



Illinois Department of Transportation

To: Jose Rios, Dist. 1 Attn: Charles Riddle
From: George A. Tapas
Subject: Approved Project Development Report
Date: January 18, 2023

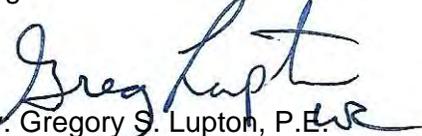
Kane County
KCDOT
Section 19-00514-00-WR
Project TBD
Randall Road at IL 71

On January 17, 2023, the Federal Highway Administration granted Categorical Exclusion Approval for the subject project. A copy of the FHWA's formal e-mail response is attached to this memo. The project design is approved this date.

Any changes to the approved design will require the project to be re-evaluated for NEPA compliance, sensitive environmental resources, and/or public involvement.

A copy of the report has been uploaded to the BLRS WMFT database under the documents folder for the project.

Engineer of Local Roads and Streets


By: Gregory S. Lupton, P.E.
Local Project Implementation Engineer

Attachment

Raffensperger, William

From: Pantoja, Irene (FHWA) <irene.pantoja@dot.gov>
Sent: Tuesday, January 17, 2023 2:55 PM
To: Raffensperger, William
Cc: Smart, Michael (FHWA)
Subject: [External] RE: Kane County Section 19-00514-00-WR Request for Federal Approved CE

Bill,

After reviewing the project information provided, FHWA has determined the project in Randall Road and IL 72 (Higgins Road), Section 19-00514-00-WR in Kane County, will not have any significant impacts on the human environment and approved its designation as a Categorical Exclusion per 23 CFR 771.117(d)(13) on January 17, 2023.

Let me know if there are any concerns.

Stay safe,



Irene Pantoja

Transportation Engineer, D-1
Federal Highway Administration
3250 Executive Park Drive
Springfield, IL 62703
217-492-4628

"Courage is not having the strength to go on; it's going on when you don't have the strength".- Theodore Roosevelt

From: Raffensperger, William <William.Raffensperger@illinois.gov>
Sent: Tuesday, January 3, 2023 11:07 AM
To: Pantoja, Irene (FHWA) <irene.pantoja@dot.gov>
Cc: Smart, Michael (FHWA) <Michael.Smart@dot.gov>
Subject: Kane County Section 19-00514-00-WR Request for Federal Approved CE

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

There is an improvement in Kane County, KCDOT, Section 19-00514-00-WR. Please see the attached location map. The project location is at the intersection of Randall Road and IL 72 (Higgins Road).

This project was presented at coordination meetings on 2/9/2021 at the IDOT District 1 office. at which the FHWA and IDOT determined that the project would be processed as a Federal Approved Categorical Exclusion. A copy of the coordination meeting minutes is attached for your convenience.

Project Scope:

- The project will reconstruct the Randall Road and IL 72 intersection to provide an additional north and south through lane on Randall Road. Additional work will include curb and gutter, storm sewer, auxiliary turn lanes, utility relocation, and a shared use path. Work on IL 72 will be that which is necessary to accommodate the Randall Road widening.

- Total project length: 0.44 mile (2,300 feet)
- This is a spot intersection improvement.
- There are no existing structures that meet the AASHTO definition of a structure within the project limits.
- The roadway work zone will be protected using the applicable traffic control measures for stage construction to maintain two-way traffic at all times.
- Traffic counts:

Roadway	Current ADT	2050 ADT
Randall Road	47,800	69,400
IL 72	18,700	25,500

- Surround land use: Residential/commercial/agricultural
- TIP # 09-21-0019. Phase 2 design, ROW, are listed in the current multi-year portion of the fiscally constrained and conformed TIP.
https://etip.cmap.illinois.gov/project_info?project_id=1044506&version=5&view_type=&fromPage=order%5Fby%3D%26order%5Forder%3D%26order%5Fold%5Fby%3D%26search%5Fstr%3D09%2D21%2D0019%26IS%5FFROM%5FFULL%3DTrue%26get%5Ftop%5Frows%3D100%26p%5Ftype%3D%26%5F%3D1672763009877%26end_page=

The following are the environmental issues and dates for this project:

- ROW and Easements are required for this project
 - 1.33 acres of additional right of way (9 parcels)
 - 0 acre of permanent easements
 - 0.12 acres of temporary easements (4 parcels)
 - 6 property owners are affected.
 - There are no displacements.
- Cultural clearance –9/2/2021. IDOT qualified staff made a “no historic properties affected” determination.
- Natural resources review – 3/18/2021
 - An unknown number of trees will be removed.
 - Wetlands were delineated within project limits.
 - 0.24 acres of permanent wetland impacts will be mitigated at a rate of 1.5:1 mitigation ratio totaling 0.36 acres.
 - A commercial wetland bank will be utilized.
 - The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project.
 - A review of the USFW Service list of endangered, threatened, proposed and candidate species and proposed and designated critical habitat determined that listed species and critical habitat may be present for the following species:
 - Northern long-eared bat (NLEB),
 - Eastern prairie fringed orchid
 - After reviewing applicable USFWS guidance, and in the professional opinion of the BDE Natural Resources Unit, it has been determined that the proposed improvement will have no effect on the Federally listed species listed above.
 - When the NRR memo is updated, it will likely include a project commitment such as “To conserve the NLEB, trees will not be cleared from April 1 through September 30.”
- A USACE regional Section 404 permit is required for this project due to instream work and adverse wetland impacts.
- According to the PDR:
 - a PSI will be prepared during the Phase II design for REC sites abutting the project limits.

- there is more than one acre of soil disturbance, the NPDES storm water permit requirements will apply.
 - The proposed project is anticipated to have traffic noise impacts, but the noise barriers at the two impacted receptor locations do not meet IDOT's feasibility and reasonableness criteria. Due to this, traffic noise abatement measures are not likely to be implemented based on preliminary design. A copy of the noise analysis is provided for your information.
- All public coordination documentation is included in the attached public involvement file. As part of the public outreach, KDOT initiated contact via a letter to the adjacent property owners within the limits of the project and to the stakeholders of the immediate area. The stakeholders include Advocate Sherman Hospital, CUSD 300, Dundee Township Highway Commissioner, Superintendent, and Park District, City of Elgin, Village of Sleepy Hollow, and the Village of West Dundee.

One property owner was concerned if there would be a conflict with their water line. Advocate Sherman Hospital responded in favor of any improvement that would reduce ambulance delay while the West Dundee Park District requested consideration of pedestrian and bicycle connections. Documentation from each entity is included in the attachment.

A virtual public information meeting was held on Thursday, October 14, 2021, from 6:00 PM to 7:30 PM over Zoom. Attendees were notified of the meeting via three avenues:

1. Direct mail to adjacent property owners and stakeholders.
2. Advertisement for virtual public information meeting in the Daily Herald, Fox Valley edition on September 30, 2021, and October 11, 2021.
3. Changeable message boards within the project corridor advising of the meeting with a link to the County website.

In addition, for those that may not have access to the internet, ahead of the meeting presentation handouts and a call-in phone number for audio attendance were provided at the Randall Oaks Recreation Center. More than 20 people were in attendance. The newspaper advertisement, letters to stakeholders, the presentation, and a summary of the meeting and comments are all included in the attached public involvement file which is provided for your convenience.

There is no apparent opposition to this project.

- Estimated project cost: \$5.4 million
- Wetland Impacts Involved Yes
The FHWA issued a programmatic Wetland Finding for CEs on October 1, 2020 in compliance with Executive Order 11990, Protection of Wetlands. The Programmatic Wetland Finding is contained in the CE Agreement, available online in the BDE Manual (Appendix A).

The following items exceed the thresholds in the Programmatic Agreement for Categorical Exclusions to be considered a State Approved CE:

1. This project meets the criteria for a Type 1 project established in 23 CFR Part 772.5 requiring a noise analysis, PA Section V #2.

Based on the above information, this project will not have any significant impacts on the human environment. Approval of this project as a Categorical Exclusion is requested.

William Raffensperger, PE, PTOE, PTP
Local Studies & Plans Engineer
Illinois Department of Transportation
Bureau of Local Roads and Streets
2300 S. Dirksen Parkway

Springfield, IL 62764

O - 217.785.1676

C - 217.720.2787

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

State Route (IL 72)



Illinois Department of Transportation

Local Project Development Report for Group II Categorical Exclusions and Design Approval

County:	Kane
Local Public Agency:	Kane County Division of Transportation
Section Number:	19-00514-00-WR
Route:	FAP 336 (Randall Road)

Project Number: TBD (applying for federal funds) Project Length: 2,300 ft (0.44 mi)

Street/Road Name: Randall Road

Termini: At FAP 341 (IL Rte. 72 / Higgins Road)

For Township or Road District bridge projects: The County Engineer certifies that the project design speed exceeds the minimum design speed recommended for this classification of roadway as provided in the BLRS Manual in order to prevent a deficient NBIS rating for approach roadway alignment appraisal. All elements have been designed to the chosen design speed unless noted otherwise in Section 2(e) and/or the attached BLR 22120.

County Engineer Date

Categorical Exclusion and Design Approval Recommended

[Signature]
Local Agency Date 12 / 05 / 2022

[Signature]
Regional Engineer Date 12/19/22

This project will not have any significant impacts on the human environment; therefore, the FHWA approves the designation project as a Categorical Exclusion on 1/17/2023
Date

Design Approval [Signature]
Bureau of Local Roads & Streets Date 1/18/2023

1. LOCATION AND EXISTING CONDITIONS

a. Location (attach location map to supplement narrative description)

The intersection of Randall Road and IL Rte. 72 is located in unincorporated Kane County. The southwest quadrant is located in the City of Elgin with the Village of West Dundee to the north and east and the Village of Sleepy Hollow to the southeast. A location map is included as **Attachment 1a**.

b. Description of Existing Facility - Give narrative description, including such items as width of travel, parking and turn lanes, sidewalks, alignment, traffic control devices, utilities, jurisdiction, maintenance responsibility, drainage, terrain, and current land use (including major public facilities and local landmarks). Attach existing typical sections showing roadway widths, bridge widths, ROW widths, sidewalk widths, guardrail, curb and gutter and surface types.

Existing Typical Sections are included as **Attachment 2**. Randall Road is under the jurisdiction and maintenance of the Kane County Division of Transportation (KDOT) and IL Rte. 72 is under the jurisdiction and maintenance of the Illinois Department of Transportation (IDOT). Right of way on each roadway varies between 60 and 90 feet either side of centerline.

The functional classification of both Randall Road and IL Rte. 72 is Other Principal Arterial. A Functional Classification Map is included as **Attachment 1b**. Randall Road is a Class II Local Truck Route. A Designated Truck Route Map is included as **Attachment 1c**. The subject intersection is signalized, and the signal is coordinated north-south along Randall Road. Each roadway is bituminous and provides at the intersection two 12-foot wide through lanes, two 12-foot left turn lanes and a 12-foot right turn lane. On each roadway the divided roadway median transitions from painted, to mountable corrugated, to raised median adjacent to the dual left turn lanes. Shoulder widths on both Randall Road and IL Rte. 72 vary between 4 and 8 feet with each shoulder bordered by M-4.24 curb and gutter. Each roadway is on tangent alignment with the vertical alignment of Randall Road ranging from 2.78% to 0.32% and IL Rte. 72 on a 1.5% downgrade from west to east.

On-street parking is not allowed on Randall Road or IL Rte. 72 and sidewalks and separated bicycle facilities are absent at this intersection. The southwest quadrant adjacent to the intersection is open land and advertised for sale and development. Kane County owns the northeast quadrant. The northwest quadrant has multiple single and multi-family homes, while the southeast quadrant is a single residential property. Land uses beyond the immediate intersection include residential, the Dundee Township Park District and Randall Oaks Park to the north; Dundee Middle School, Calan Ice Sports, industrial, and commercial uses to the west and south; and residential to the east and south. Interstate 90 (I-90) is approximately 1.5 miles south of the study intersection. Pace Bus runs Route 550 which passes north-south through the intersection but does not stop in proximity to the intersection.

Utilities include intersection lighting on both Randall Road and IL Rte. 72. Overhead electric, telephone, and cable run along Randall Road north of IL Rte. 72 and on IL Rte. 72 east of Randall Road. A NICOR gas high pressure main is located on the west leg of IL Rte. 72 and switches from the northside to the southside approximately 400 feet west of the intersection and proceeds southerly along the west side of Randall Road. An easterly connection occurs at Carrington Drive. There are no City of Elgin utilities within the project limits. See **Attachment 19** for Utility Coordination

The project does not fall within a floodway or floodplain. Within the limits of the intersection the Higgins Road storm water is collected via inlets to oversized storm sewers and outlet via restricted manholes. The Randall Road storm water is collected via ditches which flow to the Higgins Road storm sewer. An existing 48" reinforced concrete pipe culvert, 146 feet in length, is located at Station 95+35 under Randall Road and flows from west to east. A guardrail is provided on the west side of Randall Road only, approximately 265 feet long, at this culvert.

c. Traffic Data

Current ADT:	Randall Road – 47,800	% trucks:	Randall Road = 2% (S) / 2.2% (N)
	IL Rte. 72 – 18,700		IL Rte. 72 = 3.8% (W) / 1% (E)

Will 80,000 trucks be legally permitted on this route? Yes No

Design Year: 2050 ADT: Randall Rd – 69,400 DHV: Randall Rd – 5,400 % trucks: 1% to 3.8%
IL Rte. 72 – 25,500 IL Rte. 72 – 2,400

Coordination with CMAP is included in **Attachment 19** and peak hour traffic is provided as **Attachment 3**.

- d. **Structures** - Identify location within the proposed improvement of all structures on attached location map. Attach a copy of the Structure Master Report for all structures within the project limits. Attach a copy of the Bridge Condition Report or the Bridge Deck Resurfacing approval letter for structures to be replaced, rehabilitated, or resurfaced.

No structures are within the limits of this intersection.

- e. **Railroads** - Identify location of all railroad crossings on attached location map and complete the following:

Railroad Name	No. and Type of Tracks (Main or Switching)	Type of Devices*	Warning	No. of Trains Per Day	Railroad Width of Crossing at Rt. Angles
N/A	N/A	N/A		N/A	
N/A	N/A	N/A		N/A	

*Include a sketch showing location of railroad protective devices from the edge of roadway and to the nearest track.

- f. **Contiguous Sections** - Describe the existing typical sections at each end of the proposed improvement including number of travel lanes, turning lanes and parking lanes, lane widths and roadway width (f-f of curbs or e-e of shoulders), and sidewalk width.

At each end, Randall Road continues as a four-lane bituminous roadway with shoulders (12' through lanes and 82' e-e). IL Rte. 72 east the roadway transitions to a two-lane bituminous roadway with either shoulder or curb and gutter (12' travel lanes and varies 36.5' to 38.5' e-e). IL Rte. 72 west, the roadway transitions to a three-lane bituminous roadway with shoulders (12' travel lanes and 50' e-e). Neither sidewalk, bicycle facilities, or parking lanes are present on Randall Road or IL Rte. 72.

2. Proposed Improvement

- a. Discuss the purpose and need of the project:

The purpose of the project is to reduce delay and queues and subsequently reduce crash occurrences on Randall Road.

The existing (2019) intersection operations result in an overall LOS D for both the AM and PM peak hours with individual movements on Randall Road resulting in delay ranging from 65 to 101 seconds. The 2050 traffic volumes are projected to result in overall intersection operations of LOS E in the AM peak hour and F in the PM peak hour with individual movements on Randall Road resulting in delay ranging from 61 to 194 seconds. The northbound PM peak delays of Randall Road routinely result in queues extending beyond Carrington Drive, one-quarter mile south of Randall Road. These significant queues result in crashes, typically rear-end.

- b. What design guidelines will be used for the proposed improvement? (Check One)

- Rural (BLRS Manual Chapter 32)
- Urban (BLRS Manual Chapter 32)
- Suburban (BLRS Manual Chapter 32)
- 3R Guidelines (BLRS Manual Chapter 33)
- Bicycle Guidelines (BLRS Manual Chapter 42)
- Pedestrian Guidelines
- Other: SRA (BDE Manual Chapter 46)

Functional Classification: Arterial Collector Local Road Other _____

Terrain: Level Rolling

Regulatory or Posted Speed Limit: 50 – Randall Rd
45 – IL Rte. 72

Design Speed: 50 – Randall Rd
50 – IL Rte. 72

- c. Describe type of work to be accomplished by the improvement. Discussion should include width of proposed travel, parking, bicycle and turning lanes, sidewalks, shared-use paths, guardrail, traffic control devices, drainage items (including storm sewer outfalls), alignment changes, railroad work, utility adjustments, intersection improvements, side slopes and clear zones. Specify the e_{max} for horizontal curves. Attach typical sections, plan and profile sheets, and intersection design studies when applicable.

To reduce delay and queues on Randall Road, a third 12' through lane will be added on Randall Road at the intersection with IL Rte. 72. The addition of a third through lane on Randall Road will increase capacity and reduce the queues and delays over the projected 2050 no-build operations. The peak directional through traffic lane delays and queues are reflected in **Table 1**. The Synchro reports for the existing conditions, 2050 No Build, and 2050 Build are included as **Attachment 4**.

TABLE 1 - RANDALL ROAD QUEUE AND DELAY REDUCTIONS IN THE PEAK DIRECTION

PEAK DIRECTION	MEASURE	NO BUILD AM	BUILD AM	REDUCTION	NO BUILD PM	BUILD PM	REDUCTION
SB T	Delay	61.4	28.9	-32.5 seconds			
	Queue	1564	713	-851 feet			
NB T	Delay				116.6	42.6	-74 seconds
	Queue				1997	1025	-972 feet

On Randall Road the existing pavement width is 24 feet and will be widened to 36 feet, plus a 12' right lane to IL Rte. 72. The pavement will be widened to 36 feet the full length of the project limits for connectivity to adjacent future improvements, and therefore the transition of three lanes to two lanes will occur via pavement marking with an edge line taper. M-4.24 curb and gutter will be placed adjacent to the third lane. The existing left turn lanes and two through lanes on Randall Road will be retained at 12' wide.

No additional through lanes will be added on IL Rte. 72. The through lanes will be retained at 12' wide. The left and right turn lanes will be maintained as 12' wide and lengthened as needed.

The roadway alignment is not being changed and there are no railroad crossings within the vicinity of the project and thus railroad work does not occur. On-street parking is not allowed. The parkway side slopes are a maximum of 1:3 and the 1.5' clear zone from face of curb and a 4' enhanced lateral offset is provided. Superelevation is not provided on either roadway.

Proposed Typical Sections are included in **Attachment 2**, a Plan and Profile is provided as **Attachment 5**, an Intersection Design Study is included as **Attachment 6** and the approval by Geometric Studies Unit and Bureau of Traffic are included in **Attachment 19**.

To provide for pedestrian and bicycle mobility, a shelf to accommodate a future multi-use path will be graded on the west side of Randall Road from the south limit to the southwest quadrant of Randall Road at IL Rte. 72. From the northwest quadrant north to and west along Recreation Drive, the multi-use path will be constructed with the roadway improvement. Sidewalks are not proposed.

Due to varying parkway grades and to minimize impacts to adjacent residents and sensitive properties (potential historic) retaining walls are proposed in four different locations. The first two being on the east side of Randall Road from Station 106+25 to 104+00 and Station 103+25 to 101+00. These walls vary in height with the max exposed face of wall to be 3.0 feet and 4.25 feet, respectively and are located seven feet and five feet respectively, from face of curb. These lateral offsets meet the enhanced lateral offset requirement of four feet from face of curb as stated in the BDE Roadside Safety Chapter 38, section 28-9.02; not warranting guardrail.

Two additional retaining walls are needed in the northwest quadrant at the intersection corner from Station 98+60 to 99+10 and on the west side of Randall Road from Station 95+00 to 96+00 around the existing crossroad culvert. These walls vary in height with the max exposed face of wall to be 5.7 feet and 6.9 feet, respectively and are located at the back of the multi-use path, 17 feet from the face of curb. These lateral offsets meet the enhanced lateral offset requirement of four feet from face of curb as stated in the BDE Roadside Safety Chapter 38, section 28-9.02; not warranting guardrail.

Drainage will consist of improved storm sewers, lengthening of the existing crossroad culvert, removal of inline detention, and the addition of inlets; all of which will outlet to a proposed detention basin in the northeast quadrant of the intersection. The Drainage Unit approved the Location Drainage Study on 7/22/2021 and is included in **Attachment 19**.

Existing intersection lighting will need to be relocated on Randall Road due to the widening and on the east leg of Higgins Road one light pole will be relocated to accommodate the lengthening of the westbound right turn lane. No new street lighting is proposed. Other utility conflicts include underground electric and cable on the north leg, west side and the east leg, north side.

- d. Discuss items affecting improvement such as hazardous mailbox supports, parking and truck restrictions, mail delivery from traffic lanes, justification (including warrants) for multi-way stop signs, traffic signals and other traffic control and railroad protective devices, stage construction, nearby airports, and additional lighting:

There is one roadside mail delivery location on the south leg, east side of Randall Road. The mailbox will be relocated to accommodate the pavement widening and a non-hazardous support will be utilized. The driveway apron is large enough for the mail carrier to maneuver out of traffic and deliver mail.

Parking is restricted on Randall Road and IL Rte. 72. Randall Road is a Class II Local Truck Route.

Traffic signals are existing and warranted under warrants 1, 2, and 3. There are no nearby railroad crossings or airports.

The improvement will be constructed under stage construction.

Intersection lighting will be relocated on Randall Road to account for the third through lane and on IL Rte. 72 for the westbound right turn lane extension. All lighting will meet IES standards. No new lighting is proposed.

- e. Identify each aspect to be constructed at less than the design guidelines and provide a clear description of required design variances and appropriate justification. (BLRS Manual Section 27-7). If a design variance is required, include a copy of the approved BLR 22120 form as an attachment.

BLR 22120 form is not applicable for this project as it involves a State Route – IL Rte. 72 and Randall Road is an SRA, following BDE guidelines.

Attachment 7 contains BDE 3100 design variance forms for both Randall Road and Higgins Road as they were approved on April 13, 2022. The variances requested are summarized in **Table 2**.

BLR 22120 Form is not applicable for this project as it involves State Route (IL Route 72) and SRA guidelines from the BDE manual.

TABLE 2 – DESIGN VARIANCE SUMMARY

DE #	POLICY	VARIANCE REQUESTED	LOCATION	JUSTIFICATION
1	LOS C	LOS D	Overall Intersection	<p>Alternatives evaluated with additional capacity on Higgins Road did not result in a change in LOS. The intersection signal is interconnected along Randall Road, an SRA, and timing priority is given to Randall Road. The purpose and intent of the project is to reduce delays and queues occurring on Randall Road. The preferred alternative addresses the purpose and need by reducing the 2050 overall delay from 96 seconds to 53 seconds and individual movements that are LOS E or worse have reductions ranging from a minimum of 8 seconds to maximum of 104 seconds. Queues are reduced by 850 feet in the AM and 950 feet in the PM. The construction cost and property impacts associated with an innovative intersection control to meet LOS criteria is greater than the benefit of such an improvement.</p>
2	LOS C	LOS D	Randall Road NB Through (PM)	
3	LOS D	LOS F	Randall Road NB Left Turn (PM) SB Left Turn (PM)	
4	LOS D	LOS E	IL Rte. 72 WB Through (AM) EB Through (PM)	
5	LOS D	LOS F	IL Rte. 72 WB Left Turn (PM) WB Through (PM) WB Right Turn (PM) EB Left Turn (PM)	
6	B curb	M curb	Randall Rd and IL Rte. 72	<p>A barrier curb can be used for closed drainage when placed adjacent to shoulder. However, right of way is restricted due to historic property and residential homes and adequate right of way is not available to also provide a full shoulder; thus, an M curb is used.</p> <p>The existing curb along the medians is M-4.12, as installed by IDOT in their 2012 HSIP project. The existing median curb does not exhibit a crash occurrence, a significant profile change is not proposed and thus the curb type will be retained on the median.</p>
7	Median Cross Slope min 1.5%	<1.5% (Existing Range 0.22% to 1.37%)	IL Rte. 72 STA 190+50 to STA 192+00	<p>The pavement condition does not warrant reconstruction and work on IL Rte. 72 is 3R to provide additional capacity in the turn lanes. Crashes that occur are not related to this design exception. There is no cost benefit to reconstructing the profile when a safety issue is not identified. Where feasible, leveling binder will be used to correct cross slopes.</p>

f. Current estimated cost of proposed improvement? \$ 5,417,470.00 See **Attachment 8**

- g. Analyze the need for accommodating pedestrians, bicyclists and the handicapped. When applicable, describe the facilities to be provided for pedestrians and bicyclists. Discuss the ADA accessibility and maximum longitudinal grade of these facilities. (BLRS Manual Chapter 41)

A Pedestrian and Bicycle Assessment was completed following the guidelines in the BLRS Manual Chapter 41 and included as **Attachment 9**. Based upon land uses and agency plans, pedestrian and bicycle facilities are recommended.

At the November 22, 2019, IDOT/County Kick-off Meeting, (**See Attachment 18**) IDOT indicated that the wide shoulders provide accommodations for pedestrian and bicyclists on IL Rte. 72 and that the shoulders meet complete streets criteria.

On Randall Road, the parkway will be graded to a maximum longitudinal grade of 2.78%, and ditches designed to accommodate a future bike path along the west side of Randall Road from the south project limit to IL Rte. 72 that would connect to existing facilities beyond the project improvements. From IL Rte. 72 north to Recreation Drive, the County will construct a multi-use path to accommodate the residents along IL Rte. 72 to the Dundee Township Park District. To further accommodate pedestrians and bicyclists, landing pads will be added to the northeast, northwest, and southwest quadrants with cross walks and pedestrian heads crossing the north and west legs of the intersection. These features will provide connectivity to the existing shoulders on IL Rte. 72.

Coordination with the D1-ADA coordinator (**see Attachment 19**) occurred with recommendations to modify the northeast quadrant landing zone, as a commitment to address in Phase II.

Sidewalks/Shared-Use Paths:

Maximum 2% cross slope: Yes No Not Applicable

ADA ramps with detectable warnings at street intersections: Yes No Not Applicable

If no, provide justification.

- h. Discuss any proposed improvements being considered in adjacent segments including the anticipated construction startup date of these improvements.

The Randall/I-90 PEL project is considering improvements to the Randall Road corridor from north of Big Timber Road to south of IL Rte. 72, this projects terminus. The Randall/I-90 project is divided into three segments: South, Randall Road/I90 interchange, and North. Alternatives being considered in each segment are intended to function with any alternative in an adjacent segment. On August 10, 2021, the FHWA and CBLRS accepted the PEL for use in upcoming phases of study (see www.randallover90.com). Construction will occur in stages as funding opportunities are identified.

3. Crash Analysis (BLRS Manual Section 22-2.11(b)(9))

- a. Summarize crash data for the past five years, including a spot map or a location map showing crash locations when possible. Detail the types of crashes and include collision diagrams, if possible, especially at cluster sites. Give the source of this data.

The subject intersection was improved in 2012, just before the project study period, which resulted in two through lanes, dual left-turn lanes, and a right-turn lane on each approach. The improvement was a Highway Safety Improvement Program (HSIP) project to address a high occurrence of turning and angle crashes with severe injuries.

Crash reports were obtained from IDOT for the years 2013 through 2017, the most current full year data available at the time of reporting. A summary of the data and crash diagrams are included as **Attachment 10**. The summary data was extracted from the coded entry and reconciled with the written and graphical summary contained within each crash report. Animal crashes were not included in the total, but noted, because these types of crashes are not geometric related.

During the study period, a total of 110 crashes (plus 9 animal) occurred averaging 23.8 crashes per year. Of the 110, 21 (19%) were multi-vehicle crashes. A multi-vehicle crash is when three or more vehicles are involved. Sixteen of the multi-vehicle crashes occurred in the north-south direction.

Of the 110 total crashes, 23 (21%) were injury crashes with 32 injuries (1.4 persons injured per injury crash) which , averages 4.6 injury crashes per year. Two of the injury crashes were fatalities. One was a single car incident where the driver had a medical emergency, crossed the road and hit a power pole. The second was an angle crash at night where one vehicle ran a red light. Injury crashes are summarized in **Table 3**.

TABLE 3 - RANDALL ROAD AT IL RTE. 72 INJURY CRASHES

INJURY TYPE	# INJURY CRASHES	# OF INJURIES
K	2	2
A	4	4
B	8	11
C	12	15

The number of crash occurrences by year is shown in Figure 1 and the occurrences by type, without animal, are shown in Figure 2.

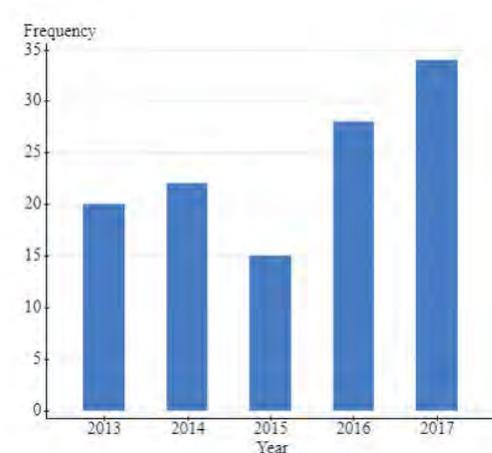


FIGURE 1 - RANDALL ROAD AT IL RTE. 72 BY YEAR

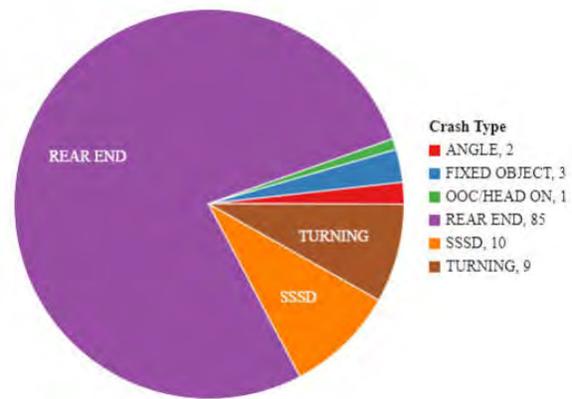


FIGURE 2 - RANDALL ROAD AT IL RTE. 72 BY TYPE

The yearly data reflects a reduction in 2015, however the other four years reflect a steady increase, even after the HSIP improvement in 2012. This increase may be due to traffic volume increases from new development or improved economy. An increase in traffic volume generally results in an increase in crash occurrence. When looking at the crash types, an overwhelming number of crashes (77%) are rear end. Sideswipe same direction and turning are distant second and third occurrences at 9% and 8%, respectively, of the overall crashes. As evidenced by the low occurrence of turning and angle crashes, the 2012 improvement did address the safety issue at the time.

- b. Analyze available crash data including results of field check. Discussion should include high crash locations, critical wet weather sites, and other crash patterns. If the data is inconclusive, make a statement to that effect.

Because rear end crashes are the prevalent crash type at the Randall Road and IL Rte. 72 intersection, the crash type was further analyzed. Figures 3 and 4, depict rear end crashes by weather condition and by light condition.

Weather was clear for over 85% of the crashes and over 75% of crashes occurred during daylight hours. Neither of these two conditions, weather nor light condition, are noteworthy and therefore are not a key factor in the intersection safety.

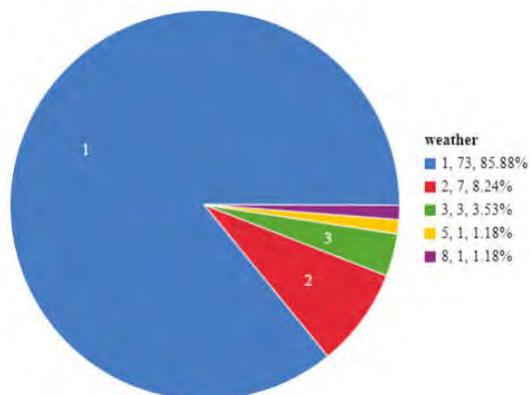


FIGURE 3 - REAR END BY WEATHER CONDITION

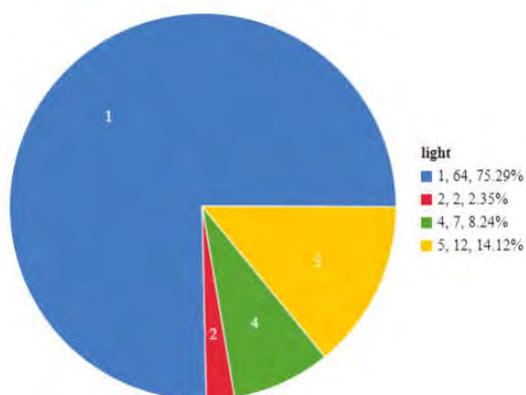


FIGURE 4 - REAR END BY LIGHT CONDITION

Figures 5 and 6 depict rear end crashes by time of day and by direction.

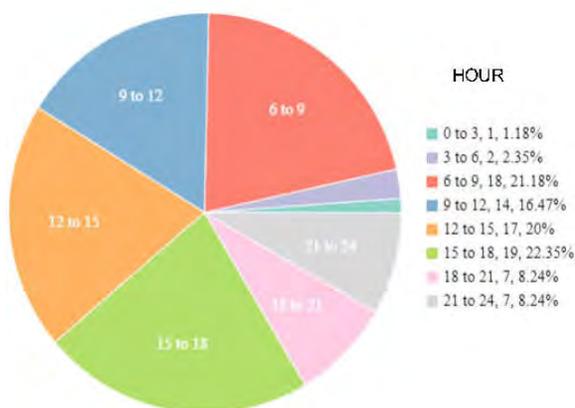


FIGURE 5 - REAR END CRASH BY HOUR

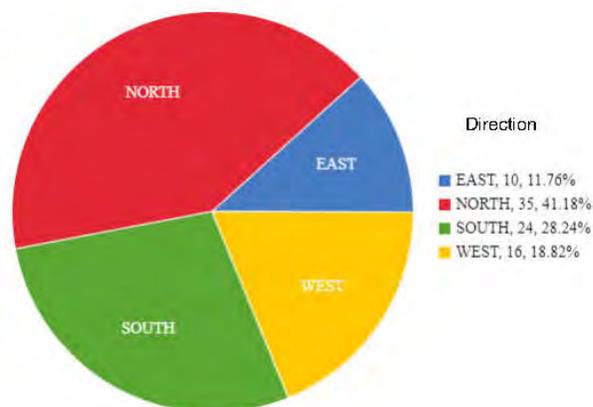


FIGURE 6 - REAR END CRASH BY DIRECTION

The majority of crashes (80%) occur between the hours of 6 AM and 6 PM. Approximately 22% occur each in the 6 to 9 AM peak and the 3 to 6 PM peak hours with 36% occurring between 9 AM and 3 PM. This is a consistent crash occurrence throughout the entire day which coincides with consistent traffic volumes occurring for the same time periods. The commercial and industrial land uses surrounded by residential properties and Randall Road being a primary route to I-90 explain the equally distributed traffic and crash occurrences throughout the day.

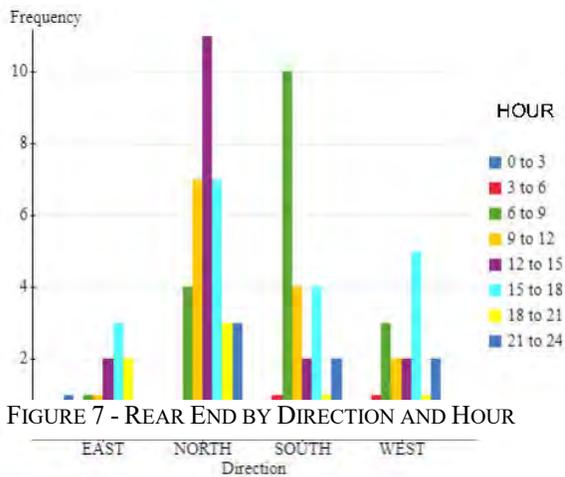


FIGURE 7 - REAR END BY DIRECTION AND HOUR

When looking at the rear end crash type by direction, there is a clear indication that the majority (69%) of crashes occur in the north-south direction; nearly twice as many occurrences than in the east-west direction. Figure 7 depicts the rear end crashes by hour and direction. As would be expected, the rear end crashes peak with the peak directional flow, highest in the PM peak hour in the northbound direction and AM peak hour in the southbound direction. However, the westbound direction has an AM and PM peak. The westbound dual peak may be due to the location of residential properties and those residents going to work in the morning also wanting to access the commercial sites in the evening.

Rear end crashes at signalized intersections can be a result of poor visibility of signals be it obstructions or queues too long and not knowing that traffic is stopping due to a signal, inadequate signal timing, slippery pavement, or turn lanes queueing into through lanes.

The cause of rear end crashes at the Randall Road and IL Rte. 72 intersection is not due to slippery pavement as evidenced by the lack of wet weather collisions. They also are not caused by turn lanes queueing into through lanes evidenced by the small number of turn lane related crashes. Therefore, the cause of rear end crashes may be due to inadequate signal timing and/or poor visibility. The two may in fact actually be a combined cause; long queues and long signal timing.

Observation has confirmed that northbound queues at IL Rte. 72 extend to or past Carrington Drive. Carrington Drive is approximately one-quarter mile away from IL Rte. 72, which is distance to be reacting to a traffic signal. Drivers that are traveling at 45 mph and cannot see a traffic signal ahead may assume the brake lights are slowing vehicles and not necessarily stopped vehicles. Thus, a rear end collision occurs. The speed and distance from the intersection at which these collisions occur may also be the reason that there is a high occurrence of multi-vehicle incidents.

For incidents that occur closer to the intersection, the cause may be due to the long green time. The signal timing for Randall Road at IL Rte. 72 allocates 75% of the cycle to the north-south direction with long cycle lengths (140 and 180 seconds). Drivers are not aware of the length of green time and are unable to anticipate when the cycle may change which may result in quick stops and rear end collisions.

The allocation of green time for the traffic signal, the length of queues that form, the high occurrence of rear end crashes and the findings that a majority of crashes consistently occur between the hours of 6 AM to 6 PM, not just during peak hours, it would be accurate to state that the north-south route, Randall Road, has insufficient capacity. It is therefore recommended to provide a third through lane on Randall Road. Geometric improvements on IL Rte. 72 are not recommended based on the findings of this intersection crash analysis.

c. Describe how the proposed project will address any crash issues.

The Highway Safety Manual (HSM) prediction for urban and suburban arterials was utilized to predict the typical occurrence of total crashes, breakdown by severity of crashes, with the proposed improvement. The HSM predicted crash severity and occurrence is stated in **Table 4**.

TABLE 4 PREDICTED CRASH SEVERITY WITH PROPOSED CONDITIONS

COLLISION TYPE	FATAL AND INJURY (FI)	PROPERTY DAMAGE ONLY (PDO)	TOTAL
MULTIPLE-VEHICLE			
Rear-end collisions	1.741	3.205	4.946
Head-on collisions	0.190	0.199	0.389
Angle collisions	1.343	1.619	2.962
Sideswipe	0.383	0.212	0.595
Other multiple-vehicle collision	0.213	1.400	1.613
Subtotal	3.869	6.635	10.505
SINGLE-VEHICLE			
Collision with parked vehicle	0.000	0.000	0.000
Collision with animal	0.000	0.001	0.001
Collision with fixed object	0.065	0.311	0.376
Collision with other object	0.006	0.025	0.031
Other single-vehicle collision	0.004	0.008	0.012
Single vehicle non collision	0.012	0.012	0.024
Collision with pedestrian	0.030	0.000	0.030
Collision with bicycle	0.164	0.000	0.164
Subtotal	0.282	0.357	0.639
Total	4.151	6.993	11.144

The proposed improvement predicts an average of 11 crashes per year with four injury crashes. Compared to the existing number of crashes per year (22) the proposed improvement is anticipated to reduce total crashes by 50%. Subsequently, injury crashes will reduce as well by 9.8% (from 4.6 to 4.151 per year).

Additionally, by adding sufficient capacity, the primary crash type, rear end is predicted to reduce significantly.

4. Right-of-Way

- a. Describe the right-of-way taking, including the total acreage required for each of the following categories: ROW, permanent easements, temporary easements, and temporary land use permits. Include the width of taking, number of property owners, acreage of right-of-way and/or easements, character of land, i.e., farm, residential, commercial, or publicly owned properties, anticipated impacts to properties that remain, and location of any improvements with respect to required right-of-way. Discuss any impacts on setbacks required by zoning.

Right of way is needed in the form of fee simple and temporary easement from eight different parcels, of which there are six different property owners. The land uses are residential and farmland.

The right of way is primarily needed to grade back to existing conditions and the taking will not have a negative effect to the property. The right of way taking does not affect any existing setbacks on each property. The right of way width needed at each property varies due to existing ground elevation variations, ranging from 13 feet to 42 feet along Randall Road. Right of way widths on Higgins Road range from 5 feet to 9.5 feet. **Table 5** defines the parcel number, location, improvement at the location, the type or right of way, and the acreage of right of way. The right of way is delineated in **Attachment 11**.

TABLE 5 – RIGHT OF WAY

# OF OWNER	PARCEL PIN LAND CLASS	LOCATION	IMPROVEMENT	FEE SIMPLE (ACRES)	TE (ACRES)	TOTAL ROW (ACRES)
1	03-19-400-021 Farmland	W side Randall – S of Carrington	Ditch drainage	0.18		0.18
2	03-19-400-023 Farmland	SW Quad Randall/72 – W of Randall	Multi-use path - Grade to existing	0.25		
		SW Quad Randall/72 – W of Randall	Multi-use path grading -Grade to existing	0.12		
		SW Quad Randall/72 – S of 72	Right Turn Lane lengthening -Grade to existing	0.02		
		SW Quad Randall/72 – S of 72	Right Turn Lane lengthening -Grade to existing	0.03		0.42
3	03-20-300-005 Residential	E side Randall N of Carrington	Pavement Widening - Grade to existing	0.05		0.05
	03-20-300-010 Residential	E side Randall N of Carrington	Pavement Widening - Grade to existing	0.07		
		E side Randall S of 72	Pavement Widening - Driveway Regrade		0.02	0.09
4	03-19-200-006 Commercial	NW Quad Randall/72	Multi-use path grading -Grade to existing	0.17		0.17
5	03-19-200-004 Farmland	W of Randall N of 72	Multi-use path grading -Grade to existing	0.44	0.04	0.48
6	03-19-277-010 Residential	W of Randall S of Recreation	Multi-use path grading -Grade to existing		0.03	0.03
	03-19-277-009 Residential	W of Randall S of Recreation	Multi-use path grading -Grade to existing		0.03	0.03
TOTALS				1.33	0.12	1.45

b. Are any residents, businesses, or farms to be displaced?

Yes No,

If yes, describe the number and type of displacements anticipated and mitigation that will be taken to provide relief for this impact on an attached sheet.

5. Prime Farmland (BLRS Manual Section 20-10)

a. If the project requires more than 3 acres/mile (0.75 hectares/kilometers), 10 acres (4 hectares) for a non-linear improvement, or the project ROW is not contiguous to the existing ROW, contact the Illinois Department of Agriculture and attach results of the coordination and summarize the results below.

The right of way needed for this project is less than 3 acres/mile, is linear and contiguous to the existing right of way.

b. The project requires consultation with the Natural Resource Conservation Service., Form AD-1006 has been completed and submitted to the local office of NRCS. The completed AD-1006 form is attached.

The impact of this project on farmland conversion has been evaluated in accordance with the requirements of the US Natural Resources (NRCS). The project will cover 3 acres or less of farmland per mile (0.75 hectares or less of farmland per kilometer) and the conversion will not result in more than minor impacts. Accordingly, the project conforms to the general form AD-1006 prepared by NRCS. Therefore, further coordination with NRCS on this project will not be necessary.

6. Floodplain Encroachment (BLRS Manual Section 20-7)

Does the proposed work cross or encroach upon a 100-year floodplain, including a regulatory floodway?

Yes No

If yes, summarize the location hydraulics study, regulatory floodway restrictions, the effect of any encroachment (including a comparison between existing and proposed conditions) and the effect of over-the-road flow on the proposed transportation facility. Attach any available floodplain maps.

7. Phase I & II NPDES Storm Water Permit Requirements (BLRS Manual Section 7-4.01)

Will the project involve soil disturbance of 1 acre (0.4 hectares) or more?

Yes No

If yes, the project must comply with the Phase II NPDES Storm Water Permit Requirements.

All NPDES Storm Water Permit Requirements will be followed.

8. "404" Permit (BLRS Manual Section 7-4.02)

Does this project involve waters regulated by Section 404?

Yes No

If yes, what type of 404 permit is required? Nationwide Individual Regional None

Attach a copy of any 404-permit authorization and/or coordination letters with the Corps of Engineers.

The Jurisdictional Determination letter from the Corps of Engineers is provided in **Attachment 12**.

If an individual Section 404 permit is required, please notify the Illinois Department of Transportation district office before submitting the application.

9. **Special Waste (BLRS Manual Section 20-12)**

- a. Following the special waste assessment screening criteria shown on Figure 20-12A of the BLRS Manual, is Preliminary Environmental Site Assessment (PESA) required?
 Yes No
- b. Is work being done on property in the name of the state or are contract plans being prepared by the state?
 Yes No
- c. If a PESA is required for either state or local ROW, did the PESA results determine that the project has Recognized Environmental Conditions (REC's) for special waste?
 Yes No/

If the PESA results determine that the project contains REC's, describe how the special waste is proposed to be handled (including if a Preliminary Site Investigation (PSI) is required).

The PESA COV State results determined that the project has 4 REC(s) within the limits of improvement. The Executive Summary dated July 9, 2020, is enclosed in **Attachment 13a**. REC site 3947-COV-7 is a result of a spill and is at the location of the intersection of Randall Road and Higgins Road. As such, a Preliminary Site Investigation (PSI) is required. The Local Agency PESA identified one REC within local right of way, the same a PESA COV State REC site 3947-COV-7. The Executive Summary dated April 7, 2020, is enclosed in **Attachment 13b**.

10. **Environmental Survey (BLRS Manual Section 20-2)**

Whenever a project involves land acquisition (including easements), any in-stream work (including drainage structure run-around), is located within or adjacent to historic properties listed in (or eligible for) the National Register of Historic Places, a bridge on the historic list, is near wetlands, or known locations of threatened or endangered species, the Environmental Survey Request Form should be submitted early in the project development phase.

The Environmental Survey Request form requesting survey for Biological, Cultural and State Special Waste was submitted 3/2020. Additional information related to cultural resources was submitted 12/2020. ESR Addendum A, to include the northeast quadrant, which is needed for detention, was submitted 1/2021. The Consultant completed Wetland Delineation. The Wetland Delineation report and WIE forms were submitted 1/2021. All clearances obtained are summarized in **Attachment 14a – Project Monitoring Form**.

- a. Wild and Scenic Rivers - If this project crosses or affects a river on the National Wild and Scenic Rivers System or a river listed in the Nationwide Inventory of Rivers with potential for inclusion on the system, include coordination between the National Park Service and the Bureau of Design and Environment (BDE).
 Involvement No Involvement
- b. Wetlands - Does the proposed work impact the use of regulatory wetlands?
 Yes No

If yes, indicate how the wetlands will be migrated. Banking Accumulation On-site Other

The improvement is located within the Upper Fox Watershed (ID 07120006). The nearest wetland bank with available credits is Jelkes Creek in West Dundee, Kane County. Wetland clearance was obtained 3/18/2021 and is included in **Attachment 14b**.

c. Archaeological and Historical Preservation Include results of coordination. Does the project impact an archaeological or historic preservation site?

Yes No

The Cultural resources finding of No Historic Properties Affected was obtained on 9/2/2021 and is included in **Attachment 14c**.

If yes, describe any required documents.

d. Threatened or Endangered Species – Does the project impact any endangered species or plants?

Involvement No Involvement

Include copy of biological resources memorandum or signoff by BDE and/or IDNR.

The Biological clearance was obtained 3/18/2021 and is included in **Attachment 14d**.

e. Stream Modification and Wildlife Impacts - Include copies of any correspondence between BDE and IDNR or U.S. Fish and Wildlife Service. Attach copies of any additional coordination between local agency and IDNR or U.S. Fish and Wildlife Service whenever required as a result of biological review by BDE. Address any proposed mitigation measures.

Involvement No Involvement

11. **Section 4(f) Lands (BLRS Manual Section 20-3)**

a. Does this project require any right-of-way, including temporary construction easements, from a publicly owned park, recreational area, wildlife and waterfowl, or any historic site in or eligible for the National Register of Historic Places?

Yes No

b. If yes, what type of the Section 4(f) involvement has been completed?

Section 4(f) de minimis Standard Section 4(f) Temporary Occupancy None

12. **Air Quality (BLRS Manual Section 20-11)** Check One:

a. This project is in an attainment area.

Projects within a portion of a nonattainment area for which the Chicago Metropolitan Agency for Planning (CMAP) is the MPO.

This project is included in the 2019-2024 (transportation plan) and in the Transportation Improvement Plan (TIP) endorsed by the Chicago Metropolitan Agency for Planning (CMAP), the region's Metropolitan Planning Organization. The 2019-2024 (transportation plan) was found to conform by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) on 10/19/2014.

The TIP was found to confirm by FHWA on 10/19/2014 and by FTA on 10/19/2014.

This project is TIP number 09-21-0019.

Projects within a nonattainment area served by a Metropolitan Planning Organization other than CMAP.

This project is included in the Long-Range Transportation Plan and in the _____ Transportation Improvement Program (TIP) endorsed by _____, the Metropolitan Planning Organization (MPO) for the region in which the project is located.

On _____ the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) determined that the Long-Range Transportation Plan conforms with the transportation-related provisions of the Clean Air Act Amendments of 1990. The FHWA and the FTA determined on _____

that the TIP conforms with the Clean Air Act Amendments. These findings were in accordance with 40 CFR Part 93, "Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and projects Funded or Approved Under Title 23 USC or the Federal Transit Act."

The project's design concept and scope are consistent with the project information used for the TIP conformity analysis. Therefore, this project conforms to the existing State Implementation Plan and the transportation-related requirements of the 1990 Clean Air Act Amendments.

b. Mobile Source Air Toxics (See BDE PM 52-06)

This project will not result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions relative to the no-build alternative. As such, FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special Mobile Source Air Toxic concerns. Consequently, this effort is exempt from analysis for MSATs.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSATs to decline significantly over the next 20 years. Even after accounting for a 64 percent increase in VMT, FHWA predicts MSATs will decline in the range of 57 to 87 percent, from 2000 to 2020, based on regulations now in effect, even with a projected 64 percent increase in VMT. This will both reduce the background level of MSATs as well as the possibility of even minor MSAT emissions from this project.

c. Construction-related Particulate Matter

Demolition and construction activities can result in short-term increases in fugitive dust and equipment-related particulate emissions in and around the project area. (Equipment-related particulate emissions are usually insignificant when equipment is well maintained.) The potential air quality impacts will be short-term, occurring only when demolition and construction work is in progress and local conditions are appropriate.

The potential for fugitive dust emissions typically is associated with building demolition, ground clearing, site preparation, grading, stockpiling of materials, on-site movement of equipment, and transportation of materials. The potential is greatest during dry periods, periods of intense construction activity, and during high wind conditions.

The Department's *Standard Specifications for Road and Bridge Construction* include provisions on dust control. Under these provisions, dust and airborne dirt generated by construction activities will be controlled through dust control procedures or a specific dust control plan, when warranted. The contractor and the Department will meet to review the nature and extent of dust-generating activities and will cooperatively develop specific types of control techniques appropriate to the specific situation. Techniques that may warrant consideration include measures such as minimizing track-out of soil onto nearby publicly traveled roads, reducing speed on unpaved roads, covering haul vehicles, and applying chemical dust suppressants or water to exposed surfaces, particularly those on which construction vehicles travel. With the application of appropriate measures to limit dust emissions during construction, this project will not cause any significant, short-term particulate matter air quality impacts.

d. Project-level Hot Spot Analysis. Check One:

This project is in an attainment area and does not require a hot spot analysis.

This project does not meet the definition of a project of air quality concern as defined in 40 CFR 93.123(b)(1).
Due to _____ The project was included in the latest conforming transportation plan and TIP in the fiscally constrained portion of the plan. The project design concept and scope have not changed significantly from what was reflected in the conformity analysis for the plan and TIP. The project will comply with PM_{2.5} and/or PM₁₀ control measures in the SIP.

it has been determined that the project will not cause or contribute to any new localized PM_{2.5} or PM₁₀ violations or increase the frequency or severity of any PM_{2.5} or PM₁₀ violations. USEPA has determined that such projects meet the Clean Air Act's requirements without any further Hot-Spot analysis.

This project is in a non-attainment or maintenance area and is a project of air quality concern. Therefore, a qualitative hot spot analysis is required. See Attachment _____

e. **COSIM**

Are through lanes or auxiliary turn lanes being added with this project?

Yes No

If yes, has a COSIM pre-screen analysis been completed?

Yes No

If yes, pre-screen analysis is attached as Attachment _____

If no, explain why an analysis has not been performed. This is in an attainment area and therefore exempt from COSIM analysis.

If yes, did the COSIM pre-screen analysis pass or fail? Pass Fail

If the COSIM pre-screen analysis failed, a full COSIM analysis would be required.

13. **Noise (BLRS Manual Section 20-6)**

****NOTE****

This project involves the addition of a through lane on Randall Road, approximately 1,200 feet north and south of Higgins Road and is therefore classified as Type I for noise assessment.

The proposed project is anticipated to have traffic noise impacts, but the noise barriers identified and evaluated do not meet the feasibility and reasonableness criterion. Due to this, traffic noise abatement measures are **not** likely to be implemented based on preliminary design. If the project's final design is different from the preliminary design, IDOT will determine if revisions to the traffic noise analysis are necessary. Neither of the two statements below reflect the findings.

The referenced project meets the criteria for a Type III project established in 23 CFR Part 772. Therefore, the proposed project requires no traffic noise analysis or abatement evaluation. Type III projects do not involve added capacity, construction of new through lanes, changes in the horizontal or vertical alignment of the roadway, or exposure of noise sensitive land uses to a new or existing highway noise source.

Based on the traffic noise analysis and noise abatement evaluation conducted, highway traffic noise abatement measures are likely to be implemented based on preliminary design. The noise barriers determined to meet the feasible and reasonable criteria are identified on the attachment. If it subsequently develops during final design that constraints not foreseen in the preliminary design or public input substantially change, the abatement measures may need to be modified or removed from the project plans. A final decision of the installation of the abatement measure(s) will be made upon completion of the project's final design and the public involvement process.

If this project involves a new alignment, additional lanes, or involves a significant alignment change, attach a traffic noise analysis.

See **Attachment 15** – Noise Study and the email concurrence of findings from BDE.

14. **Work Zone Transportation Management Plans**

Does the project intersect or follow a state route?

Yes No

Is the state or local route considered a significant route?

Yes No Not Applicable

If yes, describe how the Work Zone Transportation Management Plan is being implemented.

Upon coordination of the IDS with the Bureau of Traffic, the D1 TMP form was requested and completed. See **Attachment 16** – D1 OP0042 (Traffic Management Plan) approved 8/9/2022

15. Complete Streets (BLRS Manual Chapter 10)

Does the project include the addition of a travel, turning, or bi-directional turn lane on a state highway?

Yes No

If yes, describe how the Complete Streets Law requiring accommodating bicyclists on a state route apply.

****NOTE****

At the November 22, 2019, IDOT/County Kick-off Meeting, (**See Attachment 18**) IDOT indicated that the wide shoulders provide accommodations for pedestrian and bicyclists on IL Rte. 72 and that the shoulders meet complete streets criteria.

16. Maintenance of Traffic (BLRS Manual Section 22-2.11(b)(9))

Discuss how vehicle traffic and pedestrians will be accommodated during construction, including the impacts of any road and/or sidewalk closure. If the road will be closed, include information concerning location of alternate routes, their ability to handle the additional traffic (street width, number of traffic lanes, structural adequacy, etc.), and the amount of adverse travel. When a marked detour route will be provided, include coordination with appropriate agencies, a description of the adverse travel, and include a map showing the alternate routes or marked detour in the report.

The scope of work is to widen and resurface Randall Road. Travel lanes will be narrowed toward the centerline to provide a work zone for the outside pavement widening. A detour is not needed. On IL Route 72 lane closures will occur to perform the extension of turn lanes. See **Attachment 16** – D1 OP0042 (Transportation Management Plan) approved 8/9/2022 and the staging typical sections.

Additionally, Smart Work Zone technology will be utilized to notify drivers of roadway construction and work zones.

STAGE 1

Stage 1 will consist of work occurring on both Randall Road and Higgins Road simultaneously. The area of work on Randall Road will be delineated by barricades on the east and west sides of Randall Road to widen the pavement. Randall Road will have all lanes reduced to 11 feet except for the northbound and southbound left turn lanes. On Higgins Road, the area of work will be on the west leg (eastbound lanes) and the east leg (westbound lanes) of the intersection. The west leg work area will be delineated by barricades on the south side to lengthen the existing right turn lane. The eastbound through and right lane will be reduced to 11 feet. The east leg work area will be delineated by barricades on the north side to lengthen the existing right turn lane. The westbound through and right turn lane will be reduced to 11 feet.

STAGE 2

Stage 2 will consist of work occurring on only the west leg of Higgins Road. The area of work will be delineated eastbound by barricades to allow removal of the existing median and extension of the existing left turn lanes. All eastbound through lanes will be reduced to 11 feet and the inside left turn lane closed.

STAGE 3

Stage 3 will consist of work occurring under daytime lane closures. This work will entail the milling and resurfacing of the remainder of the intersection.

17. Public Involvement (BLRS Manual Chapter 21)

- a. Summarize public informational meetings, formal public hearings, property owner signoffs, council or board meetings, media coverage, and personal contact with public. Include copies of newspaper advertisements, letter to property owners, public comments, and documents showing all public comments have been addressed.

All public coordination documentation is included as **Attachment 17**. As part of the public outreach, KDOT initiated contact via a letter to the adjacent property owners within the limits of the project and to the stakeholders of the immediate area. The stakeholders include Advocate Sherman Hospital, CUSD 300, Dundee Township Highway Commissioner, Superintendent, and Park District, City of Elgin, Village of Sleepy Hollow, and the Village of West Dundee.

One property owner was concerned if there would be a conflict with their water line. Advocate Sherman Hospital responded in favor of any improvement that would reduce ambulance delay while the West Dundee Park District requested consideration of pedestrian and bicycle connections. Documentation from each entity is included in the attachment.

A virtual public information meeting was held on Thursday, October 14, 2021, from 6:00 PM to 7:30 PM over Zoom. Attendees were notified of the meeting via three avenues:

- 1. Direct mail to adjacent property owners and stakeholders.
2. Advertisement for virtual public information meeting in the Daily Herald, Fox Valley edition on September 30, 2021, and October 11, 2021.
3. Changeable message boards within the project corridor advising of the meeting with a link to the County website.

In addition, for those that may not have access to the internet, ahead of the meeting presentation handouts and a call-in phone number for audio attendance were provided at the Randall Oaks Recreation Center.

More than 20 people were in attendance. The newspaper advertisement, letters to stakeholders, the presentation, and a summary of the meeting and comments are all included in **Attachment 17**.

- b. Has any opposition been expressed toward the improvement?

Yes No

If yes, briefly discuss the type and extent of opposition.

- c. If yes, discuss how the opposition has been addressed with the property owners.

18. Coordination: LA-IDOT-FHWA (BLRS Manual Section 22-1.02)

Have there been any coordination meetings for this project? Yes No

If yes, list the date(s) of the coordination meeting(s) below and attach coordination meeting minutes in the report.

All meeting minutes are included as **Attachment 18**.

Table with 3 columns: Meeting ID (A, B, C), Meeting Description (IDOT Local Roads and Streets - Phase I Kick-off, IDOT Bureau of Programming - GSU, FHWA/IDOT Coordination Meeting), and Date (11/22/2019, 11/13/2020, 2/9/2021)

19. Other Coordination
Attach results.

Other Coordination is included as **Attachment 19** and includes the following:

- A. CMAP
- B. IDOT Bureau of Programming, Geometric Studies Unit approval – 5/5/2022
- C. IDOT Bureau of Traffic, Arterials approval – 6/9/2022 & 11/14/2022, 11/4/2022
- D. IDOT Bureau of Traffic, Traffic Control Staging approval – 8/9/2022
- E. IDOT Bureau of Traffic, Programs Studies approval – 8/8/2022 & 8/18/2022
- F. IDOT Bureau of Traffic, Programs Design approval – 8/26/2022
- G. IDOT Bureau of Programming, Hydraulics Unit approval – 7/22/21
- H. IDOT ADA Coordinator approval – 8/23/2022
- I. Utility Coordination

20. Summary of Commitments

- State and Local PSI will be completed in Phase II and a PESA Response for State ROW completed.
- All applicable special waste pay items should be included in final PS&E, as needed.
- Trees will be replaced per IDOT Policy D&E-18 for State Route.
- Coordination with homeowner at 16N287 Randall Road (SE quadrant) regarding construction near their water line.
- Completion of NPDES Storm Water Permit and USACE 404 Permit
- Coordinate with D1 ADA coordinator and modify the sidewalk landing/ramp on the NE quad of Randall/IL Rte 72.
- Provide all associated permits, when available, 11x17 copies of final plans, and a CD containing a PDF copy of the final plans and stormwater report to the Bureau of Programming – Hydraulics Unit.
- In Phase II, D1 OP0042 Form (Transportation Management Plan) page 3 is to be completed and signature approval on page 1 is required from D-1 Bureau of Traffic Operations
- In Phase II, coordinate intersection lighting relocation on IL Route 72 with the Bureau of Traffic Electrical Unit.

Summary of Attachments:

1. Maps
 - a – Location
 - b – Functional Classification
 - c – Designated Truck Routes
2. Existing and Proposed Typical Sections
3. Peak Hour Traffic
4. Capacity Analysis
5. Plan and Profile
6. Intersection Design Study
7. Design Exceptions
8. Estimate of Cost
9. Bicycle and Pedestrian Assessment
10. Crash Data and Collision Diagram
11. ROW Plan
12. "404" Permit - initial correspondence w/USACE
13. Special Waste
 - a – State
 - b – Local
14. Environmental Clearances
 - a – Project Monitoring Form
 - b – Wetlands
 - c – Cultural Resources
 - d – Natural Resources
15. Noise
16. Maintenance of Traffic / Transportation Management Plan
17. Public Involvement
18. Coordination
 - a – BLRS
 - b – GSU
 - c – FHWA
19. Other Coordination
 - a – CMAP
 - b – IDS, GSU
 - c – IDS, BOT Arterials
 - d – IDS, BOT Traffic Control Staging
 - e – IDS, BOT Programs Studies
 - f – IDS, BOT Programs Design
 - g – LDS, Hydraulics
 - h – D1 ADA
 - i – Utility Coordination

ATTACHMENT 1

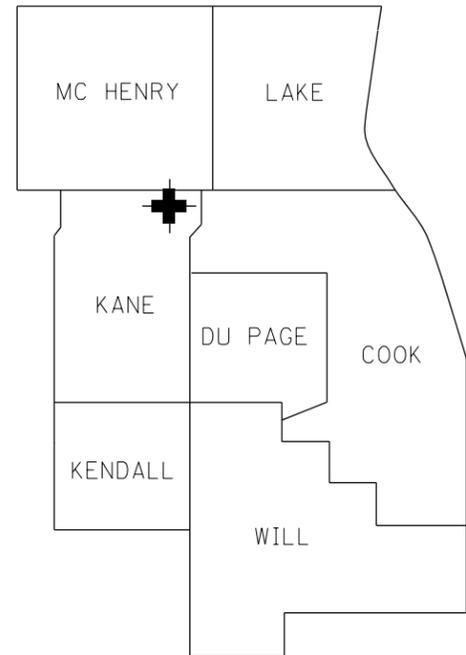
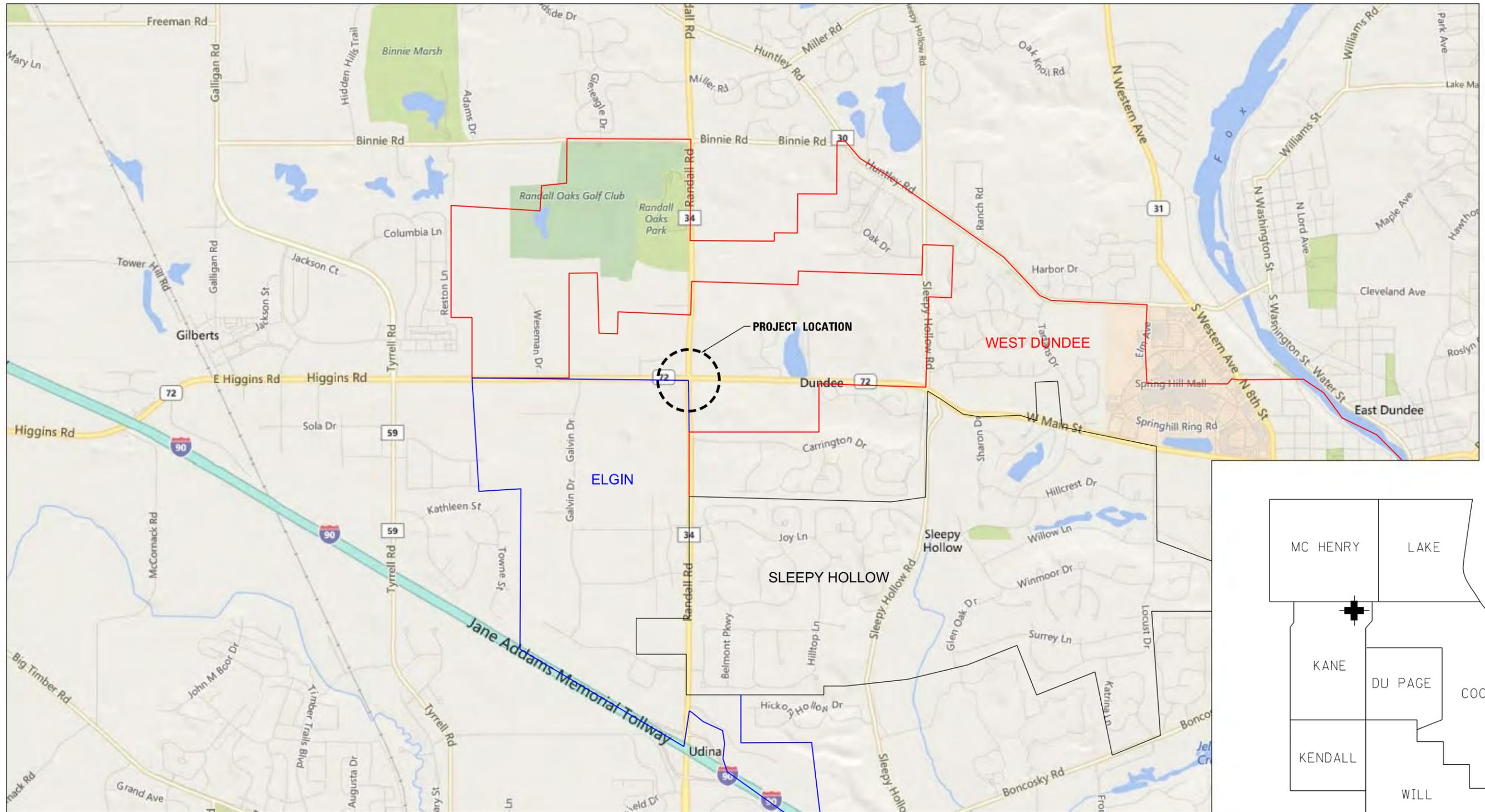
MAPS

a – Location

b – Functional Classification

c – Designated Truck Routes

ELGIN, ILLINOIS
 KANE COUNTY
 SECTION: 19-00514-00-WR



USER NAME : jrodri-guez	DESIGNED - JT	REVISED -
	DRAWN - JT	REVISED -
PLOT SCALE : 2.0000' / in.	CHECKED - MC	REVISED -
PLOT DATE : 3/5/2021	DATE - 01/05/2020	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

RANDRALL ROAD AT HIGGINS ROAD (IL 72)
 PROJECT LOCATION MAP

SCALE: NTS SHEET 1 OF 1 SHEETS STA. N/A TO STA. N/A

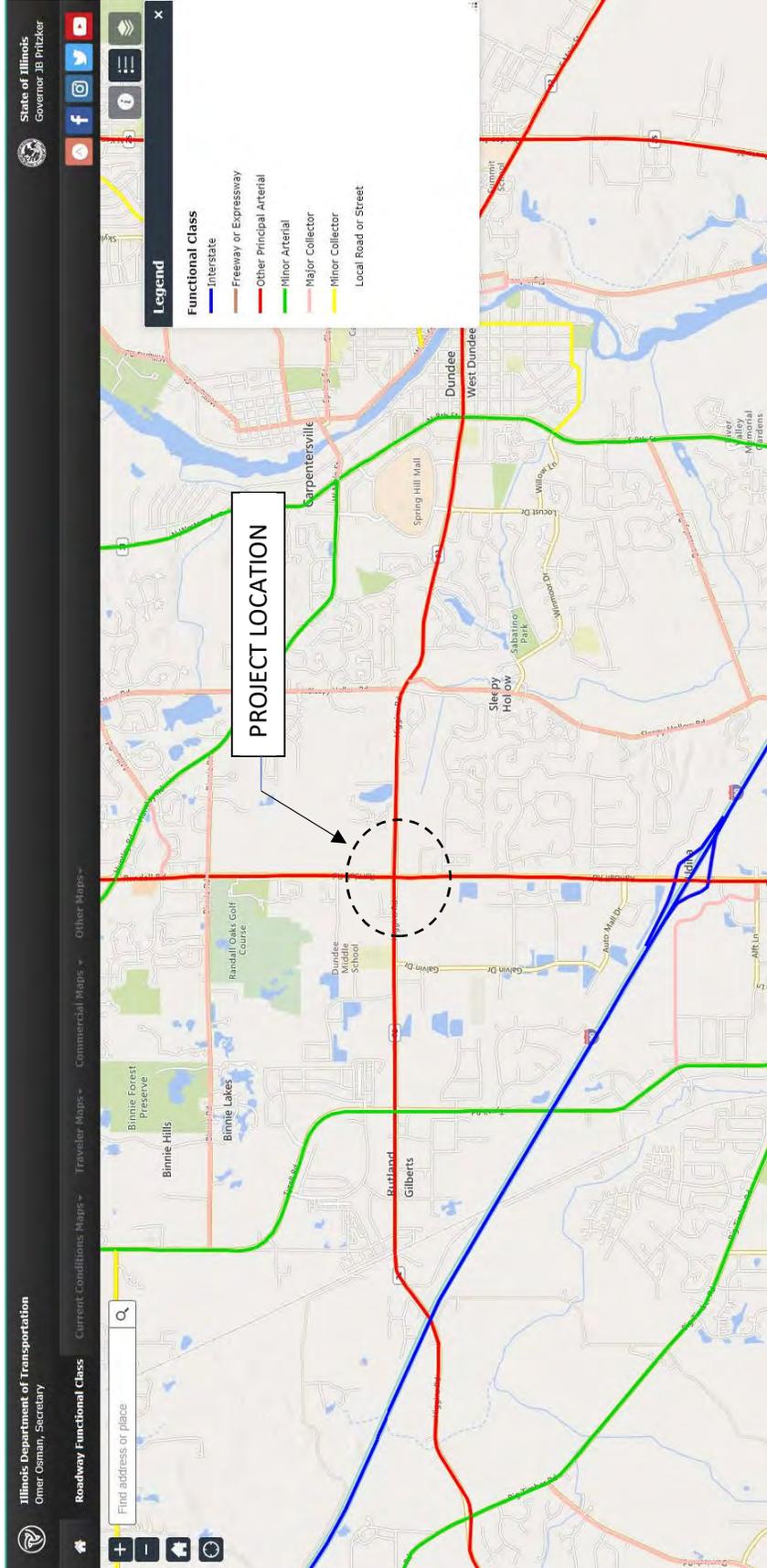
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE	1	1
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

ELGIN, ILLINOIS

KANE COUNTY

SECTION: 19-00514-00-WR

FUNCTIONAL CLASSIFICATION

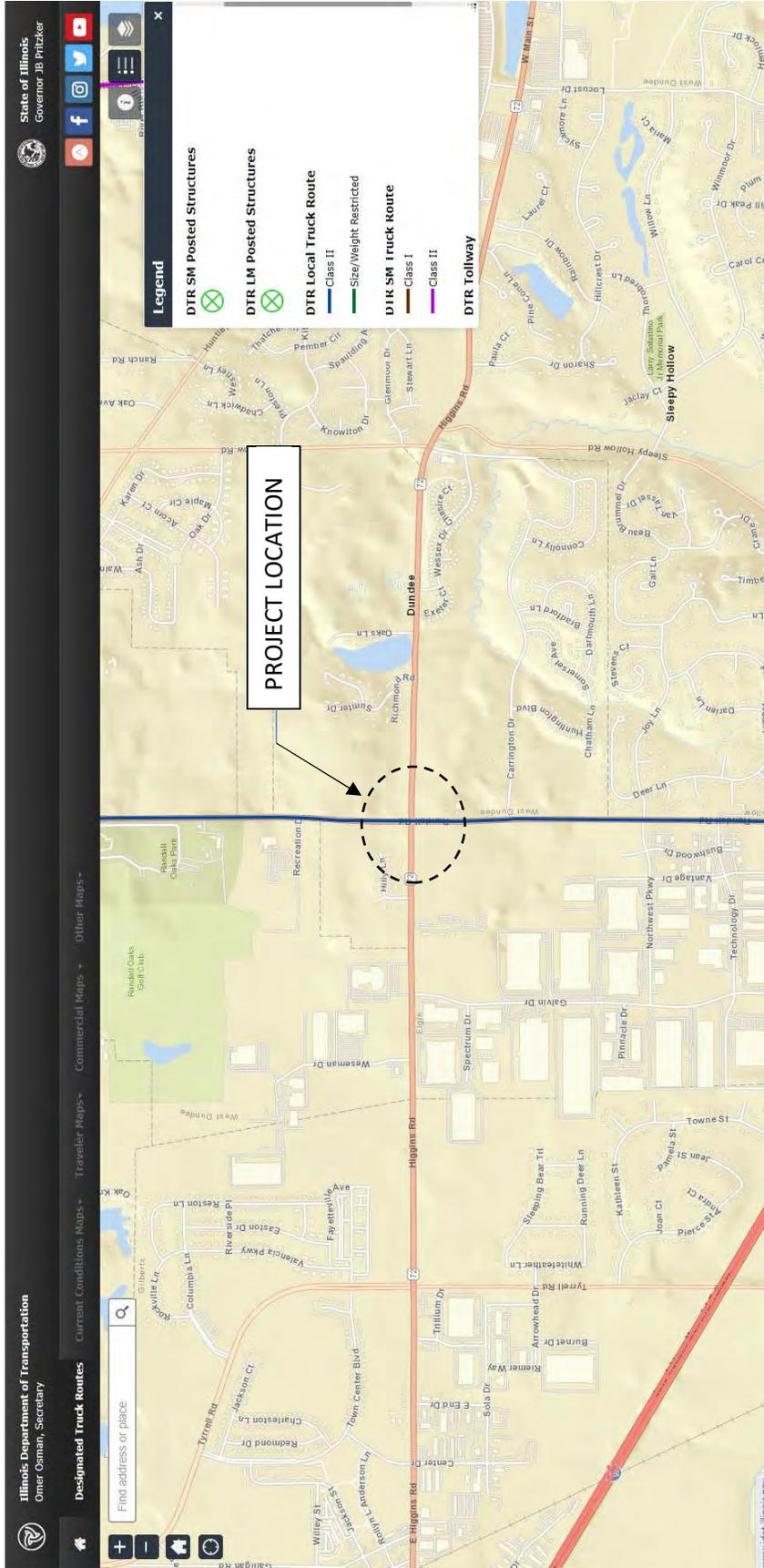


ELGIN, ILLINOIS

KANE COUNTY

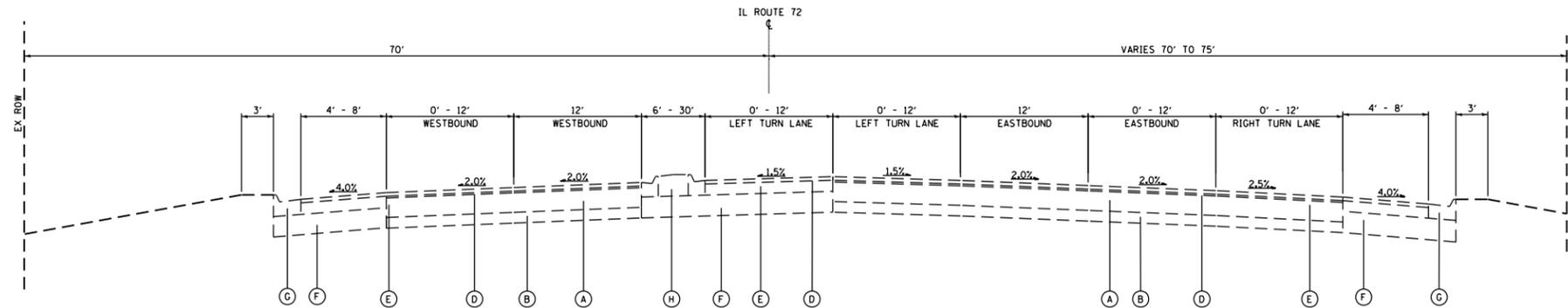
SECTION: 19-00514-00-WR

DESIGNATED TRUCK ROUTES



ATTACHMENT 2

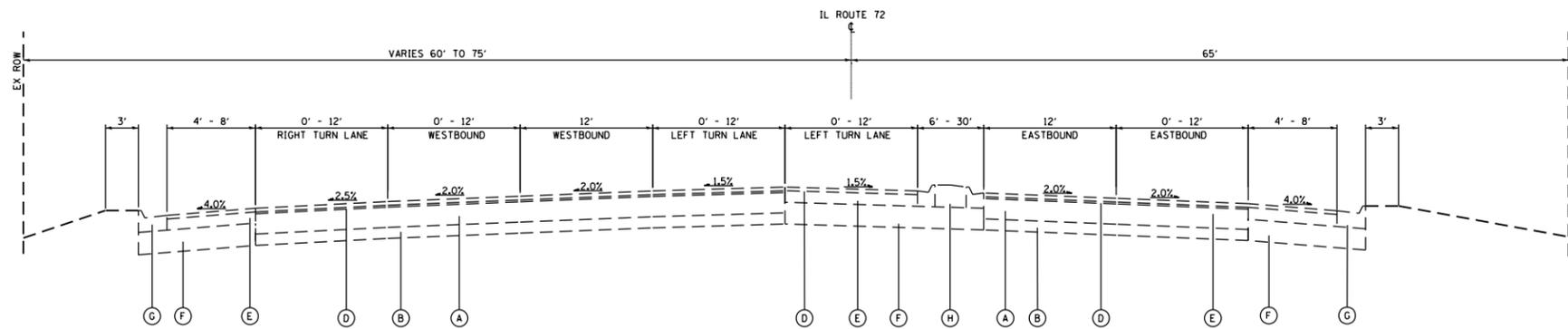
EXISTING AND PROPOSED TYPICAL SECTIONS



EXISTING TYPICAL SECTION - IL ROUTE 72
STA 189+50.00 TO STA 199+09.30

EXISTING LEGEND

- (A) EX. HMA BASE COURSE, 11"-12"
- (B) EX. SUB-BASE, 6"
- (C) EX. SWALE/DITCH
- (D) EX. HMA SURFACE COURSE,
- (E) EX. HMA BASE COURSE WIDENING, 10 1/2" & 9 1/2"
- (F) EX. AGGREGATE SUBGRADE, 12"
- (G) EX. COMB. CONC. CURB AND GUTTER, TYPE M-4.24
- (H) EX. MEDIAN
-PAINTED
-CORRUGATED CONCRETE
-M-4.12 MEDIAN



EXISTING TYPICAL SECTION - IL ROUTE 72
STA 201+00.00 TO STA 211+00.00



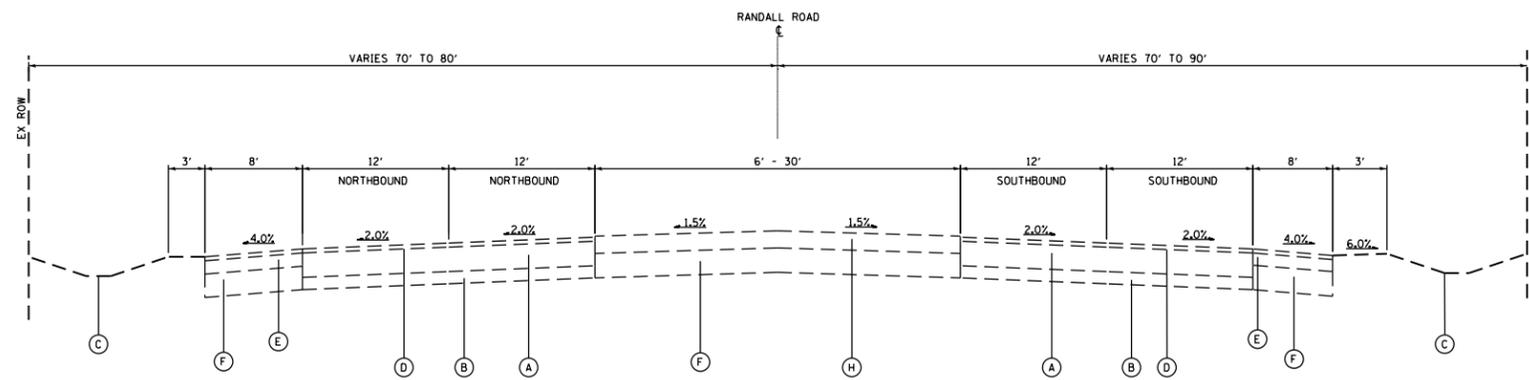
USER NAME = jqu	DESIGNED - JT	REVISED -
	DRAWN - JT	REVISED -
PLOT SCALE = 150.0000' / 1"	CHECKED - MC	REVISED -
PLOT DATE = 8/30/2022	DATE - 01/05/2020	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

RANDALL ROAD AT HIGGINS ROAD (IL 72)
TYPICAL SECTIONS - IL ROUTE 72

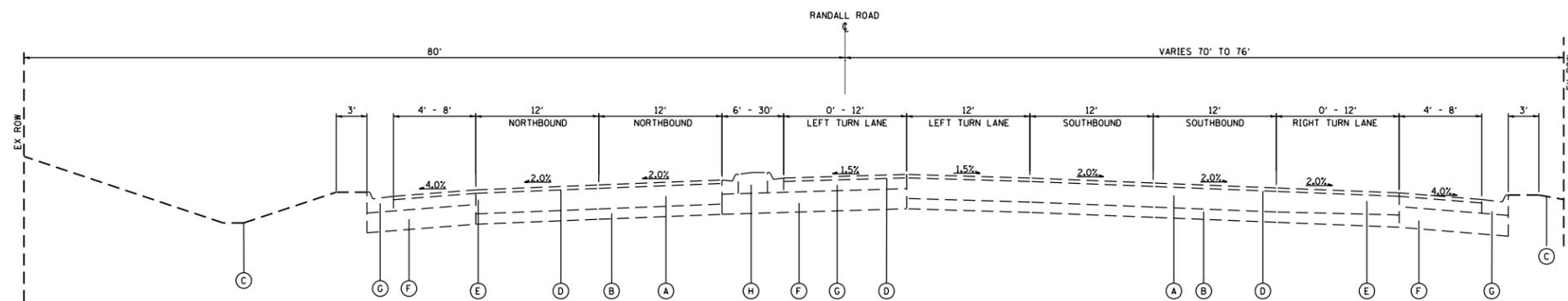
SCALE: NTS SHEET 1 OF 4 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE		
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



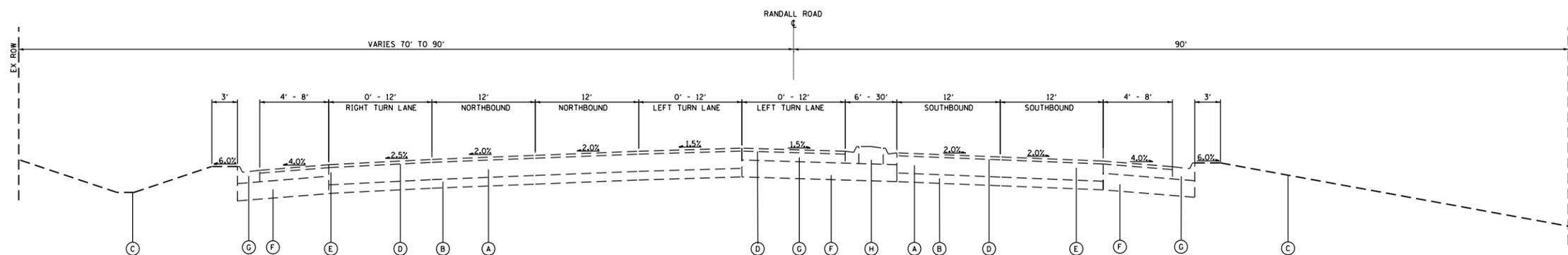
EXISTING TYPICAL SECTION - RANDALL ROAD

STA 90+00.00 TO STA 92+28.63
STA 107+22.65 TO STA 113+00.00



EXISTING TYPICAL SECTION - RANDALL ROAD

STA 92+28.63 TO STA 99+06.60



EXISTING TYPICAL SECTION - RANDALL ROAD

STA 100+71.23 TO STA 107+22.65

EXISTING LEGEND

- (A) EX. HMA BASE COURSE, 11"-12"
- (B) EX. SUB-BASE, 6"
- (C) EX. SWALE/DITCH
- (D) EX. HMA SURFACE COURSE,
- (E) EX. HMA BASE COURSE WIDENING, 10 1/2" & 9 1/2"
- (F) EX. AGGREGATE SUBGRADE, 12"
- (G) EX. COMB. CONC. CURB AND GUTTER, TYPE M-4.24
- (H) EX. MEDIAN
-PAINTED
-CORRUGATED CONCRETE
-M-4.12 MEDIAN



USER NAME = jqu
PLOT SCALE = 150.0000' / 1" =
PLOT DATE = 8/30/2022

DESIGNED - JT
DRAWN - JT
CHECKED - MC
DATE - 01/05/2020

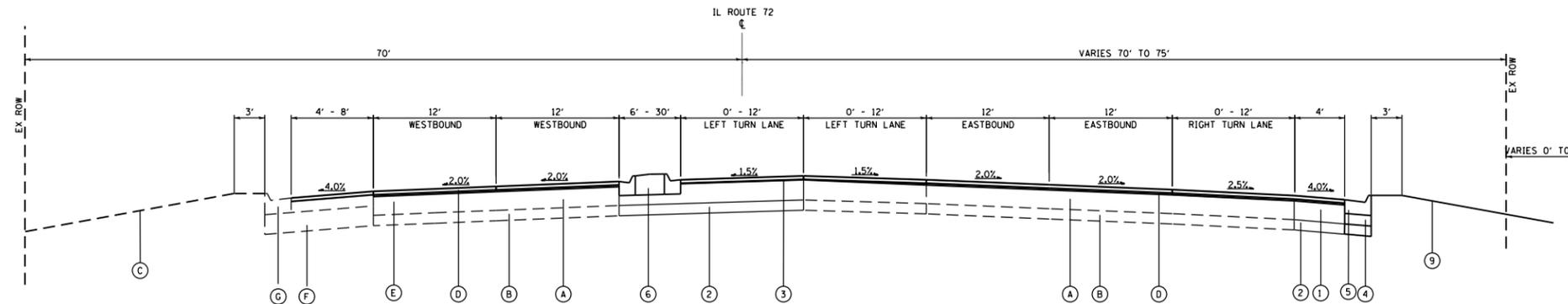
REVISED -
REVISED -
REVISED -
REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

RANDALL ROAD AT HIGGINS ROAD (IL 72)
TYPICAL SECTIONS - RANDALL ROAD

SCALE: NTS SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE		
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

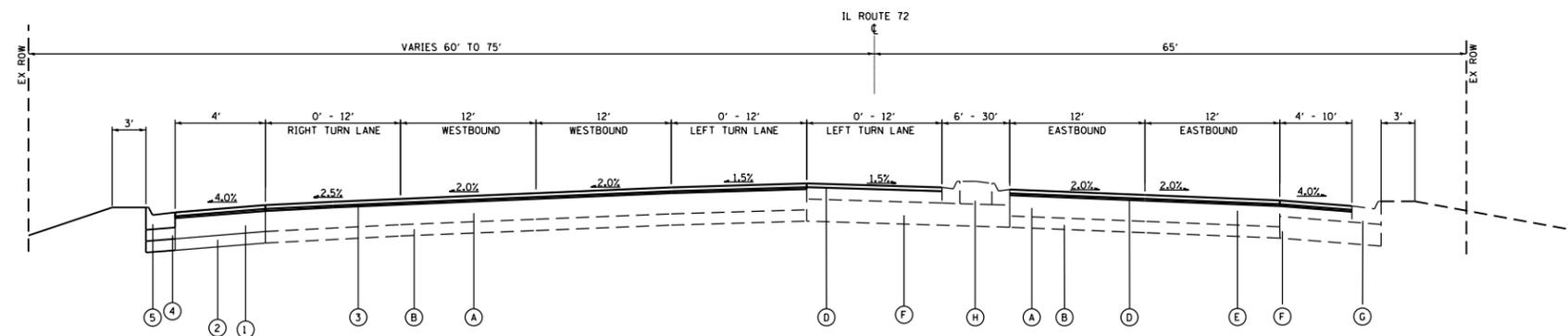


PROPOSED TYPICAL SECTION - IL ROUTE 72

STA 189+50.00 TO STA 199+09.30
 STA 195+58.48 TO STA 197+16.41
 *LENGTHEN RIGHT TURN LANE
 STA 192+83.25 TO STA 195+69.70
 *LENGTHEN LEFT TURN LANE

EXISTING LEGEND

- (A) EX. HMA BASE COURSE, 11"-12"
- (B) EX. SUB-BASE, 6"
- (C) EX. SWALE/DITCH
- (D) EX. HMA SURFACE COURSE,
- (E) EX. HMA BASE COURSE WIDENING, 10 1/2" & 9 1/2"
- (F) EX. AGGREGATE SUBGRADE, 12"
- (G) EX. COMB. CONC. CURB AND GUTTER, TYPE M-4.24
- (H) EX. MEDIAN
 -PAINTED
 -CORRUGATED CONCRETE
 -M-4.12 MEDIAN



PROPOSED TYPICAL SECTION - IL ROUTE 72

STA 201+00.00 TO STA 211+00.00
 STA 204+85.81 TO STA 207+00.00
 *LENGTHEN RIGHT TURN LANE

PROPOSED LEGEND

- (1) PR. HMA BASE COURSE, 11"-12"
- (2) PR. SUB-BASE, 6"
- (3) PR. ASPHALT SURFACE COURSE,
- (4) PR. AGGREGATE SUBGRADE, 12"
- (5) PR. COMB CON. CURB AND GUTTER, M-4.24
- (6) PR. CONCRETE MEDIAN, TYPE M-4.12
- (7) PR. HMA SHOULDER
- (8) PR. GRADING
 *FOR A FUTURE PATH
- (9) PR. DITCH

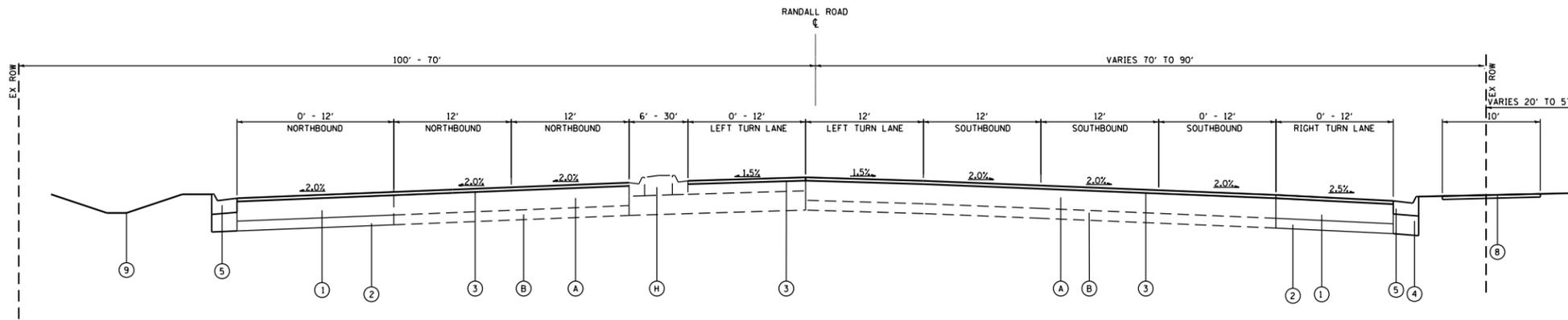


USER NAME = jqu	DESIGNED - JT	REVISED -
	DRAWN - JT	REVISED -
PLOT SCALE = 1/8" = 1'-0"	CHECKED - MC	REVISED -
PLOT DATE = 8/30/2022	DATE - 01/05/2020	REVISED -

KANE COUNTY
 DIVISION OF TRANSPORTATION

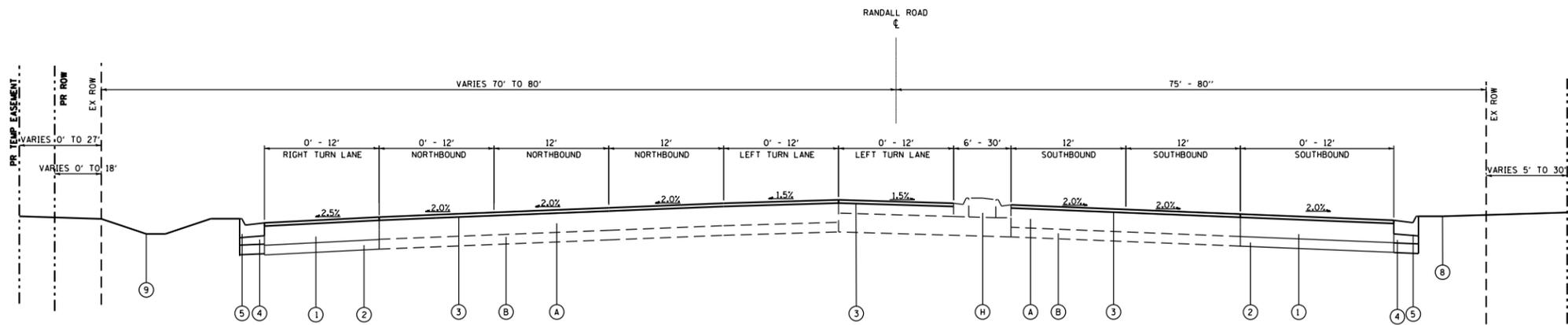
RANDALL ROAD AT HIGGINS ROAD (IL 72)	
TYPICAL SECTIONS - IL ROUTE 72	
SCALE: NTS	SHEET 3 OF 4 SHEETS
STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE		
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



PROPOSED TYPICAL SECTION - RANDALL ROAD

STA 90+00.00 TO STA 99+06.60



PROPOSED TYPICAL SECTION - RANDALL ROAD

STA 100+71.23 TO STA 113+00.00

EXISTING LEGEND

- (A) EX. HMA BASE COURSE, 11''-12''
- (B) EX. SUB-BASE, 6''
- (C) EX. SWALE/DITCH
- (D) EX. HMA SURFACE COURSE,
- (E) EX. HMA BASE COURSE WIDENING, 10 1/2'' & 9 1/2''
- (F) EX. AGGREGATE SUBGRADE, 12''
- (G) EX. COMB. CONC. CURB AND GUTTER, TYPE M-4.24
- (H) EX. MEDIAN
-PAINTED
-CORRUGATED CONCRETE
-M-4.12 MEDIAN

PROPOSED LEGEND

- (1) PR. HMA BASE COURSE, 11''-12''
- (2) PR. SUB-BASE, 6''
- (3) PR. ASPHALT SURFACE COURSE
- (4) PR. AGGREGATE SUBGRADE, 12''
- (5) PR. COMB. CONC. CURB AND GUTTER, M-4.24
- (6) PR. CONCRETE MEDIAN, TYPE M-4.12
- (7) PR. HMA SHOULDER
- (8) PR. HMA MULTI-USE PATH
- (9) PR. DITCH



USER NAME = jqu	DESIGNED - JT	REVISED -
	DRAWN - JT	REVISED -
PLOT SCALE = 150.0000' / 1" =	CHECKED - MC	REVISED -
PLOT DATE = 8/30/2022	DATE - 01/05/2020	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

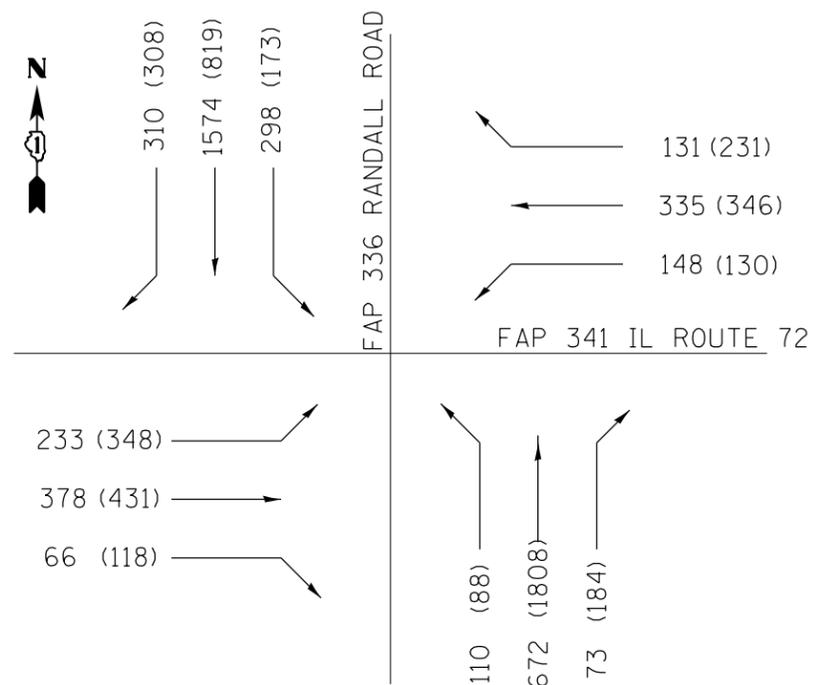
RANDALL ROAD AT HIGGINS ROAD (IL 72)
TYPICAL SECTIONS - RANDALL ROAD

SCALE: NTS SHEET 4 OF 4 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE		
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

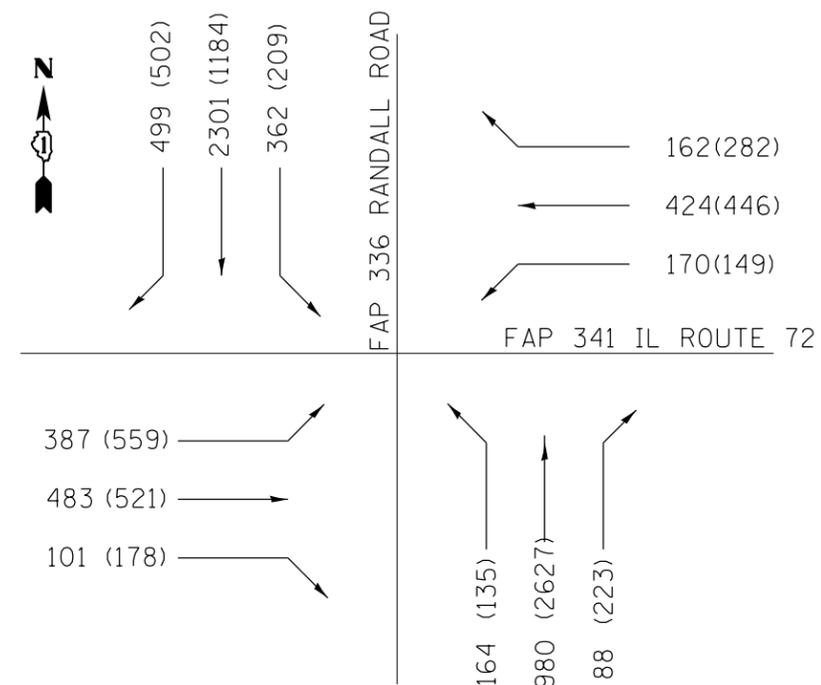
ATTACHMENT 3
PEAK HOUR TRAFFIC

EXISTING PEAK HOUR TRAFFIC



(DESIGN YEAR 2016) DHV: A.M. (P.M.)

PROPOSED PEAK HOUR TRAFFIC



(DESIGN YEAR 2050) DHV: A.M. (P.M.)



USER NAME = j-rodriguez	DESIGNED - JT	REVISED -
	DRAWN - JT	REVISED -
PLOT SCALE = 150,0000' / 11"	CHECKED - MC	REVISED -
PLOT DATE = 2/5/2021	DATE - 01/05/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RANDALL ROAD AT HIGGINS ROAD (IL 72)
PEAK HOUR TRAFFIC

SCALE: NTS SHEET 01 OF 01 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE		
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

ATTACHMENT 4
CAPACITY ANALYSIS

Randall Rd & IL Route 72
Lanes, Volumes, Timings

104: Randall Rd & IL-72
Existing AM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	233	378	66	148	335	131	110	672	73	298	1574	310
Future Volume (vph)	233	378	66	148	335	131	110	672	73	298	1574	310
Ideal Flow (vphp)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	350		220	390		390	345		240	375		240
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	290			295			290			290		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3303	3619	1417	3400	3619	1553	3273	3619	1568	3433	3689	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3303	3619	1417	3400	3619	1553	3273	3619	1568	3433	3689	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		1058			1115			1379			1611	
Travel Time (s)		16.0			16.9			18.8			22.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	6%	5%	14%	3%	5%	4%	7%	5%	3%	2%	3%	2%
Adj. Flow (vph)	243	394	69	154	349	136	115	700	76	310	1640	323
Shared Lane Traffic (%)												
Lane Group Flow (vph)	243	394	69	154	349	136	115	700	76	310	1640	323
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		32			32			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4			8			2		6	6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	10.0	3.0	3.0	10.0	3.0
Minimum Split (s)	7.5	21.5	7.5	7.5	21.5	7.5	7.5	17.0	7.5	7.5	17.0	7.5
Total Split (s)	23.0	30.0	15.0	18.0	25.0	20.0	15.0	72.0	18.0	20.0	77.0	23.0
Total Split (%)	16.4%	21.4%	10.7%	12.9%	17.9%	14.3%	10.7%	51.4%	12.9%	14.3%	55.0%	16.4%
Maximum Green (s)	18.5	23.5	10.5	13.5	18.5	15.5	10.5	65.0	13.5	15.5	70.0	18.5
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	5.0	3.5	3.5	5.0	3.5
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0	1.0	1.0	2.0	1.0	1.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.5	4.5	4.5	6.5	4.5	4.5	7.0	4.5	4.5	7.0	4.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	2.5	5.0	2.5	2.5	5.0	2.5	2.5	5.0	2.5	2.5	5.0	2.5
Recall Mode	None	C-Min	None	None	C-Min	None						

Randall Rd & IL Route 72
Lanes, Volumes, Timings

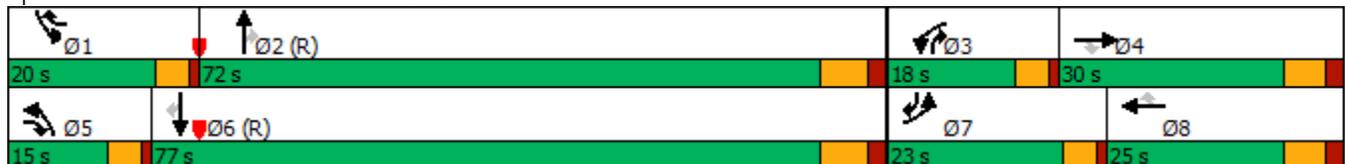
104: Randall Rd & IL-72
Existing AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)	14.9	20.9	36.7	11.0	16.9	39.3	9.3	69.8	87.8	15.8	76.3	98.2
Actuated g/C Ratio	0.11	0.15	0.26	0.08	0.12	0.28	0.07	0.50	0.63	0.11	0.54	0.70
v/c Ratio	0.69	0.73	0.19	0.58	0.80	0.31	0.53	0.39	0.08	0.80	0.82	0.29
Control Delay	70.6	65.2	40.3	70.8	73.9	41.5	66.3	26.6	15.1	67.2	32.3	13.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.6	65.2	40.3	70.8	73.9	41.5	66.3	26.6	15.1	67.2	32.3	13.7
LOS	E	E	D	E	E	D	E	C	B	E	C	B
Approach Delay		64.6			66.2			30.8			34.4	
Approach LOS		E			E			C			C	
Stops (vph)	221	354	49	140	322	100	105	430	33	274	1362	168
Fuel Used(gal)	9	14	2	7	16	5	4	16	1	11	47	7
CO Emissions (g/hr)	639	1005	141	470	1084	341	284	1127	96	792	3309	462
NOx Emissions (g/hr)	124	195	27	91	211	66	55	219	19	154	644	90
VOC Emissions (g/hr)	148	233	33	109	251	79	66	261	22	184	767	107
Dilemma Vehicles (#)	0	7	0	0	6	0	0	30	0	0	9	0
Queue Length 50th (ft)	111	182	49	71	165	96	53	194	23	137	770	167
Queue Length 95th (ft)	154	236	88	107	219	158	87	344	82	#213	910	255
Internal Link Dist (ft)		978			1035			1299			1531	
Turn Bay Length (ft)	350		220	390		390	345		240	375		240
Base Capacity (vph)	436	607	384	327	481	440	247	1804	1011	399	2010	1151
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.65	0.18	0.47	0.73	0.31	0.47	0.39	0.08	0.78	0.82	0.28

Intersection Summary

Area Type: Other
 Cycle Length: 140
 Actuated Cycle Length: 140
 Offset: 98 (70%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 42.9 Intersection LOS: D
 Intersection Capacity Utilization 82.6% ICU Level of Service E
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 104: Randall Rd & IL-72



Randall Rd & IL Route 72
Lanes, Volumes, Timings

104: Randall Rd & IL-72
Existing PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	348	413	118	130	345	231	88	1806	184	173	819	308
Future Volume (vph)	348	413	118	130	345	231	88	1806	184	173	819	308
Ideal Flow (vphp)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	350		220	390		390	345		240	375		240
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	290			295			290			290		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3242	3519	1468	3400	3654	1538	3072	3762	1599	3467	3689	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3242	3519	1468	3400	3654	1538	3072	3762	1599	3467	3689	1538
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		1058			1115			1379			1611	
Travel Time (s)		16.0			16.9			18.8			22.0	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	8%	8%	10%	3%	4%	5%	14%	1%	1%	1%	3%	5%
Adj. Flow (vph)	352	417	119	131	348	233	89	1824	186	175	827	311
Shared Lane Traffic (%)												
Lane Group Flow (vph)	352	417	119	131	348	233	89	1824	186	175	827	311
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		32			32			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov									
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4			8			2		6	6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	10.0	3.0	3.0	10.0	3.0
Minimum Split (s)	7.5	21.5	7.5	7.5	21.5	7.5	7.5	17.0	7.5	7.5	17.0	7.5
Total Split (s)	32.0	37.0	23.0	22.0	27.0	20.0	23.0	101.0	22.0	20.0	98.0	32.0
Total Split (%)	17.8%	20.6%	12.8%	12.2%	15.0%	11.1%	12.8%	56.1%	12.2%	11.1%	54.4%	17.8%
Maximum Green (s)	27.5	30.5	18.5	17.5	20.5	15.5	18.5	94.0	17.5	15.5	91.0	27.5
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	5.0	3.5	3.5	5.0	3.5
All-Red Time (s)	1.0	2.0	1.0	1.0	2.0	1.0	1.0	2.0	1.0	1.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.5	4.5	4.5	6.5	4.5	4.5	7.0	4.5	4.5	7.0	4.5
Lead/Lag	Lead	Lag	Lead									
Lead-Lag Optimize?	Yes											
Vehicle Extension (s)	2.5	5.0	2.5	2.5	5.0	2.5	2.5	5.0	2.5	2.5	5.0	2.5
Recall Mode	None	C-Min	None	None	C-Min	None						

Randall Rd & IL Route 72
Lanes, Volumes, Timings

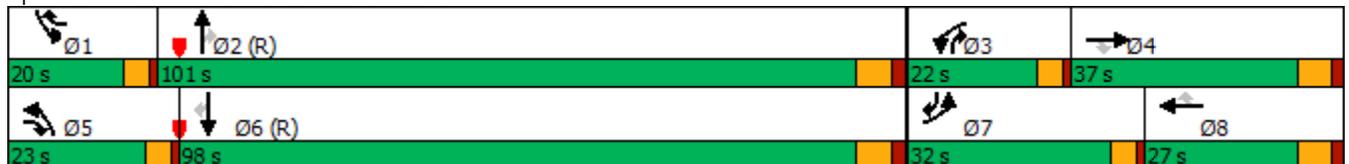
104: Randall Rd & IL-72
Existing PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Act Effect Green (s)	23.8	31.6	48.2	11.8	19.6	39.5	10.1	100.8	119.6	13.4	104.1	134.8
Actuated g/C Ratio	0.13	0.18	0.27	0.07	0.11	0.22	0.06	0.56	0.66	0.07	0.58	0.75
v/c Ratio	0.82	0.68	0.30	0.59	0.88	0.69	0.52	0.87	0.18	0.68	0.39	0.27
Control Delay	92.1	75.2	53.8	92.4	101.2	75.7	96.5	38.8	11.0	90.2	25.3	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	92.1	75.2	53.8	92.4	101.2	75.7	96.5	38.8	11.0	90.2	25.3	10.0
LOS	F	E	D	F	F	E	F	D	B	F	C	A
Approach Delay		79.0			91.2			38.8			30.3	
Approach LOS		E			F			D			C	
Stops (vph)	334	380	91	124	328	210	84	1593	67	168	487	106
Fuel Used(gal)	15	16	4	6	18	11	4	55	3	8	20	5
CO Emissions (g/hr)	1065	1150	277	454	1247	743	265	3811	213	526	1403	377
NOx Emissions (g/hr)	207	224	54	88	243	144	52	741	41	102	273	73
VOC Emissions (g/hr)	247	267	64	105	289	172	61	883	49	122	325	87
Dilemma Vehicles (#)	0	4	0	0	6	0	0	51	0	0	23	0
Queue Length 50th (ft)	211	242	111	79	214	253	51	1081	113	106	352	109
Queue Length 95th (ft)	268	307	172	117	#294	356	m86	1171	50	150	387	234
Internal Link Dist (ft)		978			1035			1299			1531	
Turn Bay Length (ft)	350		220	390		390	345		240	375		240
Base Capacity (vph)	495	634	461	330	422	355	315	2106	1112	298	2132	1183
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.66	0.26	0.40	0.82	0.66	0.28	0.87	0.17	0.59	0.39	0.26

Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 64 (36%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.88
 Intersection Signal Delay: 51.1 Intersection LOS: D
 Intersection Capacity Utilization 93.5% ICU Level of Service F
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 104: Randall Rd & IL-72



Randall Rd & IL Route 72
Lanes, Volumes, Timings

104: Randall Rd & IL-72
No-Build AM Peak - Optimized Signal Timings

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	387	483	101	170	424	162	164	980	88	362	2301	499
Future Volume (vph)	387	483	101	170	424	162	164	980	88	362	2301	499
Ideal Flow (vphp)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	350		220	390		390	345		240	375		240
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	290			295			290			290		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3303	3619	1417	3400	3619	1553	3273	3619	1568	3433	3689	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3303	3619	1417	3400	3619	1553	3273	3619	1568	3433	3689	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		1058			1115			1379			1611	
Travel Time (s)		16.0			16.9			18.8			22.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	6%	5%	14%	3%	5%	4%	7%	5%	3%	2%	3%	2%
Adj. Flow (vph)	403	503	105	177	442	169	171	1021	92	377	2397	520
Shared Lane Traffic (%)												
Lane Group Flow (vph)	403	503	105	177	442	169	171	1021	92	377	2397	520
Enter Blocked Intersection	No	No	No	No	No	No						
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		32			32			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4			8			2		6	6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	7.5	21.0	7.5	7.5	21.0	7.5	7.5	21.0	7.5	7.5	21.0	7.5
Total Split (s)	25.0	34.6	13.6	15.4	25.0	31.8	13.6	93.2	15.4	31.8	111.4	25.0
Total Split (%)	14.3%	19.8%	7.8%	8.8%	14.3%	18.2%	7.8%	53.3%	8.8%	18.2%	63.7%	14.3%
Maximum Green (s)	20.5	28.6	9.1	10.9	19.0	27.3	9.1	87.2	10.9	27.3	105.4	20.5
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	1.5	1.0	1.0	1.5	1.0	1.0	1.5	1.0	1.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0	4.5	4.5	6.0	4.5	4.5	6.0	4.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0	3.0	3.0	7.0	3.0	3.0	7.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0

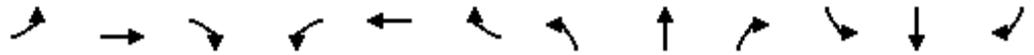
Randall Rd & IL Route 72
Lanes, Volumes, Timings

104: Randall Rd & IL-72
No-Build PM Peak - Optimized Signal Timings

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 		 	 		 	 	
Traffic Volume (vph)	559	521	178	149	446	282	135	2627	223	209	1184	502
Future Volume (vph)	559	521	178	149	446	282	135	2627	223	209	1184	502
Ideal Flow (vphp)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	350		220	390		390	345		240	375		240
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	290			295			290			290		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3242	3519	1468	3400	3654	1538	3072	3762	1599	3467	3689	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3242	3519	1468	3400	3654	1538	3072	3762	1599	3467	3689	1538
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		1058			1115			1379			1611	
Travel Time (s)		16.0			16.9			18.8			22.0	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	8%	8%	10%	3%	4%	5%	14%	1%	1%	1%	3%	5%
Adj. Flow (vph)	565	526	180	151	451	285	136	2654	225	211	1196	507
Shared Lane Traffic (%)												
Lane Group Flow (vph)	565	526	180	151	451	285	136	2654	225	211	1196	507
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		32			32			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	7.5	21.0	7.5	7.5	21.0	7.5	7.5	21.0	7.5	7.5	21.0	7.5
Total Split (s)	29.0	39.0	19.0	15.0	25.0	14.0	19.0	112.0	15.0	14.0	107.0	29.0
Total Split (%)	16.1%	21.7%	10.6%	8.3%	13.9%	7.8%	10.6%	62.2%	8.3%	7.8%	59.4%	16.1%
Maximum Green (s)	24.5	33.0	14.5	10.5	19.0	9.5	14.5	106.0	10.5	9.5	101.0	24.5
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	1.5	1.0	1.0	1.5	1.0	1.0	1.5	1.0	1.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0	4.5	4.5	6.0	4.5	4.5	6.0	4.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0	3.0	3.0	7.0	3.0	3.0	7.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0

Randall Rd & IL Route 72
Lanes, Volumes, Timings

104: Randall Rd & IL-72
No-Build PM Peak - Optimized Signal Timings

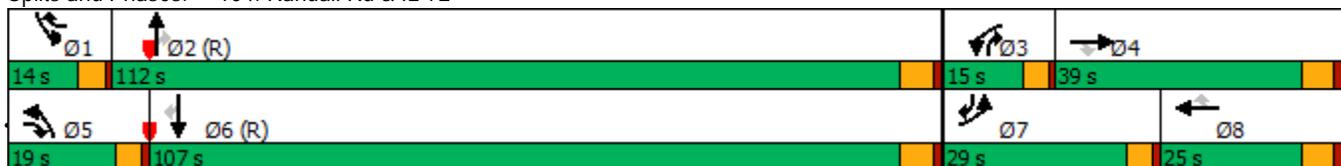


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Time Before Reduce (s)	0.0	9.0	0.0	0.0	9.0	0.0	0.0	9.0	0.0	0.0	9.0	0.0
Time To Reduce (s)	0.0	6.0	0.0	0.0	6.0	0.0	0.0	6.0	0.0	0.0	6.0	0.0
Recall Mode	None	Min	None	None	Min	None	None	C-Min	None	None	C-Min	None
Act Effct Green (s)	24.5	33.1	51.8	10.4	19.0	34.5	12.7	106.0	122.4	9.5	102.8	133.3
Actuated g/C Ratio	0.14	0.18	0.29	0.06	0.11	0.19	0.07	0.59	0.68	0.05	0.57	0.74
v/c Ratio	1.28	0.81	0.43	0.77	1.17	0.97	0.63	1.20	0.21	1.16	0.57	0.45
Control Delay	193.8	76.7	61.0	107.9	167.0	115.5	98.0	116.0	5.5	175.4	24.3	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
Total Delay	193.8	76.7	61.0	107.9	167.0	115.5	98.0	116.6	5.5	175.4	24.3	9.9
LOS	F	E	E	F	F	F	F	F	A	F	C	A
Approach Delay		126.5			140.4			107.4			37.1	
Approach LOS		F			F			F			D	
Stops (vph)	444	498	155	140	375	251	129	2121	52	172	607	164
Fuel Used(gal)	35	21	6	8	28	15	6	118	3	12	27	9
CO Emissions (g/hr)	2439	1478	452	551	1987	1062	409	8217	210	856	1906	605
NOx Emissions (g/hr)	475	288	88	107	387	207	80	1599	41	166	371	118
VOC Emissions (g/hr)	565	343	105	128	460	246	95	1904	49	198	442	140
Dilemma Vehicles (#)	0	8	0	0	10	0	0	68	0	0	33	0
Queue Length 50th (ft)	~433	318	190	92	~332	339	80	~1990	56	~151	398	207
Queue Length 95th (ft)	m#545	m377	m227	#148	#454	#539	m81	m#1997	m48	#246	435	247
Internal Link Dist (ft)		978			1035			1299			1531	
Turn Bay Length (ft)	350		220	390		390	345		240	375		240
Base Capacity (vph)	441	647	437	198	385	294	247	2215	1088	182	2107	1139
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	453	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.28	0.81	0.41	0.76	1.17	0.97	0.55	1.51	0.21	1.16	0.57	0.45

Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 150
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.28
 Intersection Signal Delay: 96.0 Intersection LOS: F
 Intersection Capacity Utilization 120.9% ICU Level of Service H
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 104: Randall Rd & IL-72



04/29/2020

Randall Rd & IL Route 72
Lanes, Volumes, Timings

104: Randall Rd & IL-72
Alternative 1 AM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 		 	  		 	  	
Traffic Volume (vph)	387	483	101	170	424	162	164	980	88	362	2301	499
Future Volume (vph)	387	483	101	170	424	162	164	980	88	362	2301	499
Ideal Flow (vphp)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	350		220	390		390	345		240	375		240
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	290			295			290			290		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3303	3619	1417	3400	3619	1553	3273	5200	1568	3433	5301	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3303	3619	1417	3400	3619	1553	3273	5200	1568	3433	5301	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		1058			1115			1379			1611	
Travel Time (s)		16.0			16.9			18.8			22.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	6%	5%	14%	3%	5%	4%	7%	5%	3%	2%	3%	2%
Adj. Flow (vph)	403	503	105	177	442	169	171	1021	92	377	2397	520
Shared Lane Traffic (%)												
Lane Group Flow (vph)	403	503	105	177	442	169	171	1021	92	377	2397	520
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		32			32			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	7.5	21.0	7.5	7.5	21.0	7.5	7.5	21.0	7.5	7.5	21.0	7.5
Total Split (s)	19.0	24.0	13.0	16.0	21.0	25.0	13.0	45.0	16.0	25.0	57.0	19.0
Total Split (%)	17.3%	21.8%	11.8%	14.5%	19.1%	22.7%	11.8%	40.9%	14.5%	22.7%	51.8%	17.3%
Maximum Green (s)	14.5	18.0	8.5	11.5	15.0	20.5	8.5	39.0	11.5	20.5	51.0	14.5
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	1.5	1.0	1.0	1.5	1.0	1.0	1.5	1.0	1.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0	4.5	4.5	6.0	4.5	4.5	6.0	4.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0	3.0	3.0	7.0	3.0	3.0	7.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0

401190077_Alt01_AM.syn

Synchro 10 Report
04/29/2020

Randall Rd & IL Route 72
Lanes, Volumes, Timings

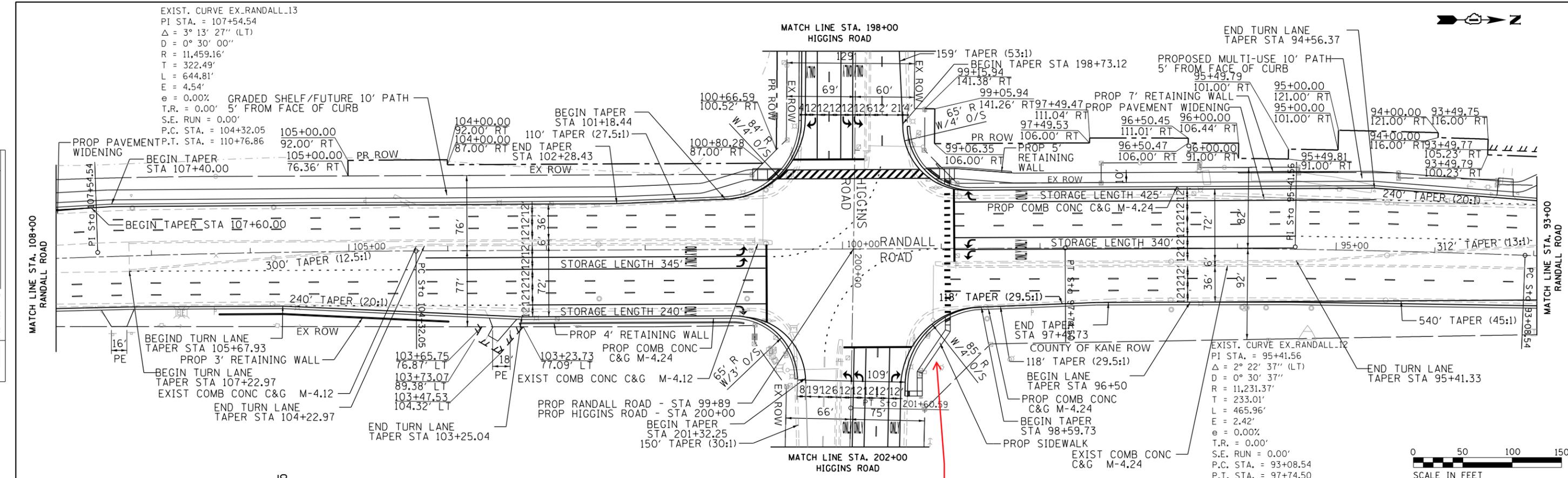
104: Randall Rd & IL-72
Alternative 1 PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	559	521	178	149	446	282	135	2627	223	209	1184	502
Future Volume (vph)	559	521	178	149	446	282	135	2627	223	209	1184	502
Ideal Flow (vphp)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
Storage Length (ft)	350		220	390		390	345		240	375		240
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	290			295			290			290		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3242	3519	1468	3400	3654	1538	3072	5406	1599	3467	5301	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3242	3519	1468	3400	3654	1538	3072	5406	1599	3467	5301	1538
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		1058			1115			1379			1611	
Travel Time (s)		16.0			16.9			18.8			22.0	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	8%	8%	10%	3%	4%	5%	14%	1%	1%	1%	3%	5%
Adj. Flow (vph)	565	526	180	151	451	285	136	2654	225	211	1196	507
Shared Lane Traffic (%)												
Lane Group Flow (vph)	565	526	180	151	451	285	136	2654	225	211	1196	507
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		32			32			32			32	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	pm+ov									
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	7.5	21.0	7.5	7.5	21.0	7.5	7.5	21.0	7.5	7.5	21.0	7.5
Total Split (s)	38.0	46.0	20.0	21.0	29.0	17.0	20.0	96.0	21.0	17.0	93.0	38.0
Total Split (%)	21.1%	25.6%	11.1%	11.7%	16.1%	9.4%	11.1%	53.3%	11.7%	9.4%	51.7%	21.1%
Maximum Green (s)	33.5	40.0	15.5	16.5	23.0	12.5	15.5	90.0	16.5	12.5	87.0	33.5
Yellow Time (s)	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	1.0	1.5	1.0	1.0	1.5	1.0	1.0	1.5	1.0	1.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0	4.5	4.5	6.0	4.5	4.5	6.0	4.5	4.5	6.0	4.5
Lead/Lag	Lead	Lag	Lead									
Lead-Lag Optimize?	Yes											
Vehicle Extension (s)	3.0	7.0	3.0	3.0	7.0	3.0	3.0	7.0	3.0	3.0	7.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0

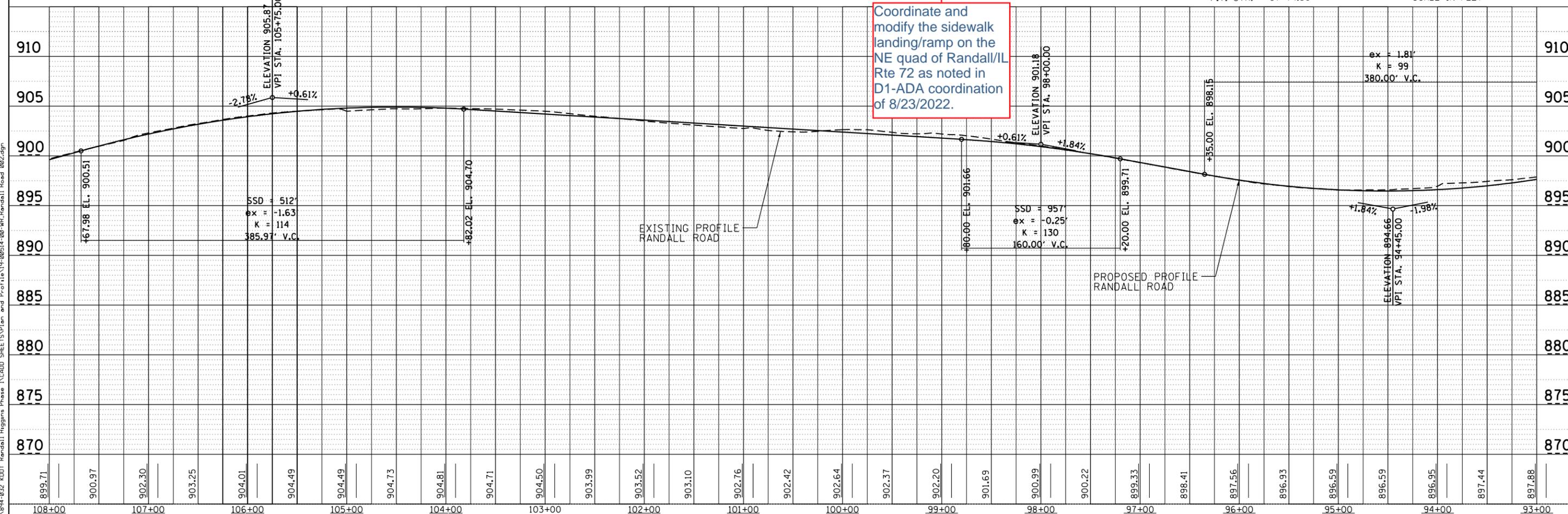
ATTACHMENT 5
PLAN AND PROFILE

DATE	
BY	
PLAN	SURVEYED
	PLOTTED
	ALIGNED
	CHECKED
	DESIGNED
	FILED
	NO.
	NO.

DATE	
BY	
PROFILE	SURVEYED
	PLOTTED
	GRADES CHECKED
	STRUCTURE NOTATIONS OK'D
	NO.
	NO.



Coordinate and modify the sidewalk landing/ramp on the NE quad of Randall/IL Rte 72 as noted in D1-ADA coordination of 8/23/2022.



USER NAME = tnestor	DESIGNED - JT	REVISED -
PLOT SCALE = 1"=50'	DRAWN - JT	REVISED -
PLOT DATE = 01/05/2020	CHECKED - MC	REVISED -
	DATE = 01/05/2020	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

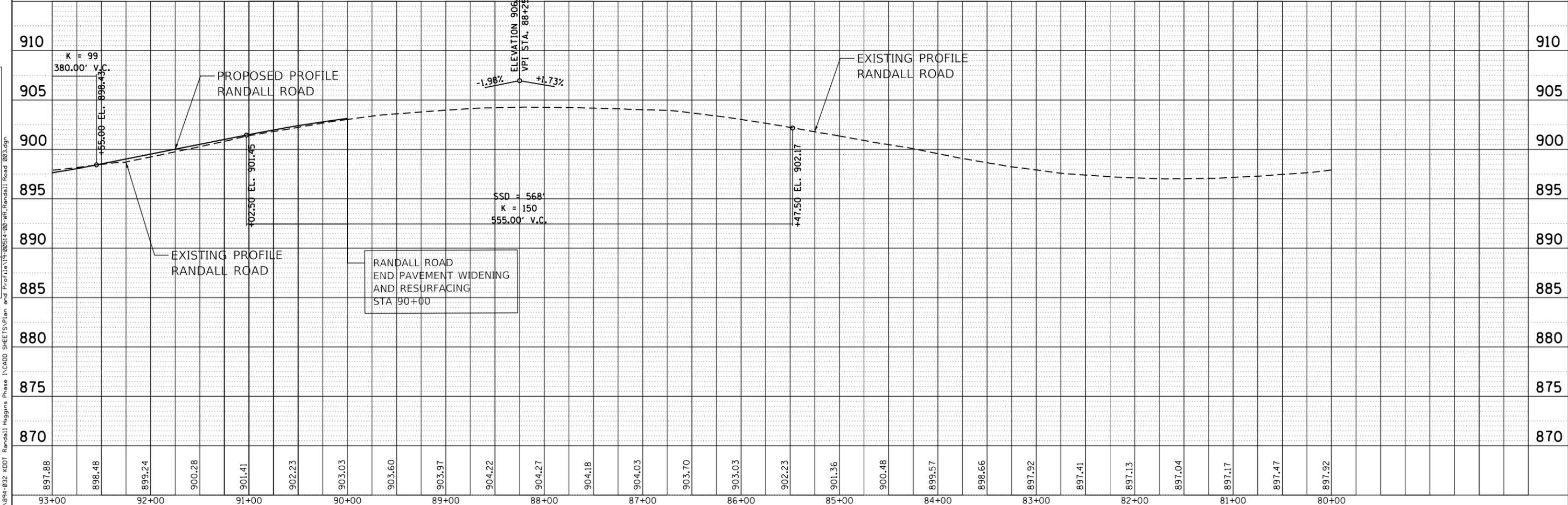
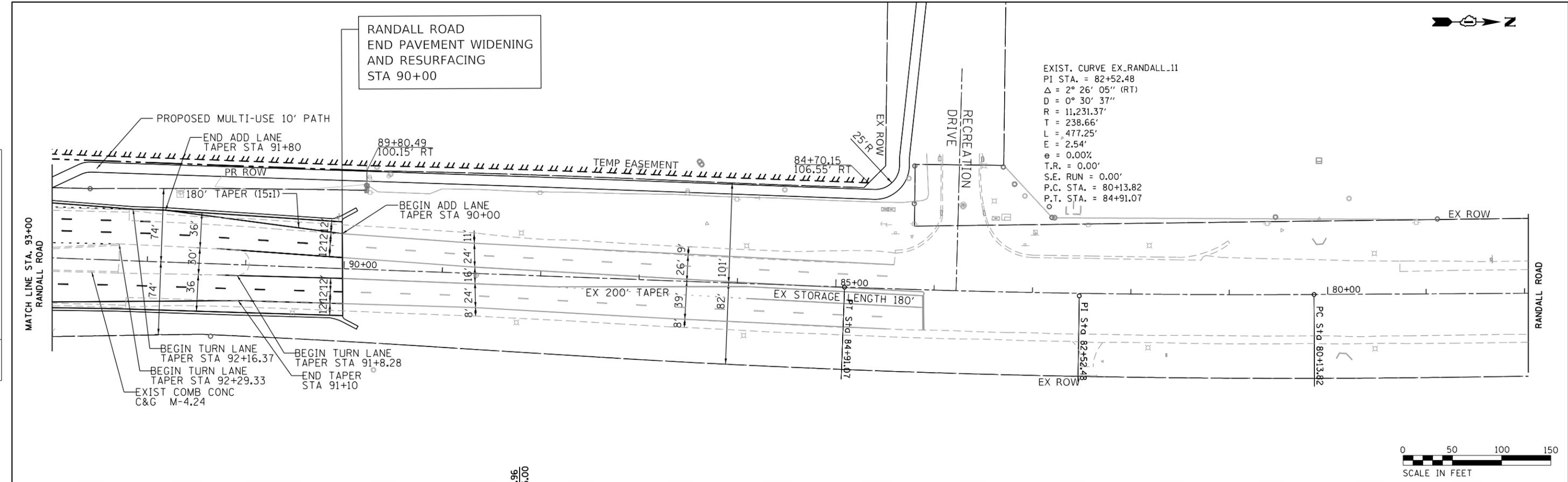
RANDALL ROAD AT HIGGINS ROAD (IL 72)
 (RANDALL ROAD)

SCALE: 1"=50' SHEET 2 OF 7 SHEETS STA. 108+00 TO STA. 93+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE	7	2
				CONTRACT NO.
				ILLINOIS FED. AID PROJECT

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	
	CHECKED	
	FILED	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHKD	
	NO.	



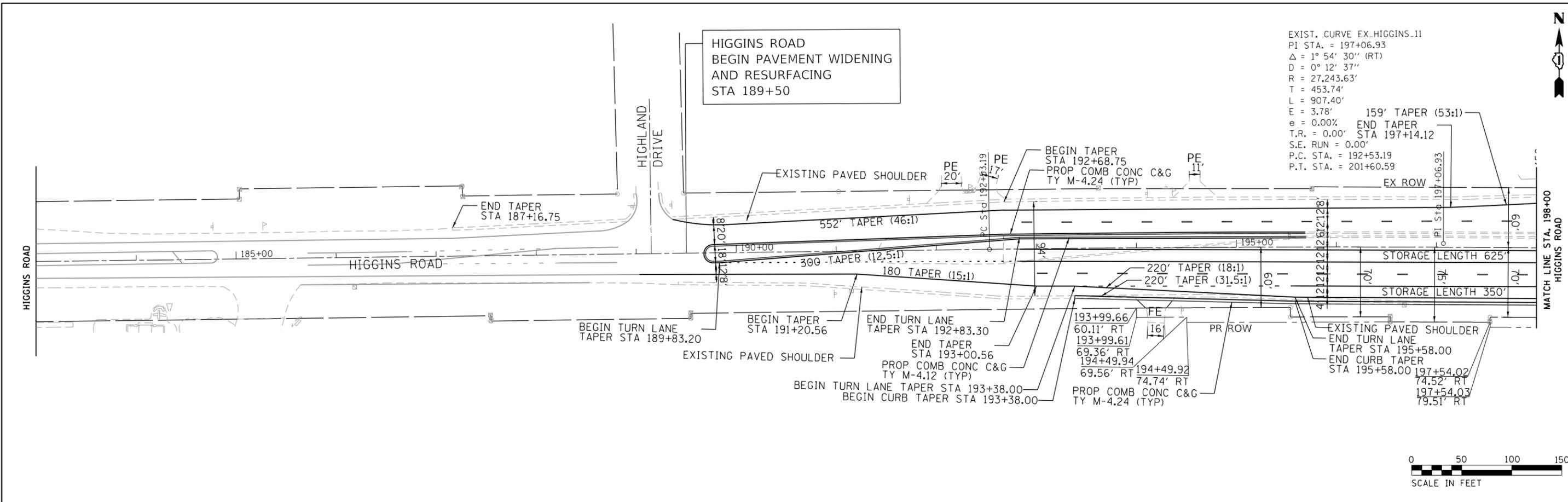
USER NAME = tnestor	DESIGNED - JT	REVISED -
	DRAWN - JT	REVISED -
PLOT SCALE = 1"=50'	CHECKED - MC	REVISED -
PLOT DATE = 01/05/2020	DATE - 01/05/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

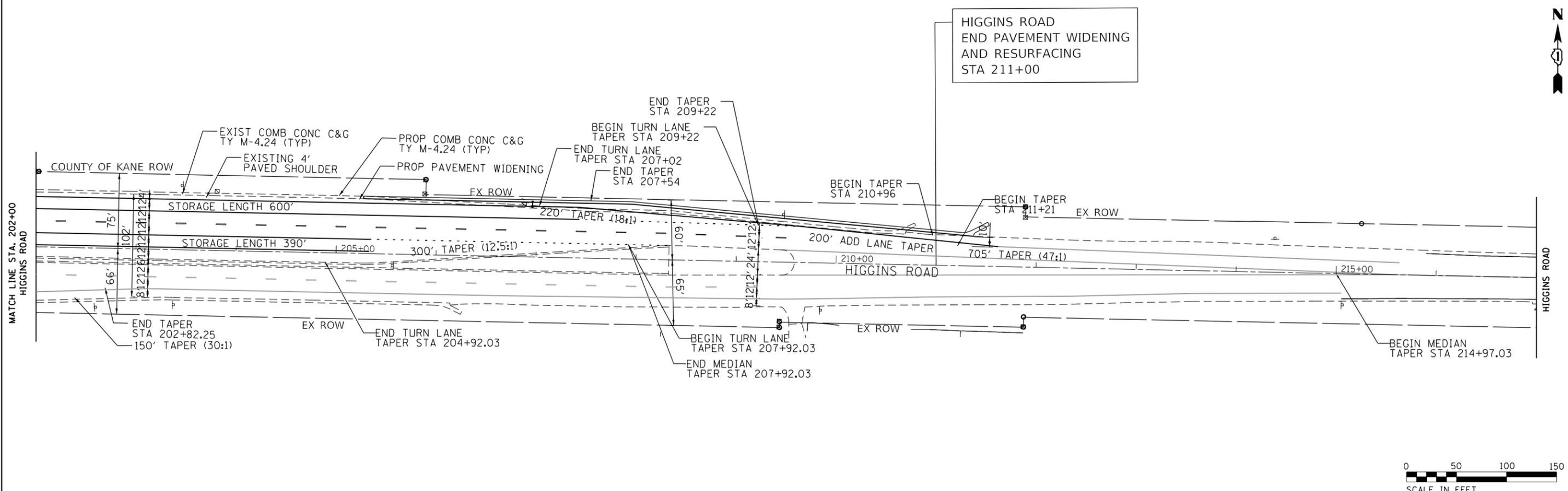
**RANDALL ROAD AT HIGGINS ROAD (IL 72)
(RANDALL ROAD)**

SCALE: 1"=50' SHEET 3 OF 7 SHEETS STA. 93+00 TO STA. 78+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE	7	3
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

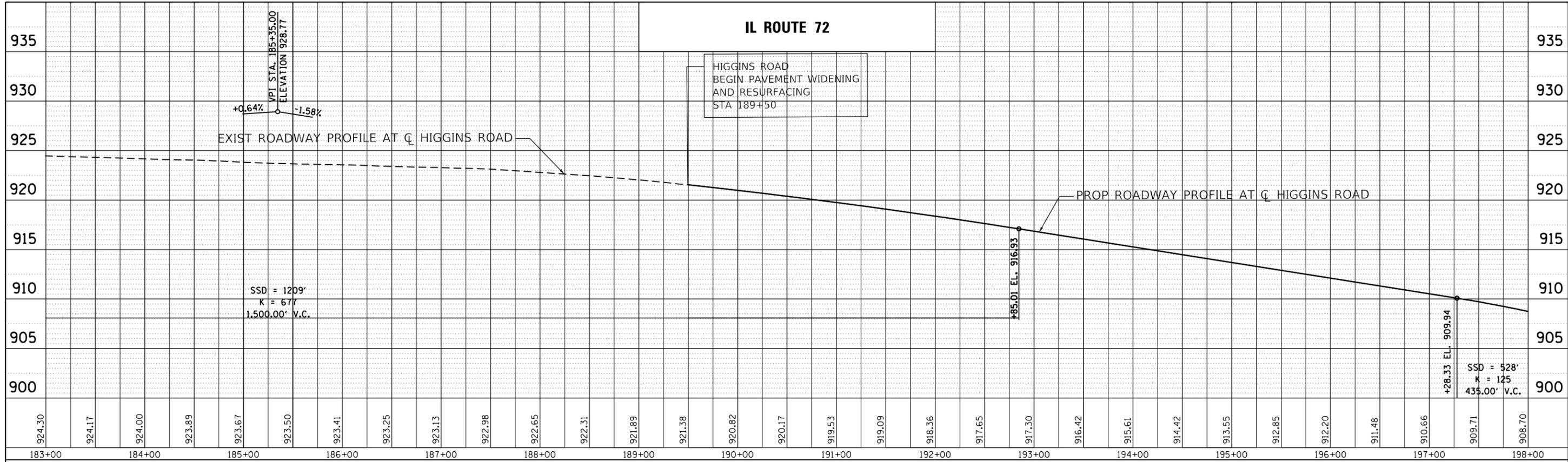


EXIST. CURVE EX_HIGGINS_11
 PI STA. = 197+06.93
 $\Delta = 1^\circ 54' 30''$ (RT)
 $D = 0^\circ 12' 37''$
 $R = 27,243.63'$
 $T = 453.74'$
 $L = 907.40'$
 $E = 3.78'$
 $e = 0.00\%$
 T.R. = 0.00' STA 197+14.12
 S.E. RUN = 0.00'
 P.C. STA. = 192+53.19
 P.T. STA. = 201+60.59

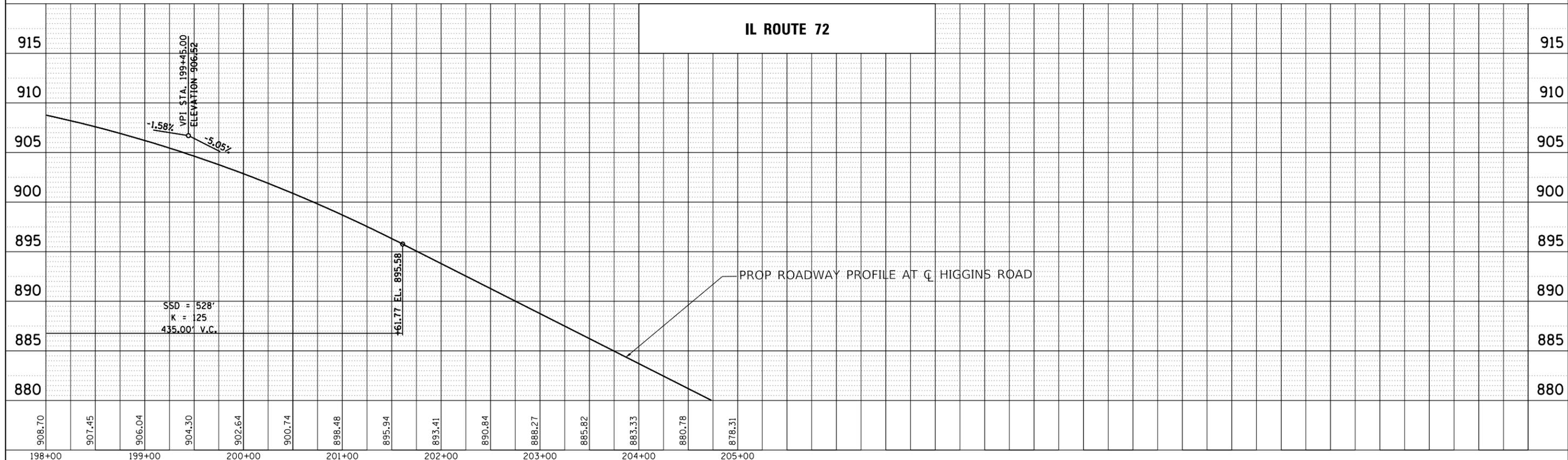


FILE NAME =	USER NAME = tnestor	DESIGNED - JT	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RANDALL ROAD AT HIGGINS ROAD (IL 72) (HIGGINS ROAD)			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
W:\19-00514-00-KDOT Rendall Higgins Phase 1	CADD SHEETS\Plan and Profile\19-00514-00-WR	DRAWN Road 001.dgn	JT		REVISED -	SCALE: 1"=50'			19-00514-00-WR	KANE	7	4
BLA, Inc.	PLOT SCALE = 100.0000' / in.	CHECKED - MC	REVISED -		REVISED -	SHEET 4	OF 7 SHEETS	STA. 189+50	TO STA. 211+00	CONTRACT NO.		
Default	PLOT DATE = 2/17/2022	DATE - 01/05/2020	REVISED -		REVISED -	ILLINOIS FED. AID PROJECT						

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK		
	NO.		
	CHECKED		
	FILE NAME		



PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NO.		



BLA, Inc.	USER NAME = tnestor	DESIGNED -	REVISED -
	PLOT SCALE = 100.00' / in.	DRAWN -	REVISED -
	PLOT DATE = 2/17/2022	CHECKED -	REVISED -
		DATE -	REVISED -

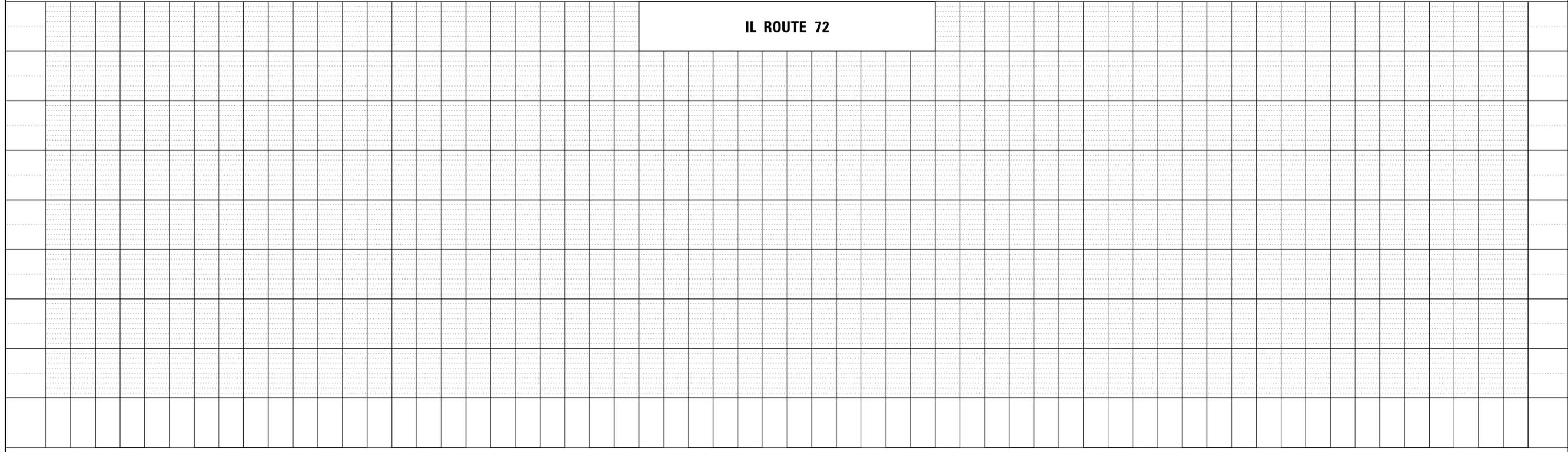
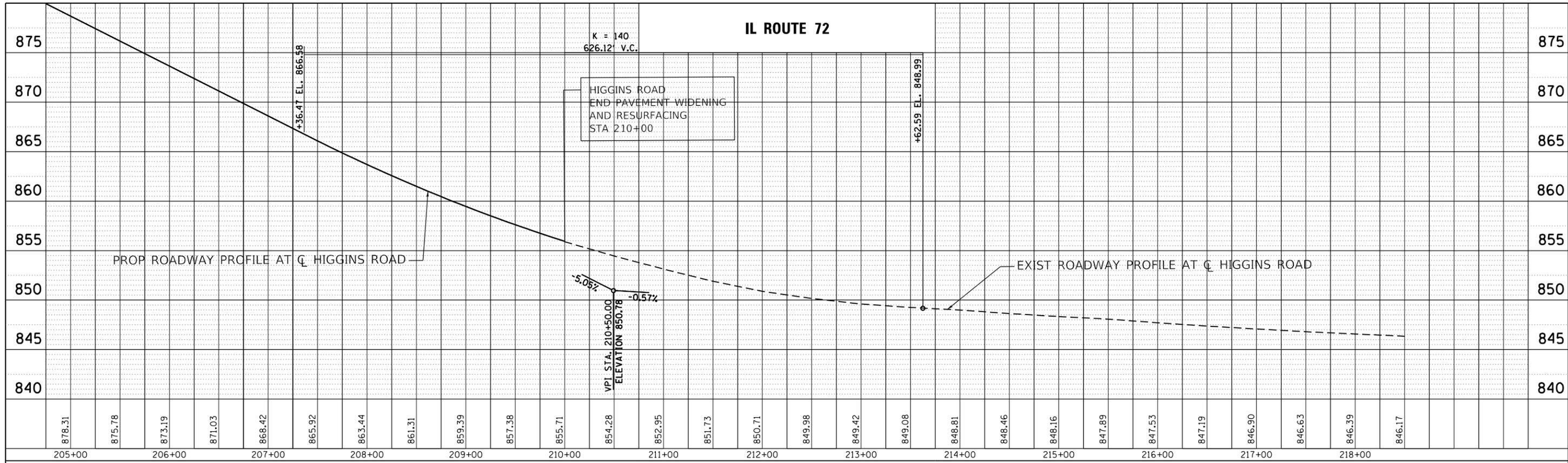
**KANE COUNTY
DIVISION OF TRANSPORTATION**

RANDALL ROAD AND HIGGINS ROAD (IL RTE 72)
SCALE: 1"=50' SHEET 5 OF 7 SHEETS STA. 183+00 TO STA. 204+75

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	19-00514-00-WR	KANE	7	5
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK		
	NO.		
	CHECKED		
	FILE NAME		

PROFILE	SURVEYED	BY	DATE
	GRADES CHECKED		
	STRUCTURE		
	NOTATIONS		
	CHKD		
	NO.		

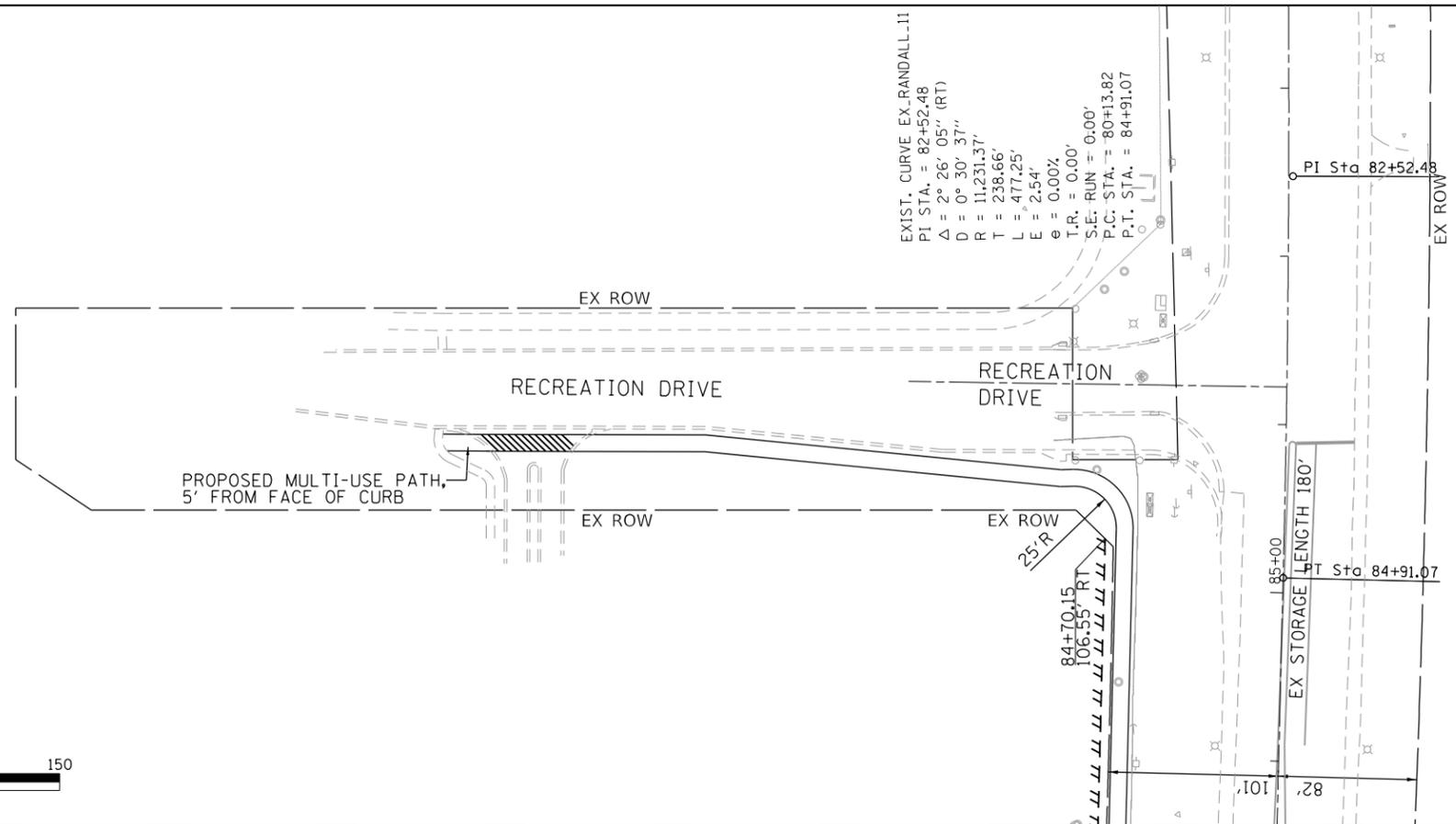


	USER NAME = tnestor	DESIGNED -	REVISED -	KANE COUNTY DIVISION OF TRANSPORTATION	RANDALL ROAD AND HIGGINS ROAD (IL RTE 72)		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.00' / 1" =	DRAWN -	REVISED -		341	19-00514-00-WR	KANE	7	6	CONTRACT NO.	
	PLOT DATE = 2/17/2022	CHECKED -	REVISED -		SCALE: 1"=50'		SHEET 6	OF 7 SHEETS	STA. 205+00	TO STA. 225+00	ILLINOIS FED. AID PROJECT

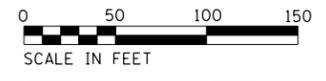
PLAN	SURVEYED	BY	DATE
	PLOTTED		
	ALIGNED		
	CHECKED		
	NO. _____		
	FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHKD		
	NO. _____		
	FILE NAME		

FILE NAME = W:\094-032\001\Randall Higgins Phase 1\CA00D SHEETS\Plan and Profile\19-00514-00-WR-Recreation Drive 001.dgn



*PROPOSED MULTI-USE PATH TO FOLLOW EXISTING ROAD PROFILE



[Empty grid area for profile plotting]																								
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



USER NAME = tnestor	DESIGNED - JT	REVISED -
PLOT SCALE = 1"=50'	DRAWN - JT	REVISED -
PLOT DATE = 01/05/2020	CHECKED - MC	REVISED -
	DATE - 01/05/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RANDALL ROAD AT HIGGINS ROAD (IL 72)
(RANDALL ROAD)

SCALE: 1"=50' SHEET 7 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE	7	6
CONTRACT NO.				

ILLINOIS FED. AID PROJECT

ATTACHMENT 6
INTERSECTION DESIGN STUDY

SIGNALLED CAPACITY DESIGN ANALYSIS

PROGRAM USED: SYNCHRO , VERSION: 10.0 SIGNAL TYPE: ACTUATED AREA TYPE: NON-CBD
 NUMBER OF PHASES: (A.M.) 6 (P.M.) 6 CYCLE LENGTH: (A.M.) 110 SEC. (P.M.) 180 SEC. PEAK HOUR FACTOR: (A.M.) 0.96 (P.M.) 0.99
 INTERSECTION DELAY/LEVEL-OF-SERVICE A.M. 35.4 SECONDS LOS D P.M. 52.5 SECONDS LOS D

APPROACH	SOUTHBOUND (A)			NORTHBOUND (B)			EASTBOUND (C)			WESTBOUND (D)		
	L	T	R	L	T	R	L	T	R	L	T	R
LANE GROUP												
NUMBER OF LANES	2	3	1	2	3	1	2	2	1	2	2	1
2050 30TH MAX. HOUR TRAFFIC (/)	A.M. 362 P.M. 209	A.M. 2301 P.M. 1184	A.M. 499 P.M. 502	A.M. 164 P.M. 135	A.M. 980 P.M. 2627	A.M. 88 P.M. 223	A.M. 387 P.M. 559	A.M. 483 P.M. 521	A.M. 101 P.M. 178	A.M. 170 P.M. 149	A.M. 424 P.M. 446	A.M. 162 P.M. 282
BASE SATURATION FLOW RATE (/)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
LANE WIDTH (FT)	12	12	12	12	12	12	12	12	12	12	12	12
VOLUME OF RIGHT TURN ON RED (/)	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0
PEDESTRIANS/HOUR (/)	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0	A.M. 0 P.M. 0
ARRIVAL TYPE	4			4			3			3		
LANE UTILIZATION ADJ. FACTOR	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00
GREEN TIME (SECONDS)	A.M. 20.5 P.M. 12.5	A.M. 51.0 P.M. 87.0	A.M. 65.5 P.M. 120.5	A.M. 8.5 P.M. 15.5	A.M. 39.0 P.M. 90.0	A.M. 50.5 P.M. 106.5	A.M. 14.5 P.M. 33.5	A.M. 18.0 P.M. 40.0	A.M. 26.5 P.M. 55.5	A.M. 11.5 P.M. 16.5	A.M. 15.0 P.M. 23.0	A.M. 23.5 P.M. 35.5
GREEN RATIO (/ C)	A.M. 0.16 P.M. 0.07	A.M. 0.46 P.M. 0.50	A.M. 0.65 P.M. 0.71	A.M. 0.08 P.M. 0.07	A.M. 0.39 P.M. 0.50	A.M. 0.53 P.M. 0.61	A.M. 0.13 P.M. 0.18	A.M. 0.17 P.M. 0.24	A.M. 0.30 P.M. 0.34	A.M. 0.09 P.M. 0.07	A.M. 0.14 P.M. 0.13	A.M. 0.35 P.M. 0.23
Ca	A.M. 636 P.M. 239	A.M. 2450 P.M. 2624	A.M. 1024 P.M. 1097	A.M. 254 P.M. 265	A.M. 2016 P.M. 2716	A.M. 858 P.M. 1004	A.M. 444 P.M. 615	A.M. 640 P.M. 860	A.M. 441 P.M. 538	A.M. 348 P.M. 305	A.M. 483 P.M. 467	A.M. 574 P.M. 351
V/C RATIO(X)	A.M. 0.71 P.M. 0.88	A.M. 0.98 P.M. 0.46	A.M. 0.51 P.M. 0.46	A.M. 0.68 P.M. 0.62	A.M. 0.51 P.M. 0.98	A.M. 0.11 P.M. 0.23	A.M. 0.91 P.M. 0.61	A.M. 0.79 P.M. 0.61	A.M. 0.24 P.M. 0.35	A.M. 0.56 P.M. 0.61	A.M. 0.92 P.M. 0.97	A.M. 0.32 P.M. 0.81
STORAGE QUEUE (FEET)	A.M. 237 P.M. 245	A.M. 713 P.M. 508	A.M. 272 P.M. 382	A.M. 123 P.M. 179	A.M. 320 P.M. 1106	A.M. 83 P.M. 220	A.M. 273 P.M. 619	A.M. 322 P.M. 535	A.M. 123 P.M. 323	A.M. 122 P.M. 178	A.M. 292 P.M. 504	A.M. 167 P.M. 570
LANE GROUP DELAY(SECONDS)	A.M. 50.9 P.M. 116.0	A.M. 29.8 P.M. 27.0	A.M. 10.6 P.M. 14.8	A.M. 54.3 P.M. 102.4	A.M. 27.7 P.M. 41.7	A.M. 16.7 P.M. 10.5	A.M. 53.6 P.M. 87.4	A.M. 39.6 P.M. 68.1	A.M. 24.4 P.M. 45.4	A.M. 54.6 P.M. 91.4	A.M. 71.9 P.M. 110.0	A.M. 27.8 P.M. 83.8
LANE GROUP LEVEL-OF-SERVICE	A.M. D P.M. F	A.M. C P.M. C	A.M. B P.M. B	A.M. D P.M. F	A.M. C P.M. D	A.M. B P.M. B	A.M. D P.M. E	A.M. D P.M. E	A.M. C P.M. D	A.M. D P.M. F	A.M. E P.M. F	A.M. C P.M. F
APPROACH DELAY (SECONDS/VEHICLE)	A.M. 29.2 P.M. 33.6			A.M. 30.4 P.M. 42.1			A.M. 43.6 P.M. 73.5			A.M. 58.6 P.M. 98.4		
APPROACH LEVEL-OF-SERVICE	A.M. D P.M. F	A.M. C P.M. C	A.M. B P.M. B	A.M. D P.M. F	A.M. C P.M. D	A.M. B P.M. B	A.M. D P.M. E	A.M. D P.M. E	A.M. C P.M. D	A.M. D P.M. F	A.M. E P.M. F	A.M. C P.M. F

ELEMENTS CONTROLLING DESIGN

PREFERRED ROUTE:
 F.A. ROUTE NUMBER: F.A.P. 336. MARKED ROUTE NUMBER: N/A
 STREET NAME: RANDALL ROAD. SRA ROUTE: YES
 FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL. OSOW DESIGN NO
 EXISTING ADT: 47,800 VPD. (2019) DESIGN YEAR ADT: 69,400 VPD. (2050)
 PROPOSED DESIGN SPEED: 50 MPH. PROPOSED POSTED SPEED: 50 MPH.

SECONDARY ROUTE:
 F.A. ROUTE NUMBER: F.A.P. 341. MARKED ROUTE NUMBER: IL 72.
 STREET NAME: HIGGINS ROAD. SRA ROUTE: NO
 FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL. OSOW DESIGN YES
 EXISTING ADT: 18,700 VPD. (2019) DESIGN YEAR ADT: 25,500 VPD. (2050)
 PROPOSED DESIGN SPEED: 50 MPH. PROPOSED POSTED SPEED: 45 MPH.

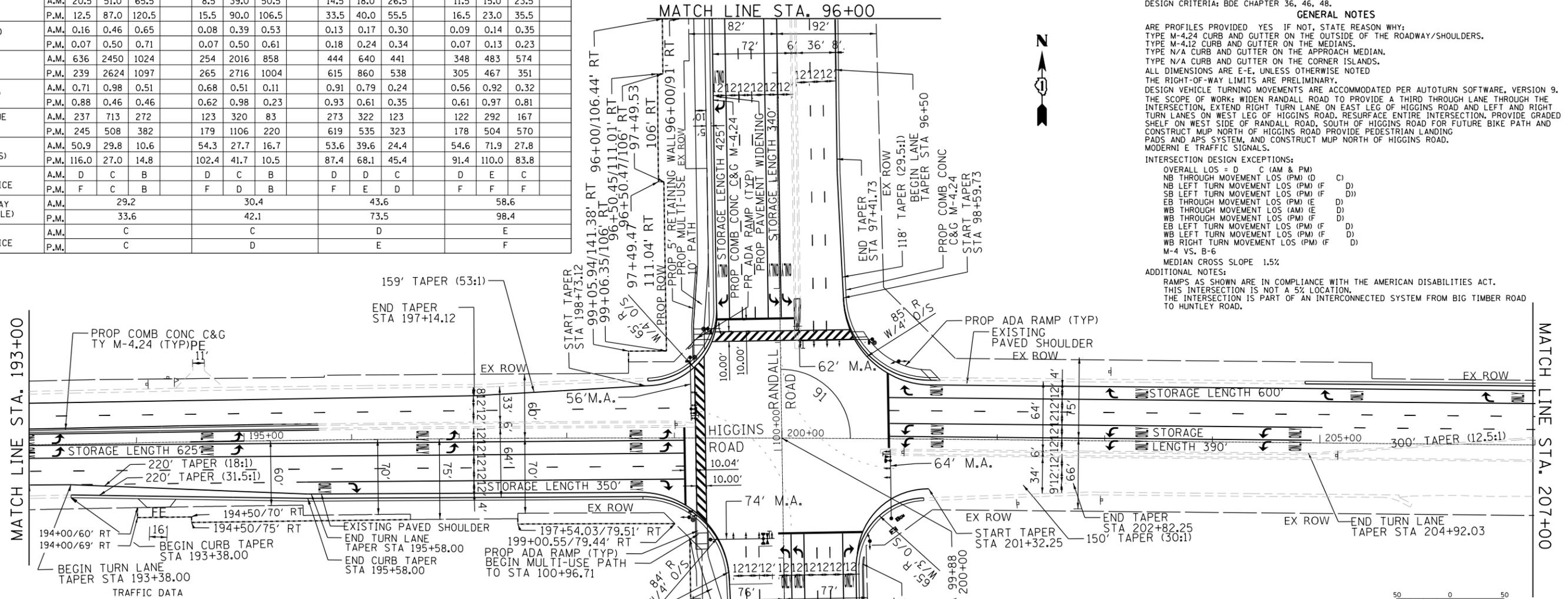
IMPROVEMENT TYPE: WIDENED AND RESURFACED RECONSTRUCTION.
 ANTICIPATED YEAR OF CONSTRUCTION: 2025.
 EXISTING METHOD OF TRAFFIC CONTROL: TRAFFIC SIGNAL. PROPOSED METHOD: TRAFFIC SIGNAL.
 SIGNAL WARRANT: EXISTING SIGNAL.
 DESIGN VEHICLE: WB-65.
 DESIGN YEAR: 2050
 TRUCK ROUTE DESIGNATION:
 PREFERRED ROADWAY: RANDALL ROAD.
 SECONDARY ROADWAY: IL RTE 72.
 DESIGN CRITERIA: BDE CHAPTER 36, 46, 48.

GENERAL NOTES

ARE PROFILES PROVIDED YES IF NOT, STATE REASON WHY:
 TYPE M-4.24 CURB AND GUTTER ON THE OUTSIDE OF THE ROADWAY/SHOULDERS.
 TYPE M-4.12 CURB AND GUTTER ON THE MEDIANS.
 TYPE N/A CURB AND GUTTER ON THE APPROACH MEDIAN.
 TYPE N/A CURB AND GUTTER ON THE CORNER ISLANDS.
 ALL DIMENSIONS ARE E-E, UNLESS OTHERWISE NOTED.
 THE RIGHT-OF-WAY LIMITS ARE PRELIMINARY.
 DESIGN VEHICLE TURNING MOVEMENTS ARE ACCOMMODATED PER AUTOTURN SOFTWARE, VERSION 9.
 THE SCOPE OF WORK: WIDEN RANDALL ROAD TO PROVIDE A THIRD THROUGH LANE THROUGH THE INTERSECTION, EXTEND RIGHT TURN LANE ON EAST LEG OF HIGGINS ROAD AND LEFT AND RIGHT TURN LANES ON WEST LEG OF HIGGINS ROAD. RESURFACE ENTIRE INTERSECTION, PROVIDE GRADED SHELF ON WEST SIDE OF RANDALL ROAD, SOUTH OF HIGGINS ROAD FOR FUTURE BIKE PATH AND CONSTRUCT MUP NORTH OF HIGGINS ROAD PROVIDE PEDESTRIAN LANDING PADS AND APS SYSTEM, AND CONSTRUCT MUP NORTH OF HIGGINS ROAD. MODERNIZE TRAFFIC SIGNALS.

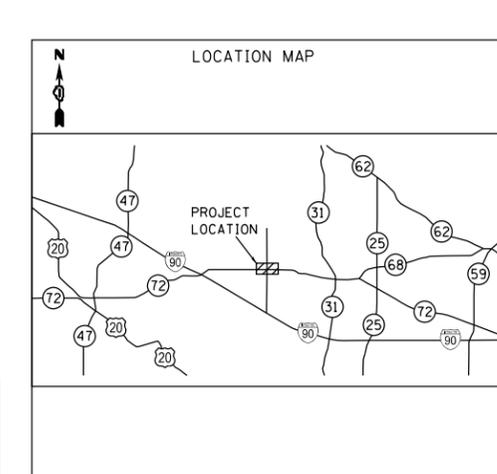
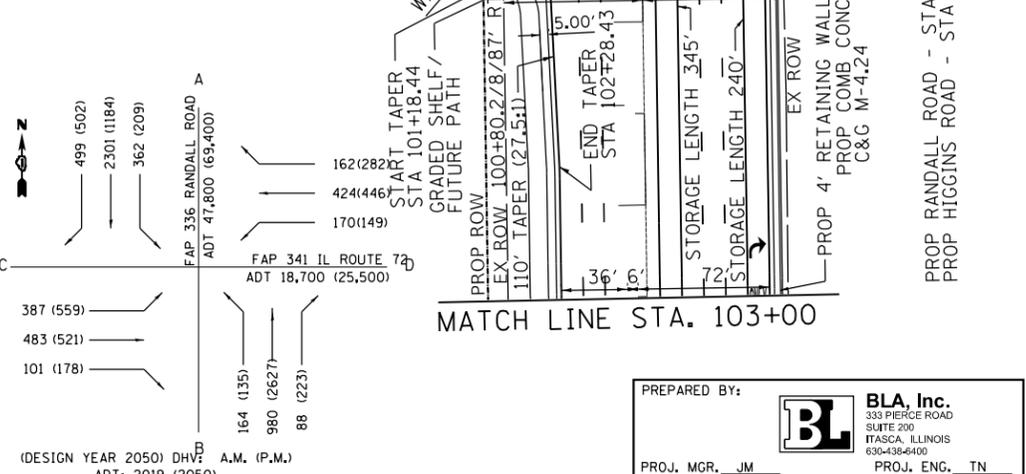
INTERSECTION DESIGN EXCEPTIONS:
 OVERALL LOS = D C (AM & PM)
 NB THROUGH MOVEMENT LOS (PM) (D) C)
 NB LEFT TURN MOVEMENT LOS (PM) (F) D)
 SB LEFT TURN MOVEMENT LOS (PM) (F) D)
 EB THROUGH MOVEMENT LOS (PM) (E) D)
 WB THROUGH MOVEMENT LOS (AM) (E) D)
 WB THROUGH MOVEMENT LOS (PM) (F) D)
 EB LEFT TURN MOVEMENT LOS (PM) (F) D)
 WB LEFT TURN MOVEMENT LOS (PM) (F) D)
 WB RIGHT TURN MOVEMENT LOS (PM) (F) D)
 M-4 VS. B-6
 MEDIAN CROSS SLOPE 1.5%

ADDITIONAL NOTES:
 RAMPS AS SHOWN ARE IN COMPLIANCE WITH THE AMERICAN DISABILITIES ACT.
 THIS INTERSECTION IS NOT A 5% LOCATION.
 THE INTERSECTION IS PART OF AN INTERCONNECTED SYSTEM FROM BIG TIMBER ROAD TO HUNTLEY ROAD.



TRAFFIC DATA

MOVEMENT	YEAR 2019 30TH MAXIMUM HOUR TRAFFIC		PERCENT TRUCK TRAFFIC IN 30TH MAX. HOUR		ESTIMATED PERCENT INCREASE BY 2050	YEAR 2030 30TH MAXIMUM HOUR TRAFFIC		ESTIMATED PERCENT INCREASE BY	YEAR 2050 30TH MAXIMUM HOUR TRAFFIC	
	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.		A.M.	P.M.
AD (L)	298	173	2	1	21	362	209		362	209
AB (T)	1574	819	3	3	45	2301	1184		2301	1184
AC (R)	310	308	2	5	63	499	502		499	502
BC (L)	110	88	7	14	53	164	135		164	135
BA (T)	672	1806	5	1	46	980	2627		980	2627
BD (R)	73	184	3	1	21	88	223		88	223
CA (L)	233	348	6	8	61	387	559		387	559
CD (T)	378	413	5	8	26	483	521		483	521
CB (R)	66	118	14	10	51	101	178		101	178
DB (L)	148	130	3	3	15	170	149		170	149
DC (T)	335	345	5	4	29	424	446		424	446
DA (R)	131	231	4	5	22	162	282		162	282
TOTAL A	3,218	3,685	-	-	46	4,691	5,363		4,691	5,363
TOTAL B	2,643	3,145	-	-	43	3,804	4,496		3,804	4,496
TOTAL C	1,432	1,620	-	-	45	2,058	2,341		2,058	2,341
TOTAL D	1,363	1,476	-	-	24	1,689	1,830		1,689	1,830



INTERSECTION DESIGN STUDY

FAP ROUTE 336 (RANDALL ROAD) WITH FAP ROUTE 341 (IL ROUTE 72)

SEC. NO. 19-00514-00-WR PROJ. NO. _____

SCALE 1"=50' COUNTY KANE

SJN: _____ REV. NO. 5

DESIGNED BY BLA, INC. DATE 12/2021

SATISFACTORY _____ DISTRICT GEOMETRICS ENGINEER DATE _____

SATISFACTORY _____ DISTRICT PROGRAM DEVELOPMENT ENGINEER DATE _____

SATISFACTORY _____ DISTRICT OPERATIONS ENGINEER DATE _____

APPROVED _____ DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER DATE _____

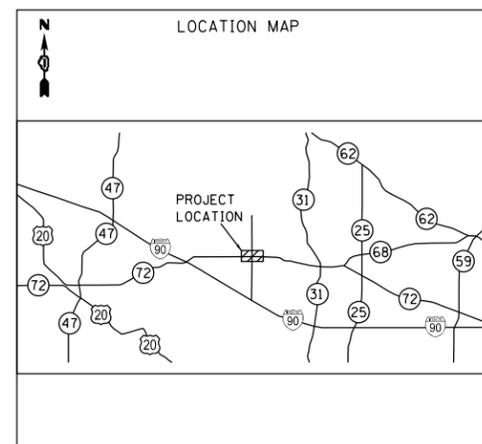
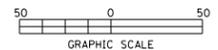
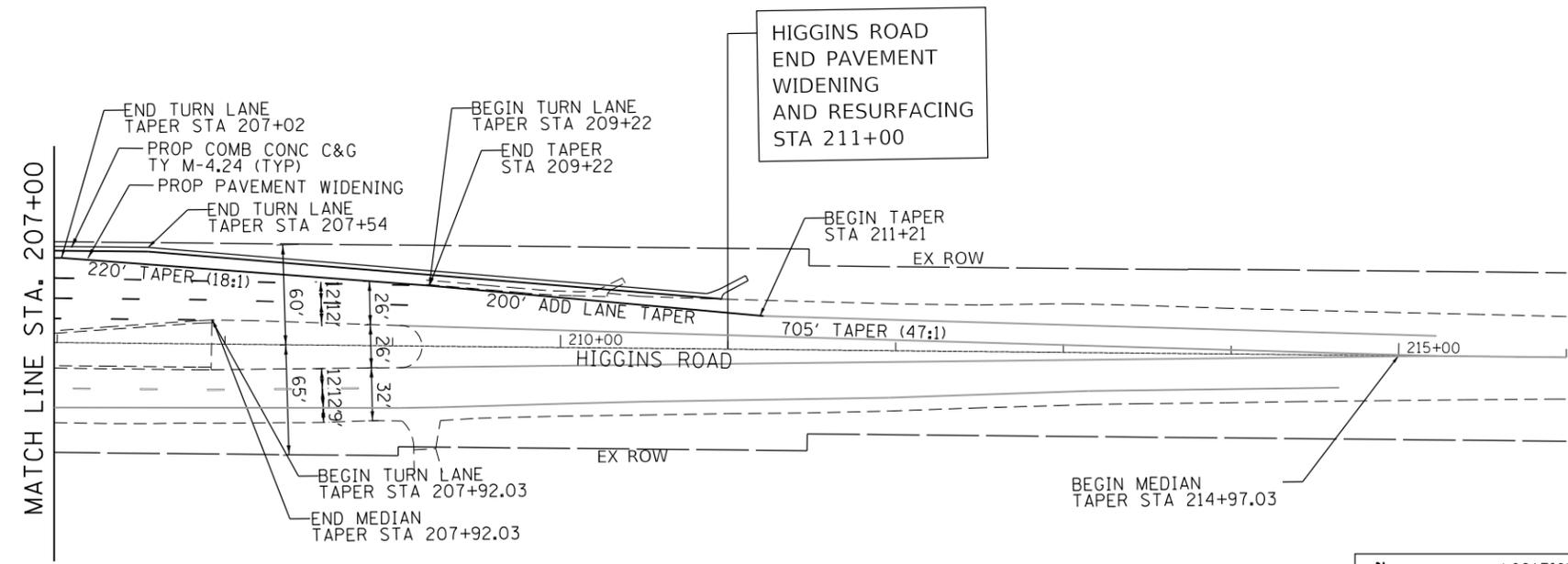
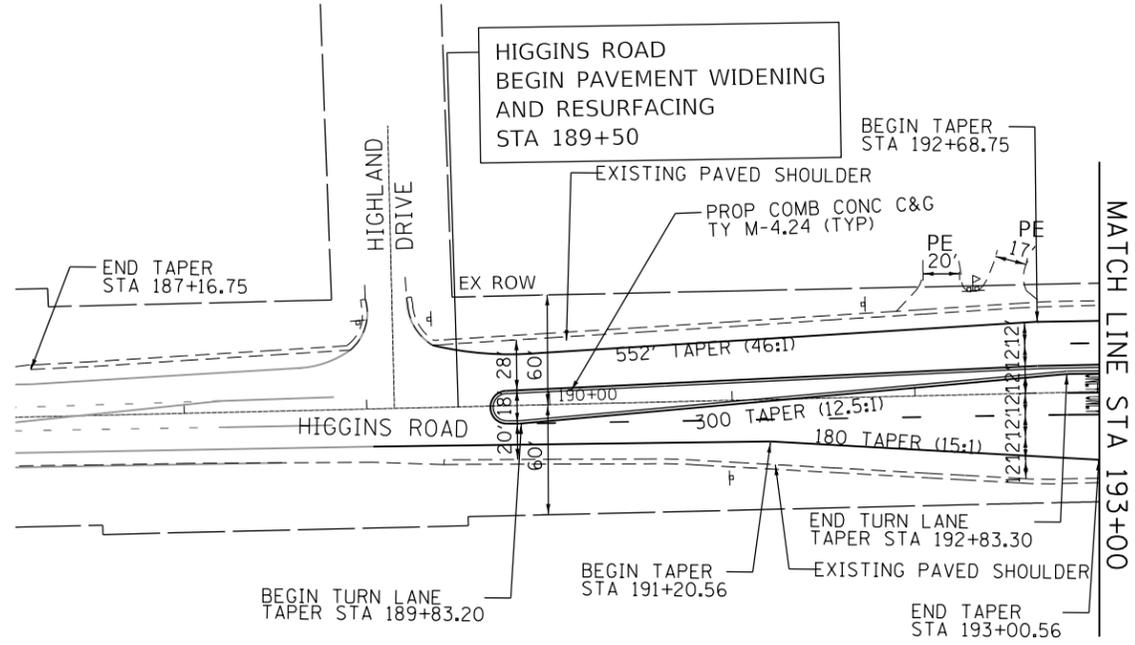
CADD FILE NAME: I.D.S. SHEET 1 OF 10

PREPARED BY: **BLA, Inc.**
 333 PIERCE ROAD
 SUITE 200
 ITASCA, ILLINOIS
 630-438-6400

PROJ. MGR. JM PROJ. ENG. TN

PLOT DATE: _____ FILE NAME: _____ PLOT SCALE: _____ USER NAME: _____

PLOT DATE = 9/14/2022
 FILE NAME = N:\904-032 KDOT Rendall Higgins Phase I\9-00514-00-WR-002 Matchline.dwg
 PLOT SCALE = 100.00 / in.
 USER NAME = tnestor



PREPARED BY: **BLA, Inc.**
 333 PIERCE ROAD
 SUITE 200
 ITASCA, ILLINOIS
 630-438-6400

PROJ. MGR. JM PROJ. ENG. TN

INTERSECTION DESIGN STUDY

FAP ROUTE 336 (RANDALL ROAD) WITH FAP ROUTE 341 (IL ROUTE 72)

SEC. NO. 19-00514-00-WR PROJ. NO. _____
 SCALE 1"=50' COUNTY KANE
 SJN : _____ REV. NO. 5

DESIGNED BY **BLA, INC.** DATE 12/2020

SATISFACTORY _____ DISTRICT GEOMETRICS ENGINEER DATE _____
 SATISFACTORY _____ DISTRICT PROGRAM DEVELOPMENT ENGINEER DATE _____
 SATISFACTORY _____ DISTRICT OPERATIONS ENGINEER DATE _____

APPROVED _____ DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER DATE _____

CADD FILE NAME : [] I.D.S. SHEET 2 OF 10

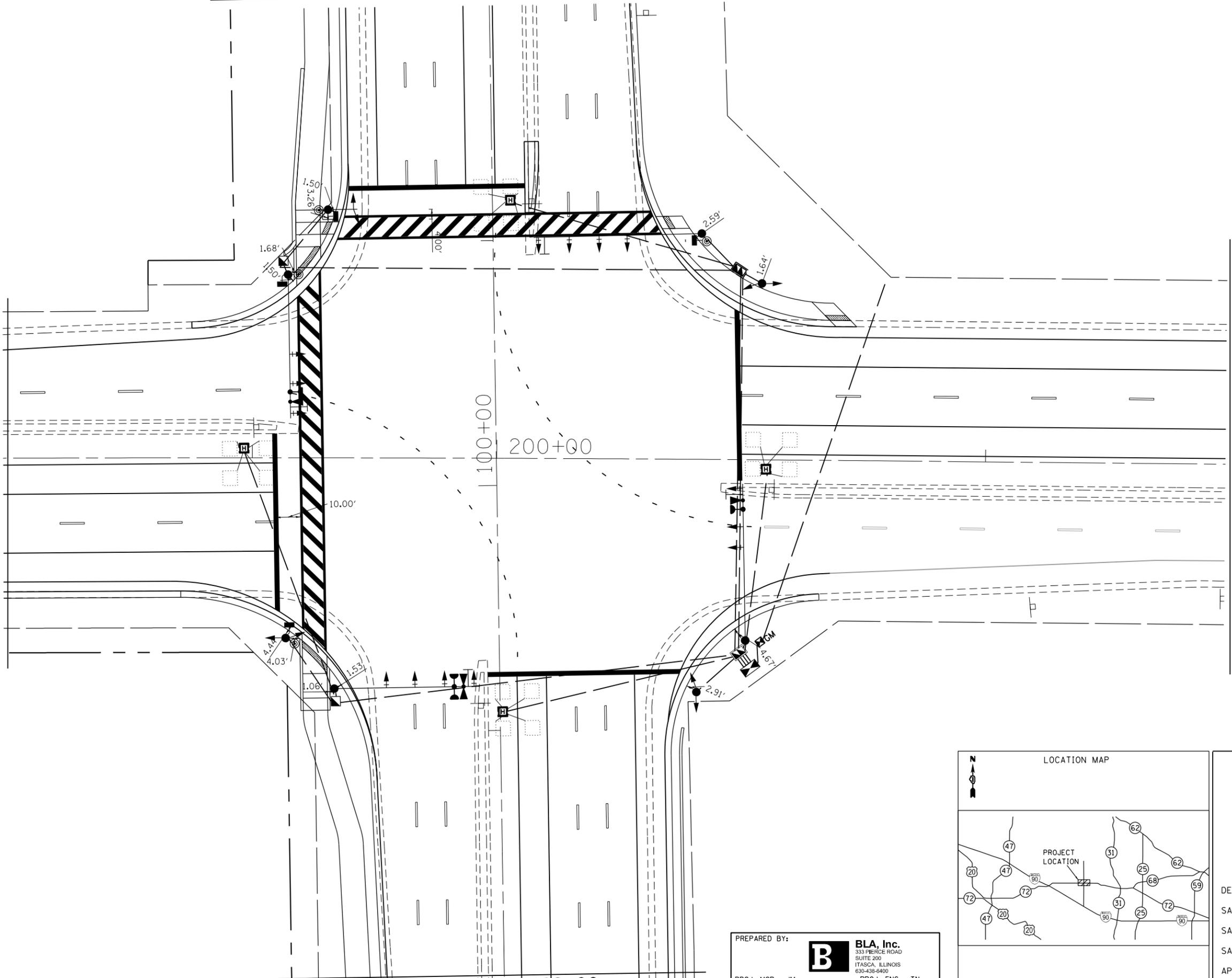
PLOT DATE = 9/14/2022
 FILE NAME = N:\19014-032-1001-Randall-Higgins-Phase-1\CA00-EXHIBITS\Intersection-Design-Study\19-00514-00-WR-004-T.S.EQUIPMENT.dgn
 PLOT SCALE = 40.00' / in.
 USER NAME = tmaster

MATCH LINE STA. 98+00

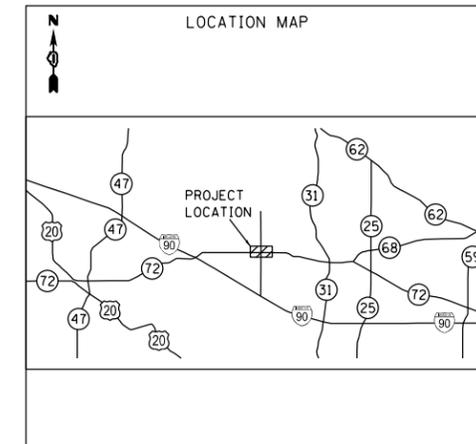
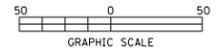


MATCH LINE STA. 198+00

MATCH LINE STA. 203+00



MATCH LINE STA. 102+00



PREPARED BY: **B** **BLA, Inc.**
 333 PERCE ROAD
 SUITE 200
 ITASCA, ILLINOIS
 630-438-8400
 PROJ. MGR. JM PROJ. ENG. TN

INTERSECTION DESIGN STUDY

FAP ROUTE 336 (RANDALL ROAD)
 WITH FAP ROUTE 341 (IL ROUTE 72)

SEC. NO. 19-00514-00-WR PROJ. NO. _____
 SCALE 1"=50' COUNTY KANE
 SJN : _____ REV. NO. 5

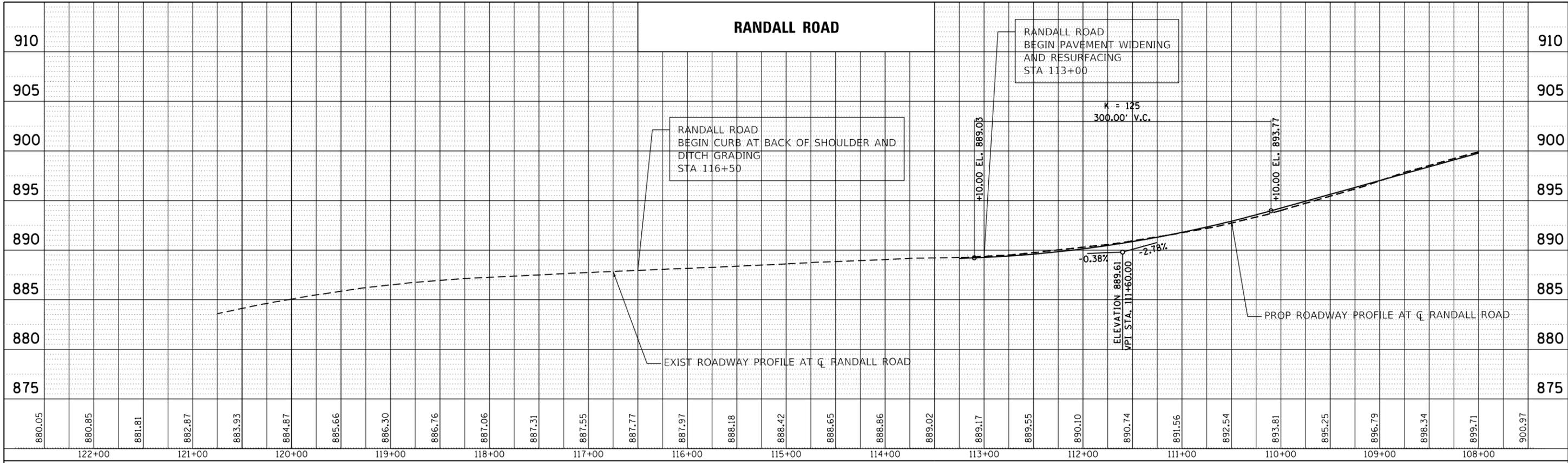
DESIGNED BY BLA, INC. DATE 12/2020

SATISFACTORY _____ DISTRICT GEOMETRICS ENGINEER DATE _____
 SATISFACTORY _____ DISTRICT PROGRAM DEVELOPMENT ENGINEER DATE _____
 SATISFACTORY _____ DISTRICT OPERATIONS ENGINEER DATE _____

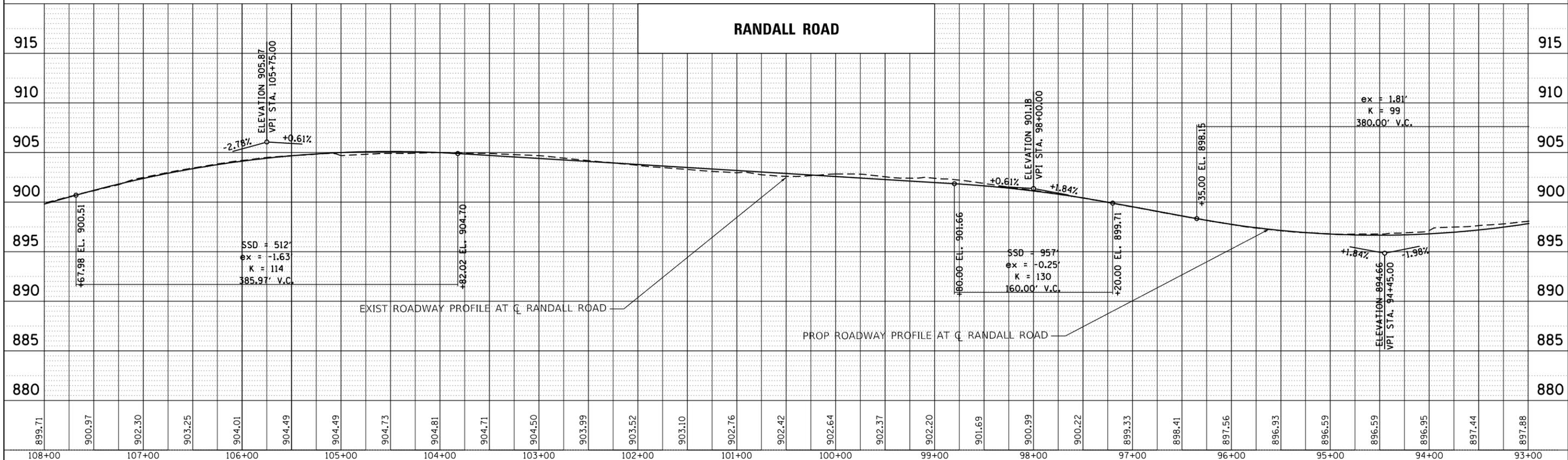
APPROVED _____ DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER DATE _____

CADD FILE NAME : [] I.D.S. SHEET 04 OF 10

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	ALIGNED		
	CHECKED		
	FILED		
	CADD FILE NAME		
	NO.		



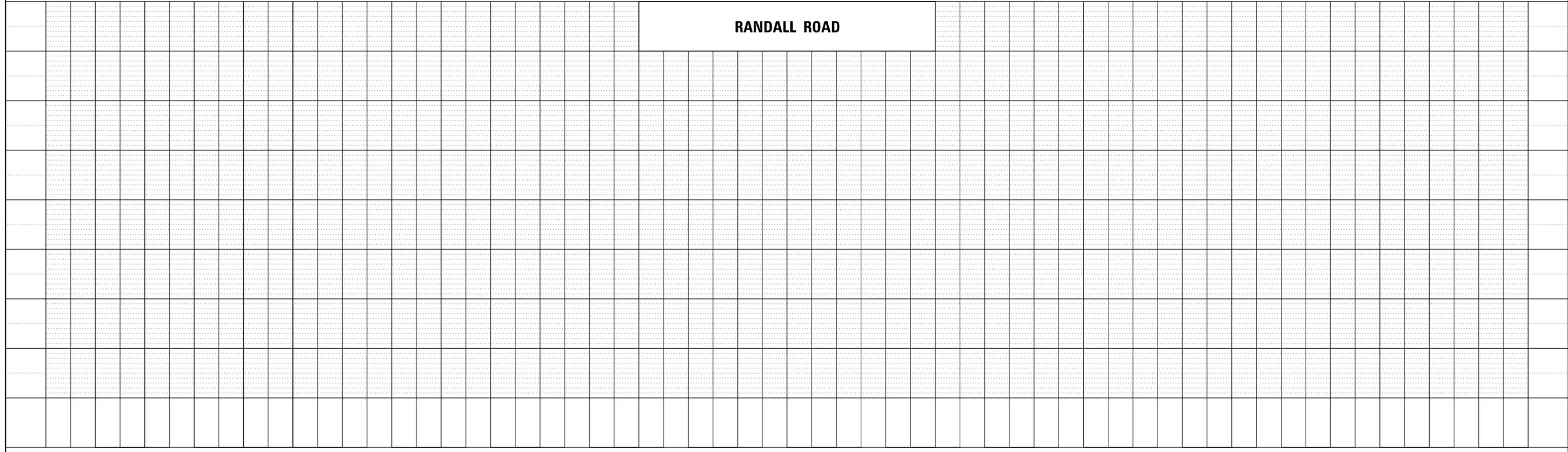
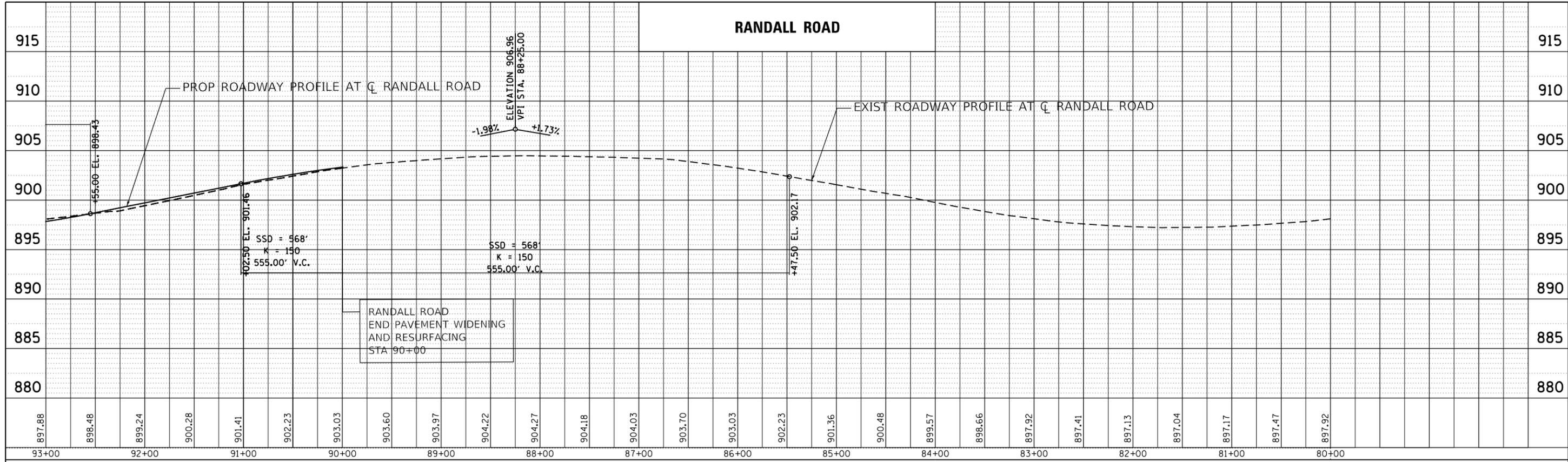
PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS OK'D		
	NO.		



BLA, Inc.	USER NAME = tnestor	DESIGNED -	REVISED -	KANE COUNTY DIVISION OF TRANSPORTATION	RANDALL ROAD AND HIGGINS ROAD (IL RTE 72)		F.A.U. RTE. 336	SECTION 19-00514-00-WR	COUNTY KANE	TOTAL SHEETS 10	SHEET NO. 05	
	PLOT SCALE = 100.00' / in.	CHECKED -	REVISED -		SCALE: 1"=50'	SHEET 01 OF 04 SHEETS	STA. 121+25 TO STA. 93+00	CONTRACT NO.		ILLINOIS FED. AID PROJECT		
	PLOT DATE = 7/20/2022	DATE -	REVISED -									

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	ALIGNED		
	CHECKED		
	FILED		
	CADD FILE NAME		
NO.			

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHKD		
NO.			



USER NAME = tnestor
 PLOT SCALE = 100.00' / 1" =
 PLOT DATE = 7/20/2022

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

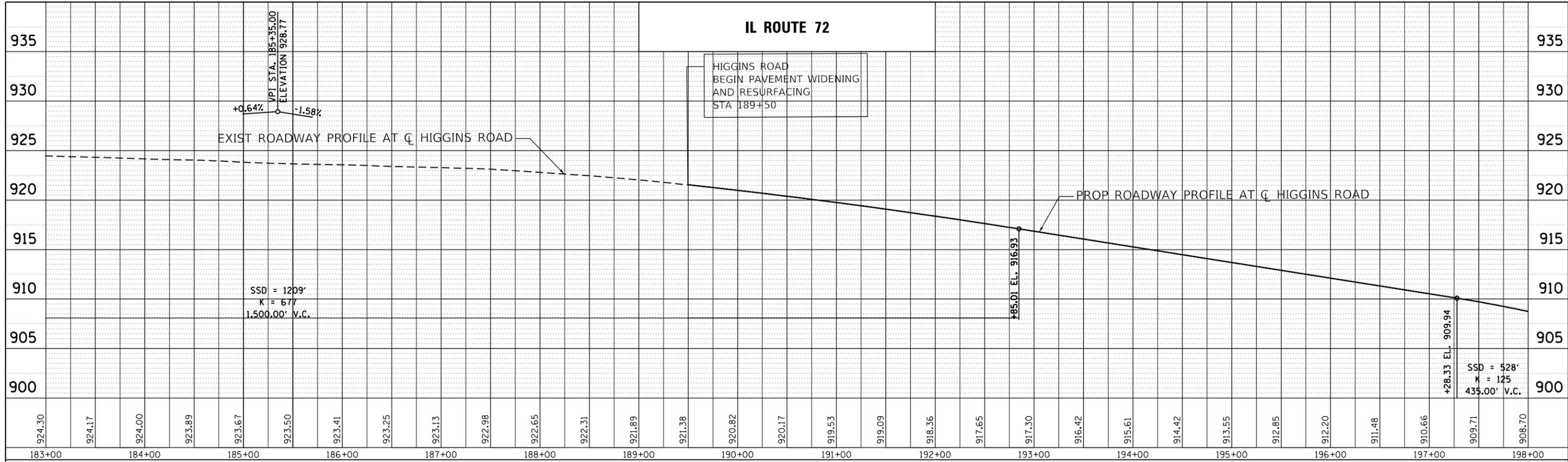
REVISED -
 REVISED -
 REVISED -
 REVISED -

**KANE COUNTY
 DIVISION OF TRANSPORTATION**

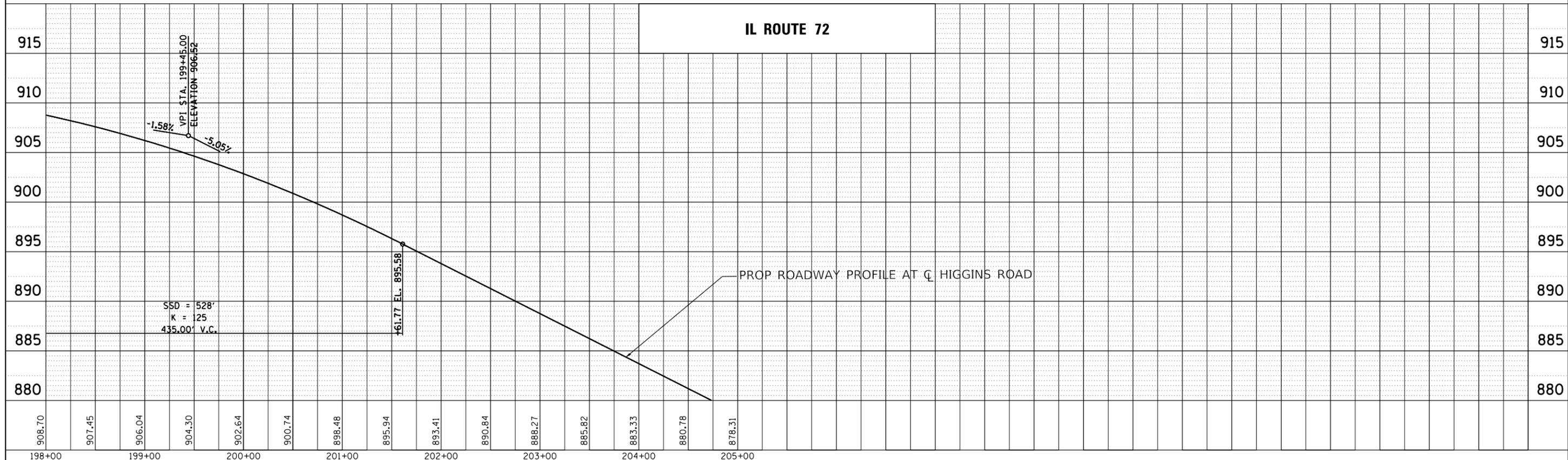
RANDALL ROAD AND HIGGINS ROAD (IL RTE 72)
 SCALE: 1"=50' SHEET 02 OF 04 SHEETS STA. 93+00 TO STA. 80+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	19-00514-00-WR	KANE	10	06
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK		
	NO.		
	CHECKED		
	CADD FILE NAME		



PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NO.		



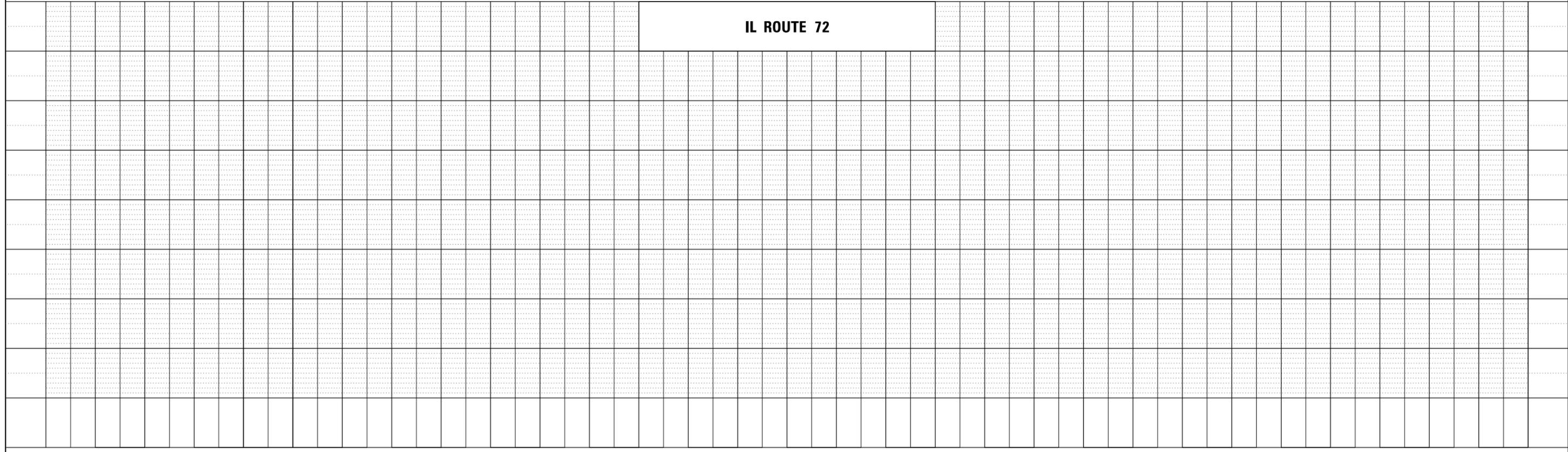
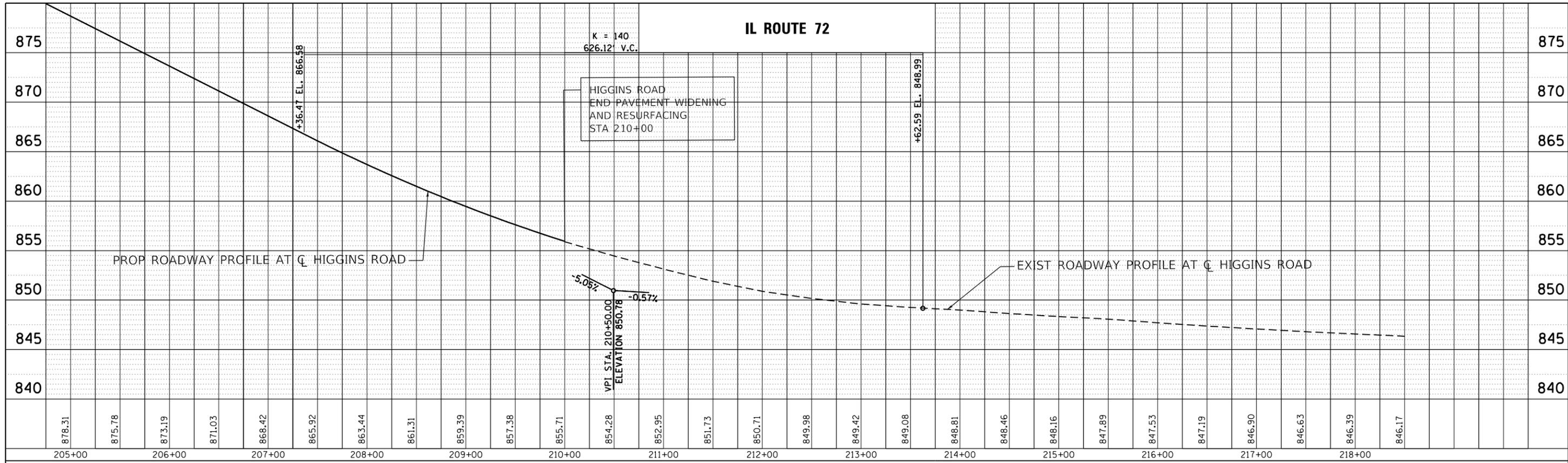
BLA, Inc.	USER NAME = tnestor	DESIGNED -	REVISED -
	PLOT SCALE = 100.00' / in.	DRAWN -	REVISED -
	PLOT DATE = 7/20/2022	CHECKED -	REVISED -
		DATE -	REVISED -

KANE COUNTY		RANDALL ROAD AND HIGGINS ROAD (IL RTE 72)	
DIVISION OF TRANSPORTATION		SCALE: 1"=50'	
		SHEET 03 OF 04 SHEETS STA. 183+00 TO STA. 204+75	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	19-00514-00-WR	KANE	10	07
CONTRACT NO.				

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK NO.		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHKD		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK NO.		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHKD		



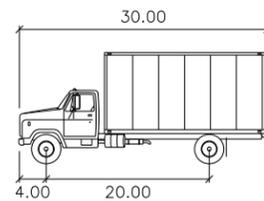
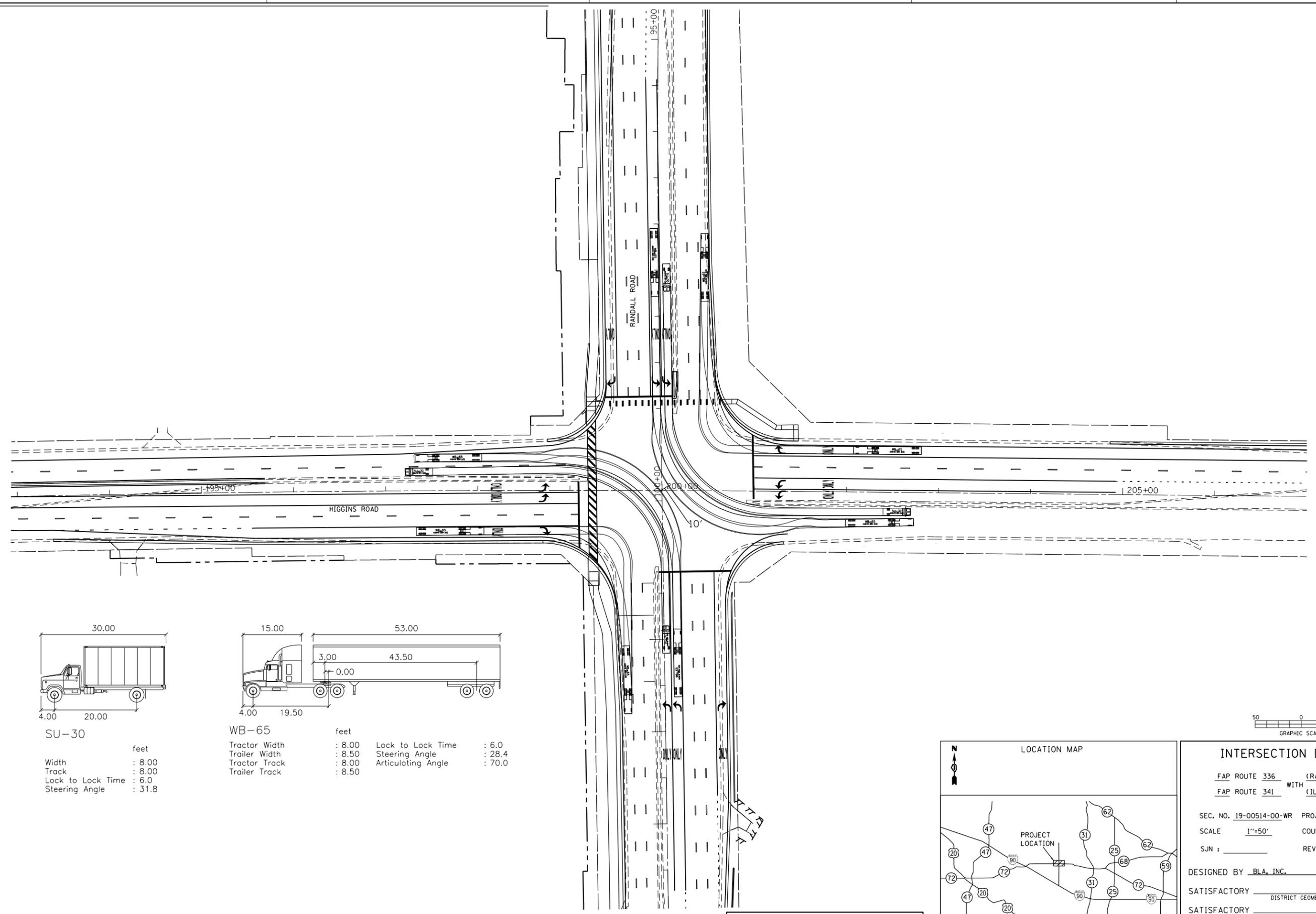
USER NAME = tnestor	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.00' / 1" =	CHECKED -	REVISED -
PLOT DATE = 7/20/2022	DATE -	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

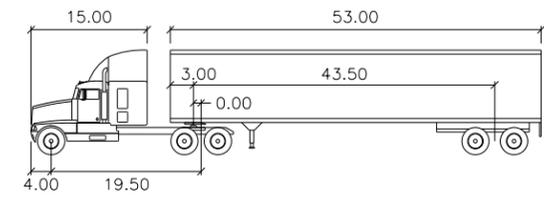
RANDALL ROAD AND HIGGINS ROAD (IL RTE 72)
SCALE: 1"=50' SHEET 04 OF 04 SHEETS STA. 205+00 TO STA. 225+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
341	19-00514-00-WR	KANE	10	08
CONTRACT NO.				

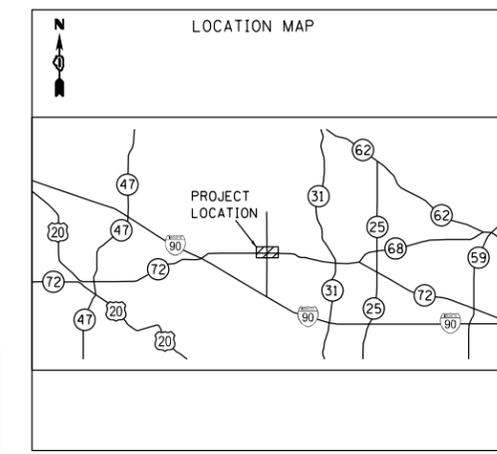
PLOT DATE = 7/20/2022
 FILE NAME = N:\190514-00\KDOT Randall Higgins Phase 1\19-00514-00-WR-009 AutoTurn.dgn
 PLOT SCALE = 100.00 / in.
 USER NAME = trestor



SU-30
 feet
 Width : 8.00
 Track : 8.00
 Lock to Lock Time : 6.0
 Steering Angle : 31.8



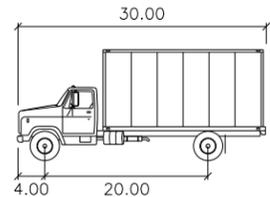
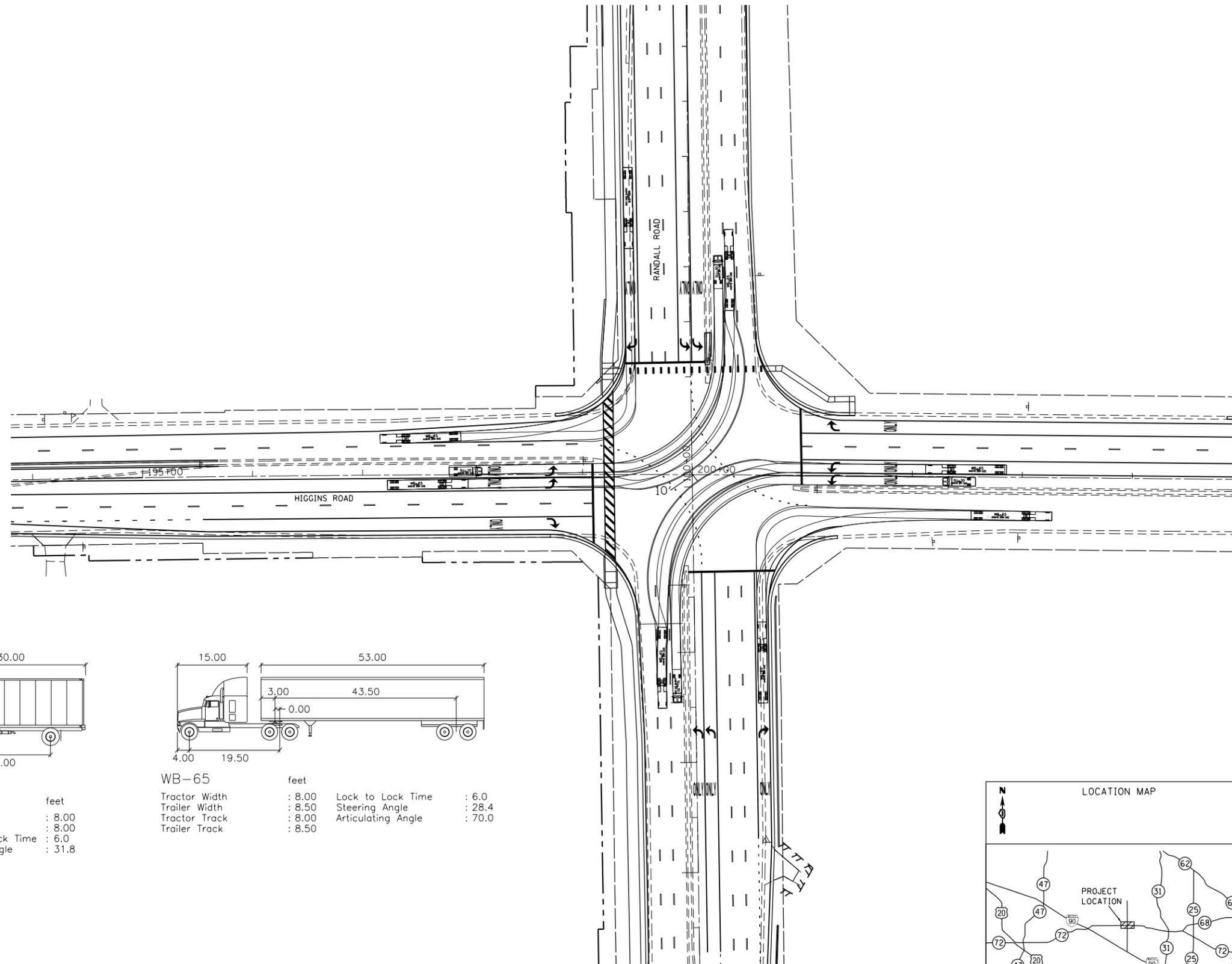
WB-65
 feet
 Tractor Width : 8.00
 Trailer Width : 8.50
 Tractor Track : 8.00
 Trailer Track : 8.50
 Lock to Lock Time : 6.0
 Steering Angle : 28.4
 Articulating Angle : 70.0



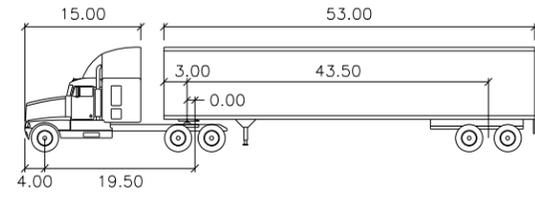
PREPARED BY: **B** **BLA, Inc.**
 ITASCA, ILLINOIS
 PROJ. MGR. DB PROJ. ENG. MC

INTERSECTION DESIGN STUDY
 FAP ROUTE 336 (RANDALL ROAD)
 FAP ROUTE 341 WITH (IL ROUTE 72)
 SEC. NO. 19-00514-00-WR PROJ. NO. _____
 SCALE 1"=50' COUNTY KANE
 SJN : _____ REV. NO. 5
 DESIGNED BY BLA, INC. DATE 12/2020
 SATISFACTORY _____ DISTRICT GEOMETRICS ENGINEER _____ DATE _____
 SATISFACTORY _____ DISTRICT PROGRAM DEVELOPMENT ENGINEER _____ DATE _____
 SATISFACTORY _____ DISTRICT OPERATIONS ENGINEER _____ DATE _____
 APPROVED _____ DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER _____ DATE _____
 CADD FILE NAME : [] I.D.S. SHEET 9 OF 10

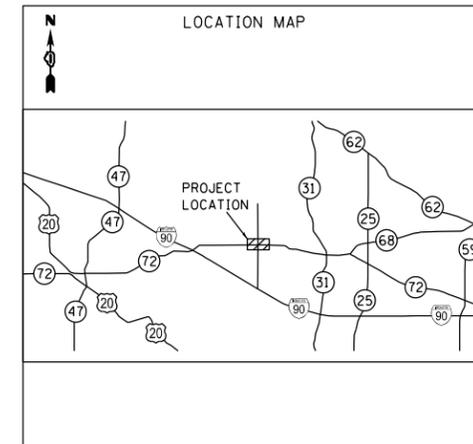
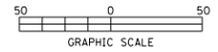
PLOT DATE = 7/20/2022
 FILE NAME = N:\1904\1904-0032 KDOT Randall Higgins Phase 1\19-00514-00-WR_010 AutoTurn_02.dgn
 PLOT SCALE = 100.00 / in.
 USER NAME = trestor



SU-30
 feet
 Width : 8.00
 Track : 8.00
 Lock to Lock Time : 6.0
 Steering Angle : 31.8

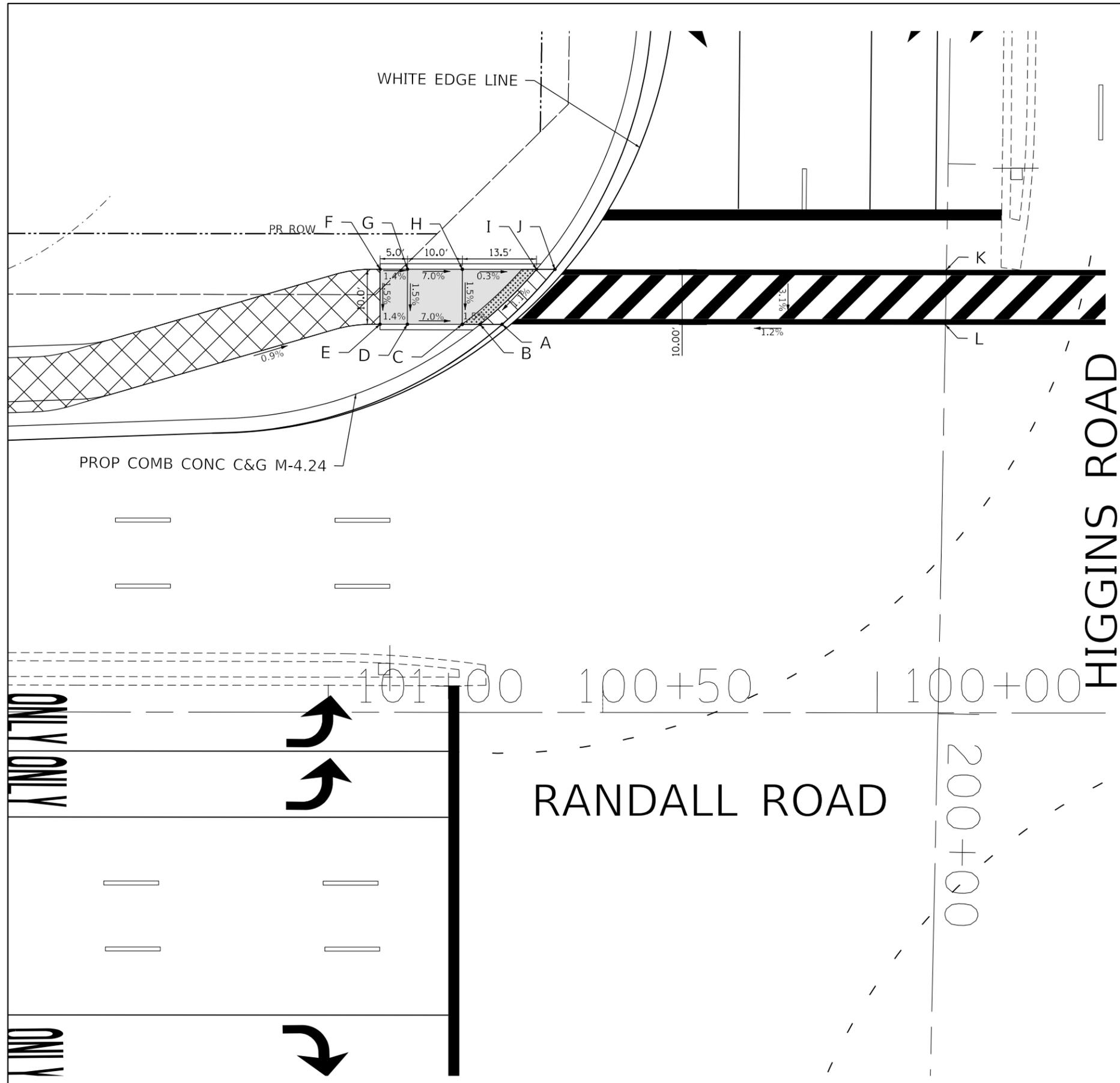
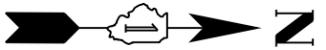
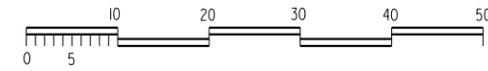


WB-65
 feet
 Tractor Width : 8.00
 Trailer Width : 8.50
 Tractor Track : 8.00
 Trailer Track : 8.50
 Lock to Lock Time : 6.0
 Steering Angle : 28.4
 Articulating Angle : 70.0



PREPARED BY: **B** **BLA, Inc.**
 ITASCA, ILLINOIS
 PROJ. MGR. DB PROJ. ENG. MC

INTERSECTION DESIGN STUDY
 FAP ROUTE 336 (RANDALL ROAD)
 FAP ROUTE 341 WITH (IL ROUTE 72)
 SEC. NO. 19-00514-00-WR PROJ. NO. _____
 SCALE 1"=50' COUNTY KANE
 SJN : _____ REV. NO. 5
 DESIGNED BY BLA, INC. DATE 12/2020
 SATISFACTORY _____ DISTRICT GEOMETRICS ENGINEER _____ DATE _____
 SATISFACTORY _____ DISTRICT PROGRAM DEVELOPMENT ENGINEER _____ DATE _____
 SATISFACTORY _____ DISTRICT OPERATIONS ENGINEER _____ DATE _____
 APPROVED _____ DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER _____ DATE _____
 CADD FILE NAME : [] I.D.S. SHEET 10 OF 10



STATIONING FROM RANDALL ROAD			
POINT NO.	STATION	OFFSET	ELEVATION
A*	100+68.41	70.56 RT	904.15
B	100+72.41	70.56 RT	904.14
C	100+75.66	70.56 RT	904.19
D	100+85.66	70.56 RT	904.89
E	100+90.66	70.56 RT	904.96
F	100+90.66	80.56 RT	905.11
G	100+85.66	80.56 RT	905.04
H	100+75.66	80.56 RT	904.34
I	100+62.15	80.56 RT	904.30
J*	100+58.80	80.56 RT	904.31
K	99+87.38	80.56 RT	905.46
L	99+87.54	70.56 RT	905.15

*POINTS WITH EDGE OF PAVEMENT ELEVATIONS

SEGMENT	LENGTH (FT)	SLOPE (%)
A-B	4.0	0.2
A-J	14.3	1.1
B-C	3.3	1.5
B-I	14.3	1.1
C-D	10.0	7.0
C-H	10.0	1.5
D-E	5.0	1.4
D-G	10.0	1.5
E-F	10.0	1.5
F-G	5.0	1.4
G-H	10.0	7.0
H-I	13.5	0.3
I-J	4.0	0.3

LEGEND

- TRUNCATED DOME
- DEPRESSED CURBS
- ASPHALT MULTI-USE PATH
- CONCRETE SIDEWALK

	USER NAME = tnestor	DESIGNED - JT	REVISED - _____
		DRAWN - JT	REVISED - _____
	PLOT SCALE = 20.0000' / in.	CHECKED - MC	REVISED - _____
	PLOT DATE = 2/18/2022	DATE - 01/05/2020	REVISED - _____

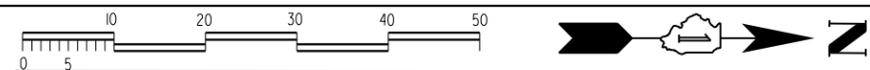
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**RANDALL ROAD AT HIGGINS ROAD (IL 72)
ADA RAMP DETAILS**

SCALE: 1"=10' SHEET 1 OF 3 SHEETS STA. _____ TO STA. _____

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE	_____	_____
CONTRACT NO.			_____	

ILLINOIS FED. AID PROJECT



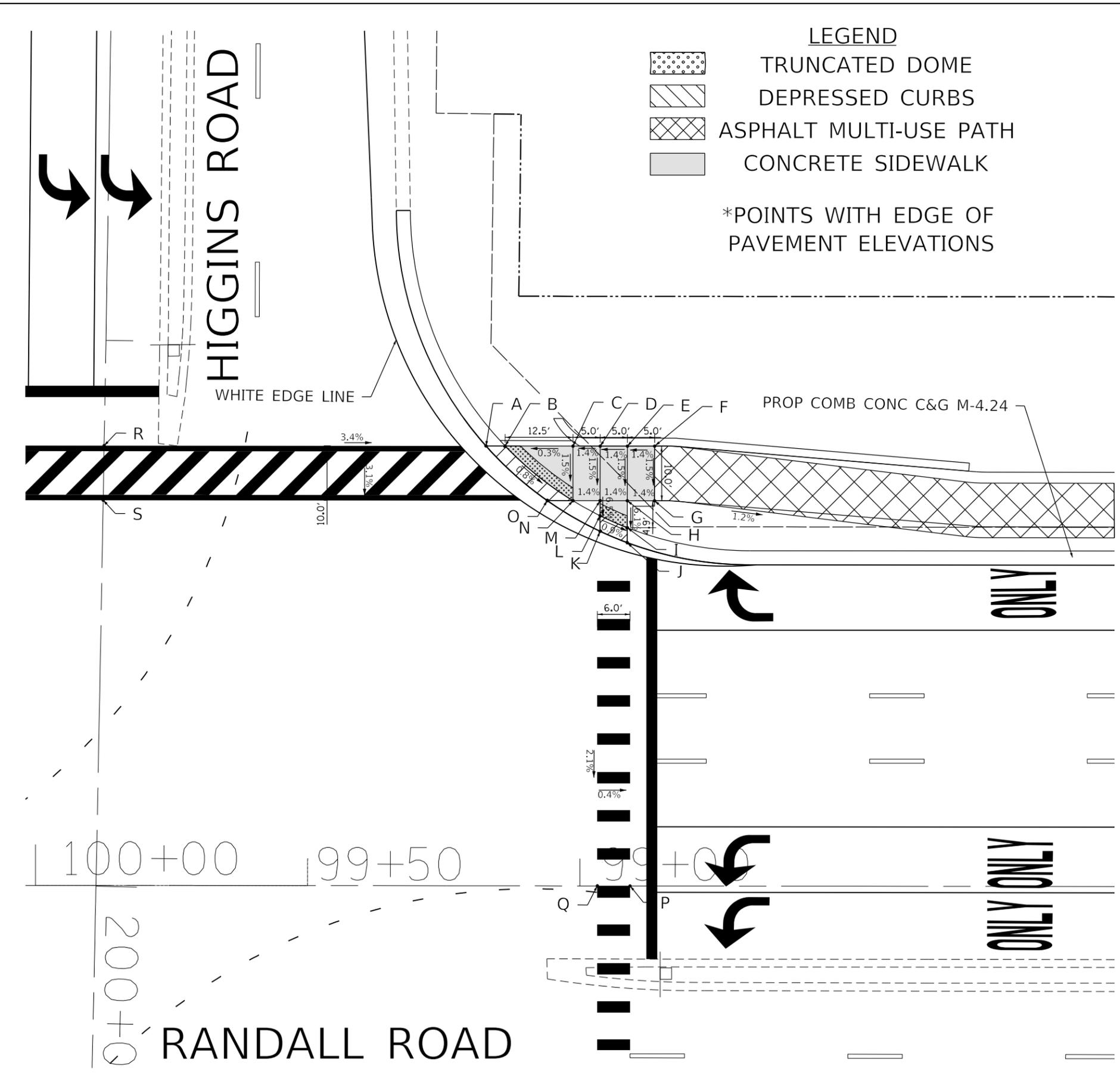
LEGEND

- TRUNCATED DOME
- DEPRESSED CURBS
- ASPHALT MULTI-USE PATH
- CONCRETE SIDEWALK

*POINTS WITH EDGE OF PAVEMENT ELEVATIONS

STATIONING FROM RANDALL ROAD			
POINT NO.	STATION	OFFSET	ELEVATION
A*	99+17.33	80.56 RT	902.85
B	99+13.81	80.56 RT	902.84
C	99+01.35	80.56 RT	902.87
D	98+96.35	80.56 RT	902.94
E	98+91.35	80.56 RT	903.64
F	98+86.35	80.56 RT	903.71
G	98+86.35	70.56 RT	903.56
H	98+91.35	70.56 RT	903.49
I	98+91.35	65.62 RT	902.79
J*	98+91.35	62.86 RT	902.54
K*	98+96.35	64.95 RT	902.55
L	98+96.35	67.81 RT	902.64
M	98+96.35	70.56 RT	902.63
N	99+01.35	70.56 RT	902.72
O*	99+06.06	70.56 RT	902.71
P	98+90.87	0.00	902.15
Q	98+96.82	0.00	902.17
R	99+87.38	80.56 RT	905.46
S	99+87.54	70.56 RT	905.15

SEGMENT	LENGTH (FT)	SLOPE (%)
A-B	3.5	0.3
A-O	15.5	0.8
B-C	12.5	0.2
B-N	15.5	0.8
C-D	5.0	1.4
C-N	10.0	1.5
D-E	5.0	1.4
D-M	10.0	1.5
E-F	5.0	1.4
E-H	10.0	1.5
F-G	10.0	1.5
G-H	5.0	1.4
H-I	5.0	6.1
I-L	5.5	0.9
I-J	2.8	0.4
J-K	5.4	0.9
K-L	2.8	0.3
L-M	2.8	6.5
M-N	5.0	1.4
N-O	4.7	0.2
H-M	5.0	1.4



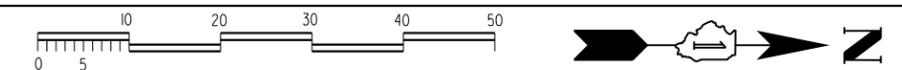
USER NAME = tnestor	DESIGNED - JT	REVISED -
DRAWN - JT	REVISIONS -	
PLOT SCALE = 20.0000' / in.	CHECKED - MC	REVISED -
PLOT DATE = 2/18/2022	DATE - 01/05/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**RANDALL ROAD AT HIGGINS ROAD (IL 72)
ADA RAMP DETAILS**

SCALE: 1"=10' SHEET 2 OF 3 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE		
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



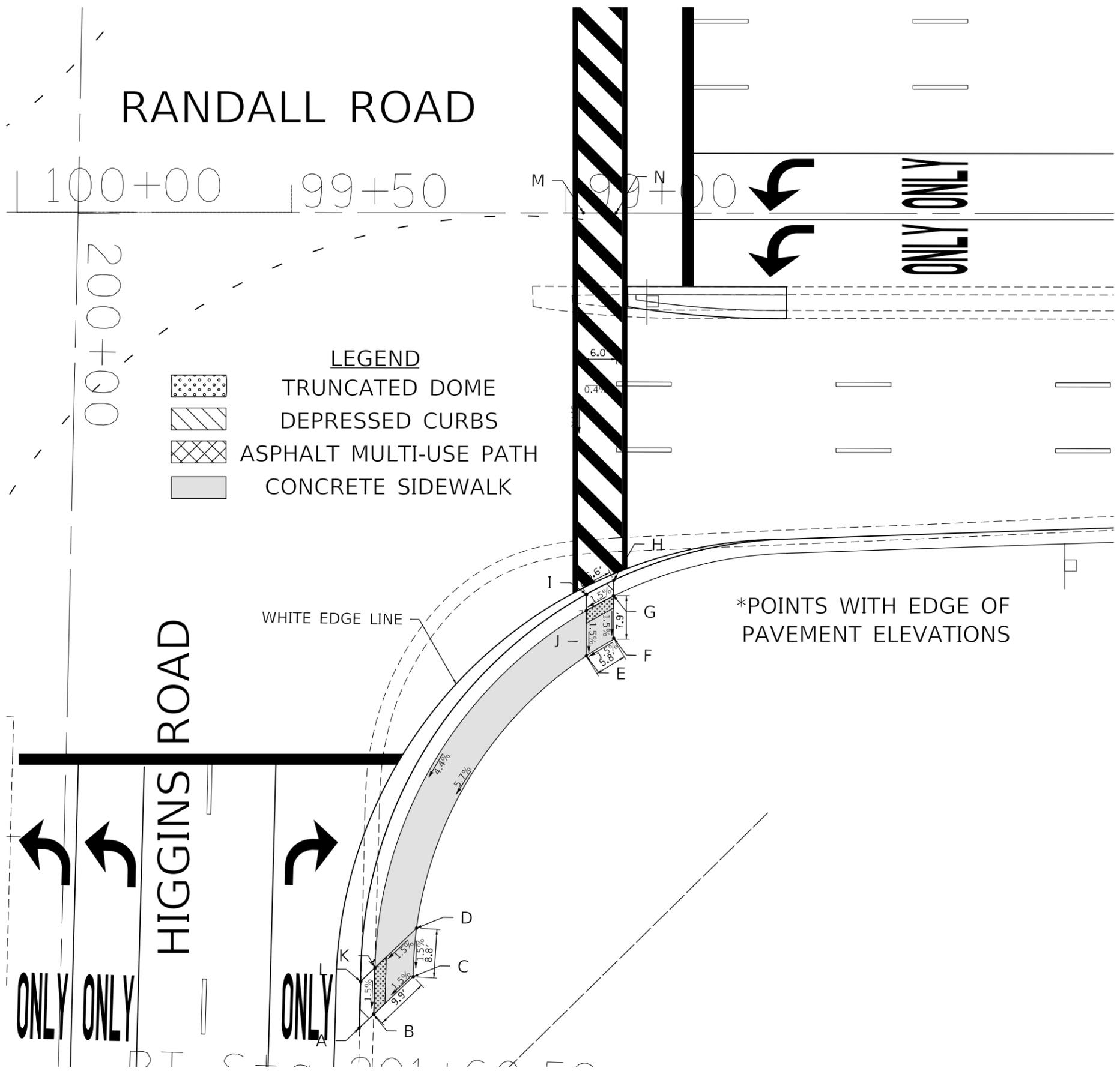
ADA RAMPS RANDALL ROAD			
POINT NO.	STATION	OFFSET	ELEVATION
A*	99+37.52	148.26 LT	895.25
B	99+34.87	145.75 LT	895.24
C	99+27.68	138.91 LT	895.09
D	99+27.09	130.07 LT	895.22
E	98+96.22	80.56 LT	898.67
F	98+91.22	77.53 LT	898.74
G	98+91.22	69.64 LT	898.86
H*	98+91.22	66.78 LT	898.87
I*	98+96.22	69.35 LT	898.80
J	98+96.22	72.32 LT	898.79
K	99+34.99	137.27 LT	895.37
L*	99+37.30	139.78 LT	895.38
M	98+90.79	0.00	901.48
N	98+90.79	0.00	901.44

RANDALL ROAD

100+00 99+50

200+00

- LEGEND**
- TRUNCATED DOME
 - DEPRESSED CURBS
 - ASPHALT MULTI-USE PATH
 - CONCRETE SIDEWALK



*POINTS WITH EDGE OF PAVEMENT ELEVATIONS

SEGMENT	LENGTH (FT)	SLOPE (%)
A-B	3.6	0.3
A-L	8.5	1.5
B-C	9.9	1.5
C-D	8.8	1.5
D-K	10.4	1.5
D-E	60.2	5.7
E-F	5.8	1.5
E-J	8.2	1.5
F-G	7.9	1.5
G-H	2.6	0.3
H-I	5.6	1.5
I-J	2.6	0.3
J-K	78.8	4.4
K-L	3.6	0.3



USER NAME = tnestor	DESIGNED - JT	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - JT	REVISED -
PLOT DATE = 9/14/2022	CHECKED - MC	REVISED -
	DATE - 01/05/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RANDALL ROAD AT HIGGINS ROAD (IL 72)
ADA RAMP DETAILS
SCALE: 1"=10' SHEET 3 OF 3 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE		
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

ATTACHMENT 7
DESIGN EXCEPTIONS

Jennifer Mitchell

From: Al Ramahi, May M. <May.AIRamahi@Illinois.gov>
Sent: Wednesday, April 13, 2022 2:57 PM
To: Jennifer Mitchell
Subject: Randall Road at IL 72 Intersection
Attachments: RandallDE's04132022.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Jennifer,

The design exceptions for the subject project were presented and approved on 04/13/2022. Can you please fill in Coordination Meeting Date and BDE Approval Date (04/13/2022) on BDE 3100 forms for this project.

Attached is the most updated DE'S package that was revised by GSU and should be used. Please change the current posted speed limit to **50 mph** for Randall Road on both the **IDS and BDE 3100 forms** where needed. Please email me back the revised IDS and attached package along with the dates filled in and the revised IDS exhibits showing the correct speed limit for Randall Road. Please let me know if you have any questions or concerns.

Best,
May

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

**RANDALL ROAD AT IL ROUTE 72 INTERSECTION IMPROVEMENT
DESIGN EXCEPTION SUMMARY TABLE**

DE #	POLICY	VARIANCE REQUESTED	LOCATION	JUSTIFICATION
1	LOS C	LOS D	Overall Intersection	<p>Alternatives evaluated with additional capacity on Higgins Road did not result in a change in LOS. The intersection signal is interconnected along Randall Road, an SRA, and timing priority is given to Randall Road. The purpose and intent of the project is to reduce delays and queues occurring on Randall Road. The preferred alternative addresses the purpose and need by reducing the 2050 overall delay from 96 seconds to 53 seconds and individual movements that are LOS E or worse have reductions ranging from a minimum of 8 seconds to maximum of 104 seconds. Queues are reduced by 850 feet in the AM and 950 feet in the PM. The construction cost and property impacts associated with an innovative intersection control to meet LOS criteria is greater than the benefit of such an improvement.</p>
2	LOS C	LOS D	Randall Road NB Through (PM)	
3	LOS D	LOS F	Randall Road NB Left Turn (PM) SB Left Turn (PM)	
4	LOS D	LOS E	IL Rte 72 WB Through (AM) EB Through (PM)	
5	LOS D	LOS F	IL Rte 72 WB Left Turn (PM) WB Through (PM) WB Right Turn (PM) EB Left Turn (PM)	
6	B curb	M curb	Randall Rd and IL Rte. 72	<p>A barrier curb can be used for closed drainage when placed adjacent to shoulder. However, right of way is restricted due to historic property and residential homes and adequate right of way is not available to also provide a full shoulder; thus, an M curb is used.</p> <p>The existing curb along the medians is M-4.12, as installed by IDOT in their 2012 HSIP project. The existing median curb does not exhibit a crash occurrence, a significant profile change is not proposed and thus the curb type will be retained on the median.</p>
7	Median Cross Slope min 1.5%	<1.5% (Existing Range 0.22% to 1.37%)	IL Rte. 72 STA 190+50 to STA 192+00	<p>The pavement condition does not warrant reconstruction and work on IL Rte. 72 is 3R to provide additional capacity in the turn lanes. Crashes that occur are not related to this design exception. There is no cost benefit to reconstructing the profile when a safety issue is not identified. Where feasible, leveling binder will be used to correct cross slopes.</p>



Key Route	Marked Route/Road Name	Contract Number	State Job Number	Section Number
FAP 336	Randall Road			

County(ies)	Municipality	Local Agency
Kane	Elgin	Kane County DOT

LRS Section Number	Permit Applicant	Permit Number	Project Length
19-00514-00-WR			0.44 mi (2,300 ft)

Project Limits

Randall Road at Higgins Road

Current Posted Speed	Estimate of Cost	Functional Classification	Design Yr	Design Traffic ADT	Design Traffic DHV
50 MPH	\$5,409,703.00	Other Principal Art	2050	69400	AM 4691 PM 5363

On the NHS System?	Structure Numbers	Type of Project (Construction, Reconstruction, 3R, 3P, SMART, HSIP, etc.)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	Reconstruction (widen and resurface)

Brief Project Description

On Randall Road widen and resurface the four-lane facility to a six-lane facility, convert shoulder and ditch drainage to closed storm sewer, provide a detention basin in the northeast quadrant, extend southbound right turn lane, provide for multi-use facilities on west side, install pedestrian heads and pedestrian crosswalks. On Higgins Road extend the eastbound left and right turn lanes and the westbound right turn lane.

EXCEPTION DOCUMENTATION

Level of Exception Level 1 Level 2

Design Element for Which an Exception is Requested

Level of Service (LOS)

Design Element Policy Value

LOS C for overall intersection LOS - BDE Figure 46-3.E

Proposed Design Element Value

LOS D (AM & PM)

Location(s) of Exception

Randall Road at Higgins Road

Crash History and Potential of Exception Location(s)

110 crashes occurred at this intersection over the five year study period from 2013 to 2017 and the intersection is not a Five Percent Report location. The proposed scope of work will improve the safety and operations related to this exception request.

Cost of Using Policy Value	Cost of Using Proposed Exception Value
\$10,000,000.00	\$5,409,703.00

Impacts Other Than Cost of Using Policy Value

Increased impacts to adjacent wetlands, potential Section 6(f) property, residential relocation, access changes

Proposed Mitigation to Address Exception

SCAT to be implemented to maximize the operations of the overall intersection

Geometric Compatibility with Adjacent Sections

Compatible

Potential Effects on Other Design Elements

N/A

Potential Impacts on Mobility or Traffic Operations

N/A

Summary of Justification for Exception

Alternatives evaluated with additional capacity on Higgins Road did not result in a change in LOS. The intersection signal is interconnected along Randall Road, an SRA, and timing priority is given to Randall Road.

The purpose and intent of the project is to reduce delays and queues occurring on Randall Road. The preferred alternative addresses the purpose and need by reducing the 2050 overall delay from 96 seconds to 53 seconds and individual movements that are LOS E or worse have reductions ranging from a minimum of 8 seconds to maximum of 104 seconds. Queues are reduced by 850 feet in the AM and 950 feet in the PM. The construction cost and property impacts associated with an innovative intersection control to meet LOS criteria is greater than the benefit of such an improvement.

Coordination Meeting Date	Proposed By	Date
04/13/22	Jennifer Mitchell, PE, PTOE, ENV SP	05/25/22

APPROVAL/DISAPPROVAL

BDE Approval Date	FHWA Approval Date (Level One)
4/13/2022	



Key Route	Marked Route/Road Name	Contract Number	State Job Number	Section Number
FAP 336	Randall Road			

County(ies)	Municipality	Local Agency
Kane	Elgin	Kane County DOT

LRS Section Number	Permit Applicant	Permit Number	Project Length
19-00514-00-WR			0.44 mi (2,300 ft)

Project Limits

Randall Road at Higgins Road

Current Posted Speed	Estimate of Cost	Functional Classification	Design Yr	Design Traffic ADT	Design Traffic DHV
50 MPH	\$5,409,703.00	Other Principal Art	2050	69400	AM 4691 PM 5363

On the NHS System?	Structure Numbers	Type of Project (Construction, Reconstruction, 3R, 3P, SMART, HSIP, etc.)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	Reconstruction (widen and resurface)

Brief Project Description

On Randall Road widen and resurface the four-lane facility to a six-lane facility, convert shoulder and ditch drainage to closed storm sewer, provide a detention basin in the northeast quadrant, extend southbound right turn lane, provide for multi-use facilities on west side, install pedestrian heads and pedestrian crosswalks. On Higgins Road extend the eastbound left and right turn lanes and the westbound right turn lane.

EXCEPTION DOCUMENTATION

Level of Exception Level 1 Level 2

Design Element for Which an Exception is Requested

Level of Service (LOS)

Design Element Policy Value

LOS C - BDE Figure 46-3.E

Proposed Design Element Value

LOS D (PM)

Location(s) of Exception

Randall Road NB Through

Crash History and Potential of Exception Location(s)

110 crashes occurred at this intersection over the five year study period from 2013 to 2017 and the intersection is not a Five Percent Report location. The proposed scope of work will improve the safety and operations related to this exception request.

Cost of Using Policy Value	Cost of Using Proposed Exception Value
\$10,000,000.00	\$5,409,703.00

Impacts Other Than Cost of Using Policy Value

Increased impacts to adjacent wetlands, potential Section 6(f) property, residential relocation, access changes

Proposed Mitigation to Address Exception

SCAT to be implemented to maximize the operations of the overall intersection

Geometric Compatibility with Adjacent Sections

Compatible

Potential Effects on Other Design Elements

N/A

Potential Impacts on Mobility or Traffic Operations

N/A

Summary of Justification for Exception

Alternatives evaluated with additional capacity on Higgins Road did not result in a change in LOS. The intersection signal is interconnected along Randall Road, an SRA, and timing priority is given to Randall Road.

The purpose and intent of the project is to reduce delays and queues occurring on Randall Road. The preferred alternative addresses the purpose and need by reducing the 2050 overall delay from 96 seconds to 53 seconds and individual movements that are LOS E or worse have reductions ranging from a minimum of 8 seconds to maximum of 104 seconds. Queues are reduced by 850 feet in the AM and 950 feet in the PM. The construction cost and property impacts associated with an innovative intersection control to meet LOS criteria is greater than the benefit of such an improvement.

Coordination Meeting Date	Proposed By	Date
04/13/22	Jennifer Mitchell, PE, PTOE, ENV SP	05/25/22

APPROVAL/DISAPPROVAL

BDE Approval Date	FHWA Approval Date (Level One)
4/13/2022	

PLOT DATE = 4/18/2022
 FILE NAME = W:\94-932 KDOT Randall Higgins Phase 1\CADD EXHIBITS\Intersection Design Study\19-00514-00-WR-001 Cover_Sheet.dgn
 SCALE = 1/8" = 1'-0"
 USER NAME = [redacted]

SIGNALIZED CAPACITY DESIGN ANALYSIS

PROGRAM USED: SYNCHRO . VERSION: 10.0 SIGNAL TYPE: ACTUATED AREA TYPE: NON-CBD
 NUMBER OF PHASES: (A.M.) 6 (P.M.) 6 CYCLE LENGTH: (A.M.) 110 SEC. (P.M.) 180 SEC. PEAK HOUR FACTOR: (A.M.) 0.96 (P.M.) 0.99
 INTERSECTION DELAY/LEVEL-OF-SERVICE A.M. 35.4 SECONDS LOS D P.M. 52.5 SECONDS LOS D

APPROACH	SOUTHBOUND (A)			NORTHBOUND (B)			EASTBOUND (C)			WESTBOUND (D)			
	L	T	R	L	T	R	L	T	R	L	T	R	
LANE GROUP	L	T	R	L	T	R	L	T	R	L	T	R	
NUMBER OF LANES	2	3	1	2	3	1	2	2	1	2	2	1	
2050 30TH MAX. HOUR TRAFFIC (veh/h)	A.M.	362	2301	499	164	980	88	387	483	101	170	424	162
	P.M.	209	1184	502	135	2627	223	559	521	178	149	446	282
BASE SATURATION FLOW RATE (veh/h)	A.M.	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
LANE WIDTH (FT)	12	12	12	12	12	12	12	12	12	12	12	12	
VOLUME OF RIGHT TURN ON RED (veh/h)	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
PEDESTRIANS/HOUR (ped/h)	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
ARRIVAL TYPE	4			4			3			3			
LANE UTILIZATION ADJ. FACTOR	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00	
GREEN TIME (SECONDS)	A.M.	20.5	51.0	65.5	8.5	39.0	50.5	14.5	18.0	26.5	11.5	15.0	23.5
	P.M.	12.5	87.0	120.5	15.5	90.0	106.5	33.5	40.0	55.5	16.5	23.0	35.5
GREEN RATIO (g/C)	A.M.	0.16	0.46	0.65	0.08	0.39	0.53	0.13	0.17	0.30	0.09	0.14	0.35
	P.M.	0.07	0.50	0.71	0.07	0.50	0.61	0.18	0.24	0.34	0.07	0.13	0.23
Cap, veh/h	A.M.	636	2450	1024	254	2016	858	444	640	441	348	483	574
	P.M.	239	2624	1097	265	2716	1004	615	860	538	305	467	351
V/C RATIO(X)	A.M.	0.71	0.98	0.51	0.68	0.51	0.11	0.91	0.79	0.24	0.56	0.92	0.32
	P.M.	0.88	0.46	0.46	0.62	0.98	0.23	0.93	0.61	0.35	0.61	0.97	0.81
STORAGE QUEUE (FEET)	A.M.	237	713	272	123	320	83	273	322	123	122	292	167
	P.M.	245	508	382	179	1106	220	619	535	323	178	504	570
LANE GROUP DELAY(SECONDS)	A.M.	50.9	29.8	10.6	54.3	27.7	16.7	53.6	39.6	24.4	54.6	71.9	27.8
	P.M.	116.0	27.0	14.8	102.4	41.7	10.5	87.4	68.1	45.4	91.4	110.0	83.8
LANE GROUP LEVEL-OF-SERVICE	A.M.	D	C	B	D	C	B	D	D	C	D	E	C
	P.M.	F	C	B	F	D	B	F	E	D	F	F	F
APPROACH DELAY (SECONDS/VEHICLE)	A.M.	29.2			30.4			43.6			58.6		
	P.M.	33.6			42.1			73.5			98.4		
APPROACH LEVEL-OF-SERVICE	A.M.	C			D			E			F		
	P.M.	C			D			E			F		

ELEMENTS CONTROLLING DESIGN

PREFERRED ROUTE:
 F.A. ROUTE NUMBER: F.A.P. 336. MARKED ROUTE NUMBER: N/A
 STREET NAME: RANDALL ROAD. SRA ROUTE YES
 FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL. OSOW DESIGN NO
 EXISTING ADT: 47,800 VPD. (2019) DESIGN YEAR ADT: 69,400 VPD. (2050)
 PROPOSED DESIGN SPEED: 50 MPH. PROPOSED POSTED SPEED: 50 MPH.

SECONDARY ROUTE:
 F.A. ROUTE NUMBER: F.A.P. 341. MARKED ROUTE NUMBER: IL 72.
 STREET NAME: HIGGINS ROAD. SRA ROUTE: NO
 FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL. OSOW DESIGN YES
 EXISTING ADT: 18,700 VPD. (2019) DESIGN YEAR ADT: 25,500 VPD. (2050)
 PROPOSED DESIGN SPEED: 50 MPH. PROPOSED POSTED SPEED: 45 MPH.

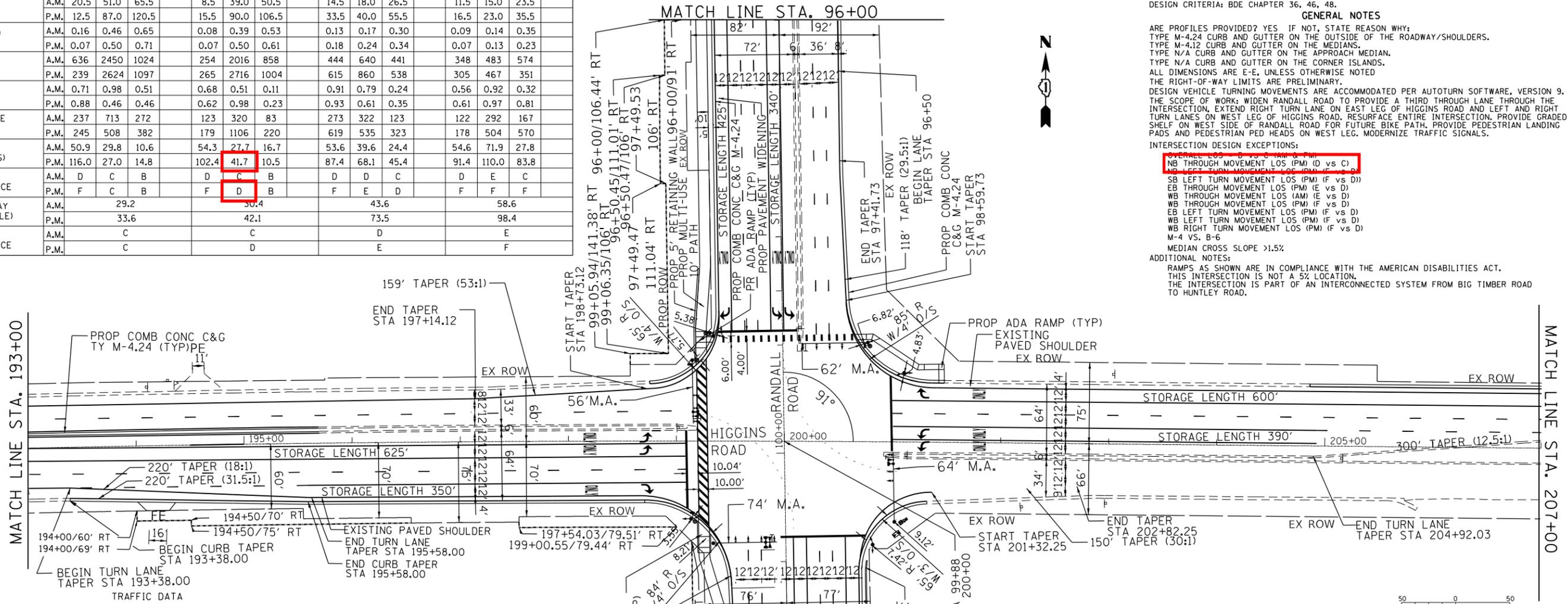
IMPROVEMENT TYPE: WIDENED AND RESURFACED RECONSTRUCTION.
ANTICIPATED YEAR OF CONSTRUCTION: 2025.
EXISTING METHOD OF TRAFFIC CONTROL: TRAFFIC SIGNAL. PROPOSED METHOD: TRAFFIC SIGNAL.
SIGNAL WARRANT: EXISTING SIGNAL.
DESIGN VEHICLE: WB-65.
DESIGN YEAR: 2050
TRUCK ROUTE DESIGNATION:
 PREFERRED ROADWAY: RANDALL ROAD.
 SECONDARY ROADWAY: IL RTE 72.
DESIGN CRITERIA: BDE CHAPTER 36, 46, 48.

GENERAL NOTES

ARE PROFILES PROVIDED? YES IF NOT, STATE REASON WHY:
 TYPE M-4.24 CURB AND GUTTER ON THE OUTSIDE OF THE ROADWAY/SHOULDERS.
 TYPE M-4.12 CURB AND GUTTER ON THE MEDIANS.
 TYPE N/A CURB AND GUTTER ON THE APPROACH MEDIAN.
 TYPE N/A CURB AND GUTTER ON THE CORNER ISLANDS.
 ALL DIMENSIONS ARE E-E, UNLESS OTHERWISE NOTED
 THE RIGHT-OF-WAY LIMITS ARE PRELIMINARY.
 DESIGN VEHICLE TURNING MOVEMENTS ARE ACCOMMODATED PER AUTOTURN SOFTWARE, VERSION 9.
 THE SCOPE OF WORK: WIDEN RANDALL ROAD TO PROVIDE A THIRD THROUGH LANE THROUGH THE INTERSECTION, EXTEND RIGHT TURN LANE ON EAST LEG OF HIGGINS ROAD AND LEFT AND RIGHT TURN LANES ON WEST LEG OF HIGGINS ROAD. RESURFACE ENTIRE INTERSECTION, PROVIDE GRADED SHELF ON WEST SIDE OF RANDALL ROAD FOR FUTURE BIKE PATH, PROVIDE PEDESTRIAN LANDING PADS AND PEDESTRIAN PED HEADS ON WEST LEG. MODERNIZE TRAFFIC SIGNALS.

INTERSECTION DESIGN EXCEPTIONS:
 OVERALL LOS D VS C (AM & PM)
 NB THROUGH MOVEMENT LOS (PM) (D vs C)
 SB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 SB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 EB THROUGH MOVEMENT LOS (PM) (E vs D)
 WB THROUGH MOVEMENT LOS (AM) (E vs D)
 WB THROUGH MOVEMENT LOS (PM) (F vs D)
 EB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 WB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 WB RIGHT TURN MOVEMENT LOS (PM) (F vs D)
 M-4 VS. B-6
 MEDIAN CROSS SLOPE >1.5%

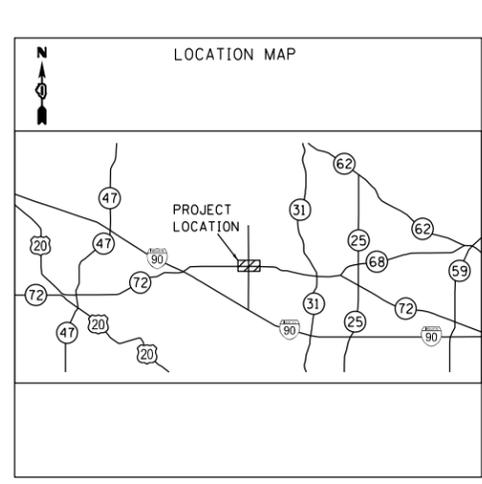
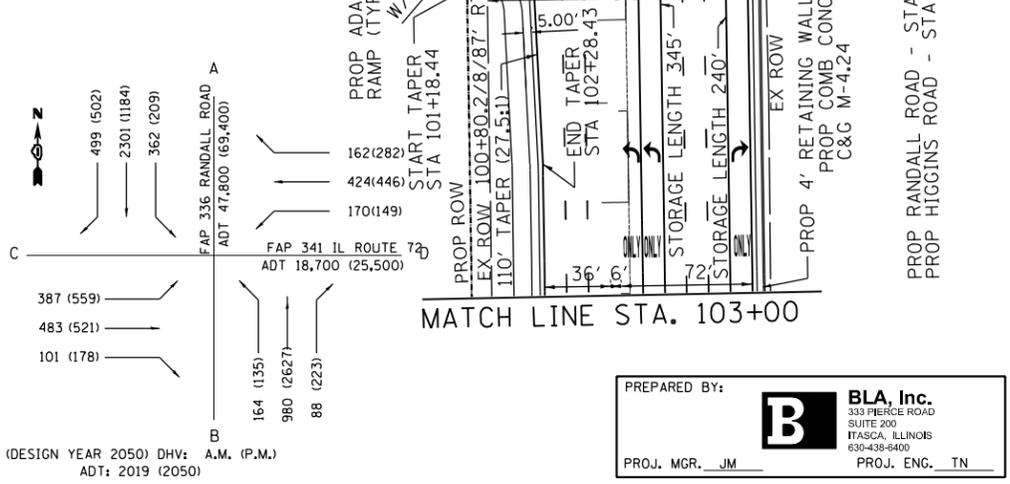
ADDITIONAL NOTES:
 RAMPS AS SHOWN ARE IN COMPLIANCE WITH THE AMERICAN DISABILITIES ACT.
 THIS INTERSECTION IS NOT A 5% LOCATION.
 THE INTERSECTION IS PART OF AN INTERCONNECTED SYSTEM FROM BIG TIMBER ROAD TO HUNTLEY ROAD.



TRAFFIC DATA

MOVEMENT	YEAR 2019 30TH MAXIMUM HOUR TRAFFIC		PERCENT TRUCK TRAFFIC IN 30TH MAX. HOUR		ESTIMATED PERCENT INCREASE BY 2050	YEAR 2050 30TH MAXIMUM HOUR TRAFFIC	
	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.
AD (L)	298	173	2	1	21	362	209
AB (T)	1574	819	3	3	45	2301	1184
AC (R)	310	308	2	5	63	499	502
BC (L)	110	88	7	14	53	164	135
BA (T)	672	1806	5	1	46	980	2627
BD (R)	73	184	3	1	21	88	223
CA (L)	233	348	6	8	61	387	559
CD (T)	378	413	5	8	26	483	521
CB (R)	66	118	14	10	51	101	178
DB (L)	148	130	3	3	15	170	149
DC (T)	335	345	5	4	29	424	446
DA (R)	131	231	4	5	22	162	282
TOTAL A	3,218	3,685	-	-	46	4,691	5,363
TOTAL B	2,643	3,145	-	-	43	3,804	4,496
TOTAL C	1,432	1,620	-	-	45	2,058	2,341
TOTAL D	1,363	1,476	-	-	24	1,689	1,830

T = THROUGH, L = LEFT, R = RIGHT



INTERSECTION DESIGN STUDY

FAP ROUTE 336 (RANDALL ROAD) WITH FAP ROUTE 341 (IL ROUTE 72)

SEC. NO. 19-00514-00-WR PROJ. NO. _____
 SCALE 1"=50' COUNTY KANE
 SJN: _____ REV. NO. 5

DESIGNED BY BLA, INC. DATE 12/2021

SATISFACTORY _____ DISTRICT GEOMETRICS ENGINEER DATE _____
 SATISFACTORY _____ DISTRICT PROGRAM DEVELOPMENT ENGINEER DATE _____
 SATISFACTORY _____ DISTRICT OPERATIONS ENGINEER DATE _____

APPROVED _____ DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER DATE _____

CADD FILE NAME: [redacted] I.D.S. SHEET 1 OF 10

PREPARED BY: **BLA, Inc.**
 333 PIERCE ROAD SUITE 200 ITASCA, ILLINOIS 60143-4340
 PROJ. MGR. JM PROJ. ENG. TN



Key Route	Marked Route/Road Name	Contract Number	State Job Number	Section Number
FAP 336	Randall Road			

County(ies)	Municipality	Local Agency
Kane	Elgin	Kane County DOT

LRS Section Number	Permit Applicant	Permit Number	Project Length
19-00514-00-WR			0.44 mi (2,300 ft)

Project Limits

Randall Road at Higgins Road

Current Posted Speed	Estimate of Cost	Functional Classification	Design Yr	Design Traffic ADT	Design Traffic DHV
50 MPH	\$5,409,703.00	Other Principal Art	2050	69400	AM 4691 PM 5363

On the NHS System?	Structure Numbers	Type of Project (Construction, Reconstruction, 3R, 3P, SMART, HSIP, etc.)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	Reconstruction (widen and resurface)

Brief Project Description

On Randall Road widen and resurface the four-lane facility to a six-lane facility, convert shoulder and ditch drainage to closed storm sewer, provide a detention basin in the northeast quadrant, extend southbound right turn lane, provide for multi-use facilities on west side, install pedestrian heads and pedestrian crosswalks. On Higgins Road extend the eastbound left and right turn lanes and the westbound right turn lane.

EXCEPTION DOCUMENTATION

Level of Exception Level 1 Level 2

Design Element for Which an Exception is Requested

Level of Service (LOS)

Design Element Policy Value

LOS D - BDE Figure 46-3.E

Proposed Design Element Value

LOS F (PM)

Location(s) of Exception

Randall Road NB/SB Left Turn

Crash History and Potential of Exception Location(s)

110 crashes occurred at this intersection over the five year study period from 2013 to 2017 and the intersection is not a Five Percent Report location. Seven of the 110 crashes were related to this exception request. The proposed scope of work will not improve the safety and operations related to this exception request.

Cost of Using Policy Value	Cost of Using Proposed Exception Value
\$10,000,000.00	\$5,409,703.00

Impacts Other Than Cost of Using Policy Value

Increased impacts to adjacent wetlands, potential Section 6(f) property, residential relocation, access changes

Proposed Mitigation to Address Exception

SCAT to be implemented to maximize the operations of the overall intersection

Geometric Compatibility with Adjacent Sections

Compatible

Potential Effects on Other Design Elements

N/A

Potential Impacts on Mobility or Traffic Operations

N/A

Summary of Justification for Exception

Alternatives evaluated with additional capacity on Higgins Road did not result in a change in LOS. The intersection signal is interconnected along Randall Road, an SRA, and timing priority is given to Randall Road.

The purpose and intent of the project is to reduce delays and queues occurring on Randall Road. The preferred alternative addresses the purpose and need by reducing the 2050 overall delay from 96 seconds to 53 seconds and individual movements that are LOS E or worse have reductions ranging from a minimum of 8 seconds to maximum of 104 seconds. Queues are reduced by 850 feet in the AM and 950 feet in the PM. The construction cost and property impacts associated with an innovative intersection control to meet LOS criteria is greater than the benefit of such an improvement.

Coordination Meeting Date	Proposed By	Date
04/13/22	Jennifer Mitchell, PE, PTOE, ENV SP	05/25/22

APPROVAL/DISAPPROVAL

BDE Approval Date	FHWA Approval Date (Level One)
4/13/2022	

SIGNALIZED CAPACITY DESIGN ANALYSIS

PROGRAM USED: SYNCHRO . VERSION: 10.0 SIGNAL TYPE: ACTUATED AREA TYPE: NON-CBD
 NUMBER OF PHASES: (A.M.) 6 (P.M.) 6 CYCLE LENGTH: (A.M.) 110 SEC. (P.M.) 180 SEC. PEAK HOUR FACTOR: (A.M.) 0.96 (P.M.) 0.99
 INTERSECTION DELAY/LEVEL-OF-SERVICE A.M. 35.4 SECONDS LOS D P.M. 52.5 SECONDS LOS D

APPROACH	SOUTHBOUND (A)			NORTHBOUND (B)			EASTBOUND (C)			WESTBOUND (D)			
	L	T	R	L	T	R	L	T	R	L	T	R	
LANE GROUP	L	T	R	L	T	R	L	T	R	L	T	R	
NUMBER OF LANES	2	3	1	2	3	1	2	2	1	2	2	1	
2050 30TH MAX. HOUR TRAFFIC (veh/h)	A.M.	362	2301	499	164	980	88	387	483	101	170	424	162
	P.M.	209	1184	502	135	2627	223	559	521	178	149	446	282
BASE SATURATION FLOW RATE (veh/h)	A.M.	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
LANE WIDTH (FT)	12	12	12	12	12	12	12	12	12	12	12	12	
VOLUME OF RIGHT TURN ON RED (veh/h)	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
PEDESTRIANS/HOUR (ped/h)	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
ARRIVAL TYPE	4			4			3			3			
LANE UTILIZATION ADJ. FACTOR	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00	
GREEN TIME (SECONDS)	A.M.	20.5	51.0	65.5	8.5	39.0	50.5	14.5	18.0	26.5	11.5	15.0	23.5
	P.M.	12.5	87.0	120.5	15.5	90.0	106.5	33.5	40.0	55.5	16.5	23.0	35.5
GREEN RATIO (g/C)	A.M.	0.16	0.46	0.65	0.08	0.39	0.53	0.13	0.17	0.30	0.09	0.14	0.35
	P.M.	0.07	0.50	0.71	0.07	0.50	0.61	0.18	0.24	0.34	0.07	0.13	0.23
Cap, veh/h	A.M.	636	2450	1024	254	2016	858	444	640	441	348	483	574
	P.M.	239	2624	1097	265	2716	1004	615	860	538	305	467	351
V/C RATIO(X)	A.M.	0.71	0.98	0.51	0.68	0.51	0.11	0.91	0.79	0.24	0.56	0.92	0.32
	P.M.	0.88	0.46	0.46	0.62	0.98	0.23	0.93	0.61	0.35	0.61	0.97	0.81
STORAGE QUEUE (FEET)	A.M.	237	713	272	123	320	83	273	322	123	122	292	167
	P.M.	245	508	382	179	1106	220	619	535	323	178	504	570
LANE GROUP DELAY(SECONDS)	A.M.	50.9	29.8	10.6	54.3	27.7	16.7	53.6	39.6	24.4	54.6	71.9	27.8
	P.M.	116.0	27.0	14.8	102.4	41.7	10.5	87.4	68.1	45.4	91.4	110.0	83.8
LANE GROUP LEVEL-OF-SERVICE	A.M.	D	C	B	D	C	B	D	D	C	D	E	C
	P.M.	F	C	B	F	D	B	F	E	D	F	F	F
APPROACH DELAY (SECONDS/VEHICLE)	A.M.	29.2	30.4			43.6			58.6				
	P.M.	33.6	42.1			73.5			98.4				
APPROACH LEVEL-OF-SERVICE	A.M.	C	D			D			E				
	P.M.	C	D			E			F				

ELEMENTS CONTROLLING DESIGN

PREFERRED ROUTE:
 F.A. ROUTE NUMBER: F.A.P. 336. MARKED ROUTE NUMBER: N/A
 STREET NAME: RANDALL ROAD. SRA ROUTE YES
 FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL. OSOW DESIGN NO
 EXISTING ADT: 47,800 VPD. (2019) DESIGN YEAR ADT: 69,400 VPD. (2050)
 PROPOSED DESIGN SPEED: 50 MPH. PROPOSED POSTED SPEED: 50 MPH.

SECONDARY ROUTE:
 F.A. ROUTE NUMBER: F.A.P. 341. MARKED ROUTE NUMBER: IL 72.
 STREET NAME: HIGGINS ROAD. SRA ROUTE: NO
 FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL. OSOW DESIGN YES
 EXISTING ADT: 18,700 VPD. (2019) DESIGN YEAR ADT: 25,500 VPD. (2050)
 PROPOSED DESIGN SPEED: 50 MPH. PROPOSED POSTED SPEED: 45 MPH.

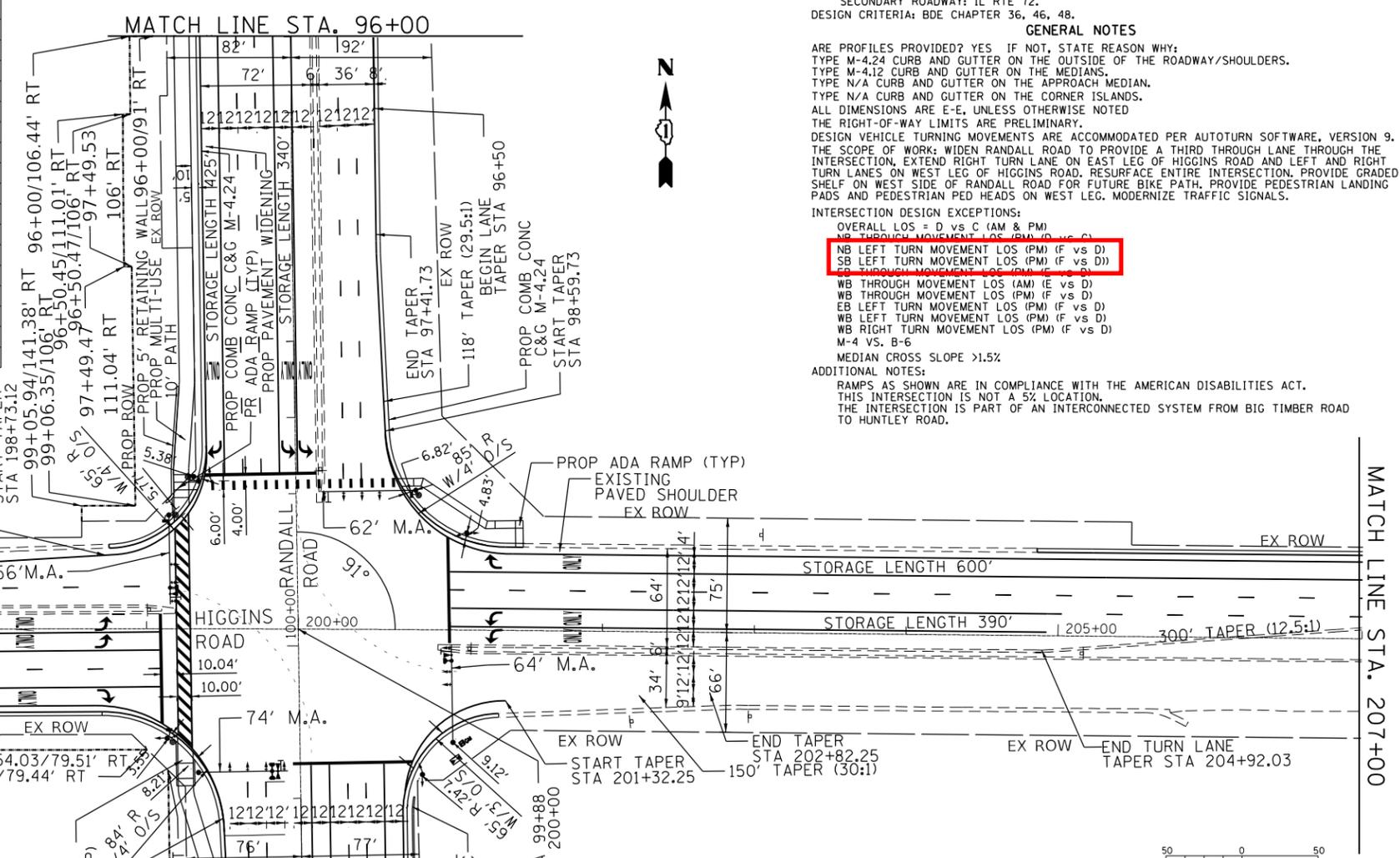
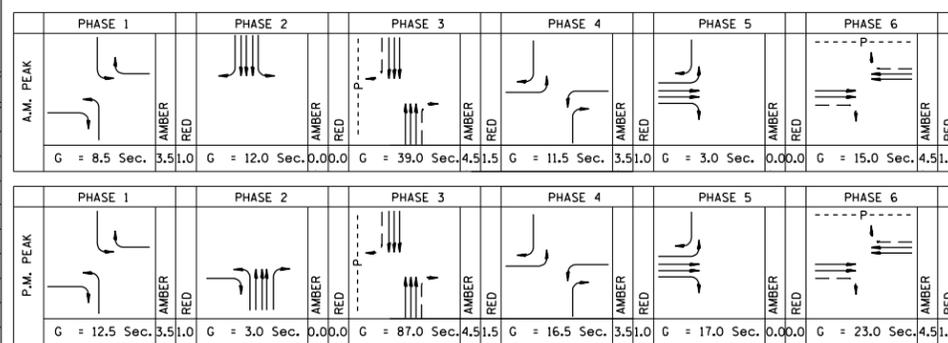
IMPROVEMENT TYPE: WIDENED AND RESURFACED RECONSTRUCTION.
 ANTICIPATED YEAR OF CONSTRUCTION: 2025.
 EXISTING METHOD OF TRAFFIC CONTROL: TRAFFIC SIGNAL. PROPOSED METHOD: TRAFFIC SIGNAL.
 SIGNAL WARRANT: EXISTING SIGNAL.
 DESIGN VEHICLE: WB-65.
 DESIGN YEAR: 2050

TRUCK ROUTE DESIGNATION:
 PREFERRED ROADWAY: RANDALL ROAD.
 SECONDARY ROADWAY: IL RTE 72.
 DESIGN CRITERIA: BDE CHAPTER 36, 46, 48.

GENERAL NOTES
 ARE PROFILES PROVIDED? YES IF NOT, STATE REASON WHY:
 TYPE M-4.24 CURB AND GUTTER ON THE OUTSIDE OF THE ROADWAY/SHOULDERS.
 TYPE M-4.12 CURB AND GUTTER ON THE MEDIANS.
 TYPE N/A CURB AND GUTTER ON THE APPROACH MEDIAN.
 TYPE N/A CURB AND GUTTER ON THE CORNER ISLANDS.
 ALL DIMENSIONS ARE E-E, UNLESS OTHERWISE NOTED
 THE RIGHT-OF-WAY LIMITS ARE PRELIMINARY.
 DESIGN VEHICLE TURNING MOVEMENTS ARE ACCOMMODATED PER AUTOTURN SOFTWARE, VERSION 9.
 THE SCOPE OF WORK: WIDEN RANDALL ROAD TO PROVIDE A THIRD THROUGH LANE THROUGH THE INTERSECTION, EXTEND RIGHT TURN LANE ON EAST LEG OF HIGGINS ROAD AND LEFT AND RIGHT TURN LANES ON WEST LEG OF HIGGINS ROAD. RESURFACE ENTIRE INTERSECTION, PROVIDE GRADED SHELF ON WEST SIDE OF RANDALL ROAD FOR FUTURE BIKE PATH, PROVIDE PEDESTRIAN LANDING PADS AND PEDESTRIAN PED HEADS ON WEST LEG. MODERNIZE TRAFFIC SIGNALS.

INTERSECTION DESIGN EXCEPTIONS:
 OVERALL LOS = D vs C (AM & PM)
 NB THROUGH MOVEMENT LOS (PM) (F vs D)
 SB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 EB THROUGH MOVEMENT LOS (AM) (E vs D)
 WB THROUGH MOVEMENT LOS (AM) (E vs D)
 WB THROUGH MOVEMENT LOS (PM) (F vs D)
 EB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 WB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 WB RIGHT TURN MOVEMENT LOS (PM) (F vs D)
 M-4 VS. B-6
 MEDIAN CROSS SLOPE >1.5%

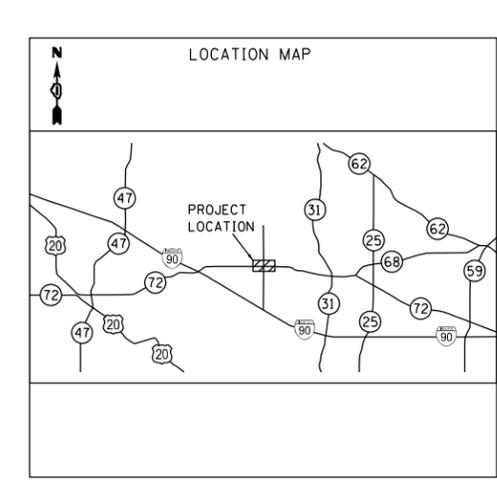
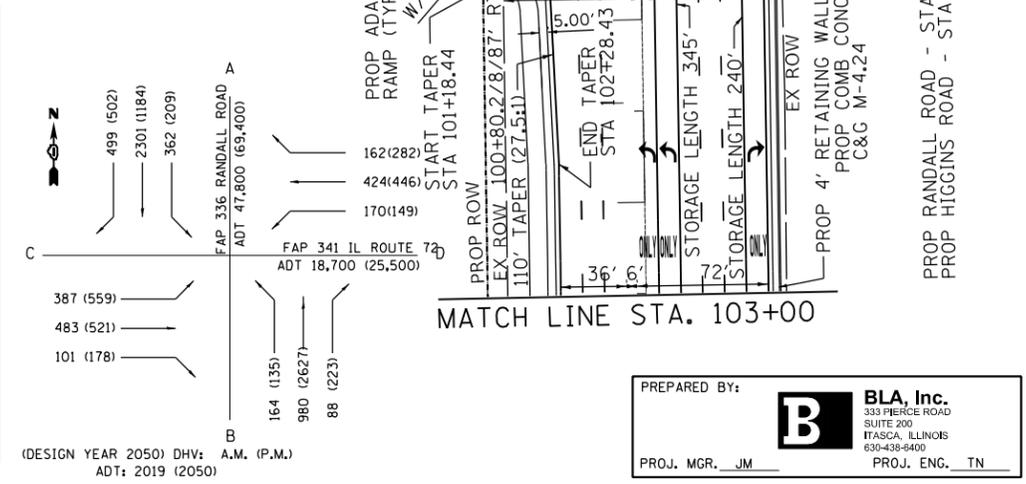
ADDITIONAL NOTES:
 RAMPS AS SHOWN ARE IN COMPLIANCE WITH THE AMERICAN DISABILITIES ACT.
 THIS INTERSECTION IS NOT A 5% LOCATION.
 THE INTERSECTION IS PART OF AN INTERCONNECTED SYSTEM FROM BIG TIMBER ROAD TO HUNTLEY ROAD.



TRAFFIC DATA

MOVEMENT	YEAR 2019 30TH MAXIMUM HOUR TRAFFIC		PERCENT TRUCK TRAFFIC IN 30TH MAX. HOUR		ESTIMATED PERCENT INCREASE BY 2050	YEAR 2030 MAXIMUM HOUR TRAFFIC		YEAR 2050 30TH MAXIMUM HOUR TRAFFIC	
	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.
AD (L)	298	173	2	1	21			362	209
AB (T)	1574	819	3	3	45			2301	1184
AC (R)	310	308	2	5	63			499	502
BC (L)	110	88	7	14	53			164	135
BA (T)	672	1806	5	1	46			980	2627
BD (R)	73	184	3	1	21			88	223
CA (L)	233	348	6	8	61			387	559
CD (T)	378	413	5	8	26			483	521
CB (R)	66	118	14	10	51			101	178
DB (L)	148	130	3	3	15			170	149
DC (T)	335	345	5	4	29			424	446
DA (R)	131	231	4	5	22			162	282
TOTAL A	3,218	3,685	-	-	46			4,691	5,363
TOTAL B	2,643	3,145	-	-	43			3,804	4,496
TOTAL C	1,432	1,620	-	-	45			2,058	2,341
TOTAL D	1,363	1,476	-	-	24			1,689	1,830

T = THROUGH, L = LEFT, R = RIGHT



INTERSECTION DESIGN STUDY

FAP ROUTE 336 (RANDALL ROAD) WITH FAP ROUTE 341 (IL ROUTE 72)

SEC. NO. 19-00514-00-WR PROJ. NO. _____

SCALE 1"=50' COUNTY KANE

SJN: _____ REV. NO. 5

DESIGNED BY BLA, INC. DATE 12/2021

SATISFACTORY _____ DISTRICT GEOMETRICS ENGINEER DATE _____

SATISFACTORY _____ DISTRICT PROGRAM DEVELOPMENT ENGINEER DATE _____

SATISFACTORY _____ DISTRICT OPERATIONS ENGINEER DATE _____

APPROVED _____ DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER DATE _____

CADD FILE NAME: [] I.D.S. SHEET 1 OF 10

PREPARED BY: **B** BLA, Inc.
 333 PIERCE ROAD
 SUITE 200
 ITASCA, ILLINOIS
 60143-4340

PROJ. MGR. JM PROJ. ENG. TN

PLOT DATE = 4/18/2022
 FILE NAME = W:\94-932 KDOT Randall Higgins Phase 1\CADD EXHIBITS\Intersection Design Study\19-00514-00-WR-001 Cover_Sheet.dgn
 SCALE = 1/8" = 100.00' / 1" = 1000.00'
 USER NAME = c:\users\j\



Key Route	Marked Route/Road Name	Contract Number	State Job Number	Section Number
FAP 341	IL Rte 72 / Higgins Road			

County(ies)	Municipality	Local Agency
Kane	Elgin	Kane County DOT

LRS Section Number	Permit Applicant	Permit Number	Project Length
19-00514-00-WR			0.44 mi (2,300 ft)

Project Limits

Randall Road at Higgins Road

Current Posted Speed	Estimate of Cost	Functional Classification	Design Yr	Design Traffic ADT	Design Traffic DHV
45 MPH	\$5,409,703.00	Other Principal Art	2050	25500	AM 2058 PM 2341

On the NHS System?	Structure Numbers	Type of Project (Construction, Reconstruction, 3R, 3P, SMART, HSIP, etc.)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	Reconstruction (widen and resurface)

Brief Project Description

On Randall Road widen and resurface the four-lane facility to a six-lane facility, convert shoulder and ditch drainage to closed storm sewer, provide a detention basin in the northeast quadrant, extend southbound right turn lane, provide for multi-use facilities on west side, install pedestrian heads and pedestrian crosswalks. On Higgins Road extend the eastbound left and right turn lanes and the westbound right turn lane.

EXCEPTION DOCUMENTATION

Level of Exception Level 1 Level 2

Design Element for Which an Exception is Requested

Level of Service (LOS)

Design Element Policy Value

LOS D - BDE Figure 46-3.E

Proposed Design Element Value

LOS E

Location(s) of Exception

Higgins Road WB Through (AM), EB Through (PM)

Crash History and Potential of Exception Location(s)

110 crashes occurred at this intersection over the five year study period from 2013 to 2017 and the intersection is not a Five Percent Report location. Thirty-two of the 110 crashes were related to this exception request. The proposed scope of work will not improve the safety and operations related to this exception request.

Cost of Using Policy Value	Cost of Using Proposed Exception Value
\$10,000,000.00	\$515,000.00

Impacts Other Than Cost of Using Policy Value

Increased impacts to adjacent wetlands and potential Section 6(f) property.

Proposed Mitigation to Address Exception

SCAT to be implemented to maximize the operations of the overall intersection

Geometric Compatibility with Adjacent Sections

Compatible

Potential Effects on Other Design Elements

N/A

Potential Impacts on Mobility or Traffic Operations

N/A

Summary of Justification for Exception

Alternatives evaluated with additional capacity on Higgins Road did not result in a change in LOS. The intersection signal is interconnected along Randall Road, an SRA, and timing priority is given to Randall Road.

The purpose and intent of the project is to reduce delays and queues occurring on Randall Road. The preferred alternative addresses the purpose and need by reducing the 2050 overall delay from 96 seconds to 53 seconds and individual movements that are LOS E or worse have reductions ranging from a minimum of 8 seconds to maximum of 104 seconds. Queues are reduced by 850 feet in the AM and 950 feet in the PM. The construction cost and property impacts associated with an innovative intersection control to meet LOS criteria is greater than the benefit of such an improvement.

Coordination Meeting Date	Proposed By	Date
04/13/22	Jennifer Mitchell, PE, PTOE, ENV SP	05/25/22

APPROVAL/DISAPPROVAL

BDE Approval Date	FHWA Approval Date (Level One)
4/13/2022	

SIGNALIZED CAPACITY DESIGN ANALYSIS

PROGRAM USED: SYNCHRO . VERSION: 10.0 SIGNAL TYPE: ACTUATED AREA TYPE: NON-CBD
 NUMBER OF PHASES: (A.M.) 6 (P.M.) 6 CYCLE LENGTH: (A.M.) 110 SEC. (P.M.) 180 SEC. PEAK HOUR FACTOR: (A.M.) 0.96 (P.M.) 0.99
 INTERSECTION DELAY/LEVEL-OF-SERVICE A.M. 35.4 SECONDS LOS D P.M. 52.5 SECONDS LOS D

APPROACH	SOUTHBOUND (A)			NORTHBOUND (B)			EASTBOUND (C)			WESTBOUND (D)			
	L	T	R	L	T	R	L	T	R	L	T	R	
LANE GROUP	L	T	R	L	T	R	L	T	R	L	T	R	
NUMBER OF LANES	2	3	1	2	3	1	2	2	1	2	2	1	
2050 30TH MAX. HOUR TRAFFIC (veh/h)	A.M.	362	2301	499	164	980	88	387	483	101	170	424	162
	P.M.	209	1184	502	135	2627	223	559	521	178	149	446	282
BASE SATURATION FLOW RATE (veh/h)	A.M.	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
LANE WIDTH (FT)	12	12	12	12	12	12	12	12	12	12	12	12	
VOLUME OF RIGHT TURN ON RED (veh/h)	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
PEDESTRIANS/HOUR (ped/h)	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
ARRIVAL TYPE	4			4			3			3			
LANE UTILIZATION ADJ. FACTOR	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00	
GREEN TIME (SECONDS)	A.M.	20.5	51.0	65.5	8.5	39.0	50.5	14.5	18.0	26.5	11.5	15.0	23.5
	P.M.	12.5	87.0	120.5	15.5	90.0	106.5	33.5	40.0	55.5	16.5	23.0	35.5
GREEN RATIO (g/C)	A.M.	0.16	0.46	0.65	0.08	0.39	0.53	0.13	0.17	0.30	0.09	0.14	0.35
	P.M.	0.07	0.50	0.71	0.07	0.50	0.61	0.18	0.24	0.34	0.07	0.13	0.23
Cap, veh/h	A.M.	636	2450	1024	254	2016	858	444	640	441	348	483	574
	P.M.	239	2624	1097	265	2716	1004	615	860	538	305	467	351
V/C RATIO(X)	A.M.	0.71	0.98	0.51	0.68	0.51	0.11	0.91	0.79	0.24	0.56	0.92	0.32
	P.M.	0.88	0.46	0.46	0.62	0.98	0.23	0.93	0.61	0.35	0.61	0.97	0.81
STORAGE QUEUE (FEET)	A.M.	237	713	272	123	320	83	273	322	123	122	292	167
	P.M.	245	508	382	179	1106	220	619	535	323	178	504	570
LANE GROUP DELAY(SECONDS)	A.M.	50.9	29.8	10.6	54.3	27.7	16.7	53.6	39.6	24.4	54.6	71.9	27.8
	P.M.	116.0	27.0	14.8	102.4	41.7	10.5	87.4	68.1	45.4	91.4	110.0	83.8
LANE GROUP LEVEL-OF-SERVICE	A.M.	D	C	B	D	C	B	D	D	C	D	E	C
	P.M.	F	C	B	F	D	B	F	E	D	F	F	F
APPROACH DELAY (SECONDS/VEHICLE)	A.M.	29.2			30.4			43.6			58.6		
	P.M.	33.6			42.1			73.5			98.4		
APPROACH LEVEL-OF-SERVICE	A.M.	C			D			E			F		
	P.M.	C			D			E			F		

ELEMENTS CONTROLLING DESIGN

PREFERRED ROUTE:
 F.A. ROUTE NUMBER: F.A.P. 336. MARKED ROUTE NUMBER: N/A
 STREET NAME: RANDALL ROAD. SRA ROUTE YES
 FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL. OSOW DESIGN NO
 EXISTING ADT: 47,800 VPD. (2019) DESIGN YEAR ADT: 69,400 VPD. (2050)
 PROPOSED DESIGN SPEED: 50 MPH. PROPOSED POSTED SPEED: 50 MPH.

SECONDARY ROUTE:
 F.A. ROUTE NUMBER: F.A.P. 341. MARKED ROUTE NUMBER: IL 72.
 STREET NAME: HIGGINS ROAD. SRA ROUTE: NO
 FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL. OSOW DESIGN YES
 EXISTING ADT: 18,700 VPD. (2019) DESIGN YEAR ADT: 25,500 VPD. (2050)
 PROPOSED DESIGN SPEED: 50 MPH. PROPOSED POSTED SPEED: 45 MPH.

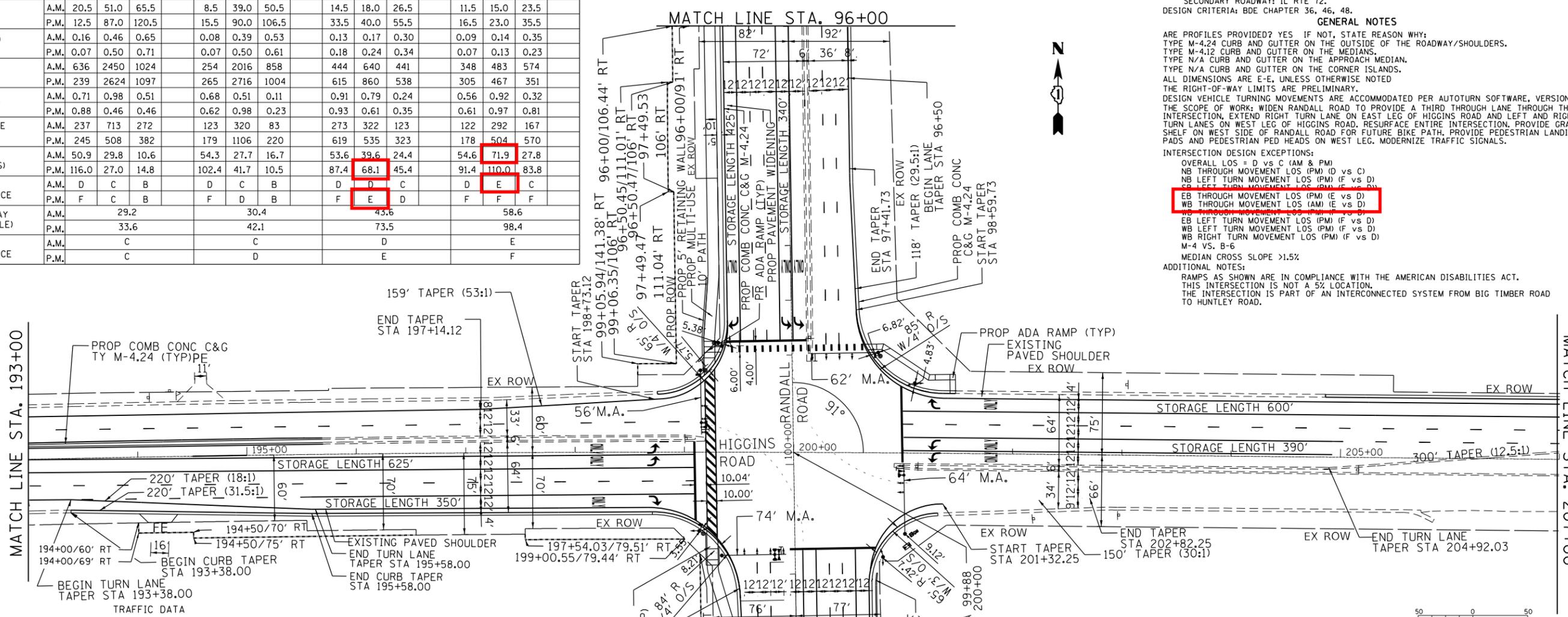
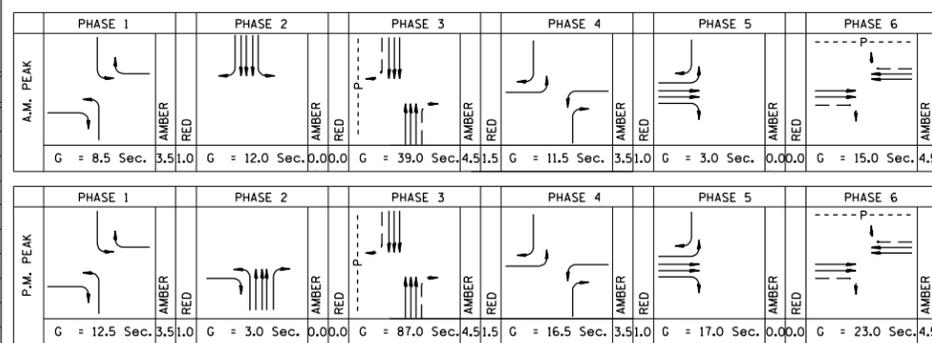
IMPROVEMENT TYPE: WIDENED AND RESURFACED RECONSTRUCTION.
 ANTICIPATED YEAR OF CONSTRUCTION: 2025.
 EXISTING METHOD OF TRAFFIC CONTROL: TRAFFIC SIGNAL. PROPOSED METHOD: TRAFFIC SIGNAL.
 SIGNAL WARRANT: EXISTING SIGNAL.
 DESIGN VEHICLE: WB-65.
 DESIGN YEAR: 2050
 TRUCK ROUTE DESIGNATION:

PREFERRED ROADWAY: RANDALL ROAD.
 SECONDARY ROADWAY: IL RTE 72.
 DESIGN CRITERIA: BDE CHAPTER 36, 46, 48.

GENERAL NOTES
 ARE PROFILES PROVIDED? YES IF NOT, STATE REASON WHY:
 TYPE M-4.24 CURB AND GUTTER ON THE OUTSIDE OF THE ROADWAY/SHOULDERS.
 TYPE M-4.12 CURB AND GUTTER ON THE MEDIANS.
 TYPE N/A CURB AND GUTTER ON THE APPROACH MEDIAN.
 TYPE N/A CURB AND GUTTER ON THE CORNER ISLANDS.
 ALL DIMENSIONS ARE E-E, UNLESS OTHERWISE NOTED
 THE RIGHT-OF-WAY LIMITS ARE PRELIMINARY.
 DESIGN VEHICLE TURNING MOVEMENTS ARE ACCOMMODATED PER AUTOTURN SOFTWARE, VERSION 9.
 THE SCOPE OF WORK: WIDEN RANDALL ROAD TO PROVIDE A THIRD THROUGH LANE THROUGH THE INTERSECTION, EXTEND RIGHT TURN LANE ON EAST LEG OF HIGGINS ROAD AND LEFT AND RIGHT TURN LANES ON WEST LEG OF HIGGINS ROAD. RESURFACE ENTIRE INTERSECTION, PROVIDE GRADED SHELF ON WEST SIDE OF RANDALL ROAD FOR FUTURE BIKE PATH, PROVIDE PEDESTRIAN LANDING PADS AND PEDESTRIAN PED HEADS ON WEST LEG. MODERNIZE TRAFFIC SIGNALS.

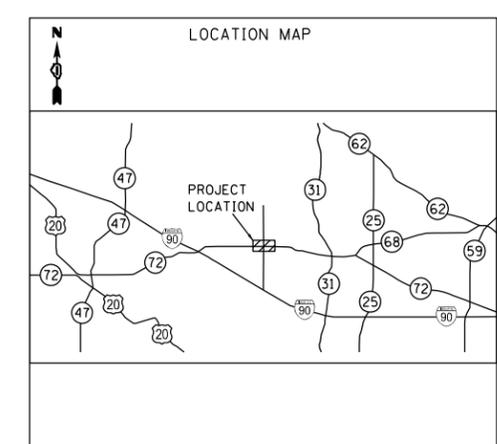
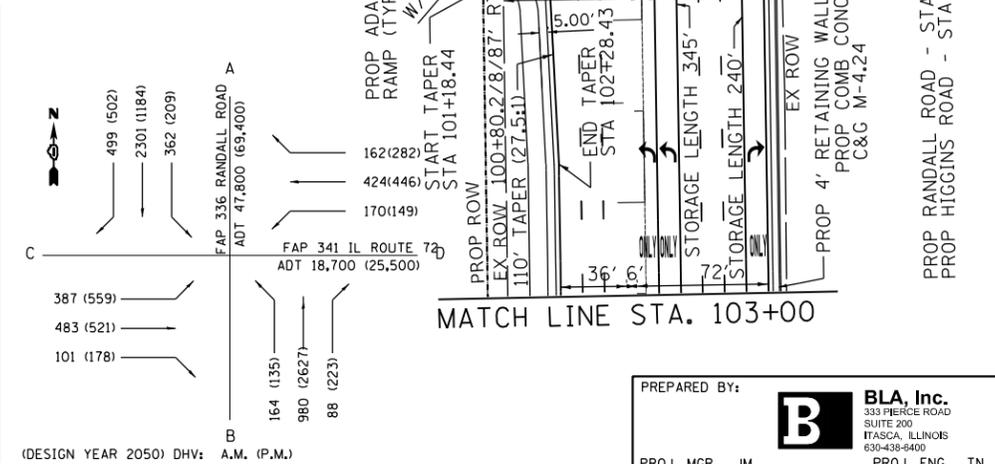
INTERSECTION DESIGN EXCEPTIONS:
 OVERALL LOS = D vs C (AM & PM)
 NB THROUGH MOVEMENT LOS (PM) (D vs C)
 NB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 SB LEFT TURN MOVEMENT LOS (AM) (E vs D)
 EB THROUGH MOVEMENT LOS (PM) (E vs D)
 WB THROUGH MOVEMENT LOS (AM) (E vs D)
 EB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 WB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 WB RIGHT TURN MOVEMENT LOS (PM) (F vs D)
 M-4 VS. B-6
 MEDIAN CROSS SLOPE >1.5%

ADDITIONAL NOTES:
 RAMPS AS SHOWN ARE IN COMPLIANCE WITH THE AMERICAN DISABILITIES ACT.
 THIS INTERSECTION IS NOT A 5% LOCATION.
 THE INTERSECTION IS PART OF AN INTERCONNECTED SYSTEM FROM BIG TIMBER ROAD TO HUNTLEY ROAD.



TRAFFIC DATA

MOVEMENT	YEAR 2019 30TH MAXIMUM HOUR TRAFFIC		PERCENT TRUCK TRAFFIC IN 30TH MAX. HOUR		ESTIMATED PERCENT INCREASE BY 2050	YEAR 2050 30TH MAXIMUM HOUR TRAFFIC	
	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.
AD (L)	298	173	2	1	21	362	209
AB (T)	1574	819	3	3	45	2301	1184
AC (R)	310	308	2	5	63	499	502
BC (L)	110	88	7	14	53	164	135
BA (T)	672	1806	5	1	46	980	2627
BD (R)	73	184	3	1	21	88	223
CA (L)	233	348	6	8	61	387	559
CD (T)	378	413	5	8	26	483	521
CB (R)	66	118	14	10	51	101	178
DB (L)	148	130	3	3	15	170	149
DC (T)	335	345	5	4	29	424	446
DA (R)	131	231	4	5	22	162	282
TOTAL A	3,218	3,685	-	-	46	4,691	5,363
TOTAL B	2,643	3,145	-	-	43	3,804	4,496
TOTAL C	1,432	1,620	-	-	45	2,058	2,341
TOTAL D	1,363	1,476	-	-	24	1,689	1,830



INTERSECTION DESIGN STUDY

FAP ROUTE 336 (RANDALL ROAD) WITH FAP ROUTE 341 (IL ROUTE 72)

SEC. NO. 19-00514-00-WR PROJ. NO. _____

SCALE 1"=50' COUNTY KANE

SJN: _____ REV. NO. 5

DESIGNED BY BLA, INC. DATE 12/2021

SATISFACTORY _____ DISTRICT GEOMETRICS ENGINEER DATE _____

SATISFACTORY _____ DISTRICT PROGRAM DEVELOPMENT ENGINEER DATE _____

SATISFACTORY _____ DISTRICT OPERATIONS ENGINEER DATE _____

APPROVED _____ DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER DATE _____

CADD FILE NAME: [] I.D.S. SHEET 1 OF 10

PREPARED BY: **BLA, Inc.**
 333 PIERCE ROAD
 SUITE 200
 ITASCA, ILLINOIS 60143-4340
 PROJ. MGR. JM PROJ. ENG. TN

PLOT DATE = 4/18/2022
 FILE NAME = W:\94-932 KDOT Randall Higgins Phase 1\CADD EXHIBITS\Intersection Design Study\19-00514-00-WR-001 Cover_Sheet.dgn
 SCALE = 100.00 / 1"
 USER NAME = cconner



Design Exception Request Project Identification



Key Route	Marked Route/Road Name	Contract Number	State Job Number	Section Number
FAP 341	IL Rte 72 / Higgins Road			

County(ies)	Municipality	Local Agency
Kane	Elgin	Kane County DOT

LRS Section Number	Permit Applicant	Permit Number	Project Length
19-00514-00-WR			0.44 mi (2,300 ft)

Project Limits

Randall Road at Higgins Road

Current Posted Speed	Estimate of Cost	Functional Classification	Design Yr	Design Traffic ADT	Design Traffic DHV
45 MPH	\$5,409,703.00	Other Principal Art	2050	25500	AM 2058 PM 2341

On the NHS System?	Structure Numbers	Type of Project (Construction, Reconstruction, 3R, 3P, SMART, HSIP, etc.)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	Reconstruction (widen and resurface)

Brief Project Description

On Randall Road widen and resurface the four-lane facility to a six-lane facility, convert shoulder and ditch drainage to closed storm sewer, provide a detention basin in the northeast quadrant, extend southbound right turn lane, provide for multi-use facilities on west side, install pedestrian heads and pedestrian crosswalks. On Higgins Road extend the eastbound left and right turn lanes and the westbound right turn lane.

EXCEPTION DOCUMENTATION

Level of Exception Level 1 Level 2

Design Element for Which an Exception is Requested

Level of Service (LOS)

Design Element Policy Value

LOS D - BDE Figure 46-3.E

Proposed Design Element Value

LOS F (PM)

Location(s) of Exception

Higgins Road EB/WB Left Turn, WB Through, WB Right Turn

Crash History and Potential of Exception Location(s)

110 crashes occurred at this intersection over the five year study period from 2013 to 2017 and the intersection is not a Five Percent Report location. Thirty-two of the 110 crashes were related to this exception request. The proposed scope of work will not improve the safety and operations related to this exception request.

Cost of Using Policy Value	Cost of Using Proposed Exception Value
\$10,000,000.00	\$515,000.00

Impacts Other Than Cost of Using Policy Value

Increased impacts to adjacent wetlands and potential Section 6(f) property.

Proposed Mitigation to Address Exception

SCAT to be implemented to maximize the operations of the overall intersection

Geometric Compatibility with Adjacent Sections

Compatible

Potential Effects on Other Design Elements

N/A

Potential Impacts on Mobility or Traffic Operations

N/A

Summary of Justification for Exception

Alternatives evaluated with additional capacity on Higgins Road did not result in a change in LOS. The intersection signal is interconnected along Randall Road, an SRA, and timing priority is given to Randall Road.

The purpose and intent of the project is to reduce delays and queues occurring on Randall Road. The preferred alternative addresses the purpose and need by reducing the 2050 overall delay from 96 seconds to 53 seconds and individual movements that are LOS E or worse have reductions ranging from a minimum of 8 seconds to maximum of 104 seconds. Queues are reduced by 850 feet in the AM and 950 feet in the PM. The construction cost and property impacts associated with an innovative intersection control to meet LOS criteria is greater than the benefit of such an improvement.

Coordination Meeting Date	Proposed By	Date
04/13/22	Jennifer Mitchell, PE, PTOE, ENV SP	05/25/22

APPROVAL/DISAPPROVAL

BDE Approval Date	FHWA Approval Date (Level One)
4/13/2022	

SIGNALIZED CAPACITY DESIGN ANALYSIS

PROGRAM USED: SYNCHRO . VERSION: 10.0 SIGNAL TYPE: ACTUATED AREA TYPE: NON-CBD
 NUMBER OF PHASES: (A.M.) 6 (P.M.) 6 CYCLE LENGTH: (A.M.) 110 SEC. (P.M.) 180 SEC. PEAK HOUR FACTOR: (A.M.) 0.96 (P.M.) 0.99
 INTERSECTION DELAY/LEVEL-OF-SERVICE A.M. 35.4 SECONDS LOS D P.M. 52.5 SECONDS LOS D

APPROACH	SOUTHBOUND (A)			NORTHBOUND (B)			EASTBOUND (C)			WESTBOUND (D)			
	L	T	R	L	T	R	L	T	R	L	T	R	
LANE GROUP	L	T	R	L	T	R	L	T	R	L	T	R	
NUMBER OF LANES	2	3	1	2	3	1	2	2	1	2	2	1	
2050 30TH MAX. HOUR TRAFFIC (veh/h)	A.M.	362	2301	499	164	980	88	387	483	101	170	424	162
	P.M.	209	1184	502	135	2627	223	559	521	178	149	446	282
BASE SATURATION FLOW RATE (veh/h)	A.M.	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
LANE WIDTH (FT)	12	12	12	12	12	12	12	12	12	12	12	12	
VOLUME OF RIGHT TURN ON RED (veh/h)	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
PEDESTRIANS/HOUR (ped/h)	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
ARRIVAL TYPE	4			4			3			3			
LANE UTILIZATION ADJ. FACTOR	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00	
GREEN TIME (SECONDS)	A.M.	20.5	51.0	65.5	8.5	39.0	50.5	14.5	18.0	26.5	11.5	15.0	23.5
	P.M.	12.5	87.0	120.5	15.5	90.0	106.5	33.5	40.0	55.5	16.5	23.0	35.5
GREEN RATIO (g/C)	A.M.	0.16	0.46	0.65	0.08	0.39	0.53	0.13	0.17	0.30	0.09	0.14	0.35
	P.M.	0.07	0.50	0.71	0.07	0.50	0.61	0.18	0.24	0.34	0.07	0.13	0.23
Cap, veh/h	A.M.	636	2450	1024	254	2016	858	444	640	441	348	483	574
	P.M.	239	2624	1097	265	2716	1004	615	860	538	305	467	351
V/C RATIO(X)	A.M.	0.71	0.98	0.51	0.68	0.51	0.11	0.91	0.79	0.24	0.56	0.92	0.32
	P.M.	0.88	0.46	0.46	0.62	0.98	0.23	0.93	0.61	0.35	0.61	0.97	0.81
STORAGE QUEUE (FEET)	A.M.	237	713	272	123	320	83	273	322	123	122	292	167
	P.M.	245	508	382	179	1106	220	619	535	323	178	504	570
LANE GROUP DELAY(SECONDS)	A.M.	50.9	29.8	10.6	54.3	27.7	16.7	53.6	39.6	24.4	54.6	71.9	27.8
	P.M.	116.0	27.0	14.8	102.4	41.7	10.5	87.4	68.1	45.4	91.4	110.0	83.8
LANE GROUP LEVEL-OF-SERVICE	A.M.	D	C	B	D	C	B	D	D	C	D	F	C
	P.M.	F	C	B	F	D	B	F	E	D	F	F	F
APPROACH DELAY (SECONDS/VEHICLE)	A.M.	29.2			30.4			43.6			58.6		
	P.M.	33.6			42.1			73.5			98.4		
APPROACH LEVEL-OF-SERVICE	A.M.	C			D			E			F		
	P.M.	C			D			E			F		

ELEMENTS CONTROLLING DESIGN

PREFERRED ROUTE:
 F.A. ROUTE NUMBER: F.A.P. 336. MARKED ROUTE NUMBER: N/A
 STREET NAME: RANDALL ROAD. SRA ROUTE YES
 FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL. OSOW DESIGN NO
 EXISTING ADT: 47,800 VPD. (2019) DESIGN YEAR ADT: 69,400 VPD. (2050)
 PROPOSED DESIGN SPEED: 50 MPH. PROPOSED POSTED SPEED: 50 MPH.

SECONDARY ROUTE:
 F.A. ROUTE NUMBER: F.A.P. 341. MARKED ROUTE NUMBER: IL 72.
 STREET NAME: HIGGINS ROAD. SRA ROUTE: NO
 FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL. OSOW DESIGN YES
 EXISTING ADT: 18,700 VPD. (2019) DESIGN YEAR ADT: 25,500 VPD. (2050)
 PROPOSED DESIGN SPEED: 50 MPH. PROPOSED POSTED SPEED: 45 MPH.

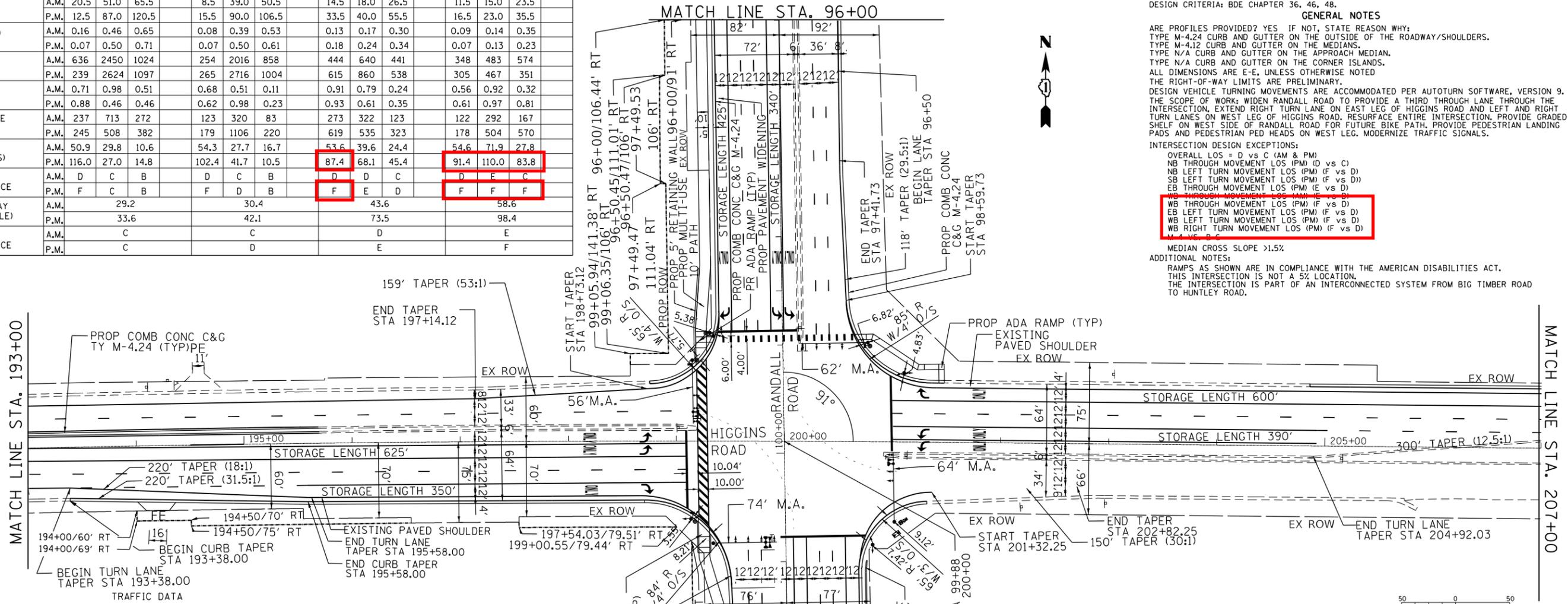
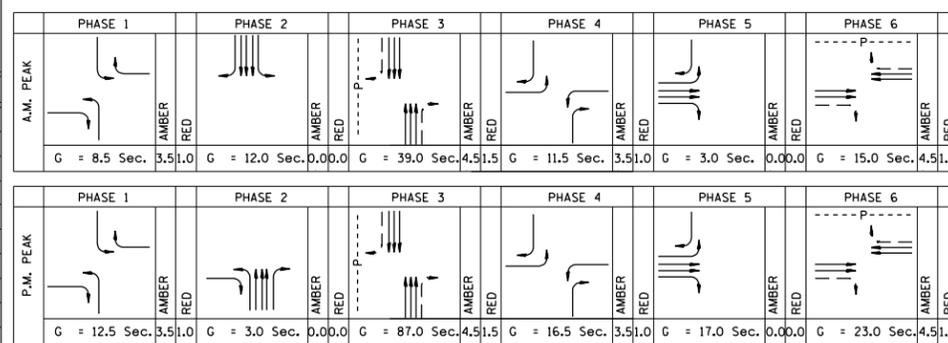
IMPROVEMENT TYPE: WIDENED AND RESURFACED RECONSTRUCTION.
 ANTICIPATED YEAR OF CONSTRUCTION: 2025.
 EXISTING METHOD OF TRAFFIC CONTROL: TRAFFIC SIGNAL. PROPOSED METHOD: TRAFFIC SIGNAL.
 SIGNAL WARRANT: EXISTING SIGNAL.
 DESIGN VEHICLE: WB-65.
 DESIGN YEAR: 2050
 TRUCK ROUTE DESIGNATION:
 PREFERRED ROADWAY: RANDALL ROAD.
 SECONDARY ROADWAY: IL RTE 72.
 DESIGN CRITERIA: BDE CHAPTER 36, 46, 48.

GENERAL NOTES

ARE PROFILES PROVIDED? YES IF NOT, STATE REASON WHY:
 TYPE M-4.24 CURB AND GUTTER ON THE OUTSIDE OF THE ROADWAY/SHOULDERS.
 TYPE M-4.12 CURB AND GUTTER ON THE MEDIANS.
 TYPE N/A CURB AND GUTTER ON THE APPROACH MEDIAN.
 TYPE N/A CURB AND GUTTER ON THE CORNER ISLANDS.
 ALL DIMENSIONS ARE E-E, UNLESS OTHERWISE NOTED
 THE RIGHT-OF-WAY LIMITS ARE PRELIMINARY.
 DESIGN VEHICLE TURNING MOVEMENTS ARE ACCOMMODATED PER AUTOTURN SOFTWARE, VERSION 9.
 THE SCOPE OF WORK: WIDEN RANDALL ROAD TO PROVIDE A THIRD THROUGH LANE THROUGH THE INTERSECTION, EXTEND RIGHT TURN LANE ON EAST LEG OF HIGGINS ROAD AND LEFT AND RIGHT TURN LANES ON WEST LEG OF HIGGINS ROAD. RESURFACE ENTIRE INTERSECTION, PROVIDE GRADED SHELF ON WEST SIDE OF RANDALL ROAD FOR FUTURE BIKE PATH, PROVIDE PEDESTRIAN LANDING PADS AND PEDESTRIAN PED HEADS ON WEST LEG. MODERNIZE TRAFFIC SIGNALS.

INTERSECTION DESIGN EXCEPTIONS:
 OVERALL LOS = D vs C (AM & PM)
 NB THROUGH MOVEMENT LOS (PM) (D vs C)
 NB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 SB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 EB THROUGH MOVEMENT LOS (PM) (E vs D)
 WB THROUGH MOVEMENT LOS (PM) (F vs D)
 WB THROUGH MOVEMENT LOS (PM) (F vs D)
 EB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 WB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 WB RIGHT TURN MOVEMENT LOS (PM) (F vs D)
 M.A. VS. B.C.

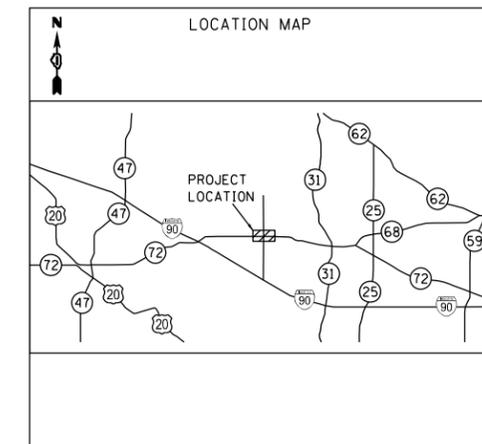
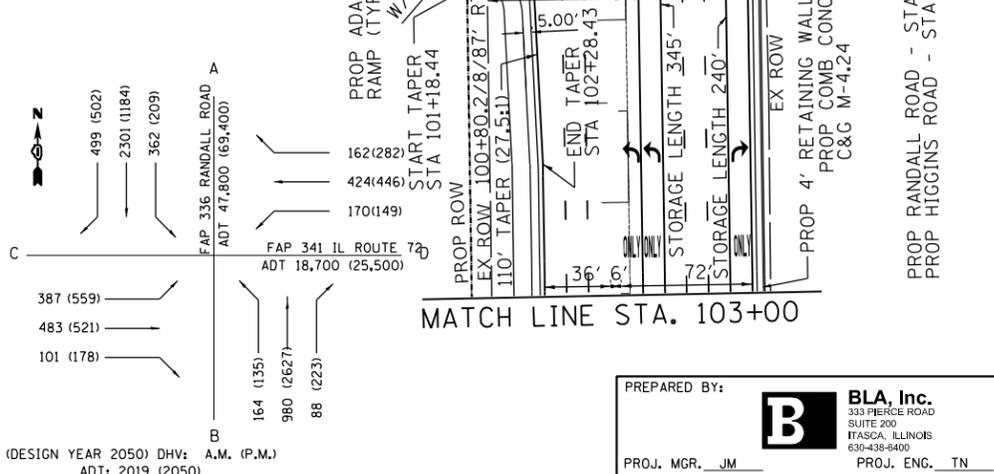
MEDIAN CROSS SLOPE >1.5%
 ADDITIONAL NOTES:
 RAMPS AS SHOWN ARE IN COMPLIANCE WITH THE AMERICAN DISABILITIES ACT.
 THIS INTERSECTION IS NOT A 5% LOCATION.
 THE INTERSECTION IS PART OF AN INTERCONNECTED SYSTEM FROM BIG TIMBER ROAD TO HUNTLEY ROAD.



TRAFFIC DATA

MOVEMENT	YEAR 2019 30TH MAXIMUM HOUR TRAFFIC		PERCENT TRUCK TRAFFIC IN 30TH MAX. HOUR		ESTIMATED PERCENT INCREASE BY 2050	YEAR 2050 30TH MAXIMUM HOUR TRAFFIC	
	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.
AD (L)	298	173	2	1	21	362	209
AB (T)	1574	819	3	3	45	2301	1184
AC (R)	310	308	2	5	63	499	502
BC (L)	110	88	7	14	53	164	135
BA (T)	672	1806	5	1	46	980	2627
BD (R)	73	184	3	1	21	88	223
CA (L)	233	348	6	8	61	387	559
CD (T)	378	413	5	8	26	483	521
CB (R)	66	118	14	10	51	101	178
DB (L)	148	130	3	3	15	170	149
DC (T)	335	345	5	4	29	424	446
DA (R)	131	231	4	5	22	162	282
TOTAL A	3,218	3,685	-	-	46	4,691	5,363
TOTAL B	2,643	3,145	-	-	43	3,804	4,496
TOTAL C	1,432	1,620	-	-	45	2,058	2,341
TOTAL D	1,363	1,476	-	-	24	1,689	1,830

T = THROUGH, L = LEFT, R = RIGHT



INTERSECTION DESIGN STUDY

FAP ROUTE 336 (RANDALL ROAD) WITH FAP ROUTE 341 (IL ROUTE 72)

SEC. NO. 19-00514-00-WR PROJ. NO. _____
 SCALE 1"=50' COUNTY KANE
 SJN: _____ REV. NO. 5

DESIGNED BY BLA, INC. DATE 12/2021

SATISFACTORY _____ DISTRICT GEOMETRICS ENGINEER DATE _____
 SATISFACTORY _____ DISTRICT PROGRAM DEVELOPMENT ENGINEER DATE _____
 SATISFACTORY _____ DISTRICT OPERATIONS ENGINEER DATE _____

APPROVED _____ DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER DATE _____

CADD FILE NAME: [] I.D.S. SHEET 1 OF 10

PREPARED BY: **BLA, Inc.**
 333 PIERCE ROAD
 SUITE 200
 ITASCA, ILLINOIS
 60143-4340

PROJ. MGR. JM PROJ. ENG. TN

PLOT DATE = 4/18/2022
 FILE NAME = W:\94-932 KDOT Randall Higgins Phase 1\CADD EXHIBITS\Intersection Design Study\19-00514-00-WR-001 Cover_Sheet.dgn
 SCALE = 100.00 / 1"
 USER NAME = cconner



Key Route	Marked Route/Road Name	Contract Number	State Job Number	Section Number
FAP 336	Randall Road			

County(ies)	Municipality	Local Agency
Kane	Elgin	Kane County DOT

LRS Section Number	Permit Applicant	Permit Number	Project Length
19-00514-00-WR			0.44 mi (2,300 ft)

Project Limits

Randall Road at Higgins Road

Current Posted Speed	Estimate of Cost	Functional Classification	Design Yr	Design Traffic ADT	Design Traffic DHV
50 MPH	\$5,409,703.00	Other Principal Art	2050	69400	AM 4691 PM 5363

On the NHS System?	Structure Numbers	Type of Project (Construction, Reconstruction, 3R, 3P, SMART, HSIP, etc.)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	Reconstruction (widen and resurface)

Brief Project Description

On Randall Road widen and resurface the four-lane facility to a six-lane facility, convert shoulder and ditch drainage to closed storm sewer, provide a detention basin in the northeast quadrant, extend southbound right turn lane, provide for multi-use facilities on west side, install pedestrian heads and pedestrian crosswalks. On Higgins Road extend the eastbound left and right turn lanes and the westbound right turn lane.

EXCEPTION DOCUMENTATION

Level of Exception Level 1 Level 2

Design Element for Which an Exception is Requested

Curb and Gutter

Design Element Policy Value

B-6 curb - BDE Figure 46-3.E

Proposed Design Element Value

M-4 curb

Location(s) of Exception

On Randall Road and on Higgins Road

Crash History and Potential of Exception Location(s)

Over the five year study period from 2013 to 2017 there has been on crash incident that a vehicle left the road and collided with a fixed object and zero crossing the median and the intersection is not a Five Percent Report location. The proposed scope of work will not improve the safety and operations related to this exception request.

Cost of Using Policy Value	Cost of Using Proposed Exception Value
\$10,000,000.00	\$26,400.00

Impacts Other Than Cost of Using Policy Value

N/A

Proposed Mitigation to Address Exception

N/A

Geometric Compatibility with Adjacent Sections

Compatible

Potential Effects on Other Design Elements

N/A

Potential Impacts on Mobility or Traffic Operations

N/A

Summary of Justification for Exception

A barrier curb can be used for closed drainage when placed adjacent to shoulder. However, right of way is restricted due to historic property and residential homes and adequate right of way is not available to also

provide a full shoulder; thus, an M curb is used.

The existing curb along the medians is M-4.12, as installed by IDOT in their 2012 HSIP project. The existing median curb does not exhibit a crash occurrence, a significant profile change is not proposed and thus the curb type will be retained on the median.

Coordination Meeting Date	Proposed By	Date
04/13/22	Jennifer Mitchell, PE, PTOE, ENV SP	05/25/22

APPROVAL/DISAPPROVAL

BDE Approval Date	FHWA Approval Date (Level One)
4/13/2022	

SIGNALIZED CAPACITY DESIGN ANALYSIS

PROGRAM USED: SYNCHRO . VERSION: 10.0 SIGNAL TYPE: ACTUATED AREA TYPE: NON-CBD
 NUMBER OF PHASES: (A.M.) 6 (P.M.) 6 CYCLE LENGTH: (A.M.) 110 SEC. (P.M.) 180 SEC. PEAK HOUR FACTOR: (A.M.) 0.96 (P.M.) 0.99
 INTERSECTION DELAY/LEVEL-OF-SERVICE A.M. 35.4 SECONDS LOS D P.M. 52.5 SECONDS LOS D

APPROACH	SOUTHBOUND (A)			NORTHBOUND (B)			EASTBOUND (C)			WESTBOUND (D)			
	L	T	R	L	T	R	L	T	R	L	T	R	
LANE GROUP	L	T	R	L	T	R	L	T	R	L	T	R	
NUMBER OF LANES	2	3	1	2	3	1	2	2	1	2	2	1	
2050 30TH MAX. HOUR TRAFFIC (veh/h)	A.M.	362	2301	499	164	980	88	387	483	101	170	424	162
	P.M.	209	1184	502	135	2627	223	559	521	178	149	446	282
BASE SATURATION FLOW RATE (veh/h)	A.M.	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	2000	1900
LANE WIDTH (FT)	12	12	12	12	12	12	12	12	12	12	12	12	
VOLUME OF RIGHT TURN ON RED (veh/h)	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
PEDESTRIANS/HOUR (ped/h)	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
	A.M.	0	P.M.	0	A.M.	0	P.M.	0	A.M.	0	P.M.	0	
ARRIVAL TYPE	4			4			3			3			
LANE UTILIZATION ADJ. FACTOR	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00	
GREEN TIME (SECONDS)	A.M.	20.5	51.0	65.5	8.5	39.0	50.5	14.5	18.0	26.5	11.5	15.0	23.5
	P.M.	12.5	87.0	120.5	15.5	90.0	106.5	33.5	40.0	55.5	16.5	23.0	35.5
GREEN RATIO (g/C)	A.M.	0.16	0.46	0.65	0.08	0.39	0.53	0.13	0.17	0.30	0.09	0.14	0.35
	P.M.	0.07	0.50	0.71	0.07	0.50	0.61	0.18	0.24	0.34	0.07	0.13	0.23
Cap, veh/h	A.M.	636	2450	1024	254	2016	858	444	640	441	348	483	574
	P.M.	239	2624	1097	265	2716	1004	615	860	538	305	467	351
V/C RATIO(X)	A.M.	0.71	0.98	0.51	0.68	0.51	0.11	0.91	0.79	0.24	0.56	0.92	0.32
	P.M.	0.88	0.46	0.46	0.62	0.98	0.23	0.93	0.61	0.35	0.61	0.97	0.81
STORAGE QUEUE (FEET)	A.M.	237	713	272	123	320	83	273	322	123	122	292	167
	P.M.	245	508	382	179	1106	220	619	535	323	178	504	570
LANE GROUP DELAY(SECONDS)	A.M.	50.9	29.8	10.6	54.3	27.7	16.7	53.6	39.6	24.4	54.6	71.9	27.8
	P.M.	116.0	27.0	14.8	102.4	41.7	10.5	87.4	68.1	45.4	91.4	110.0	83.8
LANE GROUP LEVEL-OF-SERVICE	A.M.	D	C	B	D	C	B	D	D	C	D	E	C
	P.M.	F	C	B	F	D	B	F	E	D	F	F	F
APPROACH DELAY (SECONDS/VEHICLE)	A.M.	29.2			30.4			43.6			58.6		
	P.M.	33.6			42.1			73.5			98.4		
APPROACH LEVEL-OF-SERVICE	A.M.	C			D			D			E		
	P.M.	C			D			E			F		

ELEMENTS CONTROLLING DESIGN

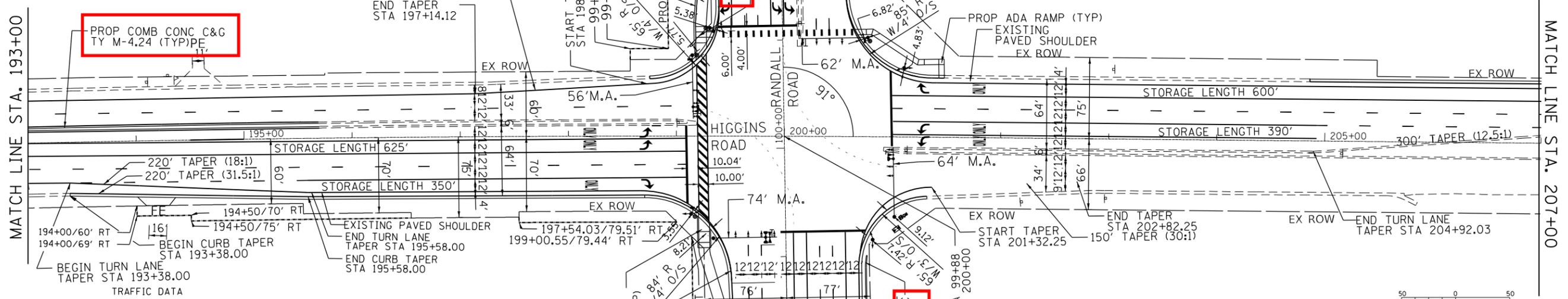
PREFERRED ROUTE:
 F.A. ROUTE NUMBER: F.A.P. 336. MARKED ROUTE NUMBER: N/A
 STREET NAME: RANDALL ROAD. SRA ROUTE YES
 FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL. OSOW DESIGN NO
 EXISTING ADT: 47,800 VPD. (2019) DESIGN YEAR ADT: 69,400 VPD. (2050)
 PROPOSED DESIGN SPEED: 50 MPH. PROPOSED POSTED SPEED: 50 MPH.

SECONDARY ROUTE:
 F.A. ROUTE NUMBER: F.A.P. 341. MARKED ROUTE NUMBER: IL 72.
 STREET NAME: HIGGINS ROAD. SRA ROUTE: NO
 FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL. OSOW DESIGN YES
 EXISTING ADT: 18,700 VPD. (2019) DESIGN YEAR ADT: 25,500 VPD. (2050)
 PROPOSED DESIGN SPEED: 50 MPH. PROPOSED POSTED SPEED: 45 MPH.

IMPROVEMENT TYPE: WIDENED AND RESURFACED RECONSTRUCTION.
 ANTICIPATED YEAR OF CONSTRUCTION: 2025.
 EXISTING METHOD OF TRAFFIC CONTROL: TRAFFIC SIGNAL. PROPOSED METHOD: TRAFFIC SIGNAL.
 SIGNAL WARRANT: EXISTING SIGNAL.
 DESIGN VEHICLE: WB-65.
 DESIGN YEAR: 2050
 TRUCK ROUTE DESIGNATION:
 PREFERRED ROADWAY: RANDALL ROAD.
 SECONDARY ROADWAY: IL RTE 72.
 DESIGN CRITERIA: BDE CHAPTER 36, 46, 48.

GENERAL NOTES

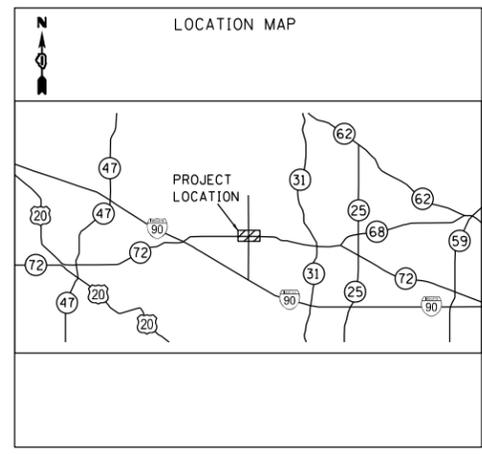
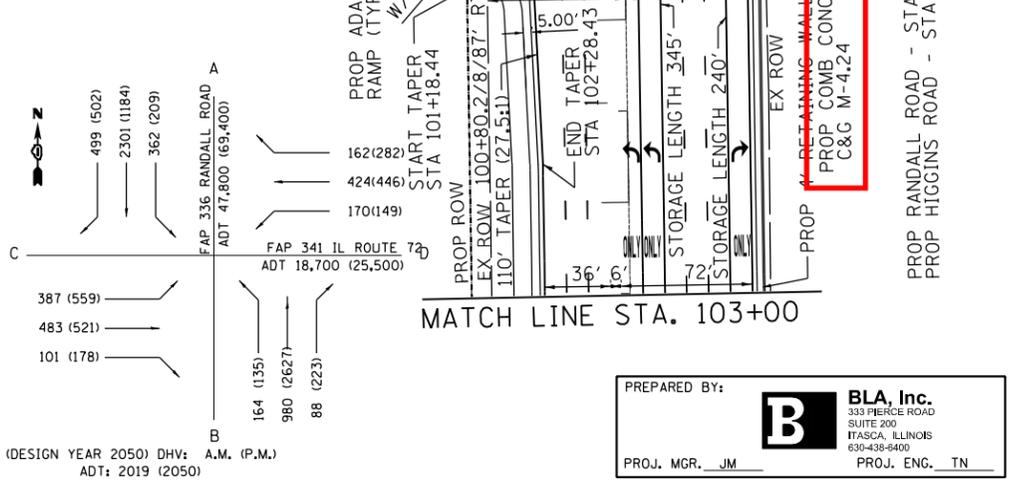
- TYPE M-4.24 CURB AND GUTTER ON THE OUTSIDE OF THE ROADWAY/SHOULDERS.
- TYPE M-4.12 CURB AND GUTTER ON THE MEDIANS.
- TYPE N/A CURB AND GUTTER ON THE CORNER ISLANDS.
- ALL DIMENSIONS ARE E-E, UNLESS OTHERWISE NOTED
- THE RIGHT-OF-WAY LIMITS ARE PRELIMINARY.
- DESIGN VEHICLE TURNING MOVEMENTS ARE ACCOMMODATED PER AUTOTURN SOFTWARE, VERSION 9.
- THE SCOPE OF WORK: WIDEN RANDALL ROAD TO PROVIDE A THIRD THROUGH LANE THROUGH THE INTERSECTION, EXTEND RIGHT TURN LANE ON EAST LEG OF HIGGINS ROAD AND LEFT AND RIGHT TURN LANES ON WEST LEG OF HIGGINS ROAD. RESURFACE ENTIRE INTERSECTION. PROVIDE GRADED SHELF ON WEST SIDE OF RANDALL ROAD FOR FUTURE BIKE PATH. PROVIDE PEDESTRIAN LANDING PADS AND PEDESTRIAN PED HEADS ON WEST LEG. MODERNIZE TRAFFIC SIGNALS.
- INTERSECTION DESIGN EXCEPTIONS:
 OVERALL LOS = D vs C (AM & PM)
 NB THROUGH MOVEMENT LOS (PM) (D vs C)
 NB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 SB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 EB THROUGH MOVEMENT LOS (PM) (E vs D)
 WB THROUGH MOVEMENT LOS (AM) (E vs D)
 WB THROUGH MOVEMENT LOS (PM) (F vs D)
 EB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 WB LEFT TURN MOVEMENT LOS (PM) (F vs D)
 WB RIGHT TURN MOVEMENT LOS (PM) (F vs D)
- M-4 VS. B-6
- MEDIAN CROSS SLOPE >1.5%
- ADDITIONAL NOTES:
 RAMPS AS SHOWN ARE IN COMPLIANCE WITH THE AMERICAN DISABILITIES ACT.
 THIS INTERSECTION IS NOT A 5% LOCATION.
 THE INTERSECTION IS PART OF AN INTERCONNECTED SYSTEM FROM BIG TIMBER ROAD TO HUNTLEY ROAD.



TRAFFIC DATA

MOVEMENT	YEAR 2019 30TH MAXIMUM HOUR TRAFFIC		PERCENT TRUCK TRAFFIC IN 30TH MAX. HOUR		ESTIMATED PERCENT INCREASE BY 2050	YEAR 2050 30TH MAXIMUM HOUR TRAFFIC	
	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.
AD (L)	298	173	2	1	21	362	209
AB (T)	1574	819	3	3	45	2301	1184
AC (R)	310	308	2	5	63	499	502
BC (L)	110	88	7	14	53	164	135
BA (T)	672	1806	5	1	46	980	2627
BD (R)	73	184	3	1	21	88	223
CA (L)	233	348	6	8	61	387	559
CD (T)	378	413	5	8	26	483	521
CB (R)	66	118	14	10	51	101	178
DB (L)	148	130	3	3	15	170	149
DC (T)	335	345	5	4	29	424	446
DA (R)	131	231	4	5	22	162	282
TOTAL A	3,218	3,685	-	-	46	4,691	5,363
TOTAL B	2,643	3,145	-	-	43	3,804	4,496
TOTAL C	1,432	1,620	-	-	45	2,058	2,341
TOTAL D	1,363	1,476	-	-	24	1,689	1,830

T = THROUGH, L = LEFT, R = RIGHT



INTERSECTION DESIGN STUDY

FAP ROUTE 336 (RANDALL ROAD) WITH FAP ROUTE 341 (IL ROUTE 72)

SEC. NO. 19-00514-00-WR PROJ. NO. _____

SCALE 1"=50' COUNTY KANE

SJN: _____ REV. NO. 5

DESIGNED BY BLA, INC. DATE 12/2021

SATISFACTORY _____ DISTRICT GEOMETRICS ENGINEER DATE _____

SATISFACTORY _____ DISTRICT PROGRAM DEVELOPMENT ENGINEER DATE _____

SATISFACTORY _____ DISTRICT OPERATIONS ENGINEER DATE _____

APPROVED _____ DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER DATE _____

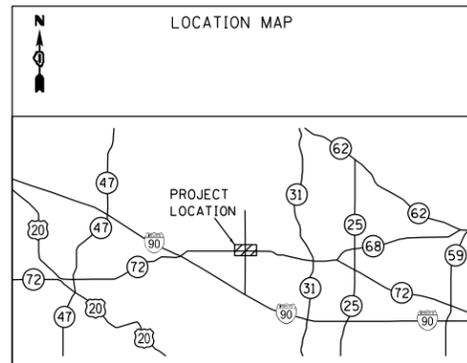
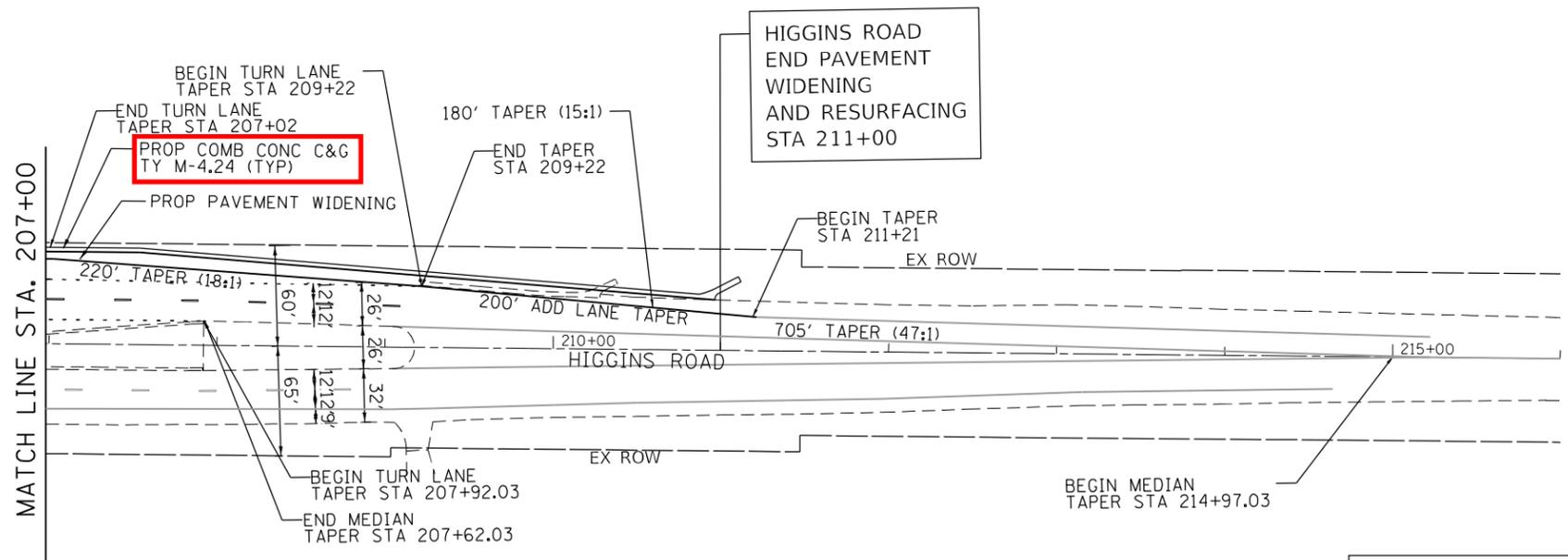
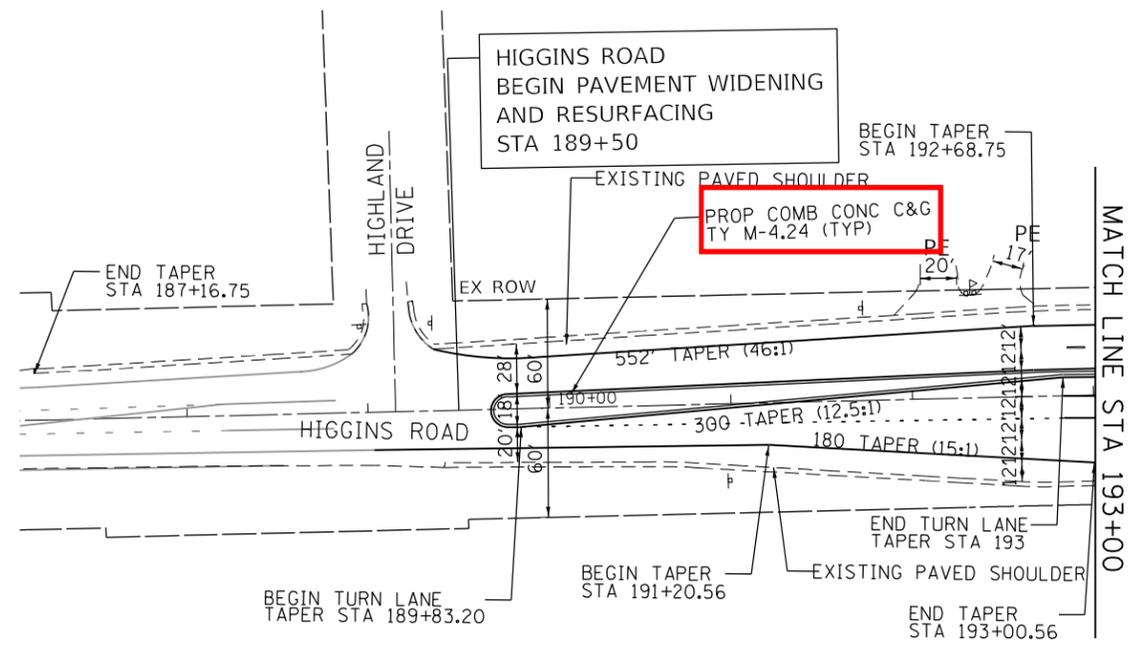
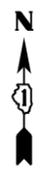
CADD FILE NAME: [] I.D.S. SHEET 1 OF 10

PREPARED BY: **BLA, Inc.**
 333 PIERCE ROAD
 SUITE 200
 ITASCA, ILLINOIS
 60143-5400

PROJ. MGR. JM PROJ. ENG. TN

PLOT DATE = 4/18/2022
 FILE NAME = W:\94-932 KDOT Randall Higgins Phase 1\CADD EXHIBITS\Intersection Design Study\19-00514-00-WR-001 Cover_Sheet.dgn
 SCALE = 100.00 / 1"
 USER NAME = c:\user

PLOT DATE = 2/17/2022
 FILE NAME = W:\894-032 KDOT Rendell Higgins Phase 19-00514-00-WR-002 Matchline-01.dgn
 PLOT SCALE = 100.00 / in.
 USER NAME = trestor



PREPARED BY: **B** **BLA, Inc.**
 333 PIERCE ROAD
 SUITE 200
 ITASCA, ILLINOIS
 630-438-8400
 PROJ. MGR. JM PROJ. ENC. TN

INTERSECTION DESIGN STUDY			
FAP ROUTE <u>336</u>	(RANDALL ROAD)		
FAP ROUTE <u>341</u>	(IL ROUTE 72)		
SEC. NO. <u>19-00514-00-WR</u>	PROJ. NO. _____		
SCALE <u>1"=50'</u>	COUNTY <u>KANE</u>		
SJN : _____	REV. NO. <u>5</u>		
DESIGNED BY <u>BLA, INC.</u>	DATE <u>12/2020</u>		
SATISFACTORY _____	DISTRICT GEOMETRICS ENGINEER	DATE _____	
SATISFACTORY _____	DISTRICT PROGRAM DEVELOPMENT ENGINEER	DATE _____	
SATISFACTORY _____	DISTRICT OPERATIONS ENGINEER	DATE _____	
APPROVED _____	DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER	DATE _____	
CADD FILE NAME : [_____]	I.D.S. SHEET 2 OF 10		



Design Exception Request Project Identification



Key Route	Marked Route/Road Name	Contract Number	State Job Number	Section Number
FAP 341	IL Rte 72 / Randall Road			

County(ies)	Municipality	Local Agency
Kane	Elgin	Kane County DOT

LRS Section Number	Permit Applicant	Permit Number	Project Length
19-00514-00-WR			0.44 mi (2,300 ft)

Project Limits

Randall Road at Higgins Road

Current Posted Speed	Estimate of Cost	Functional Classification	Design Yr	Design Traffic ADT	Design Traffic DHV
45 mph	\$5,409,703.00	Other Principal Art	2050	25,500	AM 2058 PM 2341

On the NHS System?	Structure Numbers	Type of Project (Construction, Reconstruction, 3R, 3P, SMART, HSIP, etc.)
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	N/A	Reconstruction (widen and resurface)

Brief Project Description

On Randall Road widen and resurface the four-lane facility to a six-lane facility, convert shoulder and ditch drainage to closed storm sewer, provide a detention basin in the northeast quadrant, extend southbound right turn lane, provide for multi-use facilities on west side, install pedestrian heads and pedestrian crosswalks. On Higgins Road extend the eastbound left and right turn lanes and the westbound right turn lane.

EXCEPTION DOCUMENTATION

Level of Exception Level 1 Level 2

Design Element for Which an Exception is Requested

Median Cross Slope

Design Element Policy Value

1.5% min - BDE Figure 34-3.B

Proposed Design Element Value

<1.5% (ranges 0.22% to 1.37%)

Location(s) of Exception

Station 190+50 to Station 192+00

Crash History and Potential of Exception Location(s)

110 crashes occurred at this intersection over the five year study period from 2013 to 2017 and the intersection is not a Five Percent Report location. Zero crashes are related to this design exception. The proposed scope of work will not improve the safety and operations related to this exception request.

Cost of Using Policy Value	Cost of Using Proposed Exception Value
\$10,000,000.00	\$5,409,703.00

Impacts Other Than Cost of Using Policy Value

Increased impact to adjacent wetlands, potential Section 6(f) property, residential relocation, access changes

Proposed Mitigation to Address Exception

SCAT to be implemented to maximize the operations of the overall intersection.

Geometric Compatibility with Adjacent Sections

Compatible

Potential Effects on Other Design Elements

N/A

Potential Impacts on Mobility or Traffic Operations

N/A

Summary of Justification for Exception

There is no cost benefit to reconstructing the profile when a safety issue is not identified. Where feasible, leveling binder will be used to correct cross slopes.

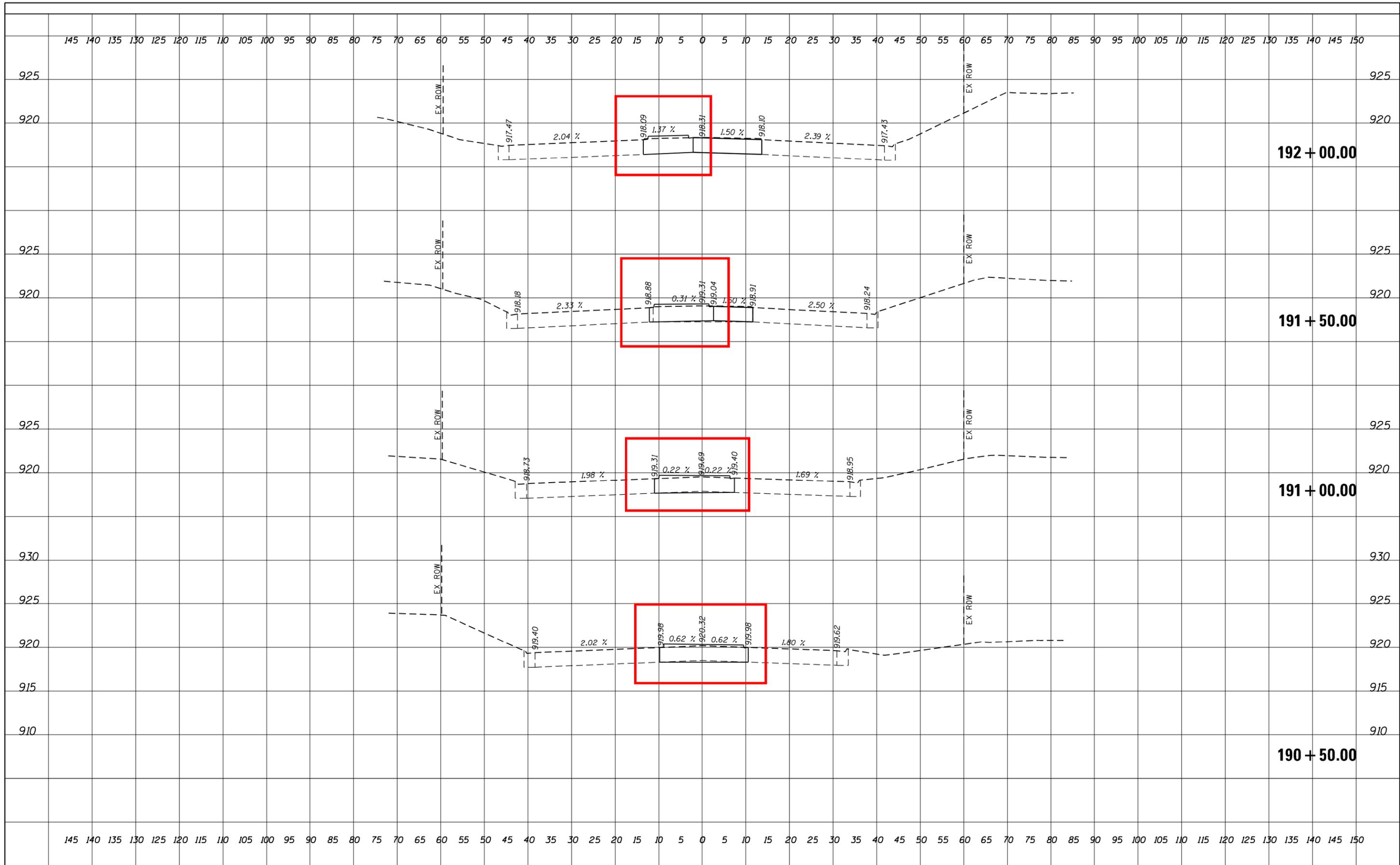
Coordination Meeting Date	Proposed By	Date
4/13/2022	Jennifer Mitchell, PE, PTOE, ENV SP	February 15, 2022

APPROVAL/DISAPPROVAL

BDE Approval Date	FHWA Approval Date (Level One)
4/13/2022	

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
NO.	TEMPLATE	
	AREAS	
	CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
NO.	TEMPLATE	
	AREAS	
	CHECKED	



FILE NAME = W:\894-032 KDOT Rendell Higgins Phase I\CADD SHEETS\Cross Sections\Higgins\19-00514-00-WR-1.dwg	USER NAME = tnestor	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HIGGINS ROAD STA. 192+00.00 STA. 190+50.00		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	PLOT SCALE = 20.00' / in.	CHECKED -	REVISED -		SCALE:	SHEET 11 OF 12 SHEETS	STA.	TO STA.	CONTRACT NO.			
	PLOT DATE = 2/17/2022	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

ATTACHMENT 8
ESTIMATE OF COST



**Illinois Department
of Transportation**

Project: Randall Road at IL Rte 72
 Route: FAP 336
 Agency: Kane County DOT
 County: Kane
 Section No: 19-00514-00-WR

Estimate of Cost

ITEM NO.	ITEM NO.	Item	Unit of Measure	Total Quantity	Unit Price	Total Cost
1	20200100	EARTH EXCAVATION	CU YD	5,952	\$20.00	\$119,044
2	21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	2,934	\$6.00	\$17,602
3	25000210	SEEDING, CLASS 2A	ACRE	1	\$2,310.00	\$1,305
4	28000400	PERIMETER EROSION BARRIER	FOOT	8,672	\$2.25	\$19,512
5	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	1,456	\$43.85	\$63,835
6	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	5,398	\$16.42	\$88,635
7	40603240	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90	TON	5,517	\$83.42	\$460,228
8	40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	5,517	\$95.99	\$529,577
9	42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	1,135	\$6.00	\$6,807
10	42400800	DETECTABLE WARNINGS	SQ FT	150	\$45.00	\$6,750
11	44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	39,745	\$2.40	\$95,388
12	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	174	\$10.00	\$1,740
13	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	3,279	\$5.00	\$16,395
14	44003100	MEDIAN REMOVAL	SQ FT	8,666	\$5.00	\$43,332
15	54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	3	\$860.00	\$2,580
16	54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	3	\$1,360.00	\$4,080
17	54213675	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	EACH	2	\$1,131.00	\$2,262
18	550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	3,827	\$53.25	\$203,782
19	550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	707	\$55.80	\$39,456
20	550A0380	STORM SEWERS, CLASS A, TYPE 2 18"	FOOT	1,069	\$60.59	\$64,777
21	550A0410	STORM SEWERS, CLASS A, TYPE 2 24"	FOOT	1,316	\$51.00	\$67,131
22	550A0430	STORM SEWERS, CLASS A, TYPE 2 30"	FOOT	2,183	\$81.65	\$178,209
23	55100500	STORM SEWER REMOVAL 12"	FOOT	672	\$18.65	\$12,539
24	55100700	STORM SEWER REMOVAL 15"	FOOT	25	\$19.50	\$497
25	55101200	STORM SEWER REMOVAL 24"	FOOT	490	\$18.50	\$9,059
26	55101400	STORM SEWER REMOVAL 30"	FOOT	254	\$19.50	\$4,956
27	55101900	STORM SEWER REMOVAL 48"	FOOT	196	\$30.00	\$5,894
28	55102000	STORM SEWER REMOVAL 54"	FOOT	68	\$36.00	\$2,451
29	60201205	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 12 FRAME AND GRATE	EACH	47	\$2,740.25	\$128,792
30	60204905	CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 12 FRAME AND GRATE	EACH	14	\$4,160.00	\$58,240
31	60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	5	\$3,456.92	\$17,285
32	60236900	INLETS, TYPE A, TYPE 12 FRAME AND GRATE	EACH	27	\$1,851.00	\$49,977
33	60500040	REMOVING MANHOLES	EACH	17	\$642.50	\$10,923
34	60500050	REMOVING CATCH BASINS	EACH	13	\$450.00	\$5,850
35	60500060	REMOVING INLETS	EACH	7	\$350.00	\$2,450
36	60608582	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.24	FOOT	5,779	\$28.35	\$163,835
37	60618760	CONCRETE MEDIAN, TYPE M-4.12	SQ FT	3,764	\$13.60	\$51,184
38	60623800	CONCRETE BARRIER MEDIAN	SQ FT	1,570	\$14.60	\$22,917
39	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	24	\$2,500.00	\$60,000
40	67100100	MOBILIZATION	L SUM	1.0	\$240,000.00	\$240,000
41	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	16,173	\$0.88	\$14,232
42		TRAFFIC SIGNAL W/ ITS COMPONENTS	L SUM	1	\$500,000.00	\$500,000
		RETAINING WALL	L SUM	1	\$470,000.00	\$470,000
43		LIGHTING	L SUM	1	\$250,000.00	\$250,000
44	M2010110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	75	\$14.00	\$1,050
45	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1.0	\$240,000.00	\$240,000
46	Z0013798	CONSTRUCTION LAYOUT	L SUM	1.0	\$160,000.00	\$160,000
					Contingency (20%)	\$902,912
					TOTAL ESTIMATE COST	\$5,417,470

Made by Tyler Nestor Date 12/21/2021
 Checked by _____ Date _____

ATTACHMENT 9

BICYCLE AND PEDESTRIAN ASSESSMENT

BICYCLE AND PEDESTRIAN ASSESSMENT

Randall Road at IL Rte 72

Existing Conditions

The intersection of Randall Road at IL Rte. 72 has been evaluated for the potential of bicycle and pedestrian accommodations in accordance with the Illinois Department of Transportation (IDOT) Bureau of Local Roads and Streets Manual, Chapter 42 Bicycle and Pedestrian Accommodations. The subject intersection is signalized, and the signal is coordinated north-south along Randall Road. Each roadway is bituminous and provides at the intersection two 12-foot wide through lanes, two 12-foot left turn lanes and a 12-foot right turn lane. On each roadway the divided roadway median transitions from painted, to mountable corrugated, to raised median adjacent to the dual left turn lanes. Shoulder widths on both Randall Road and IL Rte. 72 vary between 4 and 8 feet with each shoulder bordered by M-4.24 curb and gutter. Higgins Road has a posted speed limit of 45 miles per hour (mph) and Randall Road has a posted speed of 50 mph. The existing average daily traffic (ADT) within the Randall Road corridor is 47,800 vehicles per day (vpd).

The area of consideration, which is a boundary of 1.2 miles from the intersection, is located in un-incorporated Kane County and abuts the Village of Sleepy Hollow, Village of West Dundee, and the City of Elgin. The land uses are predominantly commercial and industrial businesses located to the south, west and north. Single family subdivisions are east of Randall Road. Two new residential multi-family developments are within the project area. Watermark at the Grove is located on the northwest quadrant of Randall Road and Northwest Parkway. The development includes a multi-use path around the detention facility. A second development, Seasons at Randall, on the southwest quadrant of Randall Road at Recreation Drive provides apartment living. In addition, there is open land for development nearest the Randall Road at Higgins Road intersection.

Currently, Pace Route 550 runs along Randall Road and is accessible to non-motorists within the project corridor.

Various community resources exist within the 1.2-mile walking/biking range of the intersection project. Figure 1 shows the resources within the vicinity of the project. These community resources include residential, commercial, 14 parks, 2 schools, fire protection district and a fire station, a police station, a library, 3 forest preserves, 2 golf courses, a church, and a zoo.

Within the project limits, Randall Road and Higgins Road lack bicycle trails, pedestrian trails, and sidewalks. However, intermittent bicycle trails are present in the surrounding areas.

- At the intersection of Higgins Road and Tyrrell Road, approximately one mile to the west of the project in the Village of Gilberts, an existing gravel multi-use path circulates around the industrial park in the southwest quadrant of the intersection and a paved multi-use path extends north 0.8 miles along Tyrrell Road.
- South on Tyrrell Road at I-90, on the east side, is a neighborhood park. A paved path runs along Tyrrell Road to provide connectivity between the residential neighborhoods to the north and the park.
- Northwest of the intersection of Randall Road and Recreation Drive in the Village of West Dundee a paved multi-use path circulates around the Dundee Township Park District and Randall Oaks Park.
- On Carrington Drive, 600 feet east of Randall Road, a paved multi-use path starts and travels easterly until it intersects with Higgins Road in the Village of West Dundee.
- On Sleepy Hollow Road at the Village of Sleepy Hollow government site located approximately 1.0 mile due east of the Randall Road at Northwest Parkway/Joy Ln intersection, a gravel multi-use path extends south approximately 0.9 miles to connect to the Jelke Creek Forest Preserve trails system.
- Northwest of the intersection of Higgins Road and Sleepy Hollow Road within the Schweitzer Woods Forest Preserve is a network of hiking trails.
- North of Binnie Road and west of Randall Road within the Binnie Forest Preserve is a network of hiking trails.

These existing bicycle and pedestrian trails connect to others outside of the project area as shown on Figure 2, Kane and Northern Kendall County Bike Map, providing regional connectivity.

Public Coordination

Documentation of related information is included in the following links.

- [Kane County Bike and Pedestrian Plan, 2012](#)
- [Kane and Northern Kendall County Bike Map](#) ,2017-2018
- [Bikeway Master Plan City of Elgin](#) , 2008
- [Village of Sleepy Hollow Comprehensive Land Use Plan](#), 2009
- Village of West Dundee Comprehensive Plan, 2005

The plans and policies of each local agency have been reviewed and reflect the following:

- The City of Elgin Master Bike Map, Figure 3, identifies multiple future facilities within the project area. The City of Elgin defines their facilities as primary bikeway, secondary bikeway, and off-street trails.

Primary bikeways provide travel on minor arterials or collector streets, are transportation focused versus recreational focused, and should be treated with bike lanes or shared lanes depending on the street characteristics. A side path may be provided in addition to or in lieu on on-street.

Secondary bikeways provide circulation within and between neighborhoods, services, schools, and parks, are both recreational and transportation focused, and should be signed as bike routes or provide side paths.

Off-street trails are through parks, forest preserves, waterways and utility easements.

1. A primary bikeway is proposed along Randall Road from the north corporate limit at Binnie Road extending south 10.44 miles to Silver Glen Road to match an existing facility.
 2. A variety of primary and secondary bikeways and an off-street are proposed for the business parks southwest and southeast of Randall Road at I-90.
- The Village of West Dundee Comprehensive Plan, Area Trails/Open Space Map, Figure 4 details multiple facilities throughout the project area as planned by the Dundee Township Park District.
 1. A bike path is identified on Higgins Road starting 1.72 miles east of the Randall Road intersection and extending westerly past Randall Road.
 2. A bike path is identified to start at the Randall Road and the south municipal limit, extend easterly through the green space and subdivisions to connect to Sleep Hollow Road.
 3. A bike path is identified on Binnie Road starting approximately 0.25 miles west of Randall Road, extending easterly to Huntley Road, then southeasterly along Huntley Road.
 4. A variety of bike paths through open space and subdivisions east of Randall Road between Binnie/Huntley Roads and Higgins Road.
 - The Village of Sleepy Hollow does not have a bicycle plan but does discuss bicycle and pedestrian facilities in the Comprehensive Plan Update -2009 (Plan). The Plan indicates consideration of facilities, either off-road or on, on collector roadways to connect park, commercial, and residential areas.
 - The Village of Gilberts does not provide any information online regarding their comprehensive or transportation plan.

Assessment of Bicycle Travel

Based on the existing land uses, lack in connectivity of existing facilities, and local plans in support of facilities, implementing bicycle and pedestrian facilities at the Randall Road and Higgins Road intersection would benefit non-motorized travel.

The City of Elgin Master Bike Plan, which is the plan that proposes a facility on Randall Road, determines if a facility is on-road or off-road based on the roadway type, posted speed limit, and ADT. The projected 2050 ADT on Randall Road, a principal arterial, is 61,100 vpd and on Higgins Road, a principal arterial, is 25,500. The posted speed on Randall Road is 50 mph and on Higgins Road is 45 mph.

From Tables 1 through 4 in the City of Elgin Master Bike Plan the roadway type only indicates a wide curb lane or shoulder for the bike facility. However, when also considering the posted speed and corresponding ADT of each roadway, a side path is recommended. The recommended path width ranges from 8 feet to 12 feet, depending on usage.

Comparing this information to the design requirements as stated in the Bureau of Local Roads and Streets Manual, a side path along Randall Road shall be 10 feet from the traveled way, or five feet from face of curb, and a minimum width of 8 feet. Higgins Road is under the jurisdiction of IDOT and thus the design requirements of the Bureau of Design and Environmental states a minimum path width of 10 feet shall be used and at a minimum a 10-foot offset from outside edge of shoulder shall be provided.

Kane County will coordinate with the jurisdictional agencies to determine the ability to implement facilities along Randall Road and Higgins Road.

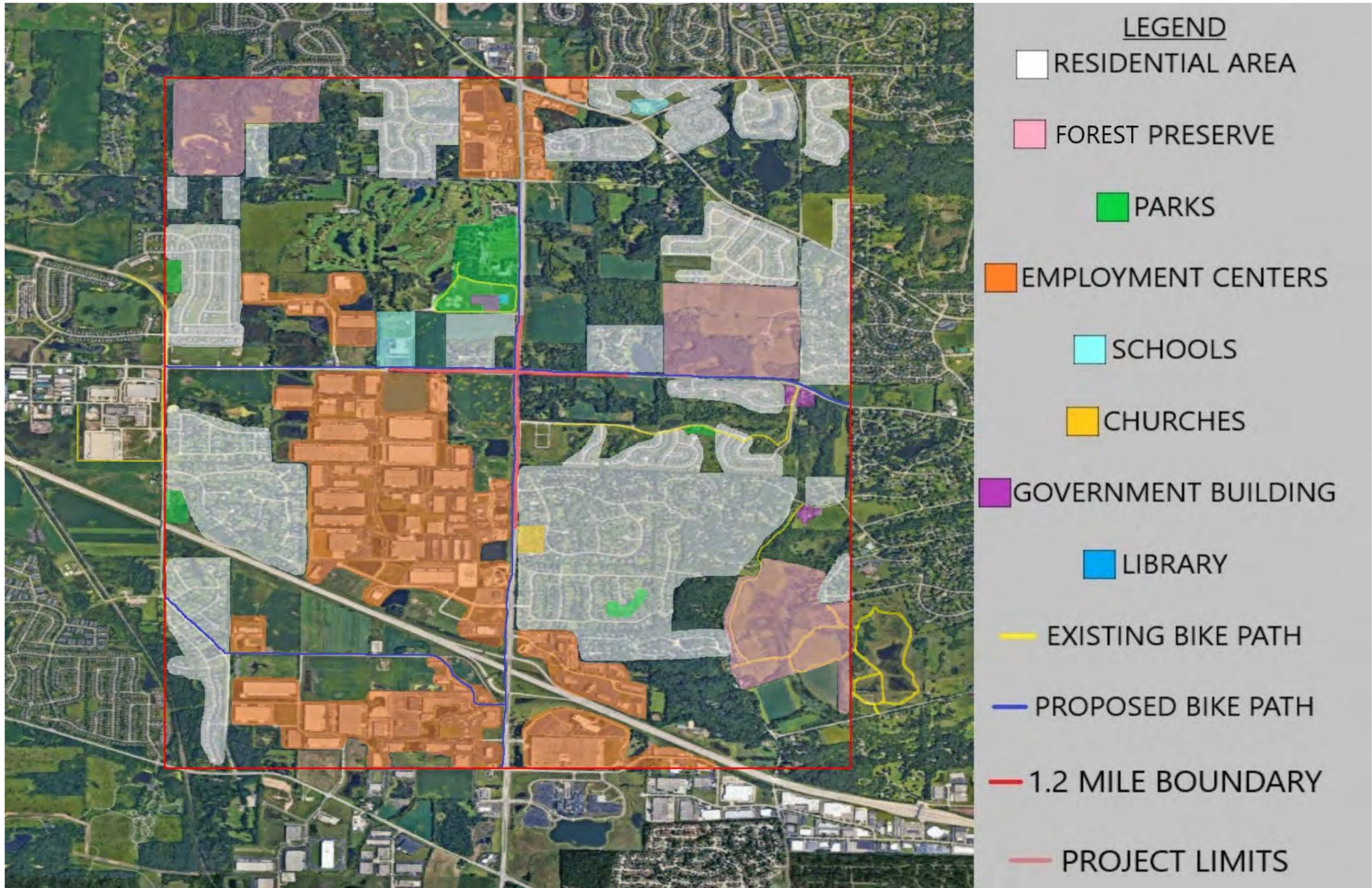


Figure 1. Bicycle Travel Generators within 1.2 Miles of the Project

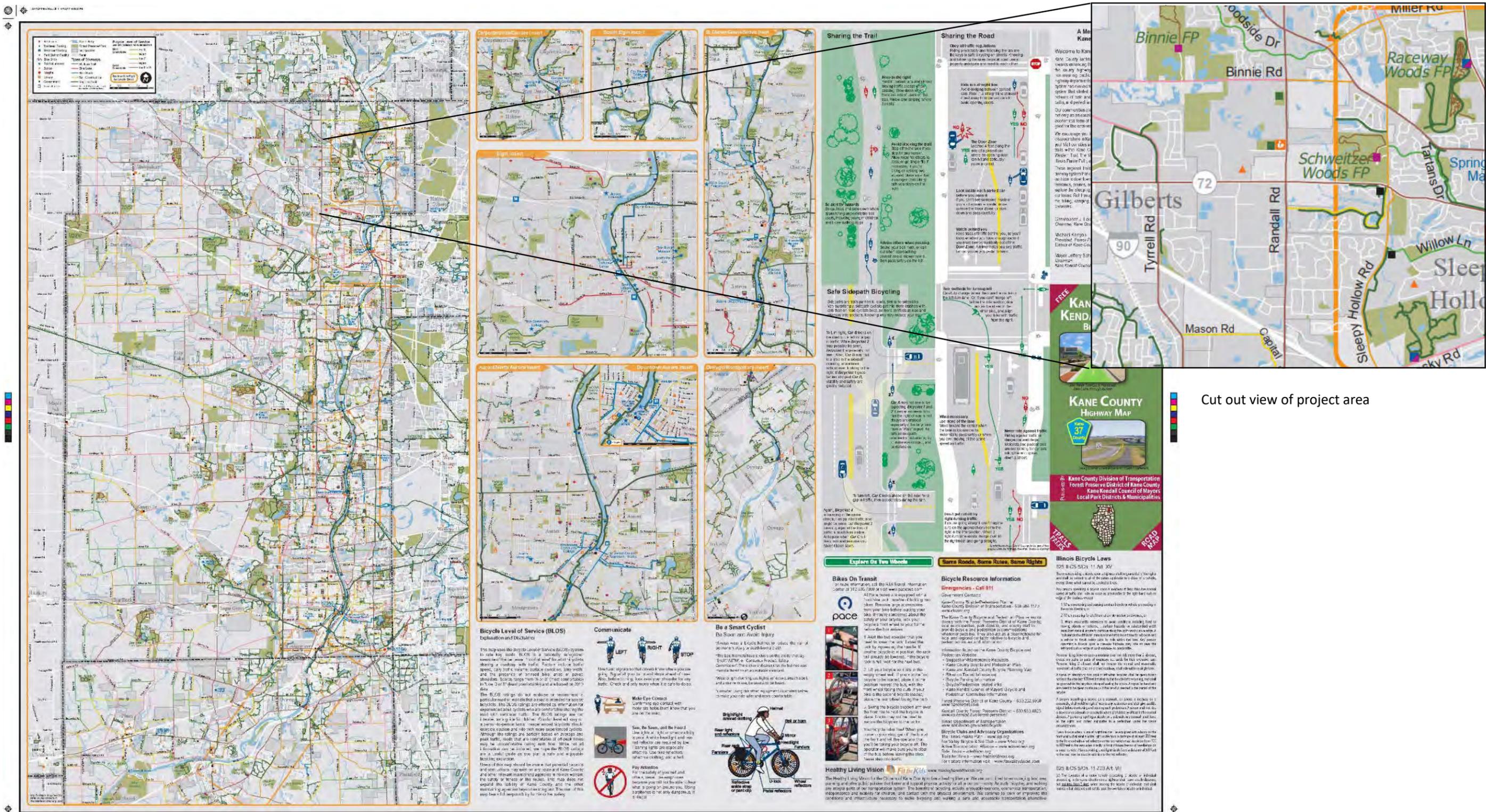


Figure 2. Kane and Northern Kendall County Bike Map

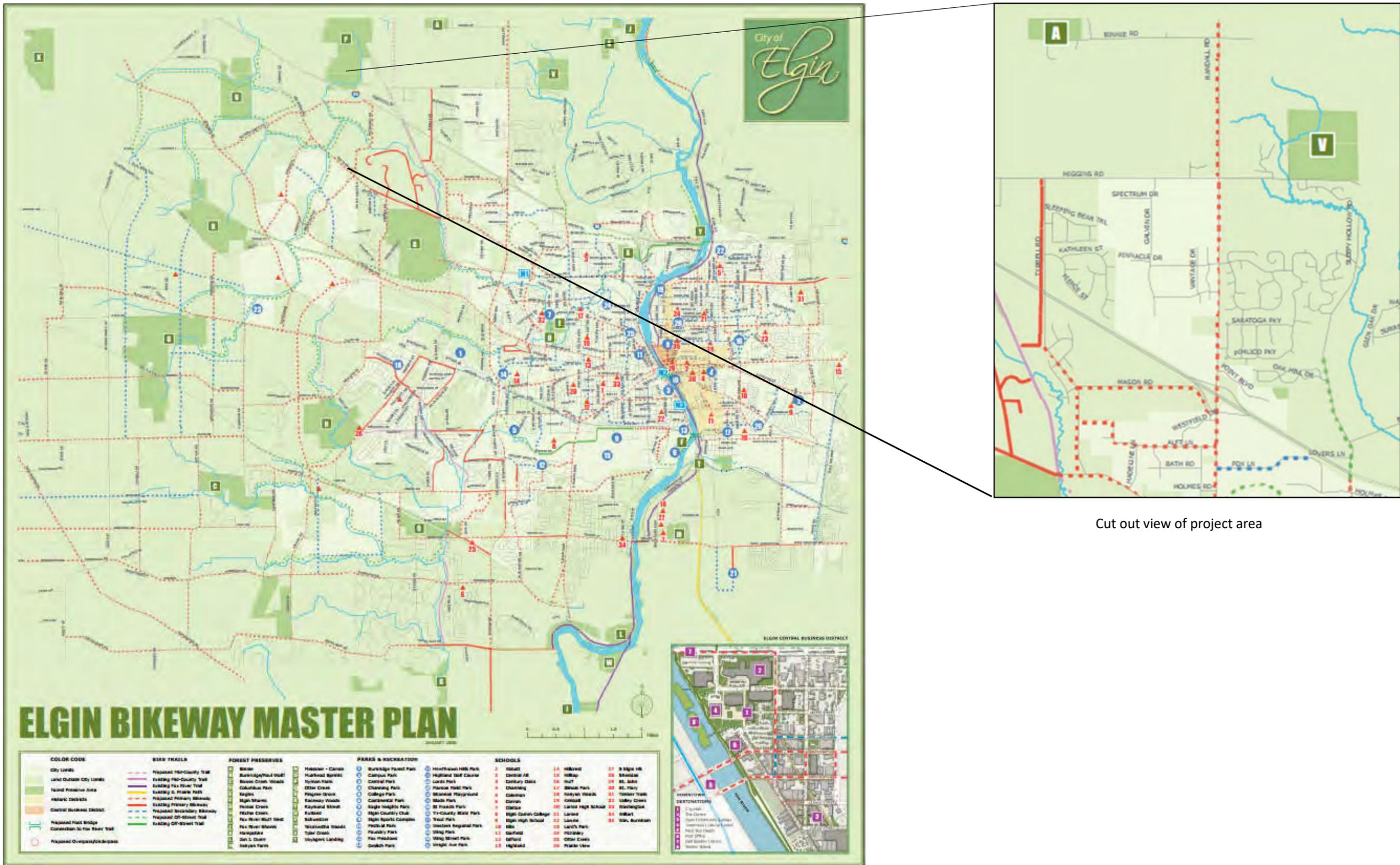
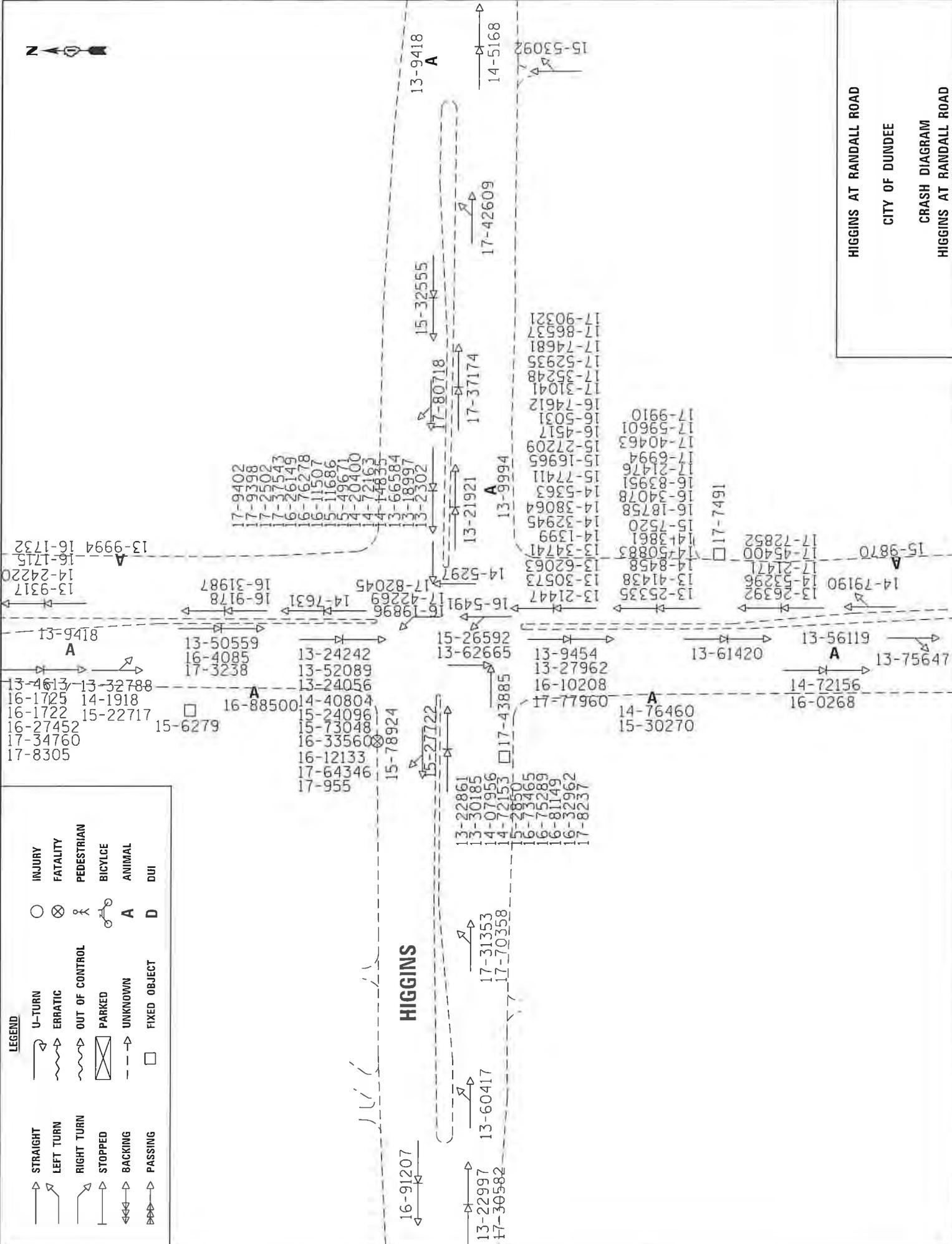
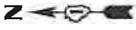


Figure 3. City of Elgin Bike Paths Map

ATTACHMENT 10
CRASH DATA AND COLLISION DIAGRAM



HIGGINS AT RANDALL ROAD
 CITY OF DUNDEE
 CRASH DIAGRAM
 HIGGINS AT RANDALL ROAD

LEGEND

↑	STRAIGHT	↗	U-TURN	○	INJURY
↖	LEFT TURN	⚡	ERRATIC	⊗	FATALITY
↘	RIGHT TURN	⚡	OUT OF CONTROL	⚡	PEDESTRIAN
⏹	STOPPED	⊠	PARKED	⚡	BICYCLE
↔	BACKING	⋯	UNKNOWN	A	ANIMAL
↔	PASSING	□	FIXED OBJECT	D	DUI

CRASH SUMMARY 2013 to 2017

Location:
 1 - Galvin Drive at IL 72
 2 - Randall Road at IL 72
 3 - Richmond Drive at IL 72
 4 - Carrington Drive at Randall Road

FILE NAME	LOCATION	CRASH REPORT NUMBER	DATE	TIME	HOUR	WEATHER	LIGHT	CONDITIONS	CARS INVOLVED	TYPE #	INCIDENT	K	A	B	C	PDO	DIR 1	DIR 2
201501054114	1	15-15801	3/19/2015	7:42 PM	19	1	5	DARKNESS	1	4	ANIMAL					X	WEST	-
201501026731	1	15-74411	12/1/2015	5:57 AM	5	2	4	RAIN/DARK	1	4	ANIMAL					X	EAST	-
201400151690	1	14-15418	3/14/2014	8:38 AM	8	1	1	-	2	10	TURNING		2				SOUTH	WEST
201501298286	1	15-78502	12/17/2015	8:00 AM	8	1	1	-	2	10	TURNING					X	SOUTH	WEST
201601239004	1	16-75558	10/11/2016	5:31 PM	17	1	1	-	2	10	TURNING					X	NORTH	WEST
201601324274	1	16-81441	11/3/2016	1:15 AM	1	1	4	DARKNESS	2	10	TURNING					X	NORTH	EAST
201601401863	1	16-85961	11/23/2016	8:24 AM	8	1	1	-	2	10	TURNING					X	NORTH	EAST
201501013885	1	15-1472	1/9/2015	4:57 PM	16	1	3	DUSK	2	11	REAR END					X	EAST	EAST
201601090537	1	16-28580	4/20/2016	7:24 AM	7	1	1	-	2	11	REAR END					X	WEST	WEST
201701031584	1	17-8404	2/1/2017	3:17 PM	15	1	1	-	2	11	REAR END					X	EAST	EAST
20170105614	1	17-16685	3/3/2017	4:59 PM	16	1	1	-	2	11	REAR END						NORTH	NORTH
201301416488	1	13-72968	12/12/2013	8:40 AM	8	1	1	-	2	15	ANGLE			1			SOUTH	WEST
201401184244	1	15-55665	9/11/2015	8:39 AM	8	1	1	-	2	15	ANGLE						SOUTH	WEST
201701240288	1	17-67591	9/16/2017	7:43 PM	19	1	5	DARKNESS	2	15	ANGLE					X	NORTH	WEST
201701351356	1	17-90592	12/27/2017	7:27 PM	19	1	5	DARKNESS	2	15	ANGLE			2			NORTH	EAST
201400089519	2	14-5297	1/27/2014	8:55 PM	20	1	5	DARKNESS	2	15	ANGLE					X	WEST	NORTH
201701155472	2	17-42269	6/12/2017	4:44 AM	4	1	5	DARKNESS	2	15	ANGLE	1			1		NORTH	EAST
20130125752	2	13-9418	5/5/2013	7:19 PM	19	1	1	-	1	4	ANIMAL					X	WEST	-
201501361709	2	15-9870	4/25/2015	8:37 AM	8	2	1	RAIN	1	4	ANIMAL					X	SOUTH	-
201501385764	2	15-30270	12/6/2015	6:52 PM	18	1	4	DARKNESS	1	4	ANIMAL					X	EAST	-
201601021483	2	16-3897	1/16/2016	6:12 PM	18	1	4	DARKNESS	1	4	ANIMAL					X	SOUTH	-
201601393967	2	16-12133	5/7/2016	11:54 PM	23	1	4	DARKNESS	1	4	ANIMAL					X	SOUTH	-
201601453560	2	16-31241	11/20/2016	2:15 AM	2	1	4	DARKNESS	1	4	ANIMAL					X	SOUTH	-
201601401598	2	16-88500	12/4/2016	5:38 AM	5	1	4	DARKNESS	1	4	ANIMAL					X	SOUTH	-
201701049755	2	17-14946	2/24/2017	11:49 AM	11	3	5	SNOW/DARK	1	4	ANIMAL					X	NORTH	-
201701391316	2	17-34760	10/22/2017	12:00 AM	0	1	4	DARKNESS	1	4	ANIMAL					X	SOUTH	-
201501297844	2	15-78924	12/20/2015	4:49 PM	16	1	5	DARKNESS	1	6	FIXED OBJECT	1				X	EAST	-
2017013934187	2	17-7491	3/12/2017	2:35 PM	14	1	1	-	1	6	FIXED OBJECT					X	WEST	-
201701431204	2	17-43885	12/24/2017	12:47 PM	12	3	1	SNOW	1	6	FIXED OBJECT					X	SOUTH	-
201400294974	2	14-72163	11/15/2014	9:26 PM	21	3	5	SNOW/DARK	2	14	OOC / HEAD ON					X	NORTH	WEST
201301035085	2	13-2302	1/15/2013	8:32 AM	8	1	1	-	2	11	REAR END					-	WEST	WEST
201301117116	2	13-18997	4/8/2013	6:52 PM	18	1	5	DARKNESS	2	11	REAR END			1			WEST	WEST
201301122581	2	13-21447	4/22/2013	2:07 PM	14	1	1	-	2	11	REAR END						NORTH	NORTH
201301201484	2	13-22997	4/30/2013	7:33 PM	19	1	1	-	2	11	REAR END					X	EAST	NORTH
201301206075	2	13-24242	5/6/2013	6:55 PM	18	1	1	-	2	11	REAR END					X	NORTH	EAST
201301205739	2	13-9454	5/6/2013	9:21 AM	9	1	1	-	2	11	REAR END					X	SOUTH	SOUTH
201301141588	2	13-25335	5/11/2013	12:00 PM	12	1	1	-	2	11	REAR END					X	NORTH	NORTH
201301088664	2	13-26392	5/16/2013	1:57 PM	13	1	1	-	3	11	REAR END			1			NORTH	NORTH
201301149537	2	13-30573	6/4/2013	3:55 PM	15	1	1	-	2	11	REAR END					X	NORTH	NORTH
201301279640	2	13-41438	7/23/2013	2:56 PM	14	1	1	-	3	11	REAR END					X	NORTH	NORTH
201301312675	2	13-50559	8/31/2013	10:41 PM	22	1	5	DARKNESS	2	11	REAR END					X	SOUTH	SOUTH
201301321894	2	13-52089	9/7/2013	4:00 AM	4	1	5	DARKNESS	3	11	REAR END					X	SOUTH	SOUTH
201301369150	2	13-62063	10/22/2013	11:09 AM	11	1	1	-	2	11	REAR END					X	NORTH	NORTH
201301387416	2	13-66584	11/11/2013	7:35 AM	7	1	1	-	2	11	REAR END					X	WEST	WEST
201301387906	2	13-24056	11/12/2013	5:47 PM	17	1	4	DARKNESS	2	11	REAR END					X	SOUTH	SOUTH
201301397271	2	13-4613	11/21/2013	6:43 AM	6	1	1	-	3	11	REAR END					X	SOUTH	SOUTH
201400070706	2	14-1399	1/9/2014	8:41 AM	8	1	1	-	2	11	REAR END					X	NORTH	NORTH

CRASH SUMMARY 2013 to 2017

Location:
 1 - Galvin Drive at IL 72
 2 - Randall Road at IL 72
 3 - Richmond Drive at IL 72
 4 - Carrington Drive at Randall Road

FILE NAME	LOCATION	CRASH REPORT NUMBER	DATE	TIME	HOUR	WEATHER	LIGHT	CONDITIONS	CARS INVOLVED	TYPE #	INCIDENT	K	A	B	C	PDO	DIR 1	DIR 2
201400090462	2	14-5363	1/28/2014	7:08 AM	7	1	1	-	2	11	REAR END					X	NORTH	NORTH
201400105306	2	14-7956	2/8/2014	2:32 PM	14	3	1	SNOW	2	11	REAR END					-	EAST	EAST
20140142358	2	14-14835	3/11/2014	9:27 PM	21	5	4	SLEET/DARK	2	11	REAR END					X	WEST	WEST
201400011973	2	14-17631	4/11/2014	12:11 PM	12	1	1	-	4	11	REAR END		1				SOUTH	SOUTH
201400047899	2	14-27962	5/9/2014	12:10 PM	12	1	1	-	2	11	REAR END					X	NORTH	NORTH
201400052695	2	14-30185	5/18/2014	5:47 PM	17	1	1	-	2	11	REAR END					X	WEST	WEST
201400077094	2	14-32945	5/23/2014	4:15 PM	16	1	1	-	2	11	REAR END					X	NORTH	NORTH
201400059114	2	14-34741	6/6/2014	6:47 AM	6	1	1	-	2	11	REAR END					X	NORTH	NORTH
201400077068	2	14-40804	7/1/2014	9:25 PM	21	1	5	RAIN/DARK	2	11	REAR END					X	NORTH	NORTH
201400166792	2	14-50883	8/14/2014	11:58 PM	23	1	5	DARKNESS	2	11	REAR END					X	NORTH	NORTH
201400208995	2	14-53296	8/24/2014	12:50 PM	12	1	1	-	2	11	REAR END					X	NORTH	NORTH
201400405660	2	14-20400	10/21/2014	5:56 PM	17	1	5	DARKNESS	2	11	REAR END					X	WEST	WEST
201501017582	2	15-2850	1/16/2015	12:23 PM	12	1	1	-	3	11	REAR END					X	EAST	EAST
201501032520	2	15-7520	2/6/2015	11:44 PM	23	1	5	DARKNESS	2	11	REAR END					X	NORTH	NORTH
201501307950	2	15-11686	5/17/2015	11:29 AM	11	1	1	-	2	11	REAR END					X	WEST	WEST
201501310842	2	15-16965	7/10/2015	10:36 AM	10	1	1	-	4	11	REAR END			1			WEST	WEST
201501162260	2	15-49671	8/19/2015	3:53 PM	15	1	1	-	3	11	REAR END				1		WEST	WEST
201501350887	2	15-27259	10/30/2015	10:47 PM	22	1	4	DARKNESS	2	11	REAR END					X	WEST	WEST
201501278547	2	15-77411	12/13/2015	11:41 PM	23	2	5	RAIN/DARK	3	11	REAR END				2		NORTH	NORTH
201501493786	2	15-32555	12/31/2015	5:43 AM	5	3	4	SNOW/DARK	2	11	REAR END					X	WEST	WEST
201601022142	2	16-4517	1/19/2016	10:07 AM	10	1	1	-	2	11	REAR END				1		NORTH	NORTH
201601321217	2	16-1716	1/21/2016	7:01 AM	7	1	1	-	2	11	REAR END					X	SOUTH	SOUTH
201601032578	2	16-5031	1/21/2016	7:06 AM	7	1	1	-	2	11	REAR END				1		NORTH	NORTH
201601320485	2	16-268	1/21/2016	7:23 AM	7	1	1	-	2	11	REAR END					X	SOUTH	SOUTH
201601320626	2	16-1715	1/21/2016	6:55 AM	6	1	2	DAWN	2	11	REAR END					X	SOUTH	SOUTH
201601321144	2	16-1732	1/21/2016	8:36 AM	8	1	1	-	2	11	REAR END					X	SOUTH	SOUTH
201601326151	2	16-1725	1/21/2016	7:51 AM	7	1	1	-	3	11	REAR END				2		SOUTH	SOUTH
201601326767	2	16-1722	1/21/2016	7:10 AM	7	1	1	-	2	11	REAR END					X	SOUTH	SOUTH
201601068814	2	16-18758	3/13/2016	11:15 AM	11	2	1	RAIN	2	11	REAR END					X	NORTH	NORTH
201601372301	2	16-9178	4/8/2016	4:54 PM	16	1	1	-	2	11	REAR END					X	SOUTH	SOUTH
201601104813	2	16-33560	5/8/2016	5:46 PM	17	1	1	-	3	11	REAR END		1				SOUTH	SOUTH
201601111328	2	16-34078	5/10/2016	2:48 PM	14	2	1	RAIN	2	11	REAR END				1		NORTH	NORTH
201601460662	2	16-26419	9/23/2016	8:05 AM	8	1	1	-	2	11	REAR END					X	WEST	WEST
201601232441	2	16-73465	10/3/2016	7:58 AM	7	1	1	-	2	11	REAR END					X	EAST	EAST
201601471970	2	16-27452	10/5/2016	7:35 AM	7	1	1	-	5	11	REAR END					X	SOUTH	SOUTH
201601237020	2	16-74612	10/7/2016	11:45 AM	11	1	1	-	2	11	REAR END					X	NORTH	NORTH
201601238037	2	16-75289	10/10/2016	3:38 PM	15	1	1	-	2	11	REAR END					X	EAST	EAST
201601244024	2	16-76278	10/14/2016	12:04 PM	12	1	1	-	2	11	REAR END					X	WEST	WEST
201601474768	2	16-4085	10/30/2016	6:45 PM	18	1	5	DARKNESS	2	11	REAR END					-	SOUTH	SOUTH
201601261411	2	16-81149	11/3/2016	12:53 AM	0	2	5	RAIN/DARK	2	11	REAR END					X	EAST	EAST
201601272891	2	16-83951	11/14/2016	6:40 PM	18	1	5	DARKNESS	2	11	REAR END					X	NORTH	NORTH
201601498345	2	16-32962	12/11/2016	5:43 PM	17	3	4	SNOW/DARK	3	11	REAR END					X	SOUTH	SOUTH
201701365621	2	17-955	1/11/2017	6:46 AM	6	1	4	DARKNESS	2	11	REAR END			1			SOUTH	SOUTH
201701371982	2	17-2502	1/21/2017	3:48 PM	15	1	1	-	2	11	REAR END					X	WEST	WEST
201701091787	2	17-6994	1/27/2017	3:15 PM	15	1	1	-	2	11	REAR END			1			EAST	EAST
201701091194	2	17-8237	2/1/2017	5:02 PM	17	1	5	DARKNESS	2	11	REAR END					X	EAST	EAST

CRASH SUMMARY 2013 to 2017

Location:
 1 - Galvin Drive at IL 72
 2 - Randall Road at IL 72
 3 - Richmond Drive at IL 72
 4 - Carrington Drive at Randall Road

FILE NAME	LOCATION	CRASH REPORT NUMBER	DATE	TIME	HOUR	WEATHER	LIGHT	CONDITIONS	CARS INVOLVED	TYPE #	INCIDENT	K	A	B	C	PDO	DIR 1	DIR 2
201701374507	2	17-3238	2/2/2017	9:10 AM	9	1	1	-	2	11	REAR END					X	SOUTH	SOUTH
201701394962	2	17-8305	3/20/2017	9:40 AM	9	1	1	-	2	11	REAR END					X	SOUTH	SOUTH
201701089936	2	17-2476	3/21/2017	1:04 PM	13	8	1	CLOUDY	2	11	REAR END		1				NORTH	NORTH
201701089949	2	17-21471	3/21/2017	12:33 PM	12	1	1	-	3	11	REAR END					X	NORTH	NORTH
201701396967	2	17-9398	3/28/2017	5:15 PM	17	1	1	-	2	11	REAR END					X	WEST	WEST
201701402750	2	17-9910	4/5/2017	6:37 AM	6	2	2	RAIN/DAWN	3	11	REAR END			1			SOUTH	SOUTH
201701098093	2	17-30582	4/25/2017	6:40 PM	18	1	1	-	2	11	REAR END					-	EAST	EAST
201701102438	2	17-31041	4/27/2017	10:30 AM	10	1	1	-	2	11	REAR END					X	NORTH	NORTH
201701115991	2	17-35248	5/14/2017	1:48 PM	13	1	1	-	2	11	REAR END					X	NORTH	NORTH
201701126154	2	17-37543	5/23/2017	12:13 PM	12	2	1	RAIN	2	11	REAR END					X	WEST	WEST
201701396969	2	17-9402	5/31/2017	2:32 PM	14	1	1	-	2	11	REAR END					X	SOUTH	SOUTH
201701137941	2	17-40463	6/4/2017	3:14 PM	15	1	1	-	3	11	REAR END					X	NORTH	NORTH
201701158603	2	17-45400	6/24/2017	3:23 PM	15	1	1	-	2	11	REAR END					X	NORTH	NORTH
201701185757	2	17-52935	7/21/2017	2:57 PM	14	1	1	-	2	11	REAR END				1		NORTH	NORTH
201701208924	2	17-59601	8/17/2017	10:40 AM	10	1	1	-	2	11	REAR END					X	NORTH	NORTH
201701226688	2	17-64346	9/3/2017	10:46 AM	10	1	1	-	2	11	REAR END					X	SOUTH	SOUTH
201701271452	2	17-72852	10/8/2017	4:29 PM	16	1	1	-	3	11	REAR END					X	NORTH	NORTH
201701272539	2	17-74681	10/17/2017	4:06 PM	16	1	1	-	2	11	REAR END			1			NORTH	NORTH
201701289478	2	17-77960	11/1/2017	3:15 PM	15	1	1	-	2	11	REAR END					-	NORTH	NORTH
201701335121	2	17-86537	12/8/2017	10:33 AM	10	1	1	-	3	11	REAR END					X	NORTH	NORTH
201701356183	2	17-90321	12/26/2017	11:45 AM	11	1	1	-	2	11	REAR END					X	EAST	EAST
201301236632	2	13-32788	6/14/2013	2:30 PM	14	1	1	-	2	12	SSSD					X	SOUTH	SOUTH
20140021080	2	14-1918	5/28/2014	10:45 AM	10	1	1	-	2	12	SSSD					X	SOUTH	SOUTH
201400409369	2	14-3861	10/6/2014	6:38 PM	18	1	1	-	2	12	SSSD					X	NORTH	NORTH
201400350966	2	14-79190	12/21/2014	7:20 PM	19	1	5	DARKNESS	2	12	SSSD					X	NORTH	NORTH
201401467894	2	15-22717	9/8/2015	12:40 PM	12	2	1	RAIN	2	12	SSSD					X	SOUTH	SOUTH
201501263932	2	15-73048	11/24/2015	12:18 PM	12	1	1	-	2	12	SSSD					X	SOUTH	-
201601026523	2	16-5491	1/22/2016	3:46 PM	15	1	1	-	2	12	SSSD					X	NORTH	NORTH
201701102431	2	17-31353	4/28/2017	4:10 PM	16	1	1	-	4	12	SSSD					X	EAST	EAST
201701254948	2	17-70358	9/28/2017	6:10 AM	6	1	2	DAWN	4	12	SSSD					X	EAST	EAST
201701303641	2	17-80718	11/13/2017	4:04 PM	16	1	3	DAWN	2	12	SSSD					X	WEST	WEST
201301334240	2	13-54697	9/19/2013	8:51 AM	8	2	1	RAIN	2	10	TURNING					X	EAST	WEST
201301371966	2	13-62665	10/25/2013	12:14 PM	12	1	1	-	2	10	TURNING					X	EAST	SOUTH
201400108484	2	14-8485	2/11/2014	3:50 PM	15	1	1	-	2	10	TURNING					X	NORTH	EAST
201400146350	2	14-6350	8/8/2014	9:00 AM	9	1	1	-	2	10	TURNING					X	NORTH	SOUTH
201400294982	2	14-72153	11/15/2014	8:26 PM	20	3	5	SNOW/DARK	2	10	TURNING					X	EAST	SOUTH
20151093486	2	15-26592	5/11/2015	11:50 AM	11	2	1	RAIN	4	10	TURNING			4			SOUTH	EAST
201501484442	2	15-27722	11/5/2015	6:01 PM	18	2	4	RAIN/DARK	2	10	TURNING					X	SOUTH	WEST
201601068787	2	16-19896	3/17/2016	4:04 PM	16	1	1	-	2	10	TURNING				2		SOUTH	SOUTH
201701325690	2	17-82045	11/19/2017	1:32 AM	1	1	5	DARKNESS	2	10	TURNING			1			SOUTH	NORTH
201301129783	3	13-9994	5/12/2013	4:46 PM	16	1	4	DARKNESS	1	4	ANIMAL					X	EAST	-
201601314258	3	16-1397	1/17/2016	12:40 AM	0	1	1	-	1	4	ANIMAL					X	EAST	-
201601487122	3	16-31062	11/17/2016	11:30 PM	23	1	4	DARKNESS	1	4	ANIMAL			1			EAST	-
201701377621	3	17-4483	2/13/2017	6:03 PM	18	1	5	DARKNESS	1	4	ANIMAL					X	WEST	-
201400119691	3	14-3902	2/20/2014	7:10 AM	7	2	2	RAIN/DARK	1	6	FIXED OBJECT					X	EAST	-
201302087005	3	13-3882	2/21/2013	5:59 PM	17	1	4	DARKNESS	3	11	REAR END					X	EAST	EAST
201301170862	3	13-5586	3/15/2013	6:46 PM	18	2	4	RAIN/DARK	2	11	REAR END					X	EAST	EAST

CRASH SUMMARY 2013 to 2017

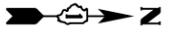
Location:
 1 - Galvin Drive at IL 72
 2 - Randall Road at IL 72
 3 - Richmond Drive at IL 72
 4 - Carrington Drive at Randall Road

FILE NAME	LOCATION	CRASH REPORT NUMBER	DATE	TIME	HOUR	WEATHER	LIGHT	CONDITIONS	CARS INVOLVED	TYPE #	INCIDENT	K	A	B	C	PDO	DIR 1	DIR 2
201301155472	3	13-17022	8/7/2013	12:28 PM	12	1	1	-	2	11	REAR END				3		EAST	EAST
201301351069	3	13-21456	10/4/2013	3:55 PM	15	1	1	-	2	11	REAR END					X	EAST	EAST
201301370486	3	13-22861	10/24/2013	10:51 AM	10	1	1	-	2	11	REAR END					X	EAST	-
201301384448	3	13-23836	11/8/2013	5:49 PM	17	1	4	DARKNESS	3	11	REAR END					X	EAST	-
201400139691	3	14-5168	3/9/2014	2:48 PM	14	1	1	-	2	11	REAR END					X	EAST	EAST
201400237412	3	14-10373	5/16/2014	11:15 AM	11	8	1	CLOUDY	2	11	REAR END		1			X	EAST	EAST
201400240693	3	14-11000	5/23/2014	4:15 PM	16	1	1	-	2	11	REAR END					X	EAST	EAST
201400416196	3	14-21452	10/17/2014	6:58 PM	18	1	4	DARKNESS	2	11	REAR END					X	EAST	EAST
201501315068	3	15-23476	9/16/2015	1:12 PM	13	1	1	-	2	11	REAR END				2		EAST	EAST
201701379362	3	17-5630	2/23/2017	5:38 PM	17	2	3	RAIN/DUSK	2	11	REAR END					X	EAST	EAST
201701380827	3	17-6046	2/27/2017	1:28 PM	13	1	1	-	3	11	REAR END					X	EAST	EAST
201701461318	3	17-29163	9/13/2017	2:57 PM	14	1	1	-	3	11	REAR END					X	EAST	EAST
201501423660	3	15-7143	3/24/2015	5:58 AM	5	1	4	DARKNESS	2	12	SSSD					X	EAST	EAST
201601473784	3	16-29609	10/30/2016	7:39 AM	7	1	4	DARKNESS	2	12	SSSD					X	EAST	EAST
20101485251	3	17-42609	12/16/2017	12:13 PM	12	1	1	-	2	12	SSSD					X	EAST	EAST
201400115430	3	14-3721	2/17/2014	7:28 PM	19	1	4	DARKNESS	2	14	OOC/HEAD ON				1		EAST	WEST
201400266937	4	14-67052	10/22/2014	5:44 AM	5	1	4	DARKNESS	1	4	ANIMAL					X	NORTH	-
201400318293	4	14-75954	12/5/2014	6:25 AM	6	1	4	DARKNESS	1	4	ANIMAL					X	SOUTH	-
201400321744	4	14-76460	12/8/2014	6:13 AM	6	2	4	RAIN/DARK	1	4	ANIMAL					X	SOUTH	-
201501114076	4	15-34225	6/12/2015	11:13 PM	23	1	5	DARKNESS	1	4	ANIMAL					X	NORTH	-
201601347232	4	16-527	2/11/2016	10:10 PM	22	1	5	DARKNESS	1	4	ANIMAL					X	SOUTH	-
201601403480	4	16-14455	6/1/2016	12:10 AM	0	1	5	DARKNESS	1	4	ANIMAL					X	NORTH	-
201701472840	4	17-35293	10/26/2017	1:45 AM	1	1	4	DARKNESS	1	4	ANIMAL					X	SOUTH	-
201701258543	4	17-71393	10/2/2017	11:12 AM	11	1	1	-	2	10	TURNING					Z	WEST	NORTH
201301208816	4	13-25104	5/10/2013	10:00 AM	10	1	1	-	2	11	REAR END					X	SOUTH	SOUTH
201301366697	4	13-61420	10/19/2013	10:47 AM	10	1	1	-	2	11	REAR END			4		X	SOUTH	SOUTH
201301389180	4	13-67145	11/14/2013	7:27 AM	7	1	1	-	2	11	REAR END					X	SOUTH	NORTH
201400035178	4	14-20058	4/3/2014	9:00 AM	9	2	1	RAIN	2	11	REAR END				1		SOUTH	SOUTH
201501032548	4	15-8854	2/13/2015	7:26 AM	7	1	1	-	2	11	REAR END					X	NORTH	NORTH
201501122788	4	15-36459	6/23/2015	12:26 PM	12	1	4	DARKNESS	2	11	REAR END					X	NORTH	NORTH
201501234396	4	15-67347	10/30/2015	5:18 PM	17	1	1	-	3	11	REAR END					X	NORTH	NORTH
201301429648	4	13-75647	12/27/2013	11:25 PM	23	1	5	DARKNESS	2	12	SSSD					X	SOUTH	SOUTH
201400294981	4	14-72156	11/15/2014	8:48 PM	20	3	5	SNOW/DARK	2	12	SSSD					X	SOUTH	SOUTH
201701264562	4	17-73170	10/10/2017	8:17 AM	8	1	1	-	2	12	SSSD					X	SOUTH	SOUTH

2 11 18 24

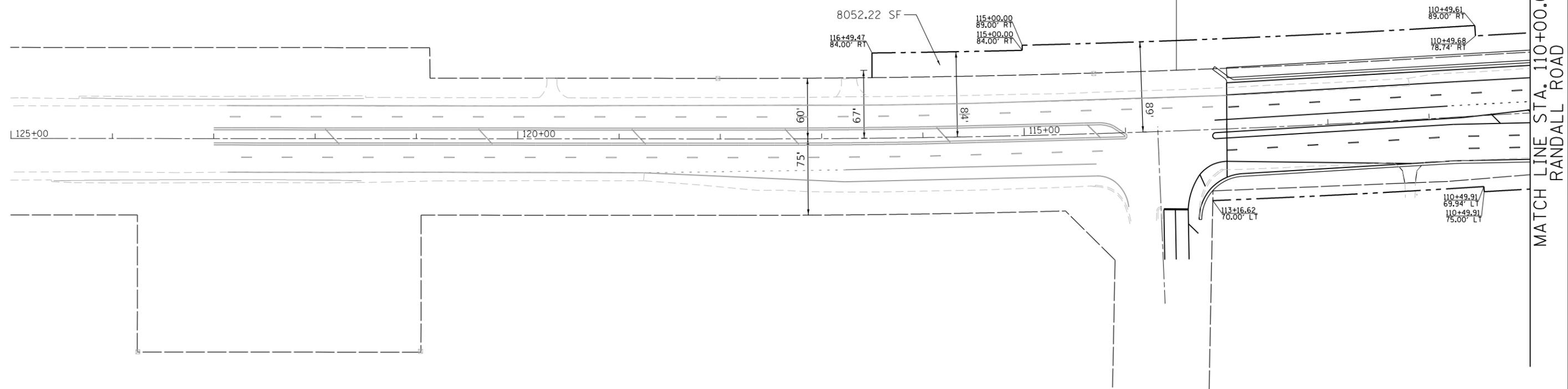
ATTACHMENT 11

ROW PLAN

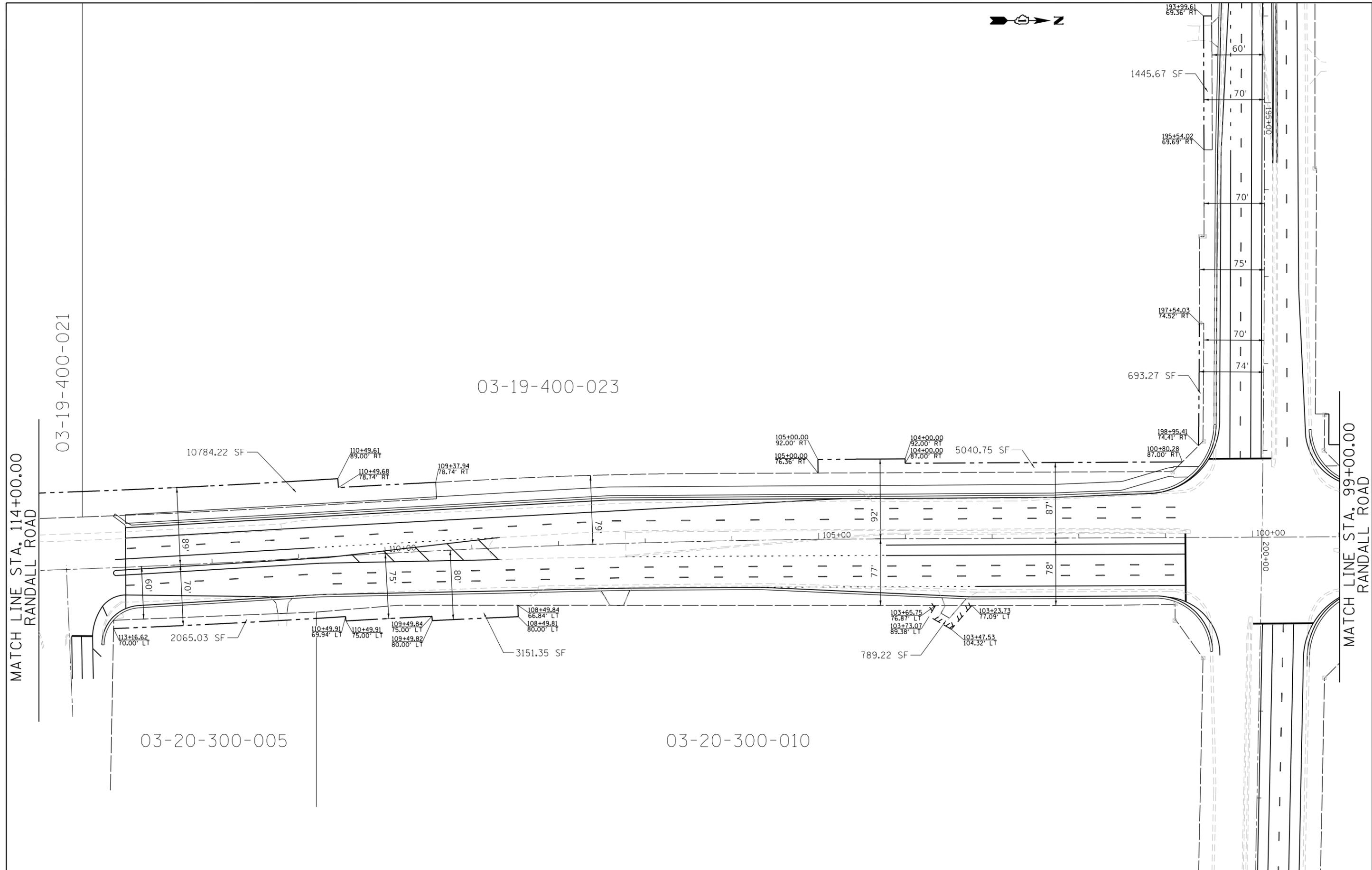
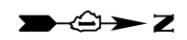


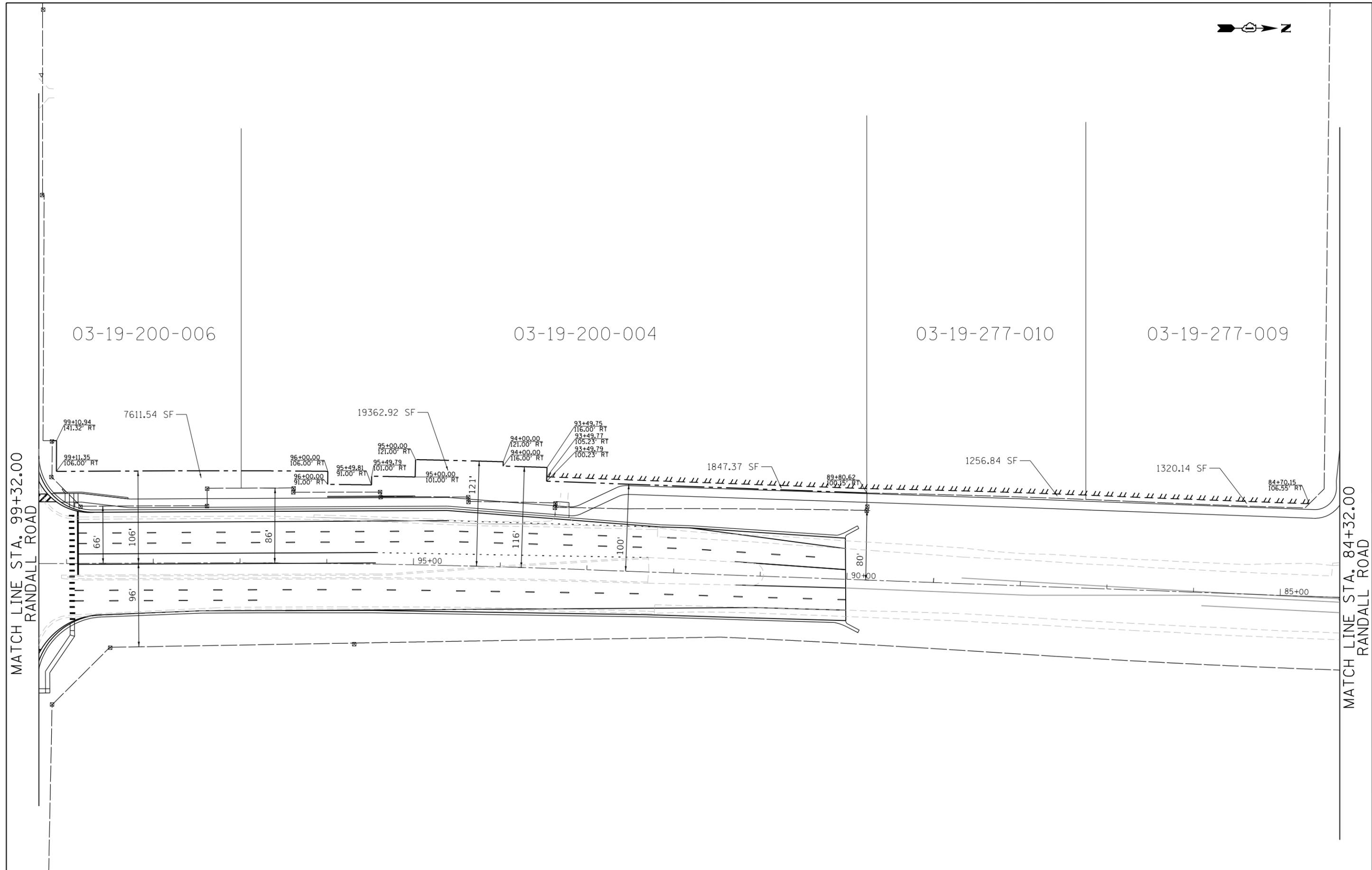
03-19-400-021

03-19-400-023



	USER NAME = tnestor	DESIGNED - JT	REVISED - _____	KANE COUNTY DIVISION OF TRANSPORTATION	RANDALL ROAD ROW STA. 125 + 00.00 TO STA. 110 + 00.00		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0187' / in.	DRAWN - JT	REVISED - _____		19-00514-00-WR	KANE	_____	_____			
	PLOT DATE = 12/21/2021	CHECKED - MC	REVISED - _____		CONTRACT NO. _____			ILLINOIS FED. AID PROJECT			
	DATE - 01/05/2020	DATE - 01/05/2020	REVISED - _____		SCALE: _____	SHEET _____ OF _____ SHEETS	STA. _____ TO STA. _____				





USER NAME = tnestor	DESIGNED - JT	REVISED - _____
	DRAWN - JT	REVISED - _____
PLOT SCALE = 100.0187' / in.	CHECKED - MC	REVISED - _____
PLOT DATE = 1/6/2022	DATE - 01/05/2020	REVISED - _____

**KANE COUNTY
DIVISION OF TRANSPORTATION**

**RANDALL ROAD ROW
STA. 99 + 32.00 TO 84 + 32.00**

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE		
CONTRACT NO. _____				
ILLINOIS FED. AID PROJECT				

ATTACHMENT 12

404 PERMIT

INITIAL USACE COORDINATION



DEPARTMENT OF THE ARMY

CHICAGO DISTRICT, CORPS OF ENGINEERS

231 SOUTH LA SALLE STREET

CHICAGO, ILLINOIS 60604-1437

REPLY TO
ATTENTION OF:

August 6, 2020

Operations Division
Regulatory Branch
LRC-2020-00415

SUBJECT: Jurisdictional Determination for the Randall Road and Route 72 Road Project in West Dundee, Kane County, Illinois (Latitude 42.10916, Longitude -88.334517)

Carl Schoedel
Kane County Division of Transportation
41W011 Burlington Road
St. Charles, Illinois 60175

Dear Mr. Schoedel:

This is in response to your request that the U.S. Army Corps of Engineers complete a jurisdictional determination for the above-referenced site submitted on your behalf by Huff & Huff, Inc. The subject project has been assigned number LRC-2020-00415. Please reference this number in all future correspondence concerning this project.

Following a review of the information you submitted, this office has determined that the subject property contains "waters of the United States".

Waterway Sites W1, W2, W3, W4, W5, W6 & W7, and Wetland Sites 2, 3, 7, 9, 12, 13, 14 & 15 have been determined to be under the jurisdiction of this office and therefore, subject to Federal regulation.

Roadside Ditches RD1, RD3, RD4, RD5, RD6, RD7, RD8, RD9, RD10 & RD11, and Wetland Sites 1, 6, 8, 10 & 11 have been determined to be excluded water features, and therefore not subject to Federal regulation. Please be informed that this office does not concur with the boundaries of waters not under the jurisdiction of this office.

This office concurs with the submitted wetland delineation and wetland boundaries at the subject site. In the event an application is submitted for work within jurisdictional areas, a survey of the wetland boundary(s) stamped by a professional surveyor shall accompany the approved wetland delineation.

For a detailed description of our determination please refer to the enclosed decision document. This determination covers only your project as depicted in the Wetland and Waterway Investigation Report dated March 16, 2020, prepared by Huff & Huff, Inc.

This determination is valid for a period of five (5) years from the date of the letter, unless new information warrants revision of the determination before the expiration date or a District Commander has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.

This letter is considered an approved jurisdictional determination for your subject site. If you object to this determination, you may appeal, according to 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and a Request for Appeal (RFA) form. If you request to appeal the above determination, you must submit a completed RFA form to the Great Lakes/Ohio River Division Office at the following address:

Jacob Siegrist
Regulatory Appeals Review Officer
US Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10-714
Cincinnati, Ohio 45202-3222
Phone: (513) 684-2699 Fax: (513) 684-2460

In order to be accepted, your RFA must be complete, meet the criteria for appeal and be received by the Division Office within sixty (60) days of the date of the NAP. If you concur with the determination in this letter, submittal of the RFA form to the Division office is not necessary.

This determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

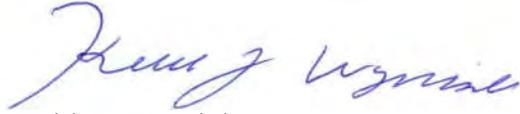
It is your responsibility to obtain any required state, county, or local approvals for impacts to wetland areas not under the Department of the Army jurisdiction. In Kane County, please note that isolated non-waters of the United States not under the jurisdiction of the U.S. Army Corps of Commanders are regulated by the Kane County Stormwater Ordinance. For projects in incorporated areas of Kane County, contact the certified community for information related to the ordinance. For projects in unincorporated areas of Kane County, contact the Kane County Department of Environmental Management at (630) 208-3179.

Pursuant to Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers regulates the discharge of dredged or fill material into waters of the United States, including wetlands. A Department of the Army permit is required for any proposed work involving the discharge of dredged or fill material within the jurisdiction of this office. To initiate the permit process, please submit a joint permit application form along with detailed plans of the proposed work. Information concerning our program, including the application form and an application checklist, can be found at and downloaded from our website:

<http://www.lrc.usace.army.mil/Missions/Regulatory.aspx>

If you have any questions, please contact Mr. Michael J. Machalek of my staff by telephone at (312) 846-5534 or email at Mike.J.Machalek@usace.army.mil.

Sincerely,

A handwritten signature in blue ink, appearing to read "Keith L. Wozniak".

Keith L. Wozniak
Chief, Regulatory Branch

Enclosures

Copy Furnished

Kane County Division of Environmental Management (Jodie Wollnik)
Huff & Huff, Inc. (Kinzie Robertson)

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: Carl Schoedel, Kane County Division of Transportation	File Number: LRC-2020-00415	Date: August 6, 2020
--	-----------------------------	----------------------

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of Permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A. INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit or a Letter of Permission (LOP), you may sign the permit document and return it to the district commander for final authorization. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district commander. Your objections must be received by the district commander within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district commander will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district commander will send you a proffered permit for your reconsideration, as indicated in Section B below.

B. PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit or a Letter of Permission (LOP), you may sign the permit document and return it to the district commander for final authorization. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

C. PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

D. APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division commander. This form must be received by the division commander within 60 days of the date of this notice.

E. PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Regulatory Branch
Chicago District Corps of Engineers
231 South LaSalle Street, Suite 1500
Chicago, IL 60604-1437
Phone: (312) 846-5530
Fax: (312) 353-4110

If you only have questions regarding the appeal process you may also contact:

Jacob Siegrist
Regulatory Appeals Review Officer
US Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10524
Cincinnati, Ohio 45202-3222
Phone: (513) 684-2699 Fax: (513) 684-2460

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Commanders personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date:

Telephone number:

ATTACHMENT 13

SPECIAL WASTE

a – State

b – Local

The district should determine if any new right-of-way or easement will involve: any site identified in Table 1 of the COV PESA report, or any site adjoining a site listed in Table 4. For those identified situations, the District Bureau of Land Acquisition (DBLA) shall coordinate the acquisition with this office, Central Bureau of Land Acquisition, and the Chief Counsel's Office to determine if an "All Appropriate Inquiries" (AAI) assessment is required prior to the acquisition process for additional liability protection under CERCLA.

Other findings and recommendations of the report should be carefully considered. If you have any questions regarding this report, please contact Josh Venaas at 217/785-4181 or James R. Curtis at 217/558-4653.

Attachments

cc: Office of Chief Counsel – Hanley Room 313
District Utility Coordinator
District Bureau of Land Acquisition

EXECUTIVE SUMMARY

This report presents the results of an environmental site assessment for the improvements to IL 72 at Randall Road, Elgin, West Dundee, and unincorporated Dundee Township, Kane County. This report was prepared on behalf of the Illinois Department of Transportation (IDOT) by the Illinois State Geological Survey (ISGS).

The following sites were examined for this project. The tables below list sites along the project for which recognized environmental conditions (RECs)* were identified for each address or address range (Table 1); sites along the project for which only de minimis conditions were identified (Table 2); sites along the project for which no RECs or de minimis conditions were identified (Table 3); and sites adjoining but not on the project that were identified on environmental databases (Table 4). Further investigation of sites with RECs may be desired.

Table 1. The following sites along the project were determined to contain RECs:

Property name IDOT parcel #	ISGS site #	REC(s), including de minimis conditions	Regulatory database(s)	Land use
Industrial building NA	3947-COV-1	Evidence of former chemical use; potential transformers; potential natural gas pipeline; potential ACM and lead paint	BOL	Industrial
Dundee Middle School NA	3947-COV-2	Former UST; potential AST; evidence of chemical use; potential natural gas pipeline; potential mound; potential ACM and lead paint	BOL, UST	Educational
Commercial buildings NA	3947-COV-5	Potential ASTs; former solid waste; potential transformer; potential ACM and lead paint; potential herbicide and/or fertilizer presence	BOL	Commercial
ROW NA	3947-COV-7	Spills	IEMA	Transportation

Table 2. The following sites along the project were determined to contain de minimis conditions only:

Property name IDOT parcel #	ISGS site #	De minimis condition(s)	Land use
Industrial building NA	3947-COV-3	Potential natural gas pipeline; potential ACM and lead paint	Industrial
Agricultural land NA	3947-COV-4	Potential transformer; potential natural gas pipeline; likely pesticide and/or herbicide use	Agricultural
Residences and vacant land NA	3947-COV-6	Potential natural gas pipeline; potential transformer; potential ACM and lead paint	Residential/ vacant
Vacant land NA	3947-COV-8	Potential transformers	Vacant
Vacant land NA	3947-COV-9	Potential transformer; potential past pesticide and/or herbicide use	Vacant
Agricultural land NA	3947-COV-10	Potential pesticide and/or herbicide use	Agricultural
Residences NA	3947-COV-11	Potential transformer; potential ACM and lead paint	Residential

Table 3. The following sites along the project were determined not to contain RECs or de minimis conditions:

Property name IDOT parcel #	ISGS site #	Land use
None		

Table 4. The following additional site, adjoining but not on the project, was identified on environmental databases:

Property name	ISGS site #	Regulatory database(s)	Land use
Retail First Inc.	3947-COV-A	BOL	Industrial

* For all sites:

Where REC(s) are indicated as present, a condition was noted that may be indicative of releases or potential releases of hazardous substances on, at, in, or to the site, as discussed in the text. Potential hazards were not verified by ISGS testing. Radon, biological hazards (such as mold, medical waste, or septic waste), and non-agricultural pesticides and/or herbicides may also be of concern. No further investigation concerning the presence

or use of these factors was conducted for this PESA.

Where RECs are not indicated as present, radon, biological hazards (such as mold, medical waste, or septic waste), and non-agricultural pesticides and/or herbicides may still be of concern. No further investigation concerning the presence or use of these factors was conducted for this PESA.

For the purposes of this report, the following are considered to be de minimis conditions:

- Normal use of lead-based paint on exteriors and interiors of buildings and structures.
- Use of asbestos-containing materials in building construction.
- Transformers in normal use, unless the transformers were visible to be leaking, appear on an environmental regulatory list, or were otherwise determined to pose a hazard not related to normal use.
- Agricultural use of pesticides and herbicides. In addition, most land in Illinois was under agricultural use prior to its conversion to residential, industrial, or commercial development. Pesticides, both regulated and otherwise, may have been used throughout the project area at any time. Unless specifically discussed elsewhere in this report, no information regarding past pesticide use that would be subject to enforcement action was located for this project, and such use is considered a de minimis condition.

The following data gaps exist for all PESAs:

- For residences, only areas visible from public roads are inspected.
- Interiors of buildings are not inspected.
- Interiors of agricultural areas are not inspected during growing seasons.

Radon and biological hazards are not considered in this PESA unless specifically noted.

NA = No parcel number was supplied by IDOT for this site.

Although potential natural hazards and undermining, if present, are described in this report, they are not considered as RECs or de minimis conditions for the purposes of this report, and are therefore not listed in the tables above. Wetlands and flooding hazards are not evaluated as part of this report.



EXECUTIVE SUMMARY

This Preliminary Environmental Site Assessment Report (PESA) is for the proposed Randall Road Intersection Improvements Project in Kane County, Illinois. The study is located along Randall Road from 0.50 miles north of the intersection with IL Route 72 to Northwest Parkway/Joy Lane to the south. The Project Corridor study area is approximately 6,000 feet in a north south direction along Randall Road.

The screening process, used to identify sites that may pose a hazard to the Project Corridor, included a historical review, database search, review of other applicable information, and site reconnaissance. Historical resources reviewed included historical aerial photos and historical topographic maps of the Project Corridor. Both were reviewed for evidence of former sites that may pose a hazard to the Project Corridor. The database search provided information (on a local, state, or federal level) on properties that may pose a hazard to the Project Corridor. Information not provided in the database search, such as water quality data, solid waste disposal sites, and the national pipeline mapping system was also reviewed with regards to the Project Corridor. Site reconnaissance was conducted on March 21, 2020 to inspect the sites identified through the screening process, and to also identify additional sites adjacent to the Project Corridor with storage areas, spills, staining, or other indications of potential environmental concern.

Sites identified through the screening process were then further reviewed to assess their status as a potentially impacted property (PIP) in connection to the Project Corridor. The following tables (Tables ES-1 through ES-4) summarize these sites. Based on the information presented in this PESA and data collected during the screening process, this assessment has revealed evidence of one (1) PIP in connection to the Project Corridor.

Table ES-1 Summary of Sites Identified to be Potentially Impacted Properties

Site ID	Site Name	Address	Reason(s)
5	Intersection of IL 72 and Randall Road	Randal Road and IL Route 72	CDL / SPILLS

Table ES-2 Summary of Sites Identified Adjacent to the Project Corridor with De Minimis Conditions¹

Site ID	Site Name	Address	Reason(s)
1	Park Services Department	750 Randall Road, West Dundee	No listings, good housekeeping noted, potential minimal use and storage of hazardous materials
2	Randall Oaks Recreation Center	500 Randall Road, West Dundee	
8	Chipotle Mexican Grill	2500 N Randall Road, Elgin	
10	Village Pizza and Pub	2498 N Randall Road, Elgin	

¹De minimis based on definition included in ASTM Standard E 1527-13

For the purposes of this report, the following are considered to be de minimis conditions:

- Transformers in normal use, unless the transformers were observed to be leaking, appear on an environmental regulatory list, or were otherwise identified to pose a hazard not related to normal use



- Lead-based paint
- Asbestos-Containing Material (ACM)
- Pesticides/herbicides used on farmland
- Soil Piles
- Radon and Biological Hazards

The conditions listed above were considered while developing the report. However, as sites with these conditions are seen often, each site was not specifically referenced as de minimis based on these conditions alone.

Table ES-3 Summary of Sites Identified Adjacent to the Project Corridor with No Status

Site ID	Site Name	Address	Reason(s)
3	Season Apartment Complex	400 Randall Road, West Dundee	No listings, good housekeeping noted
4	Agricultural Land	Unincorporated land along Randall Road, West Dundee	
6	Farmstead	16N371 Randall Road, Dundee	
7	Watermark at the Grove Apartments	2511 Watermark Terrace, Elgin	
9	Residential Properties	Various Addresses along Randall Road, Sleepy Hollow	

Table ES-4 Summary of Sites Identified Off the Project Corridor with No Status¹

Site ID	Site Name	Address	Database	Reason
---	None Identified	None Identified	None Identified	None Identified

¹Only sites identified off the Project Corridor, via the screening process, are included

ATTACHMENT 14

ENVIRONMENTAL COORDINATION

a – Project Monitoring Form

b – Wetlands

c – Cultural Resources

d – Natural Resources

Project Overview

Submittal Date: 04/08/2020 **Sequence No:** 23123
District: 1 **Requesting Agency:** Local Kane Co Hwys **Project Identifier:**
Contract #: **Job No.:**
Counties: Kane
Route: FAP 336 FAP 341 **Marked:** IL 72
Street: Randall Road **Section:** 19-00514-00-WR
Municipality(ies): NW Elgin **Project Length:** km miles
FromTo (At): Randall Rd at IL 72 (Higgins Road)
Quadrangle: Elgin **Township-Range-Section:** T42N-R8E-S19,20,29,30
Survey Target Date: 10/08/2020 **Anticipated Design Appr.:** 10/08/2020 **Anticipated Processing:** CE
Funding: Federal State TBP MFT Local Non-MFT

Consultant:
PTB No.: **Item No.:** **PTB Date:** **Prequal Level:**

Sequence No: 23123 Entered By Cleared for DA Cleared for Letting Resubmittal ResubmittalCleared Section: 19-00514-00-WR Job No.: FromTo (At): Randall Rd at IL 72 (Higgins Road)	Biological	Wetlands	Cultural	Special Waste
	BDE	BDE	BDE	BDE
	3/18/2021	3/18/2021	9/2/2021	7/9/2020
	3/18/2021	3/18/2021	9/2/2021	

Notice of Intent	Project Initiation Ltr to FHWA	Public Info Meeting(s)		Notice of Availability		Public Hearing	Draft	ROD/FONSI Approved
		1st	2nd	Draft	Final			

Project Phase Comments:

Wetlands

Submittal Date: 04/08/2020 **Sequence No:** 23123
District: 1 **Requesting Agency:** Local Kane Co Hwys **Project No:**
Contract #: **Job No.:**
Counties: Kane
Route: FAP 336 FAP 341 **Marked:** IL 72
Street: Randall Road **Section:** 19-00514-00-WR
Municipality(ies): NW Elgin **Project Length:** km miles
FromTo (At): Randall Rd at IL 72 (Higgins Road)
Quadrangle: Elgin **Township-Range-Section:** T42N-R8E-S19,20,29,30
Anticipated Design Approval: 10/08/2020 **Cleared for Design Approval:**
Cleared for Letting: **Mitigation:** Yes **Mitigation Completed:**

Wetland Impacts Evaluation

Submittal Date: 01/22/2021 **Submitted By:**
Does the project have wetland impacts? Yes **Type:** Both
Briefly describe the measures considered to avoid and minimize adverse impacts to the wetlands:
 Drainage was enclosed and retaining walls are used to minimize widening and the max slope was used for ditches.
Summarize briefly why there are no practicable alternatives to the use of the wetland(s):
 The scope of work includes addition of a through lane. There is no alternative to providing additional capacity.
Wetland mitigation is being proposed: wetland bank site Reviewed

Memo Date: 03/18/2021 **Memo By:** Susan Hargrove
Memo: Revised WIE information was received 3/18/21. Wetland impacts are now only permanent impacts, with no temporary impacts. Wetland Sites 3 and 6 shall be permanently impacted in the respective amounts of 0.07 and 0.17 ac, with impacts totaling 0.24 ac. Mitigation is proposed at the Jelkes Creek Wetland Mitigation Bank in the Fox River IWPA drainage basin. The project also occurs in the same basin; thus the bank is in-basin with a mitigation ratio of 1.5:1.0. Mitigation acreage is thus 0.36 ac. This project is cleared for construction with respect to wetlands.

Wetland Impacts and Mitigation Required

Site No.	Type	T&E	Nature Preserve	Natural Area	Essential Habitat	Size (acres)	Acres of Impact	Ratio	Acres of Compensation
1	Wet Mead	No	No	No	No	0	.000		
Basin	07120006	Quadrangle	Elgin		FQI	1.1			
Describe the work:									
2	Wet Mead	No	No	No	No	0.03	.000		
Basin	07120006	Quadrangle	Elgin		FQI	4.5			
Describe the work:									
3	Wet Mead	No	No	No	No	0.08	.070	1.5	.105
Basin	07120006	Quadrangle	Elgin		FQI	4.9			
Describe the work: Drainage									
4	Farmed	No	No	No	No	0	.000		
Basin	07120006	Quadrangle	Elgin		FQI	0			
Describe the work:									
5	Farmed	No	No	No	No	0	.000		
Basin	07120006	Quadrangle	Elgin		FQI	0			
Describe the work:									
6	Wet Mead	No	No	No	No	0.5	.170	1.5	.255
Basin	07120006	Quadrangle	Elgin		FQI	6.6			
Describe the work: Drainage									

7	Marsh	No	No	No	No	0.04		.000		
Basin	07120006	Quadrangle	Elgin		FQI	8				
Describe the work:										
8	Wet Mead	No	No	No	No	0.04		.000		
Basin	07120006	Quadrangle	Elgin		FQI	3				
Describe the work:										
9	Wet Mead	No	No	No	No	0.20		.000		
Basin	07120006	Quadrangle	Elgin		FQI	4.2				
Describe the work:										
10	Open Water	No	No	No	No	0.12		.000		
Basin	07120006	Quadrangle	Elgin		FQI	6.4				
Describe the work:										
11	Wet Mead	No	No	No	No	0.03		.000		
Basin	07120006	Quadrangle	Elgin		FQI	11.2				
Describe the work:										
12	Wet Mead	No	No	No	No	0.60		.000		
Basin	07120006	Quadrangle	Elgin		FQI	10.3				
Describe the work:										
13	Wet Mead	No	No	No	No	0.33		.000		
Basin	07120006	Quadrangle	Elgin		FQI	6.8				
Describe the work:										
14	Forested	No	No	No	No	0.10		.000		
Basin	07120006	Quadrangle	Elgin		FQI	7.8				
Describe the work:										
15	Wet Mead	No	No	No	No	0.54		.000		
Basin	07120006	Quadrangle	Elgin		FQI	13.4				
Describe the work:										
16	Wet Mead	No	No	No	No	0		.000		
Basin	07120006	Quadrangle	Elgin		FQI	4.5				
Describe the work:										
Total								.240		.360



Illinois Department of Transportation

Memorandum

To: Bureau of Local Roads Attn: William Raffensperger
From: Jack Elston By: Brad Koldehoff
Subject: Cultural Resources - No Historic Properties Affected Clearance
Date: September 2, 2021

Kane County
FAP 336. FAP 341, IL 72, Randall Road
Northwest Elgin
Sec. 19-00514-00-WR
Seq. 23123

For the above referenced undertaking, IDOT's qualified Cultural Resources staff hereby make a **"No Historic Properties Affected"** finding pursuant to Section 106 of the National Historic Preservation Act.

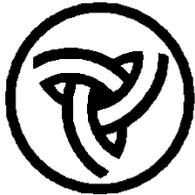
This finding concludes the Section 106 process in accordance with the stipulations of the Programmatic Agreement Regarding Section 106 Implementation for Federal-Aid Transportation Projects in the State of Illinois, executed March 6, 2018 by FHWA, Illinois SHPO, IDOT and the Advisory Council on Historic Preservation.

No further cultural resources coordination is required for this undertaking, unless design modifications or new information indicate that historic properties may be affected. After coordination with Local Roads any potential site impacts have been avoided. However, if archaeological sites cannot be avoided, then, additional coordination with my office is required.

A handwritten signature in black ink, reading "Brad Koldehoff".

Brad H. Koldehoff
Cultural Resources Unit Chief
Bureau of Design & Environment

BK:km



Illinois Department of Transportation

Memorandum

To: George A. Tapas Attn: Greg S. Lupton
From: Jack A. Elston By: Thomas C. Brooks
Subject: Natural Resources Review
Date: March 18, 2021

A handwritten signature in cursive, likely belonging to Thomas C. Brooks.

IL 72 at Randall Road
Sec. 19-00514-00-WR
T42N/R8E/S 19
Seq. No.: 23123
Kane County

The proposed project involves roadway reconstruction/widening to add through lanes and turn lanes for additional capacity and traffic moment through the intersection of IL 72 at Randall Road in northwest Elgin. Drainage improvements and possible pedestrian accommodations are included in the scope of work.

The project requires 0.3 acres of land acquisition. There will be no in stream work. There will be an unknown quantity of urban trees to be removed. The land cover in the vicinity of the project is urban.

Review for Illinois Endangered Species Protection and Illinois Natural Areas Preservation – Part 1075

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project. **Therefore, consultation under Part 1075 is terminated.**

This review for compliance with 17 Ill. Adm. Code Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed improvement is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the proposed improvement has not been implemented within two years of the date of this memorandum, or any of the above listed conditions develop, a new review will be necessary.

Review for Illinois Interagency Wetland Policy Act – Part 1090

The proposed improvement was surveyed for wetlands. We reviewed the wetland survey report and the Wetlands Impact Evaluation form and approve both. There are thirteen wetlands located within the ESR limits. There will be impacts to two wetlands totaling 0.24 acres. Compensation for permanent losses will be provided

at a commercial wetland bank. **Our review for compliance under Part 1090 is terminated.**

Review for Endangered Species Act - Section 7

The proposed improvement was reviewed in fulfillment of our obligation under Section 7(a)(2) of the Endangered Species Act. Our review included use of the US Fish and Wildlife Service's Information for Planning and Conservation (IPaC) web-based review tool. Through IPaC, an official species list was received and is saved to the project folder. The list contains the endangered, threatened, proposed and candidate species and proposed and designated critical habitat that may be present within or in the vicinity of the proposed improvement. The following species are listed in Kane County: Northern long-eared bat (NLEB) and Eastern prairie fringed orchid (EPFO). There is no Critical Habitat in the project vicinity. **Under 50 CFR 402.12(e), the accuracy of the species list is limited to 90 days.**

Northern long-eared bat

Northern long-eared bat suitable summer habitat consists of a wide variety of forested or wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees or snags ≥ 3 inches dbh that have exfoliating bark, cracks, crevices, or hollows) as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit characteristics of suitable roost trees and are within 1,000 feet of other forested or wooded habitat. Trees found in highly-developed urban areas (e.g., street trees, downtown areas) are extremely unlikely to be suitable NLEB habitat.

There will be an unknown quantity of urban trees removed as a result of this project. Land use in the project area is urban. There are no records of maternity roost trees, maternity colonies or hibernacula in the vicinity of the project corridor.

We assessed the potential for adverse impacts to the NLEB in accordance with the Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions and determined that the proposed improvement will have no effect to the NLEB.

Eastern prairie fringed orchid

Eastern prairie fringed orchid occurs in a wide variety of habitats, from mesic prairie to wetland communities such as sedge meadows, marsh edges and even bogs. It requires full sunlight for optimum growth and flowering, which restricts it to grass- and sedge-dominated plant communities. The substrate of the sites where it occurs ranges from neutral to mildly calcareous. Occasionally the orchid colonizes successional habitats or recolonizes previously occupied areas.

We evaluated the limits of the proposed improvement for the presence of potentially suitable EPFO habitat. Our evaluation included the use of EPFO guidance from the US Fish and Wildlife Service, Chicago Ecological Services Field Office. There are no impacted prairies or high-quality wetlands in the project corridor. We determined there would be no effect to EPFO from the proposed improvement.

Other Federally Listed Species

We cross-referenced the preferred habitat of each of the remaining listed species with our knowledge of the project area and determined that there are no suitable habitats present. We have determined that the proposed improvement will have no effect on any of the remaining listed species.

We have determined that the proposed improvement is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of any critical habitat.

Should the proposed improvement be modified or new information indicate listed or proposed species may be affected, consultation or additional coordination should be initiated.

Attachment — USFWS species list

SDH

ATTACHMENT 15

NOISE

Jennifer Mitchell

From: Kawash, Mohammad <Mohammad.Kawash@illinois.gov>
Sent: Thursday, August 18, 2022 10:00 AM
To: Jennifer Mitchell
Cc: Solomon, Marilin D; Thomas, Candance
Subject: FW: Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

Please see below.

From: Raffensperger, William <William.Raffensperger@illinois.gov>
Sent: Thursday, August 18, 2022 10:46 AM
To: Solomon, Marilin D <Marilyn.Solomon@illinois.gov>
Cc: Kawash, Mohammad <Mohammad.Kawash@illinois.gov>
Subject: FW: Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

Please see below. **Please ensure that a copy of the noise study and this email are included in the final PDR when it is submitted for review.**

William Raffensperger, PE, PTOE, PTP
Local Studies & Plans Engineer
Illinois Department of Transportation
Bureau of Local Roads and Streets
2300 S. Dirksen Parkway
Springfield, IL 62764
O - 217.785.1676
C - 217.720.2787

From: Sperry, Benjamin <Benjamin.Sperry@Illinois.gov>
Sent: Thursday, August 18, 2022 8:53 AM
To: Raffensperger, William <William.Raffensperger@illinois.gov>; Mead, Sam M. <Sam.Mead@Illinois.gov>
Cc: Solomon, Marilin D <Marilyn.Solomon@illinois.gov>; Kawash, Mohammad <Mohammad.Kawash@illinois.gov>; Sherrill, John <John.Sherrill@Illinois.gov>; Timothy Kelly <Timothy.Kelly@gza.com>
Subject: RE: Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

Good Morning,

IDOT-BDE concurs with the finding of this noise assessment. Based on the preliminary design, mitigation is not feasible or reasonable for this project. If the project's final design is different from the preliminary design, IDOT will determine if revisions to the traffic noise analysis are necessary. Please reach out via reply e-mail or phone (217.785.0202) if you have any questions.

Thanks,
Ben Sperry

From: Kawash, Mohammad <Mohammad.Kawash@illinois.gov>
Sent: Wednesday, August 3, 2022 3:44 PM
To: Sperry, Benjamin <Benjamin.Sperry@Illinois.gov>

Cc: Solomon, Marilyn D <Marilyn.Solomon@illinois.gov>; Raffensperger, William <William.Raffensperger@illinois.gov>
Subject: RE: Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

Ben,

Below link contains the Noise Assessment for the Randall Road at IL 72 intersection improvement. The attached report is submitted for review and concurrence of the findings that mitigation is not reasonable and nor feasible.

<https://fileT.illinois.gov/filet/download.asp?key=n45JtlfQH3QCnRddZno01uhQfZmaxRaG>

If you have any questions and/or concerns, please let us know.

Thanks,

Moe Kawash

Associate Field Engineer
Bureau of Local Roads & Streets
201 West Center Court
Schaumburg, IL 60196
☎: (847) 705-4205 Ext. 54205
✉: Mohammad.Kawash@illinois.gov





A Subsidiary of GZA



Randall Road at Illinois Route 72 Intersection Improvements Traffic Noise Analysis Kane County, Illinois

June 2021

File No. 81.0220042.08

Proactive by Design.
Our Company Commitment.

PREPARED FOR:

BLA, Inc.

Kane County Division of Transportation

Huff & Huff, A Subsidiary of GZA

915 Harger Road, Suite 330 | Oak Brook, IL 60523
630-684-9100

GZA has 30 Offices Nationwide

www.huffnhuff.com www.gza.com



1.0	INTRODUCTION	1
2.0	NOISE BACKGROUND AND REGULATIONS.....	2
2.1	NOISE BACKGROUND.....	2
2.2	FEDERAL REGULATIONS.....	2
2.3	IDOT POLICY.....	4
3.0	NOISE RECEPTOR SELECTION	5
4.0	FIELD NOISE MEASUREMENTS.....	7
4.1	TRAFFIC VOLUMES.....	7
4.2	TIME AND DAY FOR MEASUREMENTS.....	7
4.3	WEATHER CONDITIONS	7
4.4	INSTRUMENTATION.....	8
4.5	FIELD NOISE MONITORING RESULTS	8
5.0	NOISE ANALYSIS METHODOLOGY	9
5.1	TRAFFIC VOLUMES.....	9
5.2	TRAFFIC COMPOSITION	9
5.3	RECEPTOR DISTANCE/ELEVATION	9
5.4	SPEED CONDITIONS	9
6.0	TNM RESULTS	10
7.0	ABATEMENT ANALYSIS.....	11
7.1	ABATEMENT ALTERNATIVES.....	11
7.2	FEASIBILITY AND REASONABLENESS.....	11
7.3	NOISE WALL ANALYSIS.....	13
8.0	LIKELIHOOD STATEMENT.....	14
9.0	COORDINATION WITH LOCAL OFFICIALS FOR UNDEVELOPED LANDS	15
10.0	CONSTRUCTION NOISE.....	16
11.0	CONCLUSION	17



TABLES

TABLE 1	NOISE ABATEMENT CRITERIA - HOURLY WEIGHTED SOUND LEVEL	3
TABLE 2	NOISE RECEPTOR LOCATIONS	6
TABLE 3	NOISE MONITORING RESULTS, L_{EQ}	9
TABLE 4	NOISE IMPACT SUMMARY – TNM MODELING RESULTS	12
TABLE 5	NOISE WALL COST REASONABLENESS EVALUATION	16

FIGURES

FIGURE 1	PROJECT LOCATION MAP
FIGURE 2	EXISTING LAND USE MAP
FIGURE 3	NOISE RECEPTOR LOCATION MAP
FIGURE 4	ANALYZED NOISE BARRIER LOCATION MAP

APPENDICES

APPENDIX A	LOCAL AGENCY NOISE COORDINATION
------------	---------------------------------



1.0 INTRODUCTION

This traffic noise study has been prepared to evaluate traffic noise for the intersection improvements to Randall Road at Illinois Route 72 (IL 72). The noise study area, shown in Figure 1, is in Kane County, Illinois. An additional lane will be added to Randall Road in each direction. The proposed study will evaluate existing and future traffic noise conditions, and if appropriate, potential noise abatement measures. The existing land use adjacent to the road is a mixture of residential, recreational, agricultural, and open land.

This report presents the federal and state noise regulations (Section 2), a discussion of noise sensitive receptors (Section 3), field noise monitoring (Section 4), a description of the noise analysis methodology (Section 5), the analysis of the existing and future noise levels (Section 6), the noise abatement analysis (Section 7), the likelihood statement (Section 8), coordination with local officials for undeveloped lands (Section 9), construction noise (Section 10), and the noise analysis conclusion (Section 11).



2.0 NOISE BACKGROUND AND REGULATIONS

2.1 NOISE BACKGROUND

Sound is caused by the vibration of air molecules and its loudness is measured on a logarithmic scale using units of decibels (dB). Sound is composed of a wide range of frequencies; however, the human ear is not uniformly sensitive to all frequencies. Therefore, the "A" weighted scale was devised to correspond with the ear's sensitivity. The A-weighting generally weighs noise levels in the humanly audible range more heavily and screens out noise levels that cannot be heard but are still generated, such as a high frequency dog whistle. The A-weighted unit is used because:

- 1) It is easily measured.
- 2) It approximates the human ear's sensitivity to sounds of different frequencies.
- 3) It matches attitudinal surveys of noise annoyance better than other noise measurements.
- 4) It has been adopted as the basic unit of environmental noise by many agencies around the world for assessing community noise issues.

The equivalent sound level (L_{eq}) is the steady-state, A-weighted sound level that contains the same amount of acoustic energy as the actual time-varying, A-weighted sound level over a specified period. If the period is 1 hour, the descriptor is the hourly equivalent sound level or $L_{eq}(h)$, which is widely used by state highway agencies as a descriptor of traffic noise. It is generally the equivalent level of sound (in decibels or dB(A)) that represents the level of sound, held constant over a specified period that reflects the same amount of energy as the actual fluctuating noise over that period. L_{eq} is based on the energy average, not a noise level average.

2.2 FEDERAL REGULATIONS

Traffic noise analyses are required for all projects considered a Type I project. Federal regulations¹ define Type I projects as any of the following:

- The construction of a highway on new location,
- The physical alteration of an existing highway where there is either:
 - *Substantial Horizontal Alteration*. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition, or
 - *Substantial Vertical Alteration*. A project that removes shielding, therefore exposing the line-of-sight between the receptor and the traffic noise source (This is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor).
- The addition of a through-traffic lane(s) (This includes the addition of a through-traffic lane that functions as a HOV lane, High-Occupancy Toll (HOT) lane, bus lane, or truck climbing lane.),
- The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane,

¹ Based on 23 Code of Federal Regulations Part 772, *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (adopted 2010).



- The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange,
- Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane, or,
- The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.

This proposed improvement to the Randall Road and IL 72 intersection would be characterized as a Type I noise project, as it includes additional through-lanes.

Federal regulations establish noise abatement criteria (NAC), which are noise levels where noise abatement should be evaluated. Five separate NAC based upon land use are used by the Federal Highway Administration (FHWA) to assess potential noise impacts. A traffic noise impact occurs when noise levels approach, meet, or exceed the NAC listed in Table 1.² In determining the applicable noise activity category for the study area, existing and proposed land uses were reviewed. The applicable NAC for all residential noise receptors evaluated is 67 dB(A).

TABLE 1. NOISE ABATEMENT CRITERIA - HOURLY WEIGHTED SOUND LEVELS

Activity Category ¹	Leq(h)	Evaluation Location	Activity Description
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B ¹	67	Exterior	Residential.
C ¹	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails and trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E ¹	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F	---	---	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	---	---	Undeveloped lands that are not permitted.

¹ Includes undeveloped lands permitted for this activity category.

² Based on 23 Code of Federal Regulations Part 772, *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (adopted 2010).



2.3 IDOT POLICY

Based on the Federal regulations, State Highway Authorities are allowed to establish the noise level determined to 'approach' the NAC as well as the increase in noise levels that determines a substantial increase. The Illinois Department of Transportation (IDOT) defines noise impacts as follows:

- Design-year traffic noise levels approach, meet, or exceed the NAC, with 'approach' defined as 1 dB(A) (for example, the approach value for the residential NAC of 67 dB(A) would be 66 dB(A)).
- Design-year traffic noise levels are a substantial increase over existing traffic-generated noise levels, defined as an increase of 15 dB(A) or greater.



3.0 NOISE RECEPTOR SELECTION

The land use within the study limits consists of residences, a recreational area associated with an apartment complex, agricultural land, and open land. Figure 2 depicts land use based on field reviews and available aerial photography.

Receptor locations were selected based on land use adjacent to the Randall Road at IL 72 intersection project corridor to represent the land uses with established NAC. For this project, this includes residential areas (land use Activity Category B), and a recreational area (land use Activity Category C). The remaining agricultural lands and open lands along the project corridor are characterized as land use Activity Category F or Activity Category G, which do not have an established NAC.

The traffic noise study evaluates the study area using common noise environments (CNEs). A CNE is a group of receptors within the same activity category that are exposed to similar noise sources and levels. Within each of the CNEs, the closest receptor was selected to represent the CNE, thereby representing the worst-case traffic noise condition (known as the representative receptor). The remaining receptors within the CNEs (known as represented receptors) will have similar traffic noise levels as the representative receptor. CNEs typically are studied within 500 feet from the edge of roadway improvements. The distance of 500 feet is based on FHWA's 2010 performance evaluation of the Traffic Noise Model 2.5 (TNM), the model that will be used to predict existing, no-build, and build noise levels for the proposed project.

Five receptors have been selected to represent the study area. Each receptor represents a CNE. According to IDOT policy, when determining traffic noise impacts, primary consideration shall be given to exterior areas where frequent human use occurs for Activity Categories A, B, C and E. Additionally, IDOT policy states that traffic noise impacts for land uses within Activity Category D shall be predicted for interior areas only if no exterior use areas are identified. Receptor locations were identified at outdoor locations of frequent human use for all noise receptors studied. The trail at the southern end of the project corridor does not have any gathering point within the project study area, and therefore was not assigned a receptor or analyzed for noise impacts. Because exterior areas of frequent human use were identified for all receptors potentially eligible for interior noise studies, no interior noise monitoring or prediction occurred.

Receptors R1 and R2 represent the newly constructed Seasons at Randall apartment complex. Receptor R1 represents the outdoor pool at the clubhouse and Receptor R2 represents the closest apartment building to Randall Road. This apartment complex is new enough as to not appear on available aerial photography. The remaining receptors are present in the available aerial photography.

Table 2 lists the receptor/CNE number, the receptor type, the land use category and associated NAC, the nearest major roadway, and the approximate distance to the proposed edges of pavement. Figure 3 depicts the aerial photography of the study area with the receptors and CNEs depicted. Receptor locations are between 60 feet and 440 feet from the nearest proposed edge of pavement.

The vacant and undeveloped areas within the project area, shown as land use Activity Category F or Activity Category G in Figure 2, were reviewed to determine if any were permitted for development. Based on the information available from the governing agencies with permitting jurisdiction, there are no existing permits for development within the project limits.



TABLE 2. NOISE RECEPTOR LOCATIONS

Receptor/CNE Number	Receptor Type	Activity Category / NAC (dB(A))	Nearest Major Roadway	Distance to Nearest Major Roadway Proposed Edge of Pavement, ft.
R1	Recreational	C / 67	Randall Road	210
R2	MFR	B / 67	Randall Road	440
R3	SFR	B / 67	Illinois Route 72	60
R4	SFR	B / 67	Randall Road	120
R5	SFR	B / 67	Randall Road	315

SFR denotes Single Family Residential
MFR denotes Multi-Family Residential



4.0 FIELD NOISE MEASUREMENTS

Actual noise level measurements (noise monitoring) provide a “snapshot” of existing site conditions. The traffic volumes and conditions during the actual noise level measurements need to be considered when evaluating field measurements as typical for the area. The following methodology was used to collect noise level measurements.

Traffic noise levels measured during noise monitoring events are representative of the traffic characteristics (volume, speed and composition) for the period measured. This may or may not be the peak-hour noise condition at the location being measured. In addition, the noise levels also are influenced by other noise sources in the area (other than the traffic noise) and the characteristics of the location (such as shielding afforded by existing berms or structures). Consequently, comparison of the noise levels between locations also needs to consider the variations in site characteristics in addition to varying traffic conditions. Noise monitoring was conducted at three representative receptor locations – R1, R3, and R5. The noise monitoring results were compared with TNM results for existing conditions present during the monitoring to validate the noise model.

4.1 TRAFFIC VOLUMES

Traffic volumes along roadways adjacent to receptors were counted during field monitoring where traffic was present. The number of cars and trucks were recorded separately along with any other noise sources observed during monitoring. The traffic volumes were counted as a total for each direction during the noise monitoring periods. The traffic volumes counted were extrapolated to hourly volumes for use in noise model validation. This procedure is accepted by the FHWA as a representative noise monitoring method, detailed in IDOT’s “Highway Traffic Noise Assessment Manual” (IDOT HTNA Manual) Section 3.5.2.

4.2 TIME AND DAY FOR MEASUREMENTS

Typically, noise monitoring is conducted during free-flow traffic conditions. Noise monitoring was conducted at all three monitoring locations on March 12, 2021 between the hours of 10 am to 12 pm. This follows the noise monitoring methodology to define existing noise levels as described in FHWA’s “Noise Measurement Handbook” (FHWA June 2018).

4.3 WEATHER CONDITIONS

Weather conditions have some effect on noise measurement readings. Noise measurements cannot be taken if wind speed exceeds 11 mph. A wind screen was used at all times during the monitoring to reduce wind noise. The conditions during the monitoring are summarized as follows:



WEATHER CONDITIONS DURING THE NOISE MONITORING

Condition	Required	Actual*
Pavement	Dry	Dry
Humidity	Less than 90%	43 - 50%
Temperature	14 to 112 degrees F	46 - 49 degrees F
Wind Speed	Less than 11 mph	10 mph

* NWS Data

The weather conditions during the noise monitoring were within the recommended ranges for all parameters listed.

4.4 INSTRUMENTATION

A Bruel & Kjaer 2250L sound level meter was used for monitoring the actual noise level. The L_{eq} was recorded using the "A" weighted scale. L_{eq} is the equivalent level of sound (in decibels or dB(A)) held constant over a specified period that has the same amount of energy as the actual fluctuating noise over that time period. The instrument was calibrated prior to each use. The instrument was set up approximately five (5) feet from the ground and the measurement was conducted until an equilibrium was reached, which was generally 10 minutes. The noise meter was placed in an outdoor location where human activity typically occurs or in a location representative of that location.

4.5 FIELD NOISE MONITORING RESULTS

Table 3 compares the noise monitoring results for the three monitored locations to the TNM modeled existing noise levels. Noise monitored levels ranged from 54 dB(A) to 61 dB(A). The difference between modeled and monitored noise levels indicates that the TNM model accurately represents the project area and its characteristics. Sections 5 and 6 describe the TNM modeling methodology and results. Monitored noise levels are within 3 dB(A) of the modeled noise levels using the traffic volumes observed during the monitoring period, which validates the TNM model. The impact analysis and abatement evaluation will be conducted using the build traffic noise model results.

TABLE 3. NOISE MONITORING RESULTS, L_{eq}

Receptor	Noise Level Monitored, dB(A)	Modeled Existing Noise Level, dB(A)*	Difference Between Modeled and Monitored, dB(A)
R1	54	56	-2
R3	61	63	-2
R5	55	56	-1

*Modeling methodology and results are presented in Section 5 and Section 6, respectively.



5.0 NOISE ANALYSIS METHODOLOGY

Modeling traffic noise levels at receptors within the project limits was conducted utilizing the FHWA-approved TNM. Prediction of noise levels is one step in assessing potential noise impacts and abatement strategies. Traffic noise levels for the receptor sites were predicted using existing (2021) and future (2050) traffic volumes.

Inputs into TNM include traffic volume, traffic mix (cars, heavy trucks, and medium trucks), traffic controls, receptor distance, elevation, and average speeds during free-flowing traffic conditions. Information sources used in the analysis are briefly described in the following subsections.

5.1 TRAFFIC VOLUMES

Peak hourly volumes were provided by the project team for the years 2019 and 2050 for Randall Road, IL 72, and the major crossroads. The PM peak hour represents the worst-case peak hour volume for both the existing and future conditions. The year 2021 data was interpolated from the 2019 and 2050 data.

5.2 TRAFFIC COMPOSITION

Three types of vehicles (cars, medium trucks, and heavy trucks) were input into TNM. Truck composition for the roadways was estimated based on the truck percentages obtained from IDOT ADT data. The percentage of automobiles within the project area is estimated to range from 89 percent to 97 percent, with medium and heavy trucks combined accounting for between 3 percent and 11 percent. Heavy trucks were assumed to represent half of the truck traffic, with medium trucks representing the other half.

5.3 RECEPTOR DISTANCE/ELEVATION

Table 2 includes the distances of the receptors from the nearest proposed edge of pavement. The selected representative receptors include residences and a patio/pool. The distance to the nearest major roadway and elevation of each receptor directly affects the predicted traffic noise level. These distances vary from 60 feet at Receptor R3 to 440 feet at Receptor R2. The specific location of each receptor is based upon identifying the location where outdoor activity occurs.

5.4 SPEED CONDITIONS

The existing posted speed limit for the individual roadways was used for the noise analysis and has been input into the model.



6.0 TNM RESULTS

Existing (2021), No-Build (2050), and Build (2050) traffic noise levels were predicted for the five receptor sites utilizing TNM. Table 4 presents the existing (2021) and projected (2050) noise levels for the five receptor sites, as well as the anticipated difference in noise levels for these two time periods.

The existing 2021 noise levels range from 57 dB(A) at R2 to 67 dB(A) at R3 and R4. The projected No-Build 2050 traffic noise levels range from 58 dB(A) at R2 to 69 dB(A) at R3. Generally, receptor noise levels increase either 1 dB(A) or 2 dB(A) from the existing scenario to the 2050 No-Build scenario. Any increase in traffic noise levels is due to an increase in traffic volumes.

The projected Build 2050 traffic noise levels range from 58 dB(A) at R2 to 69 dB(A) at R3. The receptors increase in noise levels from the existing scenario to the build scenario by either 1 dB(A) or 2 dB(A).

Under the proposed 2050 Build scenario there are two receptor locations that exceed the FHWA NAC and are considered traffic noise impacts, warranting a noise abatement analysis (R3 and R4). None of the impacted receptors are considered impacted due to a substantial increase (15 dB(A) increase or greater) in traffic noise levels.

TABLE 4. NOISE IMPACT SUMMARY – TNM MODELING RESULTS

Receptor / CNE Number	Activity Category / NAC (dB(A))	Distance to Nearest Major Road Proposed Edge of Pavement, ft.	Existing 2021 Noise Level, dB(A)	No-Build 2050 Noise Level, dB(A)	Build 2050 Noise Level, dB(A)	Increase in Build Noise Levels over Existing Noise Levels, dB(A)
R1	B / 67	210	59	60	61	2
R2	B / 67	440	57	58	58	1
R3	B / 67	60	67	69	69	2
R4	B / 67	120	67	68	68	1
R5	B / 67	315	59	60	60	1

Bold and highlighted data indicates the noise levels approach, meet, or exceed the NAC in future build condition



7.0 ABATEMENT ANALYSIS

7.1 ABATEMENT ALTERNATIVES

Traffic noise abatement measures were considered for the two impacted receptors that approach, meet, or exceed the appropriate FHWA NAC and/or have a substantial increase in noise impact, as shown in Table 4. The most feasible approach to abating noise impacts in this area would be to construct a noise barrier. A noise barrier may be a noise wall, an earth berm, or a combination of both. Noise barriers placed adjacent to the roadway will attenuate traffic-related noise and are the most practical measure for this project. An effective noise barrier must be tall enough to break the line-of-sight between the receptor and source and typically extends beyond the last receptor four times the distance between the receptor and noise barrier. Noise barriers have a zone of effectiveness, or shadow zone, which is generally within 200 feet of the noise barrier. Therefore, less noise reduction is achieved as the distance between the receptor and the noise barrier increases.

TNM was used to perform the noise barrier feasibility and reasonableness evaluation for the impacted receptors. When determining if an abatement measure is feasible and reasonable, the noise reductions achieved, number of residences benefited, total cost, and total cost per residence benefited are considered.

7.2 FEASIBILITY AND REASONABLENESS

An analysis of noise abatement measures (noise barriers) was conducted in conformance with FHWA requirements contained in Title 23 *Code of Federal Regulations* Part 772, and IDOT policy (Chapter 26 of the IDOT Bureau of Design and Environmental Manual) for the impacted receptors. In order for a noise abatement measure to be recommended for construction, it must meet both the feasibility and reasonableness criteria, described below.

Feasibility

The feasibility evaluation is a combination of acoustical and engineering factors considered in the evaluation of a noise abatement measure. The acoustical portion of the IDOT policy, as required by FHWA regulations, considers noise abatement to be feasible if it achieves at least a 5 dB(A) traffic noise reduction at two impacted receptors. Factors including but not limited to safety, barrier height, topography, drainage, utilities, maintenance, and access issues also are considered.

Reasonableness

As per the FHWA regulations, a noise abatement measure is determined to be reasonable when all three of the following reasonableness criteria are met:

- achievement of IDOT's noise reduction design goal;
- cost effectiveness of the highway traffic noise abatement measure; and,
- consideration of the viewpoints of the benefited receptors (property owners and residents) if all other criteria are achieved.

A noise abatement measure is considered cost-effective to construct if the noise wall construction cost per benefited receptor is less than the allowable cost per benefited receptor. A benefited receptor is any receptor that is afforded at least a 5 dB(A) traffic noise reduction from the proposed noise abatement measure. The FHWA regulations allow each State Highway Authority to establish cost criteria for determining cost effectiveness.



IDOT policy³ establishes that the actual cost per benefited receptor be based on a noise wall cost of \$30 per square foot, which includes engineering, materials, and construction. The base value allowable cost is \$30,000 per benefited receptor, which can be increased based on three factors as summarized below:

- the absolute noise level of the benefited receptors in the design year build scenario before noise abatement;
- the incremental increase in noise level between the existing noise level at the benefited receptor and the predicted build noise level before noise abatement; and
- the date of development compared to the construction date of the highway. These factors are considered for all benefited receptors.

ABSOLUTE NOISE LEVEL CONSIDERATION

Predicted Build Noise Level Before Noise Abatement	Dollars Added to Base Value Cost per Benefited Receptor
Less than 70 dB(A)	\$0
70 to 74 dB(A)	\$1,000
75 to 79 dB(A)	\$2,500
80 dB(A) or greater	\$5,000

Source: IDOT Highway Traffic Noise Assessment Manual

INCREASE IN NOISE LEVEL CONSIDERATION

Incremental Increase in Noise Level Between the Existing Noise Level and the Predicted Build Noise Level Before Noise Abatement	Dollars Added to Base Value Cost per Benefited Receptor
Less than 5 dB(A)	\$0
5 to 9 dB(A)	\$1,000
10 to 14 dB(A)	\$2,500
15 dB(A) or greater	\$5,000

Source: IDOT Highway Traffic Noise Assessment Manual

³ Chapter 26 of the IDOT Bureau of Design and Environment Manual



NEW ALIGNMENT / CONSTRUCTION DATE CONSIDERATION

Project is on new alignment OR the receptor existed prior to the original construction of the highway	Dollars Added to Base Value Cost per Benefited Receptor
No for both	\$0
Yes for either	\$5,000

Note: No single optional reasonableness factor shall be used to determine that a noise abatement measure is unreasonable.
 Source: IDOT Highway Traffic Noise Assessment Manual

The IDOT noise reduction design goal is to achieve an 8 dB(A) traffic noise reduction for at least one benefitted receptor. If a noise abatement measure is feasible, achieves the cost-effective criterion, and achieves the IDOT noise reduction design goal, then the viewpoints of benefitted receptors are solicited on the construction of the noise wall.

7.3 NOISE WALL ANALYSIS

TNM was used to perform the noise wall feasibility and reasonableness analyses for the potential noise barriers. When determining if an abatement measure was feasible and reasonable, the noise reductions achieved, number of residences benefitted, total cost, and total cost per residence benefitted are considered.

Two potential noise walls were evaluated for the two impacted receptors. Noise walls were generally modeled along the proposed right-of-way (ROW).

One noise wall (B1) was found to be feasible, meaning it could achieve at least a 5 dB(A) reduction at two or more impacted receptors. The other noise wall (B2) was found to not be acoustically feasible as there is only one impacted receptor within the CNE, meaning that a 5 dB(A) reduction at two or more impacted receptors could not be achieved. The gaps in the wall needed to maintain driveway access limited the effectiveness of the barrier.

The feasible noise wall B1 does not meet the first criterion of reasonableness, as it does not achieve the IDOT noise reduction design goal of at least an 8 dB(A) traffic noise reduction at one or more benefitted receptors. Table 5 summarizes the results of the noise abatement evaluation. The analyzed noise barrier locations are detailed in Figure 4.

TABLE 5. NOISE WALL COST REASONABLENESS EVALUATION

Barrier	CNE(s) Benefited	Benefited Receptors ¹	Barrier Length (ft) ²	Average Barrier Height (ft) ²	Barrier Construction Cost ³	Actual Cost per Benefited Receptor	Adjusted Allowable Cost per Benefited Receptor ⁴	Ratio ⁵	Finding
B1	R3	Does not meet Reasonableness Criteria of 1 or More Receptors Receiving at least an 8 dB(A) Reduction						N/A	Not Reasonable
B2	R4	Does not meet Feasibility Criteria of 2 Impacted Receptors Receiving at least a 5 dB(A) Reduction						N/A	Not Feasible

¹ Any receptor receiving at least a 5 dB(A) reduction due to the proposed barrier
² Barrier length and height are not listed for barriers that are not reasonable or feasible
³ Based on the IDOT policy value of \$30 per square foot
⁴ Per IDOT traffic noise policy and the reasonableness analysis
⁵ Ratio of actual build cost of a barrier per benefitted receptor to the adjusted allowable cost per benefitted receptor. This is used to determine if a barrier can be cost-effective through cost averaging. For a single noise abatement measure to be considered as part of a cost-averaging evaluation, this ratio must not exceed 2.0 (the cost of noise abatement per benefitted receptor may not exceed two times the adjusted allowable noise abatement cost per benefitted receptor).



8.0 LIKELIHOOD STATEMENT

The proposed project is anticipated to have traffic noise impacts, but the noise barriers studied and identified in Table 5 do not meet IDOT's feasibility and reasonableness criteria. Due to this, traffic noise abatement measures are not likely to be implemented based on preliminary design. If the project's final design is different from the preliminary design, IDOT will determine if revisions to the traffic noise analysis are necessary. A final decision on noise abatement will not be made until the project's final design is approved and the public involvement processes is complete.



9.0 COORDINATION WITH LOCAL OFFICIALS FOR UNDEVELOPED LANDS

Figure 2 depicts the land use within the project limits. Undeveloped parcels of land exist throughout the corridor. For planning purposes, the Year 2050 Build scenario was analyzed to predict traffic noise levels on the undeveloped areas. Noise level contours were developed at 66 dB(A) and 71 dB(A) noise levels to determine where the NAC would be approached in the Build scenario.

Appendix A includes a draft of letters that will be sent to the local officials having jurisdiction over the undeveloped lands, and an exhibit (as an attachment to the letter), depicting the approximate distances where the NACs Activity Categories B/C, (67 dB(A)) and E (72 dB(A)) are approached.



10.0 CONSTRUCTION NOISE

Trucks and machinery used for construction produce noise that may affect some land uses and activities during the construction period. Residents along the alignment will at some time experience perceptible construction noise from implementation of the project. To minimize or eliminate the effect of construction noise on these receptors, mitigation measures have been incorporated into IDOT's Standard Specifications for Road and Bridge Construction as Article 107.35.



11.0 CONCLUSION

This traffic noise study has been conducted to evaluate traffic noise impacts for the proposed intersection improvements to Randall Road and IL 72 in Kane County, Illinois. Traffic noise was evaluated at 5 receptor locations. The Existing 2021 noise levels range from 57 dB(A) to 67 dB(A). The projected No-Build 2050 traffic noise levels range from 58 dB(A) to 69 dB(A). Receptor noise levels increase either 1 dB(A) or 2 dB(A) from the existing scenario to the 2050 No-Build scenario. Any increase in traffic noise levels is due to an increase in traffic volumes.

The projected Build 2050 traffic noise levels range from 58 dB(A) to 69 dB(A). The receptors increase in noise levels from the existing scenario to the build scenario by either 1 dB(A) or 2 dB(A). Under the proposed 2050 Build scenario, noise levels at two receptor locations approach or exceed the FHWA NAC, and therefore warrant a noise abatement analysis. No receptors are considered impacted due to a substantial increase (15 dB(A) increase or greater) in traffic noise levels.

Two potential noise walls were evaluated for the two impacted receptors. One noise wall was found to be feasible, meaning it could achieve at least a 5 dB(A) reduction at two or more impacted receptors. The other noise wall was found to be not acoustically feasible as only a single impacted receptor was present.

The feasible noise barrier (B1) would not meet the first criterion of reasonableness, as it fails to achieve the IDOT noise reduction design goal of at least an 8 dB(A) traffic noise reduction at one or more benefited receptors. The gaps in the wall needed to maintain driveway access limited the effectiveness of the barrier.

The proposed project is anticipated to have traffic noise impacts, but the noise barriers studied and identified in Table 5 do not meet IDOT's feasibility and reasonableness criteria. Due to this, traffic noise abatement measures are not likely to be implemented based on preliminary design. If the project's final design is different from the preliminary design, IDOT will determine if revisions to the traffic noise analysis are necessary. A final decision on noise abatement will not be made until the project's final design is approved and the public involvement processes is complete.



REFERENCES

IDOT Bureau of Design and Environment (BDE) Manual, Chapter 26-6, Noise Analyses.

IDOT Bureau of Design and Environment (BDE) Manual, Appendix D, Guidance on EA/EIS Preparation.

IDOT Highway Traffic Noise Assessment Manual, 2017 Addition.

FHWA Construction Noise Handbook, FHWA-HEP-06-015, August 2006.

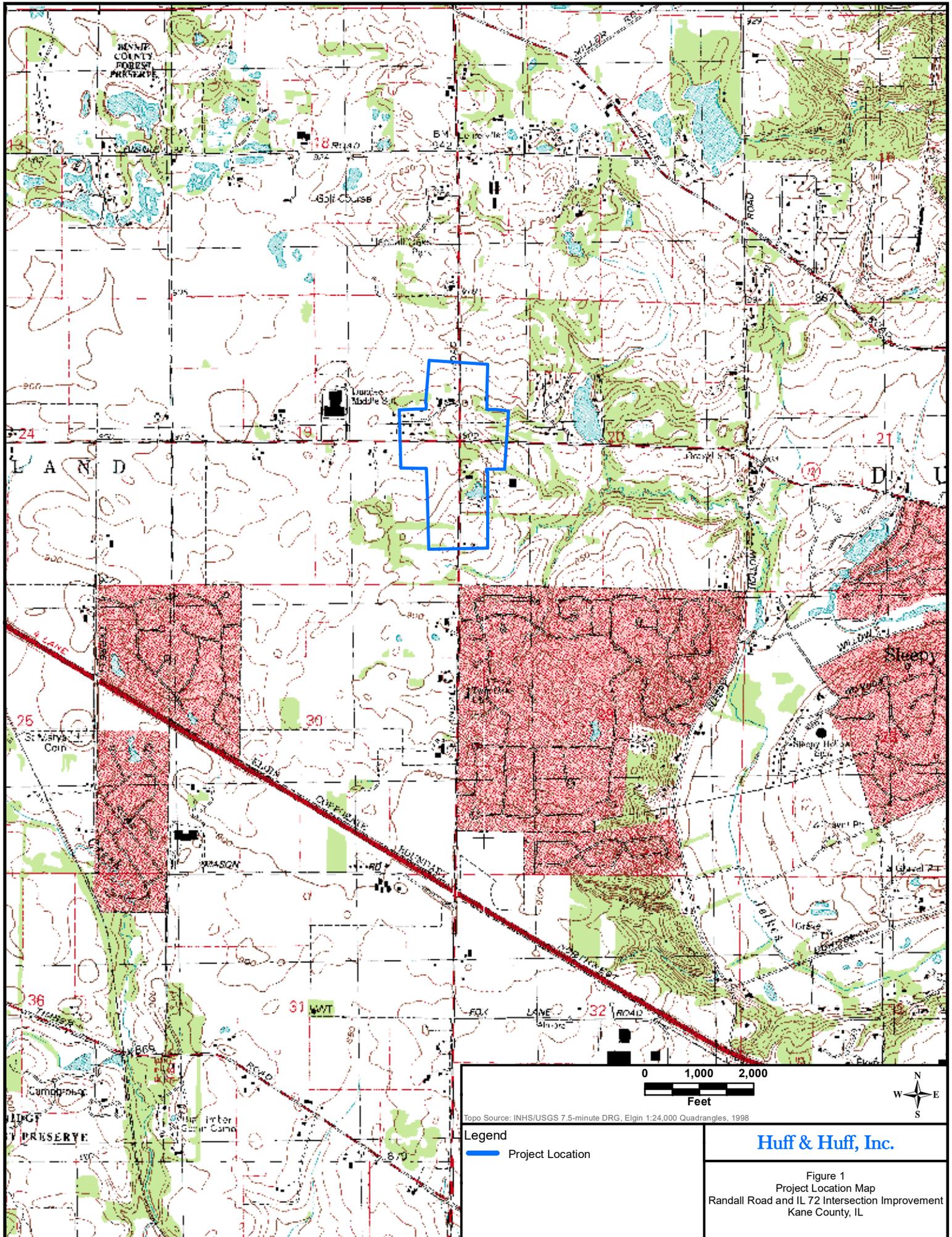
FHWA Noise Measurement Handbook, FHWA-HEP-18-065, June 1, 2018.

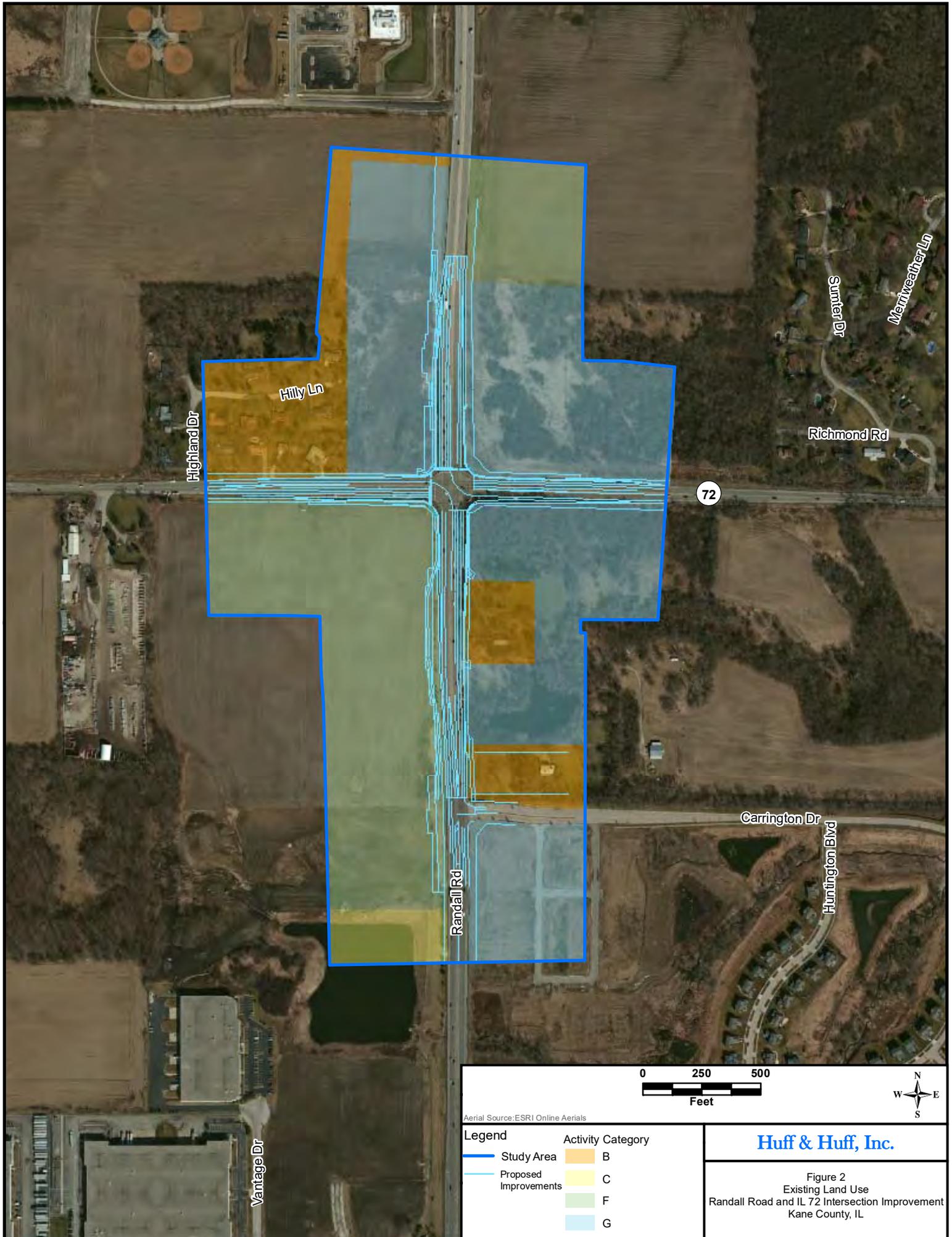
23 CFR 772 "Procedures for Abatement of Highway Traffic Noise and Construction Noise", July 13, 2010.

FHWA Highway Traffic Noise: Analysis and Abatement Guidance, FHEA-HEP-10-025, December 2011.

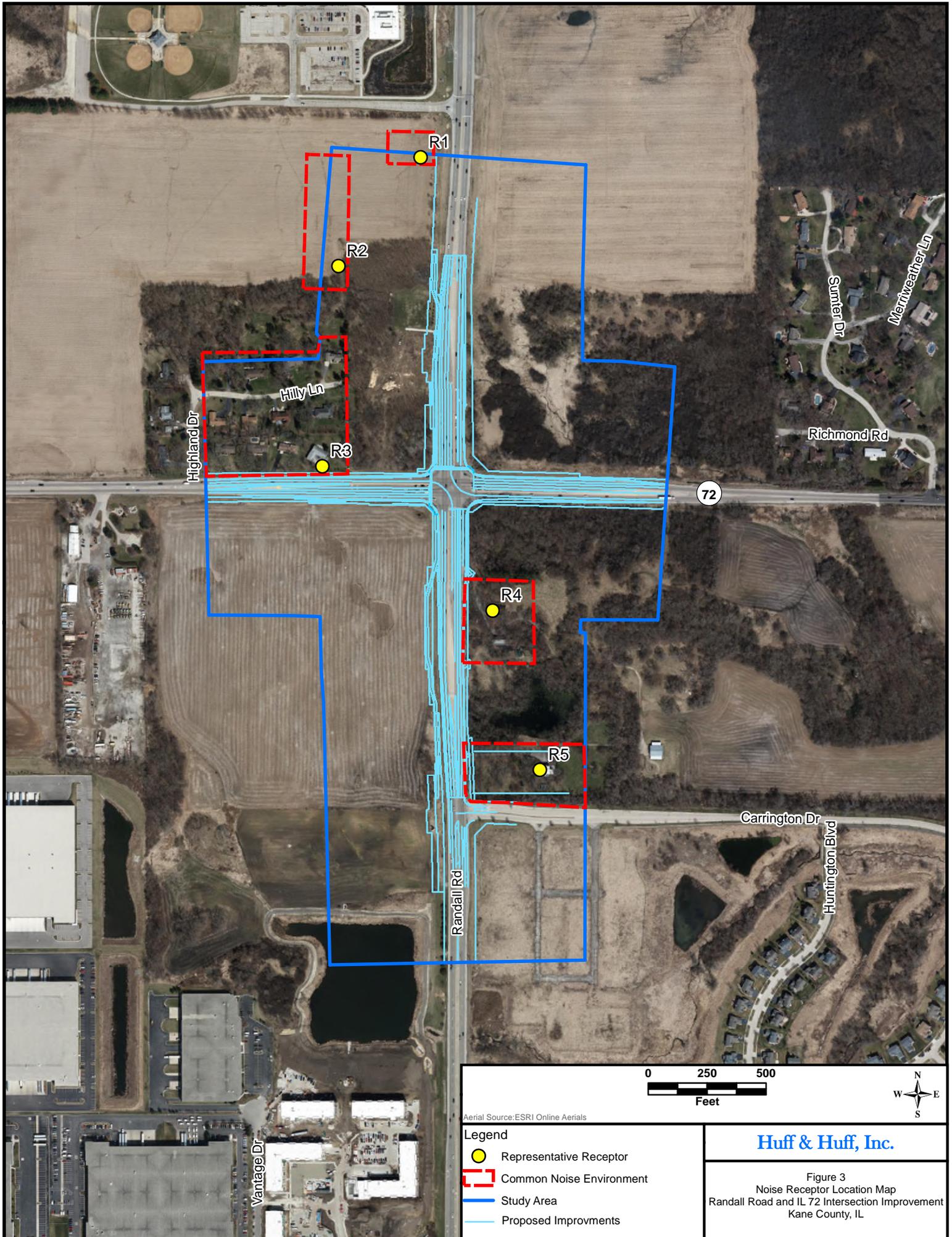
FHWA Highway Noise Barrier Design Handbook, FHWA-EP-00-005, February 2000.

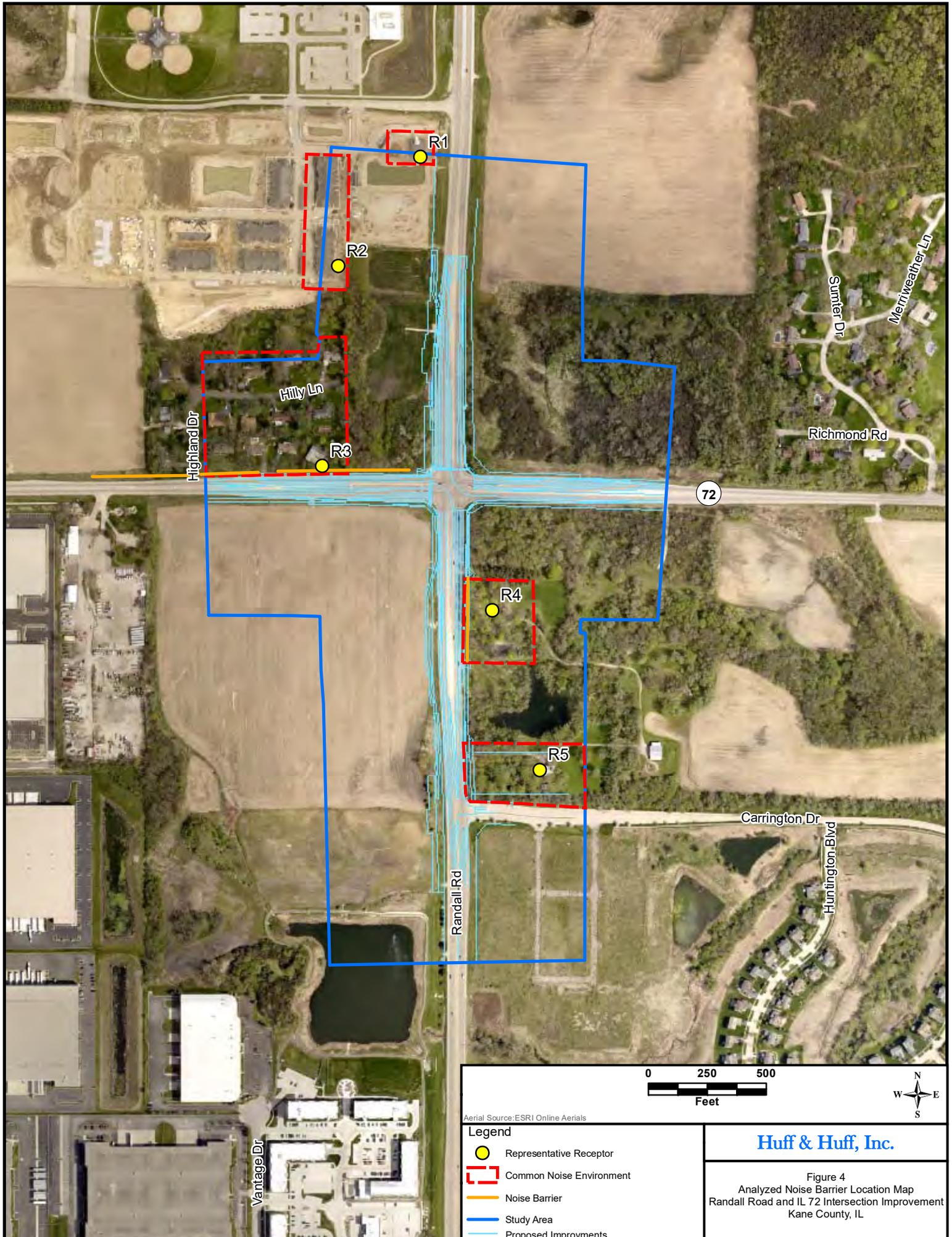
Figures





<p>Aerial Source: ESRI Online Aerials</p>		<p>0 250 500 Feet</p>			
<p>Legend</p>		<p>Activity Category</p>			
<p>Study Area</p>		<p>B</p>			
<p>Proposed Improvements</p>		<p>C</p>			
		<p>F</p>			
		<p>G</p>			
<p>Huff & Huff, Inc.</p>					
<p>Figure 2 Existing Land Use Randall Road and IL 72 Intersection Improvement Kane County, IL</p>					





<p>0 250 500</p> <p>Feet</p>		
<p>Aerial Source: ESRI Online Aerials</p>		
<p>Legend</p> <ul style="list-style-type: none"> Representative Receptor Common Noise Environment Noise Barrier Study Area Proposed Improvements 		
<p>Huff & Huff, Inc.</p>		
<p>Figure 4 Analyzed Noise Barrier Location Map Randall Road and IL 72 Intersection Improvement Kane County, IL</p>		

Appendix A – Local Agency Noise Coordination

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

August 23, 2022

Altrin Fard
Village Planner
Public Safety Center II
100 Carrington Drive
West Dundee, IL 60118

Re: Traffic Noise Information for Undeveloped Lands
Randall Road and Illinois Route 72 Intersection Improvement

Dear Mr. Fard,

The Kane County Division of Transportation is currently conducting environmental (Phase I) preliminary engineering studies for proposed improvements of Randall Road and Illinois Route 72 in Kane County, Illinois.

As part of the Phase I Environmental Study for this proposed project, projected future traffic noise levels were evaluated for lands (either currently under your jurisdiction or land that may come under your jurisdiction) near the proposed roadway improvement. For your information, this study area includes land that may be planned for future development in a comprehensive land use plan.

This letter includes an exhibit showing the predicted design year (2050) build traffic noise levels for the undeveloped lands along the project corridor within your jurisdiction. This information is for your use in planning and permitting future development. We recommend that you carefully consider the future predicted noise levels to avoid potential issues of public concern over incompatible noise levels.

The figure shows currently vacant/future development areas in blue or green, and also shows the distance from the edge of the proposed pavement (based on the proposed improvement) to both the 66- and 71-dB(A) noise level contours.

- A 66-dB(A) noise contour represents noise levels that would be a noise impact for residential areas, schools, places of worship, medical offices, recreational areas, and institutional uses.
- A 71-dB(A) noise contour represents noise levels that would be a noise impact for hotels, restaurants, and offices.

To help with your future planning and discernment regarding permitting decisions, we encourage you to obtain the Federal Highway Administration (FHWA) publication titled *Entering the Quiet Zone: Noise Compatible Land Use Planning*. This publication can be obtained from the FHWA website:

www.fhwa.dot.gov/environment/noise/noise_compatible_planning/federal_approach/land_use/quiet_ezon.pdf

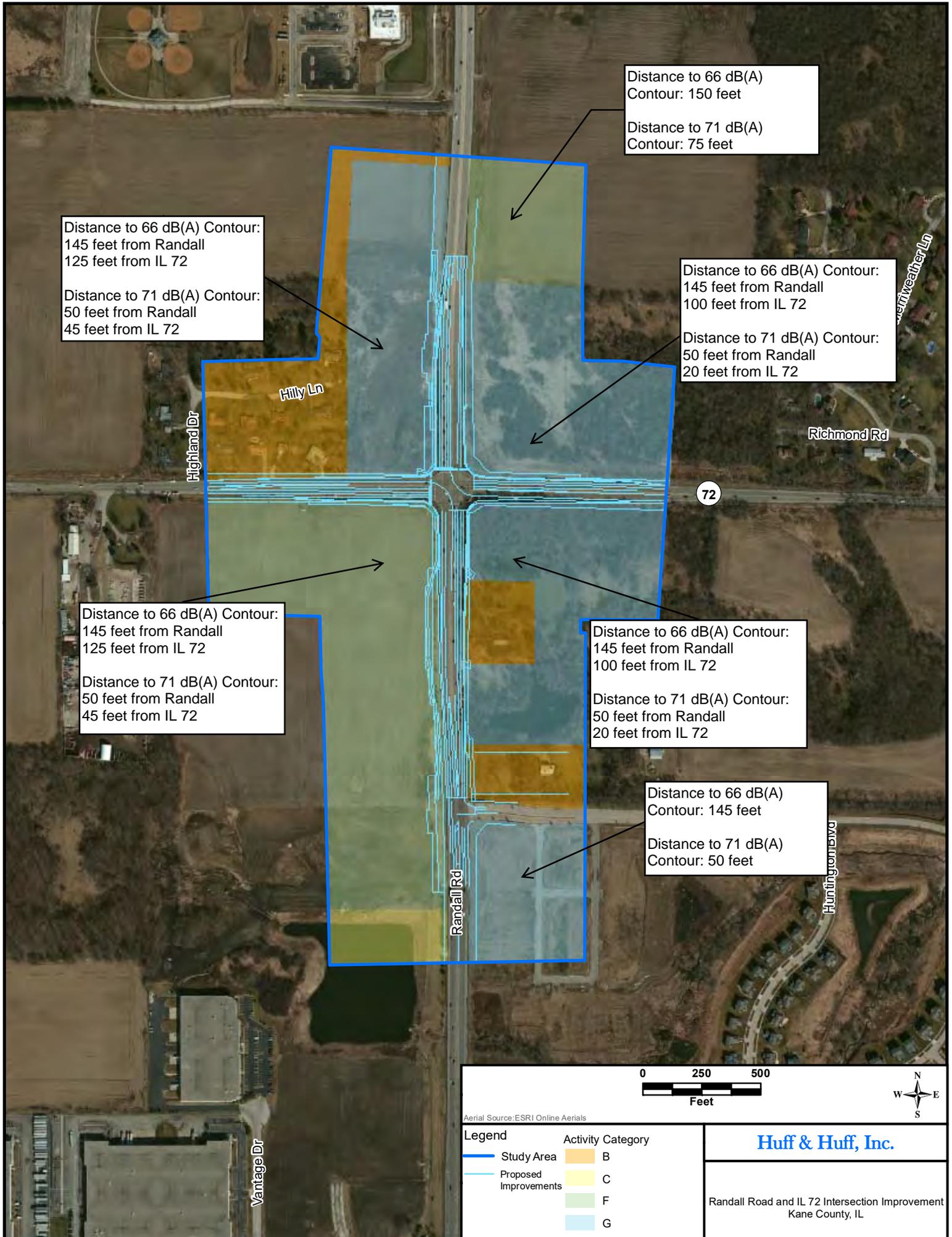
For additional information regarding traffic noise, regulations and policy, noise analyses or noise abatement, we encourage you to visit the Department's web site at: <http://www.dot.il.gov/>. Click on the "Environment" link and then the "Traffic Noise" link to access this information.

If you have any questions or require additional information, please contact Candi Thomas of our office by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

A handwritten signature in black ink, appearing to read 'CS', with a large, stylized flourish extending to the right.

Carl Schoedel, P.E.
Director/County Engineer



Distance to 66 dB(A) Contour:
145 feet from Randall
125 feet from IL 72

Distance to 71 dB(A) Contour:
50 feet from Randall
45 feet from IL 72

Distance to 66 dB(A)
Contour: 150 feet

Distance to 71 dB(A)
Contour: 75 feet

Distance to 66 dB(A) Contour:
145 feet from Randall
100 feet from IL 72

Distance to 71 dB(A) Contour:
50 feet from Randall
20 feet from IL 72

Distance to 66 dB(A) Contour:
145 feet from Randall
125 feet from IL 72

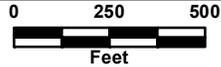
Distance to 71 dB(A) Contour:
50 feet from Randall
45 feet from IL 72

Distance to 66 dB(A) Contour:
145 feet from Randall
100 feet from IL 72

Distance to 71 dB(A) Contour:
50 feet from Randall
20 feet from IL 72

Distance to 66 dB(A)
Contour: 145 feet

Distance to 71 dB(A)
Contour: 50 feet



Aerial Source: ESRI Online Aerials

Legend		Activity Category	
—	Study Area	■	B
—	Proposed Improvements	■	C
		■	F
		■	G

Huff & Huff, Inc.

Randall Road and IL 72 Intersection Improvement
Kane County, IL

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

August 23, 2022

Richard Kozal
City Manager
City Managers Office
150 Dexter Ct.
Elgin, IL 60120-5570

Re: Traffic Noise Information for Undeveloped Lands
Randall Road and Illinois Route 72 Intersection Improvement

Dear M. Kozal,

The Kane County Division of Transportation is currently conducting environmental (Phase I) preliminary engineering studies for proposed improvements of Randall Road and Illinois Route 72 in Kane County, Illinois.

As part of the Phase I Environmental Study for this proposed project, projected future traffic noise levels were evaluated for lands (either currently under your jurisdiction or land that may come under your jurisdiction) near the proposed roadway improvement. For your information, this study area includes land that may be planned for future development in a comprehensive land use plan.

This letter includes an exhibit showing the predicted design year (2050) build traffic noise levels for the undeveloped lands along the project corridor within your jurisdiction. This information is for your use in planning and permitting future development. We recommend that you carefully consider the future predicted noise levels to avoid potential issues of public concern over incompatible noise levels.

The figure shows currently vacant/future development areas in blue or green, and also shows the distance from the edge of the proposed pavement (based on the proposed improvement) to both the 66- and 71-dB(A) noise level contours.

- A 66-dB(A) noise contour represents noise levels that would be a noise impact for residential areas, schools, places of worship, medical offices, recreational areas, and institutional uses.
- A 71-dB(A) noise contour represents noise levels that would be a noise impact for hotels, restaurants, and offices.

To help with your future planning and discernment regarding permitting decisions, we encourage you to obtain the Federal Highway Administration (FHWA) publication titled *Entering the Quiet Zone: Noise Compatible Land Use Planning*. This publication can be obtained from the FHWA website:

www.fhwa.dot.gov/environment/noise/noise_compatible_planning/federal_approach/land_use/quiet_ezon.pdf

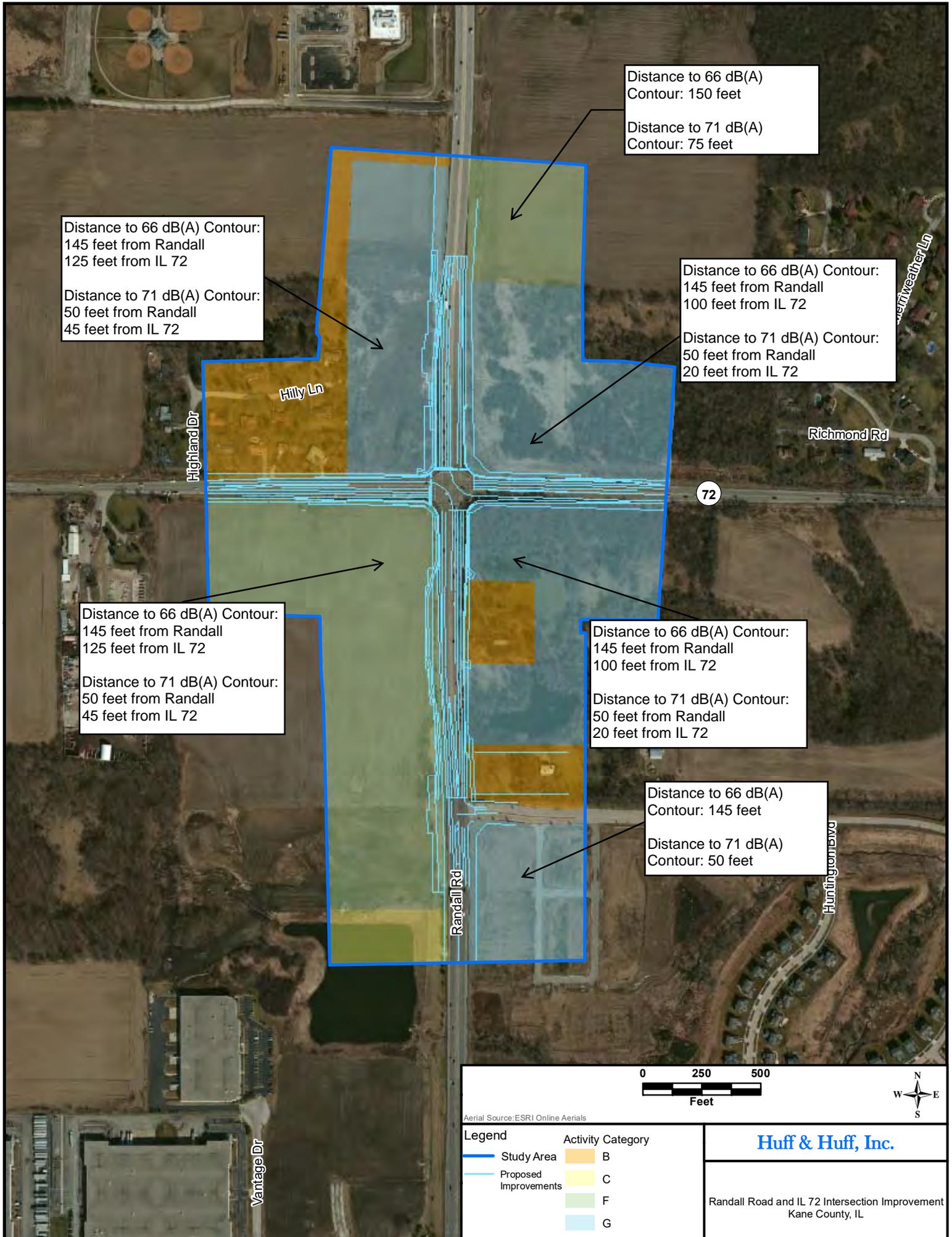
For additional information regarding traffic noise, regulations and policy, noise analyses or noise abatement, we encourage you to visit the Department's web site at: <http://www.dot.il.gov/>. Click on the "Environment" link and then the "Traffic Noise" link to access this information.

If you have any questions or require additional information, please contact Candi Thomas of our office by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

A handwritten signature in black ink, appearing to read 'Carl Schoedel', with a large, stylized flourish at the end.

Carl Schoedel, P.E.
Director/County Engineer



Distance to 66 dB(A) Contour:
145 feet from Randall
125 feet from IL 72

Distance to 71 dB(A) Contour:
50 feet from Randall
45 feet from IL 72

Distance to 66 dB(A)
Contour: 150 feet

Distance to 71 dB(A)
Contour: 75 feet

Distance to 66 dB(A) Contour:
145 feet from Randall
100 feet from IL 72

Distance to 71 dB(A) Contour:
50 feet from Randall
20 feet from IL 72

Distance to 66 dB(A) Contour:
145 feet from Randall
125 feet from IL 72

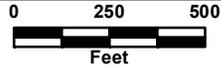
Distance to 71 dB(A) Contour:
50 feet from Randall
45 feet from IL 72

Distance to 66 dB(A) Contour:
145 feet from Randall
100 feet from IL 72

Distance to 71 dB(A) Contour:
50 feet from Randall
20 feet from IL 72

Distance to 66 dB(A)
Contour: 145 feet

Distance to 71 dB(A)
Contour: 50 feet



Aerial Source: ESRI Online Aerials

Legend		Activity Category	
—	Study Area	■	B
—	Proposed Improvements	■	C
		■	F
		■	G

Huff & Huff, Inc.

Randall Road and IL 72 Intersection Improvement
Kane County, IL

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

August 23, 2022

Mark VanKerkhoff, AIA
Director
Kane County Development and Community Services Department
719 Batavia Avenue, Building A, 4th Floor
Geneva, IL 60134

Re: Traffic Noise Information for Undeveloped Lands
Randall Road and Illinois Route 72 Intersection Improvement

Dear Mr. VanKerkhoff,

The Kane County Division of Transportation is currently conducting environmental (Phase I) preliminary engineering studies for proposed improvements of Randall Road and Illinois Route 72 in Kane County, Illinois.

As part of the Phase I Environmental Study for this proposed project, projected future traffic noise levels were evaluated for lands (either currently under your jurisdiction or land that may come under your jurisdiction) near the proposed roadway improvement. For your information, this study area includes land that may be planned for future development in a comprehensive land use plan.

This letter includes an exhibit showing the predicted design year (2050) build traffic noise levels for the undeveloped lands along the project corridor within your jurisdiction. This information is for your use in planning and permitting future development. We recommend that you carefully consider the future predicted noise levels to avoid potential issues of public concern over incompatible noise levels.

The figure shows currently vacant/future development areas in blue or green, and also shows the distance from the edge of the proposed pavement (based on the proposed improvement) to both the 66- and 71-dB(A) noise level contours.

- A 66-dB(A) noise contour represents noise levels that would be a noise impact for residential areas, schools, places of worship, medical offices, recreational areas, and institutional uses.
- A 71-dB(A) noise contour represents noise levels that would be a noise impact for hotels, restaurants, and offices.

To help with your future planning and discernment regarding permitting decisions, we encourage you to obtain the Federal Highway Administration (FHWA) publication titled *Entering the Quiet Zone: Noise Compatible Land Use Planning*. This publication can be obtained from the FHWA website:

www.fhwa.dot.gov/environment/noise/noise_compatible_planning/federal_approach/land_use/quiet_ezon.pdf

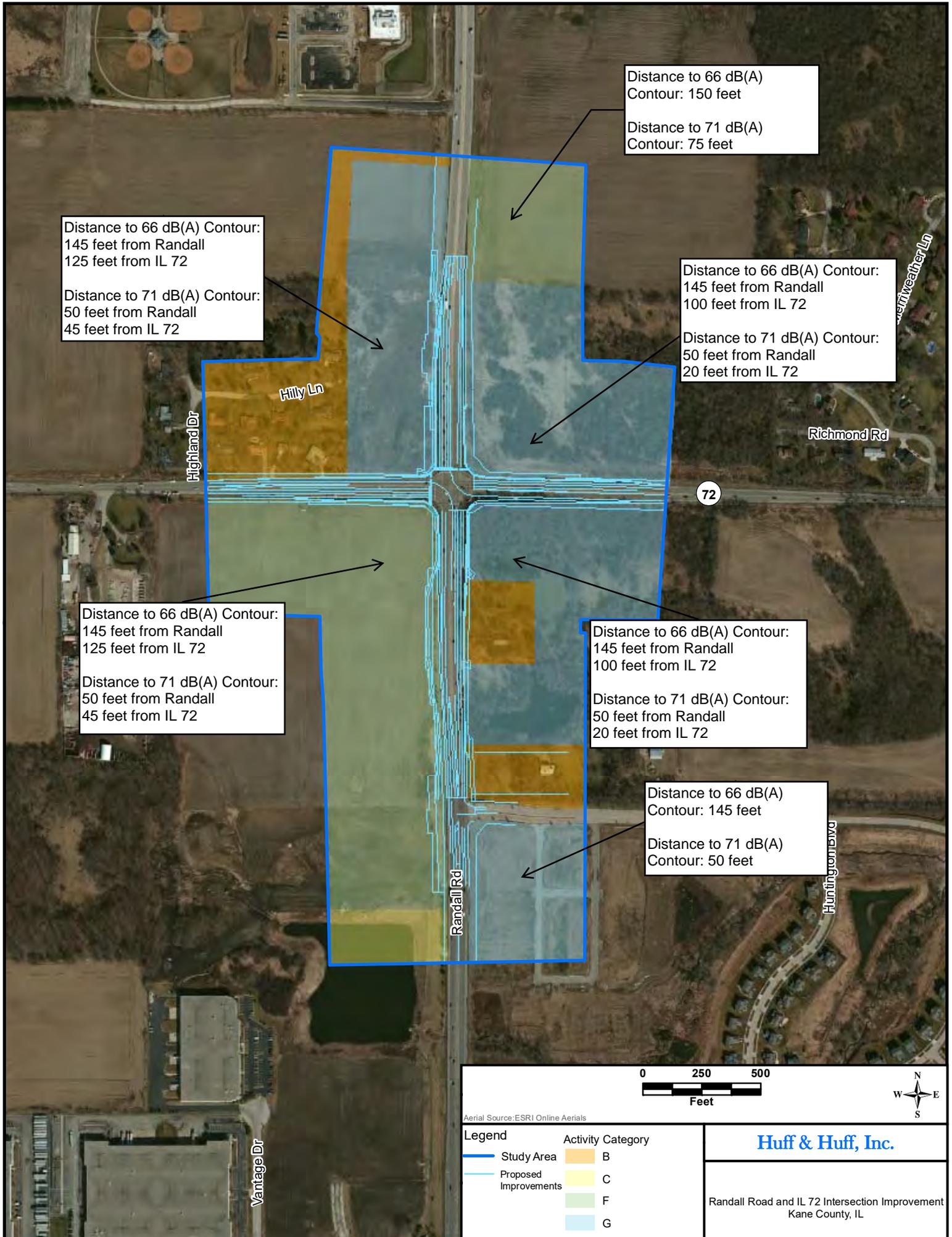
For additional information regarding traffic noise, regulations and policy, noise analyses or noise abatement, we encourage you to visit the Department's web site at: <http://www.dot.il.gov/>. Click on the "Environment" link and then the "Traffic Noise" link to access this information.

If you have any questions or require additional information, please contact Candi Thomas of our office by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

A handwritten signature in black ink, appearing to read 'CS', written in a cursive style.

Carl Schoedel, P.E.
Director/County Engineer



Distance to 66 dB(A) Contour:
145 feet from Randall
125 feet from IL 72

Distance to 71 dB(A) Contour:
50 feet from Randall
45 feet from IL 72

Distance to 66 dB(A)
Contour: 150 feet

Distance to 71 dB(A)
Contour: 75 feet

Distance to 66 dB(A) Contour:
145 feet from Randall
100 feet from IL 72

Distance to 71 dB(A) Contour:
50 feet from Randall
20 feet from IL 72

Distance to 66 dB(A) Contour:
145 feet from Randall
125 feet from IL 72

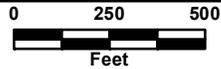
Distance to 71 dB(A) Contour:
50 feet from Randall
45 feet from IL 72

Distance to 66 dB(A) Contour:
145 feet from Randall
100 feet from IL 72

Distance to 71 dB(A) Contour:
50 feet from Randall
20 feet from IL 72

Distance to 66 dB(A)
Contour: 145 feet

Distance to 71 dB(A)
Contour: 50 feet



Aerial Source: ESRI Online Aerials

Legend		Activity Category	
—	Study Area		B
—	Proposed Improvements		C
			F
			G

Huff & Huff, Inc.

Randall Road and IL 72 Intersection Improvement
Kane County, IL



Huff & Huff, a Subsidiary of GZA

ATTACHMENT 16
MAINTENANCE OF TRAFFIC /
TRANSPORTATION MANAGEMENT PLAN



Region No: 1 Project No: Contract No:
District No: 1 County: Kane Program Yr.: 2025
Route: Randall Road Project Limits: At IL Rte 72

The stated mobility goals of the Safety Engineering Policy Memorandum Safety 3-07 are:

- 1. Delays caused by work zones should not exceed more than 5 minutes per mile of project length with a maximum of 30 minutes above the normal recurring traffic delay.
2. Queues caused by work zones should be no more than 1.5 miles beyond pre-existing queues.

Please check the appropriate box explaining the Traffic Control Case:

- Significant Route Project: Based on current impact analysis and construction strategies, the stated goals are not expected to be met. See attachments for details. In addition, complete and attach the 'Request for Exception to Compliance with the Work Zone Safety and Mobility Rule' (BSPE WZ 2) form. (IDOT - District 1 Traffic Operations Bureau Chief, Springfield, and FHWA approval required) - Route Name/Number if applicable:
Significant Route Long-Term Project that meets expectations (IDOT - District 1 Traffic Operations Bureau Chief approval required) - Route Name/Number if applicable:
Non-significant Project; No exceptions requested (IDOT - District 1 Traffic Operations Bureau Chief approval required)

Attachments shall:

- 1. Provide a brief description of the project.
2. Include a brief discussion of strategies considered and the reasons these strategies will not be utilized, which could include a listing of pros/cons, cost, delays and queues.
3. Describe the recommended strategies which will be utilized identifying the delays and queues. The mitigation measures to reduce the impacts on the project will be fully described.
4. Include a location map with project limits and applicable parts of the plan.

Submitted by Local Agency Consultant:

Jennifer Mitchell, PE, PTOE 7/19/0222

Phase I

Phase II

Type Name and Date

Approved by:

Lisa Heaven-Baum

D1- Bureau of Traffic Operations Lisa Heaven-Baum 08/09/22

D1- Bureau of Traffic Operations

District No.: 1 Contract No.: _____ Letting Date: 2025
 Route: _____ Section: 19-00514-00-WR Program Cost: \$5,500,000
 Project Location: Randall Road at IL Rte 72
 County: Kane

Scope of Work

On Randall Road widen and resurface the four-lane facility to a six-lane facility, convert shoulder and ditch drainage to closed storm sewer, provide a detention basin in the northeast quadrant, extend southbound right turn lane, provide for multi-use facilities on west side, install pedestrian heads and pedestrian crosswalks. On IL Route 72 extend the eastbound left and right turn lanes and the westbound right turn lane.

Facility type: urban
 Area type (Urban, Suburban, or Rural): Urban
 Project length (miles): 0.44 miles
 Project duration (months): 9 months

#	Route	Description	Segment	Number of Lanes		Speed Limit		Design Speed	ADT
				Exist	Work Zone	Posted	Work Zone		
#1	Randall Road	OSR	At IL Rte 72	2(2L/1R) - 2(2L/1R)	2(2L/1R) - 2(2L/1R)	50	45	45	47800
#2	IL Rte 72	ART	At Randall Road	2 - 2(2L/1R)	2 - 2(2L/1R)	45	45	40	18700
#2	IL Rte 72	ART	At Randall Road	2(2L/1R) - 2	1(1L/1R) - 2				

Phase I

1. A. Temporary Traffic Control Plan: Strategies anticipated to be utilized (Applicable strategies are marked):

- 1 Use of temporary widening _____
- 2 Use of night work _____
- 3 Permanent lane closures 2
- 4 Temp/ Restricted Lane closure 1, 2
- 5 Railroad coordination _____
- 6 Spec. Events Restrictions (Specify): _____
- 7 Signing &/or improving alt. routes _____
- 8 Detour _____
- 9 Pedestrian accommodations _____
- 10 Other (Specify): _____

Comments:

Existing Pedestrian facilities do not exist.

1.B. Transportation Operation Plan: Strategies anticipated to be utilized (Applicable strategies are marked)

- 1 Signal Coordination 1, 2
- 2 Turn restrictions _____
- 3 Service Patrol _____
- 4 Parking restrictions _____
- 5 State Police Hirebacks _____
- 6 Temporary Surveillance 1, 2
- 7 Smart WZ _____
- 8 Other (Specify): _____

Comments:

Design Approval: Est. September 2022

Phase II

Does the proposed Maintenance of Traffic (MOT) in Phase II match what was proposed in Phase I?

Yes No

Specify & Describe Changes (if applicable): _____

2.A. Temporary Traffic Control Plan: Strategies anticipated to be utilized (Applicable strategies are marked):

- | | |
|---|---|
| <input type="checkbox"/> 1 Use of temporary widening _____ | <input type="checkbox"/> 7 Improving & signing alternate routes _____ |
| <input type="checkbox"/> 2 Use of night work _____ | <input type="checkbox"/> 8 Detour _____ |
| <input type="checkbox"/> 3 Permanent lane closures _____ | <input type="checkbox"/> 9 Pedestrian accommodations _____ |
| <input type="checkbox"/> 4 Temp/Restricted Lane closure _____ | <input type="checkbox"/> 10 Incentive/Disincentive clauses _____ |
| <input type="checkbox"/> 5 Railroad coordination _____ | <input type="checkbox"/> 11 Bus stop coordination _____ |
| <input type="checkbox"/> 6 Spec. Events Restrictions (Specify): _____ | <input type="checkbox"/> 12 Other (Specify): _____ |

Comments: _____

2.B. Transportation Operation Plan: Strategies anticipated to be utilized (Applicable strategies are marked):

- | | |
|---|--|
| <input type="checkbox"/> 1 Signal Coordination _____ | <input type="checkbox"/> 8 Speed Limit Reduction _____ |
| <input type="checkbox"/> 2 Turn restrictions _____ | <input type="checkbox"/> 9 Increased WZ violations penalties _____ |
| <input type="checkbox"/> 3 Service Patrol _____ | <input type="checkbox"/> 10 Coord w/ adj. construction sites _____ |
| <input type="checkbox"/> 4 Parking restrictions _____ | <input type="checkbox"/> 11 Speed Indicator Signs _____ |
| <input type="checkbox"/> 5 State Police Hirebacks _____ | <input type="checkbox"/> 12 Incidence response coord _____ |
| <input type="checkbox"/> 6 Traffic Control Surveillance _____ | <input type="checkbox"/> 13 Other (Specify): _____ |
| <input type="checkbox"/> 7 Smart Work Zone _____ | |

Comments: _____

2.C. Public Information Plan: Strategies anticipated to be utilized (Applicable strategies are marked):

- | | |
|---|---|
| <input type="checkbox"/> 1 Media Press Release _____ | <input type="checkbox"/> 4 Static Message Signs _____ |
| <input type="checkbox"/> 2 Web Page _____ | <input type="checkbox"/> 5 Brochures/Flyers _____ |
| <input type="checkbox"/> 3 Changeable Message Signs _____ | <input type="checkbox"/> 6 Other (Specify): _____ |

Comments: _____

Phase III

To be completed by Resident Engineer and sent to the D-1 Traffic Control Supervisor and the Bureau of Safety Programs and Engineering within thirty (30) days of essential completion of the project. The information provided will be used to measure TMP performance and determine appropriate strategies for future contracts.

Were the limits and scope included on the second page of this report included in the construction contract?

- Yes
- No

If no, list limits and scope below:

3.A. Temporary Traffic Control Plan: Phase II of this report included the strategies that were planned to be used as part of the work for which the contractor was responsible for during construction. The following strategies were utilized (Please check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> 1 Use of temporary widening _____ | <input type="checkbox"/> 7 Improving & signing alternate routes _____ |
| <input type="checkbox"/> 2 Use of night work _____ | <input type="checkbox"/> 8 Detour _____ |
| <input type="checkbox"/> 3 Permanent lane closures _____ | <input type="checkbox"/> 9 Pedestrian accommodations _____ |
| <input type="checkbox"/> 4 Temp/Restricted Lane closure _____ | <input type="checkbox"/> 10 Incentive/Disincentive clauses _____ |
| <input type="checkbox"/> 5 Railroad coordination _____ | <input type="checkbox"/> 11 Bus stop coordination _____ |
| <input type="checkbox"/> 6 Spec. Events Restrictions _____ | <input type="checkbox"/> 12 Other (Specify): _____ |

List any changes made to the plan, explain briefly:

Evaluate the success of the plan:

3.B. Transportation Operation Plan: Phase II of this report included the strategies that were planned to be used that involve changes that directly affected the roadway users during construction. The following strategies were utilized (Please check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> 1 Signal Coordination _____ | <input type="checkbox"/> 8 Speed Limit Reduction _____ |
| <input type="checkbox"/> 2 Turn restrictions _____ | <input type="checkbox"/> 9 Increased WZ violations penalties _____ |
| <input type="checkbox"/> 3 Service Patrol _____ | <input type="checkbox"/> 10 Coord w/ adj. construction sites _____ |
| <input type="checkbox"/> 4 Parking restrictions _____ | <input type="checkbox"/> 11 Speed Indicator Signs _____ |
| <input type="checkbox"/> 5 State Police Hirebacks _____ | <input type="checkbox"/> 12 Incidence response coord _____ |
| <input type="checkbox"/> 6. Traffic Control Surveillance _____ | <input type="checkbox"/> 13 Other (Specify): _____ |
| <input type="checkbox"/> 7 Smart Work Zone _____ | |

List any changes made to the plan, explain briefly:

Evaluate the success of the plan:

3.C. Public Information Plan: Phase II of this report included the strategies that were planned to be used for the outreach to the public about the project. The following strategies were utilized (Please check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> 1 Media: Press Release _____ | <input type="checkbox"/> 4 Static Message Signs _____ |
| <input type="checkbox"/> 2 Web Page _____ | <input type="checkbox"/> 5 Brochures/Flyers _____ |
| <input type="checkbox"/> 3 Changeable Message Signs _____ | <input type="checkbox"/> 6 Other (Specify): _____ |

List any changes made to the plan, explain briefly:

Evaluate the success of the plan:

Provide a description of any changes made to the traffic control due to crashes occurring within the project limits during construction and if the action taken improved safety. Did it have any other effect on the roadway users (i.e. improved wait time or increased delay)?

Recommendations, if any, for changes to IDOT's standards, specifications, policies, or procedures.

Project Description / Location Map / Staging Typical Sections

At the Randall Road and IL Rte 72 intersection, see **Location Map as Exhibit 1**, the existing (2019) operations result in an overall LOS D for both the AM and PM peak hours with individual movements resulting in delay ranging from 65 to 101 seconds. The 2050 traffic volumes are projected to result in overall intersection operations of LOS E in the AM peak hour and F in the PM peak hour with individual movements resulting in delay ranging from 61 to 194 seconds. The northbound PM peak delays routinely result in queues extending beyond Carrington Drive, one-quarter mile south of Randall Road. These significant queues result in crashes, typically rear-end.

To address the traffic demand and subsequently reduce delay and queues on Randall Road, a third 12' through lane will be provided on Randall Road. The addition of a third through lane on Randall Road will increase capacity and reduce the queues and delays over the projected 2050 no-build projections.

Neither Randall Road nor IL Rte 72 is a significant route and therefore an Impact Analysis is not required. The scope of work is to widen and resurface. Travel lanes will be narrowed toward the centerline to provide a work zone for the outside pavement widening. A detour is not needed. See attached **Staging Typical Sections as Exhibit 2**. Daytime lane closures may occur between the hours of 9 am and 3 pm.

STAGE 1

Stage 1 will consist of work occurring on both Randall Road and Higgins Road simultaneously. The area of work on Randall Road will be delineated by barricades on the east and west sides of Randall Road to widen the pavement. Randall Road will have all lanes reduced to 11 feet except for the northbound and southbound left turn lanes. On Higgins Road, the area of work will be on the west leg (eastbound lanes) and the east leg (westbound lanes) of the intersection. The west leg work area will be delineated by barricades on the south side to lengthen the existing right turn lane. The eastbound through and right lane will be reduced to 11 feet. The east leg work area will be delineated by barricades on the north side to lengthen the existing right turn lane. The westbound through and right turn lane will be reduced to 11 feet.

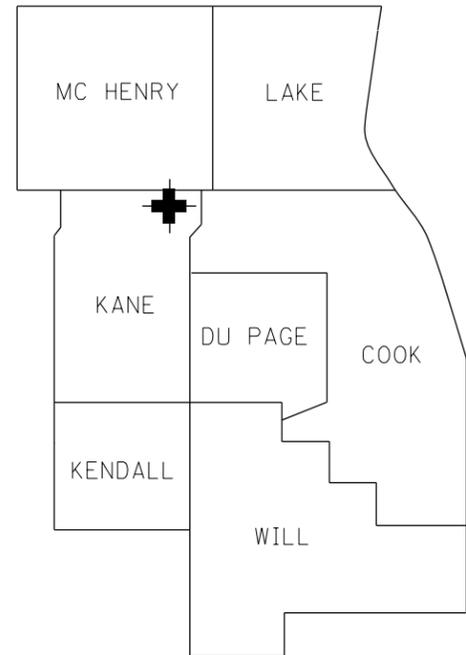
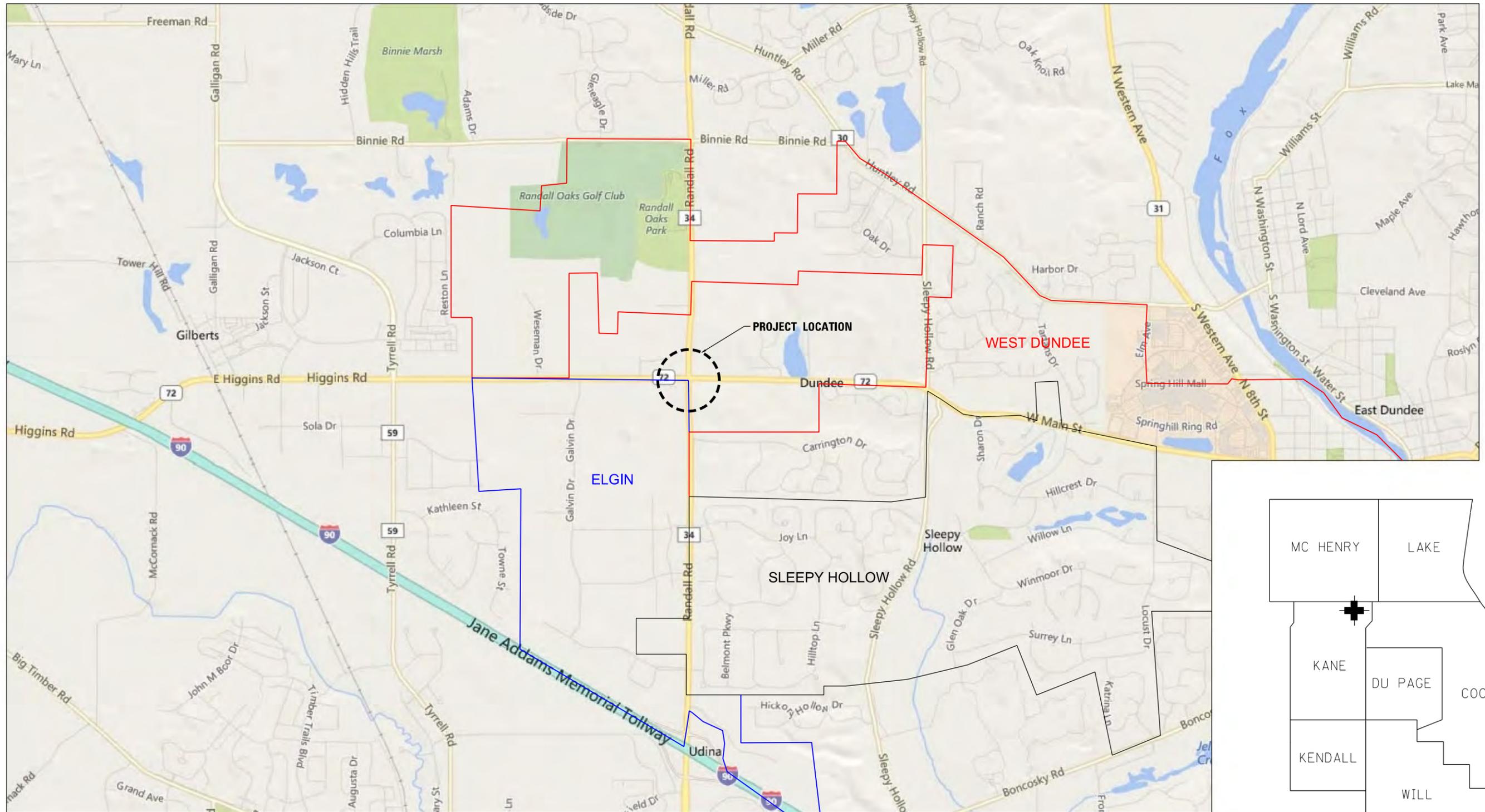
STAGE 2

Stage 2 will consist of work occurring on only the west leg of Higgins Road. The area of work will be delineated eastbound by barricades to allow removal of the existing median and extension of the existing left turn lanes. All eastbound through lanes will be reduced to 11 feet and the inside left turn lane closed.

STAGE 3

Stage 3 will consist of work occurring under daytime lane closures. This work will entail the milling and resurfacing of the remainder of the intersection.

ELGIN, ILLINOIS
 KANE COUNTY
 SECTION: 19-00514-00-WR



USER NAME : jrodri-guez	DESIGNED - JT	REVISED -
	DRAWN - JT	REVISED -
PLOT SCALE : 2,0000 ' / in.	CHECKED - MC	REVISED -
PLOT DATE : 3/5/2021	DATE - 01/05/2020	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

RANDRALL ROAD AT HIGGINS ROAD (IL 72)
 PROJECT LOCATION MAP

SCALE: NTS SHEET 1 OF 1 SHEETS STA. N/A TO STA. N/A

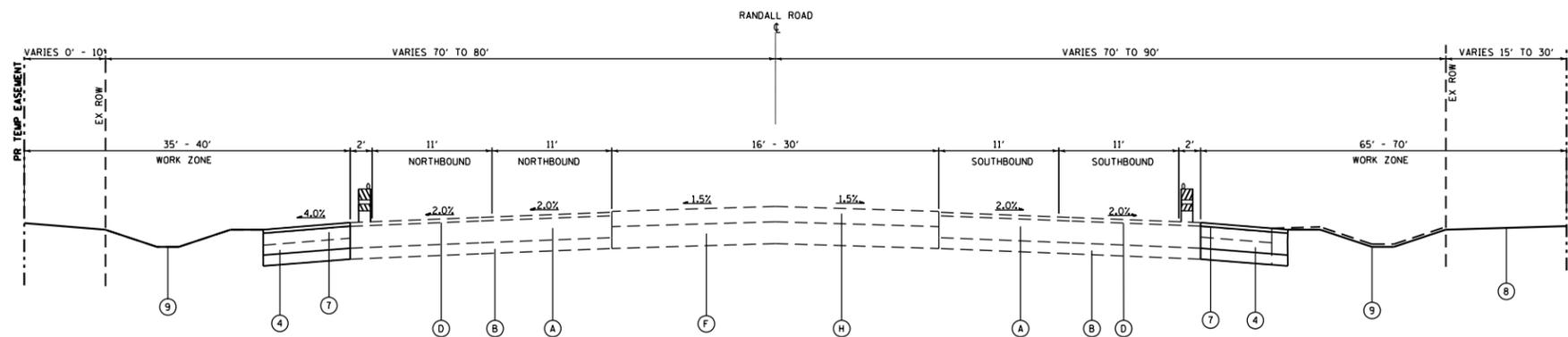
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE	1	1
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

EXISTING LEGEND

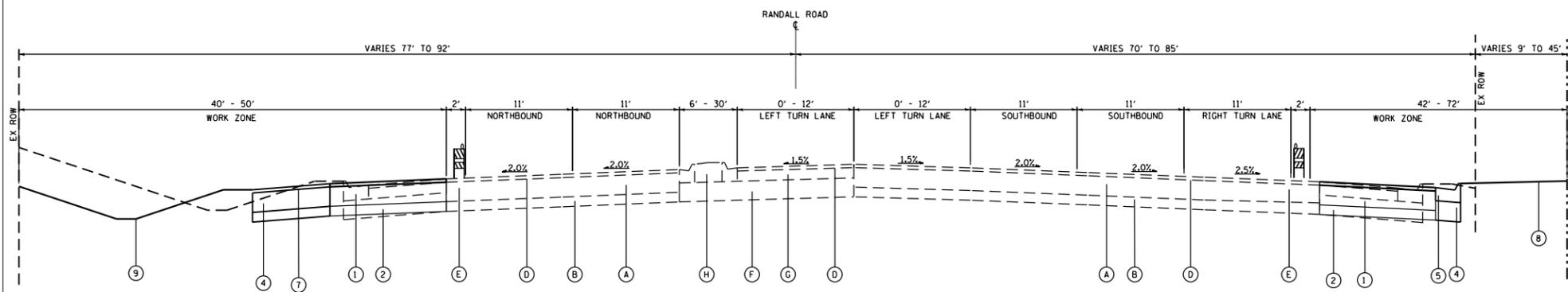
- (A) EX. HMA BASE COURSE, 11"-12"
- (B) EX. SUB-BASE, 6"
- (C) EX. SWALE/DITCH
- (D) EX. HMA SURFACE COURSE,
- (E) EX. HMA BASE COURSE WIDENING, 10 1/2" & 9 1/2"
- (F) EX. AGGREGATE SUBGRADE, 12"
- (G) EX. COMB. CONC. CURB AND GUTTER, TYPE M-4.24
- (H) EX. MEDIAN
-PAINTED
-CORRUGATED CONCRETE
-BARRIER MEDIAN

PROPOSED LEGEND

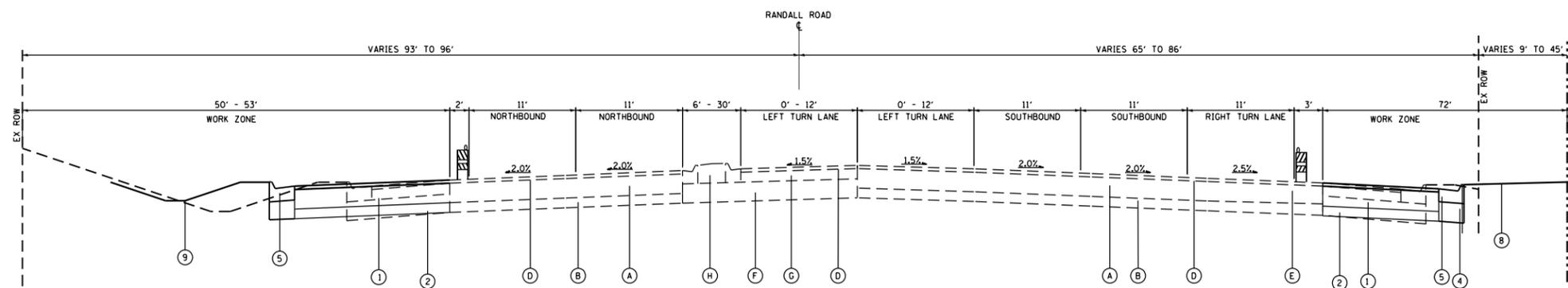
- (1) PR. HMA BASE COURSE, 11"-12"
- (2) PR. SUB-BASE, 6"
- (3) PR. ASPHALT SURFACE COURSE
- (4) PR. AGGREGATE SUBGRADE, 12"
- (5) PR. COMB. CONC. CURB AND GUTTER, B-6.24
- (6) PR. CONCRETE MEDIAN, TYPE M-4.12
- (7) PR. HMA SHOULDER
- (8) PR. GRADING
*FOR A FUTURE PATH
- (9) PR. DITCH



STAGE 1 TYPICAL SECTION - RANDALL ROAD
STA 90+00.00 TO STA 92+28.63



STAGE 1 TYPICAL SECTION - RANDALL ROAD
STA 92+28.63 TO STA 96+47.46



STAGE 1 TYPICAL SECTION - RANDALL ROAD
STA 96+47.46 TO STA 99+06.60



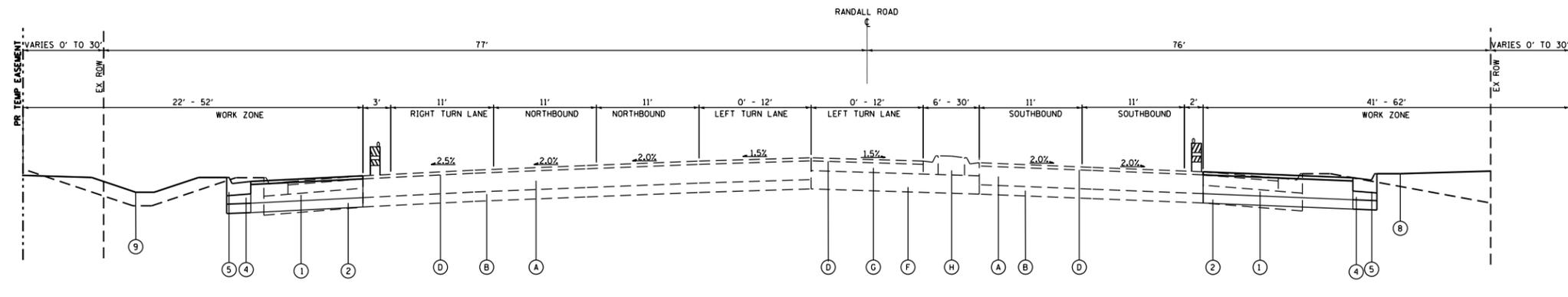
USER NAME = j.dríguez	DESIGNED - JT	REVISED -
PLOT SCALE = 150.0000' / 1"	DRAWN - JT	REVISED -
PLOT DATE = 3/2/2021	CHECKED - MC	REVISED -
	DATE - 01/05/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RANDALL ROAD AT HIGGINS ROAD (IL 72)
MOT TYPICAL SECTIONS - RANDALL ROAD

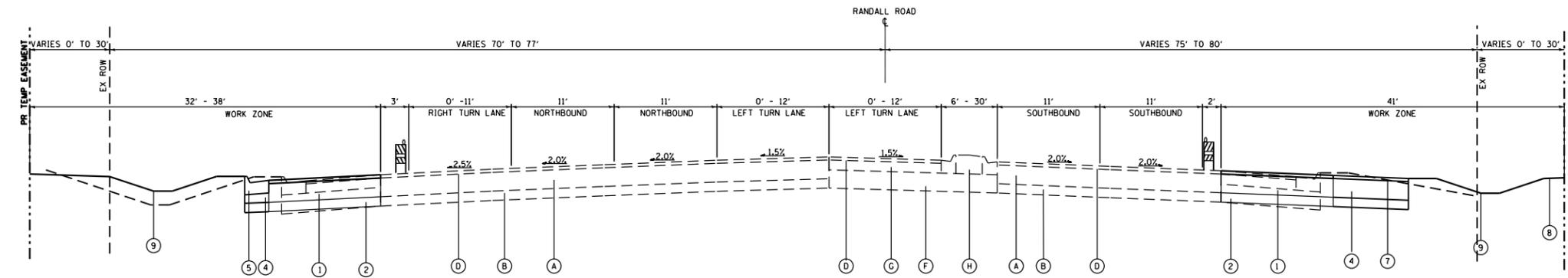
SCALE: NTS SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE		
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



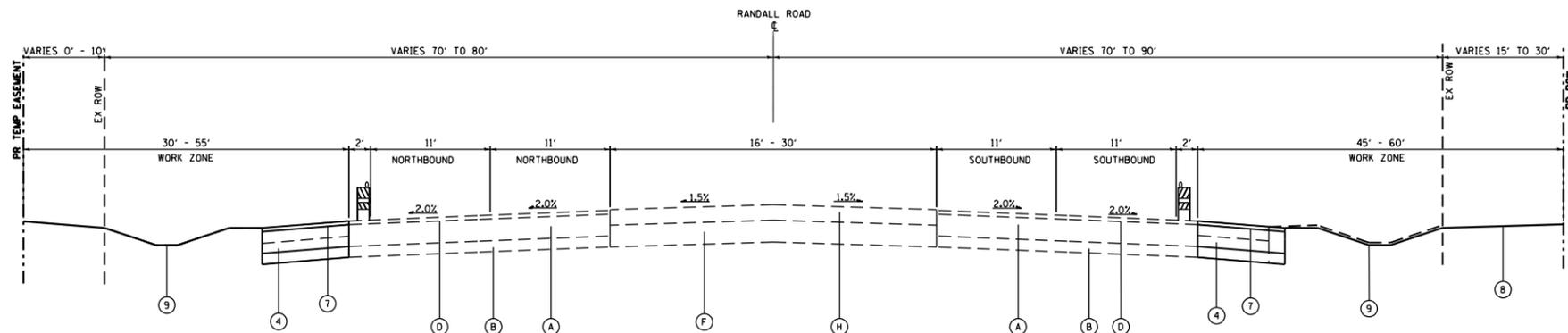
STAGE 1 TYPICAL SECTION - RANDALL ROAD

STA 100+71.23 TO STA 103+26.94



STAGE 1 TYPICAL SECTION - RANDALL ROAD

STA 103+26.94 TO STA 107+22.65



STAGE 1 TYPICAL SECTION - RANDALL ROAD

STA 107+22.65 TO STA 113+00.00

EXISTING LEGEND

- (A) EX. HMA BASE COURSE, 11"-12"
- (B) EX. SUB-BASE, 6"
- (C) EX. SWALE/DITCH
- (D) EX. HMA SURFACE COURSE,
- (E) EX. HMA BASE COURSE WIDENING, 10 1/2" & 9 1/2"
- (F) EX. AGGREGATE SUBGRADE, 12"
- (G) EX. COMB. CONC. CURB AND GUTTER, TYPE M-4.24
- (H) EX. MEDIAN
-PAINTED
-CORRUGATED CONCRETE
-BARRIER MEDIAN

PROPOSED LEGEND

- (1) PR. HMA BASE COURSE, 11"-12"
- (2) PR. SUB-BASE, 6"
- (3) PR. ASPHALT SURFACE COURSE
- (4) PR. AGGREGATE SUBGRADE, 12"
- (5) PR. COMB. CONC. CURB AND GUTTER, B-6.24
- (6) PR. CONCRETE MEDIAN, TYPE M-4.12
- (7) PR. HMA SHOULDER
- (8) PR. GRADING
*FOR A FUTURE PATH
- (9) PR. DITCH



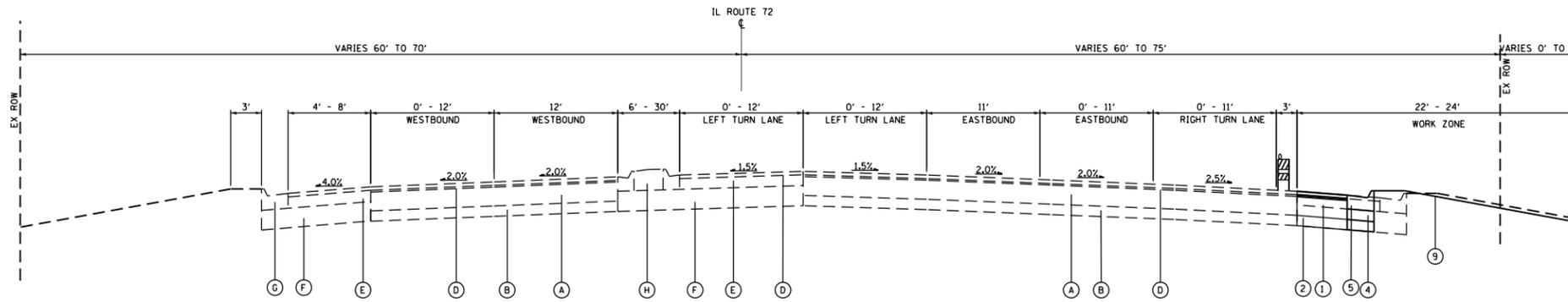
USER NAME = j.dríguez	DESIGNED - JT	REVISED -
PLOT SCALE = 150.0000' / 1in.	DRAWN - JT	REVISED -
PLOT DATE = 3/2/2021	CHECKED - MC	REVISED -
	DATE - 01/05/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

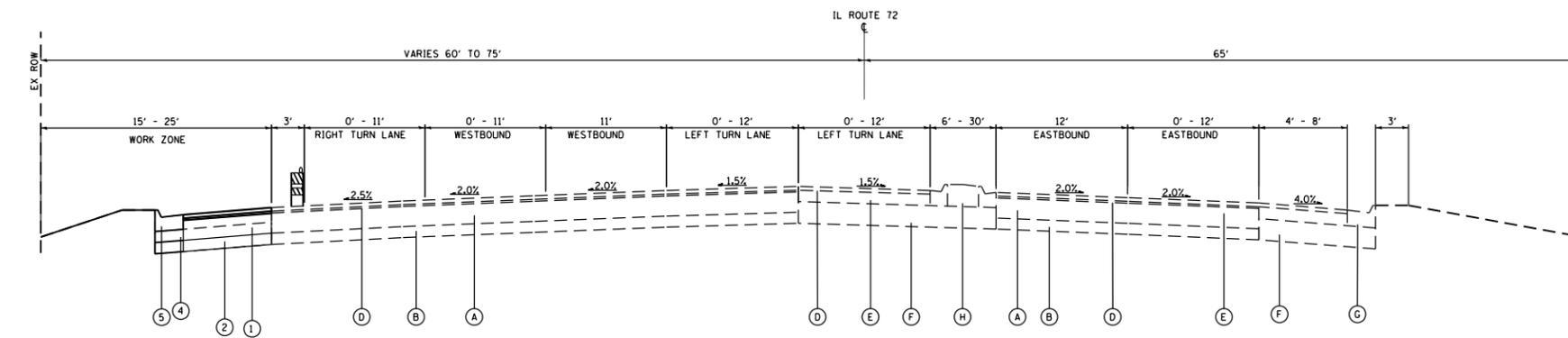
RANDALL ROAD AT HIGGINS ROAD (IL 72)
MOT TYPICAL SECTIONS - IL ROUTE 72

SCALE: NTS SHEET 2 OF 3 SHEETS STA. TO STA.

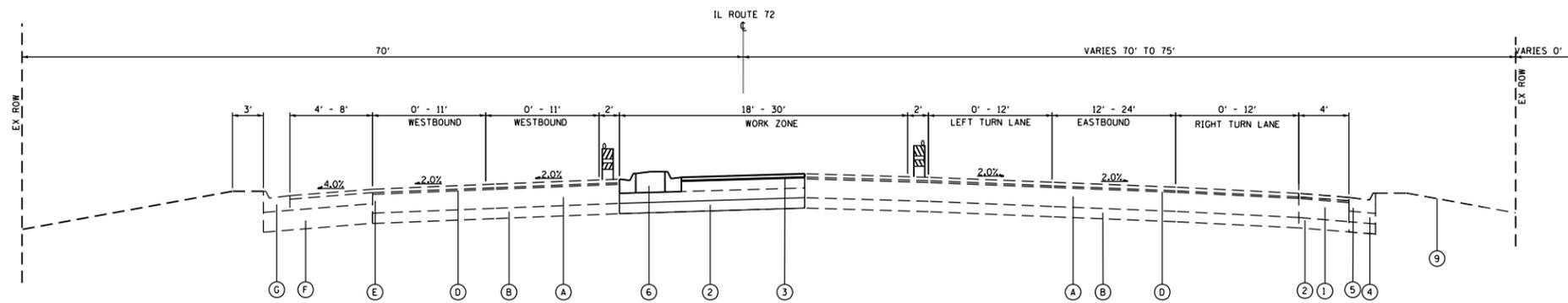
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE		
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



STAGE 1 TYPICAL SECTION - IL ROUTE 72
STA 189+50.00 TO STA 199+09.30



STAGE 1 TYPICAL SECTION - IL ROUTE 72
STA 201+00.00 TO STA 210+00.00



STAGE 2 TYPICAL SECTION - IL ROUTE 72
STA 192+66.98 TO STA 199+09.30

EXISTING LEGEND

- (A) EX. HMA BASE COURSE, 11"-12"
- (B) EX. SUB-BASE, 6"
- (C) EX. SWALE/DITCH
- (D) EX. HMA SURFACE COURSE,
- (E) EX. HMA BASE COURSE WIDENING, 10 1/2" & 9 1/2"
- (F) EX. AGGREGATE SUBGRADE, 12"
- (G) EX. COMB. CONC. CURB AND GUTTER, TYPE M-4.24
- (H) EX. MEDIAN
-PAINTED
-CORRUGATED CONCRETE
-BARRIER MEDIAN

PROPOSED LEGEND

- (1) PR. HMA BASE COURSE, 11"-12"
- (2) PR. SUB-BASE, 6"
- (3) PR. ASPHALT SURFACE COURSE,
- (4) PR. AGGREGATE SUBGRADE, 12"
- (5) PR. COMB CON. CURB AND GUTTER, B-6.24
- (6) PR. CONCRETE MEDIAN, TYPE M-4.12
- (7) PR. HMA SHOULDER



USER NAME = j_rodriguez
PLOT SCALE = 150.0000' / 1in.
PLOT DATE = 3/2/2021

DESIGNED - JT
DRAWN - JT
CHECKED - MC
DATE - 01/05/2020

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RANDALL ROAD AT HIGGINS ROAD (IL 72)
MOT TYPICAL SECTIONS - IL ROUTE 72

SCALE: NTS SHEET 3 OF 3 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	19-00514-00-WR	KANE		
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

ATTACHMENT 17
PUBLIC INVOLVEMENT

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 2, 2020

Paul Neff
Manager of Construction, Planning, Design and Construction
Advocate Sherman Hospital
1425 N Randall Road
Elgin, IL 60123

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement

Dear Mr. Neff,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to complete a Phase I Engineering Study to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

For the subject improvement, KDOT is following IDOT geometric and environmental policies to allow project eligibility for federal funding opportunities. The Phase I Engineering Study will continue into 2021 and is anticipated to be complete near the Summer of 2021. Once the Phase I Engineering Study is complete, preparation of contract plans and land acquisition are anticipated to begin.

At this time, we would like to request any feedback you may have related to the proposed intersection improvements. Please submit your feedback by January 4th, 2021 so we may consider your input in the Final Design. We will also be holding a Public Meeting in the Spring of 2021 to identify the Phase I Engineering Study findings and present the preferred alternative. We greatly appreciate your time and feedback. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation

Candi Thomas, P.E.
Senior Project Manager

Enclosure

Jennifer Mitchell

From: Thomas, Candance <ThomasCandance@co.kane.il.us>
Sent: Friday, December 18, 2020 7:45 AM
To: Jennifer Mitchell
Cc: Dan Bruckelmeyer; Matt Cesario
Subject: FW: RE: Kane Co letter of 12-2-2020 - Randall and Rt 72 Intersection.pdf
Attachments: Kane Co letter of 12-2-2020 - Randall and Rt 72 Intersection.pdf; RE: Randall/90: Stakeholder Meeting Minutes

Good Morning Team –

Attached is feedback from Sherman Hospital, regarding the stakeholder letter which was recently sent out.

Thanks!

Candi Thomas, P.E.

Senior Project Manager
Kane County Division of Transportation
Direct Phone: (630) 406-7355
Main Phone: (630) 584-1170
Fax: (630) 584-5265
Email: thomascandance@co.kane.il.us



From: Neff, Paul <Paul.Neff@aah.org>
Sent: Thursday, December 17, 2020 5:03 PM
To: Thomas, Candance <ThomasCandance@co.kane.il.us>
Cc: Deshazo, Sheri <Sheri.Deshazo@aah.org>; Smith, Jequeatta <Jequeatta.Smith@aah.org>; Orozco, Roberto <Roberto.Orozco@aah.org>; Slinkman, James <James.Slinkman@aah.org>; Neff, Paul <Paul.Neff@aah.org>
Subject: EX: RE: Kane Co letter of 12-2-2020 - Randall and Rt 72 Intersection.pdf

Apology. Correcting MS Thomas's email address.



Paul Neff

Manager of Construction, Planning, Design and Construction
Advocate Sherman Hospital | Advocate Good Shepherd Hospital
Sherman: 224.783.8081

Good Shepherd: 847-842-4122

M: 847.815.5872



From: Neff, Paul

Sent: Thursday, December 17, 2020 4:47 PM

To: thomascandance@co.kan

Cc: Neff, Paul <Paul.Neff@aah.org>; Deshazo, Sheri <Sheri.Deshazo@aah.org>; Smith, Jequeatta <Jequeatta.Smith@aah.org>; Orozco, Roberto <Roberto.Orozco@aah.org>; Slinkman, James <James.Slinkman@aah.org>; Neff, Paul <Paul.Neff@aah.org>

Subject: Kane Co letter of 12-2-2020 - Randall and Rt 72 Intersection.pdf

Dear MS. Thomas:

Thank you for your letter of 12-2-2020 concerning proposed improvements at the intersection of Randall Road and Higgins Road/IL Rt. 72 (Attached.)

The proposed improvements were discussed in my earlier meeting of 11-24-2020 with Burns & McDonnell and KDOT. I've attached minutes for your ready reference.

Sherman hospital's concerns were captured in the minutes. We discussed potential improvements along Randall Road from Big Timber Road on the south to and including the intersection at Higgins Road/IL Rt 72 to the north. As the Higgins Road intersection work is far beyond any impacts to Sherman's property our prime concern should the work proceed is to maintain the free flow of traffic to the hospital during any construction and for any improvements to eliminate traffic congestions for the foreseeable future. As mentioned on occasion ambulances have been delayed by traffic congestion.

Please keep me informed.

Thanks,
Paul



Paul Neff

Manager of Construction, Planning, Design and Construction

Advocate Sherman Hospital | Advocate Good Shepherd Hospital

Sherman: 224.783.8081

Good Shepherd: 847-842-4122

M: 847.815.5872



KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 2, 2020

Fred R. Heid
Superintendent
Community Unit School District 300
2550 Harnish Drive
Algonquin, IL 60102

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement

Dear Mr. Heid,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to complete a Phase I Engineering Study to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

For the subject improvement, KDOT is following IDOT geometric and environmental policies to allow project eligibility for federal funding opportunities. The Phase I Engineering Study will continue into 2021 and is anticipated to be complete near the Summer of 2021. Once the Phase I Engineering Study is complete, preparation of contract plans and land acquisition are anticipated to begin.

At this time, we would like to request any feedback you may have related to the proposed intersection improvements. Please submit your feedback by January 4th, 2021 so we may consider your input in the Final Design. We will also be holding a Public Meeting in the Spring of 2021 to identify the Phase I Engineering Study findings and present the preferred alternative. We greatly appreciate your time and feedback. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation

Candi Thomas, P.E.
Senior Project Manager

Enclosure

Office ITASCA
Location: INDIANAPOLIS

Project No. 894-032
Project Name: Randall Road at IL 72 Time: 2:45 A.M. Date: 6/23/2020
 P.M. Day: Tuesday
Contact: Doug Kouri Phone No.: _____
Representing: Dundee Middle School

Discussion:

Dundee Middle school was contacted via email to determine how the two driveways with access to IL 72 are utilized. The assistant principal Doug Kouri called Jennifer Mitchell of BLA. Mr. Kouri stated the following:

98-99% of all school traffic utilizes the west driveway, this is all staff and parent car traffic
Buses only enter the east driveway, 26 total, and buses exit the west driveway
Buses enter in the am between 8:30 and 9:00 am, exiting between 8:30 and 9:15 am. The majority of the am buses enter from the east. Buses enter in the pm between 3:15 and 3:45 pm and exit between 4 and 4:15 pm. All buses enter from the east in the pm.
A gravel path exists northeasterly toward Recreation Drive, but is not used nor is it desired to have a connection to Recreation Drive.
A narrow road connection connects westerly to the back of the Leafs Ice Center. Very few use it as a cut through. Not used, nor desired to be used by the school.
Has not heard of any safety issues from the bus drivers when entering the east drive. Only aware that the eastbound traffic is backed up until buses can find a gap to enter.
No needs to change access drives, want to make sure that buses continue to have access at east drive and that cars and buses use separate entrances.

Action:

Take the data into consideration when evaluating operations. Provide for bus vehicles.

By: Jennifer Mitchell

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 2, 2020

Scott Sinnett
Highway Commissioner
Dundee Township
1900 Sleepy Hollow Road
Sleepy Hollow, IL 60118

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement

Dear Mr. Sinnett,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to complete a Phase I Engineering Study to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

For the subject improvement, KDOT is following IDOT geometric and environmental policies to allow project eligibility for federal funding opportunities. The Phase I Engineering Study will continue into 2021 and is anticipated to be complete near the Summer of 2021. Once the Phase I Engineering Study is complete, preparation of contract plans and land acquisition are anticipated to begin.

At this time, we would like to request any feedback you may have related to the proposed intersection improvements. Please submit your feedback by January 4th, 2021 so we may consider your input in the Final Design. We will also be holding a Public Meeting in the Spring of 2021 to identify the Phase I Engineering Study findings and present the preferred alternative. We greatly appreciate your time and feedback. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation

Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 2, 2020

Patricia Glees
Supervisor
Dundee Township
611 East Main Street, Suite 201
East Dundee, IL 60118

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement

Dear Ms. Glees,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to complete a Phase I Engineering Study to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

For the subject improvement, KDOT is following IDOT geometric and environmental policies to allow project eligibility for federal funding opportunities. The Phase I Engineering Study will continue into 2021 and is anticipated to be complete near the Summer of 2021. Once the Phase I Engineering Study is complete, preparation of contract plans and land acquisition are anticipated to begin.

At this time, we would like to request any feedback you may have related to the proposed intersection improvements. Please submit your feedback by January 4th, 2021 so we may consider your input in the Final Design. We will also be holding a Public Meeting in the Spring of 2021 to identify the Phase I Engineering Study findings and present the preferred alternative. We greatly appreciate your time and feedback. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation

Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 2, 2020

Dave Peterson, CPRP
Executive Director
Dundee Township Park District
500 N Randall Road
West Dundee, IL 60118

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement

Dear Mr. Peterson,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to complete a Phase I Engineering Study to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

For the subject improvement, KDOT is following IDOT geometric and environmental policies to allow project eligibility for federal funding opportunities. The Phase I Engineering Study will continue into 2021 and is anticipated to be complete near the Summer of 2021. Once the Phase I Engineering Study is complete, preparation of contract plans and land acquisition are anticipated to begin.

At this time, we would like to request any feedback you may have related to the proposed intersection improvements. Please submit your feedback by January 4th, 2021 so we may consider your input in the Final Design. We will also be holding a Public Meeting in the Spring of 2021 to identify the Phase I Engineering Study findings and present the preferred alternative. We greatly appreciate your time and feedback. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation

Candi Thomas, P.E.
Senior Project Manager

Enclosure



Dundee Township Park District

665 Barrington Avenue • Carpentersville, IL 60110-2904 • 847-428-7131 • Fax 847-836-2380

January 2, 2021

Candi Thomas, P.E.
41W011 Burlington Road
St. Charles, IL 60175

Re: Randall Road at Higgins Road
Intersection Improvements

Dear Ms. Thomas,

Thank you for sharing the study you are doing related to intersection improvements at Randall Road and Higgins Road (Rte. 72) in West Dundee. I have shared your letter dated December 2, 2020 with the Park District Board and asked them to provide any feedback. Below is some feedback from staff and our Park Board that we hope you will consider in your Final Design.

- Pedestrian paths connecting our biggest park (Randall Oaks campus) would be a welcome addition for our residents in the Carrington subdivision and all other residents/users. Connectivity throughout Dundee Township has been a goal for all government entities locally as well for Kane County. A walking/bicycle path running along Randall Road north/south from Carrington Drive up to our Randall Oaks campus (recreation center, park, zoo and golf course) would be a welcome addition.
 - o Some type of overpass or underpass for bicycles and walkers would provide the safest means of pedestrian crossing, ie. Randall Road and Silver Glen Road overpass.
- Other input related to improvements at this intersection were as follows:
 - o Allocate traffic impact fees to the Park District to assist us in building an internal roadway system to connect the Randall Oaks Recreation Center through the park and zoo up north to Binnie Road (Woodman's entrance furthest west). Then, the eventual right in and right outs on Randall Road at our zoo and Park Services facility would be less impactful on our users and staff.
 - o Before any decisions are made at this intersection, wait until Longmeadow Parkway is fully opened and you see the impact that it has on traffic at Randall Road and Higgins Road.
 - o Flashing yellow arrows are well received by staff, the Park Board and our users.

The above feedback was disseminated to me by our board members and staff. If you have any questions, please do not hesitate to contact me. The Park Board and I thank you for thinking of us and allowing us to give some input. We, just like you, prioritize safety for our Dundee Township residents as we provide programs and facilities for them.

Best regards,

Dave Peterson, Executive Director
dpeterson@dtpd.org
847-428-7131 x4001

Jennifer Mitchell

From: Thomas, Candance <ThomasCandance@co.kane.il.us>
Sent: Tuesday, February 2, 2021 7:16 AM
To: Jennifer Mitchell
Cc: Matt Cesario
Subject: FW: Randall Road at Higgins Road Intersection Improvements Study
Attachments: 20210102095346342.pdf

Good Morning –

Below is correspondence with the Dundee Township Park District regarding the Randall/IL 72 improvements. Please include in the PDR.

Feel free to contact me if you have any questions.

Thank you,

Candi Thomas, P.E.

Senior Project Manager
Kane County Division of Transportation
Direct Phone: (630) 406-7355
Main Phone: (630) 584-1170
Fax: (630) 584-5265
Email: thomascandance@co.kane.il.us



From: Thomas, Candance
Sent: Tuesday, February 2, 2021 7:15 AM
To: 'dpeterson@dtpd.org' <dpeterson@dtpd.org>
Subject: FW: Randall Road at Higgins Road Intersection Improvements Study

Good Afternoon Mr. Peterson –

I heard you and Tom Rickert had some discussions on Wednesday, January 20th, regarding your pervious letter of feedback for the Randall at IL 72 intersection improvement project. As a follow-up, I just wanted to provide a quick summary of each item.

- Pedestrian paths connecting our biggest park (Randall Oaks campus) would be a welcome addition for our residents in the Carrington subdivision and all other residents/users. Connectivity throughout Dundee Township has been a goal for all government entities locally as well for Kane County. A walking/bicycle path running along Randall Road north/south from Carrington Drive up to our Randall Oaks campus (recreation center, park, zoo and golf course) would be a welcome addition.

Pedestrian and Bicycle facilities are being evaluated within the project corridor. In doing so, it was discovered that the dedication of right-of-way at the Randall/Recreation Drive intersection remains incomplete and would prevent KDOT from being able to tie-in to the existing facilities at Recreation Drive, due to 4(f) land acquisition guidelines. Dundee Township Park District has stated that they will work to get this transfer completed as soon as possible. *As an additional follow-up, if you could please provide the MyDec form to us for the transfer we would greatly appreciate it.*

- Some type of overpass or underpass for bicycles and walkers would provide the safest means of pedestrian crossing, ie. Randall Road and Silver Glen Road overpass.
The overpass at Randall and Silver Glen was funded and constructed by the St Charles Park District. Pedestrian accommodations for an overpass/underpass will not be incorporated into this intersection improvement project.
- Other input related to improvements at this intersection were as follows:
 - Allocate traffic impact fees to the Park District to assist us in building an internal roadway system to connect the Randall Oaks Recreation Center through the park and zoo up north to Binnie Road (Woodman's entrance furthest west). Then, the eventual right in and right outs on Randall Road at our zoo and Park Services facility would be less impactful on our users and staff.
Roadway Improvement Impact Fees can only be used on County highway capacity improvements.
 - Before any decisions are made at this intersection, wait until Longmeadow Parkway is fully opened and you see the impact that it has on traffic at Randall Road and Higgins Road.
A thorough traffic analysis was performed for the Randall at IL 72 improvement and also for the Longmeadow Parkway corridor improvement. Both improvements identified significant delays at the Randall and IL 72 intersection. Delays at this intersection will persist over time with forecasted traffic volumes. Additionally, the Kane County Transportation Improvement Program (TIP) includes expanding Randall Road (from Silver Glen Rd to Longmeadow Pkwy) to 3-lanes in each direction. This project is part of that plan.
 - Flashing yellow arrows are well received by staff, the Park Board and our users.
Thank you, we feel they are beneficial as well.

Please let me know if you have any further questions/concerns at this time.

Thank you,

Candi Thomas, P.E.

Senior Project Manager
Kane County Division of Transportation
Direct Phone: (630) 406-7355
Main Phone: (630) 584-1170
Fax: (630) 584-5265
Email: thomascandance@co.kane.il.us



From: Dave Peterson <dpeterson@dtpd.org>
Sent: Saturday, January 2, 2021 9:56 AM
To: Thomas, Candance <ThomasCandance@co.kane.il.us>
Subject: EX: Randall Road at Higgins Road Intersection Improvements Study

Good morning Candi,

Below in red and attached is a formal letter with feedback related to the study you are doing at Randall Road and Higgins Road. Please do not hesitate to contact me with any questions. Thank you for allowing us to provide some feedback.

January 2, 2021

Candi Thomas, P.E.
41W011 Burlington Road
St. Charles, IL 60175

Re: Randall Road at Higgins Road
Intersection Improvements

Dear Ms. Thomas,

Thank you for sharing the study you are doing related to intersection improvements at Randall Road and Higgins Road (Rte. 72) in West Dundee. I have shared your letter dated December 2, 2020 with the Park District Board and asked them to provide any feedback. Below is some feedback from staff and our Park Board that we hope you will consider in your Final Design.

- Pedestrian paths connecting our biggest park (Randall Oaks campus) would be a welcome addition for our residents in the Carrington subdivision and all other residents/users. Connectivity throughout Dundee Township has been a goal for all government entities locally as well for Kane County. A walking/bicycle path running along Randall Road north/south from Carrington Drive up to our Randall Oaks campus (recreation center, park, zoo and golf course) would be a welcome addition.
 - o Some type of overpass or underpass for bicycles and walkers would provide the safest means of pedestrian crossing, ie. Randall Road and Silver Glen Road overpass.
- Other input related to improvements at this intersection were as follows:
 - o Allocate traffic impact fees to the Park District to assist us in building an internal roadway system to connect the Randall Oaks Recreation Center through the park and zoo up north to Binnie Road (Woodman's entrance furthest west). Then, the eventual right in and right outs on Randall Road at our zoo and Park Services facility would be less impactful on our users and staff.
 - o Before any decisions are made at this intersection, wait until Longmeadow Parkway is fully opened and you see the impact that it has on traffic at Randall Road and Higgins Road.
 - o Flashing yellow arrows are well received by staff, the Park Board and our users.

The above feedback was disseminated to me by our board members and staff. If you have any questions, please do not hesitate to contact me. The Park Board and I thank you for thinking of us and allowing us to give some input. We, just like you, prioritize safety for our Dundee Township residents as we provide programs and facilities for them.

Best regards,

Dave Peterson, Executive Director
dpeterson@dtpd.org
847-428-7131 x4001

Dave Peterson, CPRP
Executive Director
Dundee Township Park District
665 Barrington Avenue

Carpentersville, IL 60110
(847) 428-7131 Ext. 4001



KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 2, 2020

Mike Pubentz, P.E.
Public Works Director
City of Elgin
1900 Holmes Road
Elgin, IL 60123

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement

Dear Mr. Pubentz,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to complete a Phase I Engineering Study to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

For the subject improvement, KDOT is following IDOT geometric and environmental policies to allow project eligibility for federal funding opportunities. The Phase I Engineering Study will continue into 2021 and is anticipated to be complete near the Summer of 2021. Once the Phase I Engineering Study is complete, preparation of contract plans and land acquisition are anticipated to begin.

At this time, we would like to request any feedback you may have related to the proposed intersection improvements. Please submit your feedback by January 4th, 2021 so we may consider your input in the Final Design. We will also be holding a Public Meeting in the Spring of 2021 to identify the Phase I Engineering Study findings and present the preferred alternative. We greatly appreciate your time and feedback. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation

Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 2, 2020

Stephen Pickett
Village President
Village of Sleepy Hollow
1 Thorobred Lane
Sleepy Hollow, IL 60118

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement

Dear Mr. Pickett,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to complete a Phase I Engineering Study to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

For the subject improvement, KDOT is following IDOT geometric and environmental policies to allow project eligibility for federal funding opportunities. The Phase I Engineering Study will continue into 2021 and is anticipated to be complete near the Summer of 2021. Once the Phase I Engineering Study is complete, preparation of contract plans and land acquisition are anticipated to begin.

At this time, we would like to request any feedback you may have related to the proposed intersection improvements. Please submit your feedback by January 4th, 2021 so we may consider your input in the Final Design. We will also be holding a Public Meeting in the Spring of 2021 to identify the Phase I Engineering Study findings and present the preferred alternative. We greatly appreciate your time and feedback. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation

Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 2, 2020

Lance Harris
Fire Chief
West Dundee Fire Department
1 Carrington Drive
West Dundee, IL 60118

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement

Dear Chief Harris,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to complete a Phase I Engineering Study to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

For the subject improvement, KDOT is following IDOT geometric and environmental policies to allow project eligibility for federal funding opportunities. The Phase I Engineering Study will continue into 2021 and is anticipated to be complete near the Summer of 2021. Once the Phase I Engineering Study is complete, preparation of contract plans and land acquisition are anticipated to begin.

At this time, we would like to request any feedback you may have related to the proposed intersection improvements. Please submit your feedback by January 4th, 2021 so we may consider your input in the Final Design. We will also be holding a Public Meeting in the Spring of 2021 to identify the Phase I Engineering Study findings and present the preferred alternative. We greatly appreciate your time and feedback. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation

Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 2, 2020

Timothy J. Scott, AICP
Community Development Director
Village of West Dundee
100 Carrington Drive
West Dundee, IL 60118

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement

Dear Mr. Scott,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to complete a Phase I Engineering Study to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

For the subject improvement, KDOT is following IDOT geometric and environmental policies to allow project eligibility for federal funding opportunities. The Phase I Engineering Study will continue into 2021 and is anticipated to be complete near the Summer of 2021. Once the Phase I Engineering Study is complete, preparation of contract plans and land acquisition are anticipated to begin.

At this time, we would like to request any feedback you may have related to the proposed intersection improvements. Please submit your feedback by January 4th, 2021 so we may consider your input in the Final Design. We will also be holding a Public Meeting in the Spring of 2021 to identify the Phase I Engineering Study findings and present the preferred alternative. We greatly appreciate your time and feedback. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation

Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 2, 2020

Eric Babcock
Public Works Director
Village of West Dundee
900 Angle Tarn
West Dundee, IL 60118

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement

Dear Mr. Babcock,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to complete a Phase I Engineering Study to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

For the subject improvement, KDOT is following IDOT geometric and environmental policies to allow project eligibility for federal funding opportunities. The Phase I Engineering Study will continue into 2021 and is anticipated to be complete near the Summer of 2021. Once the Phase I Engineering Study is complete, preparation of contract plans and land acquisition are anticipated to begin.

At this time, we would like to request any feedback you may have related to the proposed intersection improvements. Please submit your feedback by January 4th, 2021 so we may consider your input in the Final Design. We will also be holding a Public Meeting in the Spring of 2021 to identify the Phase I Engineering Study findings and present the preferred alternative. We greatly appreciate your time and feedback. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation

Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Carrington Crossing, LLC
Stanley Machining & Tool Corp
428 Maple Ave.
Carpentersville, IL 60110-1966

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcels 03-20-351-003 and 03-20-351-004

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

John and Connie Streppek Trusts TRS
16N287 Randall Road
West Dundee, IL 60118

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-20-300-005

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

Telephone Record

From: Candi Thomas

Date: 01/28/2021

Re: Randall at IL 72 - Intersection Improvements

Ms. Connie Strepek called and left a voice message on January 19th, 2021 stating she was a property owner at the corner of Randall Road and IL Rte 72 and she really needed to talk to me regarding some concerns with the water service line to her residence, which she felt would be disturbed with the widening of the roadway, and asked for me to please call her back.

I was able to get ahold of Ms. Strepek on January 28th, 2021 and we talked about her concerns.

She wanted to let us know there is a water service line running from her 'barn area' east-west out to (or near) the ROW line and then it runs south along (or near) the Randall Road ROW line. She says the water service line is on her property; however, during the last roadway widening project (when ComEd had to move their poles), they had to use a hydrovac when excavating around the water line service in order to not impact their water service. I asked her if she had any documentation on the location of the water service line but she said she did not.

She also wanted to stress the importance of her possible historic property. I informed Ms Strepek that we were aware of the importance of her possible historic property and we were doing our best to avoid as many impacts as possible at this location.

I thanked her for her information and told her to feel free to contact me if she had any further questions/concerns.

(262) 728-5828 – Ms. Connie Strepek

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Mr. John Strepak
16N287 Randall Road
Elgin, IL 60123-7822

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcels 03-20-300-005 and 03-20-300-010

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Strepek Family LLC
16N371 Randall Road
West Dundee, IL 60118

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-20-300-010

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Steven and Patricia Whitecotton
36W651 Richmond Rd
West Dundee, IL 60118

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-20-178-005

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

James and Sharon Healy, Trustees
36W659 Richmond Rd
West Dundee, IL 60118

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-20-178-004

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Christopher and Amy Field
36W691 Richmond Rd
West Dundee, IL 60118

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-20-178-003

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Steve and Mary Wuest
36W721 Richmond Rd
West Dundee, IL 60118

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-20-178-002

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Gerald Richied
36W739 Richmond Rd
West Dundee, IL 60118

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-20-178-001

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Stoneridge Legacy Partners LP
Mary Galvan
W5229 Stewart Dr
Elkhorn, WI 53121-2746

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-20-101-008

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

David Huang
2505 Bath Rd
Elgin, IL 60124

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-20-101-007

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY
DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer

41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265



December 15, 2020

Dundee Township Park District
Deputy Director
21 N. Washington St.
Carpentersville, IL 60110-2615

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-19-201-018

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation

A handwritten signature in cursive script that reads "Candi Thomas".

Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Fred West Dundee Commercial LLC
Fiduciary Real Estate Development LLC
788 N Water St.
Suite 200
Milwaukee, WI 53202-3584

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcels 03-19-277-009 and 03-19-277-010

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

HJK Ventures, LLC
1025 Aurora Ave
Naperville, IL 60540-6268

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-19-200-004

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

ProDental Care, LTD
5N523 Lakeview Dr
St. Charles, IL 60175-6173

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-19-200-006

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Mr. Sebastian Podsiadlo
37W100 IL Route 72
West Dundee, IL 60118-9592

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-19-278-009

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Mr. Artro Ramos
37W140 IL Route 72
West Dundee, IL 60118

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-19-278-013

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Fairdale Building Partnership
39W395 Freeman Rd
Gilberts, IL 60136-9765

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-19-278-012

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Phillip and Judith Menard
16N541 Highland Dr
West Dundee, IL 60118-9406

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-19-278-011

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Deon and Mona Hornsby
16N530 Highland Dr
West Dundee, IL 60118-9406

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-19-276-005

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation

A handwritten signature in cursive script that reads "Candi Thomas".

Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Falcon Funding, LLC
3611 Berry St.
Crystal Lake, IL 60012-1134

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-19-400-023

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Grove at Randall, LLC
90 Prairie Pkwy
Gilberts, IL 60136-4090

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcel 03-19-400-021

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

December 15, 2020

Northwest Corp Park Owners Assoc Inc
2860 Galvin Dr
Elgin, IL 60124-7859

Re: Randall Road at Higgins Road (IL Route 72)
Intersection Improvement
Parcels 03-19-400-022

Dear Property Owner,

BLA, Inc. has been retained by the Kane County Division of Transportation (KDOT) to evaluate the intersection of Randall Road at Higgins Road (IL Route 72) and identify alternatives to improve mobility and safety. The analyses performed indicate that the addition of a third through lane on Randall Road from approximately Carrington Drive, on the south, to Recreation Drive, on the north, will reduce intersection delays, length of queues, and crash occurrences. Additionally, left and right turn lanes on Higgins Road will be lengthened to the extent possible. KDOT is also evaluating the ability to include pedestrian and bicycle facilities within the project corridor. A project location map is enclosed.

The subject improvement is in the planning stage of a multi-year process which is anticipated to be complete near the Summer of 2021. Once the planning stage is complete, preparation of contract plans and land acquisition are anticipated to begin which is anticipated to last 18 to 24 months. Construction is dependent upon project readiness and funding availability. Detailed project information can found at the KDOT project website: <http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>. Additionally, property owner direct mailing coordination will continue throughout the project process.

We will also be holding a Public Meeting in the Spring of 2021 to define the project purpose and need and present the preferred alternative. Should you have any questions, comments, or concerns please do not hesitate to contact me by phone at (630) 406-7355 or by email at thomascandance@co.kane.il.us.

Sincerely,

Kane County Division of Transportation



Candi Thomas, P.E.
Senior Project Manager

Enclosure

**Randall Road at IL Rte 72
Virtual Public Information Meeting**

The Kane County Division of Transportation (KDOT) is hosting a Virtual Public Information Meeting concerning proposed improvements to the intersection of Randall Road at IL Rte 72. KDOT and consultant representatives will be available to discuss the project and answer any questions. All persons interested in the project are invited to attend and participate in this meeting. A historic property eligible for consideration of the National Historic Register, John and Catherine Farrell Farm, adjacent to the project corridor will be avoided resulting in a finding of "No Historic Properties Effect".

The live virtual public information meeting will be held on:
**Thursday October 14, 2021
6 p.m. to 7:30 p.m.**

Zoom Meeting Link:

<https://us02web.zoom.us/j/89884261365?pwd=TlNuMHhkaXlvaUJkdE1ScXp5S9pdZ09>

A meeting link is also available on the project website:
<http://kdot.countyofkane.org/Pages/Projects/Randall-IL-72/Randall-IL-72.aspx>

Those without internet access may call in by phone and use the meeting ID and passcode below to access the call.

Call In Number: (312) 626-6799

Meeting ID: 838 6426 1365

Passcode: 819829

All virtual public information meeting materials will be available on the project website on Thursday October 14, 2021. Those without internet access can pick up meeting materials October 19 through October 21, 2021, at Randall Oaks Recreation Center (500 N Randall Road, West Dundee, IL 60118).

Or have it e-mailed/mailed to them by contacting the KDOT Project Manager listed below. Attendees are encouraged to provide comment during or after the public meeting. Comment must be received by November 5, 2021, in order to be included in the official meeting documentation.

This meeting will be accessible to individuals with disabilities. Anyone requiring special assistance can contact the KDOT Project Manager Candi Thomas, P.E. at (630) 406-7335.

Published in Daily Herald Sep 30, Oct 11, 2021 (4570802)

CERTIFICATE OF PUBLICATION

Paddock Publications, Inc.

Fox Valley

Daily Herald

Corporation organized and existing under and by virtue of the laws of the State of Illinois, DOES HEREBY CERTIFY that it is the publisher of the **Fox Valley DAILY HERALD**. That said **Fox Valley DAILY HERALD** is a secular newspaper, published in Elgin and has been circulated daily in the Village(s) of:

Aurora, Batavia, Burlington, Carpentersville, East Dundee, Elgin,
Elburn, Geneva, Gilberts, Hampshire, Montgomery, North Aurora,
Sleepy Hollow, Saint Charles, South Elgin, Sugar Grove, Wayne,
West Dundee

County(ies) of Kane

and State of Illinois, continuously for more than one year prior to the date of the first publication of the notice hereinafter referred to and is of general circulation throughout said Village(s), County(ies) and State.

I further certify that the Fox Valley DAILY HERALD is a newspaper as defined in "an Act to revise the law in relation to notices" as amended in 1992 Illinois Compiled Statutes, Chapter 715, Act 5, Section 1 and 5. That a notice of which the annexed printed slip is a true copy, was published 09/30/2021, 10/11/2021 in said Fox Valley DAILY HERALD.

IN WITNESS WHEREOF, the undersigned, the said PADDOCK PUBLICATIONS, Inc., has caused this certificate to be signed by, this authorized agent, at Arlington Heights, Illinois.

PADDOCK PUBLICATIONS, INC.
DAILY HERALD NEWSPAPERS

BY 
Designee of the Publisher and Officer of the Daily Herald

Control # 4570802

Randall Road Public Meeting Summary

A virtual public information meeting was held on Thursday, October 14, 2021, from 6:00 PM to 7:30 PM over Zoom. Attendees were notified of the meeting via three avenues:

1. Direct mail to adjacent property owners.
2. Advertisement for virtual public information meeting in the Daily Herald, Fox Valley edition on September 30, 2021 and October 11, 2021.
3. Changeable message boards within the project corridor advising of the meeting with a link to the County website.

In addition, for those that may not have access to the internet, presentation handouts were provided ahead of time at the Randall Oaks Recreation Center and a call-in phone number for audio attendance.

More than 20 people were in attendance. A copy of the presentation is attached.

Several questions were asked throughout the meeting.

Q. What about Sideswipe in opposite directions?

A. There were no sideswipe opposite direction crashes because there is a median.

Q. What is a multi-vehicle crash?

A. A multi-vehicle crash is an incident that occurred with 3 or more vehicles.

Q. Why are there no plans for a bike path east and west of IL 72?

A. Since IDOT has jurisdiction of IL 72, as the properties develop along IL 72, IDOT will be responsible for the decision to implement a bike path. In the meantime, IDOT has identified the current wide shoulders as an acceptable facility for pedestrians and bicyclists.

Q. How was the crash reduction determined?

A. The Highway Safety manual is the main guiding document that is used to evaluate the effectiveness of safety in the highway project planning process. The Highway Safety manual uses crash reduction modification factors for various geometric improvements. Based on the traffic volumes and various geometric factors the expected crash occurrence is determined. This compared to the existing geometric expectancy results in a reduction.

Q. Will there be land acquisition at Carrington Drive?

A. Some minor resurfacing work is proposed on Carrington Drive to match the new pavement of Randall Road. Some regrading of the parkway will also occur, but acquisition is not proposed from Carrington Drive south.

Q. Why is there no bike path along Route 72?

A. Since IDOT has jurisdiction of IL 72, as the properties develop along IL 72, IDOT will be responsible for the decision to implement a bike path. In the meantime, IDOT has identified the current wide shoulders as an acceptable facility for pedestrians and bicyclists.

Q. So, there are no plans from the State for a multi-use path on 72. Why does that prevent the county from including plans for an east-west multi-use path?

Randall Road Public Meeting Summary

A. Since IDOT has jurisdiction of IL 72, as the properties develop along IL 72, IDOT will be responsible for the decision to implement a bike path. In the meantime, IDOT has identified the current wide shoulders as an acceptable facility for pedestrians and bicyclists.

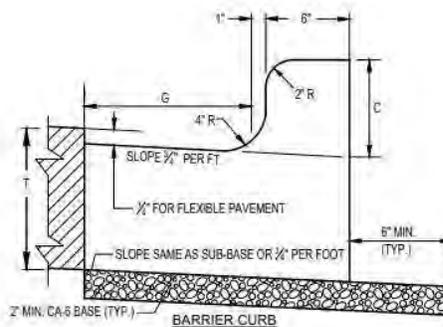
Q. Will homeowners be reimbursed for land acquisition?

A. Yes, the Federal guidelines for appraisal, review appraisal, and negotiations will be followed for all land acquisition.

Q. When curb and gutter are put in on the SE side of Randall and Route 72 parcel can you elaborate on the type of curb and gutter configuration? Do you have a picture?"

A. The curb and gutter in the median is B-6.12 and the curb and gutter on the outside of the road is B-6.24. The curb and gutter that is there now is the same type of curb and gutter that will be placed in the future. Below is a typical side view of barrier curb and gutter along with a table displaying different dimensions of each type.

BARRIER CURB DIMENSIONS FOR "G" AND "C"		
CURB TYPE	"G" (INCHES)	"C" (INCHES)
TYPE B-6.12	12	6
TYPE B-6.18	18	6
TYPE B-6.24	24	6
TYPE B-9.12	12	9
TYPE B-9.18	18	9
TYPE B-9.24	24	9



Q. Is the Longmeadow project completed? If not when?

A. It is anticipated that the remaining segment of Longmeadow Parkway will be opened late fall of next year.

Q. Any plans to widen Route 47 to reduce traffic on Randall Road?

A. Route 47 is IDOT jurisdiction, and the County is not aware of any studies being performed. The Randall Corridor is being studied because it is a direct route to I-90.

Q. Regarding safety, how about the idea of adding a stop light at Carrington? There is a visibility issue. A stop light at Carrington could cycle and slow down traffic to improve safety.

A. The installation of traffic signals requires specific traffic volumes to be met on all roadways. At this time, Carrington Drive does not meet the traffic volume requirement. Should a development occur on the west side and a fourth leg to the intersection added, a traffic signal would be contemplated further.

There were no other questions or comments submitted to BLA or Kane County upon conclusion of the meeting nor by the deadline of November 5, 2021.

Randall Road at IL Route 72 Phase I Study

VIRTUAL PUBLIC INFORMATION MEETING
OCTOBER 14, 2021



WELCOME AND AGENDA

- Where is this Project and why is this intersection being studied?
Study Location, Existing Conditions, Other Area Studies, Delays, Queues, Safety, Purpose and Need Statement
Q & A Session
- How is an improvement determined?
Traffic Patterns and Volumes, Crash Data, Environmental, Community, Stakeholder and Property Owner, Utilities, Local Plans and Regulations
Q & A Session
- What is the proposed improvement?
Geometry and Key Features, Typical Sections, Environmental Resources, Drainage, Noise, Land Acquisition
Q & A Session
- What happens after this meeting?
Project Schedule, Public Comment
- Final Comments and Q & A Session

RULES OF ENGAGEMENT



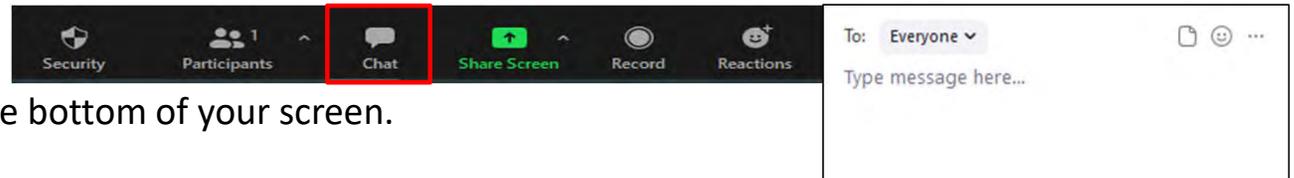
**This meeting will be recorded and
available on the project website
following the meeting**

ASKING QUESTIONS

VIA ZOOM

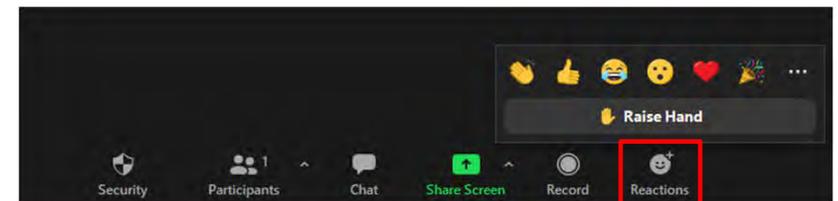
Typing in the Chat Box

- Click on the Chat icon located at the bottom of your screen.
- A Chat box should appear.
- At the bottom of the chat box, type your question in the message box.
- Chat Box questions can be asked at any time.



Verbally via Raise Hand

- Click on the Reactions icon at the bottom of your screen.
- Click on the Raise Hand command.
- The host will be notified that you have raised your hand.
- Verbal questions will be taken during Q&A sessions.



VIA TELEPHONE

- dial star 9 to raise your hand to ask questions

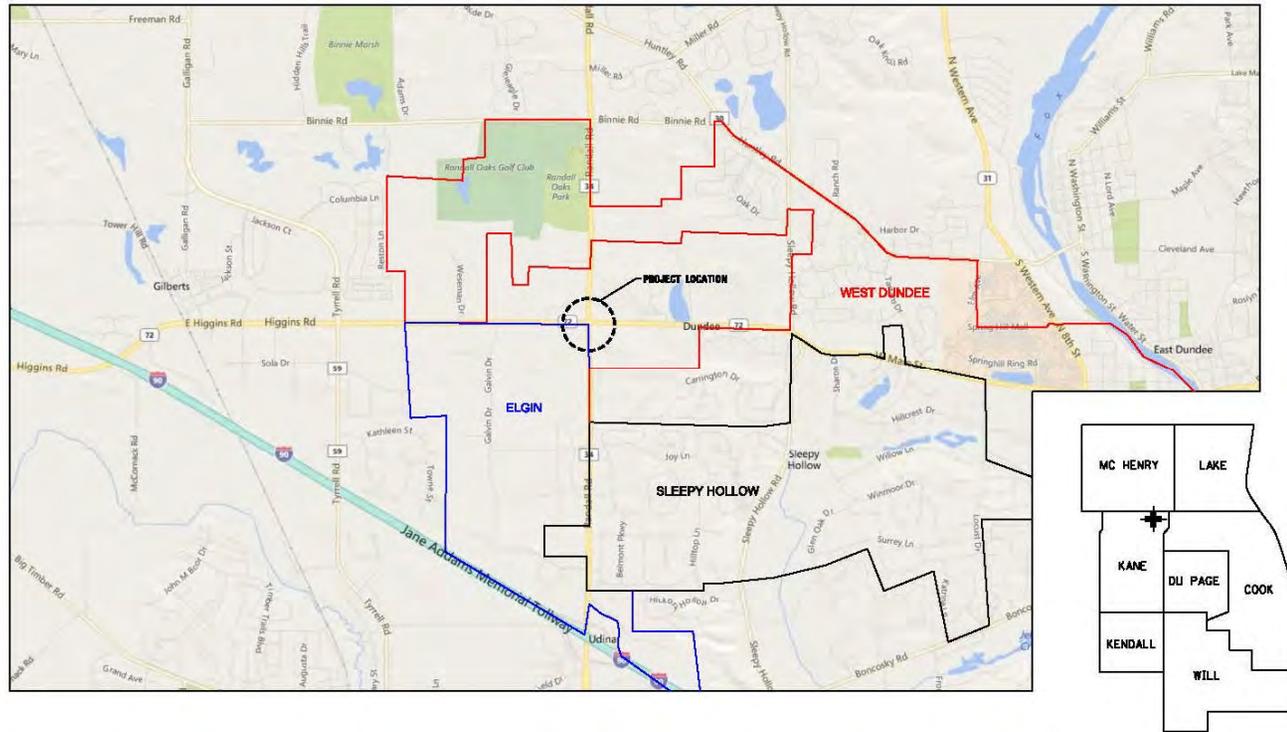
WHERE IS THIS PROJECT AND WHY IS THIS INTERSECTION BEING STUDIED?

LOCATION

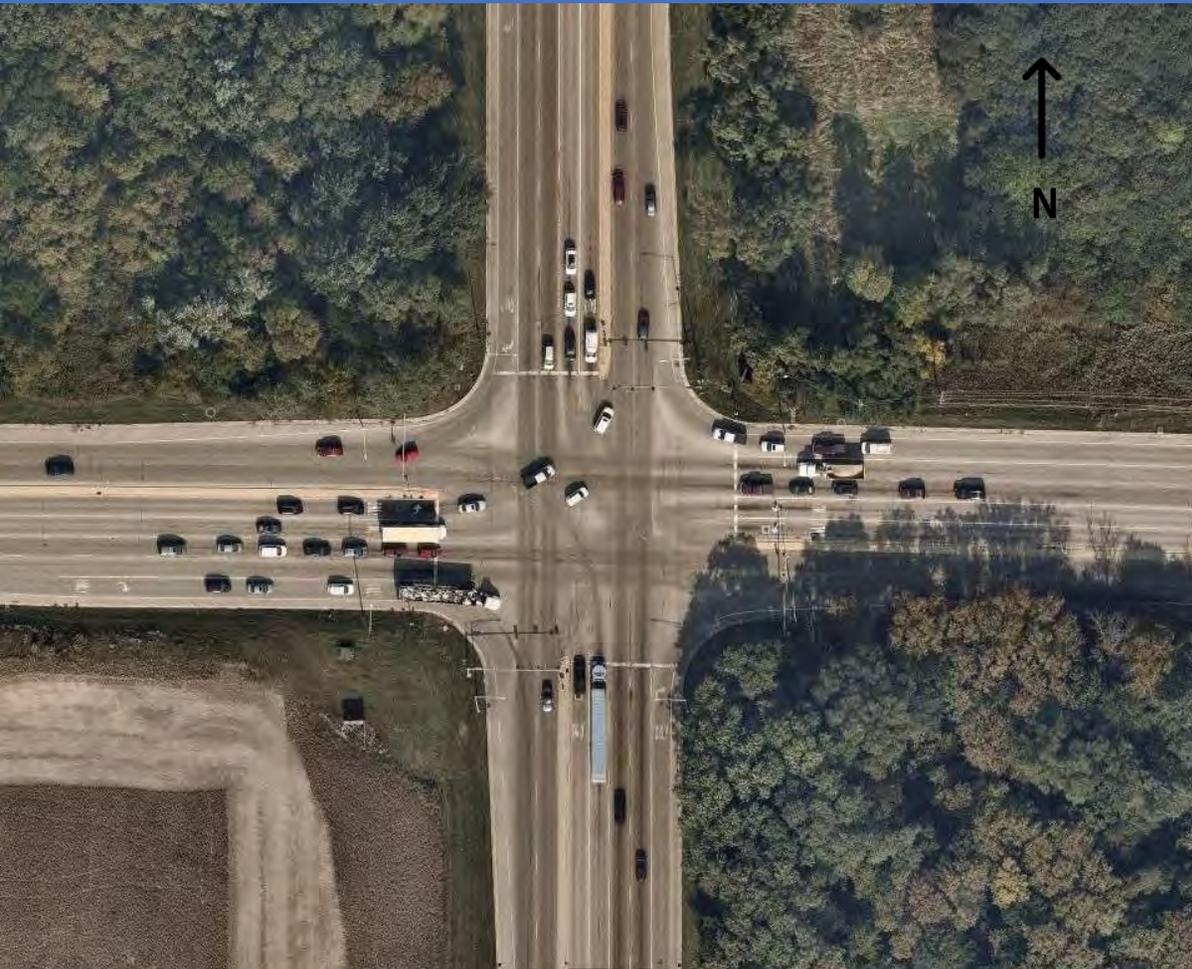
The signalized intersection of **Randall Road at IL Route 72** is located in Elgin and Unincorporated Kane County

Randall Road, 1.5 miles north of I-90, is designed to

- Supplement the freeway system
- Carry significant volumes long distances across a region



EXISTING CONDITIONS



- Two through lanes
- Two left-turn lanes
- One right-turn lane
- Shoulder plus curb and gutter

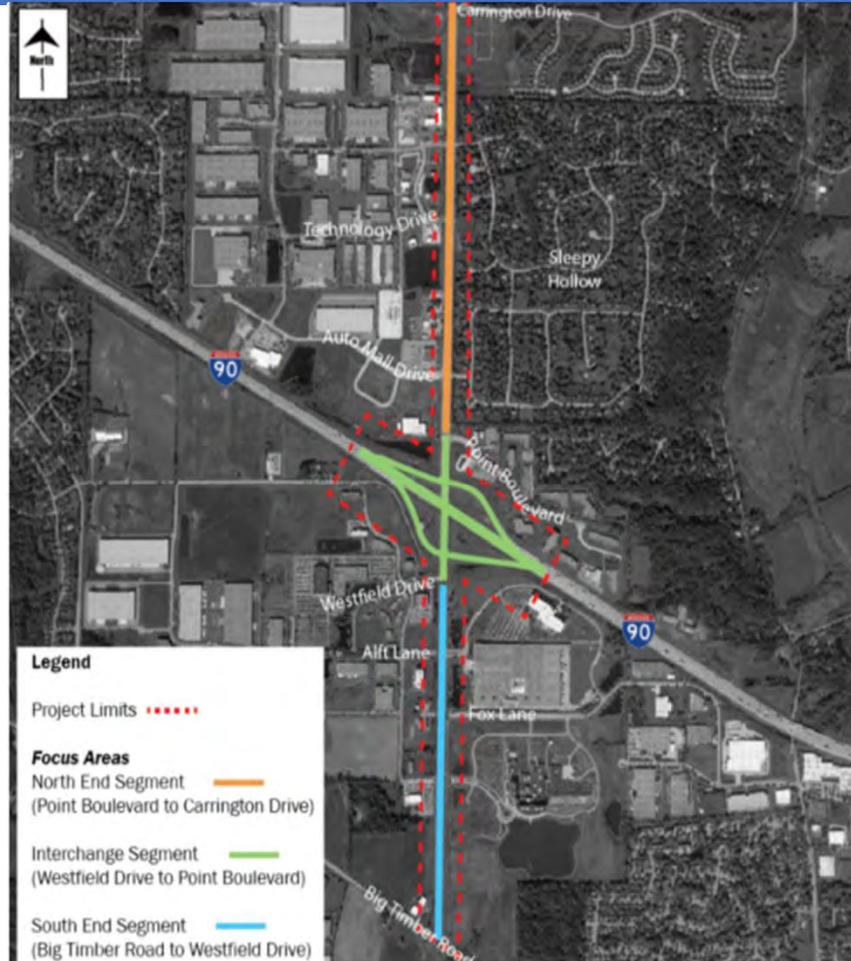
- No dedicated pedestrian or bicycle facilities
- Traffic signal interconnect along Randall Road

RANDALL ROAD AT IL ROUTE 72 – PHASE I STUDY

OTHER AREA STUDIES

Randall Road at Big Timber Road

Increase capacity and improve safety at the intersection

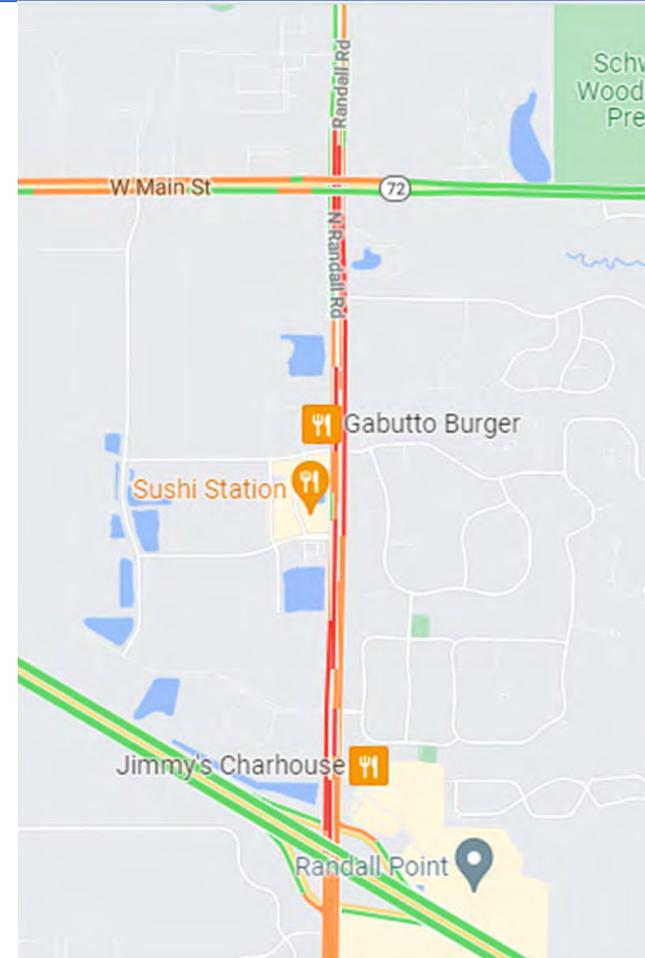


Randall Over 90 PEL

Enhance mobility, improve safety, increase capacity, address economic and quality of life impacts through the corridor

WHY IS THIS INTERSECTION BEING STUDIED?

Existing intersection is at capacity with **long queues** and **delays**.



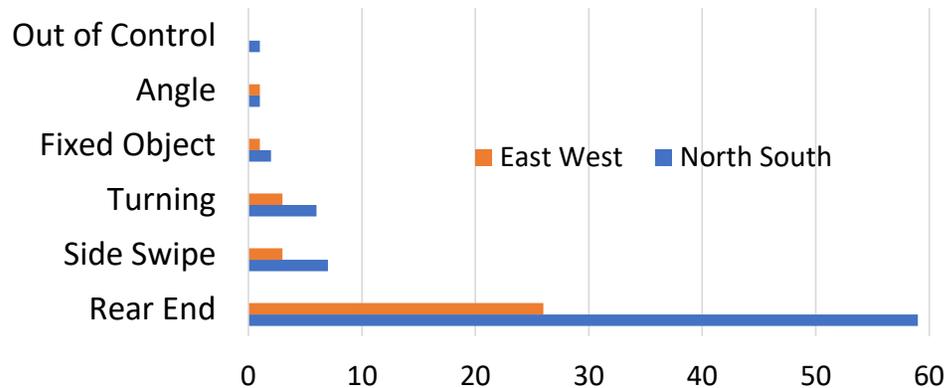
WHY IS THIS INTERSECTION BEING STUDIED?

Motorists currently use other routes to **bypass the intersection** because of existing congestion.

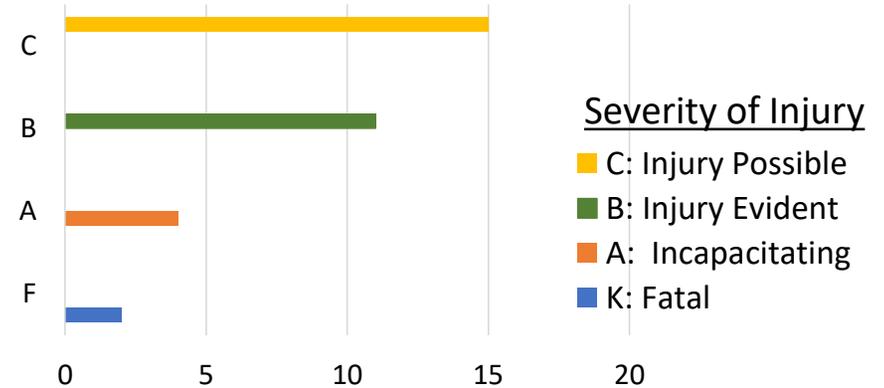


WHY IS THIS INTERSECTION BEING STUDIED?

The number of **crashes** that occur are **greater than average**.



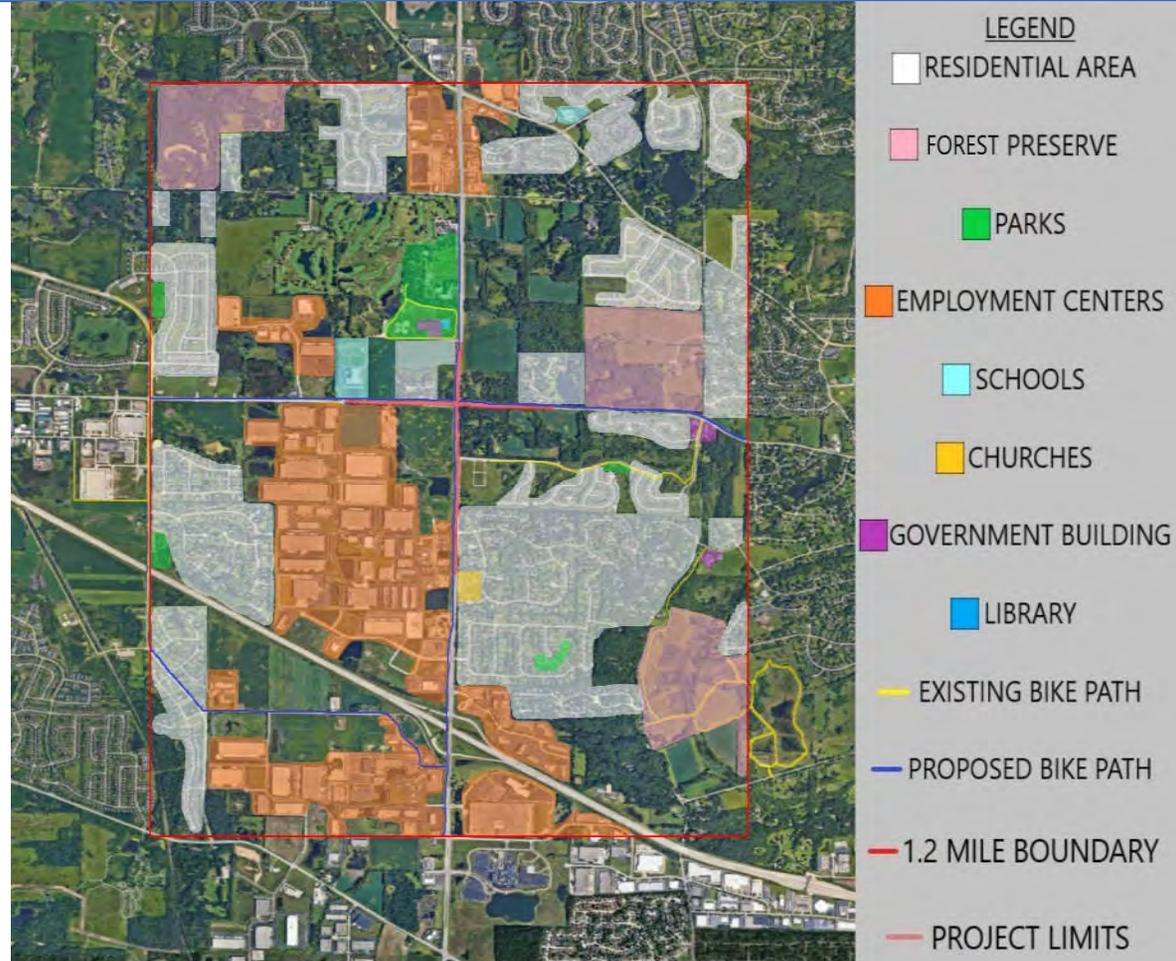
77% were Rear End which reflects a deficiency in *capacity*



110 TOTAL CRASHES, 2013 – 2017
32 TOTAL INJURIES
INCLUDING 2 FATALITIES

WHY IS THIS INTERSECTION BEING STUDIED?

No dedicated **pedestrian accommodations** are at or near the intersection; however, there are numerous generators.



PURPOSE AND NEED STATEMENT

Purpose:

To identify a feasible alternative that reduces delay and queues on Randall Road and improves safety for motorists, pedestrians and bicyclists.

Need:

The *2050 peak hour intersection operations* are projected to be an overall *LOS E or worse* and peak hour *queues* routinely *exceed one-quarter mile*, extending beyond the preceding intersections. These significant queues result in *crashes*. The current *lack of dedicated pedestrian and bicycle accommodations* do not provide a comfort level for all users, discouraging versus encouraging non-motorized usage in the project area.

QUESTIONS?

HOW IS AN IMPROVEMENT DETERMINED?

HOW IS AN IMPROVEMENT DETERMINED?

- **Traffic Data**
- Crash Data
- Environmental Resources
- Drainage
- Utilities
- Community Needs
- Stakeholder and Property Owner Input

TRAFFIC DATA

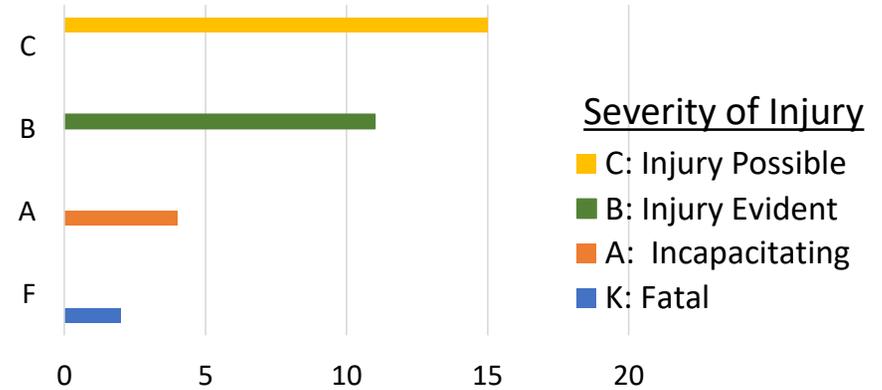
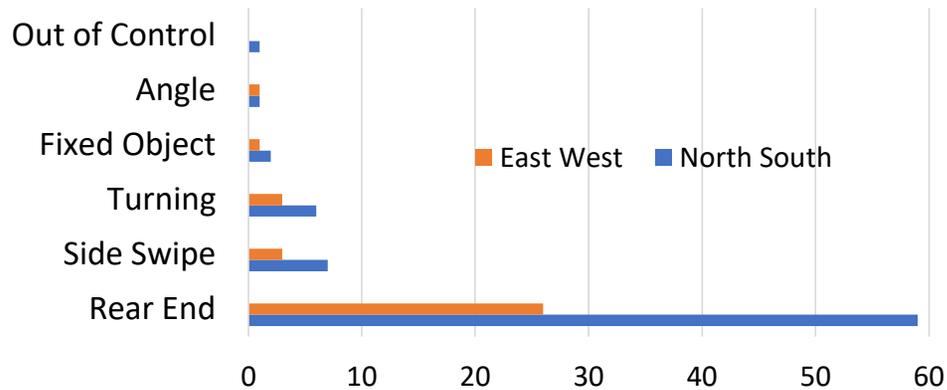
ROUTE	DAILY TRAFFIC		PEAK HOUR TRAFFIC	
	2019	2050	2019	2050
Randall Road	47,800	69,400	3,200*	5,400
IL Route 72	18,700	25,500	1,400	2,400

* Warrants Three Lanes in Each Direction

HOW IS AN IMPROVEMENT DETERMINED?

- Traffic Data
- **Crash Data**
- Environmental Resources
- Drainage
- Utilities
- Community Needs
- Stakeholder and Property Owner Input

CRASH DATA



77% were Rear End

15% Multi-Vehicle Crashes

110 TOTAL CRASHES, 2013 – 2017

32 TOTAL INJURIES

INCLUDING 2 FATALITIES

HOW IS AN IMPROVEMENT DETERMINED?

- Traffic Data
- Crash Data
- **Environmental Resources**
- Drainage
- Utilities
- Community Needs
- Stakeholder and Property Owner Input

ENVIRONMENTAL RESOURCES



- Wetlands
- Historic Structures
- Recreational Uses

- Residential Properties
- Development opportunities



HOW IS AN IMPROVEMENT DETERMINED?

- Traffic Data
- Crash Data
- Environmental Resources
- **Drainage**
- Utilities
- Community Needs
- Stakeholder and Property Owner Input



HOW IS AN IMPROVEMENT DETERMINED?

- Traffic Data
- Crash Data
- Environmental Resources
- Drainage
- **Utilities**
- Community Needs
- Stakeholder and Property Owner Input



HOW IS AN IMPROVEMENT DETERMINED?

- Traffic Data
- Crash Data
- Environmental Resources
- Drainage
- Utilities
- **Community Needs**
- **Stakeholder and Property Owner Input**



WHAT ALTERNATIVES WERE EVALUATED?



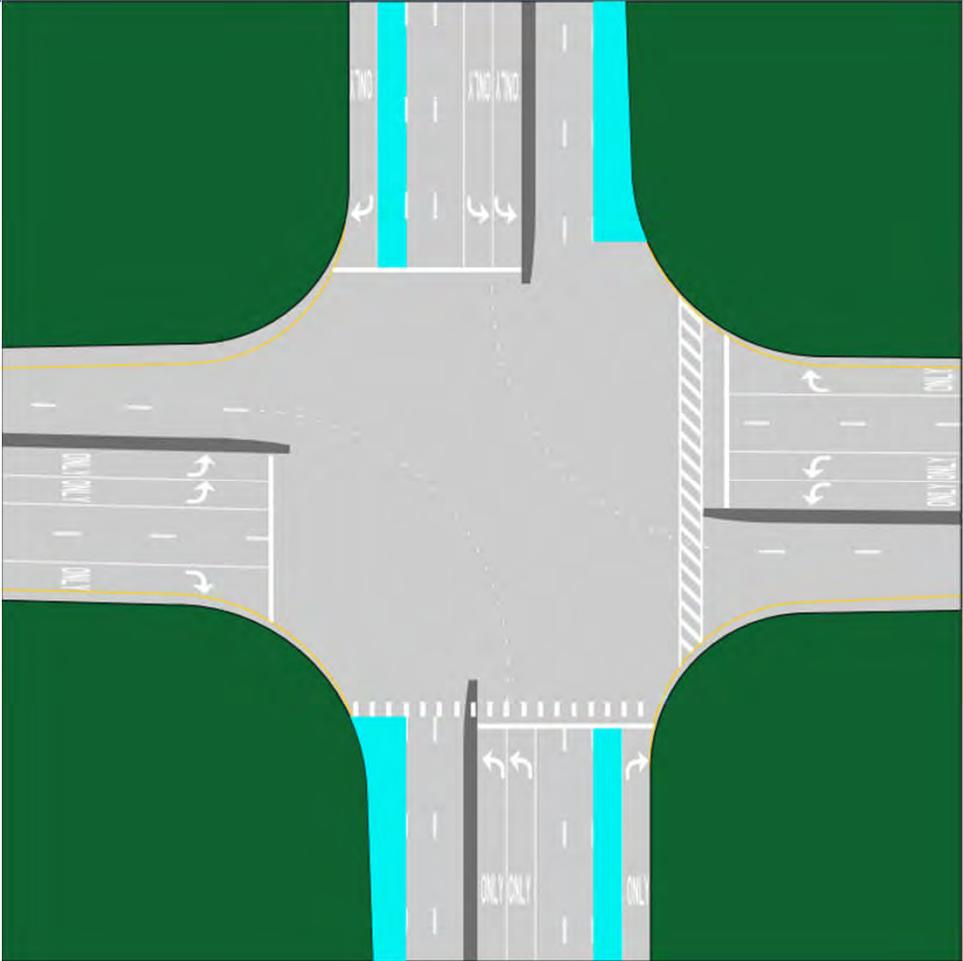
Four Alternatives Evaluated

- Operating level of service
- Delays
- Queues
- Impacts
- Cost

ALTERNATIVES EVALUATED?

Alternative 1

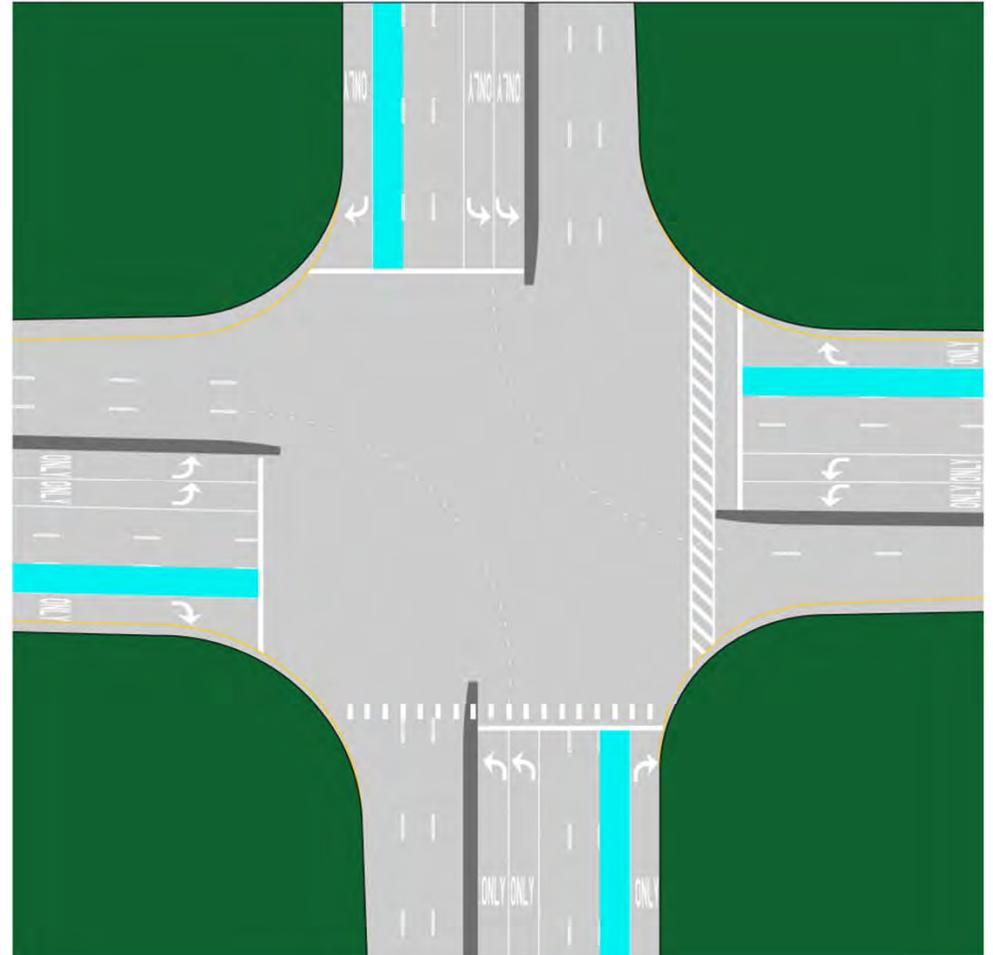
Three through lanes on Randall Road



ALTERNATIVES EVALUATED?

Alternative 2

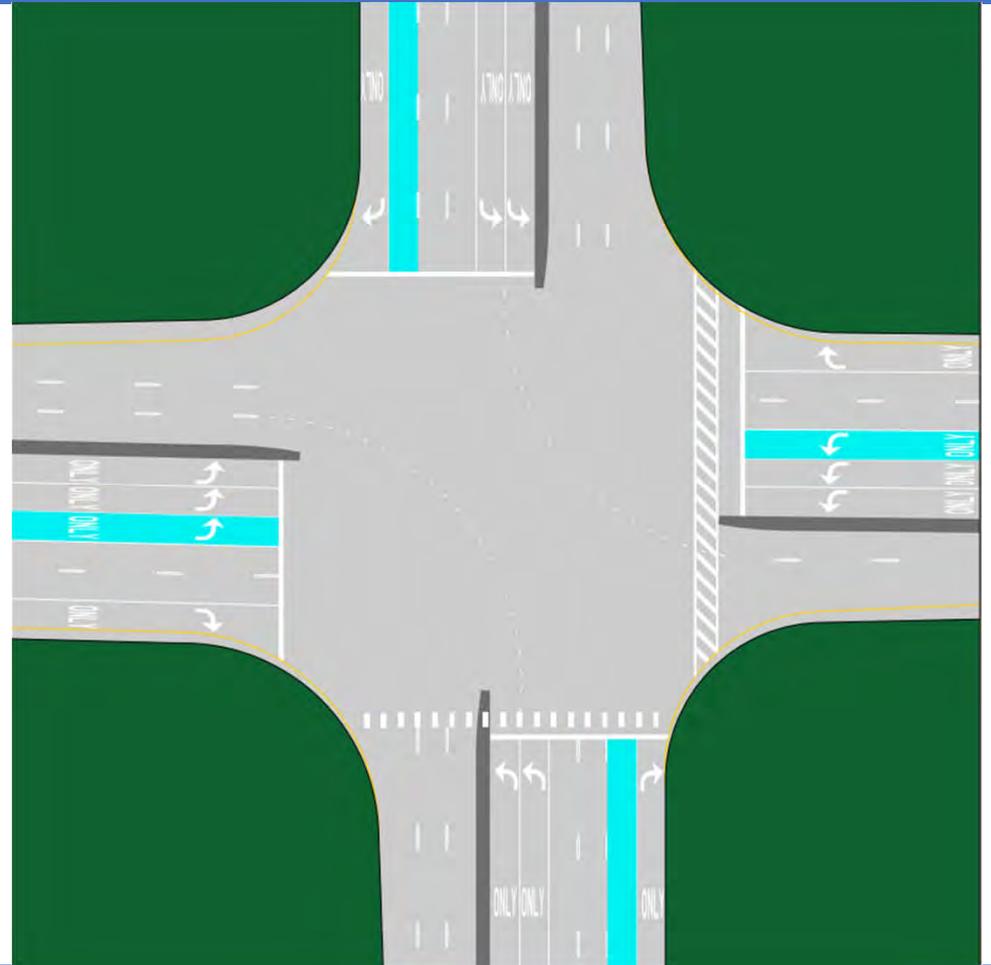
Three through lanes on Randall Road
Three through lanes on IL Route 72



ALTERNATIVES EVALUATED?

Alternative 3

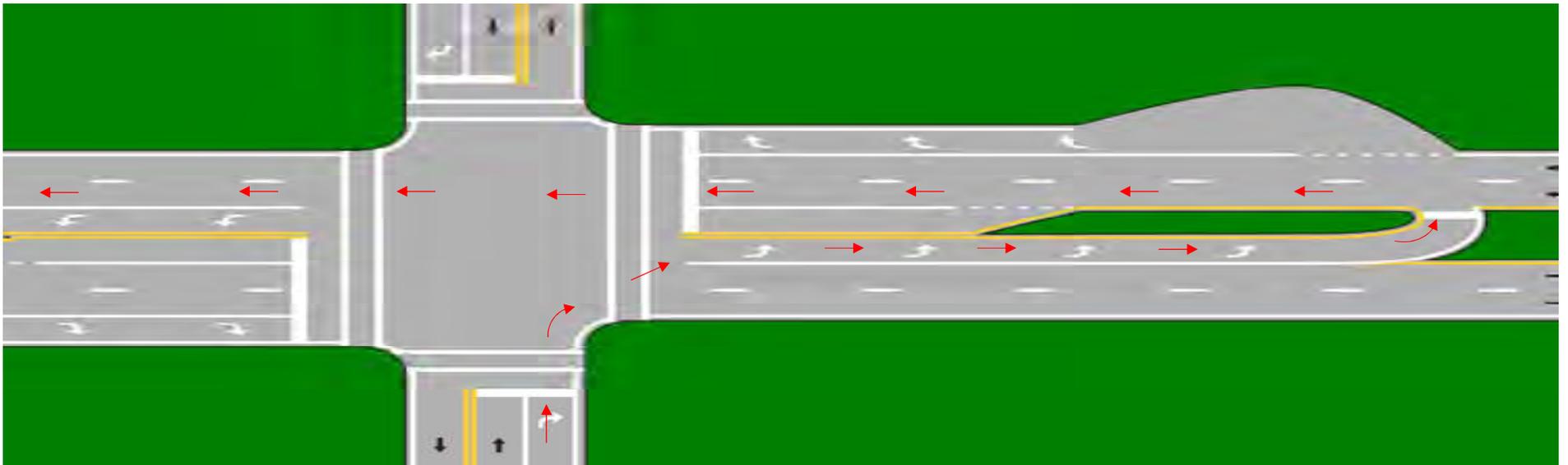
Three through lanes on Randall Road
Three left turn lanes on IL Route 72



ALTERNATIVES EVALUATED?

Alternative 4

Three through lanes on Randall Road
Median U-turn left turns from Randall Road



RANDALL ROAD AT IL ROUTE 72 – PHASE I STUDY



ALTERNATIVES CONSIDERED

ALTERNATIVE	OVERALL LOS		DELAY		QUEUE	
	AM	PM	AM	PM	AM (SB)	PM (NB)
Alternative 1	C	D	35.4	52.5	716	975
Alternative 2	C	D	33.3	45.2	713	1,052
Alternative 3	C	D	33.9	41.6	738	1,026
Alternative 4	D	D	35.7	47.2	739	1,230

Alternatives 2, 3, and 4 do not result in significant benefit over Alternative 1; yet result in higher construction cost, land acquisition needs, and environment impacts. **Alternative 1 is the Proposed Improvement.**

QUESTIONS?

WHAT IS THE PROPOSED IMPROVEMENT?

OVERALL IMPROVEMENT

Randall Road

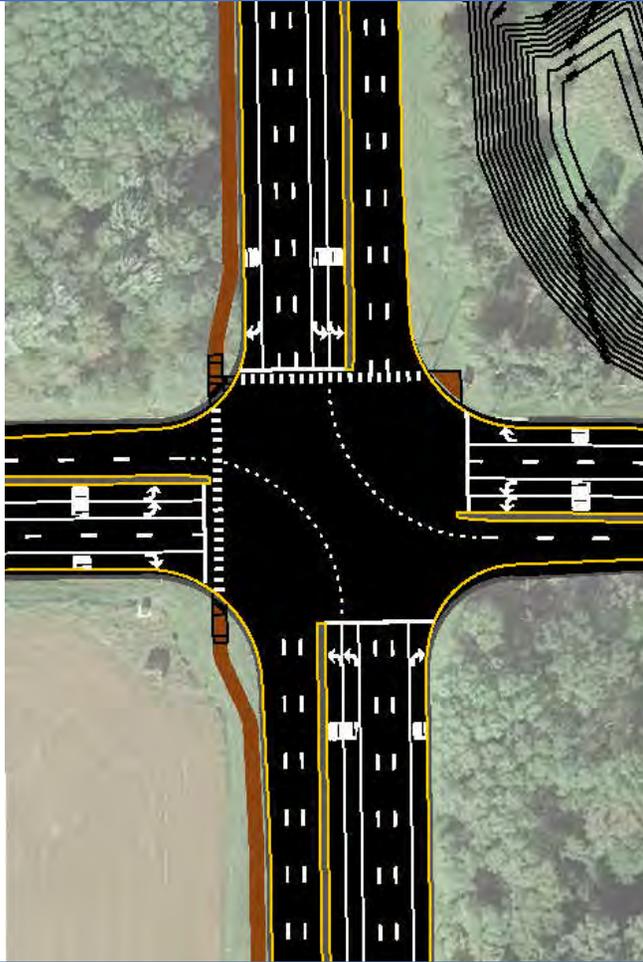
- Three through lanes in each direction
- Accommodations for multi-use path
- Pedestrian crossing signal and cross walks

Higgins Road

- Extend westbound right turn lane
- Extend eastbound right turn lane
- Extend eastbound dual left turn lanes

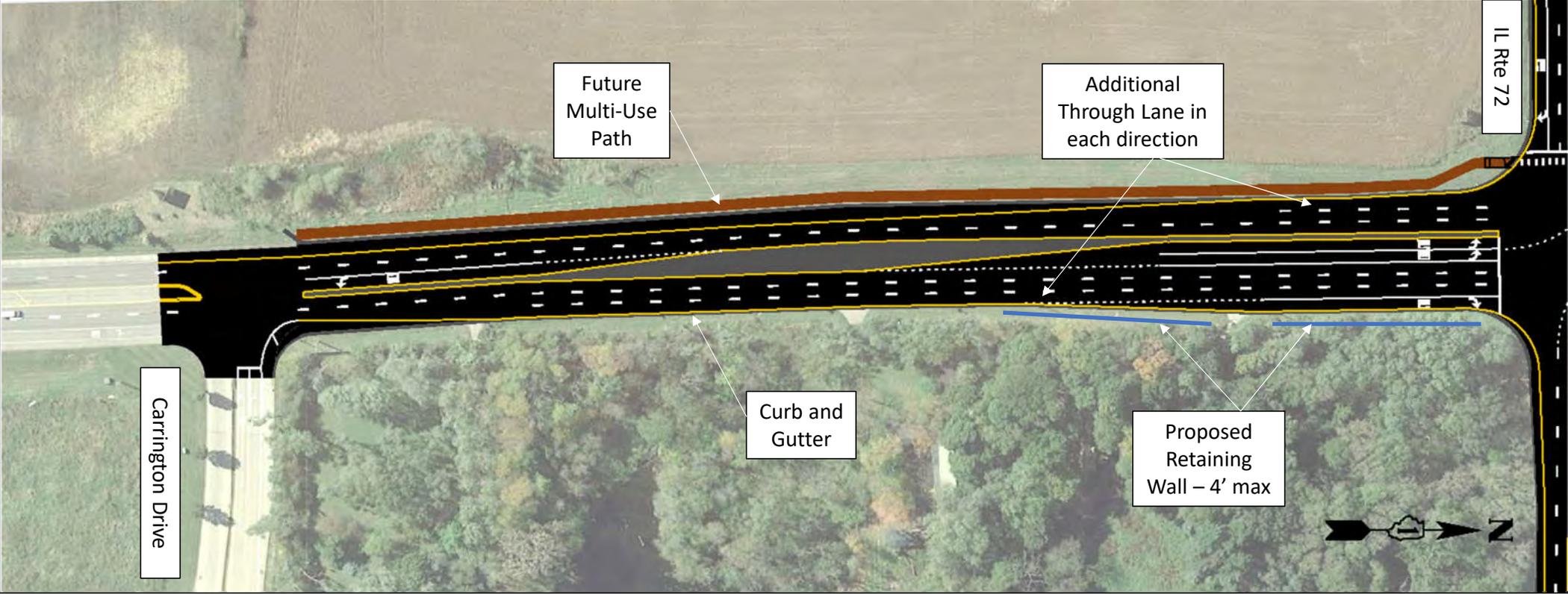
Miscellaneous

- Traffic signal upgrades
- Roadway lighting upgrades
- Resurface all pavement

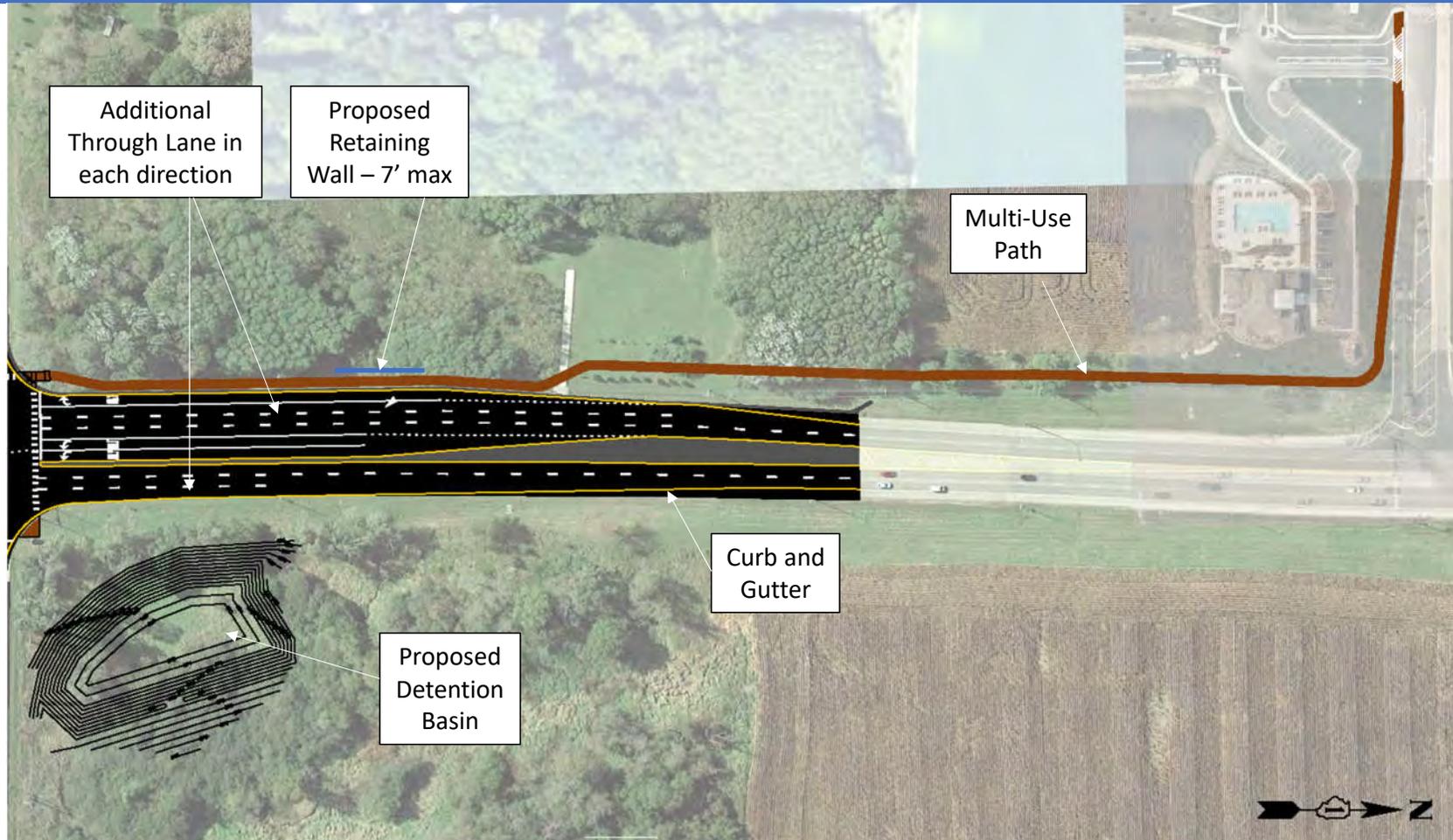


These elements will *increase capacity* and are expected to *reduce queues and delay* and *improve the safety* of the intersection.

SOUTH LEG OF RANDALL ROAD

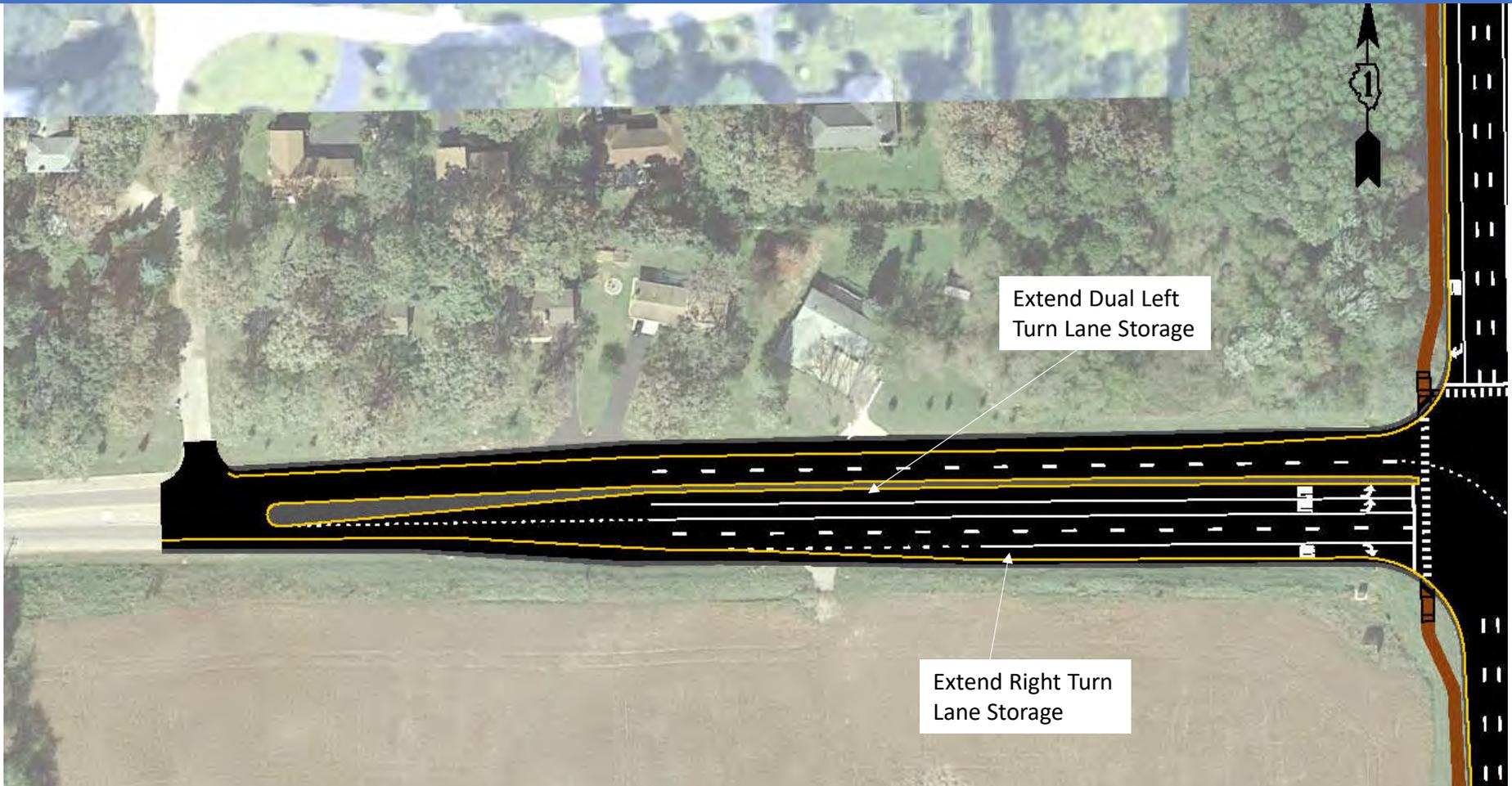


NORTH LEG OF RANDALL ROAD



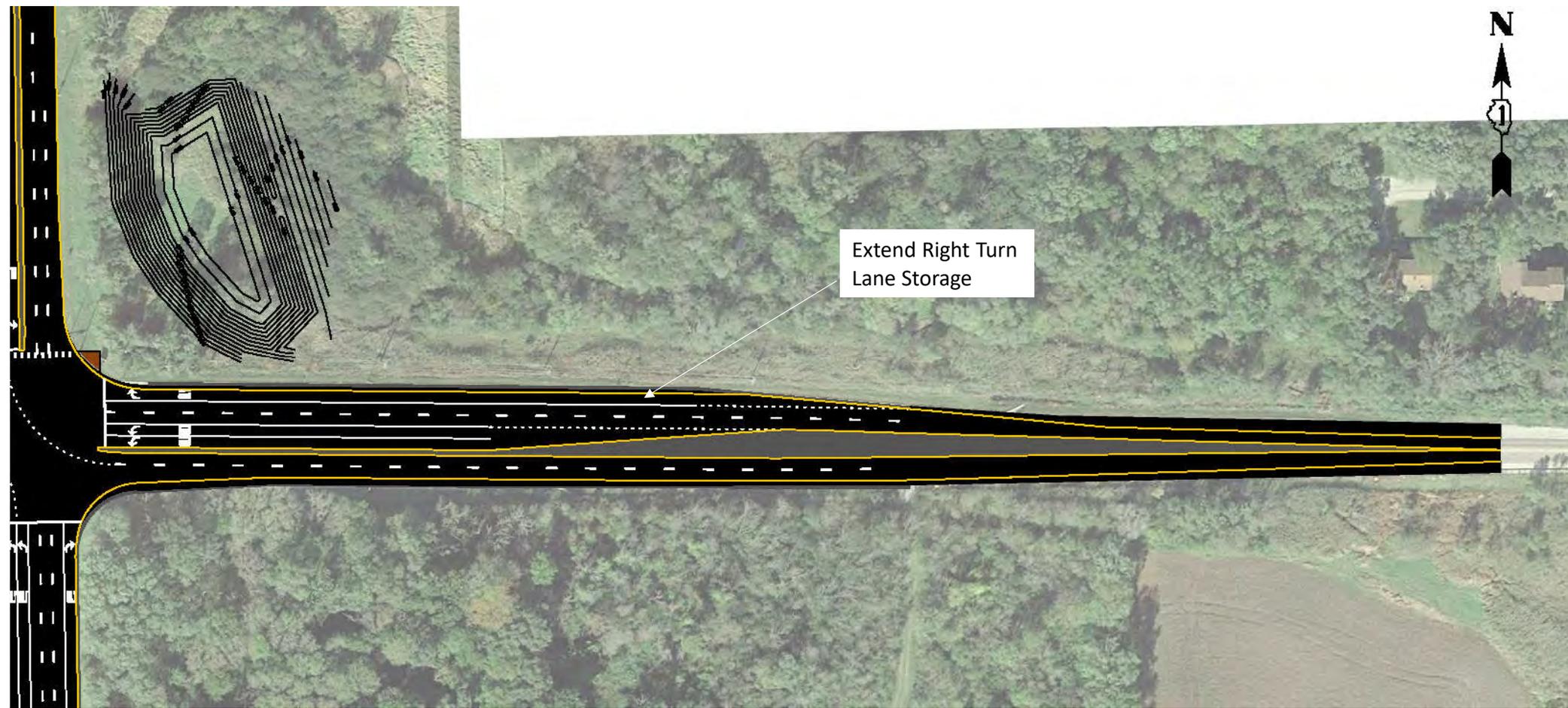
RANDALL ROAD AT IL ROUTE 72 – PHASE I STUDY

WEST LEG OF IL ROUTE 72



RANDALL ROAD AT IL ROUTE 72 – PHASE I STUDY

EAST LEG OF IL ROUTE 72

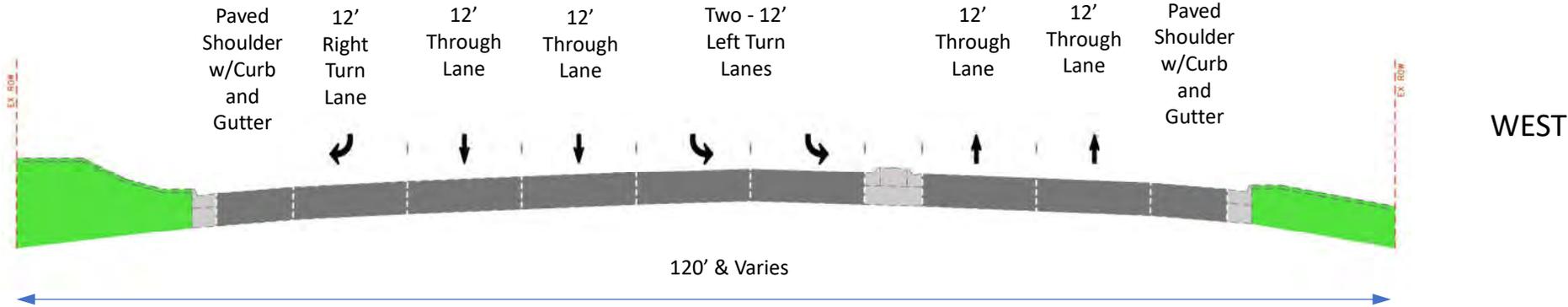


RANDALL ROAD AT IL ROUTE 72 – PHASE I STUDY



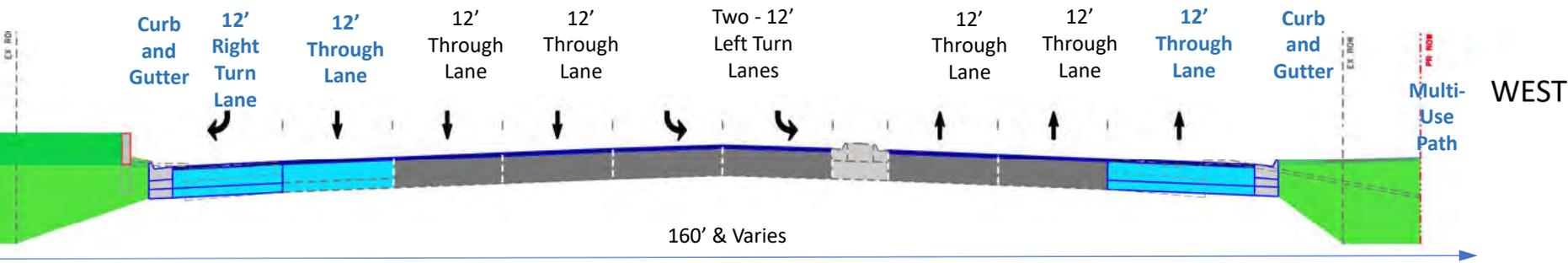
TYPICAL SECTION

EXISTING



RANDALL ROAD – SOUTH LEG – LOOKING SOUTH

PROPOSED

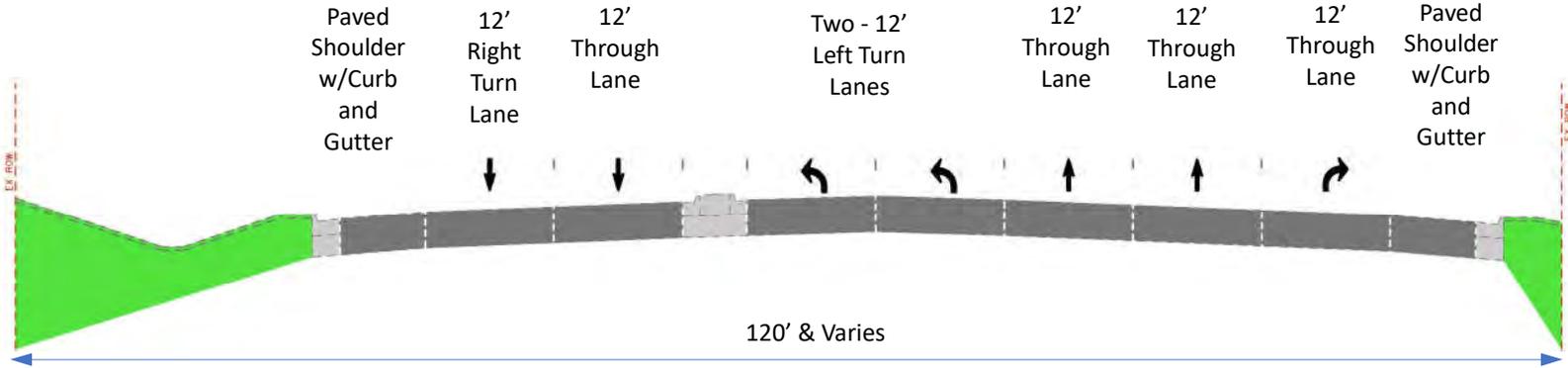


RANDALL ROAD AT IL ROUTE 72 – PHASE I STUDY



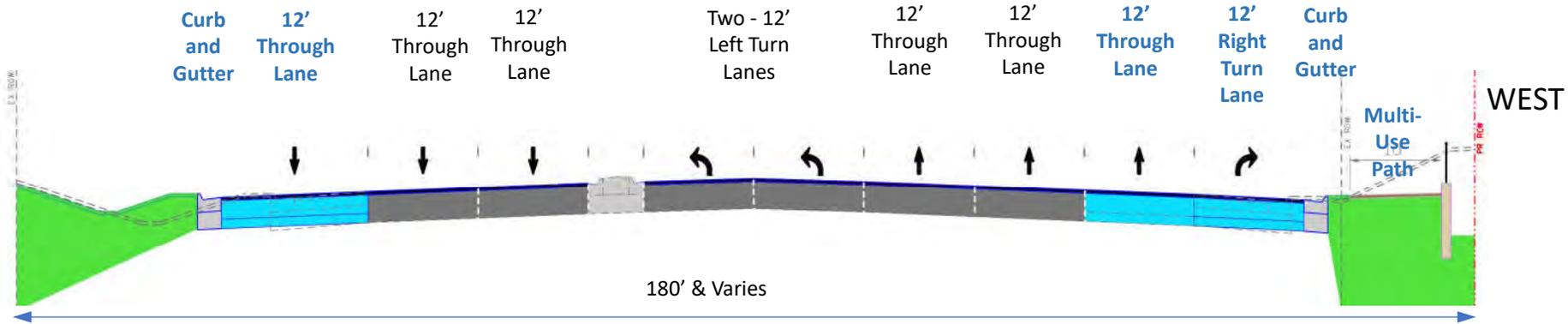
TYPICAL SECTION

EXISTING



RANDALL ROAD – NORTH LEG – LOOKING SOUTH

PROPOSED



PURPOSE AND NEED STATEMENT VERIFICATION

“reduces delay and queues”

	AM PEAK HOUR	PM PEAK HOUR
Overall Intersection Operations	C – 35.4	D – 52.5

	AM PEAK HOUR	PM PEAK HOUR
NB THROUGH QUEUE	289'	975'
SB THROUGH QUEUE	716'	387'

1,235 ft. to Carrington Drive
1,494 ft. to Recreation Drive

“improves safety for motorists, pedestrians and bicyclists”

1. Predicted annual *crash reduction* of **68%**
2. Dedicated *pedestrian/bicycle facility* with *pedestrian signals and crosswalks*

NATURAL AND BUILT ENVIRONMENT

Wetlands

- Impact 2 wetlands of 16 total identified
- Impact 0.24 acres of total 2.61 acres
- Wetland Bank 0.36 acres (1.5 : 1.0 ratio)



Trees

- 73 Remove and Replace (1:1 ratio)
- Detailed landscaping plans in Phase II during contract plan development

Cultural Resources

- No Historic Properties Affected

NOISE ASSESSMENT

Highway Noise is dependent upon:

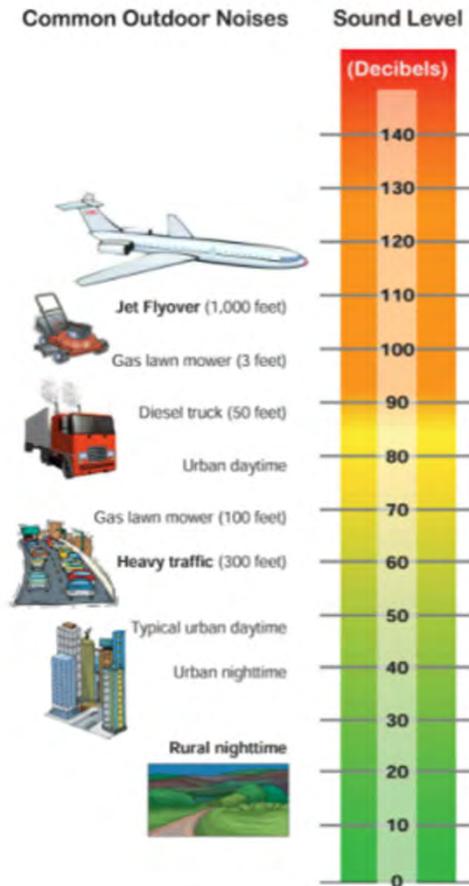
- Traffic volumes
- Traffic vehicle composition
- Traffic speeds
- Receptor distance/elevation
- Hard vs soft surface

Project Noise Receptors:

- Recreational
- Single family homes
- Multi family homes

Noise Assessment Results:

- **Existing** noise levels → 57 to 67 dB(A)
- **No Build** noise levels → 58 to 69 dB(A)
- **Build** noise levels → 58 to 69 dB(A)



Note: Sound is perceived differently by every individual

Changes in noise levels **less than 3 dB(A)** are **not** typically **perceived** by a human listener with average hearing.

Noise Abatement is *not reasonable* and is ineffective when breaks in the wall are needed to accommodate side streets and driveways and a beneficial noise reduction is not achieved.

Noise Abatement is *not feasible* if two or more receptors are not benefited.

DRAINAGE

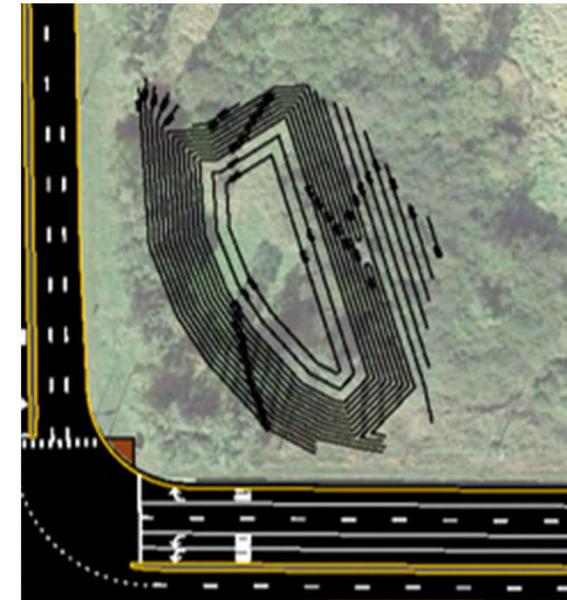


Existing Drainage System

- In-pipe detention for 10-year Storm along IL Route 72
- Roadside ditches along Randall Road
- Cross road culverts discharge to various outlets, ultimately to Jelkes Creek

Proposed Drainage System

- Maintain existing drainage patterns
- New curb & gutter along Randall Rd to collect runoff
- Maintain/replace roadside ditches for offsite flow
- New reinforced concrete storm sewer system
- New detention pond with storage for entire intersection, the multi-use path, and to replace pipe detention on IL Route 72



LAND ACQUISITION

Types of Land Acquisition

Fee Simple – 1.47 Acres

- Acquisition of all rights and interest
- Multi-use path and drainage improvements

Temporary Easement – 0.02 Acres

- Ownership retained by property owner
- Temporary use for a specified term for the completion of construction
- Driveway replacement

TOTAL RIGHT OF WAY NEEDED = 1.49 ACRES

Land Acquisition Process



QUESTIONS?

WHAT HAPPENS AFTER THIS MEETING?

PROJECT TIMELINE



**Contingent upon plan readiness, land acquisition, and funding availability*

COMMENTS AND QUESTIONS

SUBMIT written comments - multiple ways to submit

1. During the Meeting

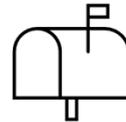
Type your comment/question into the chat box now.

2. Mail Comment Form

The comment form can be obtained from the Randall Oaks Recreation Center or download from the project website and mail to the Project Manager

3. Email or Call the Project Manager

*Comments must be received by **November 5, 2021**, to be included in the public record.*



VISIT the project website

<http://kdot.countyofkane.org/Pages/Projects/Randall-IL72/Randall-IL72.aspx>

CONTACT the Project Manager

Candi Thomas, P.E.

Mail:

Kane County Division of Transportation
41W011 Burlington Road
St. Charles, IL 60175

Email:

thomascandance@co.kane.il.us

Phone:

(630) 406-7355

ATTACHMENT 18

COORDINATION

a – BLRS

b – GSU

c – FHWA

Phase I County Kick-Off Meeting

Randall Road at Higgins Road Intersection Improvement Kane County Division of Transportation *Section: 19-00514-00-WR*

Date: *November 22, 2019 (Friday)*
Time: *10:00 am*
Place: *IDOT Executive Conference Room*
From: *Matthew Cesario – BLA, Inc.*

Participants:

Marilyn Solomon	IDOT BLRS	847-705-4643
Amruta Mate	IDOT Programming	847-705-4330
Jason Salley	IDOT Geometrics	847-705-4085
Jonathan Lloyd	IDOT Traffic	847-705-4135
Irma Romiti	IDOT Programming	847-705-4122
Perry Masouridis	IDOT Hydraulics	847-705-4474
Anand Patel	IDOT Programming	847-705-4677
Jonathan Karabowicz	IDOT Traffic Permits	847-705-4149
Candi Thomas	KDOT	630-584-1170
Tom Rickert	KDOT	630-584-1170
Jackie Forbes	KDOT	630-444-3142
Daniel Bruckelmeyer	BLA, Inc.	630-438-6400
Kevin Kenniff	BLA, Inc.	630-438-6400
Matthew Cesario	BLA, Inc.	630-438-6400

Overview:

This meeting was held as the IDOT Phase I kick-off meeting for the Randall Road at Higgins Road Intersection Improvement project. The meeting began with a project overview. The discussion and decisions are as follows:

Project Overview:

The scope of improvement includes the intersection improvements of Randall Road at Higgins Road. This portion of work includes the Phase I for capacity improvements, bicycle / pedestrian improvements, traffic signal modernization, drainage improvements, environmental clearances, traffic analysis and all associated work necessary to obtain Phase I approval. The limits are approximately ½ mile in all directions from intersection center, extending to Northwest Parkway on the south leg where the study limits of the adjacent Kane County DOT led Randall Road at I-90 study limits end. The intersection was improved in 2012, however it did not include additional capacity along Randall Road therefore this project is being implemented.

Discussions:

- The project team consists of BLA as the Prime Consultant and the Sub-Consultants listed below with the corresponding tasks.
 - TranSystems Corp. – Traffic Analysis
 - Huff & Huff, Inc. – PESA, Noise Analysis, Wetland Report (Wetland Delineation conducted under a separate contract)
 - Jorgensen & Associates, Inc. – Survey and Plats

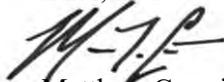
- Rubino Engineering, Inc. – Borings and Corings
 - Huddleston McBride – Drain Tile Investigation
 - Ames Engineering – Lighting Photometrics
- The Phase I is being locally funded. The intent is to apply for federal funding for the future phases of the project either through the STP program, CMAQ or other programs.
- The current ADT is approximately 41,800 vehicles along Randall Road and 22,500 vehicles along Higgins Road. Traffic counts are being obtained will be submitted to CMAP for future 2050 projections. The data collection for traffic volumes at I-90 is under way. This information will be utilized for assisting with 2050 projections at the Randall Road / Higgins Road intersection. BLA will coordinate with the consultant (Burns and McDonnell) under contract for the Randall / I-90 study.
- The wetlands were delineation under a separate contract through KDOT prior to the end of the growing season. Under this contract the Wetland Report and Jurisdictional Determination will be performed.
- The PESA for Randall Road will be performed by the project team under this contract. The PESA for Higgins is to be performed by IDOT and will be part of the Environmental Survey Request (ESR).
- A noise analysis will be performed due to the anticipation of additional lanes along Randall Road.
- IDOT informed BLA / KDOT that the ESR should be submitted a minimum of 6 months prior to the anticipated / desired approval of the ESR. The ESR will be submitted early in the Phase I to determine potential locations to avoid, if any with the design. IDOT concurred that this is a good approach to the ESR process. All components of the ESR are to be checked.
- MARS is under contract to perform historical investigation / analysis as necessary, on the property in the southeast quadrant of the intersection. The property is not on the historical register but is thought to be eligible for the registry. Near this location the existing Randall Road alignment skews west away from this property and its anticipated it does so due to the historical potential of the home.
- A drain tile investigation will be conducted due to the adjacent farm fields which are thought to carry tiles in the project study limits.
- During the Phase I several geometric alternatives are to be investigated as part of the requirement. The anticipated configuration is the third through lane on Randall Road / no additional lanes on Higgins Road however, and a third through lane on both Randall Road and Higgins Road will be investigated. IDOT stated that the queue on Higgins clears and that an additional through lane on Higgins Road may not provide a significant benefit and is not practical given the drop down to one lane in either direction outside the project limits.
- All alternatives will include a shelf inclusion for a multi-use path. During Phase I discussions will occur on the inclusion of the path as part of this project or at a later date by the local agencies. Elgin has a bikeway future plan which indicates pedestrian accommodations along Randall Road.
- IDOT indicated that there is not a need to implement pedestrian accommodations / bike path on Higgins Road. IDOT stated that the rural cross section is sufficient for Complete Streets needs at this location.
- A Technical Memorandum will be provided describing the geometric alternatives investigated and the recommended configuration. This memorandum will be provided to IDOT. IDOT will require 2 copies to be submitted to Traffic and 1 copy submitted to geometrics. The number of copies will be confirmed prior to submittal.

- An intersection design study, capacity analysis, crash analysis, and a photometric study will be performed and reviewed by IDOT.
- The traffic signal system at Randall Road and Higgins Road is IDOT owned and they also pay for the energy for the signal. The signal is KDOT maintained. The intersection is part of an interconnect along Randall Road.
- The signal at Galvin Drive is interconnected to Randall Road / Higgins Road but is not coordinated and runs “free”.
- The proposed improvement in 2012 installed restrictor structures in several drainage structures on both storm sewer lines. BLA requested the drainage and detention calculations. [After the meeting IDOT provided the calculations.]
- The existing storm sewer system will be televised.
- There is an existing culvert that crosses under the north leg of Randall Road. It appears in good condition however it is anticipated to be extended. The capacity will be confirmed for this project. There is not a structure number for the culvert.
- BLA will utilize the new Bulletin 70 rain fall intensities for the design of the storm sewer and detention. A Location Drainage Study will be completed and provided to IDOT for review.
- Right of way impacts will be evaluated. If right of way is necessary along Higgins Road it will be in the name of the State. Right of way along Randall Road will be in the name of Kane County.
- It is anticipated that one (1) Public Information Meeting will be necessary due to the type of improvement and the surrounding land use. A second PIM is included in the contract in the event stakeholders oppose the project.
- The project is anticipated to be presented to FHWA in 2020
- No Section 4(f) impacts are anticipated.
- The need for a signalized intersection at Randall Road and Carrington Road will be evaluated. If it is determined that a signal is warranted as part of future development it will be the responsibility of the developer to install the signal per existing agreements with Kane County.
- All email correspondence shall have “Kane County” and the Section number in the title.

The above constitutes my understanding of the discussion and decisions reached. Should there be any additions, deletions, or clarifications, please contact the undersigned immediately.

Sincerely,

BLA, INC.



Matthew Cesario, P.E.
Project Manager

**Randall Road at Higgins Road
Intersection Improvement
Kane County Division of Transportation
Section # 19-00514-00-WR**

Project Name: Randall Road at IL Route 72 – Intersection Improvements

Date: November 13, 2020

Time: 8:30 am

Location: Web-meeting

Attendance: John Baczek - John.Baczek@illinois.gov
Carl Schoedel - schoedelcarl@co.kane.il.us
Tom Rickert - rickerttom@co.kane.il.us
Steve Coffinbargar - coffinbargarsteve@co.kane.il.us
Issam Rayyan - Issam.Rayyan@illinois.gov
Chad Riddle - Charles.Riddle@illinois.gov
Brian Carlson - Brian.Carlson@illinois.gov
Mike Zakosek - zakosekmike@co.kane.il.us
Jason Salley - Jason.Salley@illinois.gov
Steven Schilke - Steven.Schilke@illinois.gov
Marilyn Solomon - Marilyn.Solomon@illinois.gov
Jonathan Lloyd - Jonathan.Lloyd@illinois.gov
Candi Thomas - ThomasCandance@co.kane.il.us

The purpose of this meeting was for KDOT and IDOT to discuss the options available for moving the project forward, as IDOT asked for the County to strongly consider the implementation of a full CFI as part of the Randall Rd & IL 72 intersection improvements when KDOT coordinated the preferred alternative. The meeting was hosted by IDOT – Bureau of Programming, at the request of KDOT. Agenda items for the meeting were as follows:

- Pending due date for a 'substantially complete' PDR to apply for Federal Funding opportunities is early March 2021, as they can't accommodate a CFI within that time frame.
- County has cost concerns about funding a CFI. They will need significant state and otherwise participation.
- Access point issues.
- Possibility of an interim add-lanes improvement now with an ultimate CFI improvement for the future.

KDOT started the meeting by providing a general overview of the existing conditions at Randall Road and IL Route 72; including existing geometry, existing traffic volumes and existing land use. A general overview of the Traffic Alternatives Analysis was also discussed regarding the proposed traffic volumes and the proposed alternatives for the project improvement. The County's preferred alternative is to provide 'add lanes' on

Randall Road; however, there was some added benefit of providing the option of triple lefts on IL Route 72; therefore, KDOT had reached out to IDOT-Geometrics to see what IDOT's policy was for triple lefts and whether improvements on IL Route 72 were desired by IDOT.

KDOT explained that this project is currently 100% locally funded and in order to qualify for Federal Funding opportunities a substantially complete PDR needed to be submitted into IDOT by the beginning of March 2021; therefore, KDOT was hoping to make a determination on the preferred alternative to move the project forward. Furthermore, if IDOT ultimately desired a Full CFI at the intersection, KDOT felt it was best for IDOT to lead the project.

An exhibit identifying the conceptual geometry and construction limits for both the add lanes alternative and the Full CFI alternative were provided. Existing access agreements within the area were also discussed.

In conclusion, John Baczek stated, and all agreed, that improvements along IL Route 72 were not needed at this time, based on traffic volumes, and in order to right size the current project add lanes on Randall Road would be sufficient.

Jason Salley stated that since the project is proposing to add through lanes along Randall Road the IDS would need to be submitted with 2050 design year traffic volumes. Design Exception forms (BDE 3100) should be provided with the initial submittal.

Meeting adjourned at approximately 9:10am.

By:

Candi Thomas - KDOT

Randall Road at IL Route 72 (Higgins Road)
Intersection Improvement
Section No. 19-00514-00-WR
Kane County Division of Transportation
February 9, 2021

This is the 1st presentation for this project. The purpose of this presentation is to provide a project overview and request concurrence on project scope, termini, and environmental processing.

The virtual meeting began at 11:30 AM. The Kane County Division of Transportation is the project sponsor. Phase I Engineering is funded locally, but the project is being processed through IDOT's Bureau of Local Roads and Streets (BLRS) for future federal funding eligibility. BLA, Inc. (BLA) is the consultant performing the Phase I engineering for this project and led the discussion.

Exhibits include a location map, ADT table, crash data summary, LOS summary, and potential for historic property. *[Post Note: LOS for Alternative 4 as shown in the meeting was incorrectly transcribed. The attachment enclosed with these meeting minutes has been updated to reflect the correct LOS for Alternative 4 – Randall Road Displaced Left Turns.]*

Project Overview

The project is located in unincorporated Kane County at the north limit of the City of Elgin, approximately 1.5 miles north of Interstate 90. Adjacent land use is open in the northeast and southwest quadrants, residential in the northwest quadrant, and a single owner (potential historic property) in the southeast quadrant. Beyond the intersection to the north is the Village of West Dundee recreation center, to the east is residential, to the south and west is commercial/industrial.

Randall Road is an SRA and IL Route 72 is a principal arterial. The signalized intersection was last improved in 2012 with HSIP funds to provide two through lanes, dual left turn lanes, and a right turn lane on all approaches. There is an existing paved shoulder (varies 8-10 feet) with curb and gutter for each roadway as well.

The existing 2019 ADT is 18,700 on IL Route 72 and 47,800 on Randall Road. CMAP projected 2050 ADT is 25,500 on IL Route 72 and 69,400 on Randall Road. The 2050 ADT on Randall Road warrants six lanes while the 2050 ADT on IL Route 72 warrants four lanes.

Existing 2019 intersection capacity analyses reflect an overall intersection LOS D with numerous movements at LOS E in the AM peak hour and numerous movements at LOS F in the PM peak hour. The 2050 No Build capacity analyses reflect overall intersection LOS E/F in the AM/PM peak hours, respectively, with individual LOS E and mostly LOS F. Queues that form on Randall Road are in excess of 1,500 feet. While on IL Route 72 queues are 550 feet or less.

A review of the crash data found that during the study period, a total of 110 crashes (plus 9 animal) occurred with 21 (19%) being multi-vehicle crashes. Sixteen of the multi-vehicle crashes occurred in the north-south direction.

Of the 110 total crashes, 23 (21%) were injury crashes resulting in 32 injuries (1.4 persons injured per injury crash). Two of the injury crashes were fatalities. One was a single car incident where the driver crossed the road and hit a power pole. The second was an angle crash at night where one vehicle ran a red light.

An overwhelming number of crashes (77%) are rear end. Sideswipe same direction and turning are 9% and 8%, respectively, of the overall crashes. When looking at the rear end crash type by direction, there is a clear indication that the majority (69%) of crashes occur in the north-south direction.

The primary objective of this improvement is to identify and analyze operational, capacity and safety concerns of the intersection and develop a preferred alternative to address any feasible needs.

Proposed Improvement

The addition of a third through lane on Randall Road (Alternative 1) addresses the delay and queue for through traffic, substantially cutting delay and queues. However, movements on IL Route 72 still resulted in LOS E and F. A number of alternatives were evaluated to determine if operations could also be improved for IL Route 72. All alternatives widen to a six-lane roadway on Randall Road.

Alternative 1 – Do nothing on IL Route 72.

Alternative 2 – Add a third through lane on IL Route 72, retain dual lefts and right turn lane.

Alternative 3 – Add a third left turn lane on IL Route 72, retain two through and right turn lane.

Alternative 4 – Modify Randall Road to displaced left turn.

All alternatives improved the overall intersection LOS to C in the AM, except Alternative 4 is LOS D, and LOS D in the PM. In the AM, all alternatives resulted in individual movements at LOS D or better, except for one or two movements. In the PM, all alternatives still resulted in multiple individual movements with LOS E or F.

One reason that the Alternatives do not result in better individual LOS for IL Route 72, even with unwarranted capacity improvements, is because Randall Road is interconnected and prioritizes mobility along Randall Road, not IL Route 72. So as green time becomes more available due to the capacity improvements, Randall Road “steals” the newly found green time from IL Route 72.

KDOT presented the findings to IDOT in a meeting on November 13, 2020. Understanding the signal operations, that three through lanes or three left turn lanes on IL Route 72 are not warranted, and that a significant improvement was not obtained for the increased cost of Alternatives 2 through 4, KDOT and IDOT reached consensus in selecting Alternative 1 as the preferred alternative. However, instead of “do nothing” on IL Route 72, it was agreed that the left and right turn lanes would be extended to accommodate the red time queue requirements. Thus, the preferred alternative is to provide three through lanes on Randall Road and extend the left and right turn lanes on IL Route 72 as warranted through the use of the red time formula.

Environmental Resources

An Environmental Survey Request (ESR) was submitted on March 17, 2020. The ESR included request for Biological, Cultural, and State Special Waste review.

A wetland delineation was completed by the consultant. The delineation report, ACOE JD, and WIE's were completed for the preferred alternative and submitted to BLRS on 1/22/2021.

A Local PESA was completed April 2020 and the State PESA was obtained July 2020. A PSI is likely to be performed in Phase II and a commitment for this task will be included in the PDR.

Due to the add lane on Randall Road the project requires a Noise Analysis. The process has begun, however, waiting for snow cover to diminish prior to beginning monitoring.

BDE requested additional information regarding the potential for historical impact on the southeast quadrant. An abandoned farmstead built in 1850 using locally sourced cobblestone is located on 2 acres. The seven structures of the farmstead are generally in poor condition, except for the smokehouse which retains most the original structure. The Cultural Resource Management Report for the property as completed by Midwest Archaeological Research Services (MARS), an exhibit depicting the existing edge of pavement and the proposed edge of pavement, and the plan and profile were submitted to BDE December 2020 for processing.

At this point BLA asked if there were any questions and CBLRS took over the discussion.

CBLRS requested from the FHWA concurrence for the following items:

- Logical Termini – Randall Road at IL Route 72, improvement through turn lane tapers.
- Preferred Alternative – BLA clarified Preferred Alternative 1 as three through lanes on Randall Road, no change to left/right turn lanes on Randall Road, no change to through lanes on IL Route 72, and extension of left/right turn lanes as warranted on IL Route 72.

FHWA concurred with the Logical Termini and Preferred Alternative and stressed to be very clear in the description of the Preferred Alternative in any documentation.

CBLRS discussed the following environmental issues:

- The WIE's have not yet been received by BDE. BLRS will coordinate with CBLRS. The wetland coordination falls under the Interagency Wetland Policy Act of 1989.
- The Project is a Type 1 classification as it relates to Noise Analysis. The analysis should be uploaded electronically to the District.
- A COSIM analysis is not required, northeast Illinois is exempt.
- Depending upon the findings of the cultural review a Section 106 may be needed. And if there are impacts a Section 4(f) Analysis will be needed.
- BLA noted potential for Nationwide 404 permit due to wetland impacts. CBLRS indicated it would be a regional 404 permit.

CBLRS indicated the project would be processed as a Federal Approved CE pending environmental clearances and BLR 22210 should be utilized for the PDR.

Schedule

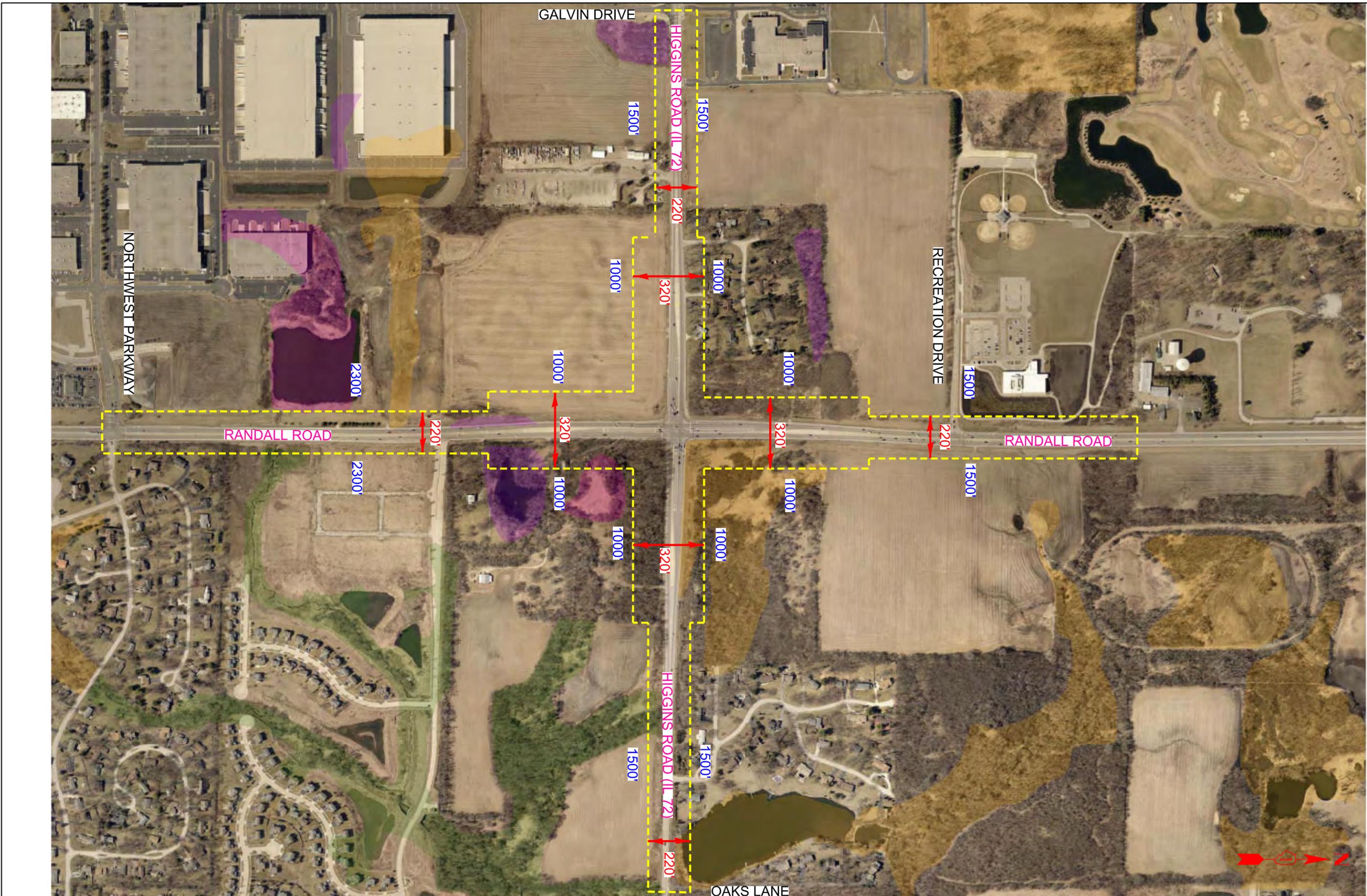
BLA briefly discussed the project schedule. It is anticipated to submit the draft PDR in March 2021, hold a PIM in Quarter 2 2021, and request design approval Quarter 2 2021. CBLRS stated that the PIM would

likely occur in Q3 because the IDS would not likely be approved before then. Any design exceptions would be approved by the District since BDE policy is being followed (SRA for Randall Road). In further regard to the PIM, BLA stated that a virtual meeting is expected with an alternative means of sharing the documentation with those unable to gain access to the internet. CBLRS requested a Virtual PIM plan to be submitted for review by D1.

General Discussion

KDOT confirmed that the project is not currently in the conformed TIP and is working toward being included in the next Amendment. Amendments are published in June and January. The project must be in the TIP prior to design approval. KDOT is applying for future federal funds (STP/CMAQ/HSIP) and anticipates construction in year 2024. CBLRS also suggested applying for Rebuild IL (RBI) funds. The application deadline is fast approaching, on February 16th.

The meeting adjourned at 12:03 PM.



USER NAME = cesario	DESIGNED - DM	REVISED -
PLOT SCALE = 1/3200" = 1" = 32.8125'	DRAWN - DM	REVISED -
PLOT DATE = 10/28/2019	CHECKED - MC	REVISED -
	DATE - 10/29/2019	REVISED -

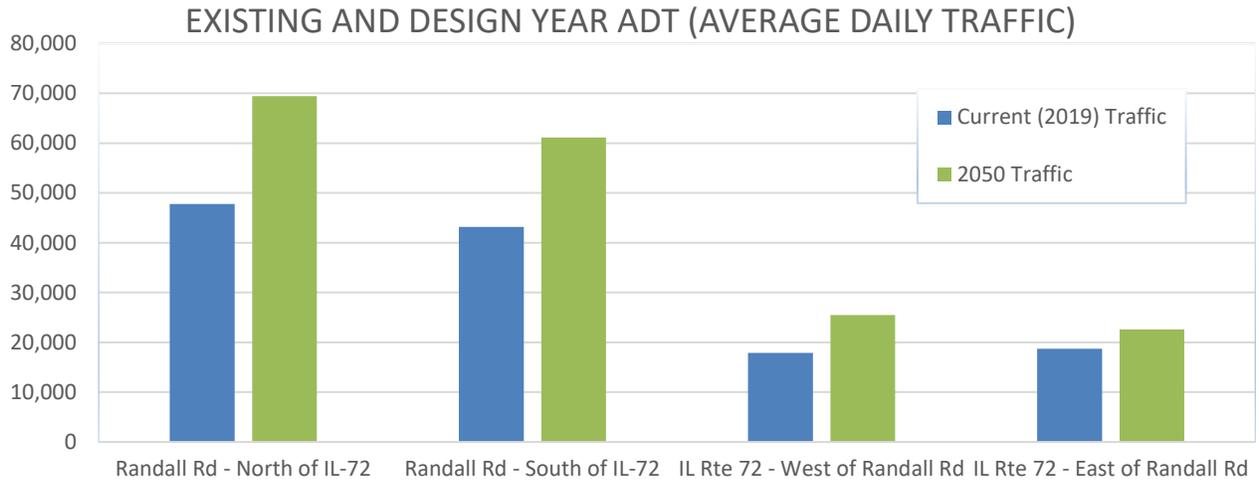
**KANE COUNTY
DIVISION OF TRANSPORTATION**

**RANDALL ROAD AT HIGGINS ROAD
AERIAL EXHIBIT**

F.A.P. RTE. 0336	SECTION 19-00514-00-WR	COUNTY KANE	TOTAL SHEETS 1	SHEET NO. 1
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

SCALE: NTS SHEET 1 OF 1 SHEETS STA. N/A TO STA. N/A

Roadway Segment	Current (2019) Traffic	2050 Traffic		
	ADT	ADT	% Growth	Annual % Growth
Randall Rd - North of IL-72	47,800	69,400	45%	1.17%
Randall Rd - South of IL-72	43,200	61,100	41%	1.09%
IL Rte 72 - West of Randall Rd	17,900	25,500	42%	1.11%
IL Rte 72 - East of Randall Rd	18,700	22,600	21%	0.59%

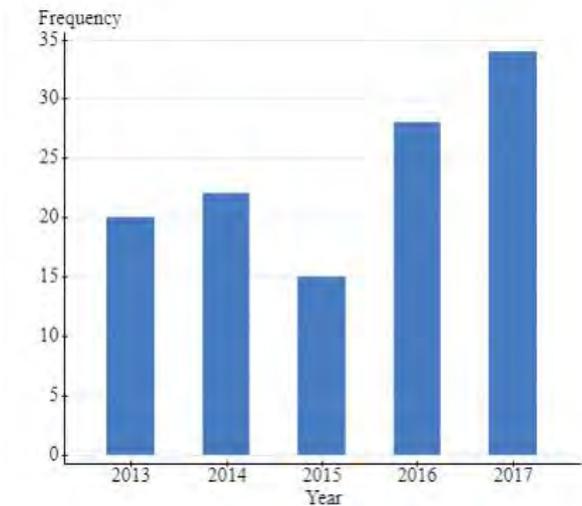


EXISTING AND DESIGN YEAR ADT (AVERAGE DAILY TRAFFIC)

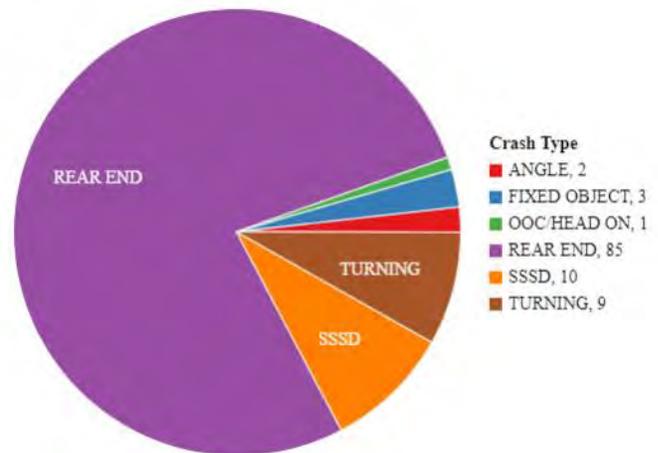
During the study period, a total of 110 crashes (plus 9 animal) occurred with 21 (19%) being multi-vehicle crashes. Sixteen of the multi-vehicle crashes occurred in the north-south direction.

Of the 110 total crashes, 23 (21%) were injury crashes resulting in 32 injuries (1.4 persons injured per injury crash). Two of the injury crashes were fatalities. One was a single car incident where the driver crossed the road and hit a power pole. The second was an angle crash at night where one vehicle ran a red light.

INJURY TYPE	# INJURY CRASHES	# OF INJURIES
K	2	2
A	4	4
B	8	11
C	12	15

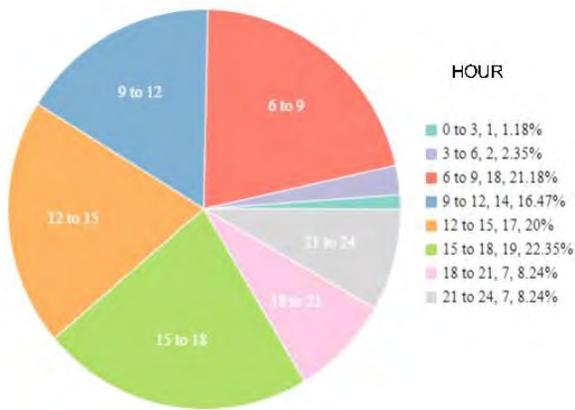


RANDALL ROAD AT IL RTE 72 BY YEAR

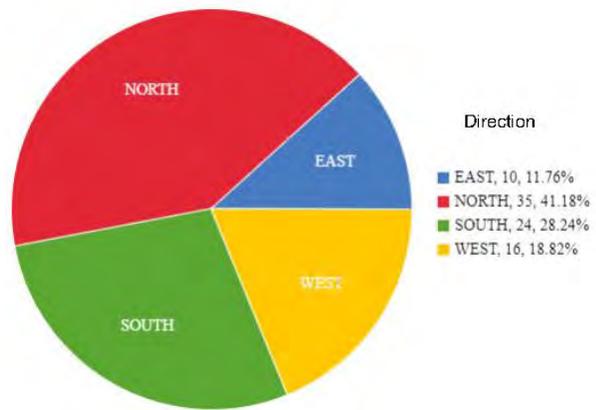


RANDALL ROAD AT IL RTE 72 BY TYPE

An overwhelming number of crashes (77%) are rear end. Sideswipe same direction and turning are at 9% and 8%, respectively, of the overall crashes.



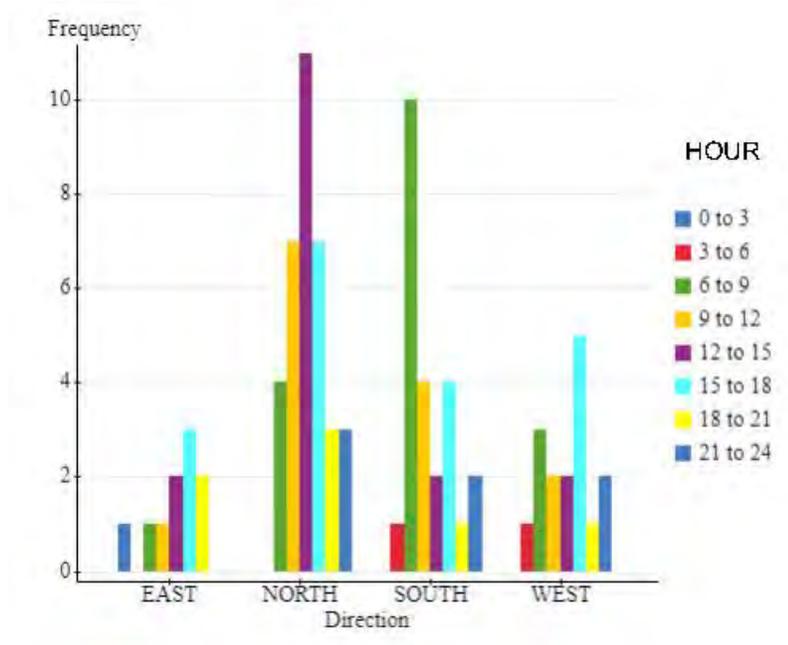
REAR END CRASH BY HOUR



REAR END CRASH BY DIRECTION

When looking at the rear end crash type by direction, there is a clear indication that the majority (69%) of crashes occur in the north-south direction; nearly twice as many occurrences than in the east-west direction.

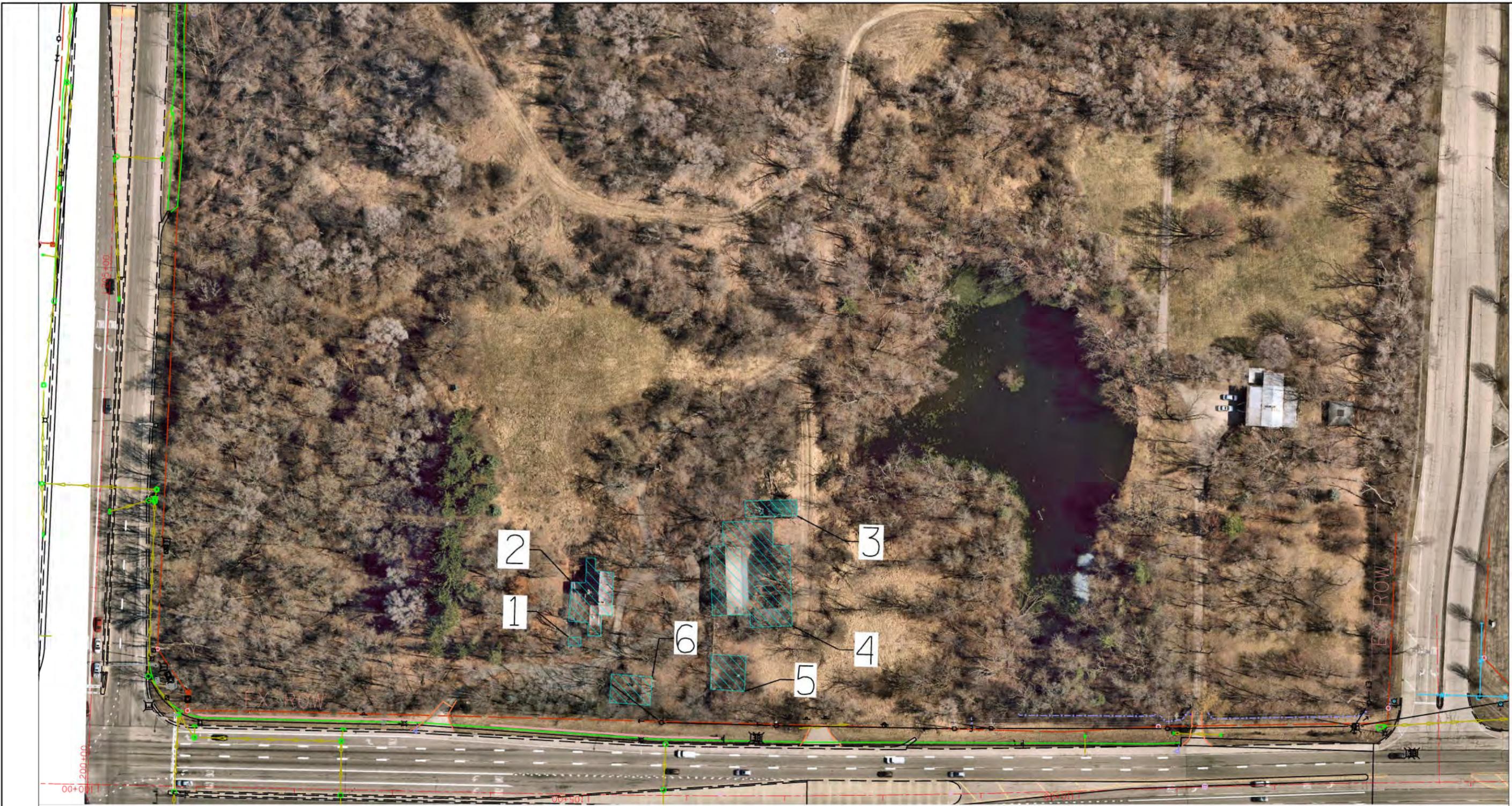
As would be expected, the rear end crashes peak with the peak directional flow; highest in the PM peak hour in the northbound direction and AM peak hour in the southbound direction.



REAR END BY DIRECTION AND HOUR

AMI PEAK																													
2019 Existing				2050 No Build				Alt 1 No Change to IL 72				Alt 2 3 Through on IL 72				Alt 3 3 Left Turn on IL 72				Alt 4 Randall Displaced LT									
Delay (s)		LOS		Delay (s)		LOS		Delay (s)		LOS		Delay (s)		LOS		Delay (s)		LOS		Delay (s)		LOS							
Approach	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT					
Delay (s)	95 th % Queue (ft)	v/c	LOS	Delay (s)	95 th % Queue (ft)	v/c	LOS	Delay (s)	95 th % Queue (ft)	v/c	LOS	Delay (s)	95 th % Queue (ft)	v/c	LOS	Delay (s)	95 th % Queue (ft)	v/c	LOS	Delay (s)	95 th % Queue (ft)	v/c	LOS	Delay (s)	95 th % Queue (ft)	v/c	LOS		
Overall	42.9		D	65.5		E		35.0		C		33.3		C		33.9		C		35.7		D							
Approach	70.6	154	0.69	113.7	371	1.04	F	56.6	197	0.93	E	59.8	206	0.93	E	41.8	110	0.75	D	54.0	194	0.76	D	438	0.91	D	438	0.91	
EB	65.2	236	0.73	76.1	381	0.85	E	40.3	238	0.80	D	32.2	156	0.56	C	39.9	233	0.80	D	33.2	233	0.80	D	438	0.91	D	438	0.91	
RT	40.3	88	0.19	49.0	122	0.30	D	24.4	82	0.24	C	26.4	82	0.24	C	23.7	80	0.23	C	34.2	108	0.28	C	108	0.28	C	108	0.28	
WB	70.8	107	0.58	11.3	174	0.84	F	54.3	97	0.55	D	54.3	97	0.55	D	53.4	67	0.48	D	53.1	96	0.54	D	96	0.54	D	96	0.54	
THRU	73.9	219	0.80	151.5	428	1.13	F	68.9	255	0.90	D	49.2	146	0.62	D	68.4	255	0.89	E	52.8	287	0.83	D	287	0.83	D	287	0.83	
RT	41.5	158	0.31	53.5	229	0.39	D	27.7	137	0.32	C	28.0	139	0.32	C	27.7	137	0.31	C	45.9	177	0.53	D	177	0.53	D	177	0.53	
LT	66.3	87	0.53	149.6	186	1.01	F	54.6	93	0.69	D	55.3	93	0.69	D	42.9	76	0.54	D	-	-	-	-	-	-	-	-	-	-
THRU	26.36	344	0.39	23.8	359	0.54	C	27.7	289	0.51	C	27.3	286	0.51	C	26.3	283	0.48	C	22.2	256	0.40	C	256	0.40	C	256	0.40	
RT	15.1	82	0.08	12.3	54	0.10	B	16.7	83	0.11	B	16.6	83	0.11	B	16.5	83	0.11	B	17.4	212	0.26	B	212	0.26	B	212	0.26	
LT	67.2	213	0.80	77.6	207	0.81	E	51.0	151	0.71	D	52.4	154	0.72	D	50.6	151	0.71	D	-	-	-	-	-	-	-	-	-	
THRU	32.3	910	0.82	61.4	1564	1.08	E	28.9	713	0.97	C	29.1	713	0.97	C	29.5	739	0.98	C	30.4	738	0.93	C	738	0.93	C	738	0.93	
RT	13.7	255	0.29	10.2	-	0.44	B	10.5	241	0.50	B	9.5	205	0.50	A	13.3	331	0.52	B	28.2	810	0.81	C	810	0.81	C	810	0.81	

PIM PEAK																												
2019 Existing				2050 No Build				Alt 1 No Change to IL 72				Alt 2 3 Through on IL 72				Alt 3 3 Left Turn on IL 72				Alt 4 Randall Displaced LT								
Delay (s)		LOS		Delay (s)		LOS		Delay (s)		LOS		Delay (s)		LOS		Delay (s)		LOS		Delay (s)		LOS		Delay (s)		LOS		
Approach	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	
Delay (s)	95 th % Queue (ft)	v/c	LOS	Delay (s)	95 th % Queue (ft)	v/c	LOS	Delay (s)	95 th % Queue (ft)	v/c	LOS	Delay (s)	95 th % Queue (ft)	v/c	LOS	Delay (s)	95 th % Queue (ft)	v/c	LOS	Delay (s)	95 th % Queue (ft)	v/c	LOS	Delay (s)	95 th % Queue (ft)	v/c	LOS	
Overall	51.1		D	96.0		F		52.8		D		45.2		D		41.6		D		47.2		D						
Approach	92.1	268	0.82	193.8	545	1.28	F	89.2	460	0.95	F	77.2	403	0.95	E	68.2	244	0.91	E	79.7	394	0.84	E	394	0.84	E	394	0.84
EB	75.2	307	0.68	76.7	377	0.81	E	68.4	381	0.62	E	56.2	235	0.50	E	58.6	306	0.72	D	52.8	472	0.62	D	472	0.62	D	472	0.62
RT	53.8	172	0.30	61.0	227	0.43	E	45.5	205	0.36	D	50.1	221	0.38	D	38.9	166	0.38	D	48.0	245	0.36	D	245	0.36	D	245	0.36
LT	92.4	117	0.59	107.9	148	0.77	F	91.0	130	0.61	F	76.8	113	0.59	F	68.5	73	0.48	F	90.6	130	0.60	F	130	0.60	F	130	0.60
THRU	101.2	294	0.88	167.0	454	1.14	F	107.7	402	0.95	F	82.9	220	0.86	F	78.1	302	0.88	E	76.2	468	0.78	E	468	0.78	E	468	0.78
RT	75.7	356	0.69	115.5	539	0.97	F	82.5	466	0.80	F	80.8	431	0.86	F	57.2	342	0.71	F	99.6	566	0.90	F	566	0.90	F	566	0.90
LT	96.5	86	0.52	98.0	81	0.63	F	102.6	119	0.62	F	83.0	86	0.56	F	79.1	82	0.59	F	-	-	-	-	-	-	-	-	-
THRU	38.8	1171	0.87	116.6	1997	1.20	F	42.6	1025	0.98	D	39.1	1052	0.98	D	37.3	1026	0.99	D	45.3	1231	0.99	D	1231	0.99	D	1231	0.99
RT	11.0	50	0.18	5.5	48	0.21	B	10.5	105	0.23	B	8.6	75	0.23	A	8.8	74	0.23	A	11.5	160	0.39	B	160	0.39	B	160	0.39
LT	90.2	150	0.68	175.4	246	1.16	F	115.4	204	0.88	F	94.2	170	0.81	F	87.3	156	0.76	F	-	-	-	-	-	-	-	-	-
THRU	25.3	387	0.39	24.3	435	0.57	C	27.0	387	0.45	C	21.6	266	0.45	C	18.6	177	0.45	C	27.6	378	0.46	C	378	0.46	C	378	0.46
RT	10.0	234	0.27	9.9	247	0.45	A	14.7	347	0.46	A	7.4	197	0.46	A	8.5	122	0.49	A	19.7	584	0.63	B	584	0.63	B	584	0.63



LEGEND

- EX ROW
- - EX BACK OF SHOULDER
- PROP BACK OF CURB
- - EX AERIAL LINES

-  EX STORM SEWER
-  EX UNDERGROUND WATER
-  BUILDING

- 1 SMOKE HOUSE
- 2 MAIN RESIDENCE
- 3 STORAGE BUILDING
- 4 HOUSE BARN
- 5 JOCKEY'S QUARTERS
- 6 GROUNDKEEPER DWELLING



	USER NAME = tnestor	DESIGNED - TN	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUILDING OFFSET EXHIBIT				F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 100.0000' / in.	DRAWN - JT	REVISED -		SCALE: 1"=50'	SHEET	OF	SHEETS	STA.	TO	STA.	19-00514-00-WR	KANE	CONTRACT NO.
	PLOT DATE = 1/19/2021	CHECKED - MC	REVISED -		ILLINOIS FED. AID PROJECT									
	DATE - 12/11/2020	REVISED -												

ATTACHMENT 19

OTHER COORDINATION

a – CMAP

b – IDS, GSU

c – IDS, BOT Arterials

d– IDS, BOT Traffic Control Staging

e – IDS, BOT Programs Studies

f– IDS, BOT Programs Design

g – LDS, Hydraulics

h – D1 ADA

i – Utilities

TRAFFIC FORECAST RECORD

Record Number: ka-03-20

Type of Report: Projection

Year Sought: 2050

Analyst: GCR

Organization requesting forecast: Kane County DOT

Contact: Gaurav Rai PE, PTOE

Phone number: (312) 669-9601

Sponsor: Kane County DOT

Date request was received: January 22, 2020

Date that response was mailed or faxed: January 23, 2020

Facility Location: Randall Road @ IL 72

Municipality: Dundee Township



Chicago Metropolitan Agency for Planning

233 South Wacker Drive
Suite 800
Chicago, Illinois 60606

312 454 0400
www.cmap.illinois.gov

January 23, 2020

Carl Schoedel, P.E.
County Engineer
Kane County Division of Transportation
41W011 Burlington Road
St. Charles, IL 60175

Subject: *Randall Road @ IL 72*
Kane County DOT

Dear Mr. Schoedel:

In response to a request made on your behalf and dated January 22, 2020, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current Volumes	Year 2050 ADT
Randall Rd – North of IL 72	47,800	69,400
Randall Rd – South of IL 72	43,200	61,100
IL 72 – West of Randall Rd	17,900	25,500
IL 72 – East of Randall Rd	18,700	22,600

Traffic projections are developed using existing ADT data provided in the request letter and the results from the October 2019 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Thomas (KDOT); Rai (Transystems)
2020_TrafficForecast\Dundee\ka-03-20\ka-03-20.docx



To:	Chad Riddle
Attn:	Marilyn Solomon & Mohammad Kawash
Unit:	Local Roads & Streets
Phone:	(847) 705-4407 & 4086
Date:	May 5, 2022

From:	Jason Salley
Unit:	Programming /Geometrics Unit
Phone:	(847) 705-4085
Subject:	Randall Road at IL 72 LR&S Section# 19-00514-00-WR Geometric & IDS Approval

Please check appropriate box below:

- | | | |
|--|---|---------------------------------|
| <input type="checkbox"/> Take Necessary Action | <input type="checkbox"/> For Your Information | <input type="checkbox"/> Reply |
| <input type="checkbox"/> For Your Comments | <input type="checkbox"/> See Me About the Attached | <input type="checkbox"/> Return |
| <input checked="" type="checkbox"/> Per Your Request | <input type="checkbox"/> Draft (Letter)(Memo) For
My signature | <input type="checkbox"/> Route |
| <input type="checkbox"/> For Your Approval | | <input type="checkbox"/> File |

Message

Marilyn & Mohammad,
 The Design Exceptions for this project were approved by IDOT BDE on 04/13/2022.
 The remaining Design Elements for this project meet current BDE Standards.

A PDF copy of the project's Intersection Design Study (IDS) has been received by the Geometric Studies Unit and has been placed onto the District's H Drive for future reference.

Therefore, I approve this project's geometry as it pertains only to the State Route as well as its IDS.

This project's BDE 2602 and 3100 Forms will be forwarded to IDOT BDE for their records.

Please contact me if you have any questions or comments.

Thanks, *Jason Salley*

Jason Salley, P.E.

Signature

Copies to

File	BDE	BOT	
------	-----	-----	--

Response

Signature



District	Consultant
1	BLA Inc.

Type of Design: Intersection Design Study Interchange Design Study
 Interchange Type Study Other Phase I Plans, ADA Details, Profiles & Cross-Sections

Route	Marked	Street
FAP 336		Randall Road

Intersecting Route	Marked	Street
FAP 341	IL Route 72	Higgins Road

Contract Number	State Job Number	Section Number

Counties	Municipalities
Kane	Elgin

Local Agency	LRS Section Number
Kane County DOT	19-00514-00-WR

Permit Applicant	Permit Number

Brief Project Description
 On Randall Road, widening and resurfacing the four lane facility to a six lane facility, convert shoulder and ditch drainage to closed storm, provide a detention basin in the northeast quadrant, extend southbound right turn lane, provide for multi-use facilities on west side, install pedestrian heads and pedestrian crosswalks. On Higgins Road, extend the eastbound left and right turn lanes and the westbound right turn lane.

Date Approved by Qualified Geometrics Engineer
 05/05/2022

Comments

GEOMETRIC REVIEW – Randall @ IL 72 – IDS – 19-00514-00-WR

1. Looks Good! - No Comments.

6/9/22

Traffic Arterials

Walter Czarny



PLAN REVIEW

Randall Road @ IL 72 – Kane – 190051400WR

1. All Good - No Comments!

11/14/22

Traffic Arterials

Walter Czarny

A handwritten signature in black ink, appearing to read 'W. Czarny', with a long horizontal stroke extending to the right.

Jennifer Mitchell

From: Kawash, Mohammad <Mohammad.Kawash@illinois.gov>
Sent: Friday, November 4, 2022 7:48 AM
To: Jennifer Mitchell
Cc: Solomon, Marilyn D; ThomasCandance@co.kane.il.us; Dan Bruckelmeyer; Matt Cesario
Subject: FW: Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

FYI – Traffic Arterials have no further comments.

From: Kannan-Hosadurga, Kalpana <Kalpana.Kannan-Hosadurga@Illinois.gov>
Sent: Friday, November 4, 2022 6:19 AM
To: Kawash, Mohammad <Mohammad.Kawash@illinois.gov>
Cc: Solomon, Marilyn D <Marilyn.Solomon@illinois.gov>; Mohammed, Muthayab A. <Muthayab.Mohammed@Illinois.gov>
Subject: FW: Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

Moe- please note that there no ped safety related comments.

Thanks,
Kalpana

From: Mohammed, Muthayab A. <Muthayab.Mohammed@Illinois.gov>
Sent: Thursday, November 3, 2022 3:28 PM
To: Kannan-Hosadurga, Kalpana <Kalpana.Kannan-Hosadurga@Illinois.gov>
Subject: RE: Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

Kalpana,
No comments on Pedestrian safety at this time.

Thanks

Muthayab Mohammed PE, PTOE, RSP1

OSEH Inc

Consultant to IDOT
Bureau of Traffic

From: Kannan-Hosadurga, Kalpana <Kalpana.Kannan-Hosadurga@Illinois.gov>
Sent: Monday, October 17, 2022 11:14 AM
To: Czarny, Walter F. <Walter.Czarny@illinois.gov>; Mohammed, Muthayab A. <Muthayab.Mohammed@Illinois.gov>
Subject: FW: Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

Wally/Muthayab- please review.

Thanks,
Kalpana

Jennifer Mitchell

From: Kawash, Mohammad <Mohammad.Kawash@illinois.gov>
Sent: Tuesday, August 9, 2022 4:48 PM
To: Jennifer Mitchell
Cc: Thomas, Candance; Solomon, Marilyn D
Subject: FW: Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)
Attachments: Traffic MEMO - 07.26.2022.docx; LRS Randall Rd at IL 72 08092022.pdf

FYI

From: Kannan-Hosadurga, Kalpana <Kalpana.Kannan-Hosadurga@Illinois.gov>
Sent: Tuesday, August 9, 2022 9:18 AM
To: Kawash, Mohammad <Mohammad.Kawash@illinois.gov>
Cc: Markoem, Allen K. <Allen.Markoem@Illinois.gov>; Senderak, Daniel Z. <Daniel.Senderak@Illinois.gov>; Nedoss, Lucie <Lucie.Nedoss@illinois.gov>; Cudecki, Rebecca S. <Rebecca.Cudecki@Illinois.gov>
Subject: FW: Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

Moe- please see attached signed TMP.

Thanks,
Kalpana Kannan-Hosadurga, P.E., PTOE
Arterial Traffic Operations Engineer
Illinois Department of Transportation
Office: 847-705-4091
Kalpana.Kannan-Hosadurga@illinois.gov

From: Senderak, Daniel Z. <Daniel.Senderak@Illinois.gov>
Sent: Friday, August 5, 2022 4:37 PM
To: Kannan-Hosadurga, Kalpana <Kalpana.Kannan-Hosadurga@Illinois.gov>
Subject: FW: Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

Kalpana-The attached TMP is ready for Lisa's signature.

Thanks,
Dan

Jennifer Mitchell

From: Kawash, Mohammad <Mohammad.Kawash@illinois.gov>
Sent: Monday, August 8, 2022 9:32 AM
To: Jennifer Mitchell
Cc: Thomas, Candance; Solomon, Marilyn D
Subject: FW: [External] Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

FYI

From: Lloyd, Jonathan M. <Jonathan.Lloyd@illinois.gov>
Sent: Monday, August 8, 2022 10:20 AM
To: Cudecki, Rebecca S. <Rebecca.Cudecki@Illinois.gov>
Cc: Nedoss, Lucie <Lucie.Nedoss@illinois.gov>; Kawash, Mohammad <Mohammad.Kawash@illinois.gov>; Salley, Jason R <Jason.Salley@illinois.gov>
Subject: RE: [External] Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

Comments addressed. Nothing further from Traffic Studies.

From: Cudecki, Rebecca S. <Rebecca.Cudecki@Illinois.gov>
Sent: Wednesday, August 3, 2022 12:10 PM
To: Lloyd, Jonathan M. <Jonathan.Lloyd@illinois.gov>
Cc: Nedoss, Lucie <Lucie.Nedoss@illinois.gov>
Subject: FW: [External] Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

Jonathan –

Attached please find submittal 22-2185 due by 9/13/2022.

Thank You

Rebecca Cudecki

Consultant - Database Technician
Illinois Department of Transportation
201 West Center Court
Schaumburg, IL 60196-1096

Jennifer Mitchell

From: Kawash, Mohammad <Mohammad.Kawash@illinois.gov>
Sent: Thursday, August 18, 2022 2:35 PM
To: Jennifer Mitchell
Cc: Solomon, Marilin D; Thomas, Candance
Subject: FW: [External] Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

FYI

From: Lloyd, Jonathan M. <Jonathan.Lloyd@illinois.gov>
Sent: Thursday, August 18, 2022 2:41 PM
To: Cudecki, Rebecca S. <Rebecca.Cudecki@Illinois.gov>
Cc: Nedoss, Lucie <Lucie.Nedoss@illinois.gov>; Kawash, Mohammad <Mohammad.Kawash@illinois.gov>; Salley, Jason R <Jason.Salley@illinois.gov>
Subject: RE: [External] Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

No further comments from Traffic Studies.

From: Cudecki, Rebecca S. <Rebecca.Cudecki@Illinois.gov>
Sent: Wednesday, August 3, 2022 12:10 PM
To: Lloyd, Jonathan M. <Jonathan.Lloyd@illinois.gov>
Cc: Nedoss, Lucie <Lucie.Nedoss@illinois.gov>
Subject: FW: [External] Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

Jonathan –

Attached please find submittal 22-2185 due by 9/13/2022.

Thank You

Rebecca Cudecki

Consultant - Database Technician
Illinois Department of Transportation
201 West Center Court
Schaumburg, IL 60196-1096

Jennifer Mitchell

From: Kawash, Mohammad <Mohammad.Kawash@illinois.gov>
Sent: Friday, August 26, 2022 2:58 PM
To: Jennifer Mitchell
Cc: Solomon, Marilin D; Thomas, Candance
Subject: FW: Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)
Attachments: Traffic MEMO - 07.26.2022.docx

FYI

From: Kobyłka, Kamil A. <Kamil.Kobyłka@illinois.gov>
Sent: Friday, August 26, 2022 2:56 PM
To: Kawash, Mohammad <Mohammad.Kawash@illinois.gov>; Solomon, Marilin D <Marilyn.Solomon@illinois.gov>
Cc: Lloyd, Jonathan M. <Jonathan.Lloyd@illinois.gov>; Kannan-Hosadurga, Kalpana <Kalpana.Kannan-Hosadurga@Illinois.gov>
Subject: RE: Kane: Section No. 19-00514-00-WR - Randall Road at IL 72 (State Route)

Moe,

Traffic – Design – has no further comments at this time. The disposition of comments answered all comments – we will wait on traffic signal plan submittal for a full signal design review.

Please let me know if you have any questions – and please send us traffic signal plans as soon as you will have these.

Thank you.

Kamil Kobyłka
Traffic Signal Engineer

Illinois Department of Transportation
Region 1 | District 1 | Bureau of Traffic
201 West Center Court | Schaumburg, IL 60196-1096
Phone: 847-705-4734 | Email: kamil.kobyłka@illinois.gov

MEMORANDUM

To: Chad Riddle – Local Roads and Streets
From: E. Perry Masouridis, P.E.
Date: July 22, 2021
Re: Higgins Road at Randall Road - Elgin, Kane County
(2nd Review #LR582)

The following items were provided to the Hydraulics Section for review:

- Location Drainage Study, prepared by BLA, Inc. dated June 2021.
- Disposition of Comments prepared by BLA, dated June 15, 2021.

Based on our review of the submitted documents, all IDOT-Hydraulics requirements have been met and we have no further comments. The applicant should provide all associated permits when available, 11" by 17" copies of the final plans and a CD containing a PDF copy of the final plans and stormwater report.

S:\WP\HYD\Project_Manage_CBBELMDC Permit and LDS Reviews\Permit #LR582_Higgins Road at Randall Elgin (2nd Review)_072221.docx



ADA/PROWAG Project Alert



Date	From	Location/Bureau	Phone	Ext
05/25/22	Candance Thomas	Kane County DOT	(630) 406-7355	

Marked Route/Street

Name	Limits	Project/Permit Number
Randall Road	At IL Route 72	

Contract Number	Section Number
	19-00514-00-WR

Type of Work

Reconstruction
 3R/W&RS
 3P/Resurfacing
 Other (explain)

Scope of Work

On Randall Road widen and resurface the four-lane facility to a six-lane facility, convert shoulder and ditch drainage to closed storm sewer, provide a detention basin in the northeast quadrant, extend southbound right turn lane, provide for multi-use facilities on west side, install pedestrian heads and pedestrian crosswalks. On Higgins Road extend the eastbound left and right turn lanes and the westbound right turn lane. See attached IDS.

Municipality

Unincorporated Cook County, City of Elgin

County

Cook
 Kane
 Lake
 Various
 Du-Page
 Mchenry
 Will

Letting Target	Design Approval Target Date
August 2024	07/15/22

Attach Location Map with alteration boundaries marked or ESR Exhibit

FOR ADA COORDINATOR USE ONLY

Date Uploaded into Inventory	Uploaded By

ADA Coordinator will update the GIS ADA Inventory points with Project Alert Form Information

Jennifer Mitchell

From: DOT.D1.ADA <DOT.D1.ADA@illinois.gov>
Sent: Tuesday, August 23, 2022 9:00 AM
To: Jennifer Mitchell
Cc: Salley, Jason R; Solomon, Marilyn D; Kawash, Mohammad; Candi Thomas (thomascandance@co.kane.il.us)
Subject: RE: Kane: 19-00514-00-WR - Randall Road at IL Rte 72

Thank you Jennifer, yes I concur with your approach to add the commitment in the Phase I Report to have the ADA revisions done in Phase II per our previous direction below on 5/26/22.

Carlos A. Feliciano, P.E.

Illinois Department of Transportation
District I - Bureau of Programming - Engineering & Environmental Studies
In-House Studies Unit Head / ADA & Bicycle Coordinator
TEL. (847) 705-4106 / CEL. (847) 521-6066 / FAX (847) 705-4666



[Chat with me on Teams](#)



Please consider the environment before printing this email

PRIVILEGED & CONFIDENTIALITY NOTICE: This email and any attachments is intended only for the use of the individual or entity above. If you are not the named or intended recipient, you are hereby notified that any disclosure, copying, distribution, or the taking of any action in reliance on the contents of such information is strictly prohibited. If you have received this transmission in error, please immediately notify the sender by telephone to arrange for the secure return of the document.

From: Jennifer Mitchell <jmitchell@bla-inc.com>
Sent: Monday, August 22, 2022 10:46 AM
To: Feliciano, Carlos A <Carlos.Feliciano@illinois.gov>
Cc: Solomon, Marilyn D <Marilyn.Solomon@illinois.gov>; Kawash, Mohammad <Mohammad.Kawash@illinois.gov>; Candi Thomas (thomascandance@co.kane.il.us) <thomascandance@co.kane.il.us>
Subject: [External] RE: Kane: 19-00514-00-WR - Randall Road at IL Rte 72

Good day Carlos,

I am reaching out because you had provided me some guidance, as noted below, for a local project that involved state right of way. I need to provide concurrence from the ADA coordinator in our PDR. I would like to know if modification of the landing pad/ramp in the northeast quadrant of Randall Road at IL 72 can be addressed in the Phase II? As noted, we will state a commitment in the PDR to do so, as well as adding a note to the ADA detail for this quadrant. Please provide a response indicating concurrence with our approach or if you need an ADA detail now in the Phase I.

Thank you,

Jennifer Mitchell, P.E., PTOE, ENV SP
Director of Preliminary Design Services
BLA, Inc.

333 Pierce Road, Suite 200
Itasca, IL 60143
630-438-6400
630-688-1273 Cell
630-438-6444 Fax

From: Jennifer Mitchell

Sent: Friday, May 27, 2022 7:44 AM

To: DOT.D1.ADA <DOT.D1.ADA@illinois.gov>; Salley, Jason R <Jason.Salley@illinois.gov>

Cc: Solomon, Marilyn D <Marilyn.Solomon@illinois.gov>; Kawash, Mohammad <Mohammad.Kawash@illinois.gov>; Candi Thomas (thomascandance@co.kane.il.us) <thomascandance@co.kane.il.us>

Subject: RE: Kane: 19-00514-00-WR - Randall Road at IL Rte 72

Thank you for your guidance! If okay, we will make the necessary changes in design. This will be a commitment that we will state in the PDR.

Jennifer

From: DOT.D1.ADA <DOT.D1.ADA@illinois.gov>

Sent: Thursday, May 26, 2022 1:27 PM

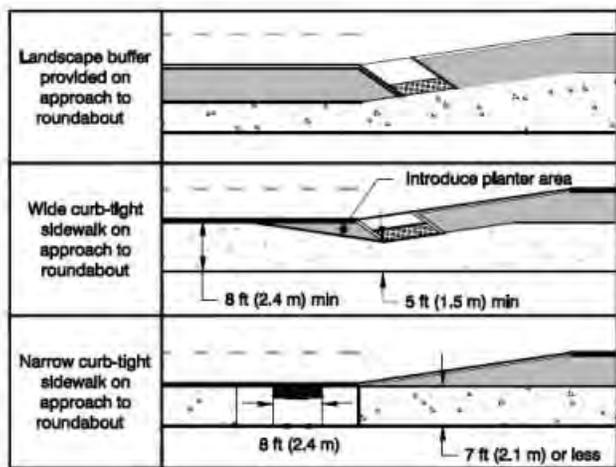
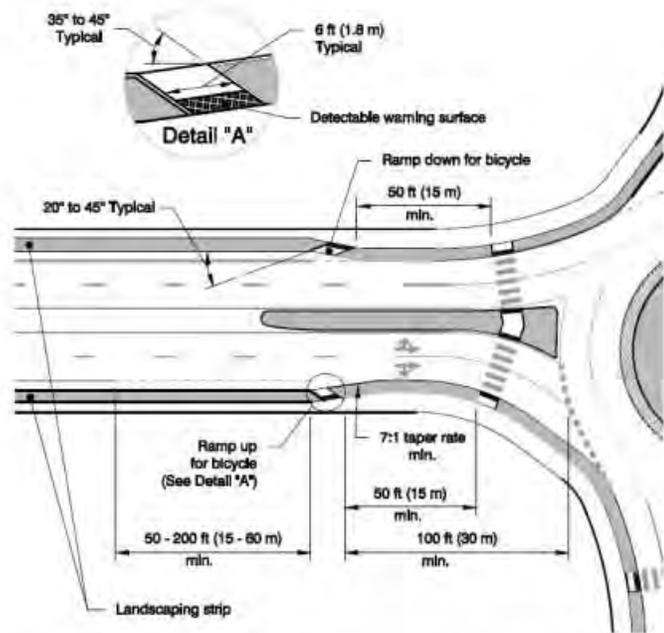
To: Jennifer Mitchell <jmitchell@bla-inc.com>; DOT.D1.ADA <DOT.D1.ADA@illinois.gov>; Salley, Jason R <Jason.Salley@illinois.gov>

Cc: Solomon, Marilyn D <Marilyn.Solomon@illinois.gov>; Kawash, Mohammad <Mohammad.Kawash@illinois.gov>; Candi Thomas (thomascandance@co.kane.il.us) <thomascandance@co.kane.il.us>

Subject: RE: Kane: 19-00514-00-WR - Randall Road at IL Rte 72

In that case I would recommend the treatment shown in IDOT's BDE 17-2.QQ for situations where you are providing a bicyclist (and in this case pedestrians) transition from shoulder to an off-road accommodation. The detectable warning surface would be at the top of the ramp and it would be angled at a 35 to 45 degree skew. I would label it as "Ramp for On-Road Bicyclists" to avoid creating confusion. If pedestrians use it as a secondary user that's fine but we should not be encouraging pedestrians walking on the shoulder. The perpendicular design previously shown would likely have ended up being removed by IDOT in a future accessibility improvement because it would be seen as promoting pedestrians crossing IL 72 behind the stop bar.

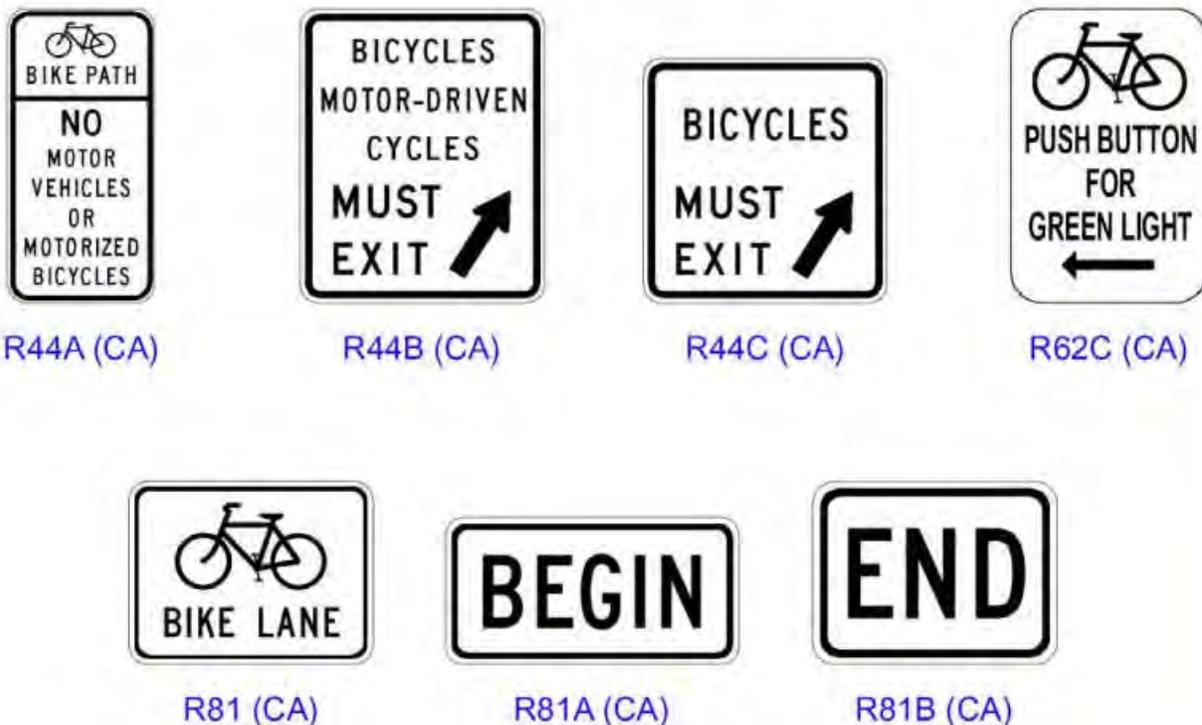
Below is an image of a California DOT sign I was thinking of but I don't see a similar one in IDOT's MUTCD Illinois Supplement. The idea would be to say "Bicyclists May Exit" the shoulder thru the ramp but CalDOT is more forceful and says "Must". This would serve to supplement the intent of the facility; however, if not allowed in Illinois I think the ramp is a step in the right direction and would accomplish the issue you are trying to address while at the same time promoting the right behavior.



POSSIBLE TREATMENTS AND RAMP OPTIONS FOR BICYCLES

Figure 17-2.QQ

Figure 9B-2 (CA). California Regulatory Signs for Bicycle Facilities



Carlos A. Feliciano, P.E.

Illinois Department of Transportation
District I - Bureau of Programming - Engineering & Environmental Studies
In-House Studies Unit Head / ADA & Bicycle Coordinator
TEL. (847) 705-4106 / CEL. (847) 521-6066 / FAX (847) 705-4666

 [Chat with me on Teams](#)

 **Please consider the environment before printing this email**

PRIVILEGED & CONFIDENTIALITY NOTICE: This email and any attachments is intended only for the use of the individual or entity above. If you are not the named or intended recipient, you are hereby notified that any disclosure, copying, distribution, or the taking of any action in reliance on the contents of such information is strictly prohibited. If you have received this transmission in error, please immediately notify the sender by telephone to arrange for the secure return of the document.

From: Jennifer Mitchell <jmitchell@bla-inc.com>
Sent: Thursday, May 26, 2022 11:57 AM
To: DOT.D1.ADA <DOT.D1.ADA@illinois.gov>; Salley, Jason R <Jason.Salley@illinois.gov>
Cc: Solomon, Marilyn D <Marilyn.Solomon@illinois.gov>; Kawash, Mohammad <Mohammad.Kawash@illinois.gov>; Candi Thomas (thomascandance@co.kane.il.us) <thomascandance@co.kane.il.us>
Subject: [External] RE: Kane: 19-00514-00-WR - Randall Road at IL Rte 72

Carlos,

The history of this is that residents east along IL 72 have commented about the difficulty of crossing Randall Road to get to the recreation center west of Randall Road/north of IL 72. Such that the shoulder along IL 72 is the "shared" ped/bike facility, we wanted to direct those east-west users of IL 72 to the proposed pedestrian cross walk of the north leg of Randall Road and suggested this sidewalk connection. Perhaps it should be more of an angled diversion versus perpendicular? We do not propose crossing of Higgins Road on this east leg. A cross walk is not proposed here.

If we do not provide this connection, what type of landing would be needed at the northeast quadrant of Randall/72? A depressed curb with a landing area as I marked below? Anything at all?

Please advise.

Jennifer Mitchell, P.E., PTOE, ENV SP
Director of Preliminary Design Services

BLA, Inc.

333 Pierce Road, Suite 200

Itasca, IL 60143

630-438-6400

630-688-1273 Cell

630-438-6444 Fax

From: DOT.D1.ADA <DOT.D1.ADA@illinois.gov>

Sent: Thursday, May 26, 2022 7:44 AM

To: Jennifer Mitchell <jmitchell@bla-inc.com>; Salley, Jason R <Jason.Salley@illinois.gov>

Cc: Solomon, Marilyn D <Marilyn.Solomon@illinois.gov>; Kawash, Mohammad <Mohammad.Kawash@illinois.gov>;

DOT.D1.ADA <DOT.D1.ADA@illinois.gov>; Candi Thomas (thomascandance@co.kane.il.us)

<thomascandance@co.kane.il.us>

Subject: RE: Kane: 19-00514-00-WR - Randall Road at IL Rte 72

Thank you. Question for you, why are you installing a curb ramp on the east leg of Higgins that leads to the WB Turn lane? Being behind the stop bar would not be safe for a pedestrian to try to cross Higgins Rd at this location. There are rare situations where that is needed for existing conditions, this being a new installation I don't see why we would approve this. Is there a reason why it wasn't placed in front of the WB stop bar? I would strongly advise against this design as it will not lead to an accessible connection even if it designed to meet technical requirements. If this is intended as a future transit boarding and alighting area, then it should be a raised sidewalk not a curb ramp and meet boarding and alighting requirements.

Matt Cesario

From: Candler, Quinanda <QuinandaCandler@usicllc.com>
Sent: Friday, December 13, 2019 11:06 AM
To: Matt Cesario
Subject: DESIGN STAGE TICKET# X3450465
Attachments: UG Locating Map Legend_Redacted_Wetland Added_031919 (002).pdf; 422-19N-UGL.pdf; 422-19S-UGL.pdf; 422-30N-UGL.pdf; 422-20S-UGL.pdf

Matt,

If your project is regarding new or renovation construction, supplied electrical voltage needs, or changes in current electrical demands, you must contact ComEd's New Business office at 1-866-NEW-ELEC (1-866-639-3532) to begin the process to complete your request.

If your project is for a publicly funded improvement project such as road widening, sewer, water, or other general public improvement, please call ComEd's Public Relocation Department at 630-437-4855.

ComEd has forwarded your JULIE Design Stage Ticket – [X3450465 - ELGIN](#) to our company to provide the attached prints as you requested. I have also attached a ComEd Legend relative to these prints. Note that since we are submitting this information for ComEd, you may need to contact ComEd directly to further develop your project.

Quinanda Candler

Administrative Assistant
O: 630-396-8221
F: 630-396-8230

860 Oak Creek Drive
Lombard, IL 60148
USICLLC.com



PROTECTING INFRASTRUCTURE

Matt Cesario

From: noreply@salesforce.com on behalf of elgin311@cityofelgin.org
Sent: Friday, December 20, 2019 8:53 AM
To: Matt Cesario
Subject: JULIE Ticket X3450465 Completed by City of Elgin



Your JULIE 1 Call Ticket # X3450465 has been completed by the City of Elgin.

State: IL
County: KANE
Place: ELGIN CIT
ST From:
ST To:
Street: RANDALL RD
Cross St: HIGGINS RD
Grids: T42NR08E19SE,T42NR08E19SW,T42NR08E20SW,T42NR08E30NE
Location:

City of Elgin Work Order #: WO-0287794
Work Order Completion Date: 12/20/2019

Electrical/Fiber Optics Markings Status: All Clear
Sewer Markings Status: All Clear
Water Markings Status: All Clear

Please note that the City of Elgin is responsible for marking **city owned** Water, Sewer, Electrical (street lamps) and Fiber Optics lines. Telephone, cable, electrical and other utilities are marked by the respective service provider.

"All Clear" indicates no lines require marking while "Completed" indicates lines have been marked.

Matt Cesario

From: gasmaps <gasmaps@aglresources.com>
Sent: Tuesday, January 07, 2020 12:54 PM
To: Matt Cesario
Subject: JULIE #X3450465, #X3450474; ENG #N13140
Attachments: N13140 5134193.pdf; N13140 5134194.pdf; N13140 5134203.pdf; N13140 5134302.pdf; N13140 5134173.pdf; N13140 5134191.pdf; N13140 5134192.pdf; N13140 5134201.pdf; N13140 5134202.pdf
Sensitivity: Confidential

Your project has been assigned Engineering #N13140. Please refer to this number in all future correspondence to assist with expediting any future inquiry.

Details are shown in noted 'boxes'. These details will be provided upon specific request through email if needed. The box title noted on the bottom is required.

Note: Nicor does not field mark 'Design' stage tickets and services typically are not shown on atlas sheets.

With reference to your request received for main details, I am sending atlas page(s) indicating the location of our gas main(s) in the area of your proposed project. **The dimensions and location of Nicor Gas utility facilities as shown on these plans are an estimate for design purposes only, and are not intended for use as field locations for construction. Nicor Gas does not warrant accuracy. These pages are considered confidential. Please handle these pages accordingly. Review and verify that the page(s) attached is the area of your request.** If this is not the page you have requested or you require additional pages, please advise and correction will be made. Please feel free to contact me if you need assistance in reading the attached pages. The date of this email represents the date of the attached page(s) most recent version and should be considered the applicable date/time stamp.

If potential conflicts are anticipated, please supply us with a large set of pre-final/final plans including right-of-way and cross-sections and ample time for design and relocation of our mains and services (if necessary) to adhere to your tentative scheduled letting date. Ample time requires a minimum of 6 months for design and planning. This time does not take into consideration the installation our mains and services or reimbursable requirements if applicable. Plan submittals should be pdf format and emailed to: gasmaps@southernco.com. This email account can accept up to 20MB file size. If plan submittals are larger, please provide a ftp site or drop box option to obtain the necessary plans.

Utility rights are generally documented through permit, license or easement and in some cases, Nicor Gas may own property. It is up to the requesting/design party(s) to research existing land rights of their proposed project. Nicor Gas will perform its own investigation to determine if any portion is reimbursable when construction is requested to relocate gas main.

Please phone JULIE at 811 OR 1-800-892-0123, 48 hours prior to construction for location of our facilities within your proposed improvement.

Nicor Gas
1844 Ferry Rd.
Naperville, IL 60563
630-388-2362



The information contained in this e-mail message and accompanying documents is intended for the confidential use of the recipient only and is the property of Nicor Gas Company. If the reader of this e-mail message is not the intended recipient, or an employee or agent responsible for delivery of this e-mail message to the intended recipient, you are hereby notified that any dissemination, distribution, copying or forwarding of this e-mail message is strictly prohibited. If you received the e-mail in error, please notify me immediately. Thank you.