Application for Bipartisan Infrastructure Law Surface Transportation Block Grant Program Funding

for the Iowa City Urbanized Area



Metropolitan Planning Organization of Johnson County February 01, 2023

Application Instructions

This application form shall be used to submit a Surface Transportation Block Grant project proposal.

- Complete the attached Minority Impact Statement (Form 105101) for the proposed project.
- 2. All information submitted as part of this application, as well as any additional information requested by the MPOJC, will be used to evaluate the application.
- Submit a digital copy of the completed application and any attachments by <u>February 22</u>, 2023 to:

Emily Bothell 410 East Washington Street lowa City, Iowa 52240

emily-bothell@iowa-city.org

With questions, please contact Emily Bothell, Sr. Associate Transportation Planner at 356-5250 or via email to emily-bothell@iowa-city.org.

Project Eligibility Requirements

 STBG projects must occur within the adopted MPO transportation planning boundary, be included in the MPOJC Long-Range Transportation Plan and be consistent with the MPOJC Complete Streets Policy.

MPOJC Long Range Transportation Plan Link:

https://www.mpojc.org/what-we-do/transportation-planning-division/long-range-transportation-plan

MPOJC Complete Streets Policy Link:

https://www.iowa-

city.org/WebLink/DocView.aspx?id=1506532&dbid=0&repo=CityoflowaCity

- STBG funds may be used for any mode of surface transportation: roadway, transit, pedestrian, or bicycle.
- STBG funding is for capital projects only.
- 4. Transit projects should maintain or expand the viability of public transportation as a complementary or alternative transportation mode. A transit vehicle replacement project should meet all standards for replacement vehicles stipulated by the state public transit management system.
- 5. STBG projects must be proposed by a member of the MPO Transportation Technical Advisory Committee (TTAC). The sponsoring entity must be the City of Coralville, the City of Iowa City, the City of North Liberty, the City of Tiffin, the City of University Heights, Johnson County, or the University of Iowa. The entity awarded funds for a project must be able to fund the local match and implement the project.
- Projects will be scored by MPO staff and considered initially by the Transportation Technical Advisory Committee (TTAC). The TTAC will make a recommendation to the MPOJC Urbanized Area Policy Board (UAPB) for all projects unless the project is withdrawn by its TTAC sponsor. All projects shall receive subsequent consideration by the MPOJC UAPB.
- Roadway projects must be structurally capable of handling all anticipated design vehicles and should provide for volume/capacity less than or equal to 1.0 at level of service E upon completion according to the adopted MPOJC Long Range Travel Demand Model.
- If funded, projects must be started within three years of the original year the project was programmed in the MPOJC Transportation Improvement Program (TIP).
- Road and bridge projects must be on designated Federal Aid Routes as approved by lowa DOT. The Federal Aid Route map is located at the following link: https://iowadot.gov/maps/Digital-maps/pdfview/johnson
- Projects must be in compliance with all Bipartisan Infrastructure Law (BIL) requirements to be eligible for funding. Eligibility requirements can be found at the following link: https://www.fhwa.dot.gov/specialfunding/stp/





The following information must be provided for all Surface Transportation Block Grant project proposals and will be provided to the MPOJC Transportation Technical Advisory Committee (TTAC) and Urbanized Area Policy Board for evaluation. MPOJC staff may contact you if additional information is required. You will have the opportunity to explain the project at a meeting of the MPOJC TTAC. MPOJC staff will score the projects; the TTAC may modify scores.

General Information			
MPO: Metropolitan Planning Organization	n of Jo	hnson County e-mail:	emily-bothell@iowa-city.org
Eligible Sponsor/Applicant Agency: City of Coralv	ille		
Contact Person (Name & Title): Zaid Alsamawi P	P.E., As	ssistant City Engineer	
Complete Mailing Address: 1512 7th Street, PO b	oox 51	27	
		Street Address and/or Box No.	
Coralville, Iowa, 52241			319.248.1720
City State		Zip	Daytime Phone
If more than one agency or organization is involved in the telephone number of the second agency. (Attach an additional additional actions of the second agency).			
Applicant Agency: Johnson County		e-mail:	ebartels@johnsoncountyiowa.gov
Contact Person (Name & Title): Ed Bartels P.E., A	ssista	nt County Engineer	
Complete Mailing Address: 4810 Melrose Avenue	е		
		Street Address and/or Box No.	
Iowa City, Iowa, 52246			319-356-6046
City State		Zip	Daytime Phone
Project Information			
Project Title: Dubuque Street NE & Forevergree	n Roa	d Roundabout	
Project Description (i.e. number of proposed through lane	e turn l	anes and other critical featu	roe):
Construct a four-legged, single-lane roundabout t			
Ridge Road NE, and Forevergreen Road. Includes a			
	1 10 51	lared use path along the	north side of Forevergreen Road
that will connect to the Dubuque Street Trail.			
If this project includes land acquisition, how many a	acres?	n/a	
(approximate)	-	II/a	
Project Category Check all boxes that apply to it	ndicate	the categories that best de	scribe your project.
Trails and Bicycles	Doo	dways and Bridges	
 Facilities for pedestrians and bicycles 	×	Construction, rehabilitation, p	reservation, or operational
including safe routes for non-drivers	_	improvements of street faciliti	
Conversion and use of abandoned railway corridors	Ш	Bridge improvements including preservation	ng construction, rehabilitation, or
Scenic and Historic	Env	ironmental	
Construction of turnouts, overlooks and viewing areas		Vegetation management pract	tices in transportation rights-of-way
Inventory, control, or removal of outdoor advertising	×	Highway related stormwater r	management
Historic preservation and rehabilitation of historic transportation facilities		Reduction of vehicle-caused v habitat connectivity	wildlife mortality or restoration of
Archaeological activities relating to impacts from another eligible activity	×	Other Emission reducti	ion

Estimated Project Costs Land Cost Utility Relocation 345,000 Design & Construction Engineering 2,300,000 Construction Cost Indirect Cost (if applicable) Other (please specify) 2,645,000 Total Cost \$ 2,110,710 STBG Fund Request Applicant Local Match (20% Minimum) 534,290 Applicant Local Match Source (20% Minimum) Assured or Anticipated (Date Anticipated) Amount \$267,145 City of Coralville (10.1%) 28E Agreement Approved 1. Johnson County (10.1%) \$267,145 28E Agreement Approved 2. 3. Are any state funds involved in this project? Yes No If yes, please explain the source and conditions Are any other federal funds involved in this project? Yes No If yes, please explain the source and conditions Does the project comply with the adopted MPO Complete Streets Policy? Yes No Which of the following facilities are included in the proposal? Turn lanes ITS/signalization improvements Geometric improvements

Facilities to reduce modal conflict (e Marked on-street bike facility		hybrid beacons, bulb-outs, grade separation, bus pull-offs, etc.)
Is a focus of the project to address a safety of history involving bicyclists or pedestrians?		ntersection or midblock, or improve safety at a location with a collision s 18-21) Yes No
Will this project be open to the public?	■ Yes	□ No
Do you intend to charge a fee to users?	Yes	■ No
If yes, how much? \$		
What will it be used for?		

Estimate	ed Project Devel	opment Schedi	ıle			
Desi	ign	Start Date	Spring 2025		Completion Date	Spring 2026
	d Acquisition	Start Date	n/a		Completion Date	n/a
Con	struction	Start Date	Spring 2027		Completion Date	Spring 2028
Has any	part of this project	ct been started?	☐ Yes	■ No		
If yes, ex	oplain:					
Docume	ntation and Nar	rative Informa	tion			
	owing documents provide the corr			his applicati	on. In the upper righ	t-hand corner of each document or
■ A.	project justificate proximity, or in project from a rate as a whole if no	ntion. Assess you mpact to an ex- regional perspect additional devo	our project in regard isting or planned tra tive and how it will	to the trans ansportation be a function received. If	sportation system rel facility. If a region onal addition to the tr	sed project, and providing adequate lative to its functional relationship, al project, assess the value of this ransportation system and the region regional project, assess the value of
■ B.	A DETAILED	MAP identifyi	ng the location of the	e project and	d any known environ	mentally sensitive areas/features.
■ C.	A SKETCH-P	LAN of the proj	ect; including a typi	cal cross-se	ction of transportation	n facilities.
D.	item type of est estimate was p manner in which project. Absen	timate. However repared; and se th these objection t a fully itemize	er, it must accomplis cond, it must enable wes are achieved ma	sh two object e a reviewe y vary wide general gui	tives: first, it must s r to determine if the ely depending on the	oes not need to be a detailed, line- show the method by which the cost e cost estimate is reasonable. The type, scope and complexity of the methods of estimating each type of
■ E.						g for projects which fail to make Department of Transportation.
■ F.	operation. The	authority must		rance that i	t will adequately ma	sponsible for its maintenance and intain the completed project for its
☐ G. n/a	should also add	ress the project	s relationship to the	byway's int	rinsic qualities, how	ic byway board. The board's letter the project will have a statewide or rridor management plan.
■ H.					as followed and the and an assessment of	extent to which adjacent property their acceptance.

The award of STBG funds and/or any subsequent funding or letting of contracts for design, construction, reconstruction, improvement, or maintenance; or the furnishing of materials shall not involve direct or indirect interest, prohibited by Iowa Code Sections 314.2, 362.5, or 331.342, of any state, county, or city official, elective or appointive. Any award of funding or any letting of a contract in violation of the foregoing provisions shall invalidate the award of funding and authorize a complete recovery of any funds previously disbursed.

A MINORITY IMPACT STATEMENT for the project.

I.

Certification

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating local authority. I understand the attached OFFICIAL ENDORSEMENT(S) binds the participating authority to assume responsibility for adequate maintenance of any new or improved facilities.

I understand that, although this information is sufficient to secure a commitment of funds, an executed contract between the applicant and the Iowa Department of Transportation is required prior to the authorization of funds.

Representing the	City of Coralville	
	-w74	02/22/2023
	ignature	Date
Zaid Alsar	nawi, Assistant City Engineer	
	Typed Name and Title	Date



Minority Impact Statement

Form 105101 (3-18)

Pursuant to 2008 Iowa Acts, HF 2393, Iowa Code 8.11, all grant applications submitted to the State of Iowa that are due beginning Jan. 1, 2009, shall include a Minority Impact Statement. This is the state's mechanism for requiring grant applications to consider the potential impact of the grant project's proposed programs or policies on minority groups.

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Provide evidence of consultation with representatives of the minority groups impacted.
Indicate which groups are impacted. Women Persons with a disability Blacks Latinos Asians Pacific Islanders American Indians Alaskan Native Americans Other
The proposed grant project programs or policies are not expected to have a disproportionate or unique impact on minority persons.
Present the rationale for determining no impact.
I hereby certify that the information on this form is complete and accurate, to the best of my knowledge.
Name Zaid Alsamawi
Title Assistant City Engineer
<u>Definitions</u> "Minority Persons," as defined in Iowa Code 8.11, means individuals who are women, persons with a disability, Blacks, Latinos, Asians or Pacific Islanders, American Indians, and Alaskan Native Americans.
"Disability," as defined in lowa Code 15.102, subsection 7, paragraph "b," subparagraph (1): b. As used in this subsection: (1) "Disability" means, with respect to an individual, a physical or mental impairment that substantially limits one or more of the major life activities of the individual, a record of physical or mental impairment that substantially limits one or more of the major life activities of the individual, or being regarded as an individual with a physical or mental impairment that substantially limits one or more of the major life activities of the individual.
"Disability" does not include any of the following: (a) Homosexuality or bisexuality.

- (b) Transvestism, transsexualism, pedophilia, exhibitionism, voyeurism, gender identity disorders not resulting from physical impairments or other sexual behavior disorders.
 (c) Compulsive gambling, kleptomania, or pyromania.
- (d) Psychoactive substance abuse disorders resulting from current illegal use of drugs.

"State Agency," as defined in Iowa Code 8.11, means a department, board, bureau, commission, or other agency or authority of the State of Iowa.

Attachment A: Itemized breakdown of total project costs guidelines.

Construction costs

These may be based on historical averages for entire projects of similar size and scope. Examples include:

- Typical cost per mile of trail (e.g. \$XXX,XXX per mile for moderate terrain and limited number of structures).
- Typical cost per square foot of bridge deck.
- Typical cost per square foot of new or renovated building space.
- Typical cost per lineal foot of sidewalk.

Design/Inspection costs

These may be estimated based on the following typical percentages of construction costs, such as:

- 8 to 10 percent for preliminary up through final design and letting activities.
- 12 to 15 percent for construction inspection activities.

Right of way acquisition costs

These may be estimated based on:

- Impact and description of impact.
- Typical cost per square foot for permanent right of way.
- · Typical cost per square foot for temporary easements.

Utility and railroad costs

These may be estimated based on:

- · Impact and description of impact.
- Typical cost per linear foot of relocated or reconstructed facility (e.g. track, pipe, electrical lines).
- · Typical cost per installation (e.g. railroad switches, utility poles, transformers, control boxes).

Indirect costs

If indirect costs are involved (e.g. wages):

- Estimated hours.
- Estimated hourly rate, salary.
- Estimated fringe, direct.
- Other direct cost estimate.
- Other indirect cost estimate.

City of Coralville Engineering Department



1512 7th Street, Coralville, Iowa 52241 Phone: 319.248.1720

Date: February 22, 2023

Project: Dubuque Street NE & Forevergreen Road Roundabout

NARRATIVE

Existing Conditions

The intersection of Dubuque Street NE and Rustic Ridge Road NE is a T-intersection within Johnson County and adjacent to the northeasterly city limits of Coralville. Dubuque St NE traffic is free flow, with a posted speed limit through the intersection of 35 MPH and a transition to 50 MPH for northbound drivers 700 feet north of the intersection. Rustic Ridge Rd NE has a posted speed limit of 35 MPH and is stop-controlled at the Dubuque St NE intersection.

Dubuque St NE is a two-lane, north-south arterial street with a rural cross-section and narrow shoulders. Dubuque St NE is an extension of Dubuque St that begins in downtown lowa City, crosses Interstate 80, and ends at Highway 965 in North Liberty. There is a shared use path along the east side of Dubuque St NE.

Rustic Ridge Rd NE is two-lane, east-west local street with a rural cross section and a narrow shoulder. Rustic Ridge Rd NE terminates at North Liberty Rd NE to the west and Dubuque St NE to the east. There is currently no sidewalk along Rustic Ridge Rd NE.

Forevergreen Rd is a two-lane, east-west arterial street. The easterly end of Forevergreen Rd currently terminates 1,700 feet northwest of the Dubuque St NE and Rustic Ridge Rd NE intersection. The approved Forevergreen Rd typical cross section provides a 10' shared use path on the north side and a 5' sidewalk on the south side.

Proposed Project

The proposed project ("the project") will construct a four-leg, single-lane roundabout at the intersection of Dubuque St NE, Forevergreen Rd, and Rustic Ridge Rd. A shared use path will be provided along the north side of Forevergreen Road with an ADA-compliant crosswalk on the north leg of the roundabout connecting to the Dubuque St Trail, and an ADA-compliant crosswalk on the west leg of the roundabout for a future path connection south along Rustic Ridge Rd. A 5' sidewalk will also be provided on the south side of Forevergreen Road. Forevergreen Rd will be extended to the project with an upcoming phase of the Forevergreen Heights development.

Project Justification

Economic Opportunity

Rapid residential growth is underway in areas of both Coralville and North Liberty. Immediately west of the project is the Forevergreen Heights subdivision in Coralville that has been under construction since 2021 and is expected to have approximately 1,000 residential units and small office/retail uses when completed in 2026. The new subdivision is located immediately south of Liberty High School and will include a future elementary school. The project will provide Forevergreen Heights subdivision direct access to and from Dubuque St NE. The project will create the fourth roundabout on the Forevergreen Rd corridor and the second roundabout on the Dubuque St NE corridor.

In addition to the joint effort between Coralville and Johnson County on this project, the cities of Coralville and North Liberty are working jointly to obtain funding to complete Forevergreen Rd between the roundabouts at 12th Ave and North Liberty Rd. \$2.5 million in federal funding has been secured to date for the Forevergreen Road extension and the funds are to be allocated by 2026.

When the Dubuque St NE to Forevergreen Rd corridor connection is complete, it will:

- Provide new, more efficient options to reach the interchanges at Interstate 80 and Interstate 380.
- Provide alternative routing for school buses serving the schools adjacent to the corridor.
- Provide more direct access for metro area residents to the healthcare facilities and commercial developments under construction along Forevergreen Rd west of Coral Ridge Ave/Ranshaw Way.
- Close a missing gap in the metro area arterial street grid.

Environment

The project will have positive, long-term environmental impacts. Roundabouts can improve air quality compared to traditional intersections due to more efficient traffic flow that reduces engine idling. The more efficient traffic flow also reduces vehicle delay and fuel consumption. The project is part of a future east-west arterial which will help reduce Vehicle Miles Traveled. Stormwater Best Management Practices, including soil quality restoration and bio-retention cells will be incorporated within the footprint of the project. The new shared use path connections have an environmental benefit by providing the means for residents to bike or walk to work/school instead of driving, which in turn will reduce emissions.

Project Justification (cont.)

Quality of Life & Choice

Approximately 640 multi-family dwelling units are proposed within the Forevergreen Heights subdivision, including a senior living facility located on the northwest side of the project. The project will connect the trails on Dubuque St NE and Forevergreen Rd providing bicyclists and pedestrians direct routes towards lowa City, Coralville, and North Liberty. Additionally, this trail connection will provide residents living east of Dubuque St NE a safe route to the future elementary school and City park spaces within the Forevergreen Heights subdivision.

System Preservation

The project will include the removal and replacement of approximately 800' of the existing Dubuque St NE pavement and approximately 340' of existing Rustic Ridge Rd pavement. Both existing roadway pavements are old and experiencing pavement deterioration with visible cracks through the existing asphalt pavement overlay.

Efficiency

The project, along with the future Forevergreen Rd extension, will complete a vital east-west arterial connection in the metro area. Currently, the closest east-west arterials to the project location are Oakdale Blvd and Penn St which are 2 miles and 2.7 miles away respectively. This intersection will save miles traveled and fossil fuel consumption. The project will help complete a well-connected transportation grid and will help reduce congestion on adjacent arterials.

The project will be designed to accommodate peak hour traffic volumes and turning movements, and will allow the connecting roadways to stay narrow. Keeping the road corridors narrow will have long-term environmental benefits by reducing the pavement footprint, and that translates into long-term financial benefits for Coralville and Johnson County in terms of road maintenance costs.

Safety

Dubuque St NE is on a curved horizontal alignment through the project area. If Forevergreen Rd was constructed as a T-intersection at Dubuque St NE instead of a roundabout, the curved alignment of Dubuque St NE would impose sight distance safety issues, especially concerning the visibility of pedestrians and bicyclists crossing Dubuque St NE to Forevergreen Rd. A roundabout intersection at this location will realign Dubuque St NE and eliminate the sight distance safety concerns. The roundabout will help reduce vehicular speeds through the intersection and will provide a refuge island to allow pedestrians and bicyclists to focus on traffic coming from only one direction at a time while crossing Dubuque St NE and Forevergreen Rd.

The project will help calm traffic along Dubuque St NE, especially within the 50 MPH posted speed limit north of the project where complaints about speeding have led to speed studies over the years. The roundabout will help reduce average corridor speeds which might help reduce the frequency of animal-vehicle collisions. The approach legs of the roundabout will be designed to naturally reduce vehicular traffic while entering the roundabout.

Project Justification (cont.)

Health

There are currently a limited number of pedestrian crossings along Dubuque St NE. Additionally, there is a very limited number of east-west trails in the metro area north of I-80. The shared use path included with the project, along with the future Forevergreen Rd extension west to 12th Ave, will fill a major gap in the regional trail network by providing a connection between the Dubuque Street Trail and North Ridge Trail.

Equity

Forevergreen Heights subdivision will include a variety of housing types and mixed-use buildings that will be owner-occupied or rented. Although most newly constructed dwellings in this subdivision are being sold at the most affordable price point for a new dwelling in the metro area, the prices of those units will still be at market rate. With only 10% of the subdivision built, it is difficult to predict the ultimate socioeconomic status of the residents of Forevergreen Heights subdivision. The subdivision will provide a variety of housing opportunities for residents of different backgrounds. It will give equitable, multi-modal access to public parks and ADA compliant trails, in addition to Liberty High school and the future elementary school, both of which will serve as important social and educational support for students in the subdivision and in the more established, adjacent neighborhoods in Johnson County.

Local Commitment

The local match of 20.2% will be split equally between the City of Coralville and Johnson County.

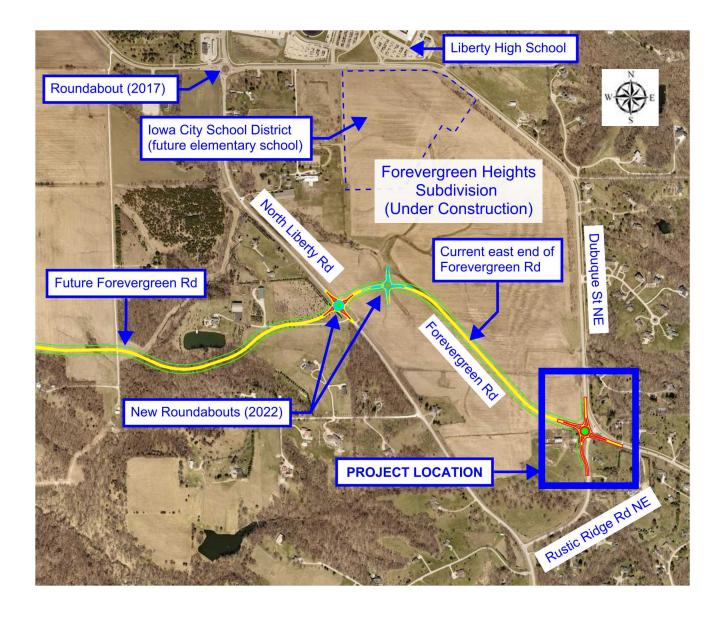
City of Coralville Engineering Department



1512 7th Street, Coralville, Iowa 52241 Phone: 319.248.1720

Date: February 17, 2023

DETAILED LOCATION MAP



City of Coralville Engineering Department



1512 7th Street, Coralville, Iowa 52241 Phone: 319.248.1720

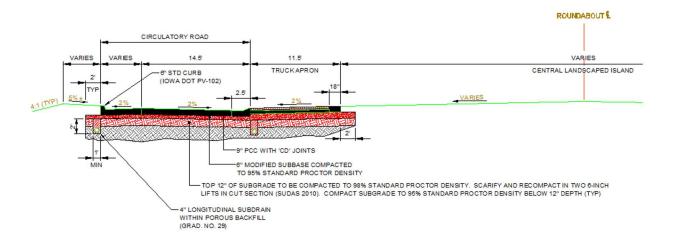
Date: February 22, 2023

SKETCH PLAN

Dubuque Street NE & Forevergreen Road Roundabout - Plan View



Dubuque Street NE & Forevergreen Road Roundabout - Typical Sections



TYPICAL ROADWAY SECTION --- THROUGH ROUNDABOUT

NOT TO SCALE

City of Coralville Engineering Department



1512 7th Street, Coralville, Iowa 52241 Phone: 319.248.1720

Date: February 17, 2023

Project: Dubuque Street NE & Forevergreen Road Roundabout

ITEMIZED BREAKDOWN

The following cost estimate breakdown was developed based on the cost of roundabouts recently constructed in the metro area with similar footprints to the proposed roundabout:

- North Liberty Road & Forevergreen Road roundabout was constructed in 2022 with a total estimated cost of \$2,654,000
- Saint Andrews Drive & South Alexander Way roundabout was constructed in 2021 with a total estimated cost of \$2,564,000

Mobilization, Removals, and Earthwork	\$ 350,000
Paving (roadway, sidewalk, and temporary pavement)	\$ 1,100,000
Utilities	\$ 460,000
Traffic Control, Signange, and Pavement Markings	\$ 85,000
Electrical and Lighting	\$ 200,000
Erosion Control, and Landscaping	\$ 105,000
Engineering Services	\$ 345,000
Project Total	\$ 2,645,000

City of Coralville Engineering Department



1512 7th Street, Coralville, Iowa 52241 Phone: 319.248.1720

Date: February 22, 2023

Project: Dubuque Street NE & Forevergreen Road Roundabout

TIME SCHEDULE

The City of Coralville has an agreement with the developer of Forevergreen Heights to transfer the right-of-way needed for the westerly half of the proposed roundabout, while the easterly half of the roundabout will be within existing City or County right-of-way.

Project design would begin spring 2025 and be completed spring 2026.

Project would be let fall 2026.

Construction would begin spring 2027 and be completed spring 2028.

City of Coralville Engineering Department



1512 7th Street, Coralville, Iowa 52241

Phone: 319.248.1720

Date:

February 21, 2023

Project:

Dubuque Street NE and Forevergreen Road Roundabout

OFFICIAL ENDORSEMENT

The City of Coralville agrees to adequately maintain and operate the Dubuque St NE & Forevergreen Rd Roundabout for its intended public use for a minimum of 20 years after project completion. The City of Coralville and Johnson County have a 28E construction agreement that states maintenance of this project will covered by the overall 28E maintenance agreement shared by the two entities.

Sincerely,

Kelly J. Hayworth City Administrator

City of Coralville Engineering Department



1512 7th Street, Coralville, Iowa 52241 Phone: 319.248.1720

Date: February 22, 2023

Project: Dubuque Street NE and Forevergreen Road Roundbout

PUBLIC INPUT

Adjacent property owners have been notified of the proposed roundabout through the rezoning, site plan submittal process, and related public hearings during the development of Forevergreen Heights subdivision.

A public open house will be held to review the preliminary design, including traffic control, and access maintenance of adjacent properties, and detour routes during construction. The public will have access to both City and Consultant staff during the entire design process.

A public hearing on the final plans and specifications will be held at a Council Meeting prior to the City Council recommending final approval of the design and setting the bid date.

During construction, the City will issue press releases through news and social media outlets for signficant changes that impact the traveling public. Key stakeholders will be provided weekly email updates on progress made and upcoming work items. Weekly progress meetings will be open to the public.