

Design Review Revisions

Child Street Open Space



Presented by:

DW NP Property, LLC
c/o DivcoWest Real Estate Investments
200 State Street, 12th Floor
Boston, MA 02109

Prepared by:

Beals and Thomas, Inc.
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Goulston & Storrs PC



December 11, 2020

Ms. Catherine Preston Connolly, Chair
Cambridge Planning Board
344 Broadway
Cambridge, MA 02139

Via: Electronic Mail and Hand Delivery

Reference: Child Street Open Space – Design Revisions and Temporary Power Station
PB #179
Cambridge Crossing
Cambridge, Massachusetts

Dear Chair Connolly and Members of the Board:

DivcoWest Real Estate Investments and its affiliate DW NP Property, LLC (collectively, “DivcoWest”) respectfully submit this update package for Design Review for Child Street Open Space, which is part of the Cambridge Crossing development. As you are aware, the Child Street Open Space (formerly known as Ellipse Park) was originally approved in connection with the development of Parcel N, which the Planning Board approved in 2012. The Planning Board approved revisions to the northeasterly corner of Child Street Open Space as part of its Design Review approval of the building currently being constructed on Parcel H on November 28, 2018.

Proposed Revitalization

Currently, Child Street Open Space is comprised of three separated green spaces surrounded by hardscaped pedestrian plaza. As part of its revitalization program and to upgrade site amenities, DivcoWest desires to alter Child Street Open Space by connecting the two southerly green spaces to create an enclosed dog park for use by the public. The revitalization will also include the relocation of bicycle racks and picnic tables within the revised hardscaped pedestrian plazas.

Temporary Condition

DivcoWest desires to undertake this revitalization project in connection with the development of Parcel U. The majority of the revitalization and construction of the dog park, the installation of picnic tables and the relocation of the existing bicycle racks will occur immediately. In order to be able to carry out the construction of Parcel U, and subsequently to construct Parcel LM, DivcoWest needs to utilize a small portion of the southwesterly area of Child Street Open Space for a temporary electric substation, which is depicted on the enclosed plans. The temporary substation is required because of the particular type of existing electrical service in this area of Cambridge, and because it must be located within a certain distance of the parcel under construction. (See plan entitled “Temporary Electric Substation Location”).



This temporary condition would last from the time of the commencement of construction on Parcel U until the activation of permanent power on either Parcel U or Parcel LM, whichever is later.

As indicated on the enclosed plans, the temporary power station will be surrounded by public art (mounted on chain link fence) as screening to buffer the pedestrian realm from any visual impact that would be caused by locating the temporary power station within the Child Street Open Space. Temporary construction power for Parcel U would be provided through a conduit running from Child Street Open Space under Jacobs Street, CX Common and Morgan Avenue to Parcel U along the route depicted on the plan entitled "Temporary Electric Substation Route at the Common."

Conduit to Parcel U

DivcoWest recommends the proposed route across the Common to minimize disruption to the residents of CX and the public. The streets and bicycle lanes at the intersection of Jacobs Street and Morgan Avenue are full of underground utilities and routing the temporary conduit through this intersection would be difficult and time consuming. By contrast, the path through the Common could be constructed quickly, and without harming any trees. The enclosed plan shows the proposed location of the temporary conduit, avoiding all trees in the Common.

New Trees in Child Street Open Space

As indicated on the enclosed plans, this revitalization work will replace six (6) dead trees with new trees. Additionally, the plan will include the removal of three (3) additional trees to allow for the construction of the new dog parks and amenities. These nine (9) trees will be replaced by twenty-two (22) trees. The replacement trees will have diameters at breast height that are greater than those of the trees removed. The number of trees having a 4" DBH will double (from 6 to 12) and a 6" DBH more than tripling (from 3 to 10) upon final completion, which will increase the overall DBH within the Child Street Open Space by 70.5".

We note that the dead trees that exist today in the Child Street Open Space were planted in small tree pits with impermeable paving surrounding them. The proposed replacement trees will be planted in larger plant beds with additional structural soil under newly paved areas, to provide for a greater tree vitality. In addition, DivcoWest will investigate soil conditions after demolition of existing paving to determine if there are any other factors adversely affecting the health of these existing trees and anything that can be done to improve the vitality of the replacements. We also note that the larger replacement trees and their larger root balls have been located to avoid conflicts between the larger root balls and the existing underground cisterns.

Permanent Condition

Following permanent power activation, DivcoWest will complete the installation of the dog park for small dogs as depicted on the plan entitled "Child St Open Space – Proposed Final Condition".



As depicted on the enclosed plans and the pedestrian circulation diagrams, the revitalization project will not impede pedestrian and/or bicycle traffic flow through the Child Street Open Space from the Common. In fact, the design retains the open nature of the north/south movement across the Child Street Open Space. Additionally, as requested by City staff, DivcoWest the proposed design includes two (2) additional trees along the easterly side of the Child Street Open Space as requested by City Staff.

As more specifically described on the enclosed plans and filing materials, DivcoWest believes that this important revitalization project will enhance the pedestrian experience and the overall use and performance of the public realm within Cambridge Crossing.

Conclusion

As part of this Application, we have included eight (8) copies, as well as an emailed electronic version, of plans depicting the existing conditions, the revisions approved by the Planning Board as part of the Parcel H Design Review approval process, the proposed interim condition, and the proposed final condition. The enclosed also provides precedent images of the dog parks as well as perspectives of the interim and final conditions.

We look forward to the opportunity to meet with the Planning Board to discuss this Application.

Thank you for your consideration.

Sincerely,
DIVCOWEST REAL ESTATE INVESTMENTS

Mark Johnson

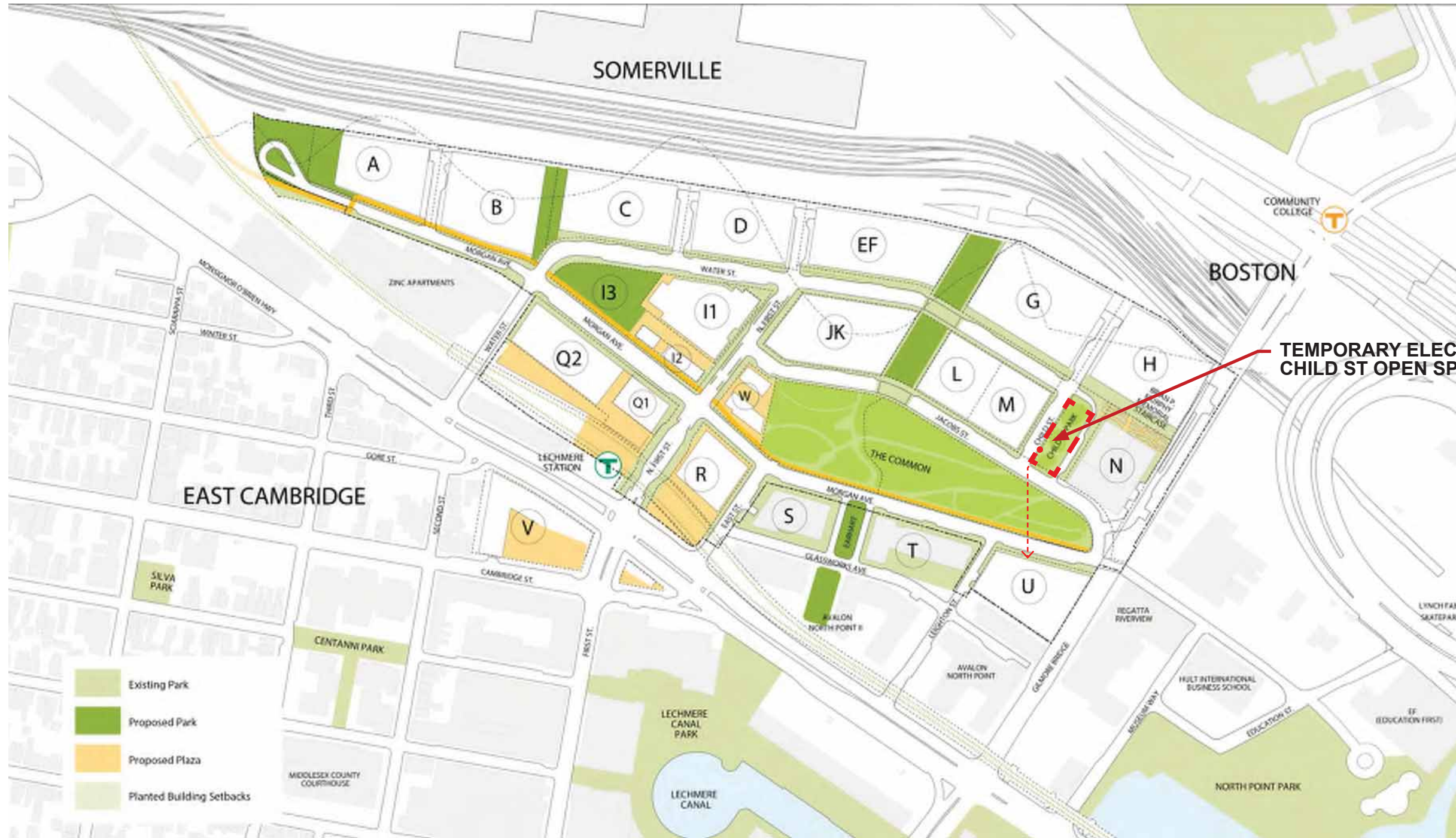
Mark Johnson, FAIA
Director of Development

Attachment

Cambridge Crossing

Temporary Electric Substation

Child St Open Space - Dog Park








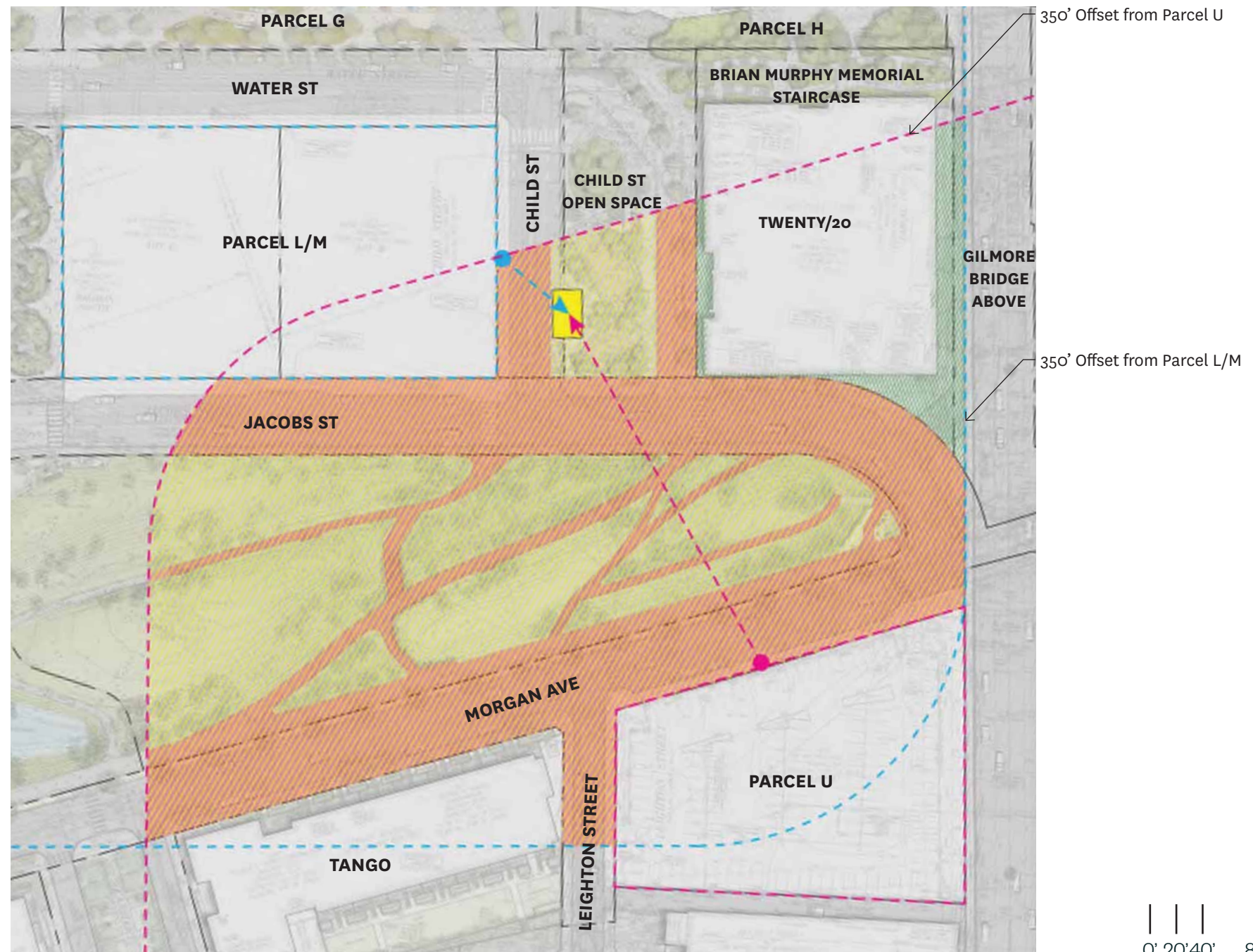
TEMPORARY ELECTRIC SUBSTATION & CHILD ST OPEN SPACE - DOG PARK



Criteria for Selected Location:

- DW Property within 350' duct run from Parcel U and Parcel L/M.
- Avoid street/pedestrian path.
- Enough space to fit 22' X 36'
- Minimal impact to Public Realm and Residents.
- Minimal tree impact.
- Cannot be located on top of a below grade structure or utility.
- Flat Station pads required.
- Cannot be placed under the Bridge per Eversource standard.

-  DW Property within 350' from Parcel U and Parcel L/M
-  Property not owned by DW
-  Streets/pedestrian path that cannot accommodate Temporary Electric Substation
-  Connection to Parcel L/M*
-  Connection to Parcel U*



*Connection shown for illustrative purpose only. See Appendix for the proposed routing.







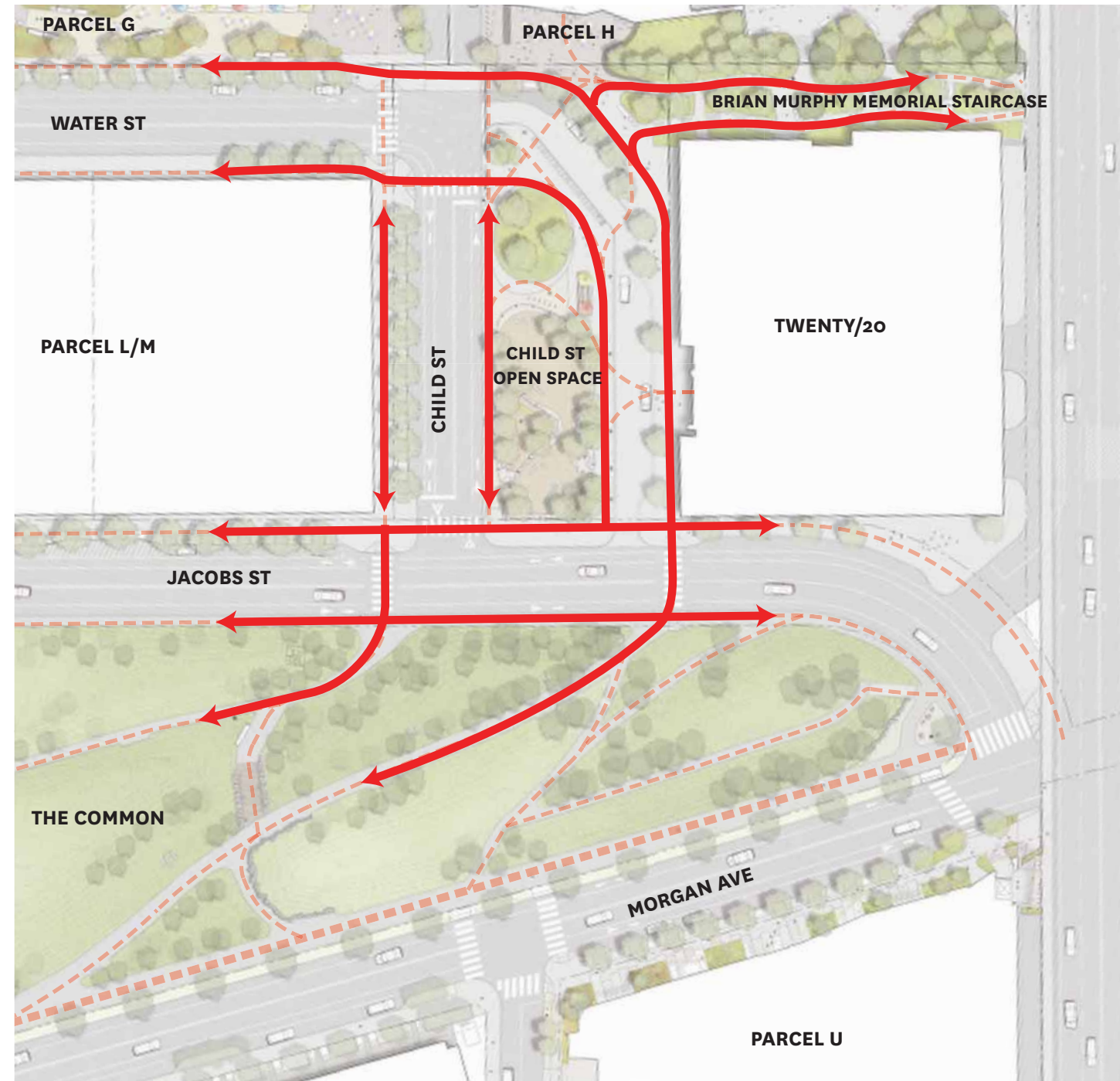
View A from NW Corner



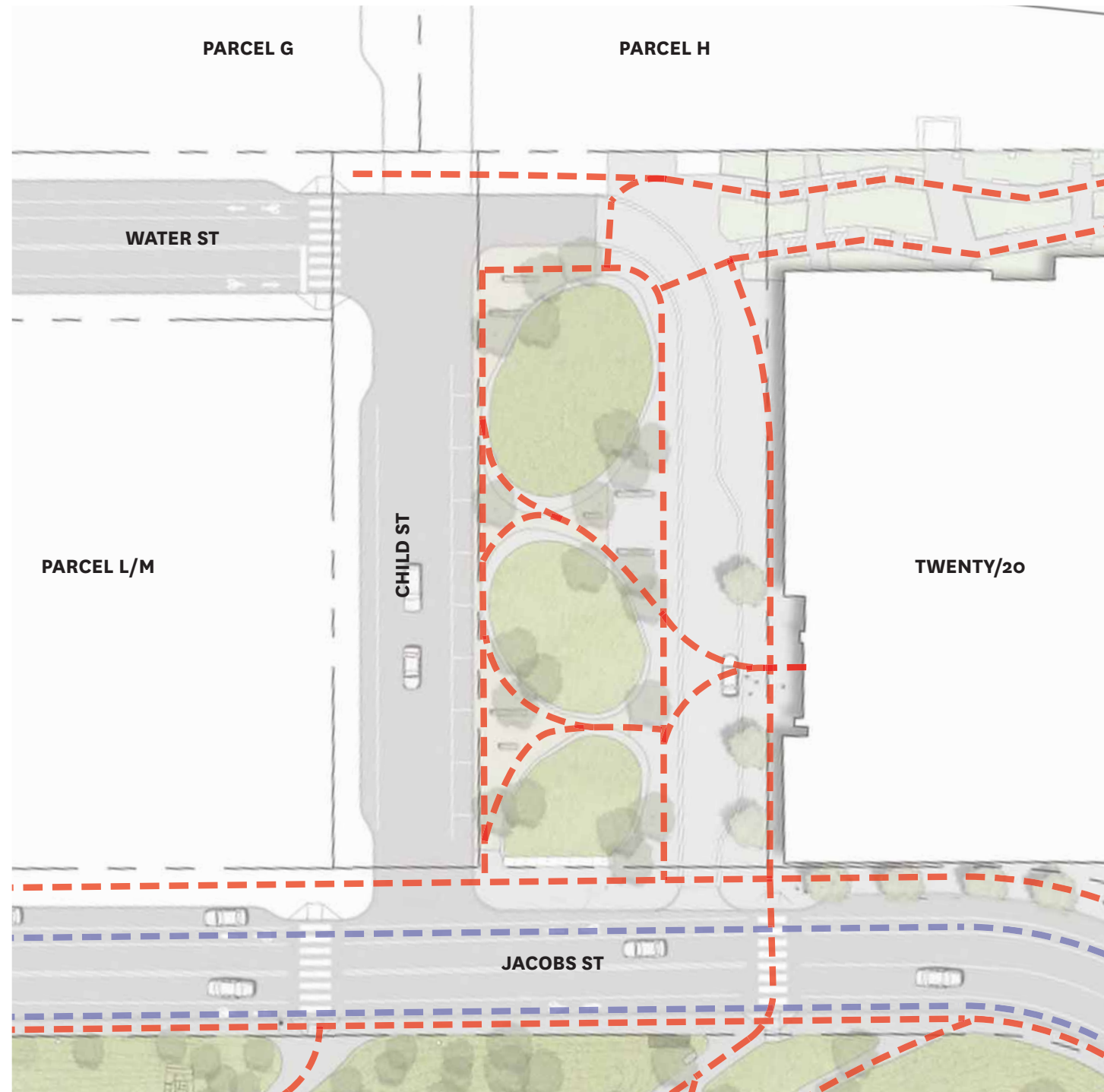
View B from SW Corner



- Child St Open Space will continue to serve as a connector open space connecting people arriving from the Common to turn west towards Water street and east towards Brian Murphy Memorial Staircase.
- Mid-block crossing from Twenty/20 to Child St and Parcel L/M is not encouraged.



CIRCULATION DIAGRAM - CONTEXT



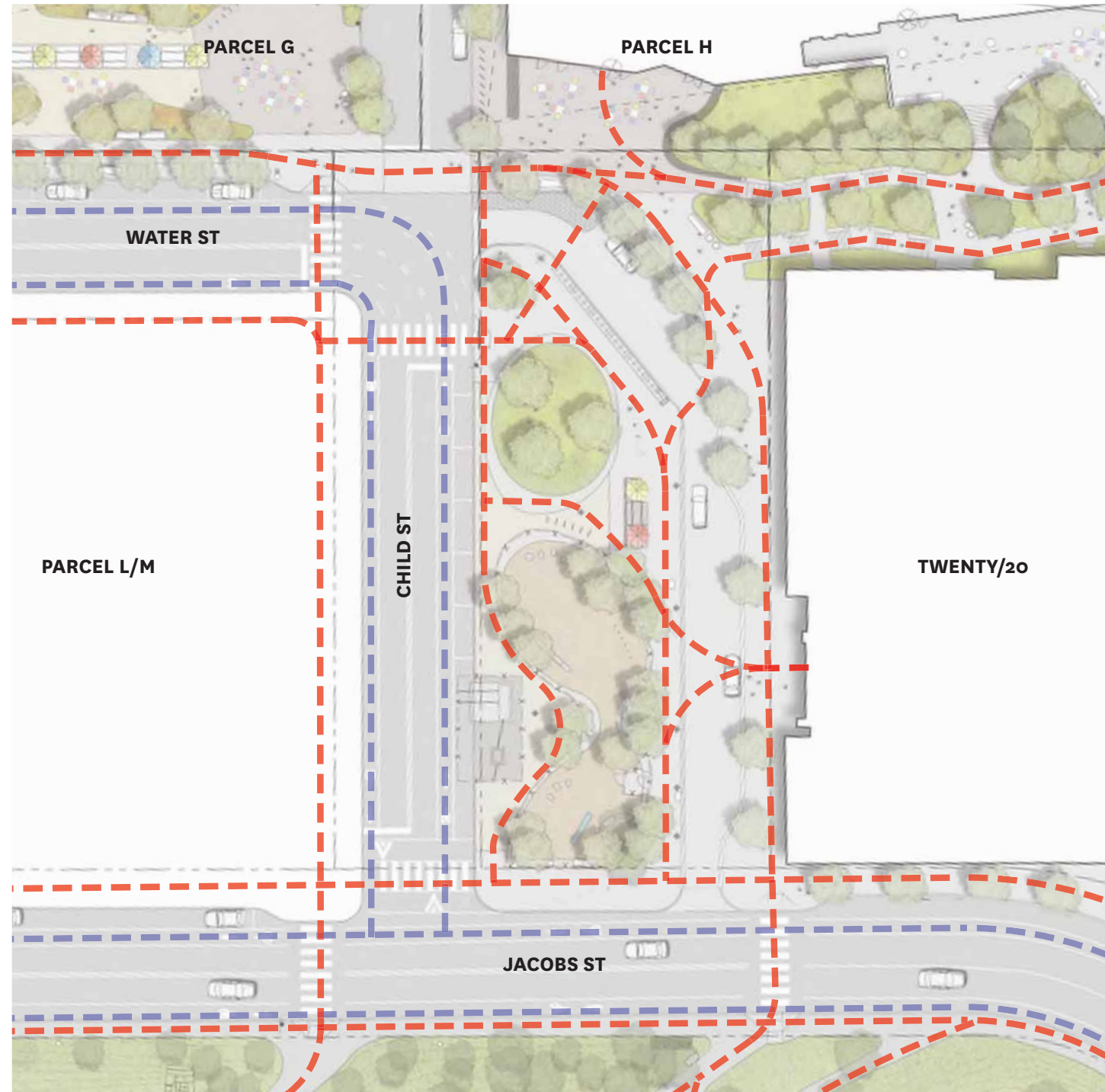
CIRCULATION DIAGRAM - EXISTING CONDITION



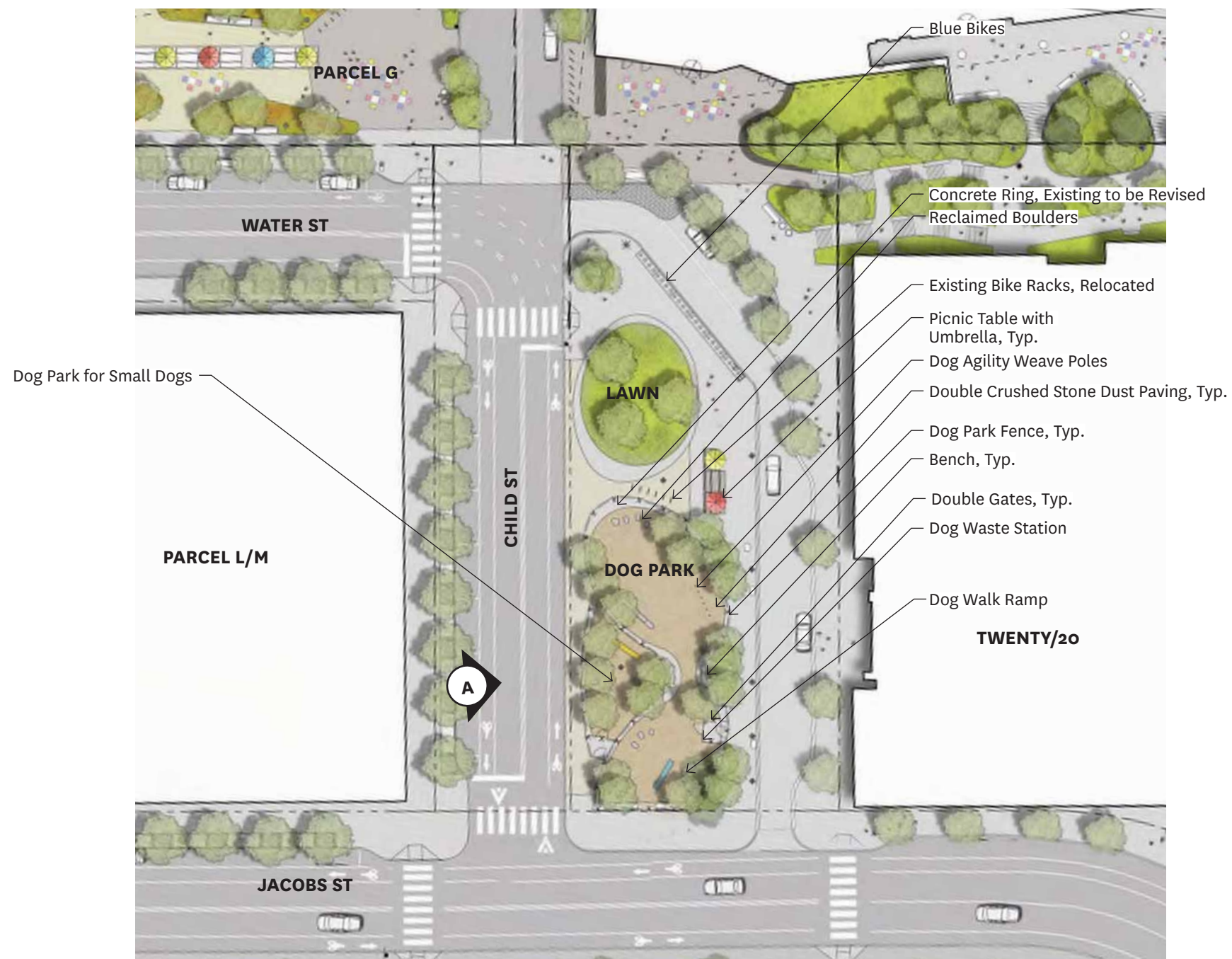


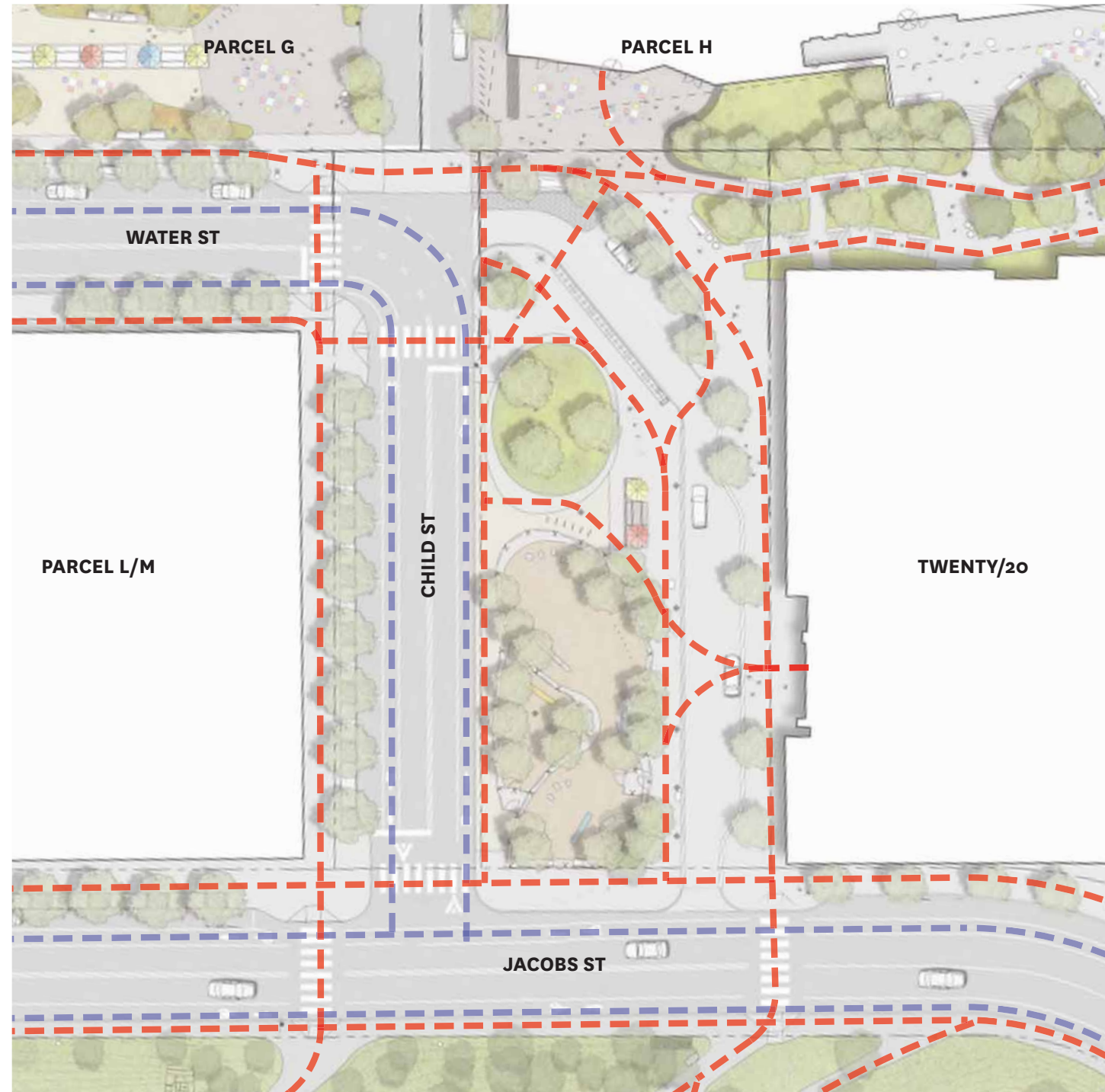
ELEVATION A
PUBLIC ART ON CHAIN LINK FENCE (36'X22'X10')
 Artwork To Be Determined





CIRCULATION DIAGRAM - INTERIM CONDITION





CIRCULATION DIAGRAM - FINAL CONDITION













Double Crushed Stone Dust Paving



Decomposed Granite Pavement



Dog Park Fence



Bench



Picnic Table



Reclaimed Stone Boulder



Dog Walk Ramp



Dog Triple Hoop



Dog Agility Weave Poles



Dog Waste Station



Bike Rack

PARCEL L/M

PROPOSED TREE SPECIES



Ostrya virginiana
Hop Hornbeam



Amelanchier canadensis
Serviceberry



Gleditsia triacanthos var. inermis
Honey Locust "Skyline"

LEGEND

- Dead Tree to be Removed
- Existing Tree to be Removed
- Existing Tree to Remain and Be Protected
- Proposed Tree (Final Condition)
- Proposed Tree Root Ball

Trees being Removed (9)

Tree Size (DBH)	Tree Qty	DBH X Tree Qty
2"-3"	7	17.5
5.5"	1	5.5
6"	1	6
TOTAL	9	29

Proposed Trees (21)

Tree Size	Tree Qty	DBH X Tree Qty
3.5"	5	17.5
5"	14	70
6"	2	12
TOTAL	21	99.5



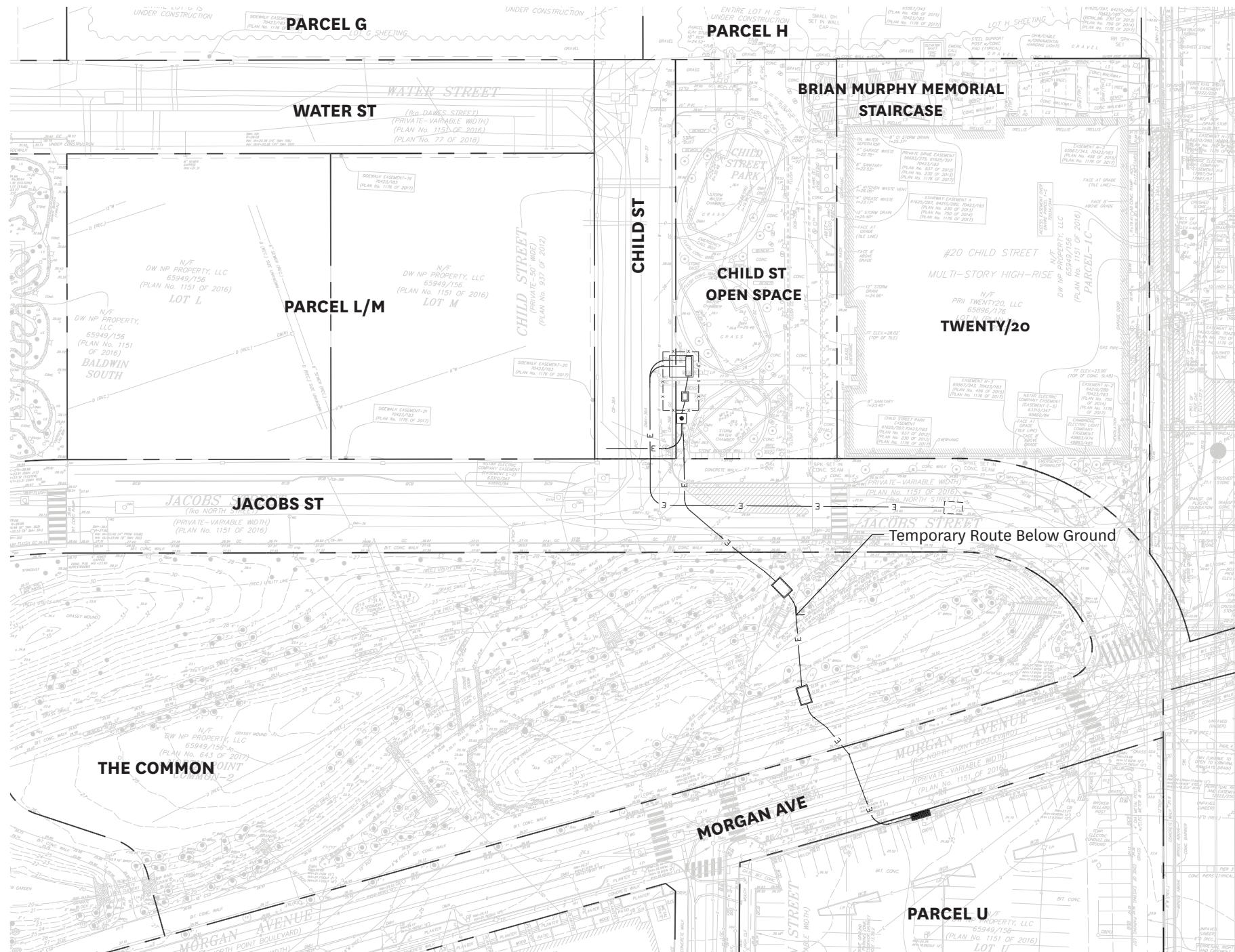
Existing Dead Trees to be Removed and Replaced (2"-3" DBH, Total of 7)



Existing Trees to Remain and be Protected (Total of 2)

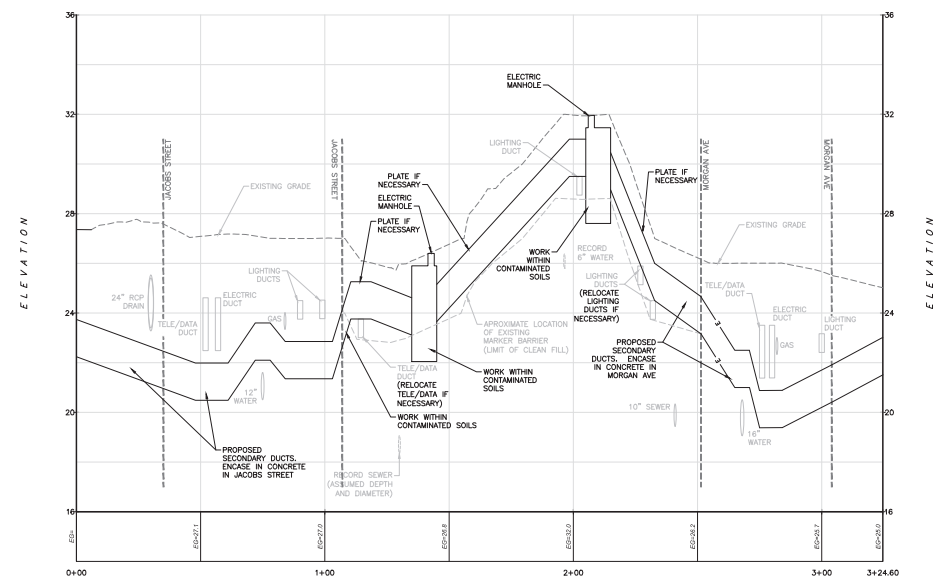


All trees are included in the City of Cambridge recommended species list and additional recommended list from Urban Forest Master Plan

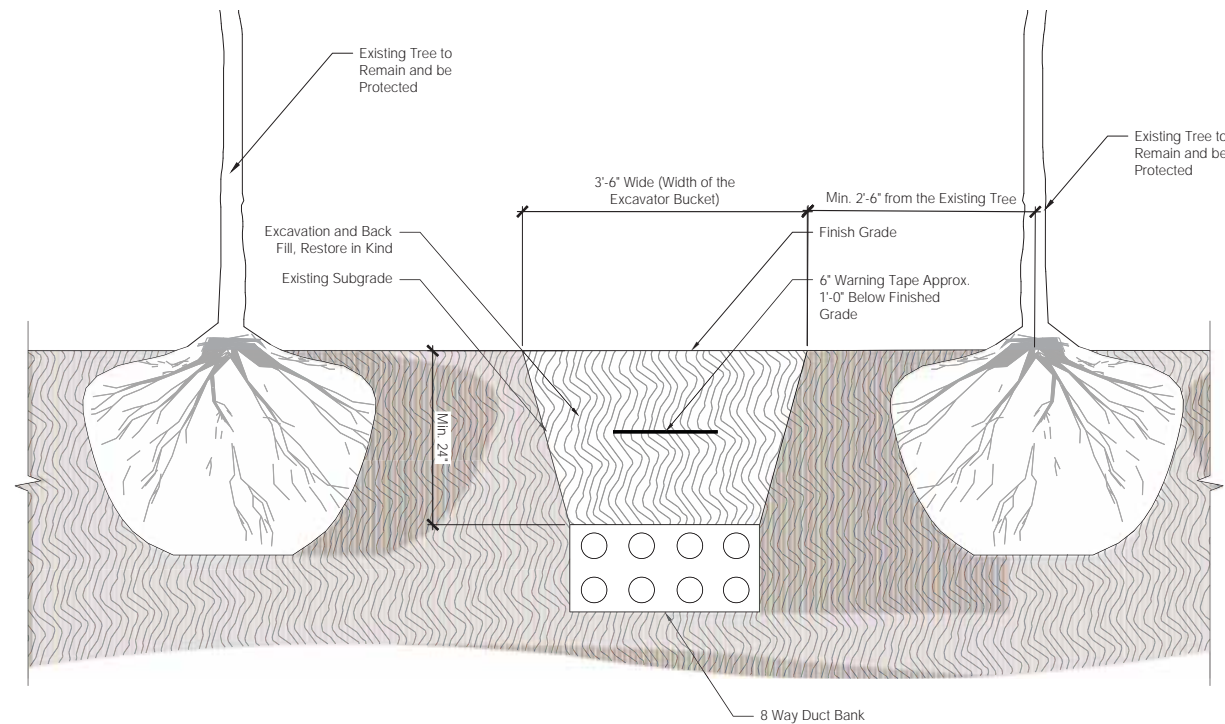




Ductbank Sectional Profile



Ductbank Typical Section at the Common



Design Review

Lot U - View Glass



Presented by:

DW NP Property, LLC

c/o DivcoWest Real Estate Investments

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December 11, 2020

Ms. Catherine Preston Connolly, Chair
Cambridge Planning Board
344 Broadway
Cambridge, MA 02139

Via: Electronic Mail and Hand Delivery

Reference: Parcel U Design Review Revision – View Glass
PB #179
Cambridge Crossing
Cambridge, Massachusetts

Dear Chair Connolly and Members of the Board:

DivcoWest Real Estate Investments and its affiliates DW NP Property, LLC DW Propco U, LLC (collectively, “DivcoWest”) respectfully submit this package for amending the existing Design Review approval already granted by the Planning Board for Parcel U, which is part of the Cambridge Crossing development. As you are aware, on September 22, 2020, the Planning Board approved the design of a proposed twelve (12)-story office/laboratory building consisting of approximately 313,270 square feet of Gross Floor Area (“GFA”) and other public realm improvements on Parcel U (the “Project”).

As we have advanced the design of the Project, we are considering the inclusion of smart windows manufactured by View, Inc. (“View Glass”) on the southeasterly and southwesterly façades of the Project, those with solar exposure. These areas are more particularly shown on the attached renderings and elevations.

As you may be aware, View Glass is an emerging technology which allows the glass to tint dynamically across four gradients as it is exposed to varying degrees of direct sunlight, all of which are depicted in the enclosed materials. The tinting of the windows is controlled by running electrical current through the windows. For example, on a cloudy day, the glass will revert to Tint State 1, which is the most transparent and least reflective of the four tint states. With progressively more sunlight falling on the façade, View Glass will automatically tint to progressively darker tint states. With direct, bright sunshine, the glass will reach its darkest state, which is more transparent than a window with the shade drawn.

We are aware of the priority that the Planning Board places on the transparency of glass facades and believe that this proposal is responsive to those concerns. First, darker tint states should not be compared to clear glass, but instead to windows with the shades down, as shades are often left down even when they are not needed and by their nature make the building less transparent. In addition to obscuring otherwise clear windows, this also gives building facades an uneven appearance – each floor and each room has its shade in a different position, giving the building a “toothless smile” appearance.



This technology will help control interior solar glare, allowing the shades to remain up during the daytime. Thus, View Glass will result in façades that are functionally more transparent, not less.

Second, at Parcel U, the glass in the northwestern façade, facing Leighton Street and the Common, and the northeastern façade, facing Morgan Avenue and the Common, would remain as approved by the Planning Board. DivcoWest is proposing to be allowed to use View Glass on the two facades, southwestern and southeastern, that have solar exposure. These two façades do not face city streets or open space, so any reduction in transparency in these facades will have a correspondingly reduced impact on the public realm.

Third, as was discussed with the Planning Board, the southwestern and southeastern façades also face and are proximate to residential buildings. The allowed lab use of Parcel U creates a unique concern – that of light trespass at night from the lab spaces, which are lit 24 hours a day, to residential neighbors. To address this concern, DivcoWest has already committed to and the Planning Board has already affirmed the use of motorized shades that deploy at night within the Parcel U building. This will block light from escaping from the building at night. DivcoWest wishes to utilize View Glass to further reduce light trespass on the southwestern and southeastern facades as described below.

DivcoWest wishes to customize the View Glass installation at Parcel U to address two concerns that we discussed with City staff: namely, maintaining the most transparency into the building while reducing light trespass to residential neighbors to the southeast and southwest. Within a pre-established range of light transmittance and glass reflectivity, DivcoWest can modify the View Glass settings for any of the four tint states. We propose setting the four tint states as follows:

Tint State 1 – Highest visible light transmittance and least reflectivity available. This tint state is very similar to the glass that the Planning Board already approved for Parcel U.

Tint State 2 – Mid-Point between States 1 and 3

Tint State 3 – Reduced visible light transmittance and increased reflectivity, very similar to those of another project that the Planning Board approved that we discussed with City staff. Allowing this reduction would mean that shades would remain up and the windows unblocked, even on sunny days.

Tint State 4 – Least visible light transmission and highest reflectivity available. Windows would be programmed to enter this state every night between 10 pm and 7 am to further reduce light trespass from Parcel U to neighboring residential buildings to the southwest and southeast. This tint state would not be used from 7 am to 10 pm.

If utilized, DivcoWest would program the windows to enter into tint states 1, 2 and 3 during the daytime, and would utilize tint state 4 utilized only at night.

While this technology is enticing, it is relatively new and, as such, DivcoWest is currently investigating whether it would be viable for use on the Project. DivcoWest desires to have the Planning Board approve the potential inclusion of View Glass within the Project in the areas depicted in the attached renderings and elevations without prescribing it. This approach would allow DivcoWest to incorporate the technology into the building design if it determines that it is viable without having to return to the Planning



Board for additional approval. If View Glass did not prove viable, then DivcoWest would install windows that comply with the Design Review Approval already issued by the Planning Board. This would benefit the overall planning and development timeline as it would allow DivcoWest to pass straight from the design phase to the development phase without an additional cycle of review and approval by the Planning Board.

As part of this Application, we have included eight (8) copies, as well as an email containing an electronic version, of the following materials for review by the Cambridge Planning Board:

- View Glass information; and
- Depictions showing how the potential inclusion of View Glass could impact the aesthetics of the proposed building.

This proposed change to the glass does not change GFA or any of the other dimensions or massing of the Project as previously approved by the Planning Board.

We look forward to the opportunity to meet with the Planning Board to discuss the Application and to potentially bringing this emerging technology to Cambridge Crossing.

Thank you for your consideration.

Sincerely,
DIVCOWEST REAL ESTATE INVESTMENTS

Mark Johnson

Mark Johnson, FAIA
Director of Development

Attachment



Divco West **Cambridge Crossing** **441 Morgan Avenue**

Cambridge Planning Board
Proposed Revision to Design
Review Approval
December 9, 2020

 **DIVCOWEST**  Cambridge Crossing

ennead JACOBS

MICHAEL
VAN
VALKENBURGH
ASSOCIATES
INC



North View



South View

Connection to Gilmore
Bridge shown pending
approval from MassDOT

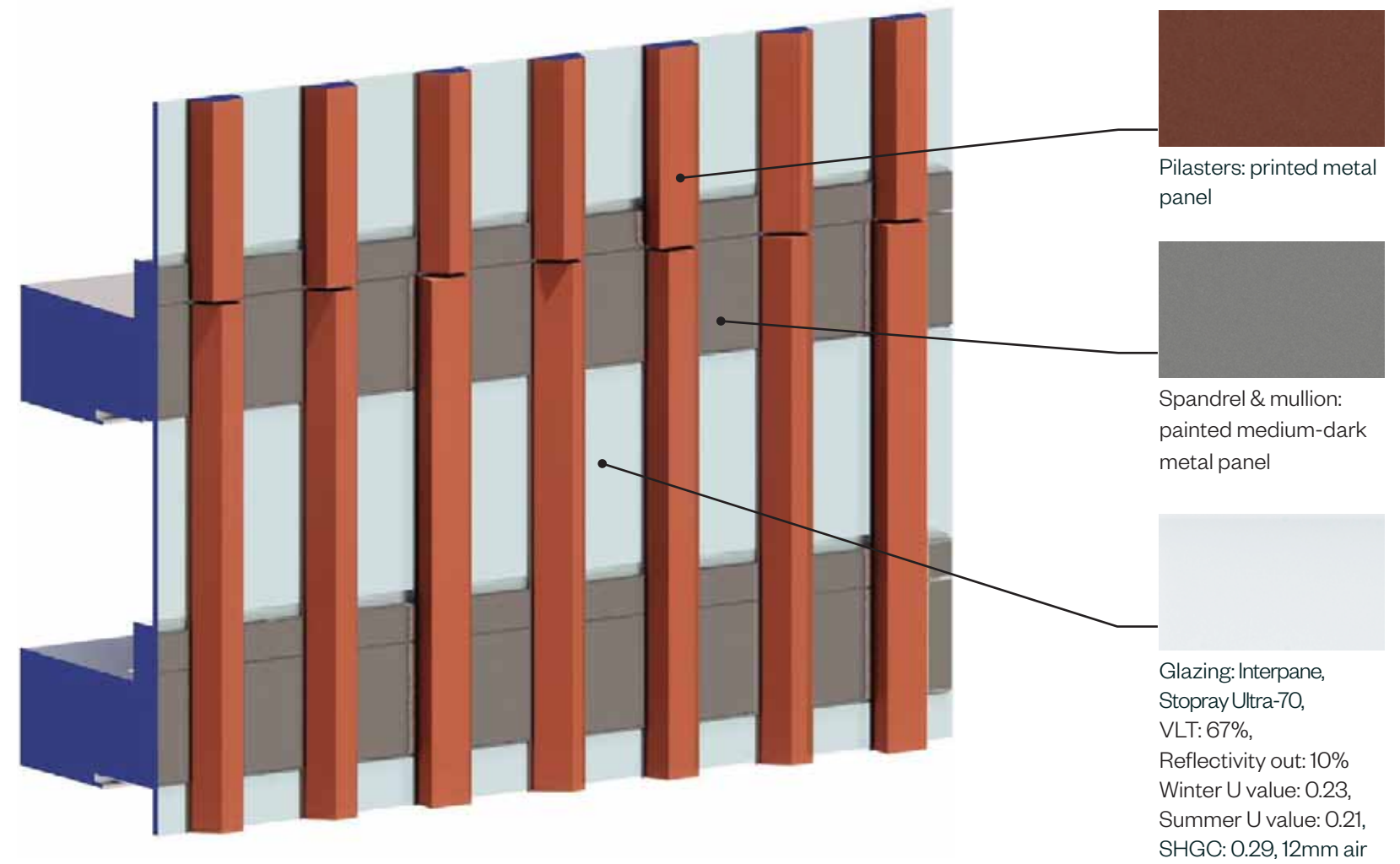


- The southeast and southwest elevations adopt metal panel cladding in context with adjacent buildings.
- The distinct base, middle and top are further accentuated by the large picture window on the south façade. The bottom of this large picture window is aligned with the setbacks that create the 'base' on the northeast and northwest façades. Similarly, the top of the window delineates a 'top' that is aligned with the top that is expressed on the northeast and northwest façades.
- 441 Morgan uses variable pilasters along its Gilmore Bridge frontage to create a striking visual ripple, with vertical cuts and a picture window opening to relate to the scale of the bridge. The faceting and terraced setbacks of the Leighton Street and Morgan Avenue elevations create a complementary iconic presence on these frontages. The prominent material palette of glass and natural-toned materials also creates a striking presence on all sides.

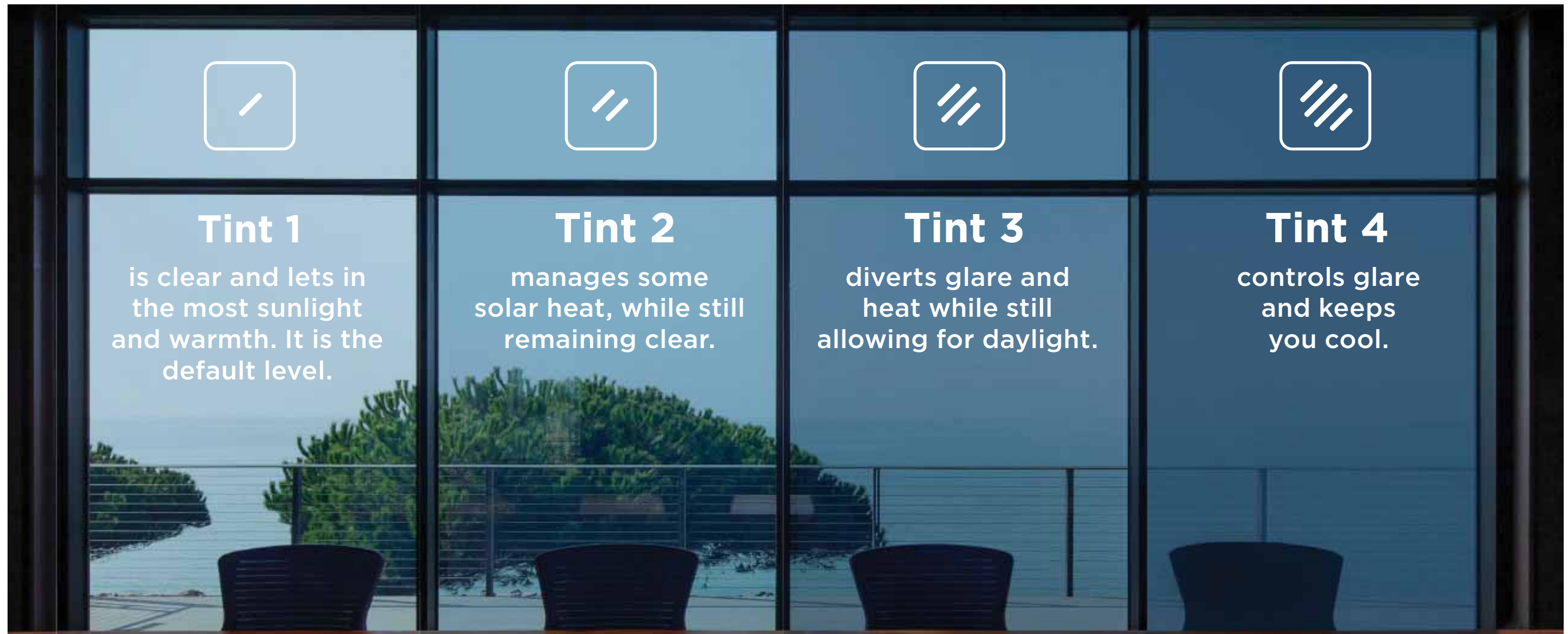
Connection to Gilmore Bridge shown pending approval from MassDOT



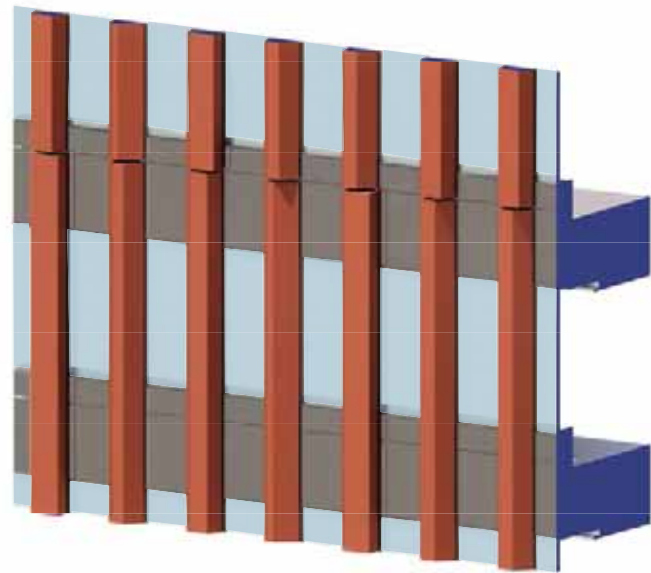
Solid façade on sun-facing elevations with earth-toned rippling angled pilasters.



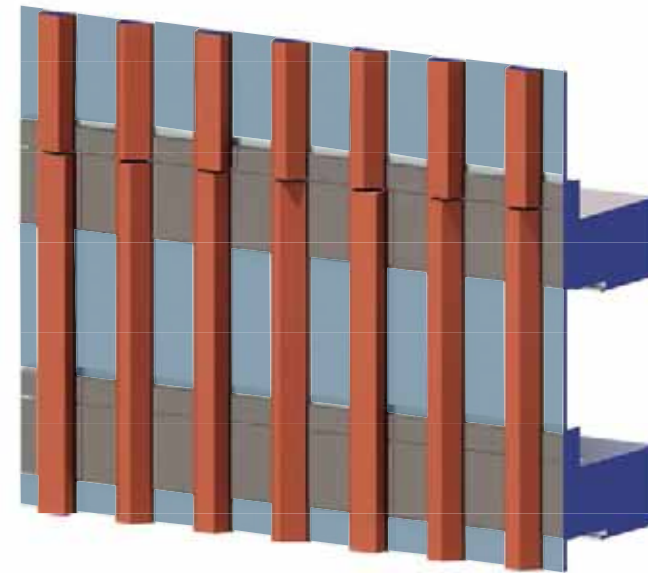
Images below illustrate the varying tint states of view glass- this is best observed by viewing the varying tints in person.



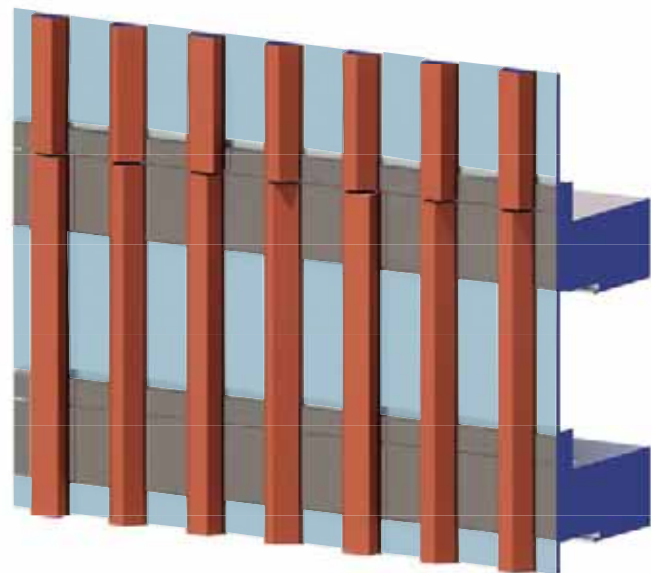
Images below illustrate the varying tint states of view glass- this is best observed by viewing the varying tints in person.



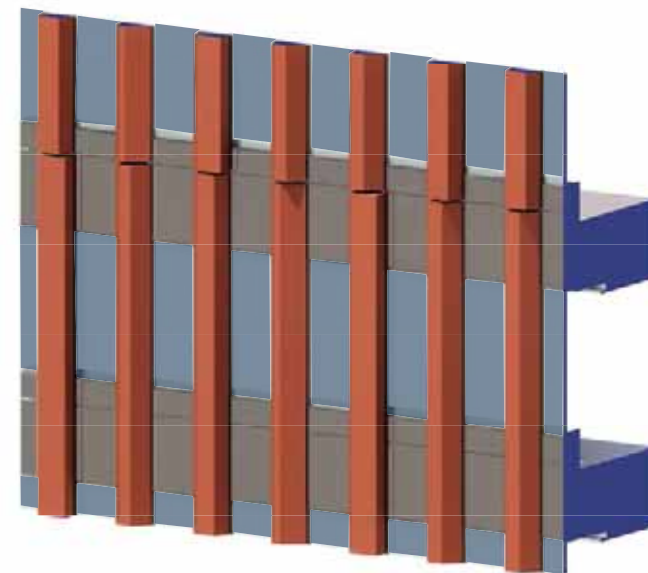
Tint State 1



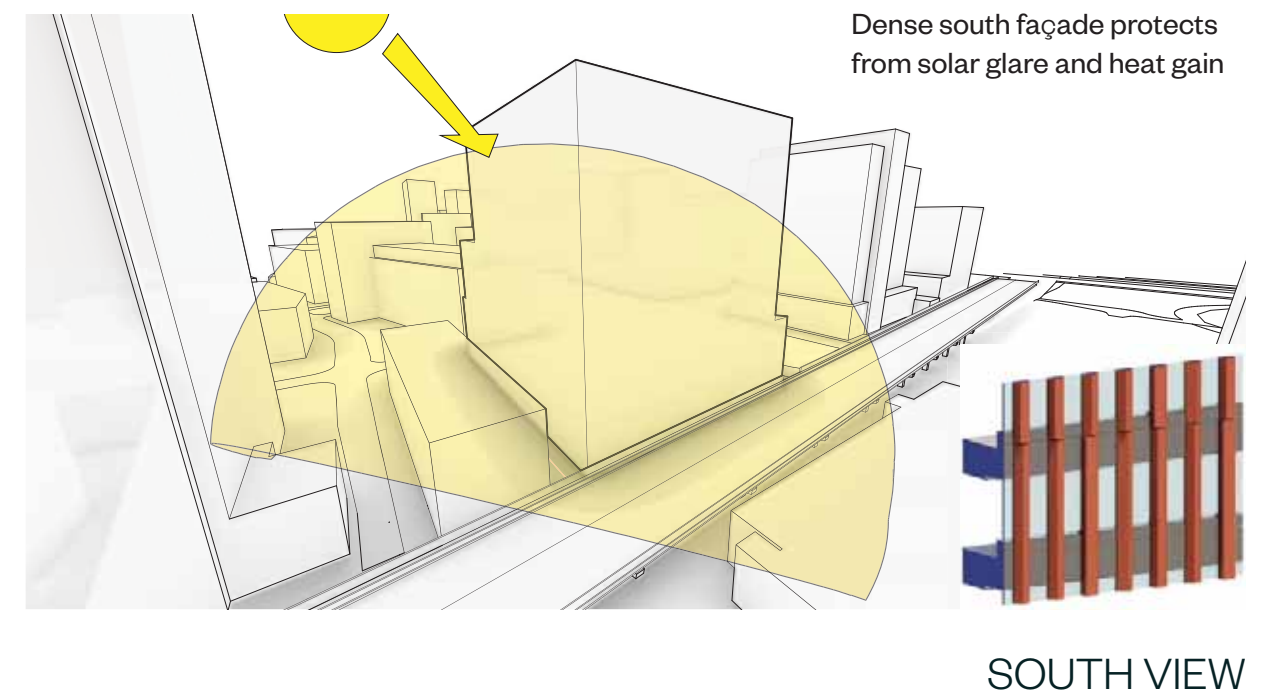
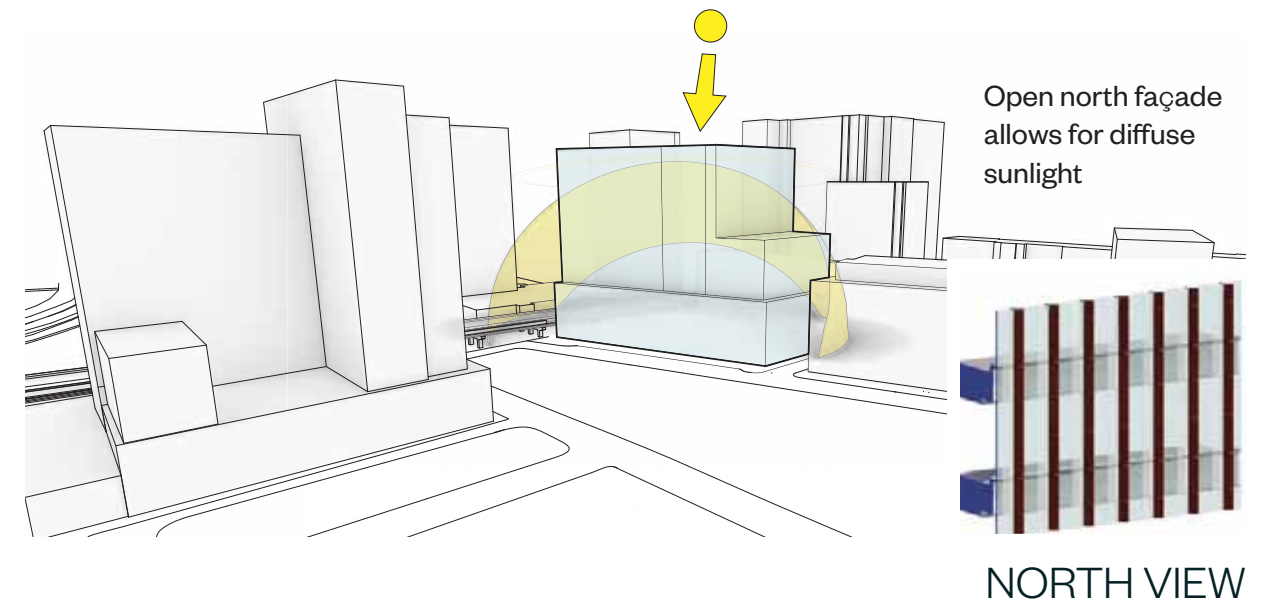
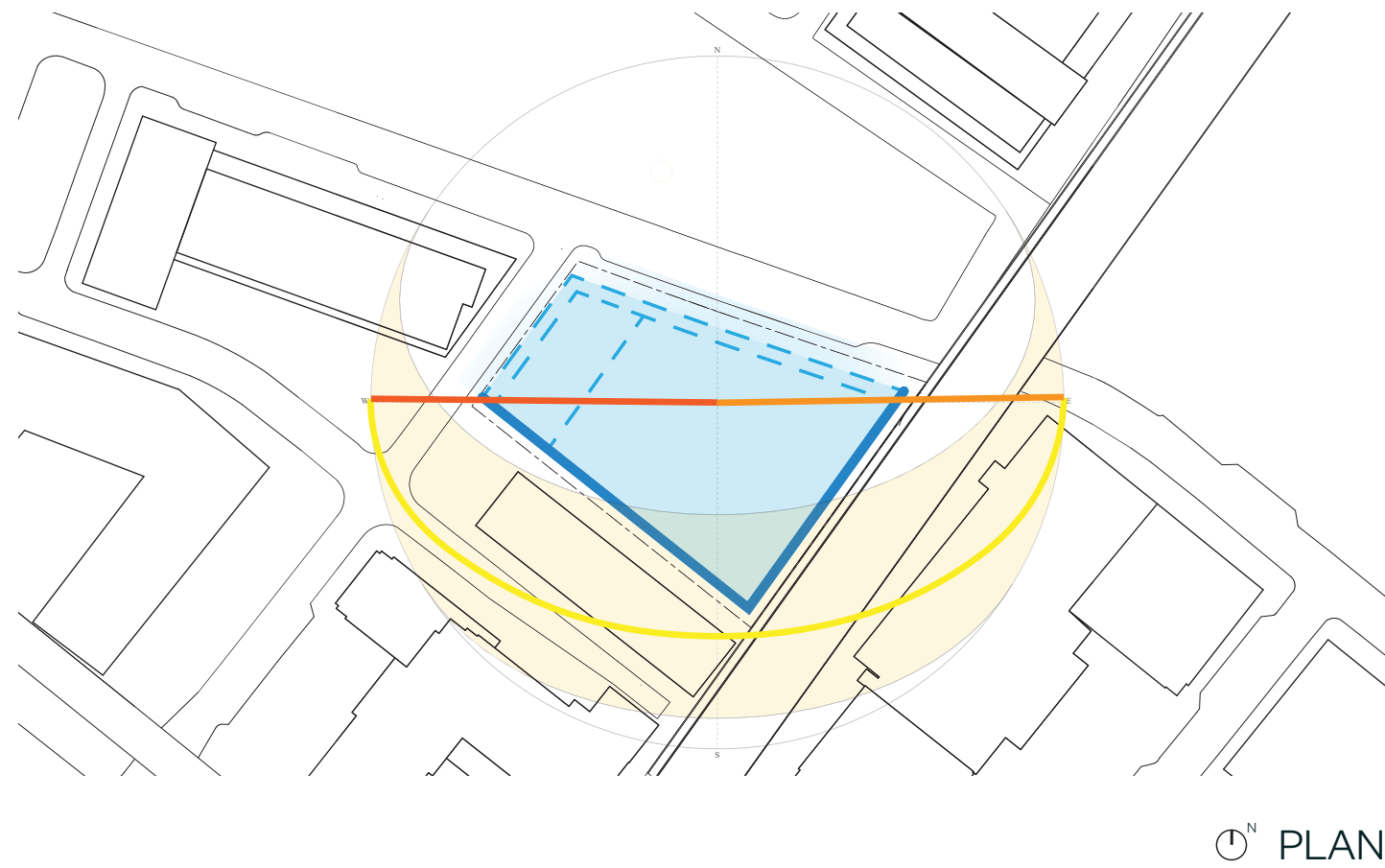
Tint State 3

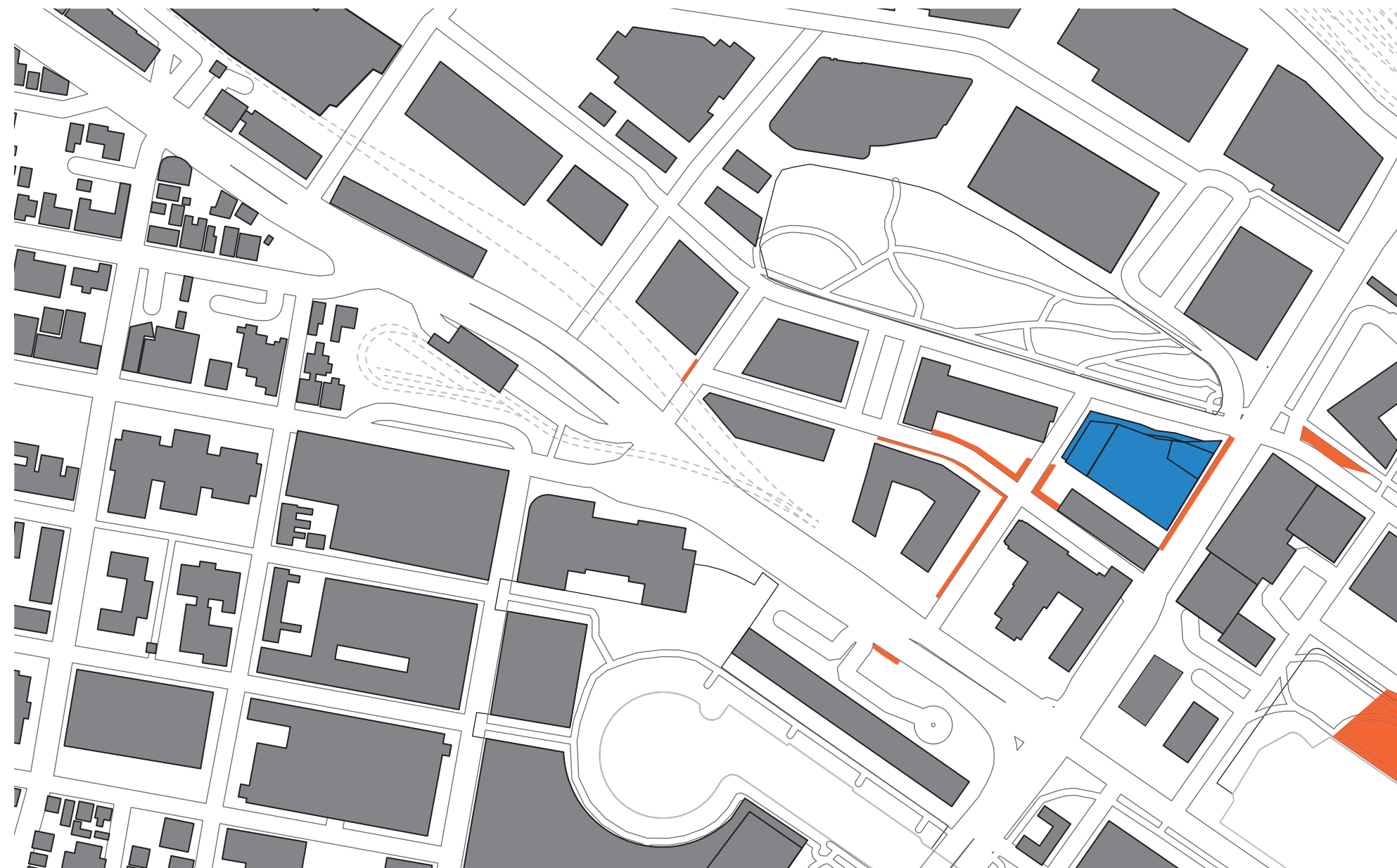


Tint State 2



Tint State 4





— Locations where View Glass is visible



Connection to Gilmore
Bridge shown pending
approval from MassDOT



Connection to Gilmore
Bridge shown pending
approval from MassDOT



Connection to Gilmore
Bridge shown pending
approval from MassDOT



Connection to Gilmore
Bridge shown pending
approval from MassDOT



Connection to Gilmore
Bridge shown pending
approval from MassDOT



Connection to Gilmore
Bridge shown pending
approval from MassDOT



Connection to Gilmore
Bridge shown pending
approval from MassDOT

APPENDIX

VLT (VISIBLE LIGHT TRANSMITTANCE) VLR (VISIBLE LIGHT REFLECTANCE-OUT)

APPROVED GLASS VALUES		
	70%	10%

STANDARD VIEW GLASS VALUES		
TINT STATE 1	52%	12%
TINT STATE 2	31%	8%
TINT STATE 3	6%	6%
TINT STATE 4	1%	6%

PROPOSED VIEW GLASS VALUES RESPONSE TO STAFF COMMENTS		
TINT STATE 1	52%	12%
TINT STATE 2	43%	10%
TINT STATE 3	35%	10%
TINT STATE 4	1%	6%