

Silver Line Under/Rail Design Charrette



Fairfax County
Office of Community Revitalization
AUGUST 2014



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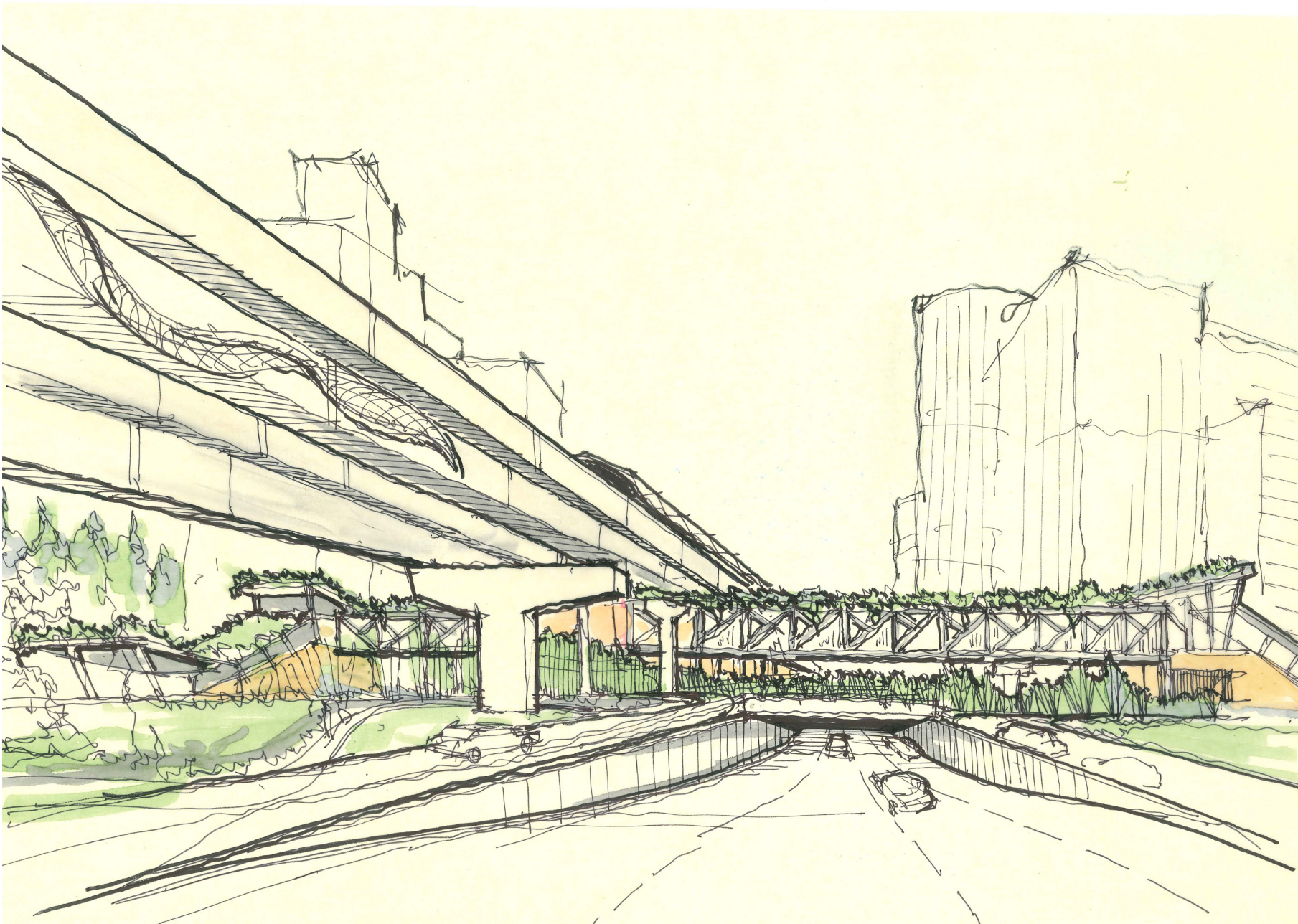
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INTRODUCTION

GOALS

To address placemaking under and around the bridges and trestles of the Silver Line at the four new Tysons Metro stations, Fairfax County convened a design charrette – or workshop – on June 4, 2014, entitled “Art + Place: Beneath the Spans.” Participants were tasked with envisioning an environment designed for all users, including pedestrians, bicyclists, transit riders, and drivers. There were approximately thirty charrette participants with backgrounds in architecture, landscape architecture, urban design, planning, art, and other design related disciplines.

Participants were asked to generate ideas that:

- #1** Creatively use the space under the Metro;
- #2** Transform and enhance the Silver Line structure itself; and
- #3** Identify amenities and placemaking components that would enhance the safety and experience for pedestrians.

CONTEXT

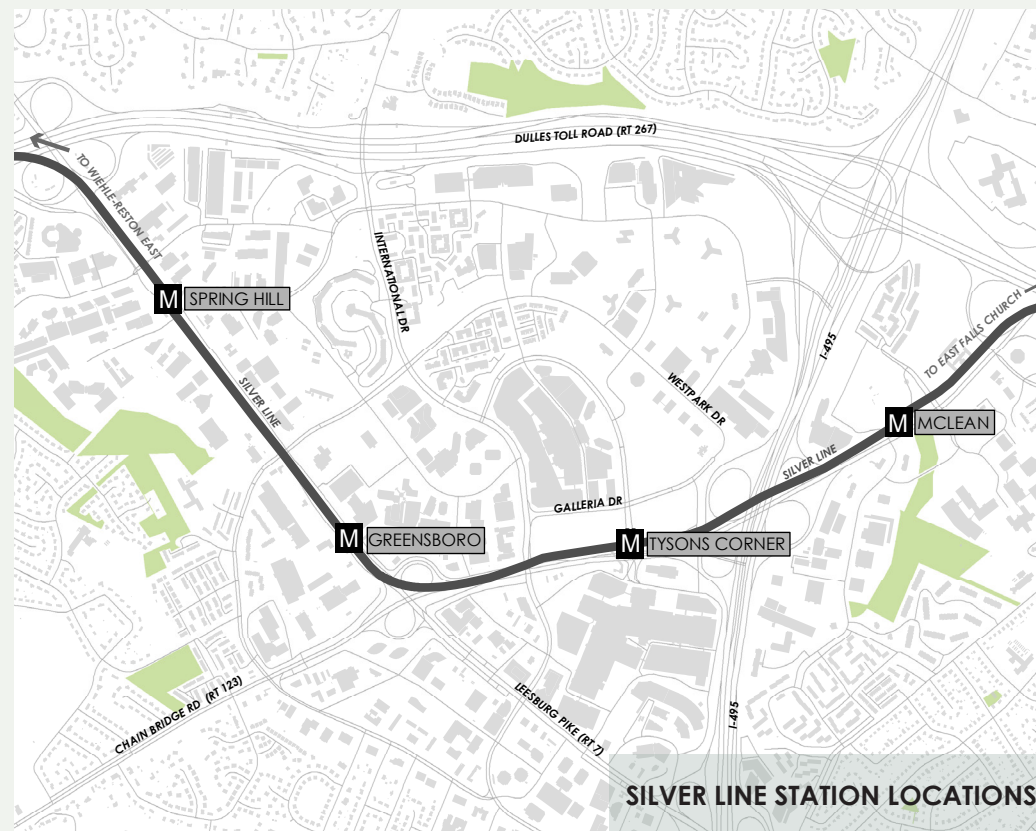
In July 2014, the first phase of the Silver Line became fully operational, further integrating the growing Tysons community with the rest of the DC metropolitan area. Each of the four new Tysons Metro destinations will serve not only as functional transit stations, but also as key nodes for planned higher density, urban redevelopment. The suburban “Edge City” Tysons has taken a significant step closer to becoming a vibrant urban center.

SPRING HILL

Serving as a gateway to Tysons from Routes 7 and 267, Spring Hill will redevelop with a mix of land uses -- including retail, office, residential, and hotel. Comprehensive Plan recommendations call for higher intensities around the Metro station. Moving out from the station, planned intensities will provide transitions in scale, mass and height to the surrounding areas. The recent opening of The Ascent apartment building just blocks from the new Metro station was one of the first steps in this process.

GREENSBORO

The Comprehensive Plan divides the area around Greensboro Station into two subdistricts (North and South) separated by Route 7 (Leesburg Pike). The North subdistrict is envisioned to be a vibrant 24-hour mixed use center with residential, retail, and hospitality uses, as well as a high concentration of office space. The South subdistrict will include a mix of public, residential and commercial uses. As with the other Tysons stations, higher intensities are recommended closer to the new Metro station.

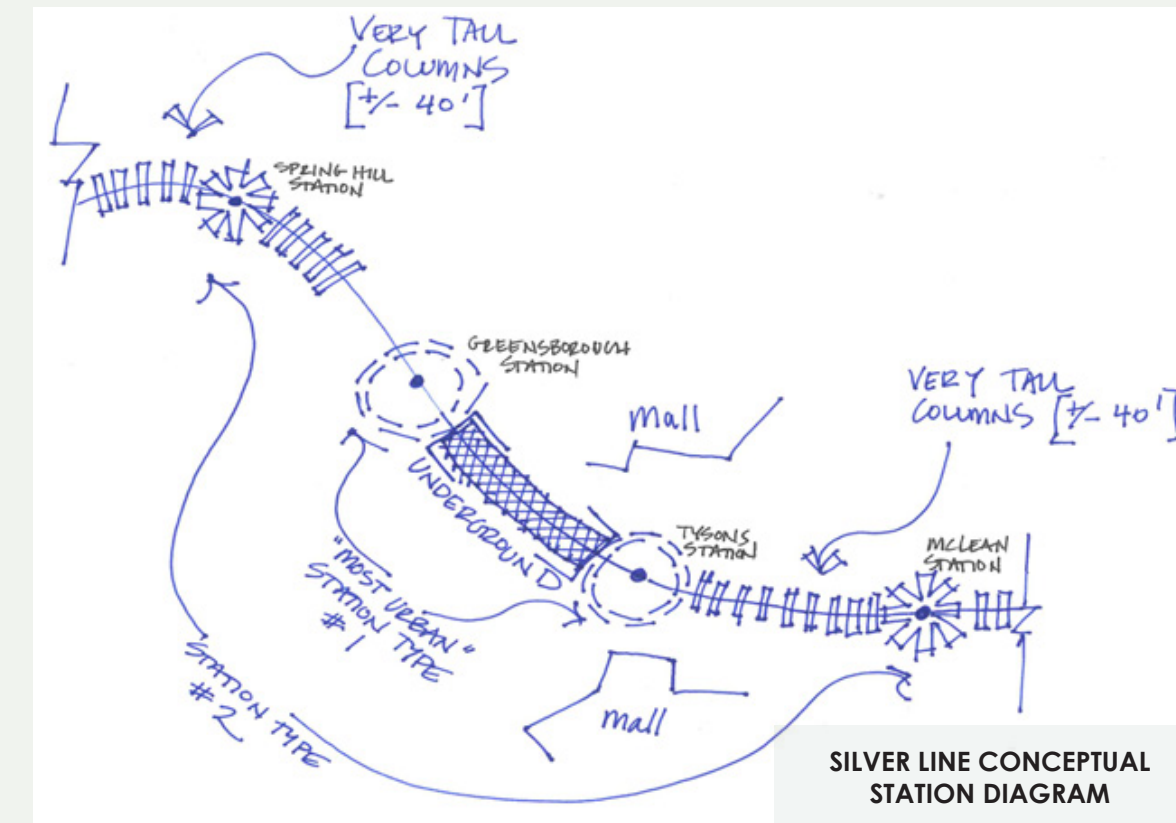


TYSONS CORNER

The Silver Line travels underground between the Greensboro and Tysons Corner stations. Upon exiting the Tysons Corner station, riders can either reach a pedestrian bridge granting access to the Tysons Corner Center shopping mall, one of the area's most renowned destinations or enter the mixed use Tysons II development. Many of the land uses around the station are commercial retail or office. The County's vision for this district includes mixed use high-rise hotel development as well as a conference center. Additionally, residents of the district's high-rise residential buildings will benefit from the convenience of retail and entertainment uses. Overall, densities and intensities in the area are approved for marked increases to coincide with the increased use of Metrorail.

MCLEAN

The McLean Station serves as the primary entry point to Tysons for riders coming from downtown Washington, Arlington, and Falls Church. The defining focus of the Tysons East area will be Scotts Run Stream Valley Park, which is envisioned to be a great urban park and natural resource amenity surrounded by a mix of uses including office, residential, hotel, support retail and services. Public and institutional facilities such as educational, recreational, health and sports amenities should also be located in this district.



INSPIRATION

Phase 1 of the Silver Line, an above ground extension of the Metrorail system that officially began operations in July 2014, links Maryland and Washington, DC with Fairfax County's largest urban centers, Reston and Tysons. While crucial to the region's future from the transportation, land use, and placemaking perspectives, the line's new infrastructure -- which includes large concrete trestles and bridges 20-50 feet above grade -- creates a visual and functional divide. The resulting grade separation along with wide, higher speed roads adjacent to the line, affects walkability, pedestrian comfort, aesthetics, and safety. It also creates spaces underneath the elevated spans that are underutilized but could be enhanced to create attractive and interesting places. These issues create opportunities in Tysons, an area in the process of undergoing major changes in land use, population, and character.

"We have attractive stations, but a lot of pretty stark, bare concrete [in between],"

Fairfax County Chairwoman Sharon Bulova has stated of the new Silver Line in Tysons. "We want to make their appearance more pleasing and communicate the vitality, energy and change that embodies what's happening in Tysons."



Above: existing Silver Line Metrorail infrastructure

PROCESS

The charrette commenced with a site visit to view the Silver Line structure and discuss preliminary observations. This was followed by a discussion of the charrette goals. Staff shared precedent images of how other communities have improved the physical environment on and around similar infrastructure with placemaking, public art, lighting, and landscaping. Participants also shared their own precedent images with the group.

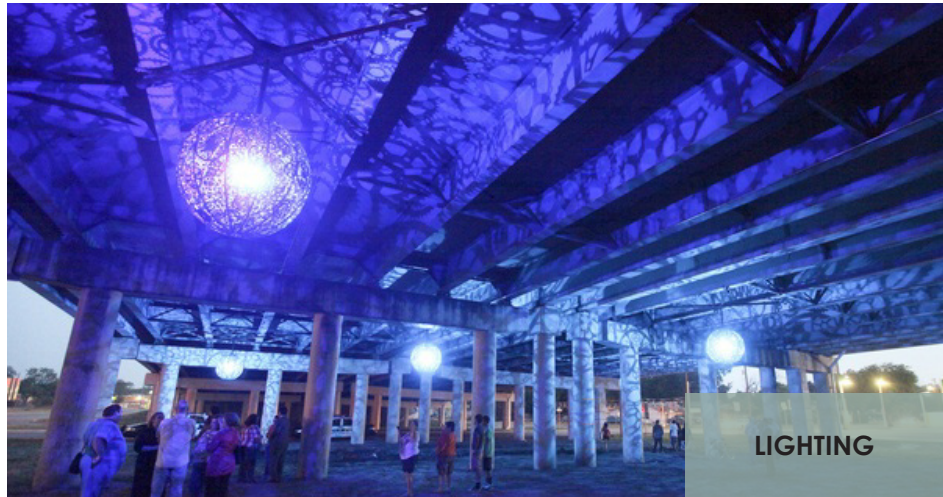
AGENDA		
11:00 AM	Site Visit (meet @ Sheraton Hotel lobby)	
11:30 AM	Introductions, Charrette Overview and Goals	Barbara Byron JoAnne Fiebe
11:40 AM	Precedent Review Image slideshow and time for participants to briefly present other ideas	JoAnne Fiebe TeAnna Johnson, OCR Intern
12:00 PM	Vision Exercise (Entire Group)	Sonja Ewing JoAnne Fiebe
12:20 PM	Lunch/Team Introductions and Informal Concept Discussions	
12:40 PM	Project 1: Overall Concept Development	
1:30 PM	Project 1 Team Presentations and Concept Refinement	Team Spokesperson
2:00 PM	Break	
2:10 PM	WMATA Presentation	Shyam Kannan, WMATA
2:20 PM	Project 2: Station Area Schematic Design	
4:00 PM	Break	
4:30 PM	Reception, Team Presentations and discussion with Guests	Team Spokesperson
5:30 PM	Closing Remarks	

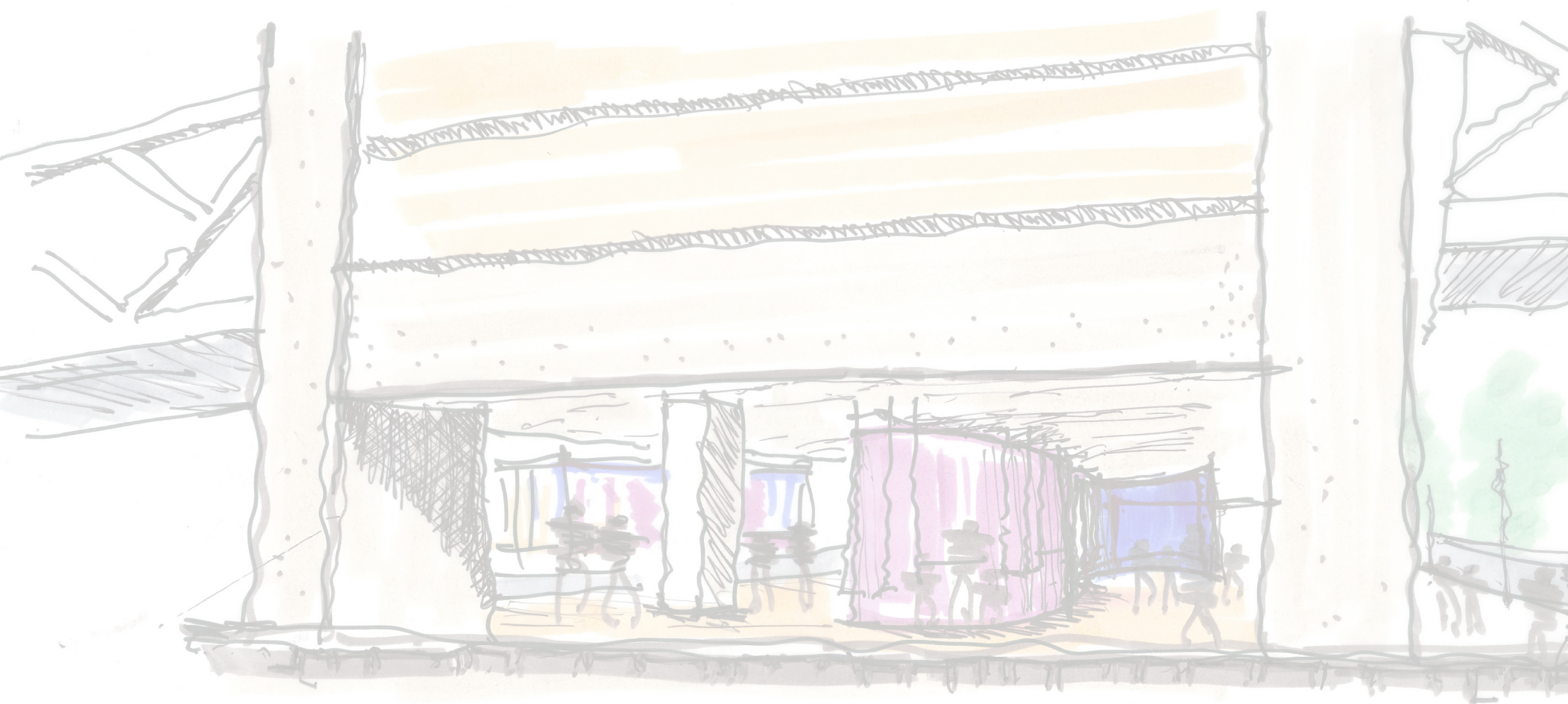
The largest portion of the agenda was dedicated to a group brainstorming exercise and two team projects, as follows:

1. A visioning discussion with all participants to brainstorm big concepts for Tysons' future as well as potential experimental elements;
2. A team project aimed at creating a large concept for the entire Tysons Silver Line area; and
3. A team project intended to develop a station area plan for each of the Tysons Metro stations.

PRECEDENTS

For inspiration, participants reviewed national and international precedents.





CHARRETTE PROJECTS

VISION EXERCISE

During a preliminary visioning exercise, participants collectively responded to two overarching questions that began to establish large-scale themes for the corridor.

QUESTION 1

What adjectives would you use to imagine the future Tysons?

<i>Potential to be unique*</i>	<i>Suburb re-visioned into urban*</i>	<i>Beautiful</i>
<i>Net zero city</i>	<i>Techy**</i>	<i>Evolving</i>
<i>Children/Kid Friendly</i>	<i>Happening</i>	<i>Corporate</i>
<i>Densified*</i>	<i>Dynamic**</i>	<i>Innovative</i>
<i>Work/Play/Live*</i>	<i>Attractive*</i>	<i>Transformational</i>
<i>Safe</i>	<i>Cool*</i>	<i>Inventive</i>
<i>Young</i>	<i>Height</i>	<i>Hyper</i>
<i>New**</i>	<i>Convulsive</i>	<i>Full of movement</i>
<i>Urban*</i>	<i>Gateway</i>	<i>Transitional</i>
<i>Vibrant*</i>	<i>Livable*</i>	<i>Contextual</i>
<i>Walkable**</i>	<i>Delicious</i>	<i>Accessible</i>
<i>Distinctive</i>	<i>Energetic*</i>	<i>Fresh</i>
<i>Artistic</i>	<i>Sustainable</i>	<i>Roller Coaster</i>
<i>Pedestrian Friendly</i>	<i>Shopping</i>	<i>Authentic</i>
<i>Multi-generational</i>	<i>Connected</i>	<i>Avant-garde</i>
<i>Wired</i>	<i>Accessible</i>	<i>Human</i>
<i>Unexpected</i>	<i>Playful*</i>	

**Indicates adjective was mentioned twice*
***Indicates adjective was mentioned three or more times*



QUESTION 2

Beyond the trestles, what are the experiential elements that should be considered in the beautification of the Silver Line corridor?

- | | | |
|---|--|--|
| Place-making | Narrow streets | Calming spaces |
| Stream valley (unique) feature | Gathering places that are safe and friendly | Gardens and winding walkways |
| Urban parks | Continuous green space* | Prioritize people movement over car movement |
| Urban spaces | Tech elements | Scale |
| Urban friction | Water | Gateways |
| Bikes, pedestrians, and cars sharing the ground plane | Reduce vehicle lanes | Incorporate Stream Valley Feature |
| Color** | Rebuild the streetscape | Lighting and experiences changing with the time or day or activity |
| Increase intersections (reduce spacing) | Trigger different senses | |
| Amenity rich | Highlight cross movement | |
| Compromise, prioritize, and deconstruct | Infill under the Silver Line | |
| Beautiful sounds | Cultural arts emphasis | |
| Cross-generational social spaces | Extraordinary site-specific lighting design* | |
| | Green infrastructure and spaces | |
| | Cafés | |

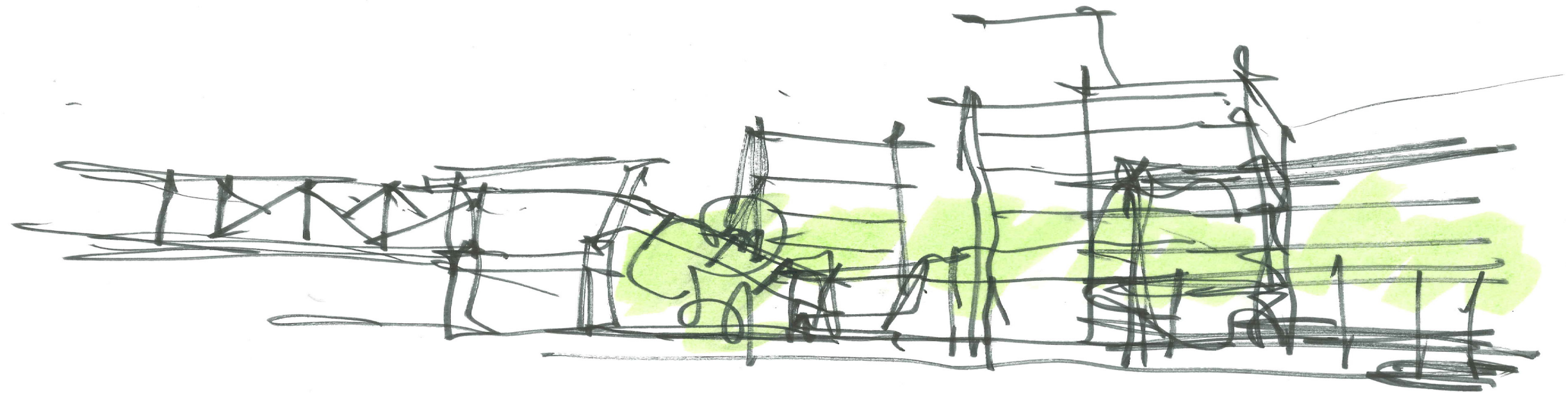
*Indicates element was mentioned twice

**Indicates element was mentioned three or more times

PROJECT 1: CONCEPT FOR THE ENTIRE CORRIDOR

Workshop participants were divided into four teams for the first exercise to develop *a vision for the entire project area*. Each team was assigned one of the four station areas.

Taking into account those on foot, in vehicles, and on transit, groups were asked to produce a list of themes and ideas, a diagram of the larger concept, and a working title. Teams were advised to pay special attention to how the overall experience might change depending on the specific station area. Results of Project 1 exercise are summarized, by team, on the following pages.



TEAM 1: GREEN RIBBON

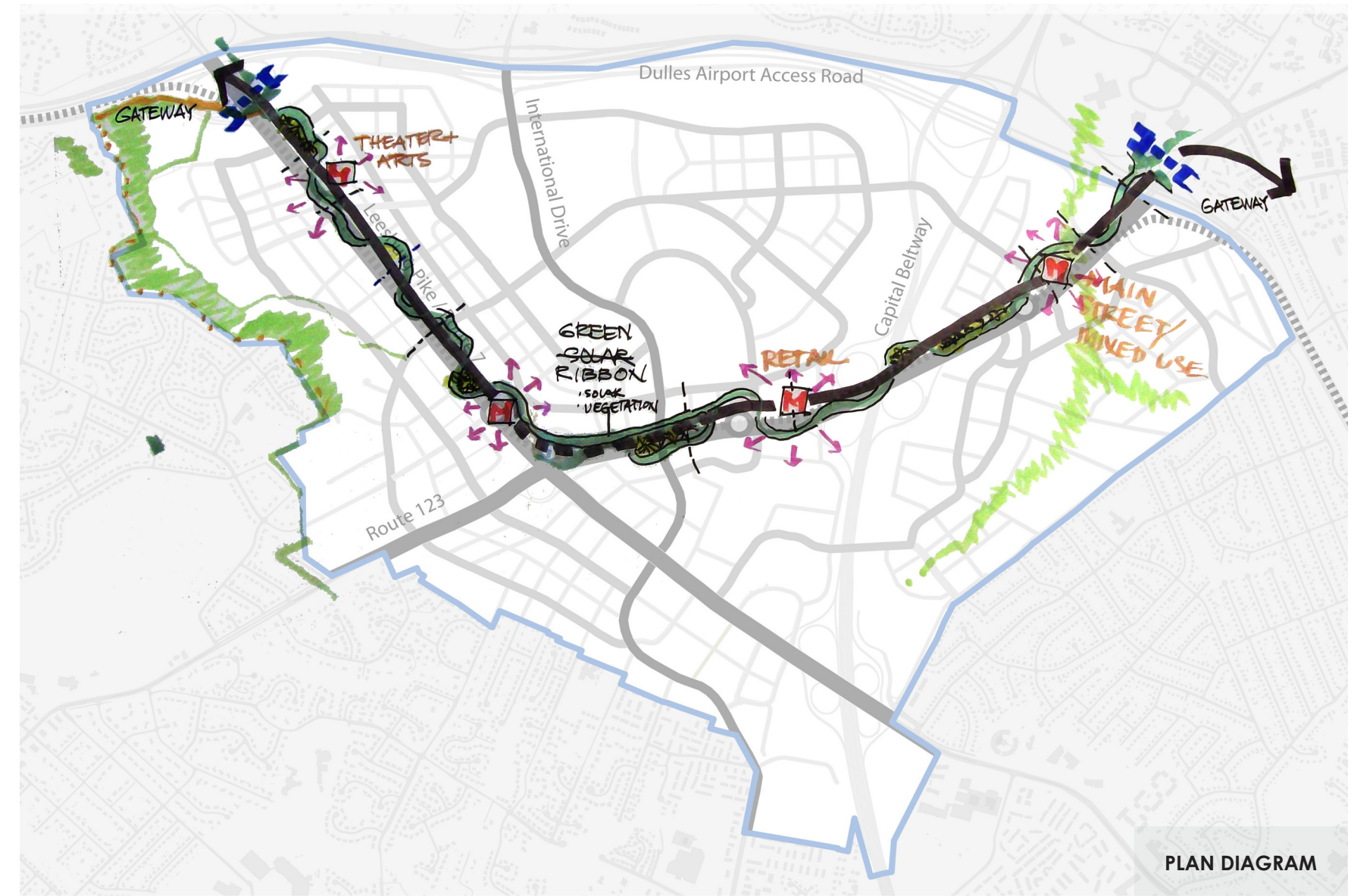
Team 1's central theme is to create a *Green Ribbon*, a heavily landscaped bicycle and pedestrian trail that weaves under the Tysons Metro stations and gradually trickles into surrounding neighborhoods. Much like a river and its tributaries, the trail would branch out to nearby residential areas and would gradually intensify with more interactive elements and landscaping as it reaches the Tysons metro station areas.

The Green Ribbon concept is designed to promote a more walkable and sustainable lifestyle by serving both pedestrians and bicyclists.

While traversing the bicycle and pedestrian trail under the metro line, users would periodically experience changes in grade to enhance the journey. The trail would include special signage to help distinguish the changing character of each metro station area.

MAIN IDEAS:

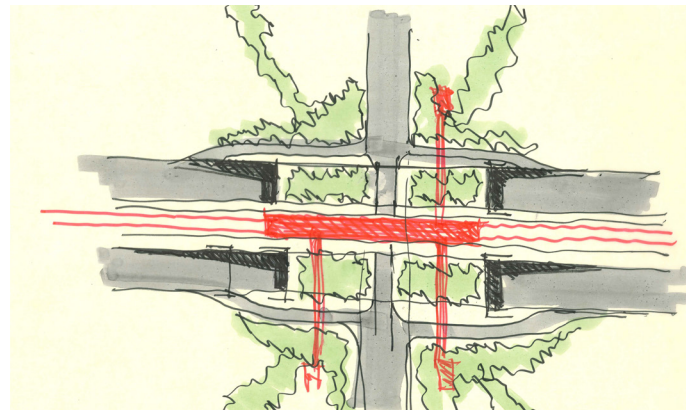
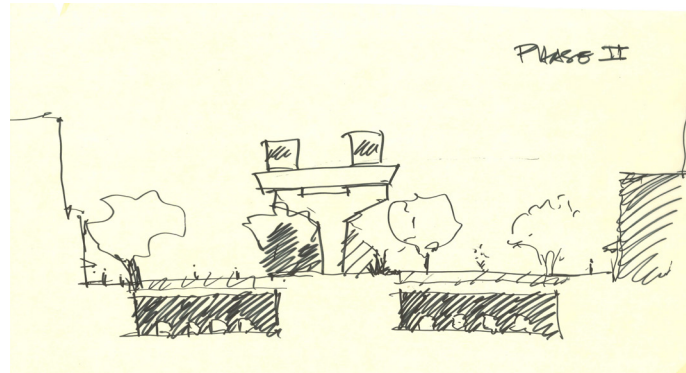
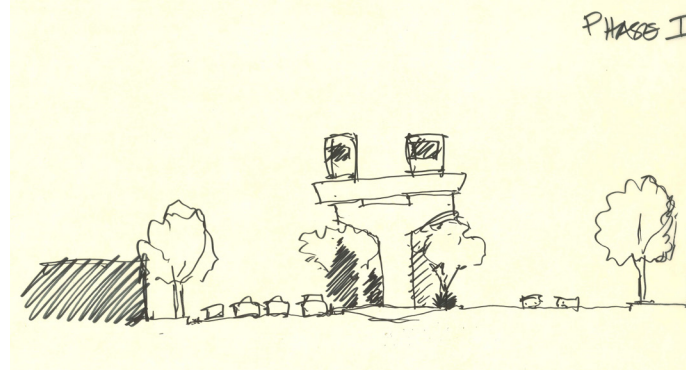
- _Green Ribbon: bicycle and pedestrian trail that traverses the Silver Line and branches out to connect to key moments in Tysons
- _Play off each station's unique themes and uses
- _Bicycle and pedestrian infrastructure improvements



TEAM 2: TYSONS WOVEN

Team 2's concept creates a trail network under the Silver Line while tapping into the surrounding green infrastructure. The plan calls for heavy planting in the open spaces under the rail structure as well as along edges of surrounding development. At nodes and metro stations along the line, the green infrastructure would branch out, connecting trails with trees, plants, streams, and other topographic features in surrounding areas. To create a contrast between natural and built elements, Metro structures at stations would be creatively lit during evening hours.

Understanding the automobile's continuing impact on the built environment, as well as the importance of Routes 123 and 7 to the transportation network, Team 2 called for a second longer-term phase that separates vehicles and pedestrian using vehicular underpasses at stations. In the interim, the ground plane would be designed to slow traffic creating a safe and vibrant pedestrian environment, blending pedestrians and bikes with cars and buses. The intersections at each station would also be treated with specialty paving and hardscaping to make a plaza-like environment.



MAIN IDEAS:

- _Green Ribbon traversing the corridor and branching out to key parts of Tysons
- _Weaving of pedestrian and vehicular networks with the rail
- _Special treatments at intersections to highlight the multimodal environment around stations



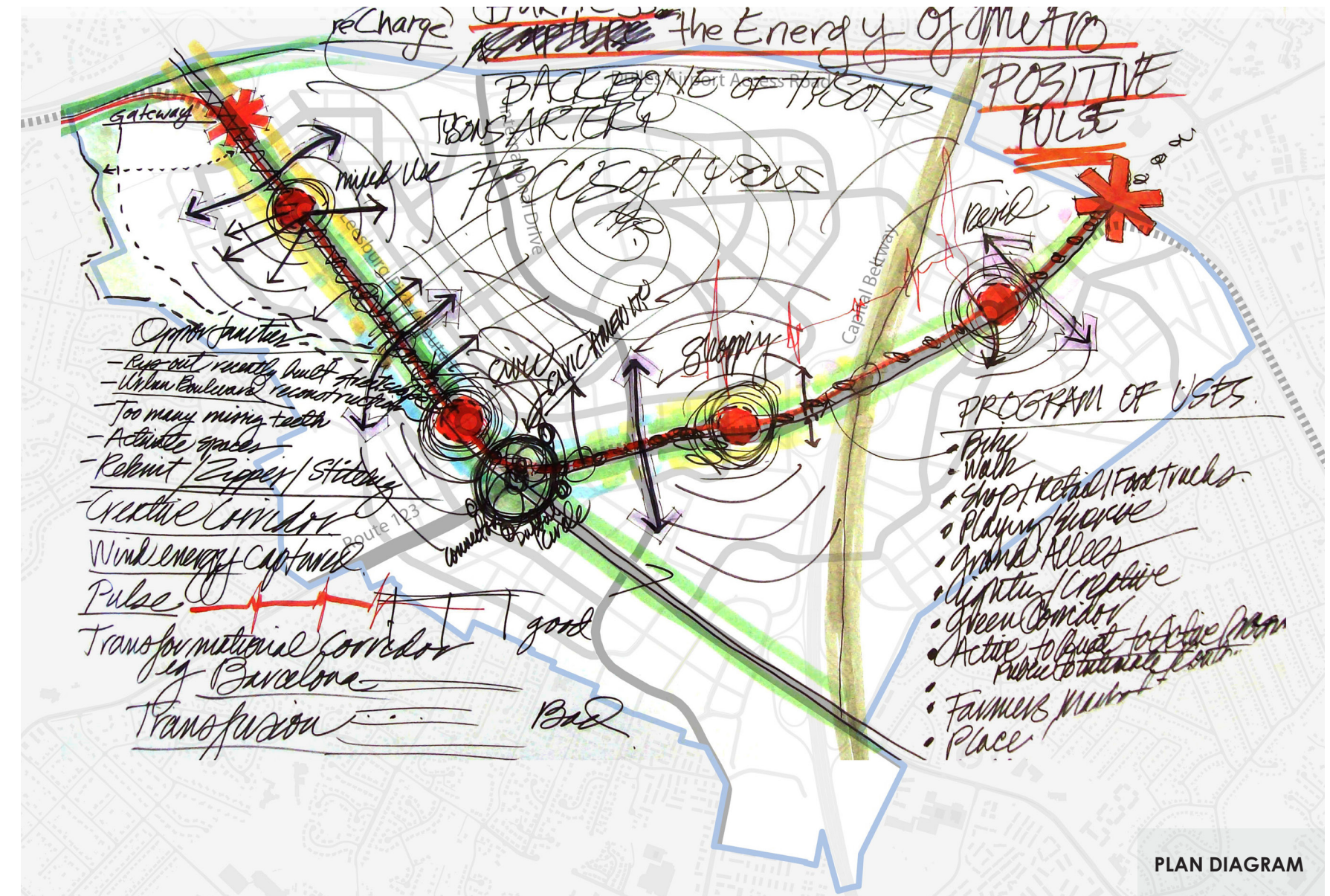
TEAM 3: THE PULSE

Team 3 developed a concept that viewed the Tysons Metro corridor as a pulse emulating the consistent rise and fall of a heart monitor. Activity at Metro stations ramps up and then tapers off between nodes. Spaces under and adjacent to each station platform could feature energizing, pop-up retail, where zones between stops could lend themselves to quieter, more contemplative uses such as parks or seating areas.

To provide an aesthetically-pleasing experience for pedestrians at both above grade (around overpasses and platforms) and the street level, enhanced landscaping and streetscaping along with public art should be provided in medians, sidewalks and other public spaces.

MAIN IDEAS:

- _ Converting negative energy into positive energy
- _ A "pulse" connecting the stations
- _ Renewable and sustainable power generation
- _ Wayfinding and other dynamic signage
- _ A celebration of public art

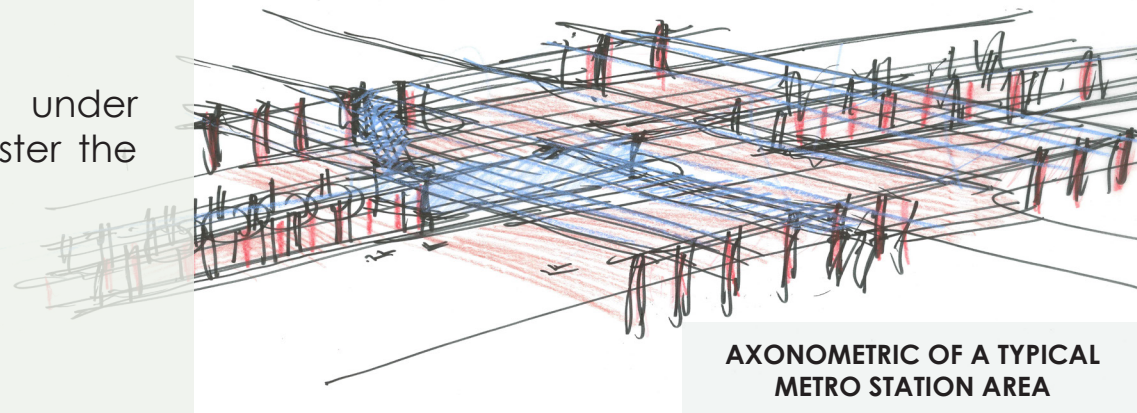


TEAM 4: THE JOURNEY

Team 4 focused on promoting an energizing journey to connect the stations, which would each have a different theme, for a sensory expedition through Tysons. This team encouraged the notion that all users, including drivers, Metro riders, and pedestrians, should create and discover opportunities around Tysons. However, pedestrians should be prioritized over cars. Two main elements are proposed in the concept:

A physical overhead structure at each station area over the surrounding streets and metro platforms. The structure's wide span would help define a zone, alerting drivers and pedestrians to this important space around the Metro station.

An intensely green landscape under the Silver Line is envisioned to bolster the pedestrian realm.



AXONOMETRIC OF A TYPICAL
METRO STATION AREA

MAIN IDEAS:

- _Celebrate the unique identity of stations
- _Creating/discovering opportunities
- _Experiential journey
- _Transportation for people, not cars



PLAN DIAGRAM

PROJECT 2: STATION AREAS

During the second project, the teams all reached a similar conclusion which is that instead of attempting to place art onto the rail or station structures, placemaking along the rail line and stations would be a more appropriate strategy to address concerns about walkability, pedestrian comfort, aesthetics, and safety. From this revelation, the designers developed a number of concepts that centered on two primary ideas.

The first idea was a green artery that would connect the four stations using a pedestrian and bicycle path weaving under and along the Silver Line. This path could serve as an organizing feature for a variety of amenities including rain gardens, public art, entertainment spaces, parks, and/or pop-up retail. These amenities might be themed by station. In some instances, the path could be elevated from the ground to avoid conflicts and create interesting experiences and views. The green artery would be designed to connect to other planned and existing pedestrian networks. In some cases, it will be difficult to introduce trees and other plantings due to the rail and trestle infrastructure. In all cases, the green artery

should be implemented in innovative ways so as to emphasize sustainability while not interfering with the built environment.

The second idea focused on the station areas themselves and how to make them distinct from the surrounding area. Station areas are activity hubs and should showcase high quality, innovative design. Key to the success of the station areas is to create safe and comfortable multi-modal connections between the Tysons community and the transit function of the stations themselves. Additionally, because the Silver Line occupies space alongside and in the median of two busy roads, significantly enhanced pedestrian and bicycle connections will be important at the intersections below and adjacent to the stations. Charrette teams developed several unique ideas for addressing these issues. One concept proposed distinguishing the station areas as 'people places' where vehicles must slow down and defer to pedestrians and bicyclists. Design concepts such as using different pavement materials, special crosswalks, landscaping, lighting, sculpture and/or canopies along Route 7 and 123 would signal that station areas are special places for people.

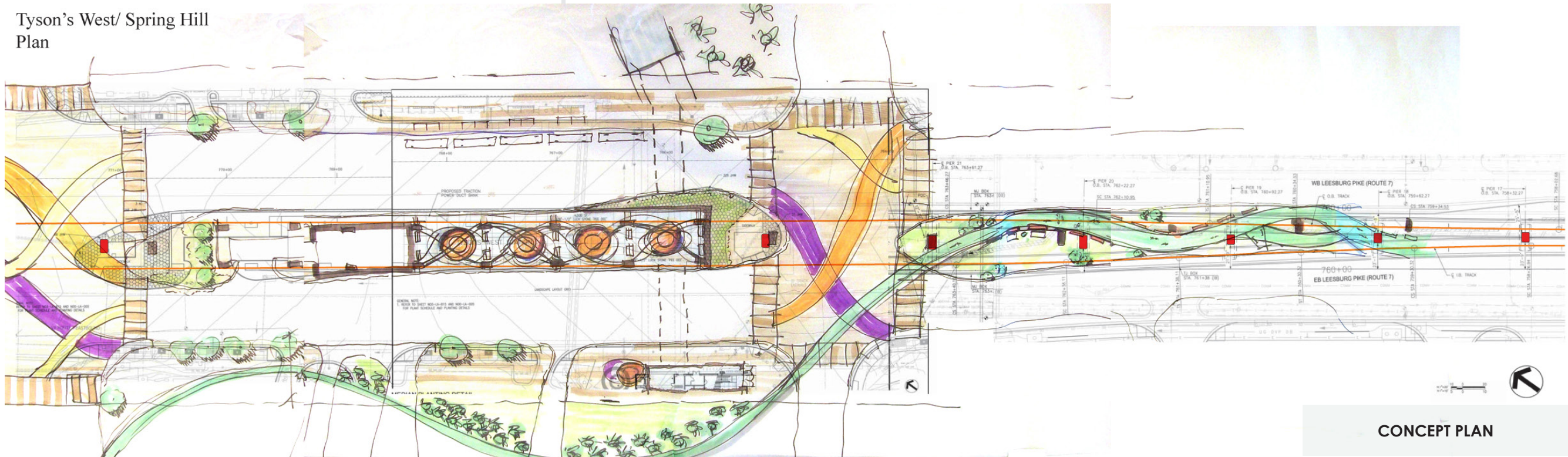


SPRING HILL: GREEN RIBBON

Team 1 pulled the “Green Ribbon” concept outside the station areas and into Tysons by incorporating pedestrian paths leading to the station from the surrounding residential neighborhoods.

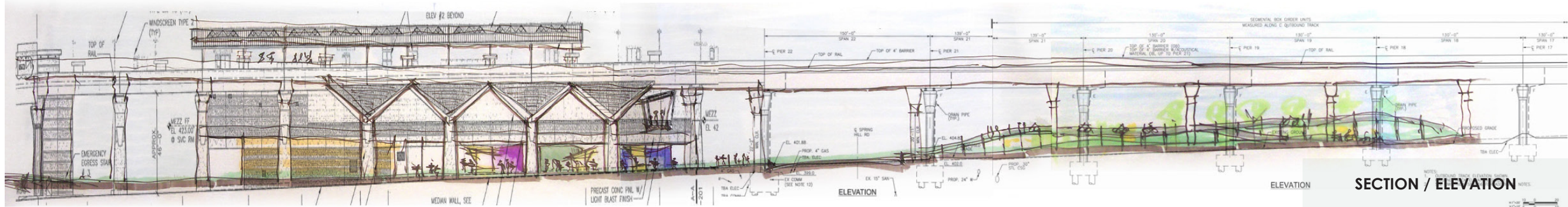
Natural plant life would line the corridor reinforcing the “green ribbon.” Sculptural representations of plants could be used in areas that would be difficult to plant, such as directly under the rail itself. The concept calls for pedestrian spaces with unique themes to activate the intersection of the trails and the metro infrastructure at each station, coordinated with the Comprehensive Plan recommendations for the district. An Arts and Entertainment theme, for example, was proposed for the Tysons West District, so at the Spring Hill Metro Station plaza, one could imagine food trucks and a summertime movie night occurring in the plaza space.

Tyson’s West/ Spring Hill
Plan



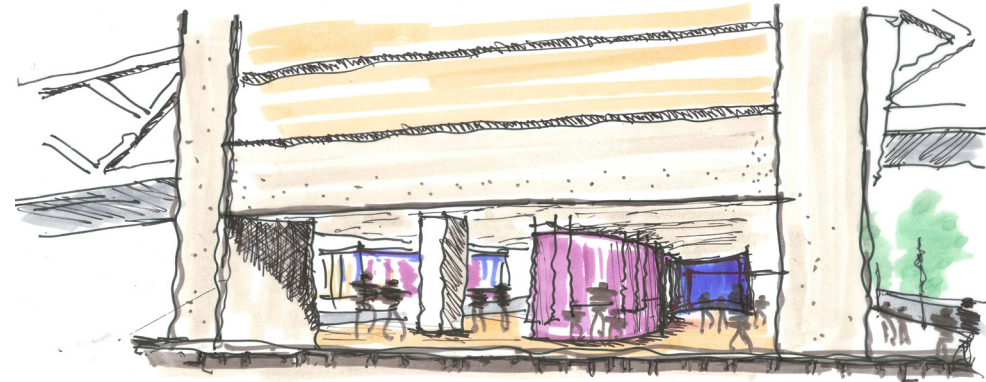
CONCEPT PLAN

Tyson’s West/ Spring Hill
Section

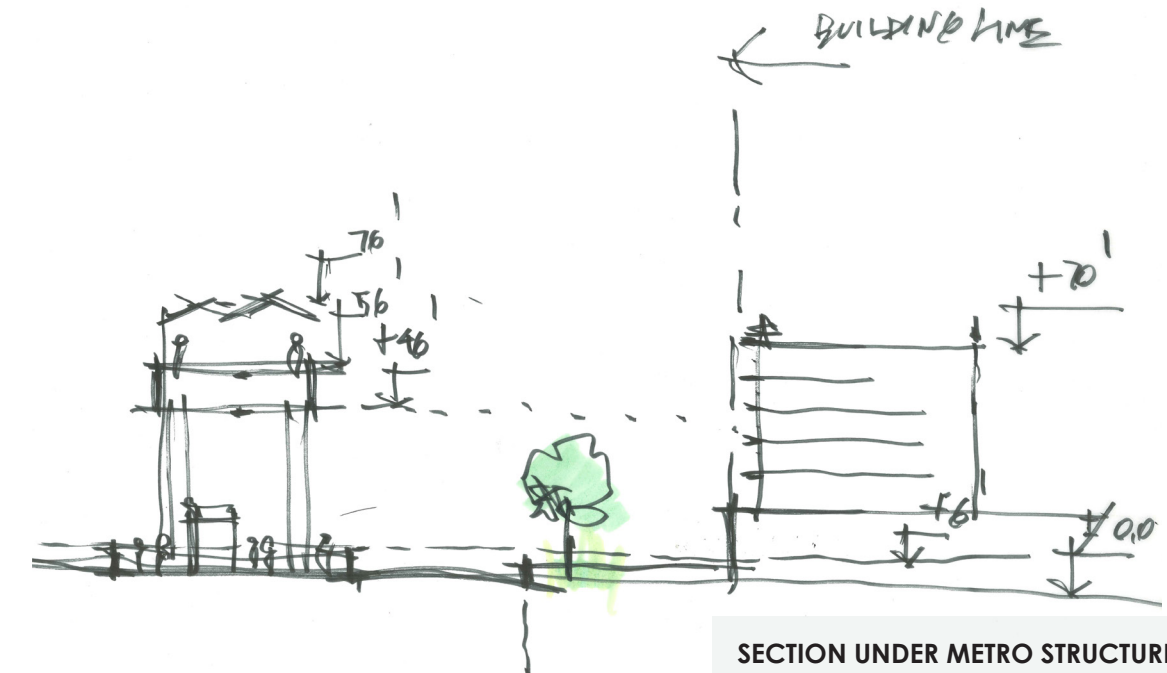


SECTION / ELEVATION

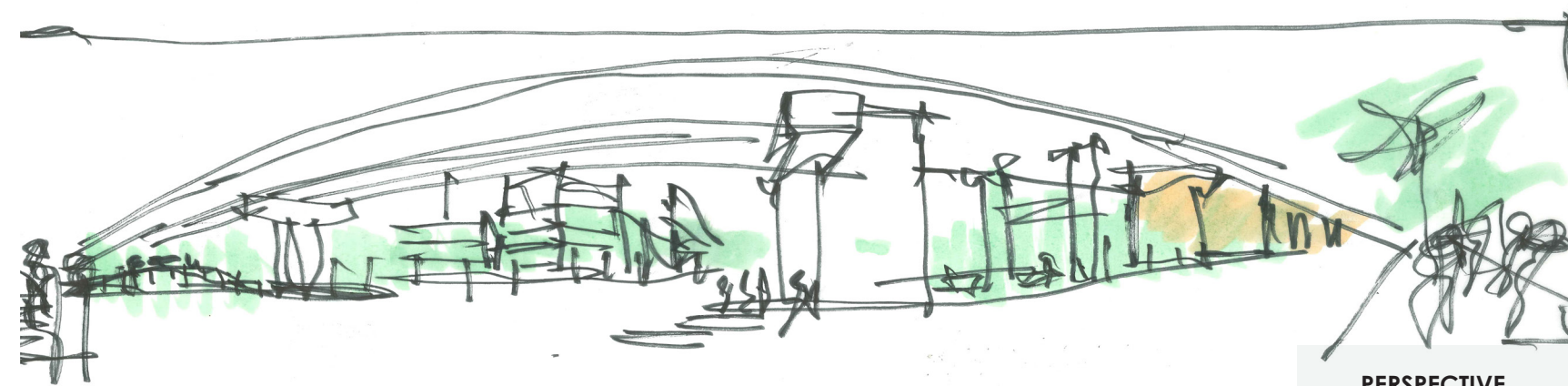
SPRING HILL



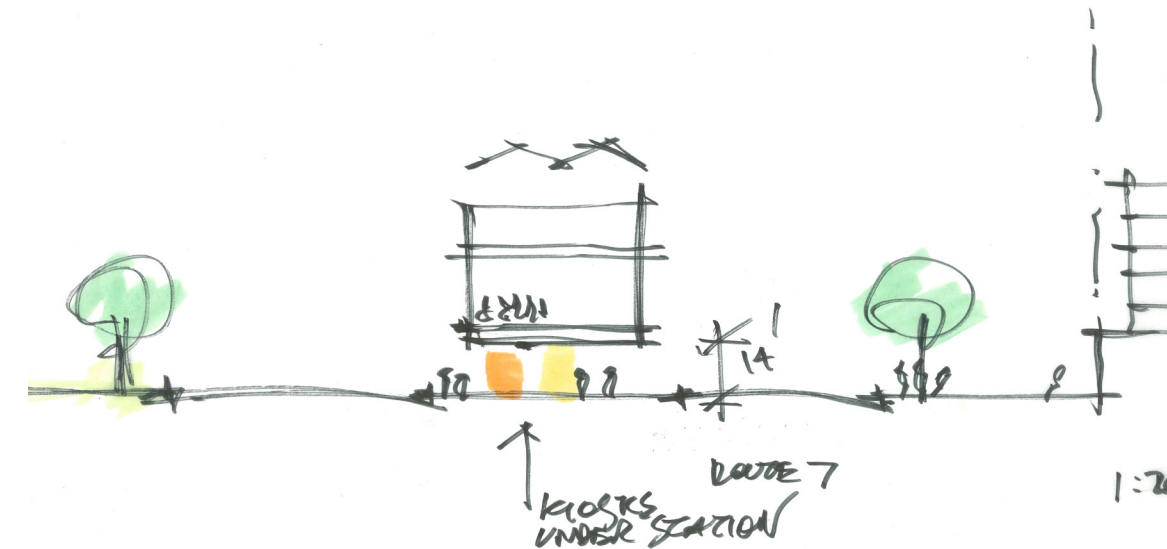
PERSPECTIVE VIEW UNDER STATION



SECTION UNDER METRO STRUCTURE



PERSPECTIVE

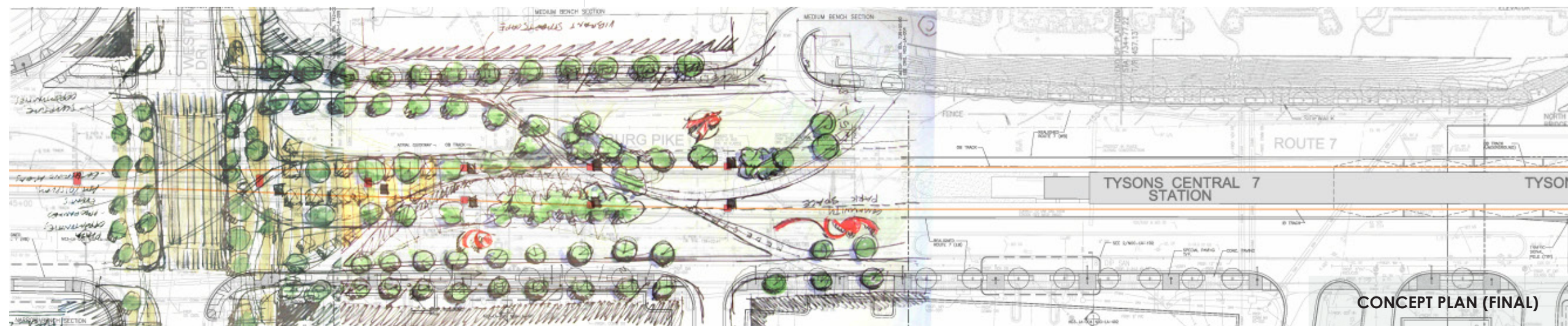
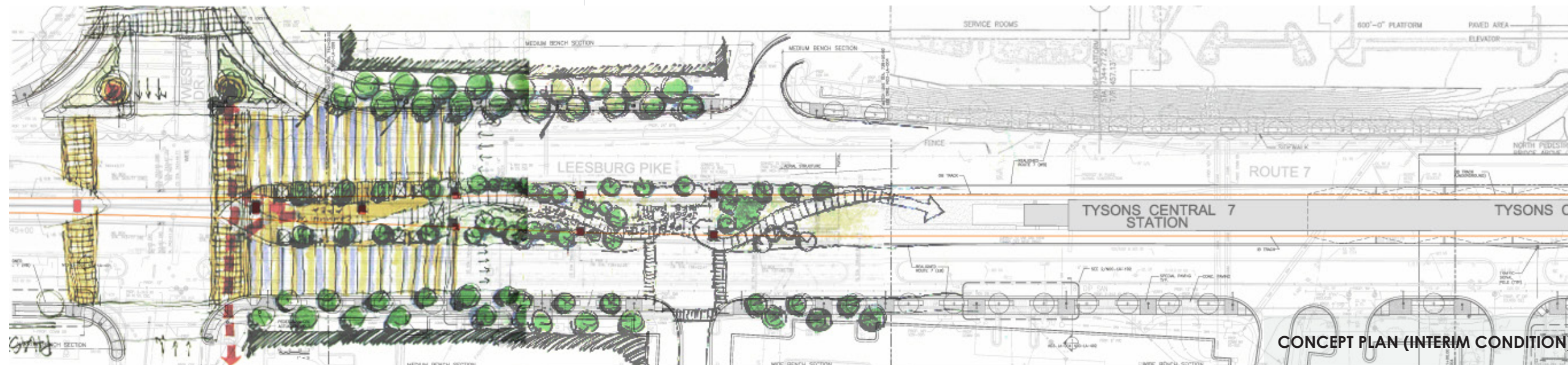


SECTION @ STATION

GREENSBORO: TYSONS WOVEN

Team 2's "Tysons Woven" concept was applied to the Greensboro Station area with a long term plan to separate pedestrian and vehicular circulation by depressing Leesburg Pike's travel lanes and constructing an at-grade pedestrian plaza extending to development on either side. In this scheme, the roads and metro would be the 'warp' and the pedestrian connections would be the 'weft,' weaving development on either side together.

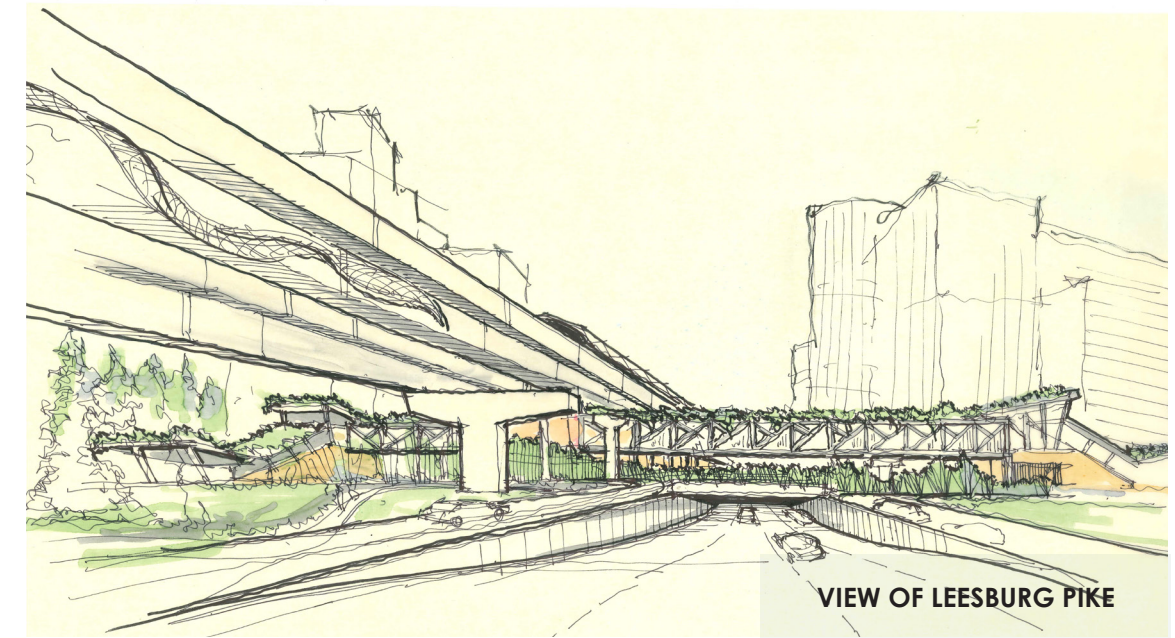
An interim condition would provide pedestrian connections between the stations with a trail and/or enhanced streetscapes. Additional landscaped islands at major intersections and heavy landscaping along Route 7 both under the rail and along the streetscape would further tie the rail area to the surrounding land. Lighting of rail stations and walkways would highlight the contrast between the natural and built environments, while a woven wire structure under the rail would accentuate paths and trestles at key activity locations.



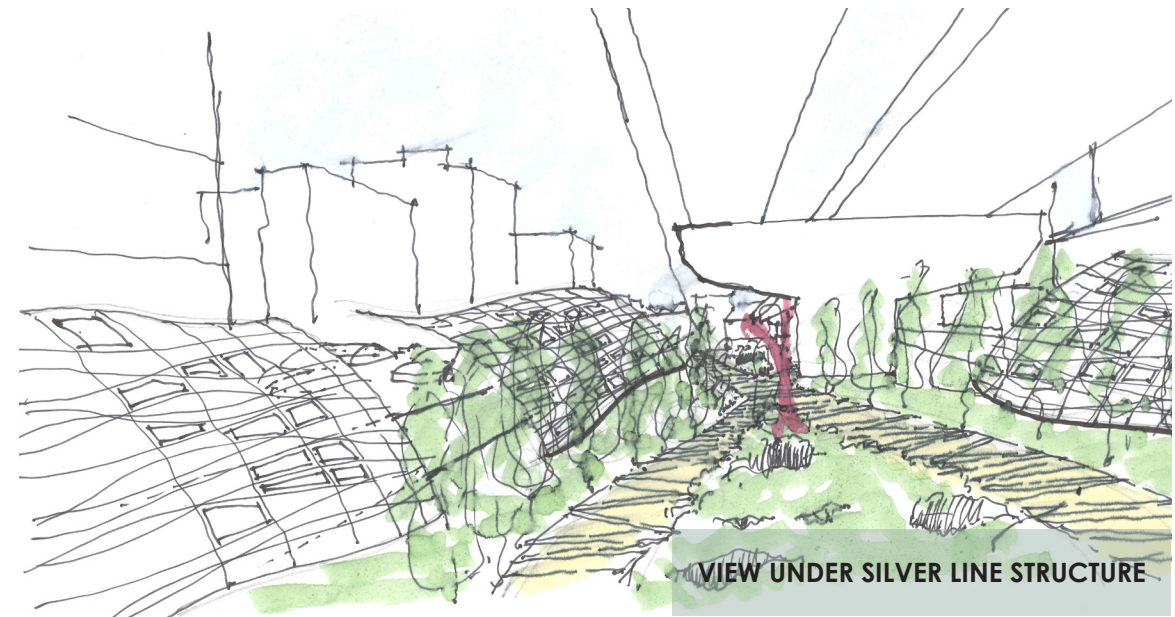
GREENSBORO



VIEW OF LEESBURG PIKE @ NIGHT



VIEW OF LEESBURG PIKE

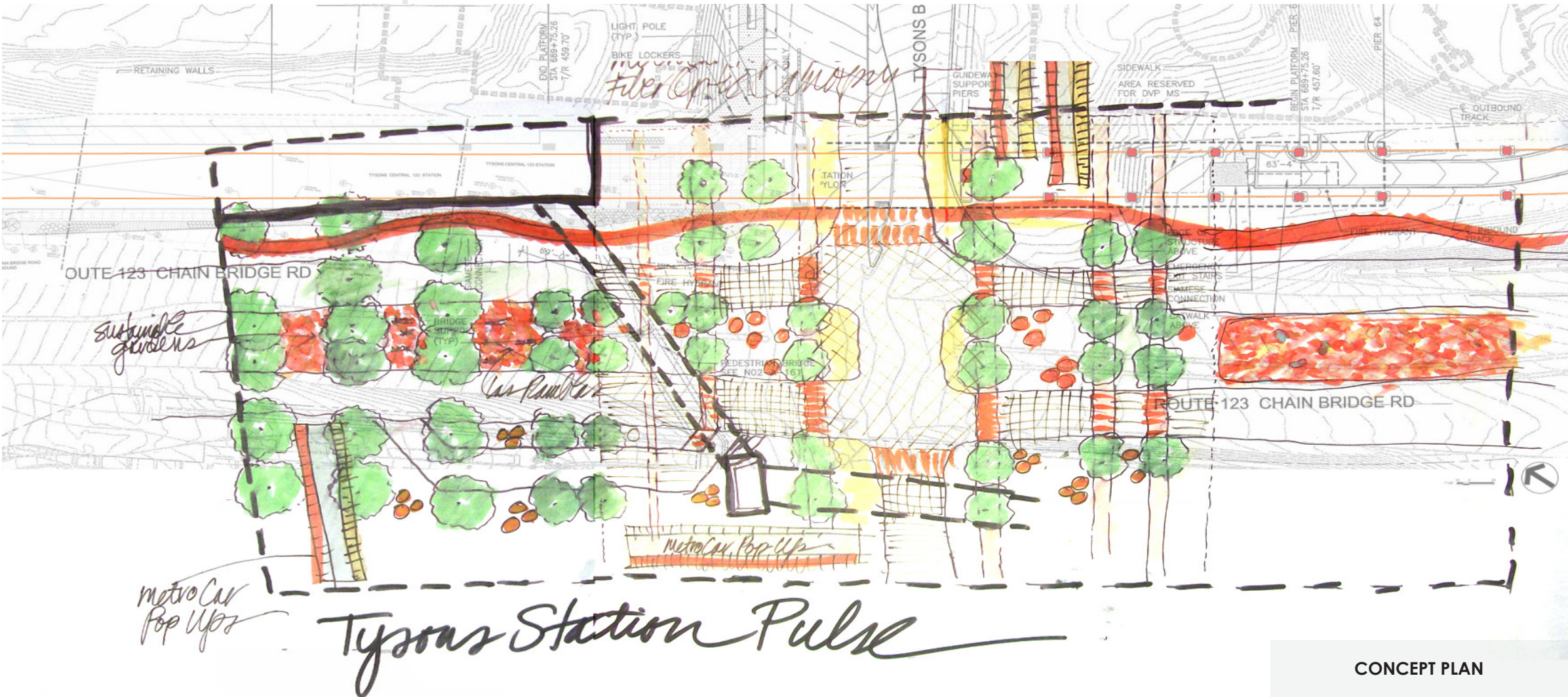


VIEW UNDER SILVER LINE STRUCTURE

TYSONS CORNER: *THE PULSE*

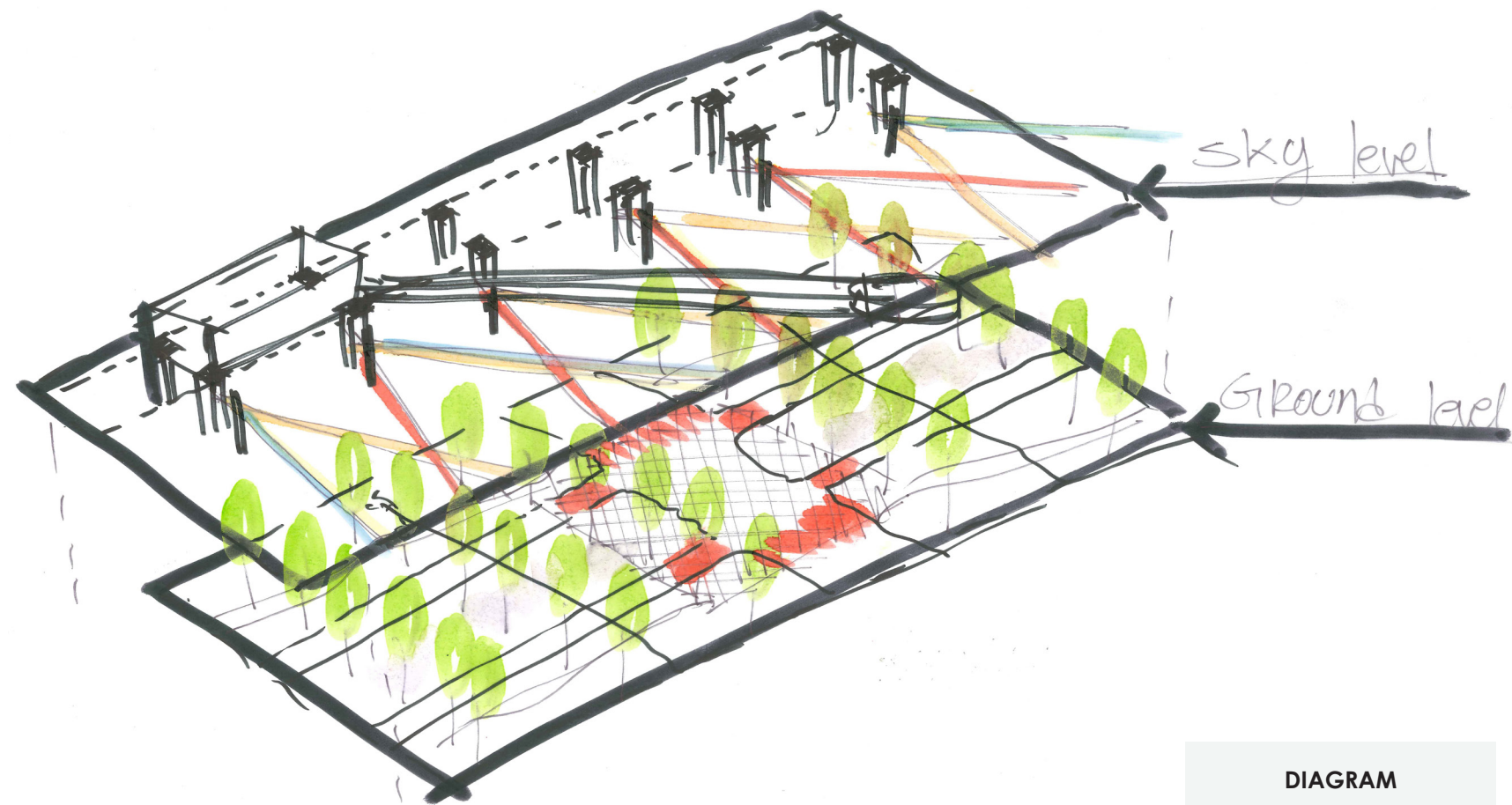
Team 3 adapted its “Pulse” concept to Tysons Corner station by integrating the spaces both under and above the station into its design. Under the station, pop-up retail or artist studios (perhaps utilizing old rail cars for space) would energize the node.

At grade, as shown in the diagram on Page 35, a beautifully-landscaped median and sidewalk area would line the street level. This would provide an exciting, visually interesting experience for those exiting the trains or walking along the pedestrian bridge above, as well as for those approaching the station or merely traversing the area at street level. Above ground, at eye level with the trains, artistic fiber optic cables would connect to trellises crossing over the node and further enhance the sense of place at the Tysons Corner station.

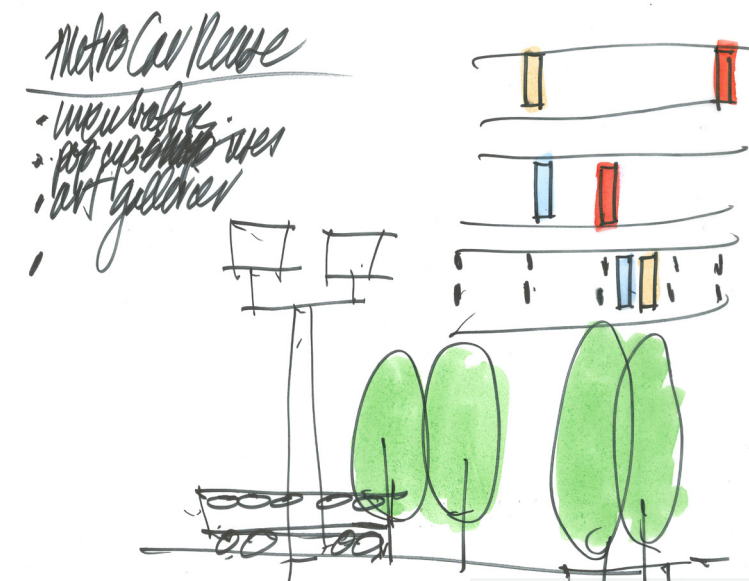


CONCEPT PLAN

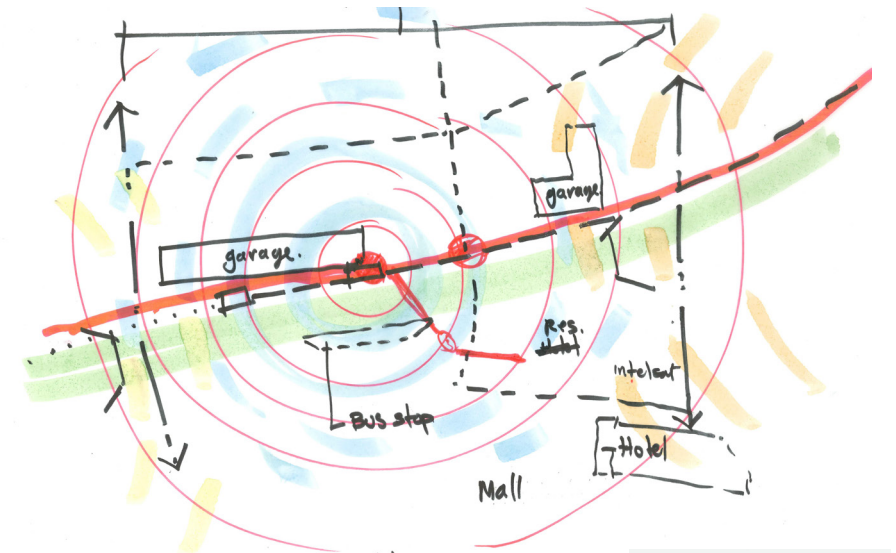
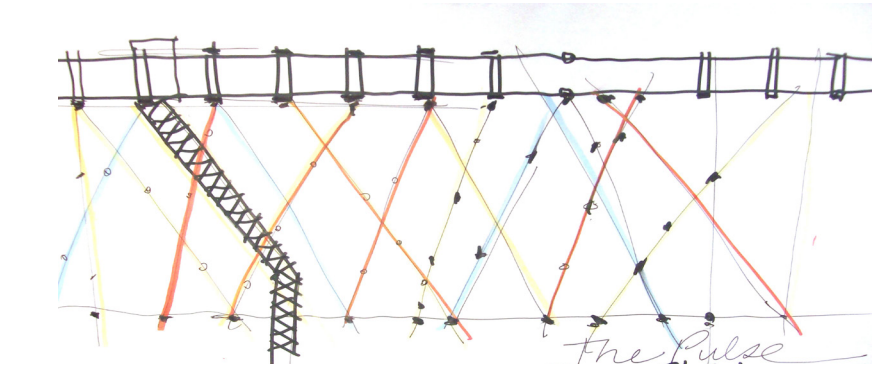
TYSONS CORNER



DIAGRAM



SECTION / DIAGRAM



Activity character (groundplain)
Retail

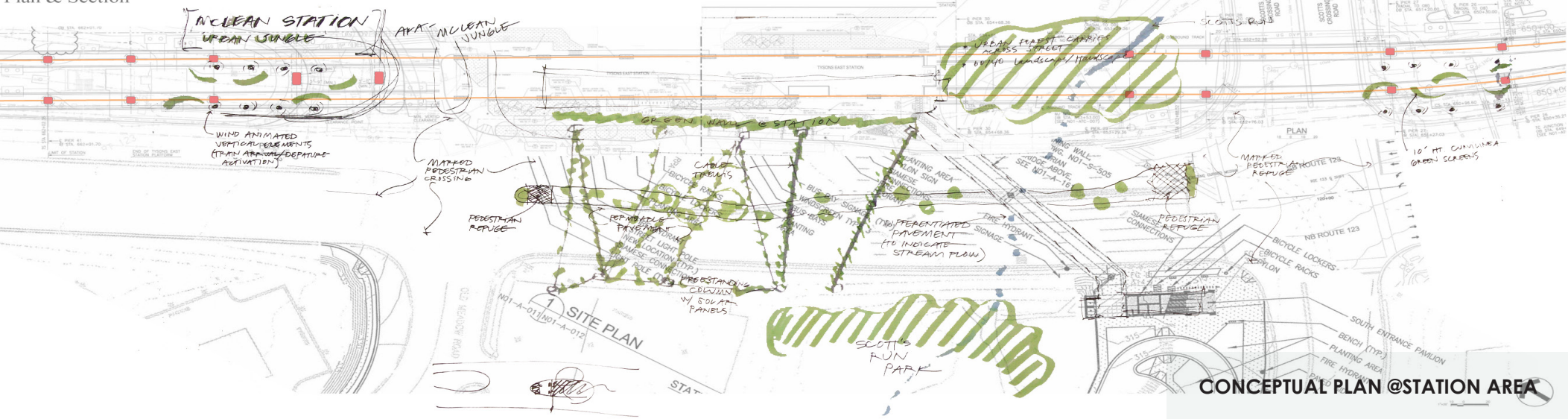
STATION DIAGRAM

MCLEAN: THE JOURNEY

Team 4's "The Journey" proposed a trellis structure at each station to create a "ceiling" across the entire station area, signaling to drivers and pedestrians alike that they have arrived at an important "people place." The station area could house iconic sculptures to introduce whimsy, such as a pyramid of tires, as a nod to the region's auto-oriented past.

Because of the adjacent Scotts Run stream valley, the concept for the McLean Station would showcase environmental sustainability and ecological harmony. Vines and greenery would be installed on the trellis in this station area, and other features such as wind-powered elements, permeable pavement, solar panels, or innovative storm water management techniques could be included.

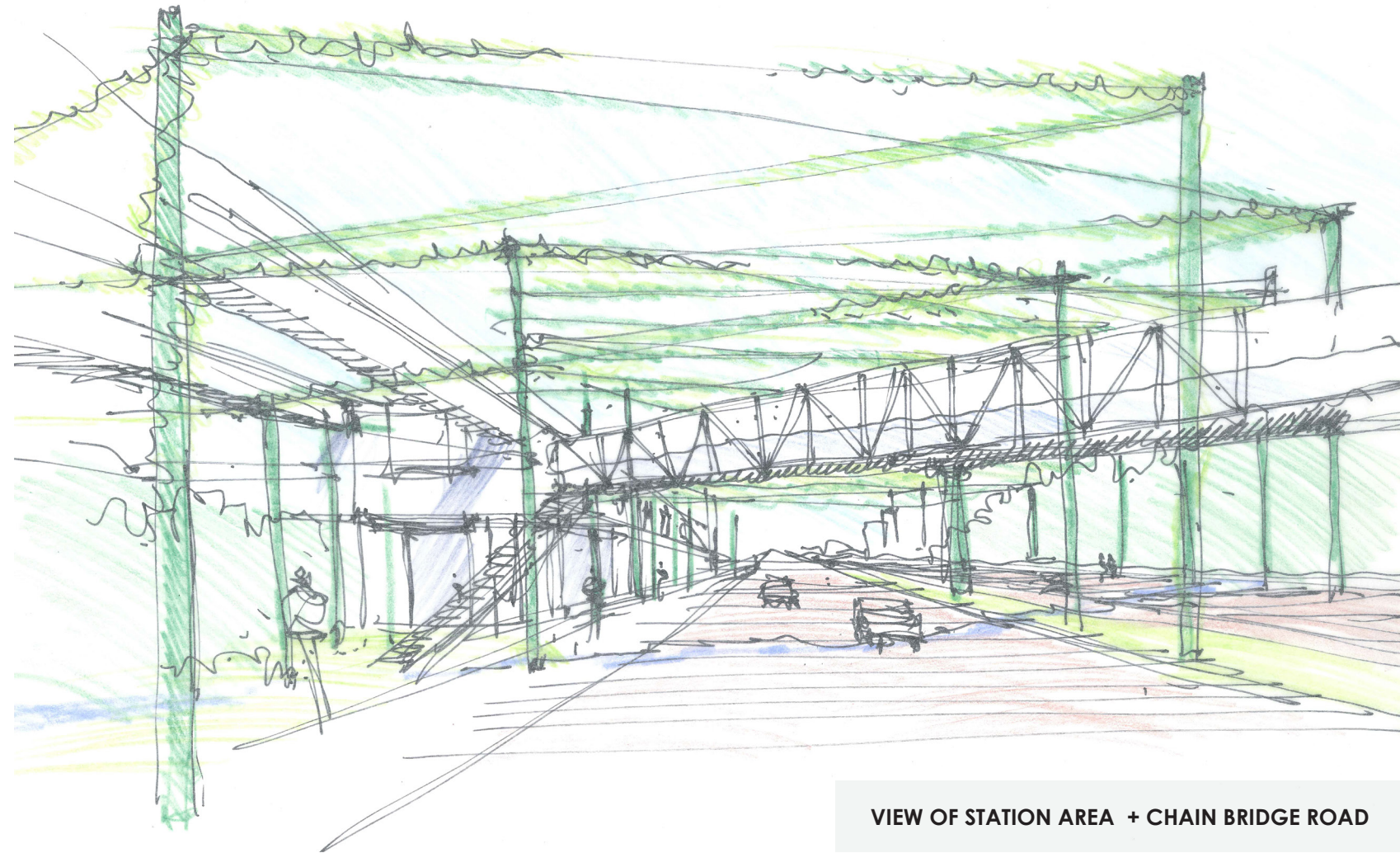
McLean/ Tysons East
Plan & Section



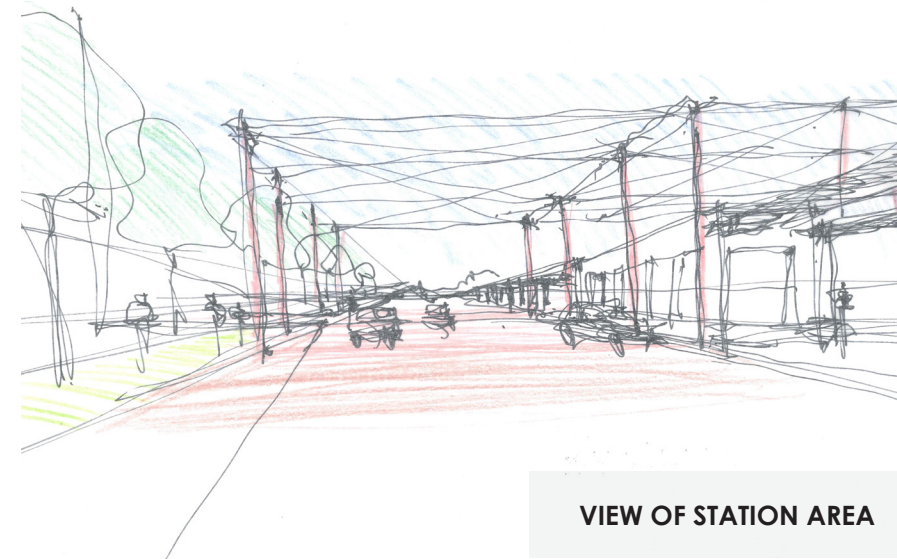
McLean/ Tysons East
Plan & Section



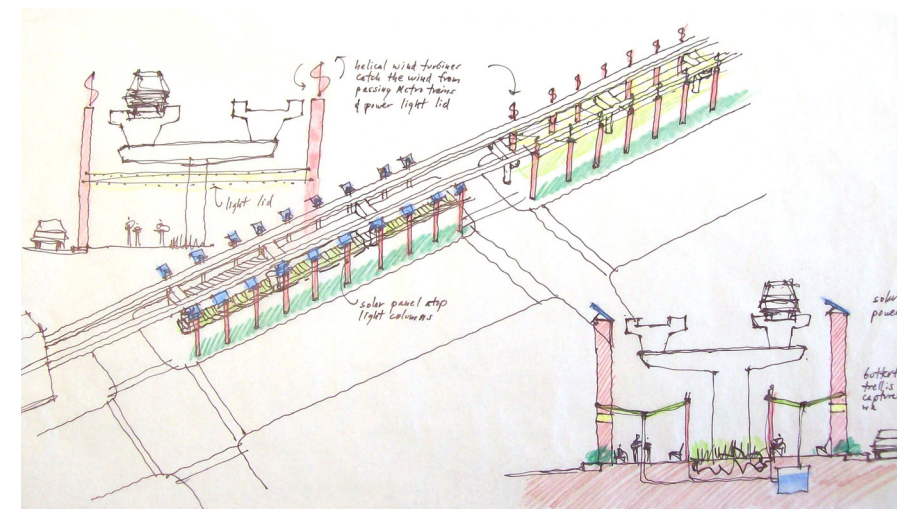
MCLEAN EAST



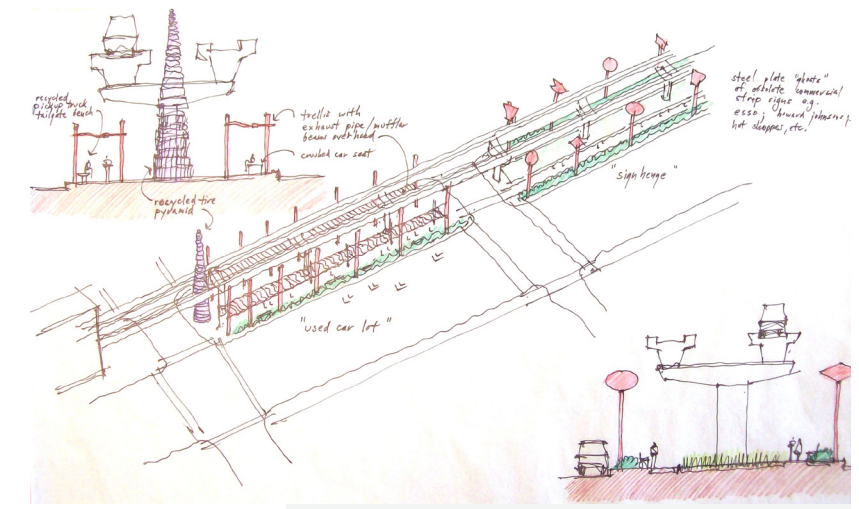
VIEW OF STATION AREA + CHAIN BRIDGE ROAD



VIEW OF STATION AREA



AXONOMETRIC OF STATION AREA



PUBLIC ART ELEMENTS ALONG SILVER LINE



DESIGN PRINCIPLES

Future design of the spaces around the Metrorail Silver Line through Tysons should be guided by the following principles, which were developed from the work that occurred during the charrette:

- #1** The design of the spaces under the Metrorail Silver Line should focus on creating places for people and improving pedestrian connections between the stations and important nodes within the Tysons community.
- #2** The Silver Line is the central artery of the future urban Tysons. Pedestrians should be able to traverse the length of the Silver Line through the area utilizing the space under and adjacent to the rail line.
- #3** The Metro stations should represent pulses of activity along the Silver Line. These nodes should maintain some commonality in style and function, but each should have its own distinct character.
- #4** Since the Metro stations will serve as important nodes within Tysons, they should be strengthened by having great streets adjacent to them. Leesburg Pike and Chain Bridge Road should be designed to become focal points for pedestrian activity, making it easier for people on foot and on bicycles to experience development on each side of the rail line.
- #5** The space under the Silver Line should be intensely green and/or pedestrian oriented. The landscape should be designed so that it interacts with and respects the structure, creating a relationship between the two.
- #6** The structure and piers of the Metrorail Silver Line should recede into the urban landscape and act as a backdrop to the activity taking place on the ground. Design interventions should avoid drawing attention to the piers.
- #7** Sustainable design, ecological features, and found elements should be used to establish a unique character and authenticity in Tysons.
- #8** The character of the area should be futuristic, high-tech, and fun to reinforce the impression of Tysons as a modern urban center and not the "Edge City" of the past.

Together, these principles provide a foundation for the future planning efforts described in the Next Steps section of this document.



NEXT STEPS

NEXT STEPS

This charrette summary encapsulates ideas and principles that serve as a guide in future planning and enhancement of metro station areas in Tysons.

While many of the design proposals generated at this workshop were innovative, each requires feedback from relevant government and transit agencies –including the Fairfax County Government, WMATA, the Metropolitan Washington Airports Authority (MWAA), and the Virginia Department of Transportation (VDOT) – before implementation. Community stakeholders must also weigh in on whether selected proposals align with community needs and desires. In addition, funding will need to be identified.

Going forward, the principles identified in the charrette will be incorporated into the Tysons Park System Concept Plan. The direction provided for the spaces around the metro stations will serve as important component to the public space network shown in the Concept Plan.

Future steps to implement these ideas will need to be developed but may include: the formation of a design and implementation committee; working with organizations such as the Tysons Partnership and the Fairfax Arts Council; and engaging land owners in Tysons to identify ways to incorporate these ideas into their redevelopment plans.



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