

Designing the Catherine and Isiah Leggett Math and Science Building

Takoma Park / Silver Spring Campus

October 2, 2018
Design Charrette

Welcome Remarks

Dr. Brad Stewart

Vice President and Provost, Takoma Park / Silver Spring

Montgomery College

Project Website

montgomerycollege.edu/tpss-design



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Community Conversations

Events



Design Charrette: Architectural and Systems Concepts

📁 Events, Updates

Tuesday, October 2, 7–9:30 p.m. Takoma Park/Silver Spring Campus | Cultural Arts Center 7995 Georgia Ave, Silver Spring, MD 20910
Free parking available. See directions below or click here for a campus map. Meet with the teams from Montgomery College,...

Recent Posts

📄 Building Form – September 11, 2018

📄 Design Charrette:

The Team

Integrated Design Firm + Community Engagement



Robert Bull, Architect, SmithGroup



Michael Akin, President, LINK Strategic Partners

Meeting Agenda

1. Large Group

- Recap from 9/11 Meeting, and Summer sessions – Feedback, Themes Heard, Engagement Process
- Design – Design Considerations and Concepts

2. Work Groups

3. Work Groups Report Out

Recap from 9/11 meeting

- Feedback

- Key Themes Heard

- Engagement Process

Feedback



Feedback

	Question/Feedback	Response (Information below was summarized from in-room responses offered by SG and LINK)
1	What is the trade off between Concept 2 and 2.5?	Concept 2, and 2.5 are similar massing along Fenton St. However, on the campus side, Concept 2 and 2.5 differ in their massing. 2.5 has a smaller footprint and is one level taller. In 2.5, the planetarium also appears as a standalone mass.
2	Is there a way to design the building façade so that it complements and reflects the aesthetics already established in the surrounding area? Ideas might include using local river stone or stone from a local quarry.	The design team will study building façade ideas that will be presented in the coming community design charrettes.
3	In Concept 2, place a service elevator by the load-in area, especially with chem labs receiving deliveries (need large elevator).	The design team will address planning requirements as the design evolves.
4	In Concept 2, for security, it will be beneficial for the top floor labs to be more isolated (not to be so easily connected to other floors, so that expensive equipment can't walk away so easily).	The design team will address planning requirements as the design evolves.
5	In Concept 2, the right angle notch would create more open space if it was oriented diagonally.	The design team will address planning requirements as the design evolves.
6	A professor liked the green-space in between (that could be a green roof or an occupied terrace) in Concept 3.	Thank you for your feedback.
7	In Concept 3, for security, it will be beneficial for the top floor labs to be isolated (not to be connected to other floors so that expensive things can't be stolen so easily).	The design team will address planning requirements as the design evolves.
8	The additional windows and better natural light are a great asset in Concept 3.	Thank you for your feedback.
9	The extra floor is good in Concept 3 because it allows for better vertical traffic.	Thank you for your feedback.
10	In Concept 3, the view of planetarium doesn't seem as prominent.	Thank you for your feedback.
11	What is the entrance to the planetarium like in Concept 3?	The planetarium entry will be located adjacent to a lobby space off of the tennis court level.
12	In Concept 2.5, the right angle notch would create more open space if it was oriented diagonally.	The design team will address planning requirements as the design evolves.
13	In Concept 2.5, the campus side is addressed very well compared to the 3-story.	Thank you for your feedback.
14	The mass of the planetarium from the neighborhood looks too prominent and feels too much like a fortress in Concept 2.5.	Thank you for your feedback.
15	In Concept 2.5, will there be a door that comes out to the roof where you can have an outdoor space?	The design team will address planning requirements as the design evolves.
16	We want the greenhouse at a close proximity to the labs, for specific labs where the students need to use the greenhouse (in a controlled environment as much as possible).	The design team will address planning requirements as the design evolves.

	Question/Feedback	Response (Information below was summarized from in-room responses offered by SG and LINK)
17	It would be good to locate a bathroom near the planetarium for kids on field trips and others so they are more accessible.	The design team will address planning requirements as the design evolves.
18	Will there be a place to set up telescopes near the planetarium? Perhaps a rooftop, parking lot, or other area with a clear view of sky?	The design team will address planning requirements as the design evolves.
19	Overall, the architects have done a great job with the building footprint. I had a lack of confidence before this session.	Thank you for your feedback.
20	We'll likely need service elevators for heavy specialized equipment, given the function of the building.	The design team will address planning requirements as the design evolves.
21	More parking would be appreciated.	The design team will address planning requirements as the design evolves.
22	Can the greenhouse be located on or near the quad?	The design team will address planning requirements as the design evolves.
23	Will the greenhouse be located on the roof? Or on the ground level?	The design team will address planning requirements as the design evolves.
24	Is there one layout that functions the best in terms of circulation?	All design options intend to provide clear, rational circulation for the interior of the building.
25	Will there be a block for a support center, including faculty offices?	The design team will address planning requirements as the design evolves.
26	I am concerned about the noise. At the moment I don't think any of these designs reflect the quality of a residential building. What is going to be done about noise pollution generated by the facility?	An acoustician is part of the design team and will provide best practice recommendations to minimize noise generated by the building.
27	I dislike the look of a square planetarium, and I think it should be traditionally round. Is there any way the structure can be made round? Is there a particular reason that it is not round?	The design team will study building form ideas that will be presented in the coming community design charrettes.
28	If there is going to be a square planetarium, can it be decorated?	The design team will study building form ideas that will be presented in the coming community design charrettes.
29	I think that the industrial buildings are horrible designs for the area. I love the way P3 looks and the image that it creates. P3 never felt like a commercial building. I think we should look at the design for P3 and base future designs from that. Is there any way we can take design influences from that building?	The design team will study building form ideas that will be presented in the coming community design charrettes.
30	How would students access the planetarium?	The planetarium will be accessed off of a primary lobby in the building.
31	Census bureau building has an amazing design. We should take some inspiration from that design.	The design team will study building form ideas that will be presented in the coming community design charrettes.
32	Can we make sure that the windows from the building don't reflect too much light? Could treating the windows help with light reflection?	The design team will study building material ideas that will be presented in the coming community design charrettes.
33	Can we put windows in the basements that look out to the lobbies or hallways?	The design team will study building form ideas that will be presented in the coming community design charrettes.
34	Will the loading dock be the same in all options?	Yes, the loading area will be located along Fenton St, near Science North for all concepts.
35	What is the learning center? Is it needed?	The learning center is a key component of the facility providing academic support spaces and functions, critical to student success.

Feedback

	Question/Feedback	Response (Information below was summarized from in-room responses offered by SG and LINK)
36	Which building sits the farthest back from the street?	Concept 2 is approximately 150' to Takoma Ave at the closest point. Concept 2.5 is approximately 155' to Takoma Ave at the closest point.
37	Is there a reason why the building design is going for LEED Silver instead of LEED Gold?	LEED Silver is a project minimum requirement. The design team and college will attempt to target the highest certification rating possible for the project.
38	Will there be a new green space next to the building?	Yes, landscape improvements and green space are part of the project.
39	Can we ensure there is a diversity of trees in the new green space and ensure that the trees are well maintained?	The landscape design and plant species will be selected in a manner that is sensitive to the regional climate.
40	Can we ensure construction workers don't litter and leave trash behind?	The College intends to hire a CM at Risk as part of the project. These construction concerns will be communicated to the CM once they are on board.
41	When will we get a fitness facility back?	A new Health and Fitness Center (32,900 NASF/49,230 GSF) to replace Falcon Hall is project no. 4 in the approved and adopted 2013 to 2023 Facilities Master Plan. It will be on the site of the existing Science North building. Project no. 4 is after project no. 2 Library Learning Commons, and project no. 3 Math Building. Project no. 4 is at least 10 years in the future.
42		
43	What is the square footage of each of the proposed concepts?	Each concept will target 134,000 sf
44	The architectural team deserves appreciation for understanding what the community wanted in the design (even when the community members might not have completely understood what they were saying).	Thank you for your support
45	Concept 2.5 is appreciated because of its height and scale, as it was not too small or big. It is also not too square and blocky, and clearly takes into account the need for aesthetically pleasing street views.	Thank you for your feedback.
46	What does the orange area in the designs represent?	The orange area in the floor plans represent the learning center and planetarium. These graphics have annotation text that help explain the major components as the plans build up in levels.
47	What's the vision for the entry from the Takoma Avenue side?	To address neighbor concerns, a main entry off of Takoma Ave is no planned for the project.
48	Can we limit the times of use of the Takoma lot for parking during different periods of the day?	The parking lot on Takoma Ave is currently assigned to faculty and is not intended for public use.
49	What is the difference in the planetarium design in Concepts 2 and 3? The planetarium in Concept 2 seems less imposing.	In concept 2, the planetarium is internalized and is an interior design feature in the building.
50	It is important to join the walking tours of the campus to understand more about the site and proposed footprint and orientations.	The planned site tours are concluded. Additional, site tours will be considered upon formal request.
51	If the designs are set further back, it is better for the community, as views of the building will be less direct.	The design team will provide views from various vantage points in the surrounding neighborhood as the design evolves.
52	Does the planetarium have to be square?	The design team will study building form ideas that will be presented in the coming community design charrettes.
53	Can we use the field stone from the existing structure so that the new design looks like it's part of the old design?	The design team will study building form ideas that will be presented in the coming community design charrettes.

	Question/Feedback	Response (Information below was summarized from in-room responses offered by SG and LINK)
54	How will the green roof area be integrated?	The design team will study building form ideas that will be presented in the coming community design charrettes.
55	Can the the planetarium reflect local design aesthetics? Could it borrow from the bungalow mission style?	The design team will study building form ideas that will be presented in the coming community design charrettes.
56	Have you looked at placement codes for labs?	The design team will follow all applicable building codes for the building. This is part of the mandatory referral process review.
57	Have you worked on building designs with labs so close to a neighborhood?	The design team has worked on lab buildings in a variety of contexts and will be sensitive to the the surrounding context as the design evolves.
58	What happened to the soil sample testing, which was performed earlier this year, and why have the results not been shared with us?	The soil boring report is in draft format as of the 9/11/2018 charrette and will be posted when it is finalized.
59	When will we get a better idea about the proposed design?	The design team will study building form ideas that will be presented in the coming community design charrettes.
60	The community members expressed concerns about the intersection of Takoma and Fenton becoming a drop-off and pickup location.	The drop off location is located along Fenton St and is intended to allow for off-street drop off. As this is a designated zone, it will help prevent traffic from stacking up along Fenton Street.
61	The community members also expressed concerns about the academic focal point of the campus shifting, resulting in a change of foot traffic and flow toward this corner of campus.	The majority of foot traffic and bus drop off occurs on the North of the project site. As such the primary entries are organized to receive this traffic. There are few students coming on foot from South of the project site.
62	What's the interest in pushing the building closer to Fenton?	The majority of the labs are pushed towards Fenton St to be as far from the adjacent neighbors as possible.
63	Please indicate where the planetarium is structurally in each concept.	The planetarium is generally located along Takoma Ave for all concepts
64	With three stories, what is the added square footage?	All options are the same size in terms of square footage.
65	Keep climate change in mind, and plan for significant rain and snow during very short periods of time.	Agreed, stormwater management strategies are a key component of the overall design.
66	Keep pedestrians in mind. Consider sheltered walkways or a tunnel.	The design team will study these ideas as the design advances.
67	The pharmaceutical building (a net zero building on Colesville & Spring) could be used as a design example.	Thank you for your feedback.
68	Why not locate doors near the drop-off area to help improve access?	The design team intends to locate near drop off areas to improve site access.
69	Concept 2 is not as interesting, takes up more space, and looks like a pretty boring space. Spacially, it has different height levels. The other 2 have interesting geometry while Concept 2 just looks like two blocks.	Thank you for your feedback.
70	Concept 2 looks too corporate.	Thank you for your feedback.
71	Concept 2 has less potential for any outside views.	Thank you for your feedback.
72	I like the low profile of Concept 2 on Fenton.	Thank you for your feedback.
73	Concept 2 seems like the least intrusive to build.	Thank you for your feedback.
74	The further set back from Takoma Avenue, the better it is for the community.	Thank you for your feedback.
75	In Concept 2, what is the full explanation of the red zone?	The red zone indicates the area where the building is to be no more than two stories tall.

Feedback

	Question/Feedback	Response (Information below was summarized from in-room responses offered by SG and LINK)
76	For Concept 2, I'm still thinking renewable energy would be a great asset. The pharmaceutical building is doing well with their headquarters and you might consider approaching them since their building is net zero.	Thank you for your feedback.
77	In Concept 2, there is also the parking lot and west wall on which you can place a canopy or shading.	The design team will study these ideas as the design advances.
78	There is a green roof on Concept 2. Why isn't there green space on the other roofs?	The design team will study these ideas as the design advances.
79	More green roofs, please.	The design team will study these ideas as the design advances.
80	There is a company that does green roofs for different kinds of photovoltaic systems, should we want to include something like that.	The design team will study these ideas as the design advances.
81	Concept 2 has a lot of mass.	Thank you for your feedback.
82	Concept 2 presents less potential for outside use.	Thank you for your feedback.
83	You have to consider that New York Avenue is also a residential side.	The design team will provide views from various vantage points in the surrounding neighborhood as the design evolves.
84	In Concept 3, the thing that my mind wants to do is push the planetarium and extension apart. Could that be accomplished if you put a dome on top instead of using a box?	Thank you for your feedback.
85	I like the boxy design of Concept 2.5.	Thank you for your feedback.
86	Is there going to be virtual reality in the planetarium?	Virtual reality type setups are generally consumer products that are small in scale and can be used in most standard space.
87	In Concept 2.5, can you explain what is going on with the gate on top of the building?	The screenwalls are intended to screen the rooftop mechanical units and provide a visual and potentially acoustical buffer.
88	In Concept 2.5, I'm trying to get an idea of what the screen would look like from afar on top of the building.	The screenwall design will be studied as the design advances.
89	Can you talk about the orientation of the labs in Concept 3?	The labs are located along Fenton St.
90	Where are the faculty offices in relationship to the student labs in Concept 2.5?	The faculty offices are in proximity to the labs in concept 2.5.
91	If someone is coming from Takoma Metro Station, what entrance would they use in Concept 2.5?	A person walking from Takoma metro would be encouraged to use the designated entrance on Fenton St.
92	Is there a bus that goes from Takoma to Silver Spring?	Yes, there is a bus from Silver Spring that drops people off in front of the Nunley Student Center.
93	Fenton Avenue is going to be closed for a month. How will you do the traffic study? Is it going to measure student activity coming up Fenton during peak traffic hours?	The traffic study will be coordinated with road closures. Typically the road closures are during off-peak hours, therefore the traffic study will collect data on peak traffic.
94	Is there at least a year from until construction will begin?	Construction will likely not begin until mid-point of 2019 at the earliest. This is approximately 1 year from the beginning of the community design charrettes.
95	Will the whole math program be in this building, as opposed to where it is now?	The math programs will be located in the new facility.

	Question/Feedback	Response (Information below was summarized from in-room responses offered by SG and LINK)
96	Is there a plan to make the building an actual lab to teach kids how to build sustainable buildings? Will the building be open to tours to teach kids about the operations and design of the building?	The design team intends to study sustainability exhibits as the design is refined.
97	I personally think Concept 2.5 is the best of three options because the geometry is interesting and doesn't intrude as much. The building is not as tall as in Concept 3 so it will not dominate the area as much.	Thank you for your feedback.
98	Concept 2.5 offers the most efficient programming.	Thank you for your feedback.
99	Do they allow dockless scooters on campus?	The College is a partner with Capital Bikeshare. There is a Capital Bikeshare dock on Fenton Street for bicycles. There is no Policy and Procedure at Montgomery College concerning dockless bicycles and dockless scooters.
100	Will there be docks for non-motorized transportation, like scooter and bikes?	The design team intends to study designated parking areas for alternative modes of transportation.
101	Locate non-motorized transportation docks near the outskirts of campus so they are accessible to students but also available to the public.	The College is a partner with Capital Bikeshare. There is a Capital Bikeshare dock on Fenton Street for bicycles. There is no Policy and Procedure at Montgomery College concerning dockless bicycles and dockless scooters.
102	Use the construction process as living classroom. After the building is built, utilize the building so that students can study its systems.	The design team will study building form ideas that will be presented in the coming community design charrettes.
103	Use flag stone in the construction.	The design team will study building form ideas that will be presented in the coming community design charrettes.
104	Use photovoltaic panels to help with energy consumption.	The design team will study building form ideas that will be presented in the coming community design charrettes.
105	Try to do a survey to understand peak usage for when students are coming and going from Metro.	Based on MC experience with the student body, the overwhelming majority of students take the Ride On bus after they arrive to Metro.
106	Pull the glass wall facing the commons back a little.	The design team will study building form ideas that will be presented in the coming community design charrettes.
107	Include a covered walkway to the entrance of the building, showing people where to go.	The design team will study building form ideas that will be presented in the coming community design charrettes.
108	Locating the entrance to planetarium so that it doesn't go through the building will make it easier for public to access.	The design team will address planning requirements as the design evolves.

Feedback

Themes from previous meetings

Engagement Process

Environmental Considerations

Design Elements

Internal Considerations

Construction Considerations

Feedback

Themes from previous meetings

Employ strategies that breakdown scale similar to Concept 2 and 3

Study pedestrian and vehicular traffic flows

Minimize noise generated by building

Minimize light trespass from building and site

Active communication and accountability during construction

Tree protection and preservation

Feedback

Key Themes Heard

Preference for the lower height in Concept 2 or 2.5

Preference for setback similar to Concept 2 or 2.5

Strong general preference for Concept 2 or 2.5

Consider site context during development of building exterior

Engagement Process

Design Charrettes

Design Parameters

Forms and Organization Concepts

Forms and Organization Concepts

Architectural Concepts
Systems Concepts

Architectural Development
Systems Development

Design Refinement
Construction Issues

Summer Engagement

Design Charrette Meeting- June 28

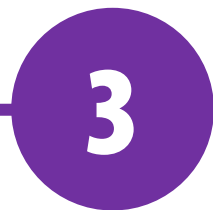
Design Charrette Meeting- July 12

Design Charrette Meeting- September 11

Design Charrette Meetings
October 2nd
October 16th

Submit Application for Mandatory Referral (Planning Board)

Design Charrette Meetings Winter 2019



Feedback

Q: Can you update the tree map with the latest survey information?

A: Yes

MC is committed to protecting the park-like green space. A tree condition assessment is the next step.

Source: Recent Civil Engineer Survey

**Updated 9/14/2018



Feedback

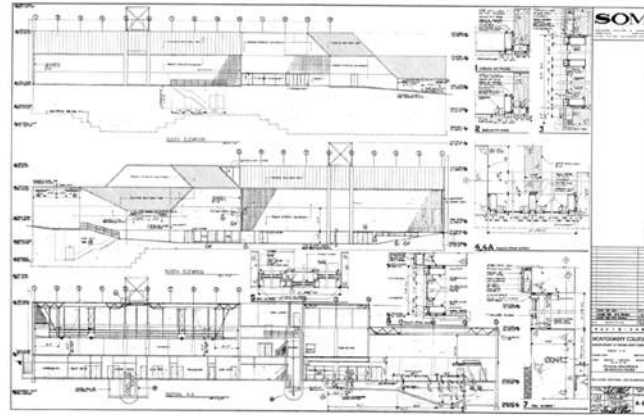
Q: Where is site context information coming from?

A: Existing campus information is compiled from multiple sources. Buildings are modeled and located based upon a combination of available record drawings and located based upon available survey data.

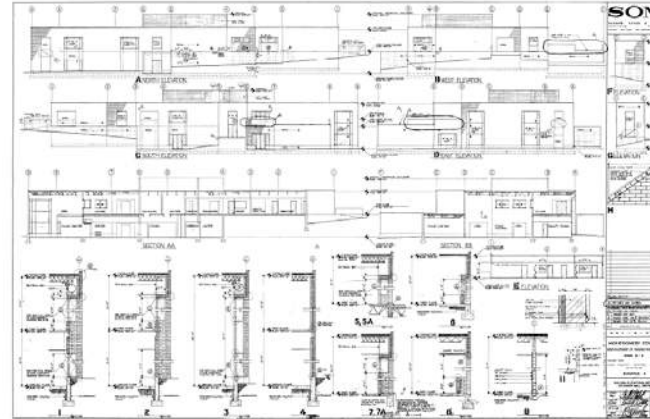
Site topography is modeled based up available survey data.

Adjacent residential buildings are approximated based on a combination of street level and aerial photographic information.

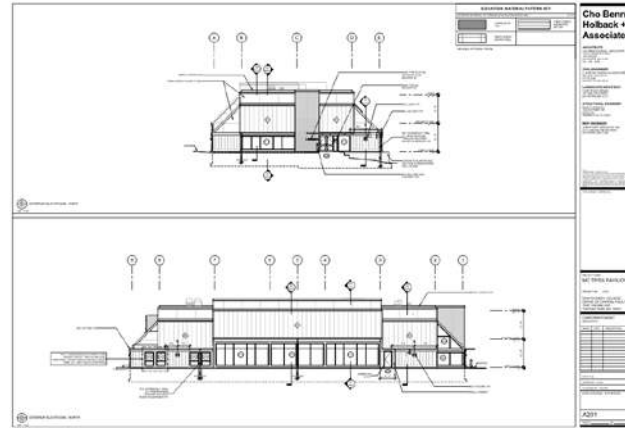
Falcon Hall



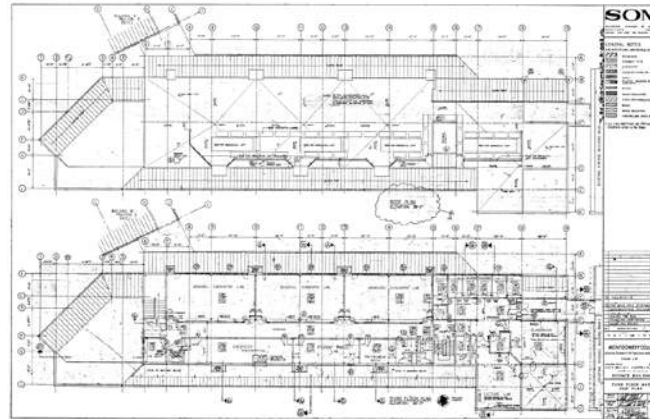
Commons



Pavilion 3



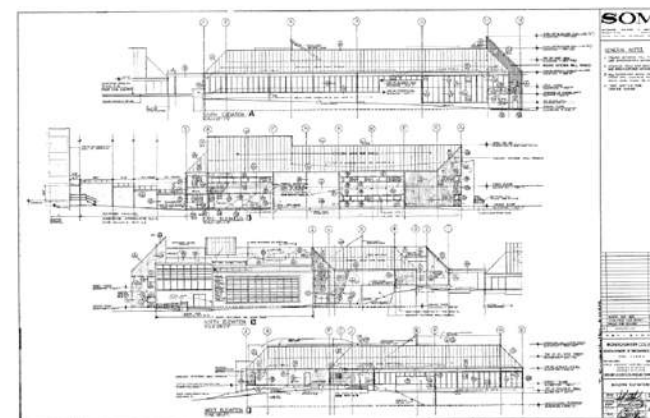
Science North



Civil Survey



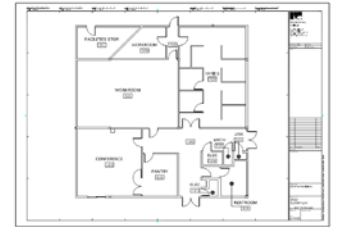
Resource Center



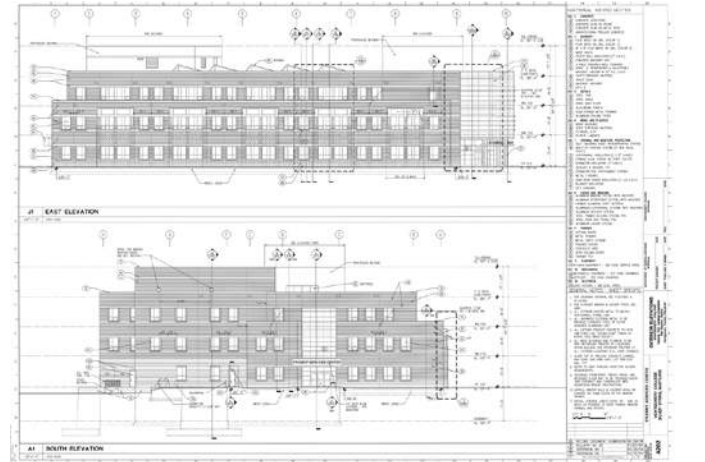
Math Pavilion



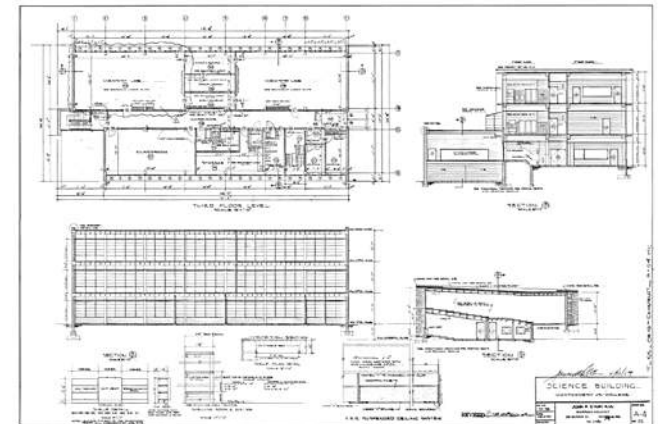
North Pavilion



Nunley Student Center



Science South



Design

Design Considerations (Recap)

Site / Forms / Organizational Concepts



Blue zone is where majority of new building will occur

Red zone is where only 2 story massing is allowed

Commitment set back of 110'

Design Directives

1. Keep the current setback of Falcon Hall along Takoma Avenue
2. Protect park-like green space along Takoma Avenue
3. Minimize windows along Takoma Avenue
4. Ensure height is no more than two stories along Takoma Avenue
5. Take advantage of topography to minimize perceived height
6. Locate height and rooftop units away from Takoma Avenue
7. Maximize building width to lower height
8. Hire an architect experienced with designing facilities in historic and residential neighborhoods

Design – Learning Environments

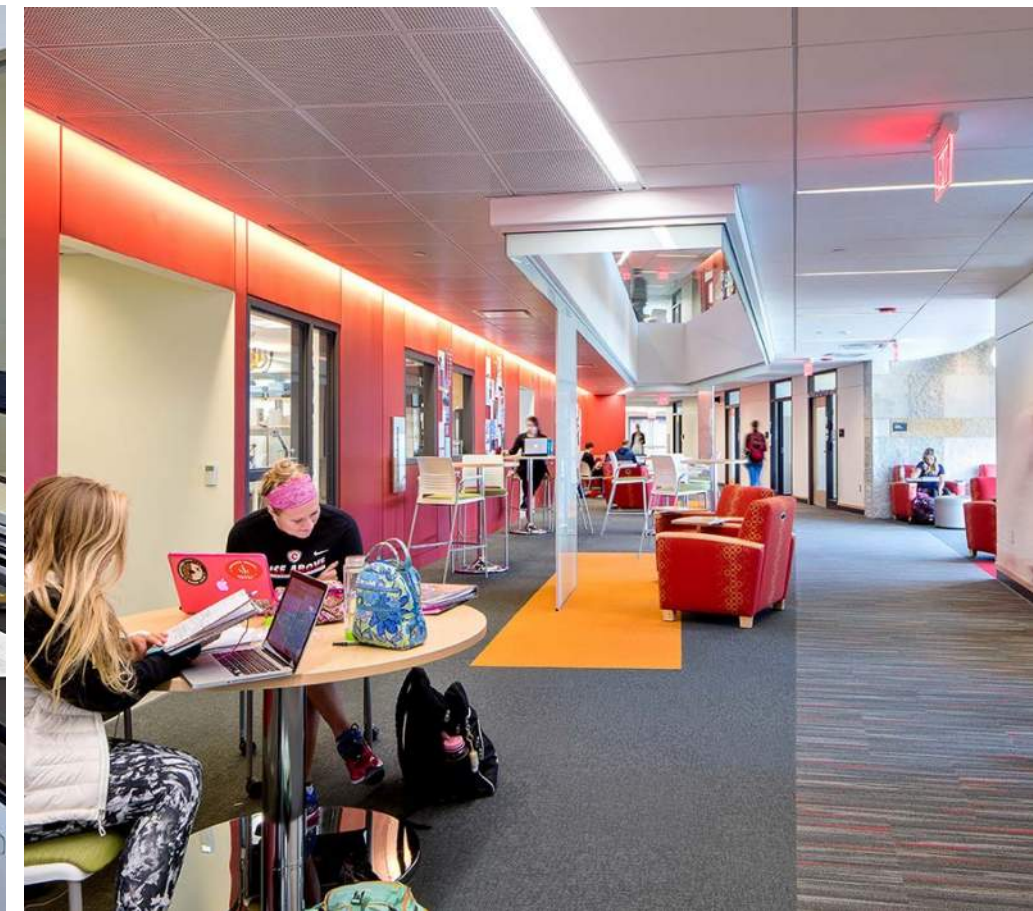
1. Active Learning



2. Hands On Experience

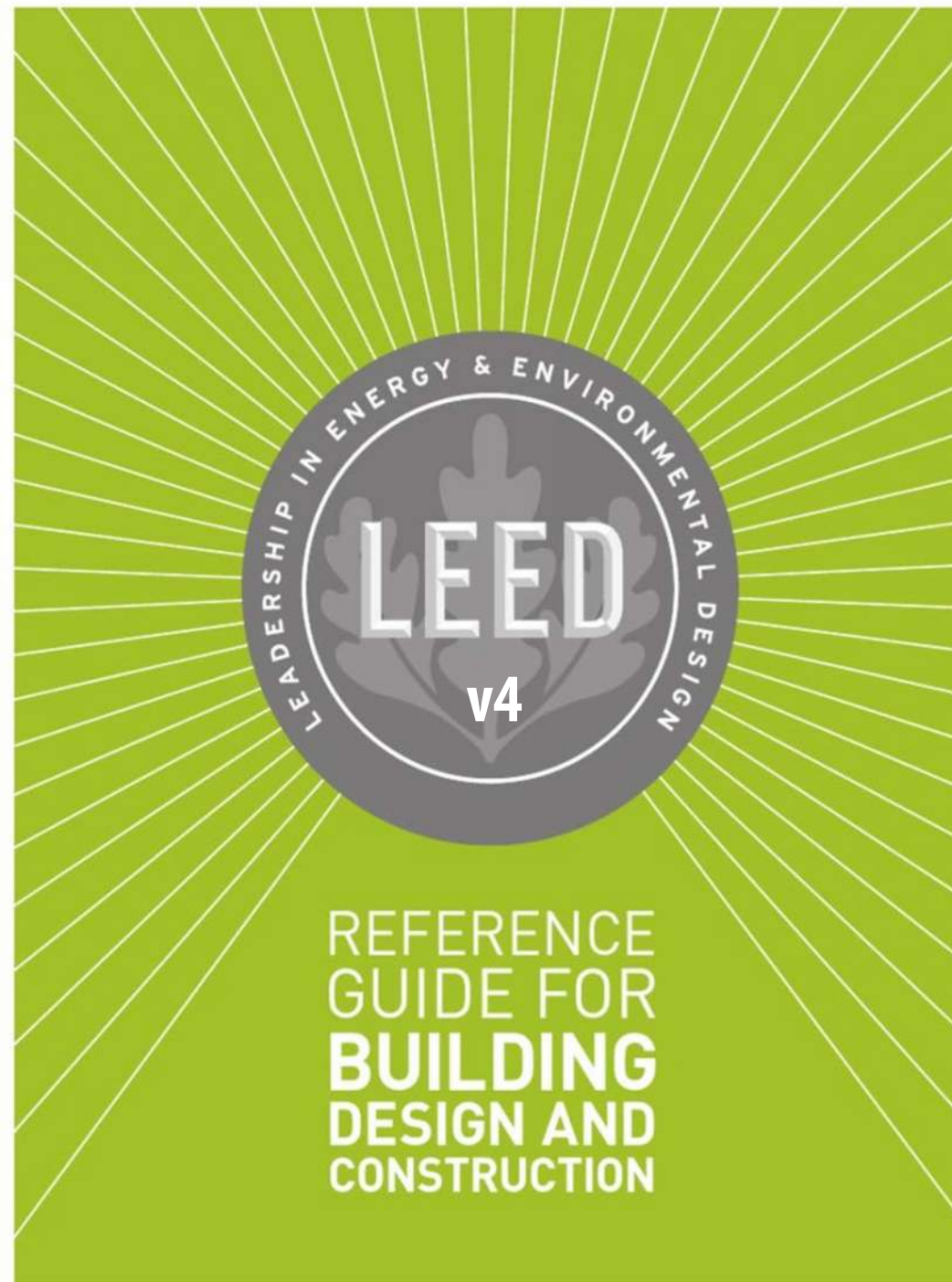


3. Science and Math Communities



“Teaching methodologies and pedagogy are undergoing transformation, **no longer are four walls and a chalkboard sufficient. . .**”

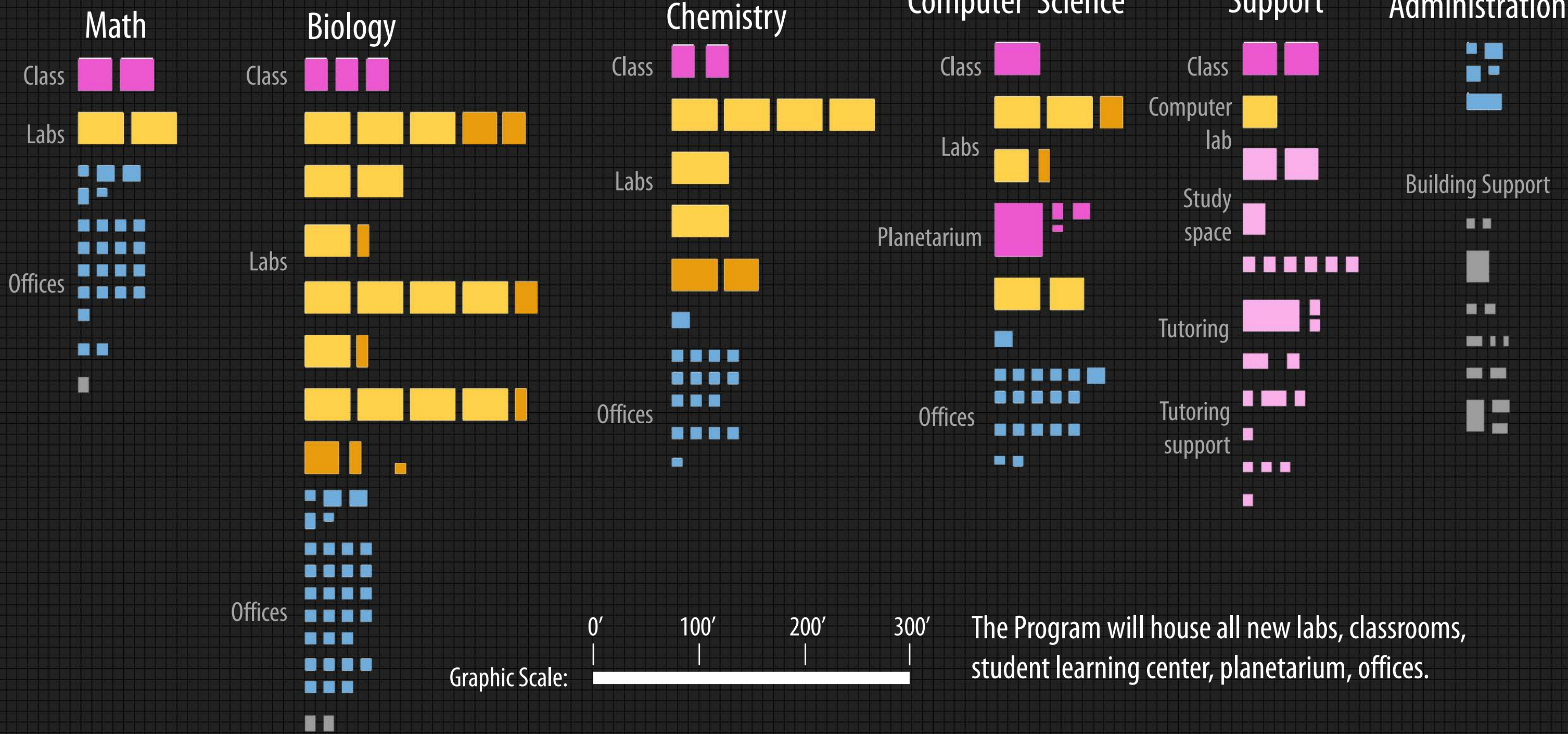
Design – Sustainability



Goals:

- Sustainable Site Design
- Water Use Reduction
- Energy Conservation
- Optimize Natural Light
- Healthy Environments
- Renewable Energy Production

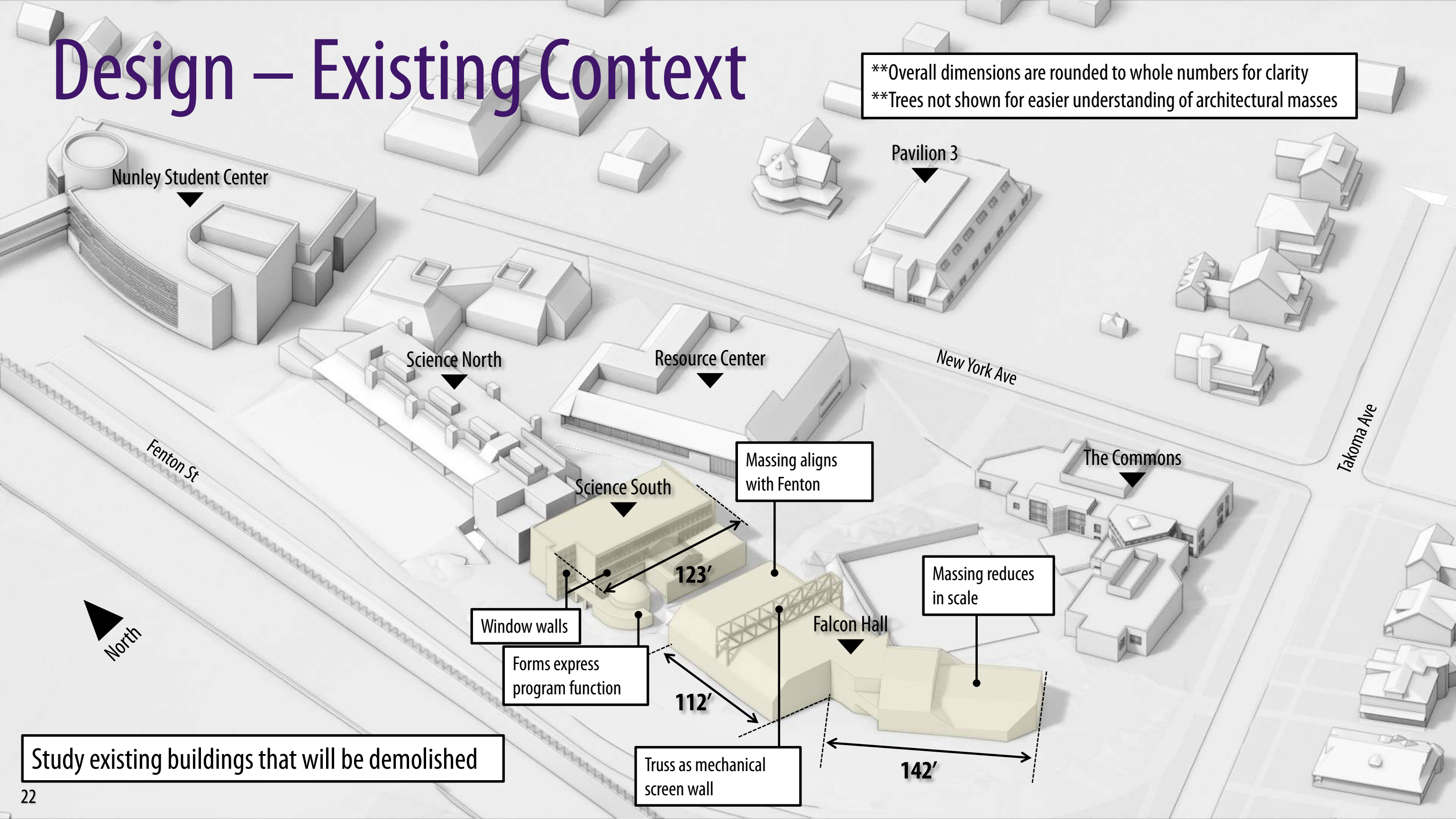
Design – Program



The Program will house all new labs, classrooms, student learning center, planetarium, offices.

Design – Existing Context

**Overall dimensions are rounded to whole numbers for clarity
**Trees not shown for easier understanding of architectural masses



Nunley Student Center

Pavilion 3

Science North

Resource Center

New York Ave

Takoma Ave

Fenton St

The Commons

Science South

Massing aligns with Fenton

Massing reduces in scale

Window walls

Forms express program function

Falcon Hall

Study existing buildings that will be demolished

Truss as mechanical screen wall

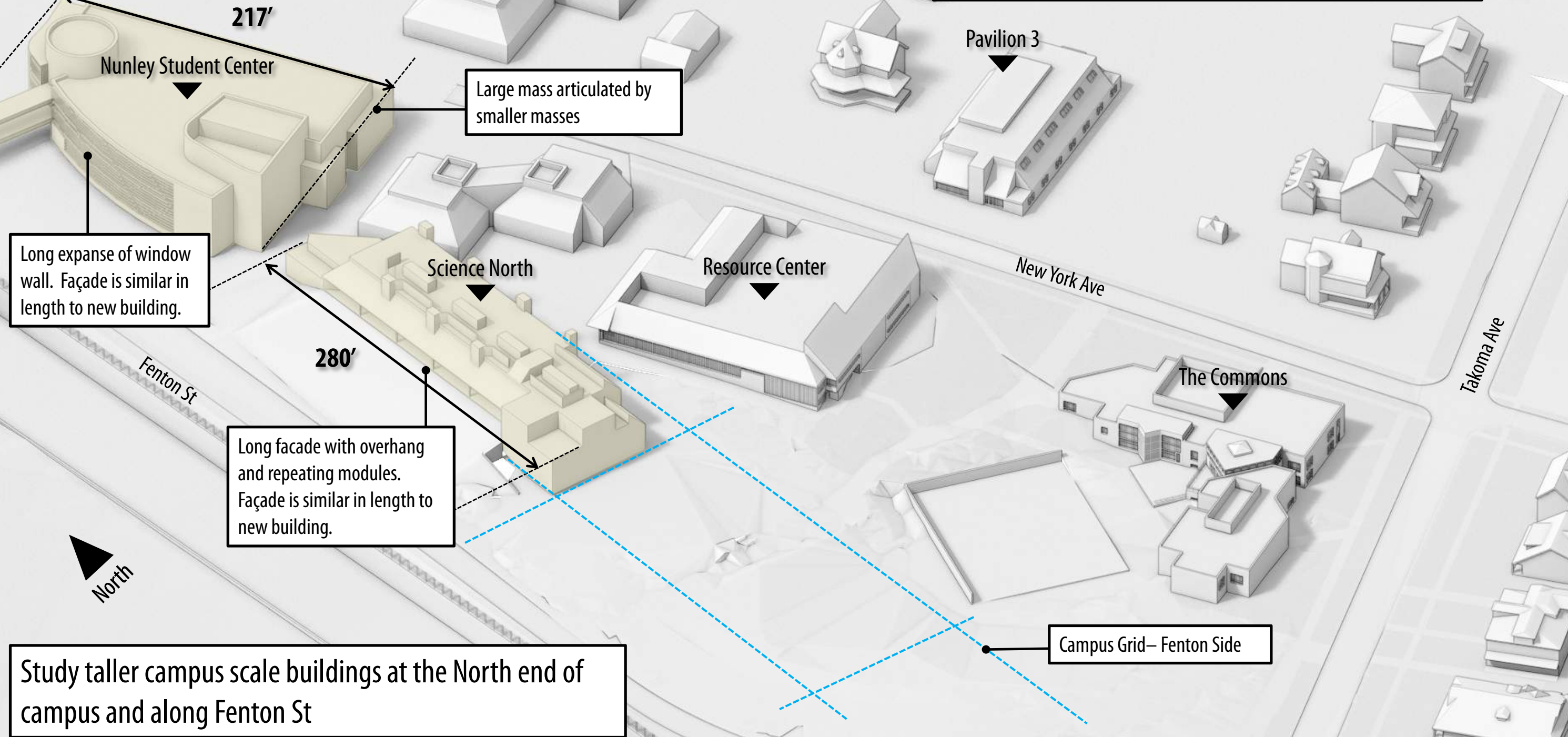
123'

112'

142'

Design – Existing Context

**Overall dimensions are rounded to whole numbers for clarity
**Trees not shown for easier understanding of architectural masses



217'

Nunley Student Center

Large mass articulated by smaller masses

Long expanse of window wall. Façade is similar in length to new building.

Science North

Resource Center

Pavilion 3

New York Ave

Takoma Ave

The Commons

280'

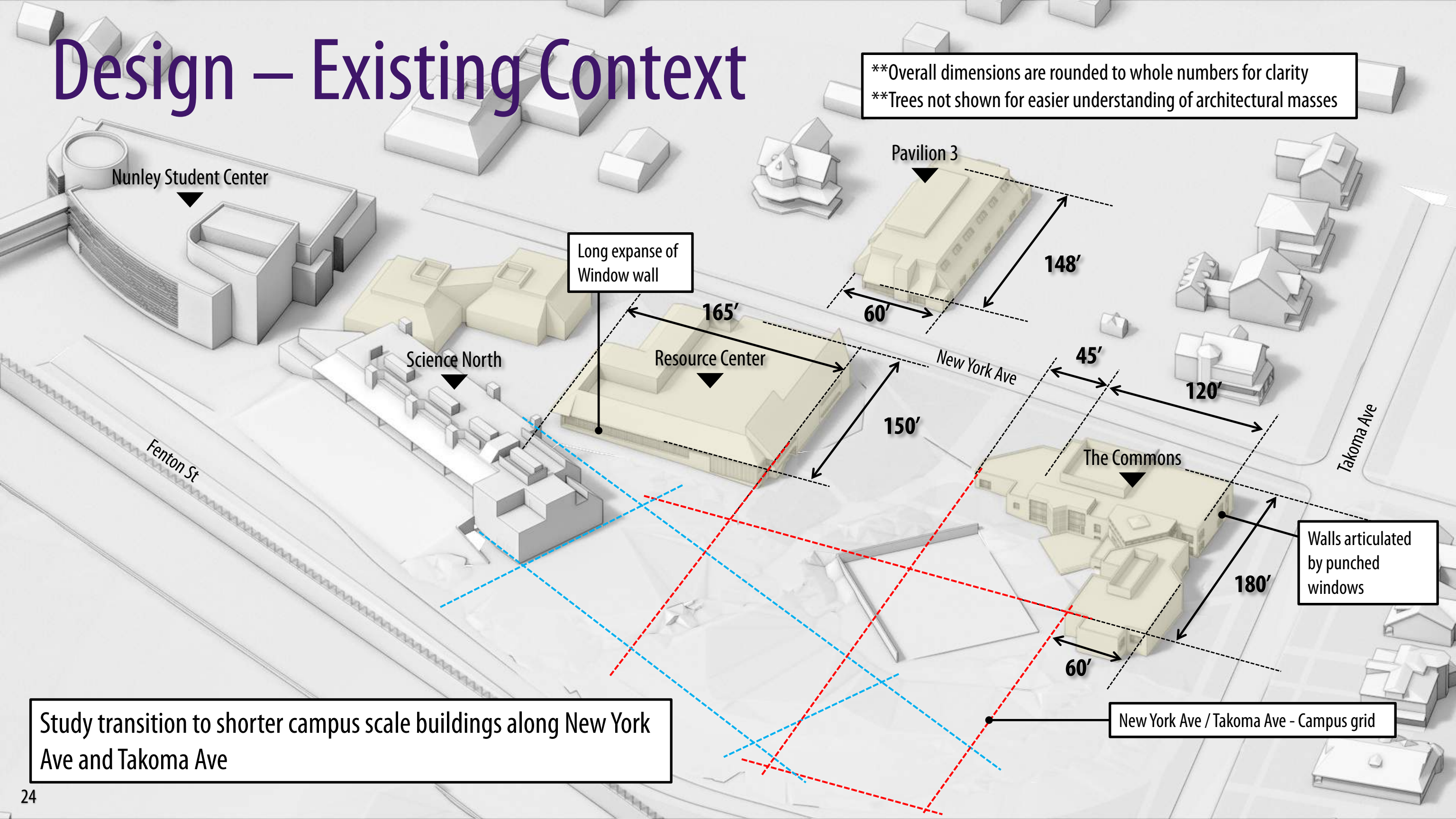
Long facade with overhang and repeating modules. Façade is similar in length to new building.

Campus Grid – Fenton Side

Study taller campus scale buildings at the North end of campus and along Fenton St

Design – Existing Context

**Overall dimensions are rounded to whole numbers for clarity
**Trees not shown for easier understanding of architectural masses



Long expanse of Window wall

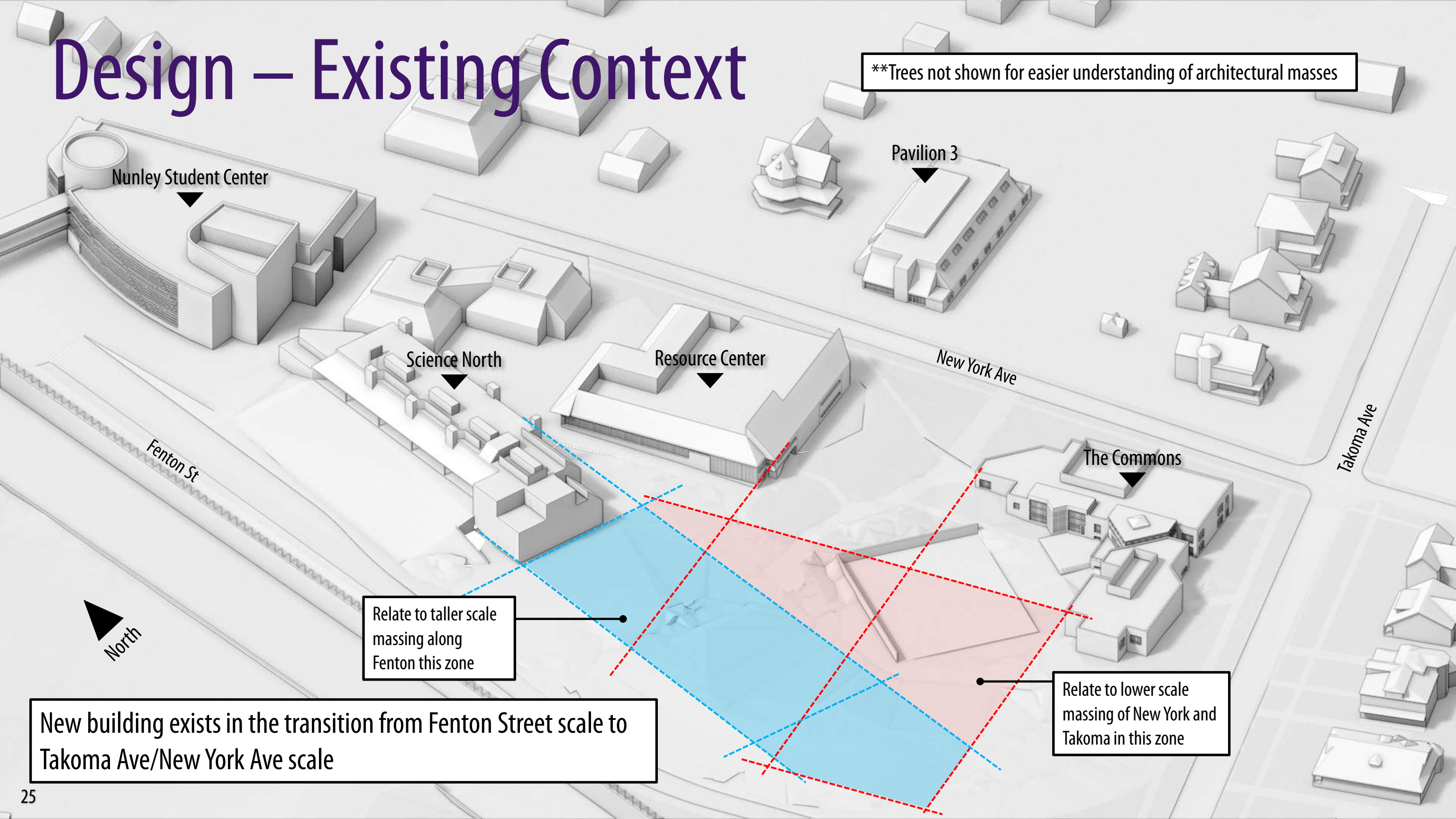
Walls articulated by punched windows

Study transition to shorter campus scale buildings along New York Ave and Takoma Ave

New York Ave / Takoma Ave - Campus grid

Design – Existing Context

**Trees not shown for easier understanding of architectural masses



Nunley Student Center

Pavilion 3

Science North

Resource Center

New York Ave

Takoma Ave

The Commons

Fenton St



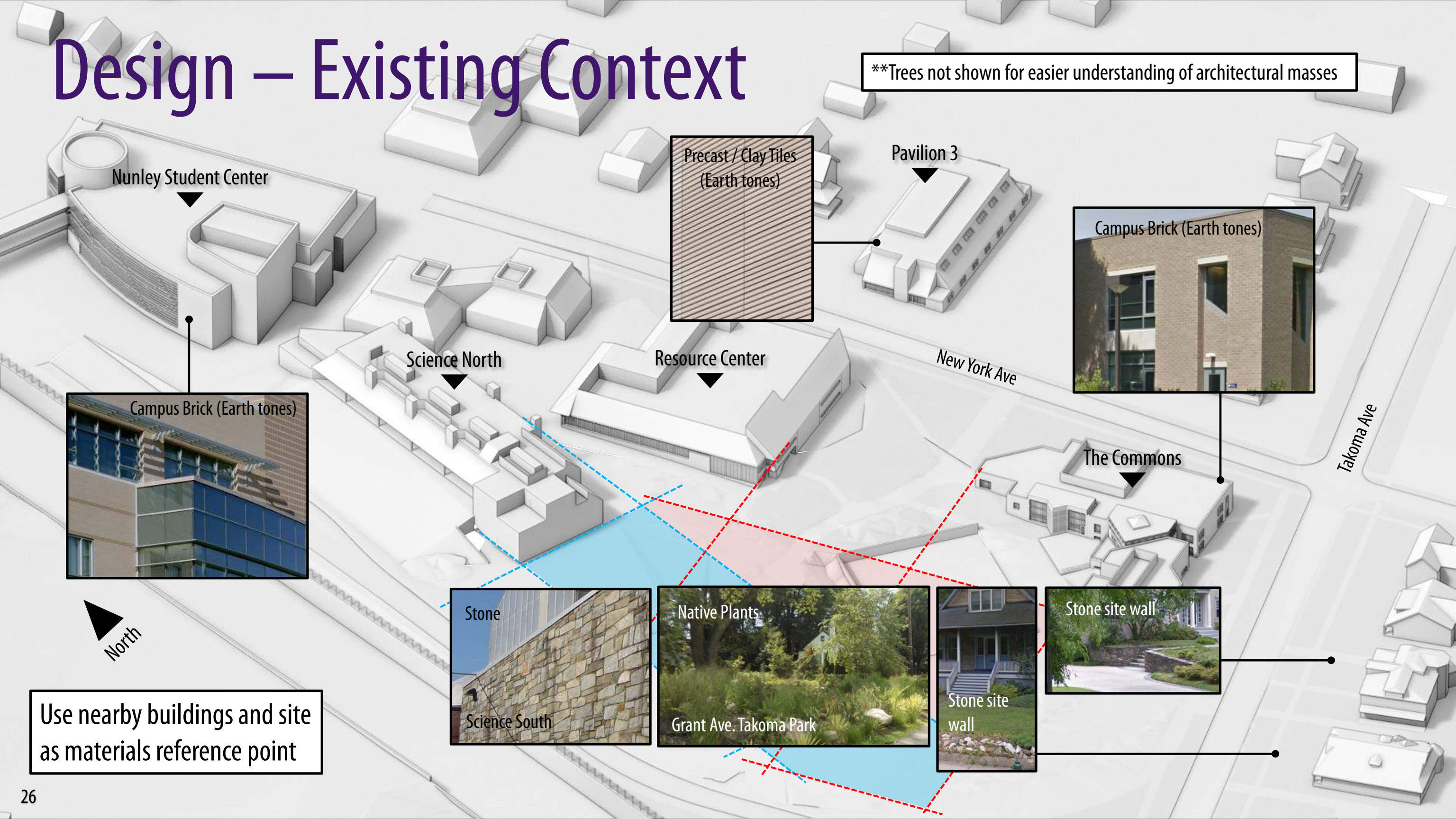
Relate to taller scale massing along Fenton this zone

Relate to lower scale massing of New York and Takoma in this zone

New building exists in the transition from Fenton Street scale to Takoma Ave/New York Ave scale

Design – Existing Context

**Trees not shown for easier understanding of architectural masses



Nunley Student Center

Precast / Clay Tiles
(Earth tones)

Pavilion 3

Campus Brick (Earth tones)

Science North

Resource Center

New York Ave

Takoma Ave

The Commons

Campus Brick (Earth tones)

Stone

Native Plants

Stone site wall

Stone site wall

Science South

Grant Ave. Takoma Park

Use nearby buildings and site as materials reference point

North

Design – Existing Context

**Trees not shown for easier understanding of architectural masses



Nunley Student Center



Pavilion 3



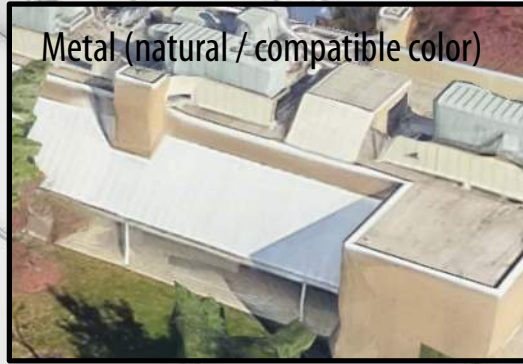
Science North

Resource Center

New York Ave

Takoma Ave

The Commons



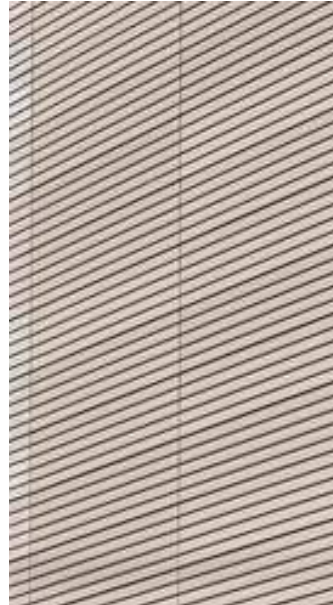
Use nearby buildings and site as materials reference point

Design – Materials

Campus Brick (Earth tones)



Precast / Clay Tiles (Earth tones)



Wood



Window Wall



Native Plants



Stone



Metal (natural / compatible color)



Pattern Glazing



Design – Forms / Organizational Concepts

Concepts shared on 9/11/2018 Design Charrette

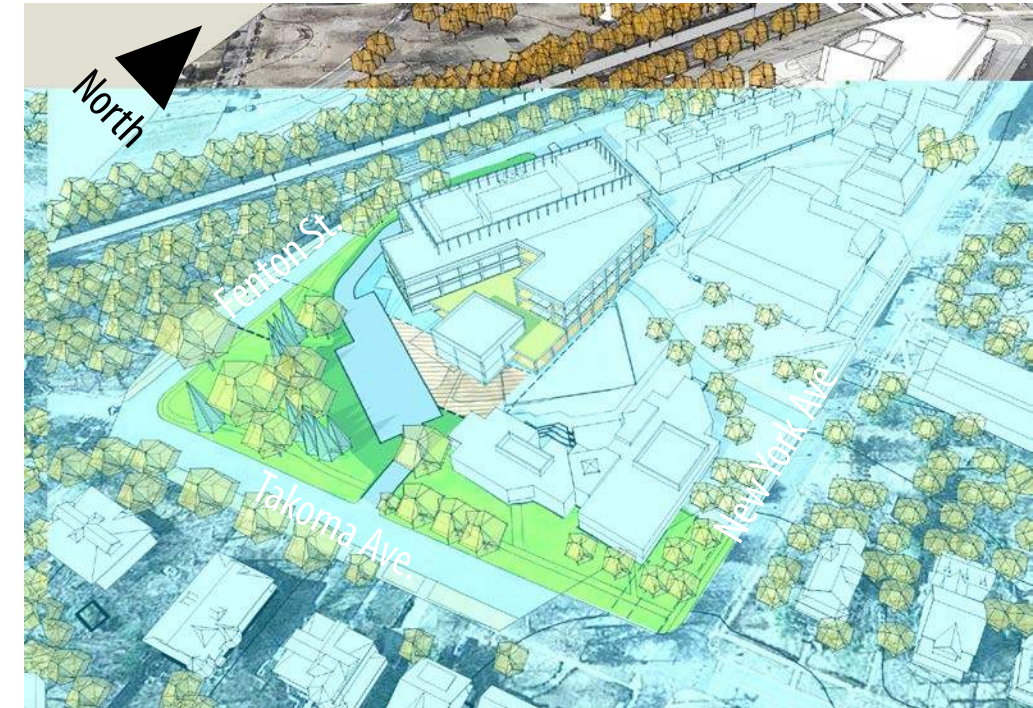
Concept 2 – Rotated Pavilion



Concept 3 – Distributed Bars



Concept 2.5 – Untitled on 9/11



Key Feedback:

- Larger footprint results in shorter massing
- Potentially difficult way finding on interior
- Angled massing following Fenton St. pushes massing farther away from Takoma Ave

Key Feedback:

- Overall massing broken down in scale
- Planetarium limits windows along Takoma Ave
- Angled massing following Fenton St. pushes massing farther away from Takoma Ave
- Perceived height is tallest of 3 options
- Isolated floor potentially breaks up program too much

Key Feedback:

- Larger footprint results in shorter massing
- Potentially difficult way finding on interior
- Angled massing following Fenton St. pushes massing farther away from Takoma Ave

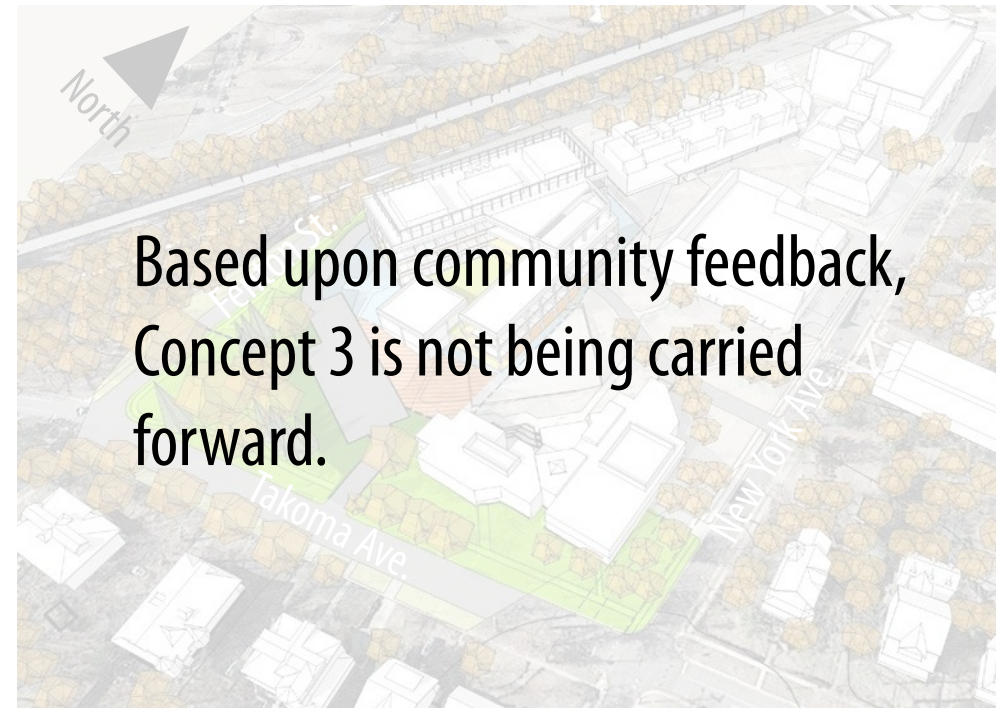
Design – Forms / Organizational Concepts

Concepts shared on 9/11/2018 Design Charrette

Concept 2 – Rotated Pavilion



Concept 3 – Distributed Bars



Concept 2.5 – Untitled on 9/11



Based upon community feedback,
Concept 3 is not being carried
forward.

Key Feedback:

- Larger footprint results in shorter massing
- Potentially difficult way finding on interior
- Angled massing following Fenton St. pushes massing farther away from Takoma Ave

Key Feedback:

- Overall massing broken down in scale
- Planetarium limits windows along Takoma Ave
- Angled massing following Fenton St. pushes massing farther away from Takoma Ave
- Perceived height is tallest of 3 options
- Isolated floor potentially breaks up program too much

Key Feedback:

- Larger footprint results in shorter massing
- Potentially difficult way finding on interior
- Angled massing following Fenton St. pushes massing farther away from Takoma Ave

Design – Forms / Organizational Concepts

10/02/2018 Design Refinements

Concept 2 – Rotated Pavilion

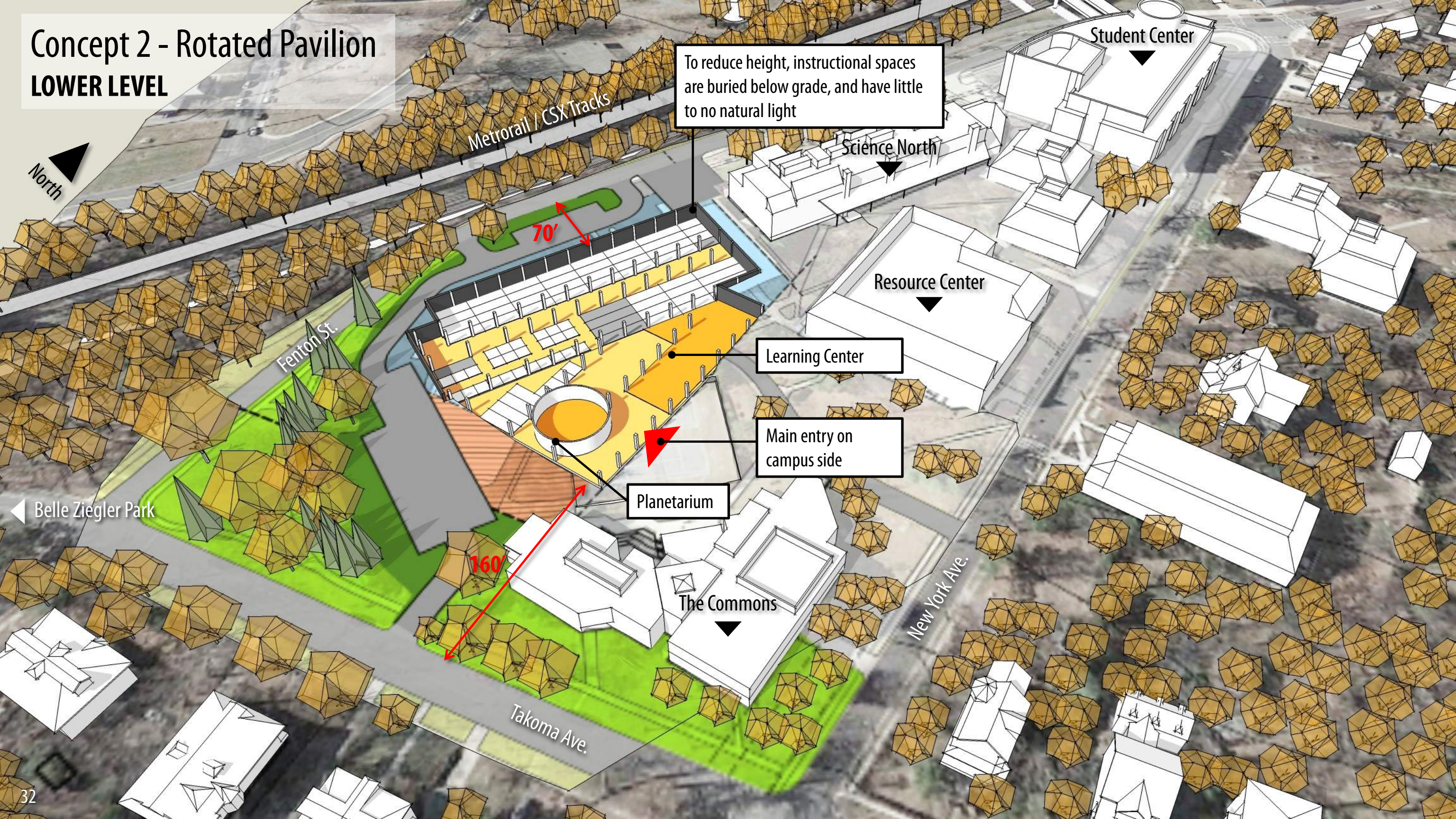


Concept 2.5 – Distributed Bars



Concept 2 - Rotated Pavilion

LOWER LEVEL



To reduce height, instructional spaces are buried below grade, and have little to no natural light

70'

160'

Student Center

Science North

Resource Center

Learning Center

Main entry on campus side

Planetarium

The Commons

Fenton St.

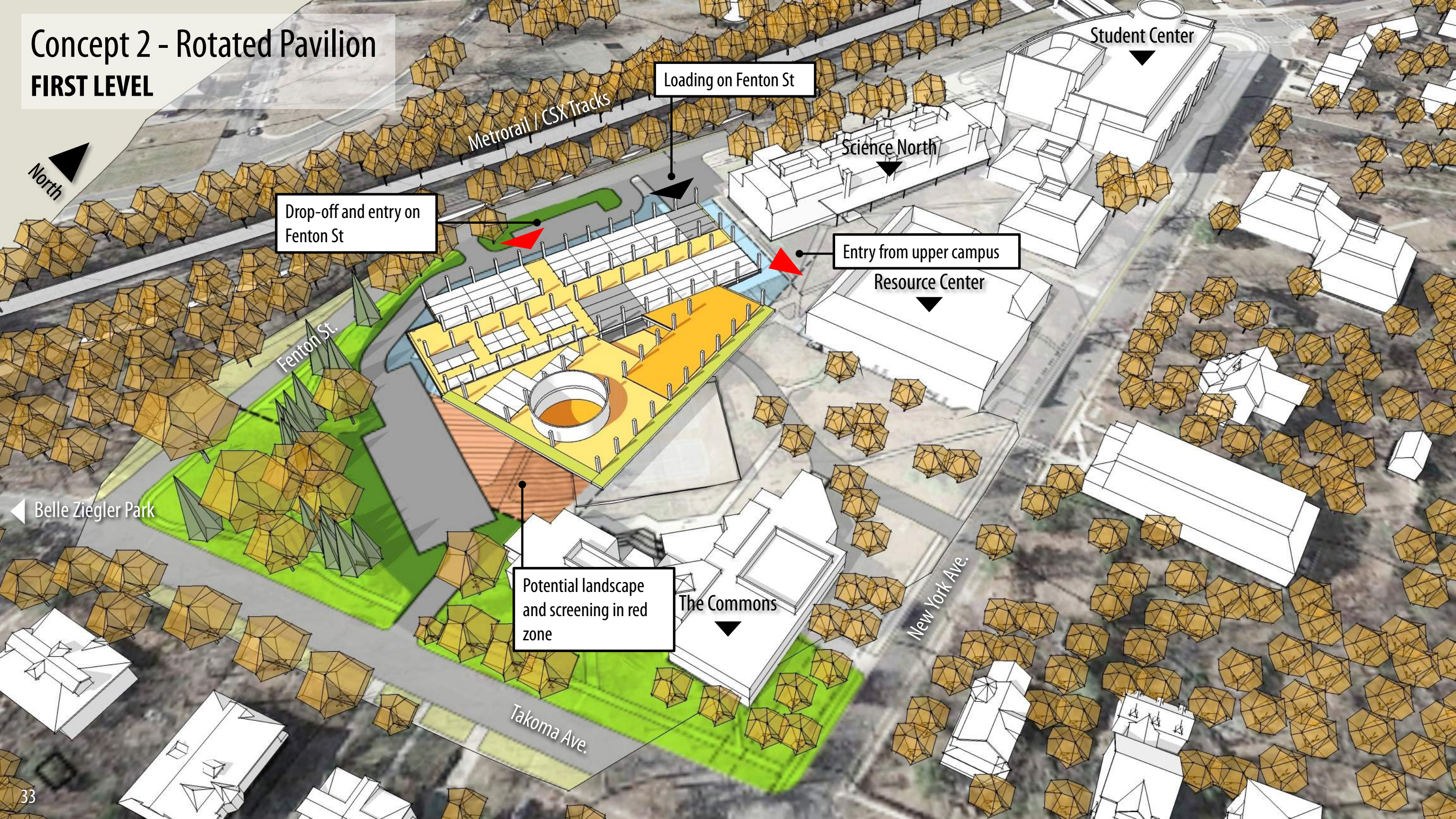
Belle Ziegler Park

Takoma Ave.

New York Ave.

Concept 2 - Rotated Pavilion

FIRST LEVEL



Belle Ziegler Park

Drop-off and entry on Fenton St

Loading on Fenton St

Science North

Student Center

Entry from upper campus

Resource Center

Potential landscape and screening in red zone

The Commons

New York Ave.

Takoma Ave.

Fenton St.

Concept 2 - Rotated Pavilion SECOND LEVEL



North

Metrorail / CSX Tracks

Student Center

Science North

Resource Center

Fenton St.

Greenhouse

Potential green roof used for academic programs

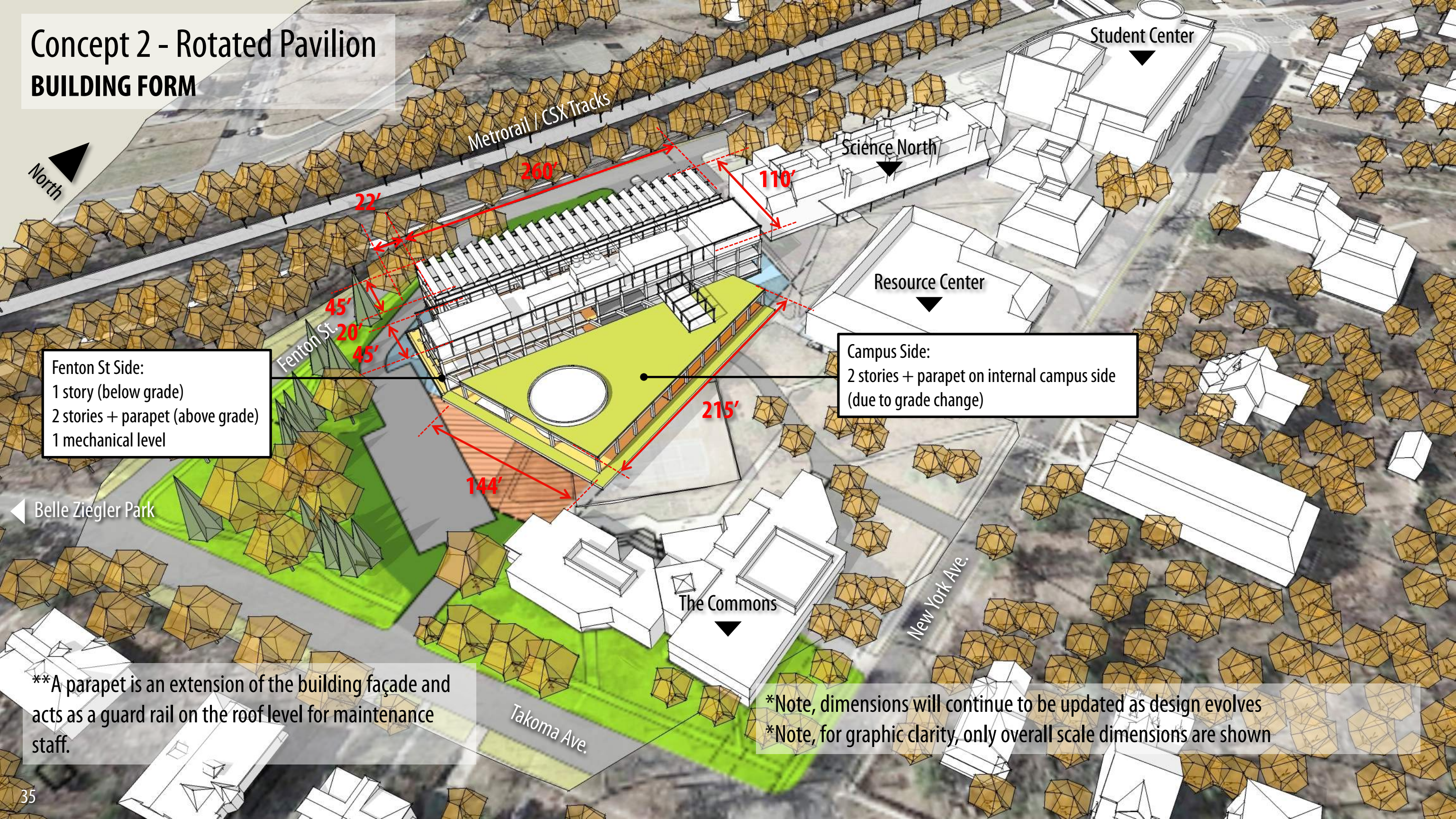
Belle Ziegler Park

The Commons

New York Ave.

Takoma Ave.

Concept 2 - Rotated Pavilion BUILDING FORM



Fenton St Side:
1 story (below grade)
2 stories + parapet (above grade)
1 mechanical level

Campus Side:
2 stories + parapet on internal campus side
(due to grade change)

**A parapet is an extension of the building façade and acts as a guard rail on the roof level for maintenance staff.

*Note, dimensions will continue to be updated as design evolves
*Note, for graphic clarity, only overall scale dimensions are shown

Concept 2 – Rotated Pavilion: Update Notes

Concept 2 shared on 9/11/2018

Concept 2 shared on 10/02/2018



Infill massing along lower Fenton

Introduce light wells for natural light

Infilled massing

Cut back massing

Started to study PV array

Reduce width of rooftop mechanical, increase length to make room for PV

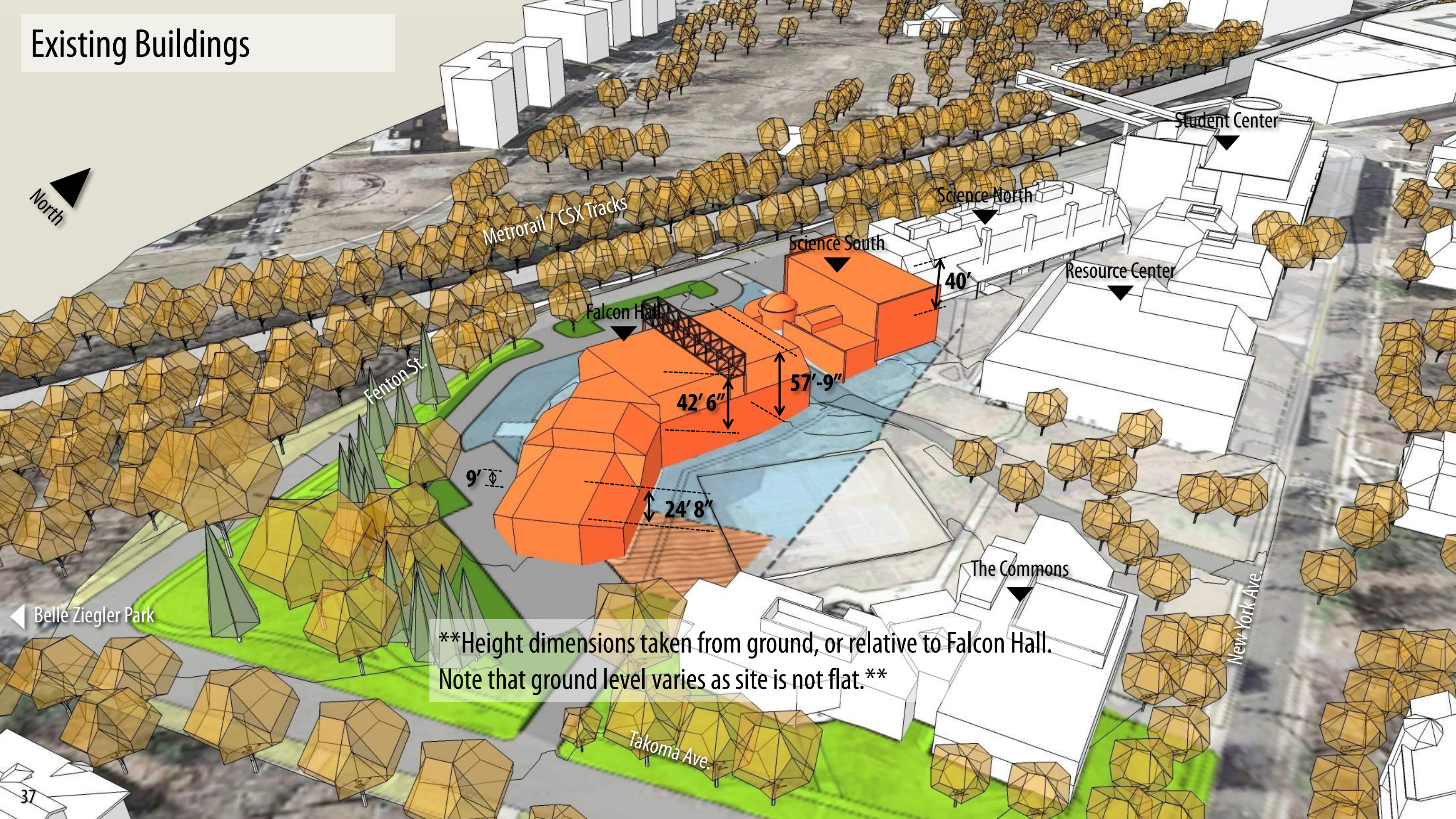
Cut back massing for entry

Locate greenhouse adjacent to green roof

Massing of planetarium expressed

Shift massing towards campus

Existing Buildings



Metrorail / CSX Tracks

Student Center

Science North

Resource Center

Science South

Falcon Hall

Fenton St

The Commons

Belle Ziegler Park

New York Ave.

Takoma Ave.

9'

42' 6"

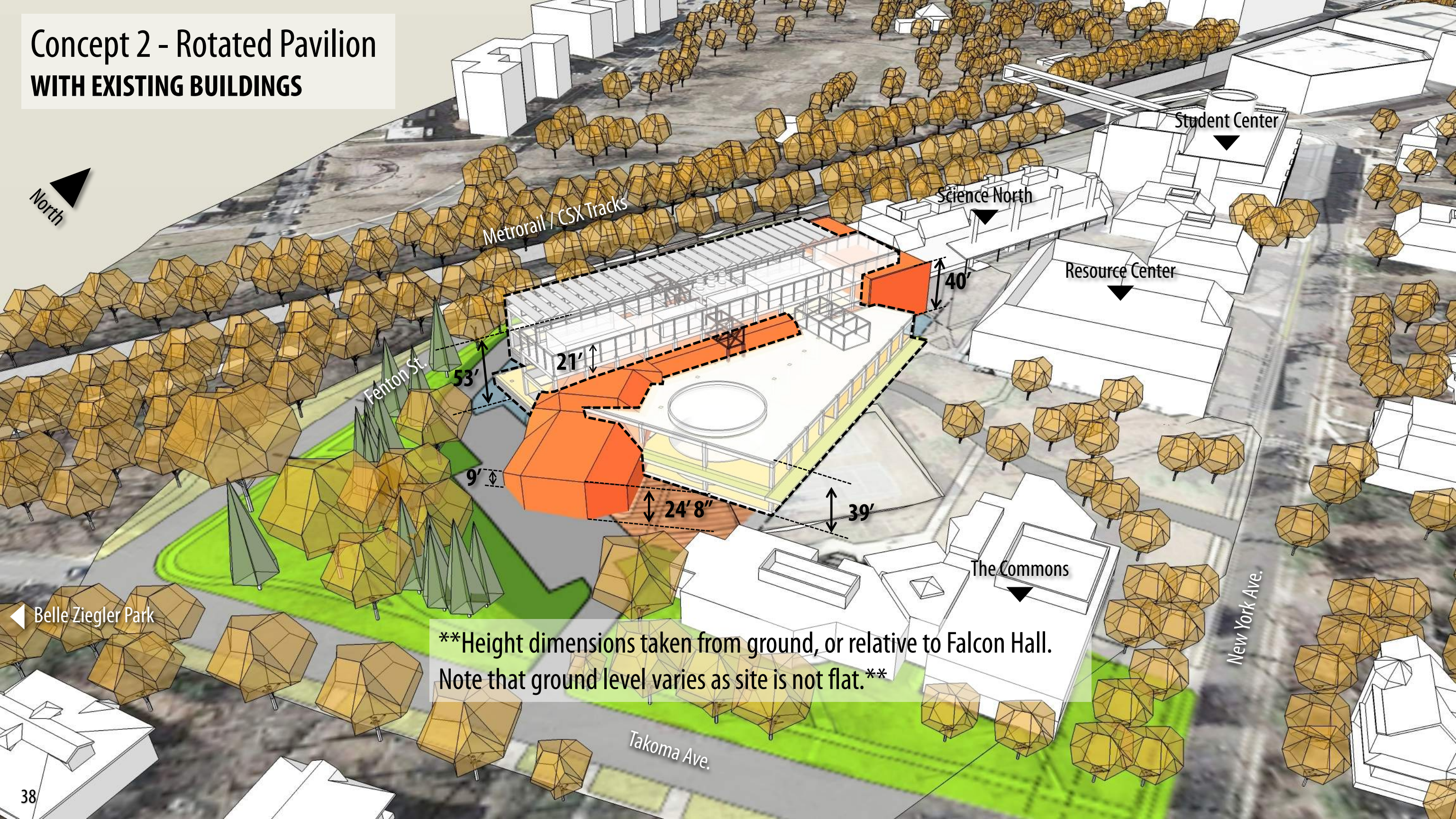
57'-9"

24' 8"

40'

**Height dimensions taken from ground, or relative to Falcon Hall.
Note that ground level varies as site is not flat.**

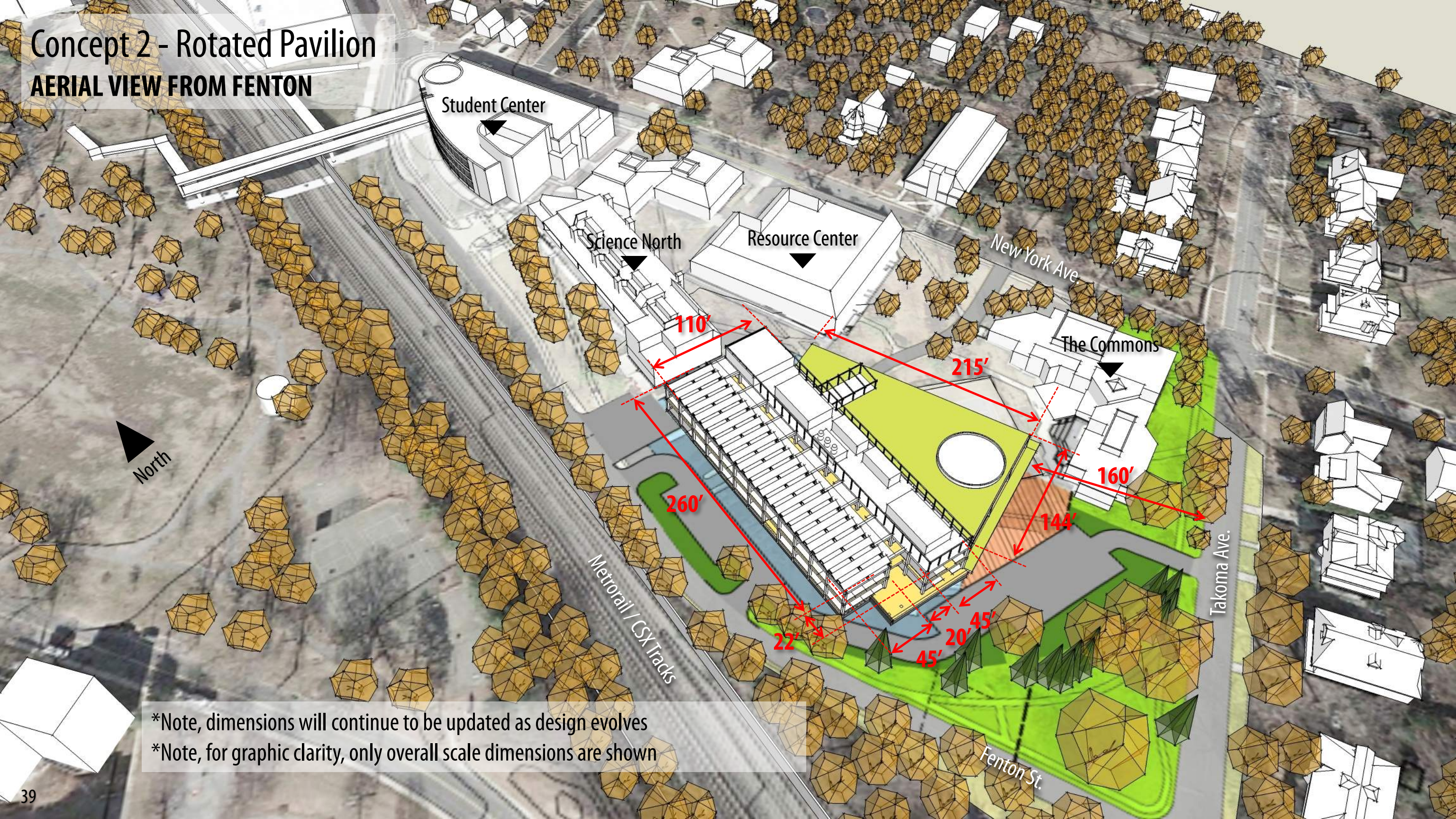
Concept 2 - Rotated Pavilion WITH EXISTING BUILDINGS



****Height dimensions taken from ground, or relative to Falcon Hall.
Note that ground level varies as site is not flat.****

Concept 2 - Rotated Pavilion

AERIAL VIEW FROM FENTON



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*Note, for graphic clarity, only overall scale dimensions are shown

Concept 2 - Rotated Pavilion

MATERIALS AND ORGANIZATION

Student Center

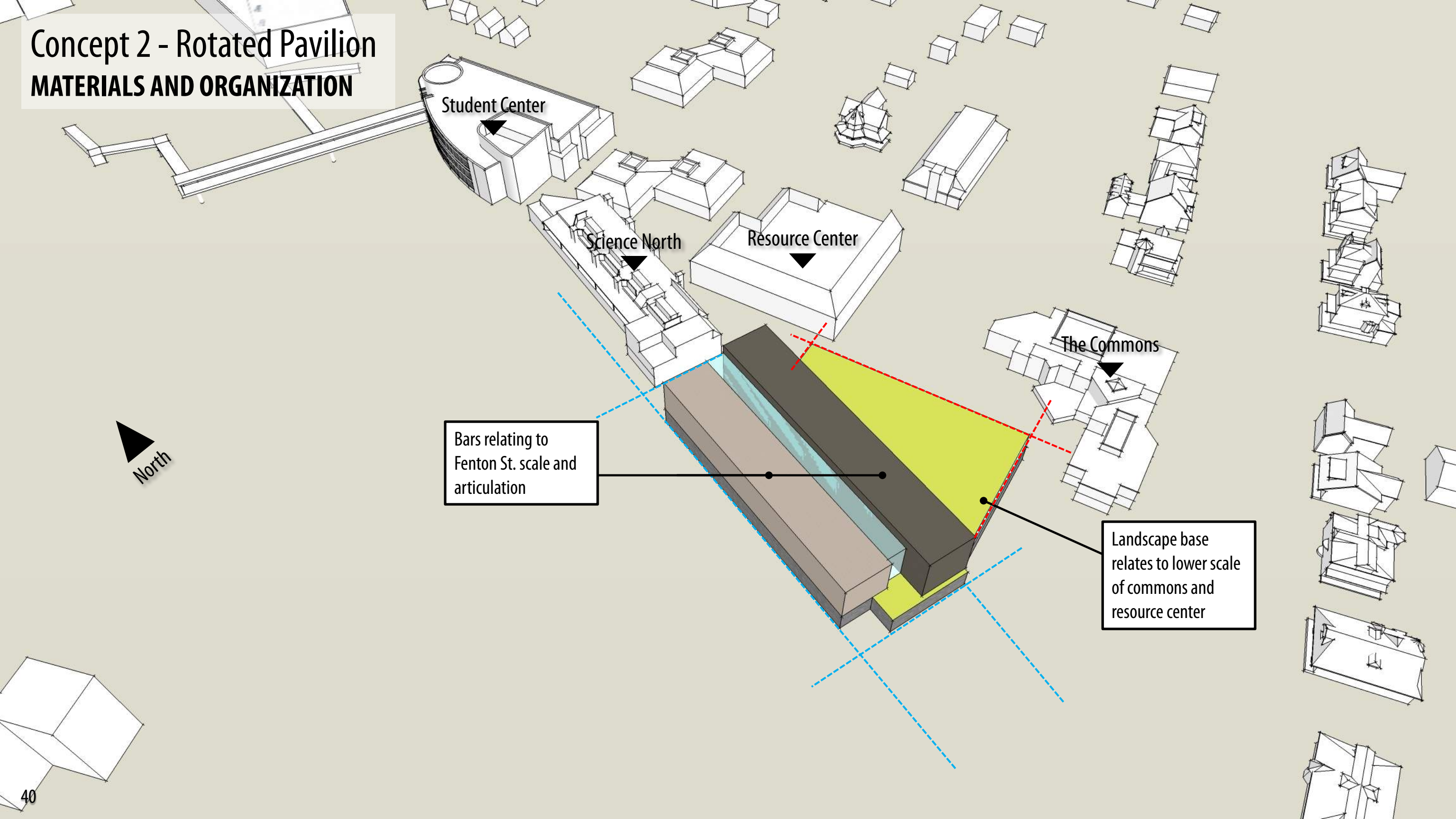
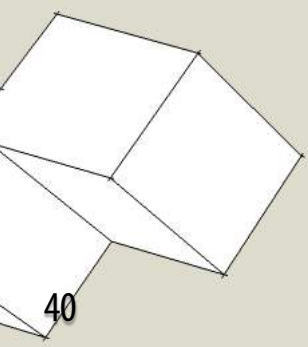
Science North

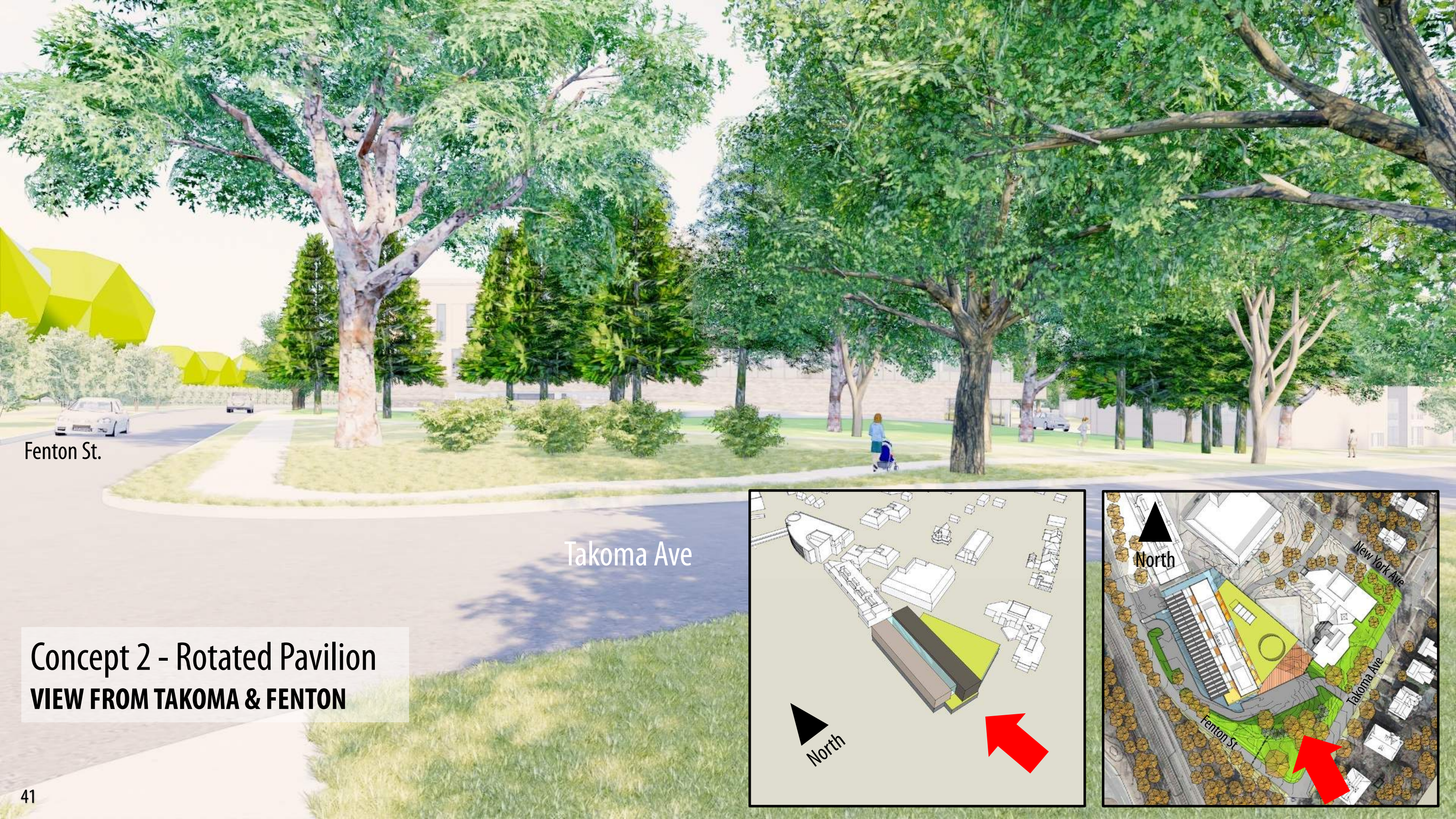
Resource Center

The Commons

Bars relating to Fenton St. scale and articulation

Landscape base relates to lower scale of commons and resource center

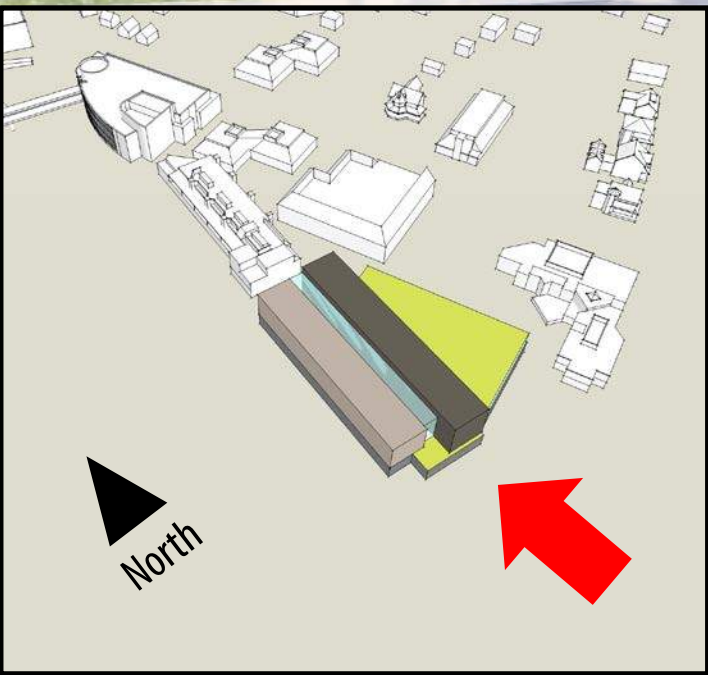




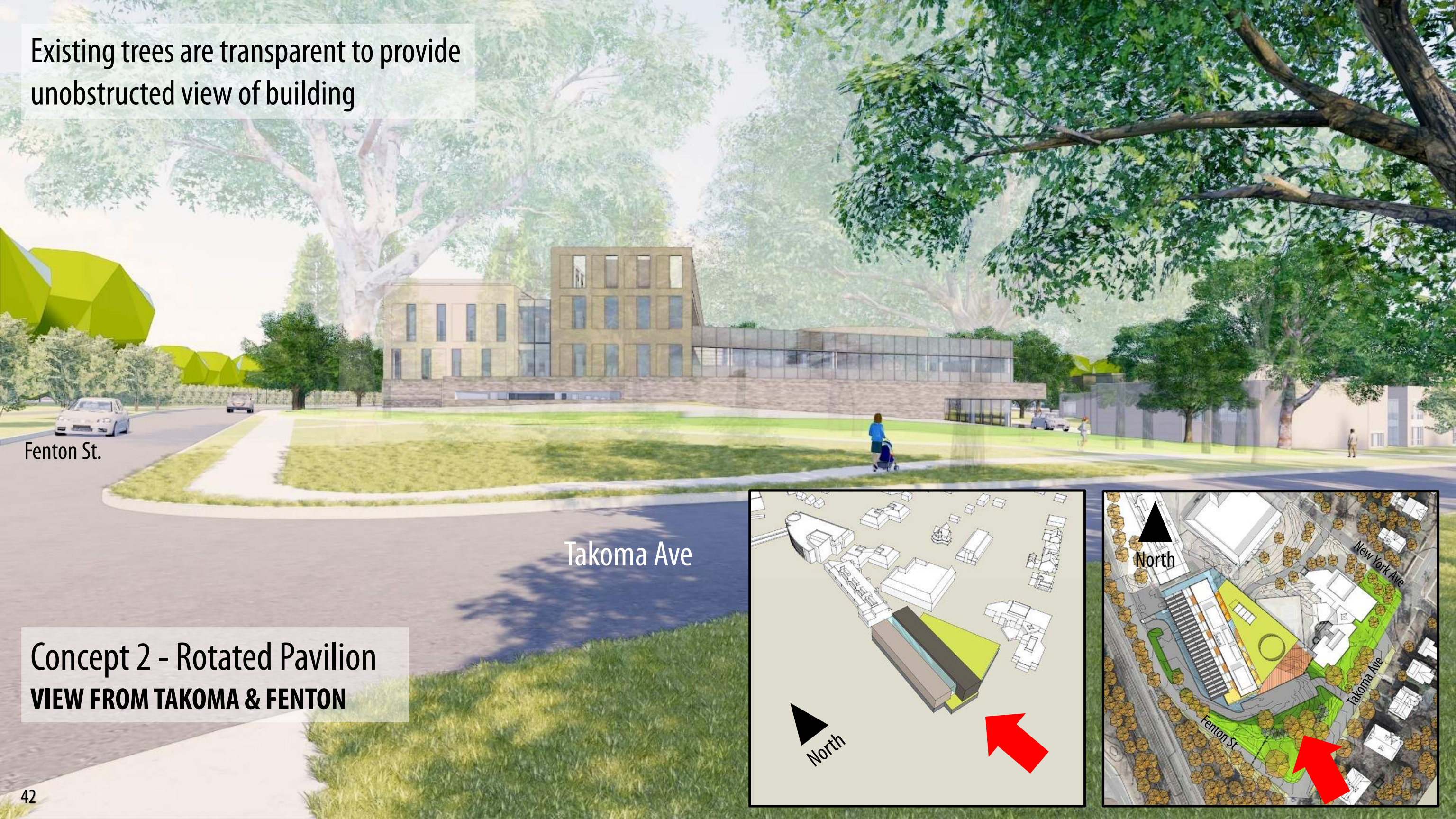
Fenton St.

Takoma Ave

**Concept 2 - Rotated Pavilion
VIEW FROM TAKOMA & FENTON**



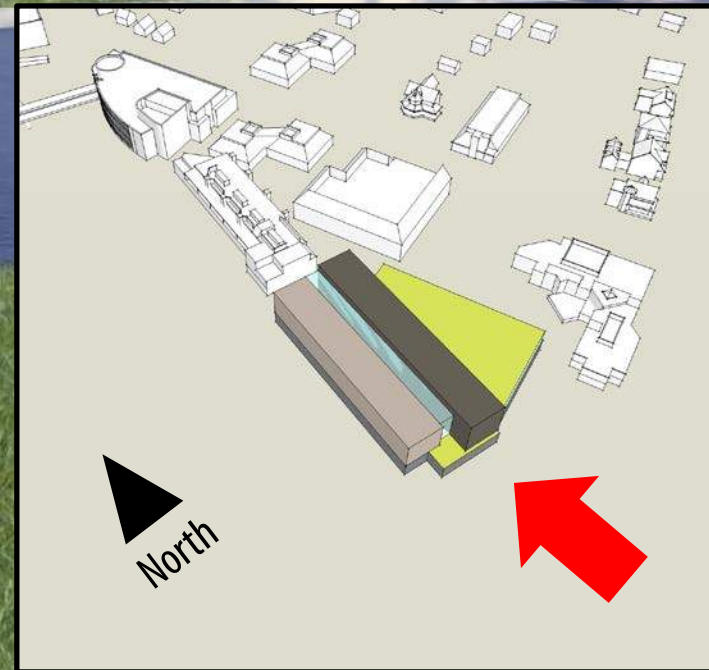
Existing trees are transparent to provide unobstructed view of building



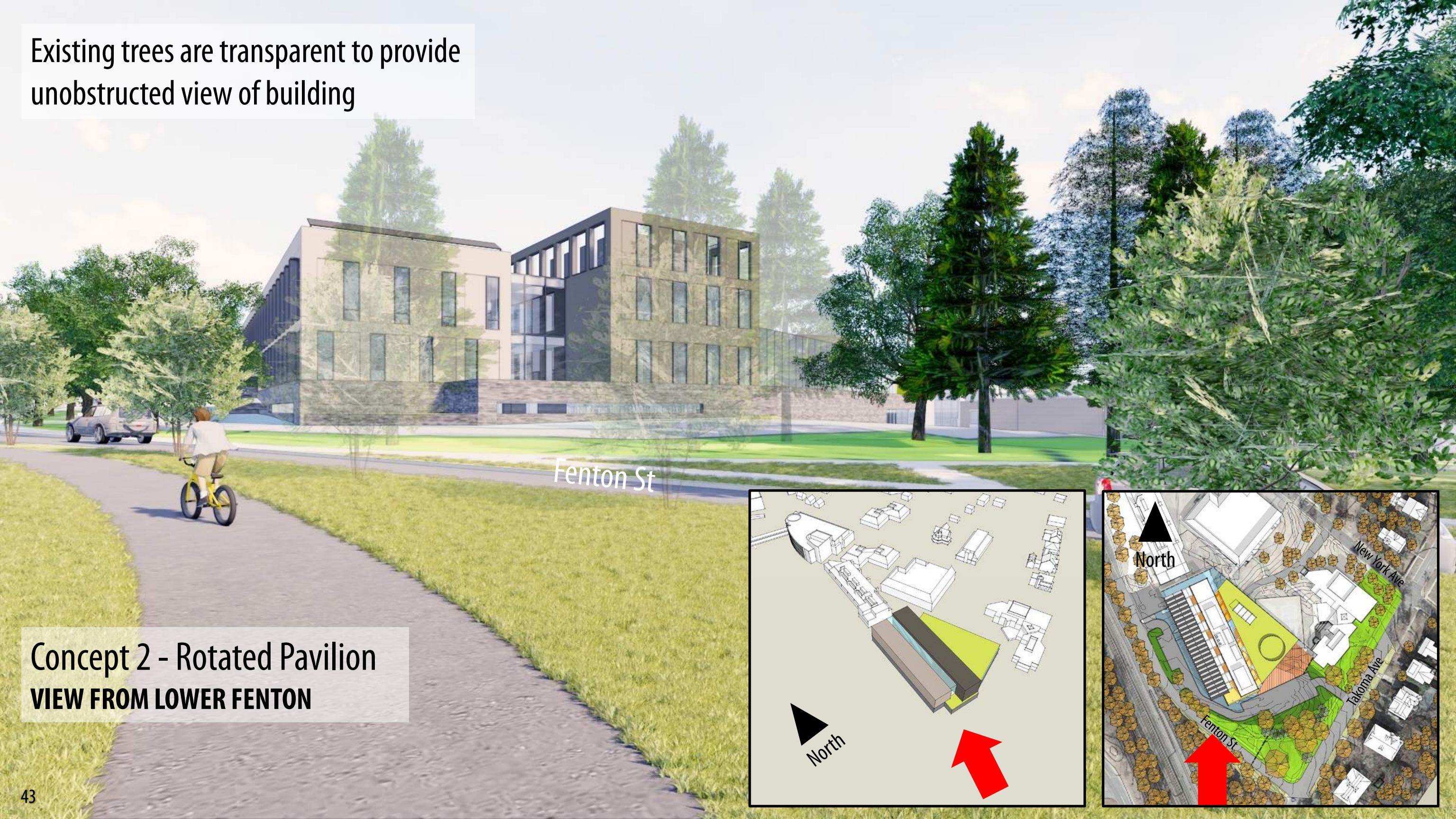
Fenton St.

Takoma Ave

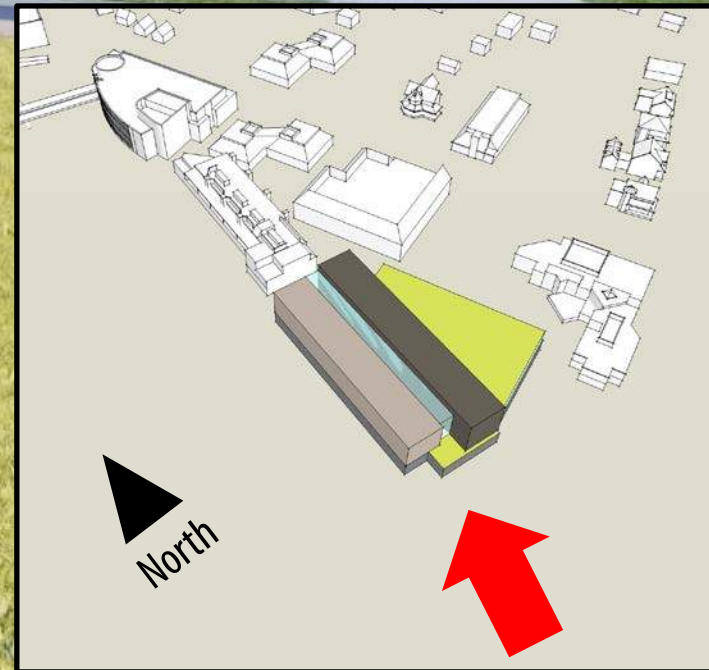
Concept 2 - Rotated Pavilion
VIEW FROM TAKOMA & FENTON



Existing trees are transparent to provide unobstructed view of building



Concept 2 - Rotated Pavilion
VIEW FROM LOWER FENTON

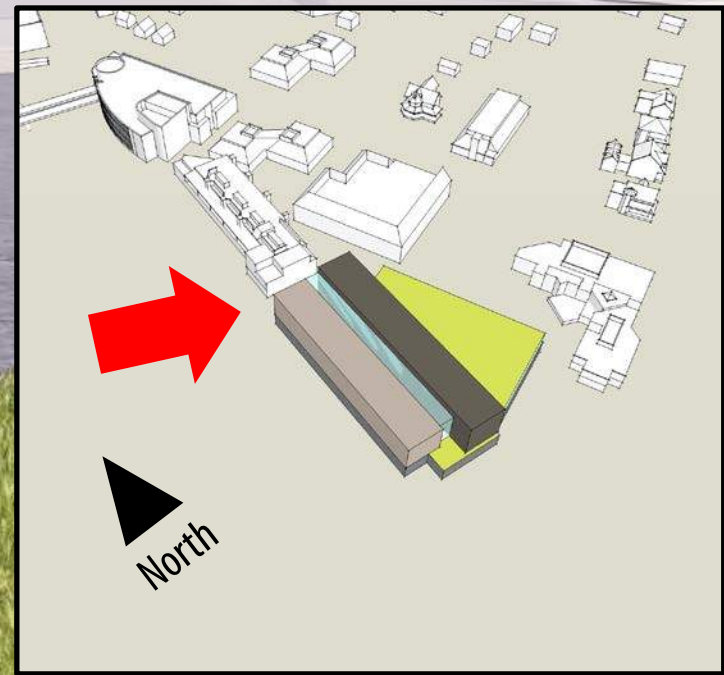


Existing trees are transparent to provide unobstructed view of building

Science North

Fenton St

Concept 2 - Rotated Pavilion
VIEW FROM UPPER FENTON

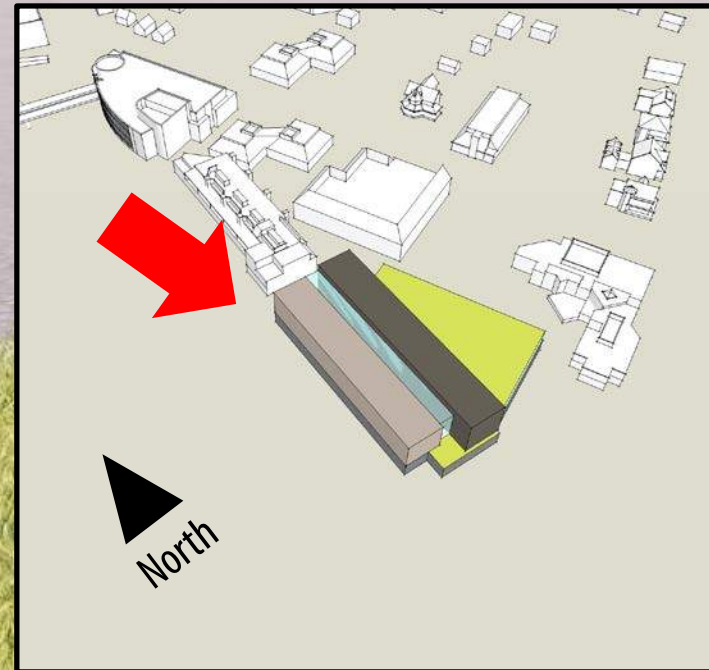


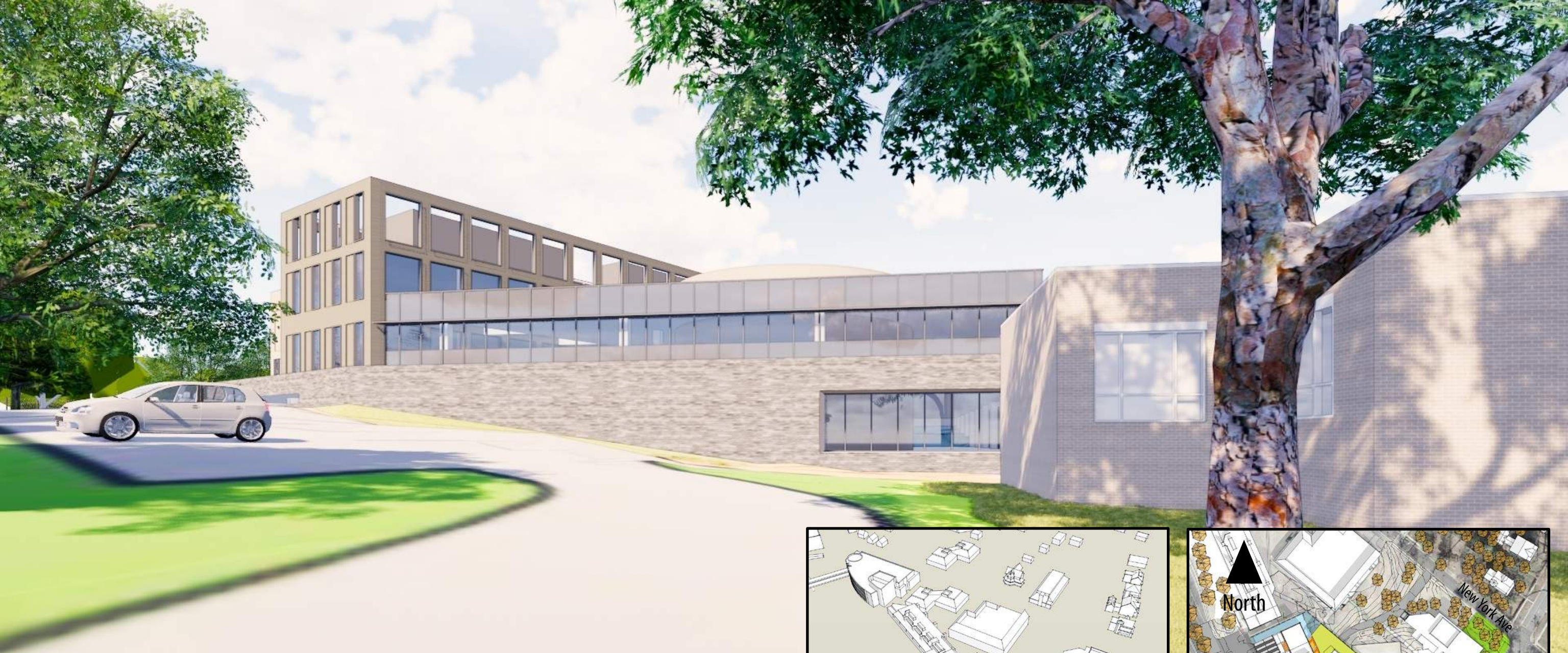
Existing trees are transparent to provide unobstructed view of building

Science North

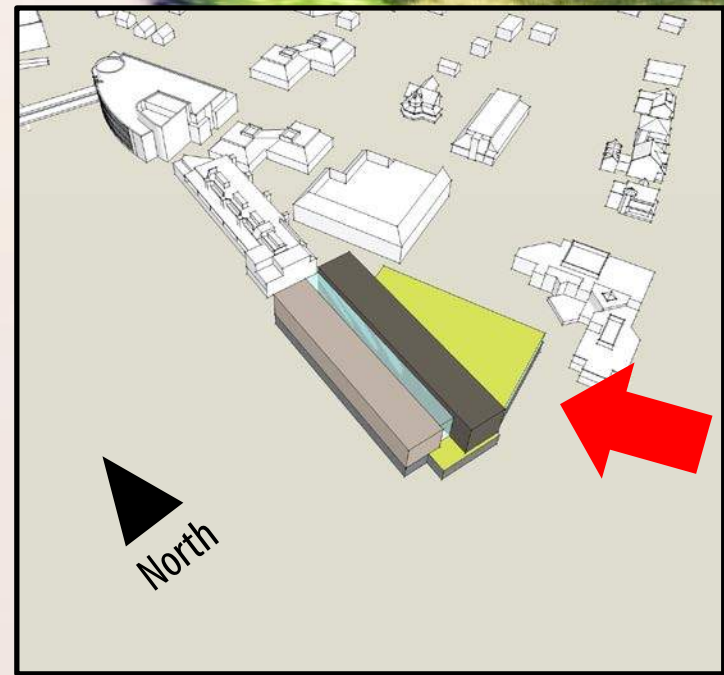
Fenton St

Concept 2 - Rotated Pavilion
VIEW FROM UPPER FENTON

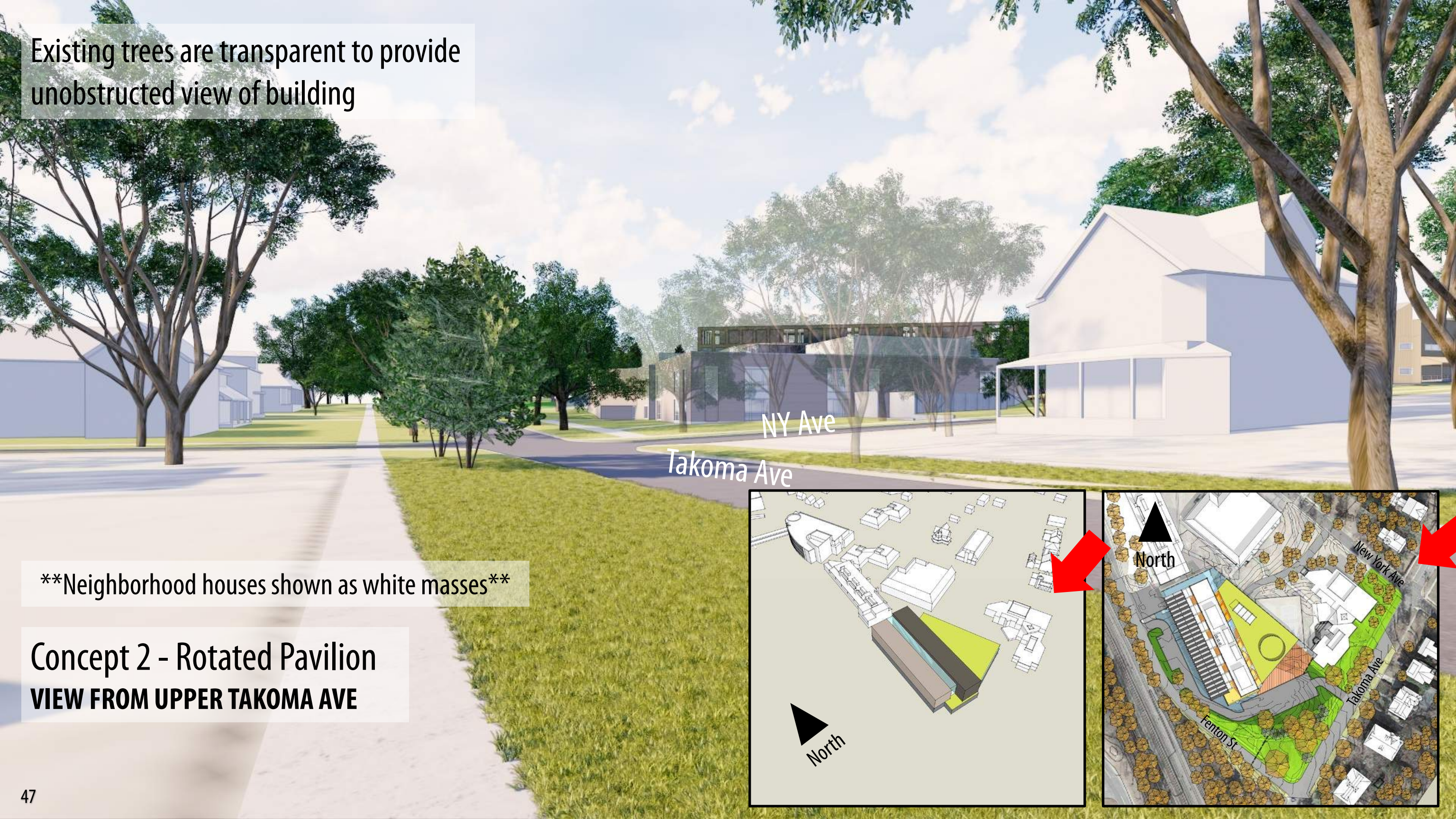




**Concept 2 - Rotated Pavilion
VIEW FROM TAKOMA ENTRY**



Existing trees are transparent to provide unobstructed view of building

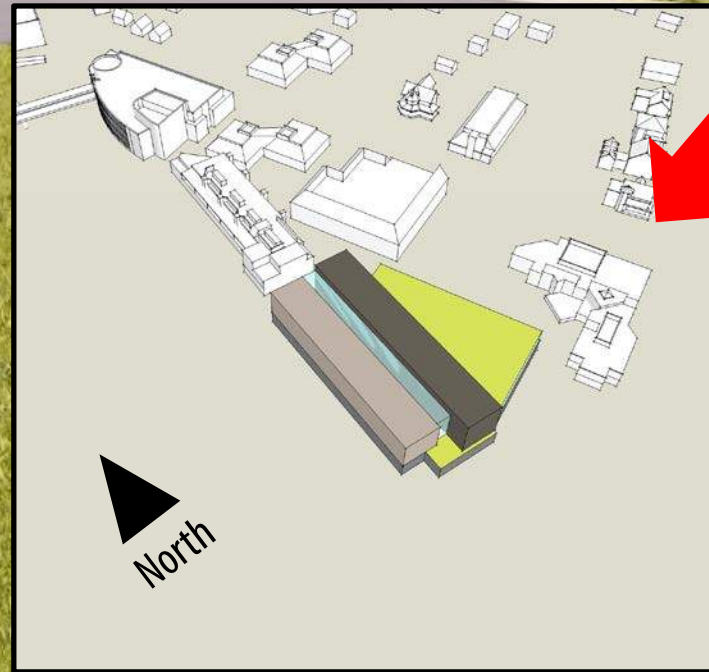


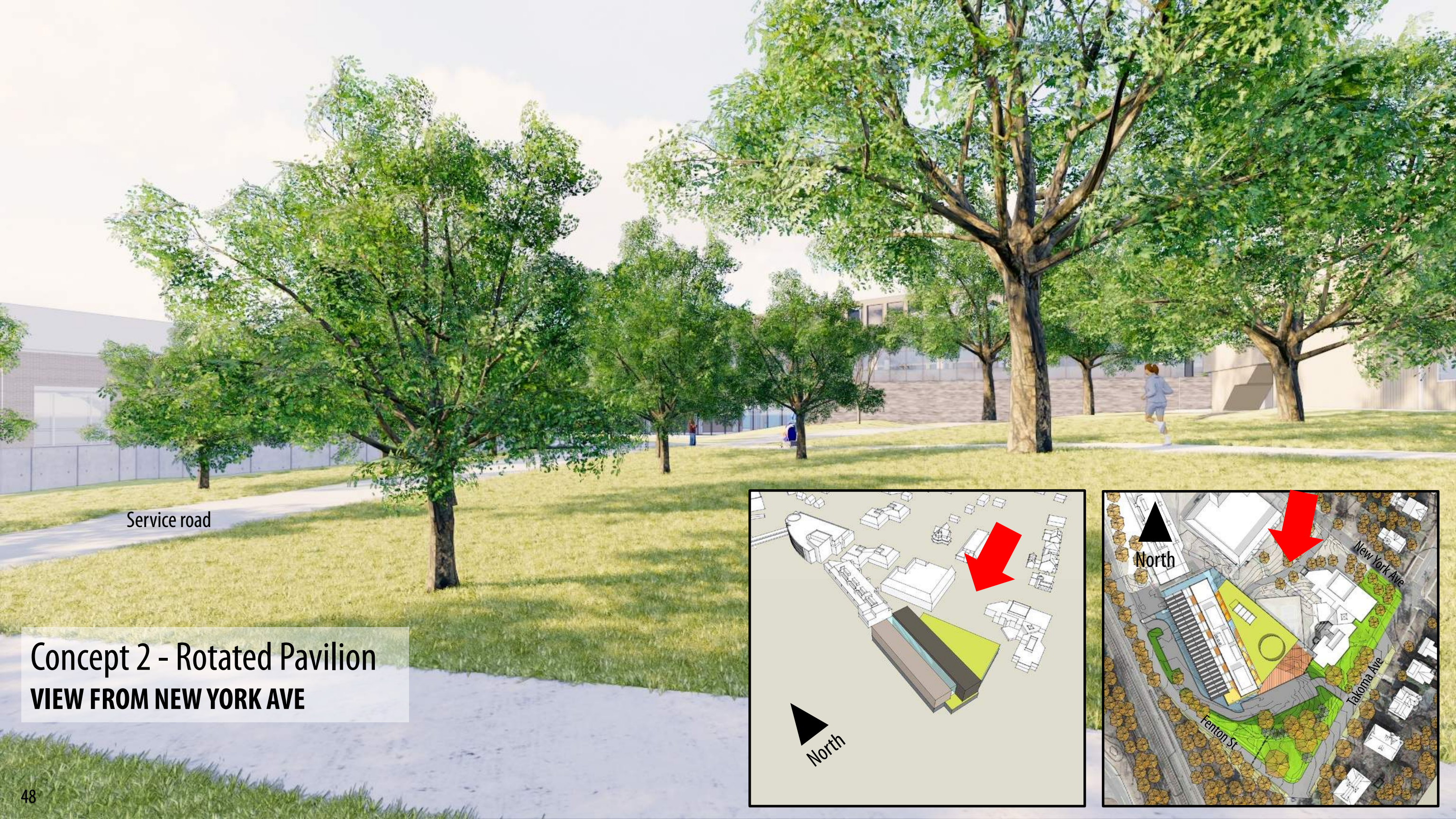
NY Ave

Takoma Ave

Neighborhood houses shown as white masses

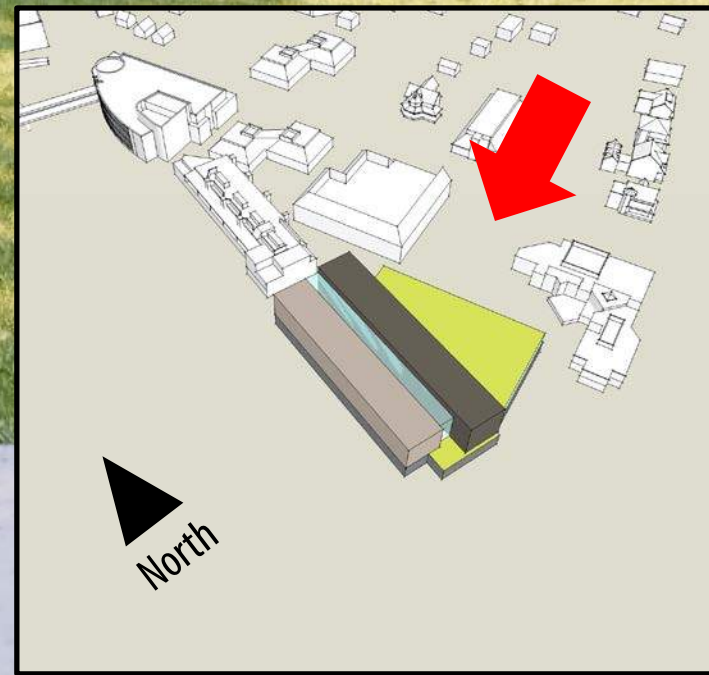
Concept 2 - Rotated Pavilion
VIEW FROM UPPER TAKOMA AVE



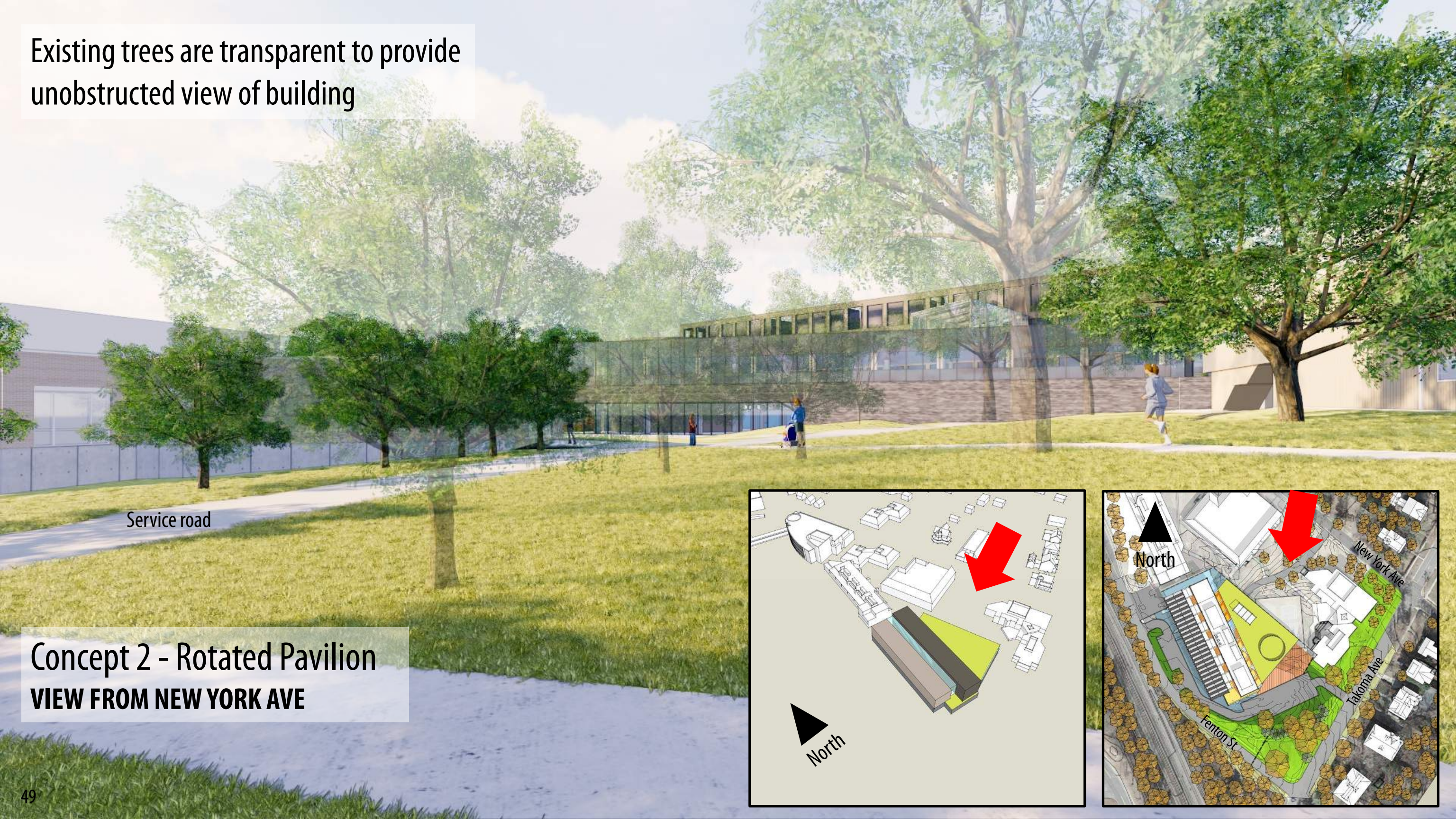


Service road

Concept 2 - Rotated Pavilion
VIEW FROM NEW YORK AVE

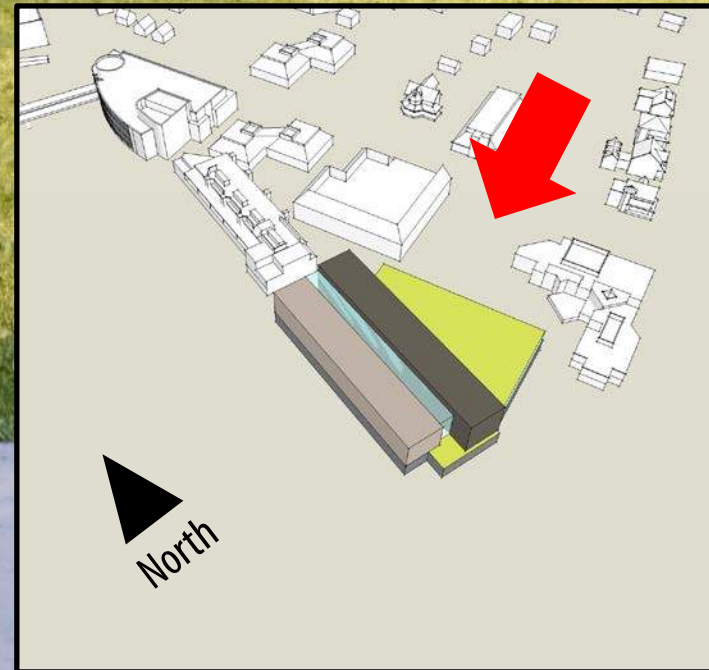


Existing trees are transparent to provide unobstructed view of building



Service road

Concept 2 - Rotated Pavilion
VIEW FROM NEW YORK AVE



Concept 2 - Rotated Pavilion

Accomplishes Design Directives

- **160' setback** along Takoma Avenue exceeds commitment of 110'
- park-like green space along Takoma Avenue is maintained
- building width maximized to reduce overall height
- The overall perceived height of building is limited to 2 stories; exceeding commitment of lowered height on Takoma Avenue
- use of lower level space (partial below-grade on Fenton) takes advantage of topography to minimize perceived height along Takoma

Accomplishes Community Considerations

- consolidated labs on Fenton St.
- learning center and student activity located on internal campus quad
- more floorplate to co-locate building functions



*Note, dimensions will continue to be updated as design evolves
*Note, for graphic clarity, only overall scale dimensions are shown

Concept 2.5 – Distributed Bars

LOWER LEVEL



North

Metrorail / CSX Tracks

Student Center

Science North

Resource Center

Learning Center

Main entry on campus side

Planetarium

The Commons

Fenton St.

Takoma Ave.

New York Ave.

Belle Ziegler Park

To reduce height, instructional spaces are buried below grade, and have little to no natural light

70'

160'

Concept 2.5 – Distributed Bars

FIRST LEVEL



Drop-off and entry on Fenton St

Loading on Fenton St

Entry from upper campus

Greenhouse

Potential green roof to support academic programs

Potential landscape and screening in red zone

Student Center

Science North

Resource Center

The Commons

Fenton St.

Belle Ziegler Park

New York Ave.

Takoma Ave.

Concept 2.5 – Distributed Bars

SECOND LEVEL



Metrorail / CSX Tracks

Student Center

Science North

Resource Center

Varied massing breaks down scale.

Planetarium limits windows on Takoma Ave.

Belle Ziegler Park

The Commons

New York Ave.

Takoma Ave.

Concept 2.5 – Distributed Bars

BUILDING FORM



Fenton St Side:
 1 story (below grade)
 2 stories + parapet (above grade)
 1 mechanical level

Campus Side:
 3 stories + parapet on internal campus side (due to grade change)

2 stories + parapet

1 story + parapet

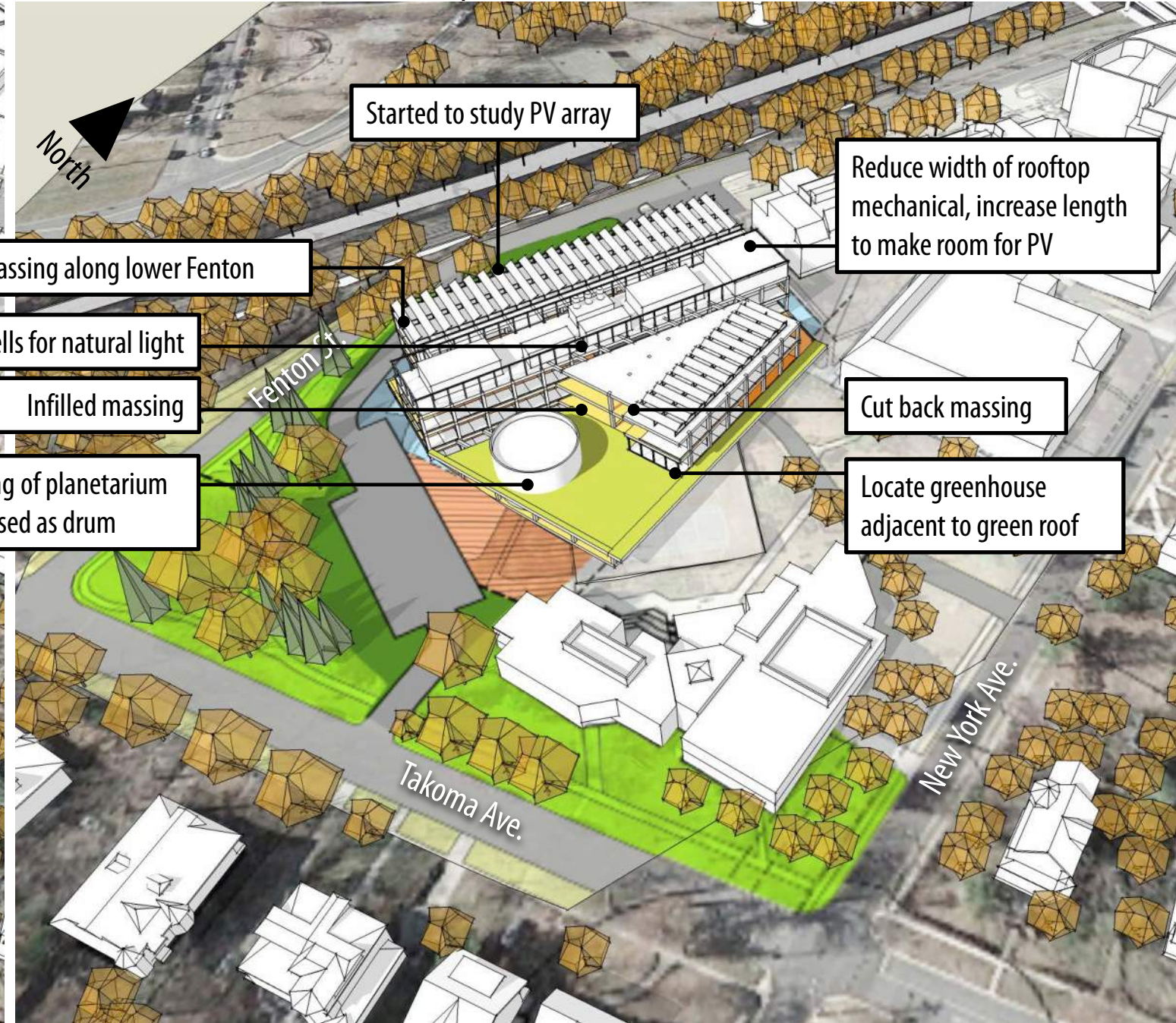
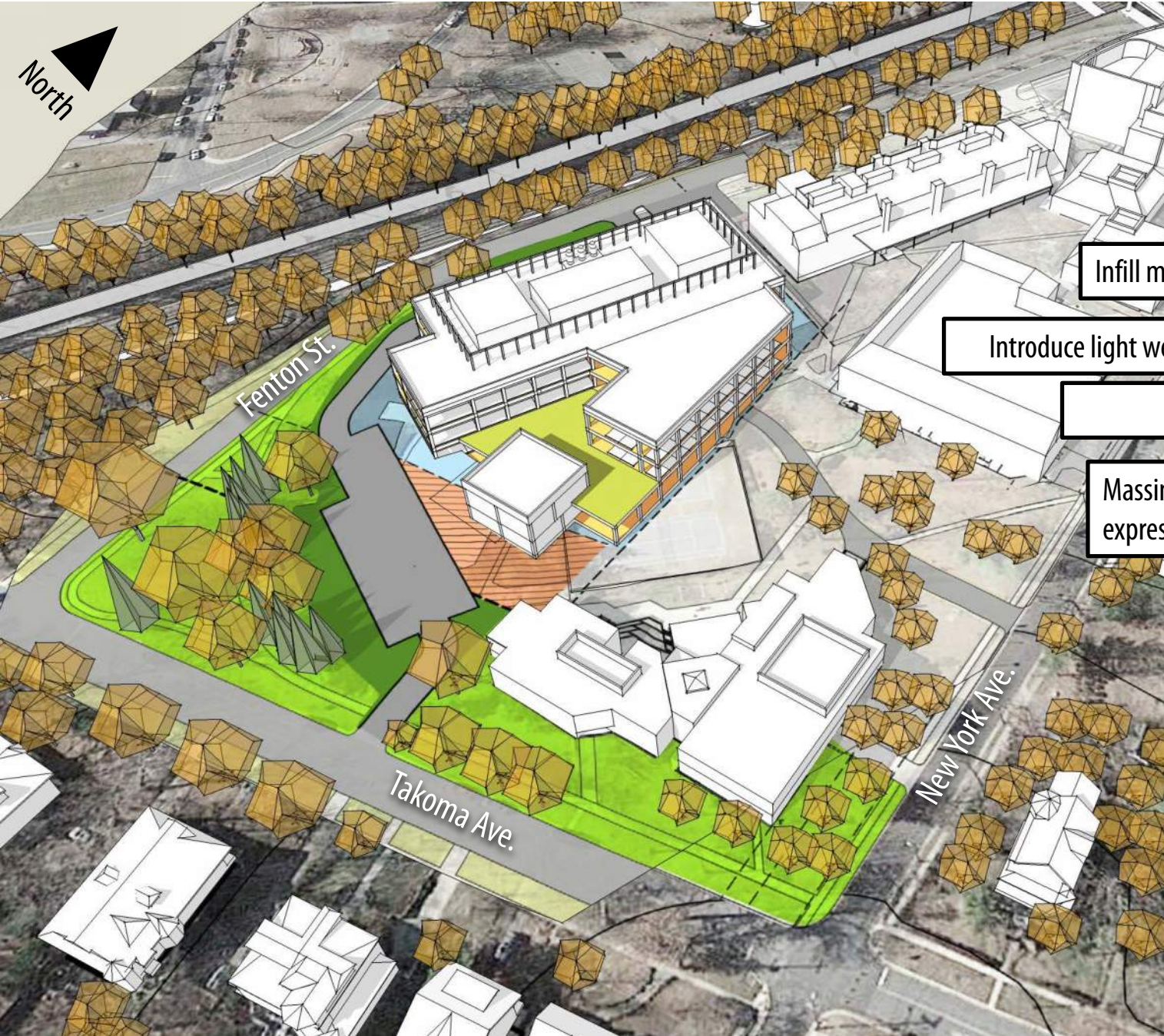
**A parapet is an extension of the building façade and acts as a guard rail on the roof level for maintenance staff.

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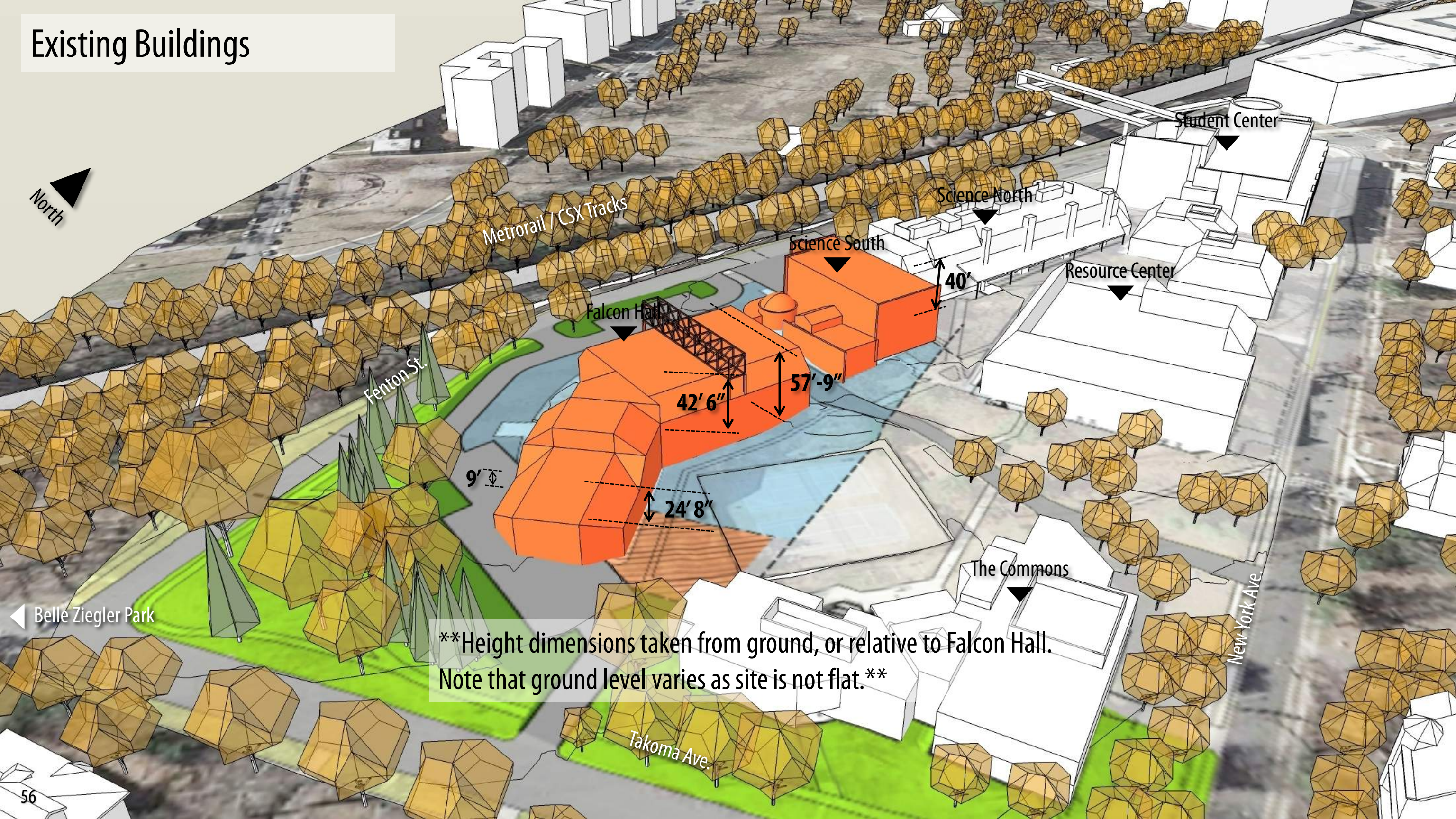
Concept 2.5 – Distributed Bars: Update Notes

Concept 2.5 shared on 9/11/2018

Concept 2.5 shared on 10/02/2018



Existing Buildings



Student Center

Science North

Resource Center

Science South

Falcon Hall

The Commons

Metrorail / CSX Tracks

Fenton St

Belle Ziegler Park

Takoma Ave.

New York Ave.

**Height dimensions taken from ground, or relative to Falcon Hall.
Note that ground level varies as site is not flat.**

40'

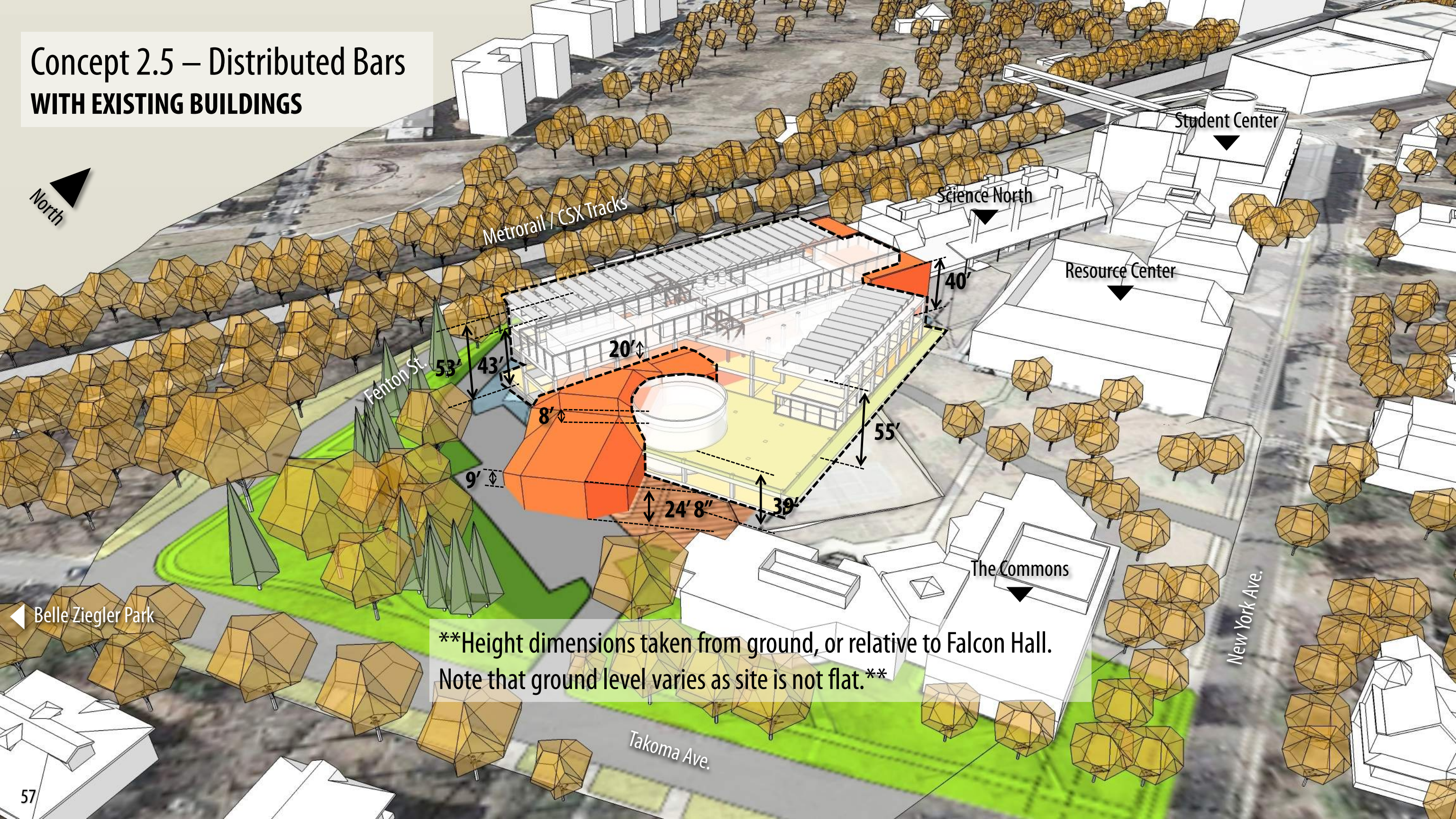
42'6"

57'-9"

24'8"

9'

Concept 2.5 – Distributed Bars WITH EXISTING BUILDINGS



Metrorail / CSX Tracks

Fenton St

Student Center

Science North

Resource Center

The Commons

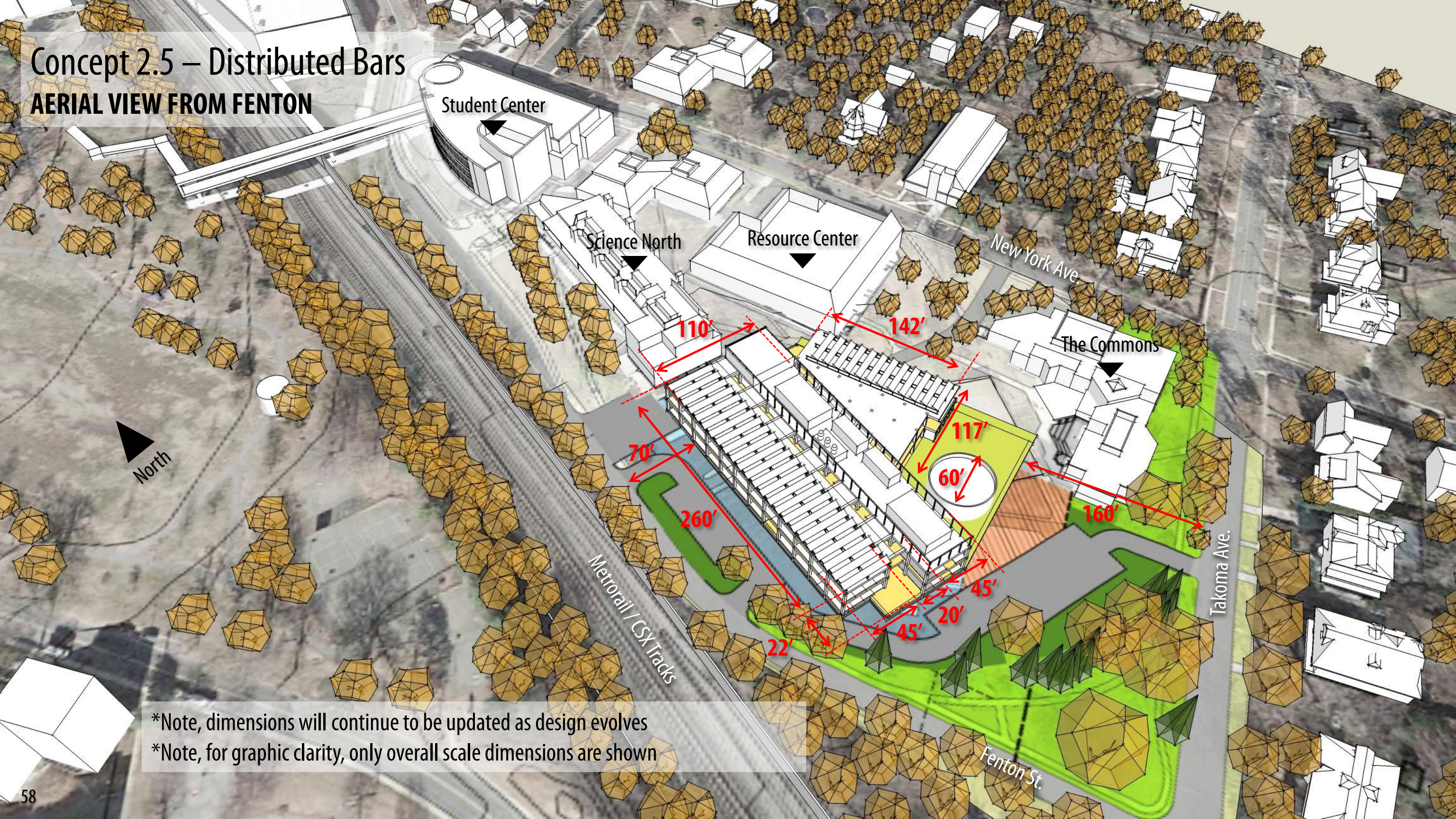
New York Ave.

Takoma Ave.

****Height dimensions taken from ground, or relative to Falcon Hall.
Note that ground level varies as site is not flat.****

Concept 2.5 – Distributed Bars

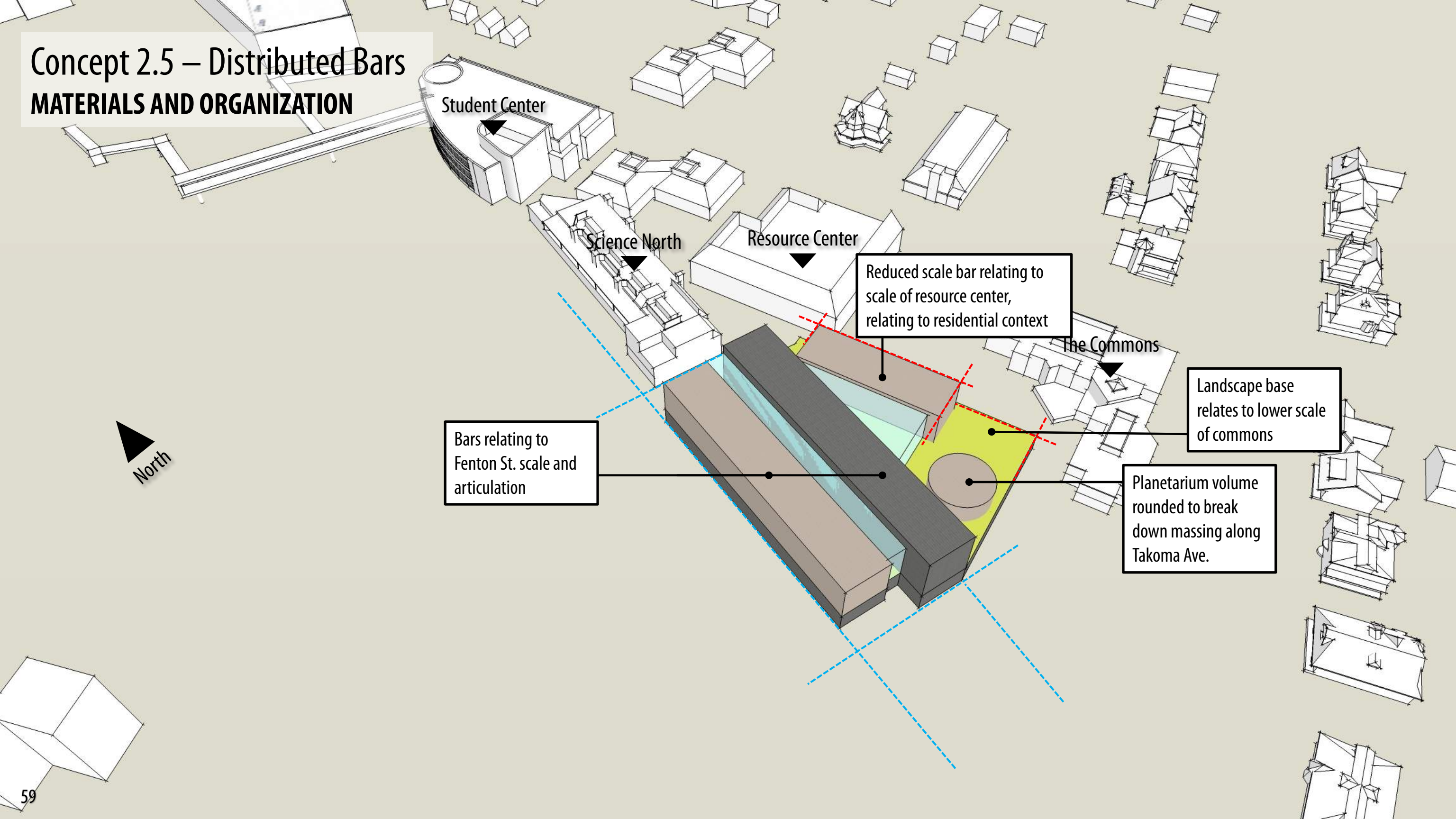
AERIAL VIEW FROM FENTON

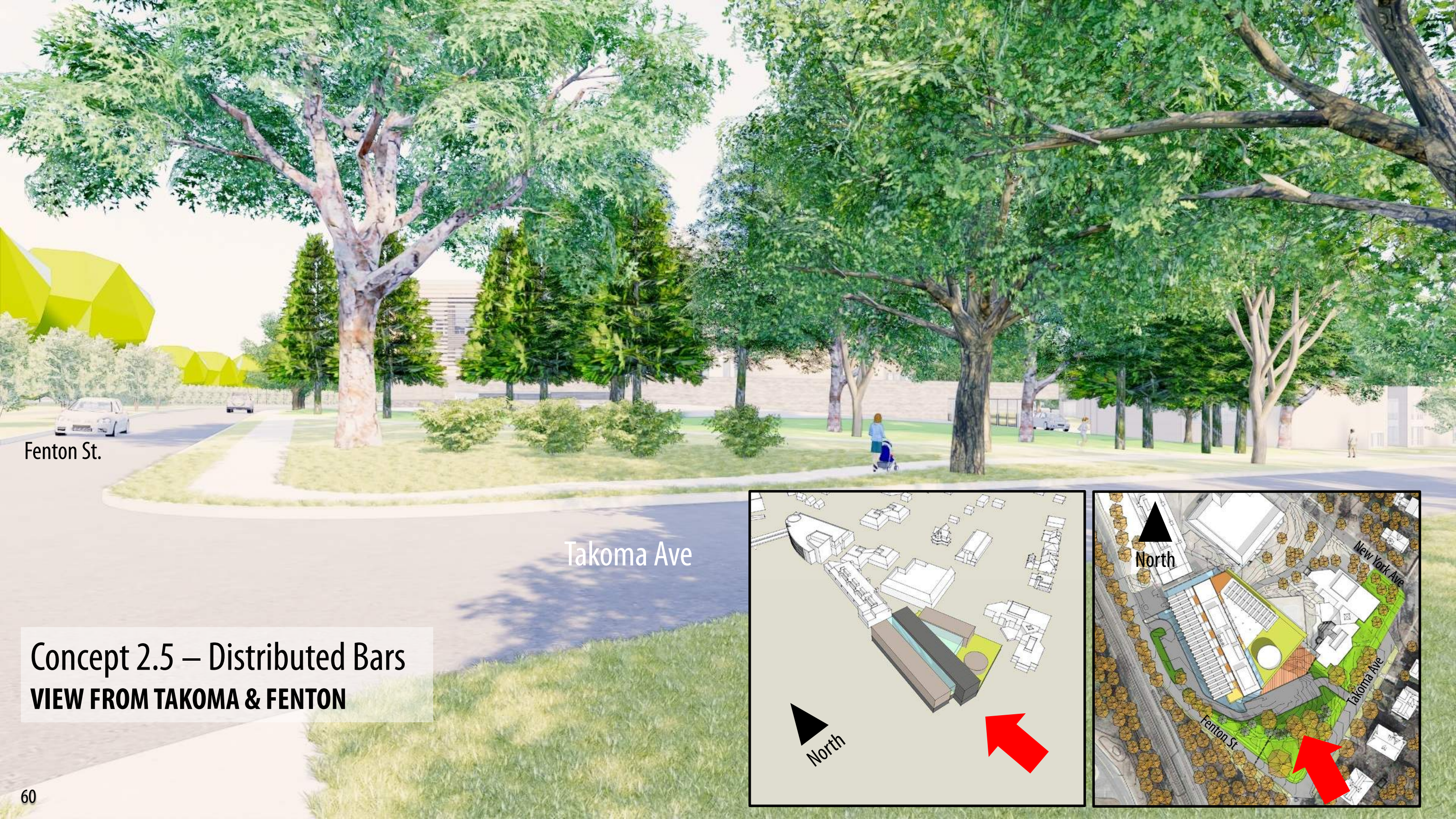


*Note, dimensions will continue to be updated as design evolves
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Concept 2.5 – Distributed Bars

MATERIALS AND ORGANIZATION

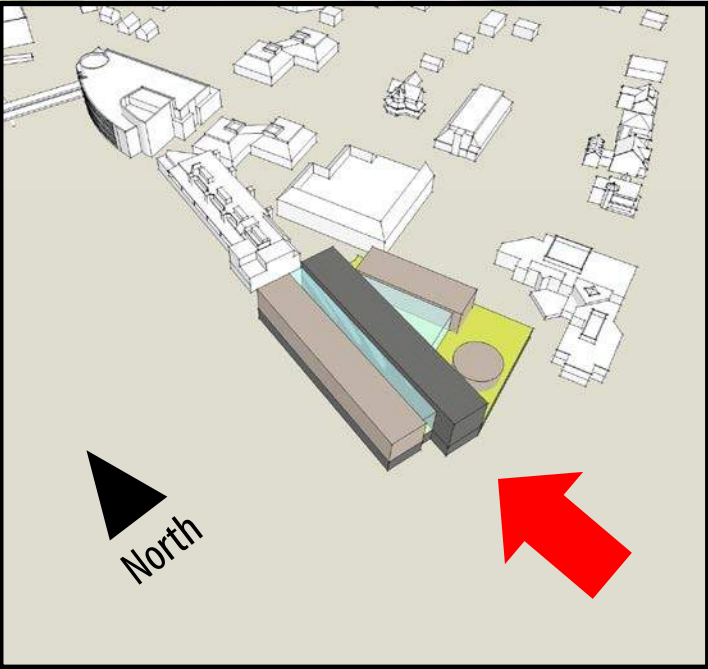




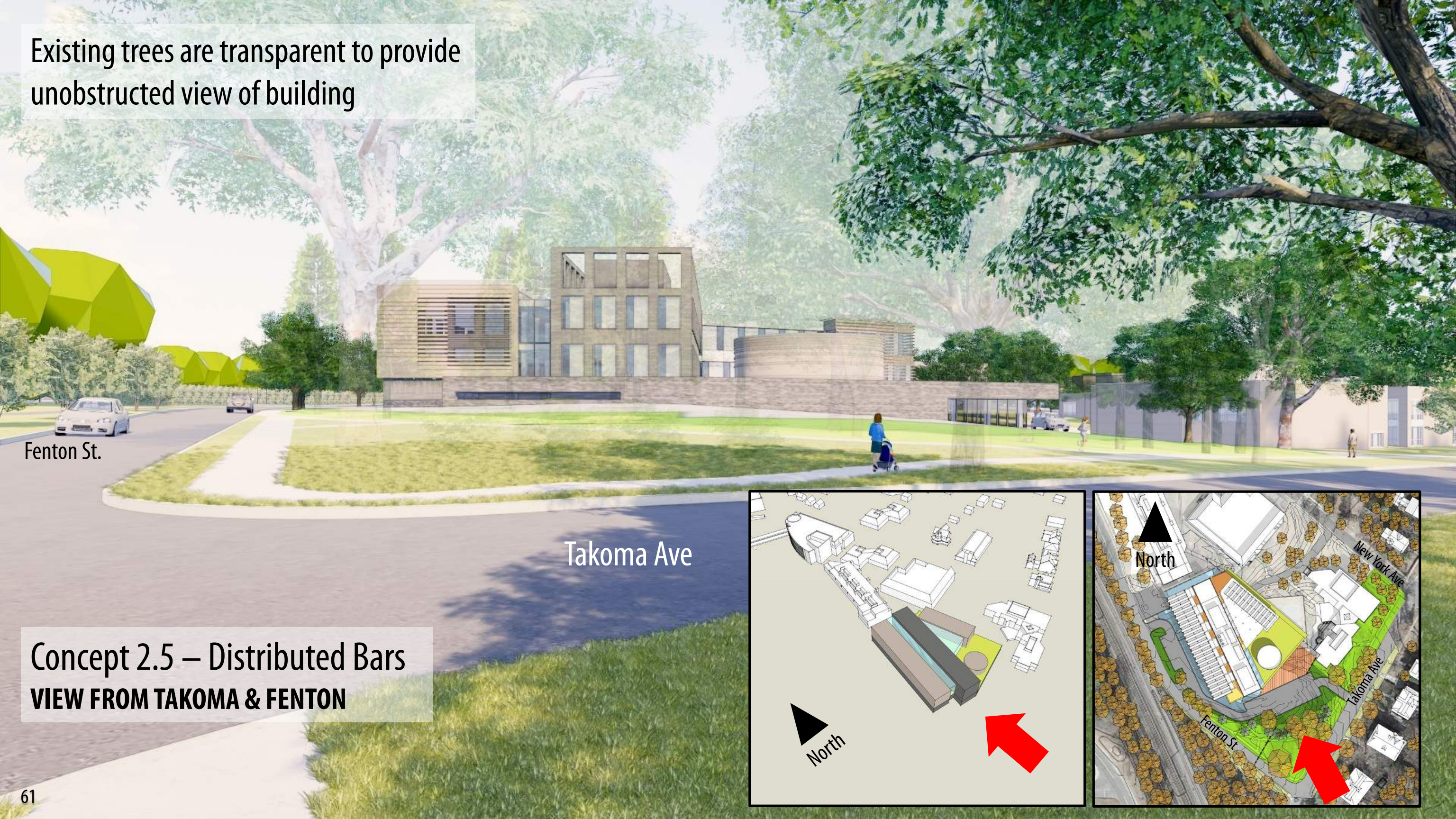
Fenton St.

Takoma Ave

Concept 2.5 – Distributed Bars
VIEW FROM TAKOMA & FENTON



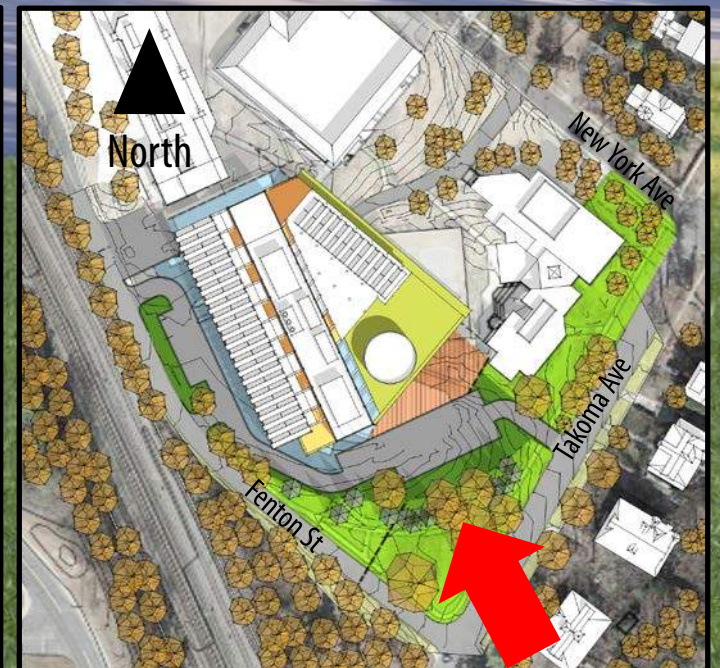
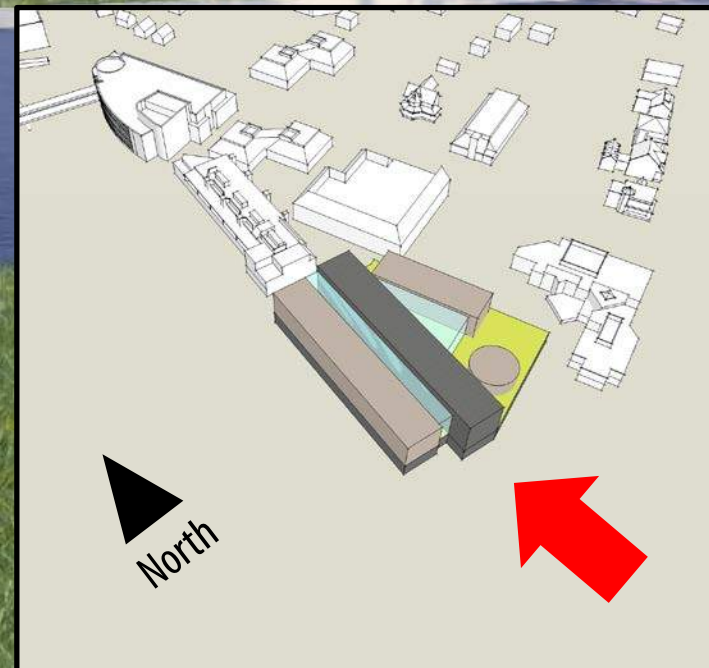
Existing trees are transparent to provide unobstructed view of building



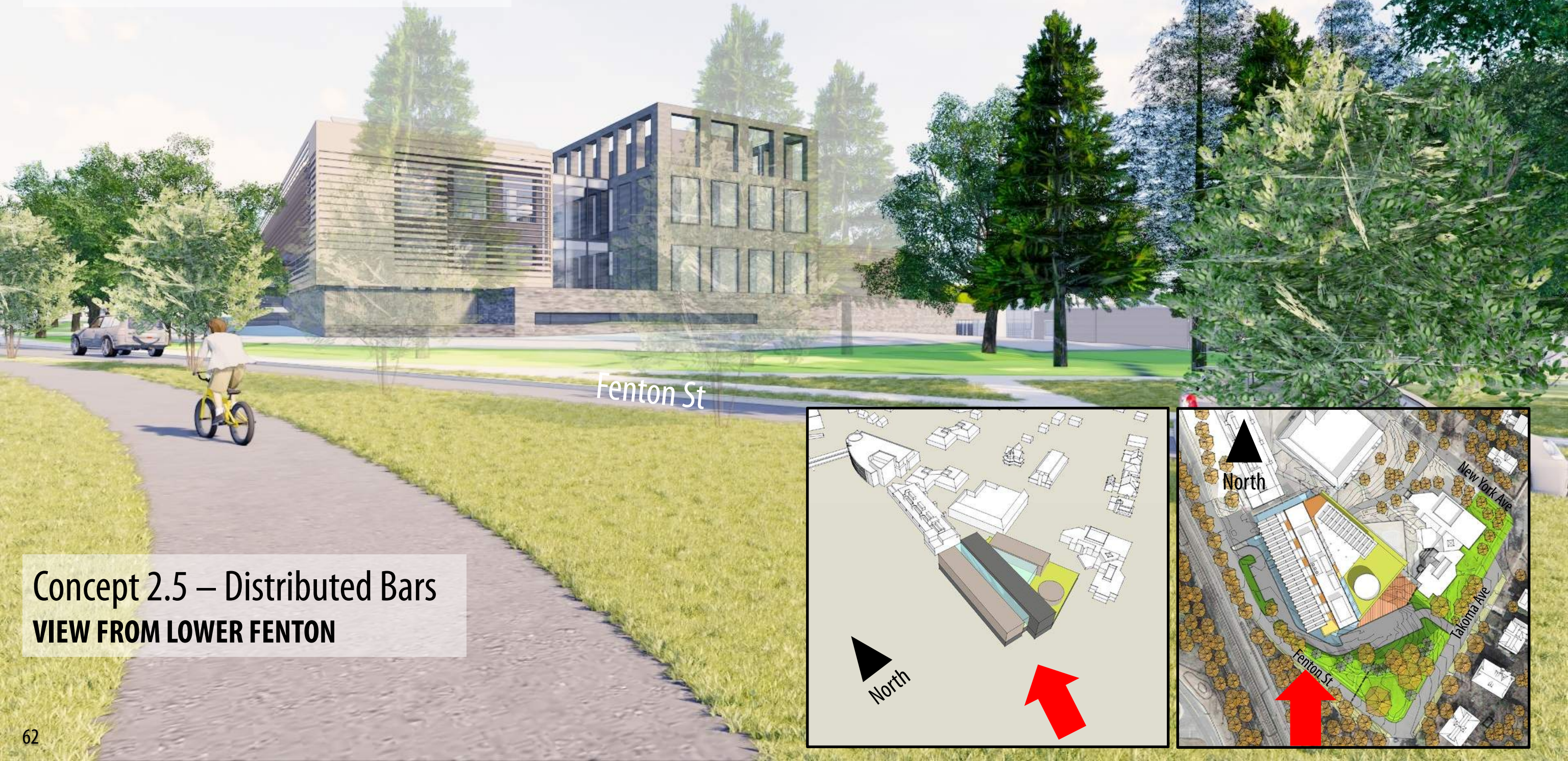
Fenton St.

Takoma Ave

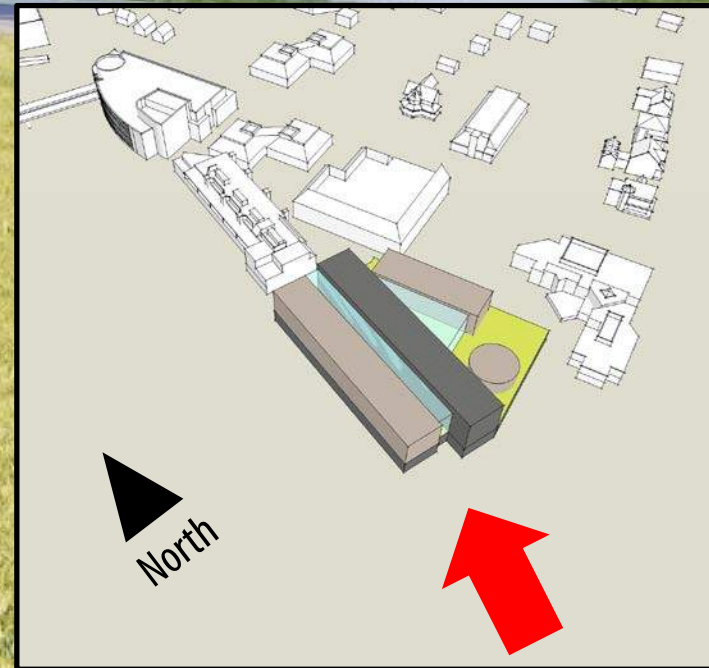
Concept 2.5 – Distributed Bars
VIEW FROM TAKOMA & FENTON



Existing trees are transparent to provide unobstructed view of building



Concept 2.5 – Distributed Bars
VIEW FROM LOWER FENTON

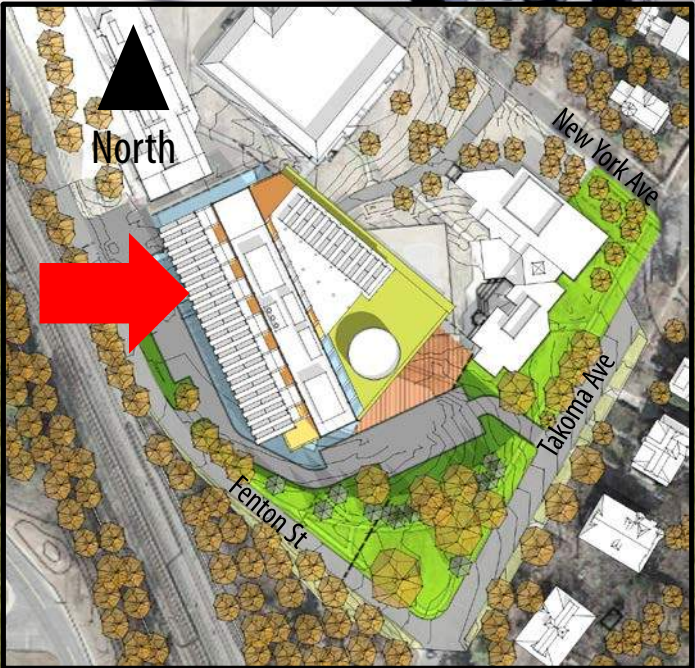
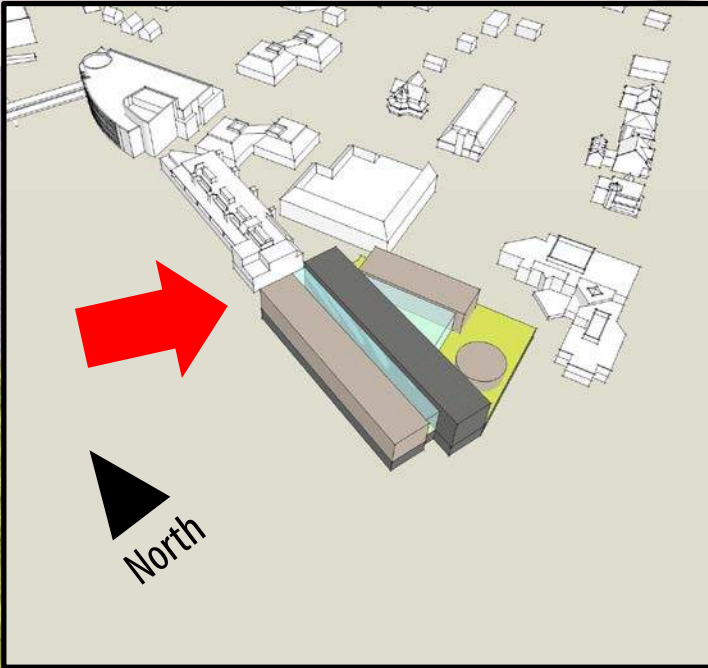


Existing trees are transparent to provide unobstructed view of building

Science North

Fenton St

Concept 2.5 – Distributed Bars
VIEW FROM UPPER FENTON

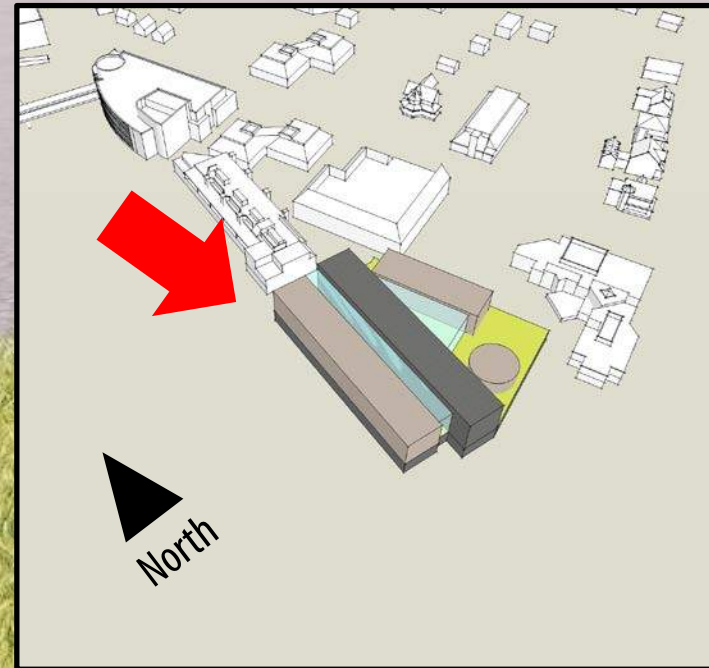


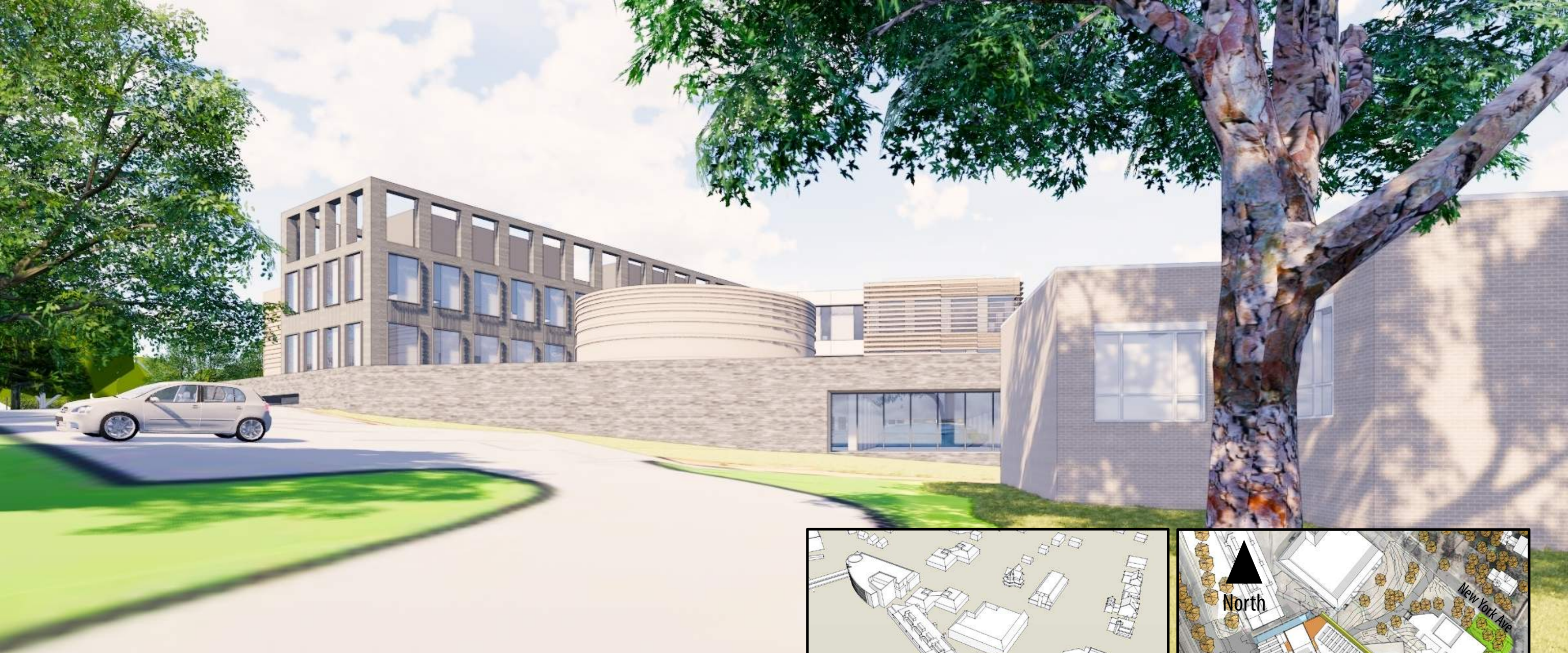
Existing trees are transparent to provide unobstructed view of building

Science North

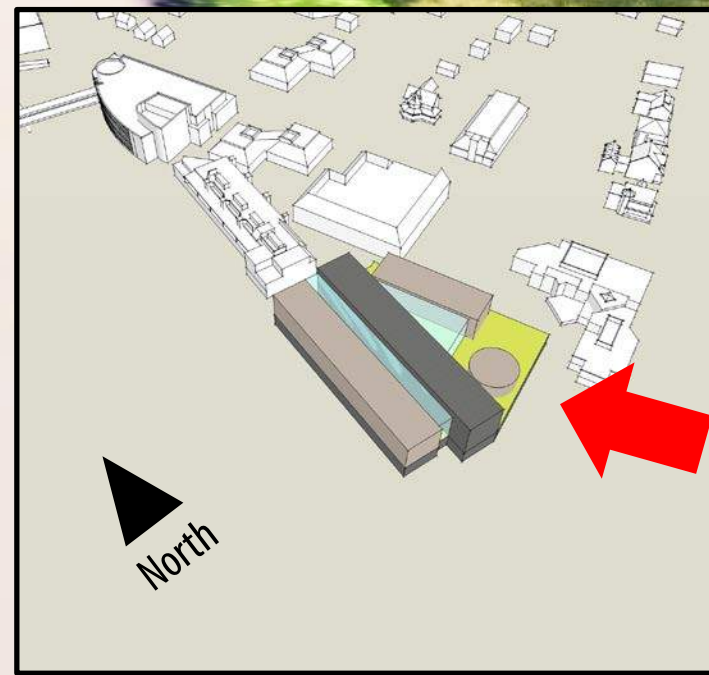
Fenton St

Concept 2.5 – Distributed Bars
VIEW FROM UPPER FENTON

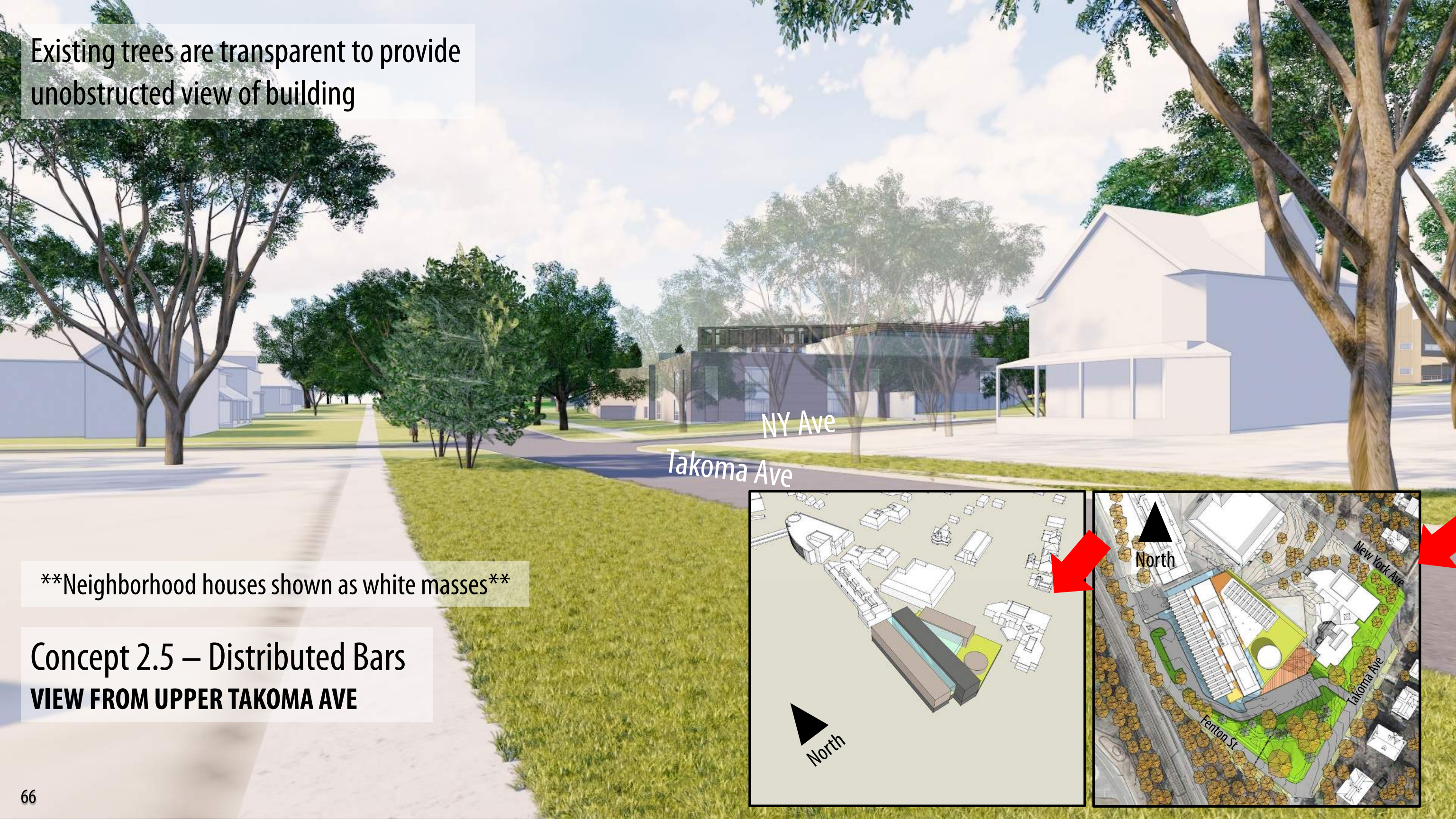




Concept 2.5 – Distributed Bars
VIEW FROM TAKOMA ENTRY



Existing trees are transparent to provide unobstructed view of building

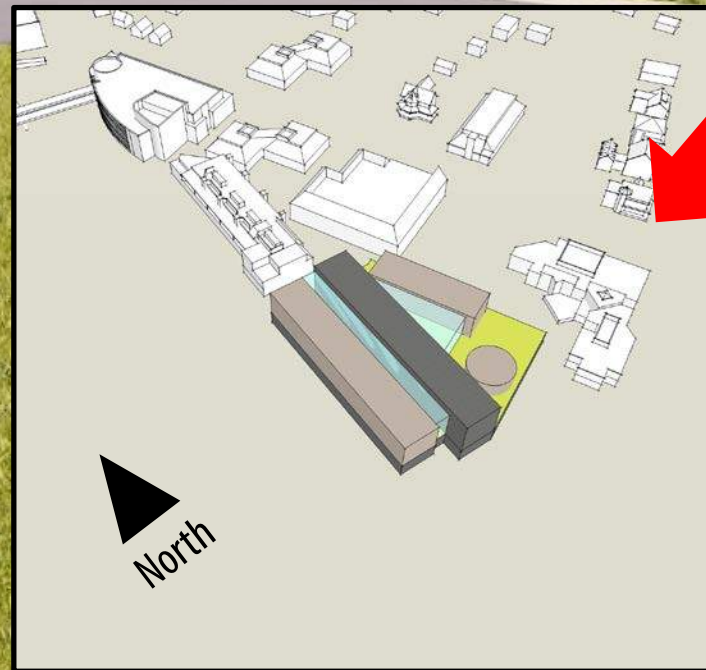


NY Ave

Takoma Ave

Neighborhood houses shown as white masses

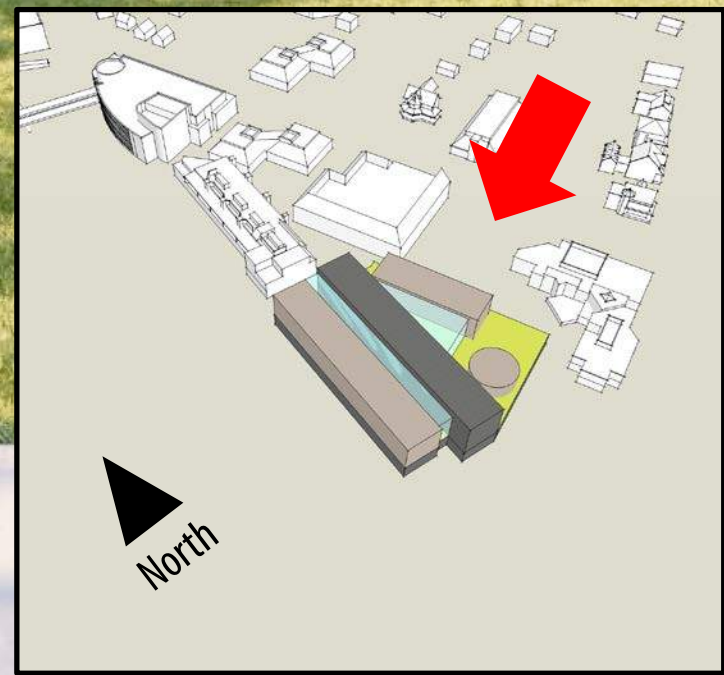
Concept 2.5 – Distributed Bars
VIEW FROM UPPER TAKOMA AVE



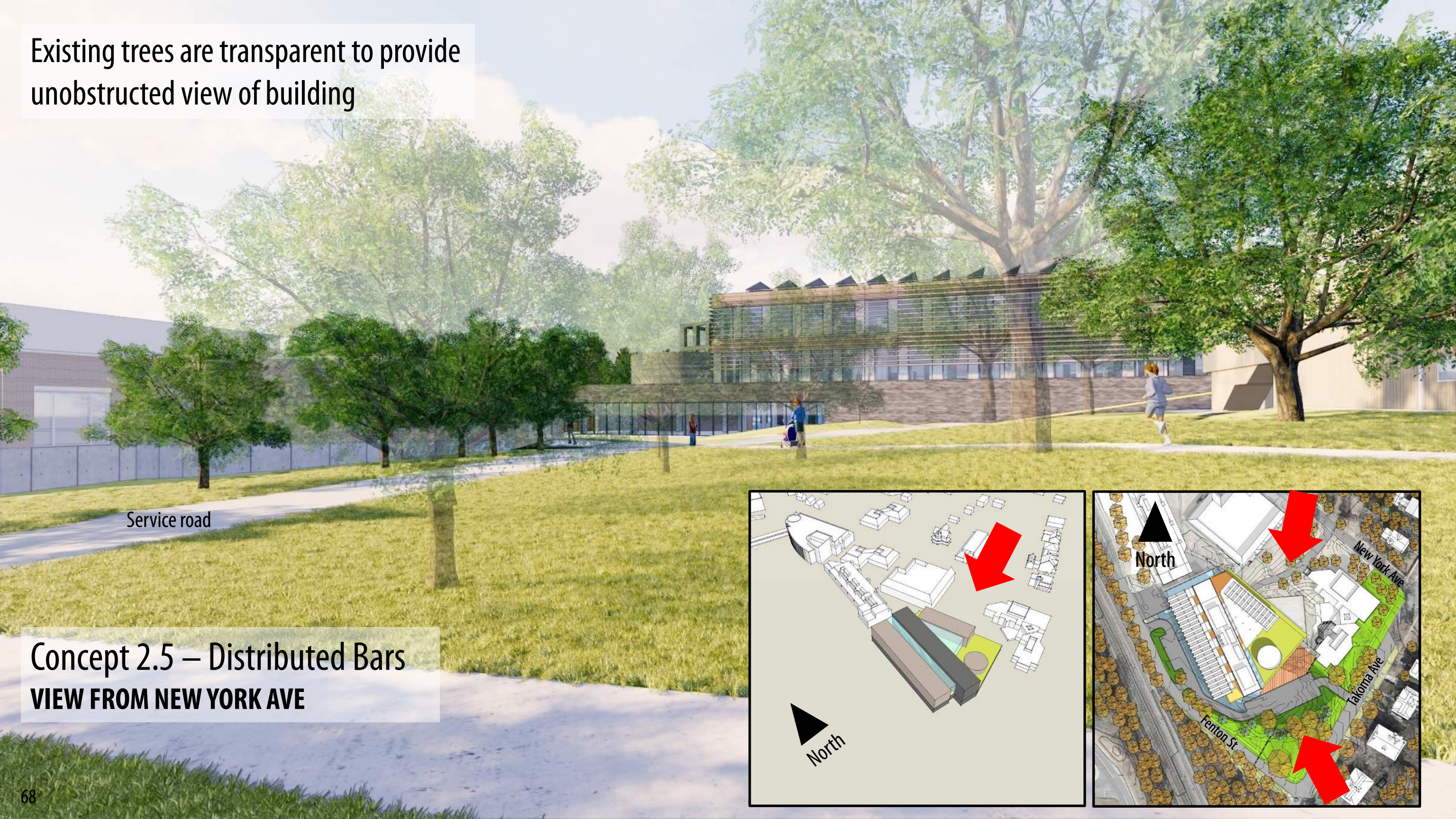


Service road

Concept 2.5 – Distributed Bars
VIEW FROM NEW YORK AVE

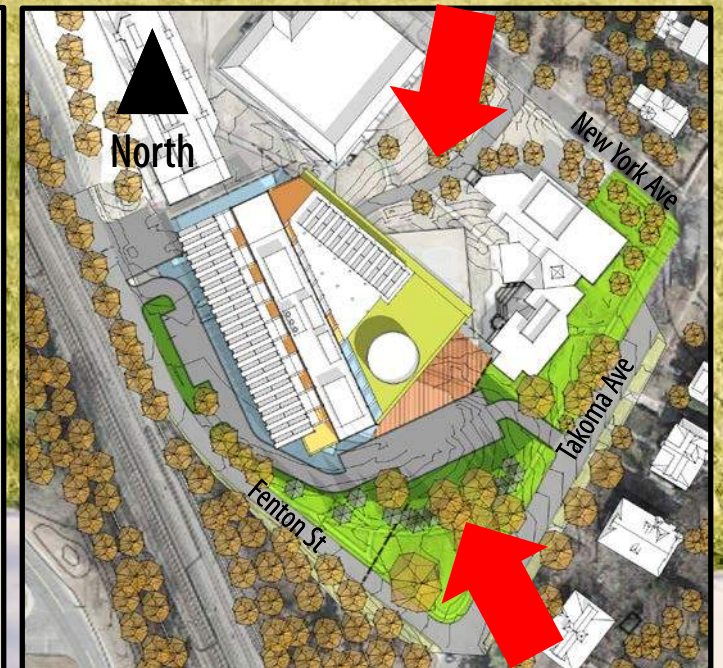
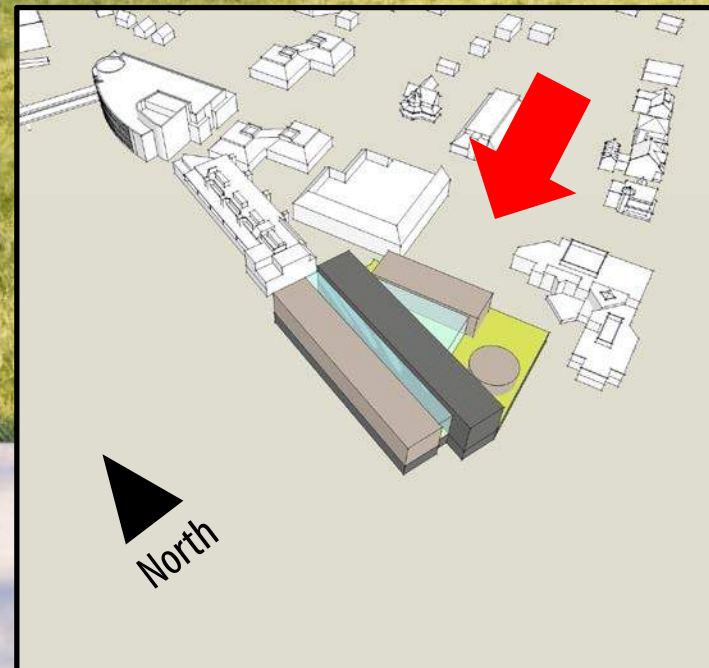


Existing trees are transparent to provide unobstructed view of building



Service road

Concept 2.5 – Distributed Bars
VIEW FROM NEW YORK AVE



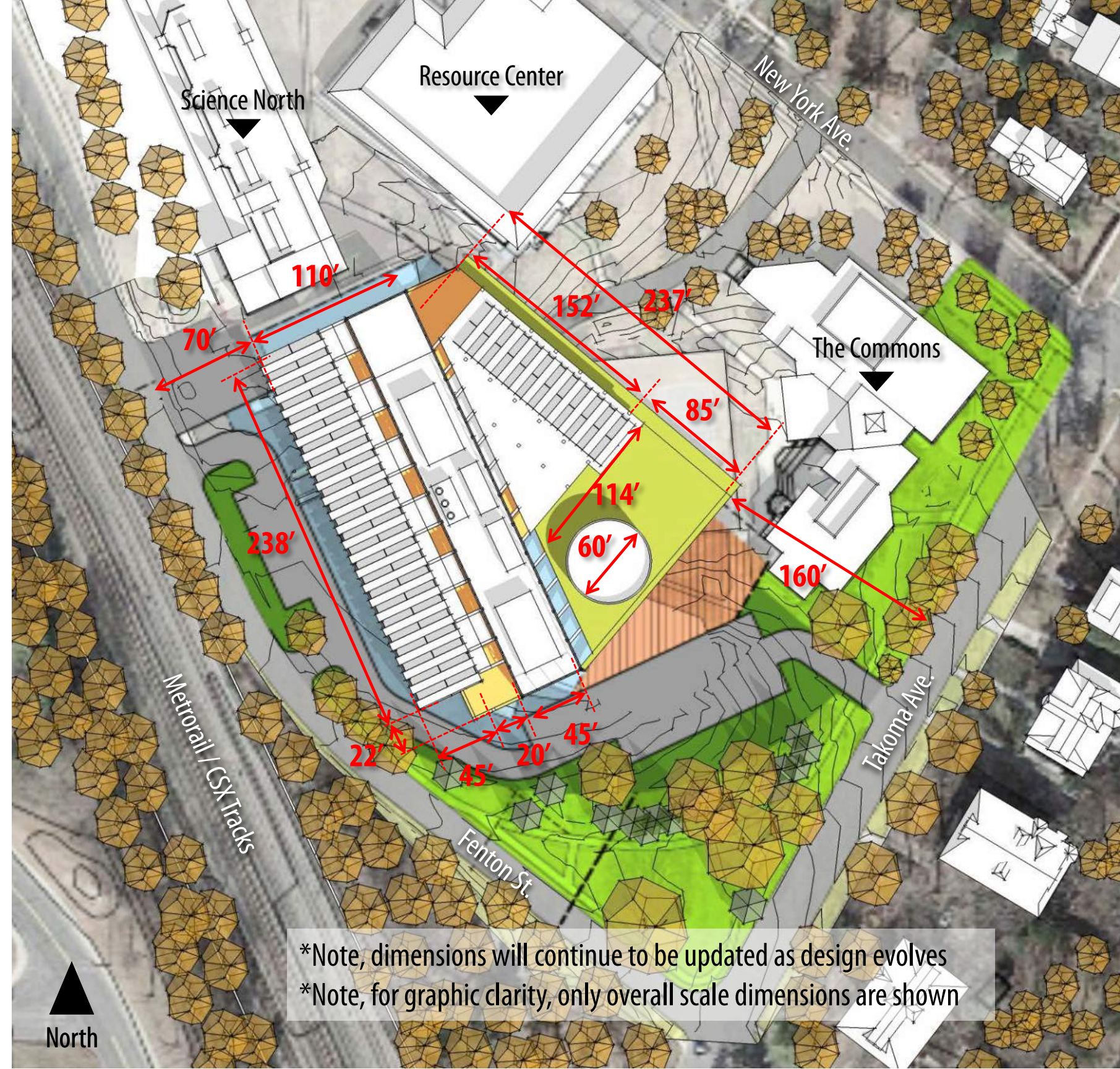
Concept 2.5 – Distributed Bars

Accomplishes Design Directives

- **160' setback** along Takoma Avenue exceeds commitment of 110'
- park-like green space along Takoma Avenue is maintained
- height along Takoma Avenue is limited to 2 stories
- location of planetarium supports minimized windows along Takoma Avenue
- use of lower level space (below-grade on Fenton) takes advantage of topography to minimize perceived height along Takoma

Accomplishes Community Considerations

- consolidated labs on Fenton St
- learning commons and student activity located on internal campus quad
- set back off of Takoma Ave reduces overall perceived scale of building from Takoma Ave



Form comparisons

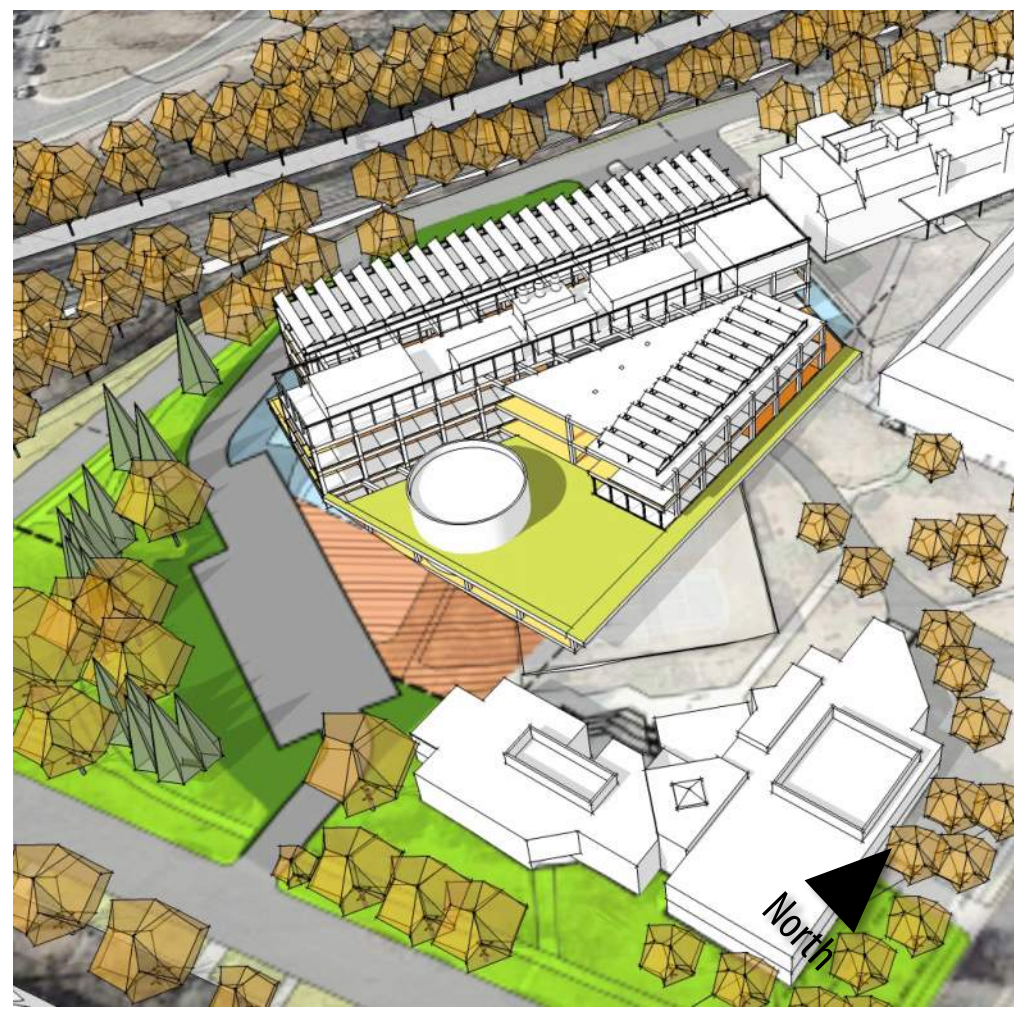
Design – Forms / Organizational Concepts

Form Comparisons

Concept 2 – Rotated Pavilion



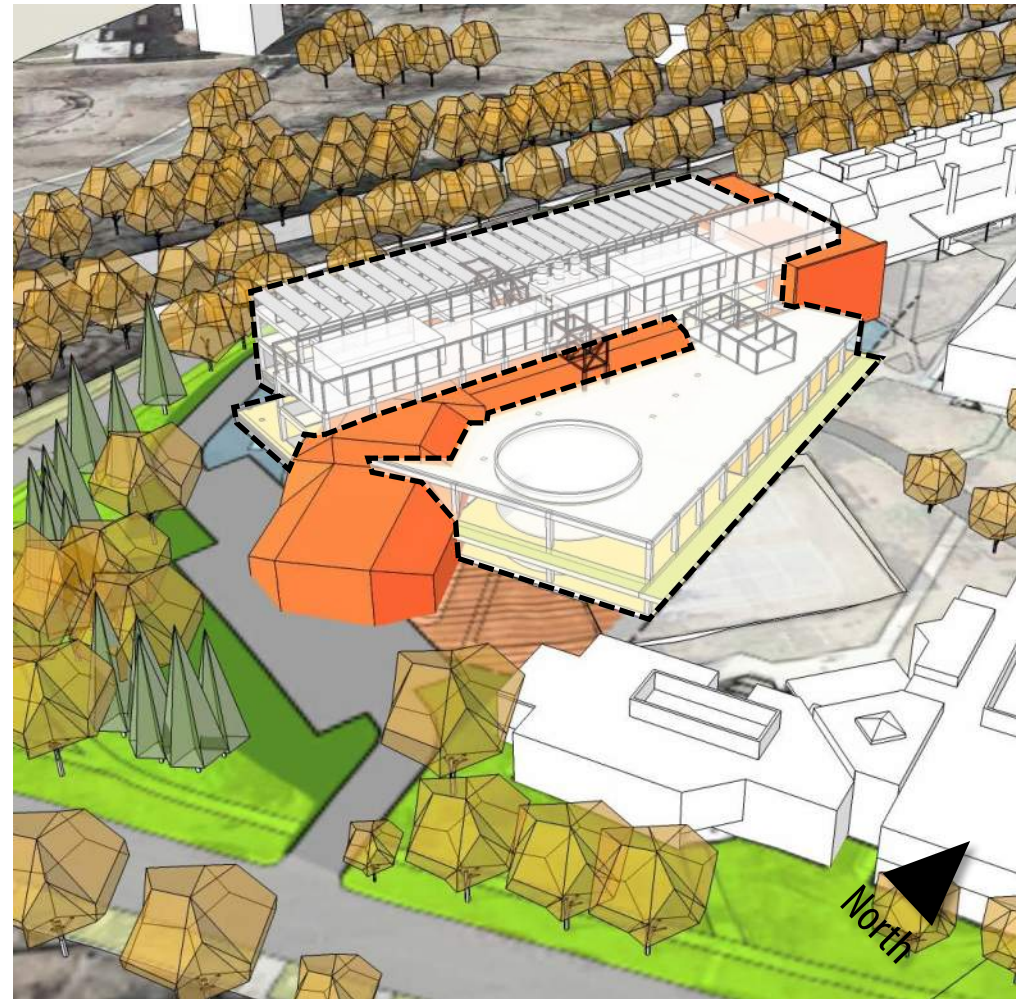
Concept 2.5 – Distributed Bars



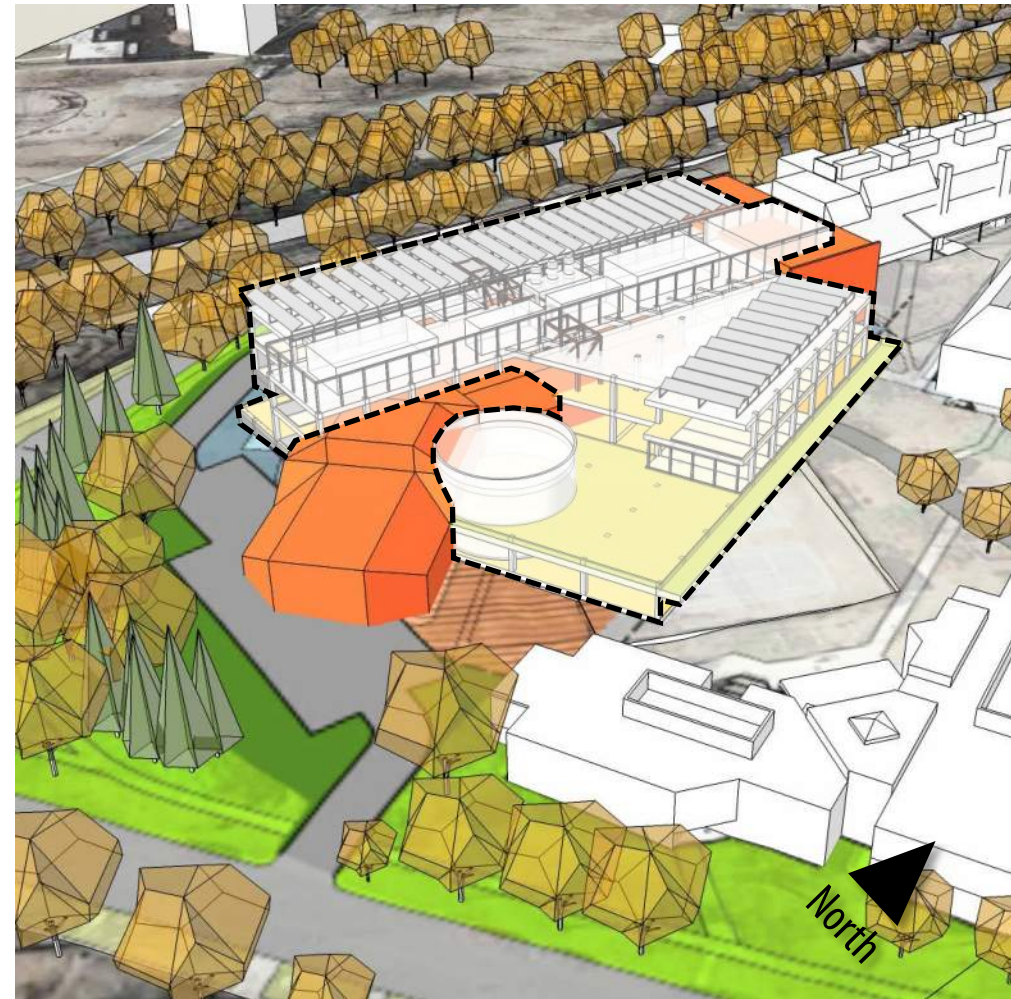
Design – Forms / Organizational Concepts

Form Comparisons

Concept 2 – Rotated Pavilion



Concept 2.5 – Distributed Bars



Design – Forms / Organizational Concepts

Form Comparisons

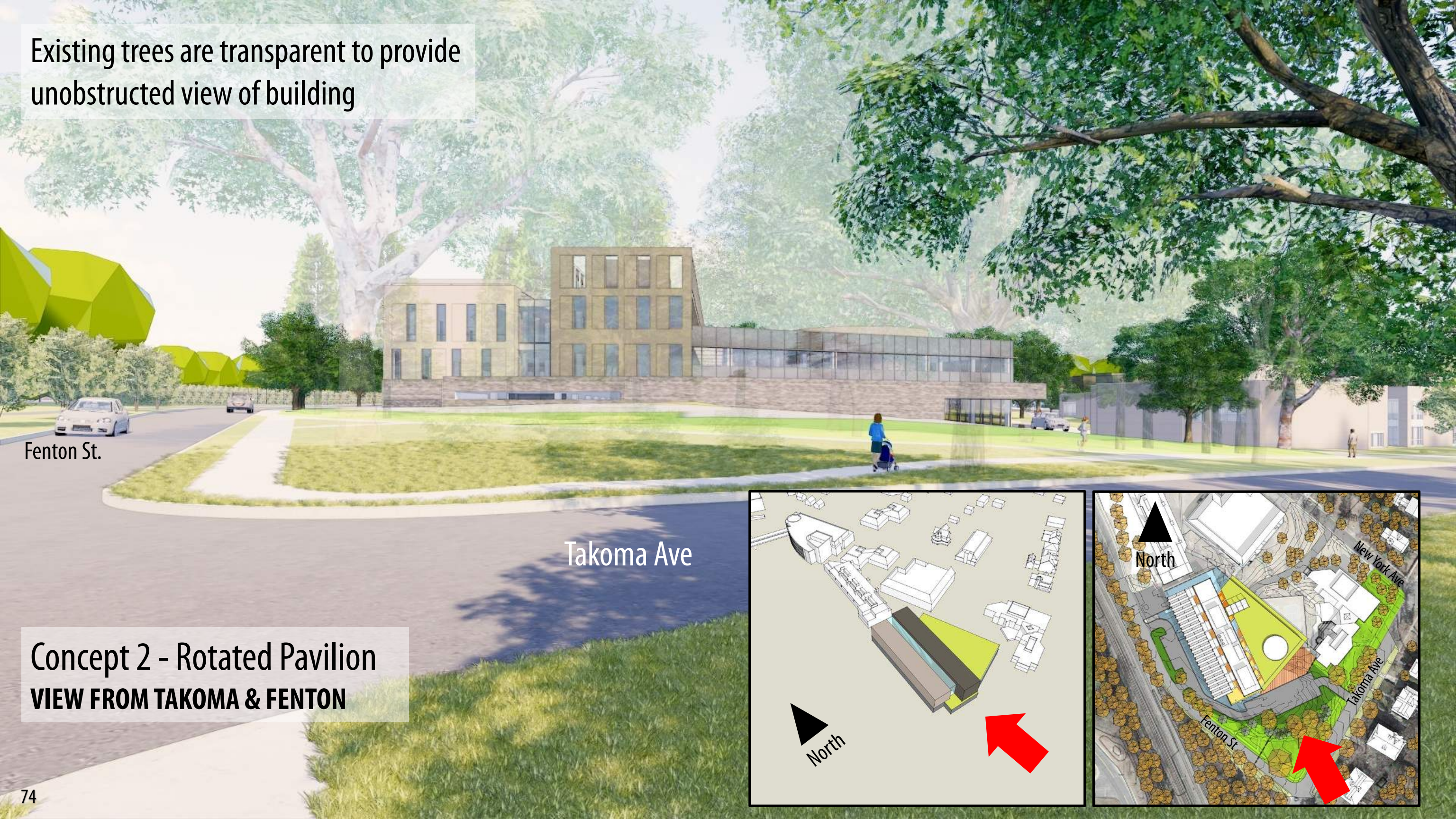
Concept 2 – Rotated Pavilion



Concept 2.5 – Distributed Bars



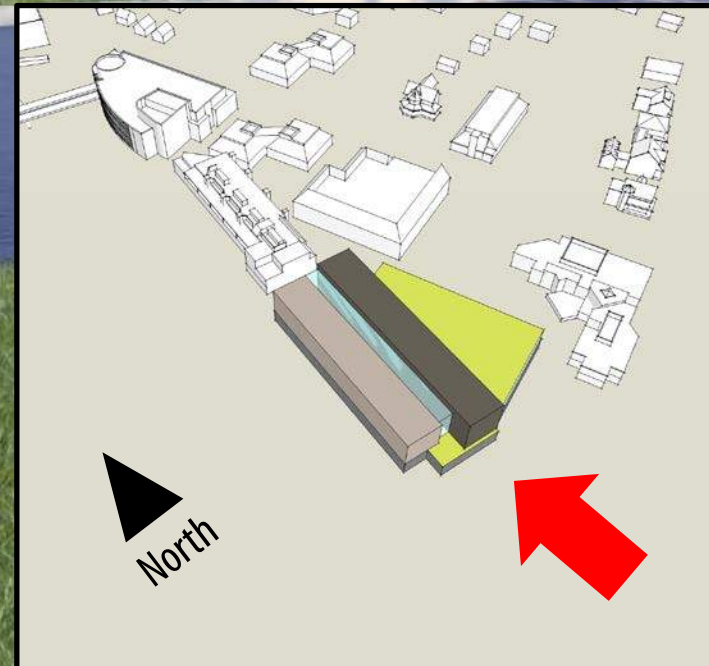
Existing trees are transparent to provide unobstructed view of building



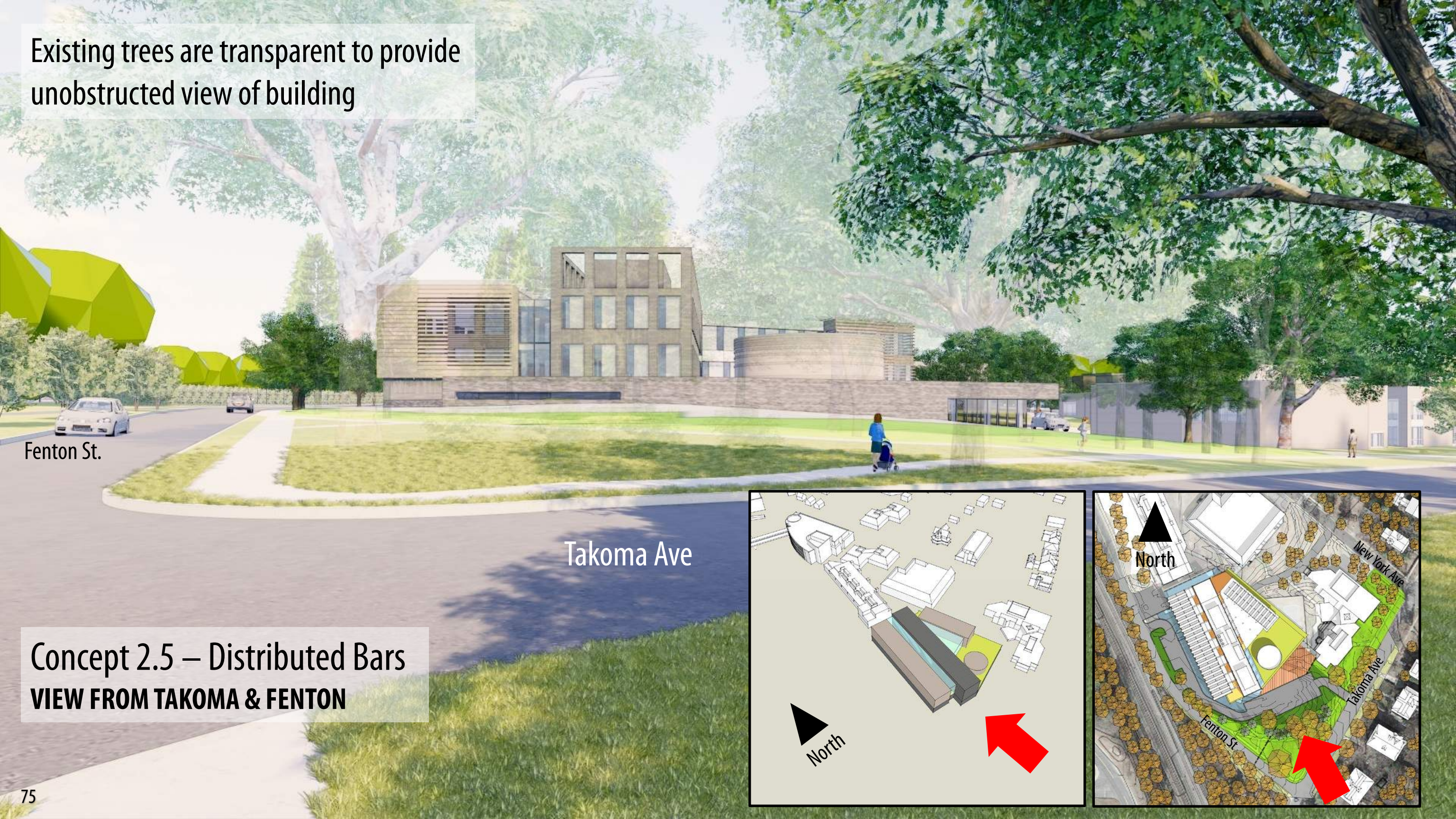
Fenton St.

Takoma Ave

Concept 2 - Rotated Pavilion
VIEW FROM TAKOMA & FENTON



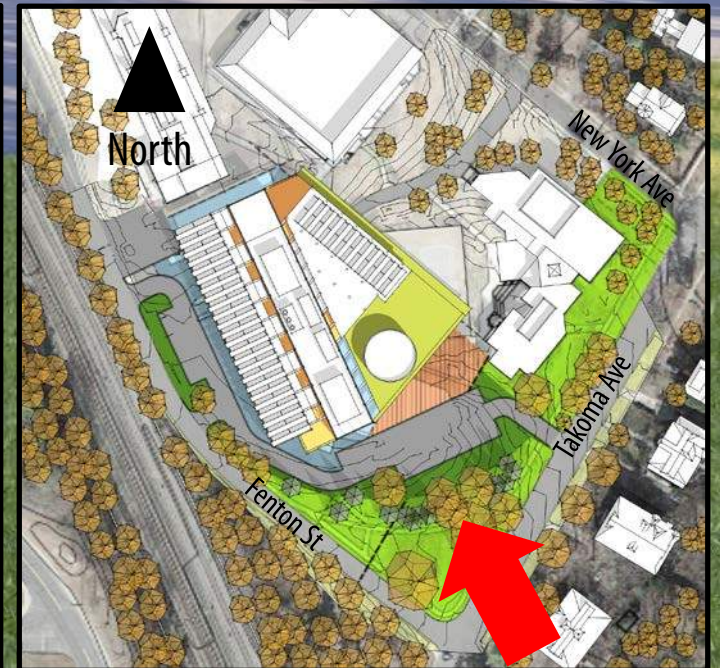
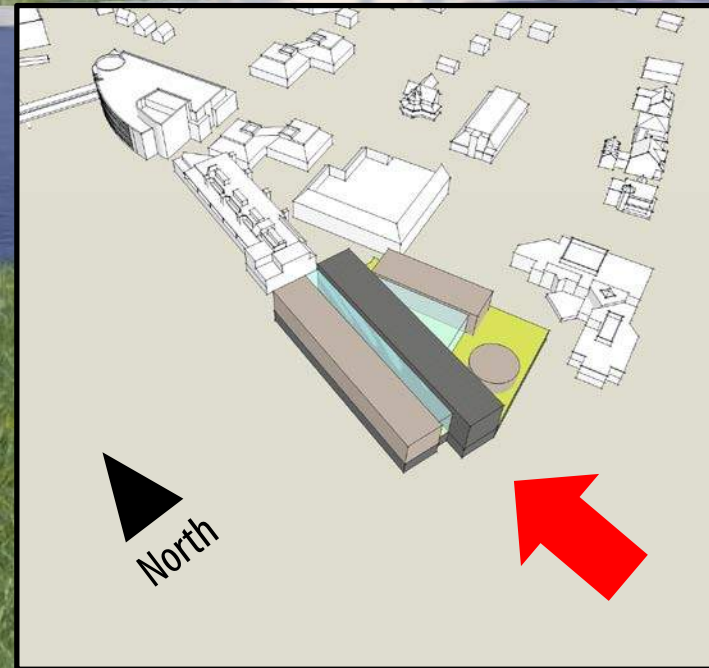
Existing trees are transparent to provide unobstructed view of building



Fenton St.

Takoma Ave

Concept 2.5 – Distributed Bars
VIEW FROM TAKOMA & FENTON



Form Comparisons – View from Takoma & Fenton

Existing trees are transparent to provide unobstructed view of building

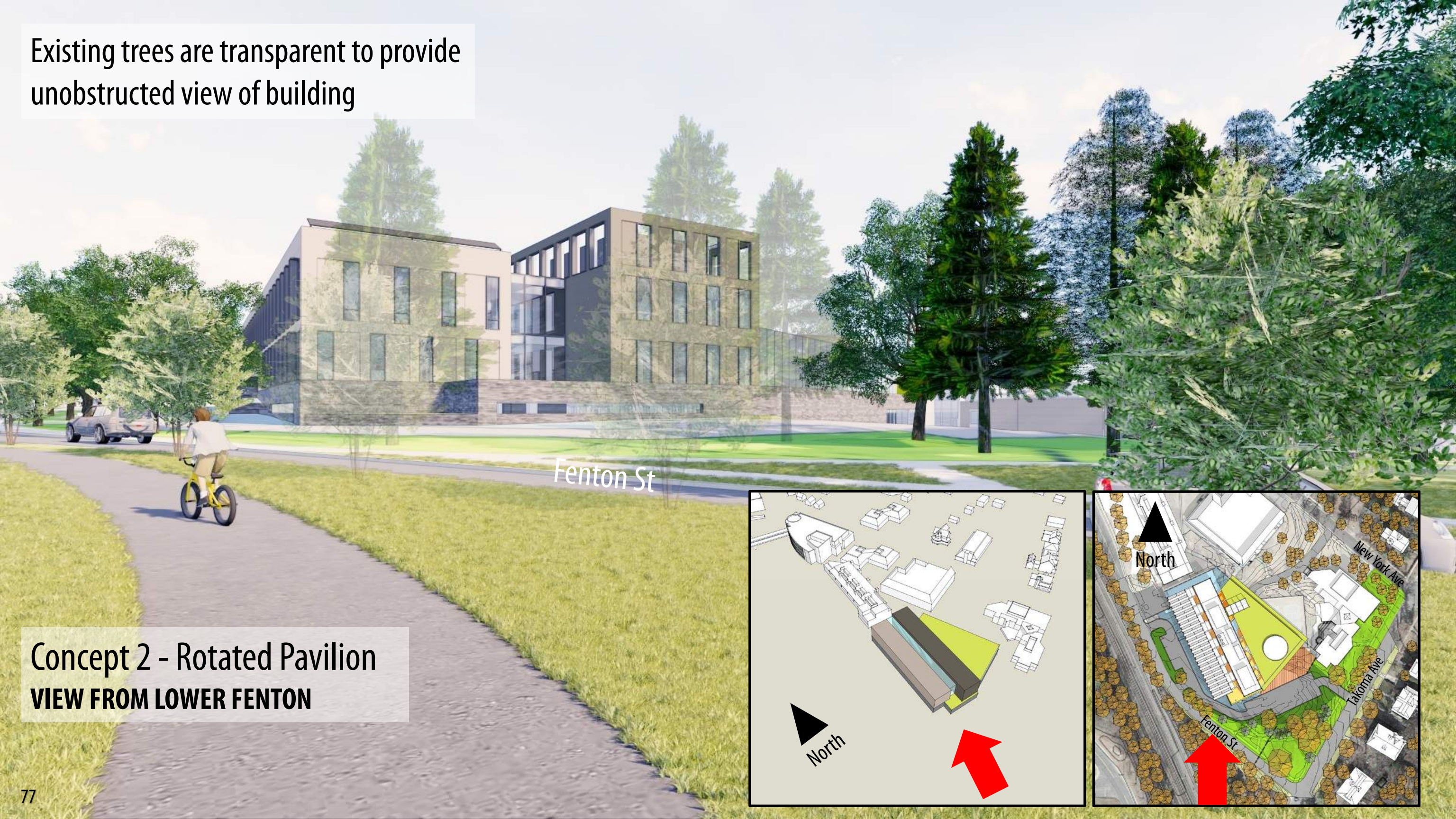
Concept 2 – Rotated Pavilion



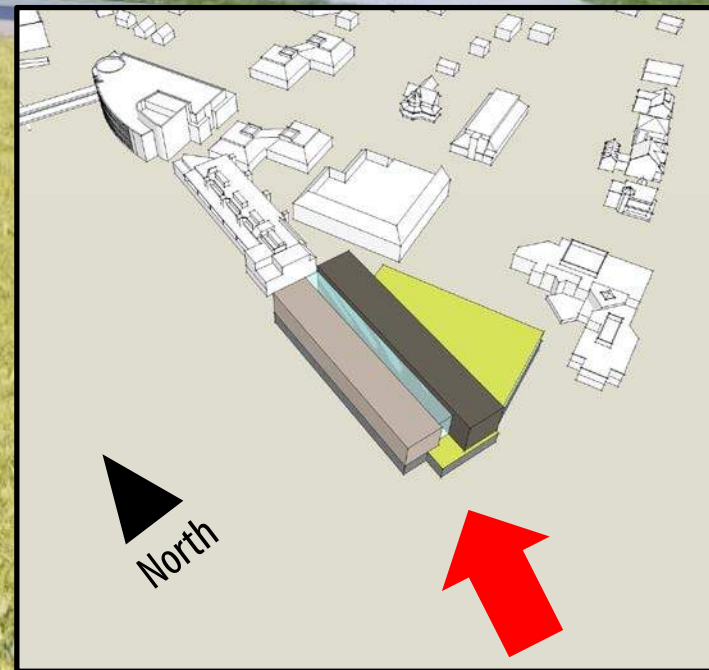
Concept 2.5 – Distributed Bars



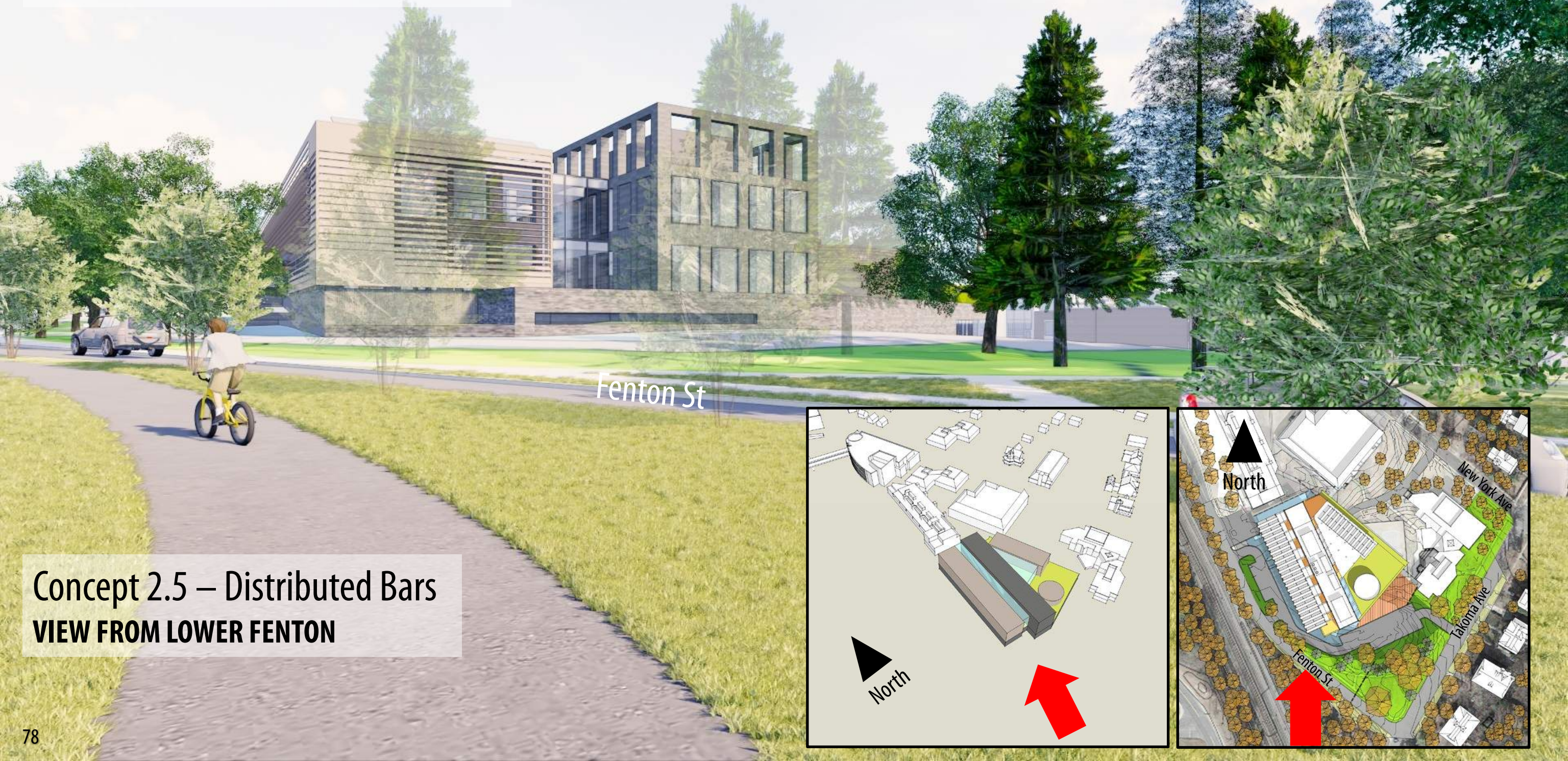
Existing trees are transparent to provide unobstructed view of building



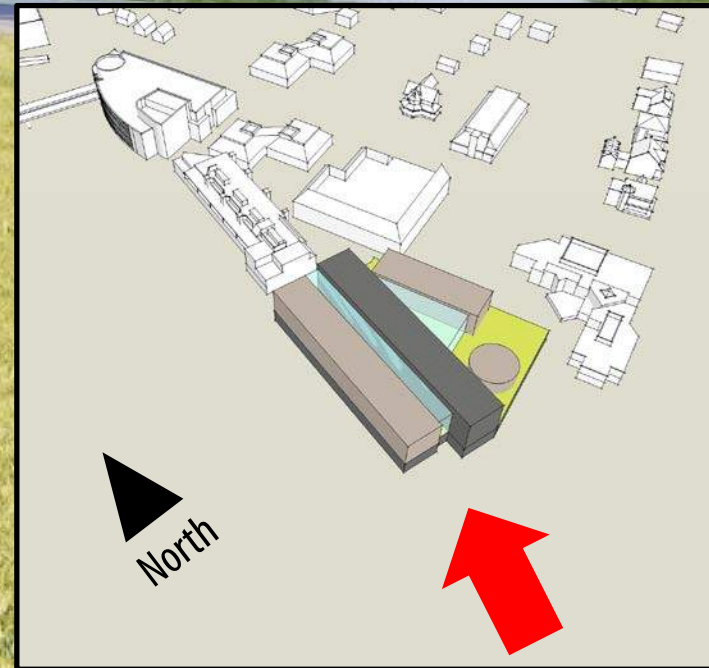
Concept 2 - Rotated Pavilion
VIEW FROM LOWER FENTON



Existing trees are transparent to provide unobstructed view of building



Concept 2.5 – Distributed Bars
VIEW FROM LOWER FENTON



Form Comparisons – View from lower Fenton

Existing trees are transparent to provide unobstructed view of building

Concept 2 – Rotated Pavilion



Concept 2.5 – Distributed Bars

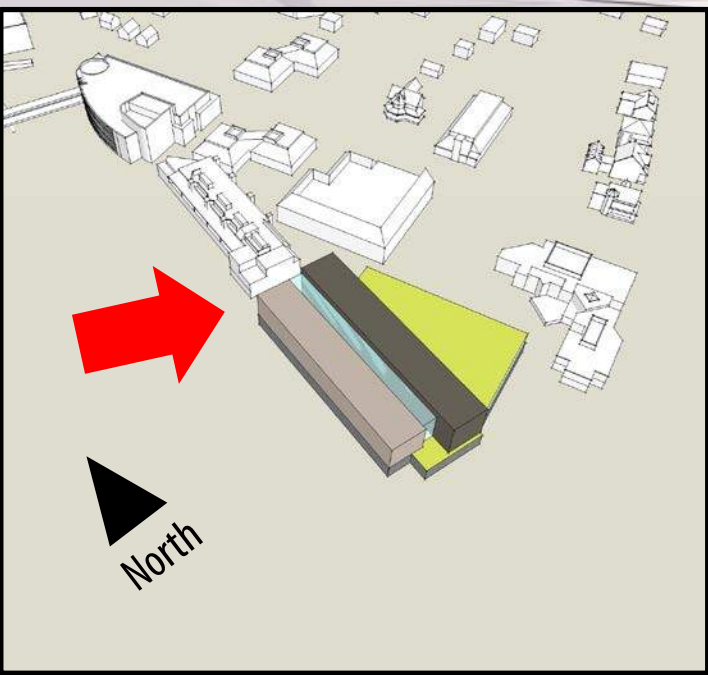


Existing trees are transparent to provide unobstructed view of building

Science North

Fenton St

Concept 2 - Rotated Pavilion
VIEW FROM UPPER FENTON

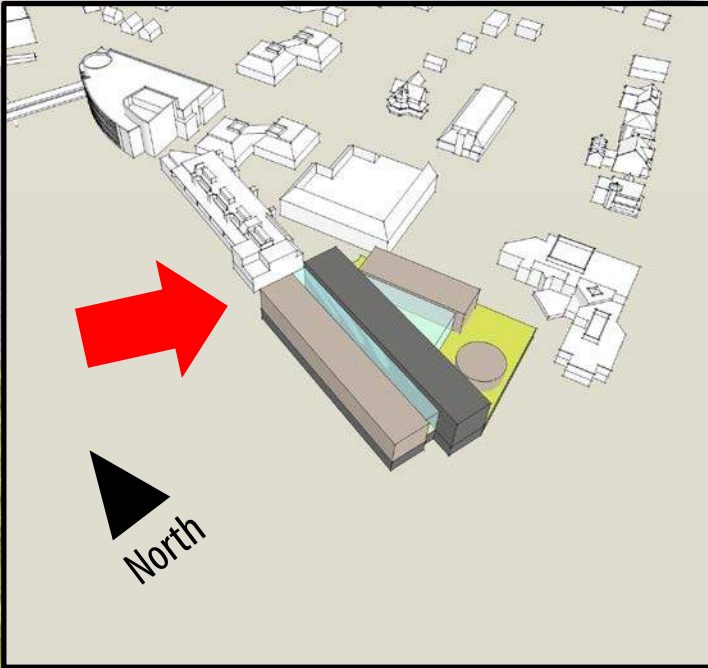


Existing trees are transparent to provide unobstructed view of building

Science North

Fenton St

Concept 2.5 – Distributed Bars
VIEW FROM UPPER FENTON



Form Comparisons – View from upper Fenton

Existing Trees are transparent to provide unobstructed view of building

Concept 2 – Rotated Pavilion



Concept 2.5 – Distributed Bars

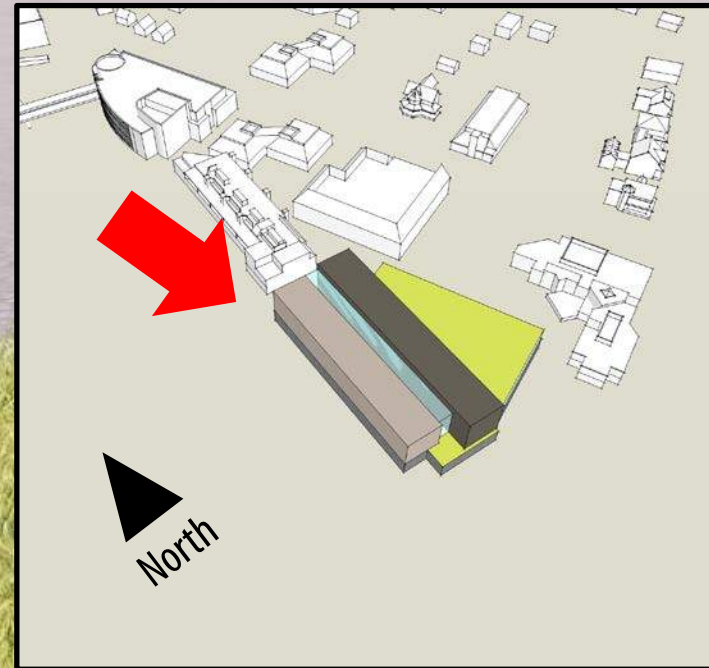


Existing trees are transparent to provide unobstructed view of building

Science North

Fenton St

Concept 2 - Rotated Pavilion
VIEW FROM UPPER FENTON

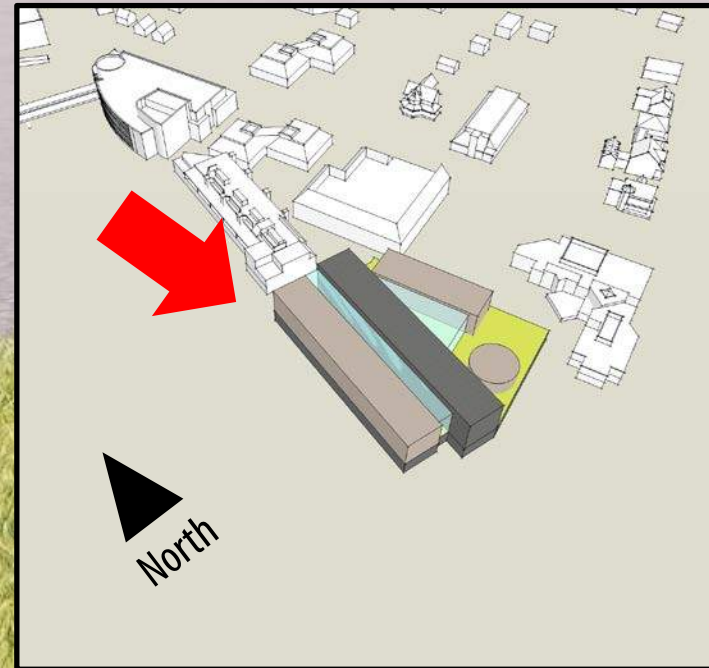


Existing trees are transparent to provide unobstructed view of building

Science North

Fenton St

Concept 2.5 – Distributed Bars
VIEW FROM UPPER FENTON



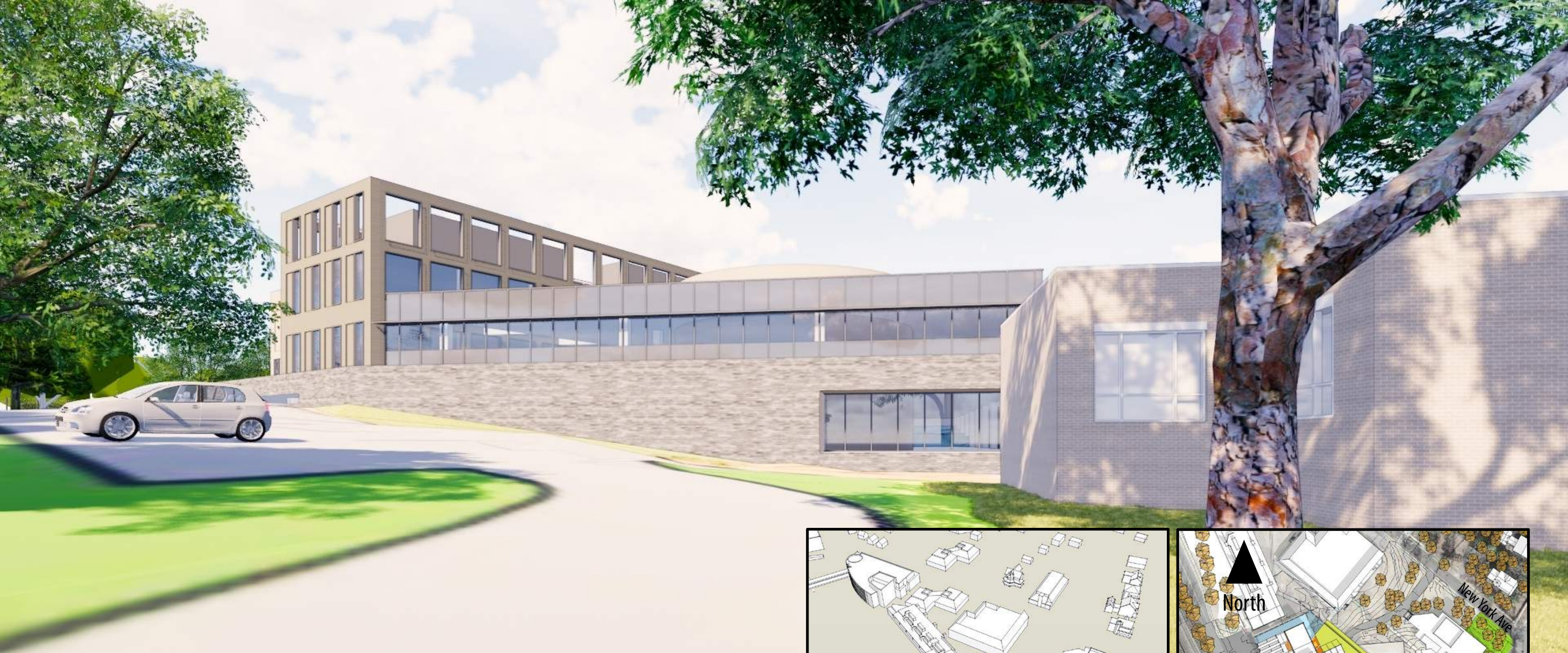
Form Comparisons – View from upper Fenton

Concept 2 – Rotated Pavilion

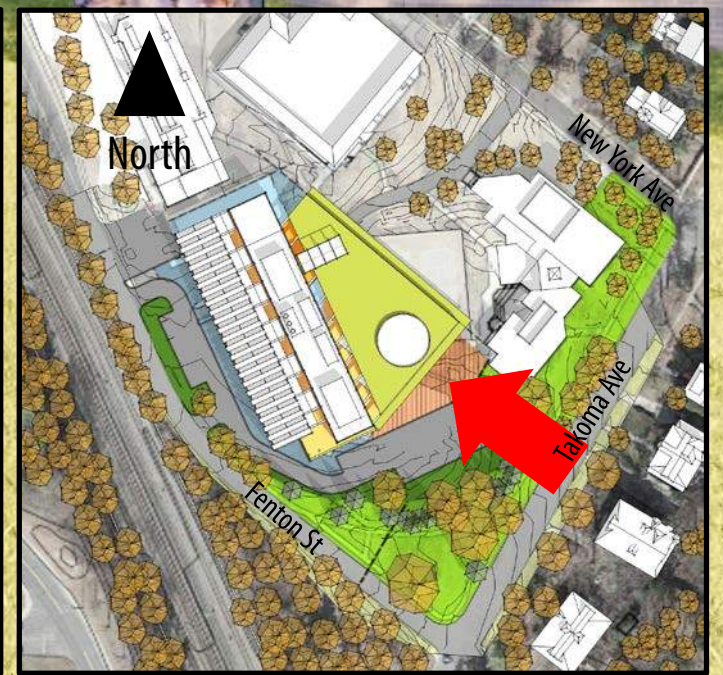
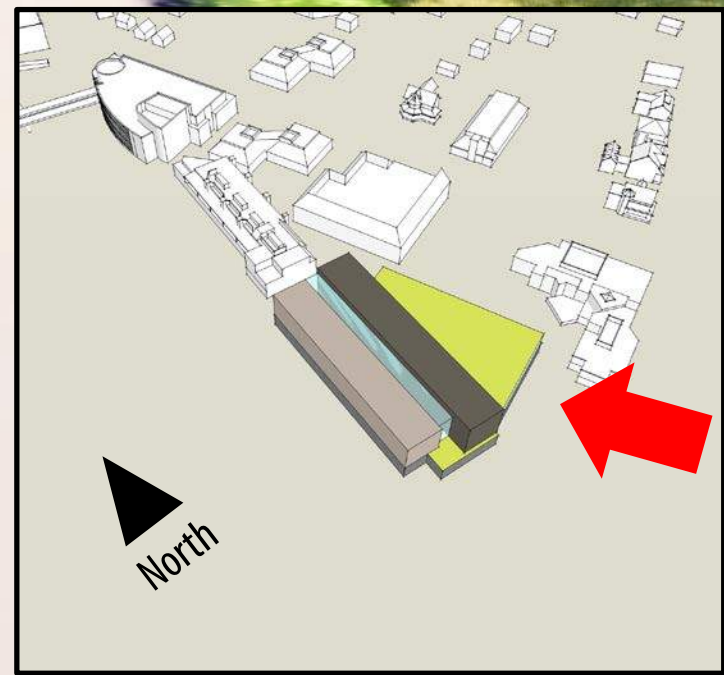


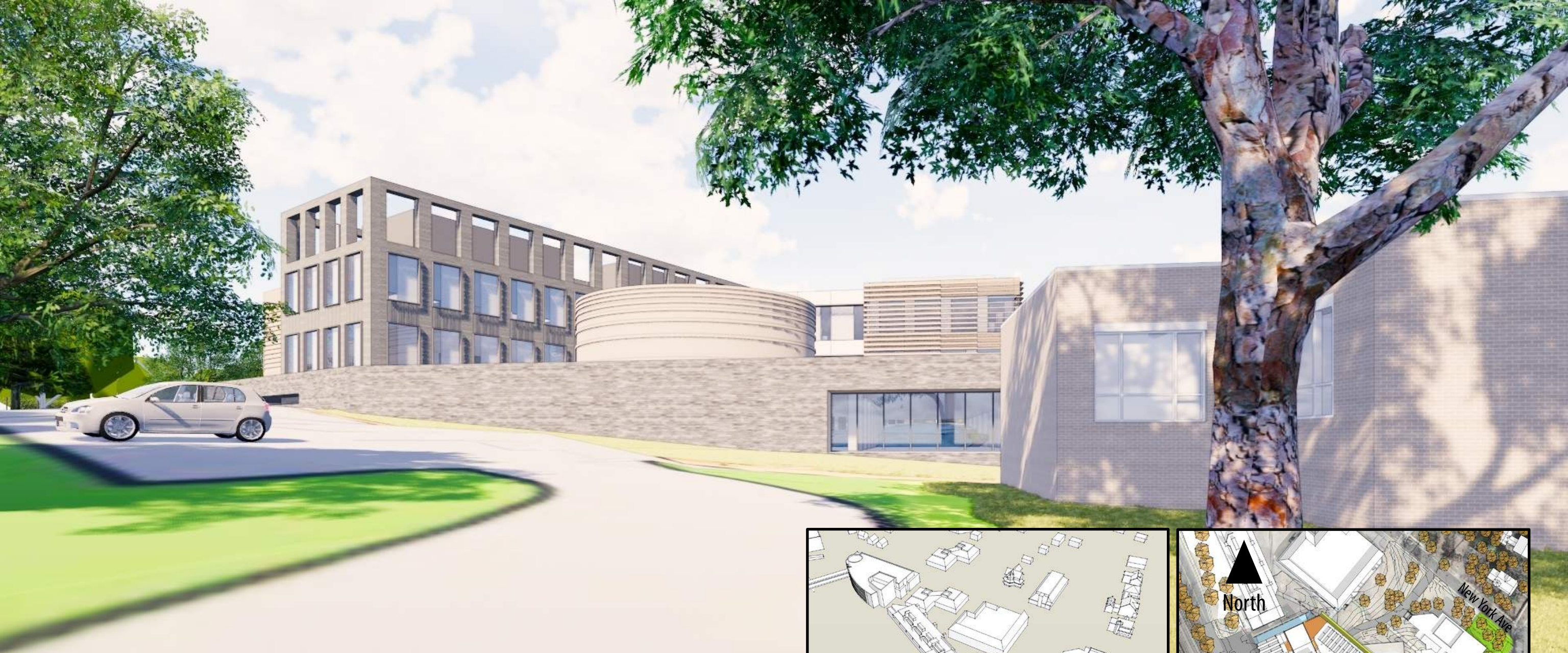
Concept 2.5 – Distributed Bars



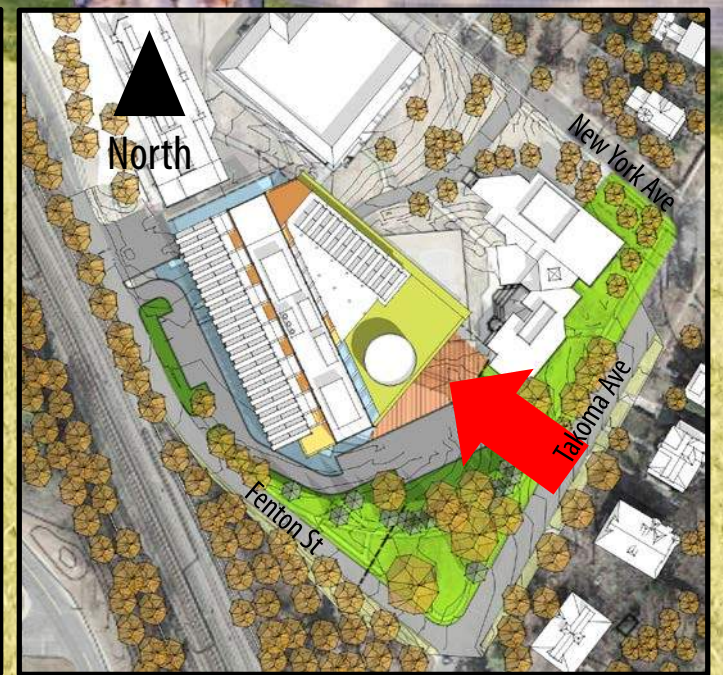
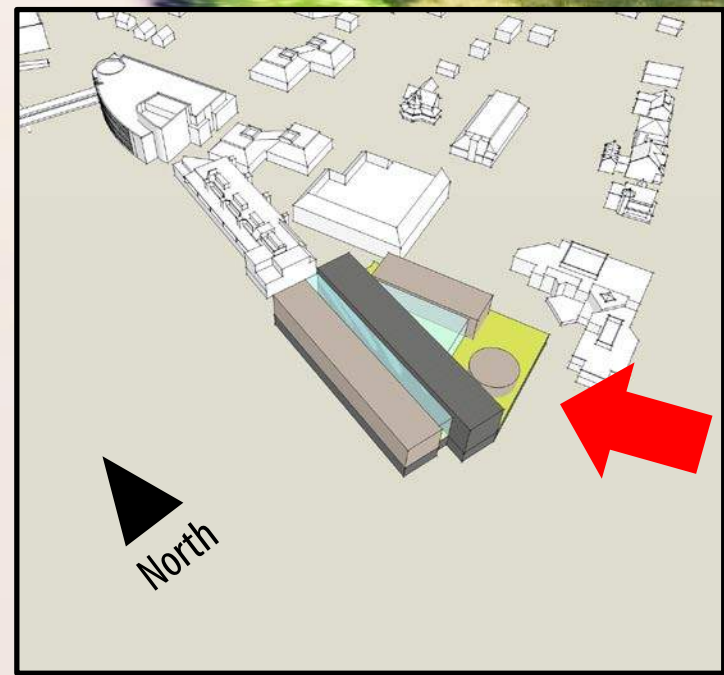


**Concept 2 - Rotated Pavilion
VIEW FROM TAKOMA ENTRY**





Concept 2.5 – Distributed Bars
VIEW FROM TAKOMA ENTRY



Form Comparisons – View from Takoma Entry

Existing Trees are transparent to provide unobstructed view of building

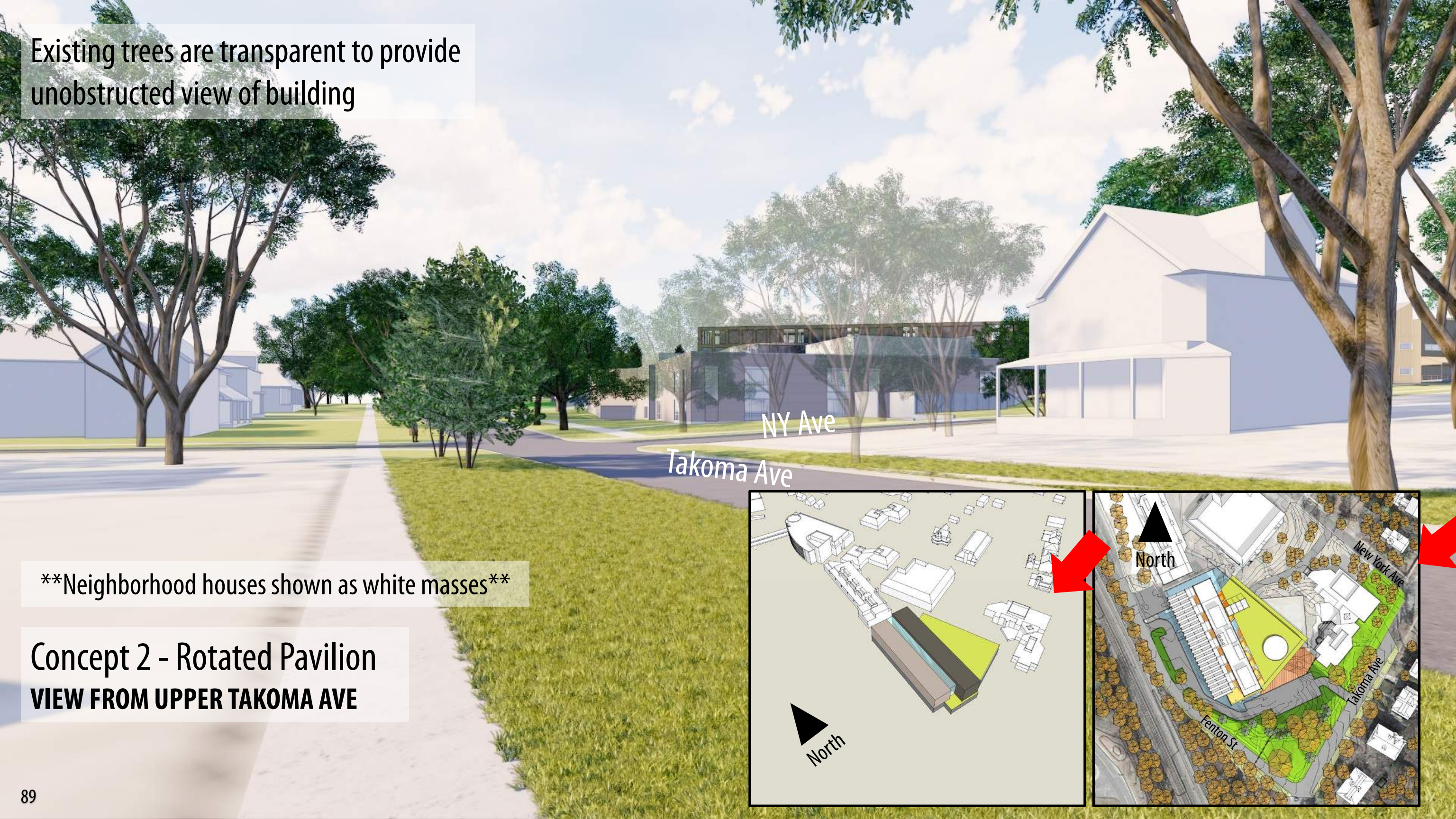
Concept 2 – Rotated Pavilion



Concept 2.5 – Distributed Bars



Existing trees are transparent to provide unobstructed view of building

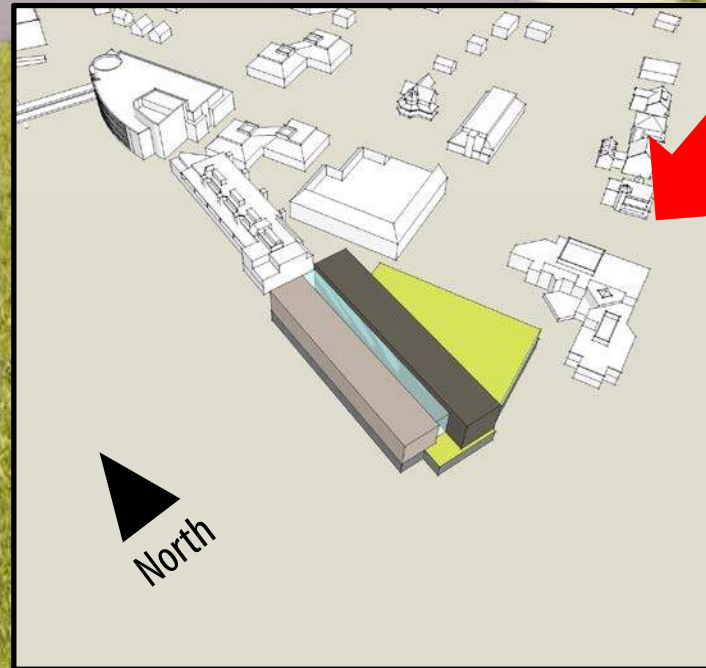


NY Ave

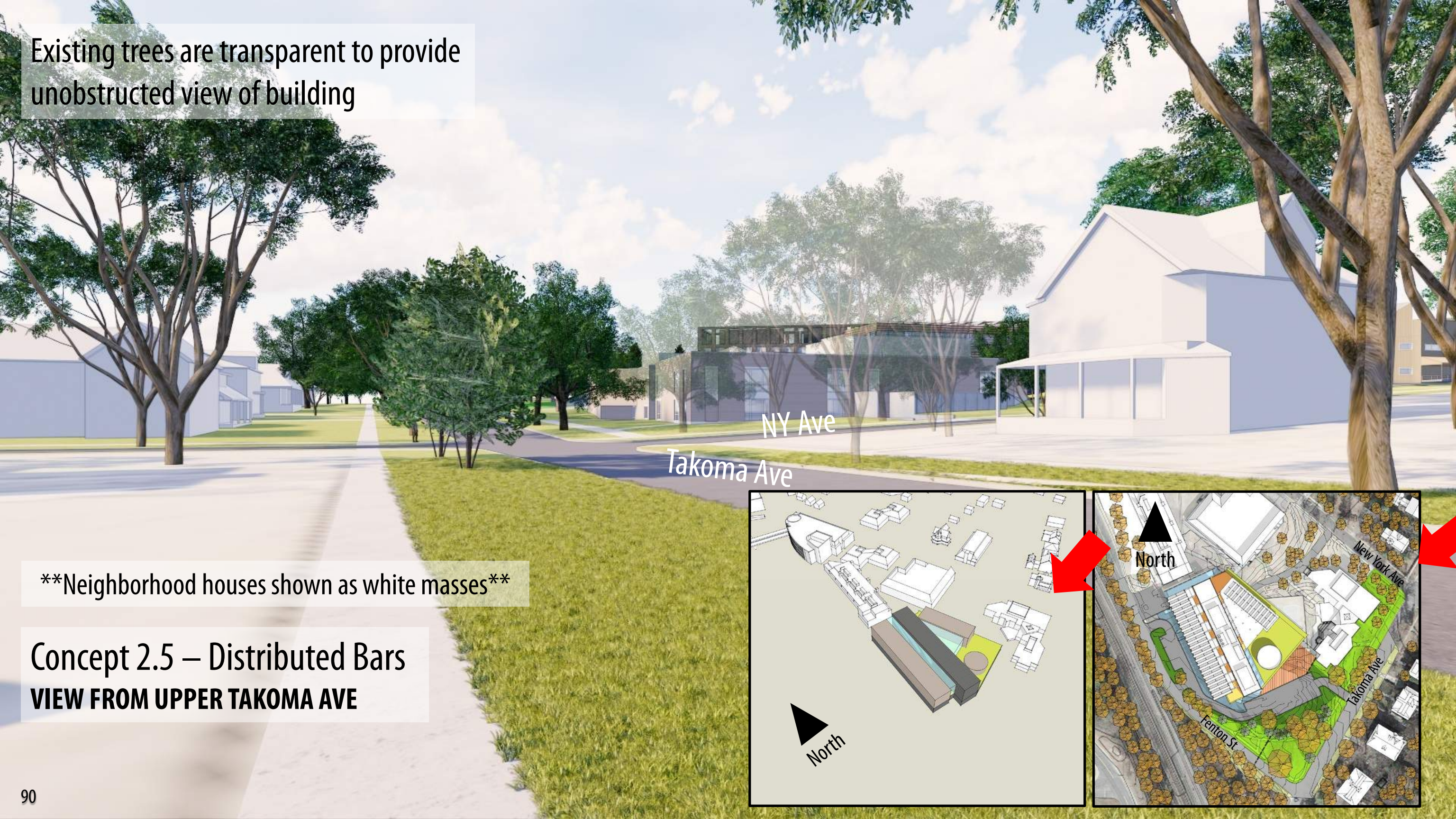
Takoma Ave

Neighborhood houses shown as white masses

Concept 2 - Rotated Pavilion
VIEW FROM UPPER TAKOMA AVE



Existing trees are transparent to provide unobstructed view of building

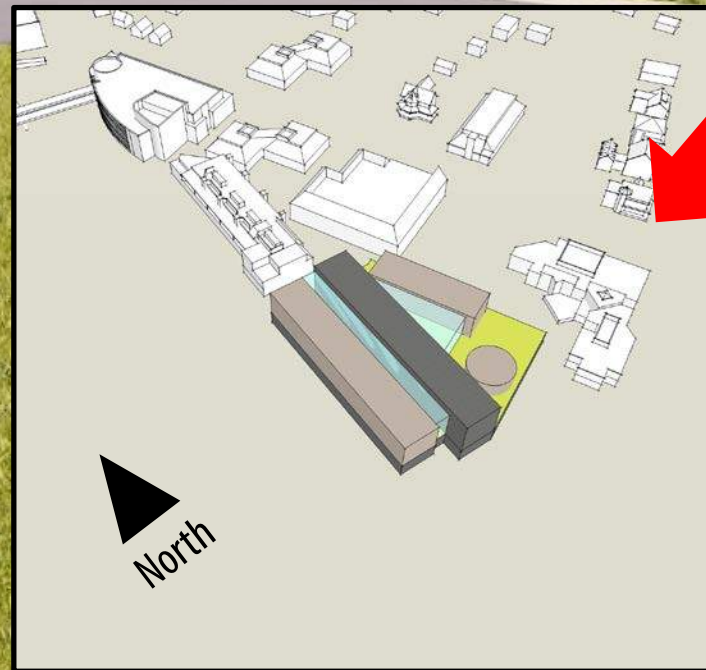


NY Ave

Takoma Ave

Neighborhood houses shown as white masses

Concept 2.5 – Distributed Bars
VIEW FROM UPPER TAKOMA AVE



Form Comparisons – View from upper Takoma

Existing Trees are transparent to provide unobstructed view of building

Concept 2 – Rotated Pavilion

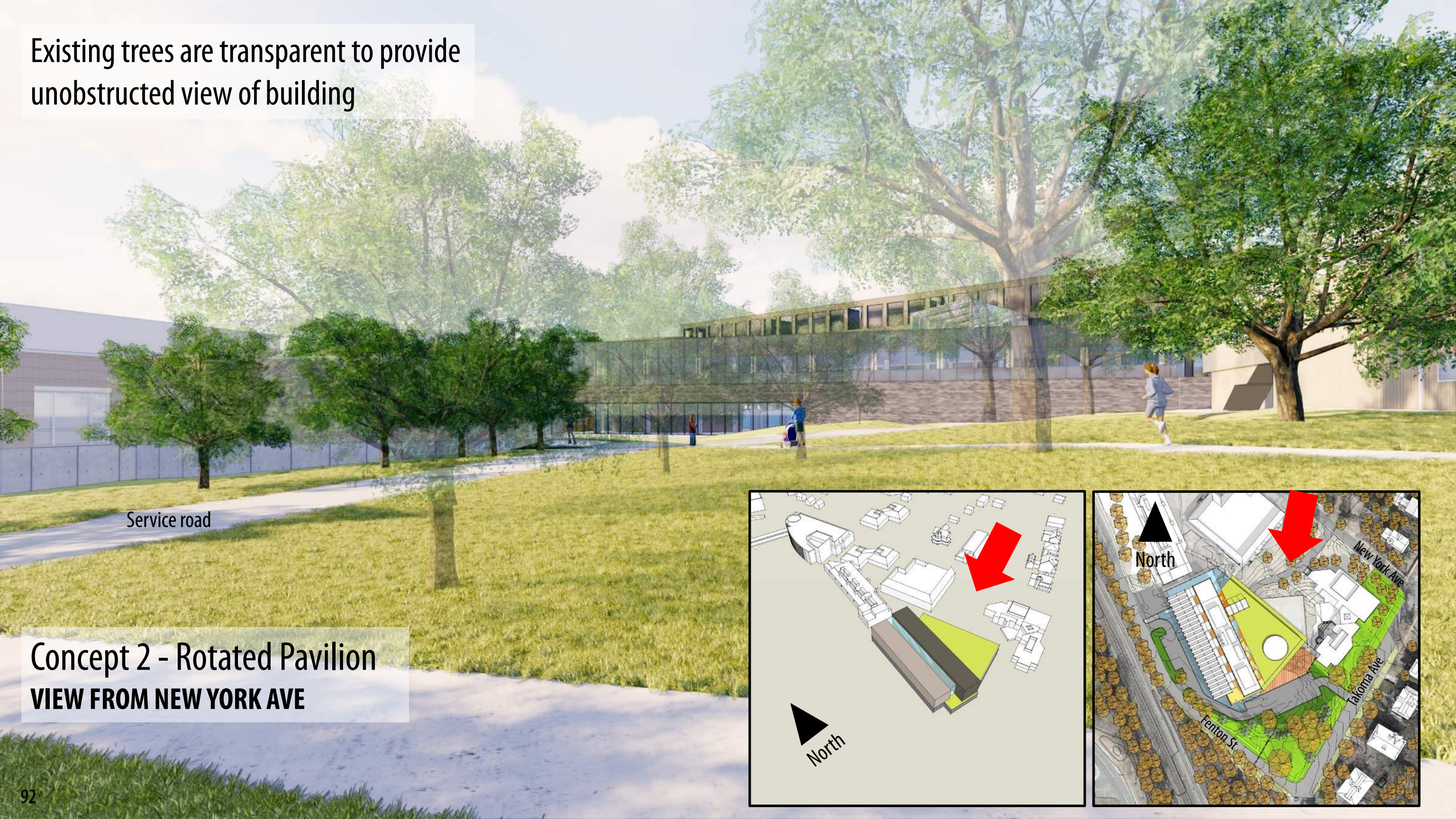


Concept 2.5 – Distributed Bars



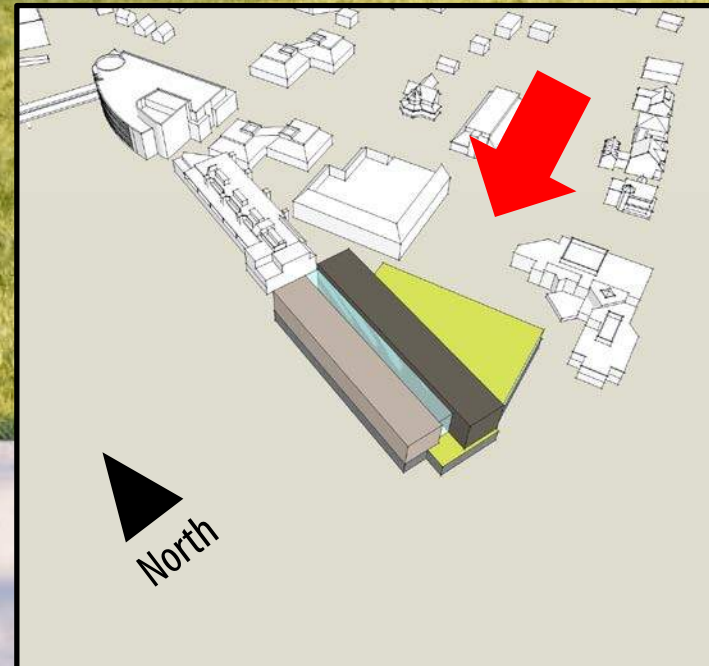
Neighborhood houses shown as white masses

Existing trees are transparent to provide unobstructed view of building

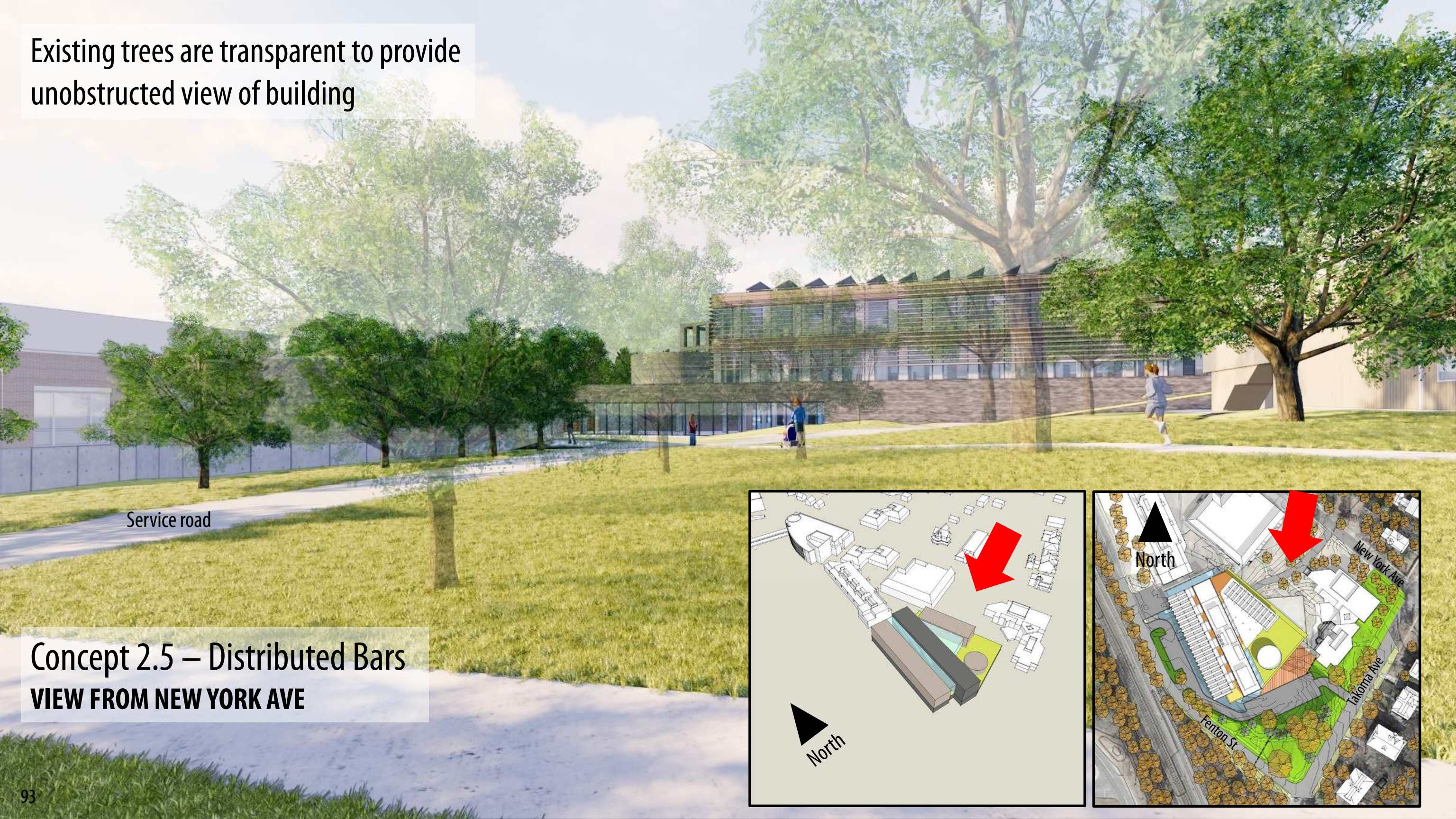


Service road

Concept 2 - Rotated Pavilion
VIEW FROM NEW YORK AVE

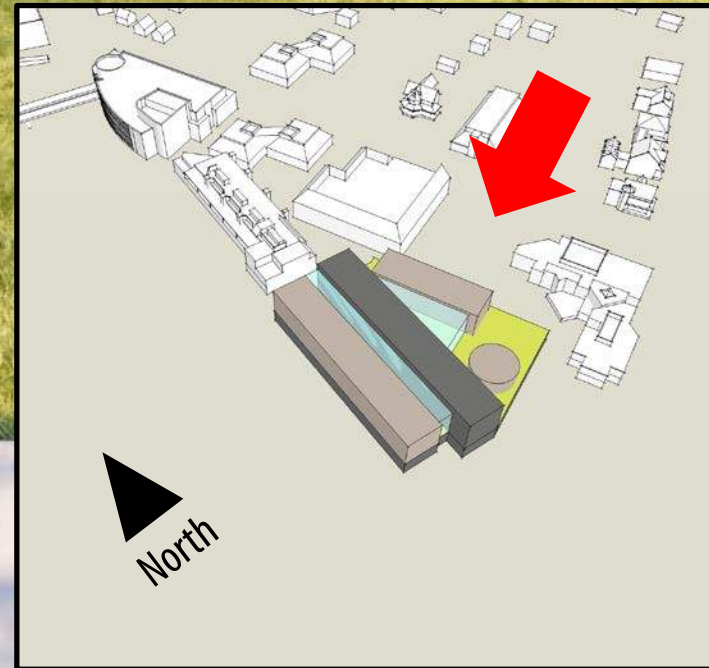


Existing trees are transparent to provide unobstructed view of building



Service road

Concept 2.5 – Distributed Bars
VIEW FROM NEW YORK AVE



Form Comparisons – View from New York Ave

Existing Trees are transparent to provide unobstructed view of building

Concept 2 – Rotated Pavilion



Concept 2.5 – Distributed Bars

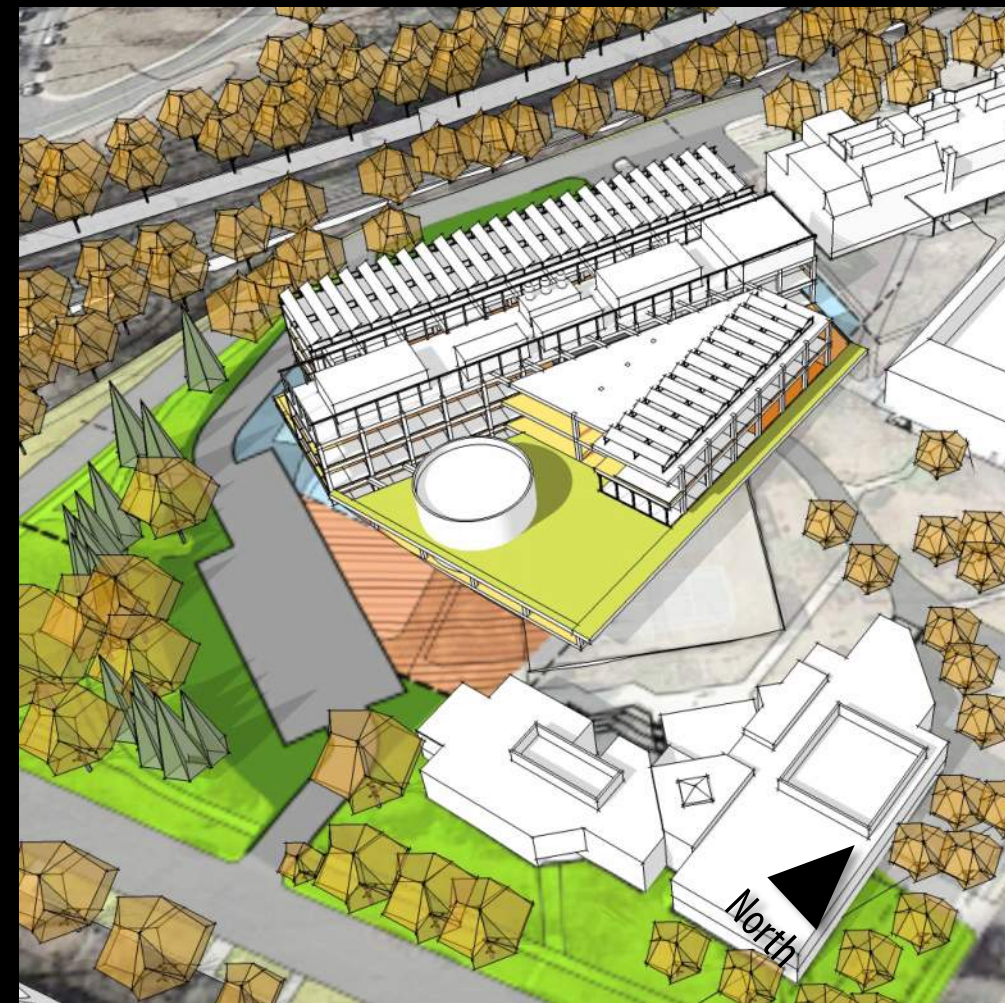


Work Groups

Concept 2 – Rotated Pavilion



Concept 2.5 – Distributed Bars



Work Groups

Group 1 – Art Gallery

Group 2 – Lobby

Group 3 – Theater I

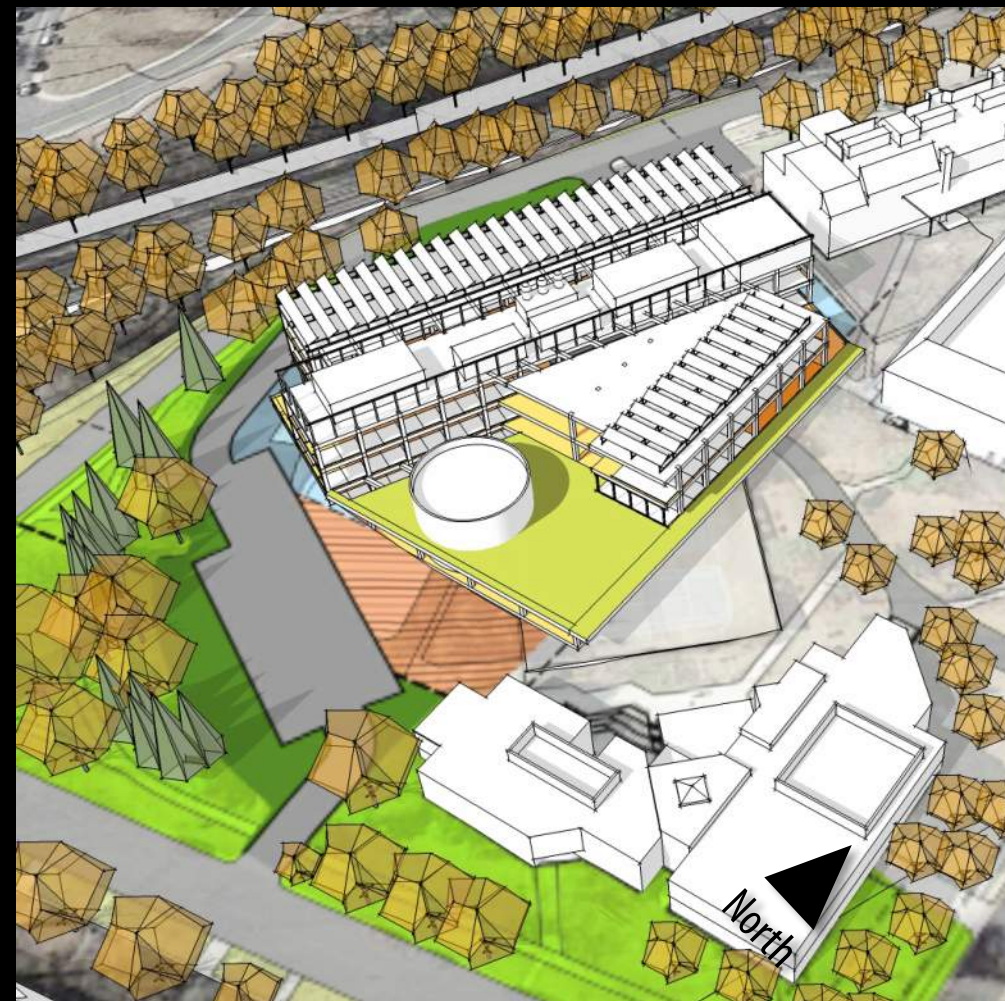
Group 4 – Theater I

Work Groups Report Out

Concept 2 – Rotated Pavilion



Concept 2.5 – Distributed Bars



Next Charrette

Cultural Arts Center
October 16, 7PM -9:30PM

MC MONTGOMERY
COLLEGE
montgomerycollege.edu/tpss-design