



# Morespace Main street 2.0

Basis of Design for Engineering Phase

January 2024



# Acknowledgments

More Space Main Street 2.0 Visioning Plan was commissioned by **Downtown Houston+** by way of the Houston Downtown Management District and in partnership with the **City of Houston**. The Plan was produced by **Design Workshop** in collaboration with **Outside Voices**.

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We thank the following for their time, guidance and support in informing this plan:

**Downtown residents, visitors, workers and business owners**

### City of Houston

Houston Public Works  
Houston Fire Department  
Houston Police Department  
Houston Administration and Regulatory Affairs  
Mayor's Office of People with Disabilities  
Mayor's Office of Special Events

### METRO

### CenterPoint Energy

### Stakeholders

AC Hotel	JW Marriot
Buffalo Bayou Partnership	Little Dipper
Council Member Gallegos	Midtown District
Dan Zimmerman	Midway
Flying Saucer	Moxy
Harris County Precinct 1	Shake Shack
Hines	UofH Downtown
Hotel Icon	Zenaku/ Cherry
Houston First	

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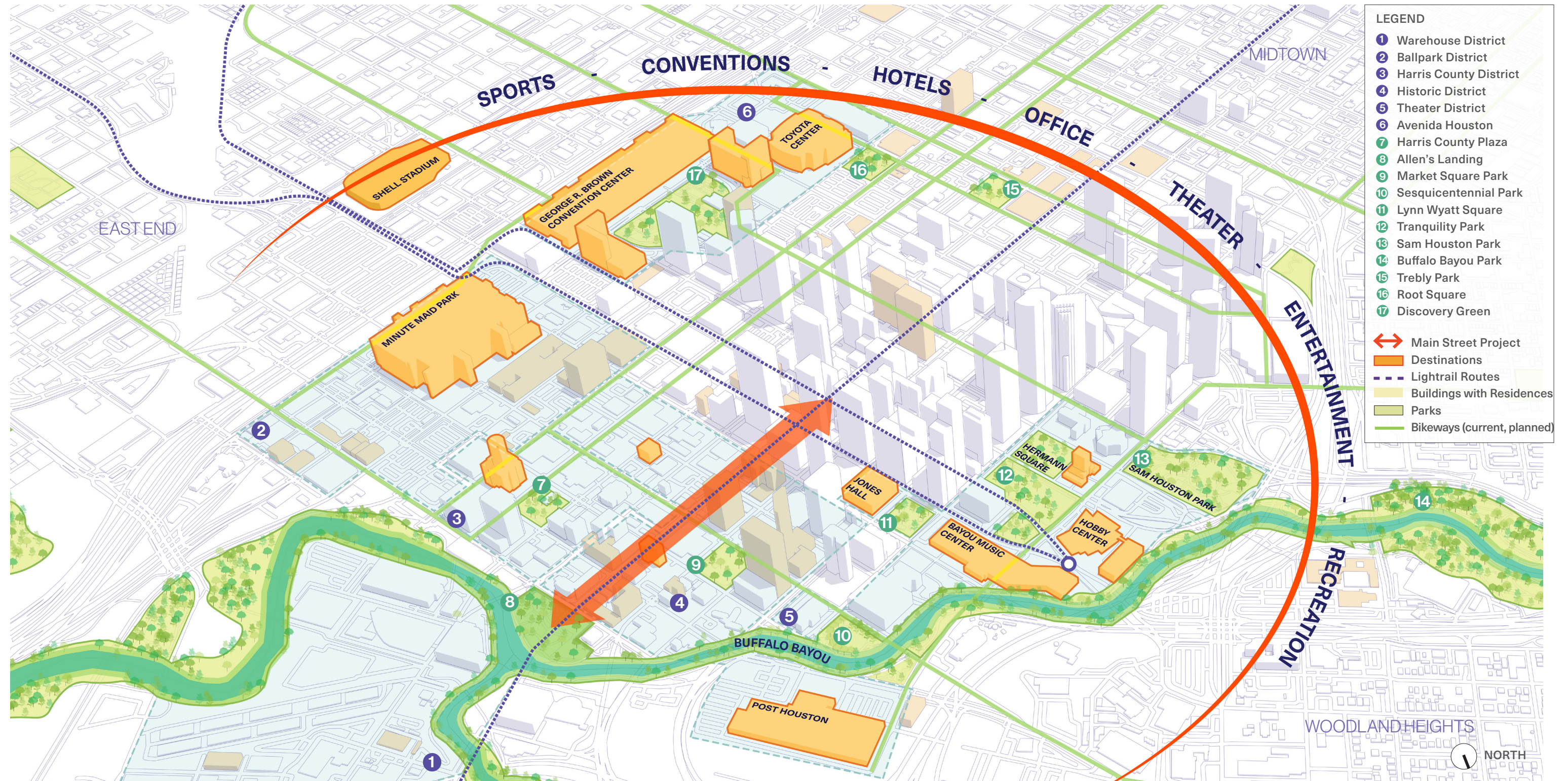
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METRO, Fire, Stormwater and Utilities, Placemaking, Proposed Conceptual Plan, Expected Timeline, Misc

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# Project Context

# MAIN STREET, THE HEART OF DOWNTOWN

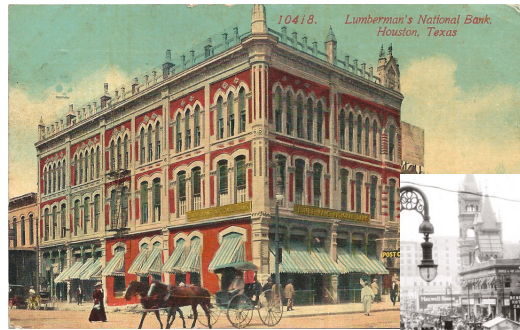
Downtown is experiencing an incredible transformation. Known for years as an office district, Downtown is now a mixed-use neighborhood, and the blocks of Main Street sited in the Historic District are at the very center of this transformation. Adjacent to Allen's Landing, the birthplace of Houston, this section of Main Street is the point of connection for the bayou, theaters, sports and events arenas, hotels, office and business centers, and civic buildings. A Main Street that reflects the changing Downtown has the potential to become a signature destination for Downtown—and the region.



# THE MAIN STREET BRAND

## Historical Timeline

Since Houston's founding, Main Street has evolved based on the needs of the city. From horse and buggy, trolleys, cars, and then the light rail, this street has reinvented itself decade after decade.



1900s



1940s



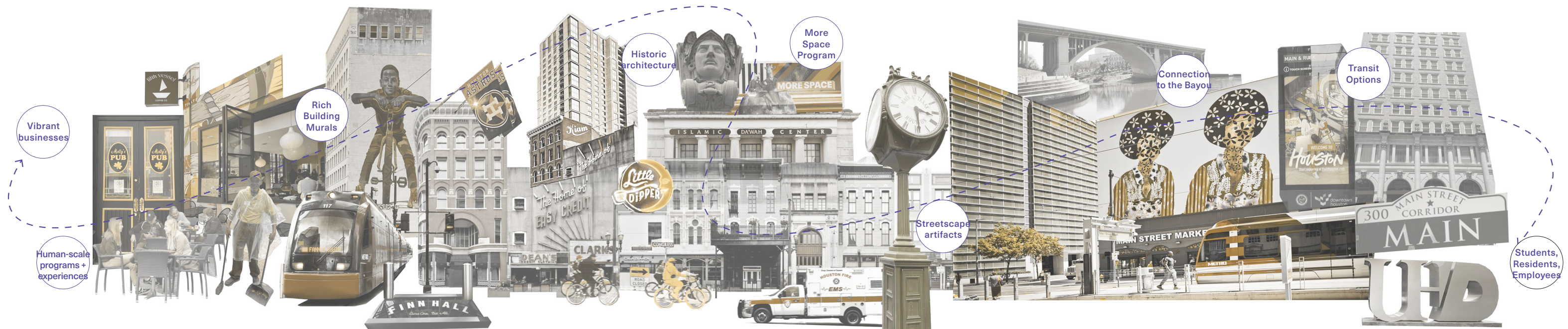
1990s



TODAY

## What is Main Street known for?

Main Street is quintessential Houston, and a Main Street that can only be found in Houston. From Buffalo Bayou to historic architecture, stunning art murals, the University of Houston Downtown, and vibrant businesses, this street is poised to be the anchor destination of the growing downtown.



# MORE SPACE: PROJECT HISTORY



## BEFORE PANDEMIC

A longtime active section of Main Street, accessible by pedestrians, light rail, and vehicular traffic.



## EARLY 2021

The More Space: Main Street program is introduced, closing blocks of Main Street to vehicular traffic to support businesses and their need for outdoor space during the pandemic.



## MARCH 2023

Houston's City Council approves a permanent More Space: Main Street program, setting up Main Street to become a pedestrian promenade with no vehicular access north-to-south.



## MARCH 2023

With the March 2023 permanent closure of Main Street, the Downtown Houston+ team, through the Houston Downtown Management District, took on the project of imagining a new promenade design for Main Street.

# Dedicating public space for everyone

Since its inception, More Space: Main Street has been a collaborative effort between the City of Houston and Downtown Houston +. It helped downtown businesses survive during COVID and taught us that our streets can provide so much more value than just to move cars. With the March 2023 permanent closure of Main Street, the Downtown Houston+ team initiated a stakeholder led process to develop a concept plan for Main Street that would be used to move forward into engineering and implementation.





An aerial view of a city street, likely in San Francisco, with a teal overlay. The street is lined with multi-story buildings, some with ornate architectural details. A prominent building on the left has a decorative tower. The street is labeled '2ND' and 'STUART'. A 'Kiam' sign is visible on a building. The overall scene is a dense urban environment.

2

# Stakeholder-Led Process

# ENGAGEMENT SUMMARY

Recap

26

stakeholder groups engaged

8 hrs

of public workshops

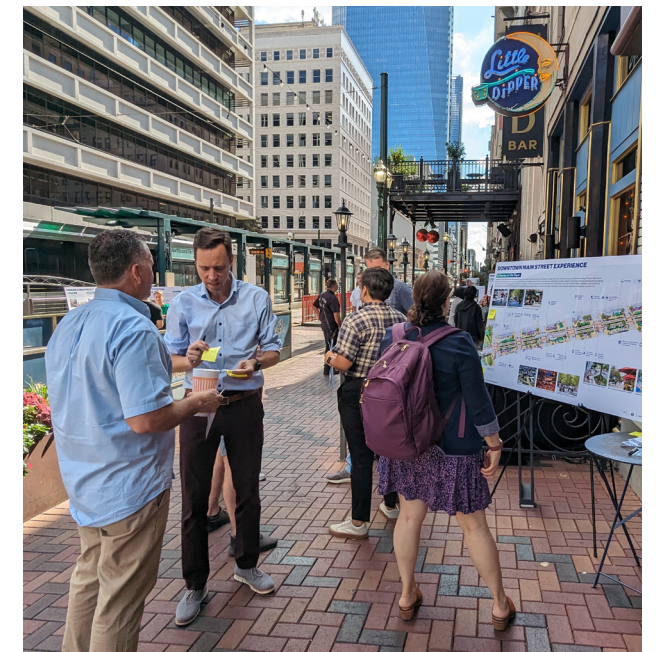
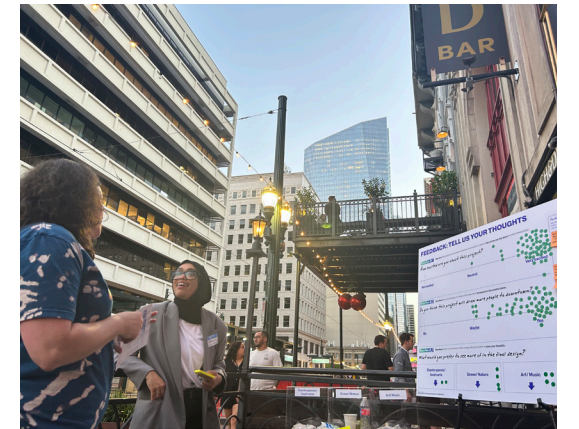
330

people engaged

1,346

feedback points collected

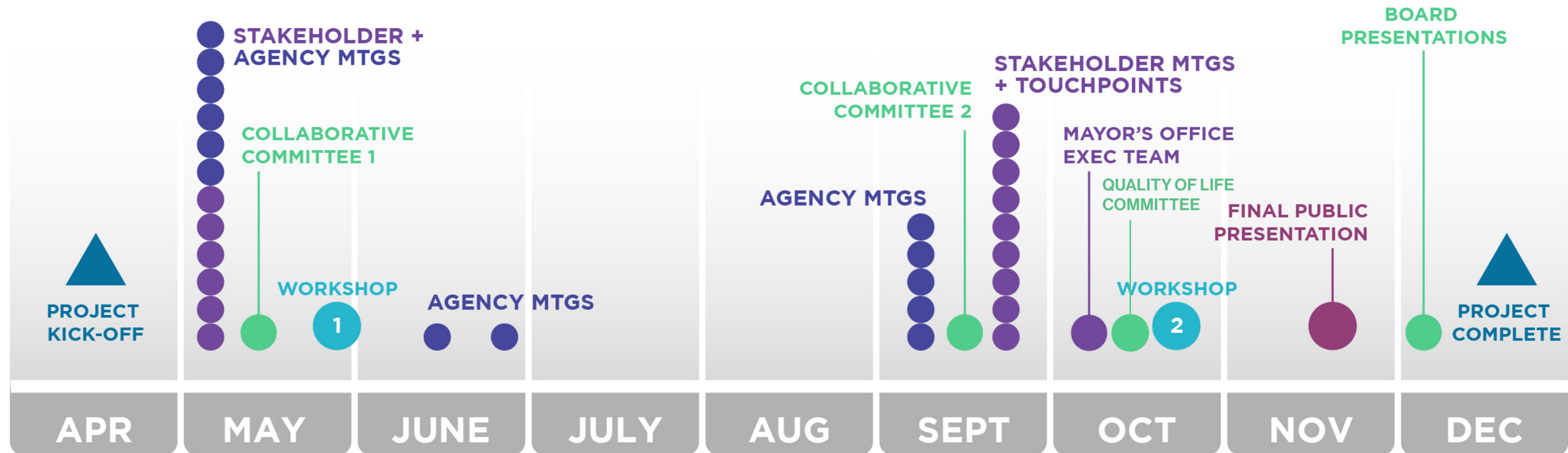
dots/post-its/chips



# ENGAGEMENT SUMMARY

## Process and Collaborators

Recognizing the complexity and importance of this project, we created an engagement-led process. Over the course of the nine month study, the design team facilitated 26 stakeholder and agency meetings. In these agency meetings, we worked through the technical, operational, and visionary needs for the project. The team hosted two public workshops at Little Dipper Bar on Main Street to connect with business owners, employees, families, and visitors. This project has had a positive response throughout the entire study. All the agencies involved have confirmed their support for the basis of design developed throughout this study.



### Agencies

- Houston Public Works
- METRO
- Centerpoint Energy
- Houston Fire Department
- Houston Police Department
- Houston Administration and Regulatory Affairs
- Mayor's Office of People with Disabilities
- Mayor's Office of Special Events

### Stakeholders

#### Business Owners

- Little Dipper
- Flying Saucer
- Zenaku / Cherry
- Shake Shack

#### Property Owners

- Hines
- Dan Zimmerman
- U of H Downtown
- Midway

#### Main Street Hotels

- Hotel Icon
- AC Hotel
- JW Marriott
- Moxy

#### Other

- Buffalo Bayou Partnership
- Council Member Gallegos
- Houston First
- Midtown Management District
- Harris County Precinct One

### Community

- 330 Downtown residents, business workers, business owners, families, advocates, and visitors

# ENGAGEMENT SUMMARY

## What We Heard

Throughout the course of engaging agencies, stakeholders, and the public, several themes arose. They were Maintenance + Safety, Accessibility, and Placemaking. Within each category there are both technical/operational needs and suggestions for how to make this project successful at drawing more people to downtown.

### Maintenance + Safety



**Need high quality maintenance** for a high quality environment

**Improve sense of safety**

**Create safe butters** between users—METRO, pedestrians, bikes, scooters

**Supply necessary support** for unhoused population

**Provide safe lighting** for the length of the street

**Maintain stormwater drainage capacity**

**Maintain intersection visibility** for METRO drivers

**Coordinate response** between METRO police and Houston police departments

### Accessibility



**Resolve the grade change** between drive lane and sidewalk

**Use ADA best practices** for materials, furnishings, and signals

**Provide everyday access** for agency and business operations

**Provide emergency access** for the fire department and METRO

**Provide clear directions** to affordable parking options

**Maintain access** to existing underground utilities

**Consider access** to water stations and public restrooms

### Placemaking



**Create a strong district identity and sense of place**

**Activate the street**—both day and night, including family-friendly spaces

**Add festive festoon lighting**

**Create spaces for pop-up events and programming**—street fests, farmer's markets, live music, seasonal performances, etc)

**Create more opportunities for art**

**Incentivize more restaurants and everyday services**—grocers, shops, pharmacies, etc

**Create a comfortable microclimate**—more green, fans, shade, umbrellas, trees, etc

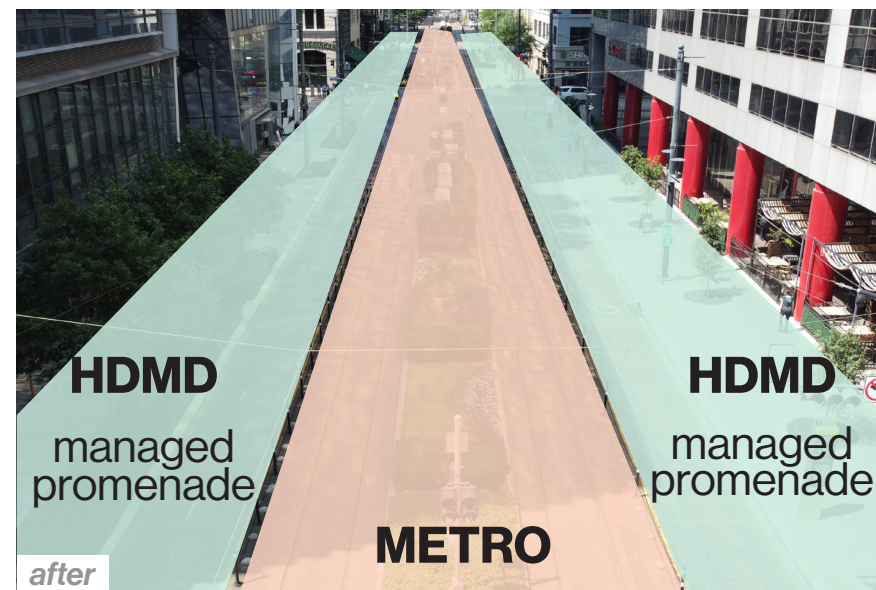
# THREE BIG SHIFTS

## Approaches to Realize a New Main Street

Downtown Houston+ brought on Design Workshop in 2023 to lead a design study for the future design of Main Street. Over the course of the year, a basis of design was developed in response to community and agency engagement and goals. Three key considerations were made clear throughout this process, which will be referred to throughout this basis of design as the Three Big Shifts.

### 1 Maintenance

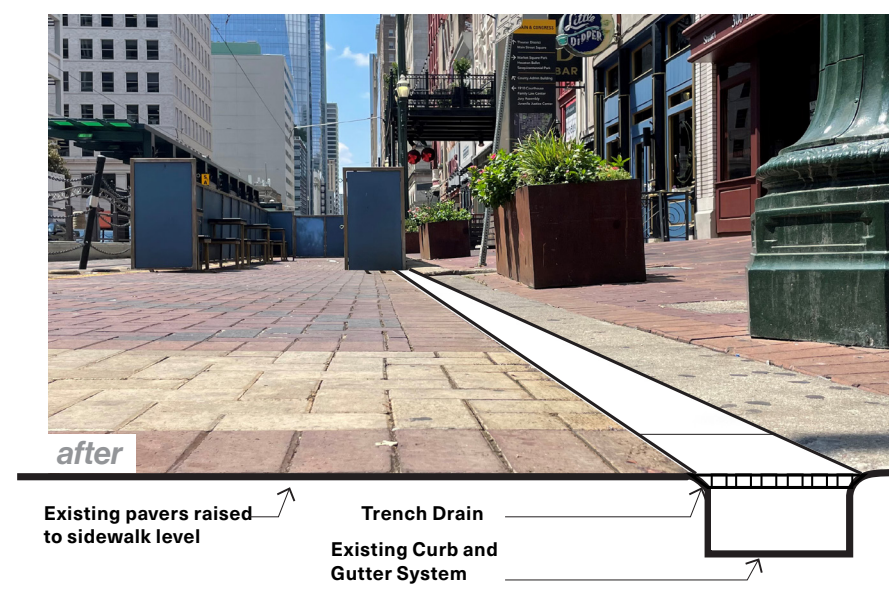
*Like the ideas, but who is going to take care of this?*



**Houston Downtown Management District**  
To manage the public realm

### 2 Accessibility

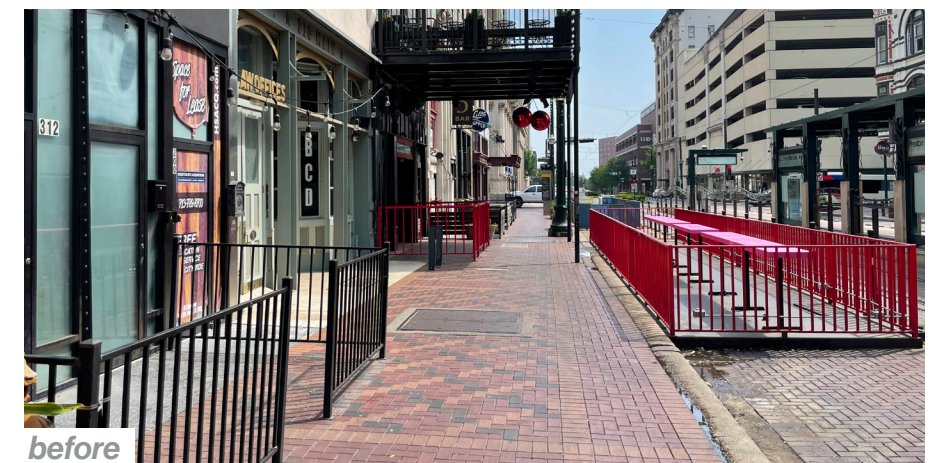
*How to resolve the elevation change between drive lane and sidewalk?*



**Raise the Street to Create Promenade**  
To create a flush walking surface between drive lane and sidewalk

### 3 Placemaking

*How do we identify Main Street as a place of interest and create a brand for the District?*



**Create Outdoor Rooms**  
That are fun, flexible and comfortable

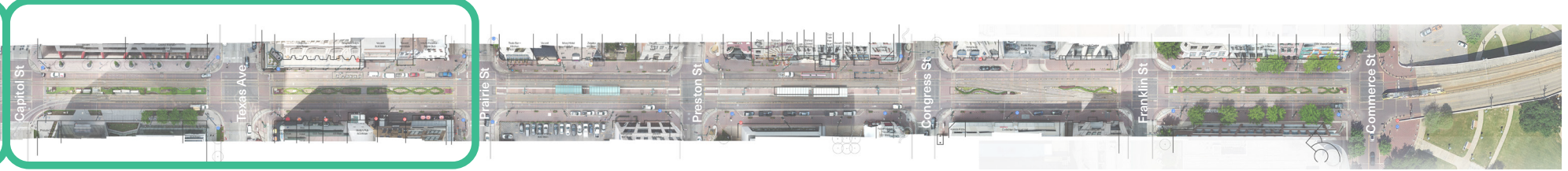
# MAIN STREET STUDY AREA

The project area extends the length of Main Street, for the blocks shown. East-west limits of work extend from the METRO right-of-way to the building face right-of-way on both sides of the street.

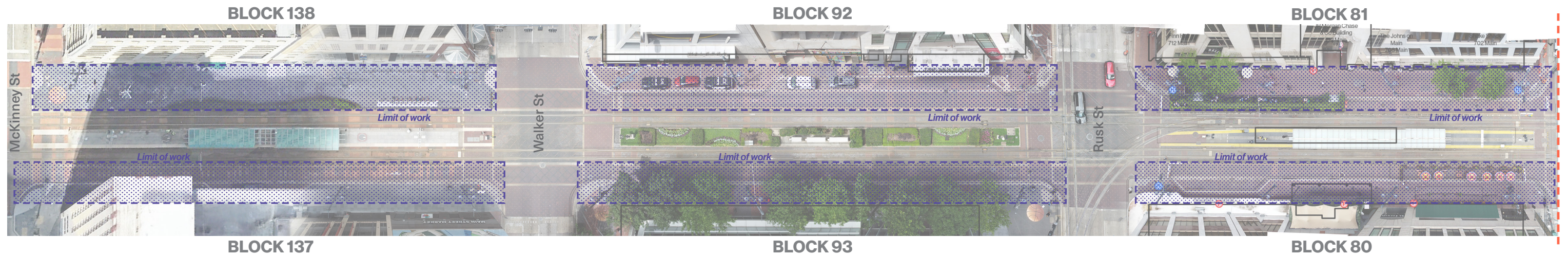
**KEY MAP - AREA 1**



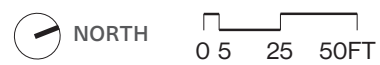
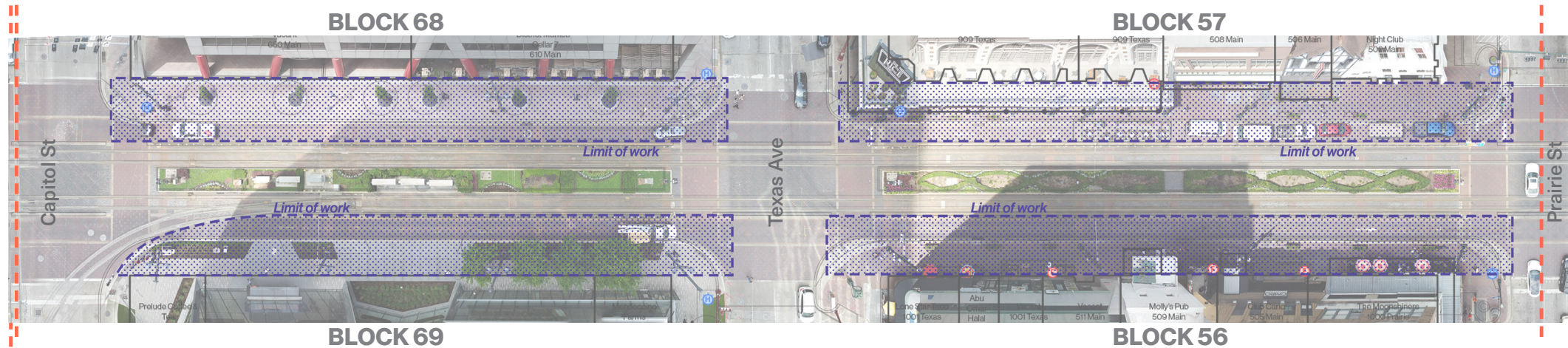
**KEY MAP - AREA 2**



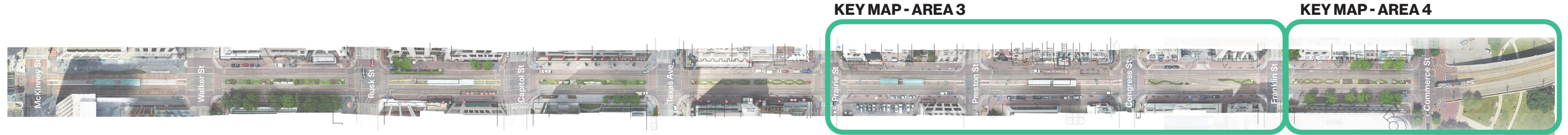
## AREA 1



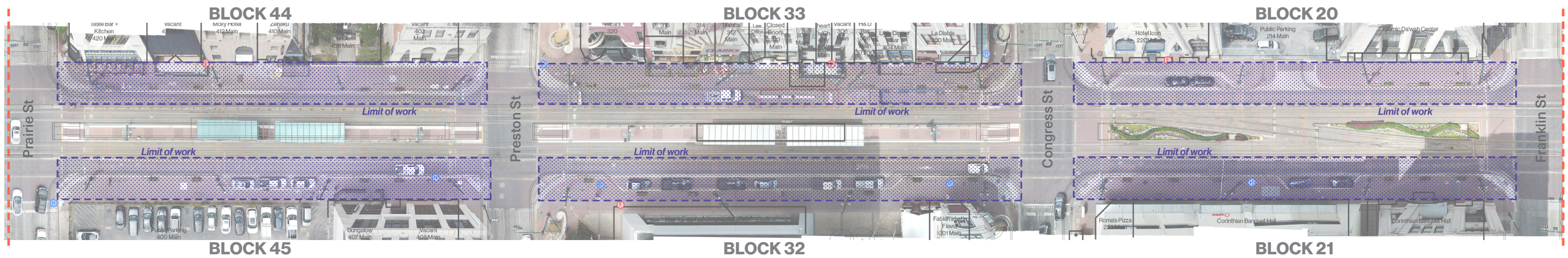
## AREA 2



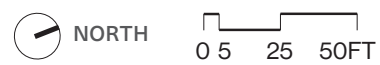
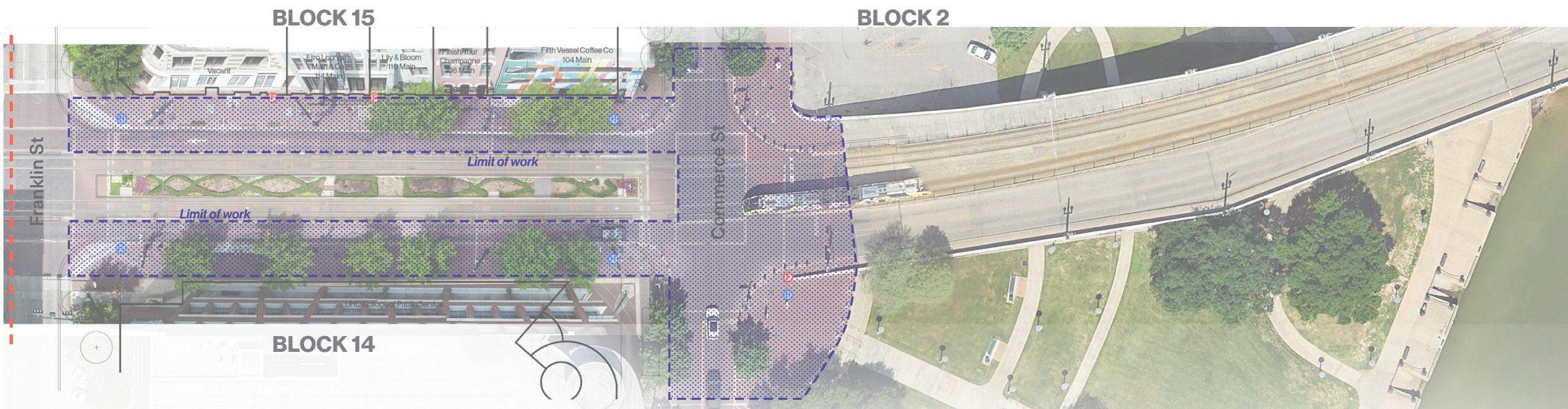
# MAIN STREET STUDY AREA



## AREA 3

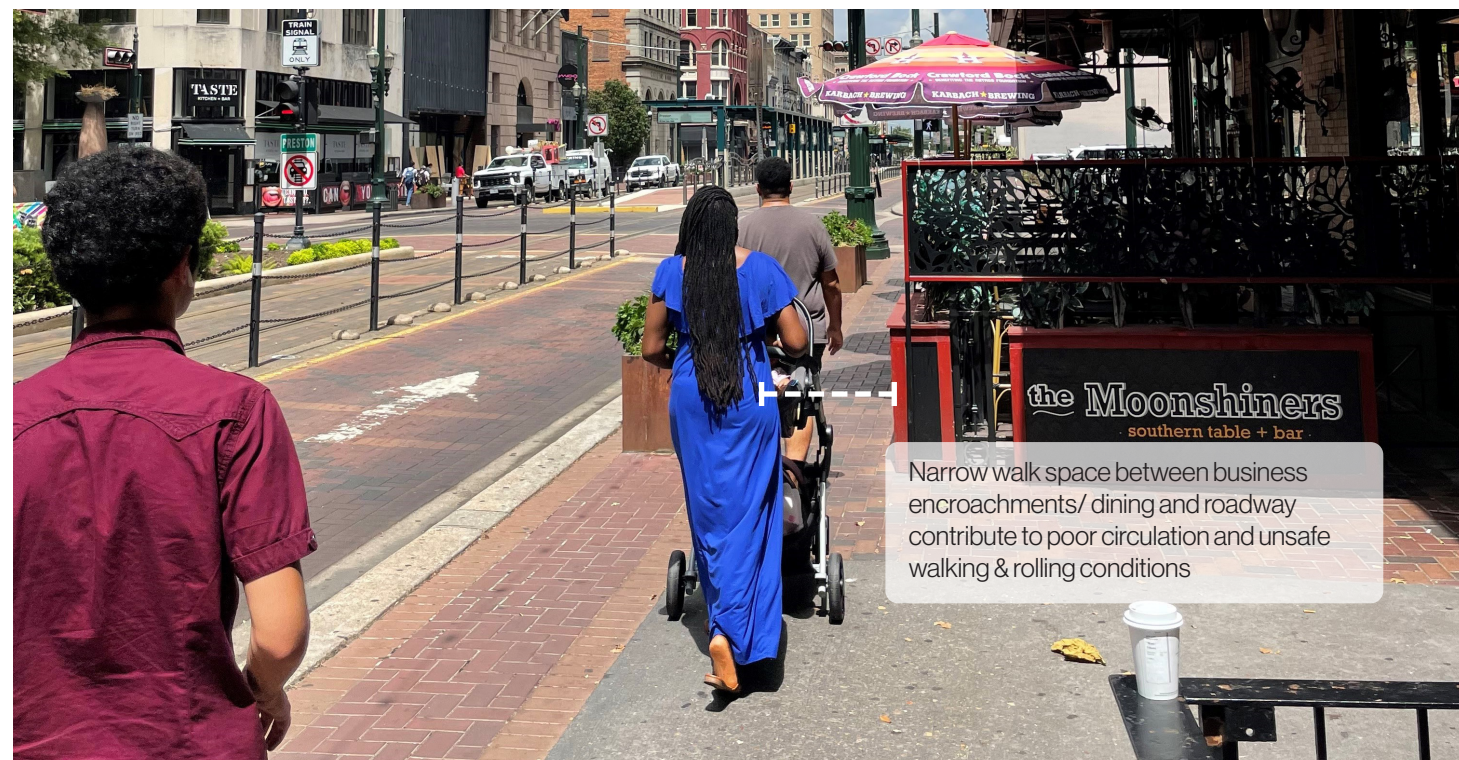
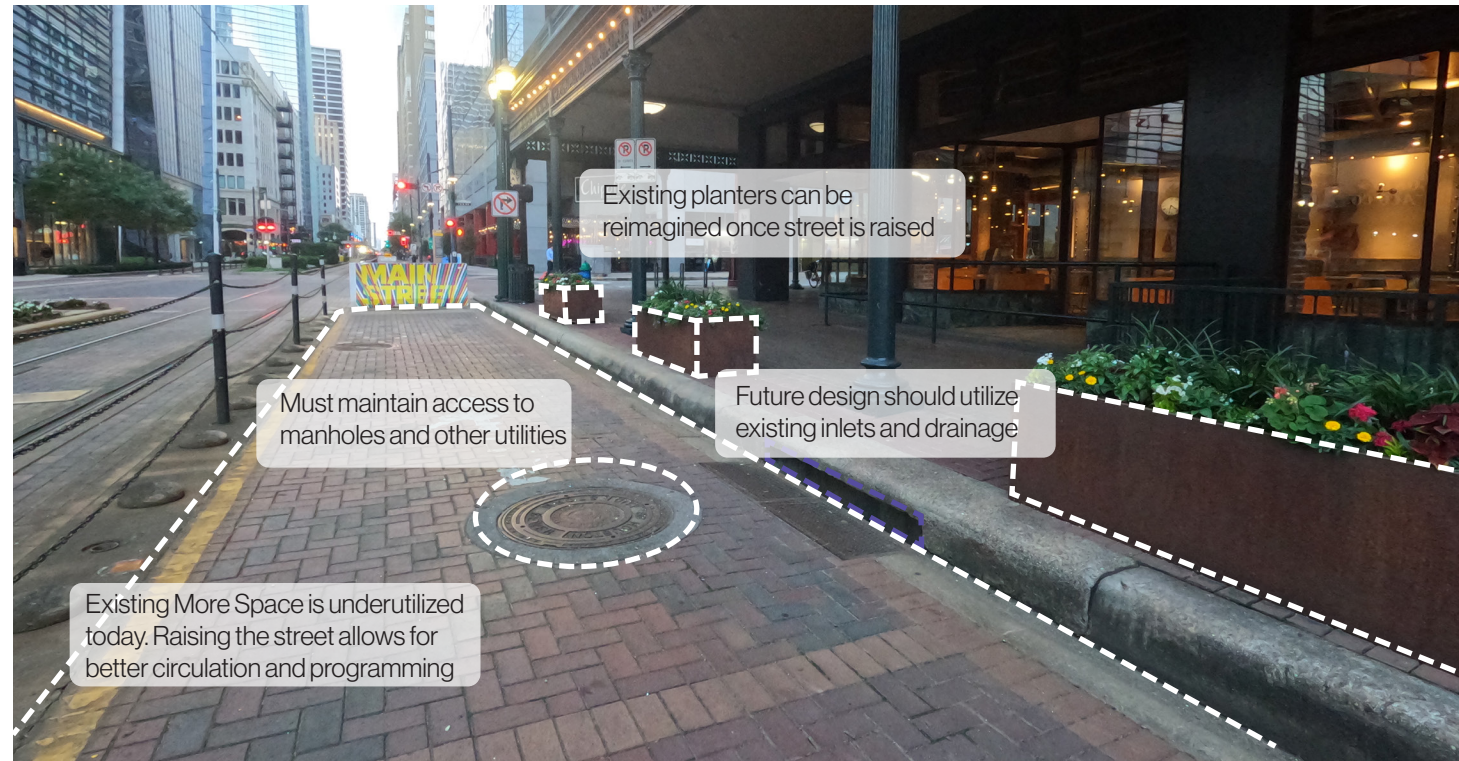


## AREA 4



# PROJECT ISSUES + OPPORTUNITIES

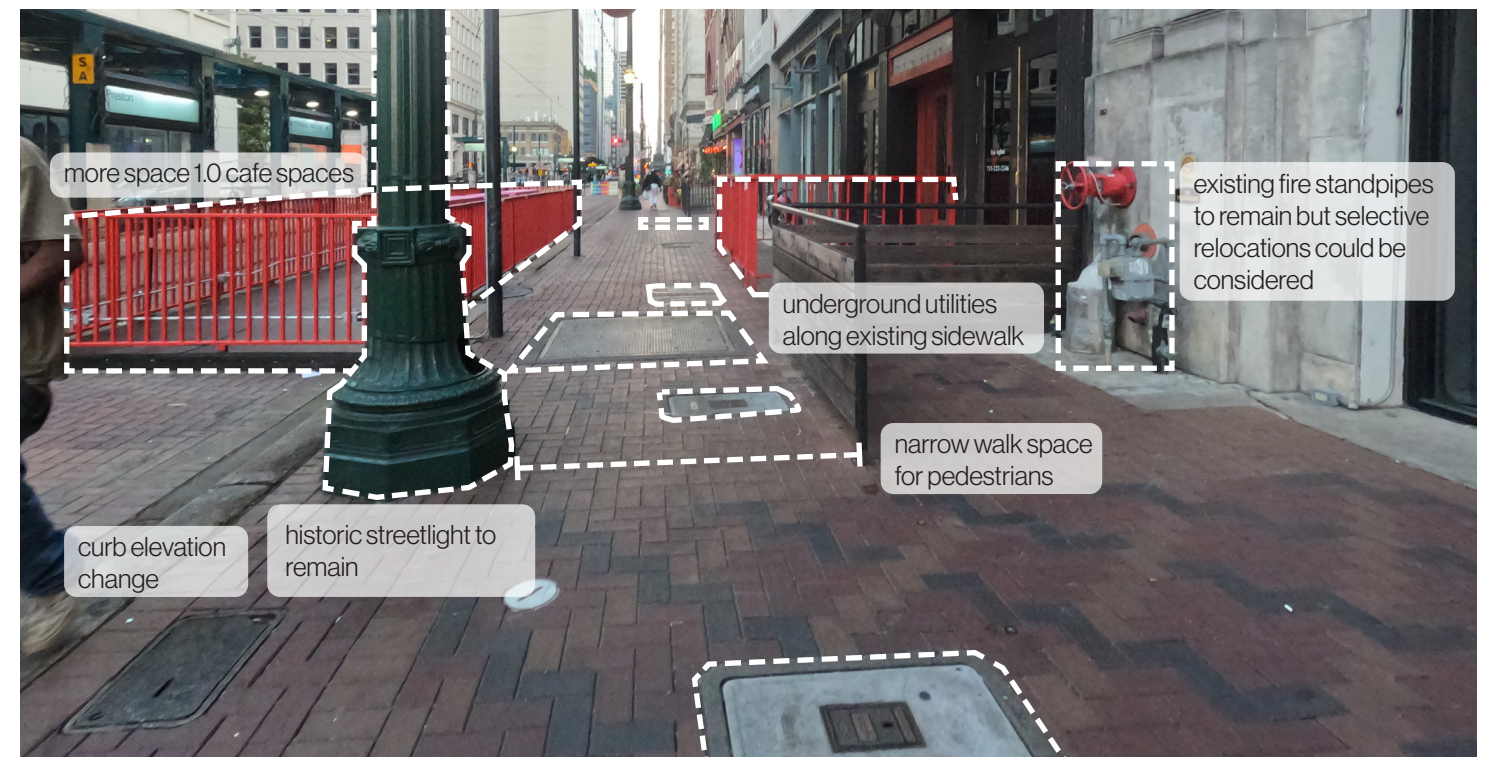
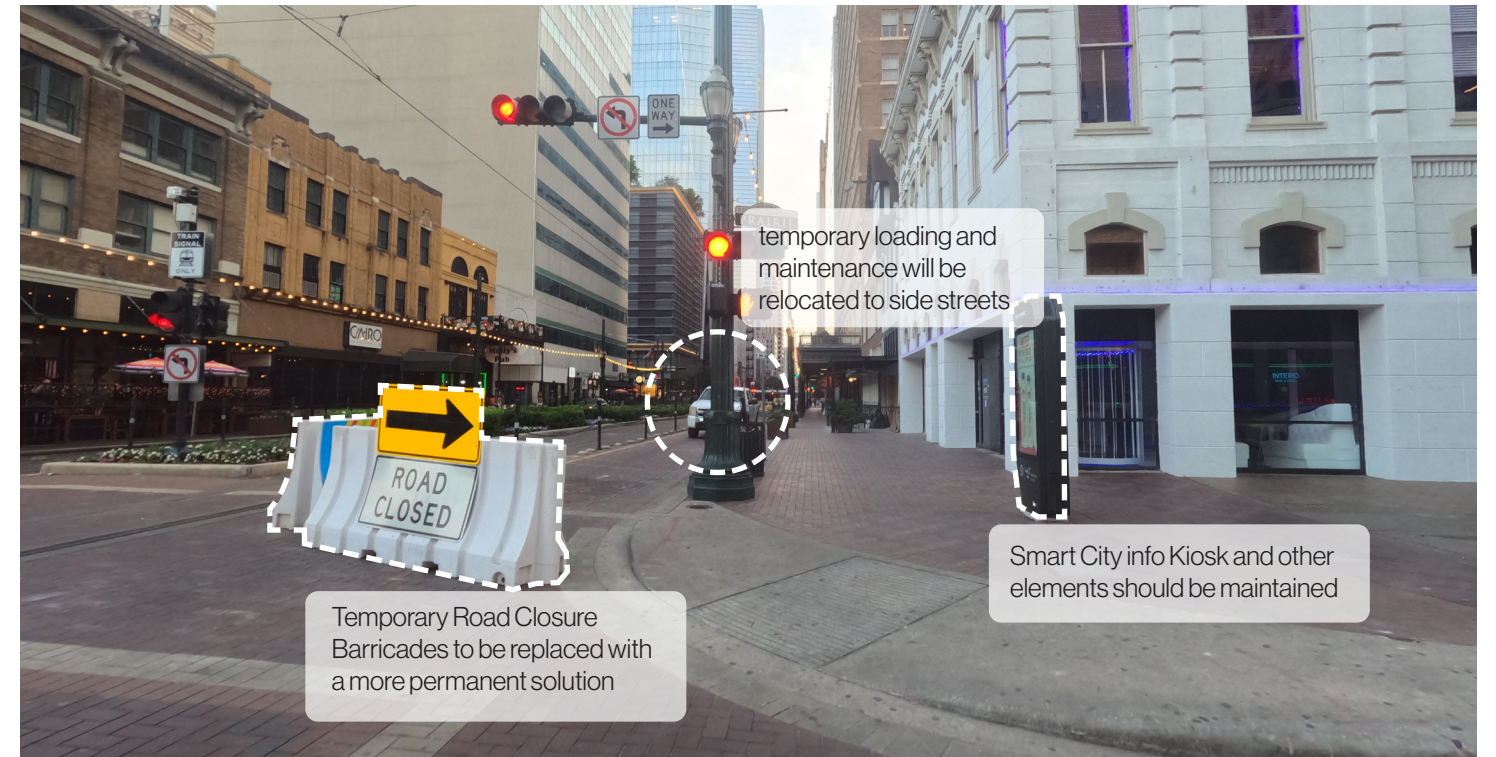
Existing conditions were documented throughout the design study. Conditions that stand to be eliminated or improved include unattractive or poorly located utility boxes and streetlights that leave less than adequate space for pedestrian flow. Additionally, outdoor dining spaces—many prompted during the temporary More Space Program--created places for patrons to sit and linger. However, their placement, whether adjacent to existing cafes and bars or on closed streets next to the METRO line, are often inconsistent in character and dimension. These create challenges for pedestrian navigation and visual clutter.





# PROJECT ISSUES + OPPORTUNITIES

There are a number of existing uses along Main Street that are successful today, including the activated public spaces adjacent to Finn Hall which was constructed during the pandemic. Elements of human comfort such as planters, shade trees and festoon lighting at the Finn Hall location and at Main Street Square provide a precedent for future, permanent improvements that can be realized through the More Space Main Street 2.0 project. Additional conditions that will need to be addressed through this project include a need for better drainage and removing the varied elevation between the sidewalk and street, which impacts ADA access.



# 3

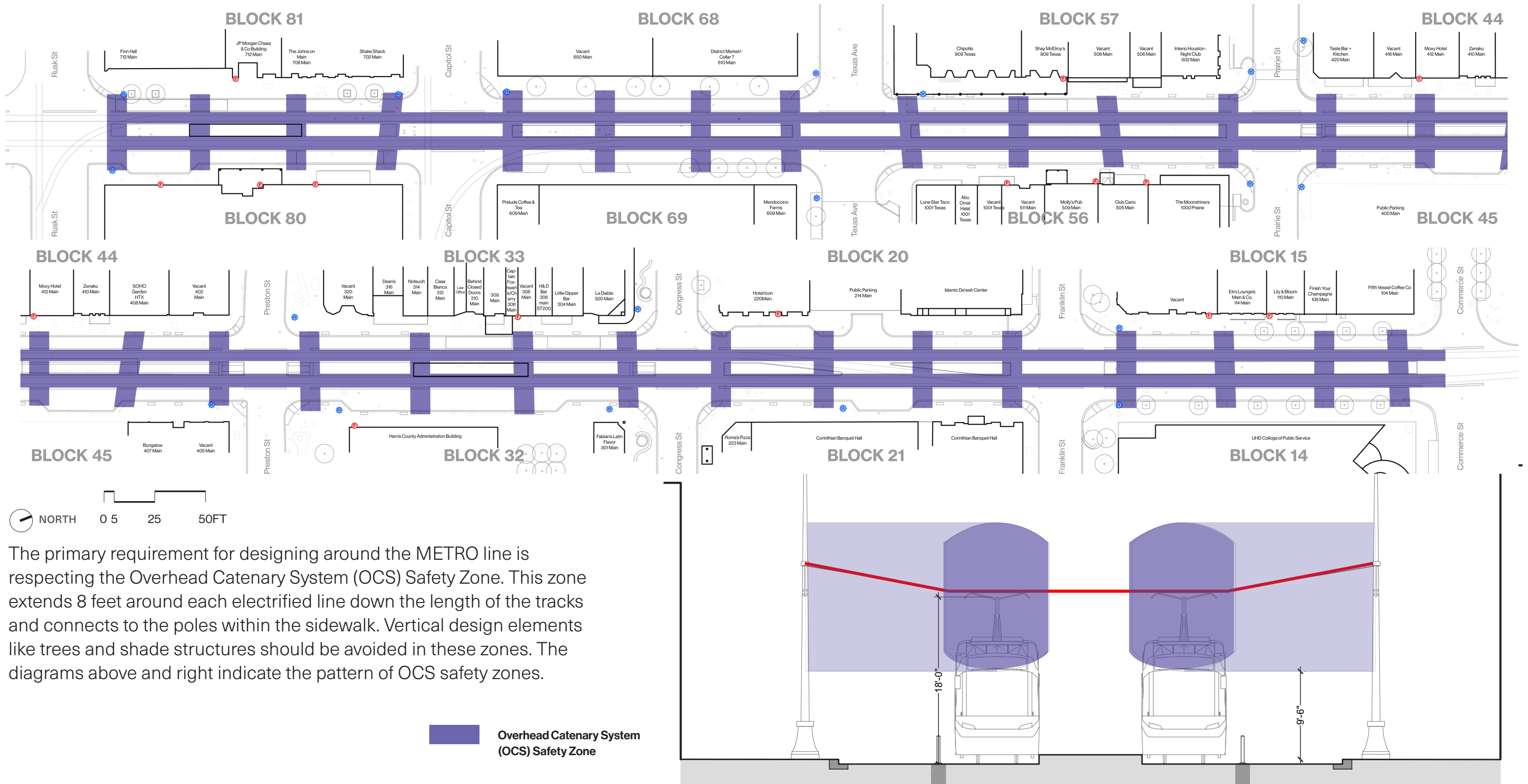
# Basis of Design

# BASIS OF DESIGN

## Supporting Diagrams

### METRO

The following diagrams and design criteria summarize the Basis of Design for METRO's needs, and the components that should be carried forward into detailed design and engineering. As much as possible, solutions for the final concept design are built off existing success on Main Street (particularly around Main Street Square). Strategies such as trench drains along the existing railing, the use of carefully placed trees, and vertical planting buffers between rail and pedestrians are all found on Main Street today. Continued coordination with METRO is required to shepherd the concept plan into implementation.



The primary requirement for designing around the METRO line is respecting the Overhead Catenary System (OCS) Safety Zone. This zone extends 8 feet around each electrified line down the length of the tracks and connects to the poles within the sidewalk. Vertical design elements like trees and shade structures should be avoided in these zones. The diagrams above and right indicate the pattern of OCS safety zones.

Figure 1: Overhead Catenary System (OCS) Safety Zone

# BASIS OF DESIGN CRITERIA

## METRO

**“Safety Zone”:** No obstructions in or around OCS Safety Zones and guidewires (see **Figure 1**).

- There are approximately 65’ pockets space with vertical clearance every 80’-0” or so for trees and shade structures.
- Explore design elements that can reasonably be located in or under the “Safety Zone” from OCS centerline. \*

**Platform Access:** Operations teams need access for on-going maintenance and repair trucks to park.

- Potential solution: Explore METRO-designated spaces on side streets and fire lanes.

**Emergency Access:** METRO PD + Houston PD should develop a coordinated emergency response system, particularly if train breaks down or derails and personnel need to lift doors without crawling under train.\*

- Explore potential use of fire lane access for emergency situations.\*

**Existing Operations Challenge for METRO-Management of deliveries to Main Street businesses:** deliveries currently block bus lanes and trains on side streets.

- Potential Solution: Explore METRO-designated spaces on side streets.

**Intersection Visibility:** Respect view triangles for METRO operators at intersections. (Exact view triangle dimensions to be determined with METRO based on needs of each block, platform and direction of travel.

- Design elements such as bollards or vegetative buffers at or below 36”.

### Additional Design Details:

**Buffer between pedestrians and trains:** Design elements should be applied in a targeted way, not extend the entire corridor, and not significantly impede visibility. Variations of the buffer may be explored to allow for both human comfort and safety as well as METRO maintenance/ access needs (see Figure 2 and 3).\*

**Promenade drainage system:** Capacity and maintenance must be self-sufficient and not overflow into METRO lines; trench drains, gutters, trees, tree debris, and trash need to be well maintained (see Figure 6 and 7).\*

**Shade:** Trees, awnings or other structures should consider the minimum and maximum height requirements that does not obstruct the OCS Safety Zone and guidewires. Design will consider appropriate species selection and spacing of trees at maturity.

**Safety Buffer at METRO edge:** Raised planters can replace the existing chain and pole barrier system that exists today. Any solution must consider maximizing distance between train and walking path. Material selections should be approved by METRO to minimize conductivity and provide sufficient grounding.

\* Key issues to be resolved in the design and engineering phase of work.

### HOUSTON FIRE DEPARTMENT

This diagram summarizes the Basis of Design for the Fire Department's needs, and the components that need to be carried forward into final design and engineering.

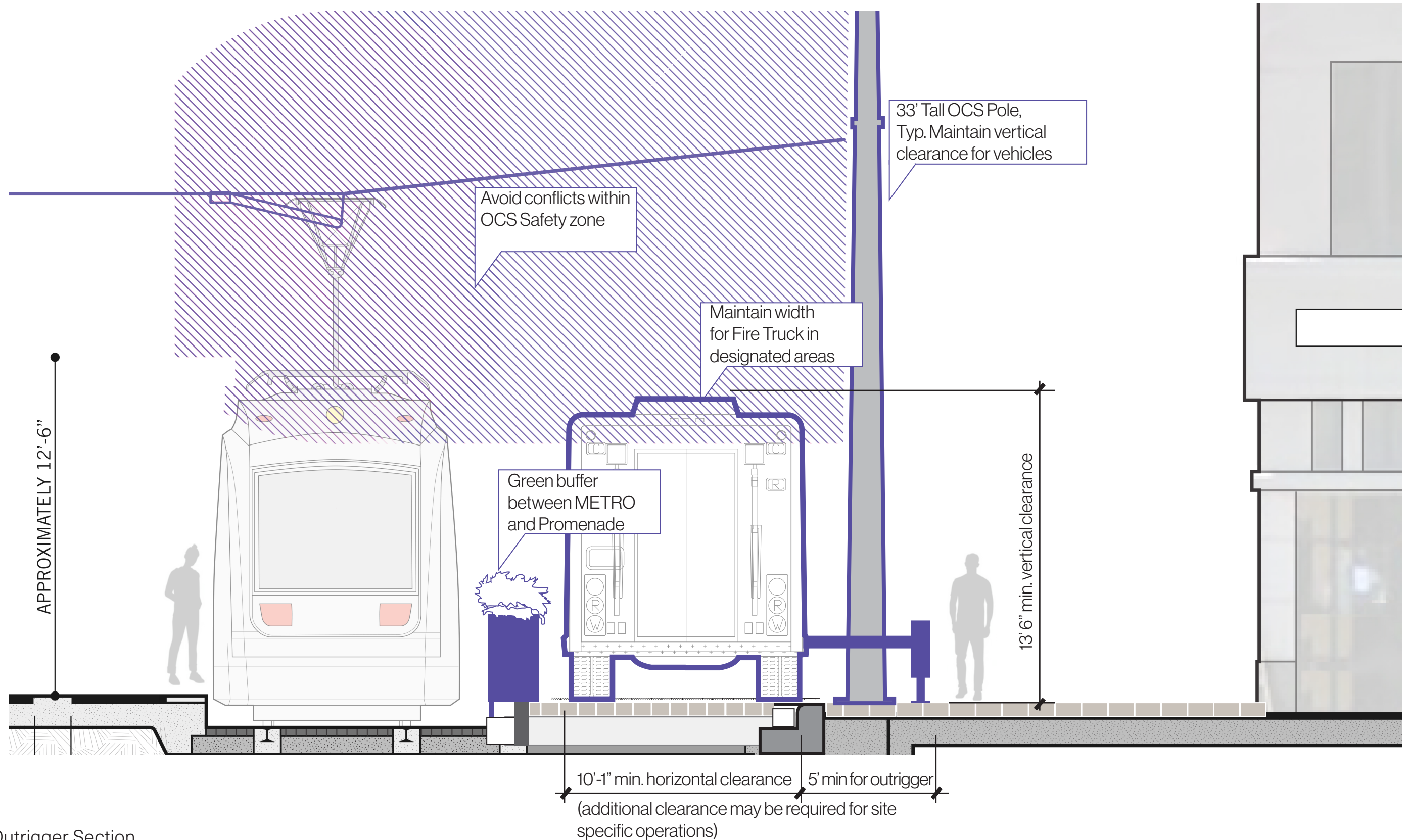


Figure 2: Outrigger Section

# BASIS OF DESIGN

## Supporting Diagrams

### HOUSTON FIRE DEPARTMENT

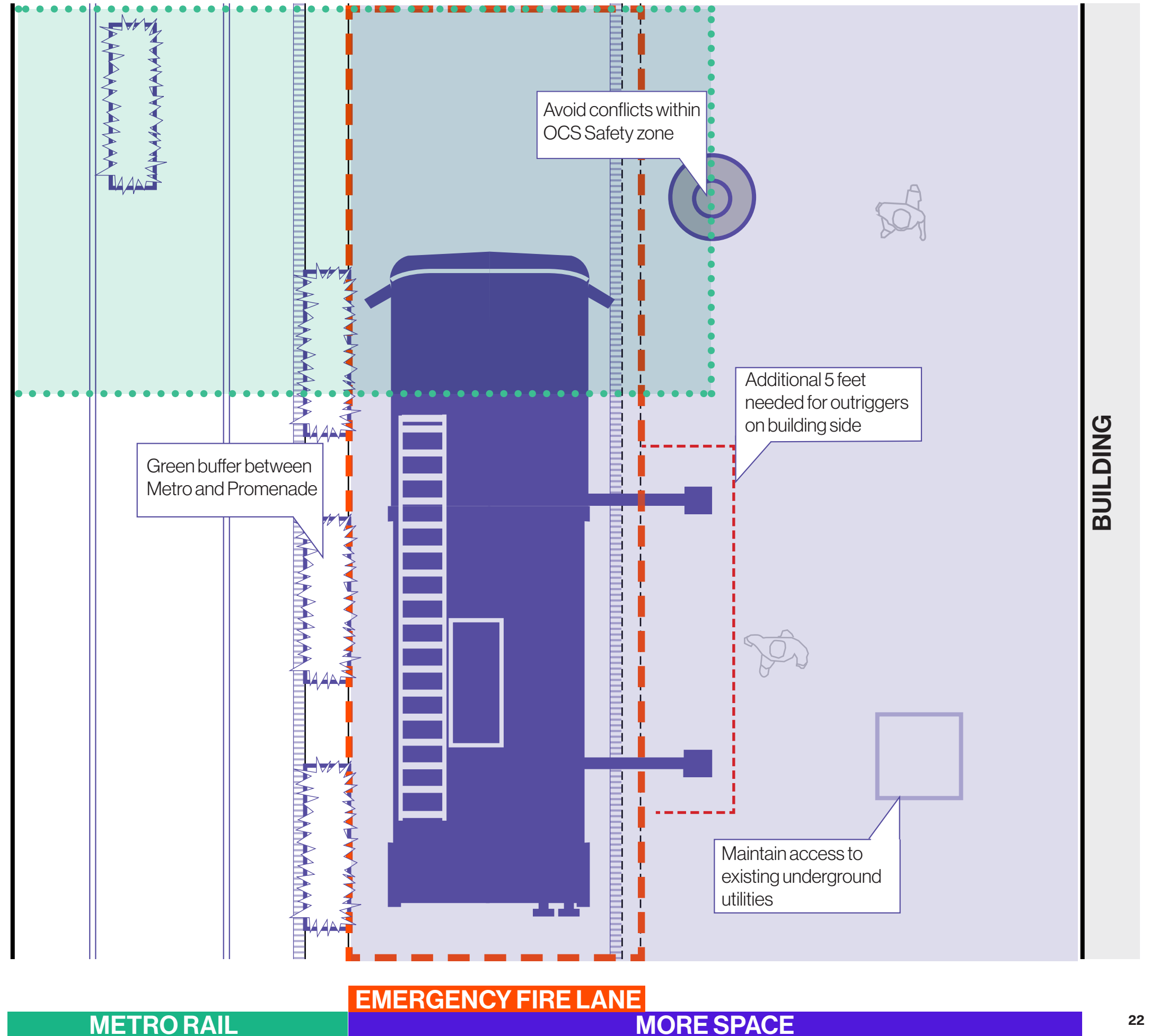


Figure 3: Outrigger Plan

# BASIS OF DESIGN

## Supporting Diagrams

### HOUSTON FIRE DEPARTMENT

With the closure of the vehicular travel lanes, the Fire Department and design team have collaborated to delineate several segments of Main Street that must remain accessible for fire trucks in the event of an emergency. These segments will be designed as the pedestrian walkway, and have the width and weight load requirements necessary for emergency situations.

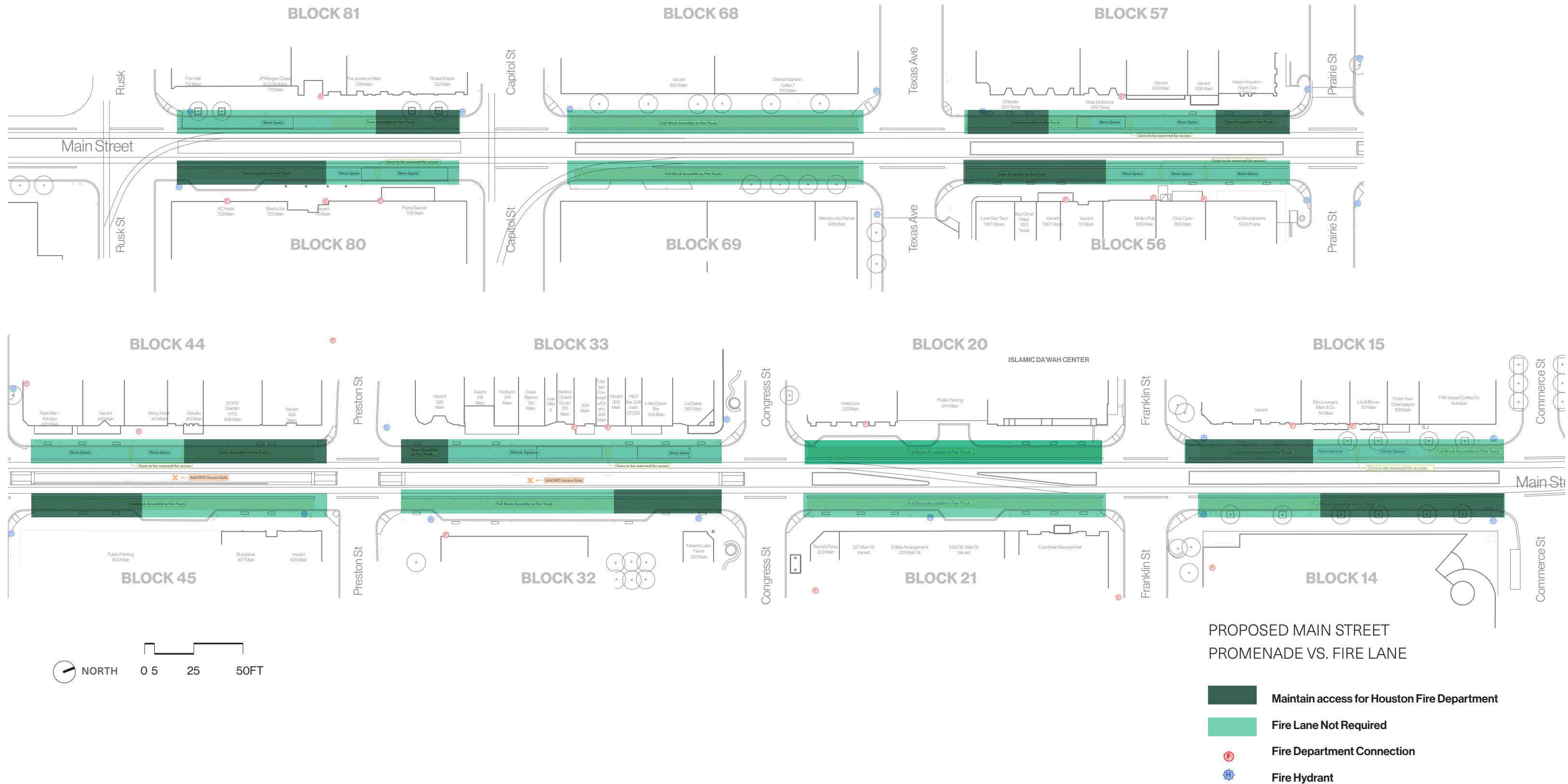


Figure 4: Required Fire lane Access Map

# BASIS OF DESIGN

## Supporting Diagrams

### HOUSTON FIRE DEPARTMENT

In order to determine which spaces on Main Street require or do not require emergency fire access, the Fire Department is taking a comprehensive approach based on building height, standpipe locations, and overall block access. This diagram illustrates how the Fire Department plans to have emergency access to all buildings in the project area.

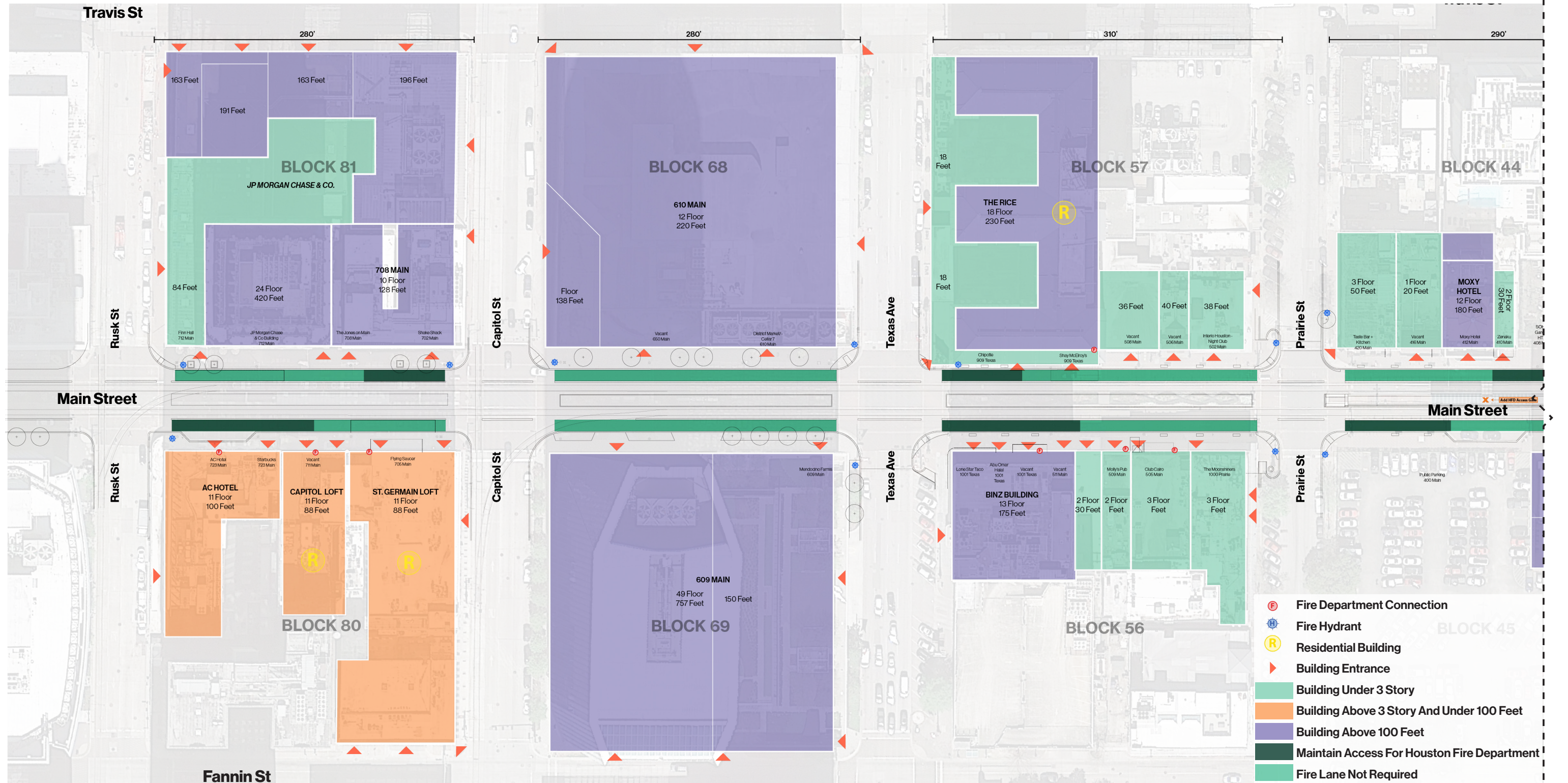


Figure 5: Building heights for firetruck access



# BASIS OF DESIGN

## Supporting Diagrams

### HOUSTON FIRE DEPARTMENT



- Ⓡ Fire Department Connection
- Ⓜ Fire Hydrant
- Ⓡ Residential Building
- ▶ Building Entrance
- Building Under 3 Story
- Building Above 3 Story And Under 100 Feet
- Building Above 100 Feet
- Maintain Access For Houston Fire Department
- Fire Lane Not Required

# BASIS OF DESIGN CRITERIA

## Houston Fire Department

### **Difference between ladder and engine truck lanes:**

Ladder trucks will need space for outriggers, engines will not.

- Explore designated pad sites in locations where ladder trucks and outriggers are required; these locations should be free of obstruction. Exact length and width of pad sites will be determined with additional meetings with HFD.\*

**Access to standpipes:** Fire trucks should be within 100' to 150' of a standpipe, but a standpipe may be moved IF a ladder is not needed and 150' hose pull can reach. Exact locations to be verified by HFD in later phases of design.

### **Building accessibility requirements** (see Figure 4 and 5):

- Ground ladder can be used for buildings 3 stories and under.
- Ladder access needed for residential and buildings over 3 stories.
- Buildings over 100' have limited access by a ladder truck.
- Only need ladder truck space in front of buildings that cannot be serviced on sidestreet (midblock buildings over 3 stories tall).

**Weight load of proposed flushed sidewalks:** Needs to hold truck and outriggers where needed; load capacity for sidewalks need to be verified with HFD.

**Clearances needed for trucks and outriggers:** Vertical clearance for trucks: 13'-6"; Fire trucks are 10'-1" wide, ladder trucks need an additional 5' on outrigger side

(building side) for fighting fires (see Figure 2 and 3).

- Morespace 2.0 will finalize proposal for designated fire lanes versus cafe/ outdoor dining/ park spaces based on emergency access needs. Additional meetings with HFD is needed for confirmation of specific location and length.

### **Additional Design Details:**

**Fire will shortjack ladder trucks in all Main Street emergencies:** Outriggers to be put on one side, the side they are extending the ladder (building side).

**Space for outriggers:** Ladder truck outriggers will need to be placed on sidewalks at specific pad sides in case of emergency; these spaces need to be rated for fire truck use.

**Fire access across METRO line:** No ladders can extend across Metro because of the catenary system, but pump hoses can pull across through designated gates at stations.

\* Key issues to be resolved in the design and engineering phase of work.

### Stormwater, Police, Utilities

This diagram summarizes the Basis of Design for the needs of COH Public Works, Houston Police Department, CenterPoint and the components that need to be carried forward into final design and engineering. To build off of existing success and solutions, this concept replicates currently existing systems that exist as much as possible.

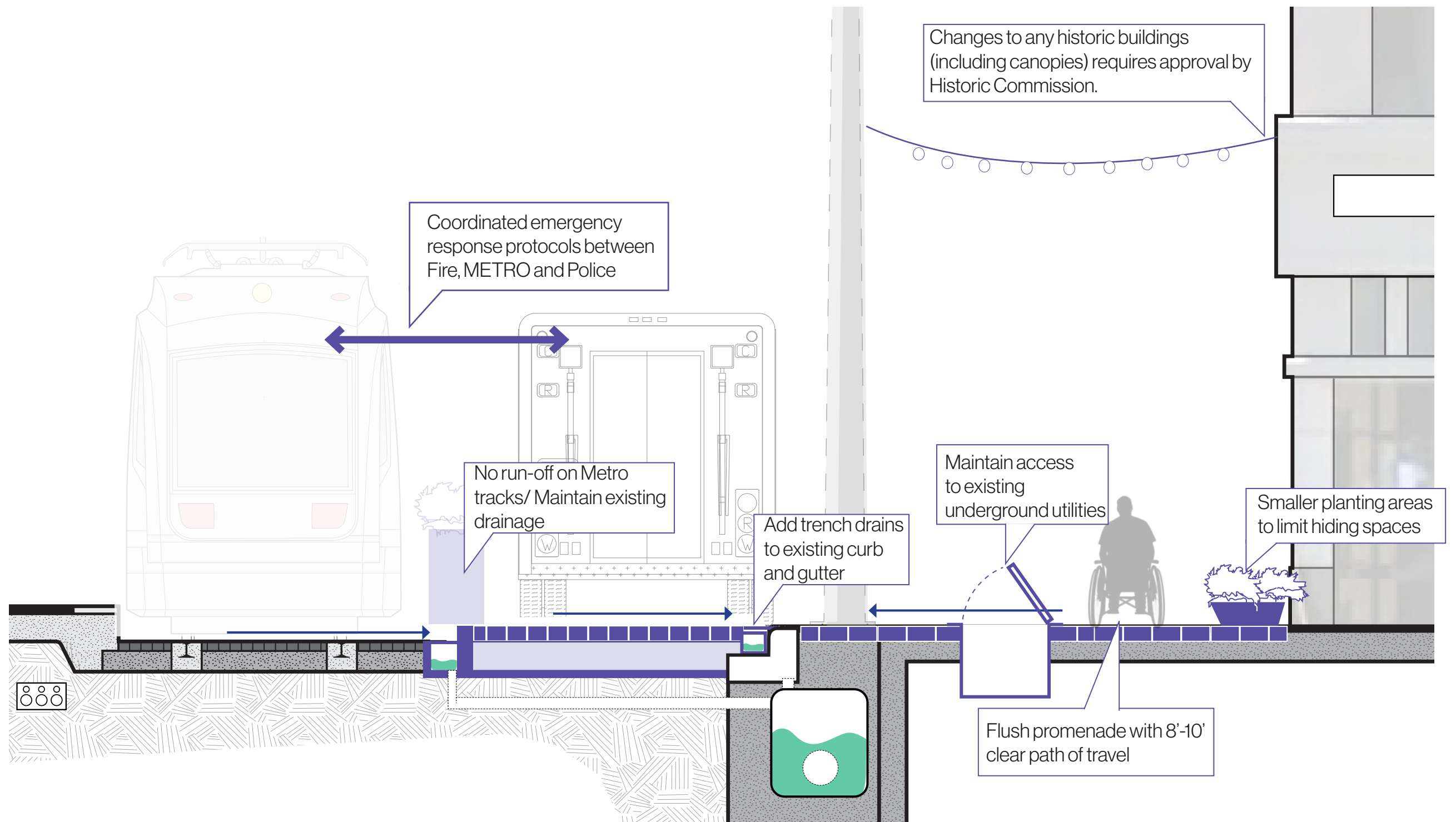


Figure 6: Drainage

# BASIS OF DESIGN

## Supporting Diagrams

### Stormwater, Police, Utilities

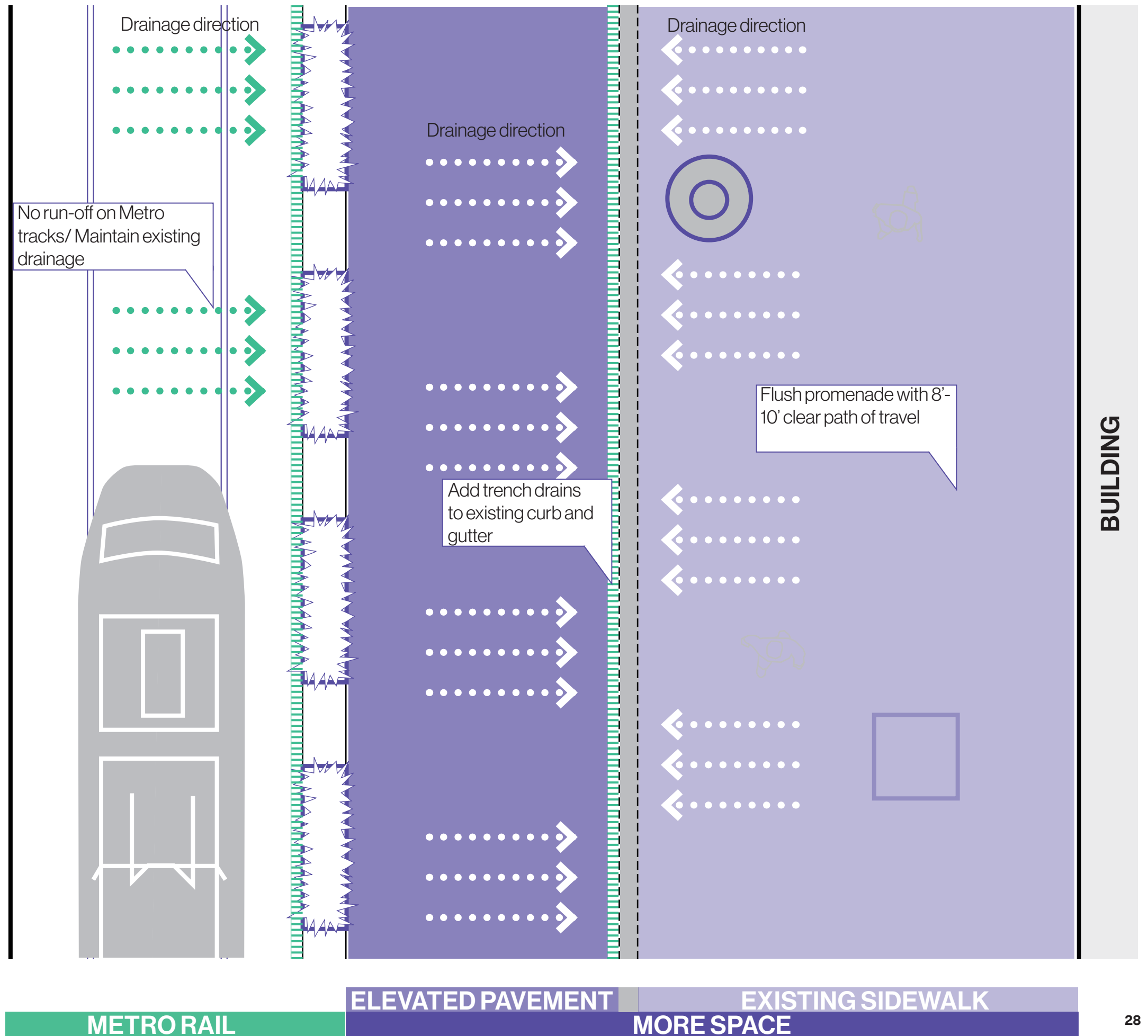


Figure 7: Drainage-plan

# BASIS OF DESIGN

## Supporting Diagrams

### Safe Crossings

Creating safe crossings is critical along a new pedestrian prioritized Main Street. Existing cross-walk alignment will be maintained with improvements to the corners to include “squaring” off corners to maximize the pedestrian zone and preventing car turns with the addition of planting buffers and/or bollards. There are several examples of this intersection design on Main Street, specifically around Main Street Square. While raising the intersection is not currently in the final concept plan, it could be something considered in the future as the final engineering develops.

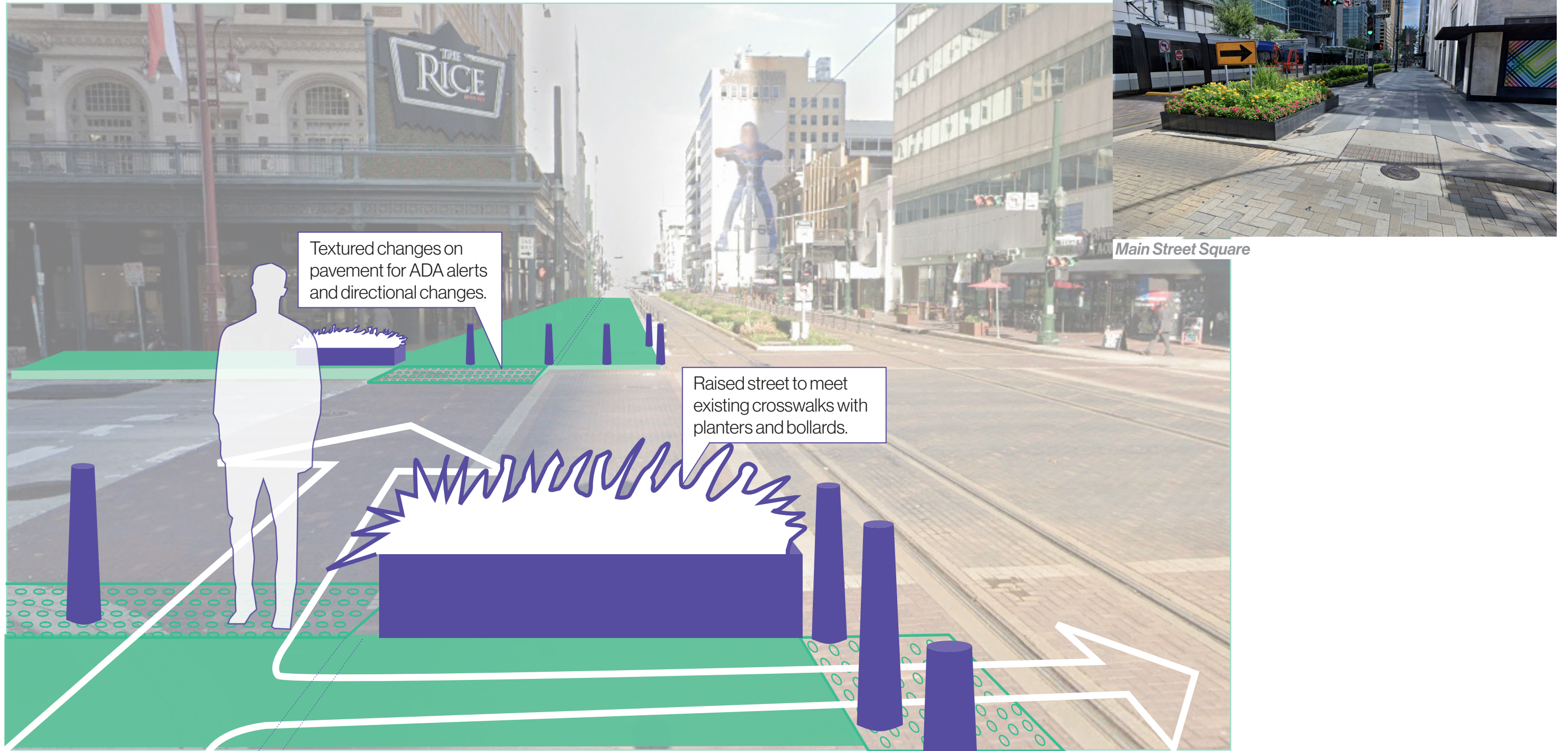


Figure 8: Safe Crossings

# BASIS OF DESIGN CRITERIA

## Stormwater

**Utilize existing stormwater infrastructure along Main Street** (See Figure 6 and 7).

- Assume raised condition drains towards existing curb. Water shall be captured in trench drain flush and adjacent to existing curb.
- \*Note: The use of trench drains is not required but offered as one potential solution. Engineering solutions that can utilize existing infrastructure and optimize storm water conveyance are encouraged.
- Water should not back up into METRO line with proposed promenade drainage. Assume water drains toward raised paved condition and captured in additional trench drain in approximate location of existing buttons/ guardrail.

## Visibility

**Ground level activities for non-dining uses:** Hotels and residential buildings should be more open at ground level entrances.

- Design should be plaza-like, open and free of obstruction for high visibility.

**Lighting:** Existing light poles to be maintained in current locations (see Figure 9 and 10).

- Festoon lighting attached to historic buildings to be avoided. Any changes to historic buildings requires approval by Historic Commission.
- Design can consider independent structures for catenary systems.
- Additional lighting may be desired and is encouraged. Refer to Downtown lighting master plan\* for additional information.

**Tree Shade:** Trees (planted underground or in above grade planters) should be carefully located in areas clear of underground utilities.

- Design will consider tree species and placement with optimal canopy, limbed up clear height and placement clear of underground utilities (see Figure 9 and 10).

\* Key issues to be resolved in the design and engineering phase of work.

## Access, Accessibility + Safety

**Pedestrians should have a continuous 8'-10' clear path of travel at all time.**

- Path of travel should be designed for comfort, safety and ease of access into buildings.
- Alignment: Path of travel can occur either along building frontage or along current drive lane but should not change alignment more than (1) time per block.
- Paving textures and patterns to alert ADA users about circulation.
- Fire Lane: When emergency access for Fire is required on a block, the laneway can double as the clear path of travel for pedestrian movement. This allows additional space for outdoor dining or shared social space in front of buildings.

**Safe Crossings:** Ensure safe crossings between METRO and cross-streets along Main Street (see Figure 8).

- Curved corners for automobile turning radii will be removed.
- Raised planters, bollards and clear striping will protect pedestrians from proximity to METRO train. Design will consider more visually substantial, removable barrier at fire lanes to complement fixed planters and direct pedestrian crosswalks.
- Adjusted signalization to ensure adequate cross time for pedestrians.

**Utility interactions\*** - Centerpoint vaults, manhole covers, duct banks, valve shut-offs, water meters and various other utilities are assumed to remain in current locations. Further discussion with relevant agencies is required to determine adequate access for routine operations.

- A survey should be completed to locate any and all utilities prior to next phase of design.
- Note: while effort will be made to maintain convenient access to utilities, some changes are inevitable and cross-discipline coordination will be required to strike a balance of needs.

**Activities and Programming**

This diagram summarizes the Basis of Design for Activities and Programming, and the components that need to be carried forward into final design and engineering.

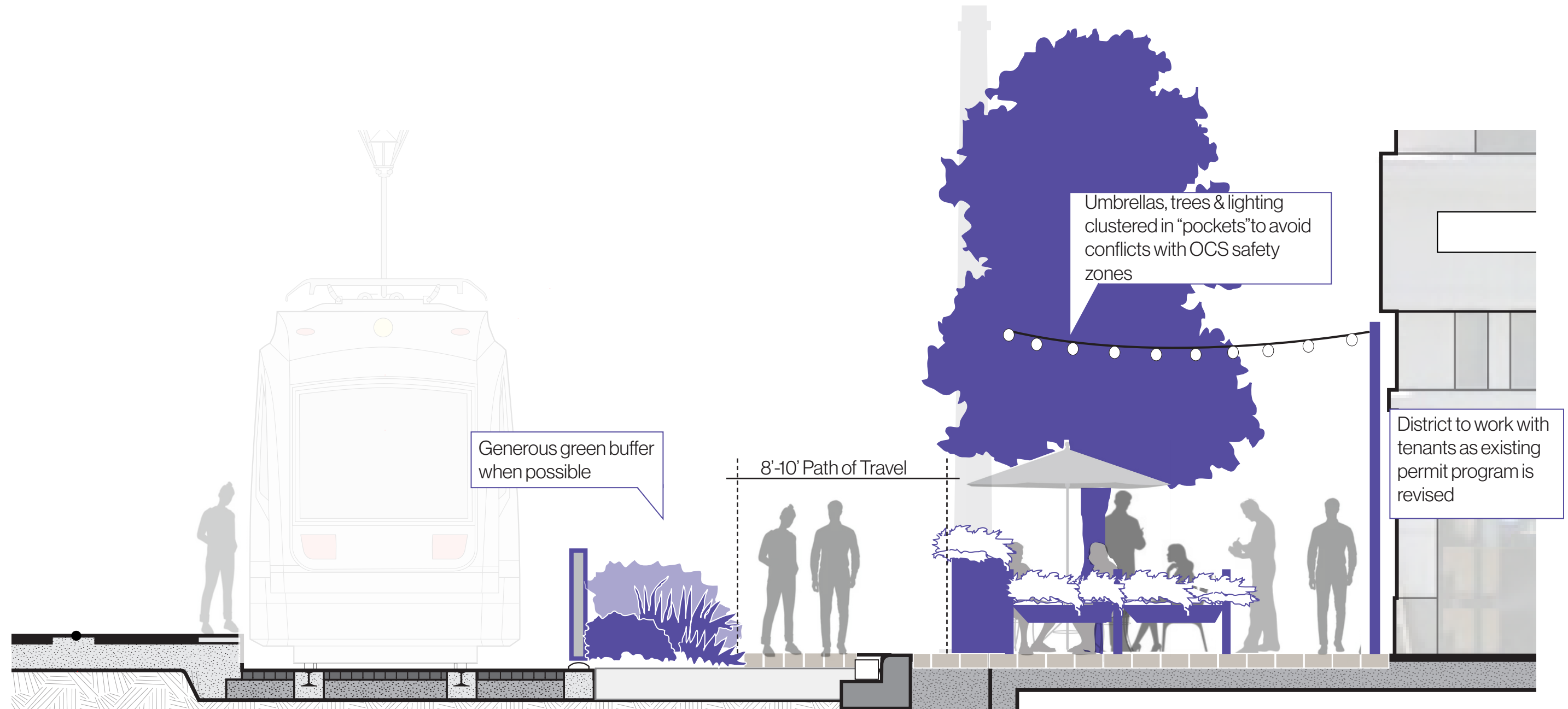


Figure 9: Active and Programming section

**Activities and Programming**

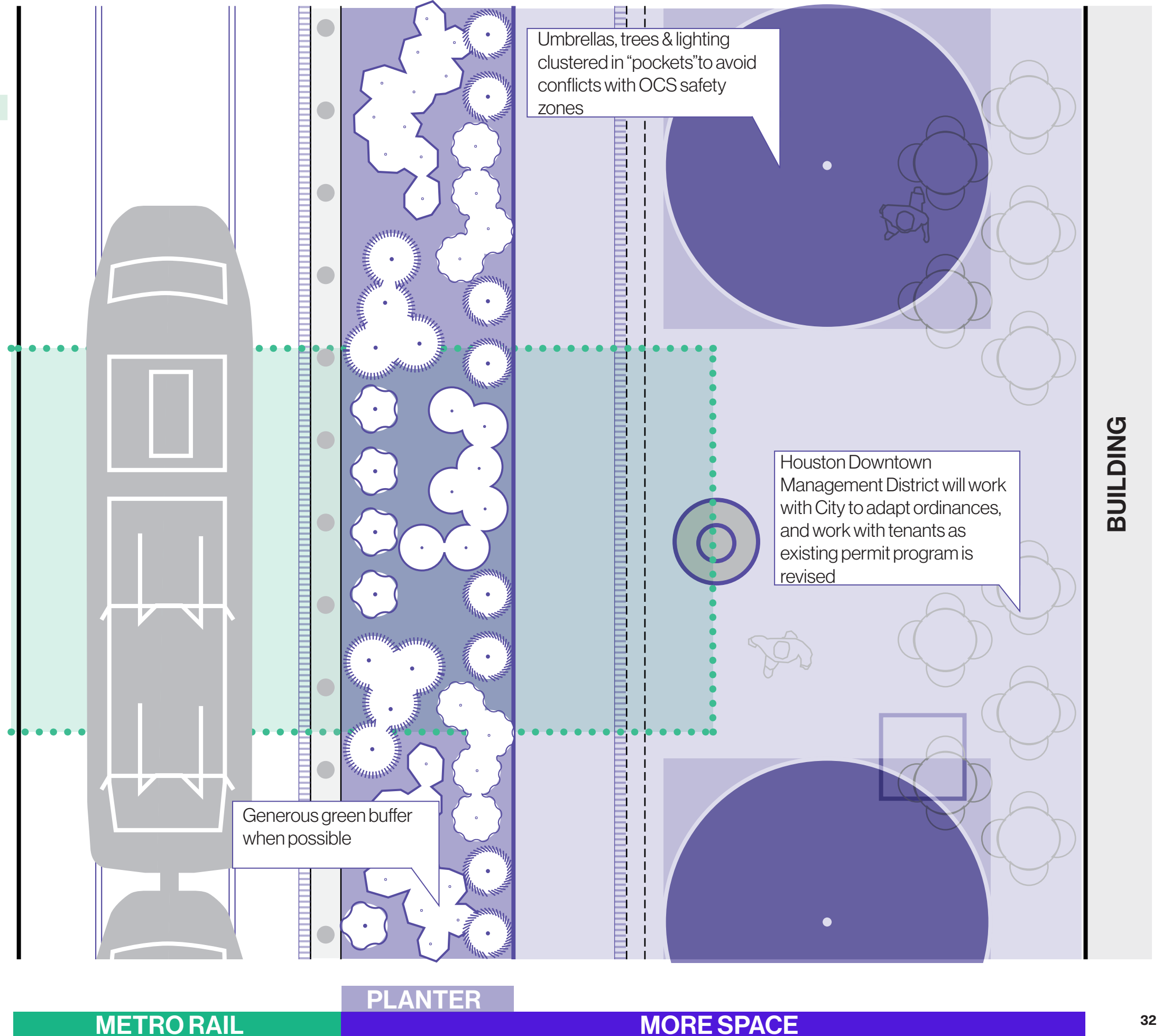


Figure 10: Active and Programming plan

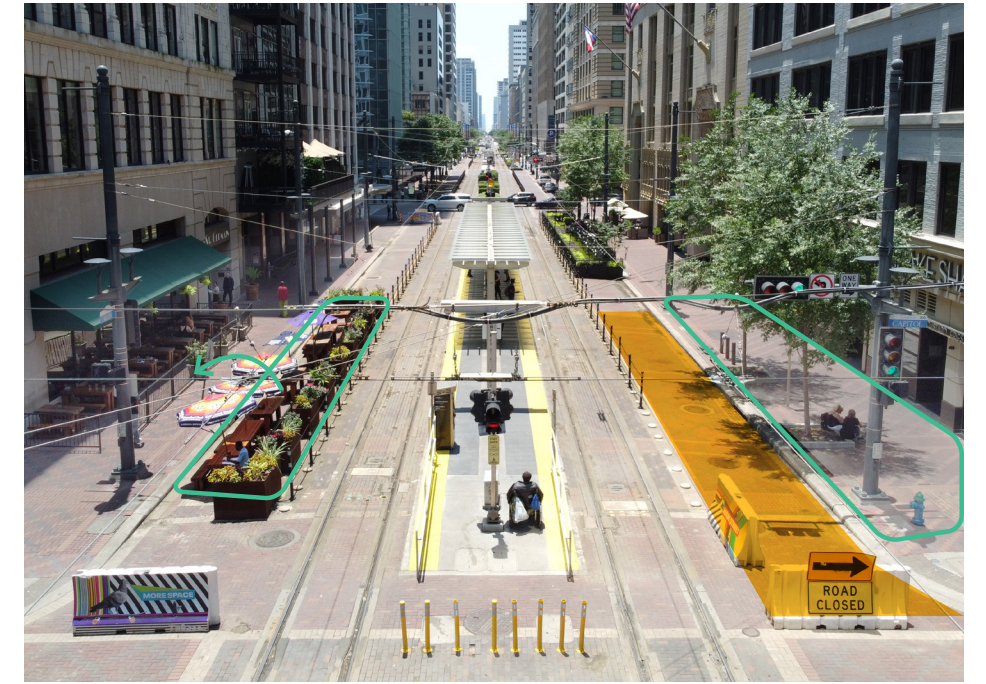


# BASIS OF DESIGN

## Supporting Diagrams

### Activities and Programming

A “kit of parts” approach to building Main Street provides several benefits including the flexibility to adapt the public space over time to accommodate the changing of tenants and phasing over time. With the Houston Downtown Management District’s oversight and management it also allows interim activation of the street during times of ground floor storefront vacancy.



### Restaurant/Cafe



### Social Space



### Opportunity Space



Figure 11: Activities and Programming

# BASIS OF DESIGN CRITERIA

## Activities and Programming

**Bars and clubs:** Bars and nightclubs do not require traditional table/chair service adjacent to their business.

All privately enclosed areas are discouraged unless they can be activated during daytime.

- Design around such businesses can be flexible and creative to accommodate a park-like setting.

**Restaurants and table service:** Restaurants with table service (and alcohol service) prefer cafe space adjacent to building.

Restaurants without table service can have cafe space away from building frontage.

**Flexibility:** Outdoor amenities between cafe and dining, park features and event spaces should consider flexible enough to be phased over time; programs should be capable of being readily changed for different uses as tenants change or district desires.

- Design should utilize a kit-of-part approach to developing outdoor amenities to achieve flexibility and design cohesion across Main Street.

**Opportunity sites:** Blocks with large blank walls and minimal activation are considered opportunity sites for District placemaking interventions.

- Programming kit-of-parts considers amenities for farmers markets, pop-up tents, music venues, event programming and other tactical interventions.

**Human comfort:** Add elements for human comfort where possible.

- Design considers trees and structures for shade, planters, casual seating, turf grass.
- Benches to be designed to promote activities, but discourage sleeping.



\* Key issues to be resolved in the design and engineering phase of work.

# BASIS OF DESIGN CRITERIA

## Governing Structure

### Operations and maintenance

- Downtown Houston+ via the Houston Downtown Management District are working closely with the City on a path forward for management and maintenance of the future Main Street, including the review of ordinances and City codes. This governing structure stands to be finalized in 2024.
- Future consultant team should continue to work with Downtown Houston+ and the City of Houston to define the appropriate boundaries of a future overlay zone (or similar governance structure) as part of final detailed design. This overlay zone should create unique opportunities for the District to create programming and host special events.

## 18-Hour Activation



\* Key issues to be resolved in the design and engineering phase of work.

# BASIS OF DESIGN CRITERIA

## Vehicle Access

**Access:** The proposed design assumes that vehicular through-traffic is not permitted within the 9-block study area with (3) exceptions:

- The east side of 600 block Main\* (for 609 Main Tower)
- The west side of 200 Main\* (for parking lot access)
- The west side of 800 Main (for JW Marriot)
- Future recommendations could consider side street access for 609 Main and land acquisition for parking lot at Congress.

## Other Important Design Details

**Historic Main Street quality:** Emphasize the unique historic qualities of Main Street.

- Design assumes integration of elements such as festival lighting, brick pavers, existing lightpoles, preservation of corridor views, historic architecture and classic forms.

**TABC policies:** When patrons carry drinks out to publicly-accessible seating areas. Final resolution to be determined.\*

**Restroom requirements:** When businesses expand outdoor occupancy, and there are more open promenade spaces for people, additional restrooms will need to be provided.\*

**Attachments or separations from buildings:** Permanent structures must be separated a certain distance for fire, and permanent attachments require building permit updates.

**Electricity source:** To be determined where electricity sources will be pulled from should street amenities require it.\*



\* Key issues to be resolved in the design and engineering phase of work.

# BASIS OF DESIGN CRITERIA

## Gateway at Main & Commerce

**This intersection plays a key role for Downtown Houston, Buffalo Bayou Partnership and the University of Houston Downtown Campus. The following criteria provides a blueprint for design guidelines at this location.**

**Vision:** Celebration of the terminus to the Main Street Promenade and the birth place of Houston along Allen's Landing.

A “gateway” element and its surrounding improvement at this intersection should:

- Be iconic and visible in order to draw people from the interior of Main Street to Commerce.
- Be designed as a 360 degree feature- recognizing that visitors will approach from all angles.
- Celebrate Houston’s history- recognizing Allen’s Landing as the birthplace of the City.
- Improve pedestrian comfort (shade, lighting, planting and vegetation, navigation, seating, etc).
- Anticipate activation at this location for seasonal events, night and day.
- Contribute to the establishment and branding of a “North Campus”- that includes the convergence of trails, open spaces and businesses.
- Design should not preclude opportunities for future access or park improvements along Buffalo Bayou. In particular, the City’s Allen’s Landing Park, historically significant Main Street Bridge, and Buffalo Bayou Partnership properties at the northwest corner and east of Allen’s Landing should be utilized as an opportunity site for vertical design elements.
- Public art is an integral component of the intersection design. Partnerships and programs should be explored with the Downtown Houston+ to incorporate meaningful art that tells the story of historic Main Street.



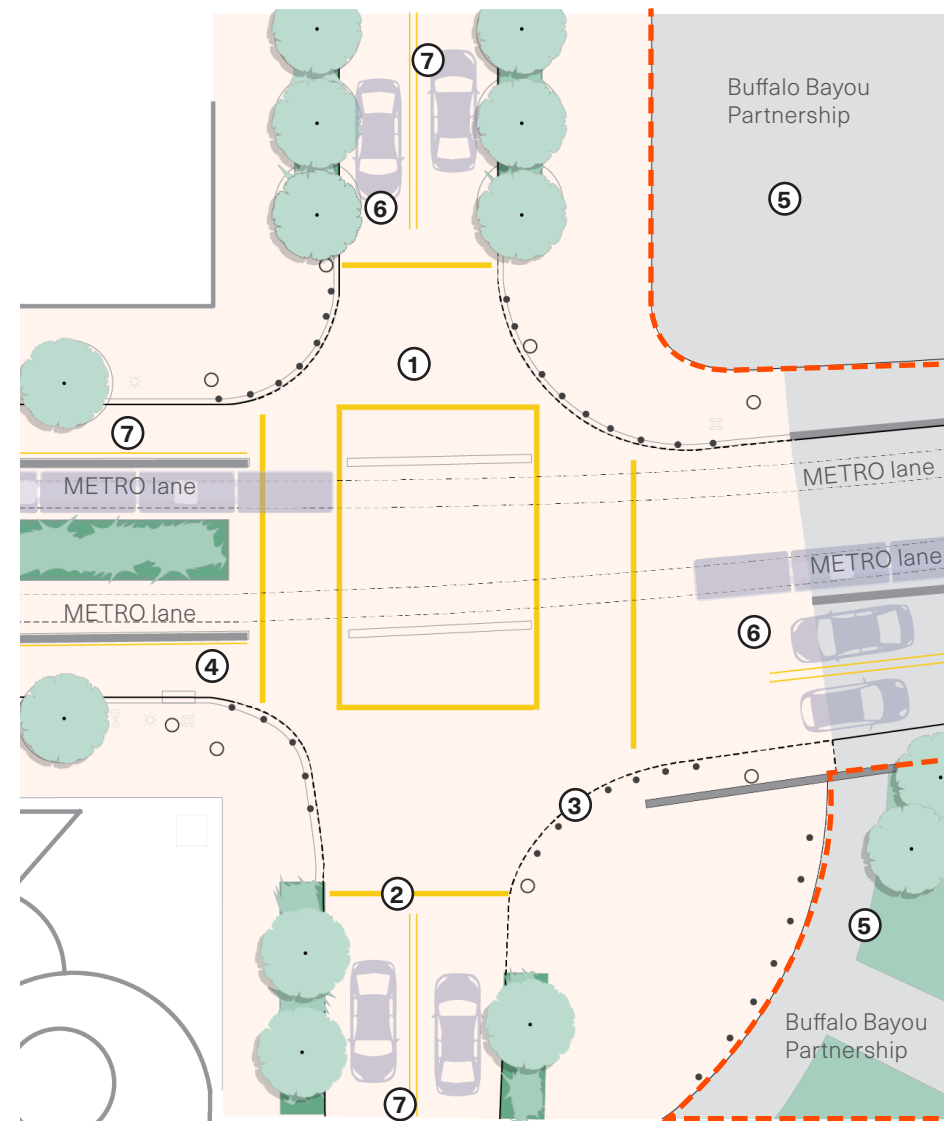
# BASIS OF DESIGN CRITERIA

## Gateway at Main & Commerce

### Improvement of traffic control and provide clear wayfinding is a must:

- Clear distinction should be made between pedestrian areas/ crossings and vehicular roadway areas through physical elements such as bollards, planters, reflectors, lighting features, low concrete domes as well as paving treatment. Strong encouragement of public art and murals should be utilized as another option to differentiate wayfinding and celebrate the intersection as a focal point of entry to the corridor. New paving pattern design to celebrate this intersection as a gateway to Allen's Landing, Buffalo Bayou, UHD campus and beyond.
- Corner curb radius shall be redesigned to exhibit a tighter right-turn lane to slow vehicles at crossing. In addition, pavement design, signage, and/or roadway markings used to clearly indicate vehicular path of travel.
- Vegetation used for intersection through planters or planting beds shall consider landscaping that is resilient, native, non-invasive and characteristic of the bayou.

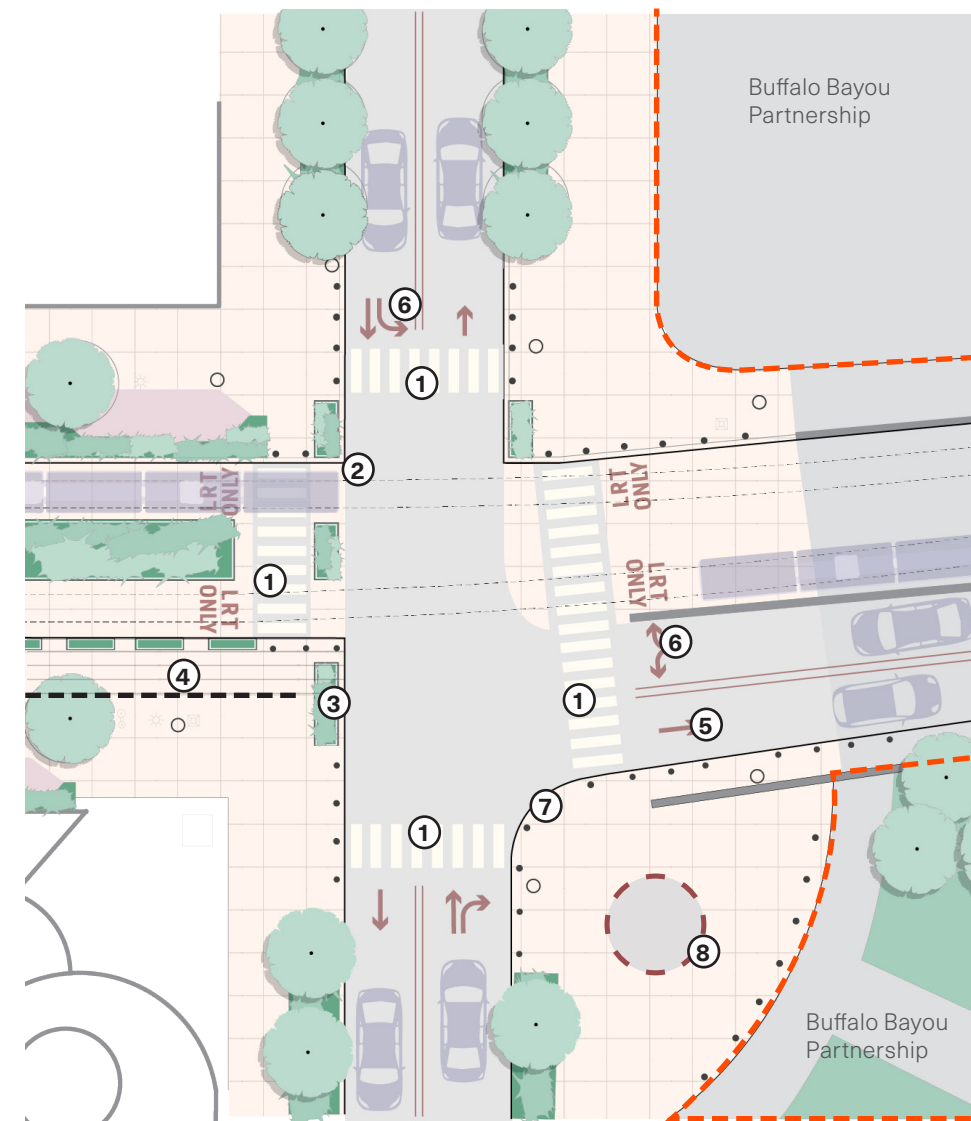
### Existing Intersection Condition



#### LEGEND | Existing Conditions

- 1 New pavement design to clearly delineate between pedestrian vs vehicular space.
- 2 Lack of clearly delineated pedestrian crossings at intersections create challenges for pedestrian navigation and access.
- 3 Wide radius at the corner results in high-speed turns by motorists at crosswalks.
- 4 Existing fire lane access to remain.
- 5 Buffalo Bayou properties should act as opportunity sites for meaningful improvements.
- 6 Clarify if left turns are allowed and reinforce by design and signage.
- 7 Existing drive lane.

### Application of Intersection Guidelines



#### LEGEND | Proposed Guidelines

- New pavement design to clearly delineate between pedestrian vs vehicular space
- Clearly marked paved crosswalks.
- 2 Squared off planted edges (per Main Street concept design) on NW, SW and SE corners for protected pedestrian access. SE and SW corners to be used as lit gateway elements that act as protective pedestrian barriers against vehicles.
- 3 Planter on rollers to be moved for fire truck access as needed.
- 4 Fire lane access to remain.
- 5 Clearly delineated roadway markings indicating drive and turn lanes.
- 6 Clearly marked left turn lanes (to be coordinated with traffic signalization).
- 7 Adjusted radius to be tightened at NE corner of intersection.
- 8 Potential for art, sculpture or other gateways.

# BASIS OF DESIGN CRITERIA

## Gateway at Main & Commerce

### Vertical branded elements could pair with ground plane treatment:

- Vertical elements should be designed to respect METRO safety requirements especially as it relates to the Overhead Catenary System (OCS) zone. In particular, Buffalo Bayou Partnership properties at the northwest and northeast corners of the intersection should be utilized as an opportunity site for vertical design elements. See examples on page 40 for high level concept application. Further study of such elements to be determined in future meetings with the Downtown Houston+\*



\* Key issues to be resolved in the design and engineering phase of work.

# BASIS OF DESIGN CRITERIA

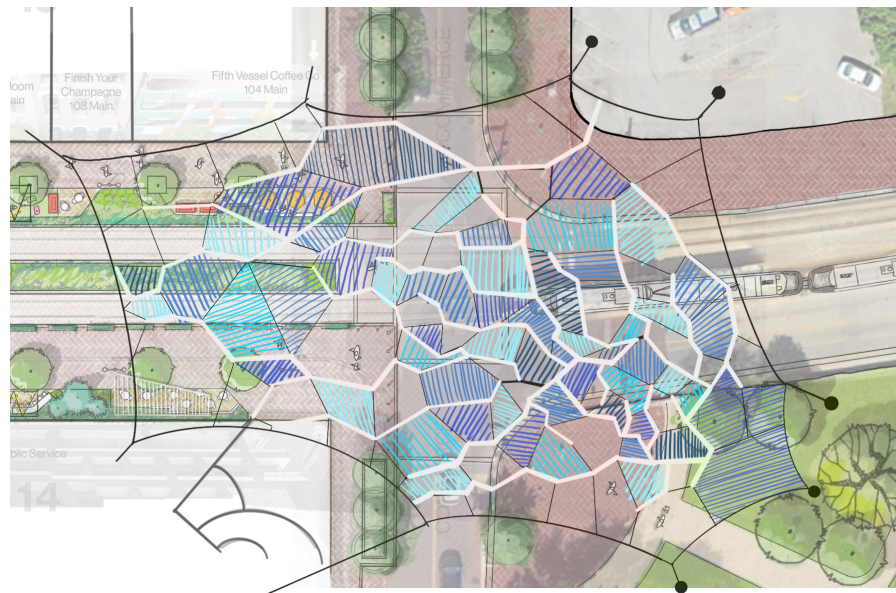
## Concept Application of Vertical Elements

*An iconic element that is uniquely Houston*

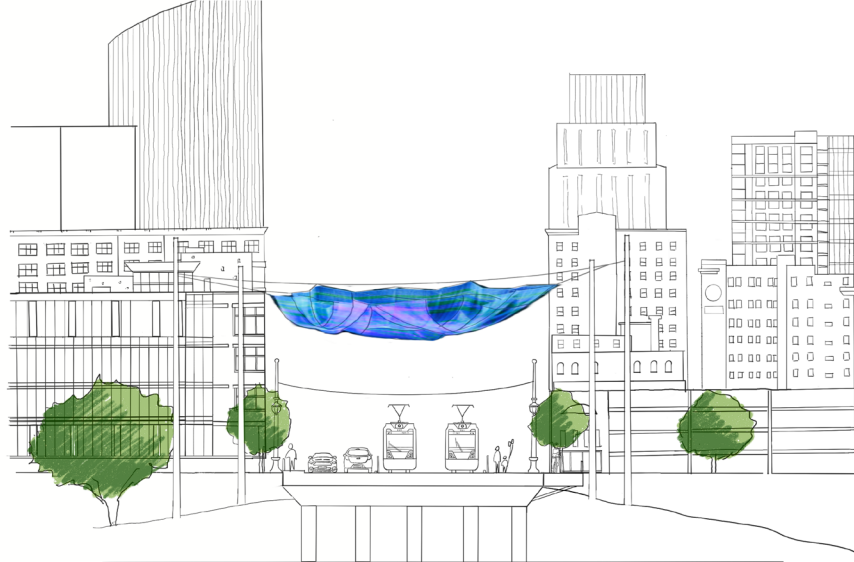
### Concept 1: 360 Overhead Art

- The “watershed” concept is envisioned as an art installation that hovers above the intersection; the piece is based on the mimicry of Houston's tributaries, bayous and their respective floodplains. Case study: *Janet Echelman's floating forms*.

Concept 1 - Plan view



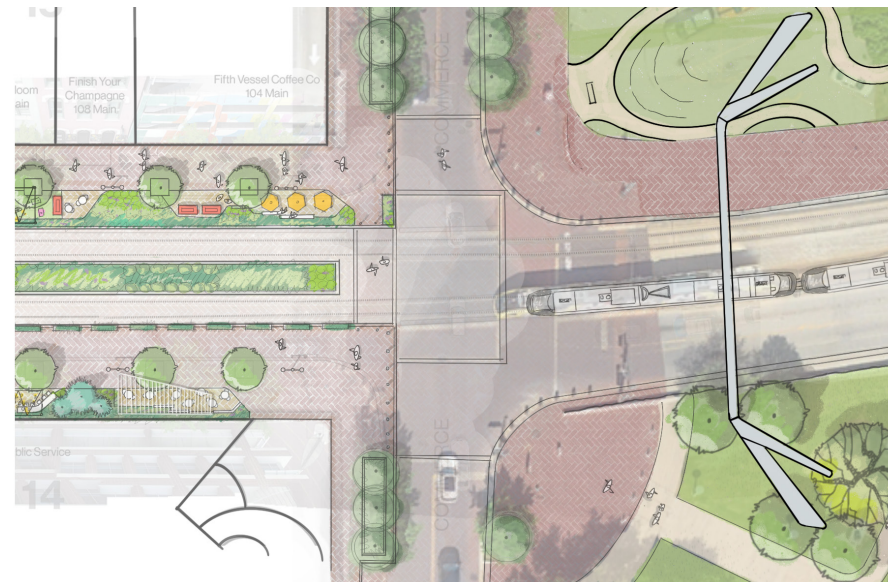
Concept 1 - Section view



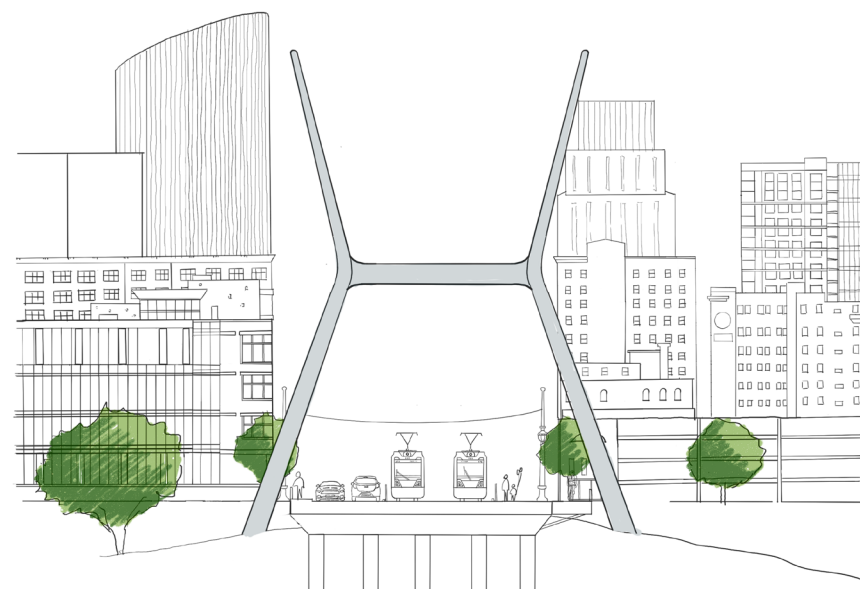
### Concept 2: Iconic Element

- The convergence of Buffalo Bayou and Main Street represents an opportunity for an iconic (perhaps oversized) element to commemorate the history of Allen's Landing and the vision of many who helped shape our City. A monument of this stature could serve as a symbol of identity for all Houstonians. Case study: *St. Louis Arch*

Concept 2 - Plan view



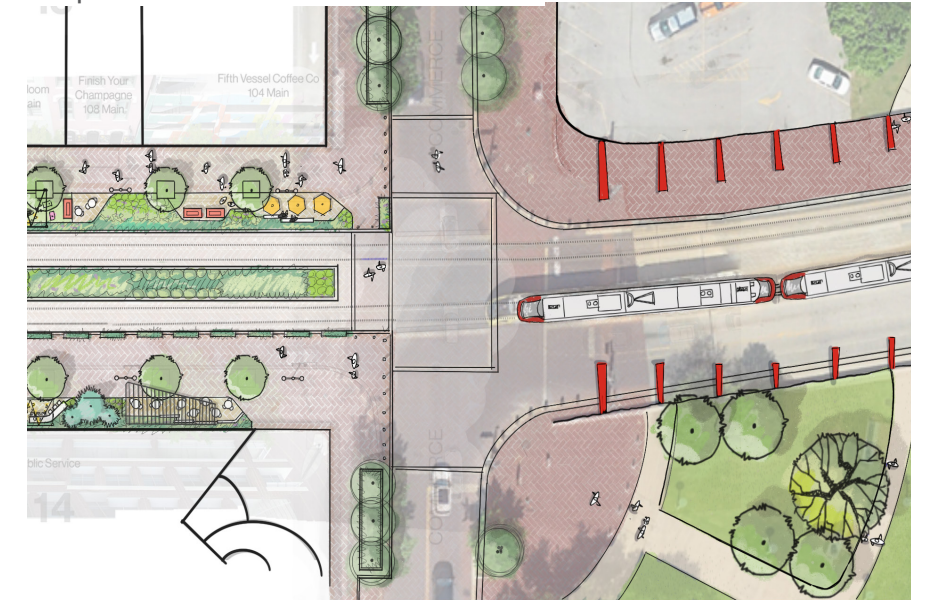
Concept 2 - Section view



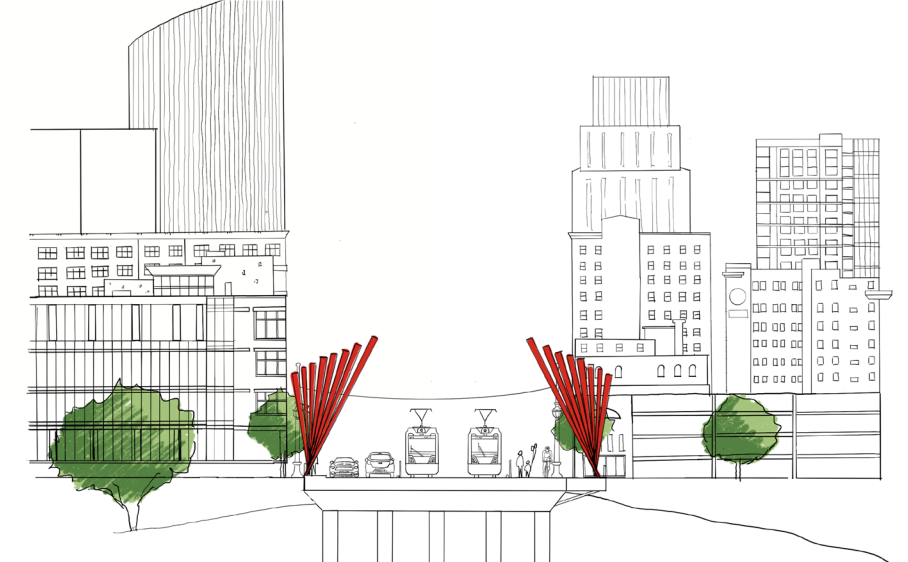
### Concept 3: Main St Bridge 'Gateway Fins'

- The 'Gateway Fins' optimize the right-of-way of the Main Street bridge to create momentum into and out of Downtown using a series of tilted vertical elements. The versatility of these elements allows for lighting and branding and kinetic movement to be embedded between day and night-time sculpture pieces.

Concept 3 - Plan view



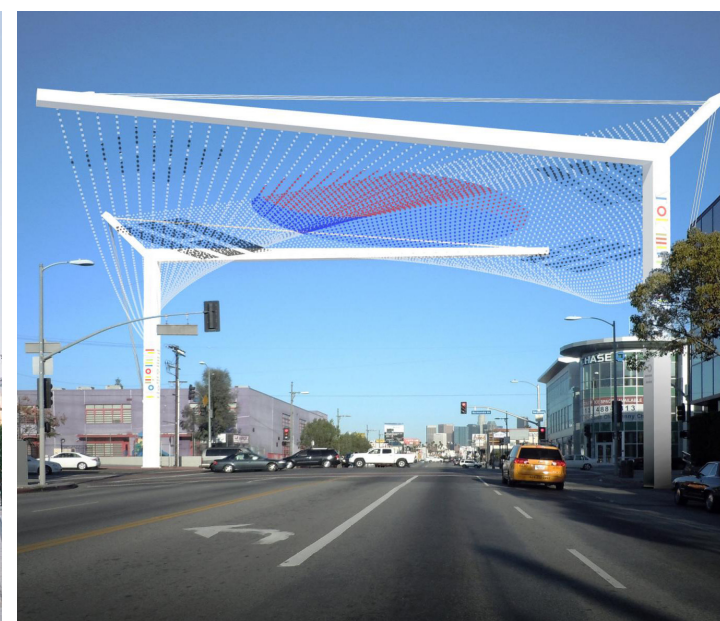
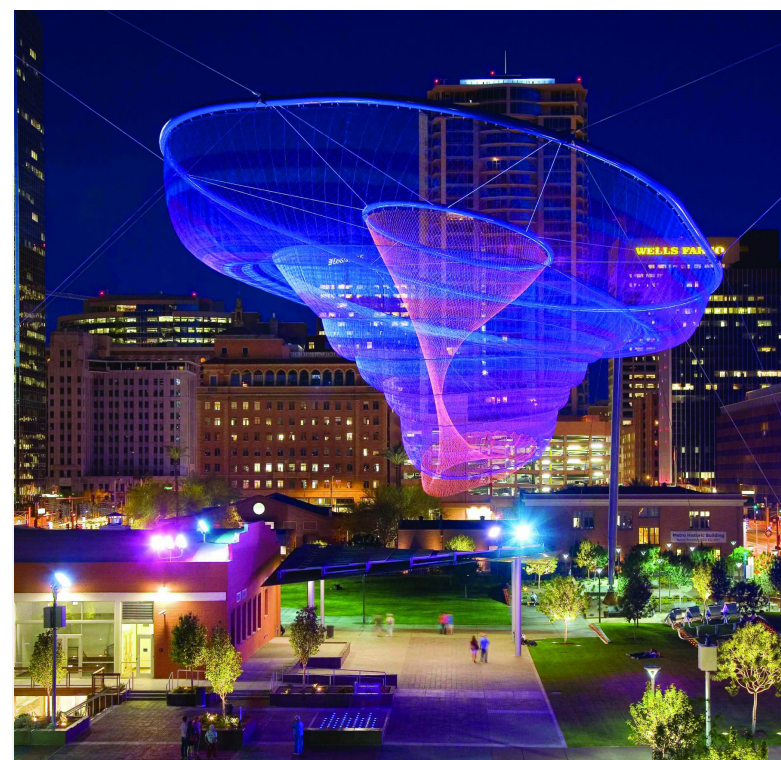
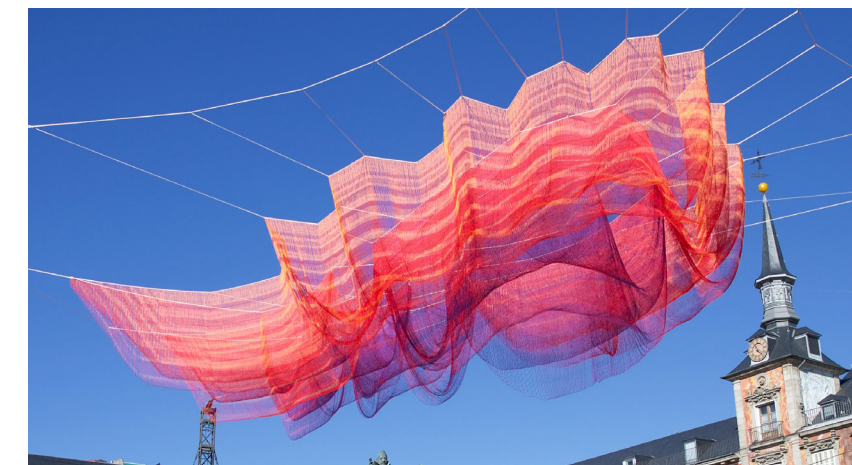
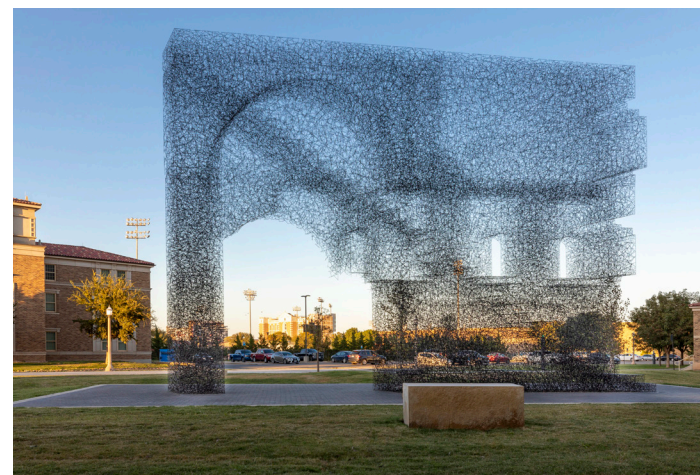
Concept 3 - Section view





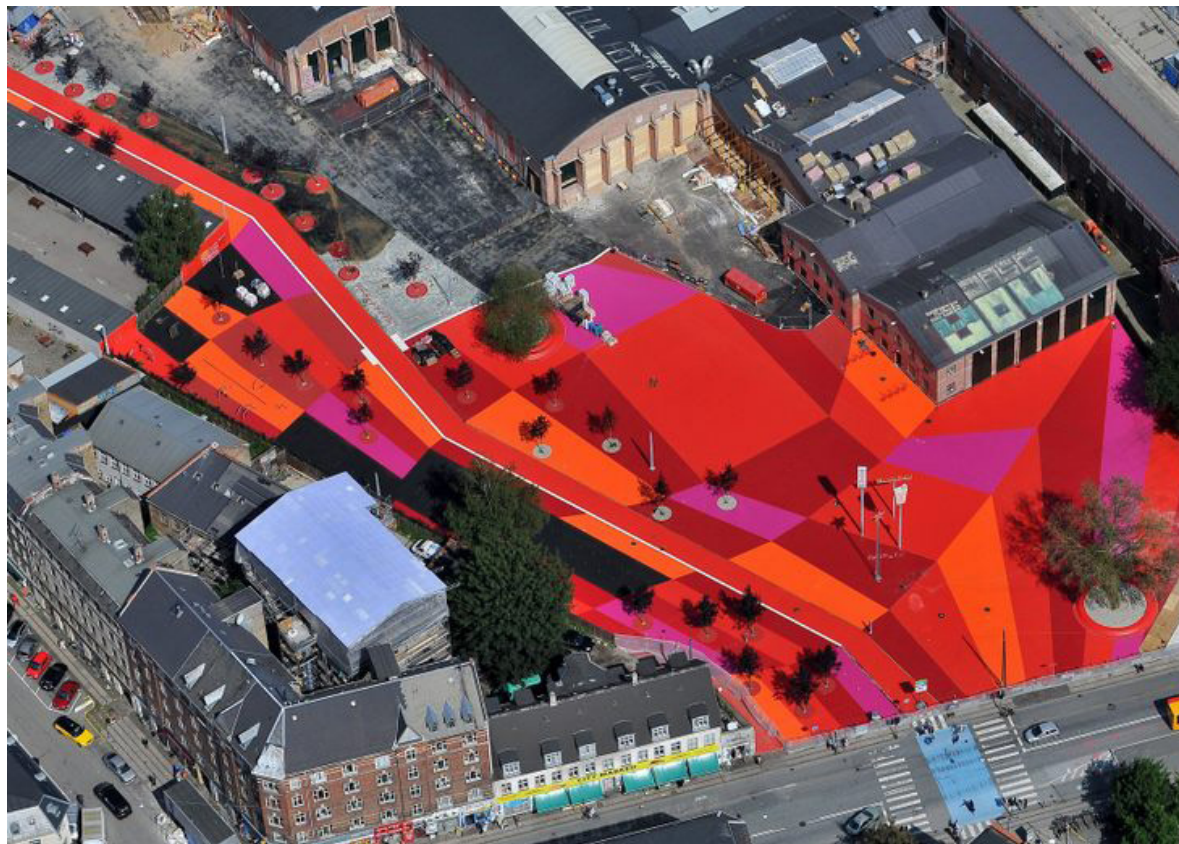
# BASIS OF DESIGN CRITERIA

## Gateway at Main & Commerce Precedent Imagery

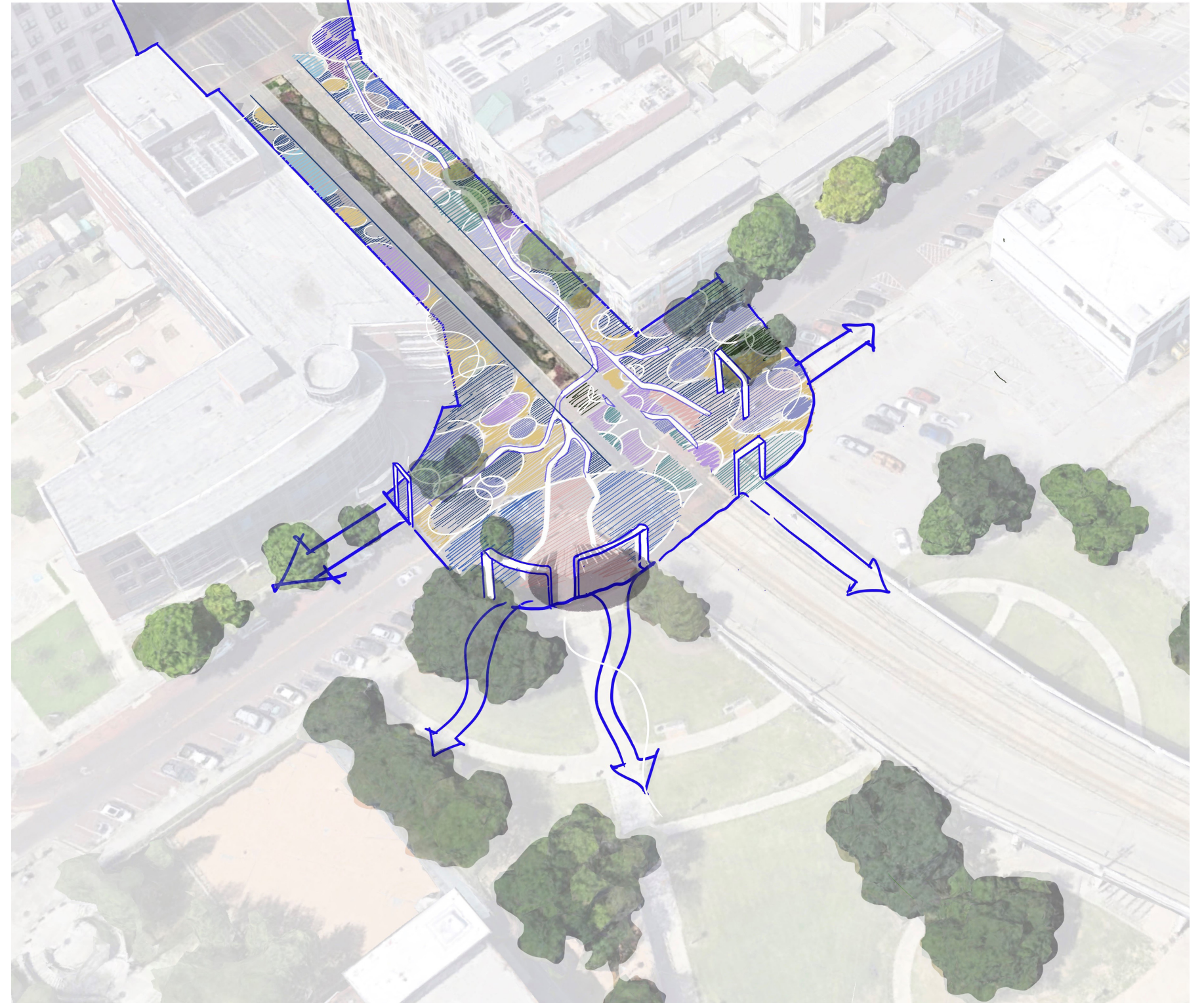


# BASIS OF DESIGN CRITERIA

## Ground Plane Treatments



Public Art Option at Intersection



# BASIS OF DESIGN CRITERIA

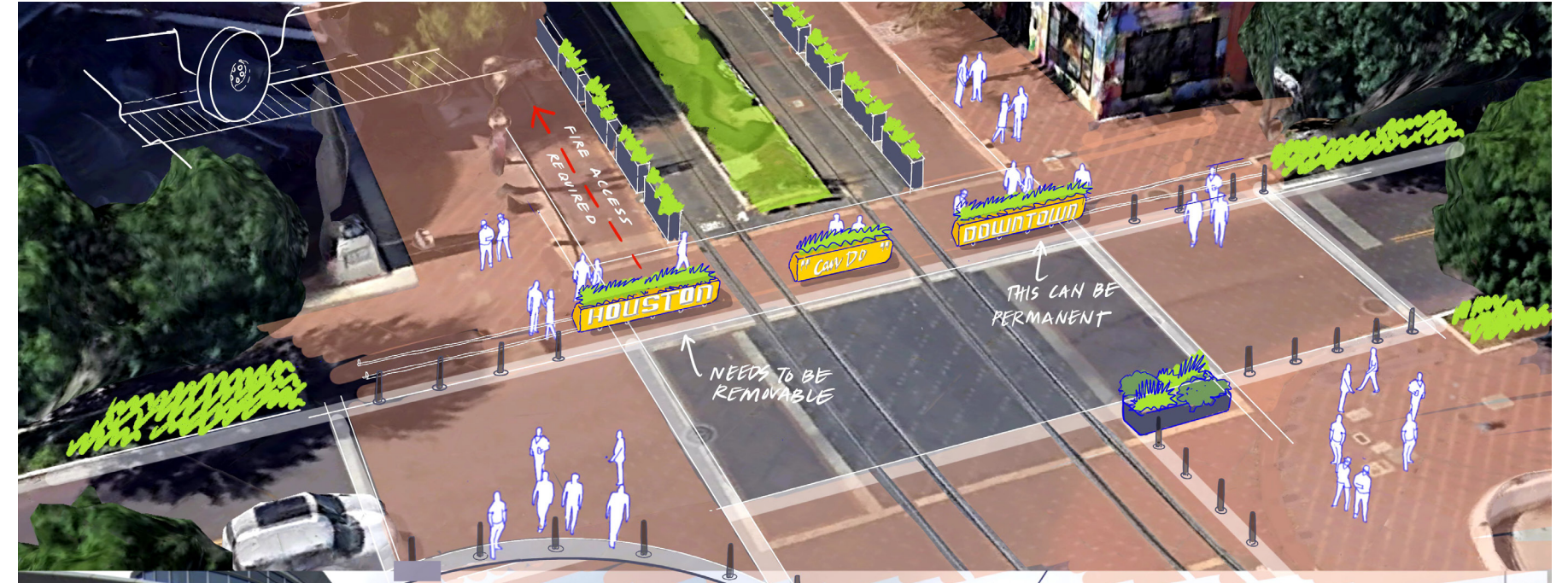
## Gateway at Main & Commerce Paving Detail + Planter Options

### Paving Detail

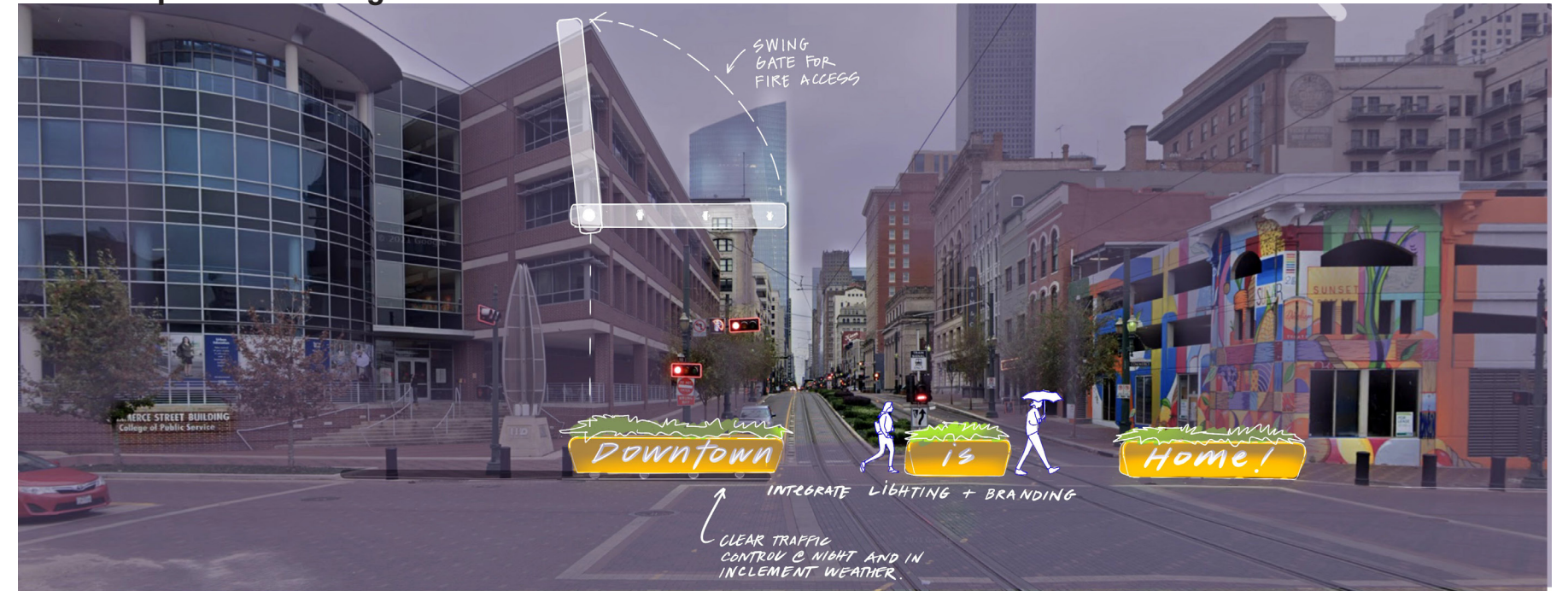


**Planter Options:** Planter on rollers to be moved for fire truck access as needed.

### Planter Options 1: Slide on Track



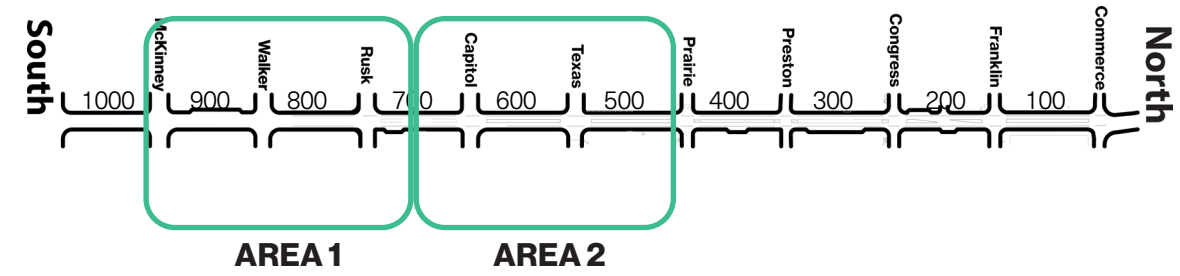
### Planter Options 2: Swing



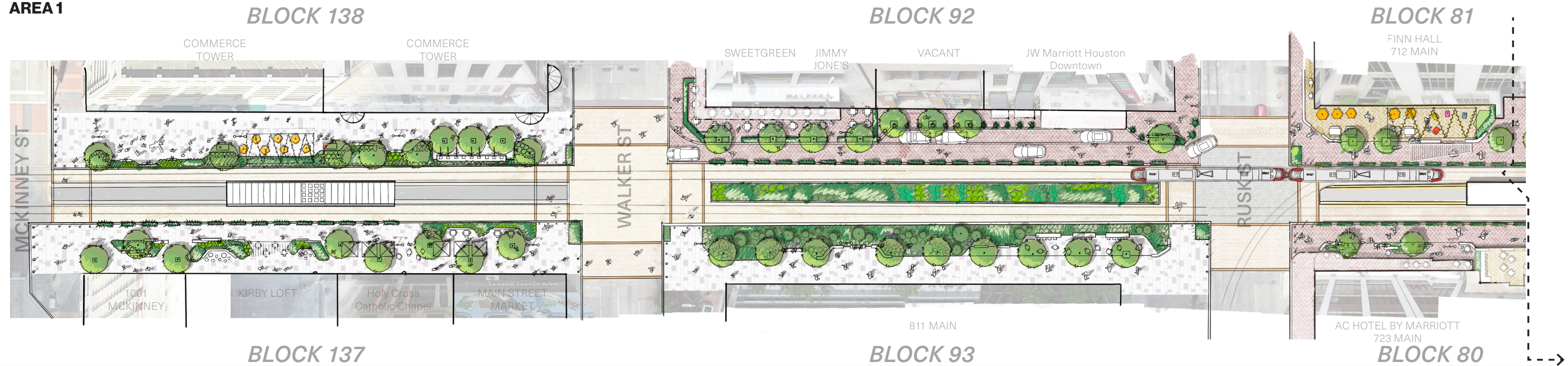
# PROJECT PLAN

The final concept plan, shown here, outlines the proposed locations for the raised pedestrian walkway, table service outdoor dining, common social spaces, and opportunity sites, along with trees, planting, and overhead canopy placements. Material selections will be determined in the final design and engineering, but the intention is to reuse the existing bricks from the roadway and incorporate appropriate ADA tactical changes when switching path of travel, avoiding street furniture/objects, and when approaching intersections.

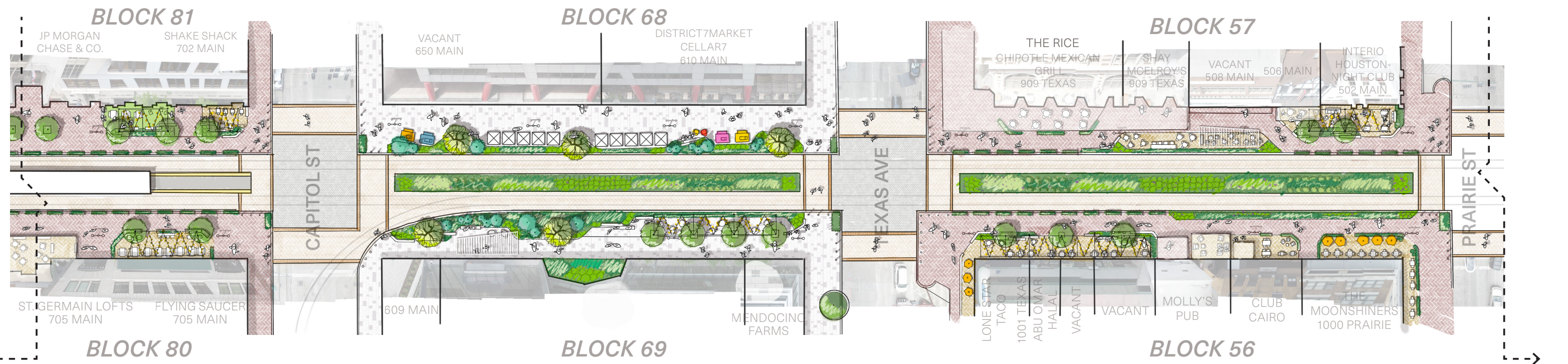
Key Map



## AREA 1

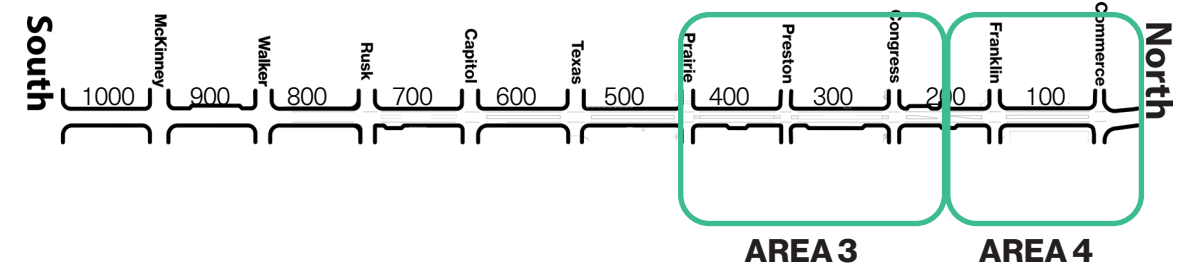


## AREA 2

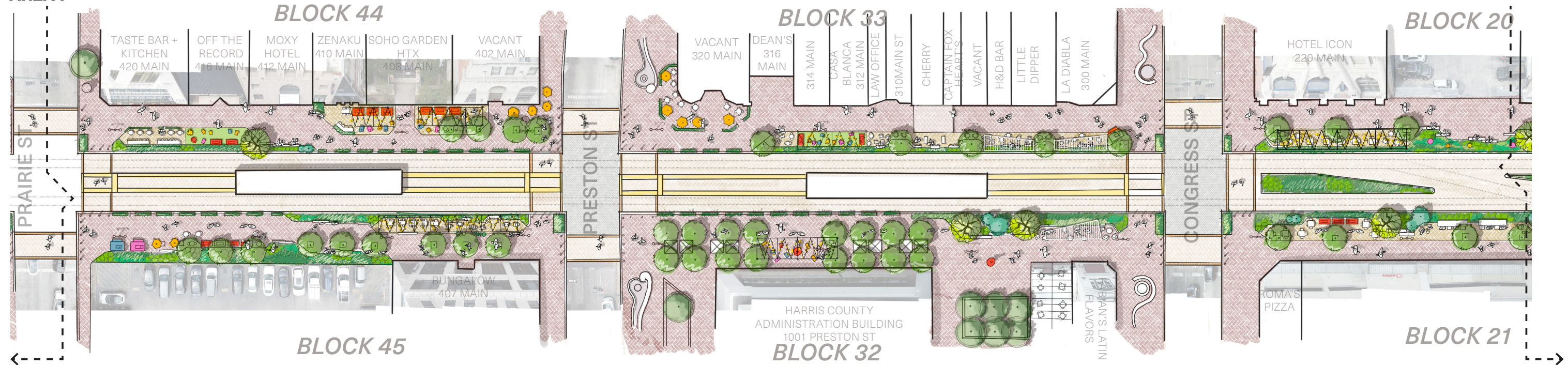


# PROPOSED PROJECT PLAN

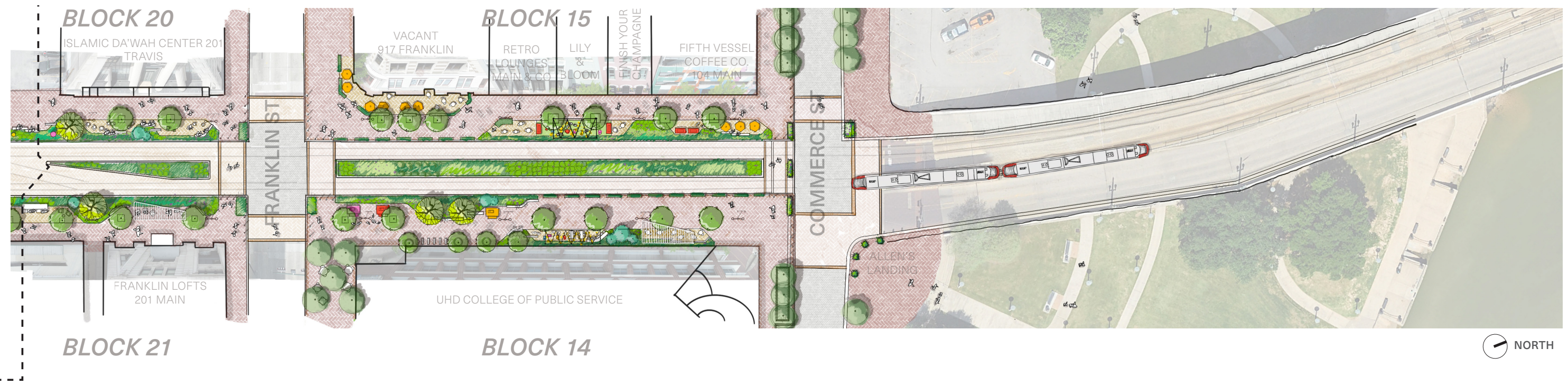
Key Map



## AREA 1



## AREA 4

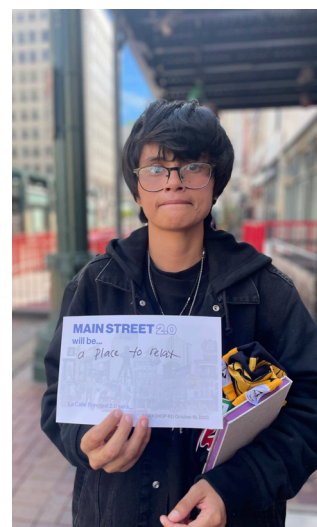
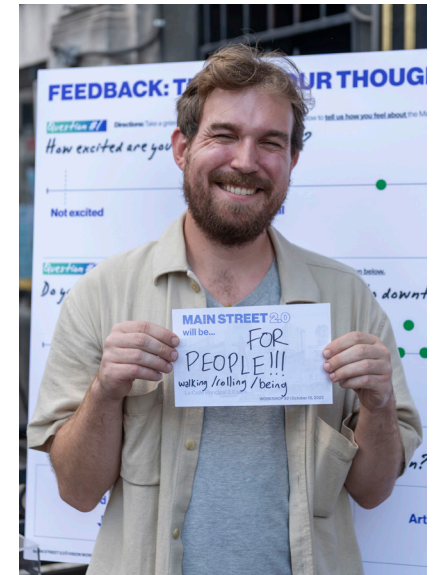
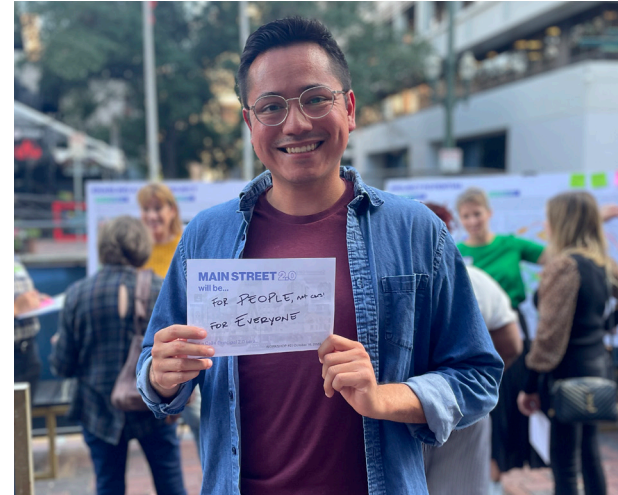


# BASIS OF DESIGN CRITERIA

Main Street 2.0 should be...

## Main Street 2.0 will be for everyone!

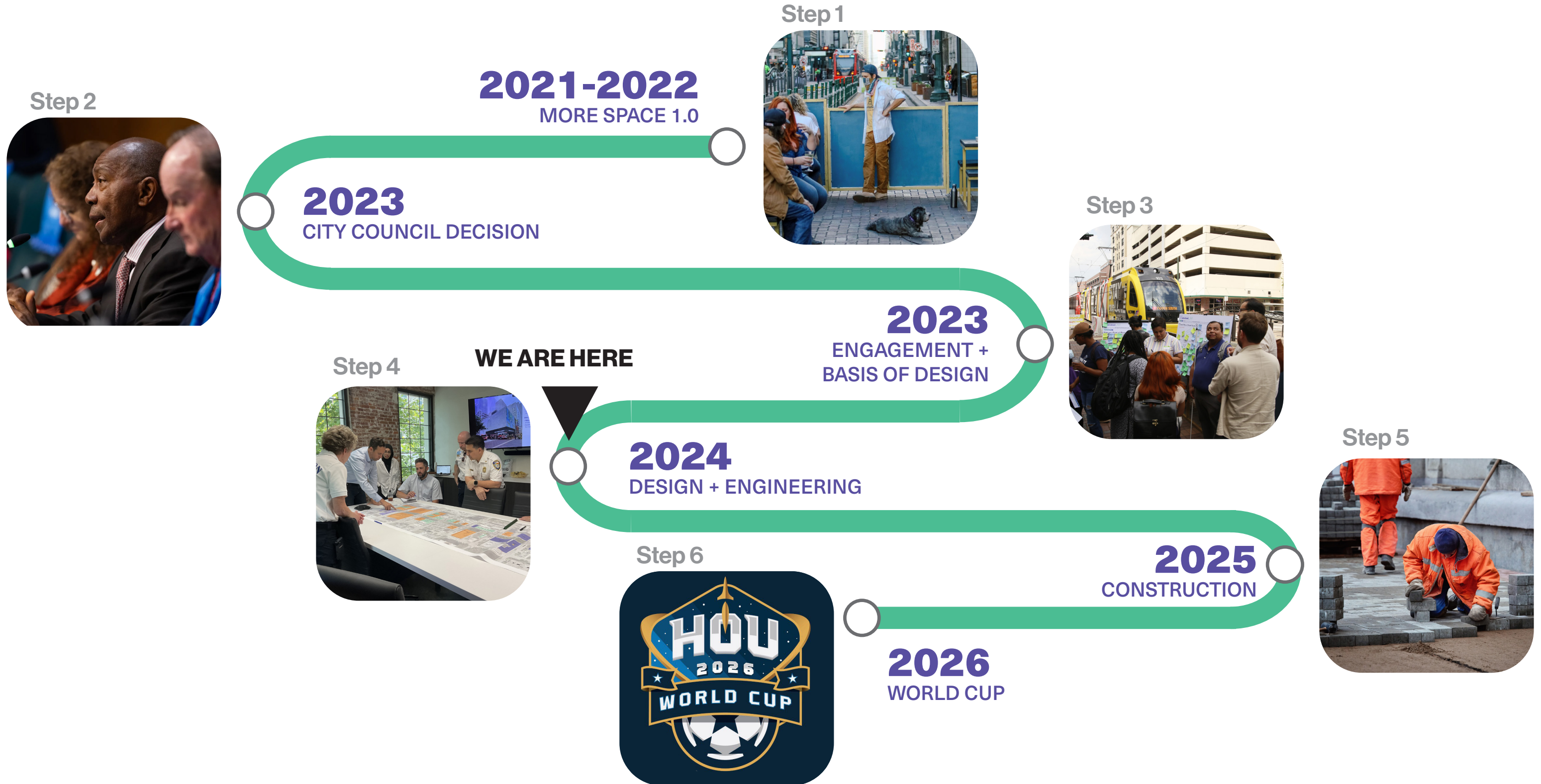
### Safe and accessible for all ages, abilities, and users



# PROPOSED PROJECT TIMELINE

## Planning Concept to Implementation

This document marks the conclusion of the Engagement and Basis of Design phase, resulting in a Final Concept Design. From here the project will move into final design and engineering in 2024, construction in 2025, and be open for the World Cup games in 2026.



# Morespace Main street 2.0

Basis of Design for Engineering Phase