



Appendix J

Section 4(f)/6(f) Supporting Materials

The following is a list of supporting materials including resolutions and meeting notes documenting coordination efforts with stakeholders in the Section 4(f) and 6(f) processes.

J.1 Coordination with Section 4(f)/6(f) Stakeholders

1. Minneapolis Park and Recreation Board resolution on their support of the proposed BLRT Extension project, November 4, 2015
2. Sohacki Park Joint Powers Agreement Board resolution recommending mitigation actions for the temporary occupancy of Sohacki Park, February 8, 2016
3. Federal Transit Administration letter to the National Park Service inviting it to become a Cooperating Agency for the proposed BLRT Extension project, April 22, 2016
4. National Park Service letter accepting Cooperating Agency status for the proposed BLRT Extension project, May 2, 2016
5. Federal Transit Administration letter to the US Department of the Interior transmitting the Amended Draft Section 4(f) and 6(f) Evaluation for review and comment, May 18, 2016
6. National Park Service letter concurring on conversion of Sohacki Park: Sohacki Management Unit in compliance with Section 6(f), June 9, 2016
7. Minnesota Department of Natural Resources email concurring on Amended Draft Section 4(f) finding on Glenview Terrace Park, June 17, 2016
8. US Department of the Interior letter concurring on Amended Draft Section 4(f) and 6(f) Evaluation, June 28, 2016

J.2 General Coordination with Park Stakeholders through Parks Issue Resolution Team (IRT) Meetings

1. Proposed BLRT Extension project Parks IRT Meeting notes, April 28, 2015
2. Proposed BLRT Extension project Parks IRT Meeting notes, May 26, 2015
3. Proposed BLRT Extension project Parks IRT Meeting notes, June 23, 2015
4. Proposed BLRT Extension project Parks IRT Meeting notes, August 25, 2015
5. Proposed BLRT Extension project Parks IRT Meeting notes, November 5, 2015
6. Proposed BLRT Extension project Parks IRT Meeting notes, November 13, 2015
7. Proposed BLRT Extension project Parks IRT Meeting notes, December 9, 2015
8. Proposed BLRT Extension project Parks IRT Meeting notes, January 14, 2016
9. Proposed BLRT Extension project Parks IRT Meeting notes, January 27, 2016



J.3 Other Supporting Materials

1. *Deep Bore Tunnel Analysis Technical Memorandum*
2. *Deep Tunnel Map Book*
3. *Alignment Shift Map Book*

Coordination with the Minnesota State Historic Preservation Office as a Section 4(f) Official with Jurisdiction can be found in **Appendix H**.



Appendix J

Section 4(f)/6(f) Supporting Materials

J.1 Coordination with Section 4(f)/6(f) Stakeholders

1. Minneapolis Park and Recreation Board resolution on their support of the proposed BLRT Extension project, November 4, 2015
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Resolution 2015-331

Resolution Stating Specific Positions of the Minneapolis Park and Recreation Board Related to the Blue Line Light Rail Transit Extension

Whereas, The Minneapolis Park and Recreation Board (MPRB) is the steward of the Minneapolis parks;

Whereas, The proposed Blue Line Light Rail Transit Extension, also known as the Bottineau Line, will pass through and is close to Theodore Wirth Regional Park, which is owned and managed by the MPRB;

Whereas, Regional transportation systems like the light rail network are designed to connect the places where people live, work, and play, and that MPRB is committed to being a constructive participant in the vitality of the region through operation of regional parks;

Whereas, A Memorandum of Understanding (MOU) between MPRB and the Metropolitan Council is in place that allows MPRB the ability to take an official stance on the Bottineau Line's project scope and budget prior to a vote on such by the Corridor Management Committee (CMC);

Whereas, MPRB staff have been involved in ongoing design discussions on various aspects of the Bottineau Line and have found the working relationship with the Bottineau Project Office (BPO) to be a positive one;

Whereas, The BPO has stated that it will need to encumber park land temporarily and permanently in order to construct the Bottineau Line, and such encumbrance will require MPRB and possibly district court approval; and

Whereas, This resolution is supported by the MPRB 2007-2020 Comprehensive Plan, which envisions "Dynamic parks shape city character and meet diverse community needs";

RESOLVED, That the Board of Commissioners supports the BPO's general design direction related to floodplain impacts, existing trails in Wirth Park, and the Olson Memorial Highway trees, provided MPRB staff continue to be directly involved in the design process for these considerations;

RESOLVED, That the Board of Commissioners request continued collaboration between MPRB and BPO staff related to right-of-way impacts and compensation, wetlands and water quality, potential reconstruction of bridges near and within Wirth Park, and a park and ride at the



proposed Golden Valley Road Station, with recognition that these considerations require further design exploration, negotiation, and/or due diligence;

RESOLVED, That the Board of Commissioners recommend that the Plymouth Avenue Station, the Golden Valley Road Station, connections to area parks and trails near the Golden Valley Road and Plymouth Avenue stations, and the reconstruction of the intersection of Golden Valley Road and Theodore Wirth Parkway be included in the final project scope and budget, with the understanding that these four considerations are critical elements of the project that connect the regional transportation system with the regional park system;

RESOLVED, That the BPO shall use all practical methods to achieve safe co-location of freight and light rail;

RESOLVED, That nothing in this resolution shall be understood to abdicate MPRB's interest in nor responsibility for aspects of the project that affect, impact, or benefit the Minneapolis park system; and

RESOLVED, That the President of the Board and Secretary to the Board are authorized to take all necessary administrative actions to implement this resolution.



TO: Minneapolis Park and Recreation Board

FROM: Michael Schroeder,

DATE: November 4, 2015

SUBJECT: Resolution Stating Specific Positions of the Minneapolis Park and Recreation Board
Related to the Blue Line Light Rail Transit Extension

BACKGROUND

This action requests that the Board of Commissioners state specific positions relative to the Blue Line Light Rail Extension Project (BLRT) also known as the Bottineau Line. The resolution suggests three general categories of topics: those on which there is general agreement between the Bottineau Project Office (BPO) and the Minneapolis Park and Recreation Board (MPRB), those on which the MPRB does not have enough information to take a position, and those which MPRB wishes to see included in the project scope and budget. The resolution being presented is based on a staff-led Board of Commissioners discussion on October 7, 2015.

Project Summary and Process

The planned Bottineau light rail transit (BLRT) project will operate about 13 miles northwest from downtown Minneapolis through north Minneapolis, Golden Valley, Robbinsdale, Crystal and Brooklyn Park, drawing riders northwest of Brooklyn Park. The proposed alignment will have 10 or 11 new stations in addition to Target Field Station where it will continue as the METRO Blue Line, providing one-seat rides to Minneapolis-St. Paul International Airport and the Mall of America. It will connect Minneapolis and the region's northwest communities with existing LRT on the METRO Green Line, future LRT on the METRO Green Line Extension (Southwest LRT), bus rapid transit on the METRO Red Line, the Northstar commuter rail line, and local and express bus routes.

The line has potential impacts and benefits to lands and assets owned and operated by the Minneapolis Park and Recreation Board (MPRB). It will utilize an existing rail line that passes adjacent to and between parcels of Theodore Wirth Regional Park and Glenwood Terrace Park. It may provide direct station access to Wirth Park. It will also run in the median of Highway 55 (Olson Memorial Highway), which is home to MPRB-maintained trees.

According to the terms of the Memorandum of Understanding (MOU) between the Metropolitan Council and the Minneapolis Park and Recreation Board (MPRB), MPRB "May take a resolution indicating its position on the project scope and budget." Such official stance is to occur prior to the Corridor Management Committee's (CMC) vote on the revised project scope



and budget, prior to the municipal consent process, and prior to issuance of the final Environmental Impact Statement.

Staff from the Bottineau Project Office (BPO) have been undertaking proper due diligence on this requirement by presenting to the Board of Commissioners on three separate occasions throughout 2015. In addition, MPRB staff, Commissioners, and members of the general public have been participating in the design process to date, including:

- Regular staff attendance at bi-weekly Golden Valley Issue Resolution Team (IRT) meetings and Parks IRT meetings (another input method called for in the MOU)
- Occasional staff attendance at bi-weekly Minneapolis IRT meetings
- Commissioner representation and staff attendance at monthly Corridor Management Committee meetings
- Monthly BPO and MPRB staff meetings held at MPRB offices
- Staff review of draft station area planning documents (this is a separate project run by Hennepin County)
- Direct coordination between BPO and MPRB staff as needed relative to permitting, understanding of land ownership, and other planning and design considerations
- Two appointments to the Community Advisory Committee for the Bottineau Line

The CMC's scope and budget vote is set to occur on November 12.

Resolution Format

Throughout 2015, MPRB staff and commissioners have been made aware of and have discussed a variety of concept design considerations related to the BLRT project and MPRB properties and assets. In many cases, Commissioners have already made their concern and/or support clear. In addition, MPRB's official comments on the Draft Environmental Impact Statement (DEIS) still have standing and are being carefully considered by the BPO.

The following is a list of topics that have been raised in Board presentations, at IRT meetings, or in the DEIS. These topics fall into three general categories, each of which has its own "RESOLVED" clause in the resolution:

- **RESOLVED, That the Board of Commissioners support the BPO's general design direction** means that, though ongoing coordination during detailed design and engineering will be necessary, the MPRB and BPO are in general agreement about the way forward on these topics.
- **RESOLVED, That the Board of Commissioners request continued collaboration** means that MPRB does not have enough information to be comfortable with current direction, or that not enough design exploration or negotiation has taken place to warrant either general alignment or a position.



- **RESOLVED, That the Board of Commissioners recommend inclusion in the final project scope and budget** includes those items for which there has been no final resolution and on which MPRB wishes to make a guiding recommendation.

Two additional “RESOLVED” clauses are included to ensure continued basic due diligence around safety and environmental review.

It is important to remember that this resolution is not the last time the MPRB Commissioners will have the opportunity to officially weigh in on the project. This action would provide specific guidance to BPO staff and the CMC when making their final project scope and budget decision.

Topic Summaries

Support for general design direction

For topics in this category, it shall be considered a foregone conclusion that design collaboration between BPO and MPRB staff will continue. BPO has stressed that this will be the case throughout detailed design. That collaboration should extend to MPRB staff having a seat at the table during design discussions, not merely an after-the-fact review capacity.

- *Floodplain Impacts* (Attachment A). It has been shown that floodplain impacts can be mitigated by grading within Wirth Park in an area that does not currently have significant active recreational use. MPRB staff will continue to work with the BPO on the exact shape and impact of this grading and on routing of an existing trail in this vicinity. In addition, conversations will continue to ensure BLRT construction does not exacerbate flooding issues in the vicinity and to consider whether additional storage might be provided to mitigate existing flooding.
- *The Trail in Wirth Park* (Attachment B). The trail that runs east of Basset Creek under the Plymouth Avenue Bridge will be impacted by construction. The BPO has indicated that this trail would be reconstructed on MPRB property for the entire length that it currently runs on railroad land. In addition, modifications to the Plymouth Avenue Bridge would shift the creek channel slightly west to allow for a standard trail width to pass under the bridge adjacent to the creek.
- *Highway 55 Trees*. More than 120 trees exist in the Highway 55 median. These are part of a University of Minnesota study on disease resistant elms. All of these trees must be removed to accommodate the center-running light rail line. The BPO has met with MPRB foresters and the U of MN researchers to discuss these impacts and has indicated they would work with MPRB to relocate trees to the extent feasible.

Request for continued collaboration

For topics in this category, MPRB will require further design exploration, negotiation, information, or due diligence. Topics in this category are not to be considered closed discussions. Rather they are ones on which significant discussion remains.



- *Right-of-Way and Compensation* (Attachment F). Though the BPO has to date been careful to understand MPRB ownership near the corridor and to minimize park land impacts, the discussion of whether and to what degree the MPRB will cooperate in land transfer must continue. Without more specific details on proposed compensation or continued discussion of parkland benefits, it is premature to make any decision on transfer of parkland.
- *The Golden Valley Road Station Park and Ride* (Attachment G). MPRB Staff have worked with the BPO to consider the option of a park-and-ride at the Golden Valley Station on Park Board property in the interest of project due diligence. The BPO understands the difficulty of acquiring park land for parking. However, the creation a regional trail hub (as described above) with associated parking could provide benefit to park users, allowing for a shared-use situation. Few details of the financial realities of this proposal are known and it is therefore premature to take a position on the possibility or design of a park-and-ride area. It should be noted that a park-and-ride area was included in the concepts arising from the Bottineau Design Charette, though that facility was a structure with a park on top, while the current proposal is for a surface lot.
- *Wetlands and Water Quality*. At the last update to the Board, wetlands delineation and impact determination was underway. Without additional information, MPRB cannot know if impacts and mitigation proposals are generally in line with MPRB desires.
- *Coordination with Railroad, including potential bridge reconstructions*. This is perhaps the greatest unknown in the project at the moment. It is apparently possible that BNSF Railroad will insist on preserving the ability to implement a second track in the corridor, which will require the reconstruction of not only the Plymouth Avenue Bridge, but also the Theodore Wirth Parkway and Golden Valley Road Bridges. The actual parkland impact of these reconstructions is unknown.

Inclusion in the final project scope and budget

For topics in this category, MPRB may wish to make a specific recommendation to BPO and the CMC on items not yet resolved.

- *Stations* (Attachment C). The Draft Environmental Impact Statement proposed the Golden Valley Road Station with a possible second station at Plymouth Avenue. The Plymouth Avenue Station provides direct access to Wirth Regional Park and, as such, is a key inter-modal transfer point. Part of the power of regional transportation systems comes when they connect places not only where people live and work, but also where they play. Failing to connect to Wirth Park at Plymouth Avenue will seem a failure to interconnect some of the region's most important amenities. In addition, failure to implement the Plymouth Avenue Station will bring Wirth Park all the effects with none of the benefit.
- *Trail Connections*. In addition to implementation of the Plymouth Avenue Station itself, trail connections beyond those committed to thus far are also critical. MPRB staff and staff from other agencies have regularly expressed the desire to see more robust trail



connections. Specific suggestions from the MPRB, Golden Valley, and Three Rivers Park District include

- a direct connection across Bassett Creek near the Plymouth Avenue Station, which would link the north-south park trail with the station (Attachment D).
- direct connections between the existing trail along Theodore Wirth Parkway, the proposed Bassett Creek Regional Trail that would run along Golden Valley Road, and they new jointly managed Sochacki Park north of Golden Valley Road. Such a connection would require some additional trail and possibly an underpass of Golden Valley Road, but would create a multi-city multi-modal hub (Attachment E).
- *Golden Valley Road / Theodore Wirth Parkway Intersection.* This intersection lies just north of the proposed Golden Valley Station and will be significantly impacted by transit operations. Whether the GVR Station is home to a passenger drop-off or park-and-ride, car and bus interconnections will likely increase as a direct result of light rail implementation. In addition, this already difficult free-right-dominated intersection will be used more frequently by pedestrians accessing the station. MPRB and the City of Golden Valley have discussed reconstruction of this intersection with the BPO but have received no commitment. This intersection could be considered a project cost not unlike other safety improvements adjacent to the line in other locations.

RECOMMENDATION

Staff recommends that the Board of Commissioners take specific positions on behalf of the Minneapolis Park and Recreation Board related to the Blue Line Light Rail Transit Extension, as articulated above and tabulated in the resolution.

ATTACHMENTS:

- A-Floodplains (PDF)
- B-Wirth Park Trail (PDF)
- C-Stations (PDF)
- D-TrailConnect-Plymouth (JPG)
- E-TrailConnect-GoldenValley (JPG)
- F-Right-of-way Impacts (PDF)
- G-GVR Park-and-Ride (PDF)

Prepared By: Adam Arvidson, Manager of Public Engagement & Citywide Planning, Strategic Planning

Review:

Cindy Anderson	Completed	10/22/2015 12:20 PM
Adam Arvidson	Completed	10/22/2015 12:26 PM
Michael Schroeder	Completed	10/22/2015 2:56 PM



Jayne Miller Completed 10/24/2015 8:00 PM
Minneapolis Park and Recreation Board Pending

11/04/2015 5:00 PM

MOTION TO RECOMMEND THE FOLLOWING 14 ACTIONS TO PROVIDE MITIGATION AND EQUITABLE COMPENSATION FOR THE TEMPORARY OCCUPANCY OF SOCHACKI PARK FOR CONSTRUCTION STAGING:

- 1) Removal of existing vegetation as agreed to by BPO staff and JPA staff within the restoration zone, defined as A) the southern construction staging area, and B) the northern staging area (*See Map Attachment A*), blending into the adjacent disturbed areas in the NE quadrant of the park.
- 2) Removal and disposal of all surface rubble within the restoration zone, in accordance with MPCA permitting requirements.
- 3) Addition of clean fill and top soil in the restoration zone in accordance with MPCA permitting requirements and consistent with the re-use of this area as guided by stakeholders.
- 4) Development and implementation of a revegetation plan approved by the JPA staff. The plan will address all areas disturbed by construction activities, including secondary construction activities in the BNSF right-of-way such as moving the Xcel power lines. In addition, the plan will identify practicable additional thickening of the vegetative buffer such as plantings of evergreen trees between the Park and the LRT Corridor for the purposes of reducing visual impacts of the LRT on Park visitors.
- 5) In the southern staging area, N. Rice Lake water edge restoration work and vegetation plantings to provide learning opportunities for park users (design and species TBD).
- 6) Restoration of the existing paved interior road to provide for safe two way traffic.
- 7) Removal or replacement of the northern parking lot to be determined in consultation with JPA staff.
- 8) Reconstruction and expansion of the interior paved parking lot (exact site TBD in consultation with JPA staff), to include room for a school bus turnaround.
- 9) Clearing, revegetation and fencing of an area immediately east and north of the interior parking lot within the northern staging area for future use as a dog off leash area.
- 10) Providing practicable utility services to a site adjacent to the interior parking lot for future development of a bathroom/storm shelter, and drinking water fountain.
- 11) Ground preparation for a future education shelter sized for 50 students in a location TBD.
- 12) Construction of a water education platform on N Rice Lake
- 13) Redevelopment of a safe 10-foot wide paved trail through the length of the park, running from the northern entrance to the current trail terminus by Bonnie Lane; with restoration along the trail edge as needed.
- 14) Construction of an off-road trail connection from the existing terminus of the Sochacki Park trail at Bonnie Lane, crossing underneath the reconstructed Golden Valley Road Bridge and connecting to the existing trail in Theodore Wirth Regional Park.

Map Attachment A





U.S. Department
of Transportation
**Federal Transit
Administration**

REGION V
Illinois, Indiana,
Michigan, Minnesota,
Ohio, Wisconsin

200 West Adams Street
Suite 320
Chicago, IL 60606-5253
312-353-2789
312-886-0351 (fax)

April 22, 2016

Roger A. Knowlton, Acting Chief
National Park Service
Recreation Grants Division
601 Riverfront Drive
Omaha, NE 68102-4226

Re: Invitation to Become a Cooperating Agency for the METRO Blue Line Extension Project in Minneapolis, Minnesota

Dear Mr. Knowlton:

The Federal Transit Administration (FTA) and the Metropolitan Council (Council) are preparing a Final Environmental Impact Statement (Final EIS) for the METRO Blue Line Extension Light Rail (BLRT Extension) project. Federal funding will be pursued for this project from FTA. As a result, as the lead federal agency for the project, FTA is required to undertake environmental review in compliance with the National Environmental Policy Act (NEPA). 42 USC §§ 4321-4370(h). As the local public agency sponsoring the project, the Metropolitan Council must also comply with the requirements of the Minnesota Environmental Policy Act (MEPA).

The BLRT Extension project is located in Hennepin County, Minnesota, extending approximately 13 miles northwest from downtown Minneapolis, serving north Minneapolis and the suburbs of Golden Valley, Robbinsdale, Crystal, and Brooklyn Park. The BLRT Extension project is anticipated to serve a broader area to the northwest, including the communities of New Hope, Brooklyn Center, Maple Grove, Osseo, Champlin, and Dayton.

During the environmental review process, FTA and the Council determined that, as proposed, the BLRT Extension project will impact park property purchased using Section 6(f)(3) funds. Because your agency has jurisdiction and expertise with respect to Section 6(f)(3) of the Land and Water Conservation Fund (LWCF) Act of 1965 (Public Law 88-578), we are inviting your agency to be a Cooperating Agency for the NEPA environmental review process for the BLRT Extension project. This is in accordance with the Council on Environmental Quality's Regulations for implementing the procedural provisions of NEPA (40 CFR Part 1501.6).

By becoming a Cooperating Agency, we invite the National Park Service to become more directly involved in the development of the BLRT project in the following ways:

1. Provide timely review and written comment as the Final EIS and other project documents are developed;
2. Participate in coordination meetings, conference calls, and join field reviews, as appropriate; and

Re: Invitation to Become a Cooperating Agency for the METRO Blue Line Extension Project in Minneapolis, Minnesota

3. Pursuant to 40 CFR Part 1506.3, the National Park Service may adopt without re-circulating the Final EIS when, after an independent review, the National Park Service concludes that its comments and suggestions have been satisfied.

To either accept or decline this invitation, please respond to Reggie Arkell at reginald.arkell@dot.gov in writing prior to Friday, May 6, 2016. If your agency chooses to decline the invitation, and does not intend to use the environmental review process to meet any regulatory or statutory requirement to make a determination on the affected park property, FTA respectfully requests that this declaration be made in writing.

If you have questions or would like to discuss the project, please contact Maya Sarna at (202) 366-5811 or maya.sarna@dot.gov.

Sincerely,



Marisol R. Simón
Regional Administrator

cc: Reggie Arkell, Federal Transit Administration
Maya Sarna, Federal Transit Administration
Kathryn O'Brien, Metropolitan Council



United States Department of the Interior

National Park Service
Midwest Region
601 Riverfront Drive
Omaha Nebraska 68102-4226



MAY 02 2016

Ms. Marisol R. Simon
U.S. Department of Transportation
Federal Transit Administration, Region V
200 West Adams Street, Suite 320
Chicago, IL 60606-5253

Dear Ms. Simon:

Thank you for your April 22, 2016 letter inviting the National Park Service (NPS) to participate as a cooperating agency with the Federal Transit Administration (FTA) and the Metropolitan Council (Council) as you prepare for a Final Environmental Impact Statement (Final EIS) for the METRO Blue Line Extension Light Rail (BLRT Extension) project located in Hennepin County, Minnesota. The Recreation Grants Division, Midwest Region of the NPS, accepts your invitation as a cooperating agency, in a limited capacity, within the provisions of the Land and Water Conservation Fund (LWCF) program as it relates to LWCF grant #27-01087, June Park, (Sochacki Park / Sochacki Management Unit).

We look forward to working with you. If you have any questions, please contact me at (402) 661-1558 or roger_knowlton@nps.gov.

Sincerely,

Roger A. Knowlton
Acting, Chief
Recreation Grants Division



U.S. Department
of Transportation
**Federal Transit
Administration**

REGION V
Illinois, Indiana,
Michigan, Minnesota,
Ohio, Wisconsin

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May 18, 2016

Director, Office of Environmental Policy and Compliance
U.S. Department of the Interior
1849 C Street, NW (MS 2462-MIB)
Washington, DC 20240

RE: Section 4(f) Submission for the METRO Blue Line Extension Project in Hennepin County,
Minnesota

Dear Ms. Braegelmann:

The Federal Transit Administration (FTA) and the Metropolitan Council (Council) are preparing a Final Environmental Impact Statement (Final EIS) for the proposed METRO Blue Line Extension Light Rail (BLRT Extension) project. The Council is pursuing Federal funding for this project from FTA. As the lead federal agency for the project, FTA is required to undertake environmental review in compliance with the National Environmental Policy Act (NEPA), 42 USC §§ 4321-4370(h). The Final FEIS being prepared includes an Amended Draft Section 4(f) evaluation in accordance with the Department of Transportation Act of 1966 and 23 CFR Part 774.

The proposed BLRT Extension project is located in Hennepin County, Minnesota, extending approximately 13 miles northwest from downtown Minneapolis, serving north Minneapolis and the suburbs of Golden Valley, Robbinsdale, Crystal, and Brooklyn Park. The proposed BLRT Extension project is anticipated to serve a broader area to the northwest, including the communities of New Hope, Brooklyn Center, Maple Grove, Osseo, Champlin, and Dayton.

Pursuant to 23 CFR § 774.5, FTA is providing the enclosed BLRT Extension project Amended Draft Section 4(f) and 6(f) Evaluation to the Department of Interior for review and comment. FTA is kindly requesting a written response by **Tuesday, July 5, 2015**. If comments are not received within this period, FTA will assume a lack of objection and proceed with the action. Please direct any questions to Reggie Arkell of the FTA Regional Office at 312-886-3704 or reginald.arkell@dot.gov. Thank you very much for your assistance.

Sincerely,

Marisol R. Simon,
Regional Administrator

Enclosure: METRO Blue Line Extension Project Amended Draft Section 4(f) and 6(f) Evaluation

cc: Reggie Arkell, FTA
Kathryn O'Brien, Metropolitan Council



United States Department of the Interior

National Park Service
Midwest Region
601 Riverfront Drive
Omaha Nebraska 68102-4226

27-01087(MWR-LCPPG)

June 9, 2016

BLRT FEIS: Amended Draft 4(f)/6(f) Evaluation
ER-14/0235R: Metro Blue Line Light Rail Transit Extension (previously Bottineau Extension)

The Recreation Grants Division, Midwest Region of the NPS, accepted the Federal Transit Administration (FTA) and the Metropolitan Council's (Council) invitation to become a cooperating agency, in a limited capacity, within the provisions of the Land and Water Conservation Fund (LWCF) program as it relates to LWCF grant #27-01087, June Park, (Sochacki Park / Sochacki Management Unit). We have reviewed the sections of the FEIS that pertain to the proposed conversion of the Land and Water Conservation Fund (LWCF) Section 6(f)(3) property, Sochacki Park: Sochacki Management Unit.

We agree that use of the park for a period of longer than 6 months constitutes a conversion.
We agree that all practical alternatives have been evaluated and considered.
We agree with the proposed conversion requirements.

Once the conversion has been approved by National Park Service (NPS), replacement property should be immediately acquired and developed according to the replacement proposal timetable. If development will be delayed beyond three years from the date of NPS conversion approval, then a request for delayed development beyond three years with a justification for the delay must be made to NPS.

Exceptions to the immediate replacement requirement will be allowed only when it is not possible for replacement property to be identified prior to the State's request for the conversion.

An express commitment must be received from the State to satisfy Section 6(f)(3) substitution requirements within a specified period normally not to exceed one year following conversion approval.

We agree that following construction, the park property would be restored and enhanced, and would remain under the ownership and control of the city of Robbinsdale and the JPA partners.

We recommend you consult directly with the official who administers the LWCF program in the State of Minnesota as the project moves forward to determine any potential conflicts with Section 6(f)(3) of the LWCF Act (Public Law 88-578, as amended).

The administrator for the LWCF program in Minnesota is Mr. Joe Hiller, Park Grants Coordinator, 500 Lafayette Road, St. Paul, MN 55155-4039

We appreciate the opportunity to provide these comments.

Sincerely,

Roger Knowlton
Acting Chief, Recreation Grants Division

From: [O'Brien, Kathryn](#)
To: [Reed, Scott](#); [BPODMC](#); [Miller, Caroline](#)
Subject: FW: BLRT Meeting Cancelled
Date: Friday, June 17, 2016 11:28:46 AM

From: Hiller, Joe H (DNR) [mailto:Joe.Hiller@state.mn.us]
Sent: Friday, June 17, 2016 11:19 AM
To: O'Brien, Kathryn <kathryn.obrien@metrotransit.org>
Subject: RE: BLRT Meeting Cancelled

Kathryn,

I concur with the evaluation of the 0.01-acre impact to Golden Valley's Glenview Terrace Park described in the Amended Draft Section 4(f) and 6(f) Evaluation dated May 2016. All practical alternatives were evaluated and rejected on a sound basis, the construction activities will not diminish outdoor recreation opportunities at the park, and the addition of nearby recreation facilities including the new trailhead with wayfinding signage will improve access to this park.

In 1977, the City and the State signed the Outdoor Recreation Agreement [OR77A-29 Glenview Terrace and Sheid Park Tennis Courts](#) to develop recreation facilities at Glenview Terrace Park. In consideration for receiving State funds, the City agreed that it "shall not at any time convert any property developed pursuant to this agreement to uses other than the public outdoor recreation uses specified in the project proposal attached, hereto, without the prior written approval of the Director (now the MN Dept. of Natural Resources)." The MN Department of Natural Resources approves this proposal to convert 0.01-acres to non-recreation use and accepts, as mitigation, the proposed nearby recreation improvements. The State and the City will amend their agreement to reflect this conversion.

Joe Hiller
Park Grant Coordinator
MN Dept. of Natural Resources, Division of Parks and Trails
651-259-5538
Joe.hiller@state.mn.us
500 Lafayette Road, St. Paul, MN 55155-4039

[REDACTED]

[REDACTED]

[REDACTED]



United States Department of the Interior

Office of the Secretary
Washington, D.C. 20240

9043.1
PEP/NRM

JUN 28 2016

ER-14/0235

Ms. Marisol Simon, Region V
Regional Administrator
Federal Transit Administration
200 West Adams Street, Suite 320
Chicago, Illinois 60606

Dear Ms. Simon:

As requested, the Department of the Interior (Department) has reviewed the Amended Section 4(f) and 6(f) Evaluations for the Final Environmental Impact Statement (FEIS) for the Metro Blue Line Light Rail Extension (formerly Bottineau Transitway), Hennepin County, Minnesota. The Department offers the following comments and recommendations for your consideration.

Section 4(f) Comments

The Federal Transit Administration (FTA), along with the Metropolitan Council (Council), proposes the construction and operation of the Metro Blue Line Light Rail Extension. The project would consist of a light rail transit (LRT) system extension of approximately 13 miles from downtown Minneapolis to the northwest suburbs. The draft Section 4(f) evaluation in 2014 identified several properties in the project study area eligible to be considered under Section 4(f) of the Department of Transportation Act of 1966 (49 U.S.C. §303). The Department reviewed the draft evaluation at that time and found the analysis preliminary and impacts to eligible resources not evaluated fully. The Department concurred that there were no feasible or prudent avoidance alternatives to the preferred alternative presented which would result in impacts to a park/recreational resource, Theodore Wirth Regional Park, but determined that additional design information was needed for all other properties.

The current evaluation now considers the potential impacts to 29 eligible properties, including 12 park/recreation properties and 17 historic properties (eligible for or listed on the National Register of Historic Places) from the project now known as the METRO Blue Line LRT Extension (BLRT) project. This evaluation by the FTA has determined that the BLRT project would not use lands from five of the park/recreation properties and 15 of the historic properties. In addition, the FTA has determined that, of the remaining seven park/recreation properties, five would only have temporary occupancy (no permanent use of the park or recreation facility land) and two would be subject to an insignificant amount of use (*de minimis*). This determination means that none of the park/recreation properties would be used by the BLRT project. The Department does not have a review role in the determination of *de minimis* use, but we will note it would appear that negotiations are still underway with the officials with jurisdiction over these properties. The FTA may not use a *de minimis* use determination unless the officials with

TRANSMITTED ELECTRONICALLY – NO HARDCOPY TO FOLLOW

jurisdiction agree. Finally, the project would result in adverse effects to the two or three remaining historic properties (the Grand Rounds Historic District, and the Osseo Branch of the St. Paul, Minneapolis and Manitoba Railway Historic District) and to the values for which they were determined to be eligible.

Impacts to the Grand Rounds Historic District, a nationally significant example of urban park development, will come from the need to construct new track, realign the existing BNSF Railway freight track, bridge reconstruction, corridor protection barriers between the two tracks, and construction of passenger stations. In sum, all of these actions will permanently use 0.7 acre from the Theodore Wirth Parkway, which is a contributing element to the Grand Rounds Historic District. All other impacts would be to non-contributing elements and an existing transportation corridor. As avoidance alternatives, the FTA considered two alignment shifts (east and west) and a tunnel option to avoid affecting the historic property; these avoidance alternatives were deemed feasible but not prudent due to other impacts to surrounding residential and business areas.

The impacts to the Osseo Branch, part of the St. Paul, Minneapolis and Manitoba Railway Historic District, would come from the need to use a portion of the Osseo Branch right-of-way that is 100 feet wide and approximately 13 miles long. The Osseo Branch portion of the Historic District preserves a portion of the early historic rail development of the Minneapolis–St. Paul area, which provided an economic outlet for products from potato farmers in Hennepin County. The BLRT project would use the easternmost 50 feet of that right-of-way for a distance of eight miles for the track, and the additional 50 feet for temporary construction easements during construction along the eight miles. The construction easements would require the project to move the existing BNSF Railway track that occupies that portion of the original right-of-way approximately 15 to 25 feet to the west. Many of the same avoidance alternatives proposed for the Grand Rounds Historic District were applied to the Osseo Branch, and found to be feasible but not prudent.

The Department would concur with the FTA that there are no feasible or prudent avoidance alternatives to the preferred alternative presented, which results in impacts to the Grand Rounds Historic District and the Osseo Branch. The evaluation demonstrates that efforts were made to avoid impacts to Section 4(f) resources and to find ways to reduce the severity of the impacts in consultation with the State Historic Preservation Officer and other consulting parties. However, the Department cannot concur that all possible planning needed to minimize harm to Section 4(f) resources has been employed since there is not an executed agreement document to provide a finalized set of mitigation actions for those historic properties. The Department will withhold its final concurrence until there is evidence of a signed agreement. We would also prefer to see evidence that the affected owners have agreed to the *de minimis* determinations for their properties.

Section 6(f) Comments

The National Park Service's (NPS) Recreation Grants Division, Midwest Region, accepted the invitation offered by the FTA and the Council to become a cooperating agency in a limited capacity, within the provisions of the Land and Water Conservation Fund (LWCF) program as it relates to LWCF grant #27-01087, June Park (Sochacki Park/Sochacki Management Unit). The NPS has reviewed the sections of the FEIS that pertain to the proposed conversion of this

property in accordance with the provisions of Section 6(f)(3) of the Land and Water Conservation Fund Act (Public Law 88-578, as amended).

The NPS agrees that use of the park for a period of longer than six months constitutes a conversion. We agree that all practical alternatives were evaluated and considered, and we agree with the proposed conversion requirements.

Once the conversion has been approved by the NPS, replacement property should be immediately acquired and developed according to the replacement proposal timetable. If development will be delayed beyond three years from the date of the NPS conversion approval, then a request for delayed development beyond three years must be made to the NPS with a justification for the delay. Exceptions to the immediate replacement requirement will be allowed only when it is not possible for replacement property to be identified prior to the State of Minnesota's request for the conversion. An express commitment must be received from the State to satisfy the Section 6(f)(3) substitution requirements within a specified period normally not to exceed one year following the conversion approval. The NPS agrees that following construction, the park property should be restored and enhanced, and would remain under the ownership and control of the City of Robbinsdale, as well as the Three Rivers Park District and the City of Golden Valley who are part of a Joint Powers Agreement with the City of Robbinsdale to manage the property.

The NPS recommends you consult directly with the official who administers the LWCF program in the State of Minnesota as the project moves forward to determine any potential conflicts with Section 6(f)(3) of the LWCF Act. The administrator for the LWCF program in Minnesota is Mr. Joe Hiller, Park Grants Coordinator, 500 Lafayette Road, St. Paul, Minnesota 55155-4039.

The Department has a continuing interest in working with the FTA to ensure impacts to resources of concern to the Department are adequately addressed. For continued consultation and coordination with the issues concerning historic resources identified as Section 4(f) resources, please contact Regional Environmental Coordinator Nick Chevance, Midwest Regional Office, National Park Service, 601 Riverfront Drive, Omaha, Nebraska 68102, telephone 402-661-1844. For questions or concerns related to Section 6(f) properties, please contact Acting Chief Roger Knowlton, Recreation Grants Division, at the same address, telephone 402-661-1558.

We appreciate the opportunity to provide these comments.

Sincerely,


for Mary Josie Blanchard
Acting Director, Office of Environmental
Policy and Compliance

cc: marisol.simon@dot.gov



Appendix J

Section 4(f)/6(f) Supporting Materials

J.2 General Coordination with Park Stakeholders through Parks Issue Resolution Team (IRT) Meetings

1. Proposed BLRT Extension project Parks IRT Meeting notes, April 28, 2015
2. Proposed BLRT Extension project Parks IRT Meeting notes, May 26, 2015
3. Proposed BLRT Extension project Parks IRT Meeting notes, June 23, 2015
4. Proposed BLRT Extension project Parks IRT Meeting notes, August 25, 2015
5. Proposed BLRT Extension project Parks IRT Meeting notes, November 5, 2015
6. Proposed BLRT Extension project Parks IRT Meeting notes, November 13, 2015
7. Proposed BLRT Extension project Parks IRT Meeting notes, December 9, 2015
8. Proposed BLRT Extension project Parks IRT Meeting notes, January 14, 2016
9. Proposed BLRT Extension project Parks IRT Meeting notes, January 27, 2016



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METRO Blue Line LRT Extension (BLRT)

5514 West Broadway Avenue, Suite 200, Crystal, MN 55428 www.bluelineext.org

Meeting Title: Parks Coordination Meeting

Date: 4/28/15 **Time:** 3:30 PM **Duration:** 1.0 hour
Location: Blue Line Project Office
Meeting called by: Kathryn O'Brien
Attendees: Per meeting invite
Purpose of Meeting: Parks Coordination on Blue Line LRT Extension – Floodplains Impacts Golden Valley/Robbinsdale

Meeting Summary (summary information presented in *italics*)

- 1) Introductions
- 2) Floodplains
 - a) Initial assessment of impacts (Golden Valley/Robbinsdale)
- 3) Floodplain mitigation opportunities
 - a) Locations
 - b) Current uses
 - c) Future plans / improvements
- 4) Next Coordination Meeting

- *Kathryn O'Brien opened the meeting after introductions. The purpose of the Parks Issue Resolution Team (IRT) meetings is to focus on the Blue Line LRT Extension (BLRT) project and potential impacts to park resources. The BLRT team has met several times already with the Minneapolis Park and Recreation Board (MPRB) staff, has also met with the Three Rivers Park District (TRPD), and is regularly meeting with the cities along the corridor. The establishment of the Parks IRT meetings formalizes the coordination efforts regarding potential park impacts, and meets the requirements of the Memorandum of Understanding (MOU) executed by Met Council and the MPRB.*
- *O'Brien noted that the focus of the meeting today is floodplains, and turned the meeting over to Lisa Goddard (SRF).*
- *Goddard reviewed the FEMA flood mapping for two areas of the BLRT corridor along the BNSF right of way: 1) Between TH 55 and Golden Valley Road (south reach), and; 2) Between Golden Valley Road and 36th Street (north reach). The south reach segment includes potential impacts to Theodore Wirth Regional Park (TWRP), while the north reach includes potential impacts to Sochacki Park.*



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- *Rick Birno noted that Sochacki Park is now the name for the combined park resources of Sochacki Park in Robbinsdale, and the Mary Hills and Rice Lake Nature Areas in Golden Valley. This consolidation is an outcome of the joint powers agreement between the cities of Golden Valley and Robbinsdale, and the TRPD.*
- *Goddard reviewed the requirements for compensatory floodplain storage, specifically the requirement that to be counted as storage, the area excavated must be above the water table but below the 100 year flood elevation and hydraulically connected to the impacted floodplain*
- *The preliminary impacts identified in the south reach were discussed. Approximately 12,000 cubic yards of floodplain impact are anticipated between TH 55 and Golden Valley Road – the northern extent of impacts is actually only a few hundred feet north of Plymouth Avenue.*
- *A knob of comparatively higher ground just north of TH 55 and west of the BNSF was mentioned as a possible mitigation site. The site is comprised of a combination of MPRB property and Canadian Pacific Railway property. It appears that all of the needed compensatory storage could be obtained at this site; however, the site would likely need to be contoured and replanted with trees to create a floodplain forest setting similar to the surround area.*
- *The BLRT team is also exploring the potential for creating compensatory floodplain storage through the MPRB's plans for reconstruction of some of their golf holes.*
- *Cliff Swenson asked about how the floodplain impacts were calculated. Goddard indicated that the team cut cross-sections along the alignment, and matched those against the floodplain elevation and existing ground surface to determine the floodplain fill volume. The cross sections included the freight rail reconstruction, the light rail line, and the light rail stations. Goddard and O'Brien noted that there was no difference in floodplain impact whether the Plymouth Avenue Station was included or not included – the impact is on the west side of the alignment and dictated by where the freight rail would need to go. There is no floodplain impact from the proposed Golden Valley Road Station.*
- *Goddard discussed the potential floodplain impacts in the Grimes Pond/North Rice Pond area. The BLRT team is still looking at various engineering options in this area; the soils are poor quality for construction purposes, and various combinations of filling and spanning the pond area are being considered. Calculations yield floodplain impacts ranging from 7,500 to 10,000 cubic yards in this area. Calculations were done using a likely worst-case scenario of retained fill the full length of the alignment in the pond.*
- *The connectivity of Grimes Pond and North Rice Pond was discussed. Currently there are two culverts connecting the two ponds. The northern culvert is set at a lower elevation, and is often blocked by beaver activity. The southern culvert is at a higher elevation.*
- *Flooding in the area was discussed. The eastern extent of the floodplain intersects private parcels, and in some cases, homes. There has been historical flooding in this area.*
- *Potential flood mitigation areas were presented. The western edge of North Rice Pond could be regarded to create additional storage, but would remove existing vegetation adjacent to the pond. Some storage could be obtained at the south end of North Rice Pond as well. The southeastern portion of Grimes Pond, and a portion of the eastern bank of Grimes Pond could also potentially provide some mitigation. The northern end of Grimes Pond includes a capped contaminated site, so no mitigation would be considered there.*
- *Plans for Sochacki Park were discussed, especially in consideration of the potential floodplain mitigation. Ann Rexine noted that survey work is being conducted in preparation for paving the existing gravel trail in Sochacki Park. Birno noted that several improvements are included in park plans, such as off-leash*



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dog park areas and natural play areas, along with plans to improve water quality, manage vegetation, and provide educational experiences.

- *Rexine noted that water quality improvements could be difficult in Sochacki Park considering the extent of the watershed that feeds the park area.*
- *There was a general discussion of the costs and benefits from floodplain mitigation on the west side of North Rice Pond. On the positive side, the mitigation effort could include demolition debris cleanup (the park contains demo debris dumped in the 50s-70s), elimination of nuisance and invasive species, and improvements to access and views of the pond, as well as providing the necessary floodplain and wetland mitigation for the BLRT impacts. Drawbacks include the fact that the park is a 6(f) resource (obtained/improved with LAWCON funds) and would require extensive coordination with the DNR and National Park Service, the potential for asbestos or other problem contaminants in the demo debris, the public perception of the removal of trees and other greenery (regardless of whether it is considered a nuisance or invasive species), and the fact that the cost of such a mitigation plan could be well in excess of what the BLRT project could afford.*
- *Birno noted that whatever plan is carried forward, it should minimize impacts on residents and recreational space.*
- *Rexine agreed to share the Sochacki Park trail survey data and park plan information with the BLRT team.*
- *O'Brien mentioned that the creation of park amenities through the floodplain mitigation process needs to be considered as an option for both potential floodplain and park impacts.*
- *There was general discussion of the private parcels that comprise the southern portion of Grimes Pond – these are very long residential lots that extend from France Avenue on the east side all the way to the BNSF right of way. The homes on these parcels are located near France Avenue, and are 60-80 feet higher in elevation than Grimes Pond. The parcels are generally heavily wooded. Floodplain mitigation may be an option on these parcels.*
- *Swenson asked about the deadline for determining the floodplain mitigation plan. O'Brien noted that options can be carried forward through the Final EIS and Record of Decision (ROD), with final details determined during detailed design efforts post-ROD.*
- *The next meeting will focus on trails and connectivity of park resources to other parks, the surrounding communities, and transportation facilities.*



METRO Blue Line LRT Extension (BLRT)

5514 West Broadway Avenue, Suite 200, Crystal, MN 55428 www.bluelineext.org

Meeting Title: Parks Coordination Meeting

Date: 5/26/15 **Time:** 3:30 PM **Duration:** 1.0 hour
Location: Blue Line Project Office
Meeting called by: Kathryn O'Brien
Attendees: See attached sign-in sheet
Purpose of Meeting: Parks Coordination on Blue Line LRT Extension – Trails Discussion

Discussion Topics

Summary information presented in *italics*.

1) Introductions

- *Attendance was limited for this meeting; non-BPO representatives included Tom Marshall of the City of Robbinsdale, and Adam Arvidson and Cliff Swenson of the Minneapolis Park and Recreation Board. Therefore, discussion focused primarily on the Theodore Wirth Regional Park Trail that runs parallel to the BNSF line and passes beneath the Plymouth Avenue Bridge.*

2) Bassett Creek Trail (at GVR Station)

- *This item was tabled, and will be addressed at the next meeting when City of Golden Valley and Three Rivers Park District staff can participate.*

3) TWRP Trail (at Plymouth Avenue Station)

- *The issue of the trail paralleling the BNSF corridor was discussed. The portion of the trail beneath Plymouth Avenue and extending to the south for some distance is on BNSF right of way. The Minneapolis Park and Recreation Board (MPRB) is working with BNSF to establish an official permit for the trail to continue to exist on BNSF property.*
- *The MPRB considers this trail to be an important connection within the Theodore Wirth Regional Park trail system. Therefore the MPRB needs this connection to be maintained after BLRT is constructed.*
- *It was noted that the trail was damaged during the tornado in 2011, and is in need of repair/resurfacing.*
- *Options for reconstructing the trail were discussed. The BLRT project section includes the construction of two LRT tracks in the eastern 50 feet of BNSF right of way, and the reconstruction of the freight rail track, along with a service road, in the western 50 feet of BNSF right of way. Because of the location of Bassett Creek to the west of the trail, there is very little room for the trail after BLRT is constructed. Approximately 8 feet would be left between the new Plymouth Avenue bridge pier and the service road. It is likely that not all of this would be available for trail, as BNSF may want a fence or other buffer between the trail and the service road. Therefore, two options for reconstructing the trail which include shifting Bassett Creek to the west were discussed. One option would involve reconstructing the existing*





Meeting Summary

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concrete creek passage (which is approximately 18 feet wide) under the bridge in a location several feet to the west. Another option would also move the creek to the west, but would provide a wider, more natural creek section.

- *The possibility of building two trail bridges over Bassett Creek that would move the trail out of the BNSF corridor under Plymouth Avenue was discussed. MPRB staff expressed concern about the maintenance of such bridges, and the addition of a circuitous route element to a relatively straight trail.*
- *MPRB staff noted that there are definite benefits to moving the trail entirely out of BNSF right of way.*
- *Trail connections were discussed.*

4) Crystal Lake Regional Trail (at 73rd Avenue Station)

- *This item was tabled, and will be addressed at the next meeting when City of Brooklyn Park and Three Rivers Park District staff can participate.*

5) Next Coordination Meeting

- *The next meeting is tentatively scheduled for 3:30-4:30 PM on June 23rd at BPO. BPO will send out an invite and agenda prior to the meeting.*



METRO Blue Line LRT Extension (BLRT)

5514 West Broadway Avenue, Suite 200, Crystal, MN 55428 www.bluelineext.org

Meeting Title: Parks Coordination Meeting

Date: 6/23/15 **Time:** 3:30 PM **Duration:** 1.0 hour
Location: Blue Line Project Office
Meeting called by: Kathryn O'Brien
Attendees: Per meeting invite
Purpose of Meeting: Parks Coordination on Blue Line LRT Extension – Trail Impact / Hwy. 55 Trees

Discussion Topics

1) Introductions

- *Attendance included Tom Marshall of the City of Robbinsdale, Adam Arvidson of the Minneapolis Park and Recreation Board, Ann Rexine of Three Rivers Park District, Rick Birno of the City of Golden Valley. BPO staff included Tom Harrington, Rob Hume, Kathryn O'Brien, Shelley Miller, Scott Reed, and Caroline Miller.*

2) Hwy. 55 Median Trees

- *This item was tabled. BPO staff have been working to make contact with the principal investigator of the U of M tree research study.*

3) TWRP Trail (at Plymouth Avenue Station)

- *The group reviewed the three options for aligning Bassett Creek, the trail, LRT, and freight beneath the Plymouth Avenue Bridge. This exhibit was shown at the last Parks IRT meeting. Adam Arvidson noted that Option 3 appears to have impacts (e.g. a longer bridge) that don't necessarily justify the naturalization of the creek for a short distance. Adam recommended further study of Option 2, which moves the trail out of BNSF right of way. Option 2 also has Plymouth Avenue Bridge approximately within the same footprint as the existing bridge today.*

4) Bassett Creek Regional Trail (GVR Station)

- *Two concepts of the Bassett Creek Regional Trail at Golden Valley Station were shown. Concept A routes the trail on the south side of Golden Valley road, between the vertical circulation from the station and the crosswalk to access the sidewalk, bus connections, passenger drop off, and the surface parking lot (shown on the north side of Golden Valley Road). A conflict point where the trail meets the vertical*





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circulation/station exit point was noted. Concept B depicted the trail south of the vertical circulation area at the station, avoiding this conflict. The trail would need to be on fill or structure. Fill would impact a large area or require a retaining wall; the structure option would essentially be a small bridge supporting the trail next to the vertical circulation.

- *Ann Rexine noted that the trail is not currently funded or programmed. However, she would like to discuss the timing of building the trail to minimize the number of times the roadway needs to be under construction.*
- *Ann and Rick Birno commented on the value of Concept B and specifically for residents at Courage Kenny Institute. Adam Arvidson agreed that Concept B is the better option for a recreational user of the park and trail. MPRB is looking for the best solution for recreation, even if that may mean additional use of parkland.*
- *Kathryn O'Brien noted that Concept B will be more expensive than Concept A and that costs above the BLRT project scope will likely need to be part of the trail project.*

5) Crystal Lake Regional Trail

- *The trail extends along the east side CSAH 81 in the project area. It has been constructed south of 73rd Avenue, and will be extended north of 73rd Avenue when that segment of CSAH 81 is reconstructed.*
- *The location where the trail will cross the LRT tracks is not perpendicular; BPO is looking at the appropriate safety measures to protect pedestrians and bicyclists.*
- *Ann brought up the Sochacki Park to Grand Rounds connection trail. This trail is likely out of scope for the BLRT project but its construction could be timed with construction of BLRT.*

6) Next Coordination Meeting

- *The next meeting will be scheduled in July at a 3pm time. The agenda will plan to cover potential Three Rivers Park District property impacts at the OMF site in Brooklyn Park.*



METRO Blue Line LRT Extension (BLRT)

5514 West Broadway Avenue, Suite 200, Crystal, MN 55428 www.bluelineext.org

Meeting Title: Parks Coordination Meeting

Date: 8/25/15 **Time:** 3:00 PM **Duration:** 1.0 hour
Location: Blue Line Project Office
Meeting called by: Kathryn O'Brien
Attendees: Per meeting invite
Purpose of Meeting: Parks Coordination on Blue Line LRT Extension – Sochacki Park and Related Items

Discussion Topics

Summary information presented in *italics*.

- 1) Introductions
 - *Following introductions, Kathryn O'Brien indicated that the purpose of today's meeting is to further discuss Sochacki Park, and the need to consider construction access and construction material laydown areas in the park.*
- 2) Construction Access Limitations – BNSF Trench
 - *Jim Toulouse summarized the limitations for construction access in the BNSF trench area – especially between 36th Avenue and Golden Valley Road. With the decision being made to build a bridge across Grimes Pond, construction access and staging becomes even more of a critical issue. Access from locations outside the park were considered, but were generally topographically challenging (too steep), or would require the acquisition and demolition of residential homes. Since construction would be a 1-2 year event, the removal of homes was thought to be an unacceptable impact.*
- 3) Sochacki Park Options
 - a) Potential Park Impacts
 - b) Regulatory Requirements
 - i) Section 4(f)
 - ii) Section 6(f)
 - *Scott Reed noted that the joint powers agreement between Three Rivers Park District (TRPD), Robbinsdale, and Golden Valley treats Sochacki Park, Mary Hills Nature Area, and Rick Lake Nature Area as a single "new" Sochacki Park. However, only the original (Robbinsdale) Sochacki Park is subject to Section 6(f) requirements. If there were an actual land transfer that consolidated ownership of the three park units into a singly-owned park entity, then all three units could be considered the same Section 6(f) resource.*
 - *Reed presented the proposed Sochacki Park access scenario using three descriptive categories:*
 - *What would happen in the park?*



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- § *Construction access to the rail corridor and construction staging/laydown areas would be provided*
 - § *Met Council would obtain temporary easements for construction; fee title would remain with the City of Robbinsdale*
 - § *Met Council would work to maintain public access to portions of the park for recreational purposes*
 - § *A construction management plan would be developed to minimize impacts, maintain public access, and facilitate safety*
 - § *The park would be restored to pre-construction conditions, with the potential for some enhancements*
 - *Section 4(f)*
 - § *Identified as a temporary occupancy in the Draft EIS/Draft Section 4(f) Evaluation*
 - § *To stay as a temporary occupancy, would need to avoid interference with the protected activities, features, or attributes of the property*
 - § *Could consider a full use determination to maintain flexibility during construction*
 - § *Document appropriately in Final EIS/Final Section 4(f) Evaluation*
 - § *Need Department of Interior approval*
 - *Section 6(f)*
 - § *A portion of Sochacki Park was acquired using Land and Water Conservation Act funds (LWCF) in 1980*
 - § *MnDNR Park Grant funding obtained for park improvements in 1984*
 - § *Temporary non-conforming use under Section 6(f) would need to be 6 months or less*
 - § *Construction requirements necessitate presence in park for more than 6 months*
 - § *Would need to do a full conversion of the park*
 - § *Propose returning the park in a restored state as the mitigation for the Section 6(f) conversion*
 - § *Would document in a combined Section 4(f)/6(f) Evaluation*
 - § *Need MnDNR and National Park Service approval; would need to be coordinated with Section 4(f) approvals*
 - *Rick Birno noted that Glenview Terrace Park and Mary Hills Nature Area are also grant-funded parks.*
 - *Jonathan Vlaming (Three Rivers Park district) noted that a new trail has been planned in Sochacki Park that would pave over the existing gravel trail*
 - *Ann noted that many of the potential lay down areas for construction staging on the handout are also prairie restoration areas.*
- 4) Water Resource Issues – Sochacki Park area
- *The team reviewed the floodplain and wetland impacts that were identified early in the BLRT project development. The selection of a bridge option by BPO staff eliminates floodplain and wetland impacts, and provides an opportunity to improve flood storage and add wetland acreage through the removal of the existing rail embankment.*
- 5) Action Items
- *Birno indicated that it would be good for BPO to do some additional analysis regarding specific access needs and then make a formal recommendation regarding Sochacki Park. Ann Rexine agreed.*



Meeting Summary

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- *Birno, Rexine, and Tom Marshall all noted the importance of considering impacts to citizens; Marshall commented that there is quite a bit of sensitivity by the public regarding Sochacki Park.*
 - *Rexine, Birno, and Marshall stated that from their perspective, they were not saying no to the access proposal, but that more discussion and review from the Joint Powers Board, the TRPD Board, and the city councils would be needed.*
 - *O'Brien indicated that BPO will proceed on a parallel path – working with the local agencies to further discuss and refine the park access proposal; and working with the MnDNR and National Park Service on the regulatory approval process.*
- 6) Next Coordination Meeting
- *To be determined.*



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5514 West Broadway Avenue, Suite 200, Crystal, MN 55428 www.bluelineext.org

Meeting Title: Parks Coordination Meeting

Date:	11/05/15	Time:	1:00 PM	Duration:	1.0 hour
Location:	Blue Line Project Office				
Meeting called by:	Kathryn O'Brien				
Attendees:	Ann Rexine (Three Rivers), Jonathan Vlaming (Three Rivers), Adam Arvidson (MPRB), Tom Marshall (Robbinsdale), Rick Birno (Golden Valley), Eric Eckman (Golden Valley), Emily Goellner (Golden Valley), Nadine Chalmers (Hennepin County), Scott Reed (BPO), Shelley Miller (BPO), Lisa Rasmussen (BPO), David Davies (BPO), Caroline Miller (BPO), Michael Jischke (BPO), Alicia Vap (BPO)				
Purpose of Meeting:	Parks Coordination on Blue Line LRT Extension – Trail connections, Golden Valley Road Station area				

Discussion Topics

- 1) Introductions
- 2) Trail connections around Golden Valley Road Station area
 - Kathryn O'Brien provided background information on the trail connection idea from Theodore Wirth Park into Sochacki Park. Lisa Rasmussen pulled up Adam Arvidson's graphic showing the concept of a trail running adjacent to the freight tracks. The objective of the meeting is to explore potential options for this trail connection and where it would go.
 - Lisa posed the question what type of trail is envisioned for this segment and who would be using the trail? Bicyclists? Jonathan Vlaming responded that he sees it as a segment for commuting use and for bicyclists to access the Golden Valley Road Station. Jonathan explained that the to connect the trail to Sochacki Park, a boardwalk could potentially be used over the ponds instead of wrapping around the steep hillside north of the Golden Valley Rd bridge. He also expressed that a mid-block crossing of the Bassett Creek Trail across Golden Valley Rd/Bonnie Lane to connect to Sochacki Park is undesirable from Three River's perspective. Three Rivers desires to create trails for all users, not just experienced bicyclists.
 - Alicia Vap noted that the process for determining the trail connection needs to be completed by Q1.
 - Lisa Rasmussen asked the group whether the trail should be a straight line, or more sinuous, both of which would create different user experiences. Lisa also asked about the placement of the trail and whether it should be higher up on the slope in the trees, or down below closer to the freight tracks. Adam responded that it would be good to have a more sinuous trail if there is room, but an exploration of the cost/benefit is needed. He also expressed that the trail should stay closer to the freight tracks to minimize the impact to trees and vegetation. Adam supports exploring the concept of the boardwalk as



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well as the wall concept wrapping around the hillside and determining what are the costs and benefits of each.

- The group discussed the potential safety issue of the sharp curve north of the Golden Valley Rd bridge. BPO staff need to look into the requirements for a trail of this type.
- The group discussed that the standard for this trail would be a 10 ft combined bike/ped trail with striping down the middle. This is consistent with Three Rivers concept plan for the BCRT. Eric Eckman brought up the portion of the BCRT near Courage Center for discussion. He encouraged BPO staff to consider additional trail width for a separate ped trail per the BCRT feasibility study. This would allow users of Courage Center to more easily access the Golden Valley Rd station.

3) Action Items

- Jonathan Vlaming's engineering staff will look at feasibility of doing a boardwalk after the bridge portal, as it enters Sochacki Park. He cited a recent project done in Nine Mile Creek (in Edina) where they eliminated wetland impacts through the use of piers for the boardwalk trail.
- BPO staff will explore feasibility of the steep slope concept and the boardwalk concept (including consideration of floodplain and wetland impacts).

4) Next Coordination Meeting

- No date was determined for the next Parks IRT as BPO staff need some time to advance concepts. BPO staff will schedule another meeting after the concepts are further fleshed out and Three Rivers staff have looked at preliminary feasibility.



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Meeting Title: Parks Coordination Meeting

Date: 11/13/15 **Time:** 11:30 AM **Duration:** 1.0 hour

Location: Blue Line Project Office

Meeting called by: Kathryn O'Brien

Attendees: Ann Rexine (Three Rivers), Jonathan Vlaming (Three Rivers), Tom Marshall (Robbinsdale), Rick Birno (Golden Valley), Rob Hume (BPO), David Davies (BPO), Caroline Miller (BPO), Scott Reed (BPO)

Purpose of Meeting: Parks Coordination on Blue Line LRT Extension – Sochacki Park

Discussion Topics

- 1) Introductions

- 2) Discuss Nov 3 letter from Sochacki Park Joint Powers Partnership Partners
 - Kathryn asked for clarification regarding the decision making authority of the Joint Powers Partnership since City of Robbinsdale is the landowner. Jonathan stated that the Joint Powers Partnership respects the City of Robbinsdale's ownership of the property and as the decision-making body in construction issues in Sochacki Park, but would like their board to provide input and potentially take action.
 - The group discussed each numbered item from the November 3rd letter
 - Item 1: 4(f) documentation. Kathryn noted that as part of the project's 4(f) documentation, alternatives will be explored and documented. Jonathan stressed the importance of demonstrating to the public that we have looked at alternatives, and access through the park is the only viable option.
 - Item 2: Public Involvement on use of Sochacki Park during construction. The group discussed that this is a broader discussion that needs to include more staff from City of Robbinsdale as to nature of meetings and timing.
 - Item 3: Sochacki Park Concept Plan/Joint Powers Agreement purpose statement. Kathryn noted that project staff acknowledge the purpose statement.
 - Items 4 and 5: Construction staging areas and use of park by public during construction. Rob explained the need of the project to access both ends of the bridge through Grimes Pond for construction. Access to both ends allows the project to be more efficient in constructing the bridge.
 - *Tree Removal:* Rob clarified that in the BPO proposed scenario for construction staging, they made all attempts to avoid tree clearing and chose areas that appeared grassy/open. Tree quality was not considered. Tom and Rick clarified that the tree quality throughout the park is poor and some level of tree clearing for construction staging/access would be acceptable as a means of improving the quality of the park long term through replanting/restoration. Rick noted that no tree clearing should occur west of the current entrance road and trail, to maintain the





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- buffer between nearby homes and the park. Joint Powers staff agreed that a staging area to the north (as they indicated in their Nov 3 letter) would be ideal, even though it requires tree removal, as it minimizes travel throughout the park and could result in long term improved park quality.
- *Access through park + 1 staging area in north + interim trail:* After BPO established the need to access the park from both sides via a construction access road, the group discussed the option of an access road and a staging area at the north end (location as indicated in the Nov 3 letter). BPO staff agreed that a staging area to the north would be valuable and reduce construction traffic through the park. The interim trail would allow continued public use of park during periods of active construction.
 - *Access through park + 2 staging areas + interim trail:* After discussion of multiple other options, the group agreed on this option as likely the best option for both parties to move forward with further coordination and input from the public. This option would allow north and south access via the construction access road, plus construction staging at both ends of the bridge. This would be the most beneficial option for construction efficiency. It would also facilitate environmental remediation and vegetative restoration of the laydown areas. This option also includes the interim trail that would keep the park open to users throughout construction.
 - *Interim Trail:* Jonathan clarified the description of the interim trail from the Nov 3 letter. He explained that the construction access road and the interim trail would share the same corridor, separated by a construction fence. Rob noted that the construction access road would need at least 12 ft of useable width for a single lane and pullout spots at several locations for opposing trucks to pass. The group agreed that it could be feasible for a construction access road and an interim trail to share the same corridor. The group agreed that an 8 ft (nominal width) interim trail would be sufficient.
- Item 6: Environmental remediation. The group discussed that the BPO would be expected to conduct environmental remediation of demolition debris in areas that may be disturbed by the project. This would include the construction access road and staging areas. It was noted that the BLRT project could not be responsible for remediation of the entire site, but would address demolition debris at and near the ground surface in areas of disturbance. The group discussed the potential benefit to the park of two staging areas being used, in that as the project would be able to complete remediation on those areas.
 - Item 7: Environmental mitigation. The project will comply with federal and state regulatory guidelines for mitigation of stormwater and floodplain and wetland impacts. The group did not discuss revegetation of the entire eastern boundary of Sochacki Park for a visual buffer. This is a topic the group will need to discuss at a future meeting. Scott explained that vegetation may be considered a buffer but that it does not mitigate noise. Additionally, Sochacki Park is considered an active use park and under FTA guidance it is not considered a noise sensitive land use.
 - Item 8: Future enhancements to the park. Item a, regarding trail connections has been added to the project scope and cost estimate as of November 12. Jonathan stated that he and the Joint Powers staff need to explore the staging area restoration items under b and c. The project agrees that a paved road to the parking lot through the park will be completed as part of the construction access needs, and therefore would be a part of the park in the future. BPO staff indicated that items under d are not feasible under the current project scope and cost estimate because:
 - The current project plan is to maintain the existing BNSF Railway berm as the location of the BNSF track and as such removal of a portion of it is not feasible.



Meeting Summary

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- Constructing a trail connection under both the existing BNSF and the proposed BLRT tracks would put the proposed trail at an elevation (after structure depth and vertical clearances) under the elevation of the water surface.

3) Action Items

- Caroline explained that the Sochacki Park issues need to be discussed more widely with City of Robbinsdale staff
- Joint Powers staff will work on providing additional detail to BPO staff about park enhancements as mitigation
- BPO staff will update the construction staging graphic to reflect today's discussion
- Visual buffer not discussed at this meeting. Need to discuss at next meeting.
- Need to determine timing and scope of public outreach for this topic

4) Next Coordination Meeting

- This topic will be discussed at an upcoming Robbinsdale IRT meeting
- The group will reconvene to continue discussions on the action items above



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Meeting Title: Parks Coordination Meeting

Date: 12/09/15 **Time:** 2:30 PM **Duration:** 1.5 hours
Location: Blue Line Project Office, Conference Room 2
Meeting called by: Kathryn O'Brien
Attendees: Jonathan Vlaming (Three Rivers), Adam Arvidson (MPRB), Tom Marshall (Robbinsdale), Rick Birno (Golden Valley), Eric Eckman (Golden Valley), Emily Goellner (Golden Valley), Nadine Chalmers (Hennepin County), Scott Reed (BPO), Shelley Miller (BPO), Lisa Rasmussen (BPO), David Davies (BPO), Caroline Miller (BPO), Tom Harrington (BPO), Alicia Vap (BPO),
Purpose of Meeting: Parks Coordination on Blue Line LRT Extension – Trail connections, Golden Valley Road Station area

Discussion Topics

- 1) Introductions
- 2) Trail Connection from Golden Valley Rd Station to Sochacki Park
 - Tom Harrington grounded the group describing the design challenges in choosing an alignment for the trail connecting Theodore Wirth Park with Sochacki Park. The main challenge is designing around the steep slope north of the Golden Valley Road bridge and maintaining a <5% grade.
 - Tom introduced two concepts that the BPO team has been working on since the last Parks IRT meeting. The first concept is a boardwalk style trail with wood piles that would run adjacent to the hillside slope and connect with Bonnie Lane. He referenced (and provided photographs of) an existing segment of the Luce Line in Golden Valley as an example of this type of construction. The second concept is an asphalt trail with retaining walls on the same alignment as the boardwalk concept. The retaining walls would be on the downslope side of the trail in in this concept.
 - The boardwalk concept would allow for vegetation beneath the piers, making the structure less visible. The retaining wall concept would have 10+ ft high walls in some portions, which would be much more visible than the boardwalk concept. Both concepts are ADA compliant.
 - Tom also acknowledged the concept that Three Rivers staff developed concurrently since the last Parks IRT. The Three Rivers concept also includes retaining walls, but they are located upslope in this concept. This concept has the trail alignment closer to the water than the BPO concepts. Jonathan Vlaming noted that this alignment follows an existing maintenance path.
 - Jonathan raised concerns about the user experience of the BPO concept trails. Since the trail would go adjacent to Bonnie Lane, many users may end up taking a shortcut across Golden Valley Road instead of using the trail. Keeping the trail away from the adjacent road would encourage users to stay on the trail and also have a better user experience by being further into the park.





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- Adam Arvidson asked if there would be any gain in user experience in keeping the trail lower through the portal beneath Golden Valley Road bridge?
- Jonathan noted that a bridge over the water was initially dismissed in favor of an option on the slope that appeared to be less expensive. However, the retaining walls could prove to be expensive, so we should consider exploring the boardwalk across the water concept.
- The group discussed pavement versus wooden boardwalk options. The group agreed that pavement appears safer for this trail due to the curve north of the portal.

3) Trail connection to Plymouth Ave Station

- Tom presented two concepts in response to MPRB's request for exploration of trail connection between the Theo Wirth Trail adjacent to Bassett Creek and the Plymouth Avenue Station. The trail connection would be intended for users on the trail coming from the south and exiting the trail to access the vertical circulation building on Plymouth Avenue.
- One concept had retaining walls and the other concept had wooden piers with a boardwalk. It was noted that the retaining walls would be prominent/tall due to the steep slope. Both concepts are ADA compliant.
- Adam noted that he needs to take some time to study the concept to provide more feedback.

4) Hwy 55/BNSF area

- Tom showed a graphic providing clarity on the construction limits on the trail adjacent to Bassett Creek, between Plymouth Ave and TH 55. The trail construction limits to the south would end at the edge of the CP boundary. Adam acknowledged that this was his understanding.

5) Action Items

- BPO staff will explore refining the current concepts to see if the portal can be lowered and retaining walls can be minimized
- BPO staff will also explore an option for a trail over the wetland area.
- BPO staff will work on costs for the different options to compare
- Adam will provide feedback on the Plymouth Ave trail connection option presented.

6) Next Coordination Meeting



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Meeting Title: Parks Coordination Meeting

Date: 1/15/16 **Time:** 10:00 AM **Duration:** 1.5 hours
Location: Blue Line Project Office, Conference Room 2
Meeting called by: Kathryn O'Brien
Attendees: Jonathan Vlaming (Three Rivers), Tom Marshall (Robbinsdale), Rick Birno (Golden Valley), Caroline Miller (BPO), Marcia Glick (Robbinsdale)
Purpose of Meeting: Parks Coordination on Blue Line LRT Extension – Sochacki Park Resolution

Discussion Topics

- 1) Introductions
- 2) Sochacki Park Resolution
 - Following the 12/28 Joint Powers Agreement board meeting, the JPA staff revised the Sochacki Park Resolution (JPA board is comprised of Three Rivers Park District, City of Golden Valley and City of Robbinsdale elected officials).
 - Prior to the meeting the JPA staff sent BPO the revised draft of the Sochacki Park Resolution
 - The meeting was spent going through each item on the revised draft of the resolution
 - The discussion of the policies/principles of the proposed JPA board resolution focused around editorial changes and restructuring a few of the policies to make a more concise action.
 - The only substantive change in the policy/principles section was to remove language about noise barriers in the park since noise impacts are addressed through the NEPA process in coordination with local jurisdictions. Language about providing vegetative buffers as a visual screen was left in the resolution under the revegetation plan.
 - The group spent the majority of the meeting discussing the actions for mitigation in the resolution
 - The group agreed upon language about following MPCA permitting requirements for addressing soil contamination in the restoration zone
 - BPO asked for clarification on the scope and location of the N. Rice Lake water edge restoration work. JPA staff responded that location is adjacent to southern staging area, but outside of it. Harden the edge to the water to allow for park users to access. Requires some tree removal and revegetation. Maybe some large boulders would be added.
 - BPO asked for clarification regarding providing utilities to a future site adjacent to the interior parking lot. Group agreed to leave in language about providing all practicable utility services with details to be worked out after the resolution is passed. There are challenges with bringing in sewer service. Water service is easier.



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- BPO asked for clarification regarding ground prep for a future education shelter for 50 students. JPA staff responded that the site would be approximately 30 x 30 ft within the proposed staging area and would be used for day camps.
- BPO asked for clarification regarding width of restored road into park. JPA staff responded that this would need to be wide enough to accommodate a bus passing a car.
- The group discussed the paved trail restoration throughout the park and JPA staff clarified that the resolution states that BPO would reconstruct the entire trail through Sochacki and the Mary Hills portion of the park. BPO noted that they did not previously understand reconstruction of the Mary Hills 8-ft trail portion from the Robbinsdale/Golden Valley border to Bonnie Lane to be a part of the resolution. BPO agreed to include it in the scope of the resolution.
- The group discussed the drawbacks to considering a trail spur from the north/south trail to Culver Rd. It may lead to increased parking and traffic on Culver Road and outreach to residents there should be considered prior to including in the resolution. Rick Birno noted that he will provide this information to the Golden Valley Open Space committee during a meeting on 1/25. He will follow up with the group on this item after meeting with the Open Space Committee.
- The group agreed to generalize language about BPO's commitment to revegetation of disturbed areas and incorporate into the policies/principles on page 1, number 5.
- BPO asked for clarification on scope of water education platform construction on North Rice Lake. JPA staff responded that it will be approximately 20 x 10 ft and floating on water. The exact location is TBD.

3) Next Coordination Meeting

- After discussing all of the items in the resolution and reaching agreement, BPO staff agreed to send their proposed edits reflecting this discussion to the JPA staff for review and finalization. The resolution will be on the 2/8 agenda for the JPA Board meeting.



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Meeting Title: Parks Coordination Meeting

Date: 1/27/16 **Time:** 2:30 PM **Duration:** 1.5 hours

Location: Blue Line Project Office, Conference Room 2

Meeting called by: Kathryn O'Brien

Attendees: Ann Rexine (Three Rivers), Jonathan Vlaming (Three Rivers), Adam Arvidson (MPRB), Tom Marshall (Robbinsdale), Rick Birno (Golden Valley), Eric Eckman (Golden Valley), Emily Goellner (Golden Valley), Nadine Chalmers (Hennepin County), Scott Reed (BPO), Shelley Miller (BPO), Lisa Rasmussen (BPO), Rob Hume (BPO), Sophia Ginis (BPO), David Davies (BPO), Caroline Miller (BPO)

Purpose of Meeting: Parks Coordination on Blue Line LRT Extension

Discussion Topics

1) Introductions

2) Trail Connection from Golden Valley Rd Station to Sochacki Park

- Tom Harrington described the proposed trail connection from Theodore Wirth Park to Sochacki Park. He mentioned that this has been introduced in a previous Golden Valley DRT. Caroline Miller noted that this was shared with the Sochacki Parks JPA staff briefly at a meeting as well.
- The revised trail design minimizes retaining walls and incorporates input from Three Rivers' initial design concept that was shared with BPO staff. The concept also keeps the trail close to the water without going into a delineated wetland.
- Eric Eckman noted that the Bassett Creek watershed typically requires a vegetative buffer between the edge of the wetland and new construction. It's something to keep in mind since the trail is very close to the delineated wetland. Golden Valley is supportive of this concept, just make sure to balance the impacts (wetland, floodplain).
- Ann Rexine stated that Three Rivers is in favor of this concept

3) Trail connection to Plymouth Ave Station

- Tom Harrington began this discussion by recapping previous trail connection concepts that have been discussed in previous DRT's and Parks DRT's. A trail with retaining walls on both sides as well as a trail with grading out on both sides were shown to the Parks IRT group in the last meeting. While the concepts serve the objective of a trail connection to the station, they are creating more impacts in terms of visual and floodplains.
- Tom introduced the newest concept which is a staircase on the north side of Plymouth Avenue and west side of Bassett Creek, with a small bridge across the creek, connecting to the TWRP trail. This





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concept is less visually impactful as the stairs are gradual and tucked in close to the Plymouth Avenue Bridge.

- Eric Eckman asked about floodplain impacts with this concept in terms of height constriction by the proposed trail bridge over the creek. BPO staff responded that Bassett Creek is currently in a channel beneath Plymouth Avenue and will be in a channel after it is relocated as part of the project. The stairs concept minimizes floodplain impacts compared to the previous concepts, but we haven't calculated specifics yet. BPO wanted to get feedback and agreement on the general concept before proceeding with more analysis and refinement.
- Adam Arvidson was supportive of this concept and noted that a few commissioners were also supportive. He appreciated how it has less of a visual impact from the Chalet and appears to be tucked into the bridge.
- Kathryn explained that while BPO proposes to build this staircase, the Met Council would not own or maintain the project element. This particular area has complicated landownership with a mix of MPRB, Golden Valley and Minneapolis. Further discussions are needed with these stakeholders to determine who will own and maintain it.

4) Xylon Avenue (Brooklyn Park)

- Tom explained the trail concept for a trail to extend on the west side of Xylon Avenue adjacent to the OMF. The trail is proposed in the existing ROW, with temporary occupancy of Three Rivers Park District property for tying in grades along the ¼ mile segment.
- Ann explained that Three Rivers would like to see visual impacts from the OMF mitigated through lighting and vegetative buffers. Kathryn responded that the OMF will be designed in accordance with Brooklyn Park city ordinances and that BPO will continue to coordinate with Three Rivers and Brooklyn Park on the design.
- Todd introduced the idea of a meandering trail through the park property instead of adjacent to Xylon. Kathryn responded that if Three Rivers and Brooklyn Park would like to go that route it would not be included as part of the LRT project.

5) Action Items

6) Next Coordination Meeting

- The group discussed Sochacki Park for a few minutes at the end of the meeting. Eric Eckman provided an update on Rick Birno's presentation to the Golden Valley Open Space committee. He noted that visual quality for park users adjacent to the LRT continues to be of importance to Golden Valley and they would like a vegetative buffer on the eastern edge of the park.
- Tom Marshall provided an update on the Robbinsdale open space committee.



Appendix J

Section 4(f)/6(f) Supporting Materials

J.3 Other Supporting Materials

1. *Deep Bore Tunnel Analysis Technical Memorandum*
2. *Deep Tunnel Map Book*
3. *Alignment Shift Map Book*



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Deep Bore Tunnel Analysis Technical Memorandum



Deep Bore Tunnel Analysis

To: Paul Danielson

From: Betty White
Rob Hume

Date: 04-19-2016

Subject: Deep Bore Tunnel Under BNSF's Monticello Subdivision

Introduction

As an alternative to constructing an at-grade light-rail transit (LRT) system within the BNSF Railway's Monticello Subdivision, a deep tunnel concept was explored that would construct the LRT utilizing two parallel round tunnels. Due to the length of this segment, approximately eight miles, it is assumed that the tunnels would be bored using a tunnel boring machine (TBM). This Technical Memorandum provides an overview of a deep tunnel concept and the associated order of magnitude costs.

In addition, a relative unit cost comparison was prepared for a shallow cut and cover LRT tunnel versus BLRT construction at grade for the Alignment Shift Avoidance Option.

Concept Design

The deep tunnel concept is defined as a subterranean light rail system (mainline and stations) that follows the BNSF Railway alignment underground from its crossing of Olson Memorial Highway (TH 55), located in Minneapolis, in the south to the proximity of 73rd Avenue, located in Brooklyn Park, in the north.

The intent of the deep tunnel concept is to plan and design the tunnel system to avoid permanent surface features that change (impact) the existing BNSF Railway corridor. To achieve this, the tunnel will need to enter and exit the BNSF Railway right-of-way (ROW) underground. In addition, all stations and tunnel support systems (ventilation) will need to be located outside the BNSF Railway ROW with subterranean access to and from the LRT system as required.

The deep tunnel concept would include the following core elements:

- i. Tunnel Boring
The LRT's inbound and outbound tracks would be accommodated within two parallel precast concrete tunnels with an estimated inside diameter of 20 feet. The tunnels would be constructed utilizing a TBM. Existing soils in the southern half of the tunnel's alignment include peat and soft organic clays to an average depth of approximately 50 feet, with depths as great as 95 feet in some areas. In these areas, it is anticipated that the tunnel would be bored below these deposits at an estimated depth of 120 – 130 feet below the existing surface. Within the northern portion of the tunnel the soils are shallower resulting in an approximate tunnel depth of 70 – 80 feet below the existing surface elevation. It is assumed that a single TBM would bore the first tunnel in one direction and then be reconfigured to bore the second tunnel in the opposite direction.



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ii. Bore Pits

To assemble and align the TBM, as well as to service tunneling operations (remove spoil and deliver tunnel panels), tunnel bore pits would be built to the north and south of the useable tunnel segments. A portion of sacrificial tunnel would be built to get the TBM between the bore pit and the useable tunnel. These large, open, temporary pits (approximately 500 feet long by 60 feet wide by 130 feet deep at the southern end and 80 feet deep at the northern end) would be constructed from the surface at a location that can be sustained for the duration of planned tunneling operations (and then removed). The location of the pits will by necessity (the TBM has a very large diameter-turning radius and so cannot deviate much from the planned alignment) be near the BNSF Railway and may require a temporary relocation and/or additional structural support of the existing freight tracks. In addition, the bore pits will require heavy-duty access to a large public roadway for delivery of the TBM segments and other tunneling materials. The tunnels will require a significant temporary power supply to operate the TBM, tunnel ventilation and other associated processes.

iii. Portals

The LRT tunnels will join the surface via a portal at either end of the operating tunnel segments. The portal accommodates the ramping of the track from the surface grade to a depth of adequate cover to accommodate the tunnel – this length is approximately 400 feet. The location of the portals are generally defined by the point at which the tunnel's profile grade intercepts existing ground. Within the portal the light rail grade would be increased to the design criteria maximum of 6%. On the south end of the tunnels the portal would be located starting at Newton Avenue and on the north at Jolly Lane.

iv. Approach Tunnels

To interconnect the portals and the bored tunnels requires curving approach tunnels that accommodate the planned LRT alignment from TH55 into the BNSF Railway ROW and from the BNSF Railway ROW into the West Broadway alignment. The curvature of these approach tunnels is tighter than achievable with a TBM and thus would be constructed using a cut and cover method. The southern approach tunnel would be approximately 2,500 feet in length and would be located within poor soils including peat and soft organic clays to an average depth of approximately 100 feet, likely requiring cofferdam type construction. The northern approach tunnel would be approximately 1,500 feet in length.

v. Stations

To accommodate the planned LRT stations, the two parallel tunnels need to be united with an underground station cavity. In order to avoid extensive impacts to the operating BNSF Railway, the station cavity would likely need to be excavated using tunneling technics. This would require at least one large shaft to the surface for the duration of construction activities, constructing heavy-duty access to the shaft for the delivery of station materials and a temporary electrical service. In addition to the station, lateral shafts would need to be tunneled from the LRT tunnels to the location of the passenger vertical circulation facility. To avoid permanent impacts to the BNSF Railway, the vertical circulation facility would be on purchased property outside the BNSF Railway ROW.

vi. Other items

In addition to the tunnels and passenger accommodations, the tunnel requires emergency egress facilities, mechanical systems for the removal of carry in and nuisance water, a system to accommodate piston effect air movement, and ventilation (operational and emergency). The tunnel will also include electrical and communications system elements.



Order of Magnitude Cost Estimate

Deep Tunnel

An order of magnitude cost estimate has been created for this design concept. The mainline tunnel cost was developed using the Southwest Light Rail Transit (SWLRT) design concept of utilizing deep bore tunnels under the Kenilworth Channel.

The cost estimate includes boring for dual parallel tunnels 20 feet in diameter each and located 25 feet on center for a length of 40,700 feet. A difficulty factor of 3 was used to account for construction in the soft soils (non-rock) present under the BNSF corridor. Entrance and exit portals, two TBM pits, and cut and cover approach tunnels are also included in the costs.

The Plymouth and Golden Valley stations will be deep underground stations because of the deeper tunnel depth in this area. The Penn Avenue, Robbinsdale, Bass Lake Road and 63rd Avenue stations would be shallower.

Temporary railroad support is included to represent the costs to support the existing BNSF Railway track located adjacent to the TBM pits at either end of the tunnel construction. A cost is also included to provide temporary electrical service to each of the TBM pits.

ROW will be required for the TBM pit locations (temporary occupancy), the station vertical circulation locations, and the ventilation system buildings.

The order of magnitude project cost for this tunnel system would be expected to be in the range of \$5 billion to \$7 billion. This cost is for the defined tunnel system and not the adjacent project elements connecting to the BLRT tunnel.

Shallow Tunnel Cost Comparison

A relative order of magnitude unit cost comparison was developed for the Alignment Shift Avoidance Option to contrast:

- a shallow cut-and-cover LRT tunnel to the east of the BNSF Railway utilizing the alignment of the Xerxes Avenue North, versus
- the costs developed for the BLRT construction at grade (Municipal Consent level of design)

The shallow tunnel unit cost was derived from work done for the SWLRT tunnel (west) cost estimating with the addition of costs for residential property acquisitions (total take and owner relocation) along Xerxes Avenue North. The cost of the shallow tunnel LRT is approximately \$250 million per mile. This is the unit cost to construct a subsurface guideway and does not include stations.

For comparison purposes, the unit cost to construct the BLRT in the vicinity of the Alignment Shift Avoidance Option is approximately \$125 million per mile. This is the unit cost to construct the guideway (which requires relocation of the BNSF Railway) and does not include stations.



Other Considerations Related to TBM

- i. Availability of the TBM at the time they are required to be on site as well as means of delivery for the several hundred ton TBM will need to be determined. Definition of dismantled TBM and maximum loads for transport need to be investigated. The route will require further investigation including capacity of local roads and bridges. Haul routes need to be defined and reviewed. Width and turning radius to access the tunnel site will need to be determined along with overhead clearance requirements during the delivery of tunneling machine and equipment.
- ii. The construction footprint for this tunneling operation will be very large and will control all of the activities in the construction zone. Our research estimates 1 -2 acres for each tunnel drive entrance. The area will require room for the TBM pit as well as the following:
 1. Construction Trailers
 2. Crew Parking/ Off Site Shuttle
 3. Loader/Trucks/Rail Cars – Tunnel Excavation Spoil Removal
 4. Excavation Conveyor Belt System
 5. Tunnel Precast Segmental Panels
 6. Generators
 7. Light Plants
 8. Utilities
 - a. Ventilation
 - b. Water Supply
 - c. Wastewater Removal
 - d. Power Supply
 9. Crane(s)
- iii. Excavated material may be required to be hauled at all hours of the day and night to maintain continuous tunneling operations.
- iv. Available power required to perform tunnel boring operations will need to be investigated.
- v. Tunneling operations generally require (2) ten hour shifts per day. Time restrictions will need to be investigated based on the possible need for continuous tunneling operations.
- vi. TBMs are expensive and most contractors want to have a very efficient operation to get the TBM in and off the site as soon as possible.
- vii. Our research shows that TBM stoppages and/or breakdowns are common and can have a major impact on schedule if the machine needs major repair or replacement. Availability of parts and access to the TBM creates problems.
- viii. The level of vibration and settlement will need to be researched and determined prior to starting construction operations. Vibration and settlement limits will need to be established. Monitoring systems may be required to record operations. This will require a specialty contractor that would likely need to be hired by the general contractor in most cases. Ground surface and local building monitoring would also be required.
- ix. The possibility of interested tunneling contractors is a real concern. The project may be reduced to one interested contractor. Special insurance riders, additional risk, and higher liability will be the result to the general contractors, as they will not be performing this scope of work.
- x. The TBM operation will or can certainly be critical path on this very large project with possible impact to both civil contracts and the systems contract. High liquidated damages will be required in the contract to motivate the contractor to maintain schedule milestones, substantial completion, and completion. This may be an important factor and concern of the contractor during bidding.



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- xi. The level of geotechnical investigation required to plan the borings greatly exceeds the currently available subsurface data and the potential contractors may request additional information be provided by the owner. This could delay the bidding process.
- xii. Because of the high cost to operate the TBM, construction claims related to cost and schedule could be higher.
- xiii. The cost contingency on the project would likely need to be increased due to the anticipated influence of TBM operations.
- xiv. Minnesota winter conditions could complicate the belt or slurry paste excavation removal.

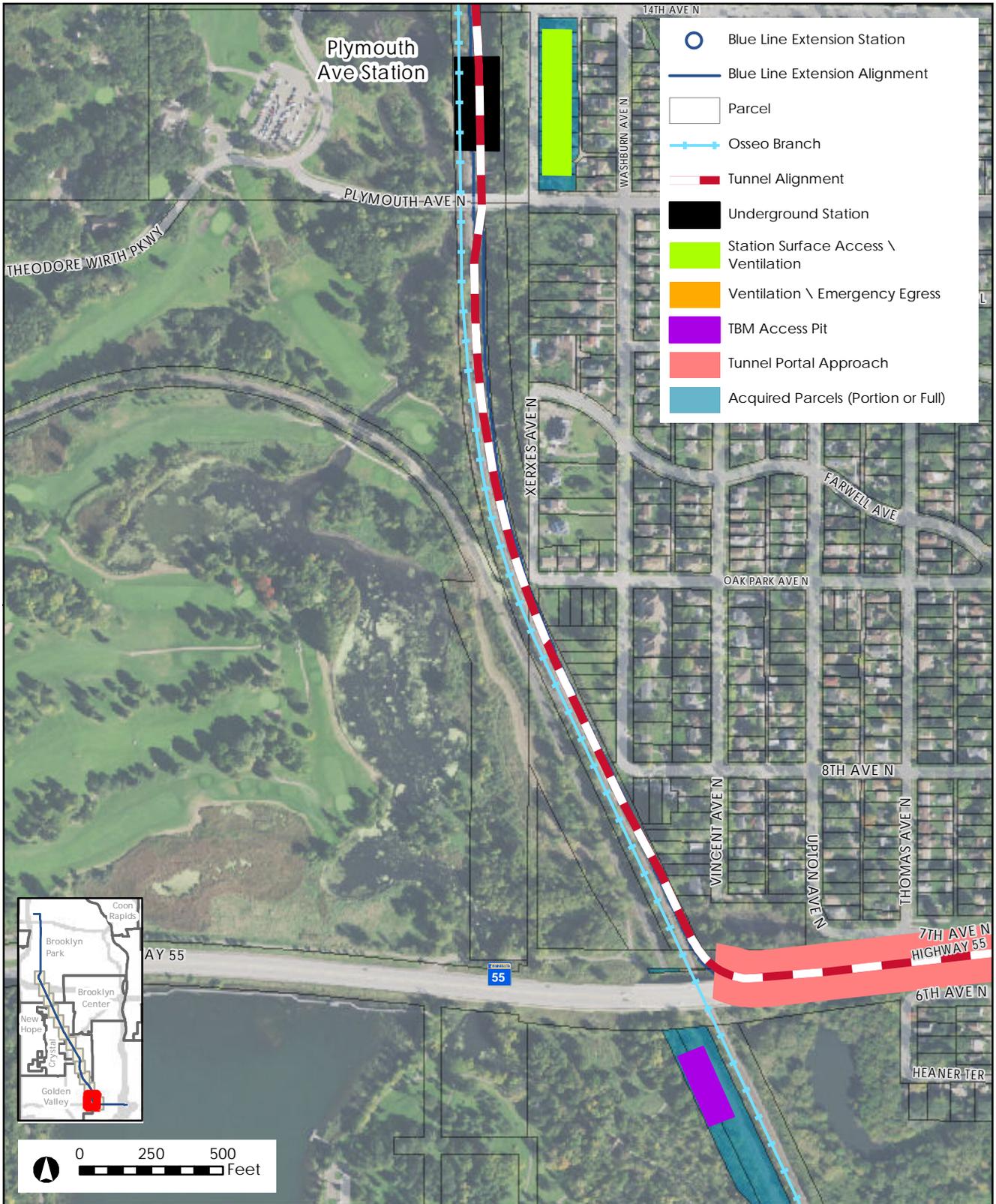
Deep Tunnel Map Book




 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 1 - Deep Tunnel Estimated Right-of-Way Impact
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 METRO Blue Line Extension





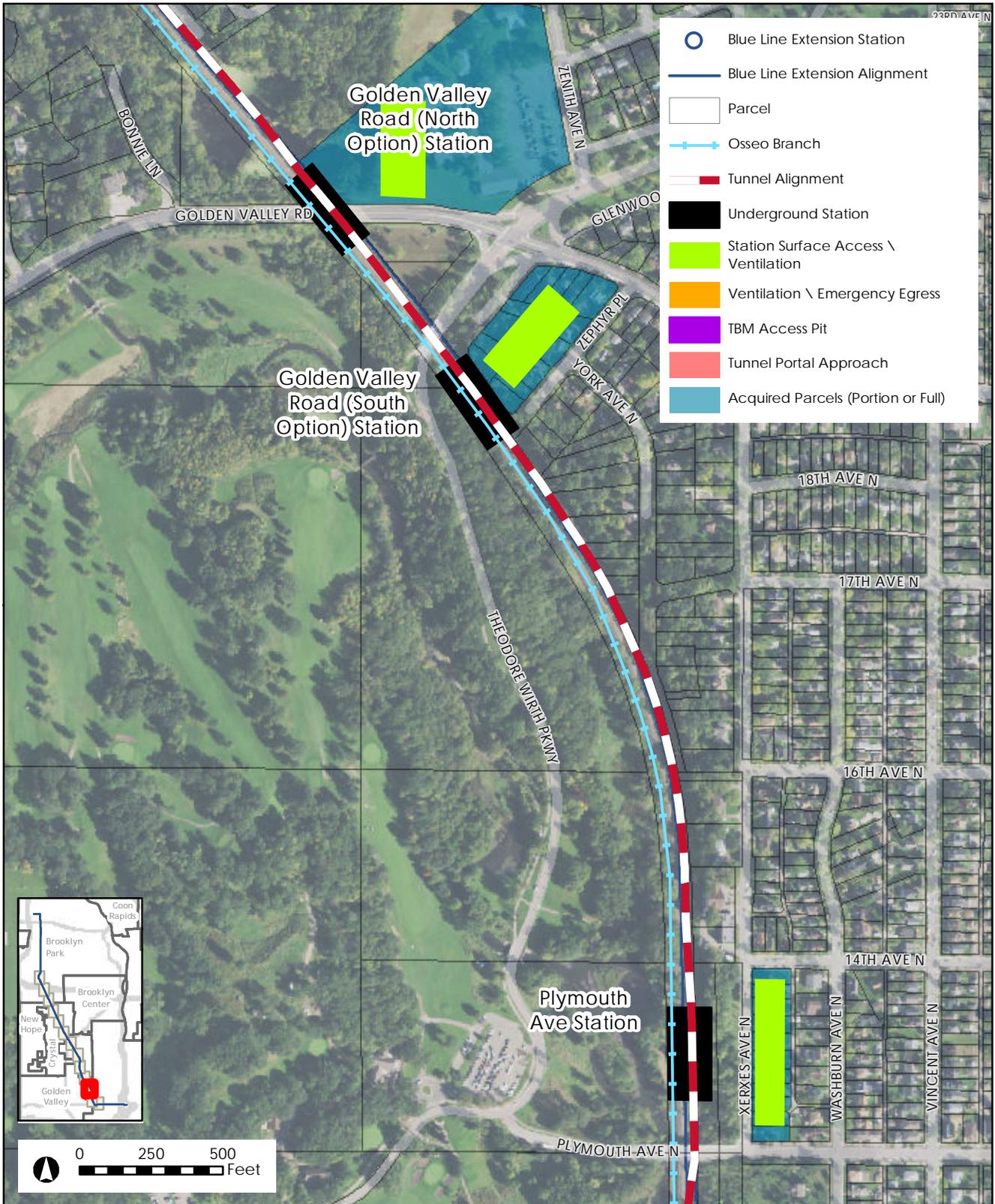

 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 1 - Deep Tunnel Estimated Right-of-Way Impact

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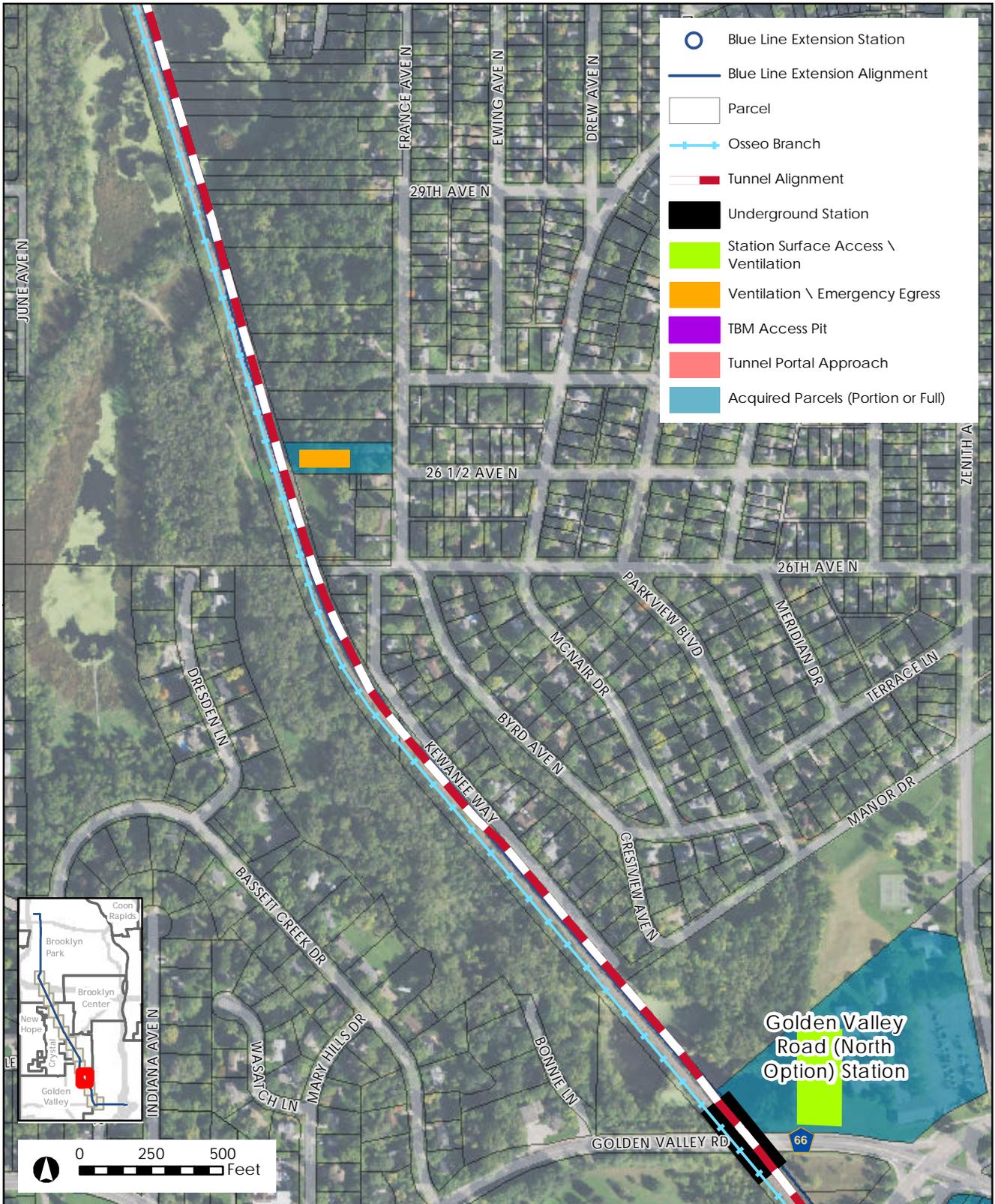

 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

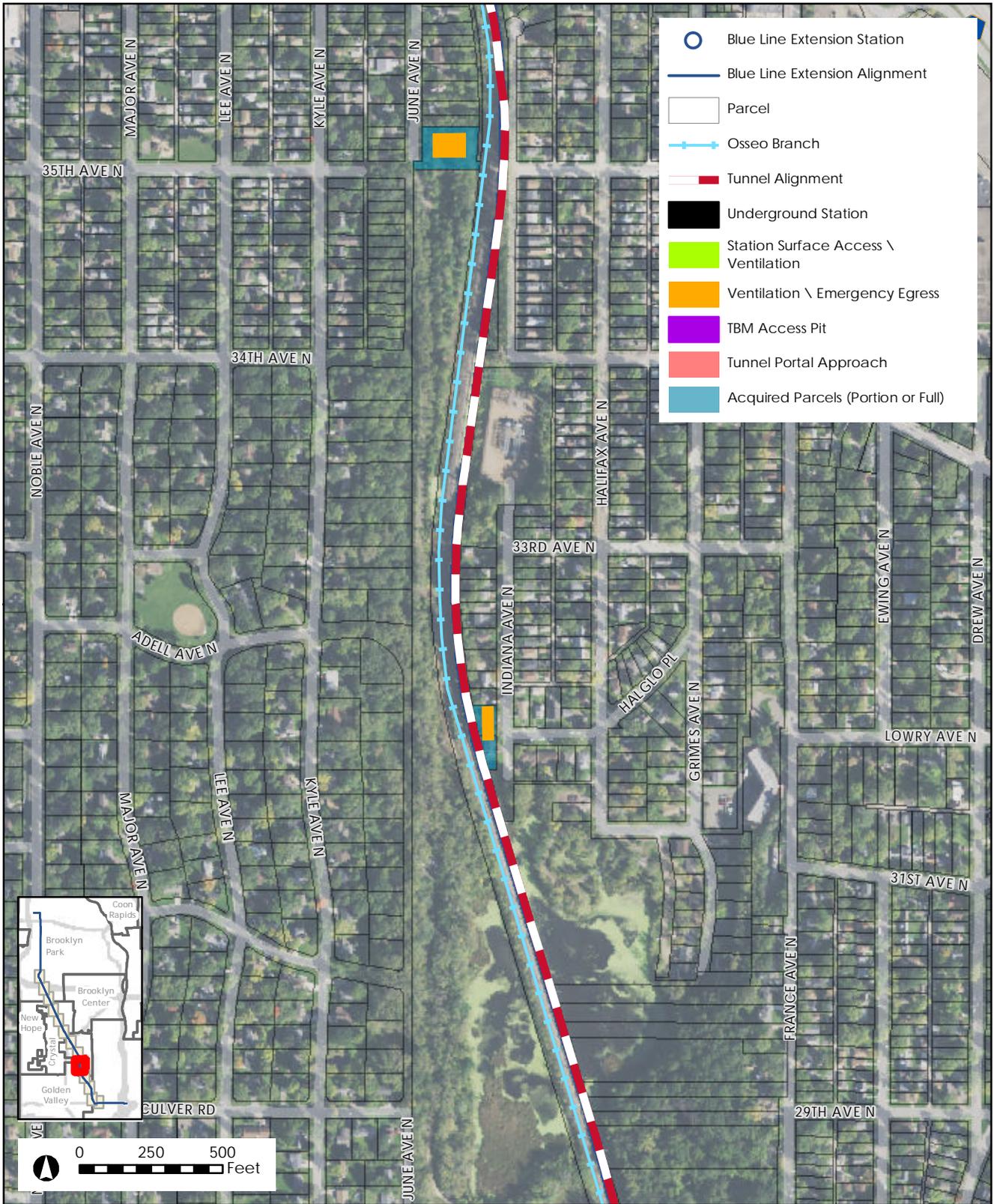
Figure 1 - Deep Tunnel Estimated Right-of-Way Impact

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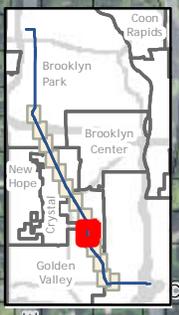
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METRO Blue Line Extension







-  Blue Line Extension Station
-  Blue Line Extension Alignment
-  Parcel
-  Osseo Branch
-  Tunnel Alignment
-  Underground Station
-  Station Surface Access \ Ventilation
-  Ventilation \ Emergency Egress
-  TBM Access Pit
-  Tunnel Portal Approach
-  Acquired Parcels (Portion or Full)



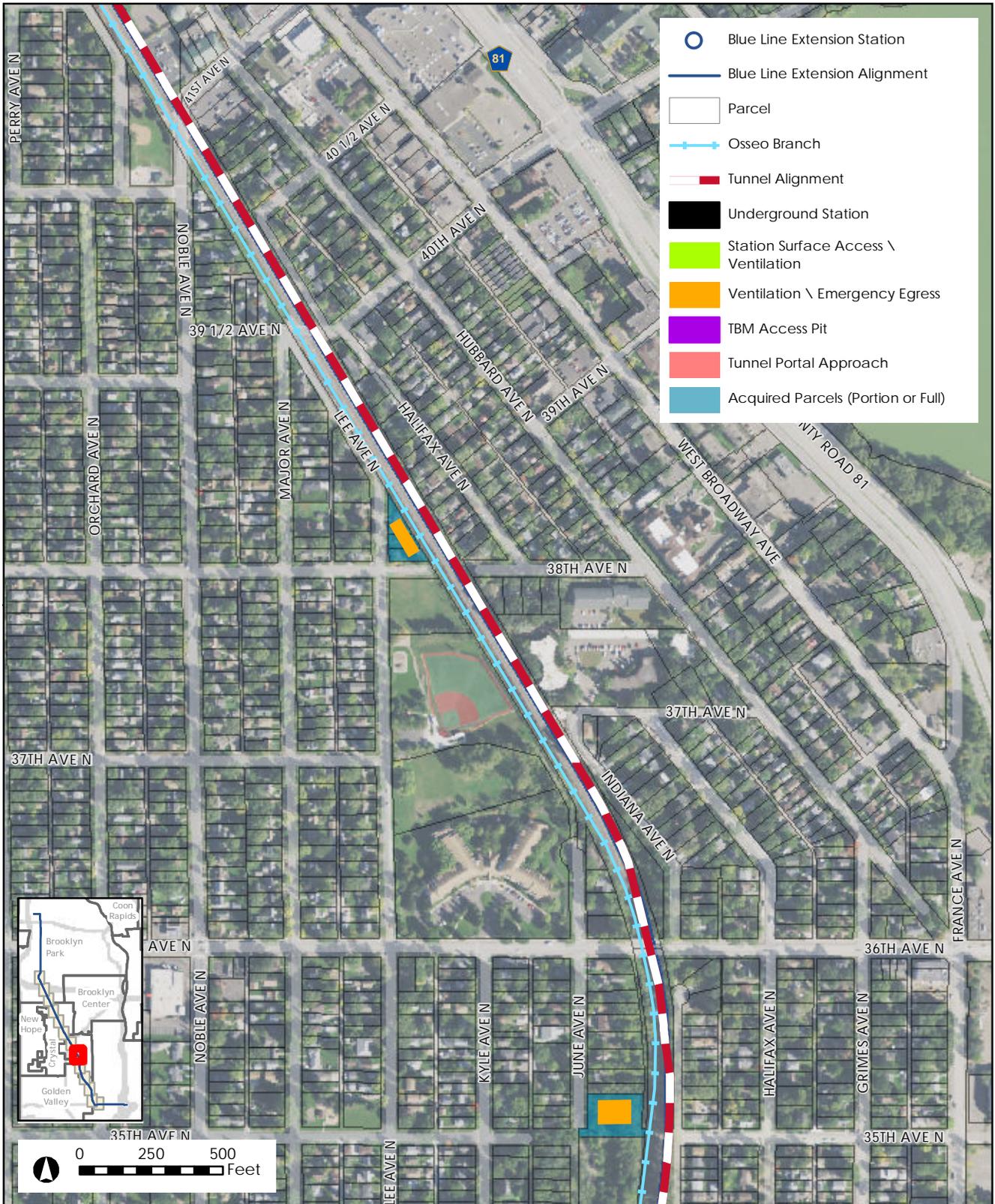

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 Source: Hennepin County, Metro Transit,

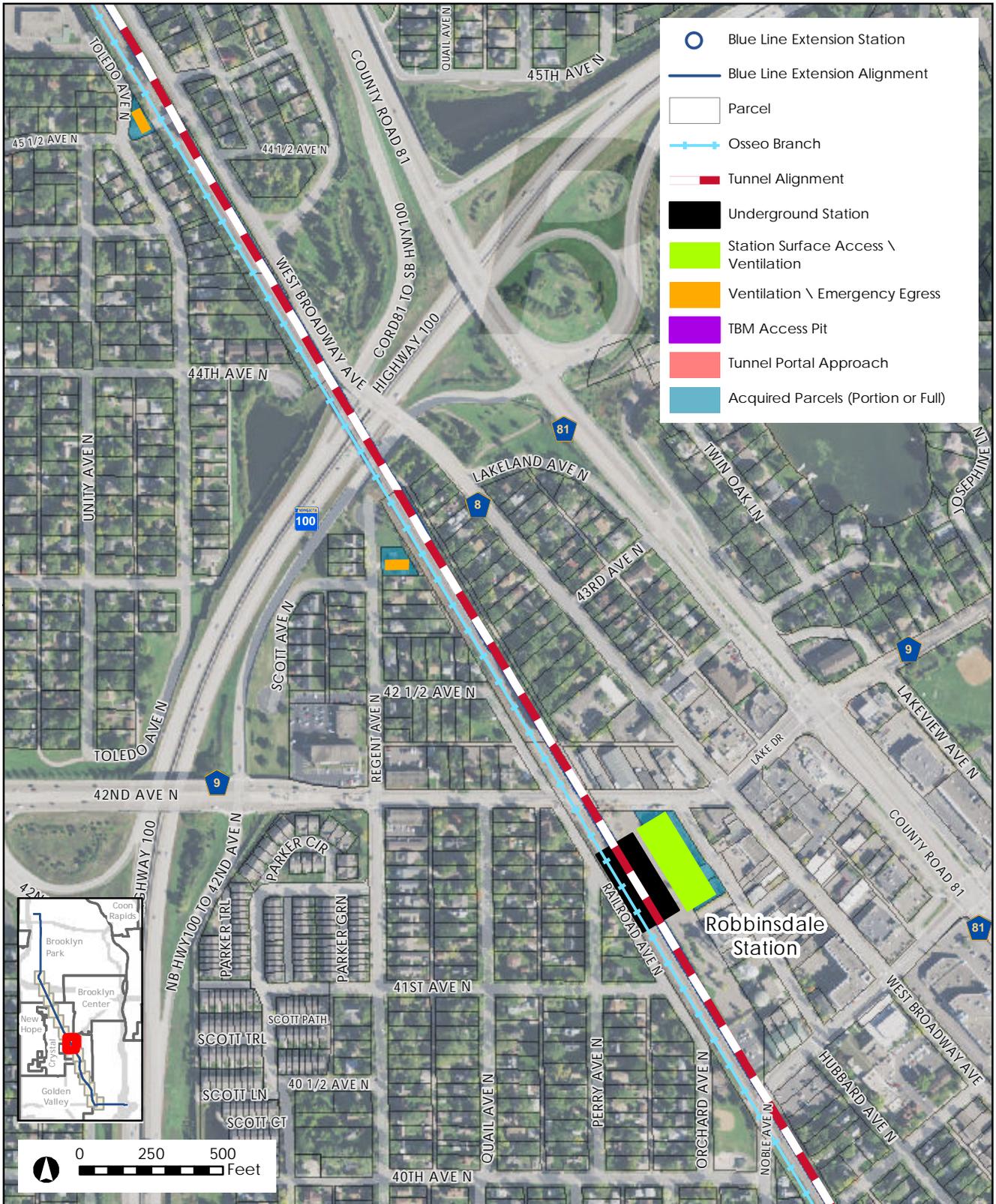
Figure 1 - Deep Tunnel Estimated Right-of-Way Impact

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METRO Blue Line Extension







- Blue Line Extension Station
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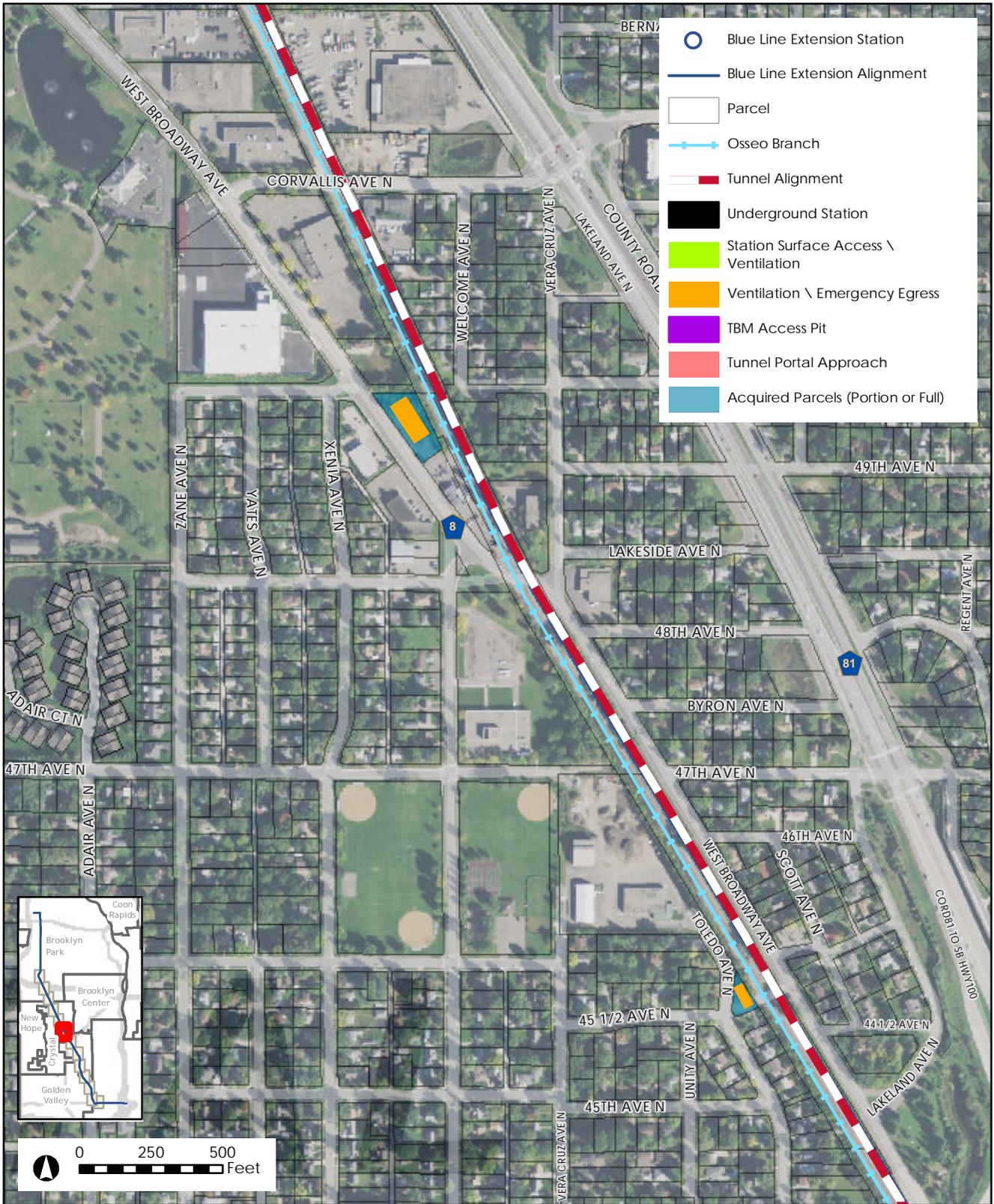


Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 1 - Deep Tunnel Estimated Right-of-Way Impact

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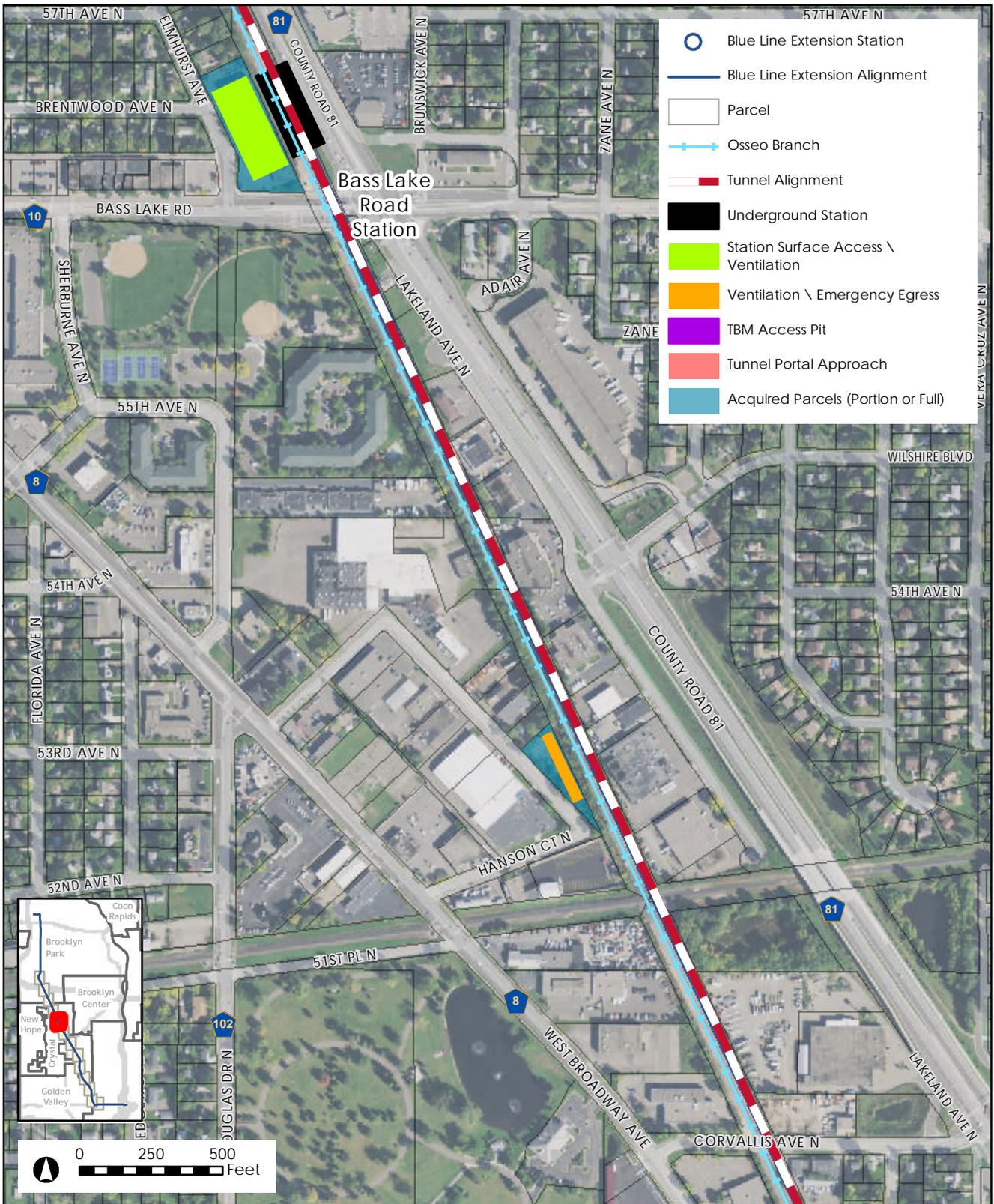





 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 1 - Deep Tunnel Estimated Right-of-Way Impact
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 METRO Blue Line Extension
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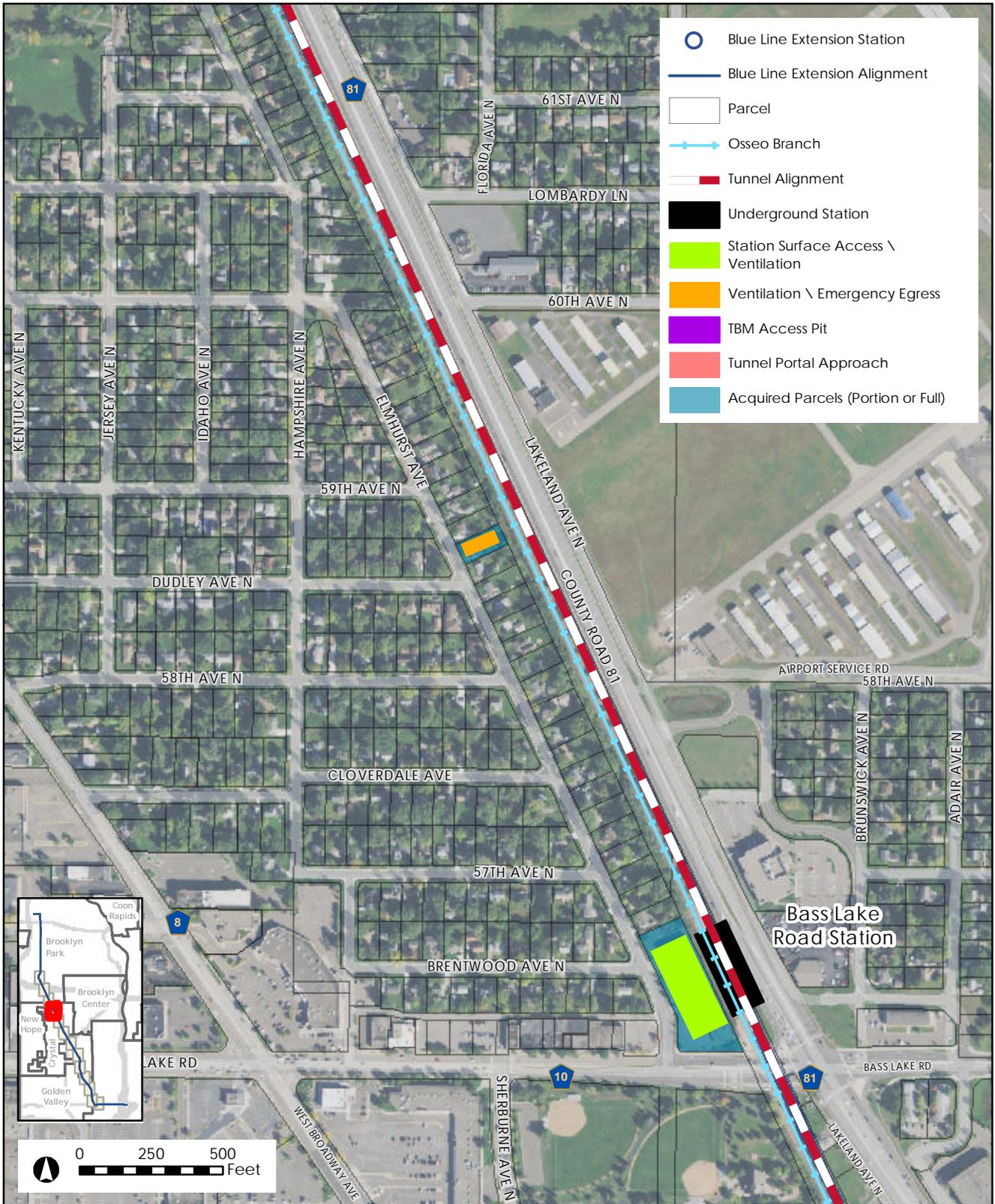

 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 1 - Deep Tunnel Estimated Right-of-Way Impact

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METRO Blue Line Extension





- Blue Line Extension Station
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- Underground Station
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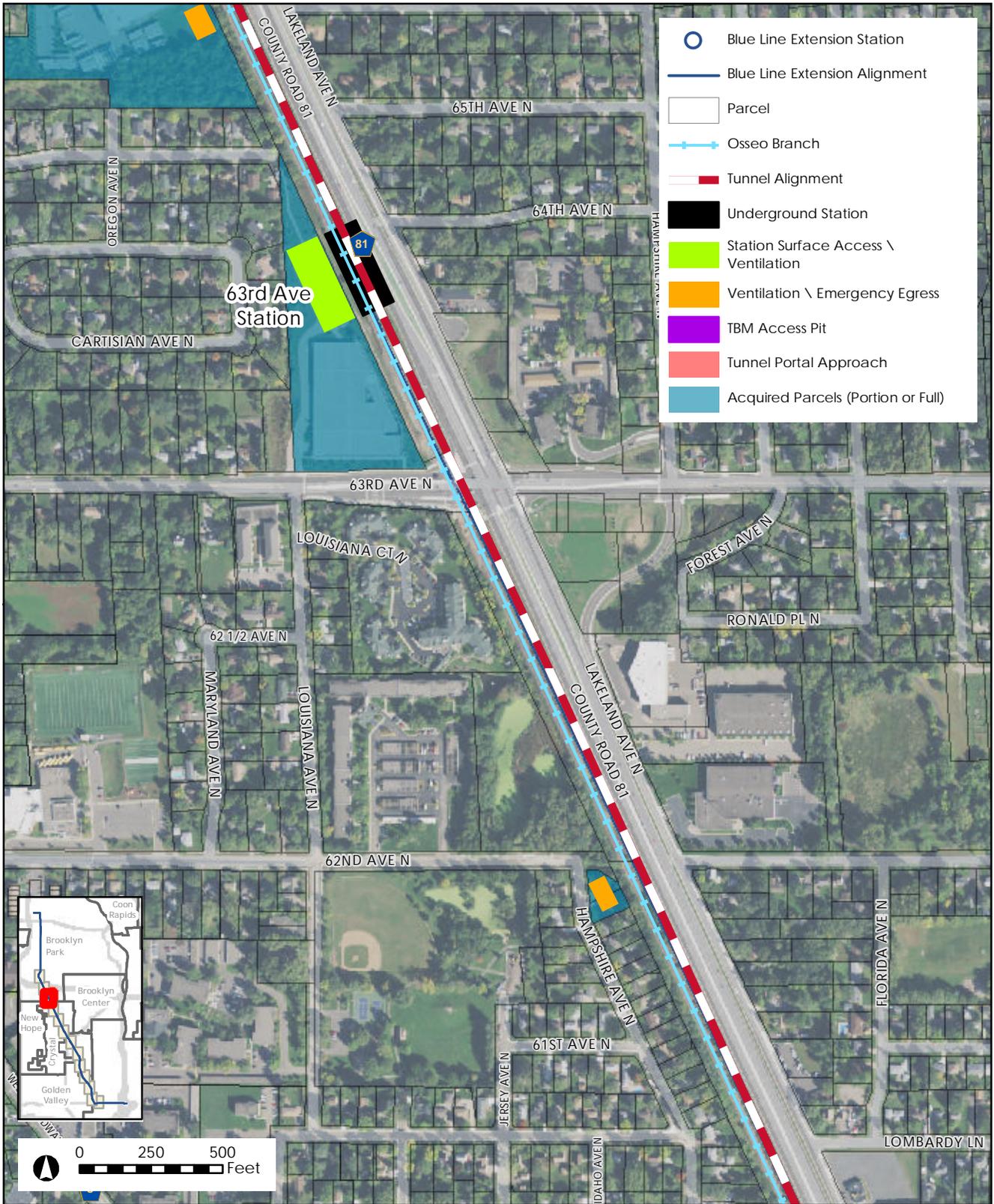



 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 1 - Deep Tunnel Estimated Right-of-Way Impact

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 METRO Blue Line Extension



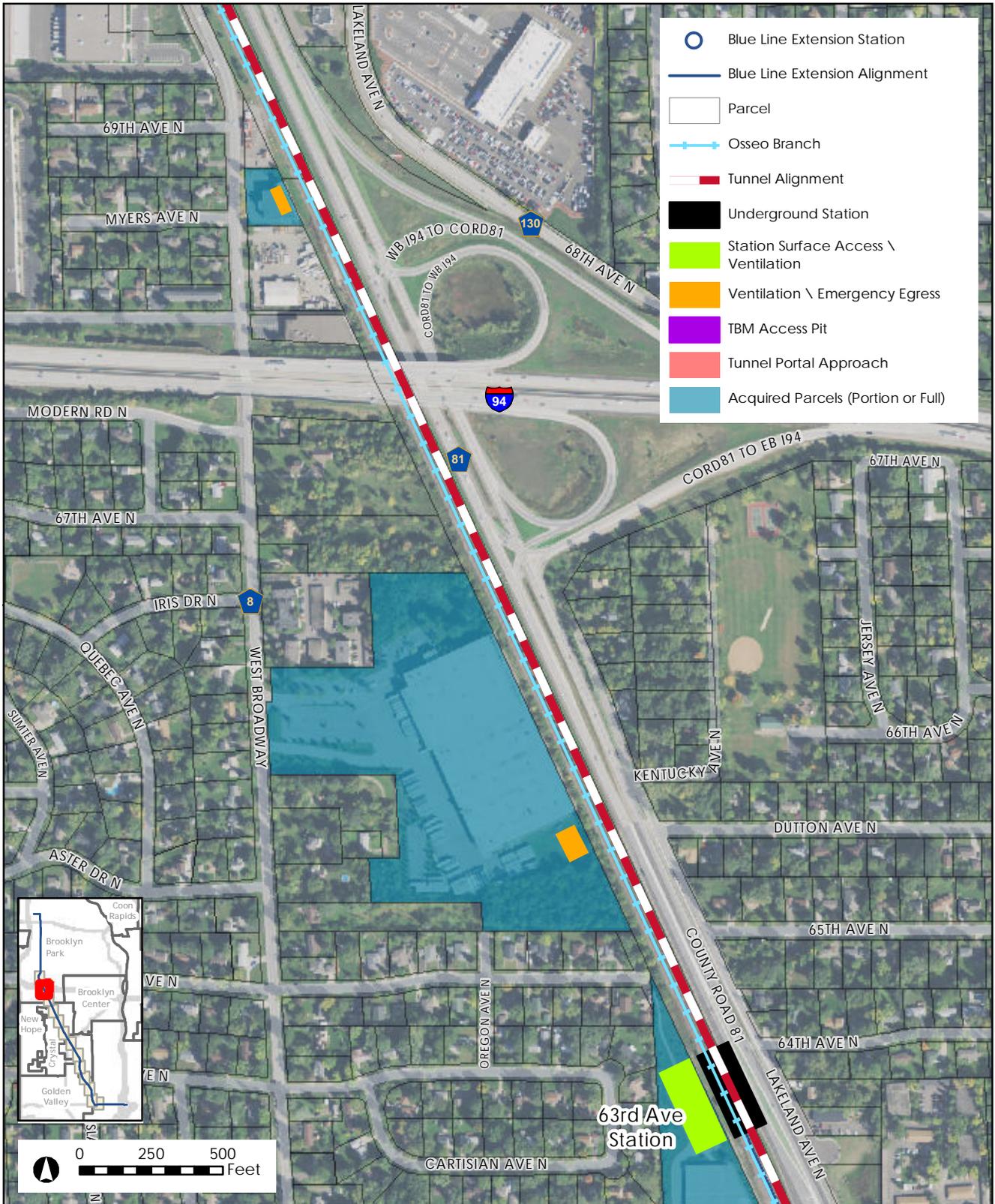


-  Blue Line Extension Station
-  Blue Line Extension Alignment
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-  Tunnel Portal Approach
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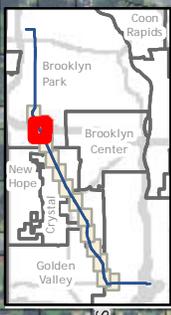

 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 1 - Deep Tunnel Estimated Right-of-Way Impact
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 METRO Blue Line Extension





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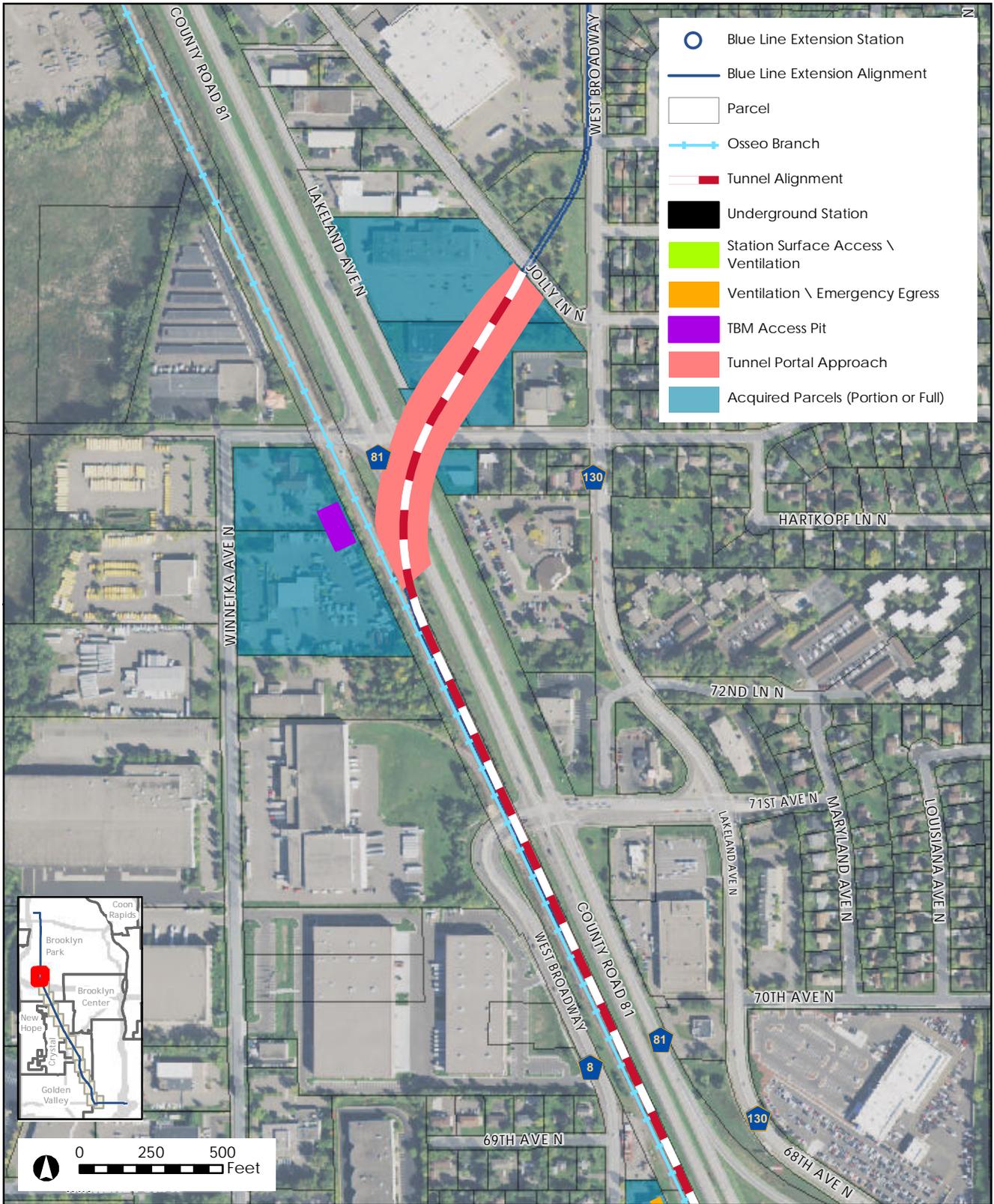



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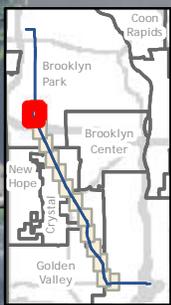
Figure 1 - Deep Tunnel Estimated Right-of-Way Impact

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Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

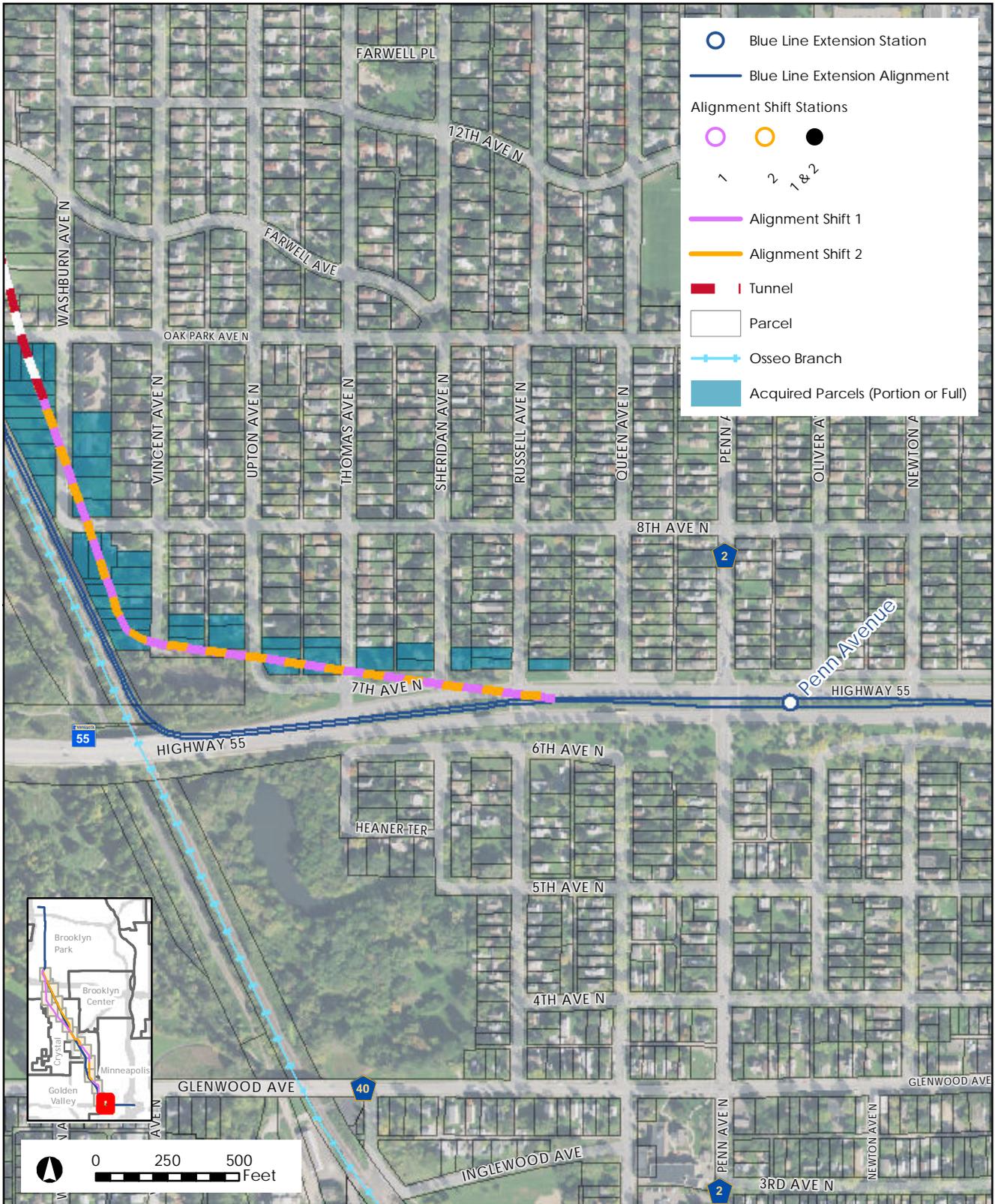
Figure 1 - Deep Tunnel Estimated Right-of-Way Impact

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 METRO Blue Line Extension



Alignment Shift Map Book




 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 2 - Alignment Shift Estimated Right-of-Way Impact
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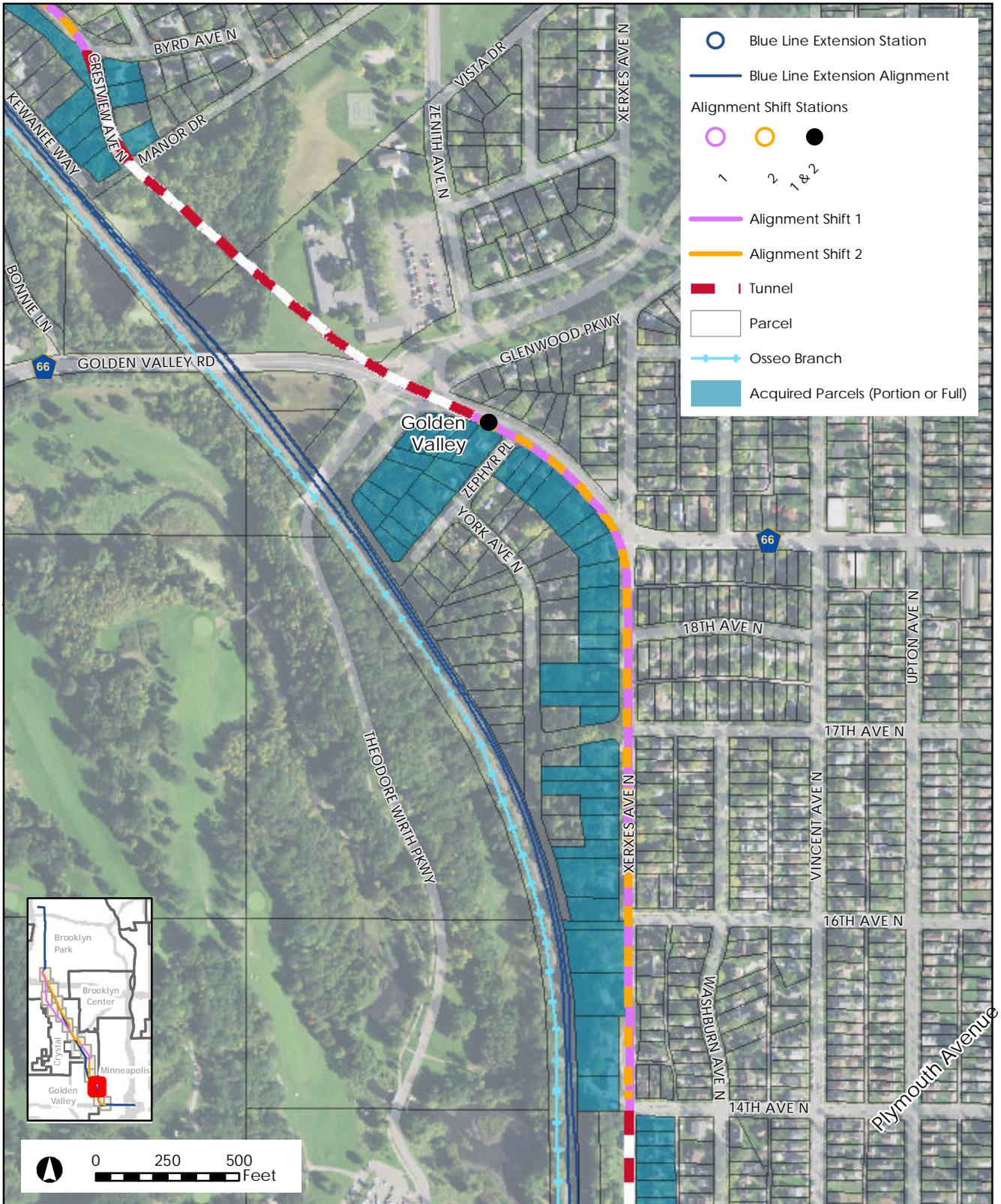





 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 2 - Alignment Shift Estimated Right-of-Way Impact
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 Page 2
 METRO Blue Line Extension

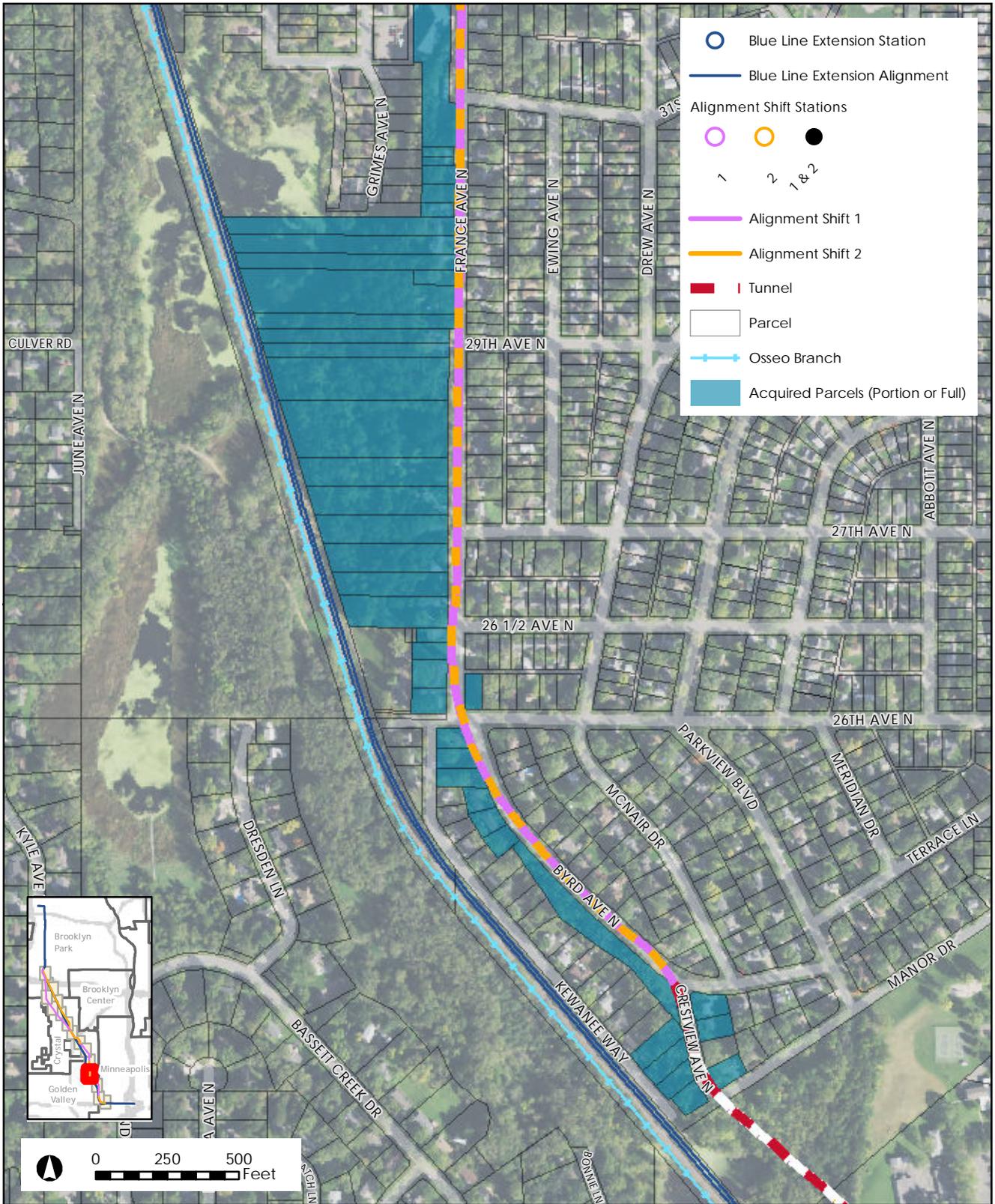





 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 2 - Alignment Shift Estimated Right-of-Way Impact
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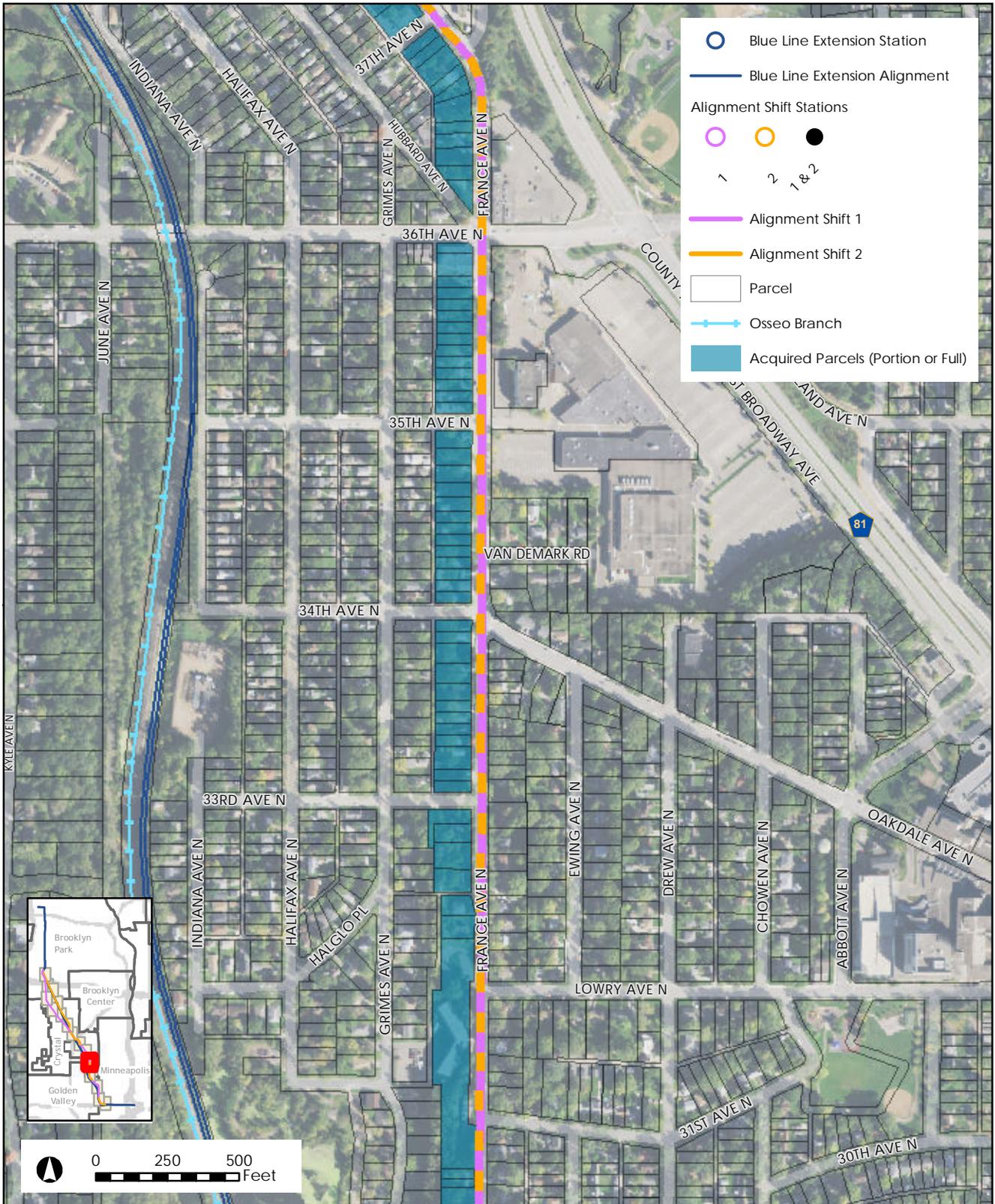





 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 2 - Alignment Shift Estimated Right-of-Way Impact
DRAFT METRO Blue Line Extension
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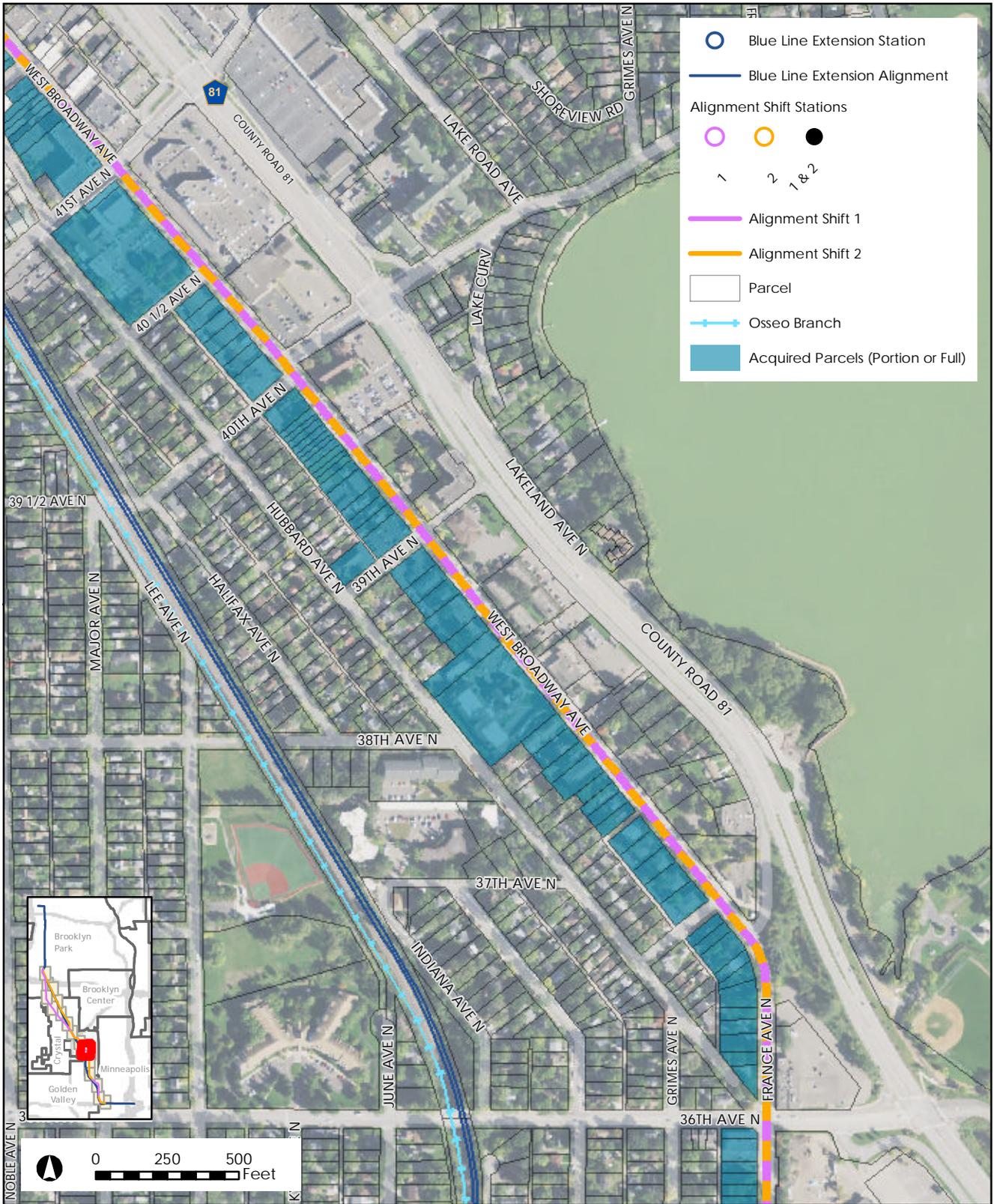


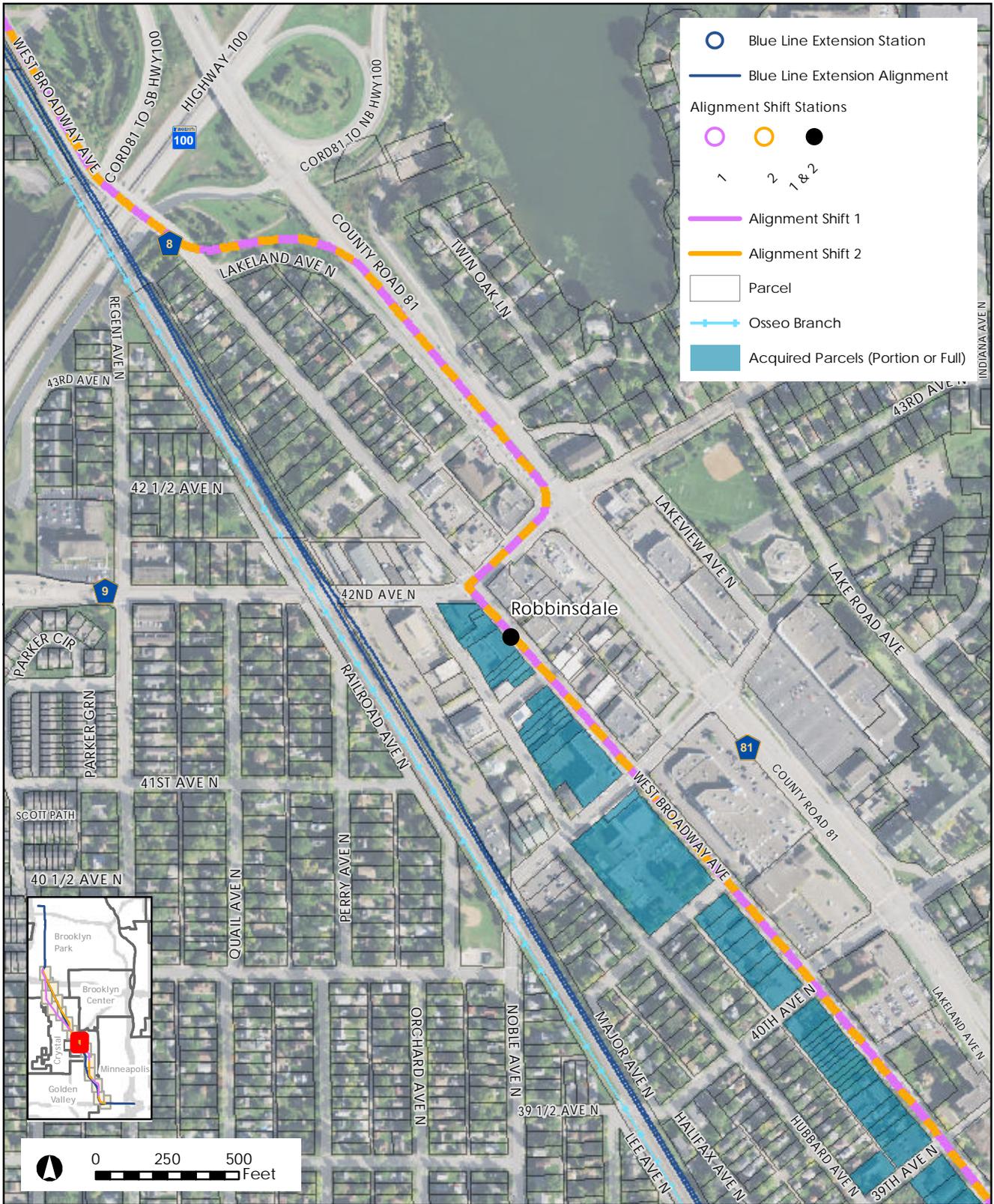



 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 2 - Alignment Shift Estimated Right-of-Way Impact
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 METRO Blue Line Extension



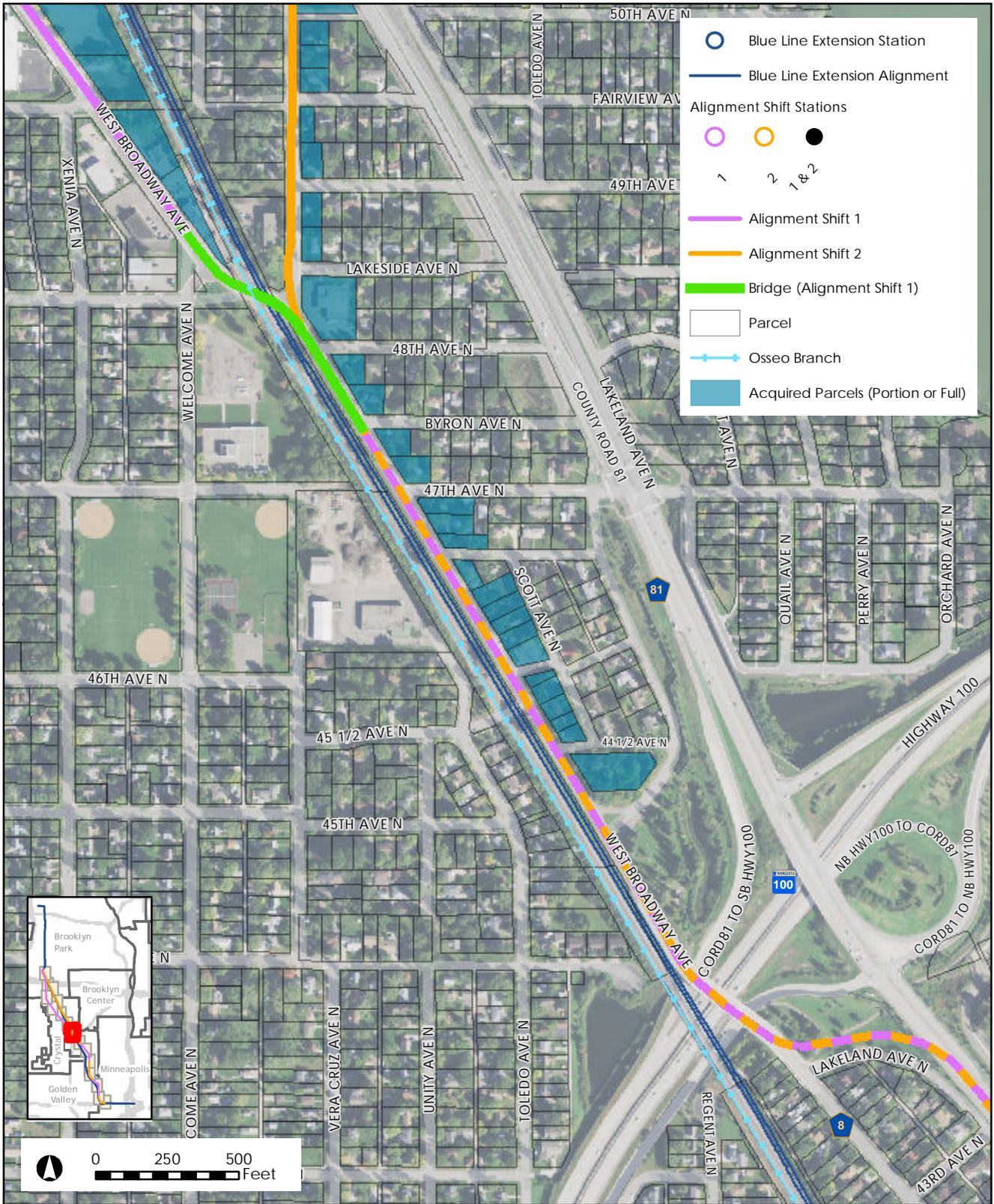


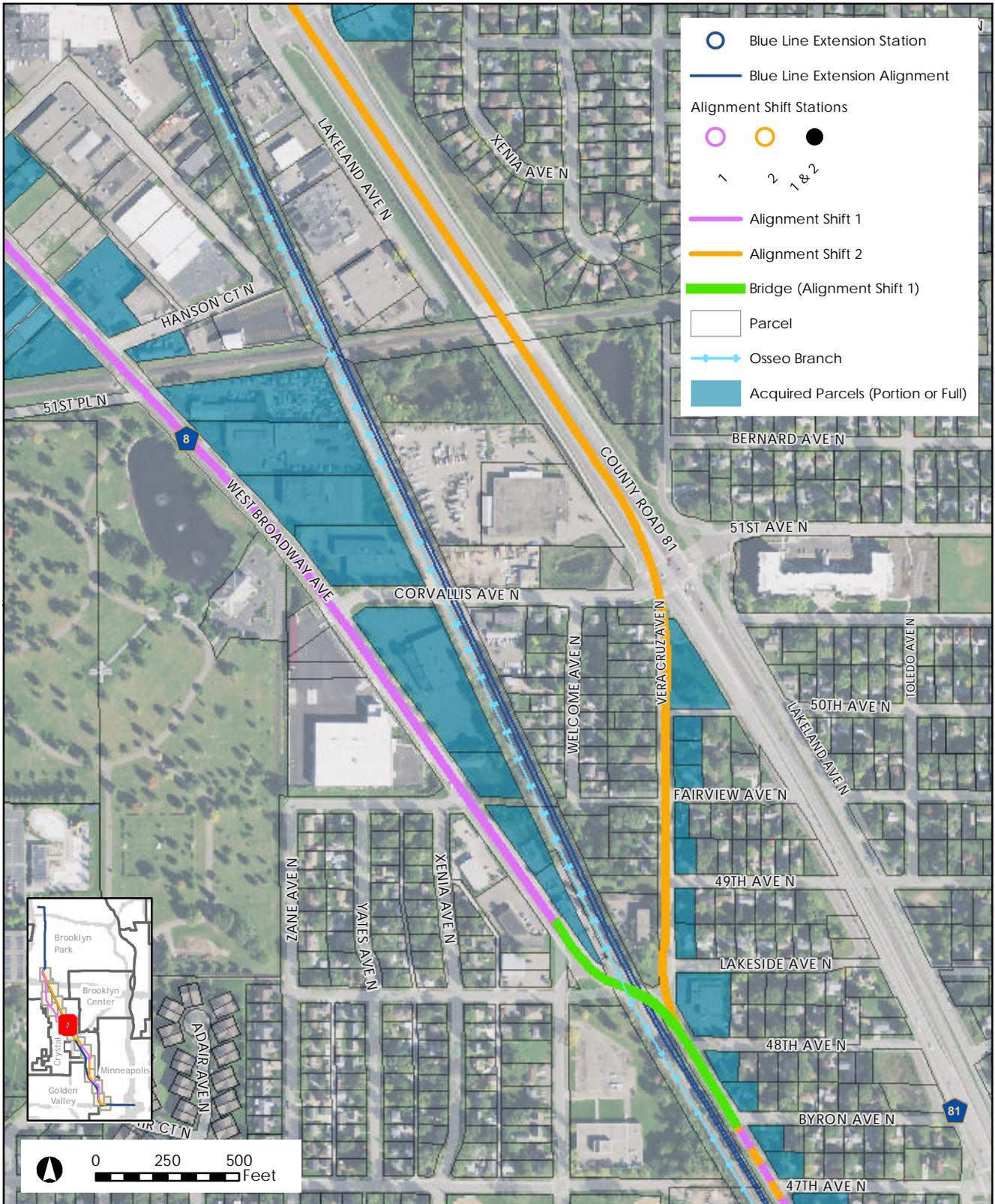


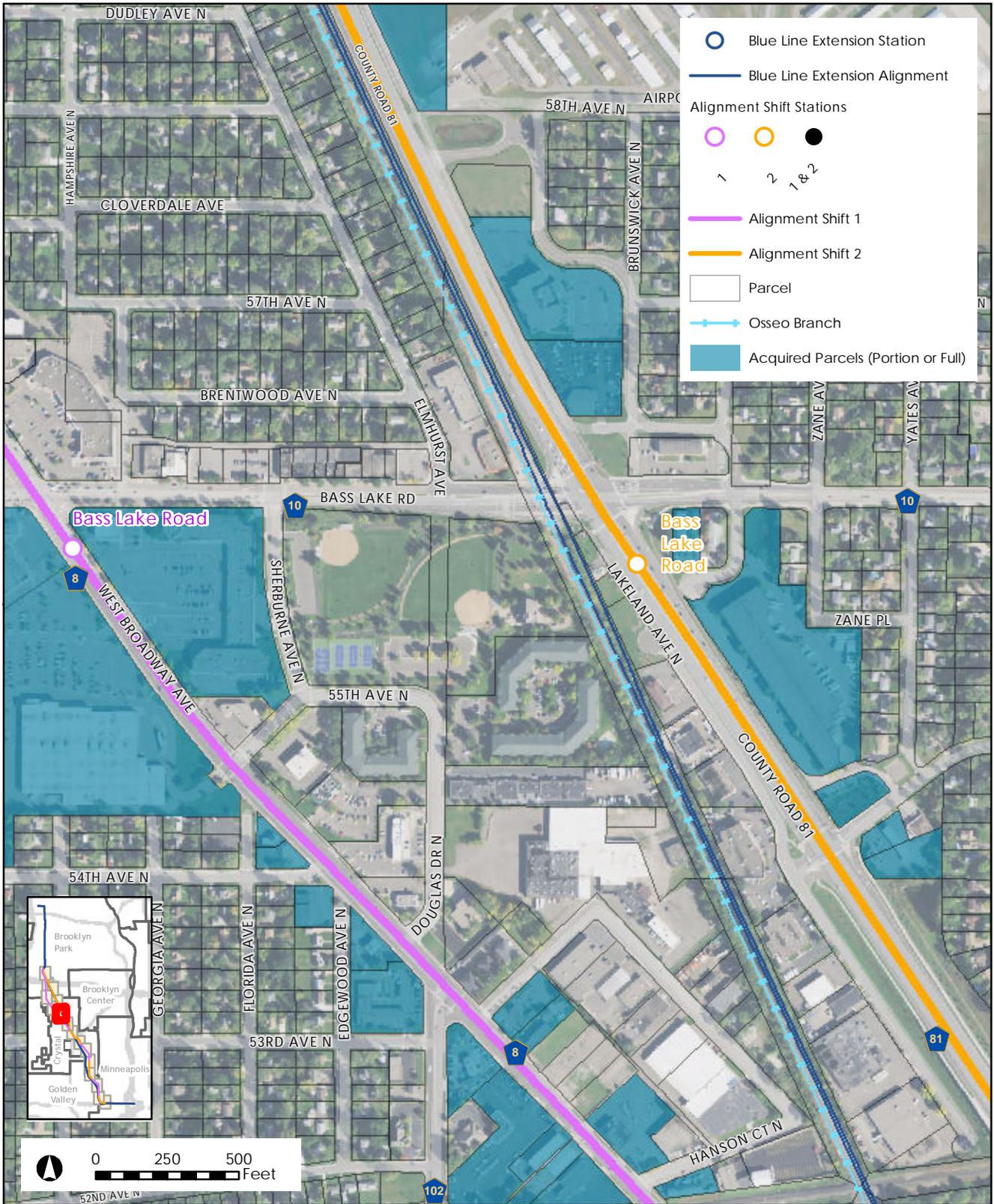

 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 2 - Alignment Shift Estimated Right-of-Way Impact
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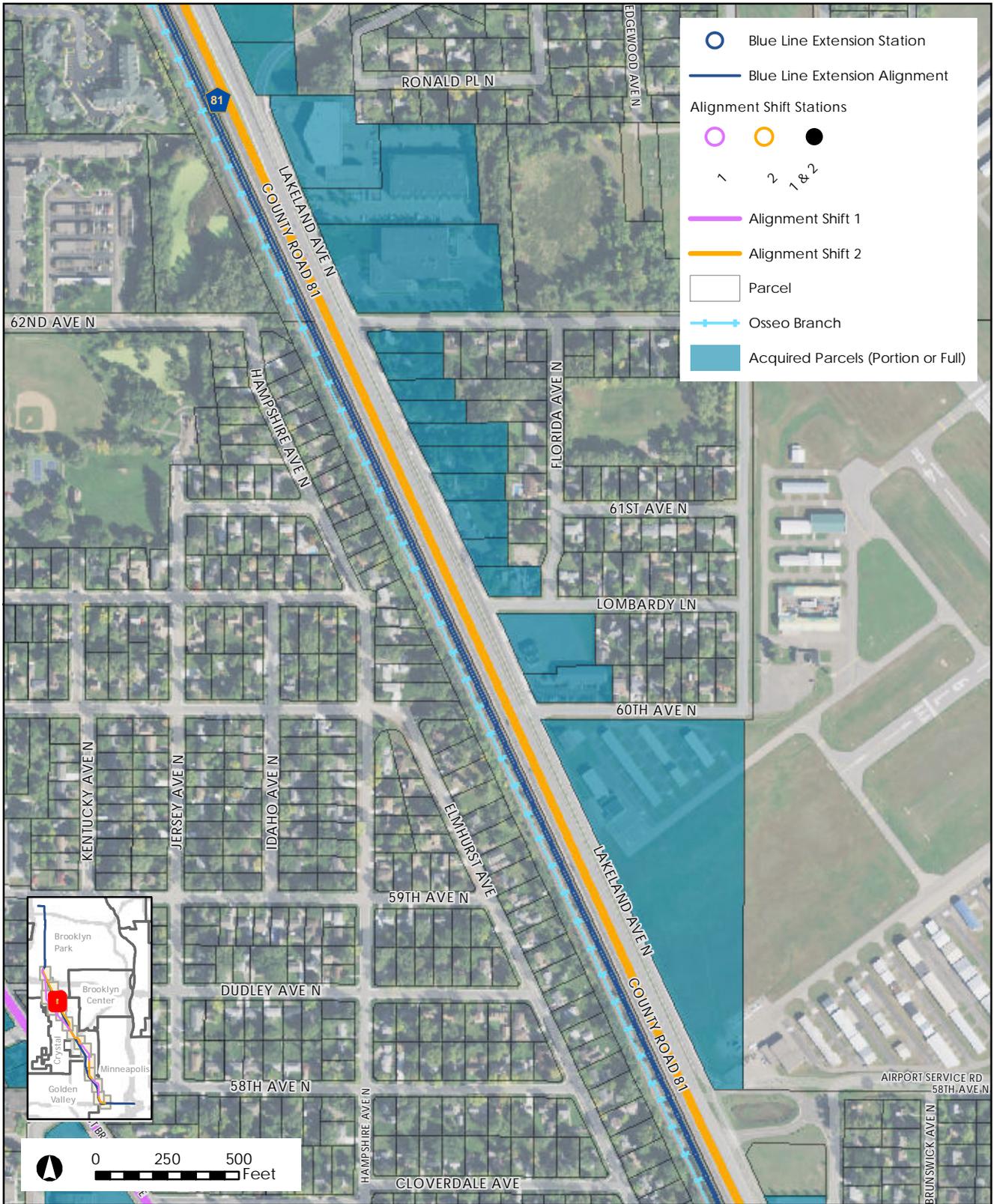





 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 2 - Alignment Shift Estimated Right-of-Way Impact
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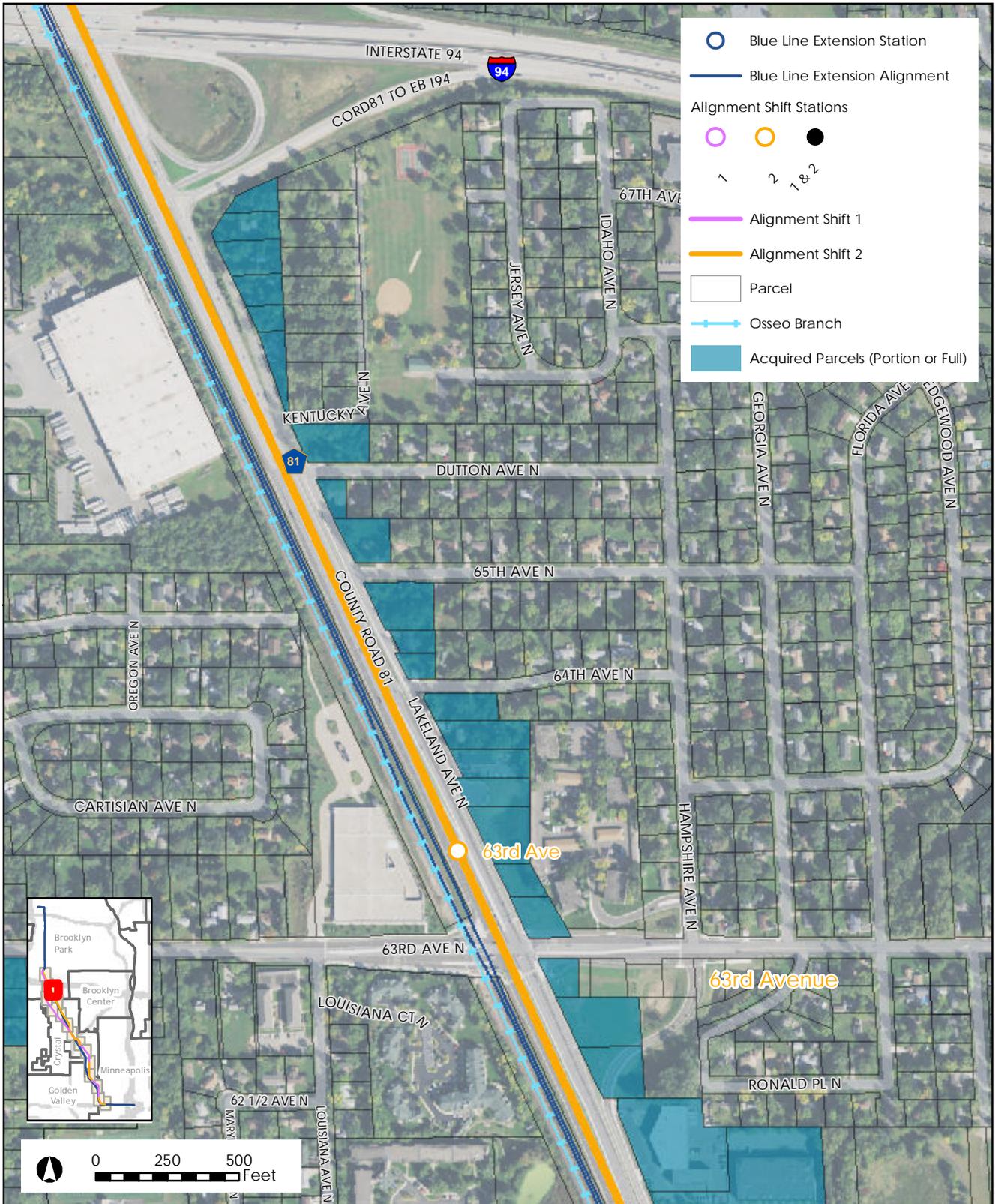





 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 2 - Alignment Shift Estimated Right-of-Way Impact
DRAFT METRO Blue Line Extension
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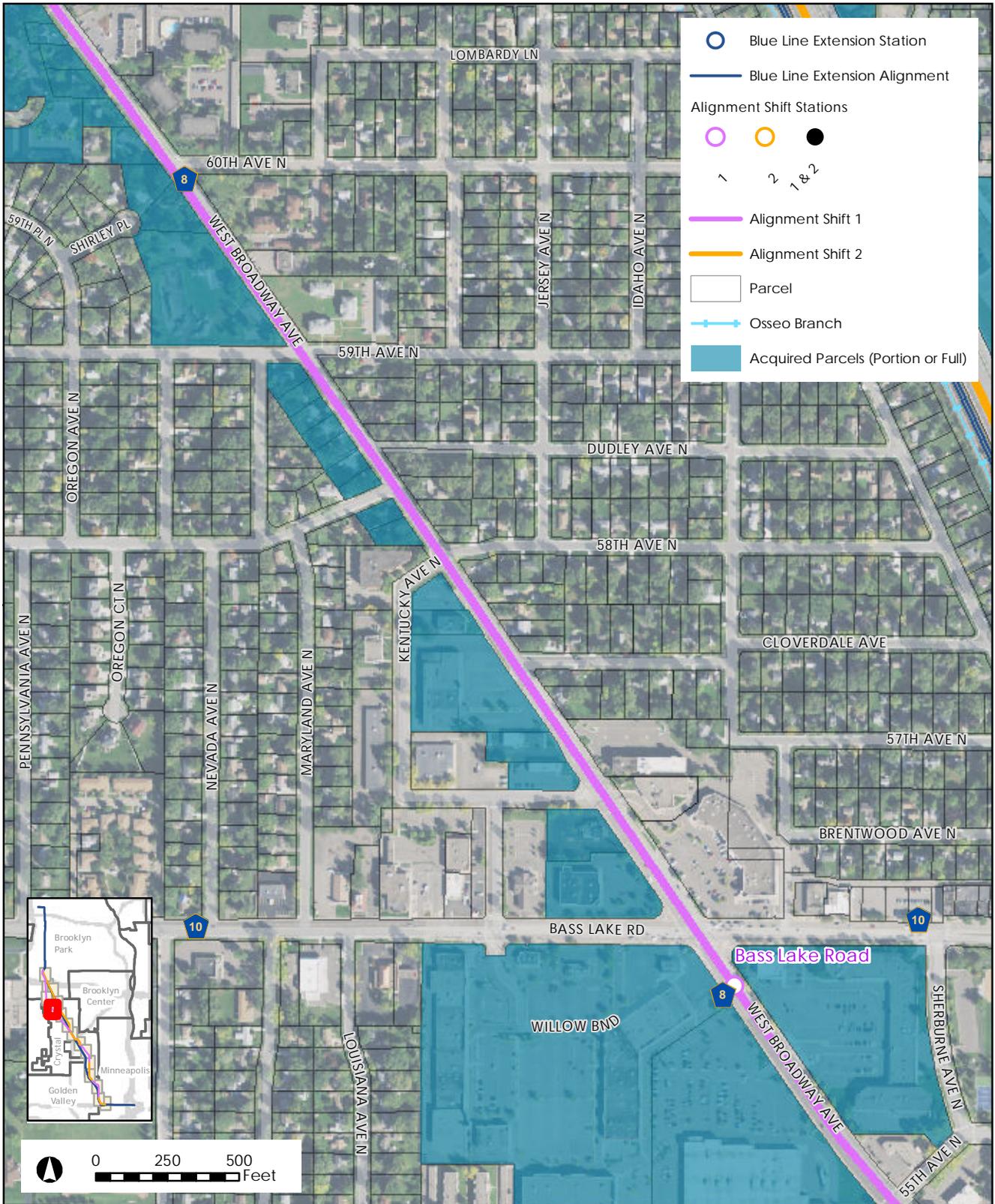





 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 2 - Alignment Shift Estimated Right-of-Way Impact
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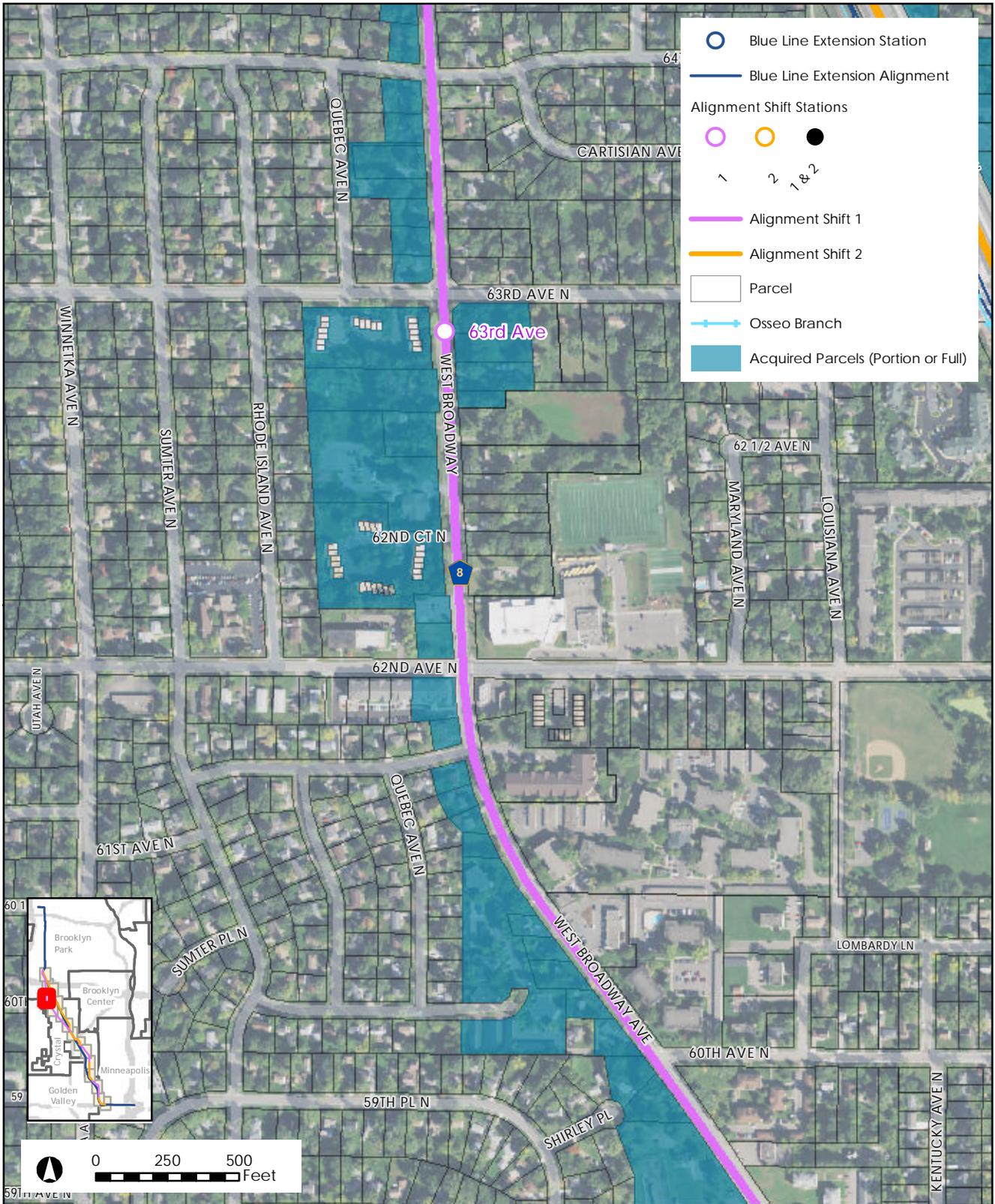





 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 2 - Alignment Shift Estimated Right-of-Way Impact
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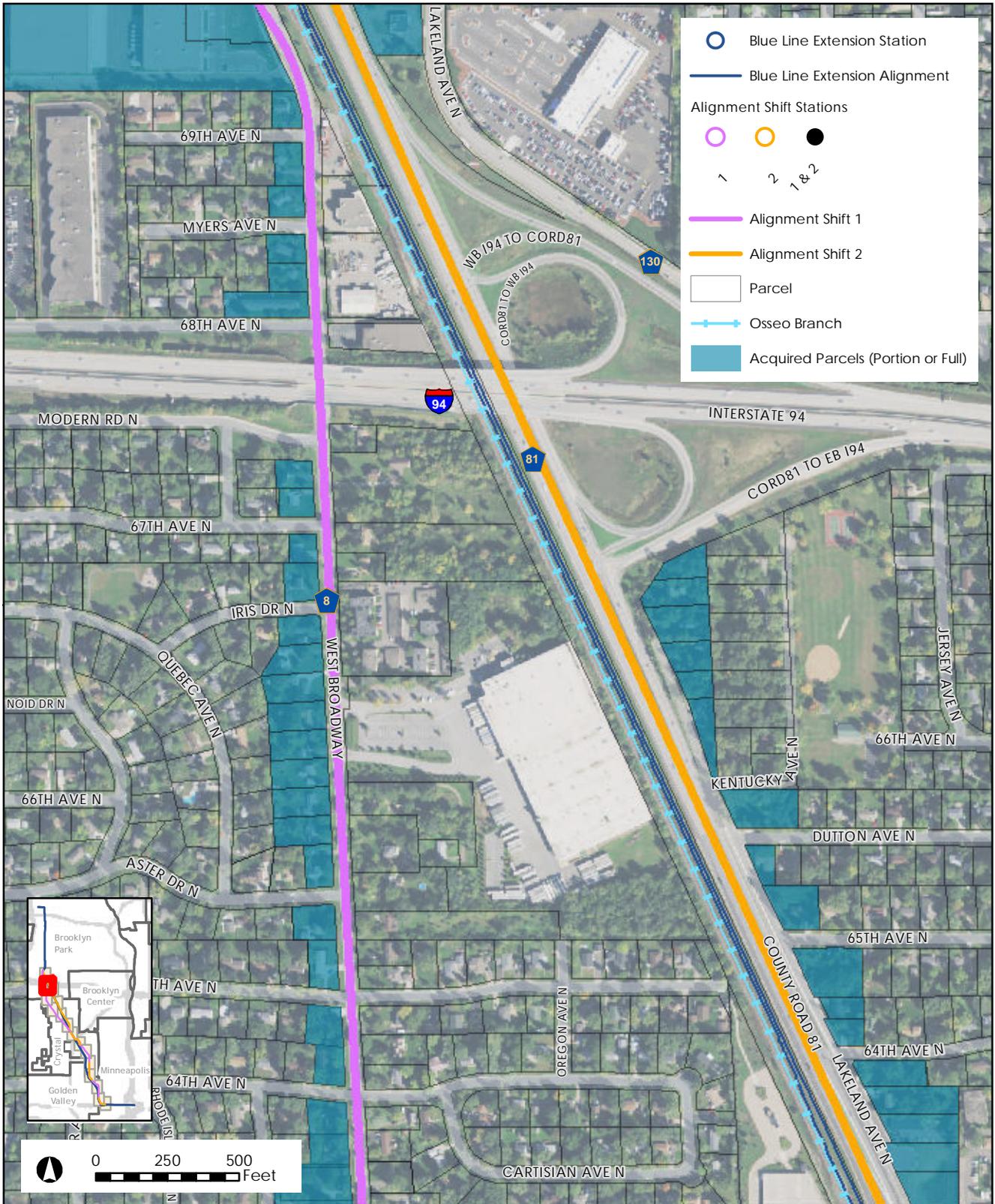





 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 2 - Alignment Shift Estimated Right-of-Way Impact
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 METRO Blue Line Extension






 Projection: Hennepin County NAD83 FT
 Source: Hennepin County, Metro Transit,

Figure 2 - Alignment Shift Estimated Right-of-Way Impact
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