

**Baum Revision, LLC  
BRICKYARDS LOFTS & TOWNHOMES  
PREFILING CONFERENCE**

**PROJECT NARRATIVE**

**THE APPLICANT**

An LLC to be formed and controlled by Baum Revision, LLC ("Applicant") is the developer of this change of use located at 155 N. Pfungsten, Deerfield, IL (the "Subject Property").

**THE PROPERTY**

Situated on a 7.43-acre parcel along the east and south sides of Pfungsten Road, approximately 890 feet north of Lake Cook Road in Deerfield, Lake County, Illinois, the Subject Property features a three-story office building constructed in 1987. This 37+ year old, 119,265 total rentable square foot building was designed for large office tenants with approximately 40,000 square feet per floor. The building is currently occupied by multiple small office tenants. The current vacancy is approximately 60% and is expected to exceed 75% by 2025. The property provides 450 parking spaces, two loading docks, and landscaping. The Subject Property has a main driveway along its southern border which provides a full point of access to North Pfungsten and Deer Lake Road.

Surrounding land uses include public open space and single-family homes to the north and west across North Pfungsten (with corresponding R-3 and P-1 zoning designation). Commercial uses are found to the south and east of the Subject Property. There is a mix of zoning classifications to the south and east, including I-1, I-2 and C-2.

The site has a historical significance as part of the former clay pit operated by The National Brick Company, which supplied bricks for local construction from the 1920's to around 1959. Subsequently, it served as a construction debris landfill until the late 1970s, when it was properly decommissioned and left vacant until the office building's construction in 1987.

The Subject Property is currently zoned I-1 Office, Research, Restricted Industrial. The building is in foreclosure proceedings. The Northshore office market has been hard hit with corporate users leaving the market and the occupancy plummeting from 2018 when the market was approximately 15% vacant versus today, with the market exceeding 30% vacant when you included unoccupied and sublease space. The future of this building is clearly a change of use as the demand for office space no longer makes this building financially viable.

**THE PROJECT**

The Applicant proposes a long-term redevelopment of the existing approximately 120,000 RSF office building, Subject Property, into a residential complex to be known as BRICKYARDS LOFTS & TOWNHOMES, consisting of two developments, Loft Apartments and Townhomes.

**LOFT APARTMENTS:**

At full build out, the existing office space will be converted into 112 loft-style residential units featuring 10'+ ceilings, oversized windows, in-unit washer/dryer, and stainless-steel appliances. Phase 1 is 93 apartments and Phase 2 adds an additional 19 for a total of 112 units. They will range in size from 629 square feet for 1BR/1BA to up to 1,142 square feet for 2BR/2BA. A majority of the units will be efficient, 885 square feet, 2BR/2BA. During Phase I the existing office tenants will remain in approximately 20,000 RSF which, upon lease expirations, will be converted to additional apartments in Phase 2.

**Affordability:** In compliance with Deerfield's Affordable Housing Ordinance, 10% or a total of Eleven (11) apartments will be designated as "affordable." nine (9) units during Phase 1 and two (2) additional units added in Phase 2. In addition, as an adaptive reuse property and compact layouts, the rental costs of Brickyards units will generally be a lower total cost than ground up construction. Based on preliminary estimated pricing, we project that our typical 2BR/2BA unit will be up to 20% less expensive than other existing or new ground-up developments in the surrounding area.

**Sustainability:** A key benefit of this project is the repurposing of an obsolete building. The greenest building is the one that you don't tear down. This approach requires significantly fewer materials and results in lower carbon emissions compared to demolishing and rebuilding from scratch. By reusing the shell of the building, we significantly reduce landfill waste generated by the project. By repurposing, we also greatly reduce embodied energy, which includes the energy used in mining, manufacturing, and transporting materials. Additionally, the project will incorporate native plantings, energy-efficient appliances, and low-flow plumbing. It will also meet or exceed the latest energy codes.

**Amenities:** Four (4) Electric Car Charging Stations, Private Fitness Center, Outdoor Seating and Cooking Grill Stations, Sun Terrace, Wi-Fi throughout, Business Center, Pet-friendly community with Dog Park & Pet Wash, Secure Indoor Bicycle Storage, Smoke-free Community, Gathering Lounge.

**Traffic and Parking:** A traffic impact study has been conducted (attached). Based on its conclusions, this redevelopment will significantly reduce generated traffic, trip generation, and the total amount of parking required compared to its current use. Upon completion of Phase 2, the total code requires 299 parking spaces, while the project will exceed code and provide 326 spaces.

During Phase 1, the code requires 344 spaces, including 83 spaces allocated for office use based on 100% occupancy (current occupancy is below 50%). Due to the shared parking arrangement, which accommodates differing peak demand times Office (9am-5pm, M-F) Residential use peak in the evenings and weekends, the actual total parking spaces needed is lower than what the code suggests. Given these factors, we believe that a "Shared Mixed-Use" parking model is applicable. Therefore, to accommodate this project during Phase 1, we request relief for 18 parking spaces from 344 to 326 parking spaces.

**Pedestrian and Bike Accommodations:** We propose the creation of a new, crosswalk location (see plans) in the Northwest quadrant of the property to provide a convenient access point to the Village Bike Route (Southern East/West Route and North/South Route connecting on the west side of Pfingsten Road for pedestrian and bike access to Brickyards Park. To enhance safety, we suggest a Rapid Rectangular Flashing Beacons crosswalk with yellow signs with button activated pedestrian controls. This has been successfully deployed in Chicago and other communities for this type of condition. The property will have both indoor and exterior bicycle storage.

#### **TOWNHOMES:**

39 newly constructed townhomes will surround the North and East perimeter of the site, comprising three stories with slab-on-grade construction. Each unit will offer 2,320 to 2,508 square feet of space, featuring 3 bedrooms, 2 full bathrooms, 1 powder room, attached 2-car garage pre-wired for electric car charging, in-unit washer/dryer, stainless steel appliances, and a second-floor balcony off the kitchen. Per Deerfield's Affordable Housing Ordinance requirements (31 to 40 units), the Developer will provide Two (2) units that will be designated as "affordable".

#### **OTHER ITEMS:**

- Loading Areas (see attached "Loading Plan"). Operations staff will coordinate moving dates, times, and permitted designated loading areas with all residents.
- Engineering: (see attached Utility Narrative) Based on preliminary review by our civil engineer, the site will not be required to change storm water detention. We will be increasing the water main and sewers for the Townhomes. We will be adding Fire Hydrants as required. The Deerfield Engineering Department will be contacted in the near future.
- Landscaping Plans will be provided in greater details and quantities in future submittals.
- Signage needed to enhance the project will be detailed in future submittals. The intent is to add only additional ground signage to identify the development and directional signage as needed. The signage will be similar in size to other properties in the immediate area.
- School Districts 109 and 113 will be contacted in the near future.
- The Deerfield-Bannockburn Fire Protection District will be contacted in the near future.

## **PROJECT PHASING:**

The project is scheduled to commence in fall 2025. The apartment conversion will be phased to accommodate existing office tenants, with Phase 1 converting approximately 80% (93 apartments) of the building. Phase 2 (an additional 19 apartments) will begin after the expiration of all remaining office leases in 2031. Townhome construction will also start in fall 2025, with completion expected approximately 12 months later.

## **PROJECT BENEFITS**

The BRICKYARDS LOFTS & TOWNHOMES project offers numerous benefits to the Village and its residents, including:

- Meeting strong demand for new housing in the area.
- Diversifying Deerfield's housing supply and providing options for existing residents seeking downsized, low-maintenance homes.
- Strengthening the Village and other taxing districts property tax base.
- Converting an underutilized and aging office building to a more productive use.
- Introducing an underserved rental apartment product within walking distance of the METRA station, area shopping, and parks.

## **PROPOSED ZONING RELIEF FOR THE SUBJECT PROPERTY**

The Applicant seeks approval for the following zoning matters:

1. Rezoning of the Subject Property to R5 General Residence District.
2. Preliminary approval of a special use permit to establish a residential planned unit development for the Subject Property, with exceptions as identified by staff. Exceptions identified so far:
  - a. Minimum Lot Per Dwelling Units
  - b. Minimum Setbacks
  - c. Minimum Usable Open Space
  - d. Parking during Phase 1
3. Amendment of the Village's Comprehensive Plan to designate the Subject Property for residential uses.
4. Preliminary plat of subdivision for the Subject Property.
5. Developer will prepare an in-house vs third-party market analysis
6. Waiver of a full traffic survey (see Traffic and Parking above)

## **PROJECT TEAM**

Developer: Baum Revision, LLC

Architecture: Hirsch/MPG

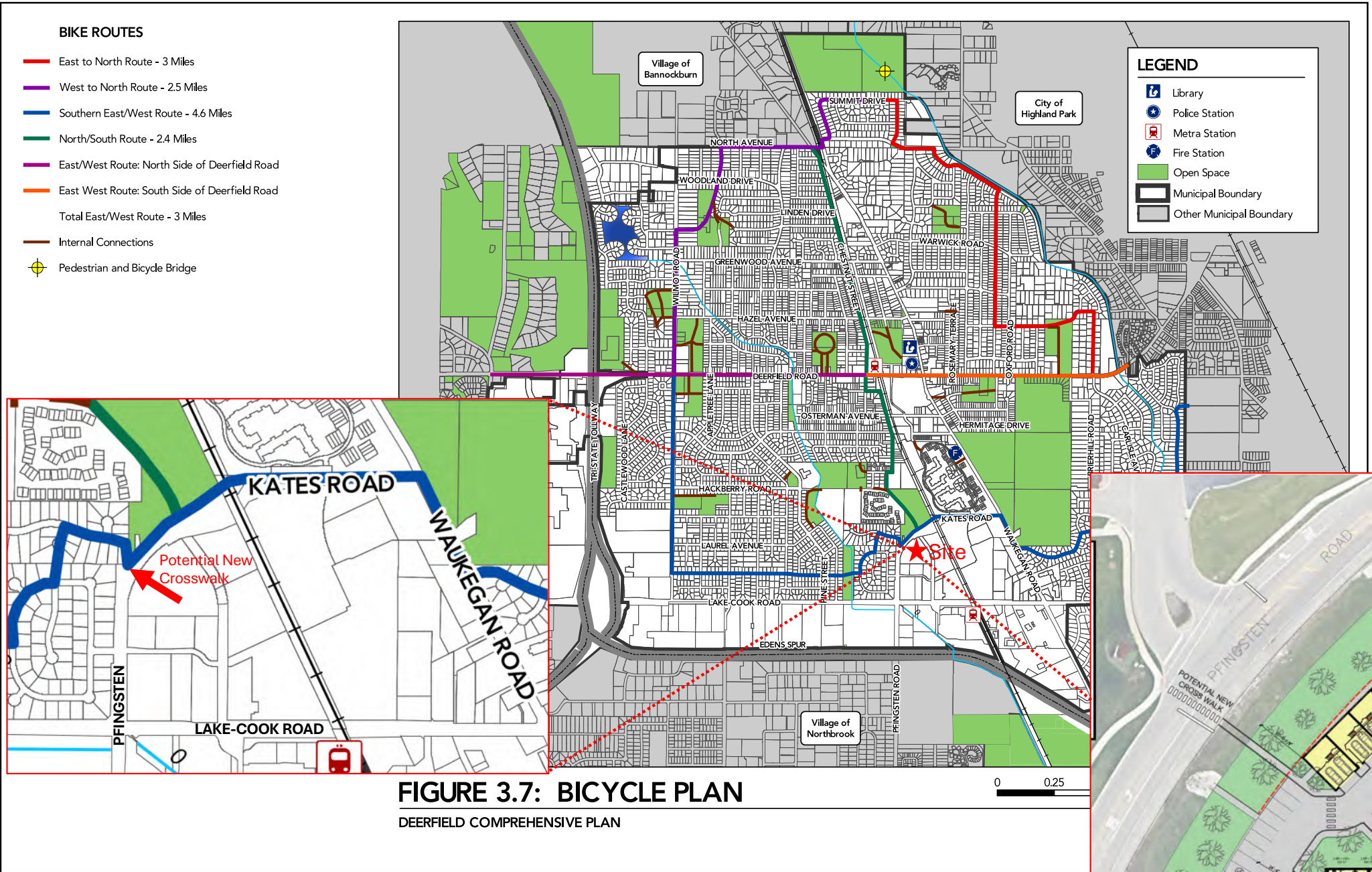
Landscape Architect: Daniel Weinbach & Partners, Ltd.

Legal: Dykema Gossett PLLC

Traffic/Parking: KLOA, Inc.

Civil Engineering: RTM Engineering Consultants

# Potential New Crosswalk Location (See Plans for Details)





**Utility Narratives  
Brickyards Lofts & Townhomes  
Deerfield, IL**

**Stormwater:**

Stormwater detention is not proposed with this redevelopment project because it meets the requirements of Section 300.06 of the Lake County Watershed Development Ordinance. This development will not increase impervious area and will most likely decrease impervious areas from the current existing conditions. All the proposed townhomes will be built where existing parking lot pavements exist. Therefore, stormwater run-off from this site is proposed to be equal to or reduced from existing conditions.

The existing storm sewer system will be extended and rerouted as necessary to provide the proper drainage of the proposed redevelopment conditions.

**Sanitary:**

Sanitary sewers will be extended from the existing on-site sanitary sewer system and/or from a new sewer connection to service the proposed townhomes.

**Water:**

Watermain will be extended with new connection(s) as necessary to provide the proper watermain looping to service the proposed development. Fire Hydrants will be added to provide the proper coverage of the proposed redevelopment to meet the Village's and Fire Protection District's requirements.

PARKING CALCULATIONS - PHASE 1			
RESIDENTIAL	# UNITS	PER UNIT	PARKING
1 BEDROOM	6	1.5	9
2 BEDROOM	87	2	174
TOWNHOMES	39	2	78
OFFICE	GSF	BY AREA	PARKING
USEABLE SF	17,561 SF	4/1000	70.2
SHARED SF	3,248 SF	4/1000	13.0
TOTAL PARKING SPACES REQUIRED			344
TOTAL PARKING SPACES PROVIDED			326

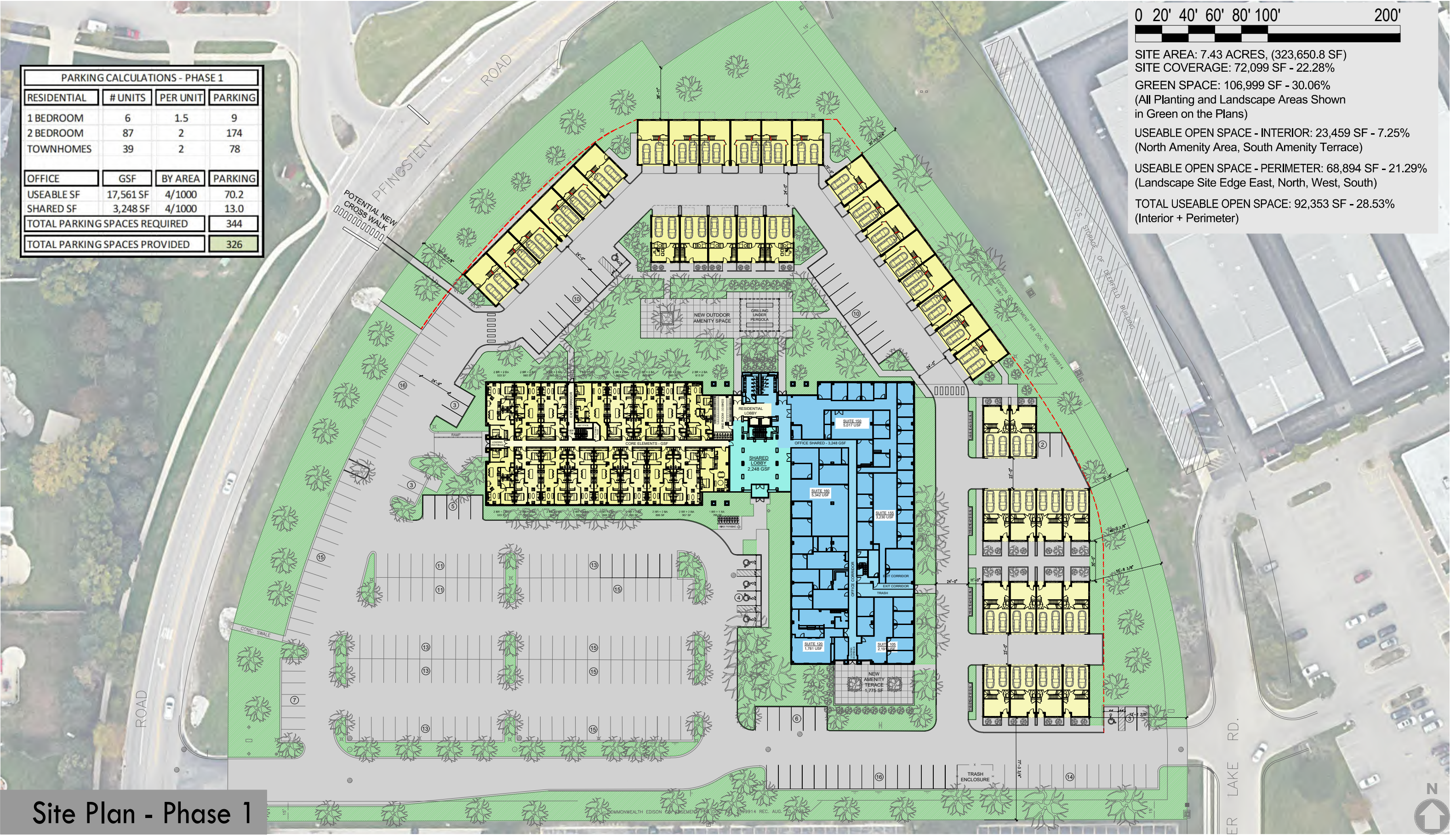
0 20' 40' 60' 80' 100' 200'

SITE AREA: 7.43 ACRES, (323,650.8 SF)  
 SITE COVERAGE: 72,099 SF - 22.28%  
 GREEN SPACE: 106,999 SF - 30.06%  
 (All Planting and Landscape Areas Shown  
 in Green on the Plans)

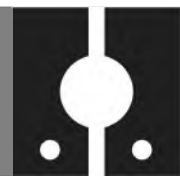
USEABLE OPEN SPACE - INTERIOR: 23,459 SF - 7.25%  
 (North Amenity Area, South Amenity Terrace)

USEABLE OPEN SPACE - PERIMETER: 68,894 SF - 21.29%  
 (Landscape Site Edge East, North, West, South)

TOTAL USEABLE OPEN SPACE: 92,353 SF - 28.53%  
 (Interior + Perimeter)



Site Plan - Phase 1



PARKING CALCULATIONS - PHASE 2			
RESIDENTIAL	# UNITS	PER UNIT	PARKING
1 BEDROOM	7	1.5	10.5
2 BEDROOM	105	2	210
TOWNHOMES	39	2	78
OFFICE	GSF	BY AREA	PARKING
USEABLE SF		4/1000	0.0
SHARED SF		4/1000	0.0
TOTAL PARKING SPACES REQUIRED			299
TOTAL PARKING SPACES PROVIDED			326

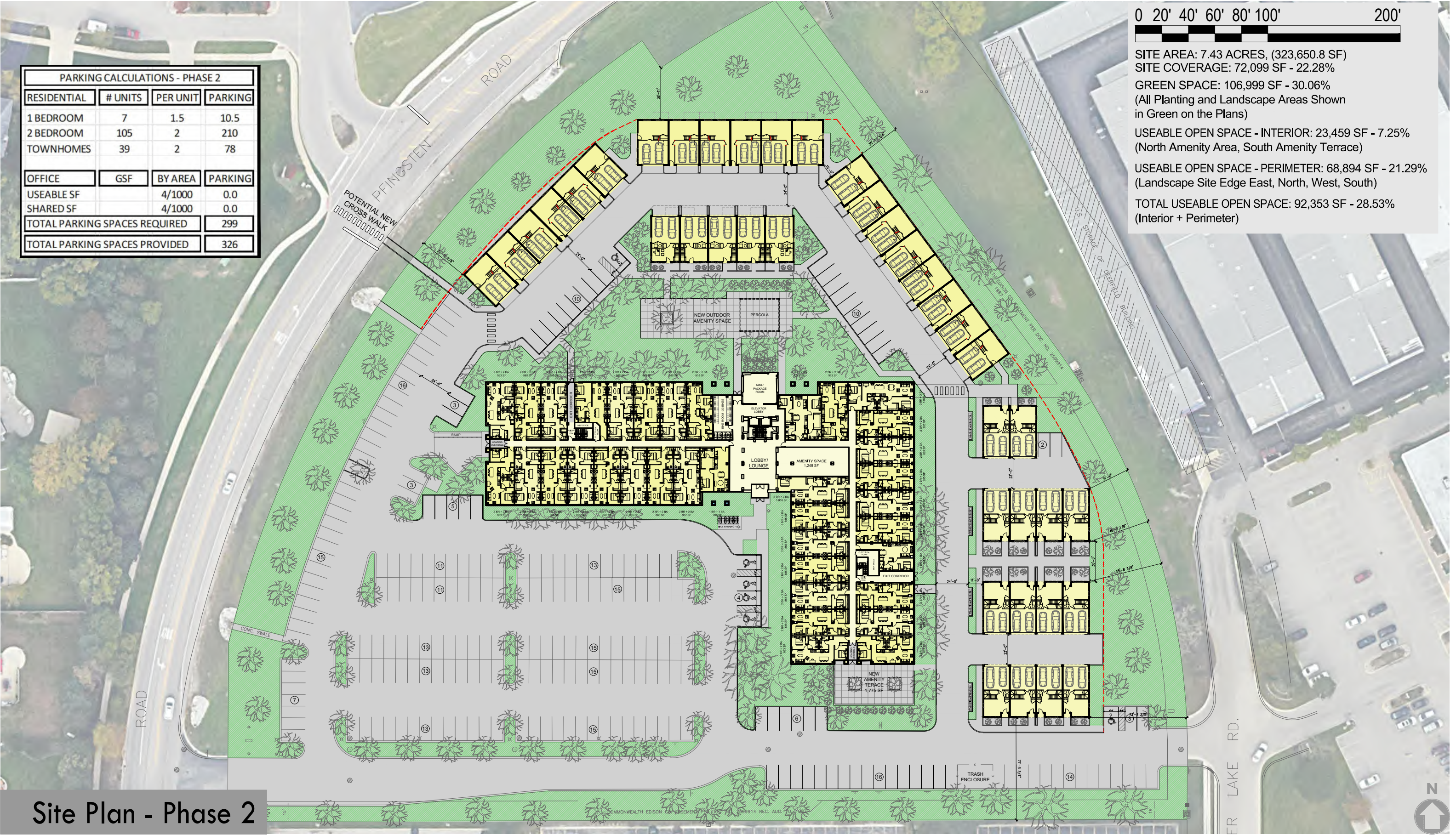
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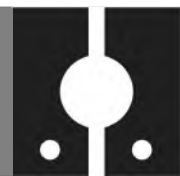
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TOTAL USEABLE OPEN SPACE: 92,353 SF - 28.53%  
 (Interior + Perimeter)



Site Plan - Phase 2



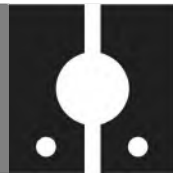


Site Plan - North





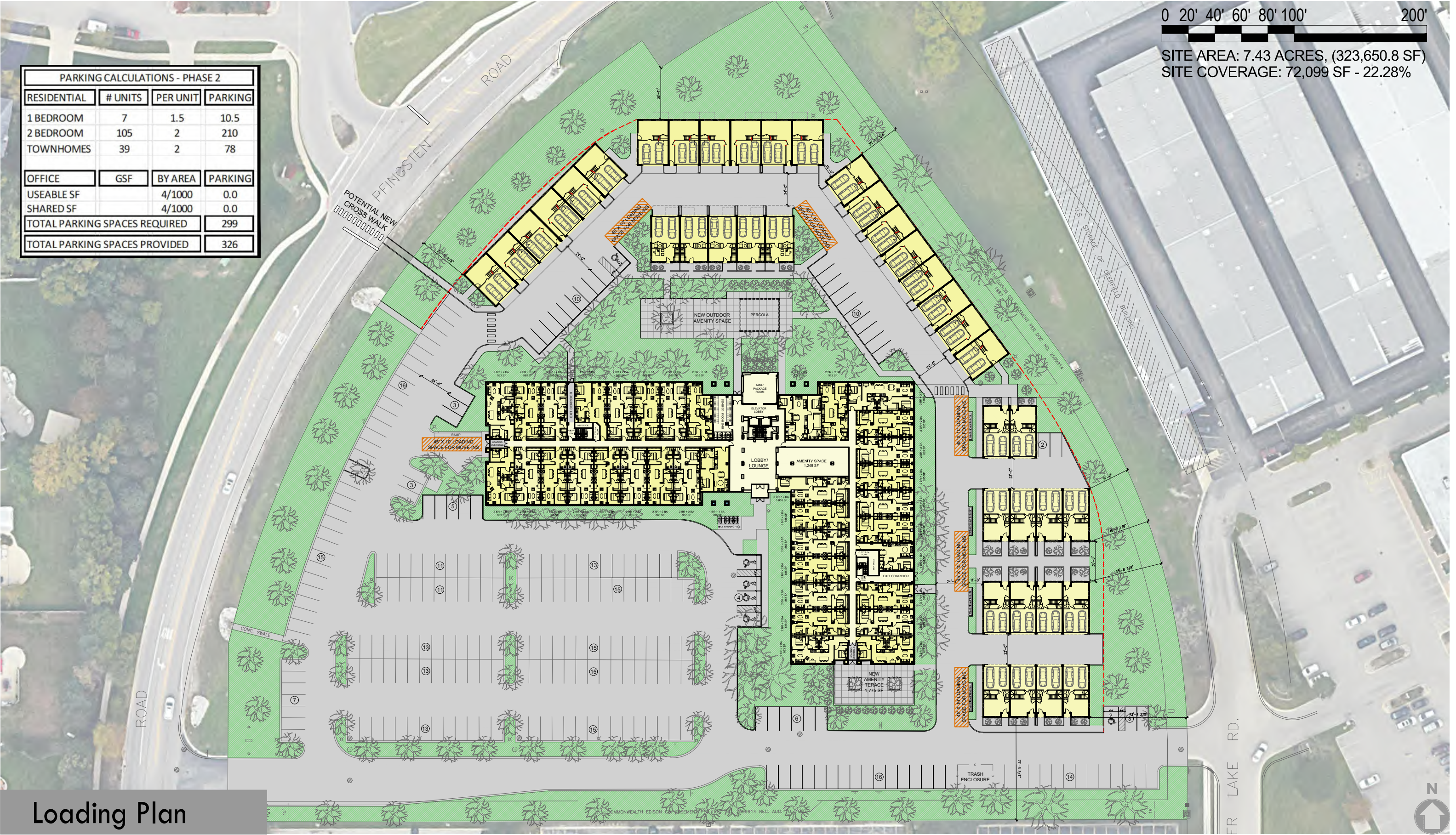
Site Plan - East



0 20' 40' 60' 80' 100' 200'

SITE AREA: 7.43 ACRES, (323,650.8 SF)  
 SITE COVERAGE: 72,099 SF - 22.28%

PARKING CALCULATIONS - PHASE 2			
RESIDENTIAL	# UNITS	PER UNIT	PARKING
1 BEDROOM	7	1.5	10.5
2 BEDROOM	105	2	210
TOWNHOMES	39	2	78
OFFICE	GSF	BY AREA	PARKING
USEABLE SF		4/1000	0.0
SHARED SF		4/1000	0.0
TOTAL PARKING SPACES REQUIRED			299
TOTAL PARKING SPACES PROVIDED			326



# Loading Plan



**BRICKYARDS**  
 LOFTS & TOWNHOMES

12 August 2024  
 24013  
 AJM  
 © HIRSCH MPG LLC 2024





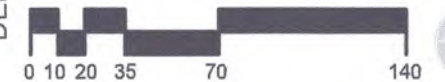
**KEY**

- EX. SHADE TREE TO REMAIN
- EX. EVERGREEN TREE TO REMAIN
- TREE TO BE REMOVED
- PROPOSED SHADE TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED SHRUBS
- PROPOSED GROUNDCOVER, PERENNIALS, & ORN. GRASSES
- LAWN

**NOTES:**

- SEE SHEET L2 FOR THE PROPOSED PLANT PALETTE.
- AN IRRIGATION SYSTEM WILL BE PROVIDED FOR A MAJORITY OF THE PLANT MATERIAL.

Landscape Plan



# BRICKYARD LOFTS & TOWNHOMES PLANT PALETTE

(SIZES AT INSTALLATION ARE NOTED)

SHADE TREES (3" CALIPER)		
NATIVE:	CELTIS OCCIDENTALIS	COMMON HACKBERRY
	GYMNOCLADUS DIOSCUS	KENTUCKY COFFEETREE
	PLATANUS OCCIDENTALIS	SYCAMORE
	POPULUS TREMULOIDES	QUAKING ASPEN
	QUERCUS BICOLOR	SWAMP WHITE OAK
	QUERCUS RUBRA	RED OAK
NON-NATIVE:	ACER X FREEMANII	AUTUMN BLAZE MAPLE
	GLEDITSIA TRICANTHOS INERMIS	SKYLINE HONEYLOCUST
ORNAMENTAL TREES (3" CALIPER OR 7' HEIGHT)		
NATIVE:	AMELANCHIER X GRANDIFLORA	AUTUMN BRILLIANCE SERVICEBERRY
	CERCIS CANADENSIS	EASTERN REDBUD
NON-NATIVE:	AMELANCHIER CANADENSIS	SHADBLow SERVICEBERRY
	SYRINGA RETICULATA	JAPANESE TREE LILAC
EVERGREEN TREES (6' HEIGHT)		
NATIVE:	THUJA OCCIDENTALIS	ARBORVITAE
LARGE DECIDUOUS SHRUBS (24"-36" HEIGHT AT INSTALLATION)		
NATIVE:	ARONIA ARBUTIFOLIA	BRILLIANT RED CHOKEBERRY
	CORNUS STOLONIFERA OR SERICEA	REDTWIG DOGWOOD
	VIBURNUM PRUNIFOLIUM	BLACKHAW VIBURNUM
	VIBURNUM TRILOBUM	HIGHBUSH CRANBERRY VIBURNUM
NON-NATIVE:	FORSYTHIA SP.	FORSYTHIA
	HYDRANGEA PANICULATA	HYDRANGEA
	SYRINGA SP.	LILAC
	VIBURNUM SP.	VIBURNUM
SMALL DECIDUOUS SHRUBS (12"-18" HEIGHT AT INSTALLATION)		
NATIVE:	ARONIA MELANOCARPA	BLACK CHOKEBERRY
	CEANOTHUS AMERICANUS	NEW JERSEY TEA PLANTS
	DIERVILLA LONICERA	DWARF BUSH HONEYSUCKLE
	HYDRANGEA ARBORESCENS	ANNABELLE HYDRANGEA
	RHUS AROMATICA	FRAGRANT SUMAC
NON-NATIVE:	COTONEASTER SP.	COTONEASTER
	HYDRANGEA PANICULATA AND QUERCIFOLIA	HYDRANGEA
	SPIRAEA SP.	SPIREA

EVERGREEN SHRUBS (24" SPREAD AT INSTALLATION)		
NATIVE:	JUNIPERUS COMMUNIS	COMMON JUNIPER
PERENNIALS (1 GALLON CONTAINER)		
NATIVE:	ASCLEPIAS SP.	MILKWEED
	ASTER SP.	ASTER
	COREOPSIS GRANDIFLORA	TICKWEED
	ECHINACEA PURPUREA	PURPLE CONEFLOWER
	HEUCHERA	CORAL BELLS
	HIBISCUS	ROSE MALLOW
	LIATRIS KOBOLD	GAYFEATHER
	MONARDA SP.	BEE BALM
	RUDBECKIA SP.	BLACK EYED SUSAN
	NON-NATIVE:	ALLIUM SP.
GERANIUM SP.		CRANESBILL
HEMEROCALLIS SP.		DAYLILY
NEPETA SP.		CATMINT
PERVOSKIA SP.		RUSSIAN SAGE
SALVIA SP.		SAGE
GRASSES (1 GALLON CONTAINER)		
NATIVE:	BOUTELOUA CURTIPENDULA	SIDE OATS GRAMA
	DESCHAMPSIA CEPITOSA	TUFTED HAIR GRASS
	PANICUM SP.	SWITCH GRASS
	SPOROBOLIUS HETEROLEPIS	PRAIRIE DROPSEED
NON-NATIVE:	CALAMAGROSTIS SP.	FEATHER REED GRASS
	MISCANTHUS SP.	MAIDEN GRASS

## Plant Palette



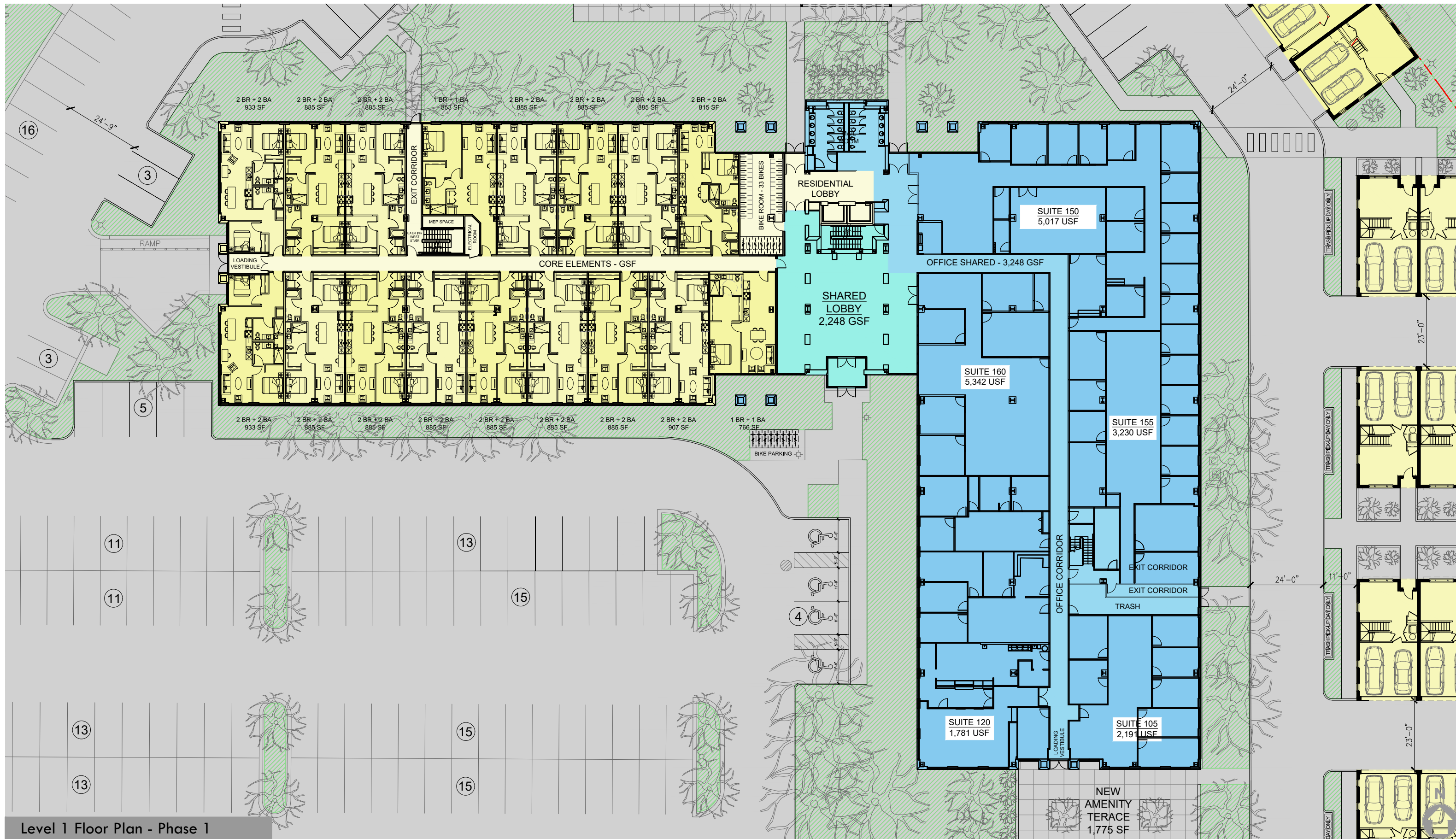
**BRICKYARDS**  
LOFTS & TOWNHOMES

9 August 2024  
24013  
EHB

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L2



Level 1 Floor Plan - Phase 1





2 BR + 2 BA  
979 SF

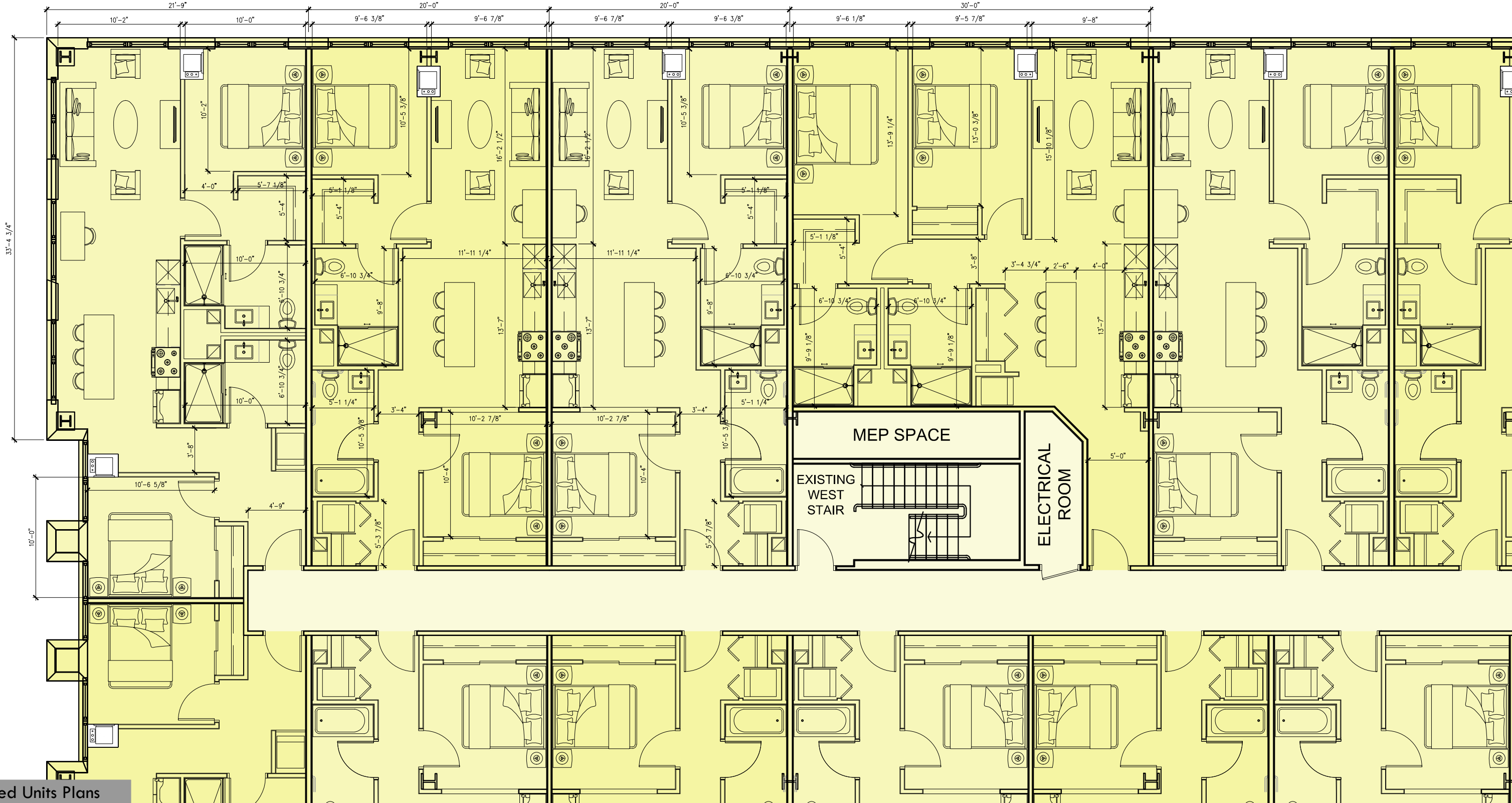
2 BR + 2 BA  
885 SF

2 BR + 2 BA  
885 SF

2 BR + 2 BA  
1,011 SF

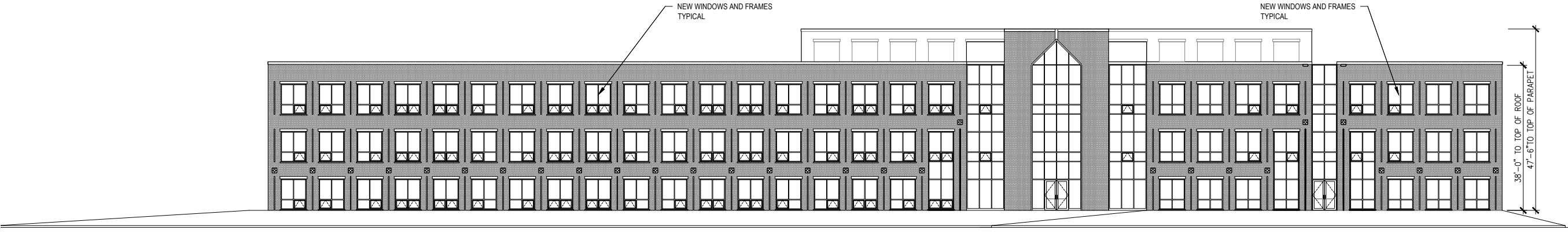
2 BR + 2 BA  
885 SF

2 BR +  
885

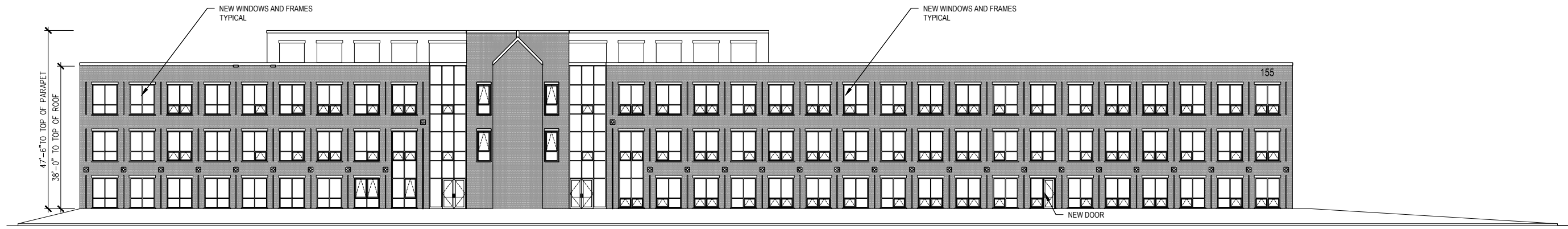


Enlarged Units Plans

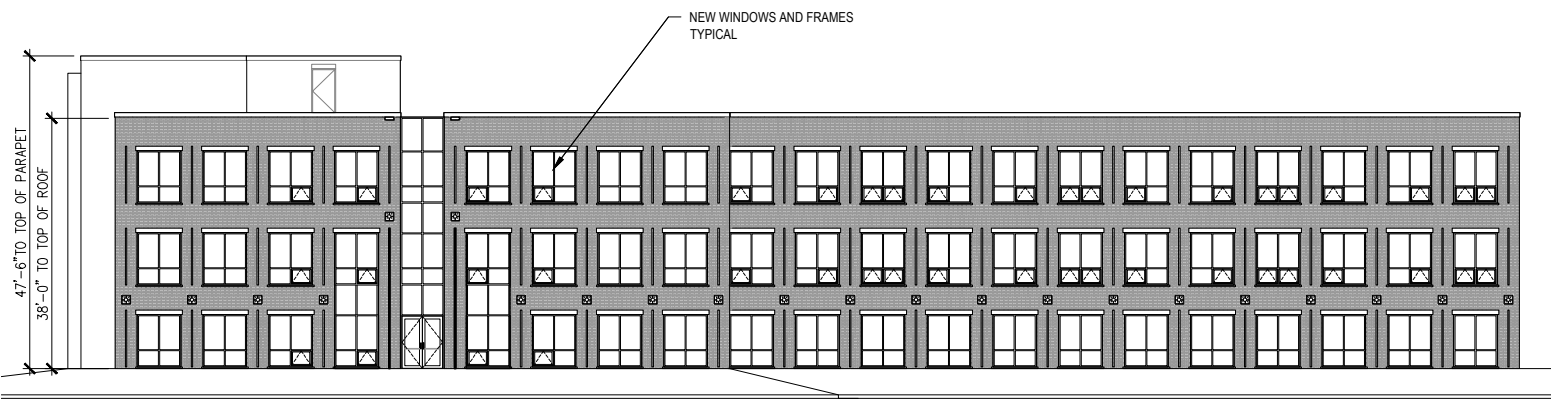




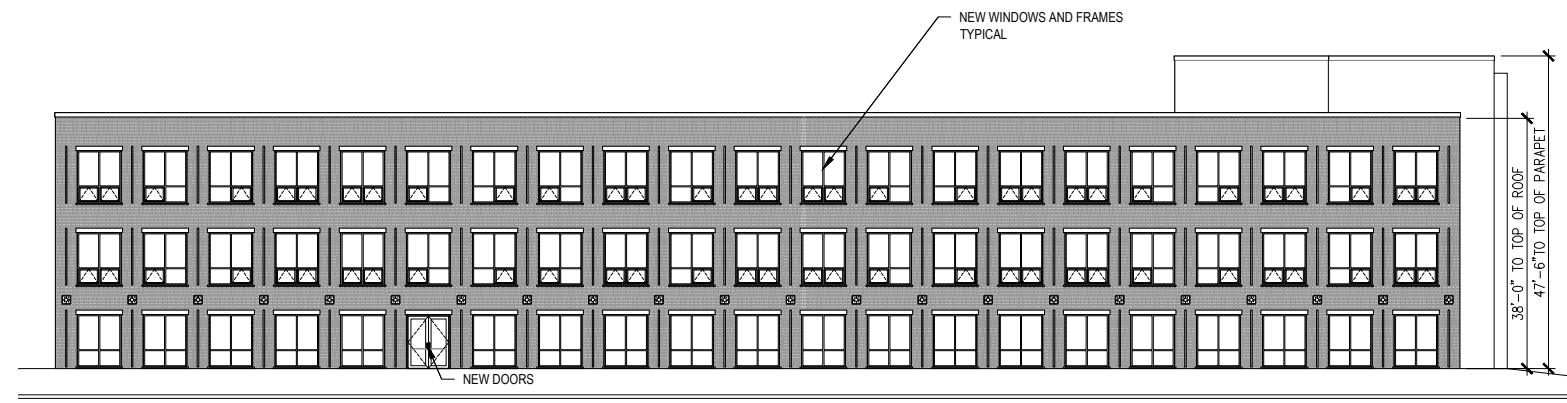
**SOUTH ELEVATION - EXISTING BUILDING**



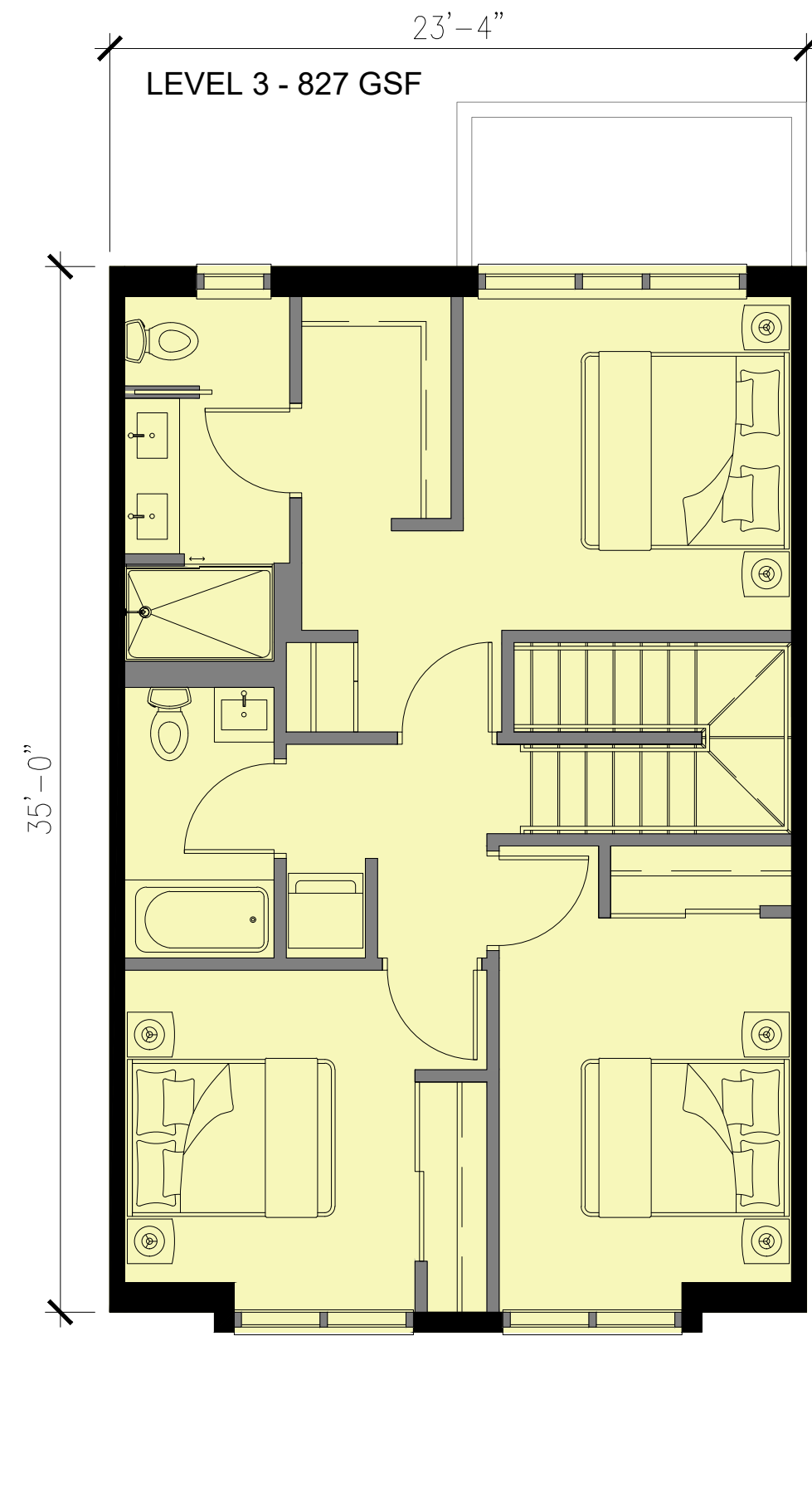
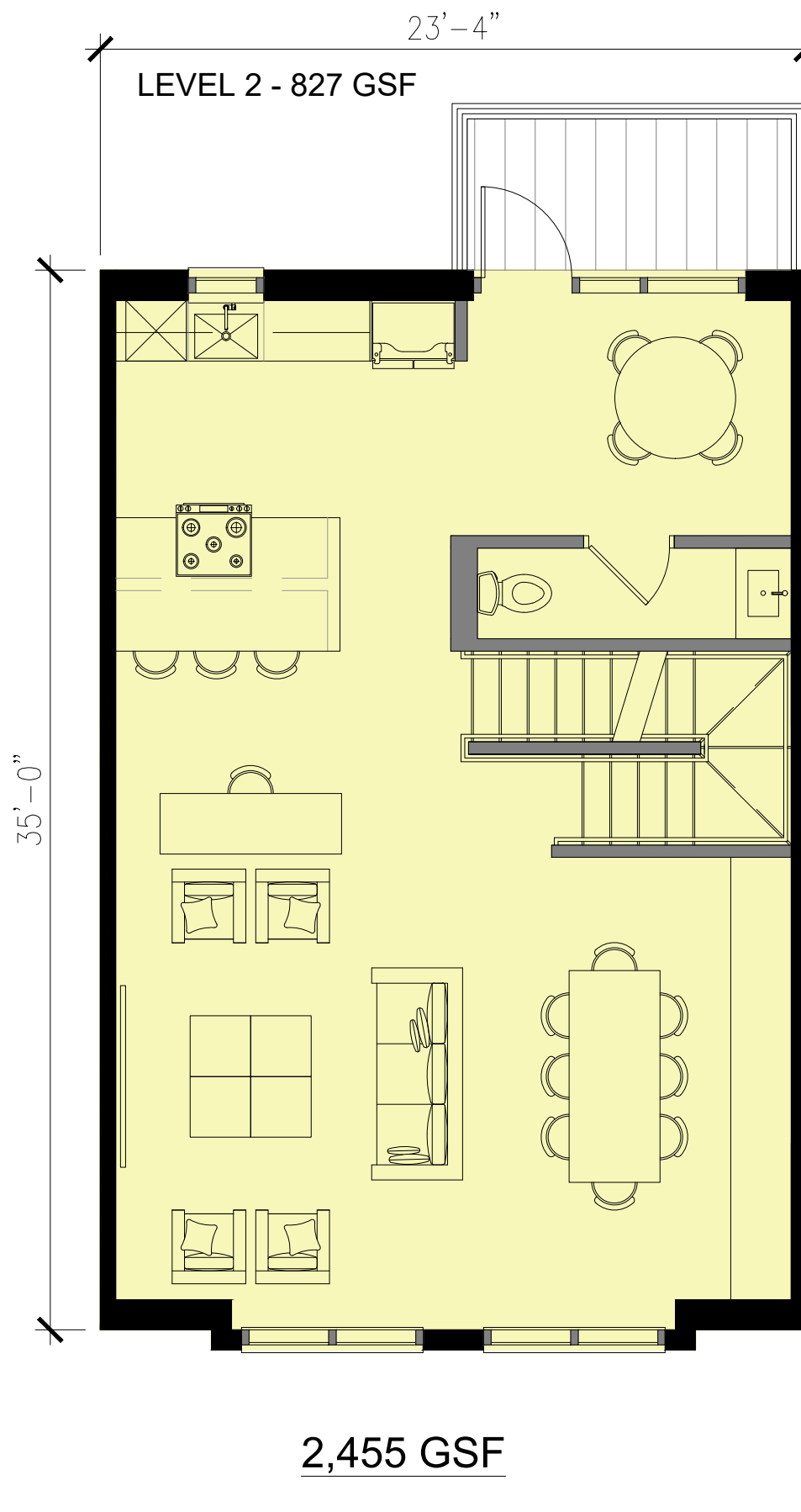
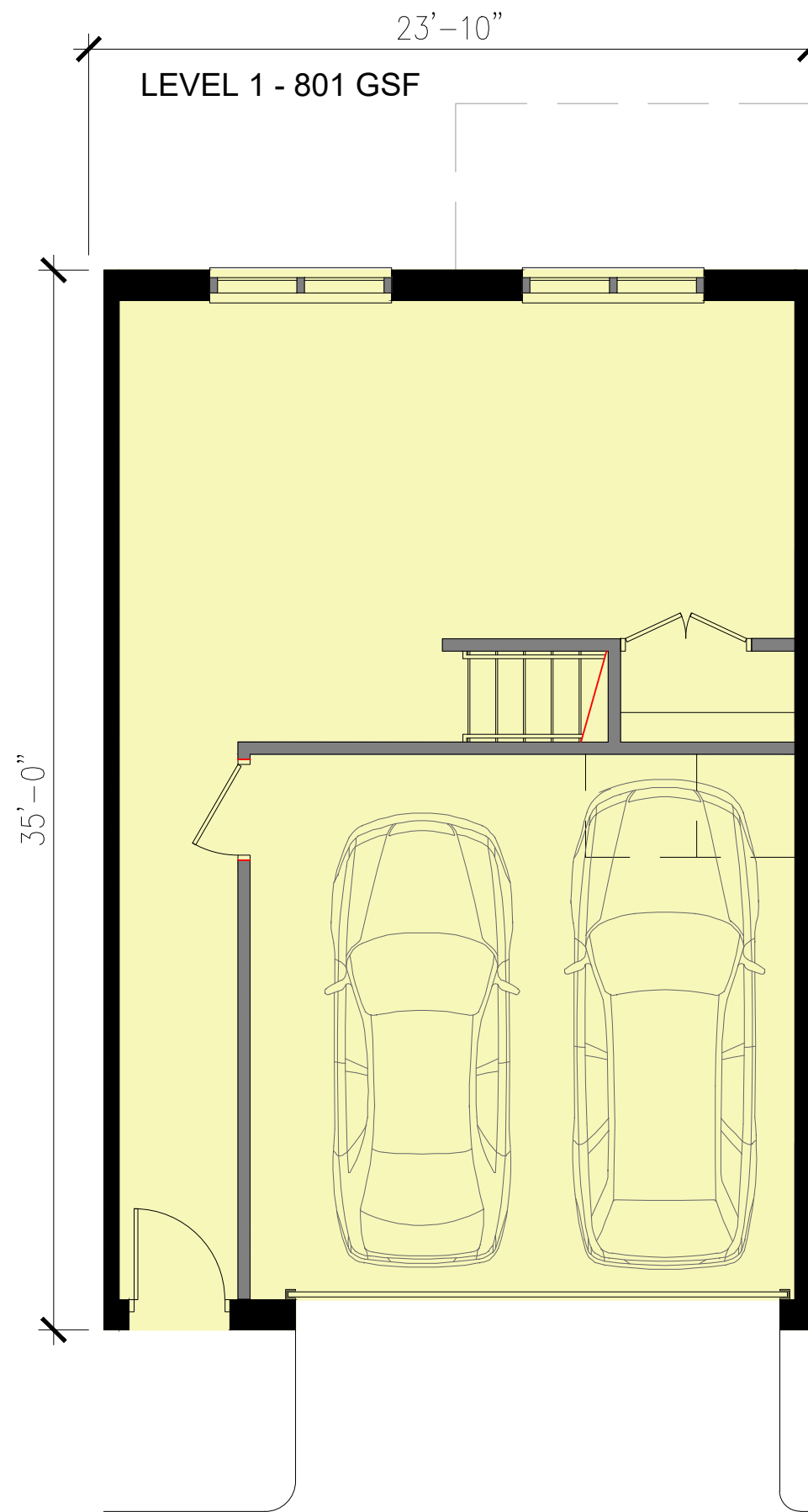
**NORTH ELEVATION - EXISTING BUILDING**



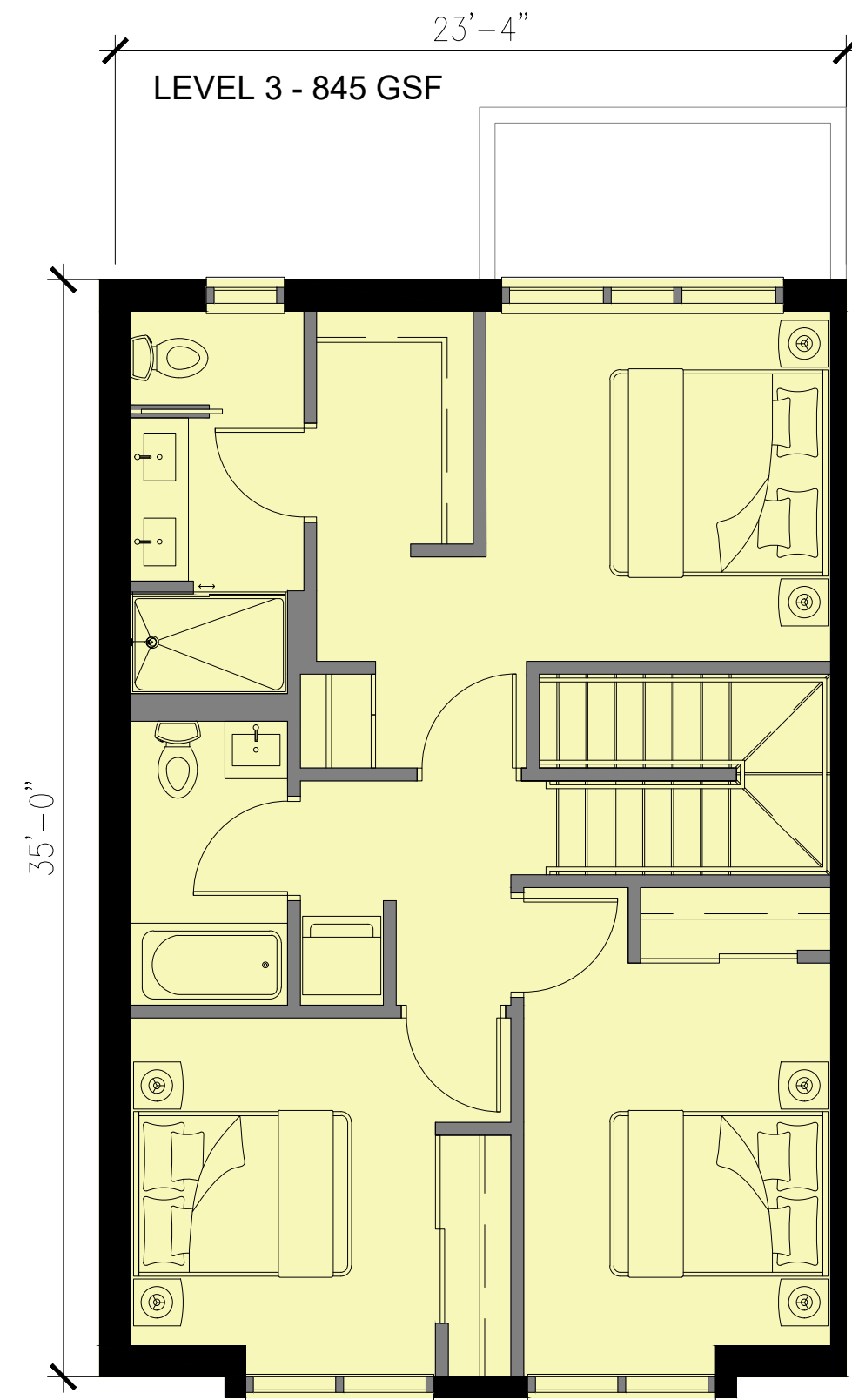
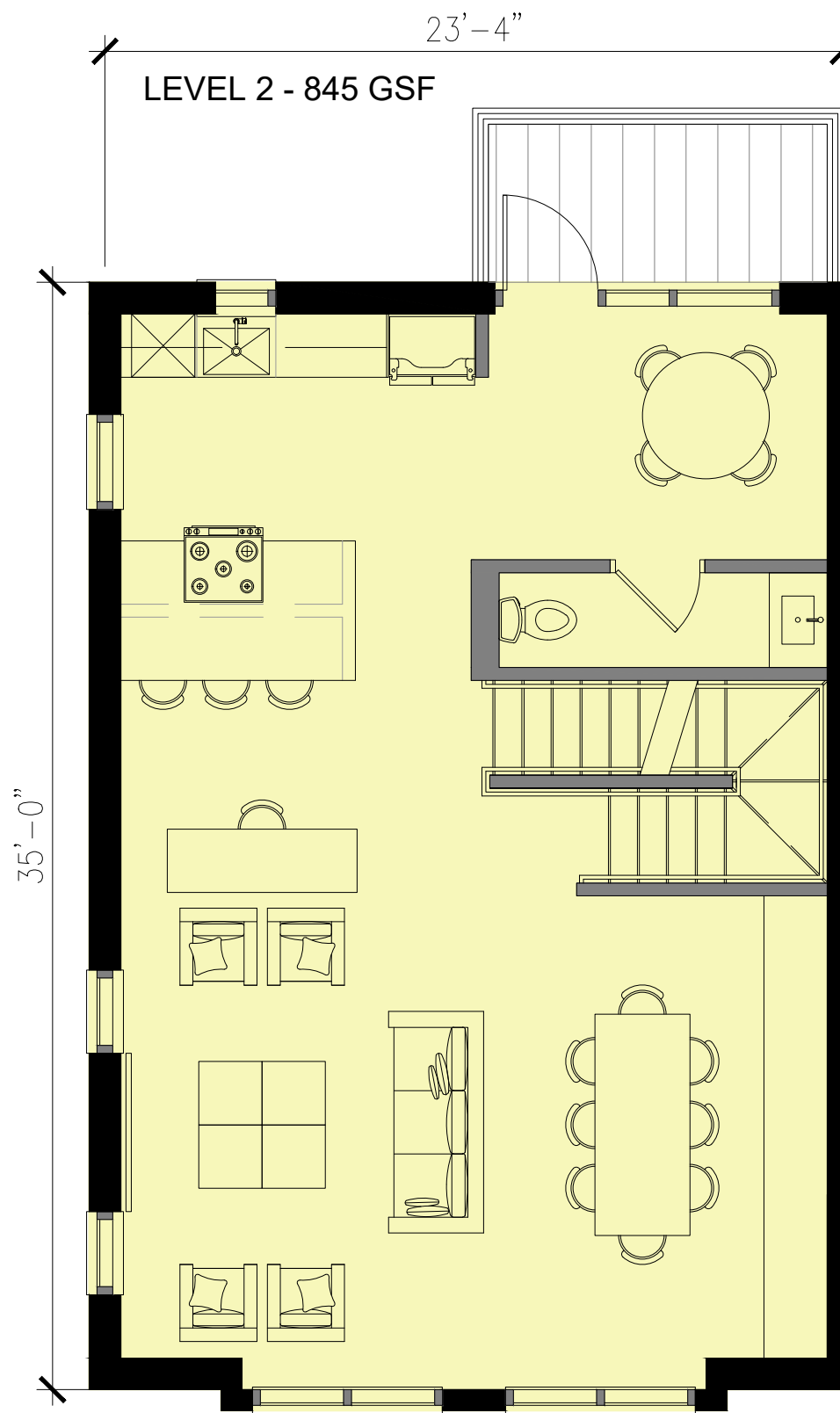
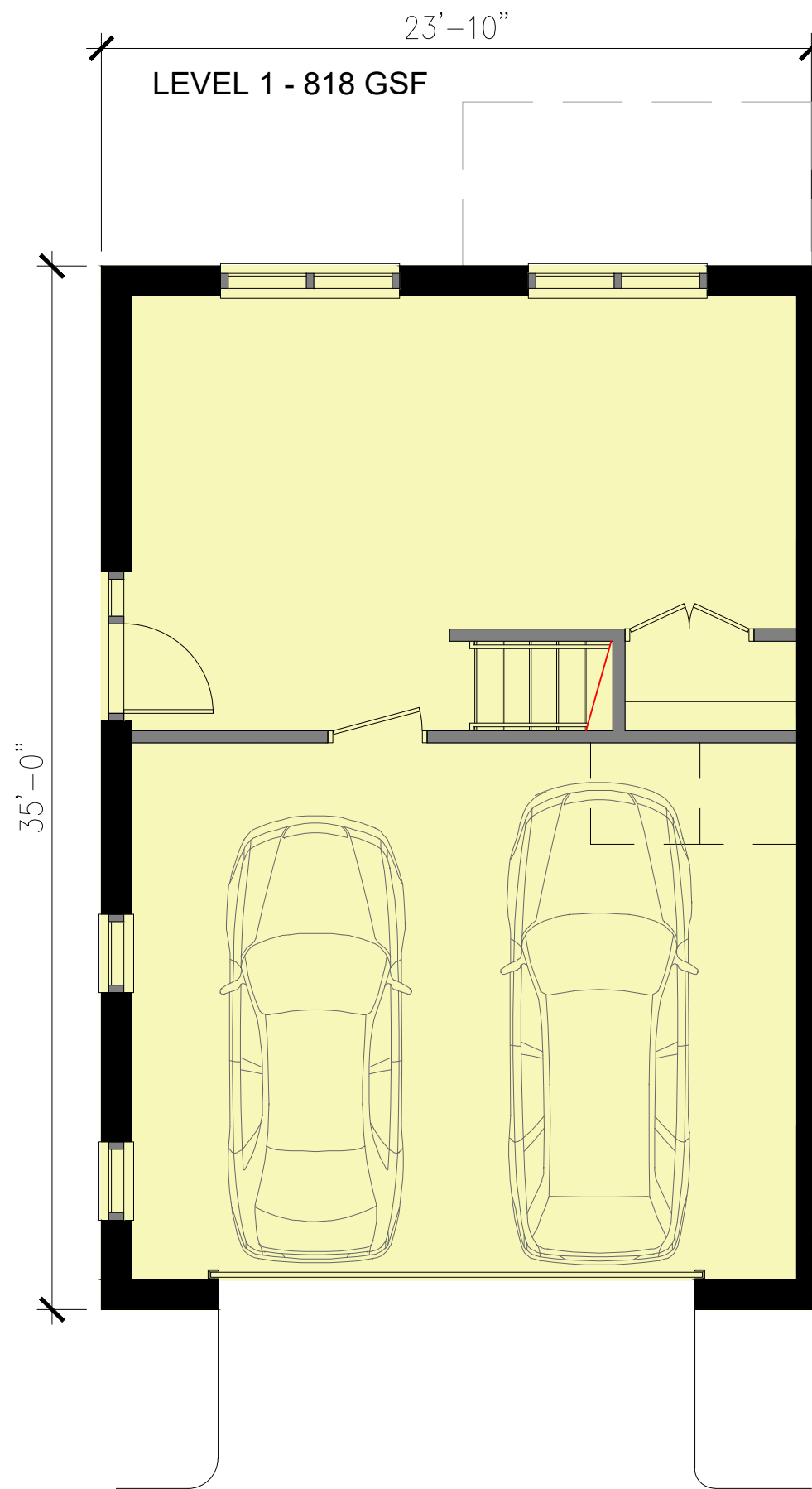
**WEST ELEVATION - EXISTING BUILDING**



**EAST ELEVATION - EXISTING BUILDING**



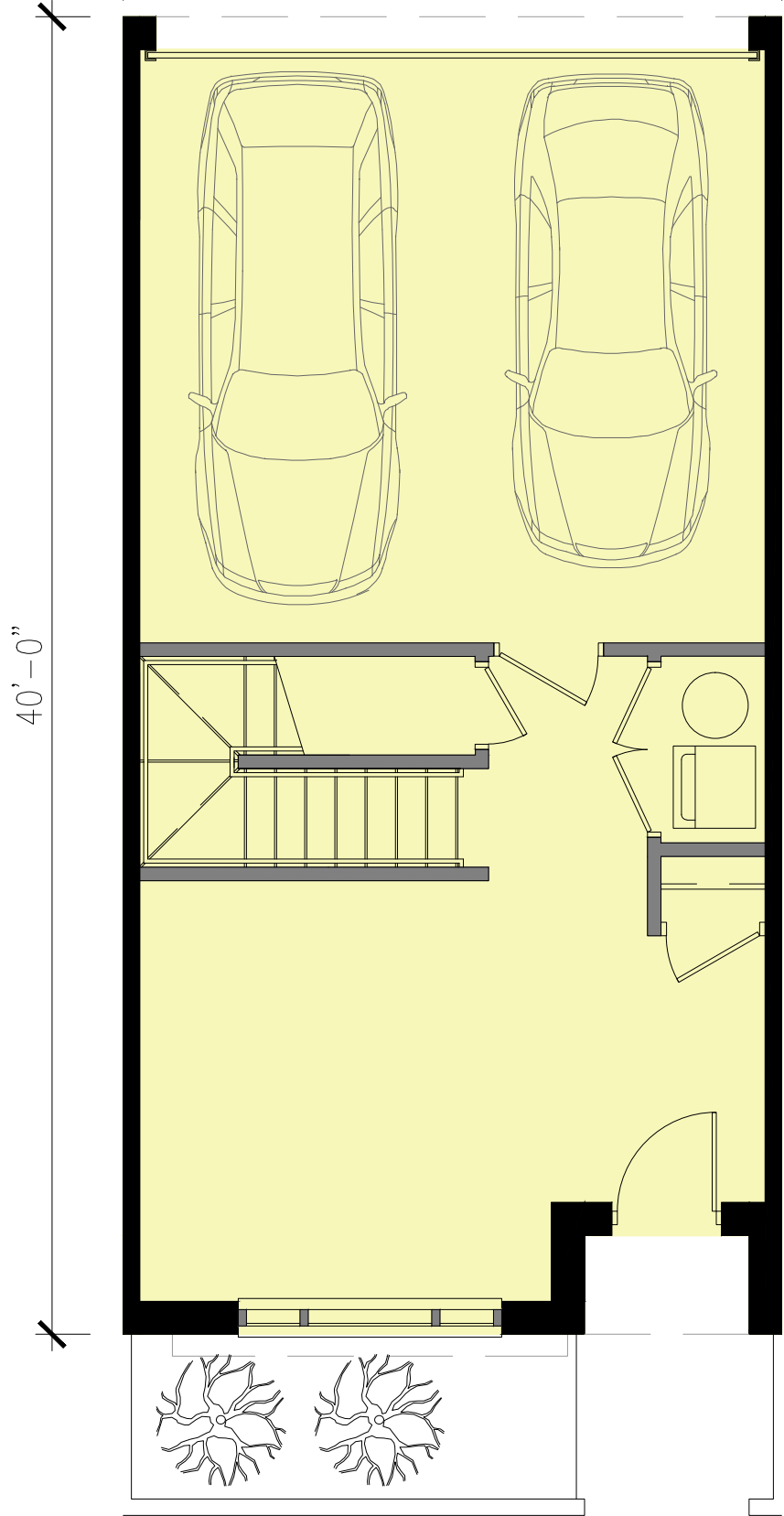
2,455 GSF



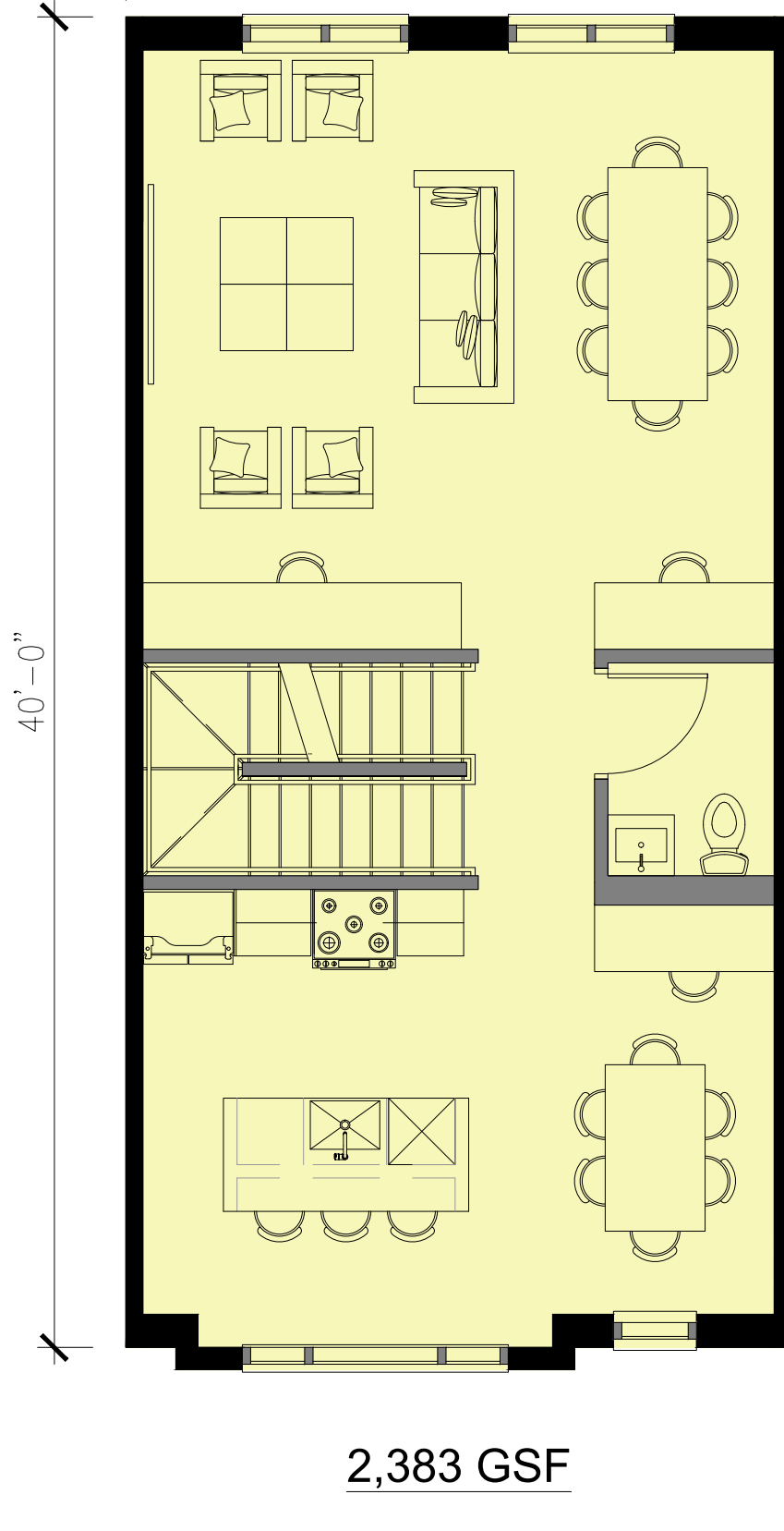
2,508 GSF



20'-0"  
LEVEL 1 - 767 GSF

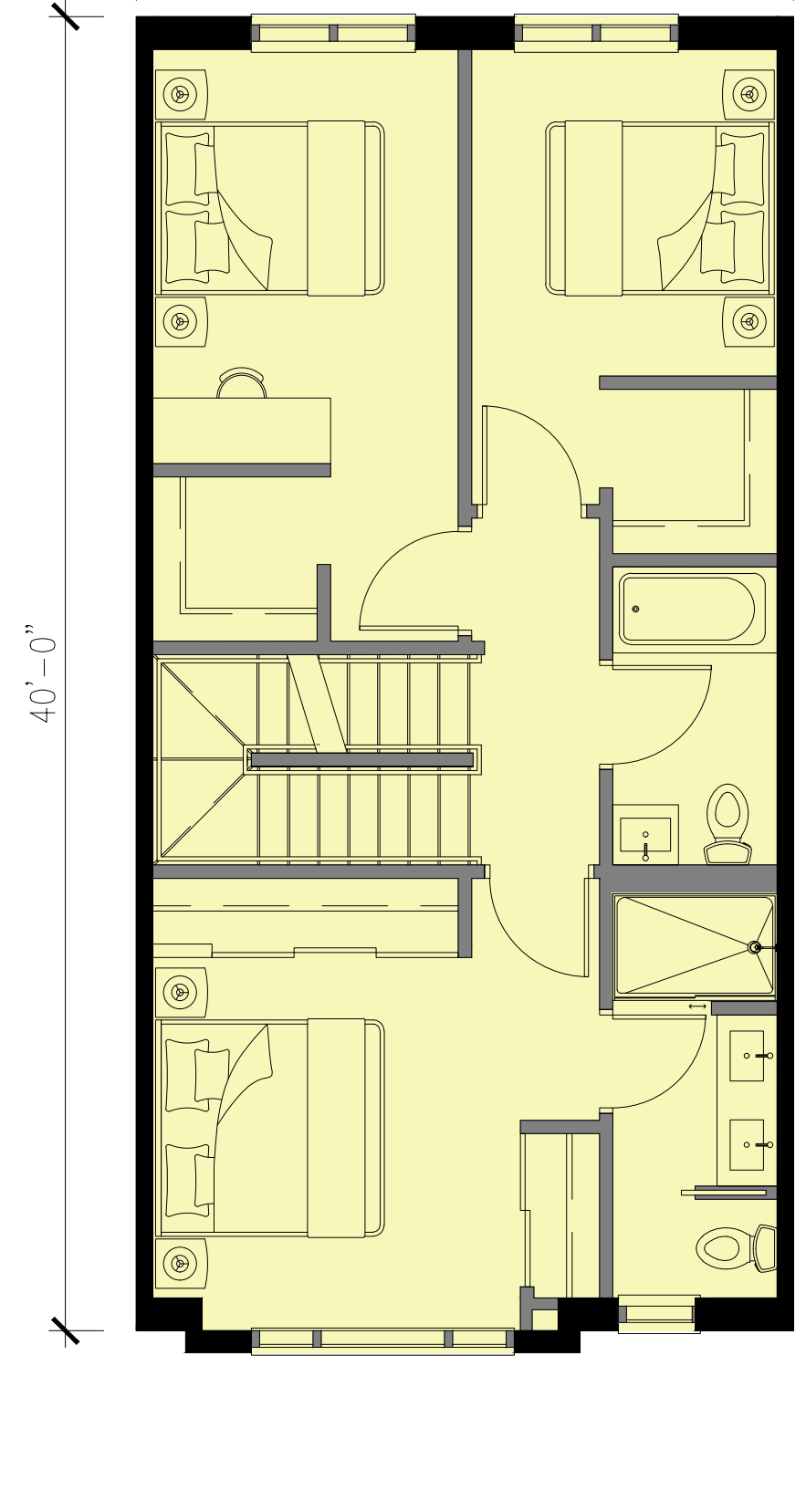


20'-0"  
LEVEL 2 - 808 GSF

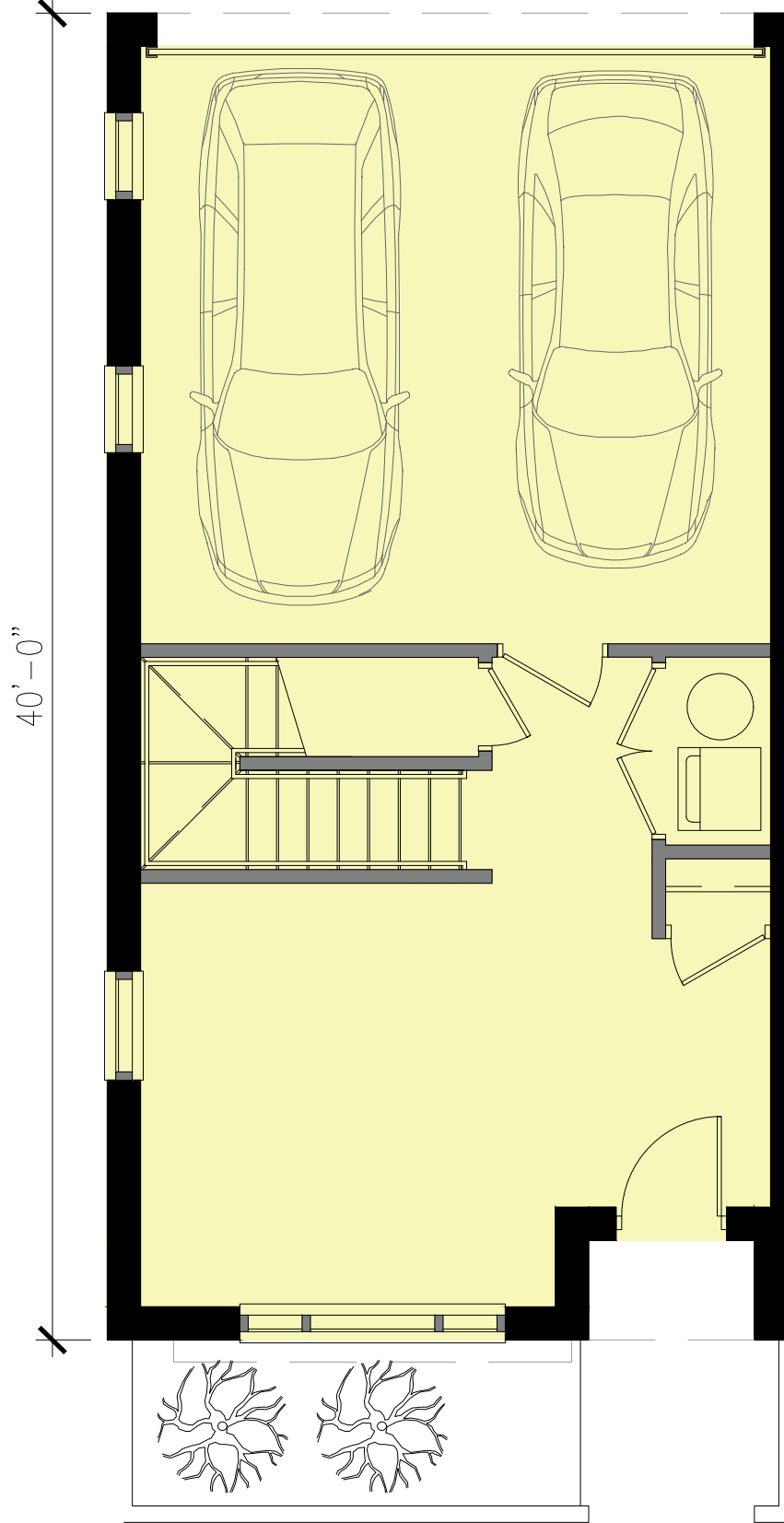


2,383 GSF

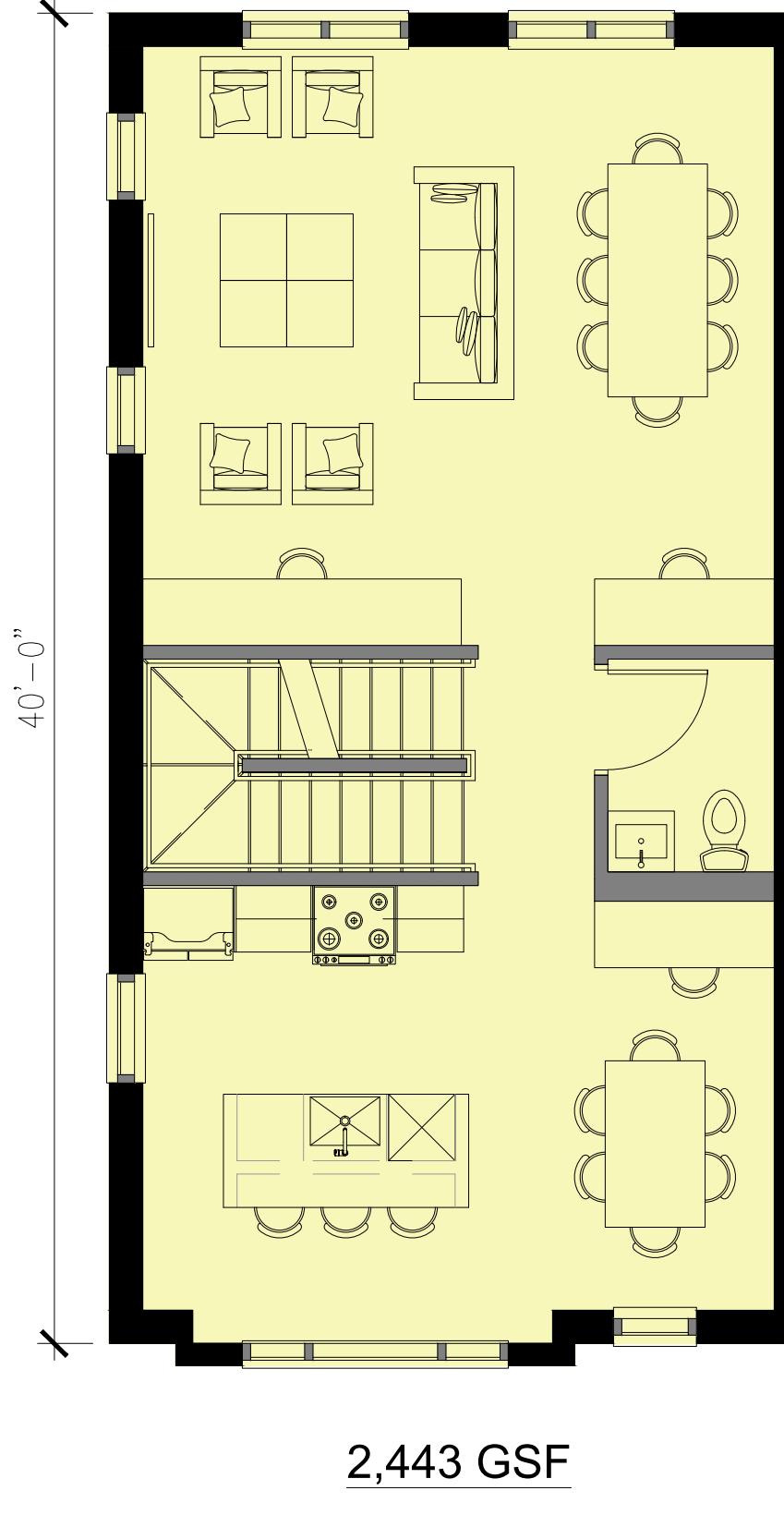
20'-0"  
LEVEL 3 - 808 GSF



20'-0"  
LEVEL 1 - 787 GSF

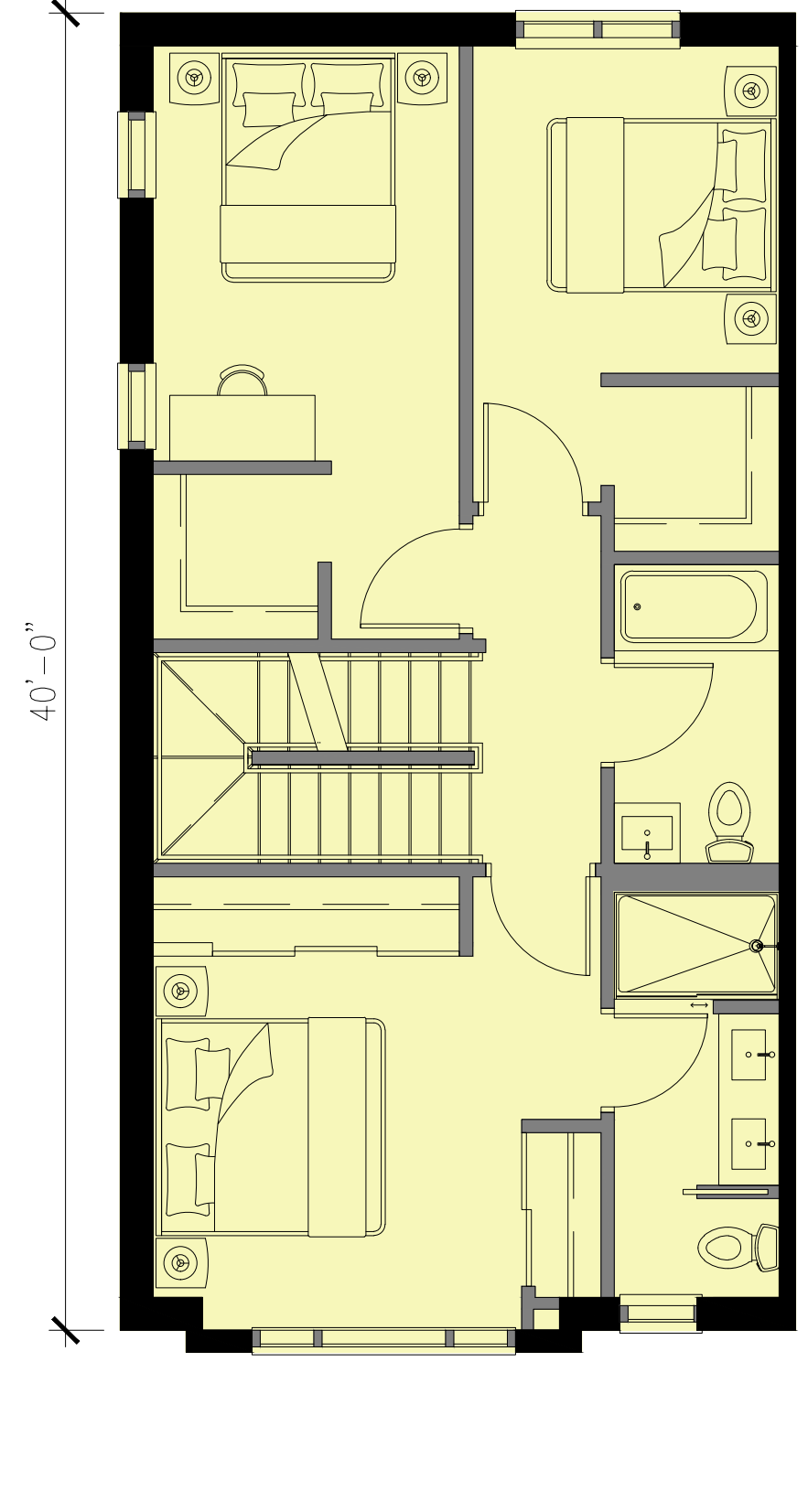


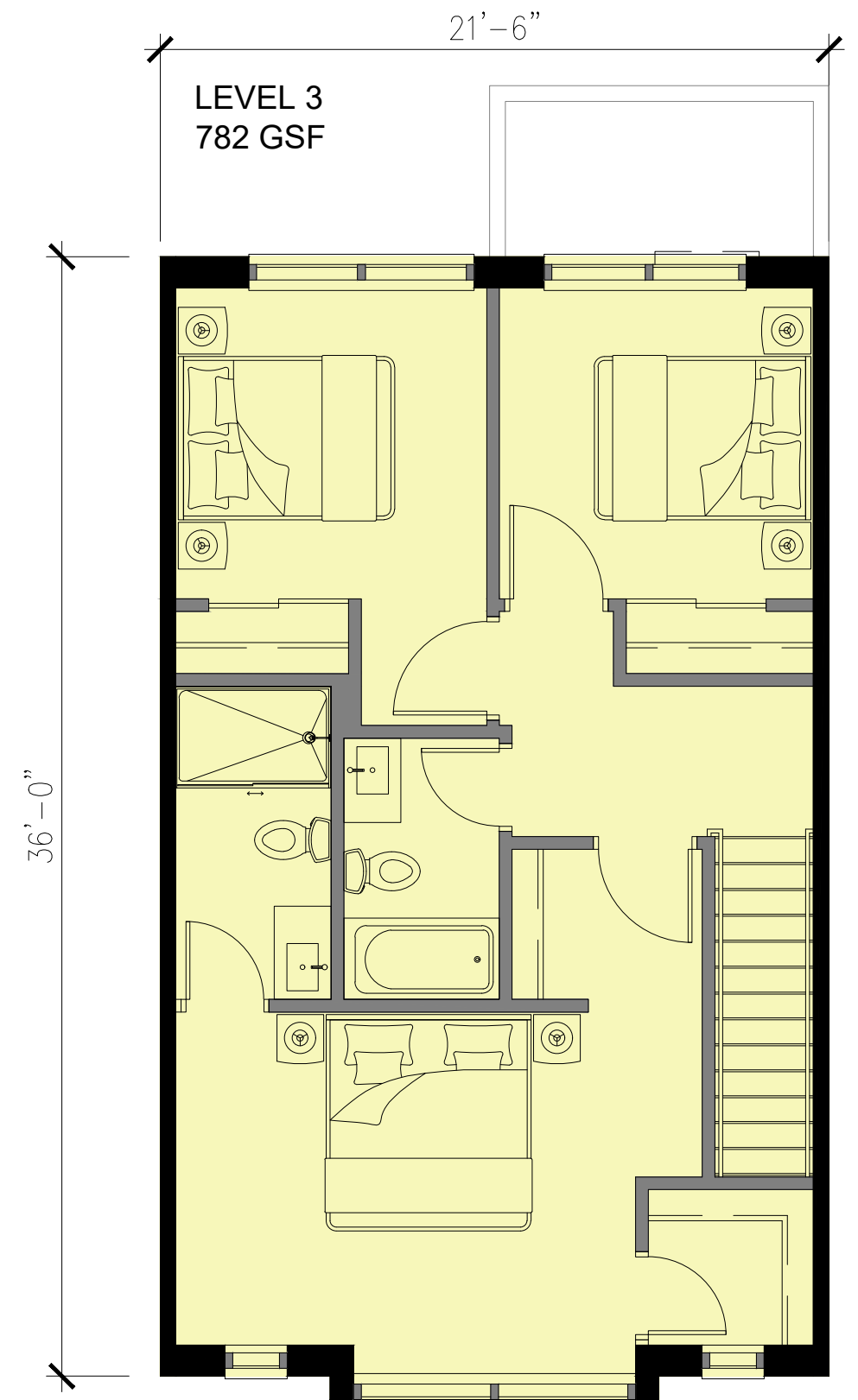
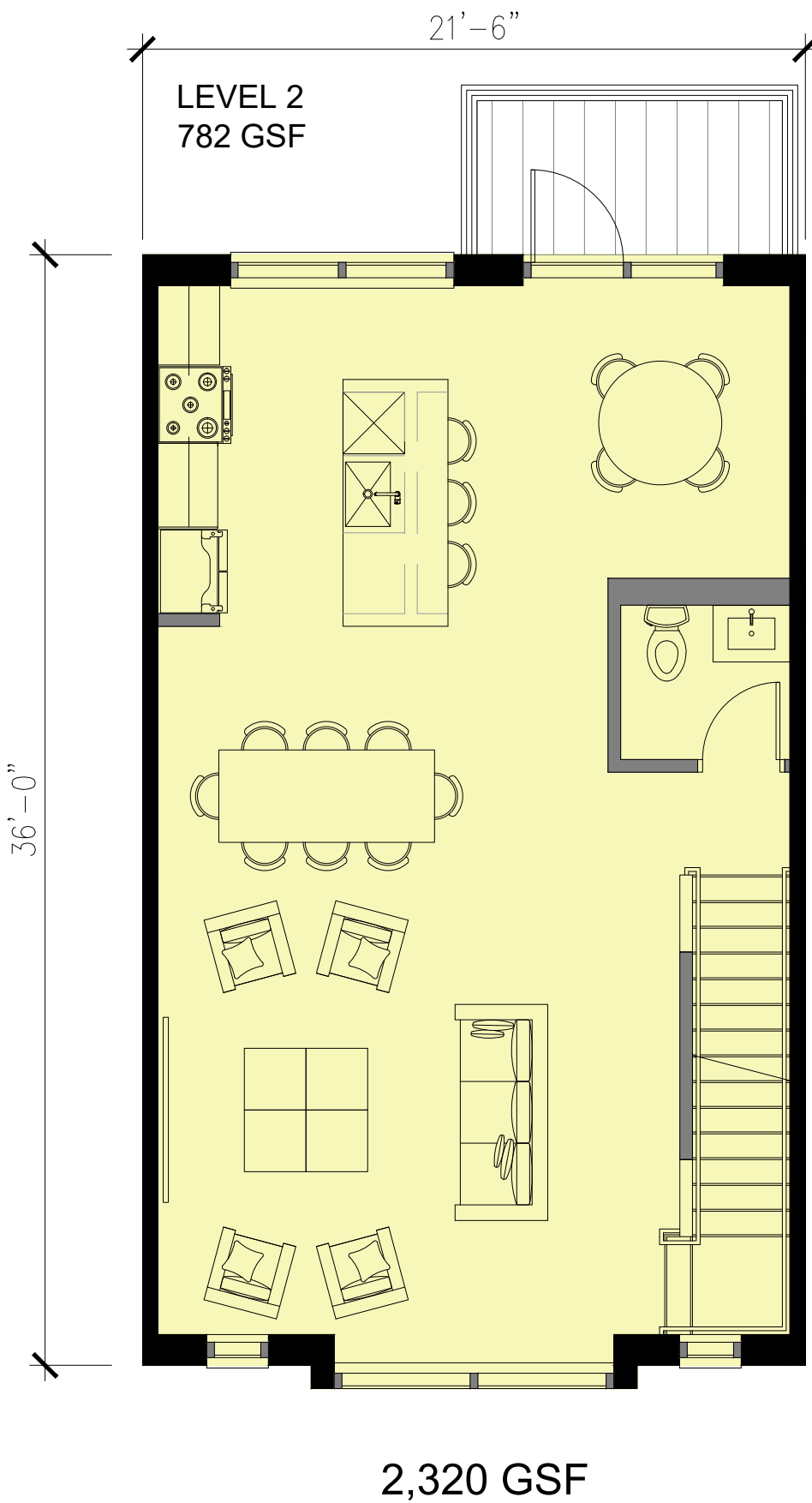
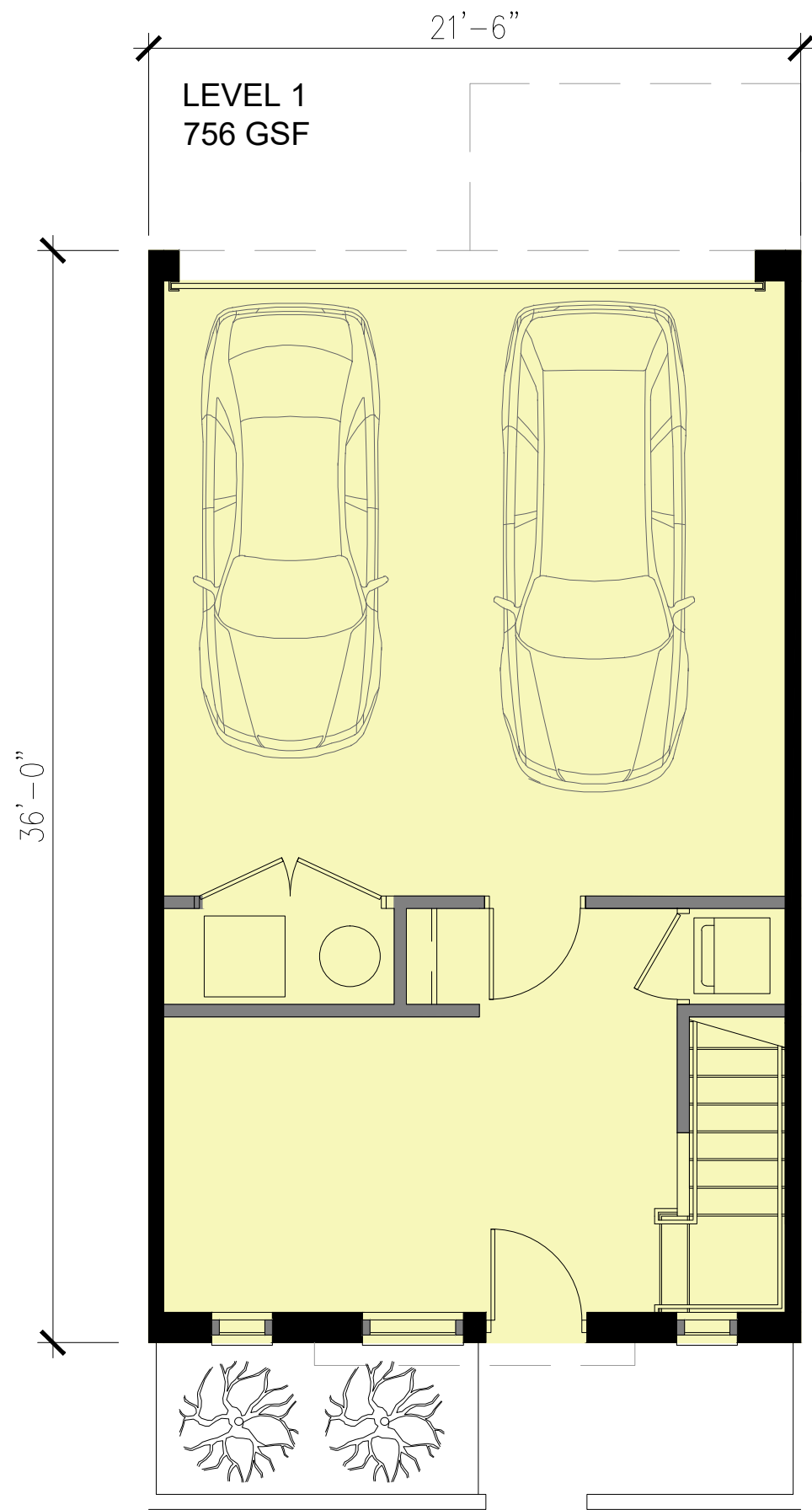
20'-0"  
LEVEL 2 - 828 GSF

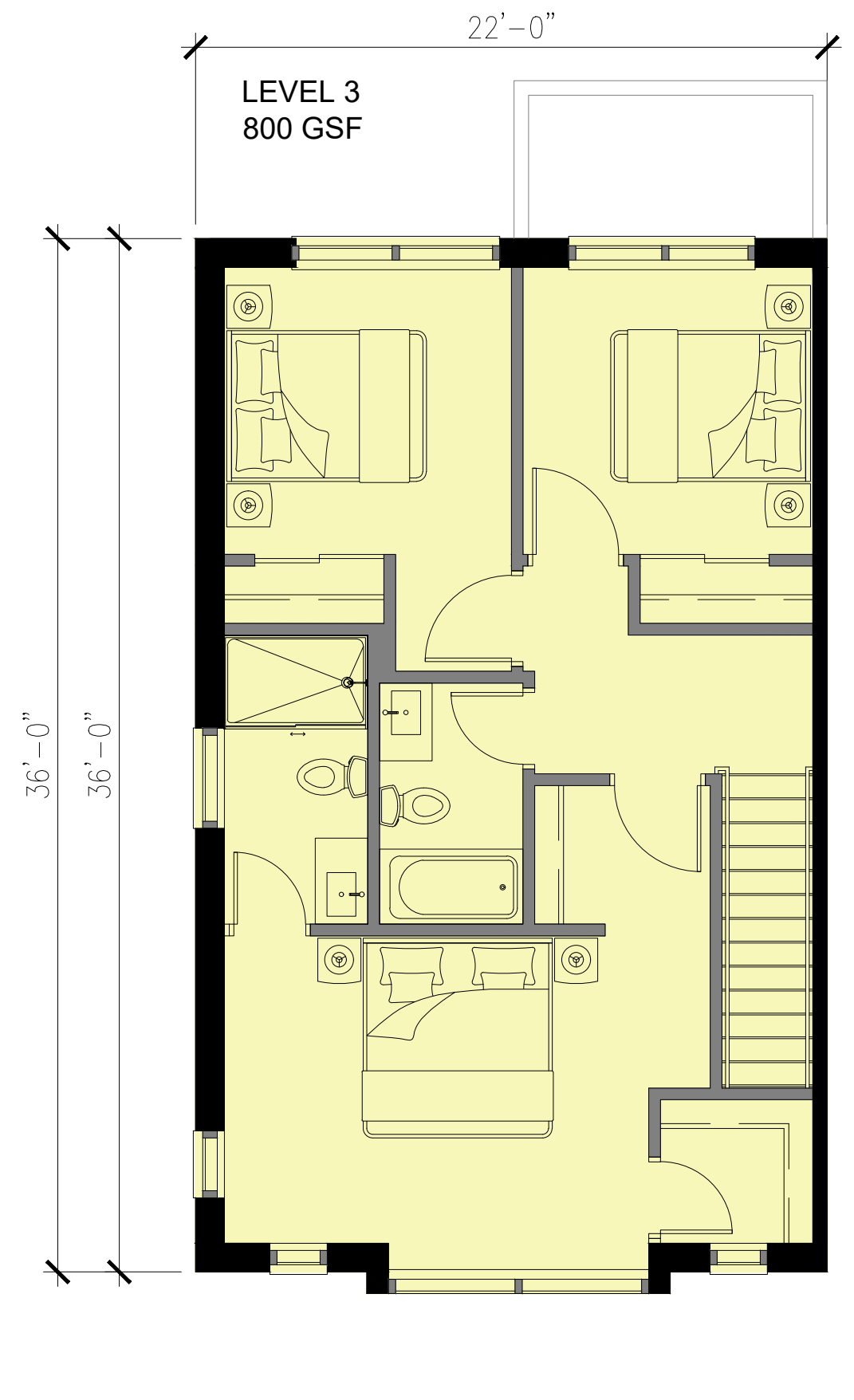
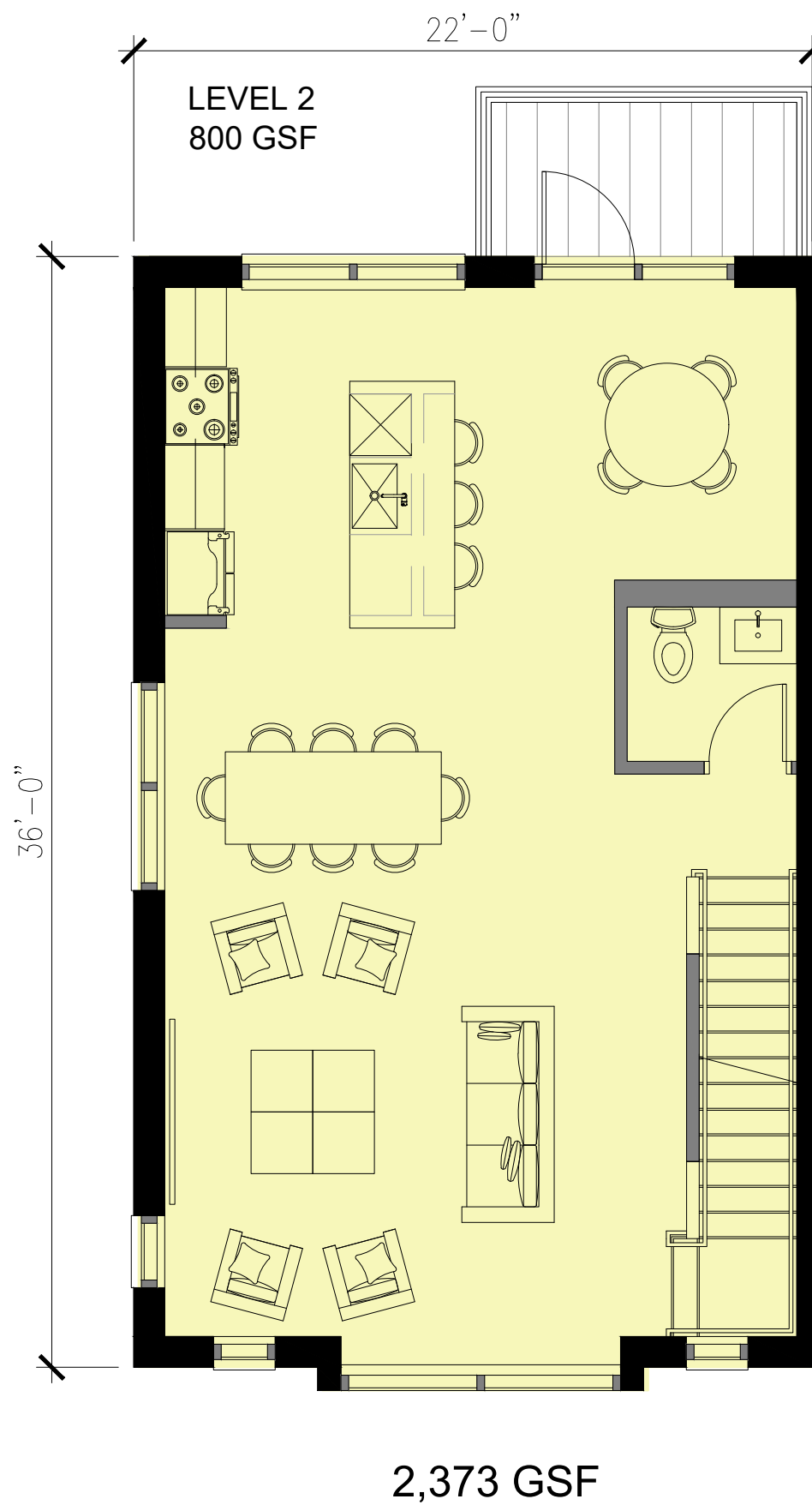
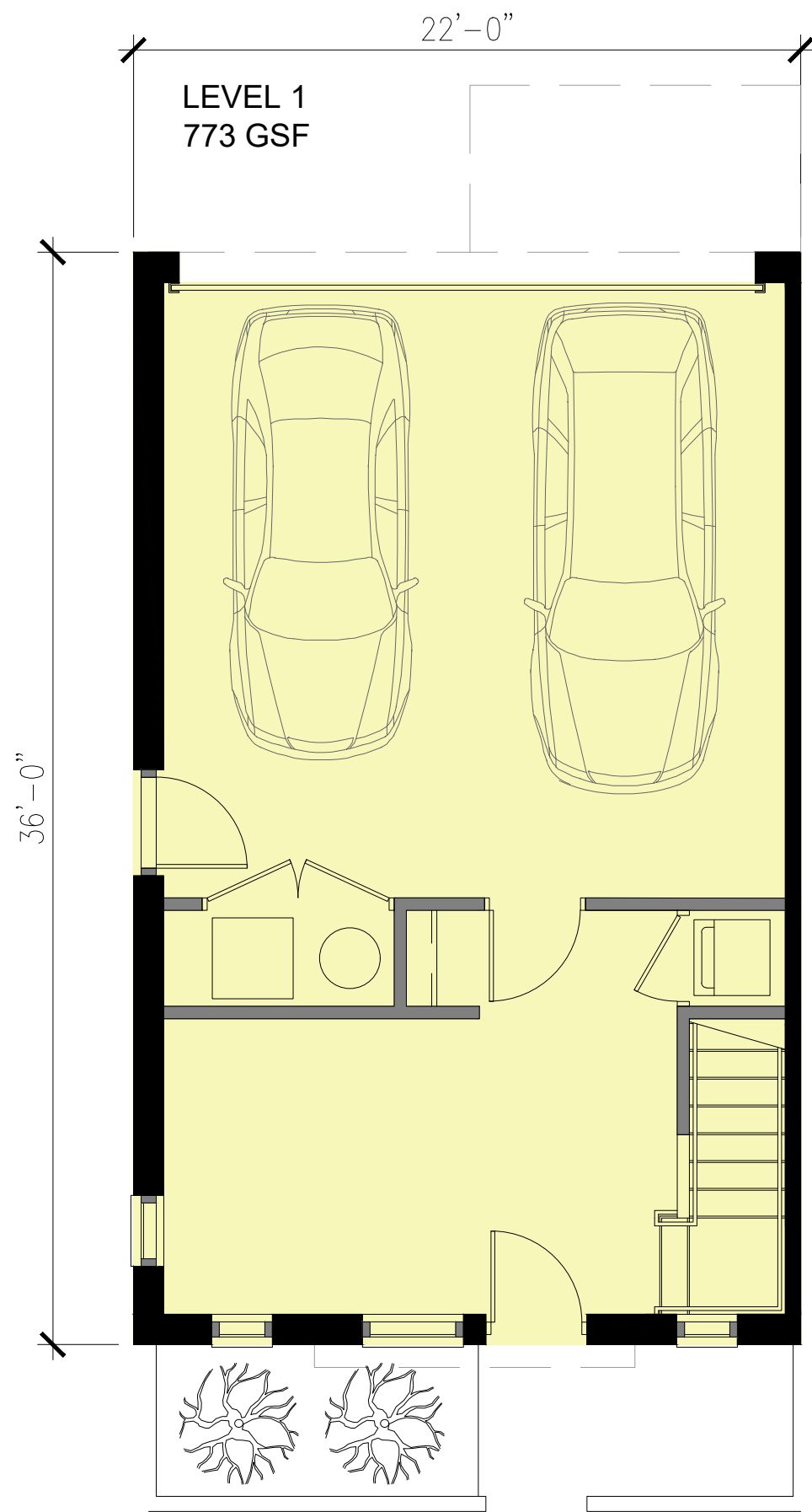


2,443 GSF

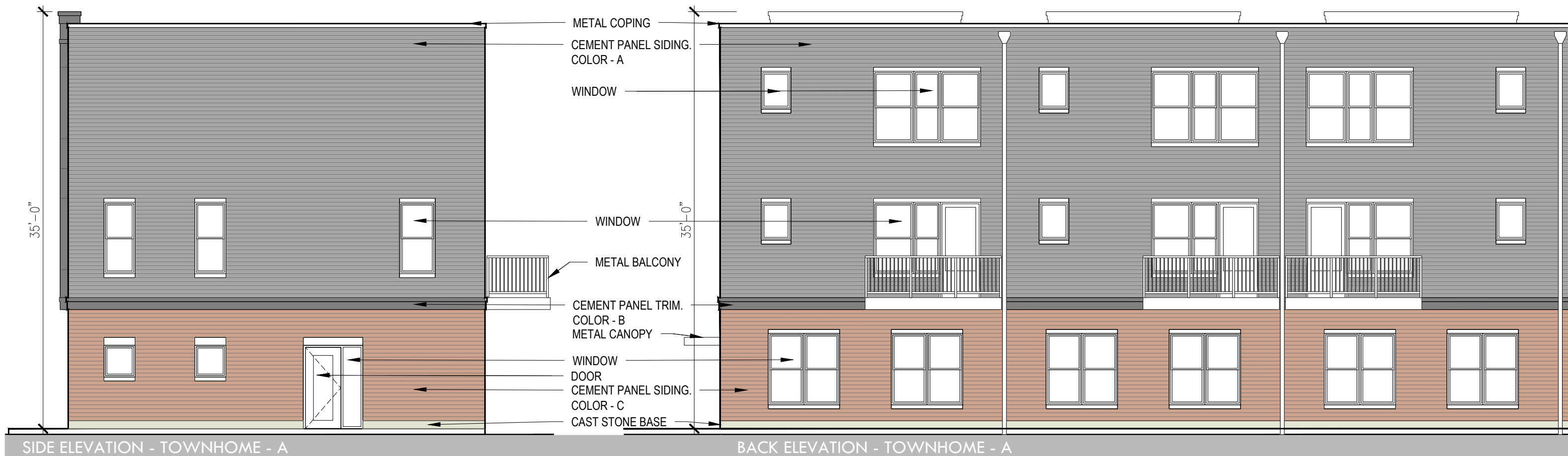
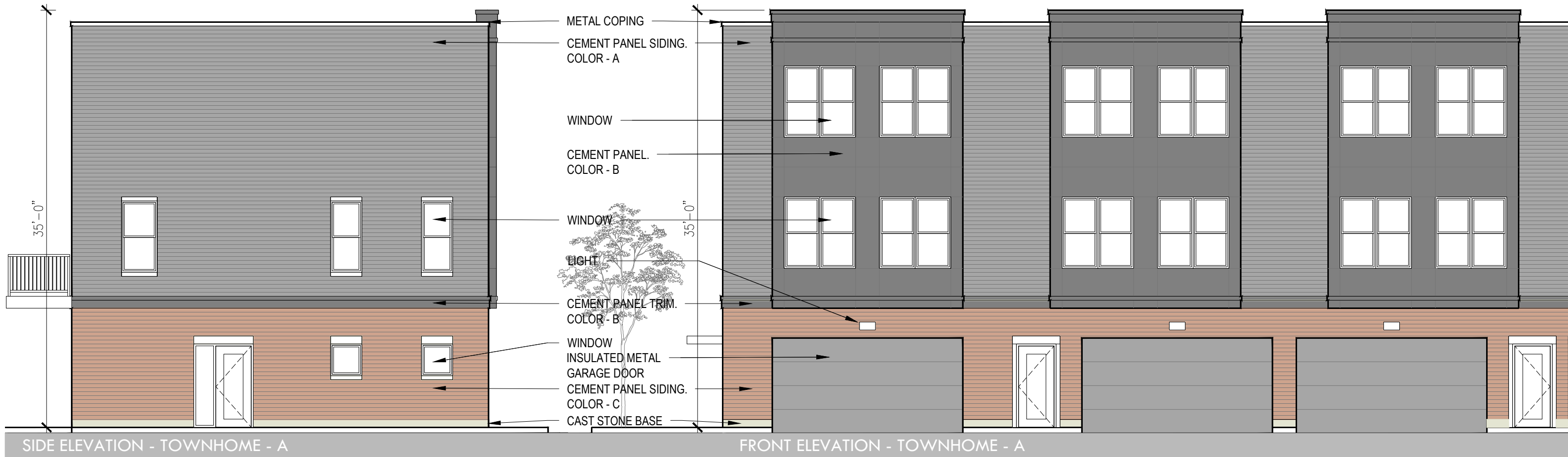
20'-0"  
LEVEL 3 - 828 GSF

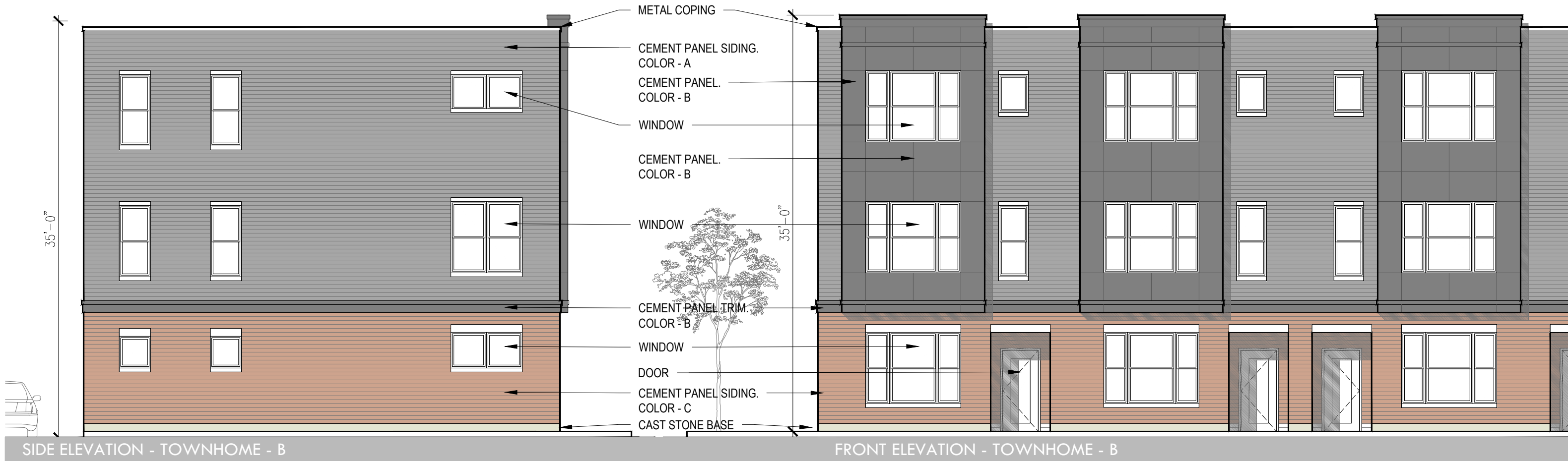






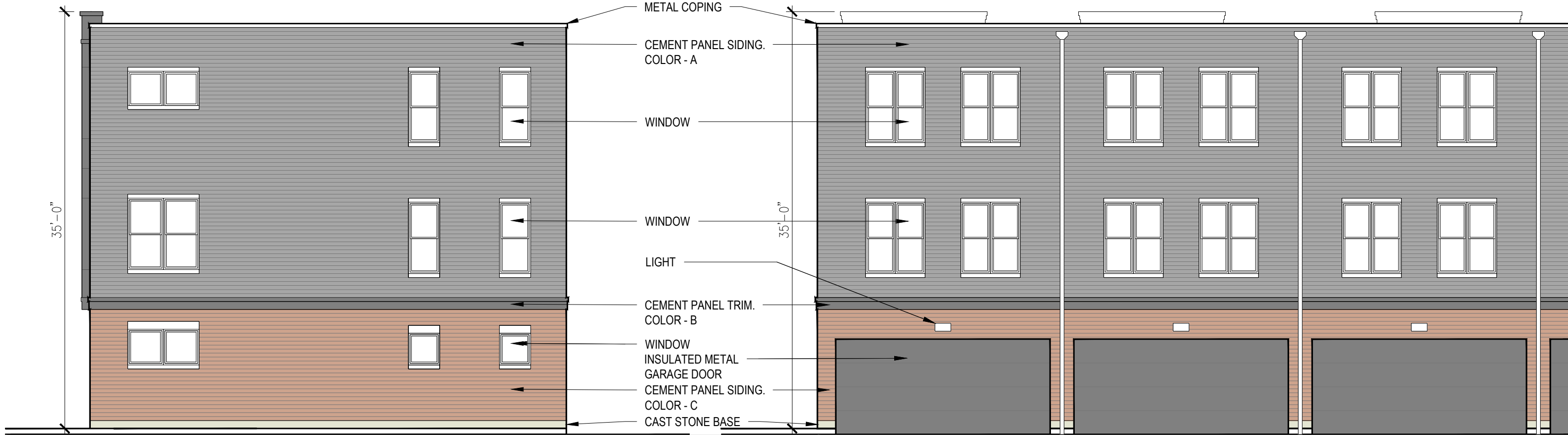
2,373 GSF





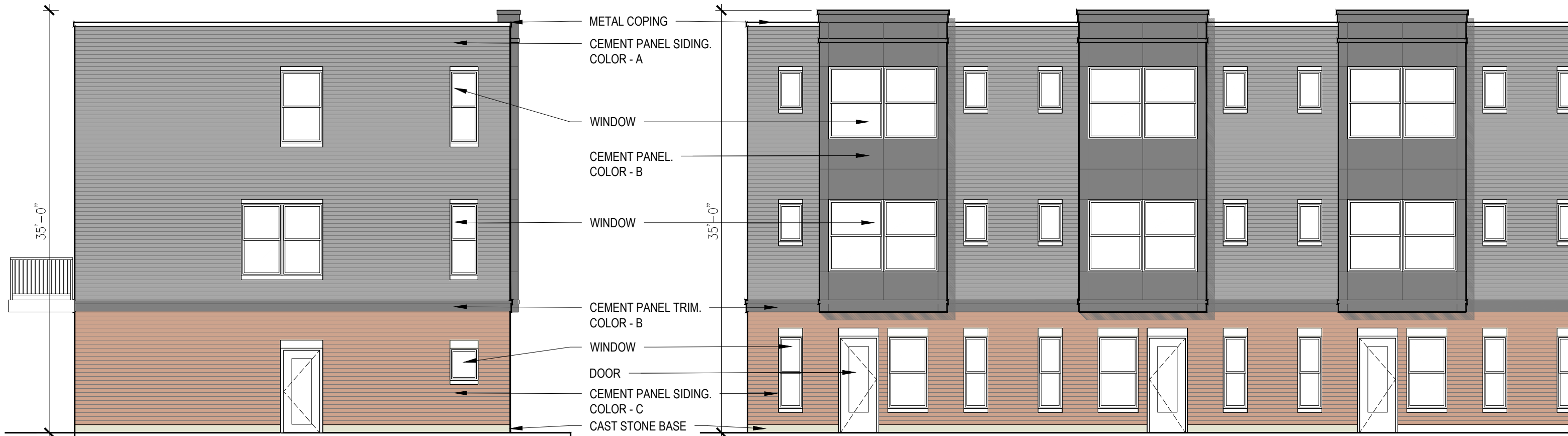
SIDE ELEVATION - TOWNHOME - B

FRONT ELEVATION - TOWNHOME - B



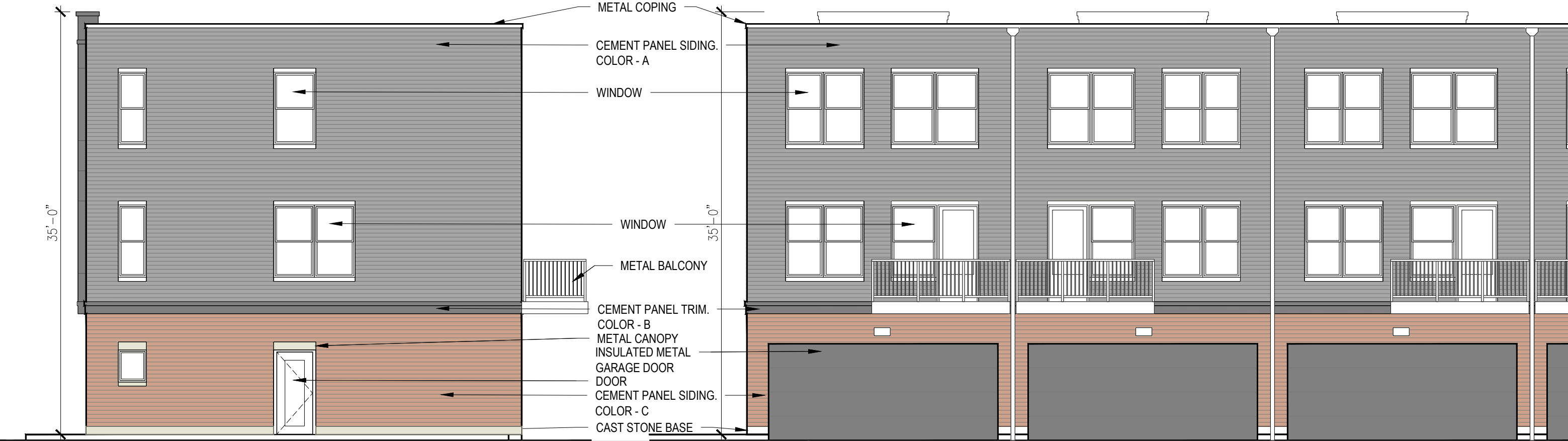
SIDE ELEVATION - TOWNHOME - B

BACK ELEVATION - TOWNHOME - B



SIDE ELEVATION - TOWNHOME - C

FRONT ELEVATION - TOWNHOME - C



SIDE ELEVATION - TOWNHOME - C

BACK ELEVATION - TOWNHOME - C

SITE AREA:		323,650.8 SF	7.43 acres																
APARTMENT BUILDING AND TOWNHOMES COMBINED - PHASE 1																			
FLR #	USE	# OF UNITS	GROSS Townhomes	GROSS Apartments	RENTABLE AREA	CORE/ MEP ETC	AVE UNIT	EFFIC.	LOBBY SHARED	# OF LOAD	# OF CARS	# OF CARS	OFFICE SHARED	OFFICE USEABLE	1 BED 1 BA	2 BED 2 BA	3 BED 2.5 BA	TOTAL	
	UPPER ROOF	Apartments & Townhomes		Apartment Building Only							Outside	Inside			Apartment Building	Apartment Building	Townhomes		
	R ROOF/ PENTHOUSE																		
3	APARTMENTS/ AMENITY	38		39,350 SF	34,372 SF	4,978 SF	905 SF	87.35%							2	36		38	
2	APARTMENTS/ AMENITY	38		39,350 SF	34,372 SF	4,978 SF	905 SF	87.35%							2	36		38	
1	LOBBY/ APARTMENTS/ OFFICE	56	94,966 SF	40,395 SF	14,944 SF	2,394 SF	879 SF	86.19%	2,248 SF	2	248	78	3,248 SF	17,561 SF	2	15	39	56	
		132	94,966 SF	119,095 SF	83,688 SF	12,350 SF			2,248 SF	2	248	78	3,248 SF	17,561 SF	6	87	39	132	
												2/per			4.55%	65.91%	29.55%	100.00%	
	SITE COVERAGE:	72,099 SF	22.28%										Parking Provided	4 per 1000	4 per 1000	1.5/DU	2/DU	2/DU	Required
													326	13.0	70.2	9.0	174.0	78.0	344

Area Chart - Phase 1

SITE AREA:		323,650.8 SF	7.43 acres																
APARTMENT BUILDING AND TOWNHOMES COMBINED - PHASE 2																			
FLR #	USE	# OF UNITS	GROSS Townhomes	GROSS Apartments	RENTABLE AREA	CORE/ MEP ETC	AVE UNIT	EFFIC.	LOBBY SHARED	# OF LOAD	# OF CARS	# OF CARS	OFFICE SHARED	OFFICE USEABLE	1 BED 1 BA	2 BED 2 BA	3 BED 2.5 BA	TOTAL	
	UPPER ROOF	Apartments & Townhomes		Apartment Building Only							Outside	Inside			Apartment Building	Apartment Building	Townhomes		
	R ROOF/ PENTHOUSE																		
3	APARTMENTS/ AMENITY	38		39,350 SF	34,372 SF	4,978 SF	905 SF	87.35%							2	36		38	
2	APARTMENTS/ AMENITY	38		39,350 SF	34,372 SF	4,978 SF	905 SF	87.35%							2	36		38	
1	LOBBY/ APARTMENTS/ OFFICE	75	94,966 SF	40,381 SF	32,496 SF	7,885 SF	903 SF	80.47%	2,248 SF	2	248	78	0 SF	0 SF	3	33	39	75	
		151	94,966 SF	119,081 SF	101,240 SF	17,841 SF			2,248 SF	2	248	78	0 SF	0 SF	7	105	39	151	
												2/per			4.64%	69.54%	25.83%	100.00%	
	SITE COVERAGE:	72,099 SF	22.28%										Parking Provided	4 per 1000	4 per 1000	1.5/DU	2/DU	2/DU	Required
													326	0.0	0.0	10.5	210.0	78.0	299

Area Chart - Phase 2



**BRICKYARDS**  
LOFTS & TOWNHOMES

12 August 2024  
24013  
AJM  
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MEMORANDUM TO: Paul Fishbein  
Baum Realty Group, LLC

FROM: Luay R. Aboona, PE, PTOE  
Principal

DATE: July 31, 2024

SUBJECT: Traffic Impact Statement  
Proposed Residential Development  
Deerfield, Illinois

This memorandum summarizes a trip generation and site access evaluation conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed residential development to be located in Deerfield, Illinois. The site, which currently contains an office building, is located at 155 N. Pfingsten Road.

The plans call for repurposing the building to provide 93 apartments, 39 townhomes, and approximately 21,000 square feet of office space. A future second phase for the development consist of converting the 21,000 square feet of office space to provide 19 additional apartment units. Access will continue to be provided off the east-west access road that extends between Pfingsten Road and Deer Lake Road on the south side of the site. **Figure 1** shows an aerial view of the site while **Figure 2** illustrates the site plan.

## Existing Traffic Conditions

*Pfingsten Road* is a north-south major collector roadway north of Lake Cook Road and a minor arterial roadway south of Lake Cook Road that in the vicinity of the site provides one travel lane in each direction. At its unsignalized intersection with Estate Drive, Pfingsten Road provides an exclusive left-turn lane, exclusive through lane, and an exclusive right-turn lane on the northbound and southbound approaches. At its unsignalized intersection with Fountain View Drive, Pfingsten Road provides an exclusive an exclusive left-turn lane and an exclusive through lane on the northbound approach and an exclusive through lane and exclusive right-turn lane on the southbound approach. At its unsignalized intersection with the east-west access road, Pfingsten Road provides a shared through/right-turn lane on the northbound approach and an exclusive left-turn and exclusive through lane on the southbound approach. Pfingsten Road is under the jurisdiction of the Village of Deerfield north of Lake Cook Road and under the jurisdiction of the Illinois Department of Transportation (IDOT) south of Lake Cook Road. Pfingsten Road carries an annual average daily traffic (AADT) of 9,300 vehicles (IDOT 2023) and has a posted speed limit of 30 miles per hour.



Aerial View of Site

Figure 1



Site Plan

Figure 2

*Deer Lake Road* is a north-south local roadway that provides one travel lane in each direction. At its unsignalized intersection with the east-west access road, Deer Lake Road provides a shared left-turn/through/right-turn lane on the northbound and southbound approaches. Deer Lake Road is under the jurisdiction of the Village of Deerfield.

*Estate Drive* is an east-west local roadway that provides one travel lane in each direction. At its unsignalized intersection with Pfingsten Road, Estate Drive provides a shared left-turn/through/right-turn lane on the eastbound approach and a shared left-turn/through/right-turn lane on the westbound approach. Both approaches are under stop sign control. Estate Drive is under the jurisdiction of the Village of Deerfield.

*Fountain View Drive* is a north-south local roadway that provides one travel lane in each direction. At its unsignalized intersection with Pfingsten Road, Fountain View Drive provides a shared left-turn/right-turn lane on the eastbound approach and is under stop sign control. Fountain View Drive is under the jurisdiction of the Village of Deerfield.

## Traffic Count Data

Based on available traffic count data for the area, the following summarizes daily and peak hour traffic volumes for the study area

- Based on available daily traffic volumes from IDOT, Pfingsten Road carries an AADT volume of 9,300 vehicles.
- Based on traffic count data collected by KLOA, Inc. at the intersection of Lake Cook Road with Pfingsten Road in 2023 the following is determined:
  - During the weekday morning peak hour the intersection carries a total of 2,976 vehicles
  - During the weekday evening peak hour the intersection carries a total of 4,221 vehicles
  - During the weekday morning peak hour, Pfingsten Road north of Lake Cook Road carries a two-way traffic volume of 725 vehicles
  - During the weekday evening peak hour, Pfingsten Road north of Lake Cook Road carries a two-way traffic volume of 902 vehicles
- Based on traffic count data collected by KLOA, Inc. at the intersection of Lake Cook Road with Deer Lake Road in 2023 the following is determined:
  - During the weekday morning peak hour the intersection carries a total of 3,507 vehicles
  - During the weekday evening peak hour the intersection carries a total of 3,843 vehicles

## Development Vehicular Access

The site, as previously indicated, is located at 155 N. Pfungsten Road. Access to the site will continue to be provided via the existing access system which consists of the following:

- A full movement access drive on Pfungsten Road which provides a shared left-turn/right-turn lane on the westbound approach and is under stop sign control. Turning movements onto the access drive from Pfungsten Road are accommodated via an exclusive southbound left-turn lane providing approximately 120 feet of storage and approximately 200 feet of taper.
- A connection to Deer Lake Road which provides a shared left-turn/through/right-turn lane on the eastbound approach that is under stop-sign control. It should be noted that Deer Lake Road has a signalized intersection with Lake Cook Road located approximately 950 feet south of the site.

The site will provide a surface parking lot with 268 parking spaces and each townhome will have a garage accommodating two vehicles. The parking fields serving the site will have three connections to the east-west access roadway that connects Pfungsten Road to Deer Lake Road.

## Development Traffic Generation

The estimates of traffic to be generated by the proposed development were based on the proposed land use and number of units and trip generation rates published by the Institute of Transportation Engineers (ITE) in its 11<sup>th</sup> Edition of the *Trip Generation Manual*. The total trips anticipated with the first phase of the development for the weekday morning and evening peak hours as well as the weekday daily traffic volumes are shown in **Table 1**, and the total trips anticipated with the second phase of the development are shown in **Table 2**.

## Trip Generation Comparison

As previously indicated, the site was previously occupied by an approximately 119,265 square foot office space. The estimate of traffic generated by the building was estimated using data published in the ITE *Trip Generation Manual*, 11<sup>th</sup> Edition. The estimated trips generated by the existing land use for the weekday morning and evening peak hours as well as the weekday daily traffic volumes are summarized in **Table 3**.

Based on a review of Tables 1 through 3, the first phase of the development will generate approximately 50 percent fewer trips during the peak hours and approximately 30 percent fewer trips on a daily basis than the current office building would have generated at full occupancy. With the second phase and the replacement of the office component with apartments, the development will continue to generate less traffic than the office building during the peak hours (approximately 70 percent less) and on a daily basis (approximately 40 percent less).

Table 1

## ESTIMATED PHASE 1 DEVELOPMENT-GENERATED TRAFFIC VOLUMES

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Weekday Daily Trips
		In	Out	Total	In	Out	Total	
221	Multifamily Housing (93 units)	7	22	29	22	15	37	397
215	Single Family Attached Housing (39 Units)	4	11	15	11	8	19	247
710	General Office Building (21,000 s.f.)	38	6	44	8	37	45	298
<b>Total</b>		<b>49</b>	<b>39</b>	<b>88</b>	<b>41</b>	<b>60</b>	<b>101</b>	<b>942</b>

Table 2

## ESTIMATED PHASE 2 DEVELOPMENT-GENERATED TRAFFIC VOLUMES

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Weekday Daily Trips
		In	Out	Total	In	Out	Total	
221	Multifamily Housing (112 units)	9	29	38	27	17	44	488
215	Single Family Attached Housing (39 Units)	4	11	15	11	9	19	247
<b>Total</b>		<b>13</b>	<b>40</b>	<b>53</b>	<b>38</b>	<b>26</b>	<b>63</b>	<b>735</b>

Table 3

## ESTIMATED PREVIOUS DEVELOPMENT-GENERATED TRAFFIC VOLUMES

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Weekday Daily Trips
		In	Out	Total	In	Out	Total	
710	General Office Building 119,265 s.f.	171	24	195	33	159	192	1,350

## Traffic Evaluation

When the estimated daily and peak hour traffic volumes anticipated to be generated by the first phase of the proposed development are compared to the existing traffic volumes on the surrounding roadway network, the following was determined:

- The development will increase the daily traffic on Pfingsten Road by approximately five percent.
- The development will increase the peak hour two-way traffic volumes on Pfingsten Road by approximately five percent.
- The development will increase the peak hour traffic volumes at the intersection of Lake Cook Road with Pfingsten Road by approximately one percent.
- The development will increase the peak hour traffic volumes at the intersection of Lake Cook Road with Deer Lake Road by less than one percent.

As such, the proposed development will have a limited impact on the operations of the adjacent roadway network and intersections.

It should be noted that the above evaluation is conservative as it assumes that all of the traffic from the proposed development will be new. As discussed earlier, the traffic that will be generated by the proposed development will be less when compared to the traffic generated by the existing office use on site. As such, the redevelopment will reduce the amount of traffic added to the adjacent roadway system resulting in a lower traffic impact.

## Parking Evaluation

As previously stated, the first phase of the proposed development will have approximately 93 apartment units, 39 townhomes, and approximately 21,000 square feet of office space. The site will provide a total of 268 surface parking spaces to be utilized by the apartment units and office space. Each townhome will provide a garage with two spaces (two spaces per unit). A second phase for the development will convert the 21,000 square feet of office space to an additional 19 apartment units.

In order to determine the projected parking demand of the proposed development, the parking demand was estimated based on the Village of Deerfield Village Code requirements and parking rates published in the Institute of Transportation Engineers' (ITE) *Parking Generation Manual*, 5th Edition. Based on the two methodologies, the parking demand for the proposed development is as follows:

### *Parking Requirements of Proposed Development per Village Code*

- Multifamily Housing (93 units)
  - 1 Bedroom (6 units) – 1.5 parking spaces per unit
  - 2 Bedroom (87 units) – 2 parking spaces per unit

- Single Family Attached Housing (39 units)
  - 2 parking spaces per unit
- General Office Building (21,000 s.f.)
  - 4 parking spaces per 1,000 s.f.

Based on the above and the requirements of the Village of Deerfield, the apartment/office building will be required to provide 268 parking spaces and the townhomes are required to provide 78 parking spaces. As such, the proposed parking supply of 346 parking spaces will meet the Village's parking requirements. It should be noted that the office portion of the development is required to provide 84 parking spaces.

The second phase of the development will provide 19 apartment units requiring 38 parking spaces (two spaces per unit). Therefore, the conversion of the office space to additional parking units will lower the parking requirement for the site.

*ITE Parking Generation Manual*

- Multifamily Housing – 2+ BR (Mid-Rise) – Land Use Code 221 (93 units)
  - 1.09 parking spaces per unit – 101 parking spaces (Weekday Monday-Friday)
  - 1.03 parking spaces per unit – 96 parking spaces (Saturday)
- Single-Family Attached Housing – Land Use Code 215 (39 units)
  - 1.36 parking spaces per unit – 53 parking spaces (Weekday Monday-Friday)
  - 1.31 parking spaces per unit – 51 parking spaces (Saturday)
- General Office Building – Land Use Code 710 (21,000 s.f.)
  - 1.86 parking spaces per 1,000 s.f. – 39 parking spaces (Weekday Monday-Friday)

Based on the above, the proposed apartment/office building will be required to provide 21 parking spaces for a total requirement of 175 spaces, which can be accommodated by the proposed 268 surface parking spaces.

The second phase of the development will provide 19 apartment units requiring 21 parking spaces for a total requirement of 175 spaces, which can be accommodated by the proposed 268 surface parking spaces.

As such, the proposed 268 surface parking spaces will be adequate in accommodating the parking generated by the apartment/office building and the two spaces per townhome unit will be adequate in accommodating the townhome parking demand.

## Conclusion

Based on the preceding evaluation, the following is concluded:

- The proposed development will have excellent accessibility to the adjacent area roadways given the direct access to Pfingsten Road and given a connection to Deer Lake Road which has a signalized intersection with Lake Cook Road.
- The estimated number of trips generated by the proposed development will be less than what was generated by the office building that occupies the site, especially during the peak hours.
- The roadway system serving the site has adequate capacity to accommodate the traffic that will be generated by the proposed development.
- The proposed parking supply will be adequate in meeting the parking needs of the proposed development under both Village of Deerfield and ITE parking requirements.