Appendix N

Visual and Aesthetic Conditions Technical Memorandum

- Draft EIS Appendix N, Visual and Aesthetic Conditions Technical Memorandum, September 2015

RED AHEAD
Moving Ahead to a Better Red

Red Line Extension

Chicago Red Line Extension Project

Visual and Aesthetic Conditions

Technical Memorandum

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Abbreviations

API	area of potential impact
BRT	Bus Rapid Transit
CSS & SBRR	Chicago South Shore & South Bend Railroad
CMAP	Chicago Metropolitan Agency for Planning
CN	Canadian National
CFR	Code of Federal Regulations
CTA	Chicago Transit Authority
EIS	Environmental Impact Statement
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NICTD	Northern Indiana Commuter Transportation District
Metra	Northeast Illinois Regional Commuter Railroad Corporation
ME	Metra Electric District
RLE	Red Line Extension
ROW	right-of-way
TIP	Transportation Improvement Program
UPRR	Union Pacific Railroad

Section 1
Summary

This technical memorandum analyzes the potential impacts of the Red Line Extension (RLE) Project on visual and aesthetic conditions. The potential for impacts on visual and aesthetic conditions was evaluated for each project alternative, including the No Build Alternative, Bus Rapid Transit (BRT) Alternative, Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Rail Alternative. The UPRR and Halsted Rail Alternatives were divided into two segments for analysis. Segment UA consists of the UPRR Rail Alternative alignment north of Michigan Avenue and Segment UB consists of the alignment south of Michigan Avenue. Segment HA consists of the Halsted Rail Alternative alignment north of 119th Street and Segment HB is the alignment south of 119th Street. The visual and aesthetic analysis considered potential visual impacts on the visual environment, including changes to infrastructure, building mass and/or scale, visible density, landscape patterns, and viewers' sensitivities. The RLE Project corridor extends through a diverse mix of residential, commercial, and light industrial areas in the southern edge of Chicago. Developments in the project area include a diversity of scale, architectural style, and neighborhood character.

The visual analysis was based on fieldwork, professional judgment and analysis of the visual simulations included in Appendix A of this report. The following summarizes the results of the potential beneficial and adverse impacts analysis, both temporary and permanent, associated with the build alternatives.

1.1 Permanent Impacts

Typical positive impacts on visual and aesthetic conditions include creating visual density[1] and a visual gateway between two low-density areas. This addition can provide visual interest and aesthetically activate underdeveloped areas, especially where vacant lots or structures currently exist. In neglected or derelict areas, where project-related mitigation measures are utilized, visual quality for pedestrians and adjacent residences or businesses would improve. Examples include providing new vegetation, landscaping, or other urban design amenities.

Typical adverse impacts include the replacement of existing cohesive community fabric with large-scale parking structures that would substantially alter the scale, character, and density of viewsheds. The addition of stations and elevated structures could affect character and visual quality substantially, and would create new shadows and light obstructions on adjacent neighborhoods. In many, but not all, instances, mitigations such as designing the station and structures to match the character of the surrounding fabric, using urban design techniques to reduce massing and create pedestrian friendly surroundings, and providing landscaping and visual screening would help reduce visual and aesthetic impacts on viewsheds.

[1] Visual density relates to the massing of objects within a view. Density may be related to buildings or structures, but density may also be created with vegetation, landscaping, or other amenities.

Impacts related to each RLE Project alternative are summarized as follows:

- BRT Alternative - Impacts would be concentrated at the Kensington Avenue and 130th Street stops, where minor land acquisition and demolition would be required to accommodate a park & ride structure at each stop. The impacts from the BRT Alternative would not be adverse after mitigation.

- The UPRR Rail Alternative Right-of-Way (ROW) Option – After mitigation, impacts would not be adverse at the Michigan Avenue station and the area of the park & ride facility (View 13A). The mitigation would involve design features for the parking structure which create relief in the façade in order to match the residential pattern in the vicinity of the parking structure.

- The UPRR Rail Alternative East Option - Impacts would be **adverse** to the southeast of the Michigan Avenue station.

- The UPRR Rail Alternative West Option – Even after application of mitigation measures, impacts would be **adverse** from 99th Street to 103rd Street, including the 103rd Street station and the park & ride facility for the Michigan Avenue station. The height and mass of the structures and its proximity to residences could not be mitigated.

- The Halsted Rail Alternative would have **adverse** impacts in Segment HA in the area at the transition from the I-57 ROW to Halsted Street (see View 23). The visual impact due to the height of the elevated structure could not be mitigated. The Vermont Street station in Segment HB would have **adverse** impacts after mitigation. The height of the structure and its proximity to residences could not be mitigated.

1.2 Construction Impacts

Construction activities associated with the alternatives would cause temporary impacts on visual and aesthetic conditions. The amount of construction activity proposed under the UPRR Rail Alternative East and West Options would be greater than for other options and alternatives due to land acquisition and demolition. Maintaining as much vegetation as practical, limiting light trespassing from night lighting, and maintaining debris-free construction areas are all discussed as construction mitigations to minimize the temporary visual impacts.

1.3 Cumulative Impacts

The No Build Alternative would not cause cumulative impacts. Any proposed developments already being considered for development within the RLE Project corridor would still occur under the No Build Alternative. There are no future developments planned for the project corridor that would have cumulative impacts on visual and aesthetic conditions with the BRT Alternative, UPRR Rail Alternative, or Halsted Rail Alternative.

1.4 2014-2015 Red Line Extension Project Update

Updated July 28, 2015

In August 2014, based on the technical analysis and public input until then, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. CTA is considering two alignment (route) options of this alternative: the East Option and the West Option. At this time, CTA is also considering only the South Station Option of the 130th Street Station. In late 2014 and early 2015, CTA conducted additional engineering on the East and West Options to refine the East and West Option alignments. Appendix B of this technical memorandum summarizes the refined alignments and any additional or different impacts that would result. The information in Appendix B supersedes information presented in other chapters of this technical memorandum.

Section 2
Project Description

The Chicago Transit Authority (CTA) is proposing to extend the Red Line from the existing 95th Street Terminal to the vicinity of 130th Street, subject to the availability of funding. The proposed RLE would include four stations. Each station would include bus transfer and parking facilities. This project is one part of the Red Ahead Program to extend and enhance the entire Red Line. The CTA is also planning 95th Street Terminal improvements that are anticipated to be completed prior to the proposed RLE construction.

The project area is 11 miles south of the Chicago central business district (commonly referred to as the Loop) and encompasses approximately 20 square miles. The boundaries of the project area are 95th Street on the north, Ashland Avenue on the west, Stony Island Avenue on the east, and the Calumet-Sag Channel/Little Calumet River and 134th Street on the south. The I-57 Expressway and I-94 Bishop Ford Freeway cross the western and eastern edges of the project area, respectively. Lake Calumet is in the eastern portion of the project area. The project area encompasses parts of nine community areas in the City of Chicago and the eastern section of the Village of Calumet Park. Chicago community areas include Beverly, Washington Heights, Roseland, Morgan Park, Pullman, West Pullman, Riverdale, Hegewisch, and South Deering. The project area comprises residential (primarily single family), industrial (both existing and vacant), transportation (including freight), and commercial development.

The Draft Environmental Impact Statement (EIS) focuses on the following alternatives (shown in Figure 2-1), which emerged from the Alternatives Analysis and the National Environmental Policy Act (NEPA) scoping process:

- No Build Alternative
- BRT Alternative
- UPRR Rail Alternative
    - ROW Option
    - East Option
    - West Option
- Halsted Rail Alternative

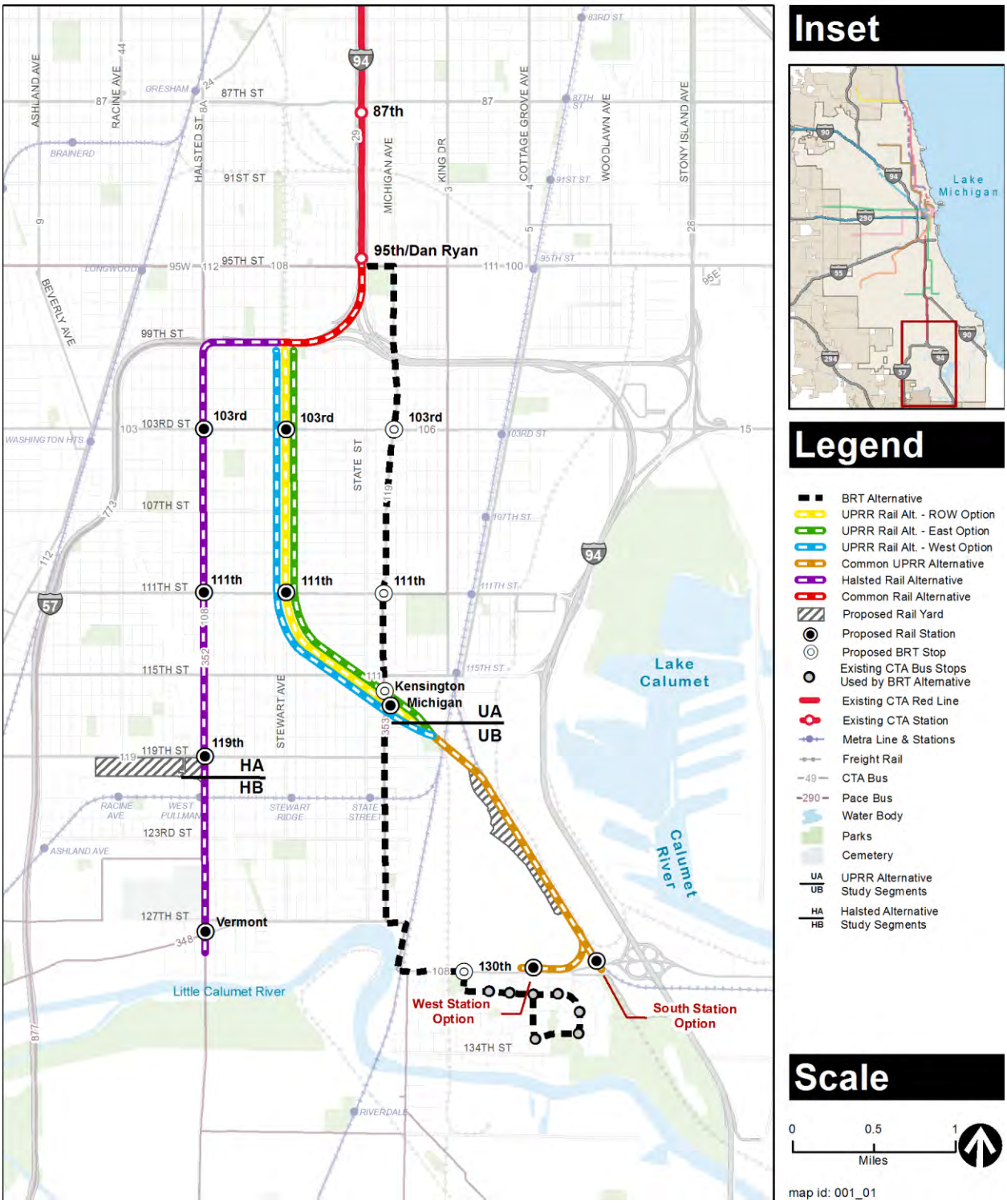


Figure 2-1: Red Line Extension Alternatives

The No Build Alternative is a required alternative as part of the NEPA environmental analysis and is used for comparison purposes to assess the relative benefits and impacts of extending the Red Line. The No Build Alternative is carried into the Draft EIS phase of the project development regardless of its performance versus the build alternatives under consideration. No new infrastructure would be constructed as part of the No Build Alternative other than committed transportation improvements that are already in the Chicago Metropolitan Agency for Planning (CMAP) Fiscal Year 2010–2015 Transportation Improvement Program (TIP) and the improvements to 95th Street Terminal. The TIP projects within the project area consist of four bridge reconstructions, several road improvement projects including resurfacing and coordination of signal timing on 95th Street, work on Metra Electric District's (ME) facilities, construction of a bicycle/pedestrian multi-use trail, and preservation of historic facilities. The No Build Alternative includes regular maintenance of existing track and structures, and bus transit service would be focused on the preservation of existing services and projects. All elements of the No Build Alternative are included in each of the other alternatives. Under this alternative, travel times would not improve from existing conditions.

The BRT Alternative (formerly referred to as the Transportation Systems Management Alternative) is a 5.0-mile, limited-stop, enhanced BRT route, which is assumed to operate 24 hours per day between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. No dedicated bus lanes would be provided for the BRT Alternative; however, parking lanes would be removed for some portions of the alignment and four stops with improved bus shelters and park & ride facilities would be created at 103rd Street and Michigan Avenue, 111th Street and Michigan Avenue, Kensington Avenue and Michigan Avenue, and 130th Street and Eberhart Avenue. Although BRT service elements would not continue south of the 130th Street stop, the bus route would continue through Altgeld Gardens along the existing route with six stops. The BRT Alternative would be consistent with bus routing changes that may occur as part of improvements to the 95th Street Terminal. Under this alternative, travel times between 130th Street and the Loop would improve over existing conditions.

The UPRR Rail Alternative is a 5.3-mile extension of the heavy rail transit Red Line from its existing 95th Street Terminal to 130th Street, just west of I-94. The Chicago Transit Board designated the UPRR Rail Alternative as the Locally Preferred Alternative at its August 12, 2009 board meeting. This alternative includes construction and operation of new heavy rail transit tracks, mostly in existing transportation corridors. The UPRR Rail Alternative has three options for alignment (ROW, East, and West), all of which would include operation on elevated structure from 95th Street to just past the Canadian National (CN)/ME tracks near 119th Street. The alignment would then transition to at-grade through an industrial area with no public through streets, terminating at 130th Street in the vicinity of Altgeld Gardens. Four new stations would be constructed at 103rd Street, 111th Street, Michigan Avenue, and 130th Street. The 130th Street station would be the terminal station, with two options under evaluation: the South Station Option and the West Station Option. A new yard and shop facility would be sited near 120th Street and Cottage Grove Avenue. The bus routes in the vicinity of the UPRR Rail Alternative would be modified to enhance connectivity between the Red Line and the bus network. The hours of operation and service frequency for the UPRR Rail Alternative are assumed to be the same as

for the current Red Line. Under this alternative, travel times between 130th Street and the Loop would improve substantially over existing conditions.

The Halsted Rail Alternative is a 5.0-mile heavy rail transit extension of the existing Red Line. In this alternative, the Red Line would operate on an elevated structure running south from 95th Street along I-57 until Halsted Street. The alignment would then turn south and continue along Halsted Street to the intersection of Halsted Street and Vermont Avenue near 127th Street. This alternative would include four new stations at 103rd Street, 111th Street, 119th Street, and Vermont Avenue. The Vermont Avenue station would be the terminal station. A new yard and shop would be sited west of Halsted Street and between the 119th Street and Vermont Avenue stations. The bus routes in the vicinity of the Halsted Rail Alternative would be modified to enhance connectivity to the Red Line. The hours of operation and service frequency for the Halsted Rail Alternative are assumed to be the same as for the current Red Line. Under this alternative, travel times between 127th Street and the Loop would improve substantially over existing conditions. This alternative would not extend rail to Altgeld Gardens, which would be served by bus connecting to the Vermont terminal station.

Section 3
Methods for Impact Evaluation

Impacts on the visual and aesthetic conditions include changes to the existing condition and visible environment that would be brought on by construction and operation of the RLE Project alternatives. Depending on location, these changes might adversely affect or positively enhance the visual environment and might have varying degrees of impact on viewer sensitivity.

3.1 Regulatory Framework

This section summarizes relevant federal, state, and local laws and regulations that guided the aesthetic and visual analysis.

3.1.1 Federal

For historic properties, Section 106 of the National Historic Preservation Act (NHPA) as amended in 1966 [36 Code of Federal Regulations [CFR] § 800.5(a)(2)] regulates activities that could diminish the visual integrity of a property's significant historic features. Potential visual impacts on historic resources were evaluated in the *Historic and Cultural Resources Technical Memorandum*.

Title 23, Section 162 of the United States Code designates National Scenic Byways or All-American Roads based on archaeological, cultural, historic, natural, recreational, and scenic qualities. The RLE Project would not affect any such designated byways or roadways and these are not discussed further in this document.

3.1.2 State

Context Sensitive Design - Public Act 093-0545, Context Sensitive Solutions, is an interdisciplinary approach that seeks effective, multimodal transportation solutions by working with stakeholders to develop, build, and maintain cost-effective transportation facilities that fit into and reflect the project's surroundings—its "context." Through early, frequent, and meaningful communication with stakeholders, and a flexible and creative approach to design, the resulting projects are intended to improve safety and mobility for the traveling public, while preserving and enhancing the scenic, economic, historic, and natural qualities of the settings through which they pass.

3.1.3 Local

The RLE Project would occur within the jurisdiction of the City of Chicago for each of the planned alternatives. In addition, a portion of the Halsted Rail Alternative alignment borders the Village of Calumet Park. The City of Chicago has guidelines or ordinances governing aspects of the aesthetics of developments including the following:

- City of Chicago Zoning Ordinance and Land Use Ordinance - Municipal Code Titles 16 and 17. The City of Chicago's Zoning Ordinance includes requirements for review of Planned

Developments (17-8-0500) including all development using Air Rights (17-8-0501). In addition to the review of building designs and plans, the zoning ordinance requires adherence to the City of Chicago's Landscape Ordinance.

- City of Chicago Landmarks Ordinance - Municipal Code Title 2, Chapter 120, Article XVII. The City of Chicago Landmarks Ordinance requires that buildings designated or "pending" landmarks be reviewed by the Commission on Chicago Landmarks.

- Community and Neighborhood Plans and Studies.

The Village of Calumet Park uses the Code of Ordinances to govern aspects of the aesthetics of developments.

3.2 Impact Analysis Thresholds

Although NEPA offers no specific thresholds for visual significance, the following thresholds were used to identify adverse impacts. For the purpose of this EIS, an impact would be adverse if it resulted in one of more of the following:

- A major change in the community's aesthetic character

- A major incompatibility with the character of the area (i.e., a project feature would contrast strongly with its surroundings)

- Incompatibility with community goals

- A substantial degradation of the existing visual character or quality of a site and its surroundings

- Impacts on a historic site through extensive remodeling or removal of buildings or their surrounding area

- Creation of new shade and shadow effects

In addition to the thresholds listed above which are related to the change in the resource, determination of impacts is influenced by a more subjective measure termed viewer response. Viewer response is related to factors such as number of people in each viewer group and distance between the viewer group and resource. Related to the number of people in each viewer group, if few people are able to view the change in resource, the impact may be low.[2] Related to the distance between the viewer group and the resource, a change in resource that is far away from viewers may be a low impact even if the change in resource is quite substantial because the ability to see the details of an object decreases with distance (USDOT 1981).

[2] Note that no counts of the number of people in a viewer group were made. Size of the viewer groups was made by professional judgment based on adjacent land use and housing density.

3.3 Area of Potential Impact

The geographic area of potential impact (API) for aesthetics includes all areas along the RLE Project corridor within visual range of major viewer groups, including residents, business owners, recreationists, commuters, and visitors. The distance of the API from the path of the RLE Project would depend on the existence of view corridors. View corridors, including parks and streets, can increase the API. View corridors perpendicular to the project area are assumed to be ¼ mile. Figure 3-1 shows the API.

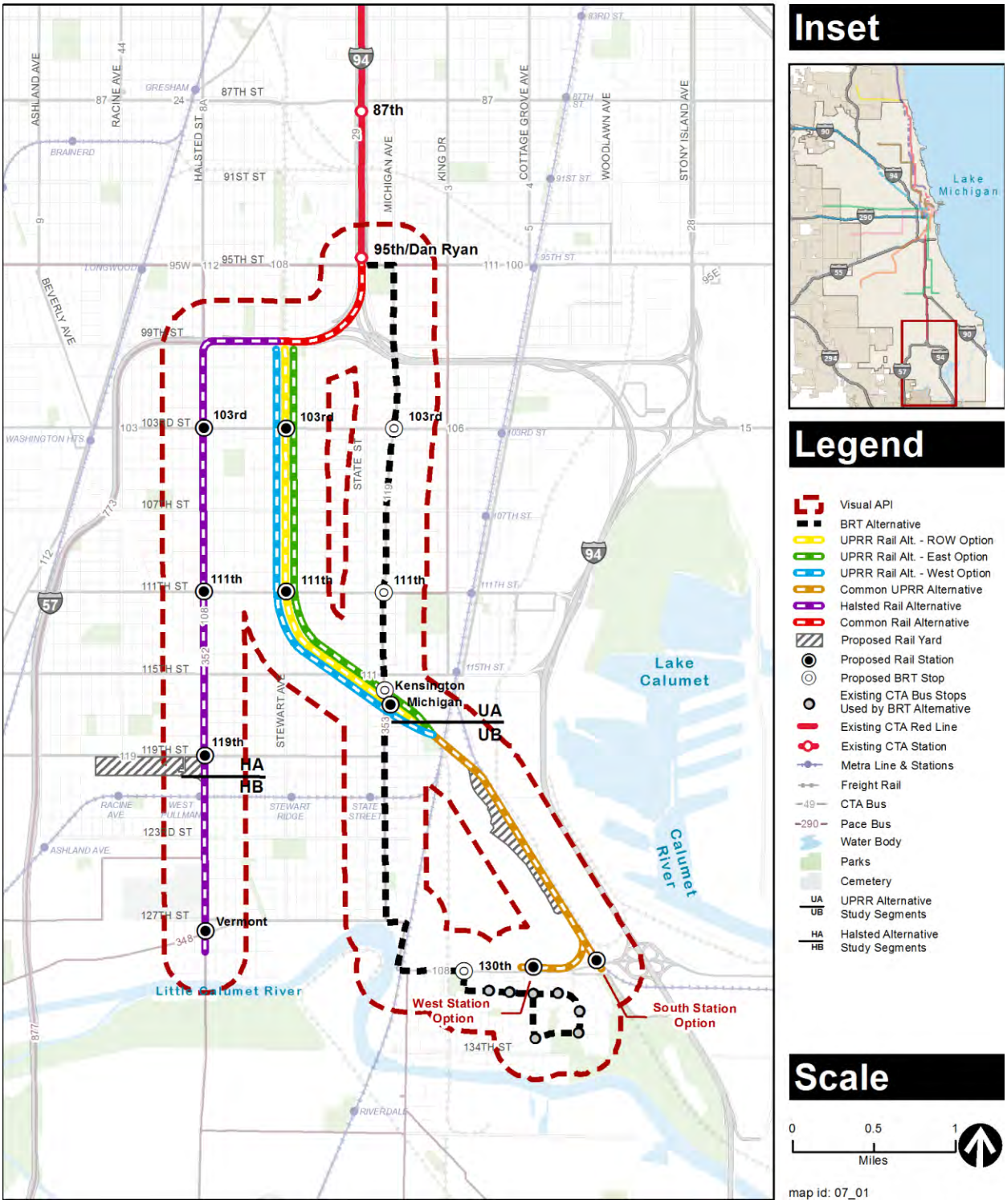


Figure 3-1: Area of Potential Impact

3.4 Methods

It is imperative when evaluating visual and aesthetic conditions to apply an objective process of uniform criteria. Areas of study were developed through fieldwork, evaluations of the scoping document public comments, community planning documents, and analysis of viewsheds.

The identified potential viewsheds included the following types:

- Views to and from historic, or potentially historic, structures or districts
- Views where the project features (either horizontal or vertical) might negatively affect the visual character of the viewshed, including changes to the scale and character of the neighborhood
- Views depicting built or natural features that might be negatively affected by shade and shadow from new structures.
- Notable views of natural features, including waterways or open space.

Potential viewsheds were inventoried and documented with photographs (Appendix A).

Characteristics of *Visual Changes* were categorized by a ranking of the degree of change on the given environment. Table 3-1 identifies the characteristics used to determine the visual change for a viewshed.

Table 3-1: Characteristics of High, Moderate, and Low Levels of Visual Change

High Level of Visual Change	Moderate Level of Visual Change	Low Level of Visual Change
Removal of Historic Building	Moderate Property Displacement	Maintaining Existing Scale
Removal of Historic Neighborhood	Moderate Change in Scale	No Removal of Vegetation
Displacement of Community	Moderate Removal of Vegetation	Similar Construction
Substantial Property Displacement		Within Existing Row
Substantial Change in Scale		Low View Disruption
Blocking Historic or Scenic Views		Low Property Displacement
Removal of All Vegetation		

In addition to classifications of visual change, the identification and determination of *Viewer Sensitivity* (*Federal Highway Administration Visual Impact Assessment for Highway Projects*, p. 63) was taken into consideration. Depending on which user groups interact the most with a given viewshed, and their priorities, the level of significance might increase or decrease. Major viewer groups along the RLE Project corridor include residents, business owners, recreationists, commuters, and visitors:

- *Residents* are defined as individuals residing within direct visual contact of the project area, who typically have a high sensitivity to visual change due to a high degree of familiarity with their surroundings and high level of frequency of visual interaction.

- *Business Owners* are operators of businesses within direct visual contact of the project area and who also typically have a high sensitivity to visual change based on familiarity with the existing conditions and frequency of interaction.

- *Recreationists* are individuals that may walk, run, or bike in direct visual contact of the project area. Individuals using parks are considered recreationists in this assessment. Recreationists have a higher sensitivity to changes to scenic views, historic neighborhoods, displacement of community, or removal of vegetation than other viewers.

- *Commuters* would view the project area in the course of daily travel to and from their ultimate destination. Commuters would typically show less visual sensitivity than other viewers because they are travelling through the project area or traveling to reach a destination within the project area. Commuters living in the immediate vicinity would be categorized as residents.

- *Visitors* are individuals who rarely have visual interaction with the project area and have little familiarity with existing conditions. Visitors would be most affected by changes to historic buildings or structures, and by the blocking or removal of scenic views.

Fifty-two viewsheds from the project area for the BRT, UPRR, and Halsted Rail Alternatives were selected for further analysis. These locations were studied using photo montage techniques for overlaying a 3D graphic rendering of a typical station on photographs representing the viewshed. Rankings of *Visual Impact*, *Viewer Sensitivity* were summarized for each location to determine a comprehensive level of impact in Section 5 of this document. Visual illustrations are provided in Appendix A.

Section 4
Affected Environment

The affected environment includes the existing visual conditions surveyed in the API. The existing conditions and the level of visual quality were used as a baseline to measure the visual impacts of each proposed alternative. For the purpose of this report, all of the RLE alternatives except the BRT Alternative have been subdivided into two segments per alternative. Figure 2-1 shows the alternatives and segment divisions, and Figures 4-1 through 4-17 show the alternatives and the specific viewpoint locations for each alternative. Figures 4-18 through 4-23 illustrate the typical conditions within each segment.

The RLE alignment would run through a diverse mix of land uses including residential, commercial, and light industrial. Each RLE alternative alignment, except for the BRT Alternative, would begin at the existing 95th Street Terminal and would run south along I-94, then curve west to follow I-57. Figures 4-18 and 4-19 show typical visual conditions along this corridor. This segment of the corridor provides a relatively cohesive landscape for all proposed alternatives.

The BRT Alternative would operate between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue. The BRT Alternative is shown on Figure 4-1. The low- to medium-density corridor consists of one- to two-story residential and light commercial structures. There is little to no architectural character or significance along the alternative corridor, shown in View 40 in Appendix A. On-street parking and generous sidewalks flank both sides of Michigan Avenue. Areas of visual interest include new development between 104th and 107th Streets and Lion Field between 124th and 125th Place. The portion of the route south of 120th Place is partially lined with trees and consists of mostly residential structures with relatively cohesive character. The portion of the BRT Alternative alignment south of Michigan Avenue runs through a low-density residential and light commercial district until 130th Street and Eberhart Avenue, near the Altgeld Gardens neighborhood. Refer to View 41 in Appendix A. Figures 4-2 through 4-5 show viewpoint locations for the BRT Alternative and Table 4-1 provides a summary of the existing viewpoints for the BRT Alternative. The table contains the description of the characteristics and baseline condition assessment for the existing visual quality.

The UPRR Rail Alternative alignment south of I-57 runs along an existing railroad corridor that is surrounded by a mix of residential and light commercial districts. Figure 4-6 shows the segments and options of the UPRR Rail Alternative. UPRR Rail Alternative Segment UA (north of 117th Street) encompasses residential development consisting of one- to two-story structures of similar style. Light commercial buildings are typically at intersections that meet the existing UPRR tracks at grade. A substantial portion of the development in this segment is vacant and contains minimum architectural embellishments. Figures 4-20 and 4-21 show typical conditions along this segment. The Roseland pumping station at 104th Street and Harvard Avenue is one of the few structures in the area with architectural character and is shown in Figure 4-22. Segment UB (UPRR Rail Alternative south of Michigan Avenue) runs along the Metropolitan Water Reclamation District property and terminates just north of the Altgeld Gardens neighborhood.

Views 18 and 41 in Appendix A show typical conditions in this area. Aside from the neighboring residences, this area has a light industrial character. The partially vacant neighborhood is relatively isolated between 130th Street, I-94, and Little Calumet River. Figures 4-7 through 4-11 show viewpoint locations for the UPRR Alternative and Table 4-1 provides a summary of the existing viewpoints for the UPRR Alternative. The table contains the description of the characteristics and baseline condition assessment for the existing visual quality.

The Halsted Rail Alternative alignment runs south along Halsted Street through a light commercial and retail corridor surrounded by residential districts. Figure 4-12 shows the Halsted Rail Alternative segments. The architectural style and character along both Segment HA and HB is relatively consistent, comprising one- to two-story structures with minimal architectural detail. Large sidewalks and parking lanes flank both sides of Halsted Street, while the street itself contains two through lanes in either direction. Figure 4-23 shows a typical visual condition along Halsted Street. Segment HA (Halsted Rail Alternative north of 119th Street) is low to moderate density and many of the commercial structures have adjacent parking lots. This portion of Halsted Street contains planters along a tree-lined median and is shown in Views 23 and 24 in Appendix A. Segment HB (Halsted Rail Alternative south of 119th Street) has an older, more commercial character but is still low to moderate density. Views 34 and 35 in Appendix A show typical conditions along this segment. The Halsted Rail Alternative alignment runs past Cedar Park Cemetery and terminates north of the bridge that carries Halsted Street over the Little Calumet River. Figures 4-13 through Figure 4-17 show viewpoint locations for the Halsted Street Alternative and Table 4-1 provides a summary of the existing viewpoints for the Halsted Street Alternative. The table contains the description of the characteristics and baseline condition assessment for the existing visual quality.

Land acquisition would be required for all UPRR Rail Alternative options and the Halsted Rail Alternative along the RLE Project corridor. Required building demolition would have impacts on the surrounding scale and character of affected areas by various degrees. Due to the large area of potential impact, not all affected viewsheds are discussed in Table 4-1. Visualization illustrations of project impacts were completed on representative areas and those with highest potential visual impact; thus, only those selected viewsheds have been shown in Table 4-1.

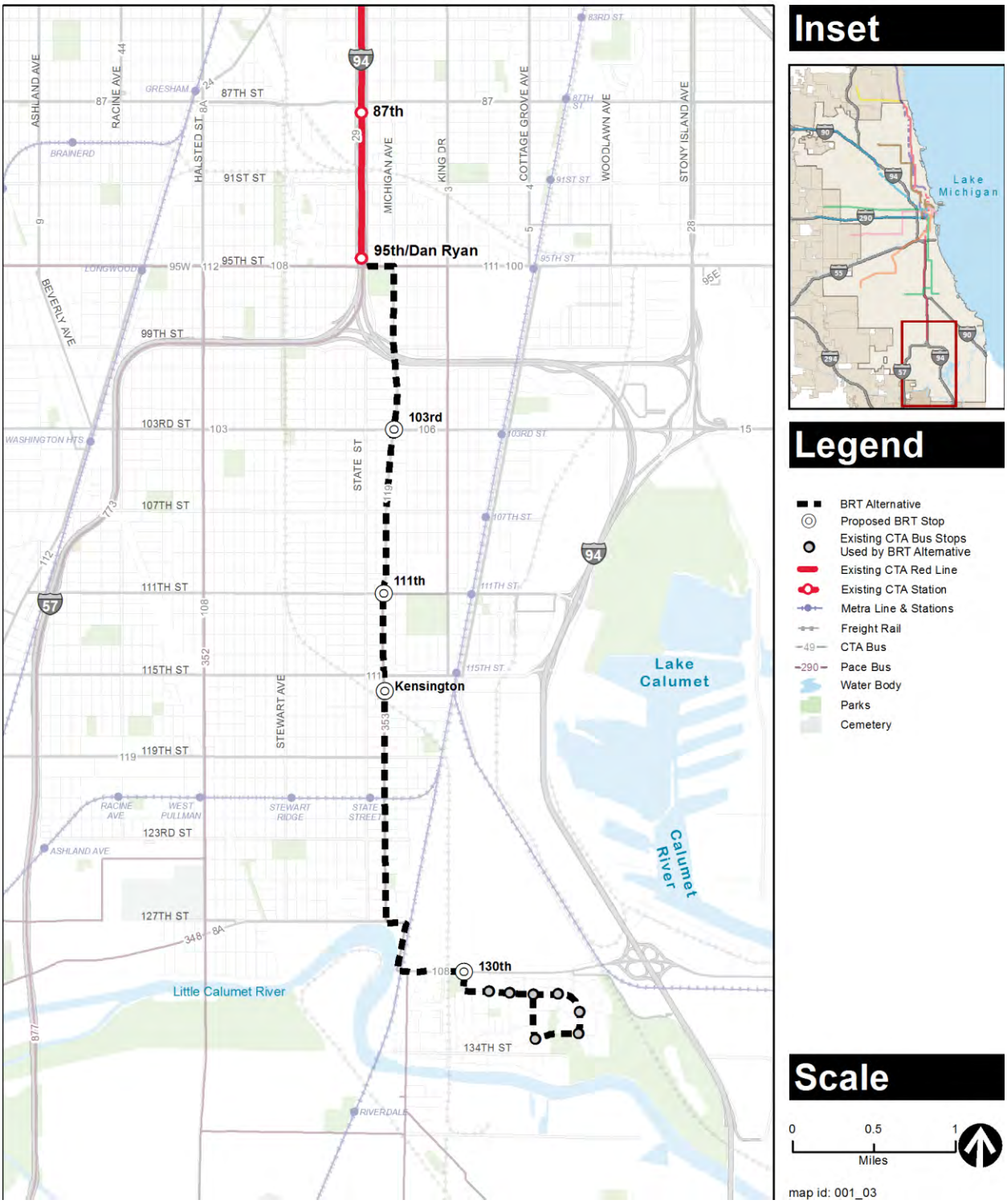


Figure 4-1: Bus Rapid Transit Alternative

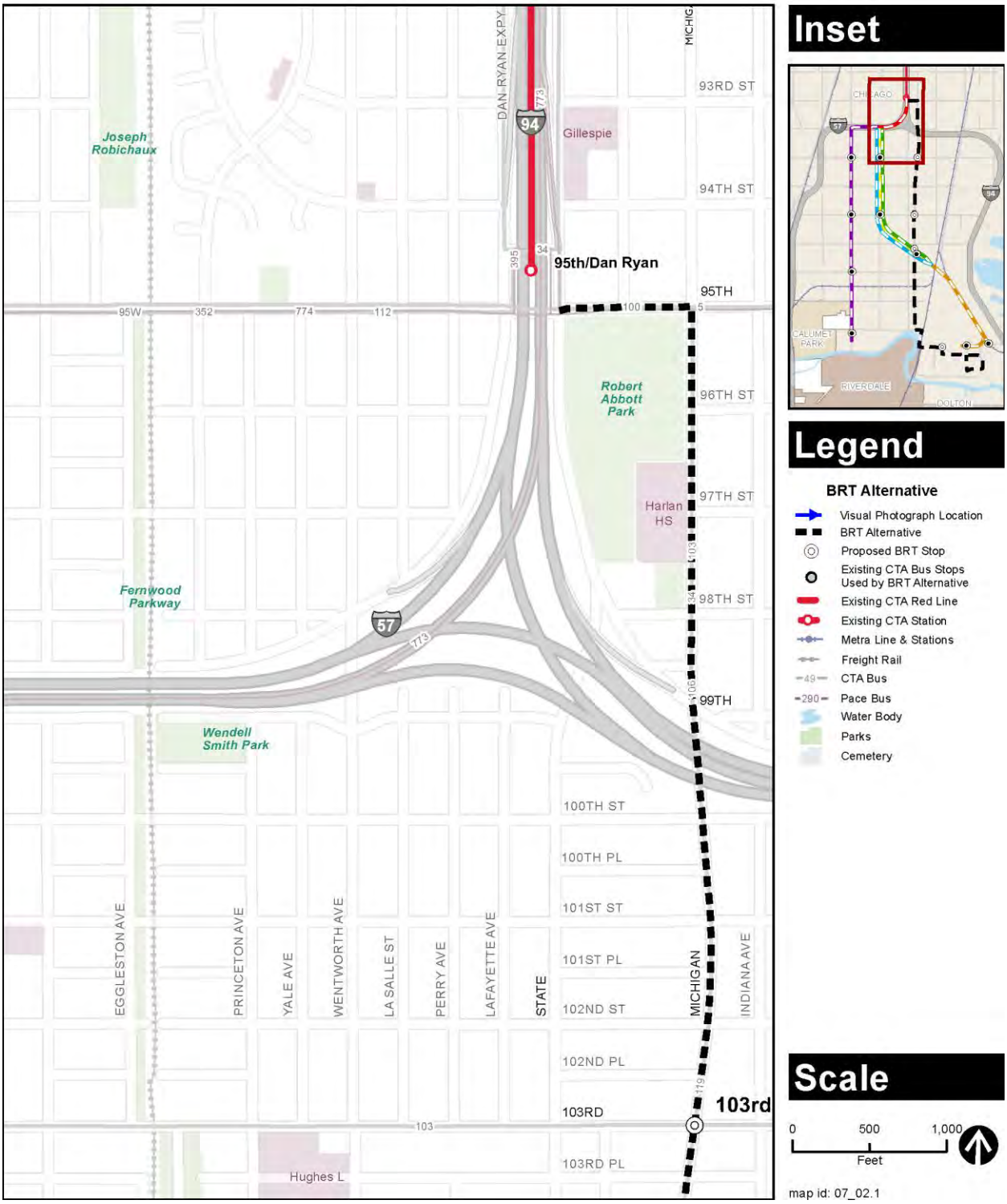


Figure 4-2: View Locations for the Bus Rapid Transit Alternative - North

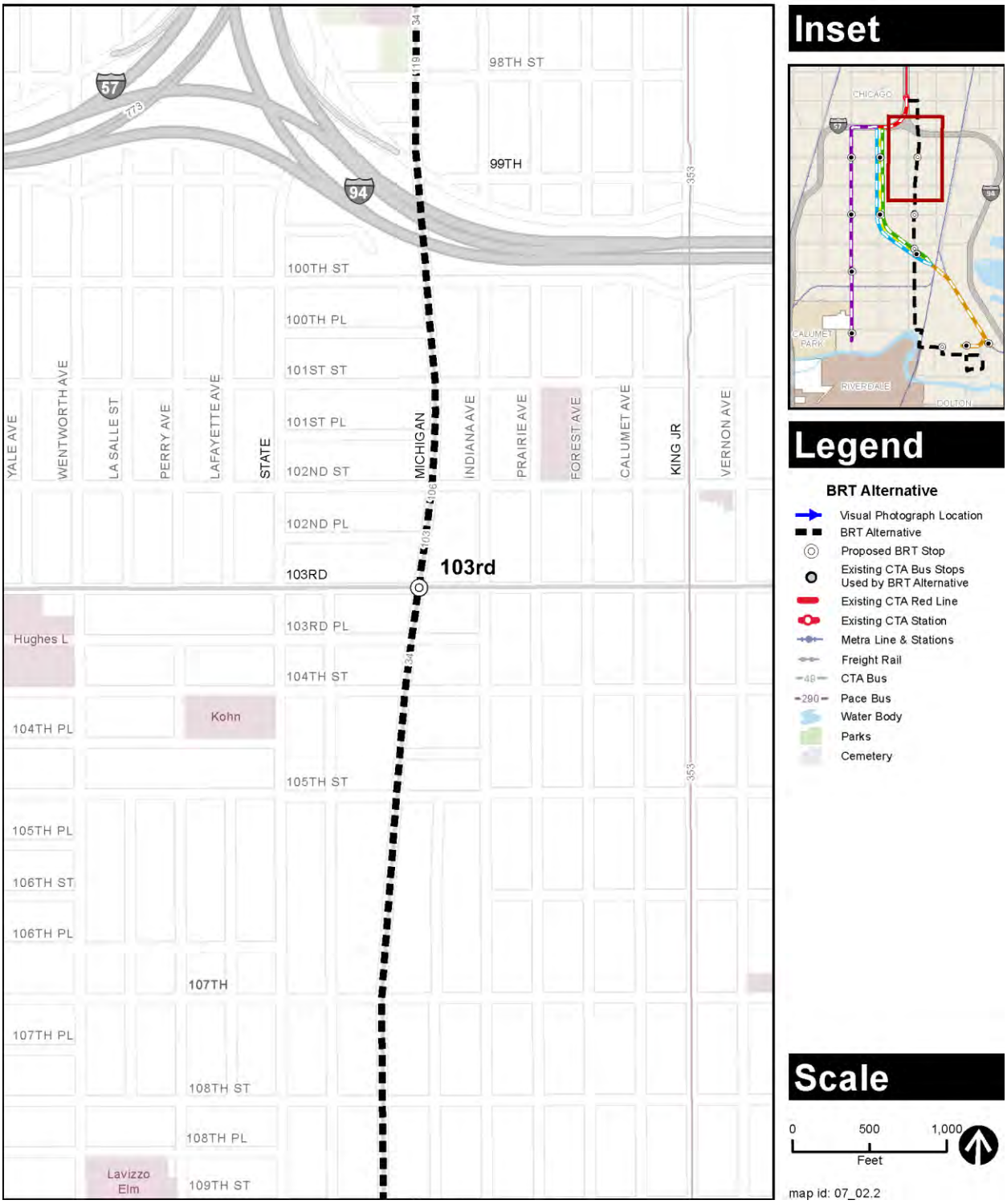


Figure 4-3: View Locations for the Bus Rapid Transit Alternative - North Central

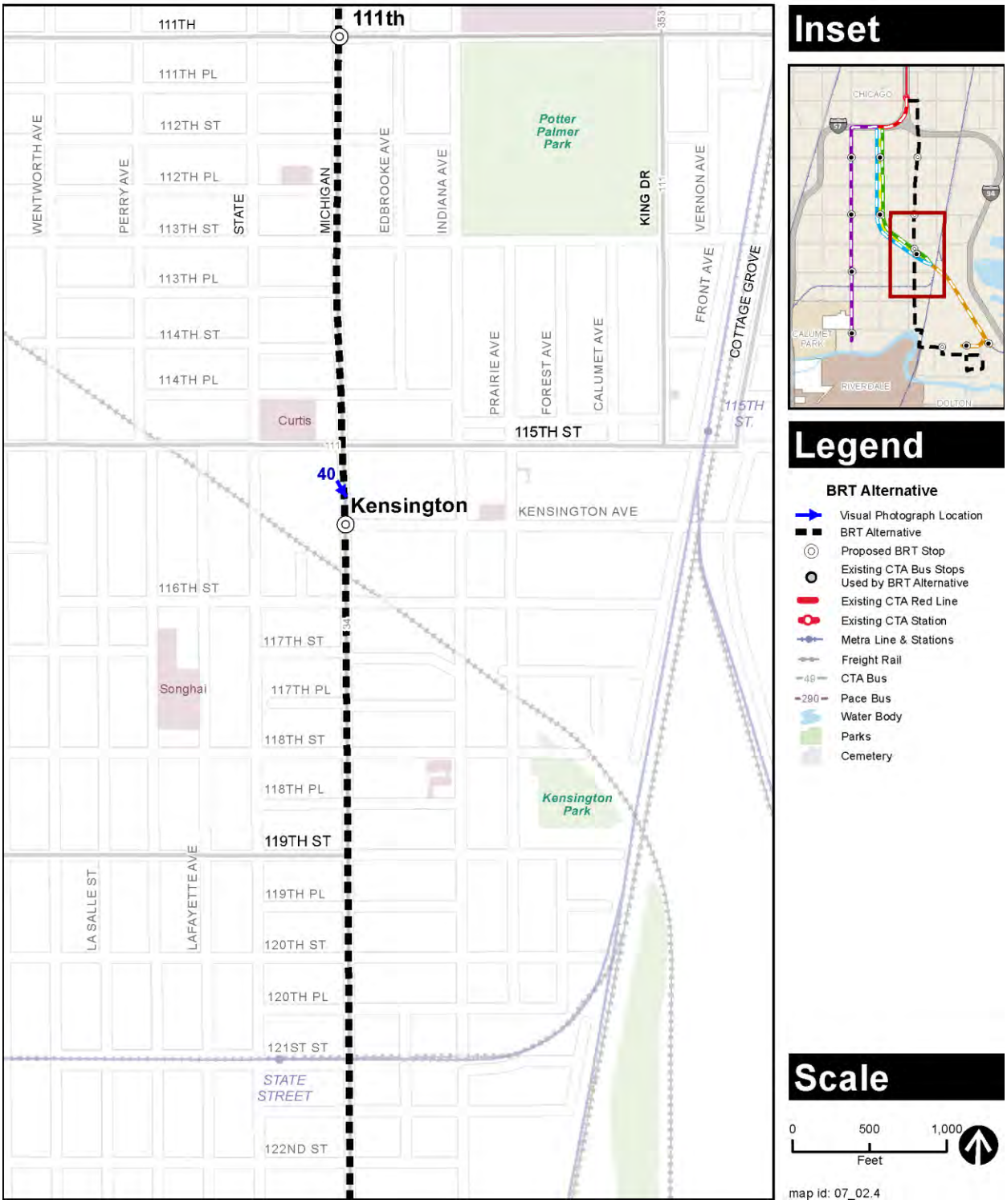


Figure 4-4: View Locations for the Bus Rapid Transit Alternative - South Central

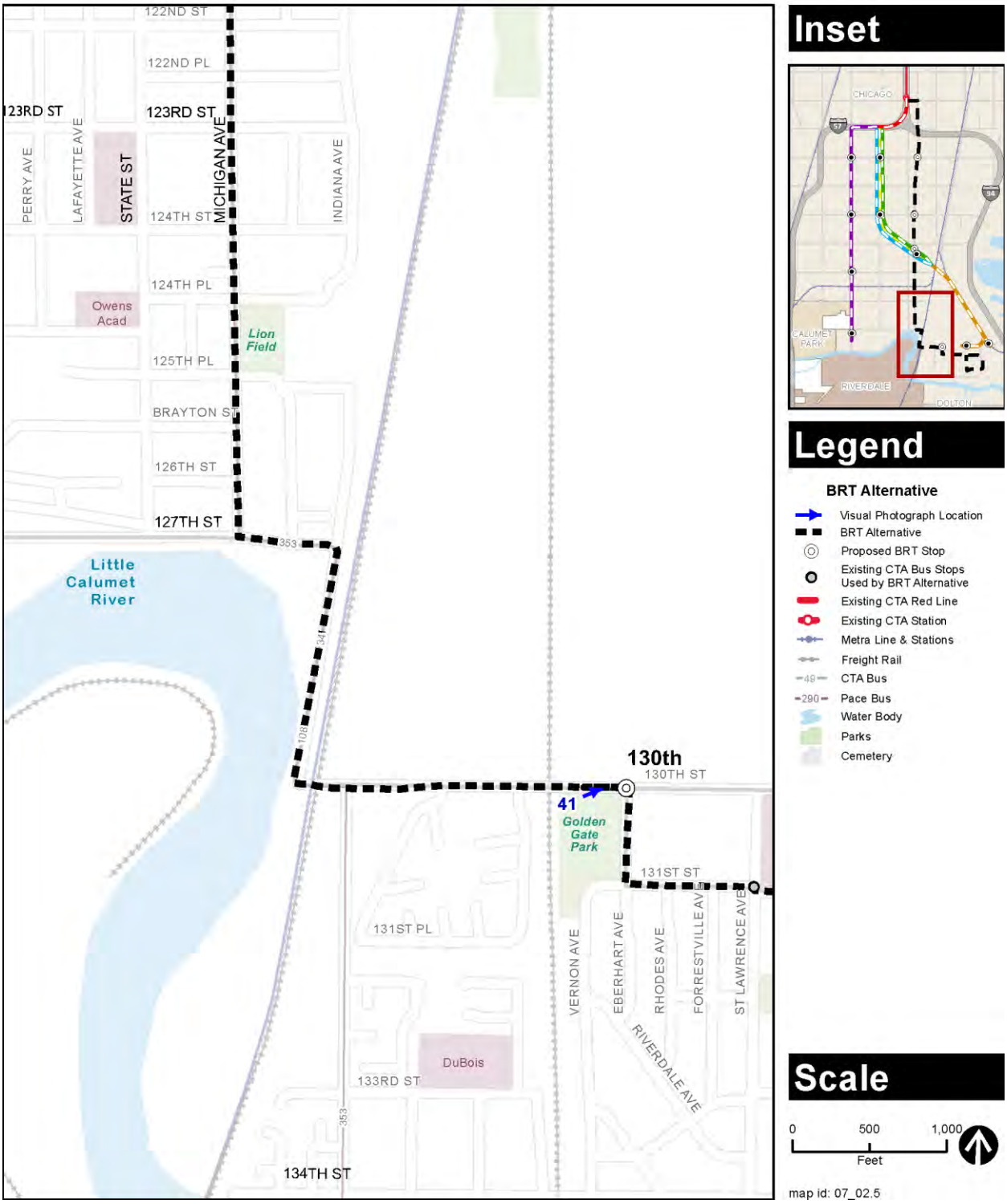


Figure 4-5: View Locations for the Bus Rapid Transit Alternative - South

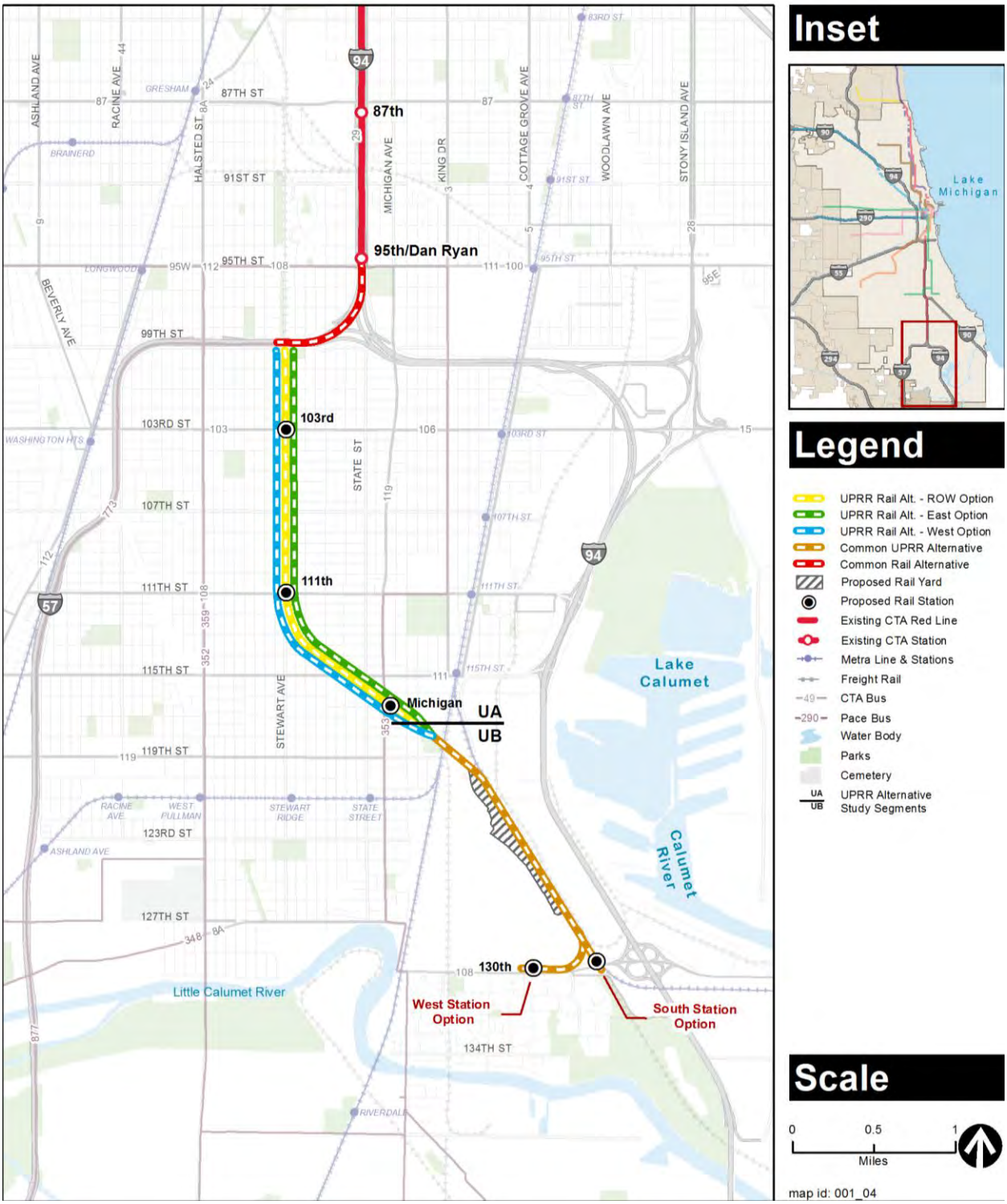


Figure 4-6: Union Pacific Railroad Rail Alternative

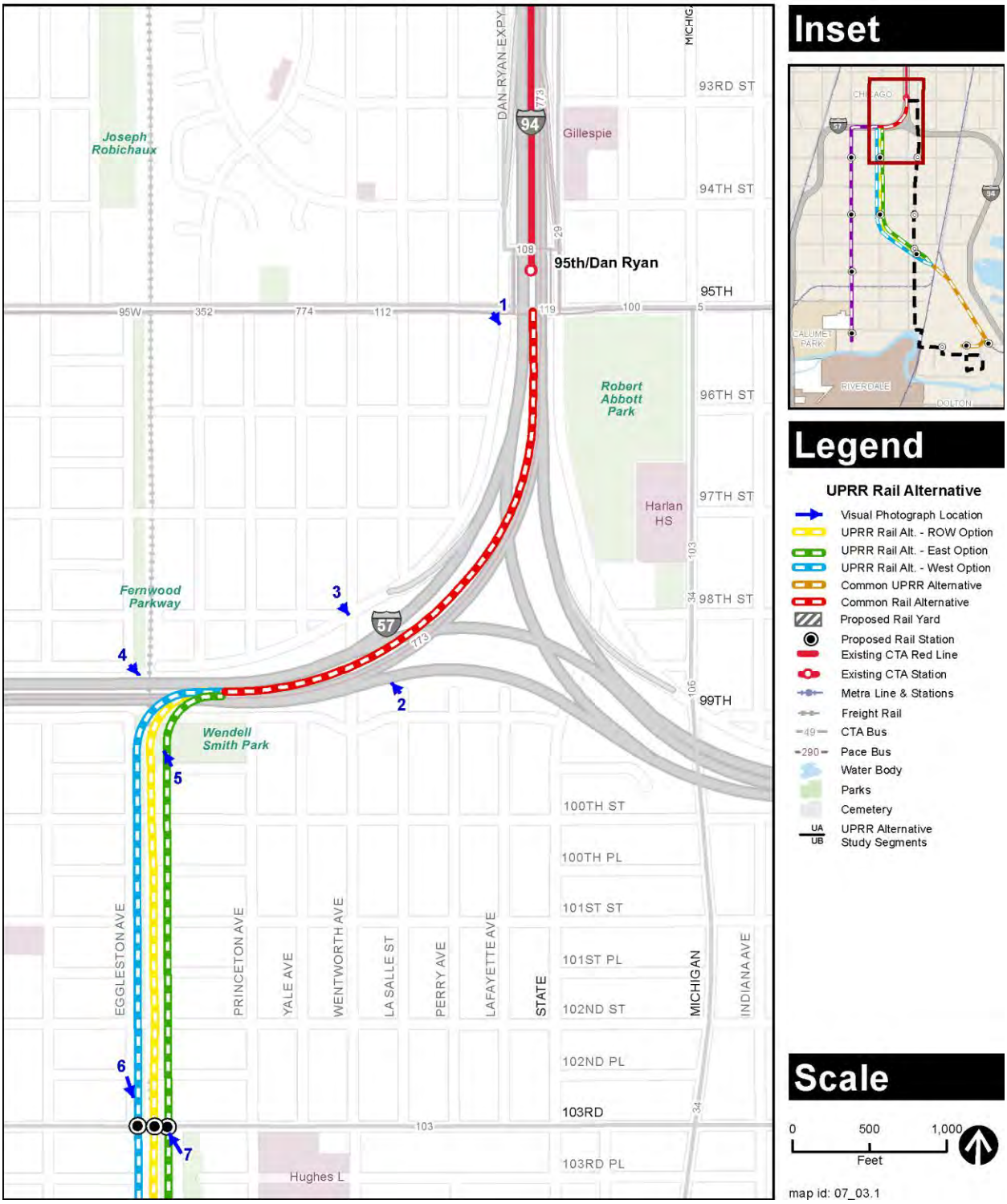


Figure 4-7: Union Pacific Railroad Rail Alternative View Locations - Segment UA North

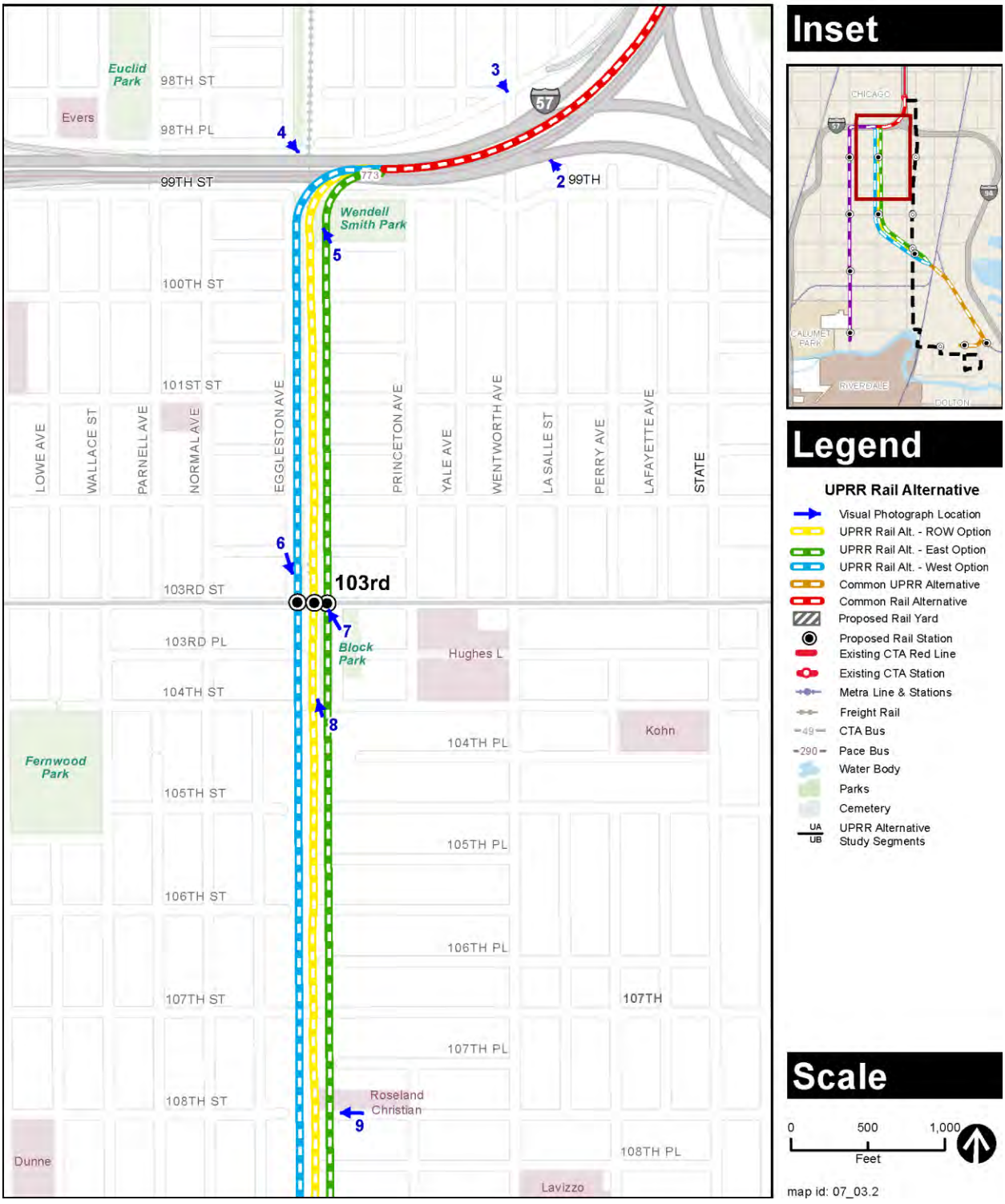


Figure 4-8: Union Pacific Railroad Rail Alternative View Locations - Segment UA

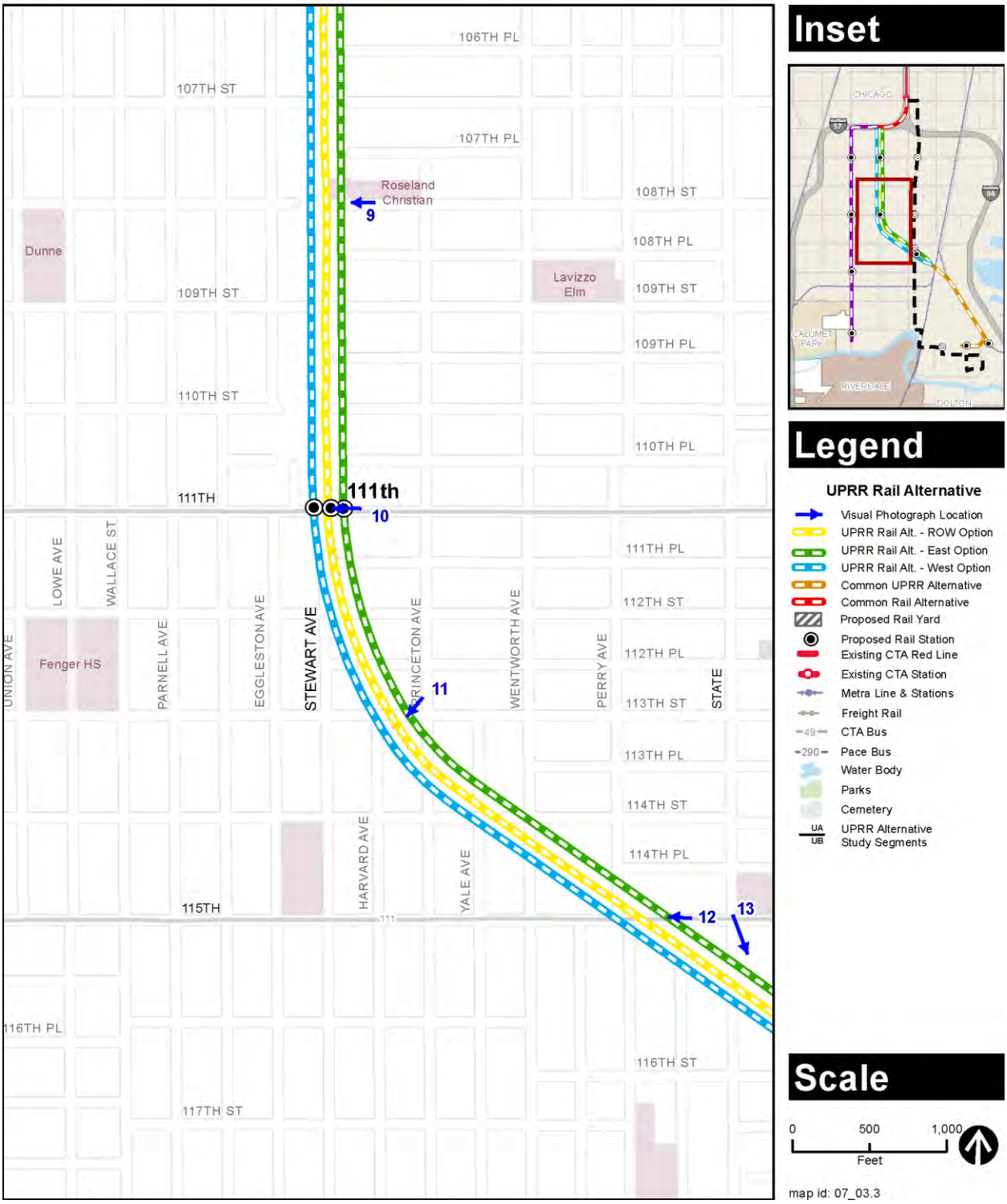


Figure 4-9: Union Pacific Railroad Rail Alternative View Locations - Segment UA

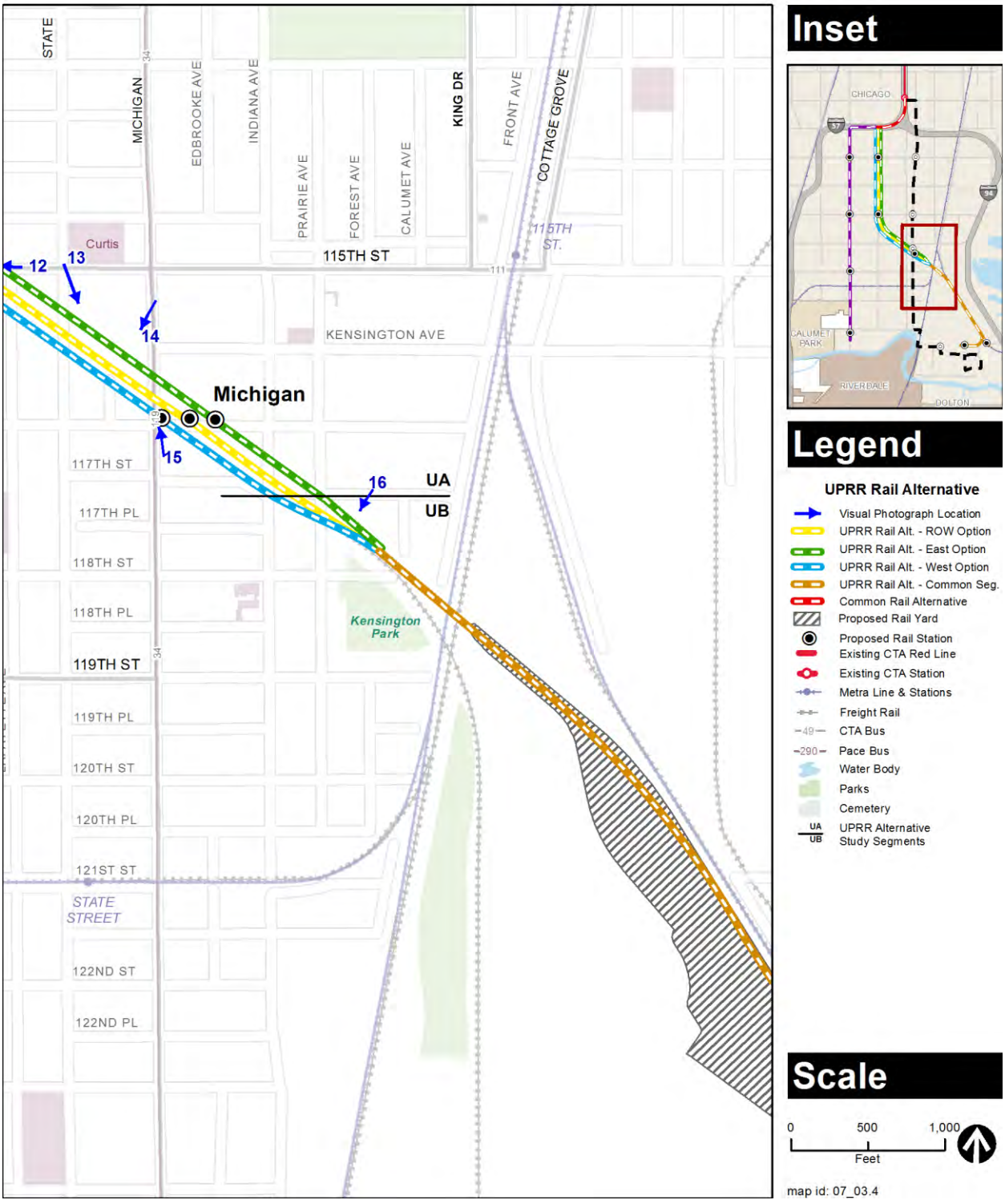


Figure 4-10: Union Pacific Railroad Rail Alternative View Locations - Segment UA and UB

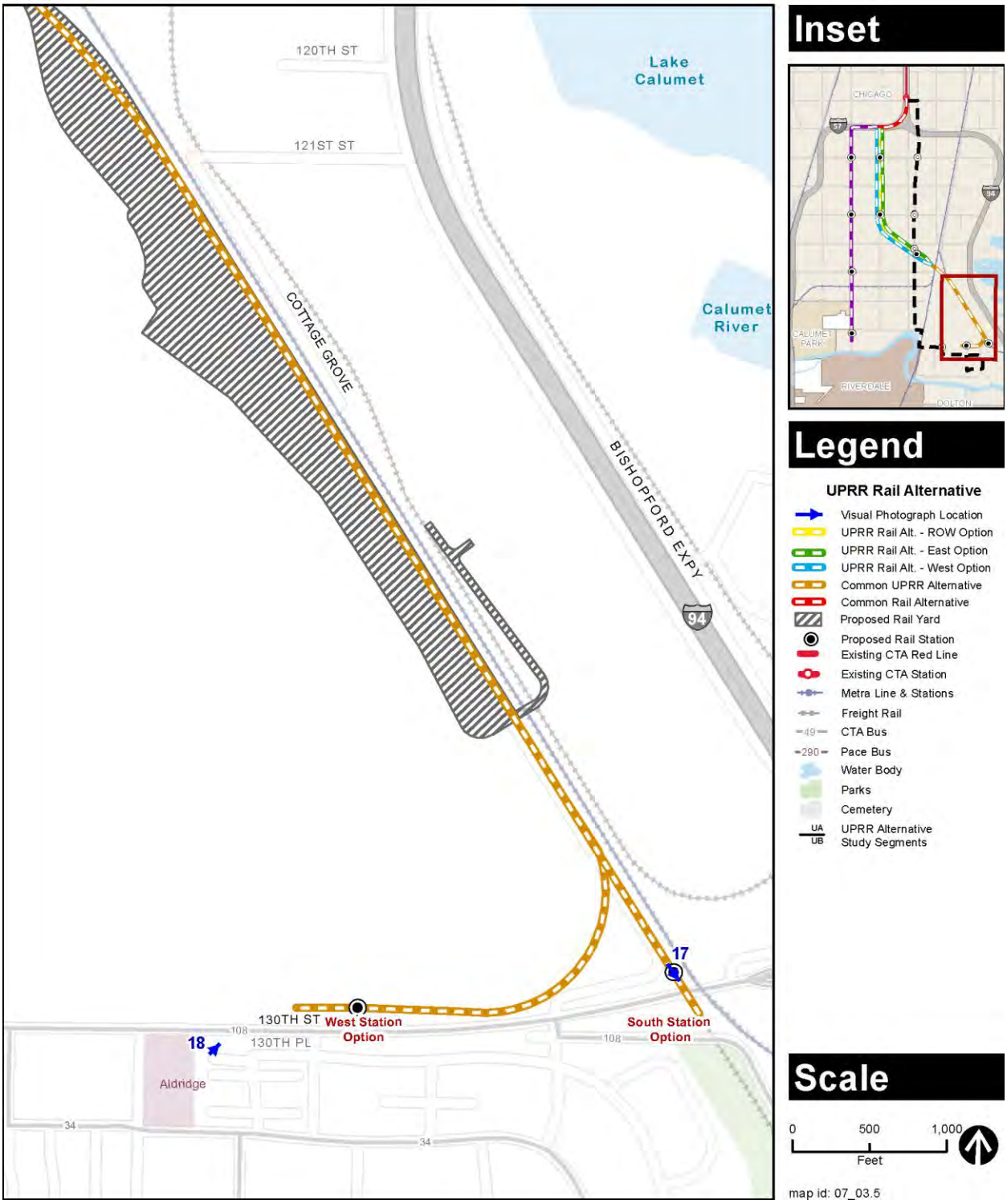


Figure 4-11: Union Pacific Railroad Rail Alternative View Locations - Segment UB

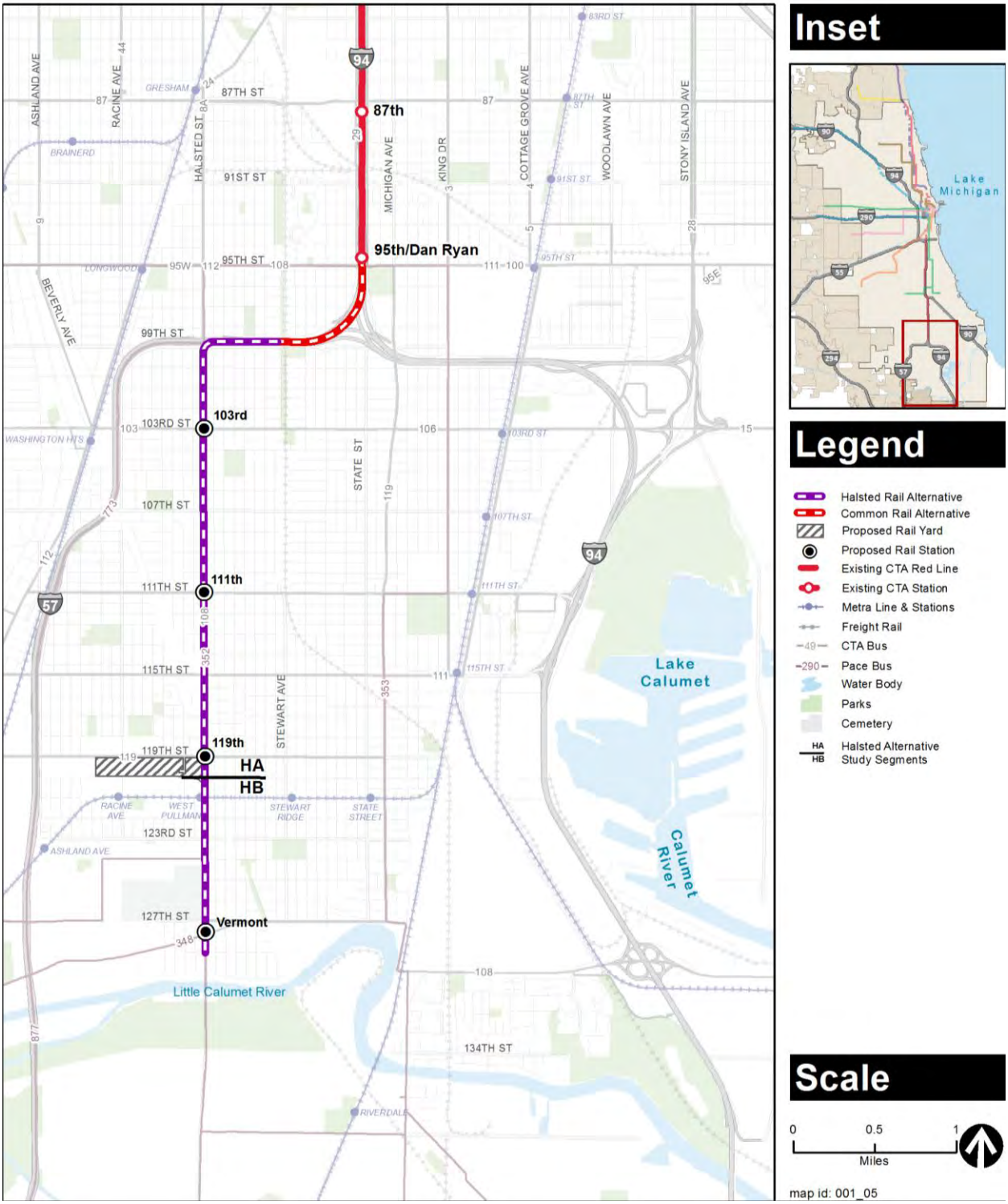


Figure 4-12: Halsted Rail Alternative

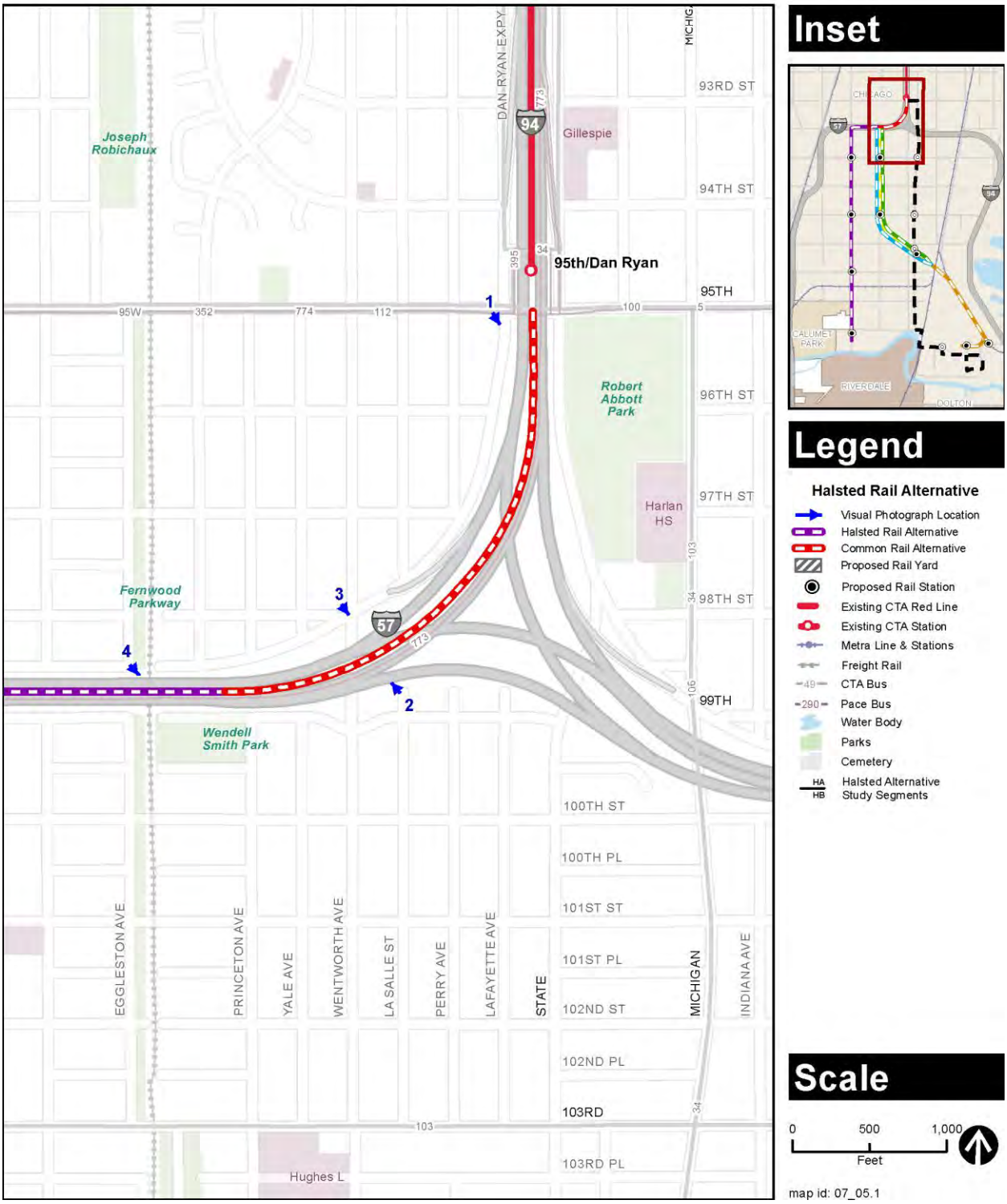


Figure 4-13: Halsted Rail Alternative View Locations - Segment HA

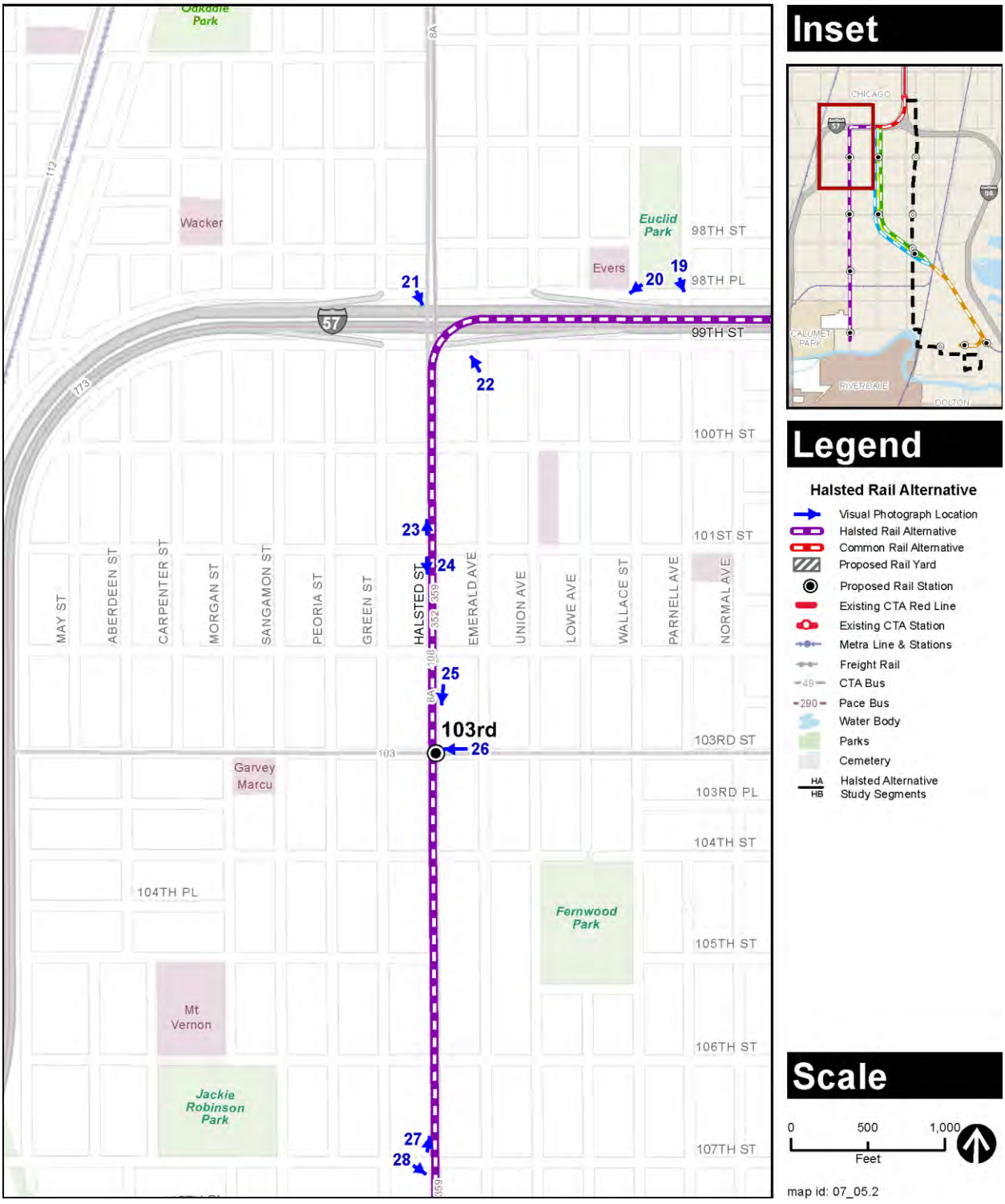


Figure 4-14: Halsted Rail Alternative View Locations - Segment HA

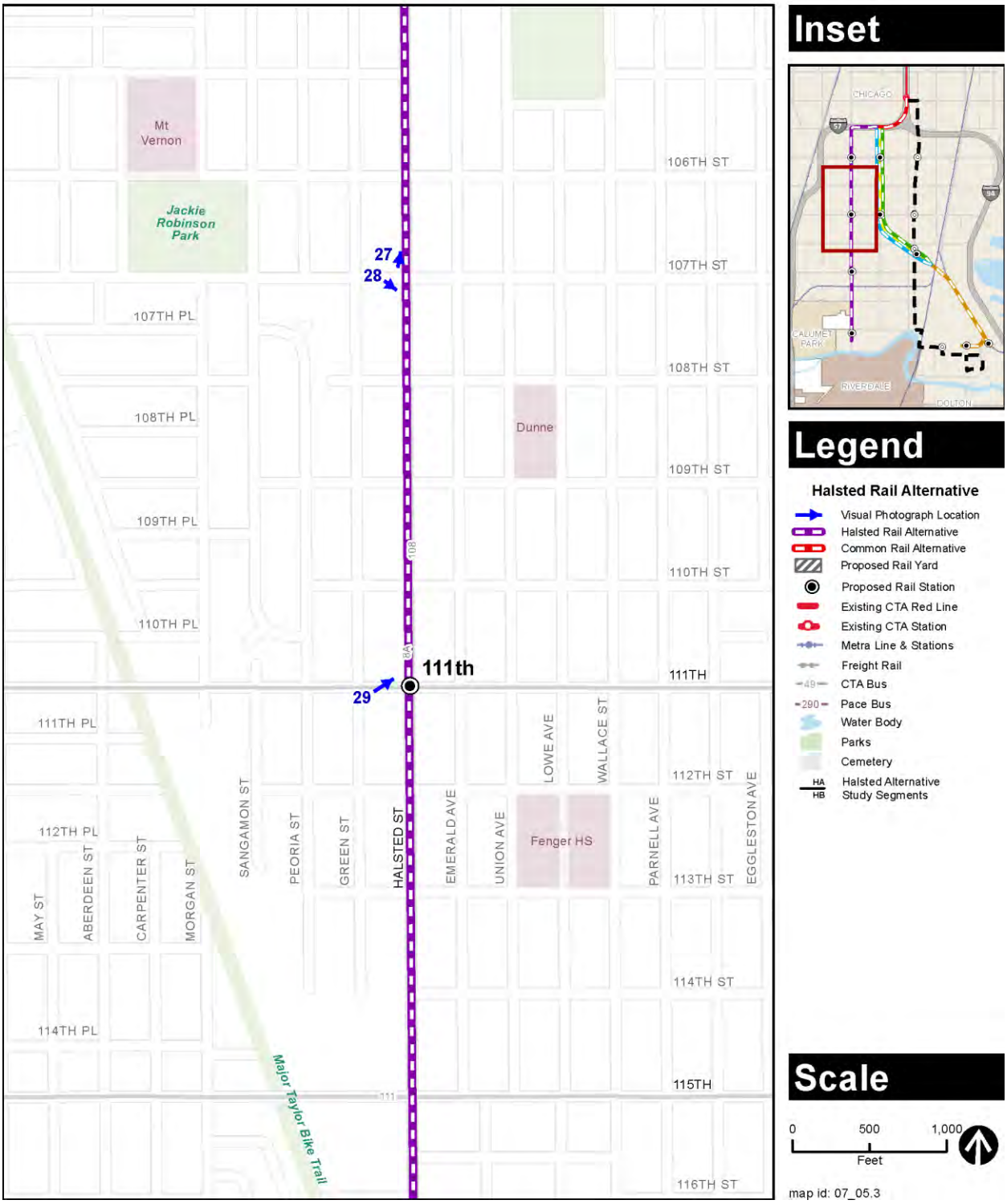


Figure 4-15: Halsted Rail Alternative View Locations - Segment HA

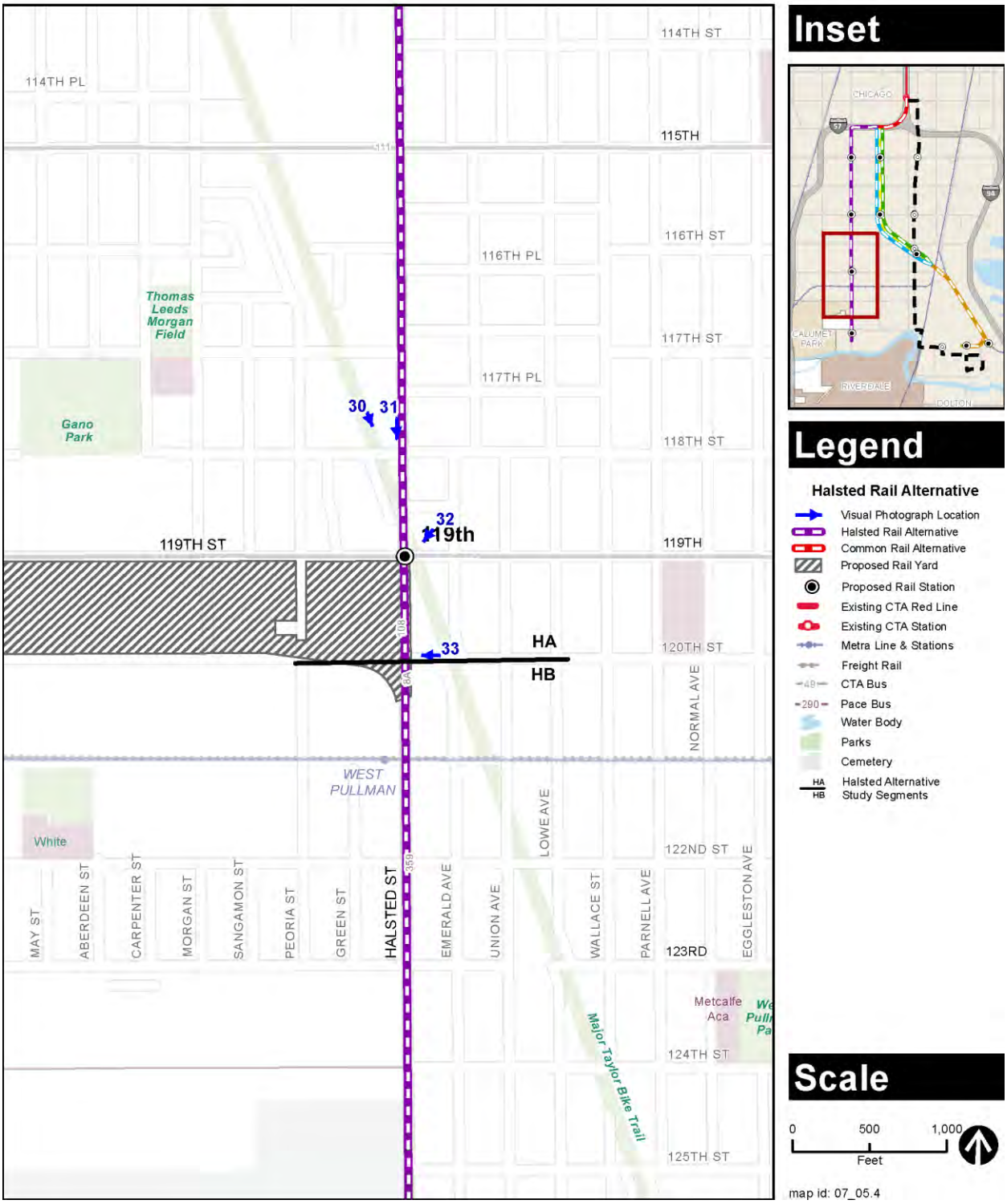


Figure 4-16: Halsted Rail Alternative View Locations - Segment HA and HB

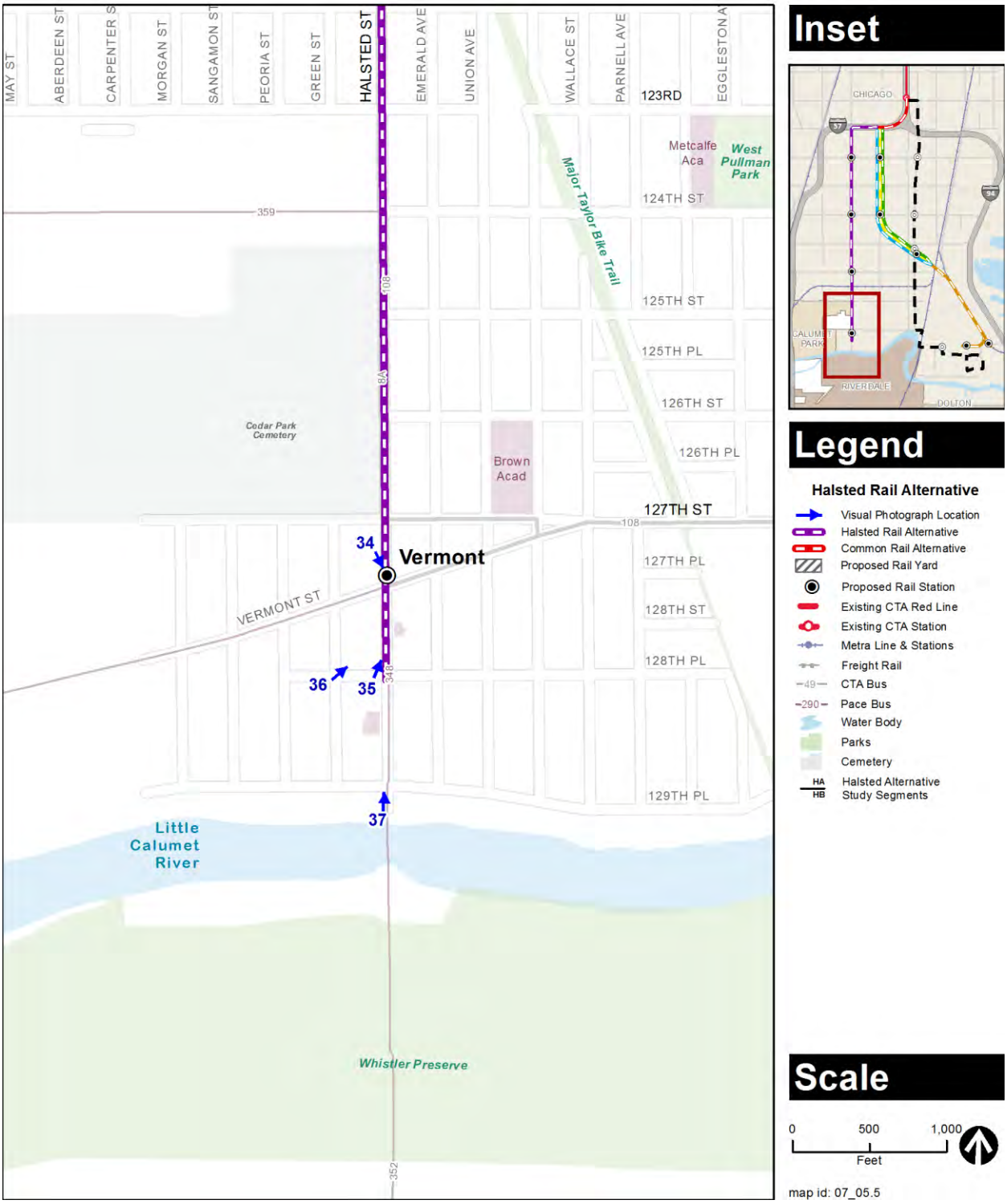


Figure 4-17: Halsted Rail Alternative View Locations - Segment HB

Figure 4-18: Affected Environment - Typical I-94 Visual Condition

Figure 4-19: Affected Environment - Typical I-57 Visual Condition

Figure 4-20: Affected Environment - Typical Existing Union Pacific Railroad Condition

Figure 4-21: Affected Environment - Typical Intersection at Existing Union Pacific Railroad

Figure 4-22: Affected Environment - View of Roseland Pumping Station

Figure 4-23: Affected Environment - Typical Halsted Street Visual Condition

Table 4-1: Affected Environment - Existing Visual Conditions Assessment

Viewpoint *See Figures 4 2 4 17*	View *See Attachment A*	Location/View Direction	Existing Visual Quality	Assessment Area
Bus Rapid Transit Alternative				
40	View 40	View south from Michigan Avenue between 115th Street and Kensington Avenue	Moderate	The viewshed consists of older commercial structures and a parking lot along the east side of Michigan Avenue, with a vacant lot along the west side.
41	View 41	View northeast from Golden Gate Park at 130th Street and Eberhart Avenue	Moderate	The viewshed includes the Altgeld Gardens neighborhood south of 130th Street and the Metropolitan Water Reclamation District property to the north.
Segment UA - UPRR Rail Alternative north of Michigan Avenue				
1	View 1	View south over I-94 from 95th Street overpass and Lafayette Avenue	Low	The viewshed includes I-94 and I-57 corridor and existing Red Line tracks to the yard.
2	View 2	View northwest toward Wentworth Avenue overpass from 99th and LaSalle Street	Low	The viewshed includes I-94 and I-57 corridor, with Wentworth Avenue overpass and surrounding residential neighborhoods visible in the distance.
3	View 3	View south toward I-57 overpass from Wentworth Avenue	Moderate	The surrounding neighborhood viewshed includes medium-density residential fabric of similar scale and style and with I-94 overpass visible in the distance.
4	View 4	View southeast from Eggleston Avenue and 98th Place	Low	The viewshed includes I-57 and existing railroad overpass with Wendell Smith Park beyond.
5	View 5	View northwest from the southwest corner of Wendell Smith Park	High	Existing views from Wendell Smith Park south of I-57 and adjacent to existing Union Pacific Railroad tracks are covered by well-established vegetation.
6	View 6	View south along Eggleston Avenue and Fernwood Parkway toward 103rd Street	High	Existing residential neighborhood fabric to the east of Fernwood Parkway is cohesive in scale and style, while the parkway is lightly vegetated and blocks the view of the existing tracks. The viewshed terminates with light commercial structures.
7	View 7	View northwest from 103rd Street and Harvard Avenue	Moderate	The existing railroad intersection at 103rd Street consists of lightly vegetated, low-density development, with residential neighborhood visible in the distance.
8	View 8	View north from the pumping station on Harvard Avenue	Moderate	The viewshed includes existing tree-lined railroad tracks to the west, a moderately vegetated green space along Harvard Avenue, and an electrical tower in the distance

Viewpoint *See Figures 4 2 4 17*	View *See Attachment A*	Location/View Direction	Existing Visual Quality	Assessment Area
9	View 9	View northwest from 108th Street adjacent to Roseland Christian School	Low	The view south of Roseland Christian School includes schoolyard with existing tree-lined railroad tracks to the west and light industrial buildings to the north.
10	View 10	View west from 111th Street	Low	The viewshed includes existing railroad crossing at 111th Street with light commercial buildings west of the tracks and vacant lots to the east. Existing residential buildings are in the foreground.
11	View 11	View southwest from 113th Street and Princeton Avenue	Low	The corner of 113th Street and Princeton Avenue shows a tree-lined residential fabric consisting of similar scale and style.
12	View 12	View northeast from 115th Street	Low	The existing railroad intersection at 115th Street consists of low-density, light industrial development west of the tracks and a vacant lot and residential building to the east.
13	View 13	View southeast from State Street	Low	The existing railroad intersection at State Street includes a vacant lot east of the tracks and a consistently developed residential neighborhood lined with trees to the west.
14	View 14	View south toward the existing UPRR viaduct from Michigan Avenue	Low	The viewshed includes an existing railroad berm and viaduct crossing over Michigan Avenue. A vacant lot is to the west and poorly maintained commercial buildings line the east side.
15	View 15	View northwest toward the existing UPRR viaduct from Michigan Avenue	Moderate	The viewshed includes an existing railroad viaduct crossing over Michigan Avenue and medium-density commercial and residential development in the surrounding area, some of which is vacant.
16	View 16	View southeast from 117th Street east of Prairie Avenue	Moderate	The viewshed includes highly vegetated existing railroad embankment with residential fabric of similar scale and style adjacent to it.
Segment UB - UPRR Rail Alternative South of Michigan Avenue				
17	View 17	View southeast toward 130th Street overpass from 130th Place	Low	The viewshed includes existing railroad tracks passing under the 130th Street overpass with medium-density vegetation surrounding it.

Viewpoint *See Figures 4 2 4 17*	View *See Attachment A*	Location/View Direction	Existing Visual Quality	Assessment Area
18	View 18	View northeast on 130th Place adjacent to Altgeld Gardens neighborhood	Low	The viewshed includes Altgeld Gardens neighborhood buildings with adjacent parking and 130th Street lined with trees. The Metropolitan Water Reclamation District property is visible to the north of 130th Street.
Segment HA - Halsted Rail Alternative North of 119th Street				
19	View 19	View southeast toward I-57 overpass from 98th and Parnell Street	Moderate	The viewshed includes the intersection of 98th and Parnell Street in the foreground with the I-57 overpass to the south and existing residential area to the east.
20	View 20	View southwest from 98th Place looking across I-57	Low	The viewshed shows typical conditions along the expressway corridor and adjacent residential areas to the south.
21	View 21	View southeast toward 98th Street from the Halsted Street overpass	Moderate	The viewshed includes the I-57 overpass at Halsted Street in the foreground with light commercial structures and a vegetated median in the distance.
22	View 22	View northwest from Emerald Avenue	High	Existing neighborhood fabric is intact and buildings are of similar style and scale.
23	View 23	View northeast from Halsted Street just north of 100th Street	Moderate	The visually cohesive, light commercial corridor consists of structures of similar style, surface parking lots, some on-street parking, and a vegetated median.
24	View 24	View south from Halsted Street at 100th Street	Low	The viewshed includes varying degrees of building styles in a low-density commercial area consisting of a vacant lot, parking lot, various commercial buildings, and a church.
25	View 25	View south from Halsted Street between 102nd Street and 103rd Street	Moderate	The viewshed includes a vegetated median along a medium-density commercial area of consistent style and scale.
26	View 26	View west from the corner of 103rd Street and Emerald Avenue	Moderate	The viewshed consists of a medium-density, light commercial district of similar style and scale, with a new commercial building and parking lot to the south and residential fencing to the north.
27	View 27	View north on Halsted Street at 107th Street	Low	The intersection includes a vacant parking lot and older light commercial buildings of similar scale and style with a newer gas station on the northeast corner.

Viewpoint *See Figures 4 2 4 17*	View *See Attachment A*	Location/View Direction	Existing Visual Quality	Assessment Area
28	View 28	View southeast from 107th Street between Halsted Street and Green Street	Low	The viewshed includes low-density commercial buildings with a large grocery parking lot in the foreground and a church on the east side of Halsted Street. Residential structures are in the distance.
29	View 29	View east from 111th Street between Halsted Street and Green Street	Low	The viewshed includes varying degrees of building style near a low-density commercial intersection. A tree-lined neighborhood is in the distance.
30	View 30	View southeast from the Major Taylor Trail at 118th Street	Moderate	The viewshed includes a tree-lined bike path with commercial structures along Halsted Street in the distance.
31	View 31	View south on Halsted Street at 118th Street	Moderate	The viewshed includes vegetated median along a very low-density, tree-lined, light commercial area.
Segment HB - Halsted Rail Alternative south of 119th Street				
32	View 32	View southwest at the corner of 119th Street and Halsted Street	Low	The intersection includes a large parking lot and older light commercial buildings of similar scale and style with the Major Taylor bike trail to the southeast.
33	View 33	View northwest at the corner of 120th Street and Halsted Street	Low	The viewshed consists of older commercial buildings of similar style and scale along a medium-density corridor.
34	View 34	View south on Halsted Street at Vermont Avenue	Low	The intersection includes older light commercial buildings of similar scale and style with a car sales lot to the west and a non-vegetated median along Halsted Street.
35	View 35	View northeast at the corner of 128th Street and Halsted Street	Low	The viewshed includes two vacant lots adjacent to light commercial buildings that appear to be old and rundown.
36	View 36	View northeast from the corner of 128th Place and Green Street	Moderate	The viewshed includes a medium-density residential neighborhood of similar scale and style with light commercial buildings in the distance.
37	View 37	View north from Halsted Street at the Little Calumet River bridge	Moderate	The viewshed includes the bridge/overpass with vegetation along both sides. Light commercial structures, vegetated median, and vacant lots are in the distance.

UPRR = Union Pacific Railroad

Section 5
Impacts and Mitigations

The No Build Alternative would have no impact on the visual and aesthetic conditions and the BRT Alternative would have very little impact. The BRT Alternative impacts would be concentrated at the Kensington Avenue and the 130th Street stops, where minor demolition would be required to accommodate a parking garage at each stop. The RLE Project could improve visual quality, depending on the location and option in question. The UPRR Rail Alternative ROW Option would require moderate land acquisition that also would typically be concentrated near station locations. Overall, this option would result in a modest change on the visual and aesthetic conditions of views for the affected project area and would be the least impactful of the three UPRR Rail Alternative options. As part of the UPRR Rail Alternative East Option, substantial land acquisition and demolition of buildings would occur along the project corridor, especially in Segment UA, with the most affected areas occurring along route curves and concentrated near station locations (refer to visual simulation). Overall, this option would result in a moderate impact on the visual and aesthetic conditions of views for the affected project area. The UPRR Rail Alternative West Option would have similar impacts as the East Option. The Halsted Rail Alternative would mainly result in visual impacts along Halsted Avenue due to the proposed structure and removal of some existing trees in the median.

5.1 No Build Alternative

The No Build Alternative would not have an impact on the visual and aesthetic conditions of the project area. This alternative only includes projects that are committed in the CMAP Fiscal Year 2010–2015 TIP and does not include extending the existing Red Line south of the 95th Street Terminal. Improvements to the 95th Street Terminal are part of the CMAP Fiscal Year 2010–2015 TIP. Generally, the No Build Alternative would not improve the current visual and aesthetic conditions, and the low visual quality of the existing area would remain and continue to degrade with time.

5.1.1 Permanent Impacts and Mitigations - No Build Alternative

Permanent impacts under the No Build Alternative would consist of minimal visual and aesthetic impacts. There are no existing CTA facilities in the project area.

5.1.2 Cumulative Impacts and Mitigations - No Build Alternative

The No Build Alternative would not cause cumulative impacts. Any proposed developments already being considered for development within the RLE Project corridor would still occur under the No Build Alternative.

5.2 Bus Rapid Transit Alternative

The proposed BRT Alternative would operate between the existing 95th Street Terminal and the intersection of 130th Street and Eberhart Avenue with stops at 103rd Street, 111th Street,

Kensington Avenue, and 130th Street. Stops along this portion would include improved bus shelters and park & ride facilities. The route would then continue through the Altgeld Gardens neighborhood along the existing #34 route, in which existing bus shelters would remain unchanged. Figure 4-1 shows the BRT Alternative.

5.2.1 Permanent Impacts and Mitigations - Bus Rapid Transit Alternative

Because parking lanes would be removed for some portions as part of the alignment, there would visually be fewer cars parked on the street in areas near new bus stops. New bus shelters would be provided at the 103rd Street, 111th Street, Kensington Avenue, and 130th Street stops and would result in minimal visual impact. Park & ride facilities would also be constructed at each stop and demolition would occur as part of this alternative. These changes would alter the density of some viewsheds in the project area by varying degrees. Potential impacts created by these parking structures are represented in Views 40 and 41 in Appendix A. Aside from the addition of a three-story parking garage at the Kensington Avenue stop and at the 130th Street stop, the implementation of the BRT Alternative overall would have minimal impact on the visual and aesthetic conditions in the project area.

Visualizations were completed for representative areas and those with highest potential visual impact. Impacts on station areas were determined based on representative visualization and the amount of change that would occur around the station areas. Specific impacts are discussed below. Mitigations to reduce visual impacts related to the BRT Alternative would include shielding exterior lighting and providing special consideration for lighting placement adjacent to sensitive areas such as residential communities; providing landscaping and/or visual screening at park & ride locations where possible; and designing the parking structure to match the character of the surrounding fabric as well as using urban design techniques to reduce massing. The impacts would not be considered adverse for the low to moderate impacts after mitigation.

- 103rd Street stop - Low visual impact - Improved bus shelters near the intersection of 102nd Street and Michigan Avenue would have little to no visual impact. A surface parking lot on the southeast quadrant of the 102nd Street and Michigan Avenue intersection would require one building to be removed, which would decrease the visual quality of the area. Visual impacts would be mitigated using measures described above.

- 111th Street stop - Low visual impact - Improved bus shelters near the intersection of 111th Street and Michigan Avenue would have little to no visual impact. A surface parking lot located on the southeast quadrant of the 111th Place and State Street would replace existing vacant lots, which would result in an increase in visual quality.

- Kensington Avenue stop - Moderate visual impact prior to mitigation - Improved bus shelters near the intersection of the Kensington Avenue and Michigan Avenue would have little to no visual impact. A three-story parking garage with retail and/or community facilities on the southeast quadrant of the Kensington Avenue and Michigan Avenue intersection would require removal of vegetation and a few structures, which would create a moderate change in

scale, density, and character. Due to low density and low viewer sensitivity in the immediate area, the impacts after mitigations discussed above would result in minimal (low) visual impact. See View 40 in Appendix A for visual illustration of this impact.

- 130th Street stop - Moderate visual impact prior to mitigation - Improved bus shelters near the intersection of 130th Street and Eberhart Avenue would have little to no visual impact. The addition of a three-story parking garage, located on the northwest quadrant of the 130th Street and Water Treatment Plant access road intersection, would change the character and scale of the surrounding area. No buildings would be removed; however, the existing area across from the Altgeld Gardens neighborhood and Golden Gate Park is mostly vegetated. The addition of a large hard surface would decrease the visual quality of the area. Due to a major change in scale of the surrounding area and high viewer sensitivity, impacts after mitigations described above would be moderate. See View 41 in Appendix A for visual illustration of this impact.

Table 5-1 summarizes the impacts on visual and aesthetic conditions for the BRT Alternative and provides an assessment of the impacts. Figures 4-2 through 4-5 show the view locations.

Table 5-1: Impacts - Bus Rapid Transit Alternative

Viewpoint *See Figures 4 2 4 5*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
Bus Rapid Transit Alternative				
40	View 40	View south from 115th Street and Michigan Avenue	Low	Minimal removal of buildings and addition of a three-story parking garage would create a change in scale and character. The addition of a bus shelter would have almost no visual impact.
41	View 41	View northeast from Golden Gate Park at 130th Street	Moderate	Removal of vegetation and addition of a three-story parking garage would alter the scale and character of the area; however, the bus shelter would have no visual impact.

5.2.2 Construction Impacts and Mitigations - Bus Rapid Transit Alternative

Projects already committed through the CMAP TIP would be constructed as described for the No Build Alternative. There would be minimal construction impacts on the existing visual condition along the BRT Alternative route. Because no dedicated bus lanes would be provided as part of the BRT Alternative, the only construction would be isolated in locations related to the installation of new bus stops, including shelters and a possible parking lot or parking garage depending on location. These visual conditions would be temporary, lasting several weeks to a year and might include construction fencing, cones, and other construction related to parking facilities. At locations where park & ride structures and lots would be created, example impacts would include the following:

- Construction fencing
- Demolition of existing buildings or clearing of vacant lots
- Temporary street closures and related signage
- Temporary lighting or entrances

During construction the CTA would attempt to maintain as much existing vegetation as practical, and minimize temporary construction impacts on the neighborhood with measures such as limiting light trespassing from night lighting. Best management practices and debris-free construction areas would mitigate temporary visual impacts from the construction sites.

5.2.3 Cumulative Impacts and Mitigations - Bus Rapid Transit Alternative

There are no future developments planned for the project corridor that would have cumulative impacts on the visual and aesthetic conditions with the BRT Alternative.

5.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR Rail Alternative is an extension of the existing Red Line with three alternative options: the UPRR ROW Option, East Option, and West Option. The trains would operate on an elevated structure that would run south from 95th Street along I-57 for nearly ½ mile to the existing UPRR corridor in the vicinity of Eggleston Avenue. Note that Views 1A, 2A, 3A, and 4A apply to all rail alternatives. The alignment would then run south along the UPRR corridor to approximately 111th Street where it would turn southeast. East of Prairie Avenue, the alignment would cross over the CN/ME tracks near 119th Street, where it would transition to an at-grade profile and then continue southeast along the Northern Indiana Commuter Transportation District Chicago South Shore & South Bend Railroad (NICTD/CSS & SBRR) ROW to terminate at 130th Street. Four stations would be included: 103rd Street, 111th Street, Michigan Avenue, and 130th Street. Figure 4-6 shows the UPRR Rail Alternative.

The scale, density, and character of several viewsheds would change by varying degrees as part of UPRR Rail Alternative. Refer to Views 1A, 2A, 3A, 4A, 10 and 10A, 13 and 13A, and 14 and 14A for visual illustrations and examples of these impacts.

The UPRR ROW Option would place CTA tracks on an elevated structure located in the existing UPRR ROW between I-57 and CN/ME tracks. UPRR Trains would relocate to another corridor as part of a separate, earlier project that may occur regardless of RLE Project implementation. A visual illustration of this impact is represented in View 12A in Appendix A. Moderate land acquisition would occur as part of this alternative, and would typically be concentrated near station locations. Overall, this option would have a modest change on the visual and aesthetic conditions of views for the affected project area.

Track alignments typically are shown to have a higher degree of visual impact than other changes, due to the demolition of existing structures and, in many cases, a substantial change in scale, density and character of the surrounding environment. Project components for all alternatives would be visible, depending on viewshed and alignment location, which would change the visual and aesthetic quality of the project corridor by varying degrees. Some of the more impactful elements would include elevated tracks and platforms, concrete piers and steel cross-girders, stations and substations, parking structures and surface lots.

5.3.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

The UPRR Rail Alternative was analyzed in two segments. Segment UA consists of the UPRR Rail Alternative north of Michigan Avenue and Segment UB is the portion south of Michigan Avenue. Refer to Figure 4-6 for segment division.

In order to reduce adverse impacts on visual and aesthetic conditions, several standard mitigation measures would be implemented for any location identified as having moderate or high impact. Mitigation actions that would apply to all alternatives include, but are not limited to, the following:

- The final design of new stations and additional structures would reflect the character and material quality of uniquely identified neighborhoods or communities.

- In locations where track alignment would lead to the removal of buildings or cohesive neighborhood fabric, all efforts would be made to create new developments on parcels no longer needed; these developments would utilize equivalent scales, styles, and character of the surrounding community.

- Replacement or restoration of removed vegetation and landscaping is assumed in nearly all instances, and additional locations would be considered in areas where new building development prohibits restoration or is limited by size of parcels. Landscaping would be in compliance with the City of Chicago Green Street Project.

- When possible the project would be designed to address neighborhood plan recommendations related to visual and aesthetic issues, especially as they relate to station, substation, and parking garage design. Where parking structures would be taller than surrounding structures, design techniques such as stepping the massing back from the street would be used to reduce the impacts of a dramatic change in scale.

- Exterior lighting would be shielded and carefully placed when adjacent to sensitive areas such as residential communities.

- Landscaping and/or visual screening would be provided at park & ride locations, where possible, to reduce the visual impact of large, open, hard surfaces or structures.

- In locations where the alignment would be immediately adjacent to commercial and residential corridors, methods of good urban design would be used to reduce adverse impacts on neighborhood character and maintain a welcoming visual character for pedestrians.

These mitigation measures would apply in varying degrees to each alternative depending on the quantity and degree of visual and aesthetic impacts. Mitigation measures specific to particular locations are addressed under designated high-impact views within each alternative. Even with mitigation measures that would lessen impacts, several locations would still have adverse impacts, such as the addition of large-scale parking structures that are out of context and scale in residential neighborhoods, or taller, flyover structures that would be at a greater scale and alter the character of their surroundings. These impacts are discussed in Section 6.

5.3.1.1 Segment UA

The creation of elevated structures along Segment UA from 95th Street to the vicinity of Eggleston Avenue would have minimal impact on the visual quality. The elevated structure and creation of related stations would have a moderate impact on the visual quality of Segment UA from the vicinity of Eggleston Avenue to 119th Street. This visual change is subjective.

Shadows created by the elevated structure would change throughout the day and season. The shadows would vary depending on the height, orientation, and density of surrounding structures, vegetation and development. Shadows would have the most impact along Segment UA. The majority of vegetation along the UPRR ROW Option corridor would remain and would help minimize visible light and shadow effects on adjacent neighborhoods. There would be additional lighting introduced to the project area that would be associated with park & ride facilities, stations, substations, yard and shop facilities, and trains (which include interior/safety lighting and exterior headlights). For most of the UPRR Rail Alternative project corridor, light and glare associated with the alignment and trains would not have an adverse impact because the proposed features would generally be located in the existing expressway/highway corridor or the existing UPRR railroad corridor, which currently produce transportation-related light and glare.

Each station in Segment UA comprises elevated island platforms with covered canopies, street level stations structures, and adjacent parking facilities. These stations include the 103rd Street station, 111th Street station, and Michigan Avenue station.

Visualizations were completed for representative areas and those with highest potential visual impact. Impacts on station areas were determined based on representative visualization and the amount of change that would occur around the station areas. Specific impacts at each station, as well as view locations with high visual impact, are discussed below. Locations with low to moderate impacts would be mitigated using the standard mitigation measures discussed at the beginning of Section 5.3.1. Impacts would not be considered adverse for the low to moderate

impacts after mitigation. High visual impact views would have specific measures to reduce adverse impacts after mitigation.

- 103rd Street station would have a low visual impact. Minimal buildings would be removed along 103rd Street to accommodate two surface parking lots, which would minimally alter the character of the surrounding neighborhood. The new station on the north side of 103rd Street would minimally change the character and density of the intersection. The creation of elevated platforms and track structure would have a moderate impact on the viewshed of residences adjacent to the project alignment. These impacts would be mitigated by using standard mitigation measures, including design of the station to match the character and scale of surrounding developments and landscaping. See View 8A in Appendix A for a visual illustration of this impact.

- 111th Street station would have a low visual impact. No buildings would be removed. The new station just north of 111th street would minimally change the character and density of the intersection. The creation of elevated platforms and track structure would have a moderate impact on the viewshed of residences adjacent to the project route. The removal of vegetation and addition of two surface parking lots would affect the surrounding neighborhood character. Impacts would be mitigated using standard mitigation measures, including landscaping and design of the station to match the character and scale of surrounding developments. See View 10A in Appendix A for visual illustration of this impact.

- Michigan Avenue station would have a high visual impact prior to mitigation. The new station on the west side of Michigan Avenue would change the character, scale, and density of the immediate area. The addition of elevated platforms and track structure and the substantial removal of buildings and vegetation for the creation of a three-story parking garage west of the tracks would have a high impact on the character and density of the local community. Despite mitigation measures, the impact on residents of State Street and 116th Street would still be substantial due to the large mass of the parking structure adjacent to the neighborhood. The moderate removal of vegetation in the existing vacant lot east of the tracks to accommodate a surface lot would have additional minimal visual impact for adjacent residents. Impacts would be mitigated using standard mitigation measures, which include designing the station and structures to match the character of the surrounding fabric, using urban design techniques to reduce massing and create pedestrian friendly surroundings, and providing landscaping and visual screening. Impacts after mitigation would be moderate due to the mass of the parking garage. See Views 13A, 14A, and 15A in Appendix A for visual illustration of this impact.

- A high visual impact prior to mitigation would occur at View 13A (see Appendix A). See description of Michigan Avenue station above or refer to Table 5-2.

The UPRR ROW Option along Segment UA would include substations located west of CTA tracks between 104th and 105th Street and west of the CTA tracks between Perry Avenue and Lafayette

Avenue. Additional minimal visual impacts would occur for surrounding residences adjacent to these locations.

Table 5-2 summarizes the impacts on visual and aesthetic conditions for the UPRR ROW Option along Segment UA and provides an assessment of the impacts. Figures 4-7 through 4-10 show the view locations.

Table 5-2: Impacts - Right of Way Option - Segment UA

Viewpoint *See Figures 4 7 4 10*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
Segment UA - North of Michigan Avenue				
1	View 1A	View south over I-94 from 95th Street overpass and Lafayette Avenue	Low	The overall visual character would not change, but the increase in scale and shadows would be noticeable to motorists due to elevated structures.
2	View 2A	View northwest toward Wentworth Avenue overpass from 99th and LaSalle Street	Low	The overall visual character would not change, but the increase in scale and shadows would be noticeable to motorists due to elevated structures. The structure would be visible in the distance to adjacent neighborhoods.
3	View 3A	View south toward I-57 overpass from Wentworth Avenue	Low	The character and scale of neighborhood would not change, but the elevated structure would be visible in the distance
4	View 4A	View southeast from 98th Place and Eggleston Avenue	Low	The character of the area would not change; however, there would be an increase in scale. The elevated structure and removal of vegetation beyond would be visible in the distance to adjacent neighborhoods.
5	View 5A	View northwest from the southwest corner of Wendell Smith Park	Moderate	The visual character would change with the removal of minimal vegetation and view of the structure in the distance.
8	View 8A	View north from the pumping station on Harvard Avenue	Low	The elevated structure would create a change in scale; however, the viewshed would otherwise remain unaltered.
9	View 9A	View northwest from 108th Street adjacent to Roseland Christian School	Low	The elevated structure would create a change in scale; however, the view from Roseland Christian School would otherwise remain unaltered.
10	View 10A	View west from 111th Street	Moderate	The character and scale of the intersection would change with the addition of the elevated structure, elevated platform, and at-grade station. No buildings and minimum vegetation would be removed.
11	View 11A	View southwest from 113th Street and Princeton Avenue	Low	The elevated structure would be minimally visible to residents due to existing vegetation.
12	View 12A	View northeast from 115th Street	Low	The elevated structure would create a minimal change in scale and character for the surrounding area.

Viewpoint *See Figures 4 7 4 10*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
13	View 13A	View southeast from State Street	Moderate	The addition of a three-story park & ride garage would substantially change the scale, character, and density of the neighborhood. The elevated structure would have minimal impact. Visual impact would be moderate after mitigation.
14	View 14A	View south toward the existing UPRR viaduct from Michigan Avenue	Moderate	The scale and character or the viewshed would moderately change with the addition of an elevated structure, elevated platform, and raised station. The removal of vegetation and structures beyond for a three-story park & ride garage would also alter the visual quality, Visual impact would be moderate after mitigation.
15	View 15A	View northwest toward the existing UPRR viaduct from Michigan Avenue	Low	The elevated structure and station would be partially hidden by the existing vegetation and structures. Only minimal vegetation would be removed,
16	View 16A	View southeast from 117th Street east of Prairie Avenue	Low	The elevated structure would be minimally visible to residents due to existing vegetation.

5.3.1.2 Segment UB

Aside from a portion of alignment north of the 120th Street yard and shop location, the UPRR ROW Option alignment in Segment UB runs along an embankment and terminates at grade. This segment continues through an industrial area with no public streets and thus would have minimal impact on the visual quality of the surrounding area. Due to the lack of architectural character and low visual quality of the existing area, changes to the visual and aesthetic conditions would be very minimal. The creation of 130th Street South Station Option or West Station Option would have a moderate impact on the visual quality. These stations would have at-grade island platforms with covered canopies, CTA Rail stationhouse, and adjacent parking facilities. Visualizations were completed for representative areas and those with highest potential visual impact. Impacts on station areas were determined based on representative visualization and the amount of change that would occur around the station areas. Specific impacts at each station would be as follows:

- 130th Street South Station Option would have a minimal visual impact. Although the new station located west of the NICTD/CSS & SBRR ROW would moderately change the scale and character of the existing light industrial area, changes in a light industrial area are not considered impacts. No buildings would be removed, but some vegetation would be affected. The tracks and platform would be lower in elevation than the 130th Street overpass and would be partially screened. The stationhouse would be similar in height to the overpass and to the one- to two-story structures at Altgeld Gardens neighborhood; however, the creation of a seven-story parking garage would have a high impact on the scale, be out of character with

the surrounding area, and be visible from the adjacent residential community, albeit at a distance. Standard mitigation measures include designing the station and structures to match the character of the surrounding fabric, using urban design techniques to reduce massing, and providing landscaping and visual screening. Due to low density and viewer sensitivity in this area, overall impacts after mitigation would be minimal. Note that at community visioning sessions, community members expressed desire for higher density surrounding this proposed station. See View 17A in Appendix A for visual illustration of this impact.

- 130th Street West Station Option would have a moderate visual impact. The new station along the north side of 130th Street would moderately change the scale and character of the existing light industrial and low-density residential area. No buildings would be removed, but some vegetation would be affected. The stationhouse, at-grade tracks, and platform would be moderately visible from 130th Street or by residences in the Altgeld Gardens neighborhood, albeit at a distance. The creation of a four-story parking garage would have a high impact on the scale and density of the area due to height and mass. Additionally, the adjacent parking lot would create a large surface area with moderate visual impact. Standard mitigation measures include designing the station and structures to match the character of the surrounding fabric, using urban design techniques to reduce massing, and providing landscaping and visual screening. As with the South Station Option, community members expressed desire for higher density surrounding this proposed station. See View 18A in Appendix A for visual illustration of this impact.

The UPRR ROW Option along Segment UB would include substations located west of CTA tracks north of the proposed parking structure for the South Option or along the curve of the CTA tracks near 130th Street for the West Option. An additional substation is proposed for a site within the 120th Street yard and shop facility. There would be additional minimal visual impact for surrounding residences adjacent to these locations.

Table 5-3 summarizes the impacts on visual and aesthetic conditions for the UPRR ROW Option along Segment UB and provides an assessment of the impacts. Figures 4-11 through 4-12 show the view locations.

Table 5-3: Impacts: Right of Way Option - Segment UB

Viewpoint *See Figures 4 10 4 11*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
Segment UB - South of Michigan Avenue				
17	View 17A	View southeast toward 130th Street overpass from 130th Place	Low	The mass of the seven-story parking garage would change the scale and character of the area. Due to the low-density location, however, viewer sensitivity would be low and these impacts would be minimal. The addition of a stationhouse and at-grade platform, partially blocked by the elevation of 130th Street, would be low impact.
18	View 18A	View northeast on 130th Place adjacent to Altgeld Gardens neighborhood	Moderate	The mass of the four-story parking garage would change the scale and character of the area. The addition of a stationhouse, large parking lot, and at-grade platform would change the character of the area creating a moderate impact.

5.3.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

During construction for the RLE Project, the CTA would attempt to maintain as much existing vegetation as practical and minimize temporary construction impacts on neighborhoods by limiting light trespassing from night lighting. Best management practices and debris-free construction areas would mitigate temporary visual impacts from the construction sites. The visual impacts of construction under the UPRR ROW Option would include temporary visual conditions related to construction. The durations of these visual conditions would vary from several months to a few years depending on the alignment location and occurrence of station facilities. Examples include the following:

- Construction fencing
- Demolition of existing buildings
- Temporary walls
- Temporary street closures and related signage
- Temporary lighting
- Temporary entrances
- Shoring of concrete structures or existing viaducts during construction

The overall visual impact on commuters and visitors would be relatively limited along the I-94 and I-57 corridor because they typically only see the location during commute times or upon entering and exiting. Residents, business owners, and recreationists typically view one station and portion of the project in their local community. Construction impacts would only be temporary in nature, and would be most extensive in areas of land acquisition.

5.3.2.1 Segment UA

Construction impacts would be longer in nature, lasting a few years, at the Michigan Avenue station due to the substantial removal of buildings and construction of a three-story park & ride garage.

5.3.2.2 Segment UB

Construction impacts would be similar in nature to those discussed in Section 5.3.2.

5.3.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - Right-of-Way Option

There are no future developments planned for the project corridor that would have cumulative impacts on the visual and aesthetic conditions along the alignment for the UPRR ROW Option.

5.3.4 120th Street Yard and Shop

The 120th Street yard and shop would be located on a combination of industrial/vacant land east of the CN/ME tracks and west of the NICTD/CSS & SBRR tracks at approximately 120th Street and Cottage Grove Avenue. The yard would be entirely at grade with a nominal amount of parking for employees. A substation is proposed for a site within the 120th Street yard on the west of the existing railroad tracks and east of the proposed shop facility.

5.3.4.1 Permanent Impacts and Mitigations

Due to the location in a low-density light industrial area, impacts would be minimal. At-grade tracks would not be visible from nearby structures nor would they disrupt the existing visual character of the industrial surroundings. In addition to the standard mitigations discussed in Section 5.3.1 that would be used, additional measures for the 120th Street yard and shop would include designing the shop facility structure to be aesthetically compatible with surrounding uses.

5.3.4.2 Construction Impacts and Mitigations

Construction impacts other than those mentioned in Section 5.3.2 would be minor for the 120th Street yard and shop due to its location in a low-density area and the nature of at-grade construction.

5.4 Union Pacific Railroad Rail Alternative - East Option

The UPRR Rail Alternative East Option would include new CTA tracks on an elevated structure located immediately adjacent to and east of the existing UPRR ROW. Under this option, the UPRR would remain operational and there would be a 50-foot offset from the existing railroad

tracks. Substantial land acquisition and demolition of buildings would occur along the project corridor, especially in Segment UA. The most affected areas would occur along route curves and would be concentrated near station locations. Visual illustrations of these impacts are represented in Views 1A, 2A, 3A, 4A, 10B and 11B in Appendix A. Note that Views 1A, 2A, 3A, and 4A apply to all rail alternatives. Overall, this option would result in a substantial change on the visual and aesthetic conditions of views for the affected project area. Mitigations for the substantial visual change associated with the UPRR Rail Alternative East Option are discussed in Section 5.3.1.

5.4.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

The UPRR Rail Alternative was analyzed in two segments: Segment UA consists of the UPRR Rail Alternative north of Michigan Avenue and Segment UB is the portion south of Michigan Avenue. Please refer to Figure 4-6 for segment division.

5.4.1.1 Segment UA

The creation of elevated structures along the Segment UA from 95th Street to the vicinity of Eggleston Avenue would have moderate impact on visual quality. The proximity to the expressway corridor is currently screened by vegetation that would be substantially removed as part of the UPRR Rail Alternative East Option, making the new elevated structure visible and intrusive to the viewshed from the adjacent neighborhood and Wendell Smith Park. The elevated structure and creation of related stations would have substantial impact on the visual and aesthetic conditions of Segment UA from the vicinity of Eggleston Avenue to 119th Street. This visual change is subjective. General light and shadow conditions for the UPRR Rail Alternative East Option would be similar to those discussed in Section 5.3.1.1; however, a substantial portion of vegetation would be removed on the east side of the project corridor, which would introduce new shadows and light patterns on developments to the east. The majority of vegetation along the west side of the East Option project corridor would remain and would help minimize visible light and shadow effects on residences to the west.

Visualizations were completed for representative areas and those with highest potential visual impact. Impacts on station areas were determined based on representative visualization and the amount of change that would occur around the station areas. Specific impacts at each station area, as well as view locations with high visual impact, are discussed below. Locations with low to moderate impacts would be mitigated using the standard mitigation measures discussed at the beginning of Section 5.3.1. Impacts would not be considered adverse for the low to moderate impacts after mitigation. High visual impact views would have specific measures to reduce adverse impacts after mitigation.

- 103rd Street station would have a moderate visual impact. Several buildings would be removed along the existing UPRR corridor. The new station on the north side of 103rd Street would minimally change the character and density of the intersection of 103rd Street and the existing UPRR tracks. The creation of elevated platforms and track structure would affect the viewshed and create new shadows on residences adjacent to the project route. Two surface parking lots

east of the station and west of the existing UPRR corridor would have additional minimal impacts on the surrounding neighborhood character. These impacts would be partially mitigated by using standard mitigation measures, including landscaping and design of the station to match the character and scale of surrounding developments. See Views 7B and 8B in Appendix A for visual illustration of this impact.

- 111th Street station would have a moderate visual impact. Minimal buildings would be removed. The new station just north of 111th street would minimally change the character and density of the intersection at 111th Street and the existing UPRR tracks. The creation of elevated platforms and track structure would alter the viewshed of residences adjacent to the project route. The substantial removal of vegetation to allow for two surface parking lots would have a moderate impact on the surrounding neighborhood character. Impacts would be mitigated using standard mitigation measures, including landscaping and design of the station to match the character and scale of surrounding developments. See View 10B in Appendix A for visual illustration of this impact.

- Michigan Avenue station area would have a moderate visual impact. Several buildings would be removed along the existing UPRR corridor. The new station on the east side of the existing UPRR corridor would not change the character, scale, and density of the immediate area. Elevated platforms and track structure would minimally affect the viewshed of the surrounding area. The substantial removal of buildings and vegetation for the creation of a three-story parking garage west of the existing UPRR corridor would have a moderate impact on the character and density of the local community. The impact on residents of State Street and 116th Street would still be substantial due to the large mass of the parking structure adjacent to a neighborhood; however mitigation measures such as designing the parking facility to match the character of the surrounding fabric would help to minimize the visual impact. The moderate removal of vegetation in the existing vacant lot east of the tracks to accommodate a surface lot would have additional minimal visual impact. Impacts would be mitigated using standard mitigation measures, which include designing the station and structures to match the character of the surrounding fabric, using urban design techniques to reduce massing and create pedestrian friendly surroundings, and providing landscaping and visual screening. See View 14B in Appendix A for visual illustration of this impact.

- A high visual impact would occur at View 16B at 117th Street and Prairie Avenue. Refer to Table 5-4. Standard mitigation measures include using landscaping and screening to minimize adverse impacts. Due to structure height, proximity to adjacent residences and intact existing neighborhood fabric, however, impacts after mitigation would still be high.

The UPRR Rail Alternative East Option along Segment UA would include substations west of existing UPRR tracks between 104th and 105th Street and west of the existing UPRR tracks between Perry Avenue and Lafayette Avenue. There would be additional minimal visual impact for surrounding residences adjacent to these locations.

Table 5-4 summarizes the impacts on visual and aesthetic conditions for the UPRR Rail Alternative East Option along Segment UA and provides an assessment of the impacts. Figures 4-8 through 4-11 show the view locations.

Table 5-4: Impacts – East Option - Segment UA

Viewpoint *See Figures 4 7 4 10*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
Segment UA - North of Michigan Avenue				
5	View 5B	View northwest from the southwest corner of Wendell Smith Park	Moderate	The visual character and scale would change with removal of moderate vegetation and the view of the elevated structure introduced to the park.
7	View 7B	View northwest from 103rd Street and Harvard Avenue	Low	The scale and character of the viewshed would change with the removal of existing residential fabric and the addition of an elevated structure, elevated platform, and at-grade station. A surface park & ride lot in the foreground would also alter the character and density of the area.
8	View 8B	View north from the pumping station on Harvard Avenue	Moderate	The removal of vegetation along Harvard avenue and the elevated structure would moderately alter the scale and character of the area surrounding the pump station.
9	View 9B	View northwest from 108th Street adjacent to Roseland Christian School	Low	The elevated structure would create a change in scale and would partially encroach on the yard at Roseland Christian School and thus would minimally affect this viewshed.
10	View 10B	View west from 111th Street	Moderate	The character and scale of the intersection would change with the addition of an elevated structure and platform and at-grade station. Minimal residential structures would be removed to the east while moderate vegetation would be removed for a surface lot to the west.
11	View 11B	View southwest from 113th Street and Princeton Avenue	Moderate	Substantial vegetation and residential structures would be removed and the elevated structure would alter the scale and character of the neighborhood.
12	View 12B	View northeast from 115th Street	Moderate	The elevated structure would create a minimal change in scale and character for the surrounding area. Moderate commercial structures would be removed.
14	View 14B	View south toward the existing Union Pacific Railroad viaduct from Michigan Avenue	Moderate	The scale and character or the viewshed would moderately change with the addition of an elevated structure, elevated platform and Michigan Avenue stationhouse in the foreground. The removal of vegetation and structures beyond the existing UPRR tracks for a three-story park & ride garage would also alter the visual quality.
16	View 16B	View southeast from 117th Street east of Prairie Avenue	High	The residential character and scale would be substantially altered by the substantial removal of vegetation and neighborhood fabric and the addition of elevated structure east of the embankment

5.4.1.2 Segment UB

The impacts, mitigations, West Station Option, and South Station Option in Segment UB would be the same for all UPRR Rail Alternative options. See Section 5.3.1.2. No specific viewpoints were assessed in Segment UB for the East Option. See Table 5.3 Views 17A and 18A show conditions reflected in all UPRR Rail Alternative options.

5.4.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

Construction impacts and mitigations would be similar in nature for all UPRR Rail Alternative options. See Section 5.3.2.

5.4.2.1 Segment UA

Construction impacts would be longer in nature for the East Option than for the UPRR ROW Option, lasting a few years, at the Michigan Avenue station due to the substantial removal of buildings and construction of a three-story park & ride garage.

5.4.2.2 Segment UB

Construction impacts would be similar in nature to those discussed in Section 5.3.2.

5.4.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - East Option

There are no future developments planned for the project corridor that would have cumulative impacts on the visual and aesthetic conditions along the alignment for the UPRR Rail Alternative East Option.

5.4.4 120th Street Yard and Shop

The 120th Street yard and shop would be the same for all UPRR Rail Alternative options. See Section 5.3.4.

5.4.4.1 Permanent Impacts and Mitigations

See Section 5.3.4.1

5.4.4.2 Construction Impacts and Mitigations

See Section 5.3.4.2

5.5 Union Pacific Railroad Rail Alternative - West Option

The UPRR Rail Alternative West Option would include new CTA tracks on an elevated structure located immediately adjacent to and west of the existing UPRR ROW. Under this option, the UPRR would remain operational and there would be a 50-foot offset from the existing railroad tracks. Substantial land acquisition and demolition of buildings would occur along the project corridor, especially in Segment UA. The most affected areas would occur along route curves and would be concentrated near station locations. Similar to the East Option, this option would

generally result in a substantial change on the visual and aesthetic conditions of views for the affected project area. Visual illustrations of these impacts are represented in Views 1A, 2A, 3A, 4A, 12C and 15C in Appendix A. Note that Views 1A, 2A, 3A, and 4A apply to all rail alternatives. Mitigations for the substantial visual change associated with the UPRR Rail Alternative West Option are discussed in Section 5.3.1.

5.5.1 Permanent Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

The UPRR Rail Alternative was analyzed in two segments. Segment UA consists of the UPRR Rail Alternative north of Michigan Avenue and Segment UB is the portion south of Michigan Avenue. Please refer to Figure 4-6 for segment division.

5.5.1.1 Segment UA

The creation of elevated structures along the Segment UA from 95th Street to the vicinity of Eggleston Avenue would have minimal impact on visual quality. The elevated structure and creation of related stations would have substantial impact on the visual and aesthetic conditions of Segment UA from the vicinity of 99th Street to 103rd Street. Vegetation along Fernwood Parkway would be removed and the viewshed for residents along Eggleston Parkway would be adversely affected. This visual change is subjective. General light and shadow conditions for the West Option would be similar to those discussed in Section 5.3.1.1. In addition to shadows and light patterns created by the elevated structure, the removal of vegetation along the west side of the existing UPRR ROW for the majority of Segment UA would alter the visual quality for developments to the west. Standard mitigation measures include providing landscaping and replanting vegetation where possible. Due to the scale and proximity of the elevated structure to adjacent residences, however impacts after mitigation would remain adverse. The majority of vegetation along the east side of existing UPRR corridor would remain and would help minimize impacts on residences to the east.

Visualizations were completed for representative areas and those with highest potential visual impact. Impacts on station areas were determined based on representative visualization and the amount of change that would occur around the station areas. Specific impacts at each station, as well as view locations with high visual impact, are discussed below. Locations with low to moderate impacts would be mitigated using the standard mitigation measures discussed at the beginning of Section 5.3.1. Impacts would not be considered adverse for the low to moderate impacts after mitigation. High visual impact views would have specific measures to reduce adverse impacts after mitigation.

- 103rd Street station would have a high visual impact. Several buildings and vegetation along the west side of the existing UPRR corridor would be removed to accommodate the new station and surface parking lot. The new station within the existing Eggleston Parkway would moderately alter the scale and density of the intersection. The creation of elevated platforms and track structure would have a high impact on the viewshed of residences adjacent to the project route and create new shadows. These impacts would be partially mitigated by using

standard mitigation measures, including design of the station to match the character and scale of surrounding neighborhood and provision of landscaping as screening. Despite mitigation measures, impacts would still be high for adjacent residences due to scale of the structure. See View 6C in Appendix A for visual illustration of this impact.

- 111th Street station would have a moderate visual impact. Minimal buildings would be removed. The substantial removal of vegetation and addition of the new station north of 111th street would have a moderate impact on the visual character of the intersection. The creation of elevated platforms and track structure would substantially affect the viewshed of residences adjacent to the project route. A surface parking lot located west of the station would have a high impact on the surrounding neighborhood character due to the removal of substantial vegetation and adjacency to residential structures to the north. Impacts would be mitigated using standard mitigation measures, including design of the station to match the character and scale of surrounding developments and provision of landscaping to replace removed vegetation. See View 10C in Appendix A for visual illustration of this impact.

- Michigan Avenue station area would have a high visual impact. Several buildings would be removed along the existing UPRR corridor. The new station on the west side of Michigan Avenue would not change the character, scale, and density of the immediate area. Elevated platforms and track structure would minimally affect the viewshed of the surrounding area. The substantial removal of buildings and vegetation for the creation of a five-story parking garage west of the elevated structure would, however, have an impact on the character and density of the local community. Despite mitigation measures, the impact on residents of State Street and 116th Street would still be substantial due to the large mass of the parking structure adjacent to a neighborhood. The moderate removal of vegetation in the existing vacant lot to accommodate a surface parking lot would have minimal visual impact. Impacts would be partially mitigated using standard mitigation measures, which include designing the station and structures to match the character of the surrounding fabric, using urban design techniques to reduce massing and create pedestrian friendly surroundings, and providing landscaping and visual screening. See Views 13C and 15C in Appendix A for visual illustration of this impact. Due to the five-story parking garage, impacts would remain high despite mitigation.

- A high visual impact would occur at View 6C (Appendix A). See description of 103rd Street station above or refer to Table 5-6.

- A high visual impact would occur at View 13C (Appendix A). Refer to Table 5-6. Standard mitigation measures include using landscaping and screening to minimize adverse impacts. Due to structure height, proximity to adjacent residences, and intact neighborhood fabric, however, impacts after mitigation would still be substantial.

- View 15C in Appendix A: High visual impact - See description of Michigan Avenue station above or refer to Table 5-6.

The UPRR Rail Alternative West Option along Segment UA would include substations located east of existing UPRR tracks between 105th Street and 105th Place and west of the existing UPRR tracks between Perry Avenue and Lafayette Avenue. There would be additional minimal visual impact for surrounding residences adjacent to these locations.

Table 5-5 summarizes the impacts on visual and aesthetic conditions for the UPRR Rail Alternative West Option along Segment UA and provides an assessment of the impacts. Figures 4-8 through 4-11 show the view locations.

Table 5-5: Impacts - West Option - Segment UA

Viewpoint *See Figures 4 7 4 10*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
Segment UA - North of Michigan Avenue				
5	View 5C	View northwest from the southwest corner of Wendell Smith Park	Moderate	The visual character and scale would change with the removal of vegetation and addition of an elevated structure in park views.
6	View 6C	View south along Eggleston Avenue and Fernwood Parkway toward 103rd Street	High	Removal of vegetation and addition of elevated structure would substantially change the character of the residential street. Removal of existing buildings and addition of surface parking lot in the distance would moderately affect the viewshed.
10	View 10C	View west from 111th Street	Moderate	The character and scale of the intersection would change with the addition of an elevated structure, elevated platform, and at-grade station and removal of moderate residential and commercial structures. Vegetation would be replaced by a surface park & ride lot located to the west.
12	View 12C	View northeast from 115th Street	Moderate	The elevated structure would create a minimal change in scale and character for the surrounding area. Moderate commercial structures would be removed.
13	View 13C	View southeast from State Street	High	The substantial removal of residential structures for the addition of a five-story park & ride garage and elevated structure would substantially change the scale, character, and density of the neighborhood
15	View 15C	View northwest toward the existing UPRR viaduct from Michigan Avenue	High	The removal of structures and vegetation and the addition of an elevated structure, platform, and stationhouse, would alter the scale, character, and density of the viewshed. The five-story park & ride garage to the west would affect the scale of the surrounding area.

5.5.1.2 Segment UB

The impacts, mitigations, West Station Option, and South Station Option in Segment UB would be the same for all UPRR Rail Alternative options, with the exception described in the following paragraph. For all other impacts and mitigations, see Section 5.3.1.

The UPRR Rail Alternative West Option in the vicinity of Prairie Avenue and 117th Street would have additional minimal impacts at the elevated structure's east-west crossing over the existing UPRR tracks. This condition is unique to the West Option and would require the typical hammerhead piers to span straddle bent supports with typical pier protection. The elevation of the structure would be 16 feet higher than in other locations, to maintain a minimum clearance of 23 feet 4 inches over the existing UPRR tracks. There would be additional minimal visual impact isolated to this area and adjacent residences.

5.5.2 Construction Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

Construction impacts and mitigations would be similar in nature for all UPRR Rail Alternative options. See Section 5.3.2.

5.5.2.1 Segment UA

Construction impacts would be longer in nature for the West Option than for the UPRR ROW Option, lasting a few years, at the Michigan Avenue station due to the substantial removal of buildings and construction of a five-story park & ride garage.

5.5.2.2 Segment UB

Construction impacts would be similar in nature to those discussed in Section 5.3.2.

5.5.3 Cumulative Impacts and Mitigations - Union Pacific Railroad Rail Alternative - West Option

There are no future developments planned for the project corridor that would have cumulative impacts on the visual and aesthetic conditions along alignment for the UPRR Rail Alternative West Option.

5.5.4 120th Street Yard and Shop

The 120th Street yard and shop would be the same for all UPRR Rail Alternative options. See Section 5.3.4.

5.5.4.1 Permanent Impacts and Mitigations

See Section 5.3.4.1

5.5.4.2 Construction Impacts and Mitigations

See Section 5.3.4.2

5.6 Halsted Rail Alternative

The Halsted Rail Alternative would include new CTA tracks on an elevated structure running south from 95th Street along I-57 until Halsted Street, and then continuing south along Halsted Street to its intersection at Vermont Avenue near 127th Street. The scale, density, and character of several viewsheds would change by varying degrees as part of this alternative. The elevated structure would alternate between steel, cross-girder bents spanning the corridor and reinforced, cast-in-place concrete hammerhead piers in the existing median along Halsted Street. In these locations, trees in the planter median would be removed. Moderate land acquisition and demolition of buildings would occur along the project corridor, with most concentrated areas near station locations. Due to the low density and viewer sensitivity along much of the Halsted Rail Alternative corridor, the overall impacts would be moderate with regards to the visual and aesthetic conditions of views for the affected project area. Figure 4-13 shows the Halsted Rail Alternative.

Track alignments typically have a higher degree of visual impact than other changes, due to the demolition of existing structures and, in many cases, a substantial change in scale, density, and character of the surrounding environment.

5.6.1 Permanent Impacts and Mitigations - Halsted Rail Alternative

The retail and commercial establishments along Halsted Street are set back from the curb, with parking lots and parking lanes in front, creating a utilitarian appearance and character. The introduction of elevated structures would alter this character to a more urban quality and would also create density in an area that currently has a large portion of vacant lots and unoccupied structures. The trees in the existing vegetated median would be removed as part of the alternative and the addition of the elevated structure would be a visible encroachment, creating new shadows and light patterns, especially to those travelling along Halsted Street by foot or vehicle. Those travelling immediately adjacent to the alternative corridor would experience similar impacts. Visual illustrations of these impacts are represented in Views 1A, 2A, 3A, 4A, 23 and 33 in Appendix A. Note that Views 1A, 2A, 3A, and 4A apply to all rail alternatives. The concrete piers and steel cross-girders would become a prominent visual feature and the introduction of the seven-story park & ride facility at the Vermont Street station would dramatically change the scale, character, and shadows, making a strong impact on the surrounding residential neighborhoods. View 36 in Appendix A shows example station impacts.

Viewsheds that are roughly two to four blocks away and are not immediately adjacent to the alignment would be less sensitive to the impacts on visual and aesthetic conditions along Halsted Street because they take in a longer, more expansive view. In many instances, viewsheds from east-west locations only capture a small portion of the elevated structure due to a narrow perpendicular position. In these views the project elements would be noticeable but not dominant; thus, visual impacts related to the alignment would not be considered substantial unless immediately adjacent to the project corridor. Because the viewshed from east-west locations is narrow, existing views across Halsted Street would be blocked by the elevated structure and piers. With minimum vertical clearances of 14 feet 9 inches, the rail alignment

would create new visual light conditions along the retail and commercial corridor for pedestrians, motorists, and adjacent structures. The elevated structure and associated piers would cast shadows that vary in intensity by time of day and season.

In addition to the standard mitigation discussed in Section 5.3.1, additional measures to reduce impacts of the Halsted Rail Alternative include the following:

- Encouraging more pedestrian-oriented urban development
- Introducing elements such as landscaping, planters, or fencing to provide a visual buffer between the project corridor and the adjacent residential neighborhoods

The Halsted Rail Alternative was analyzed in two segments: Segment HA consists of the Halsted Rail Alternative north of 119th Street and Segment HB is the portion south of 119th Street. Figure 4-13 shows the segment division.

5.6.1.1 Segment HA

The creation of elevated structures along the Segment HA from 95th Street to the vicinity of 99th and Halsted Streets would have overall minimal to moderate impacts on the visual quality. The project corridor between 99th Street and 103rd Street in Segment HA has more high quality commercial development than Segment HB; thus, impacts on visual and aesthetic conditions along this portion would be more substantial. The alternative would introduce an aesthetic, scale, and density that is not currently present along this light commercial corridor and would therefore create a moderate degree of change on the visual and aesthetic condition of views. This visual change is subjective. It would affect the vegetated median in many instances and would create new shadows on the surrounding area.

Visualizations were completed for representative areas and those with highest potential visual impact. Impacts on station areas were determined based on representative visualization and the amount of change that would occur around the station areas. Specific impacts at each station, as well as view locations with high visual impact, are discussed below. Locations with low to moderate impacts would be mitigated using the standard mitigation measures discussed at the beginning of Section 5.3.1. Impacts would not be considered adverse for the low to moderate impacts after mitigation. High visual impact views would have specific measures to reduce adverse impacts after mitigation.

- 103rd Street station would have a low visual impact. The new station at the intersection of 103rd and Halsted Streets would minimally change the character and density of the intersection. Minimal buildings would be removed for a surface park & ride lot on the northwest parcel adjacent to the station, which would have little impact on the surrounding neighborhood character. Due to low density and viewer sensitivity, impacts would be minimal. Standard mitigations would reduce impacts. See View 26 in Appendix A for visual illustration of this impact.

- 111th Street station would have a low visual impact. The new station at the intersection of 111th and Halsted Streets would minimally change the character and density of the intersection. Minimal buildings would be removed for a surface park & ride lot adjacent to the station, which would have little impact on the surrounding neighborhood character. Due to low density and viewer sensitivity, impacts would be minimal. Standard mitigations would reduce impacts. See View 29 in Appendix A for visual illustration of this impact.

- 119th Street station would have a low visual impact. The new station at the intersection of 119th and Halsted Streets would minimally change the character and density of the intersection. Minimal buildings would be removed for a surface park & ride lot adjacent to the station, which would have little impact on the surrounding neighborhood character. Due to low density and viewer sensitivity, impacts would be minimal. Standard mitigations would reduce impacts. See Views 30 and 31 in Appendix A for visual illustration of this impact.

- A high visual impact would occur at View 23 (Appendix A, and Table 5-8). To minimize adverse visual impacts, mitigations would include using landscaping and screening. Due to the structure's height and proximity to the established commercial area, however, impacts after mitigation would still be substantial.

The Halsted Rail Alternative along Segment HA would include substations on the northeast corner at the intersection of 101st and Halsted Streets and the southeast corner at the intersection of 110th and Halsted Streets. There would be additional minimal visual impact for surrounding residences adjacent to these locations.

Table 5-6 summarizes the impacts on visual and aesthetic conditions for the Halsted Rail Alternative along Segment HA and provides an assessment of the impacts. Figures 4-15 through 4-18 show the view locations.

Table 5-6: Impacts - Segment HA

Viewpoint *See Figures 4 13 4 16*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
Segment HA - North of 119th Street				
19	View 19	View southeast from 98th Street and Parnell Avenue	Low	The overall visual character would not change and there would be a minimal increase in scale for adjacent neighbors due to the elevated structure.
20	View 20	View southwest over I-57 from 98th Place	Low	The overall visual character would not change, but the increase in scale and shadows would be noticeable to motorists due to elevated structures. The structure would be visible in the distance to adjacent neighborhoods.

Viewpoint *See Figures 4 13 4 16*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
21	View 21	View southeast from I-57 overpass at Halsted Street	Low	The character and scale of the intersection would change with the addition of an elevated structure and associated shadows. Minimal removal of commercial buildings, vegetation, and median planters would be visible in the distance.
22	View 22	View northwest from Emerald Avenue	Low	The elevated structure in the distance would be minimally visible beyond the existing residential neighborhood.
23	View 23	View northeast from 100th and Halsted Streets	High	The elevated structure and removal of trees within the median planters would moderately change the scale and character of the area. The immediately adjacent commercial structures would introduce new shadows and light on storefronts and create a new visual character for pedestrians.
24	View 24	View south from 100th and Halsted Streets	Moderate	The elevated structured would alter the viewshed of the church and affect the scale of the surrounding area. Due to user sensitivity, the impacts would be moderate.
25	View 25	View south from Halsted Street between 102nd and 103rd Streets	Moderate	The removal of trees within the median planters and a structure to accommodate a surface parking lot would moderately change the character of the viewshed while the elevated structure would introduce new shadows and light patterns to pedestrians and adjacent businesses.
26	View 26	View west from 103rd Street toward Halsted Street	Low	The change of scale and density created by the elevated structure and station would have minimal impact on the viewshed from the adjacent neighborhood due to the existing commercial activity at the intersection.
27	View 27	View north from 107th Street and Halsted Street	Low	The addition of the elevated structure and introduction of shadows would minimally affect and alter the character of the low-density intersection.
28	View 28	View southeast from 107th Street toward Halsted Street	Moderate	The elevated structured would alter the viewshed of the church and affect the scale of the surrounding area. Due to user sensitivity, the impacts would be moderate.
29	View 29	View east from 111th Street toward Halsted Street	Moderate	The elevated structure, platform and station in the distance would have minimal impact on the intersection; however, moderate removal of buildings and parking lot to north of 111th Street station for a new park & ride lot would change the character and density of viewshed from the neighborhood.
30	View 30	View southeast from the Major Taylor Trail at 118th Street	Low	The elevated structure in the distance would be highly visible beyond the existing vegetation.

Viewpoint *See Figures 4 13 4 16*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
31	View 31	View south from 118th Street and Halsted Street	Moderate	The removal of trees within the median planters and removal of greenway along the sidewalk to accommodate station entry would moderately change the character of the viewshed. The elevated structure would introduce new shadows and light patterns to pedestrians and adjacent businesses.
32	View 32	View southwest from 119th Street and Halsted Street	Moderate	The viewshed would show the elevated structure over Halsted Street, as well as tracks traveling to the yard to the east, which would change the scale, character, and density for adjacent businesses and residences. New shadows and light patterns would also be created for pedestrians and recreationists on the Major Taylor Trail. Due to low density and viewer sensitivity in this area, impacts would be moderate.

5.6.1.2 Segment HB

The creation of elevated structures and stations along the alignment in Segment HB from the vicinity of 119th Street to the bridge at Little Calumet River would have moderate impact on the visual quality. The alternative would introduce an aesthetic, scale, and density that is not currently present along this light commercial corridor and would thus create a moderate degree of change on the visual and aesthetic condition of views. This visual change is subjective. It would affect the vegetated median in many instances and create new shadows on the surrounding area; however, it would only require minimal land acquisition. Visualizations were completed for representative areas and those with highest potential visual impact. Impacts on station areas were determined based on representative visualization and the amount of change that would occur around the station areas.

- Vermont Street station would have a high visual impact. The new station at the intersection of Vermont Avenue and Halsted Street would substantially change the character and density of the intersection and surrounding neighborhood. Substantial removal of a cohesive residential block to accommodate a seven-story park & ride facility west of Halsted Street would have a marginal impact on the scale, density, shadows, and aesthetic of the surrounding cohesive residential character. Additionally, the removal of commercial structures on the east side of Halsted Street to accommodate a surface lot would have moderate impacts on the adjacent neighborhood to the east. Impacts would be partially mitigated using standard mitigation measures, which include designing the station and structures to match the character of the surrounding fabric, using urban design techniques to reduce massing and create pedestrian friendly surroundings, and providing landscaping and visual screening. Due to the large mass and proximity to adjacent one- to two-story residential buildings, however, impacts would still be adverse after mitigation. See Views 34, 35 and 36 for visual illustration of this impact.

- A high visual impact would occur at Views 34 and36 (Appendix A and Table 5-9).

The Halsted Rail Alternative along Segment HB would include substations along Halsted Street between 120th Street and the ME tracks, the southeast corner at the intersection of 126th and Halsted Streets, and at the entrance to the yard along Peoria Street. There would be additional minimal visual impact for surrounding residences adjacent to these locations.

Table 5-7 summarizes the impacts on visual and aesthetic conditions for the Halsted Rail Alternative along Segment HB and provides an assessment of the impacts. Figures 4-17 through 4-18 show the view locations.

Table 5-7: Impacts - Segment HB

Viewpoint *See Figures 4 16 4 17*	View *See Attachment A*	Location/View Direction	Visual Impact after Mitigation	Assessment Area
Segment HB - South of 119th Street				
33	View 33	View northwest from 120th Street and Halsted Street	Moderate	Moderate removal of commercial and retail structures to accommodate elevated structure traveling to yard would alter the scale and density of the area and create new shadows and light patterns. Due to low density and viewer sensitivity in this area, impacts would be moderate.
34	View 34	View south from Vermont Avenue and Halsted Street	High	Substantial removal of commercial and retail structures along both sides of Halsted Street to accommodate a park & ride lot on the east and a seven-story garage on the west would visually alter the scale, density, and character of the area.
35	View 35	View northeast from 128th Street and Halsted Street	Moderate	A seven-story park & ride garage would replace the vacant lot west of Halsted Street and a surface lot would replace the vacant lot on the east, altering the scale, density and character of the area. The elevated structure, platform, and supports would alter views and shadows for pedestrians; however, due to low density and viewer sensitivity in this area, impacts would be moderate.
36	View 36	View northeast from 128th Street and Green Street	High	The substantial removal of residential and light commercial structures to accommodate a seven-story park & ride garage in the foreground and a lot on the opposite side of Halsted Street would substantially change the scale, character, and density of the neighborhood. The elevated structure, platform, and associated supports would moderately block views across Halsted Street and would alter the visual quality.
37	View 37	View north from Halsted Street bridge at Little Calumet River	Low	The addition of the elevated structure would minimally affect and alter the character of the low-density area.

5.6.2 Construction Impacts and Mitigations - Halsted Rail Alternative

Construction impacts and mitigations would be similar in nature to those described for the UPRR Rail Alternative, as construction methods would be the same. See Section 5.3.2. Additional road construction impacts would be created for the removal of trees within the median planters and replacement with hammerhead piers. In general, the Halsted Rail Alternative would require more temporary traffic lane closures than any alternative. Parking lanes would be eliminated at portions along Halsted Street to accommodate steel cross-girder and column locations near cross-intersections or stations and would require more temporary traffic lane closures than other alternatives.

5.6.2.1 Segment HA

Construction impacts would be similar in nature to those described for the UPRR Rail Alternative for all locations along Segment HA. See Section 5.3.2.

5.6.2.2 Segment HB

Construction impacts would be similar in nature to those described for the UPRR Rail Alternative for all locations along Segment HB. See Section 5.3.2 Construction impacts would be longer in nature, lasting a few years, at the Vermont Avenue station than at other locations due to the substantial removal of buildings and construction of a seven-story park & ride garage.

5.6.3 Cumulative Impacts and Mitigations - Halsted Rail Alternative

There are no future developments planned for the project corridor that would have cumulative impacts on the visual and aesthetic conditions along the alignment of the Halsted Rail Alternative.

5.6.4 119th Street Yard and Shop

The 119th Street yard and shop would be located south of the 119th Street station and north of Vermont Avenue station, west of Halsted Street. The yard would be entirely at grade with a nominal amount of parking for employees. A substation would be within the 120th Street yard, west of the existing railroad tracks and east of the proposed shop facility.

5.6.4.1 Permanent Impacts and Mitigations

Moderate land acquisition would include the removal of several buildings and a large parking lot. Track height would transition from elevated to at-grade between Halsted Street and Morgan Street, which would help minimize the visual impact on the surrounding residential community. Overall, the street yard and shop would dramatically change the character and scale of the surrounding area, which includes light commercial and residential neighborhoods. In addition to the standard mitigations discussed in the beginning of Section 5, additional measures for the 120th Street yard and shop would include designing the shop facility to be aesthetically compatible with surrounding structures.

5.6.4.2 Construction Impacts and Mitigations

The construction of the 119th Street yard and shop would last several years and would have high visual impacts. The removal of existing buildings and parking lots, including associated debris, would be more substantial than other locations along the project corridor. These impacts could be mitigated using the measures discussed in Section 5.3.2.

Section 6
Impacts Remaining After Mitigation

Adverse impacts for all alternatives would be minimized through various mitigations. At view locations where impacts would be low to moderate, visual and aesthetic impacts would be reduced or eliminated after standard mitigation measures. Due to the scale and height of the proposed improvements, the visual impacts in many instances could not be completely mitigated and would remain. Impacts at high impact views could be minimized by implementing many of the standard mitigations, as well as specific mitigations described for each view in Section 5. Typical adverse impacts that would remain after mitigation would include the replacement of existing cohesive fabric with large parking structures that would substantially alter the scale, character, and density of viewsheds. Despite mitigation measures such as planting vegetation, urban design techniques, stepping back massing, or using context sensitive design and materials, the contrasting mass would still be out of scale and character. Additionally, in many instances, despite mitigations such as incorporating planters and street trees and other methods of good urban design, the addition of stations and elevated structures, which would still be visible beyond vegetation and taller than surrounding structures, would adversely affect neighborhood viewsheds, visual character, and cohesive neighborhood fabric. For structures immediately adjacent to the alignment, shadows would be created, which would alter the visual character of the area and could not be mitigated.

The following sections present a summary of the impacts that would remain after mitigation for each of the alternatives.

6.1 No Build Alternative

There would be no adverse impacts under the No Build Alternative; therefore, there would be no mitigation or impacts remaining.

6.2 Bus Rapid Transit Alternative

No adverse impacts would remain after mitigation.

6.3 Union Pacific Railroad Rail Alternative - Right-of-Way Option

6.3.1 Segment UA

Michigan Avenue station and View 13A would not have adverse impacts after mitigation. Moderate impacts would remain after mitigation due to the mass of the parking structure and its proximity to residences.

6.3.2 Segment UB

No adverse impacts would remain after mitigation.

6.3.3 120th Street Yard and Shop

No adverse impacts would remain after mitigation.

6.4 Union Pacific Railroad Rail Alternative - East Option

6.4.1 Segment UA

The area southeast of the Michigan Avenue station (shown in View 16B) would still have adverse impacts after mitigation. The height and mass of the structure and its proximity to residences could not be mitigated. See Section 5.4.1.1 and Table 5.4-1.

6.4.2 Segment UB

No adverse impacts would remain after mitigation.

6.4.3 120th Street Yard and Shop

No adverse impacts would remain after mitigation.

6.5 Union Pacific Railroad Rail Alternative - West Option

6.5.1 Segment UA

The area from 99th Street to 103rd Street, including the 103rd Street station and park & ride structure at the Michigan Avenue station, specifically Views 6C and 13C, would still have adverse impacts after mitigation. The height and mass of the structures and the proximity to residences could not be mitigated. See Section 5.5.1.1 and Table 5.5-1.

6.5.2 Segment UB

No adverse impacts would remain after mitigation.

6.5.3 120th Street Yard and Shop

No adverse impacts would remain after mitigation.

6.6 Halsted Rail Alternative

6.6.1 Segment HA

View 23 would still have adverse impacts after mitigation due to structure height and proximity to the established commercial corridor. See Section 5.6.1.1 and Table 5.6-1.

6.6.2 Segment HB

Vermont Street station, specifically Views 34 and 36, would still have adverse impacts after mitigation. The height and mass of the structure and its proximity to residences could not be mitigated. See Section 5.6.1.2 and Table 5.6-2.

6.6.3 119th Street Yard and Shop

No adverse impacts would remain after mitigation.

Section 7
References Cited

City of Chicago. Landmarks Ordinance - Municipal Code Title 2, Chapter 120, Article XVII.

City of Chicago. Zoning Ordinance and Land Use Ordinance - Municipal Code Titles 16 and 17.

Illinois Department of Transportation. 2007. Illinois State Transportation Plan: Context Sensitive Solutions. June.

The National Historic Preservation Act. Amended 1966. Section 106.

U.S Department of Transportation. 1981. Federal Highway Administration Visual Impact Assessment for Highway Projects.

Visual and Aesthetic Visualizations

Appendix A

Note that appearance of project elements (such as parking structures, beams, columns, etc.) in visualizations is intended to show scale of project elements. Actual construction appearance may differ based on design decisions for colors, textures, finishes, and choice of specific design features.

*** View numbers are not consecutive. Analysis and photography were done in different order than views appear in this appendix.**

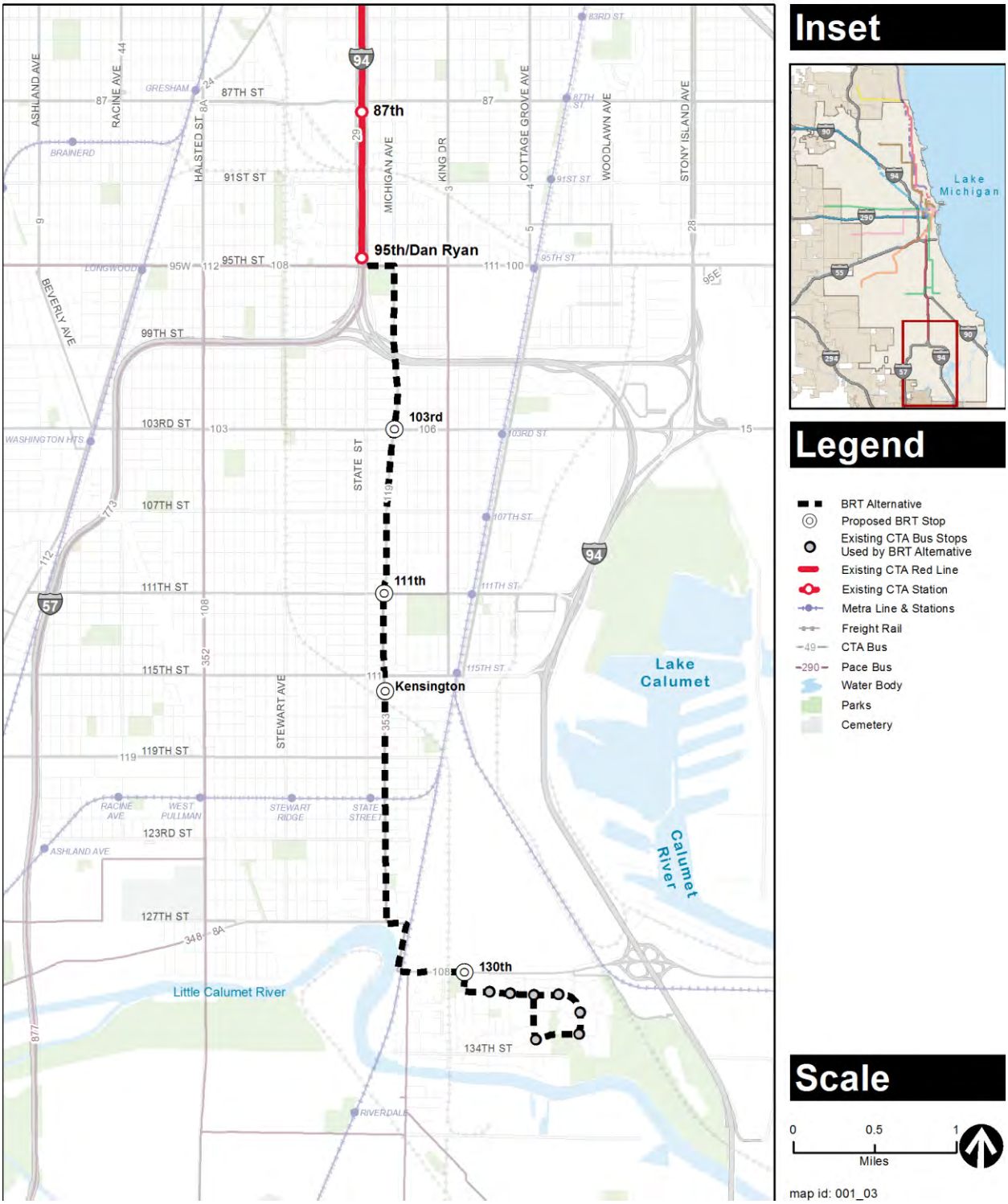


Figure A-1: Bus Rapid Transit Alternative

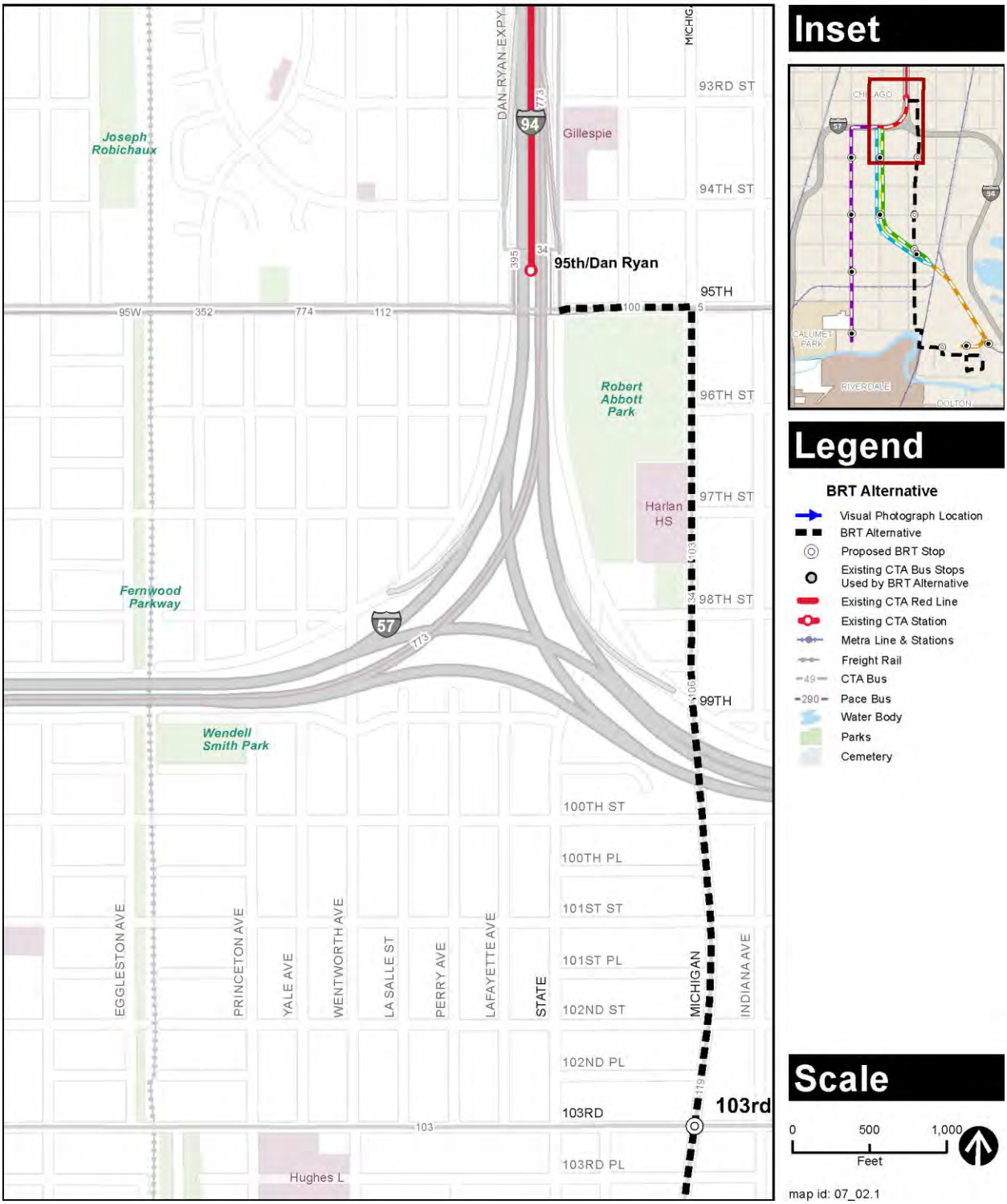


Figure A-2: View Locations for the Bus Rapid Transit Alternative - North

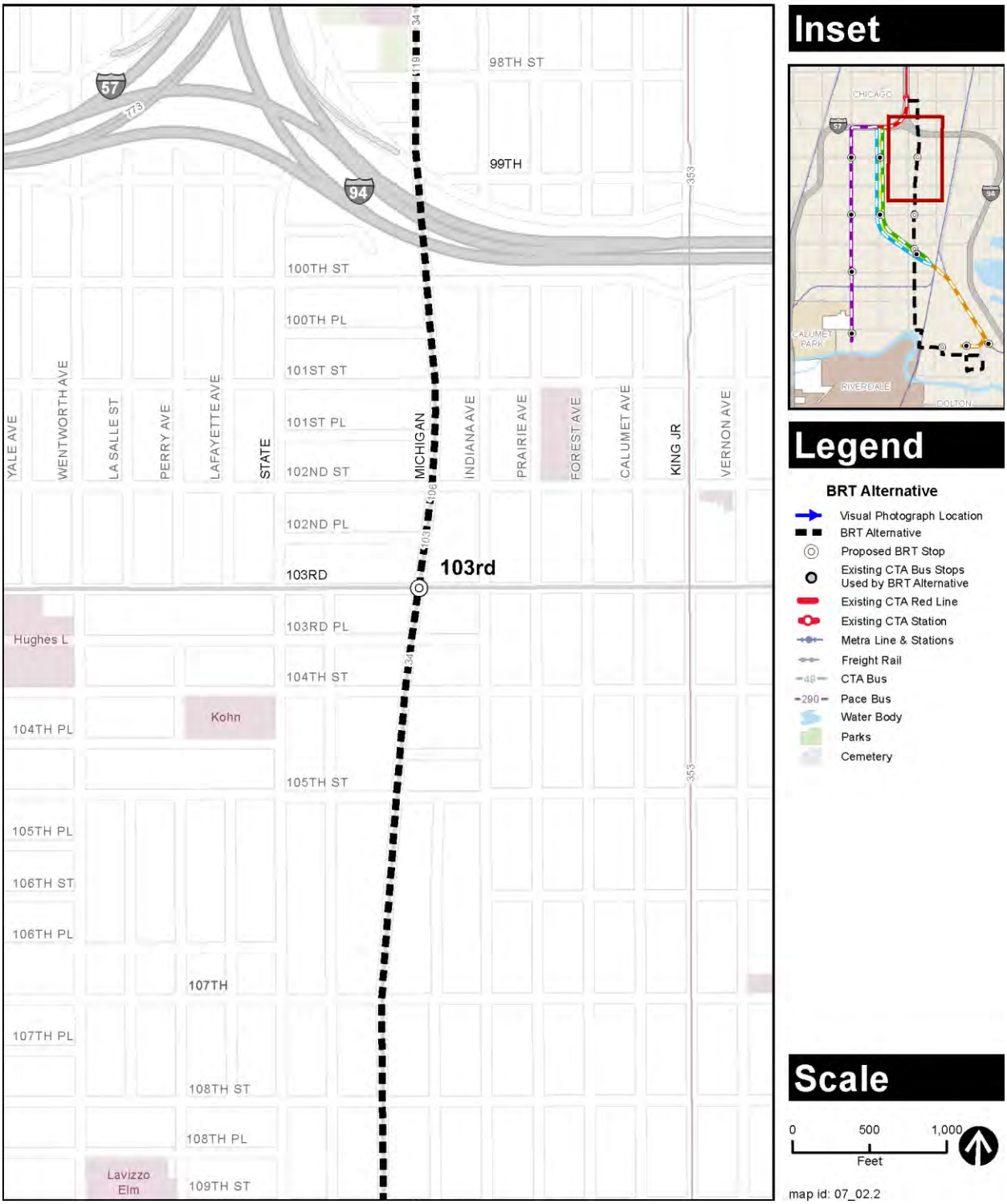


Figure A-3: View Locations for the Bus Rapid Transit Alternative - North Central

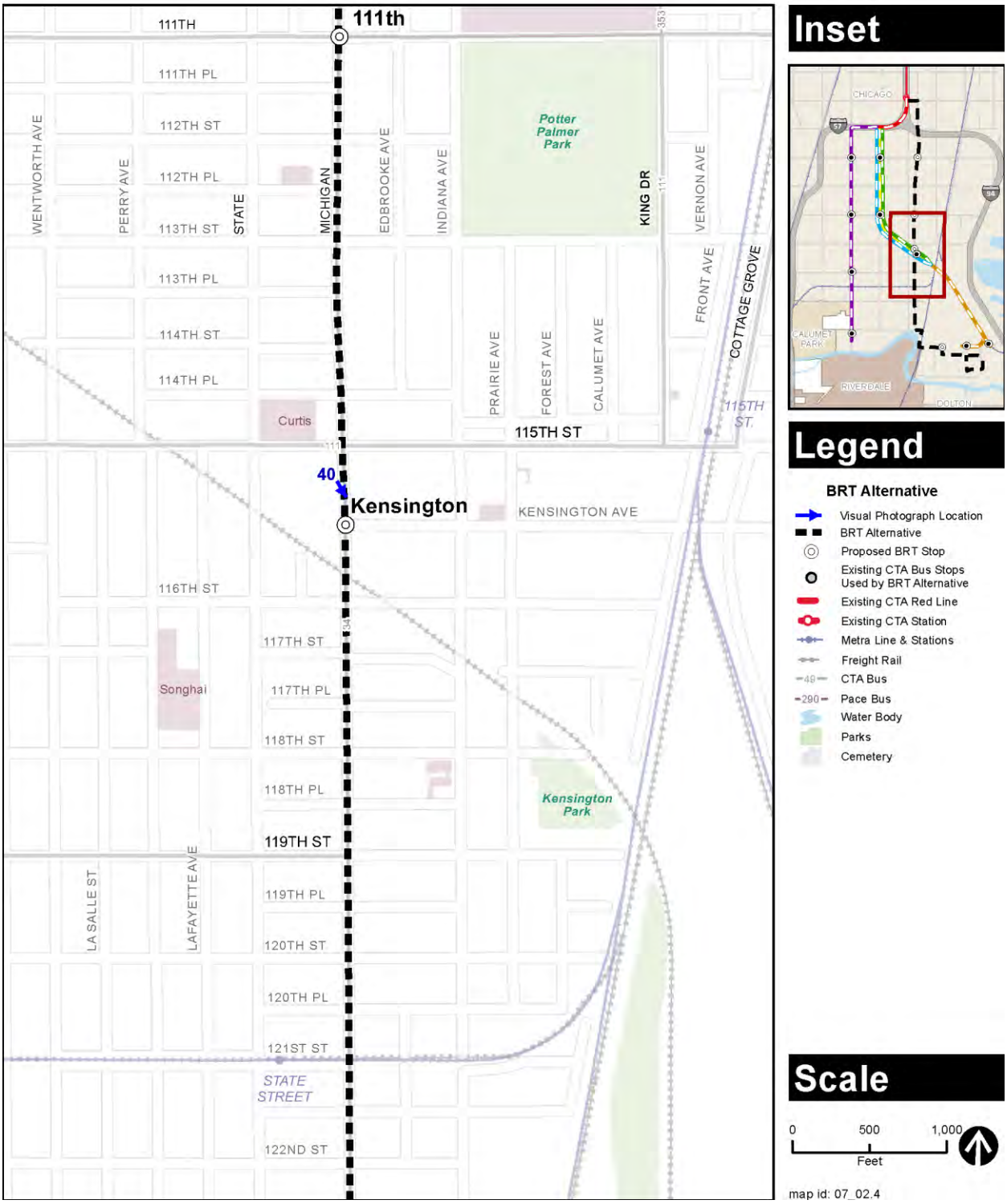


Figure A-4: View Locations for the Bus Rapid Transit Alternative - South Central

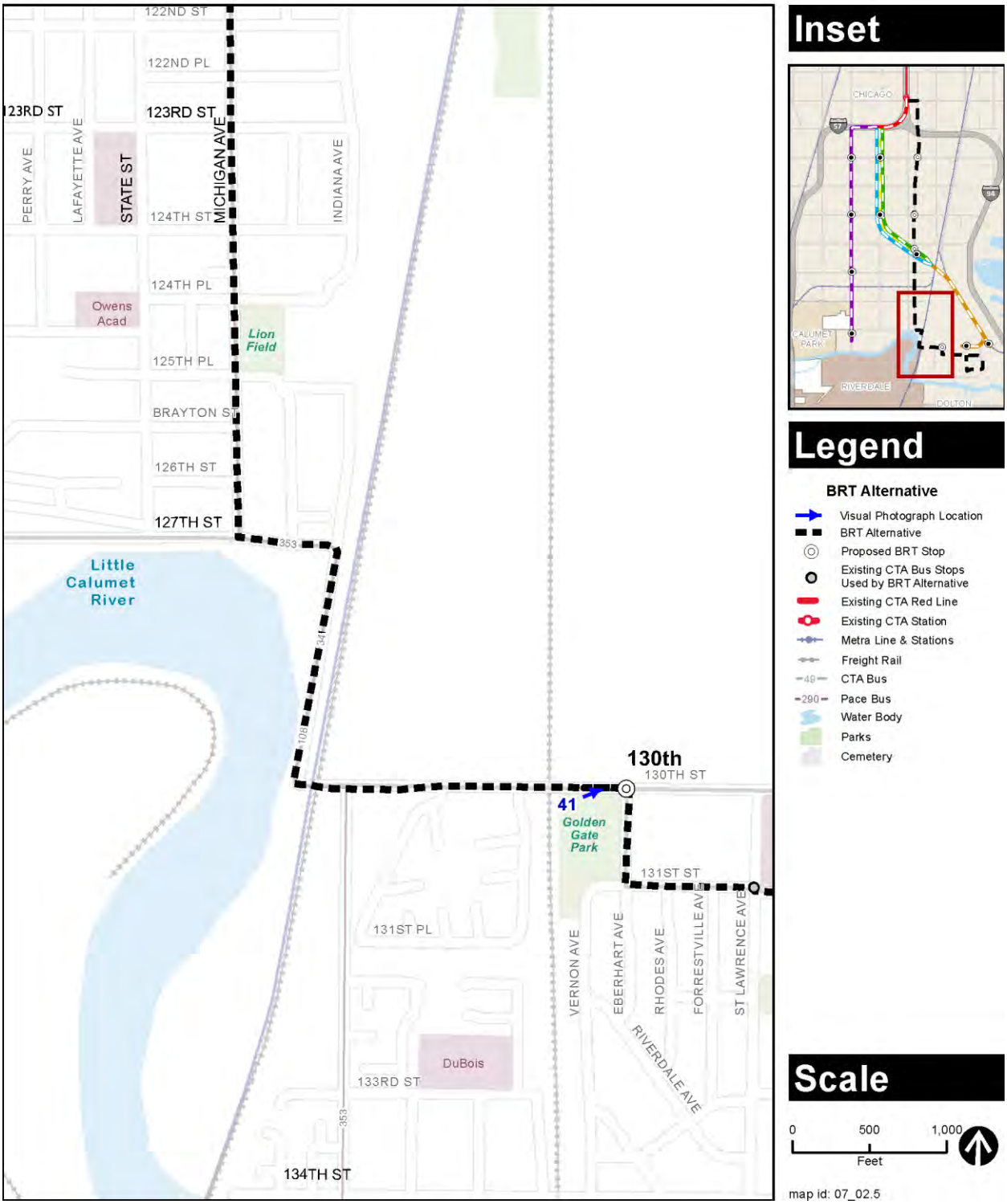


Figure A-5: View Locations for the Bus Rapid Transit Alternative - South

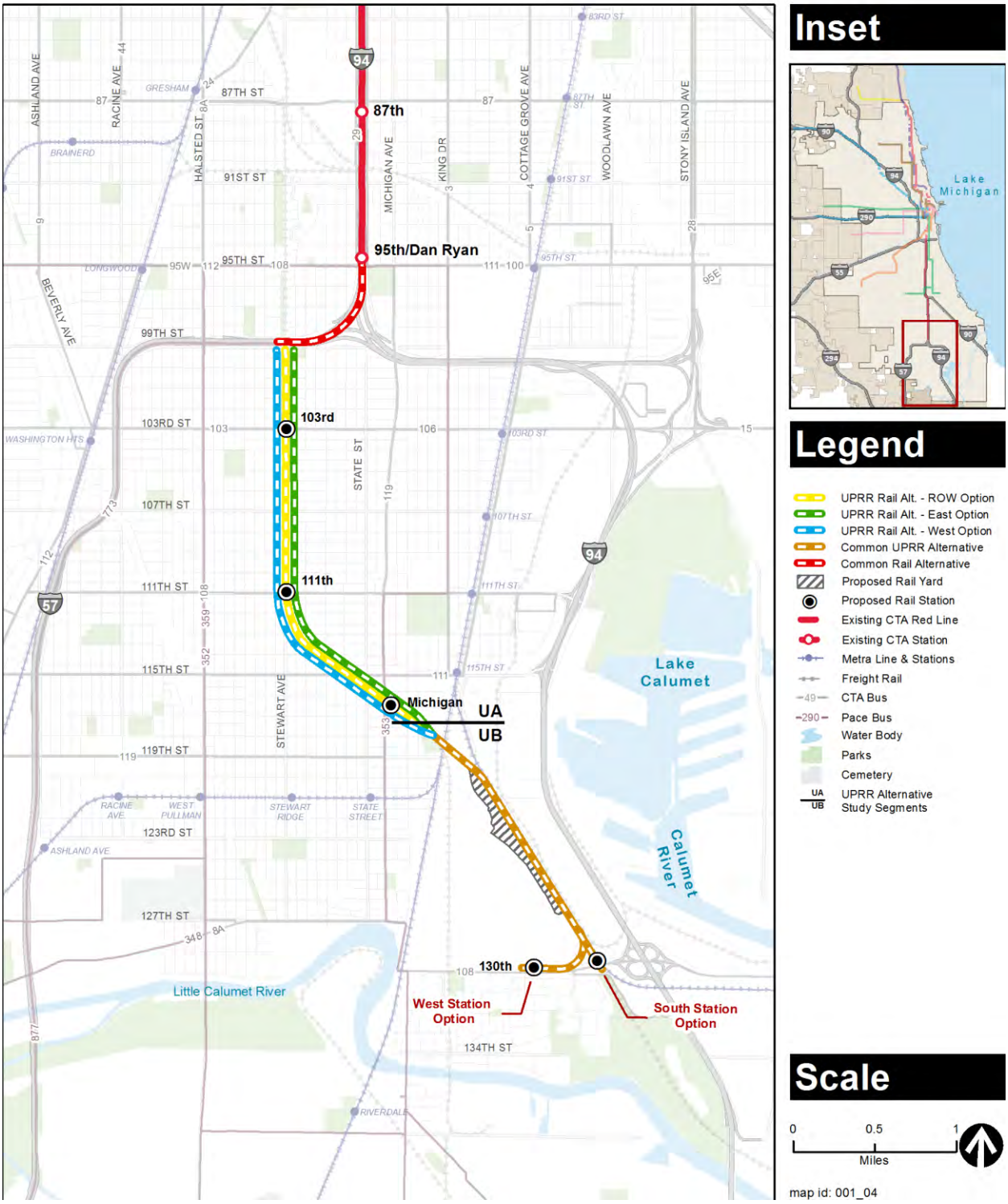


Figure A-6: Union Pacific Railroad Rail Alternative

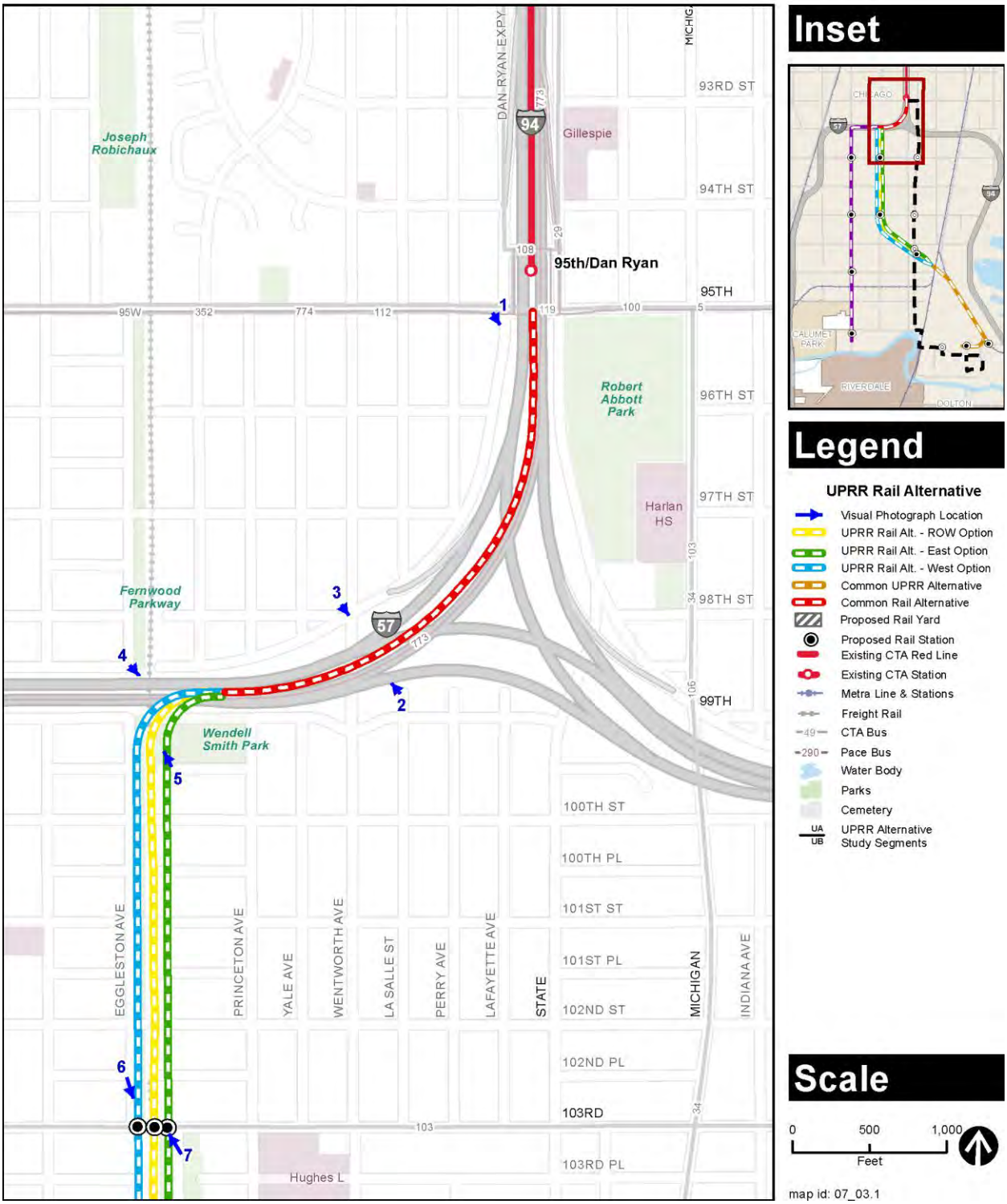


Figure A-7: Union Pacific Railroad Rail Alternative View Locations - Segment UA North

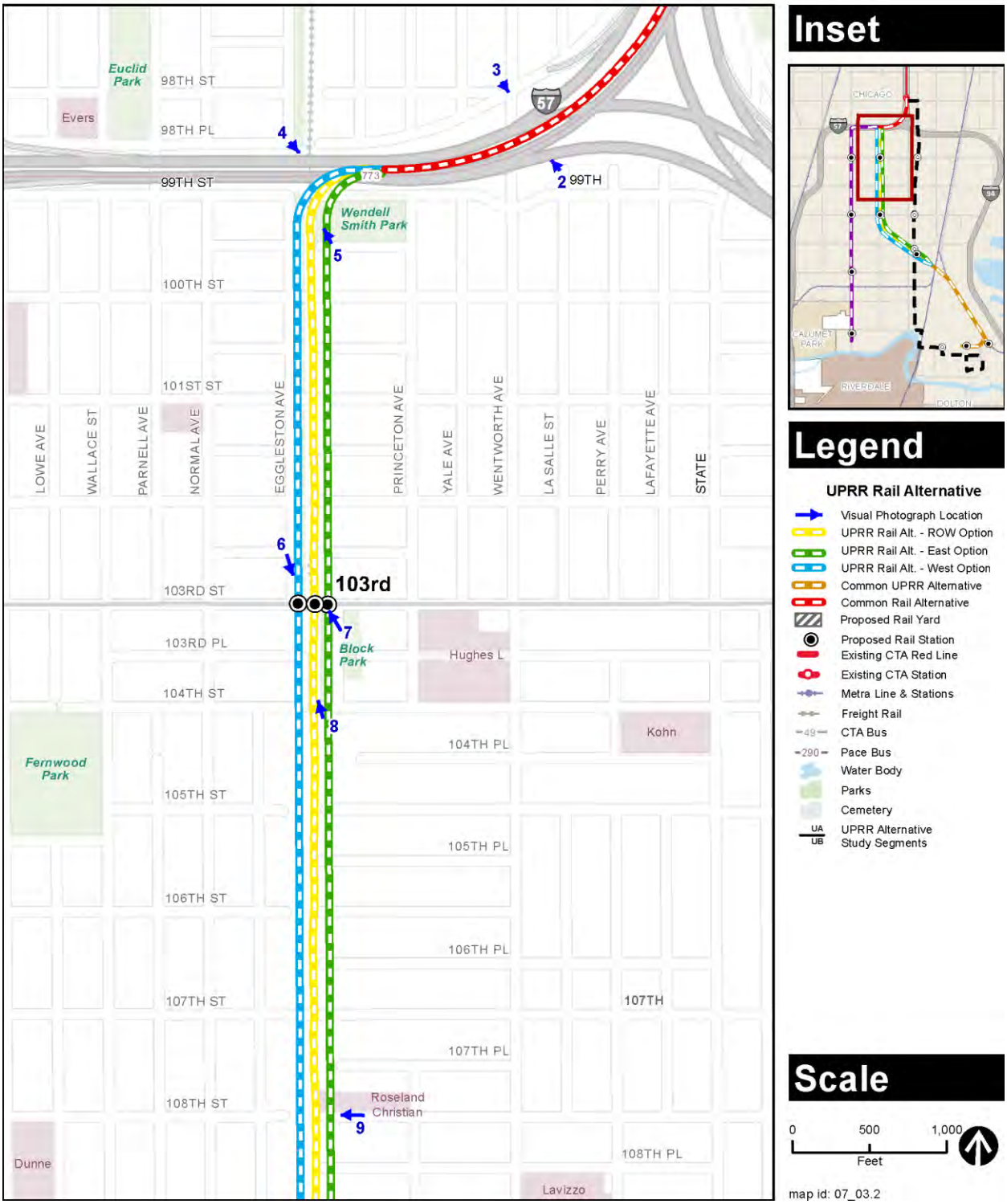


Figure A-8: Union Pacific Railroad Rail Alternative View Locations - Segment UA

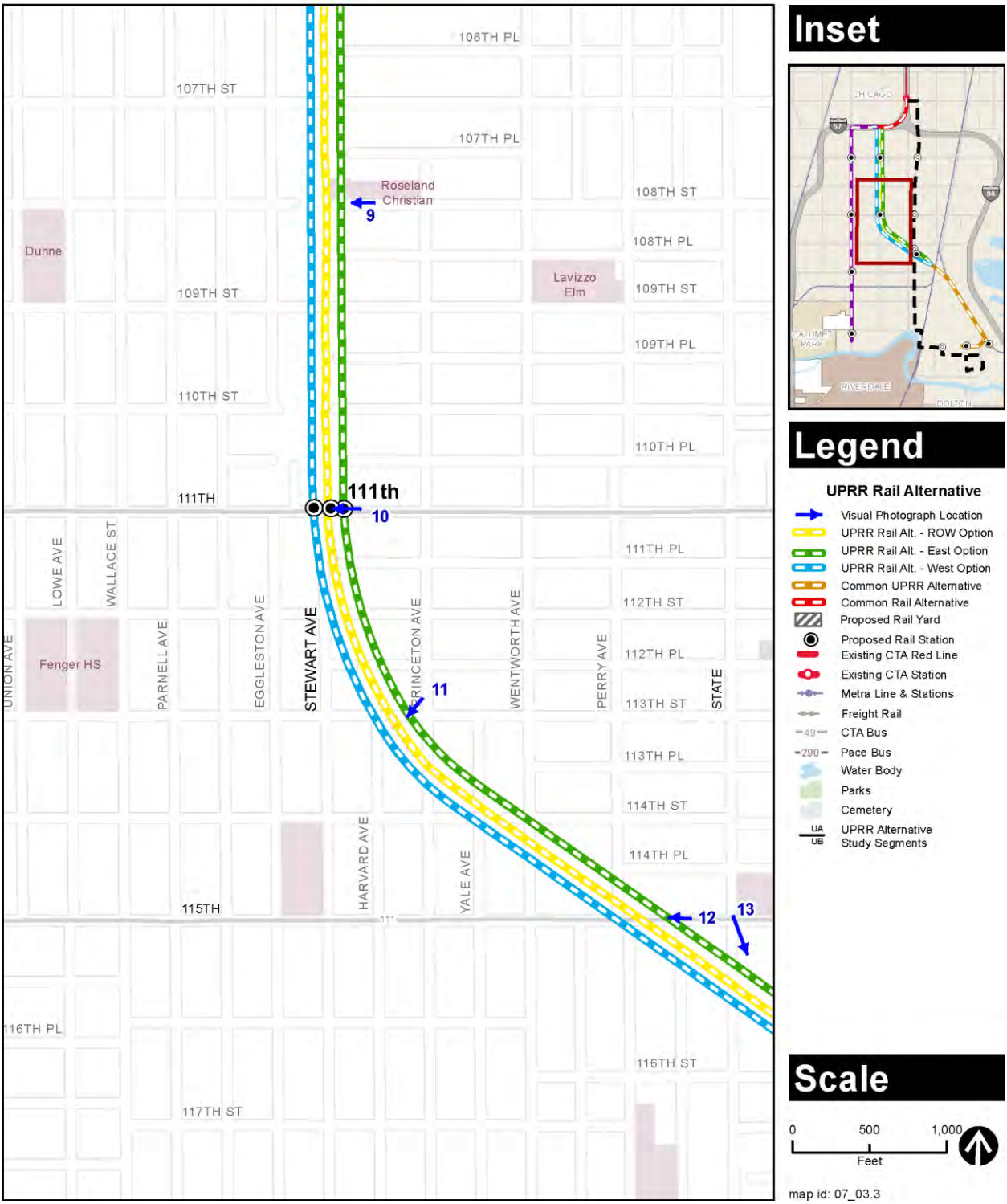


Figure A-9: Union Pacific Railroad Rail Alternative View Locations - Segment UA

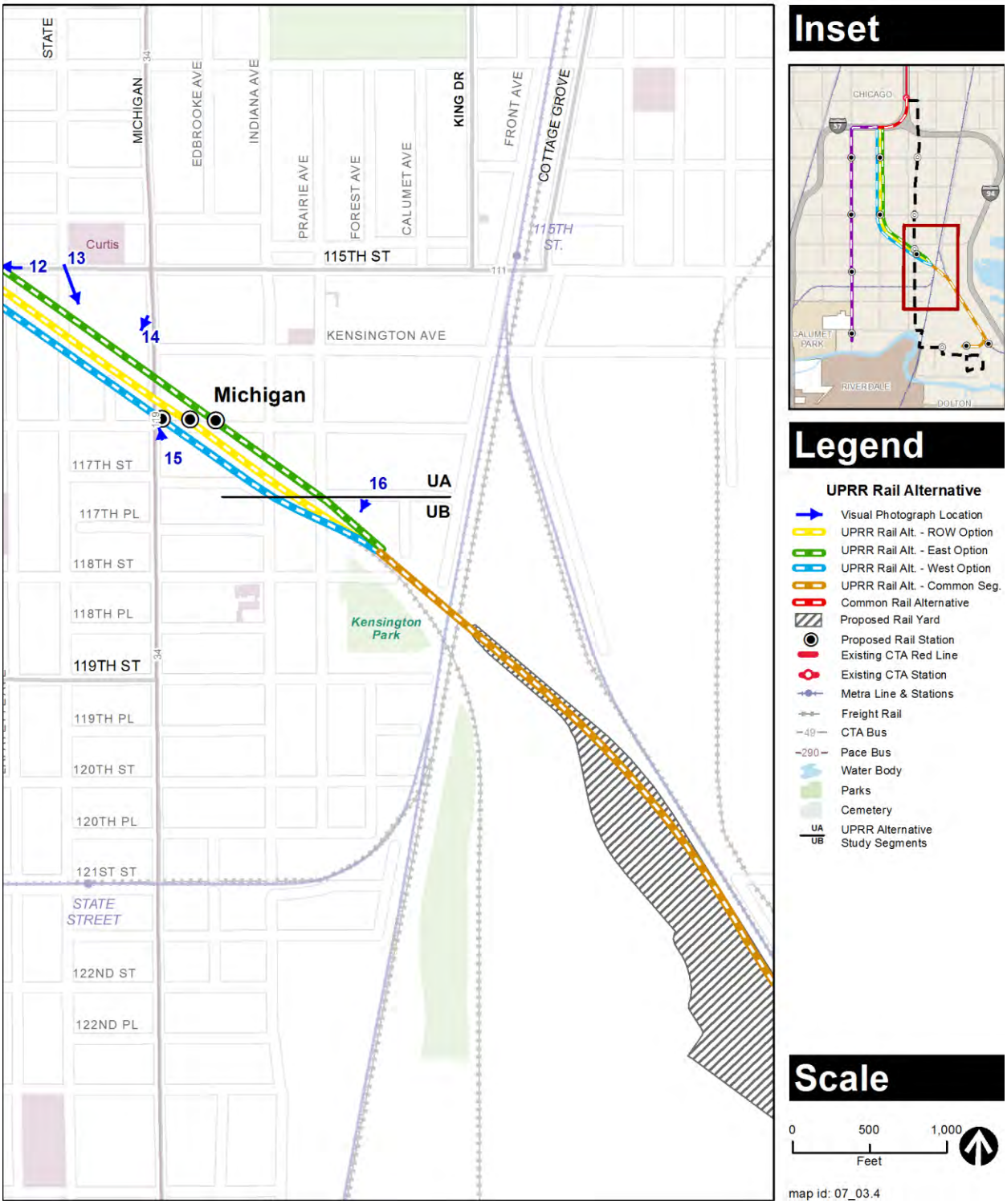


Figure A-10: Union Pacific Railroad Rail Alternative View Locations - Segment UA

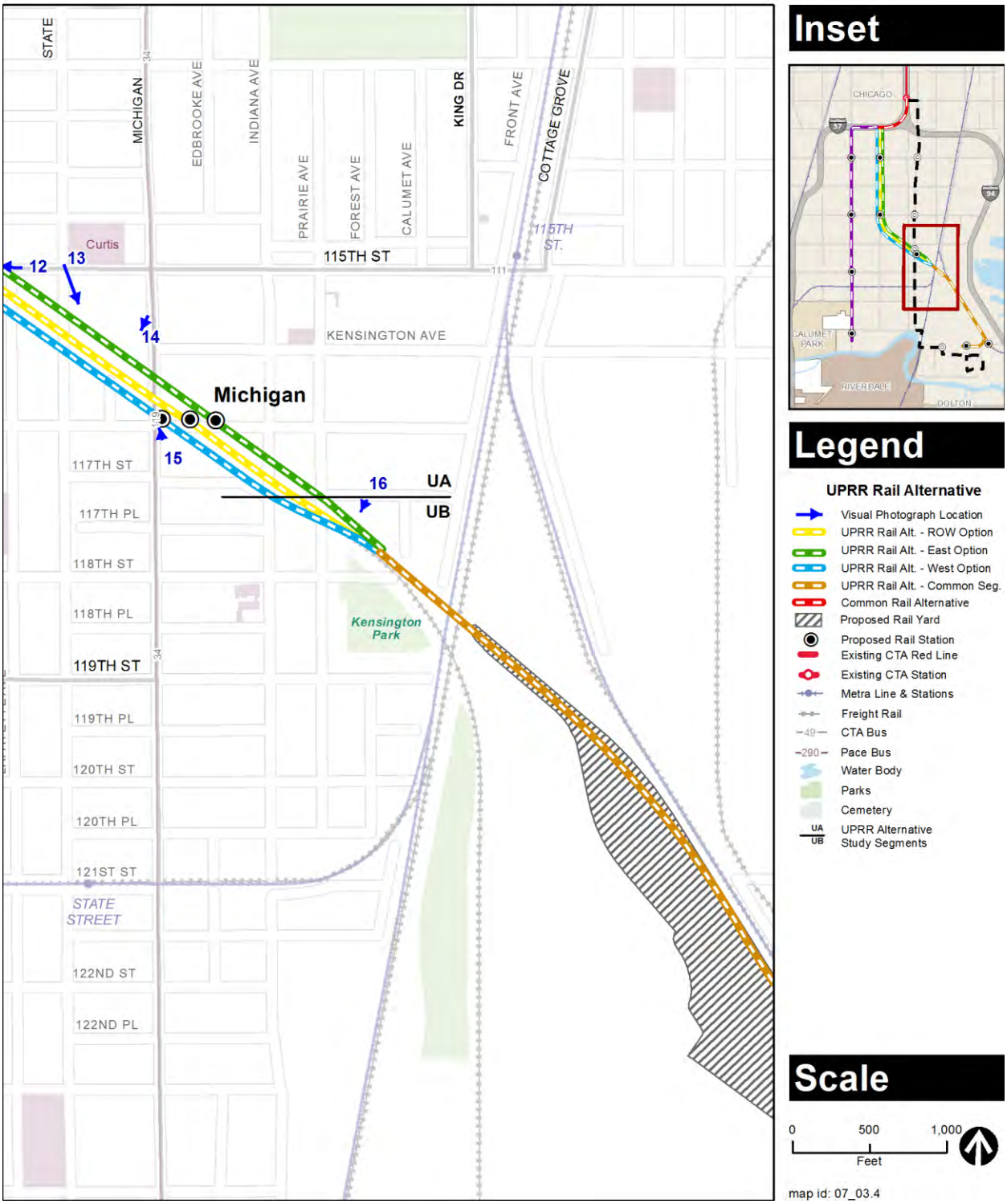


Figure A-11: Union Pacific Railroad Rail Alternative View Locations - Segment UB

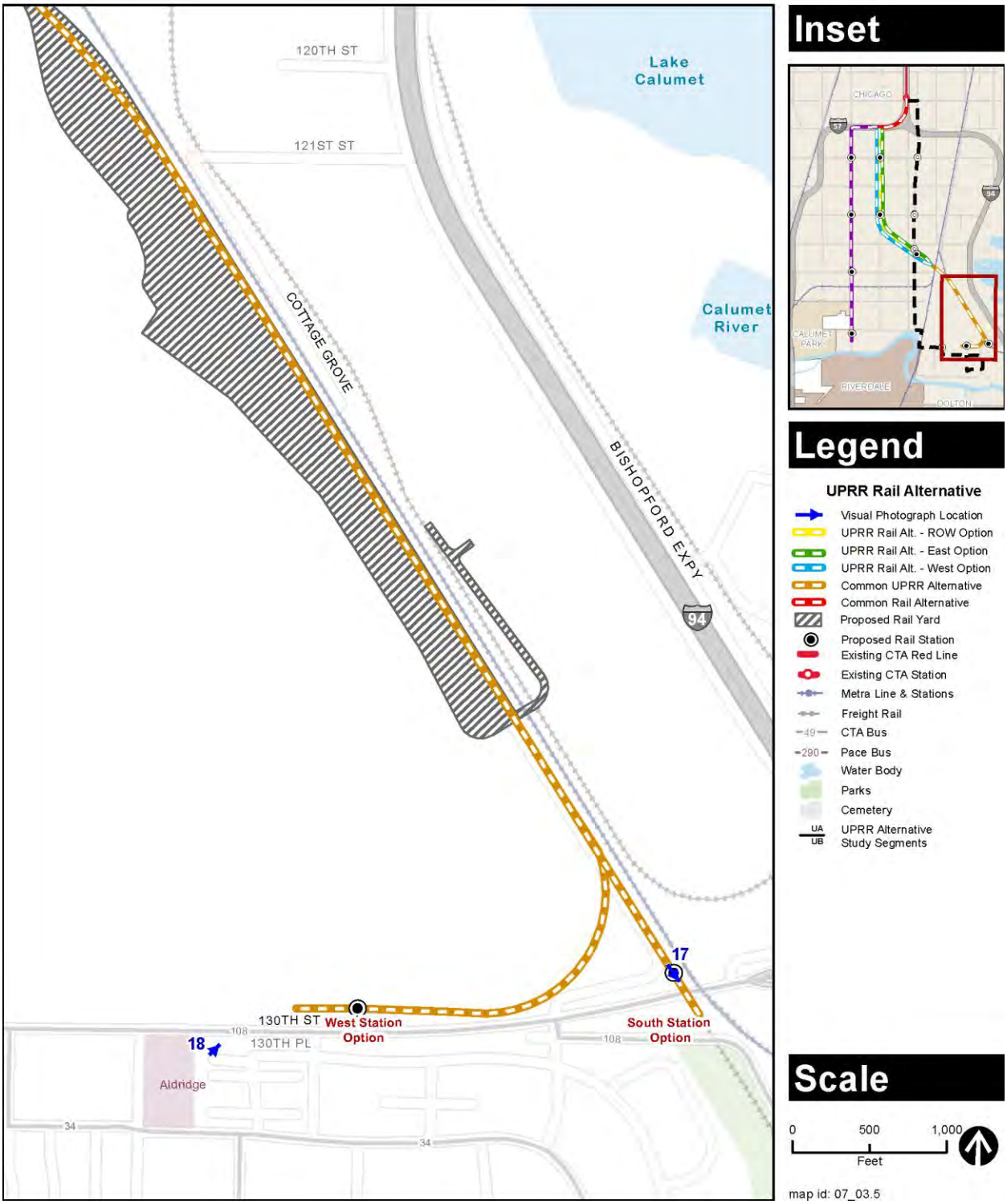


Figure A-12: Union Pacific Railroad Rail Alternative View Locations - Segment UB

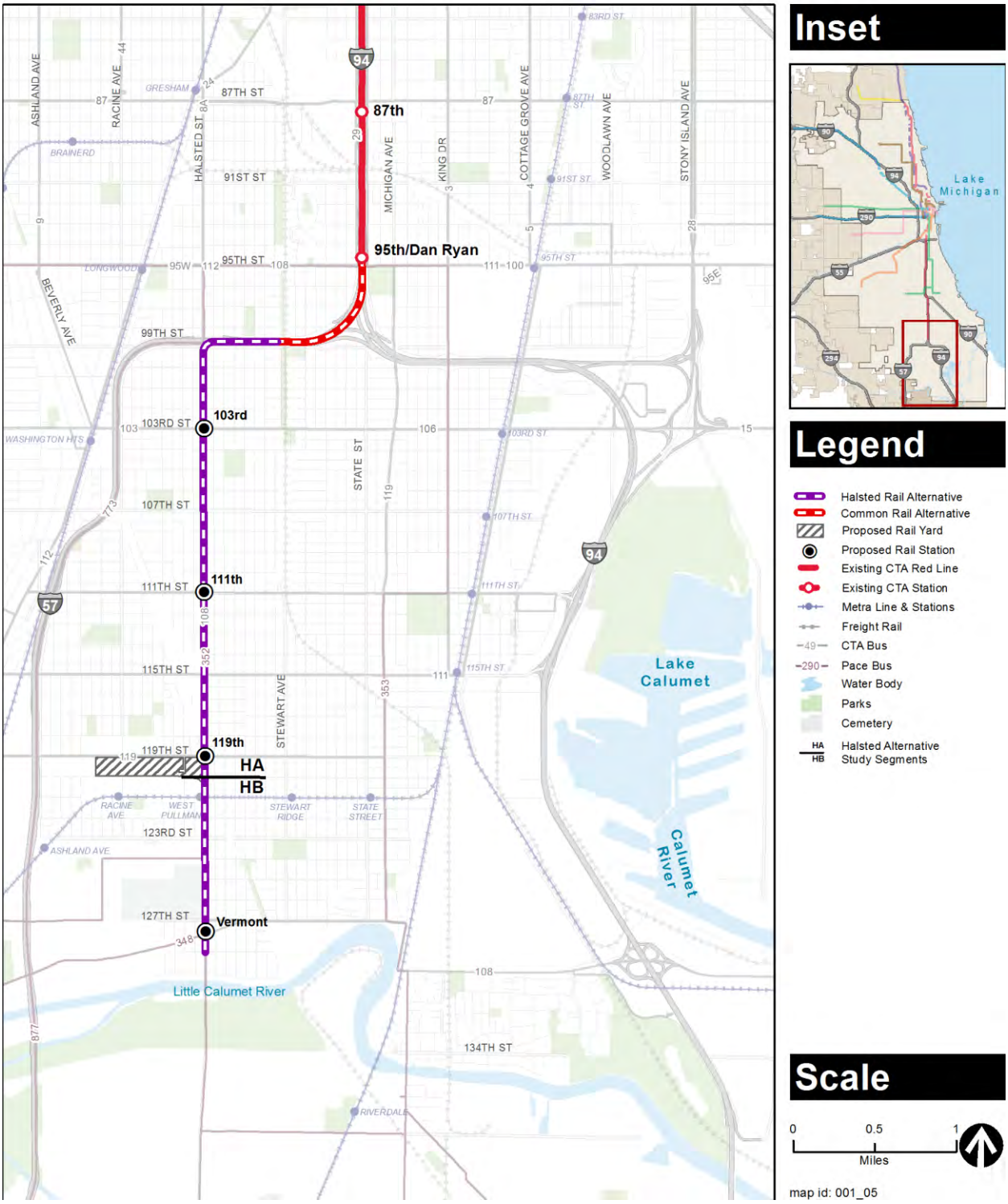


Figure A-13: Halsted Rail Alternative

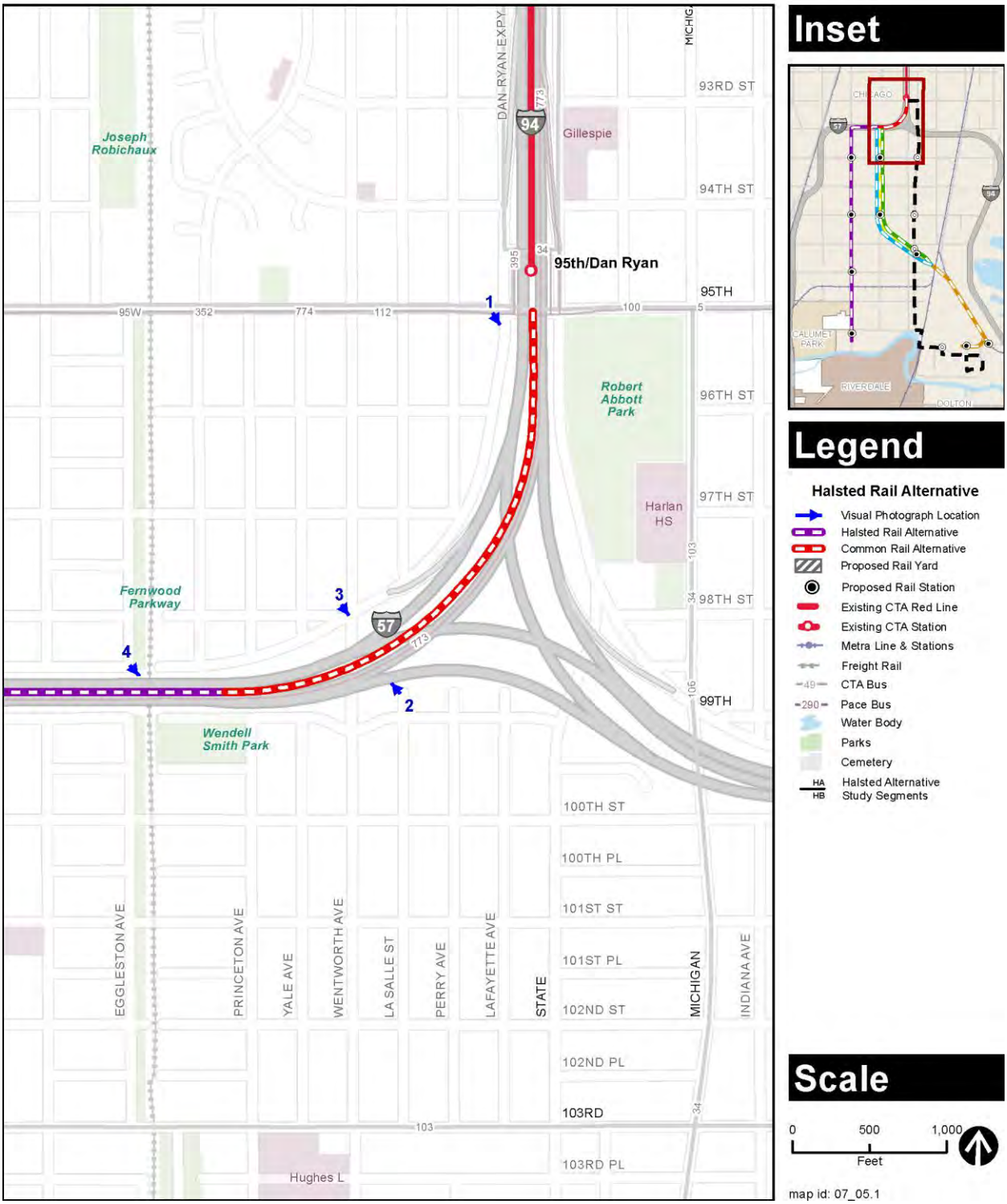


Figure A-14: Halsted Rail Alternative View Locations - Segment HA

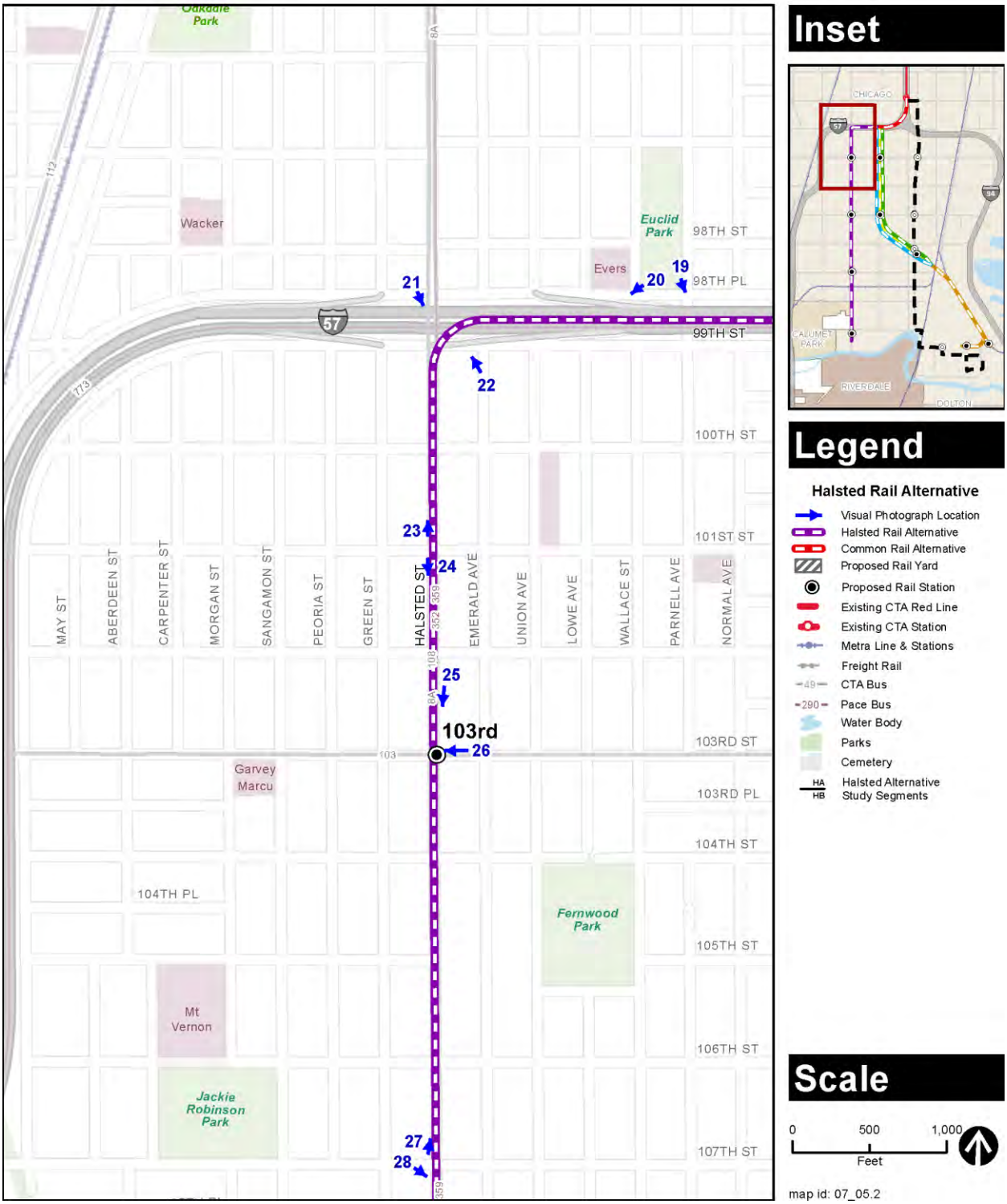


Figure A-15: Halsted Rail Alternative View Locations - Segment HA

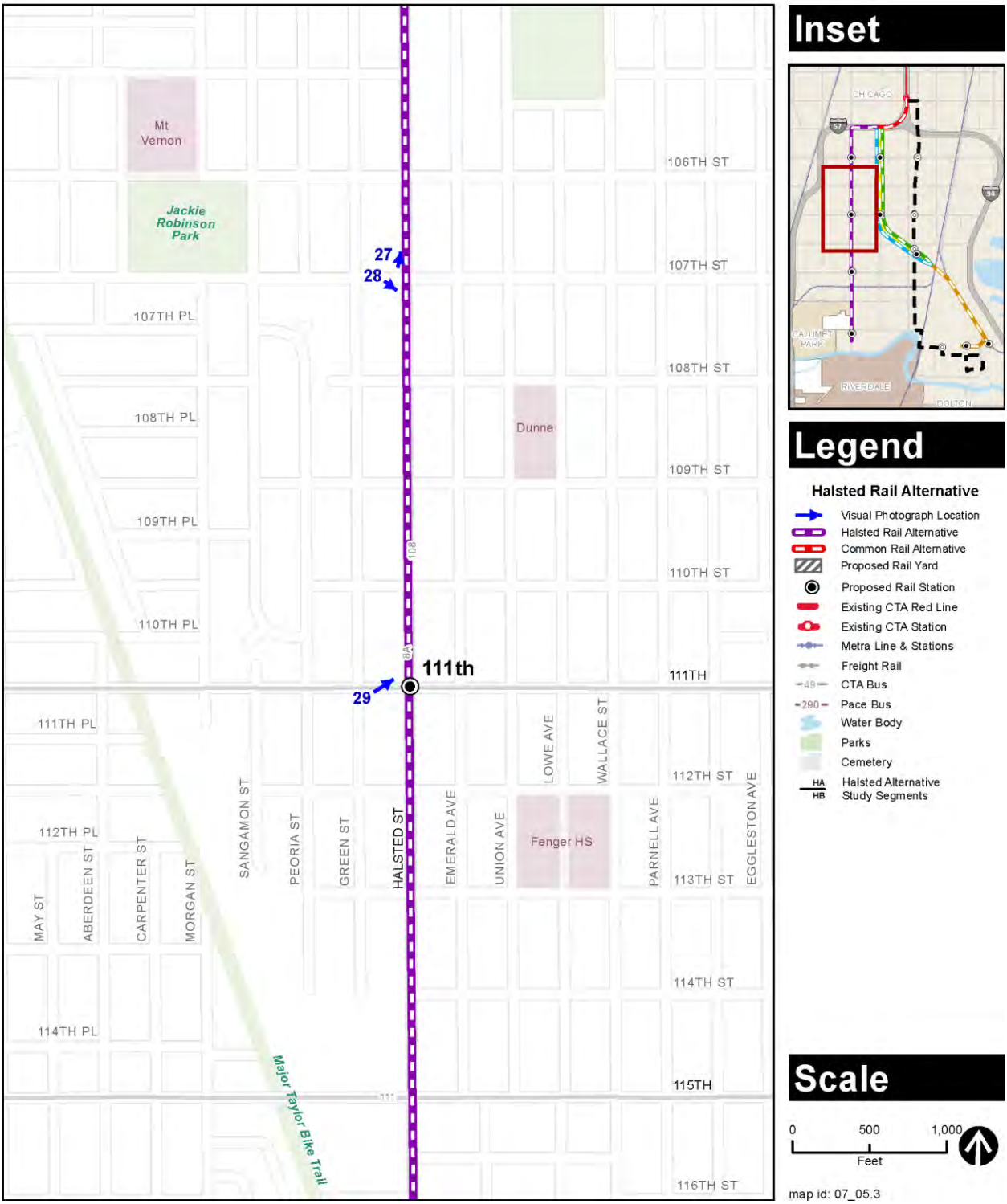


Figure A-16: Halsted Rail Alternative View Locations - Segment HA

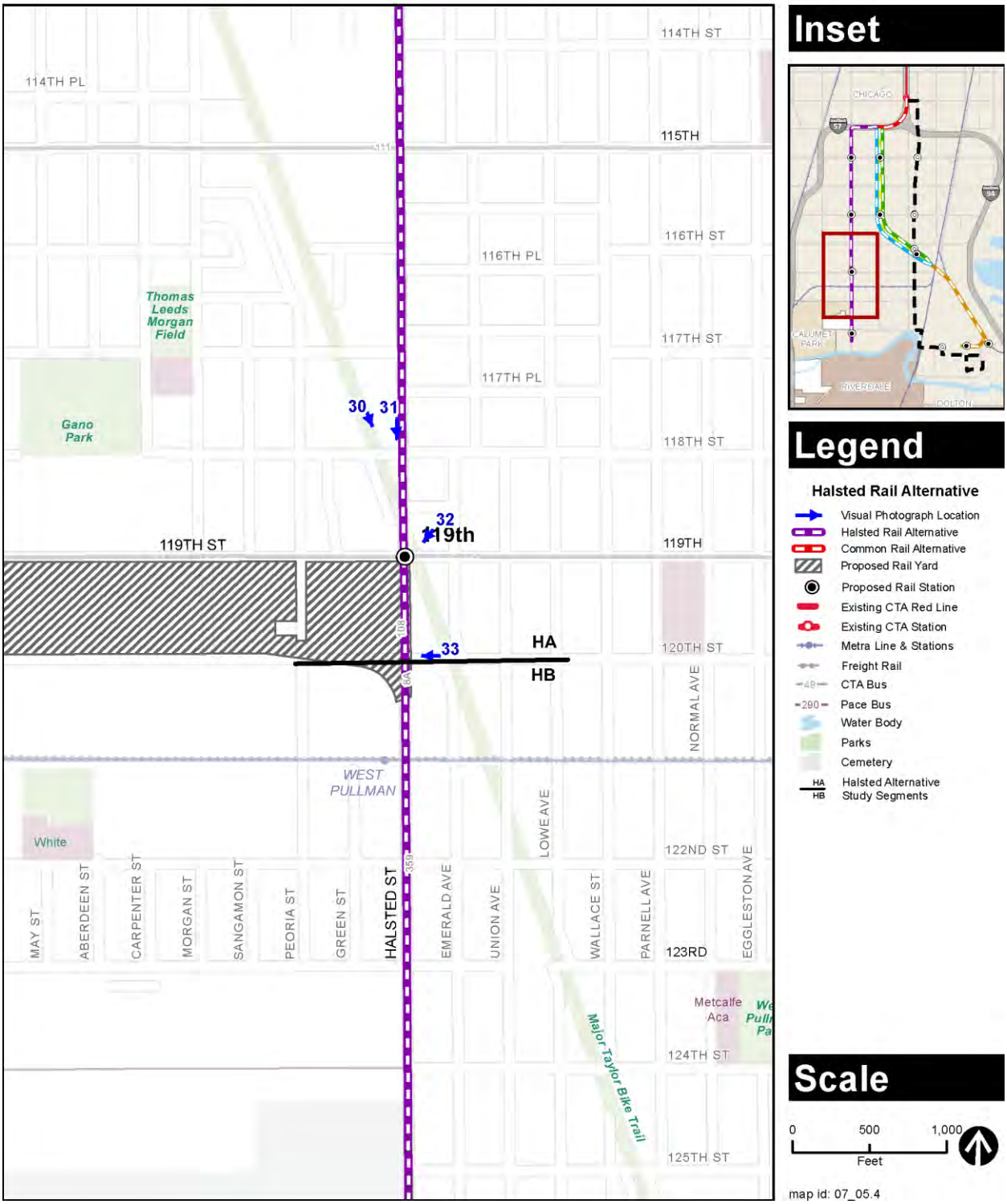


Figure A-17: Halsted Rail Alternative View Locations - Segment HA and HB

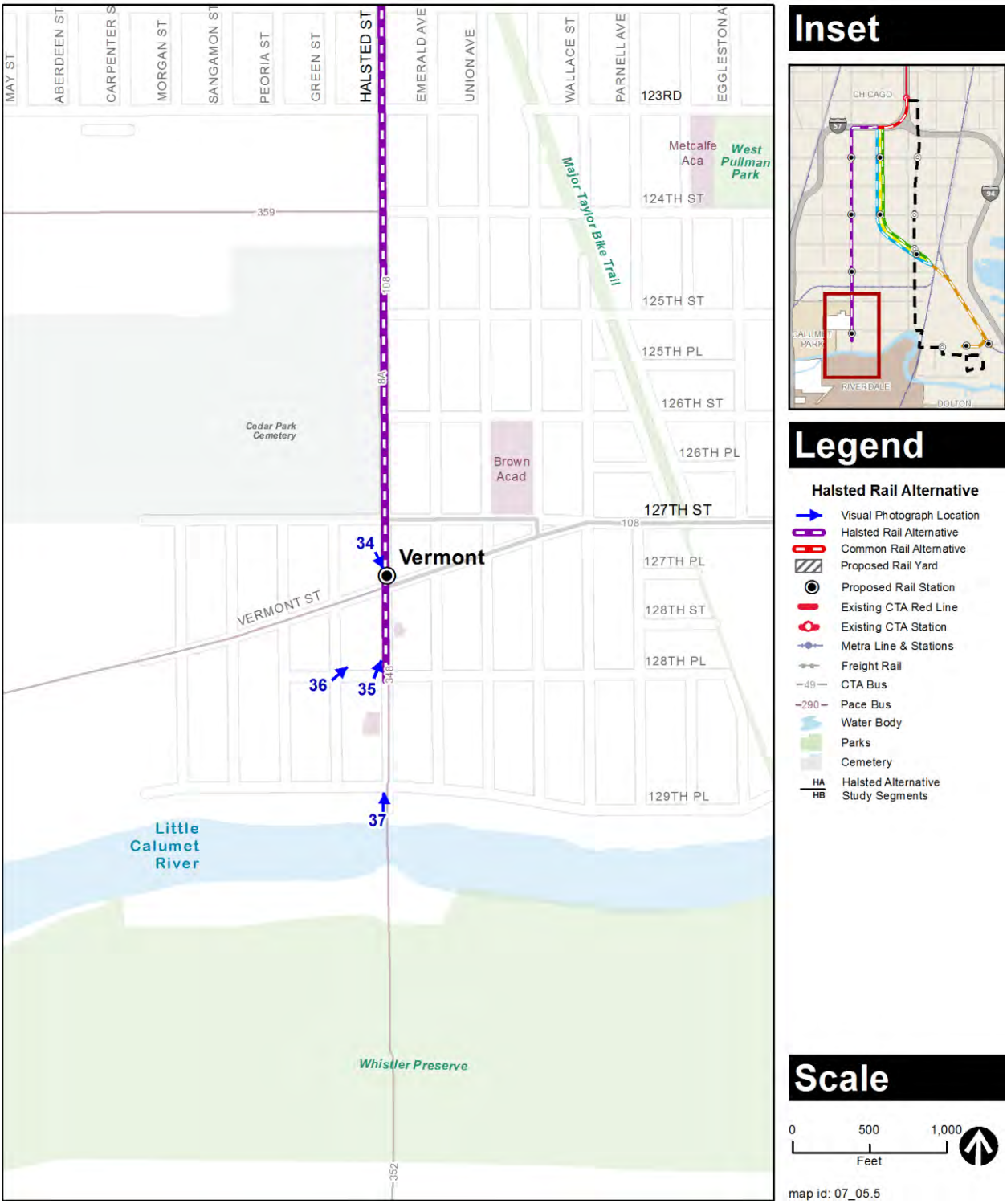


Figure A-18: Halsted Rail Alternative View Locations - Segment HB

BRT ALTERNATIVE

View 40: Existing view

View 40: Visualization- BRT Alternative

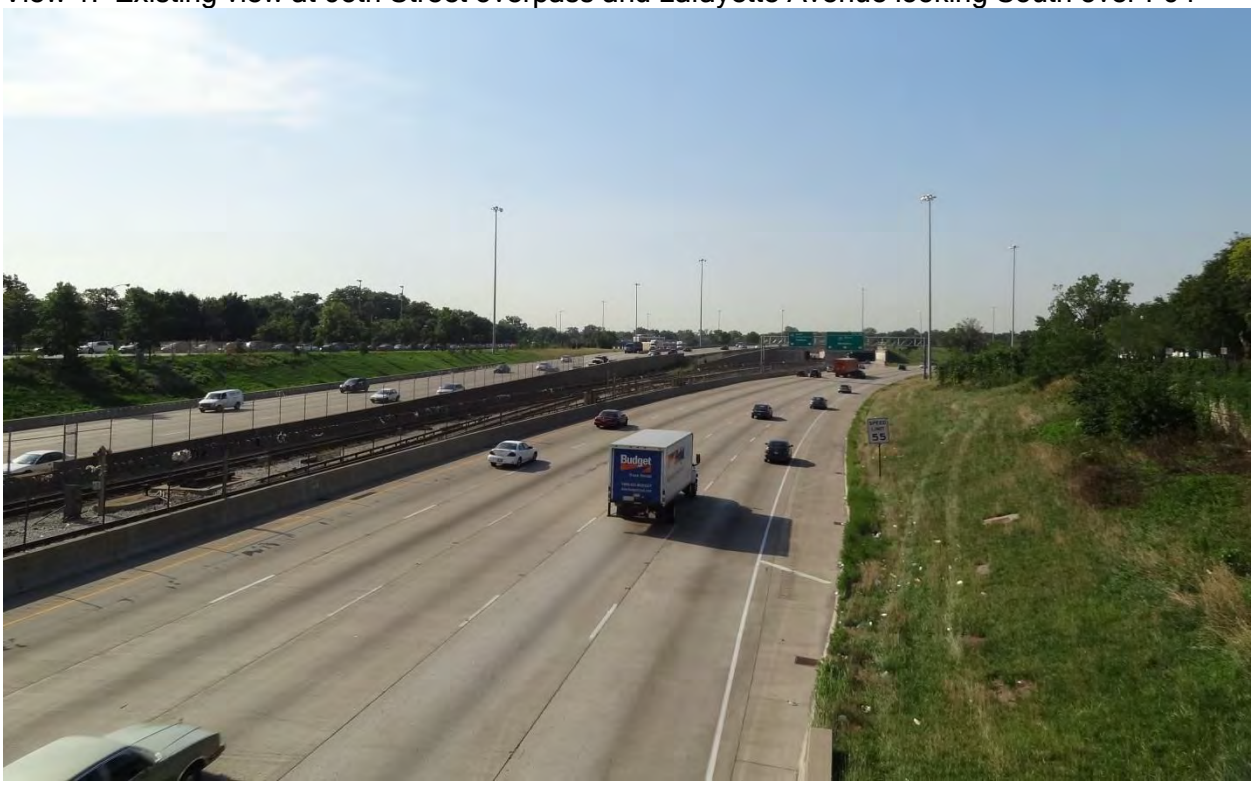
BRT ALTERNATIVE

View 41: Existing view

View 41: Visualization- BRT Alternative

All ALTERNATIVES – Segment U-A and Segment H-B

View 1: Existing view at 95th Street overpass and Lafayette Avenue looking South over I-94



View 1A: Visualization – All Alternatives

All ALTERNATIVES – Segment U-A and Segment H-B

View 2: Existing view northwest from LaSalle Street and 99th Street toward Wentworth overpass

View 2A: Visualization – All Alternatives

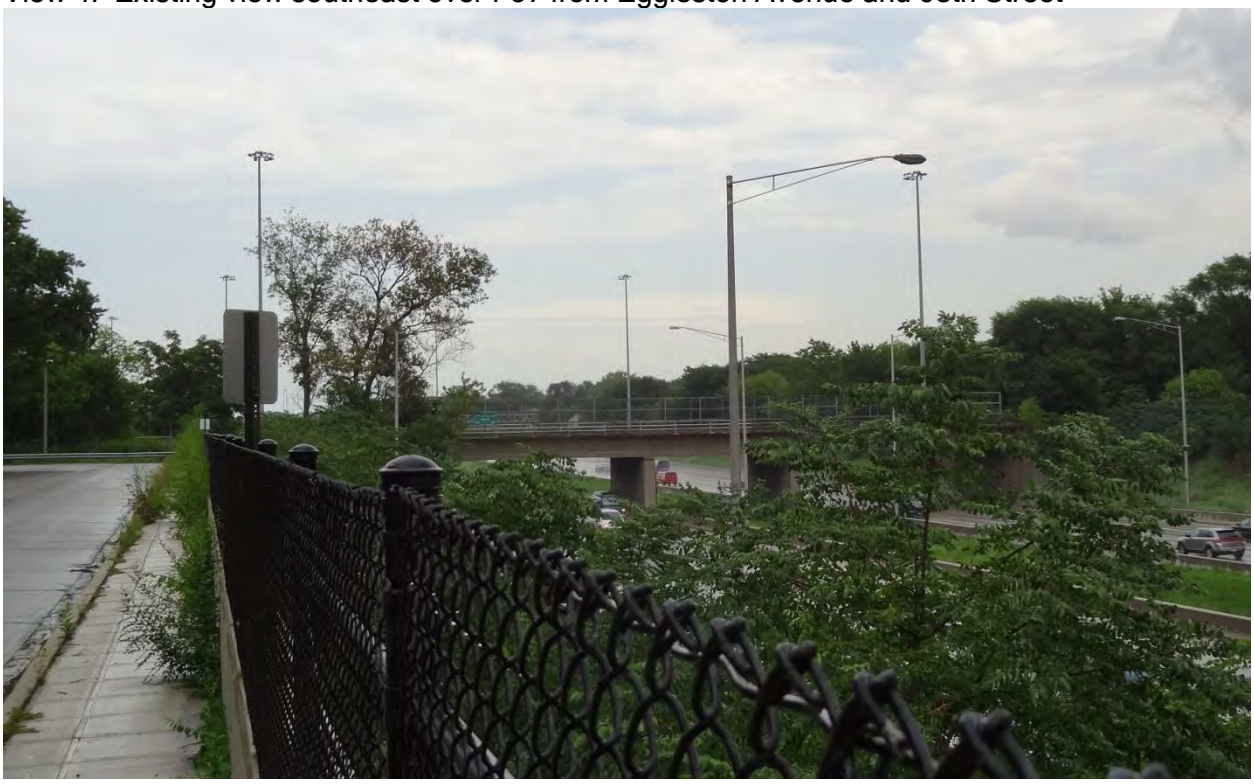
All ALTERNATIVES – Segment U-A and Segment H-B

View 3: Existing view south from Wentworth Avenue toward I-57 overpass

View 3A: Visualization – All Alternatives

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

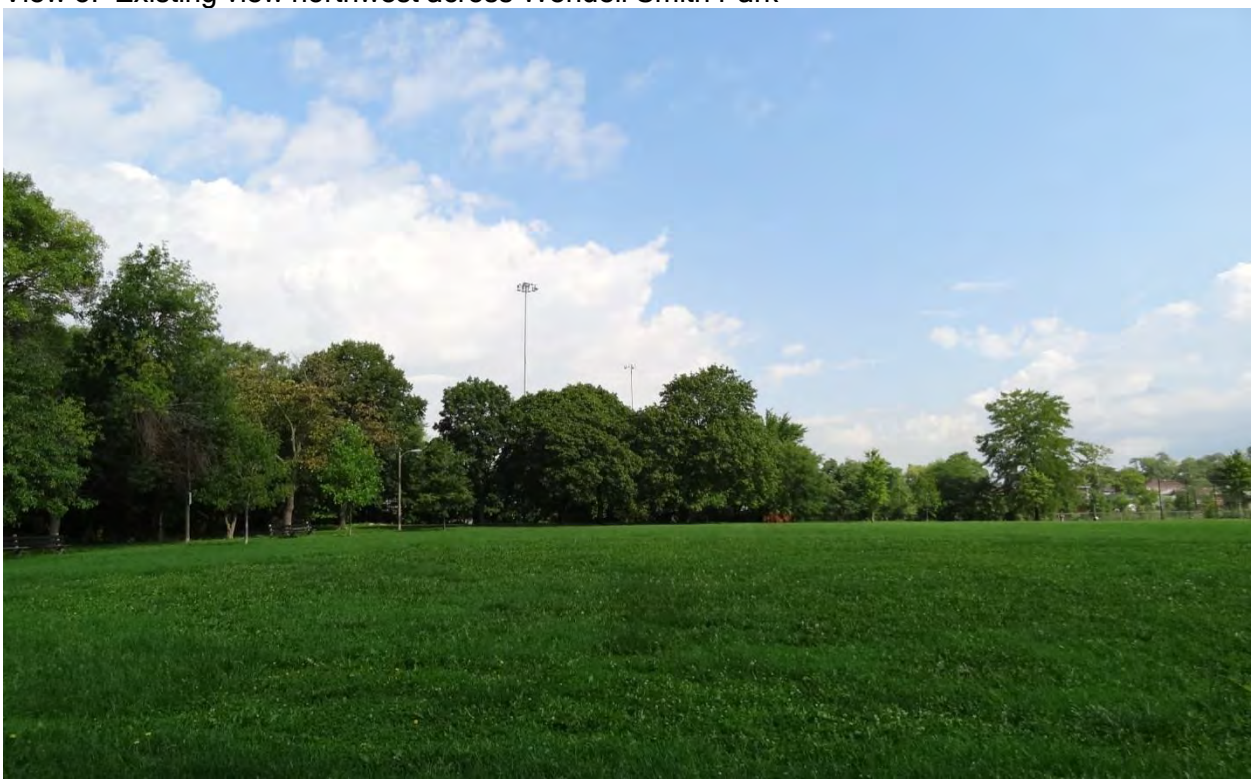
View 4: Existing view southeast over I-57 from Eggleston Avenue and 98th Street



View4A: Visualization – All Alternatives

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 5: Existing view northwest across Wendell Smith Park



View 5A: Visualization – UPRR ROW Option

View 5B: Visualization – UPRR East Option

View 5C: Visualization – UPRR West Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 6: Existing view south along Eggleston Avenue and Fernwood Parkway toward 103rd Street

View 6C: Visualization – UPRR West Option

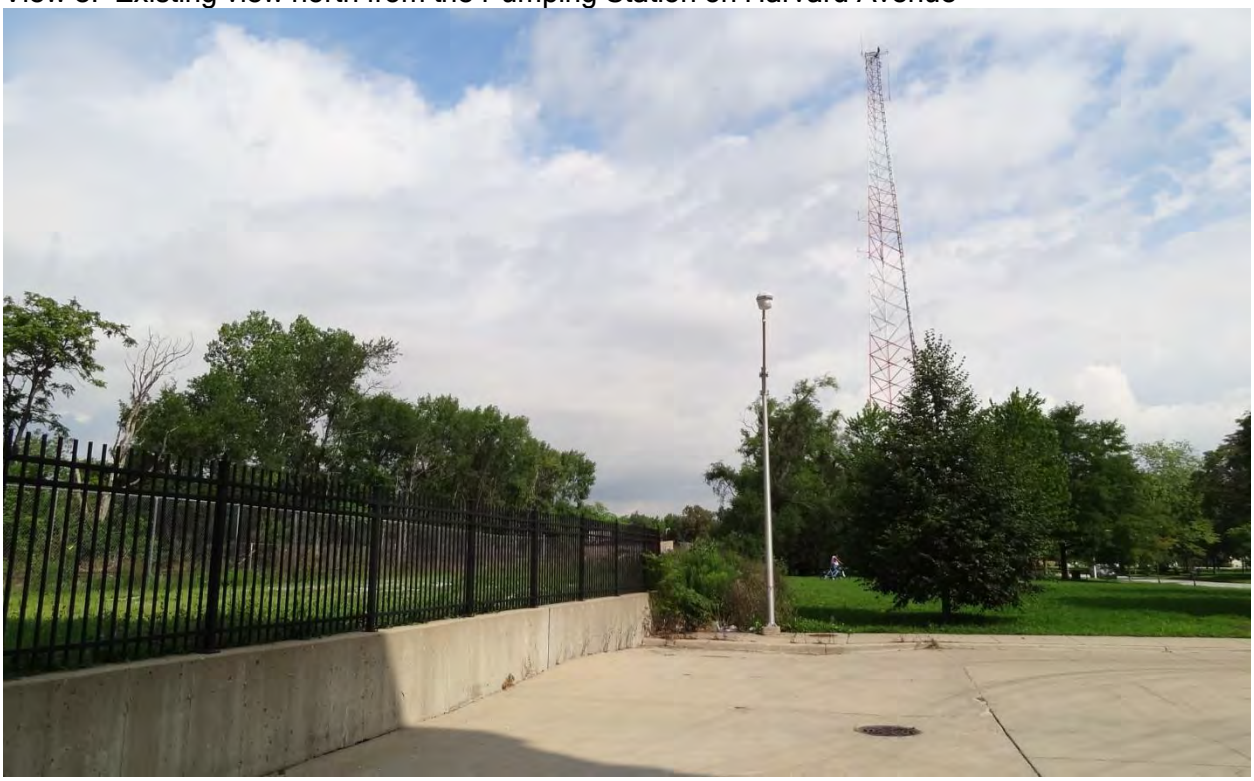
UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 7: Existing view northwest from 103rd Street and Harvard Avenue

View 7B: Visualization – UPRR East Option

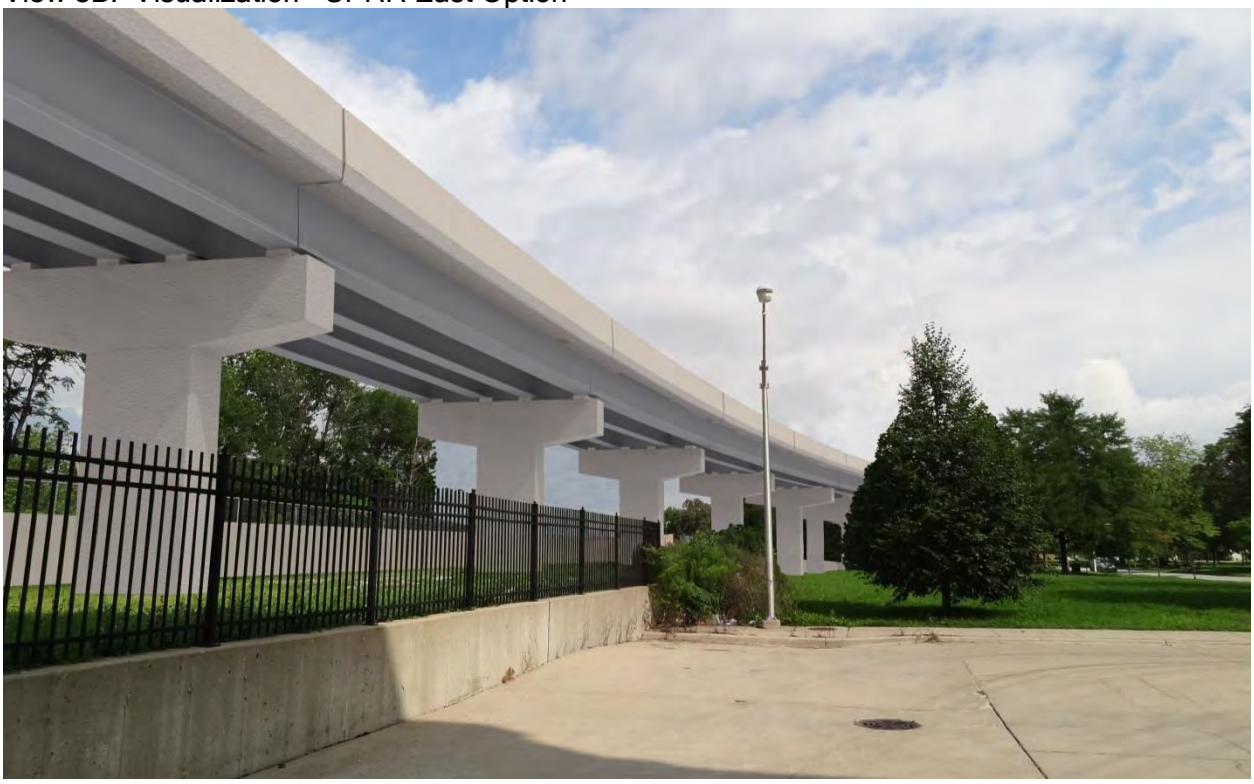
UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 8: Existing view north from the Pumping Station on Harvard Avenue



View 8A: Visualization – UPRR ROW Option

View 8B: Visualization – UPRR East Option



UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 9: Existing view northwest from 108th Street adjacent to Roseland Christian School

View 9A: Visualization – UPRR ROW Option

View 9B: Visualization – UPRR East Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 10: Existing view west from 111th Street

View 10A: Visualization – UPRR ROW Option

View 10B: Visualization – UPRR East Option

View 10C: Visualization – UPRR West Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 11: Existing view southwest from 113th Street and Princeton Avenue

View 11A: Visualization – UPRR ROW Option

View 11B: Visualization – UPRR East Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 12: Existing view northwest from 115th Street

View 12A: Visualization – UPRR ROW Option

View 12B: Visualization – UPRR East Option

View 12C: Visualization – UPRR West Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 13: Existing view southeast from State Avenue

View 13A: Visualization – UPRR ROW Option

View 13C: Visualization – UPRR West Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

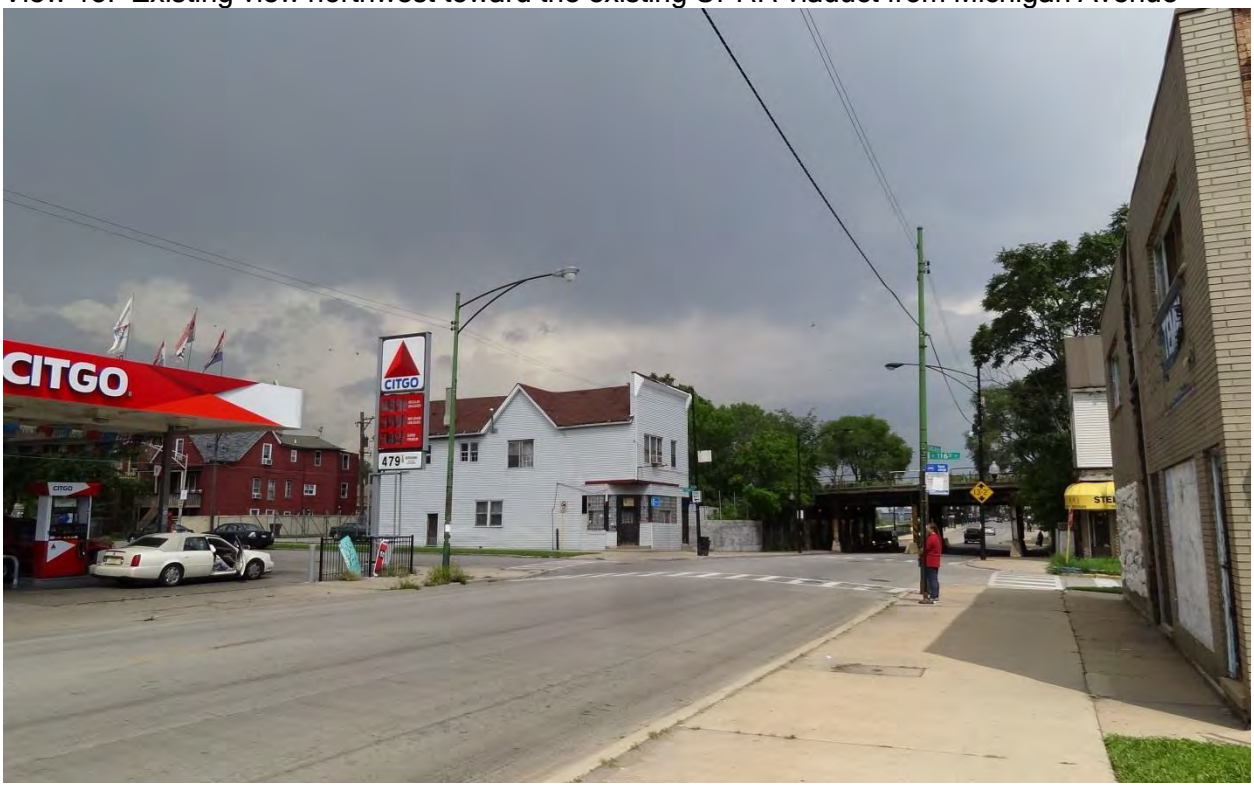
View 14: Existing view south toward the existing UPRR viaduct from Michigan Avenue

View 14A: Visualization – UPRR ROW Option

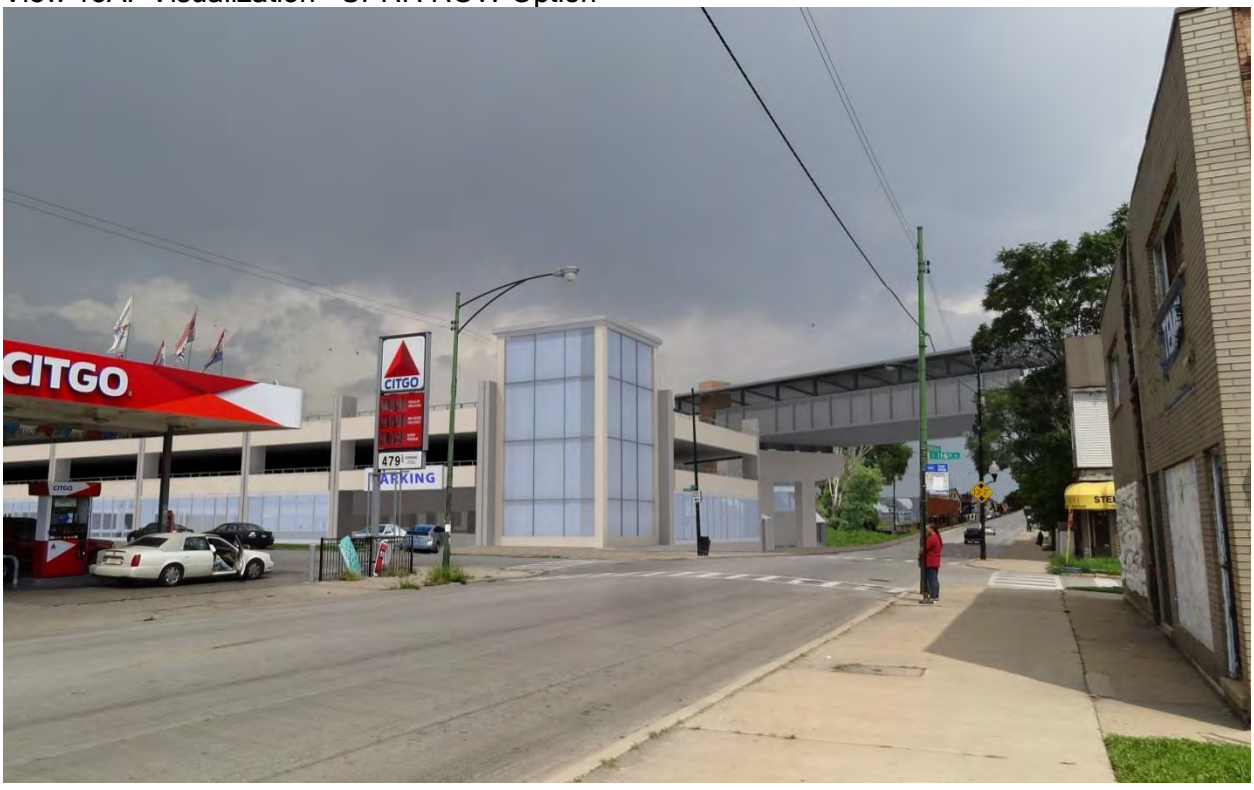
View 14B: Visualization – UPRR East Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 15: Existing view northwest toward the existing UPRR viaduct from Michigan Avenue



View 15A: Visualization – UPRR ROW Option



View 15C: Visualization – UPRR West Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-A

View 16: Existing view southeast from 117th Street east of Prairie Avenue

View 16A: Visualization – UPRR ROW Option

View 16B: Visualization – UPRR East Option

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-B

View 17: Existing view southeast toward 130th Street overpass from 130th Place

View 17A: Visualization – South Station Option, All Alternatives

(130th Street Station Market/Access Study, Dec. 2010)

UNION PACIFIC RAILROAD ALTERNATIVES – Segment U-B

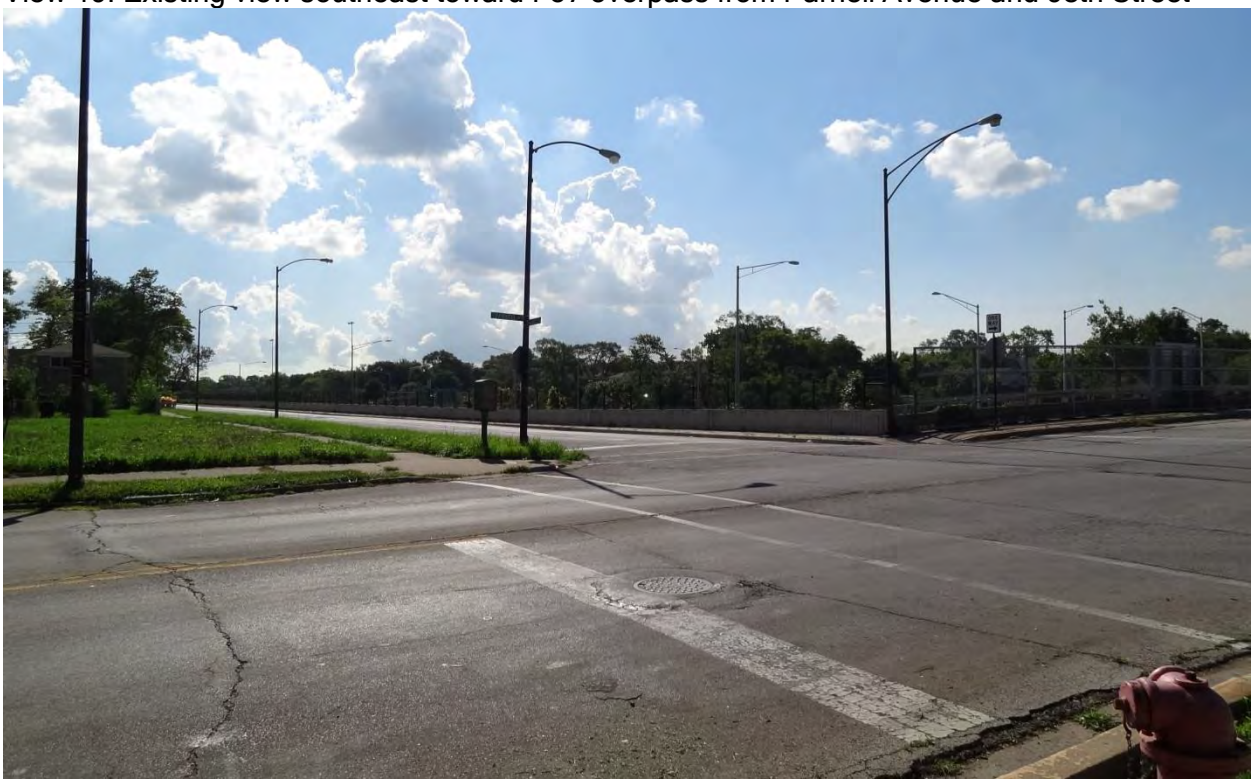
View 18: Existing view northeast on 130th Place adjacent to Altgeld Gardens neighborhood

View 18A: Visualization – West Station Option, All Alternatives

(Station design reflects CDOT Concept Sketch)

HALSTED ALTERNATIVE – Segment H-A

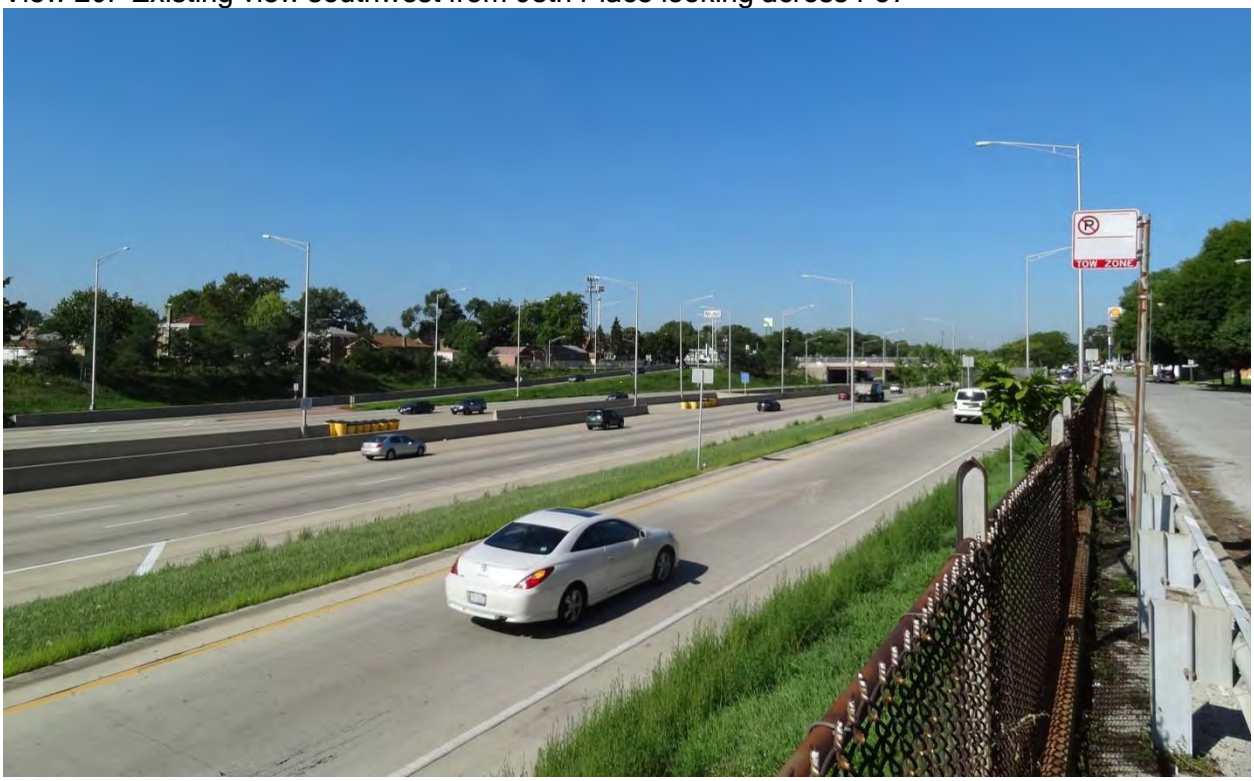
View 19: Existing view southeast toward I-57 overpass from Parnell Avenue and 98th Street



View 19: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

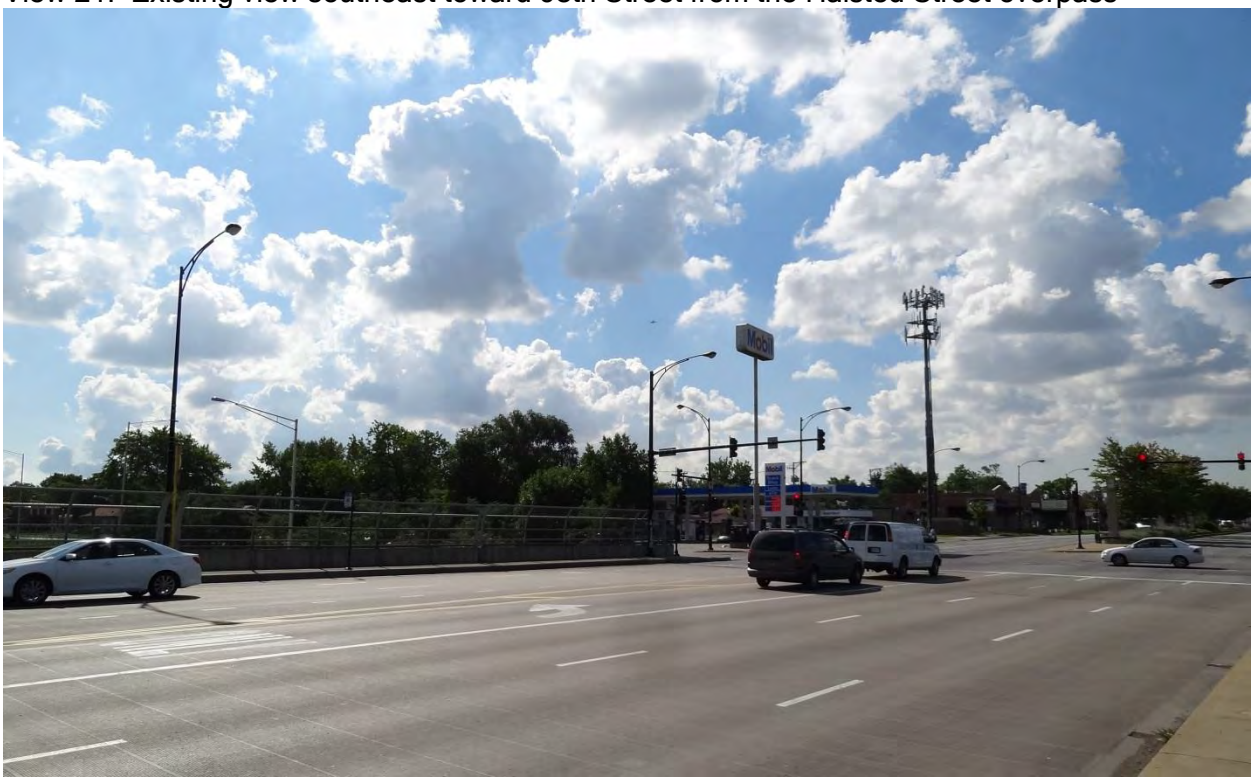
View 20: Existing view southwest from 98th Place looking across I-57



View 20: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

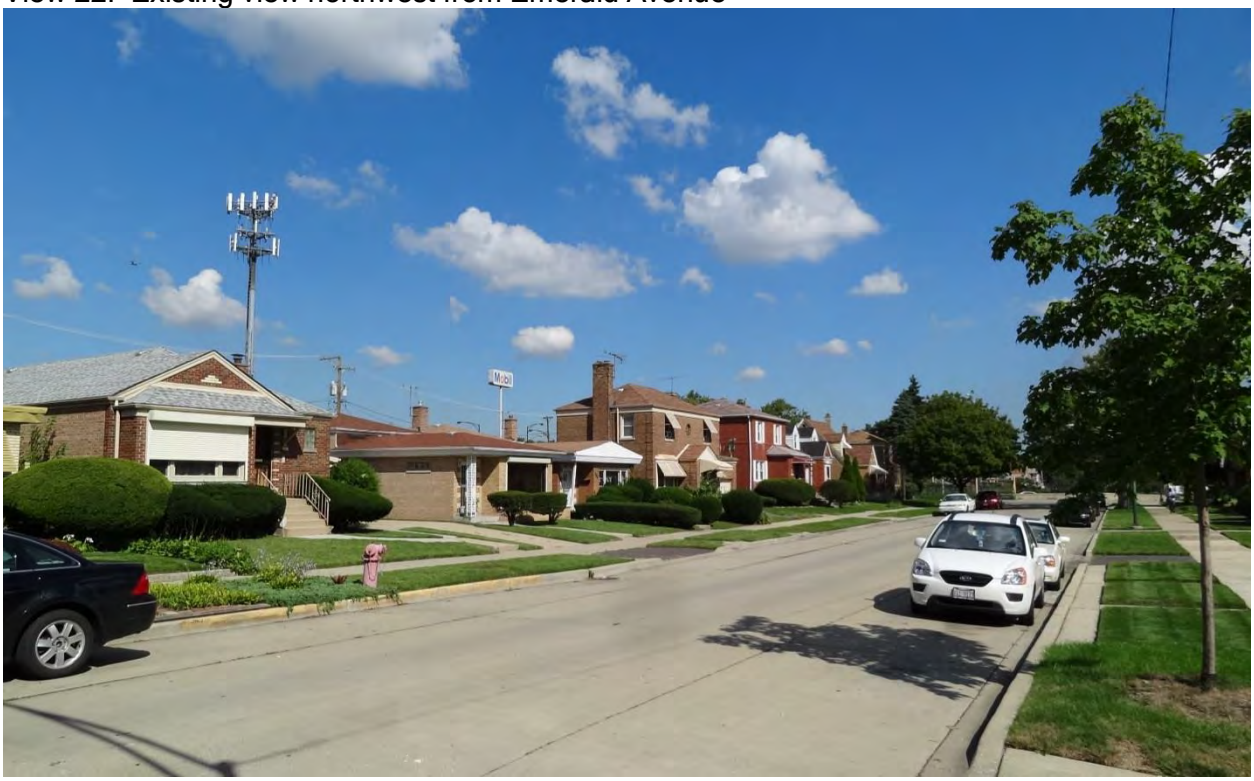
View 21: Existing view southeast toward 98th Street from the Halsted Street overpass



View 21: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

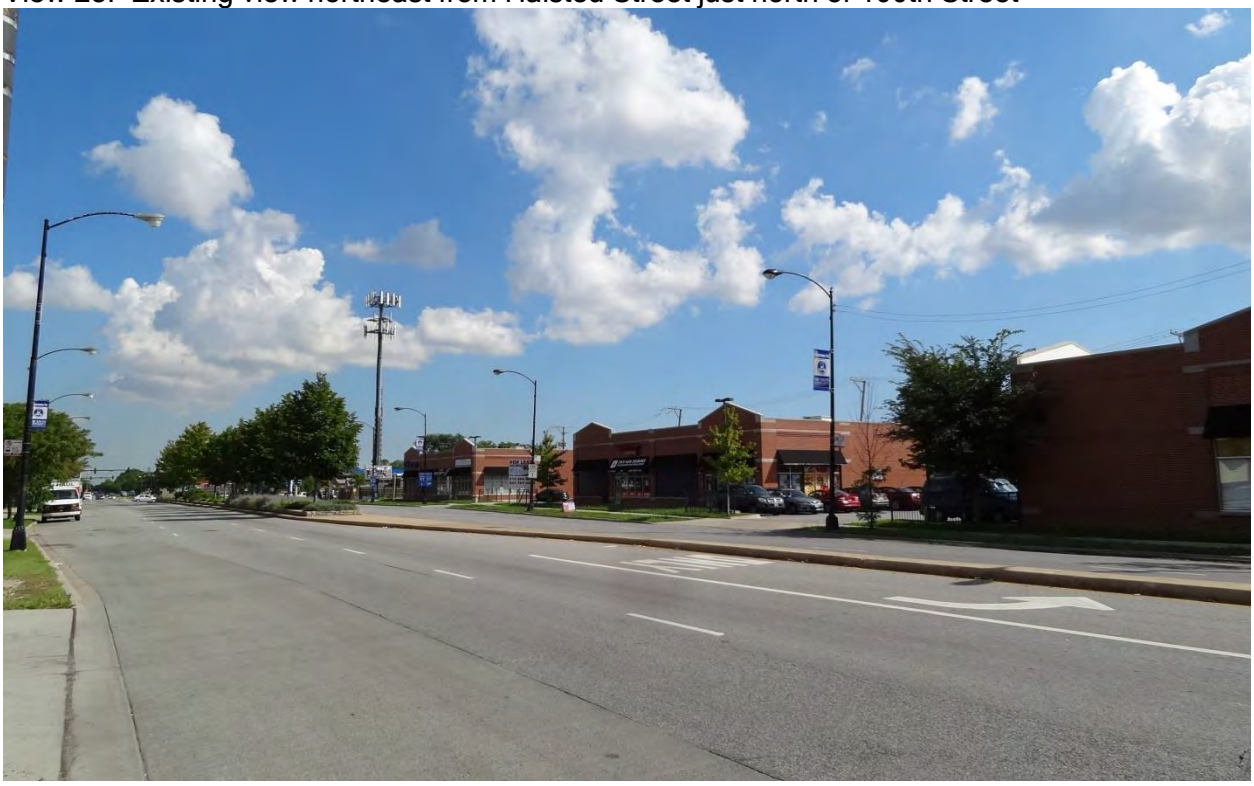
View 22: Existing view northwest from Emerald Avenue



View 22: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 23: Existing view northeast from Halsted Street just north of 100th Street



View 23: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 24: Existing view south from Halsted Street at 100th Street

View 24: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 25: Existing view south from Halsted Street between 102nd Street and 103rd Street

View 25: Visualization- Halsted Alternative

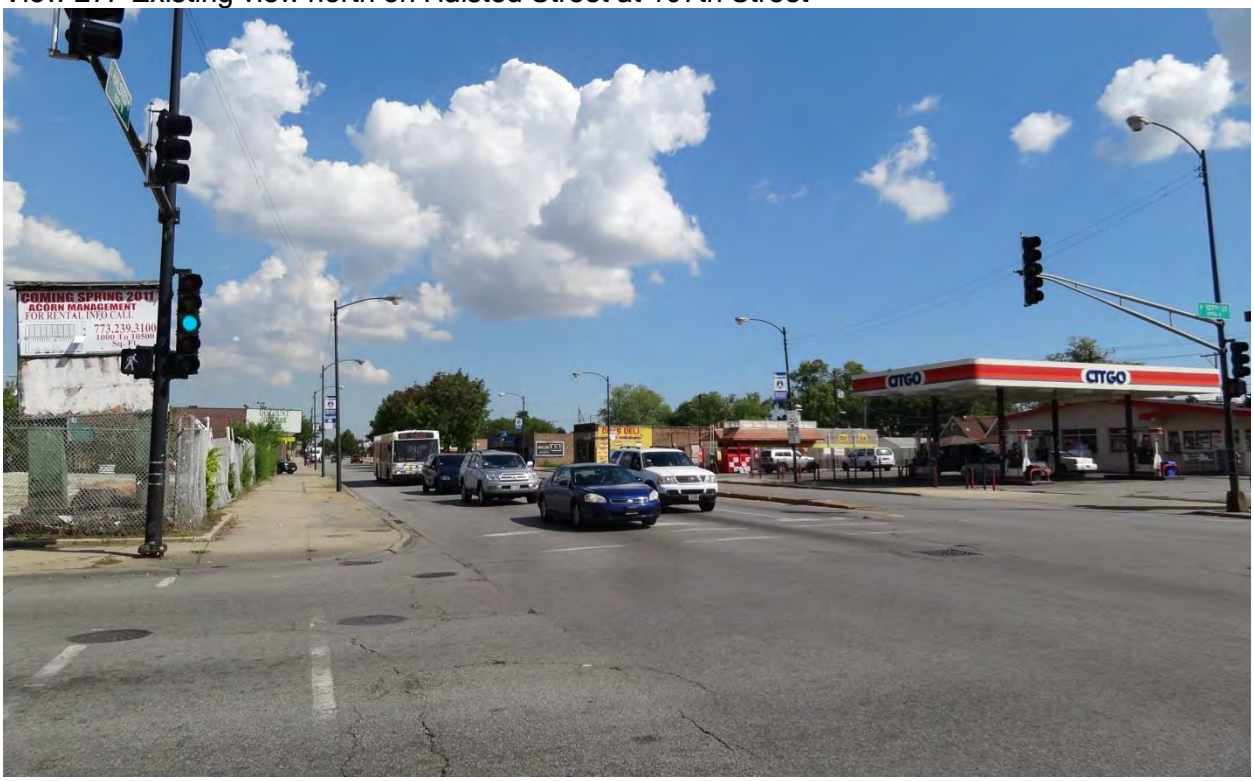
HALSTED ALTERNATIVE – Segment H-A

View 26: Existing view west from the corner of 103rd Street and Emerald Avenue

View 26: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

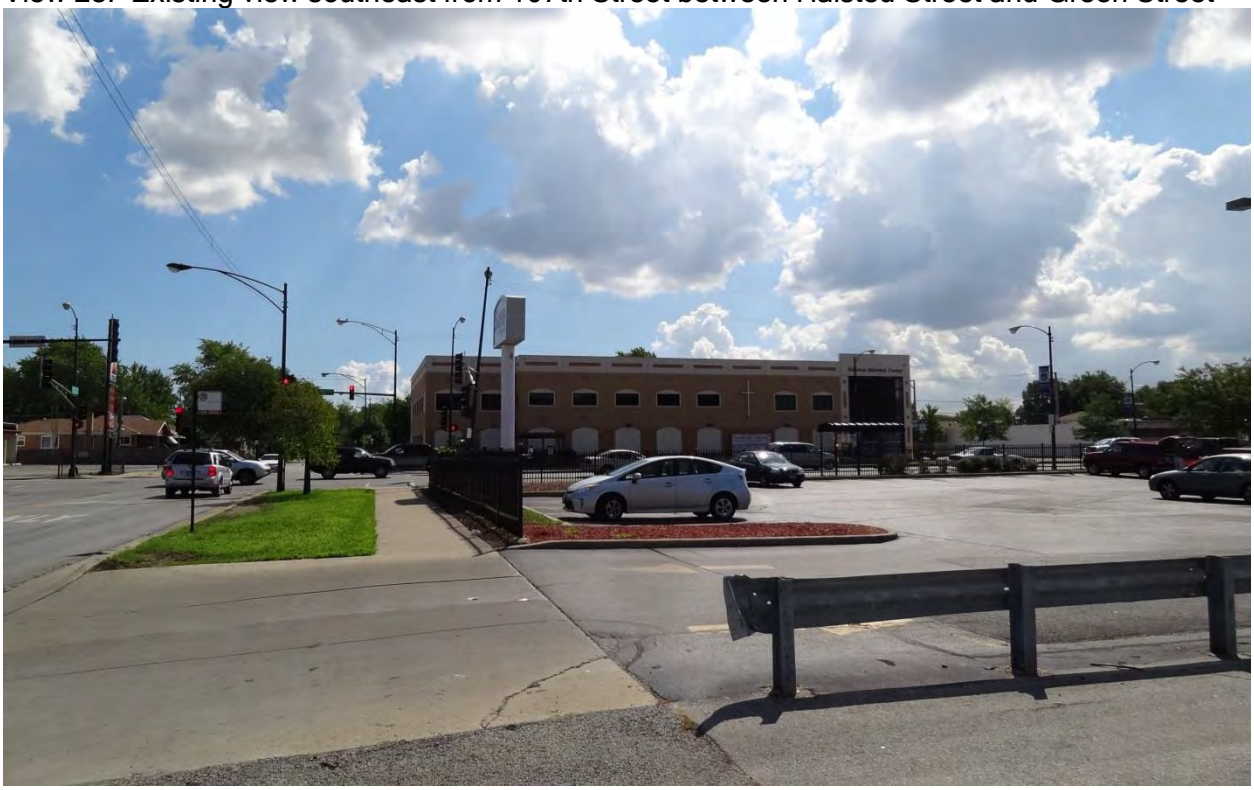
View 27: Existing view north on Halsted Street at 107th Street



View 27: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

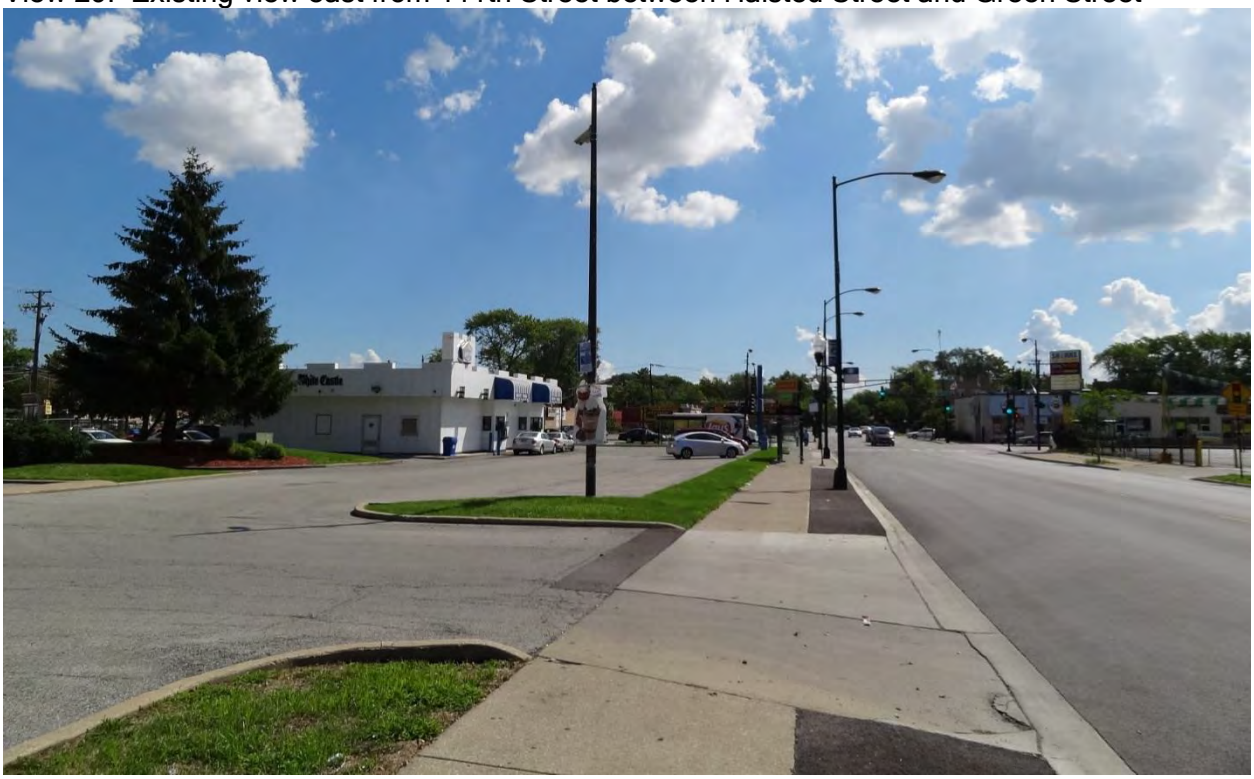
View 28: Existing view southeast from 107th Street between Halsted Street and Green Street



View 28: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 29: Existing view east from 111th Street between Halsted Street and Green Street



View 29: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 30: Existing view southeast from the Major Taylor Trail at 118th Street

View 30: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-A

View 31: Existing view south on Halsted at 118th Street

View 31: Visualization- Halsted Alternative

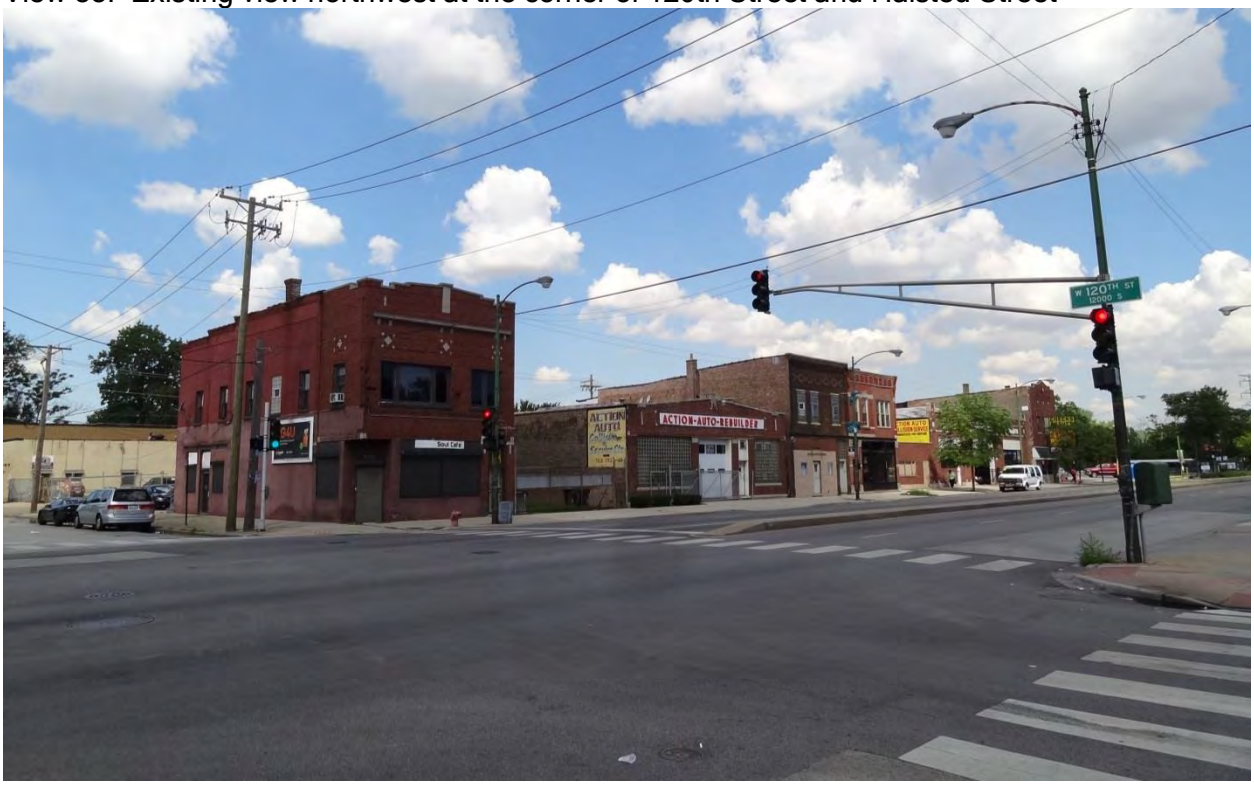
HALSTED ALTERNATIVE – Segment H-A

View 32: Existing view southwest at the corner of 119th Street and Halsted Street

View 32: Visualization- Halsted Alternative

HALSTED ALTERNATIVE – Segment H-B

View 33: Existing view northwest at the corner of 120th Street and Halsted Street



View 33: Visualization- Halsted Alternative

HALSTED ALTERNATIVE- Segment H-B

View 34: Existing view south on Halsted Street at Vermont Avenue

View 34: Visualization- Halsted Alternative

HALSTED ALTERNATIVE- Segment H-B

View 35: Existing view northeast at the corner of 128th Street and Halsted Street

View 35: Visualization- Halsted Alternative

HALSTED ALTERNATIVE- Segment H-B

View 36: Existing view northeast from the corner of Green Street and 128th Place

View 36: Visualization- Halsted Alternative

HALSTED ALTERNATIVE- Segment H-B

View 37: Existing view north from Halsted Street at the Little Calumet River bridge

View 37: Visualization- Halsted Alternative

Appendix B
2014-2015 Red Line Extension Project Update

2014-2015 Red Line Extension Project Update

From 2012–2014, CTA evaluated benefits and impacts of four alternatives: the No Build Alternative, the Bus Rapid Transit Alternative (along Michigan Avenue), the Union Pacific Railroad (UPRR) Rail Alternative, and the Halsted Alternative. CTA evaluated three options of the UPRR Rail Alternative: Right-of-Way Option, East Option, and West Option. CTA also evaluated two options of the UPRR Rail Alternative 130th Street station: a South Station Option and a West Station Option. Based on the project description provided in Section 2 of this technical memorandum, CTA analyzed the impacts of these alternatives and station options. The benefits and impacts are included in the technical memoranda prepared in 2012–2014.

In August 2014, based on the technical analysis and public input, CTA announced the NEPA Preferred Alternative—the UPRR Rail Alternative. Additional conceptual engineering was conducted on the UPRR Rail Alternative to refine the East and West Option alignments. In addition, CTA is considering only the South Station Option of the 130th Street Station.

In late 2014 and early 2015, CTA conducted additional engineering and revised assumptions on the East and West Options to refine the alignments. The refinement of the East and West Options consisted of the following items:

- For the segment of the alignment along I-57, CTA shifted the proposed alignment from the median of I-57 to the north side of I-57 within the existing expressway right-of-way. The construction would be less complex, safer for construction workers, and have a shorter duration. The shift would also allow for fewer impacts to Wendell Smith Park for the East Option, and would allow for no permanent impacts to Wendell Smith Park for the West Option.

- CTA modified the curve speeds as the alignment heads south from I-57 along the UPRR tracks. The curve speed for both the East and West Options would be 35 mph.

- CTA shifted the East Option alignment near 103rd Street station to minimize impacts to Block Park and the Roseland Pumping Station.

- CTA modified the curves south of 103rd Street for both the East and West Options to 55 mph to maximize the train speed.

- CTA refined the layout of the 120th Street yard and shop to optimize yard operations. The refined layout of the yard would accommodate 340 train cars.

The refinement of the East and West Option alignments minimizes potential impacts to parks while providing flexibility for future design phases. The Draft Environmental Impact Statement contains the benefits and impacts of the refined East and West Option alignments and supersedes information presented in other chapters of this technical memorandum.

Visual and Aesthetic Conditions

CTA prepared two additional photo simulations in early 2015, at the locations shown on the map in **Figure 1**.

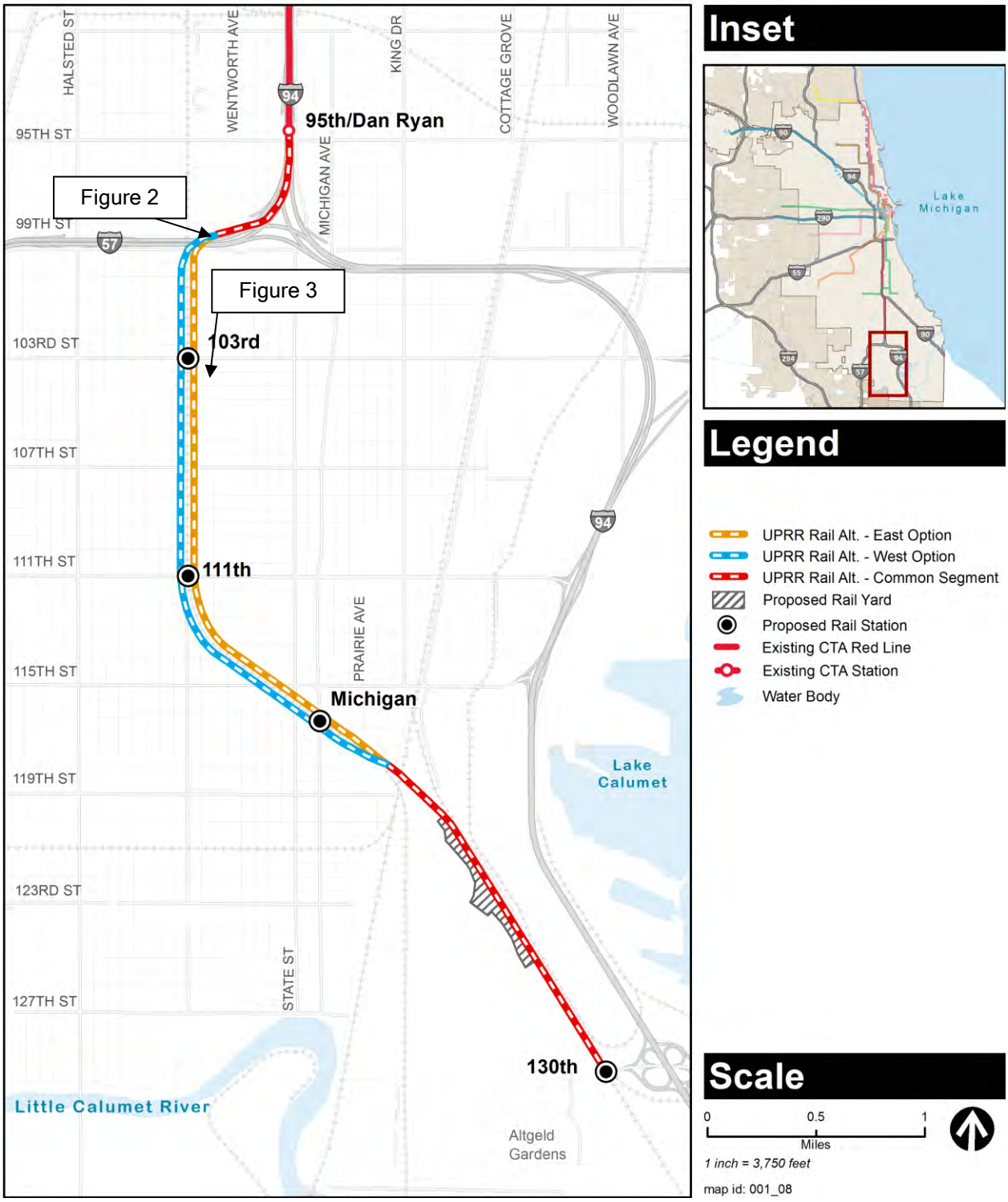


Figure 1: Locations of Additional Photo Simulations

The refined alignment along the I-57 corridor would result in high and adverse visual impacts because of the change in the visual setting due to the elevated track structure in the highway right-of-way. This would change the scale, density, and character of the residential neighborhood north of I-57. The houses that currently have a partial or full view of the expressway would experience a substantial change in their field of view due to the elevated structure and its proximity to 98th Place (frontage road) that parallels I-57. The elevated structure would block the horizon for the homes or pedestrians closest to 98th Place. The elevated structure would also create a new shadow at street level due to the movement of the sun. **Figure 2** shows existing conditions and a photo simulation of the track structure in the I-57 right-of-way.

Figure 2: Photo of Existing Conditions and Photo Simulation of the Elevated Track Structure in the I-57 Right-of-Way, Facing East from 98th Place and Princeton Avenue

CTA also prepared a photo simulation of the East Option track structure adjacent to the Roseland Pumping Station based on feedback from Section 106 consulting parties. The pumping station would not be displaced or directly affected by the East or West Option. The visual changes to the setting would not be high or adverse. **Figure 3** shows existing conditions and a photo simulation of the track structure adjacent to Roseland Pumping Station.

Figure 3: Photo of Existing Conditions and Photo Simulation of the East Option Elevated Track Structure adjacent to the Roseland Pumping Station, Facing South on Harvard Avenue