

APPENDIX E: DRAFT CATEGORICAL EXCLUSION APPLICATION





Level Two Design Criteria Checklist

Key Route: Englewood Elevated Railroad Connector

Marked Route/Road Name: 59th Street

State Job No.: N/A Contract No.: CD # E-5-487

Functional Classification: N/A Highway Type: N/A

County(ies): Cook Project Length: 1.75 miles

City: Chicago Section: 16-E5482-00BT

Project Location: Between 58th and 59th Streets (N/S), from Hoyne Ave to Wallace Ave

Project Scope of Work

a. Check the appropriate box. See Section 31-6 for definitions.

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> New construction | <input type="checkbox"/> *Reconstruction | <input type="checkbox"/> *3R (non-freeway) | <input type="checkbox"/> *3R (freeway) |
| <input type="checkbox"/> 3P | <input type="checkbox"/> SMART | <input type="checkbox"/> HSIP | <input checked="" type="checkbox"/> Other |

**Note: May include "Allowed to Remain in Place" criteria.*

This form is required for all new construction, reconstruction, and 3R projects.

b. Provide a brief project description:

The proposed Englewood Line multi-use trail is a planned conversion of an abandoned rail line into a multi-use trail. The existing abandoned rail line was elevated from street grade in 1917 by the Pennsylvania Railroad. The proposed trail is oriented in the east-west direction, parallel to and in between 58th and 59th Streets, from Hoyne Avenue on the west to Wallace Avenue on the east.

Design Criteria (Provide numerical values, where indicated.)	Does the proposed design meet the criteria?		
	Yes	No	N/A
1. Basic Design Controls (Chapter 31)			
a. Design speed 12 mph (km/h)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Stopping Sight Distance (SSD) application for vertical curves (downgrade adjusted SSD used)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Truck SSD (level) (at specific sites)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Level of service (mainline)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Horizontal Alignment (mainline) (Chapter 32)			
a. Horizontal curvature (minimum radius for selected design speed) feet (meters)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Superelevation rates ($e_{max} =$ %)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Superelevation transition lengths	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. SSD application at horizontal curves (downgrade adjusted SSD used)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Superelevation distribution between tangent and curve (ratio or percent)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. "Breakover" of outside shoulder on super-elevated curves (percent)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Relative longitudinal slope of shoulder to edge of traveled way on high side of S.E. curve adjacent to bridge with S.E.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Superelevation development at reverse curves	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Design Criteria (Provide numerical values, where indicated.)	Does the proposed design meet the criteria?		
	Yes	No	N/A
i. Is superelevation transition length located off of bridges and bridge approach pavements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Horizontal stopping sight distance on inside of horizontal curves (Level SSD for passenger cars)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Vertical Alignment (mainline) (Chapter 33)			
a. Maximum grades (in percent)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. SSD at crest vertical curves (level SSD for passenger cars)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. SSD at sag vertical curves (level SSD for passenger cars)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Minimum grades (in percent) considering drainage	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Critical length of grade	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Truck-climbing lanes/critical grade analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Design criteria for truck-climbing lanes (e.g., lane width and shoulder width)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Minimum length of vertical curves for selected design speed	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Maximum length of vertical curves (drainage of curbed facilities and bridges)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Cross Section Elements (mainline) (Chapter 34)			
a. Lane widths feet (meters)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Design Criteria (Provide numerical values, where indicated.)	Does the proposed design meet the criteria?		
	Yes	No	N/A
b. Traveled way widening	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Cross-slopes on through lanes (in percent): Inside lane Lane 1 _____ <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Outside lanes Lane 2 _____ <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Lane 3 _____ <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Lane 4 _____ <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>			
d. Shoulder widths _____ feet (meters)(inside) _____ feet (meters)(outside)	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
e. Design of parking lanes: • Cross-slope _____ % <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> • Width _____ feet (meters) <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>			
f. Type of curb and gutter used on median	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Drainage of raised curb medians: • Direction of flow of median surface or pavement _____ <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> • Direction of cross-slope on gutter _____ % <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>			
h. Type of curb and gutter used along outside edges of pavement _____	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Two Way Left Turn Lane (TWLTL) width: • Flush type _____ feet (meters) <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> • Traversable type _____ feet (meters) <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>			
j. Median widths: • Urban _____ feet (meters) <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> • Suburban _____ feet (meters) <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> • Rural _____ feet (meters) <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>			
k. Shoulder cross slopes _____ % <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>			
l. Fill slopes ____ : ____ (V:H) <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>			

Design Criteria (Provide numerical values, where indicated.)	Does the proposed design meet the criteria?		
	Yes	No	N/A
m. Outside roadway ditch:			
• Slopes _____ : _____ • Depth _____	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Widths _____	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Median ditch:			
• Slopes _____ • Depth _____ :	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Width _____	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
n. Cross-section transitions into bridges/ underpasses	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o. Use of mountable curbs (V > 45 mph (70 km/h))	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
p. Cross-section transition details (e.g., four-lane to two-lane)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Intersections (Chapter 36)			
a. Accommodation of design vehicle (identify vehicle) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Level of service:			
• Through lanes _____	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Turn lanes _____	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Skew angle	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Profiles	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Volume guidelines for turn-lanes:			
• Right-turns	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Left turns	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Design of right-turn lanes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Design of left-turn lanes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Design Criteria (Provide numerical values, where indicated.)		Does the proposed design meet the criteria?		
		Yes	No	N/A
g. Turn-lane tapers	Approach taper	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Departure taper	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Bay taper	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Turning roadway widths		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Turn-lane lengths	Deceleration (rural)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Storage (urban)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Intersection sight distance: List criteria and type _____ _____		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
k. Median opening length _____ feet (meters)		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
l. Minimum corner island size _____ sq. ft (sq. m)		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
m. Does right-turn radius accommodate design vehicle without encroachment?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
n. Driveway widths _____ feet (meters)		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o. Type of traffic control:				
• Two-way stop		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• All-way stop		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Traffic signals		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
p. Is maximum grade exceeded on any approach?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
q. Max. superelevation "e" (in percent) for intersections on curve		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Interchanges (Chapter 37)				
a. Exit terminal	Standard type	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Design speed of first curve	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Are any exit terminals located on mainline horizontal curve?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Design Criteria (Provide numerical values, where indicated.)		Does the proposed design meet the criteria?		
		Yes	No	N/A
b. Entrance terminal	Standard type	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Length of tangent after the entering curve	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Design speed of entering curve	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Design speed of ramp proper _____ mph (km/h)		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Design speed of crossroad _____ mph (km/h)		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Maximum ramp grades:		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Exit ramp _____ %		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Entrance ramp _____ %		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Ramp pavement width _____ feet (meters)		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Ramp shoulder widths:		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Left _____ feet (meters)		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Right _____ feet (meters)		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Horizontal ramp curvature in conjunction with selected design speeds		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Superelevation development on ramps	Superelevation rate	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Transition length	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Distribution between tangent & curve	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Vertical curvature compliance with selected design speed on ramp		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
k. Length of access control at crossroad		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
l. Type of traffic control at crossroad:		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Stop signs		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Traffic signals		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Free flow		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
m. Is length of crest vertical curve used on crossroad \geq that required by the selected design speed of crossroad?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Design Criteria (Provide numerical values, where indicated.)		Does the proposed design meet the criteria?			
		Yes	No	N/A	
n. Are crossroad approach grades through ramp/ crossroad intersections $\leq 2\%$?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
o. Are ramp/crossroad intersections located on a tangent section of crossroad alignment?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
p. Is decision sight distance available in advance of exit gore?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
q. Is clear recovery area available beyond gore nose?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
r. Level of service:					
• Exit terminal _____		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
• Entrance terminal _____		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
• Ramp proper _____		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
• Weaving area _____		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
• Ramp/crossroad intersection		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
s. Freeway lane drops	Location	Upgrade	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Downgrade	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Inside lane	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Outside lane	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		At exit terminal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Beyond exit terminal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Taper length	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Roadside Safety (Chapter 38)					
a. Horizontal clearances:					
• Clear zones on tangent sections		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
• Clear zones on outside of horizontal curves		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b. Barrier warrants		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c. Barrier length of need		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Design Criteria (Provide numerical values, where indicated.)	Does the proposed design meet the criteria?		
	Yes	No	N/A
d. Deceleration criteria for impact attenuators	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Structure Planning/Geometrics (Chapter 39)			
a. Clear roadway bridge widths feet (meters)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Structural capacity of bridges	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Vertical clearances 14.75 feet (meters)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Pavement Design (Chapter 54)			
a. Structural capacity of roadway	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Note: Use multiple forms for each roadway within the project.

Prepared by: _____ Date: _____
Designer (IDOT or Consultant) Signature