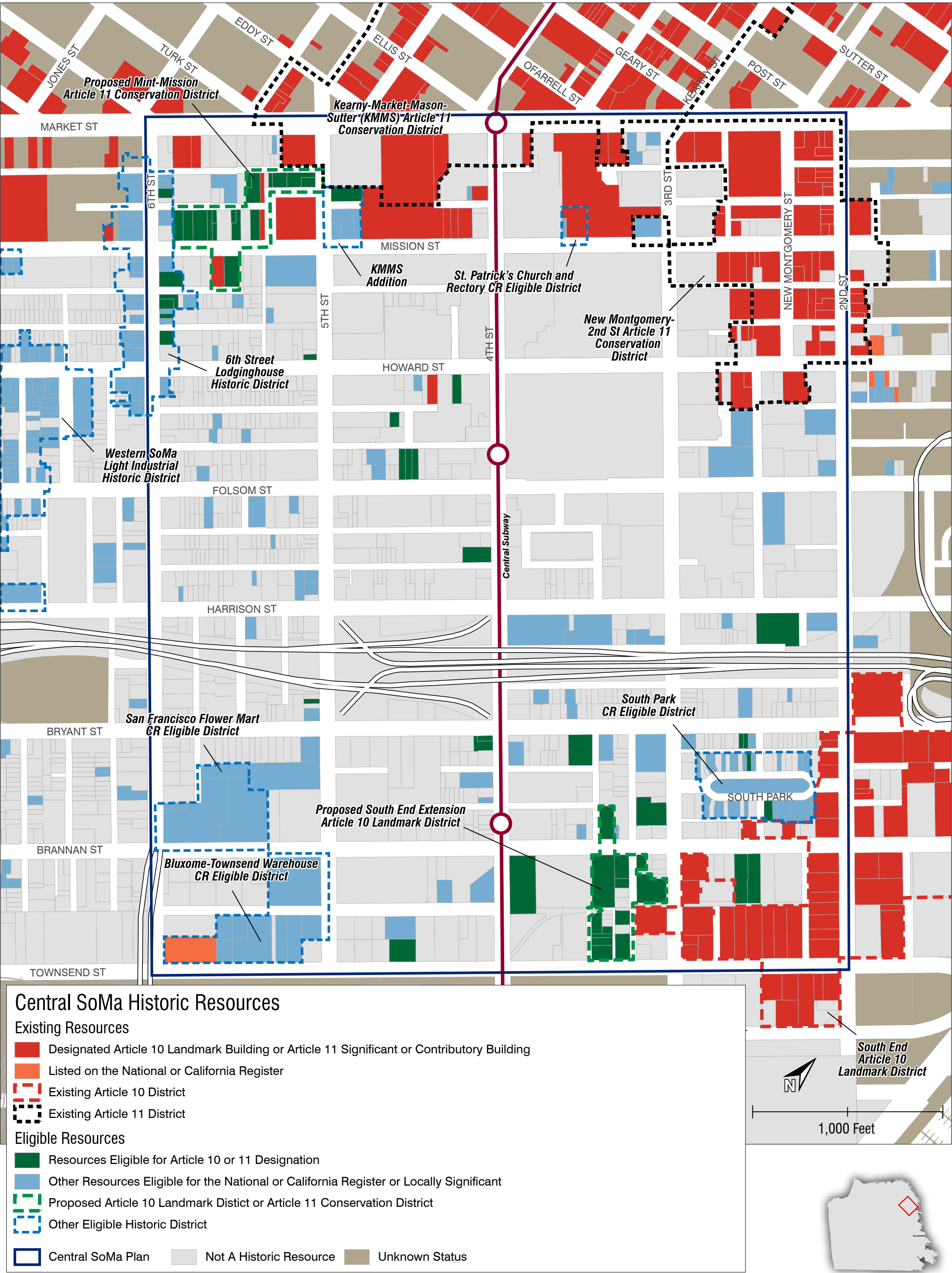


EXISTING BUILDINGS

A primary goal of the Central SoMa Plan is to maintain the diversity of buildings types within the Plan Area while protecting historic resources for future generations.

To prevent demolition or insensitive alterations to significant architectural resources, the Central SoMa Plan proposes that the City should designate significant buildings, affording them additional protections and economic incentives (such as the right to sell their unused development potential).



The buildings in red and orange are existing locally designated significant buildings. The buildings in green would receive their local designation as significant buildings through the Central SoMa Plan.



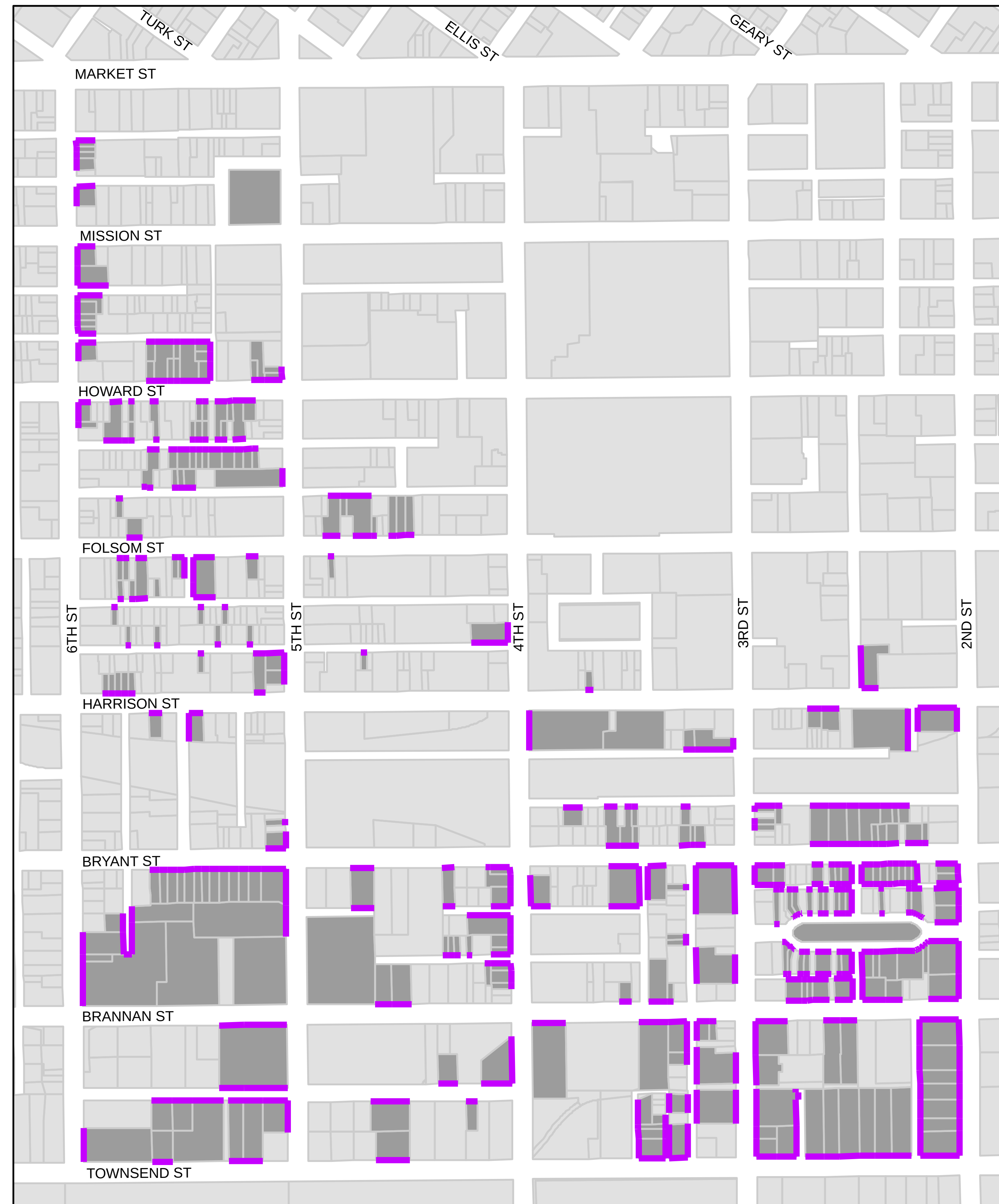
The buildings to the left and above are examples of individually significant buildings.



To help maintain the diversity of buildings types outside of the downtown, the Central SoMa Plan proposes to prohibit the merger of parcels of land that:

1. Contain either a historic building or one that warrants special consideration, and
2. Would involve street frontages of less than 200 feet

The Plan also proposes to provide economic incentives to new development that would preserve existing buildings by allowing them to count against their “TDR” requirement.



Central SoMa
Prohibition on Lot Mergers

Affected Parcel
Affected Frontage (< 200')

1,000 Feet



The buildings above are examples of building on lots where lot mergers would be prohibited.

Vision

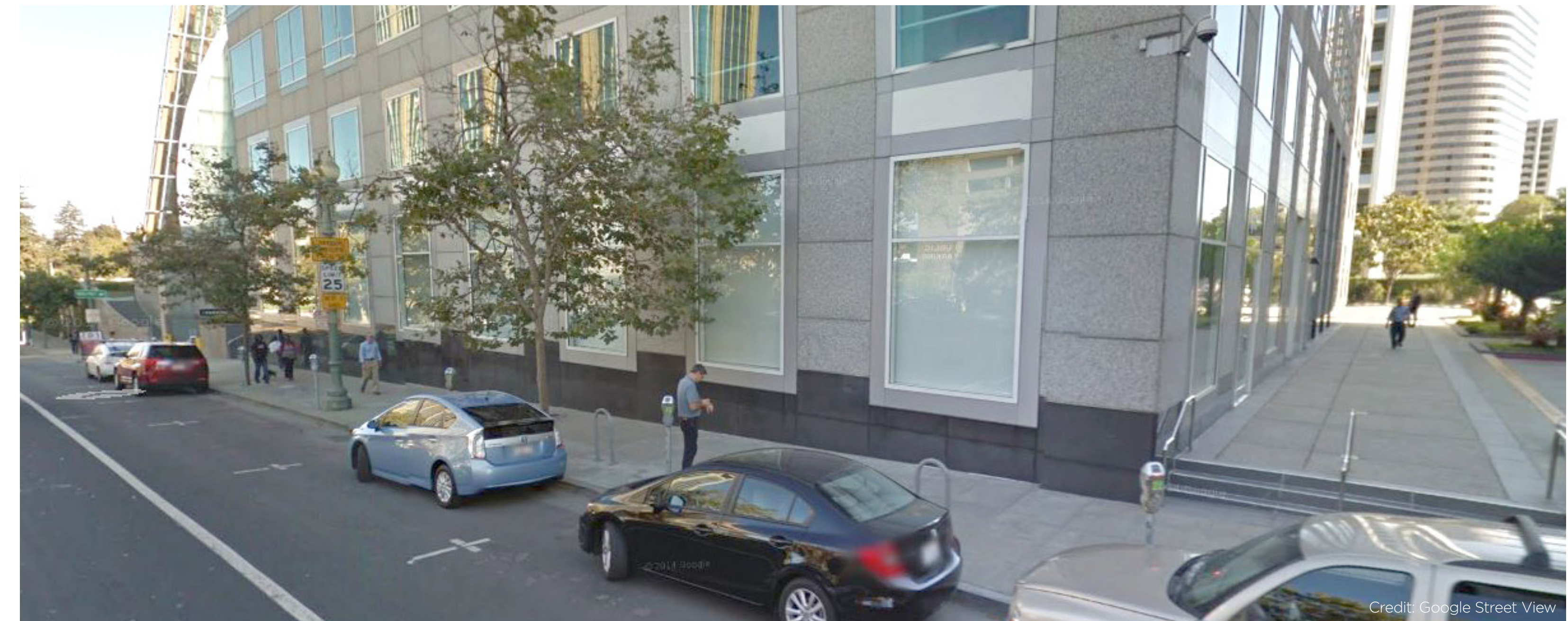
The vision of the Central SoMa Plan is to provide a safe, accessible, and attractive walking environment for all streets of the Plan Area by requiring that the ground floor of new buildings successfully engage with the street and outside world.

Without Regulations

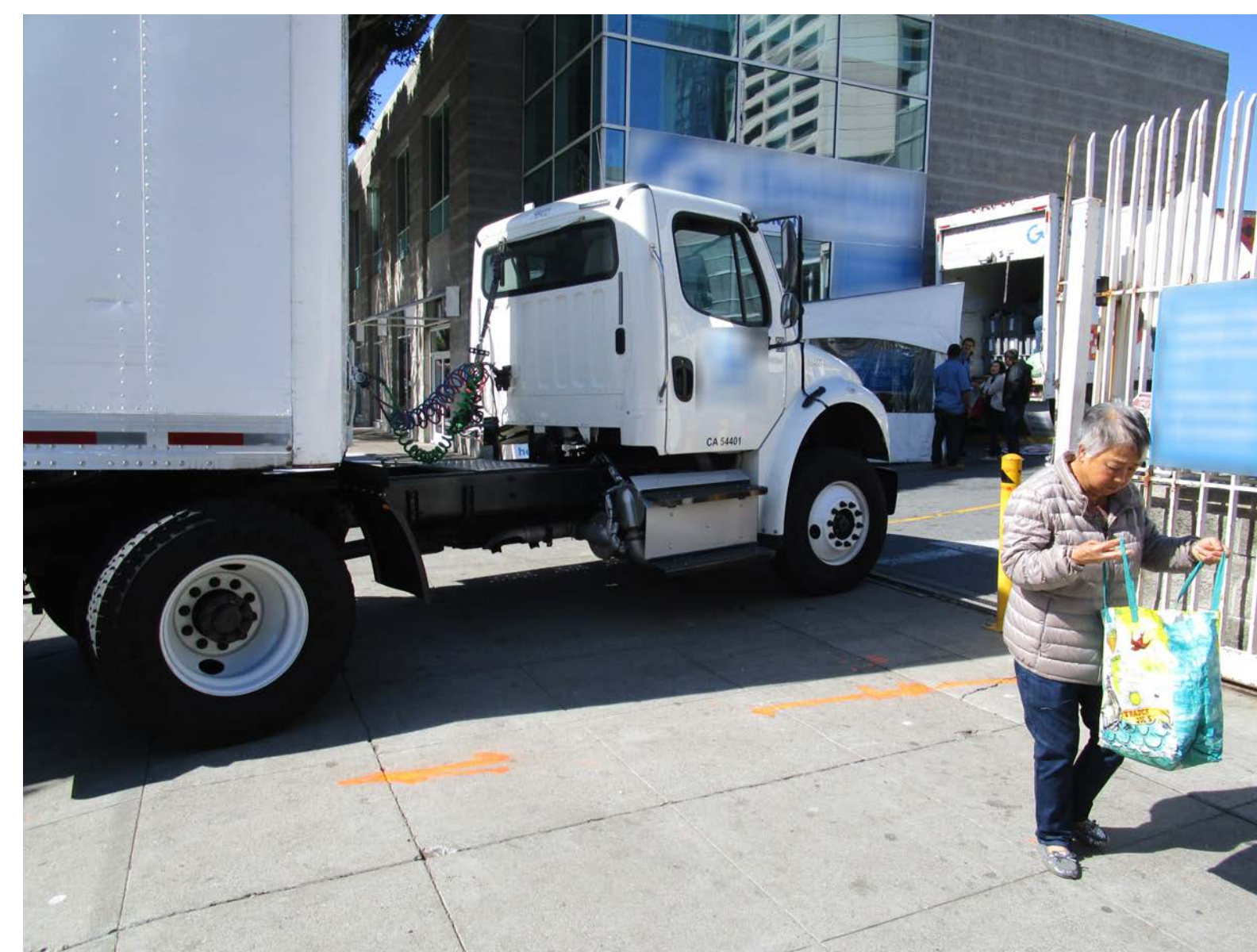
In the past, the City did not regulate the design of ground floors. In many cases, this led to buildings that ignored any association with the street, creating the kinds of undesirable conditions that people on foot tend to avoid.



For people walking, bare walls and ground floors dominated by non-public uses (such as offices) are dull and disconnecting.



Credit: Google Street View



When there are too many driveways, people on foot are endangered or disrupted by constant vehicular movement across the sidewalk.



Credit: Google Street View

When buildings are set back from the sidewalk, people on foot feel more exposed and less safe.

Existing Regulations

In recent years, the City has enacted numerous regulations to improve the interaction between the ground floor of buildings and their surrounding areas, leading to safer and more active streets.



Clear views inside and high ceilings create a sense of interest, connection, and spaciousness.



Limiting curb cuts and requiring buildings to extend to the property line creates an uninterrupted and safe environment for people walking.

Proposed Controls

The Central SoMa Plan proposes to implement the following strategies:

1. Prohibit offices fronting the street
2. Require active commercial and/or community-serving uses along 4th Street from Bryant north to Folsom Street, and from Folsom Street west to 6th Street.
3. Require new privately-owned public open spaces (POPOS) to be lined with active commercial and/or community-serving uses.
4. Require PDR uses on the ground floor of new office buildings. Allow PDR and arts uses to count as “active commercial,” as long as they have transparent storefronts similar to those required of retail.
5. Prohibit new curb cuts on Folsom, Brannan, Townsend, Second, 3rd, 4th, and 6th Streets within the Plan Area (as well as the south side of Howard Street if it continues as a one-way street). Additionally, a Conditional Use Permit would be required for new curb cuts along Harrison, Bryant, and Fifth Streets, as well as Howard if it becomes a two-way street.

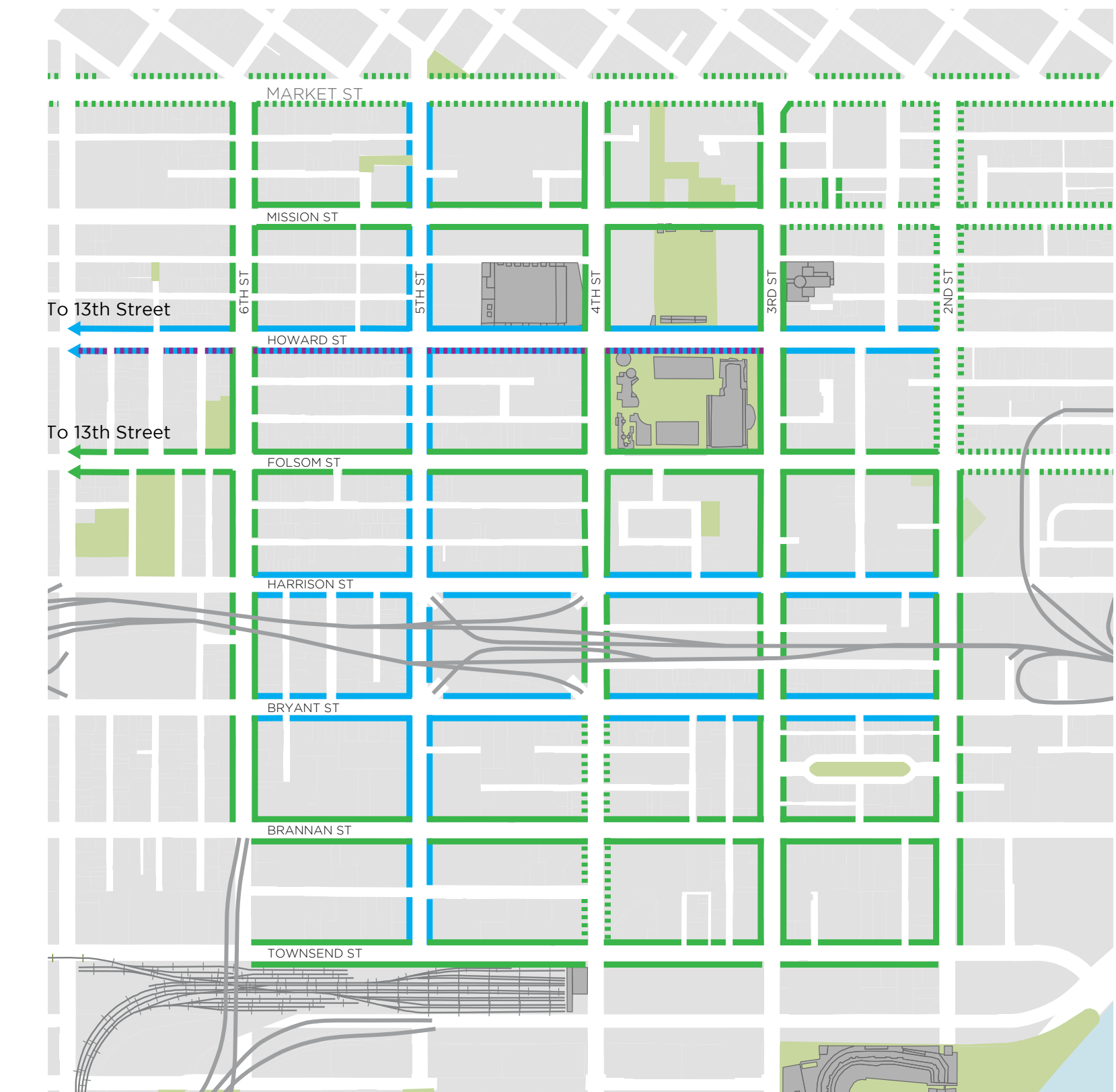


An existing POPOS in Central SoMa (303 2nd Street) lined with active uses.



Many PDR uses benefit from actively engaging the street – especially those with a retail component.

In the Plan Area, curb cuts will either be banned or require a Conditional Use permit on all the major streets.



- New curb cuts currently prohibited
- Proposed prohibition on new curb cuts
- Proposed Conditional Use for new curb cuts
- Proposed Howard Street south side, 3rd to 11th Street:
New curb-cuts prohibited on one-way blocks
New curb-cuts require Conditional Use on two-way blocks.

Vision

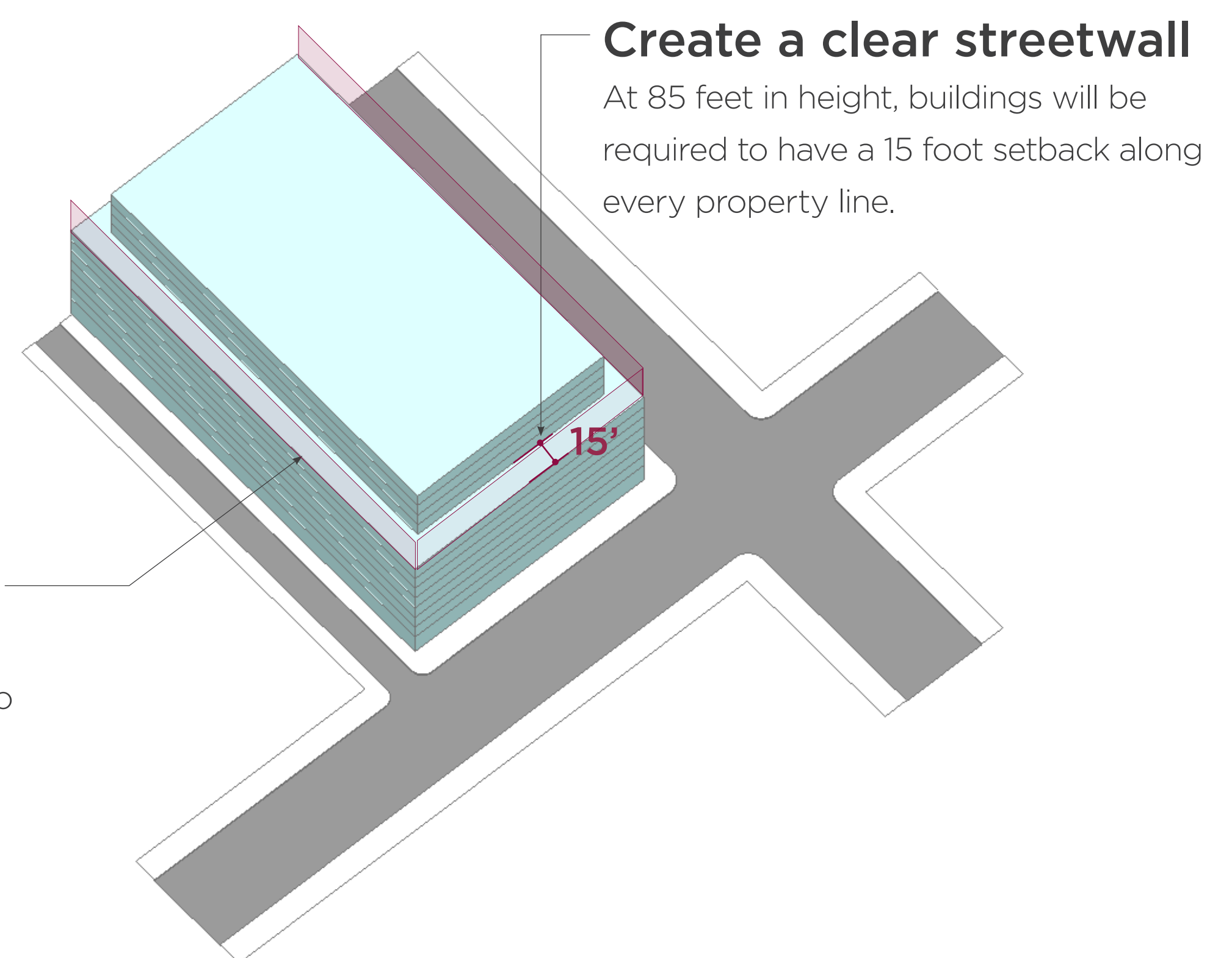
The vision of the Central SoMa Plan is to support substantial density while maintaining significant light, air, and sun access to the streets.

Mid-rise Development

Central SoMa is primarily designed to be a mid-rise district, with buildings of 85 feet to 160 feet. To support this density while still supporting light, air, and sun access to the streets, the Plan proposes to:

Simultaneously provide openness to the sky and architectural diversity

Between 85 to 160 feet in height, buildings will be required to substantially reduce what is visible from the street. Individual buildings will have architectural flexibility on how to achieve this goal.

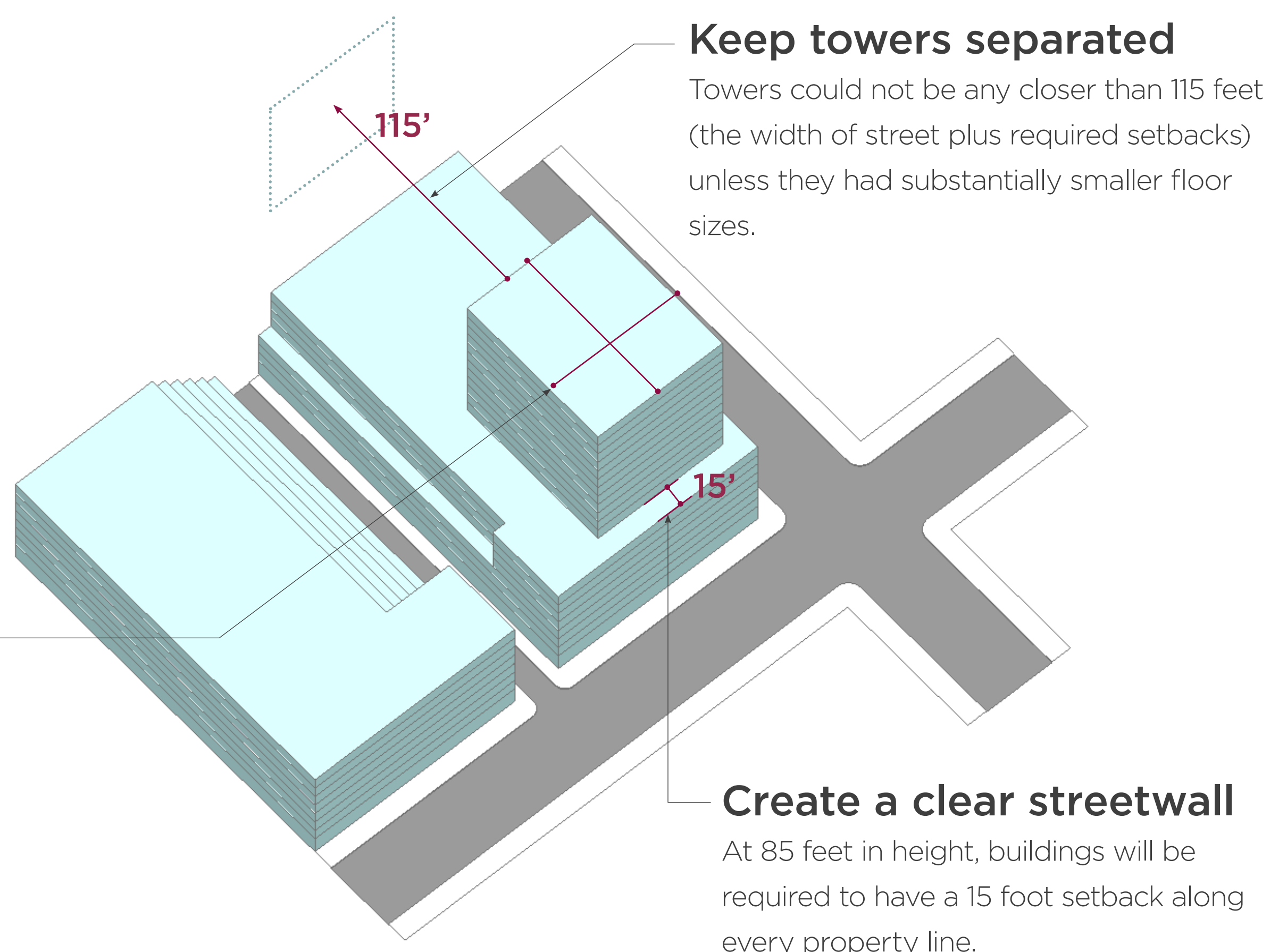


High-rise Development

Central SoMa will allow a handful of buildings taller than 160 feet, to punctuate important intersections (such as at the Caltrain station). To support height at these locations while still supporting light, air, and sun access to the streets, the Plan proposes to:

Ensure thinner towers than in downtown

The maximum floor size will be 15,000 square feet for office uses, and residential and hotel uses could not exceed 12,000 square feet. The maximum length of any side of a tower will be 150 feet.



Alleys and Small Streets

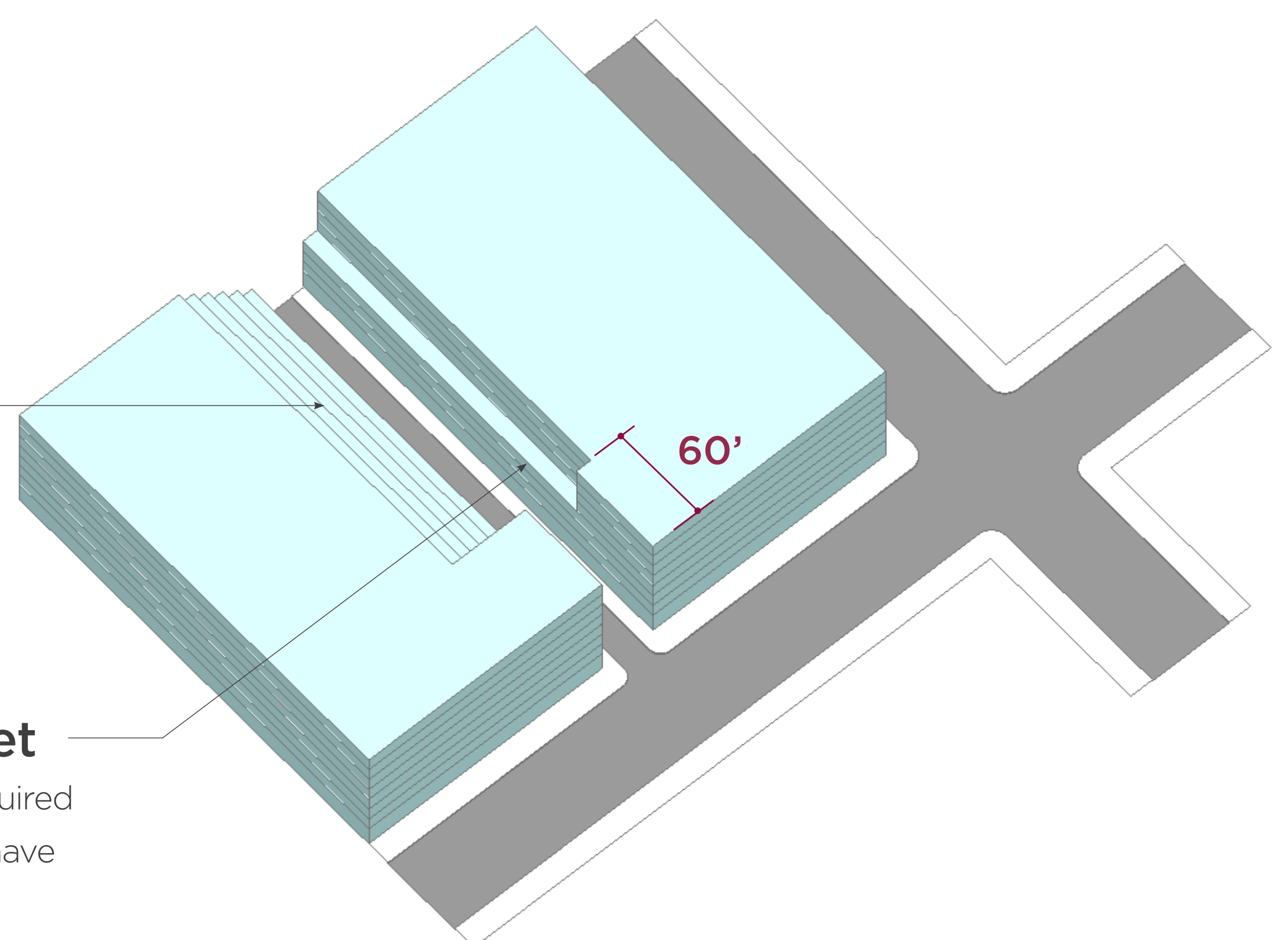
Small streets and alleys in Central SoMa offer special neighborhood character. To maintain this character by supporting light, air, and sun access to these streets, the Plan proposes to:

Ensure sun access to the north side of the street

Development on the south side of small streets and alleys will be required to step back at a 45 degree angle from the street (in keeping with current Planning Code requirements). This requirement will be extended to the south side of "north-south" alleys in addition to "east-west" alleys.

Ensure light and air to the south side of the street

Development on the north side of small streets and alleys buildings will be required to substantially reduce what is visible from the street. Individual buildings will have architectural flexibility on how to achieve this goal



How does it look from the street?

The proposed bulk controls result in more sky and light at the street level.

Mid-rise Development



No bulk controls



Draft Plan Controls:
Setbacks only



Current Proposal:
Setbacks with apparent mass reductions



What's different?

More sunlight

Sculpted building tops shape and provide more light on the ground

How does it look from the street?

The proposed bulk controls result in more sky and light at the street level.

High-rise Development



No bulk controls



Draft Plan/Current Proposal:
Setbacks and floorplate area controls

Alleys and Small Streets



No bulk controls



Draft Plan/Current Proposal:
Sun angle and setbacks

What kinds of buildings would result?

The *apparent mass reduction* encourages architects to be more creative in how they reduce what is visible from the street

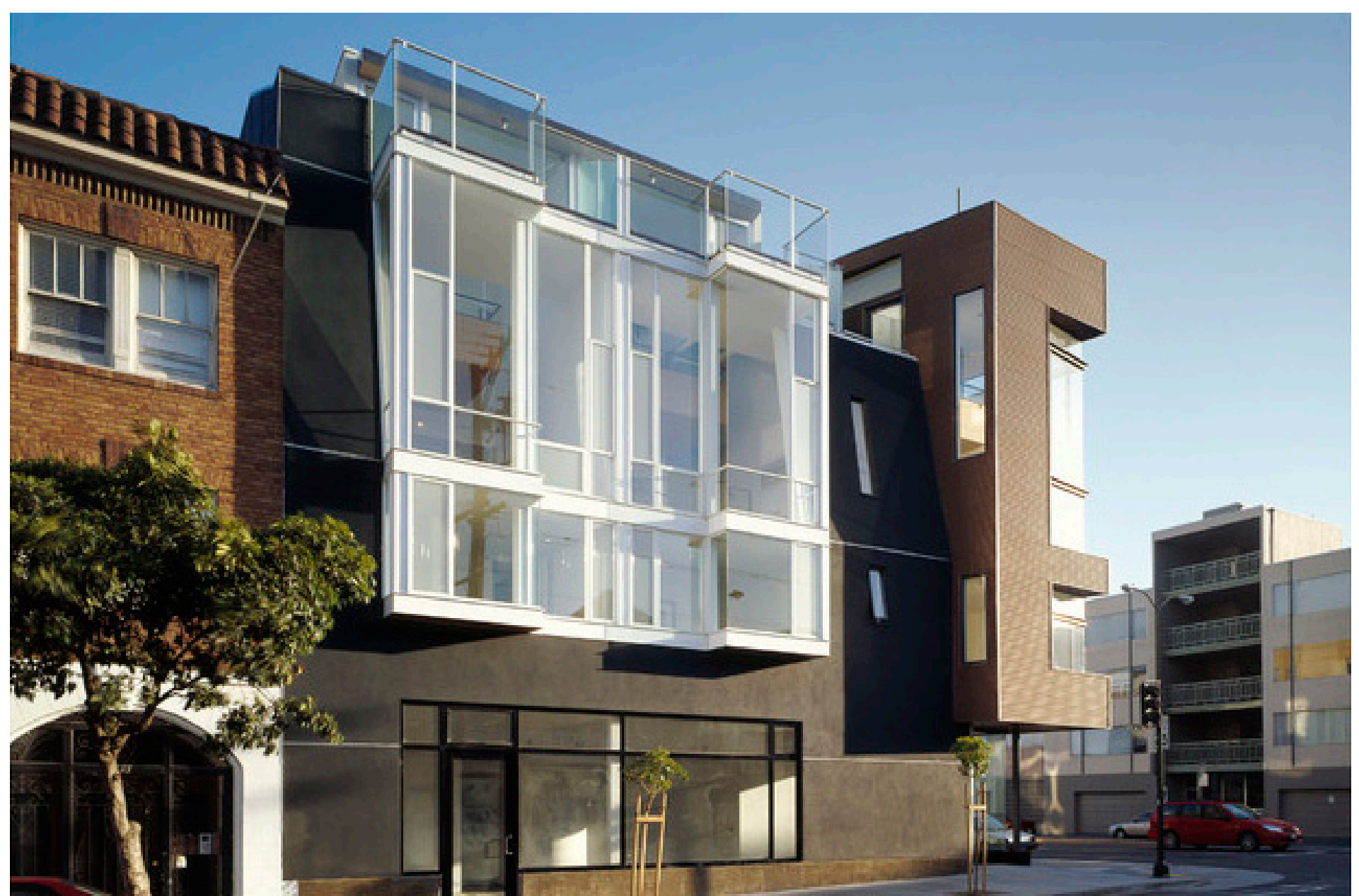


This project includes both high-rise and low-rise development. The large setback and mass reduction allows the new buildings to reflect the scale of the historic ones across the street.

Many projects on Market Street vary their front facades providing both a beautiful and interesting scene for pedestrians and significant interior space for offices and retail.

This project adds a new building to a historic one by pushing the mass farther back and giving deference to its street facade and character.

Large setbacks help break long walls



The apparent mass reduction allows architects flexibility so that the tops of the buildings do not always need to be reduced by itself. The sculpting at the top can connect creatively to other aspects of the facade.

While the corner is strongly pronounced, this project layers the top floors back in interesting and shaped ways, opening up the edge to the street.

This project breaks the scale of the top of the building to give a finer sense of its residential use.

Smaller sculpting creates elegant building tops



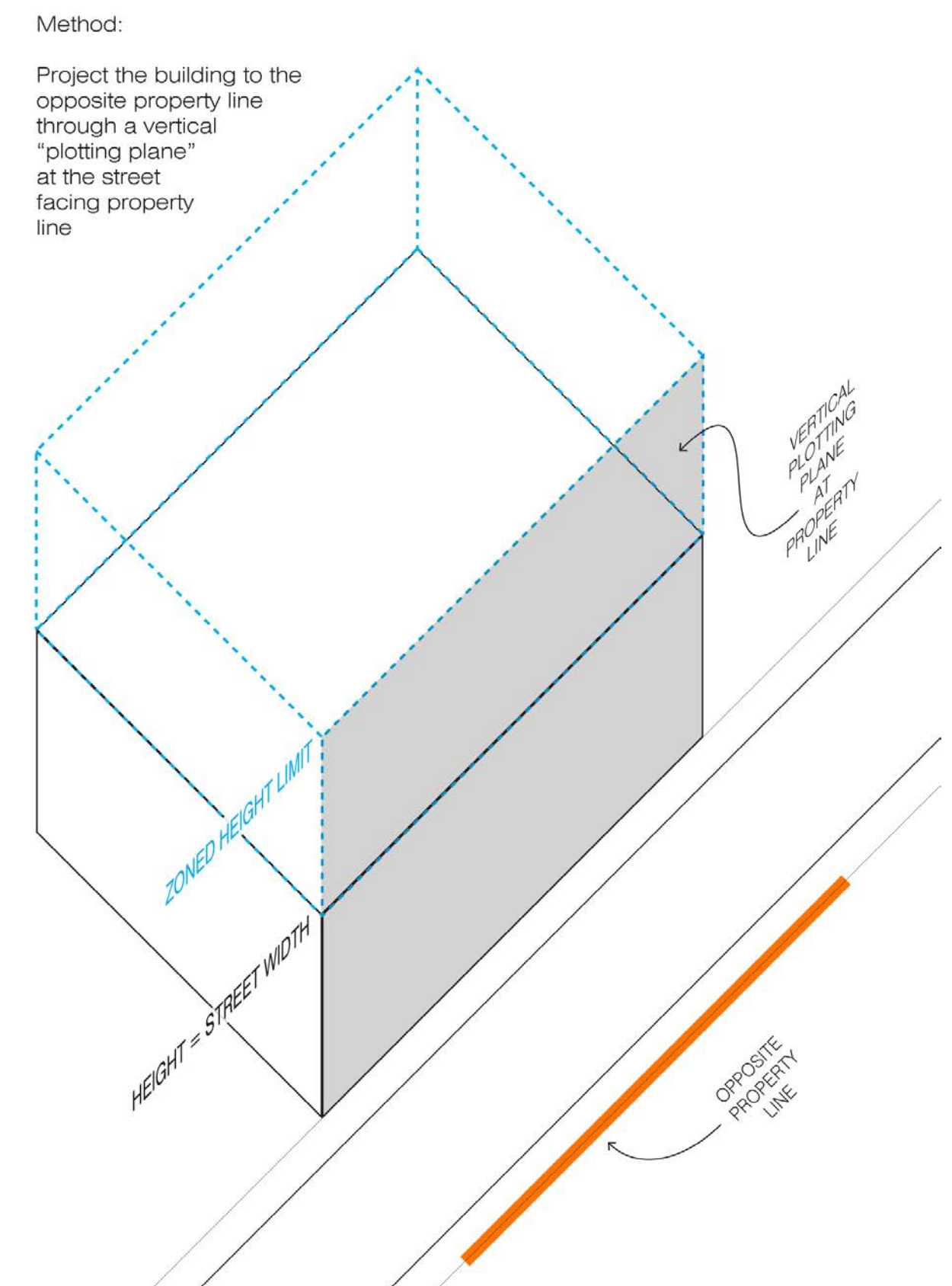
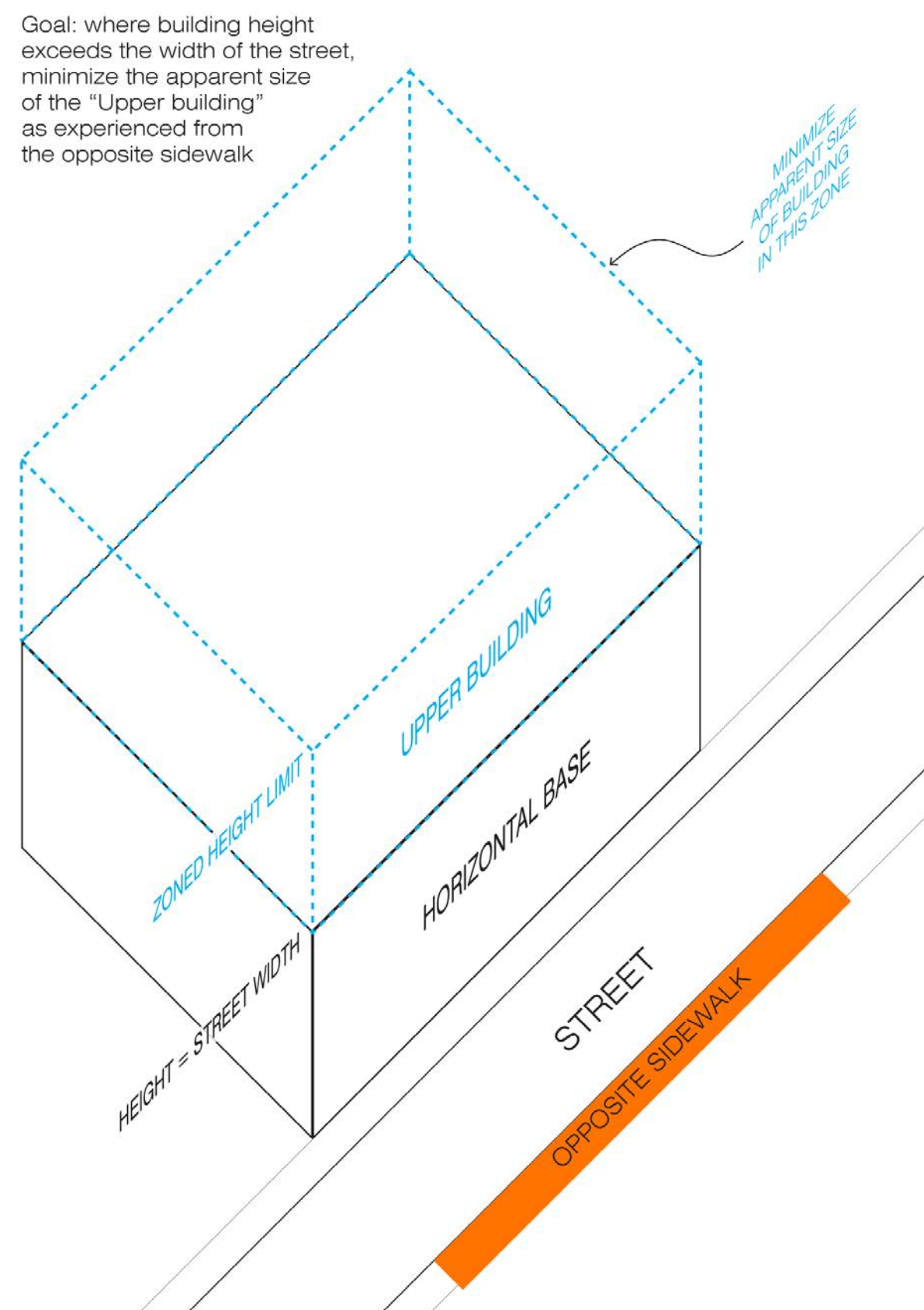
Getting Technical: how does the *apparent mass reduction* work?

An *apparent mass reduction* reduces the visual impact of density and allows architects more design flexibility than traditional setbacks.

Measuring the reduction

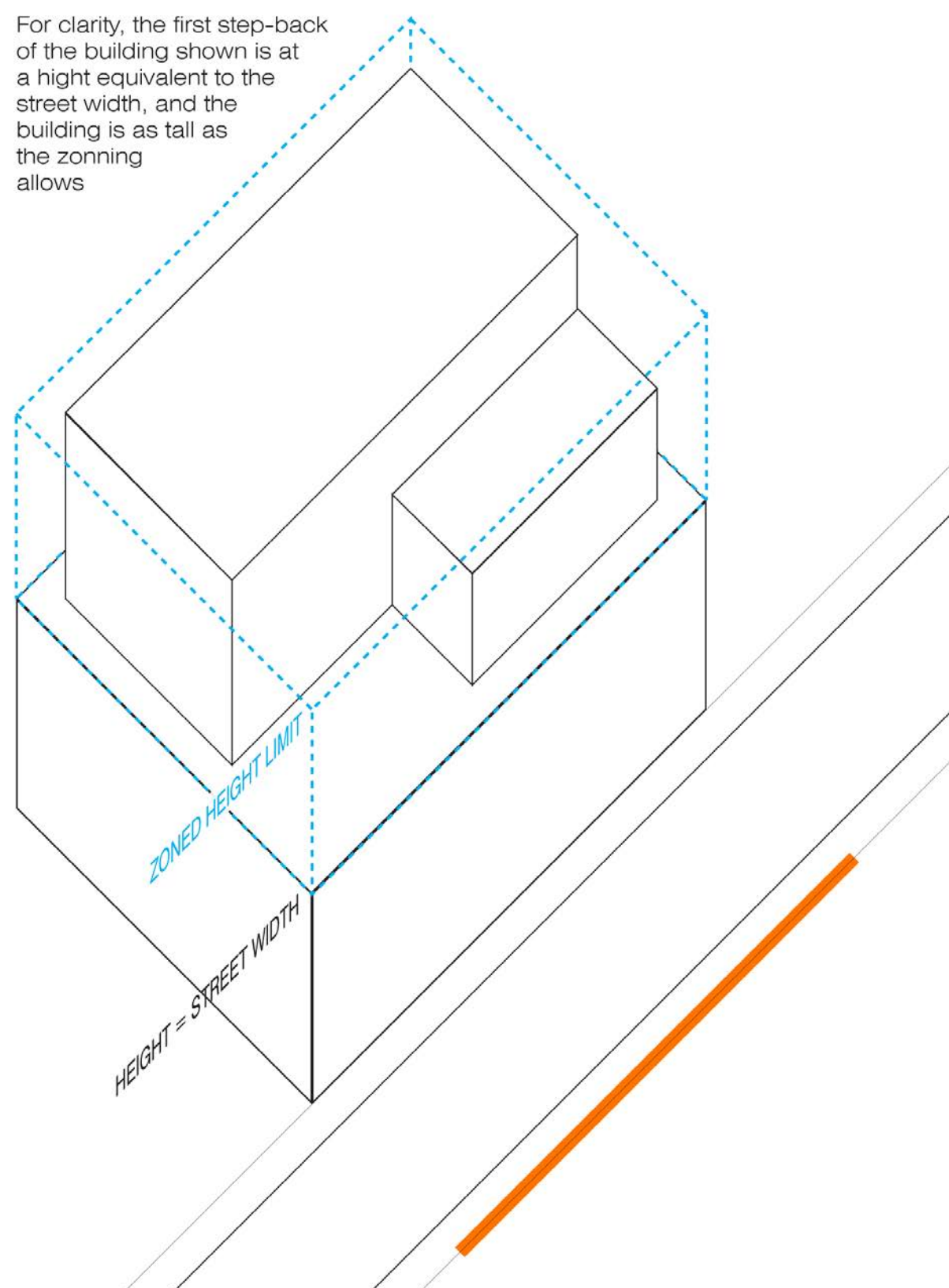
While the apparent mass reduction is a small effort in calculation, this can be done easily in software commonly available to architects:

1. To test a design, first draw lines from the opposite of the street lot lines to points or corners on the building above 85'.
2. Then make a plane from the project property line along the street up to the remaining height of the building.
3. Where those lines intersect that plane, draw connecting lines to show the “projected” face of the building.
4. By comparing the full plane with the plane just made, one can calculate the percent reduction.

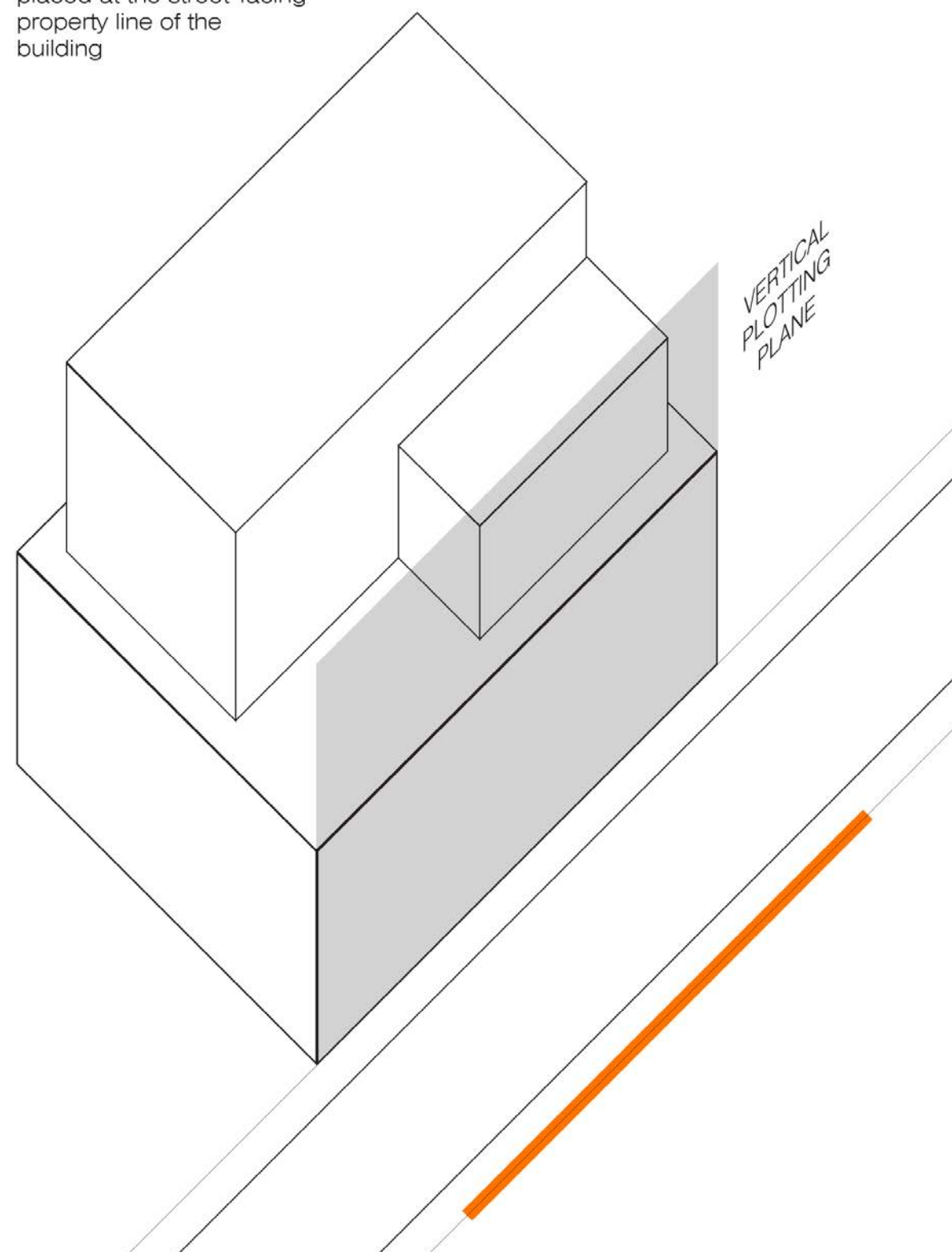


Example

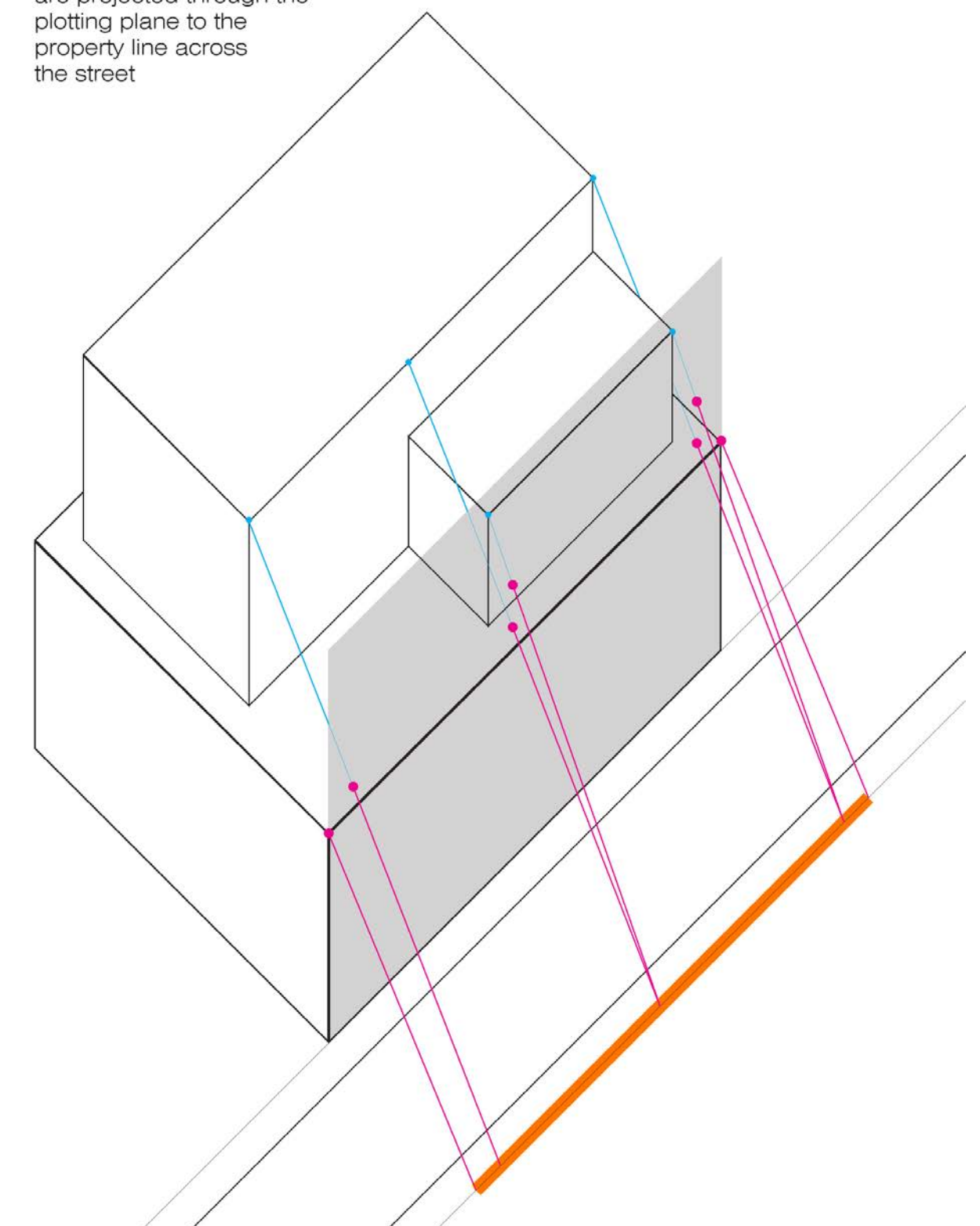
For clarity, the first step-back of the building shown is at a height equivalent to the street width, and the building is as tall as the zoning allows



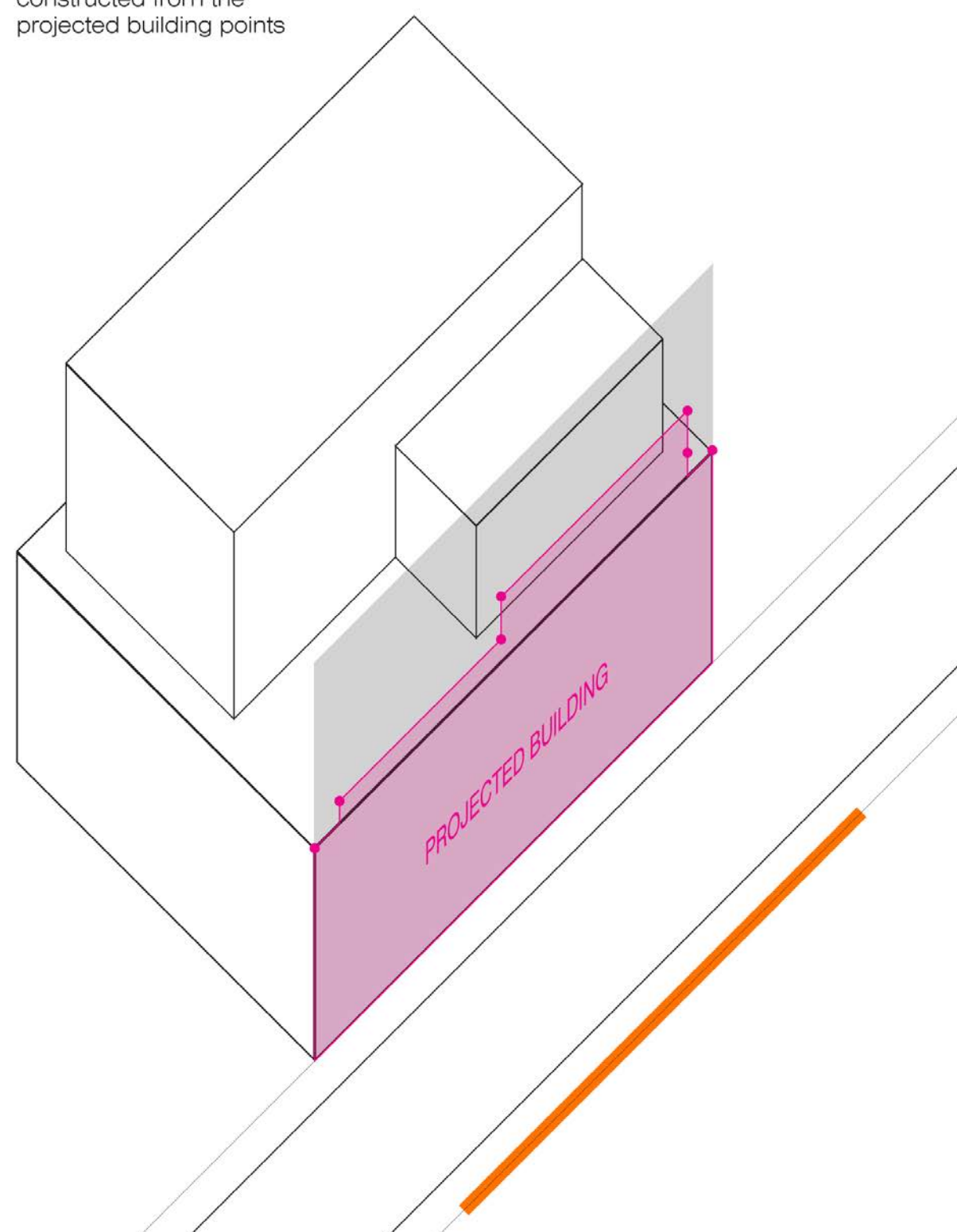
A vertical plotting plane is placed at the street-facing property line of the building



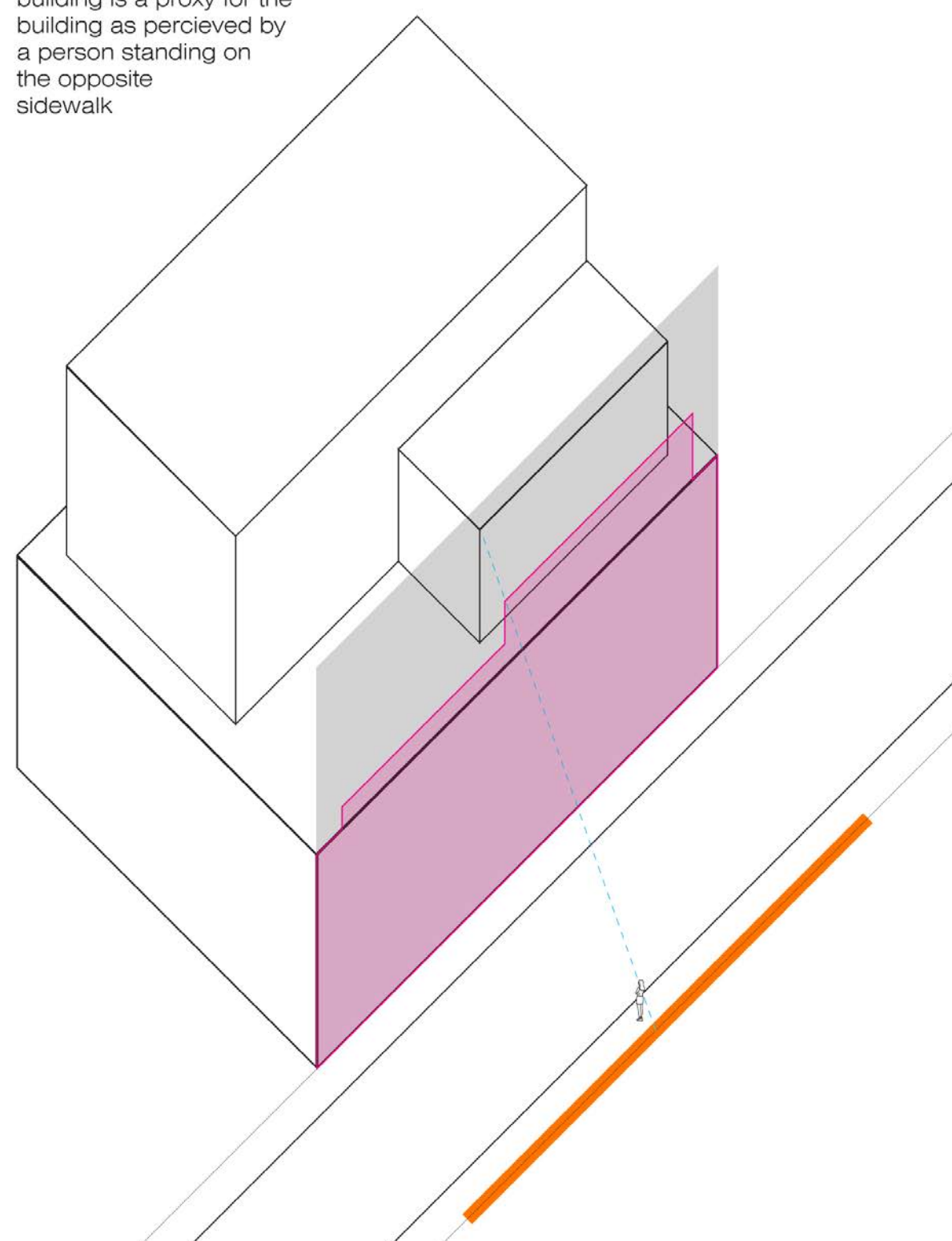
Building edges and vertices are projected through the plotting plane to the property line across the street



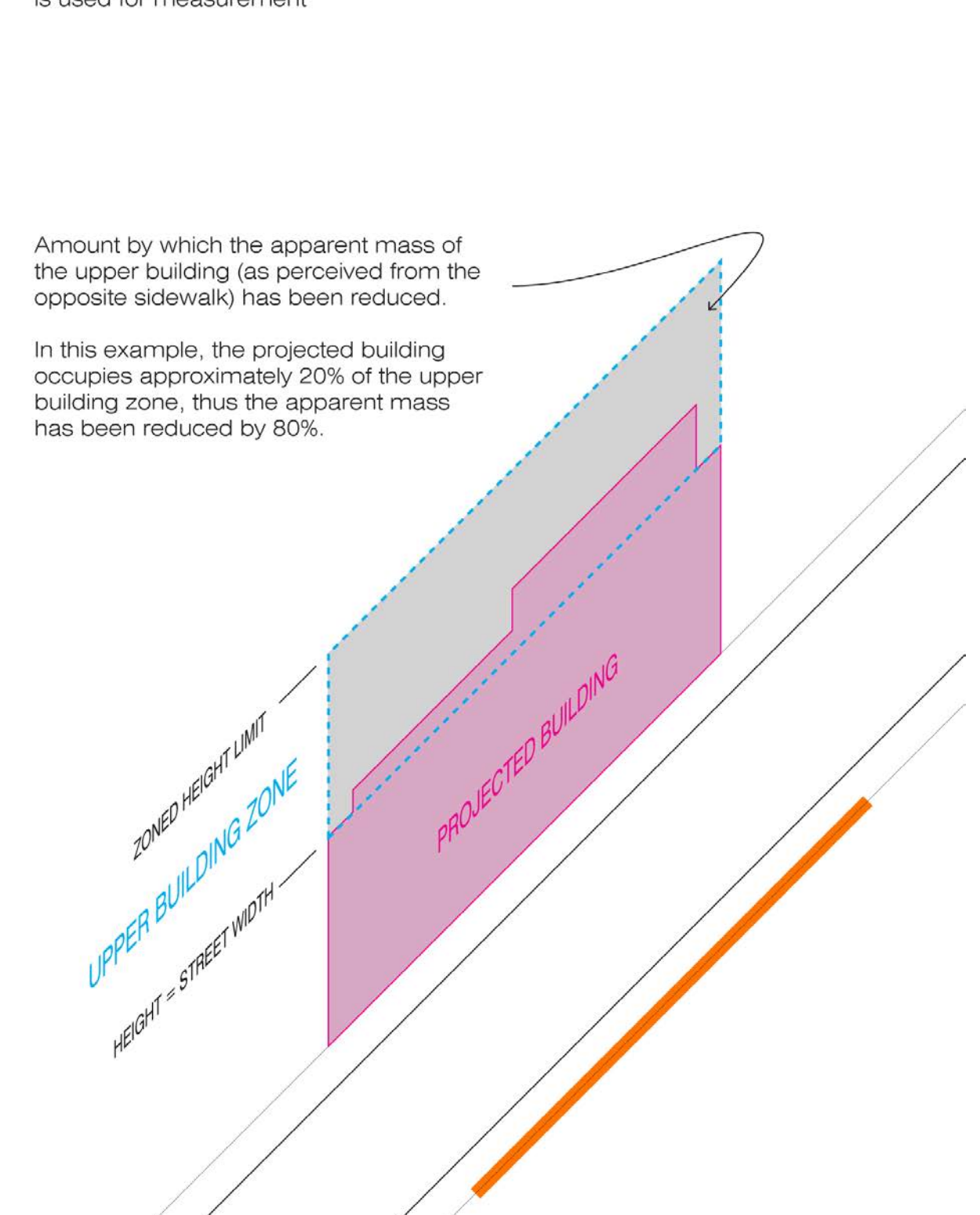
An image of the building is constructed from the projected building points



The projected image of the building is a proxy for the building as perceived by a person standing on the opposite sidewalk



The projected image of the building is used for measurement



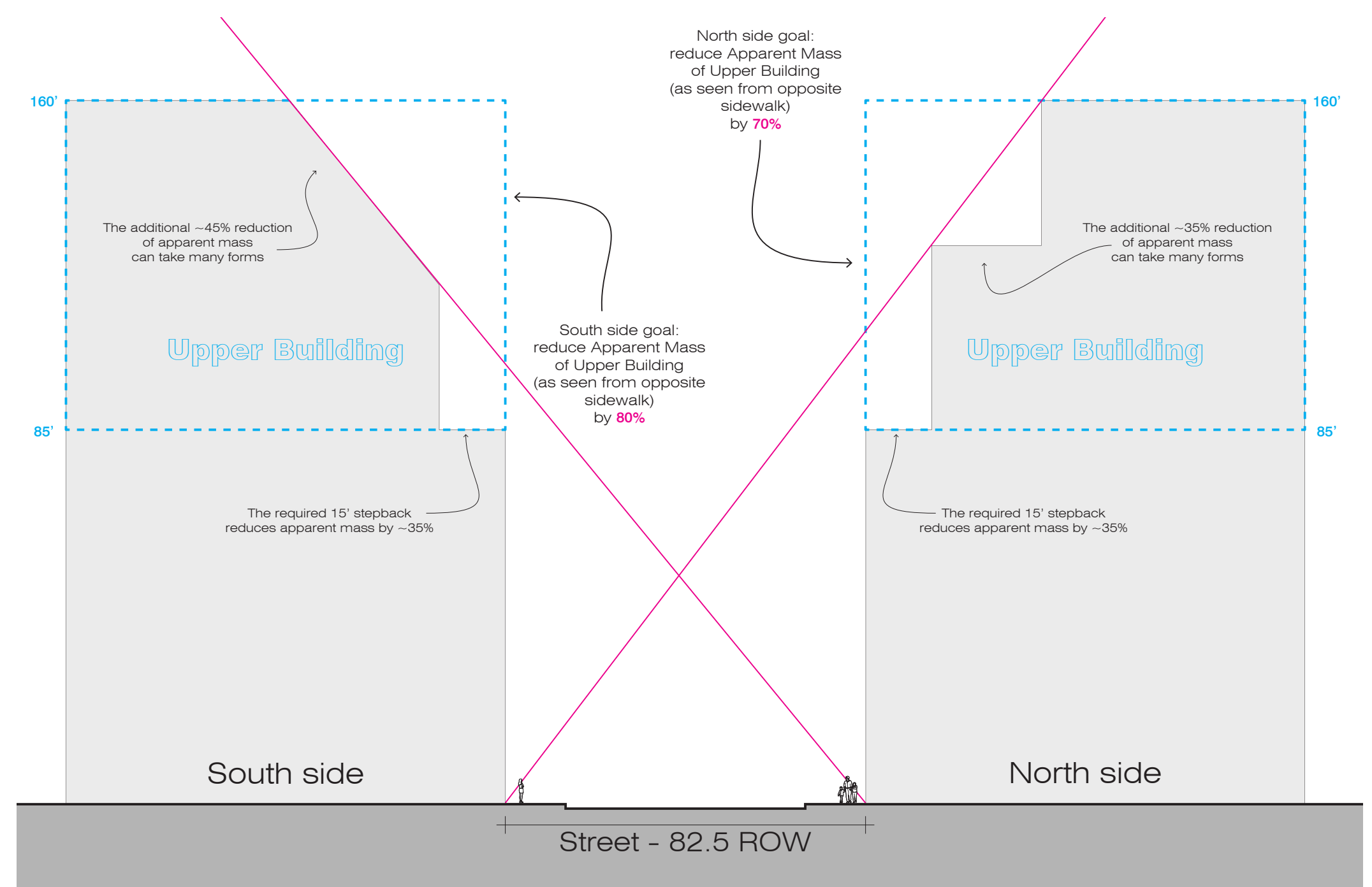
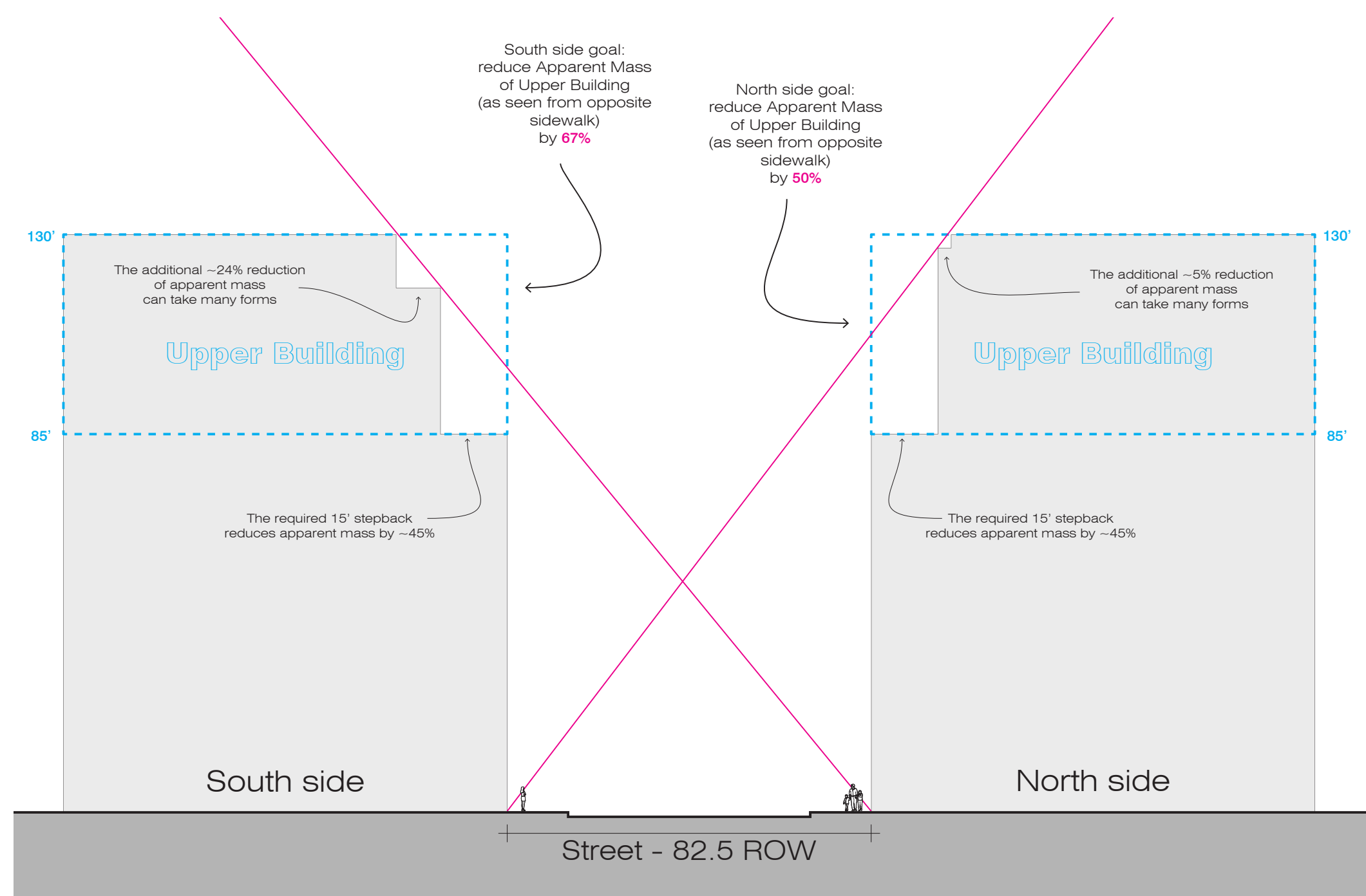
Amount by which the apparent mass of the upper building (as perceived from the opposite sidewalk) has been reduced.

In this example, the projected building occupies approximately 20% of the upper building zone, thus the apparent mass has been reduced by 80%.

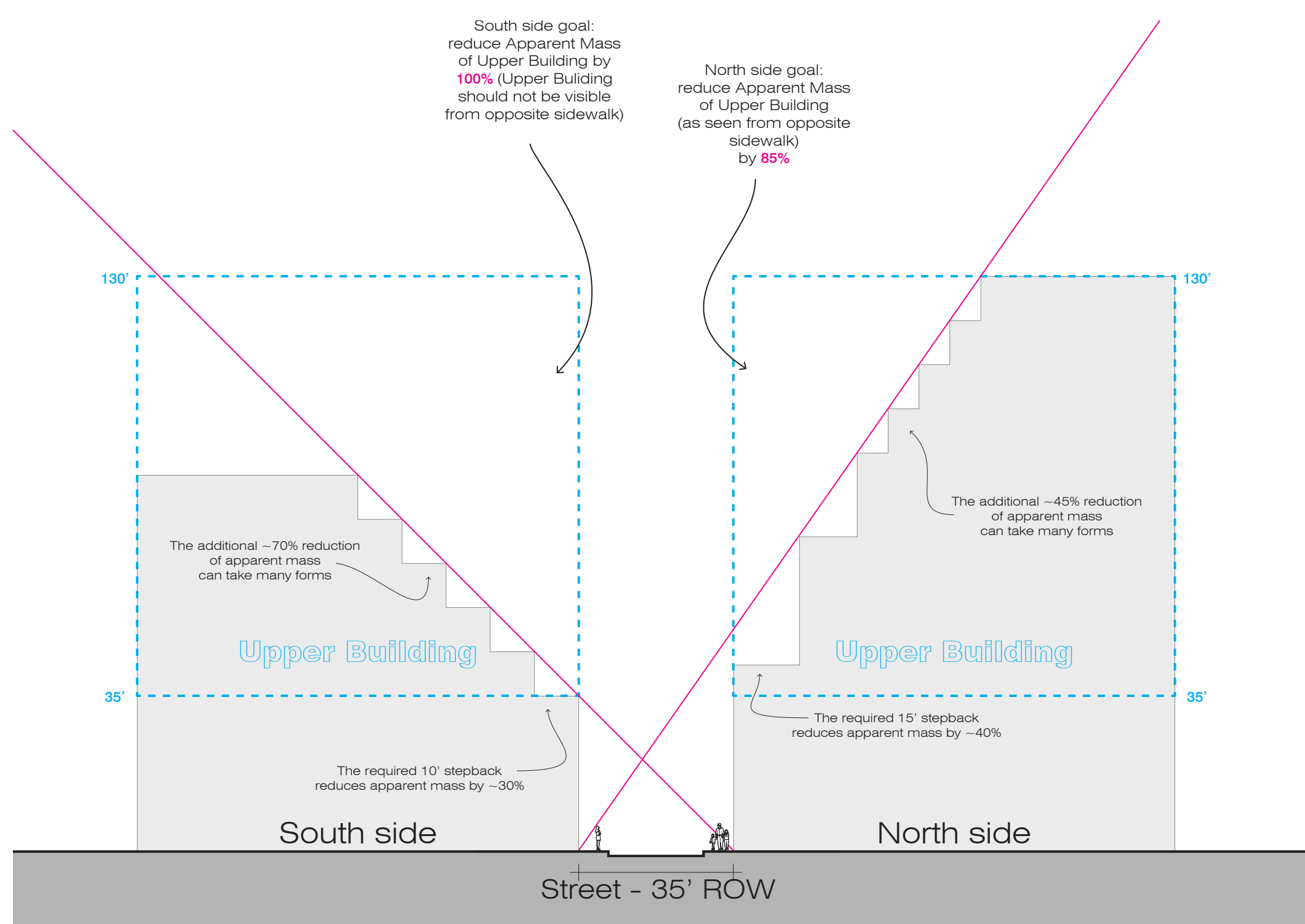
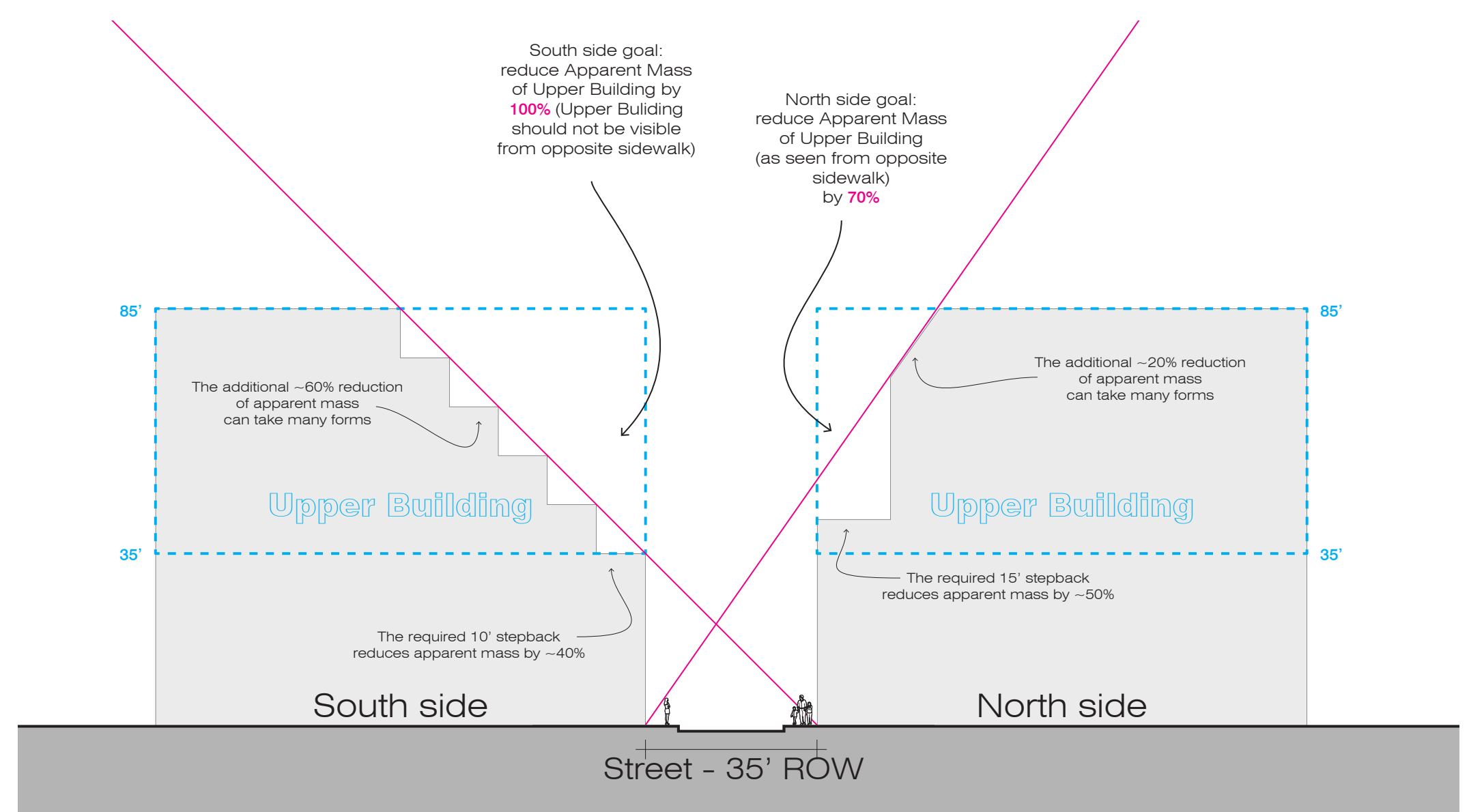
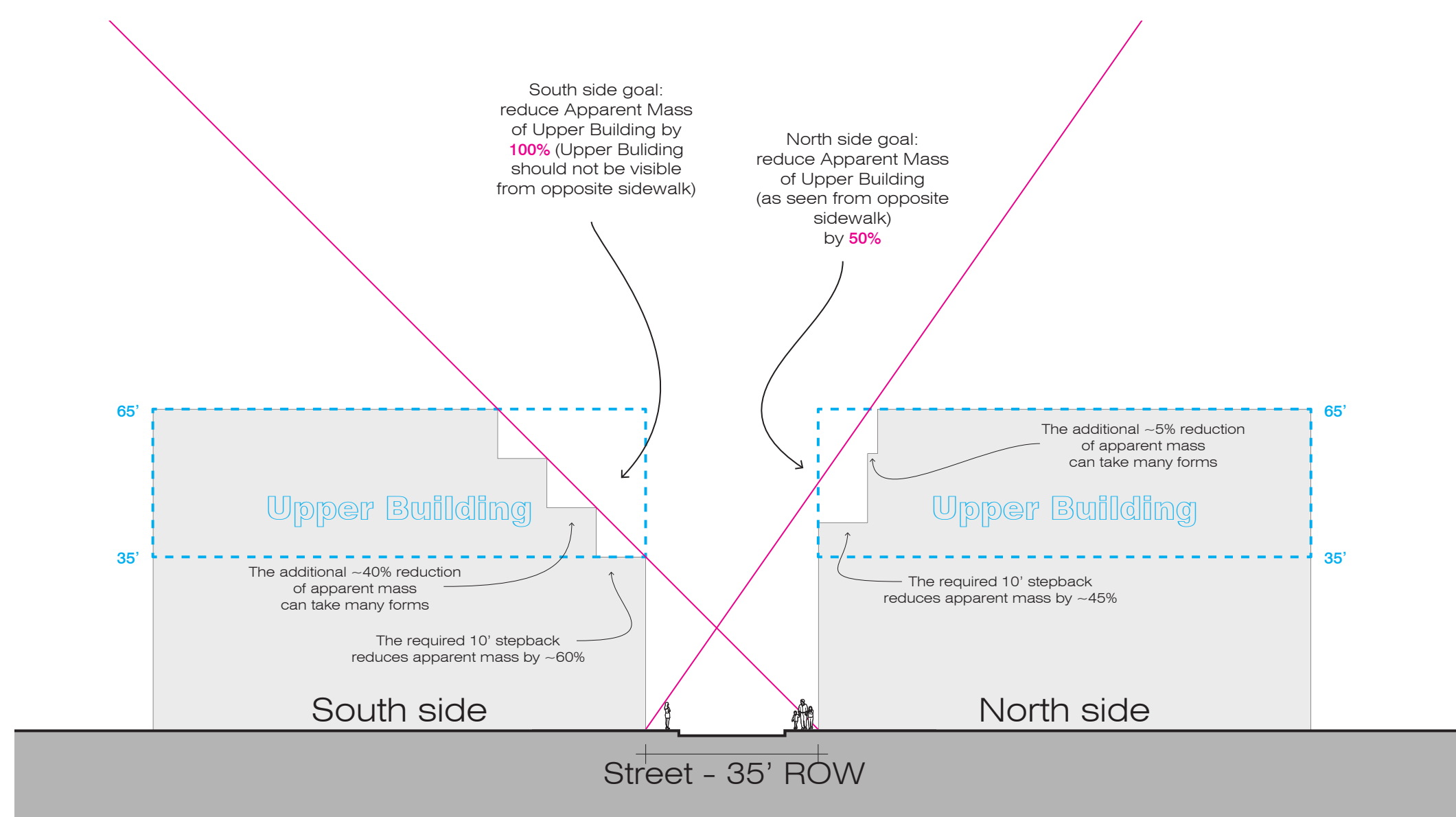
Getting Technical: which parts of the building are reduced?

The amount of reduction required depends on site orientation.

On Major Streets



On Small Streets and Alleys



While the reductions are shown as “stepbacks,” this is only a graphic device to express the building edge, not design expectations.

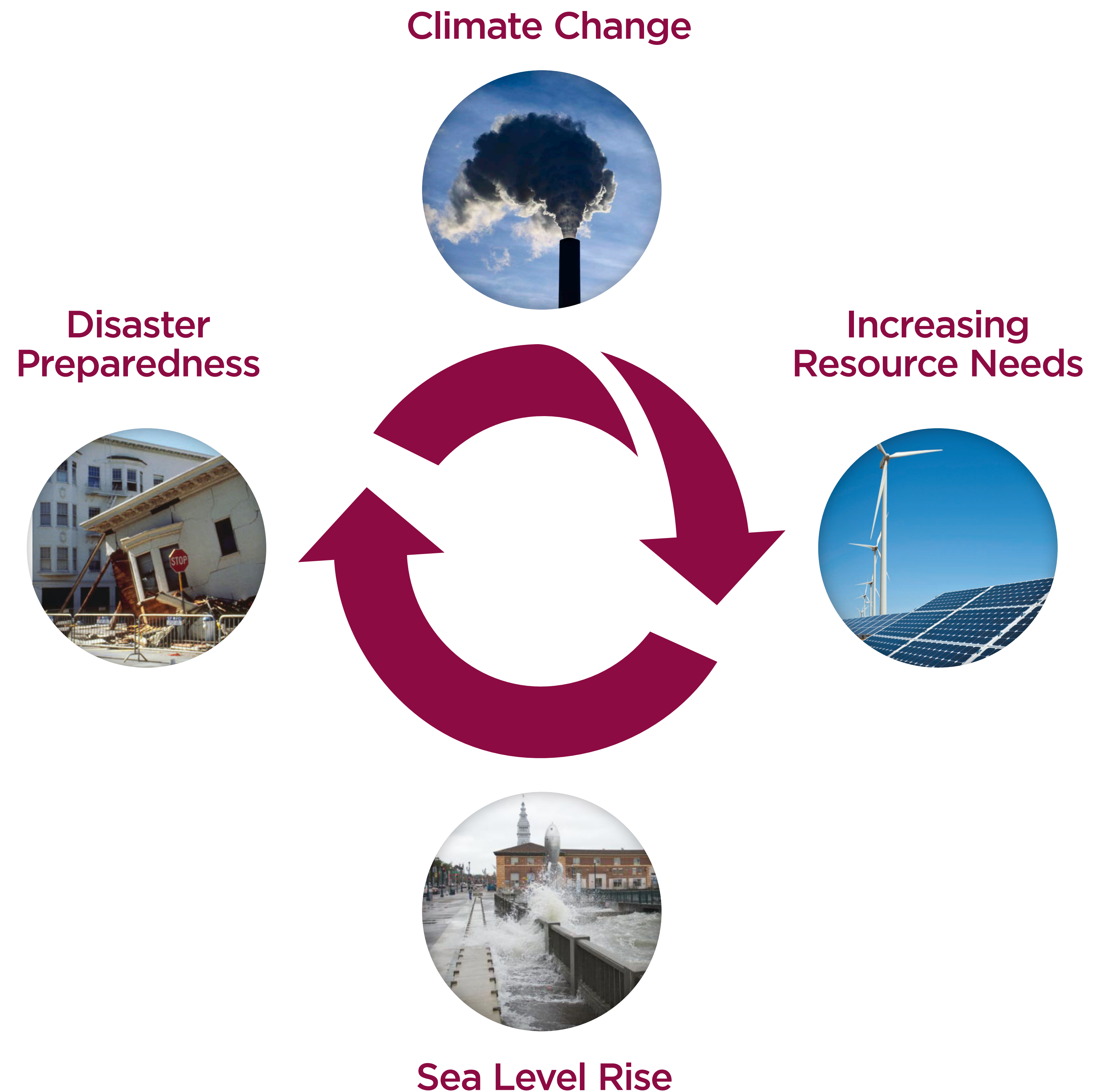
Vision

The Plan's vision is for Central SoMa to become the first regenerative neighborhood in San Francisco – a true “eco-district” where urban development returns more to the environment than it takes. The result will be one of the most sustainable urban places on the planet, serving the daily needs of the community and at the forefront of action on global climate change.



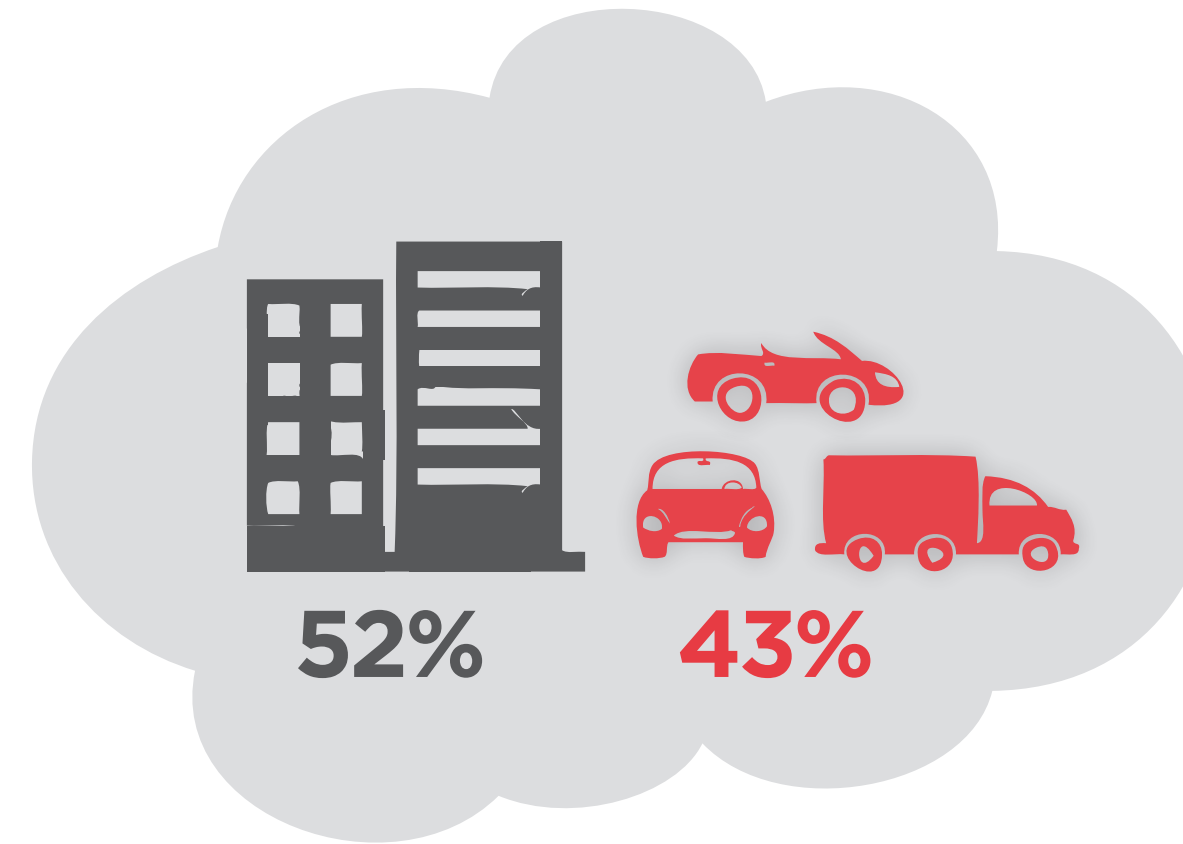
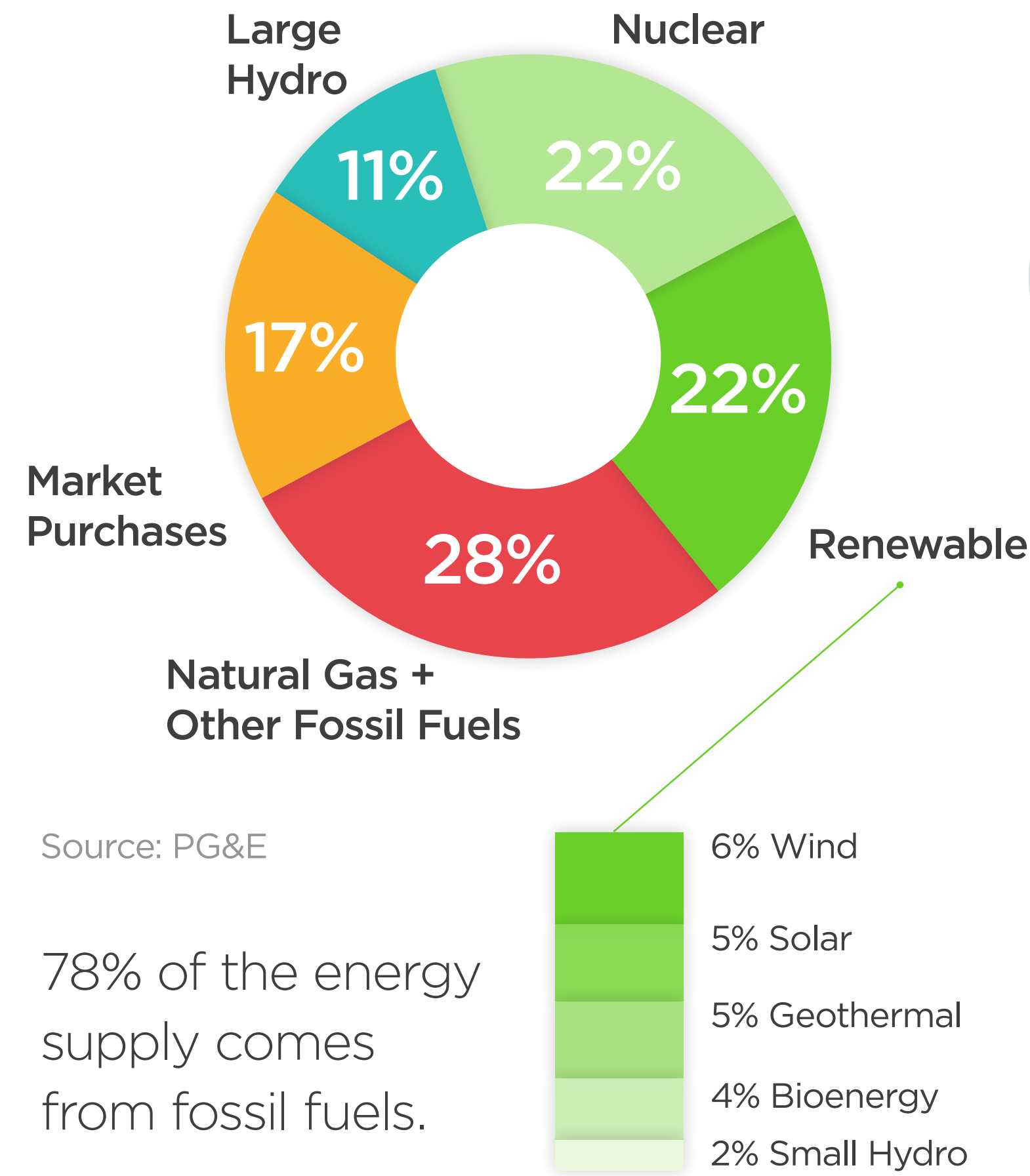
What are Our Challenges?

The Central SoMa Plan offers the opportunity to ensure new growth addresses present and future environmental challenges such as global climate change, increasing resource needs, sea-level rise and disaster preparedness.

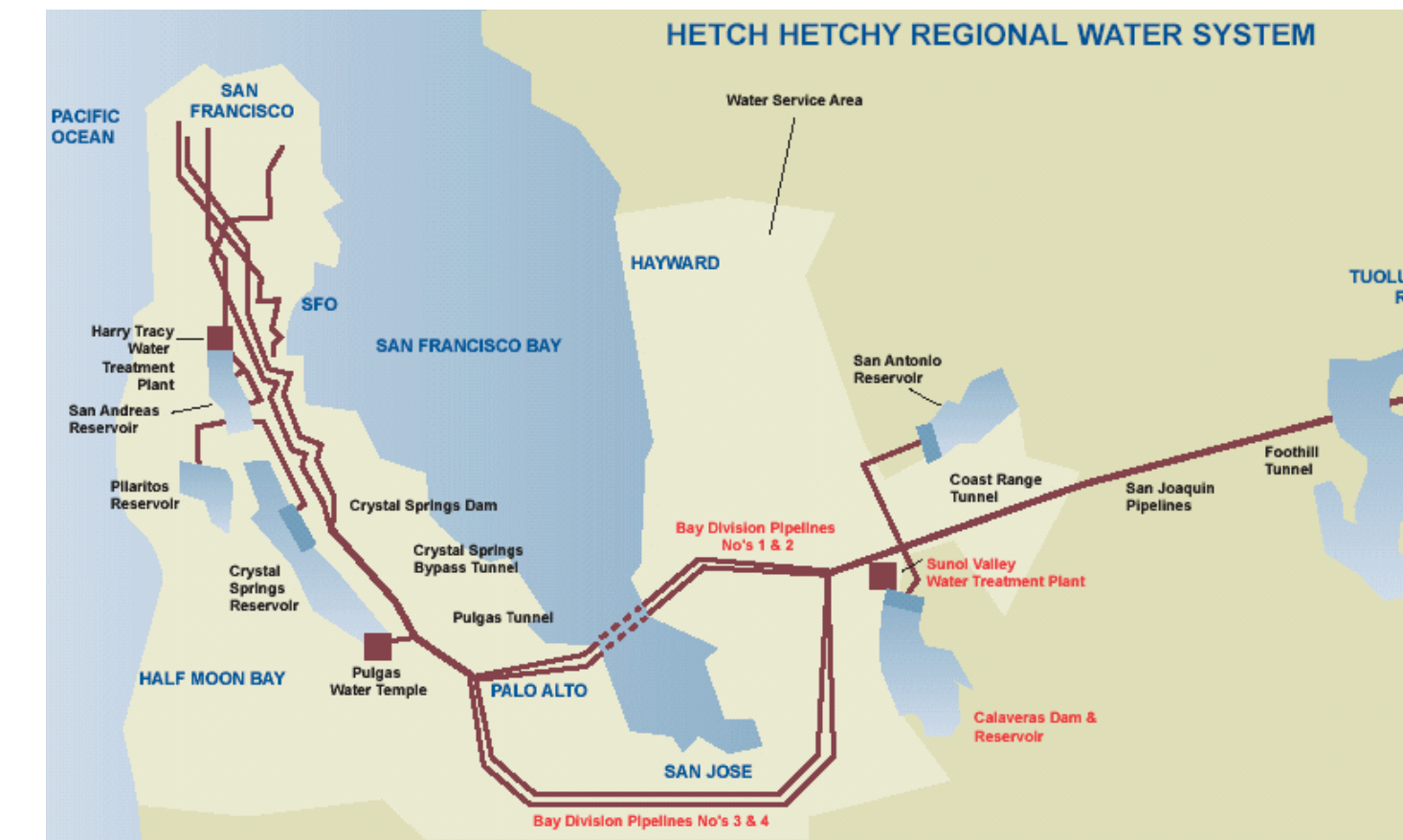


EXISTING CONDITIONS

Central SoMa's current environmental conditions are typical of a dense urban area.



Over half of San Francisco's greenhouse gas emissions come from buildings. Transportation emissions are the second largest source.



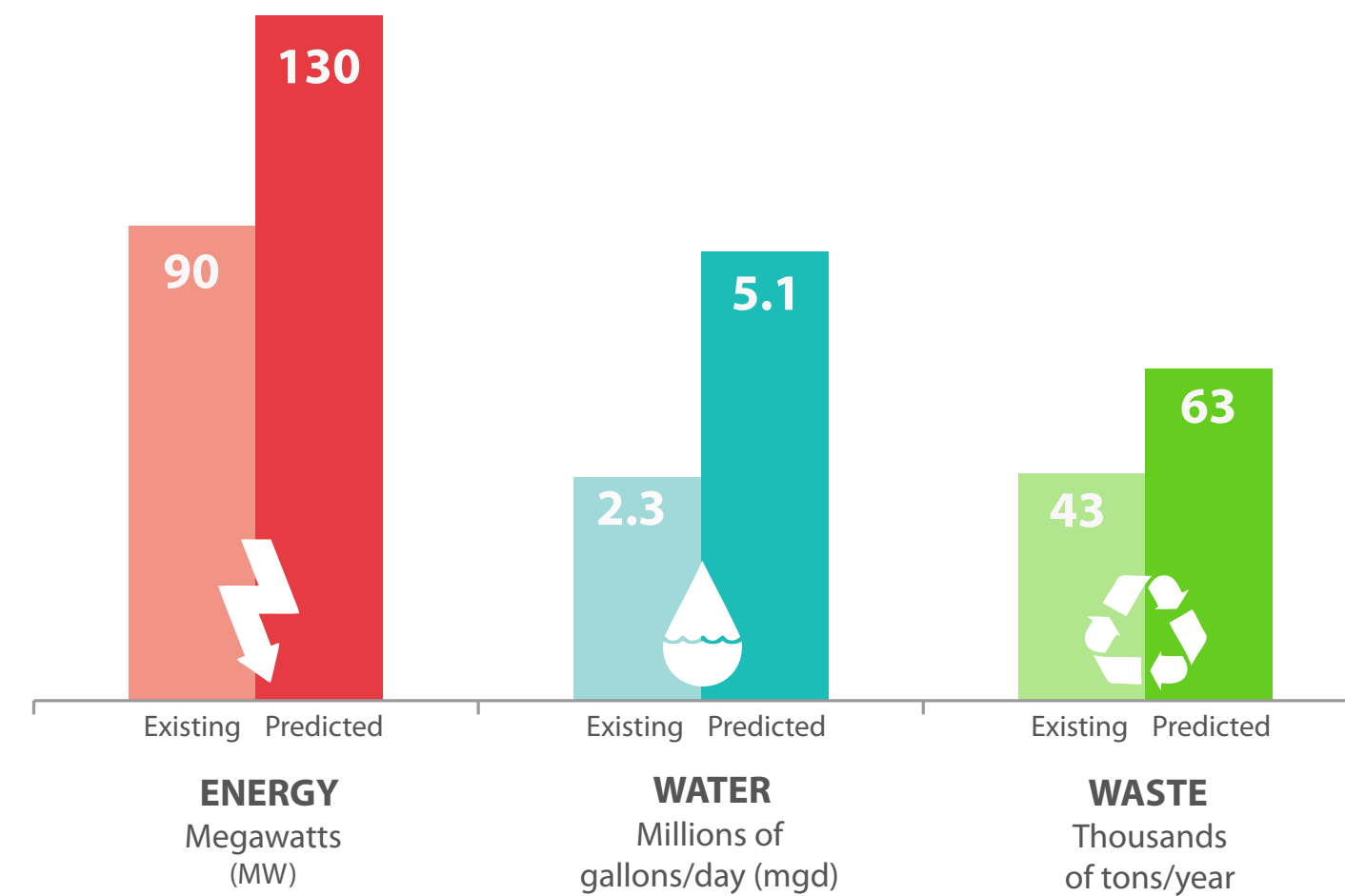
Only 10% of water brought in from Hetch Hetchy is re-used - the majority is used once before becoming wastewater.



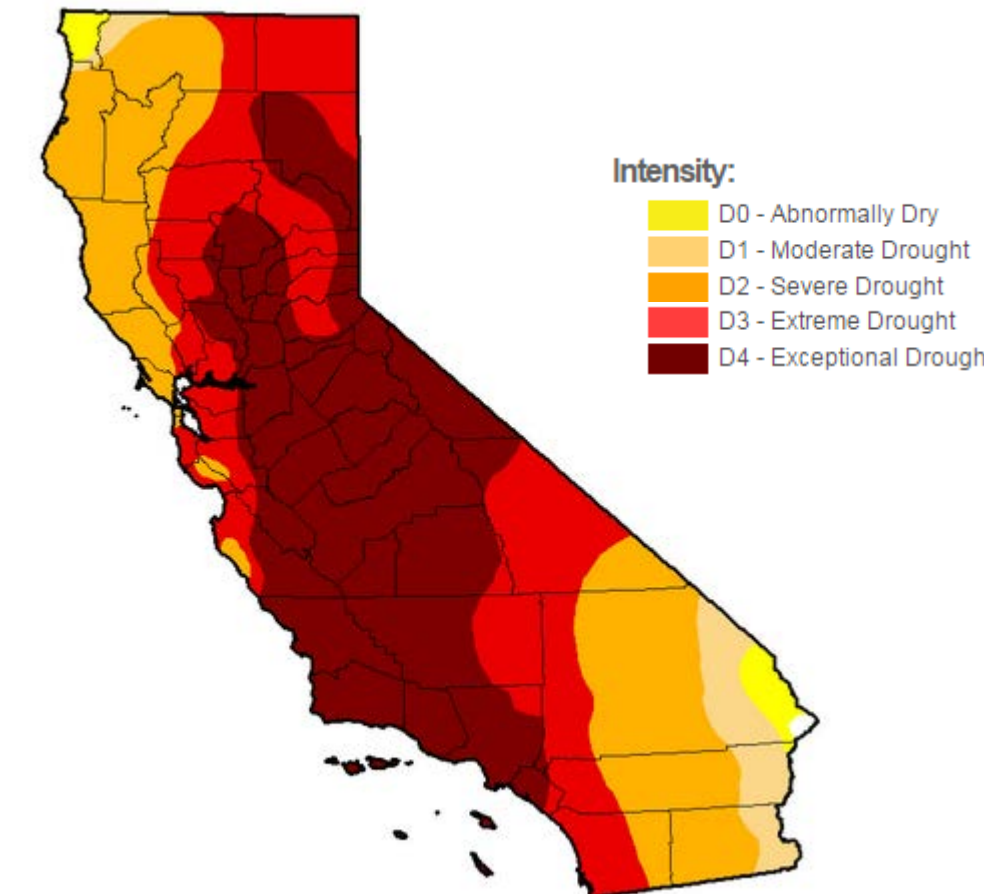
90% of Central SoMa is covered in impermeable surfaces and its tree canopy is one of the lowest in the city.

PREDICTED CONDITIONS

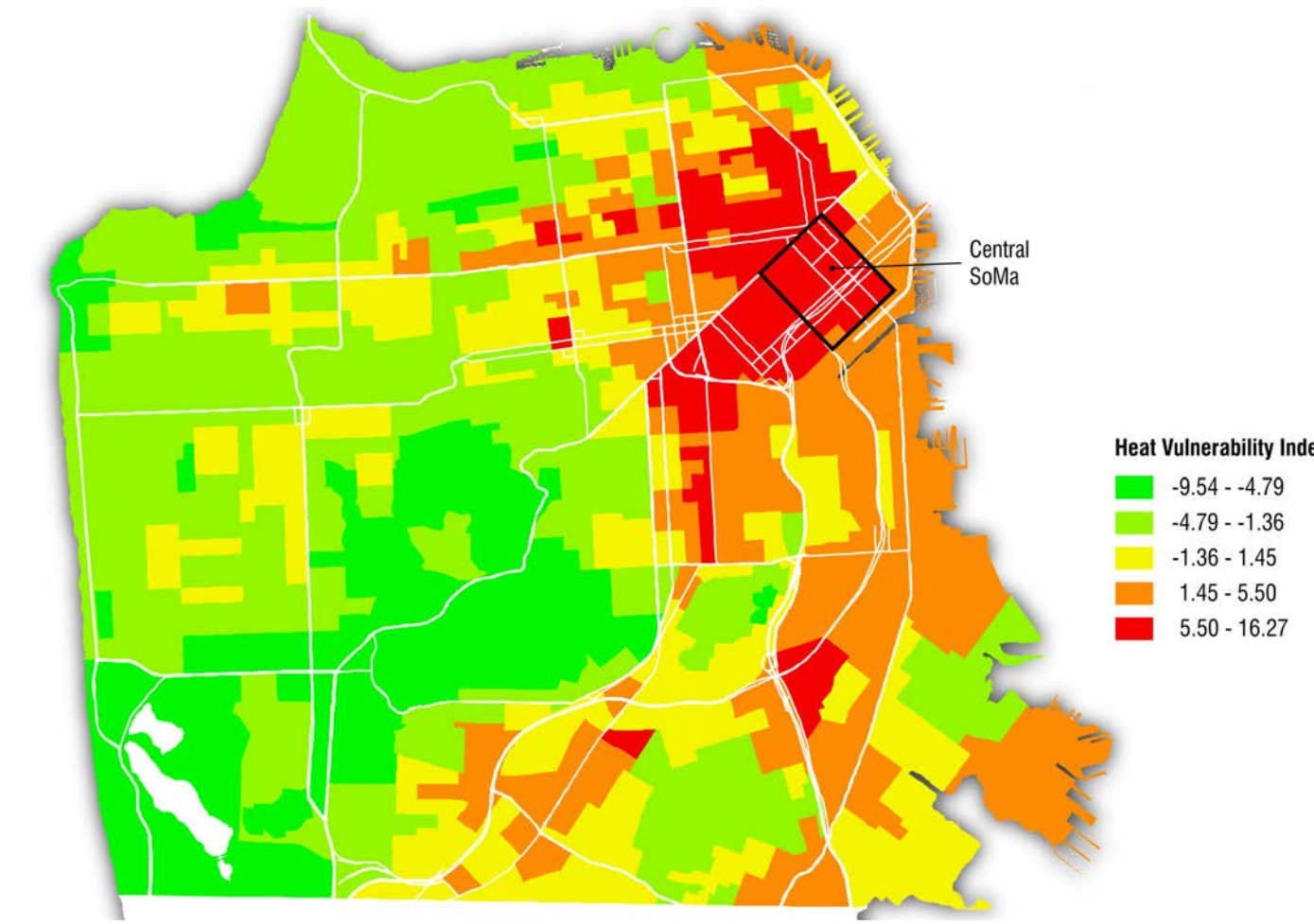
Projected conditions are influenced by expected new development and climate change.



Resource consumption in Central SoMa is expected to increase by 40 Megawatts (peak energy demand), 2.8 million gallons of water per day, and 20,000 tons of solid waste per year.



Precipitation levels are projected to fluctuate between dry and wet extremes.



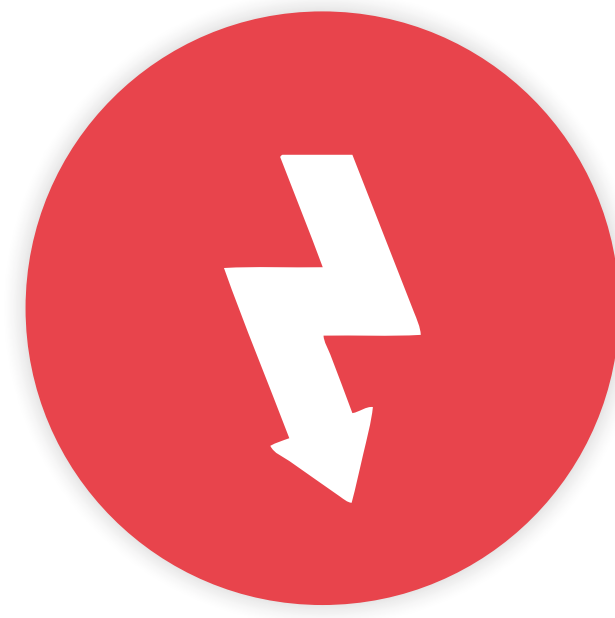
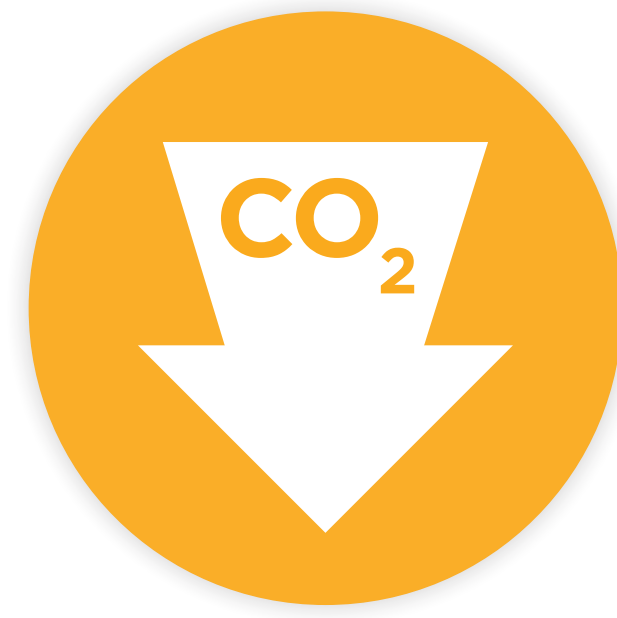
Extreme heat events (above 85F) are projected to increase in both length and frequency. Temperatures are expected to increase 4-6 degrees Fahrenheit by 2100.



Predictions indicate that sea levels will rise 7-15" by 2050 and 26-46" by 2100. Extreme storm events are expected to increase by 11%.

Targets and Goals

Achieving an environmentally “regenerative” Central SoMa will require meeting all of the City’s existing environmental targets and proposing even higher ones, where possible. Targets under consideration include:



Climate & Energy

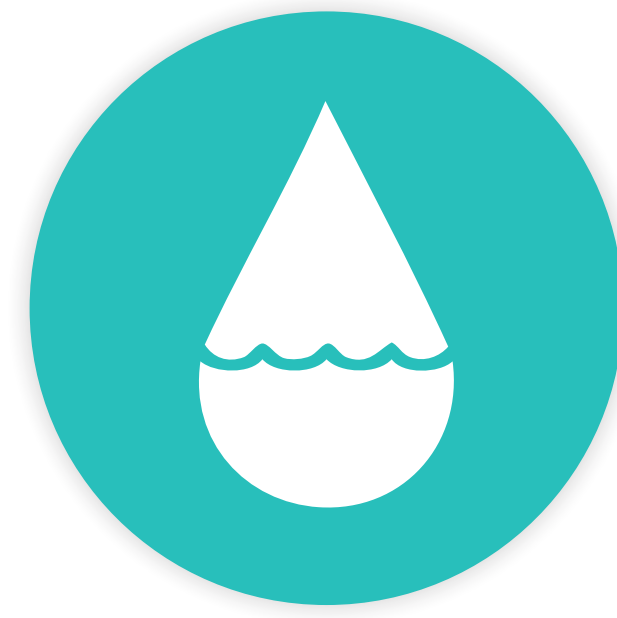
- Carbon Neutral by 2050.
- 100% of energy consumed by buildings to be generated from renewable resources by 2030.
- 50% of this renewable energy to be generated within the Plan Area, through rooftop solar or other means.

Strategy #1 – Make Existing Buildings More Efficient

Strategy #2 – Construct “Net Zero” Buildings

Strategy #3 – Generate and Share Renewable Energy

Strategy #4 – Build Green Energy Infrastructure



Water

- Reduce potable water use in existing and new buildings through efficiency and re-use.
- Strive to achieve a dramatic reduction in the discharge of water - either as wastewater or stormwater by 2030.

Strategy #1 – Increase Efficiency

Strategy #2 – Diversify the Water Supply

Strategy #3 – Explore the possibility of a Low to Zero Wastewater District



Habitat & Ecosystem

- Double Central SoMa’s tree canopy by 2030.
- Double Central SoMa’s permeable surfaces by 2030.
- Substantially increase high quality habitat and habitat connectivity.

Strategy #1 – Integrate the Built and Natural Environment in Central SoMa

Strategy #2 – Plant to Create Wildlife Habitat, Water Conservation and a Greener, Cooler Urban Environment

Strategy #3 – Connect Residents to Local Nature to Engender a Deeper Sense of Place and Community Stewardship



Solid Waste

- Achieve Zero Waste by 2020

Strategy #1 – Work to achieve the City’s Zero Waste Goal by 2020