

# 2020 Regional Surface Transportation Block Grant (STBG) Application



<b>1. PROJECT TITLE</b>		Johnson Point Rd / Hawks Prairie Rd / South Bay Rd Int. Imp.	
If the project is programmed in the State Transportation Improvement Program, please use the same title.			
<b>2. LEAD AGENCY</b>			
Lead Agency	Thurston County		
Contact Person	Scott Lindblom		
Phone Number	360-867-2329	Email Address	scott.lindblom@co.thurston.wa.us
<b>3. PROJECT CO-SPONSOR</b> (Leave blank if not applicable)			
Co-Sponsor Agency			
Contact Person			
Phone Number		Email Address	
<b>4. PROJECT OVERVIEW</b>			
Provide a brief description of the proposal. State the problem and need, how the proposal addresses the need, and the anticipated benefits. (~150 words)			
<p>The main purpose of the project is to improve the safety and mobility for all users. South Bay Rd (ADT 5,000) is a County arterial and Hawks Prairie Rd (ADT 3,500) is a County collector both with posted speeds of 40 mph. These roads provide connections between Olympia and Lacey to the Johnson Point community. This intersection is currently unsignalized with a stop controlled approach on Hawks Prairie Rd. This intersection has nineteen documented collisions including one fatality and seven serious injuries over the last ten years. Current operations do not meet current rural adopted LOS requirements and this part of the County is growing rapidly. The project will include construction of a single lane roundabout which was identified as the preferred alternative. This project is also included in the Thurston County Traffic Impact Study as a capacity project. Other project benefits include reduced speeds, improved pedestrian crossings, street lighting and widened paved shoulders.</p>			
<b>5. STBG PROJECT TYPE</b> (Mark all that apply)			
*Note: Capacity projects will not be considered in this call for projects. Capital Projects must be located on federal-aid routes. Rural minor collectors and local roads are ineligible. Exceptions apply to Transportation Alternative type projects.			
a.	Construction, reconstruction, rehabilitation, resurfacing, restoration preservation, or operational improvements of highways		<input checked="" type="checkbox"/>
b.	Bridge and tunnel replacement; and inspection and evaluation of bridges		<input type="checkbox"/>
c.	Capital costs for transit projects (vehicles and facilities)		<input type="checkbox"/>
d.	Carpool projects, electric and natural gas vehicle infrastructure		<input type="checkbox"/>
e.	Bicycle and pedestrian facilities, including shared-use paths		<input checked="" type="checkbox"/>
f.	Modification of sidewalks to comply with Americans with Disabilities Act		<input checked="" type="checkbox"/>
g.	Highway and transit safety projects, hazard eliminations, railway/highway grade crossings		<input type="checkbox"/>
h.	Capital and operating costs for traffic management systems		<input type="checkbox"/>
i.	Planning and studies		<input type="checkbox"/>
j.	Environmental mitigation		<input checked="" type="checkbox"/>
k.	Intelligent Transportation Systems (ITS)		<input type="checkbox"/>
l.	Other _____		<input type="checkbox"/>
<b>6. SUMMARY DETAILS</b> (complete the section that best matches your project type)			

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CONSTRUCTION PROJECT					
Project Location		The intersection of Johnson Point Rd, Hawks Prairie Rd and South Bay Rd			
Limits		Intersection			
Project Length		Intersection			
ALL OTHER PROJECT TYPES					
Project Location					
Duration of Project					
7. REGIONAL FUNDING PRIORITY					
What Regional Funding Priority does this project focus on?					
<input checked="" type="checkbox"/>	<b>Safety</b> – Projects that enhance the safety of all who use, operate, or maintain the transportation system				
<input type="checkbox"/>	<b>Maintenance and Preservation</b> – Projects that protect existing transportation system investments and keep life-cycle costs as low as possible				
<input type="checkbox"/>	<b>Multimodal and System Efficiency</b> – Projects that integrate multimodal facilities and/or include Transportation Demand Management elements to support adopted land use plans and encourage transit, walking, and cycling. Also includes projects that improve the operating efficiency of the system.				
8. PROPOSAL PRIORITY (If submitting more than one proposal for STBG funds, indicate the priority of this proposal compared to others)					
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Check if this project is a contingency proposal					
9. YEAR OF OBLIGATION (Select the preferred year the phase will obligate)					10. ADVANCE CONSTRUCTION (AC)*
Year	Study/Program	PE	ROW	CN	Are you able to obligate this project using Advance Construction? <input type="radio"/> Yes <input checked="" type="radio"/> No Use the space below to provide any relevant information on obligation, AC timing, or preferences.
2021	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
2022	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
2023	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
2024	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
2025	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	
R/W can obligated in 2022. Construction can be obligated in 2023, 2024 or 2025..					
*AC allows applicants to obligate a project prior to available funding for reimbursement of eligible expenses. Selecting the AC option does not guarantee this option will be available. AC is evaluated on a case by case basis.					

10. FUNDS FOR PROJECT COMPLETION		
10a. Has this project previously received federal funding through TRPC or other grant programs? <input type="radio"/> Yes <input checked="" type="radio"/> No		
10b. If Yes, please indicate which phases were completed with previous grant awards. <input type="checkbox"/> Planning/Study <input type="checkbox"/> Preliminary Engineering <input type="checkbox"/> Right-of-Way <input type="checkbox"/> Other		
10c. Will the requested grant funds allow the applicant to successfully complete the project? <input checked="" type="radio"/> Yes <input type="radio"/> Other phases will require additional funding		
11. PROJECT PHASING AND COSTS		
Select the applicable project phases and their costs for this proposal.		Cost
CONSTRUCTION	Preliminary Engineering/Design	<input type="checkbox"/> \$ 350,000.00
	Right-of-Way	<input checked="" type="checkbox"/> \$ 423,899.00
	Construction	<input checked="" type="checkbox"/> \$ 3,005,780.00
STUDIES, PROGRAMS, OR VEHICLE ACQUISITION	Planning, Study, or Program/Services	<input type="checkbox"/> \$
	Vehicles	<input type="checkbox"/> \$
Total proposed cost (Sum of all phases identified above)		\$ 3,779,679.00
12. STP FUNDING REQUEST AND MATCHING REVENUES		
*Applicants must provide a minimum 13.5% non-federal share. Federal share cannot exceed 86.5% of total project cost. See the example on the right.		Non-federal share: \$13,500 Federal STP Funds: <u>\$86,500</u> Total Project Cost: \$100,000
Local funding or other sources		\$ 813,006.00
State funding		\$ 0.00
Federal STBG Request		\$ 2,966,673.00
Total Project Revenue		\$ 3,779,679.00
13. MATCHING FUND DETAILS		
13a. MATCH SOURCE—List the source, status, and amount of all matching funds.		
Source of Funds	Current Status (secure or unsecure)	Amount
WSDOT	Secure	\$ 379,854.00
Transportation Impact Fee	Secure	\$ 300,000.00
Road Fund	Secure	\$ 133,152.00
		\$
13b. MATCH TIMING LIMITATIONS—Do any matching funds pose limitations on the timing of project obligation? <input type="radio"/> Yes <input checked="" type="radio"/> No If yes, please provide comments below.		
Comments on matching fund limitations, if applicable (~150 words).		
14. CONSTRUCTION AND RIGHT-OF-WAY PROJECT READINESS		
14a. DESIGN COMPLETENESS (enter completed or target completion dates)		
Preliminary Engineering	2021	

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NEPA Approval	2021
14c. RIGHT-OF-WAY COMPLETENESS (enter completed or target completion dates). Use the space below to provide additional details, if necessary.	
<input type="checkbox"/> Right-of-Way is not required	
Right-of-Way acquisition	2022
Relocation Plan	
Approved Right-of-Way Plan	2021
Right-of-Way Cost Estimate or True Cost Estimate	2021
Use the space below to provide any relevant right-of-way information (~150 words).	
Preliminary Right-of-Way acquisition needs has been completed	
<b>15. PROJECT DESCRIPTION DETAILS</b>	
15a. PROJECT NEED—For all project types, describe the need and current conditions or deficiencies to be addressed. (~300 words).	
<p>This intersection is currently unsignalized with a stop controlled approach on Hawks Prairie Rd. The average daily traffic volumes average 5,000 on the east bound approach of Southbay Rd and 3,500 on the west bound approach of Hawks Prairie Rd. Roadways have limited shoulder widths, limited sight distance and inadequate street lighting.</p> <p>This intersection has nineteen documented collisions including one fatality and seven serious injuries over the last ten years. Based upon a comparative safety analysis the Hawks Prairie Rd/South Bay Rd/Johnson Point Rd intersection poses a greater safety concern than other comparable intersections in the County, with more injury or fatality collisions. The intersection currently operates at LOS D during the AM and PM peak hours. This does not currently meet Thurston County’s intersection operations LOS C standard for intersections outside the urban growth area boundary and in unincorporated Thurston County.</p> <p>30 percent of vehicles exceed the posted speed limit by more than 5 mph on the South Bay Rd (eastbound) and Hawks Prairie Rd (northbound) approaches of the intersection.</p>	
15b. SCOPE OF WORK— Succinctly describe the overall scope of the project: <b>1) Construction projects—</b> include all the types of transportation facilities and infrastructure the project will address and the proposed phase deliverables and the anticipated deliverables when fully completed; <b>2) For plans or studies,</b> clearly state the study objectives and how they will be achieved; <b>3) For programs, services, and vehicle acquisition,</b> describe the type of services or programs that will be delivered (~300 words).	

Based upon an alternative analysis completed in 2019 the preferred alternative for this location is a single lane roundabout with enhanced signing, street lighting and pedestrian facilities. All design will be done in conformance with the WSDOT design manual and AASHTO green book. This design will bring the intersection within an acceptable level of service.

Roundabouts have generally been proven to have a lower crash frequency and severity than other types of intersection control. This is due to a combination of factors including the reduction of conflict points in the intersection, the lowering of vehicle speeds, and the merge condition on entry to the intersection. Studying traffic signals that are converted to roundabouts can help prove this, crash reduction factors range widely depending on the characteristics of the intersection but are generally below 1.0, meaning a reduction in crash frequency. Typical crash types at roundabouts include rear-end and sideswipe crashes. Severity types typically includes property damage only (PDO) and minor injury. The proposed roundabout will require tighter geometry than what’s existing on the westbound approach to slow speeds as drivers enter the roundabout.

A stormwater treatment facility will be necessary prior to discharge to the estuary.

Environmental mitigation will be necessary due to the projects proximity to the Woodland Creek estuary.

The acquisition of land from five parcels will be necessary for construction of the improvements. +

**16. ENVIRONMENTAL SUSTAINABILITY**

16a. DESIGN ELEMENTS—Does the project mitigate or minimize the environmental impacts of the project beyond current design standards? Check all that apply. Use the ‘Other’ box below to provide additional details, if necessary.

- Low Impact Development Best Management Practices
- Use of drought resistant vegetation/landscaping
- Includes terrestrial or stream or wetland habitat restoration (such as fish passage barrier removal)
- Flood mitigation
- Use of in-place recycling materials
- Use of LED lighting
- Use of Solar-powered lighting or signage
- Installation of electric vehicle charging infrastructure or alternative fuel support systems
- Other (describe other sustainability benefits or use the space below to provide additional details for any elements checked above ~150 words).

This project will reduce traffic congestion. Existing asphalt will be pulverized and re-used on the project site. The new improvements will extend the service life of the road by incorporating sustainable elements such as accounting for design-life traffic volumes.

16b. GREENHOUSE GAS AND AIR POLLUTANTS EMISSIONS REDUCTION— After application submission, TRPC will assist applicants with calculating the estimated reduction in emissions for each source shown below.

Source	Estimated reduction expressed in average kg/day*
Particulate Matter 2.5	
Particulate Matter 10	

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Carbon dioxide	
Ozone	
*Applicants may be required to provide TRPC data to perform the analysis, if applicable.	
<b>17. MULTIMODAL ACCESSIBILITY</b>	
17a. <b>SYSTEM USERS</b> —Describe how the project will enhance travel choices. Who are the users and how will they benefit? (~150 words).	
<p>This project will enhance vehicular, pedestrian, and bicycle modes of transportation of the corridor. Pedestrians and bicyclists will receive increased safety benefits from the raised curb that will separate them from vehicular traffic. Fewer accidents are expected from reduced speeds on Johnson Point Road. Queue length for a left turn off Johnson Point Rd onto Hawks Prairie Rd will be significantly reduced deduced with the roundabout.</p>	
17b. <b>NETWORK CONNECTIVITY</b> —Detail how the project will provide greater network connectivity and describe which modes of travel will be affected. (~150 words)	
<p>Traffic flow for through traffic will be improved on Johnson Point and South Bay Roads. Residents who live in north Thurston County will experience reduced delays. The project will create an option for vehicles coming from Hawks Prairie Rd to turn around and travel in the eastbound direction. This project will create a pedestrian crossing at an intersection where there is currently no crossing.</p>	
17c. <b>TRANSPORTATION DEMAND MANAGEMENT (TDM) OR OPERATIONS</b> —If applicable, describe any non-structural transportation demand management strategies or operational enhancements included in the project that will improve multimodal accessibility. (~150 words).	
Not applicable	

<p><b>18. EQUITY</b>— Based on the project location*, refer to the TRPC Title VI maps to enter values for each of the criteria shown below. Link to maps: <a href="https://www.trpc.org/881/Application-Materials">https://www.trpc.org/881/Application-Materials</a></p>			
Age 65 or Older	Limited English Proficiency	Minority Population	Poverty Rate
<input type="radio"/> 10.0 % or less	<input type="radio"/> 2.0% or less	<input type="radio"/> 10.0 % or less	<input type="radio"/> 5.0% or less
<input type="radio"/> 10.1 - 15.0%	<input type="radio"/> 2.1 - 5.0%	<input type="radio"/> 10.1 - 20.0%	<input checked="" type="radio"/> 5.1 - 10.0%
<input checked="" type="radio"/> 15.1 - 20.0%	<input checked="" type="radio"/> 5.1 - 10.0%	<input checked="" type="radio"/> 20.1 - 30.0%	<input type="radio"/> 10.1 - 15.0%
<input type="radio"/> 20.1 - 25%	<input type="radio"/> More than 10%	<input type="radio"/> 30.1 - 40%	<input type="radio"/> 15.1 - 20%
<input type="radio"/> More than 25%		<input type="radio"/> More than 40%	<input type="radio"/> More than 20%
<p>*If the project limits extend beyond one census tract, indicate the values of the census tract where the project will have the greatest impact.</p>			
<p><b>19. SYSTEM EFFICIENCY</b></p>			
<p>Identify applicable system efficiency benefits this project will produce. Use the 'Other' box below to provide additional details, if necessary.</p>			
<p><input checked="" type="checkbox"/> Travel time reduction  <input checked="" type="checkbox"/> Congestion reduction  <input type="checkbox"/> Reduced vehicle miles traveled  <input checked="" type="checkbox"/> Reduced emissions  <input type="checkbox"/> Operational cost reductions  <input type="checkbox"/> Maintenance cost reductions</p>			
<p><input type="checkbox"/> Other (describe other direct efficiency benefits or use the space below to provide additional details for any elements checked above ~150 words).</p>			
<p><b>20. ECONOMIC VITALITY</b></p>			
<p><i>Sustainable Thurston Centers, Corridors, and Neighborhoods Target</i>—By 2035, 72 percent of all (new and existing) households in our cities, towns, and unincorporated growth areas will be within a half-mile (comparable to a 20-minute walk) of an urban center, corridor, or neighborhood center with access to goods and services to meet some of their daily needs.</p>			
<p>For Questions 20a and 20b, refer to the Centers Map: <a href="https://www.trpc.org/881/Application-Materials">https://www.trpc.org/881/Application-Materials</a></p>			
<p>20a. CENTERS AND CORRIDORS—Is the project located in or within a half-mile of an Urban Center, Corridor, or Neighborhood Center? <input type="radio"/> Yes <input checked="" type="radio"/> No. If yes, proceed to 21b If no, skip to 20c.</p>			

<p>20b. CENTERS AND CORRIDORS DESCRIPTION—Describe how the project supports Sustainable Thurston’s priority goal to create vibrant Urban centers, Corridors, or Neighborhoods. How does the project provide infrastructure or services to provide equal access to education, services, amenities, as well as attract and retain businesses, employers, and residents in the region’s urban centers (~150 words)?</p>
<p>Not applicable, this project is not located within 1/2 mile of an Urban Center, Corridor, or Neighborhood Center.</p>
<p>20c. ECONOMIC DEVELOPMENT— If applicable, describe how the project supports other economic development objectives as described in a community Comprehensive Plan or other strategic planning document (~150 words).</p>
<p>THURSTON COUNTY COMPREHENSIVE PLAN (Economic Development)          7.5 Build a vital, diverse and strong local economy, including job opportunities that support community and household resilience, health, and well-being, by:          h. Encouraging the utilization and development of areas designated for industrial use, consistent with the environmental policies in these county wide policies.          j. Adding incentives for business to demonstrate their environmental sustainability including reduction in greenhouse gas.          Thurston County Strategic Plan          8. Support robust and well maintained infrastructure systems for a thriving community</p>
<p>20d. COMMUNITY CO-BENEFITS— If applicable, describe any co-benefits that are expected from this project such as community wellness and human health, quality of life, placemaking, climate adaptation or mitigation, or hazard mitigation. Please cite relevant local and regional planning documents, where appropriate (~150 words).</p>
<p>This project will improve access for bicyclists to travel on paved shoulders separated from motorists by a raised curb, promoting community wellness and human health, and quality of life. The noise pollution will decrease from a reduction of how often car brakes are applied. There is also potential for creating a community centerpiece or landmark within the center of the roundabout.</p>
<p><b>21. SAFETY</b></p>
<p>21a. KNOWN SAFETY PROBLEM—Does this project/program address a location with a known safety problem or include factors identified through a communitywide systemic risk assessment?</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No If yes, please complete questions 21b and 21c. If no, skip the remainder of question 21.</p>

21b. **FACTORS**—Describe the factors that contribute to the safety risks for the project location (~150 words).

- a) Limited sight distance
- b) Excessive speed
- c) No left hand turn lane from Johnson Point Road to Hawks Prairie Road
- d) No recoverable side slopes
- e) Private driveway located at apex of curve
- f) No pedestrian crossings
- g) Utility poles

21c. **COUNTERMEASURES**—Describe how the proposal will mitigate the safety problems, including the types of countermeasures the project will implement (~150 words).

The proposal will reduce vehicular speeds, create a pedestrian crossing, improve the sight distance when approaching the roundabout, and relocate utility poles to outside the clear zone.

## 22. PRESERVATION AND MAINTENANCE

What type of maintenance will the project perform? (If not applicable, skip this question).

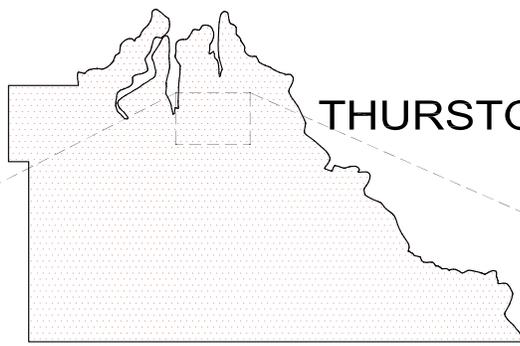
- Chipseal
- Overlay
- Full depth reclamation
- Bridge or tunnel maintenance
- Vehicle replacement
- Transit facility maintenance
- Modification of sidewalk ramps to meet current ADA standards

Other (describe other preservation and maintenance elements or use the space to provide additional details for one of the elements checked above ~150 words).

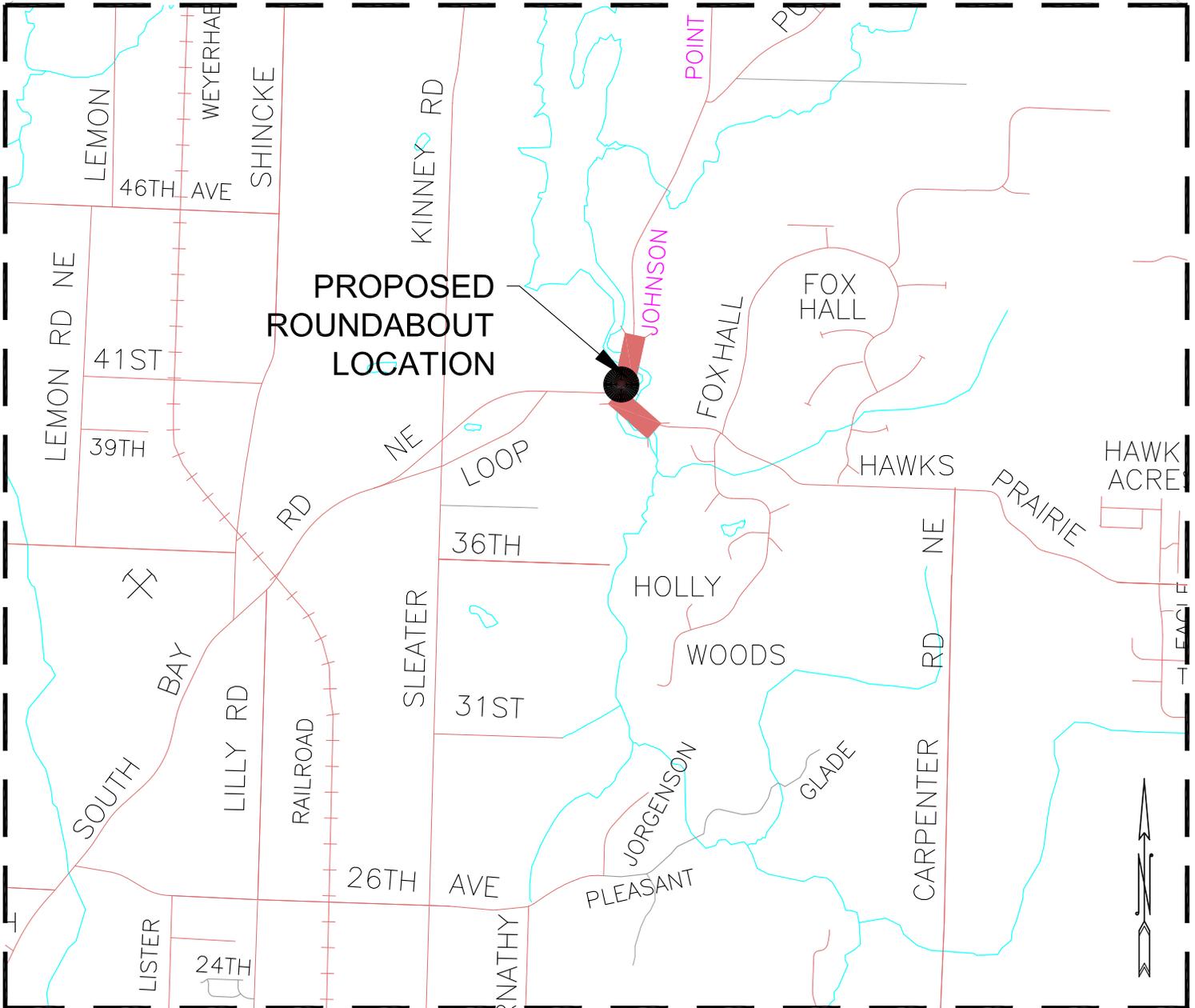
23. OPTIONAL ATTACHMENTS	
<b>Note:</b> The total number of attachments to support proposal should not exceed five pages.	
Please identify any supplemental attachments that are included in your application.	
<input checked="" type="checkbox"/> Vicinity Map <input type="checkbox"/> Photographs <input checked="" type="checkbox"/> Illustrations, cross-sections, or schematics <input type="checkbox"/> Letter of Support <input type="checkbox"/> Other _____	
24. CERTIFICATION ACCEPTANCE (CA)	
The applicant must have good standing with the WSDOT Certification Acceptance program specified in Chapter 13 of the WSDOT Local Agency Guidelines Manual: <a href="https://www.wsdot.wa.gov/Publications/Manuals/M36-63.htm">https://www.wsdot.wa.gov/Publications/Manuals/M36-63.htm</a>	
<input checked="" type="radio"/> The applicant is a CA agency <input type="radio"/> The applicant is partnering with a CA agency	
CA Agency	Thurston County
CA Agency Representative	Scott Lindblom
CA Representative Title	County Engineer
<input checked="" type="checkbox"/> I acknowledge this proposal will be administered by a CA agency.	Date: <u>03/26/2020</u>
25. PROJECT VERIFICATION AND ENDORSEMENT	
This project proposal reflects established local funding priorities consistent with the Regional Transportation Plan. Costs represent accurate planning level estimates needed to accomplish the work described herein. The project described is financially feasible, and local match revenue identified is available and will be committed to the project if TRPC awards the requested STBG funds. If selected, <b>the project must obligate by the date specified on the award letter.</b> Failure to do so could result in loss of funding for the project. I realize that the use of federal funds for this project entails administrative and project compliance requirements over which TRPC has no control, and for which this agency or organization will be responsible. This project has the full endorsement of the governing body/leadership of this agency or organization.	
LEAD AGENCY AUTHORIZATION	
Scott Lindblom	
Name of Lead Agency Representative Authorized to Submit the Application	Title County Engineer
<input checked="" type="checkbox"/> I verify and endorse this proposal as stated in the preceding statement.	Date: <u>03/26/2020</u>
CO-SPONSOR AUTHORIZATION	
Name of Co-Sponsor Representative Authorized to Submit the Application	Title
<input type="checkbox"/> I verify and endorse this proposal as stated in the preceding statement.	Date: _____



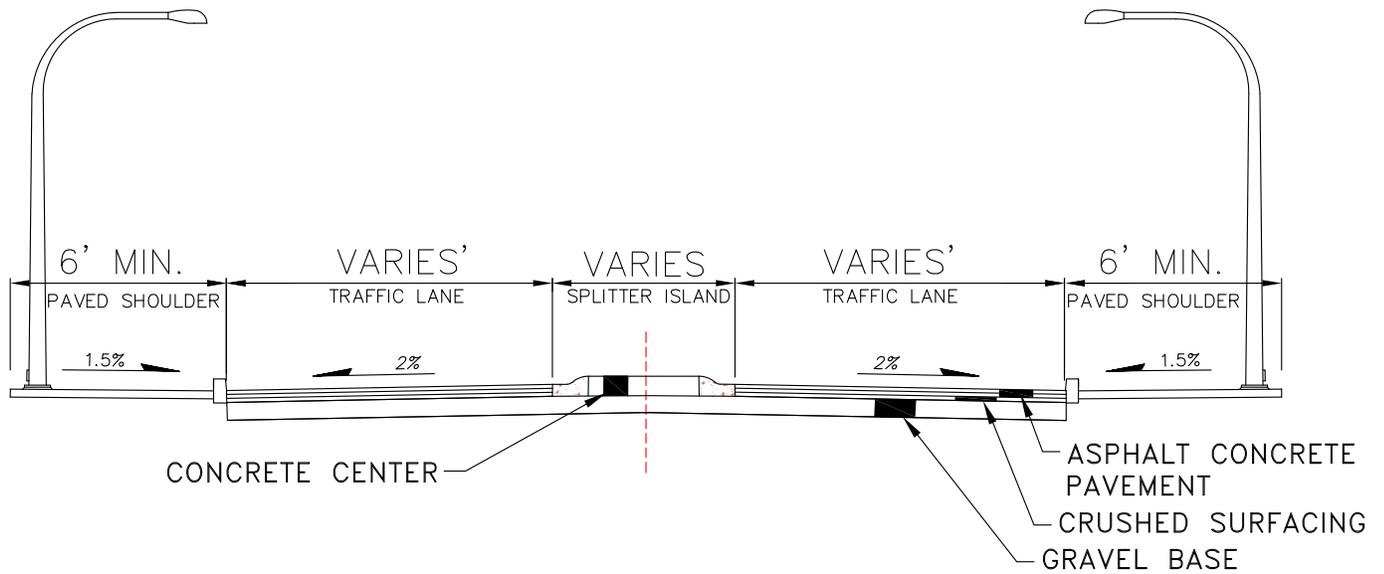
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THURSTON COUNTY

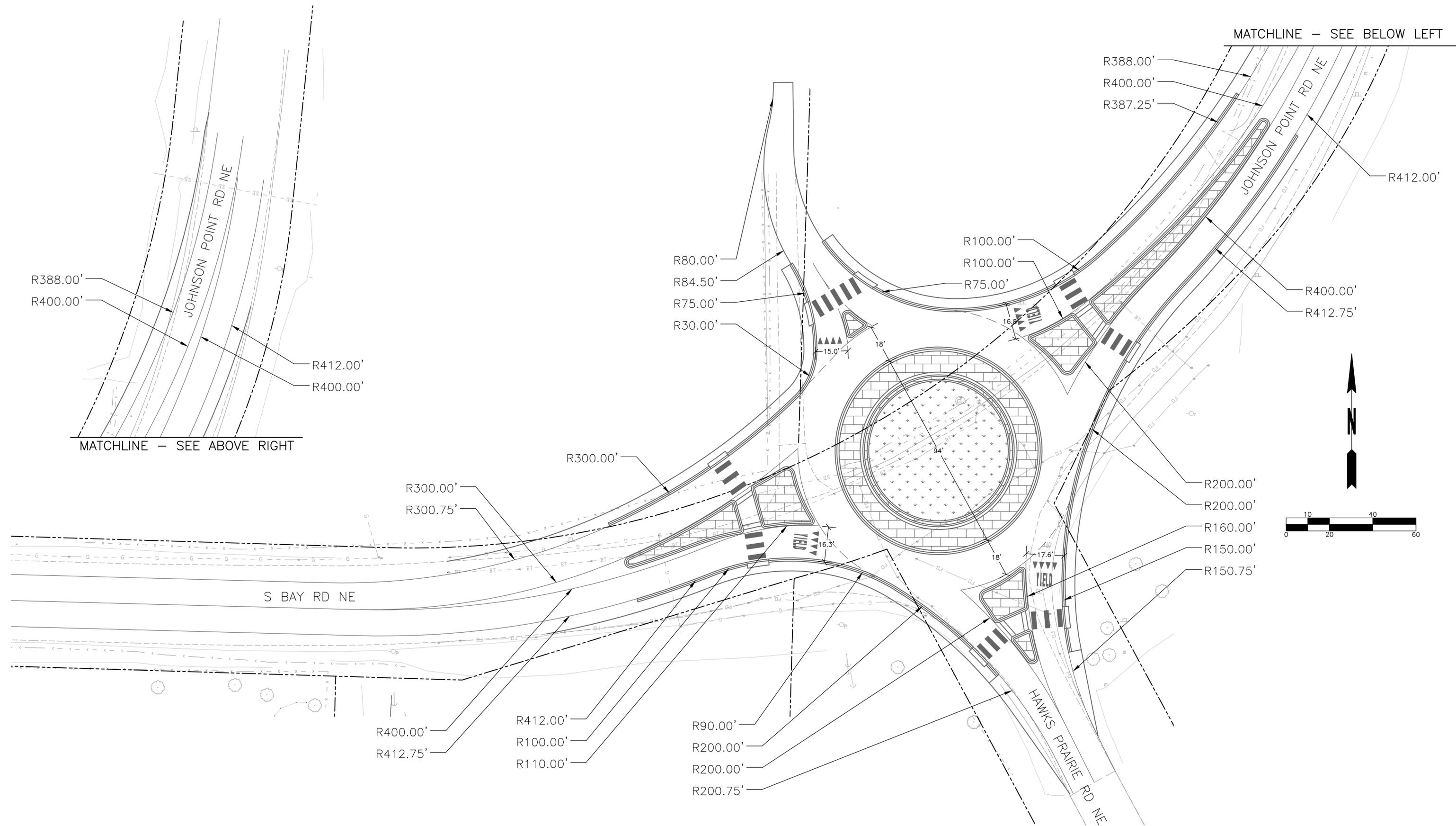


HAWKS PRAIRIE ROAD NE/JOHNSON POINT ROAD NE/ S BAY ROAD NE INTERSECTION IMPROVEMENT



TYPICAL ROADWAY SECTION  
(SPLITTER ISLAND)

HAWKS PRAIRIE ROAD NE/JOHNSON POINT ROAD NE/  
S BAY ROAD NE INTERSECTION IMPROVEMENT



# Hawks Prairie & Johnson Point - Roundabout

1.18122.00 - Thurston County On-Call

February 17, 2020

FIGURE

3



M:\18\1-18122.00 - 2018 Thurston County On-Call\Task 01 - Hawks Prairie-Johnson Point\Engineering\CAD\Conceptual\Roundabout Concept Figure.dwg\Horizontal Layout\Damani Nkeiruka 2/17/2020 6:51 PM