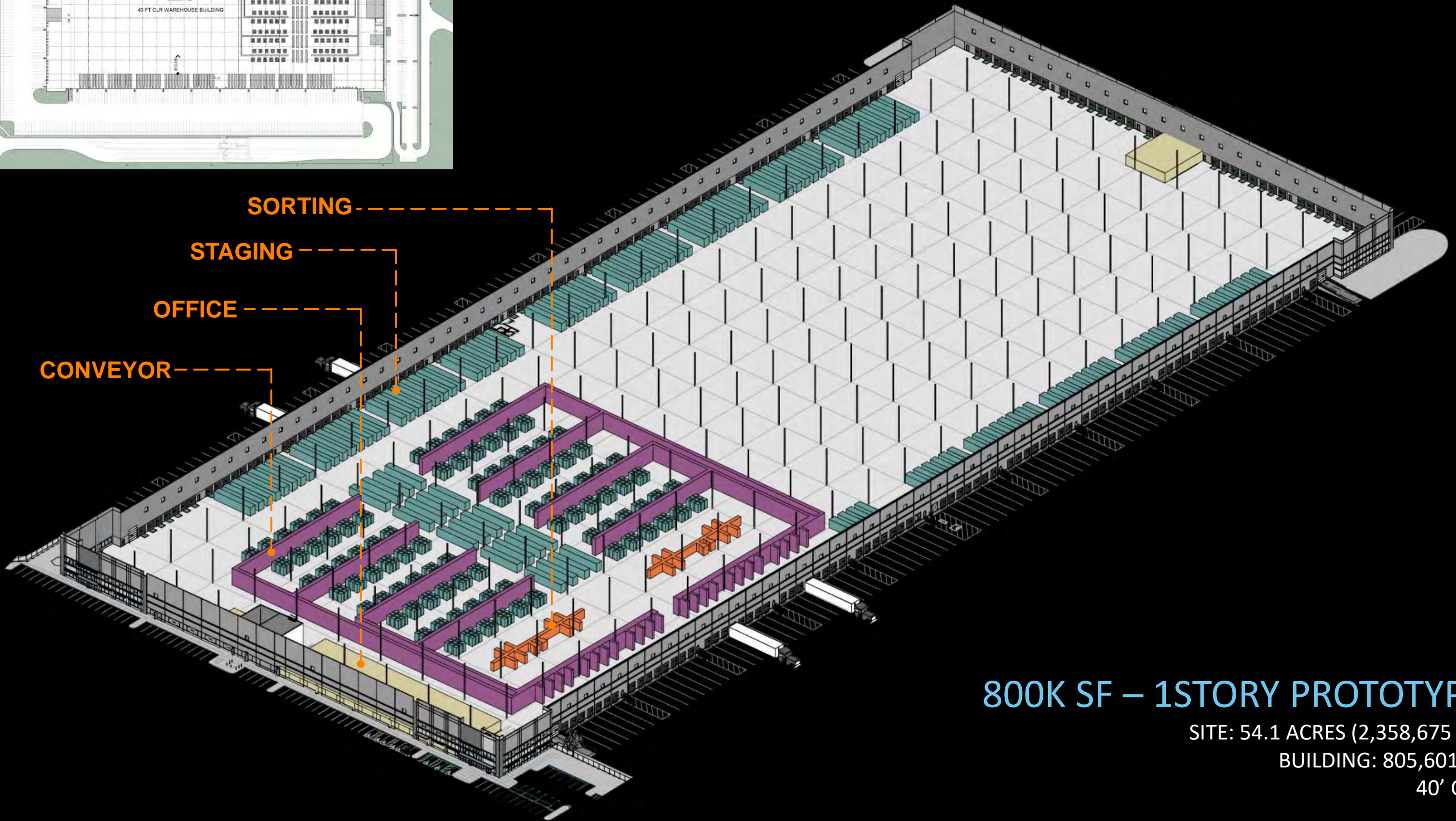
40' CLR



powers
brown
archit
ecture



CONVEYOR ———
OFFICE ———
STAGING ———
SORTING ———



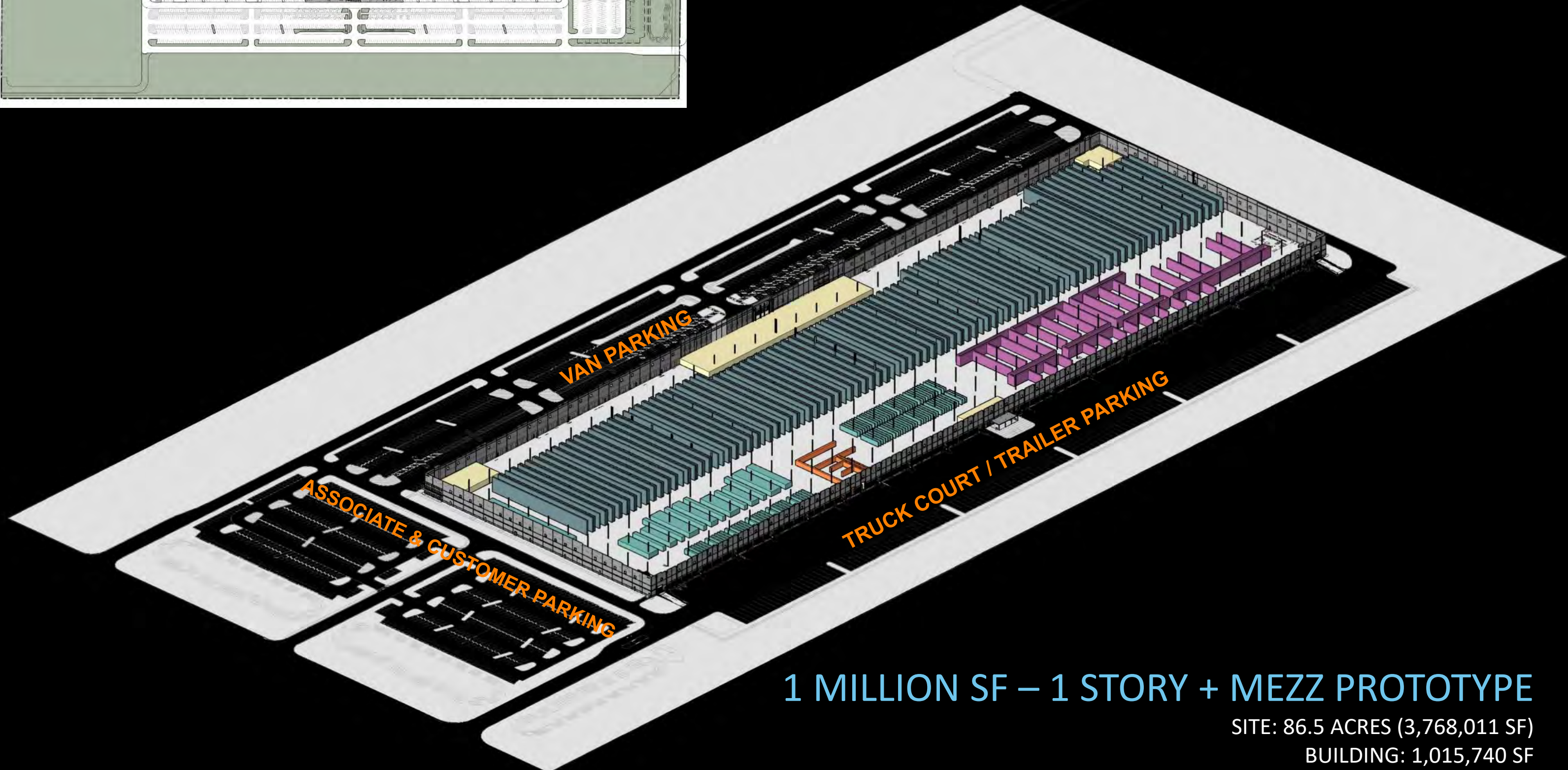
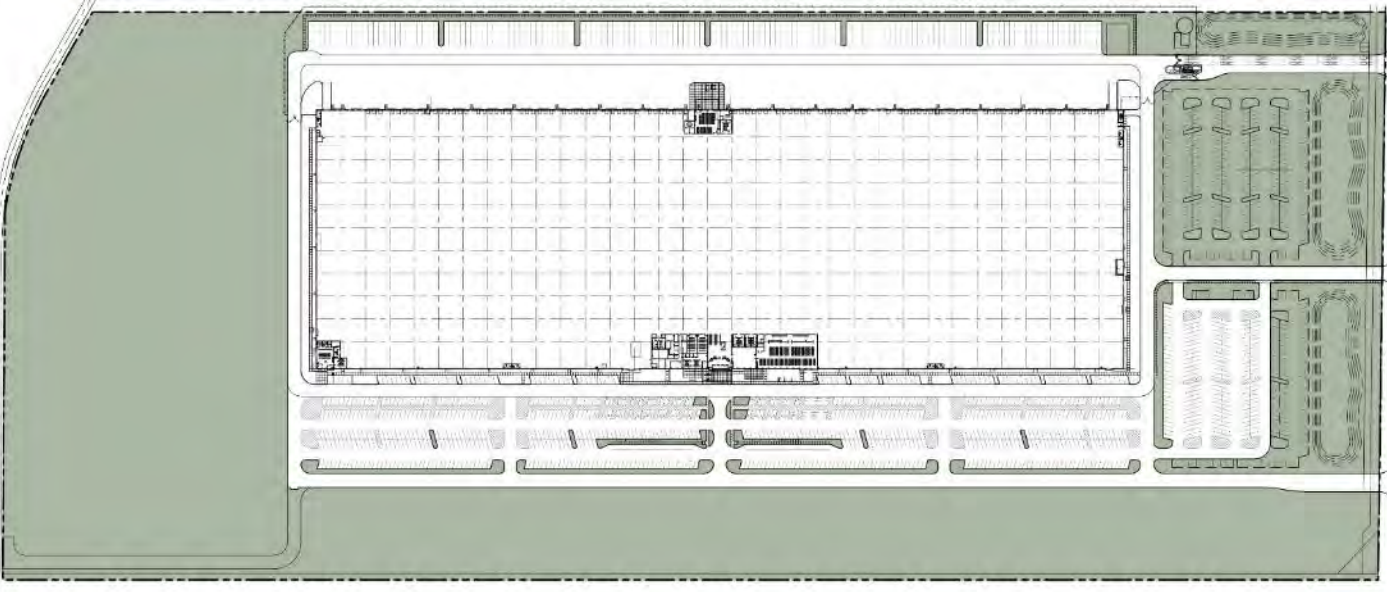
800K SF – 1STORY PROTOTYPE

SITE: 54.1 ACRES (2,358,675 SF)

BUILDING: 805,601 SF

40' CLR

powers
brown
archit
ecture



1 MILLION SF – 1 STORY + MEZZ PROTOTYPE

SITE: 86.5 ACRES (3,768,011 SF)
BUILDING: 1,015,740 SF
36' CLR

powers
brown
archit
ecture

SORTING
RACKING
OFFICE

CONVEYOR

STAGING

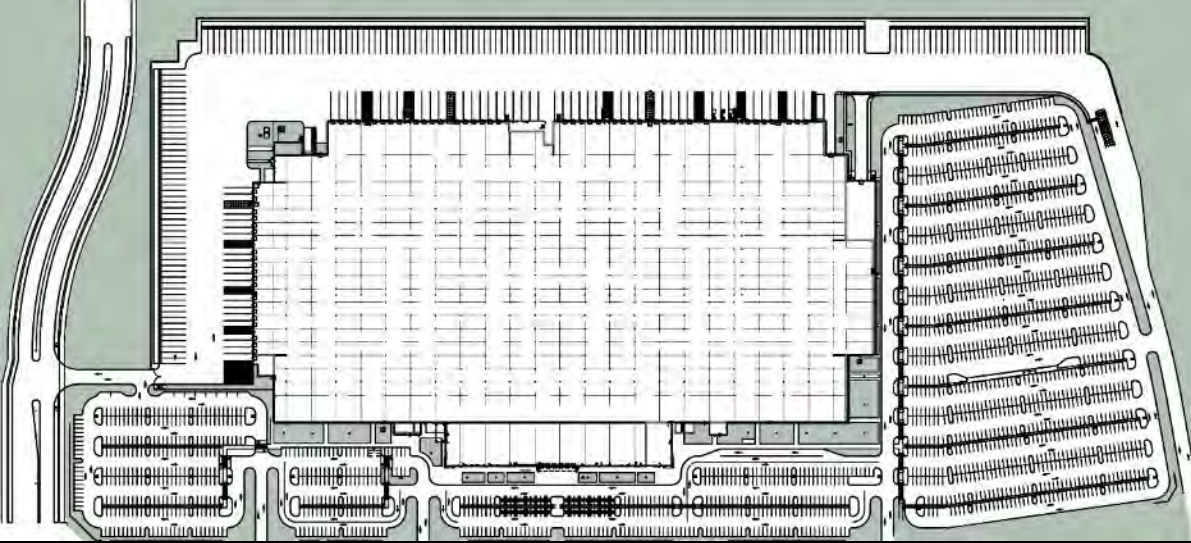
1 MILLION SF – 1 STORY + MEZZ PROTOTYPE

SITE: 86.5 ACRES (3,768,011 SF)

BUILDING: 1,015,740 SF

36' CLR

powers
brown
archit
ecture



TRUCK COURT / TRAILER PARKING

ASSOCIATE & CUSTOMER PARKING

TRUCK COURT / TRAILER PARKING

OFFICE

ASSOCIATE & CUSTOMER PARKING

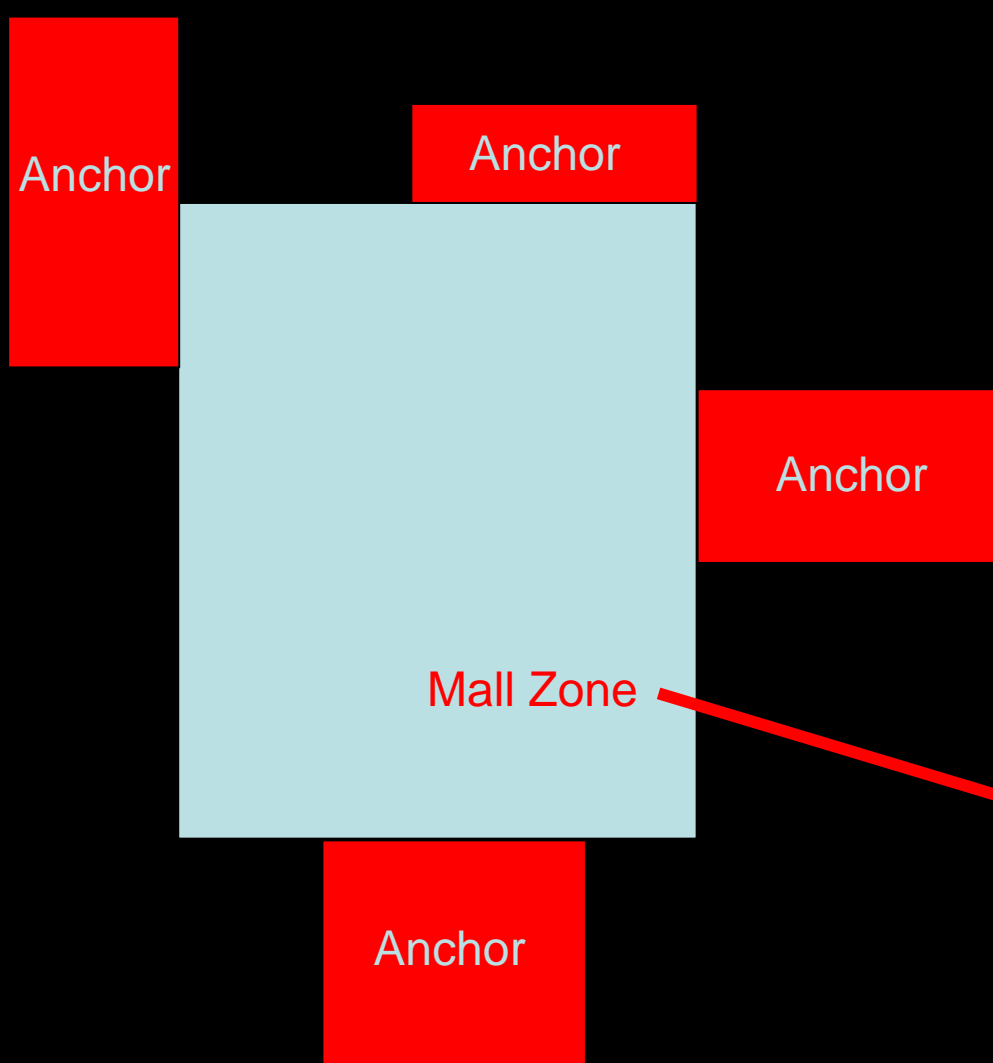
4 STORY PROTOTYPE

BUILDING: 3,057,783 SF
SITE: 57.45 ACRES (2,502,544 SF)
823,552 SF FOOTPRINT
90' TALL

Explainer

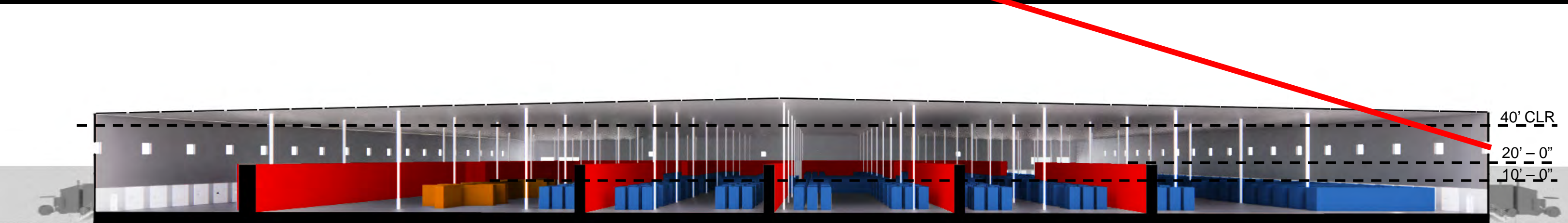
A quick but important note that the malls have varying but typically lower than market clear heights and the fact that many e-commerce building don't use the clear heights they are provided with....

E X C U R S U S



powers
brown
archit
ecture

Many older 1 story malls are 20-24 clear height



- CONVEYOR
- SORTING
- STAGING

Explainer

Case study for Brookfield Properties.

E X C U R S U S

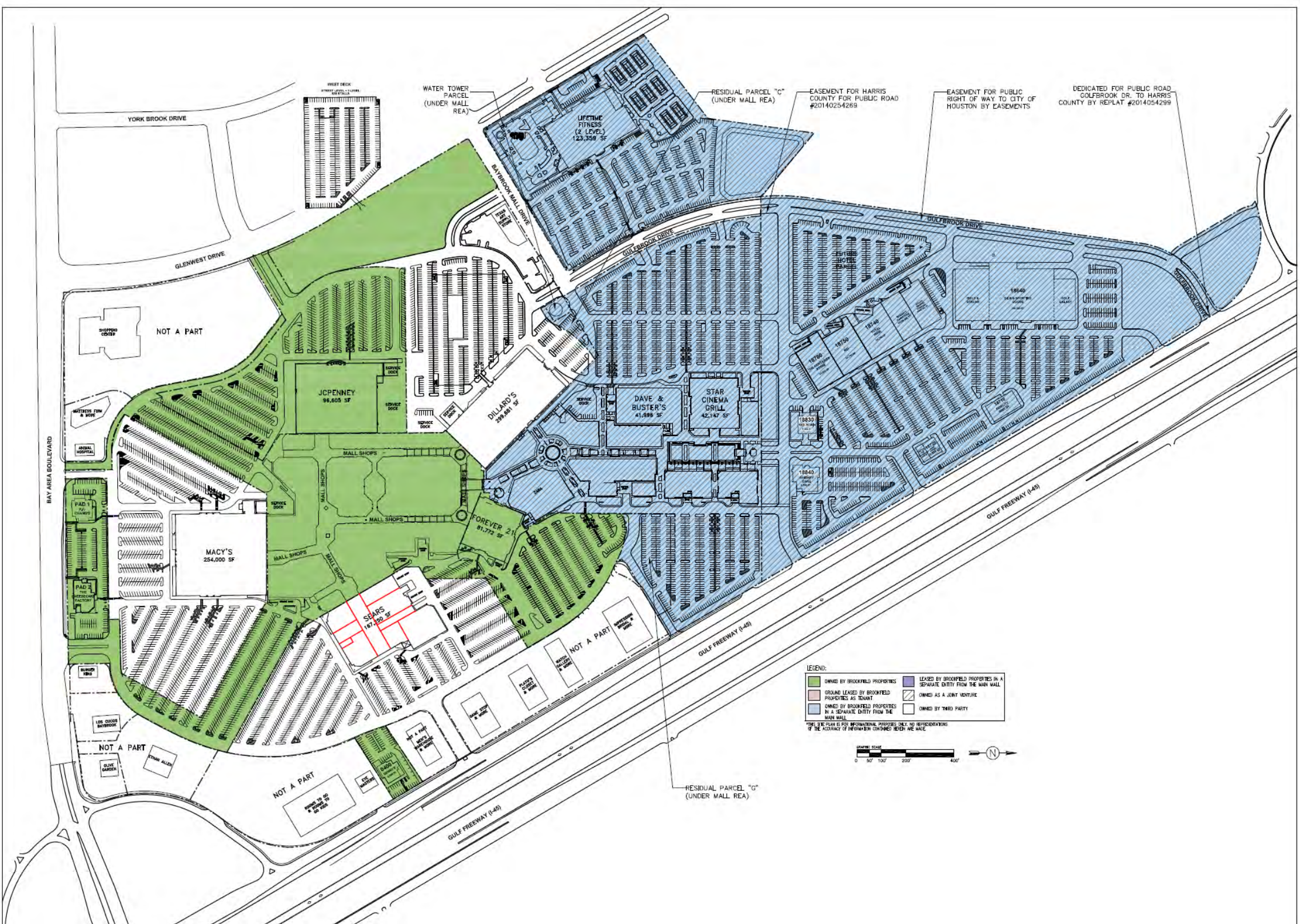
Case Study of a COMPOSITE mall type

powers
brown
archit
ecture

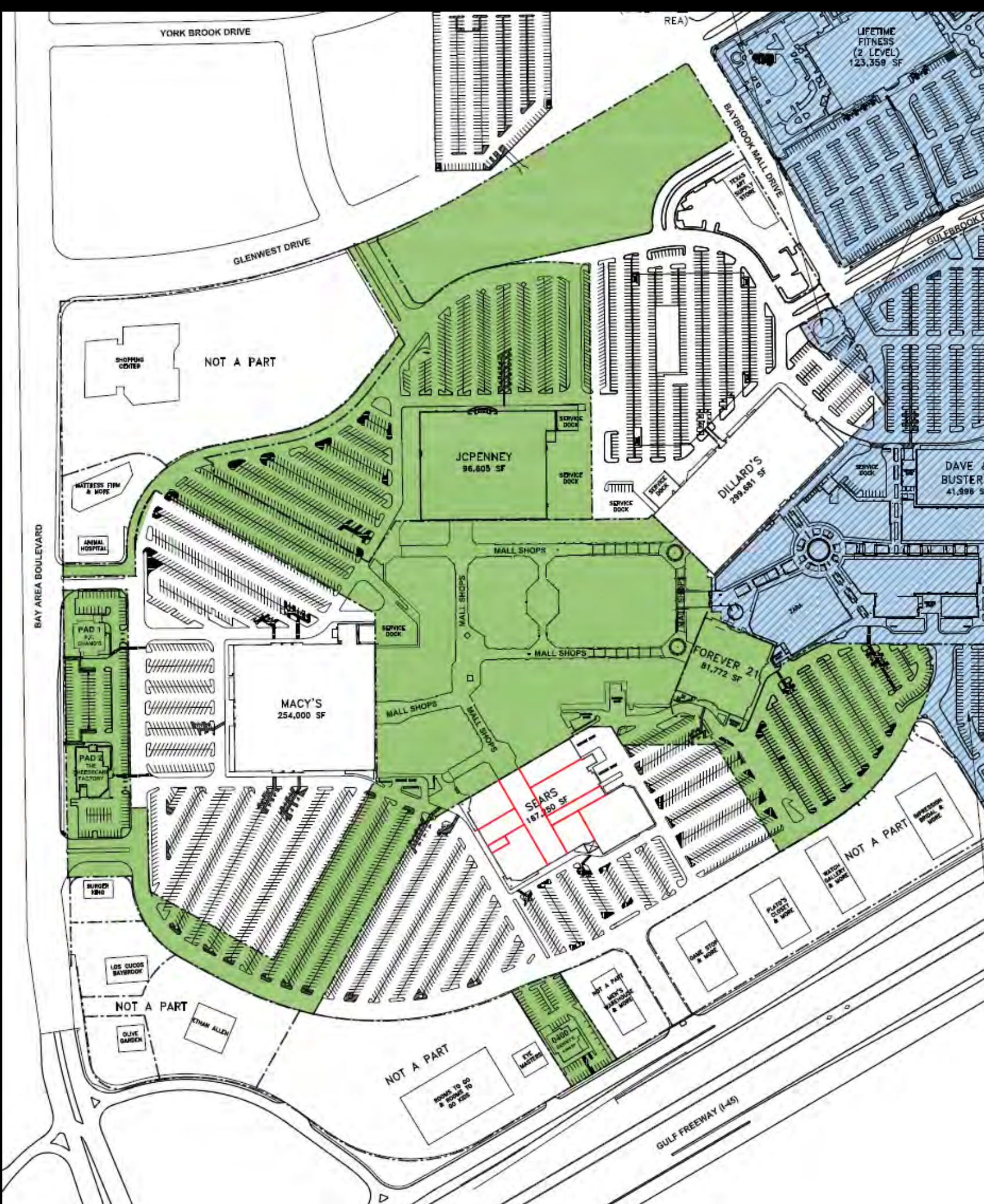


Not all of the mall can be used.
The BLUE is a separate entity.
The WHITE box stores are owned by a third party.
The GREEN is what is in play.

powers
brown
archit
ecture



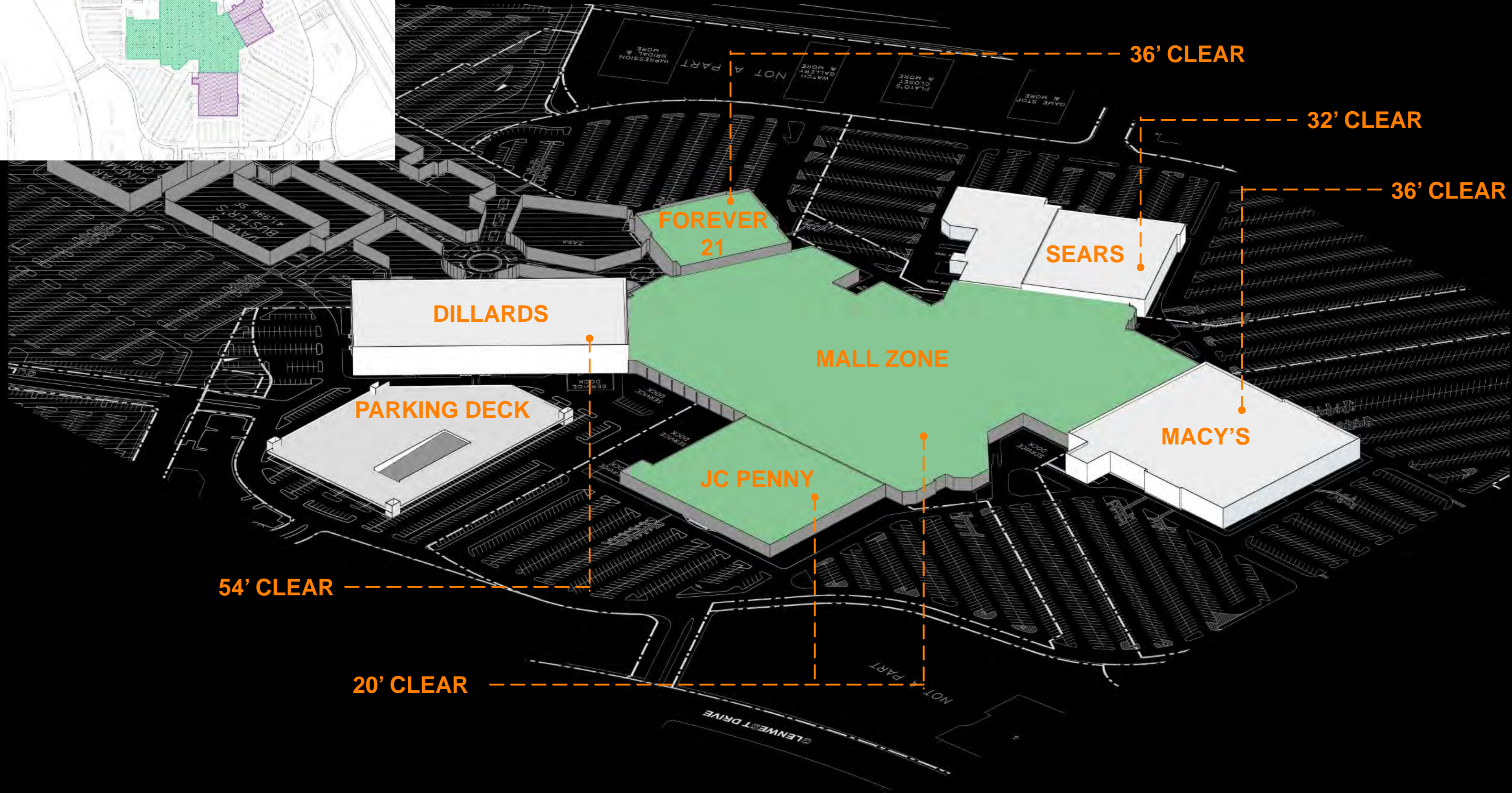
powers
brown
archit
ecture



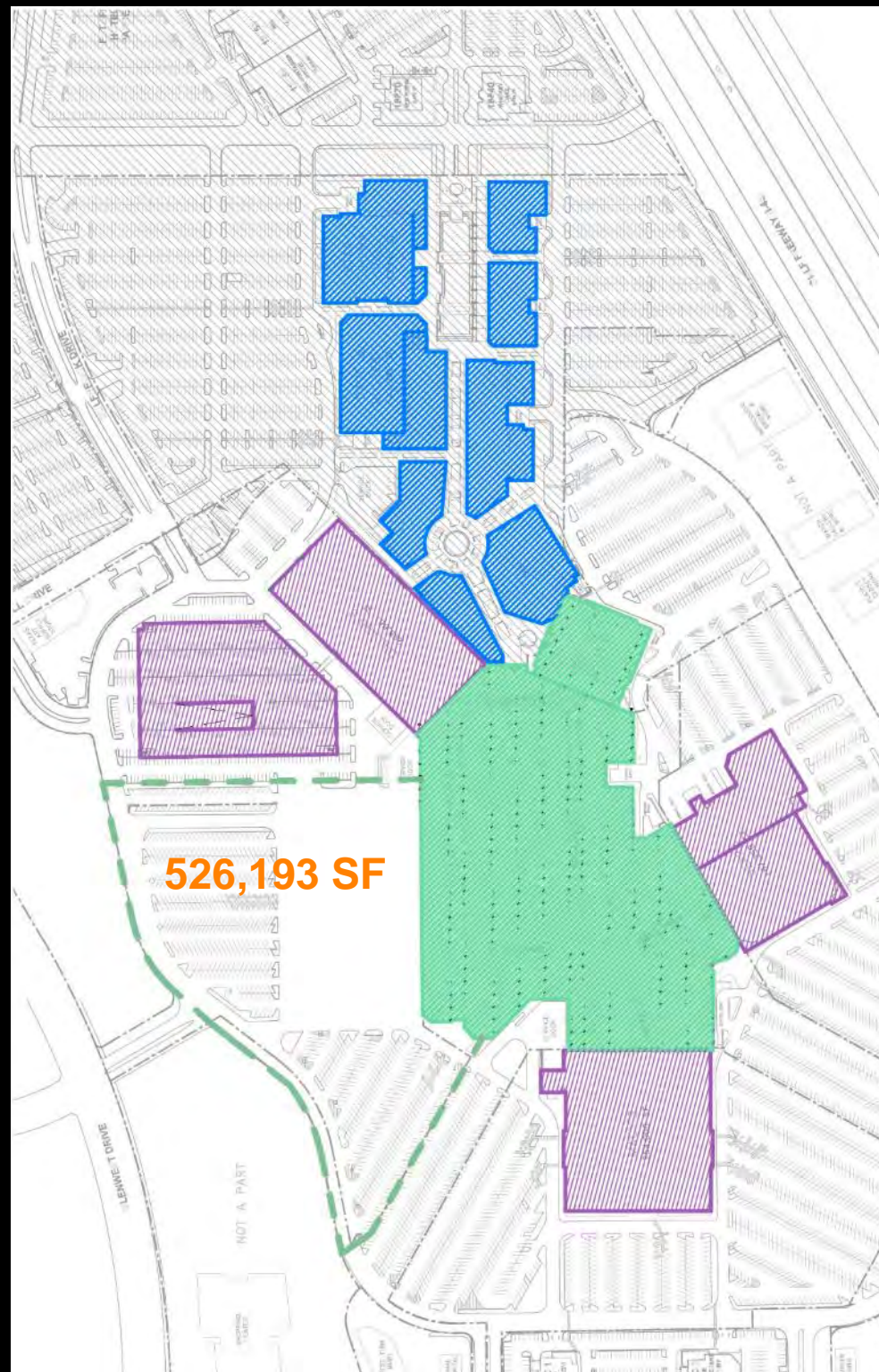
This means MACY'S, DILLARDS, and SEARS must remain ...

DEMO SCHEMES

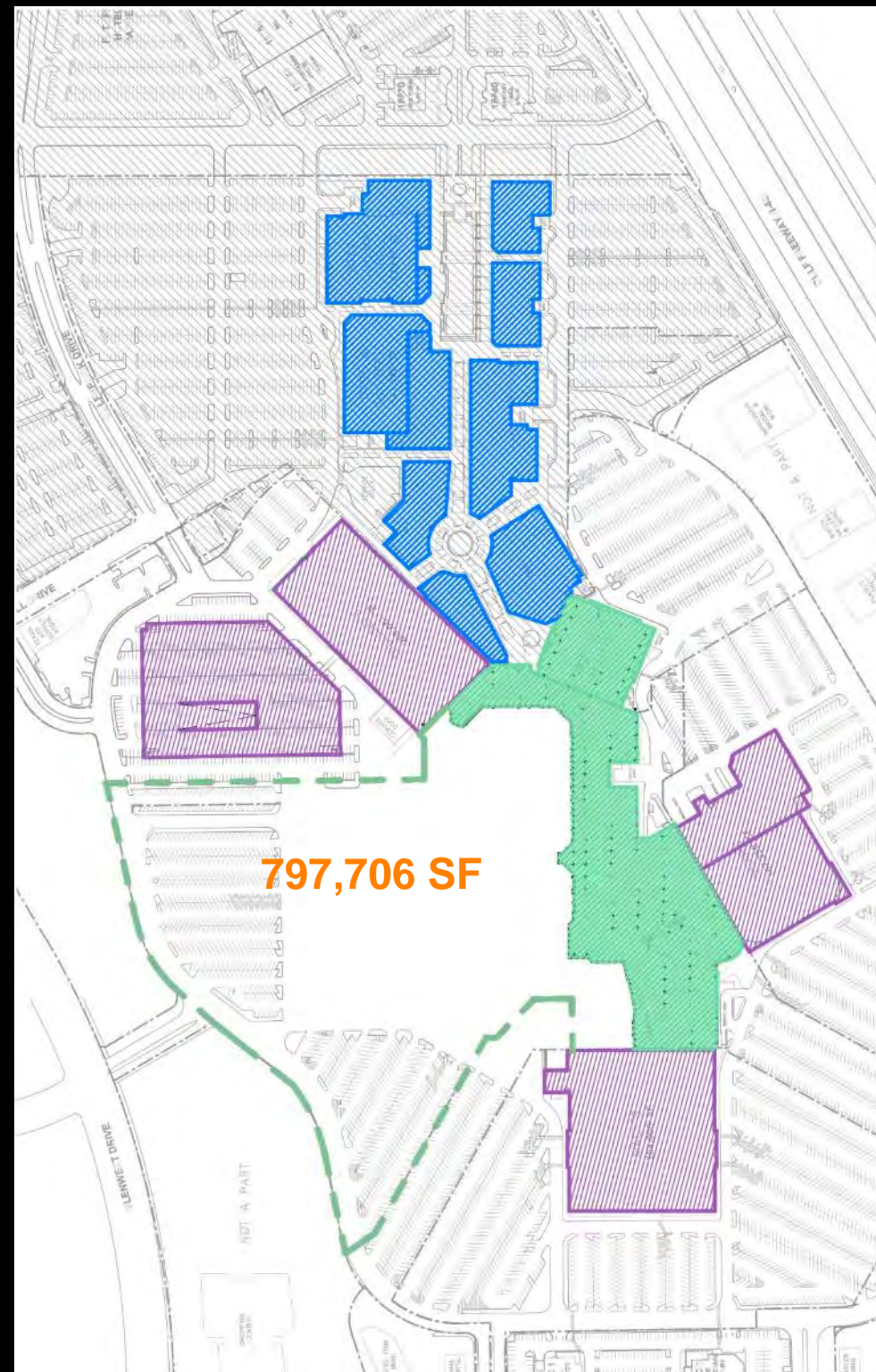
powers
brown
archit
ecture



DEMO SCHEME 1 - DEMO JUST THE JC PENNY



DEMO SCHEME 2 - PARTIAL MALL DEMO LEAVING A CONNECTOR TO THE BOX STORES



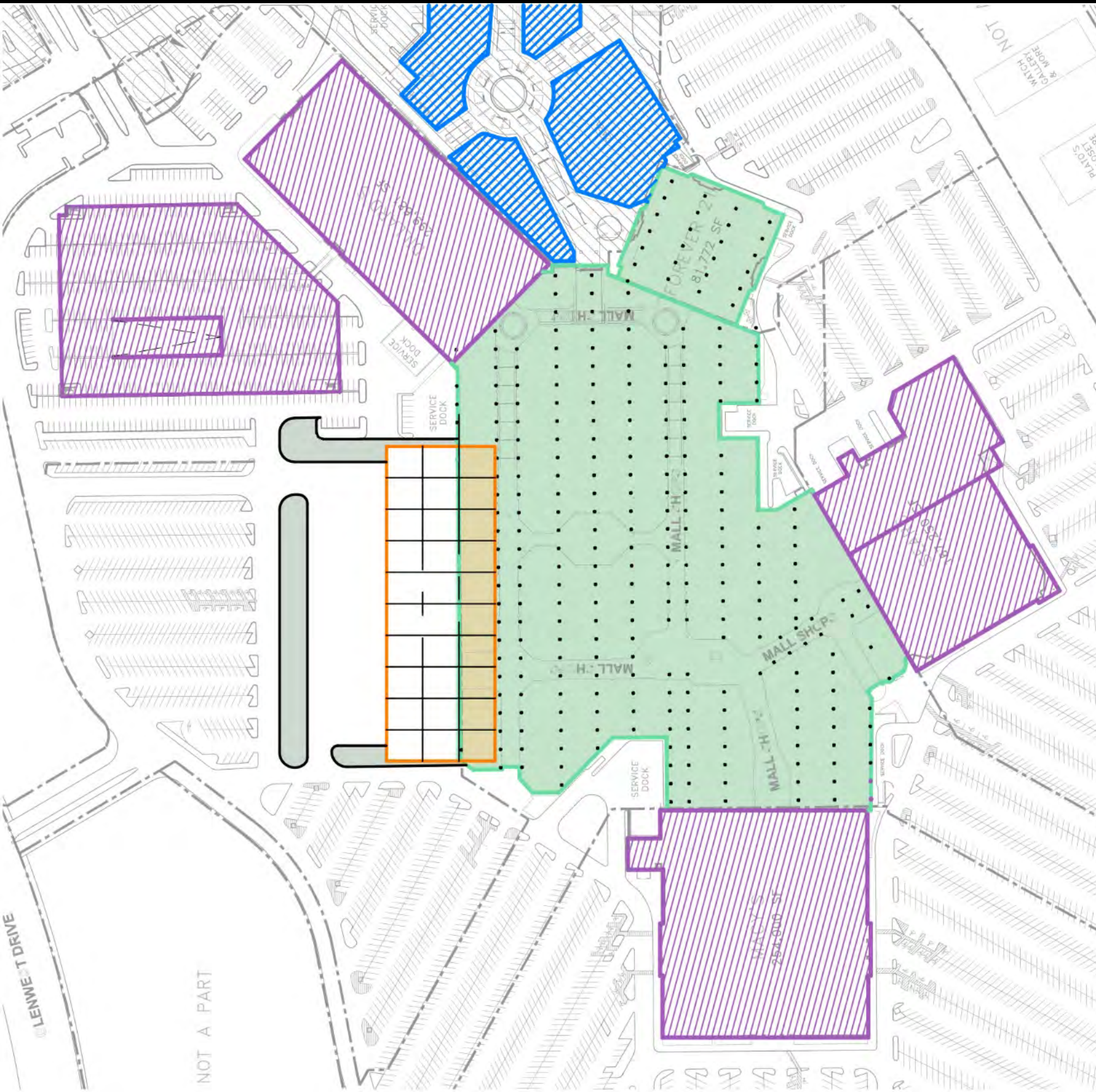
DEMO SCHEME 3 - DEMO ALL PARTS POSSIBLE



COMPOSITE mall type with
SPECULATIVE DISTRIBUTION prototypes

OFFICE FRONTAGE INTEGRATED INTO MALL

powers
brown
archit
ecture



DEMO SCHEME 1 – JC PENNY DEMO

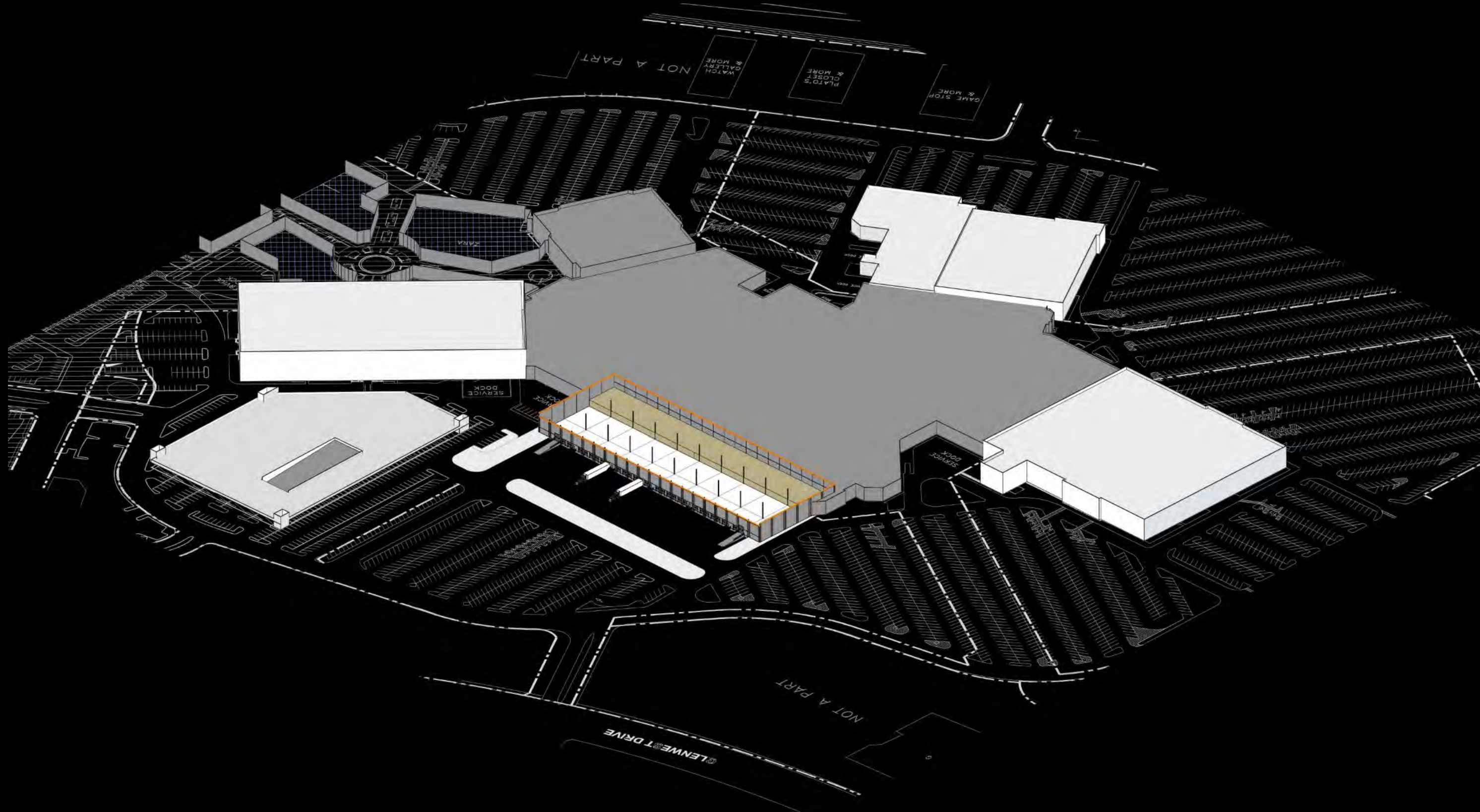
REAR LOAD

BUILDING: 93,600 SF

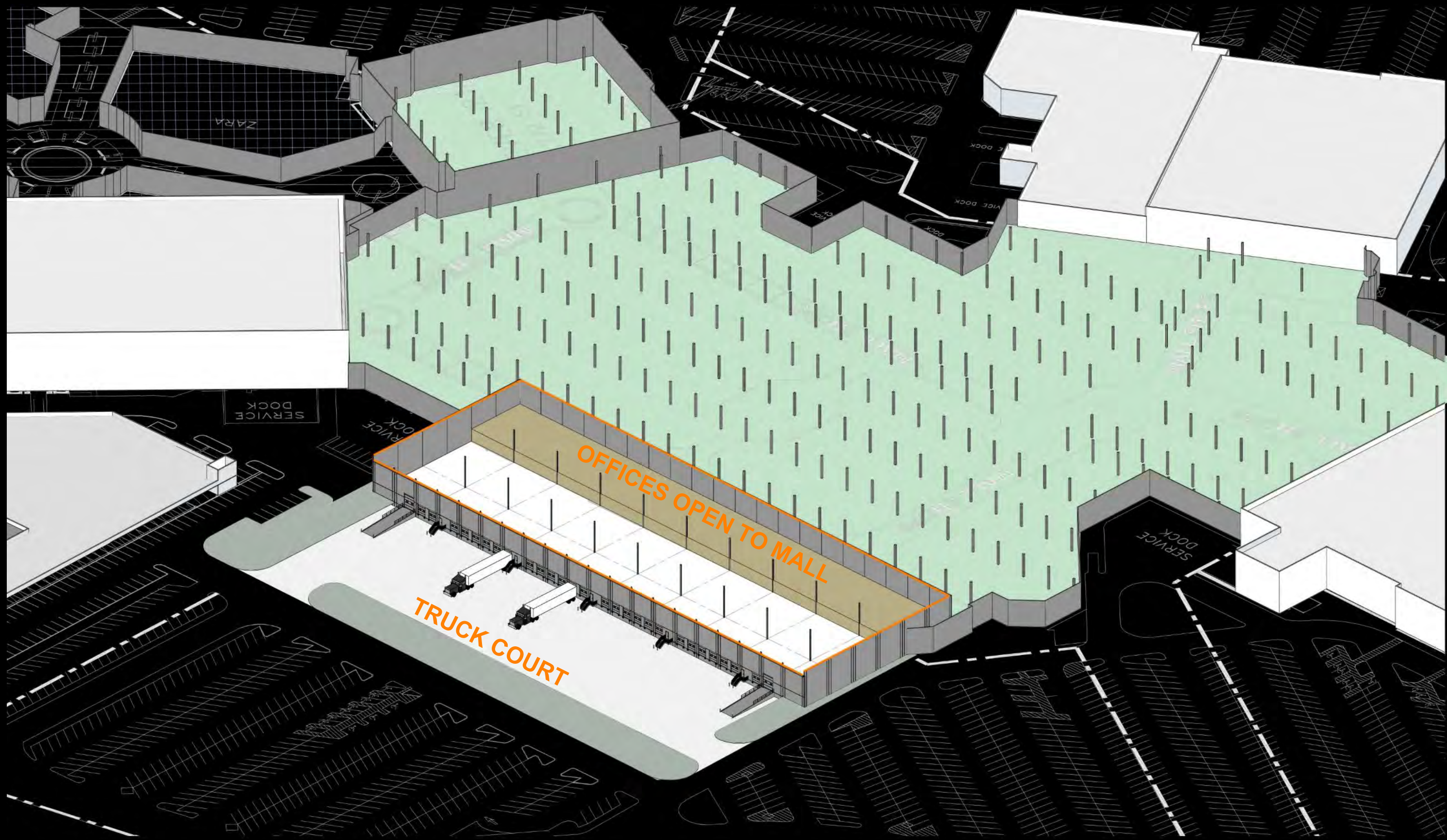
32' CLR

OFFICE FRONTAGE INTEGRATED INTO MALL

powers
brown
archit
ecture

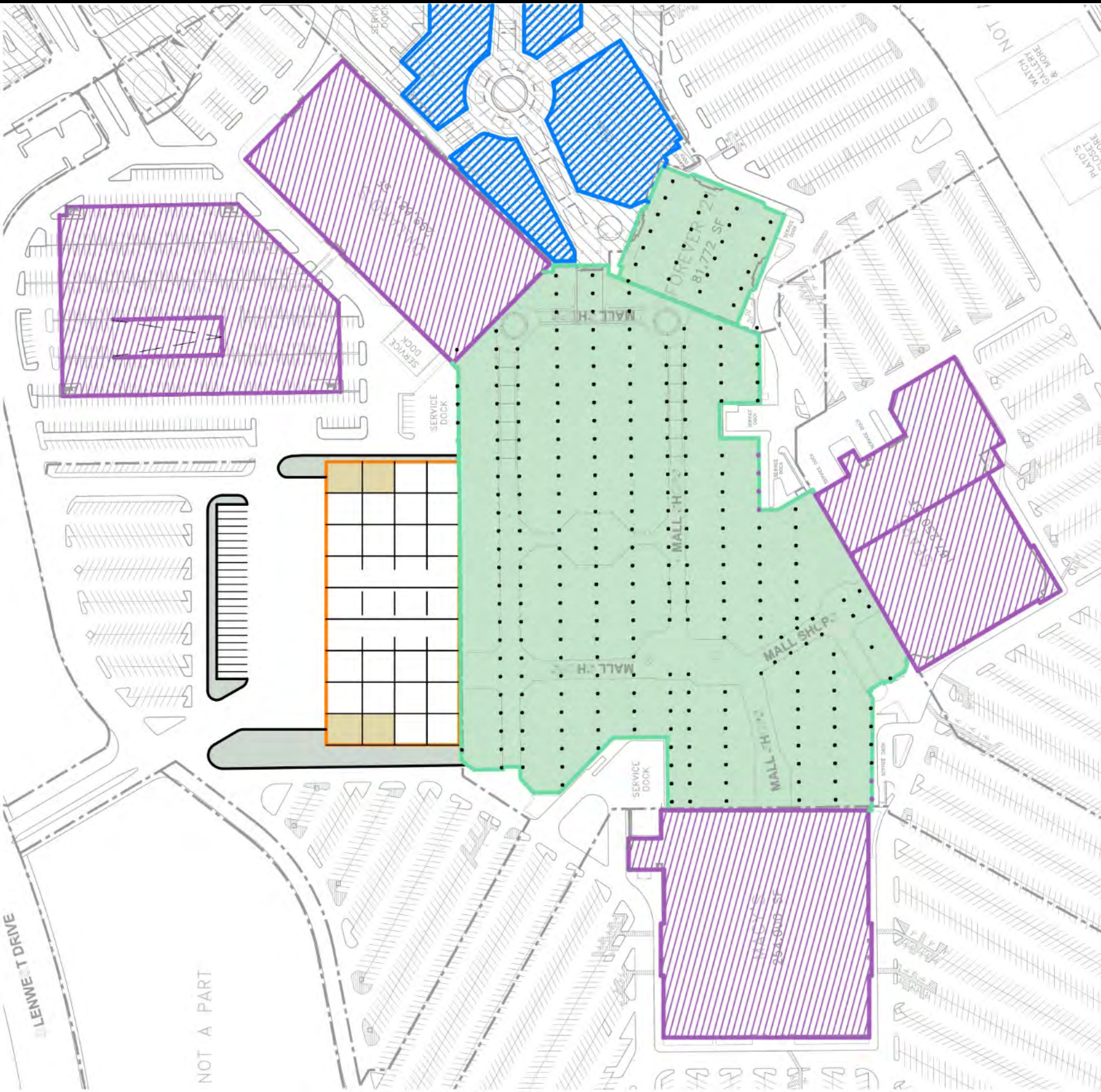


powers
brown
archit
ecture



BUILDING: 102,960 SF
32' CLR
ATTACHED TO MALL WITH FIRE WALL

powers
brown
archit
ecture



DEMO SCHEME 1 – JC PENNY DEMO

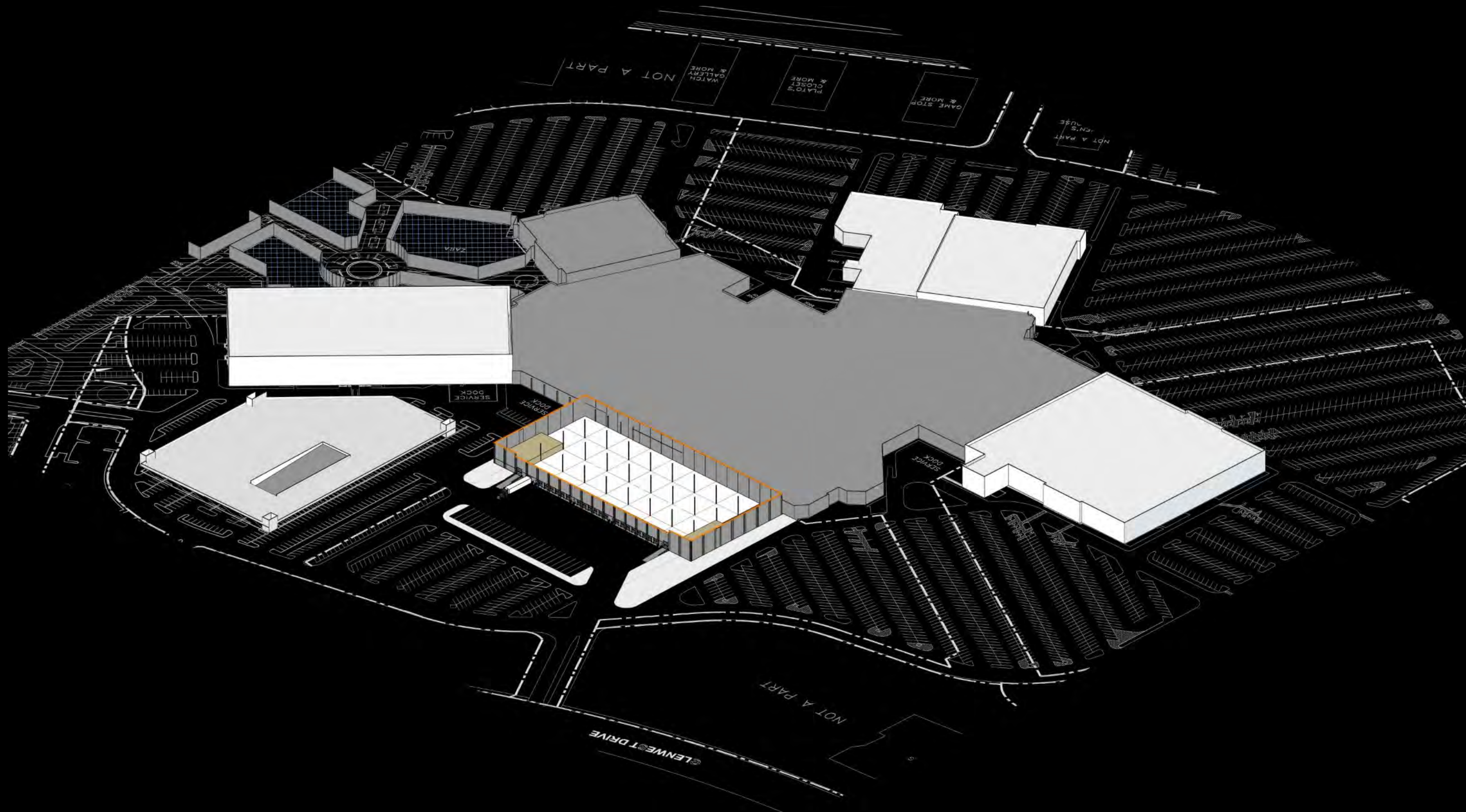
FRONT LOAD

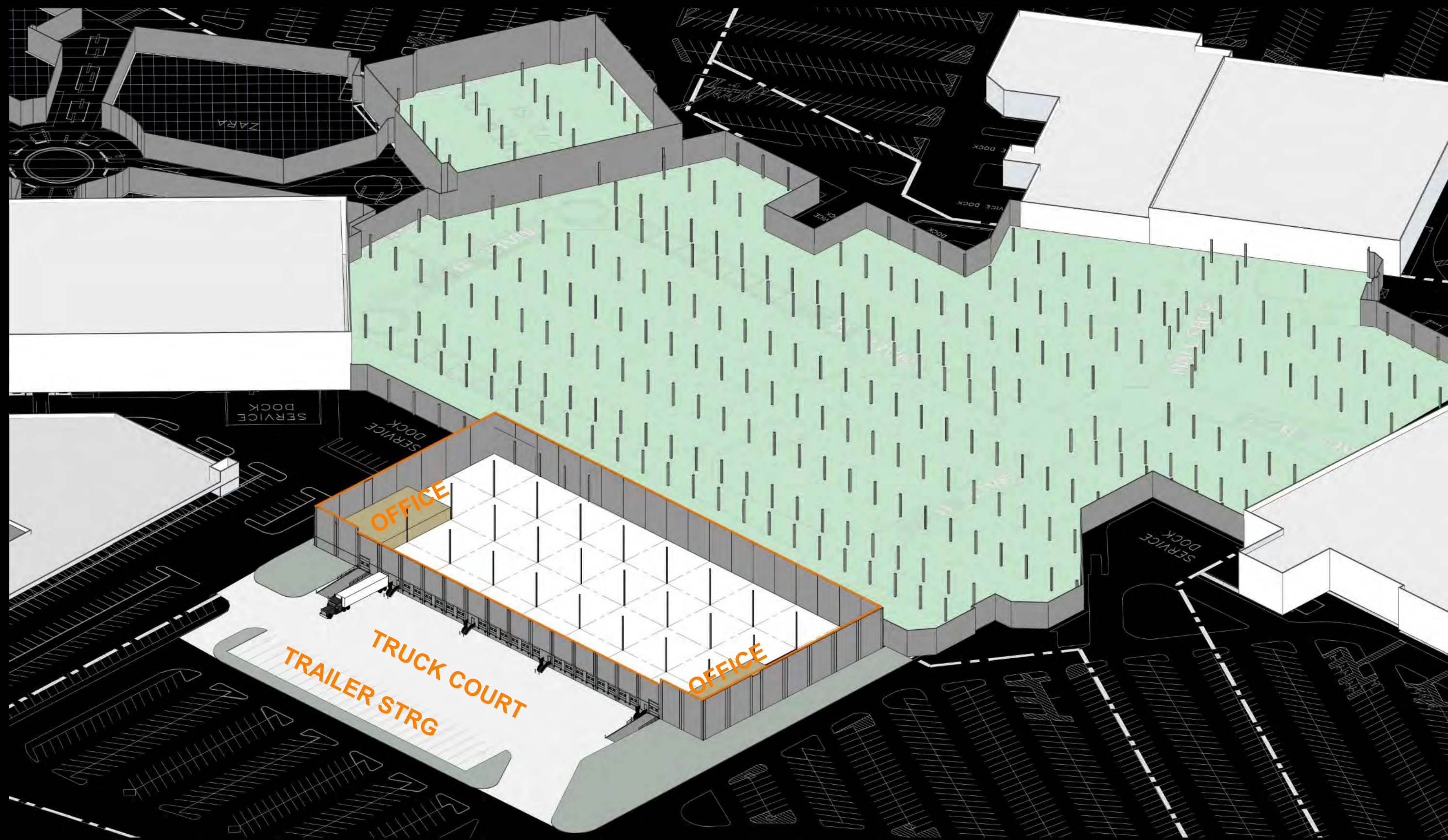
BUILDING: 102,960 SF

32' CLR

ATTACHED TO MALL WITH FIRE WALL

powers
brown
archit
ecture





FRONT LOAD / REAR LOAD

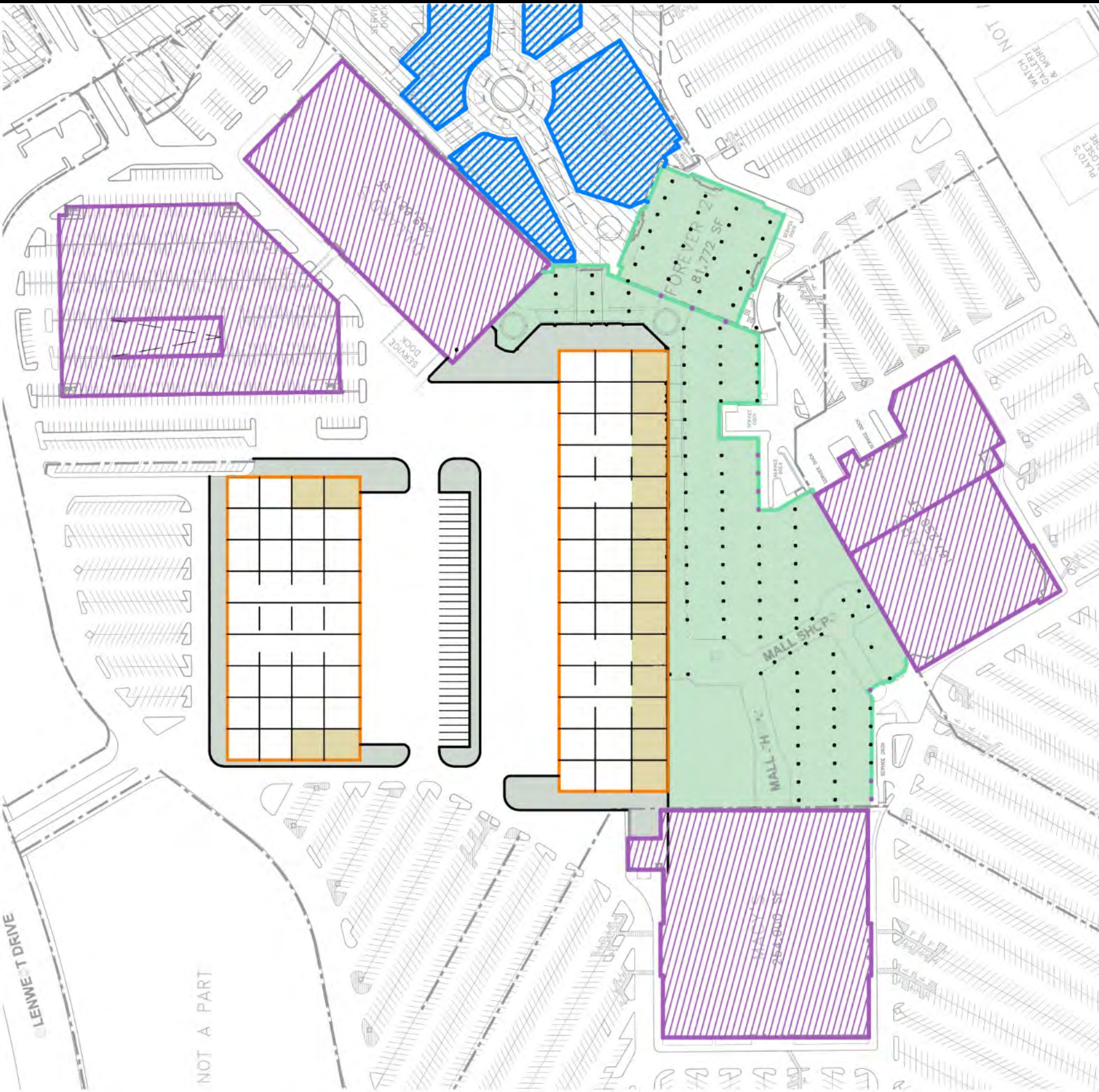
BUILDING: 102,960 SF + 131,040 SF

32' CLR

OFFICE FRONTAGE OF REAR LOAD INTEGRATED INTO MALL

INTERNALIZED TRUCK COURT

powers
brown
archit
ecture



DEMO SCHEME 2 –
PARTIAL DEMO

FRONT LOAD / REAR LOAD

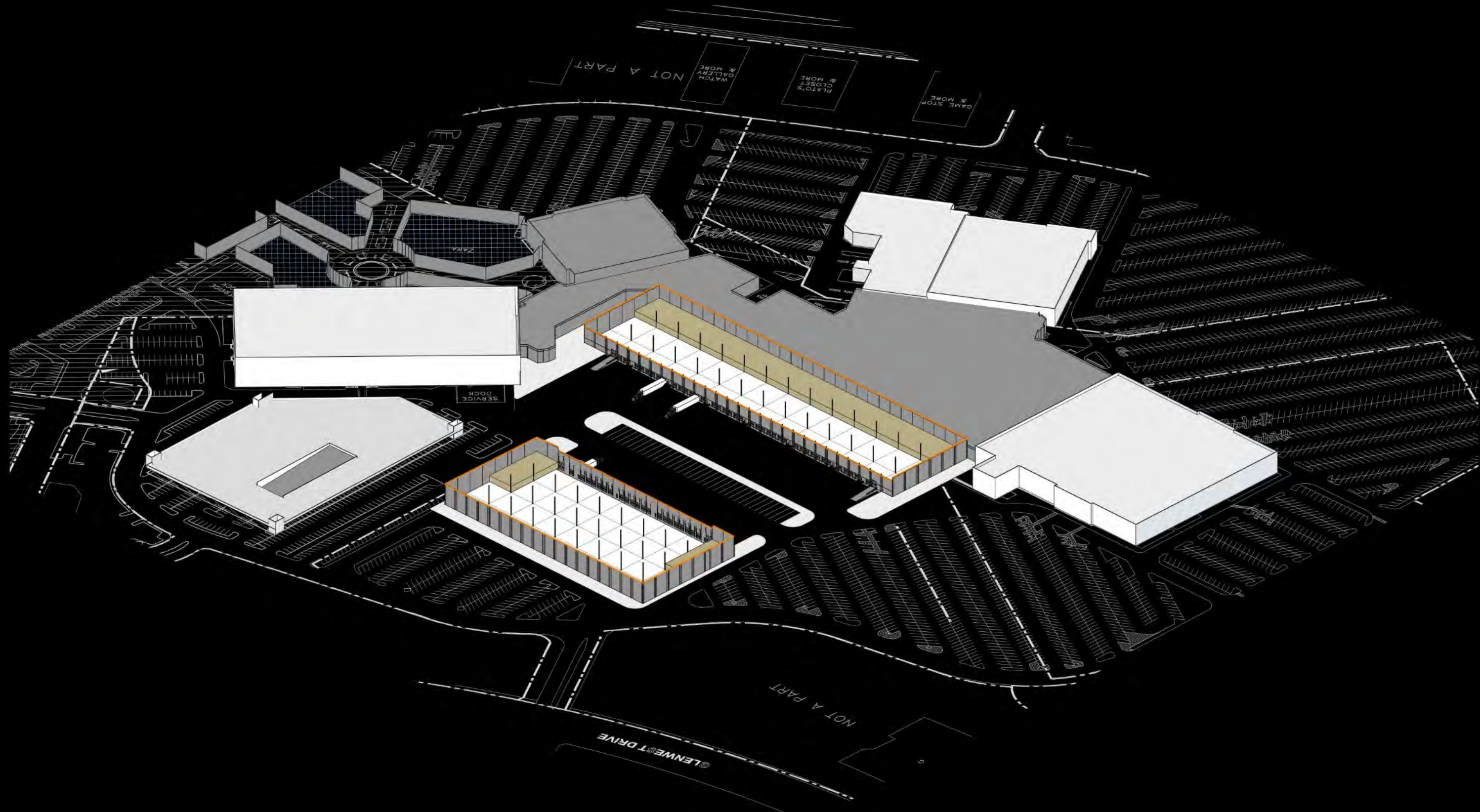
BUILDING: 102,960 SF + 131,040 SF

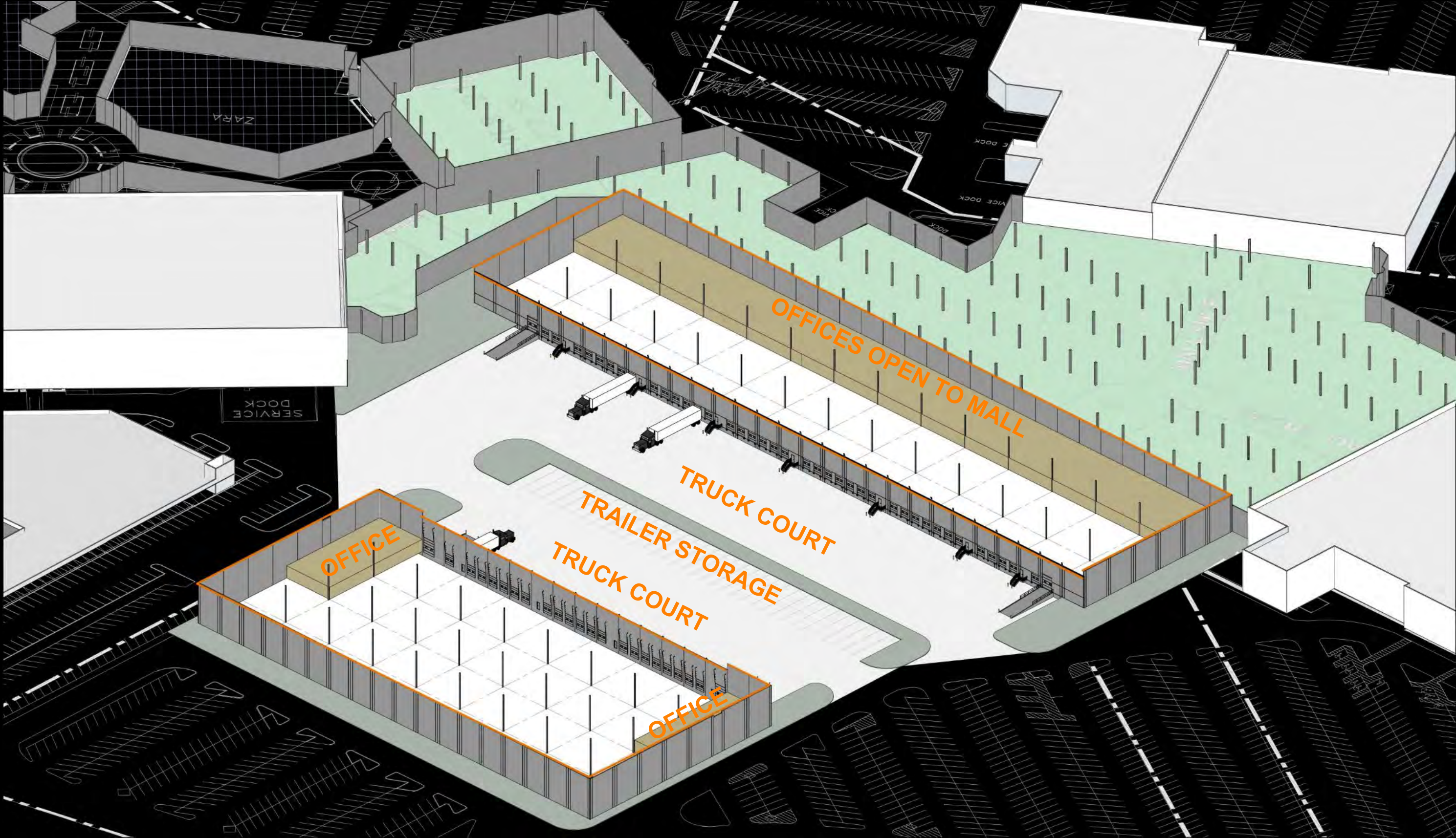
32' CLR

OFFICE FRONTAGE OF REAR LOAD INTEGRATED INTO MALL

INTERNALIZED TRUCK COURT

powers
brown
archit
ecture

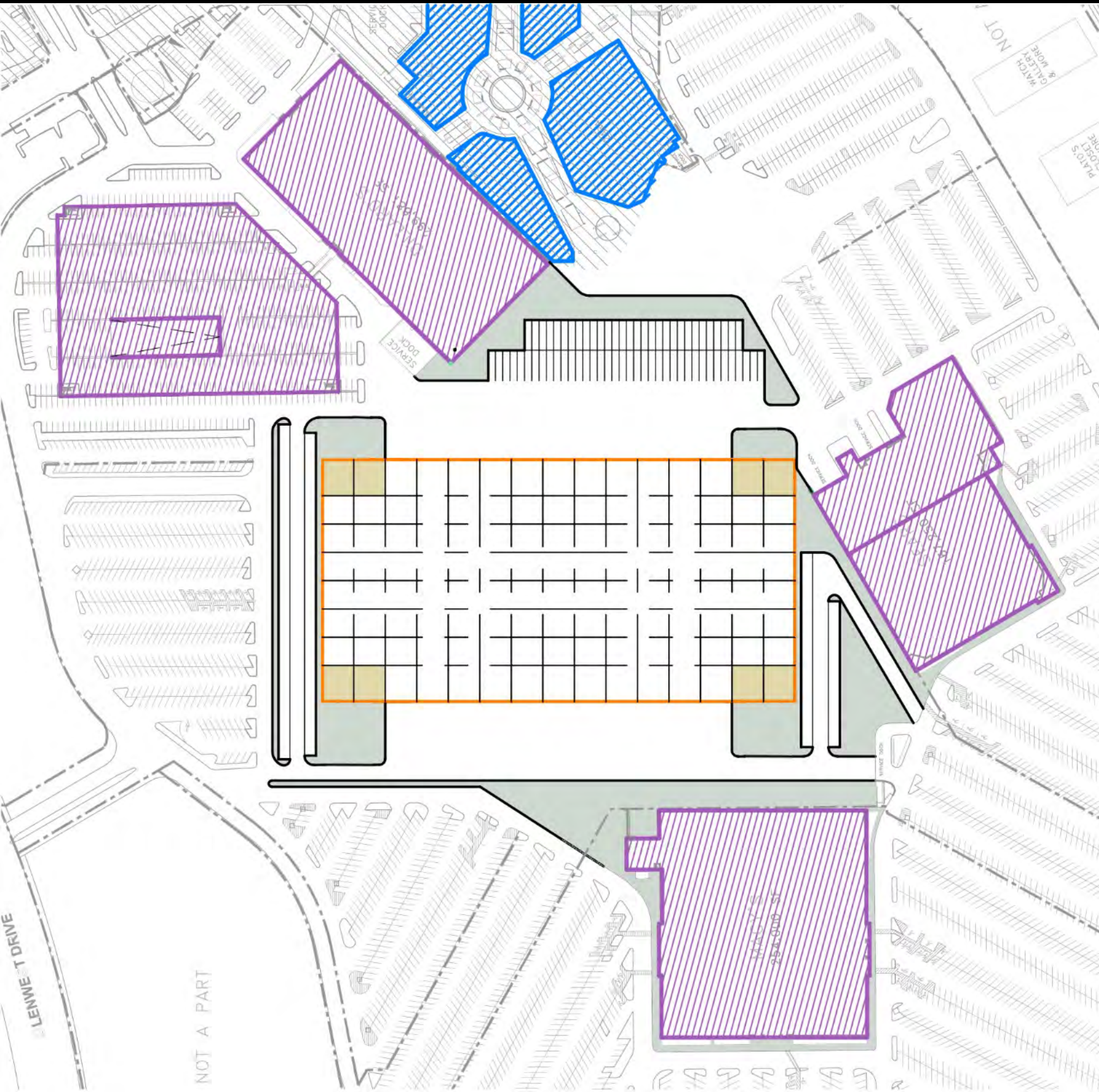




CROSS DOCK

BUILDING: 312,000 SF
32' CLR
IN PLACE OF MALL

powers
brown
archit
ecture

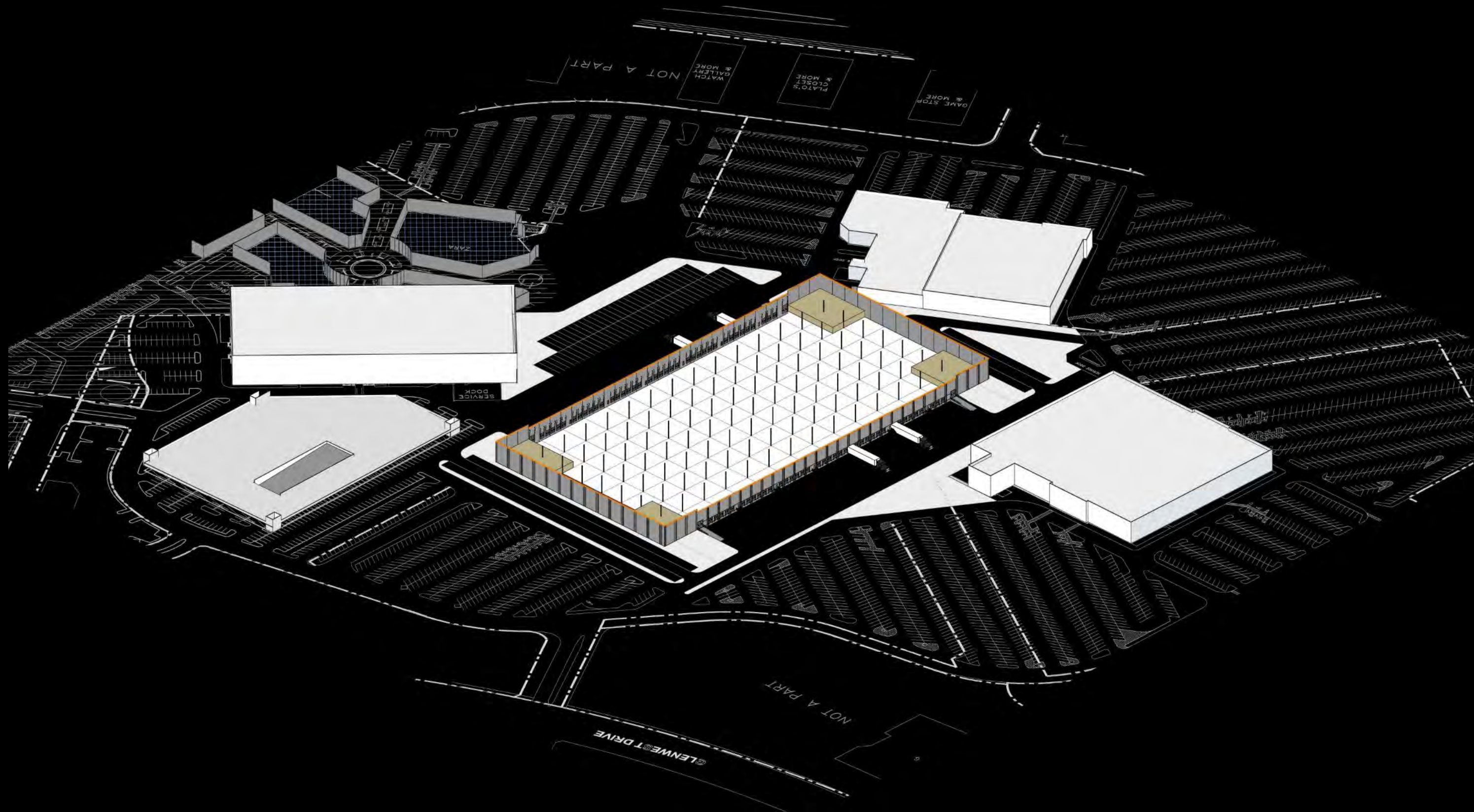


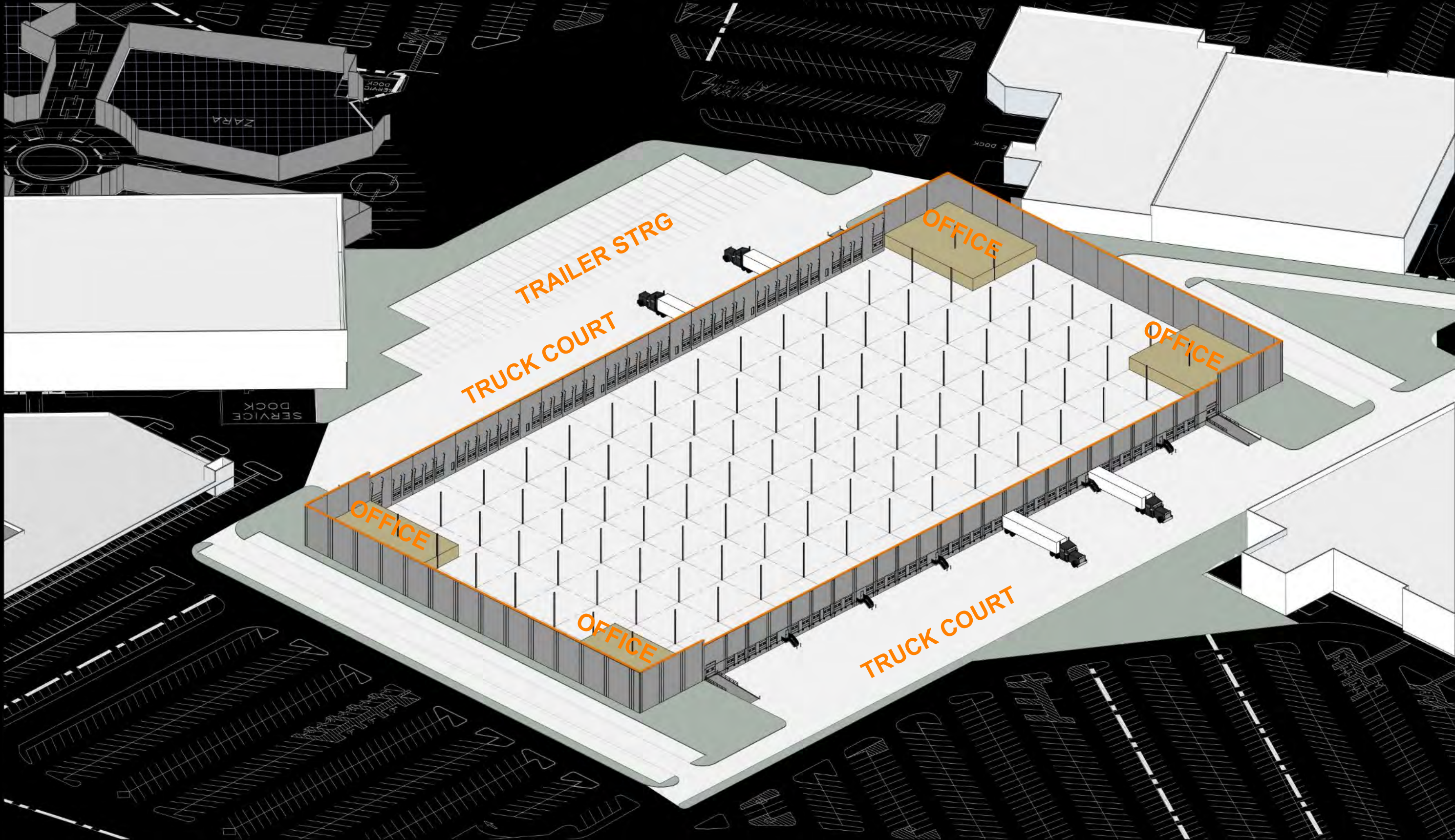
**DEMO SCHEME 3 –
FULL DEMO**

CROSS DOCK

BUILDING: 312,000 SF
32' CLR
IN PLACE OF MALL

powers
brown
archit
ecture





COMPOSITE mall type with
E - COMMERCE prototypes

Explainer

Same exercise now with e-commerce building types inspired by Amazon criteria .

E X C U R S U S

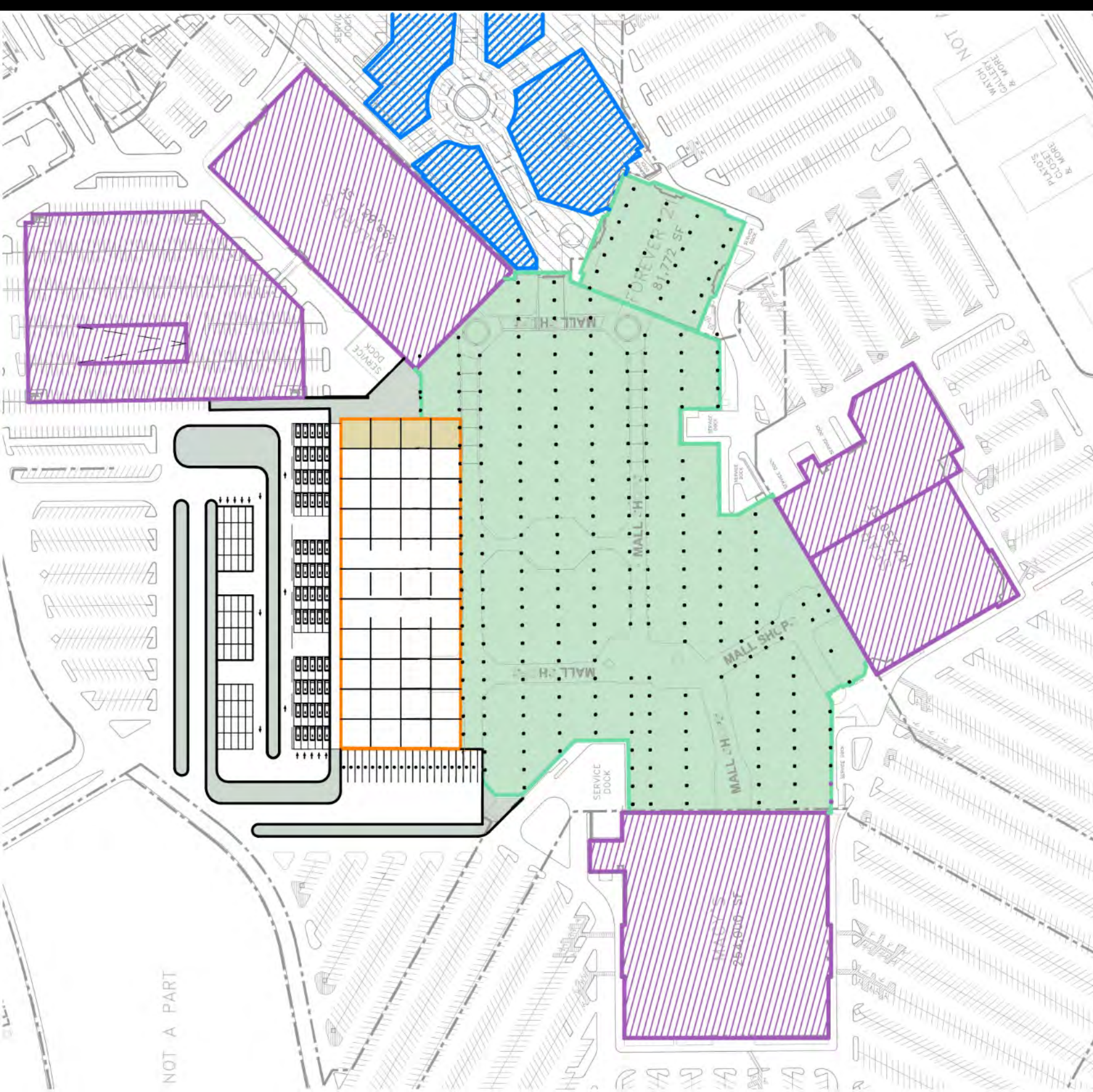
100K SF – 1STORY PROTOTYPE

BUILDING: 110,000 SF

32' CLR

INTEGRATED INTO MALL WITH FIRE WALL

powers
brown
archit
ecture



DEMO SCHEME 1 –
JC PENNY DEMO

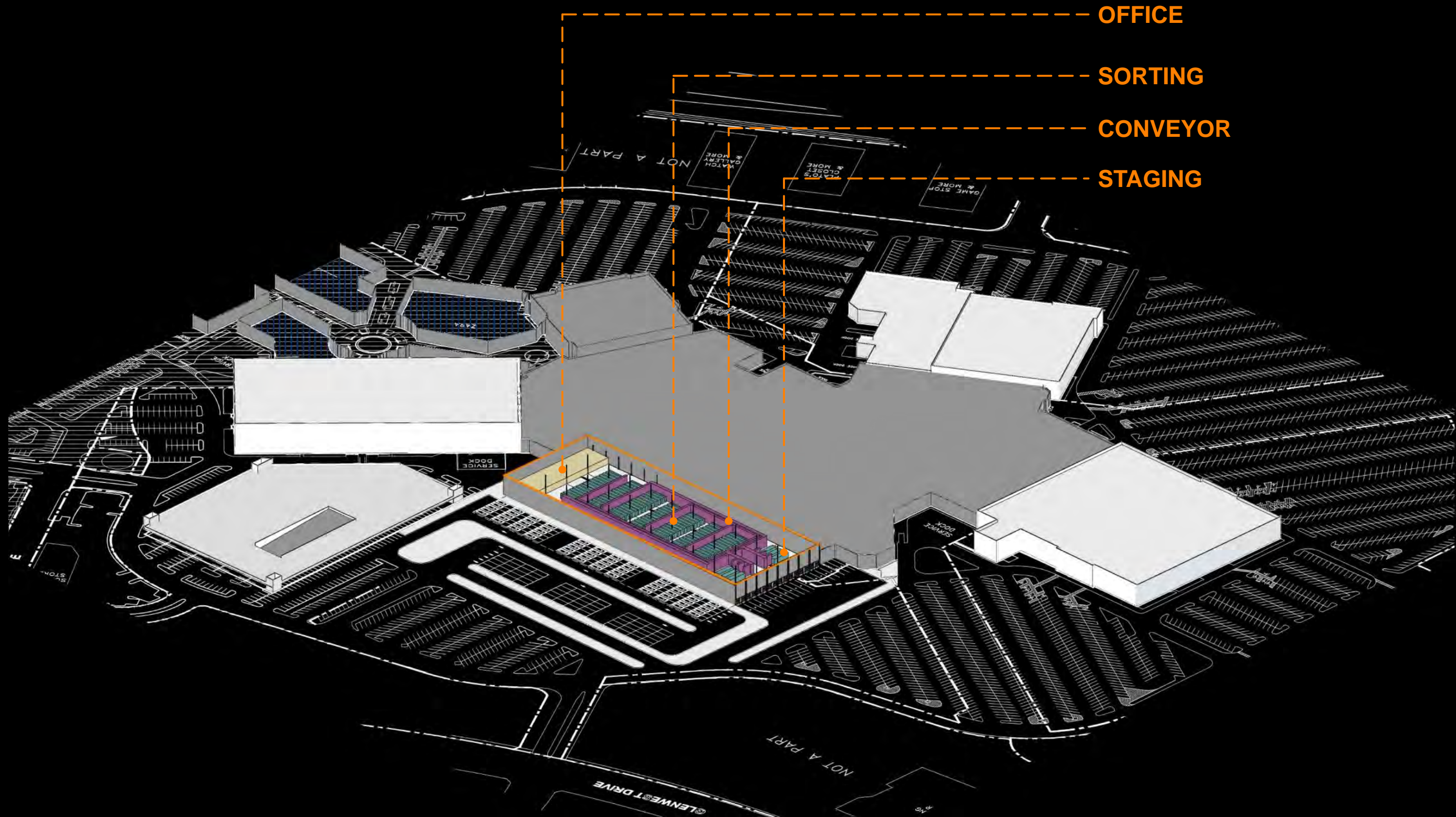
100K SF – 1STORY PROTOTYPE

BUILDING: 110,000 SF

32' CLR

INTEGRATED INTO MALL WITH FIRE WALL

powers
brown
archit
ecture



**LAUNCH PAD
VAN STAGING**



**ASSOCIATE &
CUSTOMER PKG**

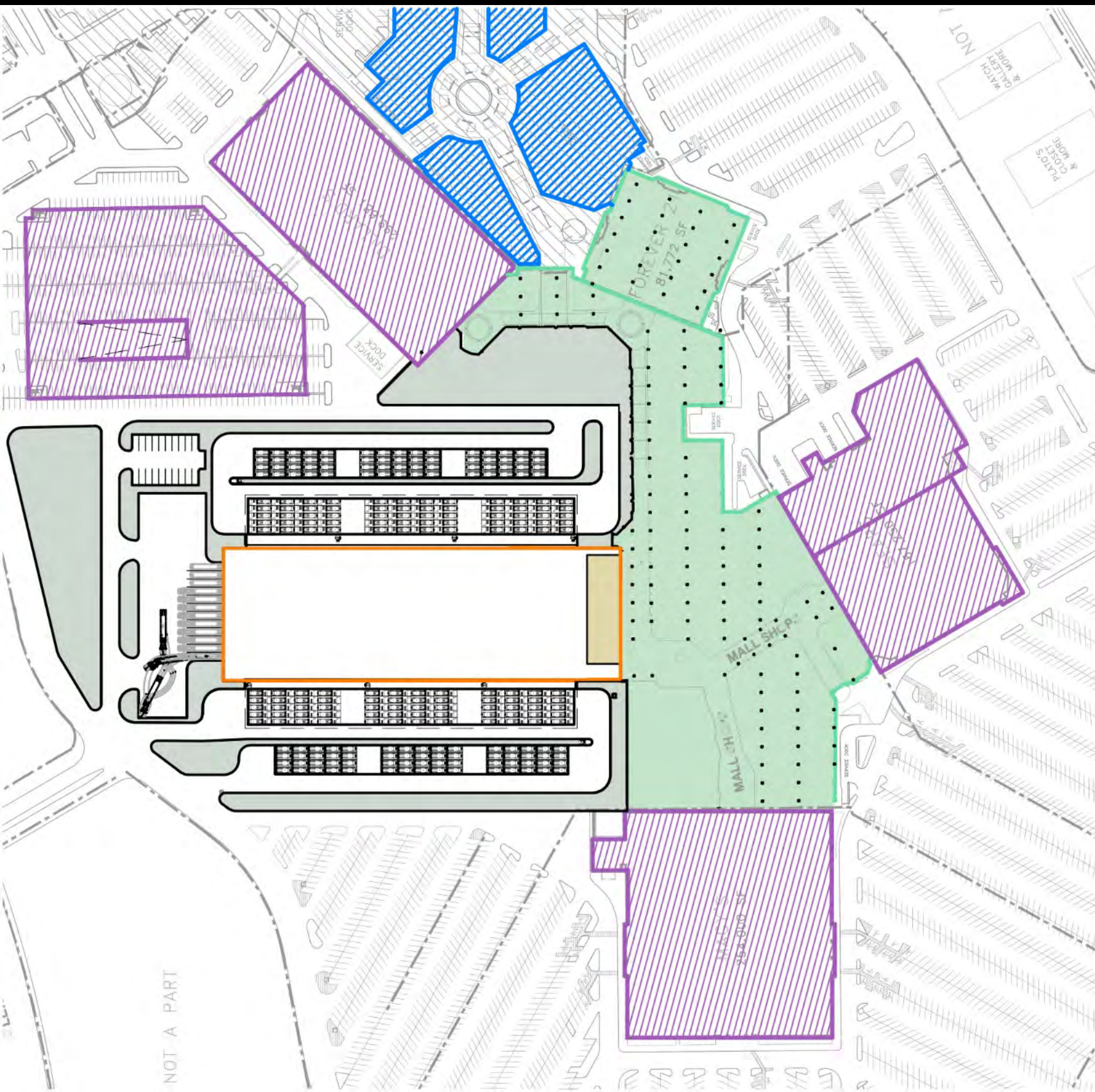
150K SF – 1STORY PROTOTYPE

BUILDING: 144,938 SF

32' CLR

OFFICE CONNECTED TO MALL CORRIDOR

powers
brown
archit
ecture



**DEMO SCHEME 2 –
PARTIAL DEMO**

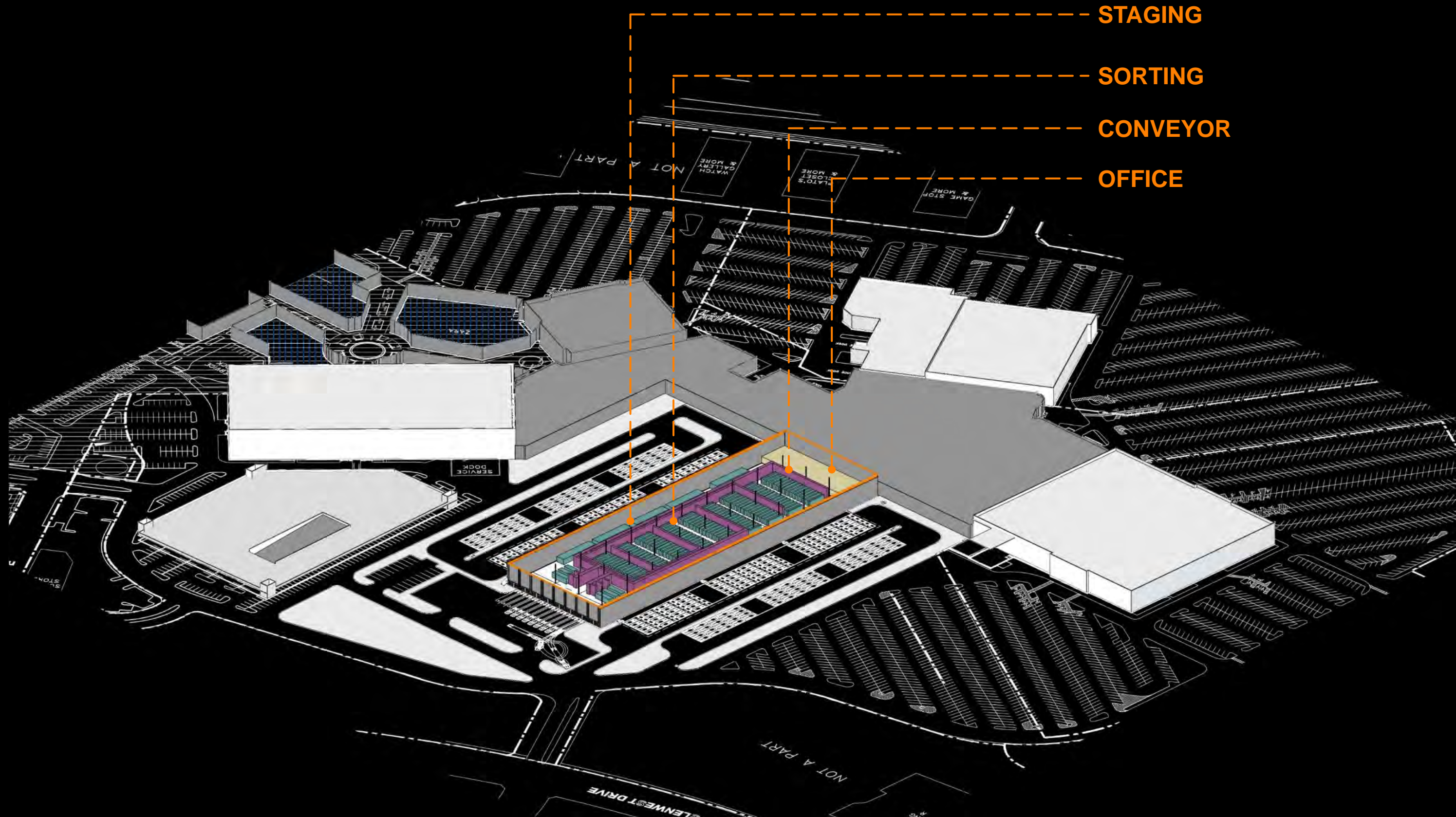
150K SF – 1STORY PROTOTYPE

BUILDING: 144,938 SF

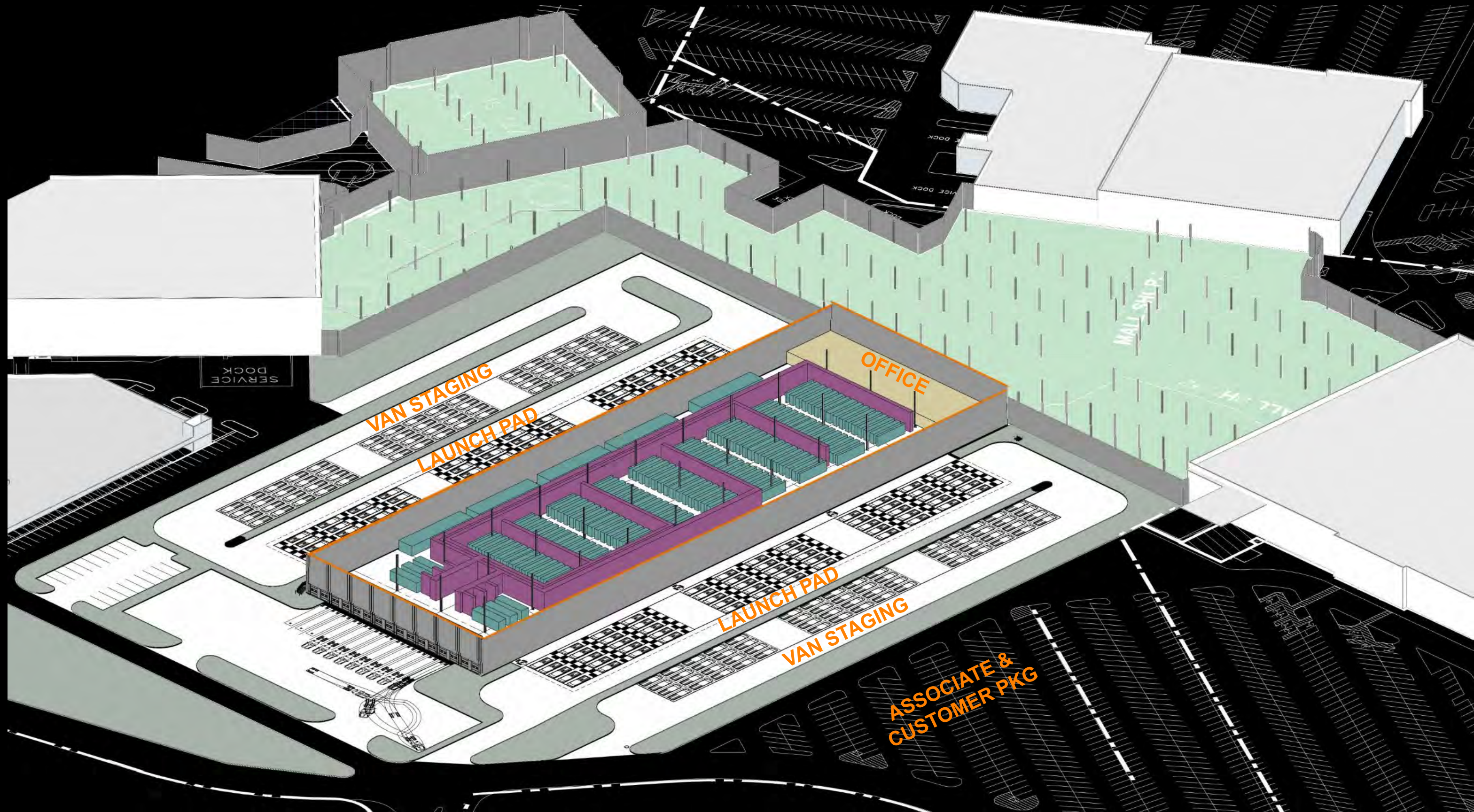
32' CLR

OFFICE CONNECTED TO MALL CORRIDOR

powers
brown
archit
ecture

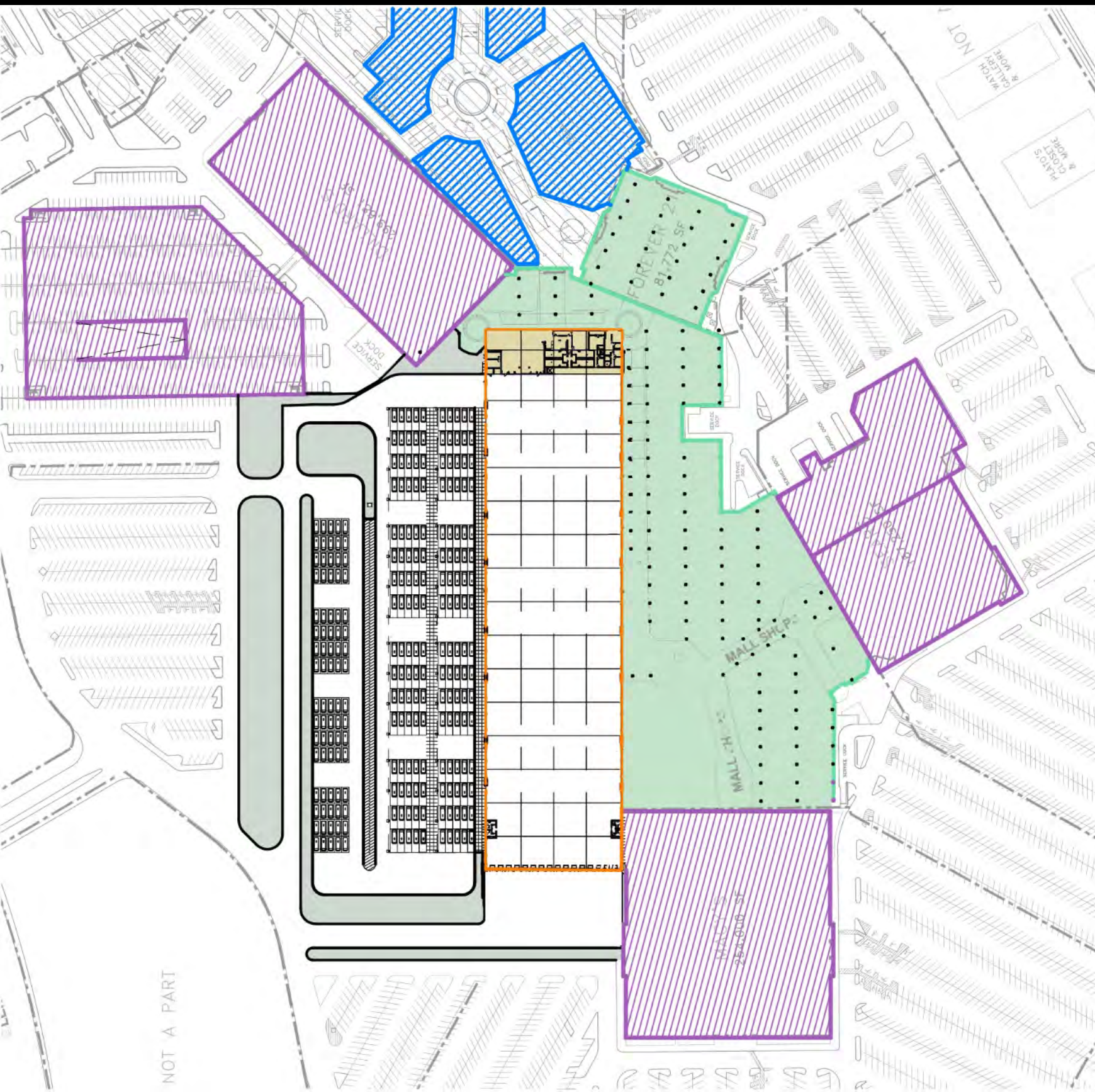


powers
brown
archit
ecture



BUILDING: 102,960 SF
28' CLR

powers
brown
archit
ecture

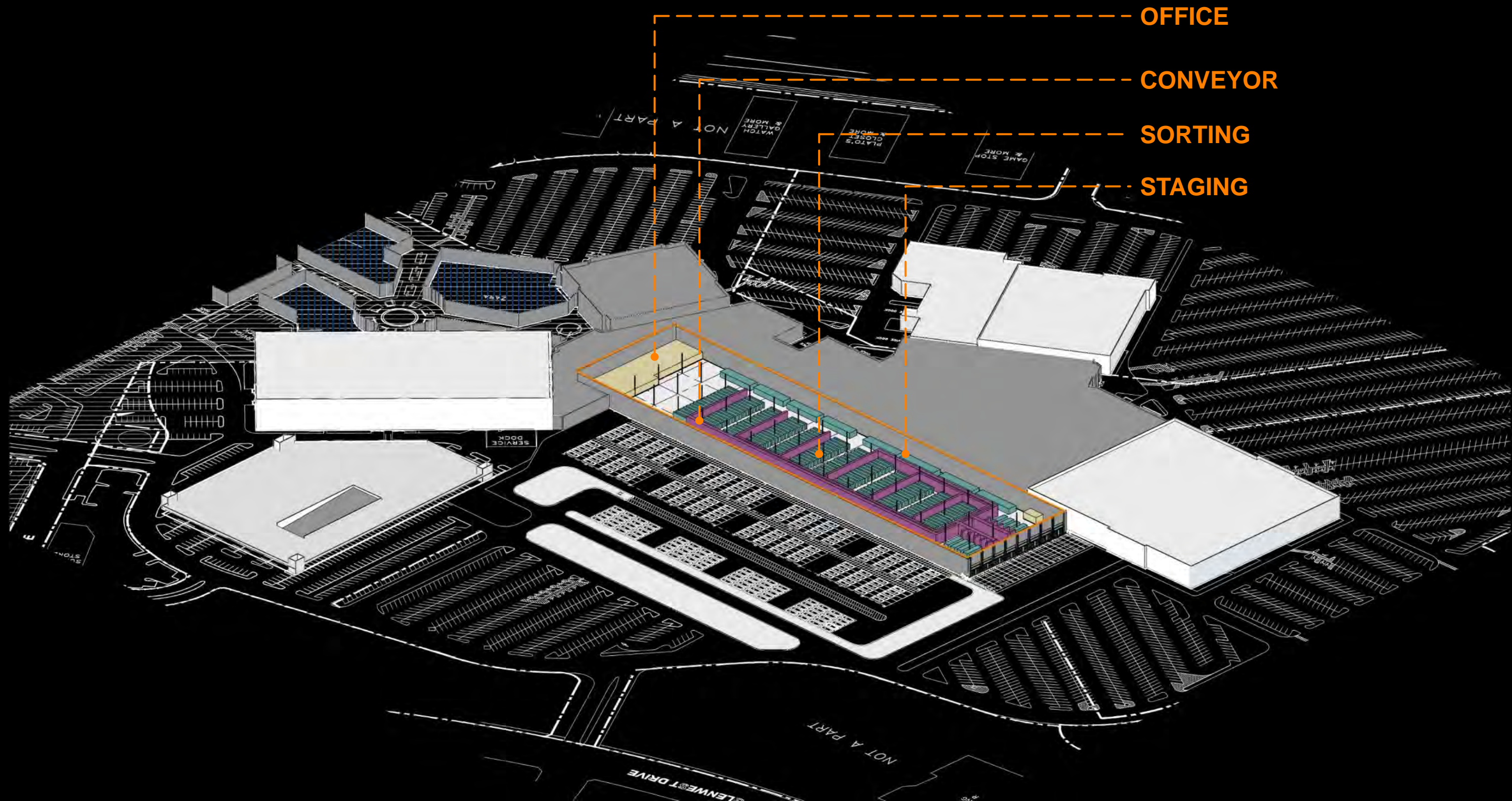


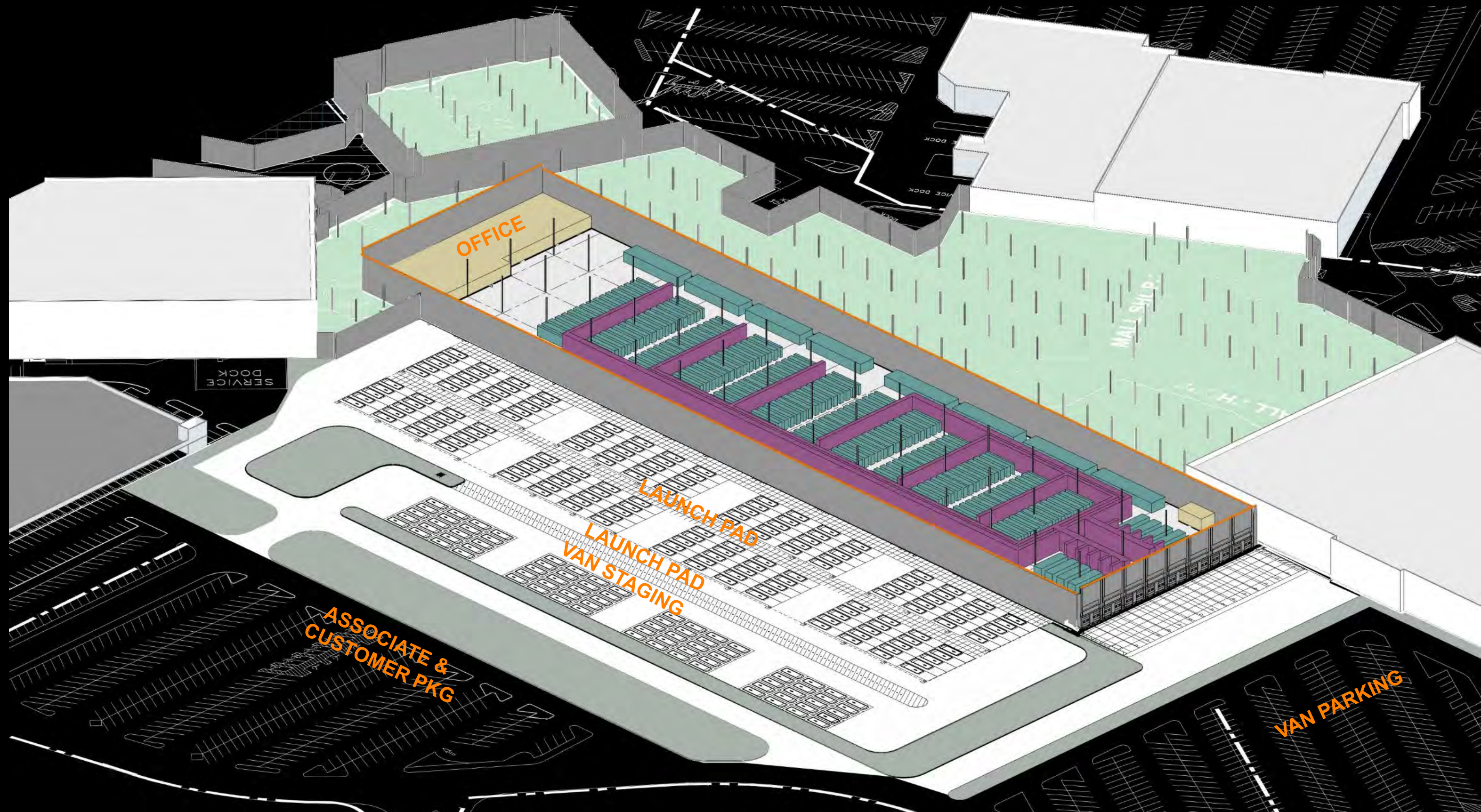
DEMO SCHEME 2 – PARTIAL DEMO

200K SF – 1STORY PROTOTYPE

BUILDING: 102,960 SF
28' CLR

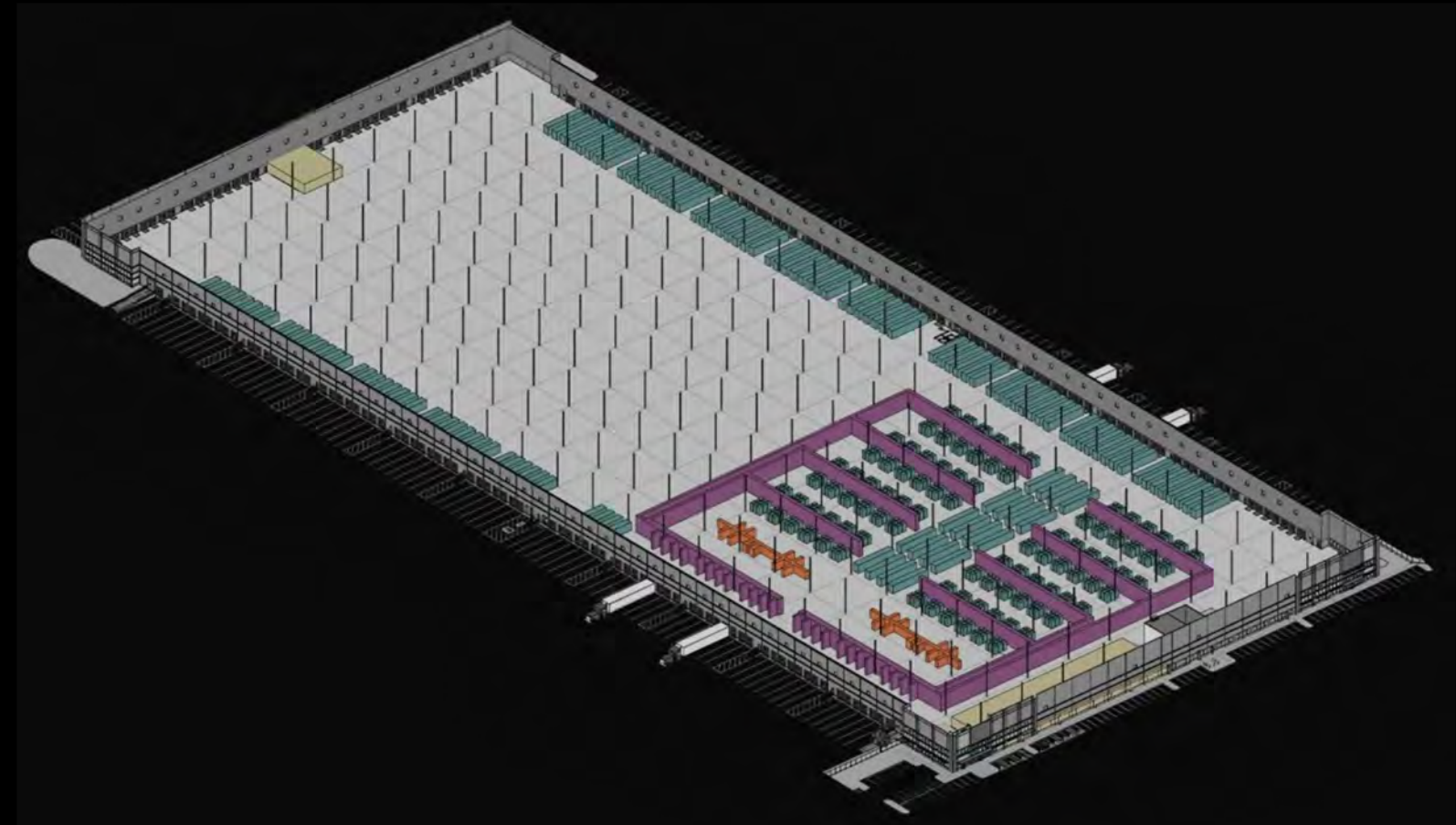
powers
brown
archit
ecture





How can we accommodate the 800K SF PROTOTYPE ...

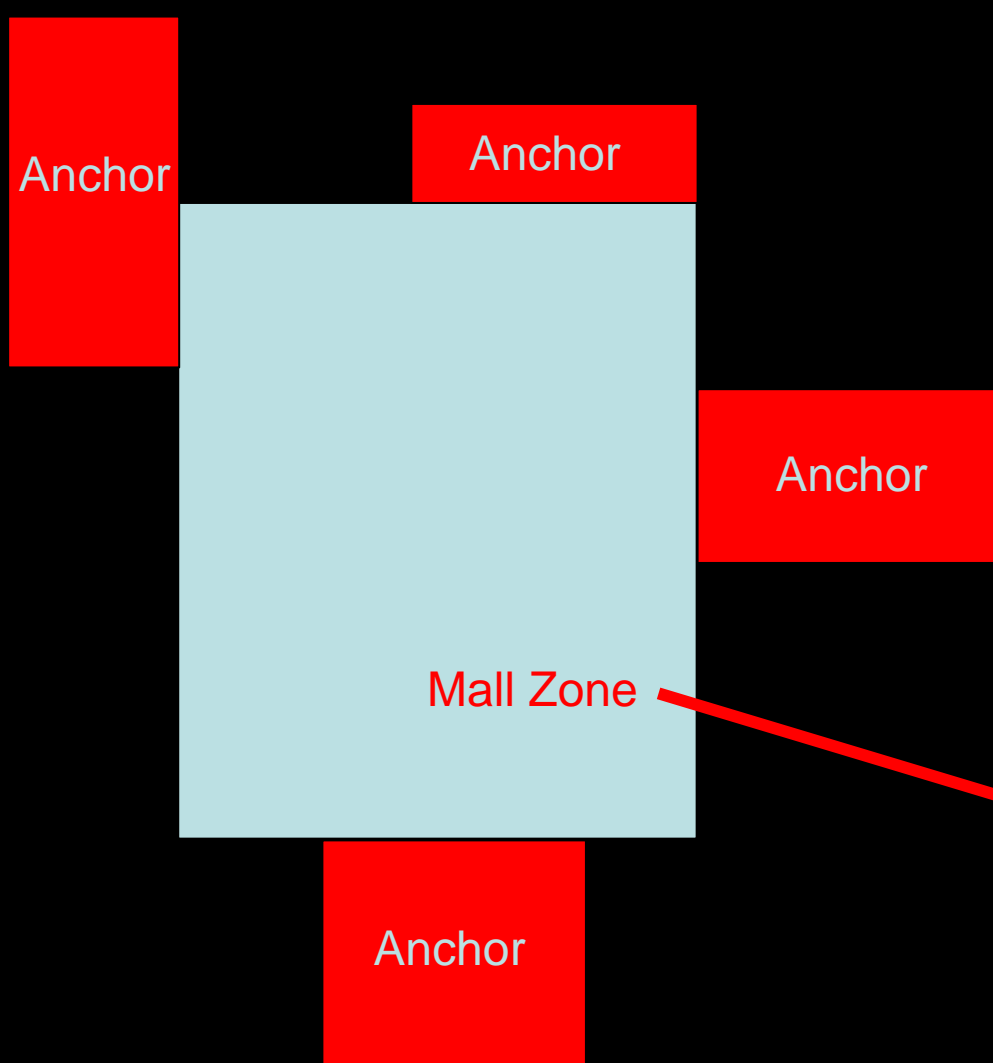
powers
brown
archit
ecture



Explainer

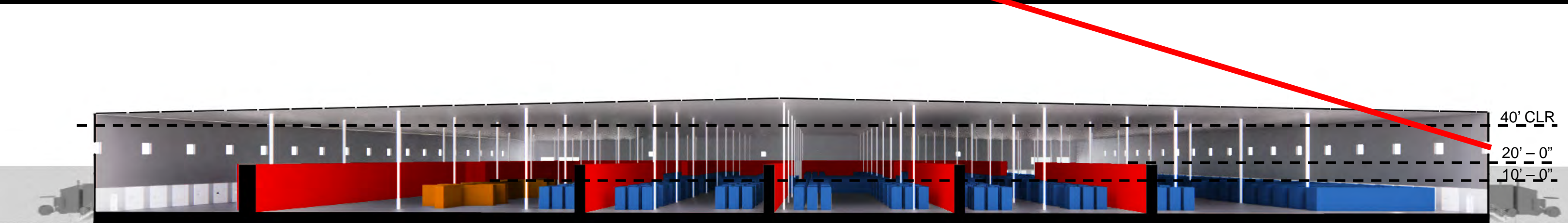
Back to that interesting observation about provided clear height and actual used clear height....

E X C U R S U S



powers
brown
archit
ecture

Many older 1 story malls are 20-24 clear height



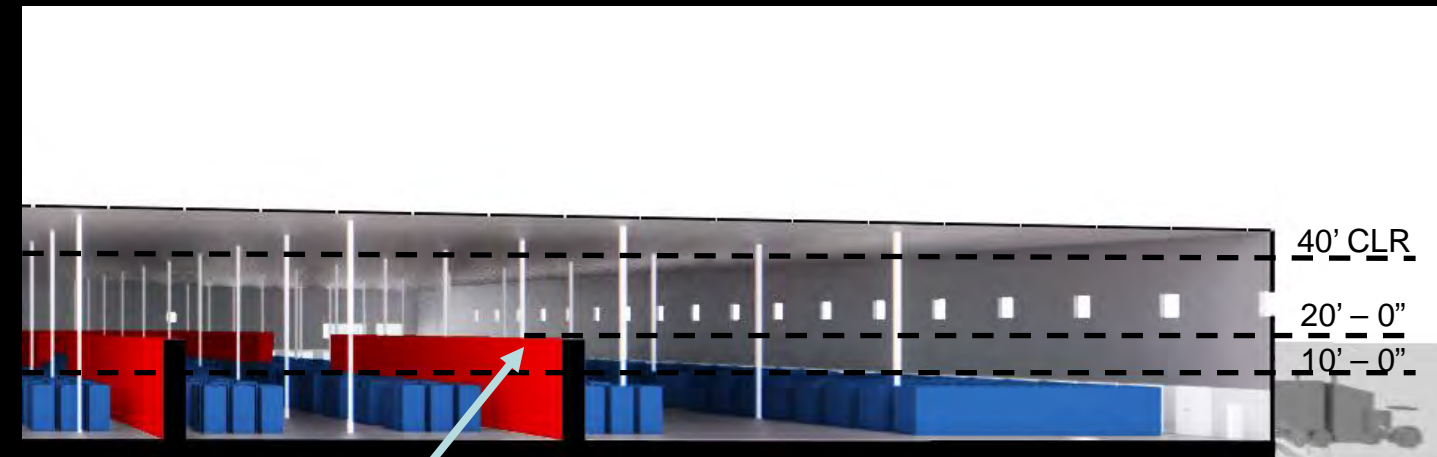
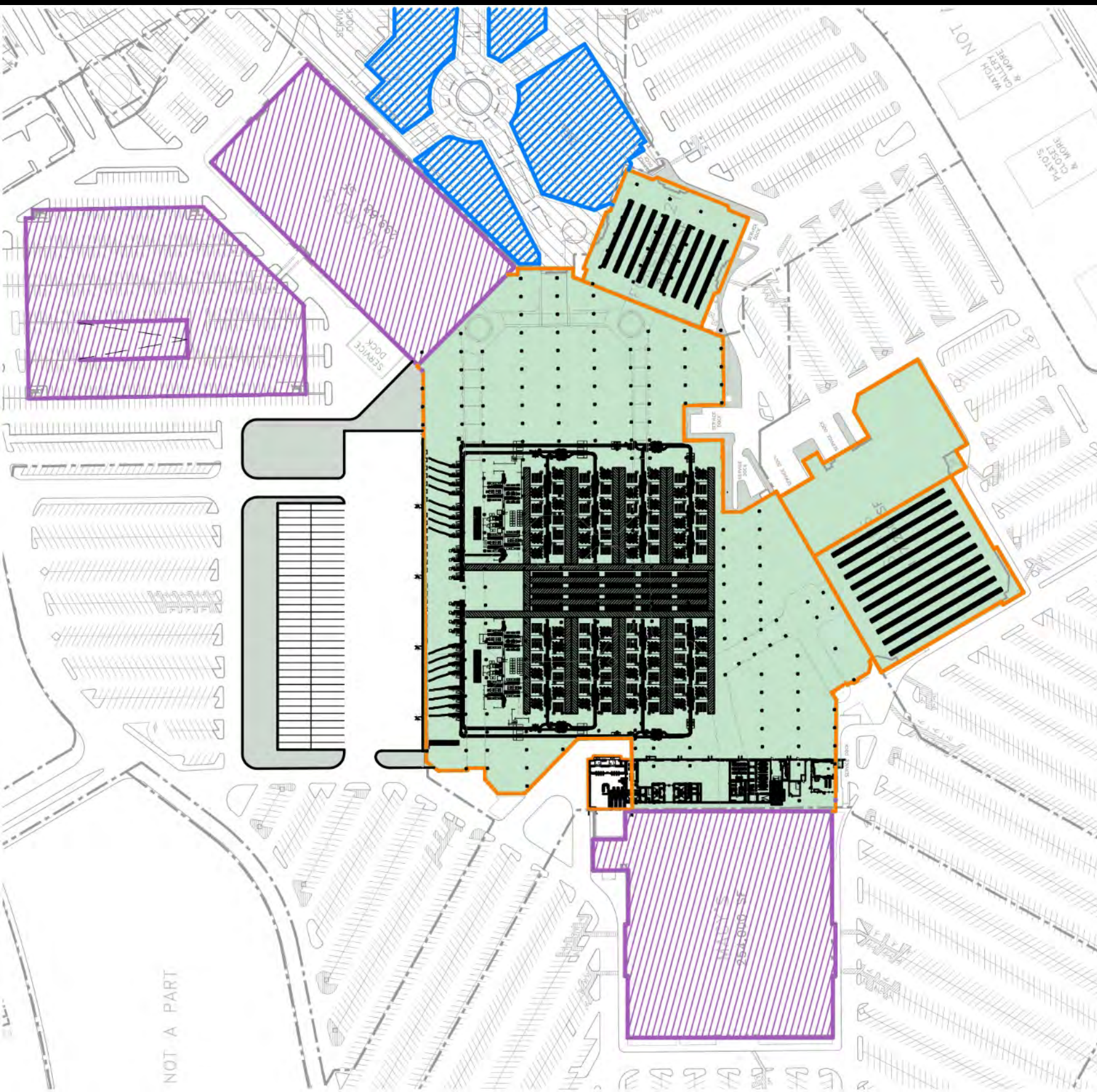
- CONVEYOR
- SORTING
- STAGING

Not the typical 800K PROTOTYPE

BUILDING: 630,577 SF

20' CLR – 36' CLR

powers
brown
archit
ecture



CONVEYOR
STAGING

Conveyors and equipment don't always need 32" clear....

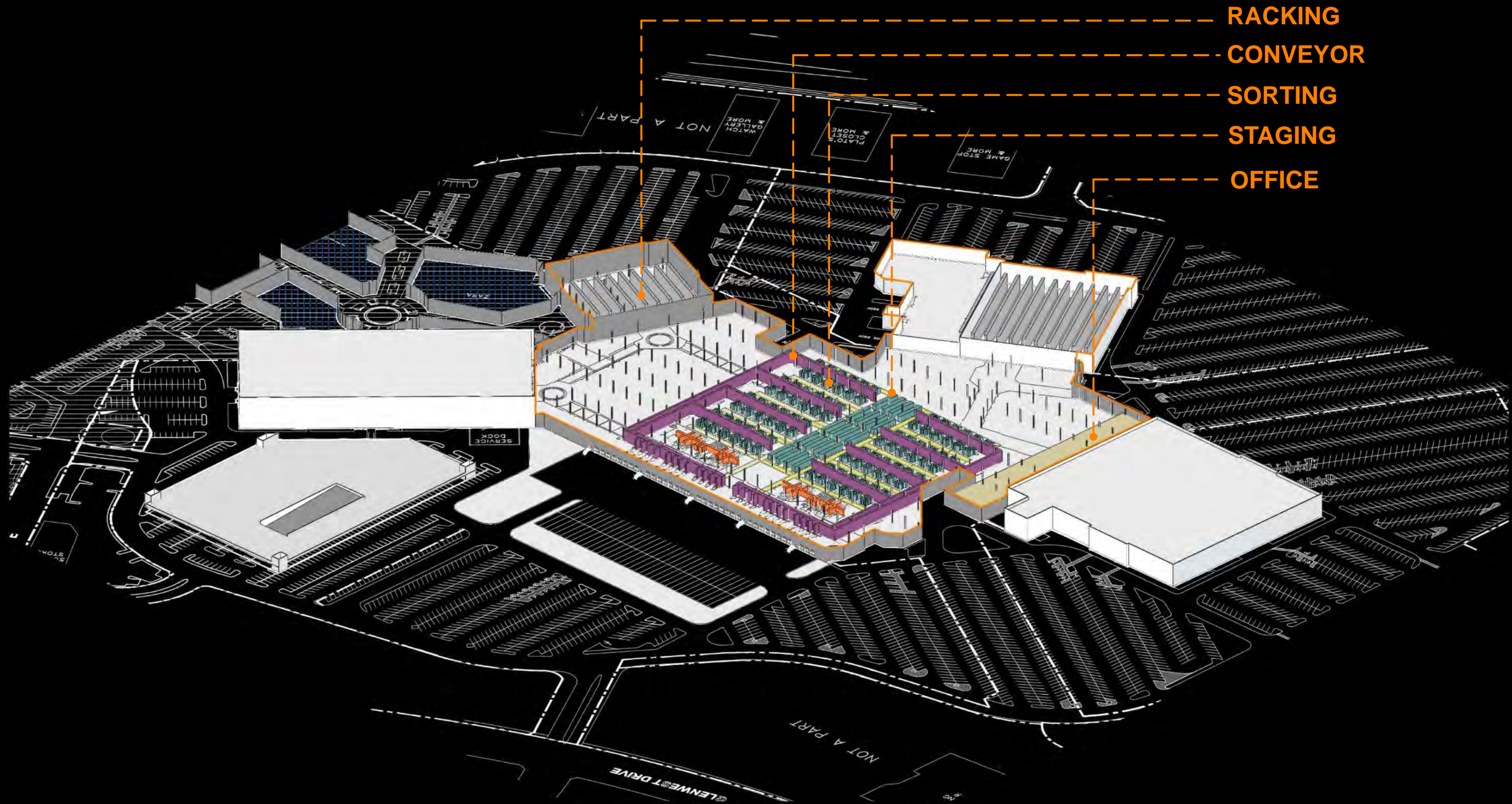
DEMO SCHEME 1 –
JC PENNEY DEMO
+ ACQUIRE SEARS

Not the typical **800K PROTOTYPE**

BUILDING: 630,577 SF

20' CLR – 36' CLR

powers
brown
archit
ecture



RACKING

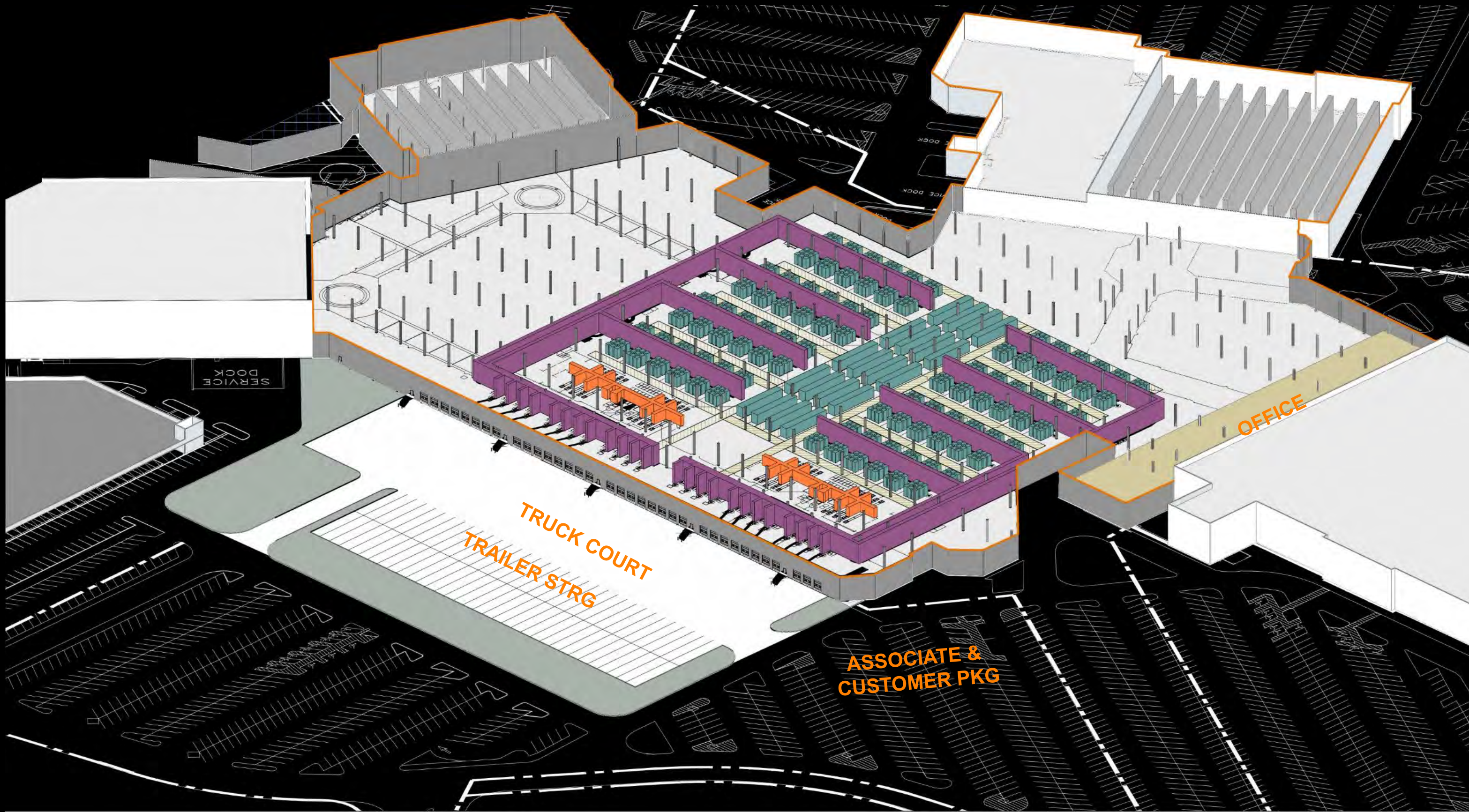
CONVEYOR

SORTING

STAGING

OFFICE

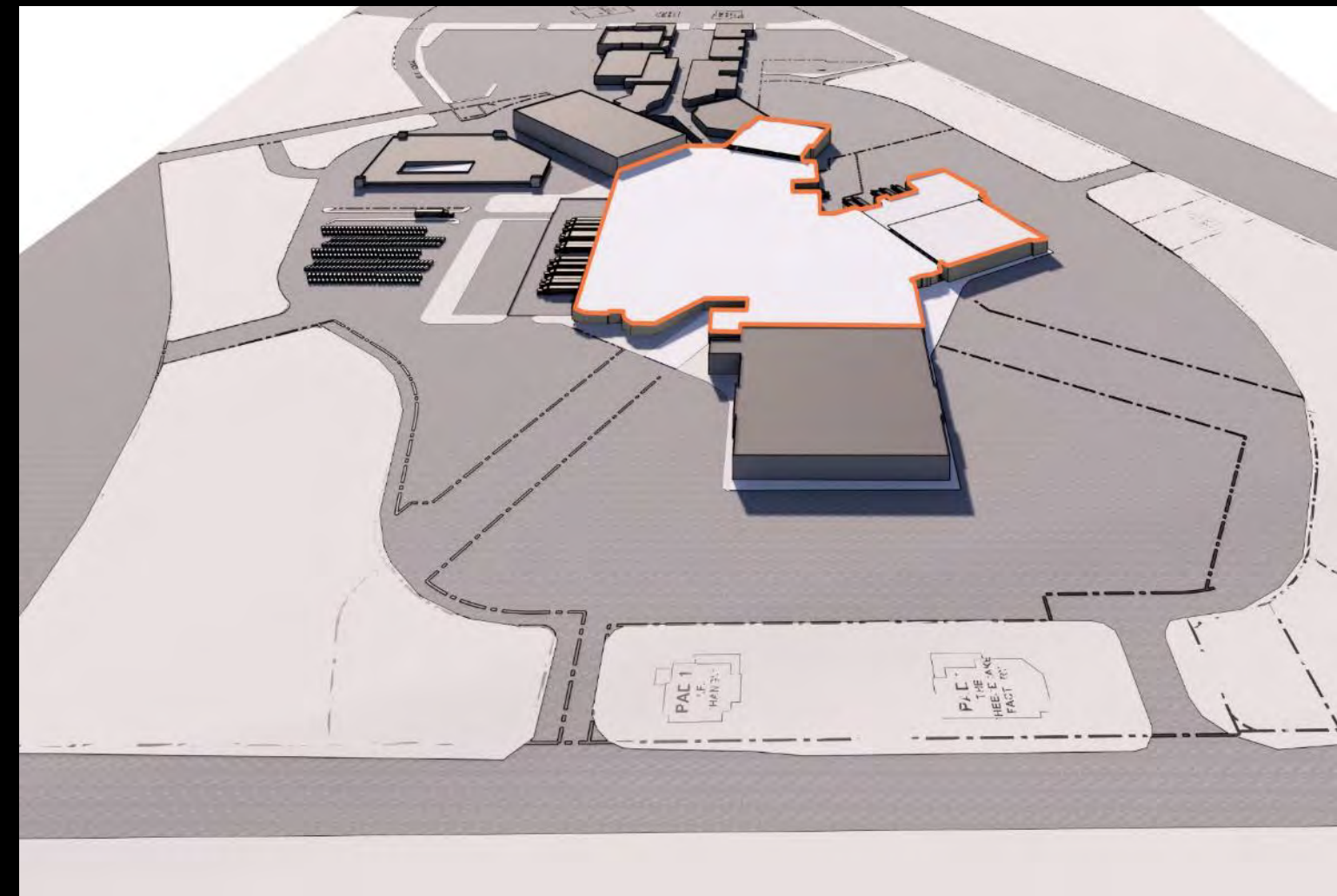
powers
brown
archit
ecture



EXISTING MALL CONVERSION

CONVERSION TO E-COMMERCE

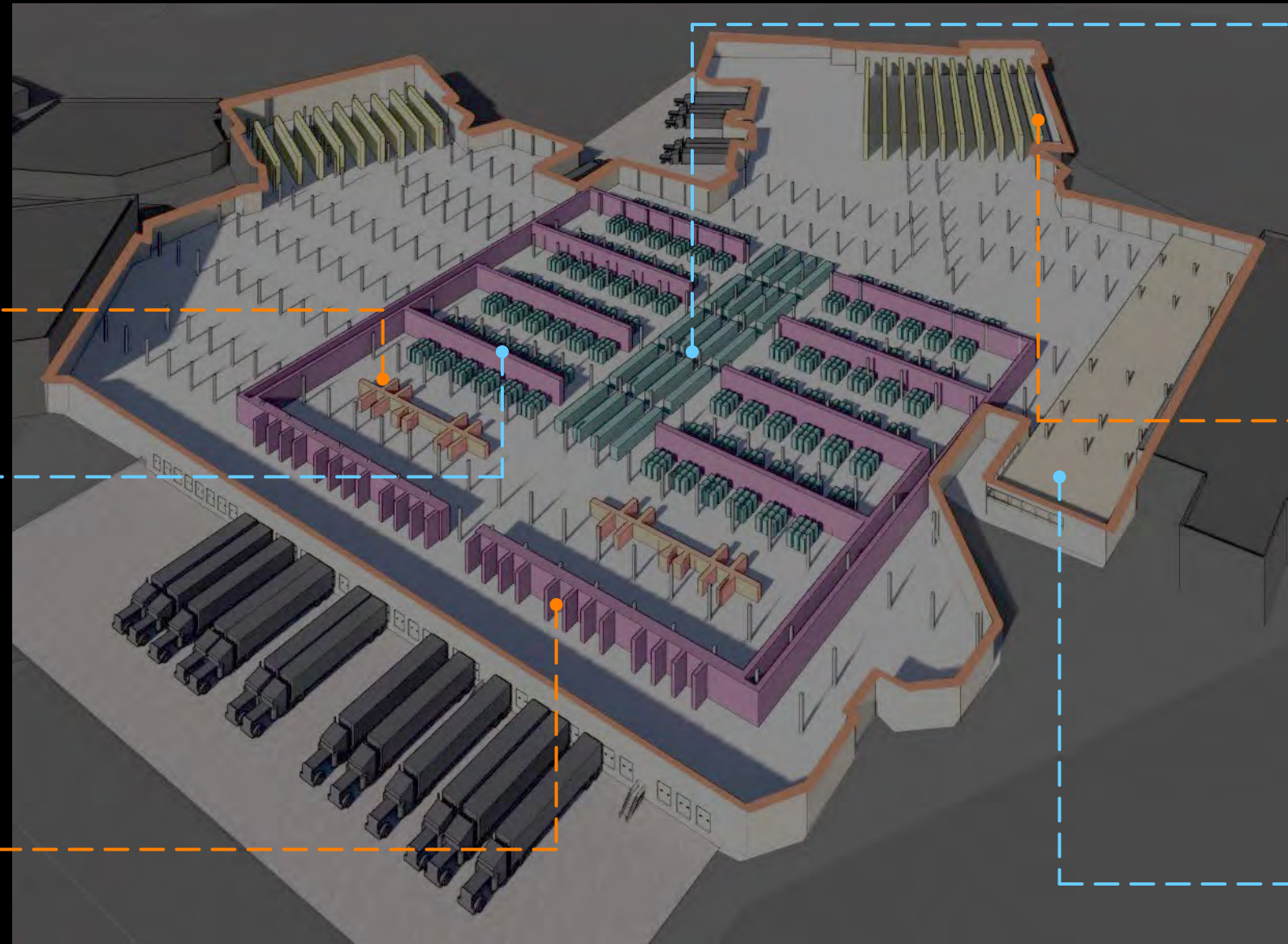
powers
brown
archit
ecture



EXISTING MALL CONVERSION

CONVERSION TO E-COMMERCE

powers
brown
archit
ecture



If this scheme seems a little far fetched, like it might not be possible, like it stretches the e-commerce functionality a bit, or it would take just the right mall ...

There is a reason it may be worth the effort.

Explainer

The following is 2020 market based contractor provided budgeting

E X C U R S U S

Shopping Mall Retrofit - Test Case
Location: Baybrook Mall
Architect: Powers Brown Architecture

Date: 07/28/20
Estimated: MR/BW
Duration: Varies

Total Project SF
625,128

ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	AMOUNT	COST PER SF OF BLDG	COMMENTS
DEMOLISH ALL BUILDINGS AND SITE							3 MONTH DURATION
1	SITE DEMOLITION - JC PENNEY	502,813	SF	0.58	\$291,632	\$0.47	
2	SITE DEMOLITION - MALL ACCESS	292,192	SF	0.58	\$169,471	\$0.27	
3	SITE DEMOLITION - FOREVER 21	240,283	SF	0.58	\$139,364	\$0.22	
4	STREET SWEEPER RENTAL	3	MO	4,400.00	\$13,200	\$0.02	
5	EROSION CONTROL	7,565	LF	10.79	\$81,618	\$0.13	
6	DEMO EXISTING BUILDINGS	625,128	SF	2.75	\$1,719,102	\$2.75	
7	SITE CONSTRUCTION FENCING	6,560	SF	8.00	\$52,480	\$0.08	SEPARATION FROM MACYS/DILLARDS/SEARS
8	FINE GRADE SITE	1,660,416	SF	0.05	\$83,021	\$0.13	
9	PROTECT / REPAIR ADJACENT PAVEMENT	1	LS	50,000.00	\$50,000	\$0.08	
10	LANDSCAPING & IRRIGATION	1	ALLO	50,000.00	\$50,000	\$0.08	
11	CAP/ABANDON SITE UTILITIES	1	LS	100,000.00	\$100,000	\$0.16	
12	SUBTOTAL				\$2,749,888	\$4.40	
13	BUILDER'S RISK	0.20%			\$5,500	\$0.01	
14	UMBRELLA & GEN LIAB	0.75%			\$20,665	\$0.03	
15	OVERHEAD	7.50%			\$206,242	\$0.33	
16	FEE	5.00%			\$140,115	\$0.24	
17	TOTAL SITEWORK				\$3,131,409	\$5.01	

If you simply take the **land play** approach, clearing the site of all possible existing mall structure and paving- you will add about \$5 per sf to the baseline cost of a new ground up facility. Call that say

\$3,131,409 = 5.01 PSF

\$50 per sf

+

\$5

= \$55

Shopping Mall Retrofit - Test Case
Location: Baybrook Mall
Architect: Powers Brown Architecture

Date: 07/28/20
Estimated: MR/BW
Duration: Varies

Total Project SF
625,128

ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	AMOUNT	COST PER SF OF BLDG	COMMENTS
CONVERT EXISTING BUILDINGS TO SHELL CONDITION							3 MONTH DURATION
SITE WORK							625,128 SF
1	SITE DEMOLITION - JC PENNEY		SF	0.58			
2	SITE DEMOLITION - MALL ACCESS		SF	0.58			
3	SITE DEMOLITION - FOREVER 21		SF	0.58			
4	EROSION CONTROL	7,565	LF	10.79	\$81,618	\$0.13	
5	DEMO JC PENNEY BUILDING	98,600	SF	2.75	\$269,650	\$0.42	ALLOWANCE
6	DEMO INTERIOR OF MALL BUILDING	528,528	SF	2.20	\$1,162,762	\$1.86	
7	SITE CONSTRUCTION FENCING	6,560	SF	8.00	\$52,480	\$0.08	SEPARATION FROM MACYS/DILLARDS/GEARS
8	EARTHWORK/GRADING	11,000	TY	14.00	\$154,000	\$0.25	CREATE TRUCK COURT
9	GRADE/STABILIZE PAVING & GARAGE SUBGRADE	11,556	SY	9.00	\$104,004	\$0.17	AT NEW TRUCK COURT
10	FINE GRADE SITE	50,000	SF	0.20	\$10,000	\$0.02	
11	8" PAVING AT NEW TRUCK COURT	104,000	SF	6.15	\$639,600	\$1.02	
12	LANDSCAPING & IRRIGATION	1	ALLO	25,000.00	\$25,000	\$0.04	
13	SITE STORM SYSTEM	750	LF	95.00	\$71,250	\$0.11	AT NEW TRUCK COURT ONLY, REMAINDER IS EXISTING
14	CAP/ABANDON SITE UTILITIES	1	LS	20,000.00	\$20,000	\$0.03	
15	SITE ELECTRICAL	1	LS	25,000.00	\$25,000	\$0.04	
16	SUBTOTAL				\$2,611,364	\$4.18	
17	BUILDER'S RISK	0.20%			\$5,223	\$0.01	
18	UMBRELLA & GEN LIAB	0.75%			\$19,624	\$0.03	
19	OVERHEAD						IN GENERAL CONDITIONS BELOW
20	FEE	5.00%			\$131,811	\$0.21	
21	TOTAL SITEWORK				\$2,768,021	\$4.43	
BUILDING SHELL							625,128 SF
17	GENERAL CONDITIONS				\$286,256	\$0.46	
18	GENERAL CONDITIONS	3.0	MO	85000	\$255,000	\$0.41	
19	BUILDING PERMIT	625,128	SF	0.05	\$31,256	\$0.05	REMODEL PERMIT
20	CONCRETE				\$433,183	\$0.69	
21	FIELD ENGINEERING	3	MO	13,100.00	\$39,300	\$0.06	
22	GENERAL CLEAN / SAFETY (4 MEN)	3	MOS	16,575.24	\$49,726	\$0.08	
23	FILL STAIR PANS	5	EA	750.00	\$3,750	\$0.01	
24	EXTEND EXISTING WALLS AT NEW TRUCK COURT	2,800	SF	20.00	\$52,000	\$0.08	
25	CUT-IN NEW OH DOOR/HM DOOR OPENINGS	35	EA	2500.00	\$87,500	\$0.14	
26	RENTAL EQUIPMENT	3	MOS	5500.00	\$16,500	\$0.03	
27	MISCELLANEOUS CONCRETE	625,128	SF	0.25	\$156,282	\$0.25	
28	DUMPSTERS	75	EA	375.00	\$28,125	\$0.04	
29	STRUCTURAL / MISCELLANEOUS METALS				\$362,500	\$0.58	
30	STEEL PAN STAIRS	5	EA	12500.00	\$62,500	\$0.10	
31	RE-WORK BUILDING ENTRIES	3	EA	100000.00	\$300,000	\$0.48	INCLUDES GLASS, ETC.
32	THERMAL AND MOISTURE PROTECTION				\$2,031,666	\$3.25	
33	INSTALL NEW ROOFING SYSTEM	625,128	SF	3.25	\$2,031,666	\$3.25	
34	DOORS, FRAMES AND HARDWARE				\$37,000	\$0.06	
35	HOLLOW METAL DOORS AND FRAMES	5	EA	750.00	\$3,750	\$0.01	
36	OVERHEAD DOORS	35	EA	950.00	\$33,250	\$0.05	
37	FINISHES				\$83,994	\$0.13	
38	RE-PAINT EXTERIOR WALLS	98,816	SF	0.85	\$83,994	\$0.13	
39	SUBTOTAL				\$3,234,598.72	\$5.17	
40	BUILDER'S RISK	0.20%			\$6,469	\$0.01	
41	GEN LIAB & UMBRELLA	0.75%			\$24,308	\$0.04	
42	SUBGUARD						
42	FEE	5.00%			\$163,269	\$0.26	
43	TOTAL BUILDING SHELL				\$3,428,645	\$5.48	
CONVERSION COST SUMMARY							
44	SITEWORK				\$2,768,021	\$4.43	
45	CORE AND SHELL WAREHOUSE				\$3,428,645	\$5.48	
46	CONVERSION COST TOTAL				\$6,196,666	\$9.91	

Site work=\$2,768,021

Shell work=\$3,628,641

If you simply take the adaptive re-use approach, utilizing all possible existing mall structure and paving- you will spend abut \$10 per square foot to “white Box” the existing building shell.

\$6,196,666 = 9.91 PSF

Shopping Mall Retrofit - Test Case
Location: Baybrook Mall
Architect: Powers Brown Architecture

Date: 07/28/20
Estimated: MR/BW
Duration: Varies

Total Project SF
625,128

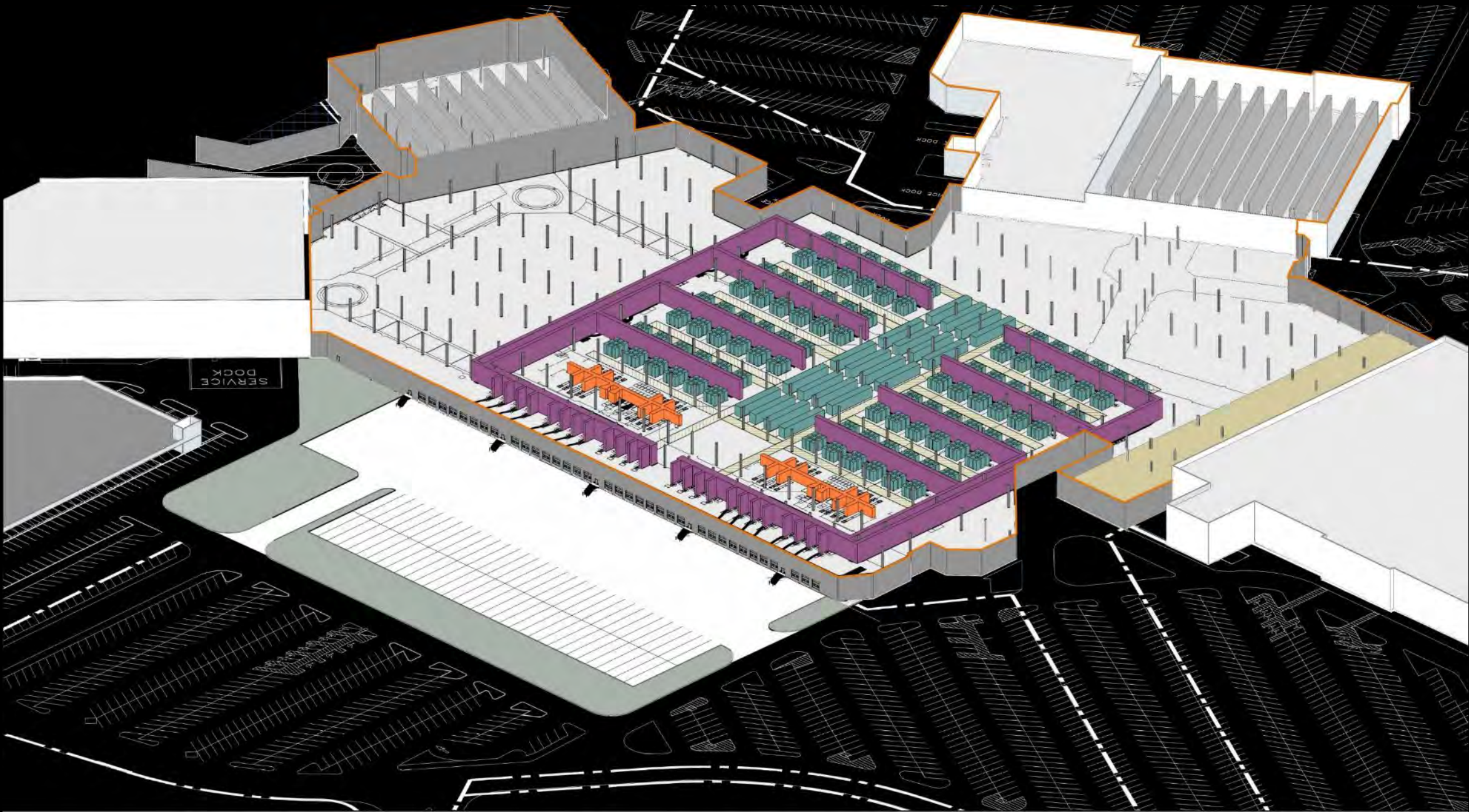
ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	AMOUNT	COST PER SF OF BLDG	COMMENTS
SAVINGS VERSUS TRADITIONAL AMAZON FC							
SITE WORK						625,128 SF	
1	CREDIT IMPORT SELECT FILL	129,626	TY	-18.00	(\$2,333,268)	(\$3.73)	ASSUMES A 4" PAD
2	CREDIT GRADE/STABILIZE PAVEMENT	86,887	SY	-7.50	(\$600,003)	(\$0.80)	
3	CREDIT EXISTING PAVEMENT	600,000	SF	-5.85	(\$3,510,000)	(\$5.61)	
4	CREDIT FOR SITE STORM SYSTEM	600,000	SF	-0.85	(\$510,000)	(\$0.82)	
5	CREDIT FOR SITE UTILITIES TO BUILDING	1	LS	-100,000.00	(\$100,000)	(\$0.16)	
6	ADD COSTS FOR SITE CONVERSION (LISTED ABOVE)	1	LS	2,611,363.58	\$2,611,364	\$4.18	
7							
8	SUBTOTAL				(\$4,341,907)	(\$6.95)	
9							
10	BUILDER'S RISK	0.20%			(\$8,684)	(\$0.01)	
11	UMBRELLA & GEN LIAB	0.75%			(\$32,629)	(\$0.05)	
12	OVERHEAD						
13	FEE	5.00%			(\$219,161)	(\$0.35)	
14							
15	TOTAL SITEWORK				(\$4,602,381)	(\$7.36)	
16							
17							
18	BUILDING SHELL					625,128 SF	
19	GENERAL CONDITIONS						
20	CREDIT GENERAL CONDITIONS	-4.0	MO	85000	(\$340,000)	(\$0.54)	4 MONTH FASTER SCHEDULE VS. TRADITIONAL
21							
22	CONCRETE				(\$4,755,802)	(\$7.61)	
23	CREDIT FOR FIELD ENGINEERING	-4	MO	13,100.00	(\$52,400)	(\$0.08)	
24	CREDIT FOR GENERAL CLEAN / SAFETY (4 MEN)	-4	MOS	16,575.24	(\$66,301)	(\$0.11)	
25	CREDIT FOR FOUNDATIONS	625,128	SF	-1.25	(\$781,410)	(\$1.25)	
26	CREDIT FOR SLAB ON GRADE	625,128	SF	-4.35	(\$2,719,307)	(\$4.35)	
27	CREDIT FOR EXTERIOR CONCRETE WALLS	98,816	SF	-11.50	(\$1,136,384)	(\$1.82)	
28							
29	STRUCTURAL / MISCELLANEOUS METALS				(\$4,313,383)	(\$6.90)	
30	CREDIT FOR STRUCTURAL STEEL ERECT	625,128	SF	-1.70	(\$1,062,718)	(\$1.70)	
31	CREDIT FOR STRUCTURAL STEEL FABRICATION	625,128	SF	-5.20	(\$3,250,666)	(\$5.20)	
32							
33	THERMAL AND MOISTURE PROTECTION				(\$1,406,538)	(\$2.25)	
34	CREDIT FOR ROOFING SYSTEM	625,128	SF	-2.25	(\$1,406,538)	(\$2.25)	
35							
36	FINISHES				(\$83,994)	(\$0.13)	
37	CREDIT FOR PAINT EXTERIOR WALLS	98,816	SF	-0.85	(\$83,994)	(\$0.13)	
38							
39	ADD CONVERSION COSTS FROM ABOVE	1	LS	3234568.72	\$3,234,599	\$5.17	
40							
41	SUBTOTAL				(\$7,665,117.84)	(\$12.26)	
42							
43	BUILDER'S RISK	0.20%			(\$15,330)	(\$0.02)	
44	GEN LIAB & UMBRELLA	0.75%			(\$57,603)	(\$0.09)	
45	SUBGUARD						
46	FEE	5.00%			(\$386,803)	(\$0.62)	
47							
48	TOTAL BUILDING SHELL				(\$8,124,954)	(\$13.00)	
49							
50							
51							
52							
53	PROJECT SUMMARY						
54							
55	SITWORK				(\$4,602,381)	(\$7.36)	
56	CORE AND SHELL WAREHOUSE				(\$8,124,954)	(\$13.00)	
57							
58	PROJECT TOTAL				-\$12,727,335.18	(\$20.36)	

Then you can credit
that back to the rest of
what would be saved in
Foundations,
Storm Sewer,
a 4 month time savings
Steel structure
Roof structure
And reduce a \$50 psf
cost
To
\$30 psf

Site work=\$4,602,381

Shell work=\$8,124,954

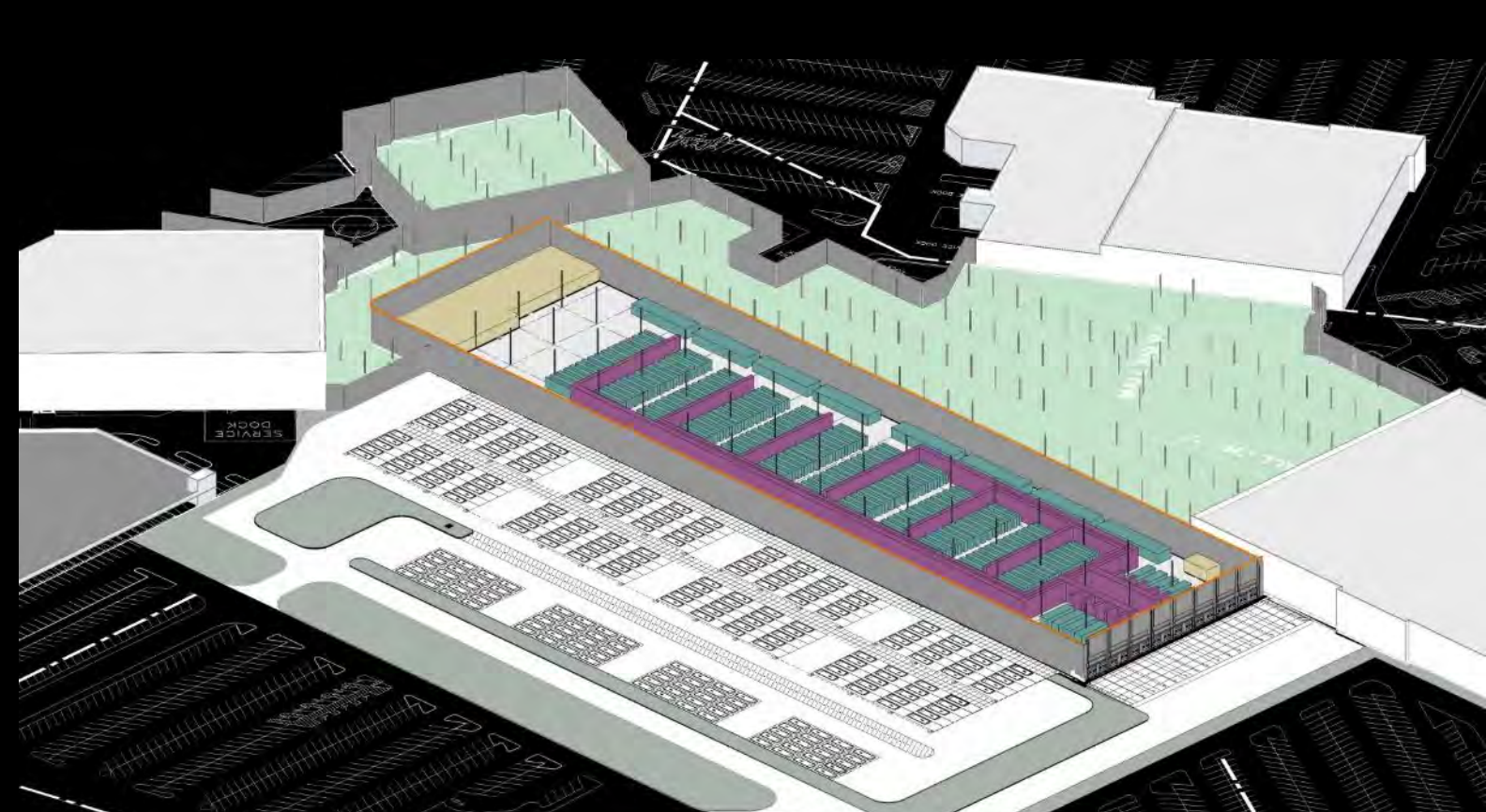
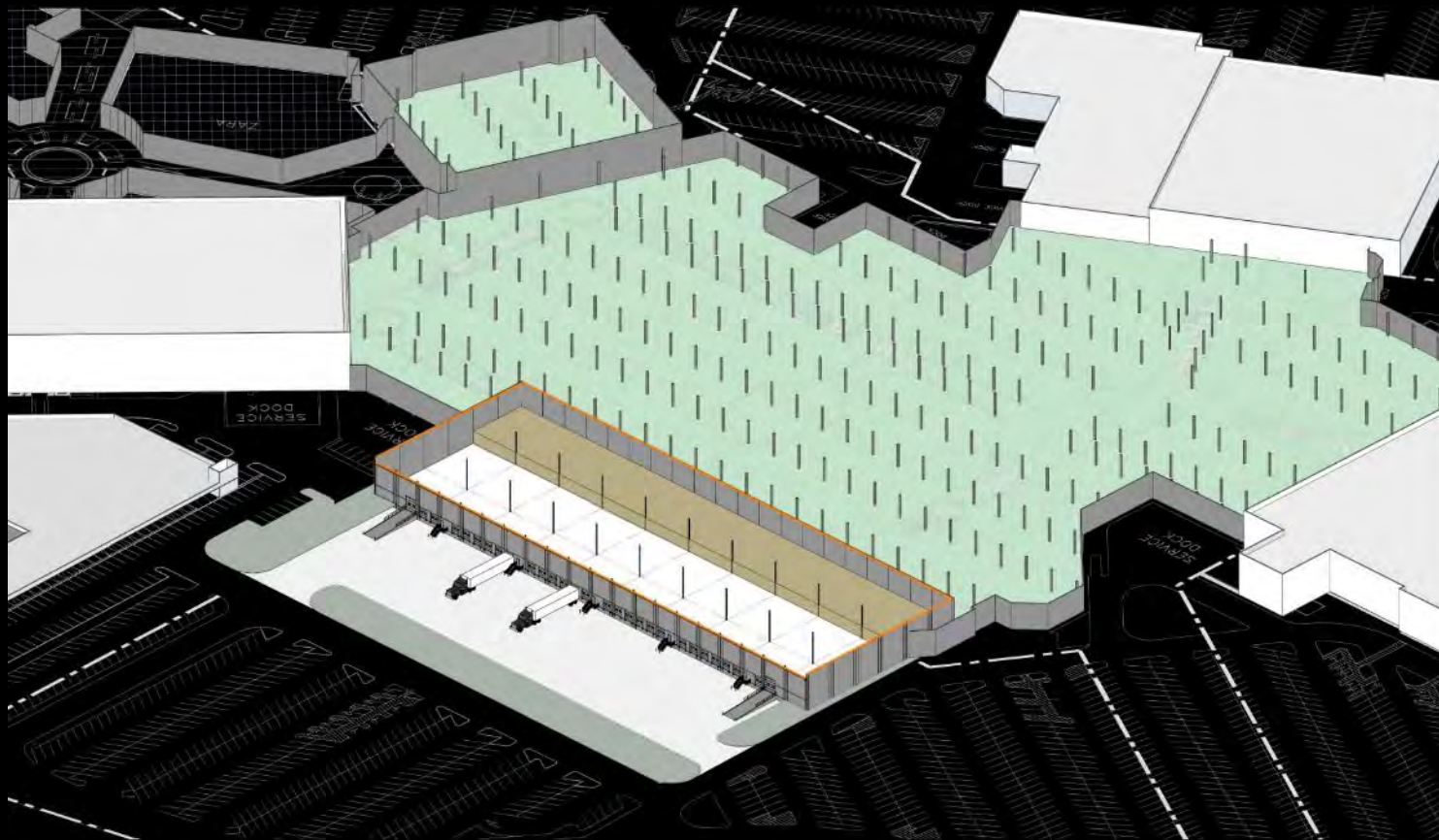
Total=\$12,727,335 =
20.36 psf



52							
53	<u>PROJECT SUMMARY</u>						
54							
55	SITework				(\$4,602,381)	(\$7.36)	
56	CORE AND SHELL WAREHOUSE				(\$8,124,954)	(\$13.00)	
57							
58	PROJECT TOTAL				-\$12,727,335.18	(\$20.36)	

Looks different with a potential 20 dollar upfront savings...

And most importantly whether it is E-Commerce or basic Market
Industrial, **synergy and vitality** is the best reason for
adaptive re-use rather than tearing down malls...



Explainer

Finally- we have been diving deeper on several opportunities around the country.

E X C U R S U S

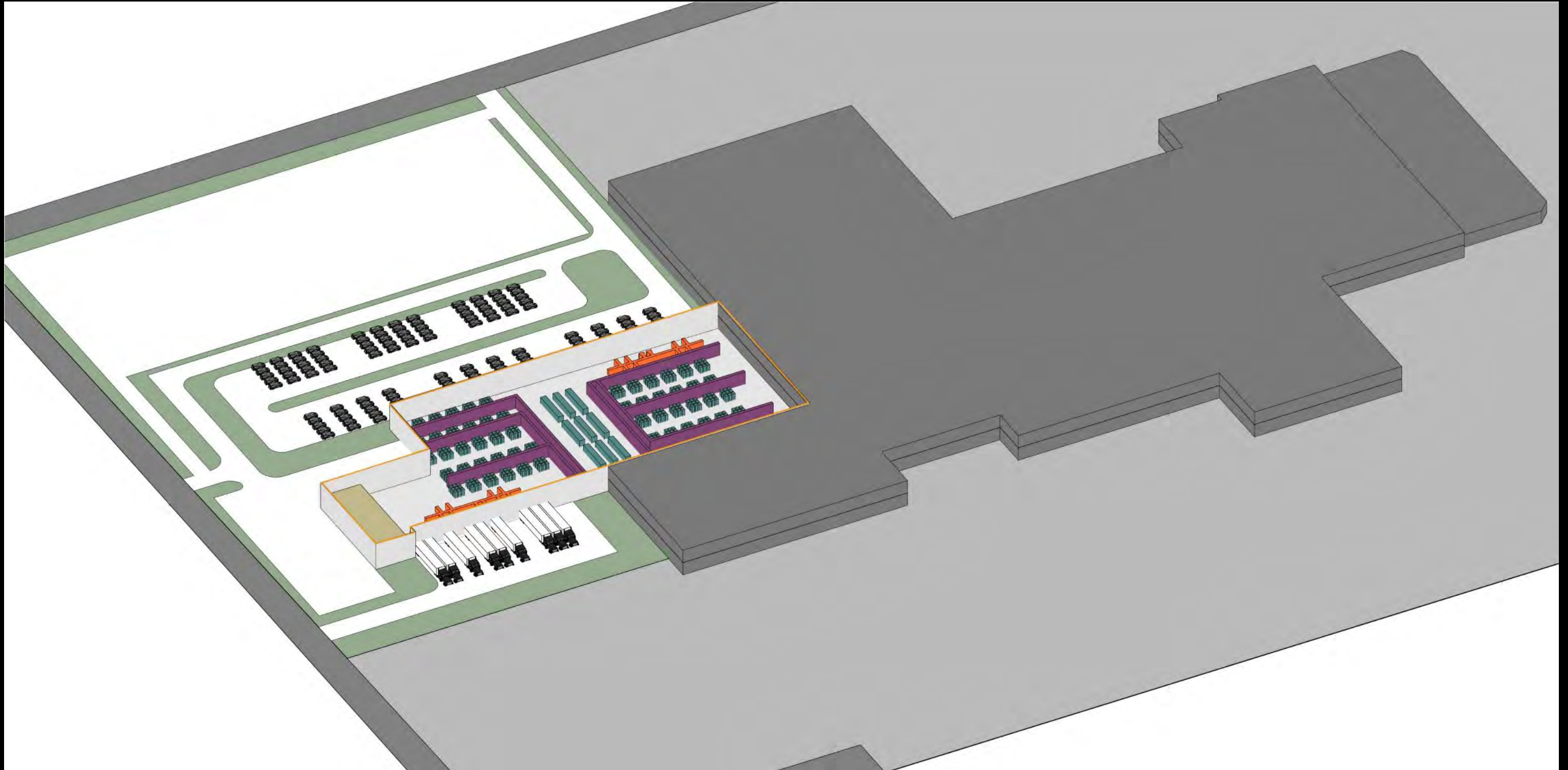
MALL CASE STUDIES

Of over 50 malls studied for clients here are some real world snap shots of actual real world efforts that are moving forward to the next steps.....

EXISTING 2 STORY MALL CONVERSION

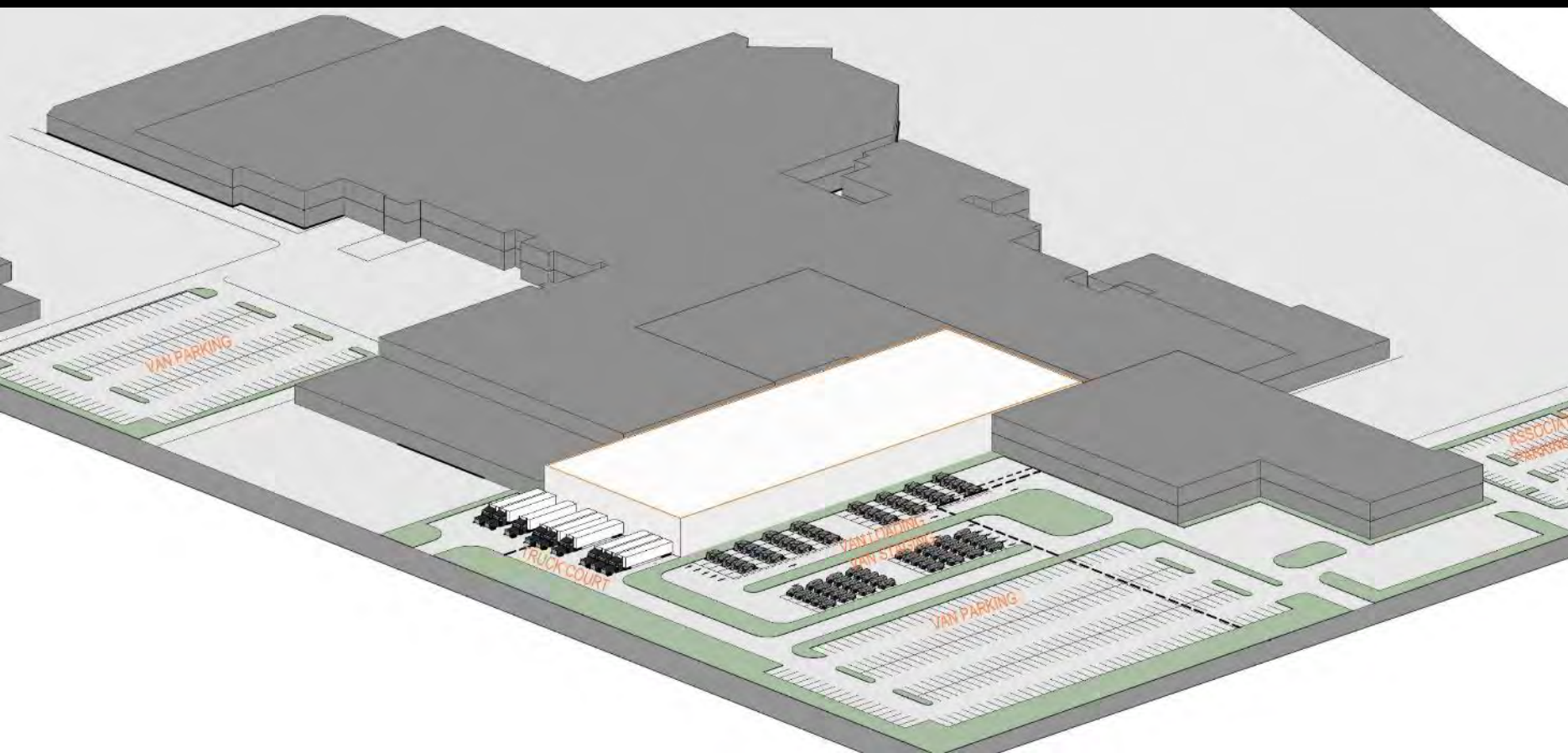
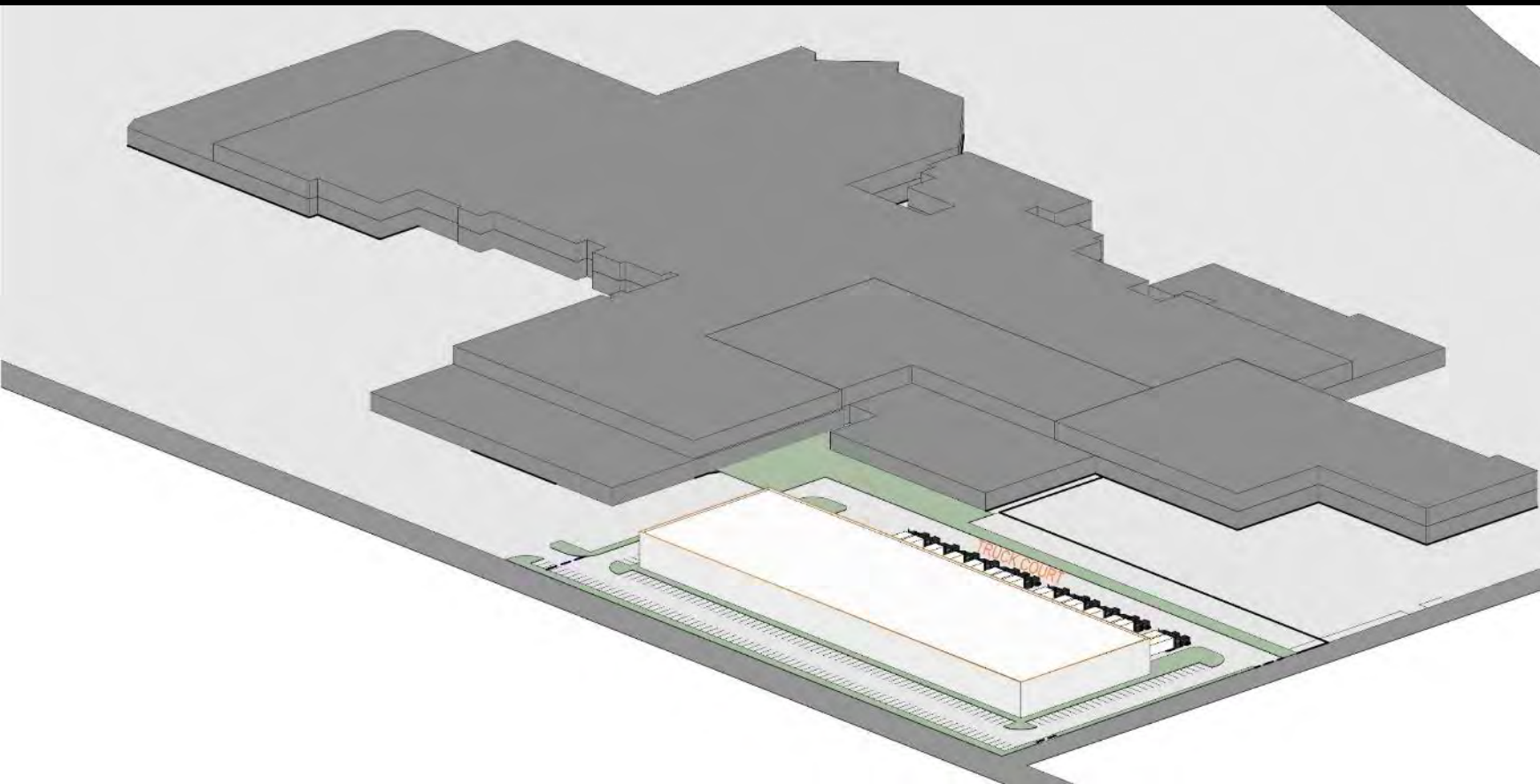
ANCHOR STORE AND PORTION OF THE MALL CONVERTED TO E-COMMERCE

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brown
archit
ecture



SPEC & E-COMMERCE OPTIONS

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2 STORY ANCHOR TENANT CONVERSION

2 STORY ANCHOR STORE CONVERTED TO MULTI-LEVEL E-COMMERCE

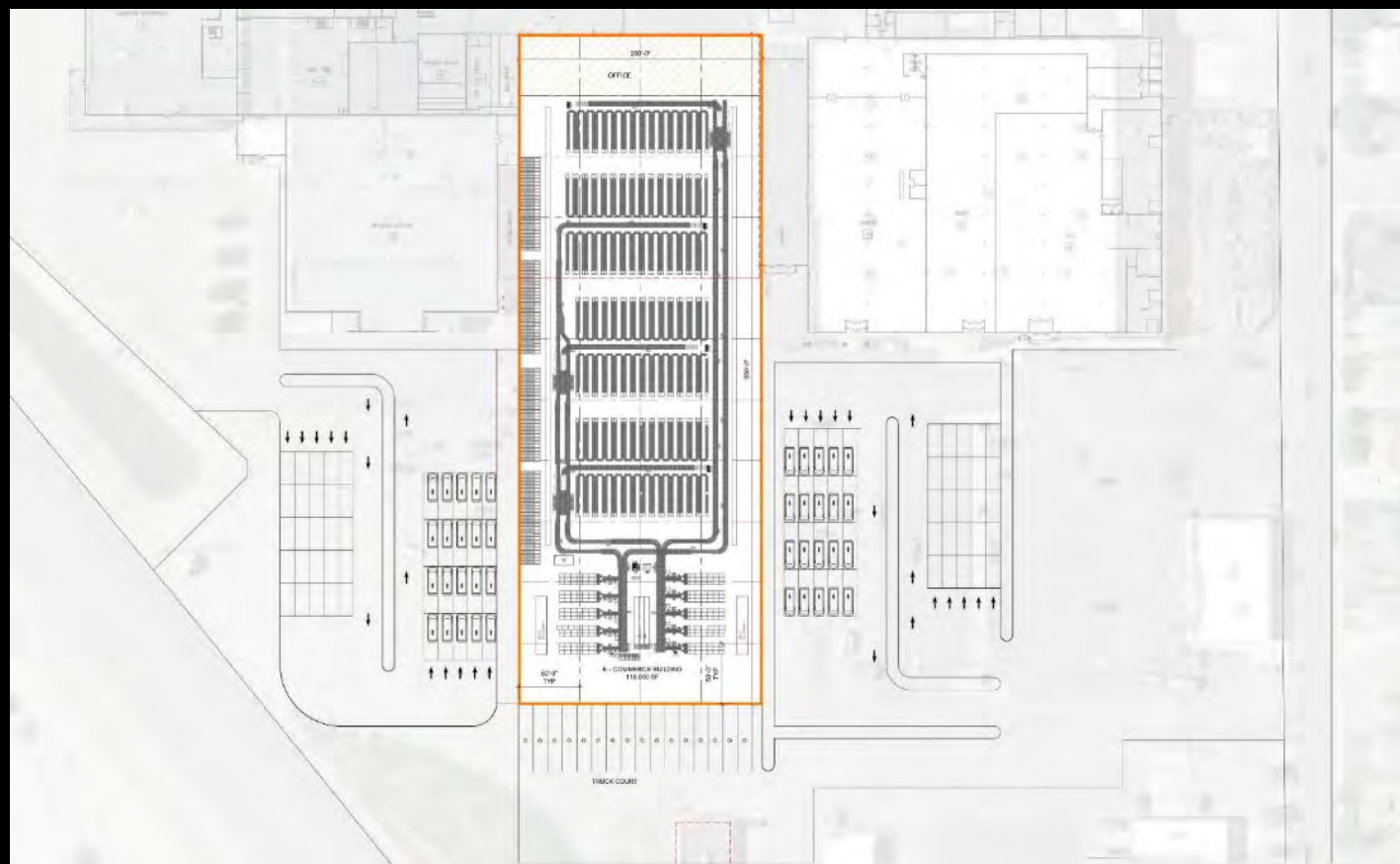
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REVITALIZING & ADAPTATION

UNDERUTILIZED MALL CONVERTED TO E-COMMERCE OR REAR LOADER

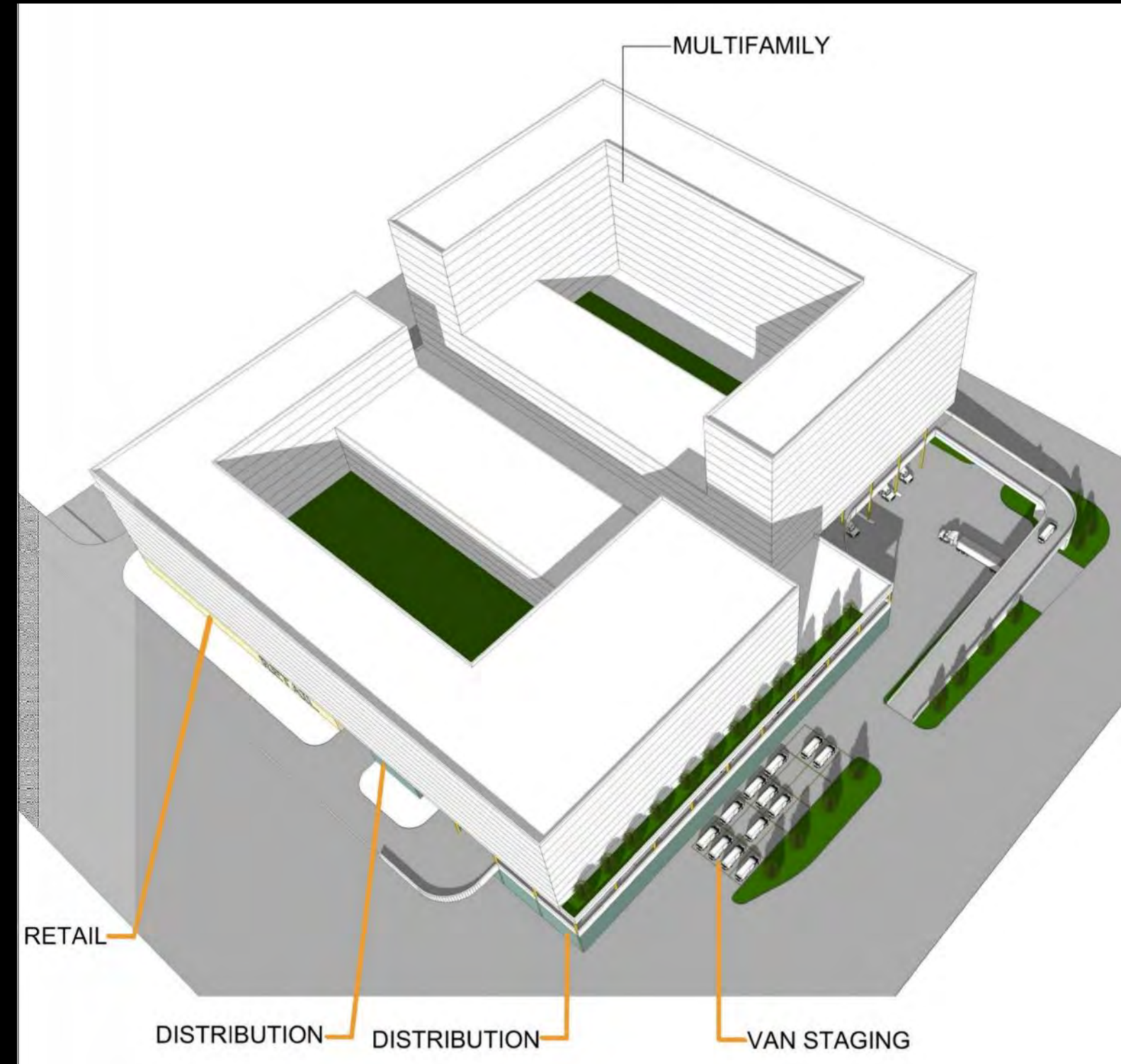
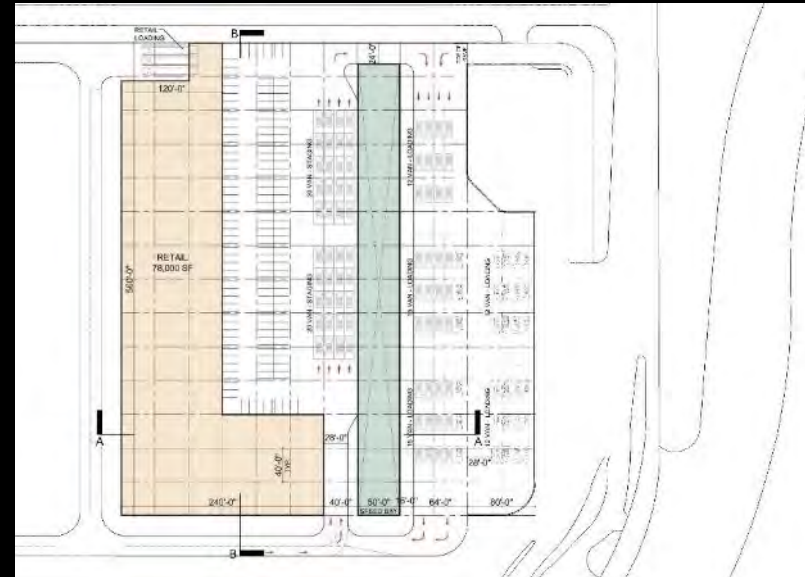
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MALL CONVERSION TO MIXED USE- CASE STUDY 1

CONVERSION TO MULTI-LEVEL E-COMMERCE
WITH RETAIL AND MULTI-FAMILY COMPONENT

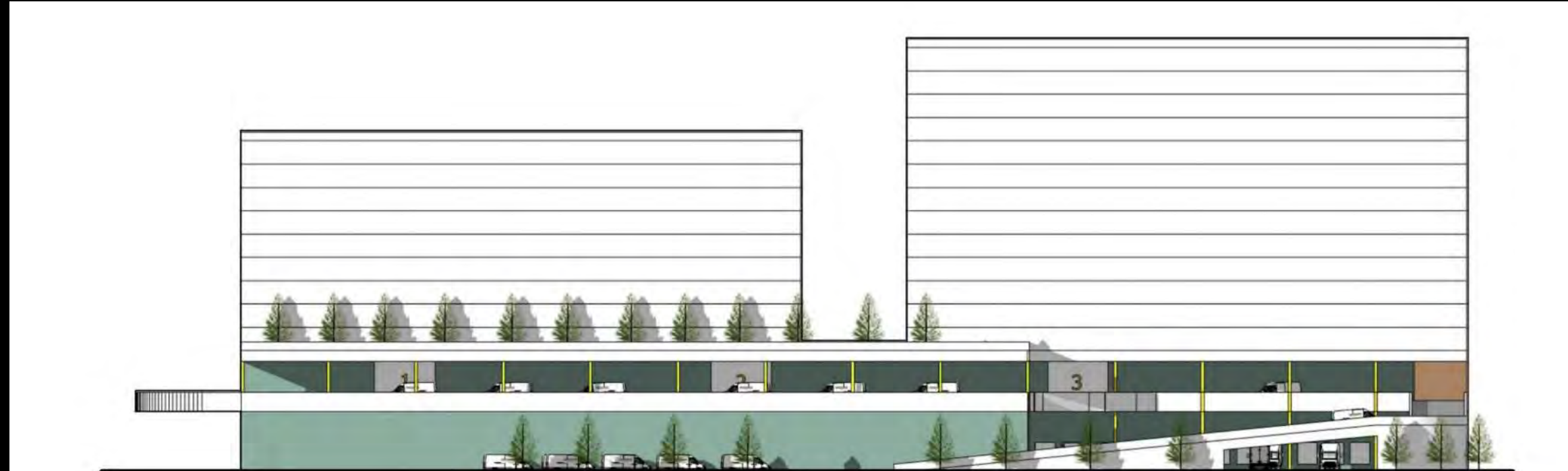
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MALL CONVERSION TO MIXED USE- CASE STUDY 1

CONVERSION TO MULTI-LEVEL E-COMMERCE
WITH RETAIL AND MULTI-FAMILY COMPONENT

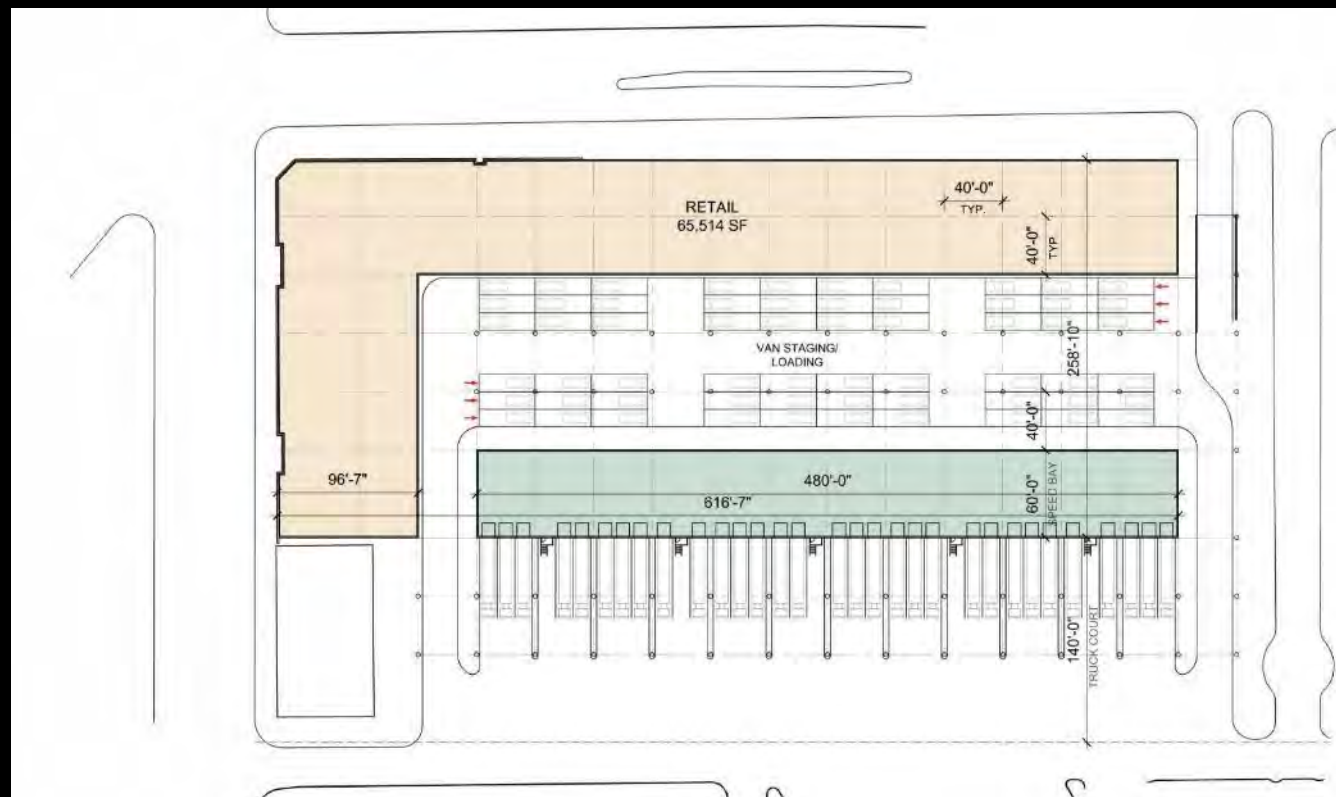
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MALL CONVERSION TO MIXED USE - CASE STUDY 2

CONVERSION TO MULTI-LEVEL E-COMMERCE
WITH RETAIL AND OFFICE COMPONENT

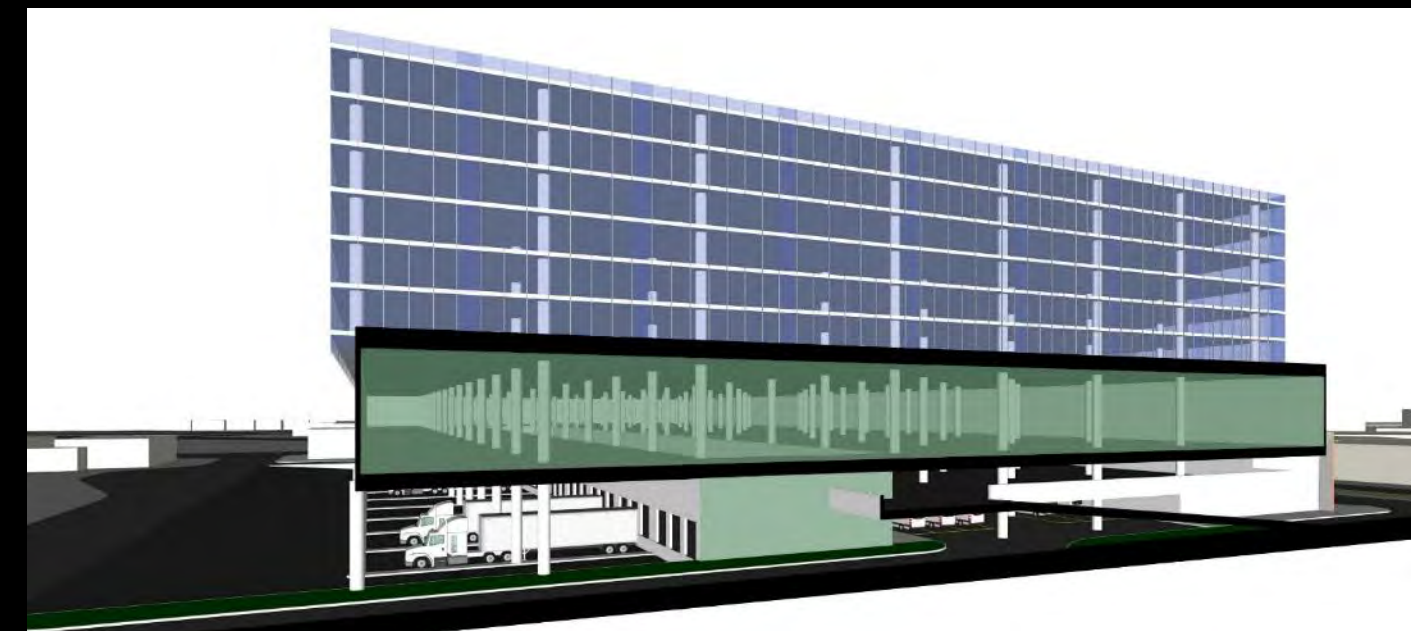
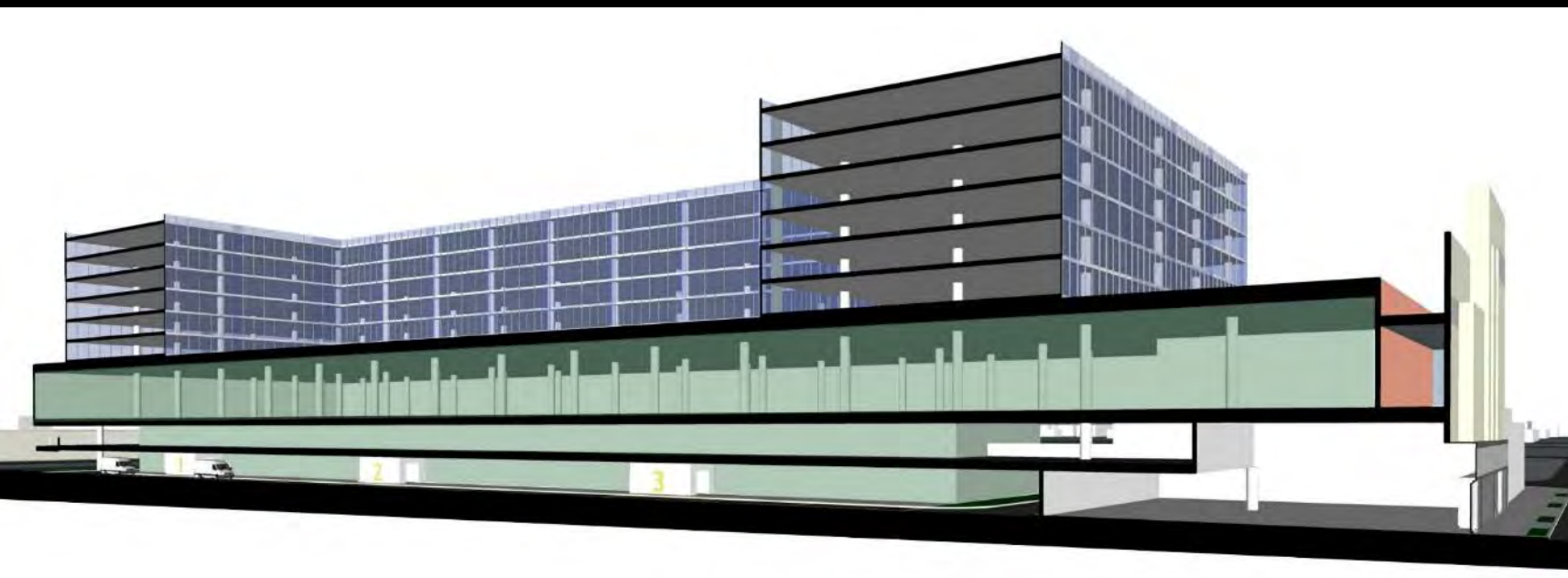
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MALL CONVERSION TO MIXED USE- CASE STUDY 2

CONVERSION TO MULTI-LEVEL E-COMMERCE
WITH RETAIL AND OFFICE COMPONENT

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WHAT'S NEXT FOR THE MALL CONVERSION.....

Explainer

Having started this study in April of 2020 and been active on it EVERY week of the year until December- things just kept popping up on our screen...

E X C U R S U S

COLD STORAGE?

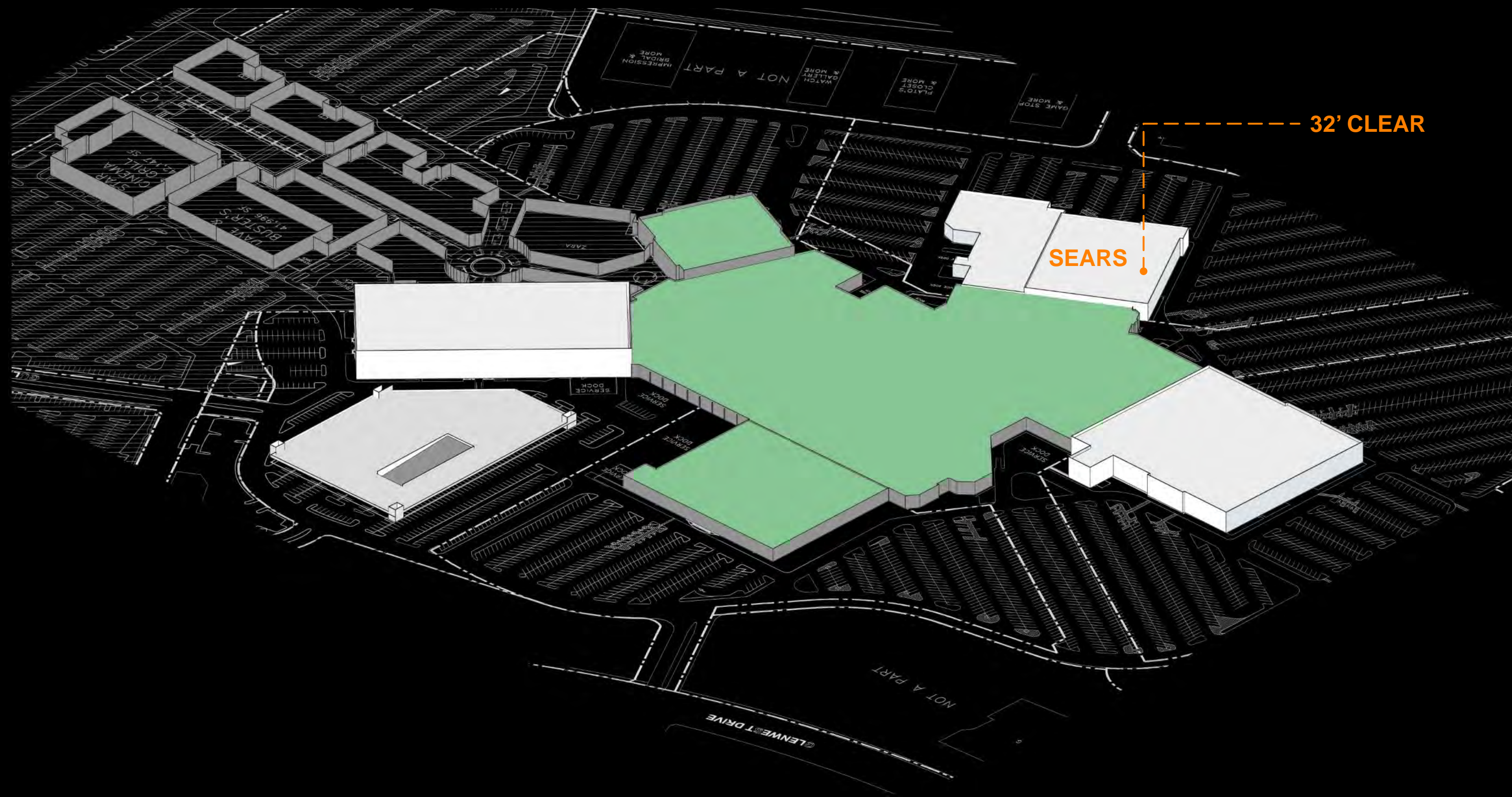
“With **COLD STORAGE** now representing a \$98.1- billion market globally and compound annual growth of 12.1% projected through 2025, it's safe to say this specialized subset of industrial has made its way into the spotlight”

-Connect Media

SEARS

BUILDING: 167,250 SF
32' CLR
RETAIL FRONTAGE & SERVICE DOCK SIDE

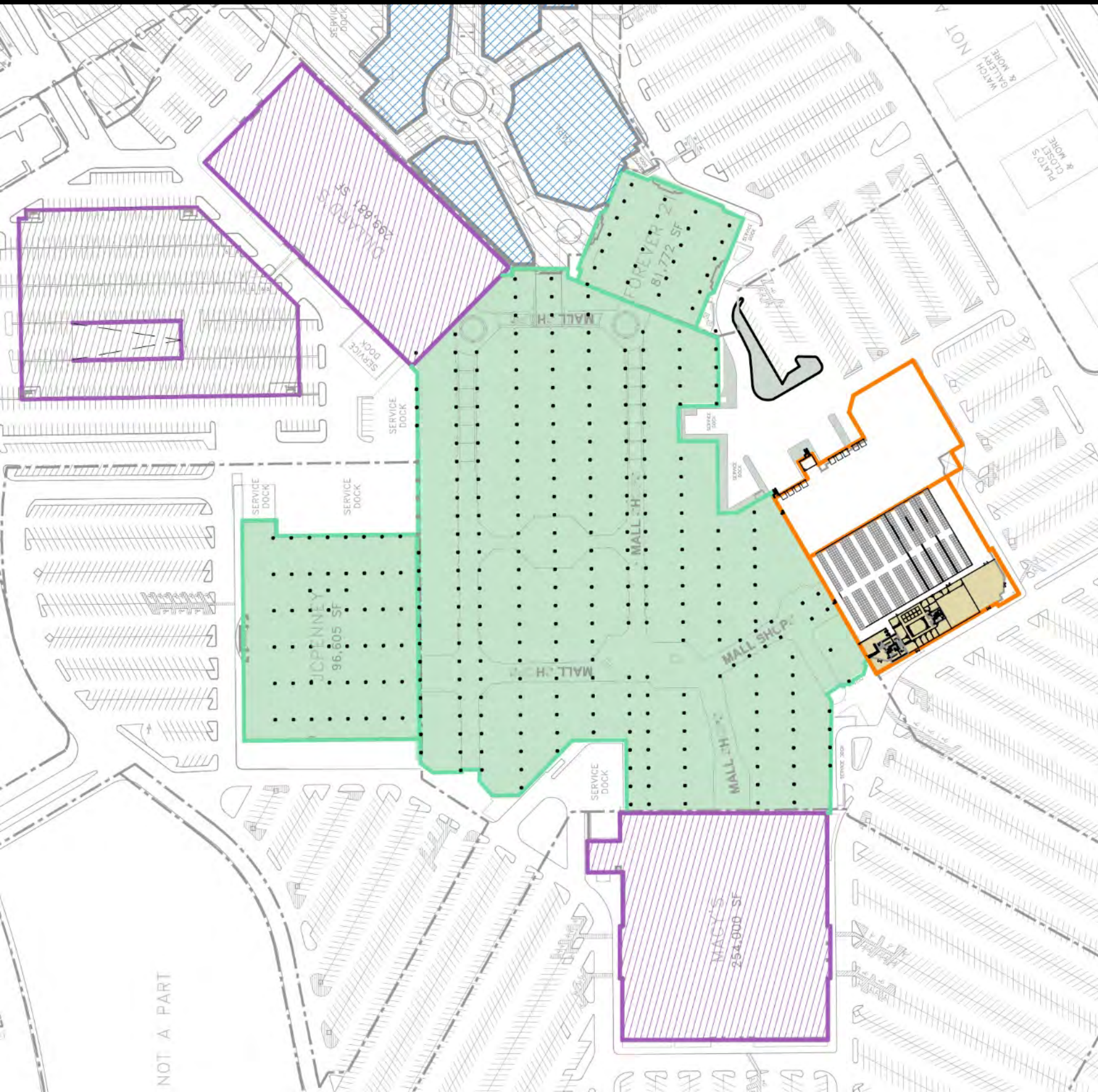
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ANCHOR TENANT CONVERSION TO COLD STORAGE

ANCHOR TENANT CONVERTED TO COLD STORAGE WITH RETAIL COMPONENT

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ANCHOR TENANT CONVERSION TO COLD STORAGE

ANCHOR TENANT CONVERTED TO COLD STORAGE WITH RETAIL COMPONENT

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