

Project Location Map



Harlem Ave @ W 63rd St

Harlem Ave @ W 65th St

0 350 700 1,400
Feet



Phase I Process



**PUBLIC
MEETINGS**



**COMMUNITY ADVISORY GROUP
(CAG) MEETINGS**

Project Development Process

PLANNING STAGE

anticipated completion 2020

**Preliminary
Engineering &
Environmental
Studies**

DESIGN STAGE

24-36 months

**Contract Plan
Preparation &
Land Acquisition**

Funding identified

CONSTRUCTION STAGE

24-36 months

**Project
Construction**

Funding identified

NOTE: This improvement is included in the Department's FY 2020-2025 Proposed Highway Improvement Program. Current engineering efforts are targeted to enable a contract letting in the later years of the multi-year program contingent upon plan readiness, land acquisition, and funding availability through future annual legislative appropriations.

Purpose and Need Statement

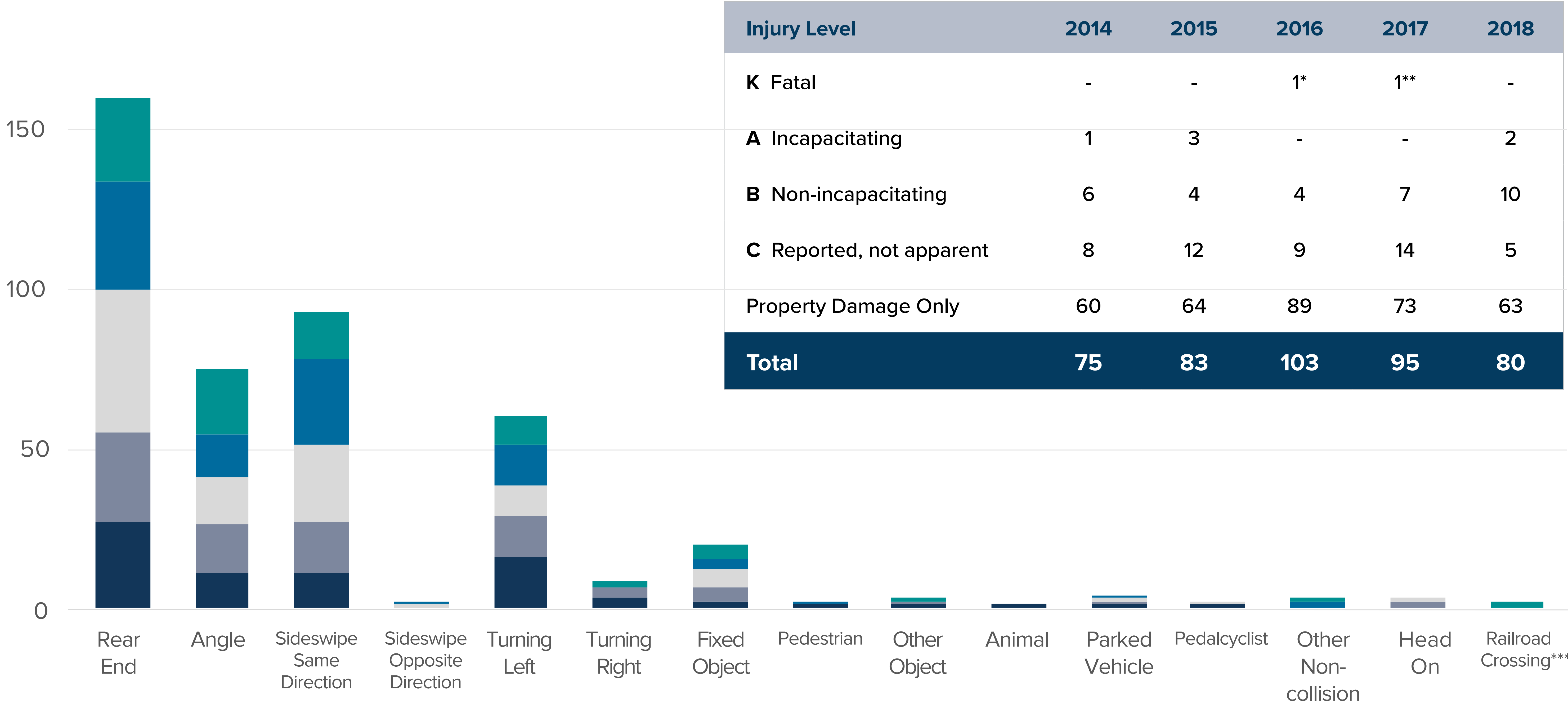
The purpose of the project is to enhance safety, increase mobility, and improve multimodal connectivity.

The study team evaluated the following existing conditions and other data to determine the need for improvement:

- Vehicular & Pedestrian Crashes
- Emergency Services
- Rail and Highway Conflict
- Traffic Analysis
- Intermodal Transportation
- Public Transportation
- Non-Motorized Modes

Crash Study Results

2014–2018



*Crash occurred on Harlem Ave. between 63rd St. and 65th St. and involved an alcohol-impaired driver.

**Crash occurred at the intersection of 63rd St. and Harlem Ave. and involved an alcohol-impaired driver.

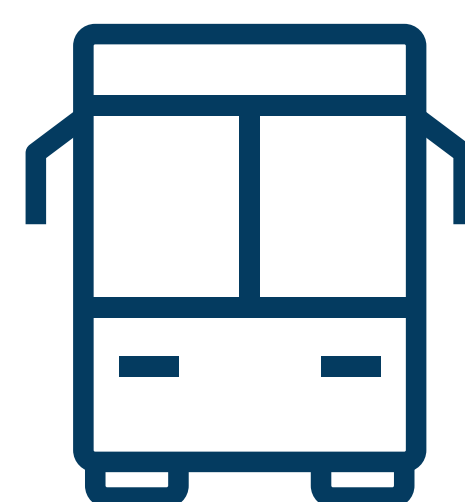
***One crash involved a vehicle and train and resulted in 2 injuries, and the other involved a pedestrian and train and resulted in 1 injury.

Multimodal Connectivity



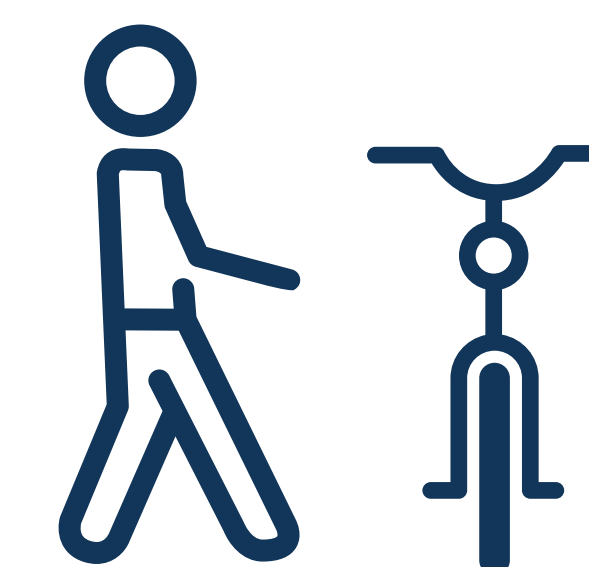
Intermodal Transportation

The IL 43 corridor and east-west movements are critical to manufacturing and freight along I-55.



Public Transportation

CTA and PACE operate bus routes that are impacted when trains occupy the crossings.



Non-Motorized Modes

It is difficult to bike or walk along Harlem Ave. due to lack of bike separation and narrow sidewalks.*

**According to a survey conducted by the Village of Summit and the Active Transportation Alliance*

5% Locations *2012, 2015, 2017*

**Locations along state highways
that are identified as 5%
locations are within the top 5%
of locations statewide with the
greatest potential for safety
improvement, based on crash
severity and frequency.**

**2013, 2014 & 2016 5% reports were not generated*



Screening Process

ALTERNATIVES CONSIDERED

~~Group 1~~ Minor Build

~~Group 2~~ Belt Railway Co. Railroad—
Elevated / Depressed

~~Group 3~~ 63rd St. Elevated (Overpass)

~~Group 4~~ 63rd St. Depressed (Underpass)

Group 5 65th St. Elevated (Overpass)

Group 6 65th St. Depressed (Underpass)

~~Group 7~~ Combinations for 63rd St.
and 65th St. Elevated/Depressed

1

Determine

if alternatives meet the Purpose and Need

Group 1: Minor Build

Eliminated

2

Conduct

stakeholder outreach and analyze
Belt Railway Co. Railroad impacts

Group 2: Belt Railway Co. Railroad Elevated/Depressed

Eliminated

3

Evaluate

remaining alternatives against criteria

Groups 3-6 evaluated

Criteria Screening Matrix

Magnitude Legend																		
Large impact or magnitude		Moderate impact or magnitude		Small/no impact or magnitude		GROUP 3 63 rd St. Elevated				GROUP 4 63 rd St. Depressed			GROUP 5 65 th St. Elevated			GROUP 6 65 th St. Depressed		
<div>CRITERIA</div> <div>All impacts are based on preliminary analysis. Alternatives will be further studied to limit and mitigate impacts.</div> <div>Preliminary Residential Displacements Parcels</div> <div>Includes parcels where building is impacted by improvement or access is impacted by retaining wall.</div> <div>Preliminary Business Displacements Parcels</div> <div>Includes parcels where building is impacted by improvement or access is impacted by retaining wall.</div> <div>Impact to Nottingham Park</div> <div>Section 4(f) Resources</div> <div>Impacts on Community Cohesion</div> <div>Adverse impact to community cohesion such as fragmenting neighborhoods with a physical disruption.</div> <div>Multimodal Ease</div> <div>Does not support multimodal transportation.</div> <div>Community Support</div> <div>Feedback from prior community meetings.</div> <div>Level of Service</div> <div>Transportation level of service for each alternative.</div> <div>Construction Challenges</div> <div>Considers depressed/elevated alternatives, non-standard bridge configuration, and Harlem Avenue realignment.</div> <div>Construction Duration</div> <div>Estimated construction duration.</div> <div>Long-Term Maintenance</div> <div>Estimated yearly maintenance cost.</div> <div>Preliminary Project Cost</div> <div>Estimated construction cost.</div>						6 Elevated with Jughandle	7 Elevated with Ramp	8 Elevated with Harlem Realign	9 Elevated Intersection	10 Depressed with Jughandle	11 Depressed with Ramp	12 Depressed Intersection	13 Elevated with Ramp	14 Elevated Intersection	31 Elevated Roundabout	15 Depressed with Ramp	16 Depressed Intersection	
						Preliminary Residential Displacements <i>(Properties/Units)</i>	24 / 83	26 / 85	28 / 87	26 / 85	15 / 73	16 / 87	14 / 72	6 / 6	6 / 6	9 / 9	2 / 2	2 / 2
						Preliminary Business Displacements <i>(Properties/Units)</i>	13 / 16	25 / 28	25 / 28	25 / 28	12 / 15	25 / 28	25 / 28	14 / 17	14 / 17	15 / 18	11 / 11	11 / 11
						Impacts to Nottingham Park <i>Section 4 (f) Resource</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	None	None	None	None	None
						Impacts to Community Cohesion	Disruptive	Disruptive	Disruptive	Disruptive	Disruptive	Disruptive	Disruptive	No Disruption	No Disruption	No Disruption	No Disruption	No Disruption
						Multimodal Ease <i>Transit, Bike/Pedestrian</i>	Limited	Limited	Supported	Supported	Limited	Limited	Supported	Limited	Supported	Limited	Limited	Supported
						Community Support	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported	Supported	Supported	Supported	Supported	Supported
						Level of Service	Acceptable	Good	Poor	Poor	Acceptable	Good	Poor	Good	Acceptable	Good	Good	Acceptable
						Construction Challenges	Minimal	Moderate	Moderate	Minimal	Moderate	Large	Moderate	Moderate	Minimal	Large	Large	Moderate
						Construction Duration <i>in years</i>	2.2	2.6	2.3	2.2	2.8	2.9	2.3	1.9	2.2	2.1	2.7	2.3
						Long-Term Maintenance	\$3M	\$4M	\$3M	\$3M	\$5M	\$5M	\$4M	\$4M	\$3M	\$4M	\$5M	\$4M
						Preliminary Project Costs	\$65M	\$99M	\$83M	\$83M	\$96M	\$120M	\$108M	\$98M	\$81M	\$105M	\$116M	\$101M

Grade Separation Examples



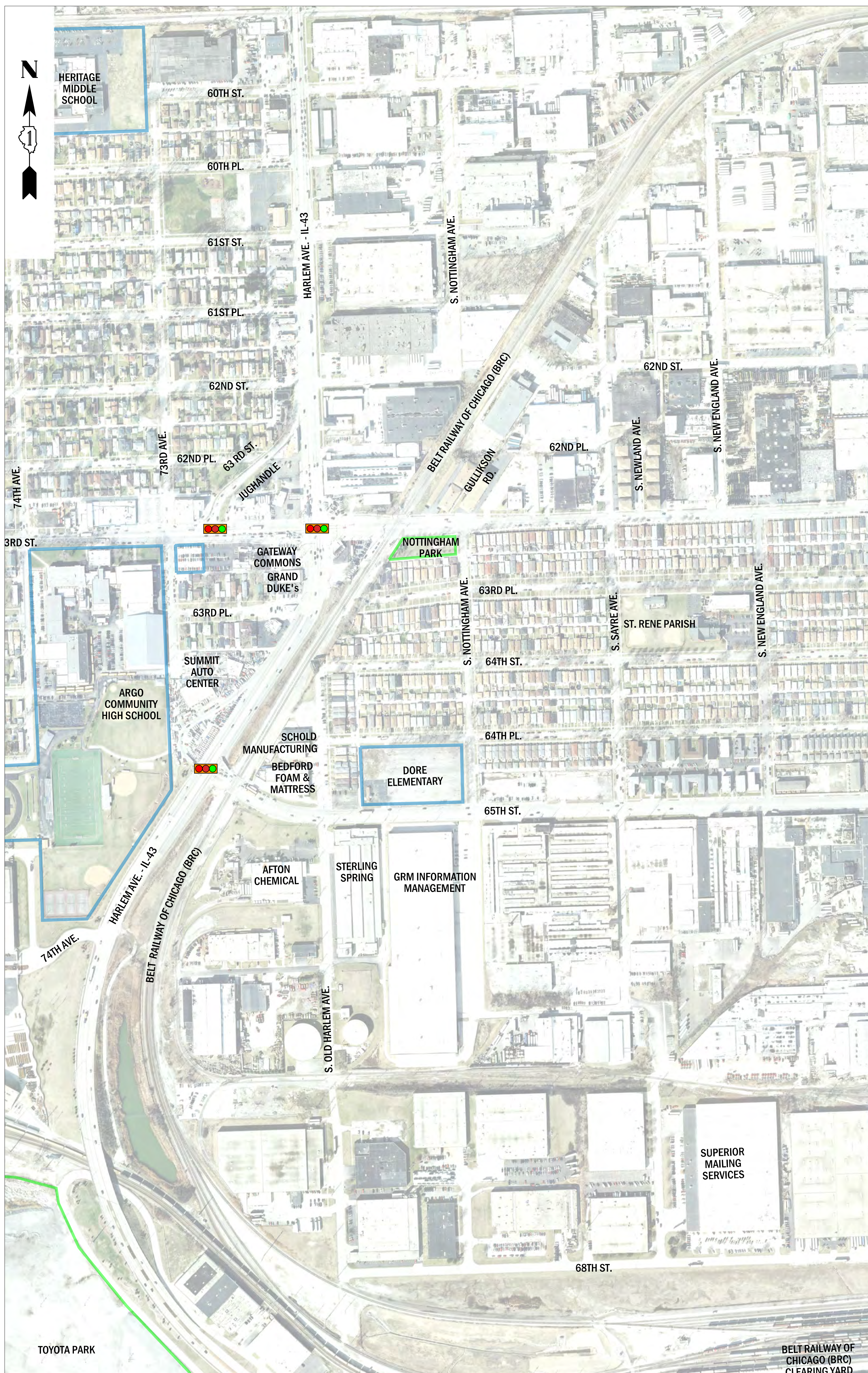
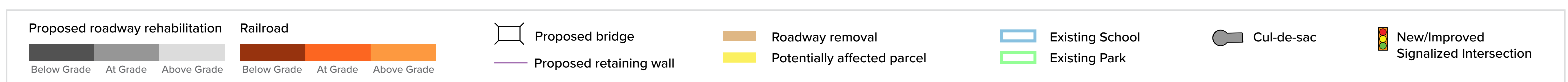
Elevated Road, At-Grade Rail

Harlem Ave. over CSX Rail Line and Toyota Park Frontage Rd.



At-Grade Rail, Depressed Road

Archer Ave. under B&O

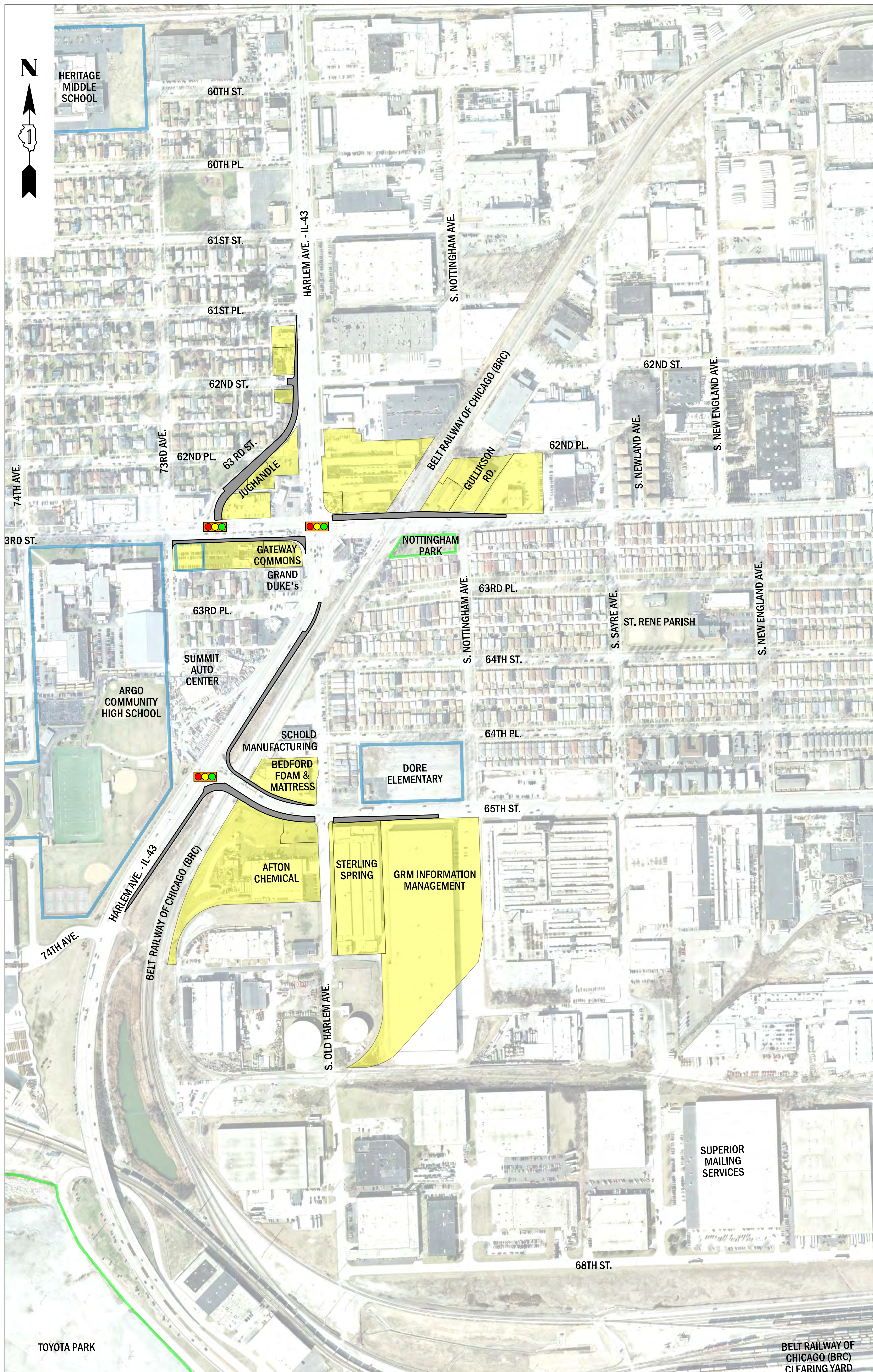


Cost

\$ \$\$ \$\$\$

No Build

- Baseline condition
- Leaves the existing conditions as is
- Minor increase in 2040 traffic versus 2016



\$ \$\$ \$\$\$

Safety	No Improvements
LOS	E or F

Residential 10-19

Businesses 10-19

Potentially no impacts to schools, parks & communities.

Minor Build

- Keep existing at-grade crossings
- Add some mainline capacity
- Improve existing jughandle at 63rd St.
- Keep existing jughandle at 65th St.
- Modify traffic and railroad signal interconnectivity and signal timing

Group 2: Belt Railway Co. Railroad Elevated/Depressed

Eliminated Alternative

Proposed roadway rehabilitation Railroad
Below Grade At Grade Above Grade Below Grade At Grade Above Grade

Proposed bridge
Proposed retaining wall

Roadway removal
Potentially affected parcel

Existing School
Existing Park

Cul-de-sac

New/Improved
Signalized Intersection

COMPARISON MATRIX

Safety	Most Improvements	Potentially Affected Properties & Access	
LOS	D	Residential	0-9
		Businesses	10-19

Potential impacts to
Nottingham Park and
Argo High School.

Cost \$ \$\$ \$\$\$

All Elevated

- New 2-track BRC railroad bridge over 63rd St. and 65th St.
- Retaining walls along BRC tracks
- Remove jughandles at 63rd and 65th St.
- Eliminate roadway conflicts with railroad

Elevated Hybrid

- Partially elevated BRC railroad over partially depressed 63rd St. and 65th St.
- Depending on roadway depth, expect impacts to Harlem Ave., 63rd St. and 65th St.
- Retaining walls along BRC tracks
- Remove jughandles at 63rd and 65th St.
- Eliminate roadway conflicts with railroad

All Depressed

- Railroad in fully depressed trench with retaining walls
- New roadway bridges over BRC
- Retaining walls along BRC tracks
- Remove jughandles at 63rd and 65th St.
- Eliminate roadway conflicts with railroad

Depressed Hybrid

- Railroad in partially depressed trench with retaining walls
- Partially elevated 63rd St. and 65th St. over BRC tracks
- Retaining walls along BRC tracks
- Remove jughandles at 63rd and 65th St.
- Eliminate roadway conflicts with railroad

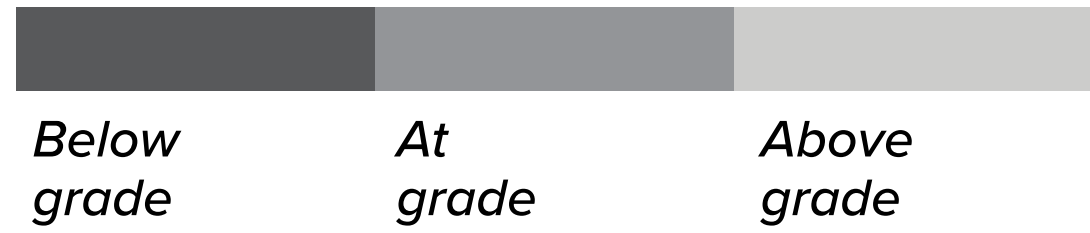


Group 3: 63rd St Elevated (Overpass)

Eliminated Alternative

PROPOSED IMPROVEMENTS

Roadway



Railroad



PRELIMINARY DISPLACEMENTS

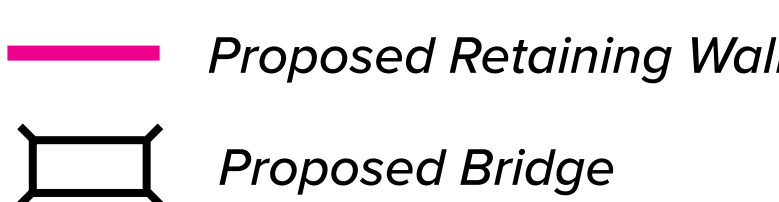
Residential



Commercial



Roadway Removal



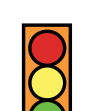
Existing Park



Existing School



Cul-de-sac



New/Improved Signalized Intersection

MATRIX OVERVIEW

Preliminary Displacements

Residential properties	24–28
Business properties	13–25

Preliminary Costs

Construction	\$65–99M
Long-term maintenance	\$3–4M

ALTERNATIVE 6

Elevated with Jughandle

- Elevated 63rd St. over BRC and Harlem Ave.
- Reconfigured jughandle to accommodate Harlem Ave./63rd St.
- Harlem Ave. / 63rd St. intersection grade separated
- New signalized intersection on Harlem Ave. at 63rd St jughandle

ALTERNATIVE 7

Elevated with Ramp

- Elevated 63rd St. over BRC and Harlem Ave.
- Harlem Ave. / 63rd St. intersection grade separated
- New 63rd St. roadway bridge over at-grade Harlem Ave.
- Elevated signalized intersection with access ramps
- Remove jughandle at Harlem Ave./63rd St. and Harlem Ave./65th St.

ALTERNATIVE 8

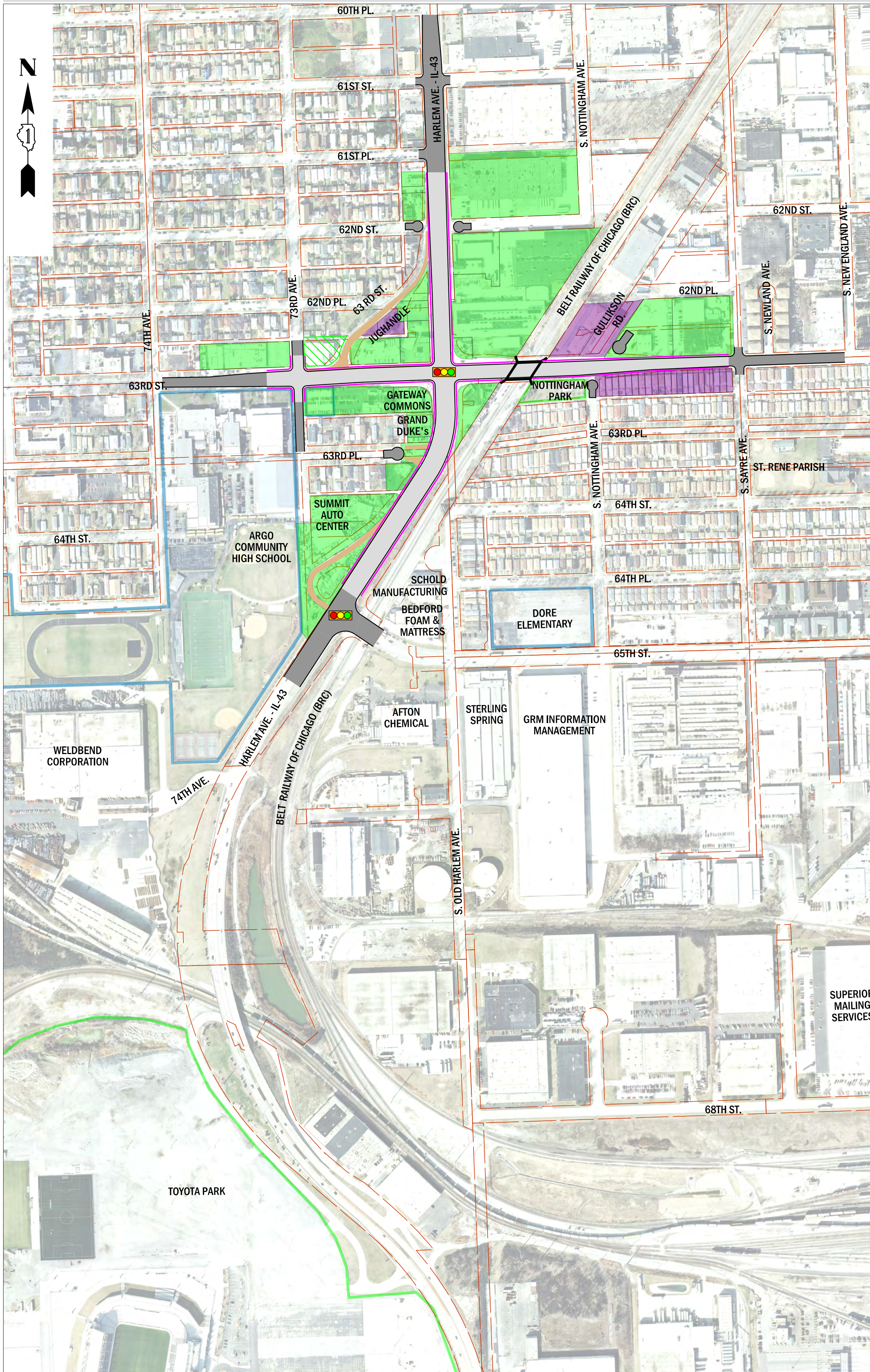
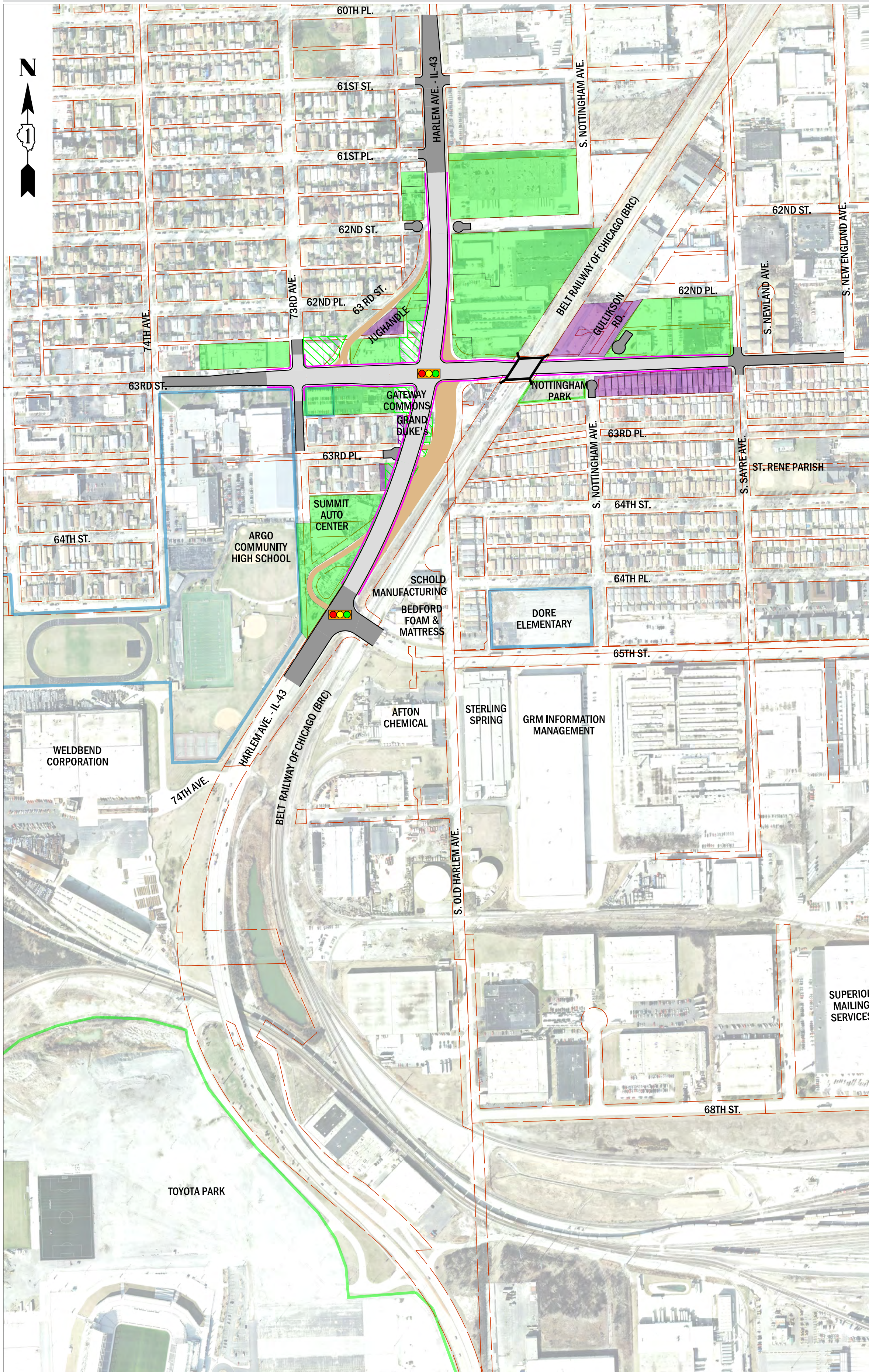
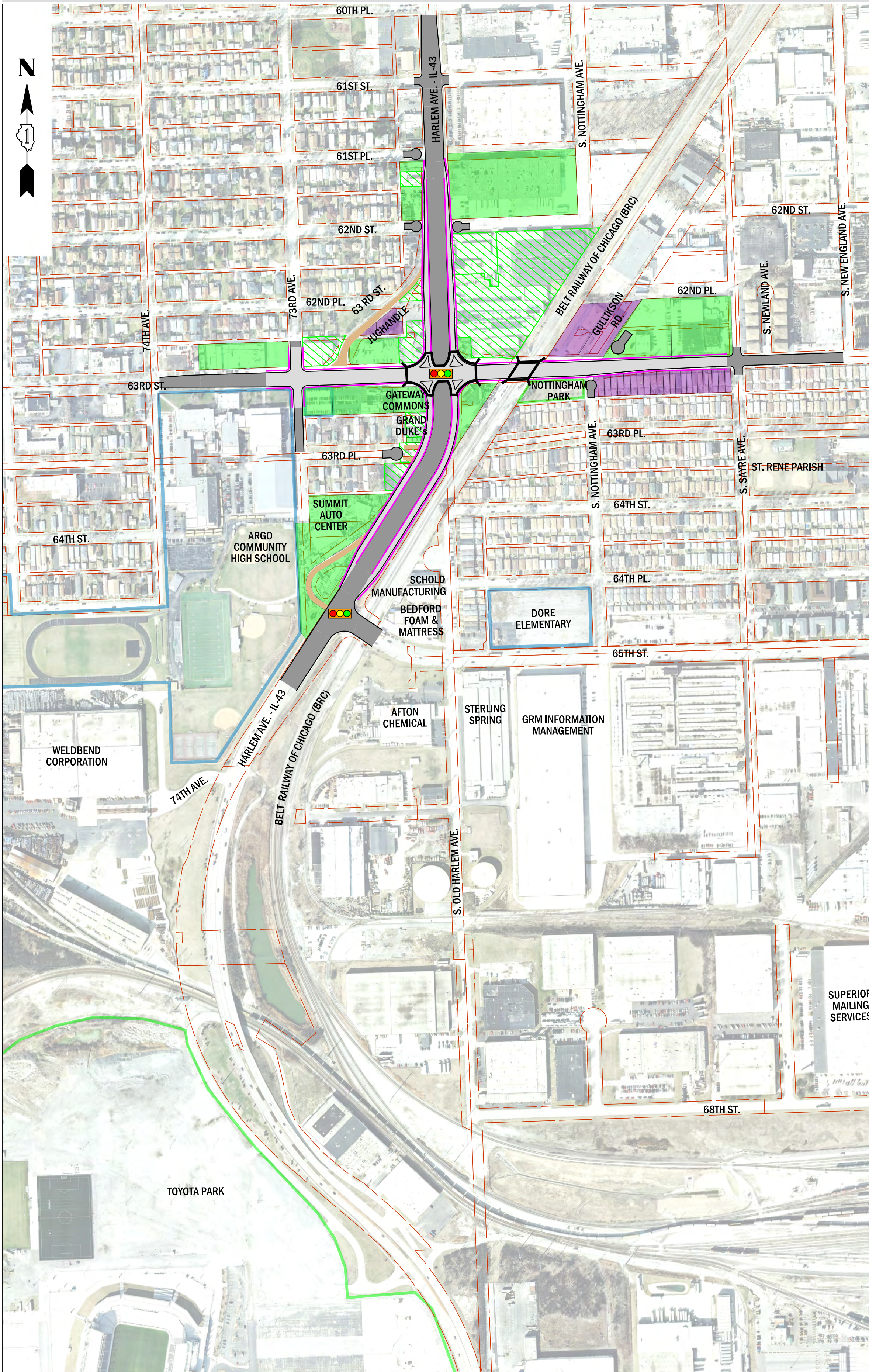
Elevated/Harlem Realign

- Elevated 63rd St. over BRC
- Realign Harlem Ave. west of existing alignment
- Remove jughandle at Harlem Ave./63rd St. and Harlem Ave./65th St.

ALTERNATIVE 9

Elevated Intersection

- Elevated 63rd St. over BRC
- Raised Harlem Ave. / 63rd St. signalized intersection
- Remove jughandle at Harlem Ave./63rd St. and Harlem Ave./65th St.



Group 4: 63rd St Depressed (Underpass)

Eliminated Alternative

PROPOSED IMPROVEMENTS

Roadway

Below grade

At grade

Above grade

Railroad

Below grade

At grade

Above grade

PRELIMINARY DISPLACEMENTS

Residential

Relocation

Access

Commercial

Relocation

Access

Roadway Removal

Proposed Retaining Wall

Proposed Bridge

Existing Park

Existing School

Cul-de-sac

New/Improved Signalized Intersection

MATRIX OVERVIEW

Preliminary Displacements

Residential properties

14–16

Business properties

12–25

Preliminary Costs

Construction

\$96–120M

Long-term maintenance

\$4–5M

ALTERNATIVE 10

Depressed with Jughandle

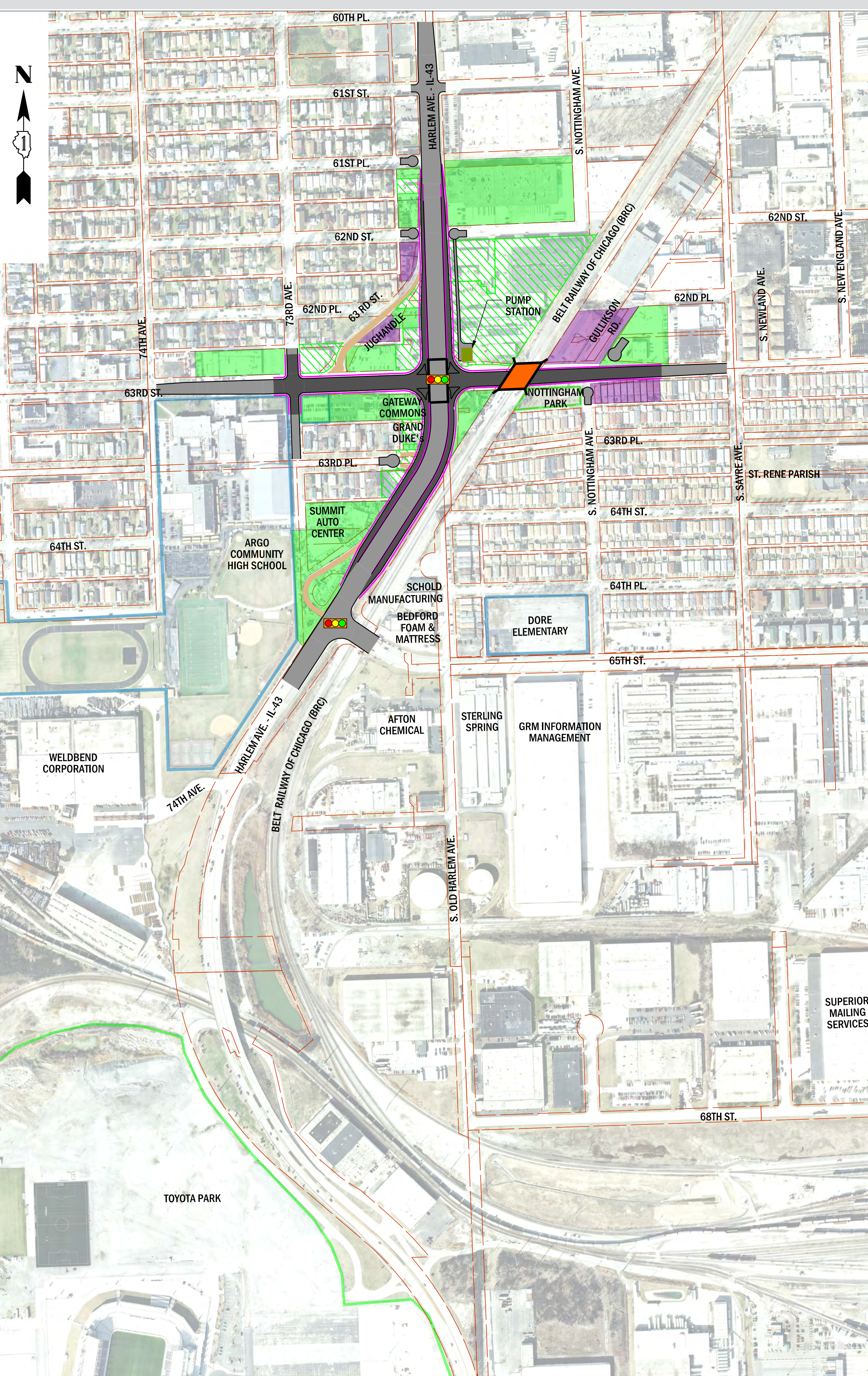
- Depressed 63rd St. under at-grade BRC and Harlem Ave.
- Harlem Ave. / 63rd St intersection grade separated
- Reconfigure jughandle to accommodate Harlem Ave./63rd St. intersection
- New signalized intersection on Harlem Ave. at 63rd St. jughandle



ALTERNATIVE 11

Depressed with Ramp

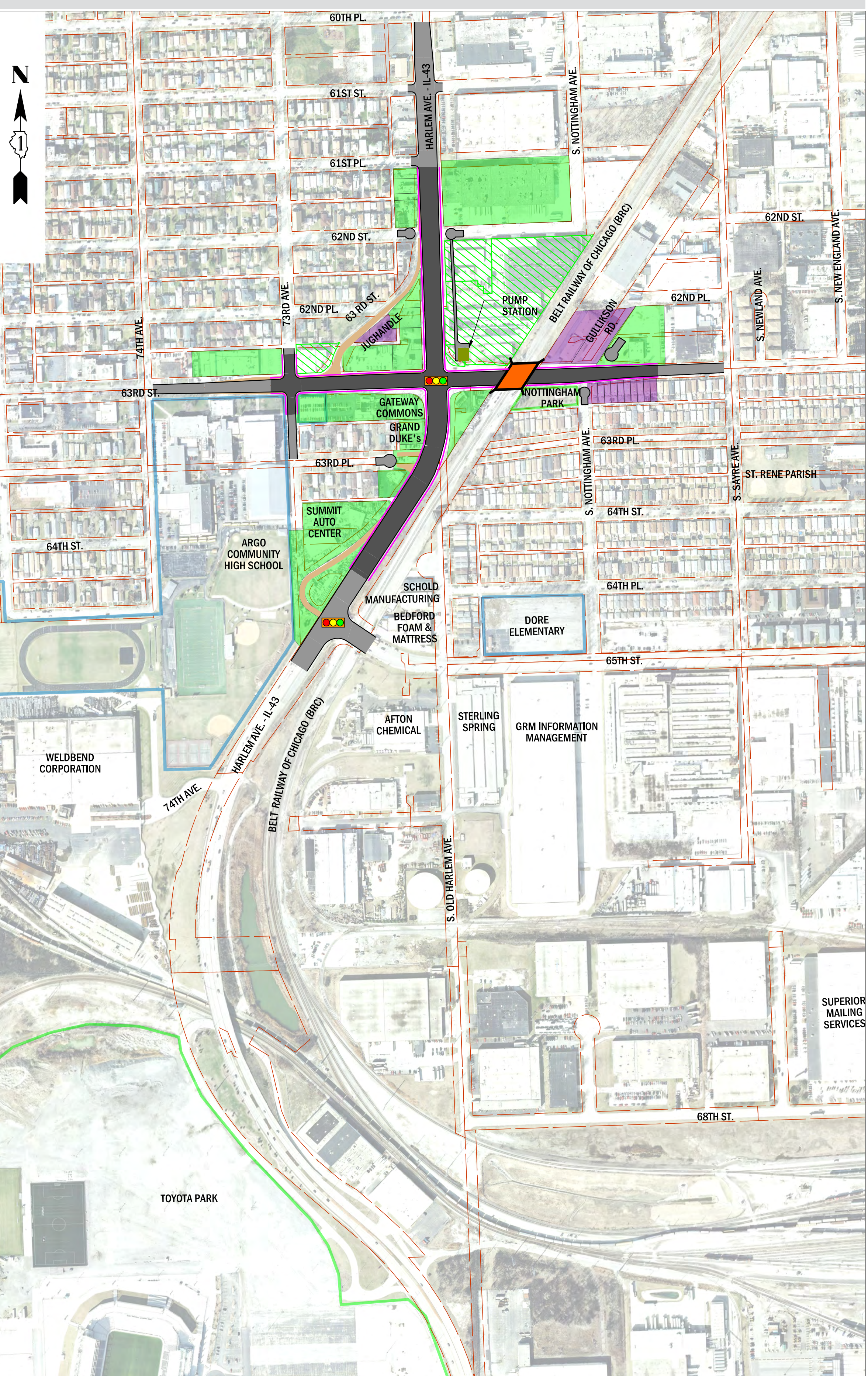
- Depressed 63rd St. under at-grade BRC and Harlem Ave.
- Harlem Ave. / 63rd St intersection grade separated
- Depressed signalized intersection, on 63rd St., with access ramps along Harlem Ave.
- Remove jughandle at Harlem Ave./63rd St. and Harlem Ave./65th St.



ALTERNATIVE 12

Depressed Intersection

- Depressed 63rd St. under at-grade BRC; Harlem Ave. is depressed to intersect 63rd St. at same grade
- Harlem Ave./63rd St. intersection lowered with retaining walls
- Remove jughandle at Harlem Ave./63rd St. and Harlem Ave./65th St.



Group 5: 65th St Elevated (Overpass)

PROPOSED IMPROVEMENTS

Roadway

Below grade At grade Above grade

Railroad

Below grade At grade Above grade

PRELIMINARY DISPLACEMENTS

Residential

Relocation Access

Commercial

Relocation Access

Roadway Removal

Proposed Retaining Wall

Proposed Bridge

Existing Park

Existing School

Cul-de-sac

New/Improved Signalized Intersection

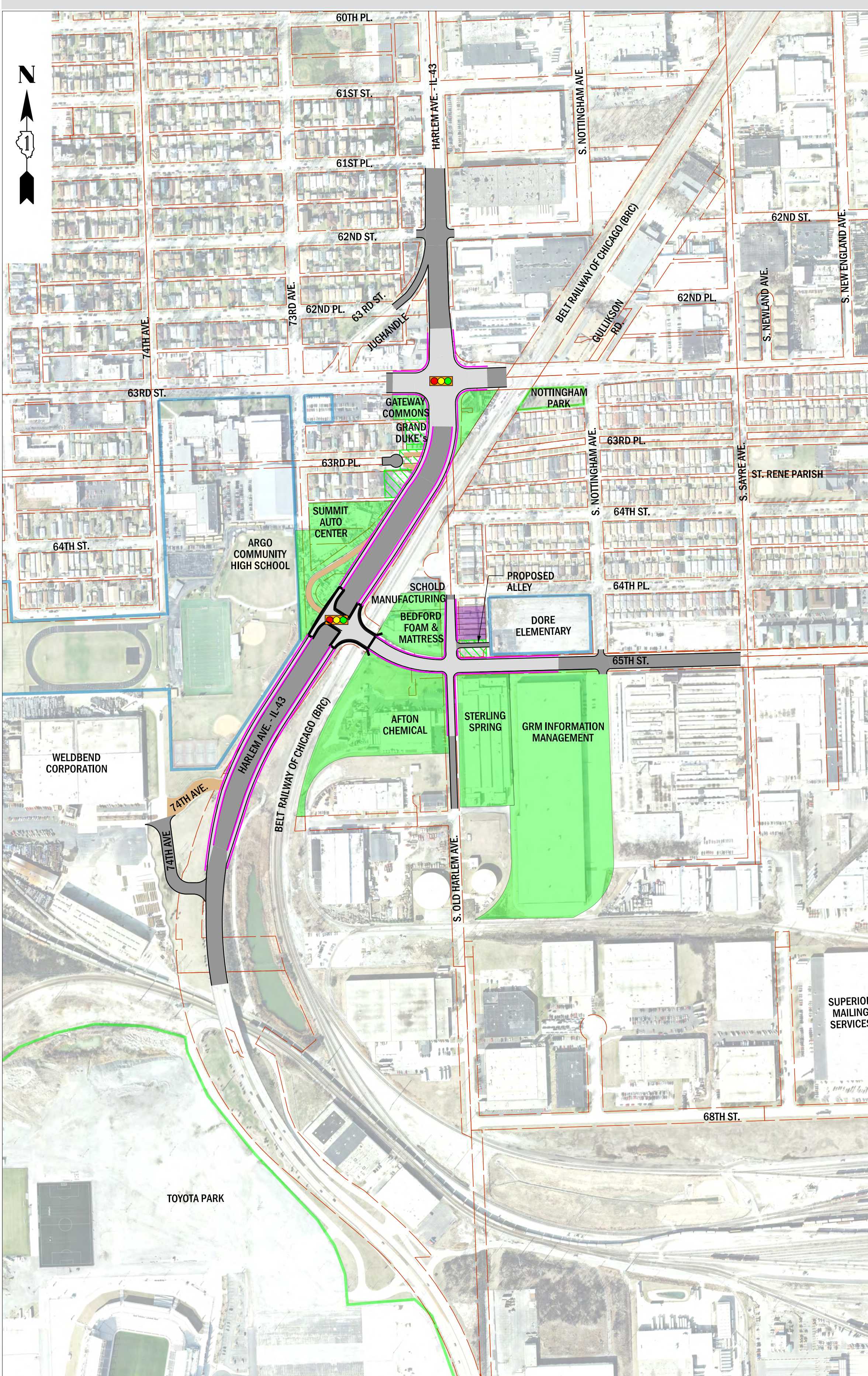
MATRIX OVERVIEW

Preliminary Displacements				Preliminary Costs			
Residential properties	6–9	Business properties	14–15	Construction	\$81–105M	Long-term maintenance	\$3–4M

ALTERNATIVE 13

Elevated with Ramp

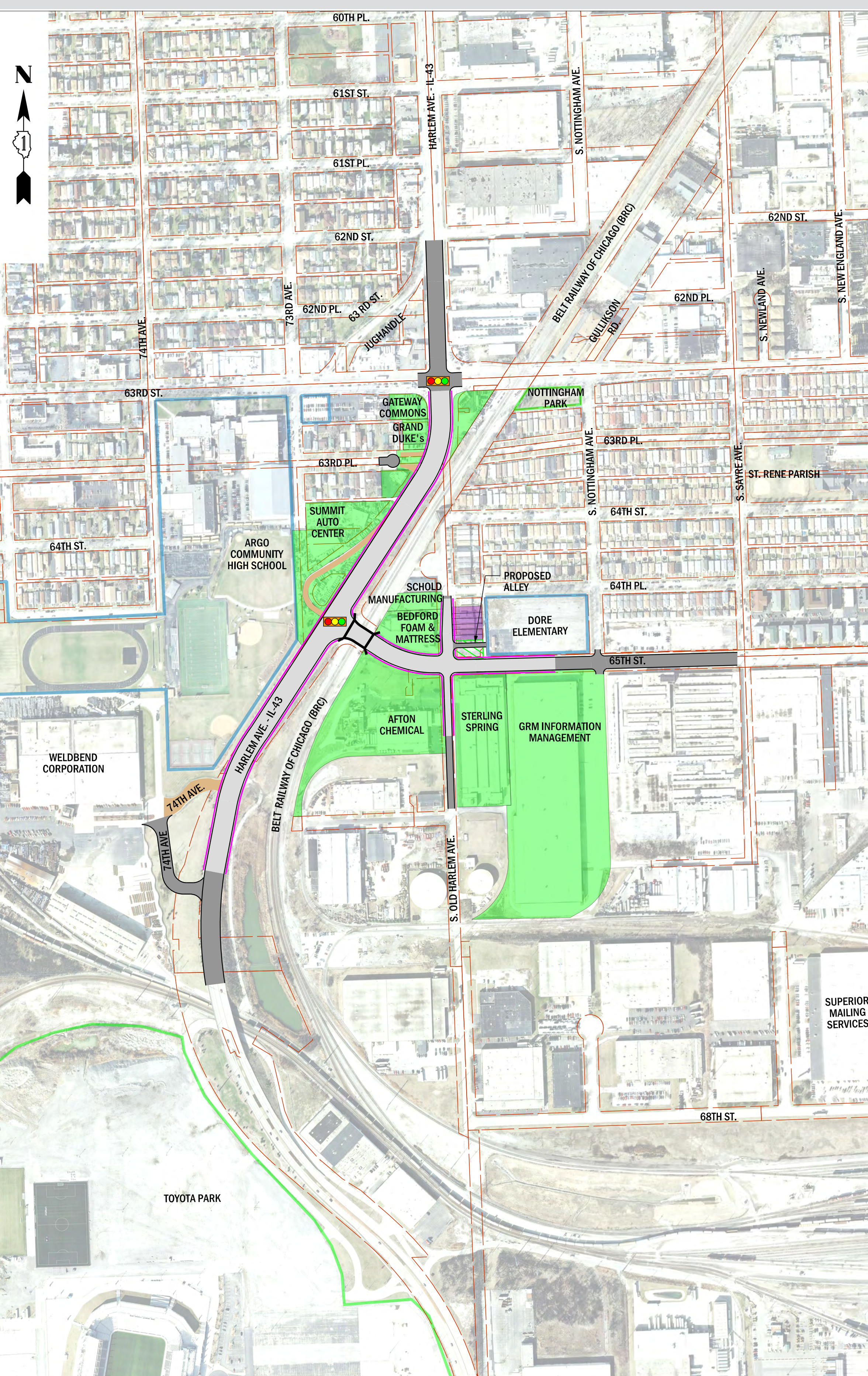
- Elevated 65th St. over BRC and Harlem Ave.
- Elevated signalized intersection, on 65th St., with access ramps to/from at-grade Harlem Ave.
- Remove jughandle at Harlem Ave./65th St.
- Raised Harlem Ave./63rd St. signalized intersection



ALTERNATIVE 14

Elevated Intersection

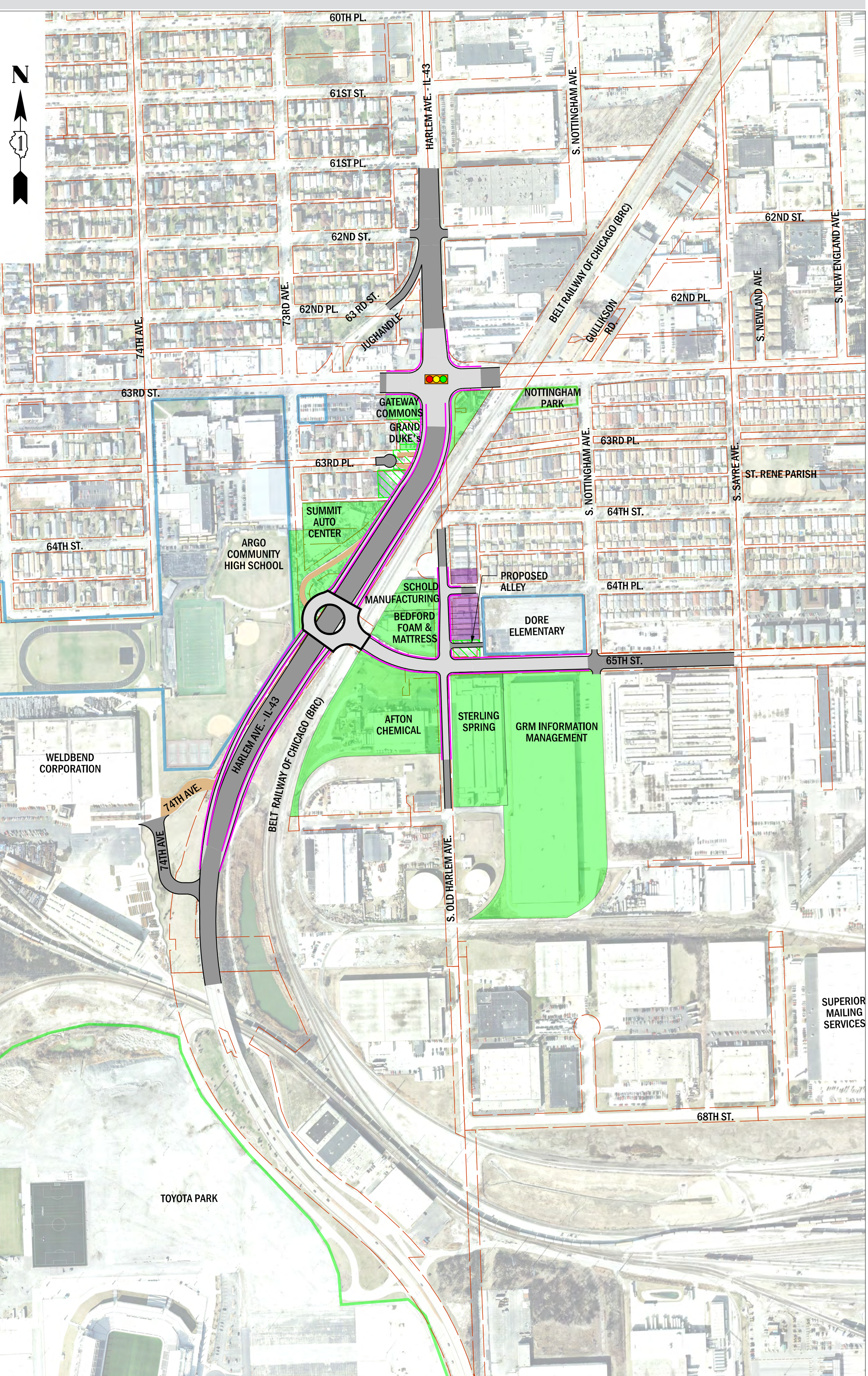
- Elevated 65th St. over BRC; Harlem Ave. elevated to intersect 65th St. at same grade
- New raised signalized intersection at Harlem Ave./ 65th St. with retaining walls
- Remove jughandle at Harlem Ave./65th St.



ALTERNATIVE 31

Elevated Roundabout

- Elevated 65th St. over BRC and Harlem Ave.
- Elevated Roundabout on 65th St., with access ramps to/from at-grade Harlem Ave.
- Remove jughandle at Harlem Ave./65th St.
- Raised Harlem Ave./63rd St. signalized intersection

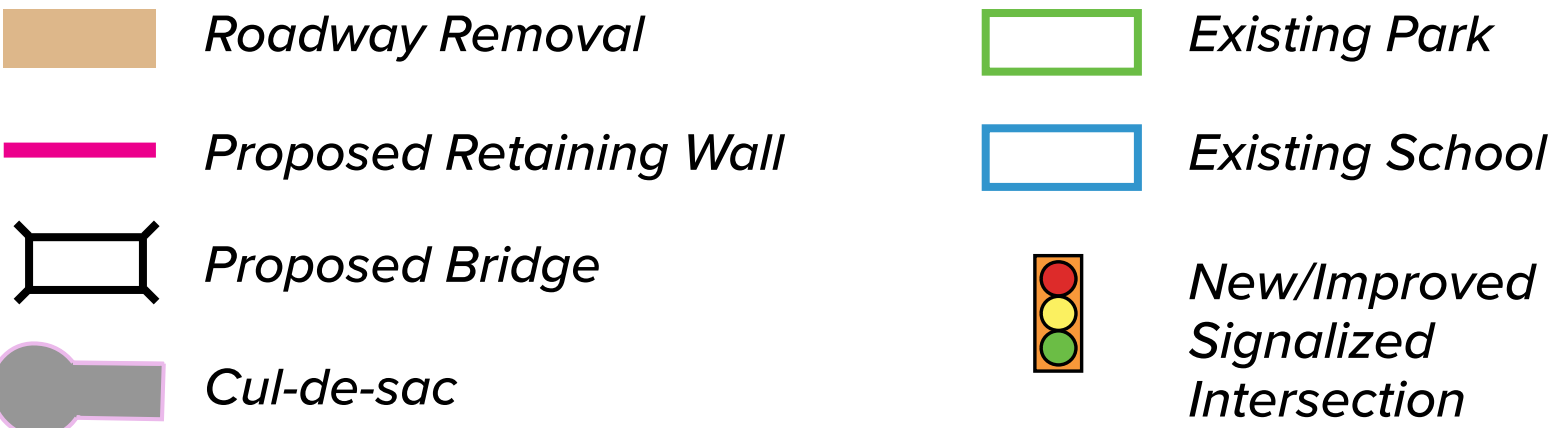
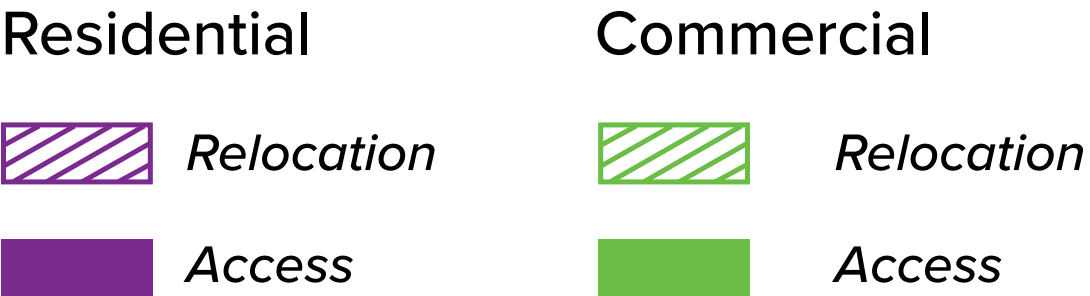


Group 6: 65th St Depressed (Underpass)

PROPOSED IMPROVEMENTS



PRELIMINARY DISPLACEMENTS



MATRIX OVERVIEW

Preliminary Displacements

Residential properties 2 Business properties 11

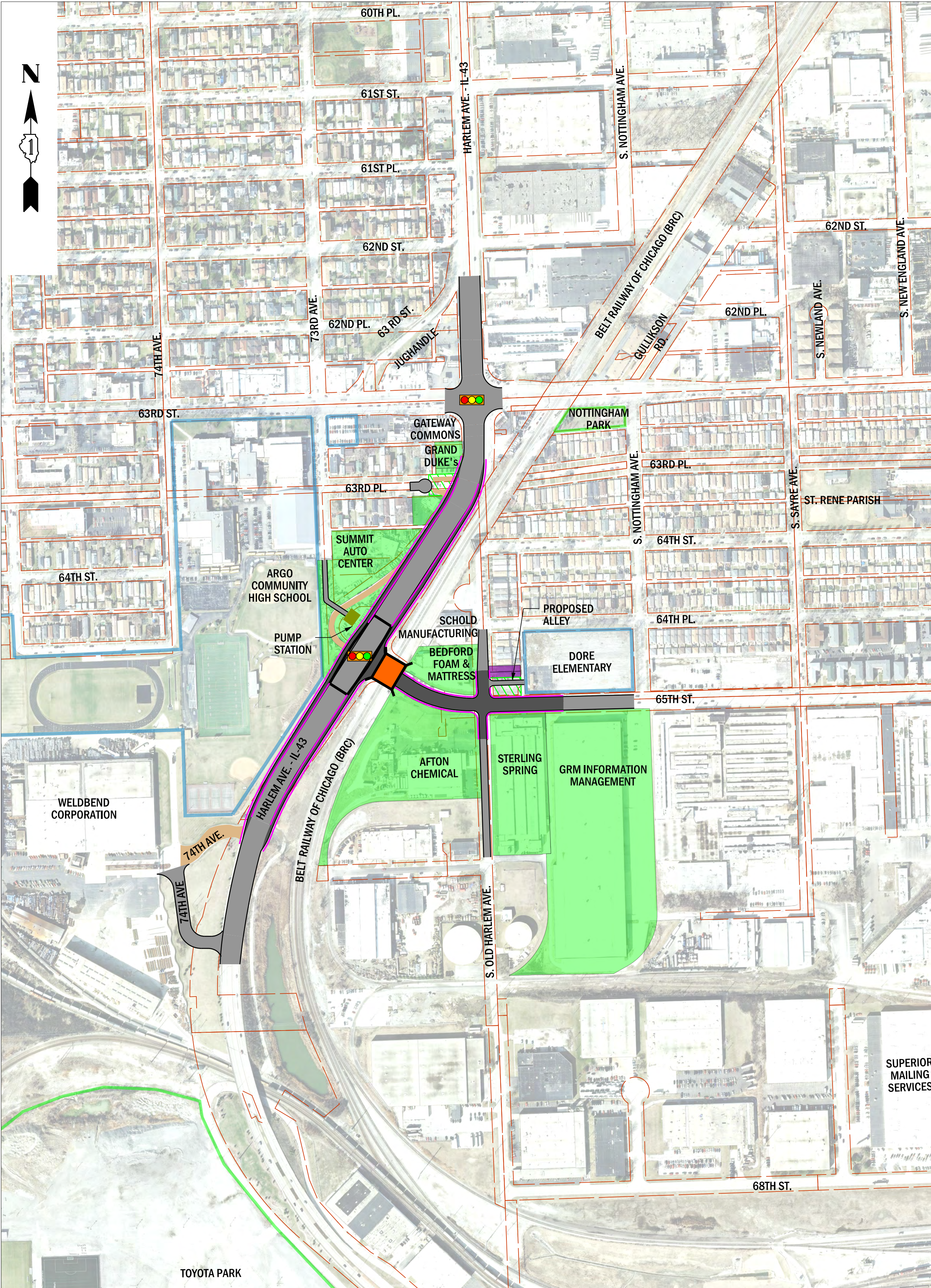
Preliminary Costs

Construction \$101–116M Long-term maintenance \$4–5M

ALTERNATIVE 15

Depressed with Ramp

- Depressed 65th St. under BRC and Harlem Ave.
- New 2-track railroad bridge for grade separation
- New Harlem Ave. roadway bridge
- Depressed signalized intersection with ramps to/from Harlem Ave.
- Remove jughandle at Harlem Ave./65th St.



ALTERNATIVE 16

Depressed Intersection

- Depressed 65th St. under BRC
- New 2-track railroad bridge for grade separation
- New lowered signalized intersection at Harlem Ave./65th St with retaining walls
- Remove jughandle at Harlem Ave./65th St.

