

75th Street Corridor Improvement Project
EW2A
Scope of Work

1. Project Footprint

- Total Acreage: 1.32+/- acres
- Total Linear Feet: 1373 ft
- Land Acquired for ROW: 5 parcels (0.78+/- acres)
- Total Permanent or Temporary Easements: 2 parcels (0.38+/- acres) PE; 2 parcels (0.16+/- acres) TE

2. Track Work

- Approx. New Track (linear feet): 17,700 ft (8,900 temp and 8,800 final)
- Approx. Shifted Track (linear feet): 45,000 ft (16,400 temp and 28,600 final)
- Approx. Track Removed (linear feet): 50,500 ft
- *General Description of Improvements:* Segment A of project EW2 consists of east-west track improvement along 75th St between S Western Ave, W 74th St, and W 78th St, including Belt Junction and Forest Hill Junction. Throughout construction, temporary track will be built to maintain rail operations as structures are rehabilitated and replaced. Improvements include the construction of new track and the shifting of existing track (including 33% tie renewal). Final alignments include a new NS mainline track, which will be built from the southeast of the segment to Landers Yard in the west, improving rail-rail conflicts at Belt Junction. At Forest Hill Junction, the east leg of BRC/CSX wye will be double tracked. NS/Metra track will be shifted at Emerald Wye, south of 74th St Junction, and west of Belt Junction to Landers Yard. C&WI track will also be shifted at Emerald Wye. BRC track will be realigned east of Belt Junction to 78th St. The table below describes the approximate locations and lengths of trackwork through all construction stages. The team may identify further scope along the rail corridor if structural or operational needs change.

Summary Table: New and Shifted Track

Category	Approx. West to East Coordinates		Approx. Length
<i>Stage A-1</i>			
Metra Main (<i>final</i>)	41°45'25.3" N 87°41'11.9" W	41°45'27.0" N 87°40'51.1" W	320 ft new
Metra Main (<i>temp</i>)	41°45'27.6" N 87°39'56.6" W	41°45'28.0" N 87°39'47.0" W	410 ft shift
NS Landers Lead (<i>temp</i>)	41°45'25.0" N 87°41'6.4" W	41°45'26.9" N 87°40'51.0" W	420 ft shift
NS Landers Main (<i>temp</i>)	41°45'25.1" N 87°41'5.6" W	41°45'26.8" N 87°40'41.0" W	430 ft shift 250 ft new
	41°45'27.5" N 87°39'56.6" W	41°45'28.0" N 87°39'41.9" W	

C&WI Main (<i>temp</i>)	41°45'20.3" N 87°38'21.8" W	41°45'28.2" N 87°38'21.4" W	670 ft shift 1,080 ft new
	41°45'30.6" N 87°38'21.4" W	41°45'38.9" N 87°38'21.5" W	
BRC #1 (<i>temp</i>)	41°45'28.2" N 87°45'57.3" W	41°45'28.3" N 87°39'40.6" W	4,945 ft shift
	41°45'28.5" N 87°39'21.6" W	41°45'28.4" N 87°39'16.6" W	
	41°45'29.1" N 87°38'33.7" W	41°45'26.3" N 87°38'25.6" W	
BRC #2 (<i>temp</i>)	41°45'28.0" N 87°39'57.5" W	41°45'28.2" N 87°39'46.4" W	
	41°45'28.3" N 87°39'22.5" W	41°45'28.2" N 87°39'16.9" W	
	41°45'28.9" N 87°38'33.6" W	41°45'26.2" N 87°38'24.8" W	
BRC #3 (<i>temp</i>)	41°45'28.2" N 87°39'24.0" W	41°45'26.2" N 87°38'25.0" W	4,530 ft new
Emerald Wye (<i>temp</i>)	41°45'29.0" N 87°38'38.6" W	41°45'29.5" N 87°38'32" W	1,550 ft shift
	41°45'31.7" N 87°38'25.7" W	41°45'38.6" N 87°38'22.1" W	
Stage A-2			
Metra Main (<i>temp</i>)	41°45'27.0" N 87°40'34.7" W	41°45'27.4" N 87°40'15.3" W	540 ft shift 980 ft new
C&WI Main	41°45'19.2" N 87°38'22.0" W	41°45'24.9" N 87°38'21.4" W	920 ft shift
NS Landers Main (<i>final</i>)	41°45'24.9" N 87°41'6.1" W	41°45'26.8" N 87°40'48.1" W	1,400 ft shift
NS Landers Main (<i>temp</i>)	41°45'26.8" N 87°40'34.7" W	41°45'27.3" N 87°40'15.4" W	240 ft shift 940 ft new
	41°45'27.6" N 87°39'52.9" W	41°45'28.0" N 87°39'40.4" W	
BRC #1 (<i>temp</i>)	41°45'28.2" N 87°39'58.4" W	41°45'28.3" N 87°39'40.4" W	5,100 ft shift
	41°45'29.4" N 87°38'33.6" W	41°45'26.7" N 87°38'25.1" W	
	41°45'25.3" N 87°38'23.7" W	41°45'20.3" N 87°38'22.1" W	
BRC #2 (<i>temp</i>)	41°45'29.3" N 87°38'33.6" W	41°45'26.7" N 87°38'25.3" W	
	41°45'25.1" N 87°38'23.8" W	41°45'20.3" N 87°38'22.3" W	
BRC #3 (<i>temp</i>)	41°45'29.2" N 87°38'33.6" W	41°45'26.6" N 87°38'25.5" W	
	41°45'25.0" N	41°45'20.4" N	

	87°38'24.0" W	87°38'22.5" W	
BRC #1 (<i>final</i>)	41°45'28.7" N 87°39'23.2" W	41°45'29.4" N 87°38'33.7" W	10,790 ft shift
BRC #2 (<i>final</i>)	41°45'28.6" N 87°39'20.2" W	41°45'29.3" N 87°38'33.7" W	
BRC #3 (<i>final</i>)	41°45'28.5" N 87°39'20.0" W	41°45'29.2" N 87°38'33.7" W	
Emerald Wye (<i>final</i>)	41°45'29.4" N 87°38'36.9" W	41°45'38.4" N 87°38'22.1" W	965 ft shift 790 ft new
Stage A-3			
Metra Main (<i>final</i>)	41°45'27.2" N 87°40'54.1" W	41°45'27.2" N 87°40'15.3" W	1,980 ft shift 3,879 ft new
	41°45'27.7" N 87°39'54.7" W	41°45'28.0" N 87°39'42.4" W	
NS Landers (<i>final</i>)	41°45'26.9" N 87°40'34.6" W	41°45'27.33" N 87°40'15.5" W	5,060 ft shift 2,840 ft new
	41°45'27.6" N 87°39'55.9" W	41°45'28.5" N 87°39'18.1" W	
Prop BRC #1 (<i>final</i>)	41°45'29.4" N 87°38'33.7" W	41°45'19.9" N 87°38'22.1" W	1,500 ft shift
BRC #1 (<i>temp</i>)	41°45'28.2" N 87°39'58.7" W	41°45'28.3" N 87°39'40.2" W	2,200 ft shift 2,103 ft new
CSX (<i>temp</i>)	41°45'28.2" N 87°40'32.5" W	41°45'27.6" N 87°40'24.4" W	665 ft shift
Stage A-4			
Prop BRC #2 (<i>final</i>)	41°45'29.3" N 87°38'33.6" W	41°45'20.4" N 87°38'22.3" W	1410 ft shift
Stage A-5			
Prop BRC #1 (<i>final</i>)	41°45'27.8" N 87°40'34.4" W	41°45'28.1" N 87°40'14.6" W	4,300 ft shift
Prop BRC #2 (<i>final</i>)	41°45'27.6" N 87°40'34.6" W	41°45'27.8" N 87°40'14.6" W	
Prop BRC #3 (<i>final</i>)	41°45'29.2" N 87°38'33.6" W	41°45'20.5" N 87°38'22.5" W	
CSX (<i>final</i>)	41°45'27.9" N 87°40'23.4" W	41°45'28.2" N 87°40'32.4" W	480 ft shift

Summary Table: Turnouts

Category	Approx. Coordinates	Track
Stage A-1		
No. 20 Turnout (<i>temp</i>)	41°45'29.0" N 87°38'38.6" W	BRC to Emerald Wye
Stage A-2		
No. 15 Turnout (<i>temp</i>)	41°45'29.2" N	BRC #1 to BRC #2

	87°38'42.3" W	
No. 15 Turnout (<i>final</i>)	41°45'29.4" N 87°38'38.4" W	BRC to Emerald Wye
	41°45'15.6" N 87°38'22.3" W	BRC #2 to BRC #3
<i>Stage A-3</i>		
No. 15 Turnout (<i>temp</i>)	41°45'28.5" N 87°39'18.4" W	BRC to NS Landers Main
	41°45'27.1" N 87°40'34.6" W	NS Landers Lead to Metra Main
	41°44'54.9" N 87°38'20.2" W	BRC #2 to BRC #3
	41°45'27.7" N 87°40'24.6" W	BRC to CSX
	41°45'26.9" N 87°40'40.6" W	NS/Metra to NS Landers Main
Turnout Removal	41°45'27.0" N 87°40'49.8" W	NS Landers Lead
No. 15 Turnout Shift (<i>temp</i>)	41°45'27.9" N 87°40'28.1" W	CSX
<i>Stage A-5</i>		
No. 15 Turnout Shift (<i>final</i>)	41°45'27.9" N 87°40'23.4" W	BRC to CSX
	41°45'28.2" N 87°40'32.1" W	CSX

3. Structure Work Summary Table

- *General Description of Improvements:* Segment A of EW2 includes the replacement or rehabilitation of numerous rail structures over city streets. In total, 14 structures on the segment will receive work. Two of these structures will be closed and filled, with cul-de-sacs added to the residential streets as needed. The remaining 12 structures will receive rehabilitation and/or partial replacement. Individual bays, decks, beams, and columns will be replaced as needed, with some structures being widened to accommodate new track. Abutments will be repaired or replaced at all structures. Retaining walls will be installed southwest of the S Loomis Ave underpass and northwest of the S Halsted Ave underpass, and a noise barrier will be installed on the Halsted wall. W 76th St will be lowered below the structure to accommodate IDOT's vertical clearances requirements. There will be additional inspection through Phase II, at which point the design team may identify further needed scope at each of the structures.

Summary Table

Category & Structure No.	Roadway Intersection	Approx. Length	Specific Activities
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<i>Replacement</i>			
NS C-10.25	S Western Ave & W 75 th St	115'	The existing nine-bay four-span through plate girder bridge will be partially replaced. The northern five bays will receive abutment repairs, and the remaining four bays will be demolished and replaced with new superstructures and piers.
NS B-518.31	S Damen Ave & W 75 th St	75'	The existing three-span through plate girder bridge will receive concrete repairs on substructure and replaced superstructure lateral bracing. The bridge will be widened to the north to accommodate an additional track
NS B-517.80	S Ashland Ave & W 75 th St	70'	The existing seven-bay, four-span steel beam bridge will be partially replaced. The decks, beams, girders, and columns will be replaced on six of the bays. The abutments will be repaired.
NS B-517.52	S Loomis Blvd & W 75 th St	70'	The existing seven-bay, four-span steel beam bridge will be partially replaced. The decks, beams, girders, and columns will be replaced on five of the bays. The abutments will be repaired.
NS B-517.35	S Racine Ave & W 75 th St	70'	The existing six-bay, four-span steel beam bridge will be partially replaced. The decks, beams, girders, and columns will be replaced on the five northern bays. The sixth bay will receive temporary repairs. The abutments will be repaired.
NS B-517.23	S Aberdeen St & W 75 th St	70'	The existing six-bay, four-span steel beam bridge will be partially replaced. The decks, beams, girders, and columns will be replaced on the five northern bays. The sixth bay will receive temporary repairs. The abutments will be repaired.
NS/BRC B-517.10	S Morgan St & W 75 th St	70'	The existing six-bay, four-span steel beam bridge will be partially replaced. The northern half will be replaced with a three-span independent structure. The southernmost bay will receive temporary repairs. The remaining two bays will be replaced with an independent, three-span structure.
NS/BRC B-516.98	S Peoria St & W 75 th St	70'	The existing six-bay, four-span steel beam bridge will be partially replaced. The northern half will be replaced with an

			independent three-span structure. The southernmost bay will receive temporary repairs
NS/BRC B-516.85	S Halsted St & W 75 th St	70'	The existing six-bay, four-span steel beam bridge will be partially replaced. The northern half will be replaced with an independent three-span structure and widened to accommodate an access road. The southernmost bay will receive temporary repairs.
NS C-8.04	S Lowe Ave & W 75 th St	29'	The existing single-span steel bridge will have its existing 3-track superstructure replaced with a 2-track structure supporting an access road. The existing substructure will be rehabilitated and modified to support this superstructure. Lowe will be lowered and drainage improved.
NS C-7.96	W 74 th St & S Parnell Ave	70'	The existing nine-bay four-span steel beam bridge will have six bays replaced with new deck, beams, cross girders, and columns. The remaining three interior bays will be removed. Abutments will be repaired and rebuilt for the new bay configuration.
NS/BRC B-516.45	W 76 th St & S Parnell Ave	70'	The existing four-span steel beam bridge will be replaced with new deck, beams, girders, and columns above the foundation. The abutments will be repaired. W. 76th St. and affected side streets will be lowered.
<i>New Construction</i>			
RW-10	East of S Peoria St	116'	A new cast-in-place cantilever retaining wall will be constructed east of Peoria along the north right-of-way line.
RW-11	West of S Halsted St	309'	A new cast-in-place cantilever retaining wall will be constructed from RW-10 to Halsted along the north right-of-way line.
RW-12	S Halsted St to S Union Ave	609'	A new cast-in-place cantilever retaining wall will be constructed between Halsted and RW-13 at Union along the north right-of-way line.
RW-13	East of S Union Ave	148'	A new cast-in-place cantilever retaining wall will be constructed from RW-12 at Union east to the existing wall along the north right-of-way line.
Noise Barrier H	West of S Halsted St to S Lowe Ave	1311'	A noise barrier will be constructed on walls RW-11 thru RW-13, and along the existing

			wall to Lowe. The barrier will be about 12 ft high above the retaining walls.
<i>Loomis SW Retaining Wall</i>			Details to be established in Phase II design
<i>Closure</i>			
NS/BRC B-516.79	S Emerald Ave & W 75 th St	16'	The existing single-span steel beam bridge will be filled between the abutments and proposed new track bed.
NS/BRC B-516.72	S Union Ave & W 75 th St	70'	The existing four-span steel beam bridge will be filled between the abutments and proposed new track bed. The roadway will be modified to become a cul-de-sac on either side of the tracks.

Signal Work Summary Table

- *General Description of Improvements:* New modification and interfaces to existing or new Solid state control points will be required to be installed around the vicinity of Damen Ave, Union Ave, Ashland Ave, Racine Ave, Belt Jct, and 76th St & Lowe Ave. The signal interfaces will facilitate the phasing of the track infrastructure improvements as each Structure is constructed through the EW2A project limits. These interfaces will be coordinated with BRC, Norfolk Southern, Metra and Union Pacific. The EW2A signal design will determine the final interfaces to align with track and structure construction.

Summary Table

Signal Area	Approx. Coordinates	Specific Activities
<i>Stage A-1</i>		
Loomis Ave/Belt Junction	41°45'28.1" N 87°39'40.9" W	New signals for temp Metra, NS Landers, and BRC track
Racine Ave	41°45'28.5" N 87°39'17.2" W	New signals for temp BRC track
Union Ave	41°45'29.5" N 87°38'31.7" W	New signals for Emerald Wye turnout and temp BRC track
<i>Stage A-2</i>		
Ashland Ave	41°45'27.7" N 87°39'53.0" W	Adjust signals for temp NS Landers and BRC track
Loomis Ave/Belt Junction	41°45'28.1" N 87°39'40.9" W	Adjust signals for temp NS Landers and BRC track
Union Ave	41°45'29.2" N 87°38'30.3" W	Adjust signals for Emerald Wye turnout and temp BRC track
<i>Stage A-3</i>		
Western Ave	41°45'27.0" N 87°40'50.2" W	New signals for proposed Metra track and NS-Metra turnout
Damen Ave	41°45'27.7" N 87°40'24.7" W	Shift signals for BRC-CSX turnout

Loomis Ave/Belt Junction	41°45'28.1" N 87°39'40.9" W	Adjust signals for temp NS Landers, BRC, and Metra track
76 th St	41°45'23.6" N 87°38'22.6" W	Shift signals and signal bridge for proposed BRC track
<i>Stage A-4</i>		
76 th St	41°45'23.6" N 87°38'22.6" W	Adjust signals for proposed BRC track
<i>Stage A-5</i>		
Damen Ave	41°45'28.0" N 87°40'23.1" W	Shift signals for BRC-CSX turnout
76 th St	41°45'23.6" N 87°38'22.6" W	Adjust signals for proposed BRC track

Viaduct Work Summary Table

- Approx. Repaving (square yards): 13,300 sy.
- Approx. Sidewalk Improvement (square yards): 7,900 sy.
- Approx. ADA Ramps Installed: 33 ramps
- Approx. Lighting Fixtures Replaced: 200
- *General Description of Improvements:* At most structures replaced or rehabilitated in Segment A of EW2, roadway viaducts will receive work with the goal of improving safety, security, and mobility for the surrounding community. In total, 13 segments of city streets will be improved. All roadways will be resurfaced or reconstructed as needed, and sidewalks within about 150 ft from the bridge will be repaired. At locations where ramps do not meet ADA guidelines, they will be reconstructed to be ADA accessible. All lighting fixtures will be upgraded from existing orange sodium vapor bulbs to new LEDs bulbs. At each viaduct, drainage conditions have been evaluated, and inlets and sewers will be cleaned and reconstructed as needed. Finally, because a portion Leland Giants Park will be used for temporary construction staging, the park will receive new landscaping. There will be additional inspection through Phase II, at which point the design team may identify further needed scope at each viaduct.

Summary Table

Structure No.	Roadway Intersection	Approx. Area (pavement and sidewalk)	Specific Activities
NS C-10.25	S Western Ave & W 75 th St	2400 sy	The existing concrete roadway and sidewalks at the structure will be repaired. Two new ADA ramps and 30 new LED light fixtures will be installed around the structure. Inlets and sewers will be cleaned and repaired as necessary.
NS B-518.31	S Damen Ave & W 75 th St	1480 sy	The existing asphalt roadway and concrete sidewalks will be repaired. 22

			new LED light fixtures will be installed around the structure. Inlets and sewers will be cleaned, and a collapsed inlet to the southwest will be rebuilt.
NS B-517.80	S Ashland Ave & W 75 th St	1100 sy	The existing concrete roadway and sidewalks will be repaired. Two new ADA ramps and 20 new LED light fixtures will be installed around the structure. Inlets and sewers will be cleaned and repaired as necessary.
NS B-517.52	S Loomis Blvd & W 75 th St	800 sy	The existing asphalt roadway and concrete sidewalks will be repaired. 20 new LED light fixtures will be installed around the structure. Inlets and sewers will be cleaned and repaired as necessary.
NS B-517.35	S Racine Ave & W 75 th St	900 sy	The existing asphalt roadway and concrete sidewalks will be repaired. Two new ADA ramps and 20 new LED light fixtures will be installed around the structure. Inlets and sewers will be cleaned, and an inlet to the northwest will be rebuilt to the curb line.
NS B-517.23	S Aberdeen St & W 75 th St	900 sy	The existing asphalt roadway and concrete sidewalks will be repaired. Four new ADA ramps and 20 new LED light fixtures will be installed around the structure. Inlets and sewers will be cleaned and repaired as needed.
NS/BRC B-517.10	S Morgan St & W 75 th St	900 sy	The existing asphalt roadway and concrete sidewalks will be repaired. Seven new ADA ramps and 10 new LED light fixtures will be installed around the structure. Inlets and sewers will be cleaned and repaired as needed.
NS/BRC B-516.98	S Peoria St & W 75 th St	900 sy	The existing concrete roadway and sidewalks will be repaired. Eight new ADA ramps and 10 new LED light fixtures will be installed around the structure. Inlets and sewers will be cleaned and repaired as needed.
NS/BRC B-516.85	S Halsted St & W 75 th St	900 sy	The existing asphalt roadway and concrete sidewalks will be repaired. Four new ADA ramps and 10 new LED light fixtures will be installed around the

			structure. Inlets and sewers will be cleaned and repaired as needed.
NS/BRC B-516.79	S Emerald Ave & W 75 th St	N/A	The structure will be filled as needed. There is currently no access under the structure, so no additional mobility improvements or changes are included.
NS/BRC B-516.72	S Union Ave & W 75 th St	1060 sy	The structure over the existing brick roadway will be closed. North and south of the structure, Union will be modified to become a cul-de-sac with sidewalks. Inlets and sewers will be cleaned and repaired as needed.
NS/BRC B-516.42	W 76 th St, west of S Parnell Ave	4700 sy	The existing asphalt roadway and concrete sidewalks will be reconstructed and lowered by 3". Ten new ADA ramps and 28 new LED light fixtures will be installed around the structure. Inlets and sewers will be cleaned and repaired as needed. After construction, Leland Giants Park south of Emerald Wye will be restored and replanted as approved by the Chicago Park District and Illinois Historic Preservation Agency.
NS C-7.96	W 74 th St, west of S Parnell Ave	4030 sy	The existing asphalt roadway and concrete sidewalk will be repaired. Three new ADA ramps and 14 new LED light fixtures will be installed around the structure. Inlets and sewers will be cleaned and repaired as needed.
NS C-8.04	S Lowe Ave, south of W 74 th St	1190 sy	The existing brick roadway will be resurfaced. Due to tight existing horizontal clearances, there are no sidewalks through the underpass. Sidewalks surrounding the underpass will be repaired improved. Inlets and sewers will be cleaned and repaired as needed.